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FOREWORD

Since 1909 the Meteorological Department of Egypt has been issuing regularly the Monthly Weather Report, giving a brief summary of the weather conditions prevailing over Egypt during the month. These reports used to include a table giving limited climatological data for some selected surface observations.

On January 1954, the Monthly Weather Report has been revised and the general summary of the weather conditions has been extended to give a more detailed description of the synoptic situations and the associated weather prevailing during the month.

On February 1955 a further extension took place, the general summary of the weather conditions has been classified into different items to give more comprehensive information. More detailed surface climatological tables for selected stations and table for miscellaneous weather phenomena have been added to the Report.

On January 1956, the climatological tables included in the Report have been extended to include upper air climatological data to meet the increasing demand for this information.

In addition the full text of the monthly report of the standard observations taken at the Central Agro-Meteorological Station at Giza has been included in this Report instead of issuing it as a separate bulletin.

On January 1957, the Report has been completely revised, a new set of meteorological tables has been introduced to give, as far as possible, complete infromation for surface and upper air data from a more representative network of stations.

In addition, a general review of the observations taken in the fields of the plant breeding farm at Giza is included in the Report. The review gives a brief summary of the characteristic features of the different meteorological and micrometeorological elements of the month, more weight is given in this review to those elements which are of interest to agriculturists.

Starting from the Report of January 1958, the Monthly Weather Report for Egypt included a detailed description of the synoptic situations and the associated weather experienced all over the Republic during the month. The Report included a new set of tables giving more detailed surface and upper air climatological data for selected stations in the Republic. The review of the Agrometeorological station at Giza and the normal observations made at the field of the station were also included in the Report.

As from January 1960, these tables have been totally revised and some new tables have been introduced to include more detailed climatological data.

In order to explain how the tables included in these Monthly Weather Reports have been compiled, detailed notes are included in the Report of January giving informations about the instruments used and their exposure, the methods of observations and the methods of computing the means and frequencies.

As from January 1964, the Monthly Weather Report was again totally revised. The number of meteorological stations appearing in the Report have been concentrated in the main synoptic stations working mostly continuously 24 hours. In addition climatological data included in the Report will be confined to the monthly mean values, monthly totals, monthly frequencies and monthly absolute values. More specific climatological data have to be requested from the Meteorological Authority.

Starting from the Report of January 1958, the monthly Weather Report of Egypt carries serial reference in volume and number; each year carries a serial number in volume, Number I, being for January and 12 for December. The reference number of January 1958 is volume I, number I.

Cairo, January 1973

Chairman (M. F. TAHA)
Board of Directors

INTRODUCTION AND EXPLANATION OF THE TABLES

For the purpose of this Monthly Weather Report, the Arab Republic of Egypt is divided into six climatic districts as follows :

Number	District	Number	District
I	Mediterranean Area	IV	Upper Egypt
II	Lower Egypt	V	Western Desert
III	Cairo Area	VI	Red Sea Area

The data included in Tables A1, A2 A3, A4 & A5, are based on surface observations made at a representative selection of the basic network of synoptic stations. The data included in Tables B1, B2 & B3 refer to Upper Air observations. The data included in Tables C1, C2, C3, C4 & C5, are based on observations taken at the Agro-Meteorological stations at Bahtim, Tahrir, Mersa Matruh and Kharga. The observation fields are considered for the moment as dry and bare fields. At Kharga Oasis, the observation field is of the size of about 4000-6000 square metres.

The soil characteristics of these fields are :

	MERSA MATRUH	TAHRIR	BAHTIM	KHARGA
Top soil type	not available at present	Pure sand	not available at present	Sandy loam granular non-compact
Top soil depth	,,	More than 3 metres.	,,	20 cms.
Sub soil type	,,	Pure sand	,,	Platy clay. non compact
Slope of ground and its direction	,,	½% towards East & North	,,	Flat (0-0.3%)
Level of water table	,,	More than 5 metres	,,	More than [illegible] metres

Except for the wind speed which is expressed in knots, the metric units are used throughout this report and are as follows :

—The atmospheric pressure is expressed in millibars (one millibar = 1000 dynes per square centimetre = the pressure due to 0.7501 millimetre of mercury at 0°C at latitude 45°).

—Air and soil temperatures in degrees celsius (°C).

—Relative humidity (%),

—Rainfall in millimetres,

—Snow depth in centimetres,

—Duration of bright sunshine in hours,

—Sky cover in octas,

—Evaporation in millimetres,

—Altitude of pressure surface in geopotential metres,

—Mean wind speed of the whole day, and of the day-time and the night-time intervals in metres per second,

—(Solar + Sky) radiation in gram-calories per centimetre square,

—Vapour pressure in millimetres.

TABLE A1.—**Monthly values of the Atmospheric Pressure, Air Temperature, Relative Humidity, Bright Sunshine Duration & Piche Evaporation**

Atmospheric Pressure.

The monthly mean values of the daily atmospheric pressure corrected to Mean Sea Level (M.S.L.) are the arithmetic means over the month of their corresponding daily hourly values or of the daily obser vations taken at the 8 synoptic hours (00,03, 06, 09, 12, 15, 18 & 21 UT). The atmospheric pressure is measured by mercury barometers installed indoors; The Mean Sea Level Pressure (M.S.L.) is the barometer reading corrected for the height of the barometer cistern above or (below) the Mean Sea Level at the station. Corrections for index, temperature and latitude have been applied to the barometer readings before reduction to M.S.L. Deviations from normals appear besides monthly mean values in a separate column.

Air Temperature :

The monthly mean values of the maximum (A) and of the minimum (B) air temperatures are computed from their corresponding daily routine values observed over the month. The maximum (mercury) and the minimum (alcohol) thermometers are freely exposed in the louvred screens with their bulbs at a height of 160 to 170 centimetres above the ground. Deviations from normals appear besides monthly mean values.

The monthly mean values of (A + B)/2 are computed from their corresponding daily calculated values over the month.

The monthly mean values of the dry and of the wet bulb air temperatures are the arithmetic means over the month of their corresponding daily hourly values or of their corresponding values at the 8 synoptic hours (00, 03, 06, 09 12, 15, 18 & 21 UT). The dry and wet bulb thermometers used are of the mercury type and are freely exposed in sloping double roofed louvred screens with their bulbs at a height of 140-150 centimetres above the ground. Deviations from normals appear besides monthly mean values in a separate coulmn.

Relative Humidity :

The mean daily R. Humidity during the month is derived from the mean daily values of the dry and wet bulb temperatures using Jelinek's Psychrometer Tables (Leibzig 1911). The mean daily values of the dry and wet bulb air temperatures are as indicated in the last paragraph. No corrections for wind speeds or atmospheric pressure are applied. Deviations from normals appear besides monthly mean values in a separate column.

Bright Sunshine Duration

The actual duration of bright sunshine for the month is the sum of the actual daily bright sunshine durations. The total possible duration for the month is the sum of the daily calculated periods between sunrise and sunset. In calculating the possible duration of sunshine for a given day, the periods of cut-off for that day caused by obstacles, such as mountains are eliminated from the possible duration with an ideal flat horizon. In case of stations where the record of day or more is or are missing, the total actual duration is given between brackets and a note is added at the end of the table giving the actual number of records (days) used in summing up this total actual. In such cases the corresponding total possible duration is also given in brackets and it is the sum of the possilbe duration of the days of the available records. The percentage of the actual to the possible duration appears besides the total possible values in a separate column. The duration of bright sunshine is measured by the Campbell-Stokes sunshine recorders which are suitably exposed.

Evaporation (Piche) :

The monthly mean value of piche evaporation is computed from its daily routine values observed at 0600 UT over the month. Evaporation measurements are taken once daily at 0600 UT and give the evaporation for the previous 24 hours. The evaporation readings are measured by a piche tube freely exposed in sloping double roofed louvred screens, the evaporation disc has an effective area of 10.1 centimetres square, white in colour, and at a height of 140-150 centimetres above the ground.

TABLE A2.—**Maximum & Minimum Air Temperatures**

Higher and lower limits of both maximum and minimum temperatures and their corresponding dates of occurrences during the month are extracted from the daily readings of maximum (mercury) and minimum (alcohol) thermometers respectively. These dates are included for actual occurrences up to three ; when exceeding three, the symbol* is added beside the last three dates.

The number of days during the month with maximum air temperature above 25°C, 30°C, 35°C, 40°C &45°C and with minimum air temperature below 10°C, 5°C, 0°C & —5°C are included also in this table under separate columns.

The types and exposure of the maximum and of the minimum thermometers are as indicated in the notes on table A1.

The monthly mean values of grass minimum temperatures are the arithmetic means over the month of their corresponding daily values. The grass minimum temperatures are measured by ordinary minimum(alcohol)thermometers suitably exposed in the open air at the station field on special stands with their bulbs at a height of 5 centimeters above ground just touching the grass tops if there is any. Grass minimum thermometres readings are taken daily as a routine base at 0600 U.T. Deviations from normals appear besides mean values in a separate column.

TABLE A3.—**Sky Cover & Rainfall**

The monthly mean values of the total sky cover at the principal hours (00,06,12 & 18 UT) are computed from their corresponding daily routine values observed during the month. Mean values of the daily total sky cover is the arithmetic means over the month of the daily hourly values or of the daily observations taken at the 8 synoptic hours (00, 03, 06, 09, 12, 15, 18 & 21 U.T). Sky cover is in octas.

The monthly total rainfall is the total rainfall during the month. The maximum daily rainfall and the number of days with rain<0.1 and more than or equal 0.1, 1, 5, 10, 25 & 50 mms are extracted from the routine daily rainfall totals during the month. The rainfall for a given day is the amount of rain which has fallen during the 24 hours commencing at 0600 U.T of that day; when the amount of rain which has fallen is not large enough to be measured (less than 0.1 mm) the term "Trace" is entered as (Tr.). The amount of rainfall measured includes the water equivalent of the rain water which has frozen after falling and the water equivalent of solid precipitation if any such as hail. Dates of maximum rain in 24 hours are included for actual occurrences up to three ; when exceeding three, the symbol* is added besides the last three dates.

The amount of rainfall is normally measured by ordinary rain gauges. Some selected stations are also equipped with a recording type of rain gauge. The rim of both types of gauges are at a height of 90-100 centimetres above the ground.

TABLE A4.—**Number of Days of Occurrence of Miscellaneous Weather Phenomena**

This table gives the number of days of occurrence of rain, snow, ice pellets, hail, frost, thunderstorm, mist, fog, haze, thick haze, dust or sandrising, dust or sandstorm, gale, clear sky & cloudy sky. Except for rain (see notes on table A3) the days of occurrence of these weather phenomena are those days during which the phenomenon has occurred at any time between 2200, and 2200 U.T.

In compiling this table, the terminology and definitions of these different weather phenomena are as follows.

—A day of rain is the day during which the total amount of rainfall is 0.1 millimetre or more.

—A day of snow is the day during which snow or snow flakes or snow showers is or are observed even if it is or (they are) so small in quantity as to yield no measurable amounts of precipitation in the rain-gauge.

—A day of ice pellets is the day during which ice pellets are observed even if they are so small in quantity as to yield no measurable amounts of precipitation in the rain-gauge.

—A day of hail is the day during which either one or more of the following types of precipitation is or are observed, even if they are so small in quantity as to yield no measurable precipitation in the rain-gauge :

—Soft hail
—Small hail
—Hail stone

—A day of frost is the day during which frost is observed at the station.

—A day of thunderstorm is the day during which thunder is heard at the station whether lightning is seen or not. A day on which lightning is seen but thunder is not heard at the station is not counted as a day of thunderstorm.

—A day of mist is the day during which the surface horizontal visibility at the station has deteriorated and became equal to or greater than 1000 metres due to mist.

—A day of fog is the day during which the surface horizontal visibility at the station has deteriorated and fell below 1000 metres due to fog.

—A day of haze is the day during which the horizontal visibility at the station has deteriorated and became equal to or greater than 1000 metres due to haze.

—A day of thick haze is the day during which the horizontal visibility at the station has deteriorated and fell below 1000 metres due to thick haze.

—A day of dust or sandrising is the day during which the horizontal visibility at the station has deteriorated and became equal to or greater than 1000 metres due to dust or sandrising.

—A day of dust or sandstorm is the day during which the horizontal visibility at the station has deteriorated and fell below 1000 metres due to dust or sandstorm.

—A day of gale is the day during which the mean surface wind speed reached or exceeded 34 knots at the station for at least 10 minutes.

—A day of clear sky is the day on which the mean cloud amount at the station is less than 2/8.

—A day of cloudy sky is the day on which the mean cloud amount at the station is 6/8 or more

As regards the last two items above, the mean cloud amount for a day is the mean of the 24 hours, the 8 synoptic hours or the 4 main synoptic hours of cloud observations according to the number of the routine observations taken at the station.

TABLE A5.—**Number in Hours of Occurrences of Concurrent Surface Wind Speed and Direction Recorded Within Specified Ranges.**

The elements used in preparing this table are the mean hourly values of the surface wind speed and the corresponding mean hourly values of direction taken from the daily records of the surface wind instruments intsalled at the stations. These mean hourly values are extracted for every hour of each day of the month and they refer to a period of 60 minutes centred at the hour.

The number in hours of occurrences of the surface wind falling within the ranges of speed and direction indicated in the table is the number of cases when the mean hourly values of the surface wind as defined have satisfied these ranges.

The number in hours of "variable" winds is the number of cases where the surface wind showed no definite direction over the period of the 60 minutes centred at the hour or when the wind vane was sticking over that period due to the lightness of the wind and not responding to the variation in wind direction ; in such cases the mean wind speed over this period is normally less than 5 knots. The number in hours of "calm" winds is the number of cases where the surface wind has a mean speed of less than one knot over that period, whatever the mean wind direction over the same period is. The number in hours during which the recording instrument failed to record over the whole month is given under a separate column.

The instruments used for recording the surface wind are of the Dines Pressure Tube Anemograph.

This table follows the general lines of Model B of chapter 12 part IV of the WMO Technical Regulations 1959. The ranges of wind speed are (1-10),(11-27), (28-47) knots and 48 knots or more; the ranges for wind direction are twelve ranges of 30° each, beginning with the range (345°-014°) as being the true north.

This table gives the following data :

—The total number in hours of simultaneous occurrences of surface wind satisfying the specified ranges of speed and direction during the month,

—The total number in hours of occurrences of surface wind satisfying the specified ranges of speed during the month irrespective of their direction,

—The total number in hours of occurrences of surface wind blowing from the specified ranges of direction during the month irrespective of their speed.

UPPER AIR DATA

TABLE B1.—**Monthly Means and Monthly Absolute Higher & Lower Values of Altitude, air Temperature & Dew point at Standard and Selected Pressure Surface**

The routine upper air observations are taken at 0000 and 1200 UT, a separate table of this type is prepared for each hour. The number of cases the height of each of the pressure surfaces indicated in the table has been attained during the month, and the number of cases the temperatures and the dew points have been observed at each of these surfaces are given in the table against each element under column (N).

The monthly mean values of the altitude, temperature and dew piont at each of these pressure surfaces are the arithmetical means of the corresponding daily values over the number of cases (N) indicated against each element. Whenever it is not posible to obtain a complete set of daily values, a useful monthly mean value may be obtained as the mean of available values, taking in consideration; (a) number of missing observations not more than 10, and (b) there is no continuous period of 5 days without an assigned value.

The instruments used are of the radiosonde modulating frequency recording type ; the types of transmitters used do not need to apply any corrections for radiation.

This table follows the general lines recommended by the Commission for Climatology of the World Meteorological Organization Rec. 34 (CCL-1) ; it gives the following data for the hour of observation indicated at the top of the table ;

—The number of cases the height of each of the pressure surfaces has been attained during the month and the number of cases the temperature and dew point at these surfaces have been observed.

—The monthly mean values of the atmospheric pressure corrected to the ground level of the station (H) ; the highest and lowest values of this pressure observed during the month,

—The monthly mean values of the air temperature and of the dew point at the surface ; the highest and lowest values of the surface air temperature observed during the month.

—The monthly mean, the highest and the lowest values of the altitude for each of the pressure surfaces,

—The monthly mean, the highest and the lowest values of air temperature ; and the mean dew point at each of the pressure surfaces.

TABLE B2.—**Mean and Extreme Values of the Freezing Level and the Tropopause ; The Highest Wind Speed in the Upper Air**

The routine upper air observations are taken at 0000 and 1200 U.T. The number of cases the altitude of the freezing level and of the first tropopause have been attained during the month and the number of cases the pressures and the dew points or temperatures have been observed at these levels are given in the table against each element in the (N) box.

The monthly mean values of the altitudes of the freezing level and of the first tropopause and the monthly mean values of the pressures and of the dew points or temperatures at each of these levels are the arithmetical means of the corresponding daily values over the number of cases (N) indicated in the box of each element.

The first tropopause is determined in accordance with the definition adopted by the Executive Committee of the World Meteorological Organization Resolution 21 (Ec - IX).

This table is based on wind observations taken by the SCR—658 or the Metox radiotheodolites working simultaneously with the radiosonde observations. The types of radiosonde instruments used are given in the notes on table B1.

This table gives the following data for each hour of observation :

—The number of cases the freezing level has been attained during the month and the number of cases the pressure and dew point have been observed at this level.

—The number of cases the altitude of the first tropopause has been attained during the month and the number of cases the pressure and the temperature have been observed at this level.

—The monthly mean values of the altitude, pressure and dew point of the freezing level.

The altitudes, pressures and dew points of the highest and lowest freezing level observed during the month.

—The monthly mean values of the altitudes, pressures and temperatures of the first tropopause.

—The altitudes, pressures and temperatures of the highest and lowest first tropopause observed, during the month.

—The direction and speed of the highest wind speed observed during the month, the altitude and the pressure at which this wind has been observed.

TABLE B3.—**Number of Occurrences of Wind Direction Within Specified Ranges and the Mean Scalar Wind Speed at the Standard and Selected Pressure Surfaces**

The routine upper air observations are taken at 0000 and 1200 U.T. A separate table of this type is used for each station.

The mean scalar wind speed "ffm" of winds blowing from each range of directions at a given pressure surface, is the arithmetical mean of the corresponding daily values of wind speed for the numbe of cases "N" during the month.

The term "Calm" is used in this table to denote wind speed of less than one knot.

This table is based on the wind observations taken at the station as indicated in the notes on table B2.

This table, as in the case of table B1, follows the general lines recommended by the Commission for Climatology of the World Meteorological Organization REC. 34 (CCL-1) : the ranges of wind direction used are tweleve ranges of 30° each beginning with the range (345°—014°) as being the true north. It gives the following data for the hour of observation indicated :

—The number of cases (N) the wind has been observed from the specified ranges of direction at the surface of the station and at the different pressure surfaces during the month.

—The mean scalar wind speeds (ffm) blowing from the specified ranges of direction at the surface of the station and at the different pressure surfaces,

—The number of cases of "calm" winds at the surface of the station and at the different pressure surfaces.

—The total number of cases (TN) the wind has been observed at the surface of the station and at the different pressure surfaces during the month irrespective of the wind direction.

—The mean scalar wind speeds at the surface of the station and at the different pressure surfaces blowing from all directions.

AGRO—METEOROLOGICAL DATA

Reviews of Agrometeorological Stations at Mersa Matruh, Tahrir, Bahtim & Kharga.

The monthly review of all agrometeorological elements that have been observed at each agrometeorological station includes a general summary of pronounced weather phenomena that prevailed during the month together with a comparison between the monthly values of this year and last year of specified elements that are of great interest to agriculturists as well as to agrometeorologists. For some elements, when observations are of a long time, departure from normal values appears also in the monthly review.

During winter, the monthly review includes normally the days of minimum air temperature below 0°C at the height of five centimetres above the ground.

TABLE C1.—**Air Temperature at 1½ Metres Above Ground**

The monthly mean values of the maximum, minimum, night-time mean, day-time mean and mean of day of air temperatures are the arithmetic means over the month of their corresponding daily values. The mean air temperature of a day is the mean of the eight values of the dry bulb temperature occuring at each of the principal and secondary observation hours, the value at 0000, 0300, & 2100 U.T. being extracted from the record of the dry bulb thermometer of a mercury in steel hygrograph, except at Mersa Matruh and Kharga where they are obtained from visual readings.

The night-time mean temperature of a day is the mean temperature for the period from sunset of the previous day to sunrise of the same day. The day-time mean temperature refers to the period from sunrise to sunset of the same day. Both night-time and day-time mean temperatures are computed from empirical formulae, which may vary from month to month but are common for all centres. These formulae were found by trial comparison with true means of the year 1966. The errors were never permitted to reach a whole degree, and usually stayed equal to or lower than 0.5°C.

The duration of air temperatures above a specified limit of temperature is obtained graphically from the same recording charts, daily to the nearest whole hour.

The maximum (mercury), the minimum (alcohol) and the dry bulb (mercury ventilated) thermometers are freely exposed in louvred Stevenson screens of the Egyptian type with their bulbs at a height of 190-195 centimetres above ground for the maximum and minimum thermometers, and 170 cms approximately for the dry bulb thermometer ; the recording thermometer used is of the bi-metallic type and is exposed in a similar screen ; the height of the bi-metallic piece is 165 centimetres approximately above the ground.

TABLE C2.—**Extreme Values of Maximum & Minimum Air Temperatures at 1½ metres above Ground, Absolute Minimum Air Temperature at 5 cms above Ground over Different Fields.**

The extreme values of maximum and minimum air temperatures at 1½ metres above ground and of minimum air temperatures at 5 cms above ground over dry fields are extracted from their routine values. Dates of occurrences are included in separate columns beside the extreme value. Extreme values of maximum & minimum air temperature at 1½ metres inculde the Highest & Lowest limits of the daily corresponding routine values during the month.

The thermometres used for minimum air temperature at 5 cms above ground are of the ordinary minimum type (alcohol) with the bulbs screened with small separate screens of horizontal 5 cm. length and 2 cm. diameter metal tubing painted whité outside and black inside, and centered on the thermometer bulbs.

TABLE C3.—**(Solar + Sky) Radiation, Duration of Bright Sunshine, Relative Humidity. Vapour Pressure at 1½ meters above Ground, Evaporation & Rainfall.**

The monthly total values of the (solar+sky) Radiation, Bright Sunshine duration, Evaporation & Rainfall are the sums of their corresponding daily values for the month. The monthly mean values of the (Solar+Sky) Radiation, Relative Humidity & Vapour pressure at 1½ metres and Evaporation are the arithmetic means of their corresponding daily values for the month respectively.

The (Solar + Sky) Radiation is obtained from the records of a Robitzsch Actinograph ; the Robitzsch values at Bahtim and Tahrir are regularly compared with the records of an Eppley pyrheliometer installed at the station. The sensitive elements of the Robitzsch Actinograph and of the Eppley phyrheliometer are at 100 cms approximately above the ground.

The types of instruments used for the measurement of the duration of bright sunshine, their exposure and the evaluation of the durations are as given in the notes on table A1.

The relative humidity and vapour pressure values for Tahrir, Bahtim and Kharga are derived from the readings of ventilated dry and wet bulb mercury thermometers freely exposed in the screen using the Aspirations psychrometer Tafeln of the Deutscher Wetterdienst 1955. The relative humidity and vapour pressure values for Mersa Matruh are drived from the readings of unventitlated dry and wet bulb mercury thermometers freely exposed in the screen, using the Jelineks Psychrometer Tables (Leibzig 1911). No corrections are applied for the wind speeds or the atmospheric pressure. The height of the bulbs is 170 cms approximately above the ground.

The mean relative humidity or vapour pressure for a given day is the mean of the eight principal and secondary observation values which are extracted from the readings of the dry and wet bulb thermometers, the values at 0000, 0300, and 2100 U.T. being extracted from the records of the mercury in steel hygrograph except at Mersa Matruh and Kharga where these values are obtained from visual readings of the dry and wet bulb thermometers.

The mean monthly values of the relative humidity or vapour pressure are the means of the corresponding mean daily values during the month. The lowest value of the relative humidity and its date of occurrence are obtained from the records of a hair hygrograph exposed in the screen, the height of the hair is 170 centimetres approximately above the ground.

The extreme maximum and minimum values of vapour pressure during the month are extracted from the values of the eight prinicipal and secondary observations.

Evaporation measurements are taken once daily at 0600 U.T. from a Piche tube and also a class "A" evaporation pan and give the evaporation for the previous 24 hours. The Piche tube is installed in the screen with the dry bulb, maximum and minimum thermometers ; the colour and effective area of the evaporation disc are as given in the notes on table A1. The class "A" evaporation pan is of the type recommended by the commisision of instruments and methods of observation of the World Meteorological Organization Rec 42 (CIMO-56); it is of a cylindrical shape, 25.4 centimetres deep, 120.6 centimetres in diameter (inside dimentions). The pan except at Bahtim is freely exposed in the open air in the dry field, its rim at a height of 41 centimetres above ground away from obstacles such as buildings or trees. At Bahtim the pan is protected from animals and birds by a cylindrical cover of the same diameter as the pan and 30 cm high made of metal wire mesh of one cm. side. Reduction of evaporation by 11% —established by systematic study-is being allowed for in the data published.

The types of instruments used for measuring the amount of rainfall, their exposure and the evaluation of these amounts are given in the notes on table A3.

TABLE C4.—**Extreme Soil Temperature at Different Depths (cms) in Dry Fields**

The highest and lowest values of soil temperatures at the selected depths in dry fields are extracted from their corresponding daily routine values.

The soil temperature readings are taken in the dry fields at the specified depths ranging from 2 cms to 300 cms in each field as indicated in the table. These readings are taken regularly during the period from 0600 to 1800 U.T. according to the following schedule, except at Kharga where the observations are as appropriate but extend in the period between 1800 and 0600 U.T.

— at 0600 U.T. and every three hours for the 2,5 and 10 cm depths.

— at 0600 U.T. and every six hours for the 20 and 50 cms depths.

— at 1200 U.T. for the 100 and 200 cms. depths.

— at 0900 U.T. once every 3 days for the 300 cms depth.

The thermometers used are of the Fuess or the Friedrich types.

TABLE C5.—**Surface Wind**

The monthly values of the daily mean, the night time mean and of the day time mean of the surface wind speed is the arithmetic mean of their corresponding daily evaluated values for the month respectively. The mean wind speed of the day is computed for the period of 24 hours from 1800 U.T. of the previous day ; the night-time mean wind speed of the day is obtained from the total run of air during the period 1800 U.T. of the previous day to 0600 U.T. of that day ; the day-time mean is similarly computed for the period 0600 to 1800 U.T. of the same day. The type of the wind instrument used is of the run counter of the Lambrecht type ; the cups of which are at $1\frac{1}{2}$ metres above the ground.

The number of days with surface wind speed reaching or exceeding specified values of velocities ($\geq$10 Knots, $\geq$15 Knots, $\geq$20 Knots, $\geq$25 Knots, $\geq$30 Knots, $\geq$35 Knots and $\geq$40 Knots) for at least 5 minutes at any time between 2200 & 2200 U.T. irrespective of its direction are extracted from the daily routine analysis of surface wind records during the whole month. The daily records of the Dine Pressure Tube Anemograph are used, the highest gust refer to the highest excursion made by the velocity pen on the records during the month. The head of the instrument is at a height of 10 metres above the ground level.

LIST OF STATIONS APPEARING IN THE REPORT — SYNOPTIC AND CLIMATOLOGICAL STATIONS

Districts.	Station	Index Number II iii	Latitude °N	Longitude °E	Elevation of the ground H or Ha (metres)	Altitude of the Station Hp (metres)	Altitude of the barometric Cistern (metres)	Height of Wind recording instrument (metres) above building	Height of Wind recording instrument (metres) above ground	Synoptic Observations 00	03	06	09	12	15	18	21	Hourly Observations (H) Half hourly obs. ns (h) (0000—2400)	Upper air observations P (Pilot Ballon) W (Radio Wind) R (Radio Sonde) 00	06	12	18	Remarks
Mediterranean	Sallum	62	300	31 33	25 11	4.0	6.0	5.2	10.0	14.0	×	×	×	×	×	×	×	×	H	P	—	P	—	
	Mersa Matruh (A)		306	31 20	27 13	30.7	30.0	30.0	10.0	17.5	×	×	×	×	×	×	×	×	H	RW	W	RW	W	
	Alexandria (A)		318	31 12	29 57	—3.35	6.78	6.45	10.0	22.08	×	×	×	×	×	×	×	×	H	P	—	P	—	
	Port Said (A)		333	31 17	32 14	1.1	6.1	2.7	—	—	×	×	×	×	×	×	×	×	H	P	—	P	—	
	El Arish		336	31 07	33 45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Ghazza		338	31 30	34 27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Lower Egypt	Tanta		348	30 47	31 00	7.31	14.85	12.51	10.0	12.0	×	×	×	×	×	×	×	×	H	—	—	—	—	
Cairo Area	Cairo (A)		366	30 08	31 24	111.54	74.5	64.72	—	10.0	×	×	×	×	×		×	×	h	—	—	—	—	
	Helwan		378	29 52	31 20	139.20	140.68	140.68	—	10.0	×	×	×	×	×	×	×	×	—	RW	W	RW	W	
Upper Egypt	Fayoum		381	29 18	30 51	23.43	—	—	10.0	13.8	—	—	×	×	×	×	×	—	H	—	—	—	—	
	Minya (A)		387	28 05	20 44	39.6	40.5	44.2	10.0	20.15	×	×	×	×	×	×	×	×	H	P	—	P	—	
	Assyout (A)		393	27 11	31 06	71.68	69.6	69.6	15.0	20.0	×	×	×	×	×	×	×	×	H	—	—	—	—	
	Luxor (A)		405	25 40	32 42	95.0	88.45	88.45	10.0	21.0	×	×	×	×	×	×	×	×	H	P	—	P	—	
	Aswan (A)		414	23 58	32 47	200.0	193.5	198.96	10.0	15.0	×	×	×	×	×	×	×	×	H	RW	W	RW	W	
Western Desert	Siwa		417	29 12	25 29	—15.0	-13.26	-13.26	10.0	14.6	×	×	×	×	×	×	×	×	H	P	—	P	—	
	Bahariya		420	28 20	28 54	128.0	129.5	129.5	—	—	×	×	×	×	×	×	×	×	H	P	—	P	—	
	Farafra		423	27 03	27 58	90.0	92.1	92.1	—	—	—	—	×	×	×	×	×	—	H	—	—	P	—	
	Dakhla		432	25 29	29 00	106.21	111.27	107.75	10.0	14.7	×	×	×	×	×	×	×	×	H	P	—	P	—	
	Kharga		435	25 27	30 32	77.79	72.75	78.68	10.2	14.2	×	×	×	×	×	×	×	×	H	P	—	P	—	
Red Sea	Tor		495	28 14	33 37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Hurghada		462	27 17	33 46	1.0	2.75	2.75	10.0	15.0	×	×	×	×	×	×	×	×	H	—	—	P	—	
	Quseir		465	26 08	34 18	8.7	10.83	10.0	10.0	14.4	×	×	×	×	×	×	×	×	H	—	—	—	—	

GENERAL SUMMARY OF WEATHER CONDITIONS

JANUARY 1972

Generally cold and humid intervened with few warm days.
Subnormal rainfall in the north.

GENERAL DESCRIPTION OF WEATHER

The prevailing weather this month was generally cold and humid with subnormal temperatures most of the month. Coldness was pronounced during night time particularly in the Western Desert & Middle Egypt, where minimum air temperatures approached or fell to 0°C in some nights. The month was intervened by few days of warm weather.

Light and subnormal rain fell over the northern parts in several days and extended to Cairo area on the 14th & 20th.

Early morning mist and fog developed frequently over scattered places in Delta, Cairo and northern parts of Upper Egypt districts.

Light rising sand blew in several occasions over few scattered localities mainly in Upper Egypt.

PRESSURE DISTRIBUTION

The outstanding pressure systems over the synoptic surface charts during this month were :

— High pressure north of the black Sea and its extensions over Europe and East Mediterranean.

— Secondary depressions through the Mediterranean.

— The Sudan monsoon trough.

Over the upper air charts, the important pressure patterns were :

— The deep upper low pressure systems over North Atlantic and North Russia, and their southern extensions through middle latitudes.

— The transits of consecutive upper troughs through East Mediterranean and Egypt round the 4th, 11th, 14th, 25th & 28th, the first two of which were weak ; and an upper low round the 21st.

— Upper high pressure system over the subtropics south of latitude 30°N.

During this month five depressions passed through the Mediterranean area. The first depression appeared over West Mediterranean together with a secondary depression over Algiers on the 6th. This system proceeded slowly eastwards and filled up over Central Mediterranean on the 11th. The second depression developed over West Mediterranean on the 12th, moved slowly southeastwards and traversed East Mediterranean on the 16th. The third depression appeared over West Mediterranean on the 17th and moved eastwards. It filled up east of Greece on the 21st, while a new depression developed also over West Mediterranean and proceeded eastwards; passing through East Mediterranean on the 26th. The last depression in this month appeared over Italy on the 25th, and remained quasi- stationary till it filled up on the 30th.

The Sudan monsoon trough showed four pronounced northward elongations on the 4th, 10th, 13th, & 31st.

High pressure operated during the first ten days of the month over the Black Sea and East Mediterranean and accordingly the barometric pressure over Egypt was in this period above normal, though it experienced two minor falls on the 4th and 10th. Otherwise the pressure field experienced consecutive oscillations and attained pronounced minima round the 13th, 16th, 20th, 25th & 31st.

SURFACE WIND

The prevailing surface winds in the northern parts of the Country were generally light to moderate W/NW and occasionally SWly in few days. In the southern parts of the Republic, light to moderate Nly and NWly winds prevailed. Winds became fresh or strong during several days mainly in the Red Sea district.

Calms were frequent most of late night and early morning intervals in scattered land localities.

TEMPERATURE

Maximum and minimum air temperatures continued below normal the whole month apart from few warm days.

Maximum air temperature values ranged generally between 17° & 22°C in the northern and middle parts, and between 21° & 25°C in the southern parts.

The highest maximum air temperature for the country in this month was 29.6°C reported at Kom-Ombo on the 20th.

Minimum air temperatures ranged most of the month, between 1° & 8°C in the Western Desert and Middle Egypt, and between 6° & 13°C otherwise.

The lowest minimum air temperature for the country in this month was — 1.5°C reported at Dakhla on the 9th.

PRECIPITATION

Light rain was reported during several days over the Mediterranean district and extended southwards to Cairo area on the 14th & 20th. The monthly rainfall was below normal and the departure from normal was appreciable in the Mediterranean district in particular.

The highest daily rainfall for Egypt in this month was (14.1 mms) at Ras-el-Teen on the 16th.

The highest monthly rainfall for Egypt in this month was (38.9 mms) at Ras-el-Teen.

Cairo, January 1973

Chairman (M. F. TAHA)
Board of Directors

SURFACE DATA

Table A 1.—MONTHLY VALUES OF THE ATMOSPHERIC PRESSURE, AIR TEMPERATURE, RELATIVE HUMIDITY, BRIGHT SUNSHINE DURATION & PICHE EVAPORATION

JANUARY 1972

STATION	Atmospheric Pressure (mbs) M.S.L.		Air Temperature °C									Relative Humidity %		Bright Sunshine Duration (Hours)			Piche Evaporation (mms.)
			Maximum		Minimum			Dry Bulb		Wet Bulb							
	Mean	D.F. Normal or Average	(A) Mean	D.F. Normal or Average	(B) Mean	D.F. Normal or Average	$\frac{A+B}{2}$	Mean	D.F. Normal or Average	Mean	D.F. Normal or Average	Mean	D.F. Normal or Average	Total Actual	Total Possible	%	Mean
Sallum	1017.1	—0.4	19.1	+0.2	9.6	+0.4	14.4	13.8	—0.4	10.2	—0.1	60	+ 2	—	—	—	5.4
Mersa Matruh (A)	1018.2	+0.8	17.9	—0.3	8.4	+0.1	13.2	12.8	—0.1	10.4	+0.6	73	+ 8	253.6	320.1	79	3.4
Alexandria (A)	1018.3	+0.6	18.4	—0.1	8.3	—1.0	13.4	13.0	—0.6	10.7	—0.3	74	+ 4	245.0	321.8	76	3.0
Port Said (A)	1016.9	—0.5	19.2	+1.1	11.2	—0.2	15.2	14.5	+0.2	11.5	—0.4	68	— 4	240.9	321.8	75	4.1
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1017.9	0.0	18.9	-0.8	5.5	—0.7	12.2	11.5	—1.1	9.3	—0.7	74	+ 4	251.6	322.8	78	2.0
Cairo (A)	1017.8	—0.2	18.8	—0.2	8.7	—0.1	13.8	13.5	—0.3	9.9	—0.2	60	+ 1	—	—	—	7.8
Fayoum	—	—	20.5	+0.1	5.4	—0.9	13.0	12.4	—0.9	9.6	—0.3	65	+ 4	—	—	—	3.1
Minya (A)	1017.2	—1.4	20.1	—0.6	3.6	—0.4	11.8	11.4	—0.5	8.0	—0.2	59	+ 1	266.9	328.2	81	3.9
Assyout (A)	1015.8	—2.7	20.1	—0.7	6.2	—0.6	13.2	12.6	—1.0	7.9	—0.5	47	+ 1	—	—	—	7.4
Luxor (A)	1015.9	—1.2	23.0	—0.1	4.5	—1.1	13.8	13.3	—0.9	8.8	—0.7	50	— 2	—	—	—	4.3
Aswan (A)	1015.8	—1.2	22.8	—1.4	7.8	—0.6	15.3	15.1	—0.9	8.6	—0.5	35	+ 2	—	—	—	12.1
Siwa	1017.4	—1.3	20.1	+0.4	4.2	—0.1	12.2	11.7	—0.2	7.7	—0.2	53	+ 1	257.1	325.9	79	4.5
Bahariya	1018.2	—0.4	19.7	—0.3	4.0	—0.5	11.8	11.5	—1.3	7.4	—0.9	52	+ 2	—	—	—	4.8
Farafra	1018.8	—1.5	19.6	—1.2	3.3	—1.1	11.5	11.1	—1.5	7.4	+0.8	55	+13	—	—	—	5.5
Dakhla	1018.3	+0.2	20.8	—0.7	2.8	—1.5	11.8	11.6	—0.9	6.6	—0.4	42	+ 5	—	—	—	6.4
Kharga	1017.1	—0.9	21.5	+0.3	5.6	—0.3	13.6	14.0	—0.2	8.0	—0.8	42	— 3	280.1	333.8	84	7.5
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	1016.2	—0.5	21.2	+0.4	9.4	—0.3	15.3	15.2	—0.7	10.8	—0.2	54	+ 2	284.1	330.5	86	8.6
Quseir	1015.6	—0.9	21.4	—1.2	13.6	—0.2	17.5	17.4	—0.9	12.4	—0.5	52	+ 3	—	—	—	7.6

Table A 2.—MAXIMUM AND MINIMUM AIR TEMPERATURES

JANUARY — 1972

Station	Maximum Temperature °C									Grass Min. Temp.		Minimum Temperature °C							
	Highest	Date	Lowest	Date	No. of Days with Max-Temp.					Mean	Dev. From Normal	Highest	Date	Lowest	Date	No. of Days with Min. Temp.			
					>25	>30	>35	>40	>45							<10	<5	<0	<-5
Sallum	22.1	1	16.0	27	0	0	0	0	0	8.8	—	11.7	14	7.0	28	17	0	0	0
Mersa Matruh . (A)	20.2	1	16.0	20	0	0	0	0	0	6.3	—	11.0	6	4.2	29	26	1	0	0
Alexandria . . (A)	20.4	24	16.0	14	0	0	0	0	0	6.5	—	12.5	5	5.4	23,24	25	0	0	0
Port Said . . (A)	21.5	2	15.1	28	0	0	0	0	0	10.6	—	14.5	10	8.2	18	9	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	20.9	19	14.6	20	0	0	0	0	0	—	—	8.7	20,21	1.8	26	31	12	0	0
Cairo	22.4	19	17.2	14	0	0	0	0	0	—	—	14.1	20	5.7	30	24	0	0	0
Fayoum	23.3	24	18.6	6,20	0	0	0	0	0	3.4	—	10.6	20	1.6	19	30	15	0	0
Minya . . . . (A)	22.4	19	17.6	17	0	0	0	0	0	0.6	—	10.0	20	1.0	19	30	22	0	0
Assyout. . . . (A)	24.5	12	17.5	17	0	0	0	0	0	2.8	—	13.0	20	2.8	8	30	11	0	0
Luxor . . . . (A)	25.6	19	18.6	27	1	0	0	0	0	0.4	—	11.0	27	1.8	29	30	22	0	0
Aswan . . . . (A)	27.4	20	19.9	27	2	0	0	0	0	—	—	13.6	27	5.4	11	26	0	0	0
Siwa	22.2	4,9,10	17.3	21	0	0	0	0	0	3.8	—	9.3	20	1.4	1	30	24	0	0
Bahariya	22.3	19	17.7	16,28	0	0	0	0	0	3.6	—	13.0	20	— 0.4	29	30	22	1	0
Farafra	23.1	25	15.5	6	0	0	0	0	0	3.3	—	12.6	20	0.0	1	30	26	0	0
Dakhla	24.1	12	18.2	26	0	0	0	0	0	3.0	—	9.4	20	— 1.5	9	31	22	3	0
Kharga	25.2	19	19.5	27	2	0	0	0	0	3.3	—	12.0	2	1.0	28	27	16	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	25.5	21	19.5	29	1	0	0	0	0	—	—	13.6	21	7.0	19	21	0	0	0
Qusier	28.8	21	19.4	29	2	0	0	0	0	11.5	—	18.0	21	11.8	17	0	0	0	0

Table A 3.—SKY COVER AND RAINFALL

JANUARY — 1972

Station	Mean Sky Cover (Oct.)					Rainfall mms.										
	00 U.T.	06 U.T.	12 U.T.	18 U.T.	Daily Mean	Total Amount	D. From Normal	Max. Fall in one day		Number of Days with Amount of Rain						
								Amount	Date	<0.1	≥0.1	≥1.0	≥5.0	≥ 10	≥ 25	≥ 50
Sallum	2.6	2.1	3.3	2.7	2.5	11.9	— 6.9	10.5	20	0	2	2	1	1	0	0
Mersa Matruh (A)	1.8	3.9	3.9	2.2	2.9	19.4	—11.3	11.6	20	2	5	4	1	1	0	0
Alexandria (A)	4.6	4.5	5.5	3.4	4.5	25.6	—23.5	6.2	16	1	9	8	2	0	0	0
Port Said (A)	1.4	2.4	2.5	1.3	1.8	2.3	—10.2	1.2	16	0	4	1	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1.7	2.1	4.2	1.3	2.3	3.2	— 7.0	2.7	20	0	3	1	0	0	0	0
Cairo (A)	0.7	2.7	4.0	1.6	2.1	0.6	— 4.6	0.5	20	0	2	0	0	0	0	0
Fayoum	—	1.6	3.4	1.4	—	Trace	— 1.0	Trace	20	1	0	0	0	0	0	0
Minya (A)	0.5	1.7	2.5	1.2	1.5	Trace	— 0.4	Trace	20	1	0	0	0	0	0	0
Assyout (A)	1.1	1.1	2.1	1.6	1.4	0.0	—Trace	0.0	—	0	0	0	0	0	0	0
Luxor (A)	1.8	2.4	2.6	2.2	2.2	Trace	— 0.1	Trace	27	1	0	0	0	0	0	0
Aswan (A)	1.4	2.4	2.4	1.7	2.0	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Siwa	1.6	2.0	3.7	1.5	2.2	1.7	+ 0.8	1.7	21	0	1	1	0	0	0	0
Bahariya	0.6	1.7	2.6	1.2	1.5	0.0	—Trace	0.0	—	0	0	0	0	0	0	0
Farafra	—	1.1	1.3	1.0	—	0.0	—Trace	0.0	—	0	0	0	0	0	0	0
Dakhla	0.2	1.0	1.3	0.3	0.7	0.0	—Trace	0.0	—	0	0	0	0	0	0	0
Kharga	1.2	2.0	2.3	1.3	1.6	0.0	— 0.1	0.0	—	0	0	0	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	1.0	2.3	3.1	1.8	2.0	0.0	—Trace	0.0	—	0	0	0	0	0	0	0
Quseir	1.0	2.0	3.2	2.1	2.2	0.1	+ 0.1	0.1	27	0	1	0	0	0	0	0

Table A 4.—DAYS OF OCCURRENCE OF MISCELLANEOUS WEATHER PHENOMENA

JANUARY — 1972

Station	Precipitation				Frost	Thunderstorm	Mist Vis ≥ 1000 Metres	Fog Vis < 10000 Metres	Haze Vis ≥ 1000 Metres	Thick Haze Vis < 1000 Metres	Dust or Sandrising Vis ≥ 1000 Metres	Dust or Sandstorm Vis < 1000 Metres	Gale	Clear Sky	Cloudy Sky
	Rain	Snow	Ice Pellets	Hail											
Sallum	2	0	0	0	0	0	0	0	0	0	0	0	0	9	1
Mersa Matruh (A)	5	0	0	0	0	1	0	0	0	0	4	0	0	7	0
Alexandria (A)	9	0	0	0	0	2	4	4	0	0	1	0	0	0	4
Port Said (A)	4	0	0	0	0	0	0	0	0	0	0	0	0	19	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	3	0	0	0	0	0	15	1	0	0	0	0	0	16	1
Cairo (A)	2	0	0	0	0	0	10	3	12	1	8	0	0	16	0
Fayoum	0	0	0	0	0	0	0	0	0	0	0	0	0	—	—
Minya (A)	0	0	0	0	0	0	9	3	11	0	5	0	0	20	1
Assyout (A)	0	0	0	0	0	0	2	1	0	0	1	0	0	23	0
Luxor (A)	0	0	0	0	0	0	0	0	22	0	4	0	0	16	1
Aswan (A)	0	0	0	0	0	0	0	0	2	0	11	0	0	16	1
Siwa	1	0	0	0	0	0	0	0	0	0	0	0	0	18	0
Bahariya	0	0	0	0	0	0	2	0	0	0	0	0	0	20	1
Farafra	0	0	0	0	0	0	3	0	1	0	1	0	0	—	—
Dakhla	0	0	0	0	0	0	0	0	0	0	0	0	0	27	0
Kharga	0	0	0	0	0	0	0	0	0	0	2	0	0	20	1
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0	0	0	0	0	0	0	0	0	0	2	1	0	17	3
Quseir	1	0	0	0	0	0	0	0	0	0	0	0	0	17	2

Table A 5.—NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES

JANUARY — 1972

Station	Calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurrences of wind blowing from the ranges of directions indicated												All directions
					345 / 014	015 / 044	044 / 074	075 / 104	105 / 134	135 / 164	165 / 194	195 / 224	225 / 254	255 / 284	285 / 314	315 / 344	
Sallum	55	0	0	1-10	5	22	38	42	31	41	36	45	54	113	64	22	513
				11-27	0	0	0	4	8	12	2	2	28	93	24	3	176
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**5**	**22**	**38**	**46**	**39**	**53**	**38**	**47**	**82**	**206**	**88**	**25**	**689**
Mersa Matruh	0	3	0	1-10	45	50	35	33	37	54	110	60	30	22	12	22	510
				11-27	1	6	8	26	32	15	9	29	59	23	8	15	231
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**46**	**56**	**43**	**59**	**69**	**69**	**119**	**89**	**89**	**45**	**20**	**37**	**741**
Alexandria	22	0	1	1-10	57	102	56	61	35	29	43	62	12	11	34	66	568
				11-27	5	22	15	8	3	0	2	24	23	13	20	18	153
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**62**	**124**	**71**	**69**	**38**	**29**	**45**	**86**	**35**	**24**	**54**	**84**	**721**
Tanta	19	0	0	1-10	99	107	61	35	18	6	22	52	62	55	54	71	642
				11-27	1	22	12	10	3	0	0	0	11	15	5	4	83
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**100**	**129**	**73**	**45**	**21**	**6**	**22**	**52**	**73**	**70**	**59**	**75**	**725**
Cairo	113	0	5	1-10	27	76	74	82	10	23	45	37	26	25	22	12	482
				11-27	10	41	31	15	9	5	12	11	10	17	3	0	164
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**37**	**117**	**105**	**97**	**19**	**31**	**57**	**48**	**36**	**42**	**25**	**12**	**626**
Fayoum	8	5	4	1-10	115	215	30	13	14	25	36	71	73	38	29	37	696
				1-27	0	19	10	0	0	0	0	0	1	1	0	0	31
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**115**	**234**	**40**	**13**	**14**	**25**	**36**	**71**	**74**	**39**	**29**	**37**	**727**
Minya	15	2	0	1-10	247	42	12	10	4	34	56	39	22	35	29	32	513
				11-27	71	19	0	0	0	0	0	0	1	3	8	12	114
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**318**	**61**	**12**	**10**	**4**	**34**	**56**	**39**	**23**	**39**	**37**	**94**	**727**
Assyout	28	5	10	1-10	20	9	10	9	17	24	11	6	16	264	186	44	597
				11-27	15	6	0	1	10	2	1	10	1	10	27	21	104
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**35**	**15**	**10**	**10**	**27**	**26**	**12**	**16**	**17**	**214**	**201**	**112**	**701**

Table A 5.(*contd,*)—NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES

JANUARY — 1972

Station	Calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number id hours of occurrences of wind blowing from the ranges of directions indicated												All directions
					345 / 014	015 / 044	845 / 074	075 / 104	105 / 134	135 / 164	165 / 194	195 / 224	225 / 254	255 / 284	285 / 314	315 / 344	
Luxor	5	0	4	1-10	59	70	60	64	30	55	116	39	25	59	65	61	703
				11-27	9	0	0	0	0	0	0	1	1	3	12	6	32
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**68**	**70**	**60**	**64**	**30**	**55**	**116**	**40**	**26**	**62**	**77**	**67**	**735**
Aswan	12	0	4	1-10	249	63	3	0	2	4	13	2	1	9	14	163	523
				11-27	74	39	0	0	0	0	0	0	0	0	5	87	205
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**323**	**102**	**3**	**0**	**2**	**4**	**13**	**2**	**1**	**9**	**19**	**250**	**728**
Siwa	145	24	5	1-10	4	5	21	60	102	93	29	16	30	123	60	8	551
				11-27	0	0	0	0	1	8	0	0	0	6	4	0	19
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**4**	**5**	**21**	**60**	**103**	**101**	**29**	**16**	**30**	**129**	**64**	**8**	**570**
Dakhla	109	21	0	1-10	59	43	16	32	18	27	62	59	51	88	98	59	612
				11-27	0	0	0	0	0	0	0	0	0	0	2	0	2
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**59**	**43**	**16**	**32**	**18**	**27**	**62**	**59**	**51**	**88**	**100**	**59**	**614**
Kharga	9	4	25	1-10	184	139	25	6	7	11	9	15	18	20	46	119	599
				11-27	68	23	0	0	0	0	0	0	0	0	4	12	107
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**252**	**162**	**25**	**6**	**7**	**11**	**9**	**15**	**18**	**29**	**50**	**131**	**706**
Hurghada	1	0	0	1-10	33	19	7	4	6	7	3	7	6	16	112	19	239
				11-27	94	12	0	0	3	5	2	1	0	6	250	122	495
				28-47	2	0	0	0	0	0	0	0	0	0	1	6	9
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**129**	**31**	**7**	**4**	**9**	**12**	**5**	**8**	**6**	**22**	**363**	**147**	**743**
Quseir	0	4	339	1-10	46	40	5	3	2	2	0	0	3	9	77	81	268
				11-27	69	43	0	0	0	0	0	0	0	0	2	19	133
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**115**	**83**	**5**	**3**	**2**	**2**	**0**	**0**	**3**	**9**	**79**	**100**	**401**

UPPER AIR CLIMATOLOGICAL DATA

Table B 1—MONTHLY MEANS AND MONTHLY ABSOLUTE HIGHER & LOWER VALUES OF ALTITUDE, AIR TEMPERATURE & DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

JANUARY 1972

Station	Pressure Surface (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Mersa Motruh 0000 UT	Surface	30	* 1016m.b.	* 1026m.b.	* 1005m.b.	30	11.3	15.0	8.6	30	7.6
	1000	30	164	243	70	30	12.6	15.4	9.4	30	8.0
	850	30	1512	1598	1415	30	5.0	14.8	0.0	30	— 2.3
	700	30	3074	3172	2955	30	— 3.6	3.4	—11.7	30	—16.7
	600	30	4277	4388	4133	30	—10.8	— 5.5	—19.5	30	—22.5
	500	30	5654	5786	5475	30	—20.8	—15.1	—29.3	30	—31.9
	400	29	7225	7430	7026	28	—31.5	—28.0	—42.1	28	—43.2
	300	28	9231	9430	8946	28	—45.3	—41.9	—49.0	27	—55.0
	250	27	10436	10747	10158	27	—51.1	—45.4	—57.7	27	—60.4
	200	26	11863	12045	11633	26	—55.8	—47.8	—63.8	16	—62.0
	150	25	13585	13854	13503	25	—59.3	—51.5	—68.4	13	—66.1
	100	20	16194	16323	16063	20	—64.5	—58.5	—67.5	1	—75.7
	70	16	18364	18452	18269	16	—63.5	—60.0	—68.5	—	—
	60	15	19341	19460	19200	15	—62.3	—58.6	—65.1	—	—
	50	15	20433	20534	20306	15	—61.2	—58.0	—64.1	—	—
	40	10	21879	22000	21730	10	—59.7	—56.9	—63.5	—	—
	30	9	23614	23707	23464	9	—57.8	—55.1	—60.4	—	—
	20	4	26228	26317	26146	4	—54.0	—52.3	—56.3	—	—
	10	—	—	—	—	—	—	—	—	—	—
Helwan 0000 UT	Surface	24	* 1001m.b.	* 1010m.b.	* 990m.b.	24	10.6	14.0	9.0	24	5.9
	1000	24	149	220	62	14	10.7	11.7	9.2	14	6.8
	850	24	1494	1566	1415	23	4.7	10.0	1.7	23	— 5.3
	700	24	3057	3122	2970	24	— 2.5	1.4	— 7.7	24	—15.9
	600	23	4262	4354	4155	23	—10.1	— 6.9	—15.5	23	—23.6
	500	23	5641	5753	5510	23	—19.8	—16.6	—24.6	23	—31.8
	400	22	7262	7384	7096	22	—31.6	—28.3	—37.3	22	—42.1
	300	21	9247	9369	9086	21	—45.9	—41.3	—50.5	21	—55.7
	250	21	10442	10550	10294	21	—52.5	—45.6	—57.4	20	—61.7
	200	21	11864	11965	11727	20	—57.8	—49.5	—64.9	13	—65.0
	150	17	13682	13767	13582	17	—60.6	—54.0	—69.1	7	—67.4
	100	16	16177	16283	16050	16	—67.2	—64.3	—69.5	—	—
	70	14	18332	18437	18219	14	—65.1	—59.5	—68.2	—	—
	60	12	19303	19430	19186	12	—64.9	—60.5	—69.4	—	—
	50	12	20389	20505	20259	12	—60.3	—57.8	—65.7	—	—
	40	10	21874	22000	21710	10	—59.1	—56.4	—61.0	—	—
	30	9	23591	23695	23449	9	—55.8	—54.5	—58.4	—	—
	20	5	26195	26253	26128	5	—53.4	—51.9	—55.9	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 0000 UT	Surface	31	* 993m.b.	* 1000m.b.	* 986m.b	31	11.6	17.7	9.0	31	0.9
	1000	31	137	193	74	—	—	—	—	—	—
	850	31	1503	1567	1445	31	11.4	17.2	6.8	31	8.3
	700	31	3108	3183	3022	30	5.0	8.8	— 1.0	30	—15.9
	600	31	4351	4421	4235	31	— 2.6	1.7	— 8.2	31	—21.3
	500	31	5777	5879	5621	31	—12.9	— 7.3	—23.5	31	—27.6
	400	31	7444	7558	7261	31	—24.8	—22.3	—28.1	30	—36.2
	300	31	9473	9568	9265	30	—39.8	—34.2	—43.8	29	—49.8
	250	30	10700	10827	10479	30	—48.8	—41.8	—55.9	30	—57.9
	200	29	12141	12276	11889	29	—56.8	—47.1	—63.4	17	—64.3
	150	26	13929	14062	13629	25	—64.8	—62.1	—73.9	—	—
	100	18	16358	16480	16015	18	—73.4	—70.5	—77.8	—	—
	70	13	18434	18570	18077	13	—72.5	—68.8	—76.5	—	—
	60	10	19396	19550	19040	10	—68.9	—63.7	—71.6	—	—
	50	10	20455	20620	20099	10	—63.6	—60.3	—66.0	—	—
	40	9	21934	22120	21570	9	—59.3	—57.4	—60.4	—	—
	30	9	23646	23826	23274	9	—55.7	—53.3	—58.3	—	—
	20	6	26277	26426	25817	6	—53.0	—49.3	—60.1	—	—
	10	—	—	—	—	—	—	—	—	—	—

N = The number of cases the element has been observed during the month.

* The atmospheric pressure corrected to the elevation of the radiosonde station.

UPPER AIR CLIMATOLOGICAL DATA

Table B 1 *(contd)*.—**MONTHLY MEANS AND MONTHLY ABSOLUTE HIGHER & LOWER VALUES OF ALTITUDE, AIR TEMPERATURE & DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES**

JANUARY 1972

Station	Pressure Surface (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Mersa Matruh 1200 UT	Surface	29	*1016m.b.	*1026m.b.	*1004m.b.	29	16.8	19.5	14.4	29	8.7
	1000	29	163	247	62	29	15.4	17.6	13.6	29	7.4
	850	29	1514	1608	1407	29	4.9	10.7	1.6	29	— 4.0
	700	28	3076	3183	2964	28	— 3.3	2.1	— 8.4	28	—15.3
	600	28	4280	4403	4158	28	—10.8	— 6.4	—16.0	28	—22.4
	500	28	5656	5803	5500	28	—20.4	—14.0	—25.8	27	—31.0
	400	27	7269	7445	7066	27	—32.0	—25.6	—40.0	27	—42.3
	300	25	9251	9440	9110	25	—45.8	—42.9	—50.7	24	—54.4
	250	25	10442	10633	10287	25	—52.6	—44.8	—57.2	23	—60.9
	200	23	11861	12034	11702	23	—56.4	—48.9	—62.2	16	—63.4
	150	21	13676	13791	13529	21	—59.2	—54.2	—65.0	12	—65.6
	100	18	16193	16265	16063	18	—64.2	—62.1	—67.9	—	—
	70	10	18381	18441	18318	10	—63.4	—60.0	—66.2	—	—
	60	6	19380	19450	19300	6	—60.4	—55.3	—64.9	—	—
	50	6	20476	20535	20383	6	—59.4	—57.1	—61.8	—	—
	40	4	21980	22030	21920	4	—57.4	—55.8	—58.5	—	—
	30	3	23724	23780	23655	3	—54.5	—53.8	—55.1	—	—
	20	2	26314	26363	26264	2	—51.0	—50.0	—52.1	—	—
	10	—	—	—	—	—	—	—	—	—	—
Helwan 1200 UT	Surface	27	*1000m.b.	*1010m.b.	*992m.b.	27	17.9	22.0	16.1	27	3.4
	1000	27	139	222	70	14	17.1	19.6	15.8	14	4.6
	850	27	1498	1583	1435	27	6.5	12.5	2.0	26	— 6.3
	700	27	3070	3157	2983	24	— 1.0	4.0	— 7.6	24	—17.9
	600	27	4284	4363	4170	25	— 8.4	— 3.2	—15.2	26	—25.1
	500	26	5675	5766	5528	26	—17.8	—12.3	—24.1	26	—33.3
	400	25	7306	7428	7140	25	—29.3	—25.8	—33.4	25	—42.4
	300	23	9298	9448	9112	23	—44.1	—39.0	—48.0	23	—55.6
	250	23	10505	10669	10410	23	—51.1	—46.3	—55.4	22	—61.8
	200	20	11949	12114	11857	20	—56.4	—47.0	—65.5	11	—64.8
	150	20	13764	13897	13671	20	—60.4	—53.3	—66.7	7	—69.0
	100	17	16262	16364	16094	17	—66.3	—62.5	—70.8	—	—
	70	10	18411	18519	18343	10	—64.3	—62.0	—66.8	—	—
	60	8	19394	19510	19340	8	—63.6	—61.4	—66.4	—	—
	50	8	20480	20608	20408	8	—61.2	—59.9	—63.1	—	—
	40	6	21999	22163	21900	6	—57.9	—55.9	—61.6	—	—
	30	5	23684	23772	23579	5	—55.1	—51.6	—62.3	—	—
	20	4	26298	26407	26184	4	—52.8	—48.0	—63.0	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 1200 UT	Surface	30	*993m.b.	*999m.b.	*987m.b.	30	21.7	27.2	18.5	30	1.7
	1000	30	128	184	78	—	—	—	—	—	—
	850	30	1505	1564	1464	30	11.4	19.8	4.3	30	—9.9
	700	30	3110	3170	3069	30	5.0	9.5	1.1	29	—17.3
	600	28	4352	4411	4308	28	— 2.5	1.2	— 7.6	28	—21.7
	500	28	5772	5836	5720	28	—12.0	— 8.7	—15.6	27	—27.7
	400	28	7444	7513	7380	28	—23.7	—21.2	—28.6	26	—38.3
	300	27	9483	9577	9403	27	—38.7	—33.5	—43.5	26	—51.5
	250	27	10712	10828	10642	27	—47.6	—43.6	—52.4	27	—59.3
	200	27	12163	12288	12062	27	—54.6	—47.9	—60.3	23	—65.7
	150	26	13962	14081	13833	25	—63.7	—59.7	—67.7	3	—70.6
	100	22	16378	16548	16259	22	—69.1	—67.9	—78.0	—	—
	70	17	18496	18614	18405	17	—71.2	—67.0	—76.1	—	—
	60	9	19440	19510	19370	9	—67.3	—65.2	—69.0	—	—
	50	9	20505	20585	20442	9	—63.3	—58.9	—67.1	—	—
	40	6	22017	22080	21900	6	—57.3	—54.2	—59.6	—	—
	30	6	23754	23806	23688	6	—52.9	—49.2	—55.1	—	—
	20	3	26421	26568	26341	3	—47.1	—42.2	—50.5	—	—
	10	—	—	—	—	—	—	—	—	—	—

N = The number of cases the element has been observed during the month

* The atmospheric pressure corrected to the elevation of the radiosonde station

Table B 2.—MEAN AND EXTREME VALUES OF THE FREEZING LEVEL AND THE TROPOPAUSE, THE HIGHEST WIND SPEED IN THE UPPER AIR

JANUARY — 1972

	Station	Freezing Level									First Tropopause									Highest wind speed			
		Mean			Highest			Lowest			Mean			Highest			Lowest						
		Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Direction (000—360)	Speed in Knots
		(N)	(N)	(N)							(N)	(N)	(N)										
0000 U.T.	M. Matruh (A)	2432 (30)	761 (30)	— 9.6 (30)	3740	650	—10.5	1450	850	— 2.2	10866 (23)	243 (23)	—55.0 (23)	13805	150	—68.4	7020	402	—38.8	9886	274	270	120
0000 U.T.	Helwan . . .	2416 (24)	759 (24)	—10.7 (23)	3300	685	—10.2	1630	831	— 7.7	11579 (17)	215 (17)	—58.0 (17)	15860	105	—68.8	9170	303	—50.8	12590	—	285	162
0000 U.T.	Aswan . . (A)	3940 (31)	629 (31)	—19.8 (31)	4700	574	—30.3	2880	715	—13.5	15742 (13)	115 (13)	—73.0 (13)	17900	77	—77.8	13110	109	—69.4	10750	252	270	144
		(N)	(N)	(N)							(N)	(N)	(N)										
1200 U.T.	M. Matruh (A)	2482 (28)	759 (28)	—10.4 (28)	3360	675	—10.9	1680	838	— 8.2	10900 (20)	234 (20)	—57.2 (20)	12300	191	—64.7	9080	303	—45.8	7645	—	330	105
1200 U.T.	Helwan . . .	2803 (27)	727 (27)	—15.2 (25)	3850	640	—20.8	1710	832	— 6.4	11599 (18)	219 (18)	—56.9 (18)	15000	123	—64.7	6100	464	—28.4	26095	19	290	160
1200 U.T.	Aswan . (A)	3968 (28)	630 (28)	—20.2 (28)	4020	582	—25.1	3260	688	—19.6	13940 (14)	158 (14)	—64.6 (14)	16302	100	—69.0	10330	264	—46.9	11800	212	245	140

N = The Number of cases the element has been observed during the month.

SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES
MERSA MATRUH (A) JANUARY 1972

Time	Pressure Surface (Millibar.)	Wind between ranges of direction (000—360°).																								Number of Calm winds	Total Number of Observations (T.N)	Mean Scalar wind Speed (Knots)
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	3	7	13	8	2	4	1	7	0	—	0	—	1	10	0	—	1	3	0	—	0	—	1	7	2	24	7
	1000	1	11	11	13	1	6	1	7	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	14	12
	850	3	9	6	12	1	18	0	—	0	—	0	—	0	—	1	12	5	11	3	10	2	14	3	12	0	24	12
	700	4	15	0	—	0	—	0	—	0	—	0	—	0	—	2	28	6	13	3	16	3	24	5	21	0	23	19
	600	1	8	1	18	0	—	0	—	0	—	0	—	0	—	3	30	2	23	6	30	7	27	3	18	0	23	25
	500	2	18	0	—	0	—	0	—	0	—	0	—	0	—	1	42	4	51	7	38	6	29	2	32	0	22	36
	400	1	30	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	73	8	54	6	38	3	54	0	22	52
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	54	9	69	5	56	2	68	0	18	64
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	50	8	75	2	72	2	43	0	14	66
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	72	4	42	0	—	0	10	60
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	58	3	56	2	70	0	—	0	6	61
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	37	1	80	0	—	0	4	45
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	34	1	27	0	—	0	3	31
	60	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	26	1	31	0	—	0	—	0	3	28
	50	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	16	1	10	0	—	0	—	0	3	14
	40	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	22	1	30	0	—	0	—	0	3	28
	30	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	34	2	50	0	—	0	—	0	3	41
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	3	6	12	10	1	7	0	—	0	—	0	—	0	—	3	29	3	6	1	3	2	4	2	6	0	27	8
	1000	2	8	10	12	0	—	0	—	0	—	0	—	0	—	1	7	0	—	0	—	0	—	1	6	0	14	11
	850	3	12	3	11	6	10	2	16	1	19	1	15	0	—	1	19	1	6	6	14	2	8	1	9	0	27	12
	700	2	11	0	—	0	—	0	—	0	—	0	—	0	—	1	34	0	—	5	22	14	20	5	15	0	27	19
	600	1	21	0	—	0	—	0	—	0	—	0	—	0	—	1	41	2	24	10	29	9	25	3	21	0	26	26
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	44	11	41	9	31	3	31	0	24	37
	400	1	28	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	41	9	57	8	44	1	23	0	20	47
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	69	10	38	5	55	1	33	0	17	68
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	76	7	71	5	52	0	—	0	14	68
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	69	5	93	6	73	0	—	0	12	81
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	42	5	57	4	90	0	—	0	10	69
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	75	3	67	0	—	0	6	71
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	22	2	32	0	—	0	4	27
	60	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	18	0	—	0	—	0	3	18
	50	0	—	0	—	0	—	0	—	0	—	1	16	0	—	0	—	0	—	2	29	0	—	0	—	0	3	25
	40	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	22	0	—	0	—	0	2	22
	30	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	19	0	—	0	—	0	1	19
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the wind has been observed from the range of direction during the month.

TN = The total number of case the wind has been observed during the month.

Table B 3 (*contd.*).—NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES

HELWAN (A) JANUARY 1972

Time	Pressure Surface (Millibar.)	Wind between ranges of direction (000–360)°																								Number of Calm winds	Total Number of Observations (TN)	Mean Scalar wind Speed (Knots)
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
Helwan 0000 UT	Surface	3	7	2	6	2	26	4	13	1	12	1	8	0	—	2	8	3	11	3	15	3	15	5	10	0	29	11
	1000	3	9	2	14	1	10	2	6	2	18	1	9	1	3	3	15	0	—	3	20	4	14	5	12	0	27	14
	850	3	11	0	—	2	14	3	7	0	—	1	12	3	12	2	6	3	22	5	17	2	16	2	14	0	26	14
	700	1	10	0	—	0	—	1	5	0	—	0	—	0	—	0	—	8	23	3	16	7	18	3	16	0	23	18
	600	1	9	0	—	0	—	0	—	1	7	0	—	0	—	0	—	6	40	9	28	2	18	3	23	0	22	28
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	7	35	4	33	7	32	1	55	0	19	36
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	45	6	60	6	56	0	—	0	17	54
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	99	7	68	1	57	1	91	0	12	75
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	111	7	85	2	54	0	—	0	10	81
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	132	7	72	1	97	0	—	0	9	93
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	54	2	68	0	—	0	—	0	3	63
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	48	0	—	0	—	0	1	48
	70	0	—	0	—	0	—	1	7	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	7
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Helwan 1200 UT	urface	3	6	1	3	1	10	3	7	2	9	3	6	7	6	4	11	4	12	1	8	0	—	0	—	1	30	8
	1000	1	4	0	—	0	—	2	8	2	15	3	10	3	7	1	18	2	2	1	22	1	10	0	—	0	16	13
	850	2	14	0	—	0	—	1	10	1	9	0	—	1	14	1	18	1	12	6	16	0	—	1	10	1	15	13
	700	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	9	3	14	3	14	3	15	1	21	0	11	14
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	5	1	33	3	30	3	19	1	34	0	9	24
	500	0	—	0	—	0	—	0	—	0	—	1	10	0	—	0	—	0	—	5	42	4	30	0	—	0	10	34
	400	0	—	0	—	0	—	0	—	0	—	1	6	0	—	0	—	2	68	3	55	4	40	0	—	0	10	46
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	84	3	102	5	75	0	—	0	9	83
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	85	2	78	3	82	0	—	0	6	81
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	102	2	78	0	—	0	5	92
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	84	1	78	0	—	0	3	82
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	30	0	—	0	—	0	1	30
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the wind has been observed from the range of direction during the month.

TN = The total number of cases the wind has been observed during the month.

Table B 3.—(*contd.*) NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES

ASWAN (A) JANUARY 1972

Time	Pressure Surface (Millibar.)	Wind between ranges of direction (000—360°)																						Number of Calm winds	Total Number of Observations (T.N)	Mean Scalar wind Speed (Knots)
		345 / 014		015 / 044		045 / 074		075 / 104		105 / 134		135 / 164		165 / 194		195 / 224		226 / 254		255 / 284		285 / 314		315 344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) N	N	(ff) m			
Aswan 0000 U.T.	Surface	23	9	1	4	0	—	0	—	1	8	0	—	0	—	0	—	0	—	0	—	2	9	4	8	0	31	9
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	3	13	4	11	4	7	3	6	1	7	1	11	0	—	0	—	3	15	0	—	6	6	6	12	0	31	10
	700	3	18	0	—	0	—	0	—	1	4	0	—	0	—	0	—	5	24	13	22	4	15	5	13	0	31	19
	600	0	—	0	—	0	—	0	—	0	-	0	—	0	—	1	52	5	41	17	53	6	22	2	12	0	31	32
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	7	63	20	47	3	25	1	31	0	31	48
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	77	19	61	6	49	0	—	0	31	62
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	95	18	75	6	84	0	—	0	30	81
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	100	18	87	6	86	0	—	0	29	90
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	112	18	97	3	40	0	—	0	23	93
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	18	72	1	75	0	—	0	19	78
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	54	0	—	0	—	0	4	54
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	32	0	—	0	—	0	2	32
	60	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	14	0	—	0	—	0	—	0	2	14
	50	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	20	1	18	0	—	0	2	19
	40	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	14	1	25	0	—	0	2	20
	30	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	10	1	18	0	—	0	—	0	2	14
	20	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	27	0	1	27
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Aswan 1200 U.T.	Surface	23	11	4	11	0	—	0	—	0	—	1	5	1	10	0	—	0	—	0	—	1	20	0	—	0	30	11
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	2	10	7	11	5	10	1	4	1	5	2	4	1	14	0	—	1	4	3	8	3	10	4	8	0	30	9
	700	0	—	1	12	0	—	0	—	0	—	0	—	0	—	3	12	6	22	10	21	5	16	4	29	0	29	18
	600	1	6	0	—	0	—	0	—	0	—	0	—	0	—	0	—	7	49	12	27	7	26	1	29	0	28	32
	500	0	—	0	—	0	—	0	—	0	—	0	—	1	43	0	—	7	60	16	49	2	34	2	26	0	23	49
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	69	17	69	5	42	0	—	0	26	64
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	78	14	86	5	60	0	—	0	25	79
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	87	15	98	4	60	0	—	0	24	89
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	100	12	102	2	56	0	—	0	19	97
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	120	12	78	2	66	0	—	0	15	80
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	46	6	53	2	35	0	—	0	9	43
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	27	3	19	0	—	0	—	0	4	21
	60	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	22	1	28	0	—	0	3	24
	50	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	11	0	—	1	6	0	—	0	—	0	2	8
	40	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	14	0	—	0	—	0	—	0	2	14
	30	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	6	0	—	0	—	0	2	6
	20	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	7	0	—	0	—	0	1	7
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the wind has been observed from the range of direction during the month.

TN = The total number of cases the wind has been observed during the month.

REVIEW OF AGRO-METEOROLOGICAL STATIONS

MERSA MATRUH — JANUARY 1972

For the month as a whole the mean daily air temperature was rather normal and the mean daily relative humidity was markedly above normal. The total monthly rainfall was 19.4 mm. against 30.7 mm. for normal.

The daily maximum air temperatures were rather normal apart from two light cold spells in the periods (20th & 21st) and (26th-28th). The first cold spell yielded the lowest maximum air temperature for the month (16.0°C) on the 20th. The second cold spell was associated with the maximum daily rainfall (11.6 mm.) on the 26th.

The extreme maximum and minimum soil temperatures were lower than the corresponding values of last January at all depths between 2 & 100cm. The departures for the extreme maxima varied between 3.0°C at 5cm. and 0.7°C at 100m. The departures for the extreme minima varied between 2.5°C. at 20 cm. and 0.7°C at 100 cm.

The mean daily actual sunshine duration was more by 1.0 hour than the corresponding value of January 1971. The mean daily values of wind speed at 1.5 met. and pan evaporation were lower than the corresponding values of January 1971 by 0.5. m./sec. and 0.97 mm. respectively.

TAHRIR — JANUARY 1972

For the month as a whole the mean daily air temperature was below average and the mean daily relative humidity was markedly above average.

The total monthly rainfall was 2.6 mm. against 10.0 mm. for average.

The daily maximum air temperatures were about average the whole month, apart from a short cold spell on the 20th & 21st yielding the lowest maximum air temperature for the month (16.1°C) together with the maximum daily rainfall (2.1 mm.) on the 20th. The daily minimum air temperatures were mostly below average.

The extreme maximum soil temperatures were lower than the corresponding values of last January at all depths between 2 & 100 cm. with significant departures ranging between 4.0°C at 2 cm. and 1.0°C at 100 cm. The extreme minimum soil temperatures were lower than last January at 2, 5, 20 cm. depths with departures between 1.0°C & 0.5°C. At 10 & 50 cm. depths the extreme soil minima were slightly higher (by 0.1° to 0.4°C) and at 100 cm. its value was the same as last January.

The mean daily values of actual sunshine duration and pan evaporation were higher than last January by 0.5 hour and 0.03 mm. respectively.

The mean daily wind speed at 1.5 m. was the same as last January.

BAHTIM — JANUARY 1972

For the month as a whole the mean daily air temperature was lower than the value of last January and the mean daily relative humidity was the same. The total monthly rainfall was 0.9 mm. against 6.6 mm. for last January.

The daily maximum air temperatures were mostly below average. The highest maximum air temperature for the month was 21.7°C reported on the 19th, and the lowest maximum air temperature was 17.2°C reported on the 7th. Minimum air temperature at 5 cm. above ground fell below 0.C in 9 days during this month. Its values on these days are given in the following. :

Date	6	7	8	12	18	26	27	30	31
Min. Temp. (°C)	-0.6	-0.8	-1.0	-1.2	-0.1	-1.2	-1.0	-0.3	-3.0.

The extreme maximum soil temperatures were lower than last January at all depths apart from 100 cm. depth where its value was the same, the departures varied between 3.7°C at 2cm. and 0.8°C at 50 cm. The extreme minimum soil temperatures were lower than last January at all depths with departures between 2.0°C at 10cm. and 0.4°C at 20 cm.

The mean daily values of actual sunshine duration, pan evaporation and wind speed at 1.5 m. were all higher than the corresponding values of January 1971 by 0.1 hour, 0.31 mm. and 0.1 m./sec. respectively.

KHARGA — JANUARY 1972

This month was rather normal as regards the mean daily air temperature and relative humidity. The daily maximum air temperatures were below average in general, apart from a warm spell on the 19th & 20 th yielding the highest maximum air temperature for the month (25.2°C) on the 19th. The lowest maximum air temperature was 19.5°C reported on the 27th. Minimum air temperature at 5 cm. above ground fell below 0.°C on the 17th & 28th when its values were - 0.8°C and - 1.2°C respectively.

The extreme maximum and minimum soil temperatures were lower than last January at all depths between 2 & 100 cm. The departures for the extreme maxima were appreciable and varied between 8.4°C at 2 cm. and 0.7°C at 100 cm. The departures for the extreme minima varied between 1.8°C at 2 cm. and 0.8°C at 100 cm.

The mean daily values of actual sunshine duration and pan evaporation were lower than the corresponding values of January 1971 by 0.3 hour and 1.36 m. respectively.

The mean daily wind speed at 1.5 m. was higher by 0.1 m/sec. than the corresponding value of January 1971.

Table C 1.—AIR TEMPERATURE AT 1½ METRES ABOVE GROUND

JANUARY — 1972

STATION	Air Temperature (°C)					Mean Duration in hours of daily air temperature above the following values										
	Mean Max.	Mean Min.	Mean of the day	Night time mean	Day time mean	-5°C	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C
M. Matruh . . .	17.9	8.4	12.8	10.9	13.8	24.0	24.0	23.9	18.7	7.0	0.0	0.0	0.0	0.0	0.0	0.0
Tahrir.	20.0	5.8	11.9	8.9	15.0	24.0	24.0	22.7	14.5	7.3	0.1	0.0	0.0	0.0	0.0	0.0
Bahtim..	18.8	4.0	10.7	7.6	13.9	24.0	24.0	20.5	12.5	6.4	0.2	0.0	0.0	0.0	0.0	0.0
Kharga.	21.5	5.6	14.0	11.2	16.8	24.0	24.0	22.9	18.5	10.4	2.8	0.0	0.0	0.0	0.0	0.0

Table C 2.—EXTREME VALUES OF AIR TEMPERATURE AT 1½ METRES ABOVE GROUND, ABSOLUTE MINIMUM AIR TEMPERATURE AT 5cms ABOVE GROUND OVER DIFFERENT FIELDS.

JANUARY — 1972

STATION	Max. Temp. at 1½ metres (°C)				Min. Temp. at 1½ metres (°C)				Min. Temp. at 5 cms. above (°C)			
	Highest		Lowest		Highest		Lowest		Dry soil		Grass	
	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date
M. Matruh	20.2	1	16.0	20	11.0	6	4.2	29	1.0	29	—	—
Tahrir	21.8	19	16.1	20	9.8	20	2.9	27	1.7	26	—	—
Bahtim	21.7	19	17.2	7	8.9	21	0.4	31	-3.0	31	—	—
Kharga.	25.2	19	19.5	27	12.0	2	1.0	28	-1.2	28	—	—

Table C 3. (SOLAR + SKY) RADIATION, DURATION OF BRIGHT SUNSHINE, RELATIVE HUMIDITY, VAPOUR PRESSURE AT 1½ METRES ABOVE GROUND, EVAPORATION & RAINFALL

JANUARY — 1972

STATION	(Solar+Sky) Radiation gm. cal/cm²	Duration of Bright Sunshine (hours)			Relative Humidity				Vapour pressure (mms)						Evaporation (mms)		Rainfall (mms)		
		Total Actual monthly	Total Possible monthly	%	Mean of day	1200 U.T.	Lowest	Date	Mean of day	1200 U.T.	Highest	Date	Lowest	Date	Piche	Pan class A	Total Amount Monthly	Max. fall in one day	Date
M. Matruh . .	254.4	253.6	320.1	79	77	60	43	29	8.4	8.7	11.2	18	5.7	30	3.4	2.94	19.4	11.6	26
Tahrir.	306.0	240.4	322.7	74	84	66	50	21	8.8	10.2	12.5	2	5.8	26.27	2.9	2.70	2.6	2.1	20
Bahtim.. . . .	312.3	225.7	323.7	70	74	48	31	28	7.0	7.4	10.8	2	4.0	26	3.6	2.98	0.9	0.5	20
Kharga.. . . .	328.8	280.1	333.8	84	45	31	21	19.28	5.2	5.6	7.8	4	3.1	29	7.5	5.77	0	0	—

Table C 4.—EXTREME SOIL TEMPERATURE AT DIFFERENT DEPTHS (cms) IN DIFFERENT FIELDS

JANUARY — 1972

STATION	Highest (H) Lowest (L)	Extreme soil temperature (°C) in dry field at different depths (cms.)								Extreme soil temperature (°C) in grass field at different depths (cms.)							
		2	5	10	20	50	100	200	300	2	5	10	20	50	100	200	300
M. Matruh	H	20.1	19.0	17.8	15.4	15.7	18.0	20.8	—	—	—	—	—	—	—	—	—
	L	5.1	5.7	9.1	11.0	13.5	16.0	19.4	—	—	—	—	—	—	—	—	—
Tahrir. . .	H	25.3	22.8	19.8	17.1	15.6	17.2	20.6	23.0	—	—	—	—	—	—	—	—
	L	6.0	7.9	9.0	11.1	13.9	16.4	18.9	21.1	—	—	—	—	—	—	—	—
Bahtim . .	H	26.9	20.4	18.0	17.1	19.0	21.2	24.6	25.5	—	—	—	—	—	—	—	—
	L	4.6	6.6	10.2	15.1	17.9	19.6	22.8	24.5	—	—	—	—	—	—	—	—
Kharga.. .	H	28.1	23.4	21.7	19.8	21.0	23.5	27.1	28.8	—	—	—	—	—	—	—	—
	L	3.7	6.9	11.4	16.0	19.6	22.4	25.5	27.6	—	—	—	—	—	—	—	—

Table C 5.—SURFACE WIND

JANUARY — 1972

STATION	Wind Speed m/sec at $1^1/_2$ metres			Days with surface wind speed at 10 metres							Max. Gust (knots at 10 metres	
	Mean of the dry	Night time mean	Day time mean	≥10 knots	≥15 knots	≥20 knots	≥25 knots	≥30 knots	≥35 knots	≥40 knots	Value (knots)	Date
M. Matruh	3.0	2.4	3.6	31	19	11	7	2	0	0	33	9.21
Tahrir.	1.6	1.0	2.1	27	16	3	0	0	0	0	32	16
Bahtim..	1.7	0.8	2.4	24	16	5	0	0	0	0	36	20
Kharga.	2.7	1.9	3.5	20	12	5	1	0	0	0	32	6

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MONTHLY WEATHER REPORT

VOLUME 15 NUMBER 2

FEBRUARY, 1972

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THE EGYPTIAN METEOROLOGICAL AUTHORITY
CAIRO

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In fulfilment of its duties, the Egyptian Meteorological Authority issues serveral reports and publications on weather, climate and agro-meteorology. The principal publications are described on this page.

Orders for publications should be addressed to :
"Chairman of the Board of Directors, Meteorological Authority, Kubri-el-Qubbeh — CAIRO".

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First issued in 1909, the Monthly Weather Report served to give a brief summary of the weather conditions that prevailed over Egypt during the month, with a table showing the mean values for few meteorological elements and their deviations from the normal values. From 1954 to 1957 this report was in a rapid state of development and extension resulting into a voluminous report on January 1958 giving surface, upper air, and agro-meteorological data for Egypt.

As from January 1964, the Monthly Weather Report was pressed to give climatological data for a representative selection of synoptic stations.

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THE ANNUAL REPORT

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THE EGYPTIAN METEOROLOGICAL AUTHORITY
CAIRO

CONTENTS

PAGES

General Summary of Weather Conditions 1-2

SURFACE DATA

Table A1.—Monthly values of the Atmospheric Pressure, Air Temperature, Relative Humidity, Bright Sunshine Duration and Piche Evaporation 3

" A2.—Maximum and Minimum Air Temperatures 4

" A3.—Sky Cover and Rainfall 5

" A4.—Number of Days of Occurrence of Miscellaneous Weather Phenomena 6

" A5.—Number in Hours of Occurrences of Concurrent Surface Wind Speed and Direction Recorded Within Specified Ranges 7,8

UPPER AIR DATA

Table B1.—Monthly Means and Monthly Absolute Higher & Lower Values of Altitude, air Temperature & Dew point at Standard and Selected Pressure Surfaces 9,10

" B2.—Mean and Extreme values of The Freezing Level and The Tropopause; The Highest Wind Speed in The Upper Air 11

" B3.—Number of Occurrences of Wind Direction Within Specified Ranges and The Mean Scalar Wind Speed at the Standard and Selected Pressure Surfaces 12-14

AGRO-METEOROLOGICAL DATA

Reviews of Agro-Meteorological Stations 15,16

Table C1.—Air Temperature at 1½ Metres Above Ground 17

" C2.—Extreme Values of Air Temperature at 1½ metres above Ground, Absolute Minimum Air Temperature at 5 cms. above Ground Over Different Fields 17

" C3.—(Solar + Sky) Radiation, Duration of Bright Sunshine, Relative Humidity and Vapour Pressure at 1½ metres above Ground, Evaporation and Rainfall. 17

" C4.—Extreme Soil Temperature at Different Depths in Different Fields 18

" C5.—Surface wind 18

Note : For explanatory notes on tables please refer to Volume 15, Number 1 (January 1972).

GENERAL SUMMARY OF WEATHER CONDITIONS

FEBRUARY 1972

Cold during the first third, generally warm otherwise. Deficient and subnormal rainfall over north of the country.

GENERAL DESCRIPTION OF WEATHER

This month was intervened by two cold waves. The first wave was pronounced and prevailed from the 1st till the 11th and was associated with markedly low minimum temperatures mainly in the Western Desert & north of Upper Egypt district. The second cold wave was light and prevailed between the 16th & 19th. Otherwise warm weather was enjoyed.

Light rain was reported over the Mediterranean district during the cold waves and extended in few days to Lower Egypt & Cairo area districts. Rain was heavy over scattered Mediterranean localities for few days.

Weather was light sandy during several days in few scattered localities mainly in the Red Sea & Upper Egypt districts.

Early morning mist developed in several occasions over scattered places in Delta, Cairo and north of Upper Egypt districts.

PRESSURE DISTRIBUTION

The outstanding characteristic features of the pressure distribution over the surface maps this month can be summarized in the extension of the Siberian anticyclone SW ridge westwards through Central Europe and southwestwards through East Mediterranean, besides four Mediterranean transitory disturbances.

In the 700 & 500 mbs levels, six upper troughs passed through East Mediterranean on the 1st, 4th, 7th, 18th, 24th & 28th. The first four troughs were well defined, while the last two upper troughs were rather flat.

The first depression in this month appeared over Central Mediterranean on the 1st, moved slowly eastwards traversing East Mediterranean on the 4th. Afterwards it continued its slow east track and deepened on the 7th, then it filled up over Iraq on the 8th. The second depression developed over West Mediterranean on the 8th and moved slowly eastwards reaching Central Mediterranean on the 11th, while a secondary depression developed over the Western Desert and filled up over north Egypt on the 12th. The Mediterranean depression continued its slow eastward motion and traversed East Mediterranean on the 17th. The third and fourth depressions developed also over West Mediterranean on the 21st & 25th respectively and proceeded rather rapidly to the east. The third depression filled up over East Mediterranean on the 23rd when the Sudan trough showed a northward elongation. The fourth and last depression filled up over Central Mediterranean on the 27th, while the Sudan trough experienced a pronounced northward elongation till the end of the month.

The atmospheric pressure over Egypt experienced falls during the transits of the Mediterranean secondary depressions through East Mediterranean, and attained marked minima round the 1st, 6th, 12th, 16th, 24th & 28th respectively.

SURFACE WIND

The prevailing surface winds over the northern parts of the Country were generally light to moderate N/NW winds and backed to W/SW during the cold waves. In the southern parts, light to moderate Nly winds prevailed.

Winds became fresh or strong during several days in few scattered localities mainly in the Red Sea district. On the other hand, calms were frequent most of night and early morning intervals in scattered localities.

TEMPERATURE

Maximum air temperature experienced moderate falls below normal during the cold waves round the periods (1st-11th), & (16th-19th) ; and was markedly above normal during the rest of the month. Maximum air temperature values ranged in general between 16° & 22°C in the northern parts, between 19° & 25°C in the middle parts and between 22° & 29°C in the southern parts.

The highest maximum air temperature for the Country in this month was 32.5°C reported at Kom-Ombo on the 27th.

Minimum air temperature was oscillatory and showed moderate departures round normal. Its values varied generally between 2° & 8°C in the Western Desert & Middle Egypt and between 6° & 12°C otherwise.

The lowest minimum air temperature for the Country in this month was — 0.6°C reported at Farafra on the 9th.

PRECIPITATION

Rain was generally deficient and subnormal apart from scattered localities in the Mediterranean district where the monthly rainfall exceeded its normal.

Light rain fell over the Mediterranean coast mostly in the first week and extended to Lower Egypt & Cairo area districts round the 2nd & 6th. Rain was heavy in few days over scattered localities in the Mediterranean district.

The highest daily rainfall for the Country in this month was 16.8 mms reported at Ras-el-Teen on the 2nd.

The highest monthly rainfall for the Country in this month was 44.7 mms reported at Ras-el-Teen also.

Cairo, January 1973

Chairman (M. F. TAHA.)
Board of Directors

SURFACE DATA

Table A 1. — MONTHLY VALUES OF THE ATMOSPHERIC PRESSURE, AIR TEMPERATURE, RELATIVE HUMIDITY, BRIGHT SUNSHINE DURATION & PICHE EVAPORATION.

FEBRUARY — 1972

STATION	Atmospheric Pressure (mbs) M.S.L		Air Temperature °C									Relative Humidity %		Bright Sunshine Duration (Hours)			Piche Evap. (mms) Mean
			Maximum		Minimum			Dry Bulb		Wet Bulb							
	Mean	D.F. Normal or Average	(A) Mean	D.F. Normal or Average	(B) Mean	D.F. Normal or Average	A+B / 2	Mean	D.F. Normal or Average	Mean	D.F. Normal or Average	Mean	D.F. Normal or Average	Total Actual	Total Possible	%	
Sallum	1016.8	—0.5	19.9	+0.2	10.6	+0.9	15.2	14.7	+0.1	10.4	—0.1	54	0	—	—	—	6.1
Mersa Matruh (A)	1018.5	+1.4	18.1	—0.7	8.7	+0.3	13.4	13.1	—0.3	10.6	—0.2	72	+ 9	227.3	320.7	71	4.7
Alexandria (A)	1018.3	+1.1	19.0	—0.2	9.4	—0.1	14.2	13.9	—0.3	10.8	—0.4	66	— 2	253.4	322.0	79	4.8
Port Said (A)	1017.1	+0.2	19.2	+0.6	11.2	—0.8	15.2	14.5	—0.3	11.0	—1.0	62	— 7	250.5	322.0	78	4.8
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1017.7	—0.1	20.1	—0.8	5.5	—1.1	12.8	12.2	—0.6	9.1	—0.8	64	— 2	271.4	322.4	84	3.5
Cairo (A)	1017.7	+0.3	20.7	+0.1	9.9	+0.5	15.3	14.5	—0.3	9.8	—0.7	51	— 4	—	—	—	9.9
Fayoum	—	—	22.6	+0.6	5.4	—2.0	14.0	13.6	—0.7	9.6	+0.2	56	+ 4	—	—	—	4.6
Minya (A)	1017.4	—0.3	22.5	+0.1	4.3	—0.9	13.4	13.2	—0.1	8.5	—0.4	48	— 5	311.4	323.6	97	6.1
Assyout (A)	1016.2	—1.0	22.5	—0.1	6.8	—0.7	14.6	14.4	—0.7	8.4	—0.8	38	— 3	—	—	—	9.3
Luxor (A)	1016.2	+0.1	25.5	+0.3	5.9	—0.8	15.7	15.6	—0.3	9.6	—0.4	40	— 2	—	—	—	6.1
Aswan (A)	1016.2	+0.6	25.7	—0.1	8.6	—0.6	17.2	17.1	—0.4	9.0	—0.0	26	+ 2	—	—		14.4
Siwa	1018.0	+0.3	22.3	+0.6	6.0	+0.3	14.2	14.0	+0.1	8.8	+0.2	45	+ 1	281.2	324.0	87	6.4
Bahariya	1018.0	+0.9	21.9	—0.3	5.3	—1.0	13.6	13.6	—0.1	7.9	—0.5	39	— 5	—	—	—	6.4
Farafra	1018.7	—0.8	22.7	+0.3	5.0	—0.4	13.8	13.6	—0.4	8.3	+0.9	43	— 3	—	—	—	7.7
Dakhla	1020.0	+2.0	22.7	—1.0	3.0	—2.7	12.8	12.4	—1.2	6.5	—0.7	34	+ 2	—	—	—	8.4
Kharga	1017.4	+0.4	24.7	+0.3	5.9	—1.2	15.2	15.8	+0.6	8.0	—0.7	31	— 7	309.5	327.6	94	10.0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	1016.4	+0.8	22.3	+1.1	9.6	—0.3	16.0	16.0	—0.5	10.5	—0.7	45	— 3	303.8	326.4	93	9.0
Quseir	1015.8	+0.1	22.1	—0.9	13.8	—0.5	18.0	18.2	—0.1	12.7	+0.3	49	+ 4	—	—	—	9.3

Table A 2 — MAXIMUM AND MINIMUM AIR TEMPERATURE

FEBRUARY — 1972

Station	Maximum Temperature °C									Grass Min. Temp.		Minimum Temperature °C							
	Highest	Date	Lowest	Date	No. of Days with Max-Temp.					Mean	Dev. From Normal	Highest	Date	Lowest	Date	No. of Days with Min. Temp.			
					>25	>30	>35	>40	>45							<10	<5	<0	<-5
Sallum	23.7	5	16.4	7	0	0	0	0	0	9.9	—	14.2	29	7.0	4	13	0	0	0
Mersa Matruh (A)	23.0	13	13.2	3	0	0	0	0	0	7.0	—	13.5	24	5.2	20	22	0	0	0
Alexandria (A)	23.4	15	13.6	3	0	0	0	0	0	6.9	—	13.1	17	4.2	15	17	1	0	0
Port Said (A)	23.4	15	14.1	7	0	0	0	0	0	10.8	—	14.2	27	7.5	7	9	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	26.2	27	15.7	7	1	0	0	0	0	—	—	9.4	28	1.2	20	29	11	0	0
Cairo (A)	27.2	27	15.7	7	3	0	0	0	0	—	—	13.7	27	5.8	7	19	0	0	0
Fayoum	28.5	23	17.6	7	5	0	0	0	0	3.2	—	10.4	28	3.1	10	28	13	0	0
Minya (A)	27.7	23	17.3	7	6	0	0	0	0	1.7	—	7.7	27	1.2	11	29	18	0	0
Assyout (A)	29.0	26	17.0	7	7	0	0	0	0	3.6	—	9.7	27	3.7	20	29	5	0	0
Luxor (A)	32.2	27	19.0	8	15	3	0	0	0	0.9	—	10.5	28	2.7	9	28	11	0	0
Aswan (A)	32.4	27	19.0	8	16	4	0	0	0	—	—	12.8	28	4.2	8	20	2	0	0
Siwa	28.3	26	17.9	3	6	0	0	0	0	5.2	—	12.4	27	2.2	8	25	14	0	0
Bahariya	28.1	22,23	17.2	7	5	0	0	0	0	4.8	—	8.8	29	1.4	9	29	13	0	0
Farafra	29.6	23	17.3	7	7	0	0	0	0	5.0	—	9.6	28	—0.6	9	29	20	1	0
Dakhla	—	—	—	—	—	—	—	—	—	2.7	—	—	—	—	—	—	—	—	—
Kharga	31.4	29	18.0	7	13	2	0	0	0	3.1	—	12.2	28	0.6	9	27	9	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	27.5	16	16.5	7	3	0	0	0	0	—	—	13.7	28	6.4	8	15	0	0	0
Quseir	26.5	16	18.2	7	2	0	0	0	0	11.2	—	16.6	15	9.4	8	1	0	0	0

Table A 3.—SKY COVER AND RAINFALL.

FEBRUARY — 1972

Station	Mean Sky Cover Oct.					Rainfall mms.										
	00 U.T.	06 U.T.	12 U.T.	18 U.T.	Daily Mean	Total Amount	D. From Normal	Max. Fall in one day		Number of Days with Amount of Rain						
								Amount	Date	<0.1	≥0.1	≥1.0	≥5.0	≥10	≥25	≥50
Sallum	2.5	2.3	3.0	2.7	2.6	0.8	—10.7	0.8	1	0	1	0	0	0	0	0
Mersa Matruh (A)	1.6	4.2	3.8	2.1	2.9	15.5	— 2.2	13.6	3	1	4	3	1	1	0	0
Alexandria (A)	3.7	4.1	4.2	3.7	3.8	41.0	+ 9.7	13.2	2	1	6	5	3	3	0	0
Port Said (A)	2.0	2.6	2.3	1.8	2.2	14.4	+ 2.4	9.6	2	0	7	3	1	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1.3	1.9	3.1	1.6	1.9	2.3	— 5.6	2.0	2	0	2	1	0	0	0	0
Cairo (A)	1.0	2.0	2.9	1.4	1.9	1.3	— 3.4	1.3	6	0	1	1	0	0	0	0
Fayoum	—	1.1	2.4	1.7	—	0.0	— 1.4	0.0	—	0	0	0	0	0	0	0
Minya	0.4	0.5	1.3	0.7	0.8	0.0	— 1.2	0.0	—	0	0	0	0	0	0	0
Assyout (A)	0.1	0.2	0.6	0.2	0.3	0.0	— 0.3	0.0	—	0	0	0	0	0	0	0
Luxor (A)	0.0	0.6	0.2	0.2	0.2	0.0	— 0.2	0.0	—	0	0	0	0	0	0	0
Aswan (A)	0.1	0.2	0.5	0.3	0.2	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Siwa	0.9	0.8	1.9	1.1	1.1	0.0	— 2.5	0.0	—	0	0	0	0	0	0	0
Bahariya	0.8	0.7	1.3	0.8	0.8	0.0	— 1.2	0.0	—	0	0	0	0	0	0	0
Farafra	—	0.0	0.0	0.0	—	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Dakhla	0.0	0.1	0.3	0.0	0.1	0.0	— 0.3	0.0	—	0	0	0	0	0	0	0
Kharga	0.1	0.2	0.3	0.4	0.3	0.0	— 0.3	0.0	—	0	0	0	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0.4	1.3	1.2	0.4	1.3	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Quseir	0.0	0.9	0.6	0.3	0.4	0.0	0.0	0.0	—	0	0	0	0	0	0	0

Table A 4. — DAYS OF OCCURRENCE OF MISCELLANEOUS WEATHER PHENOMENA.

FEBRUARY — 1972

Station	Precipitation				Frost	Thunderstorm	Mist Vis ≥1000 metres	Fog Vis <1000 Metres	Haze Vis ≥1000 Metres	Thick Haze Vis <1000 Metres	Dust or Sandstorm Vis ≥1000 Metres	Dust or Sandstorm Vis <1000 Metres	Gale	Clear Sky	Cloudy Sky
	Rain	Snow	Ice, Pellets	Hail											
Sallum	1	0	0	0	0	0	0	0	0	0	2	0	0	9	0
Mersa Matruh (A)	4	0	0	0	0	0	0	0	0	0	9	1	0	9	1
Alexandria (A)	6	0	0	0	0	1	2	0	0	0	1	0	0	6	4
Port Said (A)	7	0	0	0	0	0	0	0	0	0	0	0	0	16	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	2	0	0	0	0	0	5	0	0	0	0	0	0	17	0
Cairo (A)	1	0	0	0	0	0	7	1	9	0	9	0	0	14	0
Fayoum	0	0	0	0	0	0	0	0	0	0	0	0	0	—	—
Minya (A)	0	0	0	0	0	0	7	0	8	0	2	0	0	25	0
Assyout (A)	0	0	0	0	0	0	0	0	0	0	0	0	0	29	0
Luxor (A)	0	0	0	0	0	0	0	0	10	0	2	0	0	28	0
Aswan (A)	0	0	0	0	0	0	0	0	6	0	15	0	0	29	0
Siwa	0	0	0	0	0	0	0	0	0	0	6	0	0	23	0
Bahariya	0	0	0	0	0	0	0	0	0	0	3	0	0	25	0
Farafra	0	0	0	0	0	0	0	0	1	0	3	0	0	—	—
Dakhla	0	0	0	0	0	0	0	0	0	0	3	0	0	29	0
Kharga	0	0	0	0	0	0	0	0	0	0	5	0	0	29	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0	0	0	0	0	0	0	0	0	0	2	1	0	25	0
Quseir	0	0	0	0	0	0	0	0	0	0	0	0	0	29	0

TABLE A 5.—NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES

FEBRUARY — 1972

Station	Calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurences of wind blowing from the ranges of directions indicated												
					345 / 014	015 / 044	045 / 074	075 / 104	105 / 134	135 / 164	165 / 194	195 / 224	225 / 254	255 / 284	285 / 314	315 / 344	All directions
Sallum	0	0	0	1—10	21	30	54	29	88	39	10	9	20	24	63	71	458
				11—27	0	4	31	5	13	3	1	0	32	48	77	23	237
				28—47	0	0	0	0	0	0	0	0	0	1	0	0	1
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	21	34	85	34	101	42	11	9	52	73	140	94	696
Mersa Matruh (A)	0	0	0	1—10	24	34	15	26	37	40	15	25	35	34	15	20	320
				11—27	40	15	13	65	39	13	2	35	37	53	25	37	374
				28—47	0	0	0	0	0	0	0	2	0	0	0	0	2
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	64	49	28	91	76	53	17	62	72	87	40	57	696
Alexandria (A)	1	0	0	1—10	42	68	64	30	31	18	27	39	17	23	13	57	429
				11—27	10	31	28	15	1	0	1	25	22	17	52	63	265
				28—47	0	1	0	0	0	0	0	0	0	0	0	0	1
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	52	100	92	45	32	18	28	64	39	40	65	120	695
Tanta	9	0	0	1—10	42	103	54	20	14	11	39	50	70	70	35	31	539
				11—27	9	13	33	14	2	0	0	3	16	14	29	15	148
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	51	116	87	34	16	11	39	53	86	84	64	46	687
Cairo (A)	45	6	122	1—10	20	38	51	48	11	5	29	43	30	26	27	33	361
				11—27	3	18	47	19	3	0	20	14	3	16	7	12	162
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	23	56	98	67	14	5	49	57	33	42	34	45	523
Fayoum	4	12	0	1—10	82	199	33	4	7	18	33	51	76	61	50	52	666
				11—27	1	6	2	0	0	0	0	0	1	1	0	3	14
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	83	205	35	4	7	18	33	51	77	62	50	55	680
Minya	5	3	28	1—10	200	43	4	4	4	28	48	24	15	27	44	89	530
				11—27	74	12	0	0	0	0	3	1	0	8	10	22	130
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	274	55	4	4	4	28	51	25	15	35	54	111	660
Asyout	24	1	10	1—10	21	11	2	2	20	28	16	10	7	146	160	114	537
				11—27	21	2	0	0	0	1	0	0	0	16	37	47	124
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	42	13	2	2	20	29	16	10	7	162	197	161	661
Luxor (A)	1	0	0	1-10	73	54	26	27	18	25	100	59	32	79	61	52	606
				11-27	8	5	4	1	0	0	0	5	4	11	29	22	89
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	81	59	30	28	18	25	100	64	36	90	90	74	695

Table A 5 (*contd.*)—NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES

FEBRUARY — 1972

Station	calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurrences of wind blowing from the ranges of directions indicated												
					345 / 014	015 / 044	045 / 074	075 / 104	105 / 134	135 / 164	165 / 194	195 / 224	225 / 254	255 / 284	285 / 314	315 / 344	All directions
				1-10	163	81	12	1	3	4	1	2	9	10	27	167	480
				11-27	48	42	4	0	0	0	0	0	2	6	15	86	203
Aswan . . . . . (A)	12	0	1	28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**211**	**123**	**16**	**1**	**3**	**4**	**1**	**2**	**11**	**16**	**42**	**253**	**683**
				1-10	11	21	31	79	145	37	13	12	34	93	71	27	574
				11-27	0	0	3	0	14	0	1	0	1	8	21	6	54
Siwa	56	12	0	28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**11**	**21**	**34**	**79**	**159**	**37**	**14**	**12**	**35**	**101**	**92**	**33**	**628**
				1-10	22	15	15	27	18	16	31	32	49	48	70	80	423
				11-27	1	1	1	0	0	0	0	0	0	5	9	7	24
Dakhla	73	23	153	28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**23**	**16**	**16**	**27**	**18**	**16**	**31**	**32**	**49**	**53**	**79**	**87**	**447**
				1-10	190	131	28	13	4	10	8	12	14	20	43	116	589
				11-27	56	12	0	0	0	0	0	1	0	4	5	13	91
Kharga	3	2	11	28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**246**	**143**	**28**	**13**	**4**	**10**	**8**	**13**	**14**	**24**	**48**	**129**	**680**
				1-10	25	24	15	7	15	6	4	5	3	38	128	42	312
				11-27	77	12	4	4	0	2	0	0	0	11	147	99	356
Hurghada	16	1	0	28-47	3	0	0	0	0	0	0	0	0	0	0	8	11
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**105**	**36**	**19**	**11**	**15**	**8**	**4**	**5**	**3**	**49**	**275**	**149**	**679**
				1-10	50	64	20	9	13	9	7	7	11	144	139	48	521
				11-27	95	9	0	0	0	0	0	0	0	0	1	69	174
Quseir	1	0	0	28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**145**	**73**	**20**	**9**	**13**	**9**	**7**	**7**	**11**	**144**	**140**	**117**	**695**

UPPER AIR CLIMATOLOGICAL DATA

Table B1 —MONTHLY MEANS AND MONTHLY ABSOLUTE HIGHER & LOWER VALUES OF ALTITUDE, AIR TEMPERATURE & DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

FEBRUARY — 1972

Station	Pressure Surface Millibar	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Mersa Matruh 0000 UT.	Surface . . .	29	*1017m.b.	*1024m.b.	*1011m.b.	29	12.1	15.4	9.0	29	7.9
	1000 . . .	29	169	228	120	29	13.2	17.2	10.2	29	8.2
	850 . . .	29	1520	1588	1453	29	5.9	16.0	— 9.3	29	— 6.3
	700 . . .	28	3092	3182	2998	28	— 1.7	4.8	— 9.2	28	—15.9
	600 . . .	28	4304	4412	4179	28	— 9.2	— 3.3	—18.8	28	—21.4
	500 . . .	28	5692	5800	5549	28	—18.4	—13.0	—25.1	28	—30.9
	400 . . .	28	7319	7452	7142	28	—30.0	—26.0	—36.8	28	—42.0
	300 . . .	28	9306	9457	9092	28	—45.0	—38.1	—50.6	28	—55.2
	250 . . .	28	11937	12080	11717	28	—54.2	—43.3	—61.3	21	—63.8
	200 . . .	28	10501	10660	10272	28	—51.5	—42.9	—57.0	28	—61.5
	150 . . .	27	13768	13916	13563	27	—58.4	—52.6	—66.9	16	—67.2
	100 . . .	27	16271	16429	16115	27	—65.2	—59.5	—71.5	—	—
	70 . . .	23	18449	18649	18292	23	—65.3	—58.3	—76.2	—	—
	60 . . .	16	19429	19750	19220	16	—63.8	—59.5	—72.2	—	—
	50 . . .	16	20505	20678	20374	16	—60.1	—51.2	—66.0	—	—
	40 . . .	8	21992	22150	21850	8	—59.5	—55.8	—63.0	—	—
	30 . . .	8	23712	23858	23550	8	—57.3	—52.0	—61.1	—	—
	20 . . .	3	26294	26428	26225	3	—56.2	—55.5	—57.1	—	—
	10 . . .	—	—	—	—	—	—	—	—	—	—
Helwan 0000 U.T.	Surface . . .	29	*1001m.b.	*1008m.b.	*994m.b.	29	11.1	18.4	7.5	29	2.7
	1000 . . .	29	147	207	92	21	10.7	14.3	7.6	21	2.5
	850 . . .	29	1496	1549	1454	29	6.2	15.4	— 3.3	29	— 6.1
	700 . . .	29	3068	3151	3004	28	— 0.8	5.3	—10.5	28	—15.1
	600 . . .	29	4283	4382	4194	29	— 8.2	— 2.3	—15.8	29	—21.2
	500 . . .	29	5673	5789	5542	29	—18.1	—14.0	—26.9	29	—29.7
	400 . . .	28	7300	7447	7134	28	—30.3	—26.7	—35.3	28	—40.5
	300 . . .	28	9285	9461	9084	28	—44.7	—41.5	—49.9	28	—53.7
	250 . . .	28	10487	10665	10276	28	—51.0	—42.7	—56.7	28	—59.7
	200 . . .	28	11933	12079	11739	28	—53.3	—47.1	—62.2	25	—61.7
	150 . . .	25	13767	13885	13590	25	—60.6	—56.9	—64.8	9	—67.7
	100 . . .	24	16248	16334	16137	24	—68.1	—58.5	—72.5	—	—
	70 . . .	17	18400	18484	18315	17	—67.3	—60.4	—72.7	—	—
	60 . . .	10	19385	19450	19290	10	—65.5	—62.3	—69.7	—	—
	50 . . .	10	20468	20550	20386	10	—62.9	—59.5	—68.1	—	—
	40 . . .	8	21930	21990	21880	8	—62.0	—58.8	—65.5	—	—
	30 . . .	8	23623	23745	23564	8	—59.2	—56.1	—64.6	—	—
	20 . . .	3	26187	26238	26130	3	—55.3	—53.1	—57.4	—	—
	10 . . .	1	30693	—	—	1	—51.5	—	—	—	—
Aswan 0000 U.T.	Surface . . .	29	*994m.b.	*997m.b.	*989m.b.	29	13.0	18.8	7.4	29	— 3.4
	1000 . . .	29	141	169	108	—	—	—	—	—	—
	850 . . .	29	1511	1563	1471	29	11.3	18.2	4.1	29	—10.5
	700 . . .	29	3111	3161	3046	29	3.8	9.5	— 2.6	29	—18.7
	600 . . .	28	4345	4409	4265	28	— 3.8	0.8	—11.5	27	—24.1
	500 . . .	27	5756	5829	5657	27	—13.9	— 9.7	—17.2	27	—32.9
	400 . . .	27	7423	7640	7315	27	—25.3	—22.4	—29.1	27	—41.2
	300 . . .	26	9455	9565	9367	25	—37.9	—30.7	—43.9	24	—51.7
	250 . . .	26	10698	10795	10595	26	—44.1	—38.0	—53.5	25	—57.0
	200 . . .	26	12163	12279	12037	26	—54.4	—50.9	—60.5	24	—65.3
	150 . . .	24	13825	14079	13794	24	—65.9	—61.2	—72.3	—	—
	100 . . .	22	16356	16504	16199	22	—76.9	—71.5	—80.6	—	—
	70 . . .	13	18409	18525	18231	13	—73.0	—69.4	—80.3	—	—
	60 . . .	5	19312	19370	19270	5	—71.9	—69.9	—74.2	—	—
	50 . . .	5	20356	20392	20312	5	—67.3	—65.8	—69.5	—	—
	40 . . .	3	21830	21890	21800	3	—64.3	—62.3	—65.9	—	—
	30 . . .	3	23496	23540	23473	3	—59.9	—59.2	—60.5	—	—
	20 . . .	1	26043	—	—	1	—55.2	—	—	—	—
	10 . . .	—	—	—	—	—	—	—	—	—	—

N — The number of cases the element has been observed during the month.

* — Has atmospheric pressure corrected to the elevation of the radiosonde station.

UPPER AIR CLIMATOLOGICAL DATA

Table B1 (*contd*).—MONTHLY MEANS AND MONTHLY ABSOLUTE HIGHER & LOWER VALUES OF ALTITUDE, AIR TEMPERATURE & DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

FEBRUARY — 1972

Station	Pressure Surface (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Mersa Matruh (A) 1200 U.T.	Surface . . .	28	*1017m.b.	*1023m.b.	*1011m.b.	28	16.4	26.4	13.8	28	8.7
	1000 . . .	28	168	221	121	28	14.9	19.9	12.3	28	7.2
	850 . . .	28	1515	1578	1466	28	6.6	15.5	0.8	28	— 5.4
	700 . . .	28	3086	3172	3000	28	— 2.1	4.0	— 8.8	28	—13.8
	600 . . .	27	4297	4400	4181	27	— 9.6	— 4.9	—16.5	27	—22.7
	500 . . .	26	5680	5797	5527	26	—19.0	—12.7	—27.0	25	—30.7
	400 . . .	25	7299	7455	7122	25	—31.0	—25.3	—38.7	23	—41.9
	300 . . .	21	9475	9565	9025	21	—47.3	—39.9	—50.2	21	—53.4
	250 . . .	20	10470	10685	10275	20	—51.5	—44.6	—56.9	17	—61.5
	200 . . .	18	11903	12120	11731	18	—54.8	—48.0	—69.1	12	—61.7
	150 . . .	16	13742	13925	13551	16	—57.5	—51.0	—63.0	10	—66.6
	100 . . .	14	16276	16580	16091	14	—64.1	—61.4	—67.2	—	—
	70 . . .	13	18447	18530	18296	13	—64.3	—59.9	—69.1	—	—
	60 . . .	12	19442	19520	19220	12	—63.1	—58.3	—67.3	—	—
	50 . . .	12	20532	20615	20403	12	—60.9	—56.2	—66.5	—	—
	40 . . .	9	22014	22070	21860	9	—57.7	—53.5	—63.1	—	—
	30 . . .	8	23769	23998	23573	8	—54.8	—50.7	—59.0	—	—
	20 . . .	6	26404	26512	26270	6	—49.3	—47.0	—53.7	—	—
	10 . . .	—	—	—	—	—	—	—	—	—	—
Helwan 1200 U.T.	Surface . . .	27	*1000 m.b.	*1006m.b.	*993m.b.	27	19.5	26.2	15.2	27	1.0
	1000 . . .	27	138	191	79	16	19.0	26.2	13.7	16	0.5
	850 . . .	27	1501	1549	1454	27	6.7	14.8	— 0.6	27	— 7.4
	700 . . .	26	3039	3200	3009	26	— 0.2	5.8	— 8.5	25	—19.2
	600 . . .	24	4293	4431	4190	24	— 8.0	— 1.7	—17.7	23	—24.6
	500 . . .	23	5687	5834	5562	23	—17.2	—12.0	—24.6	21	—33.3
	400 . . .	20	7314	7446	7162	20	—29.2	—24.9	—36.7	19	—43.5
	300 . . .	20	9313	9464	9115	20	—42.8	—38.9	—55.5	19	—55.2
	250 . . .	20	10527	10694	10312	20	—48.7	—41.5	—55.7	19	—60.5
	200 . . .	20	11987	12150	11731	20	—51.3	—44.0	—61.3	16	—63.0
	150 . . .	18	13823	13989	13608	18	—58.7	—54.2	—62.8	8	—69.8
	100 . . .	15	16337	16479	16115	14	—66.9	—60.2	—70.3	—	—
	70 . . .	15	18492	18653	18306	15	—66.7	—61.1	—71.2	—	—
	60 . . .	11	19470	19640	19190	11	—63.8	—60.1	—68.2	—	—
	50 . . .	11	20565	20733	20381	11	—61.5	—58.0	—65.3	—	—
	40 . . .	5	22024	22230	21730	5	—58.0	—56.2	—60.3	—	—
	30 . . .	4	23832	23999	23743	4	—54.8	—49.6	—58.1	—	—
	20 . . .	2	26518	26689	26348	2	—48.3	—44.9	—51.7	—	—
	10 . . .	1	31329	—	—	1	—44.0	—	—	—	—
Aswan (A) 1200 U.T.	Surface . . .	28	*993m.b.	*997m.b.	988m.b.	28	23.7	31.1	18.0	28	0.7
	1000 . . .	28	131	167	85	—	—	—	—	—	—
	850 . . .	28	1521	1571	1475	28	12.6	22.1	3.6	27	— 9.0
	700 . . .	25	3126	3161	3046	25	4.6	11.0	— 4.9	25	—18.0
	600 . . .	22	4363	4412	4260	22	— 3.3	1.6	—10.2	21	—23.4
	500 . . .	21	5781	5853	5646	21	—12.5	— 8.5	—16.5	20	—30.7
	400 . . .	21	7449	7546	7316	21	—24.0	—20.7	—28.2	21	—41.4
	300 . . .	21	9496	9600	9382	21	—36.9	—28.0	—43.0	21	—51.6
	250 . . .	21	10743	10826	10592	21	—43.4	—36.8	—51.5	21	—57.3
	200 . . .	21	12216	12314	12014	21	—52.6	—48.9	—60.2	20	—64.6
	150 . . .	21	14029	14141	13789	21	—60.8	—61.0	—68.2	—	—
	100 . . .	20	16439	16561	16223	19	—75.4	—69.8	—80.4	—	—
	70 . . .	13	18520	18637	18354	13	—73.3	—67.6	—79.7	—	—
	60 . . .	7	19420	19540	19330	7	—70.2	—66.1	—75.0	—	—
	50 . . .	7	20511	20641	20394	7	—65.5	—62.1	—71.6	—	—
	40 . . .	2	22000	22090	21910	2	—57.5	—55.7	—59.3	—	—
	30 . . .	2	23726	23843	23610	2	—53.6	—52.2	—55.1	—	—
	20 . . .	2	26374	26502	26247	2	—47.7	—47.4	—48.0	—	—
	10 . . .	—	—	—	—	—	—	—	—	—	—

N — The number of cases the element has been observed during the month.

* The atmospheric pressure corrected to the elevation of the radiosonde station.

Table B 2.—MEAN AND EXTREME VALUES OF THE FREEZING LEVEL AND THE TROPOPAUSE. THE HIGHEST WIND SPEED IN THE UPPER AIR

FEBRUARY — 1972

	Station	Freezing level									First Tropopause									Highest wind speed			
		Mean			Highest			Lowest			Mean			Highest			Lowest						
		Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Direction (000—360)°	Speed in Knots
0000 U.T.		(N)	N)	(N)							(N)	(N)	(N)										
	Mersa Matruh (A)	2705 (28)	689 (28)	—11.0 (28)	3800	646	—11.3	1350	868	— 1.4	11425 (26)	225 (26)	—57.1 (26)	16355	100	—70.5	8640	323	—49.2	9388	347	280	140
	Helwan	2713 (29)	738 (29)	—11.1 (29)	4080	622	—18.1	1390	860	— 1.7	11263 (25)	233 (25)	—55.5 (25)	17400	85	—73.5	8290	340	—44.3	14380	138	255	152
	Aswan . . . (A)	3665 (28)	653 (28)	—21.4 (27)	4500	591	—30.2	2460	757	—11.3	15931 (11)	109 (11)	—76.4 (11)	16940	90	—81.7	13850	149	—65.6	10800	244	250	150
1200 U.T.		(N)	(N)	(N)							(N)	(N)	(N)										
	Mersa Matruh (A)	2744 (28)	737 (28)	—10.7 (28)	3750	650	— 8.6	1600	839	— 5.0	10791 (16)	247 (16)	—55.4 (16)	16380	100	—70.5	6380	447	—33.7	9607	311	275	145
	Helwan	2854 (25)	721 (25)	—16 3 (23)	4100	620	—21.5	1420	857	— 5.9	11159 (19)	231 (19)	—53.9 (19)	17320	86	—70.1	8220	345	—47.4	8410	364	280	150
	Aswan . . . (A)	3821 (22)	640 (22)	—20.4 (22)	4680	582	—20.3	2600	741	—19.6	16082 (14)	108 (14)	—75.3 (14)	17070	96	—79.9	14600	134	—72.2	9400	301	260	136

N = The Number of cases the element has been observed during the month.

TABLE B 3.—NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES.

MERSA MATRUH (A)— FEBRUARY 1972

Time	Pressure Surface Millibar	Wind between specified ranges of direction (000 –360)°																								Number of calm winds	Total number of observations (TN)	Mean scalar wind speed (knots)
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	3	13	1	5	0	—	3	9	6	9	2	8	2	6	3	8	5	11	3	12	0	—	1	7	0	29	9
	1000	3	16	1	17	1	12	1	23	7	16	1	21	0	—	0	—	4	16	4	23	5	18	1	14	0	28	18
	850	6	15	1	16	1	11	2	9	1	11	1	7	2	10	2	6	1	22	8	25	2	19	1	19	0	28	16
	700	1	38	1	10	0	—	0	—	0	—	1	10	2	6	1	34	3	18	5	29	7	29	6	20	0	27	23
	600	1	21	1	10	0	—	0	—	0	—	0	—	0	—	1	15	5	35	5	36	10	36	4	44	0	27	35
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	41	6	50	5	56	9	41	4	54	0	26	48
	400	1	34	0	—	0	—	0	—	0	—	0	—	0	—	1	83	5	74	7	64	8	52	2	66	0	24	62
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	85	4	66	8	65	7	71	1	74	0	21	69
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	92	1	65	9	81	2	75	0	—	0	13	80
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	90	3	82	2	84	0	—	0	7	85
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	63	0	—	0	—	0	—	0	1	63
	100	—	—	—	—	—	—	—	—	—	—	0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	2	10	3	9	1	16	6	19	0	—	0	—	1	5	3	14	3	14	0	—	4	19	5	13	0	28	14
	1000	2	17	2	10	1	17	7	20	0	—	1	27	0	—	2	20	4	12	2	8	5	22	1	11	0	27	17
	850	4	16	0	—	1	12	1	12	2	6	3	16	1	14	0	—	2	12	4	16	6	18	3	17	0	27	16
	700	0	—	1	15	0	—	0	—	0	—	1	17	0	—	2	20	3	24	7	26	6	25	7	18	0	27	22
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	13	4	23	7	34	9	31	5	22	0	26	28
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	46	5	42	8	38	10	41	1	41	0	25	40
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	37	8	57	11	48	0	—	0	24	49
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	50	11	70	5	73	2	74	0	20	69
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	68	10	75	4	69	1	97	0	17	74
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	80	3	69	1	75	1	88	0	7	76
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	50	1	69	0	—	0	—	0	2	60
	100	0	—	0	—	0	—	—	—	—	—	0	—	0	—	0	—	0	—	0	—	1	44	0	—	0	1	44
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the wind has been observed from the range of direction during the month.

TN = The total number of cases the wind has been observed for all directions during the month.

Table B 3. *(contd.)*— **NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES**

HELWAN — FEBRUARY 1972

Time	Pressure Surface (Millibar)	Wind between specified ranges of direction (000—360)°																								Number of Calm winds	Total Number of Observations (TN)	Mean Scalar wind Speed (Knots)
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	4	3	6	7	3	12	4	6	2	4	3	4	0	—	1	3	1	8	0	—	0	—	3	8	2	29	6
	1000	7	7	3	8	4	13	2	6	0	—	3	4	0	—	1	4	0	—	0	—	0	—	1	13	0	21	8
	850	3	12	4	13	2	8	0	—	3	6	0	—	0	—	2	14	2	17	6	18	3	18	4	18	0	29	14
	700	4	13	1	12	0	—	0	—	0	—	0	—	0	—	1	21	0	—	10	24	9	22	4	22	0	29	21
	600	1	15	0	—	0	—	0	—	0	—	0	—	0	—	2	40	2	29	9	21	10	30	5	27	0	29	27
	500	1	45	0	—	0	—	0	—	0	—	0	—	0	—	1	22	1	23	12	31	11	41	3	27	0	29	34
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	42	1	74	11	48	12	45	3	42	0	28	47
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	47	11	53	10	58	3	57	0	25	55
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	60	9	57	11	69	0	—	0	21	63
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	104	12	80	4	43	0	—	0	17	72
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	83	10	77	3	99	0	—	0	14	82
	100	0	—	0	—	0	—	0	—	0	—	1	46	0	—	0	—	1	114	3	79	5	91	0	—	0	10	85
	70	0	—	1	7	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	28	1	138	0	—	0	4	50
	60	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	50	1	12	0	—	0	3	37
	50	0	—	0	—	1	20	0	—	0	—	0	—	0	—	0	—	0	—	2	56	0	—	0	—	0	3	44
	40	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	82	0	—	1	22	0	2	52
	30	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	109	0	—	0	—	0	1	109
	20	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	3	8	4	10	1	10	0	—	0	—	1	4	2	8	3	4	3	8	5	9	2	9	3	7	0	27	8
	1000	3	15	1	17	2	12	0	—	0	—	0	—	1	11	2	3	2	12	2	3	2	13	2	14	0	17	11
	850	3	8	2	15	3	13	2	6	0	—	0	—	0	—	1	6	4	17	4	14	5	11	3	14	0	27	12
	700	2	24	2	16	0	—	0	—	0	—	0	—	0	—	1	30	4	23	6	24	4	20	6	13	0	25	20
	600	0	—	1	10	0	—	0	—	0	—	0	—	0	—	1	28	1	23	8	34	9	26	3	28	0	23	28
	500	1	15	0	—	0	—	0	—	0	—	0	—	0	—	1	33	0	—	9	42	6	34	4	29	0	21	35
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	25	1	44	7	47	8	48	2	31	0	19	46
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	67	10	59	5	55	1	94	0	17	61
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	11	70	5	74	0	—	0	16	71
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	10	89	3	70	0	—	0	13	85
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	77	2	72	0	—	0	7	75
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	82	1	74	0	—	0	5	81
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	25	1	92	2	60	0	—	0	4	76
	60	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	60	0	—	0	2	60
	50	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	24	0	—	0	1	24
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the wind has been observed from the range of direction during the month.

TN = The total number of cases the wind has been observed for all directions during the month.

Table B 8 (*contd.*).—NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES

ASWAN (A) — FEBRUARY 1972

Time	Pressure Surface Millibar	Wind between specified ranges of direction (000—360)°																								Number of calm winds	Total number of observations (TN)	Mean scalar wind Speed (knots)
		345 / 014		015 / 044		045 / 074		075 / 104		105 / 134		135 / 164		165 / 194		195 / 224		225 / 254		255 / 284		285 / 314		315 / 344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	19	9	3	8	1	8	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	10	5	13	0	29	10
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	2	14	2	6	5	12	1	7	1	12	1	15	1	3	0	—	0	—	4	10	4	11	8	12	0	29	11
	700	0	—	0	—	0	—	2	9	1	10	0	—	2	11	0	—	0	—	9	20	11	18	4	14	0	29	17
	600	0	—	0	—	0	—	0	—	0	—	1	3	0	—	1	21	2	12	11	29	8	28	4	20	0	27	25
	500	1	16	0	—	0	—	0	—	0	—	0	—	0	—	1	36	1	10	13	42	11	36	0	—	0	27	38
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	63	12	63	10	51	1	34	0	27	57
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	7	83	13	86	4	62	1	52	0	25	80
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	10	94	11	103	3	63	1	70	0	25	93
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	9	93	9	95	4	92	0	—	0	22	94
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	80	10	73	1	74	0	—	0	15	75
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	41	2	56	0	—	0	—	0	3	51
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	32	0	—	0	—	0	1	32
	60	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	12	0	—	0	1	12
	50	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	12	0	—	0	—	0	1	12
	40	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	20	0	—	0	—	0	—	0	1	20
	30	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	32	0	—	0	—	0	1	32
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	8	12	8	11	0	—	0	—	0	—	0	—	0	—	0	—	4	10	0	—	1	6	6	14	1	28	11
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	4	12	2	6	3	11	3	14	0	—	0	—	0	—	0	—	1	19	3	15	2	8	10	13	0	28	12
	700	0	—	1	14	1	4	1	8	0	—	1	10	0	—	0	—	1	30	2	14	14	19	3	13	0	24	17
	600	0	—	0	—	0	—	0	—	1	10	0	—	0	—	0	—	4	24	2	32	11	29	4	16	0	22	25
	500	0	—	0	—	0	—	0	—	0	—	1	34	0	—	0	—	3	35	8	40	9	35	0	—	0	21	37
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	52	11	60	5	42	0	—	0	21	51
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	100	4	78	12	83	3	69	1	63	0	21	80
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	10	99	7	95	4	66	0	—	0	21	91
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	8	90	8	93	3	81	0	—	0	19	87
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	66	11	73	3	76	0	—	0	17	69
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	52	9	41	2	46	0	—	0	14	44
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	22	0	—	0	—	0	2	22
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the wind has been observed from the range of directions during the month.

TN = The total number of cases the wind has been observed for all directions during the month.

REVIEW OF AGRO-METEOROLOGICAL STATIONS

MERSA MATRUH — FEBRUARY 1972

For the month as a whole the mean daily air temperature was rather normal while the mean daily relative humidity was markedly above normal. The total monthly rainfall was 15.5 mm. against 17.7 mm. for normal.

The prevailing weather was generally cold with subnormal temperatures, apart from a warm spell in the period (13th-15th) yielding the highest maximum air temperature (23.0°C) on the 13th. The lowest maximum air temperature for the month was 13.2°C reported on the 3rd, together with the maximum daily rainfall (13.6 mm.). The lowest minimum air temperature was 5.2°C reported on the 20th.

The extreme maximum soil temperatures were lower than last February at 2, 5, 50 and 100 cm. depths with departures between 1.1°C at 2 cm. and 0.3°C at 50 cm. At 10, 20 cm. depths the extreme soil maxima were higher than last February by 0.4°C and 1.0°C respectively. The extreme minimum soil temperatures were lower than last February at all depths, apart from 100 cm. depth where the value was the same as last February ; the departures varied between 2.2°C at both 10, 50 cm. depths and 0.4°C at 20 cm.

The mean daily wind speed at 1.5 met. was less than February 1971 by 1.3 m./sec. The mean daily actual sunshine duration was higher than February 1971 by 0.9 hour.

TAHRIR — FEBRUARY 1972

For the month as a whole the mean daily air temperature was about average, while the mean daily relative humidity was markedly above average. The total monthly rainfall was 1.2 mm. against 6.7 mm. for average.

The month was intervened with three warm spells in the periods : (12th-15th), (22nd & 23rd) and (26th-28th). The last warm spell yielded the highest maximum air temperature for the month (28.3°C) on the 27th together with the lowest relative humidity (33%). Apart from these warm spells light cold spells were experienced. The lowest maximum air temperature was 17.2°C reported on the 7th ; and the lowest minimum air temperature was 1.8°C reported on the 10th and 20th.

The extreme maximum soil temperatures were higher than last February at all depths apart from 100 cm. depth where the value was lower by 0.2°C, the departures varied between 3.9°C at 2 cm. and 0.4°C at 50 cm. The extreme minimum soil temperatures were lower than last February at all depths with departures between 1.8°C at 2 cm. and 0.2°C at 100 cm.

The mean daily actual sunshine duration was more than last February by 0.6 hour.

The mean daily wind speed at 1.5 met. and pan evaporation were lower than last February by 0.6 m./sec. and 1.0 mm. respectively.

BAHTIM — FEBRUARY 1972

For the month as a whole the mean daily air temperature was slightly below the corresponding value of last February, while the mean daily relative humidity was slightly higher. The month was rainless apart from trace on the 6th.

The prevailing weather was rather cold with subnormal temperatures most days of the month. Three warm spells were experienced in the periods (12th-15th), (22nd & 23rd) and (26th & 27th).

The highest maximum air temperature for the month was 27.4°C reported on the 27th. Minimum air temperature at 5 cm. above ground fell below 0°C on 6 days during the month; its values on these days are given in the following table :

Date	1	2	9	10	11	20
Min. Temp. (°C)	-3.8	-1.2	-0.8	-3 1	-1.0	-1.2

The extreme maximum soil temperatures were lower than last February at 2, 50, 100 cm. depths with departures between 1.4°C and 0.5°C. AT 5 cm. depth the extreme maximum soil temperature was the same, and at 10, 20 cm. depths its values were higher than last February by 0.9° and 0.2°C respectively. The extreme minimum soil temperatures were lower than last February at all depths with departures between 3.4°C at 5 cm. and 0.5°C at 100 cm.

The mean daily actual sunshine duration was higher than February 1971 by 0.7 hour.

The mean daily wind speed at 1.5 met. and pan evaporation were lower than February 1971 by 0.1 m./sec. and 0.08 mm. respectively.

KHARGA — FEBRUARY 1972

The mean daily values of air temperature and relative humidity for this month were about average.

The month was intervened with five warm spells in the periods (11th & 12th), (14th & 15th), (21st-24th), (26th & 27th) and 29th.

The higest maximum air temperature for the month (31.4°C) was reported on the 29th. Apart from these warm spells, weather was rather cold with subnormal temperatures. The lowest maximum air temperature for the month was 18.0°C reported on the 7th. Minimum air temperature at 5 cm. above ground fell below 0.°C on the 9th only when its value was — 0.7°C.

The extreme maximum soil temperatures were higher than last February at 2, 5, 20 cm. depths; the same at 50 cm. and lower at 10, 100 cm. depths ; the departures varied between 0.1°C and 0.9°C. The extreme minimum soil temperatures were lower than last February at all depths with departures between 2.1°C at 2 cm. and 0.7°C at 100 cm.

The daily mean values of wind speed at 1.5 m. actual sunshine duration and pan evaporation were all higher than the corresponding values of February 1971 by 0.1 m./sec., 0.4 hour and 0.71 mm. respectively.

Table C 1.—AIR TEMPERATURE AT 1½ METRES ABOVE GROUND
FEBRUARY — 1972

STATION	Air Temperature (°C)					Mean Duration in hours of daily air temperature above the following values										
	Mean Max.	Mean Min.	Mean of the day	Night time mean	Day time mean	-5°C	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C
M. Matruh. . . .	18.1	8.7	13.1	11.3	14.9	24.0	24.0	24.0	19.4	7.3	0.2	0.0	0.0	0.0	0.0	0.0
Tahrir	21.6	6.0	13.2	9.7	16.5	24 0	24.0	23.2	15.9	8.8	2.0	0.1	0.0	0.0	0.0	0.0
Bahtim	20.9	4.4	12.2	8.4	16.0	24.0	24.0	21.2	14.3	7.8	1.9	0.1	0.0	0.0	0.0	0.0
Kharga	24.7	5 9	15.9	12.3	19.4	24.0	24.0	23.0	19.2	12.6	6.5	2.1	0.1	0.0	0.0	0.0

Table C 2.—EXTRÊME VALUES OF AIR TEMPERATURE AT 1½ METRES ABOVE GROUND, ABSOLUTE MINIMUM AIR TEMPERATURE AT 5cms ABOVE GROUND OVER DIFFERENT FIELDS
FEBRUARY — 1972

STATION	Max. Temp. at 1½ metres				Min. Temp. at 1½ metres				Min. Temp. at 5 cms. above			
	Highest		Lowest		Highest		Lowest		Dry Soil		Grass	
	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date
M. Matruh.	23.0	13	13.2	3	13.5	24	5.2	20	2.5	20	—	—
Tahrir	28.3	27	17.2	7	9.6	28	1.8	10.20	0.2	20	—	—
Bahtim	27.4	27	16.4	7	11.2	28	0.2	10	—3.8	1st,	—	—
Kharga	31.4	29	18.0	7	12.2	28	0.6	9	—0.7	9	—	—

Table C 3.—(SOLAR + SKY) RADIATION, DURATION OF BRIGHT SUNSHINE, RELATIVE HUMIDITY & VAPOUR PRESSURE AT 1½ METRES ABOVE GROUND, EVAPORATION & RAINFALL
FEBRUARY — 1972

STATION	Solar+Sky Radiation gm. cal/cm²	Duration of Bright Sunshine (hours)			Relative Humidity %				Vapour Pressure (mms)						Evaporation (mms)		Rainfall (mms)		
		Total Actual	Total Possible monthly	%	Mean of day	1200 U.T.	Lowest	Date	Mean of day	1200 UT	Highest	Date	Lowest	Date	Piche	Pan class (A)	Total Amount monthly	Max. fall in one day	Date
M. Matruh. . . .	327.2	227.3	320.7	71	76	63	28	14	8.5	9.1	13.9	27	4.0	15	4.7	—	15.5	13.6	3
Tahrir	410.3	259.5	321.6	81	78	60	33	27	8.8	10.4	13.0	29	5.4	10	4.8	4.46	1.2	1.2	6
Bahtim	423.8	264.8	322.3	82	64	38	19	12,15	6.5	6.4	10.3	28	3.9	15	5.5	5.23	Tr.	Tr.	6
Kharga.	411.2	309.5	327.6	94	35	21	5	23	4.3	4.3	8.3	28	1.5	23	10.0	8.48	0.0	0.0	—

Table C 4.—EXTREME SOIL TEMPERATURE AT DIFFERENT DEPTHS IN DIFFERENT FIELDS

FEBRUARY — 1972

STATION	Highest (H) Lowest (L)	Extreme soil temperature (°C) in dry field at different depths (cms.)								Extreme soil temperature (°C) in grass field at different depths (cms.)							
		2	5	10	20	50	100	200	300	2	5	10	20	50	100	200	300
M. Matruh . .	H	23.5	22.2	20.5	18.2	16.4	16.8	19.3	—	—	—	—	—	—	—	—	—
	L	6.5	6.7	8.3	11.0	12.8	16.2	18.6	—	—	—	—	—	—	—	—	—
Tahrir	H	34.3	28.8	24.7	20.7	18.3	17.9	18.9	20.9	—	—	—	—	—	—	—	—
	L	6.4	8.2	9.4	11.5	13.9	16.2	18.6	20.3	—	—	—	—	—	—	—	—
Bahtim	H	35.0	27.1	23.4	19.7	19.1	19.6	22.8	24.3	—	—	—	—	—	—	—	—
	L	4.5	6.2	10.4	14.9	17.6	19.2	21.8	23.5	—	—	—	—	—	—	—	—
Kharga . . .	H	38.0	31.5	25.8	22.8	22.5	22.7	25.4	27.6	—	—	—	—	—	—	—	—
	L	3.4	6.8	11.3	15.8	19.4	22.0	24.6	26.7	—	—	—	—	—	—	—	—

Table C 5.—SURFACE WIND

FEBRUARY — 1972

STATION	Wind Speed m/sec at 1½ metres			Days with surface wind speed at (10 metres)							Max. Gust (knots) at (10 metres)	
	Mean of the day	Night time mean	Day time mean	≥10 knots	≥15 knots	≥20 knots	≥25 knots	≥30 knots	≥35 knots	≥40 knots	value	Date
M. Matruh . .	4.0	3.0	4.9	29	24	18	11	2	1	0	42	13
Tahrir	2.1	1.4	2.9	27	22	8	2	0	0	0	33	8
Bahtim	2.2	1.2	3.1	26	19	7	0	0	0	0	31	6
Kharga . . .	2.7	1.8	3.5	23	12	4	0	0	0	0	25	7,19

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THE EGYPTIAN METEOROLOGICAL AUTHORITY
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PUBLICATIONS OF THE METEOROLOGICAL AUTHORITY OF THE ARAB REPUBLIC OF EGYPT — CAIRO

In fulfilment of its duties, the Meteorological Authority of Egypt issues serveral reports and publications on weather, climate and agrometeorology. The principal publications are described on this page.

Orders for publications should be addressed to :

"Chairman of the Board of Directors, Meteorological Authority, Kubri-el-Qubbeh — CAIRO".

THE MONTHLY WEATHER REPORT

First issued in 1909, the Monthly Weather Report served to give a brief summary of the weather conditions that prevailed over Egypt during the month, with a table showing the mean values for few meteorological elements and their deviations from the normal values. From 1954 to 1957 this report was in a rapid state of development and extension resulting into a voluminous report on January 1958 giving surface, upper air, and agro-meteorological data for Egypt.

As from January 1964, the Monthly Weather Report was pressed to give climatological data for a representative selection of synoptic stations.

THE AGRO-METEOROLOGICAL ABRIDGED MONTHLY REPORT

Gives a review of weather experienced in the agro-meteorological stations of Egypt as well as monthly values of certain elements.

THE ANNUAL REPORT

This report gives annual values and statistics for the various meteorological elements, together with a summary of the weather conditions that prevailed during all months of the year.

CLIMATOLOGICAL NORMALS FOR EGYPT

A voluminous edition was issued in March 1968 which brings normals and mean values up till 1960.

METEOROLOGICAL RESEARCH BULLETIN

First issued in January 1969 on a bi-annual basis. It includes research works carried out by members of staff of "The Meteorological Institute for Research and Training" and the Operational Divisions of the Meteorological Authority.

TECHNICAL NOTES

As from October 1970, the Meteorological Authority started to issue a new series of publications in the form of Technical Notes (non periodical) on subjects related to studies and applications of meteorology in different fields for the benefit of personnel working in these fields.

THE ARAB REPUBLIC OF EGYPT

MONTHLY WEATHER REPORT

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THE EGYPTIAN METEOROLOGICAL AUTHORITY
CAIRO

CONTENTS

PAGES

General Summary of Weather Conditions 1-2

SURFACE DATA

Table A1.—Monthly values of the Atmospheric Pressure, Air Temperature, Relative Humidity, Bright Sunshine Duration and Piche Evaporation 3

" A2.—Maximum and Minimum Air Temperatures 4

" A3.—Sky Cover and Rainfall 5

" A4.—Number of Days of Occurrence of Miscellaneous Weather Phenomena 6

" A5.—Number in Hours of Occurrences of Concurrent Surface Wind Speed and Direction Recorded Within Specified Ranges 7-8

UPPER AIR DATA

Table B1.—Monthly Means and Monthly Absolute Higher & Lower Values of Altitude, air Temperature & Dew point at Standard and Selected Pressure Surfaces 9,10

" B2.—Mean and Extreme values of The Freezing Level and The Tropopause; The Highest Wind Speed in The Upper Air 11

" B3.—Number of Occurrences of Wind Direction Within Specified Ranges and The Mean Scalar Wind Speed at the Standard and Selected Pressure Surfaces 12-14

AGRO-METEOROLOGICAL DATA

Reviews of Agro-Meteorological Stations 15,16

Table C1.—Air Temperature at 1½ Metres Above Ground 17

" C2.—Extreme Values of Air Temperature at 1½ metres above Ground, Absolute Minimum Air Temperature at 5 cms. above Ground Over Different Fields. 17

" C3.—(Solar + Sky) Radiation, Duration of Bright Sunshine, Relative Humidity and Vapour Pressure at 1½ metres above Ground, Evaporation and Rainfall. 17

" C4.—Extreme Soil Temperature at Different Depths in Different Fields 18

" C5.—Surface wind 18

Note : For explanatory notes on tables please refer to Volume 15, Number 1 (January 1972).

GENERAL SUMMARY OF WEATHER CONDITIONS

MARCH 1972

Changeable, intervened by five short durable khamsin waves. Daily rainfall records in scattered localities.

GENERAL DESCRIPTION OF WEATHER

The prevailing weather in this month was changeable, characterized by five khamsin heat waves. The first four heat waves were light and were experienced round the 3rd, 7th, 11th & 18th. The last heat wave was the most pronounced and prevailed round the period (25th-28th). The break down of these heat waves was associated with appreciable fall in temperature and in particular the 3rd & 4th waves which were followed by cold weather round the periods (14th-16th) and (20th-24th).

The mean daily relative humidity was above normal most days of the month.

Weather was rainy in the period (13th-22nd) over the northern parts of the country where the monthly rainfall exceeded the normal, otherwise rain was mostly subnormal.

Rising sand was reported during several days over scattered places, mainly in the Red Sea, Western Desert and Upper Egypt districts.

PRESSURE DISTRIBUTION

The outstanding features of pressure distribution over the surface charts during this month were :

— The Siberian anticyclonic ridge north of the Black Sea and its extension over East Mediterranean.

— The Atlantic anticyclone and its extension over North Africa.

— Deep low pressure systems through Europe.

— Five secondary depressions through the Mediterranean, four of which developed over north Algiers and the fifth over Italy.

The first Mediterranean depression appeared over north Algiers on the 1st, then it moved northeastwards to Central Mediterranean on the 2nd. It continued its course eastwards reaching East Mediterranean on the 3rd where it was quasistationary and filled up on the 5th.

The second Mediterranean depression developed over Italy on the 6th, moved rapidly southeastwards and filled up over East Mediterranean on the 7th.

The third Mediterranean depression appeared over North Algiers on the 9th, moved to Central Mediterranean on the 10th and then moved rapidly southeastwards traversing East Mediterranean on the 12th.

The fourth and fifth Mediterranean depressions appeared over North Algiers on the 16th & 24th. They moved eastwards reaching the Western Desert on the 18th & 27th, then northeastwards to East Mediterranean where they filled up on the 22nd and 29th respectively.

The barometric pressure over Egypt experienced five pronounced oscillations and attained five consecutive minima round the 3rd, 7th, 11th, 18th & 28th respectively.

At the 700 & 500 mbs. levels, the upper flow was interrupted by the consecutive transits of upper troughs through East Mediterranean round the 4th, 8th, 11th, 24th & 30th, and two pronounced cold upper lows on the 16th & 21st.

SURFACE WIND

The prevailing surface winds this month were generally light to moderate W/NW in the northern parts of the country and N to NW in the southern parts. Winds changed to SE/SW in few days in advance of transitory depressions. Winds were occasionally fresh /strong during several days in scattered localities of the Republic.

TEMPERATURE

Maximum air temperature showed large variability during this month. Its departure above normal was pronounced during the last heat wave. Otherwise it oscillated below normal with marked departures within the periods (14th-16th) and (20th-24th). Maximum air temperature values ranged most of the month between 18° & 28°C in the northern and middle parts, between 25° & 35°C in the southern parts.

The highest maximum air temperature for the Republic was 38.2°C reported at Luxor on the 27th.

Minimum air temperature fluctuations were more or less similar to maximum air temperature fluctuations. Its values ranged in general between 6° & 16°C in the northern and southern parts, between 4° & 13°C in the middle parts.

The lowest minimum air temperature for the Republic was 2.8°C reported at Beni Suef on the 1st.

PRECIPITATION

The monthly rainfall was above normal in the northern parts of the country till Cairo area and mostly subnormal elsewhere.

Light to moderate rain fell over the northern parts mostly during the period (13th-22nd). Rain was heavy and associated with thunderstorms over scattered parts round the 14th & 21st. It is worthy to mention that the daily rainfall attained record values at Alexandria (15.6 mms) on the 14th, Port Said (14.8 mms) on the 20th, Rosetta (20.2 mms) on the 14th, Ras-el-Hikma (21.7 mms) on the 14th, Cairo (Abbasiya) (5.4 mms) on the 21st, Imbaba (8.6 mms) on the 21st and Tahrir (16.7 mms) on the 20th.

The highest daily rainfall was 21.7 mms reported at Ras-el-Hikma on the 14th.

The highest monthly rainfall was 34.9 mms reported at Damietta.

Cairo, February 1973

Chairman (M. F. TAHA)

Board of Directors

SURFACE DATA

Table A 1. — MONTHLY VALUES OF THE ATMOSPHERIC PRESSURE, AIR TEMPERATURE, RELATIVE HUMIDITY, BRIGHT SUNSHINE DURATION & PICHE EVAPORATION.

MARCH — 1972

STATION	Atmospheric Pressure (mbs) M.S.L.		Air Temperature °C									Relative Humidity %		Bright Sunshine Duration (Hours)			Piche Evaporation (mms)
			Maximum		Minimum			Dry Bulb		Wet Bulb							
	Mean	D.F. Normal or Average	(A) Mean	D.F. Normal or Average	(B) Mean	D.F. Normal or Average	$\frac{A+B}{2}$	Mean	D.F. Normal or Average	Mean	D.F. Normal or Average	Mean	D.F. Normal or Average	Total Actual	Total Possible	%	Mean
Sallum	1013.5	— 1.5	20.3	— 1.1	12.0	+ 0.9	16 2	15.9	— 0.5	11.8	0 0	58	+ 03	—	—	—	7.5
Mersa Matruh (A)	1014.4	— 1.2	20.0	— 0.5	11.2	+ 1.2	15.4	15 3	+ 0.3	12.3	+ 0.9	66	+ 03	223.7	371.8	60	5 9
Alexandria (A)	1014.3	— 1 3	21.1	— 0.1	10.8	— 0.4	16 0	15.7	— 0.1	12.6	+ 0.4	67	+ 01	252.7	371.8	68	5.1
Port Said (A)	1013.4	— 2 0	20.9	+ 0.7	12.7	— 0.9	16.8	16.3	— 0.1	12.6	— 0.7	62	— 06	232.5	371.8	61	4.2
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1013 9	— 1.6	22.0	— 1.7	8.3	0.0	15.2	14.7	— 1.0	11.4	— 0.4	65	+ 05	251.0	372.0	68	4.0
Cairo (A)	1013 9	— 1.4	22 3	— 1.6	12.1	+ 0.7	17.2	17.5	— 0.1	12.2	0.0	50	0.0	—	—	—	11.5
Fayoum	—	—	24.5	— 0.8	9.5	— 0.5	17.0	16.8	— 1.1	12.6	+ 0.4	59	+ 12	—	—	—	5.4
Minya (A)	1014.1	— 1.4	24.9	— 0.9	8.8	+ 0.9	16 8	16.8	+ 0.2	11.6	+ 0.5	50	+ 02	287.2	372.6	77	7.7
Assyout (A)	1012 7	— 2.2	25.4	— 1.2	11 0	+ 0.4	18.2	18.2	— 0.4	11.3	+ 0.3	37	+ 05	—	—	—	11.9
Luxor (A)	1012 7	— 0.7	28.9	— 0.4	10.9	+ 0 2	19.9	19.8	— 0.3	12.5	+ 0.2	41	+ 07	—	—	—	7.3
Aswan (A)	1012.6	— 0.4	29.6	— 1.0	13.7	+ 0.4	21.6	21.4	— 0.8	11.4	+ 0.3	21	+ 06	—	—	—	17.9
Siwa	1014.2	— 1.4	24 3	— 0.7	10.3	+ 1.9	17.3	17.5	+ 0.3	11.3	+ 0.8	42	+ 05	227.2	373.2	61	6.9
Bahariya	1014.2	— 1.2	24.6	— 1.0	9.8	+ 0.9	17.2	17 2	— 0.8	10.3	— 0 3	35	— 01	—	—	—	8.6
Farafra	1016 3	— 0.3	25.4	— 1.2	9.2	+ 0.3	17.3	17.2	— 0.7	9.8	+ 0.1	31	+ 04	—	—	—	10.5
Dakhla	—	—	26.5	— 1.3	8.2	— 1.1	17.4	17.6	— 0.7	10 2	+ 0.6	32	+ 08	—	—	—	12 0
Kharga	1013.9	— 0.6	27.7	— 0.8	11.4	+ 0.4	19.6	20.0	— 0.3	10.7	— 0.6	29	0.0	304.7	372.8	82	10.9
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	1012.7	— 0 7	24.4	+ 1.0	13 9	+ 1.5	19 2	19.2	+ 0.4	13.5	+ 0.3	49	— 01	297.5	372.4	80	10.3
Quser	1012.4	— 1.1	24.1	— 0.7	16.2	— 0.3	20.2	20.2	— 0.6	14.1	— 0.2	47	+ 01	—	—	—	9.1

Table A2.—MAXIMUM AND MINIMUM AIR TEMPERATURES

MARCH — 1972

Station	Maximum Temperature °C									Grass Min. Temp.		Minimum Temperature °C							
	Highest	Date	Lowest	Date	No. of Days with Max-Temp.					Mean	D. From Normal	Highest	Date	Lowest	Date	No. of Days with Min. Temp.			
					>25	>30	>35	>40	>45							10	<5	<0	<-5
Sallum	27.3	27	13.7	14	2	0	0	0	0	11.5	—	16.6	25	8.3	14	4	0	0	0
Mersa Natruh (A)	30.9	27	13.2	14	3	1	0	0	0	9.5	—	15.9	26	7.1	17	11	0	0	0
Alexandria (A)	30.3	27	14.4	14	4	1	0	0	0	8.8	—	15.5	28	6.8	14	14	0	0	0
Port Said (A)	24.9	28	14.8	15	0	0	0	0	0	12.9	—	16.0	28	8.4	15	2	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	30.0	27	14.3	14	6	0	0	0	0	—	—	14.0	27	4.7	24	22	1	0	0
Coiro (A)	33.3	27	16.2	14	10	1	0	0	0	—	—	21.6	27	6.6	15	7	0	0	0
Fayoum	32.3	27	18.0	14	12	2	0	0	0	6.8	—	15.0	28	5.4	7	19	0	0	0
Minya (A)	34.1	27	19.0	15	14	3	0	0	0	6.1	—	15.0	28	5.0	15	21	0	0	0
Assyout (A)	34.4	27	19.0	15	13	3	0	0	0	8.0	—	16.4	19,28	6.5	15	14	0	0	0
Luxor (A)	38.2	27	21.6	15	26	9	3	0	0	6.9	—	20.0	19	6.6	7	13	0	0	0
Aswan (A)	36.4	19	23.2	16	27	12	4	0	0	—	—	21.5	29	8.3	16	2	0	0	0
Siwa	32.3	26	18.6	14	13	2	0	0	0	9.7	—	16.6	25	3.9	5	12	1	0	0
Bahariya	35.1	27	18.2	14	12	3	1	0	0	9.1	—	17.2	28	3.9	15	17	2	0	0
Farafra	35.2	27	17.0	15	13	5	1	0	0	9.2	—	15.8	3,28	3.6	7	17	2	0	0
Dakhla	36.5	27	18.0	15	18	5	1	0	0	8.2	—	17.1	29	3.5	7	22	6	0	0
Kharga	37.2	28	19.7	15	27	7	2	0	0	9.5	—	20.2	29	5.6	17	9	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	30.5	28	20.4	16	10	1	0	0	0	—	—	19.6	3	10.1	2	0	0	0	0
Quseir	31.0	28	21.3	16,22	6	1	0	0	0	13.8	—	19.4	27,29	12.8	16	0	0	0	0

Table A 3.—SKY COVER AND RAINFALL

MARCH — 1972

Station	Mean Sky Cover Oct.					Rainfall mms.										
	00 U.T.	06 U.T.	12 U.T.	18 U.T.	Daily Mean	Total Amount	D. From Normal	Max. Fall in one day		Number of Days with Amount of Rain						
								Amount	Date	<0.1	≥0.1	≥1 0	≥5.0	≥10	≥25	≥50
Sallum . . . . . (A)	1.9	2.4	3.1	1.5	2.2	1.6	—10.0	1.6	14	0	1	1	0	0	0	0
Mersa Matruh . . . . . (A)	2.5	3.9	4.4	3.2	3.6	16.1	+ 3.8	4.2	21	2	6	5	0	0	0	0
Alexandria . . . . . (A)	4.1	5.2	5.4	4.3	4.7	28.0	+15.6	15.6	14	2	6	3	2	2	0	0
Port Said . . . . . (A)	2.3	3.5	3·1	3 0	3.0	29.9	+22.2	14.8	20	1	6	4	2	1	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1.3	2.7	4.7	2.0	2.8	8.6	+ 4.4	5.4	20	0	5	3	1	0	0	0
Cairo . . . . . (A)	1.1	3.2	4.5	3.0	3.1	5.3	+ 3.5	2.6	21	1	5	3	0	0	0	0
Fayoum	—	2.3	4.2	2.9	—	0.0	— 1.4	0.0	—	0	0	0	0	0	0	0
Minya . . . . . (A)	1.5	1.8	3.0	1.8	2.0	2.8	+ 2.5	2.8	21	0	1	1	0	0	0	0
Assyout . . . . . (A)	0.8	1.1	1.6	1.2	1.2	1.0	+ 1.0	1.0	21	0	1	1	0	0	0	0
Luxor . . . . . (A)	1.1	1.9	2.2	1.6	1.7	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Aswan . . . . . (A)	1.2	1.7	1.8	1 2	1.5	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Siwa	2.1	1.6	3 8	2.4	2.5	Tr.	— 0.2	Tr.	17	1	0	0	0	0	0	0
Bahariya	1.0	1.9	2 8	1.5	1.8	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Farafra	—	0.9	1.8	1.1	—	0.0	— 0.2	0.0	—	0	0	0	0	0	0	0
Dakhla	0.0	0.7	1.0	0 1	0.5	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Kharga	0.8	1.6	1.6	1 2	1.3	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	1.5	2.0	2.3	1.6	1.7	0.0	— 0.4	0.0	—	0	0	0	0	0	0	0
Quseir	0.9	2.2	2.2	1.0	1.6	0.0	— 0.3	0.0	—	0	0	0	0	0	0	0

Table A 4.— DAYS OF OCCURRENCE OF MISCELLANEOUS WEATHER PHENOMENA

MARCH — 1972

Station	Precipitation				Frost	Thunderstorm	Mist Vis ≥ 1000 metres	Fog Vis < 1000 Metres	Haze Vis ≥ 1000 Metres	Thick Haze Vis < 1000 Metres	Dust or Sandrising Vis ≥ 1000 Metres	Dust or Sandstorm Vis < 1000 Metres	Gale	Clear Sky	Cloudy Sky
	Rain	Snow	Ice. Pellets	Hail											
Sallum	1	0	0	0	0	0	0	0	0	0	5	0	0	11	0
Mersa Matruh (A)	6	0	0	0	0	0	1	0	1	0	6	5	0	4	3
Alexandria (A)	6	0	0	0	0	1	1	1	2	0	3	1	0	1	4
Port Said (A)	6	0	0	0	0	0	0	0	3	0	3	0	0	9	2
Al Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	5	0	0	0	0	0	4	0	1	0	1	0	0	8	1
Cairo (A)	5	0	0	0	0	1	9	1	14	1	10	1	0	8	1
Fayoum	0	0	0	0	0	0	0	0	2	0	1	0	0	—	—
Minya (A)	1	0	0	0	0	0	6	0	9	0	9	0	0	16	1
Assyout (A)	1	0	0	0	0	0	0	0	4	0	4	0	0	24	1
Luxor (A)	0	0	0	0	0	0	0	0	16	0	9	0	0	21	2
Aswan (A)	0	0	0	0	0	0	0	0	14	0	13	2	0	21	2
Siwa	0	0	0	0	0	0	0	0	0	0	8	0	0	14	0
Bahariya	0	0	0	0	0	0	0	0	0	0	4	0	0	16	1
Farafra	0	0	0	0	0	0	0	0	7	0	4	0	0	—	—
Dakhala	0	0	0	0	0	0	0	0	1	0	5	0	0	29	0
Kharga	0	0	0	0	0	0	0	0	0	0	14	0	0	23	2
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0	0	0	0	0	0	0	0	1	0	11	1	0	22	3
Quseir	0	0	0	0	0	0	0	0	1	0	3	0	0	23	1

Table A 5.—NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES

MARCH — 1972

Station	Calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurrences of wind blowing from the ranges of directions indicated												All directions
					345 / 014	015 / 044	045 / 074	075 / 104	105 / 134	135 / 164	165 / 194	195 / 224	225 / 254	255 / 284	285 / 314	315 / 344	
Sallum	24	0	0	1-10	25	47	82	27	33	15	6	6	14	8	90	92	445
				11-27	8	6	12	6	5	4	0	6	51	12	104	61	275
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**33**	**53**	**94**	**33**	**38**	**19**	**6**	**12**	**65**	**20**	**194**	**153**	**720**
Mersa Matruh (A)	9	0	0	1-10	35	19	12	10	20	21	14	15	36	53	18	59	312
				11-27	15	2	7	42	26	8	20	31	47	30	49	139	416
				28-47	0	0	0	1	0	0	0	2	1	0	3	0	7
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**50**	**21**	**19**	**53**	**46**	**29**	**34**	**48**	**84**	**83**	**70**	**198**	**735**
Alexandria	4	0	0	1—10	35	22	33	29	49	24	27	40	17	54	63	104	497
				11—27	19	3	5	18	9	1	2	11	33	33	42	67	243
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**54**	**25**	**38**	**47**	**58**	**25**	**29**	**51**	**50**	**87**	**105**	**171**	**740**
Tanta	12	0	0	1-10	49	40	41	43	21	14	26	54	70	82	89	52	581
				11-27	12	8	2	30	1	0	1	5	19	19	29	25	151
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**61**	**48**	**43**	**73**	**22**	**14**	**27**	**59**	**89**	**101**	**118**	**77**	**732**
Cairo	71	0	43	1-10	34	56	29	24	17	18	37	44	35	61	57	38	450
				11-27	5	25	14	4	19	13	7	20	16	33	18	6	180
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**39**	**81**	**43**	**28**	**36**	**31**	**44**	**64**	**51**	**94**	**75**	**44**	**630**
Fayom	8	20	3	1-10	97	154	37	11	20	49	36	56	73	76	46	43	698
				11-27	0	3	0	0	0	0	0	0	3	7	2	0	15
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**97**	**157**	**37**	**11**	**20**	**49**	**36**	**56**	**76**	**83**	**48**	**43**	**713**
Minya	9	0	5	1-10	159	37	3	9	10	57	67	25	22	28	44	78	539
				11-27	111	13	0	0	0	2	6	1	0	7	22	29	191
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**270**	**50**	**3**	**9**	**10**	**59**	**73**	**26**	**22**	**35**	**66**	**107**	**730**
Assyout	10	1	6	1-10	21	12	8	18	26	34	19	9	12	111	151	101	522
				11-27	21	0	0	0	15	13	10	1	0	6	64	75	205
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**42**	**12**	**8**	**18**	**41**	**47**	**29**	**10**	**12**	**117**	**215**	**176**	**727**
Luxor	14	0	0	1-10	47	36	36	35	13	18	69	49	44	81	128	79	635
				11-27	7	0	3	1	0	1	1	0	2	10	39	31	95
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**54**	**36**	**39**	**36**	**13**	**19**	**70**	**49**	**46**	**91**	**167**	**110**	**730**

Table A 5 *(contd.)*.—**NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES**

MARCH — 1972

Station	calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurrences of wind blowing from the ranges of directions indicated												
					345 / 014	015 / 044	045 / 074	075 / 104	105 / 134	135 / 164	165 / 194	195 / 224	225 / 254	255 / 284	285 / 314	315 / 344	All directions
Aswan	25	0	0	1–10	115	60	6	3	8	17	11	4	2	4	27	157	414
				11–27	45	28	5	1	0	0	5	0	3	2	52	164	305
				28–47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**160**	**88**	**11**	**4**	**8**	**17**	**16**	**4**	**5**	**6**	**79**	**321**	**719**
Siwa	33	29	4	1–10	42	30	49	44	62	22	19	15	23	70	109	84	569
				11–27	3	0	0	4	14	10	1	3	1	25	33	15	109
				28–47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**45**	**30**	**49**	**48**	**76**	**32**	**20**	**18**	**24**	**95**	**142**	**99**	**678**
Dakhla	15	15	0	1–10	30	47	31	43	39	28	34	13	28	67	107	125	592
				11–27	21	9	0	0	1	3	6	2	0	1	15	64	122
				28–47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**51**	**56**	**31**	**43**	**40**	**31**	**40**	**15**	**28**	**68**	**122**	**189**	**714**
Kharga	5	2	6	1–10	135	67	36	10	13	28	7	9	9	28	58	108	508
				11–27	123	26	0	0	0	0	6	1	0	0	7	60	223
				28–47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**258**	**93**	**36**	**10**	**13**	**28**	**13**	**10**	**9**	**28**	**65**	**168**	**731**
Hurghada	13	0	0	1–10	15	13	22	16	43	30	9	11	2	40	113	21	335
				11–27	108	10	0	0	2	21	0	1	0	0	97	147	386
				28–47	1	0	0	0	0	0	0	0	0	0	0	9	10
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**124**	**23**	**22**	**16**	**45**	**51**	**9**	**12**	**2**	**40**	**210**	**177**	**731**
Quseir	13	0	0	1–10	61	76	32	17	21	26	20	20	21	47	110	108	559
				11–27	69	50	3	0	0	1	4	0	1	4	7	33	172
				28–47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**130**	**126**	**35**	**17**	**21**	**27**	**24**	**20**	**22**	**51**	**117**	**141**	**731**

UPPER AIR CLIMATOLOGICAL DATA

Table B 1.—MONTHELY MEAN AND MONTHLY ABSOLUTE HIGHER AND LOWER VALUES OF ALTITUDE AIR TEMPERATURE AND DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

MARCH — 1972

Station	Pressure Surface (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Marsa Matruh 0000 U.T.	Surface . . .	29	* 1013m.b.	* 1020m.b.	* 1004m.b.	29	14.0	18.2	10.5	29	8.9
	1000 . . .	29	135	196	62	29	14.2	19.0	10.2	29	9.0
	850 . . .	29	1490	1558	1419	29	7.1	15.2	— 0.6	29	— 2.3
	700 . . .	28	3068	3171	2970	28	— 1.1	5.3	—11.2	28	—15.7
	600 . . .	27	4280	4404	4135	27	— 9.4	— 3.7	—19.2	27	—23.4
	500 . . .	27	5663	5807	5471	27	—19.3	—14.8	—27.6	27	—31.6
	400 . . .	26	7280	7440	7056	26	—31.3	—27.3	—36.3	26	—43.4
	300 . . .	26	9265	9440	9048	26	—44.5	—40.1	—52.1	26	—55.4
	250 . . .	25	10466	10642	10254	25	—51.2	—42.8	—56.5	25	—61.4
	200 . . .	25	11905	12065	11707	25	—54.3	—46.1	—62.9	19	—63.1
	150 . . .	24	13736	13887	13 35	24	—57.6	—53.1	—64.7	15	—66.2
	100 . . .	22	16393	16421	16091	22	—64.8	—58.6	—68.9	—	—
	70 . . .	20	18430	18609	18237	20	—64.8	—59.3	—69.3	—	—
	60 . . .	17	19424	19590	19230	17	—62.8	—58.0	—68.8	—	—
	50 . . .	17	20526	20769	20352	17	—60.7	—55.8	—63.3	—	—
	40 . . .	12	220 0	22700	21820	12	—58.7	—55.0	—61.1	—	—
	30 . . .	11	23728	23954	23540	11	—55.9	—45.6	—59.1	—	—
	20 . . .	8	26.66	26405	26127	8	—53.1	—50.3	—55.0	—	—
	10 . . .	—	—	—	—	—	—	—	—	—	—
Helwan 0000 U.T.	Surface . . .	30	* 998m.b.	* 1002m.b.	* 988m.b.	30	14.1	24.6	7.4	30	7.0
	1000 . . .	30	120	157	43	10	13.0	18.8	11.0	10	7.9
	850 . . .	30	1477	1514	1408	30	7.8	15.6	0.0	30	— 2.8
	700 . . .	30	3057	3120	2945	30	— 0.8	4.8	—10.4	30	—12.1
	600 . . .	30	4272	4359	4120	30	— 8.6	— 4.6	—17.7	30	—19.4
	500 . . .	30	5673	5770	5502	30	—18.1	—13.6	—27.0	30	—28.8
	400 . . .	30	7295	7431	7060	30	—29.6	—21.6	—34.7	30	—39.4
	300 . . .	30	9288	9458	9000	30	—44.0	—35.0	—48.7	30	—52.8
	250 . . .	30	10493	10676	10309	30	—50.7	—41.0	—56.3	24	—59.3
	200 . . .	30	11933	12160	11740	29	—54.0	—44.6	—62.1	19	—62.0
	150 . . .	30	13763	14049	13566	30	—58.4	—50.4	—64.0	2	—64.4
	100 . . .	29	16295	16492	16139	29	—65.6	—54.7	—72.2	—	—
	70 . . .	27	18414	18857	18313	26	—66.1	—57.9	—71.2	—	—
	60 . . .	18	19464	19840	19282	17	—64.0	—58.2	—66.0	—	—
	50 . . .	18	20511	20899	20362	18	—63.2	—58.6	—67.1	—	—
	40 . . .	12	22004	22400	21840	12	—61.0	—57.7	—63.7	—	—
	30 . . .	11	23716	24019	23522	11	—58.7	—54.9	—64.6	—	—
	20 . . .	8	26258	26503	26087	8	—54.9	—52.0	—67.1	—	—
	10 . . .	—	—	—	—	—	—	—	—	—	—
Aswan 0600 U.T.	Surface . . .	31	* 991m.b.	* 995m.b.	* 987m.b.	31	17.0	23.0	10.6	31	— 1.4
	1000 . . .	31	112	151	73	—	—	—	—	—	—
	850 . . .	31	1495	1526	1460	31	13.5	21.8	3.2	31	— 6.3
	700 . . .	31	3104	3151	3013	31	4.5	9.5	— 4.0	31	—15.6
	600 . . .	31	4344	4397	4218	31	— 3.0	6.9	— 9.9	31	—20.5
	500 . . .	31	5759	5822	5606	30	—13.1	— 9.6	—18.0	30	—28.0
	400 . . .	31	7424	7509	7237	30	—24.8	—20.5	—31.8	30	—37.4
	300 . . .	30	9452	9580	9230	30	—40.4	—34.9	—46.1	30	—51.3
	250 . . .	29	10687	10819	10453	29	—46.1	—40.5	—52.1	28	—56.5
	200 . . .	28	12149	12276	11896	28	—54.2	—47.6	—59.8	23	—61.2
	150 . . .	28	13959	14131	13726	28	—63.8	—57.2	—68.0	4	—71.2
	100 . . .	23	16384	16513	16206	23	—74.2	—70.9	—77.4	—	—
	70 . . .	10	18425	18532	18326	10	—73.6	—67.8	—81.0	—	—
	60 . . .	5	19370	19470	19150	5	—69.1	—64.9	—70.5	—	—
	50 . . .	4	20483	20535	20441	4	—61.8	—56.2	—64.5	—	—
	40 . . .	2	22020	22060	21980	2	—59.3	—58.8	—59.8	—	—
	30 . . .	2	23730	23760	23702	2	—51.6	—54.3	—51.9	—	—
	20 . . .	2	26366	26400	26333	2	—48.2	—48.0	—48.5	—	—
	10 . . .	—	—	—	—	—	—	—	—	—	—

N = The number of cases the element has been observed during the month.

* The atmospheric pressure corrected to the elevation of the radiosonde station.

UPPER AIR CLIMATOLOGICAL DATA

Table B 1 (*contd.*).—MONTHLY MEAN AND MONTHLY ABSOLUTE HIGHER AND LOWER VALUES OF ALTITUDE, AIR TEMPERATURE AND DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

MARCH — 1972

Station	Pressure Surface Millibar	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Mersa Matruh 1200 VT	Surface . . .	30	*1014m.b.	*1020m.b.	*1007m.b.	30	14.8	29.8	11.4	30	9.2
	1000 . . .	30	142	196	71	30	16.9	29.2	10.2	30	7.9
	850 . . .	30	1496	1555	1437	30	6.4	15.0	— 3.7	30	— 4.3
	700 . . .	30	3076	3180	2954	30	— 1.3	6.4	—11.5	30	—15.1
	600 . . .	29	4286	4392	4132	29	— 9.2	— 4.9	—13.1	29	—22.1
	500 . . .	29	5673	5762	5488	29	—18.9	—13.8	—24.3	29	—30.0
	400 . . .	28	7190	7472	7089	28	—30.3	—21.8	—35.1	28	—42.0
	300 . . .	28	9068	9515	9091	28	—44.8	—39.6	—50.7	28	—54.8
	250 . . .	27	10483	10735	10319	27	—51.8	—44.9	—56.0	25	—61.6
	200 . . .	24	11917	12159	11754	24	—54.8	—48.0	—66.6	20	—63.0
	150 . . .	23	13741	13946	13604	23	—58.1	—53.7	—63.2	13	—64.9
	100 . . .	23	16253	16432	16105	23	—63.6	—59.4	—70.5	1	—68.9
	70 . . .	21	18452	18612	18385	21	—63.6	—61.6	—69.0	—	—
	60 . . .	19	19444	19600	19370	19	—61.8	—60.0	—65.0	—	—
	50 . . .	19	20540	20700	20463	19	—59.8	—56.0	—64.9	—	—
	40 . . .	14	21997	22140	21870	14	—57.2	—55.0	—60.9	—	—
	30 . . .	13	23774	23918	23693	13	—53.2	—50.5	—55.3	—	—
	20 . . .	7	26412	26565	26325	7	—49.4	—45.9	—55.1	—	—
	10 . . .	—	—	—	—	—	—	—	—		
Helwan 1200 U.T.	Surface . . .	30	*997m.b.	*1002m.b.	*991m.b.	30	21.8	31.1	18.8	30	4.7
	1000 . . .	30	111	158	60	7	21.0	24.9	13.4	7	5.3
	850 . . .	30	1488	1530	1412	30	9.6	16.5	1.6	30	— 4.2
	700 . . .	29	3077	3137	2951	29	1.7	8.4	— 9.0	29	—15.7
	600 . . .	28	4302	4366	4125	27	— 6.8	— 2.5	—18.9	27	—22.5
	500 . . .	27	5699	5788	5537	27	—16.6	—11.9	—25.8	27	—30.8
	400 . . .	27	7342	7400	7064	27	—28.0	—22.9	—33.3	27	—39.8
	300 . . .	26	9343	9504	9071	26	—42.1	—35.6	—48.8	26	—54.4
	250 . . .	26	10558	10729	10307	26	—49.4	—41.8	—52.9	26	—61.2
	200 . . .	26	12008	12164	11825	26	—52.6	—47.0	—61.0	21	—62.8
	150 . . .	24	13852	13980	13721	24	—56.8	—50.1	—62.1	17	—66.7
	100 . . .	24	16373	16519	16210	24	—64.3	—58.8	—68.7	1	—67.0
	70 . . .	20	18562	18699	18362	20	—64.0	—61.5	—69.3	—	—
	60 . . .	16	19552	19690	19350	16	—62.2	—59.0	—64.4	—	—
	50 . . .	16	20544	20779	20419	16	—61.0	—58.0	—64.2	—	—
	40 . . .	10	22092	22240	21940	10	—56.8	—55.7	—58.1	—	—
	30 . . .	9	23846	23988	23654	9	—53.6	—51.5	—56.4	—	—
	20 . . .	6	26530	26658	26432	6	—49.1	—44.5	—55.2	—	—
	10 . . .	—	—	—	—	—	—	—	—	—	—
Aswan 1200 UT	Surface . . .	29	*990m.b.	*994m.b.	*985m.b.	29	28.1	38.8	21.2	29	1.0
	1000 . . .	29	104	140	50	—	—	—	—	—	—
	850 . . .	29	1509	1542	1465	29	15.7	26.5	9.1	29	— 7.3
	700 . . .	27	3131	3209	3000	27	6.1	12.3	— 1.0	27	—15.2
	600 . . .	27	4379	4480	4290	27	— 1.8	2.4	—10.3	27	—20.8
	500 . . .	26	5804	5929	5697	26	—11.1	— 6.3	—15.1	26	—28.1
	400 . . .	25	7480	7627	7355	25	—22.8	—17.0	—26.9	25	—39.3
	300 . . .	25	9527	9676	9370	24	—38.3	—32.9	—42.9	24	—52.9
	250 . . .	25	10763	10928	10625	25	—45.1	—40.0	—50.6	25	—58.8
	200 . . .	25	12233	12423	12024	25	—52.6	—46.4	—56.7	25	—65.3
	150 . . .	20	14056	14260	13907	19	—62.0	—58.9	—66.7	3	—67.6
	100 . . .	18	16533	16748	16328	18	—71.4	—66.0	—75.7	—	—
	70 . . .	14	18695	18862	18328	14	—71.2	—68.6	—73.4	—	—
	60 . . .	8	19589	19882	19400	8	—68.9	—66.0	—71.0	—	—
	50 . . .	8	20551	20892	20487	8	—65.0	—60.5	—69.9	—	—
	40 . . .	4	22175	22400	21970	4	—54.2	—49.7	—56.2	—	—
	30 . . .	4	23922	24162	23719	4	—51.2	—47.9	—55.8	—	—
	20 . . .	2	26748	26897	26603	2	—42.4	—41.0	—43.8	—	—
	10 . . .	—	—	—	—	—	—	—	—		

N = The number of cases the element has been observed during the month.

* The atmospheric pressure corrected to the elevation of the radiosonde stations.

Table B 2.—MEAN AND EXTREME VALUES OF THE FREEZING LEVEL AND THE TROPOPAUSE. THE HIGHEST WIND SPEED IN THE UPPER AIR

MARCH — 1972

	Station	Freezing Level									First Tropopause									Highest wind speed			
		Mean			Highest			Lowest			Mean			Highest			Lowest						
		Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Direction (000—360)	Speed in Knots
0000 U.T.		(N)	(N)	(N)							(N)	(N)	(N)										
	Mersa Matruh (A)	2836 (28)	720 (28)	-12.6 (27)	3750	644	-28.0	1350	860	0.0	11025 (23)	233 (23)	-57.0 (23)	16379	100	-66.3	9140	297	-49.9	10753	243	260	158
	Helwan.	2798 (30)	713 (30)	- 9.3 (30)	3800	645	-11.8	1415	850	- 4.2	11322 (28)	224 (28)	-56.0 (28)	16400	98	-65.9	8920	306	-39.2	13420	161	275	150
	Aswan . . . (A)	3650 (31)	657 (31)	-16.9 (31)	4440	579	-21.4	1880	800	-12.8	15967 (8)	108 (8)	-74.0 (8)	17480	83	-78.7	14430	139	-70.5	10040	274	270	140
1200 U.T		(N)	(N)	(N)							(N)	(N)	(N)										
	Mersa Matruh (A)	2743 (30)	730 (30)	-12.5 (30)	3850	643	- 8.5	1090	890	- 4.8	11583 (23)	217 (23)	-57.3 (23)	16262	100	-69.8	9510	283	-52.4	8597	344	300	150
	Helwan	3197 (29)	693 (29)	-15.1 (29)	4050	625	-11.2	1650	825	- 4.2	11446 (24)	223 (24)	-54.4 (24)	15660	113	-68.7	9630	281	-44.5	10920	236	285	155
	Aswan . . . (A)	4149 (27)	619 (27)	-19.2 (27)	4780	579	-15.5	3200	690	-20.2	16893 (11)	94 (11)	-74.4 (11)	18730	72	-72.5	15450	121	-72.0	13175	172	265	150

N = The number of cases the element has been observed during the month.

Table B 3.—NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES.

MERSA MATRUH (A) MARCH — 1972

Time	Pressure Surface (Millibar.)	Wind between specified ranges of direction (000—360)°																								Number of Calm winds	Total Number of Observations (T N)	Mean Scalar wind Speed (Knots)
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	0	—	0	—	0	—	2	16	3	10	1	1	2	10	2	8	5	10	3	16	4	12	6	12	1	29	11
	1000	1	30	1	10	0	—	0	—	3	20	1	13	0	—	3	14	2	20	6	22	3	23	7	15	0	27	19
	850	1	8	0	—	1	21	0	—	0	—	0	—	1	9	1	21	5	32	3	22	8	22	7	16	0	27	21
	700	1	38	0	—	1	33	0	—	0	—	0	—	0	—	2	32	4	31	6	22	6	32	6	22	0	26	28
	600	1	33	0	—	0	—	0	—	0	—	0	—	0	—	1	46	7	37	5	38	8	32	3	21	0	25	34
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	48	7	42	7	45	5	34	0	25	43
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	87	8	49	10	45	1	29	0	23	53
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	80	1	15	7	65	6	61	0	—	0	15	63
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	89	8	86	4	57	0	—	0	13	77
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	97	6	77	2	53	0	—	0	9	74
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	74	3	54	0	—	0	5	62
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	44	1	45	0	—	0	3	45
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	32	0	—	0	—	0	1	32
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	3	9	0	—	1	8	3	19	0	—	0	—	1	16	1	5	3	18	1	11	6	21	11	15	0	30	15
	1000	2	21	0	—	0	—	2	18	2	22	0	—	0	—	1	22	2	14	3	20	7	32	11	17	0	30	20
	850	2	20	1	11	0	—	1	3	0	—	1	25	1	10	4	16	5	17	4	14	9	20	2	27	0	30	18
	700	2	26	1	27	0	—	0	—	0	—	0	—	0	—	2	32	2	42	8	28	8	22	7	23	0	30	26
	600	1	20	0	—	0	—	0	—	0	—	0	—	0	—	1	65	4	45	8	36	7	40	7	27	0	28	35
	500	1	18	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	62	10	46	9	47	6	24	0	28	42
	400	1	20	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	64	12	62	9	55	1	47	0	27	58
	300	0	—	1	22	0	—	0	—	0	—	0	—	0	—	0	—	2	94	12	63	5	47	0	—	0	20	60
	250	1	25	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	75	9	71	5	68	0	—	0	16	68
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	8	73	4	88	0	—	0	12	78
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	80	2	70	0	—	0	4	75
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	45	0	—	0	—	0	2	45
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	19	0	—	0	1	19
	60	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	15	0	—	0	—	0	1	15
	50	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	17	0	—	0	—	0	—	0	1	17
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = number of cases the wind has been observed for all directions during the month.

TN = The number of cases the elemnet has been observed during the month.

SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES.

HELWAN — MARCH 1972

Time	Pressure Surface (Millibar)	Wind between specified ranges of direction (000 360)°																								Number of Calm winds	Total Number of Observations (TN)	Mean Scalar wind Speed (Knots)
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	8	7	6	7	1	12	3	9	1	6	1	3	0	—	2	4	0	—	2	6	1	6	1	3	4	30	6
	1000	2	6	4	8	0	—	1	8	0	—	0	—	0	—	1	3	0	—	0	—	0	—	1	11	1	10	7
	850	3	17	2	11	1	8	0	—	1	9	0	—	1	10	2	10	3	14	8	18	4	16	5	16	0	30	15
	700	1	6	0	—	0	—	0	—	0	—	0	—	0	—	1	20	2	40	6	25	11	26	9	21	0	30	24
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	67	7	32	9	33	11	28	0	30	34
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	82	8	50	14	40	7	31	0	30	42
	400	2	35	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	8	68	17	48	1	34	0	28	52
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	10	70	10	62	3	89	0	23	69
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	7	74	10	61	3	85	0	20	69
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	84	10	71	0	—	0	16	76
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	82	8	64	1	50	0	14	68
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	47	4	64	0	—	0	8	56
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	53	0	—	0	3	53
	60	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	67	2	40	0	—	0	3	49
	50	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	71	1	27	0	—	0	2	49
	40	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	40	0	—	0	1	40
	30	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	20	0	—	0	1	20
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	6	8	3	7	1	3	0	—	0	—	1	4	0	—	3	8	6	6	4	10	3	8	3	7	0	30	8
	1000	0	—	4	10	0	—	0	—	0	—	0	—	0	—	0	—	1	4	0	—	1	8	1	7	0	7	8
	850	6	9	4	11	0	—	0	—	0	—	1	6	3	14	1	16	2	18	7	16	2	10	4	16	0	30	13
	700	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	30	2	30	8	28	7	24	9	19	0	28	25
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	60	9	42	9	34	7	22	0	27	35
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	56	9	45	11	39	4	25	0	26	41
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	21	8	62	12	44	3	61	0	24	51
	300	0	—	0	—	1	15	0	—	0	—	0	—	0	—	0	—	0	—	4	56	12	69	2	72	0	19	64
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	87	12	76	1	39	0	18	77
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	90	11	72	0	—	0	14	76
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	98	8	75	0	—	0	9	79
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	56	6	95	0	—	0	7	90
	70	0	—	0	—	1	9	1	39	0	—	0	—	0	—	0	—	0	—	0	—	2	60	0	—	0	4	42
	60	0	—	0	—	0	—	0	—	2	20	0	—	0	—	0	—	0	—	1	52	0	—	1	43	0	4	34
	50	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	32	0	2	32
	40	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	22	0	—	0	—	0	—	0	1	22
	30	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	26	0	—	0	—	0	1	26
	20	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	34	0	—	0	—	0	1	34
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the wind has been observed during the month.

TN = The total number of cases the wind has been observed for all directions during the month.

Table B 3.(*contd*)—NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES.

ASWAN (A) — MARCH 1972

Time	Pressure Surface (Millibar.)	Wind between specified ranges of direction (000 - 360)°																								Number of Calm winds	Total Number of Observations (TN)	Mean Scalar wind Speed (Knots)
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	13	9	1		0	—	3	7	0	—	0	—	0	—	0	—	0	—	0	—	2	9	11	10	1	31	9
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	3	17	4	12	2	10	3	9	0	—	0	—	1	13	1	15	2	10	5	21	3	12	6	14	0	30	14
	700	1	6	2	10	0	—	0	—	0	—	0	—	0	—	0	—	4	24	9	30	12	21	2	21	0	30	23
	600	1	7	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	44	16	28	8	38	1	33	0	29	32
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	43	17	41	8	32	1	61	0	29	45
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	66	11	77	11	64	1	38	0	29	60
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	78	14	79	10	81	1	95	0	28	78
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	96	16	102	7	85	0	—	0	26	97
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	91	13	108	7	87	0	—	0	24	99
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	83	13	81	2	77	0	—	0	17	81
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	50	2	50	0	—	0	6	50
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	23	0	—	0	—	0	1	23
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	14	11	3	9	0	—	0	—	1	3	1	9	2	10	1	3	1	7	0	—	1	8	5	15	0	29	11
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	5	12	2	6	4	10	1	7	1	4	0	—	0	—	0	—	1	24	5	10	5	13	5	14	0	29	12
	700	3	8	1	12	0	—	1	10	0	—	0	—	0	—	0	—	3	31	8	25	7	23	4	18	0	27	21
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	36	14	38	8	27	1	24	0	26	34
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	35	17	46	4	46	1	46	0	25	45
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	46	16	60	4	73	0	—	0	24	60
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	78	18	77	4	91	0	—	0	24	78
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	93	16	102	5	86	0	—	0	23	97
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	98	15	97	3	88	0	—	0	20	96
	150	0	—	0	—	0	—	0	—	0	—	0	—	9	—	0	—	0	—	12	79	2	69	0	—	0	14	84
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	54	1	46	0	—	0	7	52
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	26	0	—	0	—	0	1	26
	60	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0		0	—	1	19	0	—	0	—	0	1	19
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the element has been observed during the month.

TN = The total number of cases the wind has been observed for all directions during the month.

REVIEW OF AGRO-METEOROLOGICAL STATIONS

MERSA MATRUH — MARCH 1972

For the month as a whole the mean daily air temperature was rather normal, while the mean daily relative humidity was above normal. The total monthly rainfall was 16.1 mm. against 12.3 mm. for normal.

The prevailing weather in this month was changeable, characterized by three khamsin warm spells in the periods (6th, 7th), 18th, (25th-27th) and three cold spells in the periods (12th-16th), (20th-24th), (29th-31st) .

The last warm spell yielded the highest maximum air temperature for the month (30.9°C) on the 27th. The first cold spell yielded the lowest maximum air temperature (13.2°C) on the 14th. The second cold spell was associated with the highest mean daily wind speed (9.0m./sec) on the 20th and the maximum daily rainfall (4.2mm.) on the next day .

The extreme maximum soil temperatures were higher than the corresponding values of last March at depths between 2 and 20 cm. with departures between 0.3°C (at 2 cm.) and 1.1°C (at 5 cm.); and lower at 50 and 100 cm. depths with departures between 0.2° and 0.7°C. The extreme minimum soil temperatures were higher than last March at 2,5 and 100 cm. depths with departures between 1.8°C (at 2 cm.) and 0.3°C (at 100 cm.); and lower at depths between 10 and 50 cm. with departures between 0.1° and 0.9°C.

The mean daily wind speed at 1.5 m. was the same as the corresponding value of March 1971. The mean daily values of actual sunshine duration and pan evaporation were less than the corresponding values of March 1971 by 1.3 hour and 2.63 mm. respectively.

TAHRIR — MARCH 1972

For the month as a whole the mean daily air temperature was about average, and the mean daily relative humidity was markedly above average. The total monthly rainfall was 20.0 mm. against 1.4 mm. for average.

The month was pronouncedly changeable, characterized by four short khamsin warm spells on the (3rd, 4th), 7th, 11th and 27th; and three pronounced cold spells in the periods (12th-17th), (19th-24th) & (28th-31st). The last warm spell yielded the highest maximum air temperature for the month (33.2°C) on the 27th together with the lowest relative humidity (24%). The first cold spell yielded the lowest maximum air temperature (15.5°C) on the 14th. The second cold spell was associated with the maximum daily rainfall (16.7 mm.) on the 20th, together with the highest day time mean wind speed (6.2 m./sec.) .

The extreme maximum soil temperatures were lower than the corresponding values of last March at all depths except at 10, 20 cm. depths where they were higher. The extreme soil minimum temperatures were higher than last March at depths between 2,10 cm. : and lower at depths between 20, 100 cm. The departures were small and ranged between 0.1°C and 0.9°C.

The mean daily values of wind speed at 1.5 met., actual sunshine duration and pan evaporation were lower than average by 0.5 m./sec., 0.6 hour and 1.85 mm respectively.

BAHTIM — MARCH 1972

For the month as a whole the mean daily air temperature and relative humidity were about average. The total monthly rainfall was 10.4 mm against 2.8 mm. for average.

The prevailing weather was remarkably changeable, characterized by four short khamsin warm spells on the 7th, 11th, (18th, 19th), (25th-28th) and four cold spells in the periods (8th, 9th), (13th-17th), (20th-24th), (29th-31st). The last warm spell yielded the highest maximum air temperature for the month (33.3°C) on the 27th together with the lowest relative humidity (17%). The second cold spell yielded the lowest maximum air temperature (16.9°C) on the 14th. The third cold spell was associated with the maximum day time mean wind speed (5.8 m./sec.) on the 20th and the maximum daily rainfall (8.6 mm.) on the next day.

The extreme maximum soil temperatures were lower than the corresponding values of last March at all depths apart from the 10 cm depth where the value was slightly higher. The departure was appreciable at shallow depths ranging between 7.1°C (at 2 cm.) and 2.8°C (at 5 cm.), but at deeper depths it ranged between 0.1°C and 0.9°C. The extreme minimum soil temperatures were higher than last March at 2, 5,20 cm. depths with departures between 1.2°C (at 2 cm) and 0.1°C (at 20 cm.) ; and were lower than last March at 10, 50, 100 cm. depths with departures between 0.3°C and 0.9°C.

The mean daily values of wind speed at 1.5 met. actual sunshine duration and pan evaporation were lower than average by 0.5 m./sec., 0.5 hour and 1.12 mm. respectively.

KHARGA — MARCH 1972

For the month as a whole the mean daily air temperature and relative humidity were about average.

The prevailing weather was changeable, characterized by three khamsin warm spells in the periods (10th, 11th), (18th, 19th), (26th-29th) and three cold spells in the periods (13th-17th), (20th-25th), (30th, 31st). The last warm spell yielded the highest maximum air temperature for the month (37.2°C) on the 28th, the lowest relative humidity (7%) on the 27th, the highest day time mean wind speed (8.0 m./sec.) and the highest daily pan evaporation (22.01 mm.) on the 29th. The first cold spell yielded the lowest maximum air temperature (19.7°C) on the 15th.

The extreme maximum and minimum soil temperatures were higher than the corresponding values of last March at all depths except the 100 cm depth where the values were lower by 0.7°C and 0.4°C respectively. The departures for the extreme maxima ranged between 2.4°C (at 5 cm) and 0.2°C (at 50 cm.). The departures for the extreme minima ranged between 1.9°C (at 2 cm.) and 0.6°C (at 50 cm.).

The mean daily values of wind speed at 1.5 met., actual sunshine duration, and pan evaporation were lower than average by 0.2 m./sec., 0.7 hour and 0.89 mm. respectively.

Table C 1. — AIR TEMPERATURE AT 1½ METRES ABOVE GROUND

MARCH — 1972

STATION	Air Temperature (°C)					Mean Duration in hours of daily air temperature above the following values										
	Mean Max.	Mean Min.	Mean of the day	Night time mean	Day time mean	—5°C	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C
Mersa Matruh. .	20.0	11.2	15.3	13.5	17.0	24.0	24.0	24.0	23.0	12.4	1.6	0.4	0.1	0.0	0.0	0.0
Fahrir	23.8	9.1	15.9	12.6	19.1	24.0	24.0	24.0	20.4	12.5	5.1	0.9	0.1	0.0	0.0	0.0
Bahtim	23.1	7.4	15.1	11.4	18.8	24.0	24.0	23.7	18.5	11.2	4.5	1.1	0.2	0.0	0.0	0.0
Kharga . . .	27.7	11.4	20.1	17.1	23.1	24.0	24.0	24.0	23.1	18.9	12.1	4.2	1.0	0.2	0.0	0.0

Table C 2 — EXTREME VALUES OF AIR TEMPERATURE AT 1½ METRES ABOVE GROUND, ABSOLUTE MINIMUM AIR TEMPERATURE AT 5cms ABOVE GROUND OVER DIFFERENT FIELDS

MARCH — 1972

STATION	Max. Temp. at 1½ metres (°C)				Min. Temp. at 1½ metres (°C)				Min. Temp. at 5 cms. above (°C)			
	Highest		Lowest		Highest		Lowest		Dry soil		Grass	
	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date
Mersa Matruh. . . .	30.9	27	13.2	14	15.9	26	7.1	17	2.8	17	—	—
Fahrir	33.2	27	15.5	14	14.8	28	6.3	1	4.8	1	—	—
Bahtim	33.3	27	16.9	14	12.9	28	3.2	9	1.2	9	—	—
Kharga	37.2	28	19.7	15	20.2	29	5.6	17	4.0	8,16,17	—	—

Table C 3.—SOLAR+SKY RADIATION, DURATION OF BRIGHT SUNSHINE, RELATIVE HUMIDITY, VAPOUR PRESSURE AT 1½ METRES ABOVE GROUND, EVAPORATION & RAINFALL

MARCH — 1972

STATION	(Solar+Sky) Radiation gm. cal/cm²	Duration of Bright Sunshine (hours)			Relative Humidity				Vapour pressure (mms)						Evaporation (mms)		Rainfall (mms)		
		Total Actual monthly	Total Possible monthly	%	Mean of day	1200 U.T.	Lowest	Date	Mean of day	1200 U.T.	Highest	Date	Lowest	Date	Piche	Pan class (A)	Total Amount Monthly	Max. Fall in one day	Date
ersa Matruh	396.1	223.7	371.8	60	72	62	25	7	9.2	9.7	12.6	28	4.4	7	5.7	5.72	16.1	4.2	2
ahrir . . .	465.4	255.0	372.0	69	74	53	24	27	9.7	10.3	13.7	11	5.2	4	5.5	5.58	20.0	16.7	20
ahtim . . .	461.8	242.4	372.0	65	66	43	17	27	8.1	8.1	12.8	27	4.2	4	5.3	5.26	10.4	8.6	21
harga . .	475.9	304.7	372.8	82	31	21	7	27	5.1	5.1	8.5	31	2.7	27	11.1	11.10	0.0	0.0	—

TABLE C 4.—EXTREME SOIL TEMPERATURE AT DIFFERENT DEPTHS IN DIFFERENT FIELDS

MARCH — 1972

STATION	Highest (H) Lowest (L)	Extreme soil temperature (°C) in dry field at different depths (cms.)								Extreme soil temperature (°C) in grass field at different depths (cms.)							
		2	5	10	20	50	100	200	300	2	5	10	20	50	100	200	300
Marsa Matruh .	H	29.4	27.9	24.6	20.8	19.0	18.3	19.9	—	—	—	—	—	—	—	—	—
	L	9.9	9.4	10.6	13.4	15.8	17.0	18.6	—	—	—	—	—	—	—	—	—
Tahrir	H	39.0	32.6	28.8	25.1	22.2	20.5	19.8	20.6	—	—	—	—	—	—	—	—
	L	11.0	11.4	12.2	14.1	16.4	18.0	18.8	20.3	—	—	—	—	—	—	—	—
Bahtim	H	36.6	31.0	27.3	22.5	21.1	20.6	21.8	23.4	—	—	—	—	—	—	—	—
	L	11.1	11.2	13.6	17.8	19.2	19.6	21.7	22.9	—	—	—	—	—	—	—	—
Kharga.	H	48.1	40.3	33.2	27.8	25.8	24.3	25.0	26.8	—	—	—	—	—	—	—	—
	L	8.3	12.3	15.5	20.0	22.3	22.8	24.6	26.4	—	—	—	—	—	—	—	—

TABLE C 5.—SURFACE WIND

MARCH — 1972

STATION	Wind Speed m/sec (1½ metres)			Days with surface wind speed at 10 metres.							Max. Gust (knots at 10 metres	
	Mean of the day	Night time mean	Day time mean	≥10 knots	≥15 knots	≥20 knots	≥25 knots	≥30 knots	≥35 knots	≥40 knots	value (knots)	Date
Marsa Matruh .	4.8	4.0	5.7	31	30	20	19	8	6	0	44	14
Tahrir	2.2	1.5	2.9	30	20	9	2	2	0	0	42	15
Bahtim.	2.1	1.2	2.9	27	15	4	2	1	0	0	36	15
Kharga	3.2	2.4	4.0	27	23	9	6	1	0	0	35	30

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ALY SULTAN ALY

Chairman of the Board of Directors

THE ARAB REPUBLIC OF EGYPT

MONTHLY WEATHER REPORT

VOLUME 15 NUMBER 4

APRIL, 1972

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TH E EGYPTIAN METEOROLOGICAL AUTHORITY
CAIRO

PUBLICATIONS OF THE METEOROLOGICAL AUTHORITY OF THE ARAB REPUBLIC OF EGYPT — CAIRO

In fulfilment of its duties, the Meteorological Authority of Egypt issues serveral reports and publications on weather, climate and agrometeorology. The principal publications are described on this page.

Orders for publications should be addressed to :

"Chairman of the Board of Directors, Meteorological Authority, Kubri-el-Qubbeh — CAIRO".

THE MONTHLY WEATHER REPORT

First issued in 1909, the Monthly Weather Report served to give a brief summary of the weather conditions that prevailed over Egypt during the month, with a table showing the mean values for few meteorological elements and their deviations from the normal values. From 1954 to 1957 this report was in a rapid state of development and extension resulting into a voluminous report on January 1958 giving surface, upper air, and agro-meteorological data for Egypt.

As from January 1964, the Monthly Weather Report was pressed to give climatological data for a representative selection of synoptic stations.

THE AGRO-METEOROLOGICAL ABRIDGED MONTHLY REPORT

Gives a review of weather experienced in the agro-meteorological stations of Egypt as well as monthly values of certain elements.

THE ANNUAL REPORT

This report gives annual values and statistics for the various meteorological elements, together with a summary of the weather conditions that prevailed during all months of the year.

CLIMATOLOGICAL NORMALS FOR EGYPT

A voluminous edition was issued in March 1968 which brings normals and mean values up till 1960.

METEOROLOGICAL RESEARCH BULLETIN

First issued in January 1969 on a bi-annual basis. It includes research works carried out by members of staff of "The Meteorological Institute for Research and Training" and the Operational Divisions of the Meteorological Authority.

TECHNICAL NOTES

As from October 1970, the Meteorological Authority started to issue a new series of publications in the form of Technical Notes (non periodical) on subjects related to studies and applications of meteorology in different fields for the benefit of personnel working in these fields.

THE ARAB REPUBLIC OF EGYPT

MONTHLY WEATHER REPORT

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THE EGYPTIAN METEOROLOGICAL AUTHORITY
CAIRO

CONTENTS

PAGE

General Summary of Weather Conditions 1–2

SURFACE DATA

Table A1.—Monthly values of the Atmospheric Pressure, Air Temperature, Relative Humidity, Bright Sunshine Duration and Piche Evaporation 3

" A2.—Maximum and Minimum Air Temperatures 4

" A3.—Sky Cover and Rainfall 5

" A4.—Number of Days of Occurrence of Miscellaneous Weather Phenomena 6

" A5.—Number in Hours of Occurrences of Concurrent Surface Wind Speed and Direction Recorded Within Specified Ranges 7,8

UPPER AIR DATA

Table B1.—Monthly Means and Monthly Absolute Higher & Lower Values of Altitude, air Temperature & Dew point at Standard and Selected Pressure Surfaces 9,10

" B2.—Mean and Extreme values of The Freezing Level and The Tropopause; The Highest Wind Speed in The Upper Air 11

" B3.—Number of Occurreneces of Wind Direction Within Specified Ranges and The Mean Scalar Wind Speed at the Standard and Selected Pressure Surfaces 12–14

AGRO-METEOROLOGICAL DATA

Reviews of Agro-meteorological stations 15,16

Table C1.—Air Temperature at 1½ Metres Above Ground 17

" C2.—Extreme Values, of Air Temperature at 1½ Metres Above Ground, Absolute Minimum Air Temperature at 5 Cms Above Ground Over Different Fields 17

" C3.—(Solar + Sky) Radiation, Duration of Bright Sunshine, Relative Humidity and Vapour Pressure at 1½ Metres Above Ground, Evaporation and Rainfall 17

" C4.—Extreme Soil Temperature at Different Depths in Different Fields 18

" C5.—Surface wind 18

Note : For explanatory notes on tables please refer to Volume 15, Number 1 (January 1972).

GENERAL SUMMARY OF WEATHER CONDITIONS

APRIL 1972

Changeable, characterized by four khamsin waves. Monthly rainfall records at scattered localities.

GENERAL DESCRIPTION OF WEATHER

Weather in this month was markedly changeable. Four khamsin waves were experienced round the periods (6th, 7th), (12th-14th), (19th-21st) & (25th—28th), the last of which was the most pronounced.

The transits of these khamsin waves were associated with rising sand and sandstorms which were most widespread during the last khamsin wave.

The break down of the khamsin disturbances was followed by mild periods with scattered rain over the northern parts, where the monthly rainfall was above normal and attained records at scattered localities. It is worth mentioning that exceptionally heavy rain associated with thunderstorms fell locally over Aswan area on the 28th.

PRESSURE DISTRIBUTION

The outstanding features of the pressure distribution over the surface charts during this month were :

— The Azores high and its extension over West Europe.

— Deep low pressure systems through North Europe and secondary depressions through the Mediterranean.

— Desert secondary depressions through North Africa.

The upper air charts depict the following upper air features :

— Deep upper lows over North Atlantic and North Europe.

— Secondary upper lows through middle latitudes, traversing East Mediterranean and Egypt round the 10th, 16th, 23rd & 30th respectively.

— Upper high pressure belt over the subtropical latitudes.

During this month six desert secondary depressions were distinguished, four of which traversed Egypt.

The first desert depression appeared south of Tunisia on the 1st. It moved eastwards and filled up on the 3rd over the Gulf of Serte.

The second desert depression originated over Tunisia on the 4th. It proceeded eastwards and traversed East Mediterranean and north Egypt on the 8th, and then it continued its course towards Iraq.

The third, fourth and fifth desert depressions developed over North Algiers on the 10th, 15th and 23rd respectively, together with secondary depressions over West Mediterranean. The third and fourth desert depressions moved slowly eastwards and traversed north Egypt on the 14th and 20th respectively. The fifth desert depression proceeded northeastwards and attained Central Mediterranean on the 24th, then it continued its course eastwards reaching Asia Minor on the 27th.

The sixth secondary desert depression appeared over the Western Desert on the 27th and traversed north of Egypt on the 28th and was rather stationary over East Mediterranean till the end of the month.

The barometric pressure over Egypt this month was oscillatory and attained consecutive minima round the 3rd, 8th, 14th, 20th & 28th.

On the other hand, a high pressure cell established over East Mediterranean & NE Africa in the rear of the desert depressions.

SURFACE WIND

Surface winds in this month were generally light to moderate NW and changed to fresh/ strong W/SW by hte transits of the khamsin depressions.

Gales were reported at Bahtim on the 29th &30th, Cairo and Suez on the 29th, Asyout on the 14th, Kom Ombo and Aswan on the 28th.

TEMPERATURE

Maximum and minimum air temperatures were remarkably above normal in general during the khamsin waves, and were slightly below normal otherwise.

Maximum air temperatures ranged most of the month between 22° & 32°C in the northern parts, between 25° & 37°C in the middle parts and between 32° & 40°C in the southern parts.

The absolute maximum air temperature for Egypt in this month was 42.6°C reported at Kom-Ombo on the 21st.

Minimum air temperatures ranged generally between 12° & 20°C in the northern and middle parts, between 15° & 24°C in the southern parts. It is worth mentioning that the highest minimum air temperature attained records at Alexandria (20.3°C) on the 26th and at Aswan (27.4°C) on the 22nd.

The absolute minimum air temperature for Egypt in this month was 6.4°C reported at Dakhla on the 3rd .

PRECIPITATION

Scattered rain fell over the northern parts round the periods (7th-9th) , (19th-21st) and (28th-30th) . It is worthy to mention that unusual heavy rain overrun local parts in Aswan area on the 28th.

The total monthly rainfall was above normal in north of the country till Cairo area, and its departure above normal was remarkable in the Mediterranean district. The monthly rainfall attained record values at Sallum (34.2 mms), at Alexandria (35.7 mms), at Sidi-Barrani (84.5 mms), at Ras-el-Teen (28.5 mms) and at Sakha (36.6 mms).

The highest monthly rainfall for Egypt in this month was 84.5 mms reported at Sidi-Barrani.

The highest daily rainfall for Egypt in this month was 32.2 mms reported at Sidi-Barrani on the 29th and it is a record for that station in April.

Cairo, February 1973

Chairman (M. F. TAHA)

Board of Directors

Table A 1.—MONTHLY VALUES OF THE ATMOSPHERIC PRESSURE, AIR TEMPERATURE RELATIVE HUMIDITY, BRIGHT SUNSHINE DURATION & PICHE EVAPORATION

APRIL — 1972

STATION	Atmospheric Pressure (mbs) M.S.L.		Air Temperature °C									Relative Humidity %		Bright Sunshine Duration (Hours)			Piche Evaporation mms. Mean
			Maximum		Minimum		A+B / 2	Dry Bulb		Wet Bulb							
	Mean	D.F. Normal or Average	(A) Mean	D.F. Normal or Average	(B) Mean	D.F. Normal or Average		Mean	D.F. Normal or Average	Mean	D.F. Normal or Average	Mean	D.F. Normal or Average	Total Actual	Total Possible	%	
Sallum	1009.1	—4.3	24.0	+0.3	15.6	+1.5	19.5	19.4	+0.5	14.6	+0.8	56	0	—	—	—	8.7
Mersa Matruh (A)	1010.1	—4.3	23.8	+1.1	13.9	+1.9	18.8	18.8	+1.5	14.5	+1.1	60	—4	226.9	388.6	58	6.7
Alexandria . .(A)	1010.8	—3.3	25.5	+1.7	14.3	+0.9	19.9	19.2	+1.0	15.3	+0.7	63	—3	248.1	388.2	64	6.6
Port Said . .(A)	1010.1	—3.6	23.9	+1.4	16.0	—0.8	20.0	19.2	+0.4	15.3	—0.2	63	—7	246.7	388.2	64	7.8
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1010.3	—2.9	26.7	—1.1	12.5	+1.7	19.6	19.4	+0.7	14.9	+1.0	59	+5	260.5	387.8	67	5.3
Cairo . . . .(A)	1010.1	—3.3	29.8	+1.6	16.6	+2.6	23.2	22.7	+1.8	15.2	+0.7	41	—5	—	—	—	17.7
Fayoum	—	—	31.3	+1.6	14.5	+1.3	22.9	21.3	0.0	15.4	+1.3	51	+11	—	—	—	8.8
Minya . . . .(A)	1010.2	—2.6	32.2	+1.6	14.4	+2.5	23.3	23.2	+2.0	15.2	+1.3	38	—3	266.8	385.1	69	12.4
Assyout . . .(A)	1008.3	—3.8	33.1	+1.3	16.7	+1.8	24.9	24.7	+0.9	14.6	+1.3	27	+3	—	—	—	17.3
Luxor . . . .(A)	1008.6	—1.9	35.9	+1.3	17.2	+1.6	26.6	26.3	+0.5	16.0	+0.9	29	+3	—	—	—	12.7
Aswan . . . .(A)	1008.4	—1.3	36.1	+1.0	19.0	+1.3	27.5	27.5	+0.7	14.8	+1.5	18	+6	—	—	—	22.3
Siwa	1009.9	—3.5	30.0	+0.2	15.3	+3.1	22.6	22.6	+1.0	14.0	+0.9	33	+1	214.1	385.4	55	12.0
Bahariya	1009.9	—2.5	31.1	+1.1	15.0	+2.2	23.0	22.9	+0.5	13.3	0.0	27	—2	—	—	—	12.2
Farafra	1010.2	—3.7	32.4	+1.2	14.9	+1.6	23.6	23.3	+0.6	12.9	+0.3	23	0	—	—	—	16.7
Dakhla	1010.4	—0.8	33.5	+0.7	13.8	—0.2	23.6	23.9	0.0	12.2	—0.4	22	+4	—	—	—	19.5
Kharga	1009.3	—2.0	34.7	+1.4	17.5	+2.0	26.1	26.3	+1.5	13.5	—0.1	20	—3	307.8	382.2	80	16.5
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	1009.0	—1.9	27.7	+1.4	17.9	+1.7	22.8	23.3	+1.0	16.5	+0.8	46	—1	282.6	383.4	74	11.0
Onseir	1008.6	—2.0	28.2	+1.0	20.2	+0.7	24.2	24.1	+0.6	17.1	+0.4	46	0	—	—	—	9.6

Table A 2.—MAXIMUM AND MINIMUM AIR TEMPERATURE

APRIL — 1972

Station	Maximum Temperature °C									Grass Min. Temp.		Minimum Temperature °C							
	Highest	Date	Lowest	Date	No. of Days with Max-Temp.					Mean	D. From Normal	Highest	Date	Lowest	Date	No. of Days with Min. Temp.			
					> 25	> 30	> 35	> 40	> 45							< 10	< 5	< 0	< -5
Sallum	38.0	26	17.3	4	9	5	2	0	0	14.5	—	22.4	25	9.6	2	1	0	0	0
Mersa Matruh . .	35.8	26	18.2	30	8	4	1	0	0	12.1	—	23.6	25	7.8	2	1	0	0	0
Alexandria . . (A)	35.7	26	18.8	30	15	5	2	0	0	12.3	—	20.3	26	8.4	3	1	0	0	0
Port Said . . (A)	35.3	27	19.6	9	7	3	1	0	0	15.7	—	20.7	27	11.9	3	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	38.0	26	21.4	30	20	6	2	0	0	—	—	17.2	26	7.2	3	7	0	0	0
Cairo . . . . (A)	39.2	27	21.7	9	26	12	6	0	0	—	—	25.2	26	11.1	4	0	0	0	0
Fayoum	39.5	27	24.0	30	27	13	9	0	0	12.7	—	20.0	21	10.3	3	0	0	0	0
Minya	40.0	27	24.5	4	25	14	10	0	0	12.9	—	20.4	14	8.8	5	2	0	0	0
Assyout. . . . (A)	41.3	14	26.2	9	30	19	11	2	0	13.7	—	26.5	28	10.8	1	0	0	0	0
Luxor . . . . (A)	42.2	14	29.4	30	30	28	16	6	0	12.0	—	25.4	29	12.4	1	0	0	0	0
Aswan . . . . (A)	42.3	21	30.6	10	30	30	18	5	0	—	—	27.4	22	12.4	1	0	0	0	0
Siwa	41.2	26	19.4	8	25	14	6	1	0	14.4	—	24.7	25	9.1	1	1	0	0	0
Bahariya	40.4	26	22.5	8	26	17	6	1	0	15.0	—	21.1	20	9.4	15	1	0	0	0
Farafra	41.7	27	22.6	8	26	19	11	1	0	14.3	—	21.1	20	9.0	15	2	0	0	0
Dakhla	41.0	20	25.7	8	30	21	14	2	0	13.4	—	23.8	21	6.4	3	1	0	0	0
Kharga	41.6	14	28.4	1,9	30	23	12	5	0	15.2	—	23.2	21	11.2	3	0	0	0	0
Tor.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	34.3	26	25.5	5	30	7	0	0	0	—	—	23.7	28	15.2	7,12	0	0	0	0
Quseir	36.4	8	24.7	4	29	6	1	0	0	17.4	—	23.7	20	17.2	5	0	0	0	0

Table A 3.—SKY COVER AND RAINFALL

APRIL — 1972

STATION	Mean Sky Cover Oct.					Rainfall mms.										
	00 U.T.	06 U.T.	12 U.T.	18 U.T.	Daily Mean	Total Amount	D. From Normal	Max. Fall in one day		Number of Days with Amount of Rain						
								Amouut	Date	<0.1	≥0.1	≥1.0	≥5.0	≥10	≥25	≥50
Sallum	2.2	2.3	3.2	3.3	2.7	34.2	+33.1	23.0	8	0	6	6	1	1	0	0
Mersa Matruh (A)	2.2	4.1	4.7	3.0	3.5	7.4	+ 4.9	2.9	29	2	6	3	0	0	0	0
Alexandria (A)	3.8	4.0	3.8	3.9	3.7	35.7	+32.6	9.6	8	1	6	6	3	0	0	0
Port Said (A)	1.9	2.6	3.0	2.5	2.5	13.7	+10.6	10.9	9	0	5	2	1	1	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1.7	3.3	4.3	2.8	3.3	12.5	+10.4	8.9	9	0	7	2	1	0	0	0
Cairo (A)	1.8	4.6	3.8	2.3	3.1	3.6	+ 2.8	2.1	9	1	3	1	0	0	0	0
Fayoum	—	2.9	3.1	3.4	—	Tr.	— 0.7	Tr.	9	1	0	0	0	0	0	0
Minya (A)	0.9	3.0	3.1	2.4	2.5	0.0	— 0.4	0.0	—	0	0	0	0	0	0	0
Assyout (A)	1.1	2.6	2.2	2.2	1.8	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Luxor (A)	1.2	2.0	2.0	2.0	1.8	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Aswan (A)	0.8	1.7	1.6	1.4	1.3	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Siwa	2.3	2.5	4.1	3.3	3.1	7.6	+ 6.7	5.7	8	0	4	2	1	0	0	0
Bahariya	2.1	2.6	4.4	3.2	3.0	0.0	— 0.5	0.0	—	0	0	0	0	0	0	0
Farafra	—	1.6	2.6	1.9	—	Tr.	— 0.1	Tr.	8	1	0	0	0	0	0	0
Dakhla	0.1	0.4	0.5	0.2	0.3	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Kharga	0.8	1.7	1.5	1.1	1.3	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0.9	2.3	2.8	1·8	1.9	1.3	+ 1.3	1.3	28	0	1	1	0	0	0	0
Quseir	0.9	2.0	2.8	1.6	1.8	1.2	+ 1.1	1.2	28	1	1	1	0	0	0	0

Table A 4.—DAYS OF OCCURRENCE OF MISCELLANEOUS WEATHER PHENOMENA

APRIL — 1972

Station	Precipitation				Frost	Thunderstorm	Mist Vis ≥1000 metres	Fog Vis <1000 Metres	Haze Vis ≥1000 Metres	Thick Haze Vis <1000 Metres	Dust or Sandrising Vis ≥1000 Metres	Dust or Sandstorm Vis <1000 Metres	Gale	Clear Sky	Cloudy Sky
	Rain	Snow	Ice Pellets	Hail											
Sallum	6	0	0	0	0	0	0	0	0	0	6	0	0	12	2
Mersa Matruh (A)	6	0	0	0	0	0	0	0	4	0	7	4	0	9	5
Alexandria (A)	6	0	0	0	0	2	1	1	5	0	1	2	0	7	3
Port Said (A)	5	0	0	0	0	0	0	0	0	0	3	1	0	15	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	7	0	0	0	0	0	2	0	2	0	3	0	0	9	3
Cairo (A)	3	0	0	0	0	0	1	2	7	0	12	5	1	8	0
Fayoum	0	0	0	0	0	0	0	0	1	0	3	0	0	—	—
Minya (A)	0	0	0	0	0	0	2	0	6	0	10	1	0	13	1
Assyout (A)	0	0	0	0	0	0	0	0	2	0	4	4	1	17	0
Luxor (A)	0	0	0	0	0	0	0	0	17	0	8	2	0	18	1
Aswan (A)	0	0	0	0	0	0	0	0	8	0	5	4	1	16	0
Siwa	4	0	0	0	0	0	0	0	1	0	9	2	0	10	4
Bahariya	0	0	0	0	0	0	0	0	0	0	3	2	0	8	2
Farafra	0	0	0	0	0	0	0	0	4	0	6	2	0	—	—
Dakhla	0	0	0	0	0	0	0	0	0	0	8	0	0	30	0
Kharga	0	0	0	0	0	0	0	0	0	0	9	0	0	21	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	1	0	0	0	0	1	0	0	7	0	12	2	0	16	0
Quseir	1	0	0	0	0	0	0	0	4	0	1	0	0	18	1

Table A 5.—NUMBER IN HOURS OF OCCURENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES

APRIL — 1972

Station	calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurrences of wind blowing from the ranges of directions indicated												
					345 / 014	015 / 044	045 / 074	075 / 104	105 / 134	135 / 164	165 / 194	195 / 224	225 / 254	255 / 284	285 / 314	315 / 344	All direction
Sallum	25	0	0	1—10	10	35	91	68	62	22	8	31	26	32	38	49	472
				11—27	0	7	2	0	1	1	0	22	39	39	86	25	222
				28—47	0	0	0	0	0	0	0	0	0	0	1	0	1
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**10**	**42**	**93**	**68**	**63**	**23**	**8**	**53**	**65**	**71**	**125**	**74**	**695**
Mersa Matruh . (A)	10	0	0	1—10	44	42	20	38	34	19	34	30	38	16	27	26	368
				11—27	8	11	10	79	24	4	32	33	26	6	43	39	315
				28—47	0	0	0	0	0	0	1	8	10	7	1	0	27
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**52**	**53**	**30**	**117**	**58**	**23**	**67**	**71**	**74**	**29**	**71**	**65**	**710**
Alexandria. . . (A)	1	1	7	1—10	54	48	47	44	43	25	38	30	15	20	27	88	479
				11—27	28	31	11	14	4	5	12	16	35	17	39	12	224
				28—47	0	0	0	0	0	0	0	4	4	0	0	0	8
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**82**	**79**	**58**	**58**	**47**	**30**	**50**	**50**	**54**	**37**	**66**	**100**	**711**
Tanta	14	0	0	1—10	52	71	66	55	29	17	46	36	27	25	49	64	537
				11—27	28	13	10	20	3	3	6	13	41	11	13	8	169
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**80**	**84**	**76**	**75**	**32**	**20**	**52**	**49**	**68**	**36**	**62**	**72**	**706**
Cairo . . . . . (A)	52	1	37	1—10	28	73	51	31	9	9	7	13	12	20	30	32	315
				11—27	20	60	40	43	14	9	14	33	48	15	5	6	307
				28—47	0	0	0	0	0	0	0	4	4	0	0	0	8
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**48**	**133**	**91**	**74**	**23**	**18**	**21**	**50**	**64**	**35**	**35**	**38**	**630**
Fayoum	3	11	0	1—10	90	237	41	12	12	19	24	38	56	32	22	37	620
				11—27	2	15	4	0	0	0	7	9	38	9	1	1	86
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**92**	**252**	**45**	**12**	**12**	**19**	**31**	**47**	**94**	**41**	**23**	**38**	**706**
Minya . . . . . (A)	2	2	2	1—10	157	73	5	7	3	40	42	38	24	15	13	43	460
				11—27	115	26	1	0	0	3	16	8	5	43	23	14	254
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**272**	**99**	**6**	**7**	**3**	**43**	**58**	**46**	**29**	**58**	**36**	**57**	**714**
Assyout . . . . (A)	10	0	0	1—10	17	18	19	29	32	26	55	10	18	77	82	63	446
				11—27	13	4	0	4	2	27	41	10	24	33	60	45	263
				28—47	0	0	0	0	0	1	0	0	0	0	0	0	1
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**30**	**22**	**19**	**33**	**34**	**54**	**96**	**20**	**42**	**110**	**142**	**108**	**710**

Table A 5 (*contd.*)—NUMBER IN HOURS OF OCCURENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES

APRIL — 1972

Station	calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurrences of wind blowing from the ranges of directions indicated												
					345/014	015/044	045/074	075/104	105/134	135/164	165/194	195/224	225/254	255/284	285/314	315/344	All directions
Luxor . . . . (A)	13	0	2	1—10	71	53	33	20	18	19	78	38	31	76	88	76	601
				11—27	1	6	12	1	3	2	11	3	3	23	21	18	104
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**72**	**59**	**45**	**21**	**21**	**21**	**89**	**41**	**34**	**99**	**109**	**94**	**705**
Aswan . . . . (A)	43	2	0	1—10	84	69	24	15	29	25	19	9	4	9	34	117	438
				11—27	20	27	7	3	3	7	5	0	0	9	38	118	237
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**104**	**96**	**31**	**18**	**32**	**32**	**24**	**9**	**4**	**18**	**72**	**235**	**675**
Siwa	21	15	0	1—10	16	16	29	98	97	53	28	12	16	67	78	27	537
				11—27	3	1	2	0	12	5	3	5	6	36	71	3	147
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**19**	**17**	**31**	**98**	**109**	**58**	**31**	**17**	**22**	**103**	**149**	**30**	**684**
Dakhla	15	20	7	1—10	34	24	34	43	45	60	38	28	27	43	80	70	526
				11—27	24	15	1	0	1	1	10	0	5	12	59	24	152
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**58**	**39**	**35**	**43**	**46**	**61**	**48**	**28**	**32**	**55**	**139**	**94**	**678**
Kharga	1	0	0	1—10	119	60	19	18	19	28	21	10	16	27	60	62	459
				11—27	125	35	3	2	0	1	21	5	7	10	27	21	257
				28—47	3	0	0	0	0	0	0	0	0	0	0	0	3
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**247**	**95**	**22**	**20**	**19**	**29**	**42**	**15**	**23**	**37**	**87**	**83**	**719**
Hurghada	34	6	6	1—10	28	33	25	25	31	73	10	3	7	18	93	33	379
				11—27	71	2	1	1	13	12	0	1	1	11	44	130	287
				28—47	0	0	0	0	0	0	0	0	0	0	1	7	8
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**99**	**35**	**26**	**26**	**44**	**85**	**10**	**4**	**8**	**29**	**138**	**170**	**674**
Quseir	9	12	0	1—10	90	67	29	32	19	42	51	15	14	7	71	127	564
				11—27	79	37	0	0	0	9	1	0	0	0	4	5	135
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**169**	**104**	**29**	**32**	**19**	**51**	**52**	**15**	**14**	**7**	**75**	**132**	**699**

UPPER AIR CLIMATOLOGICAL DATA

Table B1.—MONTHLY MEANS, ABSOLUTE HIGHER & LOWER VALUES OF ALTITUDE, AIR TEMPERATURE & DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

APRIL — 1972

Station	Pressure Surface (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Mersa Matruh 0000 U.T.	Surface	28	*1009m.b.	*1019m.b.	*995m.b.	28	16.5	25.4	12.3	28	10.6
	1000	26	116	186	70	26	17.2	26.4	12.8	26	9.8
	850	28	1488	1546	1361	28	13.2	20.5	4.5	28	— 3.5
	700	28	3089	3169	2919	28	2.1	8.0	— 6.0	27	—10.2
	600	27	4313	4401	4174	27	— 6.9	— 1.6	—13.0	26	—15.9
	500	27	5712	5825	5479	27	—16.8	— 9.6	—22.2	26	—27.7
	400	26	7361	7475	7095	26	—28.6	—18.0	—33.3	26	—40.0
	300	26	9350	9512	9049	25	—44.1	—38.7	—46.9	24	—53.8
	250	25	10555	10719	10279	25	—51.4	—42.4	—63.3	24	—60.6
	200	24	12027	12144	11779	24	—55.5	—46.4	—63.2	18	—64.2
	150	23	13806	13948	13660	23	—60.0	—50.6	—71.0	9	—68.4
	100	22	16309	16462	16133	22	—65.3	—58.0	—74.0	1	—70.4
	70	20	18485	18649	18380	20	—64.4	—57.4	—68.0	—	—
	60	17	19474	19580	19350	17	—62.9	—60.7	—66.6	—	—
	50	17	20567	20680	20440	17	—61.8	—57.4	—68.6	—	—
	40	14	22061	22300	21800	14	—59.9	—56.0	—63.9	—	—
	30	12	23774	23894	23669	12	—57.5	—51.2	—61.4	—	—
	20	8	26368	26544	26239	8	—54.5	—51.7	—58.5	—	—
	10	—	—	—	—	—	—	—	—	—	—
Helwan 0000 U.T.	Surface	30	*994m.b.	*1001m.b.	*980m.b.	30	19.2	28.5	14.2	30	7.3
	1000	3	143	150	140	3	14.8	15.0	14.6	3	11.3
	850	29	1477	1523	1371	29	14.9	22.8	7.7	29	— 0.6
	700	29	3089	3155	2970	29	4.0	7.6	— 6.0	29	— 9.0
	600	29	4322	4395	4165	28	— 5.5	— 2.3	—11.8	28	—16.7
	500	29	5727	5810	5544	29	—15.5	—10.8	—21.4	29	—24.5
	400	29	7373	7488	7154	29	—27.9	—23.7	—34.0	29	—37.1
	300	29	9375	9526	9141	29	—43.2	—38.3	—46.9	29	—52.4
	250	29	10584	10745	10372	29	—50.3	—44.7	—55.3	28	—58.9
	200	28	12020	12184	11854	28	—54.8	—47.1	—63.0	24	—59.7
	150	27	13844	14006	13724	27	—60.2	—55.3	—66.7	11	—66.5
	100	27	16323	16448	16214	27	—67.7	—61.0	—77.5	—	—
	70	19	18481	18594	18354	19	—66.1	—61.3	—72.0	—	—
	60	8	19429	19560	19320	8	—64.3	—60.0	—66.3	—	—
	50	7	20496	20549	20410	7	—62.7	—60.5	—65.0	—	—
	40	6	21965	22030	21900	6	—59.7	—56.4	—62.9	—	—
	30	6	23680	23779	23602	6	—57.6	—54.1	—63.0	—	—
	20	3	26294	26411	26229	3	—49.8	—48.9	—51.5	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 0000 U.T.	Surface	30	*987m.b.	*992m.b.	*977m.b.	30	22.1	31.5	15.0	30	1.1
	1000	29	82	124	19	—	—	—	—	—	—
	850	30	1492	1524	1425	30	19.2	27.0	11.3	30	— 2.8
	700	30	3125	3170	3061	30	7.5	12.2	2.0	30	—11.7
	600	30	4375	4434	4302	30	— 1.4	3.4	— 5.1	30	—17.7
	500	30	5802	5884	5720	30	—11.4	— 5.8	—16.2	30	—27.2
	400	30	7474	7586	7373	30	—23.9	—20.0	—28.2	29	—36.5
	300	29	9516	9648	9396	29	—37.7	—30.8	—43.2	29	—49.7
	250	29	10610	10880	10407	29	—45.6	—39.3	—49.7	29	—57.0
	200	29	12215	12350	12065	29	—53.2	—49.0	—57.3	29	—64.0
	150	29	14027	14158	13875	29	—63.9	—60.7	—66.7	—	—
	100	29	16442	16556	16265	29	—75.6	—70.0	—81.6	—	—
	70	22	18522	18619	18355	22	—72.5	—66.3	—76.8	—	—
	60	10	19489	19580	19410	10	—65.0	—61.5	—69.3	—	—
	50	9	20565	20670	20487	9	—63.2	—58.4	—65.8	—	—
	40	7	22030	22180	21870	7	—59.1	—53.9	—63.8	—	—
	30	6	23810	23935	23659	6	—55.0	—50.4	—59.5	—	—
	20	3	26428	26575	26280	3	—48.5	—47.6	—49.7	—	—
	10	—	—	—	—	—	—	—	—	—	—

* The atmospheric pressure corrected to the elevation of the radiosonde station.

N = The number of cases the element has been observed during the month.

UPPER AIR CLIMATOLOGICAL DATA

Table B1 (*contd*).—MONTHLY MEANS, ABSOLUTE HIGHER & LOWER VALUES OF ALTITUDE, AIR TEMPERATURE & DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

APRIL — 1972

Station	Pressure Surface (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Marsa Matruh 1200 U.T.	Surface	28	1010m.b.*	1018m.b.*	1001m.b.*	28	21.8	32.8	16.4	28	12.6
	1000	28	115	181	37	28	20.2	32.0	12.4	28	11.2
	850	28	1499	1559	1421	28	12.8	20.4	6.5	28	— 0.7
	700	28	3102	3188	2985	28	3.1	13.6	— 4.9	28	— 8.6
	600	27	4325	4400	4185	27	— 6.1	— 1.7	—11.2	27	—18.2
	500	27	5755	5841	5556	27	—16.2	—11.7	—22.1	27	—28.6
	400	26	7366	7456	7170	26	—28.2	—24.3	—31.7	26	—39.7
	300	26	9370	9536	9170	26	—43.4	—39.4	—47.2	25	—53.9
	250	25	10574	10752	10400	25	—50.4	—42.4	—56.5	25	—60.4
	200	25	12013	12222	11871	25	—55.4	—48.3	—65.7	19	—63.5
	150	24	13820	13957	13691	24	—58.8	—50.5	—65.9	8	—67.1
	100	24	16335	16475	16198	24	—64.5	—57.5	—69.0	1	—67.3
	70	22	18516	18685	18365	22	—63.9	—58.8	—68.5	—	—
	60	19	19488	19660	19300	19	—62.9	—60.2	—65.9	—	—
	50	19	20581	20785	20406	19	—61.2	—57.9	—65.8	—	—
	40	17	22023	22250	21820	17	—57.8	—55.0	—62.7	—	—
	30	13	23824	24042	23669	13	—53.8	—51.5	—56.4	—	—
	20	8	26450	26604	26340	8	—48.6	—44.9	—51.3	—	—
	10	—	—	—	—	—	—	—	—	—	—
Helwan 1200 U.T.	Surface	30	993m.b.*	1000m.b.*	979m.b.*	30	28.6	38.4	21.2	30	4.2
	1000	1	140	—	—	1	24.1	—	—	1	5.6
	850	28	1487	1550	1391	27	15.7	24.8	7.6	26	— 3.7
	700	28	3108	3189	2971	28	5.2	10.4	— 2.4	27	—12.6
	600	25	4342	4436	4192	24	— 4.2	— 0.6	— 9.3	24	—18.5
	500	23	5762	5848	5585	22	—14.1	—10.5	—19.0	22	—28.1
	400	22	7420	7523	7216	22	—26.2	—23.0	—30.8	22	—40.4
	300	21	9439	9565	9207	21	—41.3	—35.7	—46.5	21	—54.1
	250	20	10670	10792	10430	20	—48.5	—40.4	—53.8	20	—60.4
	200	20	12119	12274	11914	20	—54.0	—46.5	—63.9	15	—63.4
	150	19	13947	14095	13797	19	—59.5	—52.3	—67.0	8	—68.1
	100	18	16446	16574	16292	17	—67.0	—62.8	—68.6	—	—
	70	17	18621	18740	18468	16	—65.7	—62.4	—71.8	—	—
	60	15	19599	19880	19460	14	—63.6	—59.1	—67.7	—	—
	50	15	20711	21186	20523	14	—60.5	—57.0	—63.0	—	—
	40	7	22283	22680	22020	6	—55.3	—53.0	—57.2	—	—
	30	7	24036	24476	23744	7	—48.5	—45.7	—54.7	—	—
	20	4	26656	26849	26366	4	—43.7	—40.5	—50.7	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan (A) 1200 U.T.	Surface	30	987mb.*	991mb.*	979mb.*	30	34.4	41.4	29.3	30	3.2
	1000	29	76	104	11	—	—	—	—	—	—
	850	30	1509	1542	1431	30	21.1	29.1	13.9	29	— 5.6
	700	26	3147	3206	3070	26	9.1	14.2	4.7	26	—15.3
	600	23	4407	4480	4330	27	0.1	3.3	— 3.2	27	—19.8
	500	20	5851	5926	5779	20	— 9.5	— 5.0	—13.7	19	—26.5
	400	19	7535	7621	7454	19	—21.8	—18.2	—25.7	19	—37.3
	300	19	9595	9711	9490	19	—35.4	—29.0	—41.0	19	—51.4
	250	17	10848	10989	10746	17	—44.0	—38.6	—49.1	17	—58.8
	200	17	12322	12481	12194	17	—52.1	—47.7	—57.7	16	—66.0
	150	16	14142	14308	14040	16	—62.1	—56.5	—65.8	4	—72.1
	100	16	16577	16702	16451	16	—73.4	—68.9	—76.4	—	—
	70	16	18675	18783	18577	16	—69.6	—64.0	—83.1	—	—
	60	11	19647	19740	19510	11	—66.5	—61.6	—71.4	—	—
	50	11	20749	20853	20610	11	—61.6	—56.0	—65.0	—	—
	40	7	22230	22370	22090	7	—54.6	—53.7	—55.9	—	—
	30	7	24007	24163	23855	7	—49.5	—44.3	—53.1	—	—
	20	4	26652	26770	26515	4	—44.9	—44.0	—46.3	—	—
	10	—	—	—	—	—	—	—	—	—	—

* The atmospheric pressure corrected to the elevation of the radiosonde station.

N = The number of cases the element has been observed during the month.

Table B 2.—MEAN AND EXTREME VALUES OF THE FREEZING LEVEL AND THE TROPOPAUSE. THE HIGHEST WIND SPEED IN THE UPPER AIR

APRIL — 1972

	Station	Freezing Level									Frist Tropopause									Highest wind speed			
		Mean			Highest			Lowest			Mean			Highest			Lowest						
		Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Direction (000—360)	Speed in Knots
0000 U.T.		(N)	(N)	(N)							(N)	(N)	(N)										
	M. Matruh (A)	3391 (28)	673 (28)	—11.3 (28)	4270	609	— 5.1	2260	760	— 7.6	11508 (23)	220 (23)	—58.4 (23)	14200	143	—66.6	8600	319	—44.2	11799	208	310	130
	Helwan . . .	3572 (29)	661 (29)	—11.2 (29)	4000	626	— 5.5	2280	766	— 4.6	11813 (23)	213 (23)	—57.7 (23)	15670	114	—72.2	9260	298	—46.3	11600	215	360	150
	Aswan . . (A)	4192 (30)	615 (30)	—16.8 (30)	5080	552	—19.6	3580	664	—13.8	16437 (14)	101 (14)	—76.5 (14)	17310	87	—81.0	15630	116	—75.7	12380	195	310	140
1200 U.T.											(N)	(N)	(N)										
	M. Matruh (A)	3417 (28)	674 (28)	—10.7 (28)	4080	620	— 8.9	2340	760	— 1.7	11872 (24)	202 (24)	—54.0 (24)	16290	100	—60.0	9830	274	—50.0	9807	284	260	150
	Helwan . . .	3763 (25)	647 (25)	—14.0 (24)	4330	608	—15.5	2620	730	— 3.2	12780 (18)	190 (18)	—59.5 (18)	15900	113	—67.0	9250	308	—42.4	13600	252	275	165
	Aswan . . (A)	4442 (22)	598 (22)	—20.2 (22)	5080	554	—25.8	3920	634	—25.0	15965 (14)	114 (14)	—72.6 (14)	17890	80	—73.2	11900	211	—56.9	12900	—	305	135

N = The number of cases the element has been observed during the month.

Table B 3 (*contd.*).— NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES.

MERSA MATRUH(A) — APRIL 1972

Time	Pressure Surface (Millibar)	Wind between ranges of direction (000—360)°																								Number of Calm winds	Total Number of observation (TN)	Mean Scalar wind Speed (Knots)
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	1	10	1	6	1	3	2	8	4	11	2	8	2	22	6	10	3	12	1	12	0	—	2	12	3	28	10
	1000	2	14	2	10	1	5	3	8	4	18	1	9	2	17	2	12	3	18	4	10	1	18	1	18	0	26	13
	850	3	12	1	9	2	7	0	—	0	—	2	22	1	30	3	23	2	22	10	22	2	9	2	18	0	28	19
	700	0	—	0	—	0	—	0	—	0	—	0	—	3	36	2	30	6	31	8	34	7	26	2	22	0	28	30
	600	0	—	0	—	0	—	0	—	0	—	0	—	2	44	2	44	7	43	7	36	7	34	2	26	0	27	38
	500	0	—	0	—	0	—	0	—	0	—	1	49	1	54	2	70	6	41	9	34	5	38	2	22	0	26	40
	400	0	—	0	—	1	22	0	—	0	—	0	—	1	63	2	58	5	41	7	48	5	44	1	31	0	22	45
	300	0	—	0	—	0	—	0	—	0	—	0	—	1	32	3	69	2	27	9	62	5	50	0	—	0	20	53
	250	0	—	9	—	0	—	0	—	0	—	0	—	1	30	0	—	3	37	8	63	4	67	0	—	0	16	57
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	28	2	58	7	71	2	82	0	—	0	12	67
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	41	3	61	2	100	0	—	0	8	63
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	23	0	—	0	—	0	—	0	2	23
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	13	1	12	0	—	0	—	0	—	0	2	12
	60	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	15	0	1	15
	50	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	11	0	—	0	—	0	1	11
	40	0	—	0	—	0	—		—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	12	0	1	12
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	4	10	3	10	3	12	3	18	1	16	0	—	0	0	3	17	1	10	1	30	5	20	4	14	0	28	15
	1000	4	11	2	12	1	11	3	17	1	19	0	—	1	20	2	10	2	14	1	34	4	29	6	15	0	27	17
	850	0	—	0	—	0	—	2	4	0	—	1	12	2	26	3	13	7	17	5	18	2	22	5	16	0	27	16
	700	1	8	0	—	0	—	0	—	0	—	0	—	0	—	3	47	8	26	7	26	5	26	3	29	0	27	28
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	48	6	31	9	31	5	29	2	32	0	26	32
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	62	7	35	6	35	8	34	3	34	0	26	37
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	82	2	52	11	51	10	36	0	—	0	24	45
	300	1	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	73	12	68	8	48	0	—	0	23	63
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	50	2	55	14	82	4	61	0	—	0	21	75
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	68	8	67	6	84	1	50	0	17	72
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	106	6	59	1	58	0	—	0	8	65
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	15	1	17	0	—	0	2	16
	70	0	—	0	—	0	—	0	—	9	—	0	—	—	—	1	26	0	—	1	6	0	—	0	—	0	2	16
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the wind has been observed from the range of direction during the month.

TN = The total number of cases the wind has been observed for all directions during the month.

TABLE B 3. — NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES.

HELWAN — APRIL 1972

Station	Pressure Surface (Millibar)	Wind between specified ranges of direction (000—360°)																								Number of Calm winds	Total Number of Observations (T N)	Mean Scalar Wind Speed (Knots)
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	2	6	10	10	3	8	5	10	1	7	0	—	1	4	2	10	0	—	0	—	0	—	2	8	4	30	8
	1000	2	6	1	13	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	3	9
	850	5	11	3	19	1	16	2	13	0	—	2	13	1	24	3	14	5	19	0	—	4	16	3	10	0	29	15
	700	2	23	2	20	0	—	0	—	0	—	0	—	0	—	3	23	7	24	5	24	4	14	6	18	0	29	21
	600	2	23	2	17	0	—	0	—	0	—	0	—	1	43	2	23	6	32	6	24	5	19	5	24	0	29	25
	500	1	18	0	—	0	—	0	—	0	—	0	—	0	—	3	36	1	57	4	44	13	27	7	25	0	29	30
	400	1	12	0	—	0	—	0	—	0	—	0	—	0	—	2	48	3	31	8	28	8	32	7	30	0	29	31
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	50	6	43	13	45	7	42	0	29	44
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	50	3	60	7	51	14	54	3	54	0	28	54
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	82	5	79	13	65	6	48	0	26	65
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	90	4	61	15	59	2	45	0	23	61
	100	0	—	0	—	0	—	0	—	1	55	0	—	0	—	0	—	1	57	6	58	5	67	2	48	0	15	59
	70	0	—	1	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	66	3	23	0	—	0	6	44
	60	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	88	3	47	0	—	0	—	0	4	57
	50	0	—	0	—	0	—	0	—	1	10	0	—	0	—	0	—	0	—	1	12	0	—	0	—	0	2	11
	40	0	—	0	—	0	—	0	—	1	16	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	16
	30	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	32	0	—	0	—	0	—	0	1	32
	20	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	24	0	—	0	—	0	1	24
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	2	8	7	9	0	—	0	—	0	—	2	6	1	16	7	10	4	8	1	6	1	8	5	7	0	30	8
	1000	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	7	0	1	7
	850	1	8	2	13	3	10	2	12	2	8	0	—	3	20	1	2	6	20	4	9	2	12	2	10	0	28	14
	700	1	28	1	4	0	—	0	—	0	—	0	—	1	17	2	26	5	21	6	20	2	17	8	19	0	26	20
	600	1	22	0	—	1	8	0	—	0	—	0	—	0	—	1	16	2	38	8	30	6	22	5	20	0	24	24
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	15	9	29	8	30	3	22	0	23	27
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	33	7	38	10	34	3	33	0	21	34
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	45	14	63	1	44	0	20	48
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	47	11	70	3	58	0	20	61
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	77	9	53	4	53	0	18	66
	150	0	—	0	—	0	—	0	—	0	—	0	—	1	21	0	—	0	—	4	106	10	74	1	54	0	16	78
	100	0	—	0	—	1	22	0	—	0	—	0	—	0	—	0	—	0	—	1	24	7	55	1	34	0	10	49
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	42	4	49	1	8	0	8	41
	60	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	32	2	72	1	5	0	6	41
	50	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	16	0	—	0	—	0	—	1	34	0	2	25
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the wind has been observed from the range of direction during the month.

TN = The total number of cases the wind has been observed during the month.

Table B 3. *(contd.)*—**NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES.**

ASWAN (A) — APRIL 1972

Time	Pressure Surface (Millibar)	Wind between ranges of direction (000—360)°																								Number of Calm winds	Total Number of observation (TN)	Mean Scalar wind Speed (Knots)
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	14	12	2	11	2	8	3	9	3	9	0	—	0	—	0	—	0	—	1	8	1	1	4	11	0	30	11
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	3	17	5	13	2	8	3	10	0	—	2	10	0	—	1	15	2	10	2	11	5	11	3	14	0	28	12
	700	3	15	5	12	1	3	0	—	0	—	1	6	0	—	2	13	4	38	6	21	1	11	5	16	0	28	18
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	43	5	35	9	26	10	20	4	21	0	29	25
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	50	11	32	12	29	1	27	0	29	34
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	7	60	13	39	7	33	2	38	0	29	43
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	64	12	75	8	55	3	54	0	28	65
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	81	14	78	9	76	2	62	0	28	76
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	79	12	87	11	93	1	63	0	27	87
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	76	12	78	6	73	0	—	0	20	76
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	46	5	45	2	28	0	—	0	9	41
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	13	11	2	10	2	10	2	8	0	—	1	8	3	10	0	—	0	—	1	10	2	18	3	10	1	30	10
	1000	—	—	—	—	—	—	—	—	—	—	0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	7	13	4	9	2	10	3	15	2	8	0	—	1	12	1	15	0	—	0	—	5	9	5	11	0	30	11
	700	3	17	3	10	0	—	1	10	0	—	0	—	0	—	1	14	6	22	4	25	3	15	4	18	0	25	19
	600	1	19	1	10	0	—	0	—	0	—	0	—	0	—	0	—	5	40	5	15	7	16	3	16	0	22	21
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	41	7	32	7	28	0	—	0	19	33
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	50	10	40	6	15	0	—	0	19	43
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	62	4	57	9	69	1	48	0	19	64
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	74	6	74	6	83	1	36	0	17	65
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	98	10	84	4	89	0	—	0	16	87
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	85	6	89	3	71	0	—	0	13	83
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	49	2	35	2	30	0	—	0	8	41
	70	0	—	0	—	0	—	0	—	1	18	0	—	0	—	0	—	1	16	1	10	0	—	0	—	0	3	15
	60	0	—	0	—	0	—	0	—	0	—	1	29	0	—	0	—	0	—	2	8	0	—	0	—	0	3	15
	50	0	—	0	—	0	—	1	10	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	10
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the wind has been observed from range of direction during the month.

TN — The total number of cases the wind has been observed for all directions during the month.

REVIEW OF AGRO-METEOROLOGICAL STATIONS

MERSA MATRUH — APRIL 1972

For the month as a whole the mean daily air temperature and relative humidity were slightly above normal. The total monthly rainfall was 7.4 mm. against 2.3 mm. for normal.

The month was characterized by three khamsin heat waves in the periods (11th—13th), 19th and (24th—27th). The last heat wave was the most pronounced. It yielded the highest maximum air temperature for the month (35. 8°C) on the 26th, the highest minimum air temperature (23.6°C) on the 25th together with the lowest relative humidity (8%) and the highest daily pan evaporation (22.12 mm.).

Apart from the khamsin heat waves, mild weather was experienced. The lowest maximum air temperature for the month was 18.2°C reported on the 30th together with the highest mean daily wind speed (9.5 m./sec.).

The extreme maximum soil temperatures were lower than the corresponding values of last April at shallow depths between 2 and 10 cm. with departures between 3.4°C at 2 cm. and 0.3°C at 10 cm. At deeper depths the extreme maxima were higher than last April with departures between 1.2° at 50 cm. and 2.7°C at 100 cm. The extreme minimum soil temperatures were higher than last April at all depths apart from 100 cm. depth where it was lower by 0.3°C ; the departures varied between 2.6°C at 2 cm. and 0.2°C at 50 cm.

The mean daily values of wind speed at 1.5 m., actual sunshine duration and pan evaporation were lower than the corresponding values of April 1971 by 0.4 m./sec., 1.4 hour and 0.79 mm. respectively.

TAHRIR — APRIL 1972

For the month as a whole the mean daily air temperature and relative humidity were slightly above average. The total monthly rainfall was 6.7 mm. against 1.7 mm. for average.

The month was characterized by four pronounced khamsin heat waves in the periods (6th, 7th), (11th—14th), (19th, 20th), and (24th—28th). The last heat wave yielded the highest maximum air temperature for the month (39.1°C) on the 26th and the highest minimum air temperature (19.7°C) on the 27th together with the highest daily Pan evaporation (14.62 mm.). The break down of these heat waves was followed by mild periods. The lowest maximum air temperature for the month was 22.4°C reported on the 30th together with the highest mean daily wind speed (5.9 m./sec).

The extreme maximum soil temperatures were lower than the corresponding values of last April at 2,5 cm. depths by 0.7°, 0.6°C respectively ; and were higher at other depths with departures between 1.3°C (at 10 cm.) and 1.8°C (at 100 cm.). The extreme minimum soil temperatures were higher than the corresponding values of last April at all depths apart from 100 cm. depth where it was lower by 0.3°C ; the departures varied between 1.0°C (at 5 cm.) and 1.8°C (at 20 cm.).

The mean daily values of wind speed at 1.5 m., actual sunshine duration and Pan evaporation were lower than average by 0.1 m./sec., 1.4 hour and 1.82 mm. respectively.

BAHTIM — APRIL 1972

For the month as a whole the mean daily air temperature was above average, and the mean daily relative humidity was slightly below average. The total monthly rainfall was 7.7 mm. against 4.0 mm. for average.

The month was characterized by four pronouced khamsin heat waves in the periods : (6th, 7th), (11th—14th), (19th—21st) and (25th—28th). The last heat wave was the most pronounced and yielded the highest minimum air temperature for the month (19.3°C) together with the lowest relative humidity (12%) on the 26th, and the highest maximum air temperature (38.6°C) on the 27th. The break down of this heat wave was followed by the highest daily Pan evaporation (16.56 mm.) and the highest day time mean wind speed (6.7 m./sec.) on the 29th.

Apart from these khamsin heat waves, mild weather was enjoyed. The lowest maximum air temperature for the month was 22.3°C reported on the 9th together with the maximum daily rainfall (6.2 mm.).

The extreme maximum soil temperatures were higher than the corresponding values of last April at all depths with departures between 3.3°C (at 2 cm.) and 0.6°C (at 100 cm.). The extreme minimum soil temperatures were higher than last April at depths between 2 and 20 cm. with departures between 2.8°C (at 2 cm.) and 0.7°C (at 20 cm.). At 50, 100 cm. depths the extreme soil minima were lower than last April by 0.7° and 0.8°C respectively.

The mean daily actual sunshine duration was lower than average by 1.4 hour. The mean daily wind speed at 1.5 m. and Pan evaporation were higher than average by 0.1 m./sec. and 0.61 mm. respectively.

KHARGA — APRIL 1972

This month was rather normal as regards the mean daily air temperature and relative humidity.

The month was characterized by four excessive heat waves in the periods : (5th—7th), (12th—14th), (18th—21st) and (25th—28th). The second heat wave yielded the highest maximum air temperature for the month (41.6°C) and the highest daily Pan evaporation (26.10 mm.) on the 14th. The third heat wave yielded the highest minimum air temperature (23.2°C) on the 21st, and its break down was followed by the maximum daily mean wind speed (8.1 m./sec.) on the 22nd.

Apart from these heat waves, mild weatherwas experienced. The lowest maximum air temperature for the month was 28.4°C reported on both the 1st and 9th.

The extreme maximum soil temperatures were higher than the corresponding values of last April at all depths with departures between 2.7°C (at 2 cm.) and 0.8°C (at 10 cm.). The extreme minimum soil temperatures were higher than last April at 2, 5 cm. depths by 2.2°C and 1.0°C respectively, the same at 10 cm., and lower than last April at deeper depths between 20 and 100 cm. with small departures between 0.3° and 0.5°C.

The mean daily values of wind speed at 1.5 m., actual sunshine duration and Pan evaporation were lower than average by 0.5 m./sec., 0.1 hour and 0.80 mm. respectively.

Table C 1.—AIR TEMPERATURE AT 1½ MÊTRES ABOVE GROUND

APRIL — 1972

STATION	Air Temperature (°C)					Mean Duration in hours of daily air temperature above the following value										
	Mean Max.	Mean Min.	Mean of the day	Night time mean	Day time mean	—5°C	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C
Mersa Matruh. . .	23.8	13.9	18.8	16.7	20.1	24.0	24.0	24.0	23.9	19.2	6.9	2.7	0.8	0.03	0.0	0.0
Tahrir	29.2	13.3	20.6	16.8	23.0	24.0	24.0	44.0	23.6	19.8	11.8	4.7	1.8	0.3	0.0	0.0
Bahtim	29.0	12.0	20.1	15.7	23.2	24.0	24.0	24.0	23.2	18.2	11.4	4.8	2.1	0.4	0.0	0.0
Kharga	34.7	17.5	26.4	22.8	28.7	24.0	24.0	24.0	24.0	23.5	20.4	13.1	6.5	2.7	0.1	0.0

Table C 2.—EXTREME VALUES OF AIR TEMPERATURE AT 1½ METRES ABOVE GROUND, ABSOLUTE MINIMUM AIR TEMPERATURE AT 5cms ABOVE GROUD OVER DIFFERENT FIELDS.

APRIL — 1972

STATION	Max. Temp. at 1½ metres				Min. Temp. at 1½ metres (°C)				Min. Temp. at 5 cms. above			
	Highest		Lowest		Highest		Lowest		Dry soil		Grass	
	value	Date	value	Date	value	Date	value	Date	Value	Date	Value	Date
Mersa Matruh. . .	35.8	26	18.2	30	23.6	25	7.8	2	3.6	2	—	—
Tahrir	39.1	26	22.4	30	19.7	27	7.8	3	4.7	26	—	—
Bahtim	38.6	27	22.3	9	19.3	26	7.2	4	3.9	4	—	—
Kharga	41.6	14	28.4	1,9	23.2	21	11.2	3	8.6	3	—	—

Table C 3.—(SOLAR + SKY) RADIATION, DURATION OF BRIGHT SUNSHINE, RELATIVE HUMIDITY, & VAPOUR PRESSURE AT 1½ METRES ABOVE GROUND, EVAPORATION & RAINFALL.

APRIL — 1972

STATION	(Solar+Sky Radiation gm. cal/cm²	Duration of Bright Sunshine (hours)			Relative Humidity %				Vapour pressure (mms)						Evaporation (mms)		Rainfall (mms)		
		Total Actual monthly	Total Possible monthly	%	Mean of day	1200 U.T.	Lowest	Date	Mean of day	1200 U.T.	Highest	Date	Lowest	Date	Piche	Pan class A	Total Amount Monthly	Max. Fall in one day	Date
M. Matruh	461.2	226.9	388.6	58	67	60	8	25	10.6	11.4	16.4	12	2.1	25	7.1	7.23	7.4	2.9	29
Tahrir . .	527.3	254.0	387.6	66	63	39	15	14	10.9	10.7	16.8	21	6.3	3	7.3	7.86	6.7	4.3	8
Bahtim . .	533.9	248.8	387.0	64	59	33	12	26	9.7	8.8	12.6	20	7.4	29	8.7	8.79	7.7	6.2	9
Kharga .	512.8	307.8	382.2	80	23	15	6	25,26	5.4	5.2	12.5	22	1.8	7	16.5	15.28	0.0	0.0	—

Table C 4.—EXTREME SOIL TEMPERATURE AT DIFFERENT DEPTHS (cms) IN DIFFERENT FIELDS

APRIL — 1972

Station	Highest (H) Lowest (L)	Extreme soil temperature (°C) in dry field at different depths (cms.)								Extreme soil temperature (°C) in grass field at different depths (cms.)							
		2	5	10	20	50	100	200	300	2	5	10	20	50	100	200	300
Mersa Matruh.	H	36.2	33.2	30.0	26.6	23.4	22.8	20.5	—	—	—	—	—	—	—	—	—
	L	14.3	13.9	14.8	17.7	18.0	18.3	18.7	—	—	—	—	—	—	—	—	—
Tahrir	H	45.8	39.2	34.9	31.5	27.9	25.0	22.6	23.7	—	—	—	—	—	—	—	—
	L	17.7	17.2	17.4	19.2	20.9	20.6	20.8	23.4	—	—	—	—	—	—	—	—
Bahtim	H	49.4	39.2	34.2	27.5	24.7	23.1	22.4	22.8	—	—	—	—	—	—	—	—
	L	17.8	16.4	18.0	20.9	21.1	20.7	21.8	22.7	—	—	—	—	—	—	—	—
Kharga . . .	H	55.1	46.7	39.4	33.0	30.2	27.7	26.2	26.6	—	—	—	—	—	—	—	—
	L	13.8	17.4	20.8	24.0	25.2	24.8	25.0	26.3	—	—	—	—	—	—	—	—

Table C 5.—SURFACE WIND

APRIL — 1972

Station	Wind Speed m/sec at $1^1/_2$ metres			Days with surface wind speed at 10 metres							Max. Gust (knots at 10 meters)	
	Mean of the day	Night time mean	Day time mean	≥10 knots	≥15 knots	≥20 knots	≥25 knots	≥ 30 knots	≥35 knots	≥40 knots	value (knots)	Date
Mersa Matruh.	4.5	3.3	5.5	30	29	22	10	7	3	2	54	29
Tahrir	2.5	1.9	3.1	29	20	10	6	2	2	0	45	29
Bahtim	2.6	1.6	3.5	29	21	10	6	4	0	0	45	7
Kharga	3.3	2.6	4.0	28	22	11	7	1	0	0	39	22

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THE EGYPTIAN METEOROLOGICAL AUTHORITY
CAIRO

PUBLICATIONS OF THE METEOROLOGICAL AUTHORITY OF THE ARAB REPUBLIC OF EGYPT — CAIRO

In fulfilment of its duties, the Egyptian Meteorological Authority issues serveral reports and publications on weather, climate and agro-meteorology. The principal publications are described on this page.

Orders for publications should be addressed to :
"Chairman of the Board of Directors, Meteorological Authority, Kubri-el-Qubbeh — CAIRO".

THE MONTHLY WEATHER REPORT

First issued in 1909, the Monthly Weather Report served to give a brief summary of the weather conditions that prevailed over Egypt during the month, with a table showing the mean values for few meteorological elements and their deviations from the normal values. From 1954 to 1957 this report was in a rapid state of development and extension resulting into a voluminous report on January 1958 giving surface, upper air, and agro-meteorological data for Egypt.

As from January 1964, the Monthly Weather Report was pressed to give climatological data for a representative selection of synoptic stations.

THE AGRO-METEOROLOGICAL ABRIDGED MONTHLY REPORT

Gives a review of weather experienced in the agro-meteorological stations of Egypt as well as monthly values of certain elements.

THE ANNUAL REPORT

This report gives annual values and statistics for the various meteorological elements, together with a summary of the weather conditions that prevailed during all months of the year.

CLIMATOLOGICAL NORMALS FOR EGYPT

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TECHNICAL NOTES

As from October 1970, the Meteorological Authority started to issue a new series of publications in the form of Technical Notes (non periodical) on subjects related to studies and ap-

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THE EGYPTIAN METEOROLOGICAL AUTHORITY
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CONTENTS

PAGE

General Summary of Weather Conditions 1-2

SURFACE DATA

Table A1.—Monthly values of the Atmospheric Pressure, Air Temperature, Relative Humidity, Bright Sunshine Duration and Piche Evaporation 3

" A2.—Maximum and Minimum Air Temperatures 4

" A3.—Sky Cover and Rainfall 5

" A4.—Number of Days of Occurrence of Miscellaneous Weather Phenomena 6

" A5.—Number in Hours of Occurrences of Concurrent Surface Wind Speed and Direction Recorded Within Specified Ranges 7-8

UPPER AIR DATA

Table B1.—Monthly Means and Monthly Absolute Higher & Lower Values of Altitude, air Temperature & Dew point at Standard and Selected Pressure Surfaces 9,10

" B2.—Mean and Extreme values of The Freezing Level and The Tropopause; The Highest Wind Speed in The Upper Air 11

" B3.—Number of Occurrences of Wind Direction Within Specified Ranges and The Mean Scalar Wind Speed at the Standard and Selected Pressure Surfaces 12-14

AGRO-METEOROLOGICAL DATA

Reviews of Agro-Meteorological Stations 15,16

Table C1.—Air Temperature at 1½ Metres Above Ground 17

" C2.—Extreme Values of Air Temperature at 1½ metres above Ground, Absolute Minimum Air Temperature at 5 cms. above Ground Over Different Fields. 17

" C3.—(Solar + Sky) Radiation, Duration of Bright Sunshine, Relative Humidity and Vapour Pressure at 1½ metres above Ground, Evaporation and Rainfall. 17

" C4.—Extreme Soil Temperature at Different Depths in Different Fields 18

" C5.—Surface wind 18

Note : For explanatory notes on tables please refer to Volume 15, Number 1 (January 1972).

GENERAL SUMMARY OF WEATHER CONDITIONS

MAY 1972

Generally mild, intervened with three variant heat waves. Widespread rising sand in the first third of the month. Deficient and subnormal rainfall.

GENERAL DESCRIPTION OF WEATHER

This month was intervened with three heat waves of short durations in the northern parts and moderate durations elsewhere, with their peaks round the 4th, 7th and 19th. The first heat wave was the most pronounced and yielded markedly high maximum air temperatures. Apart from these heat waves, mild weather was enjoyed.

Weather was mostly dusty in association with the first and second heat waves during the first third of the month, particularly in the middle and southern parts of the Republic.

Light rain was reported during the first week over Lower Egypt and Cairo area districts where monthly rain was subnormal.

PRESSURE DISTRIBUTION

The most outstanding pressure patterns over the surface charts during this month were :

— The Atlantic anticyclone and its extension over West Europe and the Mediterranean.

— Travelling depressions through the Mediterranean and the adjacent areas.

— Three desert khamsin depressions, two of which passed through Egypt.

— Three northward elongations of the Sudan trough.

Over the 700 and 500 m.b. upper levels, the important feature over the middle latitudes was the transits of three secondary upper lows through East Mediterranean and Egypt on the 5th, 8th & 28th.

At the beginning of this month a deep complex depression appeared over Spain and Algiers together with a desert depression over West Libya. This desert depression proceeded eastwards and passed through north Egypt on the 4th.

The second desert khamsin depression developed south of Tunisia on the 5th. It proceeded eastwards reaching the Western Desert on the 7th, then it moved southeastwards crossing Middle Egypt on the 8th. This transit was followed by a northward elongation of the Sudan trough from the 9th till 12th.

The last khamsin depression in this month developed over North Algiers on the 14th. It moved eastwards and filled up on the 16th near the gulf of Serte. This was followed by a northward elongation of the Sudan trough on the 17th & 18th.

The barometric pressure over Egypt experienced three falls in association with the above mentioned khamsin transits and the corresponding minima were round 4th, 7th & 17th. In addition two more pressure falls occurred round 12th & 29th where the Sudan low showed a marked northward elongation towards East Mediterranean.

Apart from periods of pressure falls, high pressure established over the Mediterranean and NE Africa, and the atmospheric pressure over Egypt was above normal, particularly most of the second half of the month.

SURFACE WIND

Light to moderate N and NW winds prevailed most of this month. Winds changed to SW in few days. Fresh to strong winds were experienced during several days in scattered localities mainly in the Red Sea, Upper Egypt & Western Desert districts.

Calms were frequent in night and early morning intervals in general.

Gales were recorded at Hurghada on the 5th.

TEMPERATURE

Maximum air temperature was above normal during the three prevailing heat waves, and its departure above normal was pronounced in particular during the first heat wave. Otherwise, maximum air temperatures were moderately below normal. Maximum air temperatures ranged most of the month between 22° & 30°C in the northern parts, between 27° & 36°C in the middle parts and between 33° & 42°C in the southern parts. It is worth to mention that the maximum air temperature attained a record at Qusier (44.6°C) on the 5th.

The absolute maximum air temperature for the Country in this month was 45.2°C at Dakhla on the 7th.

Minimum air temperature fluctuations followed chronically maximum temperature fluctuations. Its values ranged in general between 12° & 20°C in the northern and middle parts, between 17° & 25°C in the southern parts.

The absolute minimum air temperature for the Country in this month was (7.4°C) at Dakhla on the 1st, which is a record for this station in May.

PRECIPITATION

The monthly rainfall was subnormal and confined to the northern parts, where light rain fell in few days during the first week.

The maximum monthly rainfall was 1.0 mm reported at Sidi-Barrani & Damanhour.

The maximum daily rainfall was 0.8 mm at Damanhour on the 27th.

Cairo, February 1973

Chairman (M. F. TAHA)

Board of Directors

SURFACE DATA

Table A 1.—MONTHLY VALUES OF THE ATMOSPHERIC PRESSURE, AIR TEMPERATURE, RELATIVE HUMIDITY, BRIGHT SUNSHINE DURATION & PICHE EVAPORATION

MAY — 1972

STATION	Atmospheric Pressure (mbs) M.S.L.		Air Temperature °C									Relative Humidity %		Bright Sunshine Duration (Hours)			Piche Evap. nation mms
			Maximum		Minimum			Dry Bulb		Wet Bulb							
	Mean	D.F. Normal or Average	(A) Mean	D.F. Normal or Average	(B) Mean	D.F. Normal or Average	A+B / 2	Mean	D.F. Normal or Average	Mean	D.F. Normal or Average	Mean	D.F. Normal or Average	Total Actual	Total Possible	%	Mean
Sallum.	1013.7	—0.2	25.1	—1.1	16.3	—0.2	20.7	20.2	—0.7	16.0	—0.2	62	+3	—	—	—	6.7
Mersa Matruh (A)	1014.0	+0.5	24.6	—0.9	14.9	+0.4	19.7	19.4	—0.7	16.3	0.0	71	+5	280.3	426.4	65	5.2
Alexandria . (A)	1013.6	+0.7	25.5	—1.1	16.3	—0.2	20.9	20.5	—0.9	16.9	—0.8	68	+1	291.7	425.5	68	6.3
Port Said.. . (A)	1012.1	—0.4	25.9	+0.3	18.1	—1.5	22.0	21.1	—0.9	17.0	—2.0	65	—5	312.6	425.5	73	5.9
El Arish.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta.	1012.7	+0.1	29.7	—2.0	13.9	—0.5	21.8	21.3	—1.3	16.1	—0.2	56	+7	328.2	421.5	77	6.2
Cairo . . . . (A)	1012.4	+0.2	31.2	—1.1	17.4	0.0	24.3	23.9	—0.7	16.5	—0.5	43	00	—	—	—	15.9
Fayoum.	—	—	33.2	—0.5	16.1	—1.1	24.6	24.6	—0.4	16.6	+0.6	40	+5	—	—	—	10.2
Minya. . . . (A)	1011.6	+0.6	×	×	×	×	×	25.5	—0.2	16.2	—0.4	33	—3	343.8	419.4	82	×
Assyout. . . (A)	1009.6	—1.1	35.6	—0.5	18.7	—0.5	27.2	27.2	—0.4	15.6	—0.1	23	+1	—	—	—	21.7
Luxor. . . . (A)	1009.2	+0.4	39.0	+0.2	19.7	—0.4	29.4	29.7	—0.4	17.2	—0.2	23	+1	—	—	—	13.6
Aswan. . . . (A)	1008.9	+0.3	39.6	+1.5	22.7	+2.0	31.2	31.2	+1.2	16.1	+0.8	13	+1	—	—	—	28.4
Siwa.	1012.6	—0.3	33.1	—1.1	17.7	+1.1	25.4	25.6	0.0	15.8	+0.3	30	+1	290.2	421.4	69	14.6
Bahariya.	1012.0	+0.2	33.6	—0.8	17.3	+0.1	25.4	25.4	—0.3	14.5	—1.4	24	—4	—	—	—	14.6
Farafra.	1012.7	—0.9	34.8	+0.5	17.4	+0.7	26.1	26.2	+0.7	14.4	—0.1	20	—3	—	—	—	19.2
Dakhla	1011.3	+0.9	36.7	—0.2	17.7	—1.8	27.2	27.8	+0.2	14.4	—0.6	15	—3	—	—	—	24.6
Kharga	1010.4	+0.1	37.7	—0.1	20.8	—0.1	29.2	29.7	+1.7	14.9	—0.8	17	—5	352.4	414.1	85	17.4
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada . . .	1009.7	+0.4	30.2	+0.5	21.0	+0.6	25.6	25.8	+0.2	18.5	+0.5	46	+2	360.6	417.0	86	13.4
Quseir	1009.7	+0.6	29.4	—0.9	22.2	—0.6	25.8	25.9	—0.8	18.6	0.0	47	+3	—	—	—	11.9

Table A 2.—MAXIMUM AND MINIMUM AIR TEMPERATURE

MAY 1972

Station	Maximum Temperature °C									Grass Min. Temp.		Minimum Temperature °C							
	Highest	Date	Lowest	Date	No. of Days with Max-Temp.					Mean	Dev. From Normal	Highest	Date	Lowest	Date	No. of Days with Min. Temp.			
					>25	>30	>35	>40	>45							<10	<5	<0	<-5
Sallum	34.2	3	20.3	9	15	4	0	0	0	15.2	—	18.7	18	12.7	1	0	0	0	0
Mersa Matruh (A)	31.6	2,3	21.0	14	10	3	0	0	0	13.0	—	17.9	21	11.0	16	0	0	0	0
Alexandria . .(A)	31.5	2	21.7	6	15	2	0	0	0	14.4	—	19.5	21,28	11.8	13,14	0	0	0	0
Port Said . .(A)	32.4	4	22.9	9	18	2	0	0	0	17.4	—	19.8	26	15.5	1	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	37.2	4	24.5	6	30	15	1	0	0	—	—	18.0	26	10.2	14	0	0	0	0
Cairo . . . .(A)	40.2	4	26.4	6	31	20	3	1	0	—	—	21.4	4	14.5	15	0	0	0	0
Fayoum	41.0	4	28.0	1	31	26	7	1	0	14.3	—	20.8	3	11.5	6	0	0	0	0
Minya . . . (A)	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Assyout . . .(A)	43.6	4	29.2	1	31	29	15	5	0	16.2	—	23.8	8	15.3	15	0	0	0	0
Luxor . . . .(A)	43.8	7	31.0	1	31	31	30	11	0	14.4	—	26.0	8	13.4	2	0	0	0	0
Aswan . . . .(A)	45.0	8	31.3	1	31	31	28	15	0	—	—	27.0	8	15.2	1	0	0	0	0
Siwa	39.4	2	28.4	30	31	26	8	0	0	16.4	—	23.4	2	14.0	31	0	0	0	0
Bahariya	42.9	4	28.2	1,12	31	26	10	1	0	16.9	—	22.7	3	13.9	15	0	0	0	0
Farafra	42.8	4	29.0	12	31	29	12	3	0	17.3	—	21.3	8	11.1	1	0	0	0	0
Dakhla	45.2	7	29.4	12	31	30	22	4	1	17.5	—	23.0	22	7.4	1	1	0	0	0
Kharga	45.0	7	31.4	1	31	31	23	7	0	18.7	—	24.6	22	11.0	1	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada.	33.7	28	27.2	13	31	18	0	0	0	—	—	24.2	21	16.7	2	0	0	0	0
Quseir	44.6	5	26.2	10	31	5	1	1	0	19.4	—	25.2	28	16.6	2	0	0	0	0

Table A 3.—SKY COVER AND RAINFALL

MAY — 1972

Station	Mean Sky Cover Oct.					Rainfall mms.										
	00 U.T.	06 U.T.	12 U.T.	18 U.T.	Daily Mean	Total Amount	D. From Normal	Max. Fall in one day		Number of Days with Amount of Rain						
								Amount	Date	<0.1	≥0.1	≥1.0	≥5.0	≥10	≥25	≥50
Sallum	1.9	1.7	3.7	2.0	2.2	0.0	— 3.3	0.0	—	0	0	0	0	0	0	0
Mersa Matruh (A)	2.3	4.4	2.9	3.7	3.1	0.2	— 2.5	0.1	3,6	0	2	0	0	0	0	0
Alexandria (A)	4.0	4.3	2.4	3.3	3.6	0.1	— 1.9	0.1	3	2	1	0	0	0	0	0
Port Said (A)	1.5	2.4	1.8	1.3	1.8	0.5	— 2.5	0.5	1	0	1	0	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1.8	3.2	3.4	1.9	2.5	0.8	—2.9	0.6	27	0	3	0	0	0	0	0
Cairo (A)	1.8	2.4	2.6	2.6	2.3	Trace	—0.7	Trace	2	1	0	0	0	0	0	0
Fayoum	—	1.6	2.8	2.1	—	0.0	—1.3	0.0	—	0	0	0	0	0	0	0
Minya (A)	0.6	1.6	2.3	1.7	1.5	0.0	—0.6	0.6	—	0	0	0	0	0	0	0
Assyout (A)	0.5	1.1	1.1	1.1	1.0	0.0	—Trace	0.0	—	0	0	0	0	0	0	0
Luxor (A)	0.6	1.0	1.6	1.7	1.2	0.0	— 0.4	0.0	—	0	0	0	0	0	0	0
Aswan (A)	0.2	0.7	0.7	0.7	0.6	0.0	—Trace	0.0	—	0	0	0	0	0	0	0
Siwa	2.3	2.2	3.2	2.8	2.6	0.0	—1.8	0.0	—	0	0	0	0	0	0	0
Bahariya	0.7	1.7	2.1	1.8	1.4	0.0	—0.1	0.0	—	0	0	0	0	0	0	0
Farafra	—	1.0	1.3	1.2	—	Trace	—0.1	Trace	12	1	0	0	0	0	0	0
Dakhla	0.0	0.1	0.5	0.1	0.2	0.0	—0.1	0.0	—	0	0	0	0	0	0	0
Kharga	0.0	0.5	1.2	0.9	0.7	0.0	—0.3	0.0	—	0	0	0	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0.1	1.1	1.5	1.5	1.0	0.0	—0.4	0.0	—	0	0	0	0	0	0	0
Quseir	0.2	0.8	1.5	0.9	0.8	0.0	—Trace	0.0	—	0	0	0	0	0	0	0

Table A 4.—DAYS OF OCCURRENCE OF MISCELLANEOUS WEATHER PHENOMENA

MAY — 1972

Station	Precipitation				Frost	Thunderstorm	Mist Vis ≥1000 metres	Fog Vis <1000 Metres	Haze Vis ≥1000 Metres	Thick Haze Vis <1000 Metres	Dust or Sandrising Vis ≥1000 Metres	Dust or Sandstorm Vis <1000 Metres	Gale	Clear Sky	Cloudy Sky
	Rain	Snow	Ice. Pellets	Hail											
Sallum.	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0
Mersa Matruh. .(A)	2	0	0	0	0	0	1	1	2	0	5	2	0	11	2
Alexandria. . . .(A)	1	0	0	0	0	0	3	1	2	0	2	1	0	7	4
Port Said. . . .(A)	1	0	0	0	0	0	0	0	0	0	3	0	0	19	0
El Arish.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta.	3	0	0	0	0	0	6	0	2	0	1	0	0	10	2
Cairo. . . . . .(A)	0	0	0	0	0	0	10	1	6	0	2	1	0	14	1
Fayoum.	0	0	0	0	0	0	0	0	1	0	2	0	0	—	—
Minya. . . . . .(A)	0	0	0	0	0	0	0	0	4	0	9	0	0	22	6
Assyout. . . . .(A)	0	0	0	0	0	0	0	0	5	0	8	0	0	27	0
Luxor. . . . . .(A)	0	0	0	0	0	0	0	0	11	0	3	1	0	23	0
Aswan. . . . . .(A)	0	0	0	0	0	0	0	0	11	0	9	1	0	27	0
Siwa.	0	0	0	0	0	0	0	0	2	0	3	0	0	16	3
Bahariya.	0	0	0	0	0	0	0	0	0	0	3	0	0	22	0
Farafra.	0	0	0	0	0	0	0	0	2	0	5	0	0	—	—
Dakhla.	0	0	0	0	0	0	0	0	0	0	5	0	0	31	0
Kharga.	0	0	0	0	0	0	0	0	3	0	5	0	0	31	0
Tor.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada.	0	0	0	0	0	0	0	0	5	0	9	0	1	26	0
Quseir	0	0	0	0	0	0	0	0	1	0	3	0	0	26	0

Table A 5.—NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES

MAY — 1972

Station	Calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurrences of wind blowing from the ranges of directions indicated												
					345 / 014	015 / 044	045 / 074	075 / 104	105 / 134	135 / 164	165 / 194	195 / 224	225 / 254	255 / 284	285 / 314	315 / 344	All directions
Sallum	28	3	0	1—10	35	101	62	88	40	12	6	2	4	19	77	123	569
				11—27	6	15	0	2	0	0	0	0	0	24	40	57	144
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**41**	**116**	**62**	**90**	**40**	**12**	**6**	**2**	**4**	**43**	**117**	**180**	**713**
Mersa Matruh	0	0	0	1—10	22	36	35	46	29	31	13	7	24	77	34	45	399
				11—27	28	9	17	10	14	0	1	0	15	20	66	161	341
				28—47	0	0	0	3	1	0	0	0	0	0	0	0	4
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**50**	**45**	**52**	**59**	**44**	**31**	**14**	**7**	**39**	**97**	**100**	**206**	**744**
Alexandria	6	1	1	1—10	68	44	17	15	13	22	9	6	14	52	136	168	564
				11—27	20	15	2	5	4	2	1	0	7	31	50	35	172
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**88**	**59**	**19**	**20**	**17**	**24**	**10**	**6**	**21**	**83**	**186**	**203**	**736**
Tanta	16	0	0	1—10	85	94	37	20	23	10	11	20	35	57	108	83	583
				11—27	40	30	5	10	0	0	2	0	4	8	24	22	145
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	30	0	0	0	0
				All speeds	**125**	**124**	**42**	**30**	**23**	**10**	**13**	**20**	**9**	**65**	**132**	**105**	**728**
Cairo	36	6	94	1—10	72	90	60	18	0	6	3	6	9	19	54	76	413
				11—27	32	83	3	4	5	5	7	8	3	15	18	10	193
				28—47	0	0	0	0	0	0	0	2	0	0	0	0	2
				≥48	0	0	0	0	0	0	0	0	10	0	0	0	0
				All speeds	**104**	**173**	**63**	**22**	**5**	**11**	**10**	**16**	**2**	**34**	**72**	**86**	**608**
Fayoum	4	7	0	1—10	220	265	15	11	8	9	19	15	1 0	19	31	75	697
				11—27	0	23	1	0	0	0	2	4	2	3	0	1	36
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	10	0	0	0	0
				All speeds	**220**	**288**	**16**	**11**	**8**	**9**	**21**	**19**	**2**	**22**	**31**	**76**	**733**
Minya	0	0	0	1—10	200	71	7	4	4	8	38	14	7	11	3	43	410
				11—27	228	61	2	0	1	0	9	2	4	10	10	7	334
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	10	0	0	0	0
				All speeds	**428**	**132**	**9**	**4**	**5**	**8**	**47**	**16**	**1**	**21**	**13**	**50**	**744**
Asyout (A)	8	0	0	1—10	52	29	18	4	9	24	10	6	11	42	170	128	503
				11—27	31	29	4	1	0	3	9	4	13	17	18	104	233
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**83**	**58**	**22**	**5**	**9**	**27**	**19**	**10**	**24**	**59**	**188**	**232**	**736**

Table A 5 (*contd.*)—**NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES**

MAY — 1972

Station	Calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurrences of wind blowing from the ranges of directions indicated												
					345 / 014	015 / 044	045 / 074	075 / 104	105 / 134	135 / 164	165 / 194	195 / 224	225 / 254	255 / 284	285 / 314	315 / 344	All directions
				1—10	47	45	37	23	22	33	77	44	37	60	169	102	696
				11—27	1	0	1	0	0	0	7	4	0	2	7	12	34
Luxor . . . . . .(A)	14	0	0	28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**48**	**45**	**38**	**23**	**22**	**33**	**84**	**48**	**37**	**62**	**176**	**114**	**730**
				1—10	75	79	25	4	10	21	36	15	9	5	56	111	446
				11—27	62	36	0	0	0	3	2	6	3	7	32	114	265
Aswan . . . . . .(A)	33	0	0	28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**137**	**115**	**25**	**4**	**10**	**24**	**38**	**21**	**12**	**12**	**88**	**225**	**711**
				1—10	50	87	104	140	74	19	3	4	6	47	62	59	655
				11—27	0	10	5	2	11	4	0	3	0	5	3	7	50
Siwa	14	25	0	28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**50**	**97**	**109**	**142**	**85**	**23**	**3**	**7**	**6**	**52**	**65**	**66**	**705**
				1—10	82	47	46	59	23	26	27	23	22	44	81	127	607
				11—27	37	22	0	0	0	0	0	6	5	1	10	44	125
Dakhla	0	12	0	28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**119**	**69**	**46**	**59**	**23**	**26**	**27**	**29**	**27**	**45**	**91**	**171**	**732**
				1—10	115	51	10	4	5	7	15	9	9	28	32	82	367
				11—27	235	60	3	0	0	1	8	3	7	3	9	36	365
Kharga	10	0	0	28—47	2	0	0	0	0	0	0	0	0	0	0	0	2
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**352**	**111**	**13**	**4**	**5**	**8**	**23**	**12**	16	**31**	**41**	**118**	**734**
				1—10	26	20	14	16	24	37	10	6	1	10	61	27	252
				11—27	113	22	1	0	2	5	0	0	0	1	89	215	448
Hurghada	16	4	0	28—47	3	0	0	0	0	0	0	0	0	0	1	20	24
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**142**	**42**	**15**	**16**	**26**	**42**	**10**	**6**	**1**	**11**	**151**	**262**	**724**
				1—10	163	81	23	13	17	22	32	18	7	19	44	157	596
				11—27	108	17	0	0	0	0	0	0	0	2	1	10	138
Quseir	9	1	0	28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**271**	**98**	**23**	**13**	**17**	**22**	**32**	**18**	**7**	**21**	**45**	**167**	**734**

UPPER AIR CLIMATOLOGICAL DATA

Table B 1.—MONTHLY MEANS, ABSOLUTE HIGHER AND LOWER VALUES OF ALTITUDE, AIR TEMPERATURE AND DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

MAY — 1972

Station	Pressure Surface (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Mersa Matruh 0000 U.T.	Surface	29	*1012mb.	*1016mb.	*1007mb.	29	17.7	23.5	13.8	29	13.8
	1000	29	132	165	88	29	17.4	23.6	14.0	29	13.2
	850	29	1521	1599	1452	29	14.9	23.6	7.0	29	— 0.8
	700	28	3124	3219	3021	28	4.7	9.4	— 4.8	28	— 9.5
	600	28	4369	4472	4230	28	— 3.3	0.0	— 9.1	27	—16.0
	500	26	5798	5904	5699	26	—12.7	— 8.8	—17.3	26	—26.2
	400	26	7466	7588	7330	26	—24.4	—19.0	—30.2	24	—36.6
	300	23	9503	9647	9318	23	—39.8	—33.2	—43.2	23	—50.2
	250	23	10722	10865	10538	22	—49.5	—46.3	—53.0	22	—58.7
	200	23	12157	12309	12004	22	—58.3	—52.1	—63.3	14	—65.3
	150	22	13941	14082	13753	22	—62.8	—57.3	—67.6	3	—67.0
	100	19	16435	16562	16332	19	—64.8	—58.2	—69.6	—	—
	70	16	18588	18745	18008	16	—62.9	—58.5	—66.9	—	—
	60	15	19595	19760	19500	15	—61.8	—57.1	—64.4	—	—
	50	15	20705	20823	20599	15	—59.8	—55.9	—62.6	—	—
	40	12	22209	22370	22120	12	—56.9	—54.5	—59.5	—	—
	30	13	23951	24052	23876	13	—54.3	—50.9	—57.9	—	—
	20	5	26581	26664	26467	5	—48.5	—42.0	—57.5	—	—
	10	—	—	—	—	—	—	—	—	—	—
Helwan 0000 U.T.	Surface	31	*996mb.	*999mb.	*986 mb.	31	19.1	25.2	15.2	31	10.8
	1000	—	—	—	—	—	—	—	—	—	—
	850	30	1495	1540	1420	30	15.6	21.0	8.0	30	— 0.1
	700	30	3115	3173	3011	30	6.0	12.1	— 4.0	30	— 8.3
	600	30	4360	4428	4214	30	— 2.3	2.8	— 9.9	30	—16.0
	500	30	5781	5864	5600	30	—12.3	— 7.0	—17.9	30	—24.2
	400	30	7449	7551	7220	30	—24.7	—20.4	—32.0	30	—33.5
	300	30	9381	9617	9208	30	—40.3	—36.8	—49.0	29	—49.3
	250	29	10702	10848	10438	29	—49.0	—46.1	—53.8	28	—57.4
	200	28	12135	12296	11906	28	—57.6	—49.2	—64.0	21	—64.7
	150	28	13932	14092	13760	28	—62.4	—55.0	—69.6	1	—61.2
	100	25	16424	16562	16273	25	—66.7	—59.1	—72.6	—	—
	70	19	18592	18722	18407	18	—63.5	—55.1	—69.4	—	—
	60	12	19592	19660	19470	12	—62.3	—58.2	—66.0	—	—
	50	12	20686	20762	20580	12	—60.3	—57.0	—63.3	—	—
	40	11	22175	22270	22030	11	—57.4	—53.8	—60.0	—	—
	30	11	23922	24029	23764	11	—53.9	—51.0	—61.1	—	—
	20	6	26556	26699	26408	6	—46.8	—43.7	—50.7	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 0000 U.T.	Surface	31	*987mb.	*993mb.	*982mb.	31	25.1	30.0	18.8	31	— 0.3
	1000	31	83	132	35	—	—	—	—	—	—
	850	31	1510	1534	1481	31	22.3	26.9	11.9	31	— 2.8
	700	31	3161	3196	3093	31	10.1	12.8	4.2	31	—11.1
	600	31	4421	4468	4340	30	1.1	4.0	— 2.6	30	—17.5
	500	30	5860	5917	5775	29	— 9.0	— 5.8	—13.7	29	—25.2
	400	29	7551	7618	7463	29	—20.7	—17.7	—23.6	29	—35.1
	300	29	9615	9693	9515	29	—36.5	—33.5	—38.7	29	—49.0
	250	29	10856	10945	10759	29	—45.2	—42.8	—48.8	29	—56.7
	200	29	12315	12419	12209	29	—54.7	—51.5	—58.9	29	—65.1
	150	29	14112	14229	14005	29	—65.5	—59.8	—69.3	1	—69.8
	100	29	16512	16657	16380	29	—75.8	—68.2	—83.0	—	—
	70	21	18577	18708	18440	21	—71.0	—64.6	—76.1	—	—
	60	13	19518	19620	19390	13	—66.0	—63.3	—69.8	—	—
	50	13	20596	20715	20486	13	—61.7	—58.4	—65.1	—	—
	40	9	22144	22570	21960	9	—57.8	—53.4	—62.3	—	—
	30	9	23822	23877	23705	9	—54.3	—50.2	—58.3	—	—
	20	5	26500	26665	26360	5	—49.1	—46.2	—51.3	—	—
	10	—	—	—	—	—	—	—	—	—	—

N = The number of cases the element has been observed during the month.

* The atmospheric pressure corrected to the elevation of the radiosonde station.

UPPER AIR CLIMATOLOGICAL DATA

Table B 1 (*contd.*)—MONTHLY MEANS, ABSOLUTE HIGHER AND LOWER VALUES OF ALTITUDE, AIR TEMPERATURE AND DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

MAY — 1972

Station	Pressure Surface Millibar	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Mersa Matruh (A) 1200 U.T.	Surface	31	1013mb.*	1017mb.*	1002mb.*	31	22.6	29.2	19.0	31	14.4
	1000	31	138	175	46	31	21.2	27.6	17.0	31	11.0
	850	31	1530	1590	1450	31	15.1	22.8	3.6	31	00.0
	700	31	3147	3232	3074	31	5.6	10.0	— 1.3	31	—10.5
	600	31	4387	4487	4298	31	— 2.6	4.0	— 8.0	31	—17.4
	500	30	5817	5943	5700	30	—12.1	— 6.9	—17.5	30	—26.0
	400	30	7482	7640	7331	30	—24.6	—19.5	—30.0	30	—36.0
	300	28	9514	9711	9345	28	—40.0	—33.7	—43.6	27	—51.9
	250	27	10742	10939	10565	27	—48.9	—42.5	—52.5	26	—59.7
	200	27	12178	12394	12034	27	—57.4	—53.9	—62.5	22	—66.3
	150	27	13967	14184	13795	27	—62.3	—59.0	—68.1	1	—68.0
	100	27	16166	16687	16281	27	—64.2	—58.7	—70.0	—	—
	70	24	18654	18853	18501	23	—62.6	—59.2	—71.0	—	—
	60	19	19620	19750	19370	19	—60.4	—56.5	—70.0	—	—
	50	19	20756	20974	20603	19	—57.3	—51.1	—63.7	—	—
	40	14	22270	22520	22100	14	—54.9	—49.0	—65.0	—	—
	30	14	24049	24177	23854	14	—51.1	—45.4	—61.7	—	—
	20	10	26888	27025	26433	10	—47.8	—42.1	—57.4	—	—
	10	—	—	—	—	—	—	—	—	—	—
Helwan 1200 U.T.	Surface	31	996mb*	998mb*	988mb*	31	29.6	37.8	24.6	31	4.7
	1000	—	—	—	—	—	—	—	—	—	—
	850	28	1514	1552	1467	28	17.4	23.5	10.5	28	— 4.3
	700	27	3141	3209	3062	27	7.3	11.1	— 4.3	27	—13.6
	600	25	4394	4474	4272	25	0.2	4.0	— 8.0	25	—20.5
	500	23	5826	5919	5672	22	—10.5	— 6.7	—16.0	21	—29.4
	400	21	7501	7614	7316	21	—22.8	—19.0	—25.2	21	—39.8
	300	21	9543	9687	9338	21	—38.4	—35.8	—41.0	20	—53.4
	250	20	10766	10926	10566	20	—47.4	—44.8	—51.9	20	—61.0
	200	20	12210	12374	12016	20	—55.9	—52.5	—58.9	20	—67.9
	150	20	14016	14194	13881	20	—60.9	—53.0	—68.0	4	—70.0
	100	19	16511	16678	16384	19	—61.9	—60.6	—68.0	—	—
	70	18	18688	18846	18514	18	—64.0	—59.8	—68.0	—	—
	60	14	19672	19860	19540	14	—60.8	—57.5	—63.9	—	—
	50	14	20779	20954	20653	14	—57.7	—53.3	—64.4	—	—
	40	11	22293	22500	22040	11	—53.0	—48.6	—57.8	—	—
	30	10	24082	24317	23923	10	—49.4	—46.5	—53.4	—	—
	20	7	26815	27020	26636	7	—44.4	—41.9	—46.7	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 1200 U.T.	Surface	26	988m.b.*	994m.b.*	981m.b.*	26	38.0	43.6	28.7	26	3.8
	1000	26	80	140	44	—	—	—	—	—	—
	850	26	1534	1563	1495	26	24.7	29.9	15.4	26	— 4.8
	700	25	3193	3227	3131	25	11.4	15.6	5.0	25	—13.5
	600	25	4459	4504	4389	25	2.5	7.2	— 2.1	25	—20.3
	500	24	5909	5972	5824	24	— 7.3	— 2.9	—17.5	24	—28.0
	400	23	7608	7695	7501	23	—19.3	—16.5	—23.6	23	—38.5
	300	22	9589	9785	9548	22	—34.8	—32.2	—38.1	22	—52.1
	250	22	10937	11038	10786	22	—43.8	—41.6	—47.5	22	—59.0
	200	21	12409	12514	12236	21	—52.9	—50.0	—55.2	21	—66.4
	150	21	14225	14343	14042	21	—60.2	—57.8	—65.5	3	—71.2
	100	21	16652	16843	16482	21	—73.3	—66.6	—79.5	—	—
	70	19	18770	18979	18587	19	—69.8	—65.0	—73.6	—	—
	60	11	19726	19940	19550	11	—65.1	—60.0	—68.6	—	—
	50	11	20804	21060	20519	11	—59.7	—56.9	—65.0	—	—
	40	6	22292	22440	22150	6	—54.0	—51.0	—56.8	—	—
	30	5	24095	24258	23998	5	—47.5	—42.7	—50.0	—	—
	20	4	26760	26806	26724	4	—42.6	—41.0	—44.1	—	—
	10	—	—	—	—	—	—	—	—	—	—

N = Number of observations of specified pressure surface.

* The atmospheric pressure corrected to the elevation of the radiosonde stations.

Table B2– MEAN AND EXTREME VALUES OF THE FREEZING LEVEL AND THE TROPOPAUSE; THE HIGHEST WIND SPEED IN THE UPPER AIR

MAY — 1972

	Station	Freezing level									First Tropopause									Highest wind speed			
		Mean			Highest			Lowest			Mean			Highest			Lowest						
		Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Direction (000—360)°	Speed in Knots
		(N)	(N)	(N)							(N)	(N)	(N)										
0000 U.T.	M. Matruh (A)	3852 (28)	641 (28)	-13.0 (28)	4461	600	-12.8	2550	743	- 8.1	13458 (20)	165 (20)	-63.6 (20)	16482	100	-65.2	10830	243	-54.1	10554	—	275	150
0000 U.T.	Helwan . . .	4007 (30)	629 (30)	-13.5 (30)	4720	575	- 7.7	2400	757	- 2.2	13406 (22)	157 (22)	-64.3 (22)	16600	97	-71.7	11260	228	-52.5	11220	231	300	142
0000 U.T.	Aswan . .(A)	4572 (29)	590 (29)	-18.2 (29)	5160	549	-17.2	4180	618	-21.4	16122 (19)	108 (19)	-76.9 (19)	17400	85	-78.5	14980	128	-75.5	12750	187	255	120
		(N)	(N)	(N)							(N)	(N)	(N)										
1200 U.T.	M. Matruh (A)	3960 (31)	631 (31)	-15.0 (31)	5100	555	-13.8	2730	650	- 8.0	13105 (27)	166 (27)	-63.1 (27)	15330	117	-65.3	11570	219	-56.0	11300	229	270	140
1200 U.T.	Helwan . . .	4329 (25)	606 (25)	-19.7 (25)	5030	560	-20.2	2590	742	- 9.1	13578 (19	164 (19)	-62.0 (19)	15880	112	-65.5	11800	207	-52.5	11520	220	295	142
1200 U.T.	Aswan . .(A)	4847 (25)	573 (25)	-21.9 (25)	5600	526	-21.4	4070	624	-26.9	16032 (18)	113 (18)	-72.8 (18)	17300	92	-78.5	12300	207	-54.5	11850	212	330	115

N = The number of cases the element has been observed during the month.

Table B 3 (*contd.*)—NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES.

MERSA MATRUH (A) — MAY 1972

Station	Prussure Surface (Millibar)	Wind between specified ranges of direction (000—360°)																								Number of calm winds	Total number of observations (TN)	Mean scalar wind speed (knots)
		345 / 014		015 / 044		045 / 074		075 / 104		105 / 135		135 / 164		165 / 194		195 / 224		225 / 254		255 / 284		285 / 314		315 / 344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	ff) m			
0000 U.T.	Surface	1	2	1	1	3	5	0	0	3	9	2	9	0	—	0	—	4	10	6	9	6	9	2	16	1	29	9
	1000	2	9	2	12	1	12	1	14	3	9	1	21	0	—	0	—	1	16	6	19	5	13	3	16	0	25	14
	850	1	15	1	15	0	—	0	—	1	9	0	—	0	—	1	25	0	—	4	22	5	34	12	16	0	25	19
	700	1	18	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	27	11	40	6	23	1	22	0	23	28
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	7	31	9	40	4	39	1	26	0	21	36
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	36	4	36	12	49	2	38	0	—	0	19	44
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	32	11	61	0	—	0	—	0	16	52
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	51	3	65	5	73	0	—	0	—	0	9	68
	250	1	102	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	51	4	87	0	—	0	—	0	7	79
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	81	1	120	0	—	0	—	0	2	100
	150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	1	6	7	9	0	—	1	7	0	—	0	—	0	—	0	—	0	—	1	30	12	16	9	13	0	31	15
	1000	2	11	3	10	1	7	2	19	0	—	0	—	0	—	0	—	0	—	1	22	16	19	5	15	0	30	16
	850	3	10	0	—	0	—	0	—	0	—	0	—	1	35	0	—	4	19	13	19	7	18	3	11	0	31	17
	700	1	24	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	25	10	31	13	18	1	13	0	31	24
	600	0	—	0	—	0	—	0	—	0	—	0	-	0	—	2	44	6	27	14	31	9	32	0	—	0	31	32
	500	0	—	0	—	0	—	1	—	0	—	0	—	0	—	0	—	7	37	15	47	8	41	0	—	0	30	43
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	59	9	44	16	54	2	64	6	—	0	28	50
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	54	15	62	1	80	0	—	0	21	61
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	17	3	53	13	76	1	88	0	—	0	18	68
	200	1	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	54	5	71	1	90	0	—	0	11	65
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	63	2	66	1	87	0	—	0	6	68
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	31	2	40	1	40	0	—	0	4	38
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	10	1	20	1	22	0	3	17
	60	0	—	0	—	0	—	1	40	0	—	0	—	1	21	0	—	0	—	0	—	0	—	0	—	0	2	30
	50	0	—	0	—	0	—	1	18	0	—	0	—	0	—	0	—	0	—	1	38	0	—	0	—	0	2	28
	40	0	—	1	15	1	17	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	16
	30	0	—	0	—	1	36	1	13	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	24
	20	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	4	0	—	0	1	4
	10	0	—	0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the wind has been observed from the range of direction during the month.

TN = The total number of cases the wind has been observed for all directions during the month.

Table B 3. NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES.

HELWAN — MAY 1972

Station	Prussure Surfaec (Millibar)	Wind between specified ranges of direction (000–360°)																								Number of calm winds	Total number of observations (TN)	Mean scalar wind speed (knots)
		345 / 014		015 / 044		045 / 074		075 / 104		105 / 134		135 / 164		165 / 194		195 / 224		225 / 254		255 / 284		285 / 314		315 / 344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	8	7	11	8	1	12	3	7	0	—	1	4	0	—	0	—	0	—	0	—	0	—	6	7	1	31	8
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	5	8	5	10	4	12	0	—	1	13	0	—	1	18	0	—	0	—	3	23	4	20	7	19	0	30	15
	700	1	5	2	18	2	13	0	—	0	—	1	12	0	—	0	—	1	3	7	27	11	29	5	12	0	30	22
	600	2	16	1	28	1	5	0	—	0	—	0	—	1	1	0	—	4	27	9	41	10	27	2	14	0	30	28
	500	3	23	0	—	1	3	0	—	0	—	0	—	0	—	0	—	1	23	6	39	17	39	2	18	0	30	33
	400	2	40	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	12	9	38	14	42	3	26	0	30	37
	300	1	60	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	9	53	13	61	5	39	0	28	55
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	7	52	16	55	2	42	0	25	53
	200	0	—	0	—	0	—	0	—	1	—	0	—	0	—	0	—	0	—	9	57	9	61	3	53	0	21	58
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	28	9	52	3	45	1	31	0	14	47
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	6	1	27	2	67	1	57	0	—	0	6	38
	70	0	—	1	13	0	—	1	25	0	—	0	—	0	—	0	—	0	—	0	—	1	14	0	—	0	3	18
	60	0	—	0	—	0	—	0	—	1	15	0	—	0	—	0	—	0	—	1	18	0	—	1	11	0	3	15
	50	0	—	0	—	0	—	2	16	0	—	0	—	0	—	0	—	0	—	1	14	0	—	0	—	0	3	15
	40	0	—	0	—	0	—	2	14	0	—	0	—	0	—	0	—	0	—	0	—	1	25	0	—	0	3	17
	30	0	—	0	—	0	—	1	10	0	—	0	—	0	—	0	—	0	—	0	—	1	8	0	—	0	2	9
	20	0	—	0	—	0	—	2	26	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	26
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	0	—	10	12	1	16	1	10	0	—	1	14	0	—	2	17	2	8	2	9	2	12	10	9	0	31	11
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	2	10	5	9	5	12	2	8	0	—	0	—	2	10	1	4	2	23	1	21	2	10	6	11	0	28	11
	700	1	3	1	5	0	—	1	10	0	—	2	11	1	8	2	8	2	30	4	20	7	26	5	18	0	26	20
	600	1	27	1	7	0	—	0	—	0	—	0	—	0	—	0	—	1	58	5	28	13	27	4	14	0	25	25
	500	2	32	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	10	3	46	12	34	3	18	0	21	32
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	7	41	11	42	3	32	0	21	40
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	53	8	52	4	40	0	18	50
	250	1	59	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	53	6	56	3	36	0	16	51
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	58	7	72	4	46	0	15	61
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	60	4	69	4	57	0	13	62
	100	0	—	0	—	1	23	0	—	0	—	0	—	0	—	0	—	0	—	4	26	6	70	0	—	0	11	50
	70	0	—	0	—	0	—	0	—	1	21	0	—	0	—	0	—	1	5	2	16	1	99	1	28	0	6	31
	60	0	—	0	—	0	—	0	—	1	23	1	38	0	—	1	4	1	17	0	—	0	—	0	—	0	4	20
	50	0	—	0	—	0	—	1	18	0	—	0	—	0	—	2	14	1	17	0	—	0	—	0	—	0	4	16
	40	0	—	1	34	0	—	0	—	2	6	0	—	0	—	1	10	0	—	0	—	0	—	0	—	0	4	14
	30	0	—	1	18	0	—	0	—	1	20	0	—	0	—	0	—	0	—	1	16	0	—	0	—	0	3	18
	20	0	—	0	—	0	—	0	—	1	9	0	—	0	—	0	—	1	10	0	—	0	—	0	—	0	2	10
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the wind has been observed from the range of direction during the month.

TN = The total number of cases the wind has been observed during the month.

Table E 3 (*contd.*)—NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES.

ASWAN (A) — MAY 1972

Time	Pressure Surface Millibar	Wind between specified ranges of direction (000—360)°																								Number of calm winds	Total number of observations (TN)	Mean scalar wind speed (knots)
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	21	12	1	5	0	—	1	12	0	—	1	14	0	—	2	8	0	—	0	—	0	—	3	13	2	31	11
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	5	16	5	11	5	11	1	10	1	3	1	27	0	—	0	—	2	7	2	14	4	12	4	14	0	30	12
	700	1	17	1	11	2	10	1	5	0	—	0	—	1	6	0	—	3	18	9	24	7	24	5	24	0	30	21
	600	3	21	0	—	0	—	0	—	0	—	0	—	1	4	0	—	3	19	14	27	3	23	5	23	0	29	24
	500	1	22	0	—	1	10	0	—	0	—	0	—	0	—	0	—	3	24	18	32	4	29	2	38	0	29	30
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	41	16	41	4	36	2	38	0	27	41
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	55	14	54	5	50	3	55	0	27	54
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	58	18	71	3	51	2	73	0	27	64
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	7	83	13	74	5	77	2	79	0	27	79
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	68	11	73	1	62	1	55	0	18	70
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	32	4	35	1	46	0	—	0	10	34
	70	0	—	1	27	0	—	0	—	0	—	0	—	0	—	1	8	2	14	0	—	0	—	0	—	0	4	16
	60	0	—	1	23	0	—	1	12	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	18
	50	0	—	0	—	0	—	1	10	1	11	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	10
	40	0	—	0	—	0	—	1	11	0	—	0	—	0	—	0	—	0	—	1	13	0	—	0	—	0	2	12
	30	0	—	0	—	1	29	0	—	0	—	0	—	0	—	0	—	0	—	1	19	0	—	0	—	0	2	24
	20	0	—	0	—	0	—	1	22	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	22
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T	Surface	14	11	2	6	0	—	1	3	0	—	2	4	1	20	0	—	0	—	2	1	2	7	0	—	2	26	10
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	4	14	2	5	1	8	1	3	0	—	0	—	0	—	0	—	2	10	3	15	3	14	9	11	0	25	11
	700	3	21	3	9	1	6	0	—	0	—	0	—	0	—	1	10	3	24	5	24	6	24	3	9	0	25	29
	600	3	33	2	18	0	—	0	—	0	—	0	—	0	—	0	—	7	24	5	29	5	16	3	22	0	25	24
	500	2	39	0	—	0	—	0	—	0	—	0	—	0	—	2	10	4	39	6	30	7	19	3	19	0	24	26
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	10	4	24	11	40	4	36	3	39	0	23	35
	300	1	65	0	—	0	—	0	—	1	8	0	—	0	—	0	—	4	43	10	51	4	41	2	78	0	22	49
	250	1	73	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	64	9	63	6	57	1	89	0	21	63
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	57	10	74	5	67	2	25	0	20	70
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	45	9	70	3	58	1	70	0	17	62
	100	0	—	0	—	0	—	0	—	0	—	0	—	1	44	2	28	5	28	4	37	1	51	0	—	0	13	31
	70	1	16	0	—	0	—	1	12	3	16	0	—	0	—	1	15	0	—	0	—	0	—	0	—	0	6	15
	60	0	—	0	—	0	—	0	—	3	18	1	17	1	12	0	—	1	10	0	—	0	—	0	—	0	6	15
	50	0	—	0	—	0	—	1	23	3	15	0	—	1	12	0	—	0	—	0	—	0	—	0	—	0	5	16
	40	0	—	0	—	0	—	2	18	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	18
	30	0	—	0	—	0	—	1	20	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	20
	20	0	—	0	—	0	—	1	17	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	17
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N. = The number of cases the wind has been observed from the range of directions during the month.

TN = The total number of cases the wind has been observed for all directions during the month.

REVIEW OF AGRO-METEOROLOGICAL STATIONS

MERSA MATRUH — MAY 1972

This month was rather normal as regards the mean air temperature, but more humid than normal. The monthly rainfall was 0.2 mm. against 3.0 mm. for normal.

The prevailing weather during the month was generally mild, intervened with three heat waves in the periods (2nd, 3rd), (17th—19th) and onthe 29th. The first heat wave yielded the highest maximum air temperature for the month (31.6° C) on both the 2nd, 3rd, together with the lowest relative humidity (27%) on the 2nd.

The extreme maximum soil temperatures were lower than the corresponding values of last May at all depths between 2 & 100 cm. with departures between 4.8°C (at 2 cm.) and 0.4°C (at 100 cm.). The extreme minimum soil temperatures were lower than the corresponding values of last May at all depths apart from 100 cm. depth where its value was higher by 0.3°C, the departures varied between 4.3°C (at 2 cm.) and I.8°C (at 50 cm.).

The mean daily wind speed at 1.5 m. was higher than the corresponding value of May 1971 by 0.2 m./sec. The mean daily actual sunshine duration and pan evaporation were lower than the corresponding values of May 1971 by 1.8 hour and 2.78 mm. respectively.

TAHRIR — MAY 1972

For the month as a whole the mean daily air temperature and relative humidity were about average. The total monthly rainfall was 0.4 mm. against 0.1 mm. for average.

The prevailing weather during the month was generally mild, intervened with two heat waves in the periods (2nd-4th) and (16th-21st). The first heat wave yielded the highest maximum air temperature for the month (39.2°C) and the highest minimum air temperature (18.8°C) on the 4th and the highest daily pan evaporation (15. 50 mm.) on the 2nd.

The extreme maximum soil temperatures were lower than the corresponding values of last May at all depths with departures between 4.4°C at 2cm. and 0.4°C at 100 cm. The extreme minimum soil temperatures were lower than last May at all depths apart from 100 cm. depth where it was higher by 0.6°C. The departures varied between 5.7°C (at 5 cm.) and 1.5°C (at 50 cm.).

The mean daily actual sunshine duration, wind speed at 1.5 m. and pan evaporation were lower than average by 1.1 hour, 0.2 m./sec. and 2.57 mm. respectively.

BAHTIM — MAY 1972

For the month as a whole the mean daily air temperature and relative humidity were about average. The month was rainless apart from 0.1 mm. of rain on the 2nd and trace on the 11th.

The prevailing weather was generally mild, intervened with two heat waves in the periods (2nd-4th) and (18th-21st). The first heat wave yielded the highest maximum air temperature for the month (39.8°C) on the 4th and the lowest relative humidity (12%) on the 2nd.

The extreme maximum soil temperatures were lower than the corresponding values of last May at all depths apart from the 5 cm. depth where its value was higher by 0.3°C ; the departures varied between 3.3°C (at 2 cm.) and 0.4°C (at 100 cm.). The extreme minimum soil temperatures were lower than the corresponding values of last May at depths between 2 and 20 cm. with departures between 1.7° and 1.1°C ; and were higher than last May at 50 and 100 cm. depths by 0.4°C and 0.6°C respectively.

The mean daily wind speed at 1.5 met. was the same as the corresponding value of May 1971. The mean daily actual sunshine duration and pan evaporation were less than the corresponding values of May 1971 by 0.5 hour and 0.16 mm. respectively.

KHARGA — MAY 1972

For the month as a whole the mean daily air temperature and relative humidity were about average.

The month was characterized by four heat waves in the preiods (2nd-4th), (7th-8th), 11th and (17th-22nd). The second heat wave yielded the highest maximum air temperature for the month (45.0°C) on the 7th. The break down of these heat waves was followed by mild periods.

The extreme maximum soil temperatures were lower than the corresponding values of last May at all depths with departures between 2.7°C (at 2 cm.) and 0.6°C (at 100 cm.). The extreme minimum soil temperatures were lower than last may at all depths apart from 100 cm. depth where its value was higher by 1.0°C, the departures varied between 4.8°C (at 5 cm) and 0.6°C (at 50 cm.).

The mean daily values of wind speed at 1.5 met., actual sunshine duration and pan evaporation showed insignificant departures from the corresponding values of May 1971.

Table C 1.—AIR TEMPERATURE AT 1½ METRES ABOVE GROUND

MAY — 1972

Station	Air Temperature (°C)					Mean Duration in hours of daily air temperature above the following values										
	Mean Max.	Mean Min.	Mean of the day	Night time mean	Day time mean	—5°C	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C
Mersa Matruh. . .	24.6	14.9	19.5	17.0	20.3	24.0	24.0	24.0	24.0	22.2	9.7	1.3	0.03	0.0	0.0	0.0
Tahrir	31.2	14.5	22.2	18.1	23.7	24.0	24.0	24.0	24.0	21.8	13.7	7.5	2.0	0.2	0.0	0.0
Bahtim	30.9	13.5	22.0	17.5	23.8	24.0	24.0	24.0	24.0	21.3	13.6	8.2	2.5	0.2	0.0	0.0
Kharga	37.7	20.8	29.7	26.2	30.9	24.0	24.0	24.0	24.0	23.8	23.1	18.5	11.3	4.6	0.8	0.0

Table C 2.—EXTREME VALUES OF AIR TEMPERATURE AT 1½ METRES ABOVE GROUND, ABSOLUTE MINIMUM AIR TEMPERATURE AT 5cms ABOVE GROUND OVER DIFFERENT FIELDS.

MAY — 1972

Station	Max. Temp. at 1½ metres (°C)				Min. Temp. at 1½ metres (°C)				Min. Temp. at 5 cms. above (°C)			
	Highest		Lowest		Highest		Lowest		Dry soil		Grass	
	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date	Value	Value
Mersa Matruh. . .	31.6	2,3	21.0	14	17.9	21	11.0	16	7.0	14	—	—
Tahrir	39.2	4	25.8	6	18.8	4	10.0	6	8.5	6	—	—
Bahtim	39.8	4	26.3	6	17.0	27	9.5	2	9.0	2	—	—
Kharga	45.0	7	31.4	1	24.6	22	11.0	1	8.8	1	—	—

Table C 3.—(SOLAR + SKY) RADIATION, DURATION OF BRIGHT SUNSHINE, RELATIVE HUMIDITY, VAPOUR PRESSURE AT 1½ METRES ABOVE GROUND, EVAPORATION & RAINFALL.

MAY — 1972

Station	(Solar + Sky) Radiation gm. cal/cm²	Duration of Bright Sunshine (hours)			Relative Humidity				Vapour pressure (mms)						Evaporation (mms)		Rainfall (mms)		
		Total Actual monthly	Total Possibly monthly	%	Mean of day	1200 U.T.	Lowest	Date	Mean of day	1200 U.T.	Highest	Date	Lowest	Date	Piche	Pan class A	Total Amount Monthly	Max. Fall in one day	Date
Mersa Matruh. .	558.9	280.3	426.4	65	75	61	27	2	12.5	12.7	19.2	3	7.9	5	5.5	5.78	0.2	0.1	3,6
Tahrir	629.7	319.7	424.7	75	59	31	18	20	11.1	9.5	15.7	21	5.5	5	7.4	9.15	0.4	0.2	27
Bahtim	625.4	314.5	423.7	75	54	23	12	2	10.0	8.8	15.1	22	4.4	2	10.8	10.47	0.1	0.1	2
Kharga	558.0	352.4	414.1	85	19	13	2.6	4	5.5	5.7	11.6	23	2.6	4	18.6	19.94	0.0	0.0	—

Table C 4.—EXTREME SOIL TEMPERATURE AT DIFFERENT DEPTHS (cms) IN DIFFERENT FIELDS

MAY — 1972

Station	Highest (H) Lowest (L)	Extreme soil temperature (°C) in dry field at different depths (cms.)								Extreme soil temperature (°C) in grass field at different dephts (cms.)							
		2	5	10	20	50	100	200	300	2	5	10	20	50	100	200	300
Mersa Matruh.	H	35.9	33.6	29.6	25.8	24.3	22.4	21.0	—	—	—	—	—	—	—	—	—
	L	16.0	15.6	15.7	17.8	20.1	20.6	19.7	—	—	—	—	—	—	—	—	—
Tahrir	H	47.8	41.6	36.3	32.7	29.4	27.2	24.8	23.9	—	—	—	—	—	—	—	—
	L	19.6	18.4	18.6	21.9	23.8	24.1	22.7	22.3	—	—	—	—	—	—	—	—
Bahtim	H	51.3	44.7	36.0	29 9	27.3	25.4	23.8	23.3	—	—	—	—	—	—	—	—
	L	21.3	20.6	20.9	23.9	24.1	23.2	22.4	22.8	—	—	—	—	—	—	—	—
Kharga . . .	H	55.2	47.5	40.1	34.6	32.0	29.7	27.7	27.2	—	—	—	—	—	—	—	—
	L	13.8	18.6	23.3	27.4	28.6	27.8	26.3	26.5	—	—	—	—	—	—	—	—

Table C 5.—SURFACE WIND

MAY — 1972

Station	Wind Speed m/ses at 1½ m			Days with surface wind speed at 10 metres							Max. Gust. (knots) at 10 metres	
	Mean of the day	Night time mean	day time mean	≥10 knots	≥15 knots	≥20 knots	≥25 knots	≥30 knots	≥35 knots	≥40 knots	value	Date
Mersa Matruh.	4.0	2.8	5.2	31	28	13	6	1	1	0	42	7
Tahrir	2.2	1.6	2.8	31	24	8	2	1	1	0	47	2
Bahtim	2.6	1.5	3.6	30	20	4	2	1	0	0	44	2
Kharga . . .	4.2	3.3	5.0	31	30	16	4	1	0	0	41	12

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THE EGYPTIAN METEOROLOGICAL AUTHORITY
CAIRO

PUBLICATIONS OF THE METEOROLOGICAL AUTHORITY OF THE ARAB REPUBLIC OF EGYPT — CAIRO

In fulfilment of its duties, the Egyptian Meteorological Authority issues serveral reports and publications on weather, climate and agro-meteorology. The principal publications are described on this page.

Orders for publications should be addressed to :
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THE MONTHLY WEATHER REPORT

First issued in 1909, the Monthly Weather Report served to give a brief summary of the weather conditions that prevailed over Egypt during the month, with a table showing the mean values for few meteorological elements and their deviations from the normal values. From 1954 to 1957 this report was in a rapid state of development and extension resulting into a voluminous report on January 1958 giving surface, upper air, and agro-meteorological data for Egypt.

As from January 1964, the Monthly Weather Report was pressed to give climatological data for a representative selection of synoptic stations.

THE AGRO-METEOROLOGICAL ABRIDGED MONTHLY REPORT

Gives a review of weather experienced in the agro-meteorological stations of Egypt as well as monthly values of certain elements.

THE ANNUAL REPORT

This report gives annual values and statistics for the various meteorological elements, together with a summary of the weather conditions that prevailed during all months of the year.

CLIMATOLOGICAL NORMALS FOR EGYPT

A voluminous edition was issued in March 1968 which brings normals and mean values up till 1960.

METEOROLOGICAL RESEARCH BULLETIN

First issued in January 1969 on a bi-annual basis. It includes research works carried out by members of staff of "The Meteorological Institute for Research and Training" and the Operational Divisions of the Meteorological Authority.

TECHNICAL NOTES

As from October 1970, the Meteorological Authority started to issue a new series of publications in the form of Technical Notes (non periodical) on subjects related to studies and applications of meteorology in different fields for the benefit of personnel working in these fields.

THE ARAB REPUBLIC OF EGYPT

MONTHLY WEATHER REPORT

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THE EGYPTIAN METEOROLOGICAL AUTHORITY
CAIRO

CONTENTS

PAGE

General Summary of Weather Conditions 1-2

SURFACE DATA

Table A1.—Monthly values of the Atmospheric Pressure, Air Temperature, Relative Humidity, Bright Sunshine Duration and Piche Evaporation 3

" A2.—Maximum and Minimum Air Temperatures 4

" A3.—Sky Cover and Rainfall 5

" A4.—Number of Days of Occurrence of Miscellaneous Weather Phenomena 6

" A5.—Number in Hours of Occurrences of Concurrent Surface Wind Speed and Direction Recorded Within Specified Ranges 7-8

UPPER AIR DATA

Table B1.—Monthly Means and Monthly Absolute Higher & Lower Values of Altitude, air Temperature & Dew point at Standard and Selected Pressure Surfaces 9,10

" B2.—Mean and Extreme values of The Freezing Level and The Tropopause; The Highest Wind Speed in The Upper Air 11

" B3.—Number of Occurrences of Wind Direction Within Specified Ranges and The Mean Scalar Wind Speed at the Standard and Selected Pressure Surfaces 12-14

AGRO-METEOROLOGICAL DATA

Reviews of Agro-Meteorological Stations 15,16

Table C1.—Air Temperature at 1½ Metres Above Ground 17

" C2.—Extreme Values of Air Temperature at 1½ metres above Ground, Absolute Minimum Air Temperature at 5 cms. above Ground Over Different Fields. 17

" C3.—(Solar + Sky) Radiation, Duration of Bright Sunshine, Relative Humidity and Vapour Pressure at 1½ metres above Ground, Evaporation and Rainfall. 17

" C4.—Extreme Soil Temperature at Different Depths in Different Fields 18

" C5.—Surface wind 18

Note : For explanatory notes on tables please refer to Volume 15, Number 1 (January 1972).

GENERAL SUMMARY OF WEATHER CONDITIONS

JUNE 1972

Normal summer weather intervened with three variant heat waves.

GENERAL DESCRIPTION OF WEATHER

The prevailing weather during this month was generally mild & humid in the northern parts, rather hot & moderately humid in the middle parts and hot & dry in the southern parts. The month was intervened with three variant heat waves attaining their peaks round the 7th, 19th & 26th. The second heat wave was the most excessive and prevailed most of the third week. It is worthy to mention that weather was markedly mild most of the first half of the month over north of the country, yielding a record for the lowest maximum air temperature at Cairo (29.4°C) on the 1st.

The miscellaneous weather phenomena for this month were confined in light rain on the 8th over west of the Mediterranean coast, early morning mist in the north and few scattered occasions of light rising sand.

PRESSURE DISTRIBUTION

The outstanding pressure patterns over the synoptic surface charts during this month were :

— The Azores high and its extensions over Europe.

— Low pressure systems through North Europe and their extensions over Central Europe.

— A ridge of high pressure over Central Mediterranean & Libya.

— The complex monsoon low pressure over Iraq, Arabia & Sudan.

The Iraq monsoon trough experienced three westward elongations through Asia Minor during the periods (15th—16th), (24th—25th) & (27th—30th) and a north-westward elongation towards the Black Sea area in the period (18th-20th). These elongations associated the approach and transits of depressions through the Back Sea area and its vicinities.

The barometric pressure over Egypt this month experienced five falls and reached its minima round the 7th, 16th, 20th, 25 & 30th. The first pressure fall was caused by the northward elongation of the Sudan trough on the 6th towards the Western Desert, together with a trough over the western coast of Egypt which filled up the next day. The other four pressure falls were caused by the elongations of the Iraq monsoon trough.

Apart from these pressure falls, high pressure over Central Mediterranean extended over East Mediterranean, and the atmospheric pressure over Egypt was generally above normal.

In the 700 & 500 mb levels the important features were :

— Deep upper low pressure systems over North Atlantic and North Russia.

— Four secondary upper lows through middle latitudes, the first and second moved through the Mediterranean and traversed East Mediterranean on the 2nd and 13th. The third and fourth secondary lows moved through Central Europe and their troughs traversed East Mediterranean on the 20th & 30th.

— High pressure belt over the subtropical latitudes.

SURFACE WIND

The prevailing surface winds during this month were light to moderate N/NW. Winds freshened during several days in few scattered localities mainly in the Red Sea, Western Desert and Upper Egypt districts. Calm winds were frequent during night and early morning intervals in scattered places.

TEMPERATURE

Maximum air temperature was above normal during the prevailing heat waves round the periods (6th & 7th), (14th-19th), (25th & 26th) respectively. Otherwise, it was moderately below normal.

Maximum air temperatures ranged most of month between 26° & 32°C in the northern parts, between 30° & 37°C in the middle parts and between 38° & 43°C in the southern parts.

The absolute maximum air temperature for Egypt this month was 45.0°C reported at Luxor and Farafra on the 19th.

Minimum air temperature oscillated irregularly round normal during this month. Its values ranged in general between 16° & 22°C in the northern and middle parts, between 20° & 26°C in the southern parts.

The absolute minimum air temperature for Egypt in this month was 12.8°C reported at Bahtim on the 6th and at Mallawi on the 10th.

PRECIPITATION

This month was rainless apart from light rain on the 8th over the western part of the Mediterranean district.

The maximum daily rainfall for Egypt in this month was 0.7 mm. reported at Rosetta on the 8th and it was also the maximum monthly rainfall.

Chairman (M. F. TAHA)

Board of Directors

Cairo, February 1973

SURFACE DATA

Table A 1. — MONTHLY VALUES OF THE ATMOSPHERIC PRESSURE, AIR TEMPERATURE, RELATIVE HUMIDITY, BRIGHT SUNSHINE DURATION & PICHE EVAPORATION.

JUNE — 1972

STATION	Atmospheric Pressure (mbs) M.S.L		Air Temperature °C									Relative Humidity %		Bright Sunshine Duration (Hours)			Piche Evaporation mms. Mean
			Maximum		Minimum			Dry Bulb		Wet Bulb							
	Mean	D.F Normal or Average	(A) Mean	D.F Normal or Average	(B) Mean	D.F Normal or Average	$\frac{A+B}{2}$	Mean	D.F Normal or Average	Mean	D.F Normal or Average	Mean	D.F Normal or Average	Total Actual	Total Possible	%	
Sallum	1012.6	— 0.1	30.8	+ 1.3	21.2	+ 1.4	26.0	25.6	+ 0.9	19.1	— 0.6	51	—10	—	—	—	12.0
Mersa Matruh (A)	1012.5	— 0.1	28.4	+ 0.4	18.6	+ 0.4	23.5	23.6	+ 0.3	19.6	0.0	67	— 2	366.9	425.5	86	7.0
Alexandria (A)	1012.0	+ 0.3	29.8	+ 1.4	19.1	— 1.1	24.4	24.1	— 0.1	20.3	— 0.2	69	— 2	364.6	424.2	86	5.4
Port Said (A)	1010.3	— 0.6	27.4	— 1.1	21.1	— 1.3	24.2	24.8	— 0.2	20.4	— 1.0	65	— 6	369.5	424.2	87	7.0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1011.1	0.0	33.2	— 0.8	17.4	0.0	25.3	25.0	— 0.9	19.2	— 0.4	56	+ 3	337.4	422.5	80	7.3
Cairo (A)	1010.8	0.0	33.9	— 0.8	20.3	+ 0.2	27.1	26.8	— 0.4	19.6	0.0	48	+ 2	—	—	—	16.2
Fayoum	—	—	36.4	+ 0.4	19.0	— 0.9	27.7	27.5	— 1.4	19.5	0.0	43	+ 6	—	—	—	10.1
Minya (A)	1009.6	— 0.1	36.2	— 0.2	19.0	0.0	27.6	27.8	0.0	18.8	— 0.2	38	— 2	383.7	416.3	92	20.1
Assyout (A)	1008.4	— 0.5	37.0	— 0.7	21.1	— 0.5	29.1	29.2	— 0.8	18.0	— 0.1	28	+ 2	—	—	—	20.6
Luxor (A)	1007.3	+ 0.6	40.3	— 0.7	21.2	— 1.4	30.8	31.1	— 1.5	19.1	— 0.2	27	+ 4	—	—	—	13.5
Aswan (A)	1006.9	+ 0.8	40.8	— 1.4	24.2	0.0	32.5	32.6	— 1.3	17.1	— 0.4	14	+ 2	—	—	—	29.4
Siwa	1011.7	— 0.1	37.5	+ 0.2	19.9	+ 0.5	28.7	29.2	— 0.1	18.1	— 0.2	29	— 1	373.9	416.8	90	11.8
Bahariya	1011.0	+ 1.1	35.9	— 0.6	19.9	+ 0.4	27.9	28.2	— 1.0	17.2	— 1.2	28	— 2	—	—	—	15.6
Farafra	1011.5	0.0	37.6	— 0.1	20.4	+ 0.2	29.0	29.4	— 0.1	17.3	+ 0.4	24	+ 2	—	—	—	19.9
Dakhla	1010.1	+ 1.3	38.0	— 0.5	21.0	— 1.5	29.5	30.2	— 0.9	16.9	— 0.3	19	+ 1	—	—	—	26.4
Kharga	1008.8	+ 1.0	39.0	— 0.2	24.3	+ 1.1	31.6	32.2	— 0.3	17.2	— 0.8	20	0.0	375.0	409.7	92	23.0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	1007.5	+ 0.7	32.7	+ 0.8	24.0	+ 0.4	28.4	28.7	+ 0.1	20.8	+ 0.4	46	+ 2	373.6	413.5	90	14.6
Quseir	1007.2	+ 0.1	31.3	— 1.1	25.0	— 0.5	28.2	28.5	— 0.7	20.4	— 0.4	45	+ 1	—	—	—	14.4

Table A 2.—MAXIMUM AND MINIMUM AIR TEMPERATURES

JUNE — 1972

Station	Maximum Temperature °C									Grass Min. Temp.		Minimum Temperature °C							
	Highest	Date	Lowest	Date	No. of Days with Max-Temp.					Mean	Dev. From Normal	Highest	Date	Lowest	Date	No. of Days with Min. Temp.			
					>25	>30	>35	>40	>45							<10	<5	<0	<-5
Sallum	38.9	15	25.5	1,2	30	15	5	0	0	20.5	—	26.8	15	13.5	18	0	0	0	0
Mersa Matruh (A)	35.6	18	24.7	2	29	7	1	0	0	16.4	—	22.4	26	13.3	3	0	0	0	0
Alexandria (A)	36.1	18	25.5	1	30	7	1	0	0	17.7	—	22.9	26	15.3	2	0	0	0	0
Port Said (A)	36.4	19	26.7	1	30	8	1	0	0	19.9	—	23.6	19	18.0	1	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	39.2	18	28.5	1	30	26	6	0	0	—	—	21.2	27	13.6	6	0	0	0	0
Cairo (A)	41.1	19	29.4	1	30	28	9	2	0	—	—	24.3	19	16.4	6	0	0	0	0
Fayoum	42.8	19	31.0	1	30	30	18	5	0	15.5	—	21.8	17	16.3	6	0	0	0	0
Minya (A)	42.8	19	31.8	1	30	30	19	2	0	17.5	—	22.2	27	15.0	1	0	0	0	0
Assyout (A)	42.8	19	30.6	9	30	30	22	8	0	18.1	—	25.0	2,21	18.5	4	0	0	0	0
Luxor (A)	45.0	19	35.4	1	30	30	30	16	0	15.8	—	24.2	8	18.4	10	0	0	0	0
Aswan (A)	44.4	20	36.4	1	30	30	30	19	0	—	—	28.8	7	20.8	3	0	0	0	0
Siwa	43.6	19	31.1	1	30	30	24	6	0	18.1	—	23.4	18	14.0	3	0	0	0	0
Bahariya	43.0	19	30.4	1	30	30	17	4	0	18.8	—	23.8	17	16.4	1	0	0	0	0
Farafra	45.0	19	32.0	1	30	30	30	7	0	20.4	—	24.4	20	14.6	1	0	0	0	0
Dakhla	43.0	19	31.9	9	30	30	24	9	0	20.9	—	26.2	27	13.2	10	0	0	0	0
Kharga	44.6	19	33.6	9	30	30	27	12	0	21.8	—	28.9	28	17.2	10	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	37.8	19	29.5	3	30	29	5	0	0	—	—	27.7	20	20.6	10	0	0	0	0
Qusoir	35.7	19	29.2	2	30	21	1	0	0	22.2	—	29.2	20	22.2	1	0	0	0	0

Table A 3.—SKY COVER AND RAINFALL

JUNE — 1972

Station	Mean Sky Cover Oct.					Rainfall mms.										
	00 U.T.	06 U.T.	12 U.T.	18 U.T.	Daily Mean	Total Amount	Dev. From Normal	Max. Fall in one day		Number of Days with Amount of Rain						
								Amount	Date	<0.1	≥0.1	≥1.0	≥5.0	≥10	≥25	≥50
Sallum	1.4	1.3	1.1	1.0	1.2	0.0	— 0.1	0.0	—	0	0	0	0	0	0	0
Mersa Matruh . . (A)	1.2	2.2	1.4	1.7	1.6	0.0	— 3.1	0.0	—	0	0	0	0	0	0	0
Alexandria . . . . (A)	2.3	2.4	1.6	1.2	1.8	0.3	+ 0.3	0.3	8	0	1	0	0	0	0	0
Port Said . . . . (A)	0.6	1.1	0.3	0.6	0.5	0.0	0.0	0.0	—	0	0	0	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	0.2	1.7	1.3	0.4	0.7	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Cairo . . . . . (A)	1.0	1.7	0.8	0.5	0.8	0.0	— 0.2	0.0	—	0	0	0	0	0	0	0
Fayoum	—	0.4	0.6	0.3	—	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Minya . . . . . (A)	0.0	0.0	0.2	0.4	0.2	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Assyout . . . . . (A)	0.1	0.1	0.2	0.1	0.1	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Luxor . . . . . (A)	0.4	0.5	0.7	0.8	0.6	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Aswan . . . . . (A)	0.4	0.7	1.1	0.9	0.7	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Siwa	0.0	0.3	0.5	0.4	0.3	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Bahariya	0.0	0.0	0.2	0.3	0.1	0.0	— 0.2	0.0	—	0	0	0	0	0	0	0
Farafra	—	0.0	0.0	0.2	—	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Dakhla	0.0	0.0	0.0	0.0	0.0	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Kharga	0.0	0.1	0.4	0.2	0.2	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0.0	0.3	0.7	0.4	0.3	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Quseir	0.0	0.5	0.7	0.6	0.4	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0

Table A 4.—DAYS OF OCCURRENCE OF MISCELLANEOUS WEATHER PHENOMENA

JUNE 1972

Station	Precipitation				Frost	Thunderstorm	Mist Vis ≥ 1000 metres	Fog Vis <1000 metres	Haze Vis ≥1000 metres	Thick Haze Vis <1000 Metres	Dust or Sandrising Vis ≥1000 metres	Dust or Sandstorm Vis <1000 metres	Gale	Clear Sky	Cloudy Sky
	Rain	Snow	Ice, Pellets	Hail											
Sallum	0	0	0	0	0	0	0	0	0	0	1	0	0	22	0
Mersa Matruh (A)	0	0	0	0	0	0	4	2	0	0	7	0	0	18	0
Alexandria (A)	1	0	0	0	0	0	6	0	1	0	0	0	0	17	0
Port Said (A)	0	0	0	0	0	0	0	0	0	0	0	0	0	29	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	0	0	0	0	0	0	5	0	0	0	0	0	0	28	0
Cairo (A)	0	0	0	0	0	0	10	0	10	0	1	0	0	26	0
Fayoum	0	0	0	0	0	0	0	0	0	0	0	0	0	—	—
Minya (A)	0	0	0	0	0	0	0	0	5	0	6	0	0	30	0
Assyout (A)	0	0	0	0	0	0	0	0	2	0	3	0	0	30	0
Luxor (A)	0	0	0	0	0	0	0	0	6	0	4	0	0	28	0
Aswan (A)	0	0	0	0	0	0	0	0	0	0	10	0	0	27	0
Siwa	0	0	0	0	0	0	0	0	0	0	1	0	0	30	0
Bahariya	0	0	0	0	0	0	0	0	0	0	0	0	0	30	0
Farafra	0	0	0	0	0	0	0	0	0	0	2	0	0	—	—
Dakhla	0	0	0	0	0	0	0	0	0	0	4	0	0	30	0
Kharga	0	0	0	0	0	0	0	0	0	0	9	0	0	30	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0	0	0	0	0	0	0	0	0	0	6	0	0	28	0
Quseir	0	0	0	0	0	0	0	0	0	0	0	0	0	28	0

Table A 5.—NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES

JUNE — 1972

Station	Calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurrences of wind blowing from the ranges of directions indicated												All directions
					345 / 014	015 / 044	045 / 074	075 / 104	105 / 134	135 / 164	165 / 194	195 / 224	225 / 254	255 / 284	285 / 314	315 / 344	
Sallum	72	4	0	1—10	20	99	40	83	40	5	4	6	5	32	75	98	507
				11— 27	2	4	0	0	0	0	0	0	0	1	64	66	137
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**22**	**103**	**40**	**83**	**40**	**5**	**4**	**6**	**5**	**33**	**139**	**164**	**644**
Mersa Matruh . . .	9	3	4	1—10	49	21	12	17	23	32	24	18	48	65	47	56	412
				11—27	10	12	9	14	0	0	0	0	1	5	110	131	292
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All Speeds	**59**	**33**	**21**	**31**	**23**	**32**	**24**	**18**	**49**	**70**	**157**	**187**	**704**
Alexandria . . (A)	9	0	27	1—10	40	15	10	3	12	6	13	16	11	36	129	201	492
				11—27	3	0	0	0	0	0	0	0	1	17	104	67	192
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**43**	**15**	**10**	**3**	**12**	**6**	**13**	**16**	**12**	**53**	**233**	**268**	**684**
Tanta	22	3	0	1—10	123	73	4	14	4	5	2	17	53	73	120	105	594
				11—27	45	8	0	0	0	0	0	1	1	1	15	30	101
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**168**	**81**	**4**	**14**	**4**	**5**	**2**	**18**	**54**	**74**	**135**	**136**	**695**
Cairo . . . . . (A)	52	1	7	1—10	99	101	55	11	4	2	0	4	11	30	82	96	495
				11—27	40	68	8	0	0	0	0	0	3	12	13	21	165
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**139**	**169**	**63**	**11**	**4**	**2**	**0**	**4**	**14**	**42**	**95**	**117**	**660**
Fayoum	2	2	0	1—10	232	286	6	2	0	1	1	8	19	21	29	85	690
				11—27	0	26	0	0	0	0	0	0	0	0	0	0	26
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**232**	**312**	**6**	**2**	**0**	**1**	**1**	**8**	**19**	**21**	**29**	**85**	**716**
Minya	0	0	0	1—10	319	71	4	0	0	2	3	7	4	0	18	42	470
				11—27	192	42	0	0	0	0	0	0	0	1	9	6	250
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**511**	**113**	**4**	**0**	**0**	**2**	**3**	**7**	**4**	**1**	**27**	**48**	**720**
Assyout	0	0	0	1—10	157	73	17	0	0	0	0	0	1	2	73	198	521
				11—27	130	56	9	0	0	0	0	0	0	0	0	4	199
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**287**	**129**	**26**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**73**	**202**	**720**
Luxor . . . . (A)	69	0	0	1—10	65	35	18	18	10	16	64	38	25	72	147	134	642
				11—27	0	0	0	0	0	0	0	0	0	0	7	2	9
				38—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**65**	**35**	**18**	**18**	**10**	**16**	**64**	**38**	**25**	**72**	**154**	**136**	**651**

Table A 5. (*contd.*)—**NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES**

JUNE — 1972

Station	Calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Mumber in hours of occurrences of wind blowing from the ranges of directions indication												
					345 / 014	015 / 044	045 / 074	075 / 104	105 / 134	135 / 164	165 / 194	195 / 224	225 / 254	255 / 284	285 / 314	315 / 344	All directions
				1—10	126	78	9	2	3	2	1	1	4	4	29	127	386
				11—27	68	50	3	1	0	0	0	0	1	8	31	161	323
Aswan . . . . (A)	8	3	0	28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**194**	**128**	**12**	**3**	**3**	**2**	**1**	**1**	**5**	**12**	**60**	**288**	**709**
				1—10	62	109	54	108	75	31	8	7	15	25	58	84	636
				11—27	5	2	0	0	0	0	0	0	0	0	0	11	18
Siwa	36	30	0	28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**67**	**111**	**54**	**108**	**75**	**31**	**8**	**7**	**15**	**25**	**58**	**95**	**654**
				1—10	118	66	16	11	8	9	8	18	21	42	84	146	547
				11—27	56	69	0	0	0	0	0	0	0	0	2	29	156
Dakhla	0	17	0	28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**174**	**135**	**16**	**11**	**8**	**9**	**8**	**18**	**21**	**42**	**86**	**175**	**703**
				1—10	159	15	8	3	4	1	1	1	0	0	15	85	292
				11—27	308	52	0	0	0	0	0	0	0	0	3	62	425
Kharga	2	1	0	28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**467**	**67**	**8**	**3**	**4**	**1**	**1**	**1**	**0**	**0**	**18**	**147**	**717**
				1—10	19	12	13	3	4	6	4	2	2	4	54	35	158
				11—27	182	56	0	0	0	0	0	0	0	0	74	244	556
Hurghada.	3	1	0	28—47	0	0	0	0	0	0	0	0	0	0	0	2	2
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**201**	**68**	**13**	**3**	**4**	**6**	**4**	**2**	**2**	**4**	**128**	**281**	**716**
				1—10	178	93	1	3	4	10	6	10	17	14	47	170	553
				11—27	133	21	0	0	0	0	0	0	0	0	0	10	164
Quseir	3	0	0	28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**311**	**114**	**1**	**3**	**4**	**10**	**6**	**10**	**17**	**14**	**47**	**180**	**717**

UPPER AIR CLIMATOLOGICAL DATA

Table B 1.—MONTHLY MEANS AND MONTHLY ABSOLUTE HIGHER & LOWER VALUES OF ALTITUDE, AIR TEMPERATURE & DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

JUNE — 1972

Station	Pressure Surface (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Mersa Matruh (A) 0000 U.T.	Surface	27	*1011m.b.	*1015m,b.	*1005m.b.	27	21.1	25.4	17.0	27	14.9
	1000	27	128	156	105	27	21.8	28.2	16.2	27	15.9
	850	27	1536	1584	1482	27	19.0	26.6	9.6	27	0.6
	700	27	3175	3250	3077	27	8.9	15.0	2.8	27	— 9.2
	600	27	4427	4520	4307	27	— 0.7	5.0	— 5.4	27	—17.2
	500	27	5859	5971	5716	27	—10.1	— 3.7	—14.0	27	—26.9
	400	27	7572	7642	7372	27	—22.4	—13.2	—26.8	27	—38.3
	300	27	9593	9805	9392	27	—38.0	—28.7	—43.4	27	—51.3
	250	27	10820	11080	10604	27	—47.4	—37.5	—51.8	27	—58.9
	200	27	12565	12570	12034	27	—56.1	—49.0	—62.1	25	—66.0
	150	26	14078	14400	13835	26	—60.8	—51.9	—66.5	6	—66.4
	100	24	16572	16830	16325	24	—65.5	—58.0	—76.0	—	—
	70	22	18741	18913	18529	22	—65.8	—61.3	—81.0	—	—
	60	18	19751	19940	19630	18	—62.5	—57.8	—66.2	—	—
	50	17	20831	21005	20739	17	—59.2	—55.0	—62.9	—	—
	40	15	22327	22500	22250	15	—56.9	—54.2	—59.0	—	—
	30	15	24062	24192	23965	15	—53.7	—51.0	—56.8	—	—
	20	9	26679	26801	26554	9	—49.3	—46.9	—54.6	—	—
	10	1	31421	—	—	1	—41.1	—	—	—	—
Helwan 0000 UT	Surface	30	*995m.b.	*999m,b.	*992m.b.	30	22.3	27.4	19.4	30	14.8
	1000	—	—	—	—	—	—	—	—	—	—
	850	30	1501	1528	1458	30	17.6	24.8	11.7	30	2.6
	700	30	3135	3185	3056	30	9.0	14.4	3.0	30	—10.0
	600	30	4394	4447	4300	30	1.2	6.3	— 3.3	30	—17.8
	500	30	5836	5916	5730	30	— 8.4	— 1.4	—13.3	30	—26.0
	400	30	7539	7660	7421	30	—20.7	—11.0	—25.9	30	—35.8
	300	30	9593	9799	9444	30	—35.5	—28.2	—43.7	30	—49.2
	250	30	10832	11071	10668	30	—45.6	—37.0	—51.5	30	—57.4
	200	30	12291	12562	12096	30	—54.0	—48.5	—59.2	30	—64.7
	150	30	14109	14391	13922	30	—60.6	—55.4	— 64.5	9	—68.7
	100	30	16586	16839	16435	30	—68.5	—61.0	—77.8	—	—
	70	26	18729	18916	18400	26	—69.2	—57.0	—84.8	—	—
	60	20	19681	19900	19530	20	—63.8	—60.0	—67.9	—	—
	50	19	20770	20968	20667	19	—59.4	—56.5	—62.3	—	—
	40	13	22268	22480	22090	13	—56.7	—55.0	—59.0	—	—
	30	11	24040	24238	23899	11	—52.8	—49.2	—55.0	—	—
	20	6	26639	26912	26535	6	—47.6	—40.4	—49.8	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan (A) 0000 UT	Surface	30	*986m.b.	*989m.b.	*982m.b.	30	26.7	32.0	22.0	30	2.3
	1000	—	—	—	—	—	—	—	—	—	—
	850	30	1502	1529	1472	30	23.7	29.9	19.0	30	— 1.3
	700	30	3162	3203	3121	30	12.3	15.9	5.7	30	—10.7
	600	30	4435	4481	4377	30	3.8	7.6	— 0.5	30	—17.2
	500	30	5880	5949	5829	30	6.2	— 1.1	—10.7	30	—25.5
	400	30	7598	7693	7528	30	—18.4	—12.0	—24.0	30	—35.8
	300	30	9682	9833	9582	30	—33.7	—28.1	—38.7	30	—48.2
	250	30	10937	11116	10818	30	—42.7	—37.5	—46.4	30	—56.0
	200	30	12411	12618	12295	30	—52.6	—49.3	—56.3	30	—64.4
	150	30	14222	14451	14099	29	—64.7	—62.0	—70.2	—	—
	100	29	16630	16863	16427	29	—75.3	— 69.1	— 86.4	—	—
	70	20	18729	18850	18559	20	—70.2	—65.7	— 81.2	—	—
	60	17	19691	19800	19500	17	—65.4	—62.5	—68.5	—	—
	50	16	20776	20910	20639	16	— 60.9	—56.8	—63.0	—	—
	40	13	22257	22340	22170	13	—56.7	—52.7	—60.0	—	—
	30	10	23997	24067	23929	10	—53.2	—50.4	—55.3	—	—
	20	6	26648	26695	26617	6	—48.6	— 46.5	—52.5	—	—
	10	—	—	—	—	—	—	—	—	—	—

N = The number of cases the element has been observed during the month.

* The atmospheric pressure corrected to the elevation of the radiosonde station.

UPPER AIR CLIMATOLOGICAL DATA

Table B 1.(*contd.*)—MONTHLY MEANS AND MONTHLY ABSOLUTE HIGHER & LOWER VALUES OF ALTITUDE, AIR TEMPERATURE & DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

JUNE — 1972

Station	Presure Surface (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Mersa Matruh (A) 1200 UT	Surface	30	* 1012m.b.	* 1016m.b.	* 1009m.b.	30	26.1	32.2	22.2	30	15.6
	1000	30	133	167	106	30	24.6	30.0	20.1	30	14.4
	850	30	1540	1587	1481	30	18.0	25.1	8.4	30	— 0.4
	700	30	3170	3241	3049	30	8.1	13.6	— 0.3	30	—10.4
	600	28	4421	4489	4276	28	— 0.2	6.8	— 5.6	28	—18.1
	500	28	5852	5934	5753	28	— 9.9	— 3.9	—13.3	28	—28.7
	400	27	7534	7647	7311	27	—22.3	—14.9	—30.8	27	—38.6
	300	27	9583	97[illegible]9	9301	27	—37.4	—28.1	—43.5	27	—52.0
	250	27	10826	11045	10509	27	—46.7	—36.4	—53.0	27	—59.1
	200	27	12270	12538	11933	27	—55.3	—47.9	—60.7	22	—66.4
	150	26	14094	14375	13911	26	—60.8	—55.5	—66.9	5	—69.6
	100	25	16578	16805	16386	25	—66.5	—59.5	—78.0	—	—
	70	20	18762	18893	18641	20	—65.7	—58.5	—71.0	—	—
	60	18	19744	19890	19600	18	—61.8	—57.7	—65.0	—	—
	50	19	20836	20981	20687	19	—56.8	—53.8	—59.3	—	—
	40	14	22327	22460	22120	14	—54.0	—51.9	—57.3	—	—
	30	12	24130	24262	23954	12	—49.9	—47.1	—53.7	—	—
	20	5	26815	26974	26718	5	—45.3	—42.7	—47.6	—	—
	10	—	—	—	—	—	—	—	—	—	—
Helwan 1200 UT	Surface	30	* 994 m.b.	* 998 m.b.	* 990m.b.	30	32.2	39.4	27.4	30	8.5
	1000	—	—	—	—	—	—	—	—	—	—
	850	28	1518	1519	1475	28	19.4	26.2	12.8	28	9.1
	700	26	3160	3213	3088	26	10.4	14.4	5.8	26	—13.2
	600	26	4424	4488	4339	26	2.7	6.2	— 2.8	26	—20.7
	500	24	5782	5936	5768	24	— 7.1	— 0.1	—12.9	24	—29.2
	400	23	7571	7674	7440	23	—19.6	—11.7	—26.1	23	—39.3
	300	23	9645	9822	9468	23	—35.5	—27.7	—40.7	23	—52.0
	250	23	10889	11104	10689	23	—44.0	—36.9	—49.8	23	—59.2
	200	23	12358	12606	12125	23	—53.4	—48.2	—58.1	23	—67.2
	150	22	14191	14476	13967	22	—59.2	—53.6	—66.1	10	—70.3
	100	22	16687	16861	16512	22	—66.9	—61.0	—77.1	—	—
	70	18	18855	18955	18399	18	—64.5	—60.2	—72.9	—	—
	60	16	19828	20030	19710	16	—61.2	—57.0	—66.3	—	—
	50	15	20943	21018	20810	15	—55.9	—53.4	—62.1	—	—
	40	12	22487	22710	22390	12	—51.4	—48.7	—55.2	—	—
	30	12	24278	24358	24194	12	—48.4	—46.1	—50.0	—	—
	20	3	26964	27056	26916	8	—44.2	—40.7	—48.9	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 1200 UT	Surface	30	* 986m.b.	* 990m.b.	* 98[illegible] m.b.	30	39.1	43.8	34.6	30	5.2
	1000	30	61	102	26	—	—	—	—	—	—
	850	30	1518	1546	1473	30	25.2	32.2	20.0	30	— 4.1
	700	28	3182	3233	3129	28	13.4	17.6	9.9	28	—13.9
	600	24	4459	4529	4385	24	4.8	9.0	— 1.3	24	—20.7
	500	25	5916	6011	5806	23	— 5.4	0 2	—13.8	23	—28.3
	400	21	7637	7734	7534	21	—17.4	—10.9	—21.7	21	—37.6
	300	20	97[illegible]7	98[illegible]2	95[illegible]5	20	—30.7	—26.2	—37.3	20	—50.2
	250	20	1[illegible]989	11167	10867	20	—41.3	—35.1	—45.7	20	—57.4
	200	20	12476	12[illegible]87	12340	20	—51.1	—46.7	—54.7	20	—65.5
	150	20	1[illegible]302	14537	14158	20	—62.4	—59.5	—67.0	—	—
	100	20	16738	16977	16611	20	—72.7	—65.4	—78.2	—	—
	70	20	18834	19040	18614	20	—69.9	—65.9	—74.3	—	—
	60	15	19834	20030	19680	15	—63.7	—59.4	—67.8	—	—
	50	15	20902	21120	20634	15	—57.4	—51.2	—61.5	—	—
	40	11	22467	22740	22280	11	—53.5	—50.9	—57.6	—	—
	30	10	24251	24443	24024	10	—49.8	—47.1	—59.4	—	—
	20	7	26950	27120	26724	7	—42.9	—39.7	—46.8	—	—
	10	—	—	—	—	—	—	—	—		

N = The number of cases the element has been observed during the month.

Table B 2.—MEAN AND EXTREME VALUES OF THE FREEZING LEVEL AND THE TROPOPAUSE.

THE HIGHEST WIND SPEED IN THE UPPER AIR

JUNE — 1972

	Station	Freezing level									First tropopause									Highest wind speed			
		Mean			Highest			Lowest			Mean			Highest			Lowest						
		Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Direction (000—300)°	Speed in knots
0000 U.T.		(N)	(N)	(N)							(N)	(N)	(N)										
	M. Matruh (A)	4311 (27)	607 (27)	—17.4 (27)	5240	547	—16.7	3520	663	—10.5	13175 (22)	177 (22)	—62.8 (22)	16638	100	—75.2	11000	238	—52.1	8362	355	270	100
	Helwan . . .	4592 (30)	588 (30)	—18.3 (30)	5720	512	— 9.7	3820	643	— 8.6	13928 (25)	160 (25)	—63.5 (25)	17800	84	—78.2	11460	224	—54.3	13000	163	250	122
	Aswan . . (A)	5031 (30)	559 (30)	—21.0 (30)	5800	510	—22.0	4370	604	—19.1	16434 (20)	104 (20)	—75.6 (20)	17210	90	—78.4	15160	129	—72.3	12200	205	246	95
1200 U.T.											(N)	(N)	(N)										
	M. Matruh (A)	4370 (28)	609 (28)	—17.6 (28)	5390	533	—30.4	2920	710	—14.6	14222 (25)	153 (25)	—65.7 (25)	17900	82	—73.7	11390	229	—54.2	11251	226	255	95
	Helwan . . .	4801 (25)	575 (25)	—22.5 (25)	5870	503	—23.4	4000	628	—23.5	14604 (20)	148 (20)	—64.2 (20)	17720	87	—76.6	11300	229	—52.2	13200	168	270	95
	Aswan . . (A)	5111 (23)	554 (23)	—23.8 (23)	6000	498	—25.9	4220	612	—12.8	16701 (19)	101 (19)	—74.0 (19)	18270	76	—74.2	15320	127	—67.6	13200	178	250	99

N= The number of cases the element has been observed during the month.

Table B 3.—NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES

MERSA MATRUH (A) — JUNE 1972

Time	Pressure Surface Millibar	Wind between specified ranges of direction (000—360)°																								Number of calm winds	Total number of observations (TN)	Mean scalar wind
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	3	9	0	—	0	—	0	—	2	7	2	9	0	—	1	6	4	6	7	9	3	9	3	12	2	27	8
	1000	2	13	1	8	0	—	1	14	2	9	1	11	0	—	0	—	2	8	6	12	8	14	3	4	0	26	11
	850	1	16	1	23	0	—	0	—	0	—	0	—	0	—	0	—	1	21	1	10	13	21	9	17	0	26	19
	700	1	12	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	22	8	23	8	29	8	29	0	26	26
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	17	8	31	9	32	7	30	0	26	30
	500	1	30	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	36	10	33	6	38	4	24	0	26	31
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	9	29	7	44	7	37	2	32	0	25	36
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	36	5	37	6	46	3	30	2	16	0	18	36
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	62	5	44	7	33	3	31	0	—	0	17	40
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	7	40	3	44	4	29	1	32	0	—	0	15	38
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	44	8	37	1	23	0	—	0	—	0	13	38
	100	0	—	0	—	0	—	0	—	0	—	1	22	0	—	1	25	6	24	2	18	0	—	0	—	0	10	23
	70	0	—	0	—	2	18	2	10	0	—	0	—	0	—	1	10	0	—	0	—	0	—	0	—	0	5	13
	60	1	15	0	—	2	23	1	13	0	—	0	—	0	—	0	—	0	—	1	13	0	—	0	—	0	5	17
	50	0	—	0	—	3	8	1	16	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	4	10
	40	0	—	0	—	2	17	1	18	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	3	17
	30	0	—	0	—	1	32	0	—	1	5	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	18
	20	0	—	0	—	1	18	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	18
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	4	8	3	11	1	12	1	17	0	—	0	—	0	—	0	—	1	18	0	—	5	18	15	14	0	30	14
	1000	4	7	1	10	0	—	1	12	0	—	0	—	1	17	0	—	1	16	2	24	11	19	9	15	0	30	16
	850	3	9	0	—	0	—	0	—	0	—	0	—	0	—	1	21	2	22	8	20	11	19	5	16	0	30	18
	700	5	23	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	25	5	22	10	30	8	24	0	30	25
	600	1	14	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	27	9	31	8	20	7	25	0	28	26
	500	0	—	0	—	0	—	0	—	0	—	0	—	1	28	1	20	9	16	5	36	6	25	5	24	0	27	24
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	34	8	24	9	40	5	29	1	12	0	25	31
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	36	7	39	6	48	4	27	2	24	0	23	37
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	48	6	43	6	42	4	32	0	—	0	22	42
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	49	8	43	3	41	2	26	0	—	0	17	42
	150	0	—	0	—	0	—	0	—	0	—	0	—	1	24	2	40	10	35	0	—	0	—	0	—	0	13	35
	100	0	—	0	—	0	—	0	—	1	12	0	—	3	27	2	12	3	17	0	—	0	—	0	—	0	9	19
	70	0	—	0	—	2	18	2	10	0	—	0	—	1	3	0	—	0	—	0	—	0	—	0	—	0	5	12
	60	0	—	0	—	0	—	2	8	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	8
	50	0	—	0	—	0	—	2	15	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	15
	40	0	—	0	—	0	—	1	14	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	14
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the wind has been observed from the range of direction during the month.

TN = The total number of cases the wind has been observed for all directions during the month.

Table B 3 (*contd.*)- NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES

HELWAN — JUNE 1972

Time	Pressure Surface Millibar	Wind between specided ranges of direction (000–360)°																								Number of calm winds	Total number of observations (TN)	Mean scalar wind speed (knots)
		345 / 014		015 / 044		045 / 074		075 / 104		105 / 134		135 / 164		165 / 194		195 / 224		225 / 254		255 / 284		285 / 314		315 / 344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	5	7	13	9	2	20	2	4	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	5	3	30	6
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	4	13	9	16	2	12	0	—	0	—	0	—	0	—	0	—	0	—	2	16	6	16	7	16	0	30	15
	700	3	20	7	19	0	—	0	—	0	—	0	—	0	—	1	34	0	—	3	19	11	17	5	13	0	30	18
	600	5	18	3	18	0	—	0	—	0	—	0	—	0	—	0	—	1	38	10	26	7	20	4	15	0	30	20
	500	4	16	0	—	0	—	0	—	0	—	0	—	0	—	1	11	2	26	9	24	8	26	6	20	0	30	22
	400	1	29	0	—	0	—	0	—	0	—	0	—	0	—	1	16	7	26	9	32	5	30	6	17	0	29	26
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	8	40	13	38	6	30	2	24	0	29	36
	250	0	—	0	—	0	—	1	—	0	—	0	—	0	—	0	—	9	36	13	42	7	32	0	—	0	29	38
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	13	11	48	14	46	2	26	0	—	0	28	43
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	22	7	44	18	54	0	—	0	—	0	26	50
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	12	32	10	45	1	14	0	—	0	23	36
	70	0	—	0	—	0	—	1	36	0	—	1	17	2	12	2	18	2	40	3	25	0	—	0	—	0	11	24
	60	0	—	0	—	0	—	2	28	4	24	1	6	0	—	1	28	1	55	0	—	0	—	0	—	0	9	27
	50	0	—	0	—	1	16	3	19	1	23	1	14	2	16	0	—	1	45	0	—	0	—	0	—	0	9	21
	40	0	—	0	—	1	17	3	14	1	23	0	—	0	—	0	—	1	36	0	—	0	—	0	—	0	6	20
	30	0	—	0	—	0	—	1	25	3	24	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	4	25
	20	0	—	0	—	0	—	1	28	1	11	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	20
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	10	10	3	13	0	—	0	—	0	—	0	—	0	—	0	—	3	11	3	5	5	6	6	8	0	30	9
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	3	13	7	13	4	15	1	10	0	—	0	—	0	—	0	—	1	13	2	14	6	11	4	12	0	28	13
	700	3	9	6	22	1	24	0	—	0	—	0	—	0	—	0	—	1	22	5	19	4	16	6	18	0	26	18
	600	2	18	4	20	0	—	0	—	0	—	0	—	0	—	0	—	2	19	4	20	6	18	8	19	0	26	19
	500	3	20	1	16	0	—	0	—	0	—	0	—	0	—	0	—	1	18	9	22	5	28	4	20	0	23	22
	400	2	30	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	40	12	30	4	25	3	22	0	23	29
	300	0	—	0	—	0	—	1	—	0	—	0	—	0	—	0	—	6	34	9	39	7	34	1	16	0	23	35
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	38	12	44	5	24	1	26	0	23	38
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	24	3	36	15	41	3	57	0	—	0	22	42
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	37	3	34	13	46	1	45	0	—	0	20	43
	100	0	—	0	—	0	—	0	—	0	—	0	—	1	19	3	17	1	22	11	27	1	18	0	—	0	17	24
	70	0	—	0	—	0	—	1	18	4	18	2	7	2	34	0	—	1	24	4	20	1	13	0	—	0	15	19
	60	0	—	0	—	0	—	3	15	1	22	3	20	1	4	2	26	2	21	1	32	0	—	0	—	0	13	20
	50	0	—	0	—	0	—	2	12	3	11	3	16	1	33	0	—	3	27	0	—	0	—	0	—	0	12	18
	40	0	—	0	—	0	—	1	31	4	17	0	—	2	18	1	29	0	—	1	29	1	15	0	—	0	10	21
	30	0	—	0	—	0	—	1	14	6	22	1	19	0	—	0	—	0	—	0	—	0	—	0	—	0	8	21
	20	0	—	0	—	0	—	1	18	1	14	0	—	0	—	0	—	1	15	1	8	0	—	0	—	0	4	14
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the wind has been observed from the range of direction during the month.

TN = The total number of cases the wind has been observed for all directions during the month.

Table B 3 (*contd.*)—**NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES**

ASWAN (A) — JUNE 1972

Time	Pressure Surface Millibar	Wind between ranges of direction (000 - 360)°																								Number of calm winds	Total number of observations (TN)	Mean scalar wind speed (Knots)
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	21	13	2	8	2	10	0	—	0	—	1	7	0	—	0	—	0	—	0	—	0	—	4	12	0	30	12
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	9	13	7	15	3	7	2	12	0	—	1	15	0	—	0	—	0	—	2	8	2	12	4	15	0	30	13
	700	1	17	2	16	0	—	0	—	1	3	0	—	1	14	4	18	12	15	5	13	2	15	2	17	0	30	15
	600	2	14	0	—	1	4	0	—	0	—	0	—	1	47	6	17	12	16	3	14	4	16	1	10	0	30	16
	500	2	14	2	12	0	—	0	—	0	—	1	12	0	—	2	21	15	24	6	16	2	6	0	—	0	30	19
	400	1	7	0	—	1	15	2	6	1	5	2	6	0	—	5	20	13	34	4	26	0	—	1	13	0	30	24
	300	0	—	0	—	0	—	2	11	1	21	2	14	2	16	6	40	16	39	1	43	0	—	0	—	0	30	34
	250	0	—	0	—	0	—	0	—	2	10	3	12	2	10	4	48	18	53	1	45	0	—	0	—	0	30	42
	200	0	—	0	—	0	—	1	4	2	14	3	29	1	62	6	33	14	57	2	74	0	—	0	—	0	29	46
	150	0	—	0	—	0	—	2	23	2	26	1	23	3	33	6	46	12	54	1	64	0	—	0	—	0	27	43
	100	0	—	0	—	0	—	1	41	3	31	4	28	2	22	4	23	7	22	0	—	0	—	0	—	0	21	25
	70	0	—	0	—	3	14	7	16	2	19	2	8	1	13	0	—	0	—	0	—	0	—	0	—	0	15	15
	60	0	—	0	—	3	20	5	16	2	12	0	—	0	—	0	—	1	12	0	—	0	—	0	—	1	12	15
	50	0	—	2	17	2	17	6	23	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	10	20
	40	0	—	0	—	3	39	4	27	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	7	32
	30	0	—	0	—	0	—	3	34	1	28	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	4	33
	20	0	—	0	—	0	—	1	34	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	34
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	19	11	1	22	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	10	2	8	6	9	0	30	9
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	5	13	3	11	1	8	0	—	0	—	0	—	1	3	2	4	2	4	3	10	5	13	8	11	0	30	10
	700	2	18	1	9	0	—	0	—	0	—	1	5	2	18	8	15	10	20	3	14	1	22	0	—	0	28	17
	600	2	12	0	—	0	—	0	—	0	—	0	—	1	34	6	20	9	17	3	10	1	22	1	13	0	23	17
	500	0	—	1	6	0	—	0	—	0	—	0	—	0	—	9	18	6	20	4	17	1	8	2	5	0	23	17
	400	1	18	0	—	0	—	1	8	1	18	0	—	2	4	3	23	8	30	4	26	1	7	0	—	0	21	23
	300	0	—	0	—	0	—	0	—	2	15	1	14	1	22	3	29	10	50	3	37	0	—	0	—	0	20	38
	250	0	—	0	—	0	—	0	—	3	12	0	—	0	—	2	22	12	54	2	52	0	—	1	8	0	20	42
	200	0	—	0	—	0	—	2	13	2	16	0	—	1	26	0	—	11	54	4	70	0	—	0	—	0	20	48
	150	0	—	0	—	0	—	1	33	0	—	3	29	2	36	4	36	9	48	1	65	0	—	0	—	0	20	40
	100	0	—	1	16	1	16	0	—	4	33	3	21	3	17	4	20	2	32	0	—	1	16	0	—	0	19	23
	70	0	—	0	—	3	23	7	22	2	16	2	18	1	8	0	—	0	—	0	—	0	—	0	—	0	15	20
	60	0	—	1	18	2	24	3	22	7	22	1	10	0	—	0	—	0	—	0	—	0	—	0	—	0	14	21
	50	0	—	0	—	0	—	5	30	7	27	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	12	28
	40	0	—	1	27	2	20	3	20	2	32	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	8	27
	30	0	—	0	—	1	18	3	29	2	24	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	6	26
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the wind has been observed from the range of direction during the month.

TN = The total number of cases the wind has been observed for all directions during the month.

REVIEW OF AGRO-METEOROLOGICAL STATIONS

MERSA MATRUH — JUNE 1972

For the month as a whole the mean air temperature and relative humidity were about normal.

The month was intervened with two heat waves in the periods (4th-6th) and (13th-19th). The second heat wave was excessive yielding the highest maximum air temperature for the month (35.6°C) on the 18th. Apart from these two heat waves, mild summer weather was experienced.

The extreme maximum soil tmperatures were lower than the corresponding values of last June at depths between 2 and 10 cm. with departures between 1.9°C at 2 cm. and 0.6°C at 10 cm. At depths between 20 and 100 cm. the extreme soil maximà were higher than last June with departures between 0.4° and 1.0°C. The extreme minimum soil temperatures were lower than the corresponding values of last June at all depths apart from 5 cm. depth where the values were the same, the departures were slight and varied between 0.1° and 0.9°C.

The mean daily wind speed was lower than the corresponding value of June 1971 by 1.1 m./sec. The mean daily actual sunshine duration was higher by 0.5 hour than the corresponding value of June 1971.

TAHRIR — JUNE 1972

For the month as a whole mean daily air temperature and relative humidity were rather normal.

The month was characterized by two heat waves in the periods (5th—7th) and (14th—19th). The second heat wave was excessive and yielded the highest maximum air temperature for the month (41.1°C) on the 19th together with the lowest relative humidity (16%) and the highest daily pan evaporation (16.85 mm). Apart from these heat waves mild summer weather was experienced.

The extreme maximum soil temperatures were lower than the corresponding values of last June at 2 and 5 cm. depths by 0.8 and 1.2°C respectively,the same at 50 cm, and higher than last June at 10, 20 and 100 cm. depths by slight departures between 0.3° and 0.5°C. The extreme minimum soil temperatures were higher than the corresponding values of last June at all depths apart from 100 cm. depth where its value was lower by 0.3°C; the departures varied between 1.7°C (at 2 cm.) and 0.2°C (at 50 cm.).

The mean daily values of wind speed and pan evaporation were lower than average by 0.7 m./sec., and 2.77 mm. respectively. The mean daily actual sunshine duration was higher than average by 0.2 hour.

BAHTIM — JUNE 1972

For the month as a whole the mean daily air temperature and relative humidity were about average.

The month was characterized by a short heat wave on the 7th, and a pronounced heat wave in the period (15th—19th) yielding the highest maximum air temperature for the month (41.4°C) on the 19th together with the lowest relative humidity (13%). Apart from these heat waves the prevailing weather was generally of the mild summer type.

The extreme maximum soil temperatures were higher than the corresponding values of last June at depths between 2 and 20 cm. with departures between 1.4°C (at 5 cm.) and 0.5°C (at 20 cm.); and were lower than last June at 50 and 100 cm. depths by 0.1° and 0.4°C respectively. The extreme minimum soil temperatures were also higher than the corresponding values of last June at depths between 2 and 20 cm. and lower at 50 and 100 cm. depths; the depratures were slight and varied between 1.0° and 0.1°C.

The mean daily actual sunshine duration was higher than average by only 0.1 hour. The mean daily wind speed and pan evaporation were lower than average by 0.5 m./sec and 1.47 mm. respectively.

KHARGA — JUNE 1972

For the month as a whole the mean daily air temperature and relative humidity were about average.

The month was characterized by three heat waves in the periods (6th & 7th), (15th—21st) and (26th and 27th.) The second heat wave was the most excessive and yielded the highest maximum air temperature for the month (44.6°C) on the 19th together with the lowest relative humidity (5%). In the rest of the month mild summer weather was experienced.

The extreme maximum soil temperatures were lower than the corresponding values of last June at all depths with departures between 3.9°C (at 2 cm) and 0.2°C (at both 50 & 100 cm). The extreme minimum soil temperatures were higher than the corresponding values of last June at depths between 2 & 20 cm and lower at 50 & 100 cm depths; the departures were slight and varied between 0.1° & 0.6°C.

The mean daily actual sunshine duration was higher than average by only 0.1 hour. The mean daily wind speed and pan evaporation were lower than average by 0.2 m/sec and 1.91 mm. respectively.

Table C 1.—AIR TEMPERATURE AT 1½ METRES ABOVE GROUND

JUNE — 1972

STATION	Air Temperature (°C)					Mean Duration in hours of daily air temperature above the following values										
	Mean Max.	Mean Min.	Mean of the day	Night time mean	Day time mean	—5°C	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C
Mersa Matruh. . .	28.4	18.6	23.7	21.0	24.6	24.0	24.0	24.0	24.0	23.9	20.2	7.7	1.5	0.0	0.0	0.0
Tahrir	34.6	17.5	25.4	21.1	27.0	24.0	24.0	24.0	24.0	23.8	19.7	11.4	5.0	1.0	0.0	0.0
Bahtim	33.9	16.9	25.2	20.8	26.9	24.0	24.0	24.0	24.0	23.9	18.2	11.8	5.9	1.0	0.1	0.0
Kharga.	39.0	24.3	32.2	28.9	33.3	24.0	24.0	24.0	24.0	24.0	23.9	22.0	15.2	6.9	1.6	0.0

Table C 2.—EXTREME VALUES OF AIR TEMPERATURE AT 1½ METRES ABOVE GROUND, ABSOLUTE MINIMUM AIR TEMPERATURE AT 5cms ABOVE GROUND OVER DIFFERENT FIELDS.

JUNE— 1972

STATION	Max. Temp. at 1½ metres (°C)				Min. Temp. at 1½ metres (°C)				Min. Temp. at 5 cms. above (°C)			
	Highest		Lowest		Highest		Lowest		Dry soil		Grass	
	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date
Mersa Matruh . . .	35.6	18	24.7	2	22.4	26	13.3	3	8.3	1	—	—
Tahrir	41.1	19	29.9	1	21.8	27	13.3	6	12.2	6	—	—
Bahtim.	41.4	19	28.8	1	19.7	20	12.8	6	12.5	1	—	—
Kharga	44.6	19	33.6	9	28.9	28	17.2	10	15.0	10	—	—

Table C 3.—(SOLAR+SKY) RADIATION, DURATION OF BRIGHT SUNSHINE, RELATIVE HUMIDITY, VAPOUR PRESSURE AT 1½ METRES ABOVE GROUND, EVAPORATION & RAINFALL

JUNE — 1972

STATION	(Solar+Sky) Radiation gm. cal/cm²	Duration of Bright Sunshine (hours)			Relative Humidity				Vapour pressure (mms)						Evaporation (mms)		Rainfall (mms)		
		Total Actual monthly	Total Possible monthly	%	Mean of day	1200 U.T.	Lowest	Date	Mean of day	1200 U.T.	Highest	Date	Lowest	Date	Piche	Pan class (A)	Total Amount Monthly	Max. Fall in one day	Date
M.Matruh	619.0	366.9	425.5	86	72	58	26	16	15.5	15.5	21.2	25	9.3	16	7.0	—	0.0	0.0	—
Tahrir. .	561.4	373.4	422.3	88	60	33	16	19	13.8	12.2	20.0	17	10.0	12	7.7	10.18	0.[illegible]	0.6	—
Bahtim .	555.[illegible]	362.0	421.7	86	58	31	13	19	12.9	11.5	19.1	18	6.6	10	11.4	11.59	0.0	0.0	—
Kharga .	585.0	375.0	409.7	92	22	14	5	19	7.4	6.9	12.8	23	3.6	19	23.2	21.95	0.0	0.0	--

Table C 4.—EXTREME SOIL TEMPERATURE AT DIFFERENT DEPTHS (cms) IN DIFFERENT FIELDS

JUNE — 1972

STATION	Highest (H) Lowest (L)	Extreme soil temperature (°C) at different depths (cms.) in dry field.								Extreme soil temperature (°C) at different depths (cms.) in grass field.							
		2	5	10	20	50	100	200	300	2	5	10	20	50	100	200	300
Mersa Matruh	H	40.8	38.0	33.8	30.2	27.8	24.9	22.5	—	—	—	—	—	—	—	—	—
	L	22.0	21.0	21.0	23.3	24.0	22.0	20.8	—	—	—	—	—	—	—	—	—
Tahrir . . .	H	53.8	47.4	41.5	36.2	32.6	30.4	27.4	25.8	—	—	—	—	—	—	—	—
	L	27.0	26.0	25.8	27.5	28.2	27.2	24.9	24.1	—	—	—	—	—	—	—	—
Bahtim . . .	H	55.9	47.2	40.0	33.6	30.2	27.8	25.2	23.9	—	—	—	—	—	—	—	—
	L	28.5	26.4	26.0	28.4	27.3	25.5	23.8	23.3	—	—	—	—	—	—	—	—
Kharga . . .	H	55.3	49.2	42.5	37.2	34.4	31.7	29.0	28.0	—	—	—	—	—	—	—	—
	L	19.7	24.0	28.0	31.2	31.4	30.0	27.7	27.4	—	—	—	—	—	—	—	—

Table C 5.—SURFACE WIND

JUNE — 1972

STATION	Wind Speed m/sec at 1½ metres			Days with surface wind speed at 10 metres							Max. Gust (knots) at 10 metres	
	Mean of the day	Night time mean	Day time mean	≥10 knots	≥15 knots	≥20 knots	≥25 knots	≥30 knots	≥35 knots	≥40 knots	Value knots	Date
Mersa Matruh	3.9	2.7	5.1	30	24	12	7	0	0	0	31	6
Tahrir	1.8	1.3	2.3	30	14	1	0	0	0	0	26	7
Bahtim. . . .	2.3	1.4	3.3	28	17	0	0	0	0	0	26	14
Kharga . . .	4.9	3.9	5.8	30	29	16	3	0	0	0	34	15

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THE ARAB REPUBLIC OF EGYPT

MONTHLY WEATHER REPORT

VOLUME 15 NUMBER 7

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JULY, 1972

U.D.C. 551. 506.1 (62)

THE EGYPTIAN METEOROLOGICAL AUTHORITY
CAIRO

PUBLICATIONS OF THE METEOROLOGICAL AUTHORITY OF THE ARAB REPUBLIC OF EGYPT — CAIRO

In fulfilment of its duties, the Meteorological Authority of Egypt issues serveral reports and publications on weather, climate and agrometeoro logy. The principal publications are described on this page.

Orders for publications should be addressed to :

"Chairman of the Board of Directors, Meteorological Authority, Kubri-el-Qubbeh — CAIRO".

THE MONTHLY WEATHER REPORT

First issued in 1909, the Monthly Weather Report served to give a brief summary of the weather conditions that prevailed over Egypt during the month, with a table showing the mean values for few meteorological elements and their deviations from the normal values. From 1954 to 1957 this report was in a rapid state of development and extension resulting into a voluminous report on January 1958 giving surface, upper air, and agro-meteorological data for Egypt.

As from January 1964, the Monthly Weather Report was pressed to give climatological data for a representative selection of synoptic stations.

THE AGRO-METEOROLOGICAL ABRIDGED MONTHLY REPORT

Gives a review of weather experienced in the agro-meteorological stations of Egypt as well as monthly values of certain elements.

THE ANNUAL REPORT

This report gives annual values and statistics for the various meteorological elements, together with a summary of the weather conditions that prevailed during all months of the year.

CLIMATOLOGICAL NORMALS FOR EGYPT

A voluminous edition was issued in March 1968 which brings normals and mean values up till 1960.

METEOROLOGICAL RESEARCH BULLETIN

First issued in January 1969 on a bi-annual basis. It includes research works carried out by members of staff of "The Meteorological Institute for Research and Training" and the Operational Divisions of the Meteorological Authority.

TECHNICAL NOTES

As from October 1970, the Meteorological Authority started to issue a new series of publications in the form of Technical Notes (non periodical) on subjects related to studies and applications of meteorology in different fields for the benefit of personnel working in these fields.

THE ARAB REPUBLIC OF EGYPT

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THE EGYPTIAN METEOROLOGICAL AUTHORITY
CAIRO

CONTENTS

PAGE

General Summary of Weather Conditions 1,2

SURFACE DATA

Table A1.—Monthly values of the Atmospheric Pressure, Air Temperature, Relative Humidity, Bright Sunshine, Duration and Piche Evaporation 3

,, A2.—Maximum and Minimum Air Temperatures 4

,, A3.—Sky Cover and Rainfall 5

,, A4.—Number of Days of Occurrence of Miscellaneous Weather Phenomena 6

,, A5.—Number in Hours of Occurrences of Concurrent Surface Wind Speed and Direction Recorded Within Specified Ranges 7,8

UPPER AIR DATA

Table B1.—Monthly Means and Monthly Absolute Higher & Lower Values of Altitude, Air Temperature & Dew point at Standard and Selected Pressure Surfaces. 9-10

,, B2.—Mean and Extreme values of The Freezing Level and The Tropopause; The Highest Wind Speed in The Upper Air 11

,, B3.—Number of Occurrences of Wind Direction within Specified Ranges and The Mean Scalar Wind Speed at the Standard and Selected Pressure Surfaces. 12-14

AGRO-METEOROLOGICAL DATA

Reviews of Agro meteorological Stations 15,16

Table C1.—Air Temperature at 1½ metres above Gorund 17

,, C2.—Extreme Values of Air Temperature at 1½ metres above Ground, Absolute Minimum Air Temperature at 5 cms above Ground over Different Fields 17

,, C3.—(Solar + Sky) Radiation, Duration of Bright Sunshine, Relative Humidity and Vapour Pressure at 1½ metres above Ground, Evaporation and Rainfall . . . 17

,, C4.—Extreme Soil Temperature at Different Depths in Different Fields 18

,, C5.—Surface wind 18

Note : For explanatory notes on the tables please refer to Volume 15, Number 1 (January 1972).

GENERAL SUMMARY OF WEATHER CONDITIONS

JULY 1972

Generally mild and humid in the north, excessively hot and dry in the extreme south.

GENERAL DESCRIPTION OF WEATHER

The prevailing weather this month was mild and humid in the northern parts, hot and humid in the middle parts, excessively hot and dry in the southern parts. The month was intervened with four short and light heat waves mainly pronounced in Upper Egypt area, with their peaks round the 3rd, 9th, 13th and 29th.

Early morning low clouds developed frequently over the northern parts, with several days of mist over Delta, Canal, Cairo and north of Upper Egypt.

Light rising sand was reported during few days in few scattered localities in Upper Egypt, Western Desert and Red Sea districts.

PRESSURE DISTRIBUTION

The major pressure patterns over the surface charts during this month were :

— The Atlantic anticyclone and its extensions over West Europe and West Mediterranean.

— Travelling depressions or troughs through Italy & the Balkans.

— A ridge of high pressure over Central Mediterranean and Libya.

— The monsoon low pressure system over Iraq, Arabia & Sudan.

The 700 and 500 mb upper air charts depict the important pressure patterns :

— Deep Upper low pressure systems over North Atlantic and North Russia.

— Transits of three upper troughs through East Mediterranean round the 5th, 11th, & 30th.

— Subtropical high pressure belt south of latitude 30°N.

It is worth to mention that the Iraq monsoon trough experienced five elongations through East Mediterranean & Asia Minor during this month.

These elongations associated the approach and transits of low pressure troughs or secondary depressions through the Black Sea and its vicinities round the 4th, 9th, 13th, 22nd and 29th.

The barometric pressure over Egypt was influenced alternatively by the westward elongations of the Iraq monsoon trough and eastward extension of high pressure over Central Mediterranean. It accordingly experienced five oscillations with its minima round the 4th, 9th, 14th, 23rd and 29th.

SURFACE WIND

Surface winds during the month were generally light to moderate and blew mostly from the N and NW directions, and less frequently from N/NE directions in few scattered localities.

Winds became fresh to strong during some days in scattered places in the Western Desert and Red Sea districts. On the other hand, calm winds were frequent in scattered places in the late evening and early morning intervals.

TEMPERATURE

Maximum and minimum air temperatures oscillated slightly round normal in general.

Maximum air temperatures varied most of the month between 28° & 32°C in the northern parts, between 32° & 38°C in the middle parts and between 39° & 43°C in the southern parts.

The absolute maximum air temperature for Egypt in this month was 44.6°C reported at Luxor on the 4th.

Minimum air temperatures varied generally between 19° & 24°C in the northern and middle parts, and between 22° & 27°C in the southern parts.

The absolute minimum air temperature for Egypt in this month was 15.8°C reported at Shebin-el-Kom on the 20th.

PRECIPITATION

This month was rainless - as usual - all over the country.

Cairo, July 1973

Chairman (M. F. TAHA)
Board of Directors.

Table A 1.—MONTHLY VALUES OF THE ATMOSPHERIC PRESSURE, AIR TEMPERATURE, RELATIVE HUMIDITY, BRIGHT SUNSHINE DURATION & PICHE EVAPORATION

JULY — 1972

STATION	Atmospheric Pressure (mbs) M.S.L.		Air Temperature °C									Relative Humidity %		Bright Sunshine Duration (Hours)			Piche Evaporation mms
			Maximum		Minimum			Dry Bulb		Wet Bulb							
	Mean	D.F. Normal or Average	(A) Mean	D.F. Normal or Average	(B) Mean	D.F. Normal or Average	$\frac{A+B}{2}$	Mean	D.F. Normal or Average	Mean	D.F. Normal or Average	Mean	D.F. Normal or Average	Total Actual	Total Possible	%	Mean
Sallum.	1011.5	+1.2	29.2	—1.7	22.0	+0.7	25.6	25.8	—0.3	21.0	—0.4	63	—1	—	—	—	7.3
Mersa Matruh (A)	1011.3	+1.5	28.7	—0.5	20.9	+0.6	24.8	25.0	0.0	21.6	+0.1	73	00	372.8	433.7	86	6.5
Alexandria . (A)	1010.8	+2.3	29.5	—0.2	22.3	—0.3	25.9	25.7	—0.3	22.0	—0.5	71	—2	374.1	432.1	86	5.8
Port Said.. . (A)	1008.8	+1.3	30.5	+0.1	22.1	—1.3	26.6	26.1	—0.6	22.1	—1.0	69	—3	376.5	432.1	87	5.4
El Arish.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta.	1010.2	+2.1	31.6	—2.8	19.3	0.0	25.4	25.2	—1.3	21.2	—0.2	69	+7	378.8	430.8	88	4.3
Cairo . . . . (A)	1009.8	+1.8	33.3	—1.9	21.6	+0.1	27.4	27.0	—0.9	21.3	0.0	58	+5	—	—	—	12.7
Fayoum.	—	—	36.5	—0.2	20.7	—0.8	28.6	28.2	—0.7	20.9	+0.1	49	+4	—	—	—	9.1
Minya. . . . (A)	1008.6	+1.7	36.0	—0.7	20.2	—0.1	28.1	28.2	—0.3	20.5	+0.2	46	+1	390.6	425.0	92	17.6
Assyout. . . (A)	1007.4	+0.6	36.3	—0.5	21.9	—0.4	29.1	29.3	—0.5	19.8	+0.4	38	+4	—	—	—	19.4
Luxor. . . . (A)	1006.1	+1.3	40.7	+0.2	22.0	—1.6	31.4	31.9	—0.9	20.2	+0.3	30	+5	—	—	—	13.1
Aswan. . . . (A)	1006.2	+1.5	41.0	—0.1	25.2	+0.5	33.1	33.4	—0.2	18.4	+0.3	17	+2	—	—	—	28.3
Siwa.	1010.8	+1.1	37.8	—0.1	21.8	+1.1	29.8	30.0	+0.3	20.3	+0.9	37	+3	391.9	427.7	91	14.1
Bahariya.	1009.9	+1.9	35.9	—1.0	21.4	+0.9	28.6	29.2	—0.2	19.2	—0.2	34	—2	—	—	—	13.9
Farafra.	1010.2	+0.8	38.4	+1.2	22.2	+0.9	30.3	30.4	+0.6	19.0	—1.4	29	+5	—	—	—	17.2
Dakhla	1008.9	+2.1	38.4	—0.1	22.4	—0.5	30.4	31.0	0.0	17.8	—0.1	21	0	—	—	—	23.3
Kharga	1007.9	+1.5	39.4	0.0	24.6	+1.4	32.0	32.4	+0.8	18.3	—0.4	24	—2	384.3	418.9	92	20.7
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada . . .	1006.1	+1.6	33.0	+0.1	25.4	+0.5	29.2	29.6	0.0	21.4	—0.3	45	—2	(385.6)	(408.8)	(94)	14.6
Quseir	1005.7	+0.8	31.7	—1.5	25.8	—0.5	28.8	29.0	—0.9	21.7	—0.5	50	+2	—	—	—	12.4

Note = Actual number of sunshine records at Hurghada was 30 days only.

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CONTENTS

PAGE

Foreword 1, 2

Introduction and Explanation of the Tables 3-12

List of Stations Appearing in the Report 13

General Summary of Weather Conditions 14-15

SURFACE DATA

Table A1.—Monthly values of the Atmospheric Pressure, Air Temperature, Relative Humidity, Bright Sunshine Duration and Piche Evaporation 16

„ A2.—Maximum and Minimum Air Temperatures 17

„ A3.—Sky Cover and Rainfall 18

„ A4.—Number of Days of Occurrence of Miscellaneous Weather Phenomena . . 19

„ A5.—Number in Hours of Occurrences of Concurrent Surface Wind Speed and Direction Recorded Within Specified Ranges 20, 21

UPPER AIR DATA

Table B1.—Monthly Means and Monthly Absolute Higher & Lower Values of Altitude, air Temperature & Dew point at Standard and Selected Pressure Surface 22, 23

„ B2.—Mean and Extreme values of The Freezing Level and The Tropopause; The Highest Wind Speed in The Upper Air 24

„ B3.—Number of Occurrences of Wind Direction Within Specified Ranges and The Mean Scalar Wind Speed at the Standard and Selected Pressure Surfaces . . 25-27

AGRO-METEOROLOGICAL DATA

Reviews of Agro-meteorological stations 28, 29

Table C1.—Air Temperature at 1½ Metres Above Ground 30

„ C2.—Absolute Values of Air Temperature at 1½ Metres Above Ground, Absolute Minimum Air Temperature at 5 Cms Above Ground Over Different Fields . . 30

„ C3.—(Solar + Sky) Radiation, Duration of Bright Sunshine, Relative Humidity and Vapour Pressure at 1½ Metres Above Ground, Evaporation and Rainfall . . . 30

„ C4.—Extreme Soil Temperature at Different Depths in Different Fields. 31

„ C5.—Surface wind 31

Table A 2.—MAXIMUM AND MINIMUM AIR TEMPERATURES

JULY — 1972

Station	Maximum Temperature °C									Grass Min. Temp.		Minimum Temperature °C							
	Highest	Date	Lowest	Date	No. of Days with Max-Temp.					Mean	Dev. From Normal	Highest	Date	Lowest	Date	No. of Days with Min. Temp.			
					>25	>30	>35	>40	>45							<10	<5	<0	<-5
Sallum	36.4	9	27.2	20	31	11	1	0	0	21.2	—	23.7	9	20.4	12	0	0	0	0
Mersa Matruh (A)	39.8	9	27.7	6	31	1	0	0	0	19.5	—	23.5	27	16.2	12	0	0	0	0
Alexandria (A)	33.0	3	28.5	9	31	5	0	0	0	20.9	—	25.0	31	19.2	20	0	0	0	0
Port said (A)	32.7	3	29.2	21	31	22	0	0	0	22.4	—	24.8	30	23.7	19	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	35.2	3	29.8	6	31	29	1	0	0	—	—	21.6	28	17.5	7	0	0	0	0
Cairo (A)	3[illegible].0	3	30.8	18	31	31	3	0	0	—	—	23.4	28	20.4	11	0	0	0	0
Fayouu	40.0	3	33.9	6	31	31	26	0	0	15.9	—	22.4	29	18.5	6	0	0	0	0
Minya (A)	40.5	9	33.8	7	31	31	23	1	0	18.8	—	22.3	10	18.0	8	0	0	0	0
Assyout (A)	39.3	4	33.5	7	31	31	22	0	0	19.3	—	25.0	4	18.2	8	0	0	0	0
Luxor (A)	44.6	4	38.2	7	31	31	31	18	0	16.7	—	26.0	17	20.4	7,9	0	0	0	0
Aswan (A)	43.0	4,22,24	39.4	8	31	31	31	24	0	—	—	28.9	5	23.6	8	0	0	0	0
Siwa	43.7	3	35.3	6	31	31	29	6	0	20.6	—	24.4	14	19.2	7,8	0	0	0	0
Bahariya	40.4	3	33.6	7	31	31	26	1	0	20.6	—	24.7	16	19.0	7	0	0	0	0
Farafra	43.0	3	34.8	10	31	31	30	6	0	21.8	—	25.7	17	20.0	20	0	0	0	0
Dakhla	43.0	16	34.4	7	31	31	30	8	0	22.2	—	25.1	18	17.8	9	0	0	0	0
Kharga	44.0	4	35.8	7	31	31	31	8	0	22.9	—	29.2	17	20.0	9	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	36.6	4	31.1	8	31	31	4	0	0	—	—	27.1	15,25	23.7	31	0	0	0	0
Qusier	35.5	4	29.7	8	31	29	1	0	0	23.1	—	27.5	21	23.7	8	0	0	0	0

Table A 3.—SKY COVER AND RAINFALL

JULY — 1972

Station	Mean Sky Cover Oct.					Rainfall mms.										
	00 U.T.	06 U.T.	12 U.T.	18 U.T.	Daily Mean	Total Amount	D. From Normal	Max. Fall in one day		Number of Days with Amount of Rain						
								Amount	Date	<0.1	≥0.1	≥1.0	≥5.0	≥10	≥25	≥50
Sallum	1.1	0.8	1.7	0.4	0.9	0.0	—Trace	0.0	—	0	0	0	0	0	0	0
Mersa Matruh (A)	1.6	3.5	1.7	2.4	2.2	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Alexandria (A)	3.6	3.2	2.6	2.7	2.9	0.0	—Trace	0.0	—	0	0	0	0	0	0	0
Port Said (A)	1.3	2.0	0.3	0.5	1.0	0.0	0.0	0.0	—	0	0	0	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	0.2	2.4	1.7	0.0	0.9	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Cairo (A)	0.2	3.1	0.5	0.3	1.0	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Fayoum	—	0.9	0.0	0.0	—	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Minya (A)	0.0	0.4	0.0	0.3	0.1	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Assyout (A)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Luxor (A)	0.4	0.5	0.7	0.7	0.6	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Aswan (A)	0.4	0.7	0.9	1.0	0.7	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Siwa	0.0	0.0	0.0	0.0	0.0	0.0	—Trace	0.0	—	0	0	0	0	0	0	0
Bahariya	0.0	0.3	0.0	0.1	0.1	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Farafra	—	0.1	0.2	0.3	—	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Dakhla	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Kharga	0.0	0.4	0.4	0.2	0.3	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0.2	0.4	0.5	0.8	0.5	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Qusein	0.1	0.6	0.5	0.4	0.4	0.0	0.0	0.0	—	0	0	0	0	0	0	0

Table A 4.—DAYS OF OCCURRENCE OF MISCELLANEOUS WEATHER PHENOMENA

JULY — 1972

Station	Precipitation				Frost	Thunderstorm	Mist Vis ≥ 1000 metres	Fog Vis <1000 Metres	Haze Vis ≥1000 Metres	Thick Haze Vis <1000 Metres	Dust or Sandrising Vis ≥1000 Metres	Dust or Sandstorm Vis <1000 Metres	Gale	Clear Sky	Cloudy Sky
	Rain	Snow	Ice. Pellets	Hail											
Sallum	0	0	0	0	0	0	0	0	0	0	0	0	0	27	0
Mersa Matruh (A)	0	0	0	0	0	0	2	0	2	0	5	0	0	17	0
Alexandria . (A)	0	0	0	0	0	0	0	1	0	0	0	0	0	10	1
Port Said . (A)	0	0	0	0	0	0	0	0	0	0	0	0	0	29	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	0	0	0	0	0	0	11	0	1	0	0	0	0	28	0
Cairo . . . . (A)	0	0	0	0	0	0	22	0	11	0	0	0	0	28	0
Fayoum	0	0	0	0	0	0	0	0	0	0	0	0	0	—	—
Minya . . . . (A)	0	0	0	0	0	0	7	0	6	0	1	0	0	31	0
Assyout. . . . (A)	0	0	0	0	0	0	0	0	0	0	1	0	0	31	0
Luxor . . . . (A)	0	0	0	0	0	0	0	0	5	0	2	0	0	31	0
Aswan . . . . (A)	0	0	0	0	0	0	0	0	0	0	12	0	0	25	0
Siwa	0	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Bahariya	0	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Farafra	0	0	0	0	0	0	0	0	0	0	0	0	0	—	—
Dakhla	0	0	0	0	0	0	0	0	0	0	1	0	0	31	0
Kharga	0	0	0	0	0	0	0	0	0	0	3	0	0	30	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0	0	0	0	0	0	0	0	0	0	11	0	0	26	0
Qusier	0	0	0	0	0	0	0	1	0	0	0	0	0	29	0

Table A 5. —NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES

JULY — 1972

Station	Calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurrences of wind blowing from the ranges of directions indicated												
					345/014	015/044	045/074	075/104	105/134	135/164	165/194	195/224	225/254	255/284	285/314	315/344	All directions
Sallum	10	0	12	1—10	48	86	80	46	15	0	1	1	3	27	59	150	516
				11—27	5	27	17	0	0	0	0	0	0	2	16	129	206
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**53**	**123**	**97**	**46**	**15**	**0**	**1**	**1**	**3**	**29**	**75**	**279**	**722**
Mesra Matruh	75	0	0	1—10	40	13	2	4	1	3	3	10	25	60	41	102	305
				11—27	19	1	0	0	0	0	0	0	0	10	110	223	363
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**59**	**14**	**2**	**4**	**1**	**3**	**3**	**10**	**25**	**70**	**151**	**327**	**669**
Alexandria	5	0	75	1—10	34	17	2	3	1	7	5	10	4	8	100	197	392
				11—27	12	1	0	0	0	0	0	0	0	4	139	116	272
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**46**	**18**	**2**	**3**	**1**	**7**	**5**	**10**	**4**	**12**	**239**	**313**	**664**
Tanta	45	0	17	1—10	110	41	14	5	1	2	1	15	56	61	153	133	592
				11—27	35	3	0	0	0	0	0	0	0	0	4	48	90
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**145**	**44**	**14**	**5**	**1**	**2**	**1**	**15**	**56**	**61**	**157**	**181**	**682**
Cairo	59	0	58	1—10	116	94	43	9	2	0	0	0	4	30	66	131	495
				11—27	59	22	2	0	0	0	0	0	0	0	9	40	132
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**175**	**116**	**45**	**9**	**2**	**0**	**0**	**0**	**4**	**30**	**75**	**171**	**627**
Fayoum	3	0	0	1—10	348	318	8	4	1	1	1	1	2	1	5	46	736
				11—27	0	5	0	0	0	0	0	0	0	0	0	0	5
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**348**	**323**	**8**	**4**	**1**	**1**	**1**	**1**	**2**	**1**	**5**	**46**	**741**
Minya	1	0	0	1—10	368	161	3	0	1	2	10	3	2	4	7	23	584
				11—27	122	37	0	0	0	0	0	0	0	0	0	0	159
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**490**	**198**	**3**	**0**	**1**	**2**	**10**	**3**	**2**	**4**	**7**	**23**	**743**
Asyout (A)	24	0	5	1—10	77	43	4	1	2	1	4	3	2	53	171	192	559
				11—27	58	21	0	0	0	0	0	0	0	0	9	68	156
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**135**	**64**	**4**	**1**	**2**	**1**	**4**	**3**	**2**	**56**	**183**	**260**	**715**

Table A 5 (*cont l.*) **NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES**

JULY - - 1972

Station	Calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurrences of wind blowing from the ranges of directions indicated												
					345 / 014	015 / 044	045 / 074	075 / 104	105 / 134	135 / 164	165 / 194	195 / 224	225 / 254	255 / 284	285 / 314	315 / 344	All directions
Luxor . . . . . (A)	38	0	0	1—10	42	16	4	5	8	16	99	59	46	110	186	108	699
				11—27	2	0	0	0	0	0	0	0	0	0	3	2	7
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**44**	**16**	**4**	**5**	**8**	**16**	**99**	**59**	**46**	**110**	**189**	**110**	**706**
Aswan . . . . . (A)	36	0	0	1—10	82	52	14	0	5	2	3	4	12	15	36	116	341
				11—27	50	39	1	0	0	2	1	2	2	15	79	176	367
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**132**	**91**	**15**	**0**	**5**	**4**	**4**	**6**	**14**	**30**	**115**	**292**	**708**
Siwa	10	14	6	1—10	85	120	71	70	34	10	6	4	6	20	59	119	604
				11—27	12	38	2	1	0	0	0	0	1	5	24	27	110
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**97**	**158**	**73**	**71**	**34**	**10**	**6**	**4**	**7**	**25**	**83**	**146**	**714**
Dakhle	0	9	0	1—10	109	53	1	19	15	14	21	12	26	55	86	232	643
				11—27	41	5	0	0	0	0	0	0	0	0	2	44	92
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**150**	**58**	**1**	**19**	**15**	**14**	**21**	**12**	**26**	**55**	**88**	**276**	**735**
Kharga	0	7	0	1—10	258	40	8	2	6	5	1	3	2	10	38	160	533
				11—27	167	10	0	0	0	0	0	0	0	0	2	25	204
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**425**	**50**	**8**	**2**	**6**	**5**	**1**	**3**	**2**	**10**	**40**	**185**	**737**
Hurghada	9	0	0	1—10	42	23	5	3	10	8	3	0	0	13	72	45	224
				11—27	131	9	0	0	0	0	0	0	0	2	127	242	511
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**173**	**32**	**5**	**3**	**10**	**8**	**3**	**0**	**0**	**15**	**199**	**287**	**735**
Quseir	16	0	0	1—10	230	73	10	2	7	5	8	5	8	18	59	176	601
				11—27	107	4	0	0	0	0	0	0	0	0	0	16	127
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**337**	**77**	**10**	**2**	**7**	**5**	**8**	**5**	**8**	**18**	**59**	**192**	**728**

UPPER AIR CLIMATOLOGICAL DATA

Table B 1.—MONTHLY MEANS AND MONTHLY ABSOLUTE HIGHER & LOWER VALEUS OF ALTITUDE, AIR TEMBERATURE & DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

JULY — 1972

Station	Pressure Surface (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Mersa Matruh 0000 T.U.	Surface	31	*1010mb.	*1013mb.	*1007mb.	31	23.2	25.5	21.2	31	18.1
	1000	31	119	139	89	31	23.0	27.8	20.2	31	18.8
	850	31	1527	1572	1492	31	18.6	25.6	12.2	31	— 1.4
	700	31	3165	3231	3118	31	10.1	13.0	4.5	30	—10.8
	600	30	4431	4504	4365	30	3.2	8.2	— 1.9	30	—18.8
	500	30	5883	5968	5791	30	— 6.3	— 2.1	—12.8	30	—26.7
	400	30	7795	7681	7461	30	—17.3	—11.3	—24.5	29	—36.1
	300	29	9700	9812	9501	29	—29.8	—27.2	—37.4	28	—46.8
	250	28	10979	11092	10752	28	—38.4	—35.8	—43.0	28	—54.9
	200	28	12478	12599	12366	28	—49.7	—46.9	—59.0	25	—62.8
	150	27	14311	14439	14105	27	—61.0	—57.1	—66.1	6	—70.6
	100	26	16774	16889	16615	26	—71.6	—65.8	—77.4	—	—
	70	25	18875	18960	18097	25	—68.8	—63.9	—75.5	—	—
	60	22	19854	19965	19670	22	—64.1	—61.5	—68.0	—	—
	50	22	20932	21059	20752	22	—60.3	—57.0	—65.3	—	—
	40	16	22400	22540	22180	16	—57.3	—53.0	—67.8	—	—
	30	14	24170	24296	23992	14	—53.6	—47.2	—57.1	—	—
	20	26	26779	26916	26632	8	—48.6	—46.5	—50.4	—	—
	10	—	—	—	—	—	—	—	—	—	—
Helwan 0000 U.T.	Surface	31	*994mb.	*996mb.	*988mb.	31	23.2	28.6	21.1	31	18.3
	1000	—	—	—	—	—	—	—	—	—	—
	850	31	1494	1513	1472	30	18.6	22.9	15.2	30	5.5
	700	31	3143	3171	3106	31	11.6	15.8	6.8	31	— 5.9
	600	31	4416	4452	4367	31	4.7	9.1	— 0.2	31	—12.9
	500	30	5877	5926	5797	30	— 4.7	— 0.2	—13.5	30	—20.9
	400	30	7602	7662	7478	30	—14.9	—10.9	—20.5	30	—29.5
	300	30	9724	9802	9587	30	—28.5	—25.9	—30.6	30	—41.0
	250	30	11007	11098	10871	30	—38.0	—35.0	—41.0	30	—48.0
	200	29	12510	12614	12379	29	—49.1	—47.1	—51.4	28	—59.1
	150	29	14348	14468	14224	29	—61.5	—58.9	—65.3	6	—67.4
	100	29	16784	16921	16684	29	—73.5	—69.0	—76.0	—	—
	70	27	18878	19005	18778	27	—71.1	—64.5	—82.0	—	—
	60	23	19867	20070	19720	23	—65.0	—57.7	—68.1	—	—
	50	23	20933	21035	20805	23	—57.8	—53.4	—64.3	—	—
	40	17	22412	22540	22272	17	—56.9	—47.6	—59.7	—	—
	30	16	24177	24343	23976	16	—53.7	—45.9	—58.7	—	—
	20	11	26808	26927	26569	11	—49.2	—47.0	—53.9	—	—
	10	1	31513	—	—	1	—40.0	—	—	—	—
Aswan 0000 U.T.	Surace	31	*985mb.	*987mb.	*982mb.	31	27.8	31.5	24.0	31	6.0
	1000	31	63	80	32	—	—	—	—	—	—
	850	31	1501	1517	1480	31	24.0	27.0	21.0	31	0.9
	700	31	3162	3199	3129	21	12.2	16.0	9.4	31	— 9.5
	600	31	4437	4486	4403	31	4.6	8.1	— 0.8	31	—16.7
	500	31	5903	5946	5861	31	— 3.2	— 0.7	— 5.7	31	—24.3
	400	31	7636	7677	7592	31	—14.2	—10.2	—17.8	31	—33.7
	300	31	9761	9805	9698	31	—28.9	—26.2	—31.6	31	—45.0
	250	30	11039	11095	10962	30	—38.0	—35.5	—42.0	30	—52.6
	200	30	12539	12605	12444	30	—49.9	—45.1	—53.1	30	—62.2
	150	30	143 7	14453	14256	30	—63.2	—56.1	—66.2	1	—67.3
	100	29	16777	16941	16646	29	—76.0	—71.2	—78.7	—	—
	70	25	18833	18966	18716	25	—71.6	—62.1	—87.8	—	—
	50	20	19820	19940	19700	20	—65.7	—62.2	—68.9	—	—
	50	20	20889	21016	20756	20	—62.4	—58.2	—69.1	—	—
	40	18	22395	22520	22280	18	—57.4	—51.2	—60.6	—	—
	30	18	24132	24268	23966	18	—53.5	—49.5	—57.0	—	—
	20	17	26780	26923	26629	17	—49.7	—45.9	—54.1	—	—
	10	—	—	—	—	—	—	—	—	—	—

N = The number of cases the element has been observes during the month.

* The atmospheric pressure corrected to the elevation of the radiosonde station.

UPPER AIR CLIMATOLOGICAL DATA

Table B 1 (*contd.*) -**MONTHLY MERNS AND MONTHLY ABSOLUTE HIGHER & LOWER VALEUS OF ALTITUDE, AIR TEMPERATURE & DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES**

JULY — 1972

Station	Pressure Surface (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Mersa Matruh 12000 U.T.	Surface	30	*1011mb.	*1014mb.	*1007mb.	30	27.1	28.8	24.9	30	18.8
	1000	30	122	149	89	30	25.4	28.4	22.1	30	17.4
	850	30	1535	1562	1505	30	18.0	22.8	14.2	30	3.6
	700	30	3168	3210	3136	30	9.5	13.3	4.0	30	— 6.7
	600	30	4432	4476	4356	30	2.6	6.7	— 4.0	30	—14.9
	500	30	5881	5951	5773	30	— 6.9	—0.2	—12.9	30	—23.4
	400	29	7587	7696	7435	29	—17.7	—12.0	—26.0	29	—33.4
	300	29	9687	9816	9476	29	—30.6	—27.2	—38.5	29	—43.9
	250	28	10959	11096	10726	28	—39.1	—36.7	—43.1	26	—51.9
	200	25	12449	12596	12124	25	—49.1	—45.7	—52.6	25	—60.1
	150	25	14289	14416	14089	25	—60.7	—55.0	—64.1	9	—67.6
	100	25	16715	16853	16555	24	—72.4	—67.8	—76.9	—	—
	70	23	18879	18983	18663	23	—66.9	—61.5	—70.2	—	—
	60	19	19859	19980	19630	19	—62.3	—58.2	—67.4	—	—
	50	19	20927	21053	20793	19	—58.9	—52.9	—63.9	—	—
	40	16	22440	22570	222 0	16	—55.1	—52.0	—59.5	—	—
	30	15	24218	24333	24109	15	—52.4	—49.5	—55.5	—	—
	20	11	26889	26990	26741	11	—46.8	—43.0	—49.1	—	—
	10	—	—	—	—	—	—	—	—	—	—
Helwan 12000 U.T.	Surface	31	*993mb.	*996mb.	*990mb.	31	32.0	39.0	29.3	31	14.0
	1000	—	—	—	—	—	—	—	—	—	—
	850	31	1512	1534	1482	31	20.2	26.0	16.0	31	3.4
	700	30	3164	3192	3121	30	12.3	15.8	6.9	30	—10.7
	600	30	4439	4479	4396	30	5.2	9.0	2.0	30	—17.5
	500	27	5909	5965	5840	27	— 3.1	0.8	—9.6	27	—23.9
	400	26	7642	7707	7533	26	—12.8	— 9.5	—18.0	24	—32.2
	300	24	9780	9842	9612	24	—26.9	—24.4	—29.1	24	—43.8
	250	23	11069	11136	10933	23	—36.6	—34.0	—39.9	23	—51.6
	200	22	12577	12644	12444	22	—47.7	—45.0	—50.4	21	—60.8
	150	20	14431	14527	14335	20	—60.0	—55.0	—62.9	10	—69.6
	100	19	16879	17017	16788	19	—72.5	—69.6	—76.7	—	—
	70	17	18968	19143	18869	17	—69.1	—62.7	—75.3	—	—
	60	13	19985	20140	19870	13	—62.1	—59.4	—65.9	—	—
	50	13	21054	21235	20944	13	—57.3	—55.7	—59.9	—	—
	40	11	22538	22750	22160	11	—54.0	—51.7	—57.1	—	—
	30	10	24342	24532	24222	10	—49.3	—45.9	—54.1	—	—
	20	6	27091	27245	27033	6	—43.5	—42.3	—44.5	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 12000 U.T.	Surface	31	*985mb.	*987mb.	*983mb.	31	39.1	43.0	36.4	31	7.3
	1000	31	55	74	32	—	—	—	—	—	—
	850	31	1513	1542	1491	31	25.2	29.5	22.7	31	—1.9
	700	30	3176	3215	3143	29	12.7	17.2	9.5	29	—11.8
	600	30	4451	4506	4417	29	5.3	8.2	1.8	29	—19.6
	500	30	5919	5972	5850	30	— 2.8	0.9	—5.4	30	—26.0
	400	30	7654	7729	7580	30	—13.8	—10.8	—16.4	30	—34.0
	300	30	9783	9831	9710	30	—27.8	—24.9	—30.0	30	—46.3
	250	30	11069	11172	10992	30	—37.5	—34.7	—39.8	30	—54.0
	200	30	12574	12682	12494	30	—49.1	—46.0	—51.8	30	—63.7
	150	30	14413	14510	14324	30	—62.1	—59.5	—64.0	1	—72.0
	100	30	16838	16966	16756	30	—75.1	—60.9	—78.4	—	—
	70	30	18914	19066	18809	30	—70.7	—66.7	—79.5	—	—
	60	28	19883	20040	19780	28	—65.2	—61.5	—68.8	—	—
	50	28	20965	21118	20833	28	—60.0	—54.1	—62.7	—	—
	40	22	22472	22670	22368	22	—54.7	—50.8	—57.5	—	—
	30	21	24117	24447	24085	21	—50.2	—46.5	—54.9	—	—
	20	11	26891	27140	26762	11	—44.8	—38.1	—47.6	—	—
	10	—	—	—	—	—	—	—	—	—	—

N = The number of cases the element has been observed during the month.

* The atmospheric pressure corrected to the elevation of radiosonde station.

Table B2 - MEAN AND EXTREME VALUES OF THE FREEZING LEVEL AND THE TROPOPAUSE; THE HIGHEST WIND SPEED IN THE UPPER AIR

JULY — 1972

	Station	Freezing level									First Tropopause									Highest wind speed			
		Mean			Highest			Lowest			Mean			Highest			Lowest						
		Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Direction (000—360)°	Speed in Knots
		(N)	(N)	(N)							(N)	(N)	(N)										
0000 U.T.	M. Matruh (A)	5061 (30)	567 (30)	-21.4 (30)	5620	521	-11.8	4070	622	-22.7	16954 (22)	97 (22)	-74.1 (22)	19890	84	-77.0	15160	130	-68.5	12346	204	200	90
	Helwan . . .	5166 (30)	548 (30)	-16.6 (30)	5870	502	-24.3	4280	608	-9.1	16873 (25)	99 (25)	-75.4 (25)	18240	78	-81.5	15140	111	-70.3	18410	76	195	97
	Aswan . . (A)	5260 (31)	543 (29)	-20.1 (31)	5925	500	-25.9	4350	668	-5.4	17032 (23)	96 (23)	-77.6 (23)	18300	78	-79.8	15930	114	-77.6	15350	109	134	68
		(N)	(N)	(N)							(N)	(N)	(N)										
1200 U.T.	M. Matruh (A)	4873 (30)	574 (30)	-17.1 (30)	5380	537	-13.9	3700	652	-10.7	16693 (20)	101 (20)	-69.9 (20)	18450	75	-70.3	15240	132	-68.5	9319	315	215	83
	Helwan . . .	5398 (27)	544 (27)	-21.3 (27)	6000	494	-20.8	4470	597	-18.7	17094 (15)	97 (15)	-73.8 (15)	18130	82	-74.5	16200	113	-69.8	9820	294	240	85
	Aswan . . (A)	5395 (29)	535 (29)	-23.5 (25)	6100	492	-20.2	4810	573	-23.4	17175 (30)	95 (30)	-76.0 (30)	18620	74	-77.3	15710	122	-72.9	15250	132	088	75

N = The number of cases the element has been observed during the month.

Table B 3. - NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES

MERSA MATRUH (A) – JULY 1972

Time	Pressure Surface (Millibar.)	Wind between ranges of direction (000—360°)																								Number of Calm winds	Total Number of Observations (T.N)	Mean Scalar wind Speed (Knots)
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 T.U.	Surface	3	4	1	2	0	—	0	—	0	—	1	6	0	—	1	3	1	4	4	8	10	11	8	10	2	31	8
	1000	3	5	1	7	0	—	0	—	0	—	0	—	0	—	1	5	0	—	5	11	15	16	5	8	0	30	12
	850	2	19	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	23	6	21	9	18	11	18	0	29	19
	700	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	22	13	20	5	22	4	20	0	26	21
	600	1	24	0	—	0	—	0	—	0	—	0	—	1	9	1	12	7	23	8	21	5	25	3	28	0	26	23
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	20	10	25	6	25	6	28	0	—	0	26	25
	400	0	—	0	—	0	—	0	—	0	—	0	—	2	28	8	35	4	35	9	29	2	36	0	—	0	25	32
	300	0	—	0	—	0	—	0	—	0	—	0	—	4	30	10	36	5	54	4	39	0	—	0	—	0	23	40
	250	0	—	0	—	0	—	0	—	1	—	2	32	5	41	5	37	8	52	2	28	0	—	0	—	0	22	42
	200	0	—	0	—	0	—	0	—	0	—	1	26	7	46	6	41	6	50	0	—	0	—	0	—	0	20	43
	150	0	—	0	—	0	—	0	—	0	—	3	39	6	40	2	38	2	44	1	48	0	—	0	—	0	14	41
	100	0	—	0	—	0	—	0	—	0	—	2	18	2	30	1	32	2	25	0	—	1	56	0	—	0	8	30
	70	0	—	0	—	1	22	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	54	0	—	0	2	38
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 T.U.	Surface	7	12	1	10	0	—	0	—	0	—	0	—	0	—	0	—	1	15	0	—	6	19	15	14	0	30	14
	1000	3	11	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	21	16	18	9	16	0	30	17
	850	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	18	9	18	13	16	3	19	0	29	17
	700	1	16	0	—	0	—	0	—	0	—	0	—	1	2	0	—	8	27	6	20	10	20	4	27	0	30	22
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	11	12	21	6	23	9	17	2	40	0	30	21
	500	0	—	0	—	0	—	0	—	0	—	0	—	2	16	4	17	10	26	12	21	1	21	1	21	0	30	22
	400	0	—	0	—	0	—	0	—	0	—	0	—	3	16	9	37	7	24	6	86	3	34	0	—	0	28	31
	300	0	—	0	—	0	—	0	—	0	—	1	32	2	38	12	41	6	38	6	47	0	—	0	—	0	27	51
	250	0	—	0	—	0	—	0	—	0	—	2	34	4	42	10	48	9	52	1	52	0	—	0	—	0	26	47
	200	0	—	0	—	0	—	0	—	0	—	1	42	7	31	9	47	4	56	1	35	0	—	0	—	0	22	43
	150	0	—	0	—	0	—	0	—	1	36	3	31	7	39	5	41	3	46	0	—	0	—	0	—	0	19	39
	100	0	—	0	—	0	—	0	—	2	22	4	31	5	41	1	54	1	35	0	—	1	—	0	—	0	13	33
	70	0	—	0	—	1	18	3	32	6	—	1	22	1	15	0	—	0	—	0	—	0	—	0	—	0	6	25
	60	0	—	0	—	1	16	2	32	2	22	0	—	0	—	1	18	0	—	0	—	0	—	0	—	0	6	24
	50	0	—	0	—	2	28	2	32	0	—	0	—	1	13	0	—	0	—	0	—	0	—	0	—	0	5	27
	40	0	—	0	—	2	28	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	28
	30	0	—	1	28	1	43	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	36
	20	0	—	0	—	1	40	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	40
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N The number of cases the element has been observed during the month.

TN The total number of cases the wind has been observed for all directions during the month.

TABLE B 3. (*contd.*) NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES

HELWAN — JULY 1972

Time	Pressure Surface (Millibar.)	Wind between ranges of direction (000—360°)																								Number of Calm winds	Total Number of Observations (TN)	Mean Scalar wind Speed (Knots)
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	9	7	10	8	3	6	1	10	0	—	0	—	0	—	0	—	0	—	0	—	1	6	6	5	1	31	7
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	—
	850	9	15	8	13	0	—	0	—	0	—	0	—	0	—	1	5	1	7	2	6	5	17	5	15	0	31	14
	700	6	15	1	15	0	—	0	—	0	—	0	—	1	7	2	16	2	20	2	4	8	13	9	15	0	31	14
	600	5	10	0	—	0	—	0	—	0	—	0	—	0	—	1	2	4	11	11	13	4	14	5	15	0	30	12
	500	1	4	0	—	1	5	0	—	0	—	0	—	1	2	2	4	5	11	9	20	7	16	4	10	0	30	14
	400	1	5	0	—	0	—	0	—	1	3	0	—	2	8	2	9	9	21	10	30	5	20	0	—	0	30	21
	300	0	—	0	—	0	—	0	—	0	—	1	11	2	15	6	24	9	35	8	28	3	19	1	11	0	30	27
	250	0	—	0	—	1	9	0	—	0	—	0	—	5	20	6	28	9	41	6	44	2	22	0	—	0	29	33
	200	0	—	2	25	0	—	1	6	0	—	2	30	4	26	6	31	7	41	5	39	0	—	2	9	0	29	31
	150	0	—	1	4	0	—	0	—	1	28	1	25	5	34	8	35	8	42	3	37	1	12	0	—	0	28	35
	100	0	—	0	—	0	—	0	—	2	31	8	28	4	31	8	35	3	30	1	24	0	—	0	—	0	26	30
	70	0	—	0	—	0	—	3	19	9	24	3	31	3	14	1	99	1	12	0	—	2	13	0	—	0	22	24
	60	0	—	0	—	1	6	8	22	5	27	1	30	2	16	0	—	0	—	0	—	0	—	0	—	0	17	22
	50	0	—	0	—	0	—	9	27	5	29	2	22	0	—	0	—	0	—	0	—	0	—	0	—	0	16	27
	40	0	—	0	—	2	39	9	32	3	25	1	6	0	—	0	—	0	—	0	—	0	—	0	—	0	15	30
	30	0	—	0	—	0	—	4	33	7	38	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	11	36
	20	0	—	0	—	0	—	2	38	2	33	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	4	36
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	7	9	2	14	0	—	0	—	0	—	0	—	0	—	2	4	0	—	2	6	5	9	13	10	0	31	9
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	12	14	5	10	2	12	0	—	0	—	0	—	0	—	1	1	0	—	0	—	4	10	6	12	1	31	12
	700	5	10	1	2	1	6	0	—	0	—	0	—	1	7	1	27	3	10	3	16	5	14	10	11	0	30	12
	600	3	22	0	—	1	2	0	—	0	—	0	—	1	7	4	5	1	20	8	15	6	13	3	15	0	27	13
	500	2	4	0	—	0	—	0	—	0	—	1	2	0	—	5	10	2	10	9	18	5	17	3	13	0	27	13
	400	0	—	0	—	1	4	0	—	0	—	1	6	1	12	4	22	7	28	7	23	5	14	0	—	0	26	20
	300	1	11	0	—	0	—	0	—	0	—	1	22	2	17	7	18	6	27	5	44	2	6	0	—	0	24	24
	250	0	—	1	8	1	20	0	—	1	6	0	—	0	—	8	26	4	38	6	38	1	5	1	12	0	23	28
	200	0	—	1	13	0	—	0	—	1	17	1	11	5	14	4	30	5	33	3	46	0	—	0	—	0	20	27
	150	0	—	0	—	0	—	0	—	1	10	2	12	6	22	6	44	2	10	2	30	0	—	0	—	0	19	30
	100	0	—	0	—	0	—	1	10	1	15	3	27	7	29	3	27	1	33	0	—	0	—	0	—	0	16	26
	70	0	—	0	—	0	—	0	—	4	42	8	31	0	—	2	32	0	—	0	—	0	—	0	—	0	14	31
	60	0	—	0	—	0	—	1	30	8	27	2	28	1	22	0	—	0	—	0	—	0	—	0	—	0	12	27
	50	0	—	0	—	0	—	2	30	7	26	2	27	0	—	0	—	0	—	0	—	0	—	0	—	0	11	26
	40	0	—	0	—	0	—	2	22	6	31	3	30	0	—	0	—	0	—	0	—	0	—	0	—	0	11	31
	30	0	—	0	—	0	—	4	32	4	30	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	8	31
	20	0	—	0	—	0	—	1	23	2	36	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	3	35
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the element has been observed during the month.

TN = The total number of cases the wind has been observed for all directions during the month.

Table B 3.—(*contd.*) NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED FRESSURE SURFACES

ASWAN (A) — JULY 1972

Time	Pressure Surface (Millibar.)	Wind between ranges of direction (000—360°)																								Number of Calm winds	Total Number of Observations (T.N)	Mean Scalar wind Speed (Knots)
		345 / 014		015 / 044		045 / 074		075 / 104		105 / 134		135 / 164		165 / 194		195 / 224		225 / 254		255 / 284		285 / 314		315 / 344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	)ff) m	N	(ff) m	N	(ff) m			
0000 T.U.	Surface	12	12	2	7	1	4	0	—	1	10	0	—	0	—	0	—	0	—	0	—	0	—	5	11	0	21	11
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	4	14	5	18	1	20	0	—	1	5	0	—	1	6	0	—	0	—	1	13	4	12	4	15	0	21	15
	700	0	—	1	13	1	11	2	4	0	—	0	—	1	30	4	16	10	18	0	—	1	10	1	14	0	21	15
	600	1	5	1	11	0	—	0	—	0	—	0	—	2	7	7	25	6	22	1	7	0	—	2	5	0	20	17
	500	1	9	0	-	3	7	2	6	1	5	0	—	2	7	2	16	1	20	3	12	3	6	2	8	0	20	9
	400	5	8	0	—	1	6	0	—	0	—	0	—	3	9	5	10	3	6	1	3	1	8	1	10	0	20	8
	300	2	8	0	—	1	2	1	12	2	12	3	9	1	18	3	19	3	10	1	8	0	—	1	6	0	18	11
	250	0	—	0	—	0	—	4	10	2	10	4	12	2	16	3	20	0	—	2	11	0	—	1	13	0	18	13
	200	3	15	0	—	0	—	6	16	3	16	3	19	2	26	1	16	0	—	0	—	0	—	0	—	0	18	17
	150	0	—	0	—	1	11	4	21	9	22	1	16	1	4	0	—	0	—	0	—	0	—	0	—	0	16	21
	100	0	—	0	—	1	15	6	29	3	32	1	48	0	—	0	—	0	—	0	—	0	—	0	—	0	11	30
	70	0	—	0	—	0	—	7	31	1	33	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	8	32
	60	0	—	0	—	1	26	7	31	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	8	31
	50	0	—	0	—	2	29	6	40	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	8	38
	40	0	—	0	—	2	42	5	41	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	7	42
	30	0	—	0	—	1	50	5	52	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	6	52
	20	0	—	0	—	0	—	3	53	0	—	0	—	0	—	0	—	9	—	0	—	0	—	0	—	0	3	53
	10	—	—	—	—	—	—	—	—	—	—	—	—	0	—	0	—	—	—	—	—	—	—	—	—	—	—	—
1200 T.U.	Surface	7	7	0	—	0	—	0	—	0	—	1	12	0	—	1	5	0	—	2	10	5	11	5	11	0	21	9
	1000	—	—	—	-	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	3	8	0	—	0	—	0	—	1	10	0	—	0	—	0	—	0	—	4	14	6	11	7	12	0	21	11
	700	0	—	2	10	0	—	0	—	1	3	0	—	0	—	5	21	8	28	3	11	1	11	1	30	0	21	20
	600	0	—	1	8	0	—	1	6	0	—	1	11	1	15	10	25	6	21	0	—	1	16	0	—	0	21	22
	500	3	6	0	—	2	7	0	—	0	—	3	5	1	21	8	16	3	11	0	—	1	8	0	—	0	21	10
	400	2	4	0	—	2	14	3	7	1	7	0	—	2	12	6	11	2	15	1	10	0	—	2	4	0	21	10
	300	2	9	0	—	1	8	2	9	2	12	4	10	5	12	1	18	1	7	1	7	0	—	2	6	0	21	10
	250	1	11	1	20	0	—	4	15	6	12	5	13	0	—	2	14	2	17	0	—	0	—	0	—	0	21	14
	200	1	12	0	—	1	16	2	16	9	18	6	12	0	—	0	—	1	18	1	12	0	—	0	—	0	21	15
	150	0	—	0	—	3	20	4	17	7	23	4	17	1	13	0	—	0	—	0	—	0	—	0	—	0	19	14
	100	0	—	0	—	1	44	10	31	5	31	9	—	1	37	0	—	0	—	0	—	0	—	0	—	0	17	32
	70	0	—	0	—	0	—	13	42	3	39	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	16	42
	60	0	—	0	—	1	41	10	38	2	40	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	13	38
	50	0	—	0	—	0	—	10	40	1	44	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	11	44
	40	0	—	0	—	0	—	7	39	2	38	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	9	39
	30	0	—	0	—	0	—	3	40	1	45	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	4	42
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N The number of cases the element has been observed during the month.

REVIEW OF AGRO-METEOROLOGICAL STATIONS

MERSA MATRUH — JULY 1972

For the month as a whole the mean daily air temperature and relative humidity were rather normal.

Mild summer weather was experienced during the whole month.

The highest maximum air temperature for the month was 30.8°C reported on the 3 rd together with the lowest relative humidity (34%).

The extreme maximum soil temperatures were lower than the corresponding values of last July by 0.8°C at both 2, 5cm. depths, the same at 10 cm. and higher than last July at depths between 20 & 100 cm. by 0.8°C to 1.2°C. The extreme minimum soil temperatures were higher than last July at all depths by departures between 0.1°C (at 2 & 5 cm.) and 1.6°C (at 20 cm.).

The mean daily values of wind speed, actual sunshine duration and pan evaporation were lower than the corresponding values of July 1971 by 0.6 m./sec., 0.4 hour and 1.84 mm. respectively

TAHRIR — JULY 1972

For the month as a whole the mean daily air temperature was slightly below average and the mean daily relative humidity was slightly above average

The prevailing weather during the month was generally of the normal summer type, intervened with a short heat wave on the 3rd yielding the highest maximum air temperature for the month (39.1°C) together with the lowest relative humidity (22%).

The extreme maximum soil temperatures were lower than the corresponding values of last July at depths between 2 & 10 cm. with departures ranging between 2.6°C at 5 cm. and 1.1°C at 10 cm. At deeper depths between 20 & 100 cm. the extreme soil maxima were higher by 0.2°C than last July. The extreme minimum soil temperatures were higher than the corresponding values of last July at all depths apart from 2 cm. depth where the values were the same, the departures were slight and varied between 0.1° & 0.9°C.

The mean daily actual sunshine duration was higher than average by 0.1 hour. The mean daily wind speed and pan evaporation were lower than average by 0.6 m./sec. and 2.43 mm. respectively.

BAHTIM — JULY 1972

For the month as a whole the mean daily air temperature and relative humidity were rather average.

Mild summer weather prevailed during this month in general. The highest maximum air temperature for the month was 36.1°C reported on the 3rd together with the lowest relative humidity (27%).

The extreme maximum soil temperatures were lower than the corresponding values of last July at all depths apart from 20 & 50 cm. depths where the values were higher than last July ; the departures were slight and varied between 0.1°C. & 0.6°C. The extreme minimum soil temperatures were higher than last July at depths between 2 & 10 cm. and lower at depths between 20 & 100 cm., the departures were slight and varied between 0.1° & 0.7°C.

The mean daily surface wind speed, actual sunshine duration and pan evaporation showed insignificant departures from the corresponding values of July 1971.

KHARGA — JULY 1972

For the month as a whole the mean daily air temperature and relative humidity were rather normal.

Normal summer weather prevailed during the month in general with two heat waves in the periods (3rd & 4th) and (14th-17th). The first heat wave yielded the highest maximum air temperature for the month (44.0°C) on the 4th together with the lowest relative humidiy (9%).

The extreme maximum soil temperature was lower than last July at 2 cm. depth by 1.4°C and higher at all depths between 5 & 100 cm. with departures between 1.0° & 0.1°C. The extreme minimum soil temperatures were higher than last July at depths between 2 & 10 cm., the same at 20 cm. and lower than last July at 50 & 100 cm. depths ; the departures were slight and varied between 0.2° & 0.6°C.

The mean daily surface wind speed, actual sunshine duration and pan evaporation showed insignificant departures from the corresponding values of July 1971.

Table C 1.—AIR TEMPERATURE AT 1½ METRES ABOVE GROUND

JULY — 1972

STATION	Air Temperature (°C)					Mean Duration in hours of daily air temperature above the following values										
	Mean Max.	Mean Min.	Mean of the day	Night time mean	Day time mean	—5°C	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C
Mersa Matruh .	28.7	20.9	25.1	23.1	26.5	24.0	24.0	24.0	24.0	24.0	23.5	12.8	0.0	0.0	0 0	0.0
Tahrir	34.1	19.6	26.2	22.6	28.9	24.0	24.0	24.0	24.0	24.0	22.6	13.0	6.4	0.1	0.0	0.0
Bahtim	32.8	18.5	25.4	21.7	28.4	24.0	24.0	24.0	24.0	24.0	20.5	12.0	5.6	0.1	0.0	0.0
Kharga	39.4	24.6	32.5	29.4	35.2	24.0	24.0	24.0	24.0	24.0	24.0	23.0	15.5	8.4	0.9	0.0

Table C 2.—EXTREME VALUES OF AIR TEMPERATURE AT 1½ METRES ABOVE GROUND, ABSOLUTE MINIMUM AIR TEMPERATURE AT 5cms ABOVE GROUND OVER DIFFERENT FIELDS

JULY — 1972

STATION	Max. Temp. at 1½ metres (°C)				Min. Temp. at 1½ metres (°C)				Min. Temp. at 5 cms. above (°C)			
	Highest		Lowest		Highest		Lowest		Dry soil		Grass	
	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date
Mersa Matruh . . .	30.8	3	27.7	6	23.5	27	18.2	12	15.4	25	—	—
Tahrir	39.1	3	31.8	6	22.3	28	17.2	20	16.0	13	—	—
Bahtim	36.1	3	31.2	6	21.3	28	16.0	7	13.2	7	—	—
Kharga	44.0	4	35.8	7	29.2	17	20.0	9	17.6	9	—	—

Table C 3.—(SOLAR+SKY) RADIATION, DURATION OF BRIGHT SUNSHINE, RELATIVE HUMIDITY, VAPOUR PRESSURE AT 1½ METRES ABOVE GROUND, EVAPORATION & RAINFALL

JULY — 1972

STATION	(Solar+Sky) Radiation gm. cal/cm²	Duration of Bright Sunshine (hours)			Relative Humidity				Vapour pressure (mms)						Evaporation (mms)		Rainfall (mms)		
		Total Actual monthly	Total Possible monthly	%	Mean of day	1200 U.T.	Lowest	Date	Mean of day	1200 U.T.	Highest	Date	Lowest	Date	Piche	Pan class A	Total Amount Monthly	Max. fall in one day	Date
M. Matruh	—	372.8	433.7	86	75	65	34	3	17.8	18.4	21.6	27	10.0	3	6.5	7.40	0.0	0.0	—
Tahrir . .	649.1	386.0	430.9	90	68	43	22	3	16.6	15.5	20.7	30	10.2	3	6.5	9.75	0.0	0.0	—
Bahtim . .	658.4	356.6	429.5	85	67	44	27	3	15.8	15.3	20.3	30.31	11.5	3	8.4	9.69	0.0	0.0	—
Kharga .	713.4	384.3	418.9	92	25	16	9	4	8.8	8.2	13.9	11	5.2	20	20.7	21.40	0.0	0.0	—

Table C 4.—EXTREME SOIL TEMPERATURE AT DIFFERENT DEPTHS (cms) IN DIFFERENT FIELDS

JULY — 1972

STATION	Highest (H) Lowest (L)	Extreme soil temperature (°C) in dry field at different depths (cms.)								Extreme soil temperature (°C) in grass field at different depths (cms.)						
		2	5	10	20	50	100	200	300	2	5	10	20	50	100	200
Mersa Matruh	H	40.3	37.6	34.2	30.8	29.4	26.4	23.6	—	—	—	—	—	—	—	—
	L	25.2	24.4	24.7	26.6	27.0	24.9	22.4	—	—	—	—	—	—	—	—
Tahrir	H	52.5	46.4	40.9	36.7	33.1	31.2	28.6	27.2	—	—	—	—	—	—	—
	L	28.6	27.8	28.1	30.4	31.3	30.3	27.3	26.0	—	—	—	—	—	—	—
Bahtim	H	55.6	46.3	39.8	34.3	31.5	29.5	26.7	24.8	—	—	—	—	—	—	—
	L	29.7	28.5	28.8	31.3	30.2	27.9	25.2	23.9	—	—	—	—	—	—	—
Kharga . . .	H	56.8	51.2	44.1	38.6	35.2	32.8	30.4	28.8	—	—	—	—	—	—	—
	L	21.9	25.9	29.9	32.8	33.2	31.7	29.0	28.0	—	—	—	—	—	—	—

Table C 5.—SURFACE WIND

JULY — 1972

STATION	Wind Speed m/sec at 1½ metres			Days with surface wind speed at 10 metres							Max. Gust at 10 metres
	Mean of the day	Night time mean	Day time mean	≥10 knots	≥15 knots	≥20 knots	≥25 knots	≥30 knots	≥35 knots	≥40 knots	Value (knots)
Mersa Matruh . .	4.3	3.2	5.4	31	29	13	1	0	0	0	33
Tahrir	1.9	1.3	2.6	31	10	2	0	0	0	0	30
Bahtim	2.2	1.2	3.2	29	7	0	0	0	0	0	23
Kharga	4.2	3.1	5.4	31	22	7	3	0	0	0	40

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Chairman of the Board of Directors

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THE ARAB REPUBLIC OF EGYPT

MONTHLY WEATHER REPORT

VOLUME 15 NUMBER 8

AUGUST, 1972

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U.D.C. 551, 506.1 (62)

THE EGYPTIAN METEOROLOGICAL AUTHORITY
CAIRO

PUBLICATIONS OF THE METEOROLOGICAL AUTHORITY OF THE ARAB REPUBLIC OF EGYPT — CAIRO

In fulfilment of its duties, the Meteorological Authority of Egypt issues serveral reports and publications on weather, climate and agrometeorology. The principal publications are described on this page.

Orders for publications should be addressed to :

"Chairman of the Board of Directors, Meteorological Authority, Kubri-el-Qubbeh — CAIRO".

THE MONTHLY WEATHER REPORT

First issued in 1909, the Monthly Weather Report served to give a brief summary of the weather conditions that prevailed over Egypt during the month, with a table showing the mean values for few meteorological elements and their deviations from the normal values. From 1954 to 1957 this report was in a rapid state of development and extension resulting into a voluminous report on January 1958 giving surface, upper air, and agro-meteorological data for Egypt.

As from January 1964, the Monthly Weather Report was pressed to give climatological data for a representative selection of synoptic stations.

THE AGRO-METEOROLOGICAL ABRIDGED MONTHLY REPORT

Gives a review of weather experienced in the agro-meteorological stations of Egypt as well as monthly values of certain elements.

THE ANNUAL REPORT

This report gives annual values and statistics for the various meteorological elements, together with a summary of the weather conditions that prevailed during all months of the year.

CLIMATOLOGICAL NORMALS FOR EGYPT

A voluminous edition was issued in March 1968 which brings normals and mean values up till 1960.

METEOROLOGICAL RESEARCH BULLETIN

First issued in January 1969 on a bi-annual basis. It includes research works carried out by members of staff of "The Meteorological Institute for Research and Training" and the Operational Divisions of the Meteorological Authority.

TECHNICAL NOTES

As from October 1970, the Meteorological Authority started to issue a new series of publications in the form of Technical Notes (non periodical) on subjects related to studies and applications of meteorology in different fields for the benefit of personnel working in these fields.

THE ARAB REPUBLIC OF EGYPT

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THE EGYPTIAN METEOROLOGICAL AUTHORITY
CAIRO

CONTENTS

PAGE

General Summary of Weather Conditions 1,2

SURFACE DATA

Table A1.—Monthly values of the Atmospheric Pressure, Air Temperature, Relative Humidity, Bright Sunshine, Duration and Piche Evaporation 3

" A2.—Maximum and Minimum Air Temperatures 4

" A3.—Sky Cover and Rainfall 5

" A4.—Number of Days of Occurrence of Miscellaneous Weather Phenomena 6

" A5.—Number in Hours of Occurrences of Concurrent Surface Wind Speed and Direction Recorded Within Specified Ranges 7,8

UPPER AIR DATA

Table B1.—Monthly Means and Monthly Absolute Higher & Lower Values of Altitude, air Temperature & Dew point at Standard and Selected Pressure Surfaces. 9-10

" B2.—Mean and Extreme values of The Freezing Level and The Tropopause; The Highest Wind Speed in The Upper Air 11

" B3.—Number of Occurrences of Wind Direction within Specified Ranges and The Mean Scalar Wind Speed at the Standard and Selected Pressure Surfaces. 12–13

AGRO-METEOROLOGICAL DATA

Reviews of Agro-meteorological Stations 14,15

Table C1.—Air Temperature at 1½ metres above Ground 16

" C2.—Extreme Values of Air Temperature at 1½ metres above Ground, Absolute Minimum Air Temperature at 5 Cms Above Ground over Different Fields 16

" C3.—(Solar + Sky) Radiation, Duration of Bright Sunshine, Relative Humidity and Vapour Pressure at 1½ Metres Above Ground, Evaporation and Rainfall. . . 16

" C4.—Extreme Soil Temperature at Different Depths in Different Fields 17

" C5.—Surface wind 17

Note : For explanatory notes on the tables please refer to Volume 15, Number 1 (January 1972).

GENERAL SUMMARY OF WEATHER CONDITIONS

AUGUST 1972

Generally stable summer weather with frequent early morning low clouds over the north. A daily rainfall record at Mersa Matruh.

GENERAL DESCRIPTION OF WEATHER

The prevailing weather during this month was generally mild & humid in the northern parts, hot & moderately humid in the middle parts, excessively hot & dry in the southern parts. The month was intervened by short mild periods.

The month was characterized in particular by abnormal rain over Mersa Matruh, Sidi Barrani and few land localities on the 23rd & 28th. It is worthy to mention that the daily rainfall reported a record (15.0 mm.) at Mersa Matruh on the 23rd.

Early morning low clouds developed frequently over Delta & Cairo with scattered mist or fog during several days.

PRESSURE DISTRIBUTION

The major pressure patterns over the synoptic surface charts during this month were :

— The Azores high and its extensions over West Europe & West Mediterranean.

— Travelling deep depressions through North Europe and their extensions through Central Europe and its vicinities.

— A ridge of high pressure over Central Mediterranean & Libya.

— The complex monsoon low pessure over Iraq, Arabia & Sudan.

The upper air charts depict the following main features :

— Deep upper low pressure systems over North Russia & North Atlantic.

— Secondary troughs through middle latitudes traversing East Mediterranean and north Egypt on the 10th, 18th, 24th & 29th.

— Upper high pressure belt over the subtropical latitudes.

The Iraq monsoon trough experienced westward elongations in the periods (1st, 2nd), (5th-7th) and (13th-16th). These elongations associated the transits of depressions through the Black Sea area and its vicinities.

The barometric pressure over Egypt this month showed five oscillations of moderate amplitudes and reached minima round the 2nd, 6th, 16th, 21st & 26th.

The first three pressure minima were due to the above mentioned elongations of the Iraq monsoon trough through East Mediterranean and Asia Minor.

The fourth pressure minimum associated a depression which developed over Italy & Greece on the 19th. It moved slowly eastwards on the 20th and then it continued its track northeastwards on the 21st.

The fifth pressure minimum was due to the development of a depression over East Mediterranean on the 26th which moved

rapidly the next day to the east, and was associated by a northwestward elongation of the Iraq monsoon trough till the 28th.

Apart from these pressure falls, the ridge of high pressure over Central Mediterranean & Libya extended eastward, and the barometric pressure over Egypt experienced corresponding rises above normal.

SURFACE WIND

The prevailing winds during this month were generally light to moderate, and blew mostly from N & NW directions and less frequently from the NE direction. Winds freshened during few days in few scattered localities mainly in the Red Sea district. Calms were frequent in the evening and early morning intervals.

TEMPERATURE

Maximum air temperature experienced slight to moderate departures above normal in general, apart from the periods (6th-10th) & (28th-30th) when it was moderately below normal. Maximum air temperature values ranged most of the month between 30° & 35°C in the northern parts, between 33° & 38°C in the middle parts, between 39° & 44°C in the southern parts.

The absolute maximum air temperature for Egypt in this month was 45.2°C reported at Kharga on the 4th.

Minimum air temperature was also above normal most of the month and below normal in few days with slight to moderate departures. Minimum air temperature values ranged generally between 20° & 25°C in the northern and middle parts, between 22° & 27°C in the southern parts.

The absolute minimum air temperature for Egypt in this month was 15.9°C reported at Bahtim on the 31st.

PRECIPITATION

Abnormal rain fell over Mersa Matruh, Sidi Barrani and few land localities on the 23rd & 28th. The daily rainfall attained a record at Mersa Matruh (15.0 mm) on the 23rd.

The highest monthly rainfall for Egypt was 17.3 mm reported at Mersa Matruh.

The highest daily rainfall for Egypt was 15.0 mm reported at Mersa Matruh on the 23rd.

Chairman (M. F. TAHA.)

Board of Directors

Cairo, August 1973

SURFACE DATA

Table A 1.— MONTHLY VALUES OF THE ATMOSPHERIC PRESSURE, AIR TEMPERATURE, RELATIVE HUMIDITY, BRIGHT SUNSHINE DURATION & PICHE EVAPORATION

AUGUST — 1972

STATION	Atmospheric Pressure (mbs) M.S.L.		Air Temperature °C									Relative Humidity %		Bright Sunshine Duration (Hours)			Piche Evaporation mms.
			Maximum		Minimum			Dry Bulb		Wet Bulb							
	Mean	D.F. Normal or Average	(A) Mean	D.F. Normal or Average	(B) Mean	D.F. Normal or Average	$\frac{A+B}{2}$	Mean	D.F. Normal or Average	Mean	D.F. Normal or Average	Mean	D.F. Normal or Average	Total Actual	Total Possible	%	Mean
Sallum	1011.1	+0.8	30.6	+0.5	22.6	+1.0	26.4	26.6	+0.3	21.1	—0.8	61	— 5	—	—	—	9.6
Mersa Matruh. (A)	1011.2	+1.1	30.4	+0.5	21.7	+0.7	26.0	26.2	+0.7	22.4	+0.6	71	— 1	328.6	411.7	88	7.7
Alexandria (A)	1010.6	+1.8	31.3	+0.7	22.9	+0.1	27.1	26.6	—0.1	22.7	—0.3	70	— 2	353.1	410.6	86	5.5
Port Said. (A)	1008.8	+0.8	32.3	+1.5	24.2	—0.7	28.2	27.6	+0.3	22.8	—0.9	65	— 7	365.4	410.9	89	5.2
El Arish.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta.	1010.0	+1.7	33.9	—0.7	19.7	+0.2	26.8	25.7	-1.2	22.0	0.0	71	+ 7	352.8	410.6	86	3.9
Cairo. (A)	1009.6	+1.1	33.4	—1.3	22.4	+0.6	27.9	28.0	+0.3	22.0	+0.2	57	+ 1	—	—	—	13.2
Fayoum.	—	—	37.6	+1.0	21.9	+0.3	29.7	29.2	—0.2	21.7	+0.4	49	+ 1	—	—	—	7.9
Minya. (A)	1008.4	+1.0	36.4	0.0	20.3	—0.2	28.4	28.7	+0.4	21.2	+0.4	49	— 1	376.5	406.3	93	14.9
Assyout. (A)	1007.2	+0.2	36.6	—0.3	22.4	0.0	29.5	29.4	—1.0	20.4	+0.6	40	+ 5	—	—	—	16.6
Luxor. (A)	1006.5	+1.4	40.9	—0.1	22.3	—1.3	31.6	31.8	—1.1	20.0	+0.2	30	+ 4	—	—	—	12.5
Aswan. (A)	1006.2	+1.1	41.6	+0.3	25.5	+0.3	33.5	33.5	—0.3	18.8	+0.4	18	+ 2	—	—	—	26.2
Siwa	1010.2	+0.2	37.6	—0.1	22.2	+1.5	29.9	30.2	+0.4	20.9	+1.2	40	+ 4	369.1	408.1	90	13.0
Bahariya.	1009.9	+1.7	36.8	0.0	22.2	+1.3	29.5	29.6	0.0	19.7	—0.1	35	— 1	—	—	—	13.4
Farafra.	1010.3	+0.9	38.3	+0.8	22.1	+1.0	30.2	30.2	+0.3	19.4	+1.5	32	+ 7	—	—	—	17.0
Dakhla.	1009.0	+2.1	39.0	+0.2	22.3	—0.5	30.6	31.4	+0.6	18.0	+0.1	21	— 2	—	—	—	23.7
Kharga.	1007.8	+1.2	39.8	+0.5	25.2	+2.4	32.5	33.0	+1.1	18.6	—0.5	23	— 3	374.8	403.0	93	19.2
Tor.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada.	1006.3	+1.8	34.1	+0.9	25.9	+0.7	30.0	30.3	+0.2	22.2	+0.1	46	— 2	381.6	405.3	94	13.9
Quseir	1006.0	+1.0	32.5	—1.2	26.5	—0.4	29.5	29.9	—0.4	22.1	—0.3	48	+ 1	—	—	—	13.2

Table A 2.—MAXIMUM AND MINIMUM AIR TEMPERATURE

AUGUST 1972

Station	Maximum Temperature °C									Grass Min. Temp.		Minimum Temperature °C							
	Highest	Date	Lowest	Date	No. of Days with Max-Temp.					Mean	Dev. From Normal	Highest	Date	Lowest	Date	No. of Days with Min. Temp.			
					>25	>30	>35	>40	>45							<10	<5	<0	<-5
Sallum	38.9	21	27.1	22	31	17	2	0	0	22.0	—	25.3	28	20.2	7	0	0	0	0
Mersa Matruh (A)	40.8	2	28.2	24,25	31	13	2	1	0	21.3	—	25.3	15	18.8	24	0	0	0	0
Alexandria . .(A)	35.9	2	29.2	29	31	29	3	0	0	21.4	—	24.9	1	19.0	26	0	0	0	0
Port Said . .(A)	34.8	3	30.9	6	31	31	0	0	0	23.6	—	25.1	29	22.1	11	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	37.3	3	29.8	8	31	27	2	0	0	—	—	21.7	2	17.6	26	0	0	0	0
Cairo . . . .(A)	38.4	3	30.7	7	31	31	12	0	0	—	—	24.6	27	21.0	8,9	0	0	0	0
Fayoum	42.6	3	34.4	29	31	31	28	4	0	16.7	—	24.8	4	18.6	31	0	0	0	0
Minya . . . (A)	41.2	3	33.0	29	31	31	24	1	0	19.0	—	24.5	4	18.6	31	0	0	0	0
Assyout . . .(A)	41.6	2	32.5	29	31	31	22	4	0	19.8	—	26.0	4	18.6	31	0	0	0	0
Luxor . . . .(A)	45.1	24	37.0	30	31	31	31	17	1	15.6	—	24.2	6,25	19.2	30	0	0	0	0
Aswan . . . .(A)	44.8	5	37.6	30	31	31	31	28	0	—	—	28.4	6	22.0	31	0	0	0	0
Siwa	43.4	3	31.8	28	31	31	25	8	0	21.4	—	26.0	22	19.3	24	0	0	0	0
Bahariya	43.1	3	32.6	29	31	31	23	4	0	21.6	—	24.9	4	18.8	30	0	0	0	0
Farafra	43.0	3	33.6	29	31	31	27	7	0	20.8	—	25.8	3	19.1	30	0	0	0	0
Dakhla	43.4	3-4	34.0	29	31	31	29	9	0	—	—	27.8	23	18.7	13	0	0	0	0
Kharga	45.2	4	35.0	29	31	31	30	15	1	23.3	—	29.9	3	19.6	13	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada.	38.4	3	31.2	31	31	31	8	0	0	—	—	29.0	5	23.2	28	0	0	0	0
Quseir	31.5	15	30.6	9	31	31	0	0	0	23.6	—	28.0	24	24.6	27	0	0	0	0

TABLE A 3.—SKY COVER AND RAINFALL

AUGUST — 1972

Station	Mean Sky Cover Oct.					Rainfall mms.										
	00 U.T.	06 U.T.	12 U.T.	18 U.T.	Daily Mean	Total Amount	D. From Normal	Max. Fall in one day		Number of Days with Amount of Rain						
								Amount	Date	<0.1	≥0.1	≥1.0	≥5.0	≥10	≥25	≥50
Sallum	1.7	0.9	2.2	0.8	1.3	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Mersa Matruh (A)	1.3	2.4	1.8	1.4	1.6	17.3	+17.3	15.0	23	0	2	2	1	1	0	0
Alexandria (A)	3.5	2.6	1.9	2.7	2.6	0.0	—0.4	0.0	—	0	0	0	0	0	0	0
Port Said (A)	0.8	1.4	0.2	0.4	0.7	0.0	0.0	0.0	—	0	0	0	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	0.4	2.1	1.1	0.4	1.0	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Cairo (A)	0.7	2.7	0.6	0.0	1.1	0.0	—Trace	0.0	—	0	0	0	0	0	0	0
Fayoum	—	0.6	0.8	0.1	—	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Minya (A)	0.0	0.4	0.5	0.3	0.3	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Assyout (A)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Luxor (A)	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Aswan (A)	0.0	0.3	0.4	0.4	0.3	0.0	—Trace	0.0	—	0	0	0	0	0	0	0
Siwa	1.5	0.5	1.0	1.3	1.1	1.9	+1.9	1.9	23	0	1	1	0	0	0	0
Bahariya	0.2	0.5	0.9	0.2	0.4	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Farafra	—	0.2	0.6	0.1	—	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Dakhla	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Kharga	0.0	0.0	0.1	0.0	0.0	0.0	—Trace	0.0	—	0	0	0	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Quseir	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	0	0	0	0	0	0	0

Table A 4. — DAYS OF OCCURRENCE OF MISCELLANEOUS WEATHER PHENOMENA.

AUGUST — 1972

Station	Precipitation				Frost	Thunderstorm	Mist Vis ≥ 1000 Metres	Fog Vis < 1000 metres	Haze Vis ≥ 1000 Metres	Thick Haze Vis < 1000 Metres	Dust or Sandrising Vis ≥ 1000 Metres	Dust or Sandstorm Vis < 1000 Metres	Gale	Clear Sky	Cloudy Sky
	Rain	Snow	Ice. Pellets	Hail											
Sallum	0	0	0	0	0	0	0	0	0	0	1	0	0	22	0
Mersa Matruh . . . (A)	2	0	0	0	0	1	4	0	1	0	4	0	0	21	0
Alexandira . . . . (A)	0	0	0	0	0	0	2	1	0	0	0	0	0	12	0
Port Said . . . . (A)	0	0		0	0	0	0	0	0	0	0	0	0	30	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	0	0	0	0	0	0	14	2	0	0	0	0	0	27	0
Cairo . . . . . (A)	0	0	0	0	0	0	17	4	4	0	0	0	0	27	0
Fayoum	0	0	0	0	0	0	0	0	0	0	0	0	0	—	—
Minya . . . . . (A)	0	0	0	0	0	0	4	0	3	0	4	0	0	31	0
Assyout. . . . . (A)	0	0	0	0	0	0	0	0	2	0	1	0	0	31	0
Luxor . . . . . (A)	0	0	0	0	0	0	0	0	2	0	1	0	0	31	0
Aswan . . . . . (A)	0	0	0	0	0	0	0	0	1	0	7	0	0	30	0
Siwa	1	0	0	0	0	1	0	0	0	0	2	0	0	22	0
Bahariya	0	0	0	0	0	0	0	0	0	0	0	0	0	29	0
Farafra	0	0	0	0	0	0	0	0	0	0	0	0	0	—	—
Dakhla	0	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Kharga	0	0	0	0	0	0	0	0	0	0	4	0	0	31	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0	0	0	0	0	0	0	0	0	0	5	0	0	31	0
Quseir	0	0	0	0	0	0	0	0	0	0	0	0	0	31	0

Table A 5.—NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES

AUGUST — 1972

Station	Calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurrences of wind blowing from the ranges of directions indicated												
					345/014	015/044	045/074	075/104	105/134	135/164	165/194	195/224	225/254	255/284	285/314	315/344	All directions
Sallum	5	0	0	1—10	60	106	88	36	18	5	4	5	5	15	52	157	551
				11—27	12	55	5	0	0	0	0	0	1	10	9	96	188
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**72**	**161**	**93**	**36**	**18**	**5**	**4**	**5**	**6**	**25**	**61**	**253**	**739**
Mersa Matruh	1	0	0	1—10	44	19	13	7	4	7	13	5	32	91	45	153	433
				11—27	34	12	2	6	3	2	5	6	2	4	24	209	309
				28—47	0	0	0	0	0	0	0	0	0	0	1	0	1
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**78**	**31**	**15**	**13**	**7**	**9**	**18**	**11**	**34**	**95**	**70**	**362**	**743**
Alexandria	5	0	157	1—10	115	91	10	9	7	17	17	17	12	9	59	89	452
				11—27	31	15	1	0	0	0	0	0	1	1	19	62	130
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**146**	**106**	**11**	**9**	**7**	**17**	**17**	**17**	**13**	**10**	**78**	**151**	**582**
Tanta	24	0	3	1—10	112	54	12	15	15	8	6	19	49	84	160	171	705
				11—27	12	0	0	0	0	0	0	0	0	0	0	0	12
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**124**	**54**	**12**	**15**	**15**	**8**	**6**	**19**	**49**	**84**	**160**	**171**	**717**
Caire	74	0	77	1—10	141	92	43	14	2	0	3	1	9	25	59	112	501
				11—27	43	19	1	4	5	0	1	0	0	0	2	17	92
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**184**	**111**	**44**	**18**	**7**	**0**	**4**	**1**	**9**	**25**	**61**	**129**	**593**
Fayoum	2	10	8	—10	354	241	8	4	1	4	4	6	4	15	22	50	713
				11—27	4	7	0	0	0	0	0	0	0	0	0	0	11
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**358**	**248**	**8**	**4**	**1**	**4**	**4**	**6**	**4**	**15**	**22**	**50**	**724**
Minya	2	0	1	1—10	423	178	11	2	1	0	3	2	3	9	16	36	684
				11—27	40	17	0	0	0	0	0	0	0	0	0	0	57
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**463**	**195**	**11**	**2**	**1**	**0**	**3**	**2**	**3**	**9**	**16**	**36**	**741**
Asyout	50	0	0	1—10	73	15	1	0	4	1	0	1	4	73	188	188	548
				11—27	33	14	0	0	0	0	0	0	0	0	4	95	146
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**106**	**29**	**1**	**0**	**4**	**1**	**0**	**1**	**4**	**73**	**192**	**283**	**694**

Table A 5 (*contd.*)—**NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES**

AUGUST — 1972

Station	Calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurrences of wind blowing from the ranges of directions indicated												
					345 / 014	015 / 044	045 / 074	075 / 104	105 / 134	135 / 164	165 / 194	195 / 224	225 / 254	255 / 284	285 / 314	315 / 344	All directions
				1—10	42	74	13	19	9	12	87	44	39	88	131	115	673
				11—27	2	9	0	0	0	0	0	0	0	0	0	2	13
Luxor	58	0	0	28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**44**	**83**	**13**	**19**	**9**	**12**	**87**	**44**	**39**	**88**	**131**	**117**	**686**
				1—10	142	100	15	4	3	1	3	3	3	16	64	119	473
				11—27	51	52	0	0	0	1	0	0	0	8	53	86	251
Aswan	20	0	0	28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**193**	**152**	**15**	**4**	**3**	**2**	**3**	**3**	**3**	**24**	**117**	**205**	**724**
				1—10	79	141	100	52	37	2	6	3	9	27	53	138	647
				11—27	7	23	4	4	1	1	0	0	0	2	12	7	61
Siwa	19	17	0	28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**86**	**164**	**104**	**56**	**38**	**3**	**6**	**3**	**9**	**29**	**65**	**145**	**708**
				1—10	81	40	22	10	3	10	16	23	36	41	106	215	603
				11—27	46	45	8	0	0	0	0	0	0	0	0	31	130
Dakhla	1	10	0	28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**127**	**85**	**30**	**10**	**3**	**10**	**16**	**23**	**36**	**41**	**106**	**246**	**733**
				1—10	258	89	17	7	6	0	1	2	2	14	51	134	581
				11—27	127	25	0	0	0	0	0	0	0	0	0	9	161
Kharga	0	2	0	28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**385**	**114**	**17**	**7**	**6**	**0**	**1**	**2**	**2**	**14**	**51**	**143**	**742**
				1—10	73	31	6	3	0	4	5	6	2	33	116	58	337
				11—27	93	3	0	0	0	0	0	0	0	6	94	192	288
Hurghada	19	0	0	28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**166**	**34**	**6**	**3**	**0**	**4**	**5**	**6**	**2**	**39**	**210**	**250**	**725**
				1—10	209	115	19	7	2	3	5	4	13	21	91	141	630
				11—27	60	37	0	0	0	0	0	0	0	0	0	6	103
Quseir	11	0	0	28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**269**	**152**	**19**	**7**	**2**	**3**	**5**	**4**	**13**	**21**	**91**	**147**	**733**

UPPER AIR CLIMATOLOGICAL DATA

Table B 1. -MONTHLY MEANS, ABSOLUTE HIGHER AND LOWER VALUES OF ALTITUDE, AIR TEMPERATURE AND DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

AUGUST — 1972

Station	Pressure Surface (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Helwan 0000 U.T.	Surface	31	* 993mb.	* 998mb.	* 990 mb.	31	24.3	28.0	21.8	31	18.4
	1000	—	—	—	—	—	—	—	—	—	—
	850	31	1500	1547	1436	31	20.0	23.6	14.6	31	5.0
	700	31	3147	3202	3104	31	10.5	15.5	6.2	31	— 7.4
	600	31	4415	4463	4365	31	3.6	7.6	0.3	31	—15.5
	500	31	5867	5933	5869	31	— 5.4	— 3.0	— 9.1	31	—23.4
	400	31	7593	7654	7532	31	—15.8	—12.9	—20.3	30	—32.3
	300	30	9708	9772	9632	30	—29.9	—26.6	—34.8	30	—44.4
	250	29	10984	11049	10894	29	—39.2	—36.2	—43.7	29	—52.4
	200	29	12482	12559	12366	29	—50.0	—47.9	—52.7	28	—61.6
	150	28	14312	14409	14177	28	—62.6	—60.5	—65.5	—	—
	100	26	16744	16852	16621	25	—74.1	—71.6	—77.0	—	—
	70	18	18858	18944	18744	18	—69.5	—65.4	—73.0	—	—
	60	11	19833	19890	19730	11	—64.8	—62.5	—67.4	—	—
	50	11	20912	20973	20322	11	—61.1	—57.8	—63.2	—	—
	40	7	22396	22450	22310	7	—53.1	—48.1	—59.6	—	—
	30	7	24144	24209	24085	7	—54.4	—52.8	—55.8	—	—
	20	5	26770	26822	26703	5	—51.7	—48.8	—54.6	—	—
	10	1	31420	—	—	1	—46.6	—	—	—	—
Aswan 0000 U.T.	Surface	21	* 985mb.	* 987mb.	* 983mb.	21	29.0	31.4	26.5	21	6.6
	1000	21	57	79	40	—	—	—	—	—	—
	850	21	1501	1516	1481	21	24.6	28.2	21.4	21	1.5
	700	21	3119	3196	3138	21	13.2	16.5	9.0	21	— 6.9
	600	20	4441	4477	4401	19	3.6	8.0	— 1.3	19	—13.4
	500	20	5899	5947	5842	20	— 4.1	— 1.3	— 6.7	20	—25.0
	400	20	7632	7687	7581	20	—14.6	—11.1	—17.3	19	—33.4
	300	18	9751	9810	9693	18	—29.6	—26.6	—31.5	18	—46.1
	250	18	11028	11105	10965	18	—38.9	—36.4	—41.6	18	—53.4
	200	18	12527	12616	12461	18	—49.9	—47.5	—52.7	18	—63.1
	150	18	14354	14456	14269	18	—63.6	—62.0	—65.0	—	—
	100	15	16756	16874	16652	15	—77.7	—76.3	—80.3	—	—
	70	13	18735	18875	18340	13	—71.7	—68.4	—75.7	—	—
	60	10	19774	19850	19700	10	—66.5	—64.4	—68.4	—	—
	50	10	20844	20915	20764	10	—62.7	—59.9	—64.5	—	—
	40	10	22328	22400	22220	10	—59.3	—57.4	—61.9	—	—
	30	10	24047	24129	23944	10	—55.9	—53.4	—58.7	—	—
	20	0	26694	26758	26577	6	—50.7	—45.0	—54.3	—	—
	10	1	31140	—	—	1	—44.9	—	—	—	—

N = The number of cases the element has been observed during the month.

* The atmospheric pressure corrected to the elevation of the radiosonde station.

Note : Climatological upper air data for Mersa Matruh upper air station are missing since number of days of release of radiosonde sets at this station are less than the permissible number needed for calculating or processing monthly values.

UPPER AIR CLIMATOLOGICAL DATA

Table B 1. *(cont.)* — **MONTHLY MEANS AND MONTHLY ABSOLUTE HIGHER AND LOWER VALUES OF ALTITUDE, AIR TEMPERATURE AND DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES**

AUGUST — 1972

Station	Pressure Surface (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Helwan 1200 UT	Surface . . .	31	993m.b.*	998m.b.*	989m.b.*	31	33.6	40.0	30.0	31	12.9
	1000 . . .	—	—	—	—	—	—	—	—	—	—
	850 . . .	29	1512	1534	1472	29	21.2	27.0	13.8	29	4.1
	700 . . .	29	3162	3222	3106	29	11.3	15.4	6.6	29	—10.8
	600 . . .	27	4431	4485	4363	27	4.2	8.3	— 0.4	27	—18.1
	500 . . .	27	5892	5945	5811	27	— 4.5	1.1	— 9.5	27	—25.8
	400 . . .	25	7612	7682	7478	25	—15.0	—11.5	—20.9	25	—34.3
	300 . . .	25	9733	9814	9568	25	—28.7	—26.0	—34.5	25	—45.5
	250 . . .	25	11015	11101	10826	25	— 37.8	—34.8	—43.3	25	—53.4
	200 . . .	25	12522	12614	12326	25	—48.2	—45.3	—52.1	25	—61.6
	150 . . .	23	14375	14486	14186	23	—60.9	—52.7	—64.9	5	—70.6
	100 . . .	21	16827	16947	16654	21	—72.7	—69.7	—75.8	—	—
	70 . . .	19	18913	19038	18725	19	—67.5	—61.9	—72.5	—	—
	60 . . .	13	19925	20030	19760	13	—62.0	—59.0	—64.6	—	—
	50 . . .	13	20873	21120	20023	13	—57.5	—55.1	—60.1	—	—
	40 . . .	10	22518	22620	22385	10	—54.0	—50.0	—57.1	—	—
	30 . . .	9	24279	24432	24148	9	—50.7	—48.0	—54.7	—	—
	20 . . .	4	26992	27138	26834	4	—47.2	—43.2	—49.5	—	—
	10 . . .	—	—	—	—	—	—	—	—	—	—
Aswan 1200 U.T.	Surface . . .	21	989m.b.*	985m.b.*	983m.b.*	21	39.8	43.0	38.1	21	0.9
	1000 . . .	21	48	64	34	—	—	—	—	—	—
	850 . . .	21	1513	1535	1485	21	25.4	29.3	23.0	21	0.1
	700 . . .	21	3185	3220	3140	21	13.9	19.2	9.6	21	— 8.5
	600 . . .	21	4463	4516	4420	21	4.3	7.4	0.2	21	—15.4
	500 . . .	21	5925	5996	5880	21	— 3.7	— 0.9	— 5.3	21	—26.3
	400 . . .	21	7660	7737	7610	21	—13.5	—12.1	—14.8	21	—34.5
	300 . . .	21	9794	9918	9725	21	—28.6	—25.1	—30.8	21	—46.9
	250 . . .	21	11073	11183	10998	21	—37.7	—33.3	—40.0	21	—54.2
	200 . . .	21	12579	12716	12489	21	—48.9	—45.9	—50.6	21	—63.3
	150 . . .	21	14417	14569	14310	21	—62.1	—60.0	—64.0	1	—74.1
	100 . . .	18	16839	17008	16700	18	—76.0	—74.1	—78.5	—	—
	70 . . .	17	18911	19083	18770	17	—70.8	—62.6	—75.0	—	—
	60 . . .	17	19884	20050	19750	17	—65.5	—60.4	—70.8	—	—
	50 . . .	17	20961	21125	20820	17	—60.6	—57.0	—65.8	—	—
	40 . . .	14	22469	22650	22330	14	—53.4	—53.7	—60.0	—	—
	30 . . .	12	24194	24406	24073	12	—51.5	—41.7	—55.7	—	—
	20 . . .	7	26861	27108	26739	7	—45.7	—42.3	—49.8	—	—
	10 . . .	—	—	—	—	—	—	—	—	—	—

N = The number of cases the element has been observed during the month.

* The atmospheric pressure corrected to the elevation of the radiosonde station.

Note : Climatological upper air data for Mersa Matruh upper air station are missing since number of days of release of radiosonde sets at this station are less than the permissible number needed for calculating or processing monthly values.

Table B 2.—MEAN AND EXTREME VALUES OF THE FREEZING LEVEL AND THE TROPOPAUSE; THE HIGHEST WIND SPEED IN THE UPPER AIR.

AUGUST -- 1972

	Station	Freezing level									First Tropopause									Highest wind speed			
		Mean			Highest			Lowest			Mean			Highest			Lowest						
		Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gmb)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Direction (000—360)°	Speed in Knots
0000 U.T.		(N)	(N)	(N)							(N)	(N)	(N)										
	Helwan. . . .	5013 (31)	559 (31)	—18.8 (31)	5400	531	—15.0	4500	598	— 9.2	16584 (16)	104 (16)	—74.9 (16)	17316	93	—74.6	15700	119	—71.2	2 740	28	105	84
	Aswan.	4968 (20)	564 (20)	—16.7 (20)	5720	514	—22.7	4300	611	— 7.9	16762 (13)	100 (13)	—78.2 (13)	17370	39	—80.5	16310	109	—77.8	24300	29	080	87
1200 U.T.		(N)	(N)	(N)							(N)	(N)	(N)										
	Helwan. . . .	5137 (27)	551 (27)	—21.7 (27)	5670	517	—20.8	4330	604	—22.1	16497 (17)	106 (17)	—72.9 (17)	17420	92	—75.0	15370	125	—70.3	12040	211	245	86
	Aswan.	5110 (21)	555 (21)	—20.1 (21)	5880	509	—25.9	4480	598	—11.6	17099 (17)	95 (17)	—76.9 (17)	18160	79	—77.8	15460	106	—76.4	21900	44	090	65

N = The number of cases the element has been observed during the month.

Table. B 3 *(contd.)*—NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES

HELWAN — AUGUST 1972

Time	Pressure Surface Millibar	Wind between specified ranges of direction (000—360)°																								Number of calm winds	Total number of observations (TN)	Mean scalar wind speed (knots)
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
U.T. 0000	Surface	11	5	9	4	2	7	4	7	1	4	0	—	0	—	0	—	0	—	0	—	0	—	4	4	0	31	5
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	9	11	9	14	2	14	0	—	0	—	0	—	1	14	8	—	1	6	3	9	3	11	3	12	0	31	12
	700	6	16	6	13	0	—	0	—	0	—	0	—	0	—	1	4	2	10	3	9	6	11	7	10	0	31	12
	600	2	13	2	10	1	6	1	5	0	—	0	—	0	—	1	7	2	19	9	11	7	15	6	12	0	31	12
	500	4	16	0	—	0	—	0	—	0	—	1	8	0	—	0	—	3	22	11	19	7	35	5	11	0	31	17
	400	1	11	0	—	0	—	0	—	0	—	0	—	0	—	2	13	7	25	15	22	3	14	3	19	0	31	30
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	12	8	32	14	25	2	16	2	11	0	29	24
	250	0	—	0	—	0	—	0	—	0	—	0	—	1	6	3	12	11	25	10	26	3	30	1	15	0	29	23
	200	0	—	0	—	0	—	0	—	0	—	0	—	1	12	4	16	9	24	13	29	1	17	0	—	0	28	27
	150	0	—	0	—	0	—	0	—	1	9	0	—	4	14	6	21	5	35	6	26	3	17	1	18	0	26	23
	100	0	—	0	—	0	—	1	32	0	—	1	17	3	14	5	11	4	20	3	6	1	9	0	—	0	18	14
	70	0	—	0	—	1	23	2	18	1	14	4	13	1	7	0	—	2	12	0	—	0	—	0	—	0	11	14
	60	0	—	0	—	1	23	2	24	6	21	2	8	0	—	0	—	0	—	0	—	0	—	0	—	0	11	19
	50	0	—	0	—	0	—	5	14	4	23	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	9	18
	40	0	—	0	—	0	—	5	27	1	20	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	6	26
	30	0	—	0	—	0	—	4	32	2	46	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	6	37
	20	0	—	0	—	0	—	2	32	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	32
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
U.T. 1200	Surface	8	10	7	8	0	—	0	—	0	—	0	—	0	—	0	—	2	6	4	8	2	6	8	8	0	31	8
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	7	12	8	12	2	6	2	5	0	—	0	—	1	3	1	9	2	13	1	11	4	8	1	4	0	29	10
	700	3	9	6	13	0	—	1	7	0	—	0	—	0	—	3	8	4	6	4	9	3	15	4	11	0	28	10
	600	2	11	3	8	0	—	0	—	0	—	0	—	0	—	0	—	7	13	6	13	4	10	5	13	0	27	11
	500	2	8	1	5	1	12	0	—	0	—	0	—	1	13	0	—	5	14	10	18	6	13	1	12	0	27	14
	400	0	—	0	—	0	—	0	—	0	—	0	—	1	13	1	25	7	24	11	24	4	23	1	29	0	25	24
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	20	8	26	15	27	1	24	0	—	0	25	26
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	25	8	36	14	21	2	9	0	—	0	25	25
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	20	5	41	10	21	3	19	2	12	0	24	24
	150	1	20	0	—	1	3	0	—	0	—	0	—	2	17	2	24	5	26	8	20	2	24	0	—	0	21	21
	100	2	6	1	7	0	—	0	—	1	7	0	—	6	21	5	22	2	8	1	17	1	16	0	—	0	19	16
	70	0	—	0	—	1	12	0	—	5	29	4	20	1	23	2	8	0	—	0	—	1	20	0	—	0	14	21
	60	0	—	0	—	2	14	2	27	6	22	1	20	1	20	1	22	0	—	0	—	0	—	0	—	0	13	21
	50	0	—	0	—	2	35	1	31	6	27	3	33	0	—	0	—	0	—	0	—	0	—	0	—	0	12	30
	40	0	—	0	—	2	22	2	16	4	26	1	28	0	—	0	—	0	—	0	—	0	—	0	—	0	9	23
	30	0	—	0	—	0	—	0	—	4	25	0	—	0	—	0	—	0	—	0	—	1	18	0	—	0	5	23
	20	0	—	0	—	0	—	0	—	2	21	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	21
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the wind has been observed from the range of direction during the month.

TN = The total number of cases the wind has been observed for all directions during the month.

Table B 3. (*cont l.*)—**NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES**

ASWAN (A) — AUGUST 1972

Time	Pressure Surface (Millibar.)	Wind between specified ranges of direction (000—360°)																								Number of Calm winds	Total Number of Observations (T.N)	Mean Scalar wind Speed (Knots)
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	18	12	2	8	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	10	10	12	0	31	12
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	7	17	8	11	1	6	0	—	0	—	0	—	1	10	0	—	1	13	2	13	5	12	6	11	0	31	13
	700	6	11	0	—	1	3	2	10	0	—	1	14	6	19	1	16	3	22	3	12	6	11	2	8	0	31	14
	600	2	17	1	9	1	5	0	—	0	—	2	8	3	22	4	21	6	15	7	12	2	8	3	8	0	31	14
	500	1	15	0	—	3	8	0	—	4	7	1	6	3	15	7	9	7	12	3	10	2	9	0	—	0	31	10
	400	6	10	1	20	1	4	3	10	1	5	2	8	3	6	6	10	5	11	2	12	0	—	0	—	0	30	10
	300	0	—	3	10	1	14	4	15	2	10	5	15	2	12	7	14	2	13	2	7	1	7	1	11	0	30	12
	250	0	—	1	7	2	10	2	20	5	26	4	19	5	14	7	19	1	3	0	—	0	—	2	11	0	29	17
	200	0	—	2	10	1	15	4	19	6	22	9	25	4	19	2	24	1	13	0	—	0	—	0	—	0	29	21
	150	0	—	0	—	1	17	4	26	11	31	8	27	4	30	0	—	0	—	0	—	0	—	0	—	0	28	30
	100	0	—	0	—	0	—	1	19	16	39	6	36	2	41	0	—	0	—	0	—	0	—	0	—	0	25	38
	70	0	—	0	—	1	15	10	34	7	28	1	45	0	—	0	—	0	—	0	—	0	—	0	—	0	19	31
	60	0	—	0	—	1	27	14	32	3	23	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	18	30
	50	0	—	0	—	3	44	12	39	1	42	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	16	40
	40	0	—	0	—	3	33	10	43	1	37	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	14	41
	30	0	—	0	—	1	42	11	43	0	—	0	—	1	47	0	—	0	—	0	—	0	—	0	—	0	13	43
	20	0	—	0	—	0	—	3	55	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	3	55
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	9	10	3	5	0	—	0	—	0	—	0	—	0	—	0	—	3	6	1	4	7	11	8	10	0	31	9
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	5	13	0	—	0	—	0	—	1	9	0	—	0	—	0	—	2	8	3	11	9	9	11	13	0	31	11
	700	1	32	0	—	1	6	0	—	0	—	0	—	2	34	1	33	5	14	10	15	10	14	0	—	0	30	16
	600	1	2	0	—	0	—	0	—	0	—	0	—	5	17	4	24	8	11	4	15	4	10	4	8	0	30	14
	500	0	—	4	9	3	8	2	8	0	—	1	11	0	—	9	10	5	12	5	11	1	6	0	—	0	30	10
	400	2	5	2	15	1	13	6	11	5	8	2	6	1	5	3	10	5	12	2	14	0	—	1	8	0	30	10
	300	1	7	0	—	5	12	5	18	4	16	7	12	3	12	1	8	2	18	1	14	1	4	0	—	0	30	13
	250	0	—	2	5	3	28	4	15	5	21	8	23	4	21	3	9	0	—	0	—	1	8	0	—	0	30	19
	200	0	—	0	—	1	37	5	20	6	20	11	25	6	20	0	—	1	6	0	—	0	—	0	—	0	30	22
	150	0	—	0	—	1	16	2	38	15	33	10	26	2	34	0	—	0	—	0	—	0	—	0	—	0	30	31
	100	0	—	0	—	0	—	7	37	16	43	6	30	0	—	0	—	0	—	0	—	0	—	0	—	0	29	39
	70	0	—	0	—	0	—	15	39	10	39	0	—	0	—	0	—	0	—	1	31	0	—	0	—	0	26	39
	60	0	—	0	—	0	—	19	36	6	36	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	25	36
	50	0	—	0	—	1	50	12	38	8	41	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	21	40
	40	0	—	0	—	0	—	13	38	4	42	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	17	38
	30	0	—	0	—	2	34	8	41	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	10	39
	20	0	—	0	—	1	33	1	47	1	48	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	3	43
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the element has been observed during the month.

TN = The total number of cases the wind has been observed for all directions during the month.

REVIEW OF AGRO-METEOROLOGICAL STATIONS

MERSA MATRUH — AUGUST 1972

For the month as a whole the mean daily air temperature and relative humidity were slightly above normal. The total monthly rainfall was 17.3 mm. while this month in normally rainless.

Th month was characterized by four short warm spells on the 2nd, 21st, 26th and 31st. The first warm spell yielded the highest maximum air temperature for the montn (40.8°C) on the 2nd together with the lowest relative humidity (21%). The break down of the second and fourth warm spells was followed by abnormal rainfall amounting to 15.0 mm. on the 23rd and 2.3 mm. on the 27th respectively. Apart from the warm spells mild summer weather was experienced.

The extreme maximum soil temperatures were higher than the corresponding values of last August at all depths with departures between 3.0°C (at 2 cm.) and 0.5°C (at 100 cm.). The extreme minimum soil temperatures were lower than last August at depths between 2 & 20 cm. with departures between 1.9°C (at 2 cm.) and 0.8°C (at 10 cm.) ; and were higher than last August at 50 & 100 cm. depths by 0.9° and 0.4°C respectively.

The mean daily wind speed at 1.5 met. and actual sunshine duration were lower than the corresponding values of August 1971 by 0.4 m./sec.and 0.2 hour respectively.

TAHRIR — AUGUST 1972

This month was normal as regards the mean daily air temperature and relative humidity.

The month was characterized by four heat waves in the periods (1st-5th), (10th-20th), (24th-28th) and on the 31st. The first heat wave yielded the highest maximum air temperature for the month (40.6°C) on the 3rd together with the lowest relative humidity (27%). The second heat wave was markedly prologned. The heat waves were reparated by short mild periods.

The extreme maximum soil temperatures were higher than the corresponding values of last August at 2, 20, 50 cm depths by 0.2°C to 0.4°C, lower at 5 cm. depth by 0.9°C and the same as last August at 10, 100 cm. depths. The extreme minimum soil temperatures were higher than the corresponding values of last August at all depths apart from 10, 50 cm. depths where the values were the same as last August, the departures were slight and varied between 0.1° and 0.5°C.

The mean daily actual sunshine duration was higher than average by only 0.1 hour. The mean daily wind speed and pan evaporation were lower than average by 0.5 m./sec. and 1.81 mm. respectively.

BAHTIM — AUGUST 1972

For the month as a whole the mean daily air temperature and relative humidity were about average.

The month was characterized by three heat waves in the periods (1st-5th), (12th-19th) and (26th-28th). The highest maximum air temperature for the month was 37.0°C reported on both the 3rd and 27th. Apart from these heat waves mild summer weather was experienced.

The extreme maximum soil temperatures were higher than last August at 2, 5, 20 cm. depths with departures between 1.6°C (at 2 cm). and 0.2°C (at 20 cm.). At 10, 50, 100 cm. depths the extreme soil maxima were lower than last August by slight departures between 0.1° and 0.3°C. The extreme minimum soil temperatures were lower than last August at all depths apart from 50 cm. depth where its value was slightly higher, the departures were slight and ranged between 0.1° and 0.7°c.

The mean daily actual sunshine duration and surface wind speed were the same as average. The mean daily pan evaporation was higher than average by 0.76 mm.

KHARGA — AUGUST 1972

For the month as a whole, the mean air temperature was slightly above normal and the mean relative humidity was rather normal.

The month was characterized by three heat waves in the periods (2nd-6th), (13th-20th) and (22nd-27th). The first heat wave yielded the highest maximum air temperature for the month (45.2°C) on the 4th. In the rest of the month mild summer weather was experienced.

The extreme maximum soil temperatures were higher than the corresponding values of last August at all depths apart from 100 cm. depth where the values were the same, the differences varied between 3.5°C (at 2 cm.) and 0.4°C (at 50 cm.) The extreme minimum soil tempratures were higher than last August at depth between 2 and 20 cm. wth departures between 2.2°C (at 2 cm.) and 0.4°C (at 20 cm.) At 50 cm. depth the extreme minimum soil temperature was the same as last August, and at 100 cm. it was lower by 0.1°C.

The mean daily actual sunshine duration was the same as August 1971. The mean daily wind speed and pan evaporation were more than the corresponding values of August 1971 by 0.4 m./sec. and 1.66 mm. respectively.

Table C 1.—AIR TEMPERATURE AT 1½ METRES ABOVE GROUND

AUGUST — 1972

STATION	Air Temperature (°C)					Mean Duration in hours of daily air temperature above the following values										
	Mean Max.	Mean Min.	Mean of the day	Night time mean	Day time mean	—5°C	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C
M. Matruh . .	30.4	21.7	26.2	24.2	27.6	24.0	24.0	24.0	24.0	24.0	24.0	15.4	1.0	0.2	0.03	0.0
Tahrir	35.6	20.3	27.0	23.4	29.8	24.0	24.0	24.0	24.0	24.0	23.2	13.8	7.1	0.7	0.0	0.0
Bahtim	33.7	19.2	26.1	22.3	29.0	24.0	24.0	24.0	24.0	24.0	21.7	13.0	6.6	0.5	0.0	0.0
Kharga . . .	39.8	25.2	33.1	30.0	35.6	24.0	24.0	24.0	24.0	24.0	24.0	23.0	16.7	8.9	1.7	0.0

Table C 2.—EXTREME VALUES OF AIR TEMPERATURE AT 1½ METRES ABOVE GROUND, ABSOLUTE MINIMUM AIR TEMPERATURE AT 5cms ABOVE GROUND OVER DIFFERENT FIELDS

AUGUST — 1972

STATION	Max. Temp. at 1½ metres (°C)				Min. Temp. at 1½ metres (°C)				Min. Temp. at 5 cms. above (°C)			
	Highest		Lowest		Highest		Lowest		Dry soil		Grass	
	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date
M. Matruh	40.8	2	28.2	24,25	25.3	15	18.8	24	18.6	7	—	—
Tahrir	40.6	3	32.2	8·29	23.0	4	17.4	26	17.2	8,30	—	—
Bahtim	37.0	3,27	30.9	7	22.4	1	15.9	31	13.7	8	—	—
Kharga	45.2	4	35.0	29	29.9	3	19.6	13	17.6	13	—	—

Table C 3.—(SOLAR+SKY) RADIATION, DURATION OF BRIGHT SUNSHINE, RELATIVE HUMIDITY AND, VAPOUR PRESSURE AT 1½ METRES ABOVE GROUND, EVAPORATION AND RAINFALL

AUGUST — 1972

STATION	(Solar+Sky Radiation gm. cal/cm²	Duration of Bright Sunshine (hours)			Relative Humidity				Vapour pressure (mms)						Evaporation (mms)		Rainfall (mms)		
		Total Actual monthly	Total Possible monthly	%	Mean of day	1200 U.T.	Lowest	Date	Mean of day	1200 U.T.	Highest	Date	Lowest	Date	Piche	Pan class A	Total Amount Monthly	Max. Fall in one day	Date
M.Maturh	×	328.6	411.7	88	74	63	21	2	18.7	19.1	23.2	4	11.2	2	7.6	×	17.3	15.0	23
Tahrir .	592.9	367.6	410.3	90	68	40	27	3,11	17.4	15.5	22.9	3	11,8	11	6.5	9.31	0.0	0.0	—
Bahtim .	602.2	344.5	409.2	84	69	43	25	27	16.7	15.8	20.8	3	7.9	26	6.9	9.21	0.0	0.0	—
Kharga	681.6	374.8	403.0	93	25	17	6	22	9.0	8.6	14.1	10	3.5	22	20.2	21.51	0.0	0.0	—

Table C 4.—EXTREME SOIL TEMPERATURE AT DIFFERENT DEPTHS IN DIFFERENT FIELDS

AUGUST — 1972

STATION	Highest (H) Lower (L)	Extreme soil temperature (°C) in dry field at different depths (cms.)								Extreme soil temperature (°C) in grass field at different depths (cms)							
		2	5	10	20	50	100	200	300	2	5	10	20	50	100	200	300
M.Matruh	H	44.4	41.1	36.2	32.6	30.0	27.3	25.0	—	—	—	—	—	—	—	—	—
	L	23.5	23.3	24.3	26.6	28.4	26.0	23.4	—	—	—	—	—	—	—	—	—
Tahrir	H	54.4	48.4	42.8	37.6	33.9	31.7	29.6	28.3	—	—	—	—	—	—	—	—
	L	28.0	27.3	27.6	30.7	31.5	31.2	28.7	27.4	—	—	—	—	—	—	—	—
Bahtim	H	55.9	46.8	40.7	35.3	32.3	30.6	27.8	25.8	—	—	—	—	—	—	—	—
	L	29.0	28.2	29.3	31.8	31.4	29.5	26.7	25.0	—	—	—	—	—	—	—	—
Kharga	H	59.7	52.0	44.4	39.0	36.0	33.6	31.1	29.6	—	—	—	—	—	—	—	—
	L	22.6	26.5	30.0	33.4	34.2	32.6	30.2	28.8	—	—	—	—	—	—	—	—

Table C 5.—SURFACE WIND

AUGUST — 1972

STATION	Wind Speed m/sec at 1½ metres			Days with surface wind speed at (10 metres)							Max, Gust 10 metres	
	Mean of the day	Night time mean	Day time mean	≥10 (knots)	≥15 (knots)	≥20 (knots)	≥25 (knots)	≥30 (knots)	≥35 (knots)	≥40 (knots)	Value (knots)	Date
M.Matruh. . .	4.1	3.1	5.2	31	29	16	5	2	1	1	51	24
Tahrir	1.8	1.1	2.5	31	7	1	0	0	0	0	26	28
Bahtim	1.8	1.2	2.5	19	1	0	0	0	0	0	22	6
Kharga . . .	4.0	3.4	4.7	30	16	7	0	0	0	0	32	2

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THE ARAB REPUBLIC OF EGYPT

MONTHLY WEATHER REPORT

VOLUME 15 NUMBER 9

SEPTEMBER, 1972

U.D.C. 551, 506.1 (62)

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THE EGYPTIAN METEOROLOGICAL AUTHORITY
CAIRO

PUBLICATIONS OF THE METEOROLOGICAL AUTHORITY OF THE ARAB REPUBLIC OF EGYPT — CAIRO

In fulfilment of its duties, the Meteorological Authority of Egypt issues serveral reports and publications on weather, climate and agrometeorology. The principal publications are described on this page.

Orders for publications should be addressed to :

"Chairman of the Board of Directors, Meteorological Authority, Kubri-el-Qubbeh — CAIRO".

THE MONTHLY WEATHER REPORT

First issued in 1909, the Monthly Weather Report served to give a brief summary of the weather conditions that prevailed over Egypt during the month, with a table showing the mean values for few meteorological elements and their deviations from the normal values. From 1954 to 1957 this report was in a rapid state of development and extension resulting into a voluminous report on January 1958 giving surface, upper air, and agro-meteorological data for Egypt.

As from January 1964, the Monthly Weather Report was pressed to give climatological data for a representative selection of synoptic stations.

THE AGRO-METEOROLOGICAL ABRIDGED MONTHLY REPORT

Gives a review of weather experienced in the agro-meteorological stations of Egypt as well as monthly values of certain elements.

THE ANNUAL REPORT

This report gives annual values and statistics for the various meteorological elements, together with a summary of the weather conditions that prevailed during all months of the year.

CLIMATOLOGICAL NORMALS FOR EGYPT

A voluminous edition was issued in March 1968 which brings normals and mean values up till 1960.

METEOROLOGICAL RESEARCH BULLETIN

First issued in January 1969 on a bi-annual basis. It includes research works carried out by members of staff of "The Meteorological Institute for Research and Training" and the Operational Divisions of the Meteorological Authority.

TECHNICAL NOTES

As from October 1970, the Meteorological Authority started to issue a new series of publications in the form of Technical Notes (non periodical) on subjects related to studies and applications of meteorology in different fields for the benefit of personnel working in these fields.

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CONTENTS

PAGE

General Summary of Weather Conditions 1-2

SURFACE DATA

Table A1.—Monthly values of the Atmospheric Pressure, Air Temperature, Relative Humidity, Bright Sunshine Duration and Piche Evaporation 3

" A2.—Maximum and Minimum Air Temperatures 4

" A3.—Sky Cover and Rainfall 5

" A4.—Number of Days of ccurrence of Miscellaneous Weather Phenomena. 6

" A5.—Number in Hours of Occurrences of Concurrent Surface Wind Speed and Direction Recorded Within Specified Ranges 7,8

UPPER AIR DATA

Table B1.—Monthly Means and Monthly Absolute Higher & Lower Values of Altitude, air Temperature & Dew point at Standard and Selected Pressure Surfaces 9,10

" B2.—Mean and Extreme values of The Freezing Level and The Tropopause; The Highest Wind Speed in The Upper Air 11

" B3.—Number of Occurreneces of Wind Direction Within Specified Ranges and The Mean Scalar Wind Speed at the Standard and Selected Pressure Surfaces 12

AGRO-METEOROLOGICAL DATA

Reviews of Agro-meteorological stations. 13-14

Table C1.—Air Temperature at 2 Metres Above Ground 15

" C2.—Absolute Values of Air Temperature at 2 Metres Above Ground, Absolute Minimum Air Temperature at 5 Cms Above Ground Over Different Fields. . 15

" C3.—(Solar + Sky) Radiation, Duration of Bright Sunshine, Relative Humidity and Vapour Pressure at 2 Metres Above Ground, Evaporation and Rainfall 15

" C4.—Extreme Soil Temperature at Different Depths in Different Fields 16

" C5.—Surface wind 16

Note : **For explanatory notes on the tables please refer to Valume 15, Number 1 (January 1972).**

GENERAL SUMMARY OF WEATHER CONDITIONS

SEPTEMBER 1972

Generally mild in the northern parts, rather hot in the central parts and excessively hot in the southern parts, intervened with four heat waves and characterized with abnormal high temperatures in general.

GENERAL DESCRIPTION OF WEATHER

The prevailing weather most of this month was mild & humid in the northern parts, rather hot & moderately humid in the middle parts, excessively hot & dry in the southern part. The month was intervened with four variant heat waves with their peaks round the 5*th*, 10*th*, 18*th* & 29*th*. The Last heat wave was the most pronounced. It prevailed from the 24*th* till the end of the month and was associated with markedly high temperatures and low humidity.

Early morning low clouds developed frequently over Delta & Cairo with several occasions of mist over scattered localities.

Light rising sand was reported in few days over scattered localities.

PRESSURE DISTRIBUTION

The main features of pressure distribution over the surface maps this month were :

— The Azores high and its extensions through Europe and the Mediterranean.

— High pressure north of the Black Sea and its SW extension to East Mediterranean.

— Deep depressions through North Europe and their secondaries through Central Europe.

— The complex monsoon low pressure over the Arabian Gulf, Arabia and north Sudan.

The upper air charts were characterized over our area with consecutive transits of five upper troughs through East Mediterranean round the 5*th*, 8*th*, 14*th*, 24*th* & 28*th*.

The barometric pressure over Egypt in this month showed six oscillations of small amplitudes in general reaching consecutive minima round the 5*th*, 8*th*, 13*th*, 18*th*, 23*rd* & 29*th* which were round or slightly below normal.

The first, second and fifth pressure minima associated westward elongations of the Iraq monsoon trough through East Mediterranean round the 5*th*, 8*th* & 23*rd*.

The third pressure minimum associated a northwestward elongation of the Iraq monsoon trough towards the Black Sea round the 13*th*.

The fourth pressure minimum associated the northward elongation of the Sudan monsoon trough round the 18*th*.

The sixth and most pronounced pressure minimum in this month was due to the transit of a low pressure system which appeared on the 27*th* over Central Mediterranean and north Algiers. This system proceeded northeastwards and traversed East Mediterraneanon the 29*th*.

Apart from the above mentioned depressions-high pressure operated over East Mediterrancan and the barometric pressure over Egypt was above normal.

SURFACE WIND

The prevailing winds during this month were generally light to moderate, and blew mostly from N to NW directions and less frequently from the NE direction.

Winds freshened during several days in few scattered localities mainly in the Red Sea and Western Desert districts. Calms were frequent in the evening and early morning intervals in general.

TEMPERATURE

Maximum air temperature was above normal during the prevailing heat waves, and the departure above normal was appreciable in the last heat wave in particular. Otherwise, maximum air temperatures were slightly below normal. Maximum air temperature values ranged most of the month between 29° & 34° C in the northern parts, between 32° & 40° C in the middle parts, between 38° & 45° C in the southern parts.

The absolute maximum air temperature for Egypt in this month was 45.5° C reported at Aswan on the 18th.

Minimum air temperature was moderately above normal in general during the heat waves, and round or slighily below normal otherwise. The highest minimum air temperature attained a record at Sallum (29.8°C) on the 28th. Minimum air temperature values ranged generally between 18° & 26°C.

The absolute minimum air temperautre for Egypt in this month was 14.4°C reported at Beni Suef on the 26th.

PRECIPITATION

This month was rainless all over the country, apart from light rain over Sallum on the 30th and Sidi Barrani on 29th.

The maximum daily rainfall for Egypt in this month was 0.6 mm. reported at Sidi Barrani on the 29th, which was also the maximum monthly rainfall.

Chairman (M. F. TAHA)

Board of Directors

Cairo, September 1973

SURFACE DATA

Table A 1. — MONTHLY VALUES OF THE ATMOSPHERIC PRESSURE, AIR TEMPERATURE, RELATIVE HUMIDITY, BRIGHT SUNSHINE DURATION & PICHE EVAPORATION.

SEPTEMBER — 1972

STATION	Atmospheric Pressure (mbs) M.S.L.		Air Temperature °C									Relative Humidity %		Bright Sunshine Duration (Hours)			Piche Evaporation (mms) Mean
			Maximum		Minimum			Dry Bulb		Wet Bulb							
	Mean	D.F. Normal or Average	(A) Mean	D.F. Normal or Average	(B) Mean	D.F. Normal or Average	$\frac{A+B}{2}$	Mean	D.F. Normal or Average	Mean	D.F. Normal or Average	Mean	D.F. Normal or Average	Total Actual	Total Possible	%	
Sallum	1014.1	+ 0.3	32.1	+ 2.8	22.1	+ 1.9	27.1	26.6	+ 1.8	20.5	+ 0.4	55	— 8	—	—	—	10.1
Mersa Matruh . (A)	1014.2	+ 0.5	30.8	+ 2.2	21.9	+ 2.3	26.4	26.0	+ 1.8	21.4	+ 1.4	65	— 2	313.1	370.7	84	9.0
Alexandria . . (A)	1013.8	+ 1.2	31.0	+ 1.5	21.7	+ 0.5	26.4	25.8	— 0.2	21.6	+ 0.4	67	— 1	316.7	370.8	85	5.7
Port Said . . . (A)	1011.6	— 0.3	31.7	+ 1.5	23.4	— 0.4	27.6	27.2	+ 1.1	22.6	+ 0.5	65	— 4	315.6	370.8	85	5.3
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1012.9	+ 1.0	32.8	+ 0.4	18.3	+ 0.7	25.6	24.8	+ 0.3	20.6	+ 0.8	67	+ 4	322.1	370.3	87	4.3
Cairo . . . . . (A)	1012.7	+ 0.3	34.0	+ 1.3	21.1	+ 1.2	27.6	27.0	+ 1.5	20.9	+ 0.7	56	— 2	—	—	—	13.4
Fayoum	—	—	36.2	+ 2.5	20.4	+ 0.8	28.3	27.6	+ 1.2	20.8	+ 1.1	52	+ 1	—	—	—	7.4
Minya . . . . (A)	1011.0	0.0	35 7	+ 2.3	19.5	+ 0.9	27.6	27.2	+ 1.6	19.1	— 0.5	44	— 11	330.0	369.7	89	15.0
Assyout . . . (A)	1009.9	— 0.5	35.2	+ 0.3	19.7	— 0.4	27.4	28.0	+ 0.5	19.3	+ 0.8	41	+ 2	—	—	—	14.4
Luxor . . . . (A)	1008.9	+ 0.6	40.5	+ 1.8	20.6	— 0.8	30.6	30.4	+ 0.4	19.4	0.0	31	— 1	—	—	—	11.1
Aswan . . . . (A)	1008.2	+ 0.2	41.1	+ 1 9	24.4	+ 2.3	32.8	32.4	+ 1.5	18.3	+ 1.1	18	— 1	—	—	—	24.0
Siwa	1013.3	— 0.1	37.1	+ 2.2	20.8	+ 2.5	29.0	29.4	+ 2.5	19.0	+ 0.5	33	— 8	319.3	372.8	86	10.8
Bahariya	1012.8	+ 0.9	35.4	+ 1.4	20.4	+ 1.6	27.9	27.7	+ 1.1	18.7	+ 0.1	38	— 5	—	—	—	12.2
Farafra	1013.0	— 0.2	36.6	+ 2.2	20.4	+ 1.5	28.5	28.2	+ 1.5	18.7	+ 2.2	36	+ 5	—	—	—	17.2
Dakhla	1011.8	+ 1.6	37.6	+ 2.0	20.8	+ 0.5	29.2	29.4	+ 1.4	17.4	+ 0.2	24	— 4	—	—	—	20.8
Kharga	1010.4	+ 0.4	38.6	+ 2.0	22.6	+ 1.3	30.6	30.8	+ 2.2	18.0	+ 0.1	27	— 5	328.3	368.5	89	15.7
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada . . .	1009.3	+ 1.3	32.4	+ 1.6	23.8	+ 0.7	28.1	28.5	+ 0.7	21.5	+ 0.5	52	0	335.4	369.8	93	11.1
Quser	1008.7	+ 0.5	32.0	+ 0.1	25.8	+ 0.6	28.9	29.1	+ 1.2	21.6	+ 0.4	49	— 4	—	—	—	12.4

Table A 2 — MAXIMUM AND MINIMUM AIR TEMPERATURE

SEPTEMBER — 1972

Station	Maximum Temperature °C									Grass Min. Temp.		Minimum Temperature °C							
	Highest	Date	Lowest	Date	No. of Days with Max-Temp.					Mean	Dev. From Normal	Highest	Date	Lowest	Date	No. of Days with Min. Temp.			
					>25	>30	>35	>40	>45							<10	<5	<0	<-5
Sallum	41.0	4	26.1	30	30	18	7	2	0	21.6	—	29.8	28	20.1	14	0	0	0	0
Mersa Matruh (A)	40.4	28	27.4	14,30	30	8	5	1	0	21.0	—	24.6	28	18.6	24	0	0	0	0
Alexandria . (A)	39.8	29	28.6	22	30	14	5	0	0	20.2	—	24.3	1	17.0	24	0	0	0	0
Port Said . (A)	33.6	29	29.6	25	30	29	0	0	0	23.5	—	25.8	17	21.3	25	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta.	38.3	29	30.2	2	30	30	5	0	0	—	—	19.7	1,18,29	16.8	16,24	0	0	0	0
Cairo . . . (A)	39.4	29	30.8	12	30	30	10	0	0	—	—	23.6	5	19.2	24	0	0	0	0
Fayoum.	41.0	29	32.7	22	30	30	16	3	0	14.5	—	23.0	1,30	17.5	24	0	0	0	0
Minya . . . (A)	41.0	29	32.0	23	30	30	14	3	0	17.6	—	22.6	6	16.2	25	0	0	0	0
Assyout. . . (A)	41.7	29	32.0	23	30	30	18	3	0	17.3	—	23.2	6	17.9	27	0	0	0	0
Luxor . . . (A)	44.8	18	36.6	14	30	30	30	18	0	13.6	—	24.0	19	18.0	25,29	0	0	0	0
Aswan . . . (A)	45.5	18	37.0	23	30	30	30	20	1	—	—	27.8	18	21.2	14	0	0	0	0
Siwa	41.6	28	33.2	20	30	30	26	4	0	19.9	—	23.9	1	17.6	18	0	0	0	0
Bahariya	41.2	5	31.0	22	30	30	14	1	0	19.6	—	23.0	27	16.8	23	0	0	0	0
Farafra	43.6	5	32.3	22	30	30	22	1	0	20.0	—	23.2	28	17.0	24	0	0	0	0
Dakhla	44.0	5	32.4	23	30	30	26	7	0	20.6	—	25.2	19	15.6	25	0	0	0	0
Kharga	43.6	5	34.1	23	30	30	29	11	0	21.0	—	28.0	5	18.1	17	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada . . .	35.7	17	30.8	8	30	30	1	0	0	—	—	27.1	19	20.4	25	0	0	0	0
Quseir	34.2	26	30.0	22	30	29	0	0	0	22.6	—	27.4	26	22.6	14	0	0	0	0

Table A 3.—SKY COVER AND RAINFALL

SEPTEMBER 1972

STATION	Mean Sky Cover (Oct).					Rainfall mms.										
	00 U.T.	06 U.T.	12 U.T.	18 U.T.	Daily Mean	Total Amount	D. From Normal	Max. Fall in one day		Number of Days with Amount of Rain						
								Amount	Date	<0.1	≥0.1	≥1.0	≥5.0	≥10	≥25	≥50
Sallum	1.5	1.3	2.1	1.8	1.6	0 5	—0.2	0.5	30	1	1	0	0	0	0	0
Mersa Matruh (A)	1.0	2.3	1.5	2.2	1.6	0.0	—1.0	0.0	—	0	0	0	0	0	0	0
Alexandria . . (A)	3.1	3.0	2.8	2.4	2.7	0.0	—0.5	0.0	—	0	0	0	0	0	0	0
Port Said . . (A)	1.1	1.3	1.1	0.9	1.1	0.0	—0.1	0.0	—	0	0	0	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	0.2	0.8	1.2	0.2	0.7	0.0	—0.2	0.0	—	0	0	0	0	0	0	0
Cairo . . . . (A)	1.4	2.5	0.7	0.0	1.2	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Fayoum	—	1.0	0.1	0.0	—	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Minya	0.0	0.6	0.1	0.0	0.2	0.0	— 0.1	0.0	—	0	0	0	0	0	0	0
Assyout. . . . (A)	0.0	0.2	0.0	0.0	0.0	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Luxor . . . . (A)	0.0	0.3	0.3	0.3	0.2	0.0	— 0.1	0.0	—	0	0	0	0	0	0	0
Aswan . . . . (A)	0.8	1.1	0.7	0.6	0.7	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Siwa	0.9	0.9	0.4	0.7	0.7	0.0	— 0.1	0.0	—	0	0	0	0	0	0	0
Bahariya	0.2	0.5	0.1	0.0	0.2	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Farafra	—	0.0	0.0	0.0	—	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Dakhla	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Kharga	0.1	0.3	0.1	0.1	0.1	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Quseir	0.0	0.2	0.4	0.2	0.2	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0

Table A 4.— DAYS OF OCCURRENCE OF MISCELLANEOUS WEATHER PHENOMENA

SEPTEMPER — 1972

Station	Precipitation				Frost	Thunderstorm	Mist Vis ≥ 1000 metres	Fog Vis < 1000 Metres	Haze Vis ≥ 1000 Metres	Thick Haze Vis < 1000 Metres	Dust or Sandrising Vis ≥ 1000 Metres	Dust or Sandstorm Vis < 1000 Metres	Gale	Clear Sky	Cloudy Sky
	Rain	Snow	Ice Pellets	Hail											
Sallum	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0
Mersa Matruh (A)	0	0	0	0	0	0	0	0	0	0	9	2	0	17	0
Alexandria (A)	0	0	0	0	0	0	2	2	0	0	0	0	0	9	0
Port Said (A)	0	0	0	0	0	0	0	0	0	0	0	0	0	27	0
Al Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	0	0	0	0	0	0	9	0	0	0	0	0	0	30	0
Cairo (A)	0	0	0	0	0	0	15	1	4	1	0	0	0	22	0
Fayoum	0	0	0	0	0	0	0	1	0	0	0	0	0	—	—
Minya (A)	0	0	0	0	0	0	8	0	8	0	7	0	0	29	0
Assyout (A)	0	0	0	0	0	0	0	0	0	0	0	0	0	30	0
Luxor (A)	0	0	0	0	0	0	0	0	12	0	2	0	0	29	0
Aswan (A)	0	0	0	0	0	0	0	0	0	0	8	0	0	25	0
Siwa	0	0	0	0	0	0	0	0	0	0	3	0	0	26	0
Bahariya	0	0	0	0	0	0	0	0	0	0	0	0	0	30	0
Farafra	0	0	0	0	0	0	0	0	0	0	1	0	0	—	—
Dakhala	0	0	0	0	0	0	0	0	0	0	4	0	0	30	0
Kharga	0	0	0	0	0	0	0	0	0	0	2	0	0	30	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0	0	0	0	0	0	0	0	0	0	4	0	0	30	0
Quseir	0	0	0	0	0	0	0	0	0	0	0	0	0	30	0

Table A 5.—NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES

SEPTEMBER — 1972

Station	Calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurrences of wind blowing from the ranges of direction indicated												All directions
					345 / 014	015 / 044	045 / 074	075 / 104	105 / 134	135 / 164	165 / 194	195 / 224	225 / 254	255 / 284	285 / 314	315 / 344	
Sallum	18	0	0	1—10	38	68	74	47	18	8	16	15	16	37	68	159	564
				11—27	11	10	2	0	0	0	2	16	26	6	3	62	138
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**49**	**78**	**76**	**47**	**18**	**8**	**18**	**31**	**42**	**43**	**71**	**221**	**702**
Mersa Matruh	44	0	0	1—10	42	10	0	11	16	4	6	8	23	37	18	53	228
				11—27	68	30	10	15	16	3	37	21	3	9	14	222	448
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**110**	**40**	**10**	**26**	**32**	**7**	**43**	**29**	**26**	**46**	**32**	**275**	**676**
Alexandria	4	0	0	1—10	118	70	33	14	18	44	25	12	6	4	45	143	532
				11—27	45	19	1	0	0	0	0	0	0	0	11	108	184
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**163**	**89**	**34**	**14**	**18**	**44**	**25**	**12**	**6**	**4**	**56**	**251**	**716**
Tanta	19	0	0	1—10	93	88	39	28	24	9	5	19	48	60	119	130	667
				11—27	21	4	0	0	0	0	0	0	0	0	1	8	34
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**119**	**92**	**39**	**28**	**24**	**9**	**5**	**19**	**48**	**60**	**120**	**138**	**701**
Cairo	142	1	7	1—10	82	55	28	7	4	0	0	3	3	17	48	77	324
				11—27	64	66	27	13	[illegible]	[illegible]	0	[illegible]	0	6	14	54	246
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**146**	**121**	**55**	**20**	**6**	**0**	**0**	**3**	**3**	**23**	**62**	**131**	**570**
Fayoum	6	2	0	1—10	352	23	11	2	0	0	1	3	8	2	5	50	666
				11—27	2	38	6	0	0	0	0	0	0	0	0	0	46
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**354**	**276**	**17**	**2**	**0**	**0**	**1**	**3**	**8**	**2**	**5**	**50**	**712**
Minya	1	0	0	1—10	485	100	4	0	0	0	1	1	1	0	3	27	622
				11—27	78	18	1	0	0	0	0	0	0	0	0	0	97
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**563**	**118**	**5**	**0**	**0**	**0**	**1**	**1**	**1**	**0**	**3**	**27**	**719**
Asyout	32	0	0	1—10	111	35	1	1	0	1	0	2	3	10	151	232	547
				11—27	100	1	0	0	0	0	0	0	0	0	2	38	141
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**211**	**36**	**1**	**1**	**0**	**1**	**0**	**2**	**3**	**10**	**153**	**270**	**688**

Table A 5 (*contd.*)—NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES

SEPTEMBER — 1972

Station	Calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurrences of wind blowing from the ranges of directions indicated												
					345 / 014	015 / 044	045 / 074	075 / 104	105 / 134	135 / 164	165 / 194	195 / 224	225 / 254	255 / 284	285 / 314	315 / 344	All directions
Luxor	88	0	0	1—10	87	56	20	17	7	16	119	44	22	49	78	111	626
				11—27	0	0	0	0	0	0	2	0	0	0	0	4	6
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**87**	**56**	**20**	**17**	**7**	**16**	**121**	**44**	**22**	**49**	**78**	**115**	**632**
Aswan	5	0	4	1—10	317	128	3	0	0	0	2	1	0	3	18	95	567
				11—27	98	20	0	0	0	0	0	0	0	0	2	24	144
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**415**	**148**	**3**	**0**	**0**	**0**	**2**	**1**	**0**	**3**	**20**	**119**	**711**
Siwa	32	5	0	1—10	73	148	85	67	31	46	25	13	10	7	56	77	639
				11—27	4	21	3	0	0	1	1	3	0	0	0	11	44
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**77**	**169**	**88**	**67**	**31**	**47**	**27**	**16**	**10**	**7**	**56**	**88**	**683**
Dakhla	1	11	1	1—10	104	73	10	6	3	4	4	11	42	46	92	202	597
				11—27	49	22	0	0	0	0	0	0	0	0	0	39	110
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**153**	**95**	**10**	**6**	**3**	**4**	**4**	**11**	**42**	**46**	**92**	**241**	**707**
Kharga	0	7	0	1—10	276	78	11	2	2	3	1	1	0	4	10	114	502
				11—27	178	19	0	0	0	0	0	0	0	0	0	14	211
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**454**	**97**	**11**	**2**	**2**	**3**	**1**	**1**	**0**	**4**	**10**	**128**	**713**
Hurghada	9	0	0	1—10	29	18	2	2	0	0	1	0	1	10	153	42	258
				11—27	150	7	0	0	0	0	0	0	0	4	82	205	448
				28—47	0	0	0	0	0	0	0	0	0	0	0	5	5
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**179**	**25**	**2**	**2**	**0**	**0**	**1**	**0**	**1**	**14**	**235**	**252**	**711**
Qusseir	9	1	0	1—10	165	23	2	4	0	0	3	4	3	17	94	204	549
				11—27	116	17	0	0	0	0	0	0	0	0	0	28	161
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**281**	**70**	**2**	**4**	**0**	**0**	**3**	**4**	**3**	**17**	**94**	**232**	**710**

UPPER AIR CLIMATOLOGICAL DATA

Table B 1.— MONTHLY MEANS, ABSOLUTE HIGHER AND LOWER VALUES OF ALTITUDE, AIR TEMPERATURE AND DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

SEPTEMBER — 1972

Station	Pressure Surface Millibar	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Helwan 0000 U.T.	Surface	30	996n b*	999mb*	993mb*	30	23.2	27.4	20.9	30	17.0
	1000	—	—	—	—	—	—	—	—	—	—
	850	30	1520	1552	1488	30	19.6	26.0	14.4	30	5.9
	700	30	3167	3215	3128	30	10.3	13.7	6.2	30	— 5.3
	600	30	4432	4466	4371	30	2.1	5.8	— 1.2	30	—12.7
	500	29	5877	5939	5792	29	— 8.1	— 4.1	—11.6	28	—21.5
	400	28	7571	7650	7461	27	—20.9	—17.7	—24.5	26	—33.5
	300	27	9634	9721	9485	27	—36.4	—33.3	—41.4	27	—47.3
	250	27	10876	10948	10713	27	—44.7	—40.6	—50.1	27	—54.7
	200	25	12350	12440	12162	25	—52.9	—50.0	—56.7	25	—62.1
	150	21	14166	14259	13961	20	—62.4	—58.0	—64.4	1	—66.6
	100	8	16603	16670	16442	8	—70.5	—66.9	—74.3	—	—
	70	1	18812	—	—	1	—61.8	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—

N = Number of observations of specified pressure surface.

* The atmospheric pressure corrected to the elevation of the radiosonde stations.

Note: Climatological upper air data for Mersa Matruh and Aswan upper air stations are missing since no observations were taken at these stations during this month.

UPPER AIR CLIMATOLOGICAL DATA

Table B 1 (*contd.*)—MONTHLY MEANS, ABSOLUTE HIGHER AND LOWER VALUES OF ALTITUDE, AIR TEMPERATURE AND DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

SEPTEMBER – 1972

Station	Pressure Surface (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Helwan 1200 U.T.	Surface	30	*996mb.	*998mb.	*998mb.	30	32.6	38.2	28.7	30	13.6
	1000	—	—	—	—	—	—	—	—	—	—
	850	29	1533	1579	1500	29	20.7	26.6	15.2	29	1.5
	700	27	3178	3241	3110	27	11.5	17.0	7.9	27	—10.1
	600	27	4433	4517	4382	27	3.2	8.2	— 1.3	27	—17.8
	500	23	5900	5991	5809	23	—7.0	— 3.0	—10.3	23	—26.7
	400	23	7600	7715	7486	23	—19.8	—15.8	—22.5	23	—37.8
	300	22	9677	9825	9555	22	—34.8	—30.0	—39.2	22	—50.7
	250	20	10920	11099	10778	20	—43.3	—38.2	—49.5	20	—57.3
	200	19	12402	12606	12212	19	—51.2	—47.3	—56.8	19	—63.6
	150	19	14233	14456	14018	19	—61.0	—58.0	—64.5	5	—70.0
	100	13	16701	16926	16523	13	—68.3	—56.0	—75.7	—	—
	70	4	18853	18957	18726	4	—62.8	—61.9	—64.8	—	—
	60	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—

N = The number of cases the element has been observed during the month.

*The atmospheric pressure corrected to the elevation of the radiosonde station.

Note : Climatological upper air data for Mersa Matruh and Aswan upper air stations are missing since no observations were taken at these stations during this month.

Table B 2.—MEAN AND EXTREME VALUES OF THE FREEZING LEVEL AND THE TROPOPAUSE ; THE HIGHEST WIND SPEED IN THE UPPER AIR

SEPTEMBER — 1972

STATION	Freezing Level									First Tropopause									Highest wind speed			
	Mean			Highest			Lowest			Mean			Highest			Lowest						
	Altitude (gpm)	Pressure (mb.)	Dew Point (°C)	Altitude (gpm)	Pressure (mb.)	Dew Point (°C)	Altitude (gpm)	Pressure (mb.)	Dew Point (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Direction (000—360)°	Speed in knots
0000 U.T.	(N)	(N)	(N)							(N)	(N)	(N)										
Merra Matruh .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Helwan . . .	4734 (30)	579 (30)	—14.6 (30)	5300	540	—13.9	4220	617	—14.3	13525 (2)	173 (2)	—61.5 (2)	15400	125	—68.1	11650	221	—54.9	13230	174	250	88
Aswan	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.																						
Mersa Matruh	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Helwan . . .	4858 (25)	572 (25)	—20.7 (25)	5600	527	—22.7	4210	615	—22.1	15445 (6)	125 (6)	—66.8 (6)	16450	106	—69.6	12450	193	—57.6	12840	185	245	96
Aswan	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N — The number of cases the element has been observed during the month.

Table B 3.—NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES.

HELWAN — SEPTEMBER 1972

Station	Prussure Surfaec (Millibar)	Wind between specified ranges of direction (000—360°)																								Number of calm winds	Total number of observations (TN)	Mean scalar wind speed (knots)
		345 / 014		015 / 044		045 / 074		075 / 104		105 / 134		135 / 164		165 / 194		195 / 224		225 / 254		255 / 284		285 / 314		315 / 344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	13	4	10	9	1	5	2	13	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	14	0	30	6
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	6	10	7	15	7	17	1	4	0	—	0	—	1	3	0	—	0	—	0	—	5	13	3	8	0	30	13
	700	6	10	2	14	6	18	0	—	1	4	0	—	0	—	0	—	1	10	3	17	5	12	6	16	0	30	14
	600	5	13	4	6	1	5	0	—	0	—	0	—	0	—	0	—	2	16	8	18	5	15	5	15	0	30	13
	500	2	16	0	—	0	—	0	—	0	—	1	5	1	17	0	—	6	18	8	17	8	14	2	14	0	28	16
	400	4	16	0	—	1	11	0	—	0	—	0	—	0	—	0	—	6	20	10	17	3	18	4	10	0	28	16
	300	3	35	0	—	0	—	0	—	0	—	0	—	0	—	2	9	5	28	13	25	2	26	2	14	0	27	25
	250	2	40	0	—	0	—	0	—	0	—	0	—	0	—	1	9	8	40	13	32	2	29	1	20	0	27	33
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	25	8	38	10	38	2	15	1	35	0	22	35
	150	0	—	0	—	0	—	0	—	0	—	0	—	1	24	2	36	4	32	7	39	1	6	0	—	0	15	33
	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	7	6	8	13	2	16	0	—	0	—	0	—	0	—	0	—	0	—	2	6	1	7	10	7	0	30	9
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	6	9	9	9	6	14	2	16	0	—	0	—	0	—	0	—	1	3	2	13	2	7	1	15	0	29	10
	700	7	10	2	10	1	15	1	5	0	—	0	—	1	6	0	—	4	13	2	9	7	15	2	11	0	27	12
	600	1	7	0	—	0	—	1	17	1	7	2	10	0	—	0	—	6	9	6	15	4	10	4	12	0	25	11
	500	0	—	2	8	0	—	0	—	0	—	0	—	1	8	3	16	1	18	6	17	8	10	2	14	0	23	14
	400	0	—	0	—	1	6	0	—	0	—	0	—	0	—	0	—	6	19	6	22	5	15	4	10	0	22	17
	300	1	30	0	—	0	—	0	—	0	—	0	—	0	—	2	18	7	27	6	24	4	17	1	28	0	21	24
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	8	36	8	34	4	22	0	—	0	20	32
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	43	13	38	1	43	0	—	0	19	41
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	27	8	35	6	42	1	31	0	—	0	16	37
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	16	0	—	1	33	2	8	0	—	0	5	16
	70	0	—	0	—	0	—	0	—	0	—	1	12	0	—	0	—	0	—	0	—	0	—	0	—	0	1	12
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the wind has been observed from the range of direction during the month.

TN = The total number of cases the wind has been observed during the month.

REVIEW OF AGRO-METEOROLOGICAL STATIONS

MERSA MATRUH — SEPTEMBER 1972

For the month as a whole the mean daily air temperature was above normal and the mean daily relative humidity was rather normal. The month was rainless against 1.2 mm. for normal.

The month was characterized by two short heat waves on the 4th and 10th and an excessive heat wave from the 24th till the 29th yielding the highest maximum air temperature for the month (40.4° C) and the highest minimum air temperature (24.6° C) together with the lowest relative humidity (23%) on the 28th. Apart from these heat waves mild weather was experienced.

The extreme maximum soil temperatures were lower than the corresponding values of last September at 2,5 and 20 cm. depths with departures between 1.1°C (at 2 cm.) and 0.3°C (at 20 cm.) ; and were higher than last September at 10, 50,100cm, depths with departures between 0.9° C (at 50 cm.) and 0.1° C (at 100 cm.). The extreme minimum soil temperatures were higher than last September at all depths with departures between 1.3° C (at 5 cm.) and 0.6° C (at 100 cm.)

The mean daily wind speed was higher by 0.4 m./sec. than the corresponding value of September 1971. The mean daily actual sunshine duration was lower by 0.3 hour than the corresponding value of September 1971.

TAHRIR -- SEPTEMBER 1972

For the month as a whole the mean daily air temperature and relative humidity were about average.

The month was characterized by four heat waves in the periods (4th & 5th), (9th-11th), (16th-19th) and (24th-30th). The last heat wave was the most excessive and yielded the highest maximum air temperature for the month (40.7°C) on the 29th together with the lowest relative humidity (23%). Apart from these heat waves mild weather was experienced.

The extreme maximum soil temperatures were lower than the corresponding values of last September at depths between 2 & 20 cm. with departures between 1.3°C (at both 2 & 5 cm) and 0.2°C (at 20 cm.). At 50 & 100 cm. depths theextreme soil maxima were slightly higher than last September (by 0.2°C and 0.1°C respectively). The extreme minimum soil temperatures were higher than last September at all depths with departures between 2.3°C (at 10 cm.) and 0.9°C (at 100 cm.).

The mean daily actual sunshine duration was higher than average by 0.5 hour. The mean daily wind speed and pan evaporation were lower than average by 0.1 m./sec. and 1.40 mm. respectively.

BAHTIM — SEPTEMBER 1972

For the month as a whole the mean daily air temperature and relative humidity were about average.

The month was characterized by four heat waves in the periods (4th & 5th), (10th & 11th), (17th-19th) and (25th-30th). The last heat wave was the most excessive and yielded the highest maximum air temperature for the month (38,4°C) on the 29th, together with the lowest relative humidity (18%) and the highest pan evaporation(14.55 mm.). Apart from these heat waves weather was mild.

The extreme maximum soil temperatures were lower than last September at all depths except at 2 cm. where its value was higher ; all the departures were slight and varied between 0.2°C and 0.8°C. On the other hand, the extreme minimum soil temperatures were higher than last September at all depths apart from 100 cm. where the values were the same; the departures ranged between 1.8°C (at 10 cm.) and 0.4°C (at 50 cm.).

The mean daily wind speed and actual sunshine duration were lower than average by 0.1 m./sec. and 0.2 hour respectively. The mean daily pan evaporation was higher than average by 0.71 mm.

KHARGA — SEPTEMBER 1972

For the month as a whole the mean daily air temperature and relative humidity were rather normal.

The month was characterized by four heat waves in the periods (4th-6th), (10th-12th), (16th-19th) and (25th-30th). The first heat wave yielded the highest maximum air temperaure for the month (43.6°C) on the 5th. Apart from these heat waves maximum air temperatures were about normal.

The extreme maximum soil temperatures were slightly higher than last September at 20 & 100 cm. depths (by 0.1° and 0.2°C respectively) andlower at all other depths with departures between 1.1° (at 2 cm.) and 0.1°C (at 50 cm.). The extreme minimum soil temperatures were higher than last September at all depths with departures between 1.9°C (at 10 cm.) and 0.3°C (at 100 cm.)

The mean daily actual sunshine duration and wind speed were lower than normal by 0.4 hour, 0.2 m./sec. respectively. The mean daily pan evaporation was higher than normal by only 0.22 mm.

Table C 1.—AIR TEMPERATURE AT 1½ METRES ABOVE GROUND

SEPTEMBER — 1972

Station	Air Temperature (°C)					Mean Duration in hours of daily air temperature above the following values										
	Mean Max.	Mean Min.	Mean of the day	Night time mean	Day time mean	—5°C	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C
Mersa Matruh. . .	30.8	21.9	26.1	24.1	28.0	24.0	24.0	24.0	24.0	24.0	23.5	14.1	1.9	0.7	0.0	0.0
Tahrir	34.9	18.7	25.8	22.0	29.6	24.0	24.0	24.0	24.0	24.0	21.2	11.8	5.9	0.9	0.0	0.0
Bahtim	33.5	17.6	25.1	20.8	29.3	24.0	24.0	24.0	24.0	24.0	19.1	11.2	5.5	0.8	0.0	0.0
Kharga	38.6	22.6	30.8	27.6	34.1	24.0	24.0	24.0	24.0	24.0	23.8	20.5	12.4	5.8	0.8	0.0

Table C 2.—EXTREME VALUES OF AIR TEMPERATURE AT 1½ METRES ABOVE GROUND, ABSOLUTE MINIMUM AIR TEMPERATURE AT 5cms ABOVE GROUND OVER DIFFERENT FIELDS.

SEPTEMBER — 1972

Station	Max. Temp. at 1½ metres (°C)				Min. Temp. at 1½ metres (°C)				Min. Temp. at 5 cms. above (°C)			
	Highest		Lowest		Highest		Lowest		Dry soil		Grass	
	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date
Mersa Matruh. . .	40.4	28	27.4	14,30	24.6	28	18.6	24	16.6	24	—	—
Tahrir	40.7	29	32.0	23	21.3	18	15.6	24	14.3	24	—	—
Bahtim	38.4	29	31.2	3.7	20.1	8	14.8	24	12.0	24	—	—
Kharga	43.6	5	34.1	23	28.0	5	18.1	17	15.8	17	—	—

Table C 3.—(SOLAR + SKY) RADIATION, DURATION OF BRIGHT SUNSHINE, RELATIVE HUMIDITY, VAPOUR PRESSURE AT 1½ METRES ABOVE GROUND, EVAPORATION & RAINFALL.

SEPTEMBER — 1972

Station	(Solar + Sky) Radiation gm. cal/cm²	Duration of Bright Sunshine (hours)			Relative Humidity				Vapour pressure (mms)						Evaporation (mms)		Rainfall (mms)		
		Total Actual monthly	Total Possibly monthly	%	Mean of day	1200 U.T.	Lowest	Date	Mean of day	1200 U.T.	Highest	Date	Lowest	Date	Piche	Pan class A	Total Amount Monthly	Max. Fall in one day	Date
Mersa Matruh. .	—	313.1	370.7	84	68	58	23	28	17·1	17.2	23.2	29	10.4	10	7.3	—	0.0	0.0	—
Tahrir	535.6	324.1	370.2	88	68	41	23	29	16 2	15.2	20.9	19	11.6	29	6.1	8 02	0.0	0.0	—
Bahtim	517.3	313.7	370.2	85	66	39	18	29	15.0	14.2	20.1	30	8.7	29	7.6	8 88	0.0	0.0	—
Kharga	616.6	328.3	368.5	89	30	19	8	27	9.3	8.9	16 0	8	4 2	26	15.7	18.78	0.0	0 0	—

Table C 4.—EXTREME SOIL TEMPERATURE AT DIFFERENT DEPTHS (cms) IN DIFFERENT FIELDS

SEPTEMBER — 1972

STATION	Highest (H) Lowest (L)	Extreme soil temperature (°C) at different depths (cms.) in dry field.								Extreme soil temperature (°C) at different depths (cms.) in grass field.							
		2	5	10	20	50	100	200	300	2	5	10	20	50	100	200	300
Mersa Matruh	H	38.9	36.7	33.5	30.1	29.6	26.9	25.2	—	—	—	—	—	—	—	—	—
	L	22.6	22.5	23.3	26.0	27.2	26.4	24.0	—	—	—	—	—	—	—	—	—
Tahrir . . .	H	49.5	46.1	39.7	36.0	32.3	31.4	29.6	28.4	—	—	—	—	—	—	—	—
	L	24.4	24.4	25.2	28.7	29.7	30.0	29.0	28.3	—	—	—	—	—	—	—	—
Bahtim . . .	H	52.0	44.4	38.5	33.8	31.9	30.5	28.3	26.5	—	—	—	—	—	—	—	—
	L	27.6	25.6	27.4	30.4	30.6	30.0	27.8	26.0	—	—	—	—	—	—	—	—
Kharga . . .	H	52.5	46.3	40.7	36.8	34.7	33.6	31.4	30.2	—	—	—	—	—	—	—	—
	L	20.3	24.1	27.9	31.2	32.6	32.5	31.0	29.6	—	—	—	—	—	—	—	—

Table C 5.—SURFACE WIND

SEPTEMBER — 1972

STATION	Wind Speed m/sec at 1½ metres			Days with surface wind speed at 10 metres							Max. Gust (knots) at 10 metres	
	Mean of the day	Night time mean	Day time mean	≥10 knots	≥15 knots	≥20 knots	≥25 knots	≥30 knots	≥35 knots	≥40 knots	Value knots	Date
Mersa Matruh	4.4	3.5	5.2	30	30	23	10	1	0	0	33	25
Tahrir	1.9	1.2	2.5	29	12	0	0	0	0	0	24	5
Bahtim. . . .	1.8	1.0	2.6	21	8	0	0	0	0	0	26	16.26
Kharga . . .	4.1	3.0	5.2	29	21	7	1	0	0	0	33	24

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THE ARAB REPUBLIC OF EGYPT

MONTHLY WEATHER REPORT

VOLUME 15 NUMBER 10

OCTOBER, 1972

U.D.C. 551. 506.1 (62)

THE EGYPTIAN METEOROLOGICAL AUTHORITY
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In fulfilment of its duties, the Meteorological Authority of Egypt issues serveral reports and publications on weather, climate and agrometeorology. The principal publications are described on this page.

Orders for publications should be addressed to :

"Chairman of the Board of Directors, Meteorological Authority, Kubri-el-Qubbeh — CAIRO".

THE MONTHLY WEATHER REPORT

First issued in 1909, the Monthly Weather Report served to give a brief summary of the weather conditions that prevailed over Egypt during the month, with a table showing the mean values for few meteorological elements and their deviations from the normal values. From 1954 to 1957 this report was in a rapid state of development and extension resulting into a voluminous report on January 1958 giving surface, upper air, and agro-meteorological data for Egypt.

As from January 1964, the Monthly Weather Report was pressed to give climatological data for a representative selection of synoptic stations.

THE AGRO-METEOROLOGICAL ABRIDGED MONTHLY REPORT

Gives a review of weather experienced in the agro-meteorological stations of Egypt as well as monthly values of certain elements.

THE ANNUAL REPORT

This report gives annual values and statistics for the various meteorological elements, together with a summary of the weather conditions that prevailed during all months of the year.

CLIMATOLOGICAL NORMALS FOR EGYPT

A voluminous edition was issued in March 1968 which brings normals and mean values up till 1960.

METEOROLOGICAL RESEARCH BULLETIN

First issued in January 1969 on a bi-annual basis. It includes research works carried out by members of staff of "The Meteorological Institute for Research and Training" and the Operational Divisions of the Meteorological Authority.

TECHNICAL NOTES

As from October 1970, the Meteorological Authority started to issue a new series of publications in the form of Technical Notes (non periodical) on subjects related to studies and applications of meteorology in different fields for the benefit of personnel working in these fields.

THE ARAB REPUBLIC OF EGYPT

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THE EGYPTIAN METEOROLOGICAL AUTHORITY
CAIRO

CONTENTS

PAGE

General Summary of Weather Conditions 1–2

SURFACE DATA

Table A1.—Monthly values of the Atmospheric Pressure, Air Temperature, Relative Humidity, Bright Sunshine Duration and Piche Evaporation 3

„ A2.—Maximum and Minimum Air Temperatures 4

„ A3.—Sky Cover and Rainfall 5

„ A4.—Number of Days of Occurrence of Miscellaneous Weather Phenomena 6

„ A5.—Number in Hours of Occurrences of Concurrent Surface Wind Speed and Direction Recorded Within Specified Ranges 7,8

UPPER AIR DATA

Table B1.—Monthly Means and Monthly Absolute Higher & Lower Values of Altitude, air Temperature & Dew point at Standard and Selected Pressure Surfaces 9,10

„ B2.—Mean and Extreme values of The Freezing Level and The Tropopause; The Highest Wind Speed in The Upper Air 11

„ B3.—Number of Occurreneces of Wind Direction Within Specified Ranges and The Mean Scalar Wind Speed at the Standard and Selected Pressure Surfaces 12–14

AGRO-METEOROLOGICAL DATA

Reviews of Agro-meteorological stations 15,16

Table C1.—Air Temperature at 1½ Metres Above Ground 17

„ C2.—Extreme Values, of Air Temperature at 1½ Metres Above Ground, Absolute Minimum Air Temperature at 5 Cms Above Ground Over Different Fields 17

„ C3.—(Solar + Sky) Radiation, Duration of Bright Sunshine, Relative Humidity and Vapour Pressure at 1½ Metres Above Ground, Evaporation and Rainfall 17

„ C4.—Extreme Soil Temperature at Different Depths in Different Fields 18

„ C5.—Surface wind 18

Note : For explanatory notes on the tables please refer to Valume 15, Number 1 (January 1972).

GENERAL SUMMARY OF WEATHER CONDITIONS

OCTOBER 1972

A prolonged heat wave most of the first half, generally mild during the second half.

GENERAL DESCRIPTION OF WEATHER

This month started with mild weather which continued till the 4th. From the 5th till the 16th a prolonged heat wave was experienced. The break down of this heat wave was associated with scattered light rain over north of the country till Cairo area, and was followed by a mild period.

A second short heat wave was experienced in the period (22nd-24th) and was followed by mild weather which prevailed till the end of the month. This mild period was light rainy over the Mediterranean district,though heavy rain was reported locally over Sallum on the 24th (13.3 mm.) and over Sidi Barrani on the 23rd (30. 2 mm.)

Weather was sandy in few days over scattered localities in the Western Desert, Upper Egypt and Red Sea districts.

Early morning mist developed in few days over scattered places in Delta, Canal, Cairo and north of Upper Egypt.

PRESSURE DISTRIBUTION

This month was characterized with five transitory secondary depressions through the Mediterranean from west to east.

The first depression appeared over Greece on the 4th while the Sudan trough elongated northwards. This depression moved slowly eastwards and was associated with a secondary depression north of Crete on the 5th. This system filled up on the 6th near East Mediterranean.

The second Mediterranean depression originated over Tunisia on the 7th, then it moved northeastwards reaching Cenetral Mediterranean on the 9th and filled up over East Mediterranean on the 10th, while the Sudan trough experienced a second northward elongation.

The last three Mediterranean depressions developed over West Mediterranean on the 13th, 20th & 29th respectively. The third depression took its track eastwards reaching Asia Minor on the 16th where it was quasi - stationary till the 18th, then it moved northeastwards on the next day towards the Black Sea.

The fourth depression moved eastwards reaching East Mediterranean on the 24th when the Sudan trough showed a third northward elongation. This depression was quasi - stationary and filled up over East Mediterranean on the 27th.

The fifth and last Mediterranean depression during this month moved eastwards reaching Greece on the last day of the month.

These Mediterranean depressions were of considerable vertical extension, and three upper troughs at the 700 and 500 mb. levels traversed East Mediterranean on the 11th, 20th and 27th respectively.

The atmospheric pressure over the Arab Repubilc of Egypt was interrupted by the transits of the Mediterranean depressions. Accordingly, it experienced corresponding falls and reached minima round the 5th, 11th, 18th, 24th and 31st.

High pressure established over East Mediterranean and NE Africa in the rear of the Mediterranean depressions and the pressure over Egypt experienced consecutive rises above normal.

SURFACE WIND

Light to moderate N and NW winds prevailed most of this month, and N/NE winds were experienced with a less frequency. Winds became fresh to strong during several days in few scattered localities mainly in the Western Desert and Red Sea districts. On the other hand, calms were frequent most of night and early morning intervals.

Gales were reported at Farafra on the 24th, at Hurghada on the 27th & 28th.

TEMPERATURE

Maximum air temperature experienced pronounced rises above normal in the heat waves round the periods (5th - 16th) and (22nd - 24th). Otherwise it was slightly or moderately below normal.

Maximum air temperatures ranged generally between 24°C & 30°C in the northern parts, between 26° & 36°C in the middle parts and between 32°C & 42°C in the southern parts.

The absolute maximum air temperature for Egypt in this month was 43.5°C reported at Kena on the 8th.

Minimum air temperature oscillated round normal in the northern parts, but in the middle and southren parts its fluctuations were more or less parallel to maximum air temperature fluctuations. Minimum air temperatures ranged most of the month between 15°C & 22°C in the northern and middle parts, and between 17°C & 25°C in the southern parts.

The absolute minimum air temperature for Egypt in this month was 8.0°C reported at Siwa on the 31st.

PRECIPITATION

The monthly rainfall was subnormal in general. Light rain was reported in few days over the Mediterranean area, and extended to Cairo area on the 17th and to Luxor southwards on the 2nd where it was associated with thunderstorms.

Rain was heavy locally over Sallum on the 24th (13.3 mm.) and over Sidi Barrani on the 23rd (30.2 mm).

The highest monthly rainfall for Egypt was 60.8 mm. reported at Sidi Barrani.

The highest daily rainfall for Egypt was 30.2 mm. reported at Sidi Barrani on the 23rd.

Chairman (M. F. TAHA)

Board of Directors

Cairo, September 1973

Table A 1. — MONTHLY VALUES OF THE ATMOSPHERIC PRESSURE, AIR TEMPERATURE, RELATIVE HUMIDITY, BRIGHT SUNSHINE DURATION & PICHE EVAPORATION.

OCTOBER — 1972

STATION	Atmospheric Pressure (mbs) M.S.L		Air Temperature °C									Relative Humidity %		Bright Sunshine Duration (Hours)			Piche Evap. (mms) Mean
			Maximum		Minimum			Dry Bulb		Wet Bulb							
	Mean	D.F. Normal or Average	(A) Mean	D.F. Normal or Average	(B) Mean	D.F. Normal or Average	$\frac{A+B}{2}$	Mean	D.F. Normal or Average	Mean	D.F. Normal or Average	Mean	D.F. Normal or Average	Total Actual	Total Possible	%	
Sallum	1015.6	—0.6	27.3	—0.1	18.8	+0.9	23.0	22.5	—0.1	17.6	—0.6	60	— 4	—	—	—	7.2
Mersa Matruh . (A)	1016.1	—0.3	27.0	0.0	17.5	+0.7	22.2	22.1	+0.4	18.1	+0.3	66	0	267.6	353.5	76	7.6
Alexandria . . (A)	1016.1	+0.3	27.7	—0.1	17.8	+0.1	22.8	22.5	—0.2	18.4	—0.4	62	— 6	293.5	354.2	83	5.0
Port Said . . . (A)	1014.0	—1.1	29.6	+2.3	22.1	+0.3	25.8	25.2	+1.1	20.1	—0.2	61	— 8	284.6	354.2	80	5.6
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1015.4	0.0	29.8	—0.3	14.9	—0.6	22.4	21.5	—0.6	17.2	—0.8	63	— 2	304.2	354.5	86	4.3
Cairo (A)	1015.2	0.0	30.0	+0.1	18.1	+0.3	24.0	23.6	+0.1	17.9	+0.3	55	— 3	—	—	—	11.7
Fayoum	—	—	32.1	—0.3	16.6	—0.7	24.4	23.8	—0.3	17.6	—0.4	51	— 1	—	—	—	6.9
Minya . . . . (A)	1013.7	—0.5	32.2	+0.8	16.0	+0.4	24.1	23.6	+0.4	16.9	—0.6	47	— 8	299.6	356.6	85	12.0
Assyout . . . (A)	1012.4	—1.2	33.4	+2.3	17.4	—0.6	25.4	24.9	+0.5	16.4	—0.9	37	— 9	—	—	—	13.7
Luxor . . . . . (A)	1010.9	—0.9	37.2	+2.1	18.9	+1.3	28.0	27.9	+3.0	17.9	0.0	33	— 6	—	—	—	9.2
Aswan . . . . (A)	1010.8	—0.4	38.1	+1.2	22.4	+3.0	30.2	30.0	+1.8	16.9	+1.1	20	0	—	—	—	20.6
Siwa	1015.4	—0.6	31.3	+0.3	15.9	+1.0	23.6	23.4	+0.3	16.2	+0.2	43	— 1	278.0	355.8	78	9.5
Bahariya	1015.1	+0.6	31.3	+0.2	16.1	+0.1	23.7	23.5	—0.3	15.8	—0.8	39	—10	—	—	—	9.8
Farafra	1015.3	—0.9	31.8	+0.5	15.6	+0.2	23.7	23.3	+0.1	15.4	+0.6	38	+ 2	—	—	—	12.5
Dakhla	1013.9	+1.0	32.6	+0.4	15.6	—1.7	24.2	24.8	+0.1	14.6	—0.5	27	— 3	—	—	—	16.7
Kharga	1012.8	—0.1	34.9	+0.8	20.2	+1.8	27.6	27.7	+2.0	16.1	—0.1	28	— 5	319.7	358.5	89	15.5
Tor.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada.	1012.2	+0.1	30.6	+1.8	20.8	+1.0	25.7	26.2	+1.3	20.2	+1.0	56	0	311.7	357.8	87	10.5
Quseir..	1012.0	—0.2	30.0	—0.1	23.4	+0.6	26.7	26.8	+0.9	20.9	+1.3	57	+ 4	—	—	—	10.7

Table A2.—MAXIMUM AND MINIMUM AIR TEMPERATURES

OCTOBER — 1972

Station	Maximum Temperature °C									Grass Min. Temp.		Minimum Temperature °C							
	Highest	Date	Lowest	Date	No. of Days with Max-Temp.					Mean	D. From Normal	Highest	Date	Lowest	Date	No. of Days with Min. Temp.			
					> 25	>30	>35	>40	>45							< 10	<5	<0	<-5
Sallum	35.2	9	19.0	24	23	8	1	0	0	18.0	—	23.2	9	13.3	24	0	0	0	0
Mersa Natruh (A)	33.6	15	22.6	25	22	5	0	0	0	15.3	—	21.0	7	13.3	25	0	0	0	0
Alexandria (A)	33.6	6	23.3	25	25	6	0	0	0	15.9	—	21.8	1	12.8	31	0	0	0	0
Port Said (A)	32.8	23	25.2	28	31	14	0	0	0	21.4	—	25.4	12	18.1	29	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	35.3	6	24.5	28	29	15	1	0	0	—	—	17.6	6,17	10.2	31	0	0	0	0
Coiro (A)	37.4	24	24.3	28	29	17	2	0	0	—	—	21.6	7	13.6	29	0	0	0	0
Fayoum	39.0	10	25.6	29	31	21	8	0	0	11.0	—	20.8	1	10.8	29	0	0	0	0
Minya (A)	38.0	7	25.5	29	31	21	8	0	0	14.0	—	21.3	1	10.0	31	0	0	0	0
Assyout (A)	40.0	8	25.8	29	31	21	12	0	0	14.2	—	21.7	1	11.8	30	0	0	0	0
Luxor (A)	42.3	1	29.6	29	31	30	21	7	0	12.9	—	26.0	1	11.6	30	0	0	0	0
Aswan (A)	43.4	1	30.4	29	31	31	23	12	0	—	—	26.5	12	15.3	29	0	0	0	0
Siwa	38.4	7	22.6	25	30	20	7	0	0	15.7	—	21.6	8	8.0	31	4	0	0	0
Bahariya	37.3	24	22.6	25	29	19	8	0	0	15.4	—	20.4	17	9.9	31	1	0	0	0
Farafra	38.4	16	23.6	25	28	20	9	0	0	15.4	—	20.8	17	9.2	31	1	0	0	0
Dakhla	39.4	8	24.5	25	30	21	15	0	0	15.7	—	24.2	1	9.0	31	1	0	0	0
Kharga	41.4	10	26.8	28	31	26	17	4	0	18.7	—	28.0	8	10.6	31	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	33.3	17	26.8	28	31	22	0	0	0	—	—	26.4	8	15.6	31	0	0	0	0
Quseir	31.9	7	27.0	28,29,30	31	18	0	0	0	20.7	—	26.0	8	20.0	29	0	0	0	0

Table A 3.—SKY COVER AND RAINFALL

OCTOBER — 1972

Station	Mean Sky Cover Oct.					Rainfall mms.										
	00 U.T.	06 U.T.	12 U.T.	18 U.T.	Daily Mean	Total Amount	D. From Normal	Max. Fall in one day		Number of Days with Amount of Rain						
								Amount	Date	<0 1	≥0.1	≥1.0	≥5.0	≥10	≥25	≥50
Sallum (A)	1.2	2.0	4.4	2.1	2.3	25.3	+ 8.2	13.3	24	0	2	2	2	2	0	0
Mersa Matruh (A)	1.6	3.6	3.8	1.8	2 6	2.9	—13 3	2.4	23	0	3	1	0	0	0	0
Alexandria (A)	3.8	3.6	3.7	3.1	3.5	5.9	— 3.3	5.8	17	0	2	1	1	0	0	0
Port Said (A)	1.2	2.0	1·9	1.4	1.6	0.2	— 6.8	0.2	17	1	1	0	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	0.8	1.6	2.8	0.6	1.5	0.1	— 4.3	0.1	17	0	1	0	0	0	0	0
Cairo (A)	0 7	1.5	1.7	1.1	1.3	0.3	— 0 5	0.3	17	0	1	0	0	0	0	0
Fayoum	—	0.7	1.4	0.8	—	Tr.	— 0.9	Tr.	17	1	0	0	0	0	0	0
Minya (A)	0 4	0 9	1.4	0 5	0.8	0.0	— 0.6	0.0	—	0	0	0	0	0	0	0
Assyout (A)	0 0	0.6	0.3	0.2	0.3	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Luxor (A)	1.3	1.5	1.5	1.4	1.4	Tr.	— 0.1	Tr.	2	1	0	0	0	0	0	0
Aswan (A)	0.7	1.3	1.6	1.4	1.3	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Siwa	3.3	1.9	3 4	2.1	2.7	0.0	— 0.3	0.0	—	0	0	0	0	0	0	0
Bahariya	0.4	0 6	1.2	0.8	0.8	0.0	— 0.3	0.0	—	0	0	0	0	0	0	0
Farafra	—	0.6	0.8	0.2	—	0.0	— 1.0	0.0	—	0	0	0	0	0	0	0
Dakhla	0.0	0.2	0.4	0.0	0.2	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Kharga	0.3	0.8	0.8	0.4	0.6	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	1.1	1.8	1.8	1.1	1.4	Tr.	— 0.1	Tr.	2	1	0	0	0	0	0	0
Quseir	0.8	1.7	1.7	1.5	1 6	0.0	— 0.5	0.0	—	0	0	0	0	0	0	0

Table A 4. — DAYS OF OCCURRENCE OF MISCELLANEOUS WEATHER PHENOMENA.

OCTOBER — 1972

Station	Precipitation				Forst	Thunderstorm,	Mist Vis ≥1000 metres	Fog Vis <1000 Metres	Haze Vis ≥1000 Metres	Thick Haze Vis <1000 Metres	Dust or Sandarising Vis ≥1000 Metres	Dust or Sandstorm Vis <1000 Metres	Gale	Clear Sky	Cloudy Sky
	Rain	Snow	Ice, Pellets	Hail											
Sallum	2	0	0	0	0	0	0	0	0	0	0	0	0	7	1
Mersa Matruh (A)	3	0	0	0	0	0	0	0	0	0	5	2	0	13	2
Alexandria (A)	2	0	0	0	0	0	1	4	0	0	0	0	0	6	1
Port Said (A)	1	0	0	0	0	0	0	0	0	0	0	0	0	20	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1	0	0	0	0	0	5	0	0	0	0	0	0	19	0
Cairo (A)	1	0	0	0	0	0	5	1	5	0	4	0	0	20	0
Fayoum	0	0	0	0	0	0	0	0	0	0	0	0	0	—	—
Minya (A)	0	0	0	0	0	0	7	0	3	0	6	0	0	25	0
Assyout (A)	0	0	0	0	0	0	0	0	0	0	2	1	0	31	0
Luxor (A)	0	0	0	0	0	1	0	0	6	0	0	0	0	21	0
Aswan A)	0	0	0	0	0	0	0	0	3	0	8	0	0	22	0
Siwa	0	0	0	0	0	0	0	0	0	0	0	0	0	10	1
Bahariya	0	0	0	0	0	0	0	0	0	0	1	0	0	26	0
Farafra	0	0	0	0	0	0	0	0	0	0	0	1	1	—	—
Dakhla	0	0	0	0	0	0	0	0	1	0	6	0	0	30	0
Kharga	0	0	0	0	0	0	0	0	0	0	3	1	0	28	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0	0	0	0	0	0	0	0	0	0	6	2	2	23	1
Quseir	0	0	0	0	0	0	1	0	2	0	2	0	0	18	0

TABLE A 5.—NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES

OCTOBER — 1972

Station	Calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurences of wind blowing from the ranges of directions indicated												All directions
					345/014	015/044	045/074	075/104	105/134	135/164	165/194	195/224	225/254	255/284	285/314	315/344	
Sallum	26	0	0	1—10	21	45	84	58	39	36	39	23	23	37	104	78	578
				11—27	4	6	9	9	1	0	3	11	19	30	37	11	140
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**25**	**51**	**93**	**67**	**31**	**36**	**42**	**34**	**42**	**67**	**141**	**89**	**718**
Mersa Matruh . (A)	1	0	0	1—10	31	43	18	38	35	21	35	36	47	27	14	36	381
				11—27	50	23	23	20	35	10	20	19	38	26	16	74	354
				28—47	0	0	0	0	0	0	2	2	1	0	3	0	8
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**81**	**66**	**41**	**58**	**70**	**31**	**57**	**57**	**86**	**53**	**33**	**110**	**643**
Alexandria . . (A)	4	0	74	1—10	87	124	32	32	24	30	27	32	8	6	12	69	483
				11—27	30	31	6	2	0	0	0	2	15	23	21	53	183
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**117**	**155**	**38**	**34**	**24**	**30**	**27**	**34**	**23**	**29**	**33**	**122**	**666**
Tanta.	66	0	0	1—10	93	106	74	54	20	11	12	21	42	45	80	85	643
				11—27	9	4	3	1	0	0	0	0	0	8	1	9	35
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**102**	**110**	**77**	**55**	**20**	**11**	**12**	**21**	**42**	**52**	**81**	**94**	**678**
Cairo . . . . (A)	113	2	41	1—10	57	80	39	25	5	5	7	12	19	22	9	46	326
				11—27	36	95	58	9	4	0	0	3	15	12	7	23	262
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**93**	**175**	**97**	**34**	**9**	**5**	**7**	**15**	**34**	**34**	**16**	**69**	**588**
Fayoum	6	7	0	1—10	266	247	8	4	4	5	12	21	23	25	32	31	678
				11—27	0	43	8	0	0	0	0	0	2	0	0	0	53
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**266**	**290**	**16**	**4**	**4**	**5**	**12**	**21**	**25**	**25**	**32**	**31**	**731**
Minya . . . . (A)	5	0	0	1—10	353	52	6	1	2	3	16	8	8	12	21	59	541
				11—27	137	49	0	0	0	0	0	0	1	0	0	11	198
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**490**	**101**	**6**	**1**	**2**	**3**	**16**	**8**	**9**	**12**	**21**	**70**	**739**
Asyout . . . . (A)	31	0	0	1—10	116	23	2	2	8	7	9	0	0	34	168	197	556
				11—27	76	20	1	0	0	3	5	1	2	2	11	26	147
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**192**	**43**	**3**	**2**	**8**	**10**	**14**	**1**	**2**	**36**	**179**	**223**	**713**
Luxor . . . . (A)	57	0	0	1-10	133	94	27	18	15	14	105	68	18	34	49	112	687
				11-27	0	0	0	0	0	0	0	0	0	0	0	0	0
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**133**	**94**	**27**	**18**	**15**	**14**	**105**	**68**	**18**	**34**	**49**	**112**	**687**

Table A 5 (*contd.*)—**NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES**

OCTOBER — 1972

Station	calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurrences of wind blowing from the ranges of directions indicated												
					345 / 014	015 / 044	045 / 074	075 / 104	105 / 134	135 / 164	165 / 194	195 / 224	225 / 254	255 / 284	285 / 314	315 / 344	All directions
Aswan . . . . . (A)	39	0	1	1-10	159	204	30	8	23	12	4	5	7	6	9	79	546
				11-27	53	79	0	0	0	0	0	0	0	0	0	26	158
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**212**	**283**	**30**	**8**	**23**	**12**	**4**	**5**	**7**	**6**	**9**	**105**	**704**
Siwa	48	7	0	1-10	33	48	61	115	121	14	20	14	19	67	83	51	646
				11-27	0	0	2	3	3	3	1	2	1	1	19	8	43
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**33**	**48**	**63**	**118**	**124**	**17**	**21**	**16**	**20**	**68**	**102**	**59**	**689**
Dakhla	7	32	0	1-10	84	39	8	15	6	15	31	30	29	55	117	183	612
				11-27	53	16	0	0	0	0	0	2	1	3	0	18	93
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**137**	**55**	**8**	**15**	**6**	**15**	**31**	**32**	**30**	**58**	**117**	**201**	**705**
Kharga.	0	1	0	1-10	243	93	19	4	3	4	4	5	3	3	10	88	479
				11-27	198	49	1	0	0	0	0	0	0	0	1	14	263
				28-47	1	0	0	0	0	0	0	0	0	0	0	0	1
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**442**	**142**	**20**	**4**	**3**	**4**	**4**	**5**	**3**	**3**	**11**	**102**	**743**
Hurghada . .	21	0	3	1-10	29	27	14	4	14	14	8	3	7	6	108	36	270
				11-27	88	6	0	2	1	1	0	0	0	0	70	241	409
				28-47	4	0	0	0	0	0	0	0	0	0	0	37	41
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**121**	**33**	**14**	**6**	**15**	**15**	**8**	**3**	**7**	**6**	**178**	**314**	**720**
Quseir	17	0	12	1-10	125	95	36	11	13	13	4	11	4	15	51	137	515
				11-27	77	110	6	0	0	0	0	0	0	0	0	7	200
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**202**	**205**	**42**	**11**	**13**	**13**	**4**	**11**	**4**	**15**	**51**	**144**	**715**

UPPER AIR CLIMATOLOGICAL DATA

Table B 1.—MONTHLY MEANS AND MONTHLY ABSOLUTE HIGHER & LOWER VALUES OF ALTITUDE, AIR TEMPERATURE & DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

OCTOBER—1972

Station	Pressure Surface (Millibar)	Altitude of Pressure Surface (gpm.)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Mersa Matruh (A) 0000 U.T.	Surface	29	*1015mb.	*1022mb.	*1011mb.	29	20.2	24.7	15.6	29	14.9
	1000	28	155	213	115	28	20.5	24.8	16.8	27	15.4
	850	29	1546	1600	1489	29	13.5	20.6	2.1	28	3.6
	700	28	3154	3242	3064	28	4.0	9.1	— 1.6	27	— 9.4
	600	28	4398	4495	4285	27	— 3.9	— 0.6	— 7.2	24	—16.2
	500	28	5805	5928	5678	28	—13.2	— 8.1	—17.1	26	—25.8
	400	22	7488	7610	7309	22	—26.0	—23.3	—29.9	21	—37.3
	300	22	9475	9637	9294	22	—42.1	—37.7	—45.6	21	—52.7
	250	21	10685	10846	10494	21	—51.6	—46.9	—58.7	18	—60.8
	200	17	12098	12217	11919	17	—58.8	—50.1	—64.9	5	—66.4
	150	10	13920	14003	13703	10	—64.1	—60.5	—67.5	—	—
	100	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—
Helwan 0000 U.T.	Surface	31	*999 mb.	*1005mb.	*993mb.	31	20.3	23.8	15.4	31	14.0
	1000	31	129	183	80	12	19.0	23.6	15.5	12	11.7
	850	31	1525	1562	1480	31	16.4	22.2	6.7	31	3.0
	700	31	3152	3213	3087	30	6.2	10.6	1.8	30	— 6.6
	600	31	4396	4471	4322	31	— 2.0	— 1.7	— 7.4	31	—15.4
	500	30	5823	5904	5731	29	—12.0	— 8.1	—16.6	30	—23.8
	400	30	7494	7636	7381	30	—24.6	—22.2	—27.1	30	—35.3
	300	20	9519	9589	9404	29	—40.7	—37.0	—47.2	28	—50.4
	250	27	10733	10856	10618	27	—50.1	—46.8	—52.9	26	—58.9
	200	25	12170	12280	12034	25	—58.6	—53.5	—62.1	16	—65.5
	150	12	13910	14045	13856	12	—62.1	—57.3	—70.3	1	—66.9
	100	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan (A) 0000 U.T.	Surface	30	*989mb.	*994mb.	*986mb.	30	25.7	30.6	18.0	30	6.8
	1000	30	98	140	72	—	—	—	—	—	—
	850	30	1530	1560	1508	30	23.2	27.6	17.0	30	3.0
	700	30	3184	3233	3143	30	9.0	11.6	6.6	30	— 5.5
	600	30	4437	4500	4387	30	— 1.1	1.8	— 3.8	30	—12.2
	500	29	5868	5937	5809	28	— 9.9	— 7.8	—14.5	28	—24.9
	400	28	7554	7638	7508	27	—22.0	—18.7	—25.7	27	—36.3
	300	28	9610	9712	9550	28	—37.0	—34.7	—39.7	28	—49.5
	250	26	10846	10962	10777	26	—46.0	—41.9	—49.0	26	—57.2
	200	26	12301	12438	12215	26	—55.6	—52.5	—58.4	26	—65.6
	150	20	14102	14241	14006	20	—64.8	—58.5	—70.1	2	—71.8
	100	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—

N = The number of case the element has been observed during the month.

* The atmospheric pressure corrected to the elevation of the radiosonde station.

UPPER AIR CLIMATOLOGICAL DATA

TABLE B 1 (*contd.*).—MONTHLY MEANS AND MONTHLY ABSOLUTE HIGHER & LOWE VALUES OF ALTITUDE, AIR TEMPERATURE & DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

OCTOBER — 1972

Station	Pressure Surface (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Mersa Matruh 1200 U.T.	Surface	29	1015m.b.	1022m.b.	1009m.b.	29	25.2	29.8	21.2	29	13.7
	1000	29	154	216	107	29	23.7	28.7	19.0	29	13.1
	850	29	1545	1592	1487	29	12.4	20.0	5 3	29	0.5
	700	29	3148	3217	3076	29	3.4	10.6	— 1.2	29	—11.6
	600	29	4383	4498	4288	29	— 4.4	— 0.2	— 8.9	28	—19.6
	500	27	5795	5931	5677	27	—13.3	— 9.8	—17.3	27	—27.7
	400	25	7454	7593	7310	25	—25.5	—22.3	—30.1	24	—39.1
	300	24	9478	9616	9310	24	—41.5	—39.4	—44.8	23	—53.1
	250	24	10688	10825	10513	24	—51.0	—48.5	—55.0	22	—61.0
	200	22	12124	12267	11938	22	—59.1	—49.6	—62.7	9	—65.7
	150	20	13900	14028	13738	20	—61.7	—55.2	—66.4	2	—69.4
	100	17	16410	16526	16258	17	—62.5	—56.8	—68.9	—	—
	70	14	18632	18746	18458	14	—60.3	—54.9	—68.6	—	—
	60	7	19656	19730	19550	7	—59.1	—56.0	—61 8	—	—
	50	7	20765	20886	20656	7	—58.5	—53.9	—59.0	—	—
	40	1	22400	—	—	1	—51.0	—	—	—	—
	30	1	24213	—	—	1	—48.0	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—
Helwan 1200 U.T.	Surface	31	998m.b.*	1004m.b.*	993m.b.*	31	28.9	35 8	22 8	31	10.4
	1000	3	119	175	77	10	25.1	29.1	22.3	10	9.9
	850	31	1532	1566	1484	31	17.5	24.4	8.8	31	— 0.3
	700	31	3165	3230	3087	31	8.2	12.9	1.4	31	—11.8
	600	31	4417	4503	4314	31	— 0.7	4.7	— 9.0	31	—18.2
	500	30	5853	5962	5746	30	—10.5	— 6.1	—13.8	30	—27.1
	400	30	7533	7667	7404	30	—22.9	—18.1	—25.7	28	—37.8
	300	26	9572	9740	9423	26	—38.7	—36.3	—41.8	26	—51.3
	250	26	10798	10978	10630	26	—48.4	—52.0	—44.8	26	—59.7
	200	26	12230	12430	12043	26	—55.0	—53.5	—62.0	20	—66.9
	150	24	14042	14223	13849	24	—60.2	—53.3	—65.4	10	—68.2
	100	22	16555	16740	16372	22	—64.0	—59.3	—68.7	—	—
	70	19	18759	18968	18626	19	—58.1	—57.9	—66.4	—	—
	60	18	19762	19980	19650	18	—59.6	—56.2	—62.3	—	—
	50	18	20813	21108	19820	18	—53.0	—52.2	—61.1	—	—
	40	12	22380	22660	22250	12	—54.4	—49.6	—58 3	—	—
	30	11	24159	24460	23976	11	—51.4	—45.7	—55.0	—	—
	20	1	26769	—	—	1	—43.7	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 1200 U.T.	Surface	31	989m.b.*	993m.b.*	986m.b.*	31	36.6	42.0	29.4	31	9.4
	1000	31	90	130	62	—	—	—	—	—	—
	850	31	1541	1565	1516	31	24.4	30.0	17.9	31	0.8
	700	31	3198	3248	3156	31	10.2	14.5	7.6	31	— 9.4
	600	31	4458	4526	4417	31	0.3	4.2	— 3.1	31	—16.2
	500	31	5897	5973	5849	31	— 8.5	— 3.6	—12.4	31	—27.4
	400	31	7593	7681	7531	31	—20.2	—13.0	—24.1	31	—37.3
	300	30	9662	9812	9589	30	—35.5	—26.8	—38.9	30	—50.6
	250	30	10912	11104	10820	30	—44.2	—33.4	—48.7	30	—58.1
	200	29	12380	12646	12262	29	—53.5	—41.5	—57.1	29	—65.8
	150	28	14190	14559	14052	28	—62.2	—52.6	—67.0	6	—68.8
	100	21	16668	17099	16529	21	—68.7	—61.9	—77.4	—	—
	70	5	18883	19239	18720	5	—67.3	—61.6	—70.7	—	—
	60	2	19985	20180	19790	2	—66.2	—60.9	—71.5	—	—
	50	2	21055	21227	20882	2	—66.8	—58.9	—75.0	—	—
	40	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—

N = The number of cases the element has been observed during the month.

* The atmospheric pressure corrected to the elevation of the radiosonde stations.

Table B 2.—MEAN AND EXTREME VALUES OF THE FREEZING LEVEL AND THE TROPOPAUSE. THE HIGHEST WIND SPEED IN THE UPPER AIR

OCTOBER — 1972

	Station	Freezing level									First Tropopause									Highest wind speed			
		Mean			Highest			Lowest			Mean			Highest			Lowest						
		Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Direction (000—360)°	Speed in Knots
0000 U.T.		(N)	N)	(N)							(N)	(N)	(N)										
	Mersa Matruh (A)	3380 (28)	657 (28)	—11.0 (28)	4560	595	— 6.4	2200	788	— 3.0	10315 (2)	251 (2)	—50.0 (2)	11100	230	—55.2	10130	272	44.9	1575	848	260	38
	Helwan	4075 (31)	626 (31)	—12.0 (31)	4660	586	—18.1	3350	678	— 6.2	11615 (2)	220 (2)	—56.0 (2)	11680	219	—57.8	11570	220	—54.2	9060	322	225	142
	Aswan . . . (A)	4201 (30)	614 (30)	—10.5 (30)	4740	581	—21.4	3880	642	— 9.6	—	—	—	—	—	—	—	—	—	13750	180	255	110
1200 U.T.		(N)	(N)	(N)							(N)	(N)	(N)										
	Mersa Matruh (A)	3660 (29)	655 (29)	—15.3 (29)	4700	586	—11.8	2700	733	—10.4	12370 (20)	216 (20)	—60.9 (20)	15720	155	—66.6	9950	284	—45.5	7337	403	210	75
	Helwan	4303 (31)	610 (31)	—16.9 (31)	5210	579	—18.0	3270	685	— 1.9	13022 (16)	177 (16)	—61.1 (16)	14630	139	—65.9	11900	208	—55.2	10730	254	270	135
	Aswan . . . (A)	4503 (31)	598 (31)	—16.6 (31)	5250	546	—19.0	4010	632	— 8.8	14772 (10)	141 (10)	—64.4 (10)	18020	86	— 69.2	12320	201	—55.7	11615	222	250	100

N = The Number of cases the element has been observed during the month.

Table B 3 (*contd.*)—**NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES.**

MERSA MATRUH (A) — OCTOBER 1972

Station	Pressure Surface (Millibar)	Wind between specified ranges of direction (000–360°)																								Number of calm winds	Total number of observations (TN)	Mean scalar wind speed (knots)
		345/014		015/044		045/074		075/104		105/135		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	ff) m			
0000 U.T.	Surface	0	—	4	4	1	2	4	4	2	13	4	6	2	4	4	7	1	8	0	—	1	4	4	9	2	29	6
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	700	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	600	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	500	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	250	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	6	9	4	9	1	12	2	8	2	10	0	—	0	—	1	6	2	18	2	18	2	20	7	11	0	29	11
	1000	6	9	3	10	1	11	2	11	0	—	0	—	0	—	1	8	1	17	1	17	8	18	2	12	0	25	15
	850	0	—	1	5	3	11	1	21	0	—	0	—	2	35	2	11	5	15	6	10	5	13	0	—	1	26	12
	700	2	7	0	—	0	—	1	20	0	—	0	—	1	24	2	23	7	18	3	18	3	25	0	—	0	19	20
	600	0	—	1	16	0	—	0	—	0	—	0	—	0	—	4	23	4	21	4	20	1	38	0	—	0	14	22
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	34	4	21	3	29	3	26	0	—	0	13	27
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	21	2	20	4	35	2	20	6	—	0	9	27
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	27	1	50	2	24	0	—	0	6	30
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	57	2	17	1	20	0	—	0	4	28
	200	—	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	16	1	19	0	—	0	3	17
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	22	0	—	0	—	0	2	22
	100	0	—	0	—	0	—	0	—	0	—	0	—	1	10	0	—	0	—	0	—	0	—	0	—	0	1	10
	70	0	—	0	—	0	—	1	13	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	13
	60	0	—	0	—	0	—	1	11	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	11
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the wind has been observed from the range of direction during the month.

TN = The total number of cases the wind has been observed for all directions during the month.

Table B 3 (*contd.*)—NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES.

HELWAN (A) — OCTOBER 1972

Time	Pressure Surface Millibar	Wind between specified ranges of direction (000—360)°																								Number of calm winds	Total number of observations (TN)	Mean scalar wind speed (knots)
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	8	7	13	12	1	9	3	7	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	4	2	31	8
	1000	4	12	6	11	0	—	1	5	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	11	0	12	11
	850	3	10	6	16	3	14	0	—	0	—	1	13	2	19	4	8	0	—	5	18	3	11	3	9	1	31	13
	700	1	9	1	4	1	8	1	13	1	19	0	—	2	25	5	21	9	19	5	20	2	12	2	18	0	30	18
	600	1	11	0	—	0	—	0	—	0	—	0	—	1	76	4	27	11	24	7	34	2	10	3	17	0	29	26
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	24	13	32	8	27	5	21	0	—	0	27	28
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	14	36	6	40	5	32	2	16	0	27	35
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	60	10	47	3	33	3	29	0	20	46
	250	1	22	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	49	8	40	4	30	0	—	0	19	40
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	32	5	46	5	36	0	—	0	14	38
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	40	0	—	0	—	0	—	0	1	40
	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T	Surface	9	9	8	16	2	22	0	—	0	—	0	—	0	—	1	6	1	8	4	6	1	8	5	8	0	31	9
	1000	5	9	2	6	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	8	1	8	1	12	0	10	8
	850	4	10	4	7	3	11	1	12	0	—	0	—	2	6	4	15	3	11	5	12	1	8	4	12	0	31	11
	700	2	9	0	—	0	—	0	—	0	—	0	—	1	16	5	26	14	23	5	16	3	18	1	16	0	31	20
	600	0	—	0	—	0	—	0	—	0	—	0	—	2	29	6	26	12	31	5	23	3	18	3	16	0	31	25
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	36	15	28	7	23	2	38	3	14	0	30	27
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	21	6	32	13	33	5	31	1	10	0	26	31
	300	0	—	0	—	0	—	0	—	1	—	0	—	0	—	1	40	7	47		36	7	47	1	35	0	22	43
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	34	4	56		33	6	38	0	—	0	19	40
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	26	10	47	3	52	1	27	0	15	45
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	55	5	52	3	64	0	—	0	14	56
	100	0	—	0	—	0	—	1	29	0	—	0	—	1	18	0	—	2	33	4	44	1	12	0	—	0	9	34
	70	0	—	1	15	0	—	0	—	0	—	0	—	1	12	1	22	2	32	2	29	1	24	0	—	0	8	22
	60	0	—	0	—	0	—	1	22	1	12	1	31	1	6	1	23	1	10	1	13	0	—	1	23	0	8	18
	50	0	—	0	—	0	—	3	21	0	—	1	17	0	—	0	—	1	10	1	12	0	—	0	—	0	6	17
	40	0	—	0	—	0	—	0	—	1	2	1	15	0	—	1	13	1	14	0	—	0	—	1	10	0	5	21
	30	0	—	0	—	0	—	0	—	1	12	0	—	1	22	0	—	0	—	0	—	0	—	0	—	0	2	17
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N. = The number of cases the wind has been observed from the range of directions during the month.

TN = The total number of cases the wind has been observed for all directions during the month.

Table B 3.—(*contd.*) NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELCECTED PRESSURE SURFACES

ASWAN (A) — OCTOBER 1972

Time	Pressure Surface (Millibar.)	Wind between ranges of direction (000—200°)																						Num er of Calm winds	Total Number of Observations (T.N)	Mean Scaler wind Speed (Knots)
		345 / 014		015 / 643		045 / 074		075 / 104		105 / 134		135 / 164		1 5 / 194		195 / 224		225 / 254		255 / 284		285 / 314		315 / 344				
		N	(ff) m	N	)ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	)ff) m	N	(ff) m	N	(ff) m	N	(ff m			
0000 T.U.	Surface	17	11	3	12	2	6	4	9	2	12	0	—	0	—	0	—	0	—	0	—	0	—	1	18	1	30	11
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	3	13	8	16	3	12	5	11	7	13	1	12	0	—	0	—	0	—	0	—	0	—	0	—	0	27	13
	700	0	—	0	—	4	12	4	12	4	2	2	4	3	9	4	13	2	10	2	8	1	8	1	2	0	27	10
	600	0	—	0	—	1	2	1	15	6	14	4	10	2	4	4	12	3	14	3	4	0	—	3	9	0	27	10
	500	2	8	0	—	0	—	1	13	1	10	0	—	2	6	7	12	5	16	7	15	2	12	0	—	0	27	13
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	17	10	20	4	20	3	20	4	18	0	26	19
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	14	42	7	36	5	37	0	—	0	26	39
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	50	12	56	7	50	2	40	1	60	0	24	53
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	13	67	5	68	1	24	0	—	0	19	65
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	59	0	—	0	—	0	—	0	2	59
	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 T.U.	Surface	16	9	6	11	0	—	0	—	2	4	2	4	0	—	0	—	0	—	2	4	0	—	0	—	3	31	8
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	3	10	2	10	5	9	7	7	2	6	2	8	3	5	1	8	1	4	1	9	3	8	1	10	0	31	8
	700	0	—	0	—	2	4	1	4	5	11	6	9	8	12	2	22	3	12	2	9	0	—	2	4	0	31	10
	600	1	12	0	—	1	8	1	12	0	—	2	11	9	13	5	17	4	14	4	8	2	10	2	4	0	31	12
	500	1	10	1	10	0	—	0	—	1	4	2	6	5	10	5	13	6	15	7	13	3	12	0	—	0	31	19
	400	2	8	0	—	0	—	0	—	0	—	1	29	3	15	5	26	7	23	10	18	2	12	1	13	0	31	19
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	37	10	37	12	40	3	31	0	—	0	30	37
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	16	45	10	57	3	43	0	—	0	29	49
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	53	13	66	8	61	2	69	0	—	0	24	64
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	49	12	49	7	65	0	—	0	—	0	20	55
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	23	0	—	0	—	0	—	0	3	23
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N=The number of cases the wind has been observed from the range of direction during the month

TN=The total number of cases the wind has been observed during the month

REVIEW OF AGRO-METEOROLOGICAL STATIONS

MERSA MATRUH — OCTOBER 1972

For the month as a whole the mean daily air temperature and relative humidity were slightly above normal. The tatal monthly rainfall was only 2.9 mm. against 18.7 mm. for normal.

The month was characterized by a prolonged heat wave which prevailed from the 4th till the 15th yielding the highest maximum air temperature for the month (33.6°C) on the 15th and the highest minimum air temperature (21.0°C) on the 7th, and a light heat wave on the 21st and 22nd. In the rest of the month mild weather was experienced.

The extreme maximum soil temperatures were lower than last October at depths between 2 and 10 cm. with departures between 3.0°C (at 2 cm) and 0.9°C (at 20 cm.); and were higher than last October at depths between 20 and 100 cm. with departures between 0.4°C (at 20 cm.) and 1.9°C (at 50 cm.). The extreme minimum soil temperatures were higher than last October at all depths except at 2 cm. where it was lower there last October; the departures varied between 0.1°C and 0.8°C.

The mean daily wind speed and actual sunshine duration were lower than the corresponding values of October 1971 by 0.2 m./sec. and 0.7 hour respectively.

TAHRIR — OCTOBER 1972

For the month as a whole the mean daily air temperature and relative humidity were rather normal. The total monthly rainfall was 1.4 mm. against 2.3 mm. for normal.

The month was characterized by a prolonged heat wave which prevailed from the 5th till the 18th yielding the highest maximum air temperature for the month (38.0°C) on the 6th, and a short heat wave from the 22nd till the 24th. In the rest of the month mild weather prevailed.

The extreme maximum soil temperaturs were lower than last October at shallow depths between 2 & 10 cm. with small departures ranging between 0.3° and 0.9°C. At 20 cm. the extreme maximum soil temperature was the same as last October, and at 50 & 100 cm. depths it was higher by 1.7°C and 1.1°C respectively. The extreme minimum soil temperatures were higher than last October at all depths apart from 2 and20 cm. where the values were the same as last October; the departures were slight and varied between 0.3° and 0.7°C.

The mean daily actual sunshine duration was higher than average by 0.3 hour. The mean daily wind speed and pan evaporation were lower than average by 0.2 m./sec. and 1.19 mm. respectively.

BAHTIM — OCTOBER 1972

This month was rather normal as regards the mean daily air temperature and relative humidity. The month was rainless apart from trace on the 17th.

The month was characterized by a prolonged heat wave from the 5th till the 18th yielding the highest minimum air temperature for the month (18.6°C) on the 14th and the highest daily pan evaporation (11.89 mm.) on the 7th, and a short heat wave from the 22nd to the 24th yielding the highest maximum air temperature (36.8°C) on the 24th. In the rest of the month mild weather was experienced.

The extreme maximum temperatures were higher than last October at all depths apart from 2 & 10 cm. where the values were lower ; all the departures were small and varied between 0.1°C and 0.7°C. The extreme minimum soil temperatures were higher than last October at all depths with departures between 0.1°C at 50 cm. and 1.1°C at 10 cm.

The mean daily actual sunshine duration, wind speed and pan evaporation showed insignificant departures from normal.

KHARGA — OCTOBER 1972

For the month as a whole the mean daily air temperature was above normal and the mean daily relative humidity was rather normal.

The month was characterized by three heat waves in the periods (1st & 2nd), (6th-18th) and (22nd-24th). The second heat wave was prolonged and yielded the highest maximum air temperature for the month (41.4°C) on the 10th. Apart from these heat waves, maximum air temperatures were below normal.

The extreme maximum soil temperatures were higher than last October at all depths. The extreme minimum soil temperatures were lower than last October at 2 & 5 cm. depths and higher at all other depths. All the departures were slight and ranged between 0.3° and 0.9°C.

The mean daily actual sunshine duration was lower than normal by 0.4 hour. The mean daily wind speed and pan evaporation were higher than normal by 0.5 m./sec. and 1.71 mm. respectively.

Table C 1.—AIR TEMPERATURE AT 1½ METRES ABOVE GROUND

OCTOBER — 1972

STATION	Air Temperature (°C)					Mean Duration in hours of daily air temperature above the following values										
	Mean Max.	Mean Min.	Mean of the day	Night time mean	Day time mean	—5°C	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C
Mersa Matruh . .	27.0	17.5	22.1	20.1	24.1	24.0	24.0	24.0	24.0	24.0	16.3	4.8	0.4	0.0	0.0	0.0
Tahrir	31.0	14.8	21.9	18.2	25.7	24.0	24.0	24.0	24.0	21.5	14.4	6.9	2.0	0.03	0.0	0.0
Bahtim	29.9	14.4	21.8	17.9	25.8	24.0	24.0	24.0	23.9	20.8	13.8	6.8	2.2	0.0	0.0	0.0
Kharga	34.9	20.2	27.7	24.9	30.6	24.0	24.0	24.0	24.0	23.8	21.7	15.7	7.9	3.3	0.1	0.0

Table C 2.—EXTREME VALUES OF AIR TEMPERATURE AT 1½ METRES ABOVE GROUND, ABSOLUTE MINIMUM AIR TEMPERATURE AT 5cm ABOVE GROUND OVER DIFFERENT FIELDS

OCTOBER — 1972

STATION	Max. Temp. at 1½ metres (°C)				Min. Temp. at 1½ metres (°C)				Min. Temp. at 5 cms. above (°C)			
	Highest		Lowest		Highest		Lowest		Dry soil		Grass	
	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date	Nalue	Date
Mersa Matruh . . .	33.6	15	22.6	25	21.0	7	13.3	25	11.2	21	—	—
Tahrir	38.0	6	25.9	27	18.8	6	9.6	30	7.3	31	—	—
Bahtim	36.8	24	24.0	29	18.6	14	9.4	29	5.2	30	—	—
Kharga	41.4	10	26.8	28	28.0	8	10.6	31	8.4	31	—	—

Table C 3.—(SOLAR+SKY) RADIATION, DURATION OF BRIGHT SUNSHINE, RELATIVE HUMIDITY, VAPOUR PRESSURE AT 1½ METRES ABOVE GROUND, EVAPORATION & RAINFALL

OCTOBER — 1972

STATION	(Solar+Sky) Radiation gm. cal/cm²	Duration of Bright Sunshine (hour .)			Relative Humidity				Vapour pressure (mms)						Evaporation (mms)		Rainfall (mms)		
		Total Actual monthly	Total Possible monthly	%	Mean of day	1200 U.T.	Lowest	Date	Mean of day	1200 U.T.	Highest	Date	Lowest	Date	Piche	lass A	Total Amount Monthly	Max. fall in one day	Date
Matruh .	—	267.6	353.5	76	69	53	39	22	13.8	14.5	20.3	6	9.2	27,31	7.6	—	2.9	2.4	23
hrir . . .	427.8	295.6	354.3	83	70	42	27	19	13.5	12.6	19.4	10,11	7.6	19	4.9	5.85	1.4	1.1	17
htim . . .	431.9	300.2	354.6	85	65	38	22	6	12.2	11.3	18.3	9	7.8	19	6.8	6.97	Tr.	Tr.	17
harga . .	511.4	319.7	358.5	89	31	20	10	10	8.2	7.9	15.9	1	4.9	17,31	15.5	15.96	0	0	—

TABLE C 4.—EXTREME SOIL TEMPERATURE AT DIFFERENT DEPTHS IN DIFFERENT FIELDS

OCTOBER — 1972

STATION	Highest (H) Lowest (L)	Extreme soil temperature (°C) in dry field at different depths (cms.)								Extreme soil temperature (°C) in grass field at different depths (cms.)							
		2	5	10	20	50	100	200	300	2	5	10	20	50	100	200	30
Marsa Matruh .	H	34.7	32.5	30.2	28.2	28.6	26.8	25.8	—	—	—	—	—	—	—	—	—
	L	15.3	16.2	18.1	20.8	23.2	24.0	23.8	—	—	—	—	—	—	—	—	—
Tahrir	H	45.4	41.4	35.8	31.7	30.7	30.1	28.9	28.3	—	—	—	—	—	—	—	—
	L	15.8	16.3	17.9	21.2	24.0	26.0	27.2	27.7	—	—	—	—	—	—	—	—
Bahtim	H	44.5	39.2	34.0	31.4	30.8	30.0	28.3	26.8	—	—	—	—	—	—	—	—
	L	18.0	17.4	20.7	24.5	26.8	28.1	28.0	26.6	—	—	—	—	—	—	—	—
Kharga.	H	49.5	43.0	38.1	34.4	33·4	32.5	31.4	30.4	—	—	—	—	—	—	—	—
	L	12.6	16.7	20.8	25.4	28.4	30.6	31.0	30.0	—	—	—	—	—	—	—	—

TABLE C 5.—SURFACE WIND

OCTOBER — 1972

STATION	Wind Speed m/sec (1½ metres)			Days with surface wind speed at 10 metres.							Max. Gust (knots) at 10 metres	
	Mean of the day	Night time mean	Day time mean	≥10 knots	≥15 knots	≥20 knots	≥25 knots	≥30 knots	≥35 knots	≥40 knots	value (knots)	Date
Marsa Matruh .	3.7	2.5	4.8	31	30	15	9	2	1	1	46	22
Tahrir	1.7	1.1	2.4	25	14	1	0	0	0	0	30	25
Bahtim.	2.0	1.2	2.8	27	10	2	0	0	0	0	29	7
Kharga	4.3	3.6	5.0	29	24	11	7	1	1	0	42	27

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VOLUME 15 NUMBER 11

NOVEMBER, 1972

U.D.C. 551. 506.1 (62)

THE EGYPTIAN METEOROLOGICAL AUTHORITY
CAIRO

PUBLICATIONS OF THE METEOROLOGICAL AUTHORITY OF THE ARAB REPUBLIC OF EGYPT – CAIRO

In fulfilment of its duties, the Meteorological Authority of Egypt issues serveral reports and publications on weather, climate and agrometeorology. The principal publications are described on this page.

Orders for publications should be addressed to :

"Chairman of the Board of Directors, Meteorological Authority, Kubri-el-Qubbeh — CAIRO".

THE MONTHLY WEATHER REPORT

First issued in 1909, the Monthly Weather Report served to give a brief summary of the weather conditions that prevailed over Egypt during the month, with a table showing the mean values for few meteorological elements and their deviations from the normal values. From 1954 to 1957 this report was in a rapid state of development and extension resulting into a voluminous report on January 1958 giving surface, upper air, and agro-meteorological data for Egypt.

As from January 1964, the Monthly Weather Report was pressed to give climatological data for a representative selection of synoptic stations.

THE AGRO-METEOROLOGICAL ABRIDGED MONTHLY REPORT

Gives a review of weather experienced in the agro-meteorological stations of Egypt as well as monthly values of certain elements.

THE ANNUAL REPORT

This report gives annual values and statistics for the various meteorological elements, together with a summary of the weather conditions that prevailed during all months of the year.

CLIMATOLOGICAL NORMALS FOR EGYPT

A voluminous edition was issued in March 1968 which brings normals and mean values up till 1960.

METEOROLOGICAL RESEARCH BULLETIN

First issued in January 1969 on a bi-annual basis. It includes research works carried out by members of staff of "The Meteorological Institute for Research and Training" and the Operational Divisions of the Meteorological Authority.

TECHNICAL NOTES

As from October 1970, the Meteorological Authority started to issue a new series of publications in the form of Technical Notes (non periodical) on subjects related to studies and applications of meteorology in different fields for the benefit of personnel working in these fields

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THE EGYPTIAN METEOROLOGICAL AUTHORITY
CAIRO

CONTENTS

PAGE

General Summary of Weather Conditions 1-2

SURFACE DATA

Table A1.—Monthly values of the Atmospheric Pressure, Air Temperature, Relative Humidity, Bright Sunshine Duration and Piche Evaporation 3

" A2.—Maximum and Minimum Air Temperatures 4

" A3.—Sky Cover and Rainfall 5

" A4.—Number of Days of Occurrence of Miscellaneous Weather Phenomena 6

" A5.—Number in Hours of Occurrences of Concurrent Surface Wind Speed and Direction Recorded Within Specified Ranges 7,8

UPPER AIR DATA

Table B1.—Monthly Means and Monthly Absolute Higher & Lower Values of Altitude, air Temperature & Dew point at Standard and Selected Pressure Surfaces 9,10

" B2.—Mean and Extreme values of The Freezing Level and The Tropopause; The Highest Wind Speed in The Upper Air 11

" B3.—Number of Occurrences of Wind Direction Within Specified Ranges and The Mean Scalar Wind Speed at the Standard and Selected Pressure Surfaces 12-1

AGRO-METEOROLOGICAL DATA

Reviews of Agro-Meteorological Stations 15,16

Table C1.—Air Temperature at 1½ Metres Above Ground 17

" C2.—Extreme Values of Air Temperature at 1½ metres above Ground, Absolute Minimum Air Temperature at 5 cms. above Ground Over Different Fields. 17

" C3.—(Solar + Sky) Radiation, Duration of Bright Sunshine, Relative Humidity and Vapour Pressure at 1½ metres above Ground, Evaporation and Rainfall. 17

" C4.—Extreme Soil Temperature at Different Depths in Different Fields 18

" C5.—Surface wind 18

Note : For explanatory notes on tables please refer to Volume 15, Number 1 (January 1972).

GENERAL SUMMARY OF WEATHER CONDITIONS

NOVEMBER 1972

Generally mild and light rainy during the first three weeks, cold in the last week. Abnormal heavy rain on the 23rd & 24th over the northern parts, yielding rainfall records at several places.

GENERAL DESCRIPTION OF WEATHER

The prevailing weather was generally mild day time, rather cool night time during the first three weeks, with scattered light rain mostly in the first week. Rain was locally heavy over the Mediterranean district on the 2nd. and 9th.

A pronounced cold wave was experienced from the 23rd till the end of the month. This wave was characterized by heavy rain associated with thunderstorms and lightning on the 23rd and 24th over the northern parts, yielding monthly and daily rainfall records at several places.

Early morning mist developed during several days over scattered places in Delta, Cairo and north of Upper Egypt.

PRESSURE DISTRIBUTION

The characteristic pressure patterns over the surface maps during this month were :

—The Atlantic anticyclone and its extensions over Europe and the Mediterranean

— Deep low pressure systems through North Europe and their extensions through Centeral Europe.

— Three Mediterranean secondary depressions or troughs

— Two northward elongations of the Sudan trough.

The upper air charts were characterized with two upper lows and four upper troughs. Their corresponding transists through East Mediterranean were round the 3rd, 24th, 8, 14, 17, & 29th respectively.

The second upper low was the most pronounced, it originated over the Western Desert on the 22nd and passed through Egypt on the 24th.

The first Mediterranean depression in this month was centered east of Grete on the lst. It moved slowly eastwards and traversed East Mediterranean on the 3rd, taking its track towards Iraq. The second Mediterranean distrubance was due to the extension of a deep trough from East Europe through the Balkans and Central Mediterranean on the 12th. This trough moved rapidly eastwards and its southern limit traversed East Mediterranean while filling on the 13*th*. The last Mediterranean depression in this month appeared over Greece and Central Mediterranean on the 25th and moved rapidly northeastwards on the 26th.

The Sudan trough experienced two northward elongations in the periods (7th-10th) and (23rd & 24th). It is worthy to mention that the second elongation was associated with a deep upper low yielding pronounced instability conditions over Egypt.

The atmospheric pressure over Egypt was interrupted by the transists of the Mediterranean depressions or troughs and the northward elongations of the Sudan trough, and accordingly it dropped to minima round the 3rd, 8th, 14th & 24th.

Apart from these pressure falls, high pressure established over the Mediterranean and NE Africa and the pressure over Egypt was above normal most of the month.

SURFACE WIND

Light to moderate N and NW winds prevailed most of this month. Winds freshened during several days in scattered localities mainly in the Red Sea district. On the other hand calms were frequent most of night and early morning intervals in many land localities.

TEMPERATURE

Maximum air temperature continued below normal most days of this month. The departures below normal were marked in particular from the 23rd till the end of the month. Maximum air temperature values ranged most of the month between 20° & 28°C in the northern and middle parts and between 25° & 32°C in the southern parts.

The absolute maximum air temperature for Egypt in this month was 32.6°C reported at Kom Ombo on the 11th.

Minimum air temperature oscillated round normal in the Mediterranean district and was generally below normal otherwise. Minimum air temperature values ranged most of the month between 10° & 18°C.

The absolute minimum air temperature for Egypt in this month was 2.9°C reported at Siwa on the 30 th.

PRECIPITATION

This month was characterized by heavy rainfall amounts allover the northern parts of the country till Beni Suef.

Scattered rain fell over the northern parts mostly during the first and fourth weeks. Rain was heavy and associated with thunderstorms and lightning on a widescale over lower Egypt and Cairo on the 23rd and 24th, and over few places in the Mediterranean district on the 2nd & 9th. It is worthly to mention that the daily rainfall attained records at Tanta (17.3 mm) on the 23rd, Shebin El Kom (44.0 mm.) on the 24th, Benha (27.3 mm) on the 23rd, Giza (274 mm) on the 24th, Fayoum (16.0 mm) on the 24th and Farafra (15.2 mm) on the 23rd. The monthly rainfall attained records at Rosetta (85.1 mm), Balteam (70.2 mm). Damanhour (37.1 mm), Shebin El Kom (70.9 mm) Benha (53.0 mm), Cairo (20.8 mm), Giza (47.5 mm), Fayoum (21.0 mm) and Farafra (15.2 mm).

The highest monthly rainfall for Egypt in this month was 85.1 mm reported at Rosetta.

The highest daily rainfall was 44.0 mm reported at Shebin El Kom on the 24 th.

Chairman (M. F. TAHA)

Board of Directors

Cairo, September 1973

Table A 1.—MONTHLY VALUES OF THE ATMOSPHERIC PRESSURE, AIR TEMPERATURE, RELATIVE HUMIDITY, BRIGHT SUNSHINE DURATION & PICHE EVAPORATION

NOVEMBER 1972

Station	Atmospheric Pressure (mbs) M.S.L.		Air Temperature °C									Relative Humidity %		Bright Sunshine Duration (Hours)			Piche Evaporation (mms.) Mean
			Maximum		Minimum		$\frac{A+B}{2}$	Dry Bulb		Wet Bulb							
	Mean	D.F. Normal or Average	(A) Mean	D.F. Normal or Average	(B) Mean	D.F. Normal or Average		Mean	D.F. Normal or Average	Mean	D.F. Normal or Average	Mean	D.F. Normal or Average	Total Actual	Total Possible	%	
Sallum	1020.2	+2.4	22.2	—2.4	13.9	—1.0	18.0	17.9	—1.9	14.1	—1.2	63	+3	—	—	—	5.2
Mersa Matruh (A)	1020.1	+2.3	21.9	—1.6	14.7	+1.3	18.3	18.3	+0.1	14.3	—0.4	62	—5	216.9	317.1	68	6.6
Alexandria (A)	1019.1	+1.9	22.9	—1.6	14.9	+0.2	18.9	18.8	—0.5	14.8	—1.3	62	—7	210.8	318.0	66	4.2
Port Said (A)	1016.6	+0.1	24.5	+0.5	17.7	—0.8	21.1	20.3	—0.6	16.4	—1.2	65	—6	228.4	318.0	71	4.5
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1018.6	+0.5	23.8	—2.0	11.8	—0.6	17.8	17.0	—1.4	13.9	—1.3	69	—1	244.5	318.8	77	2.5
Cairo (A)	1018.3	+1.2	23.2	—2.0	13.5	—0.3	18.4	18.1	—1.2	14.5	—0.5	65	+4	—	—	—	5.9
Fayoum	—	—	24.7	—1.8	12.4	—0.8	18.6	18.0	—1.5	14.4	—0.7	65	+6	—	—	—	3.7
Minya (A)	1017.4	+0.8	24.5	—2.3	11.0	—0.5	17.8	17.3	—1.1	13.7	—0.8	65	+5	288.6	323.5	89	6.8
Assyout (A)	1016.5	+0.1	24.8	—1.8	11.5	—1.3	18.2	17.7	—1.7	13.4	—0.2	59	+11	—	—	—	7.4
Luxor (A)	1015.3	+0.7	28.4	—1.3	12.0	—0.2	20.2	19.8	+0.1	14.1	—0.7	50	+3	—	—	—	5.5
Aswan (A)	1015.4	+1.0	28.4	—2.1	13.9	—0.7	21.2	20.6	—1.8	13.0	—0.5	36	+6	—	—	—	13.1
Siwa	1020.3	+2.3	23.9	—2.4	10.4	+0.3	17.2	17.0	—1.0	12.5	—0.1	56	+6	256.5	321.7	80	7.9
Bahariya	1019.0	+1.3	23.7	—2.5	11.1	—0.2	17.4	17.2	—1.0	13.0	—0.5	59	+8	—	—	—	4.9
Farafra	1020.6	+2.1	24.1	—2.1	11.1	+0.4	17.6	17.3	—1.0	12.4	+0.5	54	+11	—	—	—	6.6
Dakhla	1018.5	+3.1	24.8	—2.9	10.6	—0.9	17.7	17.4	—1.7	11.8	—0.2	46	+8	—	—	—	9.8
Kharga	1017.2	+1.1	26.0	—2.7	12.7	—0.2	19.3	19.6	—1.0	13.2	—0.2	44	+2	304.4	328.0	93	7.9
Tor	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—
Hurghada	1015.2	+0.4	25.3	—0.6	16.6	+1.1	21.0	21.3	+0.4	16.1	+0.4	56	+2	298.3	325.8	92	9.4
Quseir	1014.9	+0.3	26.0	—1.3	19.0	—0.5	22.5	22.5	—0.6	16.8	—0.5	53	00	—	—	—	11.0

Table A 2.—MAXIMUM AND MINIMUM AIR TEMPERATURES

NOVEMBER — 1972

Station	Maximum Temperature °C									Grass Min. Tmp.		Minimum Temperature °C							
	Highest	Date	Lowest	Date	No. of Days with Max-Temp.					Mean	Dev. From Normal	Highest	Date	Lowest	Date	No. of Days with Min, Temp.			
					>25	>30	>35	>40	>45							<10	<5	<0	<-5
Sallum	24.9	25	16.5	28	0	0	0	0	0	13.7	—	17.4	5,9,10	9.2	30	1	0	0	0
Mesra Matruh (A)	24.5	25	16.8	28	0	0	0	0	0	13.5	—	19.0	8	8.6	30	2	0	0	0
Alexandria . (A)	24.7	6	18.5	29	0	0	0	0	0	13.3	—	18.9	24	9.6	26	1	0	0	0
Port said . . (A)	27.6	1	16.8	29	12	0	0	0	0	17.0	—	20.9	6	12.2	29	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	26.6	10	18 0	29	8	0	0	0	0	—	—	16.4	24	8.9	30	6	0	0	0
Cairo . . . (A)	27.4	10	17.3	29	6	0	0	0	0	—	—	16.4	11	10.3	29	0	0	0	8
Fayoum	29.1	10	17.2	29	16	0	0	0	0	6.6	—	16.8	23	6.5	30	2	0	0	0
Minya . . . (A)	28.8	10	19.0	29	10	0	0	0	0	8.8	—	15.8	23	5.0	30	8	0	0	0
Assyout. . . (A)	28.4	10	18.8	29	13	0	0	0	0	8.8	—	14.5	23	6.0	30	5	0	0	0
Luxor . . . (A)	32.4	10	22.0	30	27	7	0	0	0	7.2	—	16.0	23	9.0	19,20	2	0	0	0
Aswan . . . (A)	32.5	1	20.0	30	28	8	0	0	0	—	—	18.3	23	8.4	30	1	0	0	0
Siwa	26.2	25	19.2	29	10	0	0	0	0	9.4	—	16.6	11	2.9	30	13	1	0	0
Bahariya	26.7	10	18.6	29	5	0	0	0	0	10.6	—	14.4	24	7.7	26	10	0	0	0
Farafra	26.6	26	19.8	29,30	9	0	0	0	0	10.6	—	14.8	2	6.0	30	9	0	0	0
Dakhla	28.6	21	19.5	30	16	0	0	0	0	10.5	—	16.2	11	5.1	30	11	0	0	0
Kharga	29.4	10	20.0	30	24	0	0	0	0	10.9	—	17.2	11	7.1	30	3	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada . . .	28.5	10	20.5	30	27	0	0	0	0	—	—	19.0	23	11.8	30	0	0	0	0
Quseir	29.5	2	21.2	30	26	0	0	0	0	17.4	—	21.2	1,24	13.5	30	0	0	0	0

Table A 3.—SKY COVER AND RAINFALL

NOVEMBER — 1972

STATION	Mean Sky Cover Oct.					Rainfall mms.										
	00 U.T.	06 U.T.	12 U.T.	18 U.T.	Daily Mean	Total Amount	D. From Normal	Max. Fall in one day		Number of Days with Amount of Rain						
								Amount	Date	<0.1	≥0.1	≥1.0	≥5.0	≥10	≥25	≥50
Sallum	2.6	3.1	4.0	2.9	3.1	15.3	—14.7	4.9	1	0	6	5	0	0	0	0
Mersa Matruh (A)	2.7	4.1	4.7	4.2	3.7	11.9	—11.7	7.7	1	0	8	4	1	0	0	0
Alexandria (A)	4.8	5.1	5.5	4.3	4.8	46.4	+17.6	35.3	2	0	8	4	1	1	1	0
Port Said (A)	2.6	2.9	2.5	2.6	2.7	14.1	+ 4.4	6.2	29	0	7	4	1	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	0.9	2.5	4.3	2.0	2.6	22.6	+18.4	17.3	23	0	7	4	1	1	0	0
Cairo (A)	1.2	3.1	4.8	2.3	2.9	20.8	+18.1	17.8	23	2	5	2	1	1	0	0
Fayoum	—	1.2	3.5	1.2	—	21.0	+20.5	16.0	24	2	2	2	2	1	0	0
Minya (A)	0.6	0.8	2.5	0.8	1.2	Tr.	— 0.2	Tr.	22,23,24*	4	0	0	0	0	0	0
Assyout (A)	0.3	0.5	1.0	0.4	0.5	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Luxor (A)	0.7	1.0	1.2	0.7	0.9	0.0	— 0.1	0.0	—	0	0	0	0	0	0	0
Aswan (A)	0.6	1.1	1.3	0.8	1.0	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Siwa	4.5	3.2	4.7	3.7	3.9	Tr.	— 0.6	Tr.	2	1	0	0	0	0	0	0
Bahariya	0.7	0.5	2.7	1.8	1.3	0.0	— 0.6	0.0	—	0	0	0	0	0	0	0
Farafra	—	0.4	2.3	0.8	—	15.2	+15.1	15.2	23	0	1	1	1	1	0	0
Dakhla	0.0	0.5	1.1	0.2	0.4	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Kharga	0.6	0.5	1.0	0.3	1.4	0.0	— 0.1	0.0	—	0	0	0	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0.6	1.3	1.4	0·7	1.0	Tr.	— 0.2	Tr.	23	1	0	0	0	0	0	0
Quseir	0.7	1.5	1.3	0.8	1.6	0.0	— 1.9	0.0	—	0	0	0	0	0	0	0

* More than 3 days.

Table A 4.—DAYS OF OCCURRENCE OF MISCELLANEOUS WEATHER PHENOMENA

NOVEMBER — 1972

Station	Precipitation				Frost	Thunderstorm	Mist Vis ≥ 1000 metres	Fog Vis < 1000 Metres	Haze Vis ≥ 1000 Metres	Thick Haze Vis < 1000 Metres	Dust or Sandrising Vis ≥ 1000 Metres	Dust or Sandstorm Vis < 1000 Metres	Gale	Clear Sky	Cloudy Sky
	Rain	Snow	Ice Pellets	Hail											
Sallum	6	0	0	0	0	0	0	0	0	0	0	0	0	7	0
Mersa Matruh (A)	8	0	0	0	0	0	0	0	0	0	2	0	0	4	2
Alexandria (A)	8	0	0	0	0	1	1	0	0	0	0	0	0	1	4
Port Said (A)	7	0	0	0	0	2	0	0	0	0	0	0	0	9	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	7	0	0	0	0	0	2	0	0	0	0	0	0	13	1
Cairo (A)	5	0	0	0	0	1	13	2	8	0	2	0	0	8	1
Fayoum	2	0	0	0	0	2	0	0	0	0	0	0	0	—	—
Minya (A)	0	0	0	0	0	1	19	1	0	0	6	0	0	24	0
Assyout (A)	0	0	0	0	0	0	0	0	0	0	1	0	0	30	0
Luxor (A)	0	0	0	0	0	0	0	0	10	0	2	0	0	30	0
Aswan (A)	0	0	0	0	0	0	0	0	0	0	4	0	0	24	0
Siwa	0	0	0	0	0	0	0	0	0	0	1	0	0	5	3
Bahariya	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0
Farafra	1	0	0	1	0	1	0	1	0	0	0	0	0	—	—
Dakhla	0	0	0	0	0	0	0	0	0	0	0	0	0	29	0
Kharga	0	0	0	0	0	0	0	0	0	0	2	0	0	27	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0	0	0	0	0	0	0	0	0	0	4	0	0	26	2
Quseir	0	0	0	0	0	1	0	0	0	0	0	0	0	23	1

Table A 5.—NUMBER IN HOURS OF OCCURENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES

NOVEMBER — 1972

Station	calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurrences of wind blowing from the ranges of directions indicated												
					345/014	015/044	045/074	075/104	105/134	135/164	165/194	195/224	225/254	255/284	285/314	315/344	All direction
Sallum	8	0	0	1—10	32	54	77	18	5	1	2	4	1	61	160	222	637
				11—27	0	0	0	0	0	0	0	0	9	23	33	19	75
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**32**	**54**	**77**	**18**	**5**	**1**	**2**	**4**	**1**	**84**	**193**	**241**	**712**
Mersa Matruh (A)	1	0	2	1—10	52	22	17	5	7	7	10	16	50	60	29	38	313
				1—27	153	45	2	1	0	0	0	4	33	30	17	119	404
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**205**	**67**	**19**	**6**	**7**	**7**	**10**	**20**	**83**	**90**	**46**	**157**	**717**
Alexandria (A)	0	1	0	1—10	191	81	20	26	6	7	26	30	12	8	17	53	477
				11—27	62	39	0	0	0	0	0	1	11	14	1	114	242
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**253**	**120**	**20**	**26**	**6**	**7**	**26**	**31**	**23**	**22**	**18**	**167**	**719**
Tanta	27	0	9	1—10	119	75	35	6	0	0	13	20	50	78	150	93	639
				11—27	15	14	5	0	0	0	0	0	0	1	2	8	45
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**134**	**89**	**40**	**6**	**0**	**0**	**13**	**20**	**50**	**79**	**152**	**101**	**684**
Cairo (A)	178	0	144	1—10	37	45	25	11	3	1	8	18	27	38	12	44	269
				11—27	28	39	5	0	0	5	5	5	19	10	3	10	129
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**65**	**84**	**30**	**11**	**3**	**6**	**13**	**23**	**46**	**48**	**15**	**54**	**398**
Fayoum	16	0	6	1—10	309	152	4	0	0	1	1	14	36	36	53	59	665
				11—27	1	29	3	0	0	0	0	0	0	0	0	0	33
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**310**	**181**	**7**	**0**	**0**	**1**	**1**	**14**	**36**	**36**	**53**	**59**	**698**
Minya (A)	5	0	0	1—10	313	52	2	0	0	2	7	5	2	8	17	53	461
				11—27	140	77	0	0	0	0	0	0	0	1	17	19	254
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**453**	**129**	**2**	**0**	**0**	**2**	**7**	**5**	**2**	**9**	**34**	**72**	**715**
Assyout (A)	19	0	0	1—10	22	0	0	0	0	0	0	0	11	180	232	126	571
				11—27	51	0	0	0	0	0	0	0	0	1	26	52	130
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**73**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**181**	**258**	**178**	**701**

Table A 5 (*contd.*)—NUMBER IN HOURS OF OCCURENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES

NOVEMBER — 1972

Station	calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurrences of wind blowing from the ranges of directions indicated												
					345/014	015/044	045/074	075/104	105/134	135/164	165/194	195/224	225/254	255/284	285/314	315/344	All directions
Luxor . . . . (A)	26	0	1	1—10	72	14	15	11	5	22	161	70	47	63	95	102	677
				11—27	2	0	0	0	0	0	0	0	0	2	2	10	16
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**74**	**14**	**15**	**11**	**5**	**22**	**161**	**70**	**47**	**65**	**97**	**112**	**693**
Aswan . . . . (A)	90	0	0	1—10	183	142	2	0	0	1	2	2	0	3	55	130	520
				11—27	37	33	0	0	0	0	0	0	0	0	13	27	110
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**220**	**175**	**2**	**0**	**0**	**1**	**2**	**2**	**0**	**3**	**68**	**157**	**630**
Siwa	93	8	0	1—10	22	104	28	19	9	8	3	9	22	66	101	203	594
				11—27	0	4	0	0	0	0	0	0	0	1	6	14	25
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**22**	**108**	**28**	**19**	**9**	**8**	**3**	**9**	**22**	**67**	**107**	**217**	**619**
Dakhla	1	8	0	1—10	97	26	3	0	1	0	1	3	26	79	180	227	643
				11—27	36	4	0	0	0	0	0	0	1	0	6	21	68
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**133**	**30**	**3**	**0**	**1**	**0**	**1**	**3**	**27**	**79**	**186**	**248**	**711**
Kharga	8	18	1	1—10	182	66	11	5	0	0	0	0	1	5	60	162	492
				11—27	149	20	0	0	0	0	0	0	0	0	2	30	201
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**331**	**86**	**11**	**5**	**0**	**0**	**0**	**0**	**1**	**5**	**62**	**192**	**693**
Hurghada	2	6	0	1—10	29	14	3	1	0	0	0	1	0	1	82	31	162
				11—27	133	4	0	0	0	0	0	0	0	0	175	229	541
				28—47	1	0	0	0	0	0	0	0	0	0	0	14	15
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**163**	**18**	**3**	**1**	**0**	**0**	**0**	**1**	**0**	**1**	**257**	**274**	**718**
Quseir	0	0	0	1—10	16	25	11	6	0	0	2	3	0	13	127	124	327
				11—27	194	64	2	0	0	0	0	0	0	0	9	117	386
				28—47	7	0	0	0	0	0	0	0	0	0	0	0	7
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**217**	**89**	**13**	**6**	**0**	**0**	**2**	**3**	**0**	**13**	**136**	**241**	**720**

UPPER AIR CLIMATOLOGICAL DATA

Table B 1.—MONTHLY MEANS AND MONTHLY ABSOLUTE HIGHER & LOWER VALUES OF ALTITUDE, AIR TEMPERATURE & DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

NOVEMBER — 1972

Station	Pressure Surface Millibar	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Mersa Matruh 0000 U.T.	Surface	29	*1018mb	*1022mb	*1011mb	29	17.0	19.4	11.2	29	11.0
	1000	29	182	214	122	29	17.1	22.0	10.4	29	12.0
	850	29	1546	1577	1488	29	8.0	14.8	2.0	28	— 0.9
	700	26	3134	3175	3065	26	2.1	7.6	— 3.0	26	—14.5
	600	26	4362	4414	4270	26	— 5.6	— 2.8	—11.5	26	—23.0
	500	24	5770	5855	5654	24	—15.4	—11.7	—19.7	24	—31.3
	400	23	7414	7500	7274	23	—28.0	—24.3	—32.1	22	—41.8
	300	22	9414	9534	9249	22	—43.1	— 39.7	—46.3	19	—54.5
	250	19	10637	10747	10473	19	—51.6	—46.9	—55.3	18	—63.1
	200	16	12056	12171	11941	16	—58.8	—50.3	—67.0	8	—70.0
	150	6	13830	13975	13778	6	—59.2	—53.8	—64.3	1	—72.3
	100	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—
Helwan 0000 U.T.	Surface	30	*1002mb	*1005mb	*995mb	30	15.5	17.6	9.2	30	11.9
	1000	30	153	184	98	26	15.4	17.8	9.1	26	11.7
	850	30	1520	1547	1459	30	9.2	16.2	0.0	30	2.0
	700	30	3116	3173	3029	30	3.0	8.1	— 8.2	30	—10.9
	600	30	4349	4436	4242	30	— 4.8	2.3	—11.3	29	—18.8
	500	29	5756	5835	5634	29	—14.7	—11.4	—18.0	29	—27.6
	400	28	7408	7478	7257	28	—27.7	—25.2	—31.6	28	—38.1
	300	27	9419	9486	9272	27	—42.4	—39.0	—46.4	24	—52.6
	250	24	10624	10675	10478	24	—50.7	—43.4	—54.0	24	—59.7
	200	23	12054	12114	11904	23	—57.1	—50.9	—62.5	18	—64.3
	150	15	13863	13984	13730	15	—60.8	—58.4	—64.1	3	—69.3
	100	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 0000 U.T	Surface	29	*993mb	*995mb	*990mb	29	17.1	22.7	10.8	29	6.1
	1000	29	132	151	116	—	—	—	—	—	—
	850	29	1520	1557	1489	29	14.3	20.3	7.9	29	1.4
	700	28	3139	3209	3081	28	7.0	11.1	3.0	28	—13.5
	600	28	4389	4471	4318	28	0.8	3.4	— 3.1	28	—20.2
	500	28	5820	5914	5743	28	—10.4	7.0	—13.9	28	—27.2
	400	27	7501	7594	7403	27	—22.1	—18.1	—25.6	27	—36.5
	300	28	9558	9651	9446	27	—36.6	—34.0	—41.7	27	—49.1
	250	27	10795	10896	10688	27	—45.7	—41.0	—56.0	27	—56.4
	200	26	12260	12361	12146	26	—54.5	—50.4	—58.8	24	—64.0
	150	18	14083	14235	13973	18	—61.1	—53.7	—67.6	7	—20.2
	100	2	16586	16599	16599	2	—69.7	—69.2	—70.2	—	—
	70	1	18763	—	—	1	—62.7	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—

N — The number of cases the element has been observed during the month.

* The atmospheric pressure corrected to the elevation of the radiosonde stations.

UPPER AIR CLIMATOLOGICAL DATA

Table B1 (*contd*).—MONTHLY MEANS AND MONTHLY ABSOLUTE HIGHER & LOWER VALUES OF ALTITUDE, AIR TEMPERATURE & DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

NOVEMBER —1972

Station	Pressure Surface (Millibars)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Mersa Matruh (A) 1200 U.T.	Surface	28	* 1018 m.b.	* 1022 m.b.	* 1013 m.b.	28	20.4	25.8	15.2	28	10.5
	1000	28	185	215	138	28	18.7	24.5	13.1	28	9.9
	850	28	1549	1569	1506	28	7.4	11.2	1.6	28	—3.6
	700	28	3134	3168	3086	28	2.0	6.3	—5.5	28	—12.9
	600	28	4360	4419	4282	28	—5.1	—1.4	—12.5	27	—22.7
	500	26	5768	5829	5652	26	—15.2	—12.7	—20.5	25	—31.2
	400	26	7414	7490	7260	26	—28.0	—24.5	—34.0	23	—42.1
	300	25	9417	9510	9210	25	—42.9	—39.6	—46.8	21	—55.1
	250	24	10625	10719	10430	24	—51.1	—48.2	—54.9	14	—62.4
	200	21	12069	12149	11954	21	—57.3	—54.2	—60.9	2	—68.2
	150	19	13879	13950	13776	19	—60.4	—57.3	—64.9	—	—71.5
	100	15	16381	16486	16253	15	—64.3	—69.3	—68.7	—	—
	70	6	18611	18714	18441	6	—61.3	—59.5	—64.3	—	—
	60	5	19626	19700	19580	5	—60.2	—58.6	—62.8	—	—
	50	5	20774	20828	20652	5	—59.4	—56.3	—65.6	—	—
	40	1	22160	—	—	1	—55.2	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—
Helwan 1200 U.T.	Surface	28	* 1000 m.b.	* 1005m.b.	* 993m.b.	28	21.9	26.6	15.5	28	11.5
	1000	28	144	182	79	22	21.9	26.6	15.1	22	11.2
	850	28	1523	1555	1461	28	9.9	14.4	1.6	28	1.8
	700	28	3102	3165	3042	28	3.3	7.8	—10.1	28	—12.0
	600	28	4355	4410	4236	28	—4.1	—0.7	—10.9	28	—18.0
	500	28	5763	5832	5616	28	—14.3	—10.9	—19.1	28	—26.3
	400	26	7424	7499	7237	25	—26.5	—23.6	—30.1	25	—38.2
	300	25	9439	9523	9212	24	—41.7	—38.0	—46.4	24	—51.9
	250	24	10655	10735	10412	23	—49.5	—45.8	—53.1	23	—61.1
	200	23	12096	12174	11858	23	—55.6	—59.1	—60.6	20	—64.2
	150	22	13911	13994	13697	22	—59.1	—55.0	—65.7	13	—66.7
	100	21	16428	16535	16251	21	—63.4	—50.1	—68.6	—	—
	70	16	18631	18769	18534	16	—62.9	—57.0	—66.0	—	—
	60	14	19693	19780	19490	14	—61.5	—55.3	—66.4	—	—
	50	13	20726	20916	20587	13	—60.1	—53.4	—69.7	—	—
	40	4	22130	22280	21830	4	—59.7	—57.1	—65.2	—	—
	30	3	23963	24020	23871	3	—56.7	—54.7	—60.8	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan (A) 1200 U.T.	Surface	30	* 993m.b.	* 997m.b.	* 989m.b.	30	27.1	31.9	19.0	30	9.0
	1000	30	129	167	94	—	—	—	—	—	—
	850	30	1533	1550	1509	30	14.8	18.8	10.4	30	—0.7
	700	30	3156	3206	3109	29	7.4	10.6	2.8	30	—12.4
	600	30	4400	4478	4353	29	—0.1	3.9	—3.5	29	—19.1
	500	30	5844	5937	5774	30	—9.9	—5.9	—12.8	29	—26.4
	400	30	7532	7658	7451	30	—21.4	—16.9	—24.9	30	—35.8
	300	30	9273	9748	9201	29	—35.5	—34.1	—39.0	30	—47.1
	250	29	10838	11002	10723	29	—45.2	—40.4	—49.9	29	—56.5
	200	29	12297	12472	12187	26	—53.8	—48.5	—57.3	28	—63.9
	150	26	14119	14287	14016	22	—63.6	—56.0	—67.1	9	—67.6
	100	22	16598	16771	16500	8	—68.7	—64.0	—75.0	—	—
	70	8	18792	18810	18630	2	—68.9	—68.1	—71.5	—	—
	60	2	19740	19780	19700	2	—65.2	—62.1	—68.4	—	—
	50	2	20821	20884	20758	—	—58.3	—54.3	—62.3	—	—
	40	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—

N = The number of cases the element has been observed during the month.

* The atmospheric pressure corrected to the elevation of the radiosonde station.

Table B 2.—MEAN AND EXTREME VALUES OF THE FREEZING LEVEL AND THE TROPOPAUSE. THE HIGHEST WIND SPEED IN THE UPPER AIR

NOVEMBER — 1972

	Station	Freezing Level									Frist Tropopause									Highest wind speed			
		Mean			Highest			Lowest			Mean			Highest			Lowest						
		Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Direction (000—360)	Speed in Knots
0000 U.T.		(N)	(N)	(N)							(N)	(N)	(N)										
	M. Matruh (A)	3372 (27)	680 (27)	—16.2 (27)	4020	629	—28.0	1720	830	— 2.7	—	—	—	—	—	—	—	—	—	2475	790	265	34
	Helwan . . .	3513 (30)	668 (30)	—12.3 (29)	4130	622	—20.8	1514	850	— 3.3	11215 (2)	232 (2)	—54.6 (2)	11380	225	—56.1	11050	238	—53.2	13560	158	280	150
	Aswan . . (A)	4263 (28)	611 (28)	—19.3 (28)	4720	584	—24.2	2380	640	— 9.1	15420 (1)	122 (1)	—70.5 (1)	—	—	—	—	—	—	10975	240	240	104
1200 U.T.											(N)	(N)	(N)										
	M. Matruh (A)	3394 (28)	678 (28)	—17.4 (28)	4220	613	—11.0	1720	832	— 7.5	12646 (13)	187 (13)	—60.0 (13)	16405	100	—68.7	10620	242	—54.8	13540	159	250	90
	Helwan . . .	3550 (28)	667 (28)	—12.5 (28)	4310	608	—22.1	1740	828	— 0.6	12510 (22)	192 (22)	—58.4 (22)	16300	101	—67.7	10840	234	—52.6	12100	199	285	151
	Aswan . . (A)	4369 (30)	603 (30)	—18.8 (29)	5080	557	—16.7	3660	654	—14.6	15298 (12)	132 (12)	—66.5 (12)	18360	76	—73.0	11590	222	—52.4	11300	233	280	120

N = The number of cases the element has been observed during the month.

Table B 3.—NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES MERSA MATRUH (A) — NOVEMBER 1972

Time	Pressure Surface (Millibar.)	Wind between ranges of direction (000—360)																								Number of Calm winds	Total Number of Observations (T.N)	Mean Scalar wind Speed (Knots)
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 T.U.	Surface	4	15	2	11	1	13	1	2	1	10	0	—	0	—	0	—	4	11	9	9	1	11	3	14	3	29	10
	1000	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	700	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	600	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	500	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	250	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 T.U.	Surface	5	10	3	8	1	8	1	6	1	14	0	—	0	—	0	—	2	14	3	11	9	11	3	16	0	28	11
	1000	3	10	0	—	1	9	0	—	0	—	0	—	0	—	0	—	0	—	3	14	8	15	7	15	0	22	14
	850	5	12	2	8	1	7	0	—	0	—	0	—	0	—	1	14	3	12	2	15	5	13	1	14	0	20	12
	700	2	18	1	14	2	20	0	—	0	—	0	—	0	—	0	—	2	18	2	25	5	17	4	12	0	18	17
	600	2	10	0	—	0	—	2	24	0	—	0	—	0	—	0	—	2	16	2	25	4	18	3	20	0	15	19
	500	1	22	1	28	1	12	1	30	0	—	0	—	0	—	1	22	1	28	4	19	3	20	1	26	0	14	22
	400	1	22	0	—	1	37	0	—	1	31	0	—	0	—	1	13	1	29	3	41	2	14	1	18	0	11	27
	300	1	17	0	—	2	18	0	—	1	34	0	—	0	—	0	—	1	15	1	40	0	—	1	23	0	7	24
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	12	1	43	1	6	1	21	0	4	20
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	37	1	77	0	—	1	32	0	3	49
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	30	—	1	30
	100	—	—	—	—	—	—	—	—	—	—	—	—	0	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the wind has been observed from the range of direction during the month.

Table B 3 (*contd.*)—NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES.

HELWAN — NOVEMBER 1972

Time	Pressure Surface (Millibar)	Wind between specified ranges of direction (000—360)°																								Number of Calm winds	Total Number of Observations (TN)	Mean Scalar wind Speed (Knots)
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	6	5	10	10	2	4	0	—	1	5	0	—	0	—	0	—	0	—	1	3	0	—	7	4	3	30	6
	1000	8	11	12	12	1	10	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	4	0	26	10
	850	11	14	5	14	3	12	2	10	0	—	1	1	0	—	1	4	0	—	2	17	1	20	4	17	0	30	13
	700	4	14	4	9	0	—	1	4	0	—	1	25	3	12	0	—	3	33	6	16	5	22	3	20	0	30	17
	600	1	20	3	15	0	—	0	—	0	—	2	26	1	42	1	13	1	6	5	20	9	24	5	26	0	28	22
	500	1	39	2	26	0	—	0	—	0	—	1	46	1	37	1	23	1	8	6	27	9	28	4	10	0	26	26
	400	1	49	1	24	2	11	0	—	0	—	1	53	1	29	1	7	1	52	6	35	8	33	2	12	0	24	30
	300	0	—	1	26	1	9	1	40	0	—	0	—	1	34	1	33	0	—	2	54	12	37	1	19	0	20	35
	250	1	30	1	44	0	—	0	—	0	—	0	—	0	—	2	56	1	22	1	88	9	47	1	4	0	16	44
	200	0	—	1	14	0	—	0	—	1	12	0	—	0	—	0	—	2	52	4	54	4	55	1	30	0	13	46
	150	0	—	—	—	0	—	0	—	—	—	0	—	0	—	1	43	0	—	1	105	0	—	0	—	0	2	74
	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	6	8	10	10	0	—	0	—	0	—	1	9	0	—	1	5	0	—	3	8	1	4	6	7	0	28	8
	1000	6	8	10	11	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	8	3	7	0	22	9
	850	3	12	7	15	1	8	4	7	1	13	1	4	0	—	0	—	0	—	2	14	4	7	5	18	0	28	12
	700	3	13	1	8	1	8	0	—	1	8	1	5	2	29	0	—	2	5	5	25	7	14	5	11	0	28	15
	600	4	21	1	16	0	—	0	—	0	—	1	25	3	17	1	6	2	22	5	16	10	24	1	18	0	28	20
	500	2	14	0	—	1	10	0	—	0	—	1	20	1	44	0	—	2	34	6	41	9	23	4	29	0	26	28
	400	2	18	0	—	1	14	0	—	0	—	0	—	1	37	1	36	1	77	8	40	9	28	1	23	0	24	33
	300	1	14	1	12	0	—	0	—	0	—	0	—	0	—	2	40	1	65	5	45	7	42	2	23	0	19	39
	250	0	—	1	18	0	—	0	—	0	—	0	—	0	—	2	72	1	76	4	42	7	44	2	24	0	17	45
	200	1	13	0	—		—	0	—	0	—	0	—	0	—	0	—	3	69	6	66	6	67	0	—	0	16	64
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	68	6	47	5	75	1	30	0	14	59
	100	1	16	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	58	3	48	2	71	0	—	0	8	52
	70	0	—	0	—	0	—	0	—	0	—	1	50	0	—	0	—	1	32	3	45	0	—	0	—	0	5	44
	60	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	22	2	40	0	—	0	—	0	3	34
	50	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	37	1	74	1	44	0	—	0	3	52
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N — The number of cases the wind has been observed during the month.

TN — The total number of cases the wind has been observed for all directions during the month.

Table B 3 (*contd.*)—NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES

ASWAN (A) — NOVEMBER 1972

Time	Pressure Surface Millibar	Wind between specified ranges of direction (000—360)°																								Number of calm winds	Total number of observations (TN)	Mean scalar wind Speed (knots)
		345 / 014		015 / 044		045 / 074		075 / 104		105 / 134		135 / 164		165 / 194		195 / 224		225 / 254		255 / 284		285 / 314		315 / 344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	21	11	2	11	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	11	0	29	11
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	5	13	4	11	6	14	2	8	1	15	0	—	0	—	0	—	3	8	0	—	3	11	4	8	0	28	11
	700	2	14	2	12	1	18	0	—	0	—	1	8	0	—	4	12	3	11	3	17	7	11	2	24	0	25	14
	600	1	6	2	12	0	—	0	—	0	—	0	—	0	—	1	12	2	27	10	16	1	6	1	8	0	18	15
	500	1	9	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	43	8	23	3	19	1	47	0	18	28
	400	0	—	0	—	0	—	1	20	0	—	0	—	0	—	0	—	4	53	10	40	3	46	0	—	0	18	43
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	65	11	54	2	72	0	—	0	18	59
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	73	9	70	2	72	0	—	0	17	71
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	73	11	71	0	—	0	—	0	14	71
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	53	0	—	0	—	0	1	53
	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	15	9	3	10	0	—	0	—	0	—	0	—	1	1	0	—	0	—	0	—	0	—	11	10	0	30	9
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	6	10	5	9	2	8	2	9	0	—	2	8	1	19	1	4	0	—	2	11	7	12	2	14	0	30	10
	700	3	8	3	8	3	11	0	—	0	—	1	3	1	17	3	17	5	17	5	15	4	9	2	15	0	30	12
	600	1	8	3	9	0	—	0	—	1	8	0	—	1	26	2	20	4	22	10	23	6	15	1	16	0	29	18
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	30	5	27	11	31	6	29	4	22	0	29	28
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	47	17	46	3	51	1	28	0	27	46
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	65	5	75	16	59	5	62	0	—	0	27	63
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	7	67	15	71	4	78	0	—	0	26	71
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	71	16	74	0	—	0	—	0	22	73
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	69	11	65	0	—	0	—	0	17	67
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	48	4	62	0	—	0	—	0	7	56
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the wind has been observed from the range of directions during the month.

TN = The total number of cases the wind has been observed for all directions during the month.

REVIEW OF AGRO-METEOROLOGICAL STATIONS

MERSA MATRUH — NOVEMBER 1972

This month was rather normal as regards the mean daily air temperature and relative humidity. The total monthly rainfall was 11.9 mm. against 24.2 mm. for normal.

The daily maximum air temperatures were below normal the whole month apart from a short warm spell on the 25th and 26th yielding the highest maximum air temperature for the month (24.5°C) on the 25th. The lowest maximum air temperature was 16.8°C reported on the 28th. The daily minimum air temperatures were above normal most days ofthe month.

The extreme maximum soil temperatures were lower than last November at depths between 2 and 20 cm. with departures between 3.1°C (at2cm) and 0.2°C (at 20 cm) ; and were highet than last November at 50 and 100 cm depths by 0.8°C and 0.2°C respectively. The extreme minimnm soil temperatures were lower than lastNovember at 2 and 5 cm. depths by 0.5°C and 0.3°C respectively ; and were higher than last November at other depths between 10 and 100 cm with departures between 2.1°C (at 50 cm.) and 0.4°C (at 100 cm).

The mean daily wind speed and actual sunshine duration were the same as the corresponding values of November 1971.

TAHRIR — NOVEMBER 1972

For the month as a whole the mean dailyair temperature was below normal and the mean daily relative humidity was rather normal. The total monthly rainfall (31.4 mm.) was appreciably above normal (4.9 mm.).

The month was characterized by four cold waves which prevailed the whole month apart from three light warm spells on the 10th, (17th — 19th) and 26th. The third cold wave was associated with heavy thundery rain and yielded the maximum daily rainfall for the month (13.7 mm) on the 23rd. The fourth cold wave yielded both the lowest maximum air temperature (19.4°C) and the lowest minimum air temperature (7.6°C) on the 29th.

The extreme maximum soil temperatures were the same as the corresponding values of last November at depths between 5 and 20 cm. andhigher than last November at 2, 50, 100 cm. depths with small departures between 0.4° and 0.7°C. The extreme minimum soil temperatures were higher than last November at 2, 5 cm. depths by0.6°C & 0.5°C ; and lower than last November at depths between 10 & 100 cm. with departuresbetween 3.1°C (at 20 cm.) and 0.5°C (at 100 cm).

The mean daily wind speed was the sameas average. The mean daily actual sunshine duration and pan evaporation were lower than average by 0.7 hour and 1.14 mm. respectively.

BAHTIM — NOVEMBER 1972

For the month as a whole the mean daily air temperature was slightly below average and the mean daily relative humidity was slightly aboveaverage. The total monthly rainfall (30.9 mm.) was appreciably above average (3.4 mm.).

The month was characterized by four variant cold waves prevailing the whole month apart from three light warm spells in the periods (9th & 10th), (21st & 22nd) and 26th. The third cold wave was associated with heavy thundery rain yielding the maximum daily rainfall for the month (23.5 mm) on the 23rd. The fourth cold wave yielded the lowest maximum air temperature for the month (17.3°C) on the 29th.

The extreme maximum soil temperature was lower than last November at 2 cm. depth by 0.7°C, higher at 5,50, 100 cm. depths with departures between 0.2° and 0.8°C and the same as last November at 10 & 20 cm depths. The extreme minimum soil temperature was lower than last November at all depths except at 100 cm. where it was higher by 0.2°C ; the departures varied between 2.4°C (at 10 cm) and 0.8°C (at 50 cm.)

The mean daily wind speed, actual sunshine duration and pan evaporation were lower than average by 0.2 m./Sec., 0.5 hour and 0.37 mm. respectively.

KHARGA — NOVEMBER 1972

For the month as a whole the mean daily air temperature was below normal and the mean daily relative humidity was above normal.

The month was characterized by three moderate cold waves prevailing the whole month apart from two light warm spells on the 10th and the period (20th—22nd). The last cold wave yielded both the lowest maximum air temperature for the month (20.0°C) and the lowest minimum air temperature (7.1°C) on the 30th, and the highest mean daily wind speed (6.3 m./sec.) on the 29th.

The extreme maximum soil tempereture was lower than last November at 2 cm. depth by 1.1°C, the same at 5 cm. and higher than last November at other depths between 10 and 100 cm. with departures between 0.4° and 1.0°C. The extreme minimum soil temperatures were higher than last November at all depths with departures between 1.7°C (at 2 cm) and 0.5°C (at 50 cm.).

The mean daily actual sunshine duration and pan evaporation were lower than average by 0.1 hour and 0.24 mm. respectively. The mean daily wind speed was higher than average by 0.4 m./sec.

Table C 1.—AIR TEMPERATURE AT 1½ METRES ABOVE GROUND NOVEMBER — 1972

STATION	Air Temperature (°C)					Mean Duration in hours of daily air temperature above the following values										
	Mean Max.	Mean Min.	Mean of the day	Night time mean	Day time mean	-5°C	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C
M. Matruh. . . .	21.9	14.7	18.3	17.0	19.6	24.0	24.0	24.0	24.0	20.8	6.8	0.0	0.0	0.0	0.0	0.0
Tahrir	24.5	11.6	17.3	14.3	20.1	24 0	24.0	24.0	23.2	16.3	6.9	0.3	0.0	0.0	0.0	0.0
Bahtim	23.3	10.6	16.4	13.5	19.4	24.0	24.0	24.0	22.4	14.2	5.5	0.3	0.0	0.0	0.0	0.0
Kharga	26 0	12.7	19·7	17.3	22.2	24.0	24.0	24.0	23.8	20.8	10.9	2.5	0.0	0.0	0.0	0.0

Table C 2.—EXTREME VALUES OF AIR TEMPERATURE AT 1½ METRES ABOVE GROUND, ABSOLUTE MINIMUM AIR TEMPERATURE AT 5cms ABOVE GROUND OVER DIFFERENT FIELDS NOVEMBER — 1972

STATION	Max. Temp. at 1½ metres				Min. Temp. at 1½ metres				Min. Temp. at 5 cms. above			
	Highest		Lowest		Highest		Lowest		Dry Soil		Grass	
	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date
M. Matruh.	24.5	25	16.8	28	19.0	8	8.6	30	6.0	21	—	—
Tahrir	27.3	10	19.4	29	16.2	24	7.6	29	6.0	29	—	—
Bahtim	27.0	1	17.3	29	15.7	24	7.0	15	3.4	29	—	—
Kharga	29.4	10	20.0	30	17.2	11	7.1	30	5.2	30	—	—

Table C 3.—(SOLAR + SKY) RADIATION, DURATION OF BRIGHT SUNSHINE, RELATIVE HUMIDIT & VAPOUR PRESSURE AT 1½ METRES ABOVE GROUND, EVAPORATION & RAINFALL NOVEMBER — 1972

STATION	Solar+Sky Radiation gm. cal/cm²	Duration of Bright Sunshine (hours)			Relative Humidity %				Vapour Pressure (mms)						Evaporation(mms)		Rainfall (mms)		
		Total Actual	Total Possible monthly	%	Mean of day	1200 U.T.	Lowest	Date	Mean of day	1200 UT	Highest	Date	Lowest	Date	Piche	Pan class (A)	Total Amount monthly	Max. fall in one day	Date
M. Matruh. . . .	—	216.9	317.1	68	66	59	29	28	10.3	11.1	14.4	9	4.2	28	6.6	—	11.9	7.7	1
Tahrir	310.1	226.1	318.8	71	77	57	34	1	11.3	11.7	16.2	23	6.3	29	3.2	3.43	31.4	13.7	23
Bahtim	303.0	227.3	319.7	71	77	56	33	1	10.7	11.0	16.2	23	6.8	1	3.8	3.89	30,9	23,5	23
Kharga.	437.6	304.4	328.0	93	49	35	21	22	8.3	8.3	11.4	11	5.3	29	7.8	9.45	0.0	0.0	—

Table C 4.—EXTREME SOIL TEMPERATURE AT DIFFERENT DEPTHS (cms) IN DIFFERENT FIELDS

NOVEMBER — 1972

Station	Highest (H) Lowest (L)	Extreme soil temperature (°C) in dry field at different depths (cms.)								Extreme soil temperature (°C) in grass field at different depths (cms.)							
		2	5	10	20	50	100	200	300	2	5	10	20	50	100	200	300
Mersa Matruh.	H	26.1	25.5	23.3	22.2	23.5	24.0	25.0	—	—	—	—	—	—	—	—	—
	L	9.1	9.7	12.2	15.4	19.5	21.0	23.0	—	—	—	—	—	—	—	—	—
Tahrir	H	34.1	31.8	27.1	24.7	24.4	25.9	27.1	27.3	—	—	—	—	—	—	—	—
	L	11.2	11.7	12.2	13.6	16.7	20.8	23.9	25.4	—	—	—	—	—	—	—	—
Bahtim	H	34.6	30.0	26.9	25.4	26.9	27.8	27.9	26.9	—	—	—	—	—	—	—	—
	L	10.1	10.4	13.0	17.9	21.9	24.5	26.6	26.6	—	—	—	—	—	—	—	—
Kharga . . .	H	39.8	32.5	28.7	27.2	29.0	30.1	30.8	30.4	—	—	—	—	—	—	—	—
	L	7.9	11.4	15.4	20.2	24.2	27.2	29.4	29.8	—	—	—	—	—	—	—	—

Table C 5.—SURFACE WIND

NOVEMBER — 1972

Station	Wind Speed m/sec at $1^1/_2$ metres			Days with surface wind speed at 10 metres							Max. Gust (knots at 10 meters)	
	Mean of the day	Night time mean	Day time mean	≥10 knots	≥15 knots	≥20 knots	≥25 knots	30 knots	≥35 knots	≥40 knots	value (knots)	Date
Mersa Matruh.	3.8	3.2	4.3	30	26	16	3	2	0	0	36	2
Tahrir	1.8	1.2	2.3	29	12	4	0	0	0	0	31	29
Bahtim	1.8	1.1	2.6	21	6	2	1	0	0	0	29	23
Kharga	3.7	2.6	4.8	30	23	7	0	0	0	0	34	28

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MONTHLY WEATHER REPORT

VOLUME 15 NUMBER 12

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U.D.C. 551, 506.1 (62)

THE EGYPTIAN METEOROLOGICAL AUTHORITY
CAIRO

PUBLICATIONS OF THE METEOROLOGICAL AUTHORITY OF THE ARAB REPUBLIC OF EGYPT — CAIRO

In fulfilment of its duties, the Meteorological Authority of Egypt issues serveral reports and publications on weather, climate and agrometeorology. The principal publications are described on this page.

Orders for publications should be addressed to :

"Chairman of the Board of Directors, Meteorological Authority, Kubri-el-Qubbeh — CAIRO".

THE MONTHLY WEATHER REPORT

First issued in 1909, the Monthly Weather Report served to give a brief summary of the weather conditions that prevailed over Egypt during the month, with a table showing the mean values for few meteorological elements and their deviations from the normal values. From 1954 to 1957 this report was in a rapid state of development and extension resulting into a voluminous report on January 1958 giving surfsce, upper air, and agro-meteorological data for Egypt.

As from January 1964, the Monthly Weather Report was pressed to give climatological data for a representative selection of synoptic stations.

THE AGRO-METEOROLOGICAL ABRIDGED MONTHLY REPORT

Gives a review of weather experienced in the agro-meteorological stations of Egypt as well as monthly values of certain elements.

THE ANNUAL REPORT

This report gives annual values and statistics for the various meteorological elements, together with a summary of the weather conditions that prevailed during all months of the year.

CLIMATOLOGICAL NORMALS FOR EGYPT

A voluminous edition was issued in March 1968 which brings normals and mean values up till 1960.

METEOROLOGICAL RESEARCH BULLETIN

First issued in January 1969 on a bi-annual basis. It includes research works carried out by members of staff of "The Meteorological Institute for Research and Training" and the Operational Divisions of the Meteorological Authority.

TECHNICAL NOTES

As from October 1970, the Meteorological Authority started to issue a new series of publications in the form of Technical Notes (non periodical) on subjects related to studies and applications of meteorology in different fields for the benefit of personnel working in these fields.

THE ARAB REPUBLIC OF EGYPT

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THE EGYPTIAN METEOROLOGICAL AUTHORITY

CONTENTS

PAGE

General Summary of Weather Conditions 1–2

SURFACE DATA

Table A1.—Monthly values of the Atmospheric Pressure, Air Temperature, Relative Humidity, Bright Sunshine Duration and Piche Evaporation 3

„ A2.—Maximum and Minimum Air Temperatures 4

„ A3.—Sky Cover and Rainfall 5

„ A4.—Number of Days of Occurrence of Miscellaneous Weather Phenomena 6

„ A5.—Number in Hours of Occurrences of Concurrent Surface Wind Speed and Direction Recorded Within Specified Ranges 7,8

UPPER AIR DATA

Table B1.—Monthly Means and Monthly Absolute Higher & Lower Values of Altitude, air Temperature & Dew point at Standard and Selected Pressure Surfaces 9,10

„ B2.—Mean and Extreme values of The Freezing Level and The Tropopause; The Highest Wind Speed in The Upper Air 11

„ B3.—Number of Occurreneces of Wind Direction Within Specified Ranges and The Mean Scalar Wind Speed at the Standard and Selected Pressure Surfaces 12–14

AGRO-METEOROLOGICAL DATA

Reviews of Agro-meteorological stations 15,16

Table C1.—Air Temperature at 1½ Metres Above Ground 17

„ C2.—Extreme Values, of Air Temperature at 1½ Metres Above Ground, Absolute Minimum Air Temperature at 5 Cms Above Ground Over Different Fields 17

„ C3.—(Solar + Sky) Radiation, Duration of Bright Sunshine, Relative Humidity and Vapour Pressure at 1½ Metres Above Ground, Evaporation and Rainfall 17

„ C4.—Extreme Soil Temperature at Different Depths in Different Fields 18

„ C5.—Surface wind 18

Note : For explanatory notes on the tables please refer to Valume 15, Number 1 (January 1972).

GENERAL SUMMARY OF WEATHER CONDITIONS

DECEMBER 1972

Markedly cold and humid with abnormal rainfall in the north.

GENERAL DESCRIPTION OF WEATHER

The prevailing weather in this month was generally cold and humid. Coldness was severe in particular during the fourth week in the middle parts, where the lowest minimum air temperature attained records at Imbaba (—1.5°C) on the 26th, Cairo (3.0°C) on the 27th, Minya (—0.8°C) on the 26th, and Assyout (0.9°C) on the 25th.

Weather was rather rainy in the Mediterranean district during the first three weeks, where the monthly rainfall exceeded its normal values. Otherwise rain was deficient and subnormal.

Early morning mist and fog developed in several occasions over scattered places in Delta, Cairo and north of Upper Egypt.

PRESSURE DISTRIBUTION

During this month the most pronounced feature over the synoptic surface charts was the establishment of high pressure over Europe most days of the month.

The Mediterranean area was interrupted by four pressure disturbances. The first disturbance was due to a low pressure trough which appeared over Central Mediterranean on the 2nd and passed through East Mediterranean on the 4th.

The second Mediterranean disturbance occurred due to a depression which originated over North Algiers on the 5th; it moved eastwards to the Gulf of Serte on the 6th, then northeastwards reaching East Mediterranean on the 8th where it filled up on the 10th.

A third depression appeared over East Mediterranean on the 18th and was quasi-stationary till it filled up there on the 20th.

The last Mediterranean disturbance was due to a trough which appeared over East Mediterranean on the 28th and moved rapidly northeastwards the next day.

It is worthy to mention that these Mediterranean depressions or troughs were of considerable vertical extension, and three secondary upper lows passed through East Mediterranean on the 4th, 10th & 20th, and an upper trough on the 28th.

The barometric pressure over Egypt was interrupted by the transits of the Mediterranean depressions or troughs. It accordingly experienced four falls reaching minima round the 4th, 8th, 18th & 28th. Otherwise, the barometric pressure was markedly above normal.

SURFACE WIND

Surface winds in this month were generally light to moderate and blew mostly from N to NE directions and in few days from W and NW directions. Winds freshened during several days in few scattered localities, mainly in the Red Sea district. On the other hand, calms were frequent during late evening and early morning intervals.

TEMPERATURE

Maximum air temperature persisted below normal during the whole month in general. The departures below normal were marked in particular most of the second half of the month. Maximum air temperatures varied in general between 18° & 23°C in the northern and middle parts, between 21° & 26°C in the southern parts.

The absolute maximum air temperature for Egypt in this month was 29.0°C reported at both Kom Ombo and Aswan on the 8th.

Minimum air temperature oscillated round normal in the Mediterranean district and was generally below normal elsewhere. The departures below normal were pronounced in the middle parts during the fourth week. It is worthy to mention that the lowest minimum air temperature attained record values at Imbaba (—1.5°C) on the 26th, Cairo (3.0°C) on the 27th, Minya (—0.8°) on the 26th and Assyout (0.9°C) on the the 27th.

Minimum air temperature varied most of the month between 8° & 15°C in the coastal districts and between 3° & 11°C elsewhere.

The obsolute minimum air temperature for Egypt in this month was — 1.5°C reported at Imbaba on the 26th.

Cairo, November 1973

PRECIPITATION

The monthly rainfall was generally above normal in the Mediterranean district, deficient and subnormal otherwise.

Rain fell over the Mediterranean district mostly during the first three weeks and extended southwards to Lower Egypt & Cairo round the 10th, 12th & 21st. Rain was generally light, but it was heavy and associated with thunderstorms in scattered places in the north on the 9th and between the 18th and 21st.

The highest monthly rainfall for Egypt in this month was 63.9 mm. reported at Rosetta.

The highest daily rainfall was 27.1 mm. reported at Rosetta on both the 25th & 28th.

Chairman (M. F. TAHA)

Board of Directors

Table A 1.- MONTHLY VALUES OF THE ATMOSPHERIC PRESSURE, AIR TEMPERATURE, RELATIVE HUMIDITY, BRIGHT SUNSHINE DURATION & PICHE EVAPORATION

DECEMBER — 1972

STATION	Atmospheric Pressure (mbs) M.S.L.		Air Temperature °C									Relative Humidity %		Bright Sunshine Duration (Hours)			Piche Evaporation mms. Mean
			Maximum		Minimum			Dry Bulb		Wet Bulb							
	Mean	D.F. Normal or Average	(A) Mean	D.F. Normal or Average	(B) Mean	D.F. Normal or Average	$\frac{A+B}{2}$	Mean	D.F. Normal or Average	Mean	D.F. Normal or Average	Mean	D.F. Normal or Average	Total Actual	Total Possible	%	
Sallum	1022.3	+5.3	19.9	—0.6	12.4	+1.4	16.2	15.8	0.0	12.3	+0.6	64	+5	—	—	—	4.0
Mersa Matruh (A)	1022.6	+4.9	18.9	—0.9	11.4	+0.8	15.2	15.1	+0.6	11.8	+0.4	65	—3	173.1	313.8	55	4.4
Alexandria (A)	1022.2	+2.7	19.6	—0.9	10.6	—0.5	15.1	14.7	—0.6	11.9	—0.8	70	—2	205.7	315.6	65	3.0
Port Said . . (A)	1020.5	+3.2	20.3	+0.5	12.9	—0.7	16.6	15.9	—0.4	13.0	—0.7	70	—3	215.5	315.6	65	4.5
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1021 8	+4.6	19.9	—1.4	6.9	—1.3	13.4	12.7	—2.0	10.0	—1.7	69	+2	243.3	316.8	76	2.2
Cairo . . . (A)	1021.5	+3.5	19.2	—1.5	9.5	—0.9	14.4	14.2	—1.2	10.5	—1.0	60	—2	—	—	—	6.4
Fayoum	—	—	21.1	—0.8	7.1	—1.3	14.1	13.4	—1.0	10.4	—0.4	66	+5	—	—	—	3.1
Minya . . . (A)	1020.2	+1.9	20.6	—1.4	5.3	—1.6	13.0	12.3	—1.4	9.1	—1.0	63	+1	272.5	322.9	84	5.9
Assyout . . (A)	1019.4	+1.4	20.9	—1.4	6.6	—2.2	13.8	13.1	—2.1	9.0	—1.2	54	+5	—	—	—	5 7
Luxor . . . (A)	1018.8	+1.9	23.8	—1.0	6.3	—1.3	15.0	14.4	—0.6	10.0	—1.1	53	00	—	—	—	3.6
Aswan . . . (A)	1018.6	+2.2	23.7	—2.2	9.0	—1.1	16.4	15.8	—2.0	9.5	—1.4	38	+2	—	—	—	14.4
Siwa	1021.8	+3.4	20.3	—1.0	5.8	—0.3	13.0	12.7	—0.9	9.1	—0.1	59	—4	233.3	319.9	73	5.2
Bahariya	1021.8	+3.5	20.0	—1.6	6.6	—0.1	13.3	13.0	—1.8	8.9	—1.1	52	+2	—	—	—	4.4
Farafra	1023.0	+3.0	20.3	—1.7	6.0	0.0	13.2	12.8	—0.7	8.3	—0.2	50	+4	—	—	—	5.8
Dakhla	1021.2	+3.9	21.4	—2.9	4.2	—1.9	12.8	12.4	—1.9	7.3	—1.5	43	—1	—	—	—	6.1
Kharga	1020.1	+2.1	22.1	—1.9	7.1	—0.9	14.6	14.7	—0.5	8.9	—0.7	45	—1	297.2	329.2	90	6.4
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada . . .	1019.2	+2.8	21.7	—0.8	11.2	—0.5	16.5	16.3	—0.9	11.9	—0.6	56	+1	296.3	325.4	91	10.8
Quseir	1018.6	+2.3	21.8	—2.3	14.9	—0.9	18.4	18.3	—1.6	13.2	—1.8	53	00	—	—	—	9.6

Table A 2. MAXIMUM AND MINIMUM AIR TEMPERATURES

DECEMBER — 1972

Station	Maximum Temperature °C									Grass Min. Temp.		Minimum Temperature °C							
	Highest	Date	Lowest	Date	No. of Days with Max-Temp.					Mean	Dev. From Normal	Highest	Date	Lowest	Date	No. of Days with Min. Temp.			
					>25	>30	>35	>40	>45							<10	<5	<0	<-5
Sallum	22.0	29	16.9	2	0	0	0	0	0	11.5	—	15.1	15	9.5	19	1	0	0	0
Mersa Matruh (A)	21.0	5	16.4	25	0	0	0	0	0	9.8	—	13.8	15,16	9.2	1	6	0	0	0
Alexandria . (A)	21.7	8	16.4	18	0	0	0	0	0	8.1	—	16.0	11	6.8	8	13	0	0	0
Port said . . (A)	24.3	5	16.0	23	0	0	0	0	0	12.4	—	16.5	14	9.3	26	1	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	22.4	5	16.2	25	0	0	0	0	0	—	—	10.1	4	1.6	26	30	4	0	0
Cairo . . . (A)	23.8	7	16.0	25	0	0	0	0	0	—	—	12.1	7	3.0	27	15	2	0	0
Fayoum	24.4	7	17.4	24	0	0	0	0	0	0.8	—	10.2	3	1.5	26	30	5	0	0
Minya . . . (A)	24.5	7	17.4	26	0	0	0	0	0	3.4	—	11.0	3	—0.8	26	30	12	1	0
Assyout . . (A)	25.8	6	16.7	25	1	0	0	0	0	3.1	—	10.2	3	0.9	25	28	7	0	0
Luxor . . . (A)	27.4	8	20.5	28	6	0	0	0	0	1.5	—	9.9	10	2.2	27	31	7	0	0
Aswan . . . (A)	29.0	8	20.8	21	7	0	0	0	0	—	—	12.7	9	6.6	21	23	0	0	0
Siwa	22.9	8	17.9	27	0	0	0	0	0	4.9	—	10.3	11	1.7	26	30	11	0	0
Bahariya	23.9	6	17.1	24	0	0	0	0	0	5.9	—	11.5	3	1.0	26	29	6	0	0
Farafra	26.4	7	15.3	25	2	0	0	0	0	5.4	—	11.4	11	1.2	26	28	11	0	0
Dakhla	25.7	6	18.5	27	1	0	0	0	0	4.1	—	7.7	17	—0.4	27	31	20	1	0
Kharga	25.8	7	19.6	27	1	0	0	0	0	4.8	—	11.8	12	2.0	27	25	7	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada . . .	24.5	7,8	19.2	24,25,27	0	0	0	0	0	—	—	13.8	8	7.8	26	8	0	0	0
Quseir	24.3	7	19.3	24	0	0	0	0	0	13.4	—	17.5	14	12.6	26,27	0	0	0	0

Table A 3.—SKY COVER AND RAINFALL

DECEMBER – 1972

Station	Mean Sky Cover Oct.					Rainfall mms.										
	00 U.T.	06 U.T.	12 U.T.	18 U.T.	Daily Mean	Total Amount	D. From Normal	Max. Fall in one day		Number of Days with Amount of Rain						
								Amount	Date	<0 1	≥0.1	≥1.0	≥5 0	≥10	≥25	≥50
Sallum	4.7	4.0	4.7	4.1	4.4	29.9	+ 9.5	10.9	22	0	8	5	2	1	0	0
Mersa Matruh (A)	3.8	5 8	5.5	4.4	4.7	61.1	+27.4	23.7	9	2	13	4	4	2	0	0
Alexandria (A)	5 3	5.6	4.5	3.7	4.9	57.8	+ 1.7	22 4	19	1	10	6	3	2	0	0
Port Said (A)	2.4	3.1	2.2	2.3	2.5	36.2	+17.3	17.8	21	2	10	5	2	1	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1.0	2.9	4.2	1.5	2.3	2.8	— 7.2	1.2	21	0	3	1	0	0	0	0
Cairo (A)	0 4	2.4	3.8	1.7	2.1	0.5	— 7 5	0.4	12	0	2	0	0	0	0	0
Fayoum	—	1.5	3 0	1.0	—	0.0	— 4.6	0·0	—	0	0	0	0	0	0	0
Minya (A)	0.6	1 8	3 1	0.9	1.5	Tr.	— 0.7	Tr.	27	1	0	0	0	0	0	0
Assyout (A)	0.3	0.9	1.7	0.3	0.7	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Luxor (A)	0.5	1.4	1 8	1.6	1.2	0.0	— 0.1	0.0	—	0	0	0	0	0	0	0
Aswan (A)	0.3	1.2	1.9	0.8	1.1	0.6	— 0.2	0.0	—	0	0	0	0	0	0	0
Siwa	1.1	2.4	4.6	2.6	2.6	Tr.	— 2.1	Tr.	2	1	0	0	0	0	0	0
Bahariya	0.6	1.0	2 9	1.3	1.3	Tr.	— 1.2	Tr.	27	1	0	0	0	0	0	0
Farafra	—	1.8	1.8	1.2	—	0.0	— 0.3	0.0	—	0	0	0	0	0	0	0
Dakhla	0.1	0.9	1.4	0.3	0.6	0.0	— 0.1	0.0	—	0	0	0	0	0	0	0
Kharga	0.3	1.3	1.6	0.5	0.9	0.0	— 0.3	0.0	—	0	0	0	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0.3	1.5	1.8	0.8	1.1	0.0	— 2.2	0.0	—	0	0	0	0	0	0	0
Quseir	0.2	2.5	2.7	1.3	1.6	0.0	— 0.1	0.0	—	0	0	0	0	0	0	0

Table A 4.—DAYS OF OCCURRENCE OF MISCELLANEOUS WEATHER PHENOMENA

DECEMBER — 1972

Station	Precipitation				Frost	Thunderstorm	Mist Vis ≥ 1000 metres	Fog Vis < 1000 Metres	Haze Vis ≥ 1000 Metres	Thick Haze Vis < 1000 Metres	Dust or Sandrising Vis ≥ 1000 Metres	Dust or Sandstorm Vis < 1000 Metres	Gale	Clear Sky	Cloudy Sky
	Rain	Snow	Ice. Pellets	Hail											
Sallum	8	0	0	0	0	0	0	0	0	0	0	0	0	3	1
Mersa Matruh (A)	13	0	0	0	0	1	0	0	0	0	2	0	0	2	8
Alexandria . (A)	10	0	0	0	0	2	1	0	0	0	0	0	0	1	6
Port Said . (A)	10	0	0	0	0	0	1	0	0	0	0	0	0	13	1
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	3	0	0	0	0	0	4	0	0	0	0	0	0	19	0
Cairo . . . . (A)	2	0	0	0	0	0	8	2	11	1	4	0	0	12	0
Fayoum	0	0	0	0	0	0	0	0	0	0	0	0	0	—	—
Minya . . . . (A)	0	0	0	0	0	0	22	1	5	0	1	0	0	22	6
Assyut . . . . (A)	0	0	0	0	0	0	0	0	0	0	0	0	0	28	0
Luxor . . . . (A)	0	0	0	0	0	0	0	0	17	0	1	0	0	23	0
Aswan . . . . (A)	0	0	0	0	0	0	0	0	0	0	3	0	0	24	0
Siwa	0	0	0	0	0	0	0	0	0	0	1	0	0	12	1
Bahariya	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0
Farafra	0	0	0	0	0	0	0	0	1	0	1	0	0	—	—
Dakhla	0	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Kharga	0	0	0	0	0	0	0	0	0	0	0	0	0	25	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0	0	0	0	0	0	0	0	0	0	1	0	0	27	0
Quseir	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0

Table A 5.—NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES

DECEMBER — 1972

Station	Calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurrences of wind blowing from the ranges of directions indicated												
					345 / 014	015 / 044	045 / 074	075 / 104	105 / 134	135 / 164	165 / 194	195 / 224	225 / 254	255 / 284	285 / 314	315 / 344	All directions
Sallum	12	1	0	1—10	31	31	55	52	53	35	25	15	21	82	126	127	653
				11—27	0	0	3	17	6	0	1	2	2	6	32	9	78
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**31**	**31**	**58**	**69**	**59**	**35**	**26**	**17**	**23**	**88**	**158**	**136**	**731**
Mersa Matruh (A)	1	0	0	1—10	63	27	55	29	33	28	40	50	56	55	32	24	493
				11—27	22	28	56	11	14	6	0	25	29	19	22	14	246
				28—47	0	0	0	0	4	0	0	0	0	0	0	0	4
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**85**	**55**	**112**	**40**	**51**	**34**	**40**	**75**	**85**	**74**	**54**	**38**	**743**
Alexandria (A)	2	0	0	1—10	104	113	82	55	44	14	44	44	39	18	17	58	632
				11—27	28	28	14	6	0	0	0	2	8	3	2	8	109
				28—47	0	0	1	0	0	0	0	0	0	0	0	0	1
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**132**	**151**	**97**	**61**	**44**	**14**	**44**	**46**	**47**	**21**	**19**	**66**	**742**
Tanta	50	0	0	1—10	66	83	117	39	14	4	7	28	65	68	84	59	634
				11—27	6	0	31	8	4	0	0	0	1	3	1	6	60
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**72**	**83**	**148**	**47**	**18**	**4**	**7**	**28**	**66**	**71**	**85**	**65**	**694**
Cairo (A)	183	0	17	1—10	27	78	83	32	33	9	25	32	17	29	19	20	404
				11—27	6	83	16	4	0	2	6	6	5	7	1	4	140
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**33**	**161**	**99**	**36**	**33**	**11**	**31**	**38**	**22**	**36**	**20**	**24**	**544**
Fayoum	14	6	0	1—10	176	230	21	8	3	10	17	59	45	38	42	20	660
				11—27	0	47	17	0	0	0	0	0	0	0	0	0	64
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**176**	**277**	**38**	**8**	**3**	**10**	**17**	**59**	**45**	**38**	**42**	**20**	**724**
Minya (A)	7	0	3	1—10	334	74	4	7	5	20	27	13	13	8	16	80	601
				11—27	79	44	1	0	0	0	0	0	0	0	1	8	133
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**413**	**118**	**5**	**7**	**5**	**20**	**27**	**13**	**13**	**8**	**17**	**88**	**734**
Assyout (A)	21	0	0	1—10	24	5	4	4	13	5	12	2	15	317	109	115	685
				11—27	17	0	0	0	0	0	0	0	0	1	2	18	38
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**41**	**5**	**4**	**4**	**13**	**5**	**12**	**2**	**15**	**318**	**111**	**133**	**723**

Table A 5 (*contd.*)—NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES

DECEMBER — 1972

Station	Calm (hours)	Variable (hours)	Unrecorded (hours)	Wind speed in knots	Number in hours of occurrences of wind blowing from the ranges of directions indicated												
					345 / 014	015 / 044	045 / 074	075 / 104	105 / 134	135 / 164	165 / 194	195 / 224	225 / 254	255 / 284	285 / 314	315 / 344	All directions
Luxor . . . . . .(A)	49	0	1	1—10	116	84	52	49	42	18	77	60	18	41	54	71	682
				11—27	1	1	0	0	0	0	0	0	0	0	1	9	12
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**117**	**85**	**52**	**49**	**42**	**18**	**77**	**60**	**18**	**41**	**55**	**80**	**694**
Aswan . . . . . .(A)	1	0	0	1—10	307	132	2	0	1	0	0	0	0	4	5	124	575
				11—27	70	31	0	0	0	0	0	0	0	0	2	65	168
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**377**	**163**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**4**	**7**	**189**	**743**
Siwa	94	3	21	1—10	23	31	45	80	79	29	9	17	32	101	36	76	558
				11—27	0	0	2	19	15	1	1	0	0	3	3	23	68
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**23**	**31**	**47**	**99**	**94**	**30**	**10**	**18**	**32**	**104**	**39**	**99**	**626**
Dakhle	15	23	0	1—10	73	67	32	16	10	5	12	24	47	117	146	145	694
				11—27	1	1	1	0	0	0	0	0	0	0	0	9	12
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**74**	**68**	**33**	**16**	**10**	**5**	**12**	**24**	**47**	**117**	**146**	**154**	**706**
Kharga	42	5	0	1—10	244	118	26	6	9	2	5	4	2	18	26	104	564
				11—27	78	37	0	0	0	0	0	0	0	0	0	18	133
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**322**	**155**	**26**	**6**	**9**	**2**	**5**	**4**	**2**	**18**	**26**	**122**	**697**
Hurghada	13	0	0	1—10	39	18	5	3	6	0	0	4	5	11	115	40	246
				11—27	87	0	0	0	0	0	0	0	0	2	249	144	482
				28—47	2	0	0	0	0	0	0	0	0	0	0	1	3
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**128**	**18**	**5**	**3**	**6**	**0**	**0**	**4**	**5**	**13**	**364**	**185**	**731**
Quseir	0	0	0	1—10	12	57	10	6	2	0	0	0	0	50	135	53	325
				11—27	159	71	1	0	0	0	0	0	0	0	25	163	419
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**171**	**128**	**11**	**6**	**2**	**0**	**0**	**0**	**0**	**50**	**160**	**216**	**744**

UPPER AIR CLIMATOLOGICAL DATA

Table B 1.—MONTHLY MEANS, ABSOLUTE HIGHER AND LOWER VALUES OF ALTITUDE, AIR TEMPERATURE AND DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

DECEMBER — 1972

Station	Pressure Surface (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Mersa Matruh 0000 U.T.	Surface	26	*1021m.b.	*1026m. b.	*1013m.b.	26	14.1	17.6	11.6	26	9.4
	1000	26	201	237	136	26	14.2	16.6	12.0	26	7.8
	850	25	1551	1594	1497	25	5.1	9.6	0.4	25	— 0.2
	700	24	3121	3184	3056	24	— 1.4	3.6	— 7.5	23	—18.0
	600	22	4333	4409	4238	22	— 8.8	— 6.0	—15.9	22	—25.9
	500	22	5720	5809	5589	22	—18.2	—14.8	—25.0	21	—33.7
	400	19	7364	7456	7179	19	—29.1	—26.1	—34.9	19	—44.9
	300	19	9362	9481	9145	19	—43.3	—38.4	—48.8	19	—57.5
	250	18	10558	10641	10404	18	—51.2	—47.1	—54.7	17	—63.9
	200	15	12017	12138	11950	15	—56.6	—48.4	—60.5	11	—69.1
	150	9	13818	13869	13753	9	—60.0	—55.2	—66.4	3	—70.9
	100	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—
Helwan 0000 U.T.	Surface	30	*1004m.b.	*1009m.b.	*1000m.b.	30	11.3	13.9	6.4	30	5.7
	1000	30	175	212	140	30	11.5	13.9	6.5	30	5.5
	850	30	1525	1549	1493	30	5.9	12.2	2.6	29	— 4.2
	700	30	3096	3155	3049	30	— 0.9	3.6	— 5.4	29	—15.0
	600	30	4310	4382	4243	30	— 8.6	— 3.9	—13.2	30	—21.5
	500	29	5702	5777	5610	29	—17.5	—13.0	—22.7	29	—30.1
	400	29	7340	7428	7218	29	—28.8	—24.2	—35.1	28	—40.0
	300	28	9335	9456	9202	28	—42.9	—38.1	—47.1	27	—52.5
	250	26	10547	10672	10405	26	—49.7	—39.8	—55.0	26	—59.0
	200	23	11982	12101	11845	23	—55.4	—44.6	—62.6	17	—63.7
	150	13	13814	13889	13702	13	—60.4	—54.7	—65.6	4	—64.4
	100	2	16256	16321	16192	2	—64.4	—62.7	—66.0	—	—
	70	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 0000 U.T.	Surface	31	*996m.b.	*999m.b.	*993m.b.	31	15.4	15.8	10.0	31	3.0
	1000	31	193	176	133	—	—	—	—	—	—
	850	31	1530	1543	1507	31	12.0	17.5	5.2	31	— 2.6
	700	31	3140	3164	3092	31	5.4	8.0	2.4	31	— 9.9
	600	31	4384	4418	4321	31	— 2.0	2.0	— 6.2	31	—16.2
	500	31	5801	5859	5728	30	—11.2	— 6.4	—14.7	30	—23.8
	400	31	7488	7550	7398	31	—26.1	—19.6	—27.6	31	—32.4
	300	31	9540	9639	9400	31	—37.9	—30.9	—44.4	30	—47.0
	250	29	10774	10852	10597	28	—45.8	—37.7	—53.4	27	—54.3
	200	26	12238	12336	12140	26	—54.6	—48.9	—58.5	26	—62.1
	150	15	14068	14156	13973	15	—62.0	—57.0	—68.1	1	—67.8
	100	2	16495	16510	16483	2	—69.8	—69.6	—70.0	—	—
	70	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—

* The atmospheric pressure corrected to the elevation of the radiosonde station.

N = The number of cases the element has been observed during the month.

UPPER AIR CLIMATOLOGICAL DATA

Table B 1 (*contd*).—MONTHLY MEANS AND MONTHLY ABSOLUTE HIGHER & LOWER VALUES OF ALTITUDE, AIR TEMPERATURE & DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

DECEMBER — 1972

Station	Pressure Surfare (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Mersa Matruh 1200 U.T.	Surface	30	*1021m.b.	*1027m.b.	*1013m.b.	30	17.3	19.8	14.5	30	7·8
	1000	30	233	246	139	30	15.4	18.2	11.5	30	7.2
	850	30	1548	1593	1499	30	4.1	9.1	— 0.2	30	— 2.1
	700	30	3110	3170	3065	30	— 1.9	2.8	— 7.8	30	—17.9
	600	30	4354	4391	4252	29	— 9.1	— 5.4	—14.0	29	—24.1
	500	29	5706	5795	5615	28	—18.3	—15.0	—23.3	27	—33.0
	400	28	7332	7474	7212	28	— 30.3	— 25.4	— 36.7	27	—44.3
	300	24	9319	9444	9192	24	—43.7	—40.0	—47.7	23	—56.5
	250	23	10527	10650	10394	23	—51.1	—43.4	— 55.1	22	—63.4
	200	21	12436	12070	11805	21	—56.9	—48.4	—61.5	12	—67.2
	150	18	13765	13867	13631	18	—61.2	—54.2	—62.5	10	—68.9
	100	16	16306	16410	16119	16	—62.8	—58.1	—66.3	1	—75.3
	70	14	18498	18592	18286	14	—63.1	—57.1	—73.1	—	—
	60	7	19469	19560	19320	7	—62.8	—60.4	—64.5	—	—
	50	5	20607	20671	20553	5	—63.7	— 61.7	— 65.0	—	—
	40	1	22130	—	—	1	—58.8	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—
Helwan 1200 U.T.	Surface	31	*1004m.b.	*1007m.b.	*999m.b.	31	18.2	21.2	15.4	31	5.0
	1000	31	168	202	111	30	17.6	21.0	11.1	30	4.2
	850	31	1532	1571	1500	31	7.2	13.4	0.9	31	— 4.2
	700	31	3109	3179	3058	30	0.3	6.0	— 5.6	30	—14.4
	600	30	4329	4415	4253	31	- 7.0	— 2.8	— 12.0	30	—21.1
	500	28	5728	5824	5624	28	—16.2	—11.7	—21.5	28	—30.2
	400	27	7376	7474	7229	27	—27.1	—20.7	—32.8	27	—40.2
	300	26	9388	9507	9195	26	—41.4	—37.6	—44.9	25	—52.8
	250	26	10605	10738	10403	26	—48.6	—41.4	—53.0	22	—59.2
	200	21	12054	12188	11865	21	—54.0	—46.4	—59.2	20	—64.4
	150	19	13881	13999	13719	19	—58.5	—52.7	—63.0	10	—67.3
	100	18	16390	16483	16273	18	—64.0	—58.8	—68.0	—	—
	70	13	18589	18587	18466	13	—63.5	—61.5	—66.5	—	—
	60	10	19559	19680	19440	10	—62.5	—60.6	—67.0	—	—
	50	10	20676	20790	20562	10	—61.4	—56.3	—64.0	—	—
	40	2	21895	22120	21670	2	—60.0	—57.7	—62.7	—	—
	30	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 1200 U.T.	Surface	31	*995m.b.	*998m.b.	*992m.b.	31	22.4	26.0	18.0	31	6.6
	1000	31	152	176	123	—	—	—	—	—	—
	850	31	1537	1553	1513	31	13.0	20.4	7.4	31	— 4.2
	700	31	3150	3189	3091	31	5.8	9.6	1.2	31	—10.9
	600	31	4397	4450	4315	31	— 1.1	2.6	— 6.1	31	—17.1
	500	31	5828	5891	5719	31	—10.3	— 7.1	—14.8	31	—28.6
	400	31	7511	7592	7384	31	—25.2	—18.6	—27.1	30	—35.7
	300	30	9566	9673	9131	30	—36.5	—32.4	—41.1	30	—48.2
	250	30	10801	10920	10716	30	— 44.9	— 39.0	— 50.6	30	—55.6
	200	28	12387	12388	12159	28	— 53.0	— 47.7	— 59.3	27	—62.9
	150	21	14099	14207	14002	21	—60.3	—49.5	—64.1	6	—67.1
	100	18	16572	16697	16454	18	—68.6	—63.0	—72.5	—	—
	70	10	18722	18837	18585	10	—69.4	—64.1	— 74.7	—	—
	60	2	19600	19680	19520	2	— 65.8	—65.0	— 66.5	—	—
	50	2	20686	20748	20623	2	—62.4	—60.9	—64.0	—	—
	40	1	22070	—	—	1	—60.7	—	—	—	—
	30	1	23831	—	—	1	—50.5	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—

N = The number of cases the element has been observed during the month.

Table B2 – MEAN AND EXTREME VALUES OF THE FREEZING LEVEL AND THE TROPOPAUSE; THE HIGHEST WIND SPEED IN THE UPPER AIR

DECEMBER — 1972

Station	Freezing level									First Tropopause									Highest wind speed			
	Mean			Highest			Lowest			Mean			Highest			Lowest						
	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Dew point (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitude (gpm)	Pressure (mb.)	Direction (000—360)°	Speed in Knots
0000 U.T.	(N)	(N)	(N)							(N)	(N)	(N)										
M. Matruh (A)	2653 (24)	743 (24)	-10.5 (24)	3880	680	-26.0	1880	818	0.0	10833 (10)	242 (10)	-54.8 (10)	12180	196	-58.6	8430	346	-40.5	10525	—	330	34
Helwan . . .	2648 (30)	740 (30)	- 9.9 (28)	3530	667	-20.8	1820	820	- 5.5	10619 (9)	249 (9)	-53.8 (9)	12460	190	-63.5	8640	327	-44.1	9980	278	295	150
Aswan . .(A)	4062 (31)	629 (31)	-14.6 (31)	4690	580	-12.8	3410	677	- 8.8	10960 (1)	241 (1)	-51.9 (1)	—	—	—	—	—	—	7175	405	275	86
1200 U.T.	(N)	(N)	(N)							(N)	(N)	(N)										
M. Matruh (A)	2752 (30)	768 (30)	-10.3 (30)	3330	688	-19.6	1460	860	-4.7	11427 (18)	218 (18)	-57.7 (18)	12730	181	-62.6	8910	315	-42.1	10500	248	240	149
Helwan . . .	3060 (30)	706 (30)	-13.3 (30)	4010	628	-12.5	2120	791	-6.2	12178 (17)	205 (17)	-56.4 (17)	17040	93	-64.6	8700	326	-40.9	8000	251	285	150
Aswan . .(A)	4246 (31)	615 (31)	-16.3 (31)	4820	574	-14.2	3320	682	-15.5	13486 (11)	172 (11)	-60.8 (11)	10540	100	-70.1	11220	235	-52.3	10060	276	258	150

N = The number of cases the element has been observed during the month.

Table B 3.—NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES

MERSA MATRUH (A)— DECEMBER 1972

Time	Pressure Surface (Millibar)	Wind between ranges of direction (000—360)°																								Number of Calm winds	Total Number of Observations (TN)	Mean Scalar wind Speed (Knots)
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	3	10	2	10	2	10	1	8	2	4	2	3	1	3	0	—	3	9	2	6	2	4	2	10	2	24	7
	1000	0	—	0	—	0	—	2	8	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	8
	850	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	700	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	600	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	500	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	250	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	6	9	4	10	0	—	3	13	2	12	0	—	0	—	1	15	2	13	0	—	4	10	3	10	4	29	9
	1000	1	14	3	12	2	10	1	9	0	—	1	2	0	—	1	19	3	14	1	14	2	13	3	14	0	18	12
	850	1	17	1	14	3	8	2	12	0	—	2	8	0	—	1	18	3	14	1	14	1	12	1	11	0	16	12
	700	0	—	1	7	0	—	0	—	0	—	0	—	0	—	3	18	2	18	4	13	1	9	1	7	0	12	15
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	25	4	18	4	25	1	2	0	—	0	11	30
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	38	4	35	2	30	0	—	0	—	0	8	34
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	77	4	56	2	46	0	—	0	—	0	7	57
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	99	2	62	0	—	0	—	0	5	84
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	47	1	53	0	—	0	—	0	2	50
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	69	0	—	0	—	0	—	0	1	69
	150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	0	—	0	—	—	—	—
	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	0	—	0	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	0	—	0	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	0	—	0	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	0	—	0	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	0	—	0	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	0	—	0	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	0	—	0	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	0	—	0	—	—	—	—

Table B 3. (contd.) NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN

SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES

HELWAN — DECEMBER 1972

Time	Pressure Surface (Millibar.)	Wind between ranges of direction (000—360°)																								Number of Calm winds	Total Number of Observations (T.N)	Mean Scalar wind Speed (Knots)
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m			
0000 U.T.	Surface	5	5	13	12	0	—	0	—	0	—	1	5	0	—	2	5	2	3	3	4	2	4	2	6	1	31	8
	1000	5	10	6	17	7	24	0	—	0	—	1	5	0	—	1	8	1	4	4	6	1	4	3	9	1	30	13
	850	4	16	8	18	2	22	4	13	0	—	0	—	1	14	0	—	0	—	6	17	2	15	4	17	0	31	17
	700	2	22	3	23	1	16	1	12	0	—	0	—	0	—	0	—	2	36	7	22	8	22	7	21	0	31	22
	600	3	17	1	16	0	—	1	6	0	—	0	—	0	—	0	—	2	66	10	34	9	35	4	39	0	30	34
	500	2	21	0	—	0	—	0	—	0	—	0	—	6	—	0	—	0	—	12	52	9	41	2	42	0	25	45
	400	1	67	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	9	61	7	78	2	36	0	19	65
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	68	6	82	1	11	0	12	70
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	140	6	71	1	116	0	8	85
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	69	3	68	1	63	0	5	67
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	73	4	94	0	—	0	5	89
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	102	0	—	0	2	102
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	21	0	—	0	—	0	—	0	—	0	1	21
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	5	3	11	7	5	4	3	4	1	2	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	30	4
	1000	6	7	7	9	13	15	3	8	0	—	0	—	1	6	0	—	0	—	0	—	0	—	0	—	0	30	11
	850	8	20	5	21	5	22	2	9	0	—	0	—	0	—	0	—	2	22	2	12	4	23	2	24	0	30	20
	700	6	18	1	25	2	48	0	—	0	—	0	—	0	—	0	—	4	42	4	23	11	26	1	36	0	29	28
	600	3	34	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	51	8	32	10	34	1	32	0	27	35
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	64	8	65	10	55	1	40	0	21	58
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	80	5	68	8	84	0	—	0	14	78
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	67	4	84	1	63	0	6	78
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	70	1	82	0	2	76
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	100	0	—	1	87	0	—	0	2	94
	150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N=The number of cases the element has been observed during the month.

TN=The total number of cases the wind has been observed for all directions during the month.

Table B 3.—(*contd.*) NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES

ASWAN (A) — DECEMBER 1972

Time	Pressure Surface (Millibar.)	Wind between ranges of direction (000—360°)																								Number of Calm winds	Total Number of Observations (T.N)	Mean Scalar wind Speed (Knots)
		345/014		015/044		045/074		075/104		105/134		135/164		165/194		195/224		225/254		255/284		285/314		315/344				
		N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	(ff) m	N	)ff) m	N	(ff) m	N	(ff) m			
0000 T.U.	Surface	25	10	5	10	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	31	10
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	9	14	7	14	3	9	0	—	0	—	0	—	1	5	0	—	1	6	0	—	3	7	4	20	0	28	13
	700	4	25	2	12	1	9	0	—	0	—	0	—	0	—	1	8	0	—	2	31	6	28	4	25	0	20	23
	600	1	29	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	16	1	30	5	42	1	47	0	9	37
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	53	0	—	2	52	1	39	0	—	0	4	49
	400	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	250	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 T.U.	Surface	23	10	6	7	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	5	0	31	9
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	9	11	8	12	2	10	1	3	0	—	0	—	0	—	0	—	0	—	3	11	2	13	6	12	0	31	11
	700	4	18	0	—	0	—	0	—	0	—	0	—	0	—	1	40	3	25	5	17	10	24	8	26	0	31	23
	600	1	22	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	37	9	38	16	33	2	37	0	31	35
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	55	16	46	10	47	1	33	0	30	47
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	57	16	65	9	58	0	—	0	29	62
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	86	12	71	7	79	0	—	0	23	76
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	104	14	85	5	89	0	—	0	21	88
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	102	12	87	2	70	0	—	0	16	87
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	7	90	1	88	0	—	0	8	90
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	40	3	73	0	—	0	—	0	4	64
	70	—	—	—	—	—	—	0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N—The number of cases the element has been observed during the month.

TN—The total number of cases the wind has been observed from all directions during the month.

REVIEW OF AGRO-METEOROLOGICAL STATIONS

MERSA MATRUH — DECEMBER 1972

For the month as a whole the mean daily air temperature and relative humidity were rather normal.

The prevailing weather in this month was generally cold. and the daily maximum air temperatures were slightly below normal the whole month apart from the 29th. The daily minimum air temperatures were above normal most days of the month.

The total monthly rainfall was 61.1 mm. which is appreciably above normal (+ 27.4 mm.). The maximum daily rainfall was 23.7 mm. reported on the 9th.

The extreme maximum soil temperatures were lower than the corresponding values of last December at depths between 2 & 20 cm. with departures between 2.4°C (at 10 cm.) and 1.8°C (at 20 cm). At 50 & 100 cm. the extreme soil maxima were higher than last December by 0.3° and 0.6°C respectively. The extreme minimum soil temperatures were higher than the corresponding values of last December at all depths except at 20cm. where its value was lower by 1.1°C ; the departures varied between 0.2°C (at 5 cm.) and 1.5°C (at both 50 & 100 cm.).

The mean daily actual sunshine duration was higher than the corresponding value of December 1971 by only 0.2 hour. The mean daily wind speed at 1.5 met height was lower by 1.9 m./sec. than the corresponding value of December 1971.

TAHRIR -- DECEMBER 1972

For the month as a whole the mean daily air temperature was below average and the mean daily relative humidity was above average. The total monthly rainfall was 4.9 mm. against 8.2 mm. for average.

The month was characterized by four cold waves in the periods (1st-3rd), (18th-20th), (22nd-27th) and 31st. The third cold wave yielded the lowest maximum air temperature for the month (17.0°C) on the 25th and the lowest minimum air temperature (2.0°C) on the 26th. In the rest of the month maximum air temperatures were about average. The daily minimum air temperatures were below average the whole month apart from the 18th & 21st, and the departures below average were marked in the first and last thirds of the month.

The extreme maximum soil temperatures were lower than the corresponding values of last December at all depths with marked departures ranging between 7.3°C (at 2 cm.) and 1.1°C (at 100 cm.). The extreme minimum soil temperatures were lower than the corresponding values of last December at all depths apart from 20 cm. depth where its value was slightly higher (by 0.1°C) ; the departures varied between 1.9°C (at 2 cm.) and 0.4°C (at 100 cm.).

The mean daily actual sunshine duration was higher than average by 0.7 hour. The mean daily wind speed at 1.5 m. height and pan evaporation were lower than average by 0.5 m./sec and 1.59 mm. respectively.

BAHTIM — DECEMBER 1972

For the month as a whole the mean daily air temperature was below average and the mean daily relative humidity was above average. The total monthly rainfall was only 0.1 mm. against 4.6 mm. for average.

The prevailing weather in this month was cold apart from a short warm spell on the 6th & 7th yielding the highest maximum air temperature for the month (23.8°C) on the 7th. Coldness was most pronounced in the period (22nd—29th) during which the lowest maximum air temperature (16.1°C) was reported on the 25th, the lowest minimum air temperature at 1.5 met. height (—1.2°C) was reported on the 26th and minimum air temperature at 5 cm. height fell below 0°C from the 24th till the 29th. The following table gives dates of occurrence and values of minimum air temperatures below 0°C at 5 cm. above ground :

Date	24	25	26	27	28	29
Min. air temp. in °C	—1.2	—5.5	—6.5	—3.5	—0.8	—0.3

The extreme maximum soil temperatures were lower than the corresponding values of last December at all depths apart from 100 cm. depth where the value was the same as last December; the departures varied between 4,1°C (at 5 cm.) and 1.1°C (at 50 cm.). The extreme minimum soil temperatures were lower than last December at all depths with departures between 3.2°C (at 2 cm.) and 0.5°C (at 100 cm.).

The mean daily actual sunshine duration was higher than average by 1.1 hour. The mean daily wind speed at 1.5 met. height and pan evaporation were rather the same as the corresponding average values.

KHARGA — DECEMBER 1972

For the month as a whole the mean daily air temperature and relative humidity were rather normal.

The daily maximum air temperatures were below normal the whole month apart from two light warm spells in the periods (7th & 8th) and (30th & 31st). The highest maximum air temperature for the month was 25.8°C seported on the 7th, and the lowest maximum air temperature was 19.6°C reported on the 27th. The daily minimum air temperatures showed irregular departures above and below normal. The highest minimum air temperature for the month was 11.8°C reported on the 12th, and the lowest minimum air temperature was 2.0°C reported on the 27th.

The extreme maximum soil temperatures were lower than the corresponding values of last December at all depths apart from 100 cm. depth where its value was higher by 0.6°C, the departures varied between 5.2°C (at 10 cm.) and 1.7°C (at 50 cm.). The extreme minimum soil temperatures were higher than the corresponding values of last December at all depths apart from 5 cm. depth where its value was lower by 0.4°C and 100 cm. depth where its value was the same as last December ; the departures varied between 1.8°C (at 2 cm.) and 0.3°C (at 50 cm.).

The mean daily wind speed at 1.5 m. height was the same as average. The mean daily actual sunshine duration and pan evaporation showed insignificant departures from the corresponding average values.

Table C 1.—AIR TEMPERATURE AT 1½ METRES ABOVE GROUND

DECEMBER— 1972

STATION	Air Temperature (°C)					Mean Duration in hours of daily air temperature above the following values										
	Mean Max.	Mean Min.	Mean of the day	Night time mean	Day time mean	—5°C	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C
Mersa Matruh .	18.9	11.4	15.1	13.8	16.4	24.0	24.0	24.0	23.7	12.5	0.3	0.0	0.0	0.0	0.0	0.0
Tahrir	21.2	7.0	12.8	9.7	16.0	24.0	24.0	23.3	16.1	8.1	1.2	0.0	0.0	0.0	0.0	0.0
Bahtim	19.9	5.3	11.8	8.4	15.2	24.0	23.8	21.9	14.3	7.1	0.9	0.0	0.0	0.0	0.0	0.0
Kharga	22.1	7.1	14.8	11.8	17.8	24.0	24.0	23.5	20.1	11.3	3.9	0.0	0.0	0.0	0.9	0.0

Table C 2.—EXTREME VALUES OF AIR TEMPERATURE AT 1½ METRES ABOVE GROUND, ABSOLUTE MINIMUM AIR TEMPERATURE AT 5cms ABOVE GROUND OVER DIFFERENT FIELDS

DECEMBER— 1972

STATION	Max. Temp. at 1½ metres (°C)				Min. Temp. at 1½ metres (°C)				Min. Temp. at 5 cms. above (°C)			
	Highest		Lowest		Highest		Lowest		Dry soil		Grass	
	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date	Value	Date
Mersa Matruh . . .	21.0	5	16.4	25	13.8	15,16	9.2	1	5.4	1	—	—
Tahrir	23.6	5	17.0	25	10.2	18	2.0	26	0.0	26	—	—
Bahtim	23.8	7	16.1	25	9.5	18	—1.2	26	—6.5	26	—	—
Kharga	25.8	7	19.6	27	11.8	12	2.0	27	0.0	27	—	—

Table C 3.—(SOLAR+SKY) RADIATION, DURATION OF BRIGHT SUNSHINE, RELATIVE HUMIDITY, VAPOUR PRESSURE AT 1½ METRES ABOVE GROUND, EVAPORATION & RAINFALL

DECEMBER — 1972

STATION	(Solar+Sky) Radiation gm. cal/cm²	Duration of Bright Sunshine (hours)			Relative Humidity				Vapour pressure (mms)						Evaporation (mms)		Rainfall (mms)		
		Total Actual monthly	Total Possible monthly	%	Mean of day	1200 U.T.	Lowest	Date	Mean of day	1200 U.T.	Highest	Date	Lowest	Date	Piche	Pan class A	Total Amount Monthly	Max. fall in one day	Date
M. Matruh	—	173.1	313.8	55	69	61	46	9,10	8.9	9.7	12.8	7	5.5	1	4.4	×	61.1	23.7	9
Tahrir . .	283.1	246.9	316.8	78	76	51	35	7	8.3	8.3	11.8	10	3.6	25	2.4	2.57	4.9	4.7	10
Bahtim . .	285.1	240.6	317.4	76	73	47	18	25	7.5	7.7	11.3	11	2.4	25	3.8	3.36	0.1	0.1	12
Kharga .	370.7	297.2	329.2	90	47	32	20	28	5.8	6.0	8.9	10	2.6	25	6.4	6.25	0.0	0.0	—

Table C 4.—EXTREME SOIL TEMPERATURE AT DIFFERENT DEPTHS (cms) IN DIFFERENT FIELDS

DECEMBER — 1972

Station	Highest (H) Lowest (L)	Extreme soil temperature (°C) in dry field at different depths (cms.)								Extreme soil temperature (°C) in grass field at different depths (cms.)							
		2	5	10	20	50	100	200	300	2	5	10	20	50	100	200	300
Mersa Matruh.	H	22.5	20.8	19.2	17.8	19.6	21.4	23.4	—	—	—	—	—	—	—	—	—
	L	8.3	8.8	10.6	11.3	15.5	17.6	21.0	—	—	—	—	—	—	—	—	—
Tahrir	H	23.9	23.6	20.9	18.7	17.7	20.4	23.7	25.1	—	—	—	—	—	—	—	—
	L	5.2	6.4	7.6	9.8	13.0	16.6	20.4	22.7	—	—	—	—	—	—	—	—
Bahtim	H	25.9	21.3	20.0	19.3	21.7	24.3	26.4	26.4	—	—	—	—	—	—	—	—
	L	1.0	3.9	7.9	13.7	17.9	20.8	24.4	25.7	—	—	—	—	—	—	—	—
Kharga . . .	H	30.8	26.4	22.8	21.2	24.2	27.4	29.4	29.8	—	—	—	—	—	—	—	—
	L	4.3	5.5	11.0	15.8	20.2	23.7	27.1	28.8	—	—	—	—	—	—	—	—

Table C 5.—SURFACE WIND

DECEMBER — 1972

Station	Wind Speed m/sec at 1½ metres			Days with surface wind speed at 10 metres							Max. Gust. (knots) at 10 metres	
	Mean of the day	Night time mean	day time mean	≥10 knots	≥15 knots	≥20 knots	≥25 knots	≥30 knots	≥35 knots	≥40 knots	value	Date
Mersa Matruh.	2.9	2.4	3.4	31	27	13	3	1	1	0	38	6
Tahrir	1.5	0.9	2.1	29	14	3	0	0	0	0	30	25
Bahtim	1.7	0.9	2.6	23	10	5	0	0	0	0	24	24
Kharga . . .	2.7	1.8	3.6	26	14	1	0	0	0	0	26	9

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