THE ARAB REPUBLIC OF EGYPT

MONTHLY WEATHER REPORT

VOLUME 17 NUMBER 1

JANUARY, 1974

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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

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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Starting from the Repot 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, March 1976

Chairman (A. F .HASAN)
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 Mersa Matruh, Tahrir, Bahitm, and Kharga. The observation fields at Mersa Matruh and Kharga are considered for the moment as dry and bare fields. at Bahtim and Tahrir there are grass fields covered with Libia in addition to the dry and bare fields.

The soil characteristics of these fields are :

	MERSA MATRUH	TAHRIR	BAHTIM	KHARGA
Top soil type	not available at present	Pure sand	Permeable clay	Sandy loam granular non-compact
Top soil depth	,,	More than 3 metres.	More than 1.5 metres	20 cms.
Sub soil type	,,	Pure sand	Clay loam aud loam	Platy clay. non compact
Slope of ground and its direction	,,	½% towards East & North	Flat (0-0.3%)	Flat (0-0.%)
Level of water table	,,	More than 5 metres	1.0-1.5m. approximately.	More than 5 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,

—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. 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. 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 column.

Relative Humidity :

The relative humidity at a certain hour is derived from the values of the dry and wet bulb temperatures using Jelinek's Psychrometer Tables (Leipzig 1911). The mean daily relative humidity is the arithmetic mean over the month of its daily hourly values,. 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 i 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 W. M. O, 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 range 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 the 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 wtihout 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 C 2.—**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 different 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 1½metres 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 Robitzch values at Bahtim, Tahrir and Kharga are regularly compared with the records of an Eppley pyrheliometer installed at the station. The sensitive elements of the Robitzsch Actiongraph and of the Eppley phyrheliometer are at 100 cms approximately above the ground.

The types of insturments 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 Deutschen Wetterdients 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 (Leipzig 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 different Fields**

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

The soil temperature readings are taken in different 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 instrumen used is of the run counter of the Lambrecht type ; the cups of which are at 1½ metres above thte ground.

The number of days with surface wind speed reaching or exceeding specified values of velocities (≥10 Knots, ≥15 Knots, ≥20 Knots, ≥25 Knots, ≥30 Knots, ≥35 Knots and ≥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

District.	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	139.26	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	30 44	39.0	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 1974

Markedly cold weather, abnormal rainfall in north with records for monthly and daily values.

PRESSURE DISTRIBUTION

Four depressions passed through the East Mediterranean on the 9th, 13th, 20th and 26th; the second and third of which were the deepest.

The Sudan trough experienced two northward elongations on the 4th and 29th. High pressure formed over the region otherwise.

SURFACE WIND

The prevailing winds were generally light to moderate and below in north of the country mostly from W and SW directions, and with a less frequency from W to NW. In the southem parts light to moderate N and NW winds prevailed. Winds freshened during several days in scattered localities.

TEMPERATURE

Maximum air temperatures were below normal most days of the month. Their departures below normal were appreciable during the third and fourth weeks.

The highest and lowest maximum air temperatures were 29.4°C at Kom Ombo on the 5th and 10.4°C at Helwan on the 23rd respectively.

Minimum air temperatures were generally above normal at northern coasts and below normal oherwise. Depatures from normal were slight to moderate in general.

The highest and lowest minimum air temperatures wre 17.2°C at Quseir on the 3rd and — 1.6°C at Dakhla on the 18th respectively.

PRECIPITATION

Frequent and heavy precipitation was a characteristic feature of this month.

Variant rain fell during many days of this month over north of the country till Cairo area.

Rain was heavy in several days mainly in the second and third weeks and associated with scattered thunderstorms and hail.

The monthly rainfall amounts were markedly above normal.

It is worthy to mention that the monthly rainfall attained records: 77.7 mm. at Sallum, 102.4 mm at Mersa Matruh, 185.3 mm at Rosetta, 137.0 mm at Balteam, 29.8 mm at Banha. The daily rainfall attained records : 34.6 mm at Mersa Matruh on the 12th, 44.1 mm at Balteam on the 20th.

The highest monthly rainfall for Egypt in this month was 185.3 mm reported at Rosetta.

The highest daily rainfall was 44.1 mm reported at Balteam on the 20th.

OTHER WEATHER PHENOMENA

Early morning mist developed over scaated places in Delta, Cairo and north of Upper Egypt during several days.

Rising sand was reported over scattered places during several days.

Chairman (A. F. HASAN)

Board of Directors

Cairo, March 1976

SURFACE DATA

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

JANUARY — 1974

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.	1018.5	+1.3	17.0	—1.8	10.0	+0.6	13.5	12.9	—0.7	10 0	0.0	68	+10	—	—	—	3.1
Mersa Matruh.(A)	1018.8	+1.5	15.7	—2.4	9.1	+0.8	12.4	12.5	—0.3	10.3	+0.6	75	+10	176.2	320.6	55	3.9
Alexandria . (A)	1017.7	0.0	17.0	—1.5	9.6	+0.5	13.3	13.0	—0.6	10.2	+0.7	68	— 2	155.6	322.1	48	3.7
Port Said.. . (A)	—	—	16.7	—1.4	9.7	—1.6	13.2	12.6	—1.7	10.0	—1.8	70	— 2	181.2	322.1	56	3.7
El Arish.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta.	1017.5	0.0	16.9	—2.7	6.2	—0.1	11.6	10.8	—1.7	8.8	—1.0	75	+ 7	198.0	322.9	61	1.8
Cairo . . . . (A)	1017.8	—0.1	16.7	—2.4	8.1	—0.7	12.4	11.8	—1.9	9.1	—0.8	68	+10	—	—	—	5.1
Fayonm.	—	—	18.3	—2.1	3.9	—2.3	11.1	11.0	—1.8	8.3	—1.1	67	+ 7	—	—	—	3.0
Minya. . . . (A)	1018.8	+0.3	18.6	—2.0	3.5	—0.4	11.1	10.9	—0.9	7.8	—0.3	55	— 2	235.6	328.5	72	4.7
Assyout. . . (A)	1018.8	+0.4	17.9	—2.8	5.5	—1.1	11.7	11.7	—1.7	8.1	—0.3	57	+10	—	—	—	5.5
Luxor. . . . (A)	1017.9	+0.7	21.0	—2.0	5.5	+0.1	13.2	12.8	—1.3	8.8	—0.6	55	+ 4	—	—	—	4.4
Aswan. . . . (A)	1017.9	+0.8	21.0	—2.8	7.6	—0.4	14.4	13.8	—1.8	8.3	—0.6	42	+ 8	—	—	—	11.3
Siwa.	1019.9	+1.5	18.5	—1.2	6.0	+1.3	12.9	12.0	+0.1	8.5	+0.6	59	+ 7	240.1	326.3	74	5.4
Bahariya.	1019.1	+0.5	17.7	—2.3	5.1	+0.2	12.3	11.3	—1.3	7.5	—0.3	55	+ 8	—	—	—	5.1
Farafra.	—	—	18.9	—1.7	5.2	+1.1	12.0	11.6	—0.7	7.6	—1.0	53	+10	—	—	—	5.2
Dakhla	1019.6	+1.1	18.8	—2.6	3.1	—1.0	11.0	10.5	—1.5	6.2	—1.0	47	+ 8	—	—	—	6.1
Kharga	1019.1	+1.2	19.6	—2.7	4.8	—1.0	12.2	12.6	—1.3	7.8	—0.2	46	+ 3	259.1	334.0	78	5.7
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	1017.1	+0.5	19.9	—1.0	9.5	—0.1	14.7	14.5	—1.3	9.7	—1.2	50	— 1	125.9	330.7	38	10.1
Quseir	1015.9	—1.2	20.8	—1.7	14.7	+0.9	17.8	18.3	+0.2	12.4	—0.2	46	— 2	—	—	—	7.4

Table A 2.—MAXIMUM AND MINIMUM AIR TEMPERATURES

JANUARY — 1974

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	20.3	3	13.7	23	0	0	0	0	0	8.9	—	13.0	2	6.2	25	15	0	0	0
Mesra Matruh (A)	18.9	3	11.2	20	0	0	0	0	0	7.1	—	14.6	4	3.8	28	18	1	0	0
Alexandria . (A)	20.9	4	13.2	23	0	0	0	0	0	7.1	—	12.0	5,15	6.3	23	14	0	0	0
Port said . . (A)	20.7	12	11.6	14	0	0	0	0	0	7.0	—	14.5	1	6.4	27	17	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	20.4	4	11.2	17	0	0	0	0	0	—	—	8.8	18	2.9	13	31	7	0	0
Cairo . . . (A)	20.9	3	11.2	23	0	0	0	0	0	—	—	10.0	5	4.9	24	30	1	0	0
Fayoum	22.9	2	13.6	26	0	0	0	0	0	2.0	—	7.2	1	1.2	24	31	19	1	0
Minya . . . (A)	23.0	3	13.8	26	0	0	0	0	0	2.0	—	9.0	22	—1.0	24	31	24	2	0
Assyout. . . (A)	21.2	2	12.6	26	0	0	0	0	0	2.6	—	10.1	22	1.3	24	30	10	0	0
Luxor . . . (A)	27.0	3	16.4	17	3	0	0	0	0	0.8	—	10.4	26	0.8	24	30	10	0	0
Aswan . . . (A)	28.0	4	16.0	18	4	0	0	0	0	—	—	12.0	2	3.8	18	28	3	0	0
Siwa	21.9	10	15.2	24	0	0	0	0	0	4.6	—	11.6	22	0.2	24	27	10	0	0
Bahariya	22.8	2	13.0	23	0	0	0	0	0	4.9	—	10.3	22	—1.5	24	30	15	1	0
Farafra	22.0	2	13.3	24	0	0	0	0	0	4.4	—	11.8	22	0.7	24	30	15	0	0
Dakhla	24.5	1	11.1	26	0	0	0	0	0	2.9	—	6.5	1	—1.6	18	31	23	2	0
Kharga	26.6	2	14.5	26	2	0	0	0	0	2.9	—	9.4	1	0.2	18	31	17	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada . . .	23.9	3+4	15.4	24	0	0	0	0	0	—	—	13.0	13	6.1	24	20	0	0	0
Quseir	24.8	3	16.3	24	0	0	0	0	0	11.3	—	17.2	3	12.0	24	0	0	0	0

Table A 3.—SKY COVER AND RAINFALL

JANUARY — 1974

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	4.7	3.2	5.1	3.9	4.1	77.7	+58.7	33.5	12	0	16	10	5	2	1	0
Mersa Matruh (A)	4.4	5.6	5.8	4.5	5.0	102.4	+70.7	31.6	12	0	20	11	5	3	1	0
Alexandria (A)	5.1	5.5	6.1	5.8	5.3	133.6	+81.0	38.8	13	0	22	12	7	6	1	0
Port Said (A)	—	3.6	4.3	2.8	—	50.9	+38.5	8.2	31	0	17	11	3	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	2.4	4.0	5.0	3.0	3.7	38.7	+28.0	10.6	29	0	14	8	4	1	0	0
Cairo (A)	2.4	4.0	4.7	3.1	3.4	26.1	+20.9	9.0	14	2	14	7	1	0	0	0
Fayoum	—	2.5	4.2	3.2	—	Tr.	− 0.9	Tr.	13,14,23,26	4	9	0	0	0	0	0
Minya (A)	2.0	2.5	4.3	2.5	2.8	0.7	+ 0.4	0.5	26	3	2	0	0	0	0	0
Assyout (A)	1.4	1.8	2.9	2.3	2.0	Tr.	0.0	Tr.	26	1	0	0	0	0	0	0
Luxor (A)	2.8	3.0	3.7	2.9	3.0	0.4	− 0.1	0.4	26	1	1	0	0	0	0	0
Aswan (A)	1.5	3.0	3.4	2.3	2.4	0.0	− 0.0	0.0	—	0	0	0	0	0	0	0
Siwa	2.8	3.6	4.4	2.4	3.2	2.0	+ 1.0	1.2	13	0	3	1	0	0	0	0
Bahariya	1.9	2.9	4.2	2.7	2.7	1.0	+ 0.8	1.0	25	10	1	1	0	0	0	0
Farafra	—	2.0	3.4	2.0	—	3.2	+ 2.6	3.2	25	2	1	1	0	0	0	0
Dakhla	0.4	1.8	2.5	1.0	1.3	1.4	+ 1.3	1.4	26	0	1	1	0	0	0	0
Kharga	0.8	2.7	3.0	1.4	1.8	Tr.	− 0.1	Tr.	26	1	0	0	0	0	0	0
Tor	—	—	—	—	—	—		—								0
Hurghada	0.8	3.2	3.7	2.0	2.3	2.0	+ 2.0	2.0	26	2	1	1	0	0	0	0
Quseir	1.4	3.4	3.8	2.5	1.3	0.7	+ 0.7	0.7	26	0	1	0	0	0	0	0

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

JANUARY 1974

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	16	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Mersa Matruh (A)	20	0	0	0	0	3	0	0	0	0	4	0	0	1	7
Alexandria (A)	22	0	0	0	0	5	0	0	0	0	0	0	0	—	14
Port Said (A)	17	0	0	0	0	1	0	0	0	0	0	0	0	—	—
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	14	0	0	0	0	0	1	0	0	0	0	0	0	6	4
Cairo (A)	12	0	0	0	0	1	12	0	10	0	8	0	0	7	2
Fayoum	0	0	0	0	0	0	2	1	0	0	0	0	0	—	—
Minya (A)	2	0	0	0	0	0	15	1	2	0	6	0	0	10	1
Assyout (A)	0	0	0	0	0	0	2	0	0	0	2	1	0	18	2
Luxor (A)	1	0	0	0	0	0	0	0	26	1	10	1	0	13	3
Aswan (A)	0	0	0	0	0	0	0	0	2	0	11	1	0	15	0
Siwa	3	0	0	0	0	0	0	0	0	0	3	0	0	7	1
Bahariya	1	0	0	0	0	0	0	0	0	0	2	0	0	11	1
Farafra	1	0	0	0	0	0	1	0	0	0	4	0	0	—	—
Dakhla	1	0	0	0	0	0	0	0	0	0	5	0	0	25	1
Kharga	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	1	0	0	0	0	0	0	0	0	0	0	1	0	15	1
Quseir	1	0	0	0	0	0	0	0	0	0	0	0	0	22	0

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

JANUARY 1974

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
Salloeu	0	0	5	1—10	24	35	26	13	11	23	6	14	19	55	104	81	411
				11—27	4	3	0	4	9	2	0	9	11	119	132	35	328
				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	28	38	26	17	20	25	6	23	30	174	236	116	739
MersaMatrah . . (A)	2	0	2	1—10	38	28	4	8	8	28	29	45	68	55	24	24	359
				11—27	45	16	1	12	5	1	12	19	52	96	31	84	374
				28—47	0	0	0	0	0	0	0	0	0	0	5	2	7
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	83	44	5	20	13	29	41	64	120	151	60	110	740
Alexandria . . . (A)	0	0	2	1—10	43	68	19	5	12	12	19	51	21	21	70	79	420
				11—27	7	18	17	3	0	0	0	41	46	32	56	102	322
				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	86	36	8	12	12	19	92	67	53	126	181	742
Tanta.	12	0	1	1—10	31	49	21	3	2	8	19	81	147	116	83	28	588
				11—27	3	0	20	4	0	0	1	6	39	33	21	16	143
				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	34	49	41	7	2	8	20	87	186	149	104	44	731
Cairo . . . . . (A)	43	3	7	1—10	8	17	27	28	20	30	99	101	76	49	33	14	502
				11—27	0	21	10	1	0	10	31	41	42	28	3	2	189
				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	8	38	37	29	20	40	130	142	118	77	36	16	691
Fayasm.	13	10	1	1—10	62	88	21	9	5	14	35	74	124	135	46	50	663
				11—27	2	6	6	0	0	0	0	5	15	15	7	1	57
				28—54	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	64	94	27	9	5	14	35	79	139	150	53	51	720
Meniya . . . . . (A)	8	0	0	1—10	173	47	9	4	3	28	65	37	41	51	70	94	622
				11—27	27	1	4	0	0	0	3	0	6	13	32	28	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	200	48	13	4	3	8	68	37	47	64	102	122	736
Asyout . . . . . (A)	73	0	2	1—10	27	4	2	4	2	4	6	7	20	168	144	103	491
				11—27	13	0	0	0	0	0	0	6	6	40	60	50	175
				28—47	0	0	0	0	0	0	0	0	0	1	2	0	3
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	40	4	2	4	2	4	6	13	26	209	206	153	669

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

JANUARY — 1973

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)	103	0	0	1—10	51	37	16	11	2	15	66	59	56	92	81	72	558
				11—27	2	0	0	0	0	0	0	10	5	12	42	12	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	**53**	**37**	**16**	**11**	**2**	**15**	**66**	**69**	**61**	**104**	**123**	**84**	**641**
Aswan . . . . . (A)	11	0	0	1—10	131	86	12	0	0	1	0	4	17	35	36	126	448
				11—27	52	26	3	0	0	0	0	0	0	8	68	128	285
				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	**183**	**112**	**15**	**0**	**0**	**1**	**0**	**4**	**17**	**43**	**104**	**254**	**733**
Siwa	69	1	3	1—10	13	31	23	53	40	30	22	21	29	137	69	45	533
				11—27	3	5	0	2	11	0	0	3	4	13	65	32	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	**16**	**36**	**23**	**55**	**51**	**30**	**22**	**24**	**33**	**150**	**154**	**77**	**671**
Dakhla	4	21	0	1—10	40	19	17	19	11	5	13	16	52	130	150	150	622
				11—27	6	1	0	0	0	0	0	0	5	6	48	31	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	**46**	**20**	**17**	**19**	**11**	**5**	**13**	**16**	**57**	**136**	**198**	**181**	**719**
Kharga	14	2	3	1—10	127	94	36	15	13	19	17	3	19	49	69	150	611
				11—27	48	15	0	0	0	0	0	0	0	8	20	23	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	**175**	**109**	**36**	**15**	**13**	**19**	**17**	**3**	**19**	**57**	**89**	**173**	**725**
Hurghada	2	4	1	1—10	41	9	7	4	0	0	0	2	9	67	162	37	338
				11—27	21	0	0	0	0	0	0	0	0	55	224	97	397
				28—47	0	0	0	0	0	0	0	0	0	0	2	1	2
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**62**	**9**	**7**	**4**	**0**	**0**	**0**	**2**	**9**	**122**	**388**	**134**	**737**
Quseir	0	0	358	1—10	8	25	12	1	0	0	0	0	5	30	109	45	235
				11—27	41	16	0	0	0	0	0	0	0	20	42	32	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	**49**	**41**	**12**	**1**	**0**	**0**	**0**	**0**	**5**	**50**	**151**	**77**	**386**

UPPER AIR CLIMATOLOGICAL DATA

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

JANUARY—1974

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	28	*1018mb.	*1024mb.	*1012mb.	28	11.3	15.5	6.4	28	7.5
	1000	28	174	226	127	28	11.2	16.0	7.8	28	6.7
	850	28	1513	1554	1457	28	2.5	12.2	— 0.9	27	— 3.0
	700	28	3060	3131	2972	28	— 0.6	2.0	—11.7	27	— 15.9
	600	28	4219	4357	4139	27	—12.5	— 6.9	—16.3	26	—24.0
	500	26	5611	5756	5460	26	—22.5	—16.1	—31.4	25	—33.0
	400	26	7212	7387	7007	26	—34.7	—28.0	—41.8	25	— 44.7
	300	25	9176	9359	9007	25	—47.5	—42.9	—53.1	23	—56.5
	250	24	10364	10542	10192	24	—52.9	—47.0	—58.5	23	—62.1
	200	23	11797	11950	11632	23	—56.5	—49.2	—63.8	19	—65.4
	150	21	13625	13807	13451	21	—58.9	—54.7	—64.2	10	—68.3
	100	16	16141	16289	15963	16	—62.8	—57.9	—68.1	—	—
	70	13	18349	18502	18163	13	—62.0	—58.0	—66.5	—	—
	60	10	19362	19490	19170	10	—61.1	—55.9	—65.1	—	—
	50	10	20466	20680	20262	10	—60.2	—55.2	—65.0	—	—
	40	7	21957	22100	21720	7	—57.8	—51.0	—64.6	—	—
	30	6	23705	23890	23423	6	—56.8	—53.5	—64.2	—	—
	20	3	26241	26467	25908	3	—56.5	—49.3	—63.8	—	—
	10	—	—	—	—	—	—	—	—	—	—
Helwan 0000 U.T.	Surface	31	*1001mb.	*1008mb.	*994mb.	31	9.1	11.9	6.0	31	4.5
	1000	31	150	208	91	22	9.4	11.3	6.0	22	4.8
	850	31	1485	1531	1424	30	2.3	13.9	— 3.3	30	— 4.8
	700	31	3038	3156	2961	31	— 5.4	3.4	—10.5	31	—18.2
	600	31	4234	4358	4133	31	—12.3	— 4.9	—19.5	31	— 26.1
	500	21	5604	5748	5470	31	—21.3	—17.2	—25.4	31	— 34.1
	400	31	7216	7385	7040	31	— 32.7	— 27.7	— 40.0	31	—43.8
	300	31	9189	9375	9004	31	— 45.3	—42.0	—48.5	31	—55.6
	250	31	10388	10575	10222	31	—52.1	—44.0	—57.0	31	—62.0
	200	29	11824	11951	11770	29	—56.5	—47.0	—62.5	26	—66.3
	150	26	13629	11760	13497	26	—60.6	—56.8	—70.9	10	—67.4
	100	22	16122	16250	15962	22	—65.5	—57.0	—69.4	—	—
	70	19	18299	18436	18092	19	—64.7	—61.1	—68.0	—	—
	60	17	19294	19440	19050	17	—62.1	—52.5	—65.9	—	—
	50	17	20384	20518	20150	17	—60.2	—50.9	—64.0	—	—
	40	14	21890	22010	21740	14	— 58.1	— 54.6	—62.8	—	—
	30	14	23617	23744	23513	14	—55.7	—49.1	— 60.7	—	—
	20	10	26219	26344	26077	10	—50.3	—43.6	—55.9	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 0000 U.T.	Surace	29	*995mb.	*1000mb.	*991mb.	29	10.1	15.4	6.4	29	1.6
	1000	29	154	193	117	3	8.0	8.2	7.6	3	1.0
	850	29	1501	1534	1474	29	6.4	13.4	— 2.9	29	— 3.1
	700	27	3082	3138	3039	27	1.6	4.6	— 2.2	27	—12.2
	600	26	4310	4374	4261	26	— 5.3	— 1.8	— 8.7	25	—18 8
	500	24	5722	5784	5664	24	—14.3	—11.6	—17.2	23	—25 1
	400	22	7378	7426	7321	22	—25.5	—19.8	—28.3	21	—32.9
	300	21	9410	9468	9325	21	—39.1	—34.8	—42.6	20	—47.0
	250	21	10638	10694	10538	20	—47.8	—42.2	—51.5	19	—55.6
	200	20	12077	12155	11978	20	— 57.9	—54.4	—61.1	15	—65.1
	150	18	13852	13937	13757	18	—66.1	—62.8	—71.2	—	—
	100	13	16260	16331	16196	13	—74.8	—70.1	—80.8	—	—
	70	5	18357	18438	18301	5	—70.6	—68.5	—72.1	—	—
	60	4	19325	19400	19250	4	—66.9	—65.4	—68.9	—	—
	50	4	20393	20467	20331	4	—64.0	—53.3	—65.1	—	—
	40	3	21900	21960	21840	3	—60.7	— 58.4	—63.7	—	—
	30	3	23601	23677	23558	3	—56.2	—54.0	—58.9	—	—
	20	3	20216	26301	26169	3	—51.3	—49.7	—53.9	—	—
	10	1	80805	—	—	1	—44.5	—	—	—	—

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 CLIMATOOGICAL DATA

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

JANUARY —1974

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.	* 1023 m.b.	* 1011 m.b.	28	15 4	18 0	9.4	28	8.7
	1000 . . .	28	168	214	120	28	13 9	16.6	7.0	28	7.7
	850 . . .	28	1506	1554	1437	28	1 8	9 7	— 4 2	28	— 2.7
	700 . . .	28	3053	3149	2944	28	— 5 6	3 0	—14 5	28	—14.9
	600 . . .	28	4252	4377	4096	28	—12.6	— 6.4	—22.2	28	—22.9
	500 . . .	28	5617	5774	5414	28	—22.9	—17.7	— 30.3	28	—32.0
	400 . . .	28	7219	7405	6962	28	—33 7	—22.7	—39.1	28	—43.4
	300 . . .	28	9219	9389	8922	28	—46.9	—42.5	—52.2	28	—55.1
	250 . . .	28	10375	10579	10140	28	—52.7	—45.9	—56.7	28	—57.1
	200 . . .	28	11801	11975	11613	28	—56 0	—47.8	—63 2	24	—59.8
	150 . . .	26	13624	13777	13370	26	—58.3	—54.4	— 62 7	14	—64.3
	100 . . .	25	16168	16288	16038	25	—62.4	—56 8	—66.1	—	—
	70 . . .	20	18391	18502	18158	20	—61.5	—57 5	—65.2	—	—
	60 . . .	10	19372	19500	19300	10	—60.0	—56.5	—62.8	—	—
	50 . . .	10	20487	20637	20398	10	—58.5	—54.3	—60.2	—	—
	40 . . .	7	21910	22080	21790	7	—56.6	—52.6	—59.2	—	—
	30 . . .	4	23771	23878	23648	4	— 52.6	—47.3	—55.3	—	—
	20 . . .	1	26335	—	—	1	—45.9	—	—	—	—
	10 . . .	—	—	—	—	—	—	—	—	—	—
Helwan 1200 U.T.	Surface . . .	31	* 1000 m.b.	* 1010 m.b.	* 992m.b.	31	15 0	19.9	9 5	31	4.2
	1000 . . .	30	141	223	73	18	14·6	18.8	9.5	18	4.2
	850 . . .	29	1490	1592	1401	29	3.9	14.8	— 3.3	29	— 4.2
	700 . . .	28	3013	3197	2961	28	— 4.5	3.6	—14.3	28	—16.1
	600 . . .	28	4251	4455	4115	28	—11.4	— 6.1	—20.4	28	—24.4
	500 . . .	28	5623	5855	5462	28	—20.6	—15.9	—27.5	28	—34.2
	400 . . .	28	7238	7499	7045	28	—31.5	—28.2	—38.0	28	—43 8
	300 . . .	28	9224	9499	9004	28	—44.2	—38.9	—52.2	28	—56.2
	250 . . .	27	10426	10963	10186	26	—50 8	—46.6	—54.7	26	—61.7
	200 . . .	27	11866	12101	11636	27	— 54.7	— 49.3	—60 5	23	—65.0
	150 . . .	25	13694	13911	13498	25	—58.5	—54.3	—62 2	17	—67.5
	100 . . .	24	16211	16477	16058	24	—63.8	—58.7	—68.4	—	—
	70 . . .	18	18401	18572	18296	18	—62.1	—56.5	—65.5	—	—
	60 . . .	16	19387	19550	19200	16	—61.2	—58.0	—63.9	—	—
	50 . . .	16	20488	20660	20384	16	—59.6	— 55 0	—64.1	—	—
	40 . . .	9	21998	22200	21830	9	—55.5	—52.4	—57 8	—	—
	30 . . .	9	23766	23988	23602	9	—50.9	—45.9	—56.2	—	—
	20 . . .	7	26389	26602	26212	7	—48.9	—41.3	—55.5	—	—
	10 . . .	1	30872	—	—	1	—44.8	—	—	—	—
Aswan (A) 1200 U.T.	Surface . . .	29	* 995m.b.	* 1000m.b.	* 990m.b.	29	19.9	25.8	16.0	29	4.6
	1000 . . .	29	147	193	105	1	16.2	—	—	1	— 0.5
	850 . . .	29	1512	1542	1470	29	7.7	14.1	3.5	29	— 6.8
	700 . . .	28	3095	3141	3025	28	2.3	6.8	— 2.9	28	—16.2
	600 . . .	27	4328	4387	4273	27	— 4.2	— 0.7	— 6.9	25	—22.7
	500 . . .	19	5737	5809	5636	19	—13.2	— 9.7	—15.9	18	—29.4
	400 . . .	18	7403	7473	7302	18	—24.5	—20.0	—28.7	17	—38.2
	300 . . .	18	9440	9513	9302	18	—38.4	—34.0	—42.1	18	—50.2
	250 . . .	18	10673	10763	10532	18	— 46.7	—44.0	—50.3	18	—58.4
	200 . . .	17	12123	12188	11972	17	—56.3	—53.7	—59.1	17	—67.0
	150 . . .	17	13913	14031	13747	16	—65.1	—60.5	—69.6	—	—
	100 . . .	15	16370	16507	16271	15	—70.4	—64.8	—75.7	—	—
	70 . . .	9	18497	18540	18445	9	—69.5	—66.3	—72.9	—	—
	60 . . .	5	19422	19500	19250	5	—66.2	—63.7	—67.9	—	—
	50 . . .	5	20543	20580	20512	5	—59.1	—57.0	—60 1	—	—
	40 . . .	4	22035	22100	22000	4	—55.8	—53.7	—57.0	—	—
	30 . . .	4	23796	23860	23767	4	—53.0	—51.6	—54.6	—	—
	20 . . .	3	26441	26495	26399	3	—50.5	—50.4	—50.7	—	—
	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 AD THE TROPOPAUSE. THE HIGHEST WID SPEED IN THE UPPER AIR

JANUARY — 1974

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)	1893 (28)	813 (28)	− 5.6 (27)	3420	677	−10.9	1170	892	− 0.2	10583 (18)	243 (18)	−55.9 (18)	13200	162	−60.0	8440	831	−47.8	11800	202	220	125
Helwan.	1913 (31)	809 (31)	− 6.6 (30)	3620	661	−25.9	1050	901	− 5.2	11256 (25)	222 (25)	−56.4 (25)	14680	126	−66.0	7620	371	−43.7	10210	253	245	150
Aswan . . . (A)	2980 (27)	714 (27)	−10.8 (26)	3900	632	−14.2	1020	905	− 4.4	15269 (7)	123 (7)	−72.5 (7)	16900	091	−75.5	12070	201	−60.0	3420	672	280	58
1200 U.T.	(N)	(N)	(N)							(N)	(N)	(N)										
Mersa Matruh (A)	1864 (28)	820 (28)	− 6.2 (28)	3520	668	−14.2	990	901	− 1.9	11101 (27)	327 (27)	−56.5 (27)	13300	158	−60.0	8330	337	−48.4	10670	248	245	138
Helwan	2156 (27)	786 (27)	− 9.2 (27)	3630	663	−18.7	1120	889	− 5.7	11785 (24)	208 (24)	−56.1 (24)	15930	108	−64.8	8920	303	−52.2	9280	295	290	140
Aswan . . . (A)	3251 (28)	681 (28)	−16.2 (27)	4100	620	−20.2	1720	830	− 4.3	15401 (10)	120 (10)	−70.1 (10)	17360	085	−74.5	13900	166	−64.3	10740	247	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) — JANUARY 1974

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	6	12	0	—	0	—	1	5	2	4	2	8	2	6	3	11	7	11	4	12	1	24	0	0	0	28	10
	1000	3	14	0	—	1	17	3	12	1	17	1	13	0	—	2	17	2	12	4	15	1	19	—	0	0	18	15
	850	3	12	0	—	3	14	1	12	0	—	0	—	2	14	—	0	3	18	2	20	2	20	2	15	0	18	16
	700	1	7	0	—	0	—	0	—	0	—	1	10	1	3	2	16	1	24	2	24	2	20	3	11	0	13	15
	600	1	—	0	—	0	—	0	—	0	—	0	—	1	9	3	15	3	24	3	30	2	20	1	13	0	13	21
	500	0	—	0	—	0	—	0	—	0	—	0	—	—	0	3	25	2	24	5	37	—	0	1	19	0	11	30
	400	0	—	0	—	0	—	0	—	0	—	0	—	1	27	1	25	5	43	3	45	1	20	0	—	0	11	38
	300	0	—	0	—	0	—	0	—	0	—	0	—	1	40	1	29	5	66	3	40	0	—	1	26	0	11	49
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	65	8	66	1	52	0	—	0	—	0	10	64
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	53	7	77	2	96	0	—	0	—	0	10	79
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	8	61	1	90	0	—	0	—	0	9	64
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	24	4	47	2	54	0	—	0	—	0	7	45
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	25	3	29	0	—	0	—	0	6	27
	60	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	28	1	34	0	—	0	—	0	5	29
	50	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	43	3	31	1	17	0	—	0	—	0	5	30
	40	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	36	2	32	0	—	0	—	0	5	35
	30	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	47	1	22	0	—	0	—	0	3	39
	20	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	10	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	—	—
1200 T.U.	Surface	3	12	1	15	0	—	2	18	0	—	0	—	2	8	2	10	2	12	6	18	3	9	7	22	0	28	15
	1000	2	13	0	—	1	20	1	20	0	—	0	—	0	—	4	7	3	24	3	25	2	28	4	21	0	20	19
	850	0	9	0	—	3	15	1	16	0	—	1	15	0	—	0	—	3	8	5	25	1	27	2	17	0	19	16
	700	0	—	0	—	0	—	0	—	1	4	1	13	1	16	3	17	3	19	3	23	6	21	1	36	0	19	20
	600	0	—	0	—	1	12	0	—	0	—	0	—	1	14	3	18	5	23	3	30	3	46	2	14	0	18	25
	500	0	—	0	—	0	—	1	4	0	—	0	—	0	—	3	32	6	34	5	37	2	34	1	40	0	18	35
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	34	5	46	6	42	2	42	1	14	0	16	41
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	43	6	64	6	53	1	116	0	—	0	14	62
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	82	9	62	4	65	0	—	0	—	0	14	64
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	10	70	2	70	0	—	0	—	0	12	70
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	11	67	1	73	0	—	0	—	0	12	67
	100	0	—	0	—	0	—	1	—	0	—	0	—	0	—	0	—	8	48	2	31	0	—	0	—	0	10	44
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	36	1	38	0	—	0	—	0	6	36
	60	0	—	0	—	2	—	0	—	0	—	0	—	0	—	0	—	4	37	0	—	0	—	0	—	0	4	37
	50	0	—	0	—	5	—	0	—	0	—	0	—	0	—	0	—	4	23	0	—	0	—	0	—	0	4	23
	40	0	—	0	—	3	—	0	—	0	—	0	—	0	—	0	—	1	35	1	26	0	—	0	—	0	2	30
	30	0	—	0	—	2	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	—	—
	20	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	—	—
	10	0	—	0	—	0	—	0	—	0	—	0	—	—	—	0	—	0	—	0	—	0	—	0	—	—	—	—

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

HELWAN — JANUARY 1974

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	0	—	4	7	1	6	3	9	1	4	4	4	0	—	1	5	2	4	3	5	1	3	2	4	9	31	4
	1000	1	3	2	10	3	10	2	16	0	—	2	6	1	6	0	—	1	5	1	6	2	3	2	8	5	22	6
	850	8	17	2	14	2	7	0	—	1	12	0	—	2	6	1	4	4	21	4	14	5	22	7	25	0	31	17
	700	2	22	0	—	0	—	0	—	0	—	0	—	1	20	2	8	3	20	10	26	7	26	5	23	0	30	23
	600	1	42	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	20	11	27	7	35	6	30	0	30	29
	500	2	33	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	34	10	40	10	48	2	25	0	30	40
	400	0	—	0	—	0	—	0	—	0	—	1	—	0	—	0	—	2	30	14	66	8	51	4	43	0	28	56
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	99	14	68	8	74	0	—	0	23	71
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	149	13	76	4	75	0	—	0	18	80
	200	0	—	0	—	0	—	9	—	0	—	0	—	0	—	0	—	0	—	8	93	2	77	6	—	0	10	90
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	85	0	—	0	—	0	5	85
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	59	1	46	0	—	0	2	52
	70	0	—	1	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	34	0	—	0	—	0	1	34
	60	0	—	0	—	1	10	0	—	0	—	0	—	0	—	0	—	0	—	0	-	0	—	0	—	0	1	10
	50	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	25	0	—	0	—	0	1	25
	40	1	16	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	-	0	—	0	1	16
	30	0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	2	6	2	16	1	8	0	—	0	—	3	8	0	—	5	7	3	9	6	10	5	12	3	5	1	31	9
	1000	2	6	1	25	1	12	0	—	1	6	1	8	1	4	2	6	2	6	1	4	4	9	2	7	0	18	8
	850	3	15	1	7	1	14	0	—	1	7	2	5	1	7	0	—	4	18	7	24	3	19	6	17	0	29	17
	700	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	14	4	18	8	23	8	24	7	23	0	28	22
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	23	12	31	8	34	5	31	0	28	31
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	31	12	43	13	43	0	—	0	28	42
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	92	11	54	11	49	0	—	0	23	53
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	105	10	60	5	86	0	—	0	16	71
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	—	0	—	10	66	3	88	0	—	0	13	71
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	-	0	—	1	79	4	86	4	77	0	—	0	9	81
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	77	0	—	0	—	0	4	77
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	64	0	—	0	—	0	3	64
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	26	0	-	0	—	0	1	26
	60	0	—	1	22	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	22
	50	0	—	0	—	1	44	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	44
	40	0	—	0	—	1	66	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	66
	30	0	—	0	—	1	37	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	37
	20	0	—	0	—	1	27	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	-	0	—	0	1	27
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases wind has been observed from the range of direction during the month.
TN = The total number of cases the wind has 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 1974

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	17	12	3	10	1	10	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	10	7	10	0	29	12
	1000	3	12	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	3	10
	850	8	16	0	—	3	7	1	8	1	5	0	—	0	—	0	—	0	—	3	21	6	16	6	23	0	28	12
	700	0	—	0	—	0	—	0	—	0	—	1	7	0	—	0	—	2	20	2	18	4	26	3	37	0	12	25
	600	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	43
	500	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	59
	400	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	74
	300	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	97
	250	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	129
	200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	132
	150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	96
	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	12	13	5	9	0	—	1	9	0	—	0	—	0	—	0	—	0	—	2	16	5	14	4	10	0	29	12
	1000	0	—	1	10	0	—	0	—	0	—	—	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	10
	850	5	9	4	8	0	—	0	—	0	—	0	—	0	—	0	—	2	10	7	13	5	16	6	14	0	29	12
	700	0	—	1	4	0	—	0	—	0	—	0	—	0	—	0	—	5	28	13	28	4	21	1	7	0	24	25
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	7	49	5	45	2	31	1	10	0	15	43
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	69	6	54	0	—	0	—	0	9	59
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	80	4	68	0	—	0	—	0	8	74
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	107	4	86	0	—	0	—	0	8	97
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	129	2	129	0	—	0	—	0	6	129
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	133	4	132	0	—	0	—	0	6	132
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	89	1	122	0	—	0	—	0	3	96
	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	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.

REVIEW OF AGRO-METEOROLOGICAL STATIONS

MERSA MATRUH — JANUARY 1974

The prevailing weather in this month was markedly cold, humid and rainy. The mean daily air temperature was below normal and the mean daily relative humidity was markedly above normal.

The daily maximum air temperatures persited below normal the whole month, and its lowest value was 11.2°C reported on the 20*th*. The daily minimum air temperatures varied slightly round normal and its lowest value was 3.8°C reported on the 25*th*.

The total monthly rainfall was 102.4 mm. which is appreciably above normal (31.7 mm). The maximum daily rainfall was 34.6 mm. reported on the 12*th*. It is worthy of mention that both the monthly rainfall and the maximum daily rainfall are records since this station was operated in the year 1947.

The highest maximum soil temperatures were higher than last January at all depths with departures between 1.1°C (at 10 cm.) and 0.2°C (at 100 cm). The lowest minimum soil temperatures were lower than last January at all depths with departures between 1.7°C (at both 5 and 100 cm.) and 0.5°C (at 50 cm.)

The mean daily actual sunshine duration was lower than normal by 1.0 hour. The mean daily wind speed at 1.5 met. and pan evoporation were higher than the corresponding values of January 1973 by 0.7 m./sec. and 0.47 mm.

TAHRIR — JANUARY 1974

Weather in this month was cold and rainy. The mean daily air temperature was below normal and the mean daily relative humidity was above normal. The total monthly rainfall was 21.8 mm. against 10.2 mm. for normal.

The daily maximum air temperatures were below normal the whole month apart from the period (3*rd* - 6*th*) and the 28*th*. The departures below normal were appreciable most of the period from the 13*th* till the 26*th*. The daily minimum air temperature werebelow normal the whole month apart from the 19*th* and 31*st*.

The minimum air temperature at 5 cm above the dry and grass fields fell below 0°C. in 2 and 5 days respectively during this month. Its values on these days are given in the following :

Date	3	24			
Min. air temp. below 0°C at 5 cm above dry field	—1.8	—0.3			
Date	3	24	25	27	29
Min. air temp. below 0°C at 5 cm above grass field	—0.7	—2.2	—1.4	—0.2	—0.8

The highest maximum soil temperatures in the dry field were lower than last January at depths between 2 and 20 cm. with departures between 2.6°C (at 5 cm.) and 1.1°C (at 10 cm.), but higher at 50 and 100 cm. by 1.2°C and 1.7°C respectively. Thelowest minimum soil temperatures were higher than last January at 2, 20, 50 and 100 cm. depths with departures between 0.2°C and 1.0°C, but lower at 5 and 10 cm. by 0.7°C and 1.4°C respectively.

In the grass field the highest maximum soil temperatures were lower than last January at depths between 2 and 20 cm. with departures between 2.1°C (at 5 cm.) and 1.0°C (at 20 cm.), but higher at 50 and 100 cm. by 1.1°C and 0.8°C respectively. The lowest minimum soil temperatures were higher than last January at depths between 2 and 20 cm. with departures between 2.1°C (at 2 cm.) and 1.5°C (at 20 cm), and the same as last January at 50 and100 cm.

The mean daily wind speed at 1.5 met. was the same as normal. The mean daily actual sunshine duration and pan evaporation were lower than normal by 1.1 hour and 1.31 mm.

BAHTIM — JANUARY 1974

The prevailing weather in this month was cold, humid and rainy. The mean daily air temperature was below average and the mean daily relative humidity was above average. The total monthly rainfall was 24.2 mm. which is markedly above average (1.8 mm.).

The daily maximum air temperatures were below average the whole month apart from the 3rd with marked departures in the period from the 14th till the 26th. The daily minimum air temperatures varied round average with slight departures in general.

It is worthy of mention that minimum air temperature at 5 cm. above the dry and grass fields fell below 0°C in 6 and 9 days respectively during this month. Its values in these days are given in the following :

Date	3	4	11	24	25	29
Min. air temp. (°C) at 5 cm. above dry soil	—2.5	—1.2	—2.2	—1.0	—3.0	—2.0

Date	1	3	4	11	12	24	25	27	29
Min. air temp. (°C) at 5 cm. above grass field	—0.2	—2.5	—1.8	—1.6	—1.2	—3.0	—3.8	—1.0	—1.2

The highest maximum soil temperatures in the dry feild were higher than last January at all depths apart from 2 and 10 cm where the values were lower by 0.6° and 0.4°C respectively, the departures varied between 0.2°C (at 20 cm.) and 1.5°C (at 50 cm.). The lowest minimum soil temperatures were higher than last January at all depths apart from 20 cm. where its value was lower by 0.3°C, the departures varied between 4.3°C (at 2 cm) and 0.1°C (at 50 and 100 cm.).

In the grass field the highest maximum soil temperatures were lower than last January at depths between 2 and 10 cm. with departures between 1.6°C (at 5 cm.) and 0.4°C (at 10 cm.) ; but higher at depths between 20 and 100 cm. with slight departures between 0.2 and 0.3°C. The lowest minimum soil temperatures were higher than last January at depths between 2 and 20 cm. with departures between 1.7°C (at 2 cm) and 0.4°C (at 20 cm.) ; and lower than last January at 50 and 100 cm. by 0.2°C and 0.1°C.

The mean daily wind speed at 1.0 met. was higher than average by 0.1 m./sec. The mean daily actual sunshine duration and pan evaporation were lower than average by 1.0 hour and 0.57 mm.

KHARGA — JANUARY 1974

Weather in this month was generally cold and rainless apart from trace on the 26th. The mean daily air temperature was below normal and the mean daily relative humidity was above normal.

The daily maximum air temperatures were below normal the whole month apart from a short warm spell on the 2nd and 3rd yielding the highest maximum air temperature for the month (26.6°C). The lowest maximum air tempertaure was 14.5°C reported on the 26th. The daily minimum air temperatures were below normal most days of the month. It is worth of mention that minimum air temperature at 5 cm. above soil fell below 0°C on the 12th, 18th and 27th when its value was —0.4°, —1.8° and —0.4°C respectively.

The highest maximum soil temperatures were lower than last January at depths between 2 and 20 cm. with departures between 4.5°C (at 2 cm.) and 1.0°C (at 20 cm.) ; the same as last January at 50 cm. and higher by 0.2°C at 100 cm. The lowest minimum soil temperatures were higher than last January at 2 and 5 cm. by 0.7° C aud 0.5°C ; and lower at depths between 10 and 100 cm. with departures between 1.0°C (at 20 cm.) and 0.3°C (at 50 and 100 cm.).

The mean daily wind speed at 1.5 met. height, actual sunshine duration and pan evaporation were lower than normal by 0.3 m./sec., 1.3 hour and 1.33 mm. respectively.

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

JANUARY — 1974

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 . .	15.7	9.1	12.6	11.5	13.5	24	24	23.9	20.2	4.7	0.0	0.0	0.0	0.0	0.0	0.0
Tahrir	18.3	6.2	11.2	9.0	13.4	24	24	22.8	13.5	4.2	0.0	0.0	0.0	0.0	0.0	0.0
Bahtim	16.8	5.6	10.6	8.4	12.8	24	24	22.2	12.8	3.2	0.0	0.0	0.0	0.0	0.0	0.0
Kharga	19 6	4.8	12.6	10.2	15.1	24	24	23.0	16.2	8.0	1.1	0.1	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 5cm ABOVE GROUND OVER DIFFERENT FIELDS

JANUARY — 1974

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	Nalue	Date
Mersa Matruh . . .	18.9	3	11.2	20	14.6	4	3.8	25	1.6	25	—	—
Tahrir	22.4	3	13.4	17	9.8	19	0.8	3	—1.8	3	—2.2	24
Bahtim	20.6	3	11.8	23	9.8	8	6.2	25	—3.0	25	—3.8	25
Kharga	26.6	2	14.5	26	9.4	1	0.2	18	—1.8	18	—	—

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

JANUARY — 1974

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	a lass A	Total Amount Monthly	Max. fall in one day	Date
M. Matruh .	203.8	176.2	820.6	55	78	70	42	5	8.4	8.9	12.3	12	4.8	17	3.9	4.92	1 2.4	34.6	12
Tahrir . . .	269.0	189.1	322.9	59	74	53	32	27	7.3	7.1	9.7	13	4.0	8	2.8	2.74	21.8	5.4	16
Bahtim . . .	260.2	178.5	324.1	55	74	55	29	2	7.0	7.2	9.8	5	4.6	29	3.3	2.85	24.2	6.9	15
Kharga . .	383.8	259.1	384.0	78	54	35	26	4,3	5.7	5.6	8 4	7	3.3	19	5.7	4.91	Tr	Tr.	26

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

JANUARY—1974

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	20.1	19.4	17.8	16.2	16.3	18.2	20.1	—								
	L	3.1	3.5	5.6	8.6	12.0	14.3	17.6	—								
Tahrir	H	22.9	20.4	18.7	16.0	16.2	18.3	21.2	22.9	16.3	15.3	15.2	14.2	14.9	16.2	18.7	—
	L	3.3	3.7	4.5	8.5	12.7	15.5	18.9	21.3	6.2	7.1	7.5	9.3	12.0	14.1	16.7	—
Bahtim	H	27.4	21.4	18.0	17.0	19.6	21.5	24.6	25.5	16.0	14.2	13.2	12.9	14.8	17.1	20.4	—
	L	4.0	4.7	8.2	12.6	16.8	19.2	22.9	24.4	5.0	6.4	8.0	9.9	12.8	15.2	18.9	—
Kharga	H	34.3	28.9	25.0	21.0	21.2	23.9	27.1	28.7	—	—	—	—	—	—	—	—
	L	3.8	5.8	7.9	12.8	18.7	22.0	25.4	27.6	—	—	—	—	—	—	—	—

TABLE C 5.—SURFACE WIND

JANUARY — 1974

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	4.5	3.9	5.0	30	27	22	14	4	2	1	51	14
Tahrir	2.3	1.7	2.9	28	21	15	8	1	0	0	39	17
Bahtim	2.3	1.7	2.9	26	17	12	7	1	0	0	37	17
Khraga	2.3	1.6	3.1	29	18	7	0	0	0	0	26	13, 17

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THE ARAB REPUBLIC OF EGYPT

MONTHLY WEATHER REPORT

VOLUME 17 NUMBER 2

FEBRUARY, 1974

N.O.A.A.
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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 Egyptian Meteorological Authority issues serveral reports and publications on weather, climate and agro-meteorology. The principal publications are described on this page.

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

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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.

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

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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

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Note : For explanatory notes on the tables please refer to Volume 17, Number 1 (January 1974).

GENERAL SUMMARY OF WEATHER CONDITIONS

FEBRUARY 1974

Mostly cold the first half, warm the second - Subnormal sainfall in general.

PRESSURE DISTRIBUTION

Five depressions passed through the East Mediterranean on the 10*th*, 16*th*, 20*th* 26*th* and 28*th* and filled up rapidly.

The barometric pressure over Egypt was influenced alternatively by the passage of these Mediterranean depressions. High pressure established over East Mediterranean and NE Africa otherwise.

SURFACE WIND

Surface winds were generally light to moderate Nly and NW ly, but changed in north to WSW ly by the passage of the Mediterranean troughs. Winds freshended during several days in scattered places.

TEMPERATURE

During the first half of the morth, maximum and minimum air temperatures were below normal apart form a short period-Departures from normal were slight to moderate.

But during the second half maximum and minimum air temperatures were generally above normal and the departures were moderate but appreciable in few days in land.

The highest and lowest maximum air temperatures were 38.4°C at Aaswan on the 24*th* and 13.0°C at Ras El Hikma on the 10*th* respectively.

The highest and lowest minimum air temperatures were 19.5°C at both Kharga on the 24*th* and Quseir on the 25*th* and-1.7°C at Dakhla on the 17*th* respectively.

PRCIPITATION

Light rain fell over the northern parts during few days, and was associated with hail over Cairo on the 28*th*.

Rain was heavy on the 10*th* over some places in the Mediteirranean distrirct where its monthly amounts exceeded normal Elsewhere the monthly rainfall was markedly subnormal.

The highest monthly rainfall was 25-9 mm at Sidi Barani.

The highest daily rainfall was 21.0 mm also at Sidi Barrani on the 9*th*.

OTHER WEATHER PHENOMENA

Early morning mist developed during few days over some places in Delta, Cairo and north of Upper Egypt.

Rising sand was reported during few days in scattered places.

Cairo, March 1976

Chairman (A. F. HASAN)

Board of Directors

SURFACE DATA

Table A1— MONTHLY VALUES OF THE ATMOSPHERIC PRESSURE, AIR TEMPERATURE, RELATIVE HUMIDITY, BRIGHT SUNSHINE DURATION & PICHE EVAPORATION.

FEBRUARY — 1974

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	1015.2	— 2.1	20.2	+ 0.3	11.0	+ 1.0	15.8	15.1	+ 0.8	10.6	0.0	53	— 1	—	—	—	5.3
Mersa Matruh . (A)	1016.0	— 1.2	18.1	— 0.8	9.2	+ 0.7	13.6	13.7	+ 0.3	10.0	— 0.3	59	— 5	233.1	309.6	75	4.9
Alexandria . . (A)	1016.3	— 1.0	19.1	— 0.2	8.6	— 0.8	13.8	13.7	— 0.5	10.7	— 0.4	67	0	232.3	310.1	75	3.8
Port Said . . . (A)	1015.4	— 1.6	19.8	+ 1.1	11.5	— 0.5	15.6	15.0	+ 0.2	12.0	0.0	68	— 1	209.4	310.1	68	4.3
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1015.9	— 1.7	20.1	— 0.8	6.1	— 0.6	13.1	12.3	— 0.8	9.8	— 0.3	71	+ 5	230.2	310.7	74	2.6
Cairo . . . . . (A)	1016.0	— 1.5	20.5	— 0.1	10.3	+ 0.9	15.4	15.2	+ 0.3	11.1	+ 0.6	57	+ 3	—	—	—	8.5
Fayoum	—	—	22.1	— 0.1	6.4	— 1.0	14.2	13.9	— 0.8	10.0	— 0.2	58	+ 5	—	—	—	4.1
Minya . . . . (A)	1010.8	— 0.9	22.4	— 0.1	5.3	+ 0.1	13.8	13.5	+ 0.1	9.2	+ 0.2	53	0	254.1	313.7	81	6.4
Assyout . . . (A)	1016.0	— 1.2	22.5	— 0.2	7.3	— 0.3	14.9	14.5	— 0.6	8.9	— 0.4	42	+ 1	—	—	—	8.0
Luxor . . . . (A)	1014.6	— 1.5	25.5	+ 0.1	7.2	+ 0.3	16.4	16.0	+ 0.0	9.9	— 0.2	40	— 2	—	—	—	6.6
Aswan . . . . (A)	1014.3	— 1.5	26.4	+ 0.3	10.0	+ 0.6	18.2	17.8	+ 0.1	9.7	+ 0.3	27	+ 2	—	—	—	15.9
Siwa	1016.3	— 1.4	21.3	— 0.5	6.9	+ 0.1	13.6	13.3	— 0.8	8.5	— 0.3	47	+ 2	246.4	312.7	79	8.4
Bahariya	1014.8	— 3.8	21.4	— 0.9	6.8	+ 0.4	14.1	14.1	— 0.1	8.2	— 0.6	38	— 6	—	—	—	7.8
Farafra	1017.6	— 1.9	22.0	— 0.7	6.0	+ 0.7	14.0	13.9	+ 0.1	7.8	+ 0.3	36	— 4	—	—	—	7.9
Dakhla	1017.0	— 1.1	22.4	— 1.4	3.5	— 2.1	13.0	12.8	— 1.3	6.8	— 1.4	34	+ 1	—	—	—	8.5
Kharga	1015.6	— 1.7	24.0	— 0.4	7.4	+ 0.2	15.7	16.0	— 0.1	8.9	0.0	32	— 4	262.4	316.5	83	9.4
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada . .	1014.9	— 0.8	22.0	+ 0.6	10.9	+ 0.9	16.4	16.5	— 0.1	11.2	0.1	49	0	247.0	314.8	78	8.4
Quser	1014.5	— 1.5	22.3	— 0.6	15.1	+ 0.7	13.7	18.5	— 0.0	12.6	0.0	46	0	—	—	—	7.6

Table A 2 — MAXIMUM AND MINIMUM AIR TEMPERATURE

FEBRUARY — 1974

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	24.3	18	15.8	10	0	0	0	0	0	9.9	—	14.4	19	7.8	13	7	0	0	0
Mersa Matruh (A)	22.1	14	14.6	10	0	0	0	0	0	6.8	—	12.5	24	5.4	5	20	0	0	0
Alexandria (A)	23.6	20	15.6	1	0	0	0	0	0	6.5	—	13.8	12	4.3	2	18	1	0	0
Port Said (A)	26.2	20	15.7	1	1	0	0	0	0	11.2	—	14.8	24	7.8	1	5	0	0	0
El Arish																			
Ghazza																			
Tanta	25.8	20	15.7	1	1	0	0	0	0	—	—	11.8	24	2.0	4	27	10	0	0
Cairo (A)	26.0	20	15.0	1	2	0	0	0	0	—	—	17.2	24	6.6	6	13	0	0	0
Fayoum	26.5	23	16.9	1	3	0	0	0	0	4.3	—	13.0	24	3.3	9	25	8	0	0
Minya (A)	29.0	20	16.0	1	4	0	0	0	0	4.1	—	14.0	24	1.5	2	25	15	0	0
Assyout (A)	31.0	20	16.4	1	5	0	0	0	0	4.2	—	17.1	24	1.9	3	24	6	0	0
Luxor (A)	32.0	21	19.1	1	14	3	0	0	0	2.2	—	17.8	25	2.2	2.5	22	6	0	0
Aswan (A)	38.4	24	18.8	1	17	5	3	0	0	—	—	18.0	25	5.3	4	17	0	0	0
Siwa	30.5	23	17.4	2	1	1	0	0	0	4.1	—	14.7	24	1.4	3	24	15	0	0
Bahariya	28.7	20	15.7	1	3	0	0	0	0	6.2	—	16.4	20	2.3	2	24	10	0	0
Farafra	33.2	23	16.2	2	5	2	0	0	0	5.5	—	13.8	24	1.0	14	23	10	0	0
Dakhla	31.4	20-23	16.5	2	7	2	0	0	0	3.8	—	13.9	24	— 1.7	17	26	21	3	0
Kharga	33.4	23	17.4	1	9	2	0	0	0	5.2	—	19.5	24	2.6	9	23	9	0	0
Tor																			
Hurghada	25.0	16	17.2	1	0	0	0	0	0	—	—	20.3	21	8.7	5	15	0	0	0
Quseir	25.8	10	18.0	1	2	0	0	0	0	12.5	—	19.5	25	13.0	11	0	0	0	0

Table A 3. — SKY COVER AND RAINFALL

FEBRUARY — 1974

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	3.3	2.1	3.0	2.9	2.9	11.5	+ 1.2	9.1	10	0	5	2	1	0	0	0
Mersa Matruh (A)	2.5	3.1	4.0	3.1	3.2	21.7	+ 6.2	13.3	10	0	5	3	1	1	0	0
Alexandria . . (A)	3.1	4.1	4.6	3.8	3.8	4.4	—22.7	4.2	10	0	2	1	0	0	0	0
Port Said . . (A)	—	2.8	3.0	2.4	—	15.4	+ 4.1	11.6	10	0	3	2	1	1	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta.	0.7	2.3	4.1	1.6	2.1	7.7	+ 0.7	6.4	27	0	2	2	1	0	0	0
Cairo . . . . . (A)	1.1	2.0	3.9	2.3	2.5	1.0	— 2.9	1.0	10	2	1	1	0	0	0	0
Fayoum	—	2.4	3.0	1.0	—	Tr.	— 1.4	Tr.	10	1	0	0	0	0	0	0
Minya . . . . (A)	1.1	2.4	2.7	1.1	1.6	Tr.	— 1.1	Tr.	10	1	0	0	0	0	0	0
Assyot . . . . (A)	0.5	1.5	2.0	1.4	1.2	0.0	— 0.4	0 0	—	0	0	0	0	0	0	0
Luxor . . . . (A)	2.0	2.6	2.6	2.7	2.3	0,0	— 0.1	0.0	—	0	0	0	0	0	0	0
Aswan . . . . (A)	0.8	2.1	1.6	1.4	1.4	0.0	0·0	0.0	—	0	0	0	0	0	0	0
Siwa	2.5	2.3	2.6	1.5	2.3	0.0	— 2.3	0.0	—	0	0	0	0	0	0	0
Bahariya	0.9	1.8	2.4	1.1	1.5	0.0	— 1.2	0.0	—	0	0	0	0	0	0	0
Farafra	—	1.7	1.6	1.5	—	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Dakahla	0.7	1.7	2.0	1.4	1.3	0.0	— 0.3	0.0	—	0	0	0	0	0	0	0
Kharga	1.0	2.2	2.0	1.1	1.6	0.0	— 0.3	0.0	—	0	0	0	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	1.7	2.6	2.7	2.2	2.8	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Quseir	1.3	2.4	2.9	1.8	2.1	Tr.	0.0	Tr.	24	1	0	0	0	0	0	0

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

FEBRUARY — 1974

Station	Precipitation				Frost	Thunderstorm	Mist Vis ≥ 1000 metres	Fog Vis < 1000 Metres	Haze Vis ≥ 1000 Metres	Thick Haze Vis < 1000 Metres	Dust or Sandrieing Vis ≥ 1000 Metres	Dust or Sandstorm Vis < 1000 Metres	Gale	Clear Sky	Cloudy Sky
	Rain	Snow	Ice. Pellets	Hail											
Sallum	5	0	0	0	0	0	0	0	0	0	0	0	0	9	1
Mersa Matruh (A)	5	0	0	0	0	0	0	0	2	0	7	2	0	7	3
Alexandria (A)	2	0	0	0	0	0	3	0	1	0	3	0	0	5	2
Port Said (A)	2	0	0	0	0	0	0	0	0	0	3	0	0	—	—
Al Arish															
Ghazza															
Tanta	2	0	0	0	0	0	6	0	2	0	1	2	0	13	1
Cairo (A)	1	0	0	0	0	0	8	1	9	0	8	2	0	10	0
Fayoum	0	0	0	0	0	0	1	0	0	0	0	0	0	—	—
Minya (A)	0	0	0	0	0	0	11	0	6	0	4	0	0	18	1
Assyout (A)	0	0	0	0	0	0	1	0	3	0	5	0	0	15	2
Luxor (A)	0	0	0	0	0	0	0	0	23		4	0	0	14	4
Aswan (A)	0	0	0	0	0	0	0	0	3	0	7	2	1	17	0
Siwa	0	0	0	0	0	0	0	0	1	0	8	2	0	15	3
Bahariya	0	0	0	0	0	0	0	0	0	0	1	0	0	19	0
Farafra	0	0	0	0	0	0	0	0	3	0	3	0	0	—	—
Dakhala	0	0	0	0	0	0	0	0	1	0	3	0	0	18	0
Kharga	0	0	0	0	0	0	0	0	3	0	5	0	0	17	0
Tor															
Hurghada	0	0	0	0	0	0	0	0	0	0	8	0	0	17	4
Quseir	0	0	0	0	0	0	0	0	2	0	3	0	0	15	3

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

FEBRUARY — 1974

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												
					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	2	3	1—10	5	7	36	45	30	15	19	15	15	82	82	36	387
				11—27	0	0	4	6	8	12	3	11	70	57	85	23	279
				28—47	0	0	0	0	0	0	0	0	1	0	0	0	1
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	5	7	40	51	38	27	22	26	86	139	167	29	667
Mersa Matruh	12	0	4	1—10	26	27	23	12	34	32	33	34	82	60	20	32	415
				11—27	2	2	1	3	28	16	13	36	26	33	30	50	240
				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	28	29	24	15	62	48	46	70	108	94	50	82	656
Alexandria	1	0	0	1—10	63	69	38	45	37	26	35	47	26	31	39	65	521
				11—27	7	2	6	19	1	0	3	9	19	29	36	19	150
				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	70	71	44	64	38	26	38	56	45	60	75	84	671
Tanta	39	0	1	1—10	60	66	37	41	31	20	34	24	78	54	57	58	560
				11—27	3	3	1	14	3	0	5	0	13	10	14	6	72
				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	63	69	38	55	34	20	39	24	91	64	71	64	632
Cairo	26	0	1	1—10	41	67	72	31	24	12	28	40	42	48	36	30	471
				11—27	17	31	12	9	7	7	13	26	30	15	6	1	174
				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	98	84	40	31	19	41	66	72	63	42	31	645
Fayoum	8	4	0	1—10	69	185	26	13	12	17	33	45	83	77	31	28	619
				11—27	0	22	13	0	0	0	0	1	0	5	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	69	207	39	13	12	17	33	46	83	82	31	28	660
Minya	5	1	1	1—10	228	45	9	2	2	32	54	31	16	29	35	73	566
				11—27	47	17	0	0	0	0	4	1	1	3	15	0	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	275	62	9	2	2	32	58	32	17	32	50	94	665
Asyout	39	0	13	1—10	23	11	10	25	7	11	10	5	17	114	164	77	474
				11—27	13	3	0	2	6	4	4	1	1	22	73	44	143
				28—47	0	0	0	0	0	0	3	0	0	0	0	0	3
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	36	14	10	27	13	15	17	6	18	136	207	121	620

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

FEBRUARY — 1974

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	65	0	4	1-10	59	50	34	18	15	22	88	39	34	65	60	75	559
				11-27	1	1	8	0	0	0	1	0	0	2	19	12	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	**60**	**51**	**42**	**18**	**15**	**22**	**89**	**39**	**34**	**67**	**79**	**87**	**603**
Aswan	10	0	1	1-10	139	97	15	7	2	1	5	1	2	12	23	133	437
				11-27	49	24	2	0	1	1	4	0	0	1	15	126	223
				28-47	0	0	0	0	0	0	1	0	0	0	0	0	1
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**188**	**121**	**17**	**7**	**3**	**2**	**10**	**1**	**2**	**13**	**38**	**259**	**661**
Siwa	53	6	1	1-10	5	22	37	59	50	43	24	18	32	107	33	4	434
				11-27	2	2	1	7	35	7	9	9	16	32	44	14	178
				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	**7**	**24**	**38**	**66**	**85**	**50**	**33**	**27**	**48**	**139**	**77**	**18**	**612**
Dakhla	7	33	28	1-10	56	26	24	32	25	17	24	24	29	72	101	110	540
				11-27	11	1	0	1	0	4	0	0	1	3	27	16	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	**67**	**27**	**24**	**33**	**25**	**21**	**24**	**24**	**30**	**75**	**128**	**126**	**604**
Kharga	5	2	9	1-10	138	80	24	11	13	9	10	2	17	33	59	128	524
				11-27	80	5	0	0	0	0	0	0	0	0	12	35	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	**218**	**85**	**24**	**11**	**13**	**9**	**10**	**2**	**17**	**33**	**71**	**163**	**656**
Hurghada	2	4	0	1-10	37	11	14	16	20	9	4	3	2	27	194	30	367
				11-27	51	2	0	1	7	6	1	0	0	9	95	125	297
				28-47	0	0	0	0	0	0	0	0	0	0	2	6	2
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**88**	**13**	**14**	**17**	**27**	**15**	**5**	**3**	**2**	**36**	**291**	**155**	**666**
Quseir	1	0	1	1-10	38	46	25	14	7	6	12	11	12	22	152	104	449
				11-47	81	59	0	0	0	1	5	0	0	3	19	51	221
				28-27	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**	**105**	**25**	**14**	**7**	**7**	**17**	**11**	**12**	**25**	**171**	**155**	**670**

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

FEBRUARY — 1974

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 1000 U.T.	Surface	25	*1016mb.	*1027mb.	*1010mb.	25	11.6	15.0	9.4	25	7.9
	1000	25	162	251	112	24	11.8	15.8	8.2	24	7.6
	850	25	1508	1585	1454	23	5.2	16.0	— 1.8	23	— 6.7
	700	25	3078	3193	2984	25	— 2.7	5.4	—12.8	25	—16.7
	600	24	4281	4372	4143	24	—10.5	— 3.9	—20.1	24	—23.7
	500	24	5658	5776	5469	24	—20.6	—13.5	—25.3	24	—32.5
	400	24	7274	7439	7030	24	—32.3	—25.0	—39.4	24	—44.0
	300	24	9245	9459	8970	24	—15.3	—41.3	—51.3	23	—55.2
	250	24	10447	10670	10176	24	—51.0	—41.1	—57.1	22	—60.3
	200	22	11892	12111	11650	22	—53.3	—42.5	—62.7	17	—61.1
	150	22	13726	13946	13526	22	—58.1	—51.0	—62.4	10	—64.6
	100	20	16243	16397	16098	20	—64.6	—58.1	—72 5	2	—72.6
	70	17	18444	18589	18230	17	—62.6	—56.1	—71.1	—	—
	60	17	19435	19590	19200	17	—61.0	—57.0	—67.4	—	—
	50	17	20537	20719	20280	17	—59.5	—55.1	—65.5	—	—
	40	14	22014	22230	21760	14	—57.6	—53.3	—58.4	—	—
	30	14	23752	23969	23611	14	—55.4	—50.4	—63.0	—	—
	20	5	26372	26495	26244	5	—52.1	—51.0	—54.3	—	—
	10	1	30831	30831	30831	1	—41.9	—41.9	—41.9	—	—
Helwan 1000 U.T.	Surface	28	*999mb.	*1009mb,	*992mb,	28	11.8	20.6	8.6	28	5.3
	1000	25	138	215	010	11	10.7	14.4	8.4	11	6.1
	850	25	1488	1515	1418	25	6.7	19.0	— 1.0	25	6.9
	700	25	3063	3145	2976	25	— 0.8	7.1	— 9.6	25	—16.0
	600	25	4279	4386	4153	25	— 9.2	— 3.6	—17.4	25	—21.6
	500	25	5659	5794	5494	25	—19.2	—14.5	—26.9	25	—29.9
	400	25	7281	7446	7070	25	—30.9	—26.1	—37.3	25	—40.4
	300	24	9278	9565	9058	24	—44.4	—40.9	—49.2	24	—52.5
	250	23	10484	10778	10273	23	—49.8	—38.7	—57.0	23	—58.4
	200	22	11917	12131	11720	22	—54.3	—44.6	—62.3	18	—62.1
	150	21	13732	13950	13550	21	—60.0	—56.0	—66.0	8	—66.5
	100	18	16236	16390	16122	18	—67.5	—60.8	—76.8	—	—
	70	15	18380	18471	18300	15	—65.3	—58.7	—70.2	—	—
	60	13	19372	19470	19280	13	—62.6	—60.3	—66.0	—	—
	50	13	20458	20578	20381	13	—60.0	—58.0	—63.2	—	—
	40	12	21951	22020	21860	12	—56.9	—54.7	—59.7	—	—
	30	10	23690	23759	23596	10	—55.5	—53.0	—58.9	—	—
	20	6	26269	26367	26194	6	—52.6	—50.2	—55.9	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 1000 U.T.	Surface	27	*990mb.	*998mb.	*982mb.	27	12.9	22.2	8.0	27	— 0.1
	1000	27	126	177	034	—	—	—	—	—	—
	850	27	1494	1529	1452	27	11.0	23.0	1.2	27	— 3.7
	700	27	3097	3167	3042	27	4.5	10.8	— 0.1	25	—10.9
	600	25	4337	4423	4277	25	— 3.6	— 0.2	— 4.1	23	—16.2
	500	24	5753	5845	5689	24	—13.6	— 8.1	—16.8	23	—24.4
	400	24	7412	7528	7325	23	—25.5	—19.8	—30.1	23	—33.8
	300	22	9451	9599	9240	21	—38.4	—32.3	—42.0	19	—45.7
	250	21	10681	10798	10581	20	—47.2	—39.4	—50.5	18	—54.3
	200	20	12134	12291	12045	19	—56.2	—51.5	—62.3	15	—63.1
	150	20	13924	14119	13797	20	—65.4	—58.9	—70.0	—	—
	100	14	16233	16448	16219	14	—75.2	—71.0	—81.2	—	—
	70	10	18405	18494	18317	10	—71.9	—66.8	—77.1	—	—
	60	7	19353	19460	19090	7	—70.0	—65.8	—74.2	—	—
	50	7	20439	20517	20341	7	—65.5	—61.2	—69.0	—	—
	40	5	21790	22000	21780	5	—59.5	—57.3	—62.9	—	—
	30	4	23664	23725	23547	4	—56.1	—52.7	—57.6	—	—
	20	2	26202	26291	26123	2	—54.0	—53.3	—54.6	—	—
	10	1	30861	30861	30861	1	—41.0	—41.0	—41.0	—	—

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

FEBRUARY — 1974

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 UT	Surface	24	* 1015m.b.	* 1026m.b.	* 1007m.b.	24	17.4	21.2	13.5	24	7.3
	1000	24	156	245	087	23	15.8	20 0	12.2	23	6.0
	850	24	1510	1581	1451	23	5.3	19.0	0.4	23	—7.1
	700	24	3079	3168	3000	23	— 2.3	4.8	—10.1	23	—16.7
	600	24	4285	4401	4177	24	—10.4	— 4.0	—17.0	21	—23.6
	500	24	5665	5746	5516	24	—20.0	—14.0	—27.4	24	—31.9
	400	24	7279	7467	7089	24	—31.6	—25.5	—41.1	24	—43.6
	300	24	9256	9496	9017	24	—45.0	—39.7	—53.3	24	—55.8
	250	24	10458	10725	10191	24	—50.3	—39.9	—56.3	24	—60.9
	200	24	11902	12195	11641	24	—53.6	—43.2	—62.5	19	—63.4
	150	23	13749	14031	13503	23	—58.2	—50.7	—67.1	12	—65.8
	100	19	16268	16474	16048	19	—62.2	—52.7	—69.6	—	—
	70	17	18481	18695	18258	17	—61.5	—51.3	—76.5	—	—
	60	16	19424	19700	19240	16	—60.4	—51.7	—66.1	—	—
	50	16	20600	20916	20348	16	—58.3	—52.3	—64.4	—	—
	40	13	22071	22400	21850	13	—54.5	—48.7	—60.1	—	—
	30	9	23834	24130	23609	9	—54.0	—48.5	—61.0	—	—
	20	5	26410	26602	26276	5	—50.3	—46.2	—54.3	—	—
	10	2	30855	30964	30746	2	—47.5	—47.1	—47.9	—	—
Helwan 1200 UT	Surface	28	* 999m.b.	* 1008m.b.	* 987m.b.	28	19.0	23.8	12.7	28	3.4
	1000	24	125	190	027	10	18.0	23.8	13.7	10	3.3
	850	24	1491	1542	1410	24	7.4	17.8	0.2	24	— 7.5
	700	24	3066	3143	2999	24	0.6	5.4	—10.9	24	—17.5
	600	24	4281	4379	4143	24	— 9.4	— 4.2	—19.3	24	—24.2
	500	24	5671	5787	5471	23	—18.3	—13.3	—29.0	23	—32.6
	400	24	7301	7444	7033	24	—29.8	—24.6	—36.2	24	—43 1
	300	24	9044	9459	9023	24	—42.8	—38.4	—47.0	24	—54.6
	250	24	10511	10679	10260	24	—47.8	—36.5	—54.5	24	—59.4
	200	24	11969	12154	11749	24	—52.1	—44.3	—62.7	22	—63.1
	150	24	13807	13981	13629	24	—58.0	—51.5	—61.8	15	—67.2
	100	21	16308	16445	16180	21	—65.5	—58.0	—73.0	1	—66.4
	70	19	18481	18593	18385	19	—64.1	—59.1	—70.0	—	—
	60	18	19464	19550	19370	18	—62.4	—58.8	—68.3	—	—
	50	18	20565	20645	20439	18	—58.9	—53.7	—66.4	—	—
	40	13	22061	22180	21950	13	—54.1	—52.0	—58.6	—	—
	30	12	23831	23961	23658	12	—51.6	—47.1	—56.8	—	—
	20	8	26514	26631	26359	8	—46.8	—42.8	—51.0	—	—
	10	1	30928	30928	30928	1	—49.0	—49.0	—49.0	—	—
Aswan 1200 UT	Surface	27	* 991m.b.	* 997m.b.	* 984m.b.	27	25.0	34.0	18.6	27	4.3
	1000	27	116	167	047	—	—	—	—	—	—
	850	27	1505	1539	1466	27	13.1	24.0	5.4	27	— 7.5
	700	26	3115	3181	3049	26	5.3	12.0	— 2.3	24	—16.4
	600	26	4358	4434	4275	26	— 2.3	2.3	— 7.2	24	—21.1
	500	26	5780	5867	5676	26	—12.5	— 7.0	—16.3	24	—28.9
	400	26	7450	7560	7336	26	—23.4	—17.9	—29.4	24	—39.8
	300	25	9507	9645	9377	25	—36.4	—31.7	—40.2	23	—50.3
	250	25	10750	10891	10619	25	—44.5	—38.2	—50.1	22	—57.6
	200	25	12217	12357	12089	25	—53.5	—44.6	—60.0	21	—65.4
	150	23	14015	14152	13894	23	—63.5	—59.6	—68.4	1	—70.6
	100	21	16441	16590	16359	21	—72.3	—66.9	—78.3	—	—
	70	17	18556	18680	18443	17	—71.4	—62.9	—76.7	—	—
	60	15	19519	19620	19410	15	—67.5	—64.6	—71.8	—	—
	50	15	20594	20710	20473	15	—59.9	—58.1	—64.8	—	—
	40	11	22046	22220	21740	11	—55.3	—50.0	—57.8	—	—
	30	11	23847	23989	23713	11	—51.3	—47.8	—55.3	—	—
	20	9	26565	26726	26458	9	—46.5	—43.2	—49.5	—	—
	10	4	31210	31272	31108	4	—38.6	—37.7	—40.4	—	—

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 — 1974

	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)										
	Mersa Matruh.	2441 (24)	760 (24	—11.2 (24)	3800	644	—26.0	1400	863	—0.8	11399 (21)	228 (21)	—55.7 (21)	17060	038	—71.3	8080	356	—39.3	11208	217	230	140
	Helwan. . . .	2714 (25)	735 (25)	—12.5 (25)	3860	633	—12.8	1360	865	—0.3	11113 (23)	238 (23)	—55.4 (23)	16215	100	—73.5	6490	437	—34.7	10790	—	265	150
	Aswan.	3797 (25)	651 (25)	—13.4 (23)	4350	603	—6.4	2160	783	—7.3	16553 (10)	098 (10)	—76.3 (10)	18740	067	—79.0	14600	134	—69.4	2965	—	230	44
1200 U.T.		(N)	(N)	(N)							(N)	(N)	(N)										
	Mersa Matruh.	2546 (24)	752 (24)	—11.9 (23)	3930	635	—30.3	1000	915	—5.5	10921 (22)	240 (22)	—54.6 (22)	16700	096	—71.9	8120	344	—49.6	9690	289	235	133
	Helwan. . . .	2803 (24)	727 (24)	—14.6 (23)	3730	650	—17.7	1530	848	—8.4	10938 (23)	243 (23)	—53.6 (23)	16150	105	—71.8	6720	419	—37.4	14630	—	265	169
	Aswan.	3943 (26)	634 (26)	—19.1 (25)	4700	578	—	2470	754	—15.0	15720 (17)	114 (17)	—72.5 (17)	17550	083	—78.3	13500	159	—64.6	10800	249	250	165

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

Table B 3. *(contd.)*—**NUMBER OFOCCURRNES OF WIND IRECTION WITHEN SPECIFIEDRANETH AND SEGMEAN SCALA RWIND SPD AT TH STEANDARD AND SELECTED PRESSURE SURFACES**

MERSA MATRUH (A) — FEBRUARY 1974

Time	Pressure surface (Millibar	Wind between specified ranges of direction (000 - 360°)																								Number of Calm winds	Total Number of Observations (T N)	Mean Scalar win Speed (Knots) d
		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	9	1	18	0	—	2	8	3	9	2	6	2	10	1	10	8	7	3	9	1	10	0	—	1	25	8
	1000	1	8	0	—	1	5	3	12	3	15	0	—	1	11	2	14	3	13	5	19	1	20	1	8	0	21	14
	850	1	4	0	—	0	—	1	12	0	—	4	17	0	—	2	22	3	15	6	20	2	19	2	12	0	21	17
	700	0	—	0	—	0	—	0	—	0	—	0	—	1	32	2	30	7	20	6	28	2	16	0	—	0	18	24
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	28	5	32	5	21	2	26	0	—	0	17	28
	500	0	—	0	—	0	—	0	—	0	—	0	—	1	40	3	38	5	42	7	39	1	28	0	—	0	17	39
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	52	7	60	6	52	0	—	1	13	0	17	53
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	45	6	85	6	65	0	—	0	—	0	15	69
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	66	4	86	4	74	0	—	0	—	0	10	77
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	90	2	64	2	59	0	—	0	—	0	6	71
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	40	0	—	1	58	0	—	0	2	49
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	36	0	—	0	—	0	—	0	—	0	1	36
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	0	—
	60	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	0	—
	50	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	0	—
	40	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	0	—
	30	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	0	—
	20	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	0	—
	10	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	0	—
1200 U.T.	Surface	7	8	0	—	0	—	2	20	1	18	1	28	1	25	1	14	2	12	0	—	3	18	6	11	0	24	18
	1000	0	—	1	12	0	—	2	22	0	—	2	27	1	28	1	15	3	13	0	—	8	20	5	11	0	23	17
	850	2	6	3	8	0	—	0	—	2	12	2	31	0	—	3	18	3	10	4	24	3	19	1	20	0	23	17
	700	1	11	1	7	0	—	0	—	0	—	0	—	0	—	7	30	5	22	4	21	4	25	0	—	0	22	24
	600	1	8	0	—	0	—	0	—	0	—	0	—	0	—	8	42	6	29	3	26	3	26	0	10	0	22	31
	500	0	—	0	—	0	—	0	—	0	—	0	—	1	35	5	46	5	49	8	38	3	19	0	—	0	22	40
	400	0	—	0	—	0	—	0	—	0	—	0	—	1	56	3	64	9	59	7	43	1	25	0	—	0	21	53
	300	0	—	0	—	0	—	0	—	0	—	0	—	1	81	1	62	8	79	5	70	3	33	0	—	0	18	68
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	70	4	83	6	75	2	42	0	—	0	14	72
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	52	1	69	2	37	0	—	0	7	50
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	47	1	48	0	—	0	—	0	—	0	2	48
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	35	0	—	0	—	0	—	0	—	0	1	35
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	—	—
	60	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	—	—
	50	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	—	—
	40	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	—	—
	30	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	—	—
	20	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	—	0	—	0	—	0	—	—	—	—
	10	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	—	0	—	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. *(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 1974

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	8	7	2	8	2	6	1	14	2	4	0	—	0	—	1	6	1	7	2	4	2	4	1	28	6
	1000	1	22	4	12	4	16	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	8	1	12	0	11	14
	850	2	17	2	8	3	11	0	—	1	7	1	6	0	—	4	26	2	10	1	13	6	16	3	16	0	25	15
	700	1	5	1	6	0	—	0	—	0	—	0	—	0	—	2	20	3	32	5	23	8	22	5	29	0	25	23
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	34	4	35	10	26	5	35	0	25	31
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	44	3	54	12	31	4	40	0	25	38
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	51	10	54	8	64	2	42	0	24	56
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	86	7	76	7	58	1	94	0	17	71
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	7	91	6	68	0	—	0	13	81
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	82	1	54	0	—	0	7	78
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	77	1	116	0	—	0	3	90
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	27	0	—	0	—	0	—	0	1	27
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	27	0	—	0	—	0	1	27
	60	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	6	0	—	0	—	0	1	6
	50	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	1	0	—	0	—	0	—	0	—	0	1	1
	40	0	—	0	—	0	—	1	19	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	19
	30	0	—	0	—	0	—	6	—	1	23	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	23
	20	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	10	0	—	0	—	0	—	0	—	9	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
1200 U.T.	Surface	2	10	7	7	0	—	0	—	0	—	2	5	0	—	2	4	5	7	6	9	0	—	3	5	1	28	7
	1000	2	7	5	13	0	—	0	—	0	—	0	—	0	—	0	—	1	4	0	—	1	10	1	2	0	10	9
	850	2	8	2	6	5	11	1	6	0	—	0	—	0	—	2	10	1	20	7	14	2	20	2	11	0	24	12
	700	2	13	0	—	0	—	0	—	0	—	0	—	0	—	2	26	3	31	5	19	10	20	2	26	0	24	22
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	32	3	50	10	34	7	29	3	32	0	24	34
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	36	3	33	8	34	9	41	2	57	0	23	38
	400	1	43	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	28	8	51	10	54	1	48	0	21	51
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	10	77	9	70	1	50	0	20	73
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	63	9	81	7	86	0	—	0	17	78
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	57	9	81	2	87	0	—	0	12	80
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	87	2	52	0	—	0	5	73
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	69	1	27	0	—	0	4	59
	70	0	—	0	—	0	—	1	27	0	—	0	—	0	—	0	—	9	—	0	—	1	54	0	—	0	2	40
	60	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	46	0	—	0	—	0	2	46
	50	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	10	0	—	0	—	0	1	10
	40	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	30	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	20	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	10	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	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 (*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 1974

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	11	1	7	1	10	0	—	0	—	1	4	0	—	0	—	0	—	0	—	1	7	2	8	0	27	10
	1000	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	850	2	28	3	13	0	—	1	16	2	20	0	—	1	32	0	—	1	19	4	16	3	15	8	12	0	25	16
	700	0	—	1	16	0	—	0	—	0	—	0	—	0	—	0	—	2	33	0	—	2	26	1	12	0	6	24
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	24	0	1	24
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	250	0	—	0	—	0	—	6	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	200	0	—	0	—	0	—	6	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	60	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	50	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	40	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	30	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	20	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	10	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
1200 U.T.	Surface	15	11	1	10	1	5	3	5	0	—	0	—	0	—	1	6	0	—	0	—	1	5	4	12	1	27	10
	1000	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	850	3	12	5	12	3	10	2	12	1	18	0	—	1	8	1	5	0	—	1	10	6	18	4	12	0	27	13
	700	1	25	2	12	0	—	1	6	0	—	0	—	0	—	3	15	5	27	6	30	5	20	1	18	0	24	22
	600	0	—	0	—	0	—	—	—	0	—	0	—	0	—	6	—	6	34	10	39	4	33	2	26	0	22	37
	500	0	—	0	—	0	—	—	—	1	41	1	9	0	—	0	—	5	52	11	55	3	42	0	—	0	21	49
	400	0	—	0	—	0	—	—	—	0	—	0	—	0	—	0	—	5	76	9	71	5	58	0	—	0	19	69
	300	0	—	0	—	0	—	—	—	0	—	0	—	0	—	0	—	5	79	10	88	1	84	0	—	0	16	85
	250	0	—	0	—	0	—	—	—	0	—	0	—	0	—	0	—	2	134	9	99	3	98	0	—	0	14	96
	200	0	—	0	—	0	—	—	—	0	—	0	—	0	—	0	—	1	121	7	109	2	110	0	—	0	10	111
	150	0	—	0	—	0	—	—	—	0	—	0	—	0	—	0	—	0	—	5	89	0	—	0	—	0	5	89
	100	0	—	0	—	0	—	—	—	0	—	0	—	0	—	0	—	0	—	1	28	0	—	0	—	0	1	28
	70	0	—	0	—	0	—	—	—	0	—	0	—	0	—	0	—	0	—	1	30	0	—	0	—	0	1	30
	60	0	—	0	—	0	—	—	—	0	—	0	—	0	—	0	—	0	—	1	45	0	—	0	—	0	1	45
	50	0	—	0	—	0	—	—	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	40	0	—	0	—	0	—	—	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	30	0	—	0	—	0	—	—	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	20	0	—	0	—	0	—	—	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	10	0	—	0	—	0	—	—	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	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.

MONTHLY REVIEW OF AGRO-METEOROLOGICAL STATIONS

MERSA MATRUH FEBRUARY 1974

This month was rather normal as regards the mean daily air temperature and relative humidity. The total monthly rainfall was 21.7 mm. against 15.5 mm. for normal.

The month was intervened by five variant cold waves in the periods (1st-5th), (9th-12th), 16th, (21st-23rd), (26th-28th) and two light warm spellson the 8th and (14th, 15th). The first cold wave yielded the lowest minimum air temperature for the month (5.4°C) on the 5th. The second cold wave was associated with the lowest maximum air temperature (14.6°C) and the maximum daily rainfall (13.3 mm.) on the 10th : The second warm spell yielded the highest maximum air temperature (22.1°C) on the 14th.

The highest maximum soil temperatures were lower than the corresponding values of last February at all depths with departures vetween 3.2°C (at 2 cm.) and 1.6°C (at 50 cm). The lowest minimum soil temperatures were also lower than last February at all depths with departures between 2.8°C (at 5, 10 cm.) and 1.5°C (at 100 cm.).

The mean daily actual sunshine duration was higher than normal by 1.0 hour. The mean daily wind speed at 1.5 met. height was lower by 0.6 m./sec. than the corresponding value of February 1973.

TAHRIR — FEBRUARY 1974

This month was rather normal as regards the mean daily air temperature and relative humidity. The total monthly rainfall was only 2.3 mm. against 6.7 mm. for normal.

The prevailing weather was generally cold in the first half of the month when two light cold waves prevailed which were separated by a short warm spell on the 8th and 9th. Weather was markedly cold might time most of the first week when minimum air temperature at 5 cm. above the grass field fell below 0°C reaching —0.8°C, —1.2°C, —1.3°C, —0.6°C on the 2nd, 3rd, 4th and 5th respectively.

In the second half of the month weather was generally mild apart from a short warm spell on the 20th yieding the highest maximum air temperature for the month (28.9°C).

The highest maximum and lowest minimum soil temperatures in the dry field were lower than the corresponding values of last February at all depths. The departures for the extreme maxima ranged between 2.0°C (at 2 cm.) and 0.5°C (at 100 cm.). The departues for the lowest minima ranged between 3.1°C (at 10 cm.) and 0.5°C (at 100 cm.).

In the grass field both the highest maximum and lowest minimum soil temperatures were also lower than the corresponding values of last February. The departures for the extreme maxima ranged between 3.4°C (at 10 cm.) and 0.3°C (at 100 cm.). The departures for the lowest minima ranged between 0.8°C (at 2 cm.) and 0.1°C (at 100 cm).

The mean daily actual sunshine duration was higher than average by 0.2 hour. The mean daily wind speed at 1.5 met. and pan evaporation were lower than average by 0.3 m./sec. and 1.05 mm.

BAHTIM — FEBRUARY 1974

The month was rather normal as regards the mean daily air temperature and relative humidity. No rain was reported except 1.1 mm. on the 10th and 0.1 mm. on the 27th.

Weather was generally cold in the first and second weeks when two cold waves prevailed which were separated by a short warm spell on the 8th and 9th. The first cold wave yielded the lowest maximum air temperature for the month (15.6°C) on the 1st and the lowest minimum air temperature (0.8°C) on the 5th.

In the second half of the month short and light cold and warm spells were experienced and weather was generally mild.

It is worthy of mention that minimum air temperature at 5 cm. heigh fell below 0°C during 8 days in the dry field and during 11 days in the grass field. These minima and their dates of occurrences are given in the following :

Date	2	3	4	5	8	9	14	15
Min. air temp. (°C) at 5 cm. above dry field	—1.0	—1.0	—2.7	—2.5	—1.0	—1.6	—1.7	—2.5

Date	2	3	4	5	7	8
Min. air temp. (°C) at 5 cm. above grass field	—1.8	—1.5	—2.9	—2.5	—0.6	—1.2

Date	9	14	15	16	23
Min. air temp. (°C) at 5 cm. above grass field	—2.0	—1.8	—2.8	—0.1	—0.2

The highest maximum soil temperatures in the dry field were higher than last February at 2,5 cm. depths by 1.9° and 0.6°C respectively and lower at deeper depths by departures between 1.8°C (at 10 cm.) and 0.1°C (at 100 cm.). The lowest minimum soil temperatures were lower than last February at all depths with departures between 3.2°C (at 5 cm.) and 0.2°C (at 100 cm.). In the grass field the highest maximum soil temperatures were higher than last February at 2, 5, 100 cm. depths by 1.6°C (at 2 cm.) and 0.1°C (at 50, 100 cm.), lower at 10 and 20 cm. depths by 0.7°C and 0.1°C respectively and the same as last February at 100 cm. The lowest minimum soil temperatures were lower than last February at all depths with departures between 1.9°C (at 2 cm.) and 0.1°C (at 100 cm.).

The mean daily actual sunshine duration was the same as average. The mean daily wind speed at 1.0 met. height and pan evaporation were lowerthan average by 0.4 m./sec. and 0.50 mm.

KHARGA — 1974

The mean daily air temperature and relative humidity for this month were rather normal.

Two light cold waves prvailed most of the first half of the month and were separated by a short warm spell on the 8th and 9th. The first cold wave yielded the lowest maximum air temperature for the month (17.4°C) on the 1st. The lowest minimum air temperature at 1.5 met. was 2.6°C reported on the 9th. The lowest minimum air temperature at 5 cm. above soil was 0°C reported on both the 5th and 8th.

In the second half of the month, weather was generally mild intervened by two short warm spells in the periods (19th-21st) and (23rd, 24th). The second warm spell yielded the highest maximum air temperature for the month (33.4°C) on the 23 rd and the highest minimum air temperature (19.5°C) on the 24th.

The highest maximum soil temperatures were lower than the corresponding values of last February at all depths with departures between 2.2°C(at 20 cm. and 1.2°C (at both 2 and 100 cm). The lowest minimum soil temperature was higher than last February at 2 cm. depth by 0.3°C ; and lower at all other depths with departures between 1.2°C (at 5 cm) and 0.2°C (at 50 cm).

The mean daily actual sunshine duration, pan evaporation and wind speed at 1.5 met. height were lower than average by 0.7 hour, 0.59 mm. and 0.3 m./sec. respectively.

Table C 1.—AIR TEMPERATURE AT 1½ METRES ABOVE GROUND
FEBRUARY — 1974

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	40
M. Matruh. . . .	18.0	9.2	13.6	11.9	15.3	24	24	24	21.4	7.9	0.6	0.0	0.0	0.0	0.0	0.0
Tahrir	21.5	6.4	13.2	9.8	16.5	24	24	22.6	16.0	8.7	1.9	1.0	0.0	0.0	0.0	0.0
Bahtim	20.7	5.0	12.6	8.9	16.2	24	24	21.4	14.9	8.5	2.2	0.0	0.0	0.0	0.0	0.0
Kharga	24.0	7.4	16·1	12.9	19.2	24	24	23.7	19.0	13.1	6.9	1.4	0.3	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
FEBRUARY — 1974

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.	22.1	14	14.6	10	12.5	24	5.4	5	2.4	5	—	—
Tahrir	28.9	20	17.0	1	13.4	24	1.8	5	0.7	4	—1.3	4
Bahtim	25.1	20	15.6	1	12.2	24	0.8	5	—2.7	4	—2.9	4
Kharga	33.4	23	17.4	1	19.5	24	2.6	9	0.0	5.8	—	—

Table C 3.—(SOLAR + SKY) RADIATION, DURATION OF BRIGHT SUNSHINE, RELATIVE HUMIDIT & VAPOUR PRESSURE AT 1½ METRES ABOVE GROUND, EVAPORATION & RAINFALL
FEBRUARY — 1974

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. . . .	332.0	233.1	309.6	75	65	54	24	24	7.5	8.0	10.8	12	3.7	24	4.9	3.84	21.7	13.3	10
Tahrir	366.3	220.0	310.5	71	67	43	20	20	7.3	7.2	11.5	20	3.4	25	3.8	4.24	2.8	1.7	10
Bahtim	382.0	227.8	311.3	73	67	41	20	9	7.0	7.0	10.0	21	4.1	16	4.7	4.36	1.2	1.1	10
Kharga.	492.4	262.4	316.5	83	41	25	12	9	5.2	5.1	7.1	23	2.7	9	9.4	8.13	0.0	0.0	—

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

FEBRUARY — 1974

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	22.1	21.5	19.2	16.0	15.6	15.7	18.0	—	—	—	—	—	—	—	—	—
	L	2.5	5.6	7.6	10.3	12.1	14.5	17.2	—	—	—	—	—	—	—	—	—
Tahrir . . .	H	30.3	25.3	23.5	20.5	17.9	17.7	18.8	20.9	20.0	18.8	18.2	16.0	15.3	15.7	16.9	—
	L	5.5	5.6	6.4	8.7	12.9	15.5	18.4	20.3	7.4	7.7	8.1	9.8	12.4	14.1	16.4	—
Bahtim . . .	H	34.5	26.8	21.4	18.9	18.9	19.5	22.8	24.3	21.6	18.4	16.2	15.2	15.2	15.8	18.8	—
	L	4.9	8.0	9.4	13.7	17.0	18.9	21.8	23.4	5.2	7.2	8.9	10.5	13.1	15.1	18.1	—
Kharga . . .	H	43.4	36.4	32.0	25.4	22.6	23.0	25.4	27.6	—	—	—	—	—	—	—	—
	L	6.2	7.5	10.3	15.0	20.0	21.7	25.4	26.6	—	—	—	—	—	—	—	—

Table C 5.—SURFACE WIND

FEBRUARY — 1974

STATION	Wind Speed m/sec at 1½ metres			Days with surface wind speed at 10 metres							Max. Gust (knot at 10 metreos)	
	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	3.0	4.8	25	19	11	8	3	0	0	41	10
Tahrir	2.0	1.3	2.7	26	16	6	0	0	0	0	31	10,11·16
Bahtim. . . .	1.8	1.1	2.5	25	17	4	1	0	0	0	33	27
Kharga. . . .	2.6	1.6	3.5	26	17	5	1	0	0	0	30	10

THE ARAB REPUBLIC OF EGYPT

MONTHLY WEATHER REPORT

VOLUME 17 NUMBER 3

MARCH, 1974

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 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 EATHER 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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GENERAL SUMMARY OF WEATHER CONDITIONS

MARCH 1974

Changeable intervened by two khamsin heat waves.
Daily rainfall records at few places.

PRESSURE DISTRIBUTION

Three khamsin depressions passed through north Egypt on the 10*th*, 14*th* & 28*th*. A marked northward elongation of the Sudan trough occurred during the period (5*th*-8*th*).

High pressure established over the Mediterranean and NE Africa otherwise.

SURFACE WIND

Winds were generally light to moderate and blew mostly from N and NW and less frequently from NE. Winds changed by the transit of khamsin depressions to W and SW, fresh to strong at times.

TEMPERATURE

Two mild waves prevailed during the first and third weeks. A moderate khamsin heat wave and anther short one prevailed during the second week and by the end of the month respectively.

Maximum and minimum air temperatures experienced moderate to large departures above normal during the khamsin waves and slight to moderate departures below normal othrerwise.

The first khamsin wave was associated with records for highest minimum air temperature at Minya (19.3°C), Asuit (22.8°C) on the 14*th*.

The highest and lowest maximum air temperatures were 38.7°C at Qena on the 14*th* and 14.6°C at Sidi Barrani on the 1*st*.

The highest and lowest minimum air temperatures were 22.8°C at both Asuit on the 14*th* & Aswan on the 13*th* and 3.3°C at Shebin El kom on the 4*th* respectively.

PRECIPITATION

Rain was reported during the mild waves in north. It also fell over scattered parts in Upper Egypt on the 1*st* and 16*th*. Though it was generally light it was heavy occasionally over the Mediterranean district.

The daily amounts had attained records at Alexandria (21.1 mm) on the 1*st*, at Wadi Elnatron (14.0 mm) on the 1*st*, at Dakhla (1.1 mm) on the 16*th* & at Luxor (1.6 mm) on the 16*th*.

The highest monthly and daily amonnts were 36.2 mm at Sidi Barrani and 31.7 mn. at Sidi Barrani on the 1*st* respectively.

MISCELLANEOUS WEATHER PHENOMENA

Early morning mist developed during several days over Delta, Cairo and north of Upper Egypt.

Rising sand was reported in several days over some scattered places.

Cairo, May 1976

Chairman (A. F. HASAN)

Board of Directors

SURFACE DATA

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

MARCH — 1974

STATION	Atmospheric Pressure (mbs) M.S.L.		Air Temperature °C									Relative Humidity %		Bright Sunshine Duration (Hours)			Piche Evaporation mms.
			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	%	Mean
Sallum	1013.0	—2.0	21.0	—1.4	13.1	+1.9	17.0	16.7	+1.4	12.9	+1.3	62	+8	—	—	—	4.3
Mersa Matruh (A)	1015.1	—0.4	19.4	—1.1	11.8	+1.6	15.6	15.5	+0.4	12.8	+1.3	71	+9	242.3	370.9	65	3.1
Alexandria (A)	1014.9	—0.6	21.3	0.0	12.1	+0.9	16.7	16.2	+0.3	13.5	+1.2	72	+7	246.6	371.2	66	3.1
Port Said (A)	1014.0	—1.2	21.8	+1.5	14.6	+1.2	18.2	17.4	+0.9	14.2	+1.0	68	+1	250.0	371.2	67	3.8
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—		—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1014.9	—1.0	23.2	- 0.6	9.1	+0.7	16.2	15.5	—0.2	12.5	+0.7	68	+8	258.4	371.2	70	2.9
Cairo (A)	1014.1	—1·1	24.4	+0.5	13.4	+1.9	18.9	18.4	+0.9	13.7	+1 6	56	+7	—	—	—	7.6
Fayoum	—	—	26.1	+0.8	10.7	+0.8	18.4	17.9	+0.2	13.4	+1.4	57	+11	—	—	—	4.8
Minya (A)	1014.0	—1.4	26.8	+1.0	10.1	+2.2	18.4	18.3	+1.7	13.0	+1.9	51	+4	277.9	371.8	75	8.1
Assyout (A)	1013.3	—1.5	27.1	+0.6	11.9	+1.2	19.5	19.1	+0.5	12.4	+1.4	41	+8	—	—	—	12.9
Luxor (A)	1012.0	—1.4	30.3	+0.9	12.4	+1.6	21.4	21.1	+0.9	13.5	+1.2	37	+3	—	—	—	9.0
Aswan (A)	1011.8	—1.3	30.7	+0.3	14.2	+1.6	22.4	22.2	+0.3	12.5	+1.3	25	+8	—	—	—	15.6
Siwa	1013.3	—2.1	26.3	+1.2	10.7	+2.2	18.5	18.4	+1.1	12.6	+2.2	47	+10	279.5	371.7	75	10.2
Bahariya	1013.7	—1.6	26.8	+1.2	11.3	+2.3	19.0	19.1	+1.6	11.6	+1.1	34	—1	—	—	—	8.7
Farafra	1014.7	—1.9	28.0	+1.5	11.0	+2.2	19.5	19.3	+1.5	10.0	+1.2	28	—1	—	—	—	10.7
Dakhla	1013.6	—1.4	28.8	+1.0	8.7	+0.4	18.8	18.9	+0.7	10.7	+0.4	29	+4	—	—	—	12.4
Kharga	1012.7	—1.3	29.5	+1.0	12.4	+1.4	21.0	21.5	+1.5	12.0	+1.1	25	—4	300.0	371.6	81	11.8
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	1012.5	—0.9	25.1	+1.5	14.5	+2.0	19.8	20.0	+1.1	14.5	+1.3	52	+3	294.1	371.7	79	8.6
Ouseir	1012.3	—1.3	24.9	+0.2	17.0	+0.6	21.0	20.9	+0.3	15.4	+1.2	53	+7	—	—	—	7.2

Table A 2.– MAXIMUM AND MINIMUM AIR TEMPERATURES

MARCH — 1974

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	30.2	10	16.5	12	2	1	0	0	0	12.2	—	16.6	10	9.3	1+17	2	0	0	0
Mersa Matruh (A)	27.6	10	15.1	1	1	0	0	0	0	9.2	—	16.8	14	7.6	2	5	0	0	0
Alexandria (A)	31.6	28	17.1	2	4	1	0	0	0	10.3	—	16.5	14	6.4	4	8	0	0	0
Port Said (A)	25.6	11	18.0	2	2	0	0	0	0	14.0	—	19.0	14	10.6	1	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	31.6	28	18.0	1+2	7	1	0	0	0	—	—	15.3	14	3.4	4	22	2	0	0
Cairo (A)	33.8	11	17.2	2	9	3	0	0	0	—	—	19.0	14	8.7	3	2	0	0	0
Fayoum	34.2	28	19.6	2	18	4	0	0	0	8.4	—	17.2	14	5.7	1	11	0	0	0
Minya (A)	35.9	28	21.6	18	18	7	2	0	0	9.3	—	19.3	14	4.7	3	18	1	0	0
Assyout (A)	35.7	11	20.0	1	18	8	3	0	0	8.7	—	22.8	14	6.3	5	10	0	0	0
Luxor (A)	37.4	13	24.0	18	26	15	5	0	0	6.7	—	20.0	13	6.4	3	9	0	0	0
Aswan (A)	38.5	15	23.6	1	27	17	6	0	0	—	—	22.8	13	9.0	2	2	0	0	0
Siwa	35.2	31	19.4	1+2	19	6	1	0	0	9.4	—	21.8	10	4.0	3	14	2	0	0
Bahariya	35.9	13	20.3	1	19	7	2	0	0	10.6	—	19.0	12	5.0	3	12	0	0	0
Farafra	37.9	13	22.1	3+15	21	9	4	0	0	10.4	—	18.7	14	5.6	3+22	12	0	6	0
Dakhla	38.6	13	20.5	18	22	12	7	0	0	8.7	—	19.9	14	2.7	2	21	6	6	0
Kharga	38.2	14	22.8	1	25	11	6	0	0	10.2	—	20.2	14	6.[illegible]	3	11	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	31.8	29	21.6	1	16	1	0	0	0	—	—	21.0	15	9.7	3	1	0	0	0
Quseir	35.0	29	21.8	1+19	11	1	0	0	0	14.1	—	22.4	15	13.8	2	0	0	0	0

Table A 3.—SKY COVER AND RAINFALL

MARCH — 1974

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	3.3	2.0	2.9	2.6	2.7	7 2	— 2.6	4.5	12	0	7	2	0	0	0	0
Mersa Matruh (A)	3.0	3.8	3.4	3.3	3.6	19.9	+ 8.2	11.5	17	2	6	2	2	1	0	0
Alexandria . . (A)	4.1	5.0	5.0	3.5	4.2	28.9	+16.5	21.1	1	1	8	3	1	1	0	0
Port Said . . (A)	—	4.0	3.2	2.1	—	5.5	— 3.0	3.0	13	0	3	3	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1.7	3.2	3.9	1.0	2.5	3.9	— 0.8	2.8	1	0	3	2	0	0	0	0
Cairo . . . . (A)	2.4	3.7	3.8	1.9	2.9	5 9	+ 3.5	5.4	1	2	2	1	1	0	0	0
Fayoum	—	2.3	3.1	2.0	—	2.0	+ 0.6	2.0	1	3	1	1	0	0	0	0
Minya	1.7	2.6	2.6	1.4	2.0	1.0	+ 0.8	1.0	1	2	1	1	0	0	0	0
Assyout. . . . (A)	1.1	1.4	2.9	1.3	1.3	0.0	+ Tr.	0.0	—	0	0	0	0	0	0	0
Luxor . . . . (A)	1.5	1.6	1.6	1.5	1.6	1.6	+ 1 6	1.6	16	1	1	1	0	0	0	0
Aswan . . . . (A)	0.6	1.2	1.5	1.1	1.0	0.7	+ 0.7	0.7	16	0	1	0	0	0	0	0
Siwa	3.3	2.9	3.5	3.5	3.2	1.9	+ 1.7	1.2	11	0	3	1	0	0	0	0
Bahariya	1.6	2.8	2.5	1.3	2.0	Tr.	0.0	Tr.	1+13	2	0	0	0	0	0	0
Farafra	—	2.3	2.8	1.8	—	0.8	+ 0.6	0.8	18	2	1	0	0	0	0	0
Dakhla	0.5	1.1	1.5	1.5	1.0	1.1	— 1.1	1.1	16	0	1	1	0	0	0	0
Kharga	1.1	1.3	1.7	1.3	1.3	Tr.	0.0	Tr.	15	1	0	0	0	0	0	0
Tor	—	—	—	—	—	—	--	—	—	—	—	—	—	—	—	—
Hurghada	1.8	2.2	2.8	2.0	2.2	1.2	+ 0.8	1.0	16	2	2	1	0	0	0	0
Quseir	1.3	2.0	2.4	1.5	1.7	1.8	+ 1.6	1.8	16	0	1	1	0	0	0	0

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

MARCH — 1974

Station	Precipitation				Forst	Thunderstorm,	Mist Vis ≥1000 metres	Fog Vis <1000 Metres	Haze Vis ≥1000 Metres	Thick Haze Vis <1000 Metres	Dust or Sanderising Vis ≥1000 Metres	Dust or Sandstorm Vis <1000 Metres	Gale	Clear Sky	Cloudy Sky
	Rain	Snow	Ice, Pellets	Hail											
Sallum	7	0	0	0	0	0	0	0	0	0	0	0	0	10	0
Mersa Matruh (A)	6	0	0	0	0	0	3	0	8	0	8	0	0	9	7
Alexandria (A)	8	0	0	0	0	3	1	3	1	0	2	0	0	4	5
Port Said (A)	3	0	0	0	0	0	0	0	0	0	1	0	0	—	—
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	3	0	0	0	0	0	10	0	0	0	0	0	0	15	2
Cairo (A)	2	0	0	0	0	0	16	1	7	0	10	0	0	11	3
Fayoum	1	0	0	0	0	0	0	0	0	0	0	0	0	—	—
Minya (A)	1	0	0	0	0	0	13	0	8	0	5	0	0	19	2
Assyout (A)	0	0	0	0	0	0	0	0	0	0	2	0	0	23	2
Luxor (A)	1	0	0	0	0	0	2	0	7	0	6	0	0	22	3
Aswan A)	1	0	0	0	0	0	0	0	4	0	1	8	1	25	0
Siwa	3	0	0	0	0	2	0	0	0	0	15	1	0	10	5
Bahariya	0	0	0	0	0	1	0	0	1	1	0	0	0	20	2
Farafra	1	0	0	0	0	0	0	0	2	0	2	0	0	—	—
Dakhla	1	0	0	0	0	0	0	0	1	0	4	0	0	25	0
Kharga	0	0	0	0	0	0	0	0	0	0	3	0	0	24	3
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	2	0	0	0	0	1	0	0	1	0	0	0	0	16	3
Quseir	1	0	0	0	0	0	0	0	0	0	0	0	0	21	2

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

MARCH — 1974

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	10	1	5	1—10	30	45	102	110	45	13	9	9	11	50	83	62	569
				11—27	0	0	25	33	5	0	0	2	5	48	22	13	153
				28—47	0	0	0	0	0	0	0	0	0	6	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**30**	**45**	**127**	**143**	**50**	**13**	**9**	**11**	**16**	**104**	**105**	**75**	**728**
Mersa Matruh . (A)	36	0	16	1—10	37	49	40	53	63	38	10	15	57	59	32	46	499
				11—27	3	0	11	41	24	5	7	5	5	14	30	48	193
				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	**40**	**49**	**51**	**94**	**87**	**43**	**17**	**20**	**62**	**73**	**62**	**94**	**692**
Alexandria . . (A)	1	0	2	1—10	98	107	57	50	42	12	19	20	14	16	42	150	627
				11—27	15	17	13	8	1	0	1	0	6	21	21	11	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	**113**	**124**	**70**	**58**	**43**	**12**	**20**	**20**	**20**	**37**	**63**	**161**	**741**
Tanta.	54	0	7	1—10	81	90	73	61	23	6	2	15	38	49	94	75	607
				11—27	15	9	11	16	5	3	0	0	0	11	3	3	76
				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	**96**	**99**	**84**	**77**	**28**	**9**	**2**	**15**	**38**	**60**	**97**	**78**	**683**
Cairo . . . . (A)	28	0	9	1—10	73	120	62	32	19	6	5	25	22	48	71	72	555
				11—27	19	21	39	18	12	0	1	4	13	15	5	5	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	**92**	**141**	**101**	**50**	**31**	**6**	**6**	**29**	**35**	**63**	**76**	**77**	**707**
Fayoum	6	1	13	1—10	140	277	42	10	20	12	13	20	33	45	34	59	705
				11—27	0	8	5	0	0	0	0	1	1	4	0	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	**140**	**285**	**47**	**10**	**20**	**12**	**13**	**21**	**34**	**49**	**34**	**59**	**724**
Minya . . . . (A)	8	0	6	1—10	273	129	14	2	10	36	35	17	8	6	22	48	600
				11—27	39	57	0	1	0	1	3	0	1	2	11	14	129
				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	**312**	**187**	**14**	**3**	**10**	**37**	**38**	**17**	**9**	**8**	**33**	**62**	**730**
Asyout . . . . (A)	32	6	21	1—10	27	9	9	15	18	14	15	1	5	80	180	90	463
				11—27	27	5	1	2	12	27	8	1	1	6	37	95	222
				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**	**14**	**10**	**17**	**30**	**41**	**23**	**2**	**6**	**86**	**217**	**185**	**685**
Luxor . . . . (A)	71	3	5	1-10	61	62	21	19	20	34	77	36	39	68	106	77	620
				11-27	3	2	3	0	1	3	0	2	2	12	12	5	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	**64**	**64**	**24**	**19**	**21**	**37**	**77**	**38**	**41**	**80**	**118**	**82**	**665**

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

MARCH — 1974

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
Aswan . . . . (A)	28	0	9	1—10	138	101	27	19	9	11	20	7	6	8	24	92	462
				11—27	45	29	3	2	10	4	2	1	0	7	36	103	242
				28—47	1	0	0	0	0	0	0	0	0	0	0	2	3
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**184**	**130**	**30**	**21**	**19**	**15**	**22**	**8**	**6**	**15**	**60**	**197**	**707**
Siwa	43	15	4	1—10	17	30	48	116	78	27	11	15	20	56	50	32	500
				11—27	9	8	10	25	39	9	3	4	1	24	32	18	182
				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	**26**	**38**	**58**	**141**	**117**	**36**	**14**	**19**	**21**	**80**	**82**	**50**	**682**
Dakhla	4	51	42	1—10	49	25	24	49	39	51	23	17	32	64	80	115	568
				11—27	18	1	0	0	0	0	0	0	0	3	14	41	79
				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**	**26**	**24**	**49**	**39**	**51**	**23**	**17**	**32**	**67**	**94**	**156**	**647**
Kharga	2	1	12	1—10	162	83	25	23	23	15	14	12	13	33	46	89	538
				11—27	107	25	0	0	0	4	1	1	0	2	18	33	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	**269**	**108**	**25**	**23**	**23**	**19**	**15**	**13**	**13**	**35**	**64**	**122**	**729**
Hurghada.	25	2	5	1—10	33	15	21	27	21	17	8	19	46	68	145	32	452
				11—27	57	9	5	3	5	0	1	3	6	23	65	83	260
				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	**90**	**24**	**26**	**30**	**26**	**17**	**9**	**22**	**52**	**91**	**210**	**115**	**712**
Quseir	2	1	5	1—10	77	44	31	10	26	24	16	20	14	101	100	90	553
				11—27	83	23	0	0	3	0	0	0	3	0	18	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	**160**	**67**	**31**	**10**	**29**	**24**	**16**	**20**	**17**	**101**	**118**	**143**	**736**

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

MARCH — 1974

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	28	*1013m.b.	*1021m,b.	*1000m.b.	28	14.5	18.6	10.0	28	10.5
	1000	28	143	203	097	28	13.9	19 5	08.9	28	8.9
	850	28	1498	1553	1428	28	7.9	18.0	— 2.7	27	— 4.8
	700	28	3073	3153	2950	28	— 1.5	5.6	—12.6	20	—14.8
	600	27	4282	4382	4113	27	— 9.6	— 4.9	—20.9	18	—20.7
	500	26	5664	5792	5435	26	—19.4	—14.7	—30.7	15	—31.7
	400	25	7280	7434	7067	25	—31.4	—27.9	—41.4	13	—43.0
	300	25	9257	9424	8994	25	—46.4	—41.9	—52.1	8	—57.7
	250	25	10440	10622	10180	25	—52.9	—43.9	—59.1	8	—63.6
	200	25	11859	12096	11680	24	—56.7	—43.9	- 67.2	5	—65.4
	150	25	13687	13996	13528	25	—59.2	—52.9	—63.7	4	—68.9
	100	24	16197	16506	16063	24	—65.4	—59.6	—71.5	—	—
	70	23	18370	18610	18240	23	—65.2	—59.1	—75.7	—	—
	60	19	19319	19510	19060	19	—63.5	—58.9	—68.0	—	—
	50	19	20412	20581	20284	19	—61.9	—57.0	—65.7	—	—
	40	19	21864	22100	21685	19	—60.2	—54.8	—65.0	—	—
	30	18	23600	23769	23433	18	—58 8	—53.9	—62.4	—	—
	20	17	26168	26336	25951	17	—52.5	—46.9	—60.5	—	—
	10	11	30749	31018	30484	11	—40.9	—33.4	—54.4	—	—
Helwan 0000 UT	Surface	31	*997 m.b.	*1006m,b.	*987 m.b.	31	15.0	25.2	9.6	31	7.9
	1000	30	114	190	35	5	12.2	13.8	11.3	5	7.2
	850	30	1482	1537	1428	30	10.1	20.4	2.5	29	— 4.7
	700	30	3067	3136	2970	30	— 0.2	7.0	— 9.9	22	0.3
	600	30	4285	4366	4143	30	— 8.4	— 3.9	—18.1	21	—19.3
	500	29	5681	5764	5487	29	—18.1	—11.7	—26.5	16	—29.3
	400	29	7303	7415	7060	29	—30.2	—25.9	—39.0	16	—38.4
	300	29	9289	9426	8992	29	—44.6	—37.6	—50.4	15	—53.1
	250	29	10491	10647	10187	29	—51.2	—40.6	—58.1	15	—60.0
	200	28	11940	12097	11698	28	—55.4	—45.9	—63.9	7	—62.0
	150	25	13764	13905	13553	25	—59.1	—53.6	—67.2	5	—64.3
	100	24	16267	16415	16118	24	—65.5	—58.2	—72.5	1	—64.6
	70	19	18444	18621	18346	19	—64.3	—60.1	—68.5	—	—
	60	16	19418	19600	19300	16	—61 8	—56.0	—68.0	—	—
	50	16	20515	20712	20401	15	—61.3	—58 0	—64.0	—	—
	40	14	21998	22200	21900	14	—59.8	—57.2	—62.0	—	—
	30	14	23713	23919	23599	14	—58.2	—54.3	—62.0	—	—
	20	8	26286	26489	26178	7	—56 8	—54.4	—59.8	—	—
	10	1	30860	—	—	1	—51.3	—	—	—	—
Aswan (A) 0000 UT	Surface	25	*990m.b.	*996m.b.	*982m.b.	25	17.4	25.8	10.8	25	0.8
	1000	25	106	160	36	—	—	—	—	—	—
	850	25	1491	1532	1454	25	13.3	24.1	3.7	21	— 2.5
	700	25	3095	3134	3003	25	3.5	13.3	— 3.9	12	— 9.1
	600	25	4328	4379	4199	25	— 4.4	— 0.6	—12.7	19	—14.6
	500	24	5738	5803	5579	23	—14.2	— 6.8	—19.9	6	—20.4
	400	23	7398	7475	7205	22	—25.8	—20.7	—32.5	6	—27.8
	300	23	9421	9531	9214	22	—41.0	—36.5	—46.3	2	—40.5
	250	22	10638	10779	10427	22	—47.8	—40.5	—55.4	—	—
	200	21	12100	12239	11868	21	—59.2	—48.0	—58.7	—	—
	150	19	13904	14033	13668	19	—63.5	—56.2	—68.8	—	—
	100	16	16336	16469	16116	16	—73.6	—61.4	—78.3	—	—
	70	11	18433	18620	18242	11	—69.2	—59.8	—75.3	—	—
	60	6	19420	19620	19240	6	—64.2	—54.2	—67.9	—	—
	50	6	20508	20780	20312	6	—61.7	—48.0	—69.1	—	—
	40	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—

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

* The atmospheric pressure correctedf the radiosonde station.

UPPER AIR CLIMATOLOGICAL DATA

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

MARCH — 1974

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	28	1014m.b.	1021m.b.	1003m.b.	28	18.6	22.2	13.0	28	11.4
	1000	28	145	207	54	28	17.2	22.1	12.4	28	9.7
	850	28	1507	1567	1448	28	8.6	17.2	2.6	27	— 3.7
	700	26	3082	3143	3013	26	— 0.2	7.4	— 7.3	16	—12.7
	600	25	4300	4466	4194	25	— 8.6	— 1.7	—15.9	14	—20.5
	500	21	5678	5776	5548	21	—18.9	—14.1	—25.0	11	—32.4
	400	20	7304	7412	7141	20	—30.5	—25.3	—35.9	8	—41.8
	300	19	9281	9427	9101	19	—45.2	—41.3	—49.2	5	—54.9
	250	18	10485	10644	10288	18	—52.9	—48.5	—60.1	5	—61.3
	200	17	11907	12074	11719	17	—55.6	—47.5	—63.6	3	—64.6
	150	17	13685	13922	13572	17	—58.5	—51.3	—65.9	1	—57.9
	100	17	16248	16452	16024	17	—63.9	—54.7	—71.1	—	— —
	70	17	18437	18599	18184	17	—63.3	—54.9	—70.5	—	—
	60	17	19424	19580	19100	17	—61.0	—53.6	—69.8	—	—
	50	17	20522	20718	20226	17	—60.0	—52.7	—68.2	—	—
	40	16	22032	22220	21700	16	—57.3	—48.0	—61.4	—	—
	30	16	23766	24018	23456	16	—53.9	—40.5	—59.9	—	—
	20	13	26378	26676	26080	12	—48.4	— 39.6	—55.9	—	—
	10	7	31103	31291	30896	7	—32.2	—21.1	—42.1	—	—
Helwa 1200 U.T.	Surface	31	* 997m.b.	* 1005m.b.	* 988m.b.	31	23.2	31.8	16.0	31	5.2
	1000	31	112	183	034	6	19.9	22.7	16.8	6	3.7
	850	31	1496	1546	1439	31	11.2	19.2	3.4	30	— 3.2
	700	30	3086	3144	2986	30	1.4	7.5	— 7.7	23	—12.1
	600	30	4305	4388	4109	29	— 6.5	— 1.7	—16.3	18	—20.9
	500	30	5704	5809	5475	30	—15.8	—11.2	—24.5	15	—29.3
	400	30	7344	7470	7062	30	—28.3	—23.7	—36.5	15	—39.9
	300	29	9354	9480	9110	29	—43.3	—37.2	—49.0	14	—55.5
	250	28	10568	10695	10300	28	—49.7	—36.3	—55.4	13	—62.3
	200	26	12011	12227	11671	26	—51.5	—40.8	—64.5	8	—64.9
	150	25	13837	14101	13522	25	—58.2	—52.8	—66.5	6	—67.1
	100	24	16352	16597	16065	24	—64.4	—58.8	—69.8	1	—70.7
	70	22	18532	18749	18279	22	—63.8	—58.1	—71.2	—	—
	60	18	19511	19700	19270	18	—61.8	—55.4	—65.6	—	—
	50	18	20610	20784	20371	18	—59.5	—52.5	—65.3	—	—
	40	14	22107	22290	21890	14	—56.6	—49.5	—60.8	—	—
	30	13	23838	24049	23628	13	—55.3	—51.0	—58.6	—	—
	20	12	26473	26712	26234	12	—49.1	—42.9	—54.8	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 1200 U.T.	Surface	27	* 989m.b.	* 995m.b.	* 982m.b.	27	30.1	38.2	23.3	27	4.8
	1000	27	094	140	024	—	—	—	—	—	—
	850	27	1505	1547	1475	27	15.8	24.2	8.6	23	2.0
	700	27	3122	3208	3046	27	5.5	14.4	— 3.9	14	— 8.7
	600	27	4362	4498	4259	27	— 2.6	1.8	— 9.7	10	—13.9
	500	27	5782	5857	5644	27	—12.5	— 8.5	—18.0	7	—15.4
	400	27	7452	7542	7302	27	—20.4	—17.5	—27.9	6	—32.2
	300	26	9503	9634	9328	26	—38.7	—32.5	—44.5	4	—42.6
	250	26	10715	10825	10548	26	—46.1	—37.1	—54.2	—	—
	200	25	12179	12267	12018	25	—52.5	—44.4	—56.1	—	—
	150	25	14002	14160	13838	25	—61.6	—56.9	—67.8	—	—
	100	25	16459	16560	16318	25	—74.4	—57.8	—78.2	—	—
	70	22	18586	18680	18462	22	—68.5	—62.7	—73.0	—	—
	60	19	19549	19600	19430	19	—66.4	—61.9	—71.5	—	—
	50	19	20624	20722	20496	19	—62.7	—56.1	—65.4	—	—
	40	11	22100	22200	22040	11	—56.9	—54.5	—60.0	—	—
	30	10	23867	23926	23813	10	—52.6	—48.7	—56.2	—	—
	20	6	26517	26622	26458	6	—47.4	—41.1	—51.7	—	—
	10	3	31141	31180	31069	3	—39.4	—37.8	—40.3	—	—

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

* The atmospheriopressure 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

MARCH — 1974

	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.	M. Matruh (A)	2773 (28)	730 (28)	—10.6 (23)	3900	637	—29.0	1000	898	— 2.1	11429 (25)	220 (25)	—51.8 (25)	17270	086	—69.8	8440	324	—65.7	9960	317	290	120
	Helwan . . .	2967 (30)	712 (30)	—10.1 (25)	3900	635	— 8.7	1720	820	— 1.6	11266 (25)	228 (25)	—57.0 (25)	15440	116	—70.0	8910	306	—49.6	13090	166	290	140
	Aswan . . (A)	3535 (25)	656 (25)	—11.3 (12)	4230	610	—	1880	808	— 4.2	16723 (7)	094 (7)	—73.8 (7)	17350	084	—76.7	16184	100	—74.8	2405	765	342	45
1200 U.T.		(N)	(N)	(N)							(N)	(N)	(N)										
	M. Matruh (A)	2960 (24)	718 (24)	—10.8 (16)	3740	650	—13.8	1780	818	— 7.0	11311 (19)	212 (19)	—57.8 (19)	13460	153	—67.8	10288	250	—54.5	8860	312	235	150
	Helwan . (A)	3246 (30)	689 (30)	—12.1 (22)	4140	618	—	1900	804	— 3.2	11820 (24)	216 (24)	—57.0 (24)	17170	089	—72.0	8820	323	—40.0	11310	223	280	160
	Aswan . . (A)	4251 (27)	656 (27)	—12.1 (12)	4580	583	—10.8	2280	771	— 7.2	16147 (21)	109 (21)	—70.6 (21)	17400	087	—73.1	14040	145	—63.9	8260	351	290	175

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

Table B3.— 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 1974

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	0	—	2	6	3	7	3	8	4	10	3	9	1	20	2	8	3	11	2	10	4	10	1	18	—	28	9
	1000	0	—	4	10	2	11	0	—	6	16	1	16	0	—	3	15	2	8	2	9	3	21	3	12	—	26	13
	850	1	20	1	7	1	7	1	20	—	—	1	29	0	—	3	30	5	23	3	18	4	14	6	18	—	26	20
	700	1	24	0	—	0	—	0	—	0	—	0	—	1	45	3	35	5	30	6	22	7	29	3	24	—	26	28
	600	2	30	0	—	0	—	0	—	1	20	0	—	0	—	5	40	3	28	8	29	4	32	1	28	—	24	31
	500	2	48	0	—	0	—	0	—	0	—	0	—	0	—	7	45	4	29	5	45	3	32	3	29	—	24	39
	400	0	—	0	—	0	—	0	—	0	—	0	—	1	40	5	44	6	36	3	49	2	40	3	39	—	20	41
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	68	4	54	4	46	2	26	2	51	—	16	52
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	58	4	59	4	48	2	48	1	26	—	12	51
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	57	2	50	2	49	0	—	—	7	53
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	54	3	43	0	—	0	—	—	4	46
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	13	0	—	0	—	—	1	13
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	3	12	9	9	3	16	2	13	0	—	0	—	0	—	0	—	1	12	0	—	3	18	7	12	0	28	13
	1000	5	10	3	9	5	11	2	14	0	—	0	—	0	—	1	14	0	—	0	—	7	17	4	11	0	27	12
	850	3	10	0	—	0	—	0	—	1	18	1	15	1	22	4	18	3	9	5	17	4	10	5	18	0	27	15
	700	1	26	1	33	0	—	0	—	0	—	0	—	2	37	4	19	5	23	3	18	5	29	4	21	0	25	24
	600	1	42	0	—	0	—	0	—	0	—	0	—	0	—	4	46	6	33	5	32	6	34	2	28	0	24	36
	500	2	30	0	—	0	—	0	—	0	—	0	—	0	—	3	40	1	62	7	38	5	32	1	85	0	19	40
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	54	1	35	6	37	5	52	4	42	0	18	44
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	64	4	46	4	44	2	77	0	14	55
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	64	3	33	4	60	0	—	0	9	52
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	48	3	56	2	46	0	—	0	7	51
	150	0	—	1	58	0	—	0	—	0	—	0	—	0	—	0	—	2	49	2	38	0	—	0	—	0	5	46
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	42	1	11	0	—	0	—	0	2	26
	70	0	—	0	—	0	—	0	—	0	—	0	—	1	12	0	—	1	13	0	—	0	—	0	—	0	2	12
	60	0	—	0	—	0	—	0	—	0	—	0	—	1	8	1	12	0	—	0	—	0	—	0	—	0	2	10
	50	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	10	1	34	0	—	0	—	0	—	0	2	22
	40	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	23	0	—	1	35	0	—	0	—	0	2	29
	30	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	34	0	—	1	25	0	—	0	—	0	2	30
	20	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	37	0	—	0	—	0	—	0	1	37
	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 1974

For the month as a whole the mean daily air temperature was rather normal and the mean daily relative humidity was above normal. The total monthly rainfall was 19.9 mm. against 11.7 mm. for normal. The maximum daily rainfall was 11.5 mm. reported on the 17th.

The daily maximum air temperatures were generally below normal apart from two light Khamsin heat waves on the (10th, 11th) and 14th. The first wave yielded the highest maximum air temperature for the month (27.6°C) on the 10th. The lowest maximum air temperature was 15.1°C reported on the 1st. The daily minimum air temperatures were above normal most days of the month. The highest minimum air temprature was 16.8°C reported on the 14th. and the lowest minimum air temperature was 7.6°C reported on the 2nd.

The highest maximum soil temperature was the same as last March at 2 cm. depth, higher at 5 and 10 cm. and lower than last March at depths between 20 and 100 cm. with small departures between 0.2° and 0.9°C. The lowest minimum soil temperature was higher than last March at depths between 2 and 20 cm. with departures between 2.1°C (at 2 cm.) and 0.8°C (at 20 cm) ; lower at 50 cm. by 0.1°C and the same as last March at 100 cm.

The mean daily actual sunshine duration was the same as normal. The mean daily wind speed at 1.5 met. height and pan evaporation were lower than the corresponding values of March 1973 by 0.9 m./sec. and 2.18 mm. respectively.

TAHRIR – MARCH 1974

For the month as a whole the mean daily air temperature was rather normal and the mean daily relative humidity was above normal. The total monthly rainfall was 9.3 mm. against 1.4 mm. for normal.

The month was characterized by three heat waves in the periods (6th-16th), (27th, 28th) and 30th. The first heat wave was prolonged and yielded the highest minimum air temperature for the month (16.7°C) on the 14th. The second heat waves yielded the highest maximum air temperature (33.4°C) and the lowest relative humidity (13%) on the 28th. Apart from these heat waves, mild weather was experienced.

The lighest maximum soil temperatures in the dry field were lower than last March by 1.2°C at both 2 and 5 cm. depths, and higher at other depths between 10 and 100 cm. with departures between 1.9°C (at 20 cm.) and 1.0°C (at 50 cm.). The lowest minimum soil temperatures were higher than last March at all depths with departures between 2.0°C (at 2 cm.) and 0.4°C (at 100 cm.). In the grass field both the highest maximum and lowest minimum soil temperatures were higher than last March. The departures for the highest maxima ranged between 1.9°C (at 2 cm.) and 0.5°C at 10 cm.). For the lowest minima the departures ranged between 2.0°C (at both 2,5 cm.) and 0.6°C (at 100 cm.).

The mean daily actual sunshine dudration, wind speed at 1.5 met. height and pan evaporation were lower than the corresponding normal values by 0.7 hour, 0.8 m./sec. and 2.56 mm. respectively.

BAHTIM—MARCH 1974

For the month as a whole the mean daily air temperature was rather normal and the mean daily relative humidity was above normal. The total monthly rainfall was 6.8 mm. against 2.8 mm. for normal

The month was characterized by two heat waves in the periods (9th-14th) and (27th, 28th). The first heat wave yielded the highest minimum air temperature for the month (17.6°C) on the 14th. The second heat wave yielded the highest maximum air temperature (34.5°C) and the lowest relative humidity (13%) on the 28th. Apart from these two heat waves mild weather was experienced.

The highest maximum soil temperatures in the dry field were higher than last March at all depths except at 5 cm. depth where it was the same as last March and at 10 cm. where it was lower ; the departures varied between 0.4° and 0.8°C. The lowest minimum soil temperatures were higher than last March at all depths except at 100cm. where it was the same as last March, the departures varied between 1.8°C (at 2 cm.) and 0.2°C (at 20, 50 cm.). In the grass field both the highest maximum and lowest minimum soil temperatures were higher than last March at all depths. The departures for the highest maxima ranged between 3.4°C (at 2 cm.) and 1.2° (at 100 cm.). For the lowest minima the departures ranged between 1.5°C (at 5 cm.) and 0.2°C (at 100 cm.).

The mean daily actual sunshine duration was lower than normal by 0.2 hour. The mean daily pan evaporation was lower by 1.51 mm. than the corresponring value of March 1973.

KHARGA—MARCH 1974

The mean daily air temperature and relative humidity for this month were slightly above average.

Weather in the month was characterized by three Khamsin heat waves in the periods (7th-14th), (27th, 28th) and 31st. The first wave yielded the highest maximum air temperature for the month (38.2°C), the highest minimum air temperature (20 2°C) and the highest daily pan evaporation (18.95 mm.) on the 14th. Apart from these heat waves mild meather was experienced.

The highest maximum soil temperatures were higher than the corresponding values of least March at depths between 2 and 10 cm. and at 100 cm.with departures between 3.3°C (at 5 cm.) and 0.2°C (at 100 cm.) ; and were lower at 20 cm. depths by 0.4°C and 1.0°C respectively. The lowest minimum soil temperatures were higher than last March at all depths apart from 100 cm. where the value was the same as last March; the departures varied between 3.7°C (at 2 cm.) and 0.3°C (at 50 cm.)

The mean daily actual sunshine duration, wind speed at 1.5 met. height and pan evaporation were lower than average by 0.8 hour, 0.6 m./sec and1.26 mm respectively.

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

MARCH — 1974

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. . .	19.4	11.8	15.6	14.0	17.1	24	24	24	23.1	14.1	1.6	0.1	0.0	0.0	0.0	0.0
Tahrir	24.9	10.3	16.5	13 2	19.8	24	24	24	21.7	14.0	6.2	1.1	0.1	0.0	0.0	0.0
Bahtim	23.9	8.7	15.8	11.9	19.6	24	24	23.7	18.9	12.4	5.8	0.8	0.2	0.0	0.0	0.0
Kharga	29.5	12.4	21.7	18.4	24.8	24	24	24	23.7	20.4	13.6	6.6	2.2	0.6	0.0	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.

MARCH — 1974

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. . .	27.6	10	15.1	1	16.8	14	7.6	2	4.7	23	—	—
Tahrir	33.4	28	19.0	2	16.7	14	4.8	4	4.0	4	1.9	4
Bahtim	34.5	28	18.2	2	17.6	14	3.4	4	—0.5	5	—0.6	5
Kharga	38.2	14	22.8	1	20.2	14	6.4	3	4.2	3	—	—

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

MARCH — 1974

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	382.0	242.3	370.9	65	75	66	34	28	10.0	10.6	15.5	10	5.5	1	2.8	4.36	19.9	11.5	17
Tahrir . .	446.4	251.4	371.3	68	70	45	13	28	9.6	9.2	14.9	13	5.3	16	3.5	4.87	9.3	5.8	1
Bahtim . .	442.6	249.9	371.4	67	70	45	13	28	9.3	9.3	15.5	14	5.1	28	4.5	4.87	6.8	5.8	1
Kharga .	564.7	300.0	371.6	81	33	21	7	28	6.0	5.7	10.1	15	2.9	28	11.8	10.73	Tr	Tr	15

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

MARCH — 1974

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	29.3	28.4	24.2	20.4	18.8	17.8	17.5	—	—	—	—	—	—	—	—	—
	L	8.4	8.3	9.8	12.0	14.9	15.8	17.3	—	—	—	—	—	—	—	—	—
Tahrir	H	38.5	33.0	30.5	26.6	22.6	21.3	20.4	20.9	28.5	26.0	23.9	21.2	19.6	19.0	18.7	—
	L	10.7	10.2	10.7	13.2	16.2	17.6	18.9	20.3	11.2	11.4	11.4	12.7	14.5	15.5	16.9	—
Bahtim	H	43.8	34.4	27.5	23.7	22.0	21.1	21.8	23.3	29.6	24.2	21.9	20.4	19.0	17.9	18.4	—
	L	9.9	9.2	13.3	16.7	18.6	19.5	21.6	22.9	9.0	10.2	11.7	13.2	14.9	15.9	18.0	—
Kharga . . .	H	51.7	45.3	39.1	30.6	25.7	25.2	25.4	26.8	—	—	—	—	—	—	—	—
	L	10.2	13.2	15.3	19.5	21.8	23.0	24.5	26.4	—	—	—	—	—	—	—	—

Table C 5.—SURFACE WIND

MARCH — 1974

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 . .	3.4	2.5	4.3	29	20	9	6	1	0	0	37	18
Tahrir	1.9	1.3	2.5	31	13	3	0	0	0	0	35	1
Bahtim	—	—	—	24	12	4	0	0	0	0	27	14
Kharga	2.8	2.1	3.5	28	20	7	3	0	0	0	32	14

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CAIRO

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Note : For explanatory notes on the tables please refer to Volume 17, Number 1 (January 1974).

GENERAL SUMMARY OF WEATHER CONDITIONS

APRIL 1974

Changeable with six short Khamsin heat waves, the third the most excessive.

Deficient and subnormal rainfall in general.

PRESSURE DISTRIBUTION

The pressure distribution was mainly influenced by two Mediterranean depressions through the East Mediterranean on the 2nd and the 8th, in addition to other five desert depressions which passed through north Egypt and the East Mediterranean on the 13th, 15th, 18th, 21st and 26th.

Otherwise, high pressure extended over the Mediterranean and NE Africa,

SURFACE WIND

Light to moderate Nly winds prevailed for many days. Winds backed to fresh or strong S and SW ly in advance of khamsin depressions.

TEMPERATURE

This month was characterized by six variant heat waves generally of short durations with their peaks round the 1st, 7th, 15th, 21st, 25th and 30th. The third wave was the most exessive khamsin wave.

Maximum air temperatures experienced moderate to large departures above normal during the Khamsin heat waves, and slight to moderate departures below normal otherwise.

The highest and lowest maximum air temperatures were respectively : 45.8°C at Luxor on the 21st & 16.7°C at Mersa Matruh on the 3rd.

Minimum air temperature fluctuations were more or less parallel to maximum air temperature fluctuations though somewhat less in magnitude.

The highest and lowest minimum air temperatture were respectively : 28.0°C at Assuit on the 14th & 4·7°C at Bahtim on the 11th.

PRCIPITATION

Precipitation was confined to light rain in few days in north including Cairo.

The monthly rainfall was subnormal in general.

The highest amount of monthly rainfall was 17.5 mm. at Sidi Barrani.

The highest amount of daily rainfall was 15.2 mm reported at Sidi Barrani on the 2nd.

OTHER WEATHER PHENOMENA

Rising sand and sandstorms were reported in scattered places in association with Khamsin depressions.

Cairo, Augsut 1976

Chairman (A. F. HASAN)

Board of Directors

SURFACE DATA

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

APRIL — 1974

STATION	Atmospheric Pressure (mbs) M.S.L.		Air Temperature °C									Relative Humidity %		Bright Sunshine Duration (Hours)			Piche Evaporation mms.
			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	%	Mean
Sallum	1010.7	—3.0	24.1	+0.4	14.7	+1.1	17.4	19.2	+1.1	13.7	0.0	54	—2	—	—	—	8.2
Mersa Matruh (A)	1012.2	—2.2	23.6	+0.8	13.6	+1.4	18.4	18.2	+0.8	13.8	+0.3	64	0	257.4	388.0	66	6.9
Alexandria . .(A)	1012.4	—1.8	24.7	+0.7	13.5	—0.0	19.1	18.3	+0.0	14.4	—0.2	65	0	246.6	387.5	64	5.1
Port Said . .(A)	1011.6	—2.1	23.2	+0.6	15.4	—0.6	19.3	18.6	—0.2	15.1	—0.4	68	—1	251.2	387.5	65	4.5
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—		—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1011.4	—2.1	26.7	- 1.0	11.0	+0.1	18.8	18.2	—0.6	13.9	+0.1	63	+9	280.3	387.0	72	4.8
Cairo . . . .(A)	1011.6	—1·9	29.0	+0.7	15.4	+1.3	22.2	21.8	+0.9	14.5	+0.1	46	+1	—	—	—	14.4
Fayoum	—	—	31.4	+1.6	13.5	+0.3	22.4	22.0	+0.6	14.6	+0.4	46	+5	—	—	—	8.8
Minya . . . .(A)	1011.3	—1.5	32.7	+2.1	13.6	+1.6	23.2	23.0	+1.7	14.7	+0.8	42	+2	316.1	384.5	82	14.5
Assyout . . .(A)	1011.1	—1.1	33.7	+2.0	16.4	+1.4	25.0	24.8	+1.2	14.3	+0.9	29	+4	—	—	—	17.2
Luxor . . . .(A)	1009.4	—1.3	37.5	+2.9	17.7	+2.0	27.6	27.3	+1.6	15.7	+0.7	26	0	—	—	—	12.6
Aswan . . . .(A)	1009.0	—1.1	38.1	+3.1	19.8	+2.3	29.0	28.9	+2.2	14.8	+1.3	16	+3	—	—	—	20.5
Siwa	1011.0	—2.3	30.6	+0.8	14.3	+1.9	22.4	22.5	+0.8	14.4	+1.3	40	+8	273.7	385.5	71	15.7
Bahariya	1011.1	—1.7	31.9	+1.8	14.9	+2.0	23.4	23.4	+0.9	13.0	+0.2	28	—1	—	—	—	15.4
Farafra	1012.0	—2.0	33.8	+1.4	15.3	+2.0	24.6	24.4	+1.9	13.0	+0.5	23	—2	—	—	—	18.1
Dakhla	1011.0	—1.4	35.5	+2.8	14.6	+0.7	25.0	25.4	+1.8	13.9	+0.8	25	+5	—	—	—	20.0
Kharga	1010.1	—1.1	36.2	+2.9	18.4	+2.8	27.3	27.6	+2.5	14.1	+0.8	22	—0	319.8	381.7	84	17.3
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	1010.2	—0.8	27.7	+1.1	17.7	+1.5	22.7	22.9	+0.6	16.9	+1.2	53	+6	314.2	383.6	82	9.9
Ouseir	1009.9	—2.3	27.9	+0.8	20.0	+0.6	24.0	23.9	+0.5	17.5	+0.9	50	+4	—	—	—	9.4

Table A 2. MAXIMUM AND MINIMUM AIR TEMPERATURES

APRIL — 1974

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	37.3	30	18.7	10	9	7	1	0	0	14.5	—	23.0	30	11.2	4.10	0	0	0	0
Mersa Matruh (A)	36.6	30	16.7	3	12	4	1	0	0	11.0	—	18.4	30	9.1	11	4	0	0	0
Alexandria (A)	34.4	1	19.6	4	10	5	0	0	0	12.0	—	17.3	15	8.0	6	2	0	0	0
Port Said (A)	32.7	15	19.0	10	4	2	0	0	0	15.4	—	18.2	30	11.8	10	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	33.5	14	20 0	4	19	8	0	0	0	—	—	16.2	26	6.5	6	10	0	0	0
Cairo (A)	38.9	15	20.4	3	23	12	4	0	0	—	—	20.3	13	11.0	11	0	0	0	0
Fayoum	40.3	15	2[illegible].6	4	24	17	7	1	0	11.1	—	19.7	14	8.4	11	5	0	0	0
Minya (A)	43.2	14,15	23.3	5	27	18	10	4	0	12.3	—	21.3	14	7.8	11	7	0	0	0
Assyout (A)	44.6	15	23.8	4	27	21	13	5	0	13.2	—	28.0	14	10.6	11	0	0	0	0
Luxor (A)	45.8	21	27.3	9	30	25	21	12	1	9.3	—	24.6	18	11.0	10	0	0	0	0
Aswan (A)	45.1	16,26	27.6	5	30	25	21	13	2	—	—	25.6	19	13.2	10	0	0	0	0
Siwa	42.1	14	22.4	9	26	15	8	2	0	13.4	—	20.7	15	8.9	5,9	4	0	0	0
Bahariya	41.6	15	22.9	4	26	16	9	4	0	13.4	—	23.1	14	8.3	5	5	0	0	0
Farafra	44.0	15	25.2	8	30	20	12	4	0	14.2	—	23.2	15	8.2	6	4	0	0	0
Dakhla	45.1	17	25.9	4	30	25	15	8	1	14.5	—	22.0	26	5.9	6	6	0	0	0
Kharga	45.1	17	26.8	9	30	24	17	9	1	16.3	—	25.2	26,30	10.2	7	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	32.2	22,25	23.1	5	25	5	0	0	0	—	—	23.5	26	12.8	6	0	0	0	0
Quseir	42.2	14	23.5	11	24	4	1	1	0	16.9	—	22.8	15,22, 23	16.0	10	0	0	0	0

Table A 3. — SKY COVER AND RAINFALL.

APRIL — 1974

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	3.2	2.2	2.8	2.6	2.6	0.4	— 2.2	0.2	3,9	0	2	0	0	0	0	0
Mersa Matruh (A)	2.3	4.7	3.3	3.0	3.2	9.6	+ 7.3	8.0	3	0	3	1	1	0	0	0
Alexandria . . (A)	2.7	4.0	4.2	3.3	3.6	1.3	— 1.6	0.7	8	0	2	0	0	0	0	0
Port Said . . (A)	0.6	2.5	3.0	2.6	2.3	2.7	0.0	2.5	10	0	2	1	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta.	1.1	2.4	3.5	1.5	2.2	3.1	+ 1.1	3.1	10	1	1	1	0	0	0	0
Caoire . . . . (A)	1.2	2.6	2.7	2.1	2.3	0.4	— 0.5	0.3	9	0	2	0	0	0	0	0
Fayoum	—	1.6	2.2	2.1	—	Tr.	— 0.6	Tr.	3	1	0	0	0	0	0	0
Minya . . . . (A)	0.8	1.6	2.7	1.9	1.8	0.0	— 0.4	0.0	—	0	0	0	0	0	0	0
Assyout . . . . (A)	0.3	0.5	0.7	0.2	0.5	0,0	— 0.1	0 0	—	0	0	0	0	0	0	0
Louxor . . . . (A)	0.5	1.7	2.1	1.2	1.4	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Aswan . . . . (A)	0.2	0.8	0.9	0.8	0.7	0.0	— 0·7	0.0	—	0	0	0	0	0	0	0
Siwa	3.0	3.1	3.3	2.2	2.9	0.0	— 1.0	0.0	—	0	0	0	0	0	0	0
Baharia	0.7	2.0	2.6	1.3	1.6	Tr.	— 0.5	Tr.	21	1	0	0	0	0	0	0
Farafra	—	1.5	2.5	2.2	—	0.0	— 0.5	0.0	—	0	0	0	0	0	0	0
Dahkalia	0.0	0.4	0.6	0.3	0.4	0.0	— 0.2	0.0	—	0	0	0	0	0	0	0
Kharga	0.4	1.1	1.2	1.0	0.8	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0.7	1.5	2.1	0.8	1.3	0.0	—0.1	0.0	—	0	0	0	0	0	0	0
Quseir	0.5	1.5	2.2	1.1	1.3	0.0	—0.1	0.0	—	0	0	0	0	0	0	0

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

APRIL — 1974

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	2	0	0	0	0	0	0	0	0	0	6	0	0	13	1
Mersa Matruh (A)	3	0	0	0	0	0	1	0	5	0	10	4	1	6	0
Alexandira (A)	2	0	0	0	0	0	2	0	2	0	6	0	0	7	0
Port Said (A)	2	0	0	0	0	1	0	0	0	0	0	0	0	16	3
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1	0	0	0	0	0	3	0	0	0	3	0	0	13	0
Cairo (A)	2	0	0	0	0	0	4	0	9	0	15	2	0	14	0
Fayoum	0	0	0	0	0	0	0	0	1	0	3	0	0	—	—
Minya (A)	0	0	0	0	0	0	3	0	3	0	14	0	0	15	0
Assyout (A)	0	0	0	0	0	0	0	0	0	0	5	0	0	27	0
Luxor (A)	0	0	0	0	0	0	0	0	21	1	13	3	0	22	1
Aswan (A)	0	0	0	0	0	0	0	0	14	0	14	2	0	25	0
Siwa	0	0	0	0	0	0	1	0	2	0	20	0	0	10	1
Bahariya	0	0	0	0	0	0	2	0	0	0	8	1	0	16	0
Farafra	0	0	0	0	0	0	0	0	5	0	8	2	0	—	—
Dakhla	0	0	0	0	0	0	0	0	1	0	5	0	0	30	0
Kharga	0	0	0	0	0	0	0	0	0	0	12	0	0	27	1
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0	0	0	0	0	0	0	0	2	0	12	1	0	21	0
Quseir	0	0	0	0	0	0	0	0	2	0	2	0	0	21	1

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

APRIL — 1974

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												
					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	13	1	7	1—10	10	71	76	68	50	13	12	13	5	11	60	68	457
				11—27	0	14	32	14	7	4	14	24	13	13	34	72	241
				28—47	0	0	0	0	0	0	0	0	1	0	0	1	1
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**10**	**85**	**108**	**82**	**57**	**17**	**26**	**37**	**18**	**24**	**94**	**141**	**699**
Mersa Matruh (A)	19	0	1	1—10	35	20	13	30	36	29	7	5	26	24	31	44	300
				11—27	6	6	10	50	61	23	15	4	7	23	96	79	380
				28—47	0	0	0	0	2	2	8	4	0	0	4	0	20
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**41**	**26**	**23**	**80**	**99**	**54**	**30**	**13**	**33**	**47**	**131**	**123**	**700**
Alexandria (A)	0	0	0	1—10	44	70	83	40	38	9	9	5	3	15	66	129	511
				11—27	11	12	28	5	4	3	1	3	13	36	51	41	208
				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	**55**	**82**	**111**	**45**	**42**	**13**	**10**	**8**	**16**	**51**	**117**	**170**	**720**
Tanta	6	2	0	1—10	46	33	71	72	29	17	13	19	47	41	94	74	556
				11—27	14	0	19	19	9	0	7	4	2	19	35	28	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	**60**	**33**	**90**	**91**	**38**	**17**	**20**	**23**	**49**	**60**	**129**	**102**	**712**
Cairo (A)	12	0	2	1—10	57	79	41	30	10	16	14	5	14	33	60	77	436
				11—27	23	62	36	16	11	6	17	19	7	14	31	28	270
				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**	**141**	**77**	**46**	**21**	**22**	**31**	**24**	**21**	**47**	**91**	**105**	**706**
Fayoum	63	0	2	1—10	133	123	20	13	5	11	33	14	11	26	47	48	484
				11—27	37	48	3	0	0	3	18	4	3	8	26	21	171
				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	**170**	**171**	**23**	**13**	**5**	**14**	**51**	**18**	**14**	**34**	**73**	**69**	**655**
Minya (A)	11	0	16	1—10	71	67	6	17	16	18	27	10	3	26	65	65	387
				11—27	60	132	0	0	0	5	5	23	3	10	13	13	303
				28—47	0	0	0	0	0	0	0	1	2	0	0	0	3
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**131**	**199**	**6**	**17**	**16**	**23**	**32**	**34**	**34**	**36**	**78**	**113**	**693**
Asyout (A)	101	0	154	1—10	21	11	3	6	14	10	7	3	6	29	79	141	330
				11—27	40	4	0	0	0	0	7	18	10	5	9	39	132
				28—47	0	0	0	0	0	0	0	0	1	2	0	0	3
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**61**	**15**	**3**	**6**	**14**	**10**	**14**	**21**	**17**	**36**	**88**	**180**	**465**

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

APRIL — 1974

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												
					345 / 014	015 / 044	845 / 074	075 / 104	105 / 134	135 / 164	165 / 194	195 / 224	225 / 254	255 / 284	285 / 314	315 / 344	All directions
Luxor . (A) . .	95	0	153	1-10	122	42	23	10	1	12	49	19	20	28	37	80	433
				11-27	7	0	2	1	0	1	6	1	0	1	1	19	39
				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	**129**	**32**	**25**	**11**	**1**	**13**	**55**	**20**	**20**	**29**	**38**	**99**	**472**
Aswan . (A) . . .	12	5	4	1-10	73	59	31	35	48	26	32	15	14	32	33	43	441
				11-27	71	32	3	1	11	22	15	5	6	9	23	55	258
				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	**144**	**91**	**34**	**36**	**64**	**48**	**47**	**20**	**20**	**41**	**56**	**98**	**699**
Siwa	16	2	125	1-10	39	105	69	65	29	6	0	0	1	7	9	31	351
				11-27	7	29	27	60	34	10	1	0	1	8	25	14	216
				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**	**134**	**96**	**125**	**63**	**16**	**1**	**0**	**2**	**15**	**34**	**45**	**577**
Dakhla	5	3	237	1-10	21	44	31	33	24	19	39	22	11	13	22	42	275
				11-27	56	18	3	1	5	4	15	10	6	5	8	13	284
				28-47	8	1	0	0	0	0	0	0	0	0	1	0	0
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**85**	**63**	**34**	**34**	**29**	**23**	**54**	**32**	**17**	**18**	**31**	**55**	**559**
Kharga	4	0	157	1-10	54	22	8	13	10	14	30	14	19	43	18	30	321
				11-27	158	27	1	5	2	12	10	6	14	23	12	14	144
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	10
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**212**	**49**	**9**	**18**	**12**	**26**	**40**	**20**	**33**	**66**	**30**	**44**	**475**
Hurghada	34	1	157	1-10	28	22	19	30	38	19	8	3	4	7	42	26	246
				11-27	65	4	0	4	7	11	0	0	0	1	27	162	281
				28-47	0	0	0	0	0	0	0	0	0	0	0	7	7
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**93**	**26**	**19**	**34**	**45**	**30**	**8**	**3**	**4**	**8**	**69**	**195**	**534**
Quseir	6	1	289	1-10	48	38	18	5	9	18	29	16	5	5	16	70	277
				11-47	78	15	0	0	0	8	1	0	0	0	2	51	147
				28-27	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	**126**	**53**	**18**	**5**	**9**	**18**	**30**	**16**	**5**	**5**	**18**	**121**	**424**

UPPER AIR CLIMATOLOGICAL DATA

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

APRIL — 1974

Station	Pressure Surface (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Meres Matruh 0000 U.T.	Surface	28	*1011.0mb.	*1018mb.	*1003mb.	28	16.7	22.5	11.9	28	10.2
	1000	28	124	179	52	28	18.0	23.0	10.2	27	8.1
	850	28	1490	1547	1427	27	10.2	20.0	0.0	25	— 7.3
	700	28	3085	3190	2890	28	2.4	10.0	— 9.0	20	—12.4
	600	27	4315	4438	4170	27	— 5.8	— 0.5	—16.0	16	—18.0
	500	26	5717	5851	5521	26	—16.0	— 8.3	—24.9	13	—26.1
	400	26	7360	7520	7115	26	—27.8	—20.3	—35.1	8	—32.4
	300	25	9375	9544	9128	25	—41.6	—37.5	—48.2	6	—48.2
	250	24	10787	11828	10310	24	—57.1	—44.6	—56.5	5	—57.6
	200	23	11998	12189	11717	23	—58.5	—53.0	—63.5	4	—63.6
	150	23	13786	14008	13616	23	—63.7	—58.7	—68.9	—	—
	100	23	16231	16470	16037	23	—70.5	—64.0	—76.7	—	—
	70	23	18355	18640	18174	23	—67.8	—63.1	—72.5	—	—
	60	17	19342	19620	19180	17	—64.5	—61.0	—68.7	—	—
	50	17	20429	20720	20253	17	—61.2	—57.0	—67.1	—	—
	40	15	21870	22120	21700	15	—58.3	—54.6	—61.1	—	—
	30	14	23615	23887	23474	14	—55.1	—51.5	—57.7	—	—
	20	13	26243	26547	26074	13	—51.1	—47.5	—56.7	—	—
	10	10	30832	31177	30651	10	—42.2	—38.6	—45.0	—	—
Helwan 0000 U.T.	Surface	30	*996mb.	*1001mb,	*988mb.	30	17.4	28.7	11.4	30	5.7
	1000	29	101	148	32	4	13.2	14.7	11.4	4	7.9
	850	29	1485	1517	1435	29	15.1	25.3	— 3.3	20	— 4.3
	700	29	3101	3153	2999	29	— 5.7	12.0	— 8.2	13	—13.1
	600	29	4342	4404	4199	29	— 3.2	— 1.0	—12.0	17	—16.5
	500	29	5756	5834	5573	29	—13.8	— 8.5	—20.4	13	—22.7
	400	29	7414	7516	7200	29	—25.7	—20.6	—31.2	10	—34.4
	300	29	9435	9567	9164	29	—40.8	—37.0	—48.5	3	—48.3
	250	28	10651	10793	10344	28	—48.6	—40.0	—5[illegible].1	2	—56.6
	200	28	12094	12237	11783	28	—55.6	—50.4	—61.7	—	—
	150	28	13895	14044	13605	28	—63.0	—58.0	—68.1	—	—
	100	26	16343	16490	16114	26	—67.3	—62.5	—74.7	—	—
	70	18	18487	18609	18309	18	—66.8	—60.8	—73.4	—	—
	60	15	19460	19560	19300	15	—62.3	—55.3	—65.5	—	—
	50	15	20557	20606	20398	15	—60.8	—57.2	—66.5	—	—
	40	15	22041	22130	21900	15	—57.6	—53.1	—60.7	—	—
	30	15	23791	23899	23660	15	—54.5	—50.7	—57.3	—	—
	20	14	26409	26527	26250	14	—50.2	—43.4	—54.6	—	—
	10	7	31076	31171	30950	7	—40.0	—33.0	—45.2	—	—
Aswan 0000 U.T.	Surface	30	*987mb.	*992mb.	*983mb.	30	22.9	30.0	15.8	30	— 0.3
	1000	30	082	125	040	—	—	—	—	—	—
	850	30	1494	1519	1472	30	20.1	27.0	8.1	14	— 3.5
	700	30	3132	3187	3062	30	8.6	13.1	— 4.6	14	—10.9
	600	30	4398	4460	4303	30	— 1.1	— 4.1	— 5.8	13	—15.4
	500	29	5814	5894	5724	28	—10.1	— 5.5	—15.1	9	—26.5
	400	28	7494	7582	7380	27	—22.0	—18.2	—25.3	8	—32.6
	300	27	9552	9642	9438	27	—36.4	—31.4	—40.6	8	—44.6
	250	27	10793	10884	10687	27	—45.7	—39.7	—50.3	6	—54.2
	200	25	12252	12343	12156	25	—56.0	—49.1	—59.5	6	—63.5
	150	23	14037	14142	13933	23	—66.9	—60.7	—69.8	—	—
	100	21	16415	16615	16287	21	—77.2	—68.4	—83.7	—	—
	70	4	18398	18424	18370	4	—76.8	—72.1	—84.3	—	—
	60	1	19380	—	—	1	—72.0	—	—	—	—
	50	1	20404	—	—	1	—64.6	—	—	—	—
	40	1	21940	—	—	1	—59.0	—	—	—	—
	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 statio.

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

APRIL — 1974

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	29	1012m.b.	1012m.b.	1007m.b.	29	22.2	35.8	16.4	29	10.2
	1000	29	134	180	46	29	20.7	33.0	12.8	29	7.9
	850	29	1507	1608	1455	29	12.1	21.0	2.8	22	— 4.5
	700	29	3111	3247	3015	29	— 3.3	12.0	— 7.5	15	—11.9
	600	28	4343	4490	4200	28	— 4.4	— 2.6	—14.8	15	—16.6
	500	26	5747	5914	5562	25	—11.1	— 0.3	—25.9	13	—22.7
	400	25	7393	7591	7158	25	—26.6	—21.0	—35.3	12	—36.1
	300	24	9403	9638	9118	24	—41.6	—35.1	—46.6	5	—49.1
	250	23	10615	10864	10308	23	—50.3	—44.7	—55.4	5	—57.9
	200	23	12062	12818	11712	23	—57.1	—50.9	—63.9	5	—65.4
	150	23	13843	14092	13550	23	—62.9	—59.2	—70.2	1	—71.3
	100	22	16299	16545	16004	22	—68.4	—62.2	—73.4	—	—
	70	22	18444	18678	18154	22	—66.4	—62.0	—71.7	—	—
	60	21	19427	19650	19060	20	—63.1	—58.2	—67.1	—	—
	50	21	20520	20748	20264	20	—59.1	—54.0	—61.1	—	—
	40	18	21966	22200	21490	17	—55.8	—52.0	—61.0	—	—
	30	17	23714	23972	23372	16	—51.2	—47.7	—55.7	—	—
	20	16	26421	26724	25950	15	—45.0	—40.5	—49.2	—	—
	10	12	31069	31434	30115	11	—35.8	—30.8	—41.8	—	—
Helwan 1200 UT			*	*	*						
	Surface	30	995m.b.	1000m.b.	987m.b.	30	28.0	37.9	19.2	30	2.6
	1000	29	91	140	22	1	23.8	—	—	1	3.8
	850	29	1499	1526	1447	29	17.1	25.7	6.0	15	— 4.7
	700	29	3120	3171	3026	29	7.1	12.2	— 5.7	12	—11.4
	600	29	4367	4426	4222	29	— 1.4	— 4.9	—12.1	13	—18.9
	500	29	5784	5874	5596	29	—11.9	— 5.9	—19.2	11	—23.5
	400	29	7461	7572	7225	29	—23.8	—18.6	—30.0	6	—34.4
	300	29	9498	9634	9215	29	—38.7	—35.0	—44.3	4	—50.3
	250	29	10722	10877	10414	29	—47.6	—45.0	—51.0	2	—59.8
	200	29	12175	12337	11874	28	—54.8	—50.3	—58.0	2	—69.2
	150	28	13990	14191	13724	28	—61.9	—56.5	—67.2	—	—
	100	27	16456	16677	16262	27	—68.2	—61.2	—74.5	—	—
	70	22	18618	18835	18446	22	—65.3	—58.5	—69.0	—	—
	60	19	19.04	19840	19430	19	—62.8	—57.8	—67.2	—	—
	50	19	20707	20957	20525	19	—57.3	—52.2	—62.7	—	—
	40	13	22192	22460	22180	13	—53.6	—50.7	—56.0	—	—
	30	12	23989	24277	23767	12	—50.3	—46.9	—54.6	—	—
	20	8	26945	27001	26429	8	—44.3	—39.3	—47.0	—	—
	10	2	31564	31685	31442	2	—34.2	—33.4	—34.9	—	—
Aswan 1200 UT			*	*	*						
	Surface	27	987m.b.	992m.b.	983m.b.	27	36.7	43.6	26.8	27	1.6
	1000	27	74	122	32	—	—	—	—	—	—
	850	27	1517	1545	1484	27	22.4	30.6	11.4	13	— 6.7
	700	27	3168	3227	3098	26	10.6	14.6	— 5.4	12	—13.0
	600	27	4430	4503	4344	26	— 1.2	3.4	— 1.1	13	—17.2
	500	26	5872	5938	5777	26	— 7.7	— 4.2	—12.9	8	—22.1
	400	25	7571	7644	7464	25	—19.7	—15.6	—25.2	8	—37.2
	300	24	9644	9727	9520	24	—34.2	—27.7	—38.0	10	—46.3
	250	23	10894	10983	10770	22	—43.0	—33.0	—46.8	5	—57.3
	200	23	12364	12530	12229	23	—53.7	—43.3	—58.2	6	—66.1
	150	20	14162	14415	13991	20	—64.9	—55.2	—71.7	1	—71.9
	100	20	16569	16968	16414	20	—74.2	—57.5	—84.3	—	—
	70	16	18688	19218	18428	16	—71.0	—52.5	—76.8	—	—
	60	11	19636	19960	19500	11	—68.0	—58.0	—74.5	—	—
	50	11	20708	21050	20483	11	—59.8	—51.9	—72.0	—	—
	40	3	22313	22700	22020	3	—51.7	—40.6	—59.8	—	—
	30	3	24094	24834	23749	3	—46.4	—30.6	—59.1	—	—
	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.

APRIL — 1974

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)										
Mersa Matruh.	3325 (28)	682 (28)	—12.5 (22)	4570	584	—25.1	1413	850	—8.7	14213 (22)	147 (22)	—68.1 (21)	16800	090	—76.9	9920	268	—52.3	7689	386	240	120
Helwan.	3816 (29)	644 (29)	—13.8 (19)	4480	591	—	2070	790	—6.4	14219 (21)	151 (21)	—66.8 (21)	17260	089	—76.0	9800	272	—54.0	9340	297	265	150
Aswan.	4202 (30)	614 (30)	—14.9 (15)	5070	553	—	3680	653	—12.7	16102 (1)	100 (1)	—81.2 (1)	—	—	—	—	—	—	2840	722	330	43
1200 U.T.	(N)	(N)	(N)							(N)	(N)	(N)										
Mersa Matruh.	3672 (28)	661 (28)	—12.4 (17)	6050	492	—	1660	830	—9.1	13465 (23)	165 (23)	—64.0 (23)	16800	096	—71.6	10000	269	—50.6	9558	297	260	130
Helwan. . . .	4083 (29)	624 (29)	—16.2 (16)	5070	553	—	2160	782	—9.1	14599 (25)	142 (25)	—65.7 (25)	16800	098	—79.7	10380	252	—52.5	10200	273	275	150
Aswan.	4620 (27)	587 (27)	—17.8 (12)	5030	557	—	4000	630	—17.6	16189 (16)	108 (16)	—74.5 (16)	17760	082	—78.2	14700	139	—67.2	12760	188	260	150

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) — APRIL 1974

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	2	6	0	—	1	4	2	12	4	10	4	13	1	3	0	—	3	6	3	7	7	13	0	—	1	28	10
	1000	2	8	1	10	3	13	2	25	4	11	3	25	0	—	0	—	1	6	3	14	6	17	3	11	0	28	15
	850	1	9	0	—	0	—	0	—	0	—	3	27	1	13	2	32	5	28	5	24	10	16	1	20	0	28	22
	700	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	28	10	39	11	32	2	24	0	—	0	27	33
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	56	11	52	11	39	1	21	0	—	0	26	46
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	38	14	57	9	72	1	29	0	—	0	25	53
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	60	15	66	5	63	0	—	0	—	0	21	65
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	70	3	89	3	74	0	—	0	—	0	7	80
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	65	1	81	0	—	0	—	0	2	73
	200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	2	10	1	14	3	11	4	17	2	18	0	—	3	19	0	—	0	—	0	—	7	19	8	13	0	29	15
	1000	2	10	1	6	3	10	2	26	2	18	1	16	1	26	0	—	0	—	5	—	7	23	4	13	0	28	19
	850	0	—	0	—	0	—	1	12	2	12	2	28	2	20	2	24	1	4	12	24	5	15	2	8	0	29	19
	700	0	—	0	—	0	—	0	—	0	—	0	—	1	11	3	35	10	36	13	24	2	24	0	—	0	29	32
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	54	13	48	9	31	1	46	0	—	0	27	45
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	70	11	59	9	37	1	70	0	—	0	24	55
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	75	15	69	5	44	0	—	0	—	0	22	70
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	78	5	69	0	—	0	—	0	7	86
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	105	2	8	0	—	0	—	0	3	92
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	102	0	86	0	—	0	—	0	1	102
	150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	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 themonth.

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 — APRIL 1974

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	7	7	6	16	2	6	1	3	3	9	0	—	0	—	0	—	0	—	2	6	2	9	5	6	2	30	8
	1000	2	6	2	14	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	4	10
	850	6	13	0	—	2	8	0	1	1	3	1	4	0	—	4	35	3	21	3	23	8	20	1	25	0	29	17
	700	0	—	1	21	0	—	0	—	0	—	0	—	0	—	0	—	5	23	9	45	11	31	3	21	0	29	32
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	47	10	44	11	37	4	33	0	28	40
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	43	8	47	14	54	1	17	0	26	49
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	9	69	13	58	1	34	0	23	61
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	73	8	80	1	47	0	15	75
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	77	6	104	0	—	0	10	93
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	110	2	114	1	97	0	5	109
	150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	3	14	4	16	1	15	1	5	1	18	0	—	2	18	3	6	1	10	2	10	2	6	10	12	0	30	12
	1000	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	11	0	1	11
	850	4	10	2	14	2	8	2	10	0	—	1	18	1	27	2	26	1	18	5	17	8	15	1	15	0	29	15
	700	1	20	1	16	0	—	0	—	1	15	0	—	0	—	0	—	3	34	13	38	7	27	3	30	0	29	32
	600	1	18	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	45	12	42	7	32	3	45	0	27	39
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	62	10	56	10	44	1	27	0	24	50
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	53	11	60	9	62	1	36	0	22	60
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	87	10	77	0	—	0	15	80
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	103	6	97	0	—	0	8	99
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	120	1	91	0	—	0	3	110
	150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	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.
ASWAN (A)— APRIL 1974

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	16	12	4	10	0	—	1	8	2	8	1	10	2	8	1	4	0	—	0	—	0	—	1	6	2	30	9
	1000	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	—	—
	850	7	14	5	12	2	10	1	11	1	6	0	—	3	10	0	—	0	—	0	—	4	14	6	16	0	29	13
	700	1	12	1	19	0	—	0	—	1	4	0	—	1	6	0	—	1	7	0	—	1	12	4	14	0	10	12
	600	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	500	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	250	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	12	12	2	9	0	—	1	7	1	4	2	8	4	6	0	—	0	—	0	—	2	8	1	12	2	27	9
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	2	10	2	14	5	10	2	7	1	3	3	9	2	6	2	14	1	3	1	2	2	15	4	23	0	27	11
	700	5	9	0	—	1	8	0	—	0	—	1	14	1	7	2	14	5	10	4	26	5	19	2	13	0	26	15
	600	2	28	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	25	10	21	5	24	5	18	0	25	22
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	36	12	33	6	30	2	34	0	23	33
	400	1	44	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	52	12	50	2	45	1	21	0	18	48
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	80	5	82	3	90	2	42	0	11	77
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	101	5	98	1	34	1	65	0	8	86
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	102	1	110	0	—	0	3	105
	150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

N = The number of cases the wind has been observed from the range of direction during the mo
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 1974

The mean daily air temperature and relative humidity for this month were rather normal. The total monthly rainfall was 9.6 mm. against 2.3 mm. for normal.

The month was characterized by five Khamsin heat waves on the 1st and the periods (6th, 7th), (11th-17th), 25th and (29th, 30th). The last wave yielded the highest maximum air temperature for the month (36.6°C) on the 30th. Apart from these heat waves mild weather was experienced.

The highest maximum soil temperatures were higher than the corresponding values of last April at depths between 2,20 cm. with departures between 2.7°C (at 5 cm.) and 1.4°C (at 20 cm.); and were the same as last April at 50 and 100 cm. depths. Thelowest minimum soil temperatures were lower than last April at all depths with departures between 0.6°C (at 10 cm.) and 1.8°C (at 50 cm.).

The mean daiy actual sunshine duration was lower than normal by 0.7 hour. The mean daily wind speed at 1.5 met. height was higher by 0.3 m./sec. than the corresponding value of April 1973.

TAHRIR – APRIL 1974

This month was rather normal as regards the mean daily air temperature and relative humidity. The total monthly rainfall was only 0.4 mm. against 1.8 mm. for normal.

The month was characterized by six Khamsin heat waves generally of short duration on the 1st, 7th, the period (12th-15th), 18th, 21st, (29th & 30th). The highest maximum air temperature for the month was 36.6°C reported on the 1st. Apart from these heat waves, mild weather was experienced.

The highest maximum soil temperatures in the dry field were higher than the corresponding values of last April at all depths with departures between 2.0°C (at 20 cm.) and 1.0°C (at 100 cm.). The lowest minimum soil temperatures were lower than last April at depths between 2 and 50 cm. with departures between 1.7°C (at 2 cm.) and 0.2°C (at 50 cm) ; but at 100 cm. it was higher by 1.0°C. In the grass field the highest maximum soil temperature was higher than last April at all depths with departures between 0.2°C (at 5 cm.) and 1.7°C (at 20 cm.). The lowest minimum soil temperature was the same as last April at 2 cm., higher at other depths apart from 20 cm. where it was lower than last April ; the departures varied between 0.1°C (at 5 cm.) and 1.1°C (at 100 cm.).

The mean daily wind speed, actual sunshine duration and pan evaporation were lower than the corresponding normal values by 0.2 m./sec., 0.4 hour and 0.72 mm. respectively.

BAHTIM—APRIL 1974

The mean daily air temperature for the month was above average and the mean daily relative humidity was below average The total monthly rainfall was only 0.4 mm. against 4.0 mm. for average.

The month was charactrized by six khamsin heat waves generally of short duration on the 1st, 7th, the period (12th-15th), 21st, 25th and (29th, 30th). The third heat wave was the most pronounced yielding the highest maximum air temperature for the month (39.0°C) on the 15th. Apart from these heat waves mild weather prevailed.

The highest maximum soil temperatures in the dry field were higher than the corresponding values of last April at all depths with departures between 3.4°C (at 2 cm.) and 0.3°C (at both 10, 100 cm.). The lowest minimum soil temperatures were lower than last April at depths between 2 and 20 cm. with departures between 2.1°C (at 5 cm.) and 0.5°C (at 10 cm.) but higher than last April at 50 and 100 cm. depths by 0.7°C and 0.5°C respectively. In the grass field the highest maximum soil temperatures were higher than last April at all depths with departures between 7.7°C (at 2 cm.) and 0.8°C (at 100 cm.). The lowest minimum soil temperatures were the same as last April at 2, 10, 20 cm. depths and higher than last April at other depths with departures between 1.7°C (at 50 cm.) and 0.1° C (at 5 cm.).

The mean daily actual sunshine duration was lower than average by 0.5 hour. The mean daily pan evaporation was higher than average by 1.15 mm.

KHARGA—APRIL 1974

The mean daily air temperature for the month was above normal and the mean daily relative humidity was rather normal.

The month was characterized by five khamsin heat waves, in the periods : (1st, 2nd), (12th-18th, (20*th* — 22*nd*i, 25*th*, (29*th*, 30*th*). The second heat wave was the most excessive yielding the highest maximum air temperature for the month (45.1°C)on the 17th. In the rest periods of the month, weather was generally mild.

The highest maximum soil temperatures were higher than the corresponding values of last April at all depths with departures between 3.0°C (at 5 cm.) and 0.5°C (at 50 cm.). The lowest minimum soil temperature were lower than last April at 2,50cm, higher at 5, 10, 20 cm. depths and the same as last April at 100 cm. ; the departures varied between 0.1°C (at 5 cm.) and 1.0°C (at 20 cm.).

The mean daily wind speed at 1.5 met. was lower than normal by 0.3 m./sec. The mean daily actual sunshine duration and pan evaporation were higher than normal by 0.3 hour and 0.47 mm.

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

APRIL — 1974

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°
Mersa Matruh. . .	23.6	13.6	18.3	16.0	19.6	24	24	24	23.9	19.2	6.1	1.9	0.5	0.1	0.0	0.
Tahrir	29.0	11.8	19.6	15.5	22.1	24	24	24	23.3	17.5	10.3	4.7	1.5	0.1	0.0	0.
Bahtim	28.3	10.7	19.4	15.0	22.1	24	24	24	22.5	16.4	10.5	5.1	1.8	0.1	0.0	0.
Kharga	36.2	18.4	27.8	24.2	30.0	24	24	24	24	23.4	20.4	15.3	8.1	3.7	1.3	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 — 1974

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. . .	36.6	30	16.7	3	18.4	30	9.1	11	5.0	11	—	—
Tahrir	33.6	1	22.6	9	19.8	26	5.4	6	4.4	6	3.0	6
Bahtim	39.0	15	12.2	10	16.3	26	4.7	11	1.3	5.6	0.6	5
Kharga	45.1	17	26.8	9	25.2	26.30	10.2	7	8.0	7	—	—

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

APRIL — 1974

STATION	(Solar+Sky Radiation gm. cal/cm²	Duration of B ight 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	459.2	257.4	388.0	66	65	51	13	25	9.9	9.9	16.7	30	4.5	25	6.9	7.10	9.6	8.0	3
Tahrir . .	537.8	284.4	387.0	74	62	37	11	7	10.0	9.6	17.1	14	3.8	7	6.6	3.36	0.4	0.2	9.10
Bahtim . .	543.6	276.6	386.5	72	57	33	12	1.7.21	8.8	8.3	13.1	14	4.1	7	7.8	9.33	0.4	0.3	10
Kharga. .	671.0	319.8	381.7	84	22	13	5	2.7.15	5.5	4.9	10.6	20	1.7	7	17.3	16.55	0.0	0.0	—

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

APRIL — 1974

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
rsa Matruh	H	35.7	33.4	28.2	24.4	21.8	20.0	18.8	—	—	—	—	—	—	—	—	—
	L	12.7	12.8	13.7	16.3	17.5	17.8	18.0	—	—	—	—	—	—	—	—	—
hrir	H	45.0	38.8	33.8	29.2	25.9	24.1	22.6	22.3	30.1	27.6	26.7	24.2	22.8	21.7	21.0	—
	L	15.9	15.7	15.7	18.2	20.9	21.3	20.5	21.0	15.3	15.1	15.0	16.2	18.4	19.1	18.9	—
htim	H	49.6	39.0	31.1	26.6	24.8	23.2	22.6	22.8	35.3	27.9	24.8	22.6	21.3	19.9	19.3	—
	L	17.0	15.4	18.0	20.9	22.1	21.2	21.8	22.7	15.3	14.6	15.8	17.2	18.9	18.1	18 4	—
arga . . .	H	55.5	50.5	43.8	36.6	29.8	28.2	26.5	26.7	—	—	—	—	—	—	—	—
	L	13.5	17.0	19.9	24.8	25.6	25.2	25.3	26.5	—	—	—	—	—	—	—	—

Table C 5.—SURFACE WIND

APRIL — 1974

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 . .	4.5	3.4	5.6	30	27	19	11	6	3	1	51	12
Tahrir	2.4	1.7	3.1	29	20	9	4	2	0	0	42	12
Bahtim	2.2	1.2	3.3	29	19	8	3	0	0	0	37	12
Kharga	3.5	2.9	4.0	29	25	14	7	0	0	0	34	12,26

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THE ARAB REPUBLIC OF EGYPT

MONTHLY WEATHER REPORT

VOLUME 17 NUMBER 5

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THE EGYPTIAN METEOROLOGICAL AUTHORITY
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In fulfilment of its duties, the Egyptian Meteorological Authority issues several 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

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

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THE ARAB REPUBLIC OF EGYPT

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THE EGYPTIAN METEOROLOGICAL AUTHORITY
CAIRO

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Note : For explanatory notes on the tables please refer to Volume 17, Number 1 (January 1974).

GENERAL SUMMARY OF WEATHER CONDITIONS

MAY 1974

Changeable with three khamsin heat waves, short in general.

PRESSURE DISTRIBUTION

High pressure established over East Mediterranean and NE Africa most of the month.

Four variant desert depressions had passed through north Egypt on the 1st, 10th, 20th and 29th.

The mean atmospheric pressure over Egypt was rather normal in general·

SURFACE WIND

The prevailing surface winds were light to moderate N ly, changed to W and SW by transit of khamsin depressions and to NW in their rears. Fresh or strong winds had prevailed in association at times.

Gales were reported at Dabaa on the 10th and at Minya on the 10th,

TEMPERATURE

Three khamsin heat waves of short durations prevailed with peaks on the 1st, 10th and 20th. A fourth one wos experienced in Upper Egypt about the end of the month.

Maximum air temperatures suffered moderate to large departures above normal during the heat waves and moderate departures below normal otherwise.

The highest and lowest maximum air temperatures were respectively :

43.4°C at Aswan on the 2nd & 19.7°C at Sallum on the 12th.

Minimum air temperature suffered slight to moderate departures from normal. Their variations were almost of the same shape as of maximum air temperature.

The highest and lowest minimum air temperatures were respectively :

26.8°C at Kharga on the 19th & 7.7°C at Shebin el Kom on the 3rd.

PRECIP TATION

This month was rainless allover the country apart from traces over few scattered localities in few days.

OTHER WEATHER PHENOMENA

Rising sand was reported in association with the khamsin heat waves over scattered places, mainly in the middle and southern regions.

Early morning mist developed during several days over scattered places in Delta and Cairo.

Cairo, August 1976

Chairman (A. F. Hasan)

Board of Directors

SURFACE DATA

Table A1— MONTHLY VALUES OF THE ATMOSPHERIC PRESSURE, AIR TEMPERATURE, RELATIVE HUMIDITY, BRIGHT SUNSHINE DURATION & PICHE EVAPORATION.

MAY — 1974

STATION	Atmospheric Pressure (mbs) M.S.L.		Air Temperature °C									Relative Humidity %		Bright Sunshine Duration (Hours)			Piche Evaporation (mms)
			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	%	Mean
Sallum	1013.6	— 0.4	26.1	— 0.5	15.8	— 0.8	21.0	20.4	— 0.5	15.6	— 0.7	61	+ 2	—	—	—	8.2
Mersa Matruh . (A)	1013.4	- 0.3	25.1	— 0.3	15.2	+ 0.6	20.2	20.1	+ 0.1	15.9	— 0.5	67	+ 1	360.8	426.2	85	4.2
Alexandria . . (A)	1013.4	+ 0.3	26.6	— 0.1	15.2	— 1.3	20.9	20.4	— 1.0	16.5	— 1.0	67	0	358.1	425.4	84	4.9
Port Said . . . (A)	1012.5	— 0.1	25.5	— 0.1	17.6	— 1.7	21.6	21.0	— 1.0	16.9	— 2.0	65	— 5	366.1	425.4	86	4.4
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1012.8	— 0.0	30.8	— 0.9	12.9	— 1.7	22.0	21.4	— 1.2	15.4	— 1.2	55	+ 4	367.3	425.5	87	6.8
Cairo . . . . . (A)	1012.2	— 0.0	31.6	— 0.6	17.3	— 0.1	24.4	24.1	— 0.5	16.4	— 0.6	46	— 3	—	—	—	15.9
Fayoum	—	—	34.0	+ 0.3	16.1	— 1.1	25.0	24.8	— 0.2	16.4	— 0.0	42	+ 5	—	—	—	9.6
Minya . . . . (A)	1011.9	+ 0.8	34 4	— 0.4	15.7	— 0.7	25.0	25.3	— 0.4	16.0	— 0.6	37	+ 2	365.6	419.2	87	18.0
Assyout . . . (A)	1010.8	+ 0.2	34.9	— 1.1	18.2	— 1.0	26.6	26.4	— 1.2	15.5	— 0.4	29	+ 5	—	—	—	18.7
Luxor . . . . (A)	1008.6	— 0.3	38.3	+ 0.5	19.1	— 1.0	28.7	29.0	— 1.1	16.7	— 0.7	25	+ 3	—	—	—	12.8
Aswan . . . . (A)	1008.3	— 0.3	38.6	+ 0.1	21.9	+ 0.8	30.2	30.2	— 0.2	15.4	— 0.1	14	+ 2	—	—	—	26.0
Siwa	1012.6	- 0.2	32.9	— 1.3	15.4	— 1.3	24.2	24.6	— 1.1	15.7	+ 0.2	38	+10	365.5	421.2	87	14.8
Bahariya	1011.9	— 0.1	33.8	— 0.5	16.7	— 0.6	25.2	25.5	— 0.5	14.7	— 1.1	29	0	—	—	—	14.1
Farafra	1013 0	— 0.4	34.9	+ 0.5	16.9	+ 0.1	25.9	25.8	+ 0.1	14.1	— 0.7	22	— 3	—	—	—	16.4
Dakhla	1011.7	+ 0.4	34.5	— 2.3	15 2	— 4.2	24.8	25.5	— 2.1	14.5	— 1.1	27	+ 8	—	—	—	22.2
Kharga	1010.1	+ 0.2	36.6	— 1.0	20.6	0.0	28.8	29.2	+ 0.2	15.6	+ 0.1	23	+ 2	353.5	413.9	85	19.4
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	1009.1	— 0 8	29.2	— 0.7	20.6	—0.4	24.9	25.2	— 0.5	17.5	— 0.6	43	— 1	353.6	417.3	85	11.3
Quseir	1008.8	— 0.6	29.5	— 0.7	22.4	—0.4	26.0	26.0	— 0.3	18.9	+ 0.1	48	+ 2	—	—	—	11.4

Table A 2 — MAXIMUM AND MINIMUM AIR TEMPERATURE

MAY — 1974

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	38.8	19	19.7	12	14	4	1	0	0	15.2	—	19.7	27	12.6	2	0	0	0	0
Mersa Matruh (A)	38.0	19	20.2	7	11	4	1	0	0	12.5	—	19.8	17	10.2	5	0	0	0	0
Alexandria . (A)	38.5	20	22.0	4,11	16	5	2	0	0	12.9	—	18.6	27	11.6	5	0	0	0	0
Port Said . (A)	32.6	20	22.6	13	18	2	0	0	0	17.2	—	20.7	20	14.5	15	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta.	40.5	20	25.6	11	31	18	3	1	0	—	—	16.9	1	8.9	3	3	0	0	0
Cairo . . . (A)	41.3	1	26.0	4,11	31	20	6	2	0	—	—	23.4	18	13.0	6	0	0	0	0
Fayoum.	41.6	20	27.5	3	31	25	13	2	0	13.7	—	20.0	31	11.5	12	0	0	0	0
Minya . . . (A)	42.0	1,20	28.2	11	31	26	15	2	0	14.4	—	22.0	1	11.6	6	0	0	0	0
Assyout. . . (A)	42.1	20	28.0	11	31	25	18	4	0	15.1	—	20.6	1	11.5	12	0	0	0	0
Luxor . . . (A)	42.4	9,10	33.2	23	31	31	23	9	0	12.7	—	23.6	21	14.8	5	0	0	0	0
Aswan . . . (A)	43.4	2	33.8	23	31	31	25	13	0	—	—	26.[illegible]	11	17.4	5	0	0	0	0
Siwa	40.0	19	26.4	11	31	24	11	0	0	14.6	—	19.7	19	10.6	2	0	0	0	0
Bahariya	42.4	20	26.6	11	31	23	15	2	0	16.0	—	22.0	19	12.4	12	0	0	0	0
Farafra	42.0	1	27.9	11	31	28	16	2	0	15.9	—	22.0	19	12.4	16	0	0	0	0
Dakhla	42.3	20	28.0	12	31	25	14	3	0	15.1	—	19.9	2	10.1	16	0	0	3	0
Kharga	43.0	29	30.8	12	31	31	19	5	0	18.6	—	26.8	19	15.6	7	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada . . .	34.2	1	25.8	14	31	9	0	0	0	—	—	23.4	28	17.5	2	0	0	0	0
Quseir	38.5	21	26.0	3	31	9	1	0	0	18.2	—	24.7	28,31	20.0	6	0	0	0	0

Table A 3.—SKY COVER AND RAINFALL

MAY — 1974

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	1.6	1.0	1.9	0.9	1.3	0.0	— 4.1	0.0	—	0	0	0	0	0	0	0
Mersa Matruh (A)	1.7	2.2	1.4	1.9	1.7	0.0	— 3.0	0.0	—	0	0	0	0	0	0	0
Alexandria . . (A)	1.6	1.9	1.5	1.4	1.5	0.0	— 1.7	0.0	—	0	0	0	0	0	0	0
Port Said . . (A)	0.6	1.5	0.9	0.7	0.9	0.0	— 2.6	0.0	—	0	0	0	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	0.4	1.0	1.2	0.5	0.7	0.0	— 4.2	0.0	—	0	0	0	0	0	0	0
Cairo . . . . (A)	1.2	2.0	1.0	0.7	1.1	0.0	— 0.7	0.0	—	0	0	0	0	0	0	0
Fayoum	—	0.7	0.7	1.0	—	0.0	— 1.1	0.0	—	0	0	0	0	0	0	0
Minya	0.2	0.9	1.1	0.8	0.9	0.0	— 0.5	0.0	—	0	0	0	0	0	0	0
Assyout. . . . (A)	0.7	0.7	0.7	0.8	0.7	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Luxor . . . . (A)	0.9	1.5	1.7	1.1	1.3	0.0	— 0.3	0.0	—	0	0	0	0	0	0	0
Aswan . . . . (A)	0.0	1.0	1.2	0.8	0.8	Tr.	0.0	Tr.	19	1	0	0	0	0	0	0
Siwa	1.6	1.4	1.8	1.2	1.5	0.0	— 1.6	0.0	—	0	0	0	0	0	0	0
Bahariya	0.6	1.0	0.9	0.9	0.9	0.0	— 0.1	0.0	—	0	0	0	0	0	0	0
Farafra	—	0.6	1.2	1.2	0.0	Tr.	0.0	Tr.	11	1	0	0	0	0	0	0
Dakhla	0.0	0.5	0.7	0.5	0.5	0.0	— 0.1	0.0	—	0	0	0	0	0	0	0
Kharga	0.5	0.8	1.0	0.8	0.7	0.0	— Tr.	9.0	—	0	0	0	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0.7	1.3	1.4	0.9	1.1	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Quseir	0.7	1.5	1.5	1.1	1.2	6.0	— 0.1	0.0	—	0	0	0	0	0	0	0

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

MAY — 1974

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	5	0	0	22	0
Mersa Matruh (A)	0	0	0	0	0	0	4	1	4	0	9	0	0	10	0
Alexandria (A)	0	0	0	0	0	0	2	4	0	0	3	0	0	19	0
Port Said (A)	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0
Al Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	0	0	0	0	0	0	4	0	0	0	0	0	0	28	0
Cairo (A)	0	0	0	0	0	0	8	1	7	0	5	1	0	26	0
Fayoum	0	0	0	0	0	0	0	0	0	0	3	0	0	—	—
Minya (A)	0	0	0	0	0	0	1	0	1	0	13	1	1	25	0
Assyout (A)	0	0	0	0	0	0	0	0	0	0	5	0	0	26	1
Luxor (A)	0	0	0	0	0	0	0	0	12	2	10	2	0	23	0
Aswan (A)	0	0	0	0	0	0	0	0	8	0	15	2	0	25	0
Siwa	0	0	0	0	0	0	0	0	0	0	6	0	0	22	1
Bahariya	0	0	0	0	0	0	0	0	0	0	2	0	0	26	0
Farafra	0	0	0	0	0	0	0	0	1	0	4	2	0	—	—
Dakhala	0	0	0	0	0	0	0	0	0	0	10	0	0	27	0
Kharga	0	0	0	0	0	0	0	0	1	0	7	0	0	24	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0	0	0	0	0	0	0	0	2	0	10	0	0	24	1
Quseir	0	0	0	0	0	0	0	0	0	0	2	0	0	23	0

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

MAY — 1974

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	35	2	1	1—10	18	107	62	67	66	7	7	4	8	23	62	89	520
				11—27	8	8	1	0	0	0	2	7	14	4	61	79	184
				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	**26**	**115**	**63**	**67**	**66**	**7**	**9**	**11**	**22**	**27**	**123**	**170**	**706**
Mersa Matruh (A)	65	0	0	1—10	30	22	10	38	48	18	1	4	42	54	28	62	357
				11—27	17	12	8	26	17	12	11	10	4	5	79	121	322
				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	**47**	**34**	**18**	**64**	**65**	**30**	**12**	**14**	**46**	**59**	**107**	**183**	**679**
Alexandria (A)	1	0	0	1—10	102	75	35	37	29	17	18	7	7	9	66	111	513
				11—27	31	18	3	6	0	1	0	2	1	11	75	82	230
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	6
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**133**	**93**	**38**	**43**	**29**	**18**	**18**	**9**	**8**	**20**	**141**	**193**	**743**
Tanta	26	4	0	1—10	80	58	75	46	21	8	9	12	34	37	100	75	555
				11—27	39	20	10	2	7	5	3	3	1	1	36	32	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	**119**	**78**	**85**	**48**	**28**	**13**	**12**	**15**	**38**	**35**	**136**	**107**	**714**
Caira	15	0	2	1—10	70	76	44	19	3	1	3	2	12	53	49	66	898
				11—27	73	82	17	13	17	1	5	9	9	42	23	38	329
				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	**143**	**158**	**61**	**32**	**20**	**2**	**8**	**11**	**21**	**95**	**72**	**104**	**727**
Fayoum	3	2	0	1—10	253	255	13	5	2	4	9	19	14	9	42	58	683
				11—27	13	32	0	0	0	0	2	4	2	0	0	3	56
				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**	**287**	**13**	**5**	**2**	**4**	**11**	**23**	**16**	**9**	**42**	**61**	**739**
Minya	3	0	0	1—10	168	167	9	2	0	5	30	13	8	4	4	24	434
				11—27	96	192	0	0	0	0	0	5	2	0	0	11	306
				28—47	0	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	**265**	**359**	**9**	**2**	**0**	**5**	**30**	**18**	**10**	**4**	**4**	**35**	**741**
Asyout	5	0	4	1—10	66	16	12	7	10	11	8	4	11	62	132	144	487
				11—27	92	24	3	0	0	0	5	3	2	1	18	100	248
				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	**158**	**40**	**15**	**7**	**10**	**15**	**13**	**7**	**13**	**63**	**150**	**244**	**735**

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

MAY — 1974

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)	77	0	4	1—10	51	47	22	11	14	10	60	46	29	77	117	99	583
				11—27	7	2	0	0	0	0	2	0	1	0	19	49	80
				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**	**49**	**22**	**11**	**14**	**10**	**62**	**46**	**30**	**77**	**136**	**148**	**663**
Aswan . . . . (A)	4	0	4	1—10	92	52	9	6	7	11	9	5	2	14	45	292	456
				11—27	36	20	1	0	1	0	0	0	0	0	30	192	280
				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	**128**	**72**	**10**	**6**	**8**	**11**	**9**	**5**	**2**	**14**	**75**	**396**	**736**
Siwa	25	10	0	1—10	25	66	75	110	74	27	24	10	11	42	53	57	574
				11—27	18	22	10	1	14	4	4	4	0	0	19	39	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	**43**	**88**	**85**	**111**	**88**	**31**	**28**	**14**	**11**	**42**	**72**	**96**	**709**
Dakhla	0	39	22	1—10	61	52	23	22	10	14	30	15	27	33	83	158	528
				11—27	57	21	6	0	0	0	0	0	2	5	11	53	155
				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	**118**	**73**	**29**	**22**	**10**	**14**	**30**	**15**	**29**	**38**	**94**	**211**	**683**
Kharga	7	1	11	1—10	191	47	7	6	5	7	12	6	3	21	25	87	417
				11—27	229	28	0	0	0	0	0	0	0	0	5	46	308
				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	**420**	**75**	**7**	**6**	**5**	**7**	**12**	**6**	**3**	**21**	**30**	**133**	**125**
Hurghada	17	0	2	1—10	47	25	9	15	14	26	5	2	6	39	30	33	301
				11—27	57	6	0	0	5	0	0	0	3	22	150	181	424
				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**	**31**	**9**	**15**	**19**	**26**	**5**	**2**	**9**	**61**	**230**	**214**	**725**
Quseir	4	6	2	1—10	139	39	9	12	15	18	26	7	13	33	103	107	521
				11—27	122	50	4	0	0	0	0	0	0	0	1	34	111
				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	**261**	**89**	**13**	**12**	**15**	**18**	**26**	**7**	**13**	**33**	**104**	**141**	**732**

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.

MAY — 1974

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	31	*1013mb.	*1019mb.	*1004mb.	31	17.8	23.2	12.4	31	13.68
	1000	31	134	187	63	31	17.8	23.2	12.2	31	11.3
	850	31	1519	1561	1461	31	14.9	22.4	4.2	31	— 2.7
	700	30	3173	3259	3027	30	5.0	9.0	— 0.7	30	—11.3
	600	30	4368	4427	4283	30	— 3.8	0.5	— 8.5	29	—17.7
	500	29	5778	5858	5679	29	—13.6	— 8.5	—19.0	29	—29.3
	400	28	7439	7543	7827	28	—25.7	—27.9	—29.9	28	—40.9
	300	28	9459	9588	9332	28	—41.0	—36.4	—46.3	28	—54.6
	250	28	10678	10818	10538	28	—49.5	—45.0	—53.0	28	—61.8
	200	27	12123	12278	11968	27	—55.2	—49.6	—60.1	26	—66.9
	150	27	13941	14117	13776	27	—59.4	—55.4	—63.0	9	—69.9
	100	27	16461	16655	16253	27	—63.5	—57.8	—75.1	—	—
	70	21	18652	18855	18419	21	—62.9	—57.6	—70.0	—	—
	60	16	19643	19850	19380	16	—61.2	—56.8	—68.0	—	—
	50	16	20751	20905	20444	16	—68.9	—55.5	—65.6	—	—
	40	14	22183	22400	21900	14	—57.2	—53.0	—65.0	—	—
	30	9	23948	24087	23594	9	—54.0	—51.7	—58.7	—	—
	20	6	26560	26735	26158	6	—50.3	—47.9	—55.5	—	—
	10	1	30638	—	—	1	—49.7	—	—	—	—
Helwan 0000 U.T.	Surface	32	*996mb.	*1022mb.	*990mb.	31	19.2	29.4	15.2	31	9.4
	1000	81	108	158	51	3	16.0	16.6	15.2	3	11.4
	850	28	1498	1535	1457	28	15.9	23.4	9.1	27	— 2.6
	700	28	3121	3158	3069	28	6.9	12.0	— 3.2	28	—14.3
	600	28	4369	4413	4304	28	— 1.5	2.5	— 3.9	28	—21.0
	500	28	5791	5853	5730	28	—11.7	— 7.9	—14.4	28	—29.5
	400	27	7466	7535	7388	27	—24.3	—21.8	—27.6	27	—39.7
	300	26	9501	9584	9398	26	—39.7	—35.5	—44.1	26	—52.7
	250	25	10723	10816	10604	25	—47.8	—42.7	—52.0	25	—59.7
	200	25	12173	12293	12028	25	—54.5	—47.7	—60.0	25	—65.7
	150	25	13987	14140	13842	25	—61.2	—55.5	—67.9	10	—70.4
	100	24	16469	16619	16303	24	—67.4	—61.8	—73.0	—	—
	70	24	18619	18824	18427	24	—66.7	—62.0	—75.4	—	—
	60	22	19595	19800	19400	22	—63.9	—60.6	—66.7	—	—
	50	22	20689	20877	20483	21	—60.4	—56.5	—66.0	—	—
	40	20	22177	22300	22000	20	—56.8	—53.3	—60.0	—	—
	30	20	23918	24054	23672	20	—54.1	—49.7	—56.8	—	—
	20	19	26552	26677	26200	19	—49.8	—46.3	—53.1	—	—
	10	15	31177	31388	30996	14	—41.9	—32.3	—48.0	—	—
Aswan (A) 0000 U.T.	Surface	30	*987mb.	*990mb.	*983mb.	30	24.7	30.7	20.0	30	0.6
	1000	30	78	107	43	—	—	—	—	—	—
	850	30	1499	1516	1475	30	21.9	28.1	16.0	30	— 4.3
	700	30	3145	3180	3115	30	9.8	14.4	6.0	30	—11.3
	600	30	4406	4455	4375	30	1.1	3.6	— 2.7	30	—18.7
	500	29	5845	5903	5806	29	— 8.7	— 4.2	—12.6	29	—25.9
	400	29	7537	7597	7466	29	—20.2	—15.7	—25.8	29	—35.9
	300	26	9606	9677	9499	26	—34.6	—30.8	—38.0	26	—48.2
	250	26	10857	10941	10749	26	—43.1	—39.4	—47.3	26	—55.9
	200	25	12330	12417	12225	25	—53.2	—49.8	—57.3	24	—65.1
	150	24	14125	14250	13978	24	—65.4	—59.4	—70.6	1	—67.8
	100	13	16400	16631	16335	13	—75.9	—71.5	—81.0	—	—
	70	5	18600	18679	18506	5	—71.1	—65.9	—78.4	—	—
	60	3	19513	19580	19480	3	—67.7	—65.0	—70.1	—	—
	50	3	20629	20714	20559	3	—61.5	—60.0	—63.2	—	—
	40	3	22083	22100	22070	3	—55.3	—53.0	—57.5	—	—
	30	3	23888	23975	23839	3	—51.0	—49.8	—52.3	—	—
	20	3	26555	26614	26495	2	—48.8	—46.8	—50.8	—	—
	10	2	—	—	—	—	—	—	—	—	

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 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

MAY — 1974

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 . . .	31	* 1013m.b.	* 1019m.b.	* 1006m.b.	31	23.9	36.0	20.4	31	13.9
	1000 . . .	31	143	190	83	31	22.1	35.6	15.5	31	11.0
	850 . . .	31	1536	1579	1483	31	15.4	23.2	4.7	31	— 2.0
	700 . . .	30	3156	3228	3061	30	6.4	13.3	1.6	30	— 9.8
	600 . . .	29	4403	4514	4289	29	— 1.9	7.1	— 5.0	29	—17.7
	500 . . .	29	5827	5995	5701	29	—11.7	— 1.2	—16.5	29	—29.0
	400 . . .	29	7497	7743	7362	29	—24.5	—12.0	—30.0	29	—39.7
	300 . . .	27	9532	9882	9376	27	—39.5	—26.7	—46.1	27	—52.7
	250 . . .	27	10758	11175	10576	27	—47.7	—34.9	—53.7	27	—59.7
	200 . . .	27	12240	12297	11998	27	—53.9	—42.1	—60.0	27	—65.5
	150 . . .	27	14041	14628	13832	27	—57.5	—47.6	—62.8	17	—67.0
	100 . . .	26	16585	17578	16366	26	—60.9	—52.5	—67.6	1	—75.3
	70 . . .	24	18800	19583	18576	24	—61.0	—53.1	—68.7	—	—
	60 . . .	21	19805	20620	19580	21	—58.2	—50.0	—65.0	—	—
	50 . . .	21	20919	21749	20664	21	—55.1	—46.1	—61.0	—	—
	40 . . .	11	22358	22600	22120	11	—51.4	—41.6	—56.2	—	—
	30 . . .	7	24145	24552	23934	7	—48.7	—38.7	—53.7	—	—
	20 . . .	3	26700	26898	26584	3	—46.4	—44.0	—50.1	—	—
	10 . . .	1	31330	—	—	1	—37.6	—	—	—	—
Helwan 1200 U.T.	Surface . . .	31	* 995m.b.	* 1001m.b.	* 937m.b.	31	30.2	39.2	23.3	31	5.1
	1000 . . .	30	101	149	20	2	24.4	25.0	23.8	2	6.8
	850 . . .	30	1516	1551	1485	30	17.3	27.8	9.8	29	—2.2
	700 . . .	30	3148	3203	3104	30	8.2	16.3	4.9	30	—15.2
	600 . . .	30	4397	4465	4339	30	— 0.1	5.5	— 3.7	30	—22.1
	500 . . .	30	5334	5920	5755	30	— 9.9	— 4.0	—12.9	30	—29.3
	400 . . .	28	7518	7659	7421	28	—22.0	—16.1	—26.4	28	—39.7
	300 . . .	28	9572	9742	9447	28	—36.7	—30.3	—41.4	28	—52.1
	250 . . .	27	10814	11013	10664	27	—44.2	—36.4	—50.0	27	—58.3
	200 . . .	27	12288	12531	12088	27	—50.8	—42.6	—60.0	26	—63.7
	150 . . .	26	14134	14441	13891	26	—57.3	—47.4	—63.1	18	—68.3
	100 . . .	25	16659	17025	16391	25	—63.4	—55.6	—69.5	1	—77.9
	70 . . .	24	18862	19260	18572	24	—62.4	—56.5	—72.0	—	—
	60 . . .	24	19864	20270	19540	24	—58.5	—53.7	—65.0	—	—
	50 . . .	24	20978	21419	20644	24	—54.6	—48.8	—59.6	—	—
	40 . . .	23	22523	23000	22140	23	—49.6	—41.3	—55.7	—	—
	30 . . .	21	24315	23897	23949	31	—45.6	—31.0	—54.9	—	—
	20 . . .	18	27019	27626	26620	18	—41.0	—27.7	—49.5	—	—
	10 . . .	14	31817	32695	31280	14	—32.9	—20.0	—41.0	—	—
Aswan 1200 U.T.	Surface . . .	31	* 986m.b.	* 990m.b.	* 983m.b.	31	37.6	44.2	32.2	31	1.0
	1000 . . .	31	69	102	33	—	—	—	—	—	—
	850 . . .	31	1517	1541	1492	31	24.2	35.8	17.1	31	— 7.1
	700 . . .	31	3173	3212	3131	31	11.6	21.6	6.3	31	—15.1
	600 . . .	29	4440	4485	4388	29	2.6	5.8	— 0.7	29	—19.9
	500 . . .	29	5889	5947	5824	29	— 7.1	— 2.5	—10.3	29	—28.0
	400 . . .	28	7594	7673	7509	28	—18.4	—12.7	—23.1	28	—37.5
	300 . . .	28	9683	9813	9548	28	—32.5	—28.0	—38.5	28	—49.3
	250 . . .	26	10949	11093	10785	26	—41.1	—35.8	—45.7	26	—56.8
	200 . . .	26	12436	12583	12265	26	—51.2	—46.0	—55.8	26	—65.8
	150 . . .	26	14260	14427	14005	26	—62.5	—53.1	—69.2	4	—71.6
	100 . . .	21	16693	16979	16473	21	—72.8	—60.1	—83.0	—	—
	70 . . .	10	18842	19221	18523	10	[illegible]	—55.0	—74.4	—	—
	60 . . .	8	19876	20270	19500	8	[illegible]	—50.1	—69.0	—	—
	50 . . .	8	20977	21421	20538	8	—53.9	—43.8	—63.8	—	—
	40 . . .	7	22473	23040	22000	7	—50.5	—38.0	—60.3	—	—
	30 . . .	7	24269	24941	23788	7	—46.7	—31.3	—56.8	—	—
	20 . . .	2	27004	27023	26985	2	—41.7	—40.6	—42.7	—	—
	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

MAY — 1974

	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
		(N)	(N)	(N)							(N)	(N)	(N)										
0000 U.T.	M. Matruh (A)	3800 (30)	645 (30)	—15.6 (30)	4450	595	—35.2	2960	713	—11.9	12522 (24)	191 (24)	—57.7 (24)	17710	84	—68.0	10050	268	—52.3	9060	317	255	120
	Helwan	4131 (28)	619 (28)	—20.8 (28)	4730	577	—18.6	3000	660	—11.3	14703 (23)	139 (23)	—65.6 (23)	17140	91	—74.8	11270	230	—54.4	10170	—	240	146
	Aswan . . (A)	4571 (30)	588 (30)	—19.3 (30)	5100	518	—22.0	4000	622	—22.0	16378 (4)	155 (4)	—76.0 (4)	17600	85	—79.5	15080	127	—72.5	3700	—	245	53
											(N)	(N)	(N)										
1200 U.T.	M. Matruh (A)	4139 (29)	624 (29)	—16.1 (29)	5800	514	—11.3	3220	677	—12.5	13381 (26)	171 (26)	—78.9 (26)	17830	80	—69.8	10608	250	—53.7	12490	188	265	120
	Helwan . . .	4392 (30)	602 (30)	—21.7 (30)	5300	543	—20.2	3890	637	— 8.6	14708 (25)	141 (25)	—61.0 (25)	18300	76	—75.8	11390	228	—49.1	12972	182	260	150
	Aswan . . (A)	4830 (20)	572 (29)	—22.3 (29)	5470	530	—27.8	4230	612	—27.8	16471 (8)	107 (8)	—70.3 (8)	17730	81	—78.8	14427	150	—56.7	11020	250	280	114

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

Table B3.— 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 1974

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	0	—	3	4	1	2	0	—	5	8	4	6	1	5	0	—	4	7	5	9	5	11	3	10	0	31	8
	1000	2	6	1	12	2	10	3	9	3	7	0	—	0	—	2	5	0	—	9	11	7	17	1	2	1	31	10
	850	0	—	0	—	0	—	0	—	2	20	2	22	0	—	2	11	4	15	6	20	10	22	5	17	0	31	19
	700	0	—	0	—	0	—	0	—	0	—	1	19	0	—	3	25	6	29	10	26	6	24	3	19	0	29	25
	600	0	—	0	—	0	—	0	—	0	—	0	—	1	25	4	29	9	31	8	31	5	25	2	20	0	29	29
	500	0	—	0	—	0	—	0	—	0	—	0	—	2	34	1	22	10	43	11	25	2	15	1	14	0	27	35
	400	0	—	0	—	0	—	0	—	0	—	0	—	1	33	3	38	9	39	9	38	3	43	0	—	0	25	39
	300	0	—	0	—	0	—	0	—	0	—	0	—	1	55	1	75	10	42	7	49	0	—	0	—	0	19	47
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	0	1	65	9	55	4	74	0	—	0	—	0	14	53
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	8	47	0	—	0	—	0	—	0	8	47
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	—	2	49	1	76	0	—	0	—	0	3	58
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	42	0	—	0	—	0	—	0	1	42
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface		13	3	10	2	10	3	12	1	7	0	—	0	—	0	—	1	13	1	10	5	17	12	15	0	31	14
	1000	0	—	2	5	2	9	1	11	2	9	0	—	0	—	2	8	0	—	1	26	14	18	6	11	0	30	14
	850	1	14	1	14	0	—	0	—	0	—	0	—	2	14	1	22	5	11	10	22	6	20	4	13	0	30	17
	700	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	18	3	26	10	24	8	16	4	18	0	28	20
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	15	6	26	13	25	5	20	1	27	0	27	24
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	23	13	27	8	30	3	34	0	—	0	27	28
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	35	10	31	9	41	2	52	1	31	0	25	32
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	51	7	47	10	52	1	72	1	50	0	22	51
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	81	7	48	10	62	2	43	0	—	0	21	58
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	9	63	7	71	0	—	0	—	0	16	66
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	48	5	75	0	—	0	—	0	10	62
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	44	1	40	0	—	0	—	0	2	42
	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 THEMEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES**

HELWAN — MAY 1974

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	6	8	12	9	1	18	4	12	0	—	0	—	0	—	0	—	0	—	0	—	1	12	3	10	4	31	8
	1000	1	15	1	7	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	3	0	3	8
	850	4	16	8	18	2	17	0	—	0	—	0	—	0	—	1	10	0	—	2	18	6	16	5	22	0	28	17
	700	5	13	3	12	2	3	0	—	0	—	0	—	0	—	1	9	4	23	3	20	7	29	3	15	0	28	19
	600	2	11	2	13	0	—	1	19	0	—	0	—	0	—	0	—	3	26	8	26	8	24	4	23	0	28	23
	500	0	—	1	18	0	—	0	—	0	—	0	—	6	—	1	15	2	35	11	31	9	22	4	16	0	28	25
	400	0	—	1	17	0	—	0	—	0	—	0	—	0	—	1	28	1	41	11	30	8	34	2	24	0	24	31
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	49	8	42	7	41	2	25	0	20	41
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	6	2	70	8	60	6	53	1	50	0	18	55
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	83	6	71	6	70	0	—	0	16	74
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	66	5	69	5	103	0	—	0	14	80
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	29	3	86	2	80	0	—	0	6	75
	70	0	—	0	—	0	—	1	25	0	—	0	—	0	—	0	—	0	—	3	42	0	—	0	—	0	4	38
	60	0	—	0	—	0	—	1	16	0	—	1	4	0	—	0	—	0	—	1	7	0	—	0	—	0	3	9
	50	0	—	1	17	0	—	1	11	0	—	0	—	0	—	0	—	0	—	1	22	0	—	0	—	0	3	17
	40	0	—	0	—	0	—	2	31	0	—	0	—	0	—	0	—	1	16	0	—	0	—	0	—	0	3	26
	30	0	—	0	—	1	28	2	17	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	3	21
	20	0	—	0	—	0	—	1	13	0	—	1	25	9	—	0	—	0	—	0	—	0	—	0	—	0	2	19
	10	0	—	0	—	0	—	2	10	9	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	10
1200 U.T.	Surface	7	12	5	15	0	—	1	12	0	—	0	—	0	—	2	10	1	9	2	9	0	—	12	10	1	31	11
	1000	2	9	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	9
	850	0	—	9	12	7	14	0	—	0	—	0	—	0	—	0	—	2	22	3	12	4	15	5	15	0	30	14
	700	3	11	3	8	0	—	0	—	0	—	0	—	0	—	1	19	3	18	7	26	7	17	6	19	0	30	18
	600	2	14	0	—	0	—	1	16	0	—	0	—	0	—	0	—	5	27	11	23	5	24	6	19	0	30	22
	500	1	7	0	—	1	30	0	—	0	—	0	—	0	—	0	—	3	28	13	31	8	30	4	18	0	30	28
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	49	16	35	6	24	1	21	0	26	34
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	93	10	47	8	33	1	64	0	21	47
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	58	6	68	7	47	0	—	0	16	57
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	7	79	5	70	0	—	0	12	75
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	65	6	81	2	73	0	—	0	9	77
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	31	2	49	1	104	0	—	0	5	52
	70	0	—	0	—	0	—	0	—	1	20	1	19	0	—	1	16	0	—	1	15	0	—	0	—	0	4	18
	60	1	5	0	—	0	—	0	—	1	13	1	23	1	26	0	—	0	—	0	—	0	—	0	—	0	4	18
	50	0	—	0	—	0	—	1	22	0	—	1	14	0	—	1	8	1	5	0	—	0	—	0	—	0	4	12
	40	0	—	0	—	0	—	0	—	1	20	0	—	1	10	1	12	1	12	0	—	0	—	0	—	0	4	14
	30	0	—	0	—	0	—	1	18	1	10	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	14
	20	0	—	0	—	0	—	0	—	0	—	1	7	0	—	0	—	0	—	1	21	0	—	0	—	0	2	14
	10	0	—	0	—	0	—	0	—	1	16	0	—	0	—	0	—	0	—	1	16	0	—	0	—	0	2	16

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

T = 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)— MAY 1974

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			
Aswan 0000 U.T.	Surface	21	12	3	8	0	—	0	—	1	12	0	—	0	—	0	—	0	—	1	8	0	—	3	13	1	30	12
	1000	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	3	14	2	11	3	7	1	19	1	8	0	—	1	14	0	—	1	12	0	—	3	14	8	18	0	30	14
	700	0	16	1	17	0	—	1	19	0	—	0	—	0	—	1	10	1	10	5	26	5	25	3	21	0	20	20
	600	—	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	11	2	14	0	—	0	—	0	3	13
	500	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	250	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Aswan 1200 U.T.	Surface	18	12	0	—	0	—	1	6	2	8	0	—	0	—	0	—	0	—	0	—	3	12	4	9	3	31	10
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	5	12	2	5	0	—	1	8	0	—	0	—	0	—	1	4	1	7	4	10	5	11	10	12	0	29	10
	700	2	24	1	5	1	12	0	—	0	—	0	—	0	—	7	18	5	21	5	18	4	14	2	21	0	27	18
	600	1	16	0	—	0	—	0	—	0	—	0	—	0	—	6	33	6	27	7	22	4	12	3	20	0	27	24
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	34	12	33	7	16	4	32	1	26	0	28	29
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	12	43	9	40	3	34	2	37	0	26	41
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	45	11	62	4	50	2	61	2	62	0	20	58
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	9	64	3	81	2	76	0	—	0	14	69
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	76	2	56	3	96	0	—	0	11	78
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	84	4	67	2	84	0	—	0	—	0	7	74
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	31	0	—	0	1	31
	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 - MAY 1974

The mean daily air temperature and relative humidity for this month were rather normal.

The month was characterized by three heat waves on the 9th, the periods (16th-20th) and (24th-27th). The second heat wave yielded both the highest maximum air temperature for the month (38.0°C) on the 19th and the highest minimum air temperature (19.8°C) on the 17th. Apart from these heat waves mild weather was experienced.

The highest maximum soil temperatures were higher than the corresponding values of last May at 2, 5, 50 cm. depths with departures between 1.1°C and 0.3°C ; and were lower than last May at 10, 20, 100 cm. depths with departures between 0.2° and 0.4°C. The lowest minimum soil temperatures were lower than last May at all depths except at 20, 50 cm. depths where they were higher ; the departures varied between 0.1° and 0.9°C.

The mean daily actual sunshine duration was higher than normal by 0.9 hour. The mean daily wind speed at 1.5 met. height was lower by 0.4 m./sec. than the corresponding value of May 1973.

TAHRIR — MAY 1974

The mean daily air temperature and relative humidity for the month were rather normal.

The month was characterized by five variant heat waves on the 1st, the periods (6th-10th) and (17th-20th), 27th and 30th. The first heat wave yielded the highest maximum air temperature for the month (41.4°C). Apart from these heat waves mild weather was experienced.

The highest maximum soil temperatures in the the dry field were lower than last May at 2,5 cm. depths by 1.1°C and 0.2°C respectively ; higher at 10, 20 cm. depths by 0.8° and 0.6°C respectively ; and the same as last May at 50, 100 cm. depths. The lowest minimum soil temperatures were lower than last May at 2, 5, 10 cm. depths with departures between 0.8°C and 0.1°C ; and higher at 20, 50, 100 cm. depths with departures between 0.4 and 1.2°C.

The mean daily actual sunshine duration was higher than normal by 0.7 hour. The mean daily wind speed at 1.5 met. height and pan evaporation were lower than normal by 0.4 m./sec. and 1.04 mm.

BAHTIM — MAY 1974

The mean daily air temperature and relative humidity for the month were rather normal

The month was characterized by four varient heat waves on the 1st, in the periods (9th. 10th), (17th-20th) and on the 27th. The first heat wave yielded the highest maximum air temperature for the month (40.7°C). In the rest of the month mild weather was experienced.

The highest maximum soil temperatures in the dry field were higher than last May at all depths except at 20, 50 cm. depths where they were lower ; the departures varied between 2.5°C (at 2 cm.) and 0.1°C (at both 50, 100 cm.). The lowest minimum soil temperatures were higher than last May at all depths except at 5 cm. where the value was lower ; the departures varied between 0.1°C (at 5 cm.) and 1.1°C (at 20 cm.).

The mean daily wind speed at 1.5 met. height was lower than average by 0.4 m./sec. The mean daily actual sunshine duration and pan evaporation were higher than average by 1.0 hour and 0.69 mm.

KHARGA — MAY 1974

The mean daily air temperature and relative humidity for this month were rather normal.

The month was characterized by four heat waves on the 1st and in the periods (6th-10th), (18th-20th) and (28th, 29th). The last heat wave yielded the highest maximum air temperature for the month (43.0°C) on the 29th. In the rest of the month, weather was mild in general.

The highest maximum soil temperatures were higher than last May at depths between 2, 10 cm. and lower than last May at depths between 20, 100 cm. ; the departures varied between 1.7°C (at 2 cm.) and 0.3°C (at 100 cm.) The lowest minimum soil temperatures were higher than last May at all depths except at 20, 50 cm. where they were the same as last May ; the departures varied between 0.6°C and 0.2°C.

The mean daily actual sunshine duration and wind speed at 1.5 met. height were the same as average. The mean daily pan evaporation was lower than average by 0.41 mm.

Table C 1.—AIR TEMPERATURE AT 1½ METRES ABOVE GROUND
MAY — 1974

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	40
M. Matruh. . . .	25.1	15.2	20.2	17.9	21.1	24	24	24	24	22.1	1.7	2.5	0.4	0.1	0.0	0.0
Tahrir	32.4	13.3	21.9	17.0	23.7	24	24	24	23.9	20.0	3.3	7.8	2.8	0.6	0.0	0.0
Bahtim	31.4	12.5	21.9	17.0	23.9	24	24	24	23.7	19.5	3.3	8.0	3.3	0.6	0.0	0.0
Kharga	36.6	20.6	29.3	26.2	30.4	24	24	24	24	24	23.4	18.3	10.3	4.5	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
MAY — 1974

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.	38.0	19	20.2	7	19.8	17	10.2	5	5.7	5	—	—
Tahrir	41.4	1	26.4	11	18.8	20	9.3	3	7.8	3	7.5	3
Bahtim	40.7	1	26.0	4,12	16.3	21	8.4	3	4.8	3	3.4	3
Kharga	43.0	29	30.8	12	26.8	19	15.6	7	13.2	7	—	—

Table C 3.—(SOLAR + SKY) RADIATION, DURATION OF BRIGHT SUNSHINE, RELATIVE HUMIDIT & VAPOUR PRESSURE AT 1½ METRES ABOVE GROUND, EVAPORATION & RAINFALL
MAY — 1974

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. . . .	566,1	360.8	426.2	85	67	56	25	9	11.7	12.1	22.9	17	6.2	9	4.2	—	0.0	0.0	—
Tahrir	643.1	370.3	424.6	87	62	35	13	1	11.4	10.9	15.6	31	7.3	1	6.9	9.89	0.0	0.0	—
Bahtim	656.2	358.9	423.2	75	53	28	8	1	9.5	8.6	14.9	31	3.8	2	9.6	11.32	0.0	0.0	—
Kharga.	720.2	353.5	413.9	85	23	16	6	10	6.6	6.6	10.4	8	3.3	18	19.2	19,62	0.0	0.0	—

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

MAY — 1974

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	40.5	38.0	31.0	27.2	25.6	22.6	20.3	—	—	—	—	—	—	—	—	—
	L	19.0	18.2	17.9	20.4	21.0	19.7	18.9	—	—	—	—	—	—	—	—	—
Tahrir	H	50.6	44.6	39.7	33.6	29.5	27.2	25.0	24.1	32.3	30.5	28.7	26.6	25.3	24.2	23.3	—
	L	22.2	20.5	20.4	23.4	25.1	24.2	22.6	22.5	19.0	18.7	18.3	19.2	21.4	21.8	21.2	—
Bahtim.	H	55.9	46.0	36.9	30.8	27.6	25.7	23.8	23.3	33.8	28.4	26.5	25.2	23.3	21.8	20.4	—
	L	24.1	21.4	22.7	25.5	24.8	23.3	22.6	22.9	18.3	18.0	18.7	20.5	21.0	20.0	19.3	—
Kharga.	H	55.4	49.8	44.7	37.2	31.5	29.7	27.8	27.4	—	—	—	—	—	—	—	—
	L	17.7	21.0	24.2	28.0	28.5	28.2	26.5	26.7	—	—	—	—	—	—	—	—

Table C 5.—SURFACE WIND

MAY — 1974

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 konts	≥20 knots	≥25 knots	≥30 knots	≥35 knots	≥40 knots	value knots	Date
M. Matruh . .	3.8	2.6	5.0	31	27	12	7	3	0	0	40	19
Tahrir	2.0	1.4	2.7	31	23	3	0	0	0	0	31	10
Bahtim. . . .	2.2	1.1	3.2	31	20	4	0	0	0	0	31	10
Kharga . . .	4.0	3.2	7.4	31	29	12	2	1	0	0	36	11

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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 Egyptian Meteorological Authority issues several 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

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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GENERAL SUMMARY OF WEATHER CONDITIONS

JUNE 1974

Normal summer weather. Three short heat waves, the second the most excessive.

PRESSURE DISTRIBUTION

The atmospheric pressure was influenced by the high pressure extending from the Mediterranean over NE Africa and the complex monsoon low pressure over Arabia and Arabian gulf.

The monsoon trough over the Arabian gulf elongated NW wards through Asia Minor during the periods. (3rd — 6th) ,(18th — 20th), (22nd — 25th) and (29th — 30th).

SURFACE WIND

Surface winds were generally light or moderate, mostly from N and NW and with a less frequency from NE.

Surface winds freshened during several days in scattered places in Upper Egypt and the Western Desert.

TEMPERATURE

Three variant heat waves prevailed round the periods (12th—13th), (17th—19th) and (26th — 30th, the second yeilded the highest maximum air temperatures for the month.

Maximum air temperatures suffered in general, slight to moderate departures from normal.

The highest and lowest maximum air temperatures were respectively : 46.8°C at Kom Ombo on the 19th & 24.0°C at both Sallum on the 4th & 13th and Mersa Matruh on the 4th & 5th.

Minimum air temperatures were round normal in general. Their departures from normal were slight to moderate.

The highest and lowest minimum air temperatures were respectively : 30.0°C at Kharga on the 19th & 12.2°C at Tahrir on the the 3rd.

PRECIPITATION

No rain was reported as normal all over the Republic.

OTHER WEATHER PHENOMENA

Rising sand was reported during several days, in scattered places in Upper Egypt and the Western Desert.

Early morning mist developed during several days over scatterd places in Delta and Cairo.

Chairman (A. F. HASAN)

Board of Directors

Cairo, October 1973

SURFACE DATA

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

JUNE — 1974

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	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	1012.0	—0.8	29.0	—0.7	19.4	—0.5	24.2	23.9	—0.6	19.0	—0.8	64	+ 4	—	—	—	8.6
Mersa Matruh. (A)	1011.8	—0.8	27.2	—1.0	18.2	—0.1	22.7	22.9	—0.5	18.7	—0.9	69	0	370.1	425.2	87	4.8
Alexandria (A)	1011.6	—0.2	28.5	—0.2	19.5	—0.7	24.0	23.8	—0.6	20.0	—0.5	71	+ 1	362.6	423.4	86	4.4
Port Said. (A)	1009.7	—1.2	28.9	+0.3	21.1	—1.3	25.0	24.6	—0.4	20.2	—1.1	67	— 4	366.6	423.4	86	5.0
El Arish.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta.	1010.6	—0.4	32.8	—1.2	17.2	+0.1	25.0	24.6	—1.4	19.2	—0.4	61	+ 8	336.4	421.4	80	5.3
Cairo. (A)	1010.2	—0.7	33.9	—0.8	20.6	+0.6	27.2	27.1	—0.1	19.5	—0.1	50	+ 4	—	—	—	16.3
Fayoum.	—	—	36.8	+0.7	19.6	—0.3	28.2	27.9	—0.7	19.4	—0.1	46	+ 7	—	—	—	10.5
Minya. (A)	1009.7	0.0	36.4	—0.2	18.9	—0.2	27.6	27.9	—0.1	18.9	—0.1	42	+ 3	375.3	415.4	90	19.8
Assyout. (A)	1009.0	+0.1	37.0	—0.8	20.8	—0.8	28.9	28.9	—1.1	18.1	—0.1	33	+ 6	—	—	—	20.1
Luxor. (A)	1006.0	—0.8	41.0	—0.1	22.5	—0.2	31.8	31.9	—0.7	19.0	—0.3	26	+ 3	—	—	—	13.6
Aswan. (A)	1005.8	—0.5	41.2	—0.9	24.5	+0.3	32.8	32.9	—0.9	17.6	+0.2	17	+ 5	—	—	—	26.8
Siwa	1011.4	—0.4	36.8	—0.6	19.5	0.0	28.2	28.5	—0.9	18.7	+0.5	38	+ 9	374.3	418.1	90	16.8
Bahariya.	1010.1	—0.6	36.4	—0.2	19.8	+0.1	28.1	28.2	—1.2	17.7	—0.8	34	+ 3	—	—	—	13.8
Farafra.	1011.1	—0.5	37.6	—0.1	20.4	+0.1	29.0	29.0	—0.4	16.8	—0.3	25	+ 1	—	—	—	18.3
Dakhla.	1009.7	+0.1	37.1	—1.4	19.5	—2.9	28.3	28.8	—2.2	16.8	—0.9	27	+ 7	—	—	—	24.4
Kharga.	1007.8	—0.3	39.0	—0.3	23.5	+0.1	31.2	31.5	—0.7	17.0	—0.8	23	+ 2	373.3	410.1	91	21.2
Tor.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada.	1006.2	—0.7	32.1	—0.1	24.0	+0.4	28.0	28.4	—0.3	20.0	—0.3	43	0	403.1	412.6	98	13.0
Quseir	1005.7	—1.6	31.1	—1.2	24.9	—0.6	28.0	28.3	—0.7	20.7	—0.1	48	+ 4	—	—	—	12.7

TABLE A2.— MAXIMUM AND MINIMUM AIR TEMPERATURE

JUNE — 1974

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	42.6	17	24.0	4,13	25	10	3	1	0	18.5	—	22.8	29	16.5	1	0	0	0	0
Mersa Matruh (A)	37.1	17	24.0	4,5	22	4	1	0	0	16.6	—	22.3	18	15.1	15	0	0	0	0
Alexandria (A)	37.4	18	26.0	1,4,10	30	5	1	0	0	17.6	—	22.7	19	15.3	3	0	0	0	0
Port Said (A)	32.2	18	26.8	5	30	6	0	0	0	2 .6	—	23.8	30	18.3	3	0	0	0	6
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	39.4	18	28.2	5	30	27	5	0	0	—	—	22 0	19	13 7	3	0	0	0	0
Cairo (A)	41.2	18	29.3	5	30	28	9	1	0	—	—	23.4	29	18.3	6	0	0	0	0
Fayoum	44.5	18	31.5	5	30	30	23	4	0	17.3	—	23.4	19	17 3	2	0	0	0	0
Minya (A)	43.0	18	31.5	6	30	30	22	4	0	17.9	—	22 2	14	16 2	25	0	0	0	0
Assyout (A)	43 7	18	31.6	6	30	30	22	5	0	17.5	—	24.5	19	18 5	1	0	0	0	0
Luxor (A)	46.0	18	36.0	6	30	30	30	19	3	15.0	—	27.2	20	18.6	2	0	0	0	0
Aswan (A)	46.6	19	36.0	6	30	30	30	20	2	—	—	29.2	20	21.1	2	0	0	0	0
Siwa	42.0	12,29	30.4	4,5	30	30	22	4	0	18.8	—	23.4	18	16.0	1	0	0	0	0
Bahariya	43.1	18	31.0	5	30	30	22	3	0	18.7	—	24.5	18	16 2	2	0	0	0	0
Farafra	43 2	13	32.4	6	30	30	24	3	0	19.5	—	26.3	19	15.9	1	0	0	0	0
Dakhla	42.6	30	31,9	1,6	30	30	24	6	0	19.4	—	26 8	19	12 8	2	0	0	0	0
Kharga	44.6	18	34.6	6	30	30	28	8	0	21.6	—	30.0	19	17.4	13	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	36.8	30	28.7	1	30	25	5	0	0	—	—	27.2	14	20.8	2	0	0	0	0
Quseir	34.3	30	28.6	1	30	25	0	0	0	20.3	—	28.3	19	22.0	2	0	0	0	0

TABLE A 3.—SKY COVER AND RAINFALL

JUNE — 1974

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	2.1	0.9	1.4	0.6	1.1	0.0	—0.4	0.0	—	0	0	0	0	0	0	0
Mersa Matruh (A)	0.9	2.1	0.9	1.2	1.1	0.0	—2.5	0.0	—	0	0	0	0	0	0	0
Alexandria (A)	1.9	2.2	1.5	1.5	1.7	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Port Said (A)	0.6	1.0	0.1	0.6	0.5	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
E. Arish	—	—	—	—	—	—	—	—	—	0	0	0	0	0	0	0
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	0.2	1.6	0.4	0.0	0.5	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Cairo (A)	0.3	2.1	0.5	0.0	0.6	0.0	—0.2	0.0	—	0	0	0	0	0	0	0
Fayoum	—	0.0	0.5	0.0	—	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Minya (A)	0.1	0.2	0.2	0.1	0.2	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Assyout (A)	0.0	0.0	0.0	0.0	0.0	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Luxor (A)	0.0	0.0	0.0	0.0	0.0	0.0	—0.0	0.0	—	0	0	0	0	0	0	0
Aswan (A)	0.0	0.0	0.0	0.0	0.0	0.0	—0.0	0.0	—	0	0	0	0	0	0	0
Siwa	0.0	0.0	0.5	0.1	0.2	0.0	—0.0	0.0	—	0	0	0	0	0	0	0
Bahariya	0.3	0.4	0.2	0.1	0.2	0.0	—0.2	0.0	—	0	0	0	0	0	0	0
Farafra	—	0.2	0.0	0.1	—	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Dakhla	0.0	0.0	0.1	0.1	0.1	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Kharga	0.0	0.1	0.0	0.0	0.1	0.0	—0.0	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
Quseir	0.0	0.0	0.0	0.0	0.0	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0

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

JUNE — 1974

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	4	0	0	22	0
Mersa Matruh (A)	0	0	0	0	0	0	4	0	2	0	9	0	0	22	0
Alexandria . (A)	0	0	0	0	0	0	1	0	0	0	0	0	0	18	0
Port Said . (A)	0	0	0	0	0	0	0	0	0	0	0	0	0	30	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	0	0	0	0	0	0	1	0	0	0	0	0	0	27	0
Cairo . . . . (A)	0	0	0	0	0	0	15	1	4	0	1	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	1	0	3	0	6	0	0	29	0
Assyut. . . . (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	16	0	6	0	0	30	0
Aswan . . . . (A)	0	0	0	0	0	0	0	0	0	8	8	2	0	30	0
Siwa	0	0	0	0	0	0	0	0	0	0	2	0	0	29	0
Bahariya	0	0	0	0	0	0	0	0	0	0	0	0	0	28	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	11	0	0	29	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	10	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

JUNE — 1974

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	22	85	74	49	35	6	3	1	10	31	58	101	475
				11—27	8	26	7	0	0	0	0	0	9	2	35	137	224
Sallum	13	4	4	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	**30**	**111**	**81**	**49**	**35**	**6**	**3**	**1**	**19**	**33**	**93**	**238**	**699**
				1—10	46	25	2	4	9	4	9	6	44	110	46	106	411
				11—27	10	1	1	5	4	3	6	4	1	7	164	84	290
Mersa Matruh (A)	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	**56**	**26**	**3**	**9**	**13**	**7**	**15**	**10**	**45**	**117**	**210**	**190**	**701**
				1—10	107	21	4	6	3	21	15	9	7	6	84	280	563
				11—27	4	0	0	0	0	0	0	0	0	1	44	106	155
Alexandria . . (A)	1	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	**111**	**21**	**4**	**6**	**3**	**21**	**15**	**9**	**7**	**7**	**128**	**386**	**718**
				1—10	179	51	16	14	5	4	7	13	38	39	87	141	594
				11—27	52	4	2	0	0	0	0	0	0	0	2	49	109
Tanta	17	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	**231**	**55**	**18**	**14**	**5**	**4**	**7**	**13**	**38**	**39**	**89**	**190**	**703**
				1—10	104	69	28	14	2	0	1	1	7	65	86	137	514
				11—27	71	18	3	12	3	0	0	0	0	7	13	62	189
Cairo . . . (A)	17	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	**175**	**87**	**31**	**26**	**5**	**0**	**1**	**1**	**7**	**72**	**99**	**199**	**703**
				1—10	303	247	13	1	1	0	0	1	0	0	8	94	668
				11—27	13	34	0	0	0	0	0	0	0	0	0	4	51
Fayoum	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	**316**	**281**	**13**	**1**	**1**	**0**	**0**	**1**	**0**	**0**	**8**	**98**	**719**
				1—10	204	173	3	0	0	0	0	0	1	3	0	9	393
				11—27	92	230	0	0	0	0	0	0	0	0	0	0	322
Minya . . . .(A)	1	0	4	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	**296**	**403**	**3**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**0**	**9**	**715**
				1—10	22	6	0	0	0	0	0	2	1	30	166	99	326
				11—27	133	32	6	0	0	0	0	0	0	0	51	176	392
Asyout . . . .(A)	1	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	**155**	**38**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**30**	**217**	**275**	**718**
				1—10	53	17	4	8	7	13	78	44	26	68	153	122	593
				11—27	1	0	0	0	0	0	0	0	0	6	10	13	24
Luxor . . . . .(A)	102	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	**54**	**17**	**4**	**8**	**7**	**13**	**78**	**44**	**26**	**68**	**163**	**135**	**617**

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

JUNE — 1974

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	1	0	13	1—10	186	67	4	3	0	3	2	3	6	15	30	196	515
				11—27	58	10	0	0	0	0	0	0	0	2	7	113	190
				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	**245**	**77**	**4**	**3**	**0**	**3**	**2**	**3**	**6**	**17**	**37**	**309**	**706**
Siwa	9	0	1	1—10	28	92	90	108	42	23	8	4	10	22	72	104	603
				11—27	4	34	14	1	0	0	0	0	0	4	15	35	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	**32**	**126**	**104**	**109**	**42**	**23**	**8**	**4**	**10**	**26**	**87**	**139**	**710**
Dakhla	1	25	10	1—10	74	18	3	2	1	4	5	15	23	28	90	229	492
				11—27	78	29	0	0	0	0	0	0	0	0	3	82	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	**152**	**47**	**3**	**2**	**1**	**4**	**5**	**15**	**23**	**28**	**93**	**311**	**684**
Kharga	1	1	13	1—10	246	35	8	4	0	3	0	1	3	7	8	120	435
				11—27	235	9	0	0	0	0	0	0	0	0	0	26	270
				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	**481**	**44**	**8**	**4**	**0**	**3**	**0**	**1**	**3**	**7**	**8**	**146**	**705**
Hurghada	1	0	5	1—10	44	44	4	2	2	1	0	0	0	9	140	52	298
				11—27	106	13	0	0	0	0	0	0	0	2	97	198	416
				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**	**57**	**4**	**2**	**2**	**1**	**0**	**0**	**0**	**11**	**237**	**250**	**714**
Quseir	0	1	0	1—10	118	24	0	4	0	3	8	7	7	28	68	121	388
				11—27	150	68	0	0	0	0	0	0	0	0	2	111	331
				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	**268**	**92**	**0**	**4**	**0**	**3**	**8**	**7**	**7**	**28**	**70**	**232**	**719**

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 — 1974

Station	Pressure Surface (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Matrah 0000 U.T.	Surface	30	1011m.b.	1014m.b.	1006m.b.	30	21.9	27.2	19.2	30	16.6
	1000	30	127	148	080	30	21.0	28.8	17.1	30	14.3
	850	30	1528	1570	1498	30	18.2	26.0	10.2	30	— 1.8
	700	30	3163	3240	3105	29	8.8	13.7	04.0	29	—10.5
	600	30	4420	4507	4341	30	0.4	4.7	— 6.0	30	—19.6
	500	30	5858	5951	5760	30	— 8.8	— 4.3	—12.8	30	—28.8
	400	30	7548	7651	7421	30	—20.9	—16.7	—24.9	30	—39.3
	300	30	9613	9732	9471	30	—35.8	—28.5	—40.0	30	—51.9
	250	30	10856	11006	10698	30	—43.7	—37.3	—49.0	30	—58.5
	200	30	12333	12511	12125	30	—50.9	—44.6	—59.5	30	—64.6
	150	30	14173	14371	13900	30	—59.7	—53.0	—64.7	10	—70.6
	100	26	16640	16881	16340	26	—63.9	—59.8	—75.0	—	—
	70	14	18760	18936	18557	14	—65.1	—60.1	—70.1	—	—
	60	14	19744	19950	19560	14	—62.1	—56.0	—64.9	—	—
	50	13	20846	21022	20167	13	—60.3	—57.9	—65.9	—	—
	40	7	22323	22480	22160	7	—56.5	—54.3	—58.1	—	—
	30	7	24071	24206	23902	7	—52.7	—50.1	—55.8	—	—
	20	3	26656	26856	26496	3	—49.6	—46.9	—54.0	—	—
	10	—	—	—	—	—	—	—	—	—	
Helw 0000 U.T.	Surface	30	*994m.b.	*997m.b.	*987m.b.	30	22.3	29.0	18.6	30	14.4
	1000	30	89	114	23	—	—	—	—	—	—
	850	30	1495	1539	1454	30	18.9	26.5	11.7	30	0.8
	700	29	3137	3200	3080	29	10.7	14.4	6.1	29	—11.1
	600	29	4404	4476	4339	29	2.5	5.6	— 1.8	29	—18.0
	500	29	5853	5937	5771	28	— 6.9	— 4.5	—10.3	28	—26.7
	400	29	7552	7640	7459	29	—19.5	—16.0	—22.4	29	—37.2
	300	29	9628	9715	9510	29	—33.6	—28.1	—38.4	29	—48.0
	250	29	10889	10985	10748	29	—40.7	—36.1	—48.0	29	—54.7
	200	28	12386	12499	12268	28	—49.6	—46.0	—58.0	28	—62.3
	150	28	14223	14371	14056	28	—60.9	—56.4	—64.1	6	—67.8
	100	28	16673	16871	16512	28	—71.2	—69.7	—76.4	—	—
	70	28	18785	19011	18686	28	—68.8	—65.1	—74.4	—	—
	60	28	19723	20200	19240	28	—64.6	—53.9	—69.9	—	—
	50	28	20839	21095	20731	28	—60.1	—55.9	—63.8	—	—
	40	22	22333	22450	22210	22	—56.0	—51.1	—60.6	—	—
	30	22	24076	24192	23960	22	—52.4	—49.4	—57.3	—	—
	20	22	26727	26903	26588	22	—48.0	—44.0	—53.9	—	—
	10	16	31389	31580	31091	16	—41.3	—33.8	—48.9	—	
Aswan 0000 U.T.	Surface	30	*985m.b.	*988m.b.	*980m.b.	30	27.3	31.8	24.2	30	3.0
	1000	30	57	088	013	—	—	—	—	—	—
	850	30	1489	1512	1447	30	23.7	28.4	17.9	30	— 1.7
	700	30	3149	3177	3093	30	12.5	16.3	8.9	30	—11.0
	600	30	4420	4450	4351	30	2.7	4.9	0.2	30	—17.8
	500	30	5868	5901	5788	30	— 6.7	— 3.6	—10.1	30	—26.7
	400	30	7578	7628	7484	30	—17.2	—14.2	—20.2	30	—36.0
	300	29	9686	9758	9575	29	—31.6	—27.2	—36.4	29	—47.2
	250	29	10941	11048	10835	29	—41.0	—36.0	—45.1	29	—55.4
	200	28	12127	12561	12306	28	—51.6	—46.8	—54.3	28	—64.4
	150	27	14218	14418	14102	27	—63.7	—57.6	—68.1	3	—70.6
	100	17	16655	16856	16482	17	—75.0	—69.3	—82.5	—	—
	70	3	18743	18859	18645	3	—73.4	—69.7	—78.7	—	—
	60	1	19600	—	—	1	—64.8	—	—	—	—
	50	1	20706	—	—	1	—57.0	—	—	—	—
	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 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

JUNE — 1974

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	28	*1012m.b.	*1014m.b.	*1006m.b.	28	26.1	33.4	22.8	28	17.6
	1000	28	128	151	56	28	24.9	33.1	19.4	28	15.3
	850	28	1540	1572	1514	28	19.6	26.1	12.8	28	— 1.4
	700	28	3183	3229	3131	28	10.5	16.5	1.8	28	—10.1
	600	28	4446	4514	4385	28	2.3	8.2	— 4.7	28	—18.4
	500	28	5897	5972	5774	28	— 7.0	— 1.5	—11.8	28	—27.2
	400	28	7598	7713	7454	28	—19.2	—13.1	—23.6	28	—38.2
	300	28	9643	9839	9510	28	—34.0	—25.4	—40.5	28	—50.4
	250	28	10932	11116	10730	28	—42.4	—32.9	—51.9	28	—57.6
	200	28	12421	12619	12142	28	—49.0	—44.3	—58.2	26	—62.9
	150	28	14275	14514	13975	28	—57.2	—50.4	—65.0	20	—69.7
	100	23	16793	17052	16622	23	—66.7	—60.4	—73.1	—	—
	70	18	18931	19276	18788	18	—64.0	—51.2	—75.4	—	—
	60	13	19919	20200	19700	13	—59.8	—52.9	—62.5	—	—
	50	12	21065	21451	20909	12	—53.2	—48.0	—58.2	—	—
	40	7	22575	22964	22400	7	—51.0	—42.1	—54.5	—	—
	30	7	24409	24921	24189	7	—46.3	—35.5	—50.0	—	—
	20	2	27013	27084	26942	2	—45.0	—43.5	—46.6	—	—
	10	—	—	—	—	—	—	—	—	—	—
Helwan 1200 U.T.	Surface	30	*994m.b.	*996m.b.	*987m.b.	30	32.6	40.6	27.2	30	9.1
	1000	30	83	106	21	—	—	—	—	—	—
	850	30	1514	1540	1477	30	20.6	27.7	12.6	30	2.0
	700	30	3166	3212	3111	30	12.1	17.2	5.1	30	—13.4
	600	29	4439	4487	4362	29	4.2	10.0	— 1.2	29	—20.5
	500	29	5896	5967	5803	29	— 5.5	— 0.5	—11.6	29	—29.3
	400	28	7608	7715	7476	28	—17.5	—11.7	—23.1	28	—38.5
	300	27	9706	9850	9518	27	—30.9	—22.4	—36.1	27	—49.2
	250	26	10980	11162	10780	26	—37.7	—30.5	—42.0	26	—54.9
	200	26	12491	12718	12275	26	—47.0	—40.9	—51.4	26	—62.2
	150	24	14356	14616	14125	24	—57.9	—51.0	—64.9	15	—62.9
	100	21	16853	17198	16578	21	—69.1	—60.3	—77.3	—	—
	70	21	18998	19396	18657	21	—65.7	—59.4	—73.2	—	—
	60	20	19998	20400	19640	20	—60.1	—53.1	—65.8	—	—
	50	20	21177	22770	20708	20	—54.3	—46.9	—60.3	—	—
	40	17	22588	23180	22250	17	—50.2	—40.0	—54.5	—	—
	30	17	24390	25064	24016	17	—45.5	—32.4	—49.9	—	—
	20	15	27143	27958	26696	15	—40.9	—26.9	—46.3	—	—
	10	14	31901	33050	31439	14	—31.5	—16.2	—36.7	—	—
Aswan 1200 U.T.	Surface	29	*984m.b.	*987m.b.	*980m.b.	29	39.9	45.0	36.5	29	4.0
	1000	29	47	73	5	—	—	—	—	—	—
	850	29	1506	1538	1464	29	25.8	30.0	19.7	29	— 5.7
	700	28	3176	3211	3122	28	14.4	17.7	11.1	28	—14.8
	600	27	4453	4495	4396	27	4.6	8.2	2.4	27	—22.2
	500	27	5911	5966	5856	27	— 4.8	— 1.6	—10.1	27	—30.6
	400	27	7634	7696	7579	27	—15.6	—12.6	—18.2	27	—38.9
	300	27	9749	9818	9698	27	—30.1	—26.7	—33.0	27	—49.7
	250	26	11022	11106	10952	26	—39.3	—37.1	—43.3	26	—57.5
	200	25	12515	12610	12434	25	—50.2	—48.9	—52.2	25	—65.9
	150	24	14335	14450	14272	24	—63.1	—60.3	—65.3	—	—
	100	17	16779	16981	16684	17	—75.3	—69.8	—80.0	—	—
	70	7	18858	18943	18756	7	—68.9	—65.5	—74.6	—	—
	60	5	19828	19920	19710	5	—62.0	—57.6	—67.3	—	—
	50	5	20912	21014	20786	5	—59.8	—57.0	—61.6	—	—
	40	2	22465	22530	22400	2	—55.5	—54.7	—56.3	—	—
	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.

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

JUNE — 1974

	STATION	Freezing Level									First Tropopause									Highest wind speed			
		Mean			Highest			Lowest			Mean			Highest			Lowest						
		Altitude (gpm)	Pressure (mb.)	Dew Point (°C)	Altitude (gpm)	Pressure (mp.)	Dew Point (°C)	Altitude (gpm)	Pressure (mb.)	Dew Point (°C)	Altitude (gpm)	Pressure (mb.)	Temperature (°C)	Altitaed (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.	4508 (30)	594 (30)	—20.7 (30)	5100	522	—16.8	3790	644	—25.0	15641 (17)	124 (17)	—62.0 (17)	18410	075	—67.6	10330	266	—45.6	12120	204	210	110
	Helwan . . .	4790 (29)	572 (29)	—20.3 (29)	5220	542	—20 2	3900	634	—15.0	16357 (28)	106 (28)	—71.9 (28)	18000	082	—76.0	14540	138	—67.4	9650	300	280	140
	Aswan	4783 (30)	571 (30)	—20.3 (30)	5100	549	—26.0	4390	598	—21.3	16285 (2)	106 (2)	—75.6 (2)	16570 (2)	112	—74.7	16000	100	—76.5	720	922	360	40
1200 U.T.		(N)	(N)	(N)							(N)	(N)	(N)										
	Mersa Matruh.	4815 (28)	577 (28)	—18.2 (28)	6160	550	—33.4	3450	674	—23.5	15407 (18)	142 (18)	—61.4 (18)	18240	083	—62.6	10680	258	—44.3	11500	22.7	210	100
	Helwan . . .	5058 (28)	556 (28)	—24.0 (28)	5870	507	—30.3	4130	618	—24.3	16454 (21)	107 (21)	—68.8 (21)	17176	099	—60.0	15120	133	—77.3	13170	176	270	145
	Aswan	5097 (27)	555 (27)	—26.3 (27)	5680	519	—25.0	4800	576	—17.2	16938 (7)	097 (7)	—75.9 (7)	17800	083	—78.6	16020	114	—72.1	12835	189	220	78

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 1974

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 Knot
		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	5	2	2	0	—	0	—	0	—	1	16	1	10	1	10	2	6	8	8	7	11	6	6	0	30	8
	1000	3	5	0	—	0	—	0	—	0	—	1	24	1	8	0	—	1	11	9	12	9	13	6	11	0	30	12
	850	2	11	0	—	0	—	0	—	0	—	0	—	0	—	1	14	2	22	5	16	11	18	9	26	0	30	18
	700	1	19	0	—	0	—	0	—	0	—	0	—	0	—	1	43	6	20	3	24	12	20	7	26	0	30	22
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	30	7	27	4	28	12	24	5	23	0	30	25
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	30	7	35	10	20	9	21	1	27	0	29	25
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	33	5	49	12	24	5	30	2	30	0	29	31
	300	1	18	0	—	0	—	0	—	0	—	0	—	0	—	3	54	9	36	8	28	2	32	0	—	0	23	34
	250	1	10	0	—	0	—	0	—	0	—	0	—	0	—	8	49	4	42	8	33	1	39	0	—	0	22	40
	200	0	—	0	—	0	—	0	—	0	—	0	—	1	64	6	63	9	42	1	26	0	—	0	—	0	17	50
	150	0	—	0	—	0	—	0	—	0	—	0	—	1	53	4	38	7	42	0	—	0	—	0	—	0	12	44
	100	0	—	0	—	0	—	0	—	0	—	1	16	0	—	0	—	0	—	0	—	0	—	0	—	0	1	16
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	7	10	1	10	0	—	0	—	0	—	0	—	—	0	—	0	—	0	—	0	9	17	11	14	0	28	14
	1000	3	8	1	8	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	—	14	19	10	14	0	28	15
	850	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	24	3	21	4	14	13	18	6	16	0	28	13
	700	1	4	1	12	0	—	0	—	0	—	0	—	0	—	1	25	4	28	5	27	10	19	6	24	0	28	22
	600	1	22	0	—	0	—	0	—	0	—	0	—	0	—	3	18	7	28	7	20	8	24	2	32	0	28	24
	500	1	20	0	—	0	—	0	—	0	—	0	—	1	14	2	29	9	31	7	26	5	27	3	19	0	28	27
	400	0	—	0	—	0	—	1	9	0	—	0	—	2	32	3	50	8	29	9	31	1	18	3	14	0	27	30
	300	0	—	0	—	0	—	1	22	0	—	0	—	0	—	5	45	11	38	6	21	1	25	1	13	0	25	33
	250	0	—	0	—	0	—	0	—	0	—	0	—	1	51	7	54	9	40	5	24	1	36	1	17	0	24	40
	200	0	—	0	—	0	—	0	—	0	—	0	—	1	54	5	48	9	52	1	37	2	38	0	—	0	13	49
	150	0	—	0	—	0	—	0	—	0	—	0	—	1	36	2	46	7	35	1	46	0	—	0	—	0	11	38
	100	0	—	1	20	0	—	0	—	1	11	0	—	1	7	0	—	0	—	0	—	0	—	0	—	0	3	13
	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.*Cont*)—NUMBER OF OCCURRENCE3 OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES

HELWAN — JUNE 1974

Tier	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.	urface	9	7	9	9	1	6	1	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	6	5	30	6
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	70	12	15	8	15	4	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	13	2	15	0	30	15
	8500	3	15	9	16	—	—	—	—	—	—	—	—	—	—	—	—	4	10	1	33	4	19	8	16	0	29	16
	600	4	18	3	16	—	—	—	—	—	—	—	—	—	—	2	20	3	14	6	21	5	16	6	13	0	29	17
	500	3	14	—	—	—	—	—	—	—	—	—	—	—	—	3	18	5	18	6	26	8	20	4	18	0	29	20
	400	1	21	1	6	—	—	—	—	—	—	—	—	—	—	2	22	3	34	12	31	7	23	3	23	0	29	27
	300	2	16	—	—	1	9	—	—	—	—	—	—	—	—	2	36	9	52	10	34	2	28	1	15	0	27	42
	250	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	52	9	54	10	54	2	50	—	—	0	24	53
	200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	73	9	61	10	52	—	—	—	—	0	22	58
	150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	32	7	49	8	51	1	18	—	—	0	18	46
	100	1	51	—	—	—	—	—	—	—	—	—	—	—	—	3	23	4	21	3	26	—	—	—	—	0	11	26
	70	—	—	1	40	—	—	2	28	2	10	—	—	2	25	—	—	2	33	—	—	—	—	—	—	0	9	26
	60	—	—	—	—	1	27	2	18	3	18	—	—	1	30	—	—	—	—	—	—	1	80	—	—	0	8	28
	50	—	—	—	—	1	21	5	23	1	28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	7	23
	40	—	—	—	—	1	30	4	28	1	22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	6	27
	30	—	—	—	—	—	—	5	31	1	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	6	28
	20	—	—	—	—	—	—	3	24	2	24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	5	24
	10	—	—	—	—	—	—	3	18	1	43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	4	25
1200 U.T.	Surface	13	12	6	11	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	6	1	5	8	5	0	30	8
	1000	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	0	0
	850	11	13	9	13	5	13	1	7	1	8	0	—	0	—	0	—	0	—	1	13	0	—	2	11	0	30	13
	700	5	16	2	10	3	16	0	—	0	—	0	—	0	—	2	12	4	12	2	10	5	12	6	8	0	29	12
	600	3	19	3	15	0	—	0	—	0	—	0	—	0	—	4	18	5	15	5	19	5	14	4	12	0	29	16
	500	4	13	1	13	0	—	0	—	0	—	0	—	1	5	3	16	2	17	10	20	6	20	2	14	0	29	17
	400	1	12	1	7	0	—	0	—	0	—	0	—	1	11	1	17	5	23	12	32	5	19	1	11	0	27	24
	300	0	—	0	—	0	—	0	—	0	—	0	—	1	9	2	35	8	42	11	35	3	24	0	—	0	25	36
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	41	12	59	7	50	2	28	0	—	0	24	51
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	49	8	75	11	54	0	—	0	—	0	22	61
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	54	8	57	7	45	0	—	0	—	0	17	51
	100	0	—	0	—	0	—	1	72	0	—	1	53	2	46	4	23	4	32	0	—	1	8	0	—	0	13	34
	70	0	—	0	—	0	—	0	—	0	—	3	22	4	15	2	21	6	9	1	74	0	—	0	—	0	11	22
	60	0	—	0	—	1	19	1	21	2	16	4	20	1	15	1	15	0	—	0	—	0	—	0	—	0	16	19
	50	0	—	0	—	0	—	1	8	6	21	1	32	2	14	0	—	0	—	0	—	0	—	0	—	0	10	19
	40	0	—	0	—	0	—	3	25	3	25	3	15	0	—	0	—	0	—	0	—	0	—	0	—	0	9	22
	30	0	—	0	—	0	—	3	29	3	20	0	—	2	15	0	—	0	—	0	—	1	28	0	—	0	9	23
	20	0	—	0	—	0	—	0	—	6	23	1	17	0	—	0	—	0	—	0	—	0	—	0	—	0	7	22
	10	0	—	0	—	0	—	3	45	1	13	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	4	37

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) — JUNE 1974

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	24	12	2	10	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	13	0	30	12
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	11	16	4	11	2	12	1	4	1	5	0	—	0	—	0	—	0	—	1	20	2	10	8	14	0	30	13
	700	0	—	1	22	1	10	0	—	0	—	0	—	0	—	2	15	2	18	1	13	2	18	1	25	0	10	17
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	7	1	20	0	—	0	—	0	—	0	2	14
	500	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	250	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	14	10	3	14	0	—	0	—	0	—	0	—	0	—	0	—	2	6	1	5	1	6	6	8	2	29	8
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	5	10	1	12	0	—	0	—	1	3	0	—	0	—	0	—	2	10	4	6	7	11	9	15	0	29	11
	700	2	18	1	3	0	—	0	—	0	—	0	—	2	11	4	20	11	26	4	19	2	15	1	12	0	27	20
	600	0	—	1	20	0	—	0	—	0	—	0	—	3	6	4	20	12	20	2	12	2	20	2	9	0	26	17
	500	0	—	0	—	2	7	0	—	0	—	0	—	3	20	4	16	6	22	6	15	3	13	2	12	0	26	16
	400	0	—	0	—	2	7	1	11	0	—	0	—	2	13	1	10	10	27	6	12	4	12	0	—	0	26	17
	300	0	—	0	—	0	—	0	—	0	—	1	10	1	8	6	22	10	33	4	15	0	—	1	5	0	23	23
	250	0	—	0	—	0	—	0	—	0	—	2	17	3	24	5	30	10	35	1	3	0	—	0	—	0	21	29
	200	0	—	0	—	0	—	0	—	0	—	3	27	3	25	8	33	4	33	0	—	0	—	0	—	0	18	31
	150	0	—	0	—	0	—	0	—	0	—	2	35	5	26	3	39	2	36	0	—	0	—	0	—	0	12	35
	100	0	—	0	—	0	—	0	—	5	—	1	28	3	22	1	47	0	—	0	—	0	—	0	—	0	5	23
	70	0	—	0	—	0	—	2	22	1	25	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	3	27
	60	0	—	1	11	0	—	0	—	2	33	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	3	26
	50	0	—	1	8	0	—	0	—	1	30	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	24
	40	0	—	0	—	0	—	1	45	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	45
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

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

REVIEW OF AGRO-METEOROLOGICAL STATIONS

MERSA MATRUH — JUNE 1974

The mean daily air temperature and relative humidity for this month were rather normal.

Mild summer weather prevailded the wholemonth apart from three short heat waves on the 12th, (17th, 18th), and 28th. The second heat waves yielded the higest maximum air temerature for the month (36.1°C) with the lowest relative humidity (21%) on the 17th and the highest minimum air temperature (22.3°C) on the 18th.

The highest maximum soil temperatures werehigher than the corresponding values of last June at all depths except at 100 cm. where its value was lower by 0.2°C ; the departures varied between 0.4°C (at 5 cm.) and 0.4°C (at both 20, 50 cm.). The lowest minimum soil temperatures were also higher thln last June at all depths except at 100 cm. where its value was lower by 0.5°C ; the departures varied between 3.1°C (at 2 cm.) and 0.6°C (at 20 cm.).

The mean daily actual sunshine duration was higher than normal by 0.8 hour. The mean daily wind speed at 1.5 met. was lower than the corresponding value of June 1973 by 0.3 m./sec.

TAHRIR — JUNE 1974

The mean daily air temperature for this month was slightly below normal, while the mean daily relative humidity was above normal.

The month was intervened by five short heatwaves on the 3rd, (12th, 13th), (17th, 18th), 26th and (28th-30th). The last heat waves yielded the highest maximum air temperature for the month (40.7°C) together with the lowest relative humidity (28%) on the 29th and the highest minimum air temperature (22.2°C) on the 28th. Apart from these heat waves mild summer weather was experienced.

The highest maximum soil temperatures in the dry field were higher than the corresponding values of last June at all depths with departures between 16°C (at 20 cm.) and 0.4°C (at 100 cm.), The lowest minimum soil temperatures were lower than last June at 2, 5, 10 cm. depths ; the same as last June at 20 cm. and higher at 50 cm. and 100 cm. All the departures were slight and ranged between 0.6°C and 0.1°C.

The mean daily wind speed at 1.5 met. height, actual sunshine duration and pan evaporation were all lower than normal by 0.7 m./sec., 0.1 hour and 2.11 mm. respectively.

BAHTIM — JUNE 1974

The mean daily air temperature and relative humidity for this morth were rather normal.

Mild summer weather prevailed the whole month apart from three short heat waves in the periods, (12th, 13th), (17th, 18th) and (29th, 30th). The second head wavee yielded the highest maximum air temperature for the month (39.4°C) on the 18th.

The highest maximum soil temperatures in the dry field were higher than the corresponding values of last June at all depths with departures between 2.8°C (at 2 cm.) and 0.3°C (at both 50, 100 cm.). The lowest minimum soil temperatures were also higher than last June at all depths with departures between 1.6°C (at 2 cm) and 0.1°C (at 100).

The mean daily actual sunshine duration was higher than average by 0.1 hour. The mean daily wind speed at 1.5 met height and pan evaporation were lower than average by 0.6 m./sec. and 0.87 mm. respectively.

KHARGA — JUNE 1974

The mean daily air temperature and relative humidity for this month were rather normal.

The month was characterized by four heat waves in the periods : 4th, (13th, 14th), (17th-19th) and (29th. 30th). The third heat wave yielded the highest maximum air temperature for the month (44.6°C) on the 18th and the highest minimum air temperature (30.0°C) on the 19th. In the rest of the month maximum air temperatures were below normal.

The highest maximum soil temperatures were below the corresponding values of last June at all depths with departures between 3.5°C (at 5 cm.) and 0.2°C (at 100 cm.). The lowest minimum soil temperatures were also below the corresponding values of last June at all depths except at 20 cm. where its value was higher by 0.2°C ; the departures varied between 2.4 °C (at 5 cm.) and 0.3°C (at 100 cm.).

The mean daily actual sunshine duration was the same as average. The mean daily wind speed at 1.5 met. height and pan evaporation were lower than average by 0.7 m/sec. and 1.49 mm. respectively.

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

JUNE — 1974

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 . .	27.2	18.2	23.0	20.8	23.8	24	24	24	24	24	19.4	5.7	0.5	0.0	0.0	0.0
Tahrir	3[illegible].0	17.5	2[illegible].2	20.8	26.9	24	24	24	24	23.8	18.3	11.5	5.9	0.8	0.0	0.0
Bahtim	33.6	16.6	25.1	20.6	2[illegible].9	24	24	24	24	23.5	18.0	11.5	6.2	0.7	0.0	0.0
Kharga	39.0	23.5	31.6	28.4	32.7	24	24	24	24	24	23.8	21.6	14.5	0.7	1.3	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

JUNE — 1974

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
Mersa Matruh . . .	37.1	17	24.0	4-5	22.3	18	15.1	15	12.1	15	—	—
Tahrir	40.7	29	31.2	6	22.2	28	12.2	3	11.0	3	9.0	3
Bahtim	39.4	18	30.0	6	20.9	28	13.0	3	9.5	12	7.4	12
Kharga	44.6	18	34.6	6	30.0	19	17.4	13	14.8	13	—	—

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

JUNE — 1974

STATION	(Solar+Sky) Radiation g.u. 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	Class A	Total Amount Monthly	Max. fall in one day	Date
M. Matruh . .	573.6	379.1	425.2	87	69	59	21	17	14.3	14.6	19.8	25	6.4	12	4.8	—	0.0	0.6	—
Tahrir . . .	663.2	3[illegible]	422.3	87	68	2	28	29	15.8	15.6	22.8	30	9.5	3	6.6	10.14	0.0	0.0	—
Bahtim . . .	774.[illegible]	3[illegible]	421.6	8[illegible]	5[illegible]	32	17	12	12.7	11.7	20.1	7	6.3	12	10.4	12.19	0.0	0.0	—
Kharga . .	735.2	373.3	410.1	91	23	14	4	13	7.5	6.7	11.7	21	2.8	13	21.2	22.37	0.0	0.0	—

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

JUNE — 1974

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	44.7	42.2	35.9	30.4	28.2	25.0	22.0	—	—	—	—	—	—	—	—	—
	L	23.3	22.8	22.4	24.0	24.8	22.5	20.4	—	—	—	—	—	—	—	—	—
Tahrir . . .	H	55.0	48.7	43.2	37.4	32.5	30.0	27.3	25.9	33.2	32.0	31.3	29.8	28.1	26.6	25.5	—
	L	27.0	25.5	24.6	27.4	28.6	27.3	25.1	24.3	22.6	22.3	22.0	22.4	24.5	24.2	23.3	—
Bahtim . . .	H	58.2	48.4	39.7	33.9	30.4	28.1	25.4	24.0	36.3	29.8	27.9	36.4	25.2	23.7	21.5	—
	L	29.0	26.6	26.9	28.9	27.9	25.7	23.9	23.4	21.3	20.8	21.4	22.7	23.2	21.9	20.4	—
Kharga . . .	H	57.6	50.5	45.9	39.3	33.2	31.5	29.1	28.2	—	—	—	—	—	—	—	—
	L	20.9	23.6	27.7	31.6	31.0	29.7	27.8	27.4	—	—	—	—	—	—	—	—

Table C 5.—SURFACE WIND

JUNE — 1974

STATION	Wind Speed m/sec at 1½ metres			Days with surface wind speed at 10 metres							Max. Gust (Knot) 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	3.7	2.7	4.9	30	23	13	5	0	0	0	31	12,29
Tahrir	1.8	1.4	2.3	28	14	1	0	0	0	0	31	24
Bahtim. . . .	2.2	0.9	3.3	30	22	2	0	0	0	0	24	23,24,25
Kharga. . . .	4.4	3.4	5.5	30	24	10	5	0	0	0	36	15

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Note : For explanatory notes on the tables please refer to Volume 17, Number 1 (January 1974)

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THE ARAB REPUBLIC OF EGYPT

MONTHLY WEATHER REPORT

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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 se veral 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, Meteor ological 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 weatner 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 19 68 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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Note **: For explanatory notes on the tables please refer to Volume 17, Number 1 (January 1974).**

GENERAL SUMMARY OF WEATHER CONDITIONS

JULY 1974

Normal summer weather with three heat waves, the second of long duration.

PRESSURE DISTRIBUTION

The monsoon trough over Iraq extended through Asia Minor and East Mediterranean during the periods (1st — 8th), (12th — 14th), (16th — 21st), (25th —26th) and (29th — 31st). In the rest periods of the month, high pressure over Central Mediterranean and NE Africa extended slightly eastwards.

SURFACE WIND

Surface winds were generally light to moderate, mostly from N and NW and with a less frequency from NE. Surface winds freshened during several days in few scattered localities.

TEMPERATURE

Three heat waves were experienced, the first and third were of short duration and occured almost by commencement and the end of the month. The second wave was of long duration, it persisted from the 15th till the 23rd.

Maximum air temperatures showed slight to moderate departures from normal.

The highest and lowest maximum air temperatures were respectively :

45.4°C at Kena on 23rd and 25.6°C at Balteam on the 11th.

Minimum air temperatures showed irregular and slight departures from normal in general.

The highest and lowest minimum air temperatures were respectively :

29.4 C at Kharga on the 23rd and 14.8 C at Shebin EL-Kom on the 9th.

PRECIPITATION

As normal no precipitation was reported.

OTHER WEATHER PHENOMENA

Early morning mist developed during several days in scattered places in Delta and Cairo.

Light rising sand was reported in few localities mainly in Upper Egypt.

Chairman (A. F. HASAN)

Board of Directors

Cairo, October 1976

SURFACE DATA

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

JULY 1974

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	1010.9	+0.4	30.2	−0.6	21.3	0.0	25.8	25.6	−0.3	21.5	+0.3	70	+ 6	—	—	—	8.7
Mersa Matruh (A)	1010.2	+0.2	28.4	−0.7	20.4	0.0	24.4	24.7	−0.2	20.5	−1.0	70	− 3	390.5	433.6	90	6.7
Alexandria. (A)	1009.4	+0.7	29.6	−0.2	22.3	−0.3	26.0	25.6	−0.4	22.1	−0.2	73	+ 1	378.4	432.1	87	4.4
Port Said. (A)	1007.5	−0.1	31.3	+0.9	23.2	−0.8	27.3	26.6	+0.2	22.7	−0.3	70	− 2	378.2	432.1	87	4.3
El Arish.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1008.1	−0.3	32.9	−1.3	19.3	+0.4	26.1	25.4	−0.8	21.4	0.0	70	+ 7	365.8	431.4	84	3.3
Cairo. (A)	1008.3	+0.2	34.7	−0.3	21.5	0.0	28.1	27.6	−0.2	21.4	+0.2	59	+ 5	—	—	—	12.0
Fayoum.	—	—	37.9	+1.2	20.8	−0.5	29.4	29.0	+0.4	21.0	+0.3	50	+ 4	—	—	—	9.5
Minya. (A)	1008.6	+1.6	37.1	+0.4	20.3	+0.1	28.7	28.8	+0.4	20.4	+0.2	47	+ 3	391.8	425.4	92	14.4
Assyout. (A)	1007.5	+0.7	36.8	+0.1	22.2	0.0	29.5	29.6	0.0	19.6	+0.1	37	+ 2	—	—	—	16.7
Luxor (A)	1005.4	+0.5	40.7	+0.2	23.4	−0.2	32.1	32.3	−0.4	19.8	−0.1	29	+ 3	—	—	—	13.4
Aswan. (A)	1005.6	+0.7	41.1	−0.1	25.3	+0.8	33.2	33.3	−0.2	18.0	−0.1	17	+ 1	—	—	—	27.9
Siwa	1009.7	0.0	36.9	−0.9	20.7	−0.1	28.8	29.3	−0.3	19.3	−0.1	39	+ 6	398.5	427.6	93	17.1
Bahariya	1008.2	−0.1	37.0	+0.1	20.9	+0.2	29.0	29.2	−0.3	18.6	−0.9	35	0	—	—	—	13.4
Farafra.	1009.4	−0.2	38.4	−1.3	21.4	+0.2	29.9	30.1	+0.5	17.6	−0.2	26	0	—	—	—	16.8
Dakhla.	1008.0	+0.4	38.4	−0.1	20.8	−2.0	29.6	30.1	−0.9	17.2	−1.1	25	+ 2	—	—	—	22.4
Kharga	1006.7	+0.5	39.8	+0.5	23.0	−0.3	31.4	32.3	+0.5	17.8	−0.5	24	0	388.7	419.0	93	17.6
Tor.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada.	1004.7	+0.2	33.4	+0.5	25.1	+0.2	29.3	29.6	+0.1	21.9	+0.5	49	+ 2	393.1	422.8	92	12.0
Quseir.	1005.0	−0.1	32.7	−0.3	26.0	−0.2	29.4	29.7	+0.1	22.3	+0.2	50	+ 1	—	—	—	10.8

Note . Starting from July 1973 the monthly mean values of the relative humidity are the arithmetic means over the month of their corresponding daily hourly values

Table A 2.--MAXIMUM AND MINIMUM AIR TEMPERATURES

JULY — 1974

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
Salum	34.8	20	26.6	11	31	15	0	0	0	20.4	—	24.2	20	19.2	14	0	0	0	0
Mersa Matruh . . . (A)	31.4	19	26.5	10	31	4	0	0	0	19.6	—	22.9	2[illegible]	18.2	14	0	0	0	0
Alexandria . . . . . (A)	32.6	20	27.7	11	31	7	0	0	0	20.9	—	24.2	21	19.4	9	0	0	0	0
Port Said . . . . . (A)	34.5	20	29.6	24	31	25	0	0	0	22.9	—	25.0	21	21.6	13	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	36.0	17	29.3	11	31	29	3	0	0	—	—	22.0	31	16.2	11	0	0	0	0
Cairo . . . . . (A)	38.4	18	29.8	11	31	30	16	0	0	—	—	23.7	20	19.6	1,9,13	0	0	0	0
Fayoum	42.5	21	34.0	11	31	31	29	6	0	18.9	—	23.4	1	17.0	1	0	0	0	0
Mjnya . . . . . (A)	41.0	1	33.2	11	31	31	26	5	0	19.3	—	23.6	1	17.4	4,12	0	0	0	0
Assyout . . . . . (A)	41.3	21	32.3	12	31	31	23	4	0	19.3	—	24.6	1	19.2	12	0	0	0	0
Luxor . . . . . (A)	44.2	1	36.8	12	31	31	31	17	0	15.7	—	27.0	24	20.8	12	0	0	0	0
Aswan . . . . . (A)	45.0	1,2	37.4	12	31	31	31	20	0	—	—	28.6	24	23.0	13	0	0	0	0
Siwa	42.0	21	32.6	11	31	31	26	3	0	20.1	—	23.5	1	18.6	12	0	0	0	0
Bahariya	42.2	21	33.5	11	31	31	24	5	0	20.0	—	23.5	1,22	18.3	12	0	0	0	0
Farafra	42.9	1	34.4	25	31	31	28	8	0	20.5	—	24.6	2	19.0	9	0	0	0	0
Dakhla	42.8	21	33.7	26	31	31	27	8	0	20.6	—	28.1	23	16.4	18	0	0	0	0
Kharga	44.2	1,23	35.3	12	31	31	31	16	0	20.9	—	29.4	23	18.4	28	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	36.3	19	30.6	12	31	31	3	0	0	—	—	27.6	21	22.2	7	0	0	0	0
Quseir	36.0	17	30.6	3	31	31	2	0	0	21.5	—	28.5	21	23.0	12	0	0	0	0

Table A 3. — SKY COVER AND RAINFALL.

JULY — 1974

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	0.9	0.9	0.2	0.9	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Mersa Matruh (A)	1.0	2.0	0.8	1.0	1.0	0.0	0.0	0 0	—	0	0	0	0	0	0	0
Alexandria (A)	2.1	2.3	1.5	1.9	1 9	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Port Said (A)	0.7	1.9	0.1	0.2	0.6	0.0	0.0	0.0	—	0	0	0	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	0.4	2.8	0.7	0.0	0.7	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Cairo (A)	1.2	3.0	0.3	0.0	0.9	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Fayoum	—	0 2	0.0	0.0	—	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Minya (A)	0.0	0 3	0.1	0 0	0.0	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
Louxor (A)	0.0	0.1	0.1	0.1	1.1	0.0	0.0	0 0	—	0	0	0	0	0	0	0
Aswan (A)	0.0	0.3	0.5	0.3	0.3	0.0	0·0	0.0	—	0	0	0	0	0	0	0
Siwa	0.1	0.2	0.2	0.4	0.2	0 0	0 0	0.0	—	0	0	0	0	0	0	0
Baharia	0.0	0.4	0.0	0 0	0.1	0.0	0.0	0.0	—	1	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
Dakhalia	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	0.0	0.0	0.0	0.0	0.0	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

JULY — 1974

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	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0
Mersa Matruh (A)	0	0	0	0	0	0	4	2	0	0	4	0	0	24	0
Alexandria (A)	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0
Port Said (A)	0	0	0	0	0	0	0	0	0	0	0	0	0	31	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	0	0	0	0	0	0	10	0	0	0	0	0	0	29	0
Cairo (A)	0	0	0	0	0	0	17	6	6	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	1	0	7	0	0	0	0	31	0
Assyout (A)	0	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Luxor (A)	0	0	0	0	0	0	0	0	7	0	6	0	0	31	0
Aswan (A)	0	0	0	0	0	0	0	0	3	0	10	1	0	30	0
Siwa	0	0	0	0	0	0	0	0	0	0	5	0	0	31	0
Bahariya	0	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Farafra	0	0	0	1	0	0	0	0	0	0	0	0	0	31	0
Dakhla	0	0	0	0	0	0	0	0	0	0	7	0	0	31	0
Kharga	0	0	0	0	0	0	0	0	0	0	1	0	0	31	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0	0	0	0	0	0	0	0	0	0	5	0	0	31	0
Qaseir	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

JULY — 1974

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	9	10	0	1—10	53	177	65	10	5	3	1	5	8	20	82	175	604
				11—27	0	19	7	0	0	0	0	0	0	0	16	79	121
				28—47	0	0	0	0	0	0	0	0	0	6	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	53	196	72	10	5	3	1	5	8	20	98	254	725
Marsa Matruh . (A)	4	1	0	1—10	42	6	1	0	1	0	0	0	17	138	73	100	378
				11—27	29	0	0	0	0	0	0	0	0	1	67	264	361
				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	71	6	1	0	1	0	0	0	17	139	140	364	739
Alexandria . . (A)	0	0	0	1—10	27	0	0	0	1	2	2	1	2	46	163	321	565
				11—27	8	0	0	0	0	0	0	0	0	1	50	120	179
				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	0	0	0	1	2	2	1	2	47	213	441	744
Tanta.	0	0	0	1—10	89	22	1	0	0	0	2	15	77	131	180	163	683
				11—27	20	0	0	0	0	0	0	0	0	0	1	40	61
				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	109	22	1	0	0	0	2	15	77	131	181	206	744
Cairo . . . . (A)	75	0	0	1—10	84	15	0	0	0	0	0	1	19	138	177	141	575
				11—27	32	3	0	0	0	0	0	0	0	1	34	24	94
				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	116	18	0	0	0	0	0	1	19	139	211	165	669
Fayoum	5	5	1	1—10	298	243	7	4	0	2	3	5	10	13	22	115	622
				11—27	1	10	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	299	253	7	4	0	2	3	5	10	13	22	115	733
Minya . . . . (A)	2	0	13	1—10	252	215	10	2	3	5	9	1	5	3	15	45	530
				11—27	61	107	1	0	0	0	0	0	0	0	0	0	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	313	317	11	2	3	5	9	1	5	3	15	45	729
Asyout . . . . (A)	5	0	25	1—10	65	23	3	1	0	2	2	4	5	88	183	144	520
				11—27	43	3	0	0	0	0	0	0	0	0	20	128	194
				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	108	26	3	1	0	2	2	4	5	88	203	272	714
Luxor . . . . (A)	86	0	0	1-10	51	19	9	10	9	13	56	72	47	107	137	110	640
				11-27	0	0	0	0	0	0	0	0	0	8	4	6	18
				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	19	9	10	9	13	56	72	47	115	141	116	658

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

JULY — 1974

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
Aswan . . . . (A)	25	0	1	1—10	61	60	10	2	5	11	8	14	19	98	106	138	532
				11—27	8	0	0	0	0	0	0	1	3	34	65	75	186
				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	**69**	**60**	**10**	**2**	**5**	**11**	**8**	**15**	**22**	**132**	**171**	**213**	**718**
Siwa	18	3	0	1—10	34	125	107	58	22	9	5	3	5	17	95	148	628
				11—27	3	33	18	2	0	0	0	0	0	0	8	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	37	**158**	**125**	**60**	**22**	**9**	**5**	**3**	**5**	**17**	**103**	**179**	**723**
Dakhla	1	0	0	1—10	75	36	22	9	3	1	11	20	42	83	132	219	653
				11—27	14	12	1	0	0	0	0	0	0	1	0	62	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	**89**	**48**	**23**	**9**	**3**	**1**	**11**	**20**	**42**	**84**	**132**	**281**	**743**
Kharga	3	1	0	1—10	229	69	28	17	21	8	4	6	7	14	90	186	679
				11—27	44	3	0	0	0	0	0	0	0	0	0	14	61
				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	**273**	**72**	**28**	**17**	**21**	**8**	**4**	**6**	**7**	**14**	**90**	**200**	**740**
Hurghada.	18	5	0	1—10	75	68	27	3	11	25	14	5	2	26	136	48	440
				11—27	73	4	0	0	0	0	0	0	0	0	63	141	281
				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	**148**	**72**	**27**	**3**	**11**	**25**	**14**	**5**	**2**	**26**	**199**	**189**	**721**
Quseir	1	7	0	1—10	114	80	42	15	10	15	23	20	22	44	84	78	547
				11—27	85	75	11	0	0	0	0	0	0	0	4	14	189
				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	**199**	**155**	**53**	**15**	**10**	**15**	**23**	**20**	**22**	**44**	**88**	**92**	**736**

UPPER AIR CLIMATOLOGICAL DATA

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

JULY 1974

Station	Pressure Surface (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Meras Matruh 0000 UT	Surface	31	*1010m.b.	*1015m.b.	*1006m.b.	31	23.8	26.0	21.5	31	19.3
	1000	31	118	159	079	31	22.8	24.6	20.4	31	18.8
	850	31	1523	1553	1495	31	18.7	23.6	11.6	31	— 3.5
	700	31	3195	3200	3096	31	10.0	13.8	5.8	31	—17.5
	600	31	4430	4471	4346	31	3.3	8.9	— 1.7	31	—21.4
	500	31	5892	5976	5822	31	— 4.5	0.4	—10.6	31	—30.8
	400	31	7613	7744	7476	31	—14.6	—10.6	—20.8	31	—36.4
	300	31	9724	9866	9593	31	—29.3	—26.0	—34.1	31	—38.6
	250	31	10999	11166	10858	31	—38.5	—34.1	—44.9	31	—56.1
	200	30	12500	12694	12347	30	—48.6	—44.0	—55.0	30	—62.4
	150	30	14347	14574	14153	30	—60.5	—55.9	—64.9	10	—63.7
	100	16	16831	17076	16587	16	—70.9	—62.0	—79.0	—	—
	70	5	19025	19574	18812	5	—64.5	—64.1	—72.9	—	—
	60	4	19862	19950	19810	4	—65.4	—62.5	—69.3	—	—
	50	4	20940	21035	20869	4	—60.0	—52.7	—65.3	—	—
	40	3	22413	22480	22380	3	—58.1	—56.0	—60.5	—	—
	30	3	24132	24216	24070	3	—52.9	—50.2	—55.0	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—
Helwan0000 UT	Surface	31	*992m.b.	*899m.b.	*989m.b.	31	23.4	27.6	20.4	31	17.6
	1000	28	075	123	043	—	—	—	—	—	—
	850	28	1489	1543	1462	28	20.1	25.0	15.5	28	2.7
	700	28	3137	3189	3085	27	11.2	14.2	8.1	27	— 9.0
	600	28	4408	4459	4344	28	4.6	9.2	0.7	28	—16.7
	500	28	5876	5920	5780	28	— 2.3	3.7	— 9.0	28	—23.2
	400	28	7608	7685	7475	28	—13.0	— 9.8	—18.2	28	—31.9
	300	28	9741	9841	9598	28	—27.8	—24.9	—31.0	28	—44.2
	250	27	11031	11129	10905	27	—37.2	—34.2	—41.9	27	—52.5
	200	26	12543	12644	12409	26	—48.1	—44.0	—53.9	26	—61.1
	150	25	14387	14508	14247	25	—61.3	—56.4	—67.4	5	—67.4
	100	21	16812	16960	16645	21	—77.8	—67.5	—79.0	—	—
	70	21	18899	19062	18752	21	—69.7	—65.1	—75.3	—	—
	60	21	19881	20120	19720	21	—65.8	—61.2	—69.5	—	—
	50	21	20963	21097	20790	21	—60.4	—53.1	—63.9	—	—
	40	14	22443	22570	22300	14	—57.6	—53.6	—60.0	—	—
	30	13	24216	24751	24036	13	—54.7	—52.6	—59.5	—	—
	20	3	26845	26886	26792	3	—47.4	—45.0	—48.8	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 0000 UT	Surface	29	*984m.b.	*987m.b.	*981m.b.	29	27.8	32.0	24.4	29	5.7
	1000	29	55	77	25	—	—	—	—	—	—
	850	29	1486	1517	1461	29	22.3	26.0	18.3	29	— 1.4
	700	29	3135	3173	3098	29	9.9	13.3	5.7	29	— 8.6
	600	29	4399	4433	4354	29	2.9	5.6	— 1.7	29	—16.0
	500	29	5855	5894	5801	29	— 4.6	— 0.2	— 9.2	29	—25.1
	400	29	7581	7624	7512	28	—14.4	—11.6	—17.4	28	—34.7
	300	29	9700	9758	9614	29	—29.6	—27.6	—33.7	29	—46.4
	250	25	10977	11038	10880	25	—39.5	—36.6	—44.2	25	—54.1
	200	22	12474	12546	12343	22	—50.8	—47.1	—56.9	21	—62.1
	150	21	14297	14394	14106	21	—63.8	—59.6	—70.5	2	—70.7
	100	12	16687	16801	16564	12	—78.2	—74.4	—80.0	—	—
	70	6	18700	18781	18617	6	—74.0	—70.3	—81.2	—	—
	60	4	19670	19750	19560	4	—66.7	—65.7	—67.8	—	—
	50	4	20744	20807	20654	4	—62.9	—61.0	—64.6	—	—
	40	4	22245	22300	22130	4	—58.1	—56.5	—59.3	—	—
	30	4	23976	24037	23919	4	—53.7	—51.6	—55.7	—	—
	20	1	26667	—	—	1	—49.9	—	—	—	—
	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.(*cont.*)—MONTHLY MEANS AND MONTHLY ABSOLUTE HIGHER & LOWER VALUES OF ALTITUDE, AIR TEMPERATURE & DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

JULY — 1974

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	19	*1101m.b.	*1013m.b.	*1009m.b.	19	27.6	30.8	25.0	19	19.1
	1000	19	122	142	107	19	26.4	30.0	25.2	19	17.9
	850	19	1537	1564	1514	19	20.1	24.4	15.8	19	− 5.1
	700	19	3182	3228	3139	19	12.9	23.6	8.4	19	−22.8
	600	18	4461	4510	4397	18	5.2	8.8	1.8	18	−20.2
	500	18	5928	6007	5844	18	− 2.9	3.2	− 7.1	18	−25.9
	400	18	7665	7781	7587	18	−13.1	− 6.5	−19.9	18	−36.1
	300	18	9792	9963	9708	18	−28.0	−21.1	−35.0	18	−47.8
	250	18	11078	11283	10942	18	−36.3	−29.5	−41.5	18	−54.8
	200	17	12597	12843	12438	17	−46.8	−38.9	−57.0	16	−63.0
	150	17	14459	14773	14278	17	−58.2	−50.0	−63.3	8	−69.9
	100	16	16875	17256	16730	16	−69.4	−61.1	−75.1	—	—
	070	10	18998	19359	18838	10	−68.7	−62.3	−75.7	—	—
	060	4	20060	20380	19850	4	−61.0	−59.1	−62.5	—	—
	050	4	21243	21855	20917	4	−57.0	−55.8	−59.4	—	—
	040	2	22460	22600	22320	2	−55.4	−54.1	−56.7	—	—
	030	2	24282	24408	24157	2	−47.4	−41.0	−53.8	—	—
	020	—	—	—	—	—	—	—	—	—	—
	010	—	—	—	—	—	—	—	—	—	—
Helwan 1200 U.T.	Surface	31	*992m.b.	*990m.b.	*989m.b.	31	33.5	37.8	29.7	31	10.9
	1000	30	064	104	040	—	—	—	—	—	—
	850	30	1502	1542	1472	29	21.8	27.2	18.4	29	− 0.2
	700	29	3158	3202	3102	29	12.6	16.3	8.0	29	−12.1
	600	28	4436	4479	4370	28	6.0	11.0	3.3	28	−21.0
	500	25	5911	5973	5834	25	− 1.4	3.2	− 5.2	25	−27.3
	400	25	7659	7746	7566	25	−11.3	− 6.7	−17.2	25	−34.6
	300	25	9806	9916	9694	25	−25.8	−22.9	−29.5	25	−46.1
	250	25	11103	11230	10974	25	−35.1	−30.3	−38.6	25	−53.1
	200	24	12625	12780	12474	24	−45.5	−39.1	−49.0	24	−61.5
	150	23	14488	14682	14314	23	−57.7	−50.5	−61.6	16	−69.8
	100	23	16964	17226	16734	23	−71.4	−63.9	−76.9	—	—
	70	20	19080	19394	18810	20	−66.5	−60.9	−71.9	—	—
	60	19	20073	20380	19790	19	−60.7	−56.1	−65.1	—	—
	50	19	21184	21502	20870	19	−54.9	−51.2	−57.9	—	—
	40	14	22649	23000	22390	14	−50.8	−45.3	−54.0	—	—
	30	14	24451	24830	24150	14	−46.5	−38.5	−52.4	—	—
	20	6	27079	27189	26830	6	−43.6	−39.7	−46.6	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 1200 U.T.	Surface	29	*984m.b.	*987m.b.	*982m.b.	29	39.8	43.2	35.6	29	5.0
	1000	29	49	74	25	—	—	—	—	—	—
	850	29	1510	1530	1476	29	25.9	30.0	21.3	29	− 4.4
	700	29	3173	3205	3133	29	12.2	16.8	7.6	29	−13.3
	600	29	4444	4497	4337	29	4.6	8.2	− 0.5	29	−20.2
	500	28	5914	5964	5860	28	− 2.7	− 2.4	− 7.6	28	−28.4
	400	28	7655	7735	7590	28	−12.1	− 7.0	−15.0	27	−36.4
	300	27	9794	9915	9705	27	−27.3	−21.7	−30.2	26	−48.2
	250	26	11038	11232	10977	26	−37.1	−30.5	−40.5	26	−55.8
	200	24	12586	12784	12462	24	−48.3	−41.5	−51.7	24	−64.6
	150	20	14454	14798	14289	20	−62.1	−54.6	−67.7	3	−71.7
	100	17	16877	17214	16683	17	−73.7	−64.2	−80.1	—	—
	70	9	18902	19404	18475	9	−69.7	−61.6	−73.8	—	—
	60	6	19907	20400	19700	6	−63.7	−54.8	−68.1	—	—
	50	6	20002	21539	20785	6	−58.9	−53.1	−62.9	—	—
	40	4	22675	23100	22330	4	−53.2	−44.2	−57.3	—	—
	30	4	24380	24963	24080	4	−46.8	−38.0	−50.5	—	—
	20	2	26846	26919	26772	2	−45.4	−43.9	−46.8	—	—
	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

JULY — 1974

	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)	4639 (31)	561 (31)	—24·1 (31)	6050	495	—8.1	4240	610	—18.6	15904 (6)	114 (6)	—69.5 (6)	17280	092	—72.5	14720	139	—63.0	1640	836	340	45
	Helwan	5396 (28)	532 (28)	—21.1 (28)	6530	464	—25.4	4540	595	—16.8	16940 (21)	098 (21)	—75.6 (21)	18170	082	—72.5	16000	112	—76.4	13820	162	255	88
	Aswan . . . (A)	4947 (29)	563 (29)	—18.3 (29)	5850	501	—20.2	3900	638	—10.7	16527 (7)	104 (7)	—78.6 (7)	17720	085	—83.0	15590	119	—76.3	16000	115	120	75
1200 U.T.		(N)	(N)	(N)							(N)	(N)	(N)										
	Mersa Matruh (A)	5478 (17)	557 (17)	—25.4 (17)	6600	467	—10.4	4640	583	—35.2	16896 (7)	101 (7)	—71.5 (7)	18430	082	—69.3	15620	122	—67.3	20580	058	160	76
	Helwan	5686 (25)	516 (25)	—25.3 (25)	6640	457	—23.5	5020	556	—23.5	16921 (19)	104 (19)	—71.8 (19)	18450	082	—69.3	14990	137	—67.8	14980	141	180	66
	Aswan . . . (A)	5377 (28)	538 (28)	—24.7 (28)	6950	456	—25.9	4400	604	—15.5	17034 (8)	98 (8)	—75.8 (8)	17800	092	—65.4	15470	175	—72.3	16950	84	110	75

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

TABLE 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 1974

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	4	11	0	—	0	—	0	—	0	—	1	4	0	—	0	—	0	—	12	7	8	8	6	10	—	31	15
	1000	1	14	0	—	0	—	0	—	0	—	0	—	1	3	0	—	1	8	7	10	11	12	6	16	—	27	12
	850	2	14	1	21	0	—	0	—	0	—	0	—	0	—	0	—	1	21	2	14	5	17	16	21	—	27	16
	700	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	14	0	—	0	—	0	—	—	1	14
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	10	0	—	0	—	0	—	—	1	19
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	13	0	—	0	—	—	1	13
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	13	0	—	—	1	13
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	13	0	—	0	—	—	1	13
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	24	0	—	0	—	0	—	—	1	24
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	43	0	—	0	—	0	—	0	—	—	1	43
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	48	0	—	0	—	0	—	0	—	—	1	48
	100	0	—	0	—	0	—	0	—	0	—	0	—	1	26	0	—	0	—	0	—	0	—	0	—	—	1	26
	70	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	—	—
	60	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	9	—	0	—	—	—	—
	50	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	—	—
	40	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	—	—
	30	0	—	0	—	0	—	—	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	—	—
	20	0	—	0	—	0	—	—	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	—	—
	10	0	—	0	—	0	—	—	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	—	—
1200 U.T.	Surface	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	16	13	15	0	19	15
	1000	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	10	16	19	2	16	0	19	18
	850	3	8	1	11	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	15	9	12	4	15	0	19	12
	700	5	12	2	12	0	—	0	—	0	—	1	12	0	—	1	9	1	18	2	10	4	14	3	11	0	19	12
	600	2	15	1	10	1	4	0	—	0	—	1	8	0	—	1	19	2	10	3	11	3	22	3	10	0	17	13
	500	0	—	0	—	0	—	0	—	0	—	1	4	0	—	1	32	3	13	7	17	3	13	2	14	0	17	15
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	20	4	25	5	20	1	23	0	—	0	16	22
	300	0	—	0	—	0	—	0	—	0	—	0	—	1	17	4	18	6	29	4	31	1	24	0	—	0	16	26
	250	0	—	0	—	0	—	0	—	0	—	2	10	2	30	2	21	7	30	2	34	0	—	0	—	0	15	27
	200	0	—	0	—	0	—	1	16	0	—	1	16	2	28	2	30	3	29	6	29	0	—	0	—	0	15	27
	150	0	—	0	—	0	—	0	—	2	13	2	29	1	46	3	26	1	30	3	19	0	—	0	—	0	12	24
	100	0	—	0	—	0	—	0	—	0	—	2	30	0	—	3	18	1	40	1	24	0	—	0	—	0	7	25
	70	0	—	0	—	0	—	0	—	1	29	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	29
	60	0	—	0	—	0	—	0	—	0	—	1	74	0	—	0	—	0	—	0	—	0	—	0	—	0	1	74
	50	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	40	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	30	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	20	0	—	0	—	—	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	10	0	—	0	—	—	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—

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

N = 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 1974

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	17	6	2	4	0	—	1	10	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	6	6	31	05
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	5	11	7	12	2	17	2	6	0	—	0	—	0	—	1	30	0	—	1	8	5	14	5	13	0	28	13
	700	4	10	5	11	2	11	0	—	1	3	0	—	2	10	2	18	1	18	3	18	5	10	3	21	0	28	13
	600	3	8	2	10	2	6	1	7	2	6	1	5	0	—	3	6	3	18	2	10	4	14	5	15	0	28	11
	500	2	6	1	12	1	6	1	4	0	—	0	—	0	—	1	5	1	4	8	14	7	19	5	15	0	27	14
	400	0	—	1	14	0	—	1	4	1	14	1	11	0	—	5	10	0	—	8	27	6	21	4	13	0	27	18
	300	1	11	0	—	0	—	0	—	1	12	1	12	1	5	1	10	6	20	9	25	7	23	0	—	0	27	21
	250	0	—	0	—	0	—	0	—	0	—	3	11	1	14	4	16	2	31	9	32	5	19	1	22	0	25	23
	200	0	—	0	—	0	—	0	—	0	—	2	20	3	21	2	26	6	20	5	40	2	18	2	22	0	22	25
	150	0	—	0	—	0	—	0	—	0	—	0	—	6	22	2	26	5	27	3	33	1	21	0	—	1	18	24
	100	1	8	0	—	1	3	0	—	2	16	2	34	4	31	3	30	1	10	1	38	0	—	1	5	0	16	24
	70	0	—	0	—	2	20	7	27	4	24	2	30	1	11	0	—	0	—	0	—	0	—	0	—	0	16	25
	60	0	—	0	—	3	25	10	27	3	27	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	16	26
	50	0	—	0	—	0	—	10	28	6	32	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	16	28
	40	0	—	0	—	0	—	7	32	3	25	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	10	30
	30	0	—	0	—	0	—	4	35	3	15	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	7	28
	20	0	—	0	—	0	—	2	24	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	24
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	4	8	4	12	0	—	0	0	0	0	0	0	0	—	2	3	1	4	7	7	1	2	9	10	3	31	07
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	6	12	5	13	6	11	1	3	0	—	1	11	1	13	0	—	1	6	2	8	2	11	5	9	0	30	11
	700	3	5	3	11	2	4	0	—	0	—	0	—	2	16	2	19	5	15	4	11	5	12	3	12	0	29	12
	600	1	7	2	8	2	10	2	3	1	5	1	8	1	6	5	16	3	6	3	10	2	8	3	15	0	26	11
	500	0	—	0	—	1	8	0	—	1	14	0	—	1	4	1	11	2	14	9	15	7	14	3	13	0	25	14
	400	0	—	0	—	0	—	1	19	0	—	0	—	2	13	3	13	1	7	11	24	4	20	2	21	0	24	12
	300	1	19	0	—	0	—	0	—	2	16	1	3	1	21	3	21	3	27	10	29	3	23	0	—	0	24	24
	250	0	—	0	—	0	—	1	17	0	—	1	18	3	19	2	25	4	26	4	37	6	28	2	12	0	23	25
	200	0	—	0	—	0	—	0	—	1	7	1	20	0	—	3	22	5	26	4	28	3	30	1	19	0	18	24
	150	0	—	0	—	0	—	0	—	3	15	0	—	2	23	1	14	4	29	4	27	2	22	2	23	0	18	23
	100	2	7	0	—	0	—	0	—	2	20	5	24	1	37	3	25	1	11	1	40	1	30	0	—	0	16	23
	70	0	—	0	—	1	27	5	21	6	28	2	24	0	—	0	—	0	—	0	—	0	—	0	—	0	14	25
	60	0	—	0	—	0	—	1	20	8	28	3	27	0	—	0	—	0	—	0	—	0	—	0	—	0	12	27
	50	0	—	0	—	0	—	2	36	10	33	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	12	34
	40	0	—	0	—	0	—	4	38	6	36	1	30	0	—	0	—	0	—	0	—	0	—	0	—	0	11	35
	30	0	—	0	—	0	—	2	26	3	32	1	25	0	—	0	—	0	—	0	—	0	—	0	—	0	6	29
	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.

ASWAN (A) — JULY 1974

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			
4000 U.T.	Surface	16	12	1	5	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	11	3	10	7	12	0	29	12
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	3	11	2	14	0	—	0	—	0	—	0	—	0	—	0	—	3	9	2	14	6	16	12	14	0	28	14
	700	0	—	0	—	0	—	0	—	0	—	0	—	2	14	4	15	4	10	3	24	2	13	2	12	0	17	15
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	21	2	21	1	7	0	—	0	—	0	6	19
	500	2	12	0	—	1	12	0	—	0	—	2	6	0	—	0	—	1	2	0	—	0	—	0	—	0	6	8
	400	1	21	0	—	1	17	1	23	0	—	1	10	1	3	0	—	0	—	0	—	0	—	0	—	0	5	15
	300	0	—	1	20	0	—	2	22	2	18	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	5	20
	250	0	—	1	26	0	—	2	32	0	—	1	25	0	—	0	—	0	—	0	—	0	—	0	—	0	4	28
	200	0	—	0	—	0	—	2	26	2	46	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	4	36
	150	0	—	0	—	0	—	2	32	1	54	1	50	0	—	0	—	0	—	0	—	0	—	0	—	0	4	42
	100	0	—	0	—	0	—	0	—	2	56	0	—	—	—	0	—	0	—	0	—	0	—	0	—	0	2	56
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	5	9	2	10	0	—	1	10	0	—	0	—	0	—	0	—	1	12	8	14	9	14	1	13	2	29	12
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	1	6	0	—	1	3	1	3	0	—	0	—	0	—	1	6	1	7	13	19	8	14	3	11	0	29	14
	700	0	—	0	—	1	3	0	—	0	—	0	—	1	6	5	8	10	20	6	21	4	14	0	—	0	27	16
	600	0	—	1	8	0	—	0	—	0	—	0	—	1	23	5	20	7	20	5	25	4	10	1	5	0	24	18
	500	3	8	3	10	3	14	2	10	2	20	1	3	1	15	4	14	0	—	3	9	1	13	2	7	0	25	11
	400	1	24	3	12	5	19	5	16	3	12	0	—	0	—	1	13	0	—	0	—	1	13	4	7	0	23	14
	300	1	40	3	14	3	22	3	29	3	9	1	3	2	8	0	—	0	—	1	4	1	8	0	—	0	18	16
	250	1	16	0	—	4	22	2	22	5	18	4	14	1	7	0	—	0	—	1	5	0	—	0	—	0	18	17
	200	0	—	1	3	1	27	2	29	3	23	3	31	1	37	0	—	0	—	0	—	0	—	1	15	0	12	25
	150	0	—	0	—	0	—	3	34	2	48	1	62	0	—	0	—	0	—	0	—	0	—	0	—	0	6	44
	100	0	—	0	—	0	—	0	—	0	—	3	49	1	63	0	—	0	—	0	—	0	—	0	—	0	4	52
	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 for all directions during the month.

REVIEW OF AGRO-METEOROLOGICAL STATIONS

MERSA MATRUH — JULY 1974

The mean daily air temperature and relative humidity were nearly the same as normal.

Mild summer weather prevailed the whole month apart from a light heat wave in the period (16th-20th) yielding the highest maximum air temperature for the month (31.4°C) on the 19th and the lowest relative humidity (45%) on the 18th.

The highest maximum soil temperatures were lower than last July at all depths except at 5 and 10 cm. where they were higher. The lowest minimum soil temperatures were higher than last July at all depths except at 100 cm. where its value was lower. The departures were generally slight and ranged between 0.1° and 0.9°C.

The mean daily actual sunshine duration was higher than average by 0.5 hour. The mean daily wind speed at 1.5 met. height was the same as the corresponding value of last year.

TAHRIR — JULY 1974

The mean daily air temperature for this month was rather normal and the mean daily relative humidity was above normal.

The month was characterized by four heat waves on the lst and in the periods (4th-9th), (14th-22nd) and (28th-30th). The third heat wave was the most excessive yielding the highest maximum air temperature for the month (40.6°C) on the 18th and the highest minimum air temperature (22.7°C) on the 21st. In the rest periods of the month, mild summer weather was experienced.

The highest maximum soil temperatures in the dry field were lower than the corresponding values of last July at all depths with departures between 2.5°C (at 2 cm.) and 0.2°C (at 50 cm.). The lowest minimum soil temperatures were lower than last July at depths between 2 and 20 cm. with departures between 0.3° and 0.7°C ; and higher by 0.6°C at both 50 and 100 cm.

The mean daily wind speed at 1.5 met., actnal sunshine duration and pan evaporation were lower than average by 0.8 m./sec., 0.2 hour and 0.71 mm. respectively.

BAHTIM — JULY 1974

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

The month was characterized by a short heat wave on the 1st, and a long wave in the period from the 16th till the 22nd yielding the highest maximum air temperature for the month (37.2°C) on the 17th. In the rest of the month, mild summer weather was experienced.

The highest maximum soil temperatures in the dry field were higher than the corresponding values of last July at all depths except at 10 and 50 cm. depths where the values were the same as last July ; the departures varied between 1.4°C (at 2 cm.) and 0.1°C (at 100 cm.). The lowest minimum soil temperatures were lower than last July at depths between 2 and 10 cm. with departures between 1.6°C and 0.2°C ; and higher than last July at depths between 20 and 100 cm. with departures between 0.7°C and 0.2°C.

The mean daily actual sunshine duration was higher than average by 0.2 hour. The mean daily wind speed at 1.5 met. and pan evaporation were lower than average by 0.9 m./sec. and 0.83 mm. respectively.

KHARGA—JULY 1974

The mean daily air temperature and relative humidity for this month were rather normal.

The month was characterized by three heat waves in the periods (1st, 2nd), (14th-23rd) and (29th, 30th). The second heat wave was prolonged and yielded both the highest maximum air temperature for the month (44.2°C) and the highest minimum air temperature (29.4°C) on the 23rd. In the rest of the month, maximum air temperatures persisted subnormal.

The highest maximum soil temperatures were lower than the corresponding values of last July at all depths, except at 10 cm. where its value was the same as last July ; the departures varied between 1.4°C (at 2 cm.) and 0.2°C (at 5 cm). The lowest minimum soil temperatures were lower than last July at 2, 100 cm. and higher at depths between 5 and 50 cm. ; the departures varied between 0.2°C and 0.8°C.

The mean daily actual sunshine duration was higher than average by 0.1 hour. The mean daily wind speed at 1.5 met. and pan evaporation were lower than average by 0.9 m./sec. and 2.0 mm. respectively.

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

JULY — 1974

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. . .	28.4	20.4	24.8	22.7	26.4	24	24	24	24	24	23.4	11.3	0.4	0.0	0.0	0.0
Tahrir	36.0	20.0	26.5	22.7	29.5	24	24	24	24	24	22.8	12.8	6.8	1.1	0.0	0.0
Bahtim	33.7	18.3	25.7	21.8	28.8	24	24	24	24	24	19.9	12.1	6.1	0.3	0.0	0.0
Kharga	39.8	23.6	32.4	29.2	25.3	24	24	24	24	24	24	21.9	15.5	8.0	1.6	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.

JULY — 1974

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. . .	31.4	19	26.5	10	22.9	26	18 2	14	17.1	14	—	—
Tahrir	40 6	18	31.9	11	22 7	21	17.2	24	15.0	9	13.6	9
Bahtim	37 2	17	30.1	11	21.9	30	15.3	11	12.0	11	10.6	11
Kharga	44 2	1,23	35.3	12	29.4	23	18.4	28	16.0	7	—	—

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

JULY — 1974

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	5.9.0	490.5	433.6	90	69	58	45	18	16.2	16.5	19.9	21	11.7	10	6.7	—	0.0	0.0	—
Tahrir . .	665.7	378.5	431.2	88	71	44	29	18	17.9	17.4	22.2	1,19	12.8	11	6.2	10.76	0.0	0.0	—
Bahtim . .	666.4	869.9	429.9	86	67	39	24	9	15 9	14.5	21.9	20	8.8	9	7.2	9 27	0.0	0.0	—
Kharga. .	724.5	388.7	419.0	93	24	16	6	18	8.2	8.1	13.7	24	3.2	18	17.6	19.00	0.0	0.0	—

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

JULY — 1974

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
Mersa Matruh	H	42.9	41.0	36.2	31.8	29.6	26.7	23.4	—	—	—	—	—	—	—	—	—
	L	26.1	25.5	25.5	27.0	28.0	25.0	22.1	—	—	—	—	—	—	—	—	—
Tahrir	H	54.1	48.2	43.1	37.5	33.7	31.5	29.0	27.4	33.7	33.4	31.6	29.8	29.2	28 2	27.1	—
	L	28.2	26.8	27.3	30.2	31.6	30.2	27.3	26.1	24.3	24.4	24.6	25.2	27.1	27.0	25.6	—
Bahtim	H	59.4	49.8	41.4	35.7	32.1	29.9	26.9	25.0	39.4	33.0	30.9	29.4	27.5	25.6	22.8	—
	L	26.5	27.4	29.4	31.8	30.3	28.1	25.4	24.2	24.4	23.9	24.4	25.4	25.2	27.7	21 5	—
Kharga . . .	H	58.6	52.5	47.0	40.4	34.9	33.0	30.3	29.0	—	—	—	—	—	—	—	—
	L	22.5	26.0	28.4	33.2	33.1	31.5	29.0	28.0	—	—	—	—	—	—	—	—

Table C 5.- SURFACE WIND

JULY — 1974

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 . .	4.3	3.1	5.4	31	31	12	0	0	0	0	29	1
Tahrir	1.7	1.3	2.2	31	21	0	0	0	0	0	25	3.7
Bahtim	1.4	0.5	2.3	20	2	0	0	0	0	0	20	11
Kharga	3.1	2.3	3.7	26	15	2	0	0	0	0	28	22

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Chairman of the Board of Directors

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THE ARAB REPUBLIC OF EGYPT

MONTHLY WEATHER REPORT

VOLUME 17 NUMBER 8

AUGUST, 1974

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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 Egyptian Meteorological Authority issues several 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

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

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General Summary of Weather Conditions

AUGUST 1974

Normal summer weather. Three heat waves the first of which was excessive in Upper Egypt. Early morning mist over north of the Country

PRESSURE DISTRIBUTION

The atmospheric pressure over Egypt in this month was affected by the monsoon low pressure over the Arabian Gulf, Arabia and Sudan ; and weak high pressure extending from Central Mediterranean through Libya.

The monsoon trough over Iraq elongated through East Mediterranean and Asia Minor during the periods (6th—9th), (13th—16th), (20th—22nd) and (25th—27th).

In the rest periods of the month high pressure over the Mediterranean extended slightly eastwards.

SURFACE WIND

Surface Winds during this month were generally light to moderate, and blew mostly from N and NW directions and with a less frequency from NE. Winds freshened during several days in few scattered localities, mainly in the Red Sea and Upper Egypt districts.

TEMPERATURE

This month was intervened by three heat waves. The first was the most excessive and prevailed in Upper Egypt from the 4th till the 9th. Otherwise the heat waves were light and short.

Maximum air temperatures experienced slight or moderate departures above normal in the heat waves and below nomal otherwise.

The highest maximum air temperature for Egypt in this month was 46.9°C at Qena on the 4th.

The lowest maximum air temperature was 27.2°C at Sallum on the 21st.

Minimum air temperatures experienced slight and irregular departures from normal.

The highest minimum air temperature was 28.8°C at Kharga on the 6th and Hurghada on both 3rd and 4th.

The lowest minimum air temperature was 15.0°C at Bahtim on the 31st.

WEATHER PHENOMENA

Early morning mist developed during several days in scattered places in Delta, Cairo and north of Upper Egypt.

Light rising sand was reported in some days in scattered places in Upper Egypt and the Red Sea.

Cairo, May 1977

Chairman (A. F. Hasan)

Board of Directors

SURFACE DATA

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

AUGUST 1974

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	1009.1	−1.3	30.3	−0.8	21.6	0.2	26.0	25.7	−0.6	20.9	−0.9	65	− 1	—	—	—	7.0
Mersa Matruh (A)	1009.9	−0.3	29.0	−0.8	20.4	0.6	24.7	25.1	−0.4	21.2	−0.6	72	0	369.7	412.1	90	6.5
Alexandria. (A)	1009.6	−0.6	30.6	0.0	21.7	−1.2	26.2	26.0	−0.6	22.2	−0.6	72	+ 1	354.6	411.2	86	4.3
Port Said. (A)	1008.1	0.0	31.3	+0.5	23.7	−0.7	27.5	26.8	−0.5	23.0	−0.6	71	− 1	362.9	411.2	88	4.4
El Arish.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1008.4	−0.2	32.3	−2.2	19.3	+0.2	25.8	25.1	−1.5	21.2	0.8	71	+ 6	355.8	410.6	87	3.7
Cairo. (A)	1008.7	+0.1	33.7	−0.9	22.1	+0.3	27.9	27.4	−0.3	21.4	−0.3	60	+ 3	—	—	—	12.6
Fayoum.	—	—	36.9	+0.4	20.8	−0.7	28.8	28.3	−0.5	21.4	0.0	55	+ 5	—	—	—	8.0
Minya. (A)	1008.9	+1.4	35.8	−0.6	19.8	−0.6	27.8	28.0	−0.2	20.4	−0.3	51	+ 1	373.2	406.8	92	12.7
Assyout. (A)	1008.0	+0.9	35.5	−1.3	21.8	−0.5	28.6	28.7	−1.3	19.6	−0.2	41	+ 5	—	—	—	15.1
Luxor (A)	1005.9	+0.6	39.7	−1.4	22.7	−0.8	31.1	31.3	−1.4	19.5	−0.5	30	+ 4	—	—	—	12.6
Aswan. (A)	1006.0	+0.6	40.4	−0.9	25.0	+0.3	32.7	32.5	−1.0	18.4	+0.1	21	+ 5	—	—	—	28.7
Siwa	1009.8	−0.1	36.3	−1.4	20.9	+0.1	28.6	28.9	−0.8	19.5	−0.3	41	+ 5	380.9	408.3	93	15.6
Bahariya	1008.6	+0.2	36.4	−0.5	21.3	+0.3	28.8	29.1	−0.7	18.9	−1.0	36	+ 1	—	—	—	12.4
Farafra.	1009.7	+0.2	37.8	+0.4	21.0	−0.1	29.4	29.5	−0.2	17.7	−0.4	28	+ 1	—	—	—	16 0
Dakhla.	1008.6	+0.7	37.6	+0.9	19.9	−2.7	28.8	29.2	−1.5	17.8	−0.6	31	+ 8	—	—	—	21.2
Kharga	1007.4	+0.9	38.8	−0.5	23.0	+0.2	30.9	31.9	+0.2	18.6	+0.1	28	− 2	372 5	403.1	92	16.4
Tor.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada.	1005.1	+0.4	33.7	+0.4	25.5	+0.4	29.6	29.8	−0.2	21.6	−0.4	46	− 1	375.6	405.4	93	12.1
Quseir.	1005.2	−0.2	32.7	−0.9	26.3	−0.5	29.5	29.8	−0.3	21.8	−0.5	46	− 2	—	—	—	12.0

Note - Starting from July 1973 the monthly mean values of the relative humidity are the arithmetic means over the month of their corresponding daily hourly values

Table A 2.–MAXIMUM AND MINIMUM AIR TEMPERTURE

AUGUST — 1974

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	35.6	6	27.2	21	31	15	1	0	0	20.5	—	23.6	6, 14	19.9	18	0	0	0	0
Mersa Matruh (A)	30.8	31	28.0	18	31	3	0	0	0	19.5	—	23.9	14	18.9	2	0	0	0	0
Alexandria . (A)	32.8	8	29.4	14	31	23	0	0	0	19.6	—	24.6	9	18.6	12.31	0	0	0	0
Port said . . (A)	34.2	8	29.4	28	31	29	0	0	0	23.3	—	25.3	9	22.1	15	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	35.5	8	30.0	51	31	30	1	0	0	—	—	21.8	8	17.2	31	0	0	0	0
Cairo . . . (A)	37.0	27	31.0	15.29	31	31	7	0	0	—	—	24.1	4	20.1	30	0	0	0	0
Fayoum	39.5	7	33.7	51	31	31	26	0	0	18.7	—	23.0	4	17.3	31	0	0	0	0
Minya . . . (A)	37.8	3	33.0	16.30	31	31	23	0	0	18.7	—	22.0	9	17.7	10	0	0	0	0
Assyout . . (A)	37.0	3.4.6	32.0	15	31	31	21	0	0	18.9	—	23.3	8	19.0	15.31	0	0	0	0
Luxor . . . (A)	43.4	5	36.0	16	31	31	31	12	0	18.4	—	25.2	6	20.0	16	0	0	0	0
Aswan . . . (A)	45.0	5.7	36.0	16	31	31	31	15	0	—	—	27.2	6	22.8	30	0	0	0	0
Siwa	39.3	8	33.0	17	31	31	20	0	0	20.2	—	23.2	5	18.8	3	0	0	0	0
Bahariya	40.1	12	32.4	17	31	31	22	1	0	20.7	—	23.6	23	18.2	31	0	0	0	0
Farafra	41.5	12	33.6	17	31	31	28	2	0	20.1	—	23.6	28	17.9	3	0	0	0	0
Dakhla	39.9	8	33.0	16	31	31	28	0	0	19.8	—	22.6	9	16.2	2	0	0	0	0
Kharga	41.2	8.13	34.2	16	31	31	29	11	0	21.1	—	28.8	6	20.0	12.21	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada . . .	36.3	6	31.3	15	31	31	5	0	0	—	—	28.8	3.4	22.7	18	0	0	0	0
Quseir	34.5	2.6.28	30.4	16	31	31	0	0	0	22.5	—	28.6	6	24.5	18	0	0	0	0

Table A 3. — SKY COVER AND RAINFALL.

AUGUST — 1974

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
Sollum	1.7	0.5	2.1	0.9	1.3	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Mersa Matruh (A)	1.0	2.0	1.5	1.4	1.4	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Alexandria . . (A)	2.0	2.4	2.2	1.7	2.0	0.0	— 0.3	0.0	—	0	0	0	0	0	0	0
Port Said . . (A)	0.7	1.6	0.2	0.6	0.7	0.0	Tr.	0.0	—	0	0	0	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta.	0.0	1.8	1.8	0.0	0.9	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Cairo . . . . (A)	0.5	2.5	0.9	0.1	0.9	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Fayoum	—	0.0	0.3	0.1	—	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Minya . . . . (A)	0.0	0.1	0.2	0.1	0.1	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Assyout . . . . (A)	0.0	0.0	0.0	0.0	0.0	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Louxor . . . . (A)	0.2	0.4	0.3	0.2	0.3	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Aswan . . . . (A)	0.1	0.7	0.5	0.4	0.3	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Siwa	0.8	0.5	1.2	1.1	0.8	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Baharia	0.1	0.3	0.6	0.3	0.3	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Farafra	—	0.0	0.2	0.1	0.0	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Dakhalia	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Kharga	0.0	0.1	0.2	0.1	0.1	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Quseir	0.2	0.3	0.2	0.1	0.2	0.0	0.0	0.0	—	0	0	0	0	0	0	0

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

AUGUST — 1974

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	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0
Mersa Matruh . . (A)	0	0	0	0	0	0	13	0	3	0	10	0	0	22	0
Alexandria . . . . (A)	0	0	0	0	0	0	3	1	0	0	0	0	0	16	0
Port Said . . . . (A)	0	0	0	0	0	0	0	0	0	0	0	0	0	31	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	0	0	0	0	0	0	12	0	0	0	0	0	0	30	0
Cairo . . . . . (A)	0	0	0	0	0	0	20	1	2	0	1	0	0	29	0
Fayoum	0	0	0	0	0	0	0	0	0	0	0	0	0	—	—
Minya . . . . . (A)	0	0	0	0	0	0	5	0	5	0	0	0	0	31	0
Assyout. . . . . (A)	0	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Luxor . . . . . (A)	0	0	0	0	0	0	0	0	2	0	4	0	0	30	0
Aswan . . . . . (A)	0	0	0	0	0	0	0	0	1	0	8	1	0	30	0
Siwa	0	0	0	0	0	0	0	0	0	0	4	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	—	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	0	0	1	0	0	30	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0	0	0	0	0	0	0	0	0	0	5	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

AUGUST — 1974

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	2	2	0	1- 10	62	135	55	26	14	0	1	3	9	26	150	205	686
				11—27	0	0	0	0	0	0	0	0	0	0	23	31	54
				28—47	0	0	0	0	0	0	0	0	0	6	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**62**	**135**	**55**	**26**	**14**	**0**	**1**	**3**	**9**	**26**	**173**	**236**	**740**
Mersa Matruh . (A)	33	0	0	1—10	67	22	1	2	1	2	1	36	81	101	41	89	444
				11—27	27	7	0	0	0	0	1	3	1	1	31	196	267
				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	**94**	**29**	**1**	**2**	**1**	**2**	**2**	**39**	**82**	**102**	**72**	**285**	**711**
Alexandria . . A)	0	0	1	1—10	44	12	1	3	2	14	28	17	7	34	117	215	494
				11—27	7	0	0	0	0	0	0	0	0	14	115	113	249
				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**	**12**	**1**	**3**	**2**	**14**	**28**	**17**	**7**	**48**	**232**	**328**	**743**
Tanta.	12	38	16	1—10	114	46	9	4	4	1	7	27	77	99	98	152	683
				11—27	17	1	0	0	0	0	0	0	0	0	4	18	40
				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	**131**	**47**	**9**	**4**	**4**	**1**	**7**	**27**	**77**	**99**	**102**	**170**	**678**
Caire . . . . (A)	44	0	1	1—10	77	77	38	15	1	0	0	2	17	89	138	165	619
				11- 27	15	6	0	2	0	0	0	0	0	10	20	27	80
				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	**83**	**38**	**17**	**1**	**0**	**0**	**2**	**17**	**99**	**158**	**192**	**699**
Fayoum	3	10	0	1—10	293	279	11	5	2	2	0	6	8	7	23	94	730
				11—27	1	0	0	0	0	0	0	0	0	0	0	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	**294**	**279**	**11**	**5**	**2**	**2**	**0**	**6**	**8**	**7**	**23**	**94**	**731**
Minya . . . . (A)	4	0	0	1—10	246	280	28	4	0	2	5	5	4	6	13	39	632
				11- 27	27	81	1	0	0	0	0	0	0	0	0	0	108
				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	**273**	**361**	**28**	**4**	**0**	**2**	**5**	**5**	**4**	**6**	**13**	**39**	**740**
Asyout . . . . (A)	27	0	0	1—10	58	21	2	1	0	2	4	2	4	79	207	176	556
				11—27	39	2	0	0	0	0	0	0	0	0	5	115	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	**97**	**23**	**2**	**1**	**0**	**2**	**4**	**2**	**4**	**79**	**212**	**291**	**717**
Luxor . . . . (A)	99	0	0	1-10	55	15	1	5	14	6	53	61	45	88	152	93	588
				11-27	7	0	0	0	0	0	0	0	0	0	16	34	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	**62**	**15**	**1**	**5**	**14**	**6**	**53**	**61**	**45**	**88**	**168**	**127**	**645**

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

AUGUST — 1974

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	Alldirections
Aswan . . . . (A)	0	0	0	1—10	104	42	2	1	0	0	0	1	3	31	113	230	527
				11—27	35	2	0	0	0	0	0	0	0	9	42	129	217
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	00
				≥ 48	0	0	0	0	0	0	0	0	0	0	0	0	4
				All speeds	**139**	**44**	**2**	**1**	**0**	**0**	**0**	**1**	**3**	**40**	**155**	**359**	**74**
Siwa	17	1	0	1—10	48	101	60	55	21	4	8	8	13	37	101	126	2 584
				11—27	4	38	4	0	1	0	0	0	0	0	35	62	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	6
				All speeds	**52**	**139**	**64**	**55**	**22**	**4**	**8**	**8**	**13**	**37**	**136**	**188**	**72**
Dakhla	1	0	0	1—10	72	19	4	5	3	6	14	11	51	86	130	242	3 640
				11—27	25	3	0	0	0	0	0	0	0	0	1	71	100
				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	3
				All speeds	**97**	**22**	**4**	**5**	**3**	**6**	**14**	**11**	**51**	**86**	**131**	**313**	**74**
Kharga	6	1	7	1—10	318	60	20	12	9	0	3	4	4	11	57	168	6 664
				11—27	37	8	0	0	0	0	0	0	0	0	0	19	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	**355**	**68**	**20**	**12**	**9**	**0**	**3**	**4**	**4**	**11**	**57**	**187**	**73**
Hurghada.	16	2	0	1—10	40	57	29	8	2	1	7	3	0	2	100	86	5 391
				11—27	115	11	0	0	0	0	0	0	0	0	20	185	330
				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	6
				All speeds	**155**	**68**	**29**	**8**	**2**	**1**	**7**	**3**	**0**	**2**	**180**	**271**	**72**
Quseir	1	2	0	1—10	103	139	79	34	10	4	3	7	14	13	24	53	3 488
				11—27	85	98	145	15	0	0	0	0	0	0	0	0	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	
				All speeds	**103**	**237**	**224**	**49**	**10**	**4**	**3**	**7**	**14**	**13**	**24**	**53**	**741**

UPPER AIR CLIMATOLOGICAL DATA

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

AUGUST 1974

Station	Pressure Surface (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
			m.b.*—	m.b.*—	m.b. —						
Mersa Matruh 0000 UT	Surface of station	31	1010	1014	1008	31	23.8	27.0	21.5	31	19.1
	1000	31	711	150	90	31	23.1	26.0	21.0	31	18.9
	850	31	1521	1548	1504	31	16.9	22.7	12.0	31	0.6
	700	31	3151	2312	3119	31	8.7	14.8	3.8	31	—13.2
	600	31	4414	4501	4369	31	3.1	9.8	— 2.6	31	—22.1
	500	31	5857	5987	5590	31	— 5.3	1.3	— 9.1	31	—29.1
	400	31	7586	7754	7499	31	—15.3	— 9.0	—21.1	31	—37.6
	300	31	9703	9914	9577	31	—29.1	—23.5	—35.1	30	—48.7
	250	30	10985	11217	10846	30	—38.1	—33.5	—41.7	29	—55.2
	200	29	12489	12756	12332	29	—48.1	—40.9	—53.1	28	—63.6
	150	28	14330	14676	14150	28	—59.8	—50.8	—63.0	8	—27·2
	100	27	16779	17046	16605	27	—71.2	—64.1	—75.8	—	—
	70	23	18903	19237	18760	23	—66.1	—60.0	—72.7	—	—
	60	21	19880	20150	19710	21	—62.9	—58.2	—71.5	—	—
	50	21	20978	21350	20866	21	—59.2	—46.5	—70.0	—	—
	40	16	22437	22720	22220	16	—60.5	—53.9	—68.7	—	—
	30	15	24164	24330	23929	15	—53.6	—48.9	—67.0	—	—
	20	4	25828	26945	26766	4	—44.2	—32·0	—49.4	—	—
	10	—	—	—	—	—	—	—	—	—	
Helwan 0000 UT	Surface of Station	31	993m.b.*	995m.b.*	989mb.*	31	23.4	26.2	20.9	31	18.7
	1000	30	075	096	041	—	—	—	—	—	—
	850	30	1486	1518	1462	29	18.9	22.7	17.0	29	4.3
	700	30	3129	3176	3075	30	11.9	18.5	7.0	30	— 8.3
	600	30	4405	4465	4370	30	4.9	10.0	0.1	30	—14.9
	500	30	5871	5935	5795	30	— 3.4	— 0.5	— 6.1	30	—22.5
	400	30	7603	7698	7529	29	—13.4	— 8.3	—16.8	29	—31.3
	300	30	9732	9880	9652	30	—28.2	—23.5	—31.5	30	—43.2
	250	29	11014	11187	10950	29	—37.4	—33.5	—40.1	29	—51.0
	200	29	12521	12722	12433	29	—48.4	—44.0	—51.2	29	—60.4
	150	28	14363	14602	14264	28	—60.8	—53.7	—64.3	6	—66.0
	100	20	16799	17640	16695	20	—74.0	—69.3	—78.8	—	—
	70	17	18888	19158	18805	17	—69.1	—64.3	—74.0	—	—
	60	16	19864	20140	19780	16	—64·2	—60.0	—68.5	—	—
	50	15	20947	21222	20859	15	—59.7	—56.1	—68.0	—	—
	40	14	22461	22720	22380	14	—56.9	—54.5	—63.3	—	—
	30	11	24173	24263	24104	11	—53.2	—51.2	—55.4	—	—
	20	5	26860	26901	26734	5	—49.4	—48.1	—52.0	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 0000 UT	Surface of station	31	985m.b.*	988m.b.*	981m.b.*	31	27.9	30.4	25.7	31	6.8
	1000	31	58	86	03	—	—	—	—	—	—
	850	31	1489	1517	1468	31	22.3	31.0	17.8	31	1.8
	700	31	3144	3181	3094	31	12.4	17.1	7.4	31	— 8.6
	600	31	4419	4474	4349	31	4.0	— 0.2	— 6.8	31	—12.6
	500	31	5875	5911	5793	30	— 5.2	— 2.0	—10.2	30	—23.8
	400	31	7587	7669	7321	31	—15.8	—12.9	—19.3	31	—34.1
	300	31	9706	9776	9560	31	—30.5	—25.7	—36.4	31	—45.2
	250	31	10978	11052	10800	31	—39.8	—35.3	—46.0	31	—53.6
	200	30	12475	12546	12429	30	—51.0	—48.6	—55.1	30	—63.3
	150	30	14293	14369	14177	30	—64.3	—61.7	—67.5	—	—
	100	28	16685	16789	16597	28	—77.6	—69.4	—82.3	—	—
	70	22	18749	18839	18673	22	—71.4	—67.9	—79.1	—	—
	60	18	19708	19810	19570	18	—65.6	—61.2	—69.1	—	—
	50	18	20793	20872	20677	18	—61.2	—53.3	—63.8	—	—
	40	12	22289	22500	22100	12	—57.1	—49.7	—59.7	—	—
	30	10	24025	24162	23918	10	—55.0	—52.1	—58.8	—	—
	20	6	26648	26776	26575	6	—51.4	—49.6	—52.6	—	—
	10	—	—	—	—	—	—	—	—	—	—

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

UPPER AIR CLIMATOLOGICAL DATA

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

AUGUST — 1974

Station	Pressure Surface Millibar	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Hong Matrah 1200 U.T.	Surface	30	*1010m.b.	*1014m.b.	*1008m.b.	30	28.3	30.0	27.2	30	19.0
	1000	30	120	151	98	30	27.0	29.8	25.3	30	17.2
	850	30	1535	1584	1508	30	17.9	23.4	12.2	30	— 2.4
	700	30	3169	3213	3126	30	9.8	14.4	5.0	29	—15.9
	600	29	4438	4488	4306	29	4.2	9.7	— 3.1	29	—22.2
	500	29	5894	5976	5779	28	— 4.3	1.9	— 8.2	28	—29.0
	400	29	7616	7736	7554	28	—14.2	— 8.5	—20.3	28	—35.3
	300	28	9734	9849	9515	28	—28.6	—22.1	—33.7	27	—49.5
	250	27	11015	11140	10815	27	—37.6	—31.0	—42.9	26	—56.8
	200	26	12513	12672	12305	26	—48.4	—41.3	—57.7	23	—65.6
	150	25	14361	14580	14133	25	—59.5	—52.1	—64.9	13	—73.7
	100	25	16830	17140	16603	25	—70.7	—62.7	—77.3	—	—
	070	15	18932	19083	18783	15	—65.2	—59.2	—72.3	—	—
	060	11	19952	20200	19690	11	—60.2	—54.5	—64.5	—	—
	050	10	21052	21221	20919	10	—56.1	—52.4	—58.9	—	—
	040	7	22581	22750	22480	7	—53.0	—47.2	—54.9	—	—
	030	7	24377	24574	24216	7	—48.6	—44.0	—51.3	—	—
	020	1	27101	—	—	1	—42.9	—	—	—	—
	010	—	—	—	—	—	—	—	—	—	—
Kalwa 1200 U.T.	Surface	31	*992m.b.	*995m.b.	*988m.b.	31	32.6	36.5	30.2	31	11.3
	1000	28	70	95	31	—	—	—	—	—	—
	850	28	1500	1534	1467	28	19.6	25.3	13.9	28	5.7
	700	28	3148	3192	3113	28	12.7	20.2	8.0	28	—13.9
	600	26	4427	4486	4381	26	6.1	12.5	2.4	26	—19.2
	500	24	5896	5984	5846	24	— 2.8	2.3	— 6.8	24	—27.3
	400	23	7634	7746	7539	23	—12.7	— 7.5	—18.9	23	—34.9
	300	21	9766	9907	9648	21	—27.3	—25.0	—30.6	21	—46.4
	250	20	11059	11209	10918	20	—36.2	—31.9	—40.5	20	—53.1
	200	20	12574	12726	12419	20	—46.3	—36.2	—50.2	20	—61.3
	150	18	14435	14586	14286	18	—61.5	—53.5	—62.7	10	—70.1
	100	17	16890	17043	16708	17	—72.6	—66.1	—77.9	—	—
	70	15	18981	19183	18806	14	—66.9	—62.5	—73.5	—	—
	60	15	19989	20210	19820	15	—61.4	—54.3	—68.8	—	—
	50	14	21066	21339	20905	14	—56.5	—52.5	—60.9	—	—
	40	12	22585	22840	22420	12	—52.4	—46.3	—55.7	—	—
	30	12	24347	24659	24159	12	—47.9	—42.4	—50.5	—	—
	20	7	27074	27116	26828	7	—44.2	—40.5	—46.7	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 1200 U.T.	Surface	29	*984m.b.	*987m.b.	*981m.b.	29	39.1	42.6	36.0	29	5.9
	1000	29	49	75	14	—	—	—	—	—	—
	850	29	1507	1533	1485	29	25.1	29.5	21.7	29	— 3.4
	700	29	3172	3201	3138	28	14.0	17.7	10.0	28	—12.6
	600	29	4453	4488	4396	29	5.7	9.5	3.2	29	—18.6
	500	28	5920	5973	5865	28	— 3.7	— 0.2	— 8.4	27	—26.4
	400	27	7654	7720	7603	27	—13.5	— 9.4	—16.6	27	—36.6
	300	26	9783	9862	9722	26	—28.6	—25.4	—31.5	26	—48.3
	250	26	11065	11165	10999	26	—38.1	—36.6	—41.4	26	—55.8
	200	26	12568	12709	12492	26	—49.3	—42.4	—53.7	26	—64.9
	150	26	14402	14619	14299	26	—62.4	—52.5	—64.7	—	—
	100	25	16826	17169	16710	25	—76.2	—65.3	—79.4	—	—
	70	19	18913	19348	18790	19	—68.5	—57.9	—76.5	—	—
	60	15	19889	20350	19750	15	—63.4	—57.8	—68.3	—	—
	50	15	20987	21498	20862	15	—58.6	—49.9	—63.2	—	—
	40	8	22543	23090	22340	8	—53.5	—44.1	—57.0	—	—
	30	6	24375	24938	24165	6	—48.2	—39.3	—52.6	—	—
	20	4	27127	27768	26808	4	—43.1	—31.3	—51.7	—	—
	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

AUGUST — 1974

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)	4959 (31)	565 (31)	—25.6 (31)	6250	485	—22.0	3990	630	—19.1	16688 (23)	101 (23)	—72.4 (23)	17640	87	—74.0	15350	126	—68.6	9135	322	220	75
Helwan . . .	521 9 (30)	542 (30)	—18.2 (30)	5935	500	—10.5	3950	634	—5.7	16753 (18)	102 (18)	—75.7 (18)	17900	83	—81.5	15800	119	—70.6	12960	188	250	126
Aswan . . (A)	5007 (31)	561 (31)	—15.8 (31)	5640	517	—25.0	4360	603	—7.8	16667 (20)	102 (20)	—78.4 (20)	17800	82	—79.9	14400	14o	—69.1	14580	141	150	75
1200 U.T.																						
M. Matruh (A)	5172 (29)	547 (29)	—24.4 (29)	6300	480	—35.2	3920	636	—31.7	16433 (15)	107 (15)	—72.0 (15)	17220	95	—75.7	14400	149	—60.0	10155	280	230	85
Helwan . . .	5435 (24)	529 (24)	—24.9 (24)	6300	482	—22.1	4840	571	—27.0	16892 (16)	101 (16)	—73.9 (16)	18320	81	—79.0	15590	122	—68.3	11870	217	260	89
Aswan . . (A)	5313 (28)	541 (28)	—22.8 (28)	5940	498	—25.0	5000	564	—21.3	17009 (17)	98 (17)	—74.1 (17)	17770	87	—78.3	15900	116	—76.0	17250	93	310	70

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

TABL B 3..—NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCAL R WIND SPEED AT THE STANDARD AND SELECTED PRESSURE URFCES

MERSA MATRUH (A) — AUGUST 1974

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 of Staton	2	3	2	3	0	—	0	—	0	—	0	—	1	4	2	6	6	6	11	6	1	5	4	14	2	31	7
	1000	2	7	0	—	0	—	0	—	0	—	1	4	0	—	1	6	1	9	12	10	8	14	4	12	0	29	11
	850	1	10	0	—	1	3	1	7	0	—	0	—	0	—	0	—	3	12	5	17	10	15	8	18	0	29	15
	700	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	11	2	22	10	15	7	14	5	17	0	25	16
	600	1	5	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	22	10	22	6	13	2	10	0	23	18
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	9	25	7	24	6	18	1	14	0	23	23
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	17	37	4	40	2	14	0	—	0	23	36
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	38	15	45	3	28	0	—	0	—	0	21	45
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	37	11	43	0	—	0	—	0	—	0	14	43
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	44	5	43	0	—	0	—	0	—	0	6	44
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	15	0	—	0	—	0	—	0	—	0	1	15
	100	0	—	0	—	0	—	0	—	0	—	0	—	1	14	0	—	0	—	0	—	0	—	0	—	0	1	14
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface of Staton	8	11	1	8	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	15	16	14	0	30	13
	1000	4	10	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	14	17	12	15	0	30	15
	850	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	6	15	10	15	8	16	6	16	0	30	16
	700	2	12	0	—	0	—	0	—	0	—	0	—	0	—	0	—	7	14	8	15	10	12	2	17	0	29	13
	600	0	—	0	—	0	—	0	—	0	—	1	12	0	—	5	18	7	21	8	19	6	15	2	8	0	29	18
	500	0	—	0	—	0	—	0	—	0	—	1	8	2	15	5	18	8	25	10	18	3	28	0	—	0	29	20
	400	0	—	0	—	0	—	0	—	0	—	3	13	0	—	2	35	18	34	3	22	1	27	1	16	0	28	30
	300	0	—	1	41	0	—	0	—	1	8	1	7	1	25	5	34	12	49	4	41	1	35	0	—	0	26	40
	250	0	—	0	—	0	—	1	8	0	—	0	—	2	24	3	35	12	44	4	35	0	—	0	—	0	22	38
	200	0	—	0	—	0	—	0	—	0	—	1	19	1	39	4	48	9	46	2	38	0	—	0	—	0	17	44
	150	0	—	0	—	0	—	0	—	0	—	0	—	2	24	3	37	5	34	0	—	0	—	0	—	0	10	32
	100	0	—	0	—	0	—	0	—	0	—	1	30	1	10	2	27	0	—	0	—	0	—	0	—	0	4	24
	70	0	—	0	—	0	—	0	—	1	38	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	38
	60	0	—	0	—	0	—	1	39	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	39
	50	0	—	0	—	0	—	1	41	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	41
	40	—	—	—	—	0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	—
	30	—	—	—	—	0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	—
	20	—	—	—	—	0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	—
	10	—	—	—	—	0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	—

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

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

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

HELWAN — AUGUST 1974

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.	urface	6	7	9	8	0	—	2	10	0	—	0	—	0	—	0	—	0	—	0	—	0	—	7	4	7	31	5
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	8	18	3	14	0	—	0	—	0	—	0	—	1	9	1	9	0	—	4	12	5	11	8	12	0	30	14
	700	4	12	0	—	0	—	2	10	0	—	0	—	0	—	3	22	0	—	5	17	8	11	8	14	0	30	14
	600	1	13	1	9	1	10	0	—	0	—	0	—	1	12	2	25	4	23	9	18	6	16	4	17	0	29	18
	500	0	—	0	—	1	12	0	—	0	—	1	15	1	34	1	18	5	30	12	21	8	20	—	—	0	29	23
	400	0	—	0	—	1	5	0	—	1	12	0	—	1	20	2	22	3	33	20	32	1	20	—	—	0	29	29
	300	0	—	0	—	1	14	1	17	0	—	1	23	0	—	2	18	6	34	14	41	2	42	—	—	0	27	35
	250	0	—	0	—	1	11	0	—	0	—	0	—	0	—	1	16	9	34	7	38	2	29	—	—	0	20	38
	200	0	—	0	—	0	—	0	—	0	—	1	34	0	—	0	—	10	45	3	49	3	39	—	—	0	17	44
	150	0	—	0	—	0	—	0	—	1	30	1	16	0	—	2	33	6	41	2	47	—	—	—	—	0	12	37
	100	0	—	0	—	0	—	0	—	1	43	0	—	1	7	1	25	3	39	1	54	—	—	—	—	0	8	34
	70	1	28	0	—	0	—	1	27	2	26	2	15	0	—	1	13	0	—	—	—	—	—	—	—	0	7	21
	60	0	—	1	32	0	—	6	22	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	7	22
	50	0	—	0	—	0	—	4	27	2	27	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	6	27
	40	0	—	0	—	0	—	2	45	4	35	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	6	39
	30	0	—	0	—	0	—	4	49	1	35	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	5	47
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	5	11	1	5	0	—	0	—	0	—	0	—	0	—	0	—	1	3	5	9	6	7	13	11	—	31	13
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	7	14	4	8	1	6	0	—	0	—	0	—	1	3	1	3	1	7	0	—	3	11	10	12	—	23	11
	700	2	7	1	5	1	3	0	—	0	—	1	7	0	—	2	20	5	19	2	8	10	15	3	16	—	27	14
	600	0	—	0	—	0	—	1	13	0	—	1	5	0	—	2	31	4	31	12	20	3	21	2	13	—	25	21
	500	0	—	0	—	0	—	1	13	0	—	0	—	0	—	1	21	7	31	9	28	4	16	1	23	—	23	26
	400	0	—	0	—	0	—	0	—	1	13	0	—	0	—	0	—	5	27	11	33	3	34	0	—	—	20	30
	300	0	—	0	—	0	—	0	—	0	—	1	13	0	—	1	26	3	46	10	36	2	58	0	—	—	17	35
	250	0	—	0	—	0	—	0	—	1	7	0	—	0	—	1	30	6	34	7	33	2	32	0	—	—	17	33
	200	0	—	0	—	0	—	0	—	1	16	0	—	0	—	1	19	6	43	8	39	0	—	0	—	—	16	37
	150	0	—	0	—	0	—	0	—	0	—	1	23	0	—	2	25	8	34	2	21	0	—	0	—	—	13	30
	100	0	—	0	—	0	—	1	26	0	—	1	23	5	22	2	22	2	19	0	—	1	37	0	—	—	12	24
	70	0	—	0	—	0	—	2	24	7	24	1	19	0	—	0	—	1	2	0	—	0	—	0	—	—	11	22
	60	0	—	0	—	0	—	1	34	6	21	3	30	0	—	0	—	0	—	0	—	0	—	0	—	—	10	23
	50	0	—	0	—	0	—	3	27	4	22	1	20	0	—	0	—	0	—	0	—	0	—	0	—	—	8	30
	40	0	—	0	—	0	—	3	27	5	26	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	8	28
	30	0	—	0	—	0	—	5	31	1	43	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	6	33
	20	0	—	0	—	0	—	1	25	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	1	25
	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)— AUGUST 1974

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			
Aswan 0000 U.T.	Surface	15	12	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	14	14	15	1	31	13
	1000	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	850	12	12	1	5	1	6	0	—	0	—	0	—	0	—	0	—	1	15	1	13	4	15	9	13	0	29	12
	700	2	6	2	5	1	10	2	9	0	—	2	14	1	30	6	18	6	15	3	17	0	—	2	8	0	27	14
	600	0	—	1	5	2	15	2	9	2	18	1	19	3	16	5	18	7	21	2	20	0	—	2	14	0	27	17
	500	0	—	0	—	1	14	6	14	5	13	0	—	3	16	5	9	2	8	5	11	1	7	0	—	0	28	12
	400	0	—	2	11	3	12	4	8	2	17	2	11	6	10	3	5	1	4	2	6	1	7	1	4	0	28	9
	300	1	5	2	8	6	13	4	18	4	18	1	10	4	9	3	9	3	8	—	—	0	—	0	—	0	28	12
	250	1	6	2	10	3	7	6	17	6	20	1	12	3	6	5	12	1	5	—	—	0	—	0	—	0	28	13
	200	0	—	2	15	1	14	8	19	7	21	5	20	1	15	3	14	0	—	—	—	0	—	0	—	0	27	19
	150	1	15	1	22	0	—	10	27	3	33	4	41	4	22	0	—	0	—	—	—	0	—	0	—	0	23	29
	100	0	—	0	—	0	—	7	32	9	20	4	34	0	—	0	—	0	—	—	—	0	—	0	—	0	20	34
	70	0	—	0	—	0	—	7	32	4	34	0	—	0	—	0	—	0	—	—	—	0	—	0	—	0	11	33
	60	0	—	0	—	1	28	7	31	1	25	0	—	0	—	0	—	0	—	—	—	0	—	0	—	0	9	30
	50	0	—	0	—	0	—	5	39	0	—	0	—	0	—	0	—	0	—	—	—	0	—	0	—	0	5	39
	40	0	—	0	—	1	29	2	41	0	—	0	—	0	—	0	—	0	—	—	—	0	—	0	—	0	3	37
	30	0	—	0	—	1	37	1	45	6	—	0	—	0	—	0	—	6	—	—	—	0	—	0	—	0	2	41
	20	0	—	0	—	0	—	—	—	0	—	0	—	0	—	0	—	0	—	—	—	0	—	0	—	0	—	—
	10	0	—	0	—	0	—	—	—	0	—	0	—	0	—	0	—	0	—	—	—	0	—	0	—	0	—	—
Aswan 1200 U.T.	Surface	8	13	1	15	0	—	1	13	0	—	0	—	0	—	0	—	0	—	2	12	9	15	7	27	1	29	13
	1000	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	—	—
	850	6	29	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	10	2	16	13	14	7	15	0	29	14
	700	0	—	0	—	0	—	2	13	1	6	1	11	1	13	3	16	9	23	7	20	5	10	0	—	0	29	17
	600	0	—	1	13	0	—	1	7	1	12	2	16	3	19	12	20	7	21	0	—	1	9	1	2	0	29	18
	500	0	—	0	—	1	5	1	13	2	19	3	15	3	13	7	17	5	11	2	15	4	9	0	—	0	28	13
	400	0	—	1	9	3	7	3	13	3	12	5	12	1	10	2	8	5	7	3	11	1	2	0	—	0	27	10
	300	0	—	2	9	3	9	6	14	8	12	1	3	1	11	3	8	0	—	0	—	1	12	1	4	0	26	11
	250	1	12	1	9	1	18	5	13	9	20	4	13	1	12	1	5	1	4	1	14	1	34	0	—	0	26	16
	200	0	—	1	10	0	—	9	20	8	21	3	12	1	20	0	—	2	10	0	—	1	30	0	—	0	25	19
	150	0	—	0	—	5	23	5	32	5	22	3	18	3	13	1	8	0	—	0	—	1	40	0	—	0	23	23
	100	0	—	0	—	0	—	8	36	7	28	3	24	0	—	0	—	0	—	0	—	1	50	0	—	0	19	32
	70	0	—	0	—	1	54	4	38	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	5	42
	60	0	—	0	—	0	—	1	45	2	81	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	3	36
	50	0	—	0	—	0	—	3	36	0	—	6	—	0	—	0	—	0	—	0	—	0	—	0	—	0	3	43
	40	0	—	0	—	0	—	0	—	2	34	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	—
	30	0	—	0	—	0	—	1	4	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	20	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	10	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	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 during the month.

REVIEW OF AGRO-METEOROLOGICAL STATIONS

MERSA MATRUH — AUGUST 1974

Mild summer weather prevailed the whole month. The mean daily air temperature and relative humidity were nearly the same as normal.

The highest maximum soil temperatures were higher than last August at 2 and 5 cm. depths by 0.9°C and 1.4°C respectively ; and lower than last August at depths between 10 and 100 cm. by slight departures between 0.2° and 0.6°C. The lowest minimum soil temperatures were lower than last August at depths between 2 and 10 cm. and higher at depths between 20 and 100 cm ; The departures were slight at all depths except at 20 cm where the lowest minimum soil temperature was higher by 2.0°C than last August.

The mean daily actual sunshine duration was the same as average. The mean daily wind speed at 1.5 met. height was lower by 1.0 m./sec. than the coresponding value of August 1973.

TAHRIR — AUGUST 1974

The mean daily air temperture and relative humidity for this month were rather normal.

Maximum air temperatures persisted above normal most days of this month. The highest maximum air temperature was 39.2°C reported on the 8th.

Minimum air temperatures were below normal most days of the month. The lowest minimum air temperature was 16.3°C reported on the 31st.

The highest maximum soil temperatures were higher than last August at all depths except at 20 and 100 cm. depths where they were lower than last August ; the departures varied between 0.1° and 0.7°C. The lowest minimum soil temperatures were lower than last August at all depths between 2 and 20 cm. but higher at 50 and 100 cm. depths ; the departures varied between 0.2° and 0.6°C.

The mean daily actual sunshine duration was the same as average. The mean daily wind speed at 1.5 met. height and pan evaporation were lower than average by 0.6 m./sec. and 1.29 mm. respectively.

BAHTIM — AUGUST 1974

The mean daily air temperature and relative humidity for this month were slightly below average.

Mild summer weather prevailed the whole month apart from two light heat waves. The first wave was experienced from the 7th till the 9th, and the second wave on the 27th yielding the highest maximum air temperature for the month (35.2°C).

The highest maximum soil temperatures were higher than last August at all depths with departures between 3.3°C (at 2 cm.) and 0.2°C (at 100 cm.). The lowest minimum soil temperatures were also higher than last August at all depths with slight departures ranging between 0.1° and 0.8°C.

The mean daily wind speed at 1.5 met. height and actual sunshine duration were higher than average by 0.2 m./sec. and 0.2 hour. The mean daily pan evaporation was lower than average by 0.10 mm.

KHARGA — AUGUST 1974

The mean daily air temperature and relative humidity for this month were rather normal.

The month was characterized by two heat waves, the first of which was prolonged and prevailed most of the first and second weeks yielding the highest maximum air temperature for the month (41.2°C) on both the 8th and 13th. The second heat wave was experienced on the 27th and 28th.

The highest maximum soil temperatures were higher than last August at depths between 2 and 20 cm. with departures between 2.0°C (at 5 cm.) and 0.2°C (at 20 cm.) and lower than than last August at 50 and 100 cm. depths by 1.4°C & 0.2°C respectively. The lowest minimum soil temperatures were higher than last August at depths between 2 and 20cm. with departures between 1.3°C (at 2 cm.) and 0.4°C (at 20 cm.) ; lower by 0.1°C at 50 cm. depth and the same as lastt August at 100 cm. depth.

The mean daily actual sunshine duration, wind speed and pan evaporaion were lower than average by 0.1 hour, 0.4 m./sec. and 1.87 mm. respectively.

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

AUGUST — 1974

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. . .	29.0	20.4	25.2	23.1	27.0	24.0	24.0	24.0	24.0	240.	23.6	12.5	0.03	0.0	0.0	0.0
Tahrir	35.5	19.3	26.2	22 3	29.2	24.0	24.0	24.0	24.0	24.0	21.7	12.4	6.4	0.2	0.0	0.0
Bahtim	32.8	18.4	25.0	21.1	28.1	24.0	24.0	24.0	24.0	24.0	19.5	11.2	5.4	0.0	0.0	0.0
Kharga	38.8	23.0	32.0	28.8	34.7	24.0	24.0	24.0	24.0	24.0	24.0	21.9	15.0	7.7	0.5	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.

AUGUST — 1974

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. . .	30.6	31	28.0	18	23.9	14	18.9	2	16.2	4	—	—
Tahrir	39.2	8	32.1	15	22.8	8	16.3	31	15.2	31	14.0	31
Bahtim	35.2	27	30.8	30	21.0	1	15.0	31	13.4	11	—	—
Kharga	41.2	8,13	34.2	16	28.8	6	20.0	12.21	17.4	18	—	—

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

AUGUST — 1974

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	504.9	369.7	412.1	90	72	61	45	14	17.2	17.9	21.6	6	10.5	31	6.5	—	0.0	0.0	—
Tahrir . .	581.2	362.0	410.5	88	69	40	24	8	16.8	15.3	20.9	8	10.9	8	5.6	9.17	0.0	0.0	—
Bahtim . .	616.0	350.9	409.7	86	70	43	24	3	16.1	15.0	20.8	7	11.0	27	6.1	8·35	0.0	0.0	—
Kharga . .	680.8	372.5	403.1	92	28	20	13	11	9.5	9.5	14.8	31	6.2	9,11	16.4	17.82	0.0	0.0	—

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

AUGUST — 1974

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	41.7	40.0	35.2	31.2	29.7	27.2	24.5	—	—	—	—	—	—	—	—	—
	L	24.6	24.2	25.1	27.4	28.4	26.6	23.6	—	—	—	—	—	—	—	—	—
Tahrir . . .	H	53.5	47.8	42.8	37.5	33.7	31.6	29.4	28.2	33.5	32.2	30.9	29.7	29.4	28.6	27.7	—
	L	26.5	25.3	26.1	29.5	31·3	31.1	29.0	27.7	24.5	24.4	24.6	25.9	27.7	27.7	27.1	—
Bahtim . . .	H	58.6	48.5	41.2	35.8	32.9	30.6	28.0	26.0	39.8	33.2	33.8	29.6	27.8	26.3	23.8	—
	L	30.0	28.0	28.8	31.9	31.8	29.9	26.9	25.1	22.8	22.8	23.8	25.3	26.7	25.7	22.8	—
Kharga . . .	H	55.7	50.4	44.2	38.8	34.6	33.3	31.1	29.6	—	—	—	—	—	—	—	—
	L	23.2	26.2	29.0	32.8	33.6	33.0	30·3	29.0	—	—	—	—	—	—	—	—

Table C 5.—SURFACE WIND

AUGUST — 1974

STATION	Wind Speed m/sec at 1½ metres			Days with surface wind speed at 10 metres							Max. Gust (Knot 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	3.7	2.4	4.9	31	26	9	2	0	0	0	33	15
Tahrir	1.7	1.0	2.3	31	8	1	0	0	0	0	29	14
Bahtim. . . .	2.0	1.3	2.6	23	2	0	0	0	0	0	21	15
Kharga. . . .	3.2	2.2	4.3	30	19	4	1	0	0	0	31	6

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THE ARAB REPUBLIC OF EGYPT

MONTHLY WEATHER REPORT

VOLUME 17 NUMBER 9

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SEPTEMBER, 1974

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 Egyptian Meteorological Authority issues several 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

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

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Note : For explanatory notes on the tables please refer to Volume 17, Number 1 (January 1974).

GENERAL SUMMARY OF WEATHER CONDITIONS

SEPTEMBER 1974

Generally mild weather in north of the country and hot in the south. Two heat waves, the first of which was excessive.

PRESSURE DISTRIBUTION

The prevailing pressure systems in this month were the monsoon low pressure system over the Arabian gulf, Arabia and north Sudan, and weak high pressure over Central Mediterranean and NE Africa.

The monsoon trough over Iraq elongated through East Mediterranean and Asia Minor in the periods (1st, 2nd), (13th—15th) and (17th—19th).

The East Mediterranean area was disturbed by the transit of a depression on the 10th and a deep trough on the 27th.

Otherwise high pressure over Central Mediterranean and NE Africa extended slightly eastwards.

SURFACE WIND

Light to moderate N ly, NW ly winds prevailed most of the month in general.

Winds freshened during several days in scattered places mainly in Upper Egypt.

TEMPERATURE

This month was intervened by two heat waves during the second and fourth weeks, the first of which was the more intense.

Maximum air temperatures experienced moderate or large departures above normal during the heat waves, and slight departures below normal in general during the rest of the month.

The highest maximum air temperaure for Egypt in this month was 43.6°C at Qena on the 10*th.*

The lowest maximum air temperature was 25.3°C at Sallum on the 29*th.*

Minimum air temperatures showed irregular departures from normal, slight or moderate in general.

The highest minimum air temperature for Egypt in this month was 29.8°C at Quseir on the 11*th.*

The lowest minimum air temperature was 13.0°C at Shebin Elkom on the 30*th.*

PRECIPITATION

This month was rainless apart from 2.2 mm. at Mersa Matruh and Trace over Cairo on the 10*th.*

OTHER WEATHER PHENOMENA

Early morning mist developed during several days over scattered places in Delta and Cairo.

Rising sand was reported in some days over few scattered places.

Chairman (A. F. HASAN)

Board of Directors

Cairo, June 1977

SURFACE DATA

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

SEPTEMBER — 1974

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	1013.3	—0.3	29.5	+0.2	20.8	+0.4	25.2	24.8	+0.1	19.9	—0.3	63	—1	—	—	—	8.6
Mersa Matruh. (A)	1012.8	—0.9	28.6	0.0	19.5	—0.3	24.0	23.5	—0.7	19.9	—0.2	70	+3	324.1	371.3	87	6.5
Alexandria (A)	1012.3	—0.4	30.1	+0.6	20.6	—0.6	25.4	24.9	—0.8	20.9	—0.2	70	+ 2	323.4	370.2	87	4.7
Port Said. (A)	1010.2	—1.6	30.6	+1.3	23.0	—0.7	26.8	26.0	—0.2	21.4	—0.7	65	— 4	306.7	370.2	83	4.4
El Arish.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta.	1010.9	—1.1	32.3	—0.2	17.7	+0.5	25.0	24.1	—0.5	20.1	+0.1	71	+7	330.6	369.9	89	4.1
Cairo. (A)	1011.2	—0.9	33.6	+1.2	21.3	+1.3	27.4	26.8	+1.0	20·3	+0.1	57	—1	—	—	—	14.1
Fayoum.	—	—	35.4	+1.6	19.9	+0.3	27.6	28.1	+1.5	20.6	+0.5	51	— 2	—	—	—	7.5
Minya. (A)	1011.1	+0 1	34.7	+0.3	18.7	+0.2	26.7	26.7	+1.0	19.3	—0.3	51	— 3	321.2	368.9	87	12.6
Assyout. (A)	1010.5	+0.1	34.6	—0.3	20.1	0.0	27.4	27.1	—0.4	18.8	—0.2	44	+ 4	—	—	—	13.7
Luxor. (A)	1008.2	—0.1	38.5	0.0	20.5	—1.1	29.5	29.4	—0.7	18.8	—0.5	34	+ 2	—	—	—	10.8
Aswan. (A)	1008.1	+0.1	38.6	—1.0	22.6	+0.4	30.6	30.5	—0.6	17.7	+0.3	24	+ 5	—	—	—	25.4
Siwa	1012.5	—0.7	34.3	—0.6	19.2	+0.7	26.8	26.9	—0.1	18.8	+0.3	46	+ 6	318.5	369.6	86	11.9
Bahariya.	1011.3	—0.6	34.4	+0.3	19.6	+0.6	27.0	27.1	+1.1	18.5	—0.3	44	+ 2	—	—	—	10.8
Farafra.	1012.8	—0.3	35.6	+0.7	19.5	+0.4	27.6	27.3	+0.4	17.2	+0.4	34	+ 2	—	—	—	13.8
Dakhla.	1010.9	—0.1	35.7	0.0	18.7	—1.6	27.2	27.3	—0.8	17.9	+0.5	39	+10	—	—	—	20.9
Kharga.	1009.7	+0.2	36.8	+0.2	21.9	+0.5	29.4	29.7	+0.3	18.3	+0.4	34	+ 4	339.7	369.4	92	15.3
Tor.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada.	1008.3	+0.2	32.1	+1.0	23.3	+0.2	27.7	27.8	0.0	20.8	—0.1	51	0	342.6	368.9	93	11.9
Quseir.	1008.1	—0.3	31.4	—0.4	24.8	—0.4	28.1	28.3	+0.2	21.0	—0.2	50	— 2	—	—	—	11.1

TABLE A2.— MAXIMUM AND MINIMUM AIR TEMPERATURE

SEPTEMBER — 1974

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	37.8	25	25.3	29	30	10	2	0	0	19.9	—	24.0	7.9.25	17.5	29	0	0	0	0
Merse Matruh (A)	36.6	25	25.9	21	30	3	1	0	0	18.5	—	24.0	10	13.4	22	0	0	0	0
Alexandria (A)	37.6	26	27.4	29	30	10	2	0	0	18.9	—	24.0	11	15.8	22	0	0	0	0
Port Said (A)	35.6	26	28.2	29	30	24	1	0	0	22.5	—	24.6	9	20.8	26	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	40.0	10	29.3	29	30	26	3	0	0	—	—	22.1	11	14.0	30	0	0	0	0
Cairo (A)	41.5	10	29.8	29	30	29	8	2	0	—	—	26.4	9 10	16.6	24	0	0	0	0
Fayoum	41.5	10	31.2	20	30	30	14	2	0	17.5	—	23.2	12	17.2	23	0	0	0	0
Minya (A)	41.4	27	31.4	29	30	30	10	3	0	17.3	—	22.0	11	15.7	24	0	0	0	0
Assyout (A)	41.0	27	31.8	30	30	30	10	2	0	16.9	—	24.0	11	16.3	24,30	0	0	0	0
Luxor (A)	43.4	10	36.4	2,19,30	30	30	30	6	0	17.6	—	23.2	3	17.4	27	0	0	0	0
Aswan (A)	43.0	10	36.4	3.15.16	30	30	30	7	0	—	—	26.2	11	19.8	25	0	0	0	0
Siwa	39.6	7.26	31.2	20	30	30	9	0	0	18.6	—	23.4	10	15.7	22	0	0	0	0
Bahariya	41.6	9	30.1	20	30	30	8	2	0	19.0	—	23.5	10	16.4	21	0	0	0	0
Farafra	42.2	9	32.0	21	30	30	15	2	0	16.0	—	23.6	10	16.2	24	0	0	0	0
Dakhla	42.2	9	32.0	30	30	30	14	4	0	18.5	—	22.7	11	14.7	7	0	0	0	0
Kharga	42.2	10	33.4	30	30	30	22	4	0	20.2	—	26.6	11	17.5	7	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	38.2	10	29.3	30	30	28	3	0	0	—	—	27.6	12	20.4	9	0	0	0	0
Quseir	34.8	11	29.4	30	30	28	0	0	0	21.0	—	29.8	11	22.7	16	0	0	0	0

TABLE A 3.—SKY COVER AND RAINFALL

SEPTEMBER — 1974

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	1.5	1.6	1.3	1.7	0.0	—1.8	0.0	—	0	0	0	0	0	0	0
Mersa Matruh (A)	1.0	2.5	1.7	1.3	1.6	2.2	+1.0	2.2	10	0	1	1	0	0	0	0
Alexandria (A)	2.0	2.6	2.2	2.1	2.2	0.0	—1.2	0.0	—	0	0	0	0	0	0	0
Port Said (A)	0.5	1.0	0.8	0.5	0.7	0.0	—0.2	0.0	—	0	0	0	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	0	0	0	0	0	0	0
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	0.0	0.2	2.2	0.0	0.8	0.0	—0.2	0.0	—	0	0	0	0	0	0	0
Cairo (A)	1.2	1.5	1.8	0.3	1.3	Tr.	—0.0	Tr.	10	1	0	0	0	0	0	0
Fayoum	—	1.3	0.3	0.1	—	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Minya (A)	0.0	0.6	0.3	0.0	0.2	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Assyout (A)	0.0	0.0	0.0	0.0	0.0	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Luxor (A)	0.0	0.0	0.2	0.2	0.1	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Aswan (A)	0.1	0.1	0.2	0.0	0.2	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Siwa	0.8	0.7	1.1	0.3	0.7	0.0	—0.1	0.0	—	0	0	0	0	0	0	0
Bahariya	0.0	0.9	0.5	0.0	0.3	0.0	—Tr.	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	0.0	0.0	0.0	0.0	0.0	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0.0	0.0	0.0	0.0	0.0	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Quseir	0.0	0.2	0.1	0.2	0.1	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0

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

SEPTEMBER — 1974

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	16	0
Mersa Matruh (A)	1	0	0	0	0	0	1	0	0	0	6	0	0	17	1
Alexandria . (A)	0	0	0	0	0	0	3	0	0	0	0	0	0	14	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	12	0	0	0	0	0	0	27	0
Cairo . . . . (A)	0	0	0	0	0	0	18	2	0	0	0	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	4	0	1	0	0	30	0
Assyut. . . . (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	3	0	4	0	0	30	0
Aswan . . . . (A)	0	0	0	0	0	0	0	0	4	8	6	2	0	30	0
Siwa	0	0	0	0	0	0	1	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	0	0	0	—	—
Dakhla	0	0	0	0	0	0	0	0	0	0	6	0	0	30	0
Kharga	0	0	0	0	0	0	0	0	0	0	0	0	0	30	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0	0	0	0	0	0	0	0	0	0	9	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 — 1974

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	0	1	1–10	50	113	112	39	14	8	2	3	13	51	96	191	692
				11–27	0	1	0	0	0	0	0	0	3	2	5	4	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	**50**	**114**	**112**	**39**	**14**	**8**	**2**	**3**	**16**	**53**	**101**	**195**	**707**
Mersa Matruh (A)	26	1	0	1–10	135	83	4	3	5	15	6	23	59	39	23	110	465
				11–27	24	16	9	7	9	3	0	8	4	2	0	146	228
				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	**159**	**59**	**13**	**10**	**14**	**18**	**6**	**31**	**63**	**41**	**23**	**256**	**693**
Alexandria . . (A)	2	0	0	1–10	77	20	20	14	8	11	17	10	4	4	56	236	487
				11–27	16	8	0	1	0	0	1	2	3	1	35	158	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	**93**	**28**	**26**	**15**	**8**	**11**	**18**	**12**	**7**	**15**	**91**	**394**	**718**
Tanta	19	0	0	1–10	123	80	22	22	13	0	16	10	37	59	128	134	650
				11–27	30	4	0	2	0	0	0	0	0	0	0	15	51
				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**	**84**	**22**	**24**	**13**	**6**	**16**	**10**	**37**	**59**	**128**	**149**	**701**
Cairo . . . (A)	70	0	0	1–10	82	60	1[illegible]	10	9	7	5	17	17	66	110	91	488
				11–27	60	33	3	7	4	0	4	6	1	3	10	31	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	**1[illegible]2**	**93**	**11**	**17**	**13**	**7**	**9**	**23**	**18**	**69**	**120**	**122**	**650**
Fayoum	3	3	0	1–10	291	183	1[illegible]	6	8	9	9	13	39	23	14	83	692
				11–27	8	14	0	0	0	0	0	0	0	0	0	0	22
				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	**299**	**197**	**14**	**6**	**8**	**9**	**9**	**13**	**39**	**23**	**14**	**83**	**714**
Minya . . . . (A)	13	3	0	1–10	217	183	8	1	0	10	30	14	3	3	22	34	525
				11–27	27	152	0	0	0	0	0	0	0	0	0	0	179
				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	**244**	**335**	**8**	**1**	**0**	**10**	**30**	**14**	**3**	**3**	**22**	**34**	**704**
Asyout . . . . (A)	25	0	0	1–10	61	15	2	9	6	6	8	2	2	85	185	146	527
				11–27	45	8	0	0	0	0	0	0	0	0	2	113	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	**106**	**23**	**2**	**9**	**6**	**6**	**8**	**2**	**2**	**85**	**187**	**259**	**695**
Luxor . . . . . (A)	96	0	0	1–10	60	41	11	16	10	0	69	68	36	68	111	104	600
				11–27	3	0	0	0	0	0	0	0	0	1	7	13	24
				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	**63**	**41**	**11**	**16**	**10**	**6**	**69**	**68**	**36**	**69**	**118**	**117**	**624**

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

SEPTEMBER — 1974

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	
Aswan	0	0	1	1—10	122	118	4	1	0	3	0	1	0	6	50	201	506
				11—27	54	38	0	0	0	0	0	0	0	0	18	103	213
				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**	**156**	**4**	**1**	**0**	**3**	**0**	**1**	**0**	**6**	**68**	**304**	**719**
Siwa	11	0	0	1—10	59	117	98	62	40	27	10	9	10	27	68	121	648
				11—27	4	17	2	0	0	0	1	5	3	2	1	26	61
				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	**63**	**134**	**100**	**62**	**40**	**27**	**11**	**14**	**13**	**29**	**69**	**147**	**709**
Dakhla	0	0	0	1—10	65	25	20	19	11	14	23	19	24	59	123	214	616
				11—27	29	9	0	0	0	0	0	0	0	0	0	66	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	**94**	**34**	**20**	**19**	**11**	**14**	**23**	**19**	**24**	**59**	**123**	**280**	**720**
Kharga	2	2	1	1—10	402	74	11	6	3	2	0	0	2	9	15	151	675
				11—27	25	3	0	0	0	0	0	0	0	0	0	12	40
				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	**427**	**77**	**11**	**6**	**3**	**2**	**0**	**0**	**2**	**9**	**15**	**163**	**715**
Hurghada	9	0	5	1—10	36	12	7	3	3	11	4	5	12	82	76	18	239
				11—27	83	12	0	0	0	0	0	0	1	43	166	132	437
				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**	**24**	**7**	**3**	**3**	**11**	**4**	**5**	**13**	**125**	**242**	**150**	**706**

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

SEPTEMBER — 1974

Station	Pressure Surface (Millibar)	Altitude of Pressure Surface (gpm)				Temperature (°C)				Dew Point (°C)	
		N	Mean	Highest	Lowest	N	Mean	Highest	Lowest	N	Mean
Matruh 0000 U.T.	Surface	23	1012m.b.	1018m.b.	1009m.b.	23	23.3	26.2	18.4	23	16.1
	1000	23	131	181	107	23	22.4	25.6	18.0	22	15.7
	850	23	1525	1580	1508	23	14.6	20.0	10.1	19	— 2.2
	700	22	3139	3213	3092	22	6.2	11.3	2.2	14	—12.1
	600	22	4387	4473	4326	22	— 0.6	2.6	— 4.0	13	—18.4
	500	22	5817	5930	5746	22	—10.1	— 6.9	—14.9	12	—29.6
	400	21	7499	7625	7418	21	—21.7	—18.3	—27.3	11	—39.0
	300	21	9557	9700	9421	21	—36.1	—30.1	—43.9	9	—52.5
	250	19	10796	10945	10624	19	—44.3	—40.0	—48.2	8	—59.5
	200	17	12257	12407	12079	17	—53.3	—48.2	—55.9	6	—69.6
	150	16	14066	14217	13877	16	—63.1	—59.1	—66.5	—	—
	100	15	16512	16692	16337	15	—68.2	—63.5	—72.3	—	—
	70	13	18688	18872	18490	13	—64.1	—59.9	—70.5	—	—
	60	11	19652	19850	19400	11	—62.4	—56.4	—69.9	—	—
	50	11	20761	20962	20490	11	—60.2	—52.7	—69.0	—	—
	40	6	22292	22580	22080	6	—56.1	—46.4	—59.9	—	—
	30	4	23923	24109	23802	4	—54.4	—51.3	—56.9	—	—
	20	2	26458	26486	26410	2	—50.4	—48.3	—52.5	—	—
	10	—	—	—	—	—	—	—	—	—	—
Helwan 0000 U.T.	Surface	22	994m.b.*	998m.b.*	992m.b.*	22	23.3	30.9	21.0	22	17.7
	1000	21	89	123	70	—	—	—	—	—	—
	850	21	1495	1517	1466	21	17.0	23.4	12.4	30	4.2
	700	20	3127	3166	3098	20	11.2	12.7	3.7	17	—11.9
	600	20	4390	4411	4363	20	2.5	6.4	— 2.2	17	—20.4
	500	19	5817	5885	5862	19	— 6.4	— 2.5	—11.0	16	—27.5
	400	19	7547	7600	7486	19	—18.5	—14.3	—23.1	16	—36.1
	300	19	9634	9712	9565	19	—32.5	—28.8	—36.4	16	—48.1
	250	19	10893	10988	10811	19	—41.3	—36.7	—44.9	16	—55.8
	200	19	12377	12447	12275	19	—51.2	—48.3	—54.0	16	—64.1
	150	19	14199	14313	14083	19	—62.9	—59.7	—65.0	3	—73.8
	100	17	16629	16774	16508	17	—71.2	—63.2	—75.9	—	—
	70	16	18752	18883	18662	16	—66.8	—63.3	—70.2	—	—
	60	14	19726	19870	19640	14	—63.1	—60.1	—66.0	—	—
	50	14	20816	20932	20747	14	—60.3	—57.7	—62.4	—	—
	40	14	22288	22400	22134	14	—57.9	—56.0	—60.0	—	—
	30	11	24009	24125	23445	11	—54.7	—52.9	—56.8	—	—
	20	7	26698	26778	26626	7	—50.6	—47.9	—52.3	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 0000 U.T.	Surface	26	987m.b.*	990m.b.*	984m.b.*	26	26.0	29.4	23.5	26	6.8
	1000	26	76	105	51	—	—	—	—	—	—
	850	26	1501	1539	1464	26	21.5	26.4	18.4	24	2.2
	700	25	3152	3187	3100	25	11.2	13.8	8.2	19	— 6.2
	600	25	4418	4476	4359	25	2.1	7.6	— 0.7	19	—12.7
	500	25	5867	5924	5808	25	— 6.0	— 2.1	—10.0	14	—25.6
	400	25	7579	7640	7520	25	—17.6	—13.6	—21.3	14	—36.1
	300	25	9667	9730	9623	25	—33.1	—30.8	—35.4	13	—48.0
	250	24	10921	10987	10883	24	—42.7	—40.8	—45.3	13	—56.3
	200	23	12392	12459	12321	23	—53.7	—51.8	—56.6	12	—65.1
	150	23	14188	14266	14006	23	—66.3	—61.5	—69.6	—	—
	100	22	16572	16684	16466	22	—77.2	—72.5	—80.7	—	—
	70	15	18634	18814	18550	15	—69.8	—66.6	—77.9	—	—
	60	9	19643	19930	19560	9	—65.5	—63.3	—66.3	—	—
	50	9	20694	20861	20593	9	—60.9	—55.8	—63.3	—	—
	40	3	22130	22170	22080	3	—58.7	—57.0	—59.8	—	—
	30	3	23867	23935	23820	3	—55.5	—52.3	—57.9	—	—
	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.

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 — 1974

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	21	*1012m.b.	*1017m.b.	*1009m.b.	21	27.8	33.1	26.0	21	17.6
	1000	21	137	176	108	21	25.6	32.5	21.4	21	16.1
	850	20	1541	1585	1517	20	16.2	21.7	12.0	19	— 2.8
	700	20	3165	3225	3110	20	7.2	11.5	0.2	15	—14.6
	600	18	4416	4486	4338	18	0.0	3.4	— 3.0	11	—21.3
	500	17	5857	5930	5765	17	— 9.2	— 5.7	—13.1	9	—28.5
	400	16	7533	7625	7439	16	—21.2	—17.9	—26.5	8	—38.8
	300	15	9599	9686	9478	15	—34.3	—29.0	—39.9	8	—49.8
	250	14	10848	10954	10732	14	—42.1	—36.3	—45.7	7	—57.4
	200	13	12328	12450	12198	13	—51.2	—44.8	—54.4	7	—65.0
	150	12	14151	14289	13994	12	—61.4	—54.6	—65.9	—	—
	100	8	16587	16751	16420	8	—67.8	—61.5	—73.3	—	—
	70	7	18735	18961	18554	7	—64.5	—60.2	—75.6	—	—
	60	7	19723	19900	19500	7	—62.0	—58.6	—73.4	—	—
	50	7	20823	21071	20634	7	—58.1	—54.5	—70.8	—	—
	40	2	22439	22600	22300	2	—51.9	—51.1	—52.7	—	—
	30	2	24138	24263	24212	2	—48.6	—47.1	—50.0	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—
Helwan 1200 U.T.	Surface	30	*995m.b.	*998m.b.	*991m.b.	30	31.6	37.9	28.6	30	11.3
	1000	20	85	104	59	—	—	—	—	—	—
	850	20	1513	1543	1480	20	18.5	25.3	13.2	20	6.9
	700	20	3151	3201	3115	20	10.3	13.0	5.6	19	—13.7
	600	19	4419	4465	4338	19	3.9	7.2	— 1.4	18	—20.8
	500	19	5879	5910	5823	19	— 5.4	— 2.6	— 9.9	19	—28.3
	400	18	7592	7658	7533	18	—16.0	—12.4	—20.7	18	—37.8
	300	17	9695	9788	9643	17	—30.7	—27.4	—34.5	16	—49.1
	250	17	10967	11047	10910	17	—39.4	—34.6	—43.7	16	—55.9
	200	17	12453	12620	12334	17	—49.2	—43.0	—52.7	16	—63.7
	150	15	14306	14512	14296	15	—59.6	—53.1	—63.9	7	—69.4
	100	14	16782	16945	16659	14	—67.3	—61.6	—72.9	—	—
	70	14	18945	19249	18704	14	—63.6	—56.3	—76.2	—	—
	60	10	19916	20260	19760	10	—60.0	—57.6	—63.0	—	—
	50	10	21030	21371	20876	10	—55.5	—53.0	—57.3	—	—
	40	6	22492	22590	22410	6	—52.8	—47.0	—55.9	—	—
	30	6	24326	24740	24172	6	—48.8	—43.3	—51.6	—	—
	20	6	27020	27508	26827	6	—44.8	—37.3	—48.9	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 1200 U.T.	Surface	26	*986m.b.	*989m.b.	*984m.b.	26	37.5	42.0	35.0	26	6.9
	1000	26	65	92	35	—	—	—	—	—	—
	850	26	1515	1547	1474	26	24.0	29.2	21.0	23	— 0.4
	700	26	3178	3223	3116	25	13.2	16.0	9.6	19	—10.1
	600	25	4451	4495	4385	25	3.7	8.4	1.4	18	—16.3
	500	24	5908	5942	5852	24	— 4.8	0.6	— 8.6	17	—25.4
	400	24	7629	7703	7582	24	—15.9	— 9.3	—20.0	15	—37.3
	300	23	9731	9860	9656	23	—31.2	—26.0	—35.6	13	—49.7
	250	23	10998	11088	10906	23	—40.6	—33.3	—43.1	13	—57.5
	200	23	12484	12686	12376	22	—51.6	—44.6	—55.0	12	—66.2
	150	23	14296	14557	14166	23	—64.7	—55.5	—68.3	1	—72.7
	100	21	16300	16522	16082	21	—75.7	—65.4	—80.0	—	—
	70	14	18743	18879	18582	14	—61.9	—65.1	—73.5	—	—
	60	7	19737	19910	19590	7	—65.0	—62.1	—68.7	—	—
	50	7	20794	20845	20670	7	—62.2	—58.2	—65.9	—	—
	40	2	22325	22350	22300	2	—55.2	—54.2	—56.2	—	—
	30	2	24076	24102	24051	2	—52.3	—50.8	—53.9	—	—
	20	1	26717	—	—	1	—44.9	—	—	—	—
	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

SEPTEMBER — 1974

	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.	4164 (23)	619 (23)	—19.3 (15)	4800	570	—	2380	765	— 8.5	15333 (13)	124 (13)	—69.2 (13)	16320	106	—67.0	13100	177	—70.3	9540	297	250	100
	Helwan . . .	4832 (19)	569 (19)	—20.5 (16)	5550	523	—23.5	4010	613	— 4.2	16249 (16)	108 (16)	—72.5 (16)	17230	092	—74.9	14510	140	—64.7	12440	201	280	145
	Aswan	4748 (25)	577 (25)	—12.7 (19)	5550	522	—25.0	4250	612	—10.3	16298 (14)	107 (14)	—77.3 (14)	17160	91	—80.8	14960	130	—75.3	10300	—	210	58
1200 U.T.		(N)	(N)	(N)							(N)	(N)	(N)										
	Mersa Matruh.	4332 (18)	607 (18)	—20.8 (12)	5040	559	—29.1	3170	695	—12.2	15849 (7)	116 (7)	—68.3 (7)	17740	84	—63.9	13970	157	—71.7	11300	237	240	90
	Helwan . . .	5052 (19)	557 (19)	—23.4 (18)	5923	500	—27.0	4230	617	— 8.4	16209 (13)	111 (13)	—68.2 (13)	16960	100	—66.0	15040	134	—62.5	10520	265	300	145
	Aswan	5072 (24)	557 (24)	—20.5 (18)	6050	494	—27.9	4660	588	—15.8	16506 (12)	103 (12)	—77.1 (12)	17210	92	—79.5	16000	113	—76.3	10550	—	230	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) SEPTEMBER 1974

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 Knot
		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	12	1	2	2	3	0	—	1	14	1	2	0	—	0	—	2	8	1	5	1	5	8	8	0	23	8
	1000	5	13	2	4	0	—	0	—	1	17	1	2	0	—	0	—	0	—	1	14	6	10	7	12	0	23	11
	850	6	18	0	—	1	5	0	—	0	—	0	—	1	17	0	—	1	17	3	13	2	17	9	12	0	23	14
	700	1	15	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	14	5	13	7	18	6	16	0	22	16
	600	0	—	0	—	0	—	1	6	0	—	0	—	0	—	2	23	3	13	9	18	4	18	3	19	0	22	18
	500	0	—	0	—	0	—	0	—	0	—	0	—	1	5	3	3	5	25	7	27	5	19	1	21	0	22	24
	400	0	—	0	—	0	—	0	—	0	—	0	—	1	20	3	23	8	38	6	31	3	24	0	—	0	21	32
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	49	10	50	4	43	1	40	0	—	0	19	49
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	53	10	57	3	40	0	—	0	—	0	16	53
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	60	5	35	0	—	0	—	0	—	0	9	56
	150	1	40	0	—	0	—	0	—	0	—	0	—	0	—	3	53	2	32	1	45	0	—	0	—	0	7	44
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	17	0	—	0	—	0	2	17
	70	0	—	0	—	1	22	0	—	0	—	1	15	0	—	0	—	0	—	0	—	0	—	0	—	0	2	18
	60	0	—	0	—	1	15	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	—	0	1	15
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	4	10	1	5	1	18	1	18	0	—	0	—	0	—	0	—	0	—	0	—	2	15	12	14	0	21	14
	1000	2	11	0	—	1	17	1	18	0	—	0	—	0	—	0	—	0	—	0	—	5	18	12	15	0	21	16
	850	2	27	1	9	0	—	0	—	0	—	0	—	1	21	1	10	1	4	4	12	4	8	6	15	0	20	13
	700	0	—	0	—	0	—	0	—	0	—	0	—	1	31	0	—	3	11	4	13	6	19	4	19	0	18	17
	600	0	—	0	—	0	—	0	—	1	2	0	—	1	27	0	—	4	12	4	16	5	22	2	14	0	17	16
	500	0	—	0	—	0	—	0	—	0	—	1	9	0	—	2	24	4	25	6	21	3	18	0	—	0	16	22
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	22	4	39	7	32	1	16	0	—	0	14	31
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	31	7	46	6	52	0	—	0	—	0	14	48
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	41	6	51	4	48	0	—	0	—	0	12	48
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	53	0	—	0	—	0	—	0	5	53
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	32	0	—	0	—	0	—	0	3	22
	100	0	—	0	—	0	—	0	—	0	—	0	—	1	13	0	—	0	—	0	—	0	—	0	—	0	1	13
	70	0	—	0	—	0	—	1	15	0	—	0	—	0	—	0	—	0	—	0	—	—	—	0	—	0	1	15
	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 B3 NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES.
HELWAN—SEPTEMBER 1974

Sme	Pressure surface (Mi ar)	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 T.U.	Surface	8	8	6	6	0	—	2	15	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	5	1	22	7
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	2	17	6	13	0	—	1	15	—	—	—	—	—	—	1	16	3	6	0	—	3	12	3	16	0	19	13
	700	3	11	3	11	0	—	0	—	0	—	0	—	0	—	1	4	2	17	2	9	7	17	1	28	0	19	14
	600	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	20	7	21	3	20	5	15	0	18	19
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	26	10	29	1	17	5	31	0	18	28
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	28	11	42	3	31	2	36	0	18	39
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	53	11	52	4	46	0	—	0	18	51
	250	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	57	14	57	1	87	0	—	0	17	58
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	5	69	12	66	0	—	0	—	0	17	67
	150	0	—	0	—	0	—	0	—	0	—	0	—	1	17	0	—	1	80	8	80	1	75	0	—	0	11	57
	100	1	8	0	—	0	—	0	—	0	—	1	17	0	—	0	—	1	125	5	42	0	—	0	—	0	8	45
	70	0	—	1	14	1	12	1	34	1	27	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	4	22
	60	0	—	0	—	1	20	3	22	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	4	22
	50	0	—	1	17	0	—	1	19	1	25	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	3	20
	40	0	—	0	—	1	23	2	25	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	3	24
	30	0	—	0	—	0	—	1	29	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	29
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—		—	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—	—
1200 U.T	Surface	5	12	4	11	0	—	0	—	0	—	0	—	0	—	2	6	4	8	1	14	1	8	13	8	0	30	9
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	5	14	5	13	1	11	0	—	0	—	0	—	0	—	1	6	0	—	1	15	4	7	3	12	0	20	12
	700	2	22	0	—	0	—	1	11	0	—	0	—	0	—	1	14	2	10	2	13	3	10	8	11	0	19	12
	600	1	12	0	—	0	—	0	—	0	—	1	—	0	—	2	12	2	10	7	25	5	20	2	12	0	19	19
	500	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	21	10	30	4	23	1	17	0	19	26
	400	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	24	10	51	3	37	2	52	0	17	45
	300	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	35	10	61	2	71	0	—	0	15	57
	205	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	60	11	59	2	38	0	—	0	15	61
	200	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	49	7	55	2	63	0	—	0	13	55
	150	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	24	1	105	7	52	1	88	0	—	0	11	55
	100	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	18	5	23	2	49	0	—	0	9	28
	70	0	—	0	—	1	13	2	33	1	10	0	—	0	—	0	—	0	—	1	29	2	20	0	—	0	7	23
	60	0	—	0	—	1	20	3	29	1	13	1	18	0	—	0	—	0	—	0	—	0	—	0	—	0	6	22
	50	0	—	0	—	0	—	2	44	2	28	1	12	0	—	0	—	0	—	0	—	0	—	0	—	0	5	31
	40	0	—	0	—	0	—	2	22	1	20	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	3	21
	30	0	—	0	—	0	—	2	31	1	25	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	3	29
	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 obeserved 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) — SEPTEMBER 1974

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	21	12	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	16	4	16	0	26	12
	1000	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	850	9	10	5	11	0	—	0	—	0	—	0	—	2	11	0	—	0	—	1	10	2	10	4	12	0	23	11
	700	0	—	0	—	0	—	0	—	0	—	0	—	2	10	5	15	3	18	8	14	3	13	1	8	0	22	14
	600	0	—	0	—	0	—	0	—	0	—	0	—	1	12	8	20	7	17	4	14	2	11	0	—	0	22	17
	500	0	—	2	4	2	4	2	6	0	—	1	10	1	9	4	12	4	16	4	12	1	9	2	8	0	23	10
	400	2	6	0	—	1	10	1	3	0	—	1	7	1	6	6	14	6	21	2	17	2	9	1	6	0	23	13
	300	1	10	0	—	0	—	0	—	1	10	0	—	2	11	6	24	6	14	5	15	2	15	0	—	0	23	16
	250	0	—	0	—	1	17	0	—	0	—	0	—	4	14	5	26	8	22	5	19	0	—	0	—	0	23	21
	200	0	—	0	—	0	—	0	—	0	—	1	17	3	21	8	16	7	23	1	21	1	24	1	9	0	22	20
	150	0	—	0	—	0	—	0	—	1	12	3	18	4	18	6	26	5	16	1	25	1	6	0	—	0	21	19
	100	1	4	0	—	0	—	1	14	4	21	2	22	6	13	2	14	1	10	1	7	0	—	1	5	0	19	15
	70	0	—	0	—	1	26	4	21	0	—	1	12	0	—	0	—	0	—	0	—	0	—	0	—	0	6	20
	60	0	—	0	—	0	—	3	17	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	3	17
	50	0	—	0	—	2	21	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	21
	40	0	—	0	—	0	—	2	33	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	33
	30	0	—	0	—	0	—	1	36	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	36
	20	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	10	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
1200 U.T.	Surface	12	11	3	14	0	—	0	—	1	10	0	—	0	—	0	—	0	—	1	9	1	12	8	8	0	26	11
	1000	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	850	3	14	4	5	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	10	6	10	9	12	0	26	11
	700	0	—	0	—	0	—	0	—	0	—	1	18	2	12	8	22	8	18	5	16	1	13	1	4	0	26	18
	600	0	—	0	—	0	—	0	—	0	—	0	—	1	26	9	16	7	18	7	13	0	—	0	—	0	24	16
	500	0	—	0	—	1	7	1	6	1	6	0	—	5	10	5	17	6	15	4	9	0	—	1	9	0	24	12
	400	4	8	0	—	0	—	1	8	1	4	2	4	3	11	1	7	8	13	4	16	0	—	0	—	0	24	11
	300	0	—	0	—	0	—	0	—	1	3	2	10	1	5	6	18	8	17	3	17	2	11	0	—	0	23	15
	250	1	7	0	—	0	—	0	—	0	—	3	15	1	13	5	25	7	18	5	14	1	13	0	—	0	23	17
	200	0	—	0	—	0	—	0	—	1	14	1	19	2	12	6	17	7	18	2	20	2	14	1	11	0	22	17
	150	0	—	0	—	0	—	0	—	2	12	2	16	3	20	6	17	4	16	2	10	2	10	1	7	0	22	15
	100	0	—	0	—	0	—	4	19	4	22	6	11	1	12	2	5	1	9	1	9	0	—	0	—	0	19	14
	70	0	—	0	—	0	—	6	19	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	6	19
	60	0	—	0	—	0	—	3	27	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	3	27
	50	0	—	0	—	0	—	1	36	2	28	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	3	30
	40	0	—	0	—	0	—	2	30	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	30
	30	0	—	0	—	0	—	2	44	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	44
	20	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—
	10	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	—	0	—	—	—	—	—	—	—	—

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

TN = The total number of cases the wind has been observxed from all direction during the month.

REVIEW OF AGRO METEOROLOGICAL STATIONS

MERSA MATRUH - SEPTEMBER 1974

The mean daily air temperature and relative humidity for this month were nearly the same as normal.

Weather during the month was generally mild, intervened by two heat waves in the periods : (8*th*—9*th*) and (24*th*—26*th*). The second hear wave yielded the highest maximum air temperature for the month (36.6°C) together with the lowest relative humidity on the 25*th*.

The highest maximum soil temperatures were higher than last September at all depths except at 20 cm. were its value was the same as last September ; the departures varied between 1.7°C (at 2 cm.) and 0.1°C (at 100 cm.). The lowest minimum soil temperatures were lower than last September at 2, 5, 20 cm., the same at 10 cm. and higher than last September at 50, 100 cm ; the departures varied between 0.2 and 0.8°C.

The mean daily actual sunshine duration was lower than normal by 0.3 hour. The mean daily wind speed at 1.5 met. height was higher by 0.2 m./sec. than the corresponding value of September 1973.

TAHRIR—SEPTEMBER 1974

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

The month was characterized by two heat waves in the periods (5*th*—15*th*) and (24*th*—27*th*). The first heat wave was prolonged and yielded the highest maximum air temperature for the month (41.9°C) on the 9th and the highest minimum air temperature (23.4°C) on the 11*th*. In the rest of the month mild weather was experienced

The highest maximum soil temperatures were higher than last September at all depths except at 100 cm. where it was the same as last September ; the departures varied between 1.4°C (at 2 cm.) and 0.7°C (at 50 cm.). The lowest minimum soil temperatures were lower than last September at all depths except at 100 cm. where it was higher by 0.1°C ; the departures varied between 1.9°C (at 2 cm.) and 0.3°C (at 50 cm.).

The mean daily actual sunshine duration was slightly above average. The mean daily wind speed at 1.5 met. height and pan evaporation were slightly below average.

BAHTIM—SEPTEMBER 1974

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

The mnth was characterized by two heat waves in the periods (7th—13th) and (25th—27th). The first heat wave yielded the highest maximum air temeprature for the month (41.5°C) on the 10*th* and the highest minimum air temperature (22.8°C) on the 11*th*. In the rest of the month mild weather prevailed.

The highest maximum soil temperature was lower than last September at 2 cm. depth by 0.7°C, the same as last September at 50 cm. and higher at other depths with departures between 2.5°C (at 5 Cm.) and 0.2°C (at 100 cm.).

The lowest minimum soil temperature was lower than last September at 2, 10, 20 cm. depths ; the same as last September at 5 cm ; and higher at 50, 100 cm. depths. The departures were slight ranging between 0.1° and 0.5°C.

The mean daily actual sunshine duration was slightly below average. The mean daily wind speed at 1.5 met. and pan evaporation were slightly above average.

KHARGA — SEPTEMPER 1974

The mean daily air temperature and relative humidity for this month were rather normal.

The month was characterized by two heat waves in the periods (8*th*—11*th*) and (25th—28th). The first heat wave yeilded the highest maximum air temperature for the month (42.2°C) on the 10*th* and the highest minimum air temperature (26.6°C) on the 11th. In the rest of the month weather was mild.

The highest maximum soil temperatures were higher than last September at all depths except at 50 cm. where its value was lower by 0.2°C;the departures varied between 2.4°C (at 10 cm.) and 0.2°C (at 100 cm.).

The lowest minimum soil temperatures were also higher than last September at all depths except at 50 cm. where its values was the same as last September; the departures varied between 1.3°C (at 2cm.) and 0.2°C (at 100 cm.).

The mean daily actual sunshine duration was the same as average. The mean daily wind speed at 1.5 met, height and pan evaporation were lower than average by 0.7 m./sec. and 1.61 mm.

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

SEPTEMBER—1974

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 . .	28.6	19.5	24.4	22.3	26.6	24.0	24.0	24.0	24.0	24.0	21.4	10.5	0.6	0.1	0.0	0.0
Tahrir	35.1	18.0	25.2	21.2	29.3	24.0	24.0	24.0	24.0	24.0	19.3	11.2	4.9	0.7	0.1	0.0
Bahtim	33.5	17.0	25.0	20.8	29.2	24.0	24.0	24.0	24.0	23.5	17.7	11.4	5.5	0.9	0.0	0.0
Kharga	36.8	21.9	29.8	26.9	32.9	24.0	24.0	24.0	24.0	24.0	23.9	19.8	11.0	3.3	0.4	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

SEPTEMBER — 1974

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
Mersa Matruh . . .	36.6	25	25.9	21	24.0	10	15.3	23	13.4	22.23	—	—
Tahrir	41.9	9	30.8	30	23.4	11	14.2	29.30	12.4	29	11.6	29
Bahtim	41.5	10	29.6	29	22.8	11	13.7	23,24	10.0	24	9.0	24.30
Kharga	42.2	10	33.4	30	26.6	11	17.5	7	15.4	7	—	—

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

SEPTEMBER — 1974

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
M. Matruh .	442.7	324.1	371.3	87	72	60	26	25	16.4	16.9	23.6	9	9.4	26	6.5	—	2.2	2.2	10
Tahrir . . .	495.9	315.6	370.8	85	67	37	16	10	15.3	13.4	21.1	11	9.1	10	5.8	8.61	0.0	0.0	—
Bahtim . . .	521.0	311.7	370.8	84	62	33	13	10	13.8	11.9	20.9	11	7.7	10.27	7.6	8.76	Tr.	Tr.	10
Kharga . .	612.3	339.7	369.4	92	34	23	10	10	10.1	10.0	15.9	19	5.5	24	15.3	16.95	2.2	3.2	10

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

SEPTEMBER — 1974

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	40.9	38.3	33.7	30.1	30.2	27.1	25.0	—	—	—	—	—	—	—	—	—
	L	21.1	20.8	22.2	24.8	27.2	26.2	24.2	—	—	—	—	—	—	—	—	—
Tahrir	H	50.3	45.1	40.3	35.8	32.6	30.9	29.4	28.4	33.5	32.2	31.4	29.7	28.9	28.1	27.6	—
	L	22.8	21.8	23.1	26.9	29.1	29.6	28.9	28.3	21.7	21.8	22.3	23.7	26.3	26.9	27.1	—
Bahtim	H	56.2	47.0	39.4	34.7	31.9	30.6	28.4	26.5	33.8	30.6	28.7	27.5	26.9	26.2	24.1	—
	L	24.7	24.0	25.9	29.5	30.5	29.9	28.0	26.0	20.4	20.8	21.6	23.2	25.0	25.1	23 8	—
Kharga . . .	H	56.4	50.4	44.7	37.8	34.0	33.2	31.2	30.2	—	—	—	—	—	—	—	—
	L	21.1	23.5	26.1	30.4	31.8	32.2	31.0	29.6	—	—	—	—	—	—	—	—

Table C 5.—SURFACE WIND

SEPTEMBER — 1974

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 . .	3.6	2.5	4.7	30	21	8	2	0	0	0	31	2
Tahrir	1.7	1.1	2.4	30	11	0	0	0	0	0	26	1
Bahtim	2.2	1.4	3.0	29	11	0	0	0	0	0	26	10
Kharga	3.6	2.6	4.6	26	11	2	1	0	0	0	27	30

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THE ARAB REPUBLIC OF EGYPT

MONTHLY WEATHER REPORT

VOLUME 17 NUMBER 10

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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 several 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

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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Note : For explanatory notes on the tables refer to Volume 17, Number 1 (January 1974).

GENERAL SUMMARY OF WEATHER CONDITIONS

OCTOBER 1974

Generally mild in the north, hot in the south. Four heat waves, the third was the most excessive.

PRESSURE DISTRIBUTION

The pressure disribution over Egypt was affected by the following pressure systems :

- The monsoon low pressure over Arabia and Sudan.
- High pressure extending from Mediterranean to NE Africa.
- Three low pressure troughs passing through East Mediterranean on the 16*th*, 21*st*, 29*th*.

The barometric pressure over Egypt experienced consecutive oscillations reaching minima round the 6*th*, 18*th*, 21*st* and 29*th*. The first minimum was caused by the development of a thermal low over Upper Egypt. The other three pressure minima associated the transit of troughs through East Mediterrancan.

SURFACE WIND

Light to moderate N/NW and N/NE winds prevailed most of the month in general. Winds freshened during few days in scattered places.

TEMPERATURE

Weather was characterized by four variant heat waves. The first wave occurred round the end of the first week. The other three waves prevailed most of the third and fourth weeks. The third heat wave was the most excessive with its peak on the 21*st*.

Maximum a ir temperatures were moderately above normal most days of this month.

The highest maximum air temperature was 41.1°C at Qena on the 21*st*.

The lowest maximum air temperature was 22.3°C at Sidi Barrani on the 14*th*.

Minimum air temperatures showed irregular departures below and above normal in the Mediterranean district and were mostly above normal otherwise.

The highest minimum air temperature was 25.7°C at Quseir on the 9*th*.

The lowest minimum air temperature was 9.7°C at Dakhla on the 31*st*.

PRECIPITATION

This month was rainless all over the country.

OTHER WEATHER PHENOMENA

Early morning mist developed during several days over scattered places in Delta and Cairo.

Rising sand was reported in some days over few scattered places.

Cairo, January 1977

Chairman (A. F. HASAN.)
Board of Directors

SURFACE DATA

Table A1— MONTHLY VALUES OF THE ATMOSPHERIC PRESSURE, AIR TEMPERATURE, RELATIVE HUMIDITY, BRIGHT SUNSHINE DURATION & PICHE EVAPORATION.

OCTOBER — 1974

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	1014.8	— 1.1	29.4	+ 2.1	19.6	+ 1.6	24.5	24.0	+ 1.7	18.7	+ 0.7	59	— 3	—	—	—	5.7
Mersa Matruh (A)	1014.5	— 1.7	27.9	+ 0.9	17.1	+ 0.2	22.5	22.3	+ 0.7	18.3	+ 0.5	70	+ 4	299.7	354.0	85	5.9
Alexandria (A)	1014.9	— 0.9	29.3	+ 1.6	17.4	— 0.2	23.8	22.9	+ 0.3	19.4	+ 0.6	72	+ 4	296.1	354.5	84	3.9
Port Said (A)	1013.1	— 1.9	28.9	+ 1.7	21.3	— 0.3	25.1	24.3	+ 0.2	20.5	+ 0.3	70	+ 2	285.1	354.5	80	4.4
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1014.4	— 0.7	31.6	+ 1.6	15.5	+ 0.3	23.6	22 5	+ 0.5	18.6	+ 0.7	71	+ 6	309.5	354.7	87	4.0
Cairo (A)	1013.9	— 1.1	31.7	+ 1.9	19.4	+ 1.6	25.6	25.0	+ 1.6	19.2	+ 1.1	59	+ 2	—	—	—	13.6
Fayoum	—	—	33.8	+ 2.2	17.6	+ 0.4	25.7	25.1	+ 1.2	18.9	+ 0.9	56	+ 2	—	—	—	6.5
Minya (A)	1013.6	— 0.6	33.8	+ 2.5	16.3	+ 0.8	25.0	24.6	+ 1.5	17.3	0.0	49	— 5	310.4	356.3	87	11.1
Assyout (A)	1013.3	— 0.2	34.8	+ 3.6	17.3	— 0.5	26.0	25.5	+ 1.2	16.3	— 0.7	37	— 7	—	—	—	14.6
Luxor (A)	1011.0	— 0.8	37.5	+ 2.5	16.9	— 0.7	27.2	26.6	+ 1.4	17.0	— 0.8	35	— 4	—	—	—	9.7
Aswan (A)	1010.6	— 0.5	37.2	+ 0 9	20.0	+ 0.7	28.6	28.4	+ 0.6	16.0	+ 0.2	23	+ 1	—	—	—	26.6
Siwa	1014.3	- 1.4	32.5	+ 1.0	15.8	+ 0.8	24.2	23.9	+ 0.8	16.5	+ 0.5	46	+ 2	310.3	356.1	87	10.5
SBahariya	1013.6	— 1.1	33.3	+ 2.2	16.9	+ 0.8	25.1	24.7	+ 1.0	16.8	+ 0.7	44	0	—	—	—	9.2
Farafra	1014.7	— 1.3	34.2	+ 3.0	16.2	+ 0.8	25.2	24.6	+ 1.4	15.4	+ 0.9	36	— 1	—	—	—	11.9
Dakhla	1012.7	— 0.9	35.5	+ 3.3	15 3	— 1.6	25.4	25.2	+ 0.8	16.0	+ 0.5	39	+ 7	—	—	—	16.5
Kharga	1011.9	— 0 6	36.2	+ 2.2	19.0	+ 0.3	27.6	27.9	+ 0.7	15.9	0.0	29	— 3	332.1	358.9	93	14.0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	1011.7	— 0 3	30.4	+ 1.5	20.6	+0.8	25.5	25.5	+ 0.6	19.9	+ 0.8	58	+ 3	325.3	358.1	91	8.6
Quseir	1011.5	— 0.7	30.0	0.0	22.4	—0.6	26.2	26.3	+ 0.5	20.5	+ 0.9	57	+ 3	—	—	—	8.0

Table A 2.—MAXIMUM AND MINIMUM AIR TEMPERATURE

OCTOBER — 1974

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	36.8	14,15	25.9	19	31	10	3	0	0	18.8	—	23.4	15	15.1	29	0	0	0	0
Mersa Matruh	32.2	27	25.0	29	30	5	0	0	0	15.2	—	22.7	18	14.2	17	0	0	0	0
Alexandria (A)	35.8	21	27.0	1	31	8	1	0	0	15 1	—	22.0	4	13.0	25j30	0	0	0	0
Port Said (A)	34.8	21	26.8	27	31	2	0	0	0	20.9	—	23.2	17	19.2	26	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	37.5	21	29.0	13,29	31	24	2	0	0	—	—	19.6	28	12.0	25	0	0	0	0
Cairo (A)	37.8	21	29.1	13	31	23	2	0	0	—	—	23.6	29	14.9	26	0	0	0	0
Fayoum	38.2	21	30.3	30	31	31	7	0	0	14.7	—	20.2	4.7	14.5	26	0	0	0	0
Minya	39.6	21	30.4	30	31	31	8	0	0	14.2	—	19.6	4	12.2	31	0	0	0	0
Assyout (A)	39.2	17,23	30.2	30	31	31	14	0	0	13.9	—	19.5	9.21	15.3	31	0	0	0	0
Luxor (A)	40.5	18	34.4	12	31	31	28	1	0	14.2	—	19.7	9	12.9	25	0	0	0	0
Aswan (A)	40.0	17,18,21	34.3	11	31	31	26	0	0	—	—	24.0	9	17.0	24	0	0	0	0
Siwa	36.6	9	26.1	29	31	26	5	0	0	15.4	—	20.0	18	10.6	31	0	0	0	0
Bahariya	37.3	28	28.6	29	31	28	10	0	0	16.3	—	20.0	18	11.4	31	0	0	0	0
Farafra	37.8	17	29.4	29	31	29	11	0	0	15.3	—	20.3	9	9.9	31	1	0	0	0
Dakhla	40.5	21	30.2	29,30	31	31	17	2	0	15.2	—	22.6	4	9.7	31	1	0	0	0
Kharga	40.0	21	32.5	30	31	31	19	0	0	16.7	—	24.4	9	14.3	29	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	33.2	17,19,21	28.4	12	31	15	0	0	0	—	—	23.8	3.30	17.7	28	0	0	0	0
Quseir	33.0	22	28.6	10,15	31	13	0	0	0	18.8	—	25.7	9	19.9	28	0	0	0	0

TABLE A 3.—SKY COVER AND RAINFALL

OCTOBER 1974

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	Dte	<0.1	≥0.1	≥1.0	≥5.0	≥10	≥25	≥50
Sallum (A)	3.4	0.6	2.3	1.0	1.8	0.0	—17.8	0.0	—	0	0	0	0	0	0	0
Mersa Matruh (A)	1.2	2.5	2.2	1.2	1.8	0.0	—18.7	0.0	—	0	0	0	0	0	0	0
Alexandria (A)	2.0	2.2	2.3	1.7	2.0	0.0	—10.3	0.0	—	0	0	0	0	0	0	0
Port Said (A)	0.7	1.8	1.1	0.7	1.0	0.0	— 7.3	0.0	—	0	0	0	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	0.8	0.9	1.2	0.3	0.8	0.0	— 4.1	0.0	—	0	0	0	0	0	0	0
Cairo (A)	1.6	1.8	1.0	0.7	1.4	0.0	— 1.2	0.0	—	0	0	0	0	0	0	0
Fayoum	—	0.8	0.5	0.3	—	0.0	— 0.8	0.0	—	0	0	0	0	0	0	0
Minya (A)	0.2	0.6	0.4	0.3	0.4	0.0	— 0.5	0.0	—	0	0	0	0	0	0	0
Assyout (A)	0.0	0.3	0.0	0.0	0.1	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Luxor (A)	0.0	0.4	0.4	0.2	0.2	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Aswan (A)	0.0	0.0	0.2	0.0	0.0	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Siwa	0.3	0.7	0.6	0.5	0.5	0.0	— 0.5	0.0	—	0	0	0	0	0	0	0
Bahariya	0.3	1.3	0.6	0.2	0.5	0.0	— 0.2	0.0	—	0	0	0	0	0	0	0
Farafra	—	0.5	0.3	0.2	—	0.0	— 0.7	0.0	—	0	0	0	0	0	0	0
Dakhla	0.0	0.1	0.3	0.0	0.1	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Kharga	0.0	0.2	0.2	0.0	0.1	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0.4	0.7	0.7	0.3	0.5	0.0	— 0.2	0.0	—	0	0	0	0	0	0	0
Quseir	0.7	0.8	0.7	0.7	0.6	0.0	— 0.8	0.0	—	0	0	0	0	0	0	0

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

OCTOBER — 1974

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	21	0
Mersa Matruh (A)	0	0	0	0	0	0	2	0	0	0	2	1	0	17	1
Alexandira (A)	0	0	0	0	0	0	5	5	0	0	2	0	0	18	1
Port Said (A)	0	0	0	0	0	0	1	0	0	0	0	0	0	25	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	0	0	0	0	0	0	11	1	0	0	0	0	0	24	0
Cairo (A)	0	0	0	0	0	0	11	2	6	0	4	0	0	23	0
Fayoum	0	0	0	0	0	0	0	0	0	0	0	0	0	—	—
Minya (A)	0	0	0	0	0	0	1	0	3	0	2	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	8	0	0	0	0	30	0
Aswan (A)	0	0	0	0	0	0	0	0	0	0	2	0	0	31	0
Siwa	0	0	0	0	0	0	0	0	0	0	7	0	0	28	2
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	2	0	1	0	0	—	—
Dakhla	0	0	0	0	0	0	0	0	0	1	4	0	0	31	0
Kharga	0	0	0	0	0	0	0	0	0	0	2	0	0	31	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0	0	0	0	0	0	0	0	0	0	6	0	0	28	1
Quseir	0	0	0	0	0	0	0	0	0	0	0	0	0	27	0

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

OCTOBER — 1974

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	1	7	0	1–10	30	54	72	57	42	25	16	9	31	67	84	85	572
				11—27	1	8	11	5	4	0	8	4	29	52	40	2	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	**31**	**62**	**83**	**62**	**46**	**25**	**24**	**13**	**60**	**119**	**124**	**87**	**736**
Mersa Matruh (A)	0	0	1	1—10	65	53	31	52	56	64	60	35	72	34	19	127	668
				11—27	2	4	3	4	3	2	10	9	5	9	7	16	74
				28—47	0	0	0	0	0	0	1	0	0	0	0	0	1
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**67**	**57**	**34**	**56**	**59**	**66**	**71**	**44**	**77**	**43**	**26**	**143**	**743**
Alexandria (A)	8	0	0	1—10	106	83	45	42	29	36	44	10	1	12	20	191	619
				11—27	7	24	6	2	1	3	4	2	6	11	6	45	117
				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	**113**	**107**	**51**	**44**	**30**	**39**	**48**	**12**	**7**	**23**	**26**	**236**	**736**
Tanta	34	3	1	1—10	149	134	100	33	12	8	38	15	29	21	53	77	669
				11—27	12	5	11	2	0	0	4	2	0	1	0	0	37
				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	**161**	**139**	**111**	**35**	**12**	**8**	**42**	**17**	**29**	**22**	**53**	**77**	**706**
Caire (A)	72	0	10	1—10	94	149	67	25	6	2	5	5	6	22	23	71	475
				11—27	40	76	23	3	8	2	18	3	1	2	0	11	187
				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**	**225**	**90**	**28**	**14**	**4**	**23**	**8**	**7**	**24**	**23**	**82**	**662**
Fayoum	4	4	0	—10	283	223	20	6	9	8	23	30	22	15	17	40	696
				11—27	1	29	8	0	0	0	0	2	0	0	0	0	40
				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	**284**	**252**	**28**	**6**	**9**	**8**	**23**	**32**	**22**	**15**	**17**	**40**	**736**
Minya	19	9	0	1—10	203	207	13	3	1	7	44	17	9	4	15	56	579
				11—27	8	119	5	0	0	0	1	3	0	0	0	1	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	**211**	**326**	**18**	**3**	**1**	**7**	**45**	**20**	**9**	**4**	**15**	**57**	**716**
Assyout	8	4	0	1—10	34	12	2	14	12	17	13	12	9	132	209	125	591
				11—27	48	9	0	0	0	6	15	6	1	8	11	37	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	**82**	**21**	**2**	**14**	**12**	**23**	**28**	**18**	**10**	**140**	**220**	**162**	**732**

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

OCTOBER — 1974

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)	147	0	0	1—10	115	74	42	31	16	15	71	56	20	30	64	61	595
				11—27	0	0	0	0	0	0	0	0	0	0	0	2	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	**115**	**74**	**42**	**31**	**16**	**15**	**71**	**56**	**20**	**30**	**64**	**63**	**597**
Aswan . . . . (A)	0	3	0	1—10	304	127	22	9	12	10	4	1	2	9	15	110	625
				11—27	85	18	1	0	0	1	0	0	0	0	1	10	116
				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	**389**	**145**	**23**	**9**	**12**	**11**	**4**	**1**	**2**	**9**	**16**	**120**	**741**
Siwa	39	1	0	1—10	13	65	76	110	129	49	26	16	15	37	67	45	648
				11—27	0	10	3	11	2	5	1	0	2	6	7	9	56
				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	**13**	**75**	**79**	**121**	**131**	**54**	**27**	**16**	**17**	**43**	**74**	**54**	**704**
Dakhla	8	0	0	1—10	67	45	41	31	28	23	25	38	30	68	131	139	666
				11—27	27	16	0	0	0	0	0	0	0	1	1	25	70
				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	**94**	**61**	**41**	**31**	**28**	**23**	**25**	**38**	**30**	**69**	**132**	**164**	**736**
Kharga	3	4	1	1—10	237	112	23	9	9	6	6	5	7	13	28	110	565
				11—27	133	19	0	0	0	0	0	0	0	0	0	19	171
				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	**370**	**131**	**23**	**9**	**9**	**6**	**6**	**5**	**7**	**13**	**28**	**129**	**736**
Hurghada	6	3	0	1—10	32	21	21	13	10	26	13	17	12	57	142	60	424
				11—27	49	9	2	0	0	7	6	0	0	20	112	106	311
				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**	**30**	**23**	**13**	**10**	**33**	**19**	**17**	**12**	**77**	**254**	**166**	**735**
Quseir	4	2	0	1—10	71	38	38	18	6	16	16	26	21	49	90	123	512
				11—27	93	25	5	0	0	0	0	0	0	0	19	84	226
				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	9	0	0	0
				All speeds	**164**	**63**	**43**	**18**	**6**	**16**	**16**	**26**	**21**	**49**	**109**	**207**	**738**

UPPER AIR CLIMATOLOGICAL DATA

OCTOBER—1974

During this month no upper air observations were taken at the three radiosonde stations.

REVIEW OF AGRO-METEOROLOGICAL STATIONS

MERSA MATRUH — OCTOBER 1974

The mean daily air temperature and relative humidity for this month were slightly above normal. No rain was reported the whole month, while the normal rainfall is 18.7 mm.

Weather was characterized by four warm spells in the periods (7th—9th), (14th—17th), (20th—28th) and (30th—31st). The third spell yielded thehighest maximum air temperature for the month (32.2°C) together with the lowest relative humidity (18%) on the 27th. In the rest periods of the month weather was mild..

The highest maximum soil temperatures were generally higher than last October, except at 20 cm. depth where its value was lower by 0.7°C and at 50 cm. where it was the same as last October ; the departures varied between 1.7°C (at 2 cm.) and 0.1°C (at 100 cm.). The lowest minimum soil tempe ratures were lower than last October at 2, 5, 100 cm. depths and higher at 10, 20, 50 cm. depths; the departures were generally slight and varied between 0.1° and 0.6.C.

The mean daily actual sunshine duration was higher by 1.0 hour than normal. The mean daily wind speed at 1.5 met. height was lower by 0.4 m./sec. than its value for October 1973.

TAHRIR — OCTOBER 1974

For the month as a whole the mean daily air temperature was above average, while the mean daily relative humidity was rather the same as average.

Maximum air temperatures persisted above normal all days of the month. The highest maximum air temperature was 38.3°C (on the 21st) and the lowest was 30.8°C (on the 31st). The highest minimum air temparature was 20.5°C (on the 18*th* & 19*th*). and the lowest was 12.7°C (on the 30*th*).

The highest maximum soil temperatures were higher than last October at all depths with slight departures between 0.1° and 0.6°C. The lowest minimum soil temperatures were lower than last October at all depths with departures between 0.4°C (at 10 cm.) and 2.6°C (at 20 cm).

The mean daily wind speed at 1.5 met. height was lower than average b y0.4 m./sec. The mean daily actual sunshine duration and pan evaporation were higher than average by 0.2 hour and 0.71 mm.

BAHTIM — OCTOBER 1974

The mean daily air temperature for this month was above average, while the mean daily relative humidity was slightly below average.

Weather was generally mild during the first and second weeks. A prolonged heat wave prevailed from the 15th till the end of the month which yiel ded the highest maximum air temperature for the month (37.8°C) on the 21st and also the highest min imum air temperature (20.1°C) on both the 16th & 19th.

The highest maximum soil temperatures were higher than last October at 2, 5, 100 cm. depths with departures between 5.1°C (at 2 cm.) and 0.3°C (at 100 cm.) ; slightly lower at 10, 20 cm. depths and the same as last October at 50 cm depth. The lowest minimum soil temperatures were higher than last October at all depths except at 5 cm. where it was the same as last October ; the departures varied between 0.3°C (at 10 cm.) and 1.1°C (at 20 cm.).

The mean daily wind speed at 1.5 met. height, actual sunshine duration and pan evaporation were higher than average by 0.3 m./sec., 0.1 hour and 0.94 mm. respectively.

KHARGA — OCTOBER 1974

For the month as a whole the mean daily air temperature was above normal, while the mean daily relative humidity was below normal.

The month was characterized by a short heat wave from the 7th till the 9th, and a prolonged heat wave from the 15th till the end of the month which yielded the highest maximum air temperature for the month (40.0°C) on the 21st.

In the rest of the month mild weather was experienced.

The highest maximum soil temperatures were higher than last October at all depths except at 50 cm. where it was lower by 0.4°C ; the departures varied between 3.7°C (at 5 cm.) and 0.1°C (at 100 cm.). The lowest minimum soil temperatures were higher than last October at all depths with departures between 2.6°C (at both 2, 10 cm.) and 0.3°C (at 100 cm.).

The mean daily actual sunshine duration was the same as average. The mean daily wind speed at 1.5 met. hight was slightly lower than average. The mean daily pan evaporation was slightly above average.

Table C 1.—AIR TEMPERATURE AT 1½ METRES ABOVE GROUND
OCTOBER — 1974

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.....	27.9	17.1	22 4	19.9	25.1	24.0	24.0	24.0	24.0	24.0	16.3	6.9	0.4	0.0	0.0	0.0
Tahrir.....	33.4	15.7	23.2	19.2	27.3	24.0	24.0	24.0	24.0	22.9	16.0	9.2	2.7	0.1	0.0	0.0
Bahtim	31.7	15.6	23.4	19.5	27.3	24.0	24.0	24.0	24.0	22.8	15.9	9.2	2.7	0.1	0.0	0.0
Kharga	36.2	19 0	28.0	24.5	31.5	24.0	24.0	24.0	24.0	24.0	22.3	16.5	9.0	2.7	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.
OCTOBER — 1974

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.....	32.2	27	25.0	29	22.7	18	14.2	17	12.5	7,13,23	—	—
Tahrir	38.3	21	30.8	31	20.5	18.19	12.7	30	10.2	31	10.2	30
Bahtim	37.8	21	29.1	11	20.1	16.19	11.8	26	8.5	26	6.6	26
Kharga	40.0	21	32.5	30	24.4	9	14.3	29	11.8	26	—	—

Table C 3.— (SOLAR+SKY) RADIATION, DURATION OF BRIGHT SUNSHINE, RELATIVE HUMIDITY, VAPOUR PRESSURE AT 1½ METRES ABOVE GROUND, EVAPORATION & RAINFALL.
OCTOBER — 1974

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.	Lowes	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...	345.9	299.7	354.0	85	70	55	18	27	14.1	14.8	20.6	17	6.5	27	5.9	—	0.0	0.0	—
Tahrir.....	449.8	298.7	354.9	84	71	41	20	21	14.4	13.6	20.8	18	7.2	29	5.0	7.34	0.0	0.0	—
Bahtim	428.1	299.2	355.0	84	63	35	13	21	12.9	11.7	18.8	17	4.8	29	7.2	7.63	0.0	0.0	—
Kharga	531.6	332.1	358·9	93	29	19	10	21	7.8	7.7	13.9	5	3.2	27	14.0	14.57	0.0	0.0	—

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

OCTOBER — 1974

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	36.5	34.7	30.5	28.0	27.5	26.6	25.2	—	—	—	—	—	—	—	—	—
	L	17.0	17.0	19.0	22.0	24.4	24.4	24.3	—	—	—	—	—	—	—	—	—
Tahrir	H	42.6	38.8	34.6	31.0	29.3	29.4	28.9	28.4	30.8	29.6	28.1	26.4	26.2	26.7	27.2	—
	L	19.1	18.8	20.0	23.8	26.4	27.4	27.4	27.7	18.4	18.6	19.0	20.6	23.0	24.6	25.5	—
Bahtim	H	48.5	40.0	34.0	30.9	30.3	30.0	28.4	27.0	30.0	26.9	25.6	24.8	24.7	25.0	24.0	—
	L	21.1	19.8	23.0	26.7	28.0	28.5	28.1	26.8	18.2	18.7	19.6	21.5	23.1	23.7	23.5	—
Kharga . . .	H	51.2	48.2	39.6	35.0	32.6	32.2	31.2	30.2	—	—	—	—	—	—	—	—
	L	17.4	20.3	23.1	27.4	30.1	31.0	30.6	30.0	—	—	—	—	—	—	—	—

Talbe C 5.—SURFACE WIND

OCTOBER — 1974

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.	2.8	1.9	3.8	31	15	2	1	1	1	0	38	27
Tahri.	1.5	0.9	2.1	28	11	2	0	0	0	0	30	21,27
Bahtim	2.4	1.7	3.1	27	13	3	0	0	0	0	26	15
Kharga. . . .	3.0	2.5	3.6	27	20	10	2	0	0	0	31	3.4

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THE ARAB REPUBLIC OF EGYPT

MONTHLY WEATHER REPORT

VOLUME 17 NUMBER 11

NOVEMBER, 1974

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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 Egyptian Meteorological Authority issues several 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

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

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Note : For explanatory notes on the tables refer to Volume 17, Number 1 (January 1974).

GENERAL SUMMARY OF WEATHER CONDITIONS

NOVEMBER 1974

Two short warm periods during the first decade, rather cold to mild weather otherwise. Light and Subnormal rainfall in general.

PRESSURE DISTRIBUTION

The pressure distribution over Egypt in this month was affected by the following pressure systems :—

- Two low pressure troughs passing through East Mediterranean on the *2nd* and *11th*.
- High pressure over the Mediterranean & NE Africa.
- The Sudan monsoon trough.

The atmospheric pressure over Egypt was above normal most of this month. It reached minima round the *1st*, *10th*, *16th*, *22nd* and *27th*.

The first two minima associated the transit of the two troughs through East Mediterranean. The other three pressure minima were caused by the northward elongation of the Sudan monsoon trough.

SURFACE WIND

Surface winds during this month were mostly light to moderate N ly and NW ly and changed to W ly in few days. Winds freshened during several days in scattered places mainly in the Western Desert and Red Sea districts.

TEMPERATURE

Three light cold waves prevailed the whole month apart from two short warm periods during the first decade.

Maximum air temperatures were above normal in the warm spells and below normal otherwise. The departures from normal were slight to moderate.

The highest maximum air temperature was 38.0°C at Aswan on the *1st*.

The lowest maximum air temperature was 17.7°C at Bahtim on the *27th*.

Minimum air temperatures showed irregular departures below and above normal, generally slight to moderate.

The highest minimum air temperature was 23.2°C at Quseir on the *2nd*.

The lowest minimum air temperature was 2.8°C at Dakhla on the *30th*.

PRECIPITATION

Light rain was reported during several days over scattered places in north of the country where its monthly amounts were subnormal in general.

Rain was heavy on the *17th* and *21st* over few places where its monthly amounts exceeded normal.

The highest monthly rainfall was 70.5 mm at Mamoura (Alexandria area).

The highest daily rainfall was 49.6 mm also at Mamoura on the *17th*.

OTHER WEATHER PHENOMENA

Early morning mist developed during several days over scattered places in Delta, Cairo and north of Middle Egypt.

Rising sand was reported during few days in scattered places

Cairo, February 1977

Chairman (A. F. HASAN)

Board of Directors

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

NOVEMBER — 1974

STATION	Atmospheric Presure (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. Notmal 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	1018.9	+1.3	23.9	—0.5	14.5	—0.5	19.2	18.7	—0.	14.5	—0.7	62	+ 2		—	—	5.6
Mersa Matruh (A)	1019.0	+1.2	22.6	—0.8	13.2	—0.6	17.7	17.4	—0.8	13.9	—0.9	69	+ 1	234.4	317.3	74	5.1
Alexandria (A)	1018.7	+1.5	23.5	—0.9	13.3	—1.3	18.4	18.7	—0.5	15.1	—1.0	68	— 2	226.8	318.3	71	3.3
Port Said (A)	1017.9	+1.4	24.6	+0.7	17.3	—1.0	21.0	20.1	—0.7	16.3	—1.3	66	— 5	241.6	318.3	76	4.
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1017.9	+0.7	24.9	—0.8	11.7	—0.5	18.3	17.4	—1.0	14.4	—0.8	73	+ 3	255.8	319.3	80	2.8
Cairo (A)	1018.1	+1.1	24.6	—0.6	14.3	+0.4	19.4	19.2	—0.1	15.0	0.0	64	+ 3	—	—	—	7.9
Fayoum	—	—	26.5	0.0	11.9	—1.2	19.7	18.6	—0.9	14.6	—0.6	65	+ 4	—	—	—	3.9
Minya (A)	1018.2	+1.7	26.0	—0.7	10.5	—1.0	18.2	17.8	—0.8	13.4	—1.8	62	+ 1	281.6	323.7	87	6.8
Assyout (A)	1017.3	+1.8	25.3	—1.4	11.4	—0.1	18.4	18.2	—0.2	12.8	—1.2	54	— 6	—	—	—	8.2
Luxor (A)	1015.4	+0.8	30.1	+0.3	11.7	—0.6	20.9	20.2	+0.3	13.3	—1.5	49	+ 2	—	—	—	5.1
Aswan (A)	1014.9	+0.7	30.2	0.0	15.2	—0.3	22.7	22.1	—0.2	13.6	0.0	36	+ 4	—	—	—	19.6
Siwa	1019.4	+1.6	23.6	—2.6	10.1	—0.1	16.8	16.4	—1.6	12.1	—0.6	61	+10	284.9	322.2	89	6.5
Bahariya	1018.6	+1.5	25.3	—0.9	10.9	—0.5	18.1	17.7	—0.7	12.6	—0.8	54	+ 3	—	—	—	6.0
Farafra	1020.0	+1.5	25.8	—0.2	10.2	—0.5	18.0	17.5	—0.8	11.5	—0.7	47	+ 3	—	—	—	7.3
Dakhla	1017.7	+1.7	26.4	—1.2	8.8	—2.5	17.6	17.4	—1.6	11.2	—1.0	47	+ 8	—	—	—	10.0
Kharga	1016.6	+1.4	28.0	—0.7	12.8	—0.2	20.4	20.7	—0.1	13.3	—0.1	46	+ 4	302.4	328.2	92	9.4
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	1015.5	+0.8	26.5	+0.5	16.1	+0.5	21.3	21.1	+0.1	15.6	—0.2	53	—2	294.0	325.7	90	8.5
Quseir	1015.4	+1.0	26.5	—0.7	19.3	—0.2	22.9	22.3	—0.7	17.0	—0.4	53	—1	—	—	—	8.7

Table A 2.—MAXIMUM & MINIMUM AIR TEMPERATURE

NOVEMBER — 1974

Station	Maximum Temperature									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	28.6	8	21.8	22	7	0	0	0	0	13.5	—	17.6	1	11.9	30	0	0	0	0
Mersa Matruh (A)	30.8	1	18.8	21	3	1	0	0	0	11.8	—	16.7	16	10.6	26	0	0	0	0
Alexandria (A)	31.6	1	21.0	24	10	1	0	0	0	12.0	—	16.8	2,3	9.3	30	2	0	0	0
Port Said (A)	30.2	1	20.9	28	13	1	0	—	—	16,2	—	20.3	1,8	13.4	26	0	—	0	—
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	31.1	1	20.2	27	12	1	0	0	0	—	—	15.4	2	7.4	26	5	0	0	0
Cairo (A)	32.4	1	19.2	27	11	1	0	0	0	—	—	19.2	2	9.2	27	1	0	0	0
Fayoum	33.5	1	23.3	27	19	2	0	0	0	8.4	—	16.4	2	6.8	27	6	0	0	0
Minya (A)	34.6	1	22.8	28.30	14	2	0	0	0	8.0	—	15.8	1,2	5.5	27	14	0	0	0
Assyout (A)	34.2	1	21.9	28	15	3	0	0	0	10.2	—	15.4	2	8.2	27	5	0	0	0
Luxor (A)	37.0	1	26.0	+	30	12	2	0	0	10.1	—	16.6	12	6.2	26	8	0	0	0
Aswan (A)	38.0	1	24.0	23	26	14	4	0	0	—	—	20.4	1	10.2	30	0	0	0	0
Siwa	31.7	1	20.2	28	7	1	0	0	0	9.5	—	14.9	22	7.4	30	17	0	0	0
Bahariya	35.1	1	22.1	19	11	2	1	0	0	10.2	—	16.0	2	5.7	30	9	0	0	0
Farafra	34 9	1	23.0	23	12	3	0	0	0	9.2	—	16.4	2	5.1	26	12	0	0	0
Dakhla	36.1	1	23.2	19	17	6	1	0	0	8.6	—	12.8	12	2.8	30	19	3	0	0
Kharga	36.6	1	23.2	24	19	9	1	0	0	10.5	—	17.8	1,4	7.2	29	7	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	31.8	1	23.4	28	23	1	0	0	0	—	—	20.6	1	12.6	27	0	0	0	0
Quseir	30.6	2	24.5	30	24	2	0	0	0	16.8	—	23.2	2	17.5	24,25	0	0	0	0

Table A 3. — SKY COVER AND RAINFALL.

NOVEMBER — 1974

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	4.8	2.7	3.3	2.9	3.5	0.0	—29.8	0.0	—	0	0	0	0	0	0	0
Mersa Matruh (A)	2.4	4.6	4.4	2.2	3.3	7.4	—16.7	5.3	21	1	6	2	1	0	0	0
Alexandria . . (A)	3.0	4.6	5.2	3.7	4.1	45.4	+12.2	29.4	17	2	9	6	2	1	1	0
Port Said . . (A)	0.7	2.3	2.7	1.5	1.6	1.3	— 7.5	1.3	18	0	1	1	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta.	0.7	2.6	4.3	0.6	2.0	6.1	+ 2.1	2.7	23	0	5	3	0	0	0	0
Cairo . . . . (A)	0.5	1.6	3.6	1.5	1.8	Tr.	— 3.2	Tr.	18	1	0	0	0	0	0	0
Fayoum	—	0.9	2.6	0.0	—	0.0	— 0.5	0.0	—	0	0	0	0	0	0	0
Minya . . . . (A)	0.1	0.6	2.0	0.2	0.8	0,0	— 0.5	0.0	—	0	0	0	0	0	0	0
Assyout . . . . (A)	0.2	0.1	0.5	0.3	0.3	0.0	— 0.1	0.0	—	0	0	0	0	0	0	0
Louxor . . . . (A)	0.5	1.2	1.1	1.0	0.9	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Aswan . . . . (A)	0.3	1.0	1.2	0.7	0.8	0.0	— 0.1	0.0	—	0	0	0	0	0	0	0
Siwa	0.6	1.5	2.8	1.0	1.4	25.4	+25.3	25.4	21	0	1	1	1	1	1	0
Baharia	0.2	1.0	2.0	0.4	1.0	0.0	— 0.5	0.0	—	0	0	0	0	0	0	0
Farafra	—	0.6	1.5	0.7	—	0.0	— 0.5	0.0	—	0	0	0	0	0	0	0
Dahkalia	0.0	0.7	1.1	0.2	0.5	0.0	— 0.1	0.0	—	0	0	0	0	0	0	0
Kharga	0.1	0.7	0.7	0.3	0.5	0.0	— Tr.	0.0	—	0	0	0	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	1.0	1.3	1.5	0.7	1.1	Tr.	— 0.1	Tr.	22	1	0	0	0	0	0	0
Quseir	0.2	1.3	1.5	1.4	1.0	0.9	+ 0.5	0.9	22	0	1	0	0	0	0	0

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

NOVEMBER — 1974

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	0	0	0	0	0	0	0	0	0	0	2	0	0	6	0
Mersa Matruh (A)	6	0	0	0	0	1	0	0	0	0	1	0	0	6	1
Alexandria (A)	8	0	0	0	0	1	3	0	0	0	0	0	0	2	1
Port Said (A)	1	0	0	0	0	0	0	0	0	0	0	0	0	18	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	5	0	0	0	0	0	5	0	0	0	0	0	0	13	0
Cairo (A)	0	0	0	0	0	0	11	0	6	0	0	0	0	16	0
Fayoum	0	0	0	0	0	0	1	0	0	0	0	0	0	—	—
Minya (A)	0	0	0	0	0	0	10	0	2	0	0	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	11	0	1	0	0	23	0
Aswan (A)	0	0	0	0	0	0	0	0	0	0	4	0	0	24	0
Siwa	1	0	0	0	0	0	0	0	0	0	4	0	0	19	0
Bahariya	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0
Farafra	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	6	0	0	27	0
Kharga	0	0	0	0	0	0	0	0	0	0	2	0	0	29	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0	0	0	0	0	0	0	0	0	0	3	0	0	24	0
Quseir	1	0	0	0	0	0	0	0	0	0	0	0	0	21	0

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

NOVEMBER— 1974

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	0	5	0	1—10	20	33	45	24	18	19	14	5	16	56	101	108	459
				11—27	0	2	1	2	1	0	3	4	14	73	119	37	256
				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	**20**	**35**	**46**	**26**	**19**	**19**	**17**	**9**	**30**	**129**	**220**	**145**	**715**
Mersa Matruh (A)	16	0	0	1—10	57	27	17	23	20	33	48	53	99	76	28	64	545
				11—27	0	0	0	0	0	2	1	18	43	16	36	40	156
				28—47	0	0	0	0	0	0	0	3	0	0	0	0	3
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**57**	**27**	**17**	**23**	**20**	**35**	**49**	**74**	**142**	**92**	**64**	**104**	**704**
Alexandria	10	1	0	1—10	98	71	46	29	24	18	54	25	25	25	38	123	576
				11—27	7	8	0	7	0	0	0	18	10	9	56	25	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	**105**	**79**	**46**	**29**	**24**	**18**	**54**	**43**	**35**	**34**	**94**	**148**	**709**
Tanta	24	0	0	1—10	90	109	48	17	7	2	5	24	56	60	139	88	645
				11—27	11	6	17	0	0	0	0	0	0	7	3	7	51
				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
				All speeds	**101**	**115**	**65**	**17**	**7**	**2**	**5**	**24**	**56**	[illegible]	**142**	**95**	**696**
Cairo (A)	111	0	0	1—10	30	69	70	32	16	17	40	44	44	68	35	52	517
				11—27	8	47	5	2	0	2	0	10	3	5	4	6	92
				28—47	0	0	0	0	0	0	0	0	4	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**38**	**116**	**75**	**34**	**16**	**19**	**40**	**54**	**47**	**73**	**39**	**58**	**609**
Fayoum	17	6	1	1—10	234	178	10	5	5	16	22	49	53	36	18	46	672
				11—27	0	23	1	0	0	0	0	0	0	0	0	0	24
				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	**234**	**201**	**11**	**5**	**5**	**16**	**22**	**49**	**53**	**36**	**18**	**46**	**696**
Minya (A)	34	5	0	1—10	227	217	10	4	3	12	11	10	7	7	15	79	602
				11—27	9	70	0	0	0	0	0	0	0	0	0	0	79
				28—47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	[illegible]	0	0	0	0	0	0	0	0	0	0
				All speeds	**236**	**287**	**10**	**4**	**3**	**12**	**11**	**10**	**7**	**7**	**15**	**79**	**681**
Assyout (A)	35	0	1	1—10	38	9	0	0	1	5	8	1	2	166	208	104	542
				11—27	74	23	0	0	0	0	0	0	0	2	11	32	142
				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	**112**	**32**	**0**	**0**	**1**	**5**	**8**	**1**	**2**	**168**	**219**	**136**	**684**

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

NOVEMBER — 1974

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)	134	0	7	1—10	102	79	37	32	21	21	92	42	20	34	47	52	579
				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	**102**	**79**	**37**	**32**	**21**	**21**	**92**	**42**	**20**	**34**	**47**	**52**	**579**
Aswan . . . . (A)	3	0	0	1—10	331	74	4	0	0	2	0	1	0	3	7	95	517
				11—27	139	13	1	0	0	1	0	0	0	0	5	41	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	**470**	**87**	**5**	**0**	**0**	**3**	**0**	**1**	**0**	**3**	**12**	**136**	**717**
Siwa	75	0	0	1—10	14	29	15	43	66	32	9	10	26	112	101	99	616
				11—27	0	5	0	0	4	1	0	0	3	4	3	9	29
				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	**14**	**34**	**15**	**43**	**70**	**33**	**9**	**10**	**29**	**116**	**164**	**108**	**645**
Dakhla	8	0	0	1—10	52	39	20	3	4	5	16	30	50	98	138	164	619
				11—27	34	21	0	0	0	0	0	0	1	0	2	35	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	**86**	**60**	**20**	**3**	**4**	**5**	**16**	**30**	**51**	**98**	**140**	**199**	**712**
Kharga	0	0	0	1—10	193	102	16	6	5	0	2	2	1	6	9	106	448
				11—27	207	38	0	1	0	0	0	0	0	0	0	26	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	**400**	**140**	**16**	**7**	**5**	**0**	**2**	**2**	**1**	**6**	**9**	**132**	**720**
Hurghada	2	0	0	1—10	40	23	4	2	2	2	2	2	4	93	165	41	380
				11—27	43	3	0	0	0	0	0	0	0	32	128	132	338
				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**	**26**	**4**	**2**	**2**	**2**	**2**	**2**	**4**	**125**	**293**	**173**	**718**
Quseir	2	0	0	1—10	105	63	26	27	8	2	1	0	6	34	77	59	408
				11—27	93	89	33	34	0	0	0	0	0	4	18	39	310
				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	**198**	**152**	**59**	**61**	**8**	**2**	**1**	**0**	**6**	**38**	**95**	**98**	**718**

UPPER AIR CLIMATOLOGICAL DATA

NOVEMBER—1974

During this month no upper air observations were taken at the three radiosonde stations.

REVIEW OF AGRO-METEOROLOGICAL STATIONS

MERSA MATRUH — NOVEMBER 1974

The mean daily air temperature for this month was below normal and the mean daily relative humi dity was rather normal. The total monthly rainfall was 7.4 mm. against 24.2 mm. for normal.

Weather was mild with meximum air temperatures slightly below normal in general, apart from a short warm spell on the 1st yielding the highest maximum air temperature for the month (30.8°C) and a short cold spell on the 21st & 22nd yielding the lowest maximum air temperature (18.8°C). The highest minimum air temperature was 16.7°C (on the 16th) and the lowest was 10.6°C (on the 26th).

The highest maximum and lowest minimum soil temperatures were higher than last November at all depths. The depatures for the highest maxima ranged between 7.5°C (at 2 cm). and 0.7°C (at 50 cm.). The departures for the lowest minima ranged between 2.8°C (at 10 cm.) and 1.6°C (at 100 cm.)

The mean daily actual sunshine duration was lower than normal by 0.5 hour. The mean daily wind speed at 1.5 met. height was lower than the corresponding value of November 1973 by 0.3 m./sec.

TAHRIR — NOVEMBER 1974

The mean daily air temperature for this month was below average and the mean daily relative humidity was nearly the same as average.

The month was intervened by two light heatwaves in the periods (1 *st* & 2 *nd*JJ and (8*th*—10 *th*J. The first wave yielded both the highest maximum airtemperature for the month (34.0° C) on the 1 *st* and the highest minimum air temperature (16.9° C) onthe 2 *nd*. Otherwise, mild weather was experienced in general.

The highest maximum and lowest minimum soile temperatures were higher than the values of Noverber 1973 at all depths. The departures for the highest maxima ranged between 5.1°C (at 2 cm) and 0.7°C (at 100 cm.). The departues for the lowest minima ranged between 0.2°C (at 2 cm.) and 1.4°C (at 20 cm.).

The mean daily actual sunshine duration, wind speed at 1.5 met. height and pan evaporation were slightly lower than the corresponding average values.

BAHTIM — NOVEMBER 1974

The mean daily air temperature and relative humidity for this month were nearly the same as average.

The month was characterized by a warm spell on the 1st yielding the highest maximum air temperature for the month (32.6°C), a second warm spell on the 8th & 9th and a short cold spell on the 27th yielding both the lowest maximum air temperature(17.7°C) and the lowest minimum air temperature (5.3°C). Otherwise, weather was generally mild.

The highest maximum and lowest minimum soil temperatures were higher than the corresponding values of November 1973 at all depths. The departures for the highest maxima varied between 5.3°C (at 2 cm.) and 0.4°C (at 100 cm.). For the lowest minima the departures varied between 0.3°C (at 2 cm.) and 1.2°C (at 10 cm.).

The mean daily actual sunshine duration was higher than average by 0.8 hour. The mean daily wind speed at 1.5 met. and pan evaporation were slightly higher than average.

KHARGA — NOVEMBER 1974

The mean daily air temperature and relative humidity for the month were nearly the same as average.

The month was characterized by two heat waves on the 1*st* and in the period (6*th* — 11*th*). The first heat wave yielded the highest maximum air temperature for the month (36.6°C). Otherwise weather was mild in general.

The highest maximum and lowest minimum soil temperatures were higher than the corresponding values of November 1973 at all depths. The departures for the highest maxima ranged between 5.3°C (at 2 cm.) and 0.3°C (at 100 cm.). For the lowest minima the departures ranged between 3:7°C (at 2 cm.) and 0.9°C (at 100 cm.).

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

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

NOVEMBER — 1974

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
Marsa Matruh. . .	22.6	13.2	17.5	15.4	19.6	24.0	24.0	24.0	24.0	16.4	6.2	0.3	0.1	0.0	0.0	0.0
Tahrir	26.5	10.9	17.4	13 9	21.0	24.0	24.0	24.0	22.7	14.5	8.1	1.1	0.1	0.0	0.0	0.0
Bahtim	24.6	10.8	17.3	14.1	20.6	24.0	24.0	24.0	23.0	14.5	7.4	1.4	0.1	0.0	0.0	0.0
Kharga	28.0	12.8	20.8	18.0	23.8	24.0	24.0	24.0	23.4	20.7	13.1	4.8	1.6	0.1	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 — 1974

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. . .	30.8	1	18.8	21	16.7	16	10.6	26	7.9	10	—	—
Tahrir	34.0	1	22.0	27	16.9	2	5.9	30	4.4	30	3.4	30
Bahtim	32.6	1	17.7	27	16.1	2	5.3	27	1.5	27	1.8	27
Kharga	36.6	1	23.2	24	17.8	1,4	7.2	29	4.1	30	—	—

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

NOVEMBER — 1974

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	246.2	234.4	317.3	74	69	55	22	1	10.2	10.6	13.0	6	6.7	30	5.1	—	7.4	5.3	21
Tahrir . .	332.3	243.2	319.1	76	77	55	28	1	11.3	12.1	15.5	1,8	6.3	29,30	3.5	4.19	0.6	0.6	18
Bahtim . .	337.2	266.8	320.2	83	70	45	18	1	10.1	9.8	14.0	11	6.3	30	4.5	4·55	0.0	0.0	—
Kharga. .	441.7	302.4	328.2	92	46	30	12	10	7.9	8.0	11.7	12	4.6	10	9.4	10 29	0.0	0.0	—

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

NOVEMBER — 1974

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	30.8	29.2	25.6	24.2	24.6	24.9	24.6	—	—	—	—	—	—	—	—	—
	L	11.9	12.0	14.2	16.6	19.6	21.6	23.4	—	—	—	—	—	—	—	—	—
Tahrir . . .	H	35.9	32.5	29.8	26.8	26.6	27.2	27.5	27.5	25.8	25.5	24.3	23.3	23.2	24.4	25.4	—
	L	9.9	10.4	12.6	16.8	19·9	22.4	24.8	25.9	12.0	12.6	13.4	15.3	17.5	19.7	22.1	—
Bahtim . . .	H	41.5	35.0	29.4	27.5	28.1	28.4	28.0	26.8	27.0	23.6	22.6	22.3	23.1	23.6	23.5	—
	L	9.8	11.5	16.0	19.7	23.4	25.2	27.0	26.8	11.0	12.3	13.6	15.4	18.2	20.5	22.5	—
Kharga . . .	H	45.8	40.3	35.1	31.0	30.2	31.0	30.7	30.2	—	—	—	—	—	—	—	—
	L	10.1	12.6	14.9	20.0	24.8	27.5	29·5	29.8	—	—	—	—	—	—	—	—

Table C 5.—SURFACE WIND

NOVEMBER — 1974

STATION	Wind Speed m/sec at 1½ metres			Days with surface wind speed at 10 metres							Max. Gust (Knot 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	3.1	2.3	4.0	29	15	6	4	1	1	0	39	1
Tahrir	1.6	1.0	2.2	29	11	1	0	0	0	0	31	23
Bahtim. . . .	2.1	1.3	2.8	26	7	0	0	0	0	0	24	21
Kharga. . . .	3.2	2.5	4.0	30	23	9	0	0	0	0	29	4

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THE ARAB REPUBLIC OF EGYPT

MONTHLY WEATHER REPORT

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

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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

VOLUME 17 NUMBER 12

DECEMBER, 1974

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Note . For explanatory notes on the tables please refer to Volume 17, Number 1 (January 1974).

GENERAL SUMMARY OF WEATHER CNDITIONS

DECEMBER 1974

Cold weather in general. Heavy rain over north coast with records at Alexandria.

PRESSURE DISTRIBUTION

Pressure distribution was mainly i n uenced by the transit of six East mediterranean depressions on the 1*st*, 4*th*, 8*th*, 11*th*, 20*th* and 29*th*.

The mean monthly atmospheric pressure was in general above normal.

SURFACE WIND

Prevailing surface winds were generally light to moderate wly and swly in north but N ly and NW ly in south.

Winds were fresh to strong during several days in scattered places.

TEMPERATURE

Successive cold waves gave rise to moderately subnormal maximum air temperatures all days of the month.

The highest and lowest maximum air temperatures were sespectively:27.0°C at Aswan on the 2*nd* and 12.2°C at both Port Said and Damietta on the 11*th*.

Minimum air tempratures showed departures below normal most days of the month.

The highest and lowest minimum air temperatures were respectively : 17.8°C at Quseir on the 2*nd* and 0.1°C at Dakhla on 15*th*.

PRECIPITATION

Rainfall occurred over the Mediterranean coast many days and extended southwards to Lower Egypt and Cairo in few days.

The daily rainfall was light to moderate over most places where its monthly values were below normal.

However heavy rain associated with thunderstorms was reported in few days over scattered places in the Mediterranean district where its monthly values were abnormal. In particular at Alexandria both the monthly rainfall (191.5 mm) and the highest daily rainfall (54.3 mm) on the 4*th* were records since the year 1942. Moreover, these two values were the highest daily and monthly amounts reported from all stations.

OTHER WEATHER PHENOMENA

Early morning mist developed during several days over scattered places in Lower Egypt, Cairo and Middle Egypt.

Rising sand was reported during several days in some places.

Cairo, January 1977

Chairman (A. F. HASAN.)
Board of Directors

SURFACE DATA

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

DECEMBER — 1974

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	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	1019.2	+ 2.3	18.6	— 1.8	10.7	— 0.2	14.6	14.3	— 0.9	10.4	— 0.9	59	+ 2	—	—	—	5.6
Mersa Matruh (A)	1018.7	+ 1.8	18.1	— 1.6	10.3	+ 0.3	14.2	13.7	— 1.5	10.6	— 0.7	69	+ 12	174.1	314.1	56	4.7
Alexandria . . (A)	1018.6	+ 1.0	18.5	— 2.0	10.2	— 0.6	14.4	13.9	— 1.3	11.4	— 1.1	74	+ 4	161.9	315.3	51	2.8
Port Said . . (A)	1017.8	+ 0.6	19.0	— 0.9	11.7	— 1.6	15.4	14.5	— 1.7	11.1	— 2.4	64	— 8	203.7	315.3	65	4.0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	1018.8	+ 1.5	19.0	— 2.3	7.5	— 0.6	13.2	12.5	— 1.9	9.9	— 1.6	72	+ 5	219.4	316.9	69	2.3
Cairo . . . . (A)	1018.9	+ 0.9	19.0	— 1.7	10.2	— 0.2	14.6	14.2	— 1.1	10.5	— 0.8	61	+ 1	—	—	—	7.4
Fayoum	—	—	20.5	— 1.4	6.5	— 1.8	13.0	12.8	— 1.3	9.7	— 0.9	67	+ 5	—	—	—	3.1
Minya . . . (A)	1020.0	+ 1.7	19.4	— 2.5	5.4	— 1.2	12.4	12.4	— 1.1	9.0	— 1.0	64	+ 3	269.1	323.1	—	4.6
Assyout . . . (A)	1019.9	+ 1.9	19.7	— 2.5	7.0	— 1.6	13.4	12.8	— 2.2	8.6	— 1.4	55	+ 6	—	—	—	5.6
Luxor . . . . (A)	1017.9	+ 0.9	22.6	— 2.2	5.4	— 2.0	14.0	13.5	— 1.6	9.1	— 1.8	56	+ 4	—	—	—	3.9
Aswan . . . . (A)	1018.0	+ 1.4	22.3	— 3.2	7.9	— 2.0	15.1	14.3	— 3.1	8.5	— 2.0	42	+ 6	—	—	—	12.5
Siwa	1020.0	+ 1.7	19.3	— 1.9	8.0	+ 2.0	13.6	13.5	+ 0.1	9.7	+ 0.7	60	+ 6	248.3	320.3	78	5.6
Bahariya	1019.9	+ 1.4	19.6	— 2.0	6.0	— 0.6	12.8	12.6	— 1.7	8.4	— 1.0	56	+ 8	—	—	—	5.0
Farafra	1022.2	+ 2.1	20.3	— 1.4	5.3	— 0.3	12.8	12.3	— 0.9	7.7	— 0.6	49	+ 3	—	—	—	5.6
Dakhla	1020.1	+ 2.1	21.4	— 1.8	4.6	— 1.3	13.0	12.7	— 1.2	7.9	— 0.7	50	+ 8	—	—	—	6.5
Kharga	1019.3	+ 1.9	20.8	— 3.1	5.8	— 2.1	13.3	13.5	— 2.1	8.5	— 0.7	53	+ 8	296.4	329.2	90	5.2
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	1017.4	+ 0.9	21.6	— 1.0	10.9	— 0.7	16.2	16.0	— 1.2	10.7	— 1.8	48	— 6	271.8	325.8	83	7.3
Quseir	1017.0	+ 0.5	21.9	— 2.1	15.5	— 0.2	18.7	18.3	— 1.4	12.1	— 2.1	43	— 8	—	—	—	8.5

TABLE A2.— MAXIMUM AND MINIMUM AIR TEMPERATURE

DECEMBER — 1974

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	21.2	13	14.6	23	0	0	0	0	0	9.5	—	14.2	2	8.2	31	9	0	0	0
Mersa Matruh . (A)	23.0	1	15.6	21	0	0	0	0	0	9.2	—	13.3	25	7.9	15	13	0	0	0
Alexandria . . . (A)	23.3	1	15.4	24	0	0	0	0	0	8.6	—	13.4	2	5.5	15	14	0	0	0
Port Said . . . (A)	22.7	1	12.2	11	0	0	0	0	0	11.1	—	15.8	3	9.5	12	5	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	23.3	1	13.4	11	0	0	0	0	0	—	—	11.6	5	3.6	23	29	1	0	0
Cairo . . . . . (A)	22.2	1	16.5	11	0	0	0	0	0	—	—	12.7	8	7.4	23.26	12	0	0	0
Fayoum	24.2	1	18.2	11	0	0	0	0	0	2.6	—	12.0	27	3.0	20	29	10	0	0
Minya . . . . . (A)	22.4	1	18.2	11	0	0	0	0	0	2.6	—	10.8	28	2.4	15	30	12	0	0
Assyout. . . . . (A)	23.3	1	17.2	11	0	0	0	0	0	5.7	—	10.2	30	4.7	26	30	1	0	0
Luxor . . . . . (A)	26.3	1	20.5	12	3	0	0	0	0	3.9	—	8.7	5	3.0	16,20	31	16	0	0
Aswan . . . . . (A)	27.0	2	19.2	12	4	0	0	0	0	—	—	10.6	4	4.7	28	29	1	0	0
Siwa	22.1	1,2	17.1	4	0	0	0	0	0	7.5	—	11.1	27	4.7	15	28	2	0	0
Bahariya	23.0	1	17.3	22	0	0	0	0	0	5.4	—	9.9	27	2.4	20	31	10	0	0
Farafra	23.4	1	17.4	22	0	0	0	0	0	4.7	—	9.2	6	1.0	20	31	14	0	0
Dakhla	24.0	15	19.3	25	0	0	0	0	0	4.6	—	10.6	23	0.1	15	30	16	0	0
Kharga	24.0	1	18.8	25	0	0	0	0	0	3.7	—	11.7	22	1.0	13	29	15	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	24.4	1	19.0	22	0	0	0	0	0	—	—	15.3	4	8.5	15	11	0	0	0
Quseir	24.7	1	20.0	12	0	0	0	0	0	12.3	—	17.8	2	14.2	12	0	0	0	0

TABLE A 3.—KY COVER AND RINFALL

DECEMBER — 1974

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	4.3	4.2	4.3	4.6	4.3	21.1	+ 3.2	10 9	23	0	5	4	2	1	0	0
Mersa Matruh (A)	3.1	4.7	4.8	3.7	4.0	42.9	+ 13.4	9 1	10	0	12	9	5	0	0	0
Alexandria (A)	4.7	5.6	5.5	4 8	5.1	191.5	+138.7	54.3	4	0	20	16	11	5	2	1
Port Said (A)	1.7	2.8	3.0	1.9	2.3	7.4	— 10.2	3.3	11	0	6	2	0	0	0	0
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	2.0	3.0	3.8	1.5	2.5	27.2	+17.5	9.0	11	0	7	5	2	0	0	0
Cairo (A)	1.9	2.7	3.7	2.5	2.7	4.0	—2.7	2.1	5	0	5	1	0	0	0	0
Fayoum	—	1.7	2.8	2.3	—	Tr.	—4 0	Tr.	4	1	0	0	0	0	0	
Minya (A)	0.7	1.7	2.6	1.0	1.5	0.0	—0.6	0.0	—	0	0	0	0	0	0	
Assyout (A)	0.8	1.2	0.8	1.2	1.0	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Luxor (A)	1.2	1.6	2.1	1.6	1.5	0.0	—Tr.	0.0	—	0	0	0	0	0	0	0
Aswan (A)	0.6	1.9	2.1	1.6	1.6	0.0	—0.1	0.0	—	0	0	0	0	0	0	0
Siwa	3.6	3.2	3.5	3.0	3.3	0.6	—1.5	0.6	29	0	1	0	0	0	0	0
Bahariya	1.0	1.7	2.8	1.6	1.7	0.0	—0.8	0.0	—	0	0	0	0	0	0	0
Farafra	—	0.2	0.9	0.2	—	Tr.	—0.2	Tr.	4	1	0	0	0	0	0	0
Dakhla	0.2	0.8	1.7	0.7	0.9	0.0	—0.6	0.0	—	0	0	0	0	0	0	0
Kharga	0.8	1.0	1.8	0.8	1.1	0.0	—0.3	0.0	—	0	0	0	0	0	0	0
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0.9	2.2	2.3	1.6	1.7	0.0	—1.8	0.0	—	0	0	0	0	0	0	0
Quseir	1.2	2.2	3.0	1.7	2.0	0.0	—0.1	0.0	—	0	0	0	0	0	0	0

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

DECEMBER — 1974

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		Clear Sky	Cloudy Sky
	Rain	Snow	Ice. Pellets	Hail											
Sallum	5	0	0	0	0	0	0	0	0	0	0	0	0	4	0
Mersa Matruh . . . (A)	12	0	0	0	0	1	0	0	1	0	2	0	0	7	7
Alexandira . . . . (A)	20	0	0	0	0	6	0	1	0	0	0	0	0	3	11
Port Said . . . . (A)	6	0	0	0	0	0	0	0	0	0	0	0	0	11	1
El Arish	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ghazza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	7	0	0	0	0	0	2	0	0	0	0	0	0	14	2
Cairo . . . . . (A)	5	0	0	0	0	0	7	1	6	0	3	0	0	9	1
Fayoum	0	0	0	0	0	0	1	0	0	0	0	0	0	—	—
Minya . . . . . (A)	0	0	0	0	0	0	14	0	1	0	4	0	0	22	0
Assyout. . . . . (A)	0	0	0	0	0	0	1	0	0	0	0	0	0	25	0
Luxor . . . . . (A)	0	0	0	0	0	0	0	0	14	0	3	0	0	21	1
Aswan . . . . . (A)	0	0	0	0	0	0	0	0	1	0	2	0	0	20	1
Siwa	1	0	0	0	0	0	0	0	0	0	13	0	0	6	2
Bahariya	0	0	0	0	0	0	0	0	0	0	0	0	0	17	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	1	1	0	0	27	0
Kharga	0	0	0	0	0	0	0	0	0	0	0	0	0	26	1
Tor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada	0	0	0	0	0	0	0	0	0	0	3	0	0	17	0
Quseir	0	0	0	0	0	0	0	0	0	0	0	0	0	19	3

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

DECEMBER — 1974

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 / 011	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	25	27	28	5	3	2	1	2	13	53	111	81	351
				11—27	0	0	0	0	0	0	0	6	44	166	127	50	393
				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**	**27**	**28**	**5**	**3**	**2**	**1**	**8**	**57**	**219**	**238**	**131**	**744**
Mersa Matruh. . (A)	11	0	0	1—10	83	27	1	3	1	4	27	101	85	43	40	60	485
				11—27	18	4	0	0	0	0	17	52	78	39	17	23	248
				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	**101**	**31**	**1**	**3**	**1**	**4**	**44**	**153**	**163**	**92**	**57**	**83**	**733**
Alexandria . . . (A)	4	0	0	1—10	51	24	13	19	22	22	43	111	27	30	35	55	452
				11—27	17	0	0	0	0	0	1	102	54	16	40	58	288
				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**	**24**	**13**	**19**	**22**	**22**	**44**	**213**	**81**	**46**	**75**	**113**	**740**
Tanta	19	0	0	1—10	39	15	21	6	4	16	29	106	152	102	66	73	629
				11—27	10	4	0	0	0	0	0	0	20	58	2	2	96
				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**	**19**	**21**	**6**	**4**	**16**	**29**	**106**	**172**	**160**	**68**	**75**	**725**
Caire . . . . . (A)	87	0	7	1—10	51	19	17	13	12	42	126	83	37	33	25	29	487
				11—27	12	7	0	0	0	10	37	34	38	17	2	6	163
				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	**63**	**26**	**17**	**13**	**12**	**52**	**163**	**117**	**75**	**50**	**27**	**35**	**650**
Fayoum	7	5	18	1—10	124	83	6	3	8	45	74	121	115	58	15	33	685
				11—27	0	19	0	0	0	0	0	0	4	6	0	0	29
				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**	**102**	**6**	**3**	**8**	**45**	**74**	**121**	**119**	**64**	**15**	**33**	**714**
Minya	42	7	0	1—10	106	35	7	3	1	38	114	22	17	32	60	81	570
				11—27	46	38	0	0	0	0	0	0	0	0	19	22	125
				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	**206**	**73**	**7**	**3**	**1**	**38**	**114**	**22**	**17**	**32**	**79**	**103**	**695**
Assyout	74	0	0	1—10	38	5	1	5	4	15	30	6	12	163	158	139	576
				11—27	26	10	0	0	0	0	0	0	0	14	13	31	94
				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	**64**	**15**	**1**	**5**	**4**	**15**	**30**	**6**	**12**	**177**	**171**	**170**	**670**

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

DECEMBER — 1974

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)	94	0	0	1—10	60	72	29	20	18	39	107	100	41	39	71	44	640
				11—27	6	0	0	0	0	0	0	0	0	0	1	3	10
				28—47	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	**66**	**72**	**29**	**20**	**18**	**39**	**107**	**100**	**41**	**39**	**72**	**47**	**650**
Aswan . . . . (A)	4	0	0	1—10	411	65	2	2	0	1	2	2	4	19	41	110	662
				11—27	43	3	0	0	0	0	0	0	0	1	7	24	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	**454**	**68**	**2**	**2**	**0**	**1**	**2**	**2**	**4**	**20**	**51**	**134**	**740**
Siwa	39	1	1	1—10	19	33	22	13	10	5	16	33	58	195	139	77	620
				11—27	2	1	2	2	2	0	7	2	5	19	30	11	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	**21**	**34**	**24**	**15**	**12**	**5**	**23**	**35**	**63**	**214**	**169**	**88**	**703**
Dakhla	17	0	6	1—10	53	41	26	10	6	6	10	13	46	111	171	144	637
				11—27	31	22	1	0	0	0	0	0	2	1	13	14	84
				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	**84**	**63**	**27**	**10**	**6**	**6**	**10**	**13**	**48**	**112**	**184**	**158**	**721**
Kharga	11	3	2	1—10	166	82	28	13	12	9	3	4	12	29	71	111	540
				11—27	134	13	0	0	0	0	0	0	0	3	20	18	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	**300**	**95**	**28**	**13**	**12**	**9**	**3**	**4**	**12**	**32**	**91**	**129**	**728**
Hurghada	1	0	1	1—10	39	10	0	0	0	0	0	0	6	71	168	39	333
				11—27	36	1	0	0	0	0	0	0	0	40	214	118	409
				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	**75**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**111**	**382**	**157**	**742**
Quseir	0	0	1	1—10	42	35	11	0	0	0	0	0	1	157	94	17	357
				11—27	103	6	0	0	0	0	0	0	2	90	79	106	386
				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	9	0	0	0
				All speeds	**145**	**41**	**11**	**0**	**0**	**0**	**0**	**0**	**3**	**247**	**173**	**123**	**743**

UPPER AIR CLIMATOLOGICAL DATA

DECEMBER—1974

During this month no upper air observations were taken at the three radiosonde stations.

REVIEW OF AGRO - METEOROLOGICAL STATIONS

MERSA MATRUH — DECEMBER 1974

The mean daily air temperature for this month was below normal and the mean daily relative humidity as slightly above normal. The total monthly rainfall was 42.9 mm. while the normal is 29.5 mm.

The prevailing weather was generally cold. Maximum air temperatures were below normal the whole month except on the 1st, 29 th.and31 st. The lowest maxinmum air temperature was 15.6°C reported on the 21 st. Minimum air temperatures were below normal most days of the mouth and the lowest minimum was 7.9° C on the 15th.

The highest maximum soil temperatures were higher than the corresponding values of December 1973 at all depths with departures between 0.7°C (at 2cm) and 2.4-°C (at 50 cm) The lowest minimum soil temperature were lower than last December at all depths except at 100 cm where its value was the same as last December; the departures varied between 1.6°C (at 5 cm.) and 0.5°C (at 20 cm.).

The mean daily actual sunshine duration was lower than normal by one hour. The mean daily wind speed at 1.5 met. height was higher by 0.7 met./sec, than the corresponding value of December 1973 .

TAHRIR — DECEMBER 1974

The meanaily air temperature for this month was below average, while the mean daily relative humidi was above average. The total monthly rainfall was 18.3 mm against 6.3 mm for average.

The prevailing weather during the month was generally cold. Maximum air temperatures were below average the whole month apart fom two short warm periods :(1st and 2 nd) and (29th, 30th,31 st). The lowest maximum air temperature for the month was 14.4°C reported on the 11th. Minimum air temperatures were also below average the whole month apart from the 5 th.Minimum air temperature at 5 cm. above grass field fell below 0°C on the 23rd and 27th when it dropped to-0.4°C and -0.2°C respectively.

The highest maximum soil temperatures were lower than last December at depths 'between 2&20 cm. with slight departures between 0.1° and 0.6°C, and higher than last December at 50 &100 cm. by 1.0& 1.1°C. The lowest minimum soil temperatures were higher than last December at 2and5 cm.by 0.°5& 0.1°C respectively; and lower than last December at depths between 10 and 100 cm. with departures between 2.2°C (at 20 cm.) and 0.7°C (at 100 cm.)

The mean daily actual sunshine duration, wind speed at. 1.5 met. height and pan evaporation were lower than average by 0.4 hour, 0.1 m./sec. and 0.99 mm. respectively.

BAHTIM — DECEMBER 1974

For the month as a whole the mean daily air temperature was below avera and the mean daily relative humidity was the same as average . The total monthly rainfall was 5.3 mm. againrt 4.6 mm. for average.

Weather during the month was cold in general. Maximum air temperatures were below average the whole month apart from the 29*th*and31 *st*, and its lowest value was 16.8°C reported on the 21*st*.Minimum air temperatures were below average most days of the month. It is worthy of mention that miniimum air temperature at 5 cm.above dry and grass fields fell below 0°C during 3 days and 6 days respectvely. These minima are given in the following :

Date	20	23	26
Min. air temp. at 5cm. a bove dry field	-0.8	-1.9	-0.3

Date	15	19	20	23	25	26
Min. air temp. at 5 cm. above grass field	-1.8	-0.2	-1.2	-2.2	-0.2	-1.5

The highest maximum soil temperatures were highet than last December at all depths except at 2cm where it was lower. All the departuers were slight ranging between 0.1° and 0.8°C The lowest minimum soil temperatures were lower than last December at 2,10,20 cm. depths and higher at 5,50,100 cm depths. The departures were also slight ranging between 0.1° and 1.0°C

The mean daily actual sunshine duration was higher than average by 0.7 hour, The mean daily wind speed at 1.5 met. height and pan evaporation were slightly above average.

KHARGA — DECEMBER 1974

The mean daily air temperature for this month was below average, while the mean daily relative humidity was above average.

Maximum air temperatures persisted below average the whole month, and its lowest value was 18.8°C reported on the 25-*th*. Minimum air temperatures were below average most days of the month and its lowest value was 1.0°C reported on the 13*th* Minimum. air temperature at 5cm. above soil fell below 0°C on the 15 *th* only when it drpped to -0.2°C.

The highest maximum soil temperatures were lower than last December at depths between 2 and 20 cm. with pronounced departures between 7.3°-C(at 2 cm.) and 1.9°C (at 20 cm) but higher than last December at 50 and 100 cm. by 1.7°C and 0.9°C respectively. The lowest minimum soil temperatures were higher than last Decemeber at all depths with departwres between 1.4°C (at 10 cm) and 0.1°C (at 100cm.).

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

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

DECEMBER — 1974

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. . .	18.1	10.3	13.8	12.5	15.1	24.0	24.0	24.0	21.8	7.6	0.0	0.0	0.0	0.0	0.0	0.0
Tahrir	20.4	6.8	12.5	9.6	15.4	24.0	24.0	23.4	15.8	7.2	0.8	0.0	0.0	0.0	0.0	0.0
Bahtim	19.3	6.7	12.4	9.7	15.2	24.0	24.0	23.9	16.9	7.4	0.4	0.0	0.0	0.0	0.0	0.0
Kharga	20.8	5.8	13.6	10.8	16.5	24.0	24.0	22.5	18.4	10.2	2.0	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.

DECEMBER — 1974

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. . .	23.0	1	15.6	21	13.3	25	7.9	15	6.0	12	—	—
Tahrir	25.4	1	14.4	11	12.1	5	2.4	23	1.2	23	—0.4	23
Bahtim	22.0	1	16.8	21	11.8	5	2.0	23	—1.9	23	—2.2	23
Kharga	24.0	1	18.8	25	11.7	22	1.0	13	—0.2	15	—	—

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

DECEMBER — 1974

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	188.3	174.4	314.1	56	67	56	30	14,30	8.1	8.4	12.7	1	4.2	15	4.7	—	42.9	9.1	10
Tahrir . .	300.7	213.8	316.9	67	78	59	26	15	8.4	9.2	12.2	1,2	4.5	16	3.1	2.82	18.3	10.2	4
Bahtim . .	266.8	223.0	317.6	72	69	48	31	15	7.3	7.5	11.9	2	5.0	15	3.7	3·37	5.3	2.8	4
Kharga. .	381.6	296.4	329.2	90	52	33	22	17	5.9	5.9	8.6	2	3.6	17	5.2	6.11	0.0	0.0	—

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

DECEMBER — 1974

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	22.0	21.9	19.5	18.5	20.0	21.5	23.5	—	—	—	—	—	—	—	—	—
	L	7.5	7.3	9.1	12.0	15.2	18.0	21.4	—	—	—	—	—	—	—	—	—
Tahrir . .	H	25.5	24.0	21.1	19.0	20.1	22.3	24.7	25.7	18.6	17.9	17.4	16.8	17.7	19.5	22.1	—
	L	6.1	6.3	7.3	10.2	14.6	17.7	20.9	23.2	8.3	8.7	9.5	11.4	13.5	15.5	18.5	—
Bahtim . . .	H	30.0	24.8	21.7	20.8	23.2	25.1	26.8	26.8	17.4	16.6	16.2	16.0	18.2	20.4	22.5	—
	L	4.5	6.6	10.5	15.6	19.5	21.7	24.9	26.0	6.8	8.4	9.8	11.9	14.8	17.1	20.6	—
Kharga . . .	H	32.9	28.7	24.3	22.1	25.1	27.4	29.5	30 0	—	—	—	—	—	—	—	—
	L	5.4	7.4	10.4	15.6	20.7	24.0	27.4	29.9	—	—	—	—	—	—	—	—

Table C 5.—SURFACE WIND

DECEMBER — 1974

STATION	Wind Speed m/sec at 1½ metres			Days with surface wind speed at 10 metres							Max. Gust (Kno 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	3.8	3.3	4.4	31	24	17	7	1	0	0	40	11
Tahrir	1.9	1.3	2.5	29	14	6	0	0	0	0	33	11
Bahtim. . . .	2.2	1.6	2.9	29	16	3	0	0	0	0	27	11
Kharga. . . .	2.4	1.6	3.3	26	14	4	0	0	0	0	30	22