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THE ARAB REPUBLIC OF EGYPT

MONTHLY WEATHER REPORT

VOLUME 9 NUMBER 7

JULY, 1966

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METEOROLOGICAL DEPARTMENT
CAIRO

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

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

Orders for publications should be adressed to :
"The Director General, Meteorological Department, Kubri-el-Qubbeh — CAIRO".

THE DAILY WEATHER REPORT

This report is issued daily by the Meteorological Department since the year 1901. It includes surface and upper air observations carried out by the relevant networks of the Republic at the principal hours of observations.

As from January 1968 this report was revised to include a condensed representative selection of surface and upper air observations besides the 1200 U.T. surface & 500 mb charts.

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 Meteorological Department.

TECHNICAL NOTES

As from October 1970, the Meteorological Department 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 first Technical Note I was issued in October 1970 on : Sandstorms & Duststorms in Egypt.

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METEOROLOGICAL DEPARTMENT
CAIRO

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GENERAL SUMMARY OF WEATHER CONDITIONS

JULY 1966

Rather mild summer weather in the northern parts, rather hot in the central parts and excessively hot in the southern parts. Early morning mist or fog over Delta, Canal and Cairo areas in several days.

GENERAL DESCRIPTION OF WEATHER

The prevailing weather during this month was generally rather mild in the northern parts, rather hot in the central parts and excessively hot in the southern parts. The month was intervened with several heat waves generally of short durations except one heat wave which prevailed round the period (19th-24th).

Early morning low clouds developed frequently with scattered mist or fog patches in many days over Delta, Canal & Cairo areas. Few occasions of rising sand occurred in few localities of the Red Sea & Western Desert districts.

PRESSURE DISTRIBUTION

The most prevailing pressure systems over the surface maps during this month were :

— High pressure extending from North Altantic SE wards through the Mediterranean & North Africa.

— Travelling deep low pressure systems through North Europe and their attached shallow secondaries or troughs over North Italy & North Balkans.

— Complex Monsoon low pressure system over the Arabian Gulf, Arabia & North Sudan.

On the 700, 500 mb. upper charts the most prevailing upper pressure systems were :

— Two deep low pressure systems one over North Urasia and the other over North Atlantic.

— Travelling secondary upper troughs or lows through middle latitudes between 30°, 45°N.

— Quasi-stationary upper high pressure belt south latitude 30°N.

During this month the barometric pressure in Egypt showed frequent oscillations and experienced six falls round the periods (4th—5th), (9th—10th), (15th—17th), (21st—24th), (27th-28th) & (30th-31st). These pressure falls were due to the elongation of the Iraq Monsoon trough either north-westwards through central Mediterranean towards the Balkans during the period (21st—24th) or westwards through East Mediterranean during the rest periods. These elongations generally accompanied the transits of the southern troughs of the deep northern low pressure systems through the Black Sea area.

Apart from the above mentioned periods, high pressure established over East Mediterranean and barometric pressure in Egypt was slightly above normal.

The highest wind speed in the upper air at Mersa Matruh, Helwan & Aswan was 86, 97, & 80 Knots on the 21st, 6th & 27th respectively.

SURFACE WIND

The prevailing winds during this month were generally light to moderate N/NW. Fresh to strong winds blew for many days in scattered localities of the Mediterranean (western parts), Upper Egypt, Western Desert &Red Sea districts. On the other hand calms were frequent during night and early morning intervals over scattered places.

TEMPERATURE

This month was characterized with rather short durable and consecutive heat waves. As an exception ; the prevailing heat wave between 19th & 24th was the most durable and excessive.

Maximum temperature showed small variability and its values ranged most days of the month between 28°C 31°C in the northern parts, between 33°C & 38°C in the central parts and between 40°C & 44°C in the southern parts.

The absolute maximum temperature for the Republic was 46.5°C reported at Kena on the 24th.

Minimum temperature also showed small departures above or below normal and its values ranged most days of the month between 19°C & 23°C in both the northern & central parts. In the southern parts minimum temperature was slightly below normal and its values generally ranged between 22°C & 25°C.

The absolute minimum temperature of the Republic was 16.5°C reported at Shebin El Kom on the 13th.

PRECIPITATION

This month was rainless all over the Country.

Cairo, October 1971

M. F. TAHA
Under Secretary of State
Director General
Meteorological Department

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

JULY — 1966

STATION	Atmospheric Pressure (mbs) M.S.L		Air Temperature °C									Relative Humidity %		Bright Sunshine Duration (Hours)			Piche Evap. (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	1010.7	+0.4	31.2	+0.3	21.8	+0.5	26.5	26.2	+0.1	21.1	—0.3	61	— 3	—	—	—	6.4
Mersa Matruh (A)	1010.3	+0.5	29.3	+0.1	20.4	+0.1	24.8	25.0	0.0	21.9	+0.4	76	+ 3	—	—	—	7.0
Alexandria (A)	1009.3	+0.8	30.5	+0.8	22.3	—0.3	26.4	26.0	0.0	22.3	—0.2	72	— 1	384.2	432.3	89	6.8
Port Said (A)	1008.0	+0.5	29.1	—1.3	24.3	+0.2	26.7	26.4	—0.3	23.1	0.0	74	+ 2	349.9	432.6	81	6.5
El Arish	1008.2	+0.7	29.6	—1.0	21.5	+0.3	25.6	26.3	+0.1	23.0	+0.1	74	0	—	—	—	5.5
Ghazza	1007.6	+0.1	29.9	+1.3	21.6	+0.2	25.8	26.0	+0.5	23.1	+0.2	77	— 2	361.6	433.6	83	5.1
Tanta	1007.8	+0.2	33.9	—0.5	20.2	+0.9	27.0	26.4	—0.1	21.4	0.0	64	+0.2	371.8	431.0	86	6.5
Cairo (A)	1008.5	+0.5	34.6	—0.6	21.3	—0.2	28.0	27.4	—0.5	20.9	—0.4	54	+ 1	—	—	—	16.9
Fayoum	1008.0	+0.3	37.0	+0.3	21.2	—0.3	29.1	28.8	—0.1	20.5	—0.3	44	— 1	—	—	—	12.2
Minya (A)	1006.7	—0.2	37.0	+0.3	20.0	—0.3	28.5	28.5	0.0	20.2	—0.1	44	— 1	389.9	425.3	92	14.4
Assyout (A)	1006.1	—0.7	36.7	—0.1	22.0	—0.3	29.4	29.5	—0.3	19.4	0.0	34	0	—	—	—	22.7
Luxor (A)	1004.5	—0.3	41.4	+0.9	24.1	+0.5	32.8	33.0	+0.2	20.1	+0.2	25	0	—	—	—	16.9
Aswan (A)	1004.2	—0.5	42.0	+0.9	23.2	—1.5	32.6	33.8	+0.2	18.3	+0.2	15	0	—	—	—	23.3
Siwa	1009.7	0.0	38.3	+0.4	21.6	+0.9	30.0	30.4	+0.4	19.2	—0.2	30	— 4	—	—	—	18.8
Bahariya	1008.3	+0.3	37.0	+0.1	21.7	+1.2	29.4	30.1	+0.7	19.8	+0.4	35	— 1	—	—	—	14.2
Farafra	1009.9	+0.5	37.5	+0.3	20.6	—0.7	29.0	29.3	—0.5	18.6	+1.0	31	+ 7	—	—	—	23.0
Dakhla	1007.4	+0.6	38.9	+0.4	22.3	+0.6	30.6	30.9	—0.1	17.8	—0.1	21	0	—	—	—	26.9
Kharga	1006.1	—0.3	39.8	+0.4	24.5	+1.3	32.2	32.6	+1.0	18.1	—0.7	18	— 8	391.7	418.7	94	29.0
Tor	1004.8	+0.2	33.9	—0.7	24.4	—0.1	29.2	28.5	—0.4	22.5	—0.4	58	0	—	—	—	14.0
Hurghada	1004.4	0.0	33.3	+0.4	24.8	—0.1	29.0	29.1	—0.5	20.5	—1.2	42	— 5	—	—	—	23.3
Quseir	1005.1	+0.2	32.2	—1.0	25.3	—1.0	28.8	29.1	—0.8	21.5	—0.9	48	0	—	—	—	19.3

Table A2.— MAXIMUM AND MINIMUM AIR TEMPERATURES

JULY — 1966

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	37.4	19	27.6	3	31	19	3	0	0	20.9	—	25.0	22	19.0	7	0	0	0	0
Mersa Maitruh (A)	33.2	19	26.8	3	31	6	0	0	0	—	—	23.5	17	18.2	19	0	0	0	0
Alexandra (A)	32.0	21	28.5	5-13	31	22	0	0	0	—	—	24.6	21	19.2	15	0	0	0	0
Port Said (A)	32.9	13	26.9	12	31	7	0	0	0	23.1	—	25.9	30	22.5	14	0	0	0	0
El Arish	32.7	20	28.6	4	31	18	0	0	0	19.0	—	24.3	12	20.0	7	0	0	0	0
Ghazza	31.2	29	28.8	11	31	12	0	0	0	21.3	—	24.4	13	19.7	10	0	0	0	0
Tanta	37.4	20	29.7	4	31	30	7	0	0	—	—	22.4	22	18.6	1,4,7	0	0	0	0
Cairo (A)	38.0	10-20	31.2	13	31	31	12	0	0	—	—	23.8	23	18.6	8	0	0	0	0
Fayoum	41.4	23	33.4	4	31	31	25	2	0	18.6	—	23.3	24	19.2	14	0	0	0	0
Minya (A)	41.0	24	34.0	4,5	31	31	15	1	0	18.8	—	23.0	30	18.0	5	0	0	0	0
Assyout (A)	40.6	24	33.8	5	31	31	24	1	0	20.4	—	24.5	24	19.0	4	0	0	0	0
Luxor (A)	45.6	24	37.6	5	31	31	31	25	1	19.0	—	26.3	31	22.4	19	0	0	0	0
Aswan (A)	45.4	25	39.3	27	31	31	31	27	1	—	—	25.6	20	20.8	27	0	0	0	0
Siwa	43.4	23	34.2	12	31	31	28	6	0	20.0	—	24.9	10	19.0	8	0	0	0	0
Bahariya	42.5	23	34.3	4	31	31	29	5	0	19.9	—	24.5	25	19.9	5	0	0	0	0
Farafra	43.2	24	33.2	4	31	31	28	3	0	19.7	—	23.2	16	17.9	5	0	0	0	0
Dakhla	45.0	24	34.4	5	31	31	30	10	0	—	—	27.1	25	18.8	9,29	0	0	0	0
Kharga	45.3	24	35.2	5	31	31	31	12	1	23.1	—	29.0	21	18.9	10	0	0	0	0
Tor	41.4	24	29.4	5	31	30	9	1	0	—	—	26.7	26	20.3	6	0	0	0	0
Hurg hada	37.3	16	30.4	5	31	31	5	0	0	22.8	—	28.6	25	21.8	6	0	0	0	0
Qusetr	34.5	24	30.0	5	31	30	0	0	0	23.9	—	27.7	25	22.3	19	0	0	0	0

Table A 3.—SKY COVER AND RAINFALL

JULY — 1966

Station	Mean Sky Cover Oct.					Rainfall mms.										
	00 U.T.	06 U.T.	12 U.T.	18 U.T	Daily Mean	Total Amount	D. From Normal	Max. Fall in one day		Number of Days with Amount of Rain						
								Amount	Date	<0.1	≥0.1	≥1.0	≥5.0	≥10	≥25	≥50
Sallum (A)	0.3	0.4	0.3	0.2	0.3	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Mersa Matruh (A)	1.0	1.8	0.8	1.7	1.1	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Alexandria (A)	2.2	1.6	1.3	1.3	1.5	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Port Said (A)	0.6	1.6	0.3	0.4	0.7	0.0	0.0	0.0	—	0	0	0	0	0	0	0
El Arish	1.5	1.9	0.7	1.4	1.4	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Ghazza	4.0	3.5	1.2	2.4	2.5	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Tanta	0.3	0.9	0.6	0.0	0.4	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Cairo (A)	1.0	3.6	0.3	0.2	1.2	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Fayoum	--	0.9	0.0	0.1	—	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Minya (A)	0.0	0.4	0.2	0.1	0.1	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Assyout (A)	0.0	0.2	0.2	0.0	0.1	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Luxor (A)	0.3	0.3	0.3	0.3	0.2	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Aswan	0.3	0.4	0.4	0.3	0.4	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Siwa	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Bahariya	0.0	0.5	0.1	0.1	0.2	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Farafra	—	0.1	0.0	0.0	—	0.6	0.0	0.0	—	0	0	0	0	0	0	0
Dakhla	0.0	0.1	0.2	0.1	0.0	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Kharga	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Tor	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Hurghada	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	0	0	0	0	0	0	0
Quseir	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	—	0	0	0	0	0	0	0

* More than 3 days

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

JULY — 1966

Station	Precipitation				Frost	Thunderstorm,	Mist Vis ≥1000 metres	Fog Vis <1000 Metres	Haze Vis ≥1000 Metres	Thick Haze Vis <1000 Metres	Dust or Sandrising Vis ≥1000 Metres	Dust or Sandstorm Vis <1000 Metres	Gale	Clear Sky	Cloudy Sky
	Rain	Snow	Ice, Pellets	Hail											
Sallum	0	0	0	0	0	0	0	0	0	0	1	0	0	31	0
Mersa Matruh (A)	0	0	0	0	0	0	3	2	0	0	3	0	0	26	0
Alexandria (A)	0	0	0	0	0	0	3	0	0	0	0	0	0	20	0
Port Said (A)	0	0	0	0	0	0	0	0	0	0	0	0	0	29	0
El Arish	0	0	0	0	0	0	7	1	0	0	0	0	0	22	0
Ghazza	0	0	0	0	0	0	3	0	0	0	0	0	0	11	0
Tanta	0	0	0	0	0	0	8	0	0	0	0	0	0	—	—
Cairo (A)	0	0	0	0	0	0	13	5	3	0	0	0	0	28	0
Fayoum	0	0	0	0	0	0	0	0	0	0	0	0	0	—	—
Minya (A)	0	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Assyout (A)	0	0	0	0	0	0	0	0	0	0	1	0	0	31	0
Luxor (A)	0	0	0	0	0	0	0	0	0	0	2	0	0	31	0
Aswan A)	0	0	0	0	0	0	0	0	3	0	4	0	0	29	0
Siwa	0	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Bahariya	0	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Farafra	0	0	0	0	0	0	0	0	0	0	1	0	0	—	—
Dakhla	0	0	0	0	0	0	0	0	0	0	2	0	0	30	0
Kharga	0	0	0	0	0	0	0	0	0	0	6	0	0	31	0
Tor	0	0	0	0	0	0	0	0	0	0	9	0	0	31	0
Hurghada	0	0	0	0	0	0	0	0	0	0	1	0	0	31	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

JULY — 1966

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	15	1	75	1–10	47	48	27	18	7	4	2	0	22	49	38	61	323
				11–27	42	53	2	0	0	0	0	0	0	6	111	116	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	0
				All speeds	89	101	29	18	7	4	2	0	22	55	149	177	653
Meras Matruh (A)	12	0	7	1–10	87	38	7	0	1	6	1	2	5	65	126	114	452
				11–27	114	13	5	0	0	0	0	0	0	0	6	135	273
				28–47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	201	51	12	0	1	6	1	2	5	65	132	249	725
Alexandria (A)	1	0	0	1–10	54	13	3	2	3	3	3	3	6	12	163	275	540
				11–27	3	0	0	0	0	0	0	0	1	3	128	68	203
				28–47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	57	13	3	2	3	3	3	3	7	15	291	343	743
Port Said (A)	0	0	13	1–10	100	10	0	1	1	1	1	2	22	78	55	79	350
				11–27	109	2	0	0	0	0	0	0	3	25	64	178	381
				28–47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	209	12	0	1	1	1	1	2	25	103	119	257	731
Tanta	16	0	0	1–10	78	52	7	0	1	2	3	18	59	105	193	202	720
				11–27	1	0	0	0	0	0	0	0	0	0	6	1	8
				28–47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	79	52	7	0	1	2	3	18	59	105	199	203	728
Cairo (A)	25	0	6	1–10	149	103	24	9	2	0	3	1	1	21	47	149	509
				11–27	102	32	3	0	0	0	0	0	0	0	0	67	204
				28–47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	251	135	27	9	2	0	3	1	1	21	47	216	713
Fayoum	3	0	35	1–10	449	74	6	0	0	0	0	0	0	3	9	159	700
				11–27	2	0	0	0	0	0	0	0	0	0	0	4	6
				28–47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	451	74	6	0	0	0	0	0	0	3	9	163	706
Minya (A)	0	21	1	1–10	222	10	0	0	0	0	0	0	0	0	3	174	49
				11–27	262	0	0	0	0	0	0	0	0	0	3	48	373
				28–47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	484	10	0	0	0	0	0	0	0	0	6	222	722

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

JULY — 1966

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
Assyout (A)	0	0	4	1-10	9	3	0	0	0	3	3	0	6	116	269	105	514
				11-27	28	1	0	0	0	0	0	0	0	0	97	99	225
				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	**38**	**4**	**0**	**0**	**0**	**3**	**3**	**0**	**6**	**116**	**366**	**204**	**740**
Luxor (A)	6	0	0	1-10	18	13	9	2	7	58	114	72	64	117	162	91	727
				11-27	0	0	0	0	0	0	0	0	0	0	10	1	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	**18**	**13**	**9**	**2**	**7**	**58**	**114**	**72**	**64**	**117**	**172**	**92**	**738**
Aswan (A)	0	0	13	1-10	131	86	12	8	0	1	20	20	39	46	37	102	502
				11-27	75	38	0	2	0	0	0	1	5	12	22	72	227
				28-47	0	0	0	0	0	0	0	0	0	0	1	0	1
				≥48	0	0	0	1	0	0	0	0	0	0	0	0	1
				All speeds	**206**	**124**	**12**	**11**	**0**	**1**	**20**	**21**	**44**	**58**	**60**	**174**	**731**
Kharga	1	0	30	1-10	130	29	1	4	1	8	3	0	2	7	27	134	346
				11-27	291	14	0	0	0	0	0	0	0	0	11	51	367
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**421**	**43**	**1**	**4**	**1**	**8**	**3**	**0**	**2**	**7**	**38**	**185**	**713**
Siwa	20	33	0	1-10	81	115	52	40	12	10	6	5	19	39	83	92	554
				11-27	37	39	2	0	0	1	0	2	2	4	14	36	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	**118**	**154**	**54**	**40**	**12**	**11**	**6**	**7**	**21**	**43**	**97**	**128**	**691**
Hurghada	5	0	2	1-10	20	19	4	0	2	6	0	3	0	9	55	58	176
				11-27	151	43	0	0	0	0	0	0	0	5	95	236	530
				28-47	0	0	0	0	0	0	0	0	0	0	2	27	29
				≥48	2	0	0	0	0	0	0	0	0	0	0	0	2
				All speeds	**173**	**62**	**4**	**0**	**2**	**6**	**0**	**3**	**0**	**14**	**152**	**321**	**737**
Quseir	4	33	0	1-10	191	86	15	5	3	7	10	7	7	12	14	145	502
				11-27	172	24	0	0	0	0	0	0	0	0	0	9	205
				28-47	0	0	0	0	0	0	0	0	0	0	0	0	0
				≥48	0	0	0	0	0	0	0	0	0	0	0	0	0
				All speeds	**363**	**110**	**15**	**5**	**3**	**7**	**10**	**7**	**7**	**12**	**14**	**154**	**707**

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

JULY—1966

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	*1011m.b.	*1014m.b.	*1007m.b.	31	22.3	24.5	18.6	31	19.1
	1000 . . .	31	121	149	90	31	22.5	26.6	20.0	31	18.2
	850 . . .	31	1530	1559	1498	31	18.7	23.7	14.0	29	1.1
	700 . . .	31	3170	3203	3133	31	10.2	13.2	6.2	7	— 5.8
	600 . . .	31	4437	4471	4388	31	2.7	6.4	0.1	2	—10.4
	500 . . .	31	5883	5938	5830	31	— 6.2	— 0.9	—10.2	—	—
	400 . . .	31	7596	7681	7533	31	—16.4	—12.7	—20.2	—	—
	300 . . .	29	9703	9805	9648	29	—29.8	—27.3	—32.0	—	—
	200 . . .	26	12481	12584	12423	26	—49.6	—45.5	—51.3	—	—
	150 . . .	14	14306	14367	14254	14	—62.1	—59.3	—64.7	—	—
	100 . . .	5	16698	16723	16682	5	—74.3	—71.3	—77.8	—	—
	70 . . .	1	18980	—	—	1	—63.8	—	—	—	—
	60 . . .	1	19927	—	—	1	—62.0	—	—	—	—
	50 . . .	1	21059	—	—	1	—59.8	—	—	—	—
	40 . . .	1	22467	—	—	1	—56.2	—	—	—	—
	30 . . .	—	—	—	—	—	—	—	—	—	—
	20 . . .	—	—	—	—	—	—	—	—	—	—
	10 . . .	—	—	—	—	—	—	—	—	—	—
Helwan(A)0000 U.T.	Surface . . .	30	*992m.b.	*995m.b.	*989m.b.	30	23.1	25.6	20.8	30	17.2
	1000 . . .	30	72	97	43	—	—	—	—	—	—
	850 . . .	30	1483	1499	1448	30	20.2	25.6	14.7	19	— 2.0
	700 . . .	30	3133	3163	3098	30	12.6	15.3	9.2	4	— 7.6
	600 . . .	30	4405	4431	4370	30	4.9	—10.0	— 1.0	3	—13.8
	500 . . .	30	5867	5906	5811	30	— 3.6	— 0.3	— 9.4	—	—
	400 . . .	30	7596	7655	7525	30	—14.4	—11.0	—17.2	—	—
	300 . . .	30	9694	9789	9640	30	—28.9	—26.0	—31.2	—	—
	200 . . .	30	12496	12585	12431	30	—49.2	—46.2	—54.0	—	—
	150 . . .	30	14329	14431	14213	30	—62.1	—59.4	—65.5	—	—
	100 . . .	29	16762	16857	16693	29	—74.3	—70.2	—77.6	—	—
	70 . . .	27	18844	18950	18660	27	—70.2	—66.1	—78.8	—	—
	60 . . .	26	19775	19858	19714	26	—64.3	—58.6	—71.7	—	—
	50 . . .	25	20904	20977	20848	25	—60.5	—57.3	—68.2	—	—
	40 . . .	22	22307	22383	22250	22	—57.0	—53.7	—59.8	—	—
	30 . . .	17	24158	24218	24082	17	—52.4	—47.8	—55.2	—	—
	20 . . .	7	26839	26874	26770	7	—46.3	—43.6	—48.7	—	—
	10 . . .	1	31550	—	—	1	—39.8	—	—	—	—
Aswan(A)0000 U.T.	Surface . . .	30	*983m.b.	*986m.b.	*981m.b.	30	27.9	32.0	25.0	30	5.9
	1000 . . .	30	42	70	23	—	—	—	—	—	—
	850 . . .	30	1480	1503	1412	30	25.4	29.7	20.7	22	2.5
	700 . . .	30	3145	3174	3110	30	13.4	17.0	10.6	19	— 5.1
	600 . . .	30	4421	4458	4386	30	4.7	8.4	1.9	13	—10.9
	500 . . .	30	5886	5919	5850	30	— 2.8	1.1	— 8.2	3	—19.0
	400 . . .	30	7617	7660	7575	30	—14.2	—10.5	—18.8	1	—24.3
	300 . . .	30	9740	9808	9667	30	—28.8	—25.2	—32.4	—	—
	200 . . .	29	12519	12630	12422	29	—50.0	—46.0	—55.1	—	—
	150 . . .	28	14347	14488	14224	28	—63.2	—58.5	—65.7	—	—
	100 . . .	28	16757	16936	16635	28	—76.0	—72.2	—79.8	—	—
	70 . . .	20	18841	19000	18723	20	—71.5	—65.8	—85.6	—	—
	60 . . .	16	19768	19914	19684	16	—65.1	—62.4	—71.8	—	—
	50 . . .	16	20893	21008	20806	16	—60.8	—58.0	—64.7	—	—
	40 . . .	16	22292	22388	22217	16	—57.8	—52.7	—60.6	—	—
	30 . . .	16	24127	24242	24047	16	—53.3	—50.2	—57.2	—	—
	20 . . .	10	26764	26878	26684	10	—49.9	—45.7	—53.2	—	—
	10 . . .	—	—	—	—	—	—	—	—	—	—

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

* The atmospheric presselevation of the radiosonde station.

UPPER AIR CLIMATOLOGICAL DATA

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

JULY — 1966

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 1200 U.T.	Surface	31	*1011m.b.	*1014m.b.	*1008m.b.	31	28.1	32.1	26.2	31	21.3
	1000	31	126	151	98	31	26.9	32.0	24.0	31	18.8
	850	31	1543	1570	1517	31	19.9	27.0	15.1	25	2.4
	700	31	3189	3234	3150	31	11.3	14.7	8.0	5	— 4.6
	600	31	4457	4504	4413	31	3.7	8.9	— 0.4	1	— 9.2
	500	31	5914	5958	5846	31	— 5.3	0.2	—11.4	—	—
	400	31	7631	7680	7530	31	—15.6	—12.4	—18.4	—	—
	300	31	9751	9869	9641	31	—28.5	—24.6	—31.5	—	—
	200	26	12549	12680	12444	26	—48.5	—45.8	—51.7	—	—
	150	19	14400	14594	14304	19	—60.7	—58.7	—63.0	—	—
	100	11	16831	16882	16740	11	—71.9	—70.5	—73.5	—	—
	70	2	18970	18980	18960	2	—67.4	—64.9	—69.9	—	—
	60	1	19890	—	—	1	—64.1	—	—	—	—
	50	1	21022	—	—	1	—57.2	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—
	10	—		—	—	—	—	—	—	—	—
Helwan 1200 U.T.	Surface	30	*992m.b.	*994m.b.	*988m.b.	30	34.2	37.7	30.4	30	11.8
	1000	30	62	86	33	—	—	—	—	—	—
	850	30	1498	1517	1444	30	21.7	25.8	15.9	26	— 3.5
	700	30	3155	3188	3104	30	13.4	16.4	11.3	4	— 9.3
	600	30	4433	4474	4384	30	5.9	9.1	0.2	2	—15.4
	500	30	5885	5953	5846	30	— 2.5	2.8	— 8.3	—	—
	400	30	7639	7713	7571	30	—13.0	—10.1	—16.9	—	—
	300	30	9774	9864	9687	30	—27.1	—25.0	—28.8	—	—
	200	30	12570	12665	12482	30	—46.3	—44.8	—49.3	—	—
	150	29	14419	14514	14327	29	—60.5	—57.0	—64.0	—	—
	100	26	16842	16940	16757	26	—73.4	—68.7	—77.6	—	—
	70	22	18955	19080	18740	22	—67.6	—59.2	—72.0	—	—
	60	21	19895	20016	19783	21	—62.4	—57.6	—67.8	—	—
	50	15	21031	21130	20950	15	—56.2	—45.0	—61.8	—	—
	40	7	22476	22529	22427	7	—53.6	—52.6	—54.5	—	—
	30	4	24371	24394	24337	4	—49.2	—48.2	—50.9	—	—
	20	2	27076	27104	27048	2	—42.1	—40.4	—43.8	—	—
	10	—	—	—	—	—	—	—	—	—	—
Aswan 1200 U.T	Surface	31	*983m.b.	*985m.b.	*980m.b.	31	40.5	44.5	37.0	31	6.4
	1000	30	32	56	20	—	—	—	—	—	—
	850	31	1495	1512	1476	31	26.9	29.9	23.0	19	— 0.6
	700	30	3167	3185	3137	30	14.1	18.0	10.4	16	— 7.7
	600	30	4446	4473	4399	30	5.5	9.6	0.1	13	—12.2
	500	30	5913	5941	5867	30	— 2.4	1.2	— 7.2	2	—15.4
	400	30	7651	7699	7609	30	—13.3	—10.9	—16.5	—	—
	300	29	9748	9838	9710	29	—27.9	—25.0	—31.8	—	—
	200	29	12578	12639	12479	29	—48.5	—46.6	—50.6	—	—
	150	28	14411	14487	14309	28	—62.0	—59.4	—63.9	—	—
	100	28	16837	16929	16743	28	—74.0	—69.8	—78.2	—	—
	70	22	18916	19020	18820	22	—69.9	—60.8	—76.0	—	—
	60	16	19870	19952	19752	16	—63.2	—59.3	—67.6	—	—
	50	15	21011	21095	20896	15	—58.2	—54.5	—60.7	—	—
	40	11	22524	22529	22306	11	—54.1	—51.3	—58.5	—	—
	30	10	24313	24390	24218	10	—49.0	—43.3	—54.0	—	—
	20	7	27038	27078	26955	7	—40.3	—38.2	—41.9	—	—
	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.

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

JULY — 1966

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)	4896 (31)	567 (31)	-10.8 (1)	5770	512	—	4430	599	...	15890 (2)	117 (2)	-70.7 (2)	17060	95	-73.0	14720	139	-68.4	—	—	—	—
Helwan	5253 (30)	541 (30)	-13.3 (3)	6090	488	—	4240	610	-15.5	16965 (27)	97 (27)	-75.2 (27)	18270	77	-73.3	15170	117	-68.7	15050	132	230	97
Aswan . . (A)	5252 (30)	542 (30)	-12.7 (10)	6040	491	—	4860	582	-11.0	16857 (19)	99 (19)	-75.9 (19)	17800	86	-76.2	15580	123	-72.4	15350	127	140	80
1200 U.T.	(N)	(N)	(N)							(N)	(N)	(N)										
Mersa Matruh (A)	5117 (31)	554 (31)	0.0 (31)	5990	497	—	4360	605	—	16442 (5)	108 (5)	-71.3 (5)	17300	93	-73.6	15620	123	-69.0	12660	196	254	86
Helwan	5513 (30)	526 (30)	-12.5 (1)	6350	474	—	4600	583	—	16824 (23)	101 (23)	-73.8 (23)	17840	86	-77.0	15600	123	-67.4	15810	120	190	85
Aswan . . . (A)	5438 (30)	531 (30)	-14.8 (7)	6240	482	—	4880	559	—	16810 (26)	102 (26)	-74.6 (26)	18330	78	-73.6	15310	128	-72.8	17150	94	120	70

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

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

MERSA MATRUH (A)— JULY 1966

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			
6000 U.T.	Surface	2	11	1	4	0	—	0	—	0	—	0	—	1	1	0	—	0	—	8	5	11	6	7	10	1	31	7
	1000	3	13	2	12	0	—	0	—	0	—	1	5	0	—	0	—	0	—	3	9	11	12	6	15	0	26	12
	850	9	20	4	14	1	14	0	—	0	—	0	—	0	—	0	—	0	—	1	24	8	21	4	27	0	27	21
	700	0	—	1	43	0	—	0	—	0	—	0	—	0	—	0	—	0	—	—	—	1	19	0	—	0	2	31
	600	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	500	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	250	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	15	14	3	10	1	5	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	17	11	16	0	31	14
	1000	5	13	0	—	1	12	0	—	0	—	0	—	0	—	0	—	0	—	0	—	3	21	22	18	0	31	18
	850	3	18	2	21	0	—	0	—	0	—	0	—	0	—	0	—	0	—	4	28	7	22	14	19	0	30	21
	700	8	22	2	12	2	22	0	—	0	—	0	—	0	—	0	—	0	—	3	37	11	29	5	17	0	31	25
	600	5	13	3	12	2	22	0	—	0	—	0	—	0	—	0	—	3	19	7	29	7	28	4	22	0	31	22
	500	4	13	1	17	3	16	0	—	0	—	0	—	0	—	1	30	4	35	11	30	5	32	2	14	0	31	26
	400	1	11	0	—	1	10	0	—	0	—	0	—	1	27	0	—	11	29	7	37	6	31	2	9	0	29	29
	300	0	—	1	31	1	5	0	—	0	—	0	—	0	—	1	24	10	36	10	46	2	16	0	—	0	25	36
	200	0	—	0	—	0	—	0	—	1	8	0	—	0	—	1	24	7	29	7	37	0	—	0	—	0	16	31
	150	0	—	0	—	0	—	0	—	1	15	0	—	1	15	5	19	2	16	0	—	0	—	0	—	0	9	18
	100	0	—	0	—	0	—	1	25	2	17	1	24	0	—	1	10	0	—	0	—	0	—	0	—	0	5	19
	70	0	—	0	—	0	—	0	—	1	39	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	39
	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 dirictions 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—JULY 1966

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	17	8	6	8	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	2	6	5	30	6
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	9	13	10	15	3	13	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	12	7	15	0	30	14
	700	5	11	1	13	1	9	0	—	1	5	1	11	0	—	1	10	1	16	4	16	4	14	11	11	0	30	12
	600	3	10	2	15	1	14	0	—	1	3	0	—	1	19	1	5	1	17	10	16	5	12	5	16	0	30	14
	500	1	11	1	22	1	11	0	—	0	—	0	—	0	—	1	13	9	20	9	18	4	14	4	17	0	30	17
	400	0	—	0	—	0	—	0	—	1	3	0	—	1	2	7	18	9	24	9	19	2	14	1	14	0	30	19
	300	1	9	0	—	0	—	0	—	1	3	0	—	1	7	13	22	5	20	6	22	2	16	1	7	0	30	19
	200	0	—	1	7	0	—	0	—	1	6	2	8	7	37	7	28	5	14	4	23	1	34	0	—	0	28	24
	150	0	—	0	—	0	—	0	—	4	16	2	24	10	30	8	27	3	35	1	8	0	—	0	—	0	28	27
	100	0	—	0	—	0	—	0	—	6	26	4	25	7	36	3	30	0	—	0	—	0	—	0	—	0	20	30
	70	0	—	0	—	0	—	4	29	5	24	2	23	2	18	0	—	0	—	0	—	0	—	0	—	0	13	25
	60	0	—	0	—	2	24	8	19	2	28	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	12	22
	50	0	—	0	—	1	31	8	29	2	27	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	11	29
	40	0	—	0	—	2	44	5	37	2	28	0	—	0	—	0	—	1	14	0	—	0	—	0	—	0	10	35
	30	0	—	0	—	1	42	4	42	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	5	42
	20	0	—	0	—	0	—	2	46	1	54	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	3	49
	10	0	—	0	—	0	—	0	—	1	75	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	75
0000 U. T.	Surface	17	15	2	11	0	—	0	—	0	—	0	—	0	—	0	—	0	—	1	7	1	10	9	10	0	30	10
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	8	12	9	13	1	6	1	9	1	8	0	—	0	—	0	—	0	—	2	10	3	11	5	15	0	30	12
	700	7	6	1	5	1	6	3	9	0	—	0	—	1	9	1	13	3	13	3	13	5	18	5	17	0	30	12
	600	3	8	1	10	0	—	1	24	0	—	1	12	0	—	1	8	7	16	5	11	8	14	3	9	0	30	13
	500	1	12	3	13	1	3	0	—	0	—	0	—	0	—	2	18	9	17	7	22	7	16	0	—	0	30	17
	400	0	—	0	—	0	—	1	3	0	—	0	—	0	—	7	19	11	21	6	21	3	17	2	16	0	30	19
	300	1	5	0	—	0	—	0	—	2	8	0	—	4	13	8	25	8	22	5	19	2	18	0	—	0	30	19
	200	1	15	1	11	1	22	0	—	0	—	4	16	6	29	7	27	5	30	2	14	0	—	2	14	0	29	24
	150	0	—	0	—	0	—	0	—	6	25	5	21	9	31	2	15	1	24	0	—	0	—	1	10	0	24	25
	100	0	—	0	—	0	—	6	22	4	28	7	35	4	37	0	—	0	—	0	—	0	—	0	—	0	21	30
	70	0	—	0	—	0	—	3	33	11	38	0	—	0	—	0	—	1	43	0	—	0	—	0	—	0	15	37
	60	0	—	0	—	0	—	4	29	5	36	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	9	33
	50	0	—	0	—	0	—	4	25	2	34	1	25	0	—	0	—	0	—	0	—	0	—	0	—	0	7	27
	40	0	—	0	—	1	28	2	35	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	3	33
	30	0	—	0	—	0	—	2	41	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	2	41
	20	0	—	0	—	1	24	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	1	24
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

TN = 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 — 1966

Time	Pressure Surface Millibar	Wind between specified ranges of direction (000—300)°																						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	9	1	8	0	—	0	—	0	—	0	—	0	—	0	—	1	8	2	6	2	6	7	10	0	30	9
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	12	10	2	14	0	—	1	13	0	—	1	9	3	3	3	8	2	6	2	7	2	15	1	7	0	29	9
	700	2	8	1	13	0	—	0	—	0	—	2	12	6	17	7	11	8	15	1	27	0	—	2	14	0	29	14
	600	2	6	1	9	2	10	0	—	0	—	0	—	2	22	10	15	4	14	4	11	3	10	1	13	0	29	13
	500	2	10	3	6	5	11	3	7	3	13	2	8	4	17	0	—	3	9	0	—	2	6	2	6	0	29	10
	400	4	10	3	10	4	14	8	9	3	12	3	6	0	—	1	3	0	—	0	—	2	12	1	4	0	29	10
	300	1	5	1	2	0	—	7	15	9	16	7	15	4	8	0	—	0	—	0	—	0	—	0	—	0	29	14
	200	1	13	0	—	2	24	4	23	14	22	6	25	0	—	0	—	0	—	0	—	0	—	0	—	0	27	23
	150	0	—	0	—	1	28	3	32	16	35	2	44	0	—	0	—	0	—	0	—	0	—	0	—	0	22	34
	100	0	—	0	—	0	—	10	43	17	48	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	27	46
	70	0	—	0	—	2	32	11	38	2	38	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	15	38
	60	0	—	0	—	1	18	13	36	1	37	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	15	35
	50	0	—	0	—	2	30	11	41	1	40	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	14	39
	40	0	—	0	—	1	53	5	46	1	43	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	7	47
	30	0	—	0	—	0	—	2	57	1	46	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	3	53
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1200 U.T.	Surface	6	12	0	—	0	—	0	—	0	—	0	—	0	—	1	8	4	7	4	8	5	9	6	8	5	31	7
	1000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	850	1	16	1	3	0	—	0	—	0	—	1	10	2	2	3	10	5	8	10	10	4	17	4	13	0	31	11
	700	1	12	1	10	0	—	0	—	0	—	3	15	2	20	8	16	7	15	5	17	2	21	1	7	0	30	16
	600	1	8	3	13	1	14	1	18	0	—	2	16	4	19	6	15	4	10	3	12	2	8	3	8	0	30	13
	500	1	3	4	9	4	8	3	9	4	15	2	10	3	7	0	—	2	8	3	4	2	9	1	12	0	29	9
	400	0	—	3	13	3	10	7	12	6	15	5	11	1	6	1	4	1	1	0	—	1	7	0	—	0	28	12
	300	1	6	3	15	2	14	5	16	14	15	0	—	1	11	0	—	0	—	1	2	0	—	1	6	0	28	14
	200	0	—	0	—	1	20	8	28	14	26	3	25	2	28	0	—	0	—	0	—	0	—	0	—	0	28	16
	150	0	—	0	—	1	37	9	29	10	34	4	41	1	20	0	—	0	—	0	—	0	—	0	—	0	25	33
	100	0	—	0	—	1	42	11	41	10	48	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	22	44
	70	0	—	0	—	0	—	9	43	6	40	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	15	42
	60	0	—	0	—	0	—	7	40	4	42	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	11	40
	50	0	—	0	—	0	—	7	38	2	37	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	9	38
	40	0	—	0	—	1	28	2	37	3	41	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	6	38
	30	0	—	0	—	1	8	5	41	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	—	0	6	35
	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

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

REVIEW OF AGRO-METEOROLOGICAL STATIONS

EL KASR — JULY 1966

This month was normal with respect to mean daily air temperature at 2 metres above ground.

The extreme maximum soil temperatures were 1.1°C to 7.0°C higher than the corresponding values of July 1965 for depths 0.3 to 10 cm ; and 0.4°C to 0.7°C lower for other depths. The extreme minimum soil temperatures ranged from 0.7°C less to 0.4°C more than the corresponding values of last July.

Mean daily wind speed at 2 metres above ground was 0.5 m/sec. lower than the corresponding value of July 1965. Mean daily values of Piche evaporation and pan evaporation were 3.1 mm and 1.44 mm respectively lower than the corresponding values of last July. Total actual duration of bright sunshine was 2.7 hours lower than the corresponding value of July 1965.

TAHRIR — JULY 1966

This month was rather mild with respect to air temperature and relative humidity. Mean daily air temperature and mean daily relative humidity at 2 metres above ground were lower than the corresponding values of July 1965 by 0.1°C and 1% respectively. The extreme maximum soil temperatures at all depths were generally lower than the corresponding values of July 1965, the maximum difference was —2.8°C at 1 cm depth. The extreme minimum soil temperatures showed positive and negative differences from the corresponding values of last July. These differences varied between + 1.0°C at 1 cm depth and —0.5°C at 100 cm depth.

For the month as a whole, the mean daily values of wind speed at 2 metres above ground, and pan evaporation were lower than the corresponding values of July 1965 by 0.1 m/sec and 0.25 mm respectively. Mean daily Piche evaporation was equal to the corresponding value of last July. The total actual duration of bright sunshine was 1.7 hours higher than the corresponding value of July 1965.

GIZA — JULY 1966

This month was rather mild with respect to air temperature and relative humidity. The mean daily air temperatures at 2 metres above ground was 0.1°C below normal, while the mean daily relative humidity was 3% above normal. The month was characterised by two mild spells in the periods 1st to 8th and 11 th to 18th A heat wave occurred in the period 19th to 24th with the peak on the 23rd which was associated with the absolute maximum air temperature for the month.

The extreme maximum soil temperatures in the dry field at all depths apart from 5 and 10 cm were lower than the corresponding values of July 1965. The maximum difference was 6.6°C at 2 cm depth. At 5 and 10 cm depth the values were higher than the corresponding values of last July by 1.9 and 0.9°C respectively. The extreme minimum soil temperatures in the dry field from surface down to 10 cm depth were higher than the corresponding values of July 1965, the maximum difference was 4.0°C at 1 cm depth. For futher depths down to 100cm the values were 0.1°C lower than the corresponding values of July 1965.

For the month as a whole the mean daily values of wind speed at 2 metres above ground, Piche evaporation, pan evaporation and potential evapotranspiration for grass were lower than the corresponding values of July 1965. The differences were —0.3 m/sec., —0.2, —0.13 mm and —0.6 mm respectively. Total actual duration of bright sunshine was 2.6 hours lower than the corresponding value of last July.

KHARGA — JULY 1966

This month was warmer than normal. The mean daily air temperature at 2 metres above ground was 1.3°C above normal. The month was characterised by a mild spell between the 3rd and 8th with its peak on the 5th, and a heat wave between the 19th and the 25th with its peak on the 24th giving rise to the absolute maximum air temperature of the month.

The extreme maximum soil temperatures in the dry field at all depths were higher than the corresponding values of July 1965, the maximum difference was 2.5°C at 0.3 cm depth. Compared with the corresponding values of last July, the extreme minimum soil temperatures at 1 cm and 10 cm depths were higher, while the values at 2, 5, 20, 50 cm depths were lower and the values at the depths 0.3 and 100 cm were the same. The extreme differences were + 0.2°C and — 0.6°C at 1 cm and 5 cm respectively.

The mean daily value of wind speed at 2metres above the ground was 0.8 m/sec. higher than the corresponding value of July 1965. The mean daily values of Piche and pan evaporation were higher than the corresponding valus of last July by 3.0 and 2.82 mm respectively. The total actual duration of bright sunshine was the same as the corresponding value of July 1965.

Table C 1.—AIR TEMPERATURE AT 2 METRES ABOVE GROUND
JULY — 1966

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
El Kasr	28.9	20.1	25.0	22.6	26 5	24.0	24.0	24.0	24.0	24.0	22.6	11.3	0.0	0.0	0.0	0.0
Tahrir	34.5	20.2	26 7	23.1	29.3	24.0	24.0	24.0	24.0	24.0	23.0	13.4	7.2	1.0	0.0	0.0
Giza	34.3	20.8	27.2	24.3	29.2	24.0	24.0	24.0	24.0	24.0	23.5	14.1	7.7	0.7	0.0	0.0
Kharga	39.8	24 5	32.6	29.8	34.8	24.0	24.0	24.8	24.0	24.0	24.0	22.9	15.2	8.1	1.7	0.0

Table C 2.—ABSOLUTE VALUES OF AIR TEMPERATURE AT 2 METRES ABOVE GROUND, ABSOLUTE MINIMUM AIR TEMPERATURE AT 5cms ABOVE GROUND OVER DIFFERENT FIELDS.
JULY — 1966

STATION	Max. Temp. at 2 metres (°C)				Min. Temp. at 2 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
El Kasr	30.8	19	27.4	5	23.7	17	17.1	1	12.0	20	—	—
Tahrir	38.8	23	31.2	4	22.4	22	18.2	1	16.2	7	—	—
Giza	38.2	23	31.2	13	23.5	19	18.3	8	15.8	15	13.4	14
Kharga	45.3	24	35.2	5	29.0	21	18.9	10	17.2	10	—	—

Table C 3 —(SOLAR+SKY) RADIATION, DURATION OF BRIGHT SUNSHINE, RELATIVE HUMIDITY, VAPOUR PRESSURE AT 2 METRES ABOVE GROUND, EVAPORATION & RAINFALL.
JULY — 1966

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	%	Duration in hours 90 %	Duration in hours > 80 %	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
El Kasr. .	589.7	388.1	433.3	90	—	—	77	70	55	19	18.8	19.7	23.5	23	15.2	19	9.3	9.92	0.0	0.0	—
Tahrir . .	687.3	383.7	431 2	89	5	9	67	37	25	20	16.7	14.4	22.1	23	10.1	5	14.4	11.69	0.0	0.0	—
Giza . . .	679.9	364.1	4 9.9	85	1.2	6.0	62	37	19	30	15.9	14.3	21.5	24	8.1	30	15.5	11.86	0.0	0.0	—
Kharga . .	581.0	391.7	418.7	94	0	0	24	14	8	20	8.3	7.5	13.8	19	4.0	10	45.1	23.82	0 0	0.0	—

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

JULY — 1966

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.)									
		0.3	1	2	5	10	20	50	100	200	300	0.3	1	2	5	10	20	50	100	200	300
El Kasr . . .	H	54.7	46.0	45	41.0	36 4	30.8	28.2	26.3	23 9	—	—	—	—	—	—	—	—	—	—	—
	L	17.3	18.5	18.9	20.6	23.7	25.8	26.6	25.1	22.7	—	—	—	—	—	—	—	—	—	—	—
Tahrir	H	57.0	55.2	51.3	48.7	43 2	37.1	33.4	31.4	8 9	27 3	—	—	—	—	—	—	—	—	—	—
	L	18.7	19.8	19.8	26 2	26 2	26.8	30.6	30.0	27 5	26 0		—	—	—	—	—	—	—	—	—
Giza	H	62.3	58.6	57.0	46 9	40.4	35.0	33.4	31.2	27 6	25.6	40 4	35.3	33.4	32.4	30 5	28.6	27 8	25.7	23.5	—
	L	20.0	21.7	22.1	26.2	29 8	31.8	32.0	29.8	26 2	24 6	19 8	20.8	21.0	23.0	24.3	26.0	26 1	24 2	22.3	—
Kharga. . . .	H			55.8	50.7	42.8	38 0	35.3	33.0	30 3	28.8	—	—	—	—	—	—	—	—	—	—
	L			23.0	26.0	30.3	32.3	33.2	31.8	29 3	27.8	—	—	—	—	—	—	—	—	—	—

TABLE C 5.—SURFACE WIND

JULY — 1966

STATION	Wind Speed m/sec (2 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
El Kasr	4.1	3.3	5.7	—	—	—	—	—	—	—	—	—
Tahrir	3.1	2 0	4.1	31	12	1	0	0	0	0	28	—
Giza	2.5	2.1	3.0	31	14	0	0	0	0	0	24	4.8
Kharga	5.3	4.2	6.7	31	29	13	8	2	0	0	40	3

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