GOVERNMENT OF IRAQ

MINISTRY OF DEFENCE.

—:o:—

653606

Iraq.

Meteorological Service

Climatological Atlas for Iraq.

Publication No. 8

G
2251
.C8
I7
1945

LIBRARY
N.O.A.A.
U.S. Dept. of Commerce

Baghdad
Printed by Survey Department
Ministry of Communications and Works,
1945.

88602

National Oceanic and Atmospheric Administration

Environmental Data Rescue Program

ERRATA NOTICE

One or more conditions of the original document may affect the quality of the image, such as:

Discolored pages
Faded or light ink
Binding intrudes into the text

This document has been imaged through the NOAA Environmental Data Rescue Program. To view the original document, please contact the NOAA Central Library in Silver Spring, MD at (301) 713-2607 x124 or www.reference@nodc.noaa.gov.

Information Manufacturing Corporation
Imaging Subcontractor
Rocket Center, West Virginia
September 14, 1999

CONTENTS.

		PAGES.
Mean Isobars at 0200 GMT	..	1—12
Mean Isobars at 0600 GMT	..	13—24
Mean Isobars at 1300 GMT	..	25—36
Mean Daily Maximum Temperature	..	37—48
Mean Daily Minimum Temperature	..	49—60
Mean Daily Vapour Pressure	..	61—72
Mean Isohyets (Rainfall)	..	73—80
Seasonal Rainfall	..	81
Duration of Daylight	..	82
Tracks of Depressions	..	83—90
Frequency of Surface Wind from Specified Directions—Baghdad	..	91—96
Frequency of Surface Wind from Specified Directions—Basra	..	97—102
Mean Vector Wind at Baghdad Airport	..	103—108

PREFACE.

The project of publishing synonymously Climatological Means for Iraq together with a climatological atlas presenting much of this data in graphic form was originally undertaken by Mr. J. S. Farquharson, Director of the Iraq Meteorological Service from 1940 to 1942.

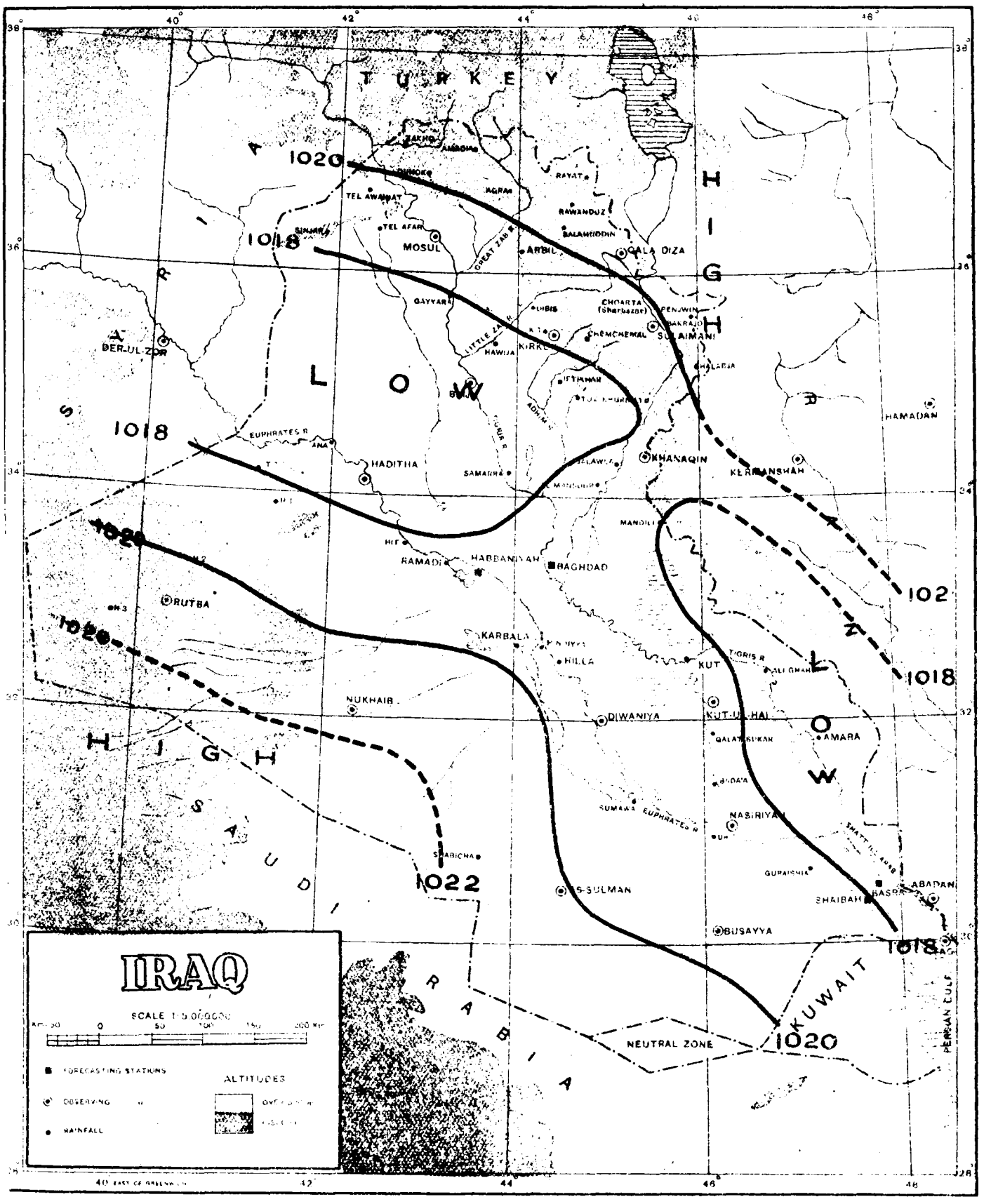
The former was completed and published in 1942; difficulties and delays in obtaining a supply of the requisite paper during wartime have prevented publication of the Atlas and it was not until August 1944 that stocks became available.

The charts were prepared almost entirely from the data published in the Climatological Means, Iraq Meteorological Service Publication No.7. The sources of this data are enumerated in detail in that publication, and attention is again drawn to the fact that data, based on long series of homogeneous meteorological observations made under standard conditions was not available, and many of the mean values based on short term observations are subject to considerable statistical error. Nevertheless the data presented gives a fairly accurate picture of norm conditions.

The fullest acknowledgement is tendered to Mr. J. S. Farquharson who conceived and supervised the preparation of the Atlas and to Mr. Mikhail Alaka who prepared most of the charts, the remainder being drawn by Mr. Fattah and Mr. Mukammal. I also wish to acknowledge the efforts of my predecessor F/Lt L. G. Cameron whose initiative resulted in publication being undertaken under difficult wartime conditions. My thanks are also due to the Director and staff of the Surveys Department for their close cooperation in the printing of the far from simple plates.

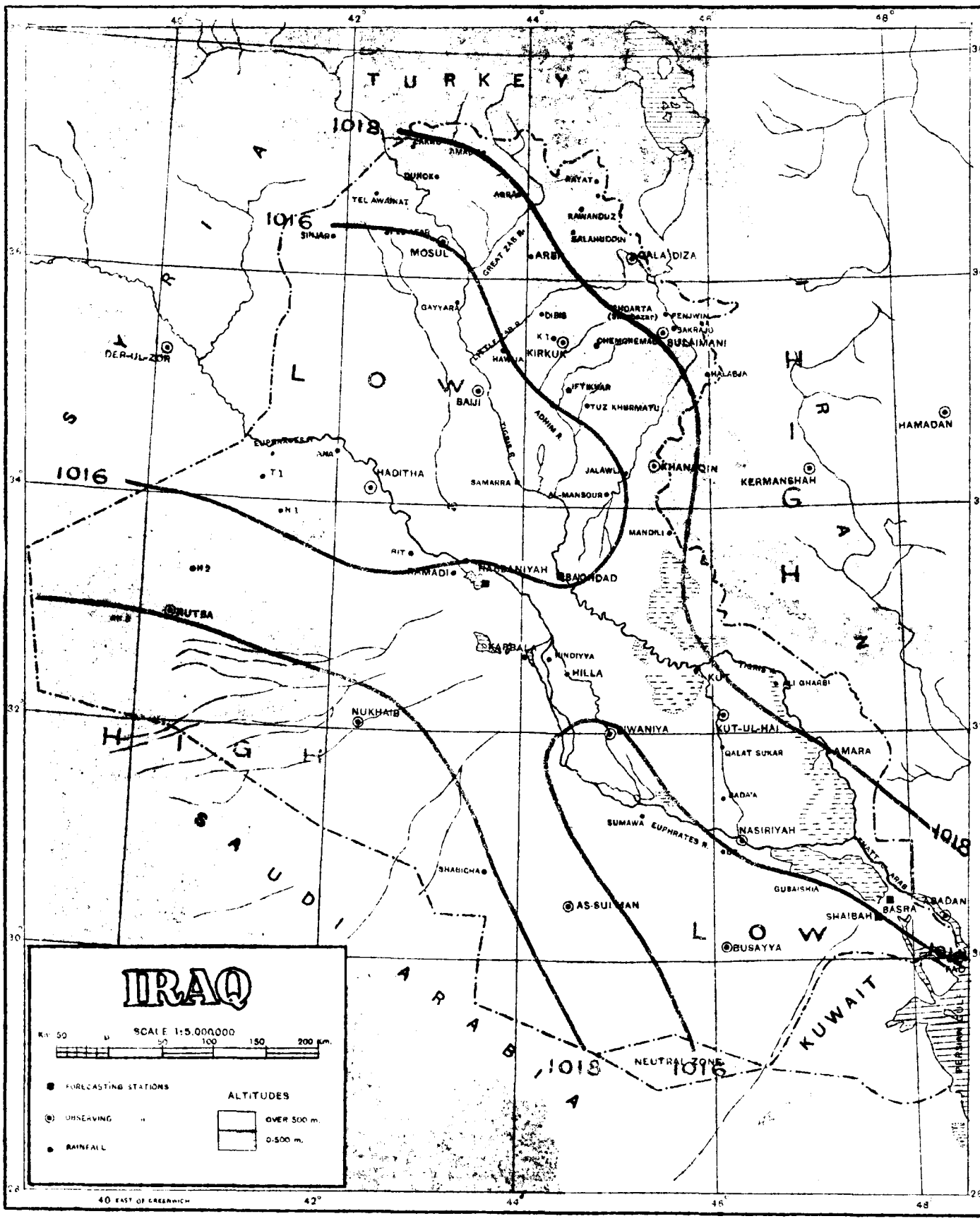
D. F. Booth F/Lt.
Senior Meteorological Officer
Baghdad Airport.

Mean Pressure at 0200 G.M.T. in Millibars at M.S.L January



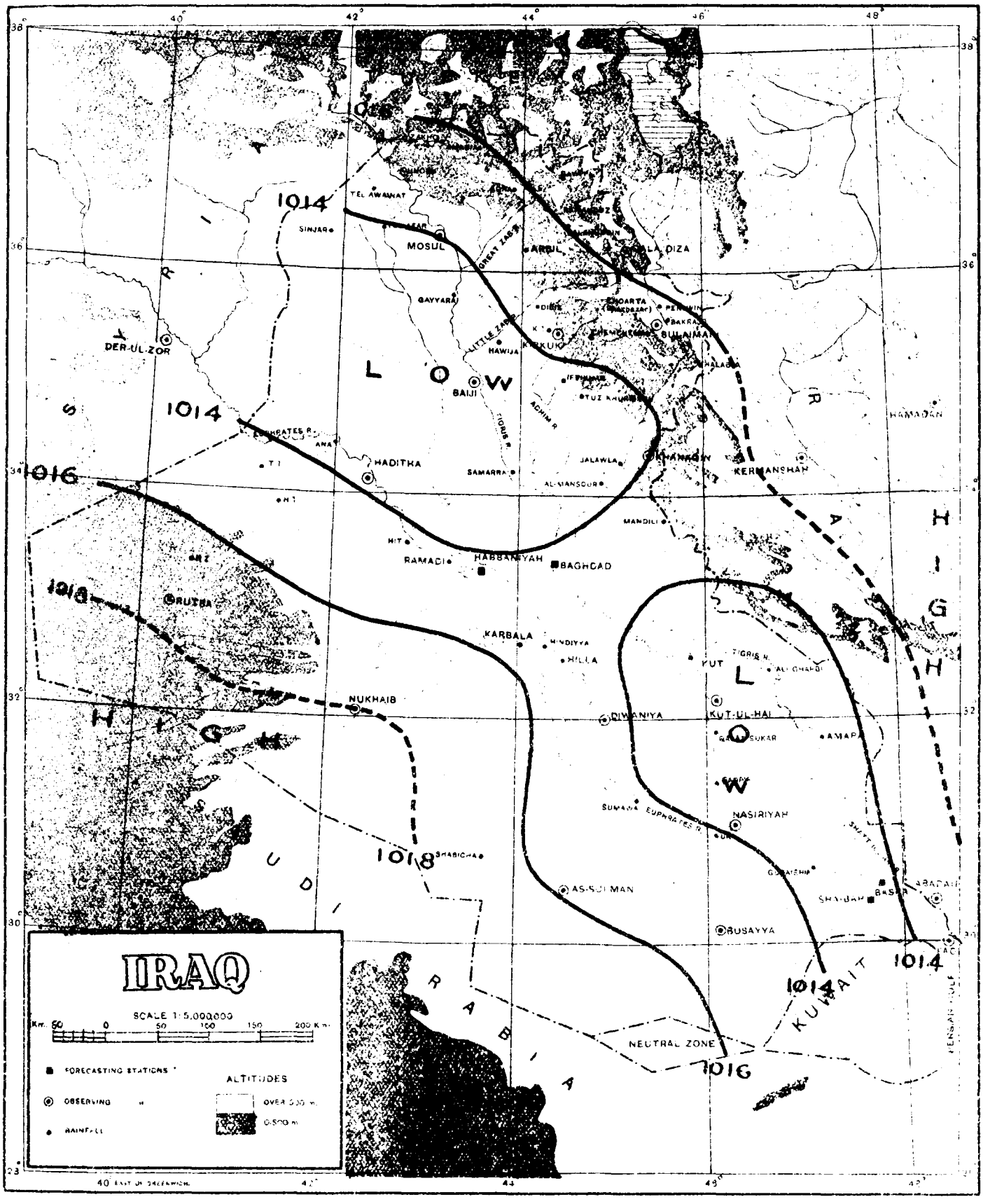
SURVEY PRESS, BAGHDAD

Mean Pressure at 0200 G.M.T. in Millibars at M.S.L. February



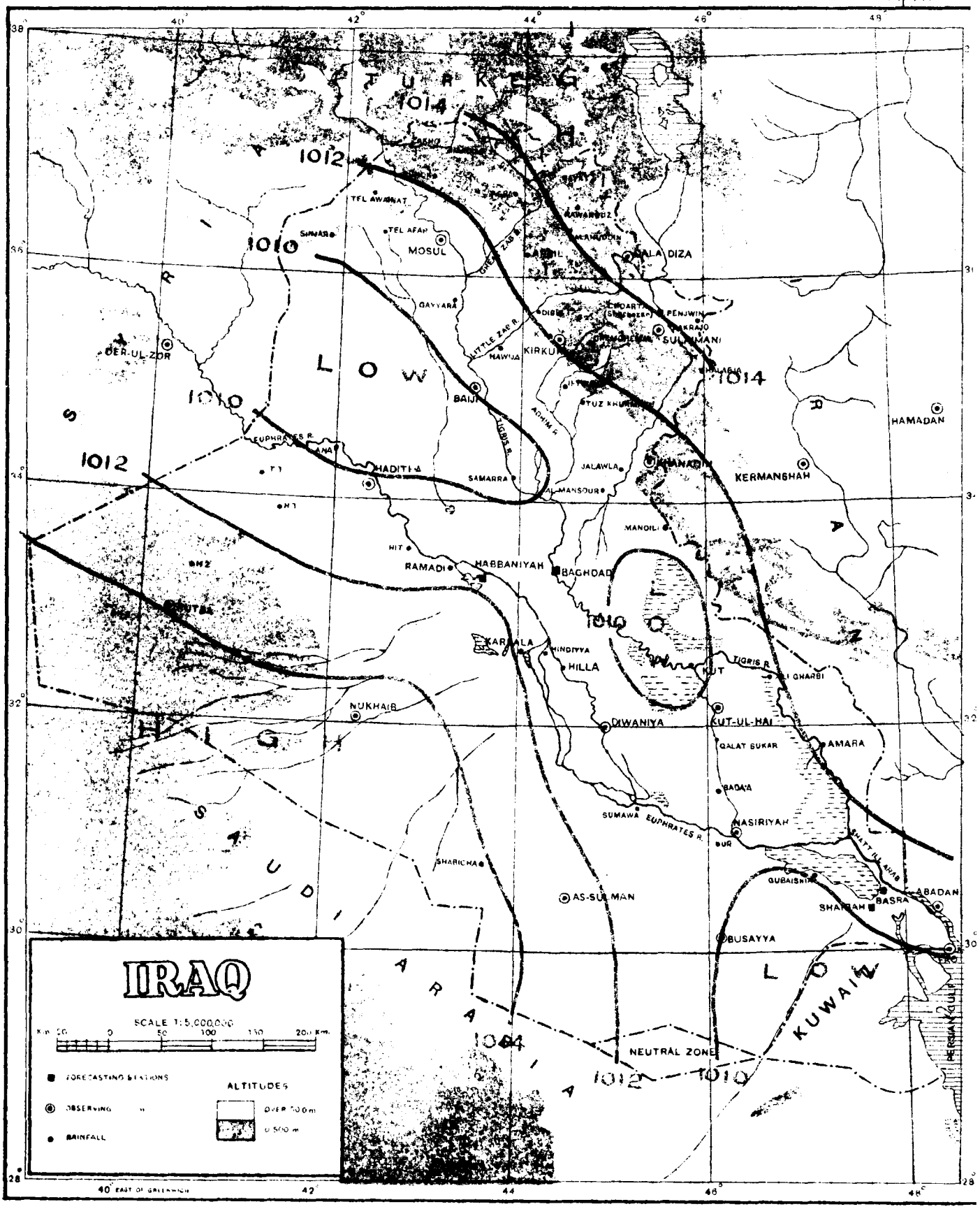
SURVEY PRESS, BAGHDAD.

Mean Pressure at 0200 G.M.T. in Millibars at M.S.L. March



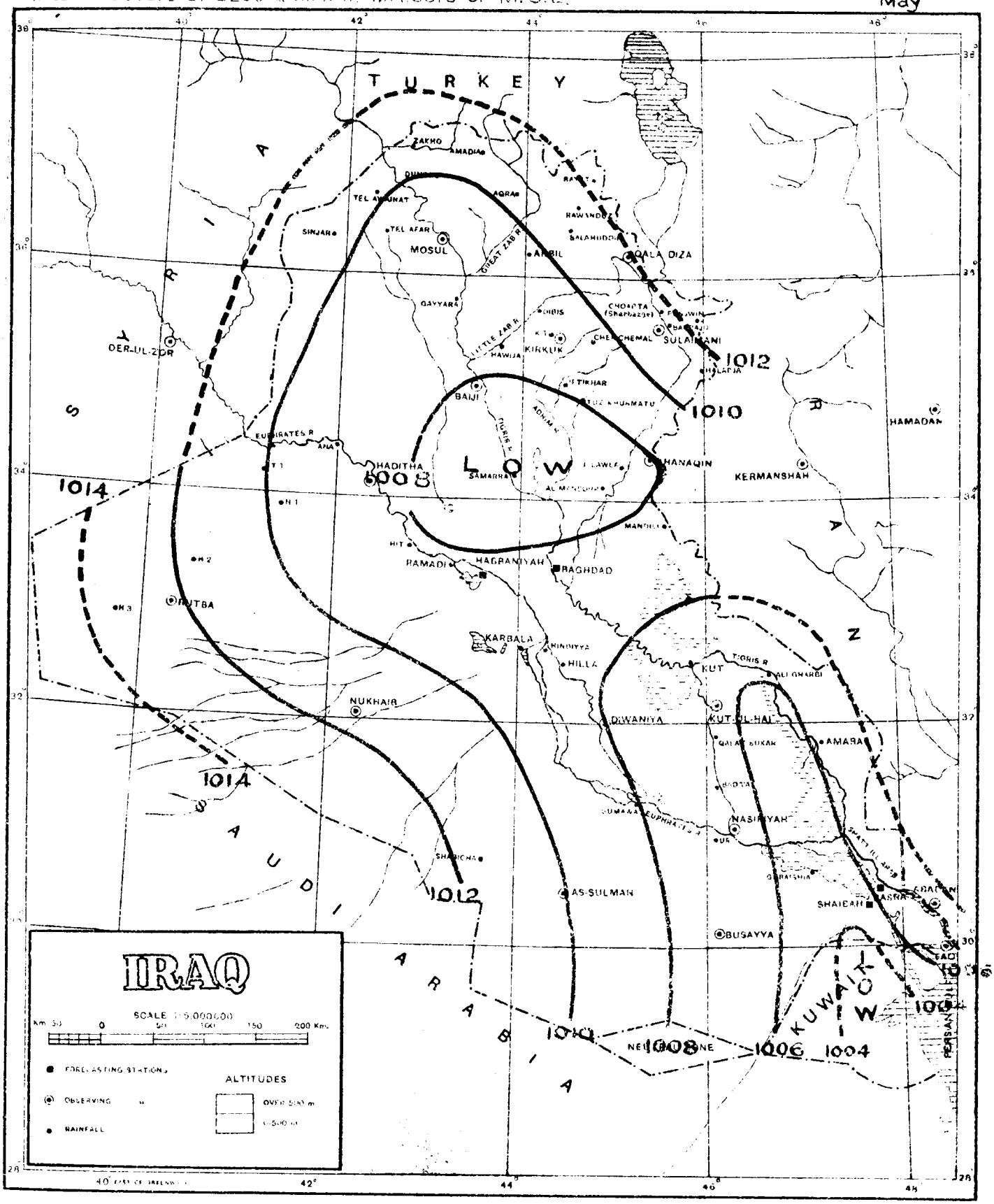
SURVEY PRESS BAGHDAD

Mean Pressure at 0200 G.M.T. in Millibars at M.S.L. April



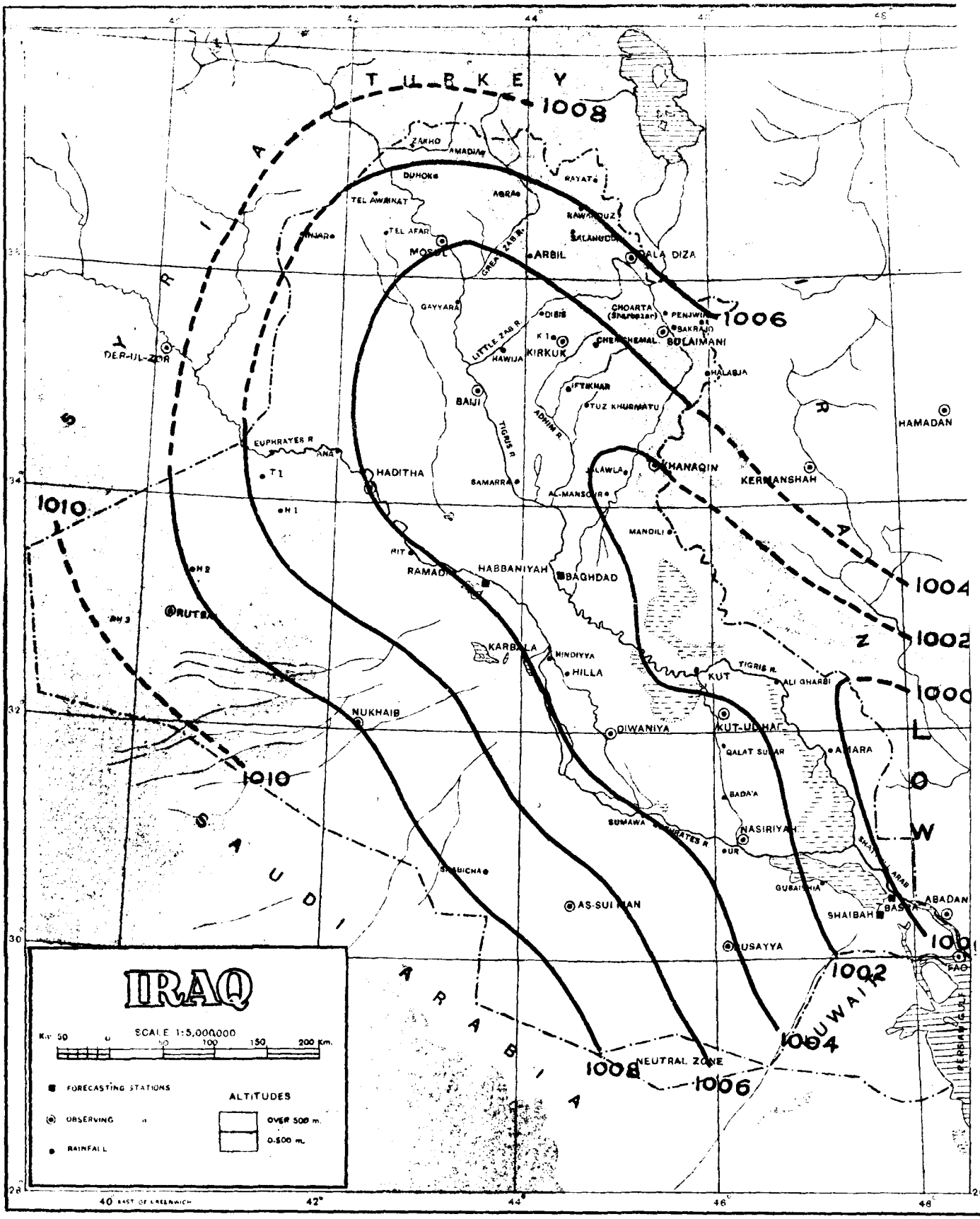
SURVEY PRESS, BAGHDAD

Mean Pressure at 0200 G.M.T. in Millibars at M.S.L. May



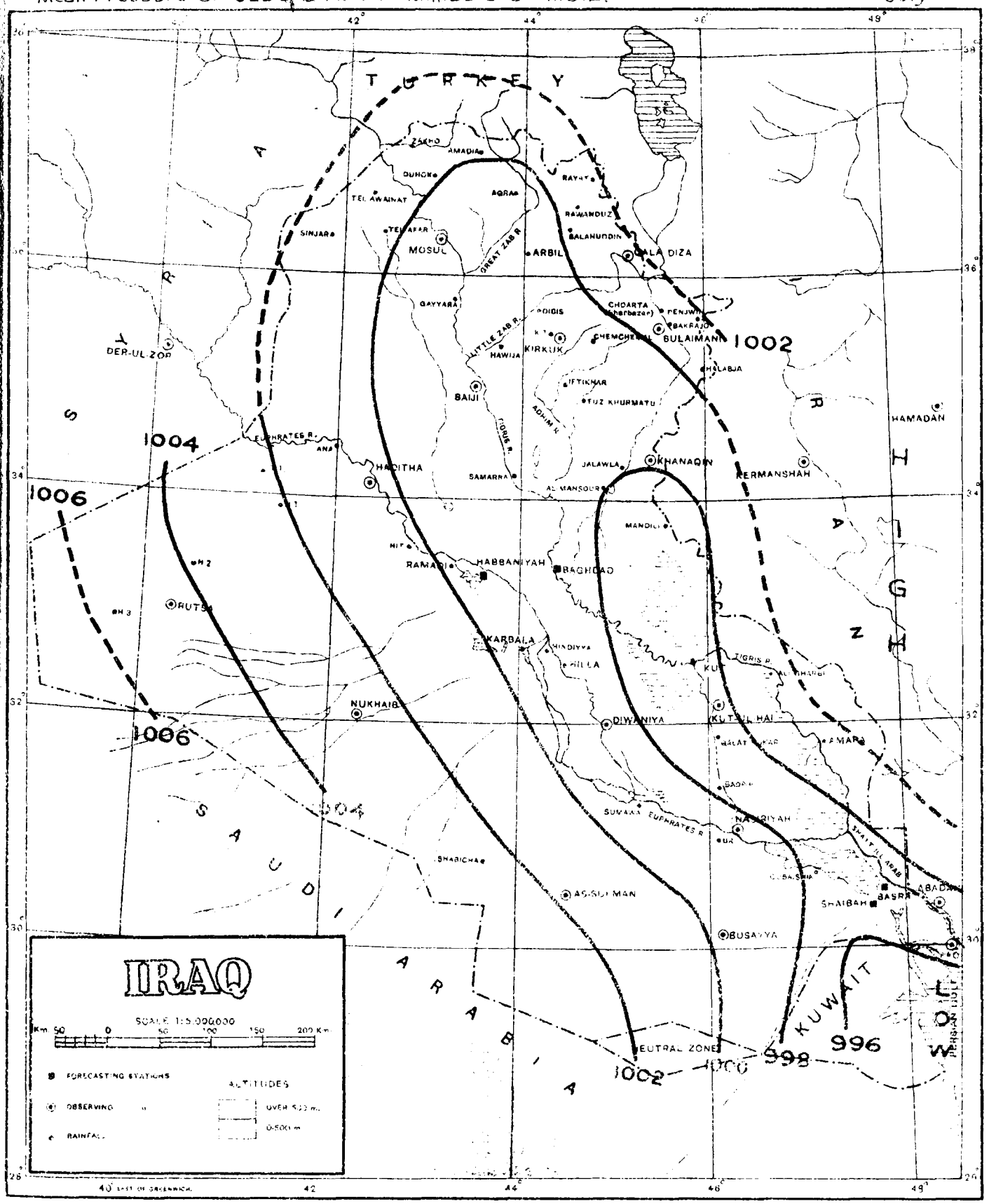
SURVEY PRESS, BAGHDAD

Mean Pressure at 0200 G.M.T. in Millibars at M.S.L. June



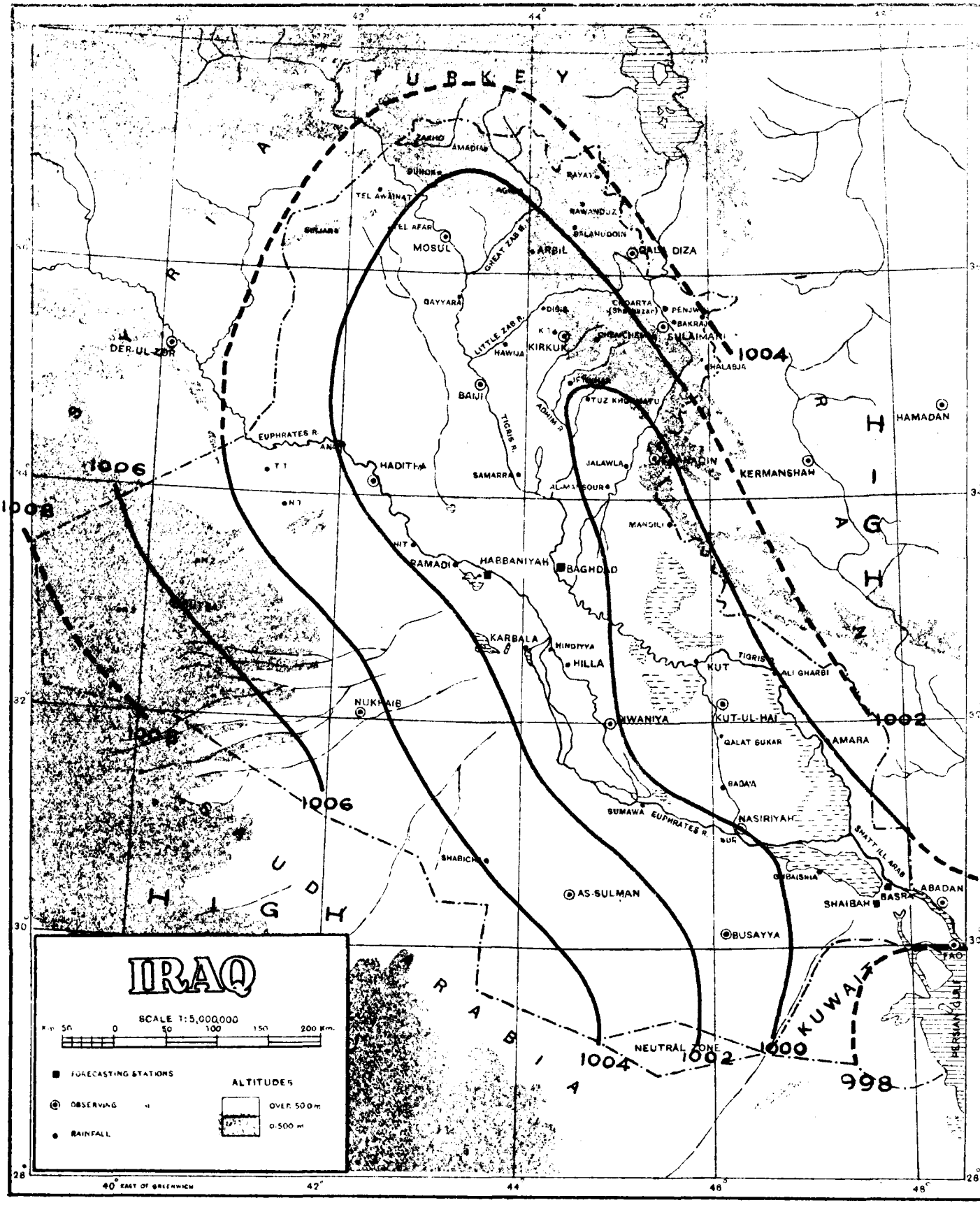
SURVEY PRESS, BAGHDAD

Mean Pressure at 0200 G.M.T. in Millibars at M.S.L. July



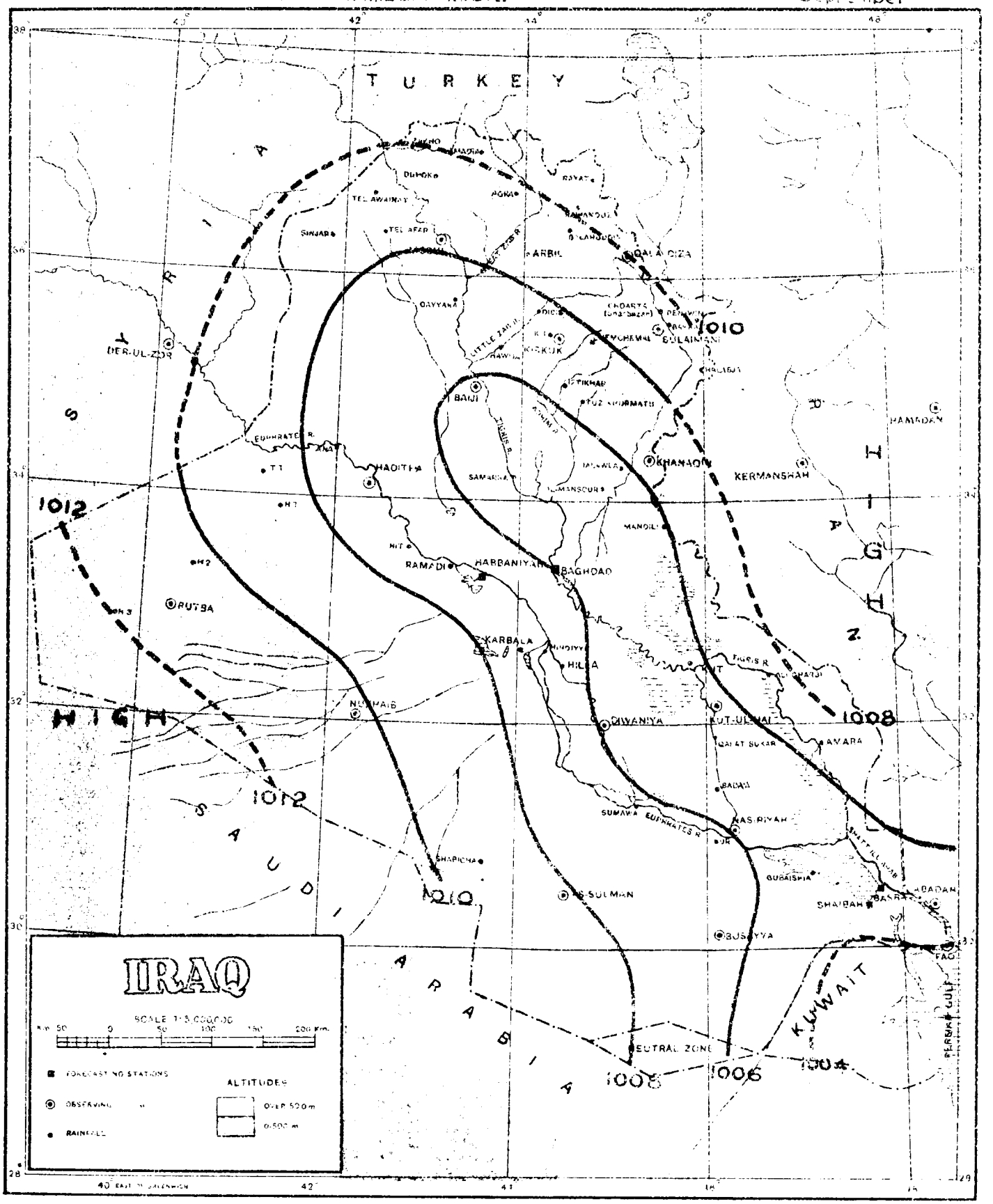
SURVEY PRESS, BAGHDAD

Mean Pressure at 0200 G.M.T. in MilliBars at M.S.L. August



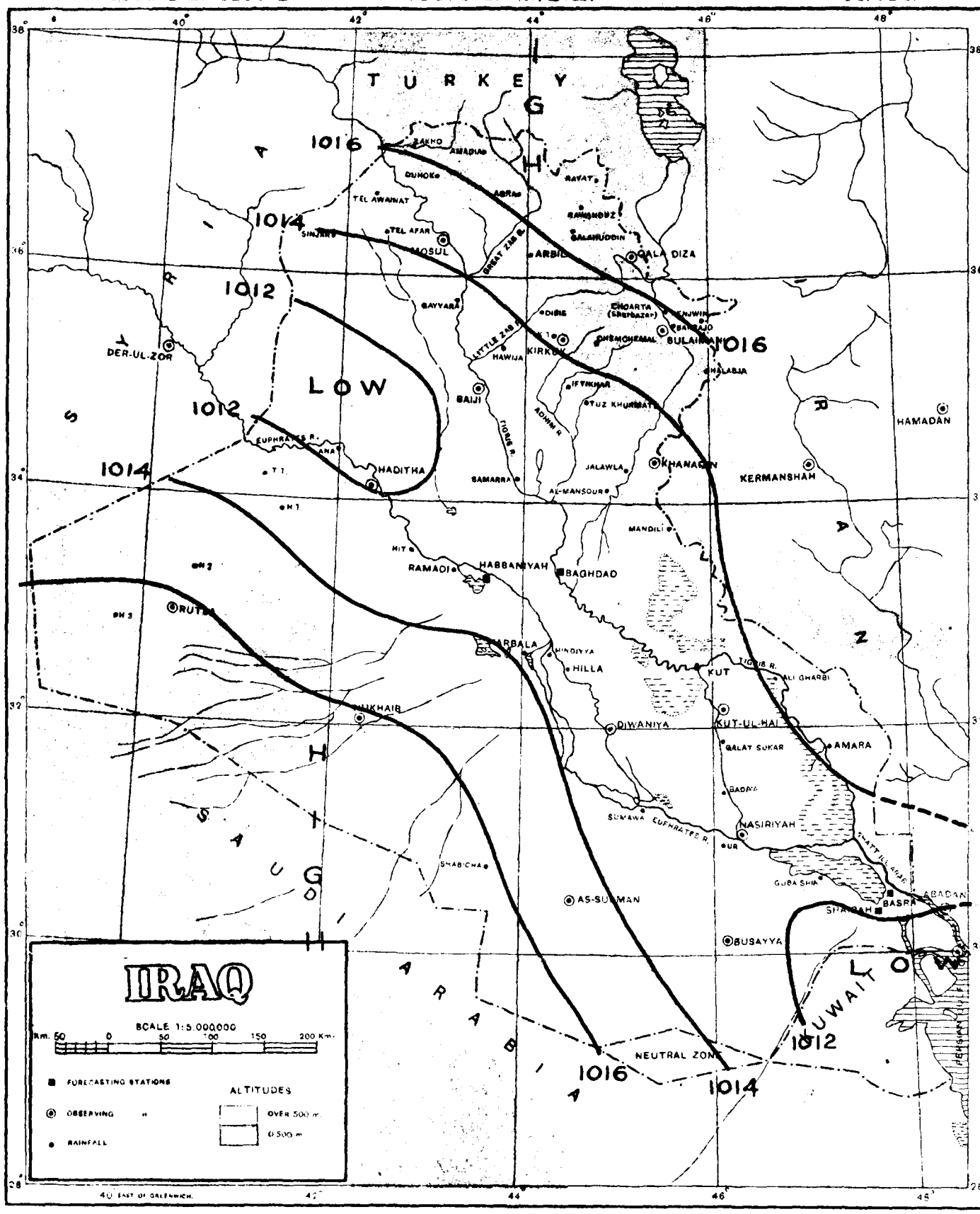
SURVEY PRESS, BAGHDAD

Mean Pressure at 0200 G.M.T. in Millibars M.S.L. September



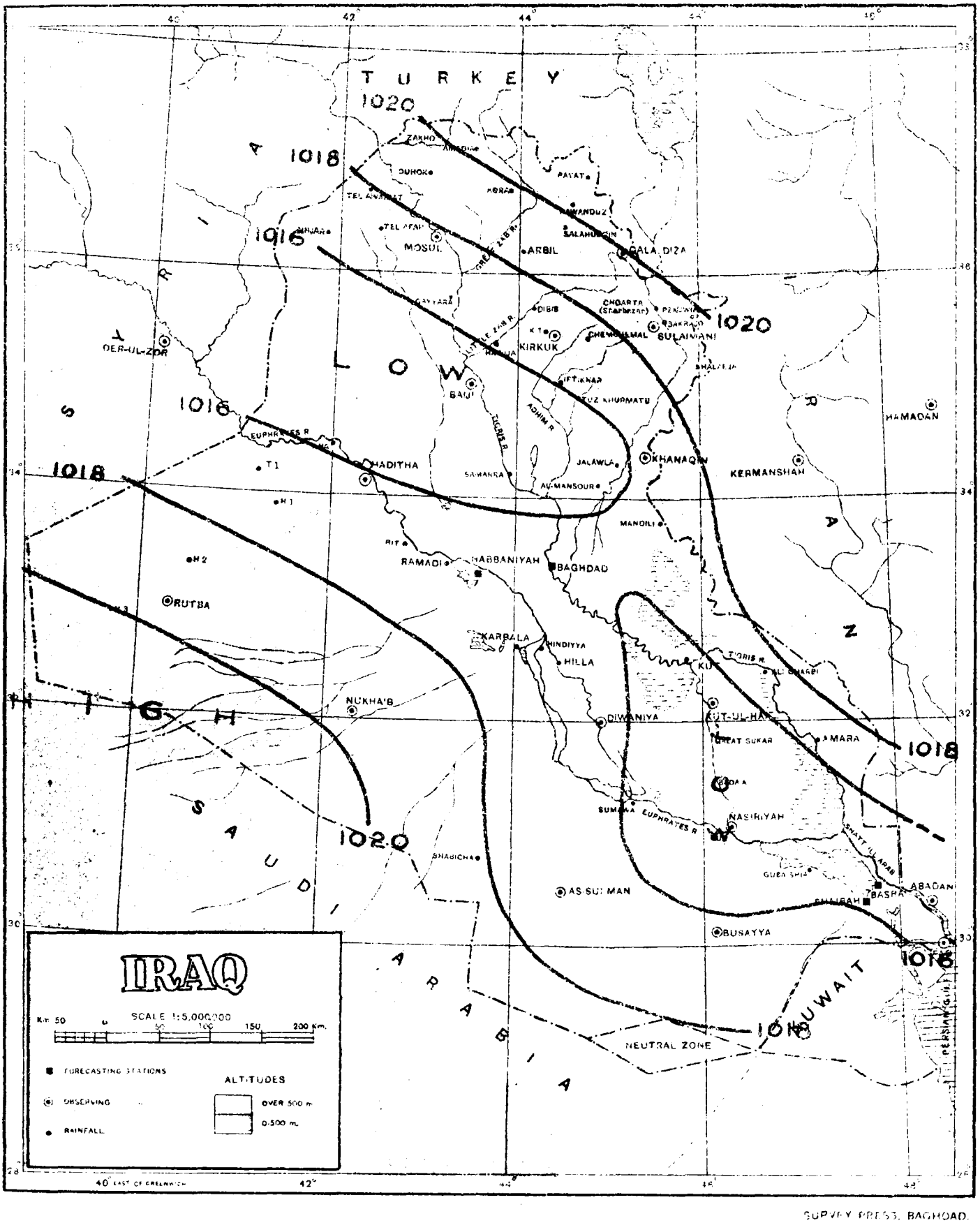
SURVEY PRESS, BAGHDAD

Mean Pressure at 0200 G.M.T. in Millibars at M.S.L. October



SURVEY PRESS, BAGHDAD.

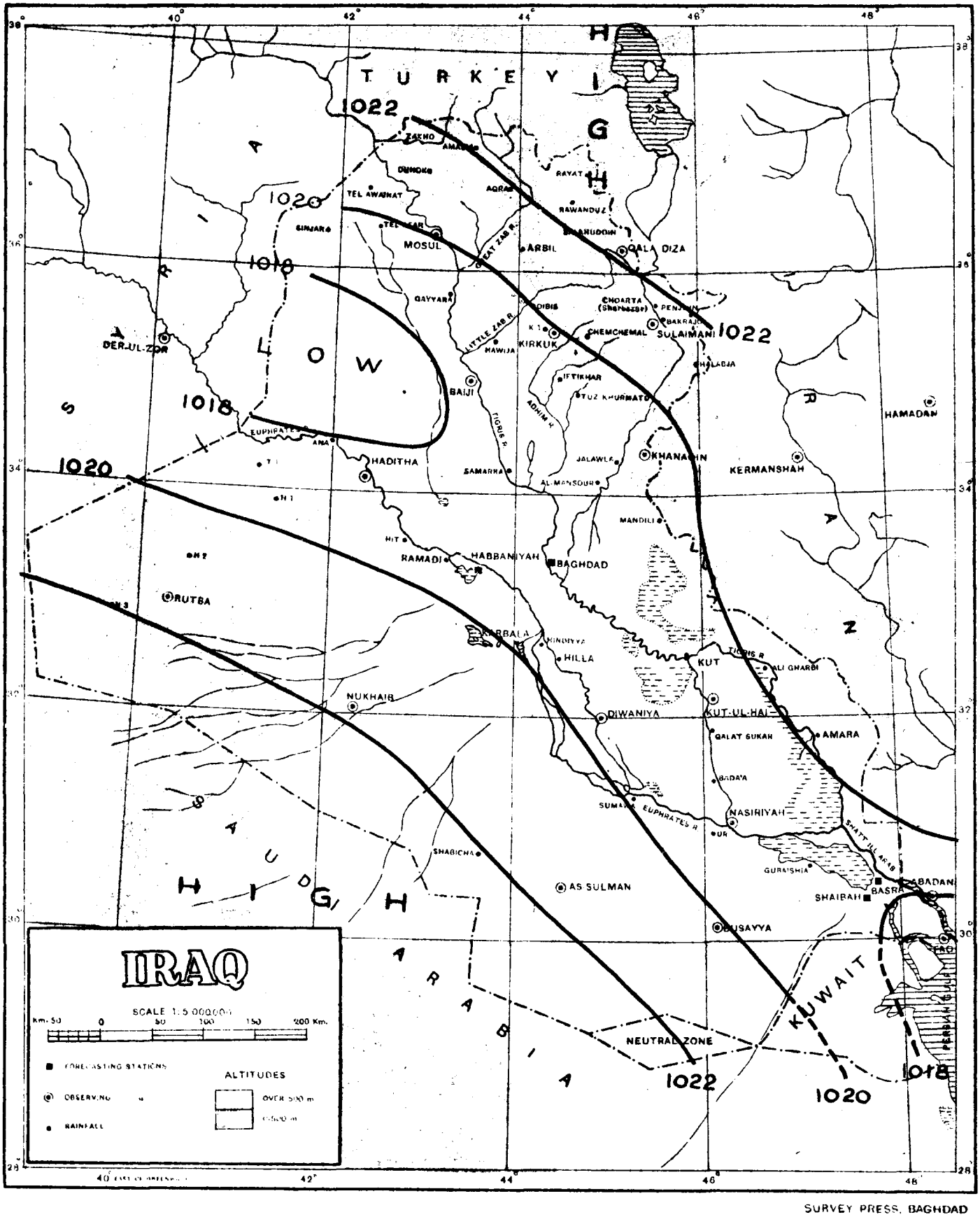
Mean Pressure at 0200 G.M.T. in Millibars at M.S.L. November



SURVEY PRESS, BAGHDAD.

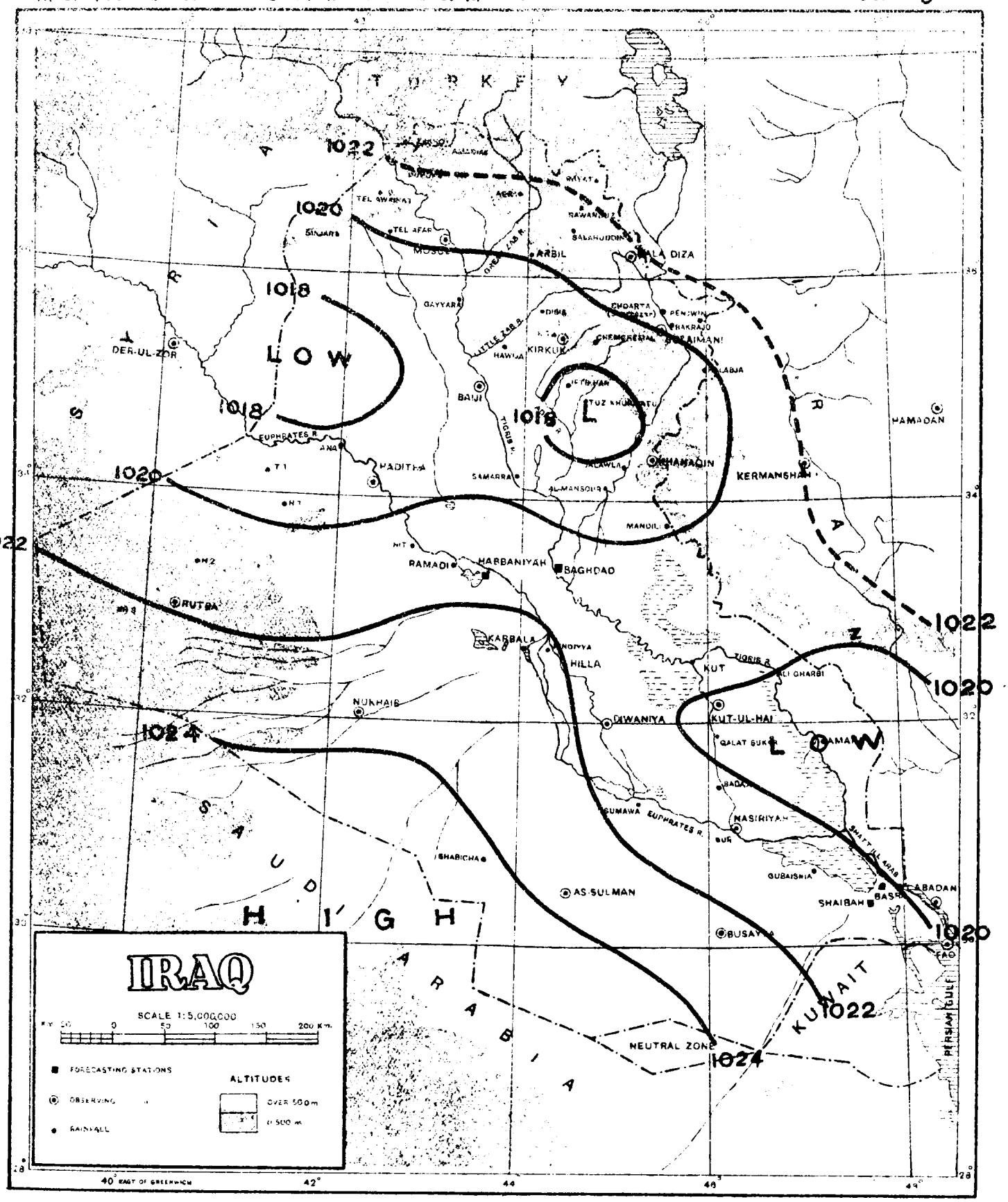
Mean Pressure at 0200 G.M.T. in Millibars at M.S.L.

December



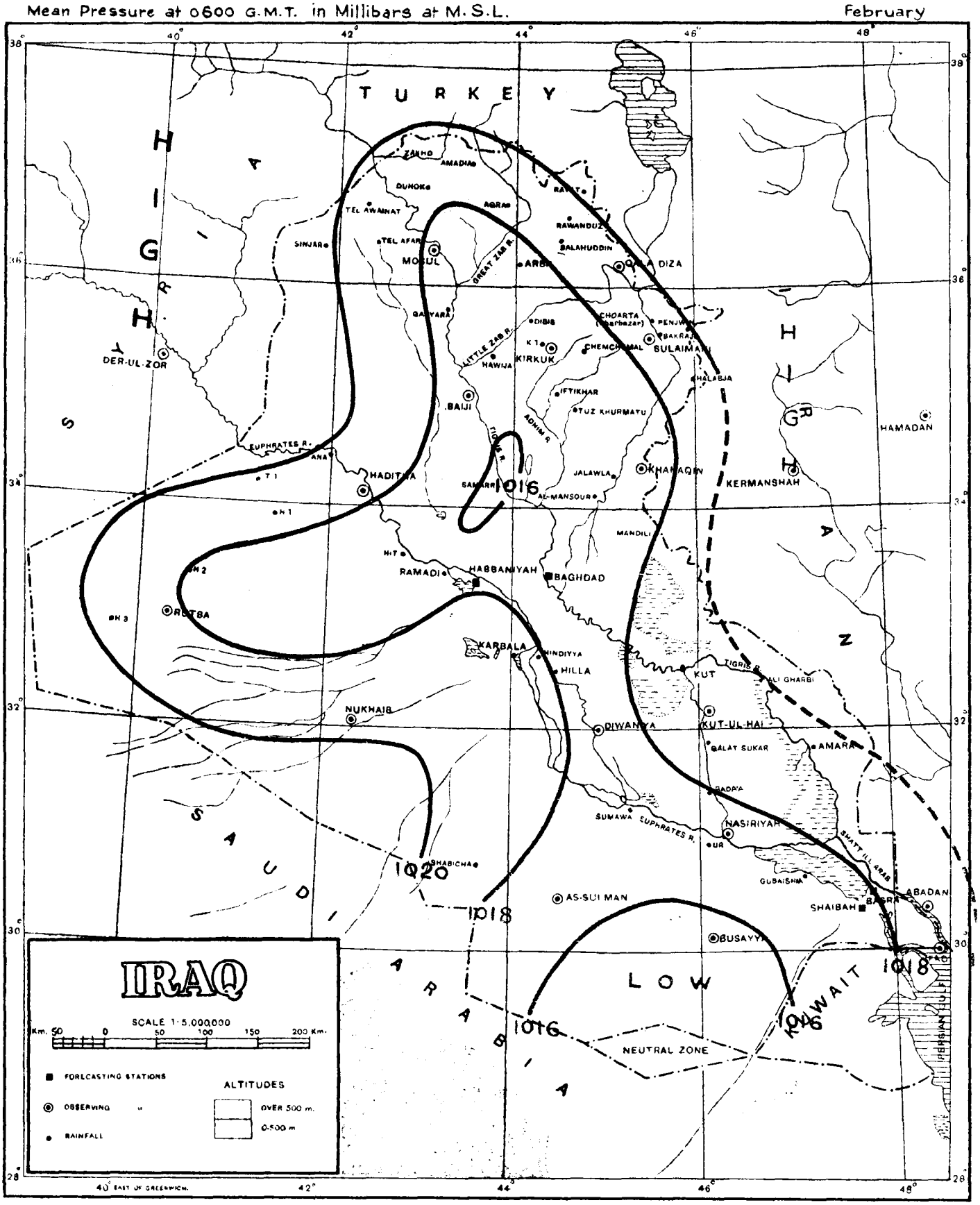
SURVEY PRESS, BAGHDAD

Mean Pressure at 0600 G.M.T. in Millibars at M.S.L. January



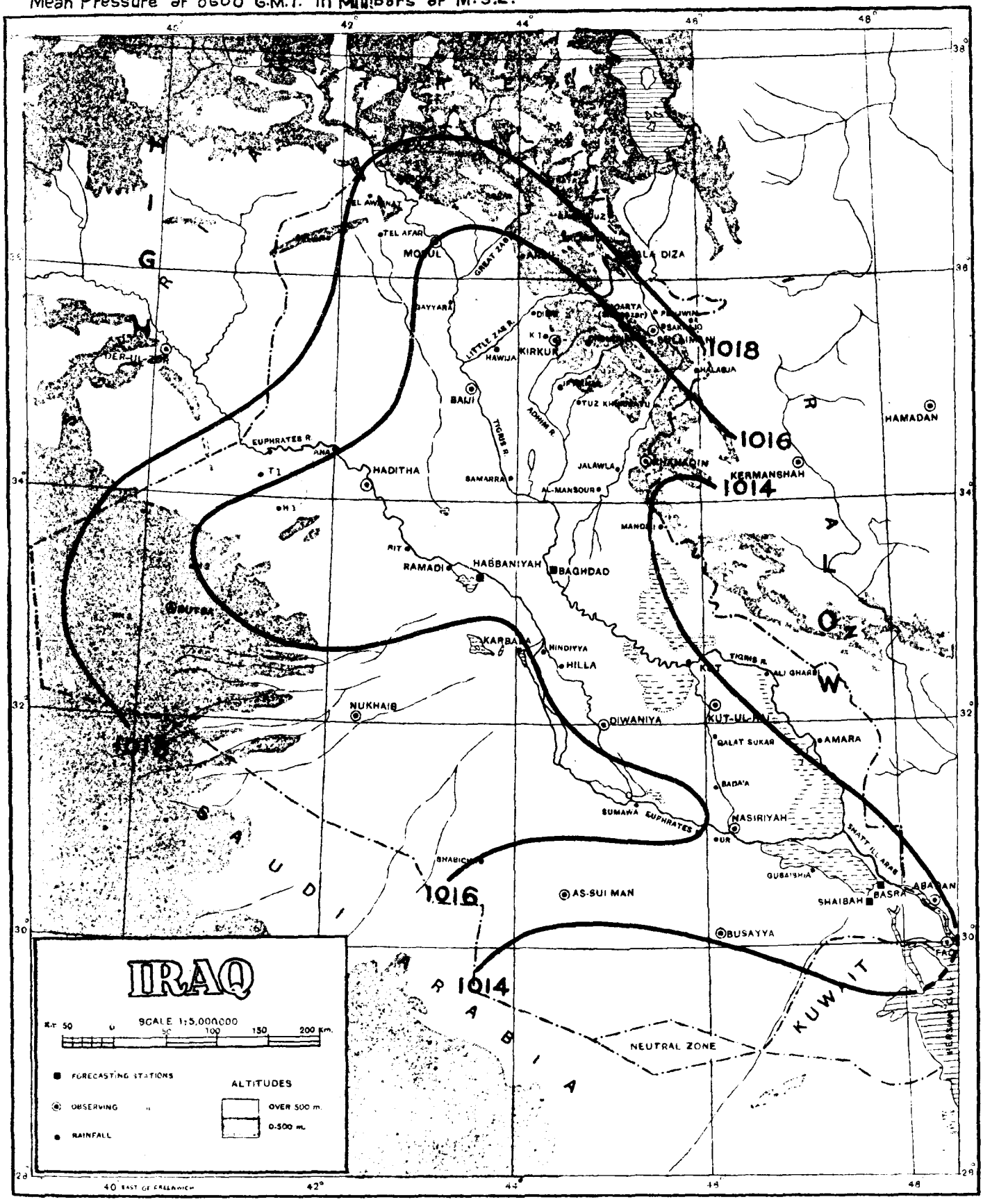
SURVEY PRESS, BAGHDAD

Mean Pressure at 0600 G.M.T. in Millibars at M.S.L. February



SURVEY PRESS, BAGHDAD.

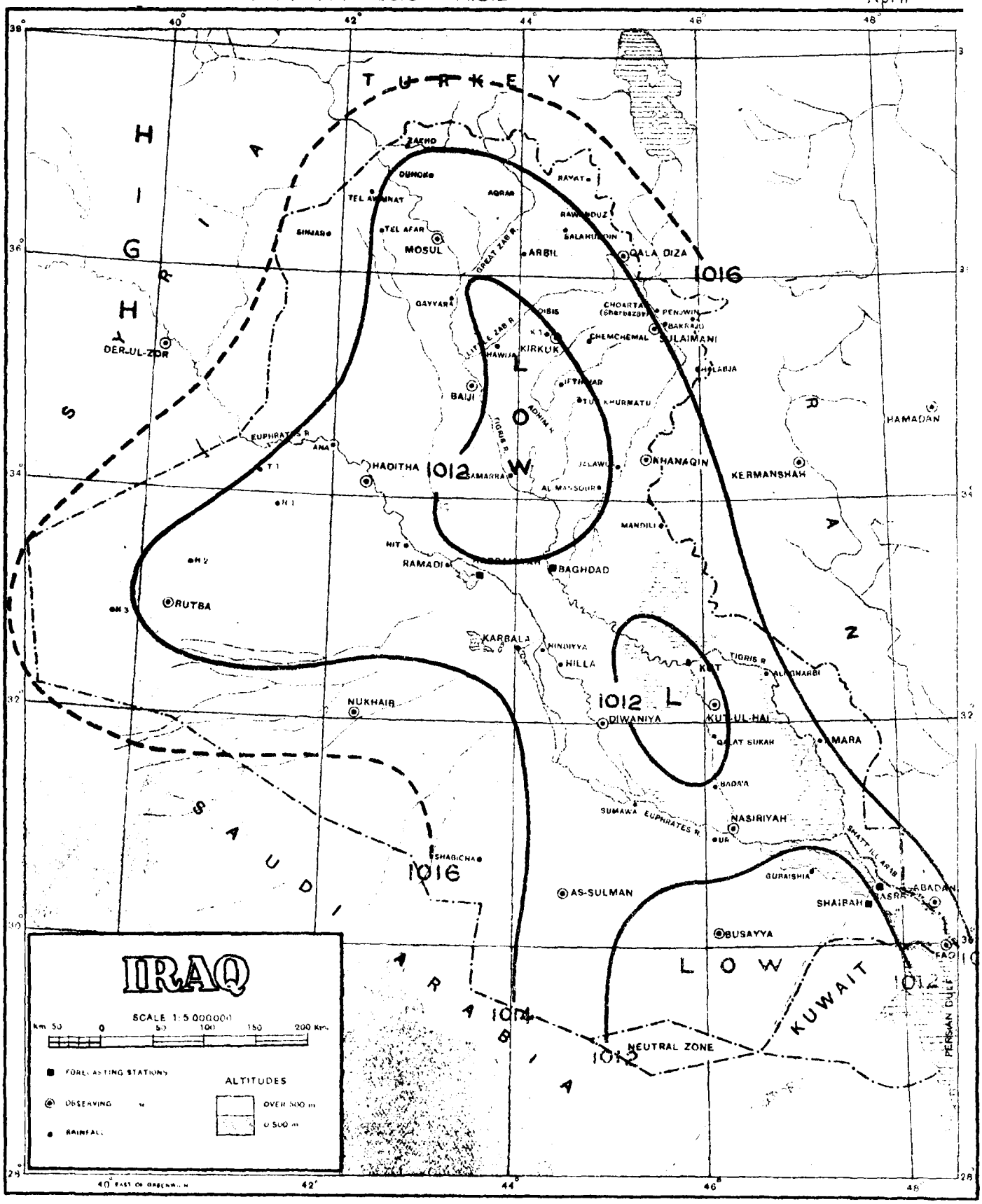
Mean Pressure at 0600 G.M.T. in Millibars at M.S.L. March.



SURVEY PRESS, BAGHDAD

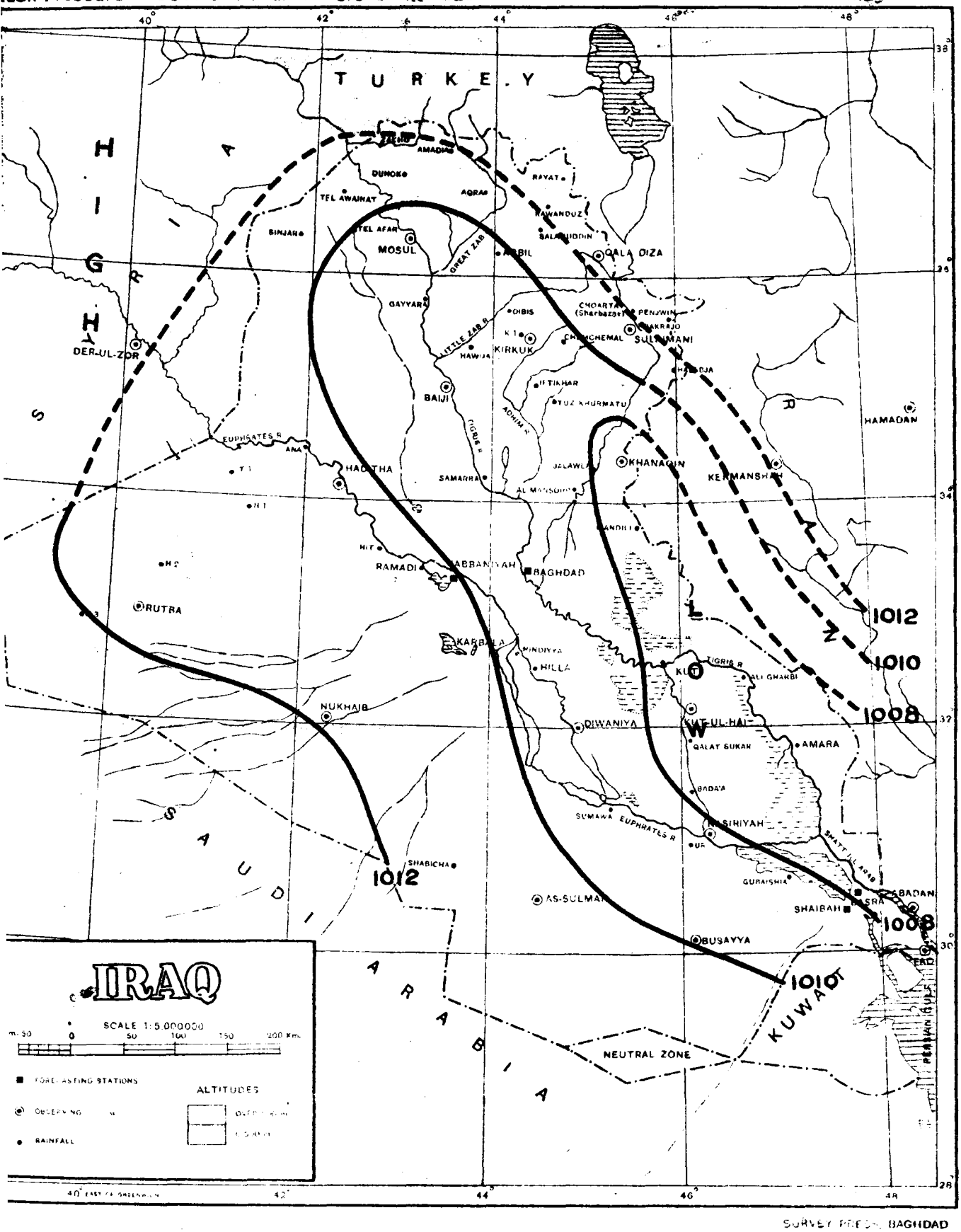
Mean Pressure at 0600 G.M.T. in Millibars at M.S.L

April



SURVEY PRESS, BAGHDAD

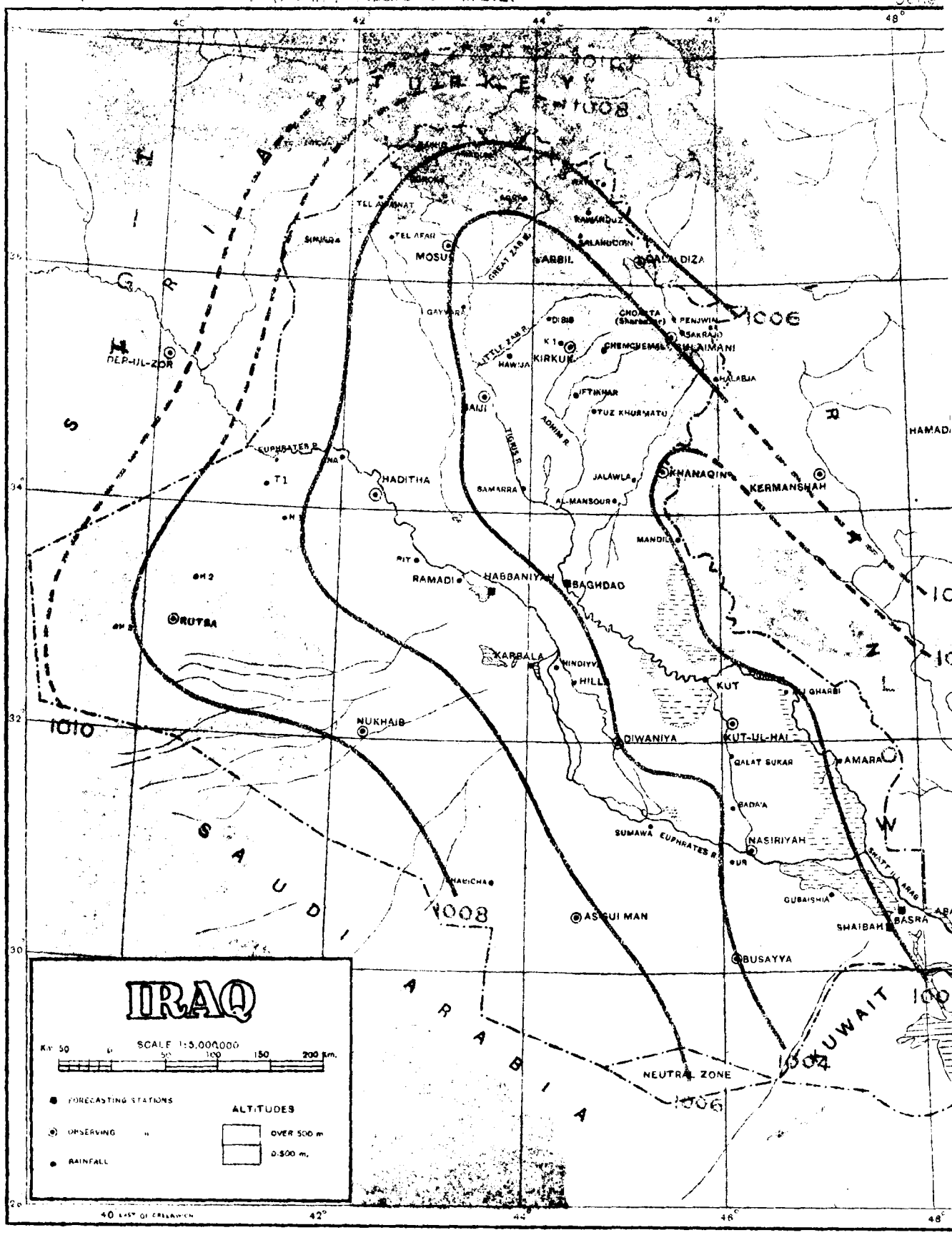
lean Pressure at 0800 G.M.T. in Millibars at M.S.L. May



SURVEY PRESS, BAGHDAD

Mean Pressure at 0600 G.M.T. in Millibars at M.S.L.

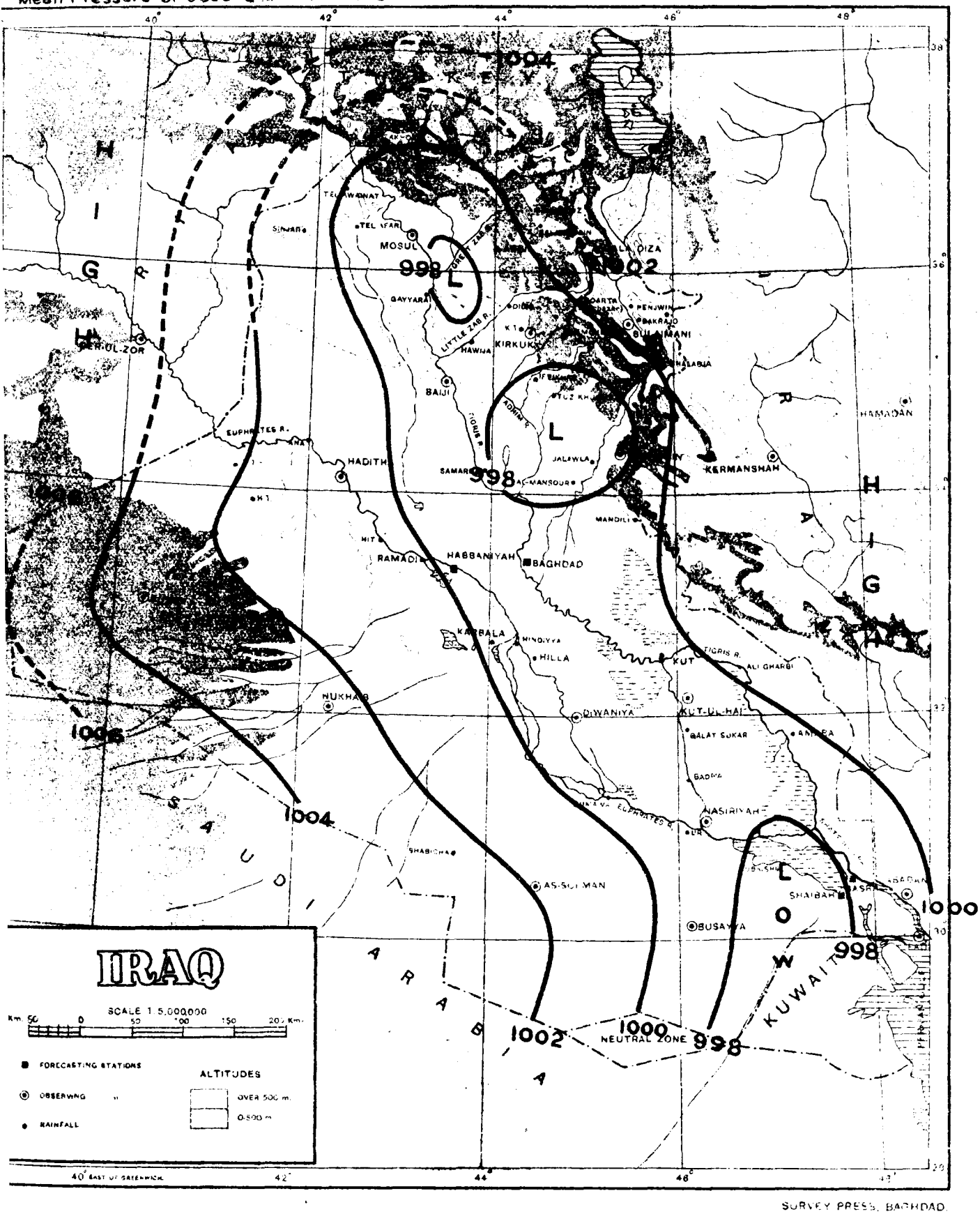
June



SURVEY PRESS, BAGH

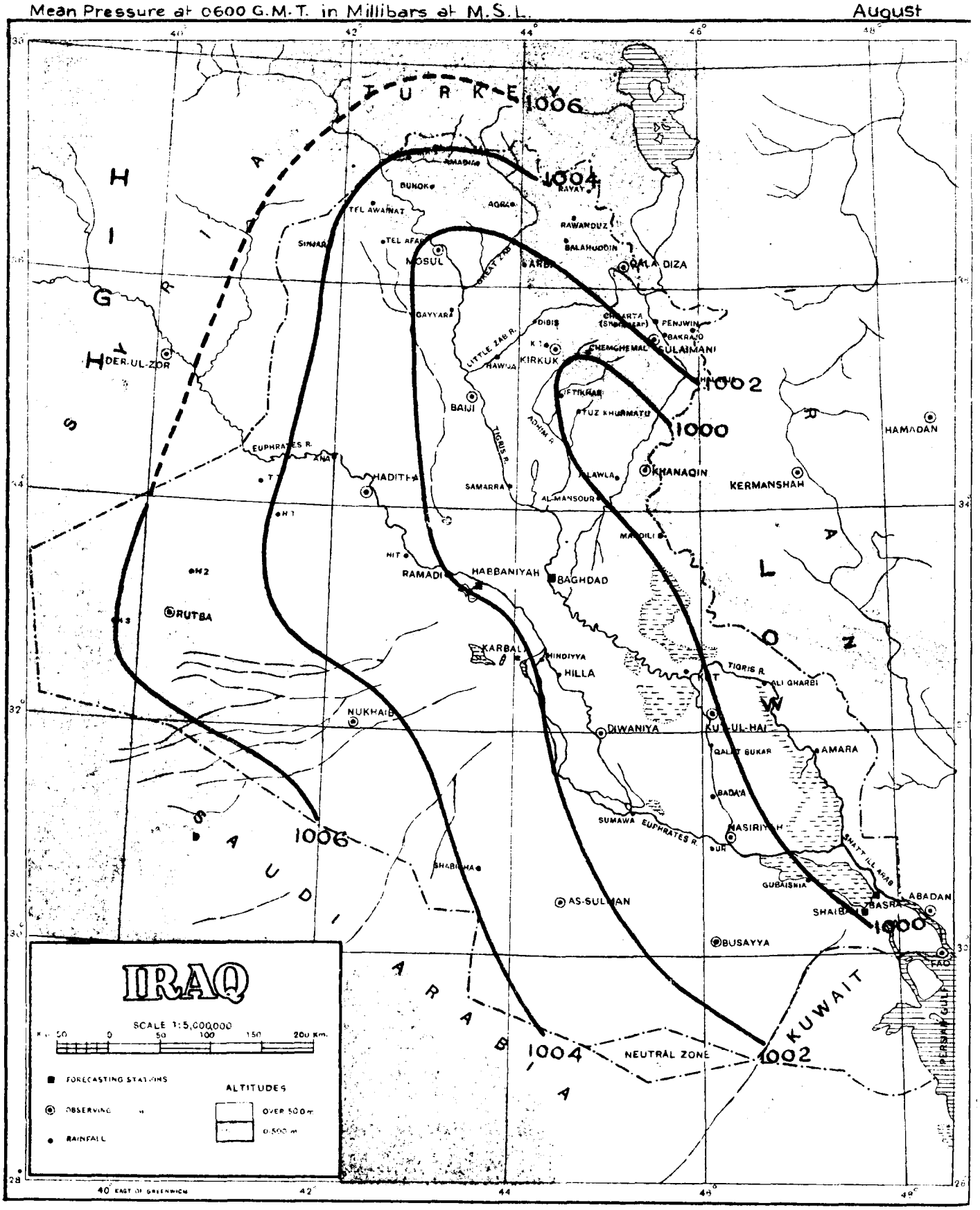
Mean Pressure at 0600 G.M.T. in Millibars at M.S.L

July



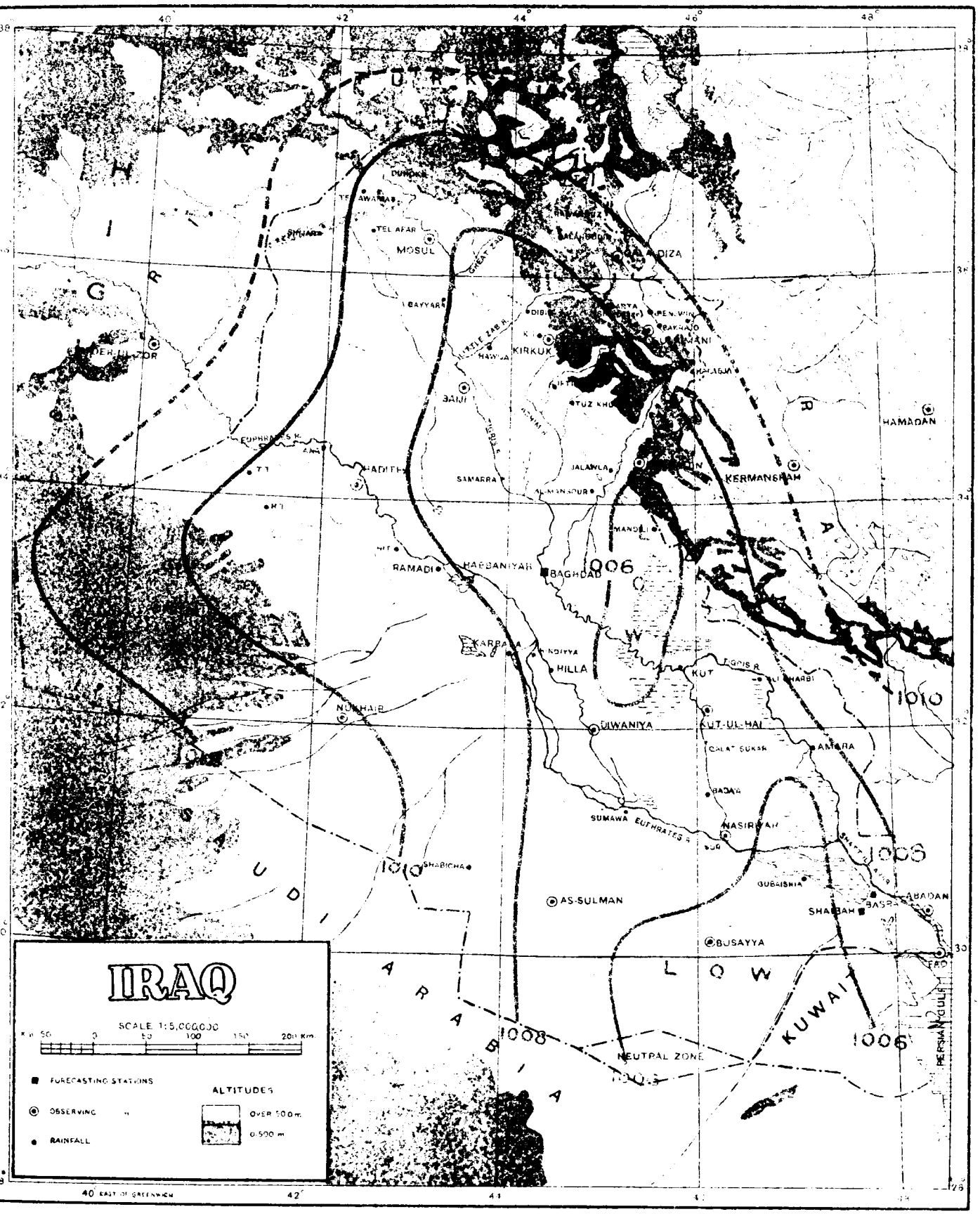
SURVEY PRESS, BAGHDAD.

Mean Pressure at 0600 G.M.T. in Millibars at M.S.L. August



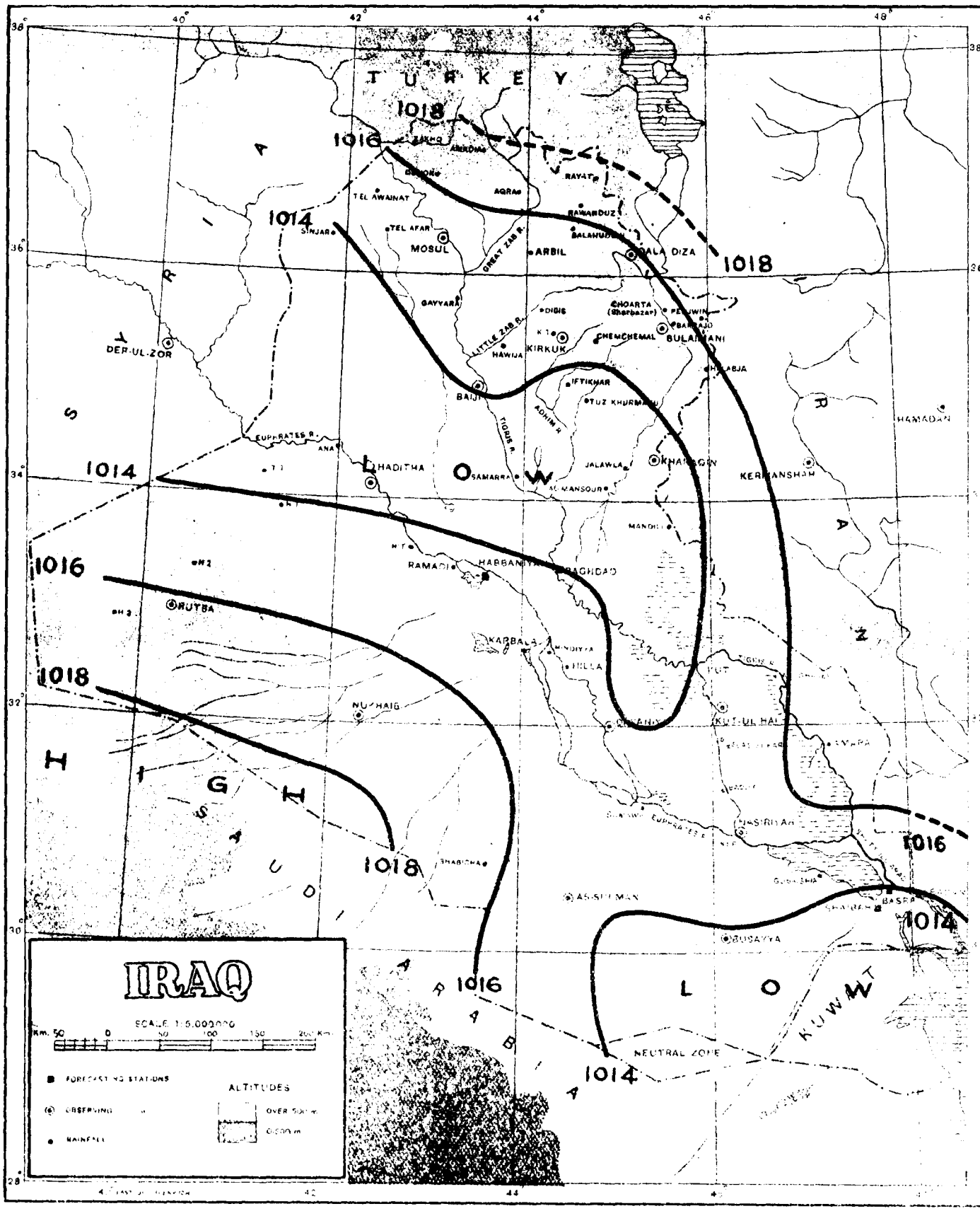
SURVEY PRESS, BAGHDAD

Mean Pressure at 0600 G.M.T. in Millibars at M.S.L. September

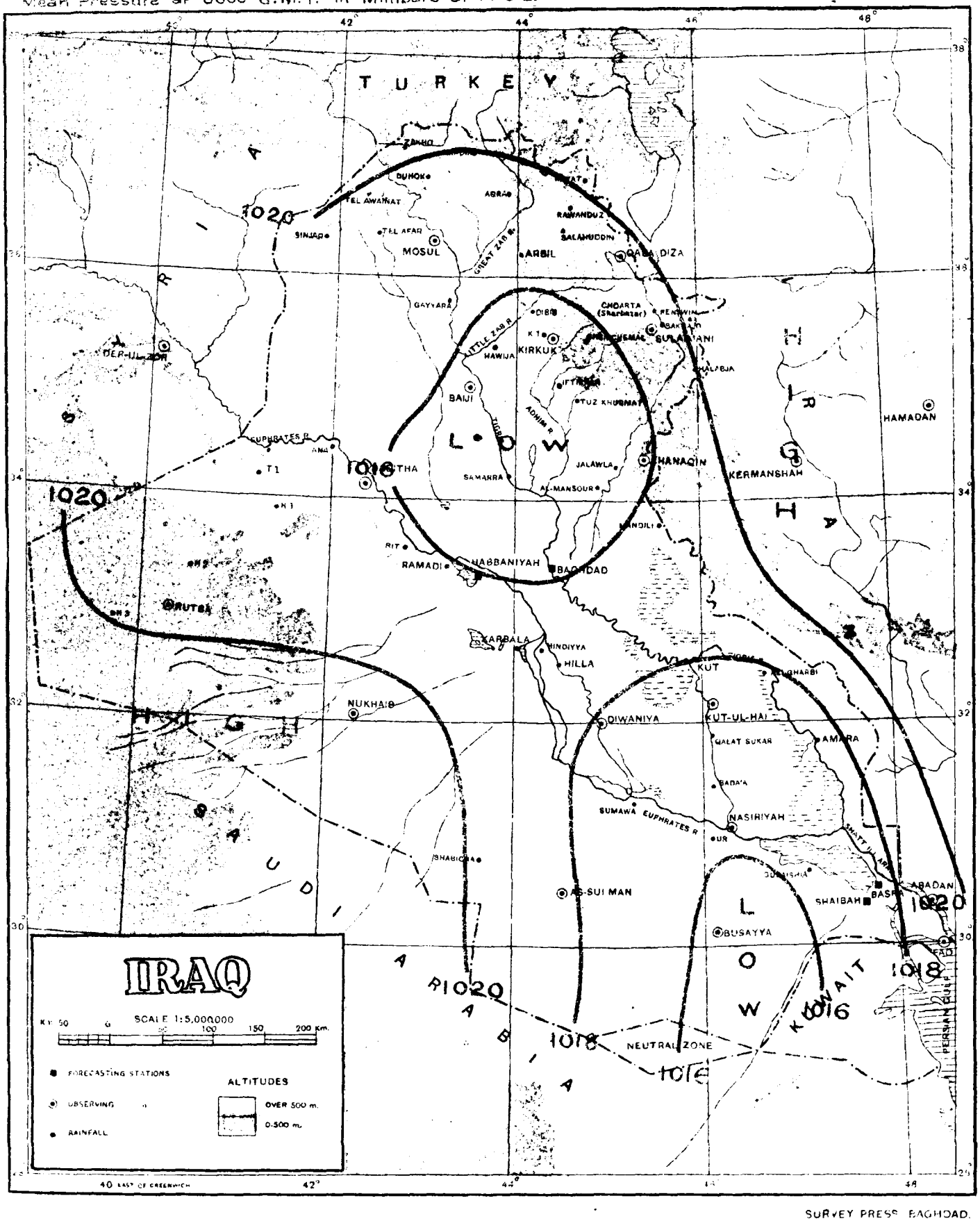


SURVEY PRINTING, BAGHDAD

Mean Pressure at 0600 G.M.T. in Millibars at M.S.L. October



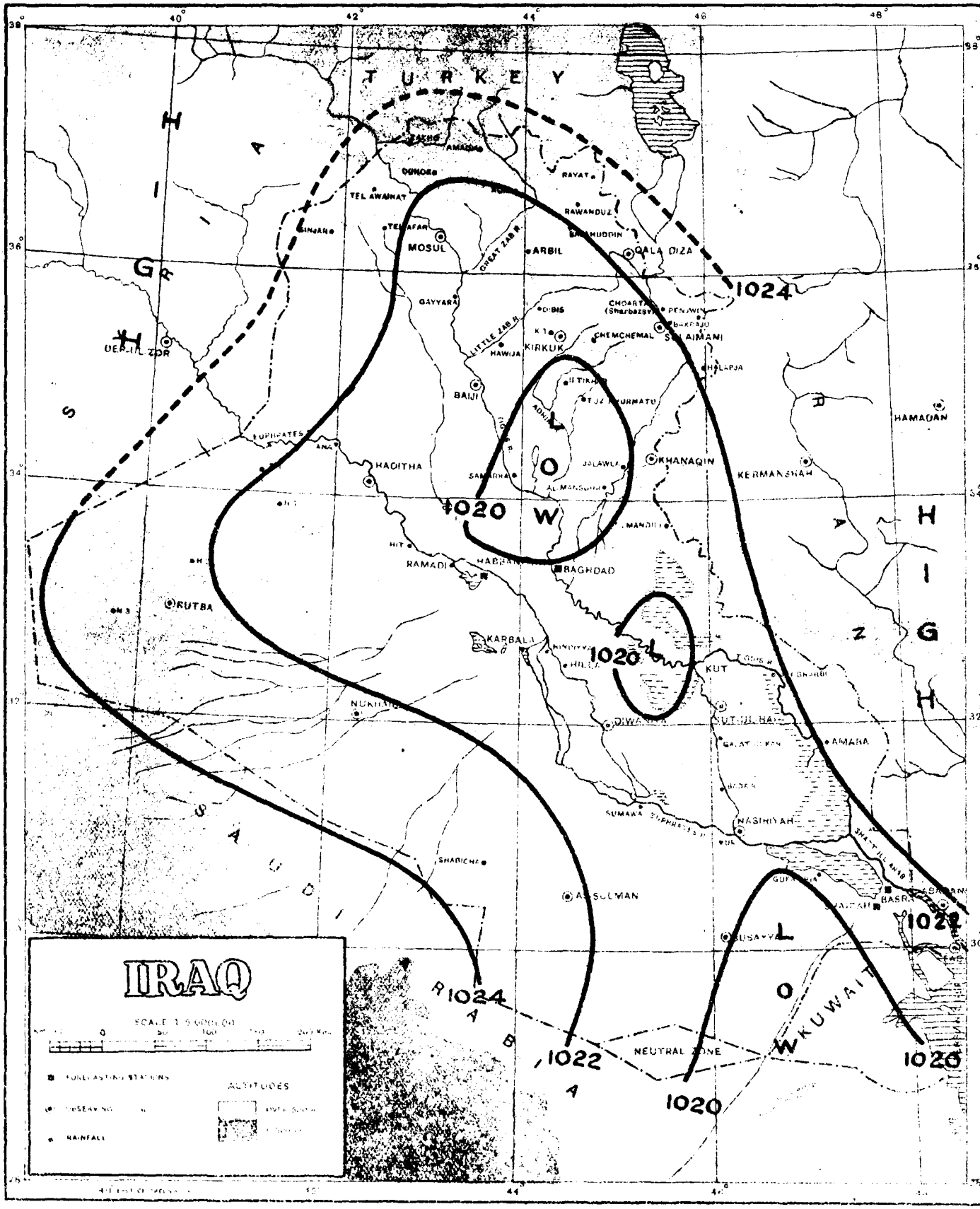
Mean Pressure at 0600 G.M.T. in Millibars at M.S.L. November



SURVEY PRESS BAGHDAD.

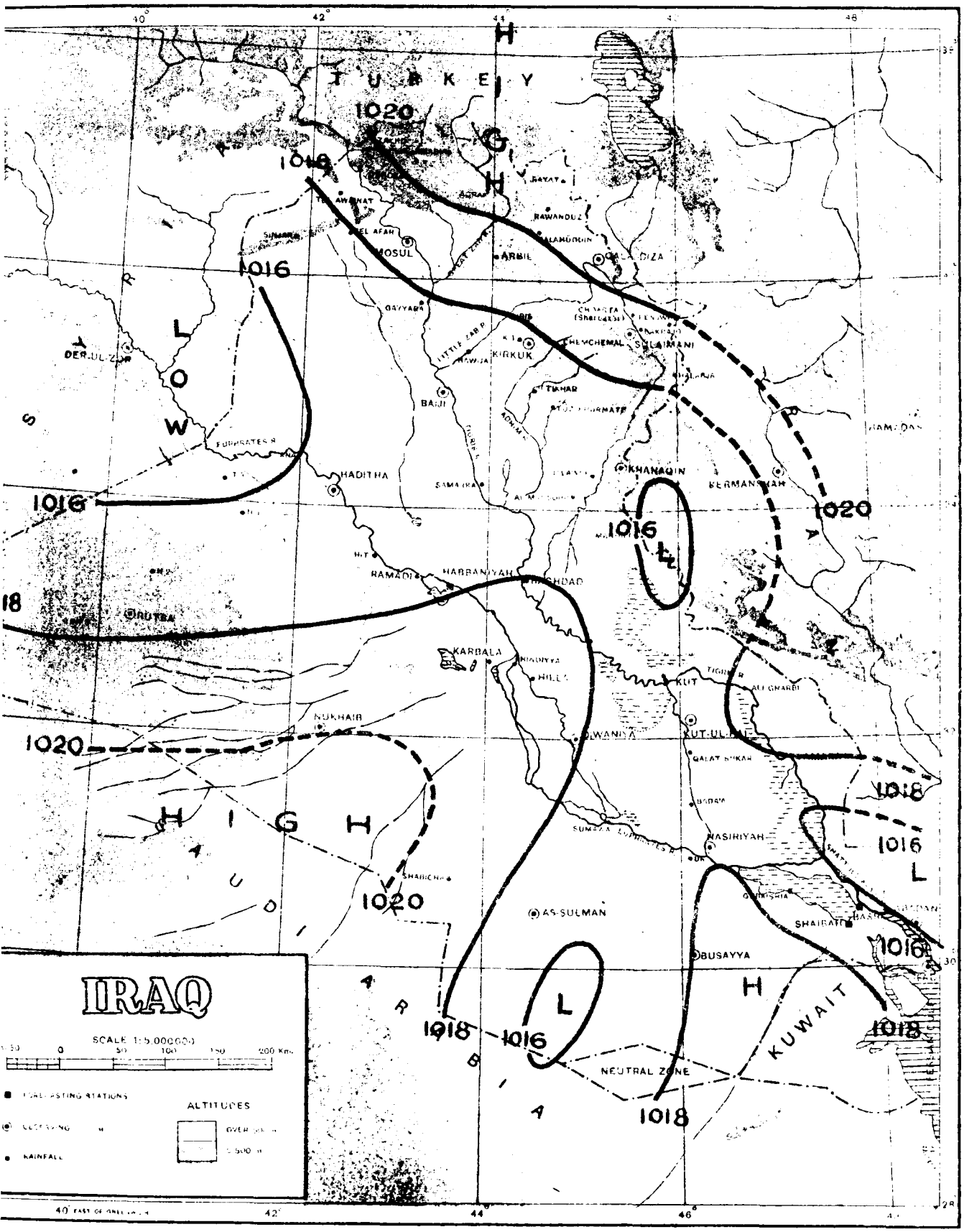
Mean Pressure at 0600 G.M.T. in Millibars at M.S.L

December



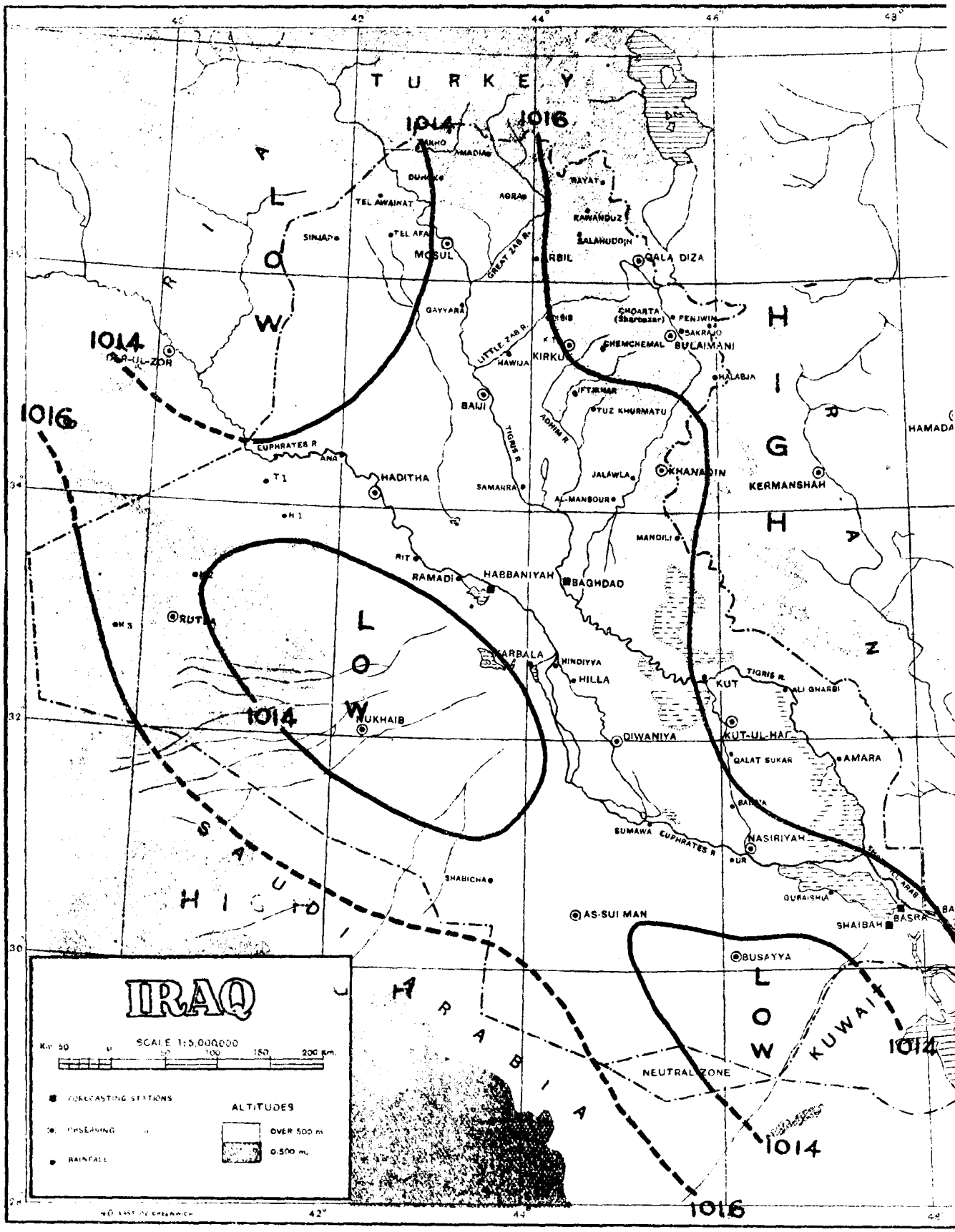
SUMER PRESS, BAGHDAD

Pressure at 1300 G.M.T. in Millibars at M.S.L. January



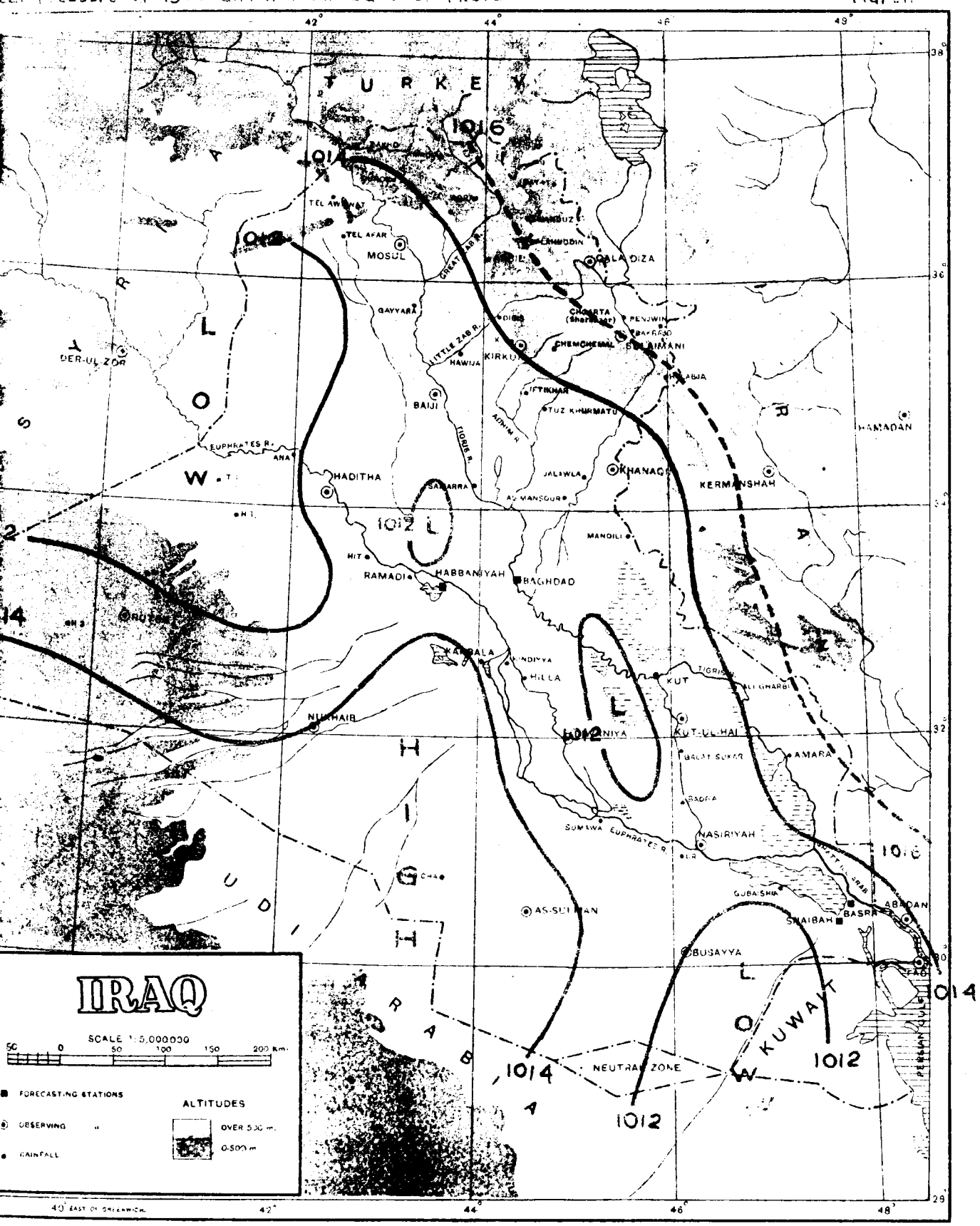
SURVEY PRESS BAGHDAD

Mean Pressure at 1300 G.M.T. in Millibars at M.S.L. February



SURVEY PRESS BAGH

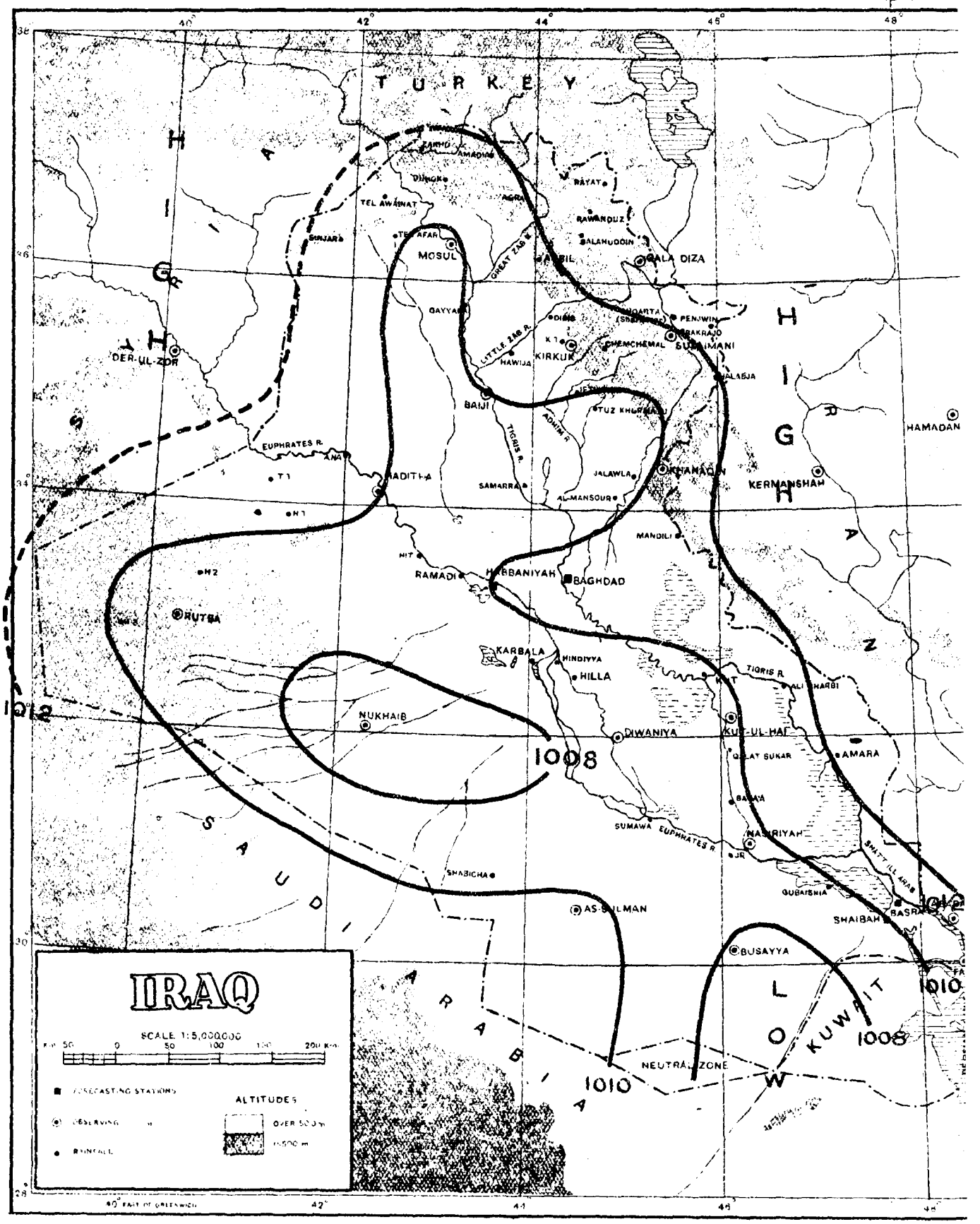
ean Pressure at 1300 G.M.T. in Millibars at M.S.L. March



SURVEY PRESS, BAGHDAD.

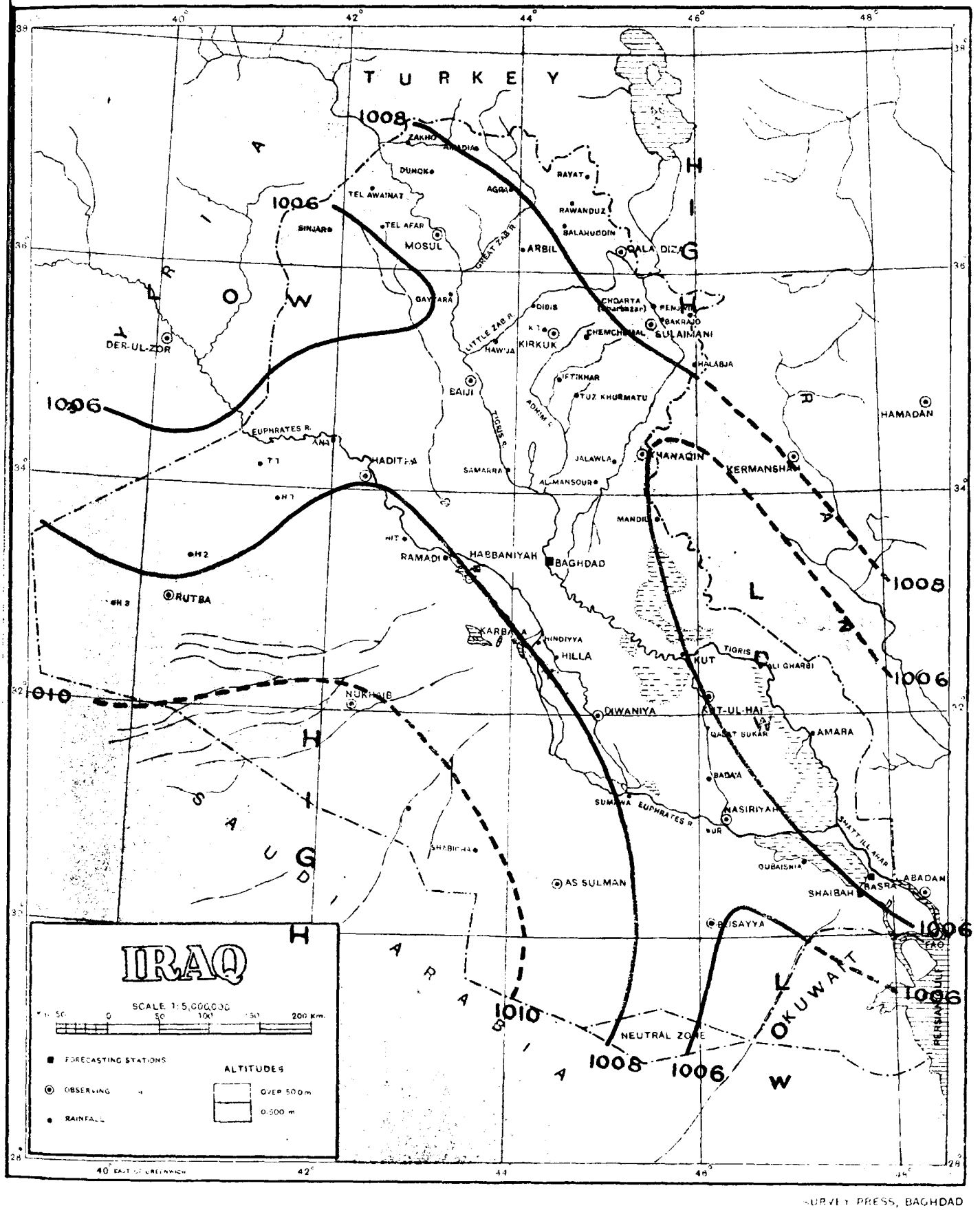
Mean Pressure at 1300 G.M.T in Millibars at M.S.L.

April



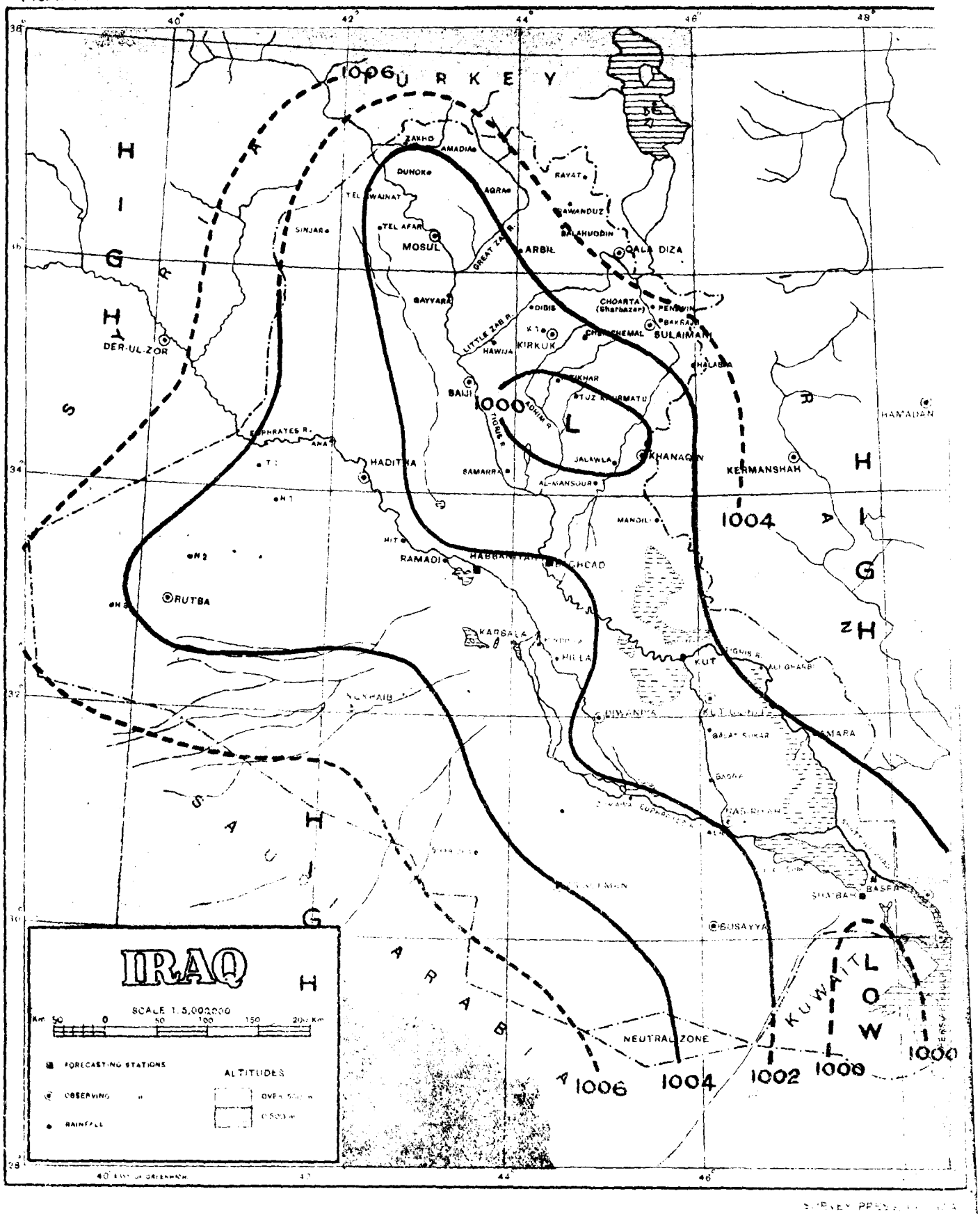
SURVEY PRESS, BAGH

Mean Pressure at 1300 G.M.T. in Millibars at M.S.L. May



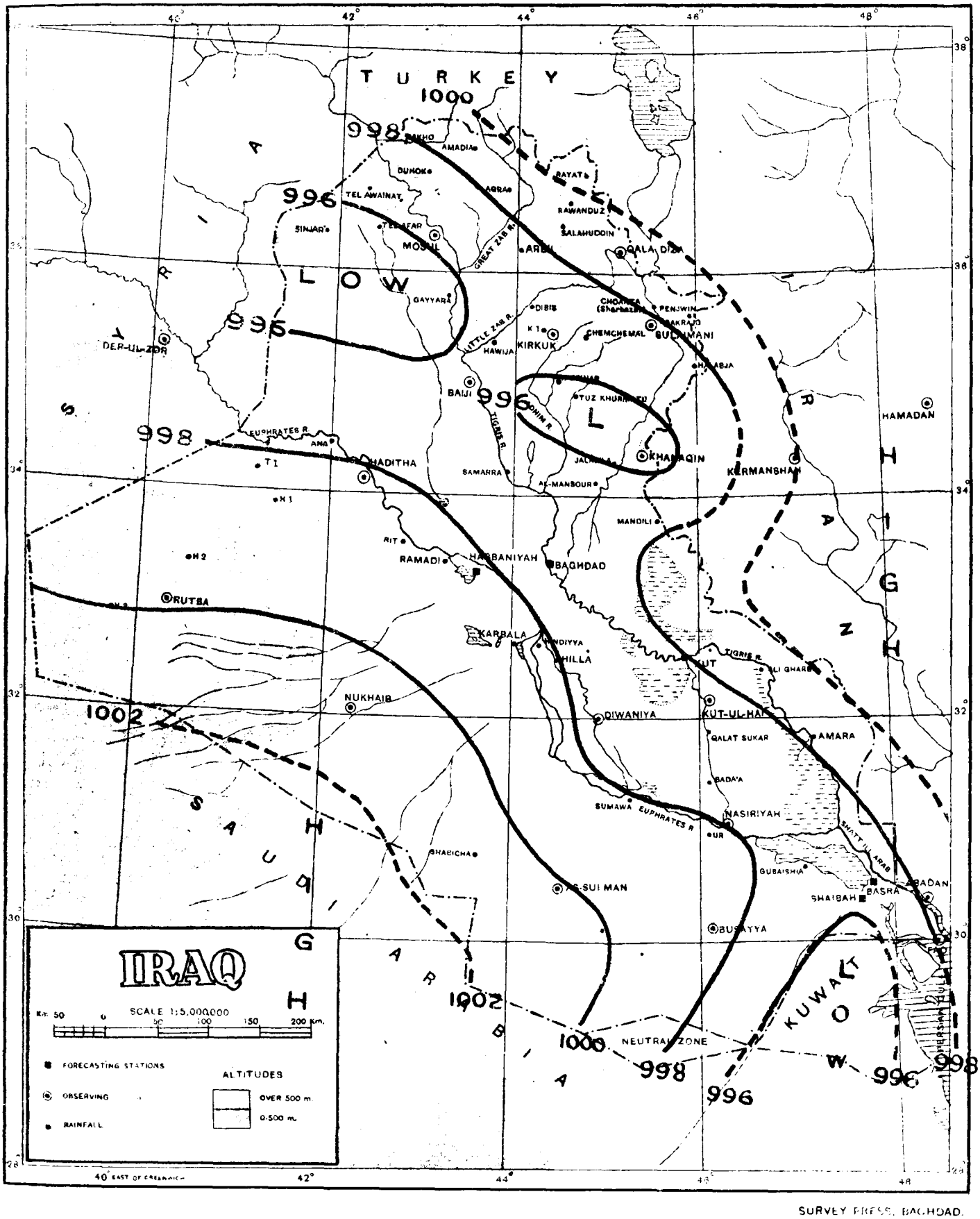
SURVEY PRESS, BAGHDAD

Mean Pressure at 1300 G.M.T. in Millibars at M.S.L. June



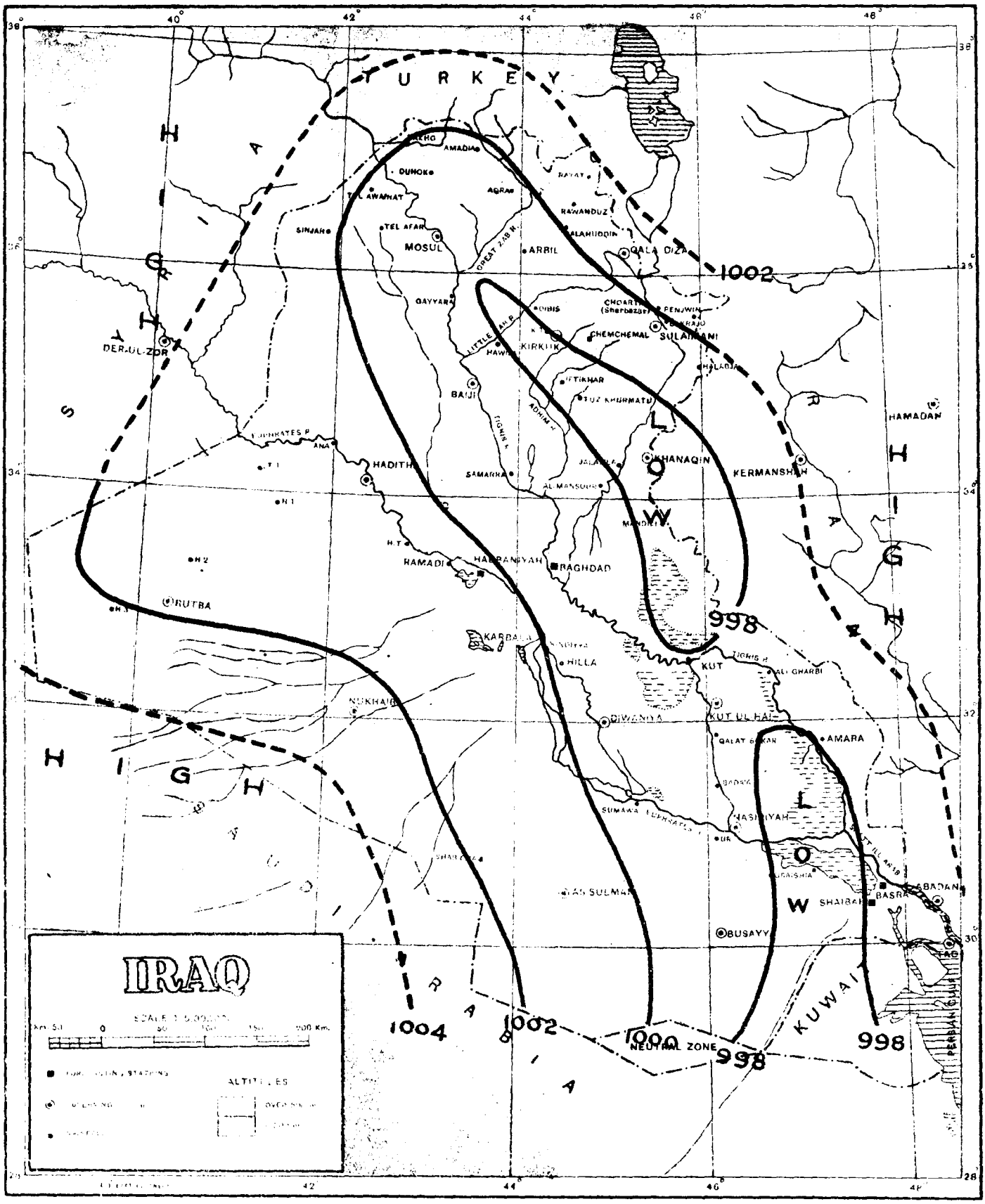
SURVEY PRESS

Mean Pressure at 1300 G.M.T. in Millibars at M.S.L. July



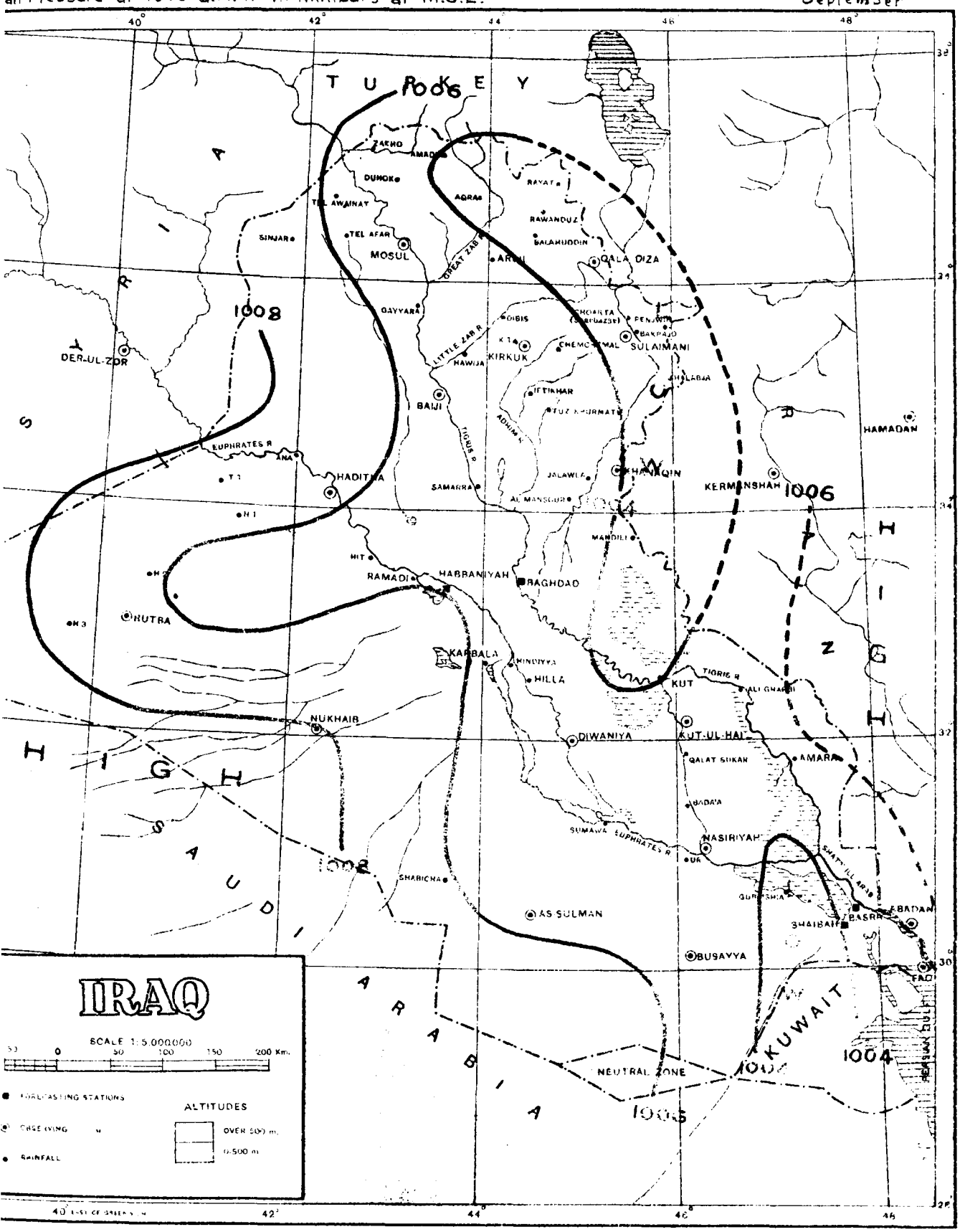
SURVEY PRESS, BAGHDAD.

Mean Pressure at 1300 G.M.T. in Millibars at M.S.L. August



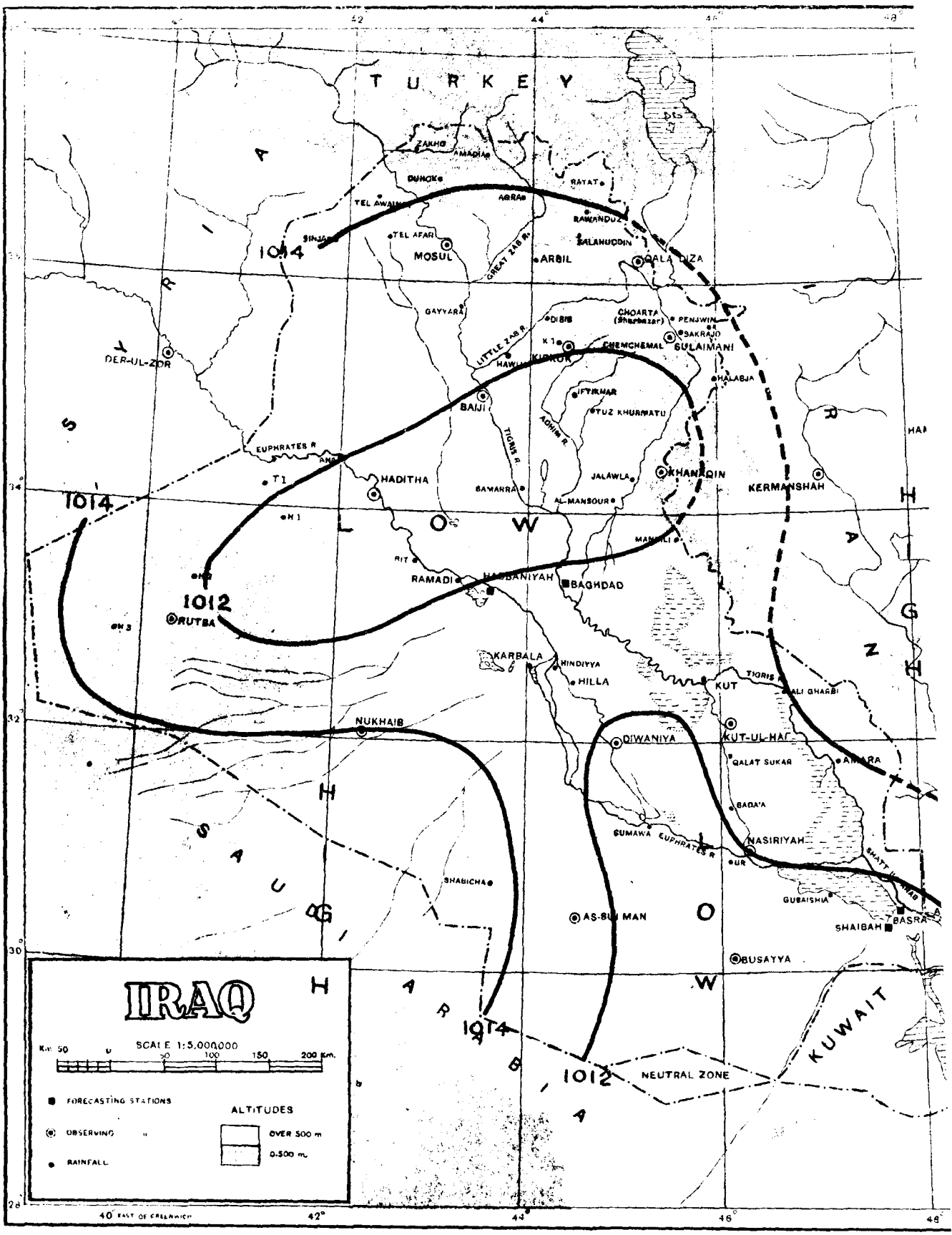
SURVEY PRESS, BAGHDAD

an Pressure at 1300 G.M.T. in Millibars at M.S.L. September



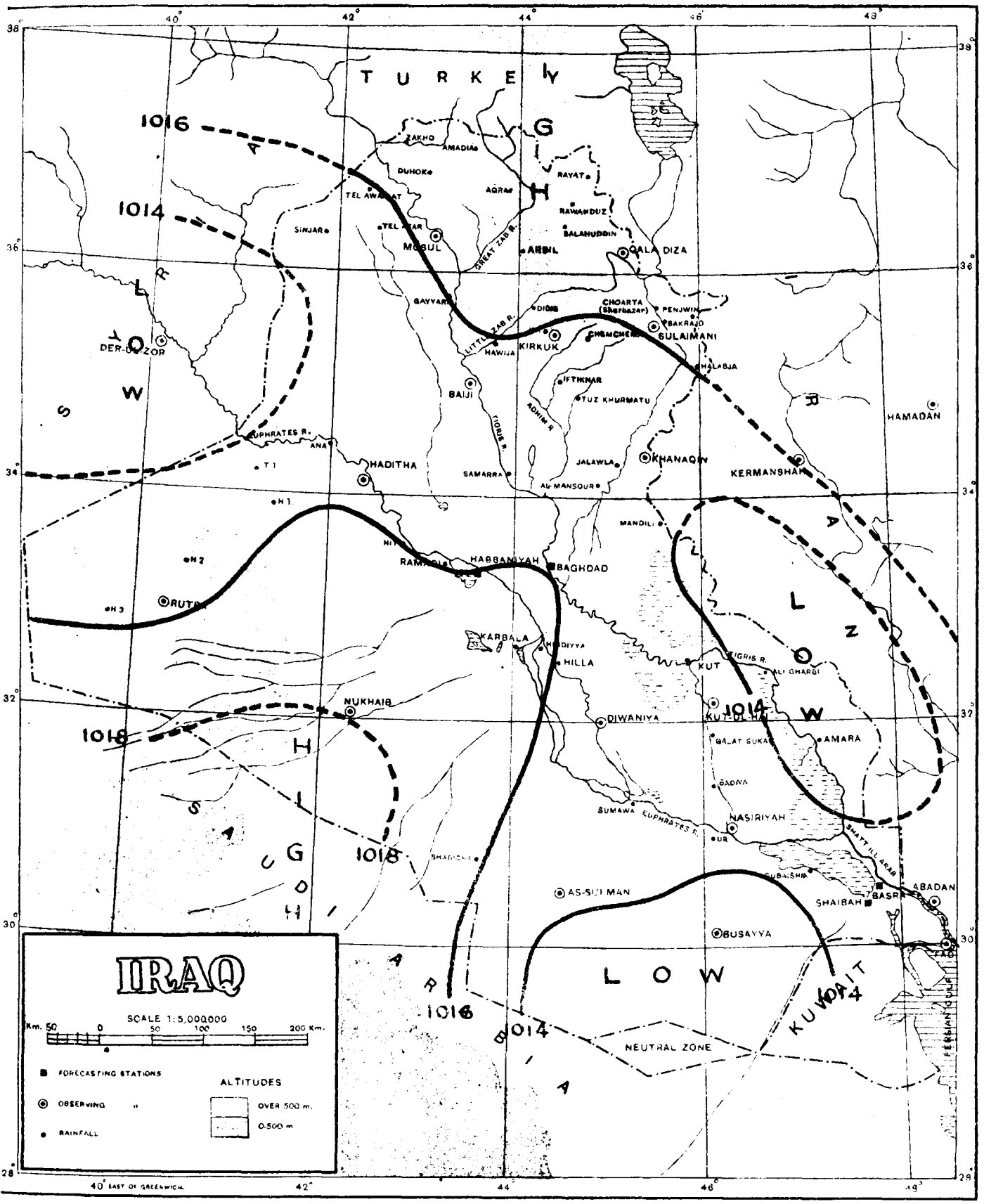
SURVEY PRESS, BAGHDAD

Mean Pressure at 1300 G.M.T. in Millibars at M.S.L. Octob



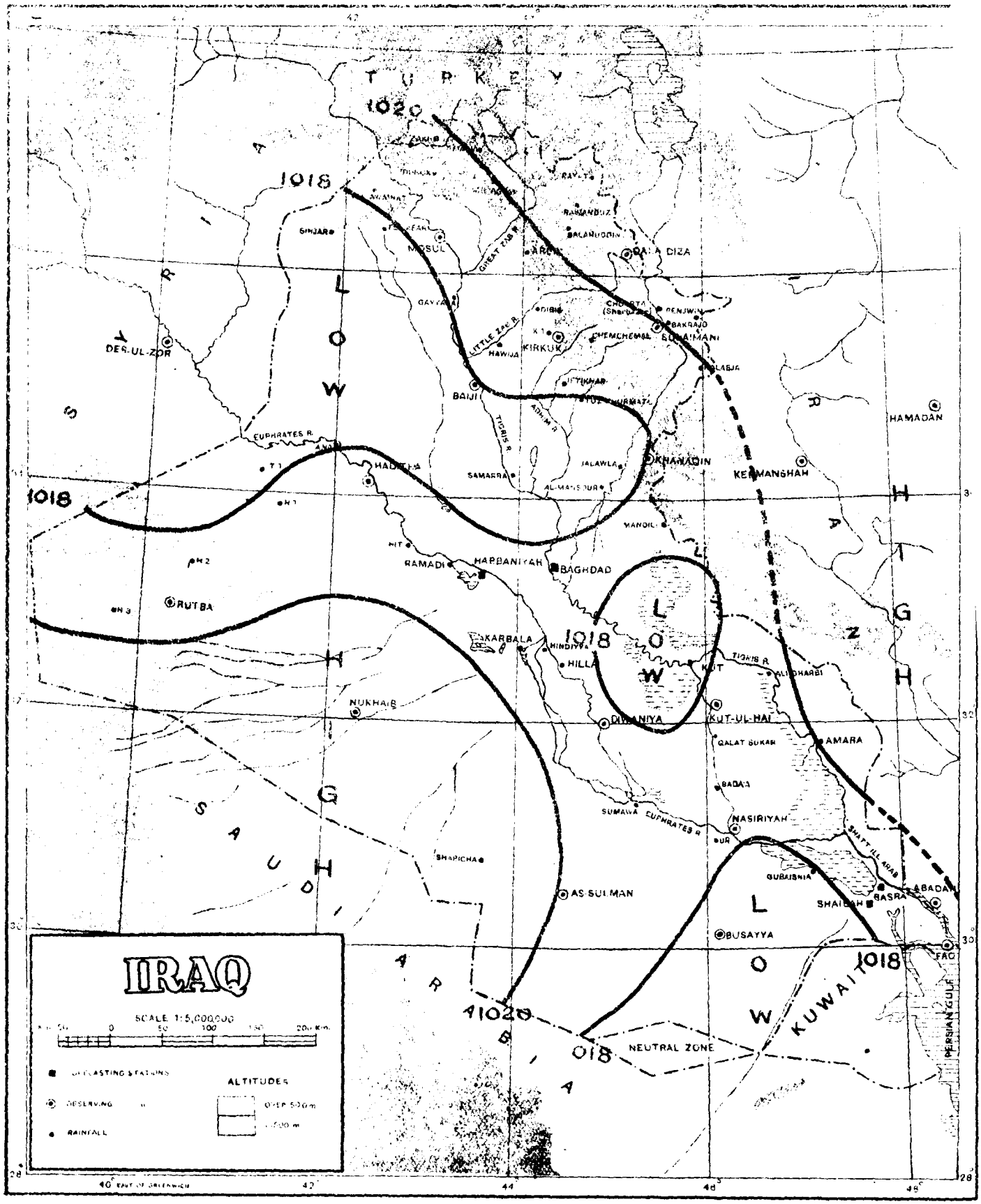
SURVEY PRESS, BAG

Mean Pressure at 1300 G.M.T. in Millibars at M.S.L. November



SURVEY PRESS, BAGHDAD.

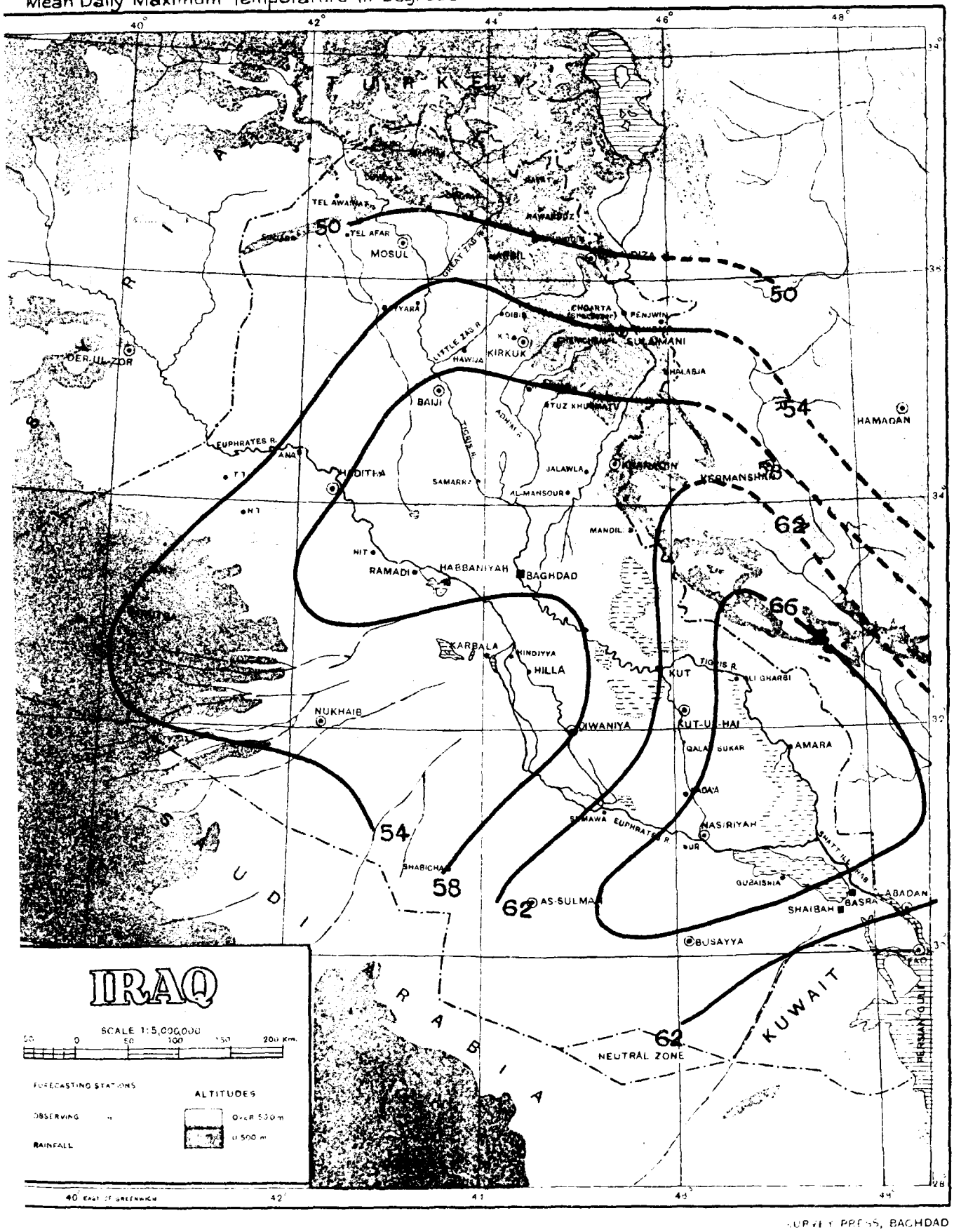
Mean Pressure at 1300 G.M.T. in Millibars at M.S.L. December



SURVEY PRESS, BAGHDAD

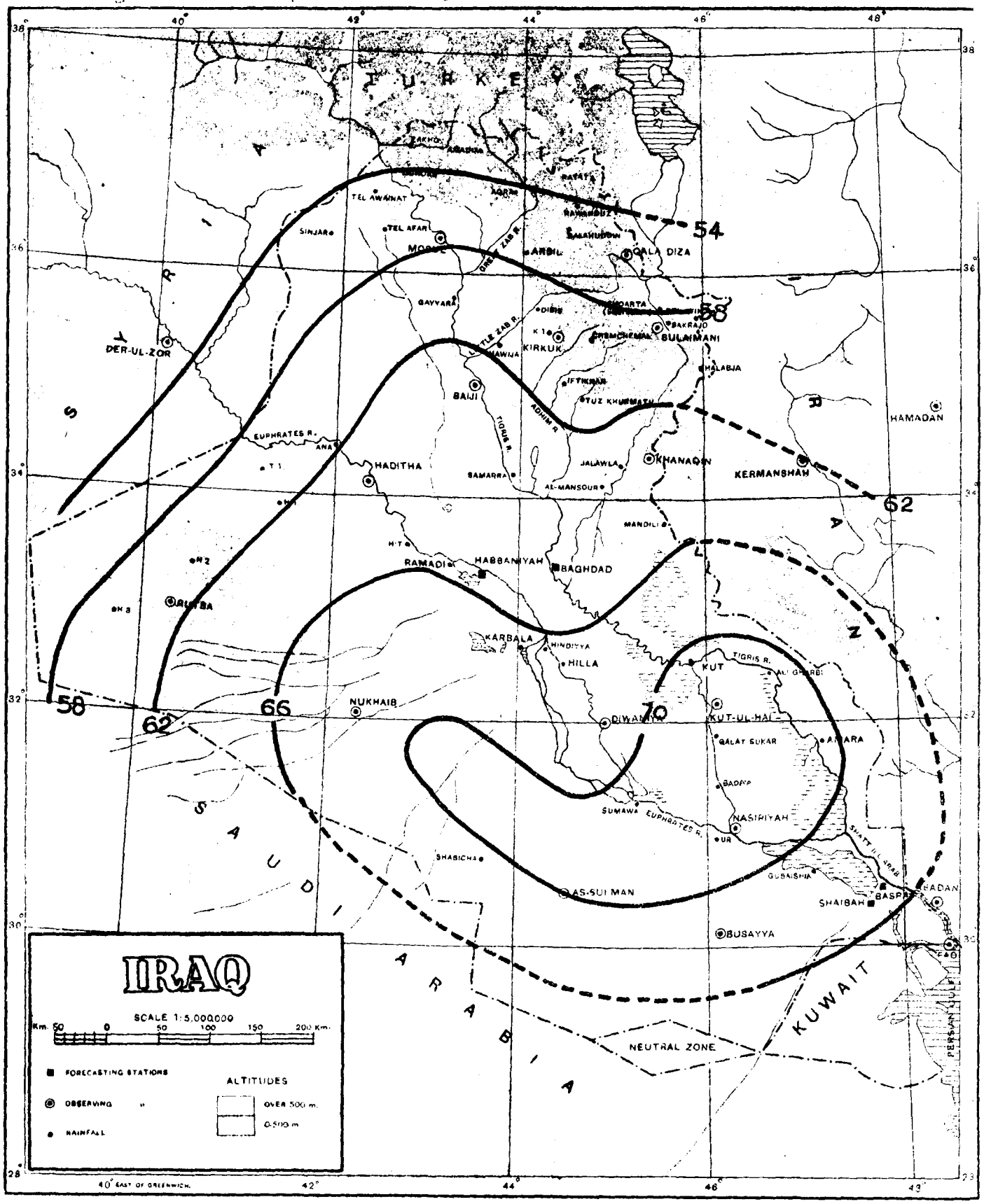
Mean Daily Maximum Temperature in Degrees Fahrenheit

January



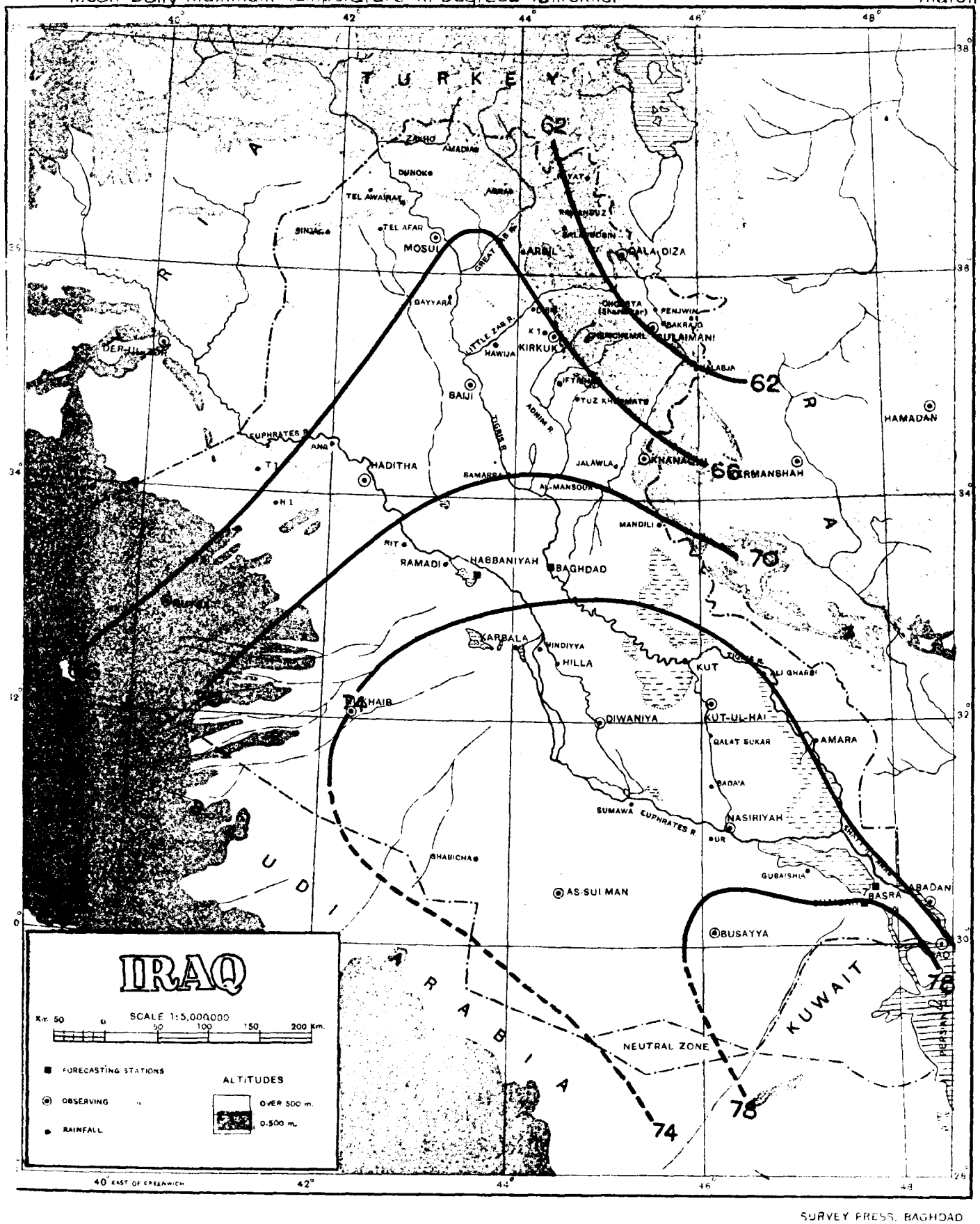
SURVEY PRESS, BAGHDAD

Mean Daily Maximum Temperature in Degrees Fahrenheit — February



SURVEY PRESS, BAGHDAD

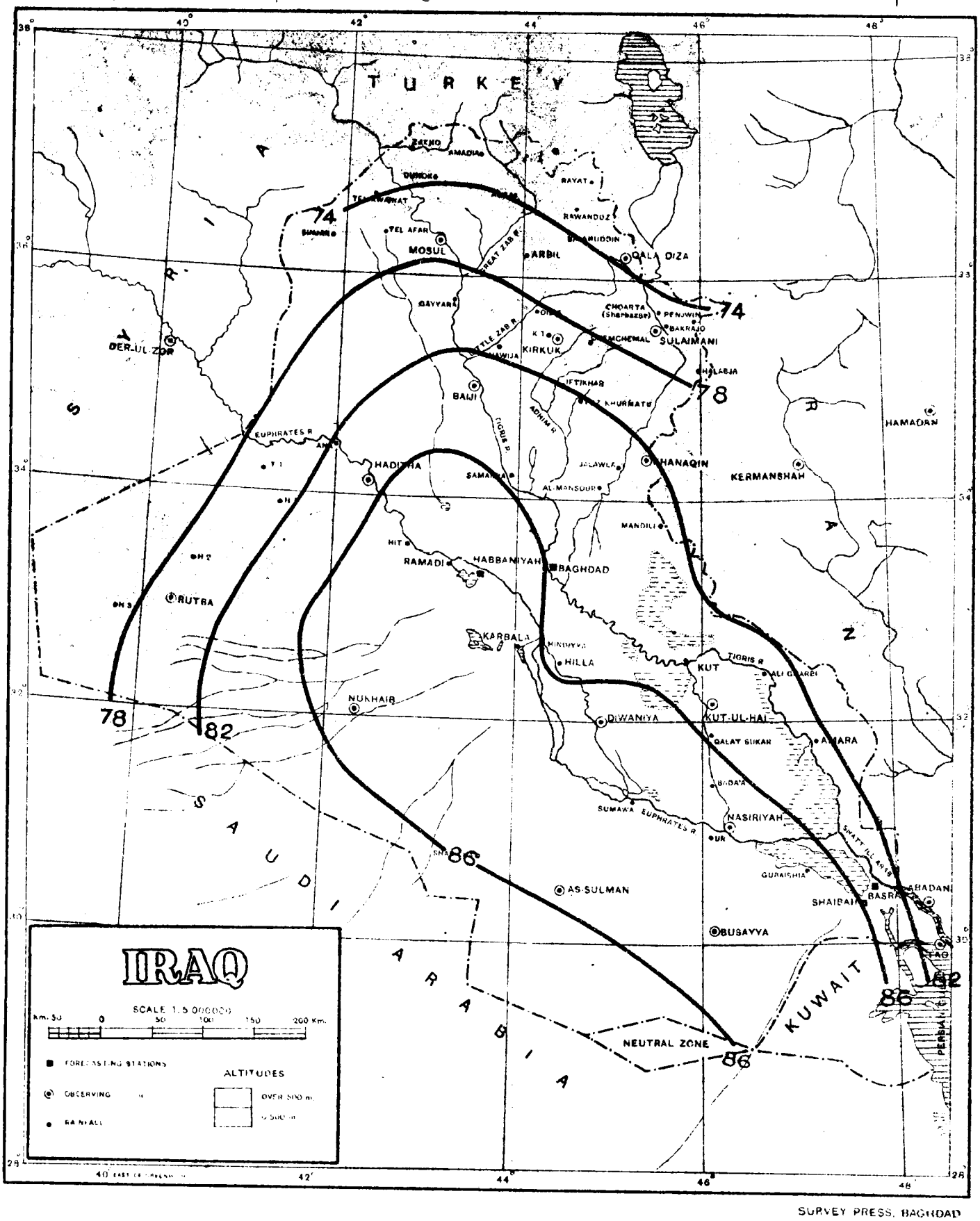
Mean Daily Maximum Temperature in Degrees Fahrenheit — March



SURVEY PRESS, BAGHDAD

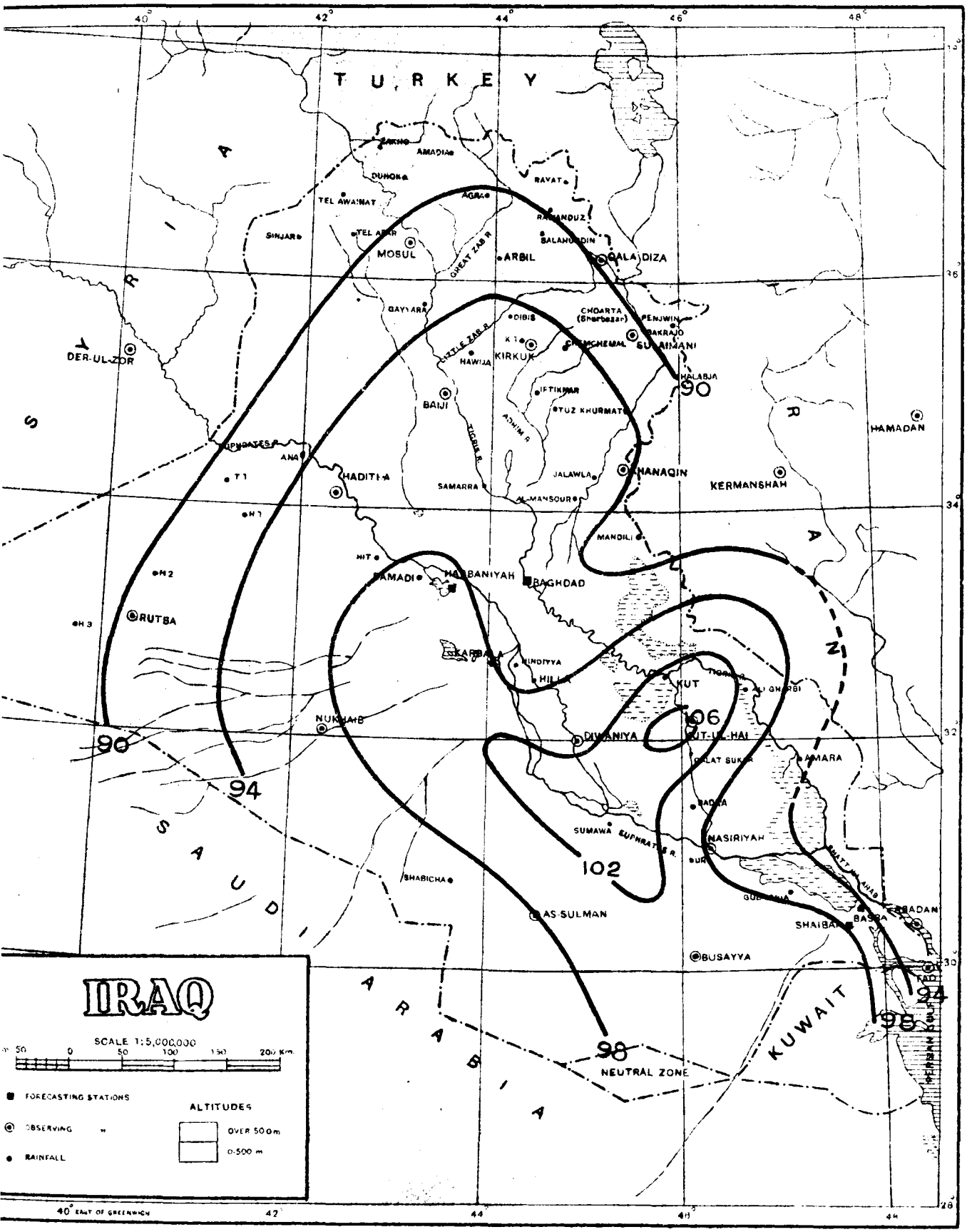
Mean Daily Maximum Temperature in Degrees Fahrenheit

April



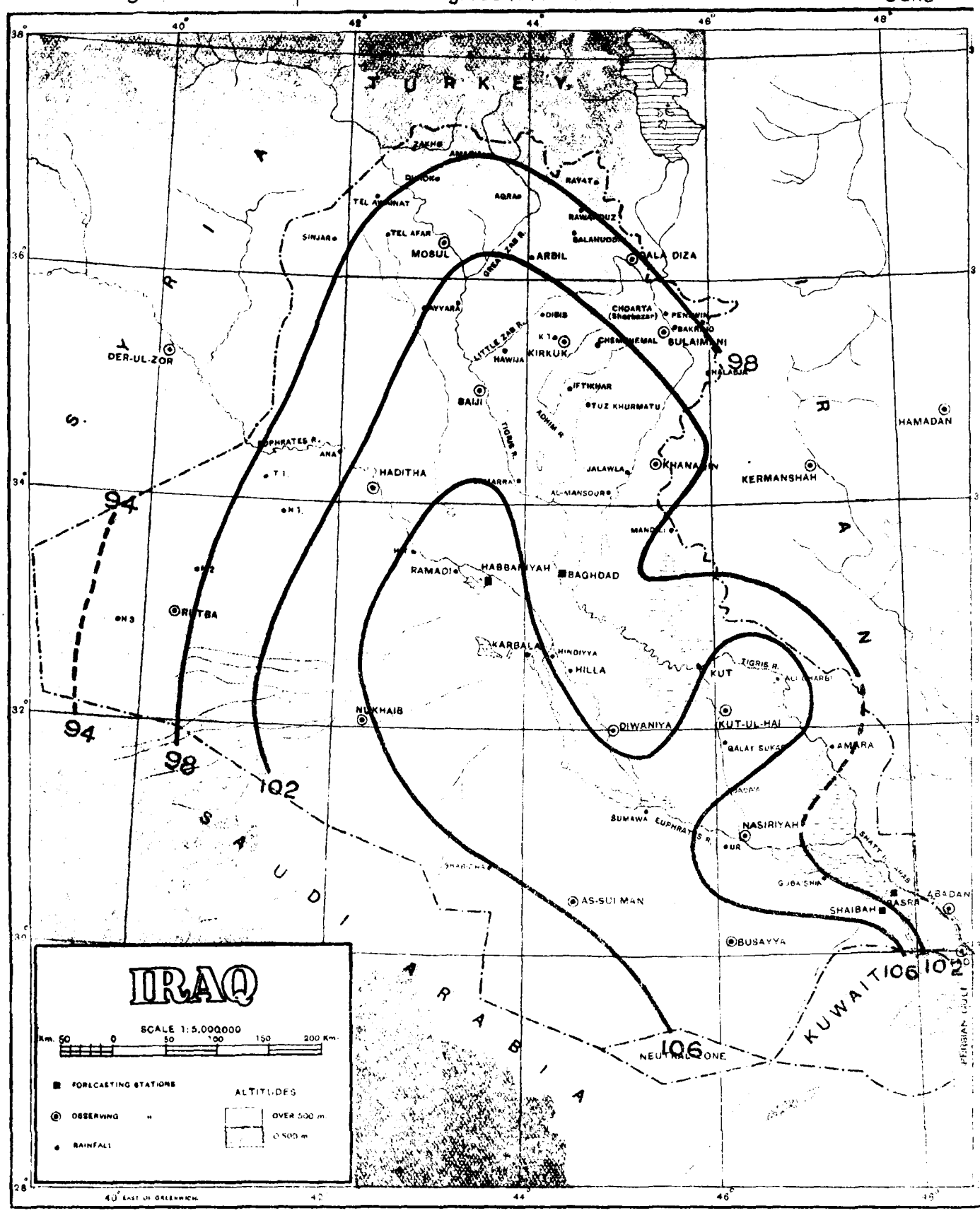
SURVEY PRESS, BAGHDAD

ean Daily Maximum Temperature in Degrees Fahrenheit May



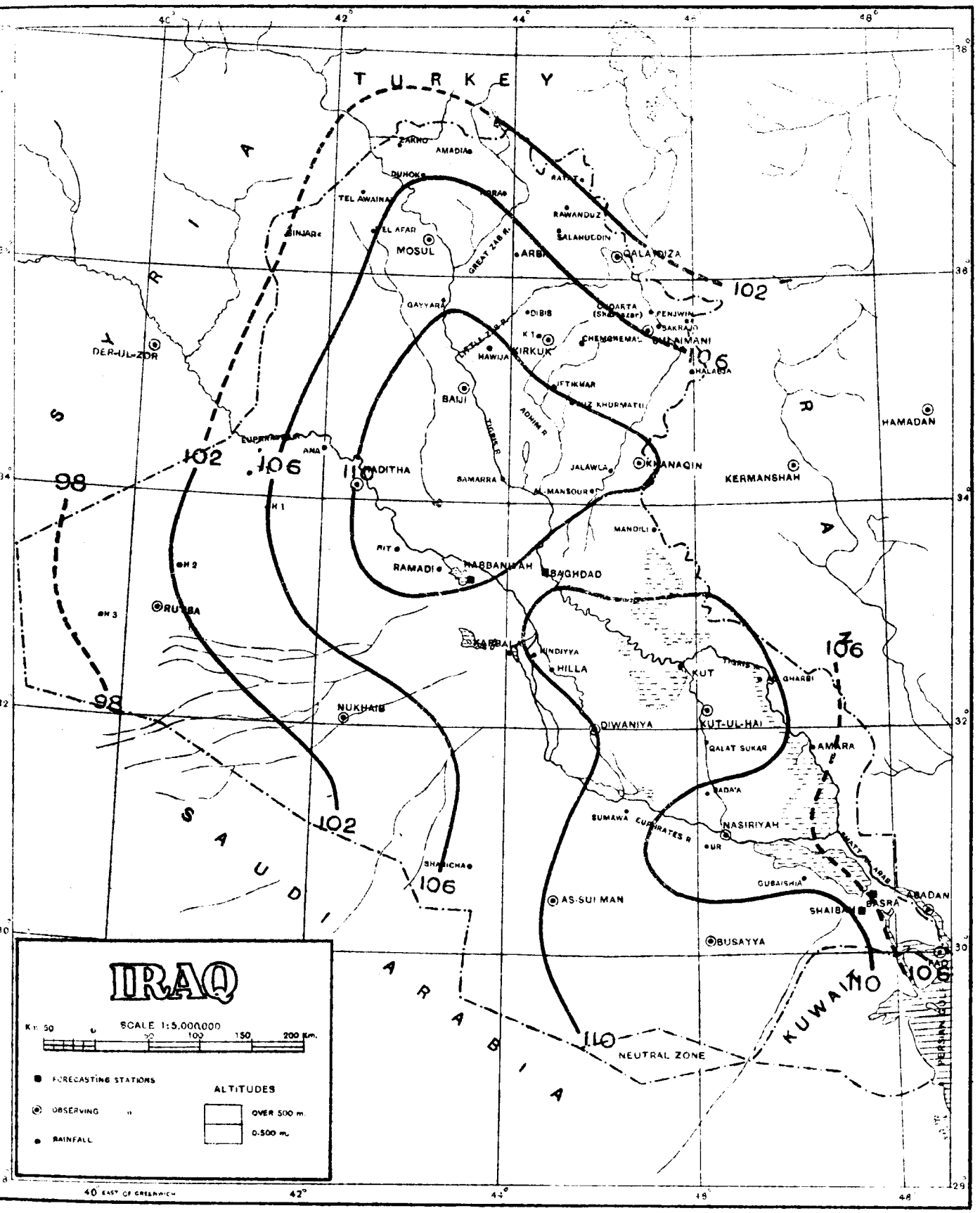
SURVEY PRESS, BAGHDAD

Mean Daily Maximum Temperature in Degrees Fahrenheit June



SURVEY PRESS, BAGHDAD

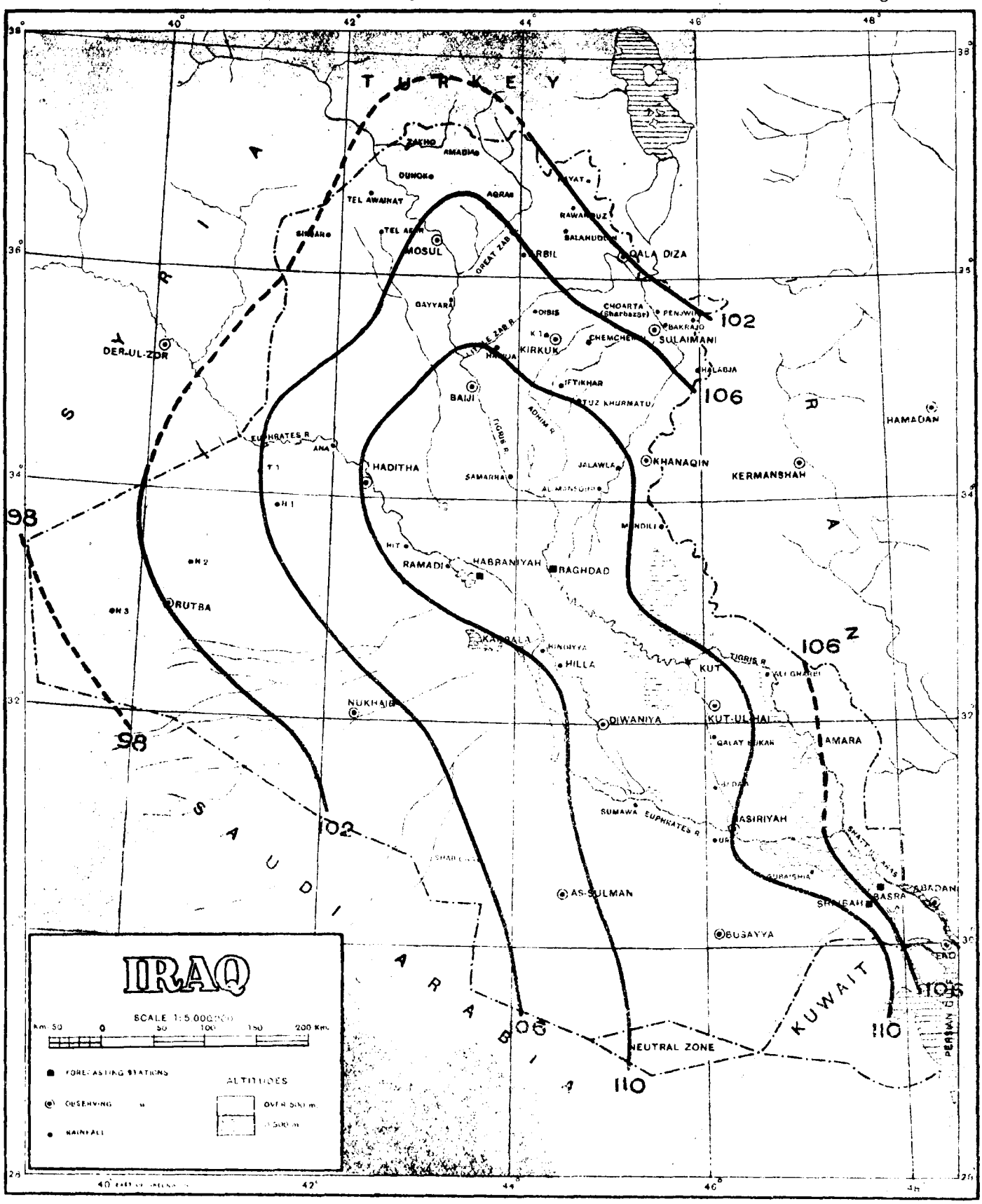
Mean Daily Maximum Temperature in Degrees Fahrenheit — July



SURVEY PRESS, BAGHDAD.

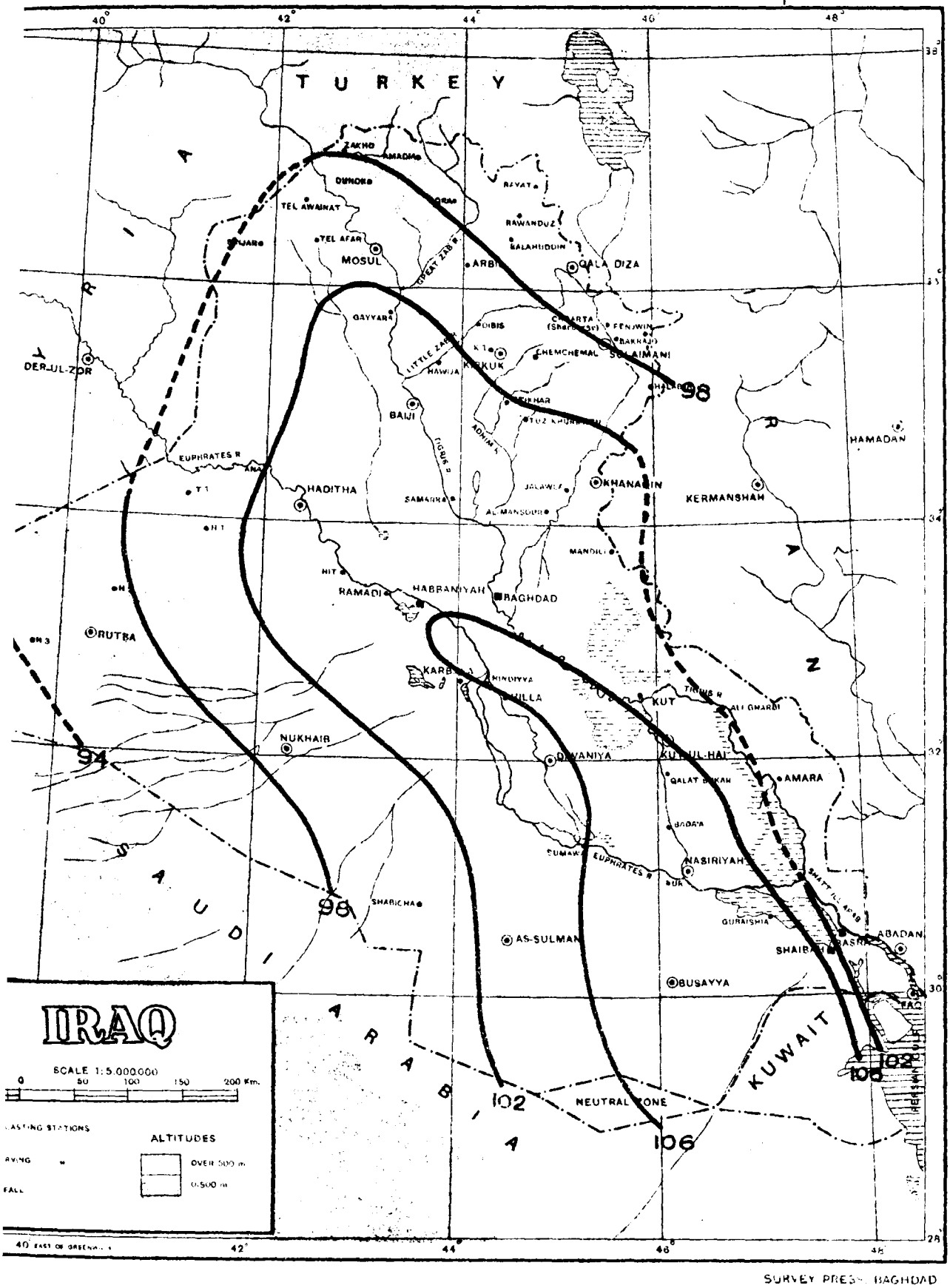
Mean Daily Maximum Temperature in Degrees Fahrenheit

August



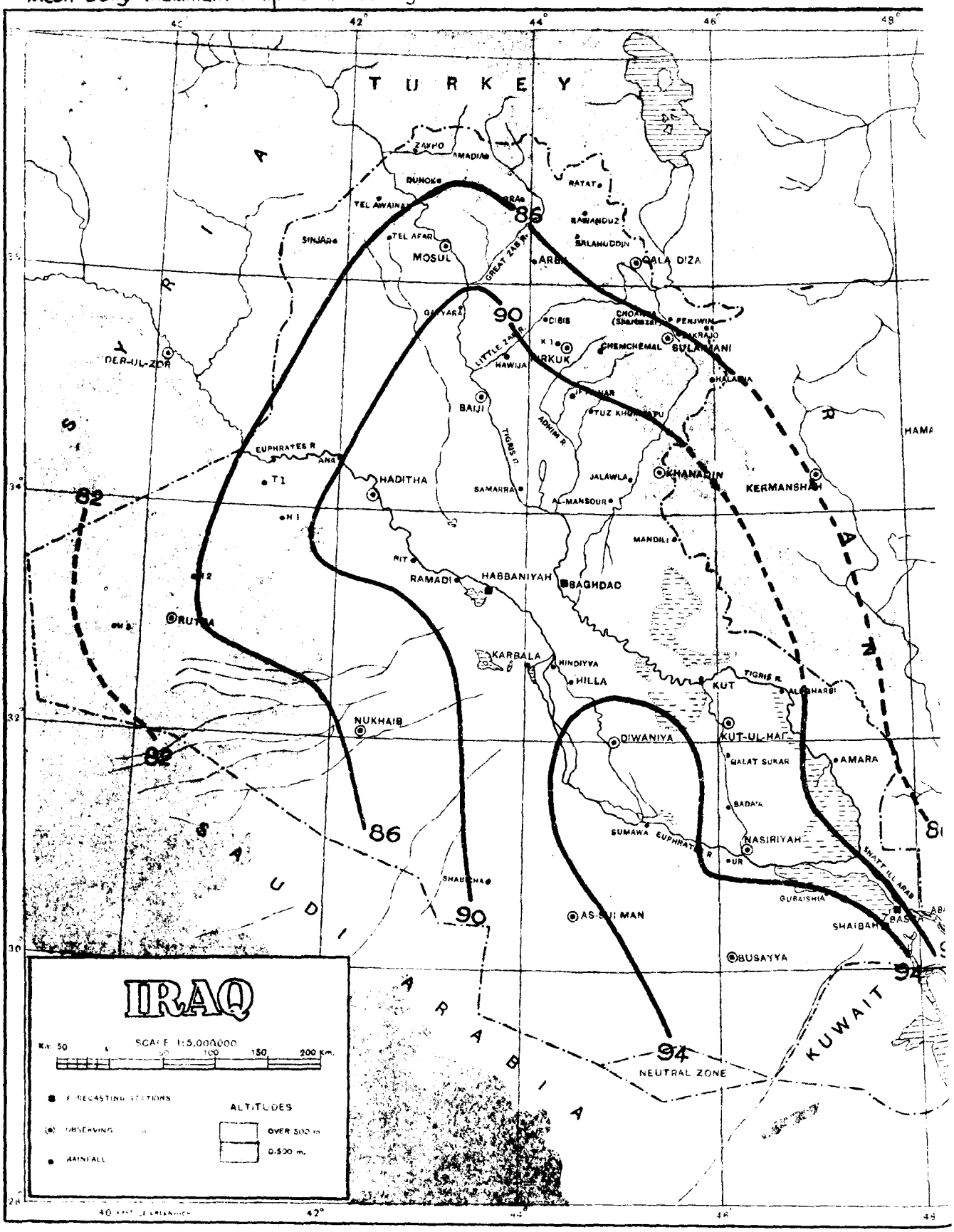
SURVEY PRESS BAGHDAD

Maximum Temperature in Degrees Fahrenheit September



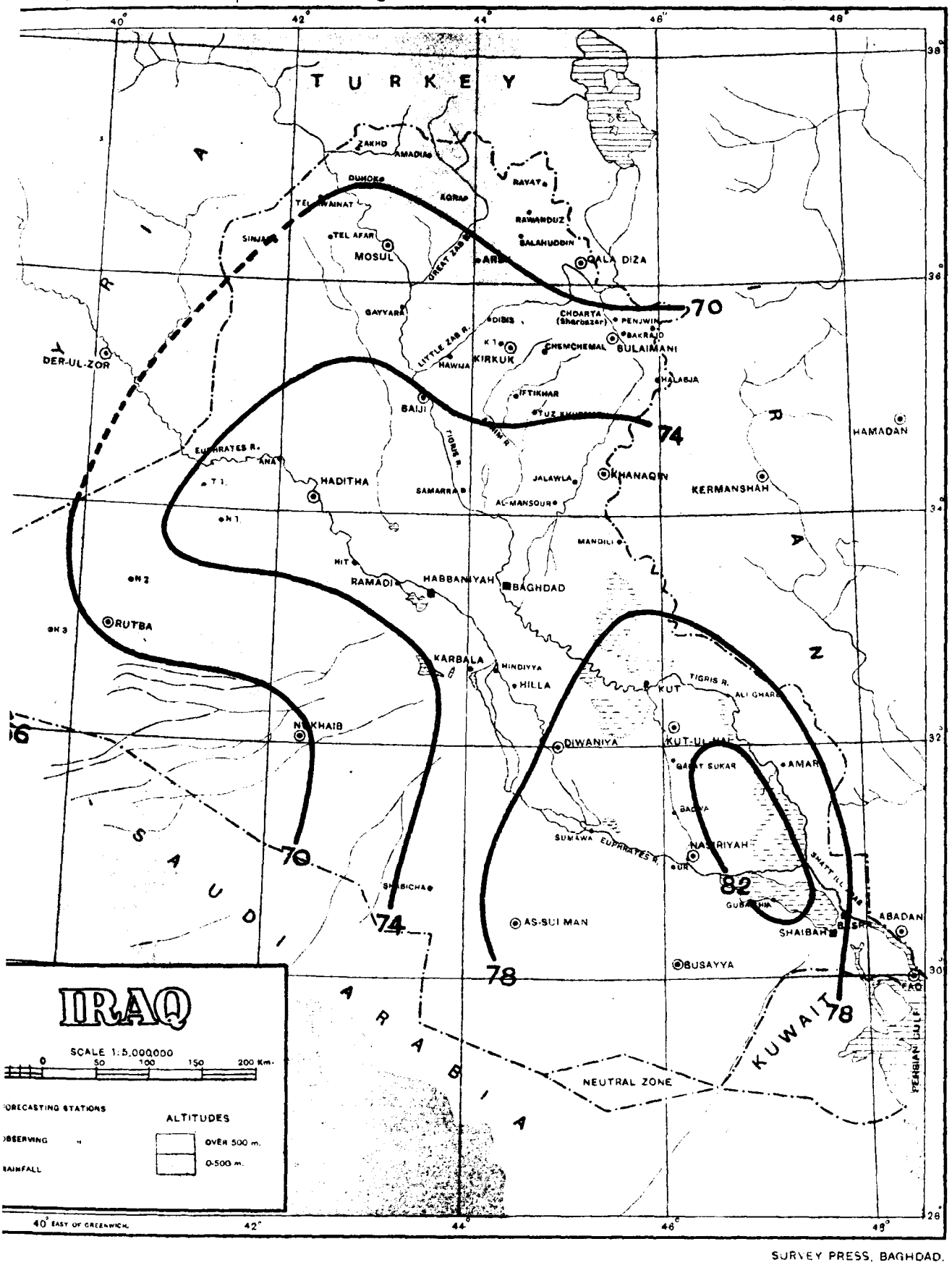
SURVEY PRESS BAGHDAD

Mean Daily Maximum Temperature in Degrees Fahrenheit — October



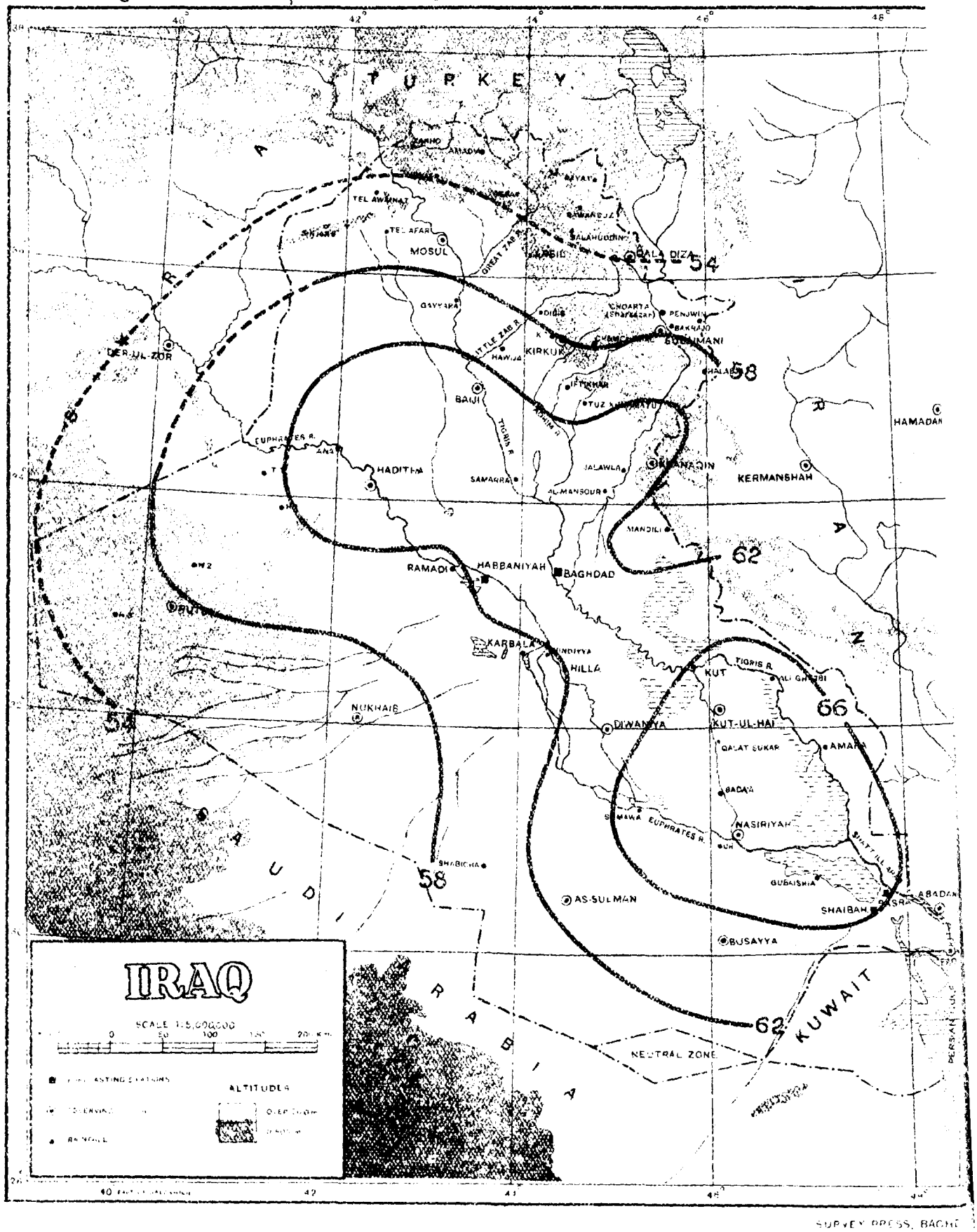
SURVEY PRESS, BA

Daily Maximum Temperature in Degrees Fahrenheit — November

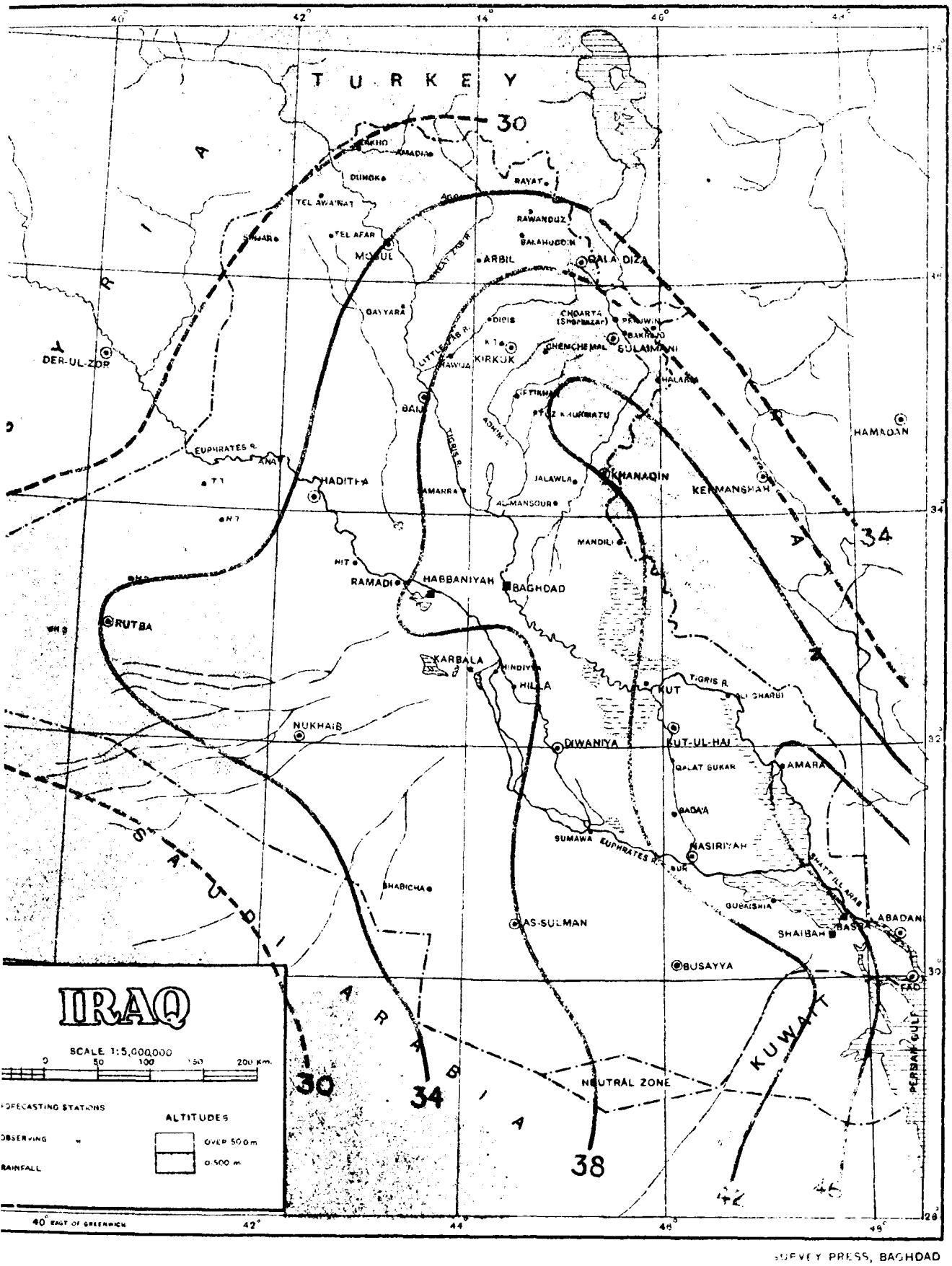


SURVEY PRESS, BAGHDAD.

Mean Daily Maximum Temperature in Degrees Fahrenheit — December



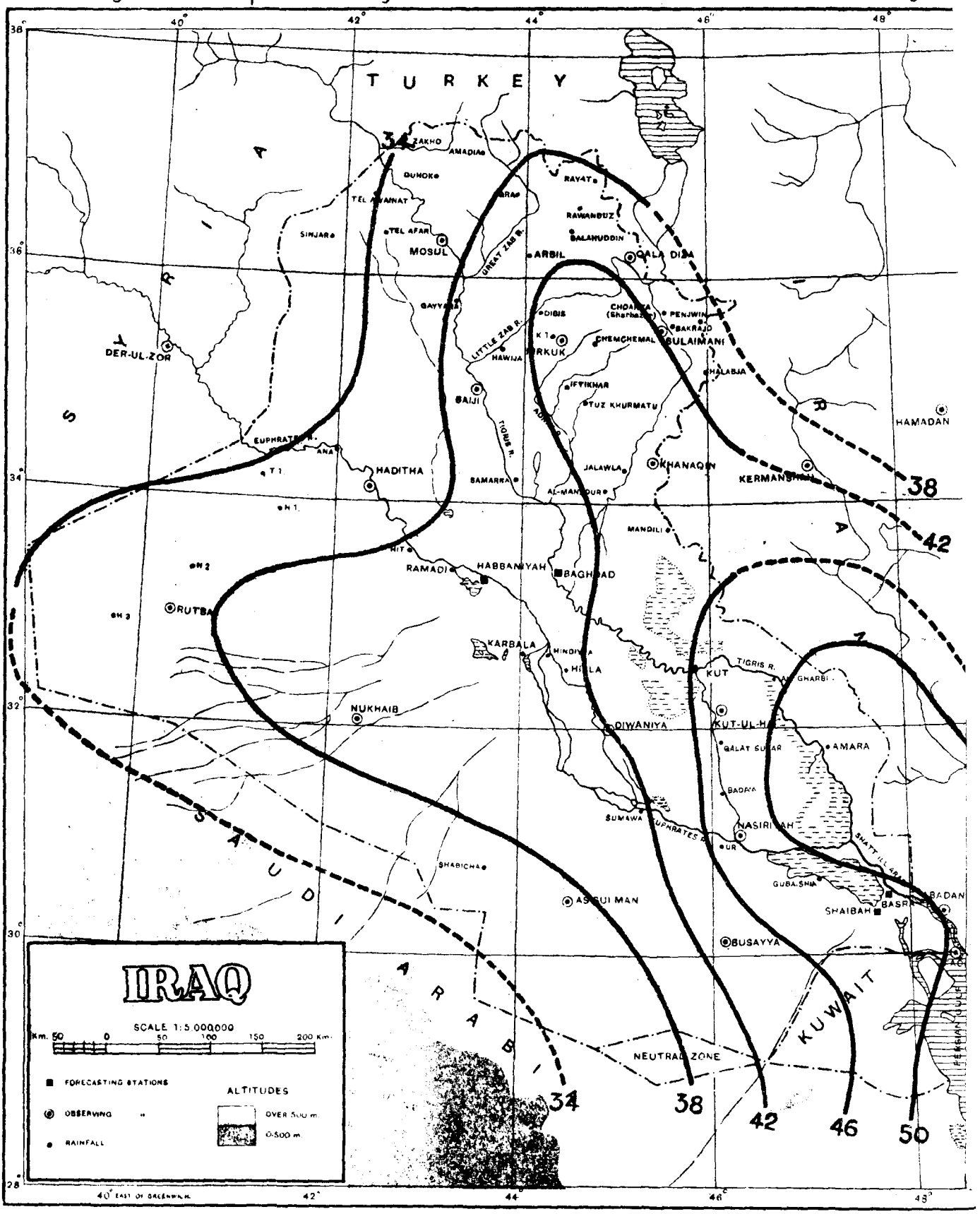
Daily Minimum Temperature in Degrees Fahrenheit — January



SURVEY PRESS, BAGHDAD

Mean Daily Minimum Temperature in Degrees Fahrenheit

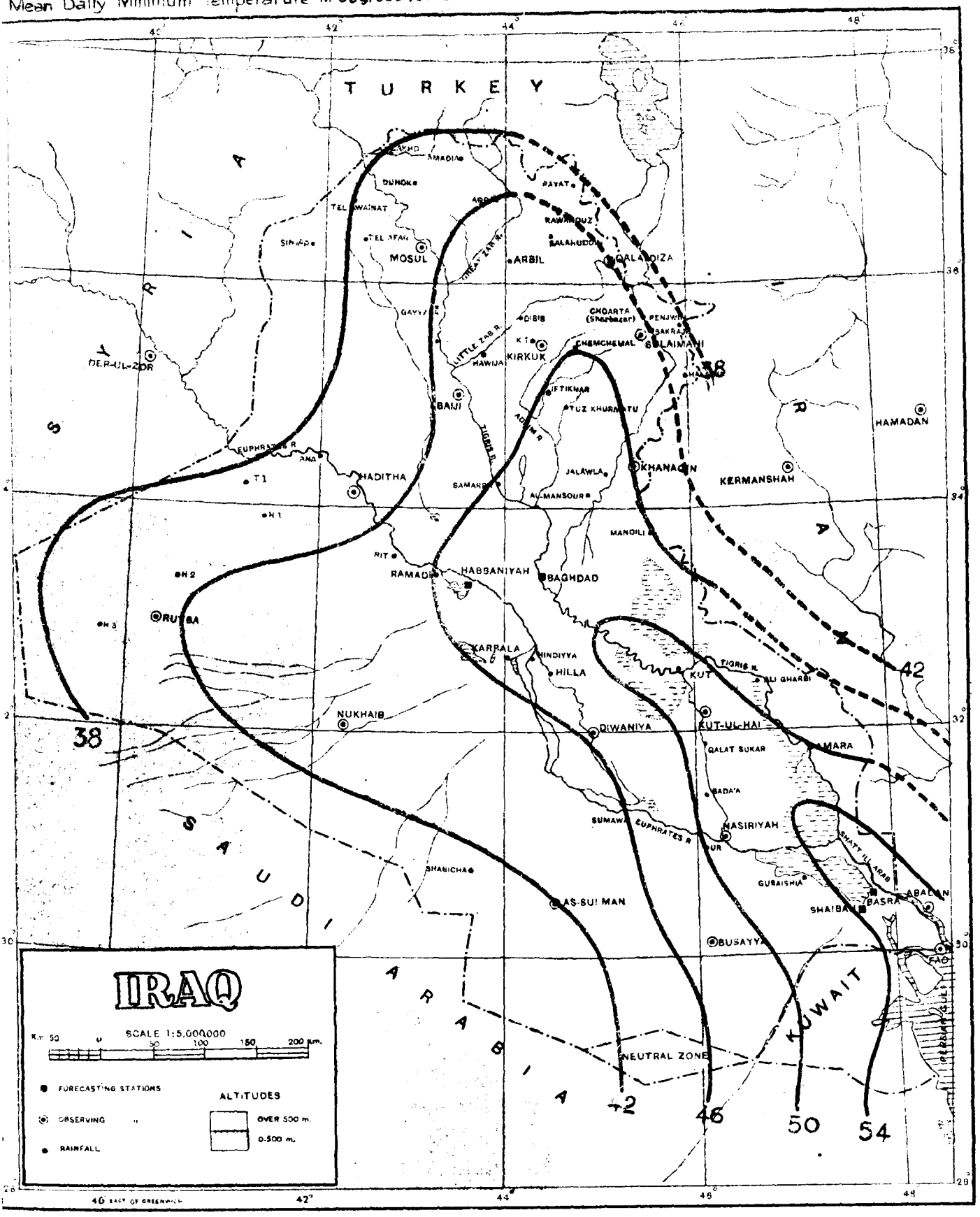
February



SURVEY PRESS, BAGHDAD

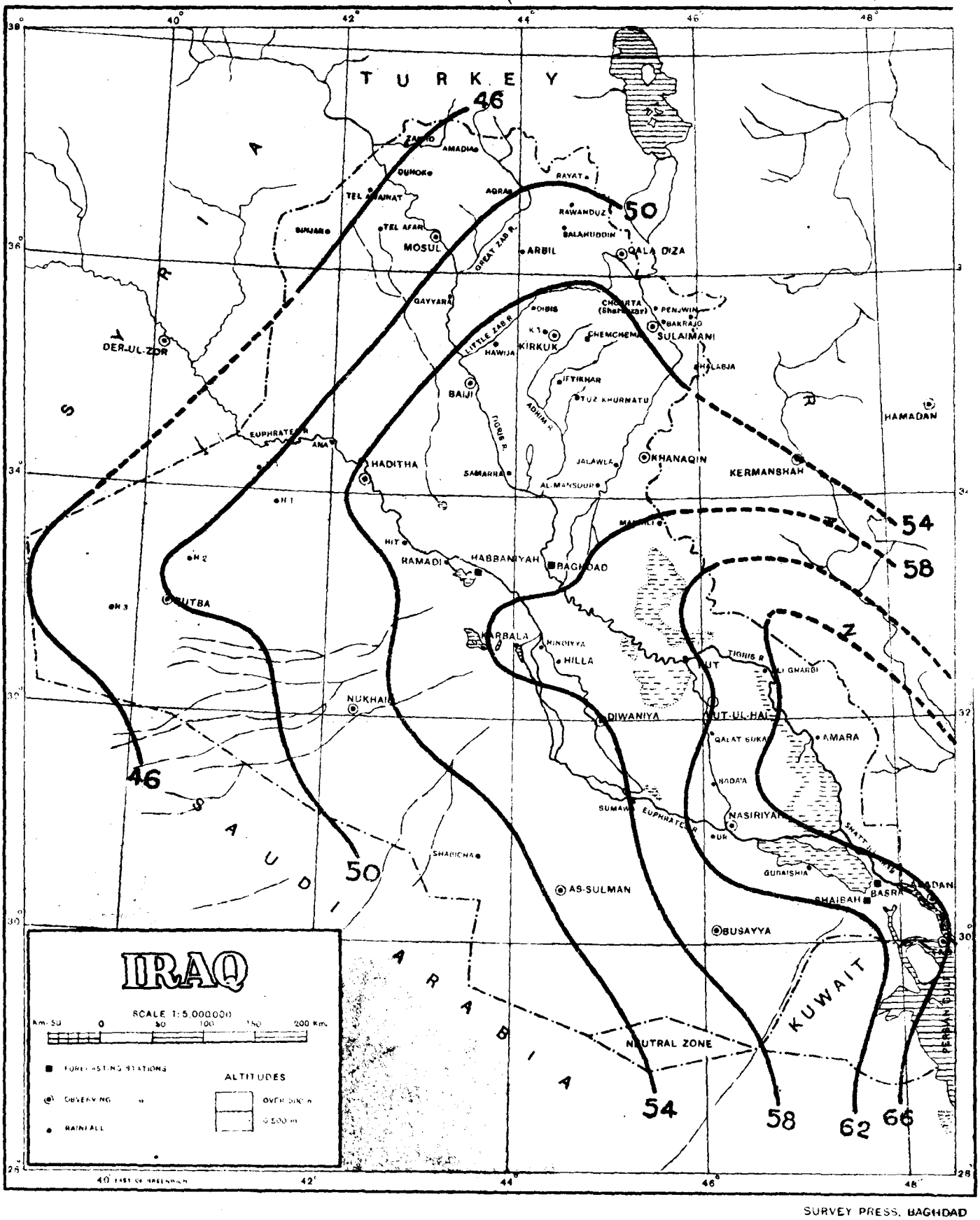
Mean Daily Minimum Temperature in Degrees Fahrenheit

March



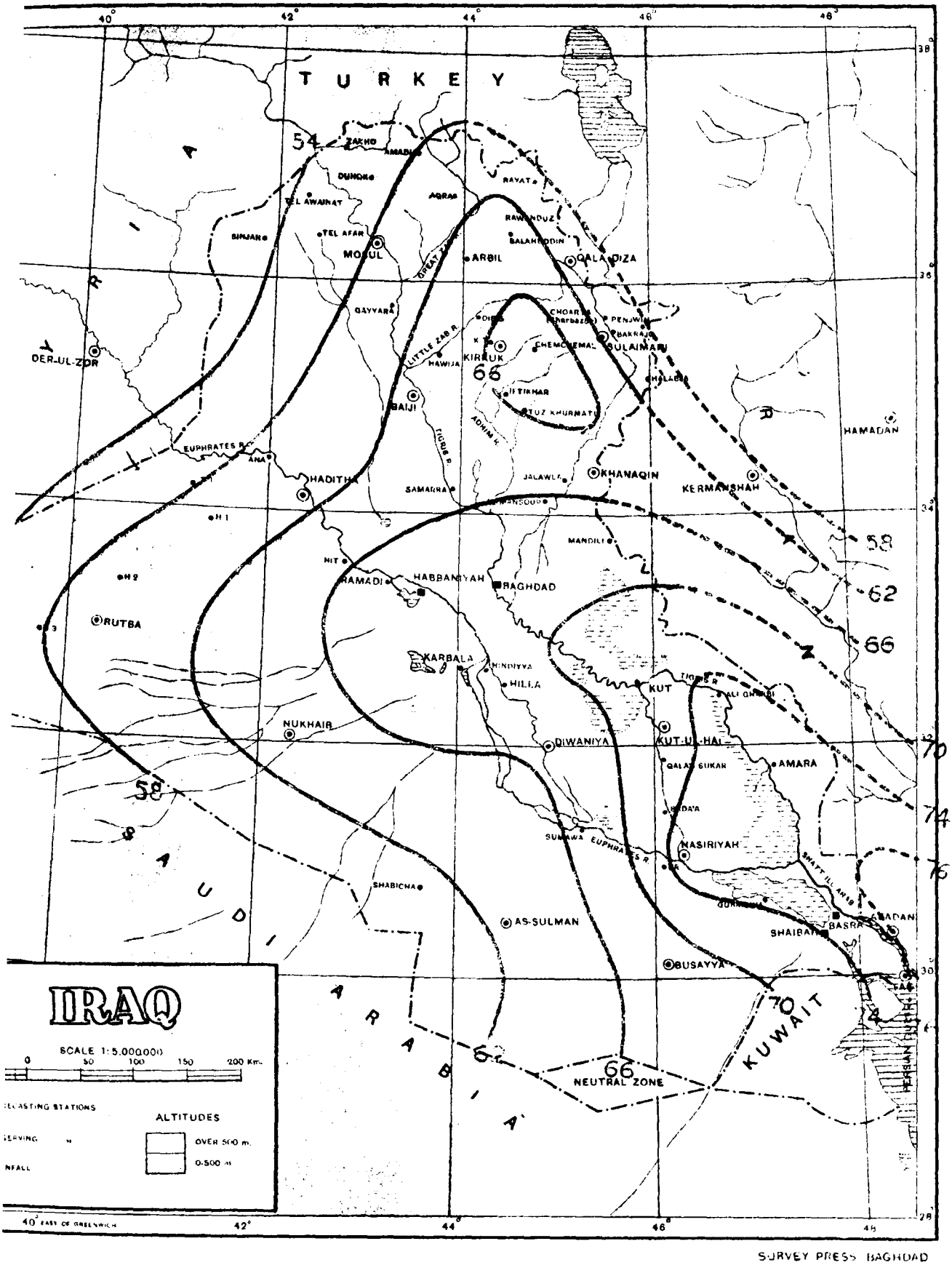
SURVEY PRESS, BAGHDAD.

Mean Daily Minimum Temperature in Degrees Fahrenheit April



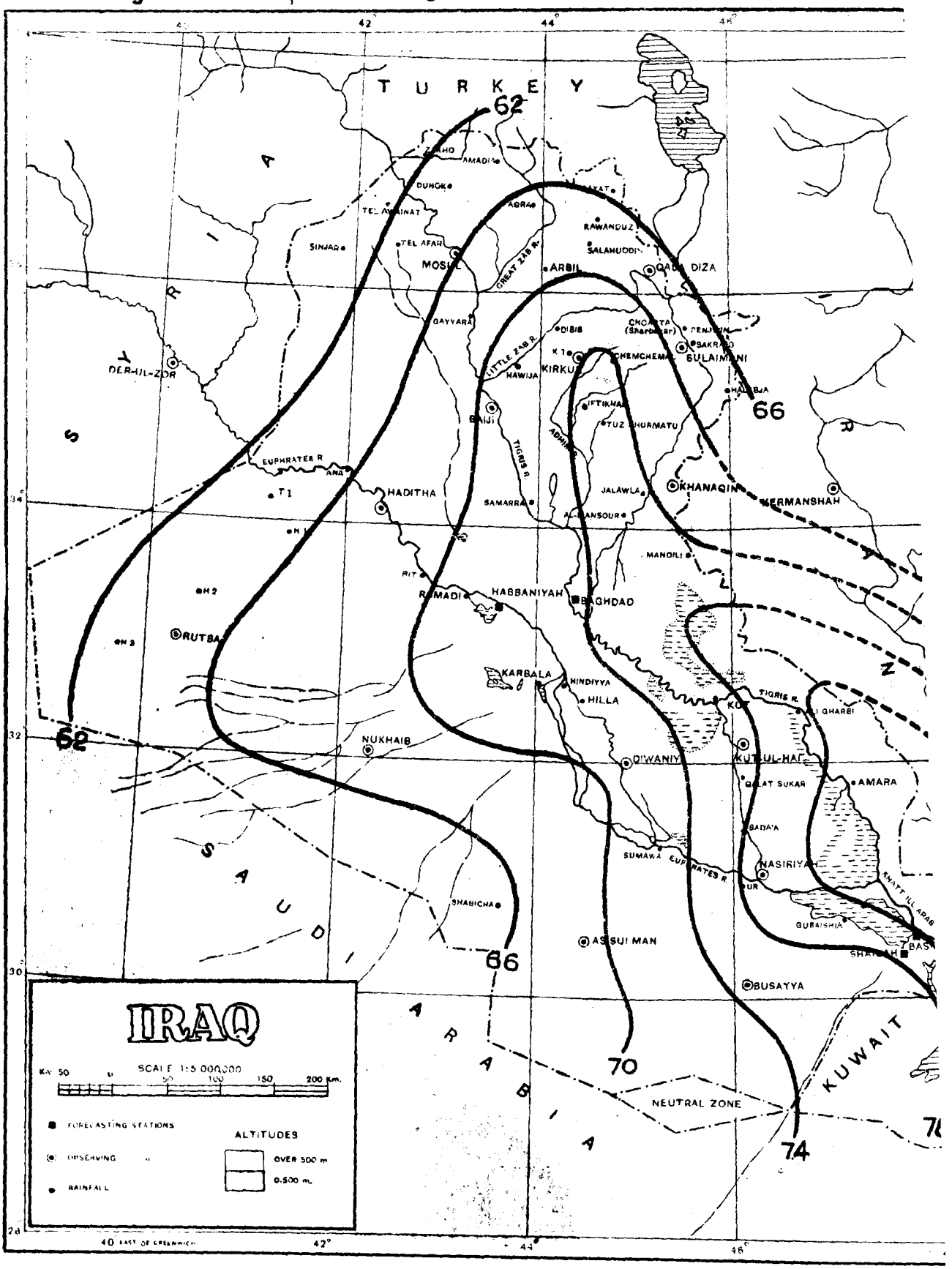
SURVEY PRESS, BAGHDAD

ily Minimum Temperature in Degrees Fahrenheit May

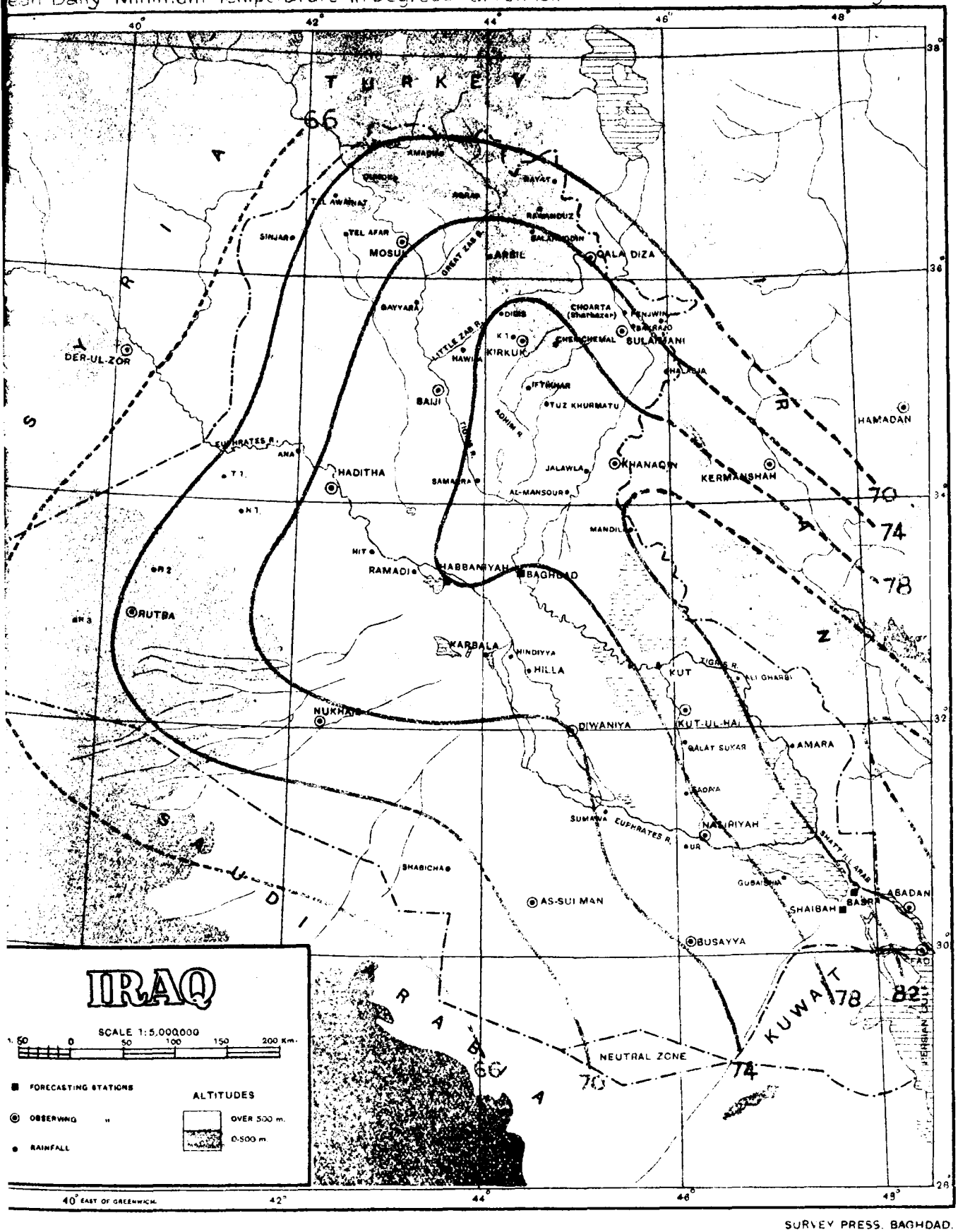


SURVEY PRESS BAGHDAD

Mean Daily Minimum Temperature in Degrees Fahrenheit

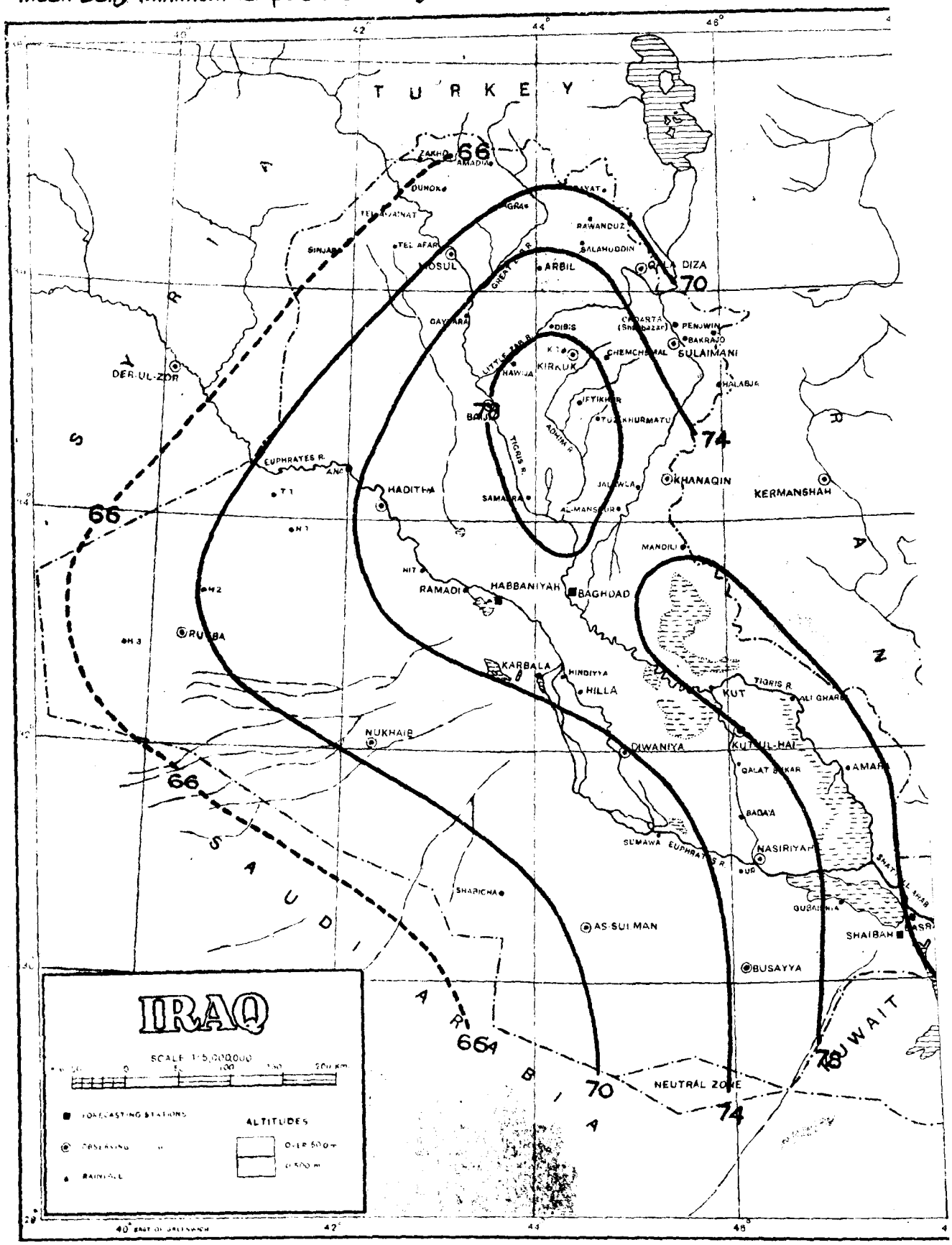


ean Daily Minimum Temperature in Degrees Fahrenheit July



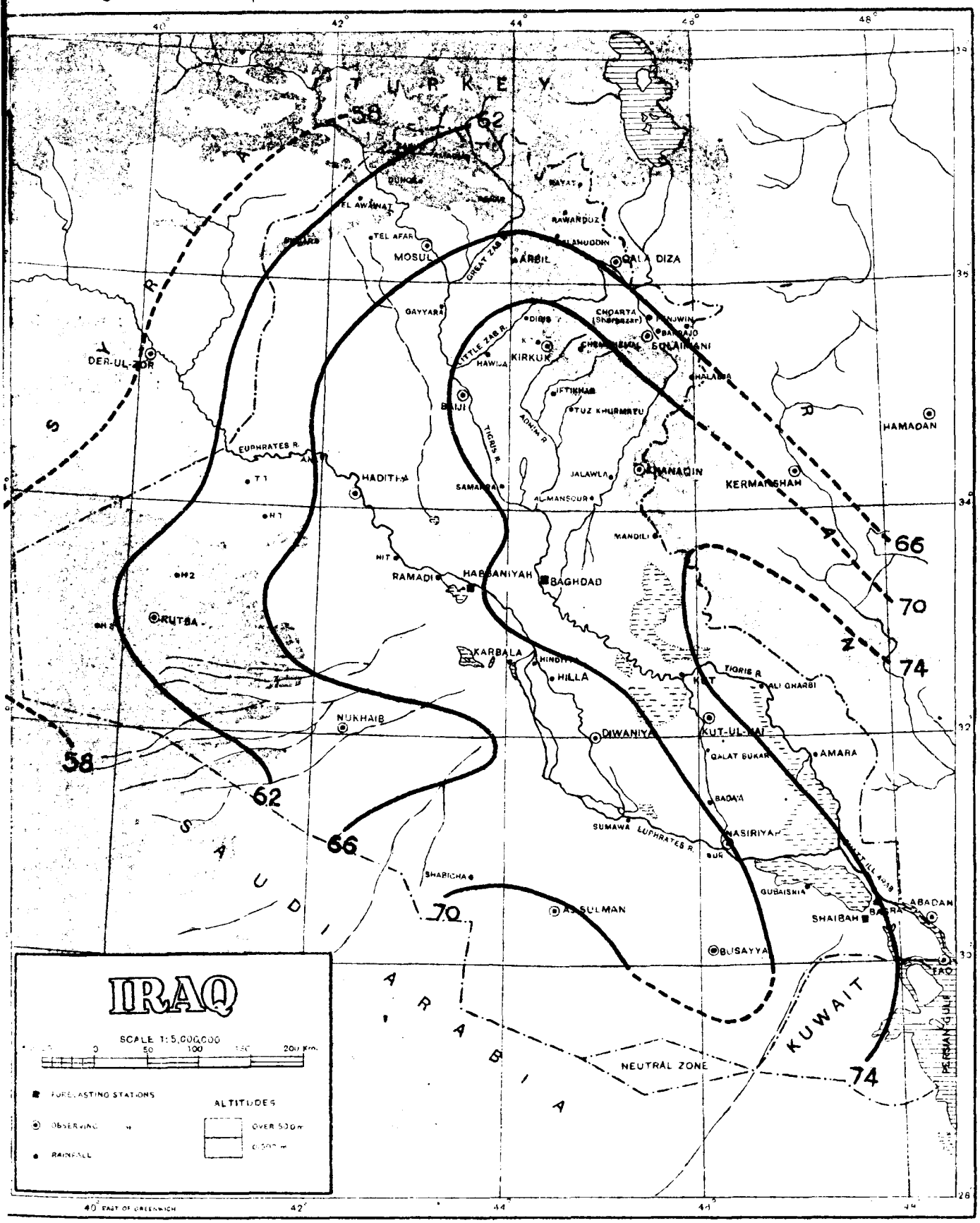
SURVEY PRESS. BAGHDAD.

Mean Daily Minimum Temperature in Degrees Fahrenheit



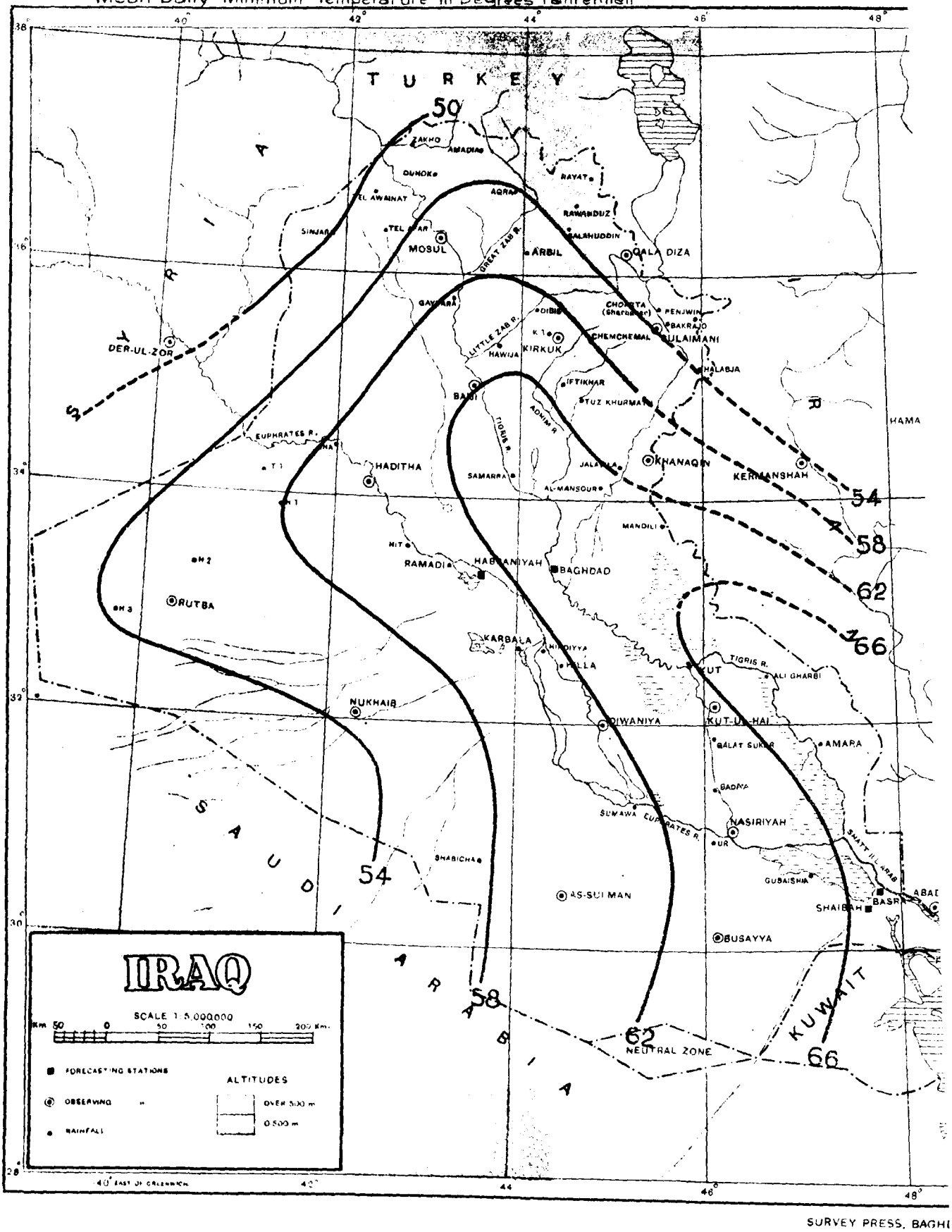
SURVEY PRESS,

Mean Daily Minimum Temperature in Degrees Fahrenheit — September



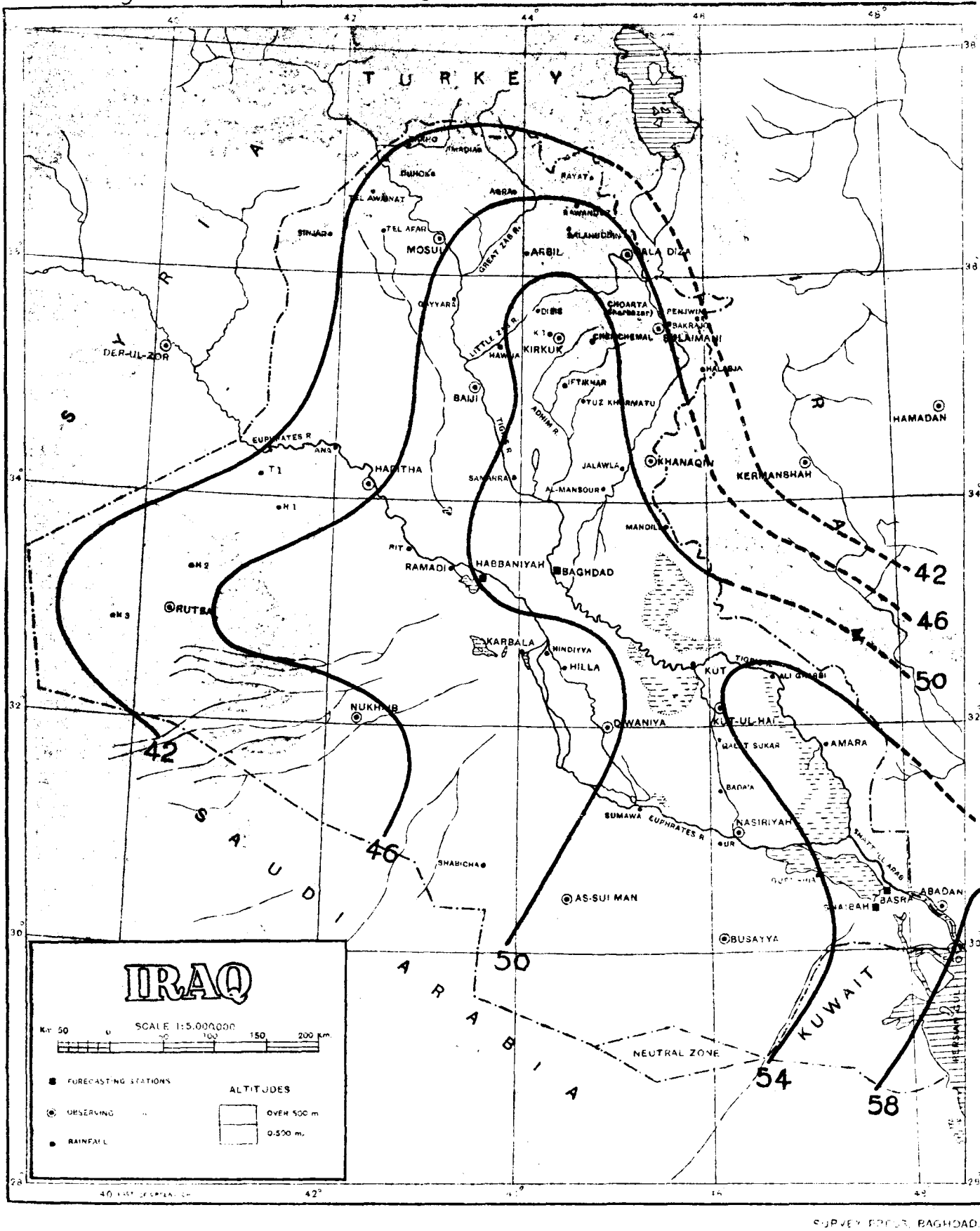
SURVEY PRESS, BAGHDAD

Mean Daily Minimum Temperature in Degrees Fahrenheit



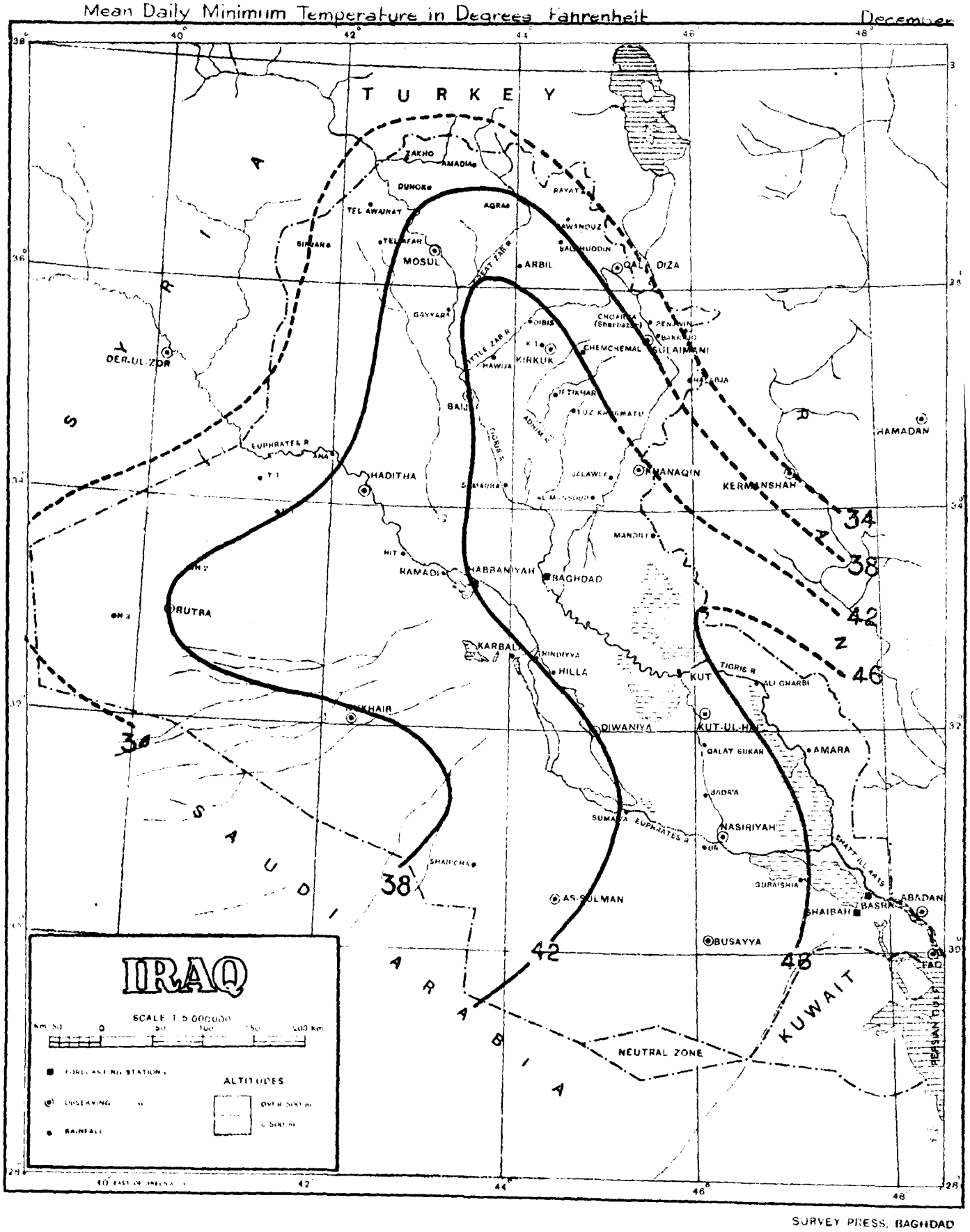
SURVEY PRESS, BAGHD

Mean Daily Minimum Temperature in Degrees Fahrenheit November



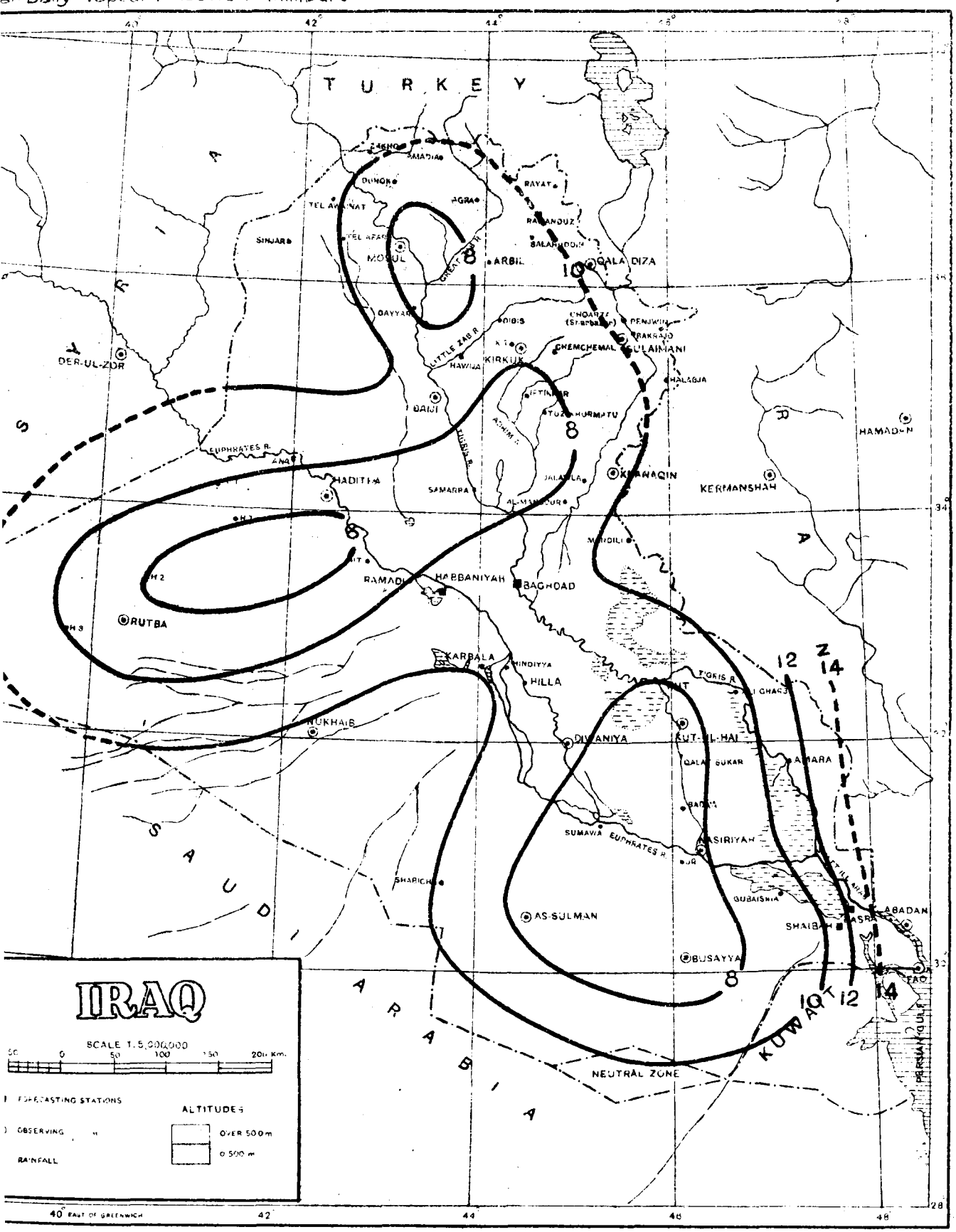
SURVEY PRESS, BAGHDAD.

Mean Daily Minimum Temperature in Degrees Fahrenheit December



SURVEY PRESS, BAGHDAD

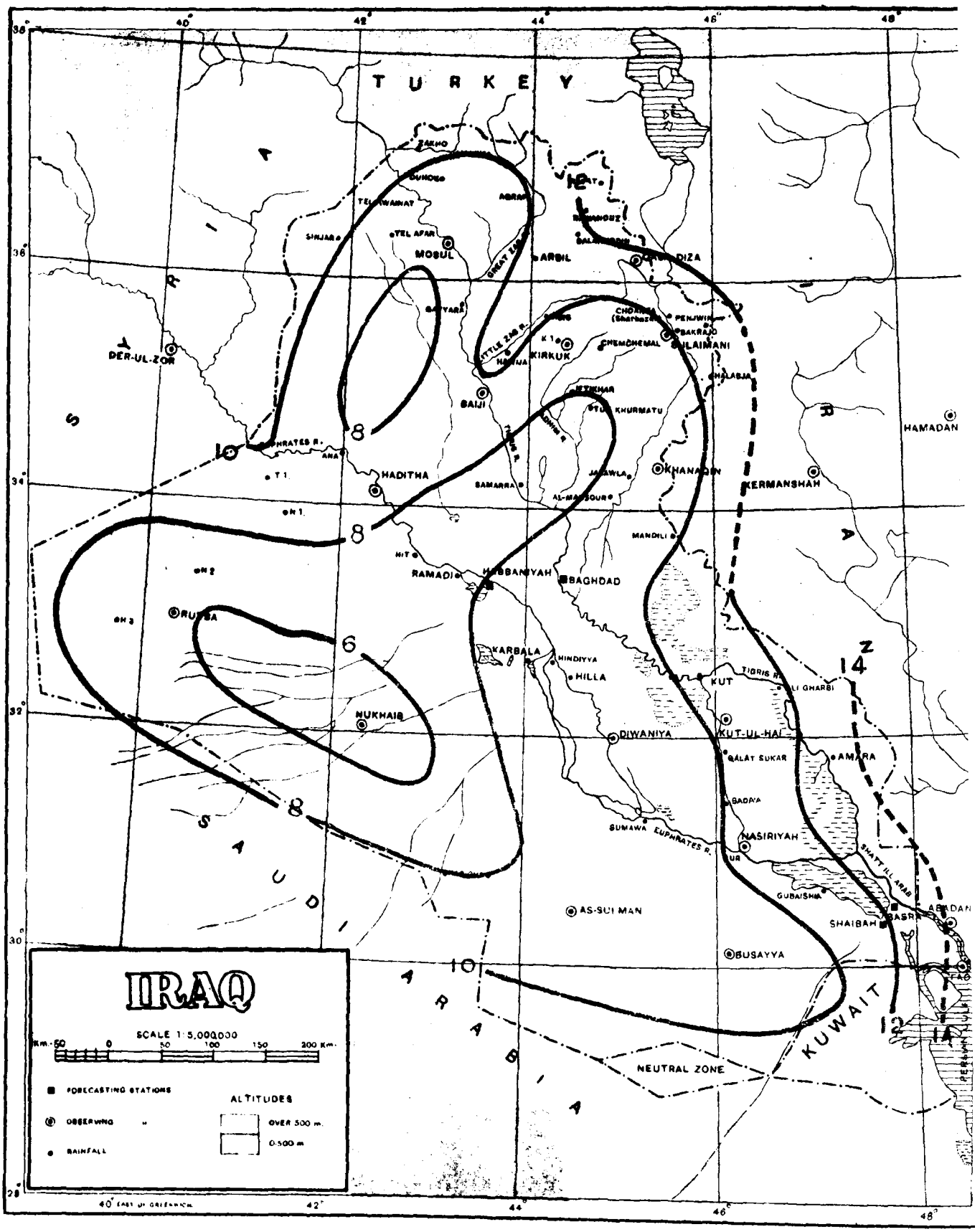
an Daily Vapour Pressure in Millibars January



SURVEY PRESS, BAGHDAD

Mean Daily Vapour Pressure in Millibars

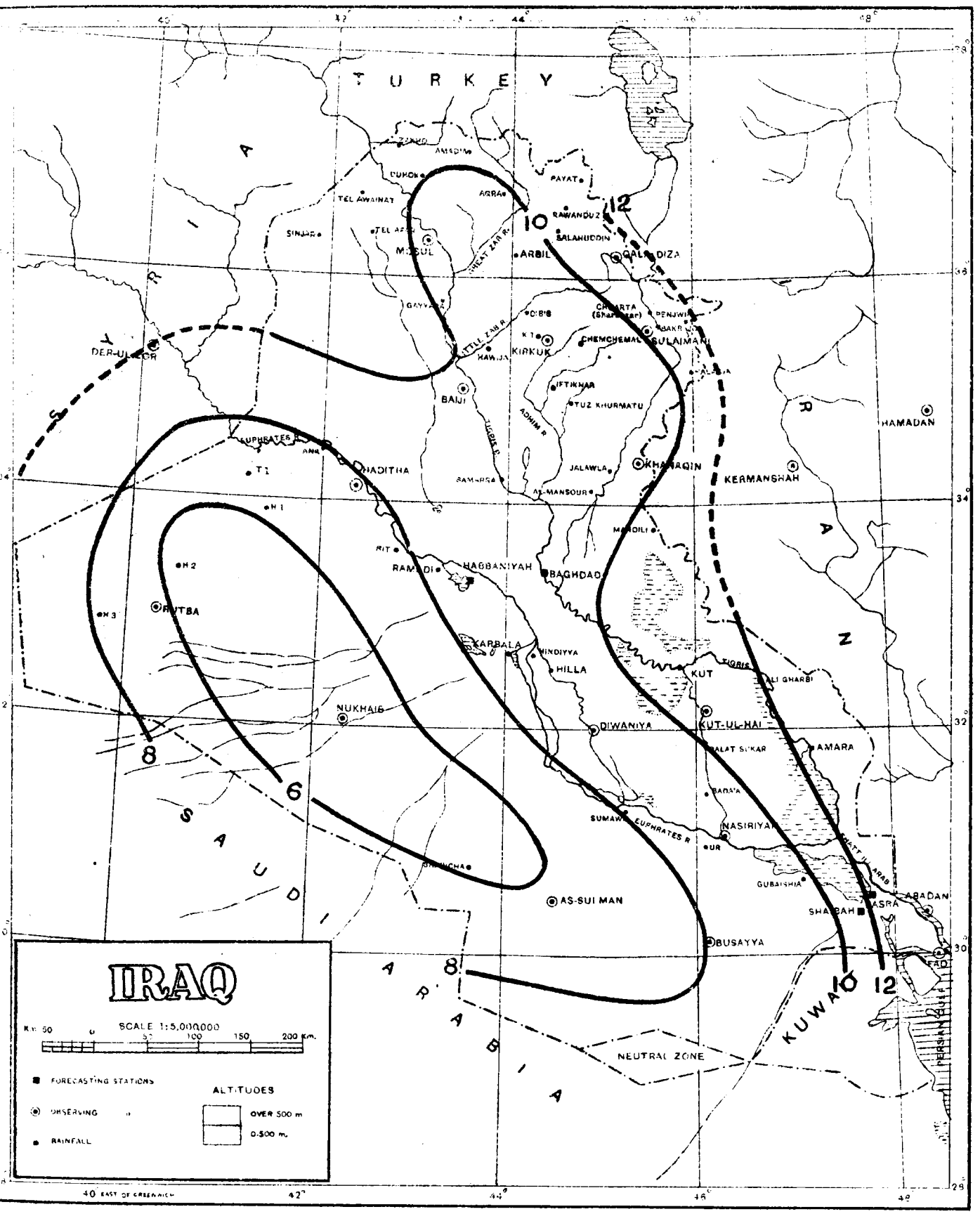
February



SURVEY PRESS, BAGHDA

Mean Daily Vapour Pressure in Millibars

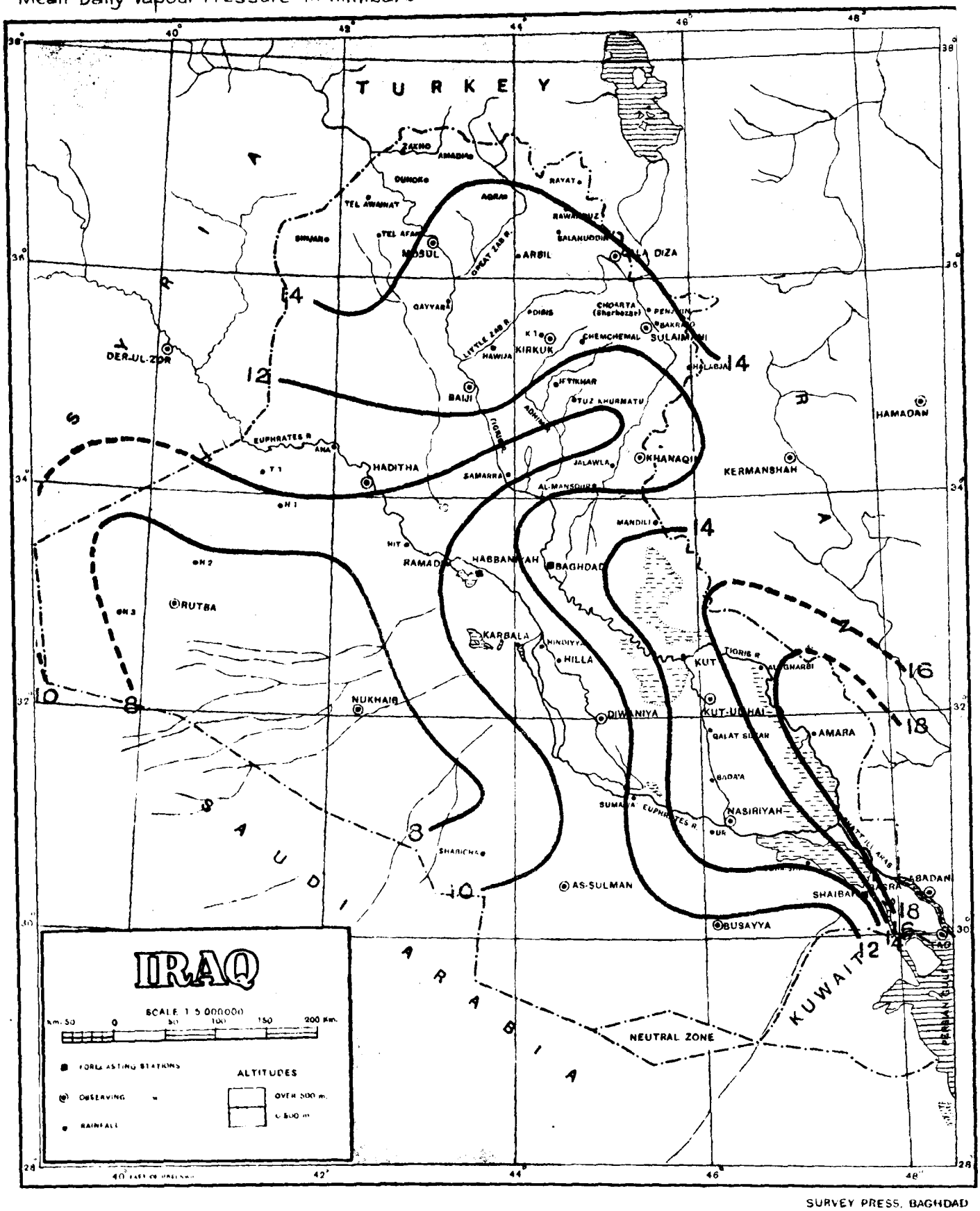
March



SURVEY PRESS, BAGHDAD.

Mean Daily Vapour Pressure in Millibars

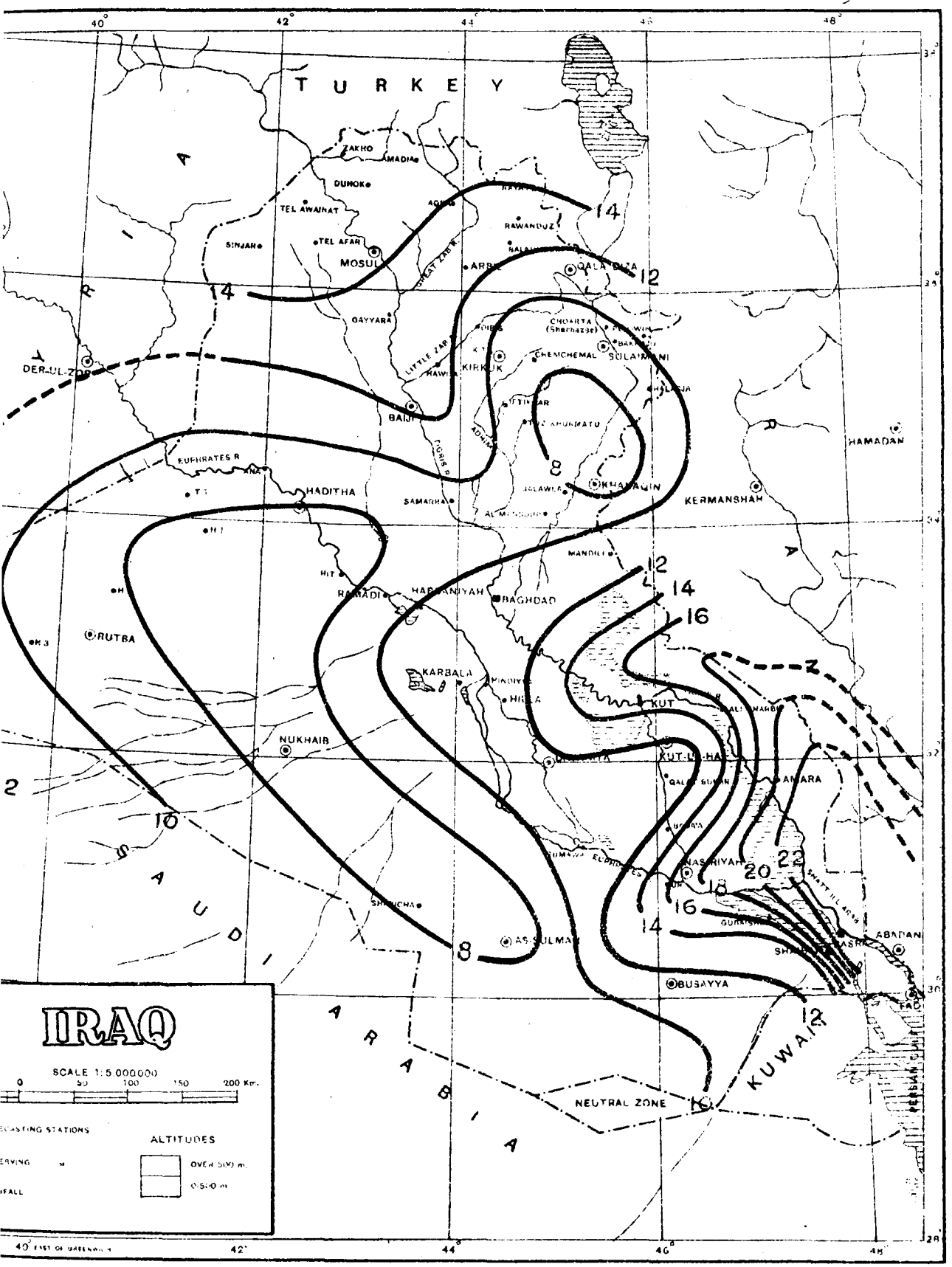
April



SURVEY PRESS, BAGHDAD

Daily Vapour Pressure in Millibars

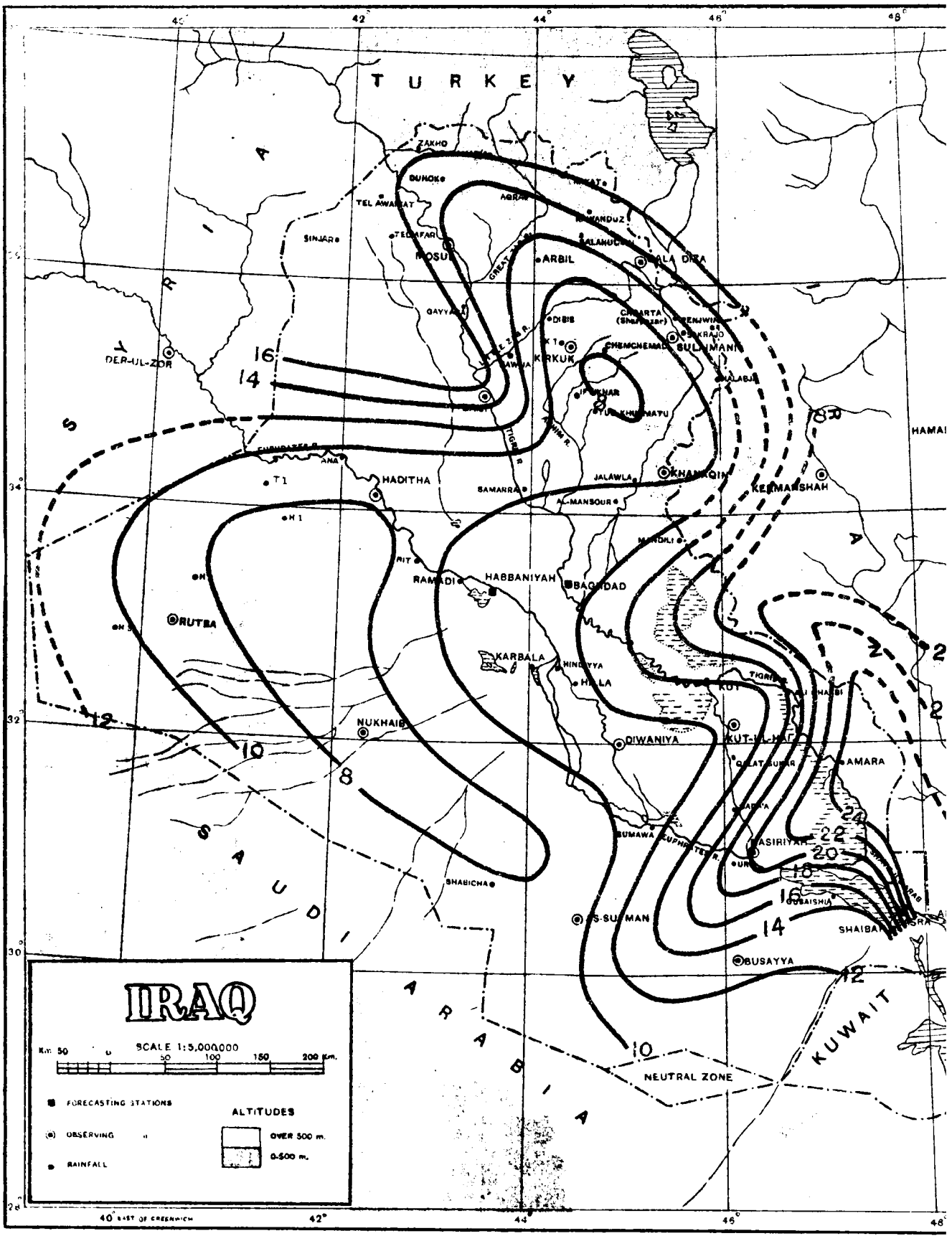
May



SURVEY PRESS BAGHDAD

Mean Daily Vapour Pressure in Millibars

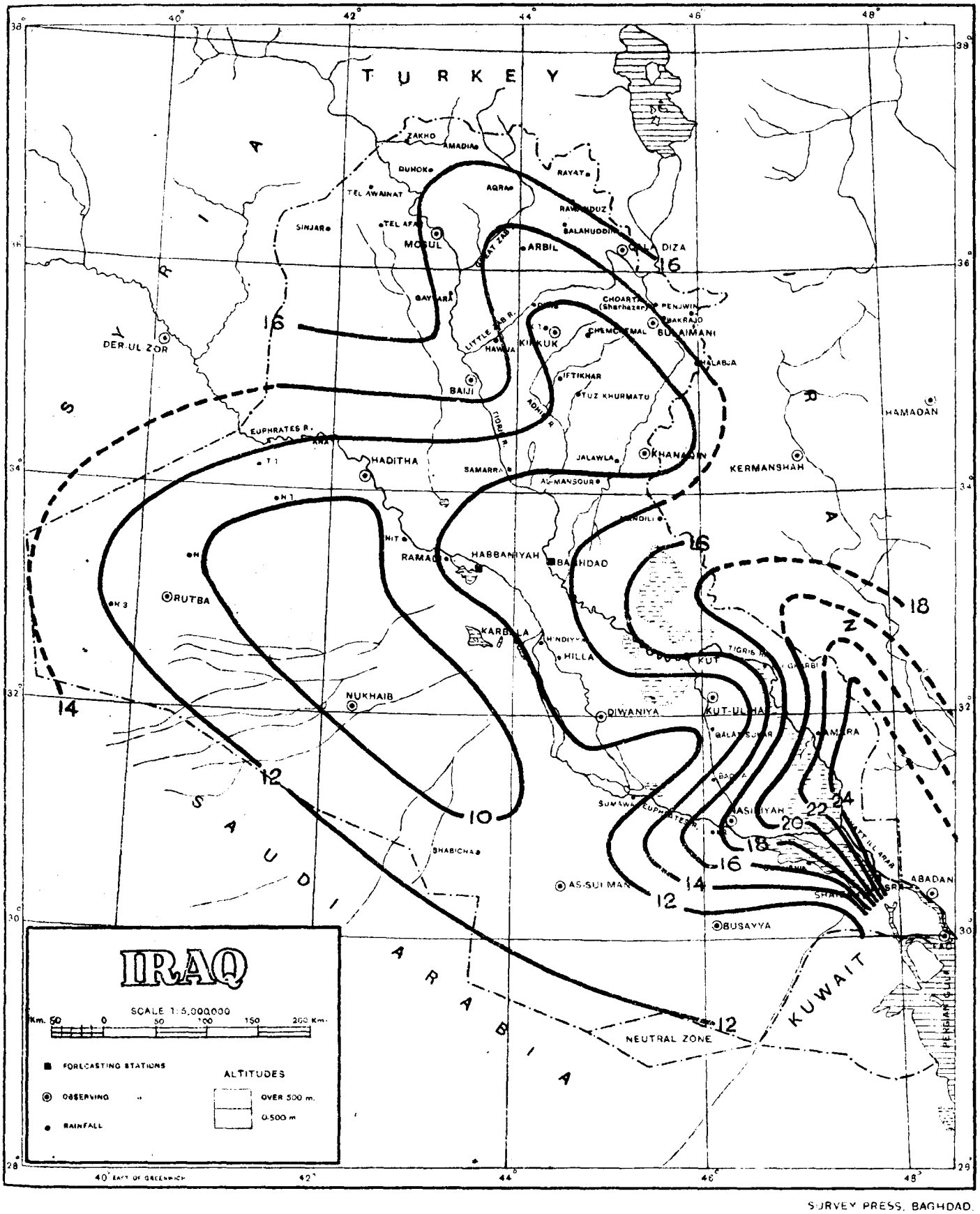
June



SURVEY PRESS, BA

Mean Daily Vapour Pressure in Millibars

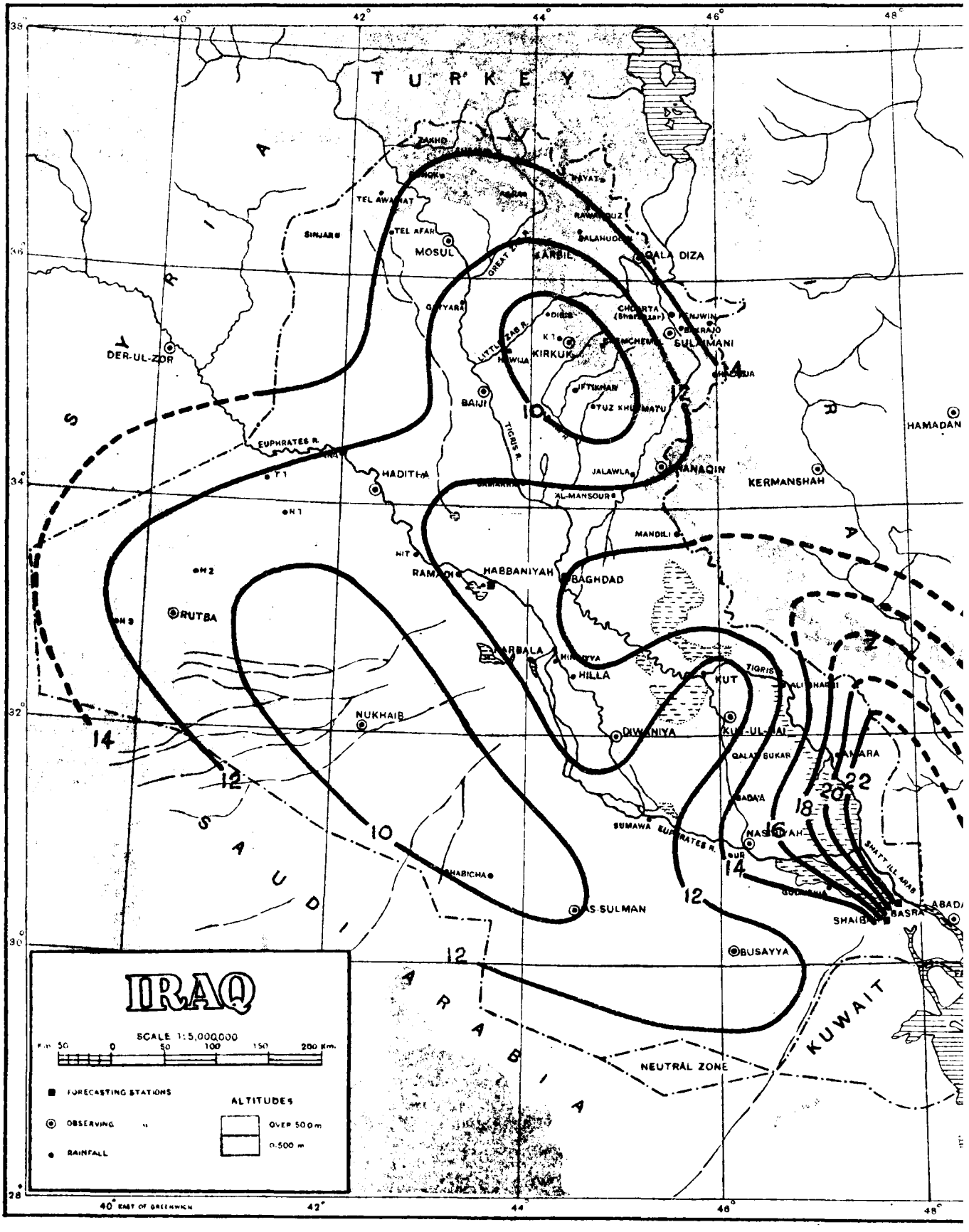
July



SURVEY PRESS, BAGHDAD.

Mean Daily Vapour Pressure in Millibars

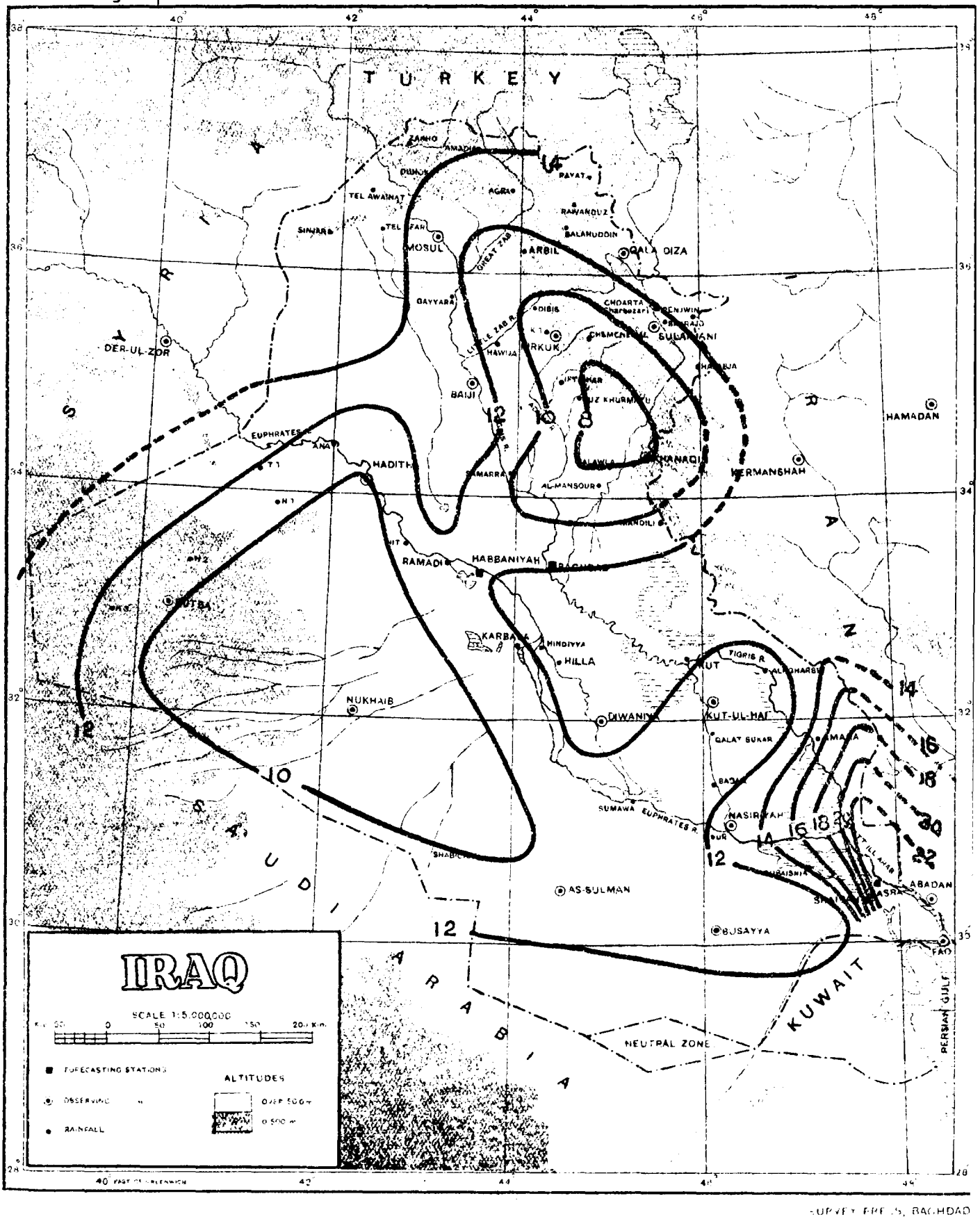
August



SURVEY PRESS, BAGH

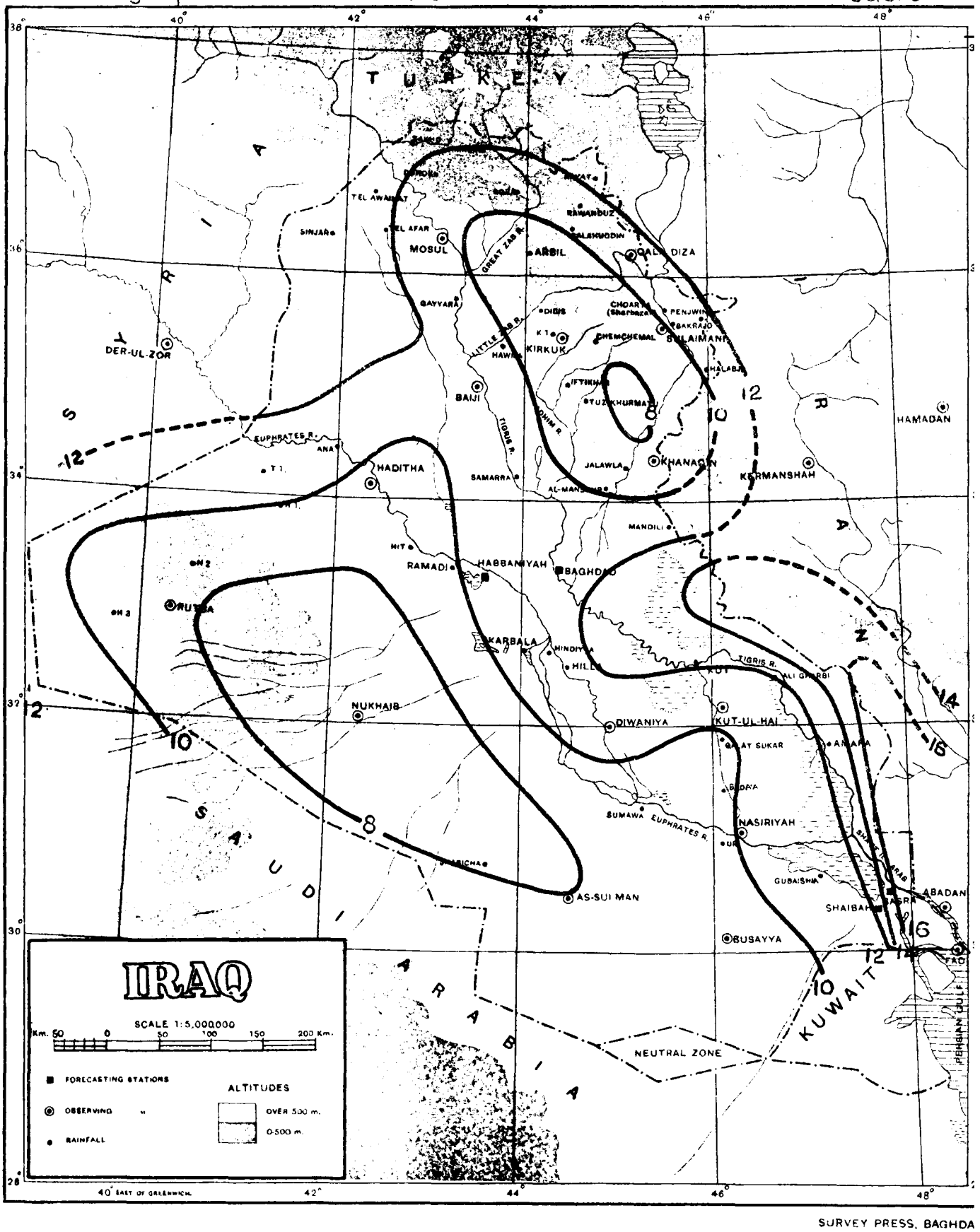
Mean Daily Vapour Pressure in Millibars

September



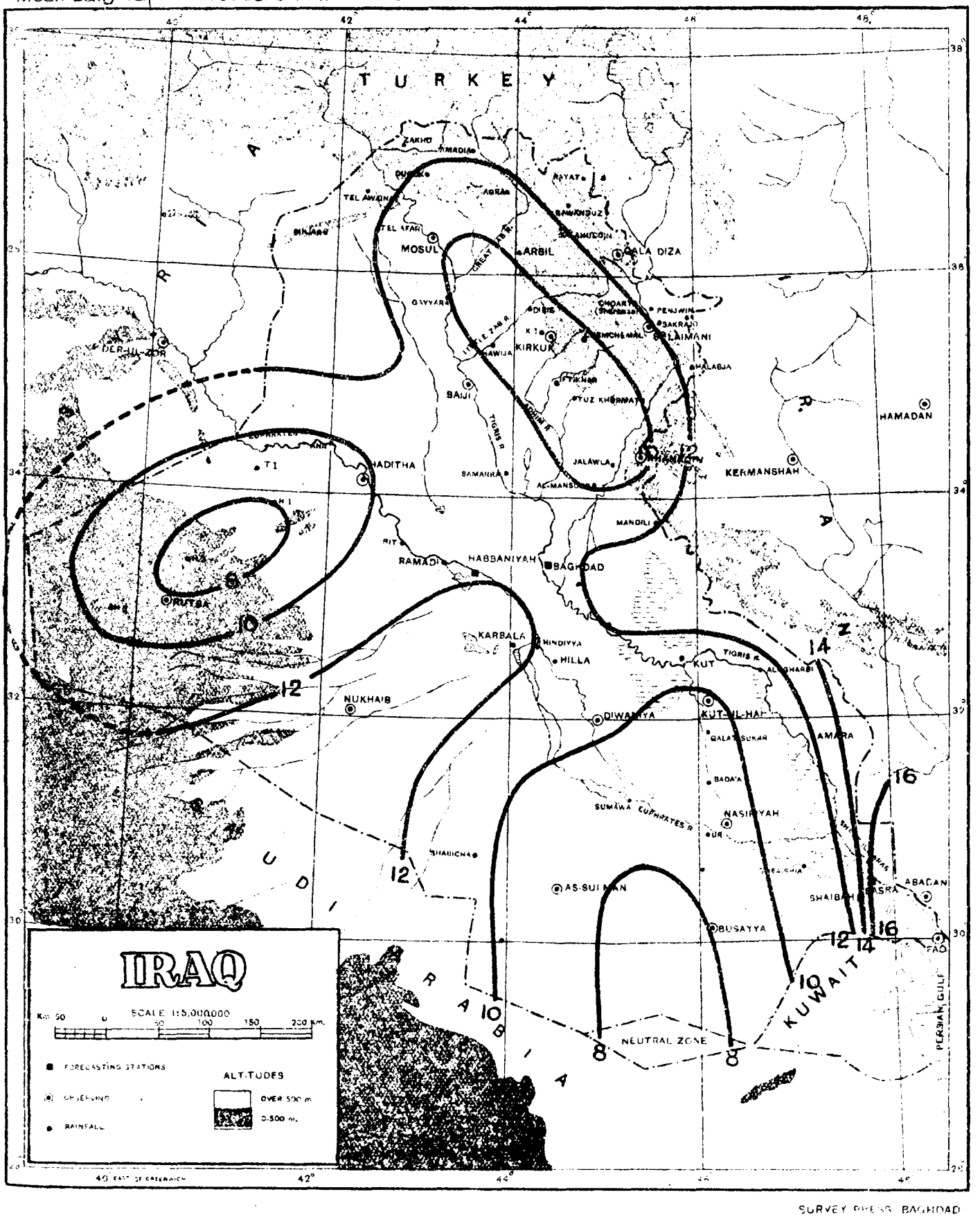
SURVEY PRESS, BAGHDAD

Mean Daily Vapour Pressure in Millibars — October



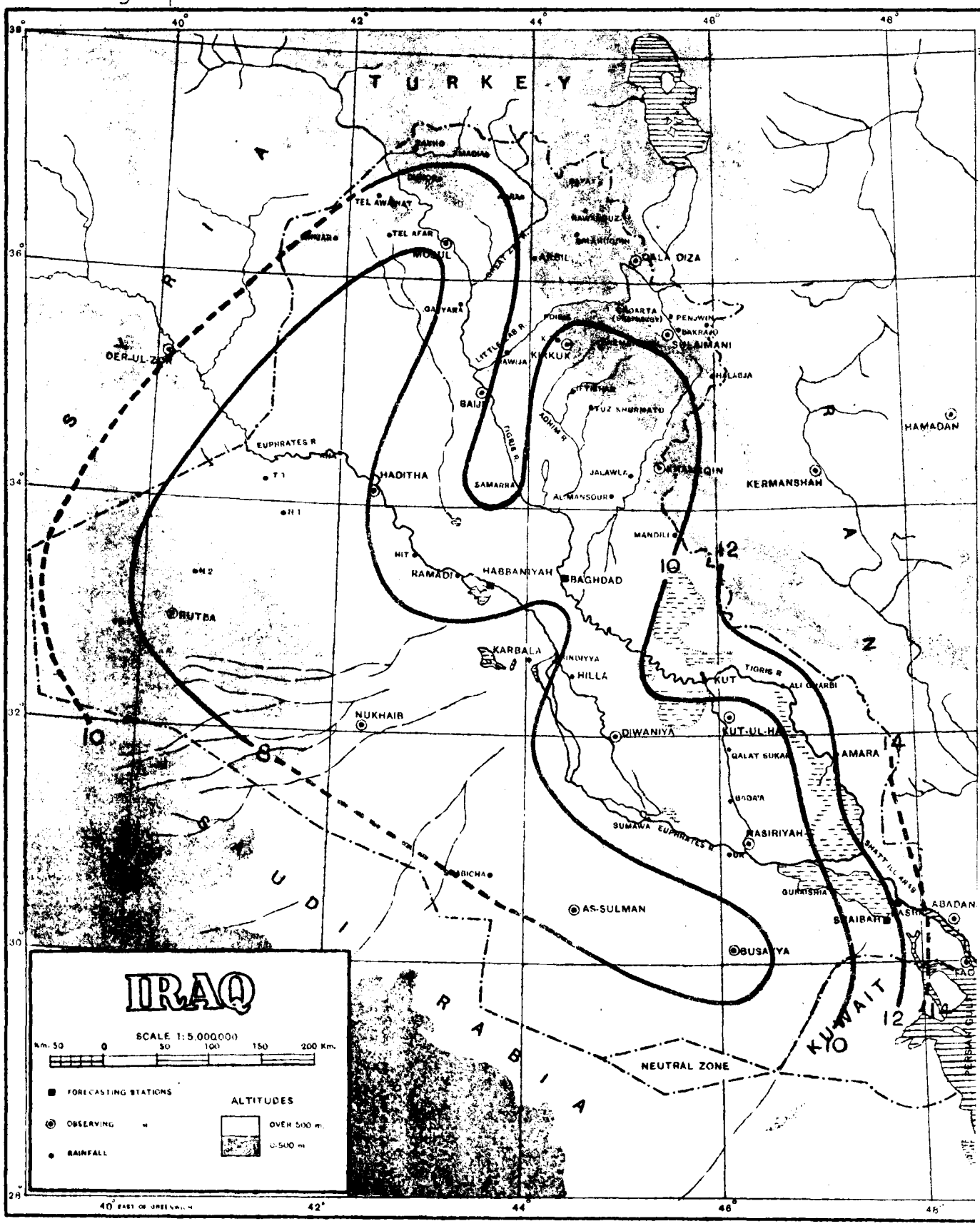
Mean Daily Vapour Pressure in Millibars

November



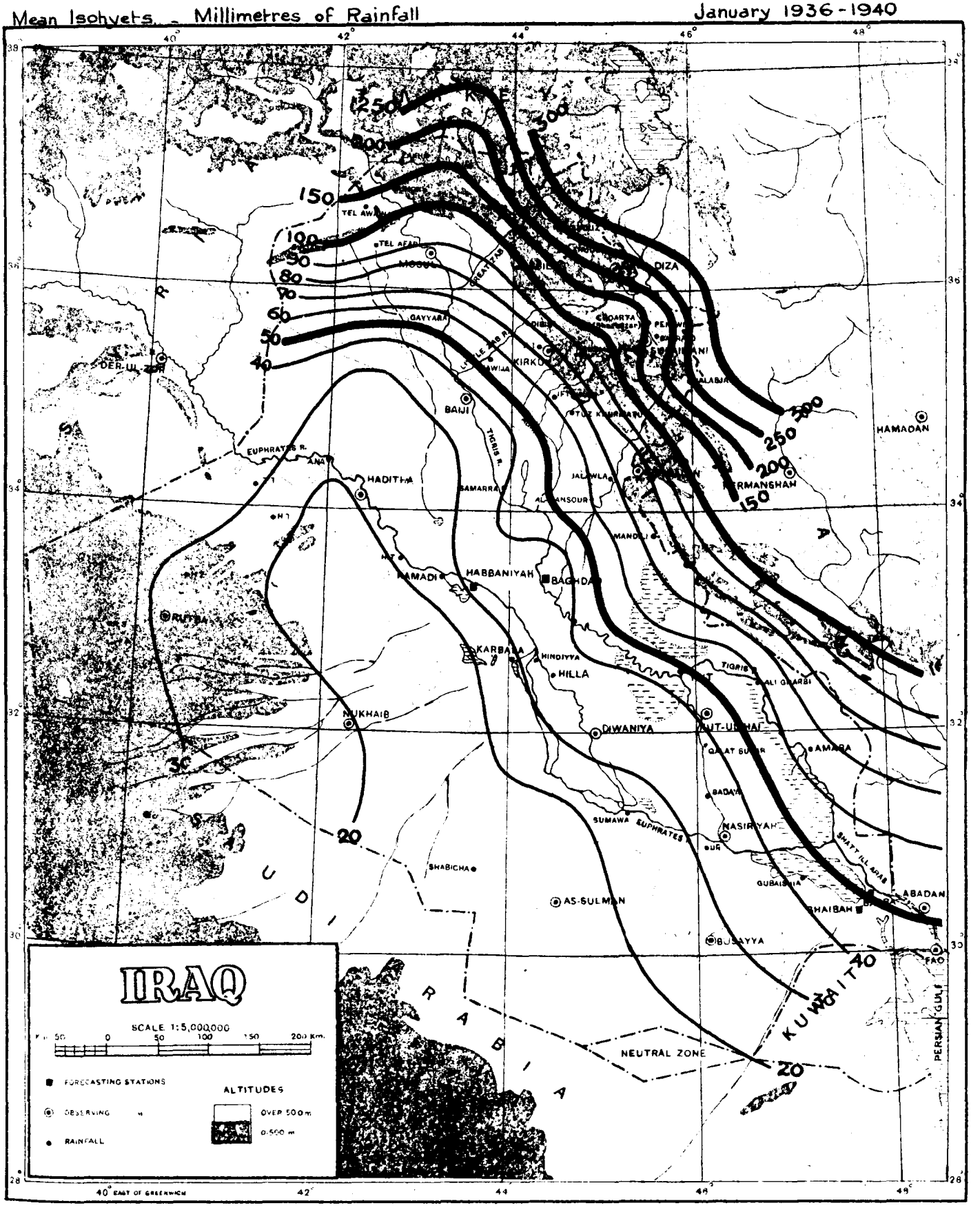
Mean Daily Vapour Pressure in Millibars

December



SURVEY PRESS. BAGHDA

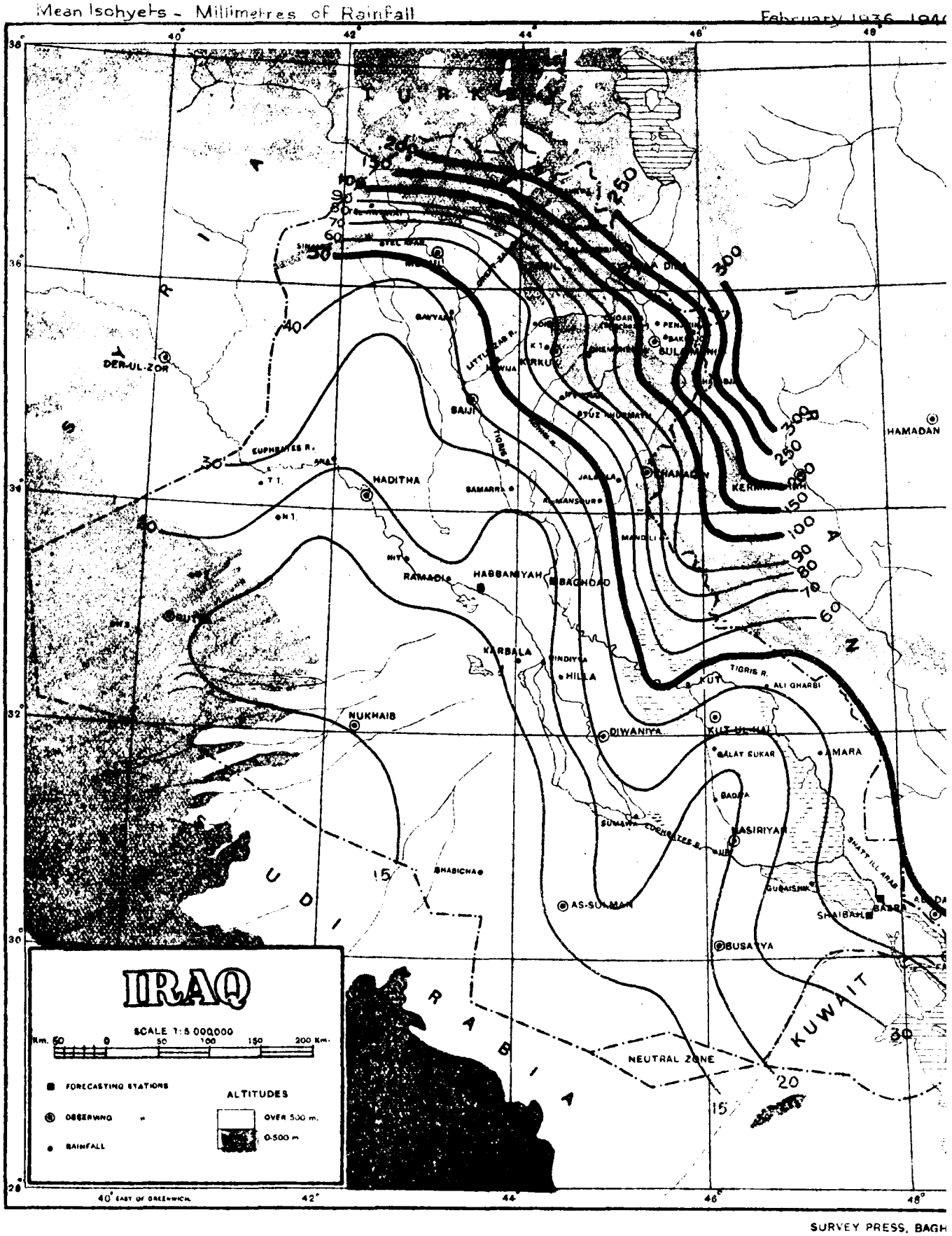
Mean Isohyets. - Millimetres of Rainfall January 1936-1940



SURVEY PRESS, BAGHDAD

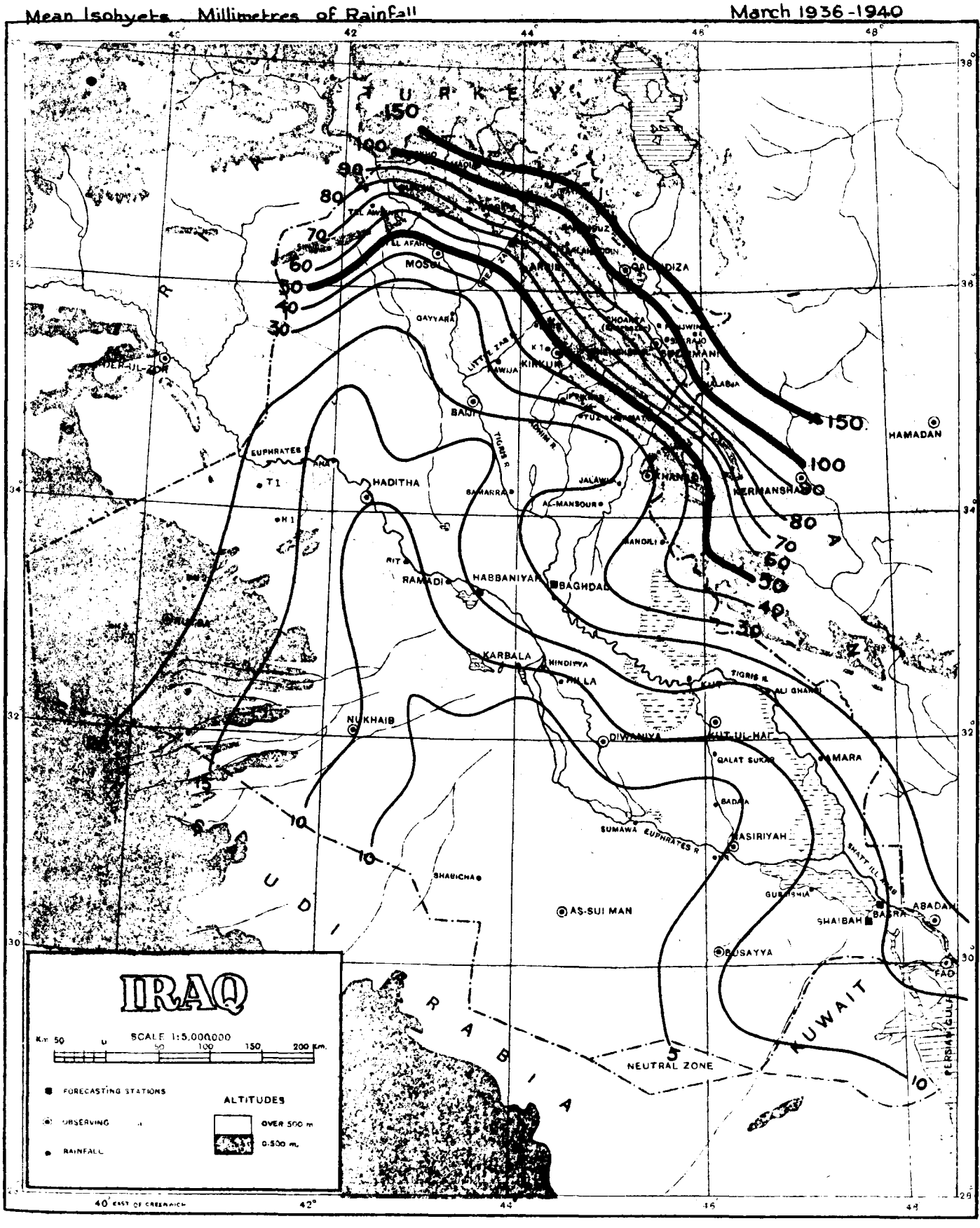
Mean Isohyets - Millimetres of Rainfall

February 1936 - 1940



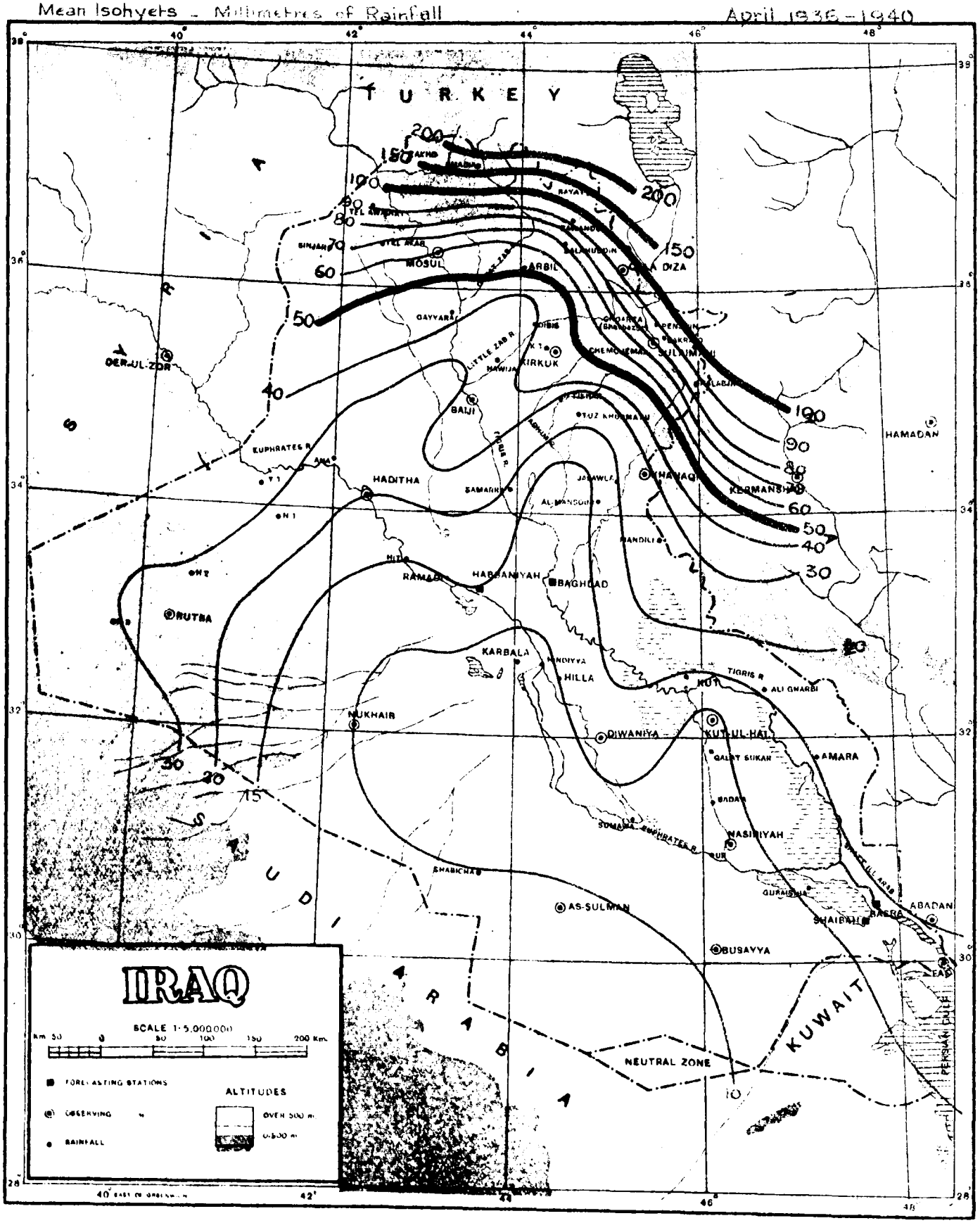
SURVEY PRESS, BAGH

Mean Isohyets Millimetres of Rainfall March 1936-1940



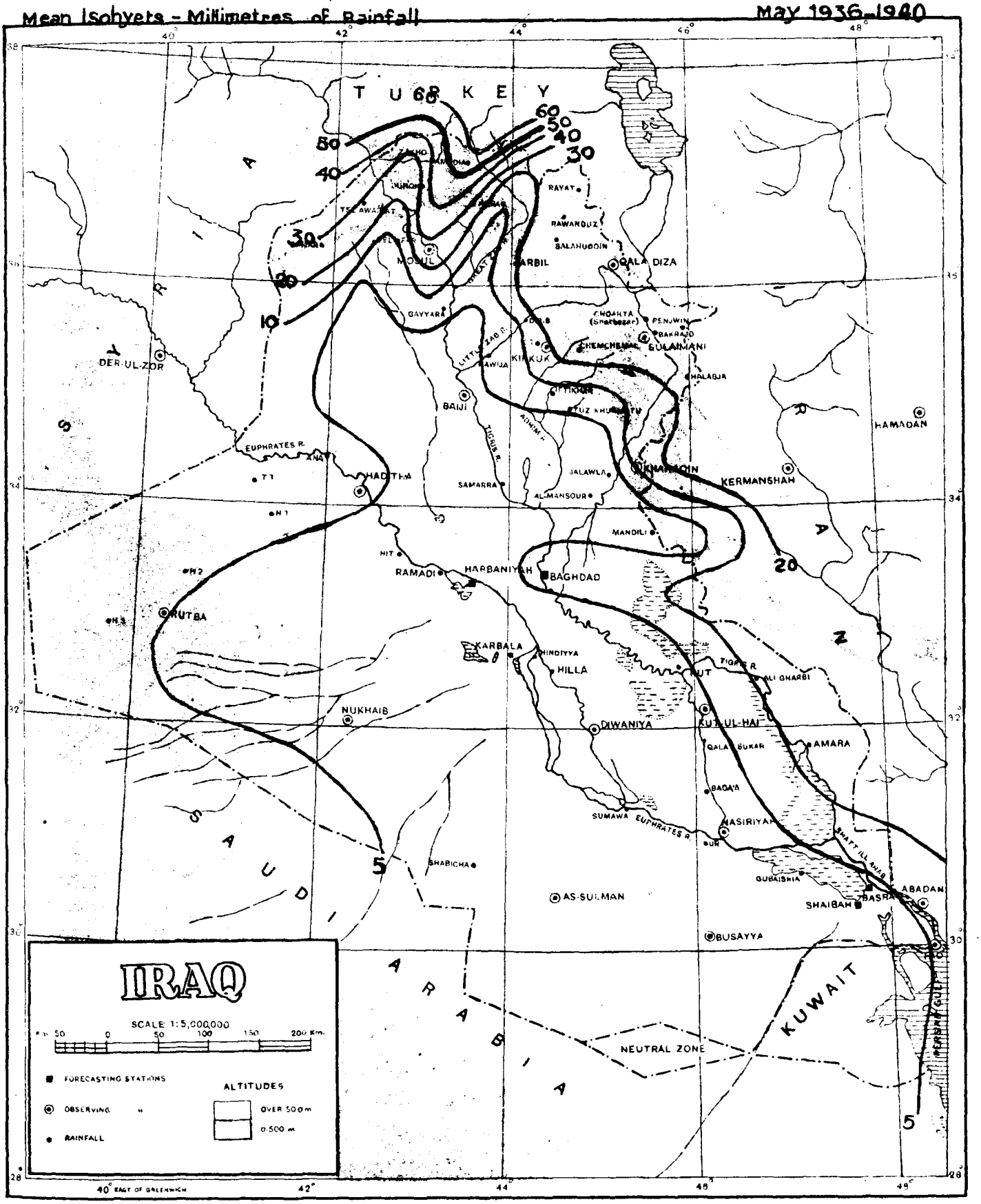
SURVEY PRESS, BAGHDAD.

Mean Isohyets - Millimetres of Rainfall April 1936-1940



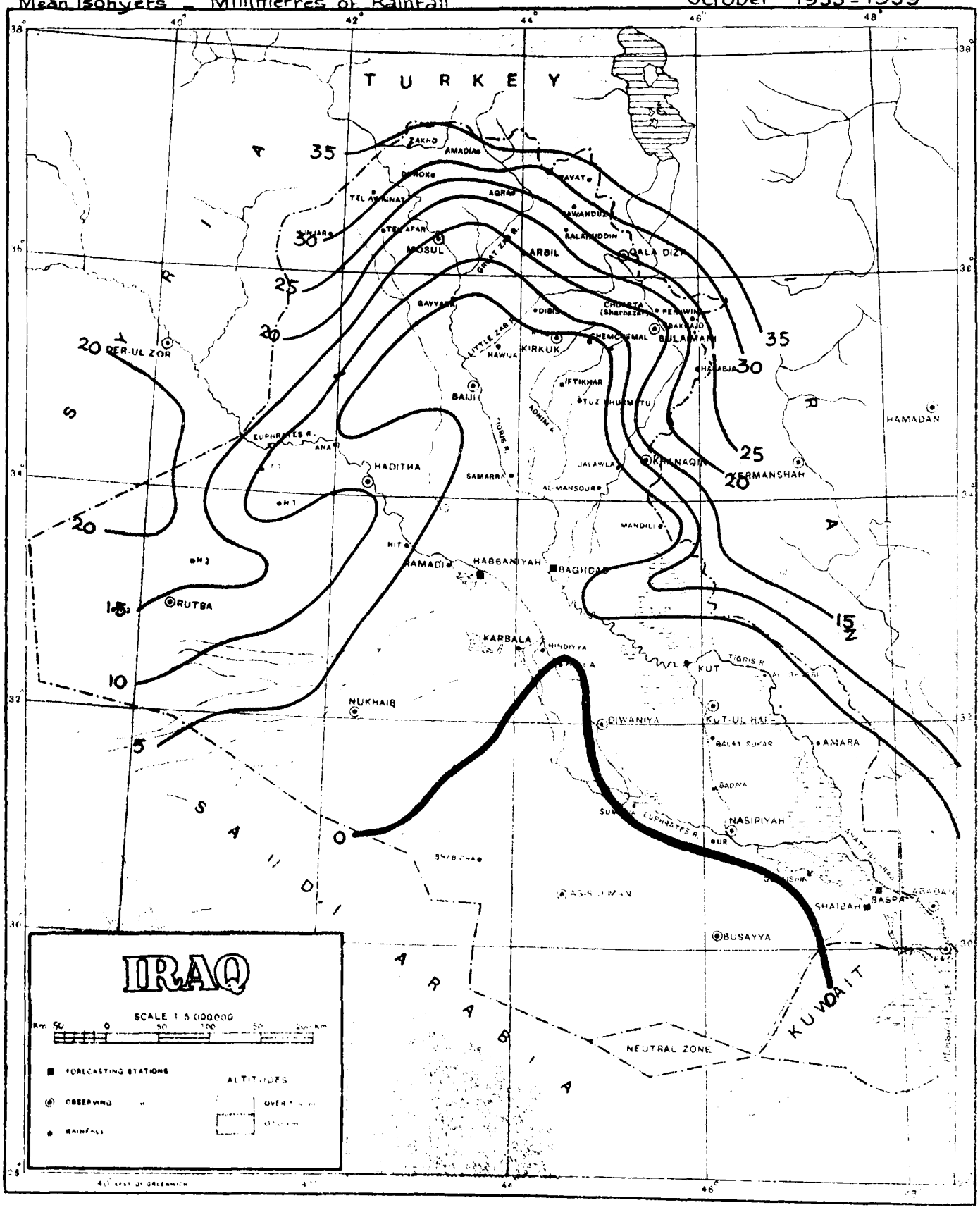
SURVEY PRESS, BAGHDAD

Mean Isohyets - Millimetres of Rainfall May 1936-1940



SURVEY PRESS, BAGHDAD

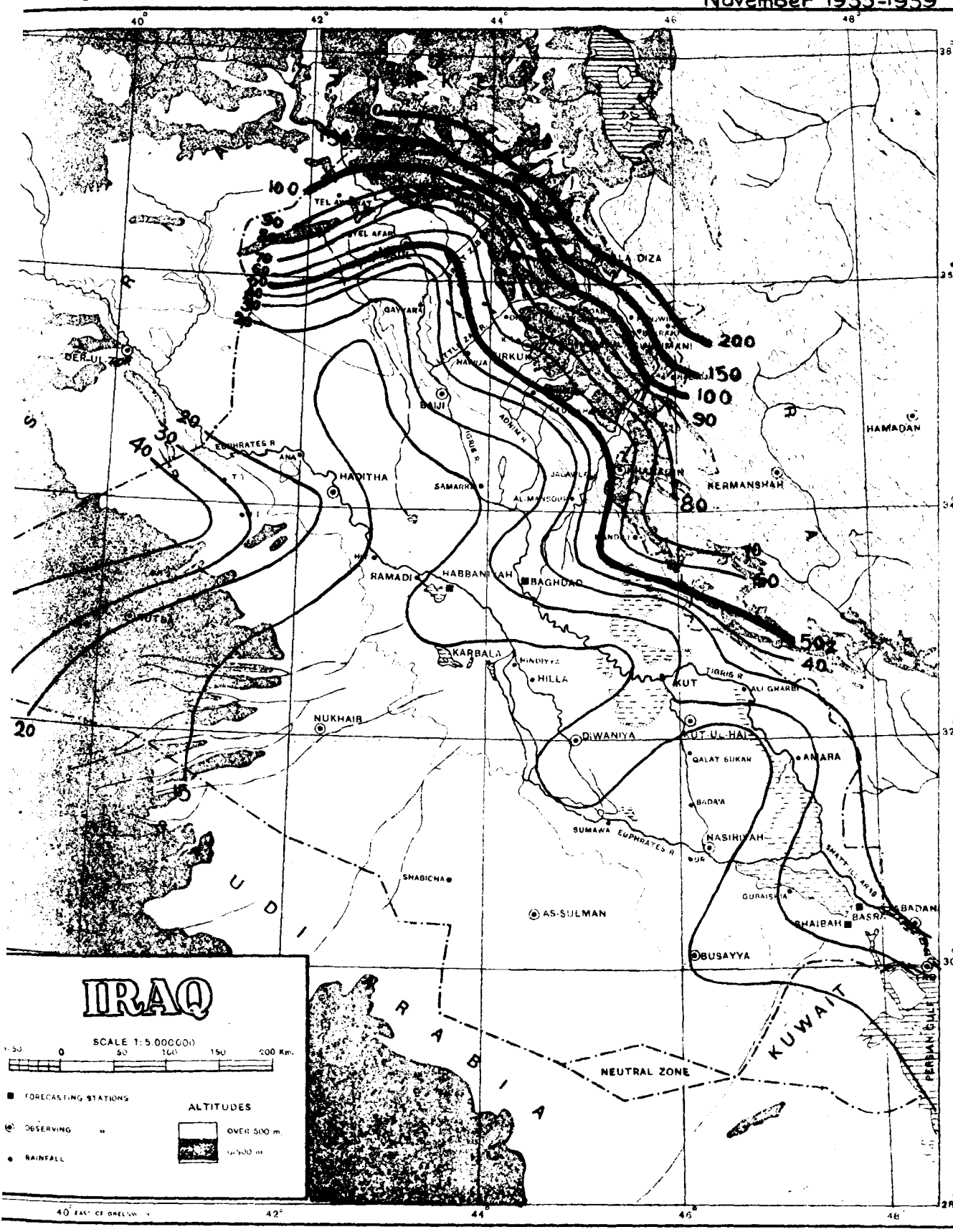
Mean Isohyets – Millimetres of Rainfall October 1935 - 1939



SURVEY PRESS BAGHDAD

n Isohyets - Millimetres of Rainfall

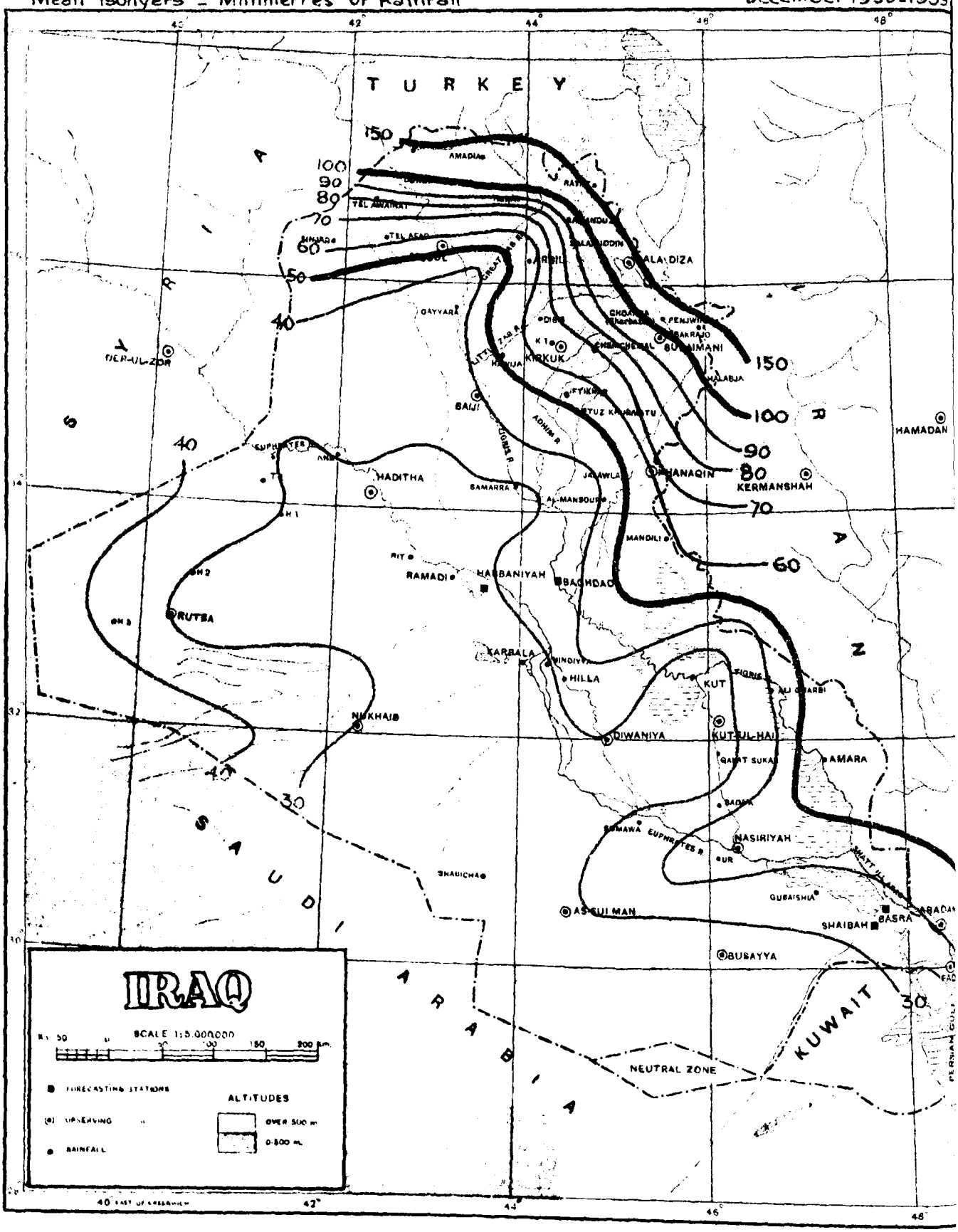
November 1935-1939



SURVEY PRESS, BAGHDAD

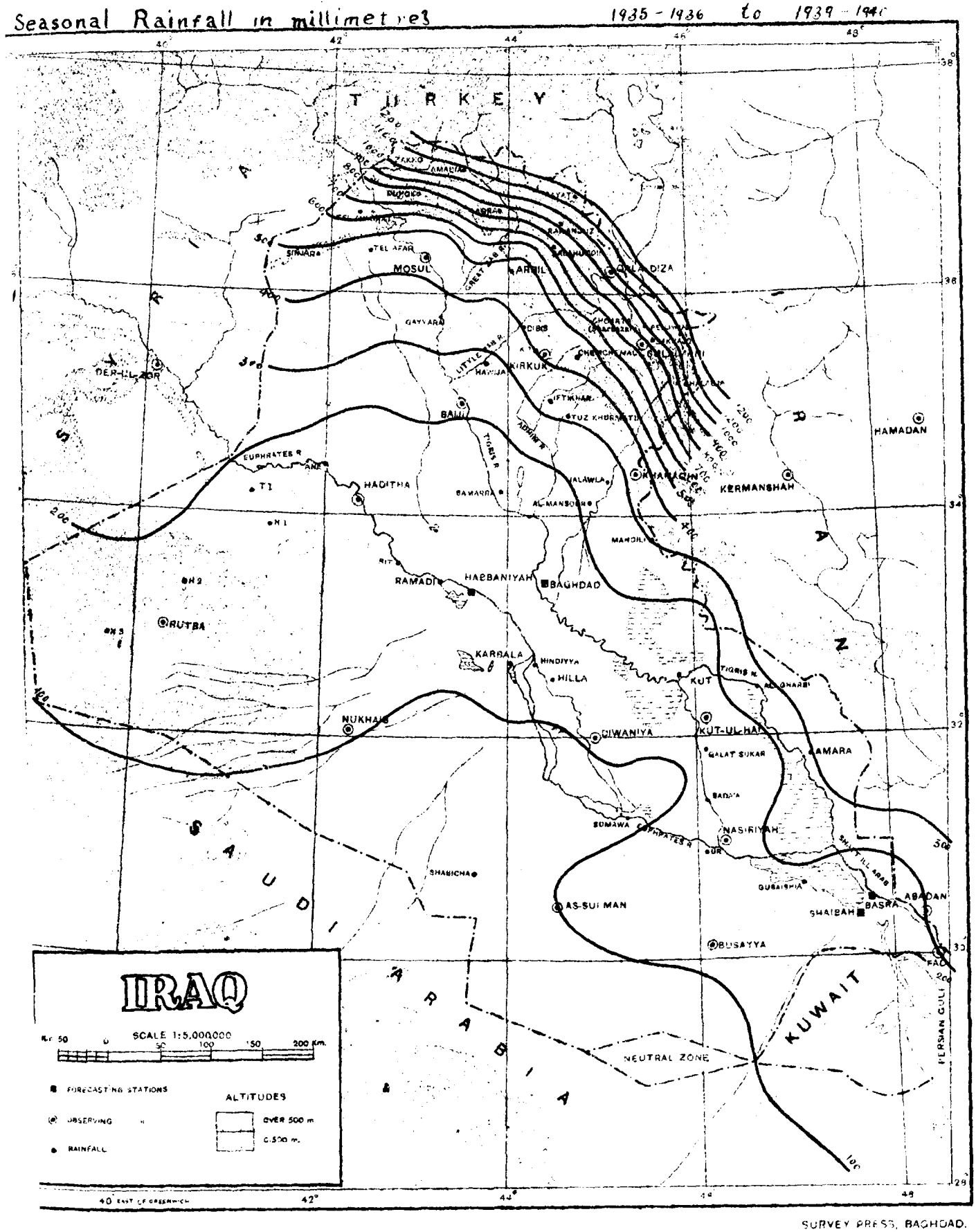
Mean Isohyets - Millimetres of Rainfall

December 1935-1939

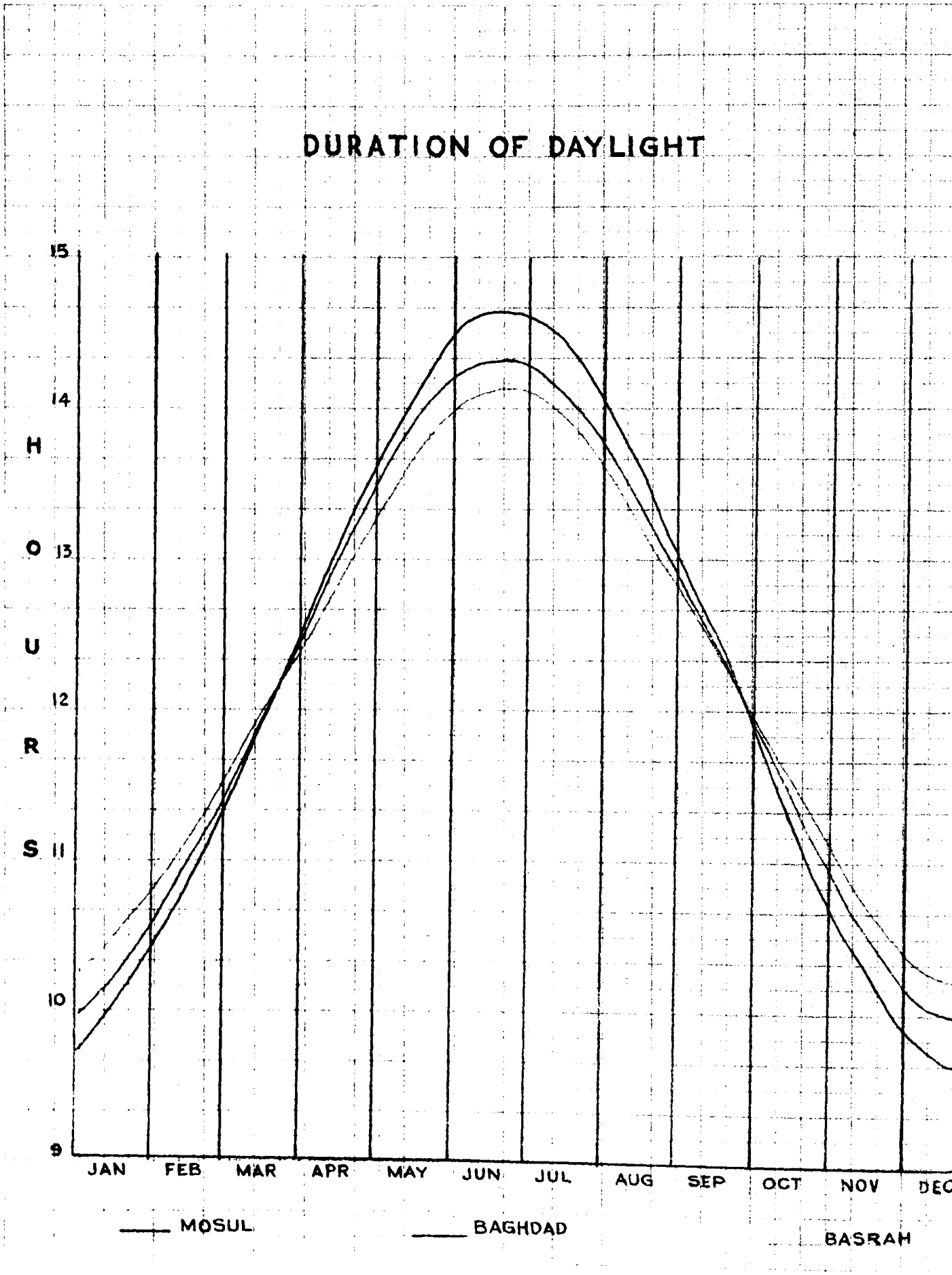


SURVEY PRESS, BAGHDAD

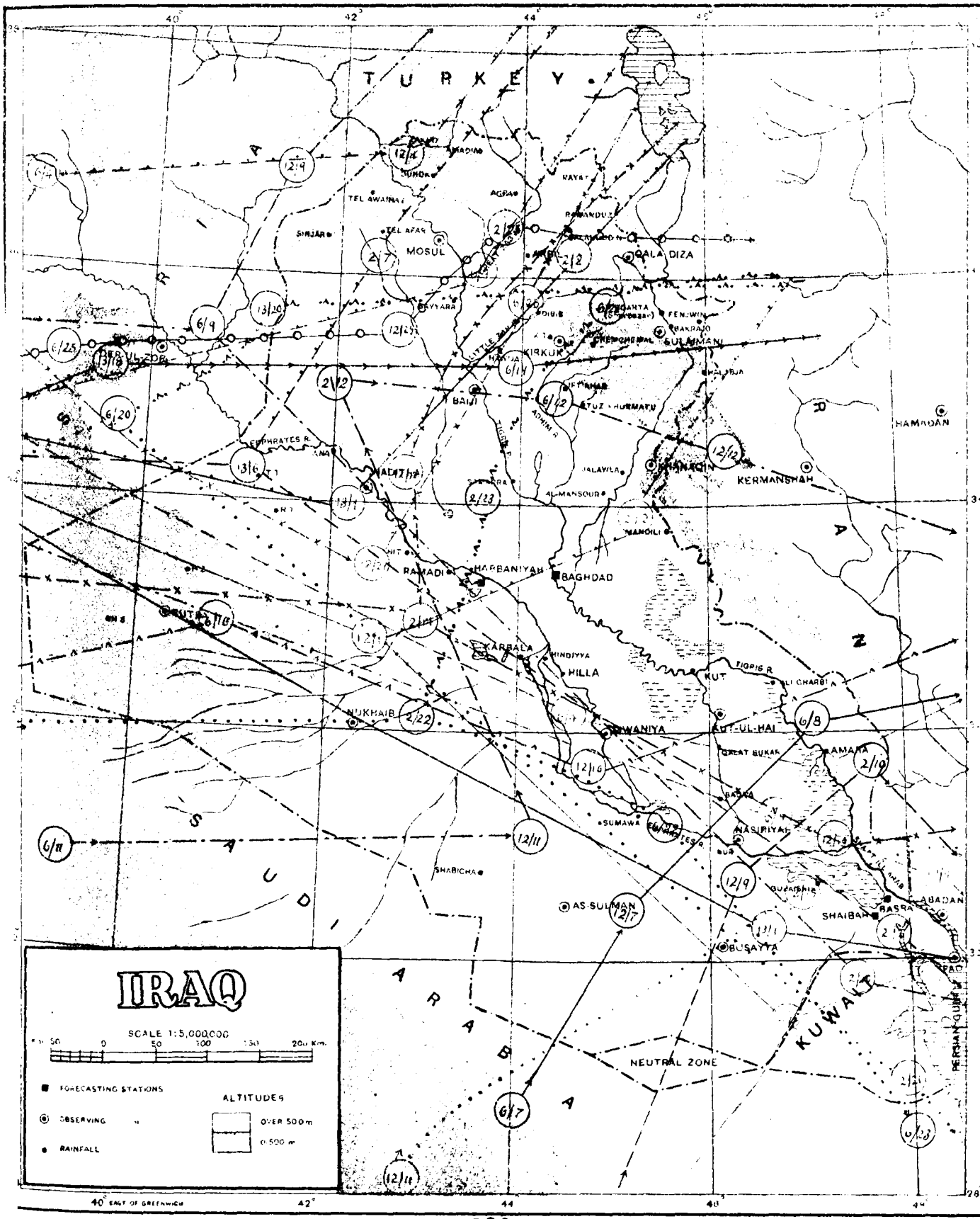
Seasonal Rainfall in millimetres 1935 - 1936 to 1939 - 1940



SURVEY PRESS, BAGHDAD.

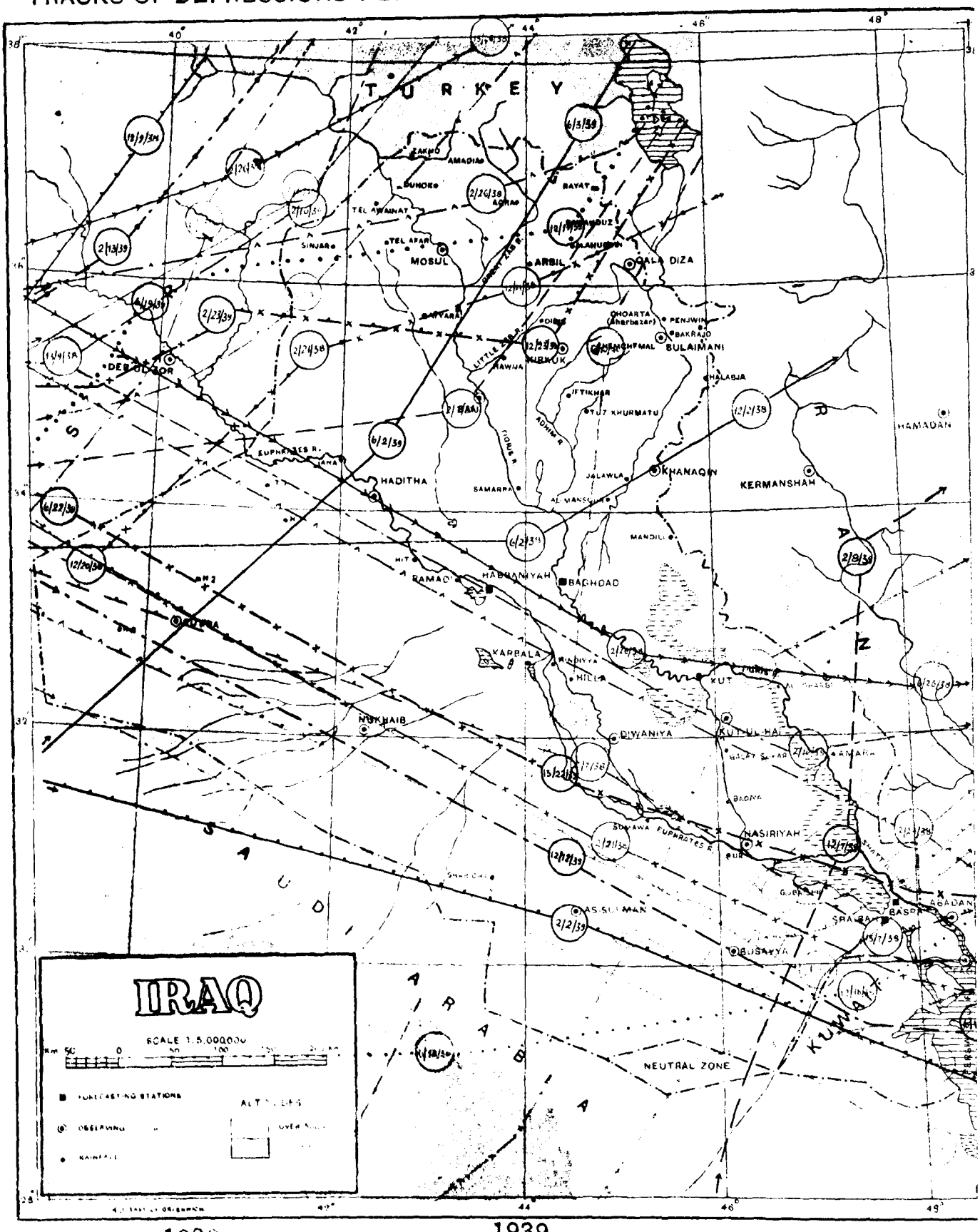

DURATION OF DAYLIGHT
HOURS
15
14
13
12
11
10
9
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
MOSUL
BAGHDAD
BASRAH

TRACKS OF DEPRESSIONS JANUARY 1938–1940



Indicates 0200 G.M.T. on the 10th.

TRACKS OF DEPRESSIONS FEBRUARY 1938–1940

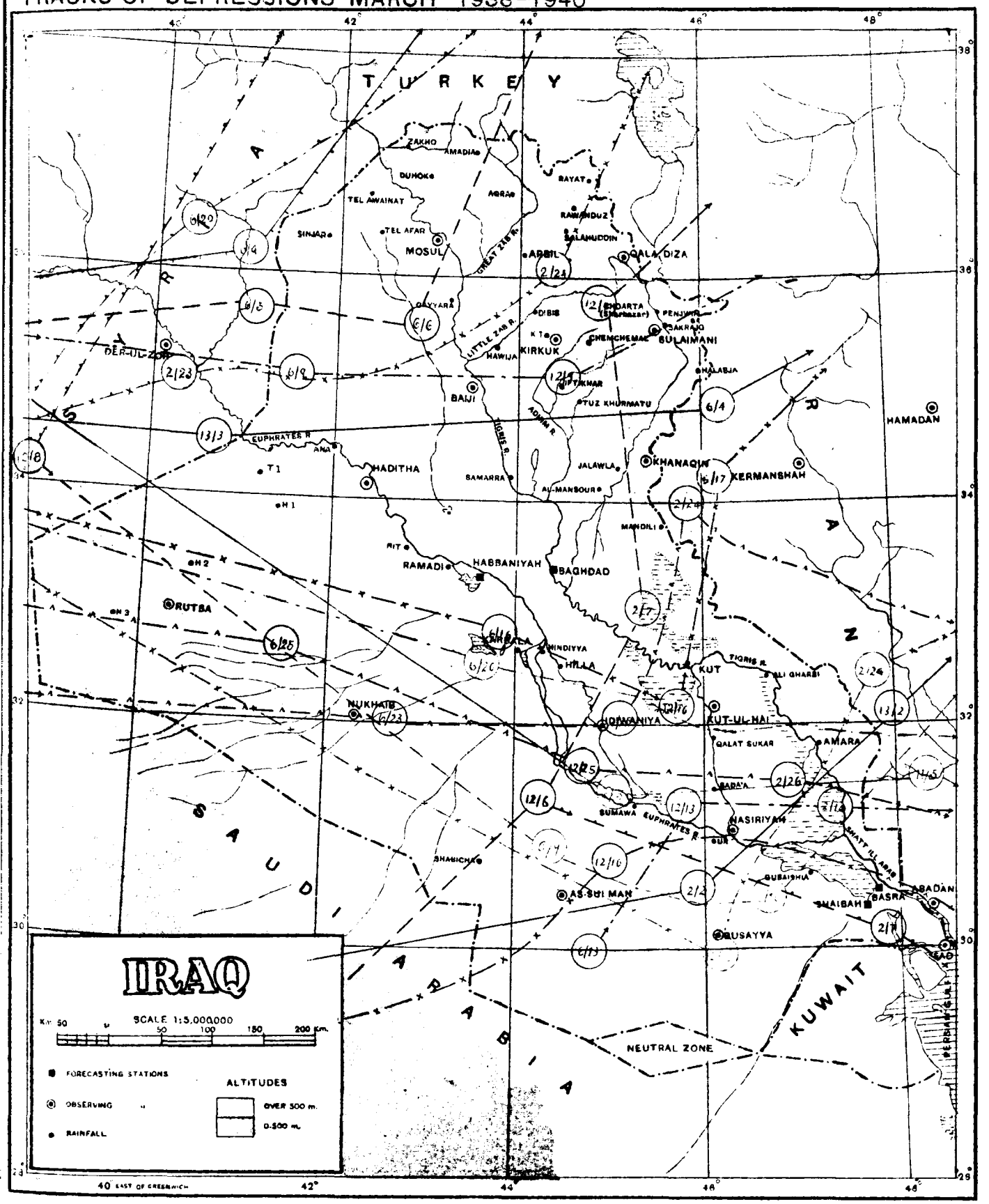


1938 1939

SURVEY PRESS BAGHD

(2/10) indicates 6200 G.M.T. on the 10th

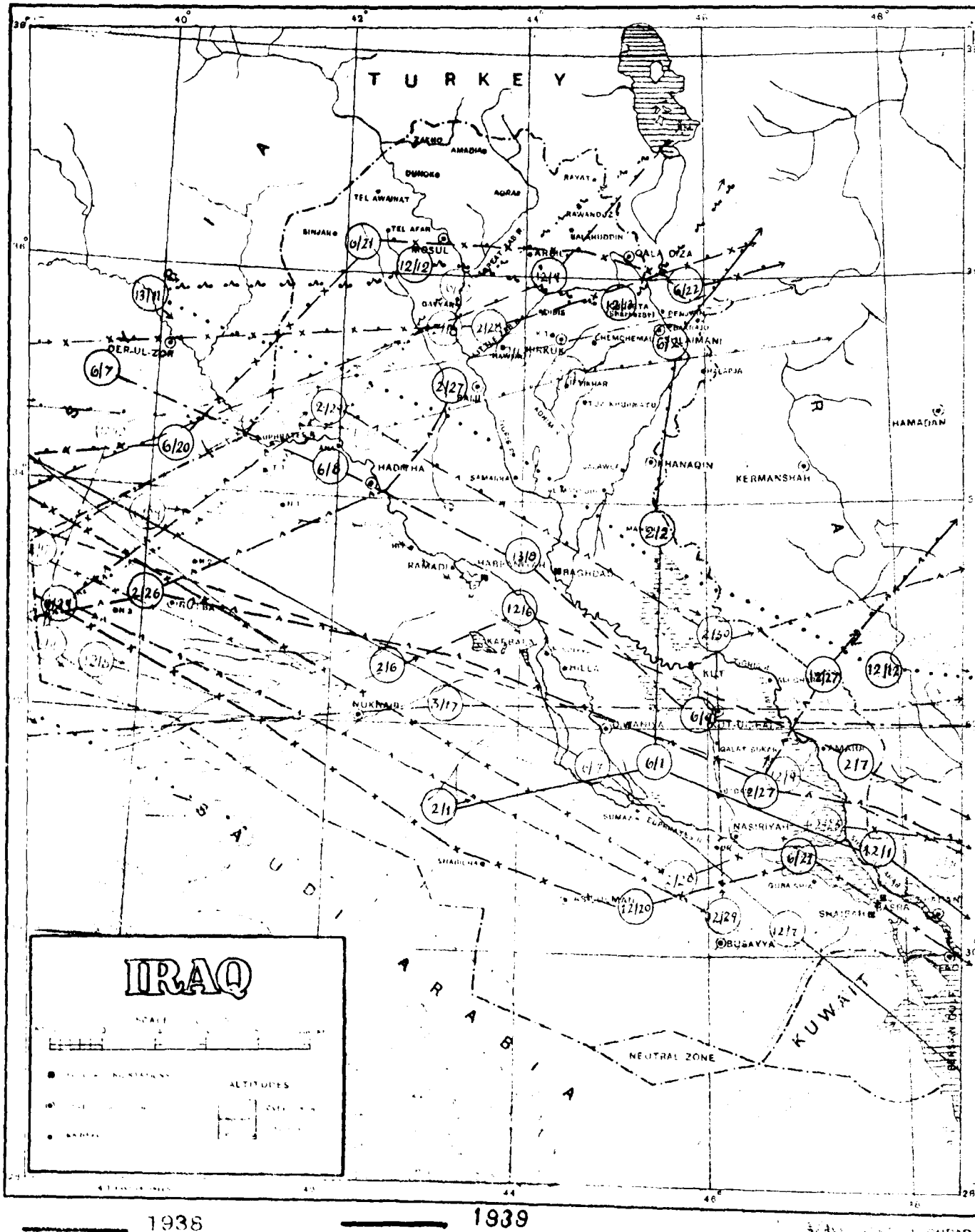
TRACKS OF DEPRESSIONS MARCH 1938–1940



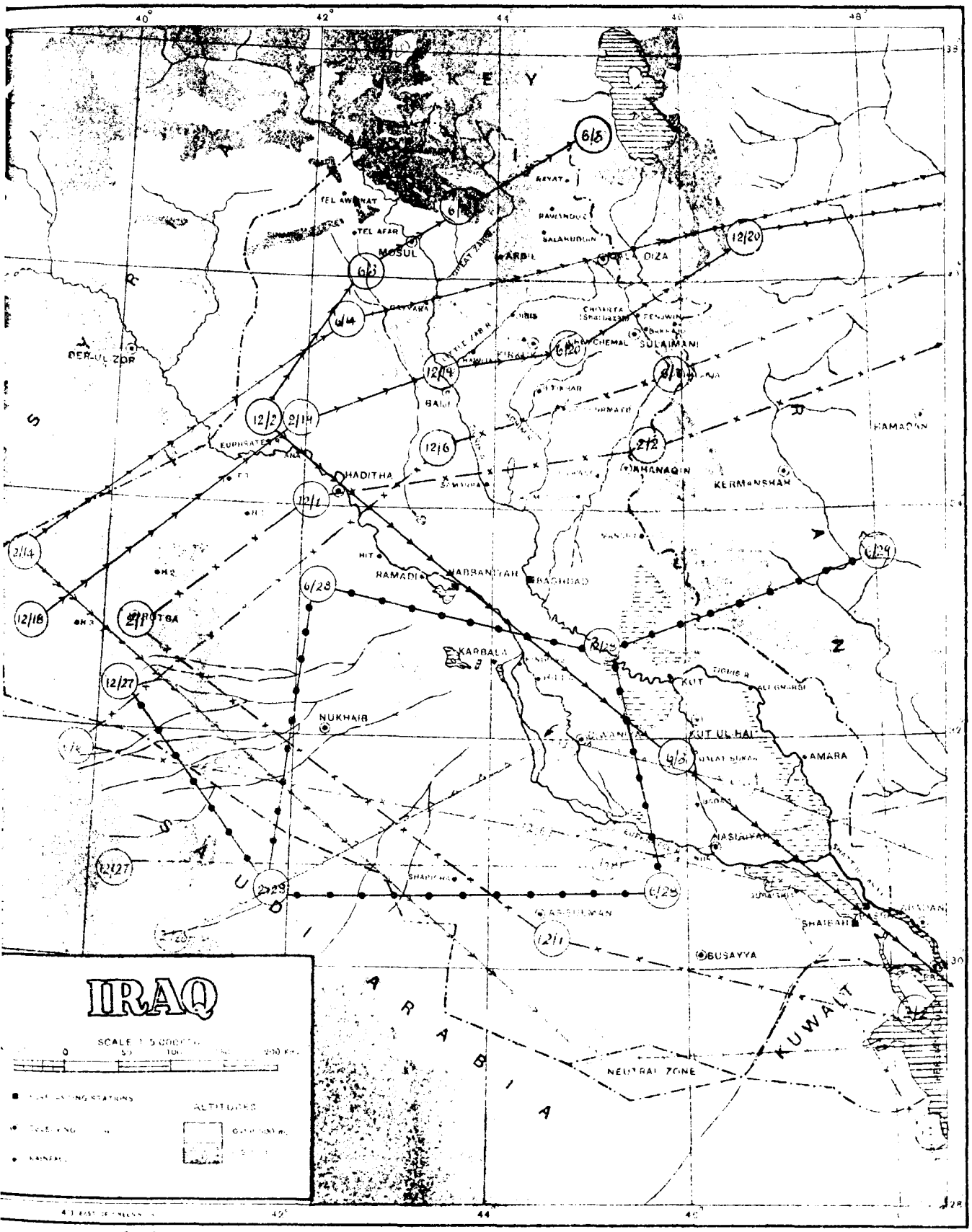
1938 1939 SURVEY PRESS, BAGHDAD.

Indicates 0200 G.M.T. [illegible]

TRACKS OF DEPRESSIONS APRIL 1938-1940



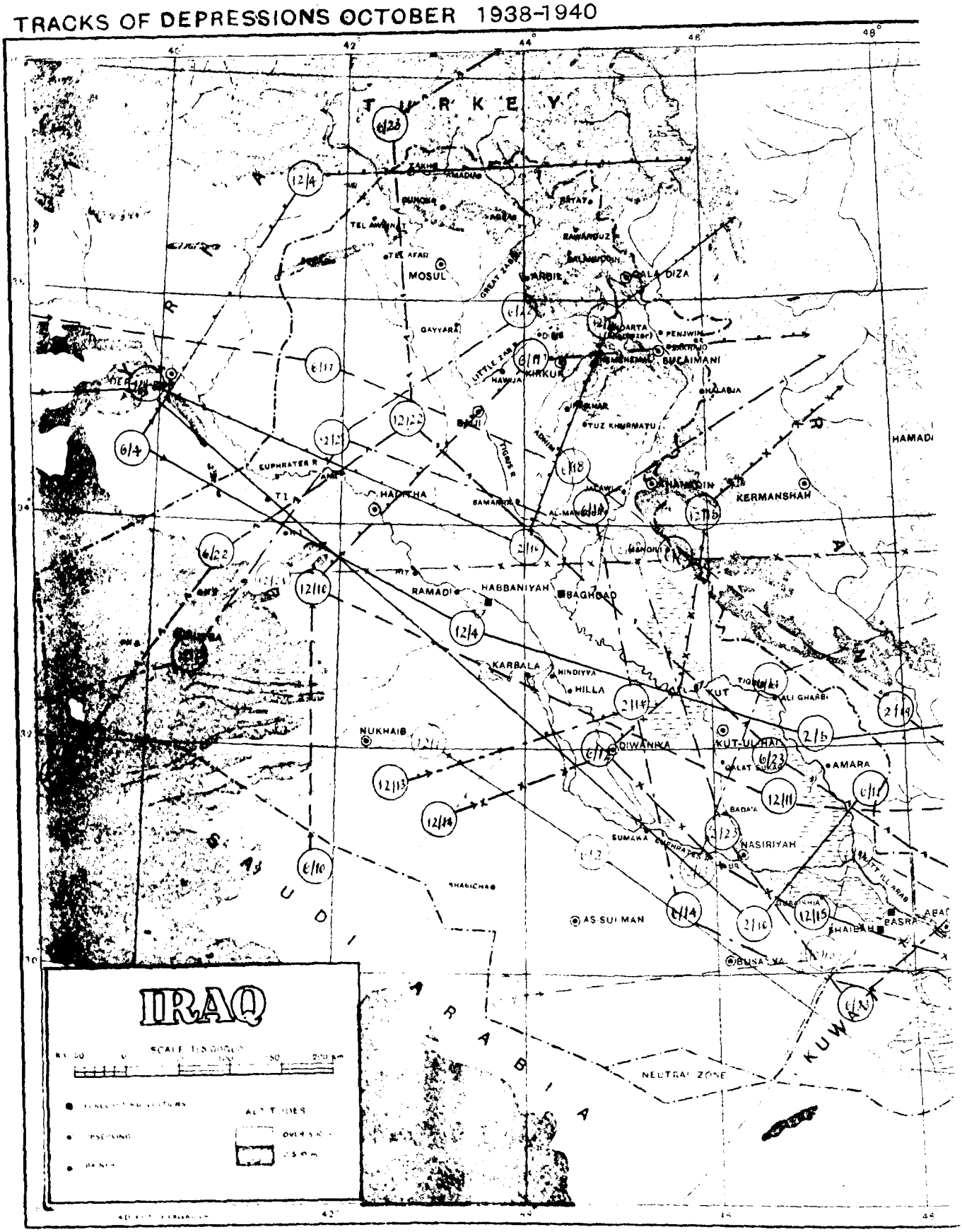
TRACKS OF DEPRESSIONS MAY 1938-1940



1938 1939

...tes 0200 G.M.T on the 10th

TRACKS OF DEPRESSIONS OCTOBER 1938-1940

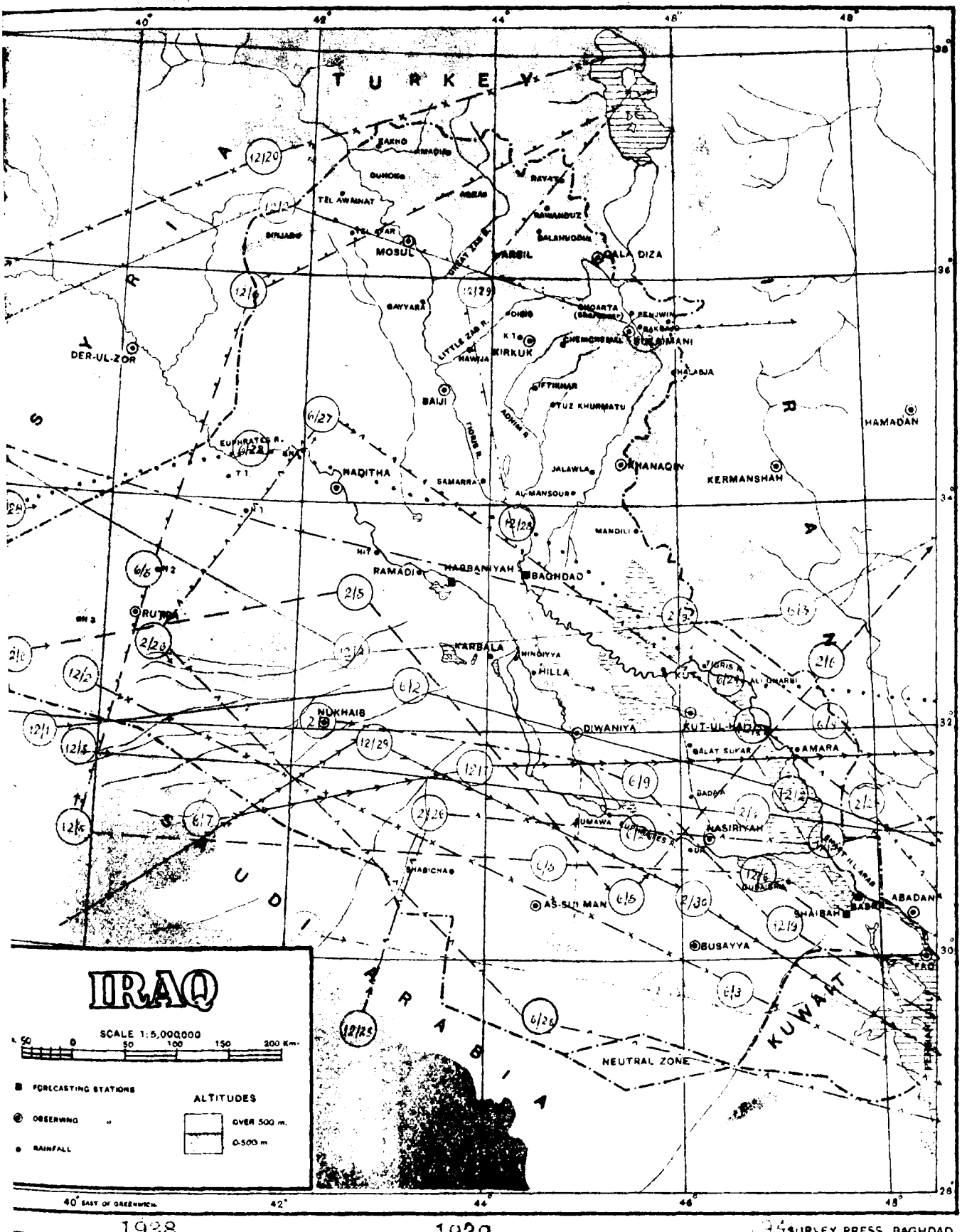


1938 1939

Indicates 0200 G M T on the 10th.

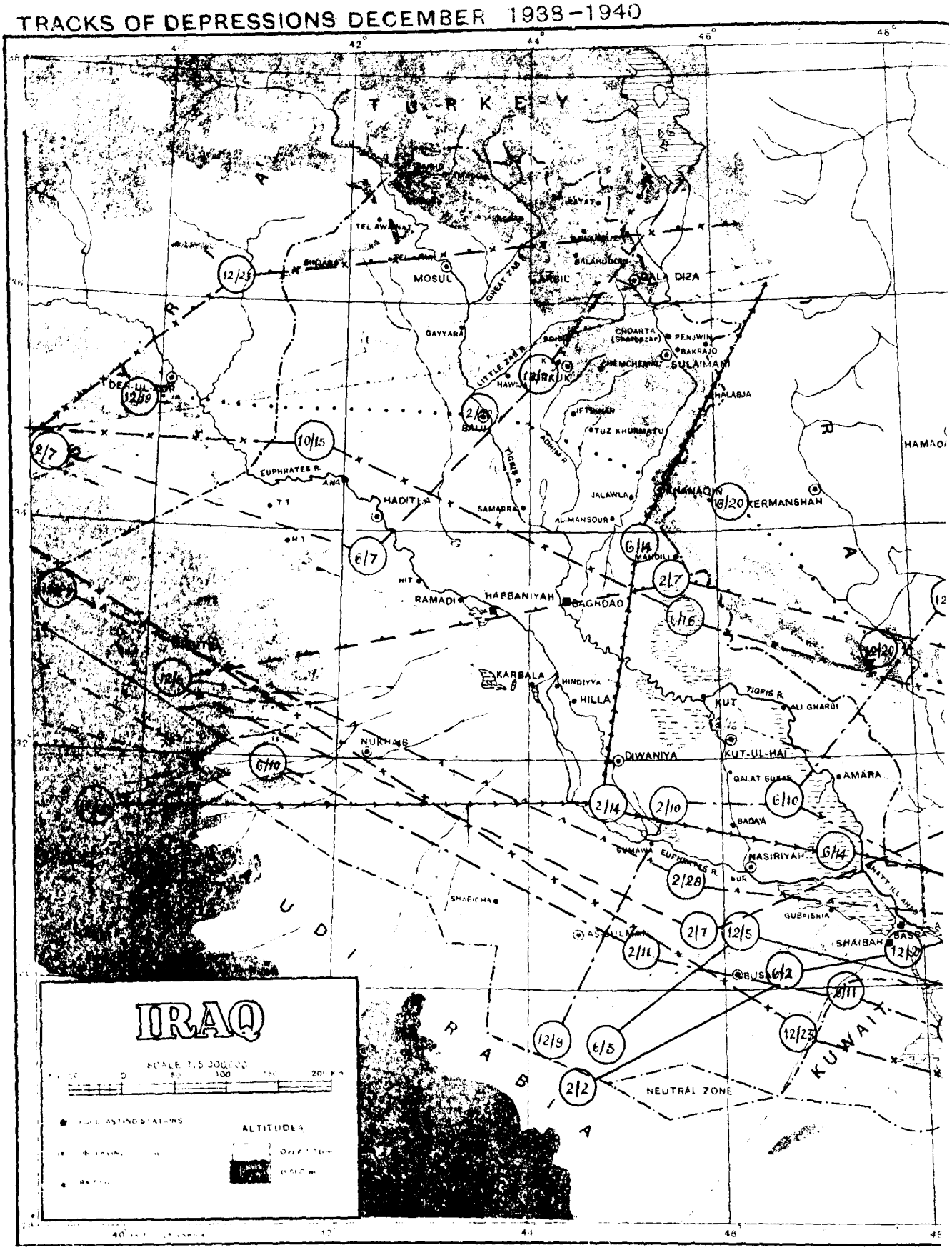
SURVEY PRESS

TRACKS OF DEPRESSIONS NOVEMBER 1938-1940



licates 0200 G.M.T. on the 10th.

TRACKS OF DEPRESSIONS DECEMBER 1938–1940



1938 1939

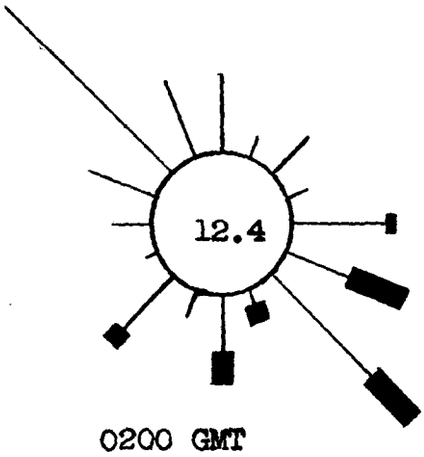
SURVEY PRESS,

(2/10) indicates 0200 G.M.T. on the 10th.

PAGE FREQUENCY OF SURFACE WIND FROM SPECIFIED DIRECTIONS.

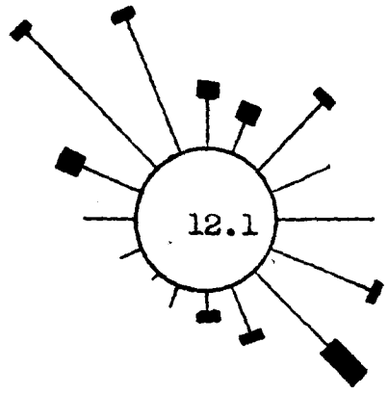
BAGHDAD (April 1937 - March 1944)

JANUARY

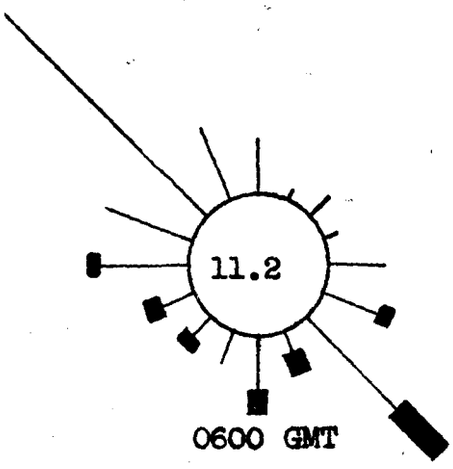


0200 GMT

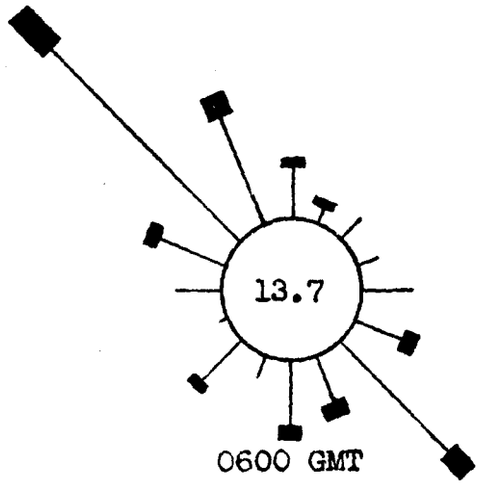
FEBRUARY



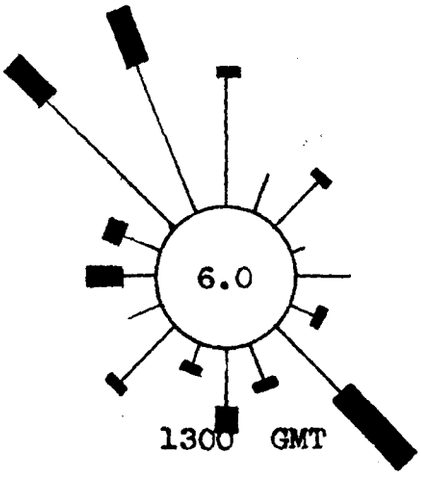
0200 GMT



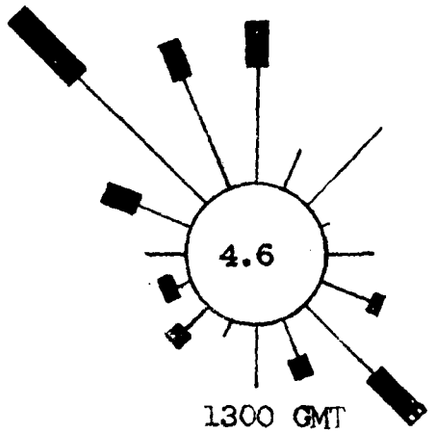
0600 GMT



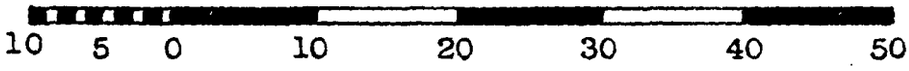
0600 GMT



1300 GMT



1300 GMT

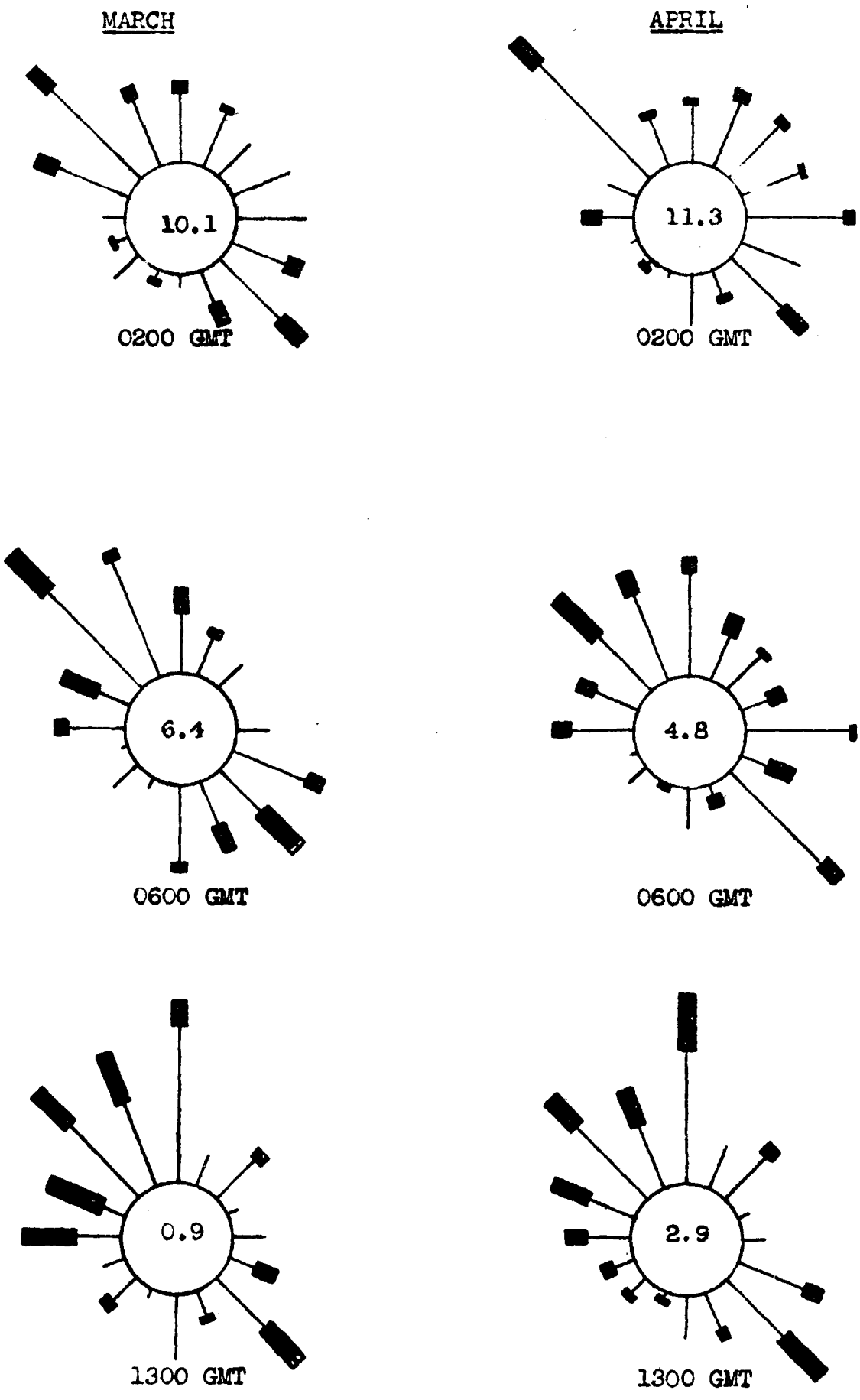


CALMS ARE SHOWN BY FIGURES IN CIRCLES.

1-12 M.P.H. 13-38 M.P.H. ABOVE 38 M.P.H.

PERCENTAGE FREQUENCY OF SURFACE WIND FROM SPECIFIED DIRECTION

BAGHDAD- (April 1937 - March 1944)

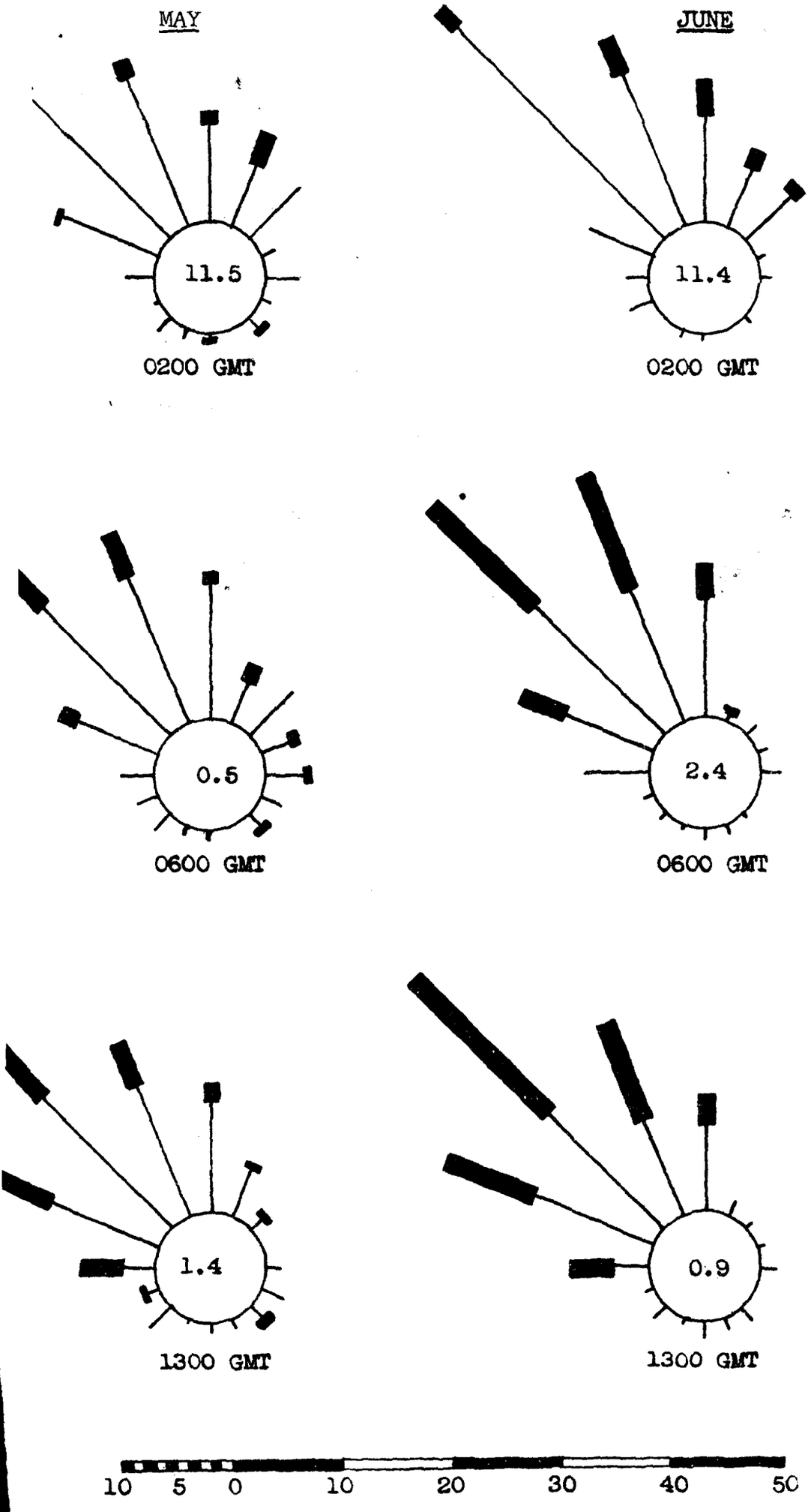


CALMS ARE SHOWN BY FIGURES IN CIRCLES.

1-12 M.P.H. 13-38 M.P.H. Above 38 M.P.H

NTAGE FREQUENCY OF SURFACE WIND FROM SPECIFIED DIRECTIONS.

BAGHDAD- (April 1937 - March 1944)

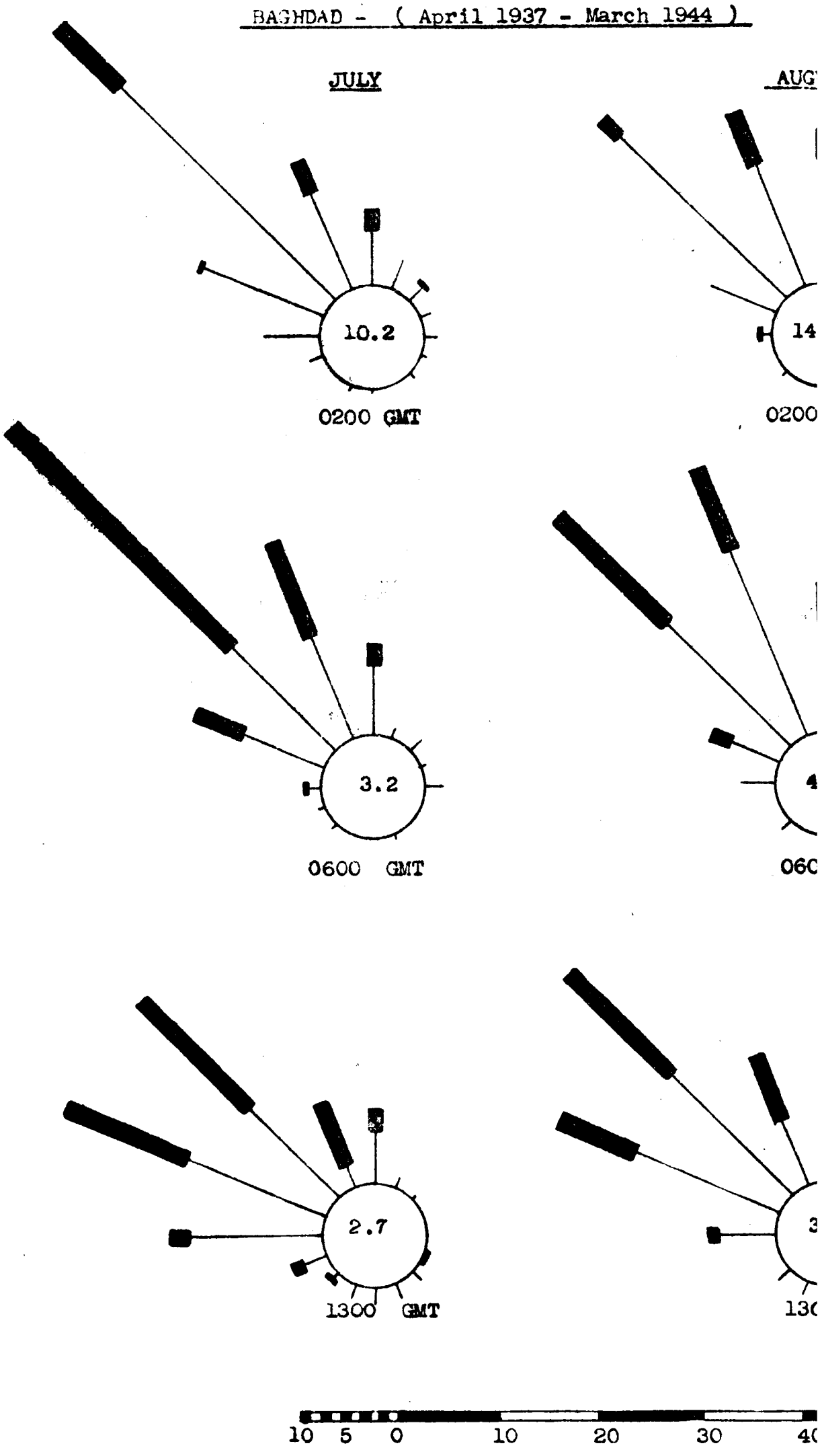


CALMS ARE SHOWN BY FIGURES IN CIRCLES.

1-12 MPH 13-38 MPH Above 38 MPH

PERCENTAGE FREQUENCY OF SURFACE WIND FROM SPECIFIED DIRE

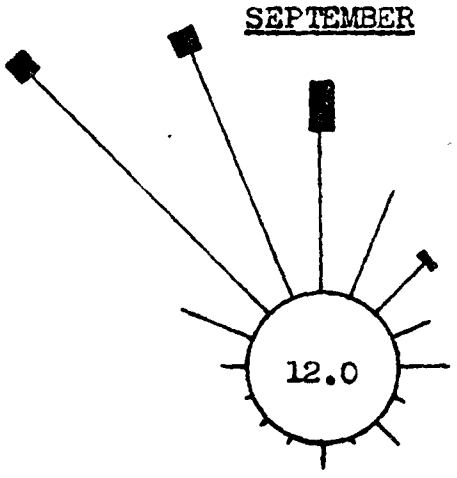
BAGHDAD - (April 1937 - March 1944)



ERCENTAGE FREQUENCY OF SURFACE WIND FROM SPECIFIED DIRECTIONS.

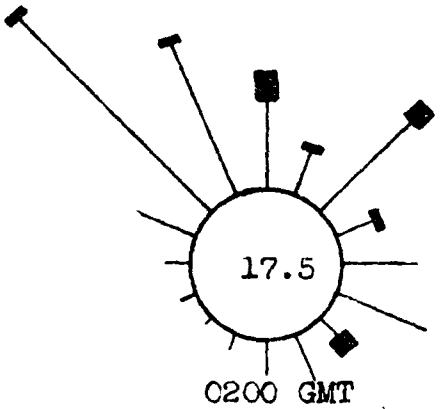
BAGHDAD - (April 1937 - March 1944)

SEPTEMBER

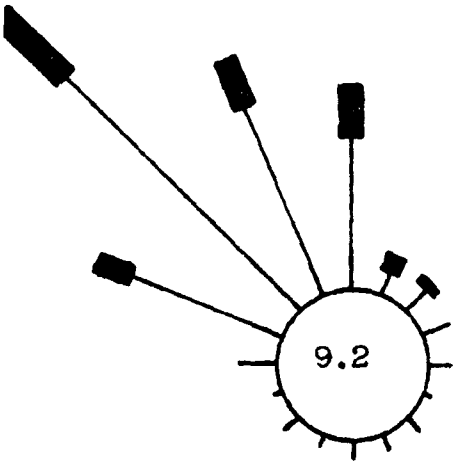


0200 GMT

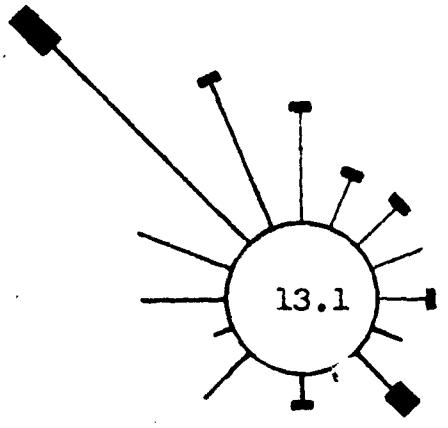
OCTOBER



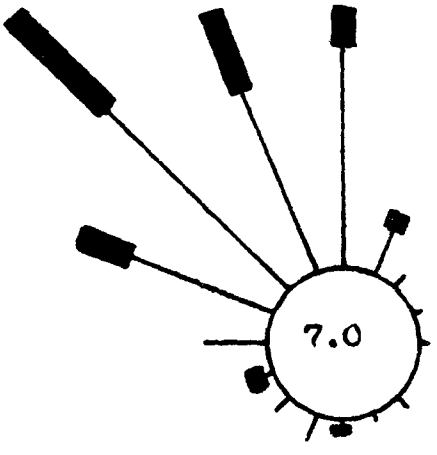
0200 GMT



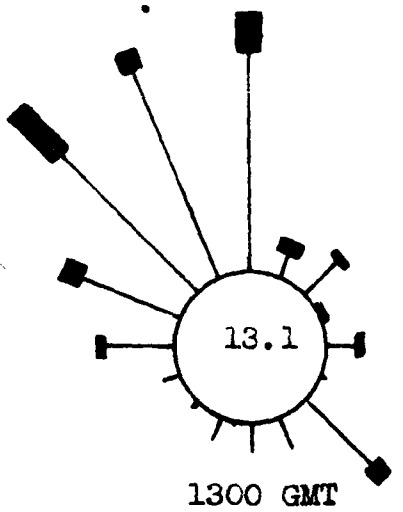
0600 GMT



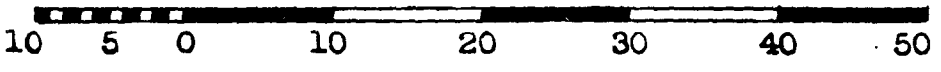
0600 GMT



1300 GMT



1300 GMT

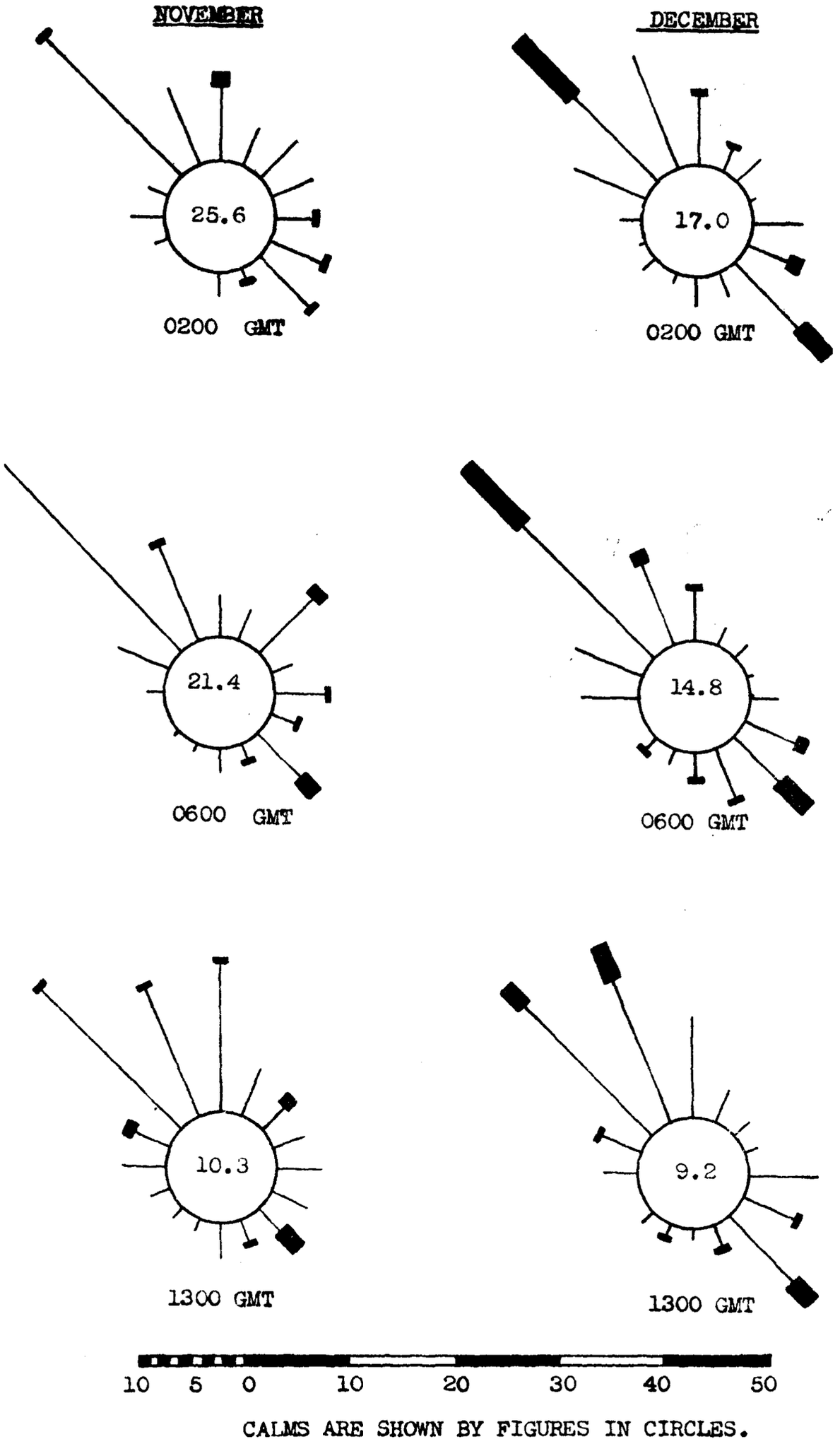


CALMS ARE SHOWN BY FIGURES IN CIRCLES.

1-12 M.P.H. 13-38 M.P.H. Above 38 M.P.

PERCENTAGE FREQUENCY OF SURFACE WIND FROM SPECIFIED DIRECTI

BAGHDAD - (April 1937 - March 1944)

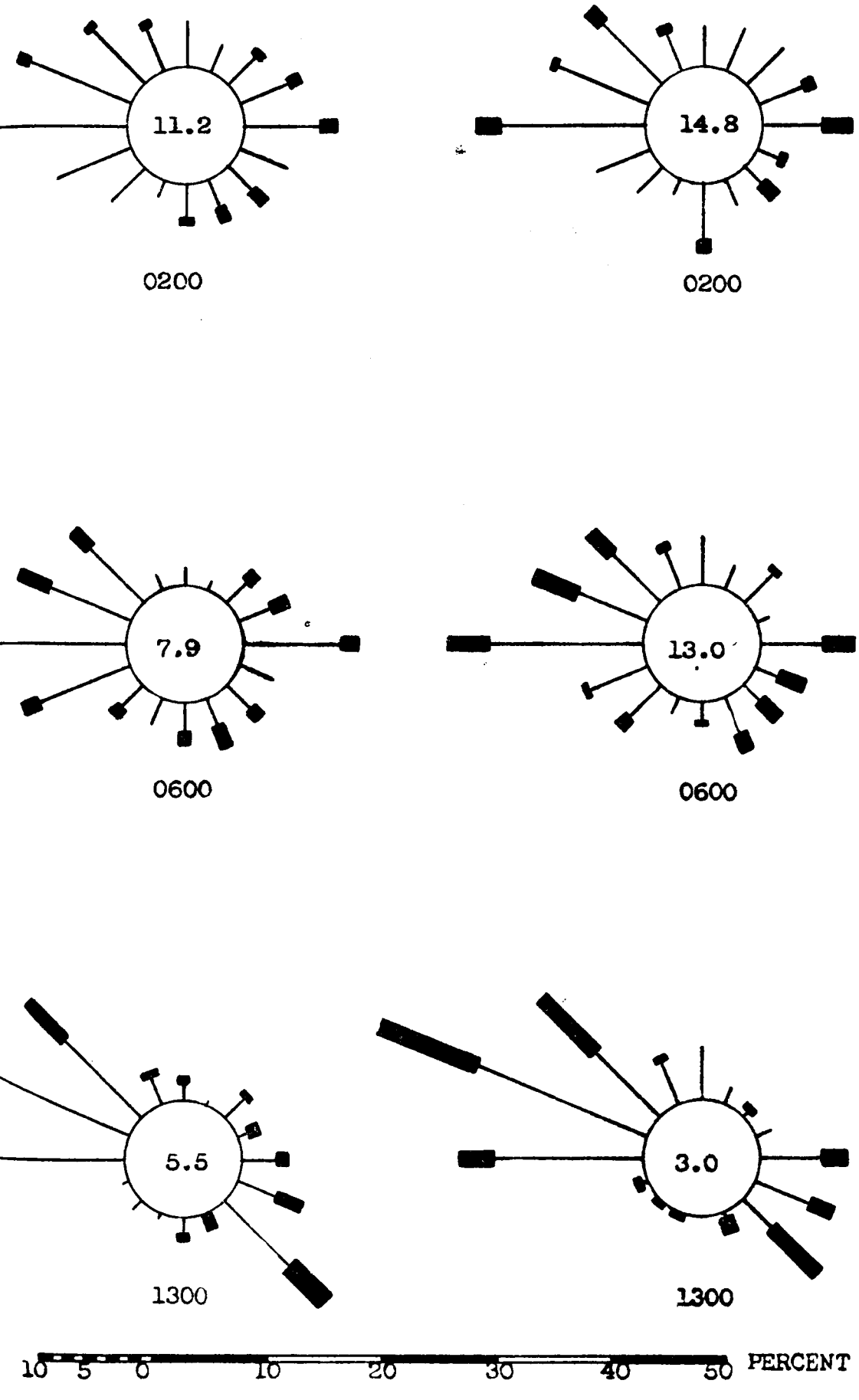


TAGE FREQUENCY OF SURFACE WIND FROM SPECIFIED DIRECTIONS.

BASRA

JANUARY

FEBRUARY



CALMS ARE SHEWN BY FIGURES IN CIRCLES.

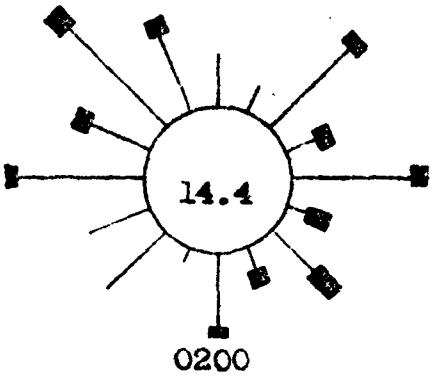
12 M.P.H. 13- 38 M.P.H. ABOVE 38 M.P.H.

PERCENTAGE FREQUENCY OF SURFACE WIND FROM SPECIFIED DIR

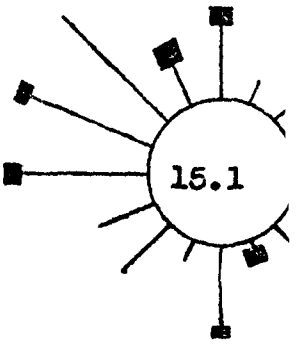
BASRA

MARCH

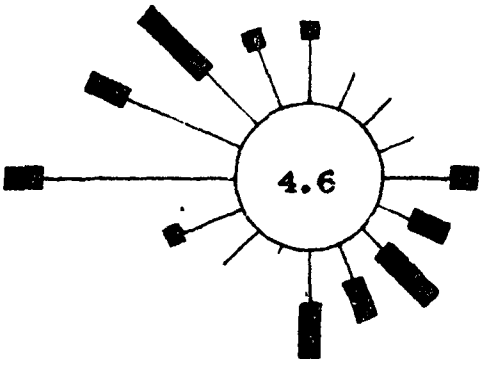
APRIL



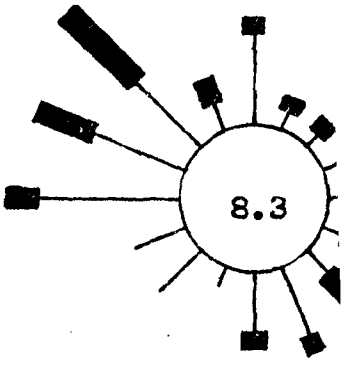
0200



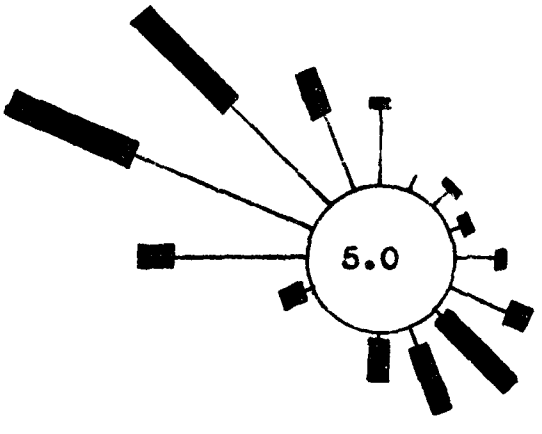
0200



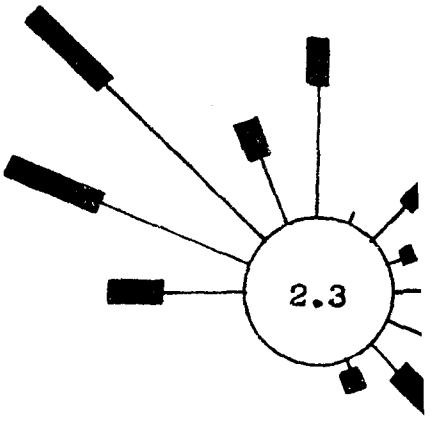
0600



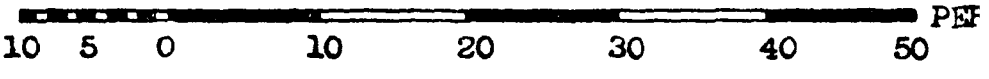
0600



1300



1300

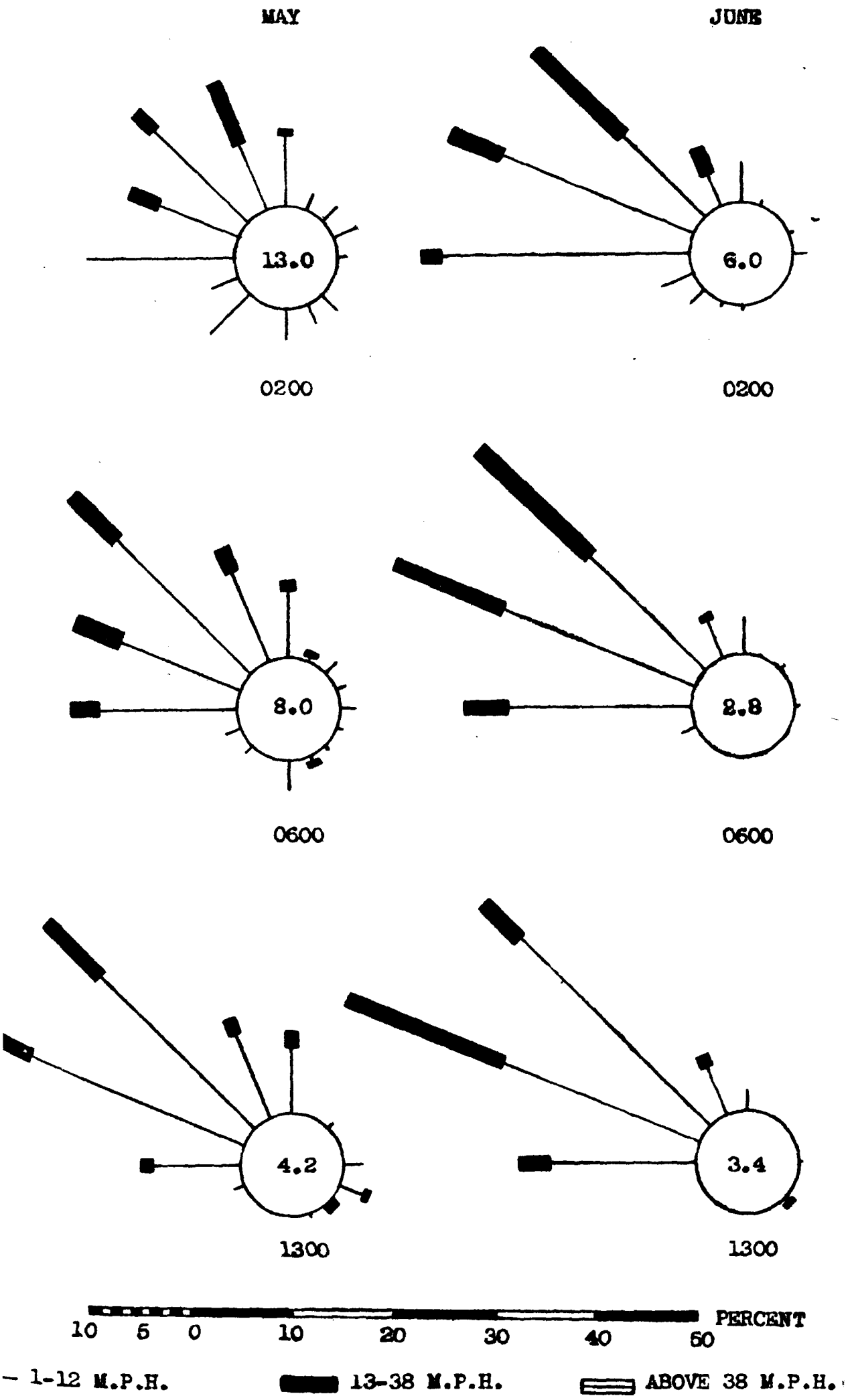


CALMS ARE SHEWN BY FIGURES IN CIRCLES.

—— 1-12 M.P.H. ▬ 13-38 M.P.H. ▭ ABOVE

PERCENTAGE FREQUENCY OF SURFACE WIND FROM SPECIFIED DIRECTIONS.

BASRA

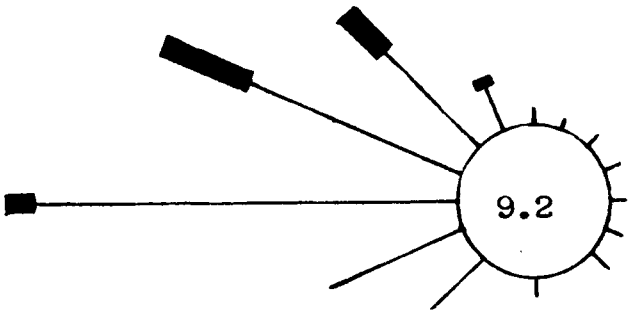


PERCENTAGE FREQUENCY OF SURFACE WIND FROM SPECIFIED DIRECTION

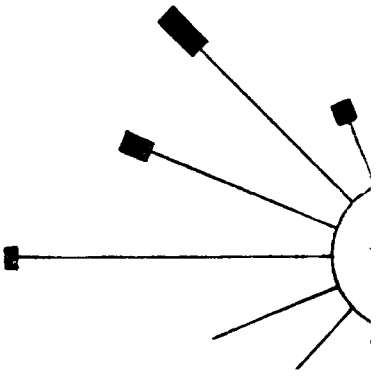
BASRA

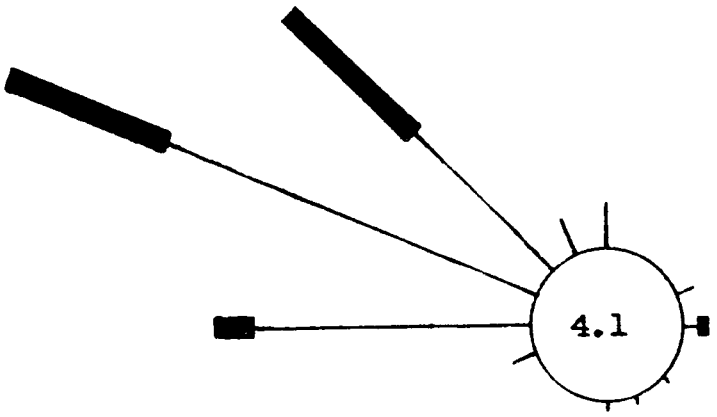
JULY

AU

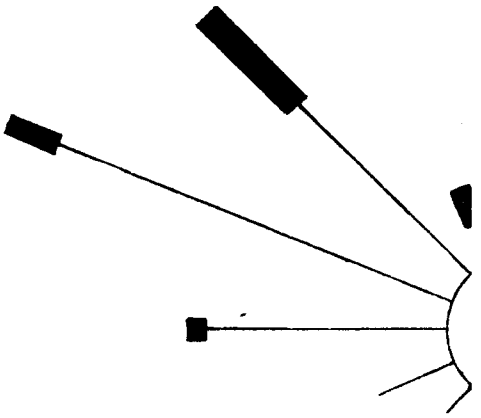


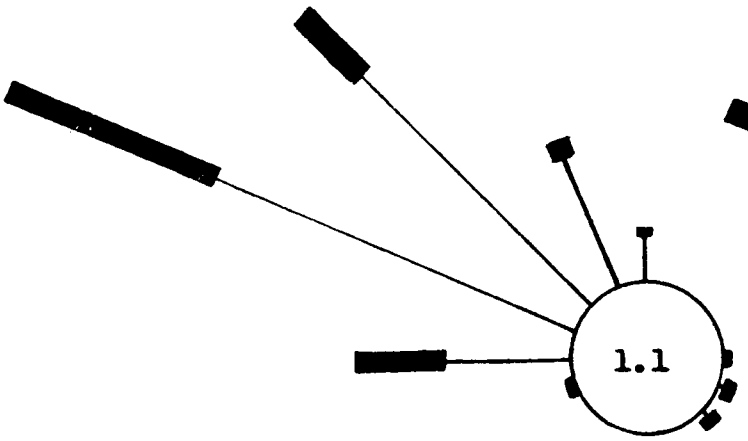
0200



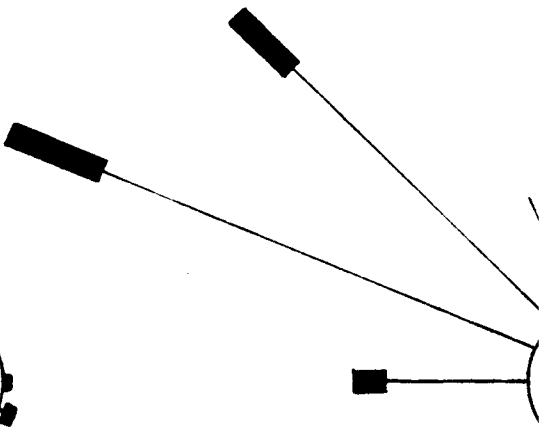


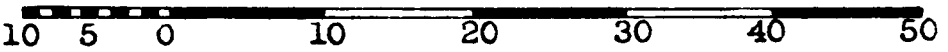
0600





1300





CALMS ARE SHEWN BY FIGURES IN CIRCLES.

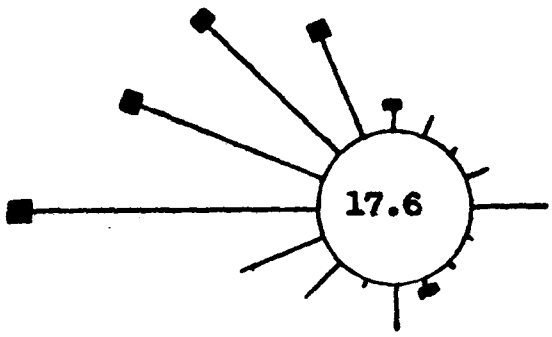
—— 1-12 M.P.H. ▬ 13-38 M.P.H. ▭ ABOVE 3

PERCENTAGE FREQUNCY OF SURFACE WIND FROM SPECIFIED DIRECTIONS.

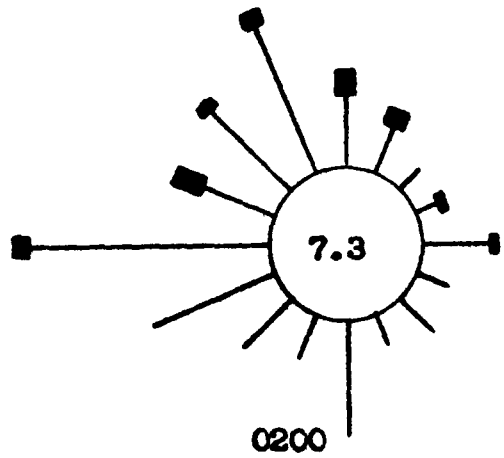
BASRA

SEPTEMBER

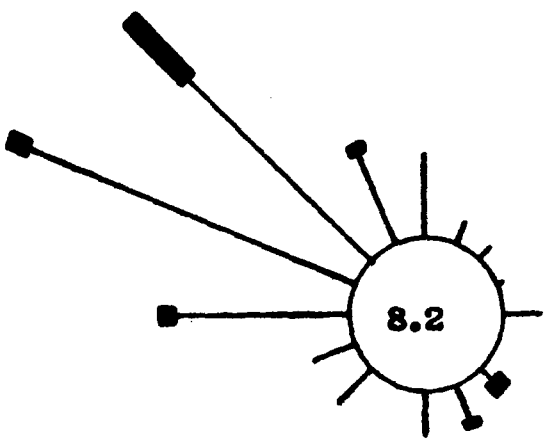
OCTOBER



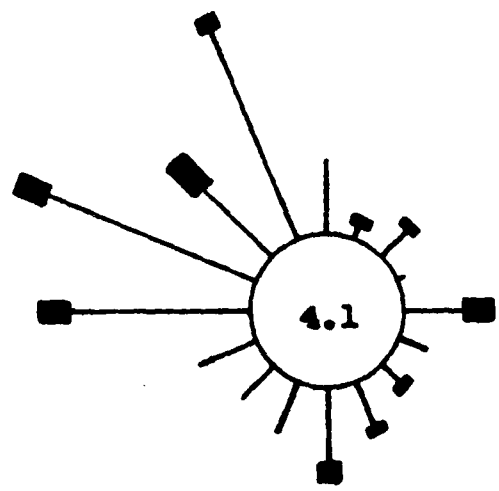
0200



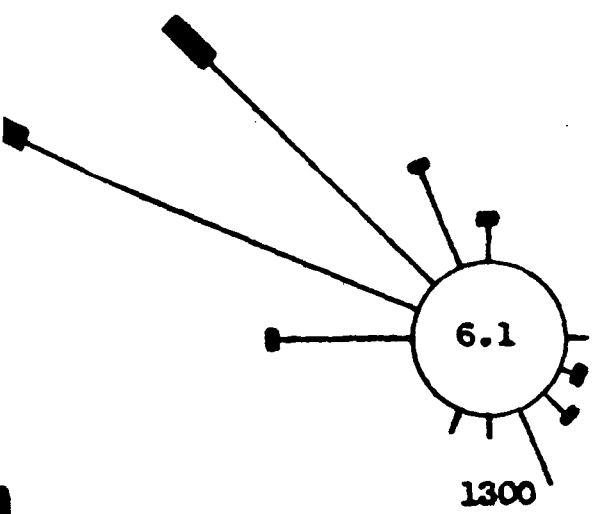
0200



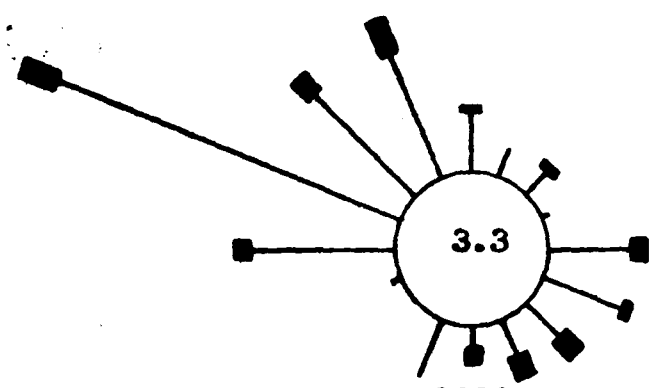
0600



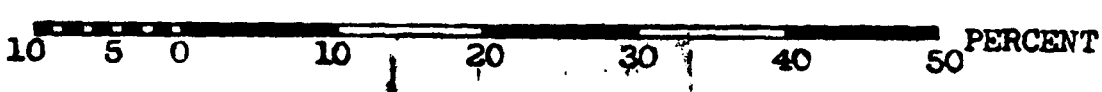
0600



1300



1300



CALMS ARE SHEWN BY FIGURES IN CERCLES.

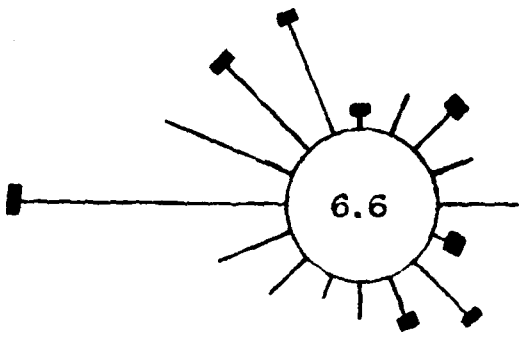
—— 1-12 M.P.H. ▬ 13-38 M.P.H. ▭ ABOVE 38 M.P.

PERCENTAGE FREQUENCY OF SURFACE WIND FROM SPECIFIED DIRECTION

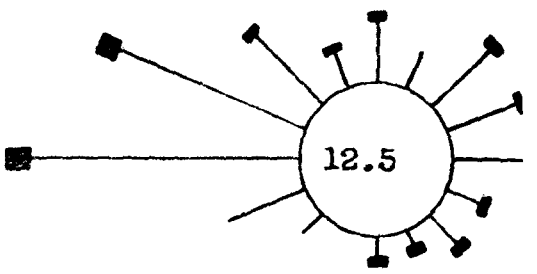
BASRA

NOVEMBER

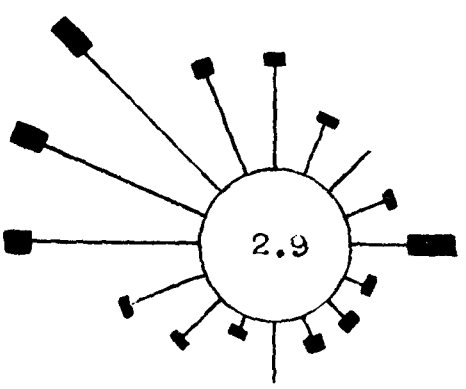
DECEMBER



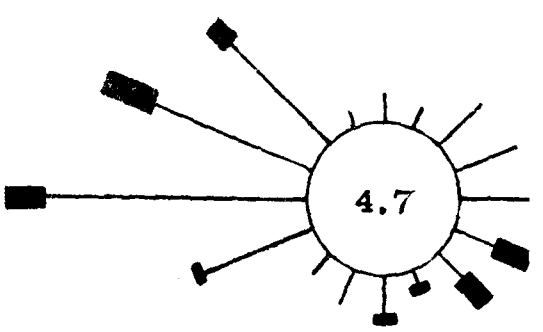
0200



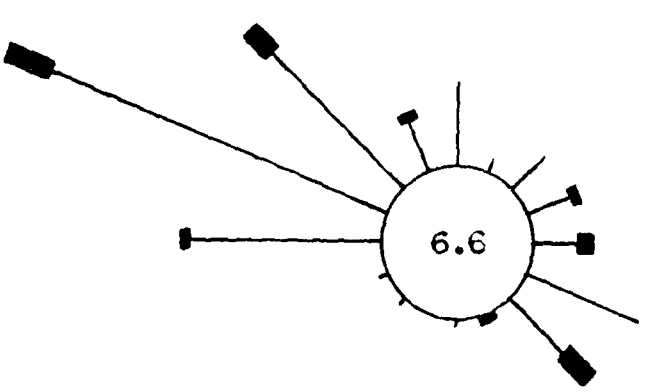
0200



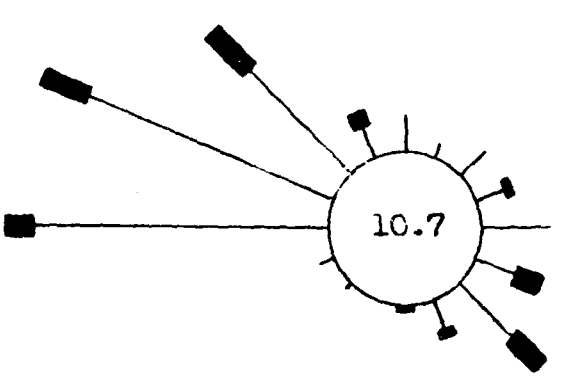
0600



0600



1300



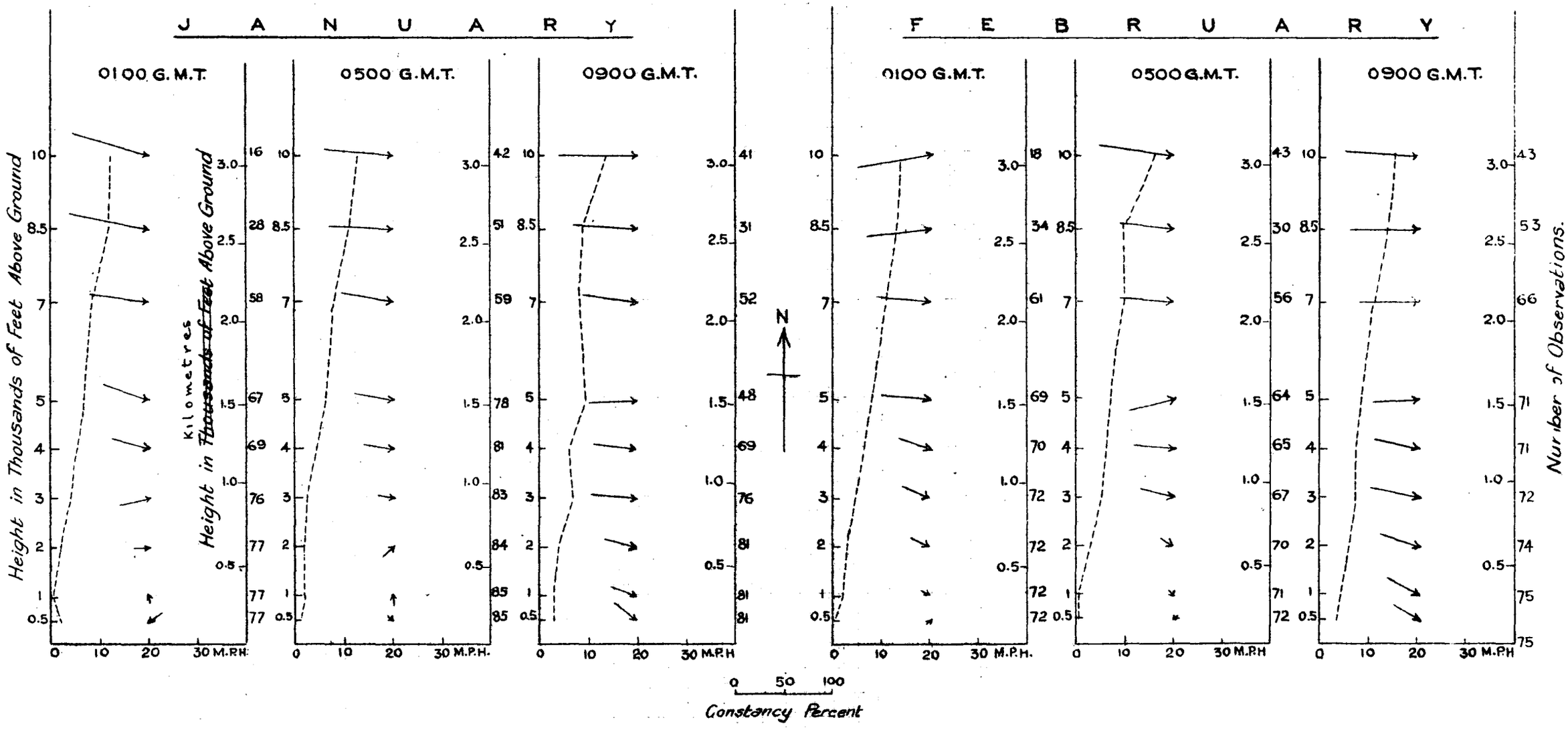
1300

CALMS ARE SHEWN BY FIGURES IN CIRCLES.

—— 1-12 M.P.H. ▬ 13-38 M.P.H. ▭ ABOVE 38 M.P.H.

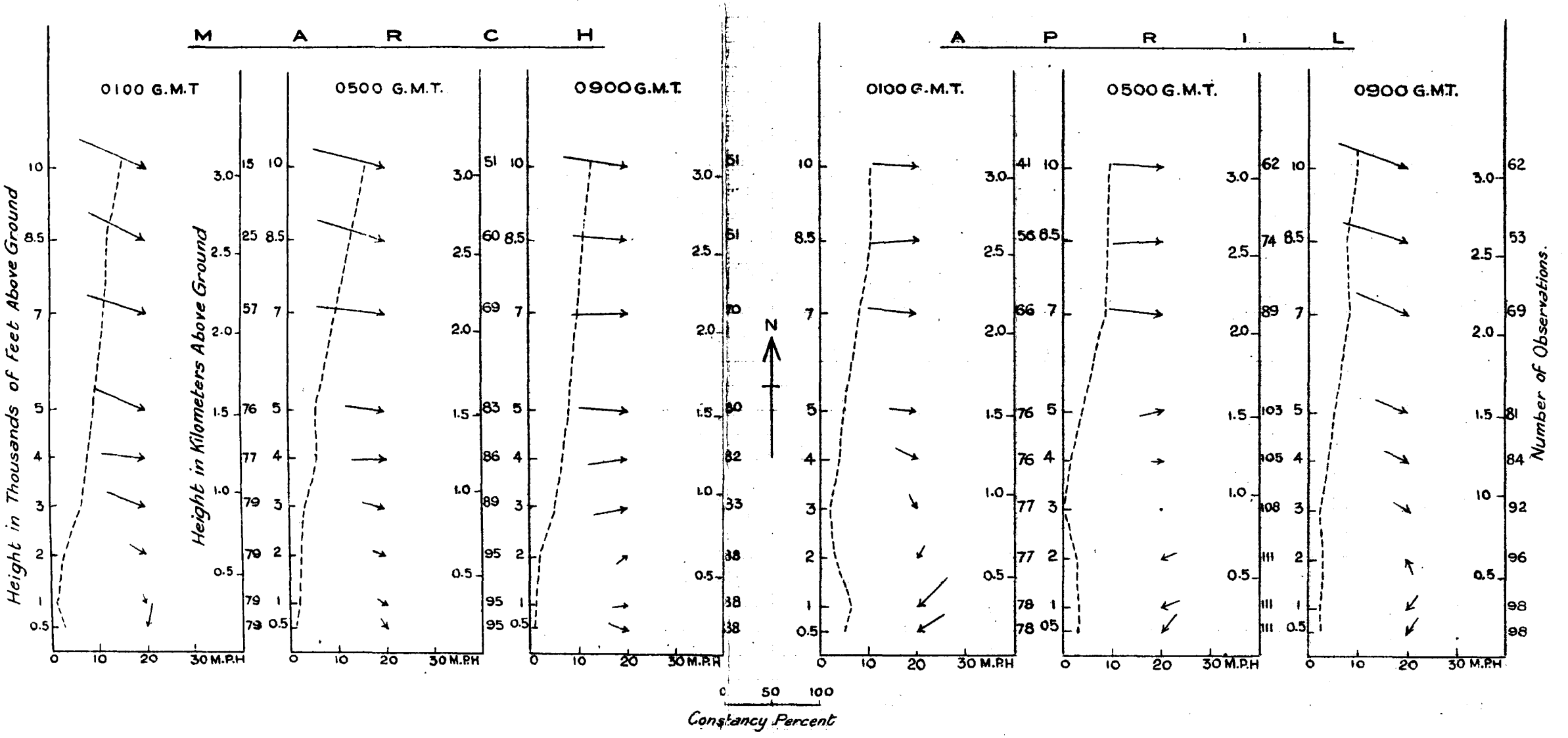
(p.103)

MEAN VECTOR WINDS AT BAGHDAD AIRPORT 1937-1941



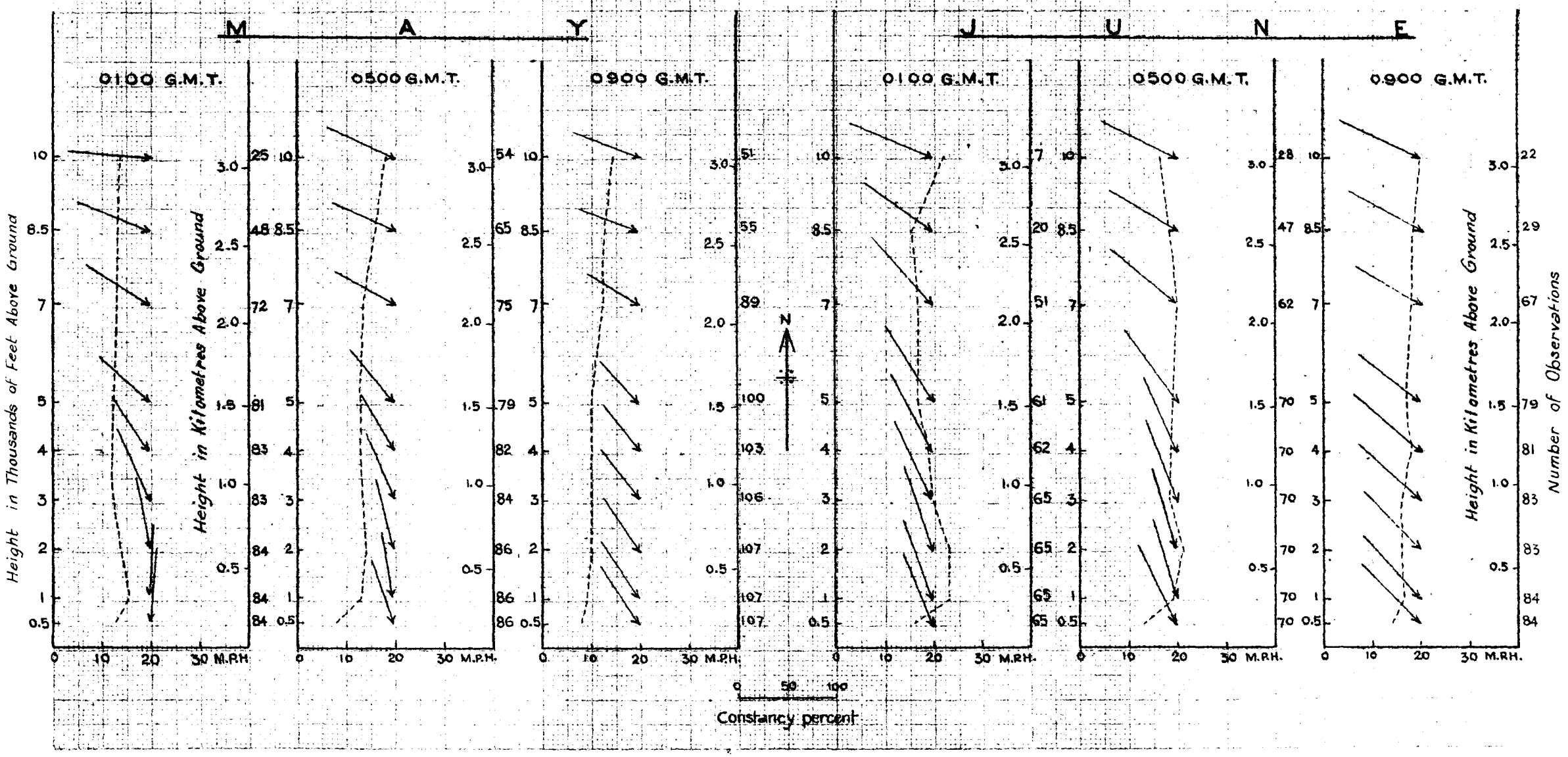
(P.104)

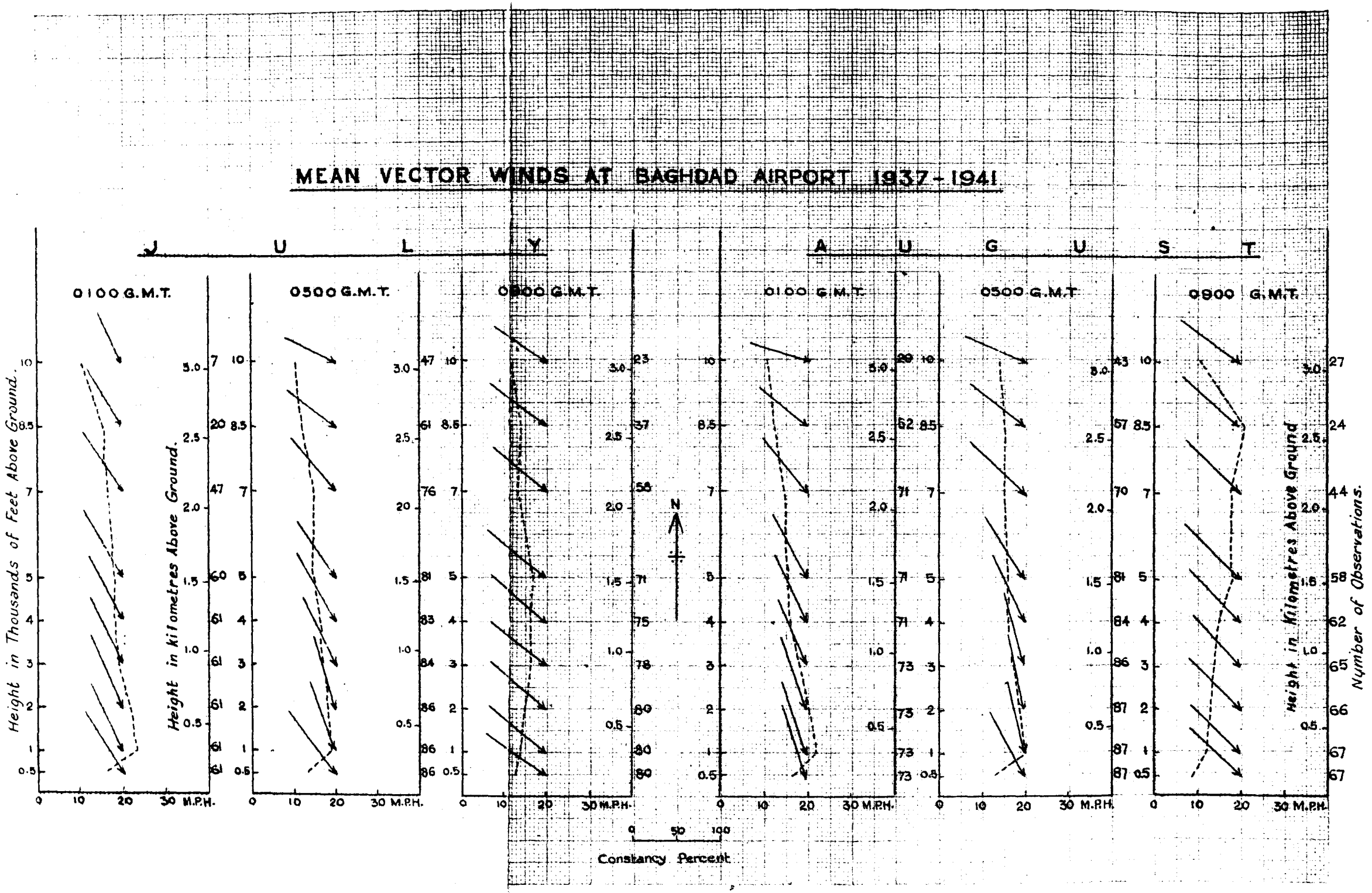
MEAN VECTOR WINDS AT BAGHDAD AIRPORT 1937-1941

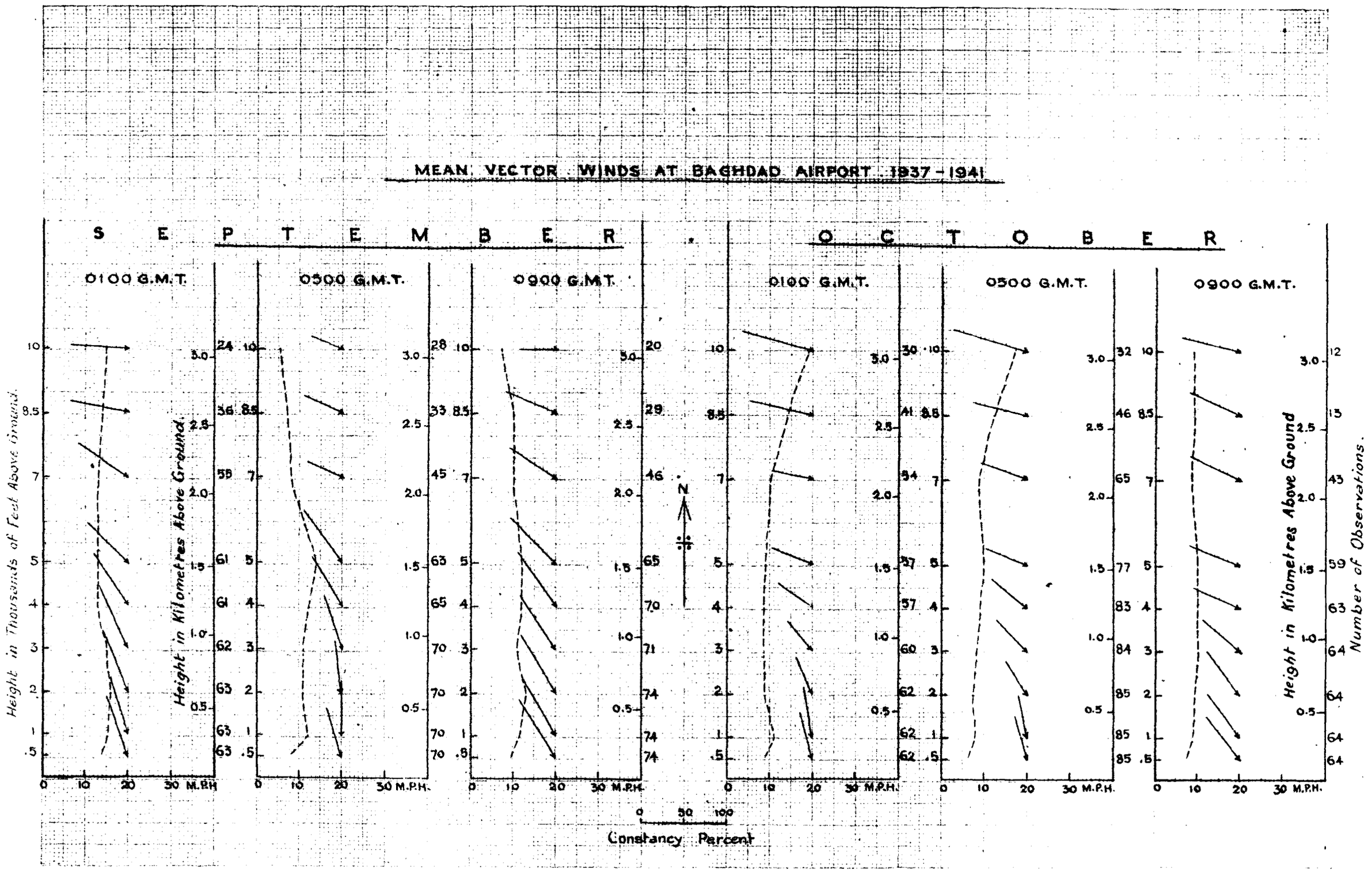


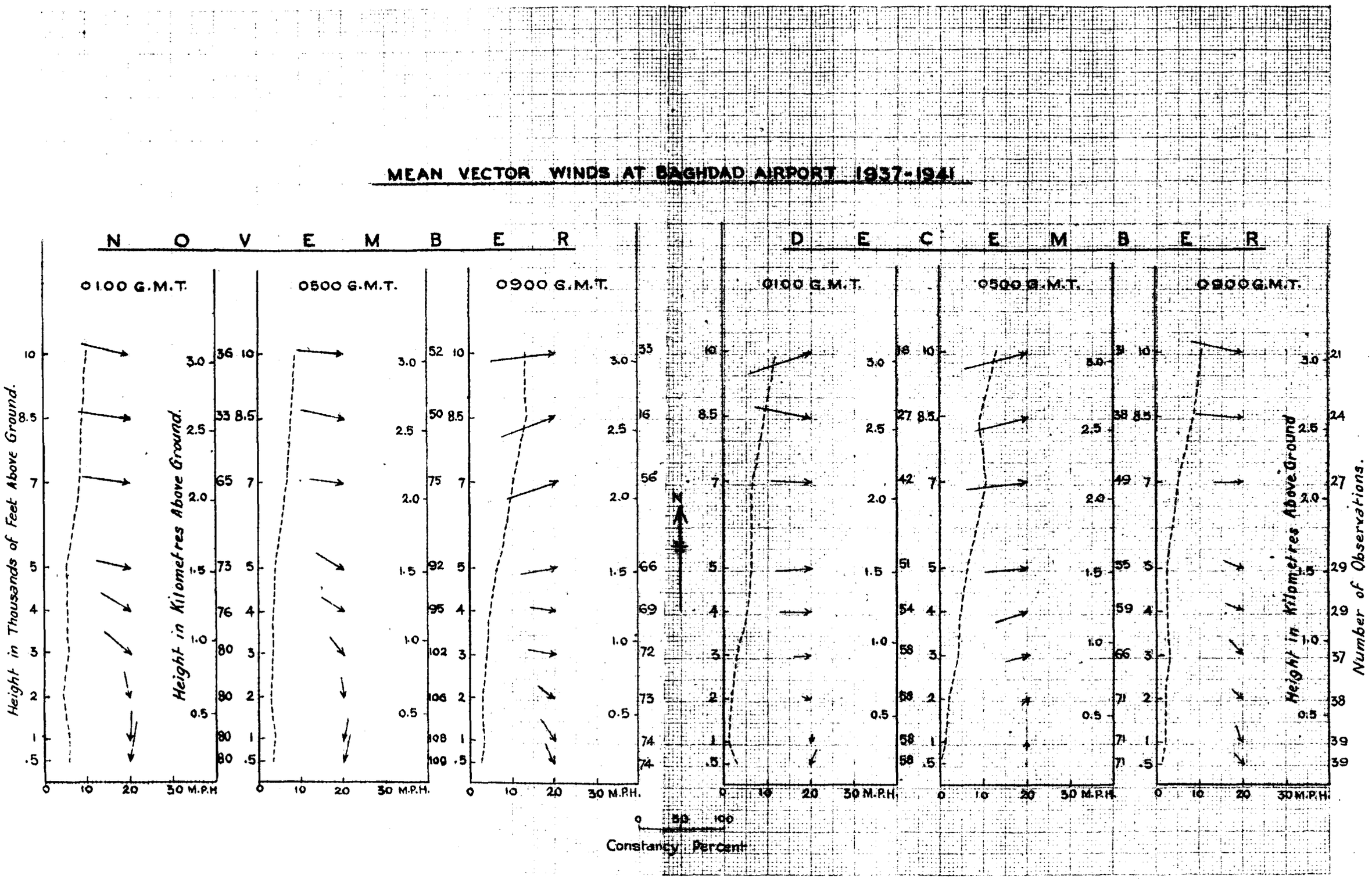
(p. 105)

MEAN VECTOR WINDS AT BAGHDAD AIRPORT 1937-1941




MEAN VECTOR WINDS AT BAGHDAD AIRPORT 1937-1941
J U L Y
A U G U S T
0100 G.M.T.
0500 G.M.T.
0900 G.M.T.
Height in Thousands of Feet Above Ground.
Height in Kilometres Above Ground.
Number of Observations.
M.P.H.
N
Constancy Percent


MEAN VECTOR WINDS AT BAGHDAD AIRPORT 1937 - 1941
SEPTEMBER
OCTOBER
0100 G.M.T.
0500 G.M.T.
0900 G.M.T.
0100 G.M.T.
0500 G.M.T.
0900 G.M.T.
Height in Thousands of Feet Above Ground
Height in Kilometres Above Ground
Number of Observations
M.P.H.
N
Constancy Percent


MEAN VECTOR WINDS AT BAGHDAD AIRPORT 1937-1941
NOVEMBER
DECEMBER
0100 G.M.T.
0500 G.M.T.
0900 G.M.T.
Height in Thousands of Feet Above Ground.
Height in Kilometres Above Ground.
Number of Observations.
M.P.H.
Constancy Percent