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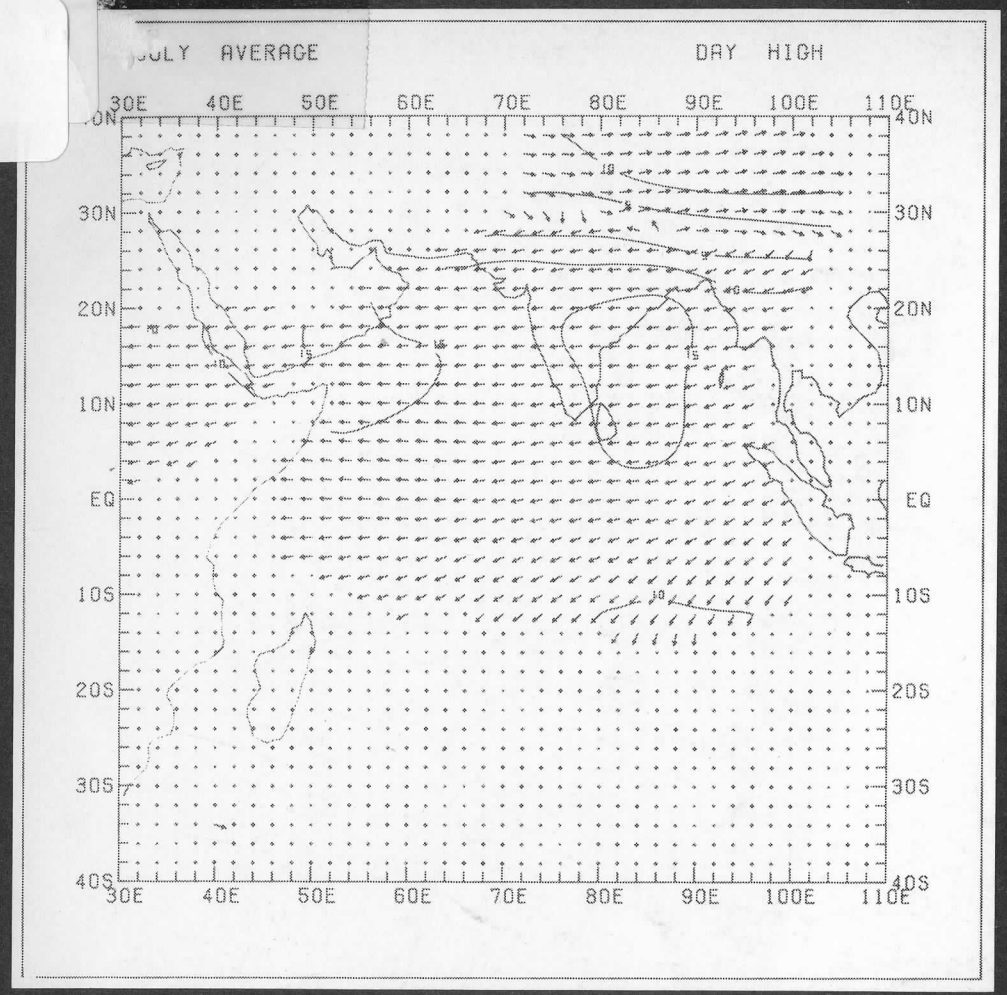

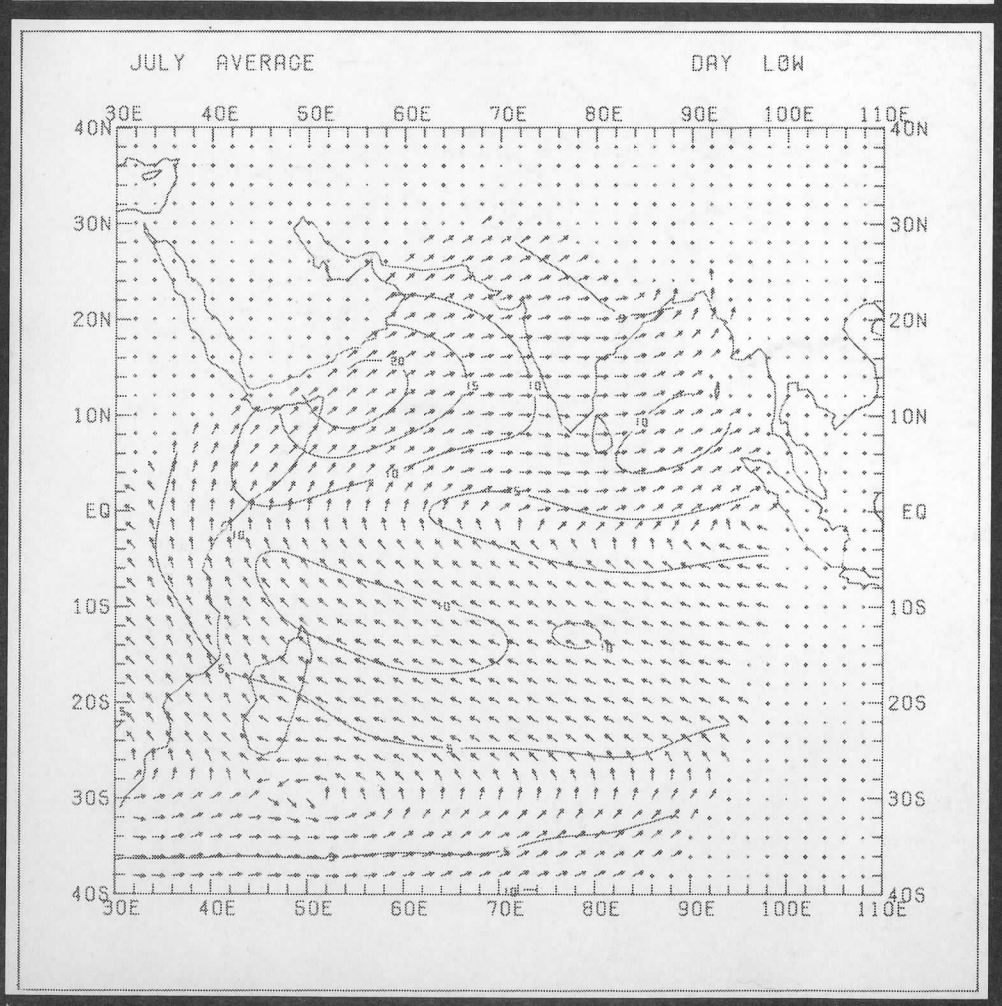

SUMMER MONSOON WINDSETS FROM GEOSTATIONARY SATELLITE DATA

SUMMER MONEX: 1 MAY-31 JULY, 1979

BY

JOHN A. YOUNG
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SPACE SCIENCE AND ENGINEERING CENTER
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UNIVERSITY OF WISCONSIN—MADISON

National Science Foundation, Under Grant No. ATM-78-21873

JUNE 1980

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SUMMER MONSOON WINDSETS
DERIVED FROM GEOSTATIONARY SATELLITE DATA

Abstract

During 1979 the GOES satellite over the Indian Ocean gave researchers the first opportunity to continuously view the monsoon circulation during one complete annual cycle. Special cloud tracking efforts at the University of Wisconsin allowed relatively complete synoptic wind coverage for the summer monsoon at two levels. The coverage included the experimental areas of summer MONEX as well as the southern equatorial Indian Ocean during the period 1 May - 31 July, and forms the basis for this atlas. These cloud motion vectors constitute the complete FGGE level IIb satellite wind data set produced at the University of Wisconsin, and form a majority of all upper air wind observations over the Indian Ocean during this period. The fields cover the "pre-monsoon," "onset" and "established" periods of evolution.

It is intented that this atlas be used as a reference for: (i) the information contained in the FGGE level IIb satellite wind data set, and (ii) the large-scale monsoon flows over the Indian Ocean outside of FGGE/MONEX dropsonde areas. The atlas shows (a) daily maps of lower and upper tropospheric wind fields and (b) visible and infrared imagery from the TIROS-N satellite for each phase of the summer monsoon. These windfield charts represent analyses of gridded, spatially interpolated data designed for easy inspection of the satellite products. The outer two rows of vectors in "fringe" areas should be ignored. TIROS-N Satellite imagery relates evolution of the monsoon cloud cover to the flow fields obtained from the cloud motion vectors. These fields illustrate the applicability of the satellite data for future diagnostic study of the monsoonal "climate machine".

1. Introduction

The First Garp Global Experiment (FGGE) of the Global Atmospheric Research Program (GARP) was conducted during 1979. Two special observing periods were designated for intensive observations. The second of these spanned the period 10 May - 8 June during which the planetary development of the summer monsoon circulation normally takes place.

The importance of the monsoon as a fundamental seasonal element was recognized by conducting the GARP sub-program known as MONEX (The Monsoon Experiment) simultaneously and in coordination with FGGE. The summer portion consisted of three phases: (i) the Radiation Heat Source Experiment, conducted from Saudi Arabia in early May; (ii) the Arabian Sea Experiment, conducted from Bombay in June; (iii) the Bay of Bengal Experiment, conducted from Calcutta in July. Detailed descriptions of early MONEX plans can be found in the international document "The Monsoon Experiment" (GARP Pub. Series No. 18, Oct. 1976) and the "Plan for U.S. Participation in MONEX" (Report of U.S. MONEX Panel to the U.S. GARP Committee, published by the National Academy of Sciences, 1977). A summary of the summer field phases (Kuettner and Fein, 1980) is scheduled for publication in the Bulletin of the American Meteorological Society.

In the past our knowledge of the wind fields over the Indian Ocean on individual days was sketchy. Upper-air observations over the Arabian Sea and Bay of Bengal were essentially absent except for a few limited term observational programs (IIOE, 1963-64; ISMEX, 1973; Monsoon-77). No geo-synchronous satellites operated over the summer monsoon area. With the advent of FGGE, this situation changed dramatically: the GOES-I satellite was operational during 1979 at 58°E. This yielded the first opportunity to continuously view the Indian summer monsoon circulation during one complete annual cycle.

For the summer MONEX period (1 May to 31 July 1979) a unique cloud motion data set was obtained from GOES-I satellite imagery over the Indian Ocean. Two separate groups at the University of Wisconsin were involved in this effort. One group at the Space Science and Engineering Center of the University of Wisconsin-Madison derived a continuous set of cloud wind observations for the entire FGGE year. During this MONEX observing period, a second group at the University of Wisconsin-Milwaukee enhanced the density of these observations using imagery of higher time-space resolution. Analyses of two image sequences taken 12 hours apart resulted in one or two wind sets per day at each level; the combined effort formed University of Wisconsin's complete satellite wind contribution to the international FGGE level IIb data set. In this sense the atlas is not a "quick-look" atlas, as it is based upon an analysis of all satellite-derived wind vectors, and no other type of wind data is included. The cloud motion vector information has been interpolated, gridded and analyzed for easy inspection of the satellite derived flow field properties. Computer tapes containing the complete wind information are available from the Space Science and Engineering Center, University of Wisconsin, Madison. These tapes contain (a) all original cloud motion vectors and (b) time series of our interpolated vectors at 2° grid intervals.

2. GOES-I Winds

a. Production History during May-July 1979

Sequences of images from the Indian Ocean geosynchronous satellite stationed at 58°E longitude were displayed on the McIDAS (Man Computer Interactive Data Access System) of the Space Science and Engineering Center.

Three images were used per sequence for tracking cloud motions. The Madison-based group analyzed 3 n mi resolution images taken at 1/2 hour intervals starting at approximately 0930 GMT (daytime) and 2130 GMT (nighttime). The Milwaukee team used 2 n mi images taken at 15 minute intervals starting at approximately 0830 GMT (daytime) and 2030 GMT (nighttime). A complete description of the cloud tracking system used is given in Mosher (1979). Two successive vectors were measured from each cloud target. These vectors were compared for their consistency as part of the quality control procedure. Any pairs differing by more than 5 m s^{-1} in either the u (zonal) or v (meridional) component were rejected. Vector pairs passing the quality control test were averaged. The averaged vectors were also checked for spatial consistency with other adjacent cloud motion vectors. Each group's analysis was compared with the other group's analysis for consistency. This provided a "second opinion" check on each wind set produced.

The pressure altitudes of the cloud winds were derived from infrared temperature imagery obtained by GOES-I or TIROS-N satellites (Mosher, 1979). The measured cloud temperatures were compared to latitude mean soundings for determining the altitudes of the wind observations. For low-level clouds with tops below 850 mb, wind level assignments were made at the level of cloud base using an estimated thickness since studies by Hasler et al. (1976, 1979) have shown the low level cloud motions are best correlated with the wind at their base levels. Low-level cloud groups with tops between 700 mb and 800 mb probably move with velocities indicative of their lower portions. The heights of cirrus tracers were usually compared to the infrared derived heights of the centers of the closest

convective system. This comparison was made to minimize the height errors in tracking thin cirrus.

During 65% of the SOP II, the infrared sensor on the GOES-I satellite malfunctioned leading to loss of useful signal for the nighttimes, as well as necessitating the use of the data from the TIROS-N satellite infrared sounder for calculation of cloud heights during the daytimes. The TIROS-N height measurements obtained at ±3 hours were superimposed on the GOES-I satellite imagery during the cloud tracking for wind height assignments (Smith and Wolf, 1976). This led to additional uncertainties in the cloud heights, which for our data set is about ± 100 mb.

b. Data Coverage

The combined analyses covered the region between 40°N and 40°S latitudes and 30°E and 110°E longitudes. A total of approximately 1500 vectors per daytime and 900 vectors per nighttime were produced. The analyses of the Milwaukee (MONEX) group nearly doubled the total number of observations over that obtained by the Madison (FGGE) group alone.

Fig. 1 shows the time history of vectors production for both day and nighttimes. The nighttime data sets were obtained for only 35% of the 92-day period because of loss of the GOES-I infrared imagery. During the periods when the infrared sensor malfunctioned, only the daytime wind set was analysed by each group. The variability of the number of vectors produced was generally indicative of the relative abundance of cloud tracers. Loss of GOES-I satellite signal (e.g. complete loss on 6 June 1979) occasionally reduced the number of vectors obtained.

An example of the vertical distribution of cloud tops yielding wind estimates is shown in Fig. 2. Dense coverage was obtained for the lower

layer (1000-700 mb) and the upper layer (300-100 mb). This reflects the abundance of the trade cumuli groups and cirrus clouds.

Figure 3a illustrates the excellent areal coverage at low levels. Maximum areal coverage corresponds to one cloud observation within each degree of latitude and longitude. The flow in the northern Indian Ocean region is well defined by this dense coverage. The "Somali Jet" is strong and extends from the East African Coast toward India. The core of the southeast trades over the southeastern section is also clearly delineated. Very few measurements are obtained northwest of the jet near Saudi Arabia because of the dryness of this region. Thus the areal coverage is weighted toward the areas where the tradewind cumuli were abundant.

Fig. 3b shows that reasonably good areal coverage was also realized for the upper levels. Only the leading edges of the cirrus shields were used to estimate cloud displacements; thus, these cloud winds represent the synoptic scale flow well. The upper level flow is generally easterly over the northern Indian Ocean indicating the location of the Tropical Easterly Jet. Cirrus tracers were relatively sparse in the convectively inactive areas and the coverage at upper levels is not uniform. Few cloud tracers between 700 and 300 mb were found.

3. Analysed Fields

a. Gridded analyses (Plates 1-124)

All data from 40°N to 40°S latitude, 30°E to 110°E longitude were interpolated to a 2° x 2° grid using the method of Endlich and Mancuso (1968). Wind components for each grid point were obtained from a minimum of 2 observations within a 6° (latitude or longitude) radius of the point. Grid points for which less than two observations were available were marked as being

data void. In data rich areas, the closest observations (10 maximum) were used to calculate the grid point value. The observations were weighted as a function of their distances from the point, $w = 1/(1 + \left(\frac{R}{2}\right)^2)$, where R is in degrees. This gives a "half-width" for the weighting which corresponds to a circle with a radius of 2°. In contrast to the original scheme of Endlich and Mancuso, non-isotropic weighting preferences to upwind-downwind data were not made here; in addition, no adjustments for time or altitude differences were made. From the preceding description, it is clear that *plotted vectors in the "fringe" region between data-void areas (no isotachs plotted) and data-rich areas are of uncertain reliability. As a practical "rule of thumb," users should ignore the outer two rows of vectors surrounding data-rich regions.*

The grid analyses were made using the combined data sets from both wind tracking teams. Two gridded wind fields per set were made--a low level field using all observations from 700 mb to the surface and a high level field using all observations from 100 to 300 mb. The analysed daytime and nighttime windfields are shown in plates 1-92 and 93-124, respectively. Isotachs are drawn at intervals of 5 m s^{-1} and the wind direction has been plotted as a unit vector at each grid point for easy visualization of the streamlines of flow. The cloud windfields depict motions at synoptic to planetary scales. Day-to-day variability in the flow structure is well defined. While the cloud fields in TIROS-N imagery exhibit diurnal variation, the fewer nighttime windfields may not be sufficient to determine diurnal fluctuations in the flow.

b. Monthly Mean Fields (Plates 125-127)

The monthly mean charts allow the primary persistent features to be

identified, and hence are an aid to interpreting the daily flow patterns. The arithmetic means have been made from individual daily time series of daytime vectors at each grid point. Grid points with fewer than 18 values during a month (60% temporal coverage) have been eliminated. Thus, the plotted vectors represent a relatively stable estimate of the monthly mean flow. The May 1979 chart shows pre-monsoon conditions, while the July chart shows the established phase (somewhat modified by some typical "break monsoon" variablity). June was a transition month, as the onset over the Arabian Sea began after mid-month. Major features of the flow during pre-monsoon and established phases are described below.

(i) July 1979-Established phase (Plate 127)

It is easiest to begin by consulting the average flow during the established average monsoon, flow during July (Plate 127). At low levels, a giant "S-shaped" streamline pattern links major parts of the two hemispheres in this sector; this is similar to the climatological surface flow pattern. The southeast trades of the southern hemisphere approach and cross the equator on a long curved path; a "core" of faster speeds is evident well upstream from the equator. Near and downstream from the equator, the flow develops into the well-defined structure of stronger winds known as the East African or Somali Jet.

The southerly wind stress and its curl (negative along the Equator) provide fundamental driving for the three-dimensional summer circulations within the upper layers of the western Indian Ocean. In the jet exit region off Somalia, the left edge of the jet is cloud-free, confluent, and cyclonic; its location is an index of the northward penetration of the monsoon circulation from the Southern Hemisphere.

Further downstream the flow continues down the pressure gradient, but

under increasing Coriolis influence, and forms the relatively broad and strong "Southwest Monsoon" over the Arabian Sea. This is a region of exceptionally strong air-sea interaction (exchange of latent heat, momentum, and sensible heat) that modifies the flow as it progresses toward India, the Bay of Bengal, and the regions of strongest monsoonal rainfall in the general area of the monsoon trough. This air-sea interaction also cools the upper layers of the ocean, and so the evaporation rates are modulated by the past history of the strong interaction. It is believed that the net water vapor transport toward India and the convective stability of the flow are influenced by these processes. A secondary acceleration of the flow downstream from the equator is focussed over the southeastern Arabian Sea. No previous data has provided such a complete view of this circulation nor its variability.

The high level flow during the established phase is similar to previous climatological expectations. It is moderately well defined by high cloud tracers due to convection. It is more zonal than the flow at low levels, with the broad signature of the Tropical Easterly Jet (weaker than normal) found to the north of the equator. Cross-equatorial motions are more pronounced on this and other individual daily maps compared to the climatological charts. An elongated anticyclone is evident along 25°N. The westerly flow increases in speed north of 30°N indicating the existence of the westerly jet in central Asia.

Considering both levels, a thermally direct mass circulation in the Northern Hemisphere is described in a vertical plane oriented southwest to northeast along the low-level streamlines; the implied vertical connection is rising motion in monsoon rain regions. The displacement of this rising

motion to a position well north of the Equator, and sinking implied to the south, characterizes this as a kind of reverse Hadley circulation.

(ii) May 1979 - Premonsoon phase (plate 125)

At low levels, the broad band of southeasterly trade wind flow extends over most of southern Indian Ocean. Weak cross-equatorial flow is seen with strong northwesterlies to the south of India near the equator. Anti-cyclonic circulation is found over the Arabian Sea. The East African Jet and southwest monsoon are absent. At 75°E, the confluence line separating air masses with recent histories in different hemispheres is slightly to the north of the equator.

At high levels, the monsoon flow is undeveloped. The flow is generally diffluent along 4°N across the Indian Ocean. An anticyclone is located at 18°N, 98°W. The flow is generally westerly north of 25°N and faster speeds of about 25 m s^{-1} are located over north Africa and the Middle East indicating the location of the westerly jet.

4. Acknowledgments

Our thanks go to Professor V. E. Suomi, who believed that the Indian Ocean geostationary satellite was essential to MONEX and whose efforts helped to assure that capability and hence make this work possible. Production of these wind fields was assisted by the diligent efforts of Dr. Fred Mosher, Carl Norton and numerous FGGE wind trackers at Madison, and wind trackers Robert Mack, Mark Wysocki, Mark Michelson, Richard Albrecht and Margret Nowak at Milwaukee. The overall encouragement given by the NOAA FGGE Project Office was most helpful; FGGE winds were produced under NOAA contract 7-35217. The MONEX winds were produced under NSF Grant ATM 78-21873 to the Space Science and Engineering Center. Partial support was also provided by: (JAY) NSF Grant ATM 78-25503 to the Department of Meteorology, (HV) NSF Grant ATM 74-23041 to the Center for Climatic Research, and (DW) NSF Grant ATM 79-13097 to the Space Science and Engineering Center.

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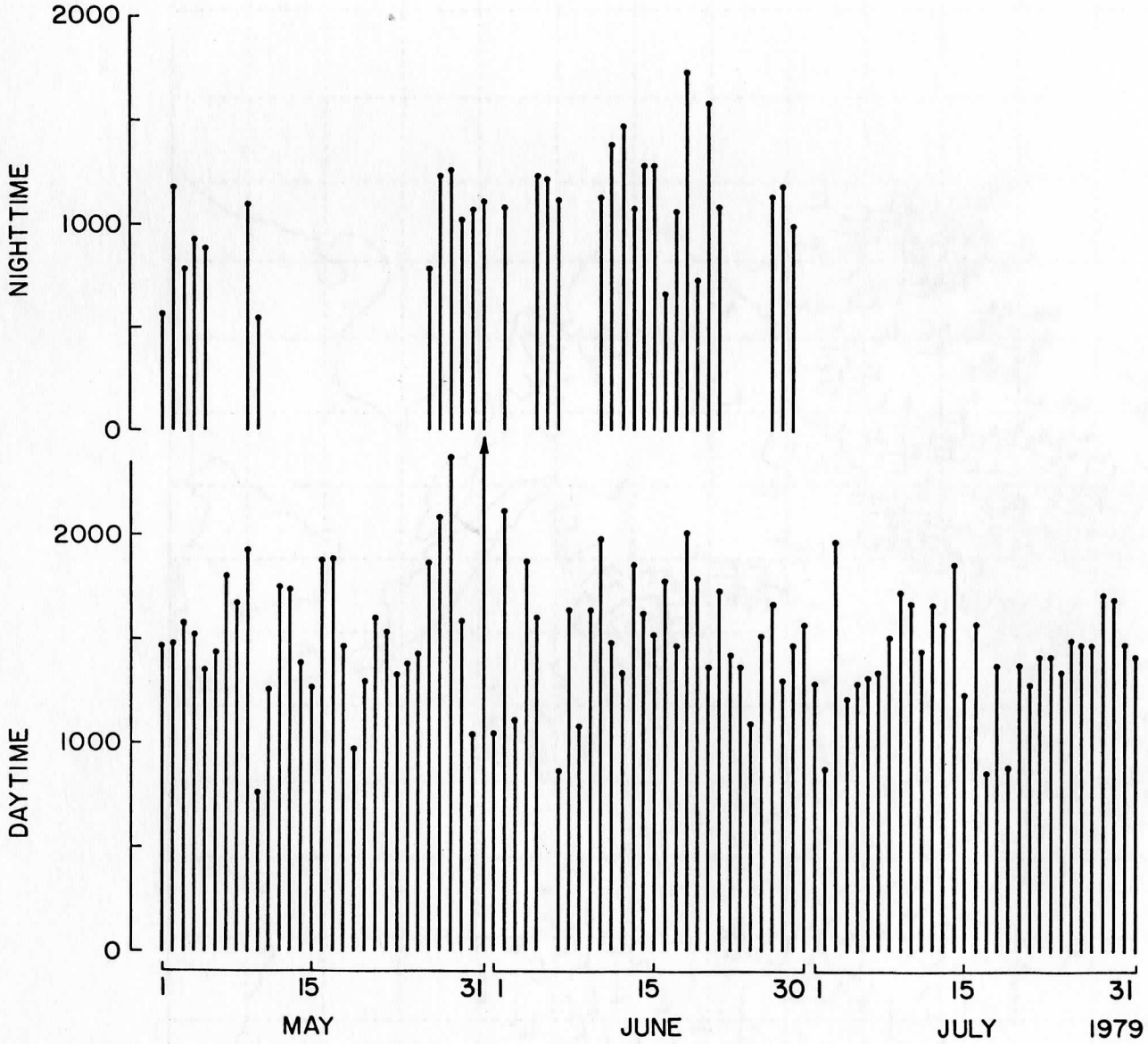


FIG. 1 TOTAL NUMBER OF CLOUD WINDS ACCESSED DURING 1 MAY - 31 JULY, 1979

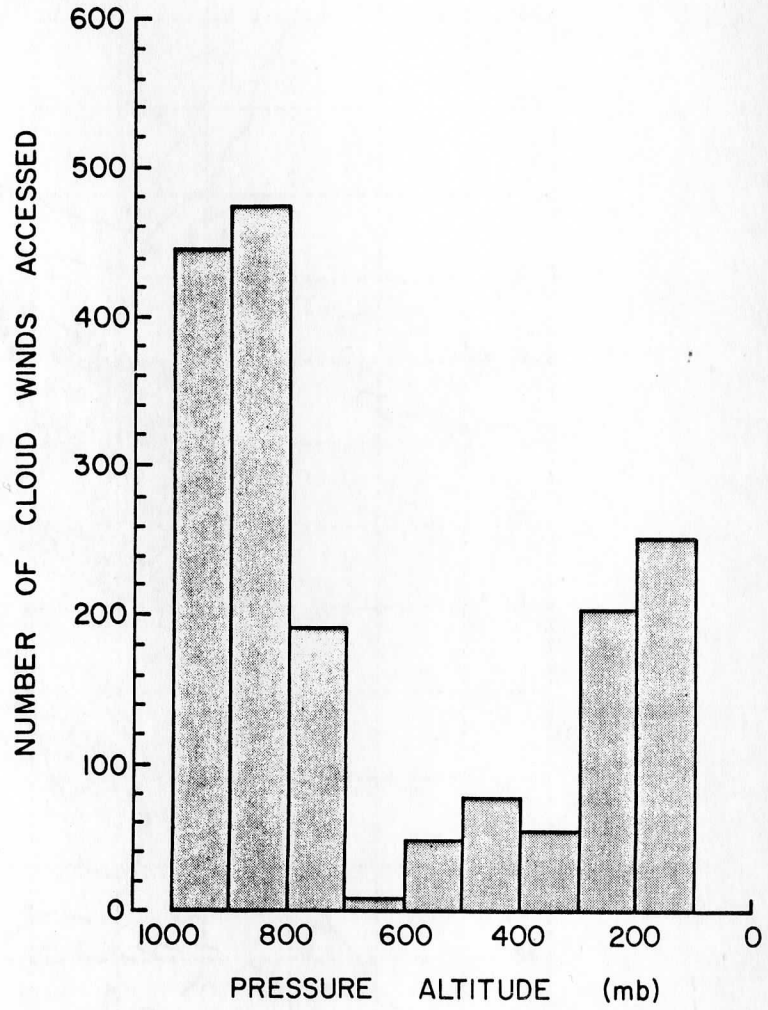


FIG. 2 VERTICAL DISTRIBUTION OF CLOUD TOPS ON 9 JULY, 1979

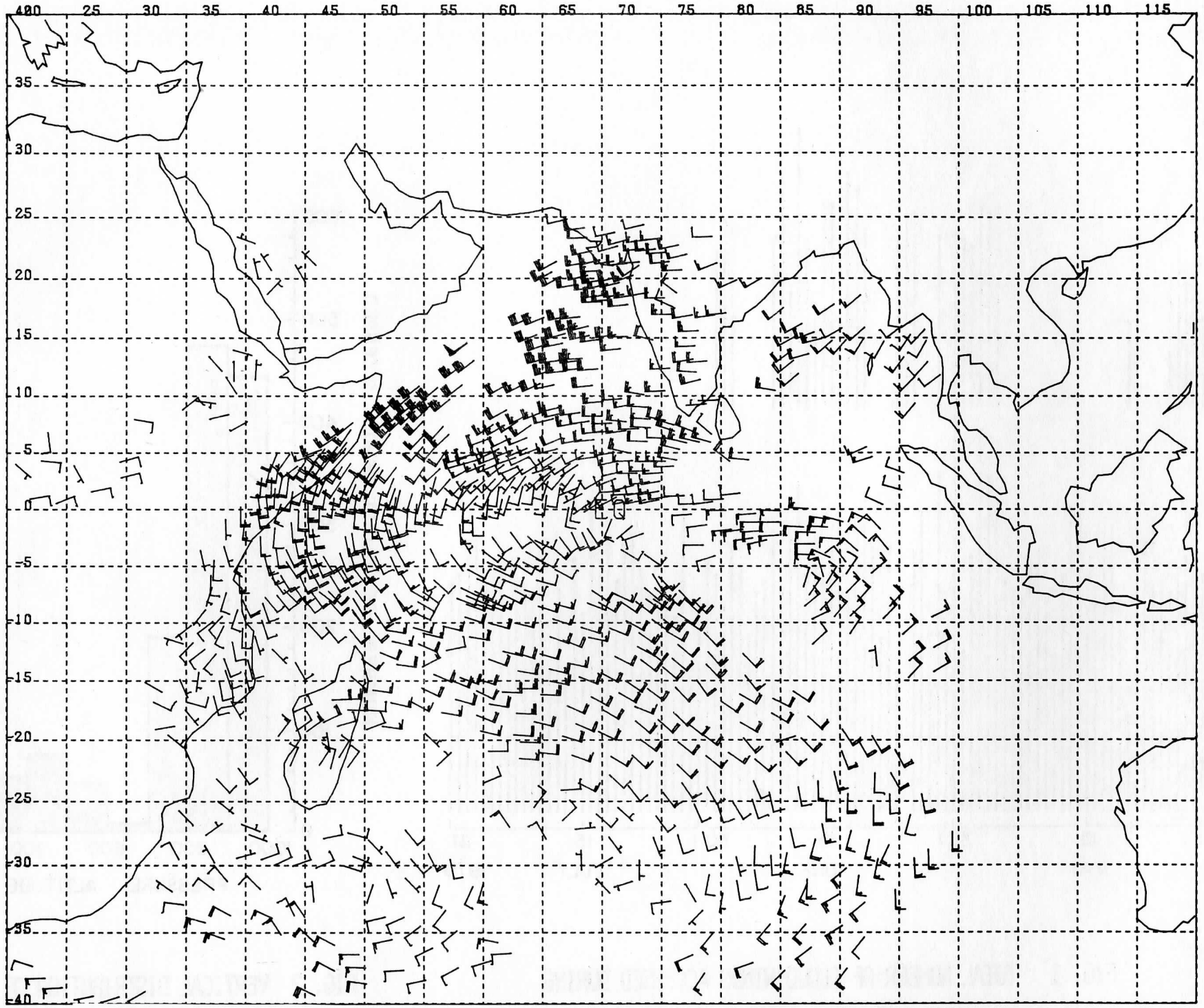


FIG. 3A LOW LEVEL (1000 - 700 MB) CLOUD WINDS FOR 14 JULY, 1979 AT 083533 GMT

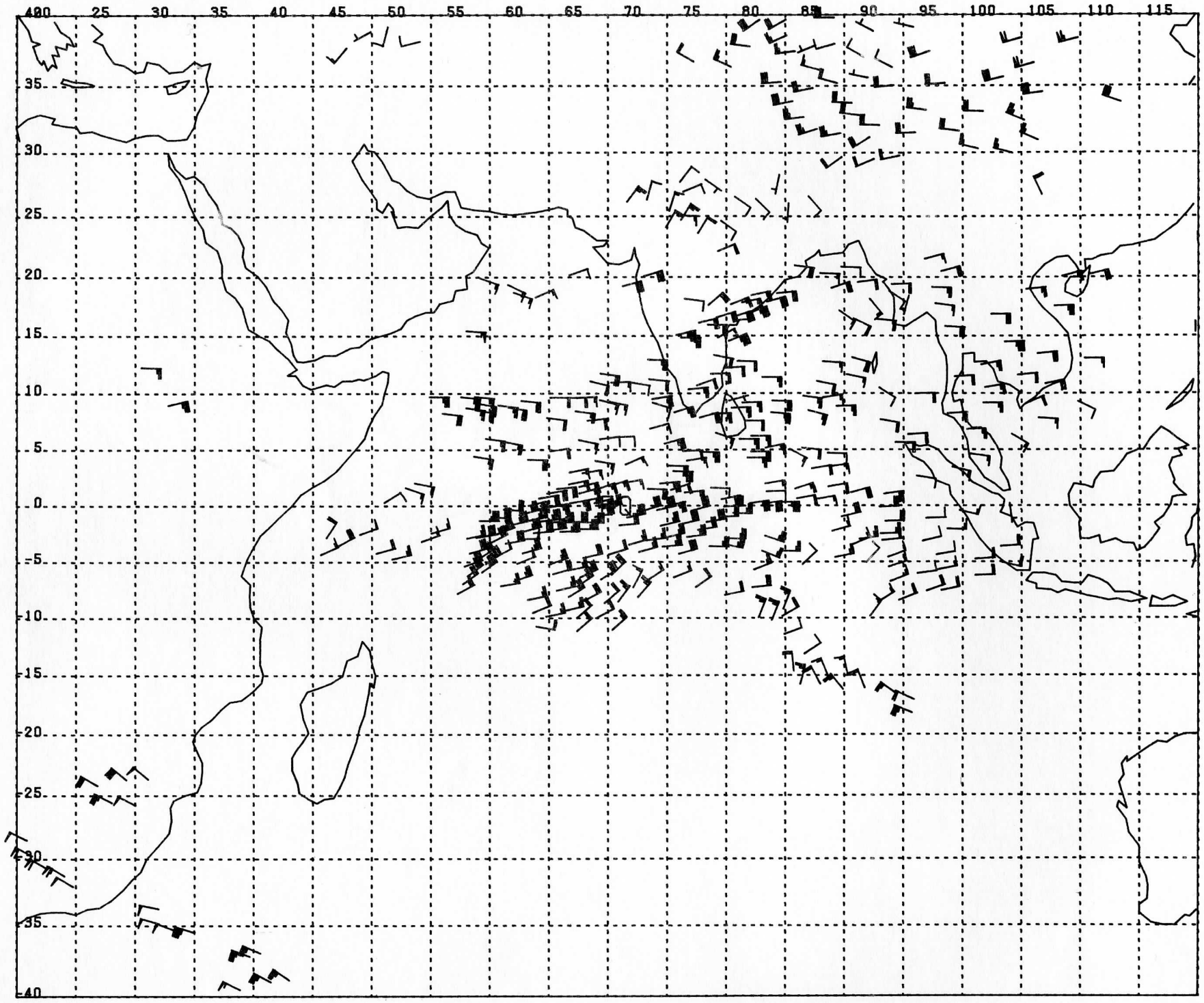
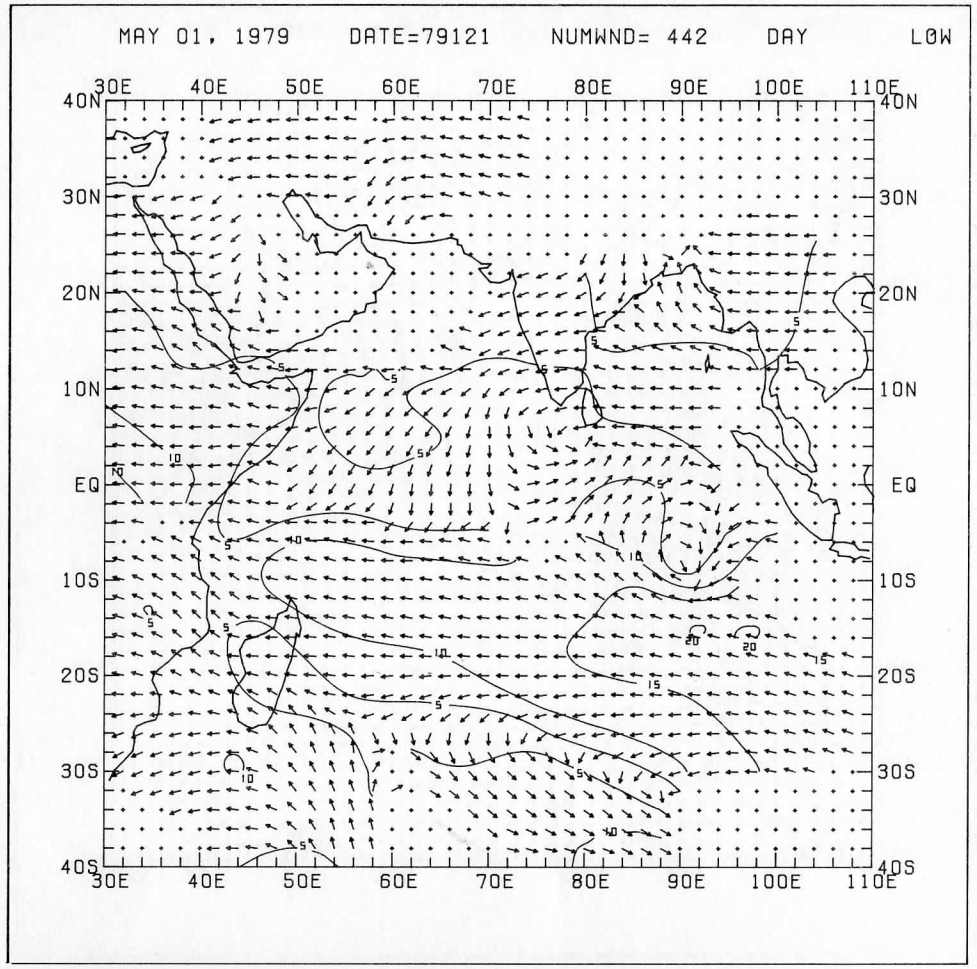


FIG. 3B HIGH LEVEL (300 - 100 MB) CLOUD WINDS FOR 14 JULY, 1979 AT 083533 GMT

DAYTIME FIELDS

Plates 1-92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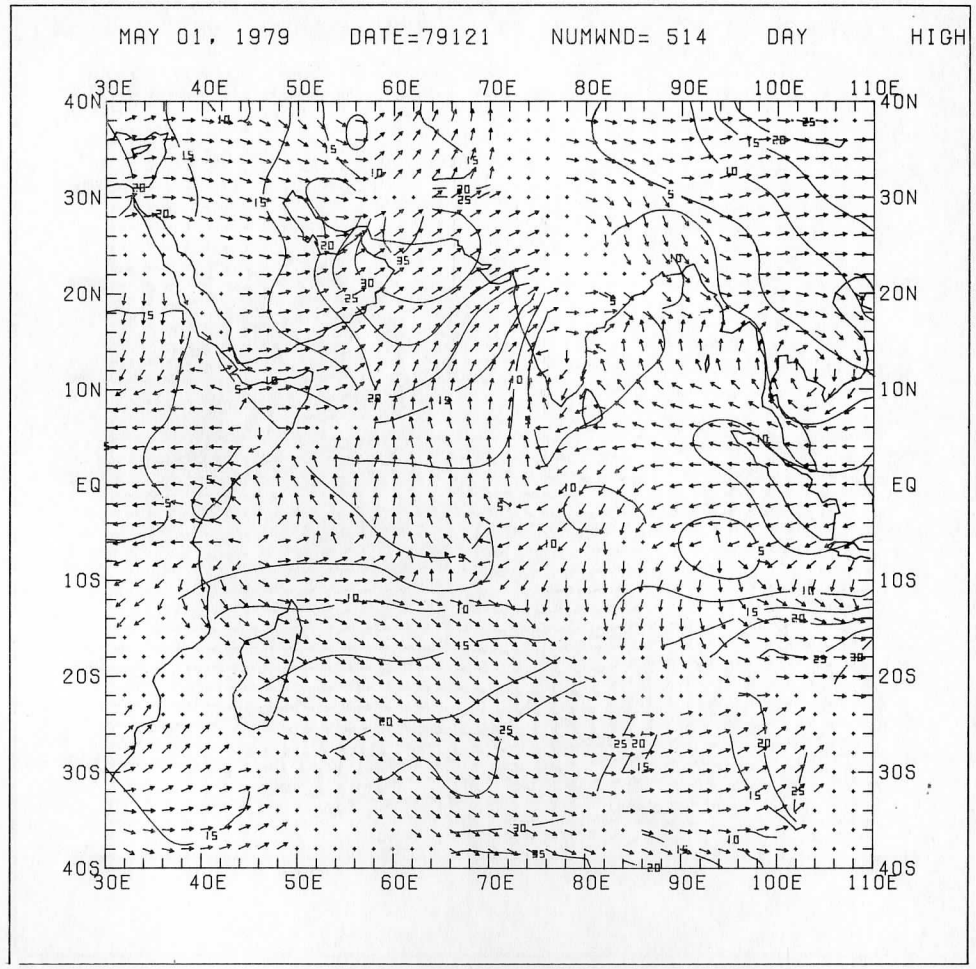
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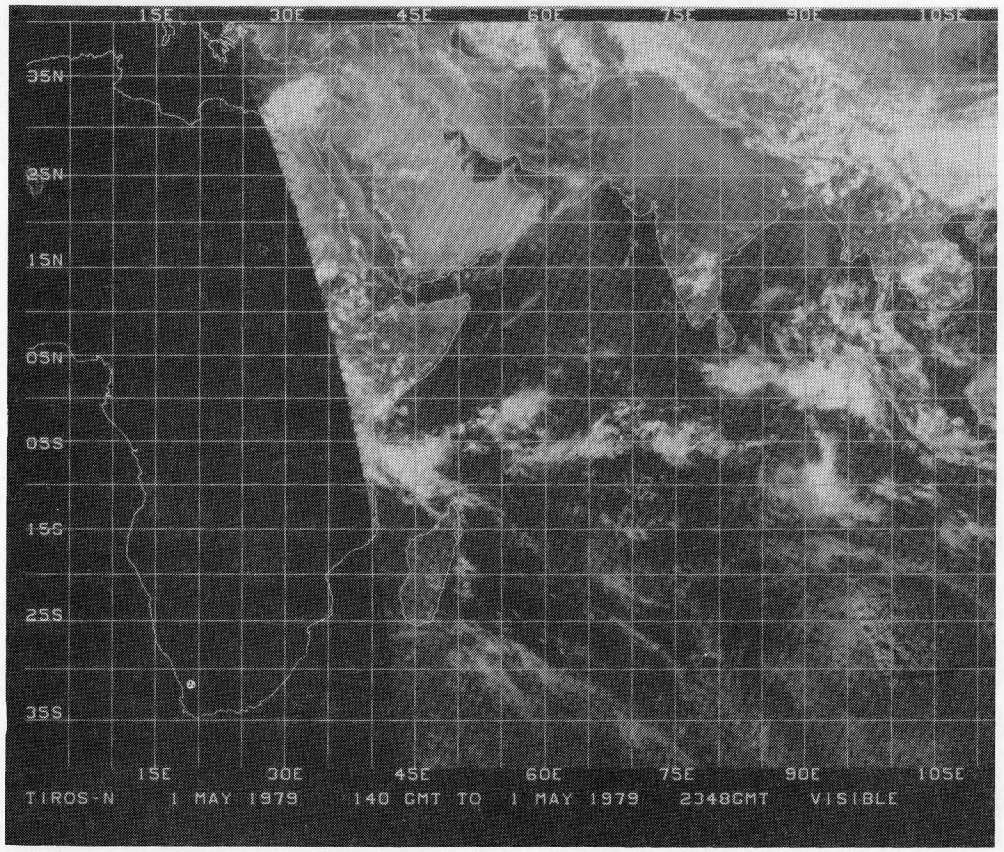
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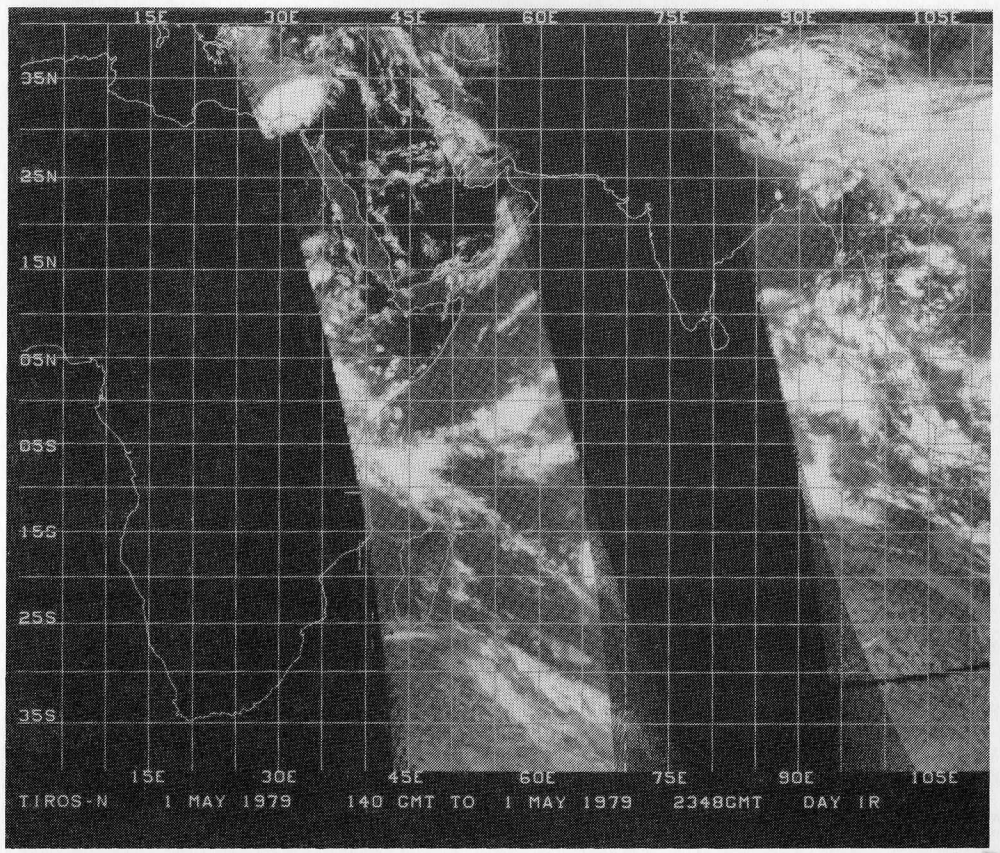
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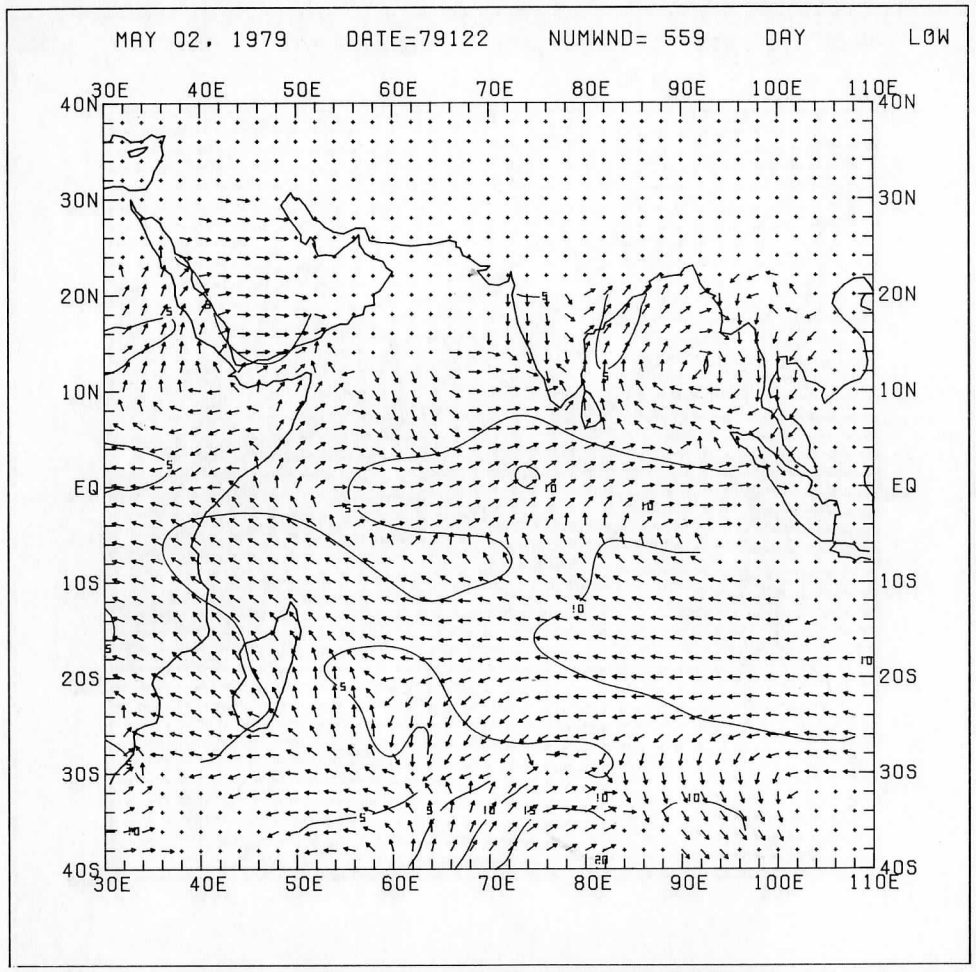
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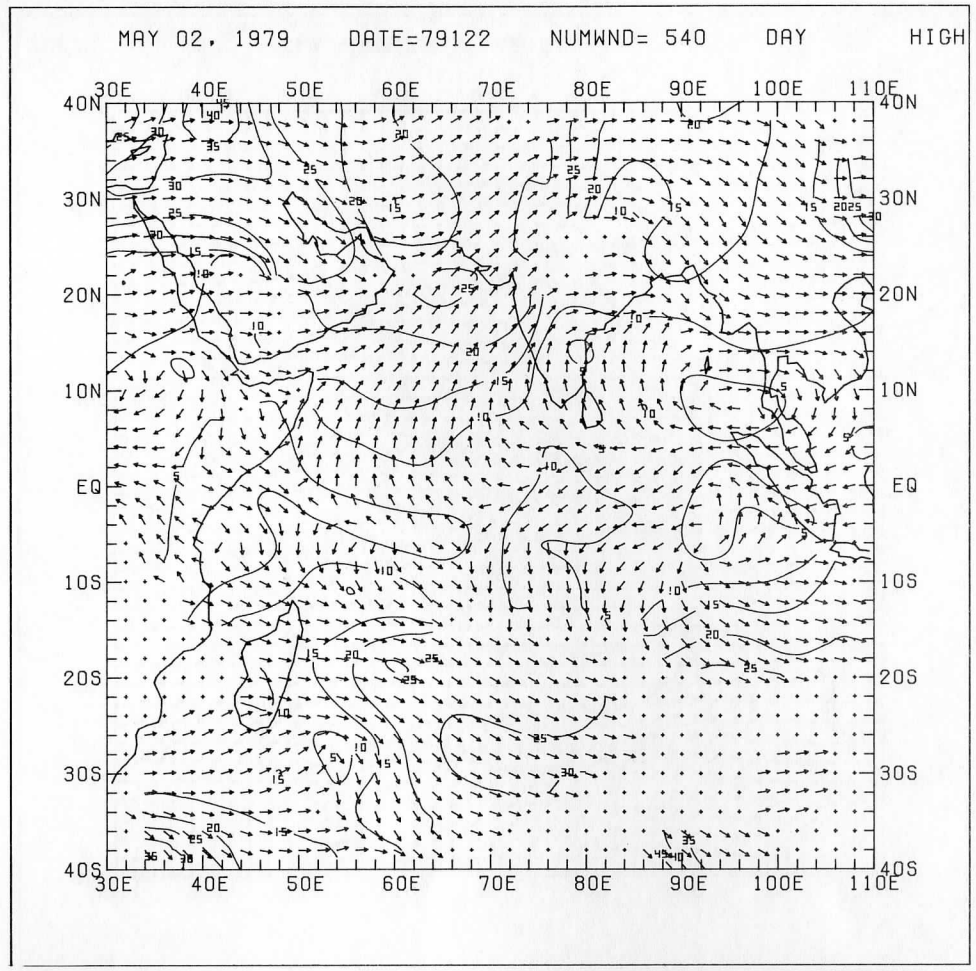
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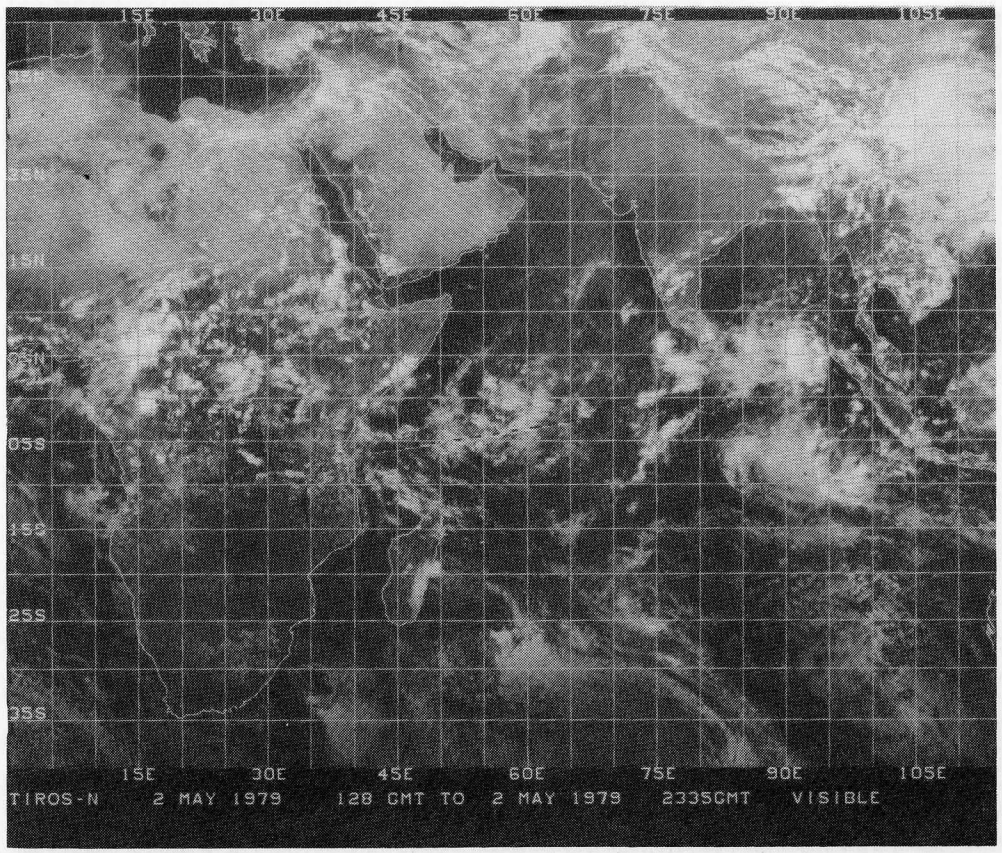
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05S
15S
25S
35S
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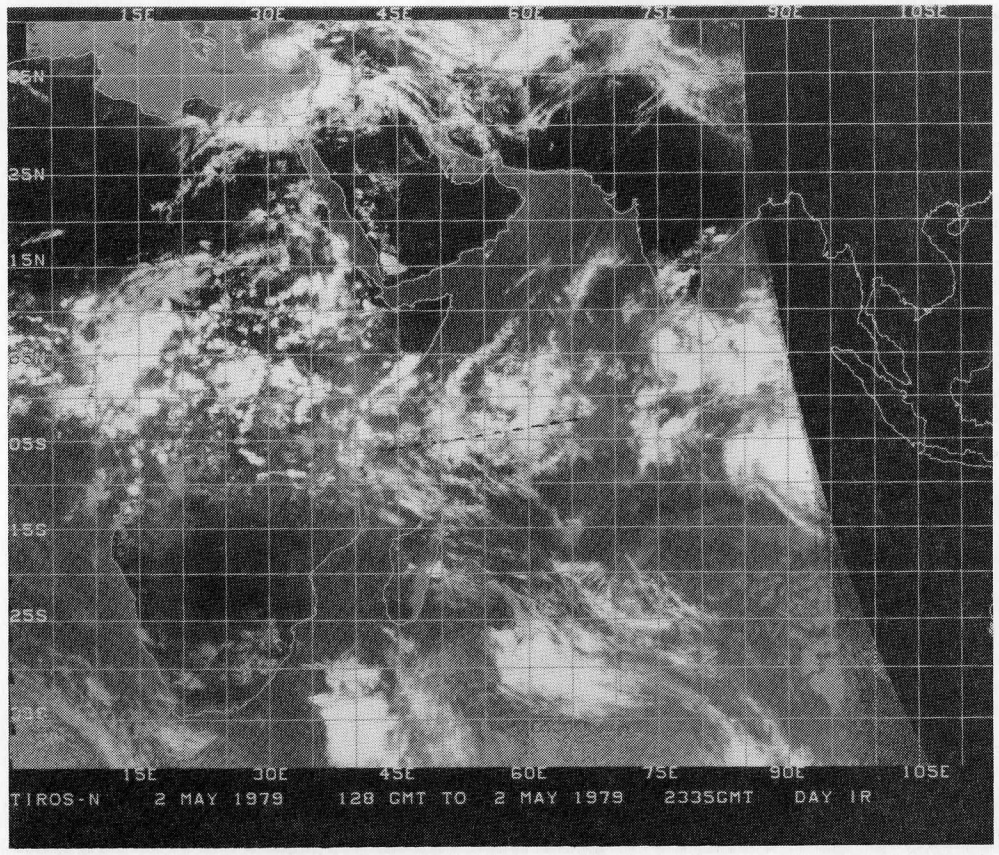
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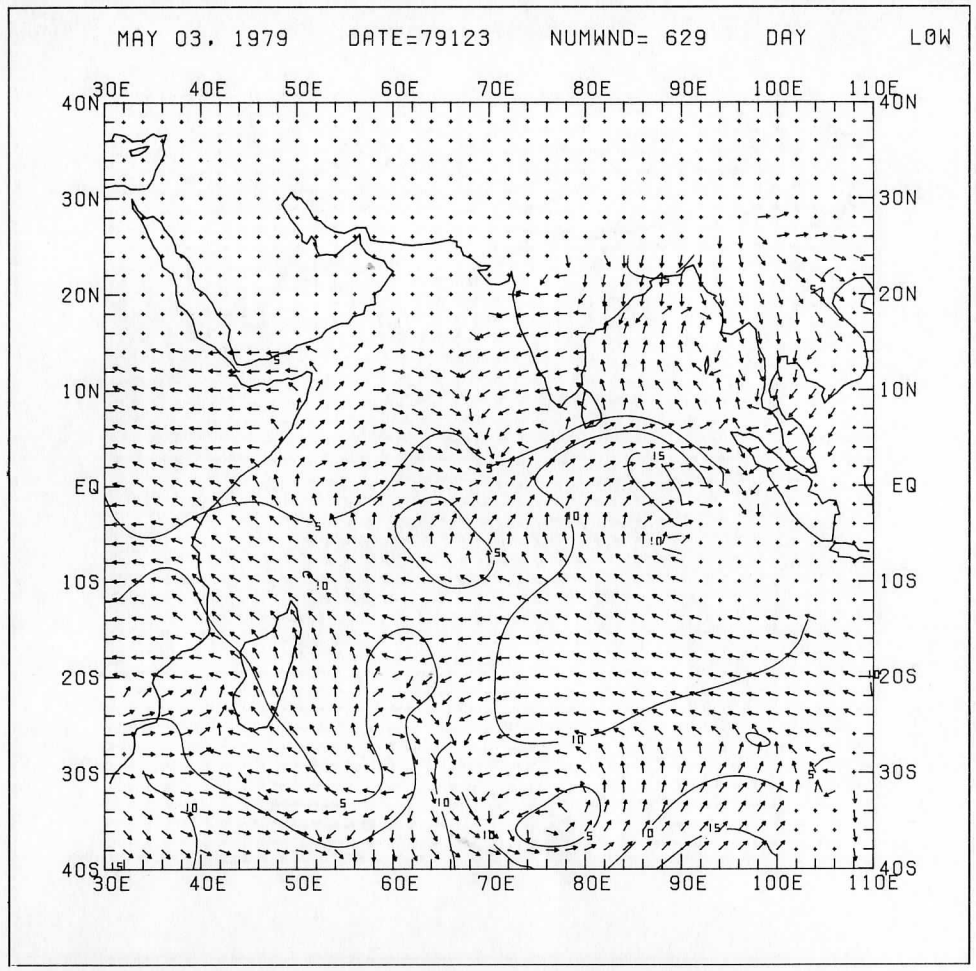
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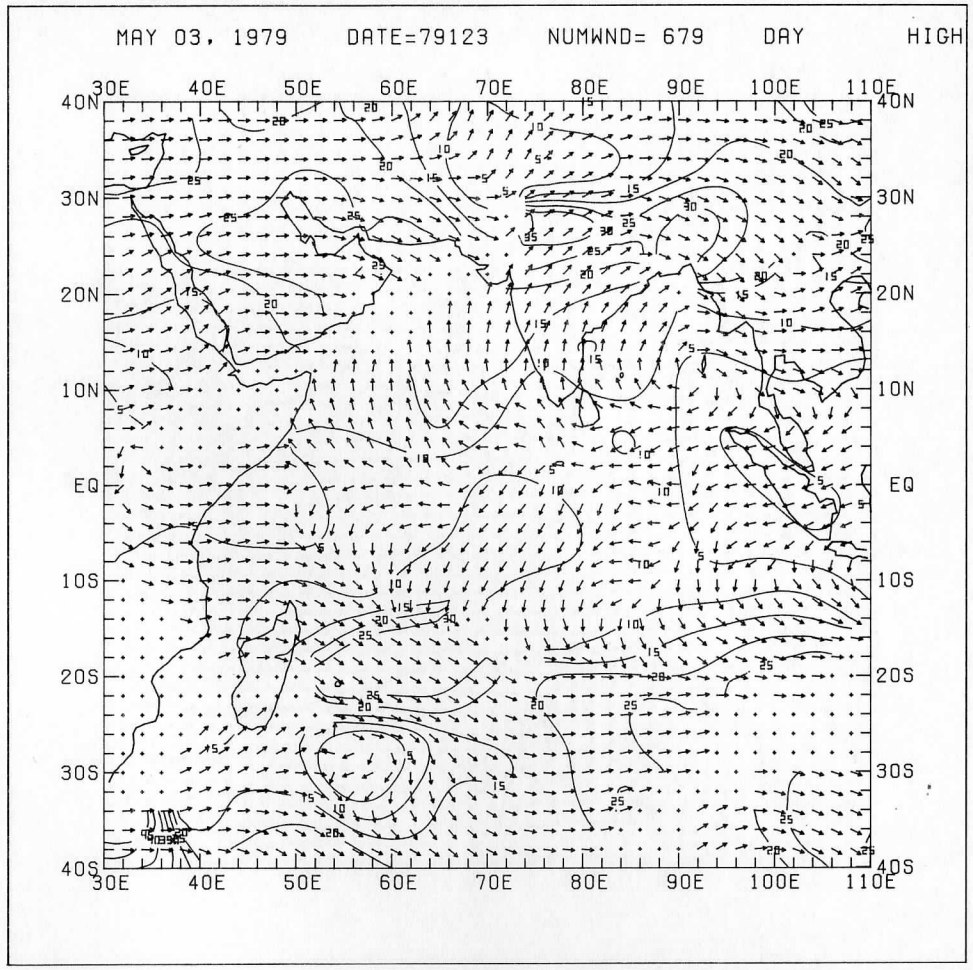
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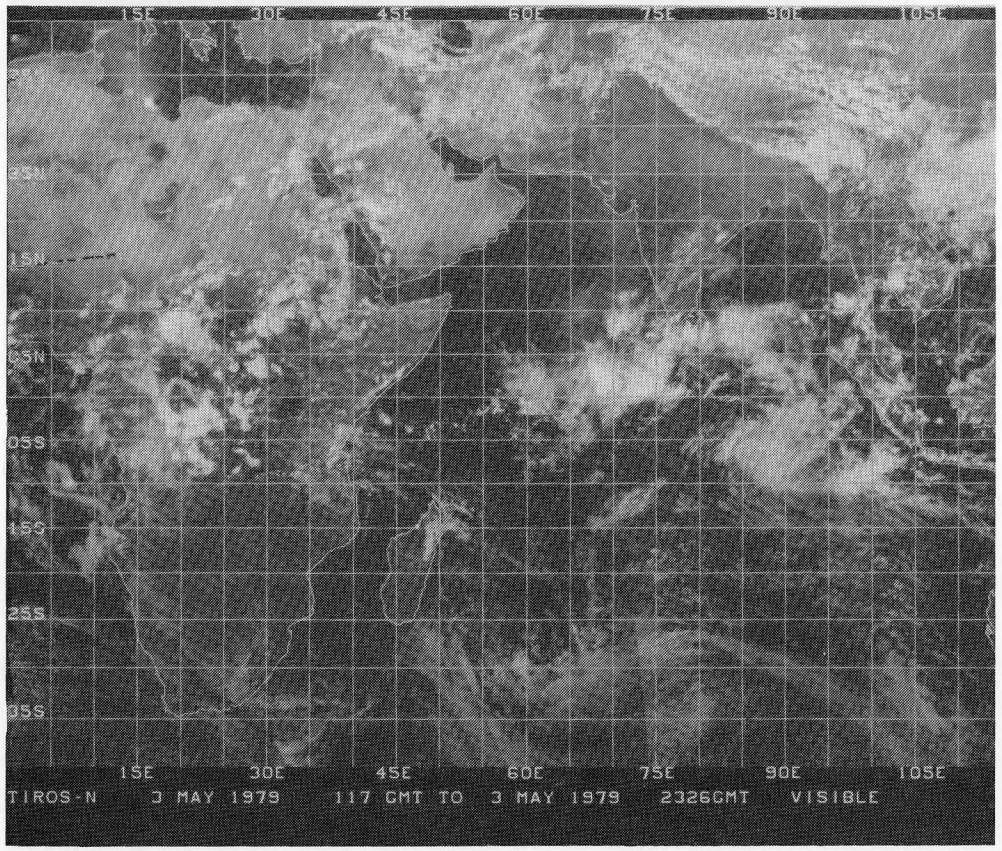
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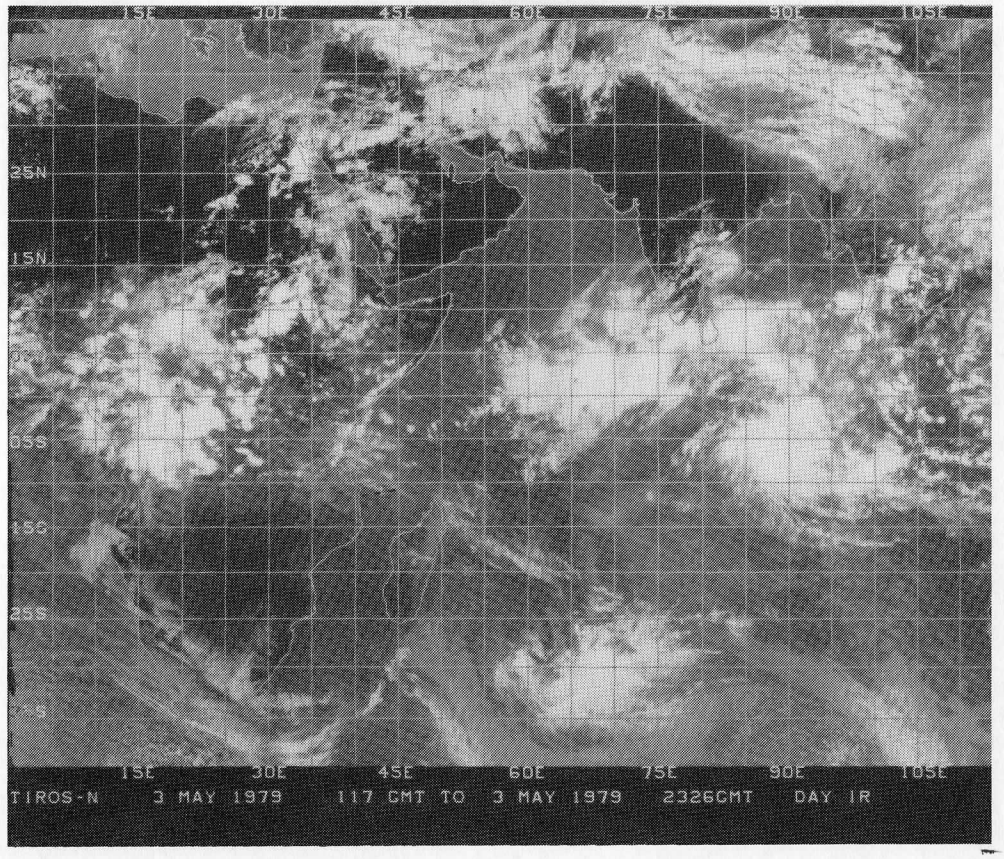
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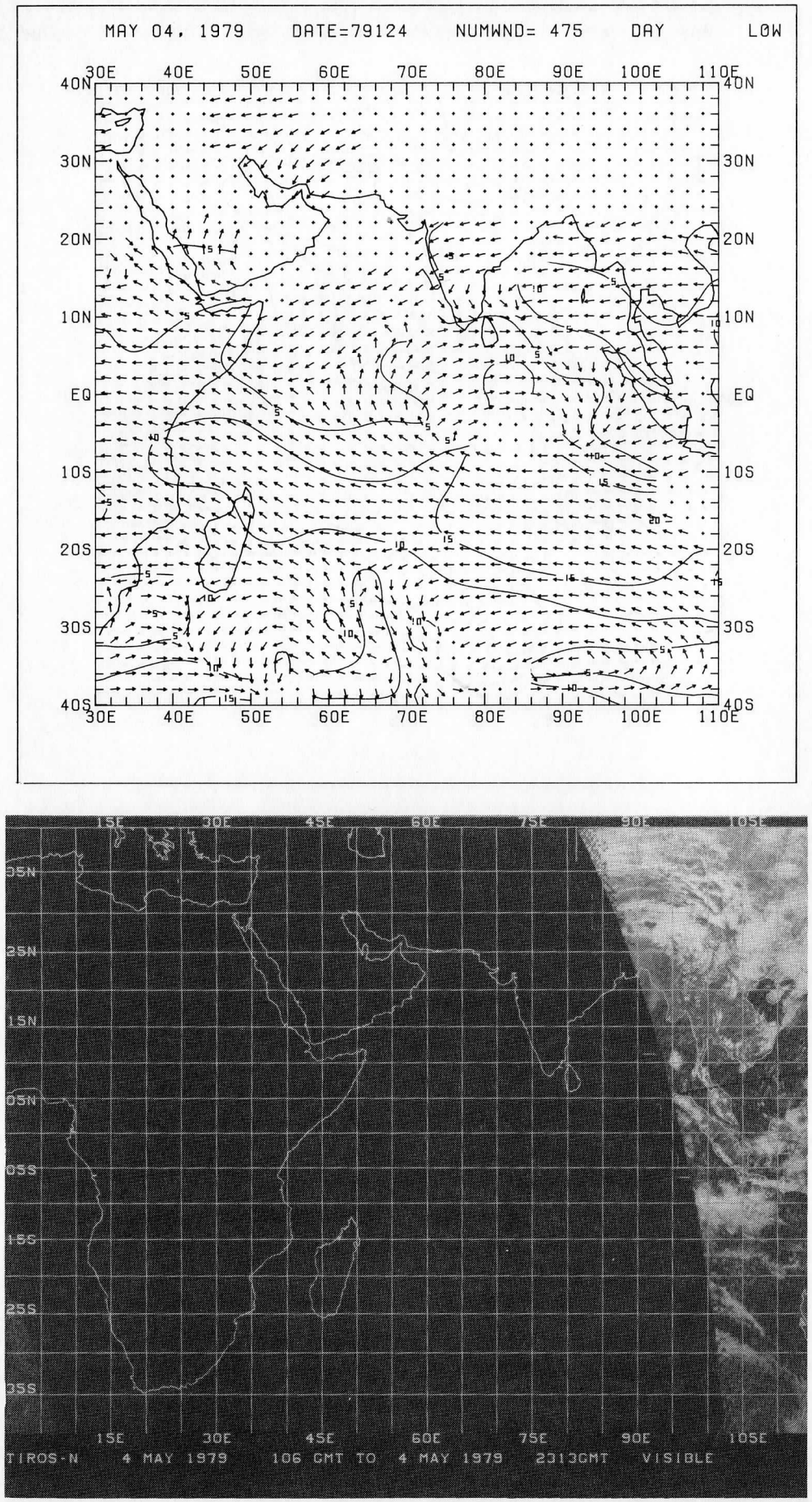
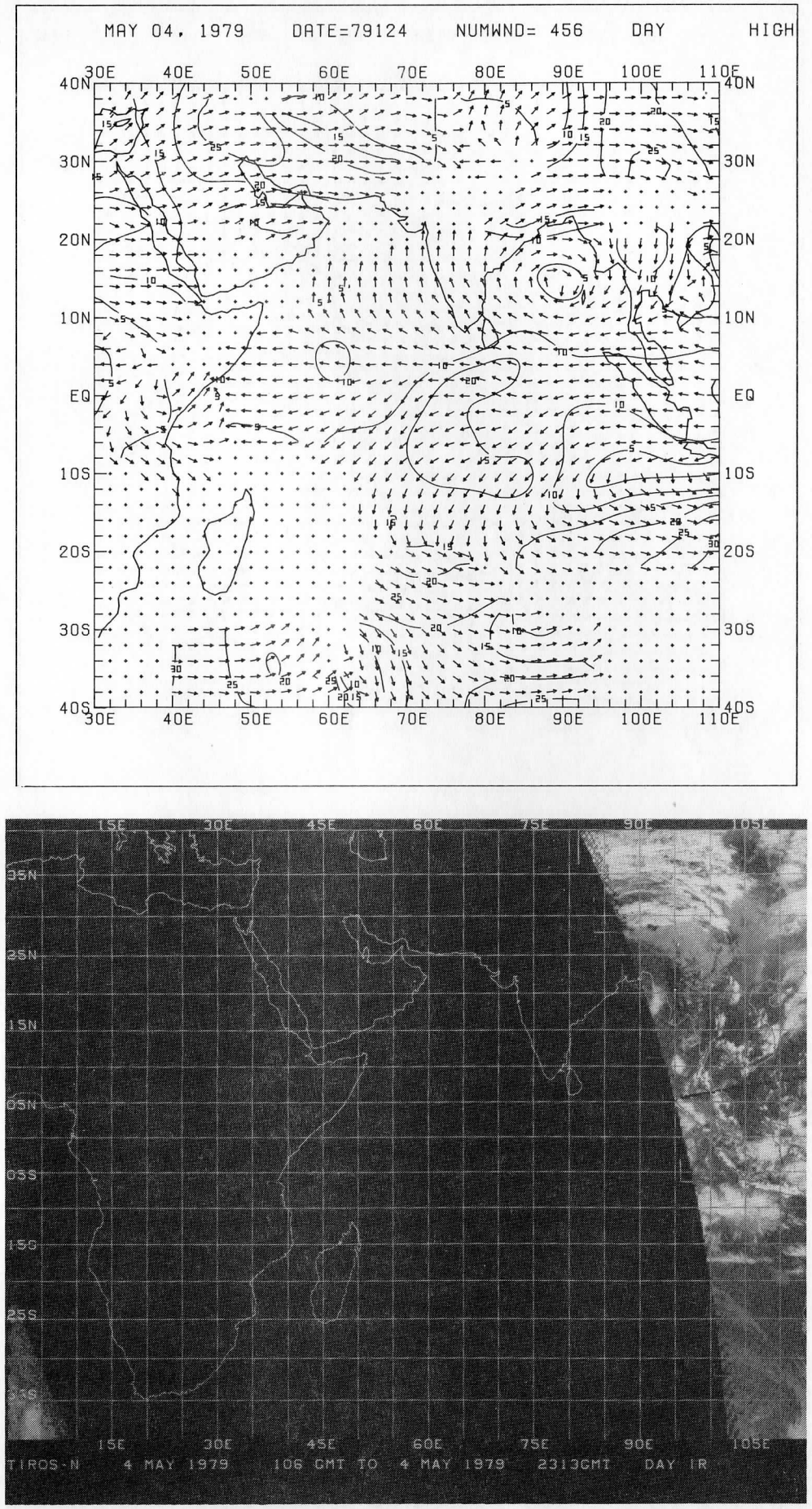
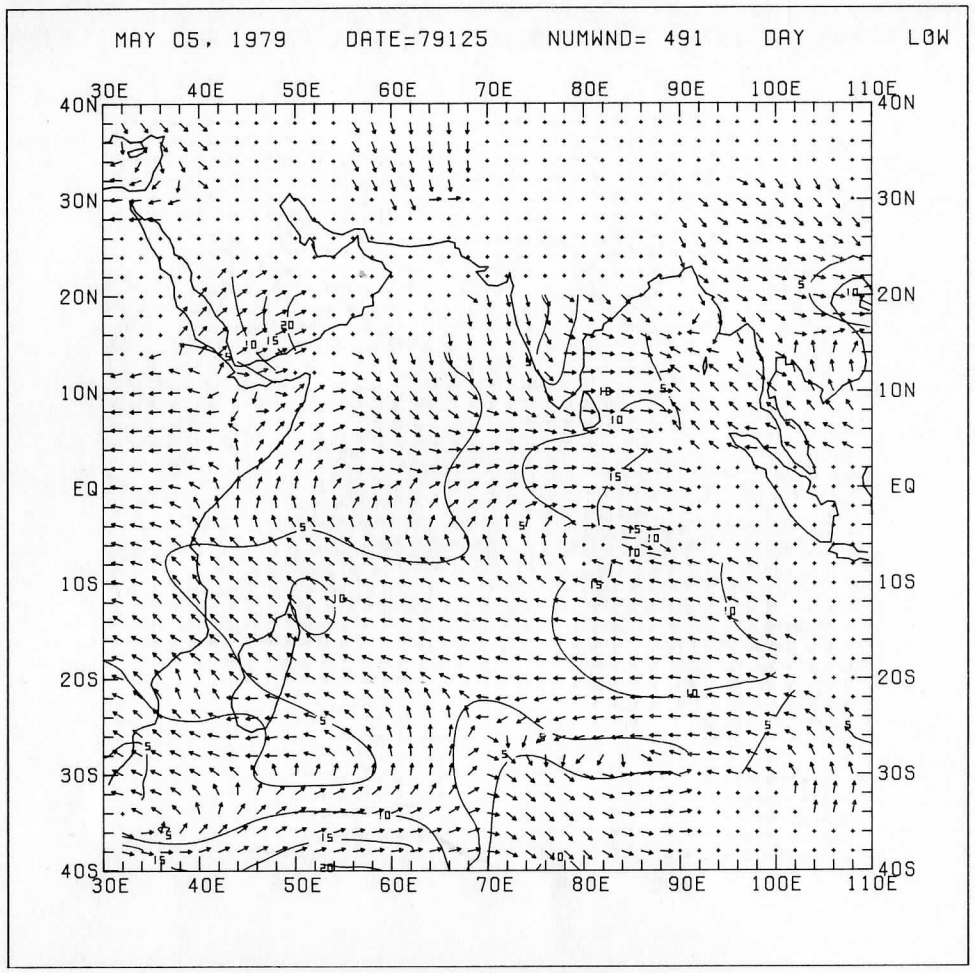
15N
TIROS-N 3 MAY 1979 117 GMT TO 3 MAY 1979 2326GMT DAY IR

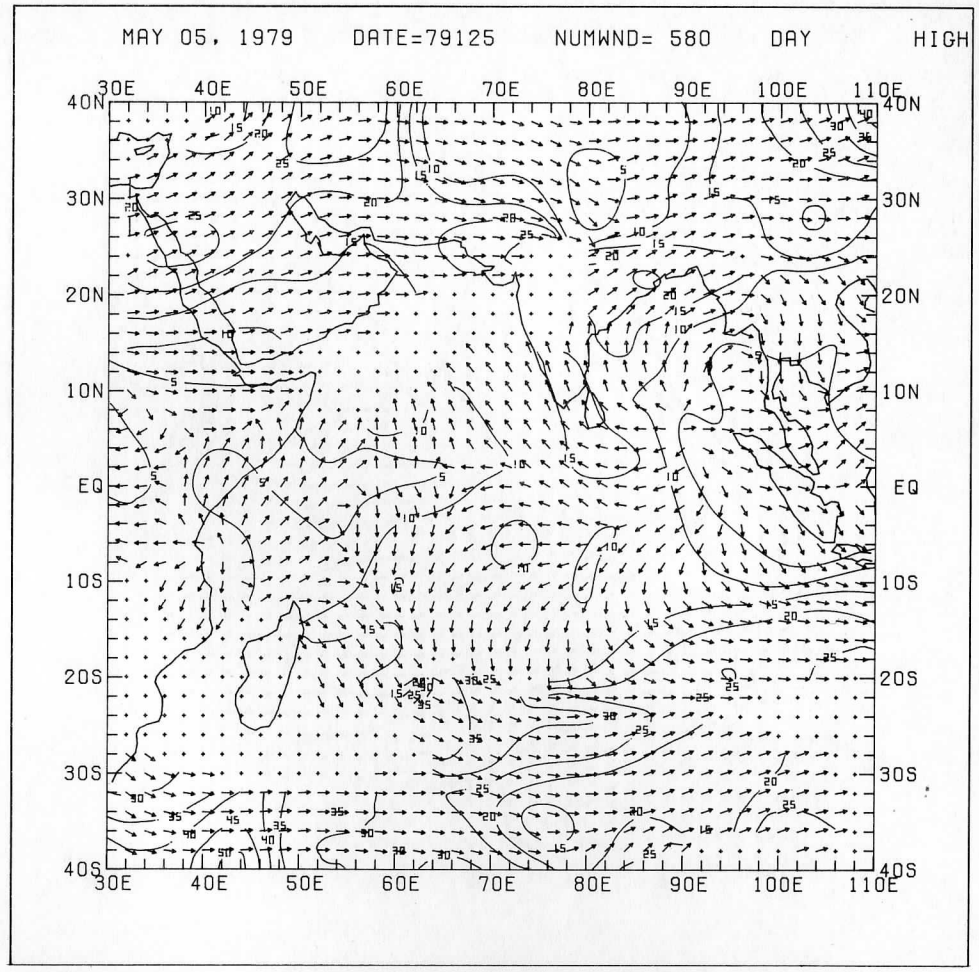

MAY 04, 1979 DATE=79124 NUMWND= 475 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

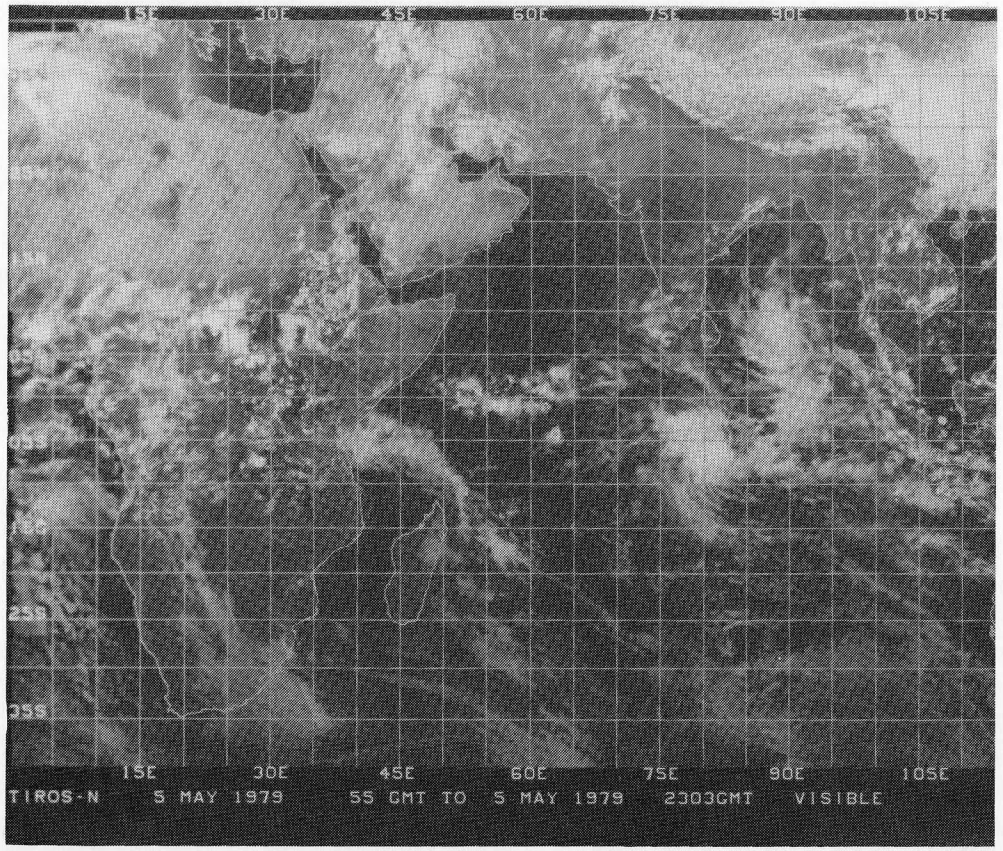

MAY 04, 1979 DATE=79124 NUMWND= 456 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

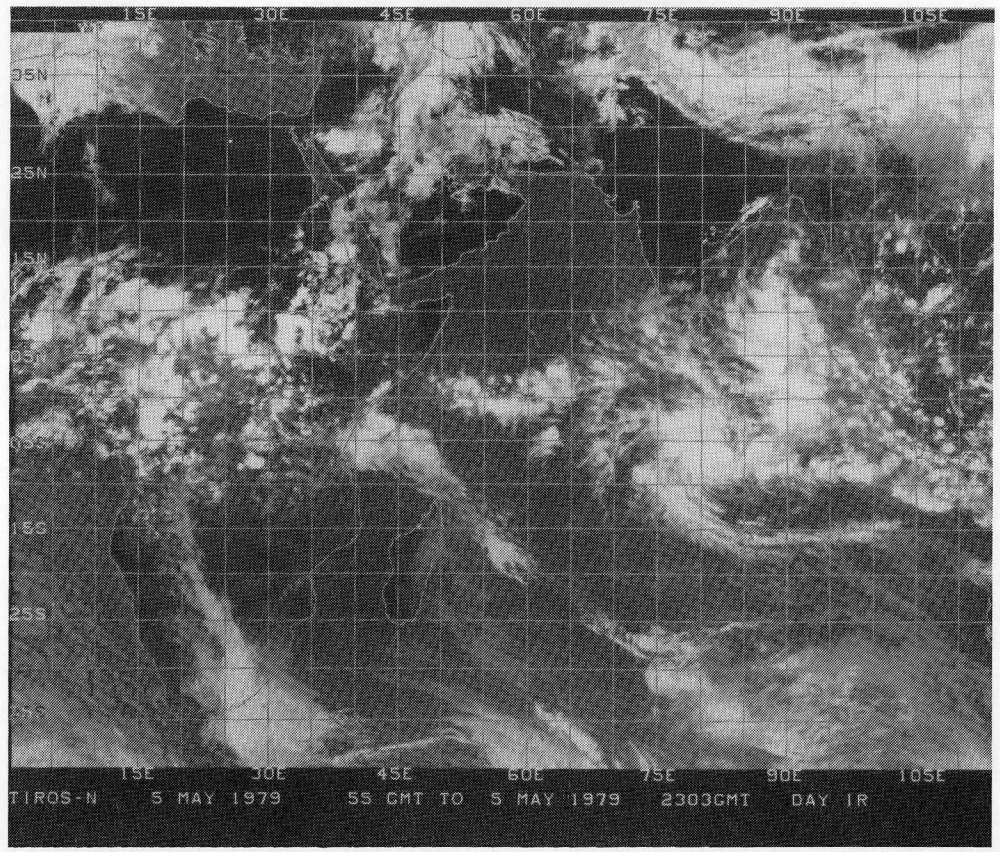
15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 4 MAY 1979 106 GMT TO 4 MAY 1979 2313GMT VISIBLE

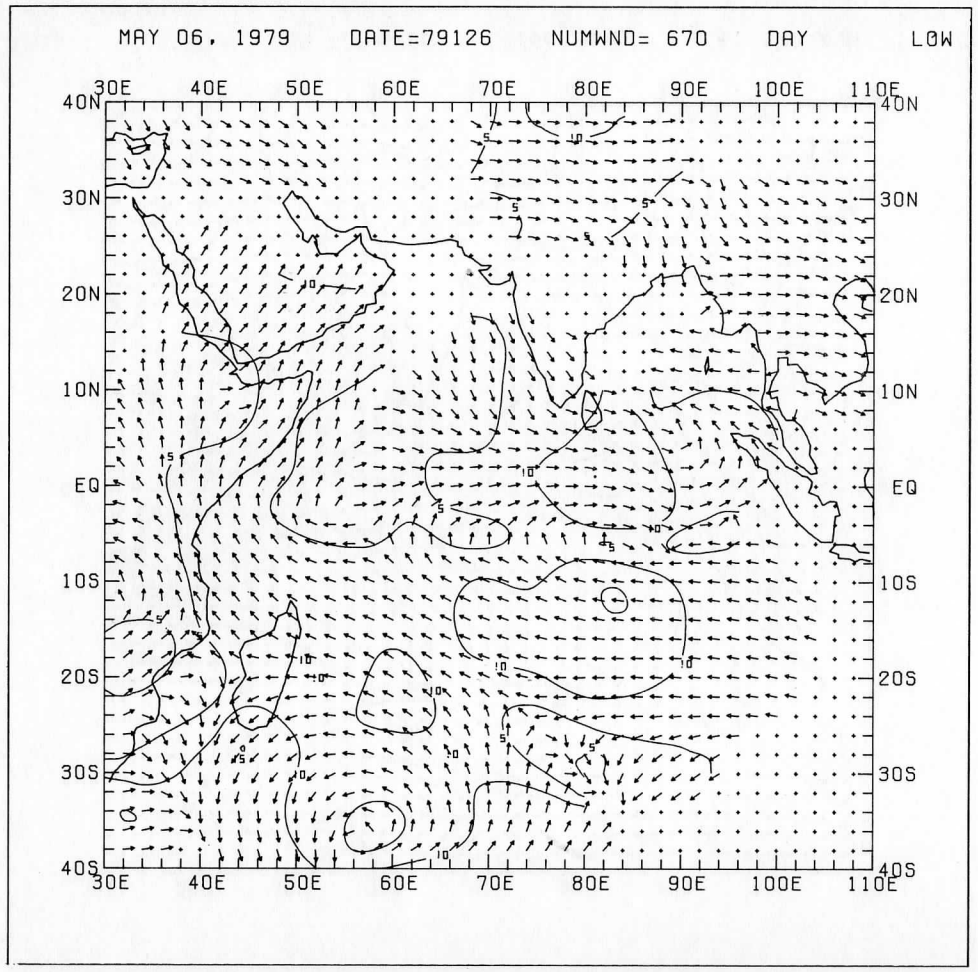
15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S
TIROS-N 4 MAY 1979 106 GMT TO 4 MAY 1979 2313GMT DAY IR

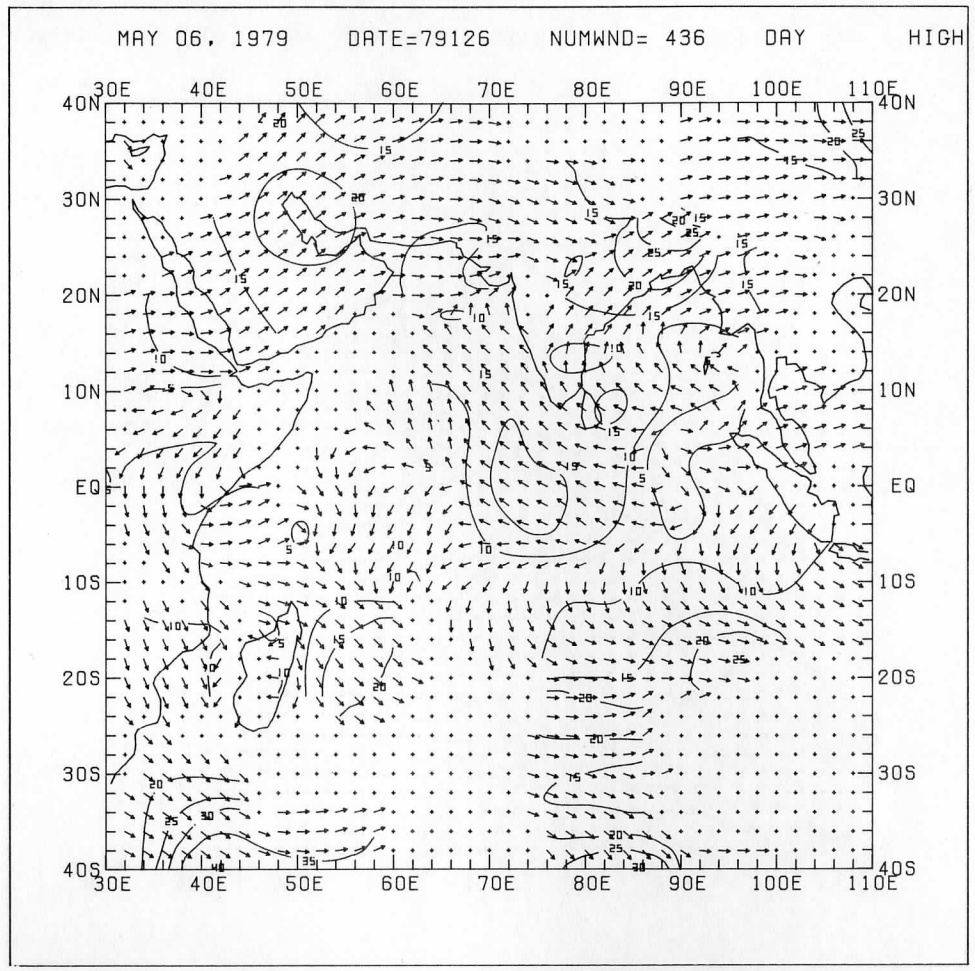

MAY 05, 1979 DATE=79125 NUMWND= 491 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

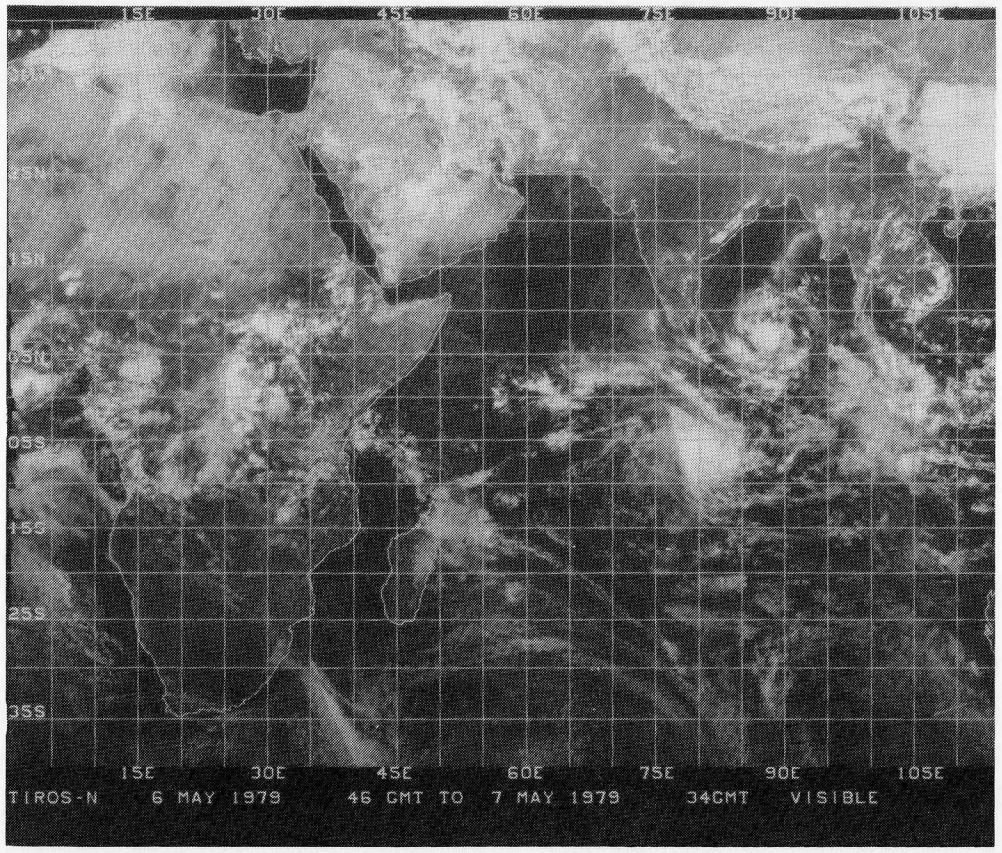

MAY 05, 1979 DATE=79125 NUMWND= 580 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

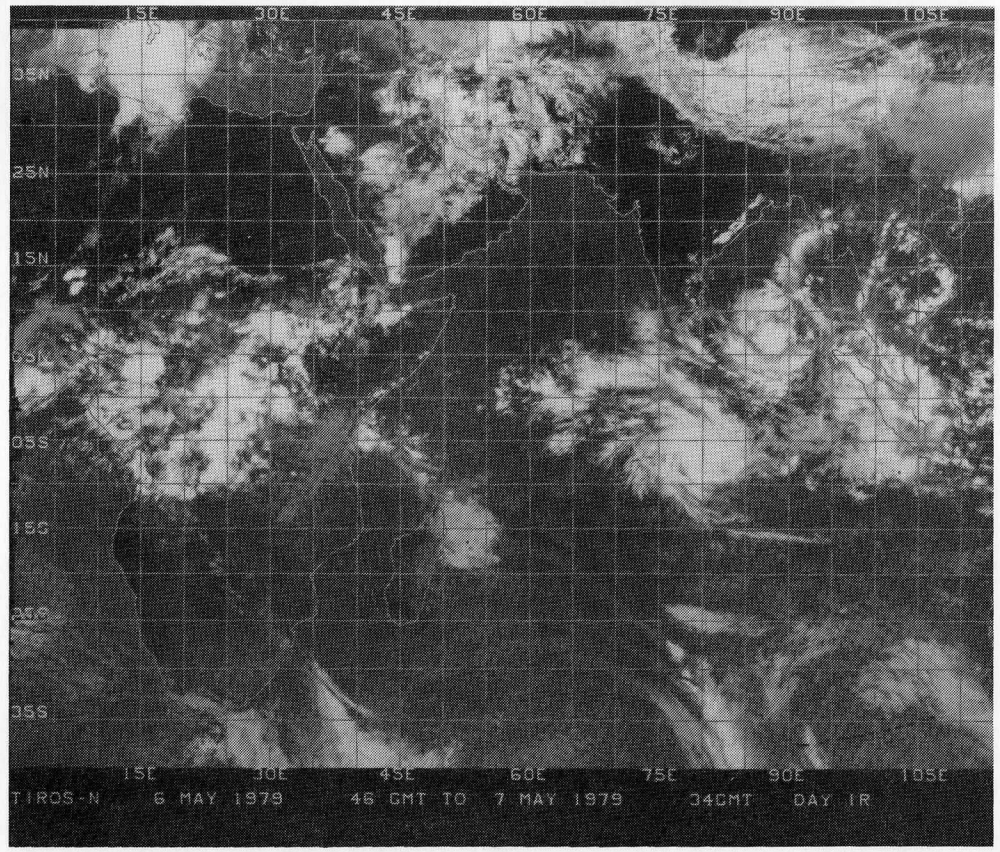

15E 30E 45E 60E 75E 90E 105E
TIROS-N 5 MAY 1979 55 GMT TO 5 MAY 1979 2303GMT VISIBLE

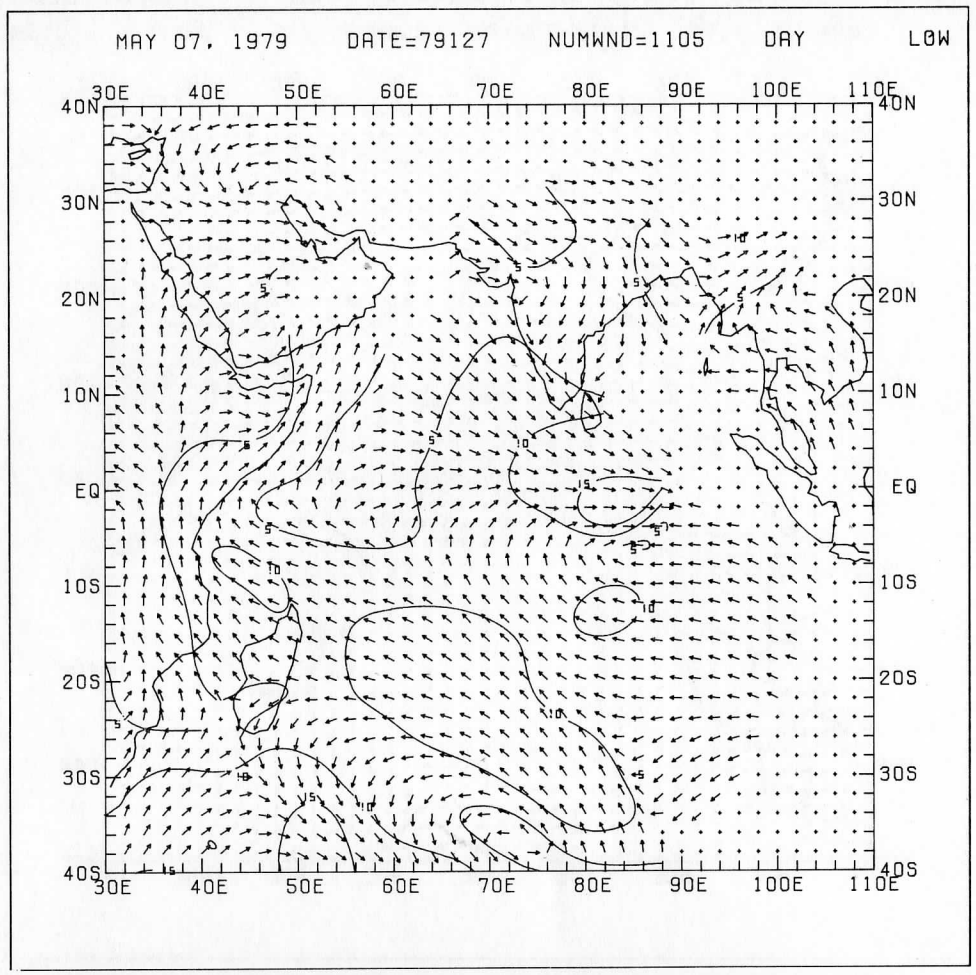

15E 30E 45E 60E 75E 90E 105E
TIROS-N 5 MAY 1979 55 GMT TO 5 MAY 1979 2303GMT DAY IR

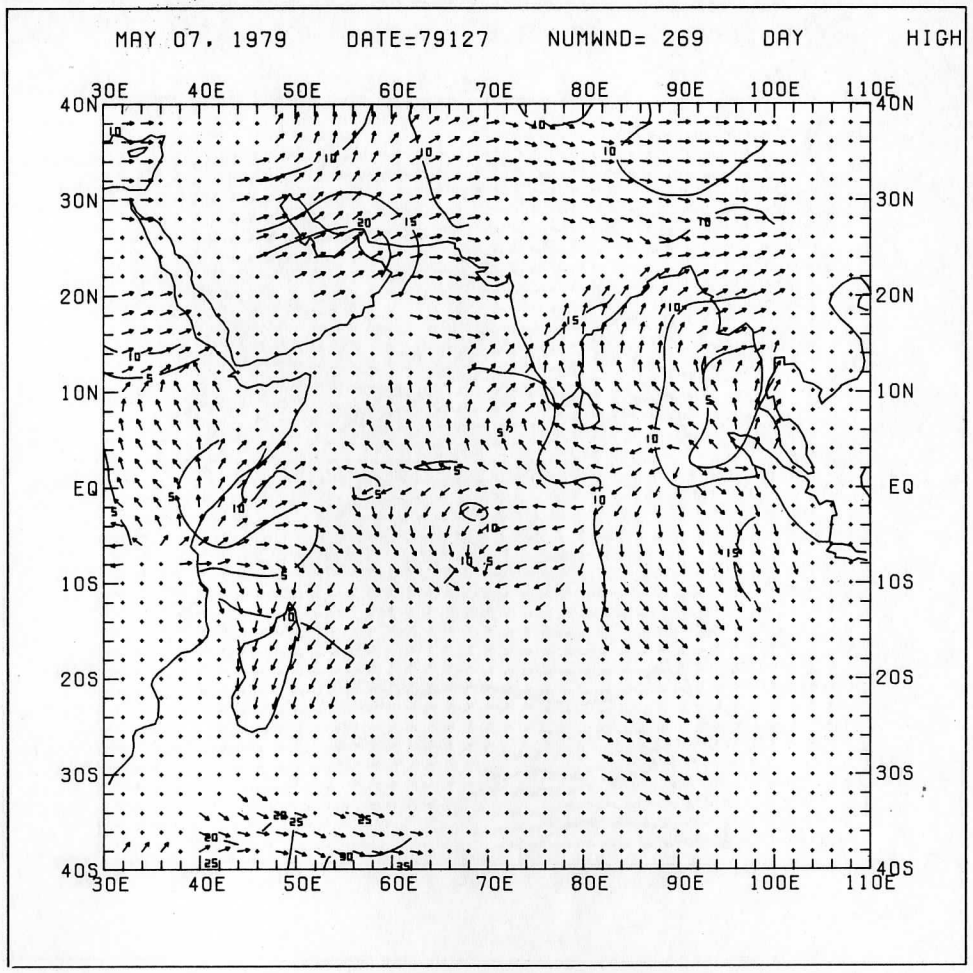

MAY 06, 1979 DATE=79126 NUMWND= 670 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

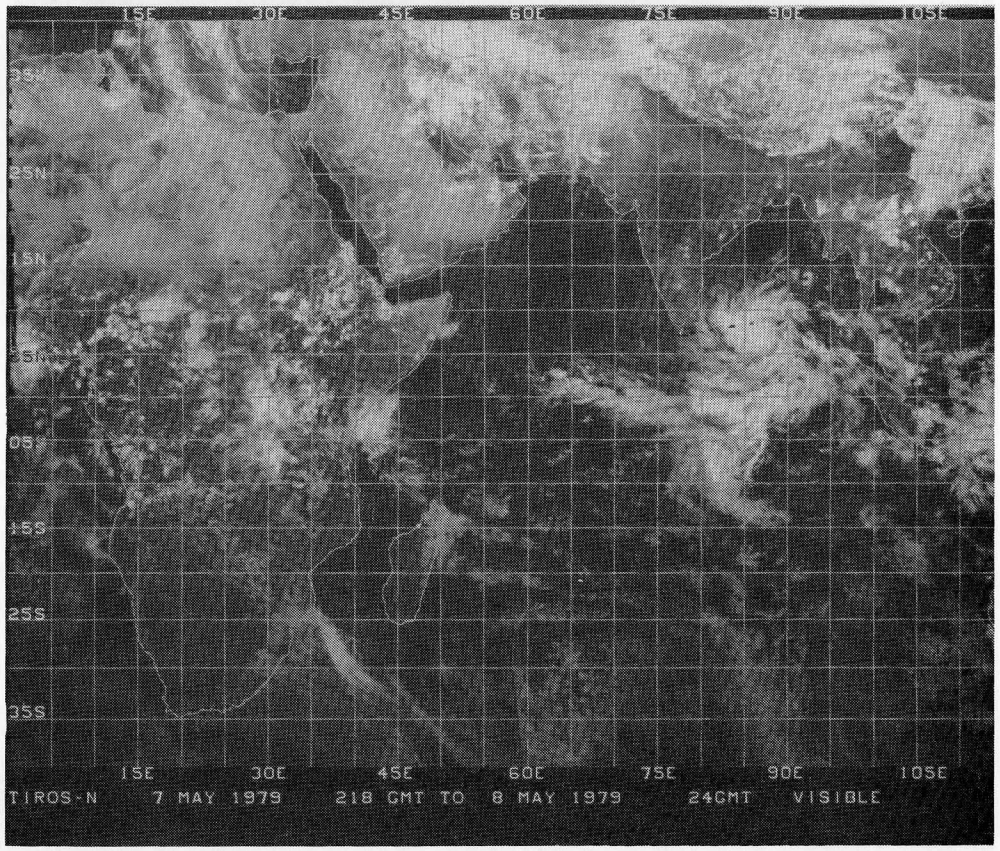

MAY 06, 1979 DATE=79126 NUMWND= 436 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

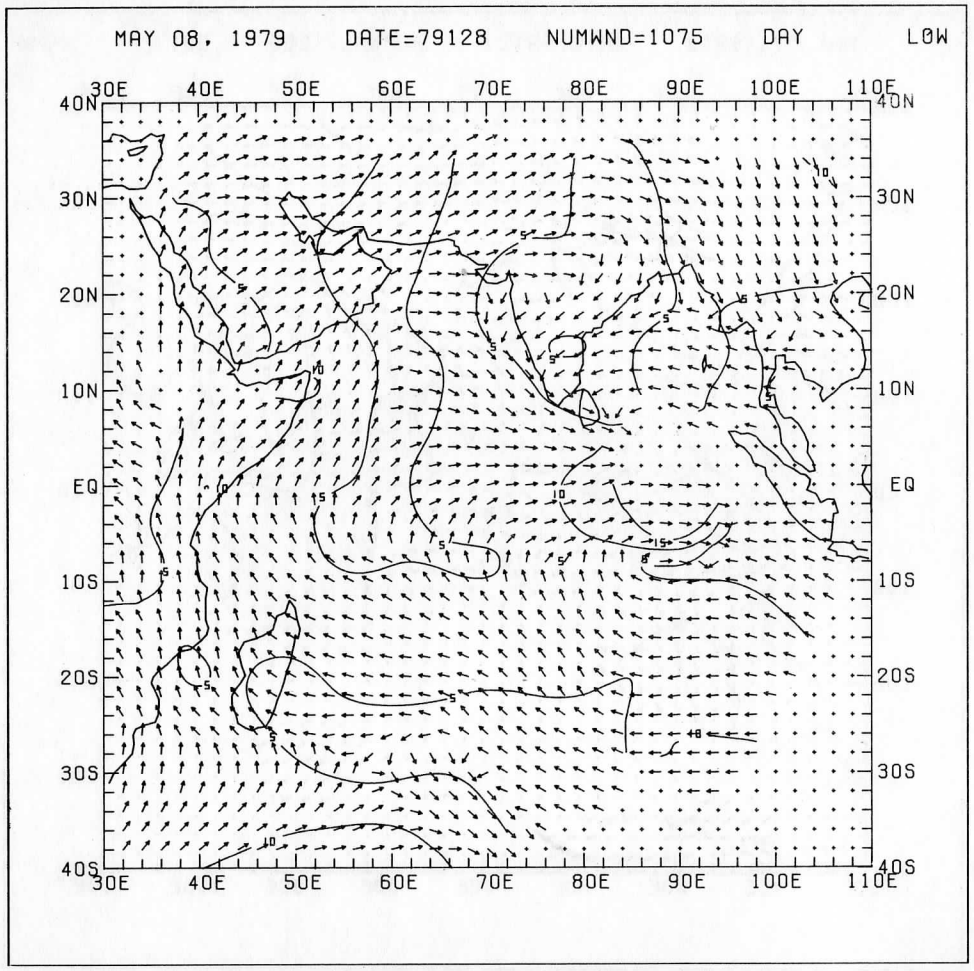

15E 30E 45E 60E 75E 90E 105E
TIROS-N 6 MAY 1979 46 GMT TO 7 MAY 1979 34GMT VISIBLE

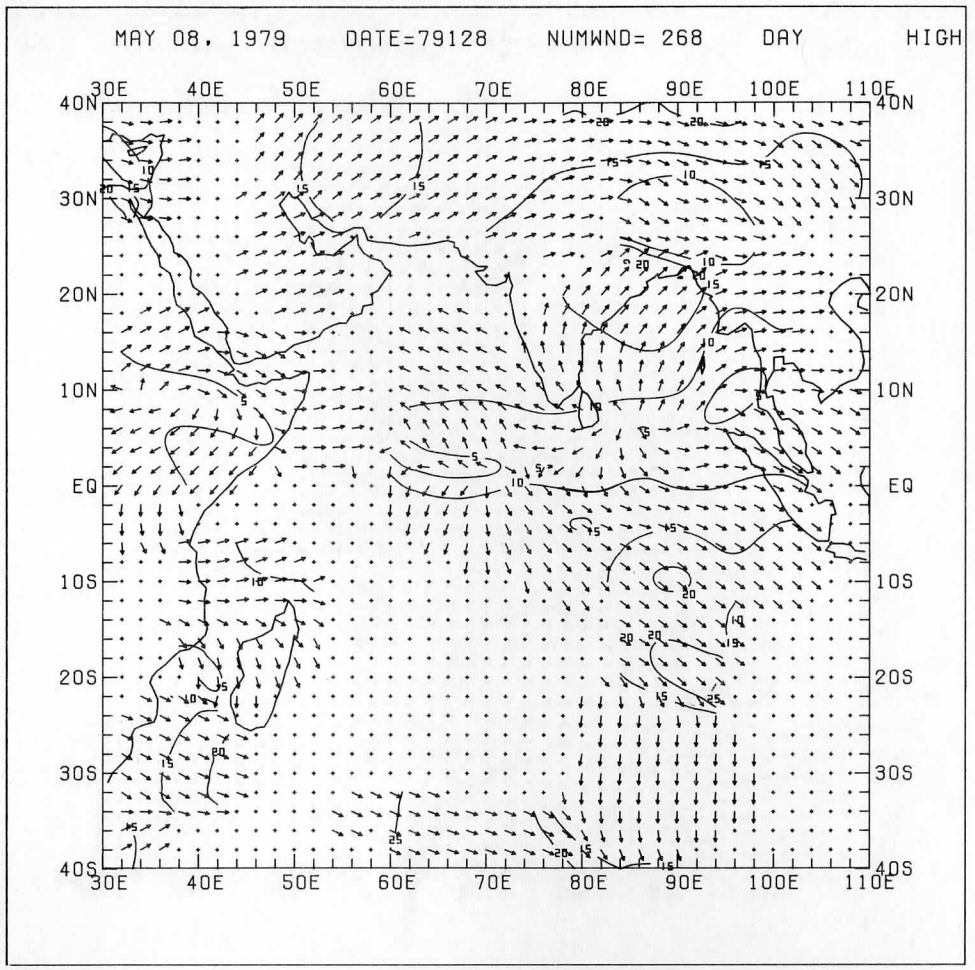

15E 30E 45E 60E 75E 90E 105E
25N 15N EQ 15S 25S 35S
TIROS-N 6 MAY 1979 46 GMT TO 7 MAY 1979 34GMT DAY IR

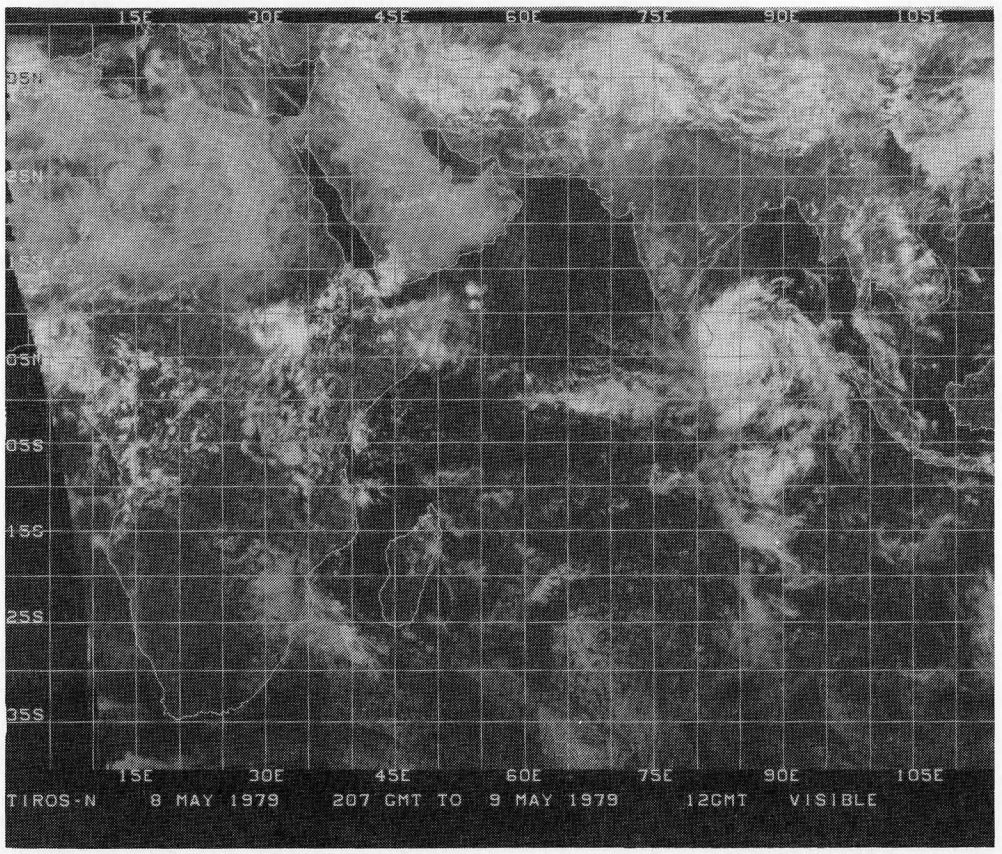

MAY 07, 1979 DATE=79127 NUMWND=1105 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

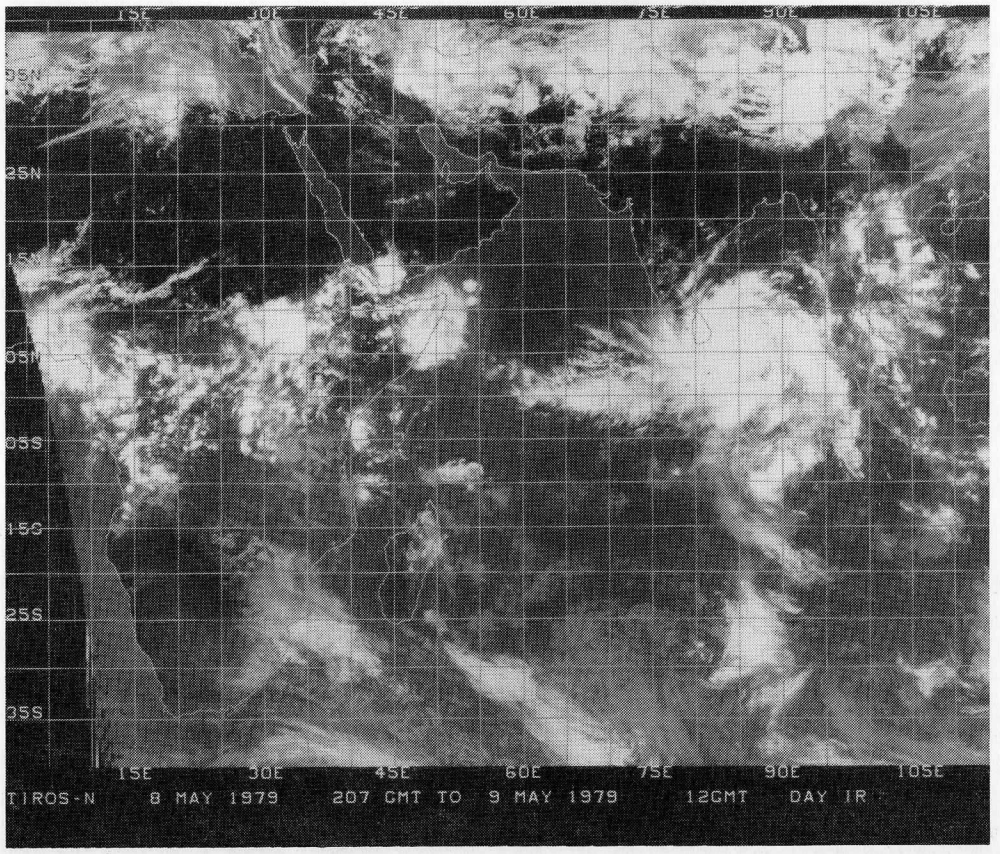

MAY 07, 1979 DATE=79127 NUMWND= 269 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

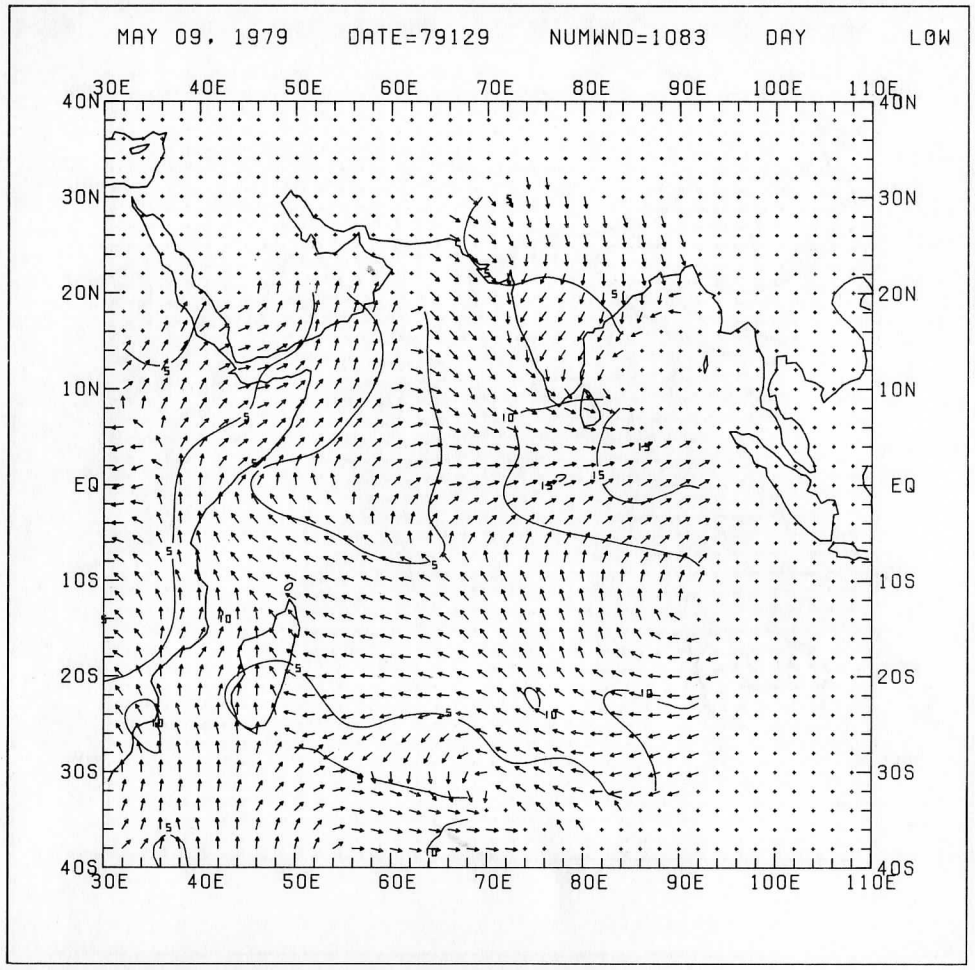

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 5N 5S 15S 25S 35S
TIROS-N 7 MAY 1979 218 GMT TO 8 MAY 1979 24GMT VISIBLE

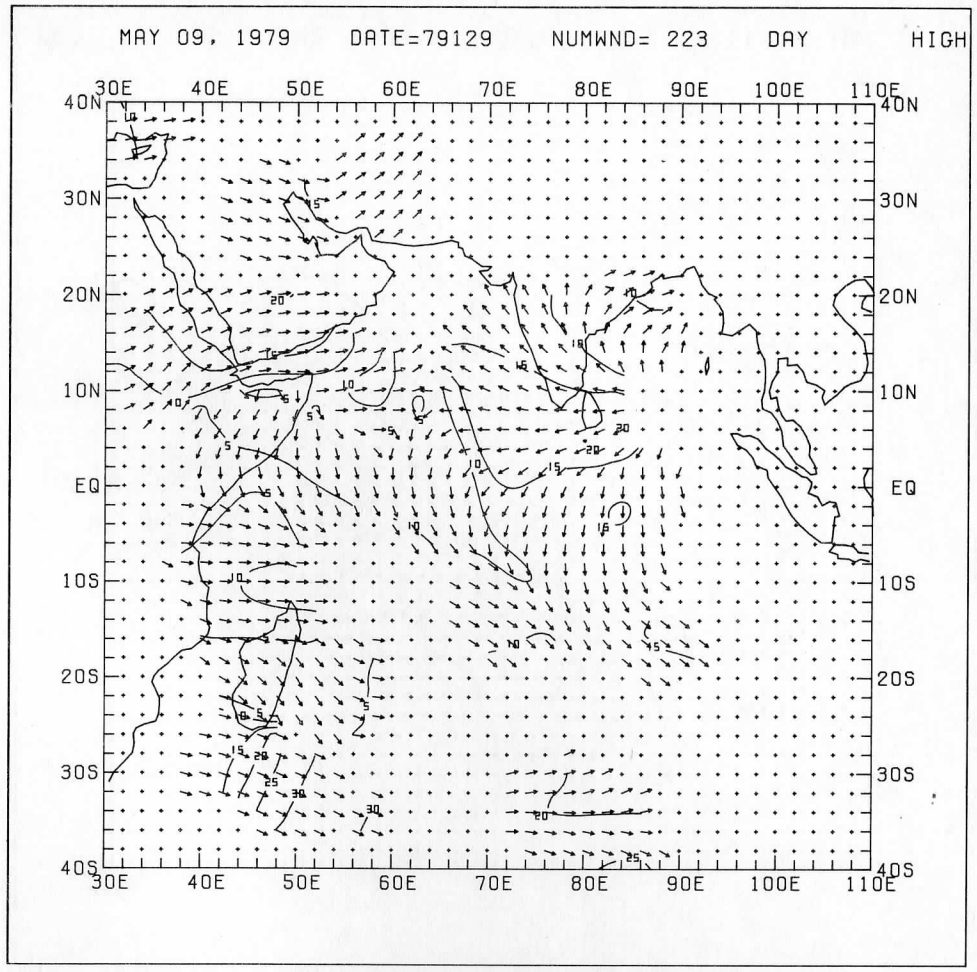

MAY 08, 1979 DATE=79128 NUMWND=1075 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

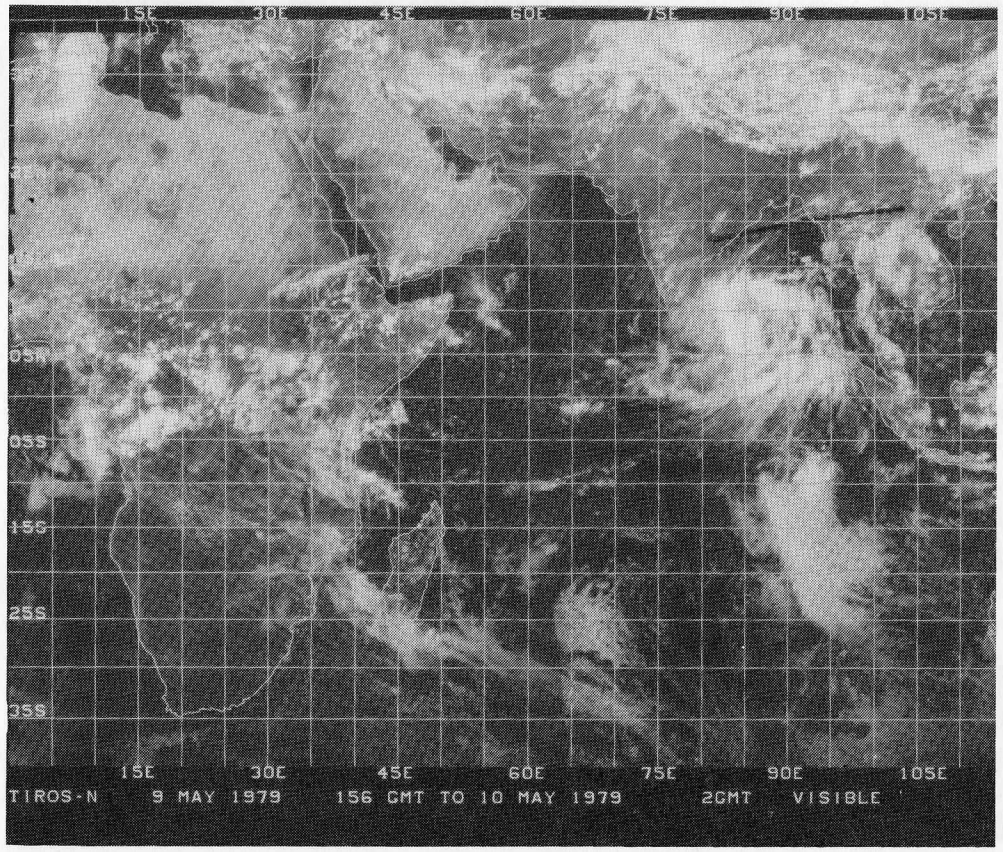

MAY 08, 1979 DATE=79128 NUMWND= 268 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

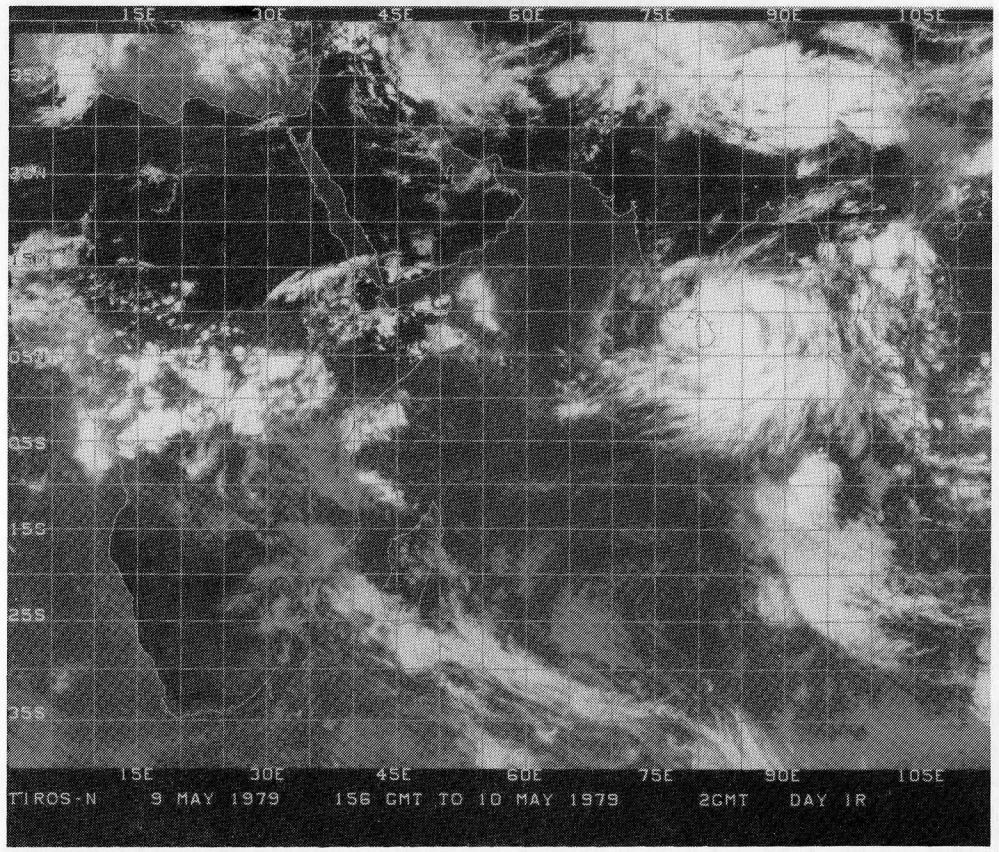

TIROS-N 8 MAY 1979 207 GMT TO 9 MAY 1979 12GMT VISIBLE

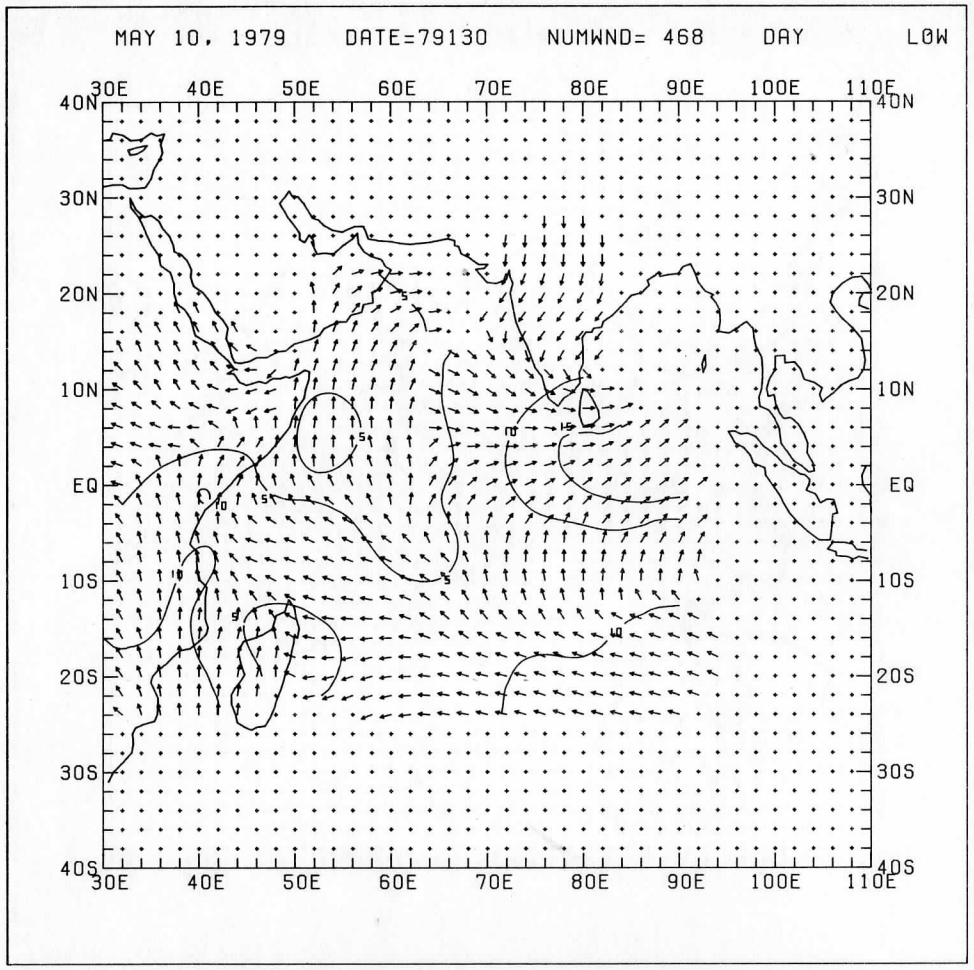

TIROS-N 8 MAY 1979 207 GMT TO 9 MAY 1979 12GMT DAY IR

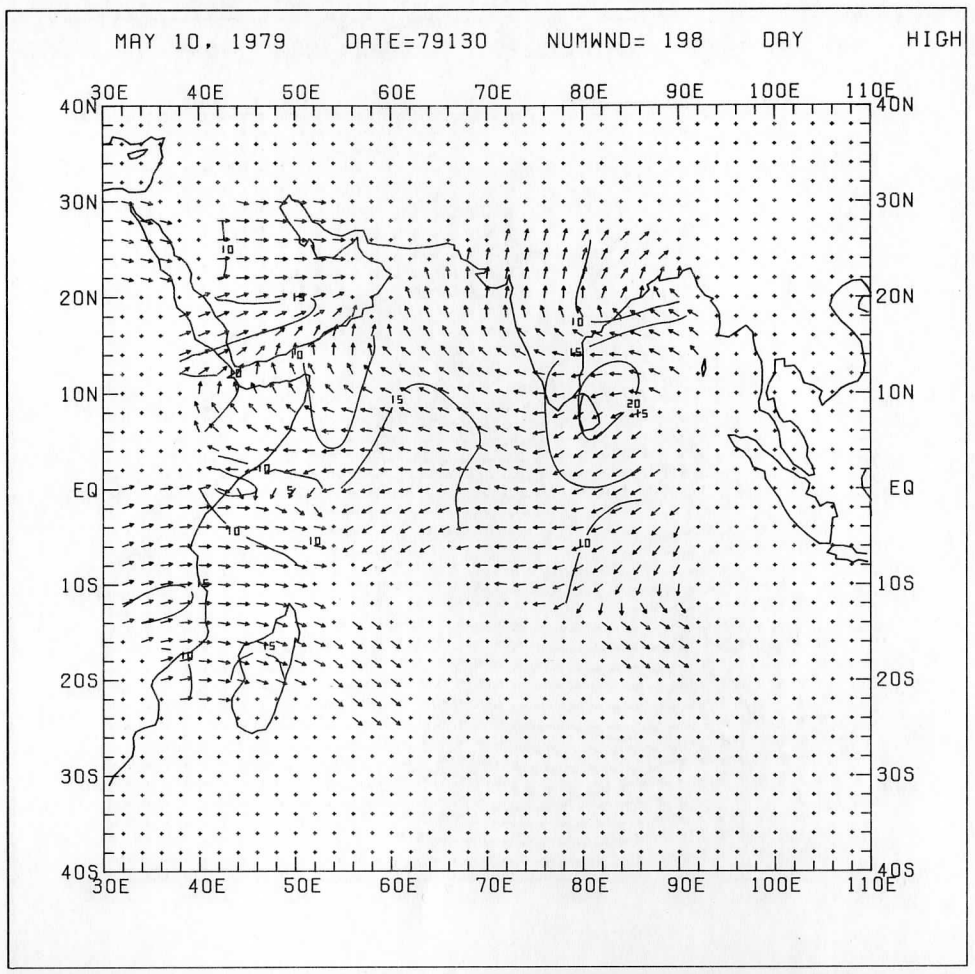

MAY 09, 1979 DATE=79129 NUMWND=1083 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

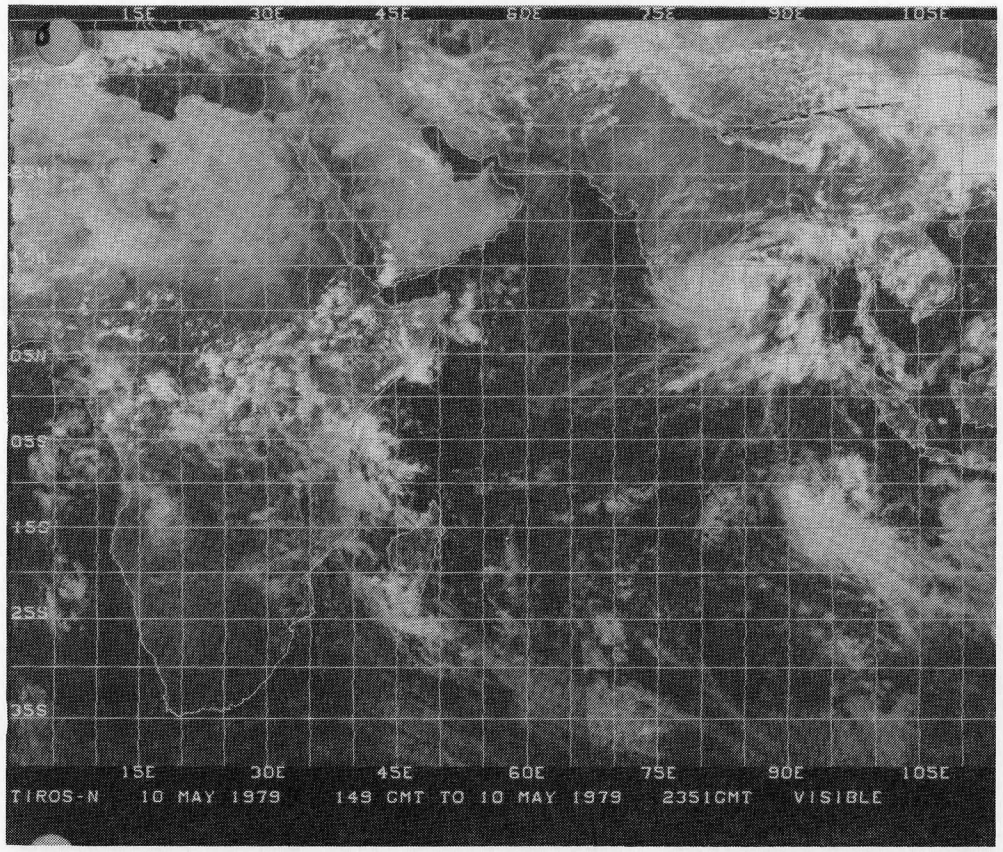

MAY 09, 1979 DATE=79129 NUMWND= 223 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

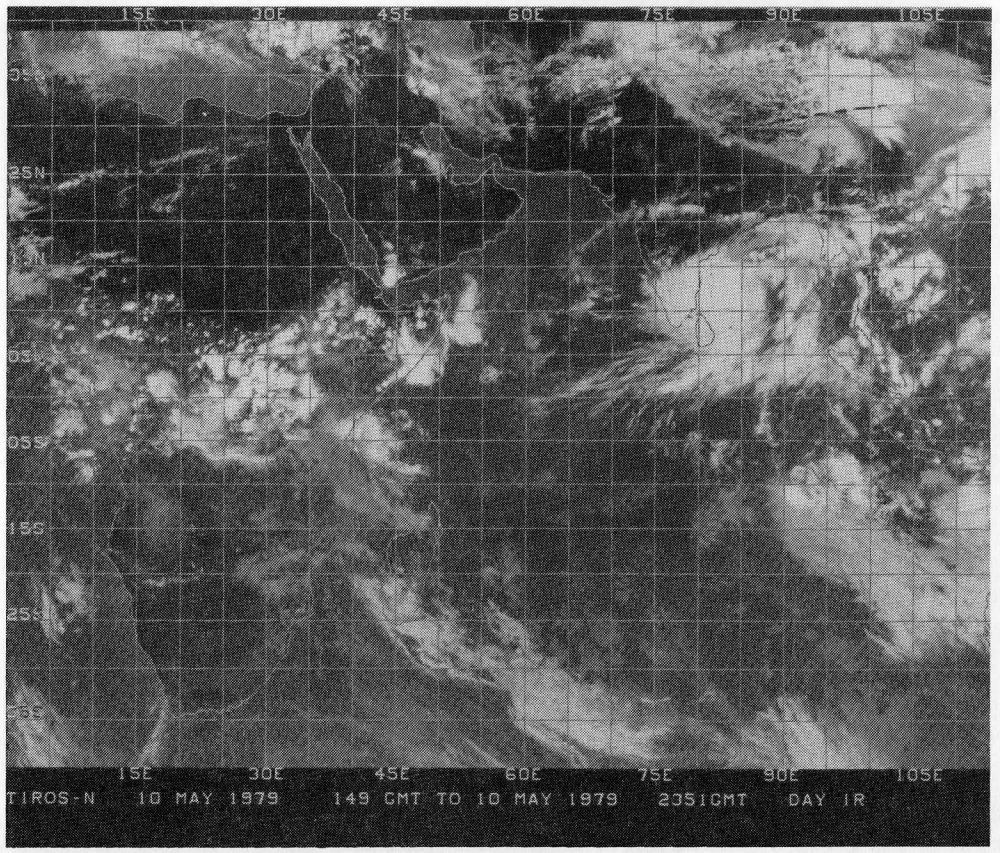

15E 30E 45E 60E 75E 90E 105E
TIROS-N 9 MAY 1979 156 GMT TO 10 MAY 1979 2GMT VISIBLE

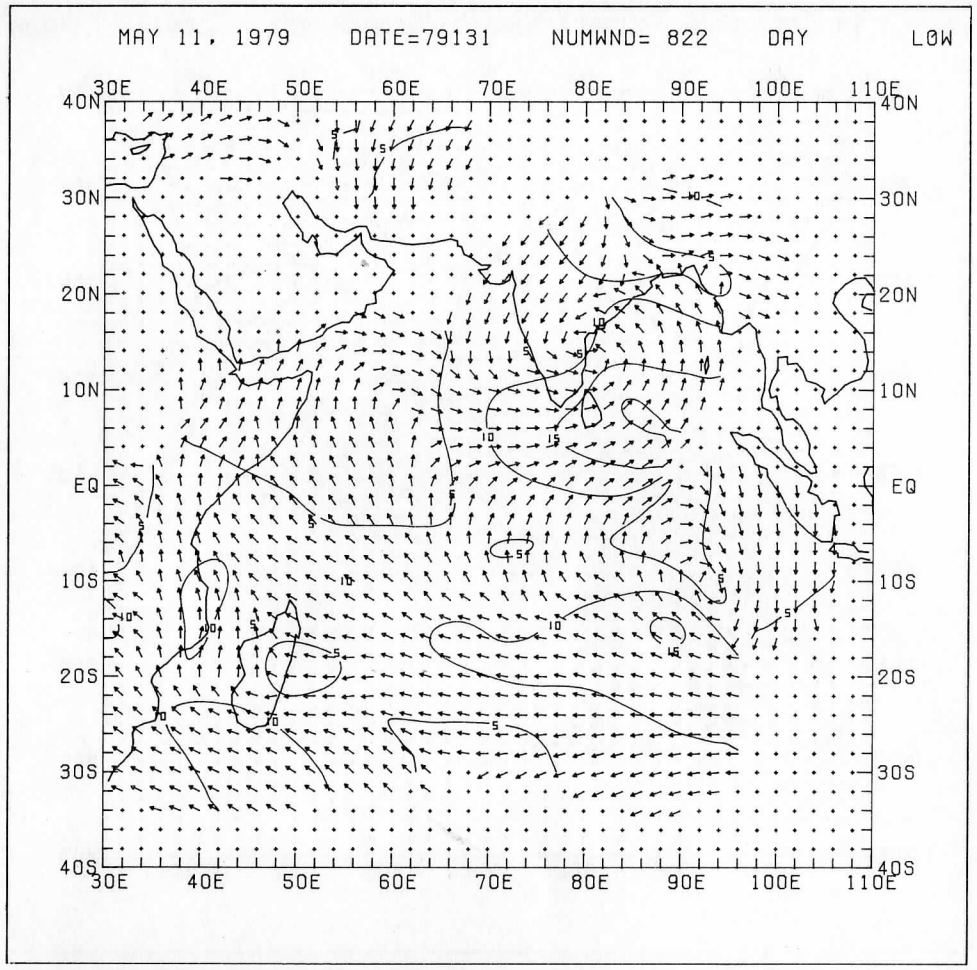

15E 30E 45E 60E 75E 90E 105E
TIROS-N 9 MAY 1979 156 GMT TO 10 MAY 1979 2GMT DAY IR

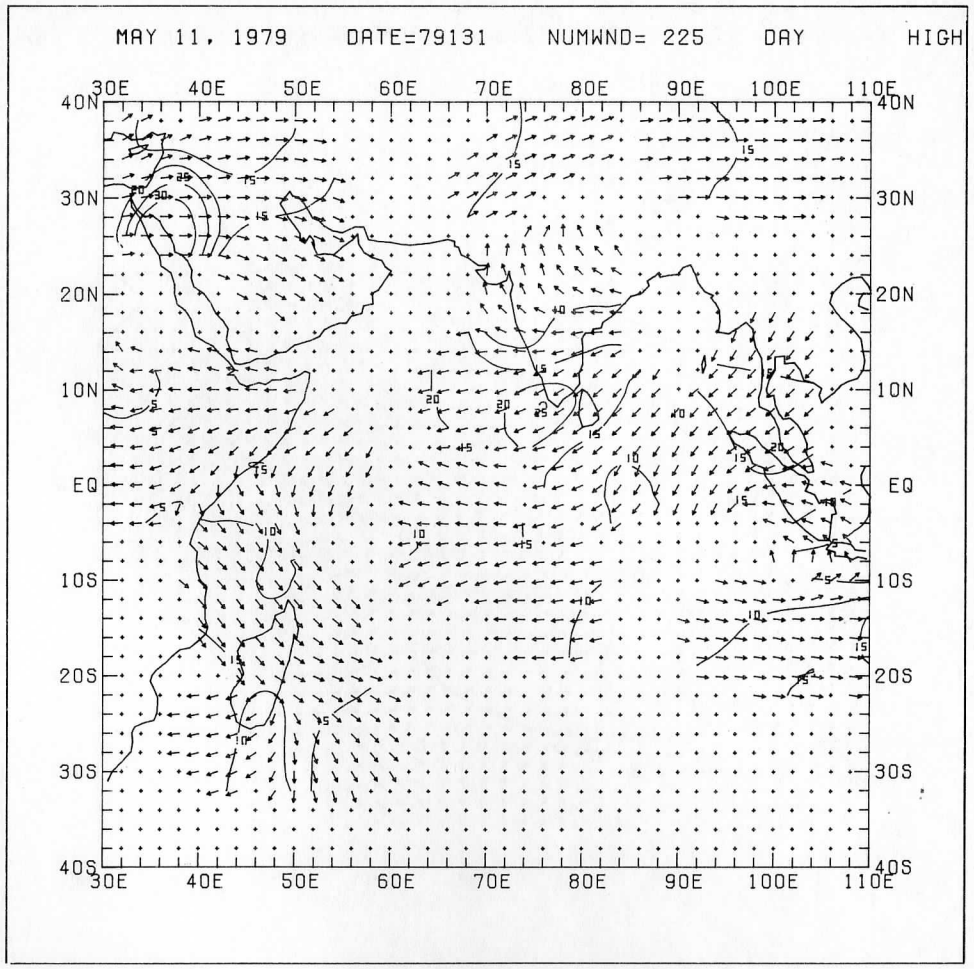

MAY 10, 1979 DATE=79130 NUMWND= 468 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

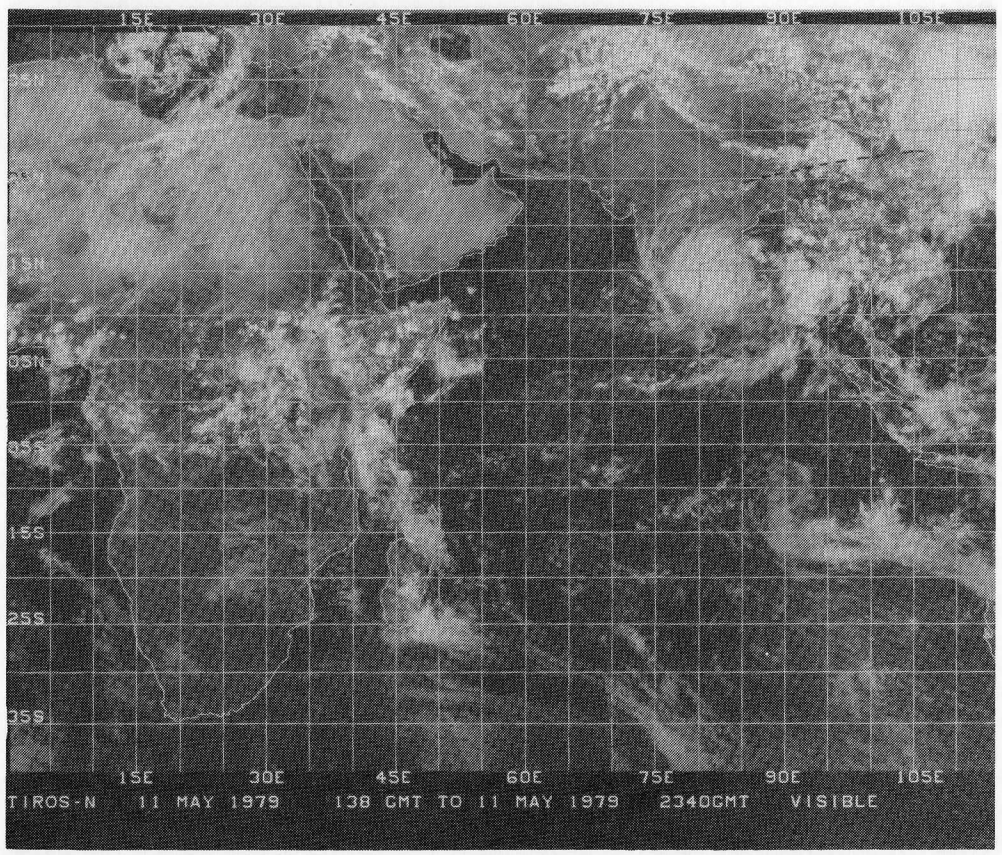

MAY 10, 1979 DATE=79130 NUMWND= 198 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

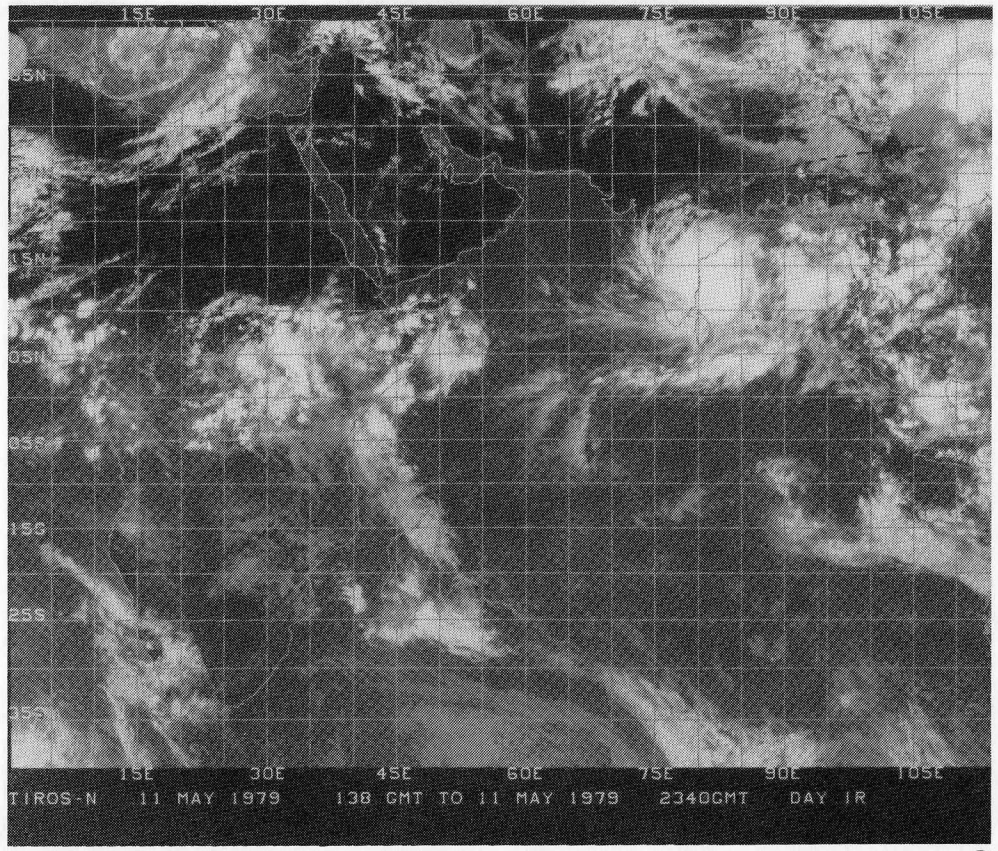

15E 30E 45E 60E 75E 90E 105E
25N
05N
05S
15S
25S
35S
TIROS-N 10 MAY 1979 149 GMT TO 10 MAY 1979 2351GMT VISIBLE

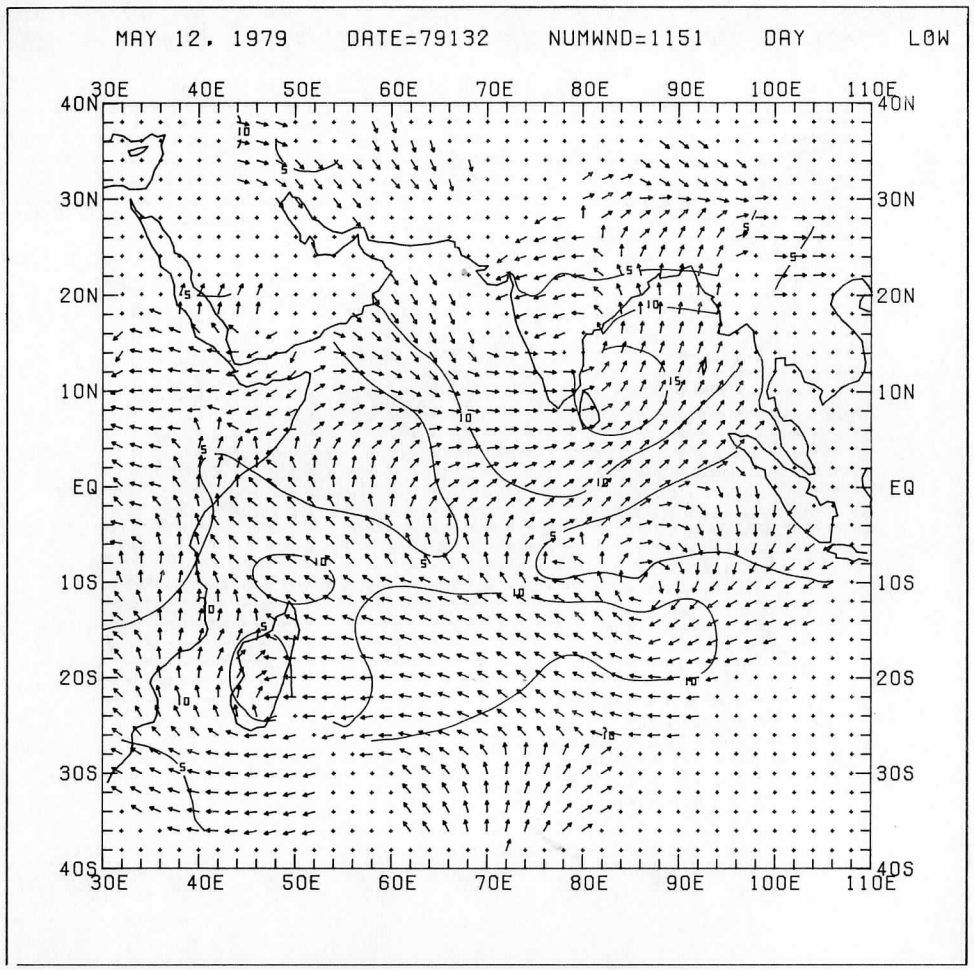

15E 30E 45E 60E 75E 90E 105E
25N
05N
05S
15S
25S
TIROS-N 10 MAY 1979 149 GMT TO 10 MAY 1979 2351GMT DAY IR

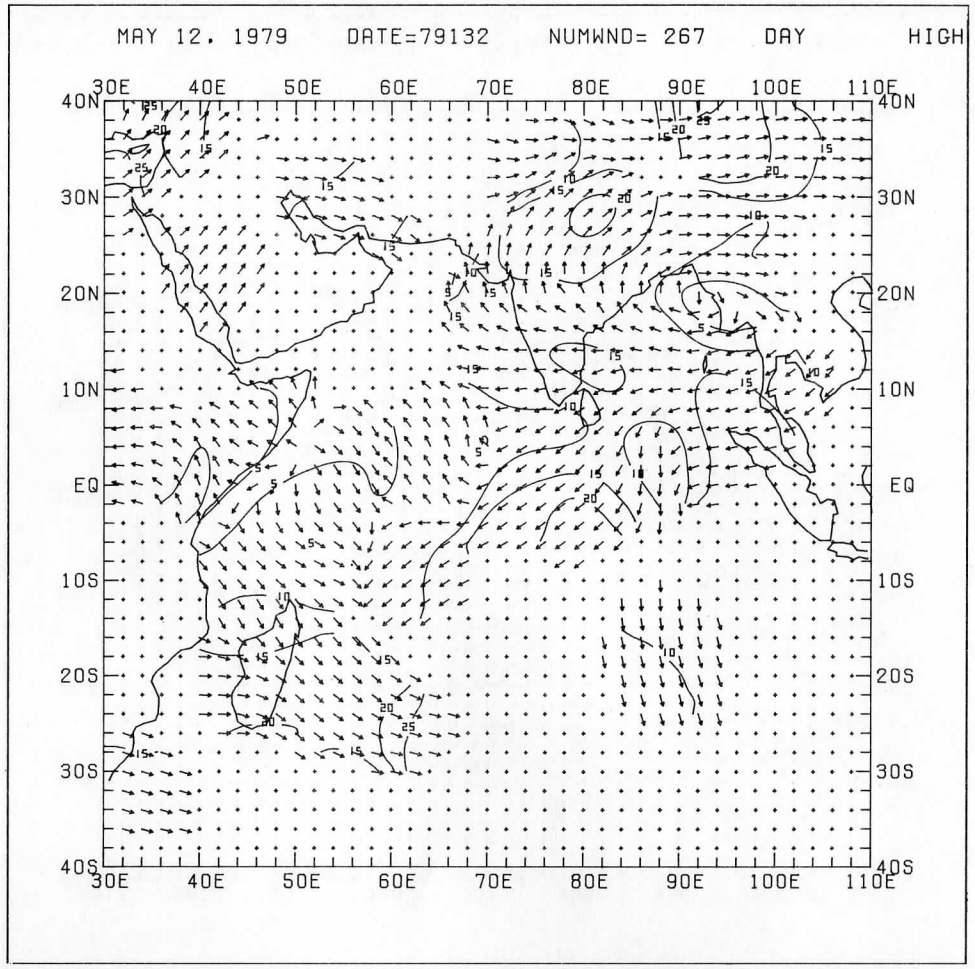

MAY 11, 1979 DATE=79131 NUMWND= 822 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

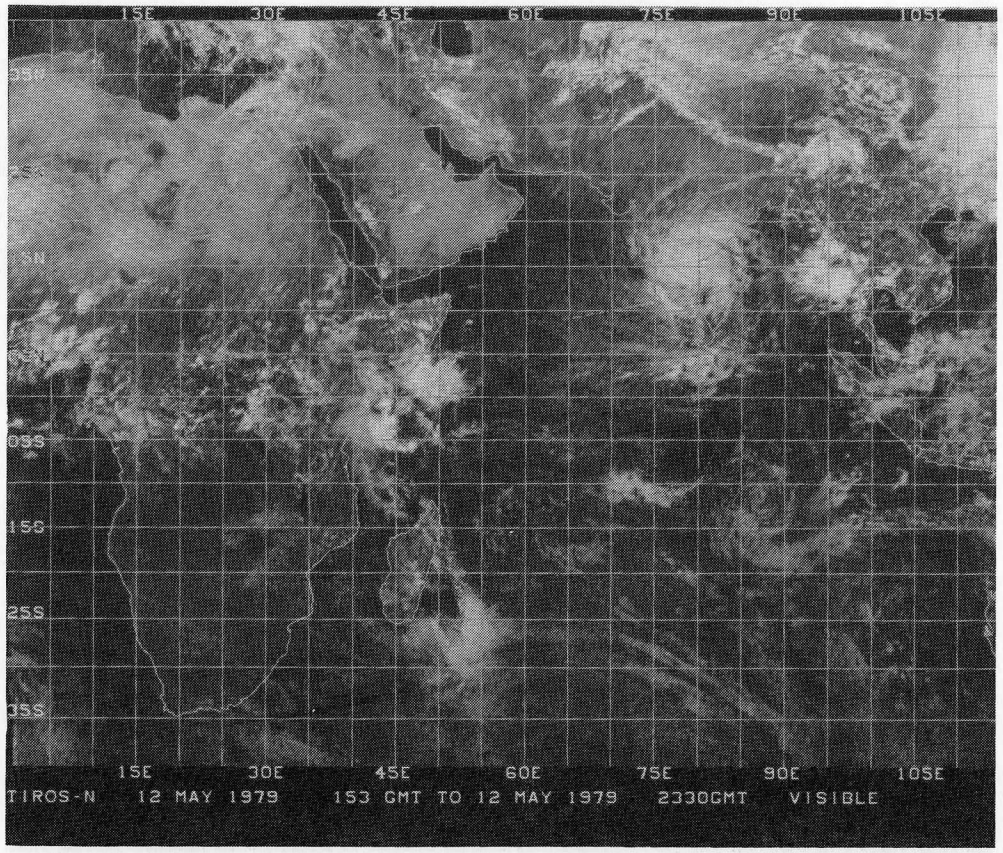

MAY 11, 1979 DATE=79131 NUMWND= 225 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

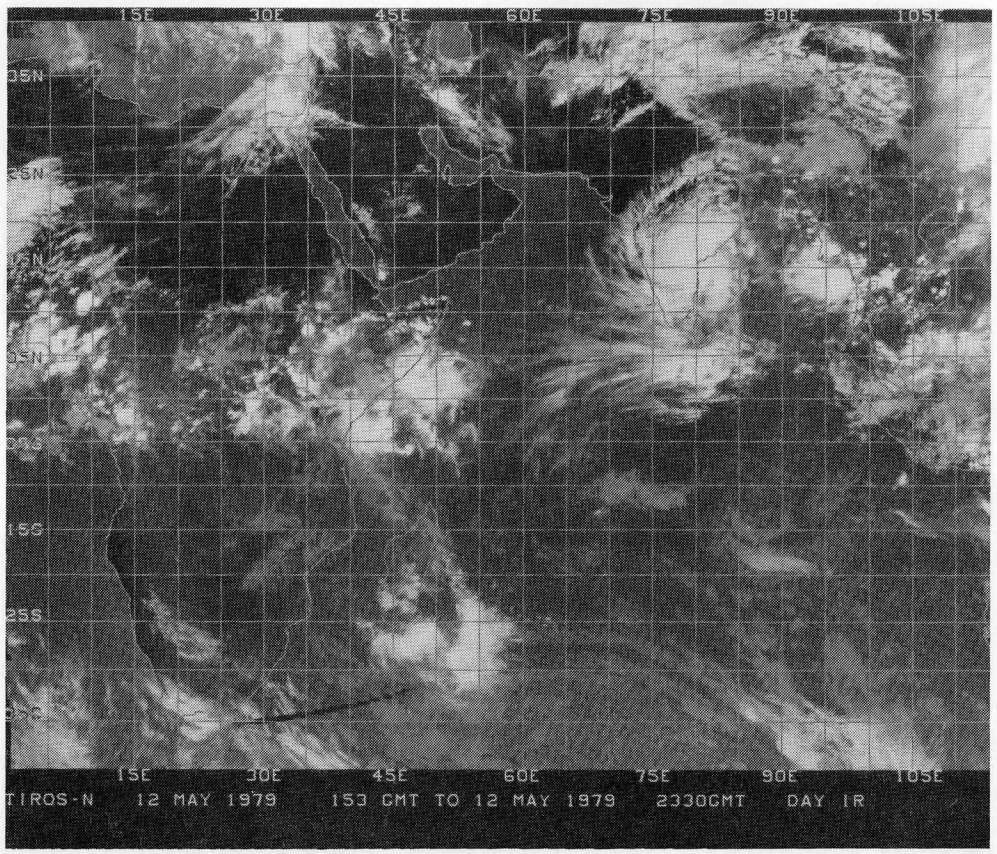

15E 30E 45E 60E 75E 90E 105E
TIROS-N 11 MAY 1979 138 GMT TO 11 MAY 1979 2340GMT VISIBLE

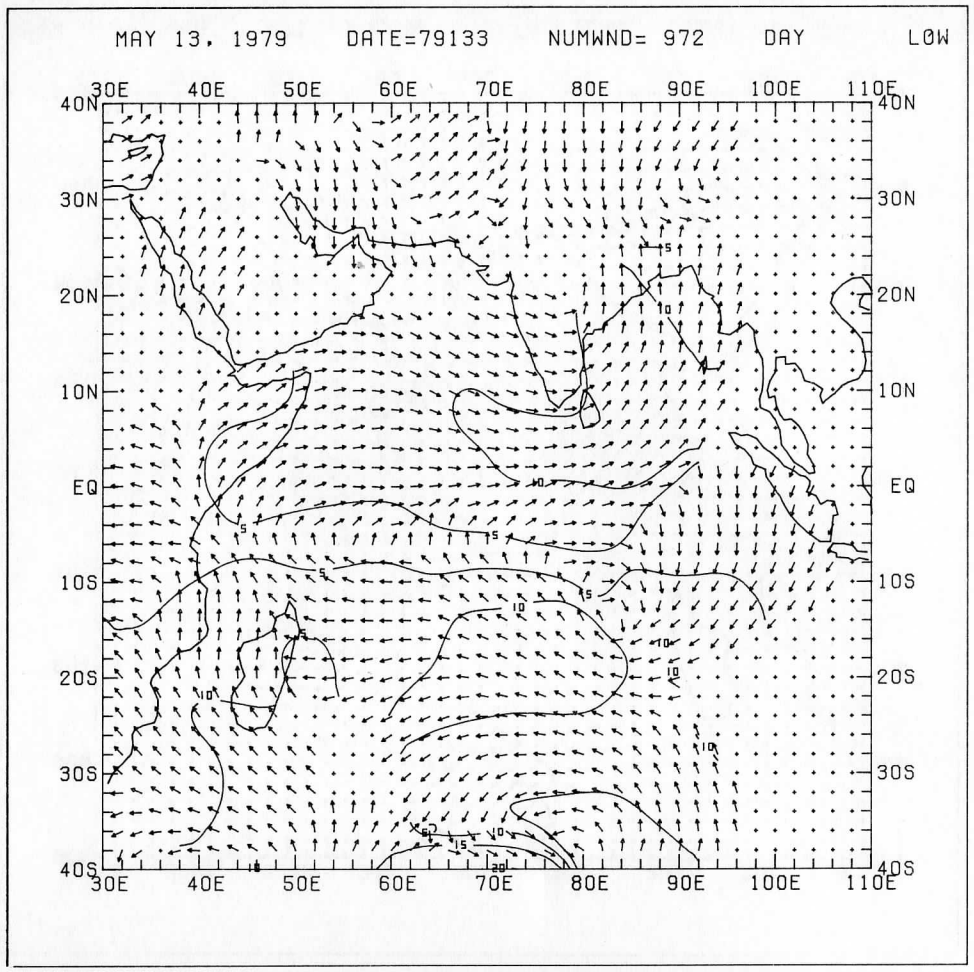

15E 30E 45E 60E 75E 90E 105E
TIROS-N 11 MAY 1979 138 GMT TO 11 MAY 1979 2340GMT DAY IR

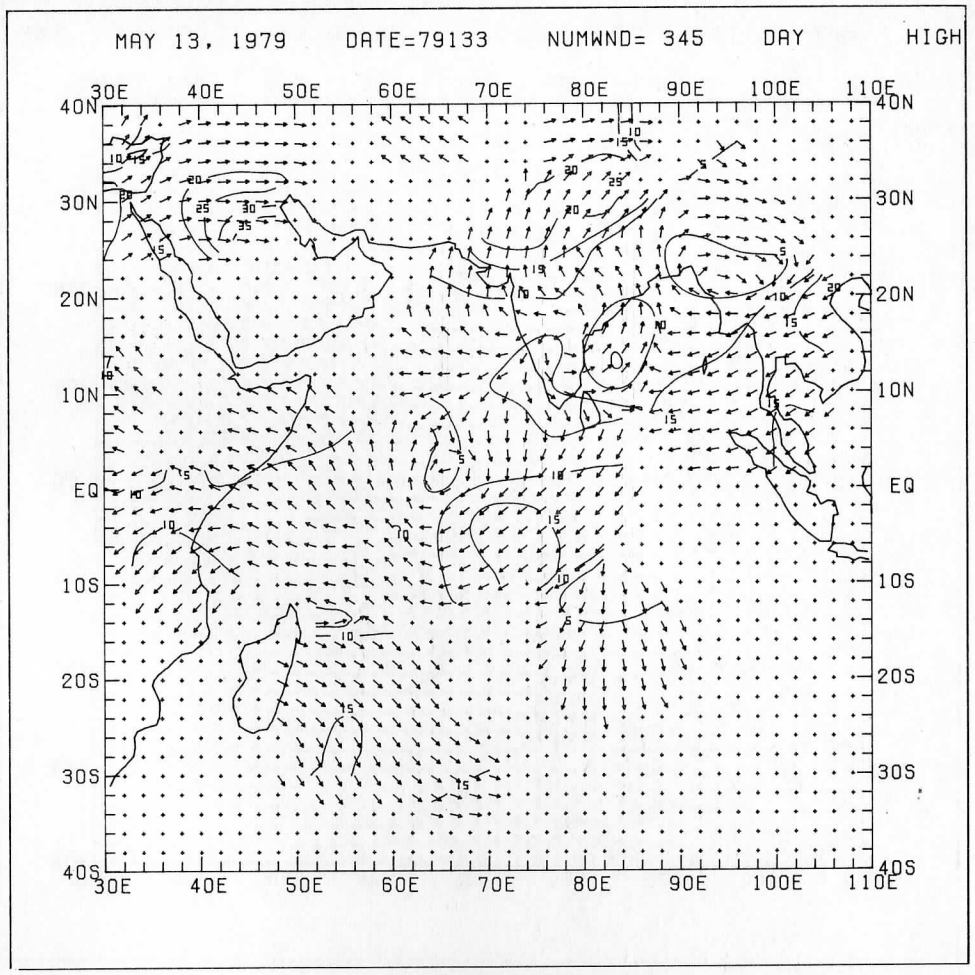

MAY 12, 1979 DATE=79132 NUMWND=1151 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

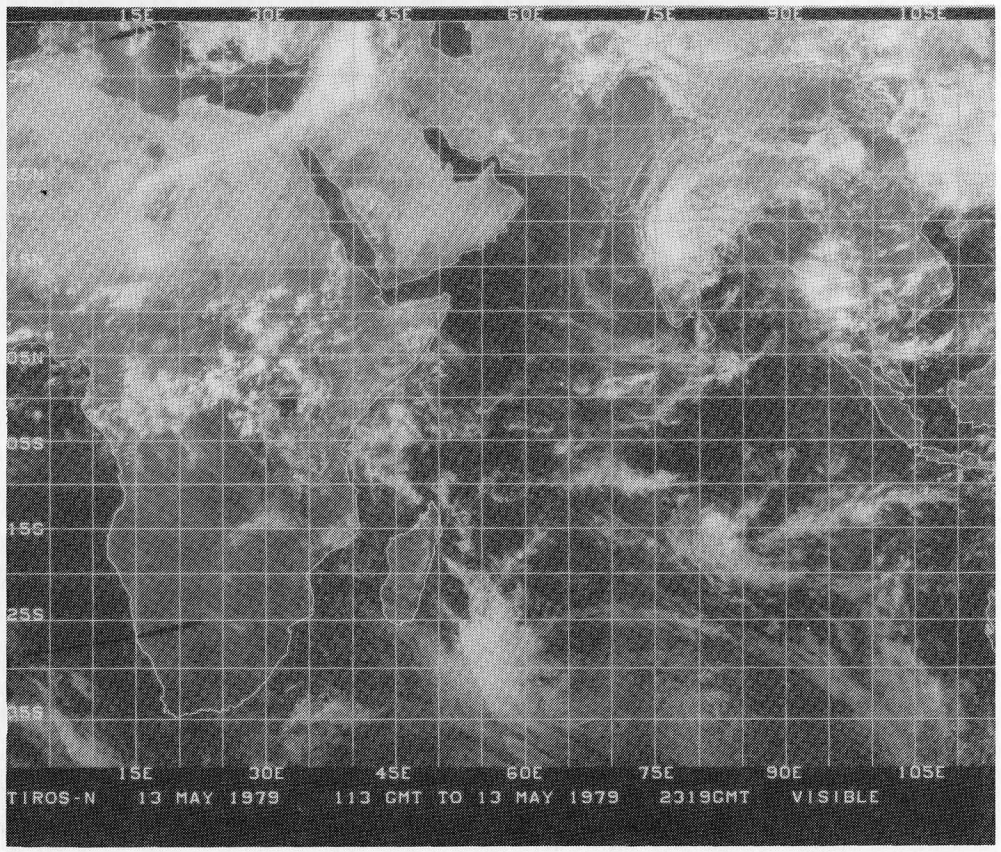

MAY 12, 1979 DATE=79132 NUMWND= 267 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

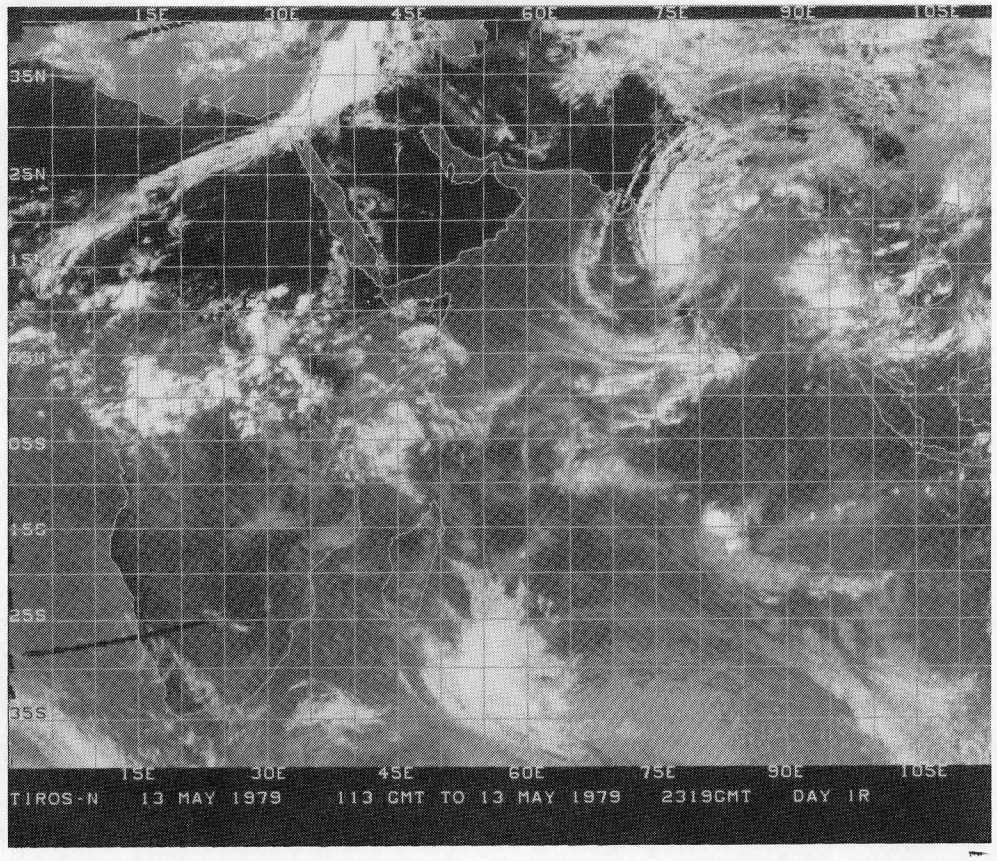

15E 30E 45E 60E 75E 90E 105E
TIROS-N 12 MAY 1979 153 GMT TO 12 MAY 1979 2330GMT VISIBLE

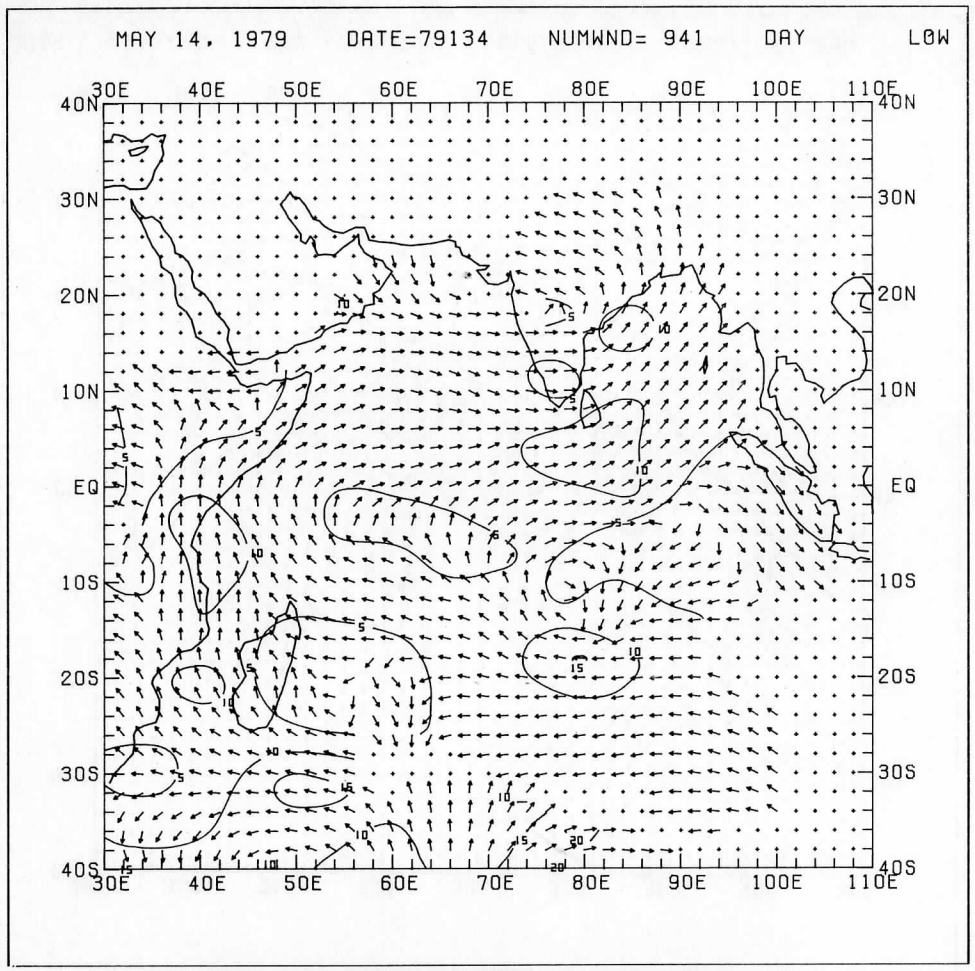

15E 30E 45E 60E 75E 90E 105E
TIROS-N 12 MAY 1979 153 GMT TO 12 MAY 1979 2330GMT DAY IR

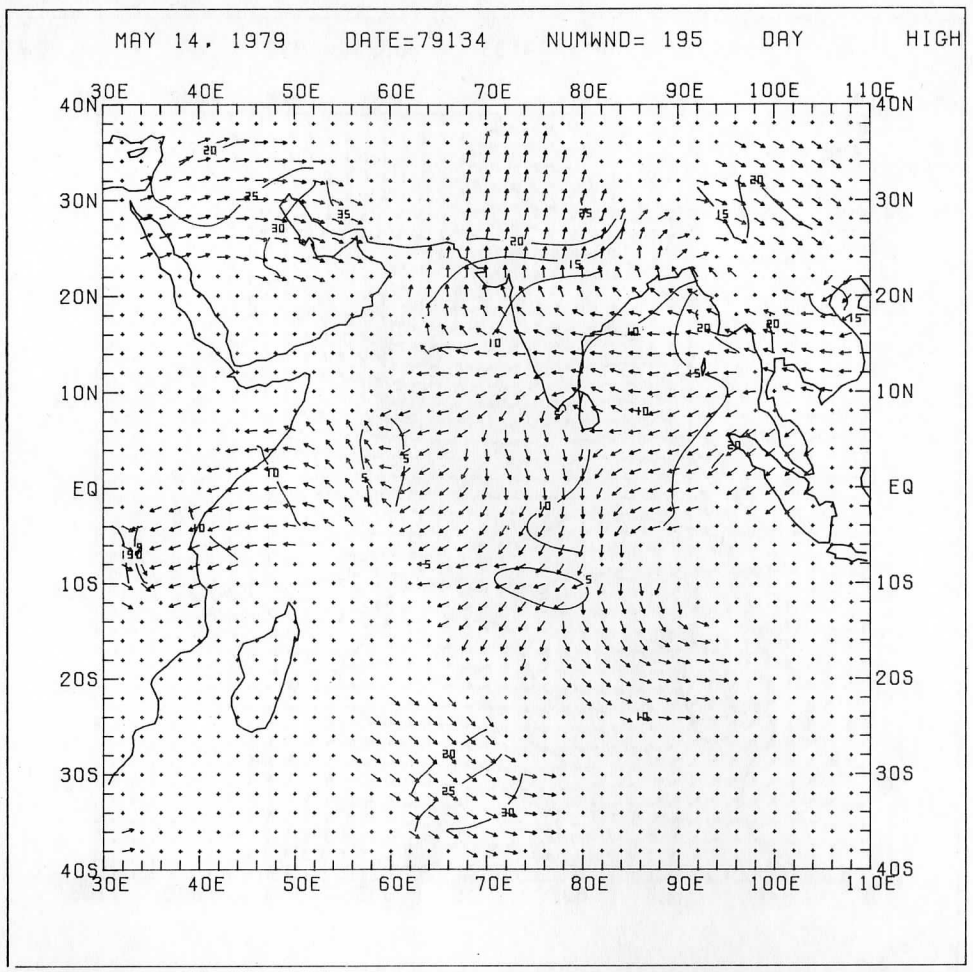

MAY 13, 1979 DATE=79133 NUMWND= 972 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

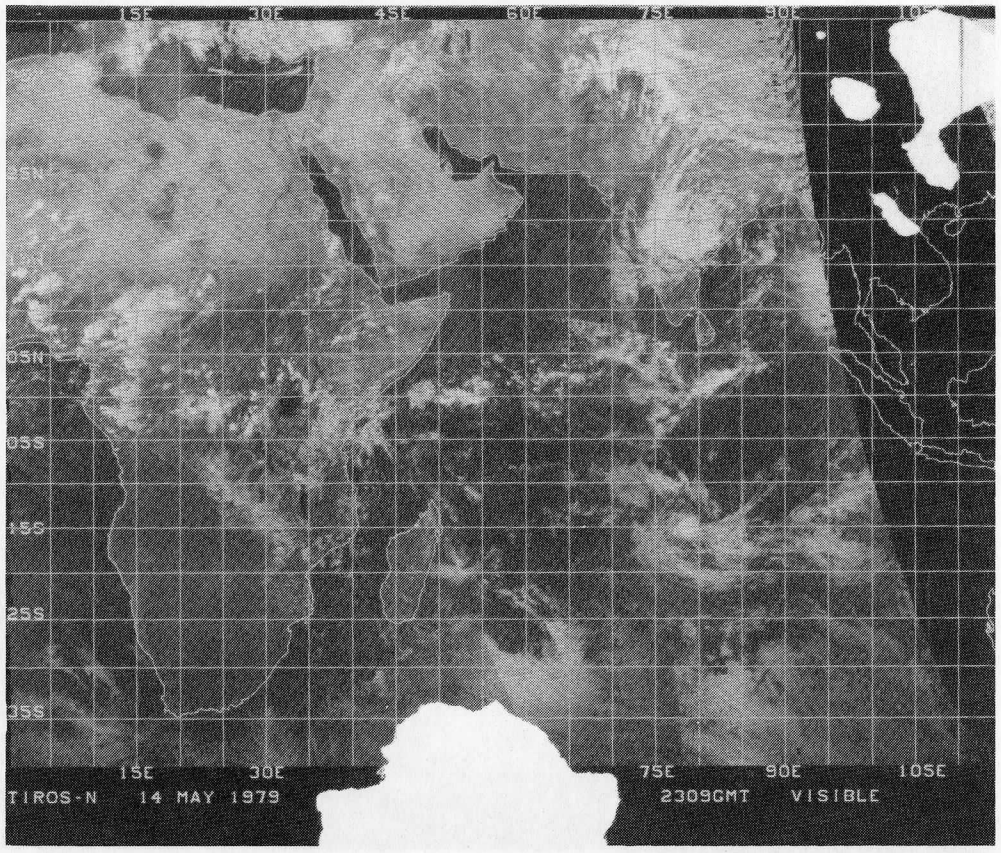

MAY 13, 1979 DATE=79133 NUMWND= 345 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

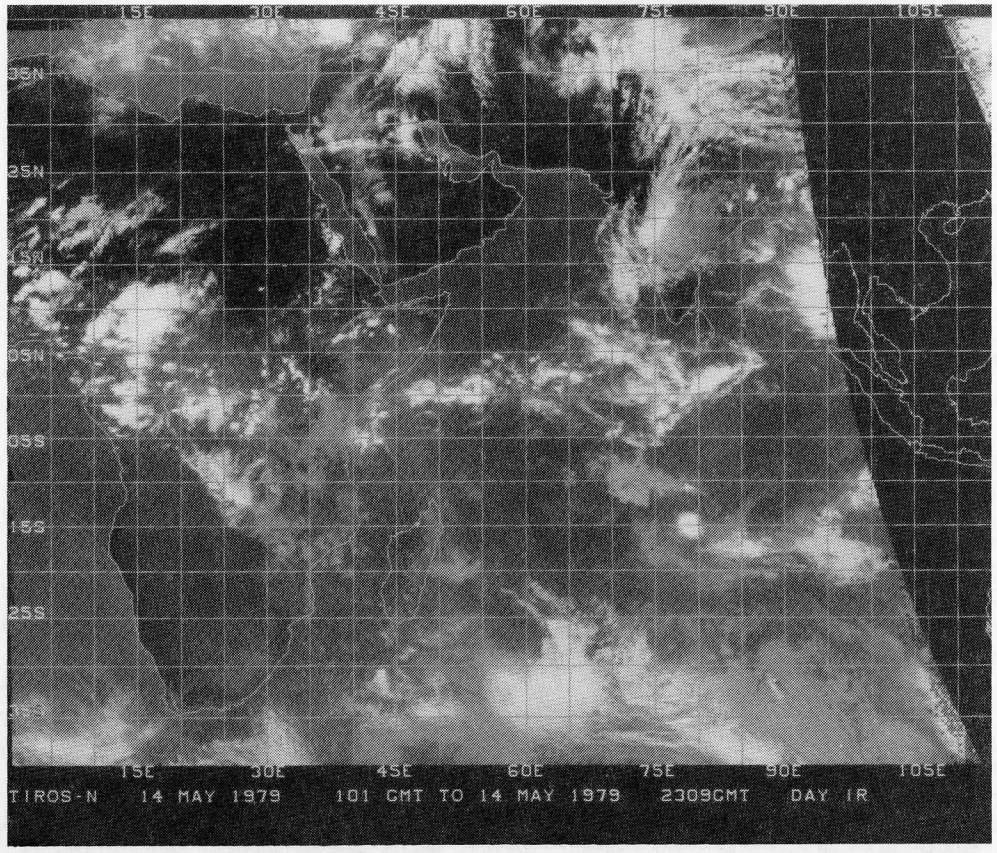

15E 30E 45E 60E 75E 90E 105E
TIROS-N 13 MAY 1979 113 GMT TO 13 MAY 1979 2319GMT VISIBLE

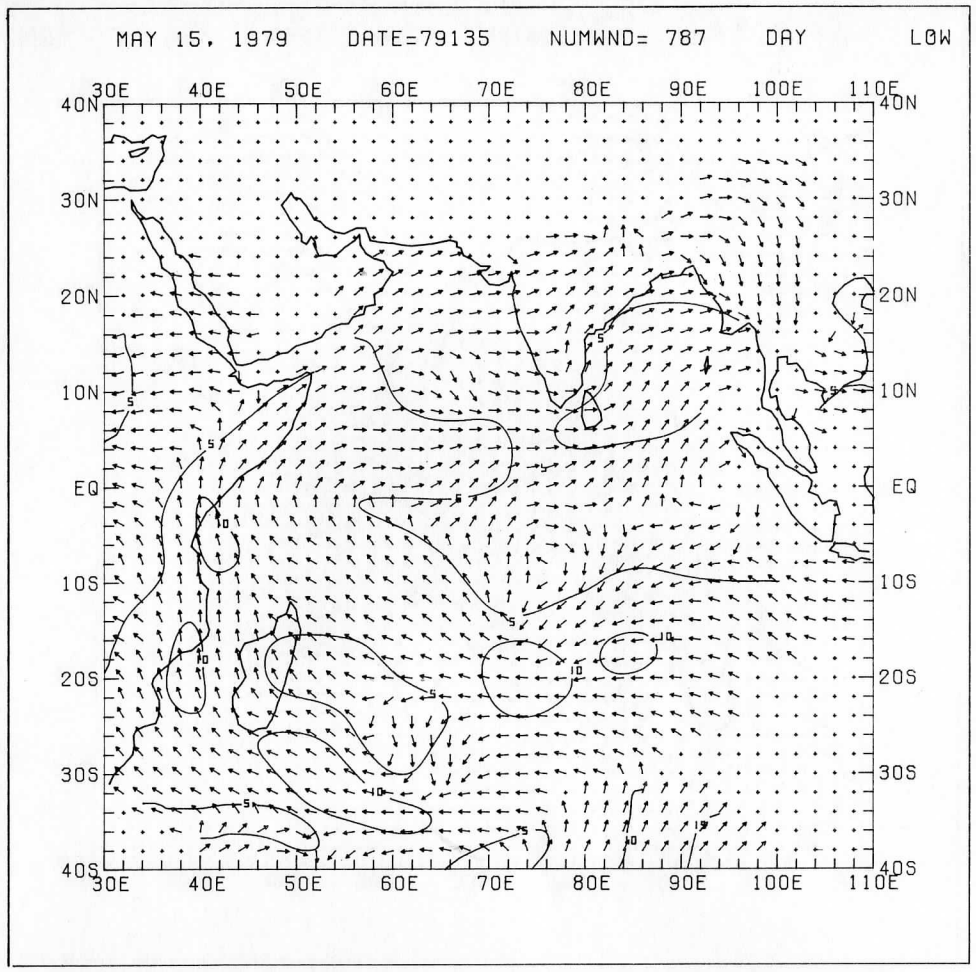

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 13 MAY 1979 113 GMT TO 13 MAY 1979 2319GMT DAY IR

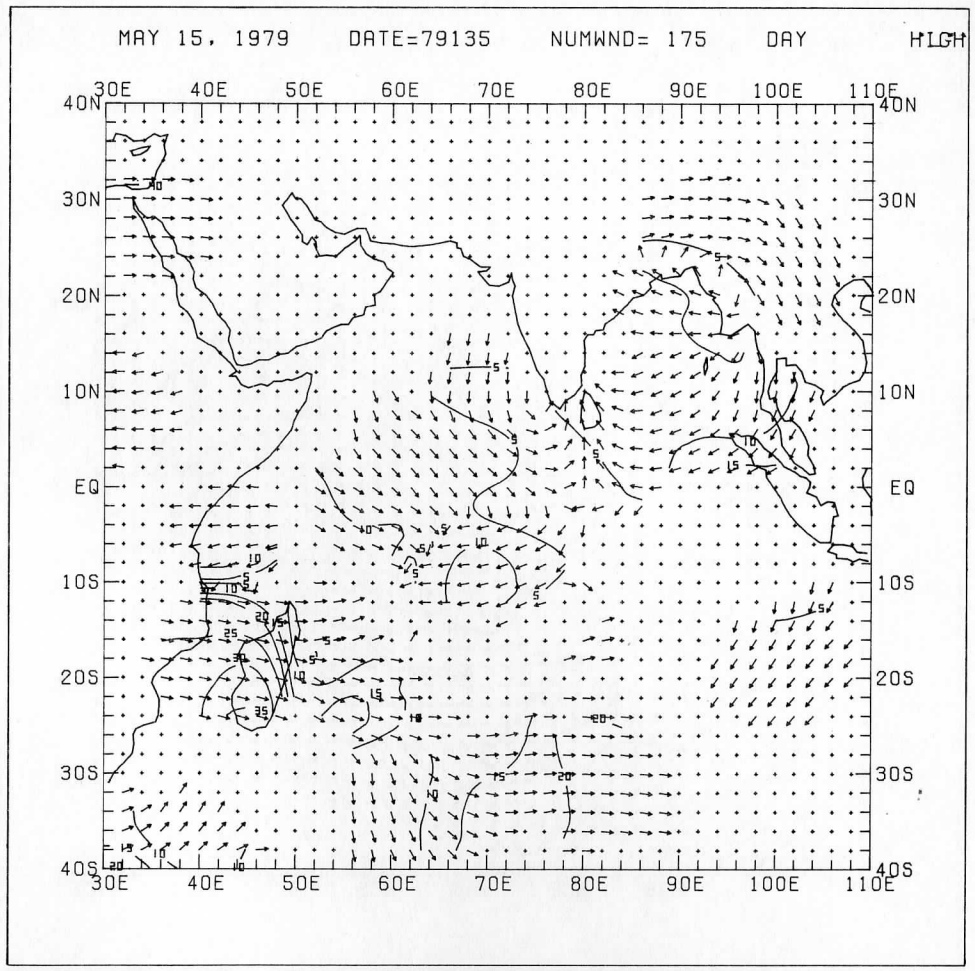

MAY 14, 1979 DATE=79134 NUMWND= 941 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

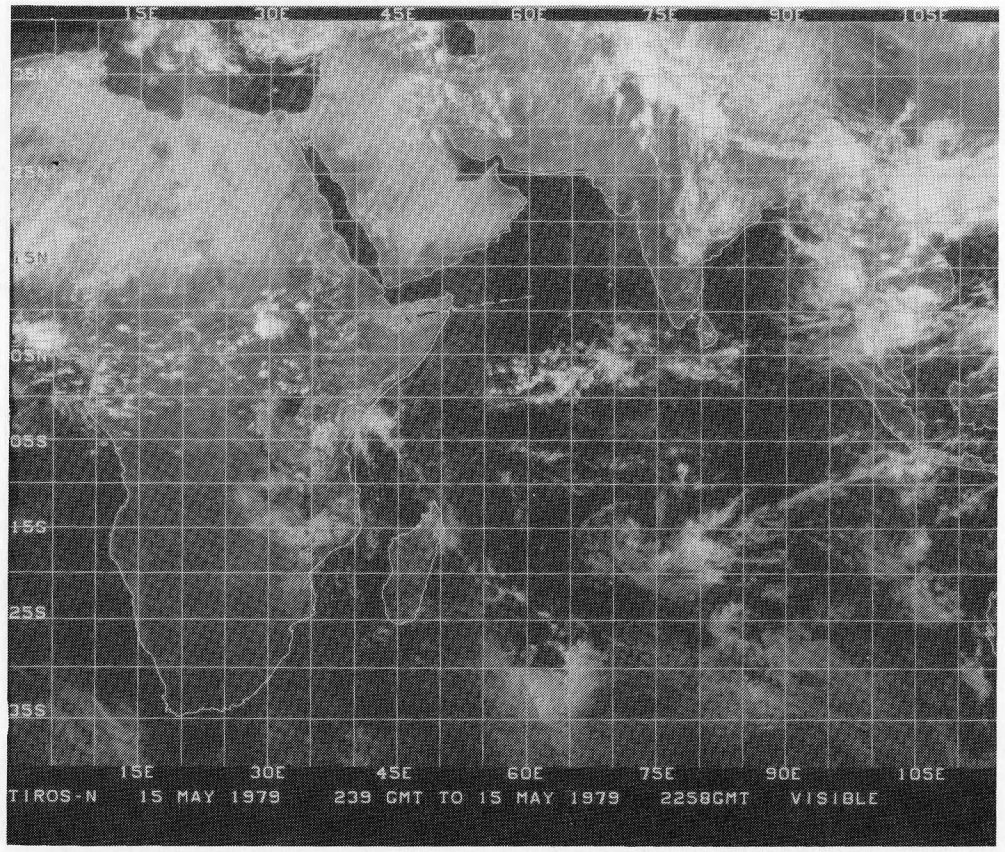

MAY 14, 1979 DATE=79134 NUMWND= 195 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

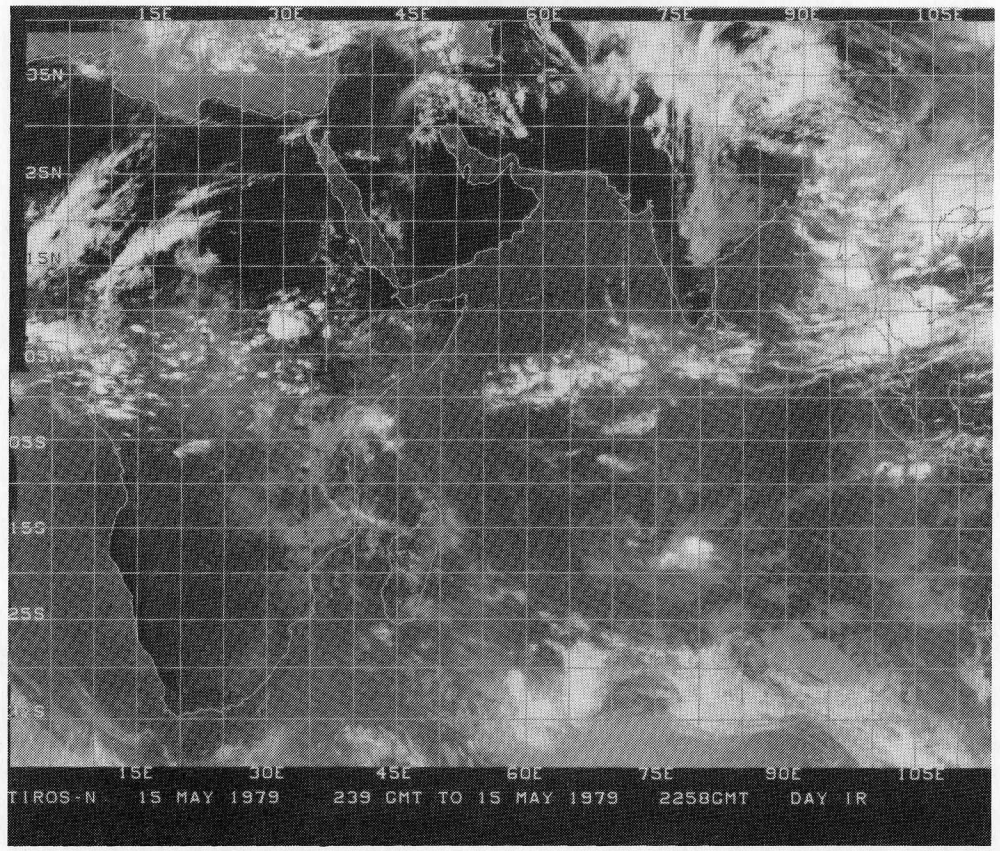

15E 30E 75E 90E 105E
TIROS-N 14 MAY 1979 2309GMT VISIBLE

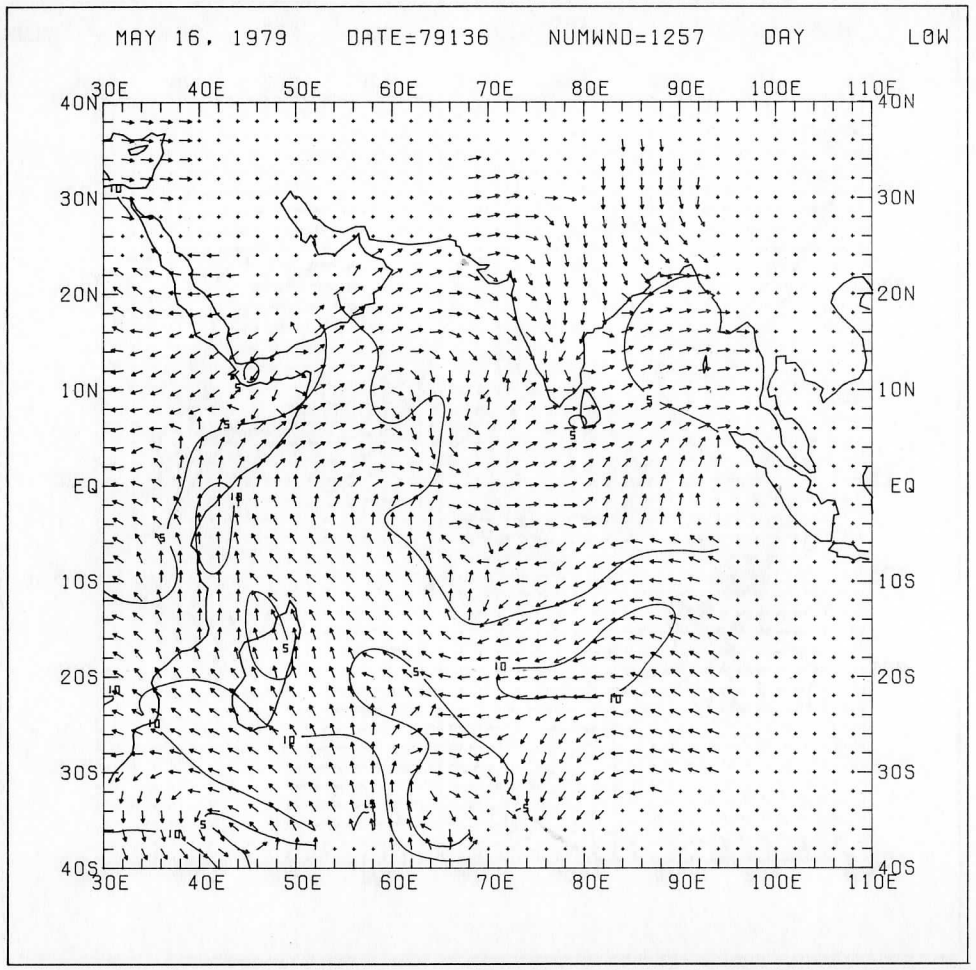

15E 30E 45E 60E 75E 90E 105E
TIROS-N 14 MAY 1979 101 GMT TO 14 MAY 1979 2308GMT DAY IR

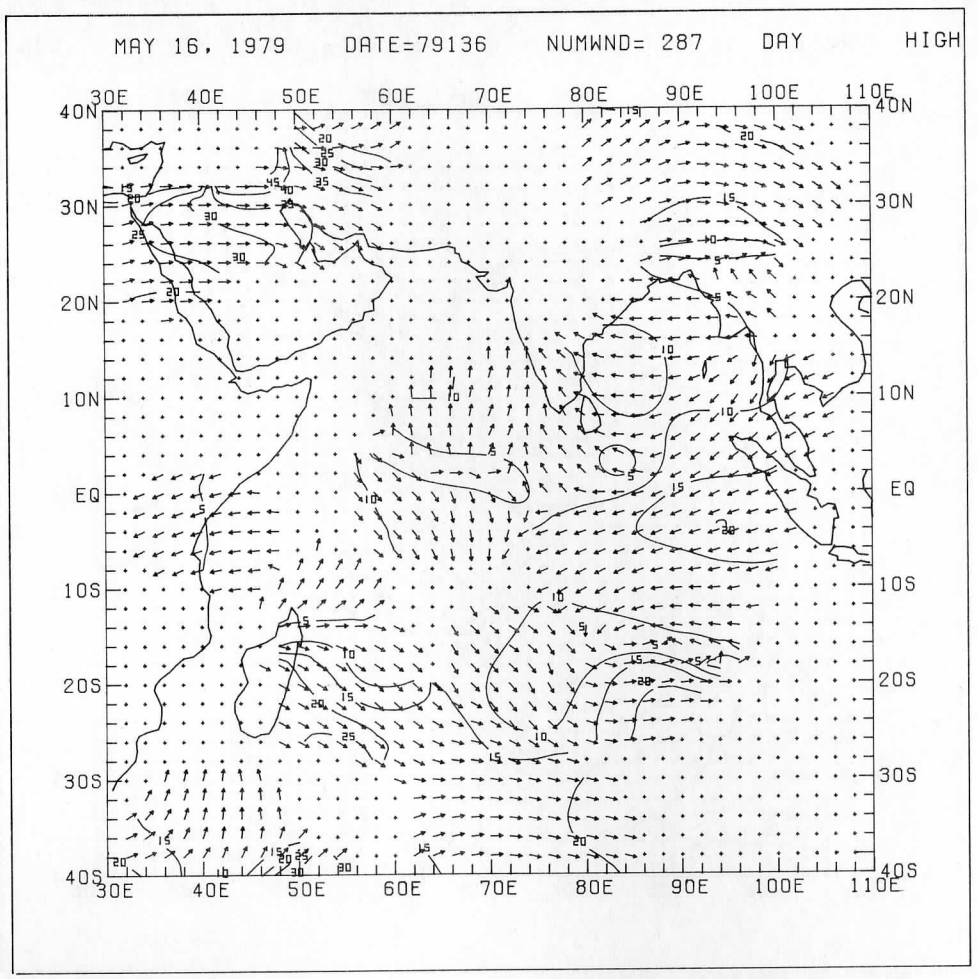

MAY 15, 1979 DATE=79135 NUMWND= 787 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

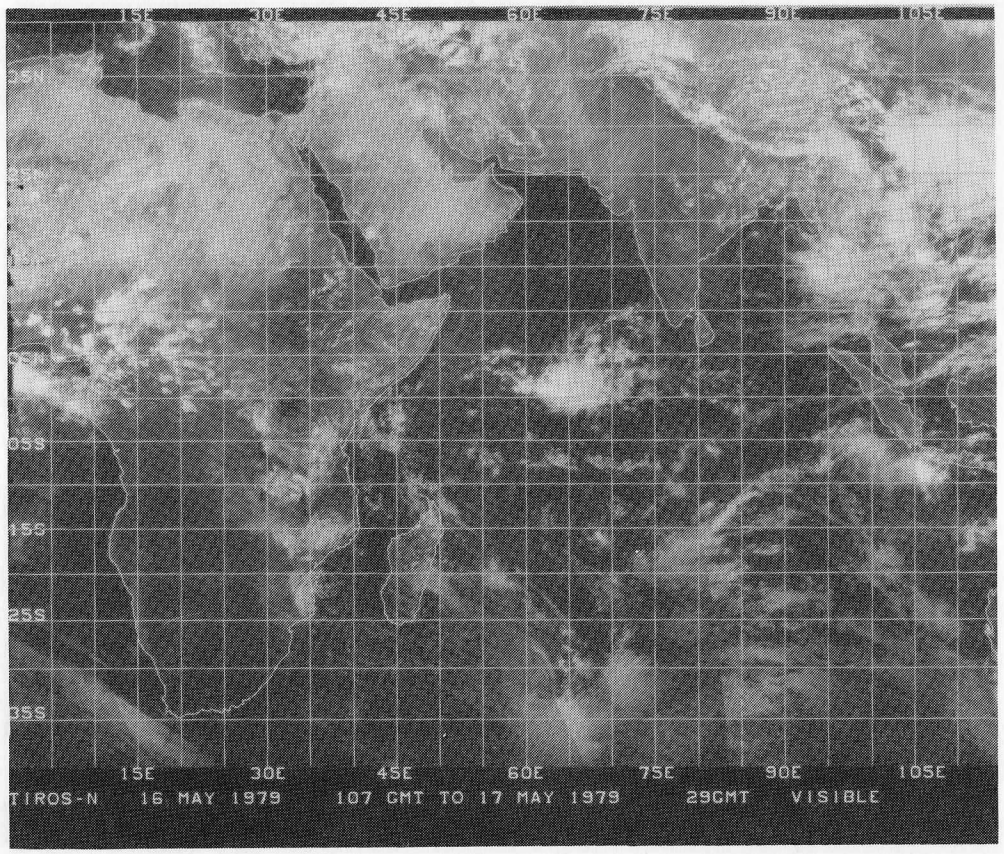

MAY 15, 1979 DATE=79135 NUMWND= 175 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

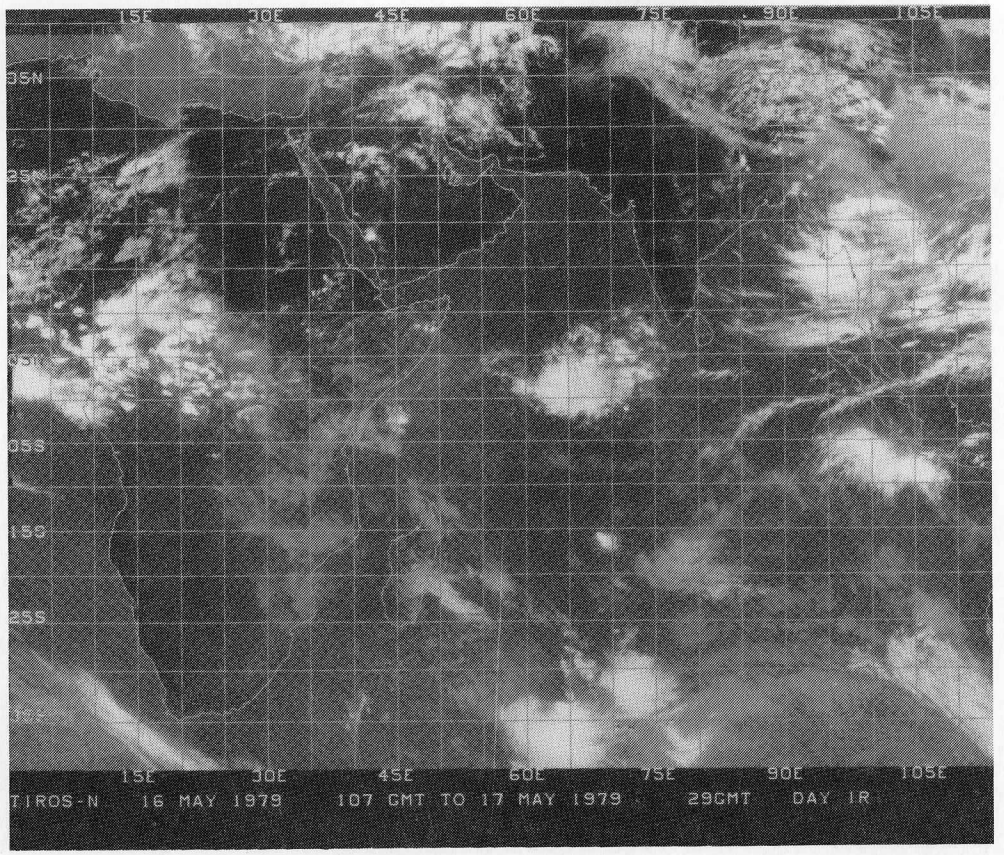

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 15 MAY 1979 239 GMT TO 15 MAY 1979 2258GMT VISIBLE

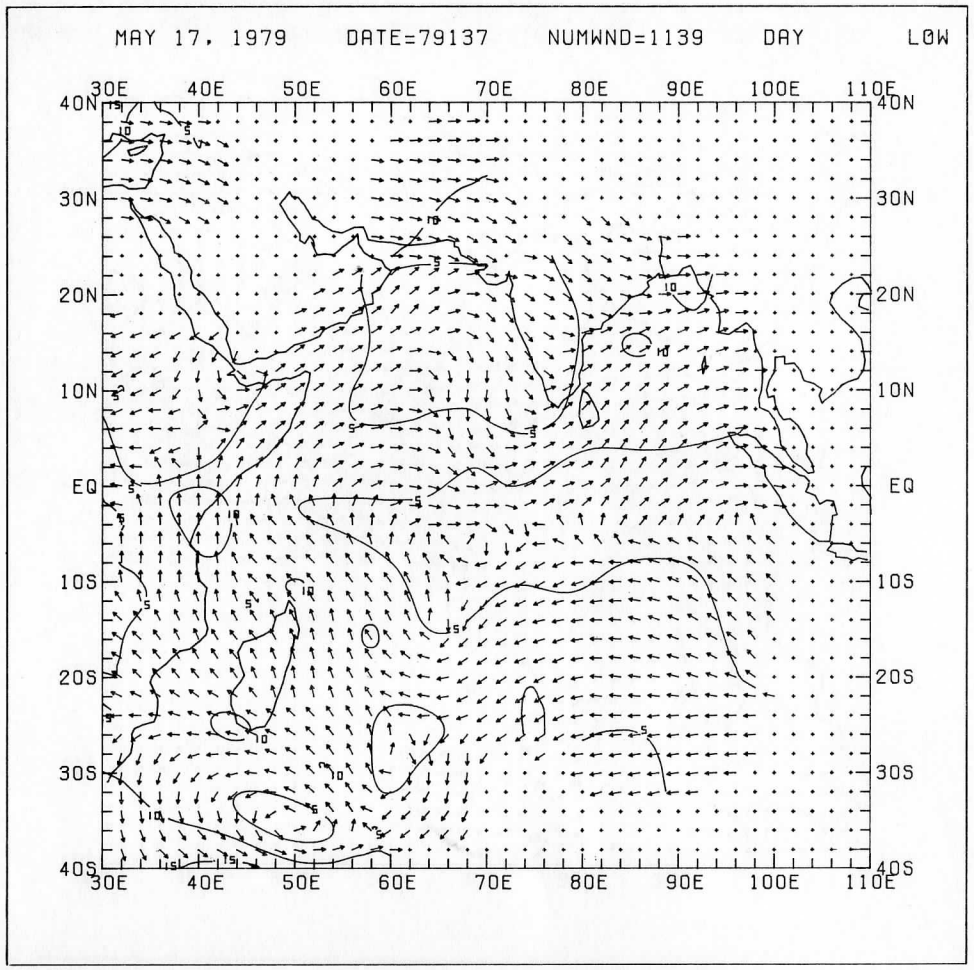

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S
TIROS-N 15 MAY 1979 239 GMT TO 15 MAY 1979 2258GMT DAY IR

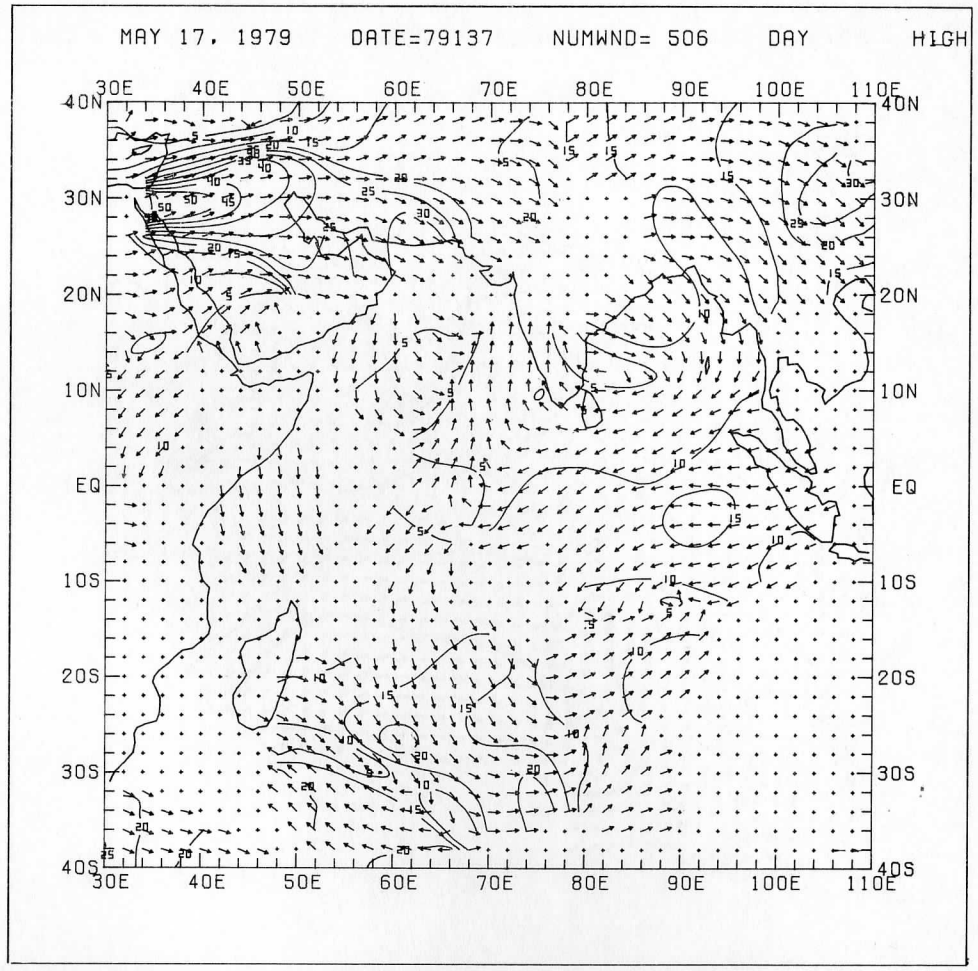

MAY 16, 1979 DATE=79136 NUMWND=1257 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

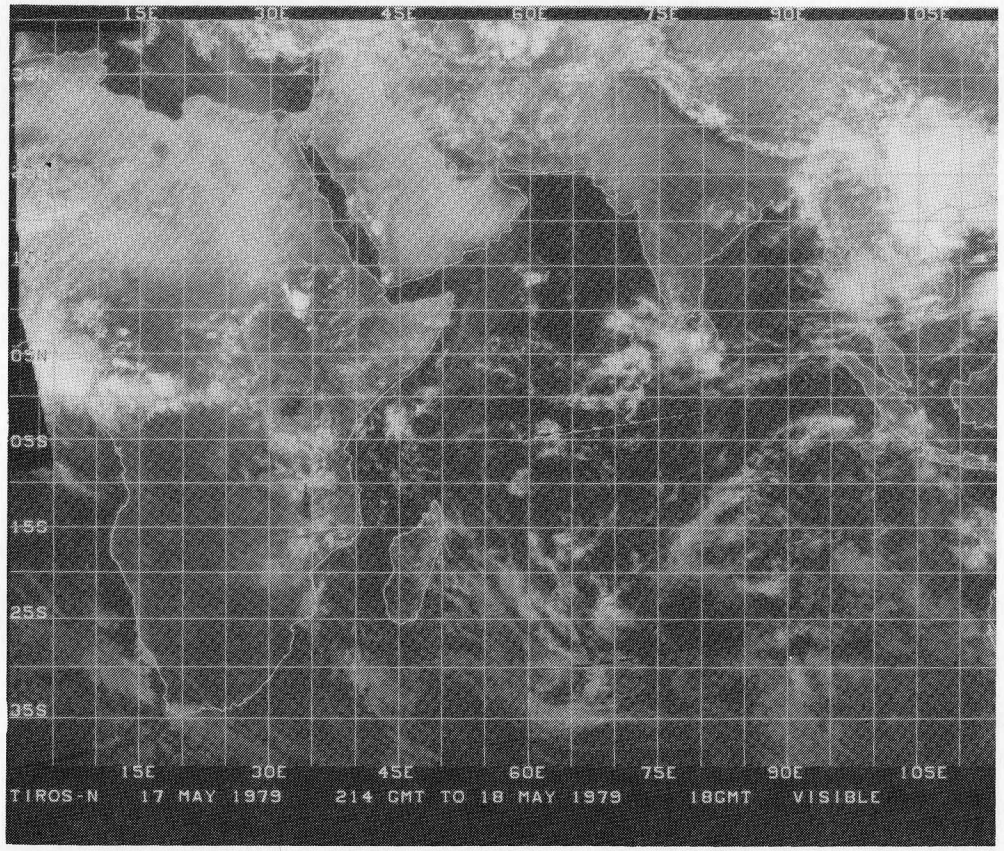

MAY 16, 1979 DATE=79136 NUMWND= 287 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

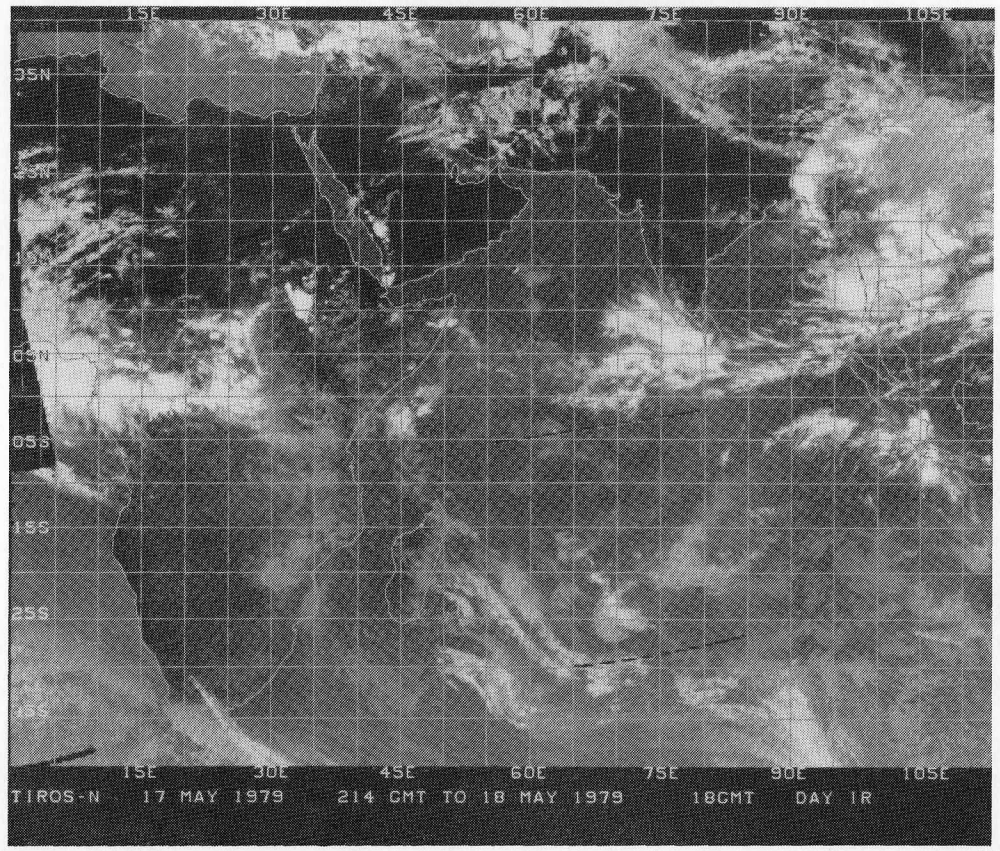

15E 30E 45E 60E 75E 90E 105E
TIROS-N 16 MAY 1979 107 GMT TO 17 MAY 1979 29GMT VISIBLE

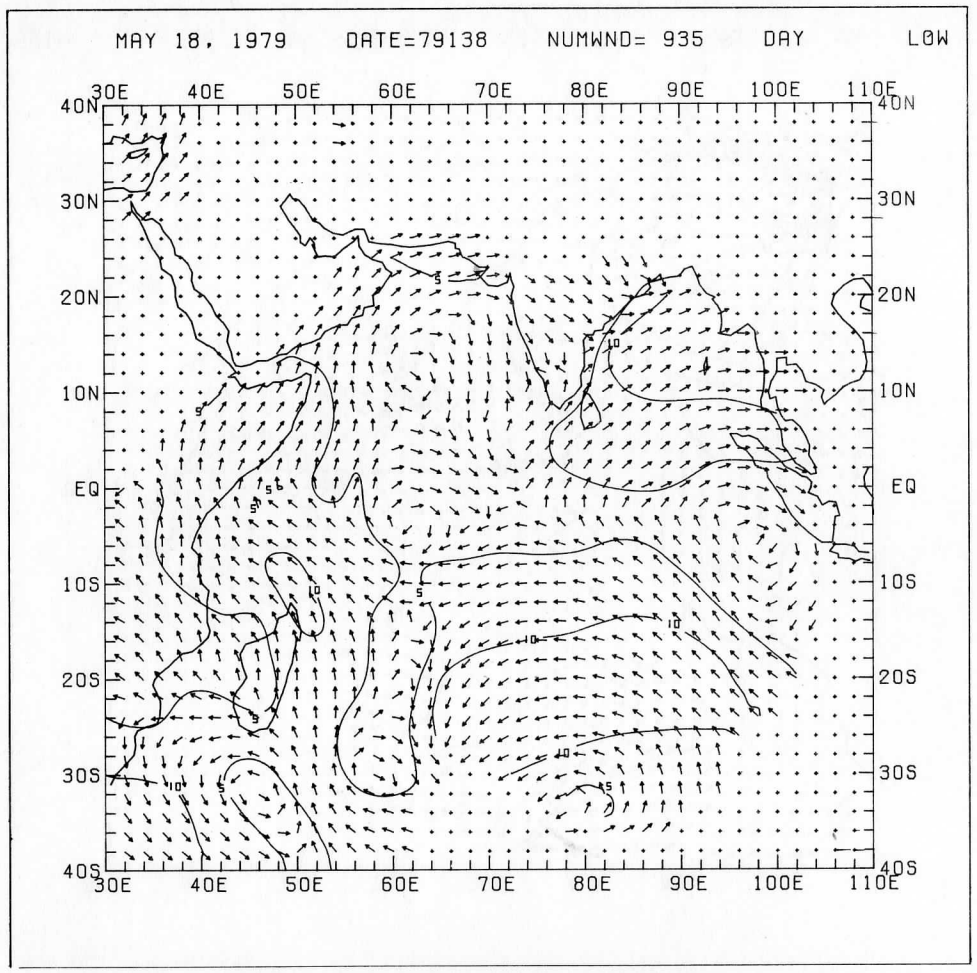

15E 30E 45E 60E 75E 90E 105E
TIROS-N 16 MAY 1979 107 GMT TO 17 MAY 1979 29GMT DAY IR

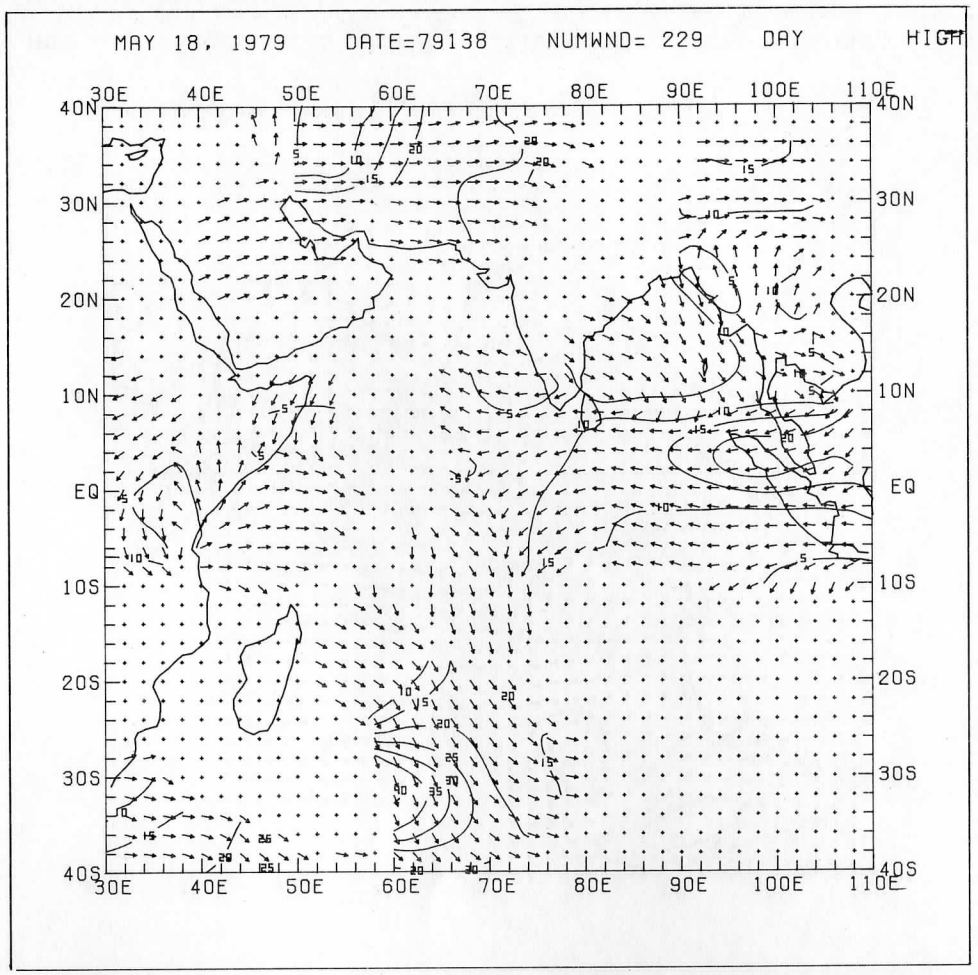

MAY 17, 1979 DATE=79137 NUMWND=1139 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

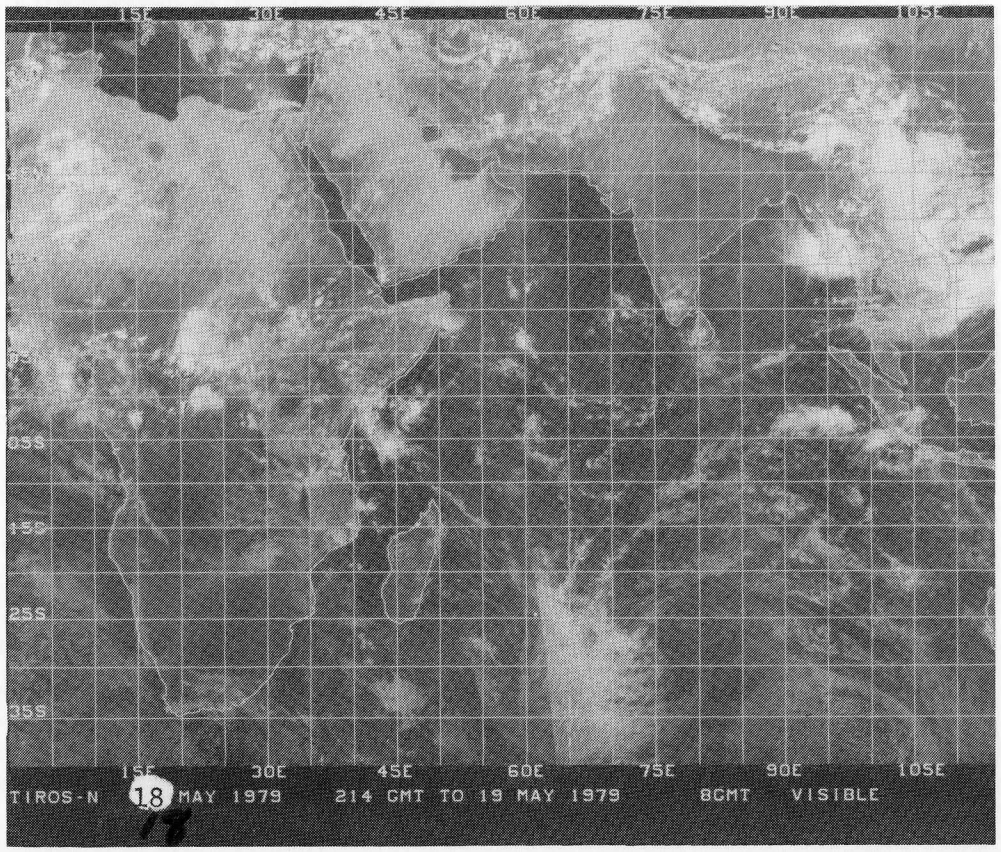

MAY 17, 1979 DATE=79137 NUMWND= 506 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

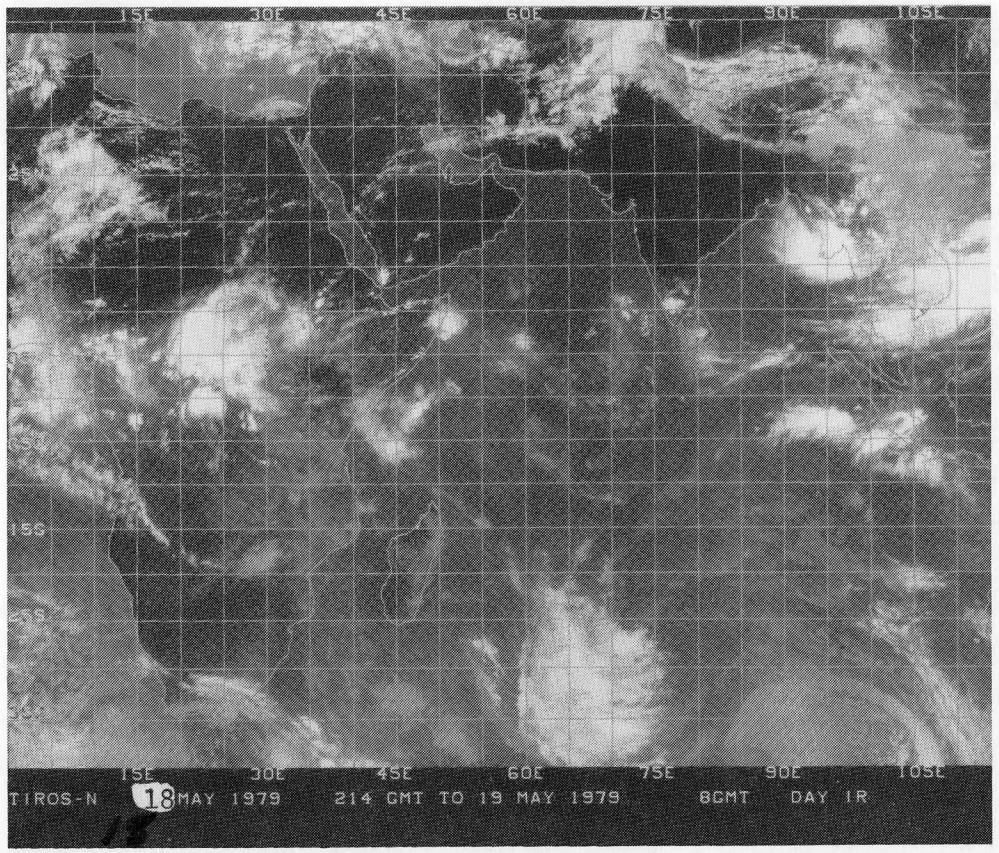

15E 30E 45E 60E 75E 90E 105E
35N 05N 05S 15S 25S 35S
TIROS-N 17 MAY 1979 214 GMT TO 18 MAY 1979 18GMT VISIBLE

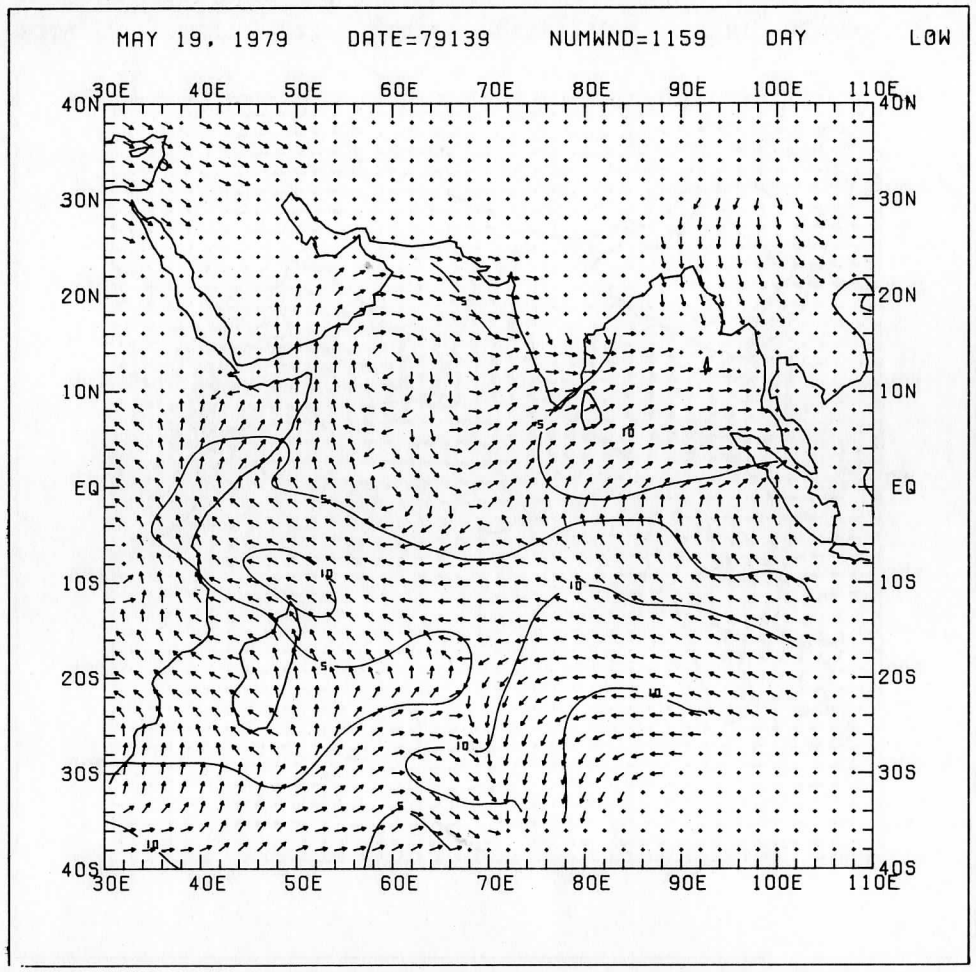

15E 30E 45E 60E 75E 90E 105E
35N 05N 05S 15S 25S
TIROS-N 17 MAY 1979 214 GMT TO 18 MAY 1979 18GMT DAY IR

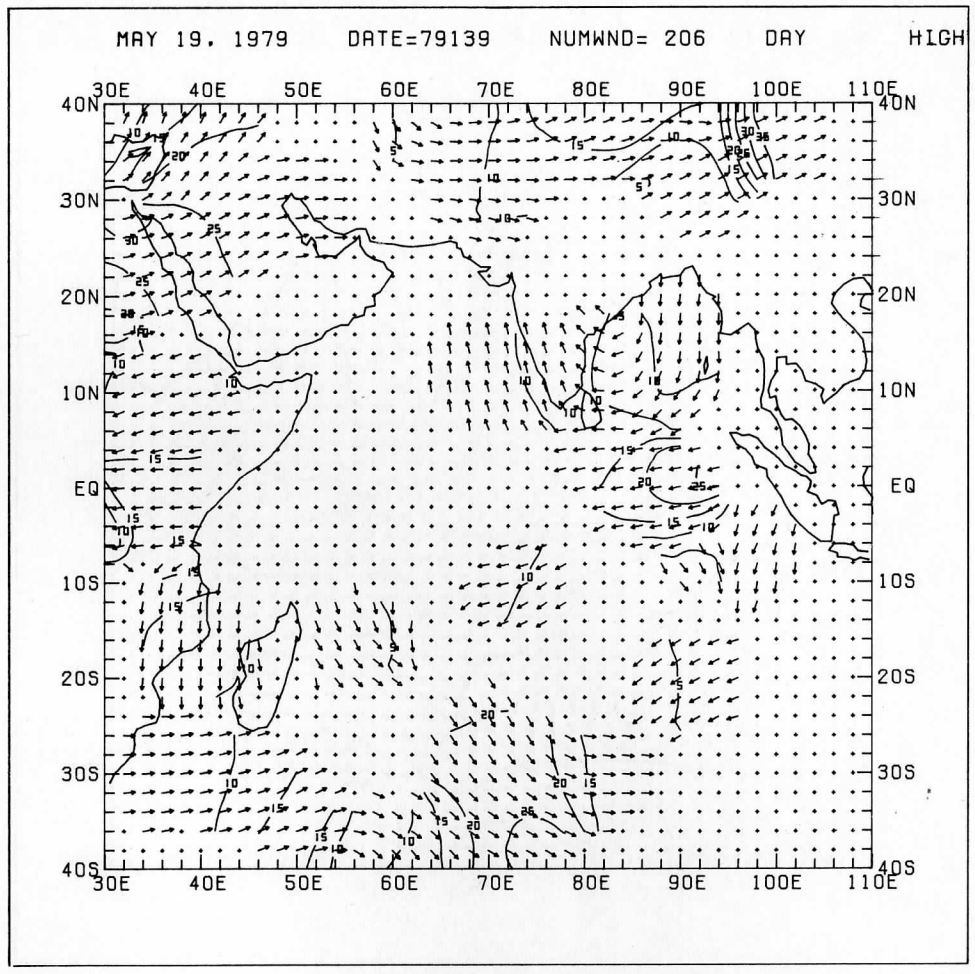

MAY 18, 1979 DATE=79138 NUMWND= 935 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

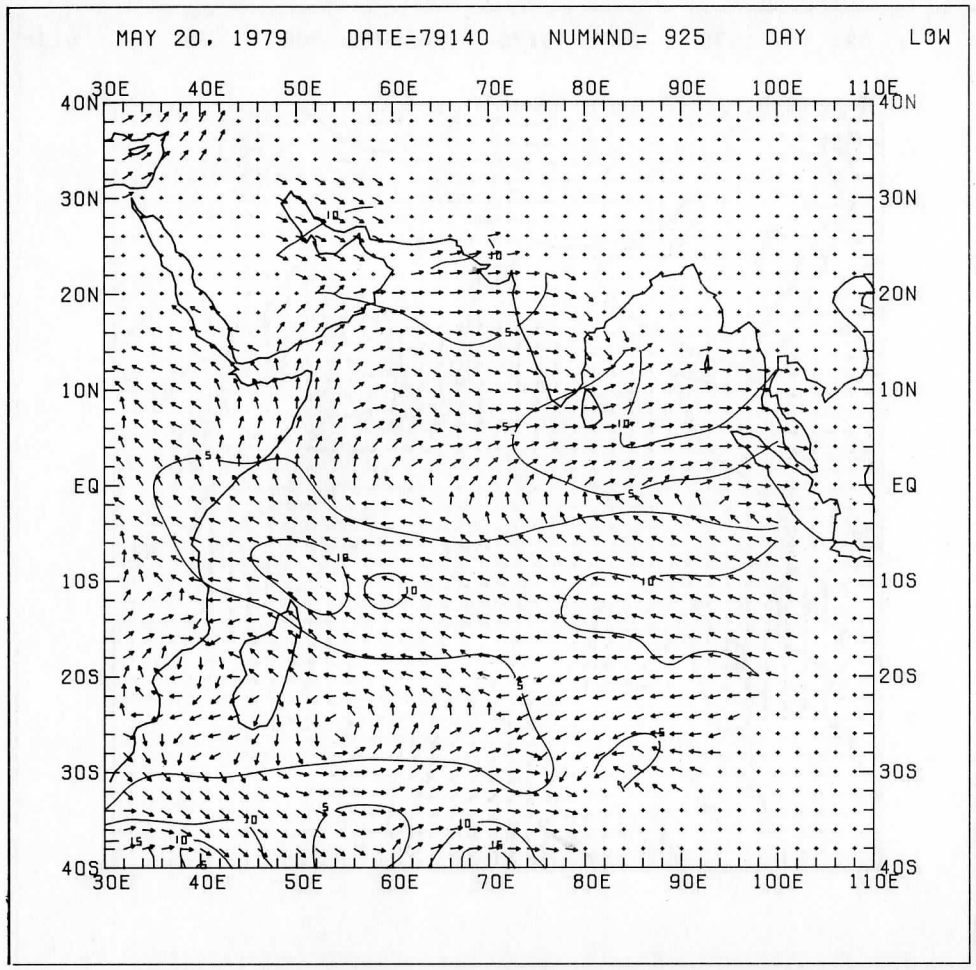

MAY 18, 1979 DATE=79138 NUMWND= 229 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

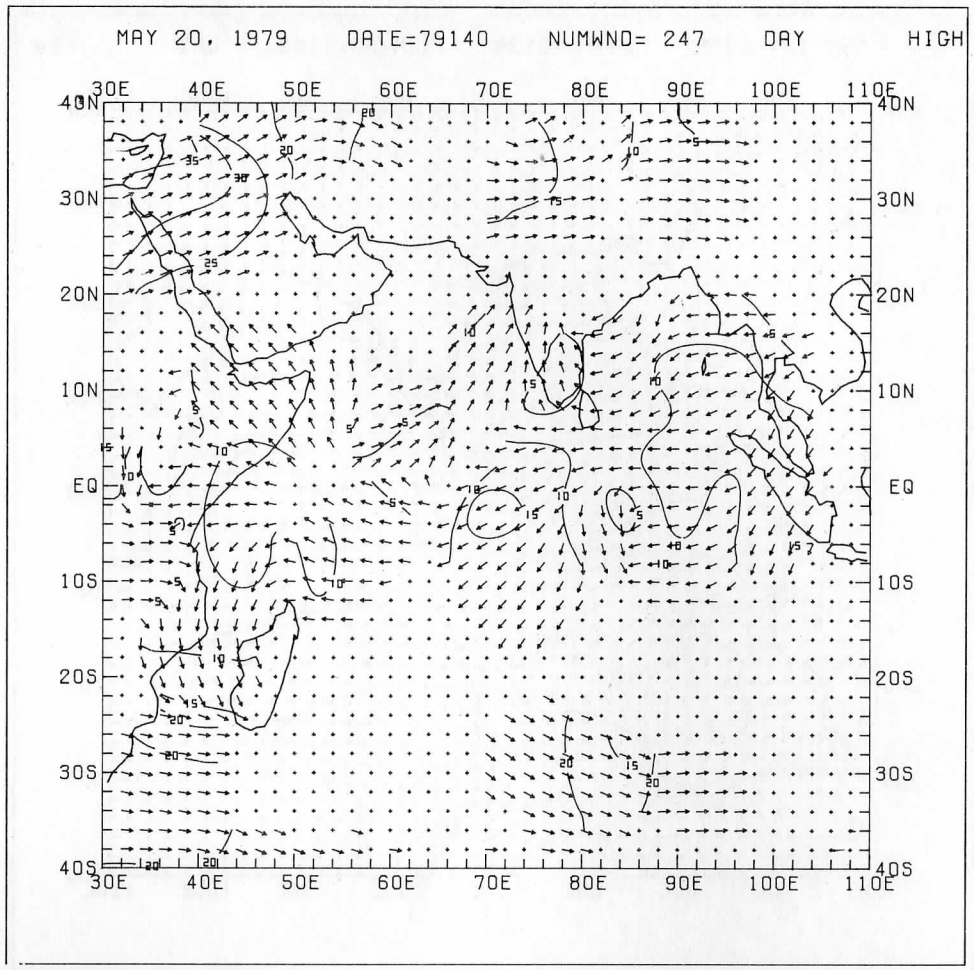

15E 30E 45E 60E 75E 90E 105E
TIROS-N 18 MAY 1979 214 GMT TO 19 MAY 1979 8GMT VISIBLE

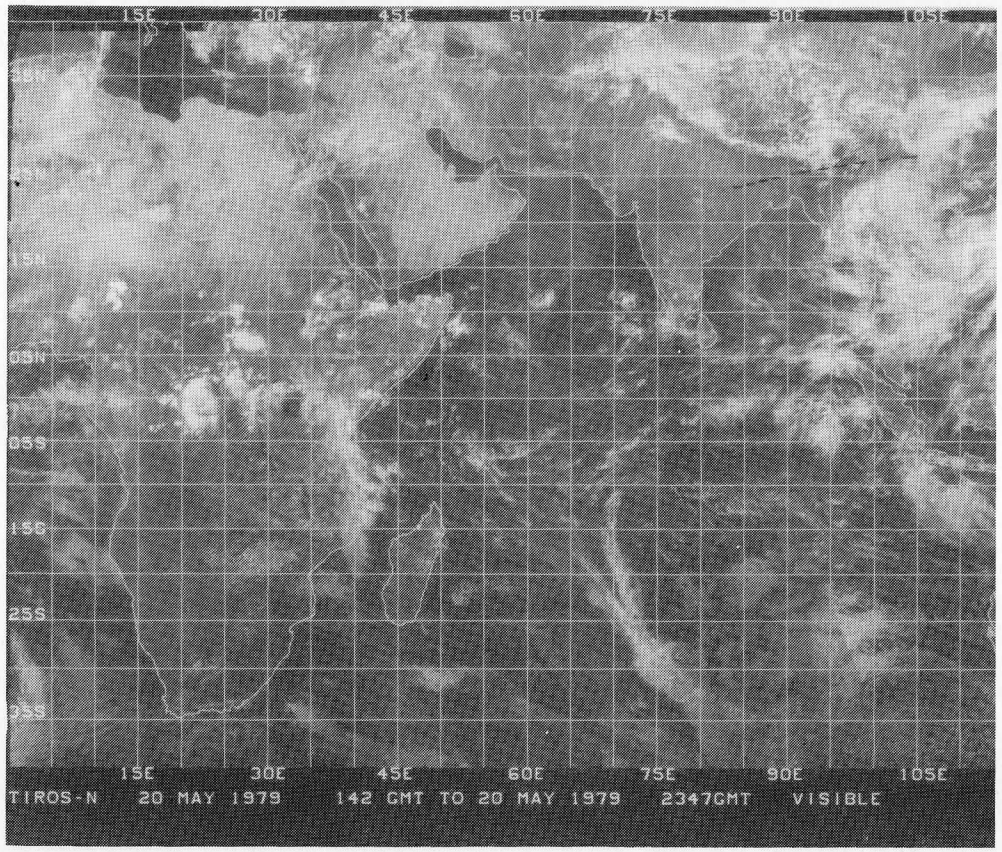

15E 30E 45E 60E 75E 90E 105E
TIROS-N 18 MAY 1979 214 GMT TO 19 MAY 1979 8GMT DAY IR

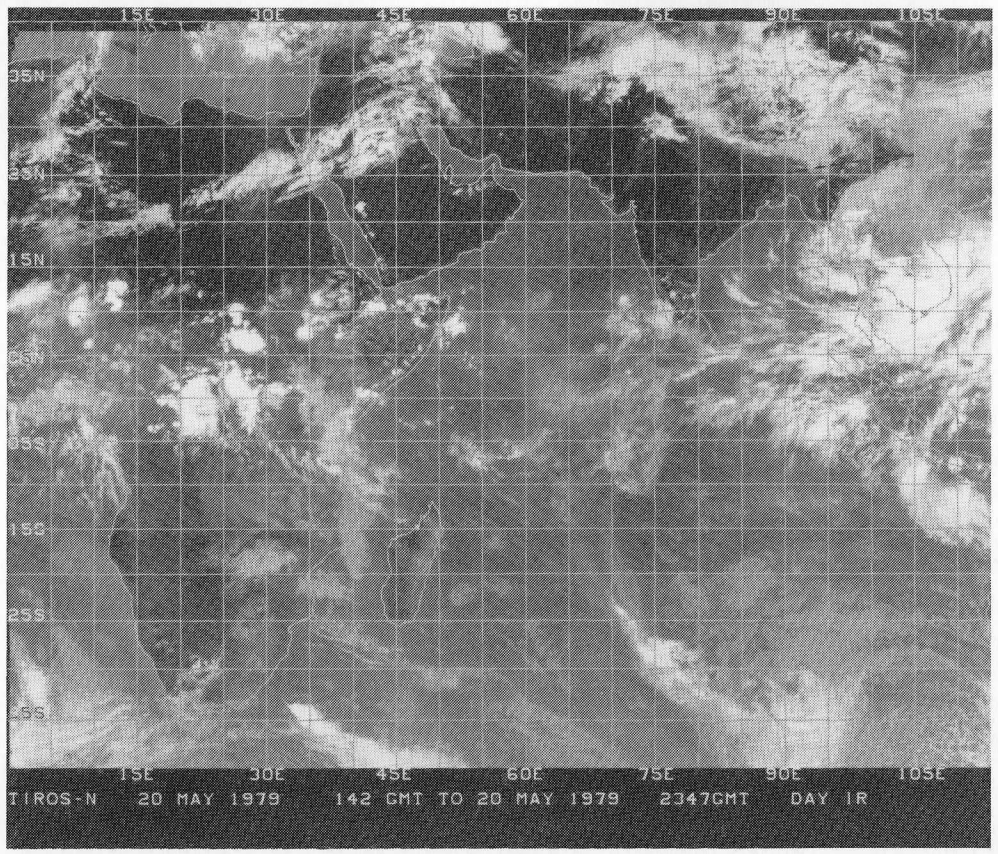

MAY 19, 1979 DATE=79139 NUMWND=1159 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

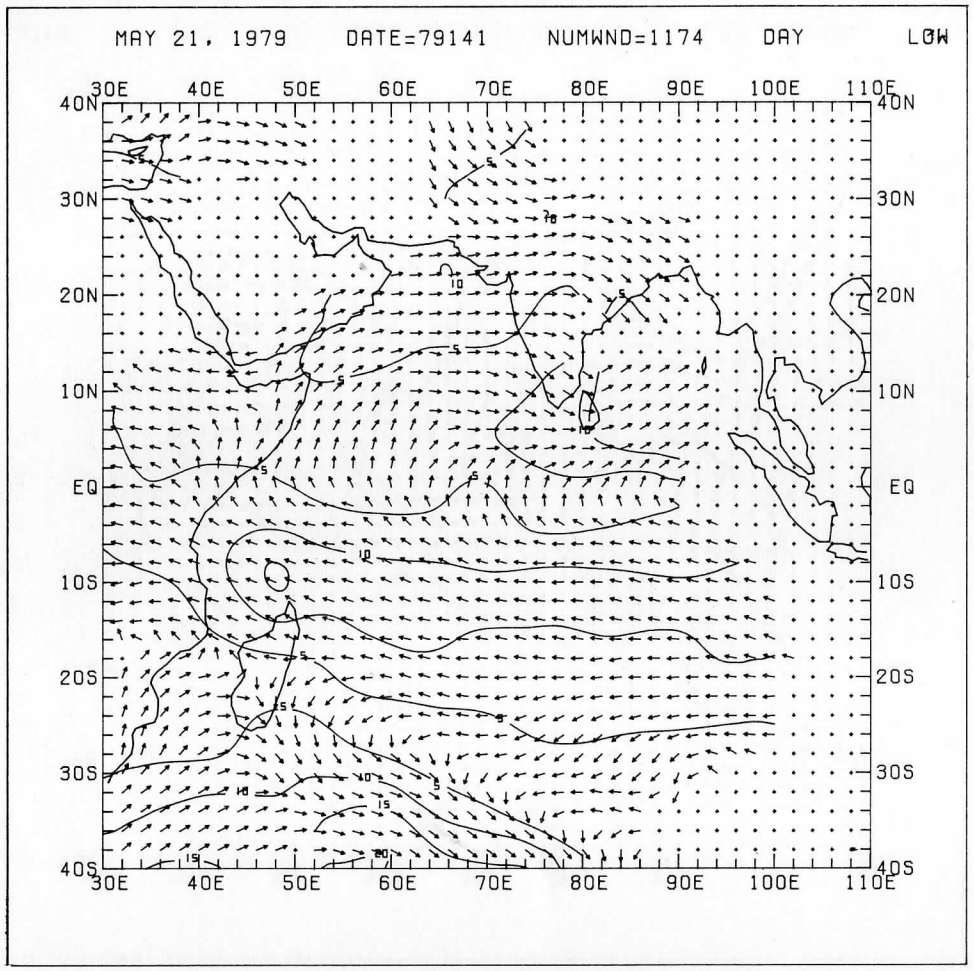

MAY 19, 1979 DATE=79139 NUMWND= 206 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

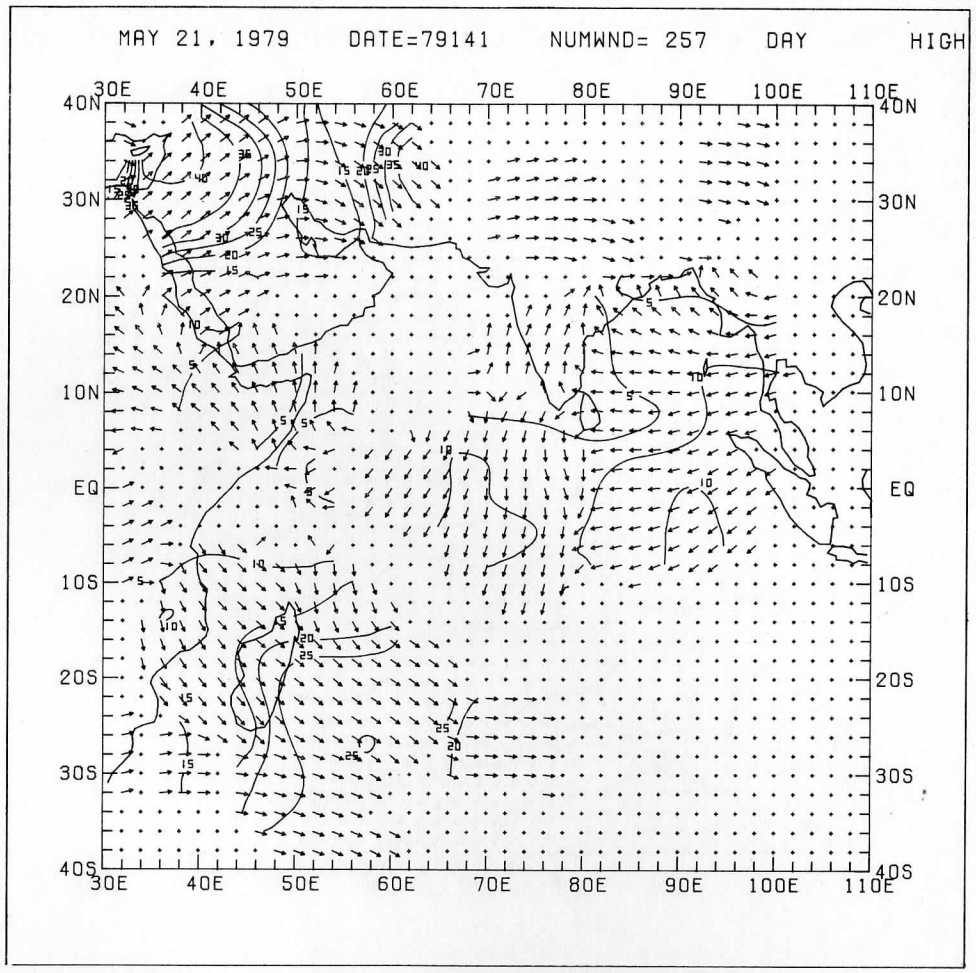

MAY 20, 1979 DATE=79140 NUMWND= 925 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

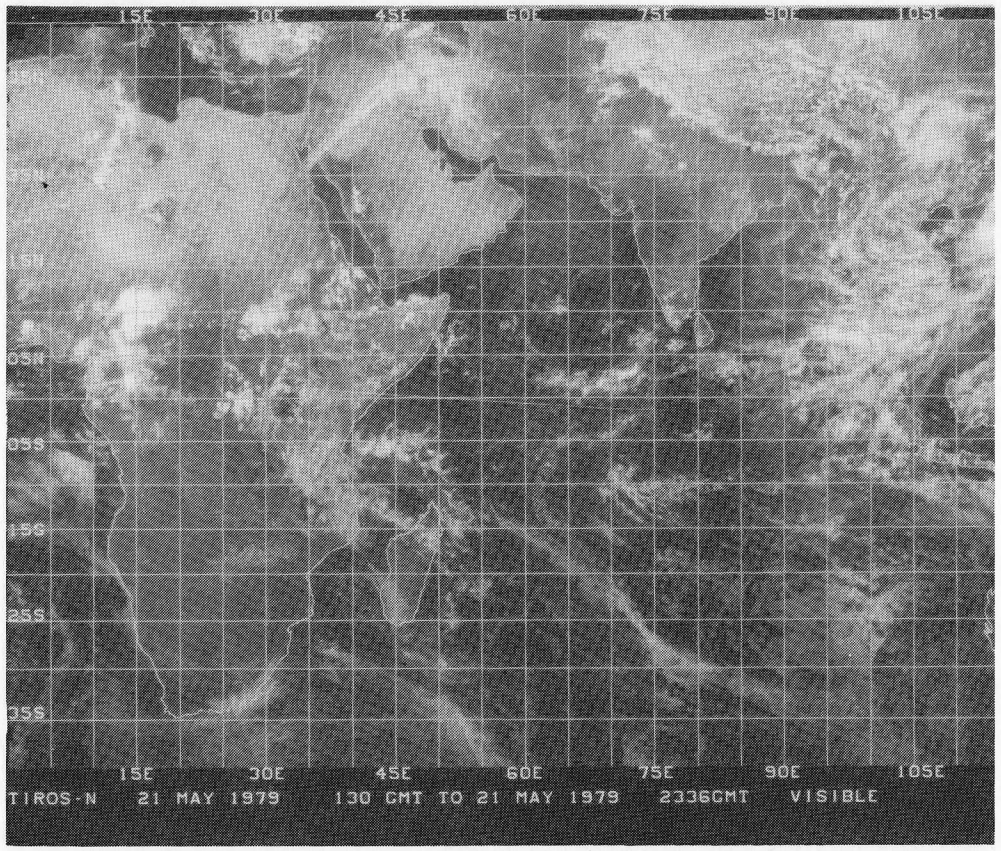

MAY 20, 1979 DATE=79140 NUMWND= 247 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

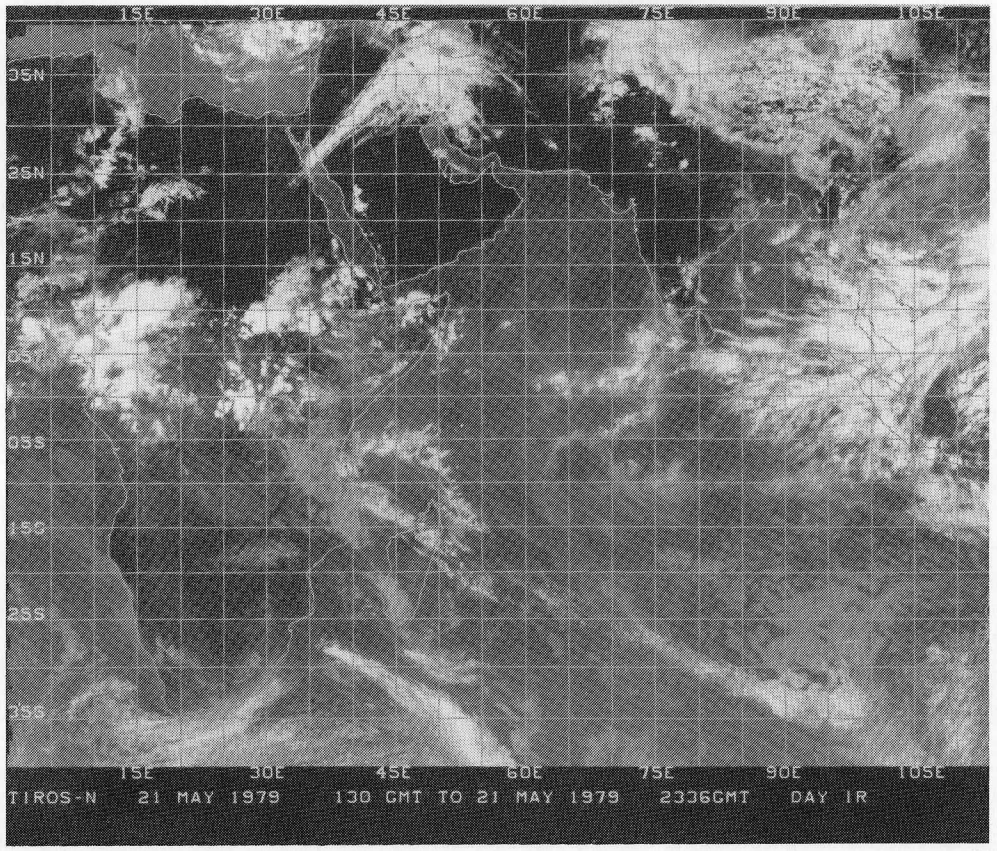

15E 30E 45E 60E 75E 90E 105E
TIROS-N 20 MAY 1979 142 GMT TO 20 MAY 1979 2347GMT VISIBLE

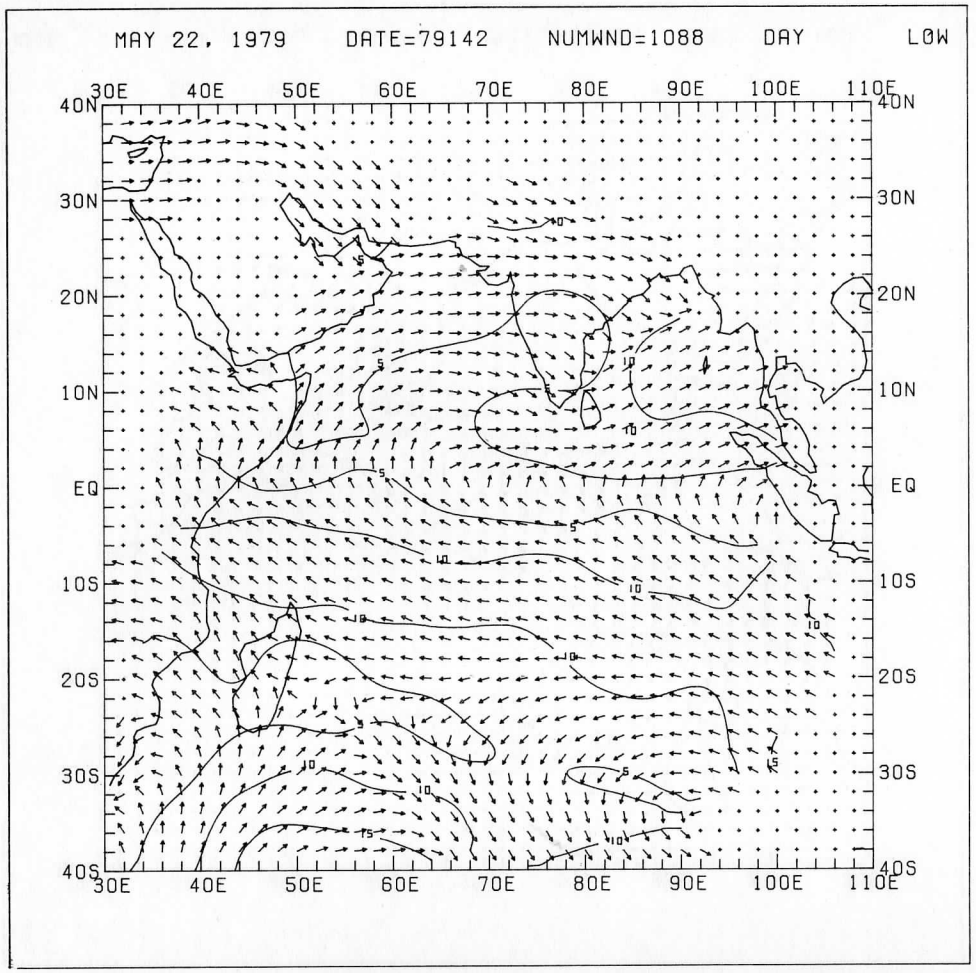

15E 30E 45E 60E 75E 90E 105E
TIROS-N 20 MAY 1979 142 GMT TO 20 MAY 1979 2347GMT DAY IR

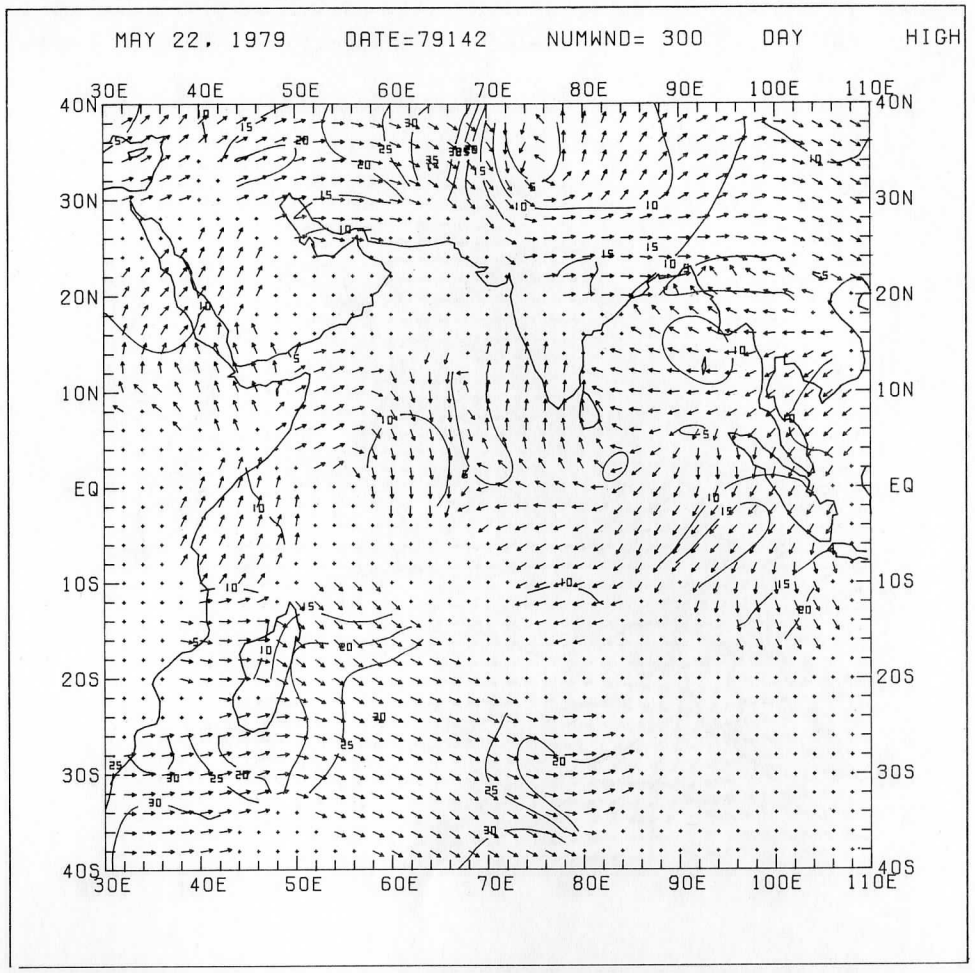

MAY 21, 1979 DATE=79141 NUMWND=1174 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

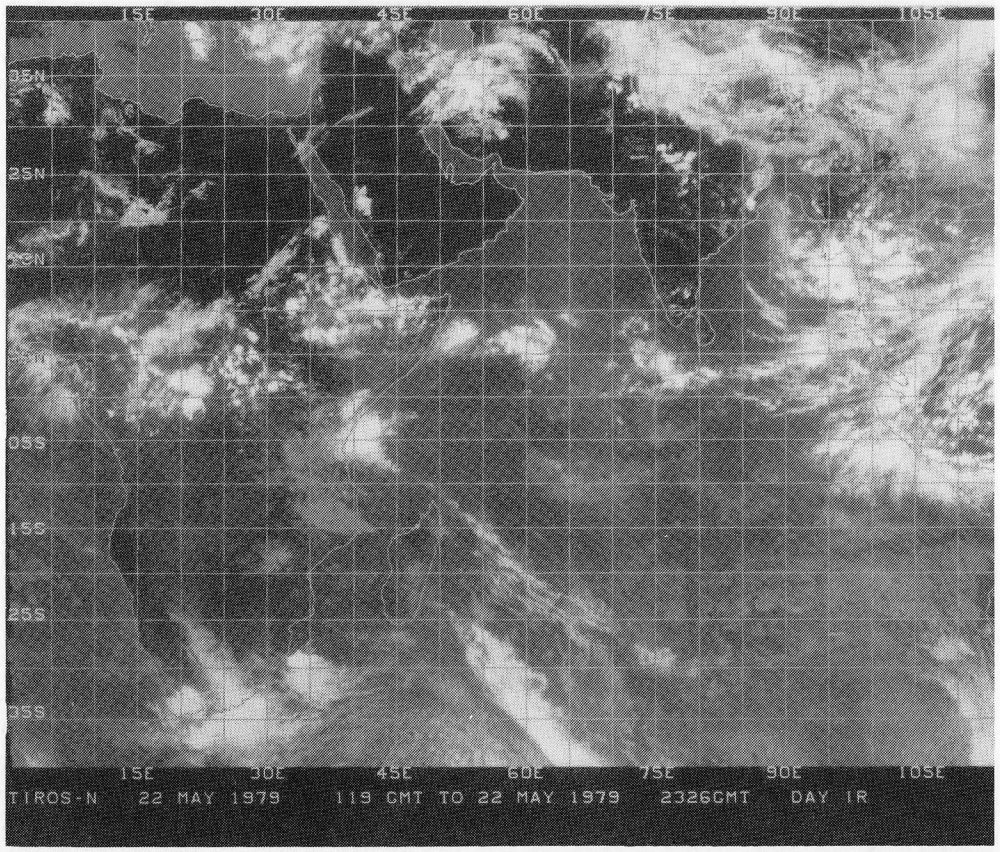

MAY 21, 1979 DATE=79141 NUMWND= 257 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

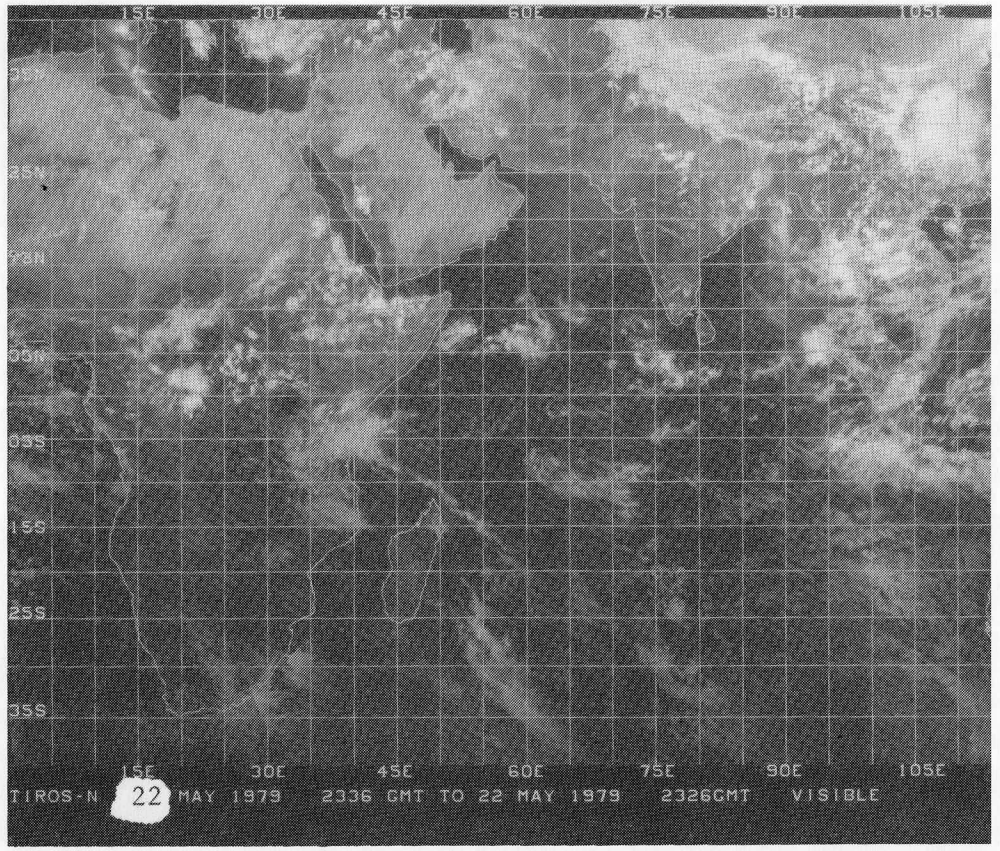

15E 30E 45E 60E 75E 90E 105E
TIROS-N 21 MAY 1979 130 GMT TO 21 MAY 1979 2336GMT VISIBLE

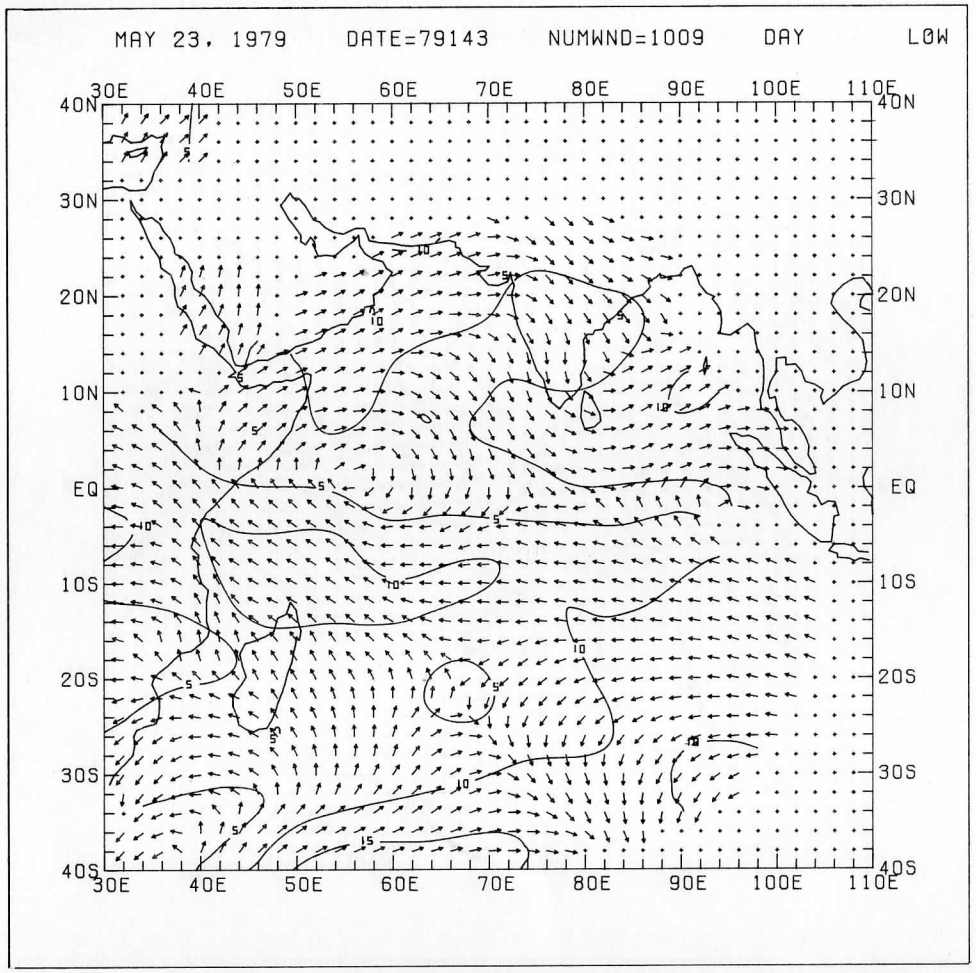

15E 30E 45E 60E 75E 90E 105E
TIROS-N 21 MAY 1979 130 GMT TO 21 MAY 1979 2336GMT DAY IR

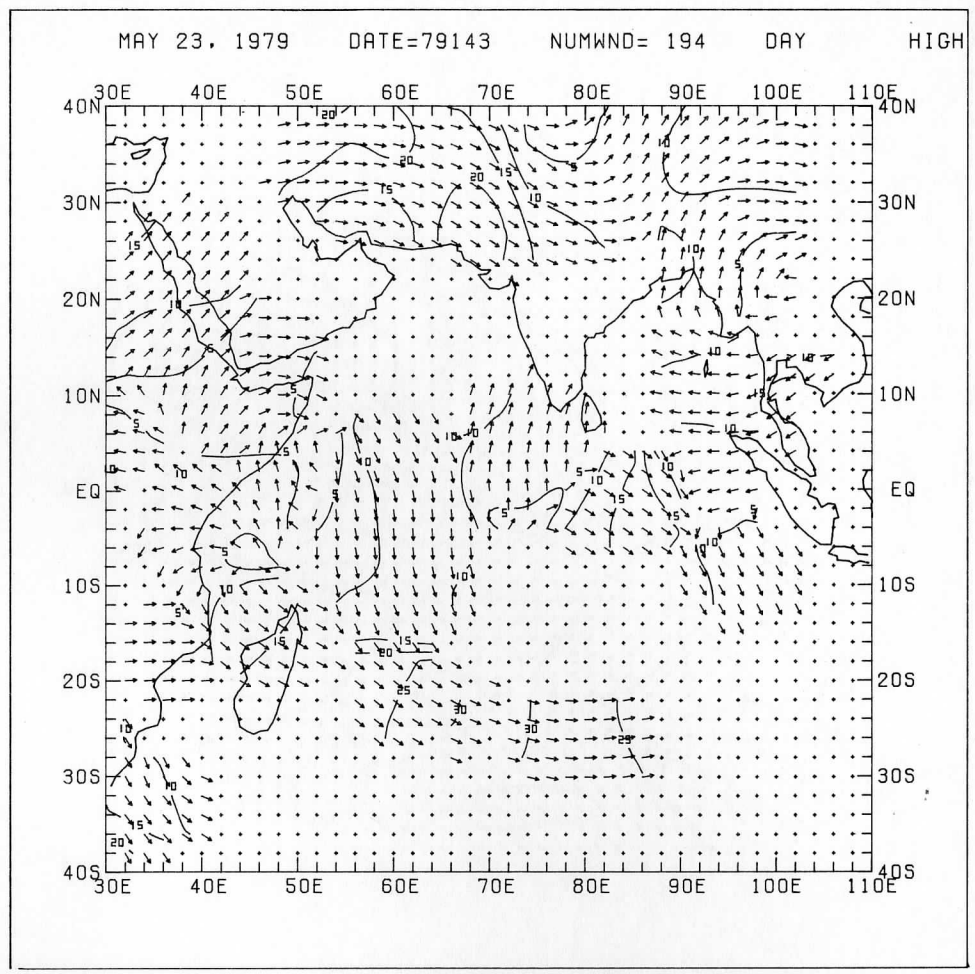

MAY 22, 1979 DATE=79142 NUMWND=1088 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

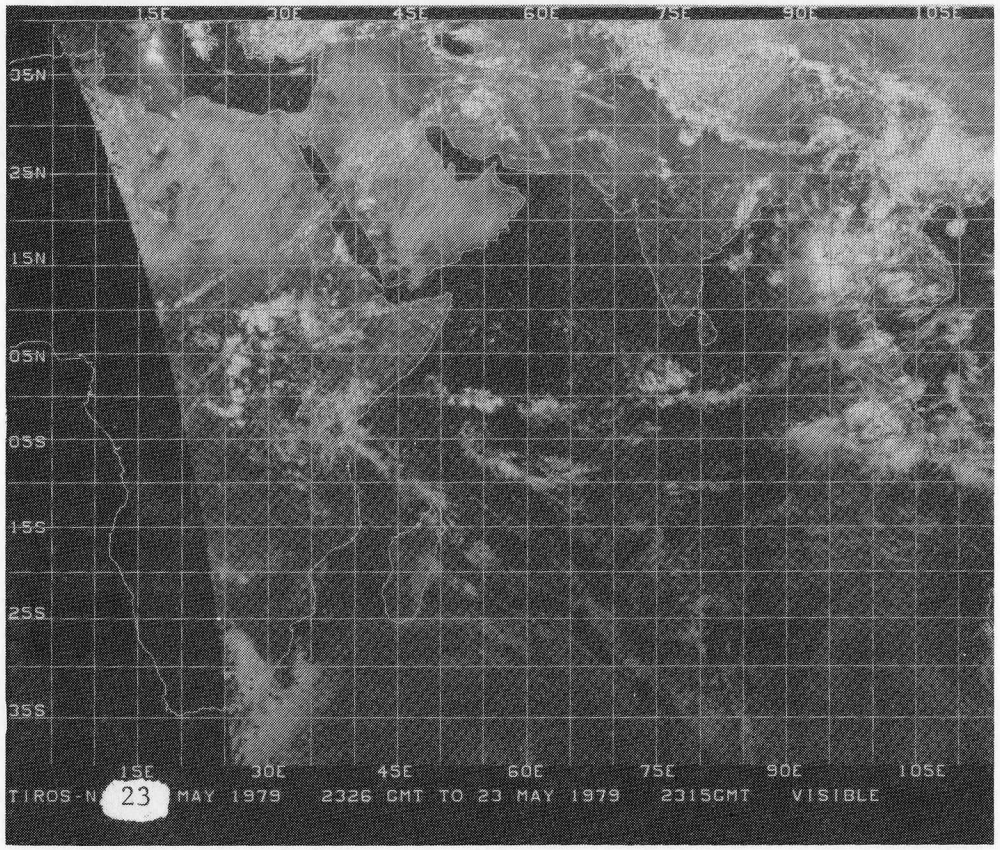

MAY 22, 1979 DATE=79142 NUMWND= 300 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

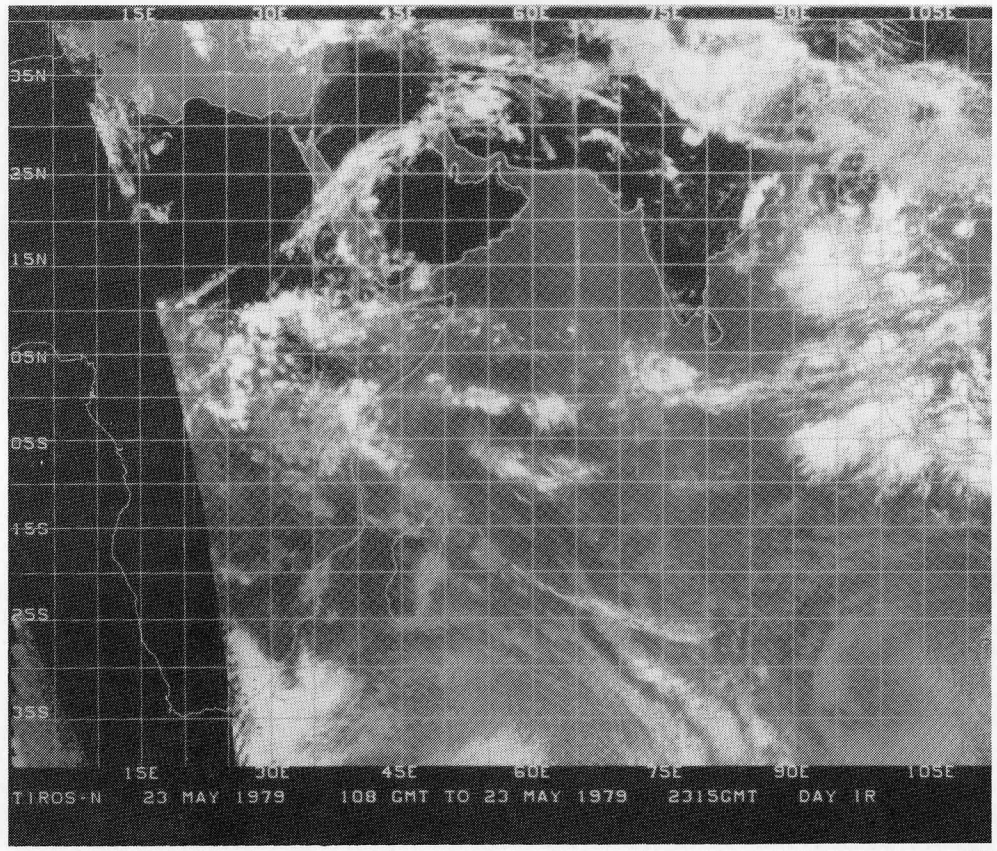

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 22 MAY 1979 119 GMT TO 22 MAY 1979 2326GMT DAY IR

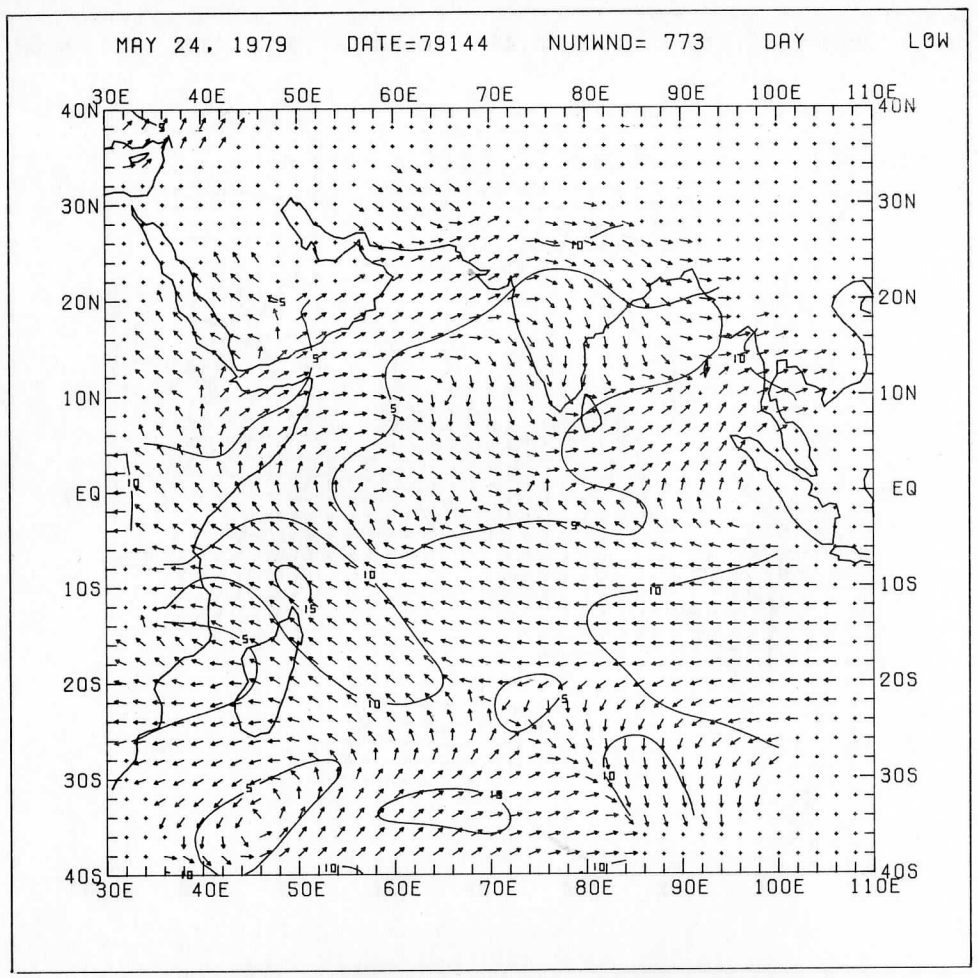

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 22 MAY 1979 2336 GMT TO 22 MAY 1979 2326GMT VISIBLE

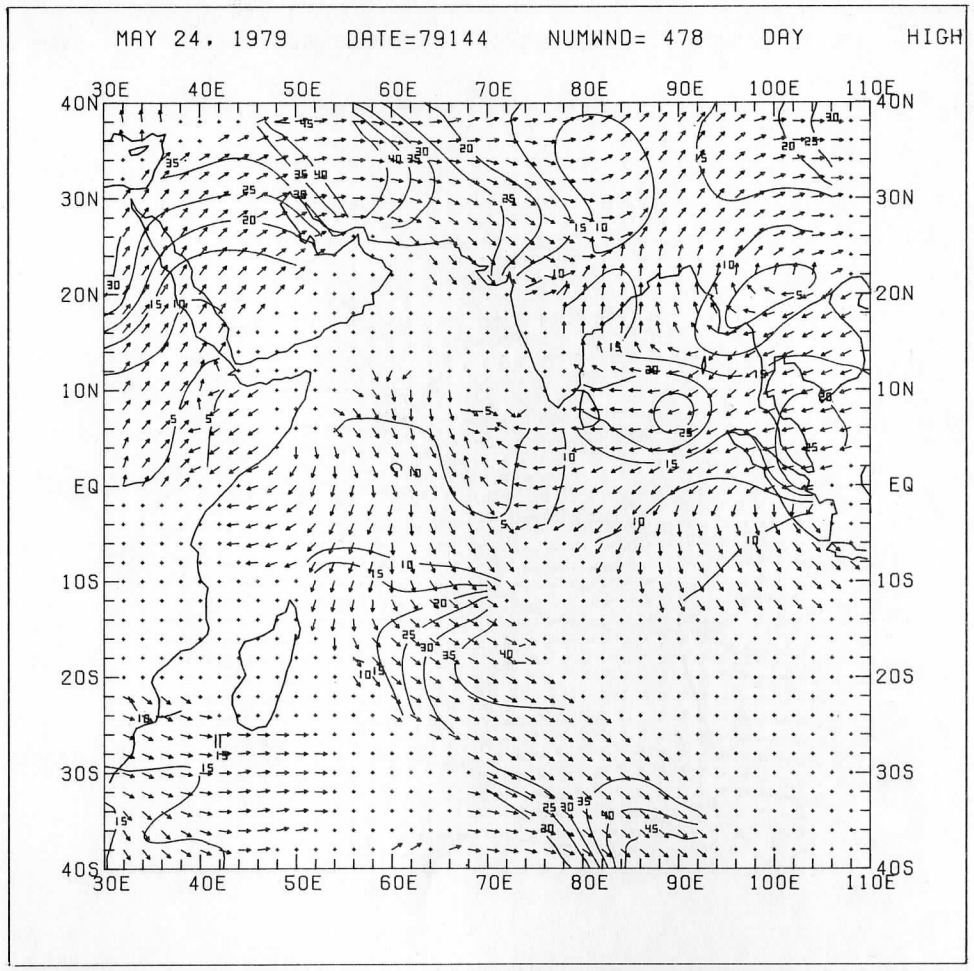

MAY 23, 1979 DATE=79143 NUMWND=1009 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

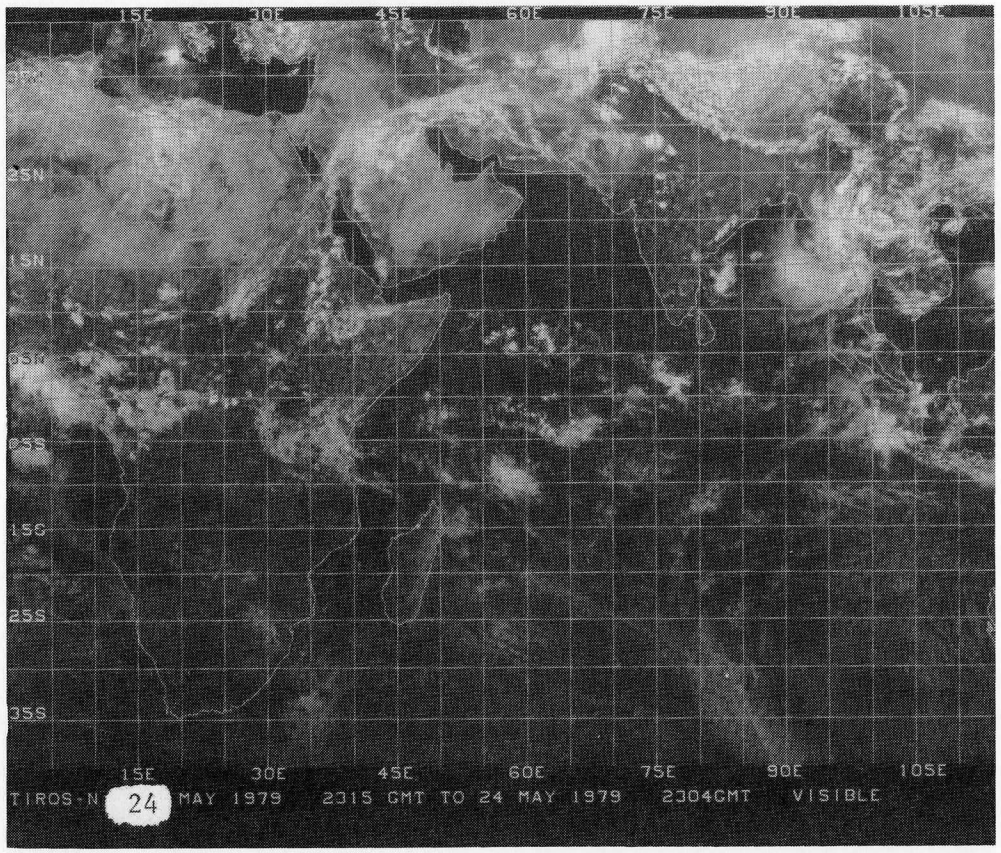

MAY 23, 1979 DATE=79143 NUMWND= 194 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

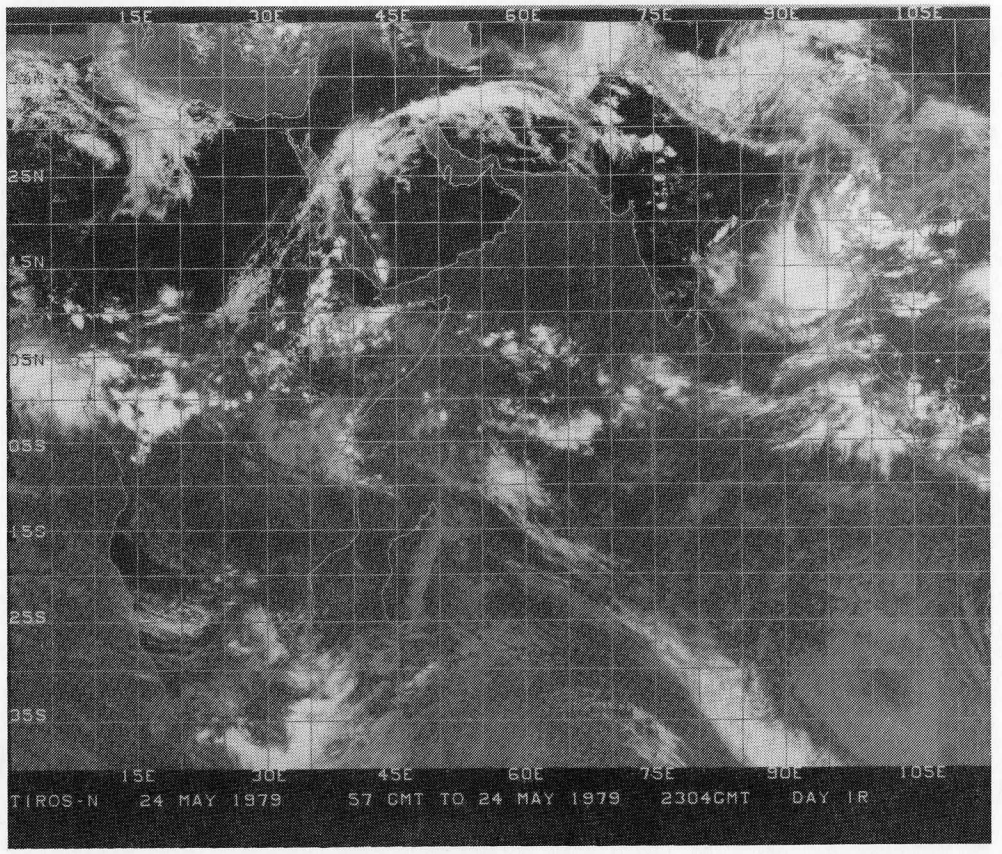

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 23 MAY 1979 2326 GMT TO 23 MAY 1979 2315GMT VISIBLE

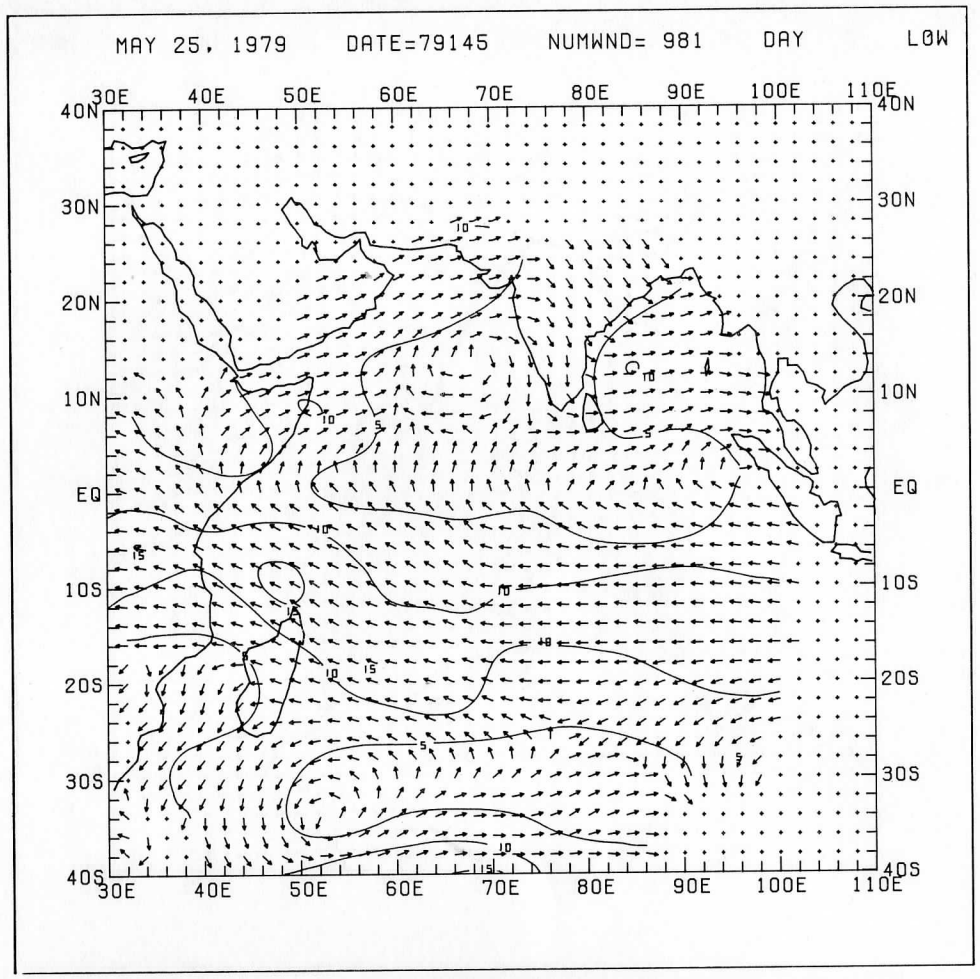

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 23 MAY 1979 108 GMT TO 23 MAY 1979 2315GMT DAY IR

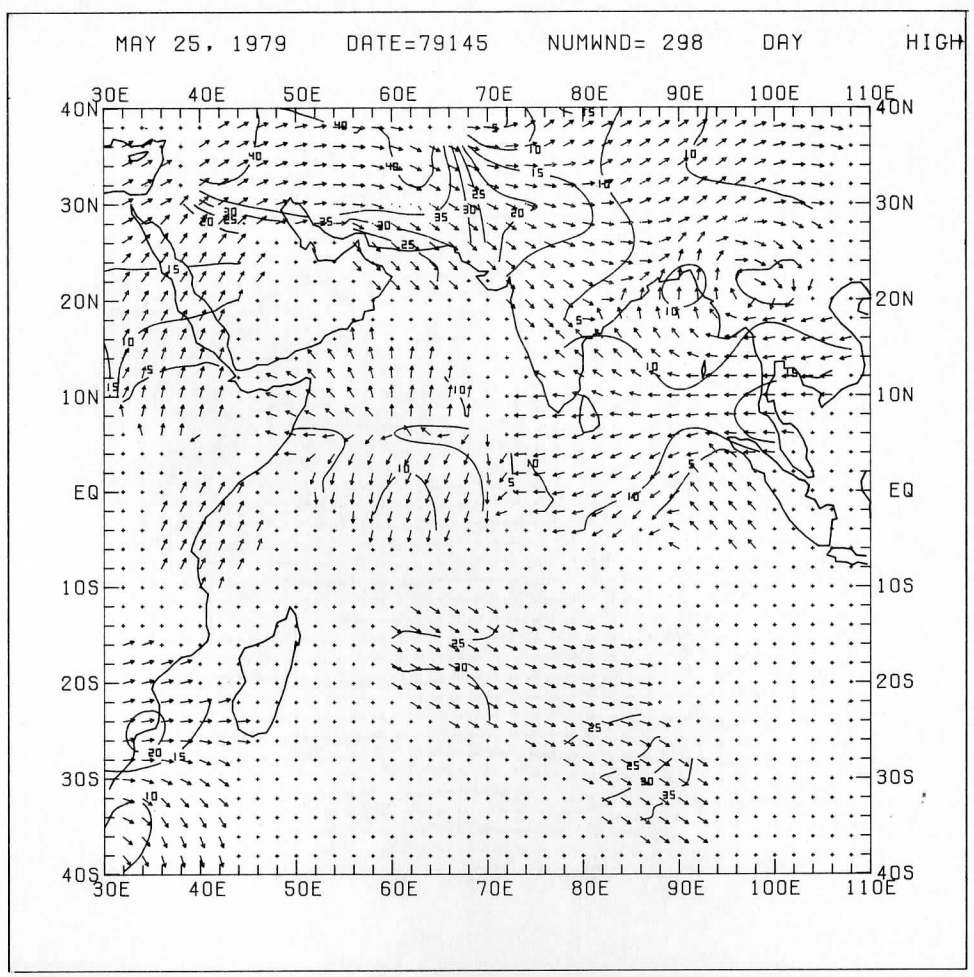

MAY 24, 1979 DATE=79144 NUMWND= 773 DAY L0W
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

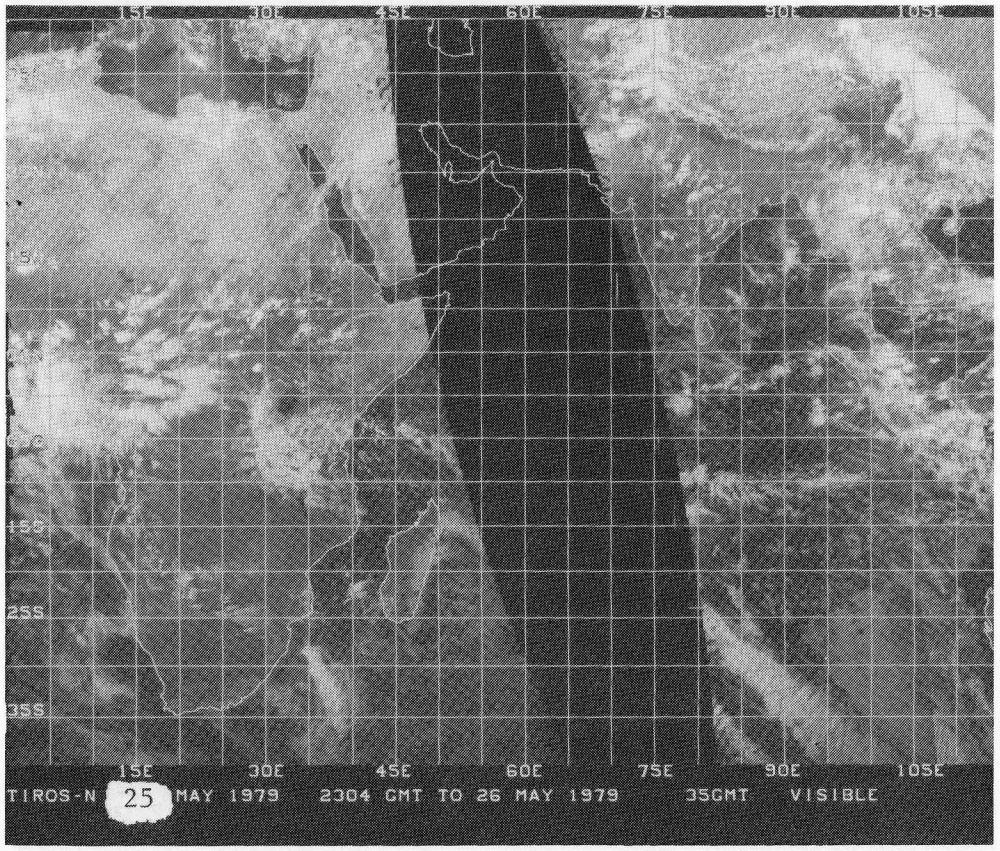

MAY 24, 1979 DATE=79144 NUMWND= 478 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

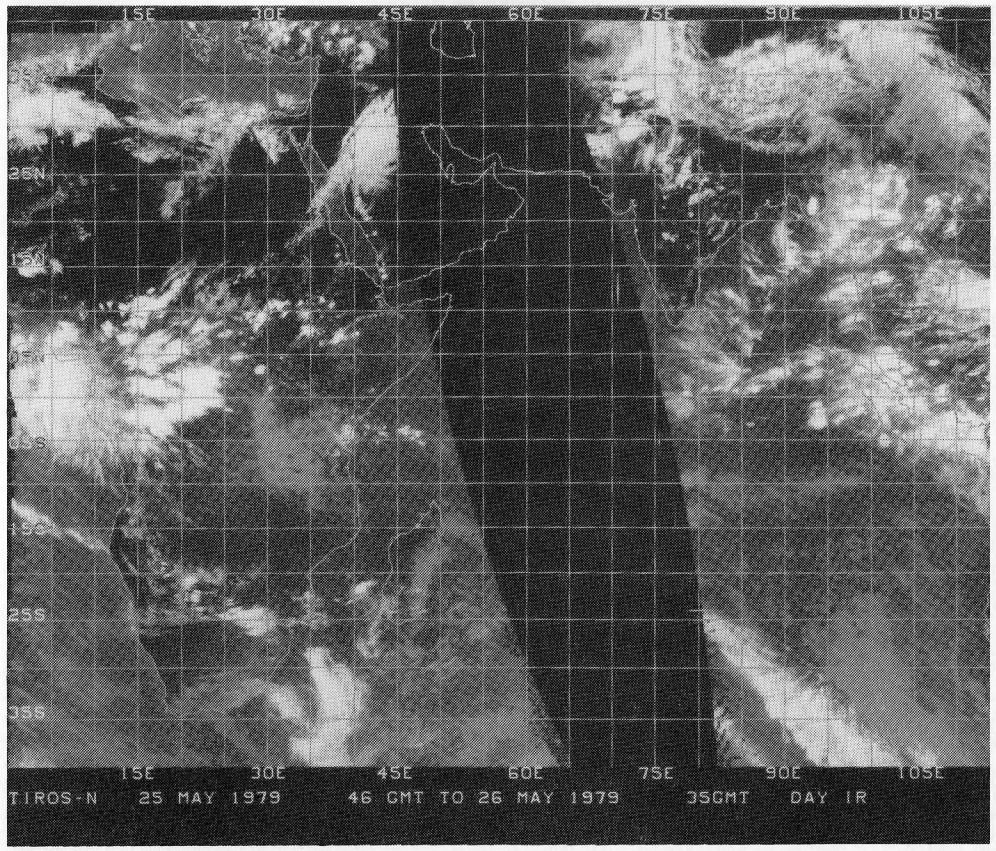

15E 30E 45E 60E 75E 90E 105E
25N 15N 05N 05S 15S 25S 35S
TIROS-N 24 MAY 1979 2315 GMT TO 24 MAY 1979 2304GMT VISIBLE

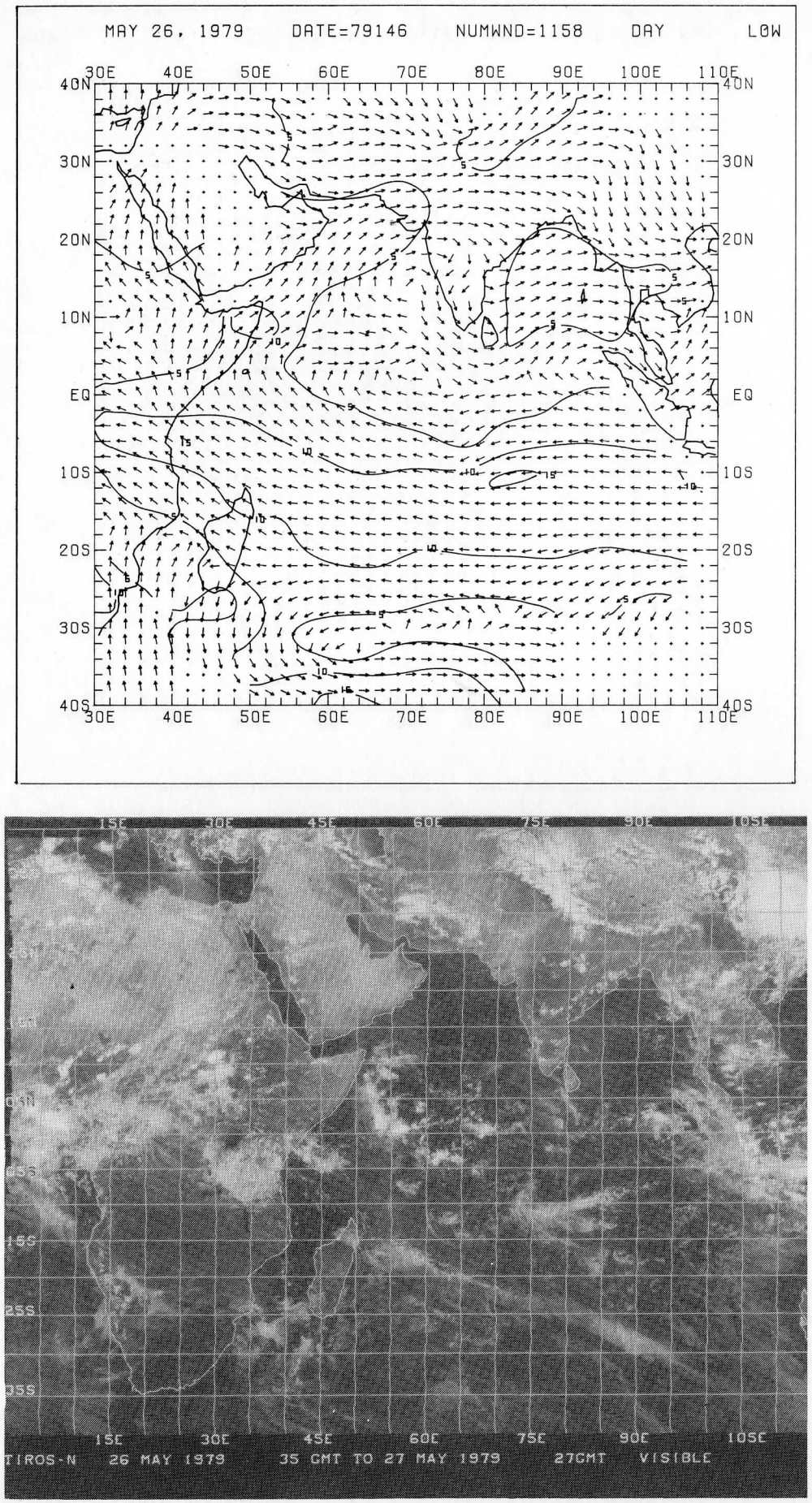

15E 30E 45E 60E 75E 90E 105E
25N 15N 05N 05S 15S 25S 35S
TIROS-N 24 MAY 1979 57 GMT TO 24 MAY 1979 2304GMT DAY IR

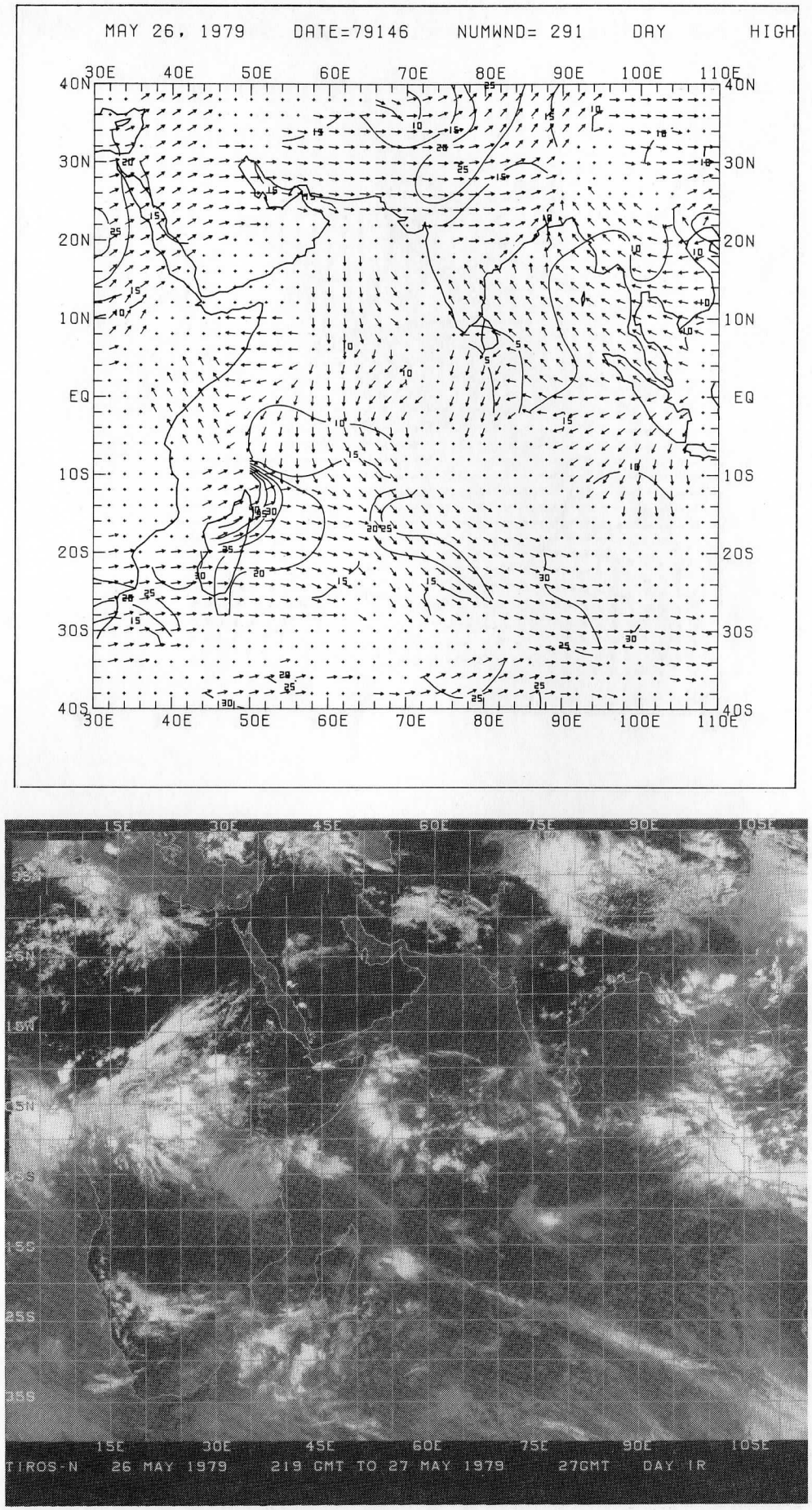

MAY 25, 1979 DATE=79145 NUMWND= 981 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

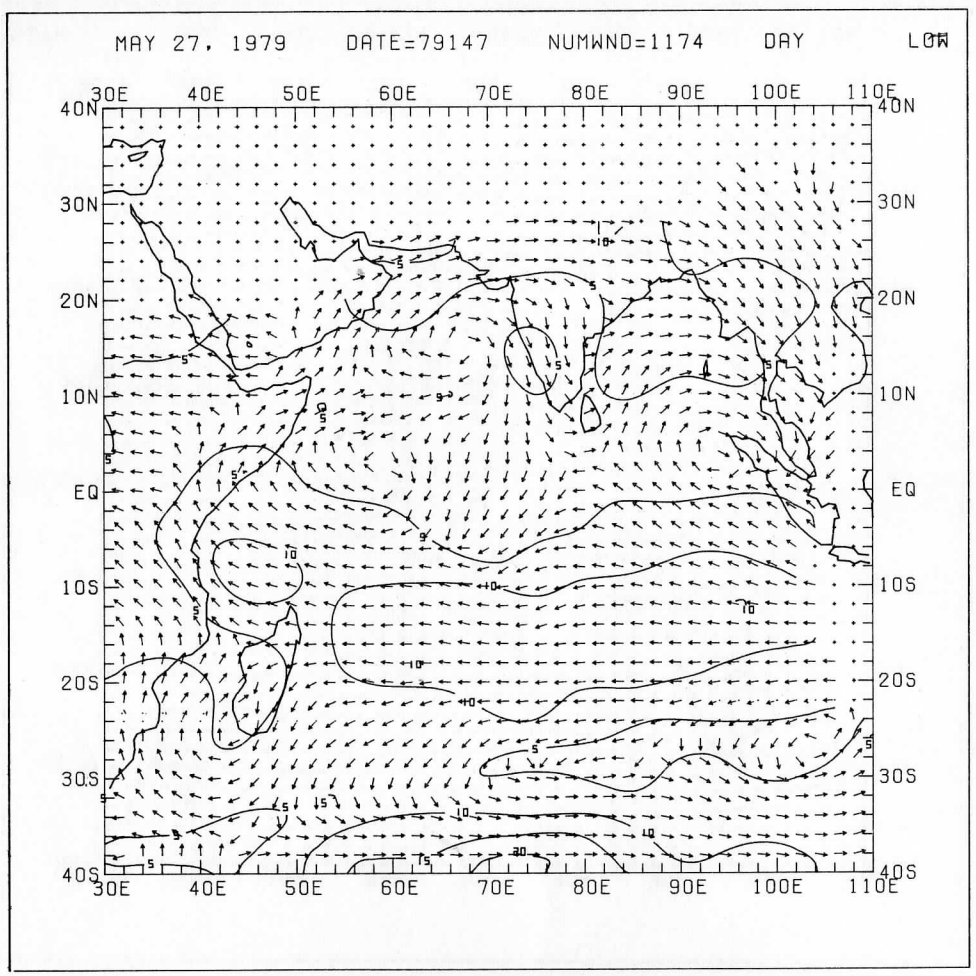

MAY 25, 1979 DATE=79145 NUMWND= 298 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

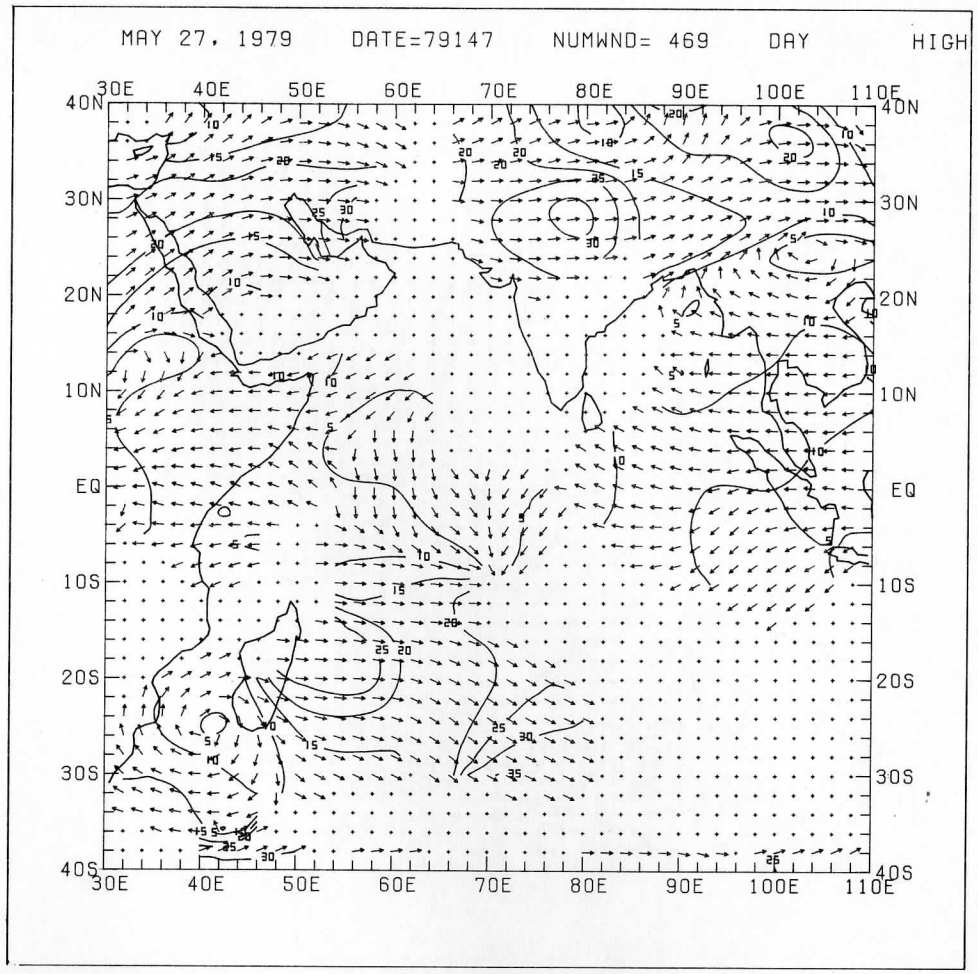

15E 30E 45E 60E 75E 90E 105E
TIROS-N 25 MAY 1979 2304 GMT TO 26 MAY 1979 35GMT VISIBLE

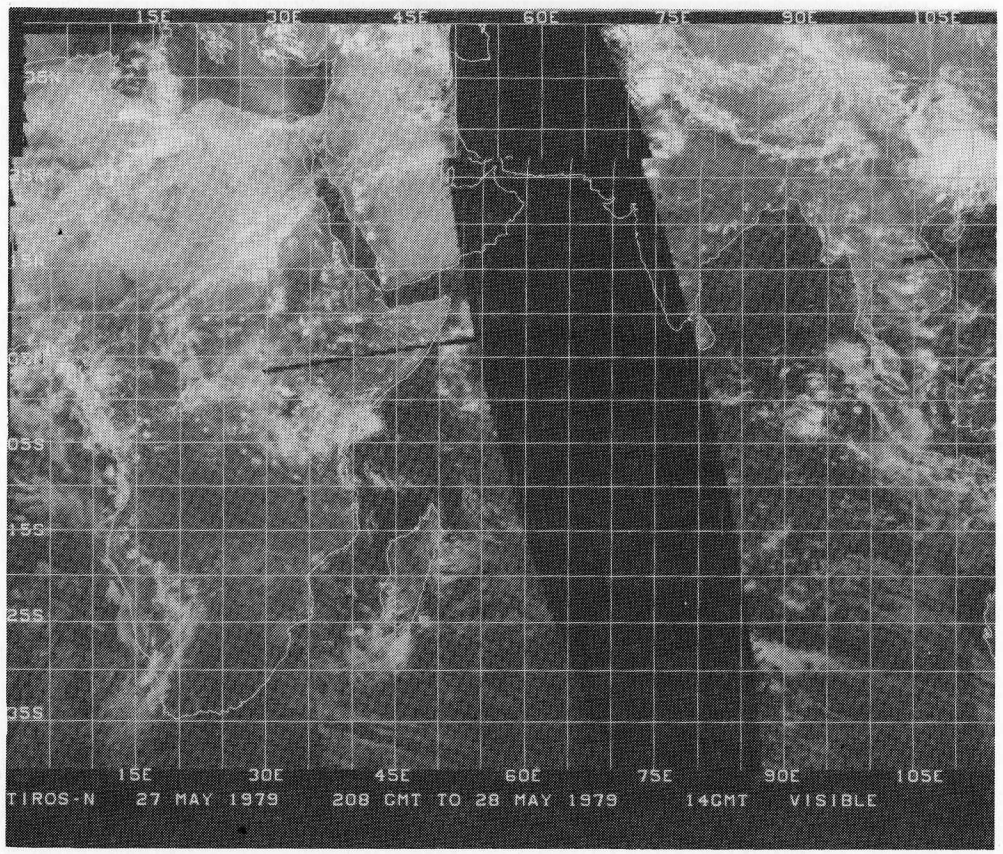

15E 30E 45E 60E 75E 90E 105E
TIROS-N 25 MAY 1979 46 GMT TO 26 MAY 1979 35GMT DAY IR

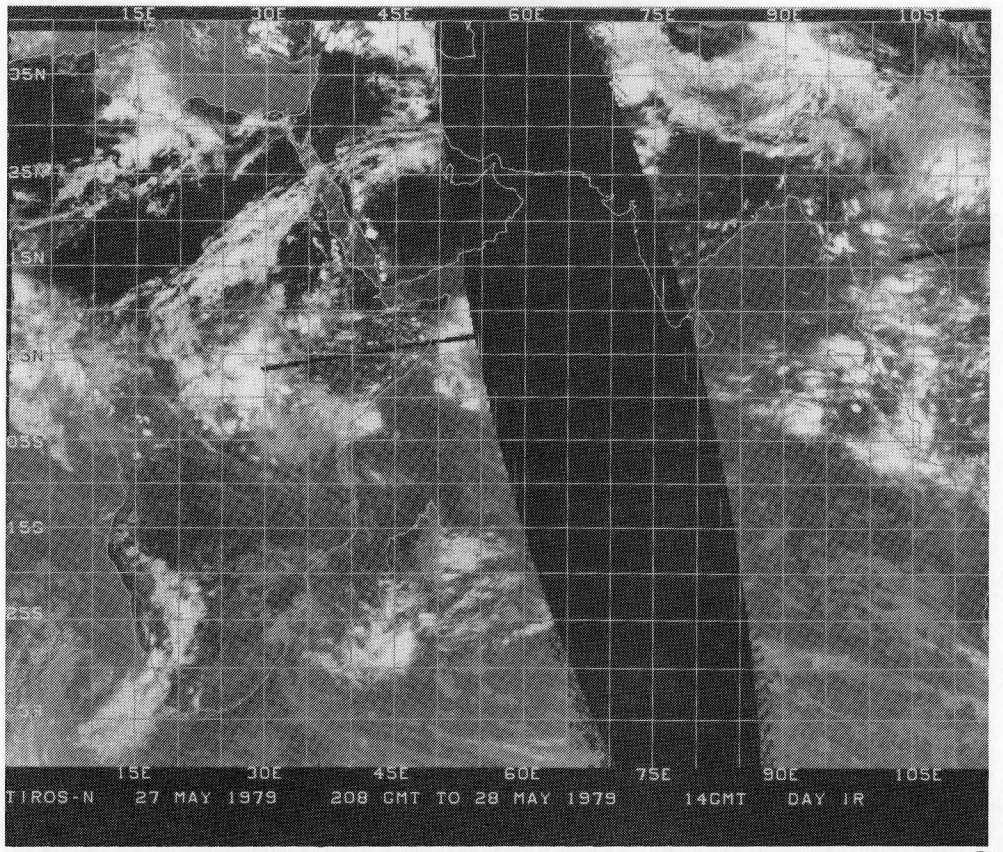

MAY 26, 1979 DATE=79146 NUMWND=1158 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S
15E 30E 45E 60E 75E 90E 105E
TIROS-N 26 MAY 1979 35 GMT TO 27 MAY 1979 27GMT VISIBLE

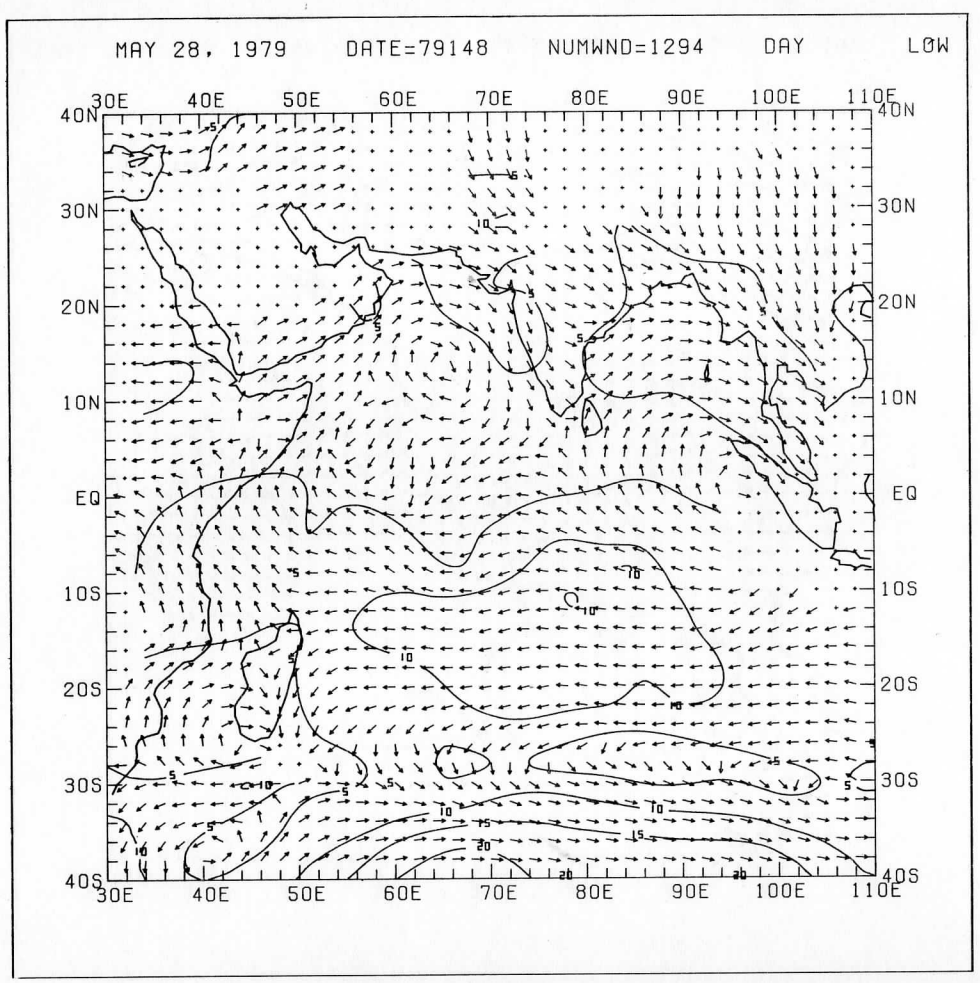

MAY 26, 1979 DATE=79146 NUMWND= 291 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S
15E 30E 45E 60E 75E 90E 105E
TIROS-N 26 MAY 1979 219 GMT TO 27 MAY 1979 27GMT DAY IR

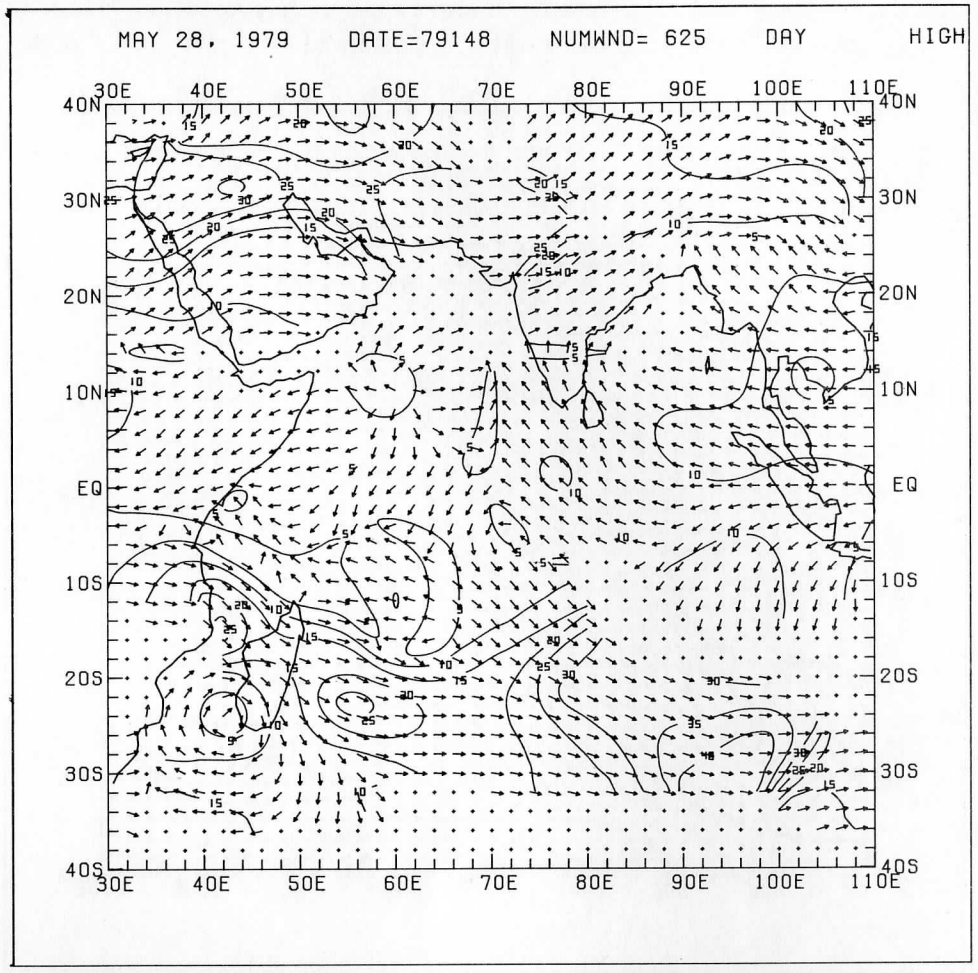

MAY 27, 1979 DATE=79147 NUMWND=1174 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

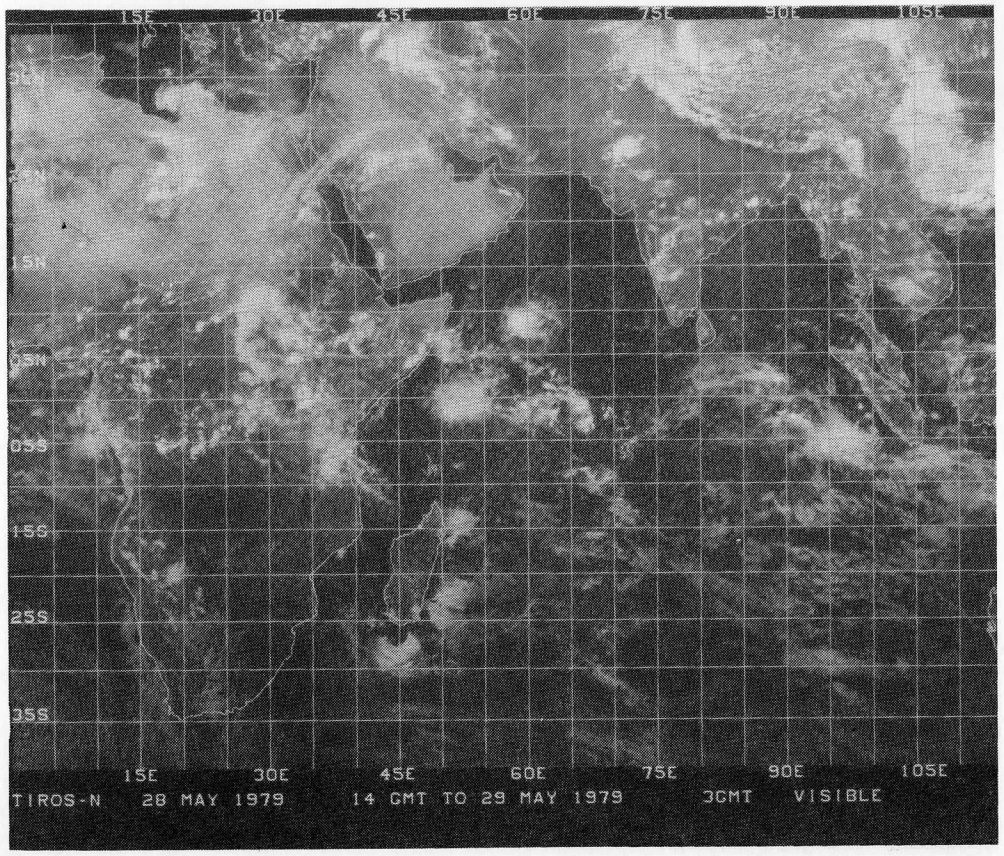

MAY 27, 1979 DATE=79147 NUMWND= 469 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

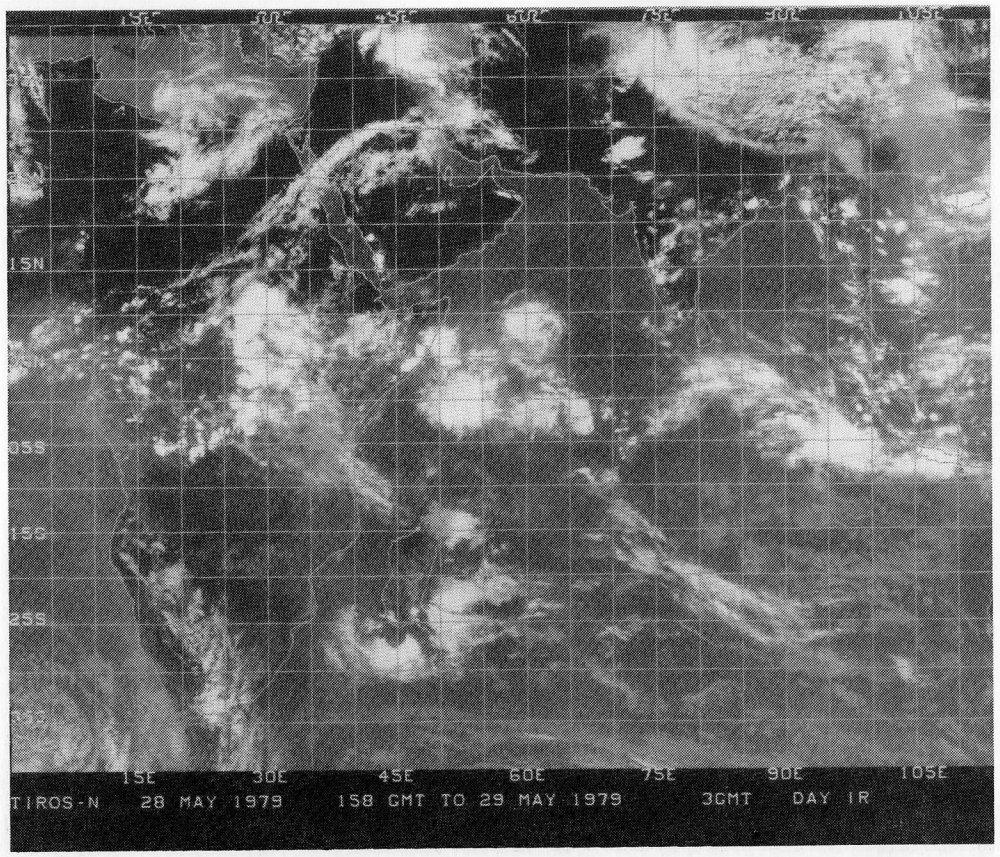

15E 30E 45E 60E 75E 90E 105E
TIROS-N 27 MAY 1979 208 GMT TO 28 MAY 1979 14GMT VISIBLE

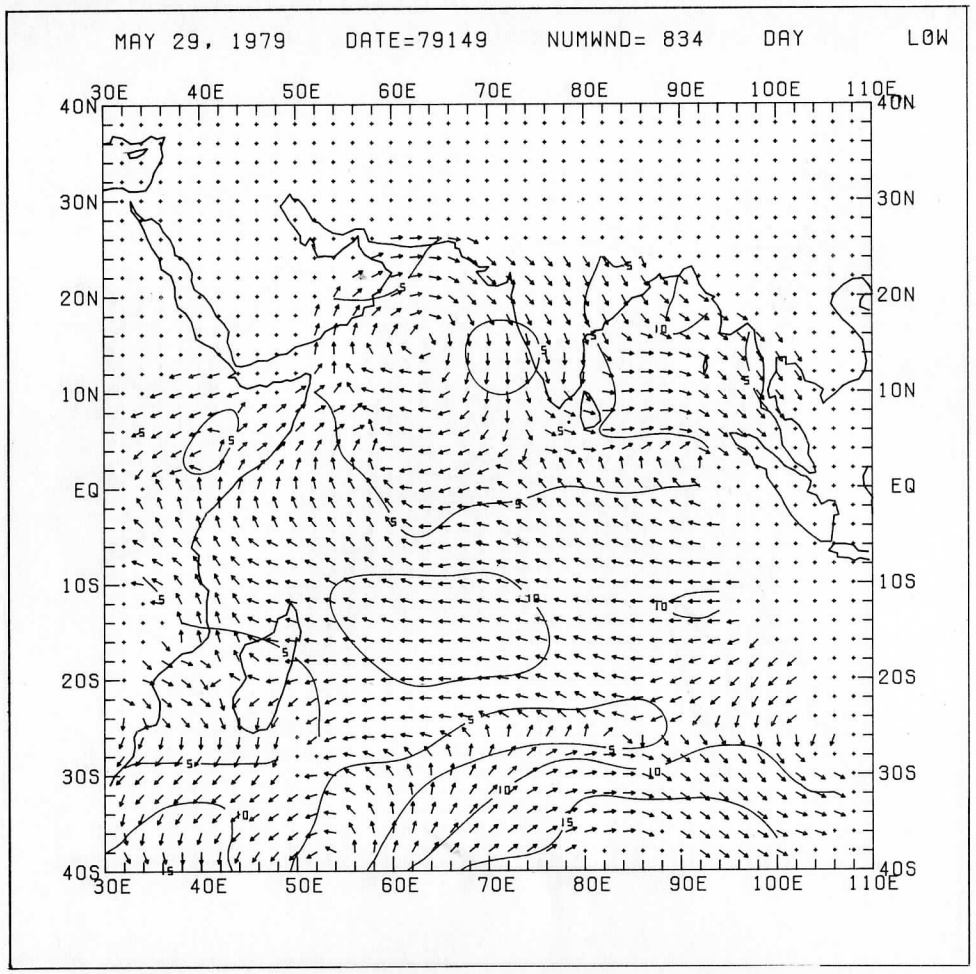

15E 30E 45E 60E 75E 90E 105E
TIROS-N 27 MAY 1979 208 GMT TO 28 MAY 1979 14GMT DAY IR

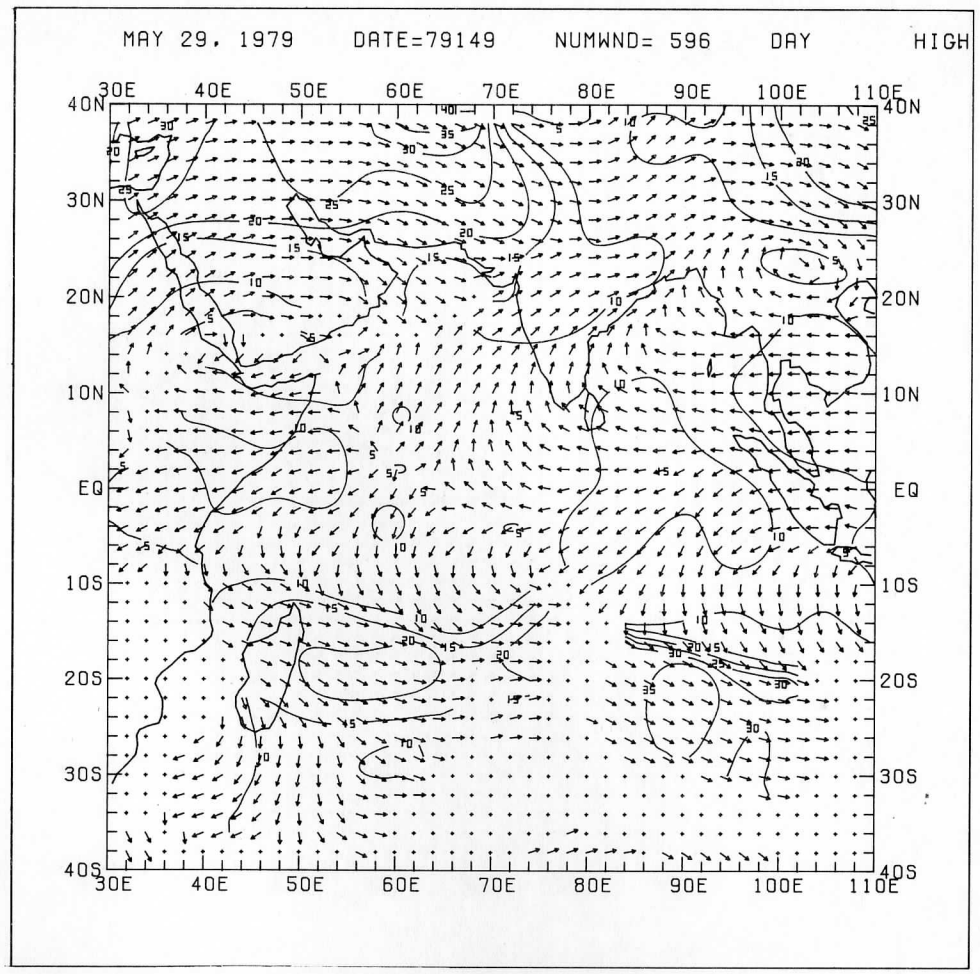

MAY 28, 1979 DATE=79148 NUMWND=1294 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

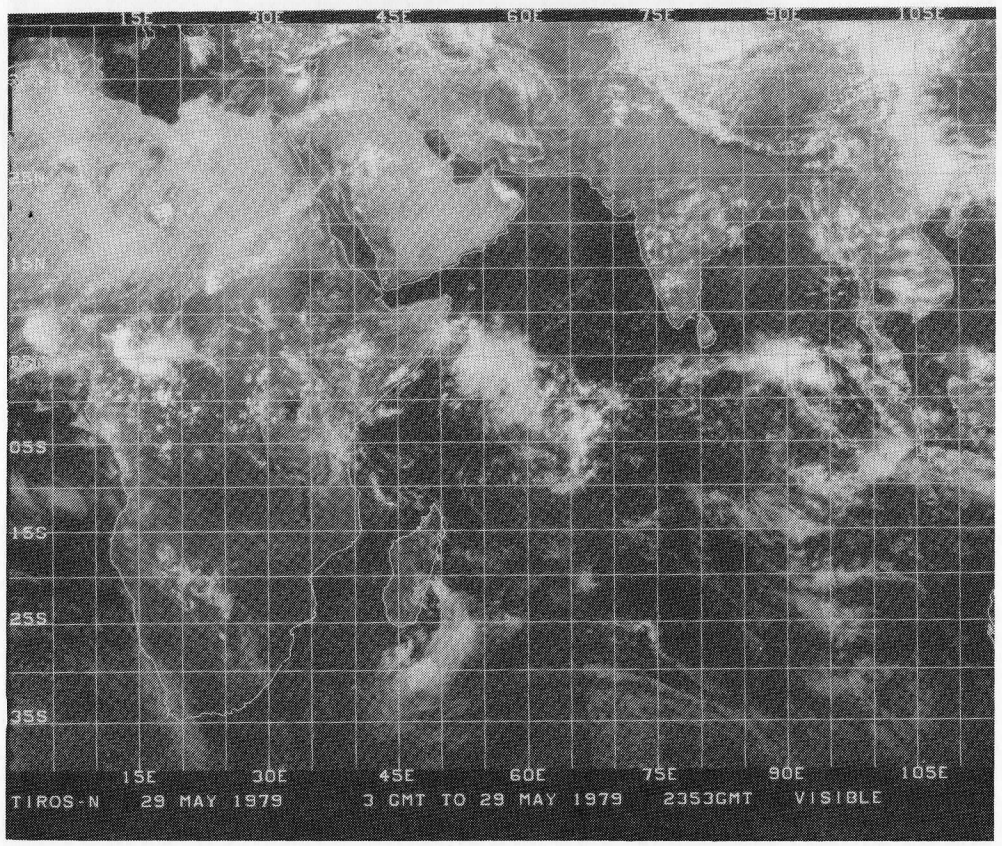

MAY 28, 1979 DATE=79148 NUMWND= 625 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

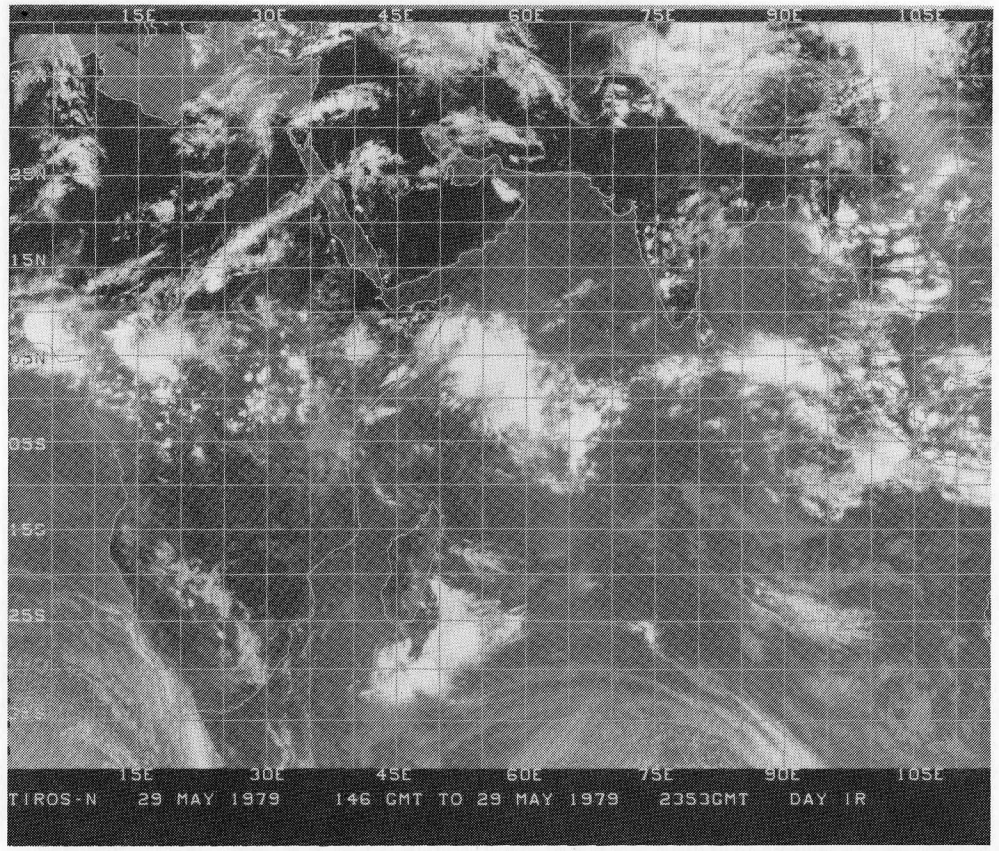

15E 30E 45E 60E 75E 90E 105E
TIROS-N 28 MAY 1979 14 GMT TO 29 MAY 1979 3GMT VISIBLE

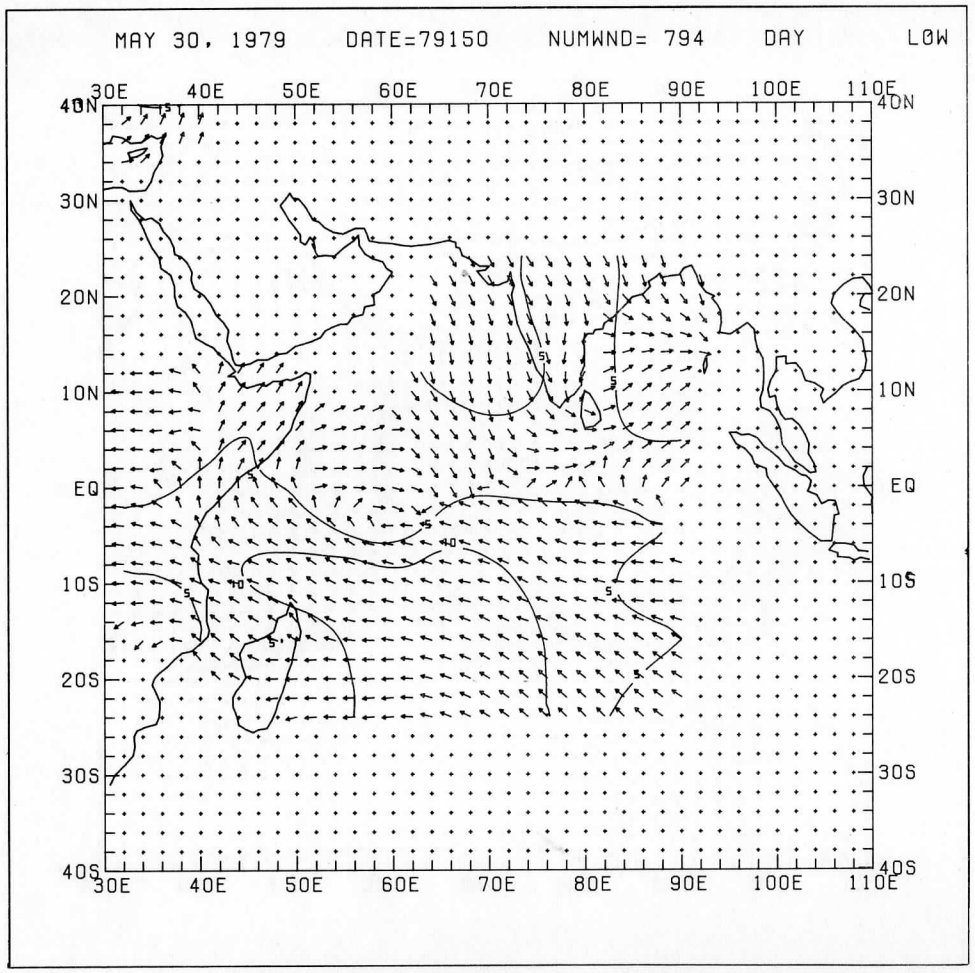

15E 30E 45E 60E 75E 90E 105E
TIROS-N 28 MAY 1979 15Z GMT TO 29 MAY 1979 3GMT DAY IR

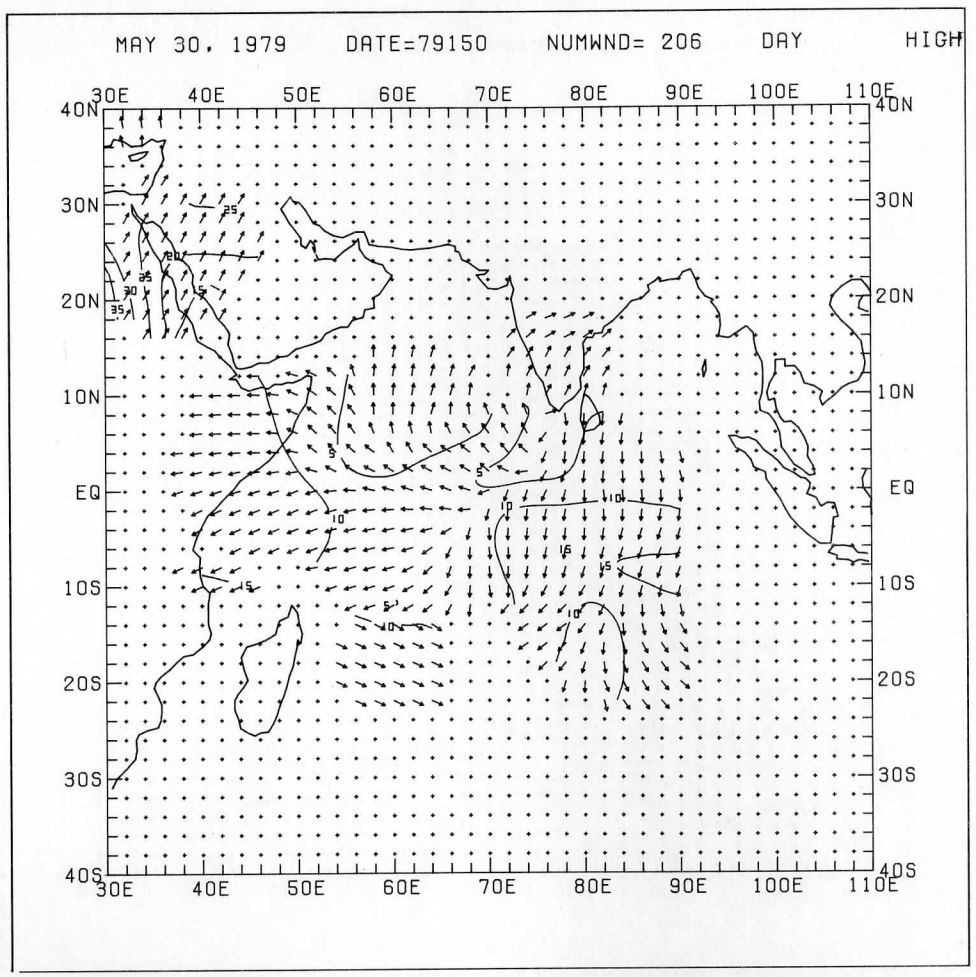

MAY 29, 1979 DATE=79149 NUMWND= 834 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

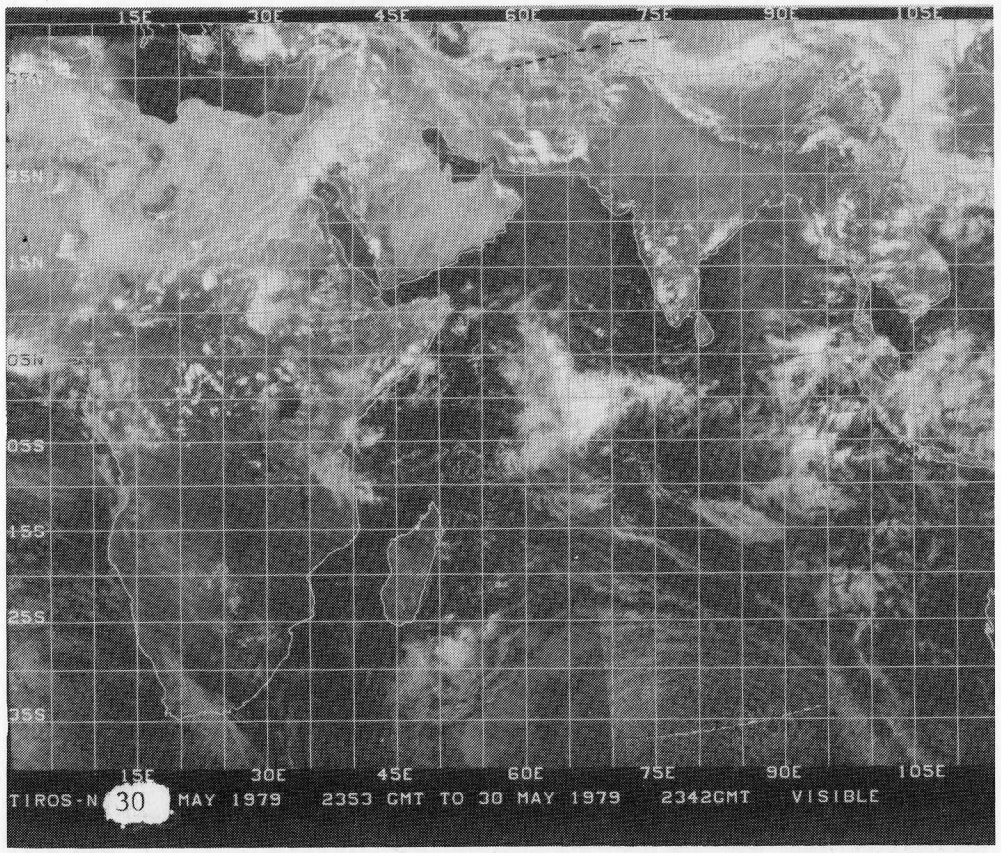

MAY 29, 1979 DATE=79149 NUMWND= 596 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

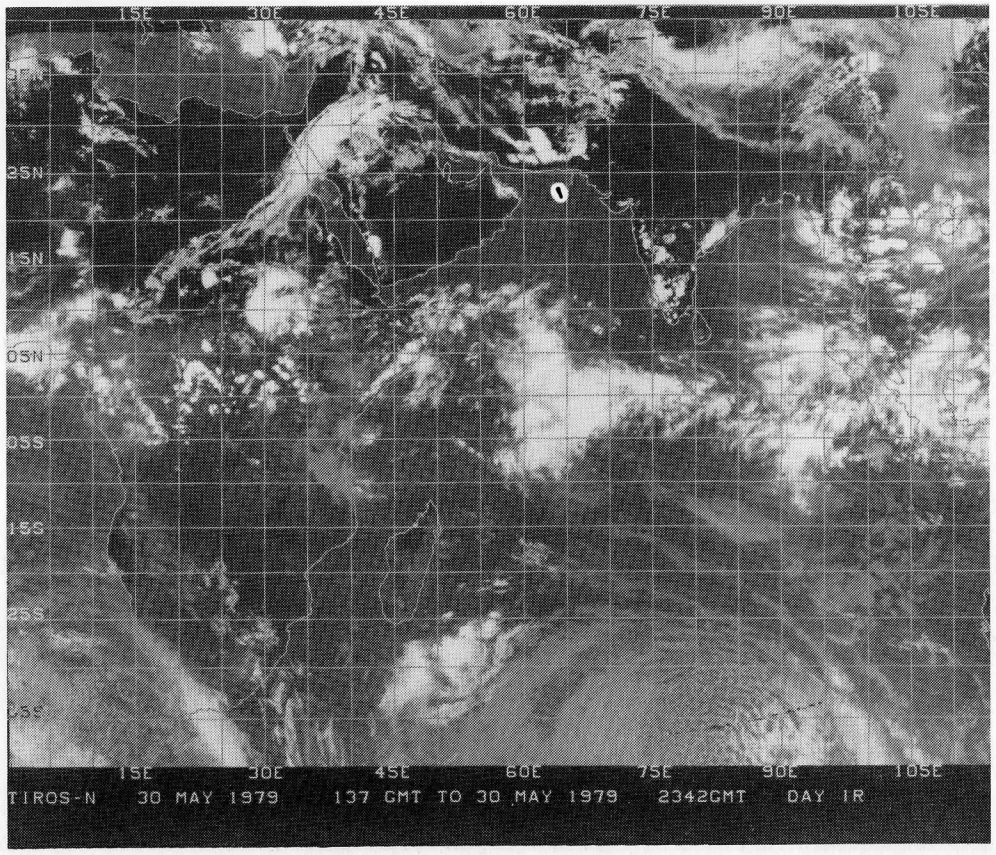

15E 30E 45E 60E 75E 90E 105E
05S 15S 25S 35S
TIROS-N 29 MAY 1979 3 GMT TO 29 MAY 1979 2353GMT VISIBLE

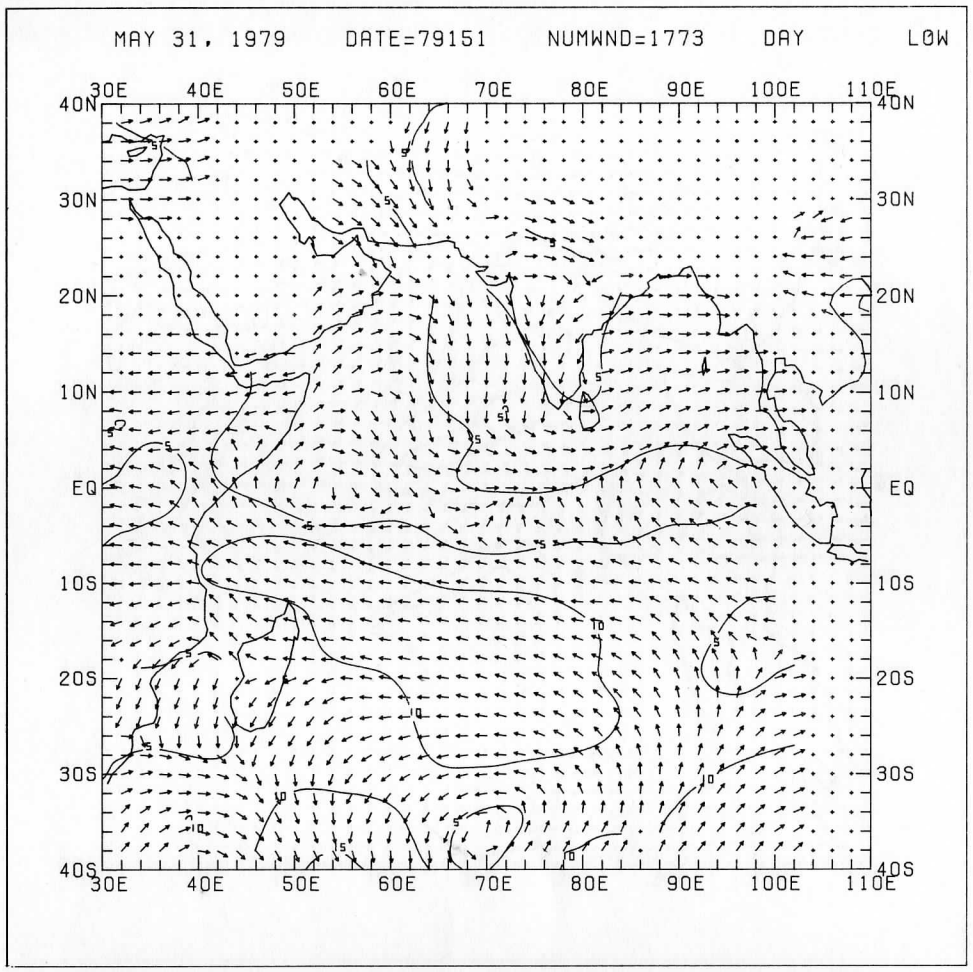

15E 30E 45E 60E 75E 90E 105E
15N 05N 05S 15S 25S
TIROS-N 29 MAY 1979 146 GMT TO 29 MAY 1979 2353GMT DAY IR

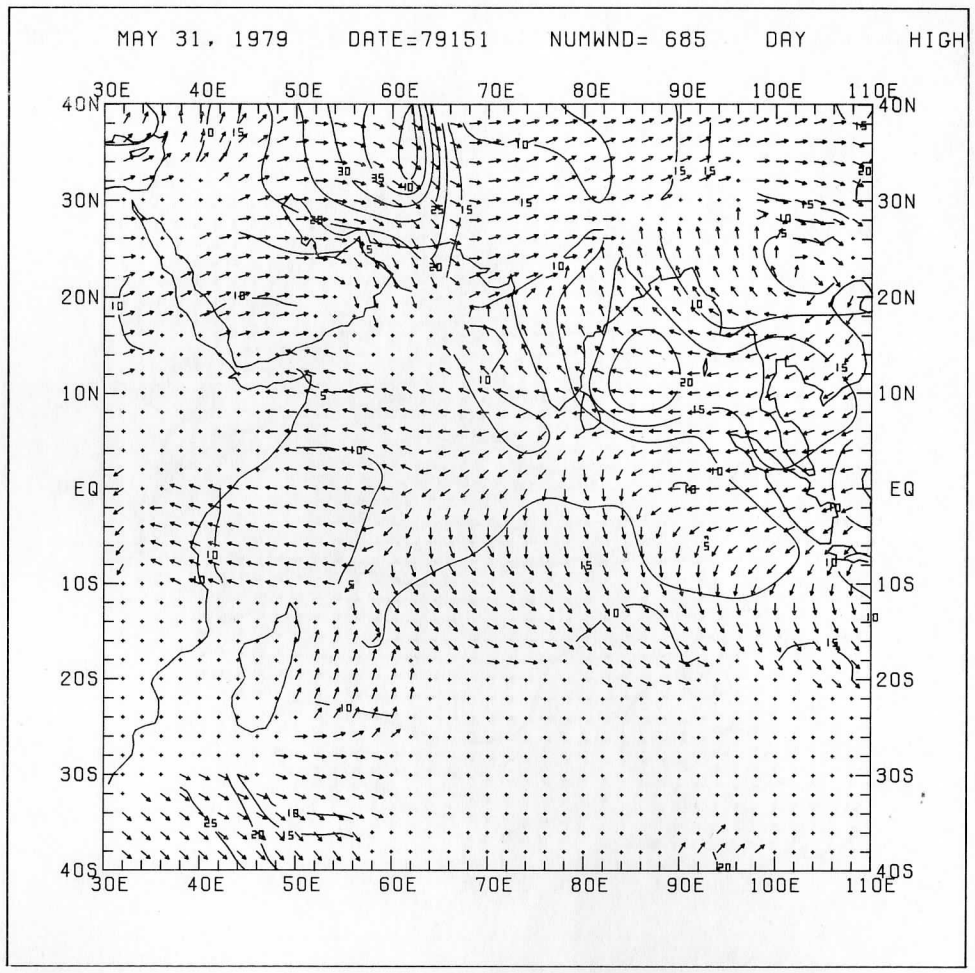

MAY 30, 1979 DATE=79150 NUMWND= 794 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

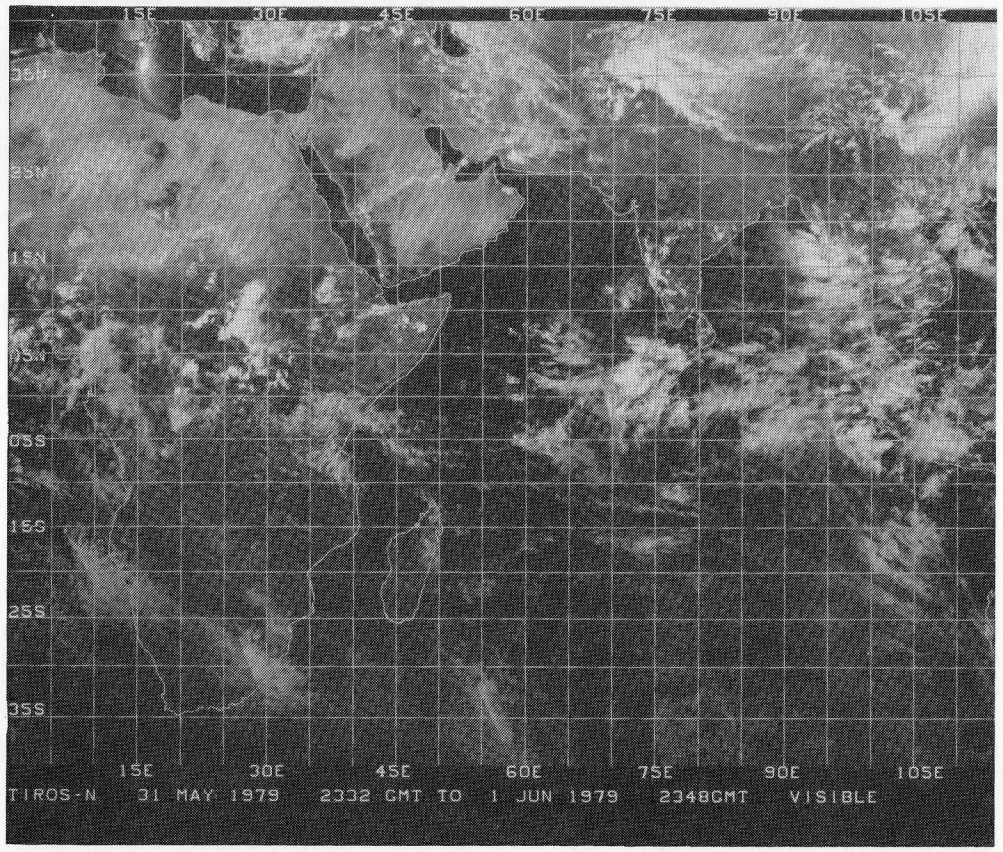

MAY 30, 1979 DATE=79150 NUMWND= 206 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

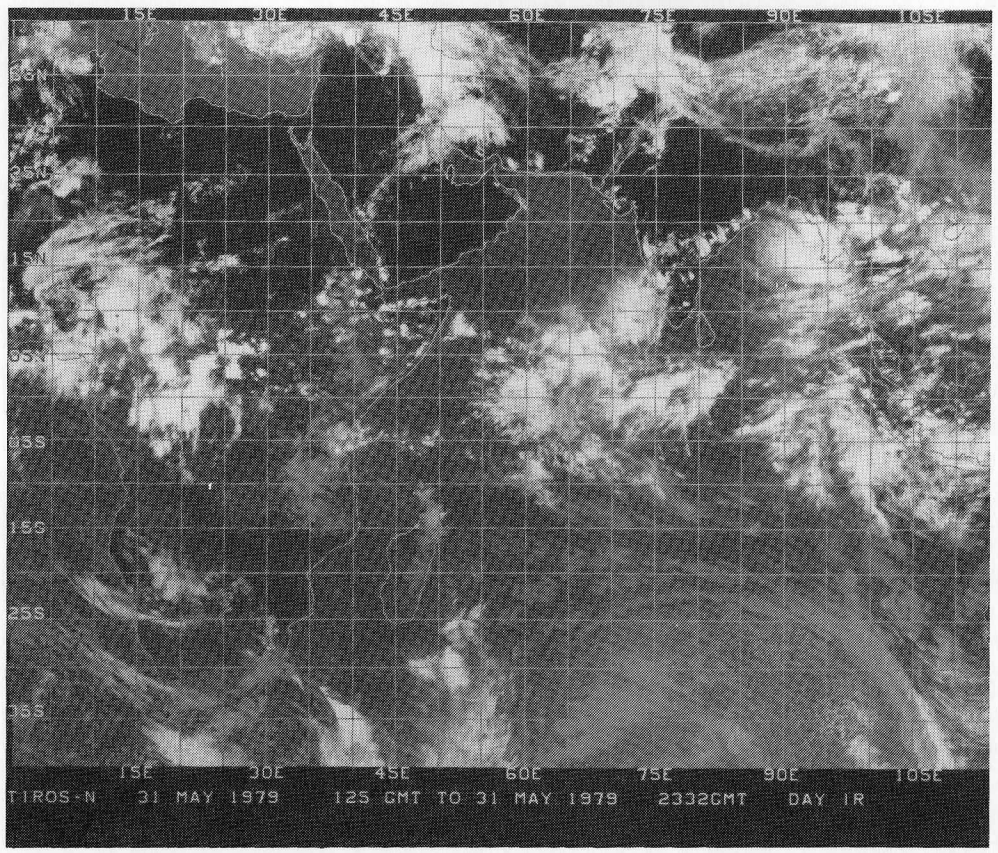

15E 30E 45E 60E 75E 90E 105E
TIROS-N 30 MAY 1979 2353 GMT TO 30 MAY 1979 2342GMT VISIBLE

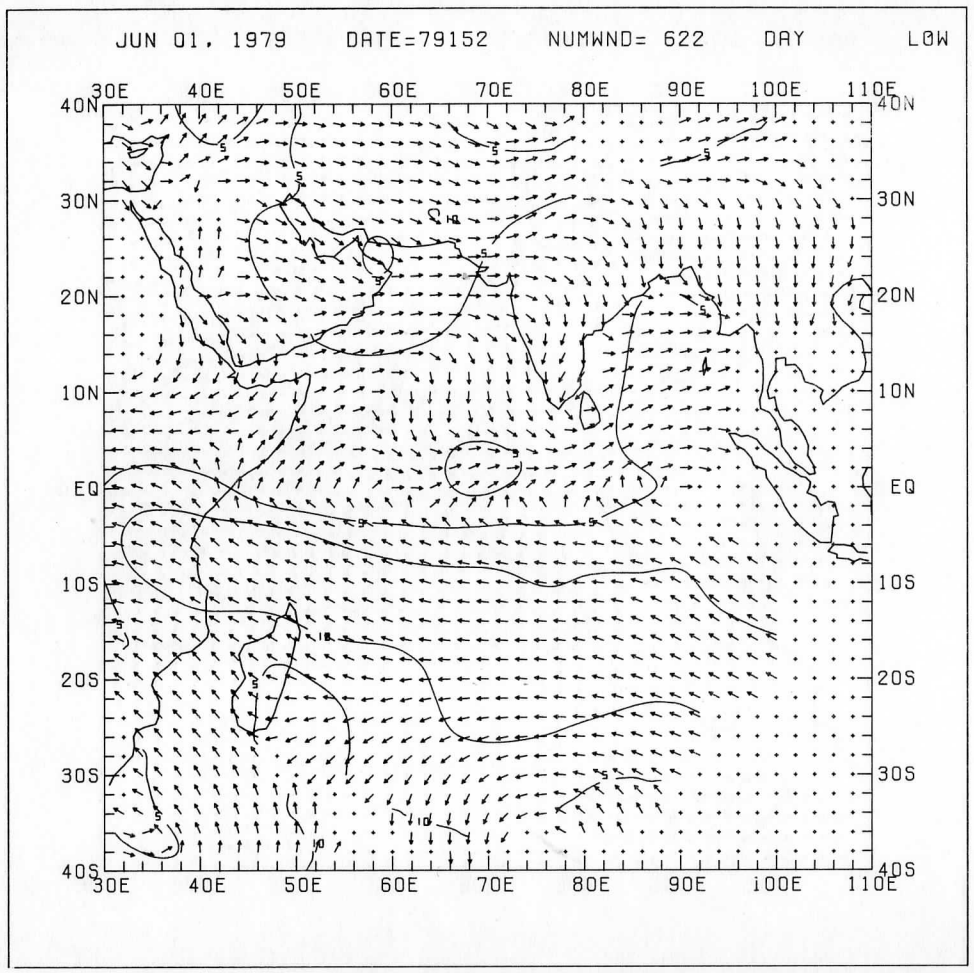

15E 30E 45E 60E 75E 90E 105E
TIROS-N 30 MAY 1979 137 GMT TO 30 MAY 1979 2342GMT DAY IR

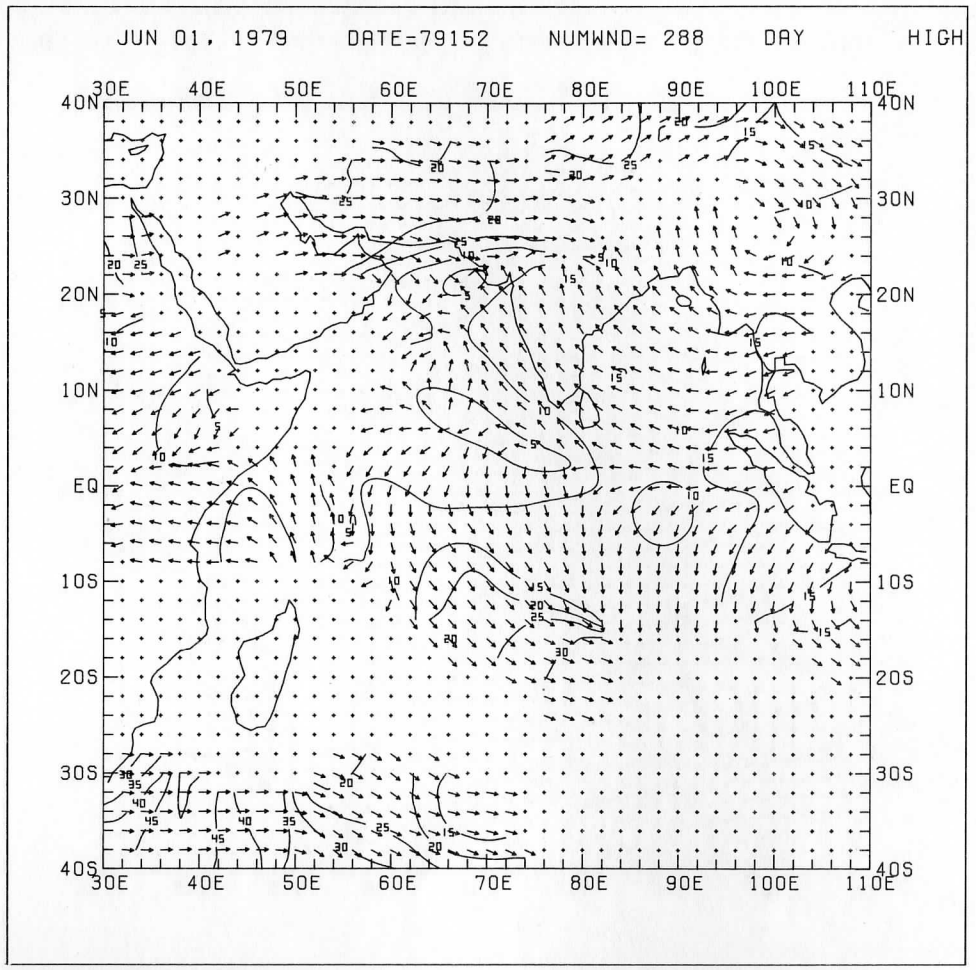

MAY 31, 1979 DATE=79151 NUMWND=1773 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

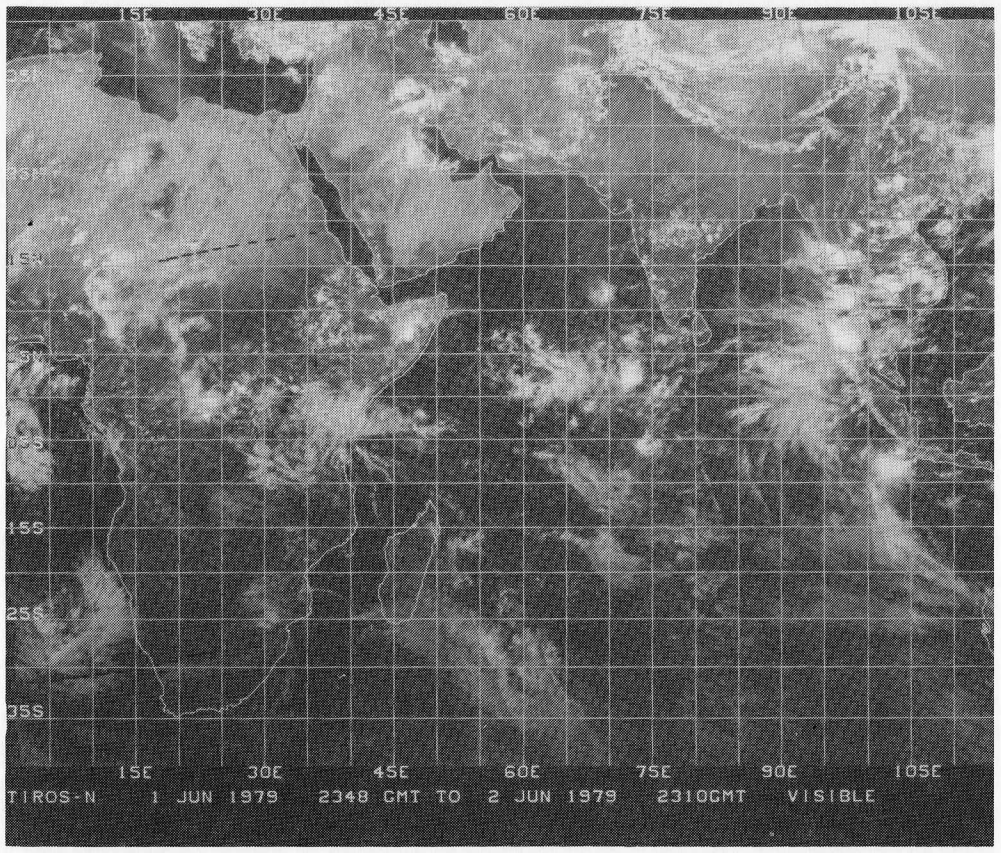

MAY 31, 1979 DATE=79151 NUMWND= 685 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

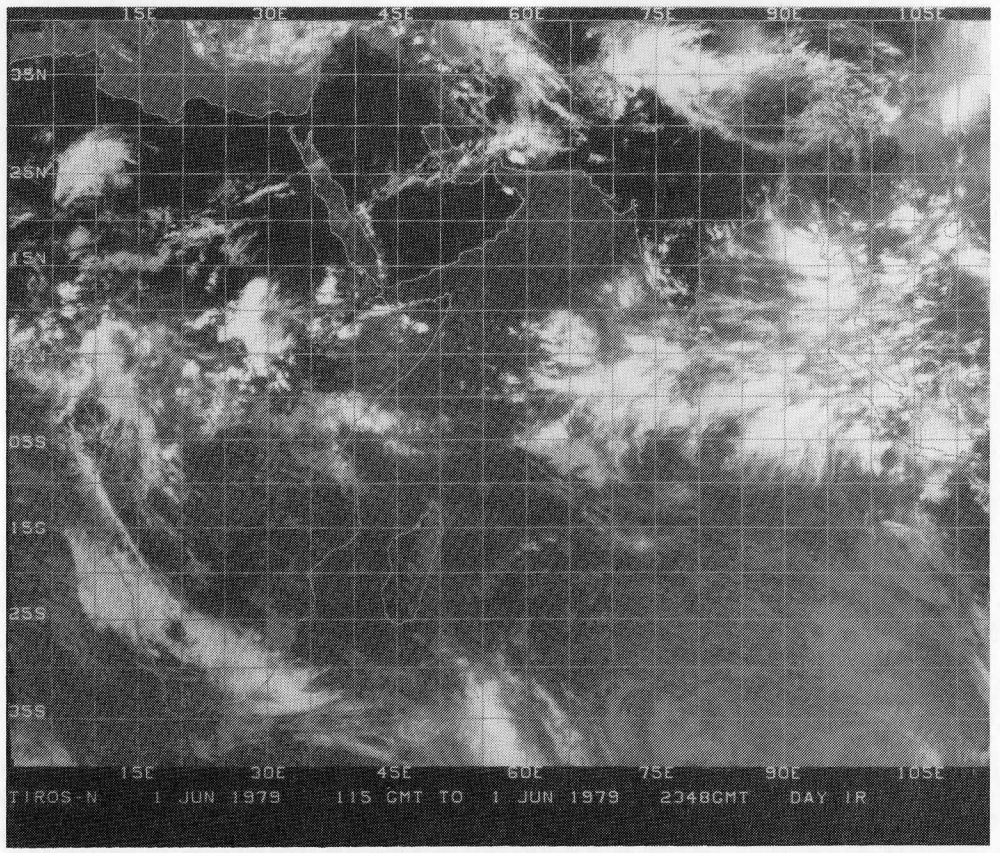

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 31 MAY 1979 2332 GMT TO 1 JUN 1979 2348GMT VISIBLE

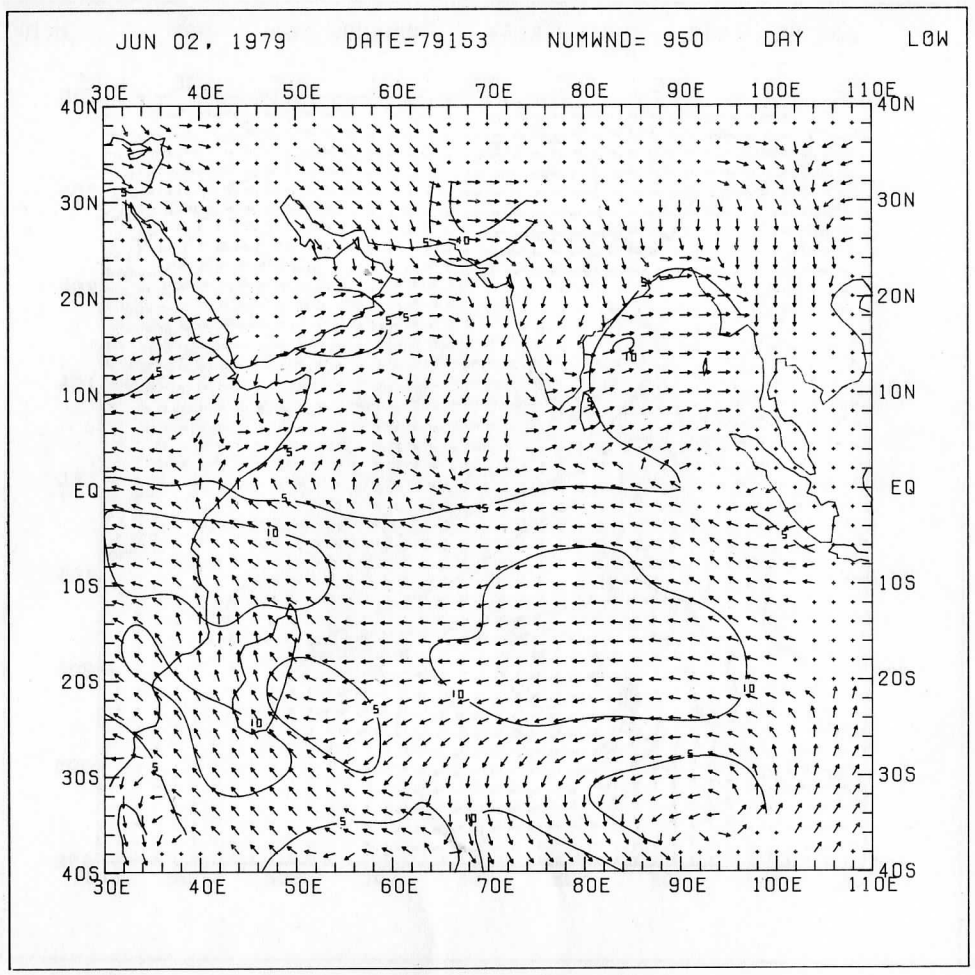

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 31 MAY 1979 125 GMT TO 31 MAY 1979 2332GMT DAY IR

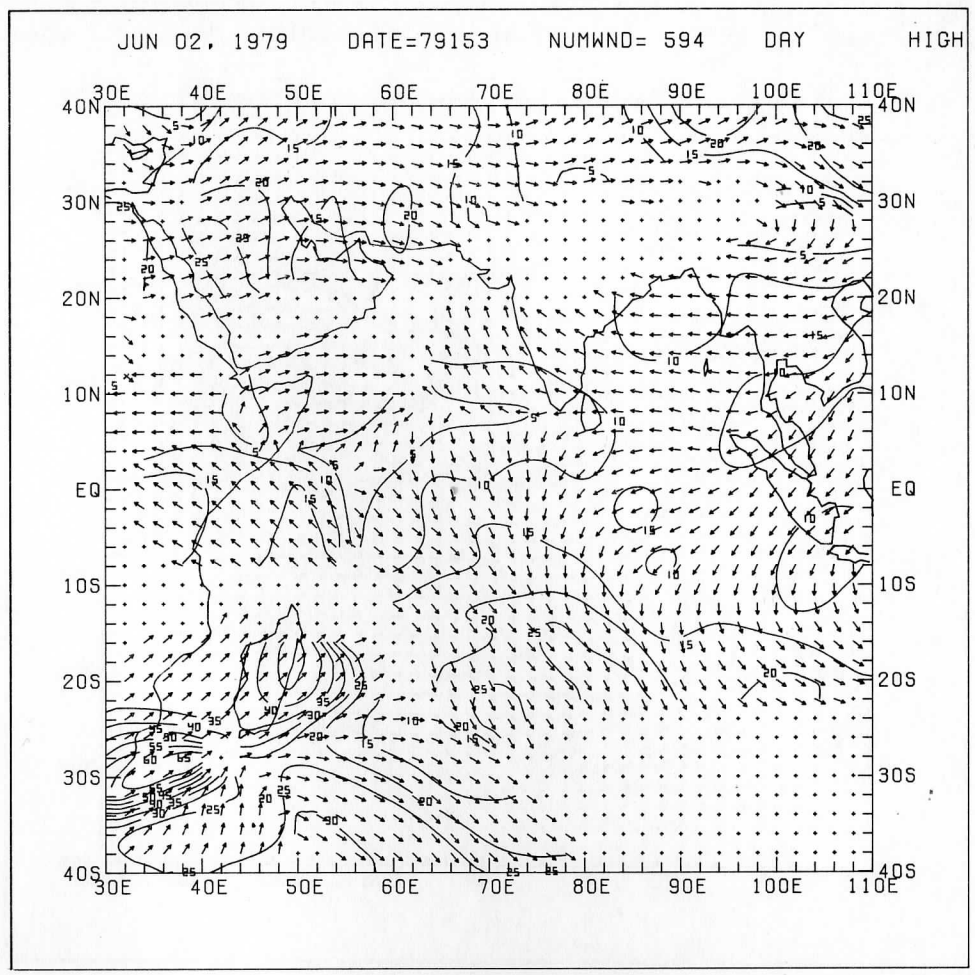

JUN 01, 1979 DATE=79152 NUMWND= 622 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

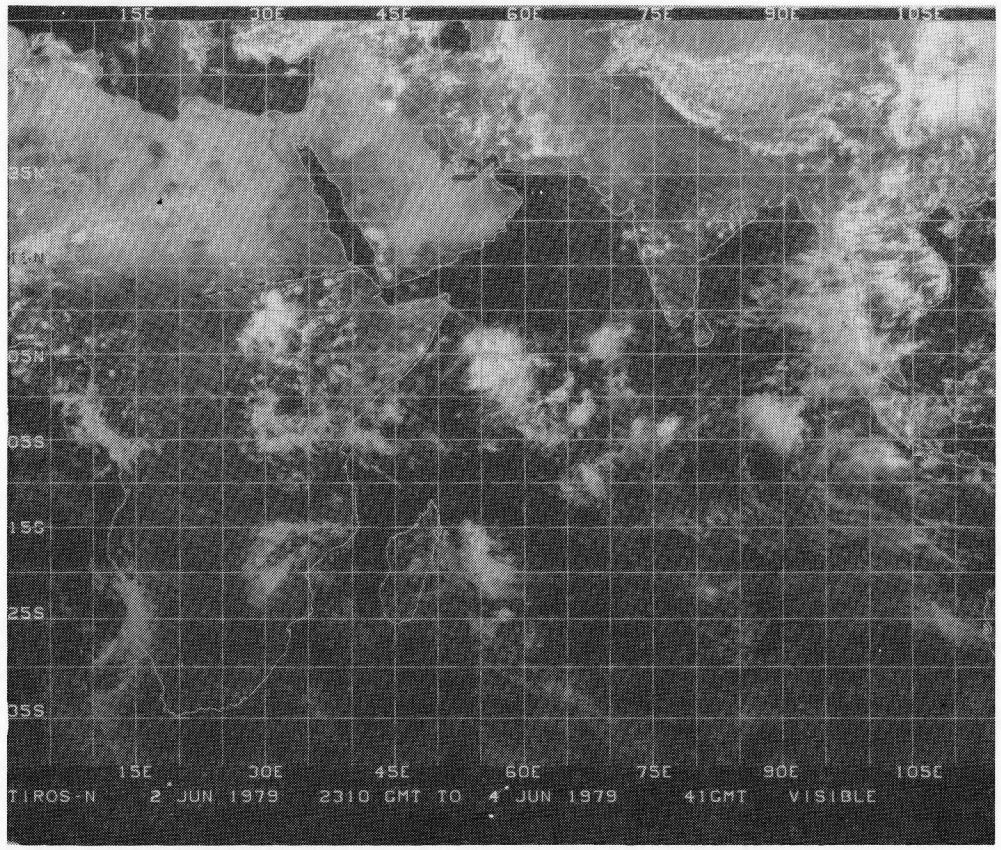

JUN 01, 1979 DATE=79152 NUMWND= 288 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

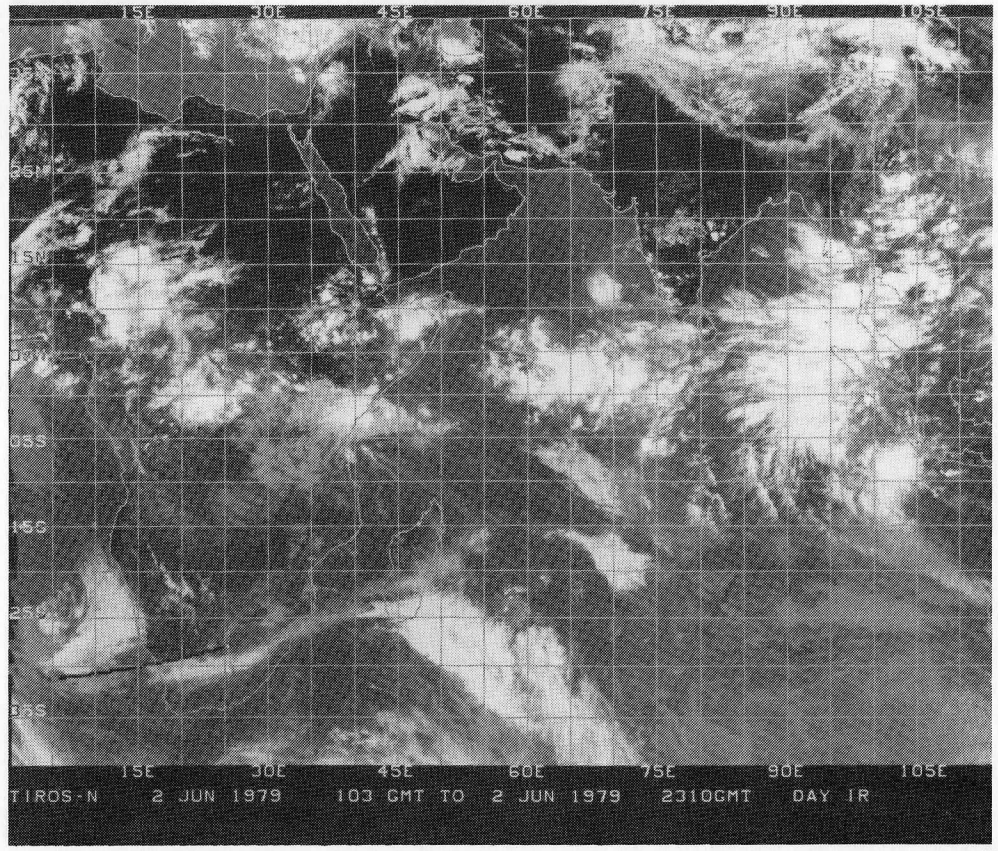

15E 30E 45E 60E 75E 90E 105E
15S 25S 35S
TIROS-N 1 JUN 1979 2348 GMT TO 2 JUN 1979 2310GMT VISIBLE

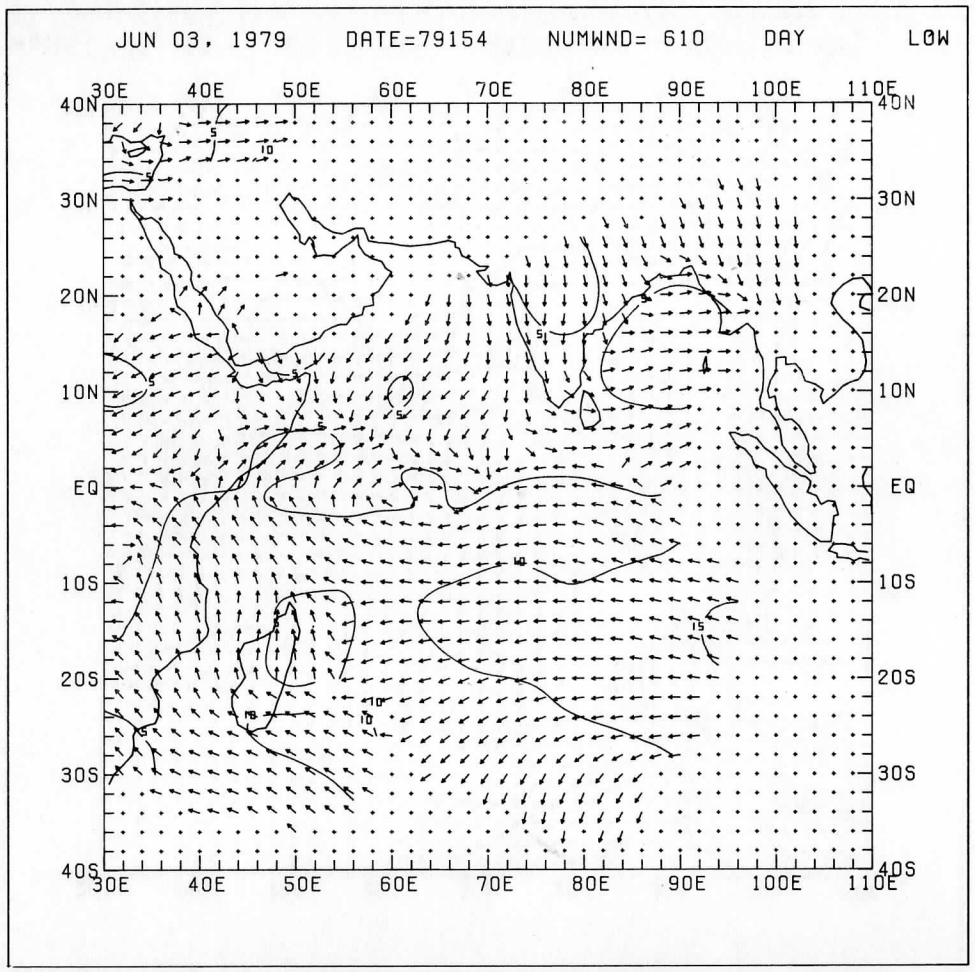

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05S 15S 25S 35S
TIROS-N 1 JUN 1979 115 GMT TO 1 JUN 1979 2348GMT DAY IR

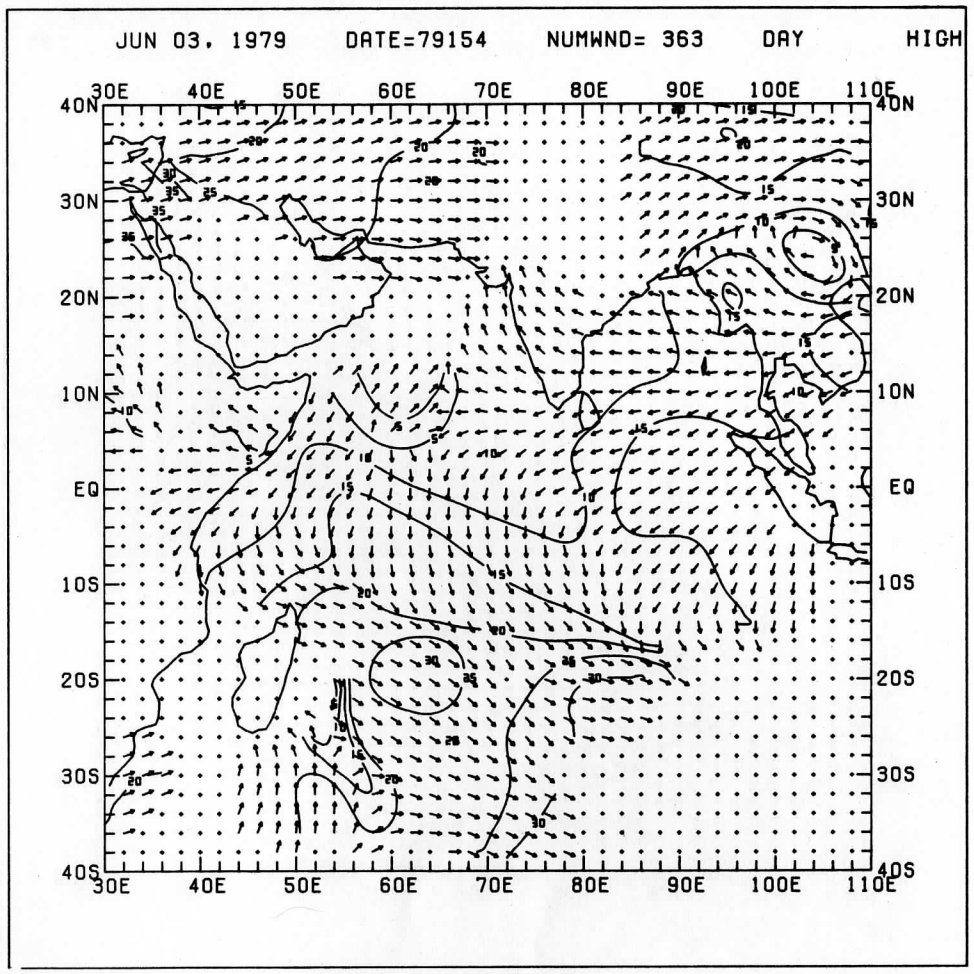

JUN 02, 1979 DATE=79153 NUMWND= 950 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

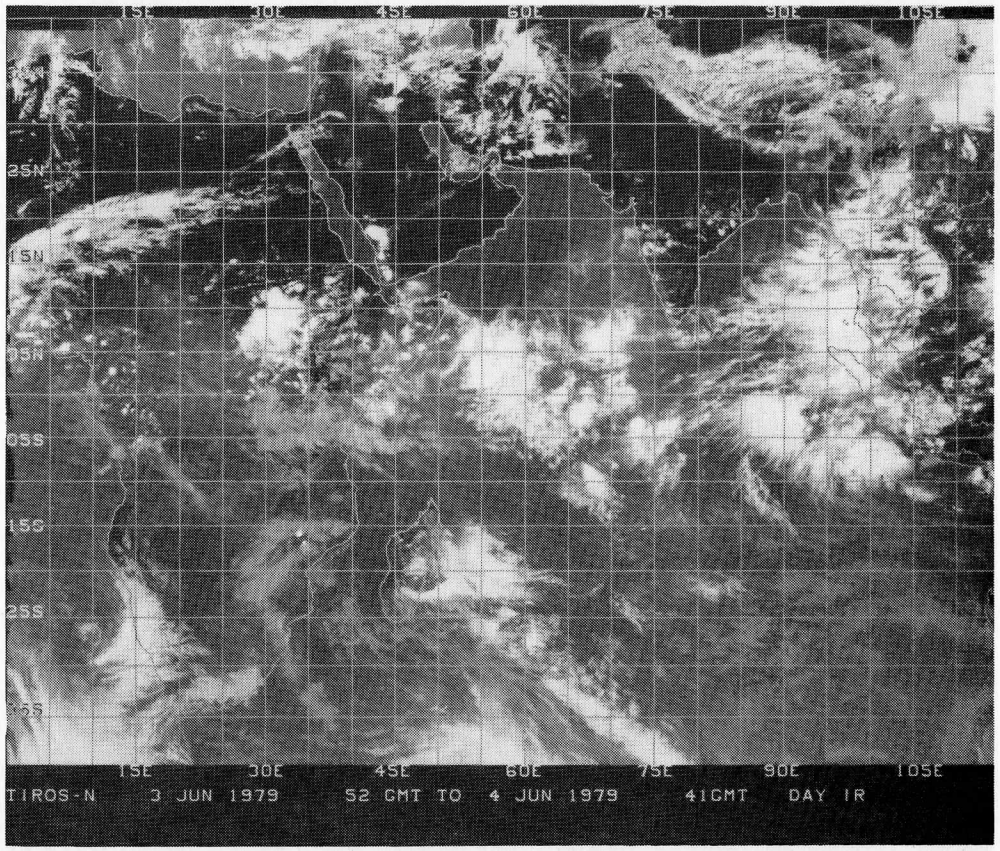

JUN 02, 1979 DATE=79153 NUMWND= 594 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

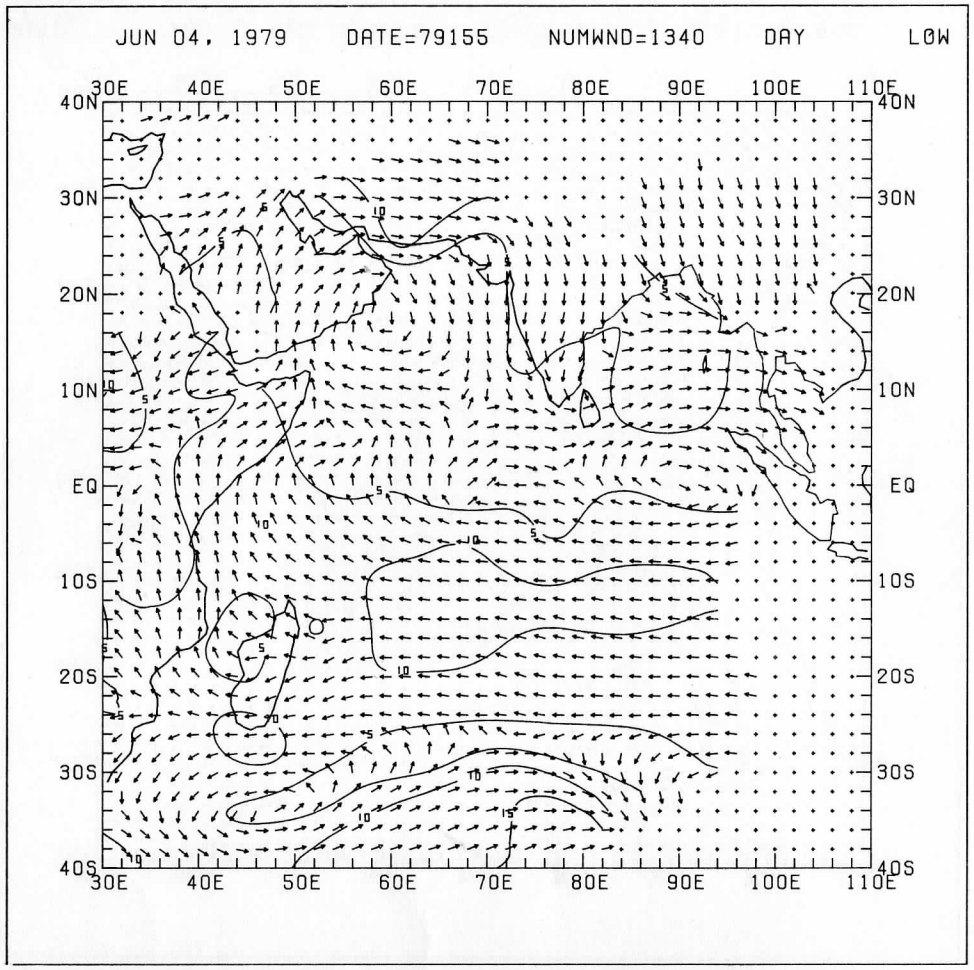

15E 30E 45E 60E 75E 90E 105E
TIROS-N 2 JUN 1979 2310 GMT TO 4 JUN 1979 41GMT VISIBLE

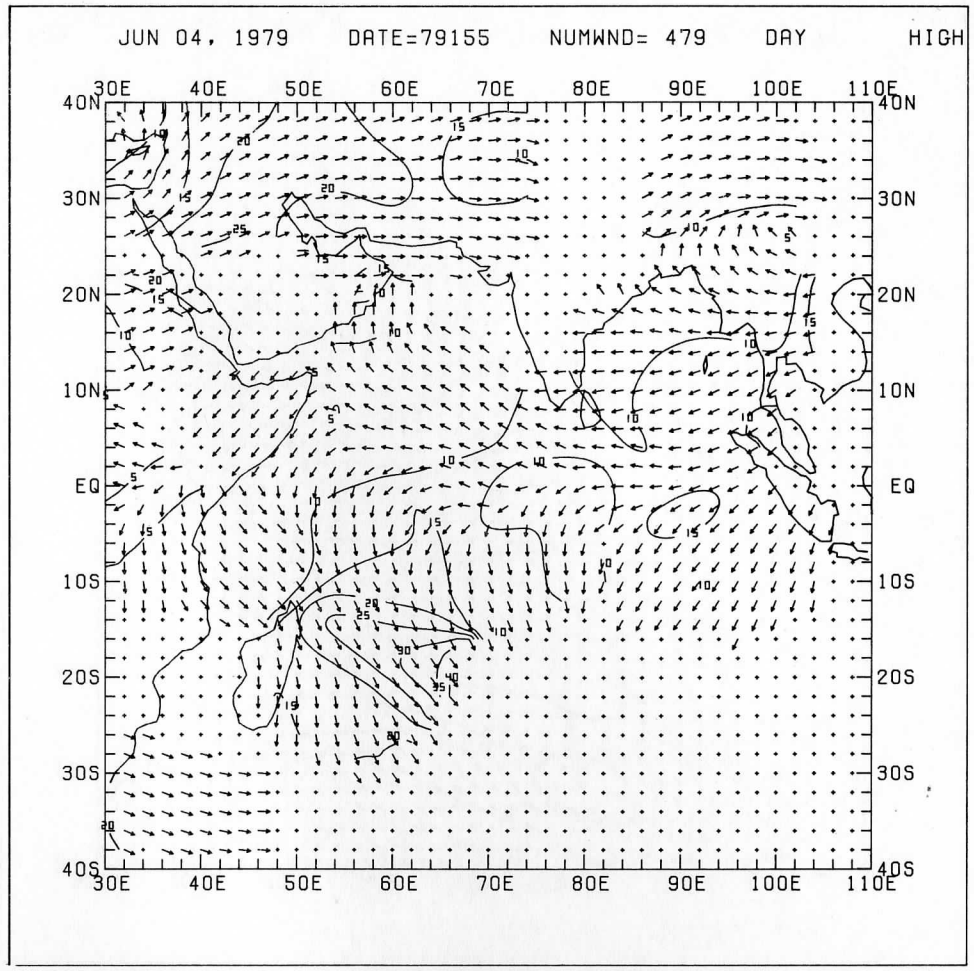

15E 30E 45E 60E 75E 90E 105E
TIROS-N 2 JUN 1979 103 GMT TO 2 JUN 1979 2310GMT DAY IR

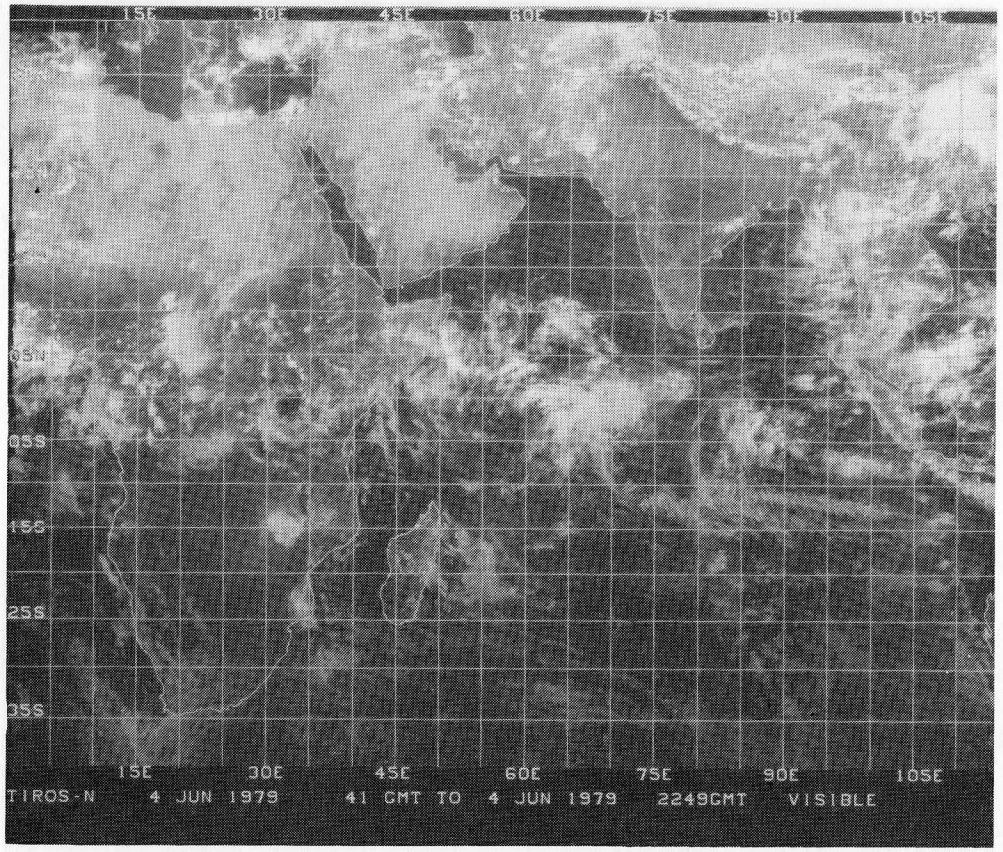

JUN 03, 1979 DATE=79154 NUMWND= 610 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

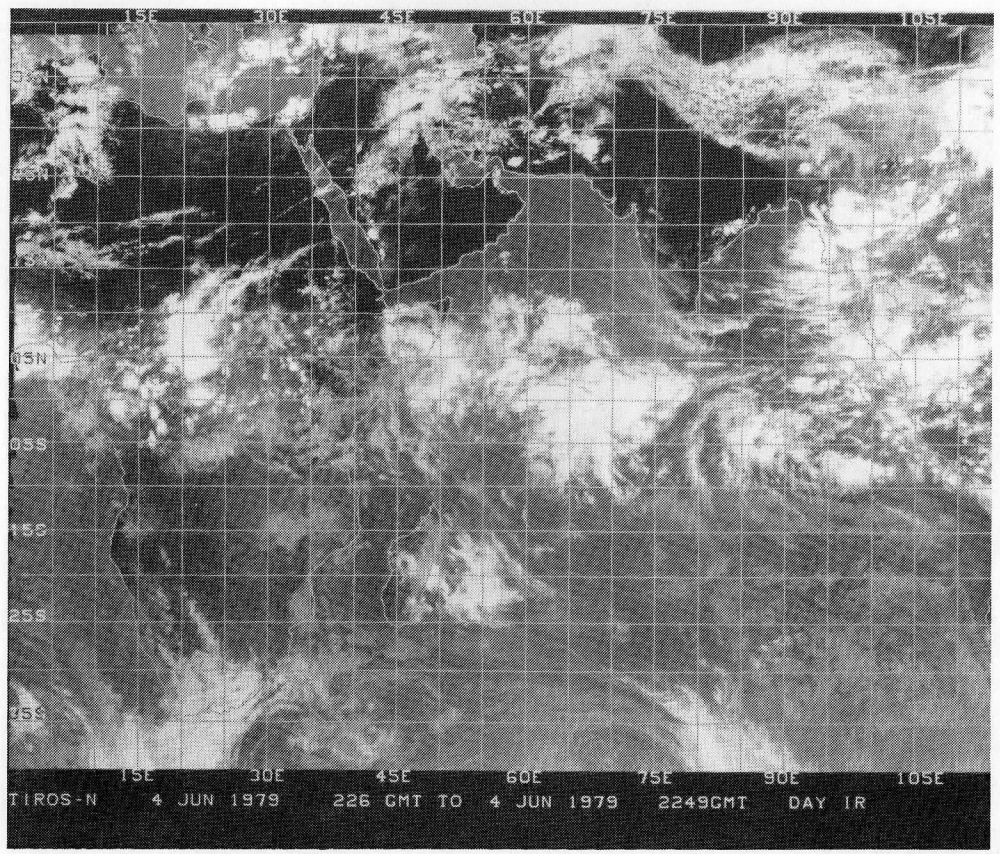

JUN 03, 1979 DATE=79154 NUMWND= 363 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

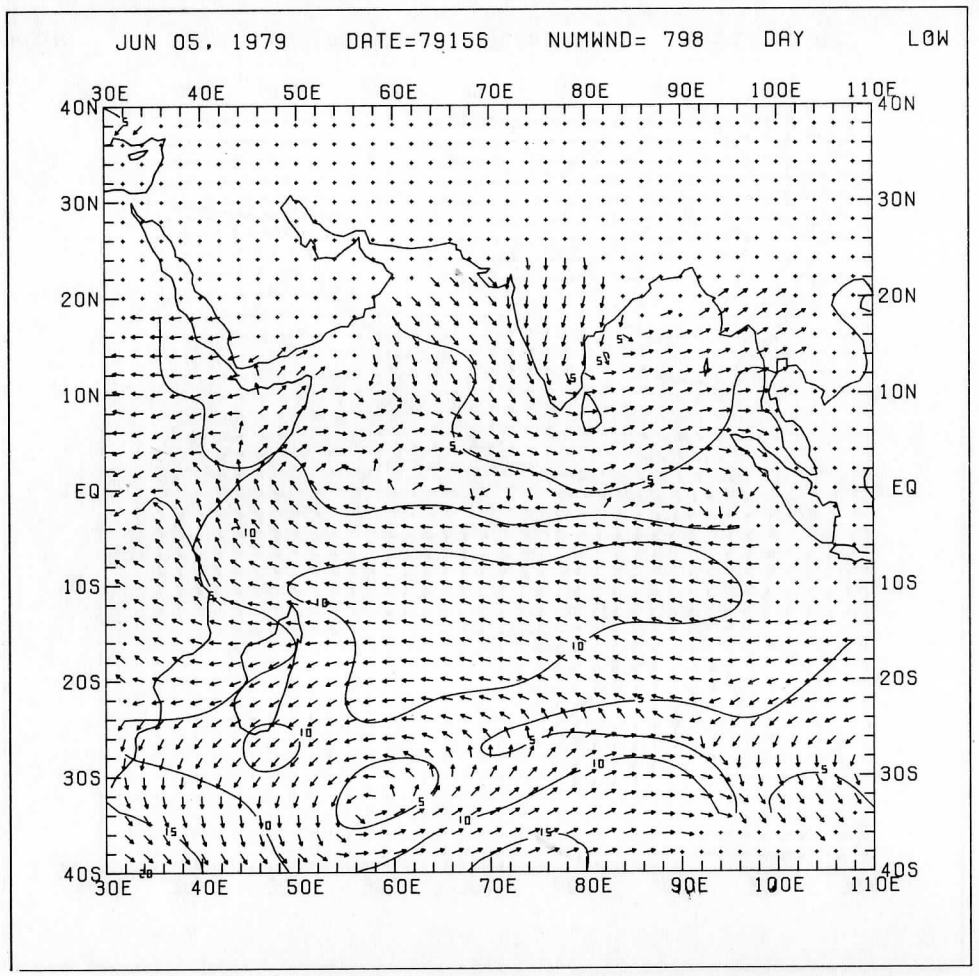

TIROS-N 3 JUN 1979 52 GMT TO 4 JUN 1979 41GMT DAY IR

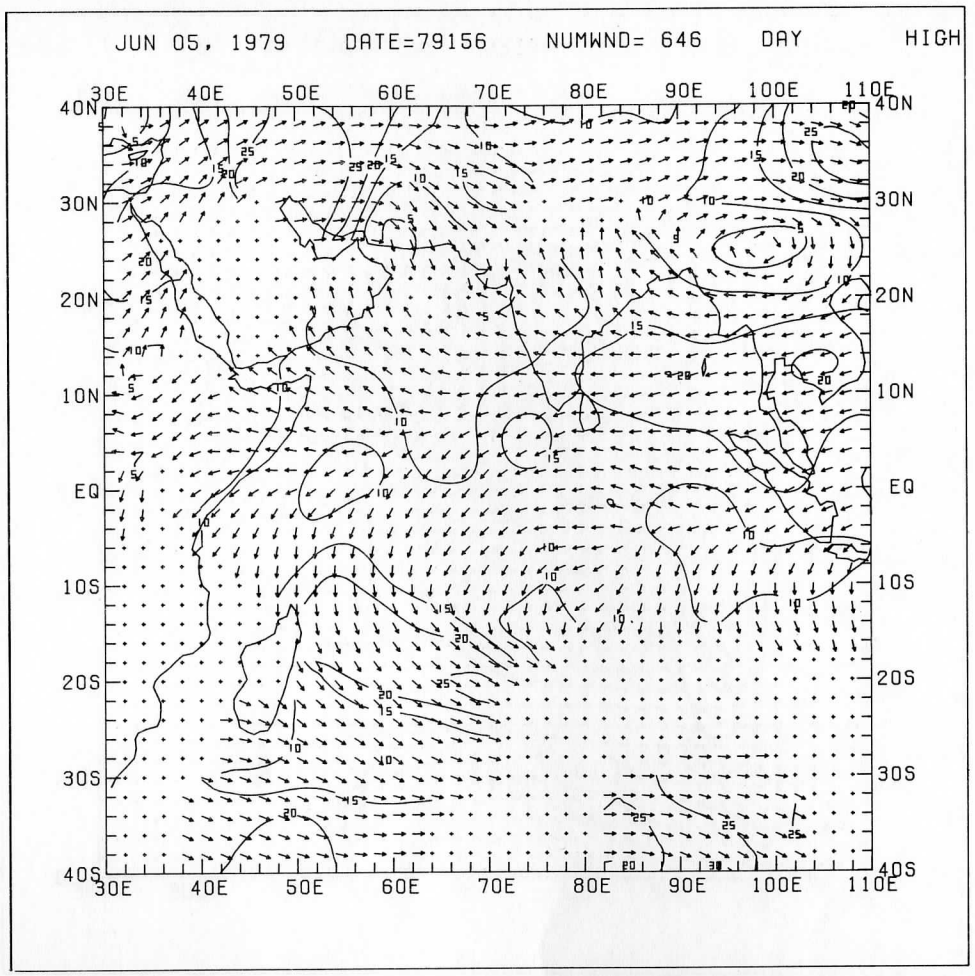

JUN 04, 1979 DATE=79155 NUMWND=1340 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

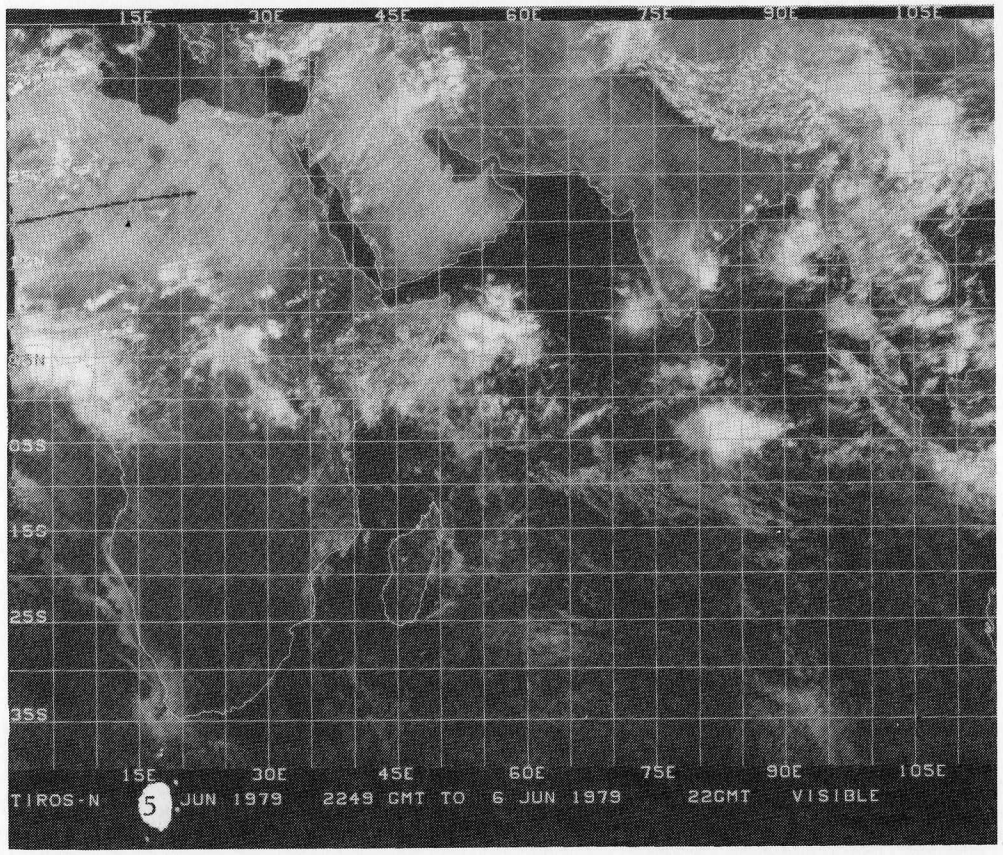

JUN 04, 1979 DATE=79155 NUMWND= 479 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

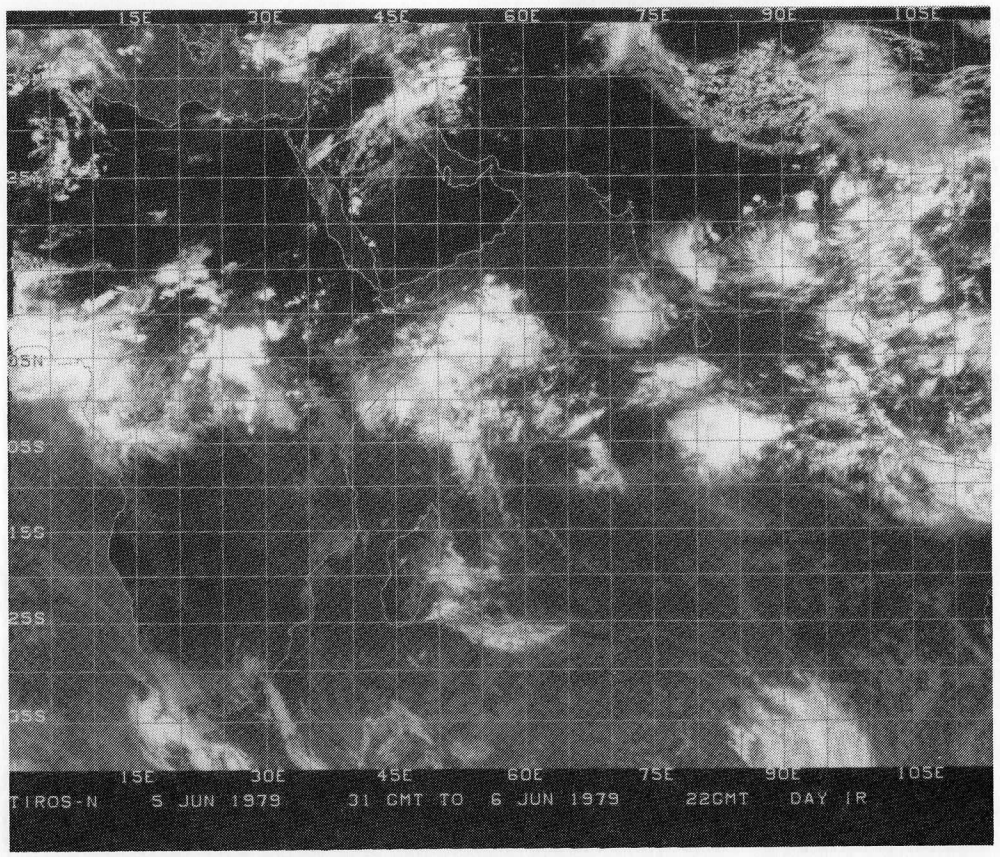

15E 30E 45E 60E 75E 90E 105E
05N 05S 15S 25S 35S
TIROS-N 4 JUN 1979 41 GMT TO 4 JUN 1979 2249GMT VISIBLE

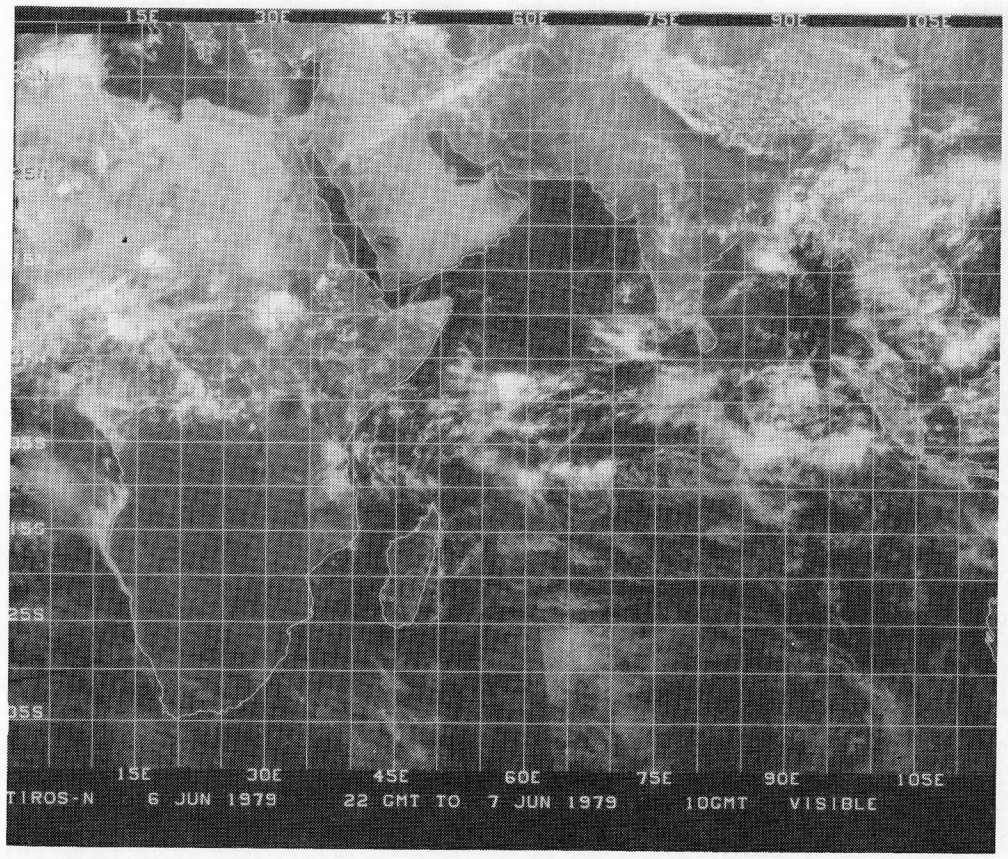

15E 30E 45E 60E 75E 90E 105E
05N 05S 15S 25S 35S
TIROS-N 4 JUN 1979 226 GMT TO 4 JUN 1979 2249GMT DAY IR

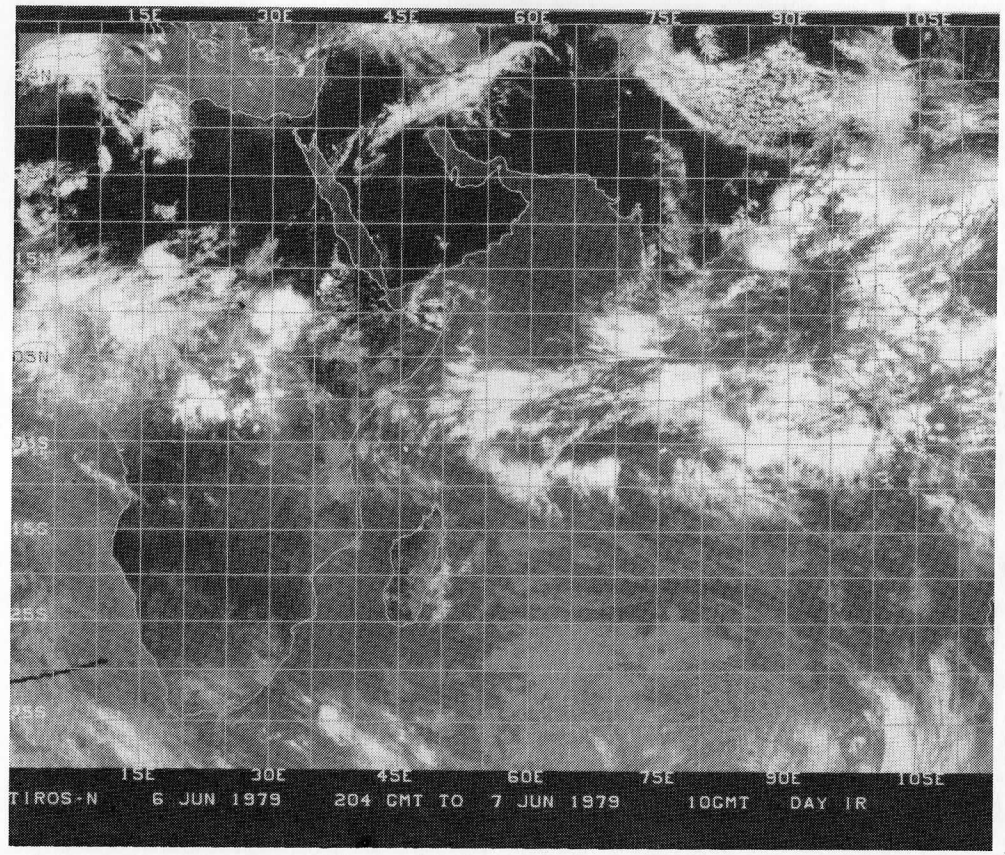

JUN 05, 1979 DATE=79156 NUMWND= 798 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

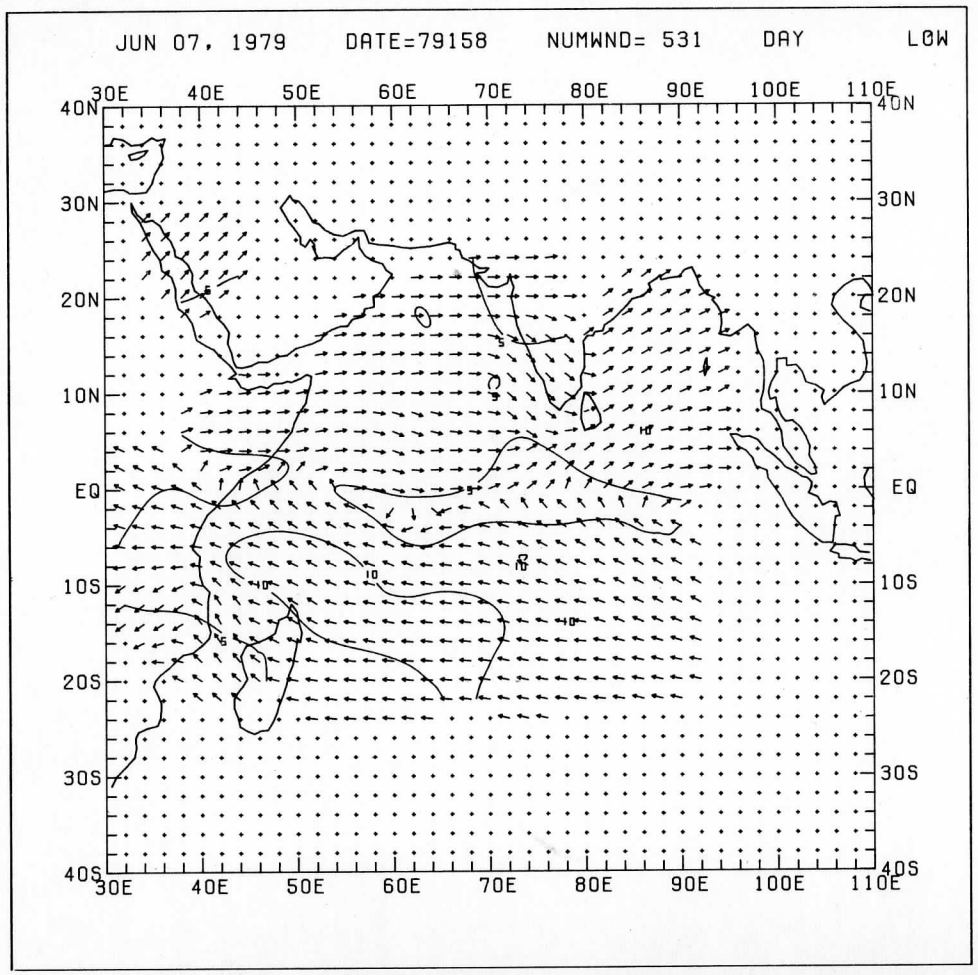

JUN 05, 1979 DATE=79156 NUMWND= 646 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

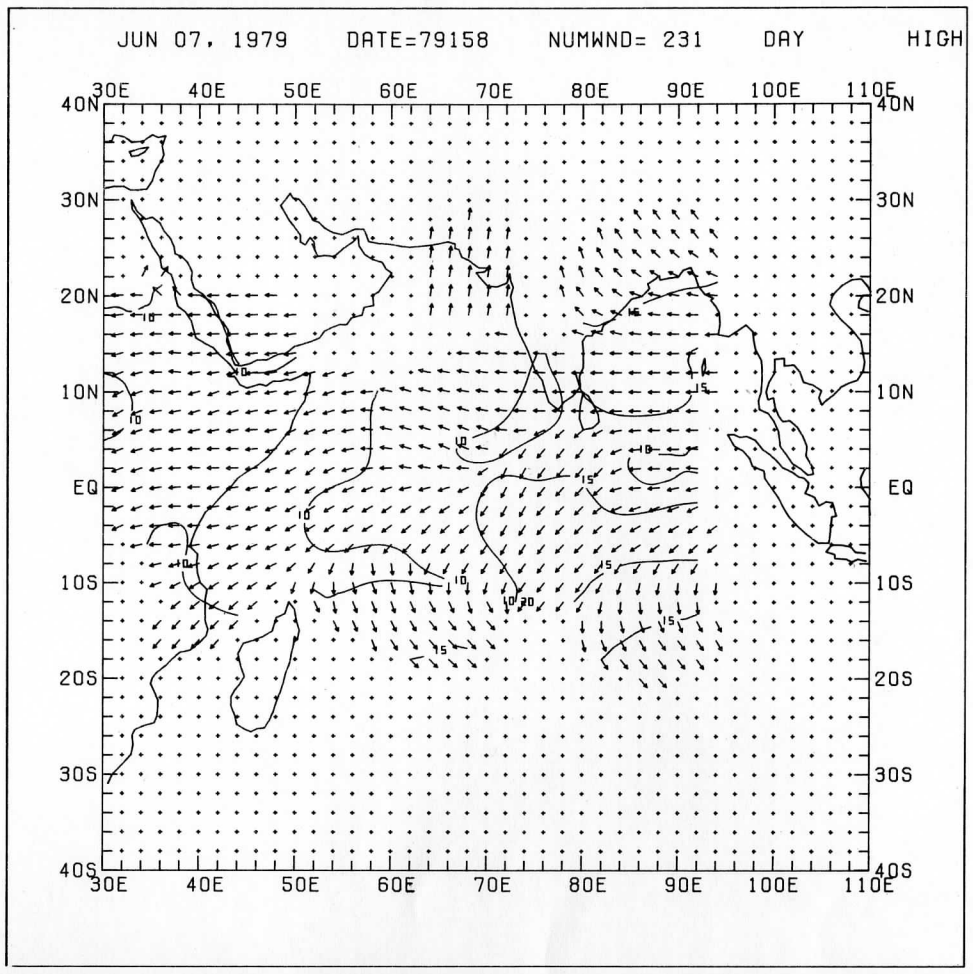

15E 30E 45E 60E 75E 90E 105E
05N 05S 15S 25S 35S
TIROS-N 5 JUN 1979 2249 GMT TO 6 JUN 1979 22GMT VISIBLE

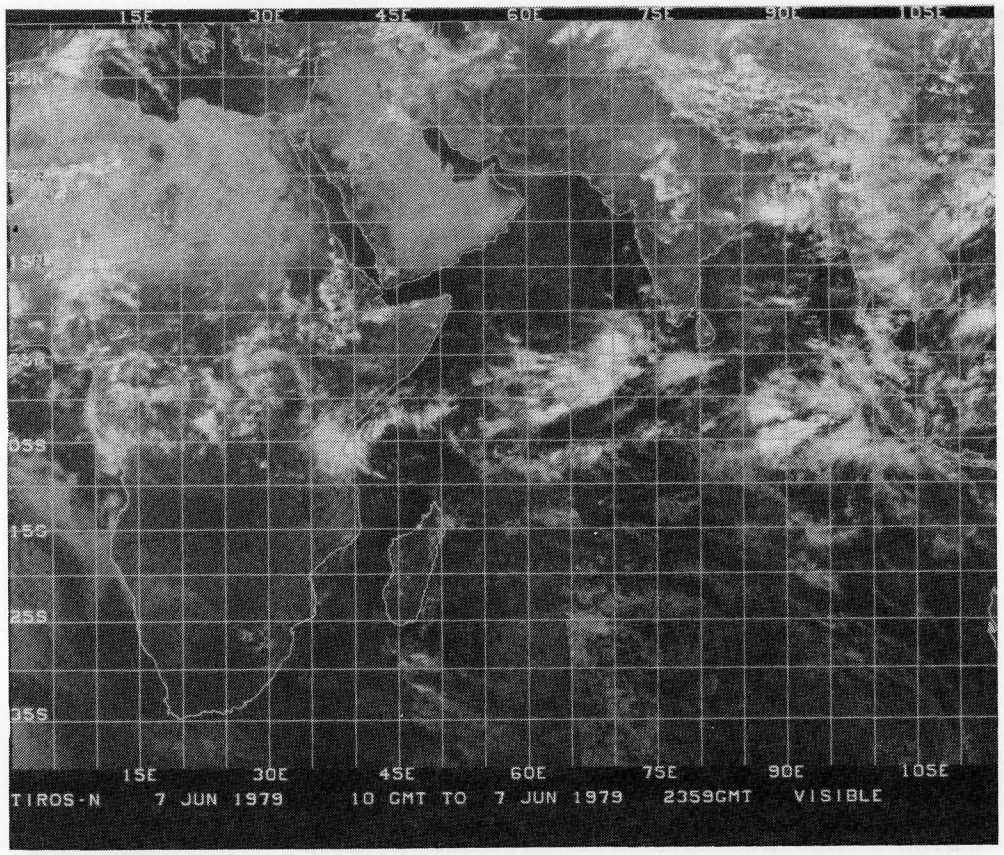

15E 30E 45E 60E 75E 90E 105E
05N 05S 15S 25S 35S
TIROS-N 5 JUN 1979 31 GMT TO 6 JUN 1979 22GMT DAY IR

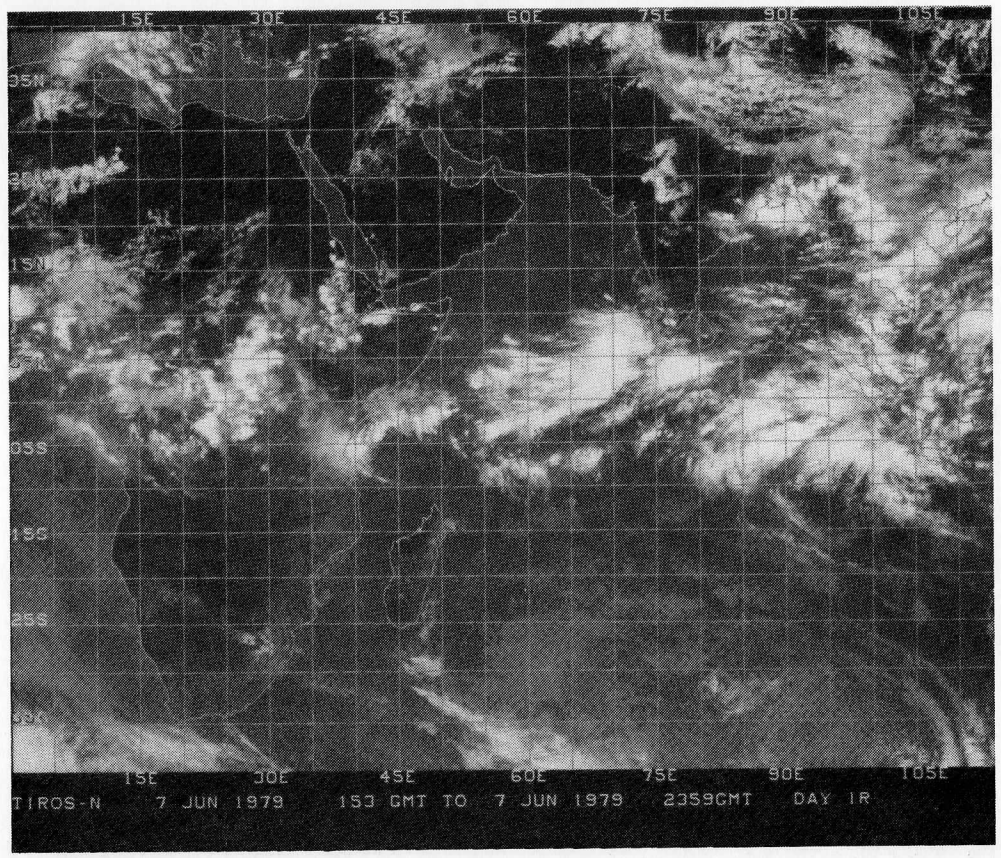

15E 30E 45E 60E 75E 90E 105E
15E 30E 45E 60E 75E 90E 105E
TIROS-N 6 JUN 1979 22 GMT TO 7 JUN 1979 10GMT VISIBLE

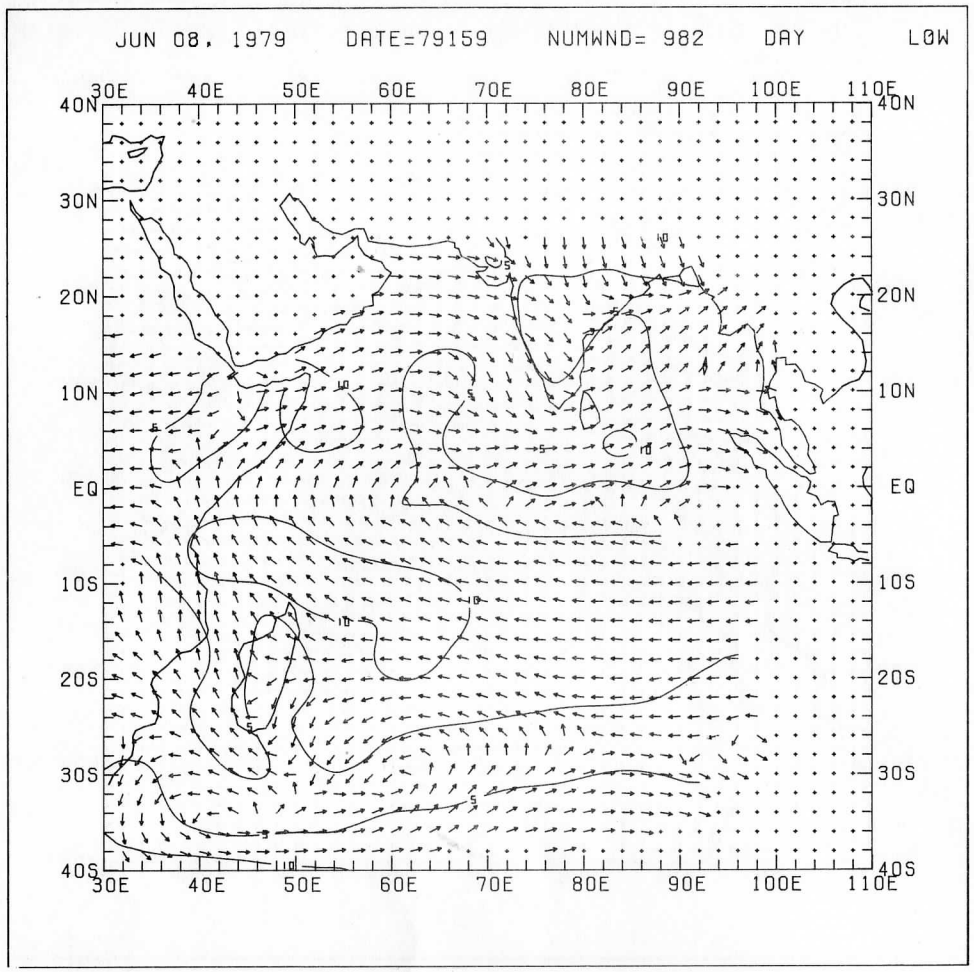

15E 30E 45E 60E 75E 90E 105E
15E 30E 45E 60E 75E 90E 105E
TIROS-N 6 JUN 1979 204 GMT TO 7 JUN 1979 10GMT DAY IR

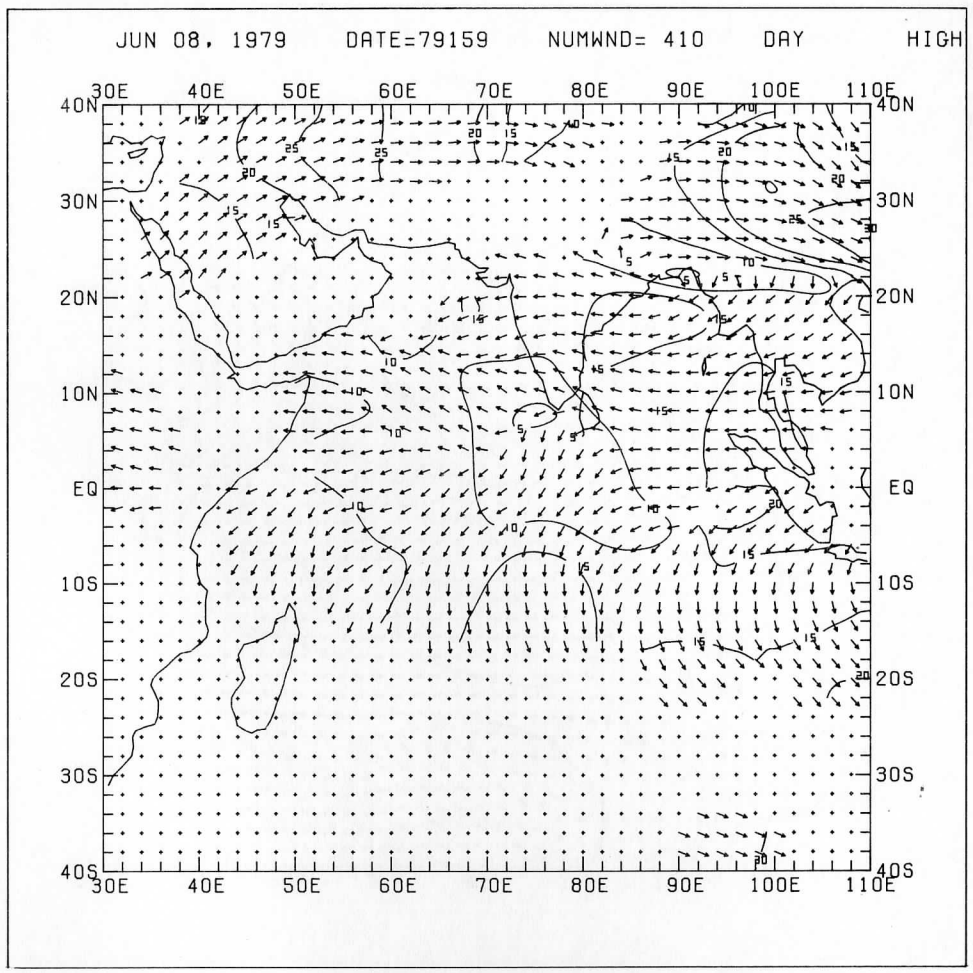

JUN 07, 1979 DATE=79158 NUMWND= 531 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

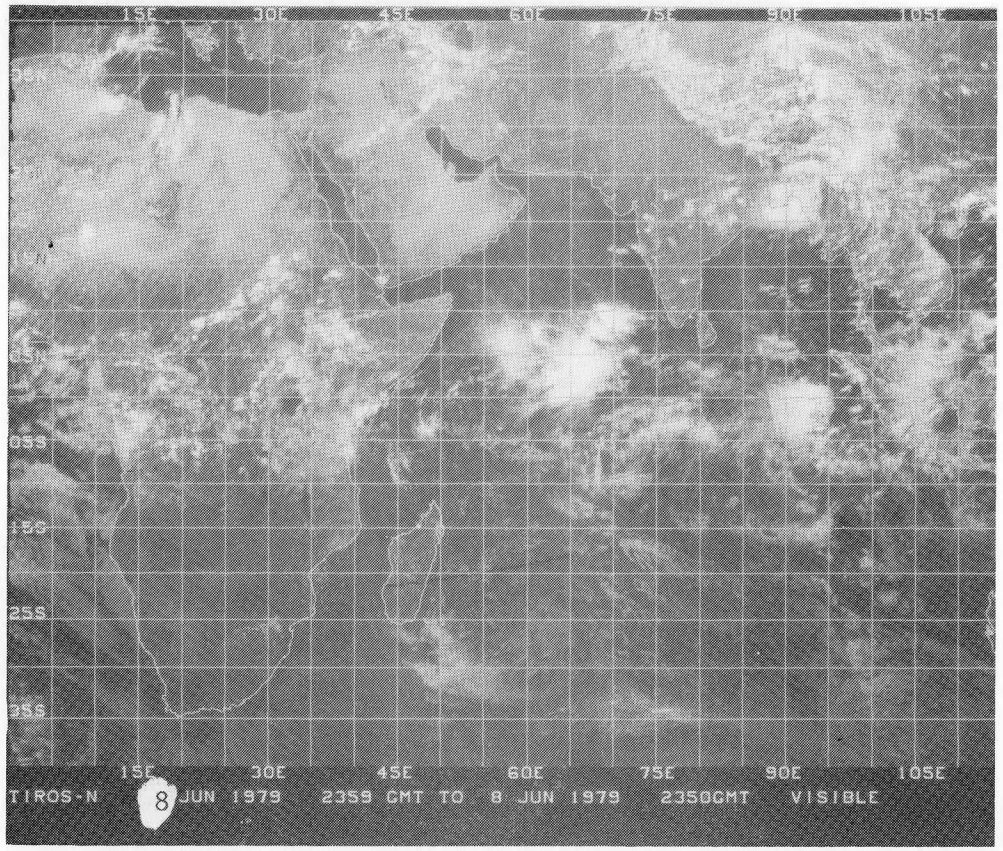

JUN 07, 1979 DATE=79158 NUMWND= 231 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

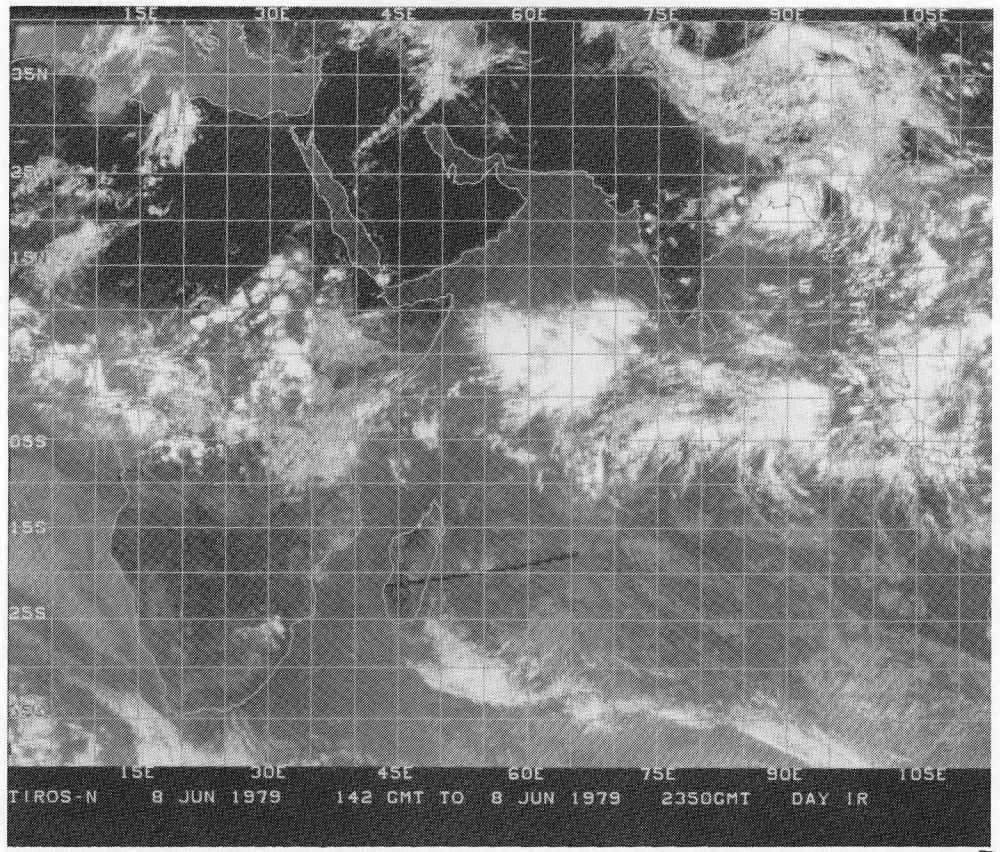

15E 30E 45E 60E 75E 90E 105E
TIROS-N 7 JUN 1979 10 GMT TO 7 JUN 1979 2359GMT VISIBLE

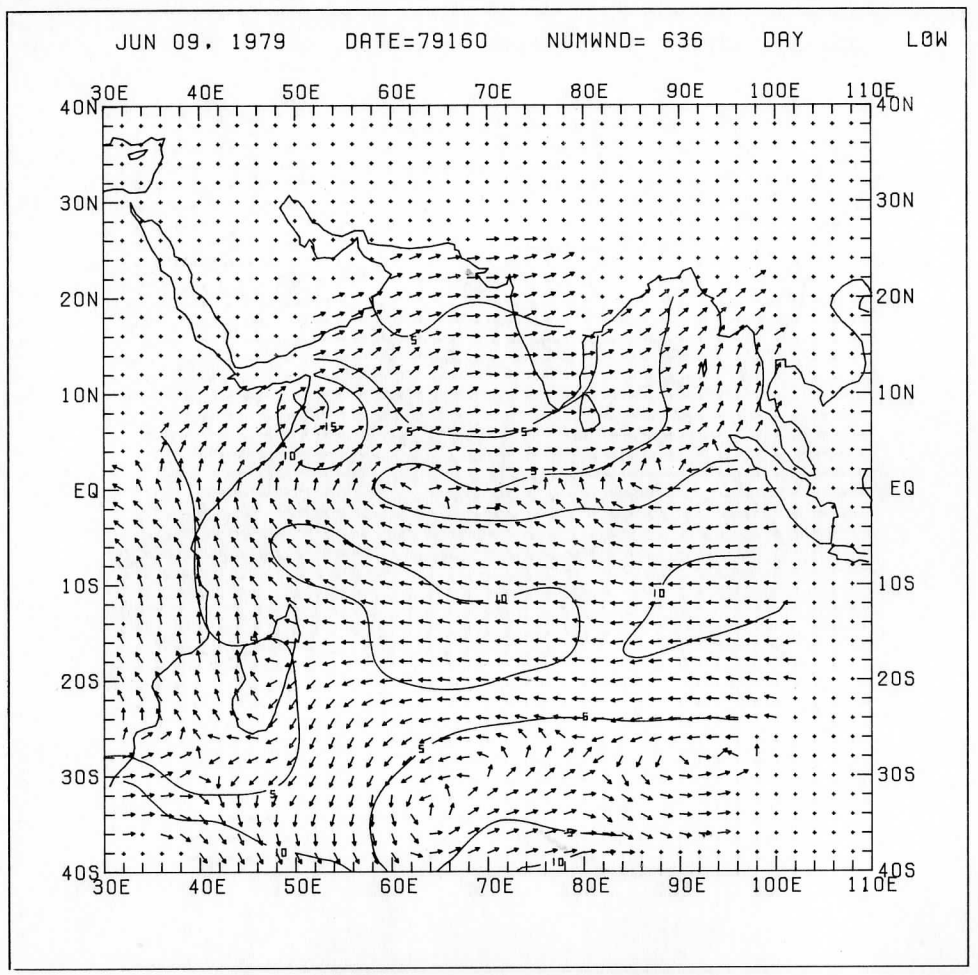

15E 30E 45E 60E 75E 90E 105E
TIROS-N 7 JUN 1979 153 GMT TO 7 JUN 1979 2359GMT DAY IR

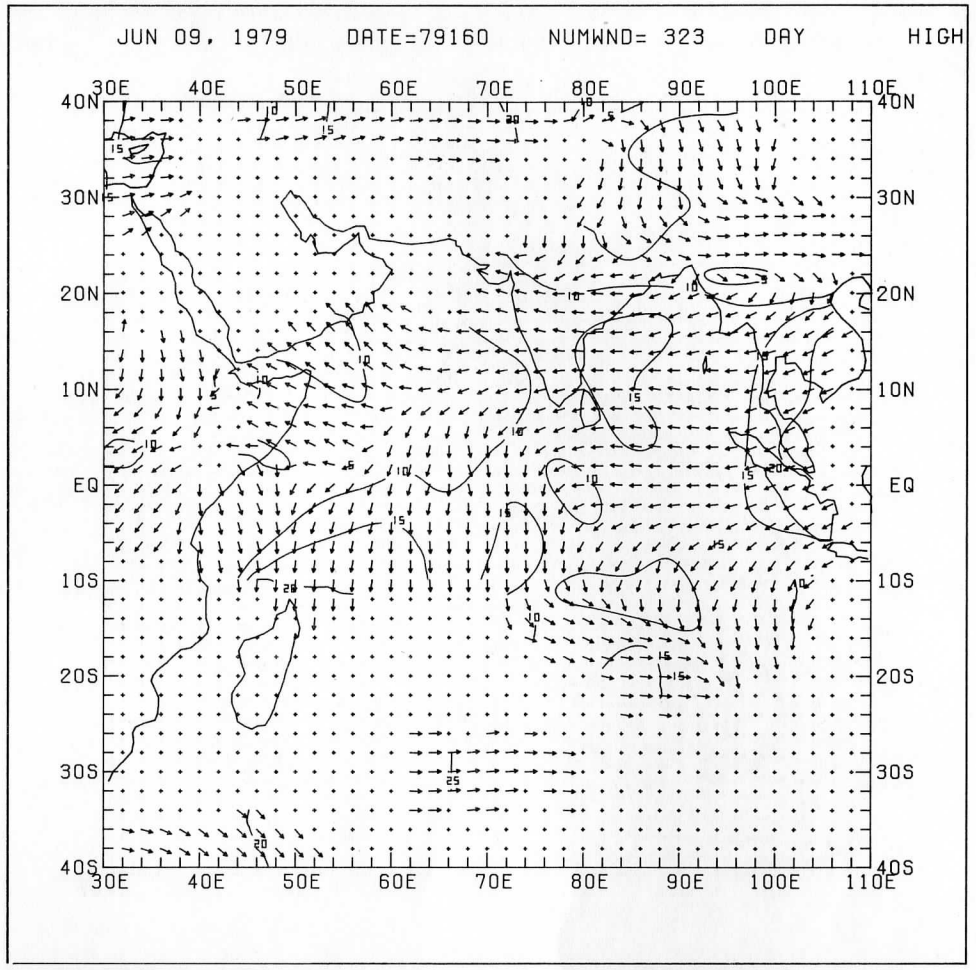

JUN 08, 1979 DATE=79159 NUMWND= 982 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

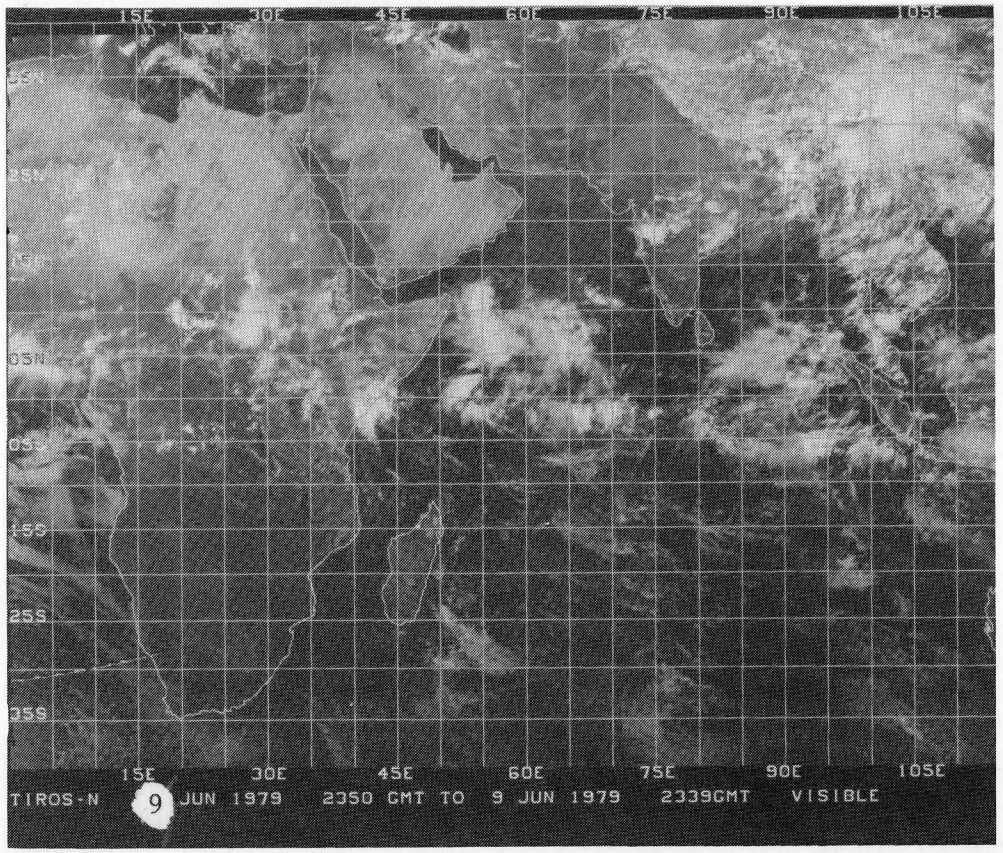

JUN 08, 1979 DATE=79159 NUMWND= 410 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

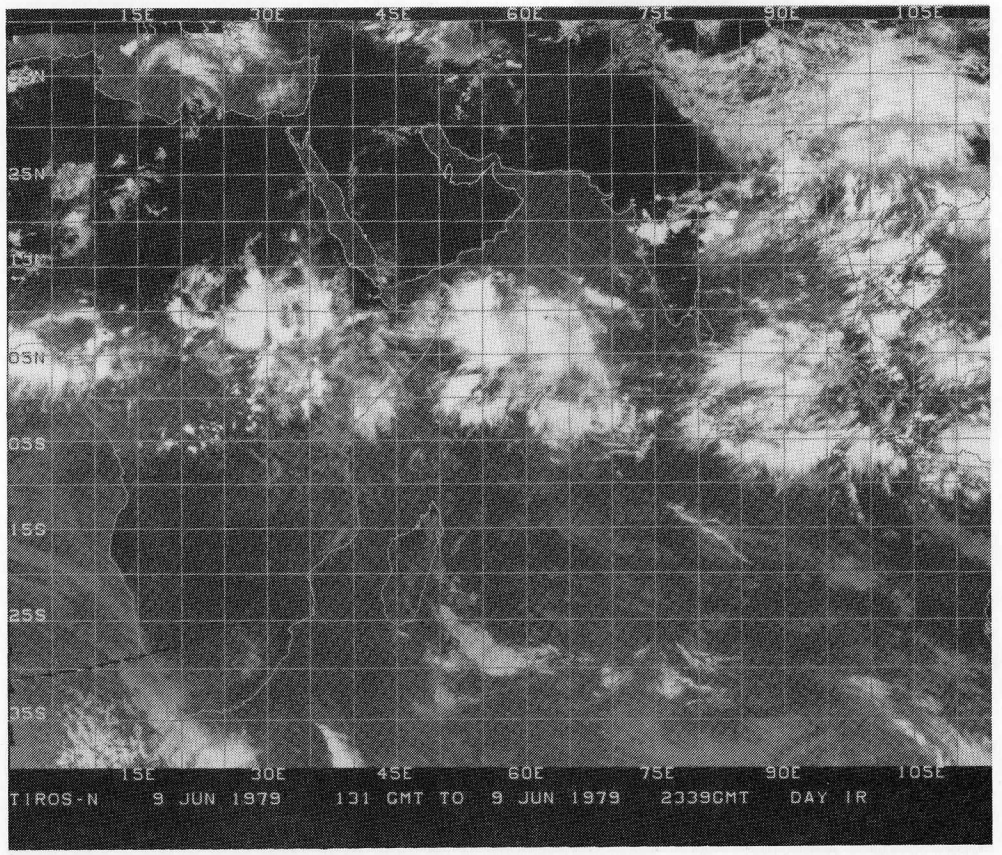

15E 30E 45E 60E 75E 90E 105E
TIROS-N 8 JUN 1979 2359 GMT TO 8 JUN 1979 2350GMT VISIBLE

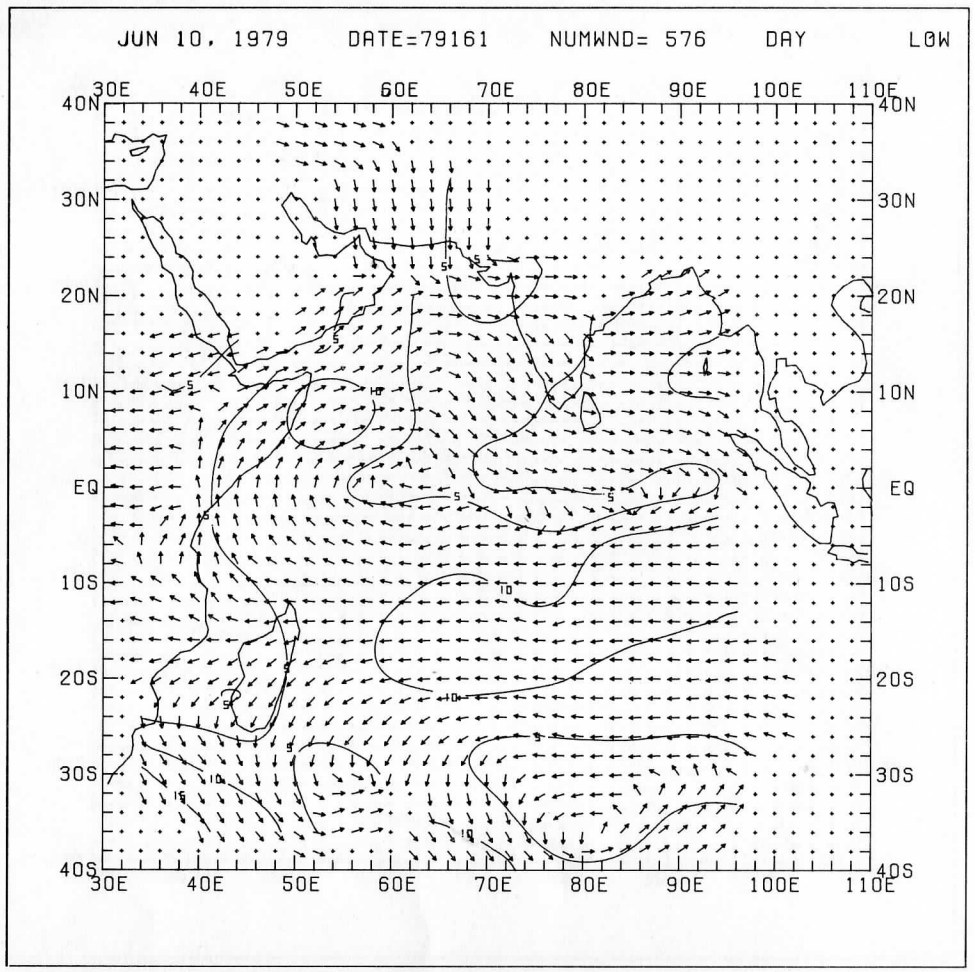

15E 30E 45E 60E 75E 90E 105E
TIROS-N 8 JUN 1979 142 GMT TO 8 JUN 1979 2350GMT DAY IR

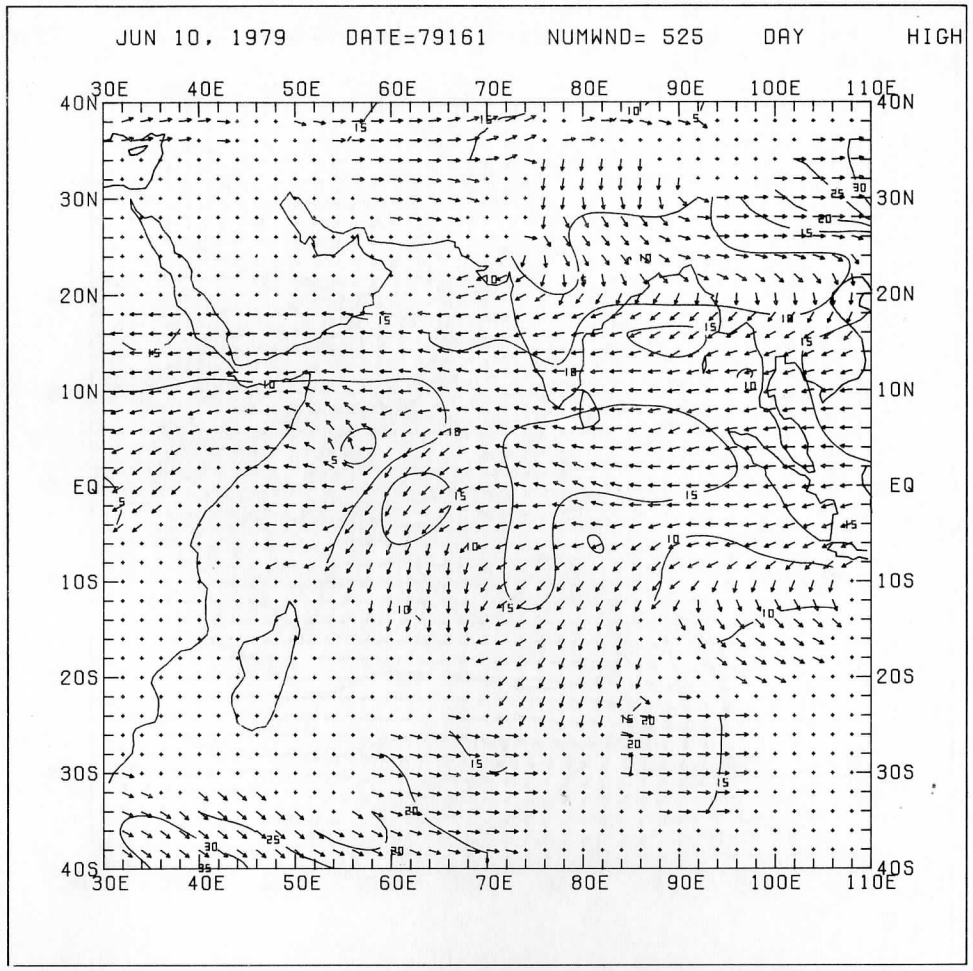

JUN 09, 1979 DATE=79160 NUMWND= 636 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

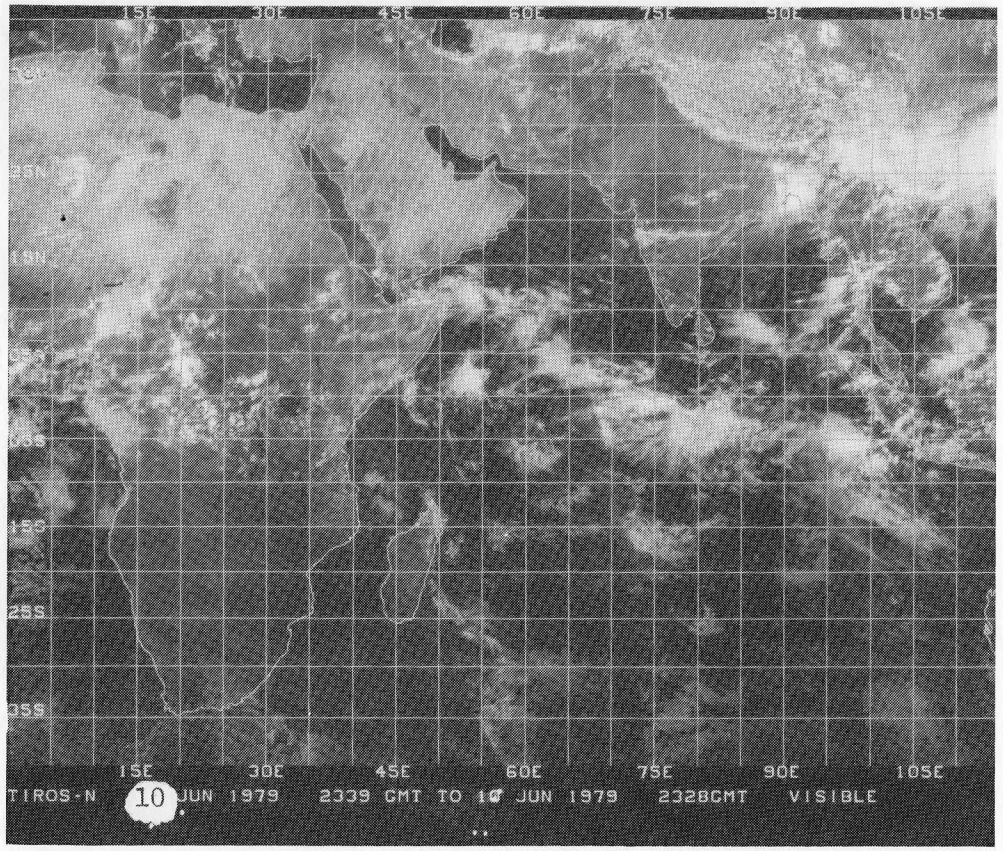

JUN 09, 1979 DATE=79160 NUMWND= 323 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

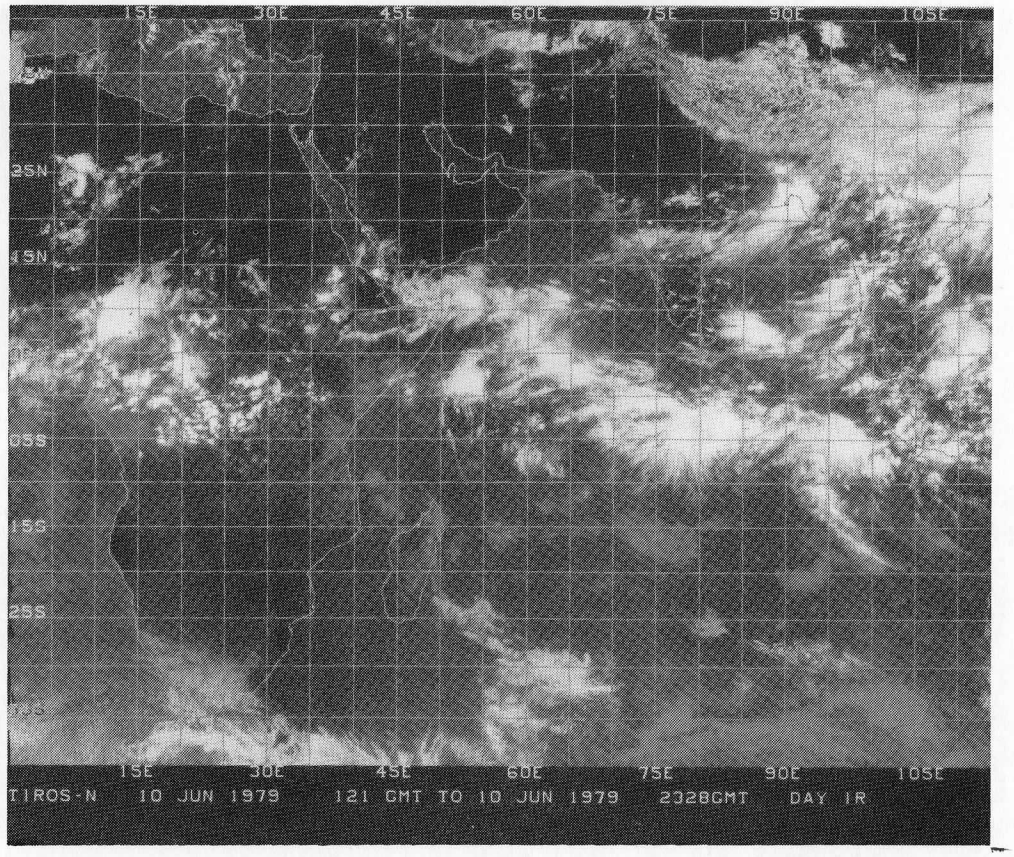

15E 30E 45E 60E 75E 90E 105E
TIROS-N 9 JUN 1979 2350 GMT TO 9 JUN 1979 2339GMT VISIBLE

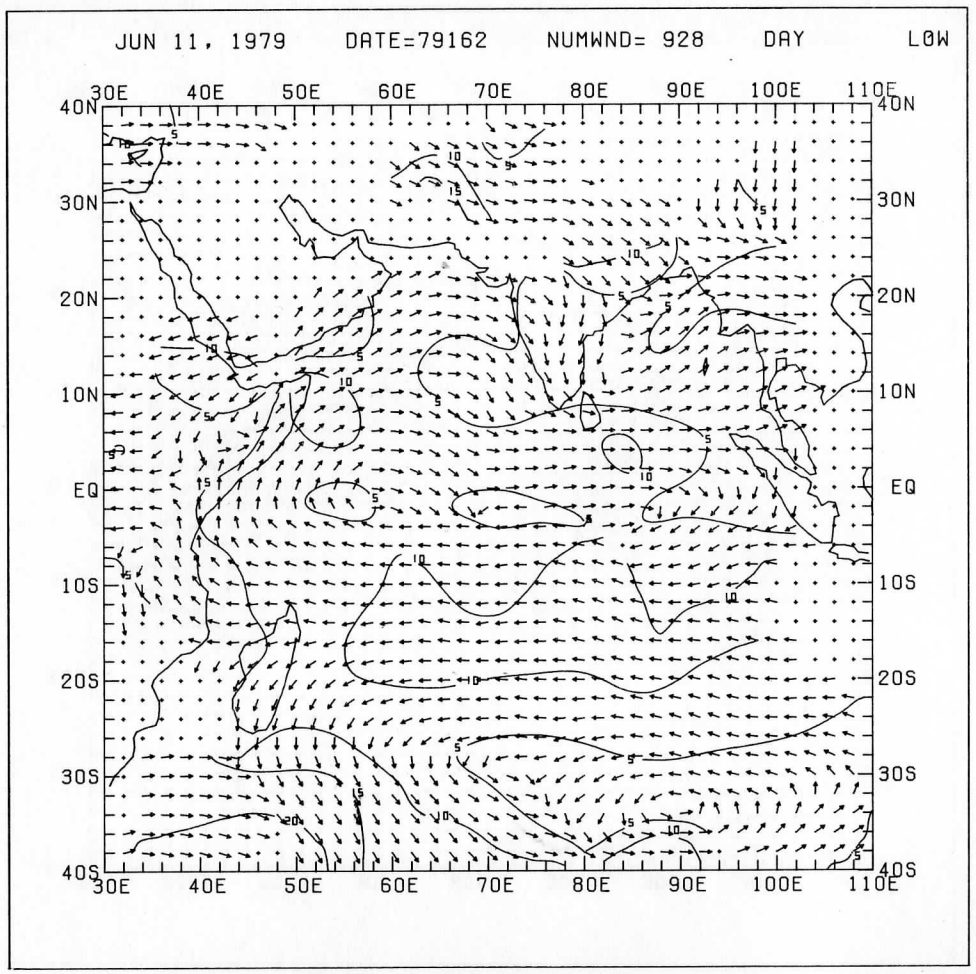

15E 30E 45E 60E 75E 90E 105E
TIROS-N 9 JUN 1979 131 GMT TO 9 JUN 1979 2339GMT DAY IR

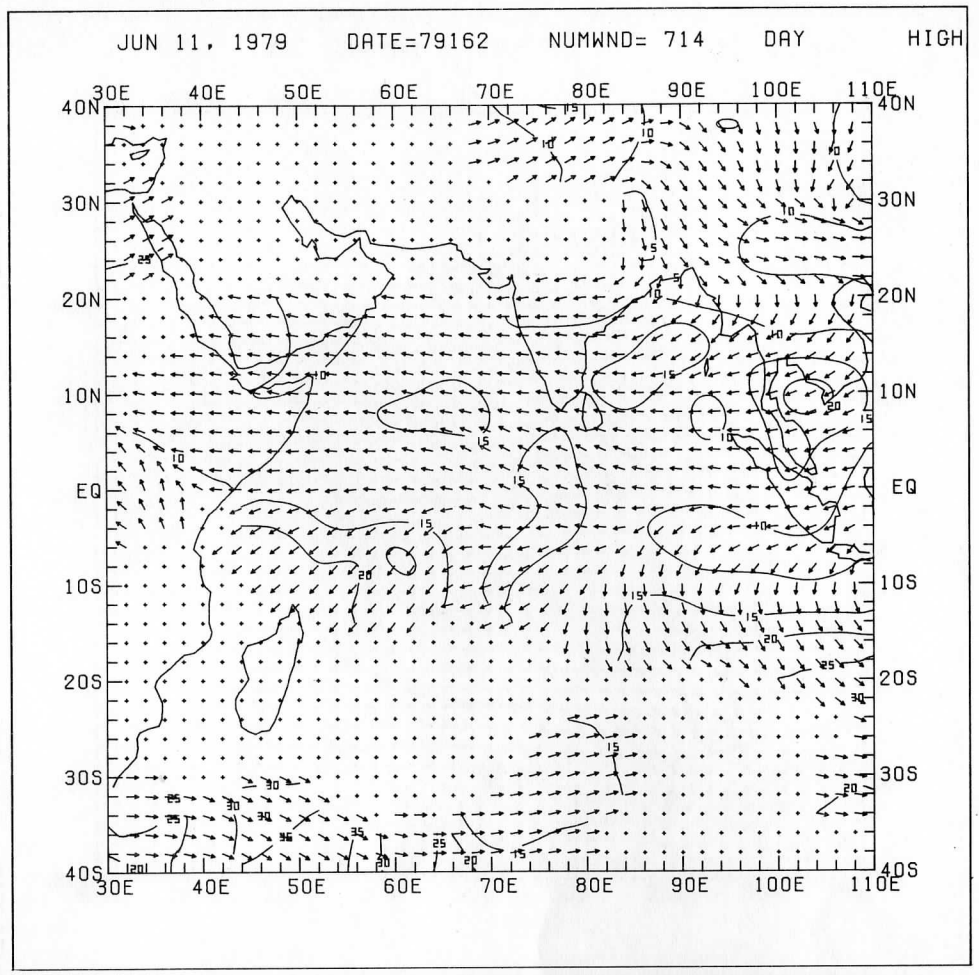

JUN 10, 1979 DATE=79161 NUMWND= 576 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

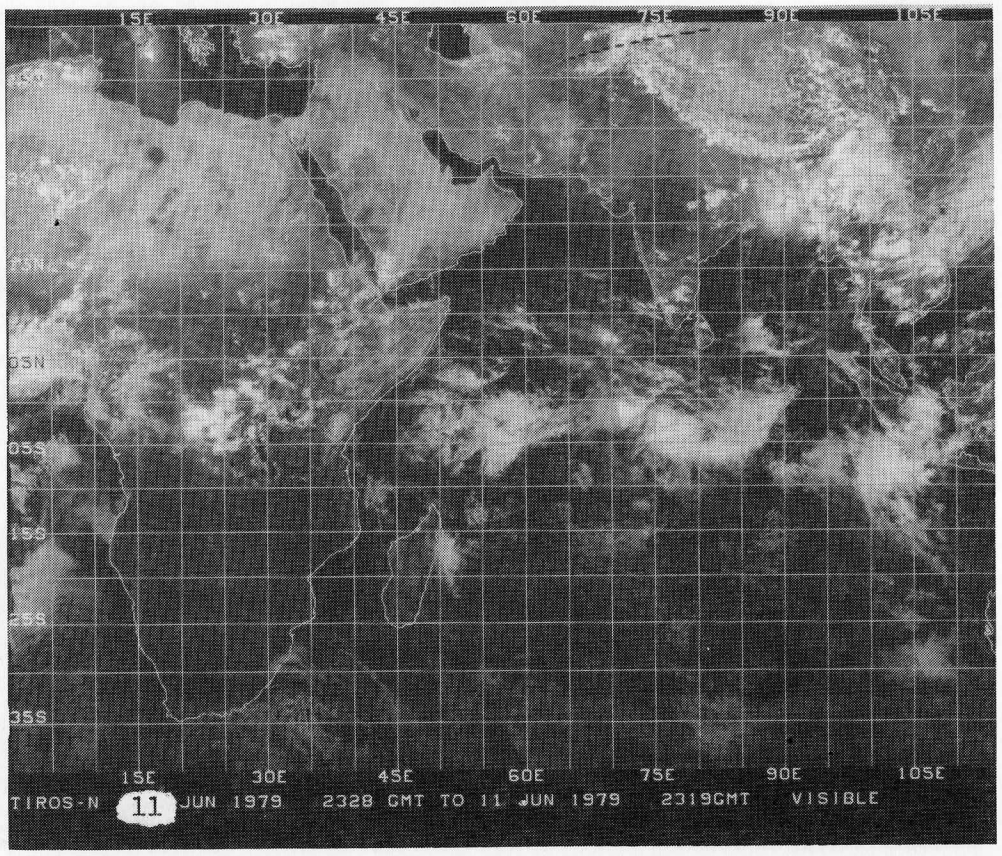

JUN 10, 1979 DATE=79161 NUMWND= 525 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

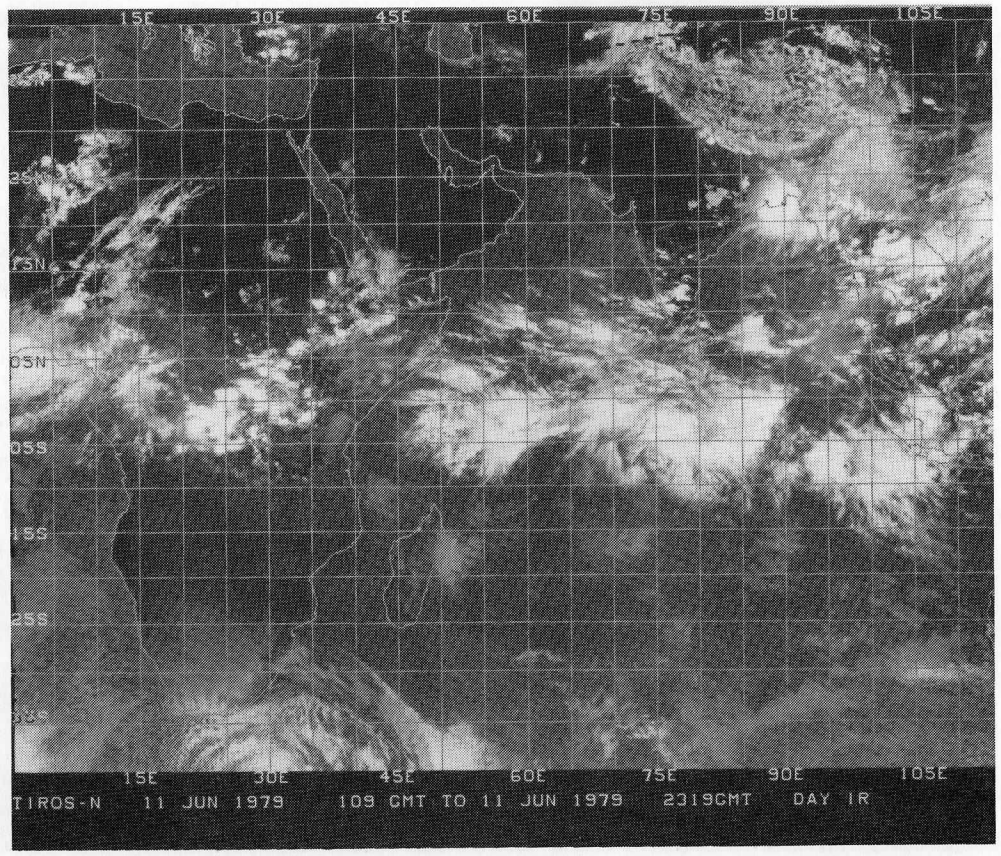

15E 30E 45E 60E 75E 90E 105E
TIROS-N 10 JUN 1979 2339 GMT TO 10 JUN 1979 2328GMT VISIBLE

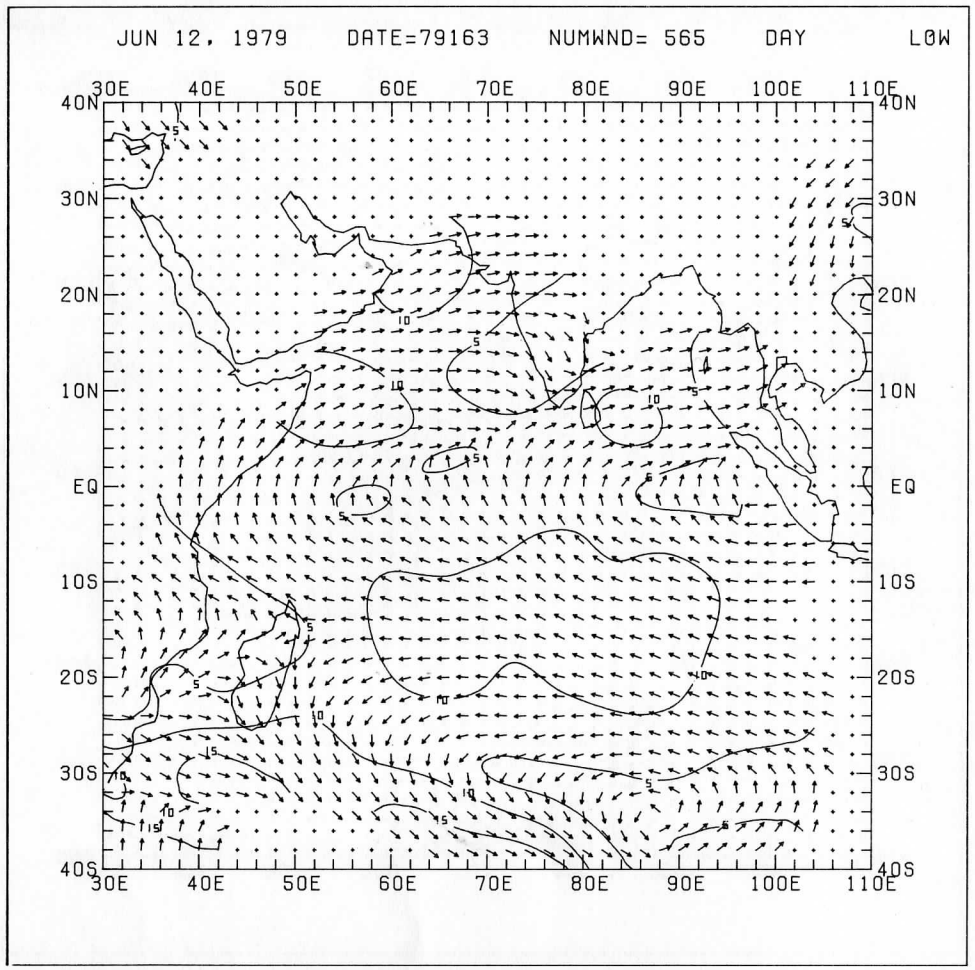

15E 30E 45E 60E 75E 90E 105E
TIROS-N 10 JUN 1979 121 GMT TO 10 JUN 1979 2328GMT DAY IR

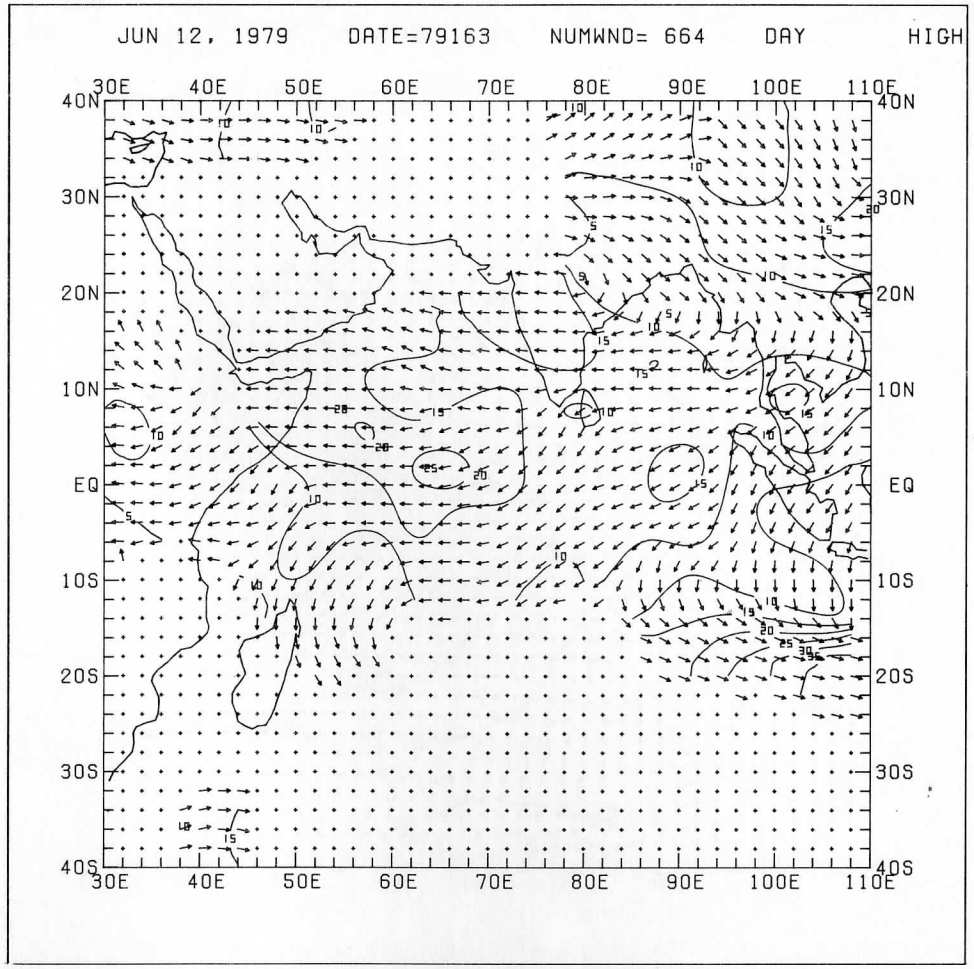

JUN 11, 1979 DATE=79162 NUMWND= 928 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

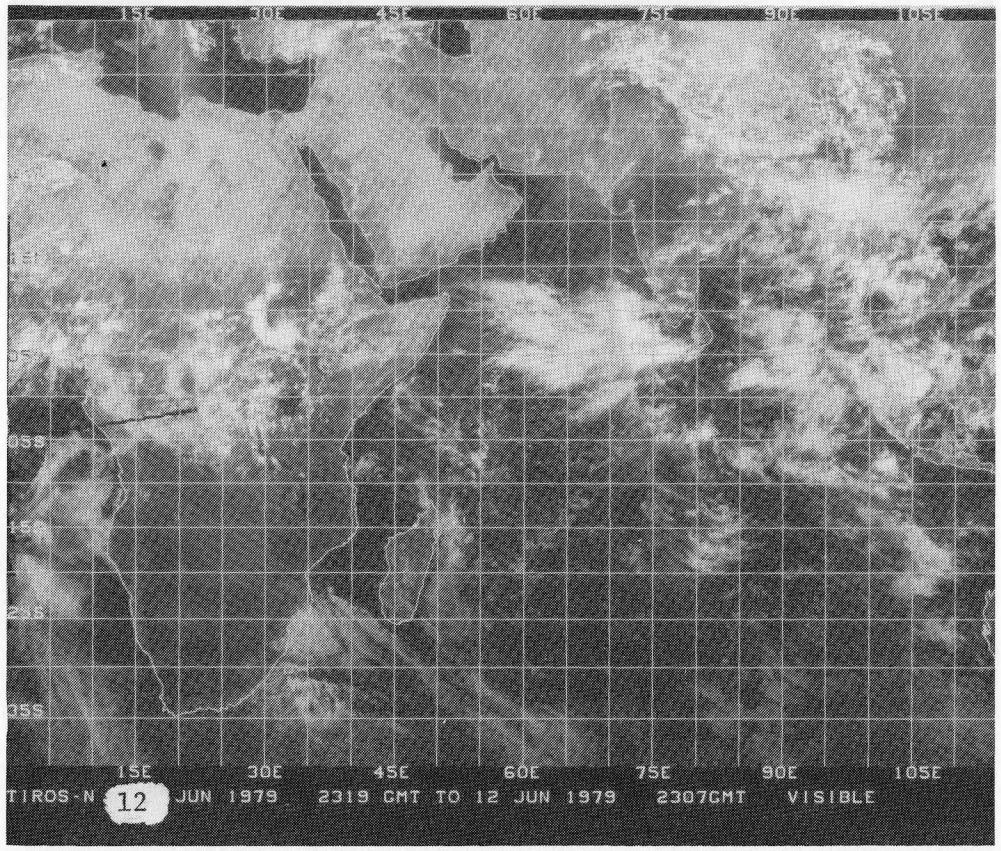

JUN 11, 1979 DATE=79162 NUMWND= 714 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

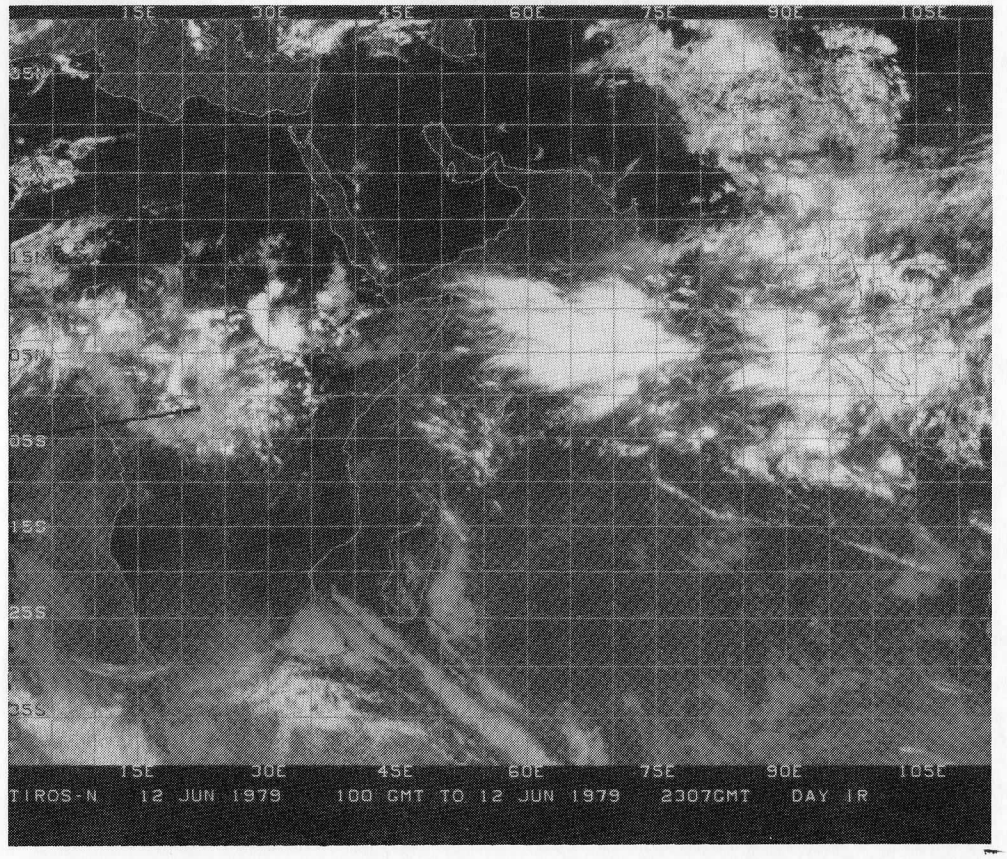

15E 30E 45E 60E 75E 90E 105E
TIROS-N 11 JUN 1979 2328 GMT TO 11 JUN 1979 2319GMT VISIBLE

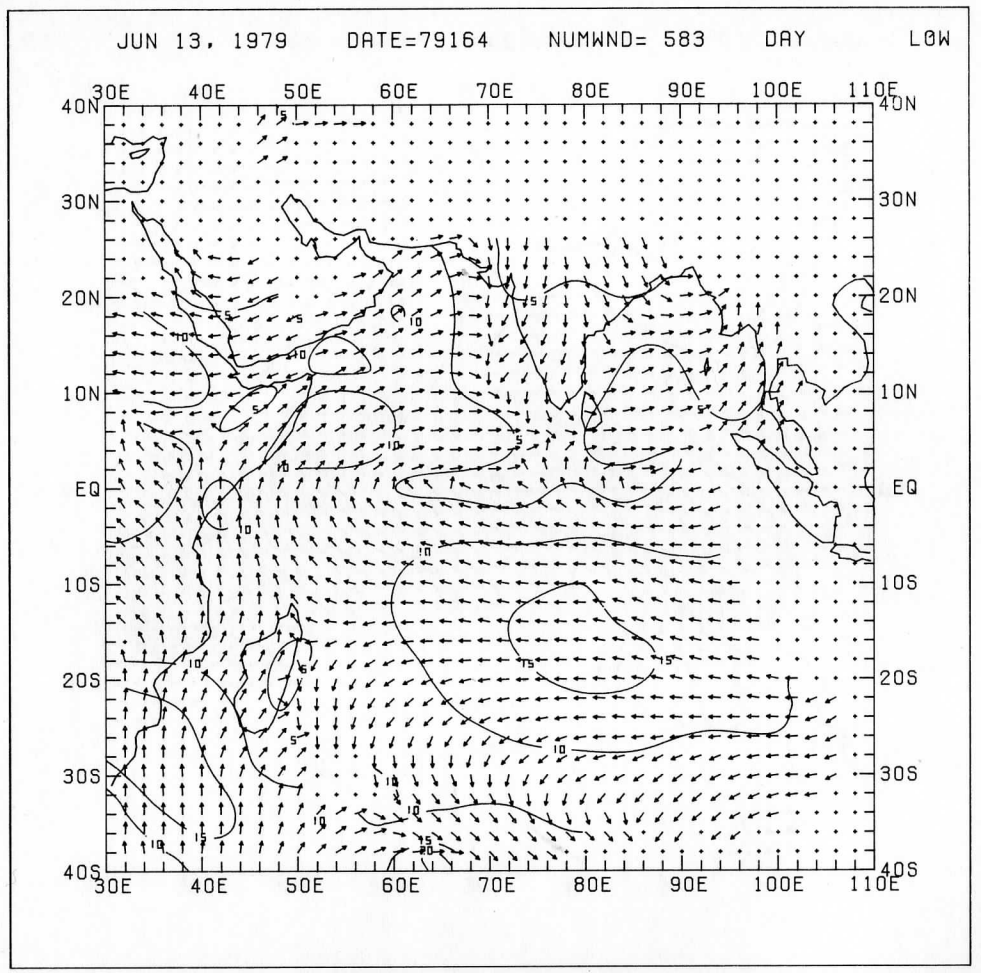

15E 30E 45E 60E 75E 90E 105E
TIROS-N 11 JUN 1979 109 GMT TO 11 JUN 1979 2319GMT DAY IR

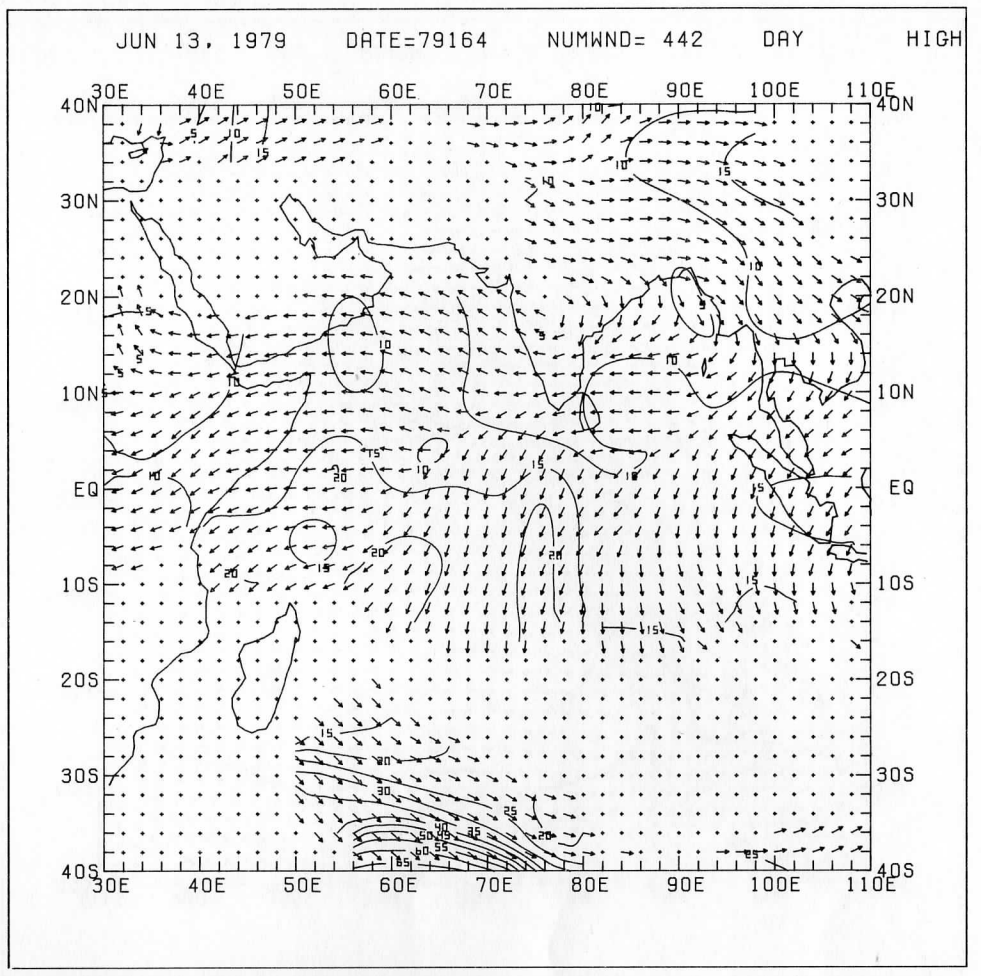

JUN 12, 1979 DATE=79163 NUMWND= 565 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

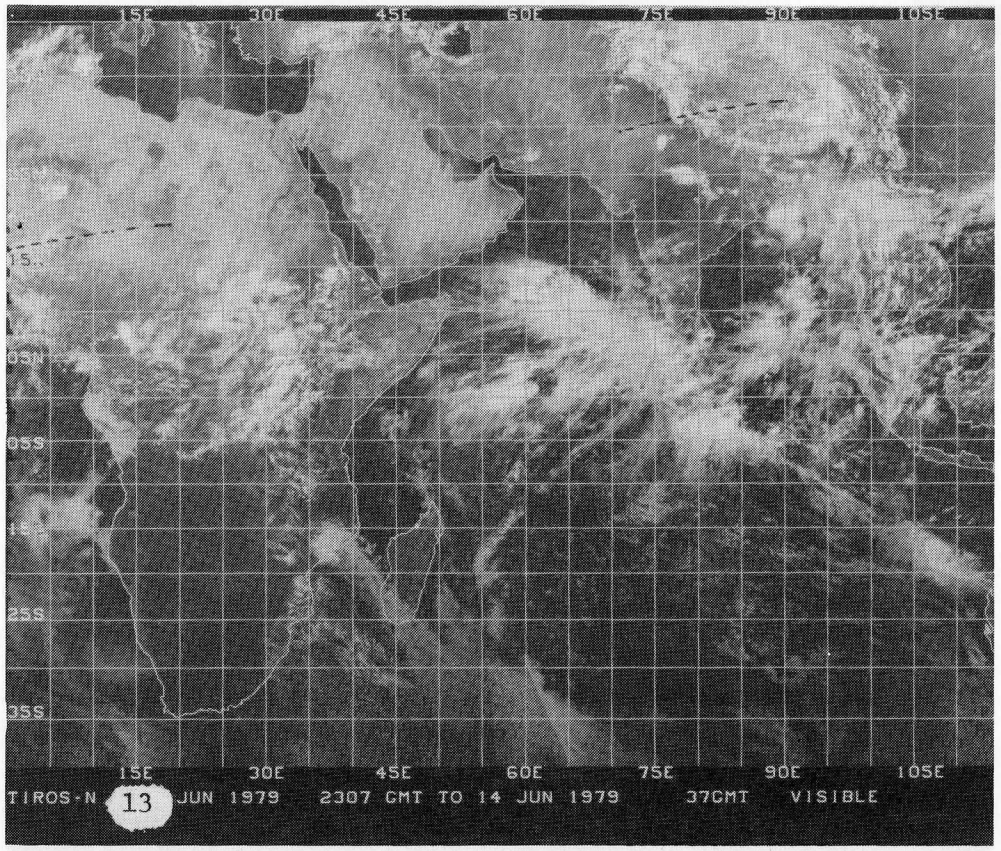

JUN 12, 1979 DATE=79163 NUMWND= 664 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

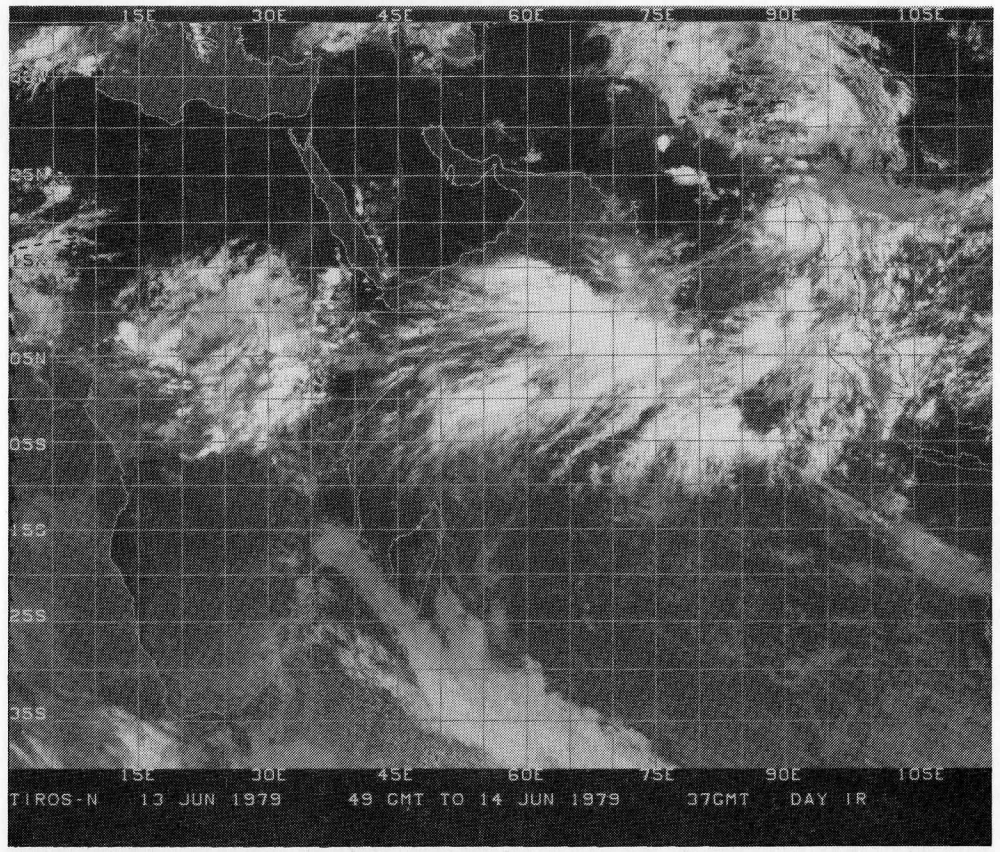

15E 30E 45E 60E 75E 90E 105E
TIROS-N 12 JUN 1979 2319 GMT TO 12 JUN 1979 2307GMT VISIBLE

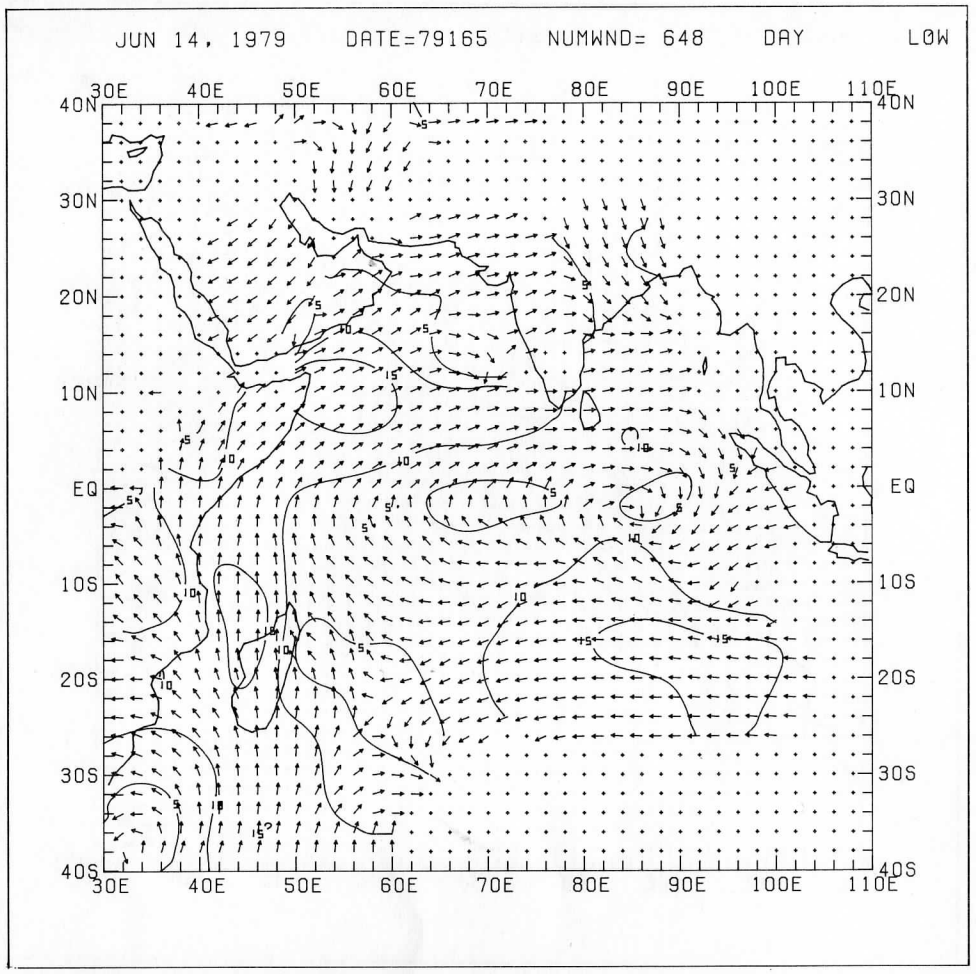

15E 30E 45E 60E 75E 90E 105E
TIROS-N 12 JUN 1979 100 GMT TO 12 JUN 1979 2307GMT DAY IR

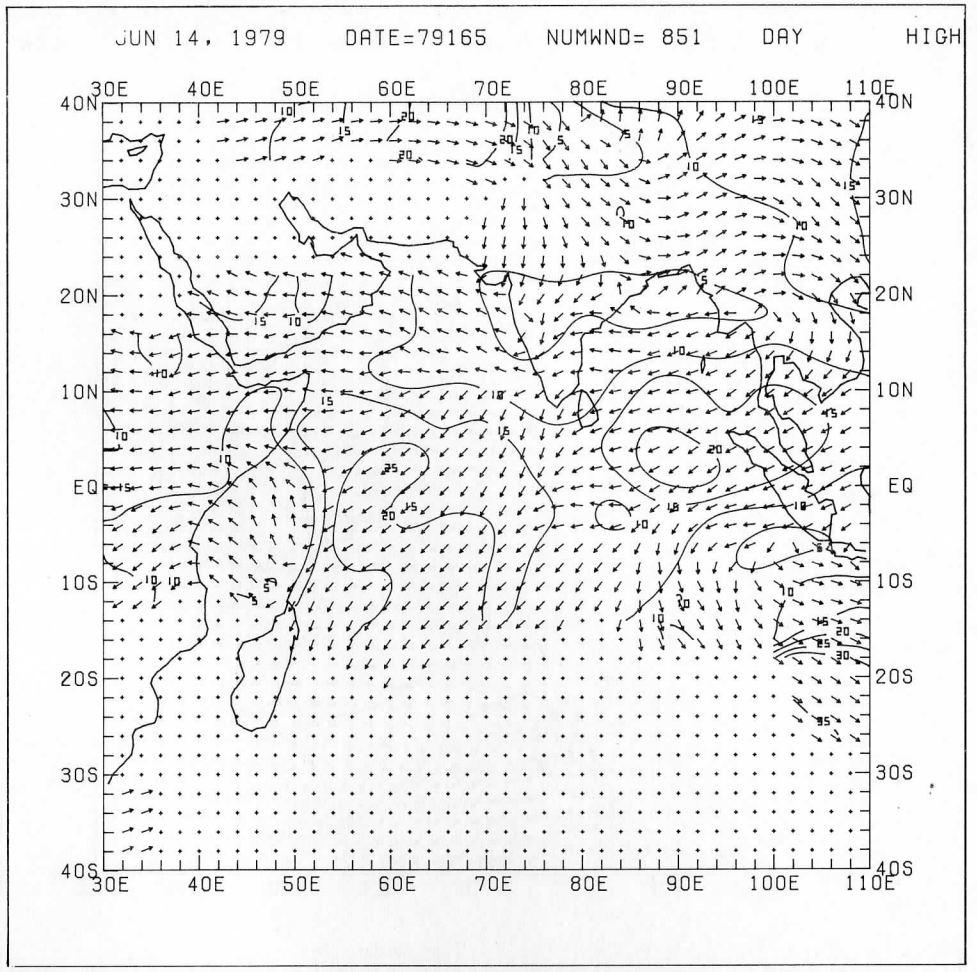

JUN 13, 1979 DATE=79164 NUMWND= 583 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

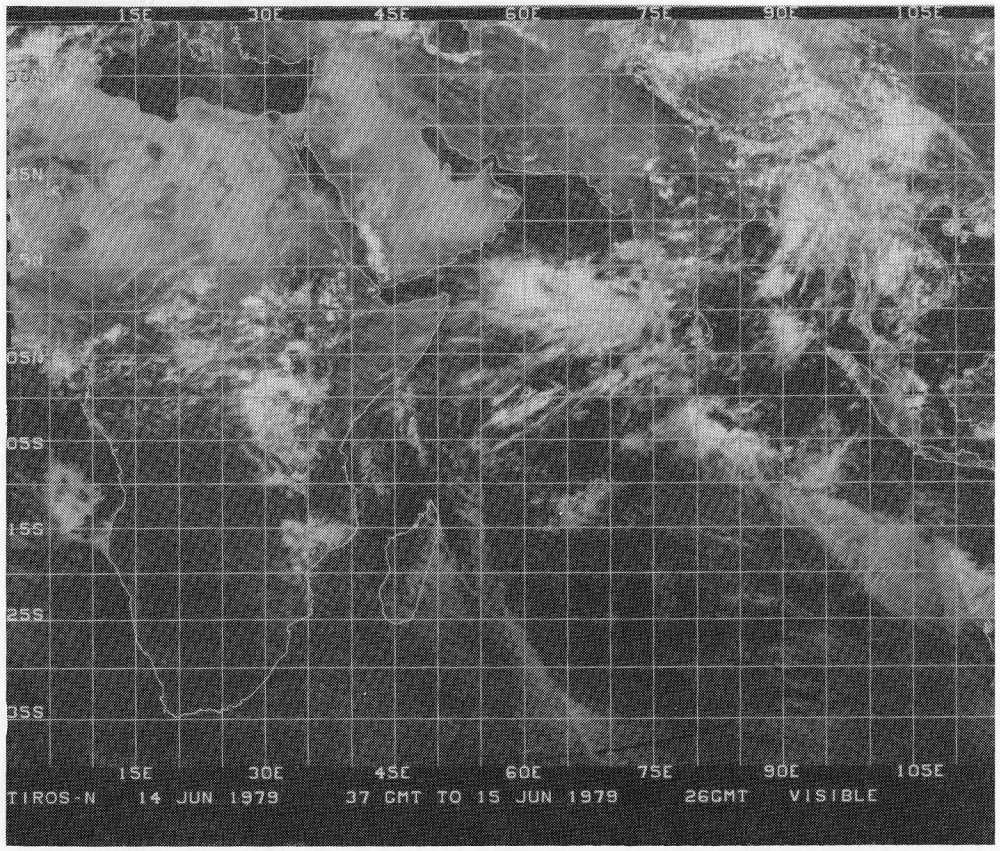

JUN 13, 1979 DATE=79164 NUMWND= 442 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

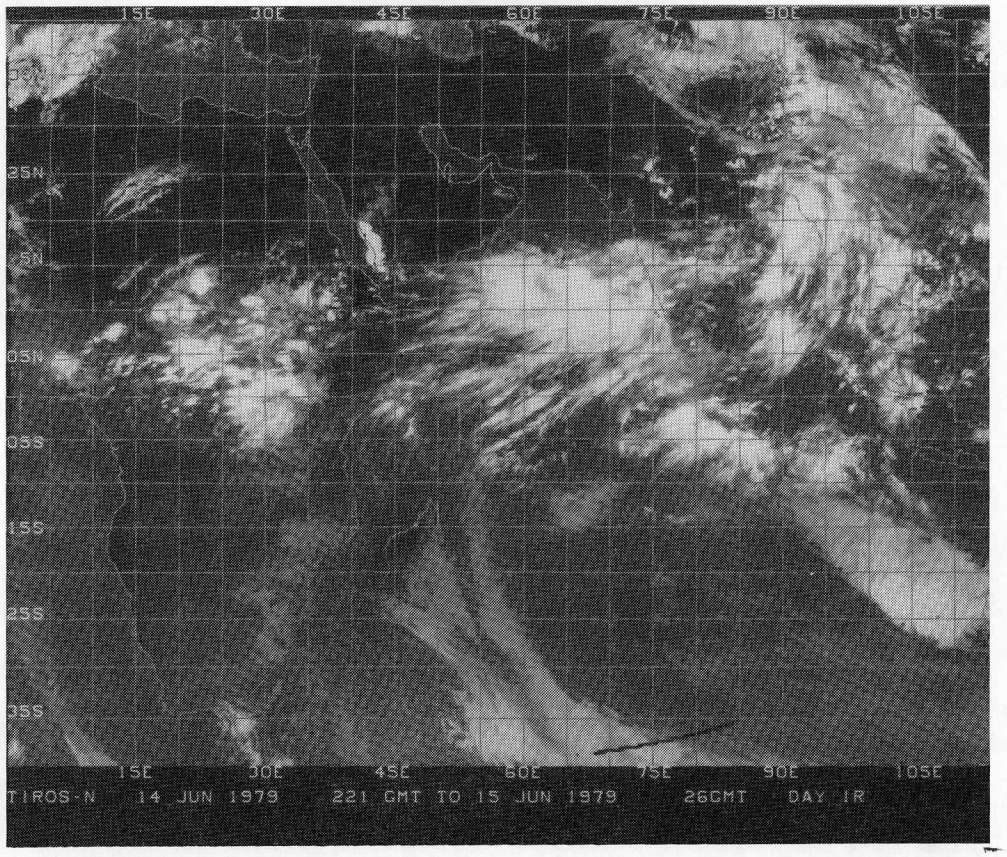

15E 30E 45E 60E 75E 90E 105E
TIROS-N 13 JUN 1979 2307 GMT TO 14 JUN 1979 37GMT VISIBLE

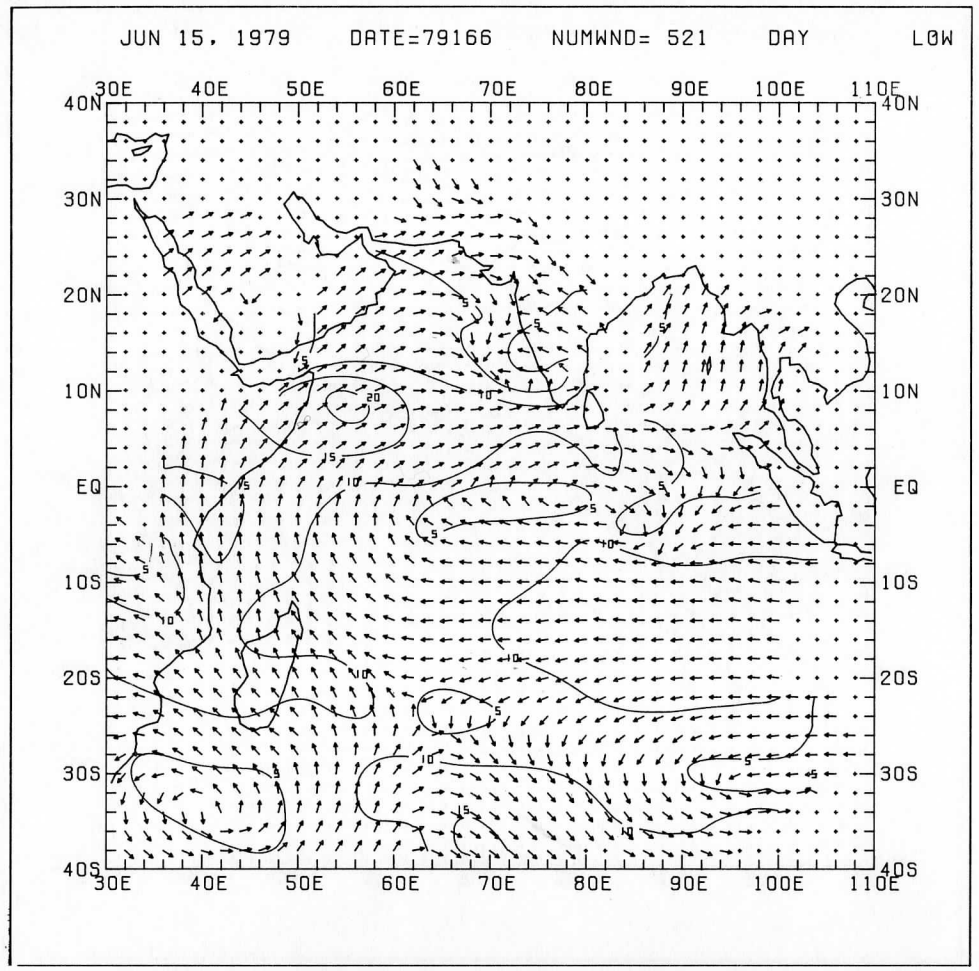

15E 30E 45E 60E 75E 90E 105E
TIROS-N 13 JUN 1979 49 GMT TO 14 JUN 1979 37GMT DAY IR

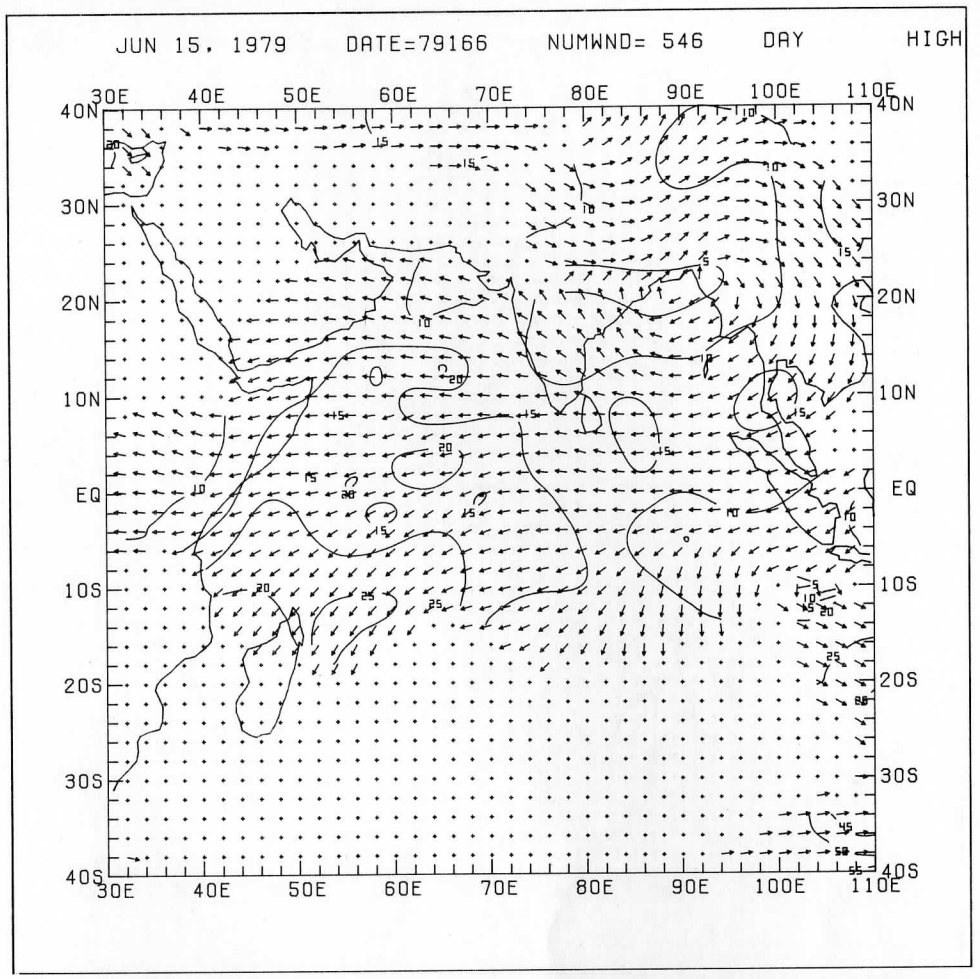

JUN 14, 1979 DATE=79165 NUMWND= 648 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

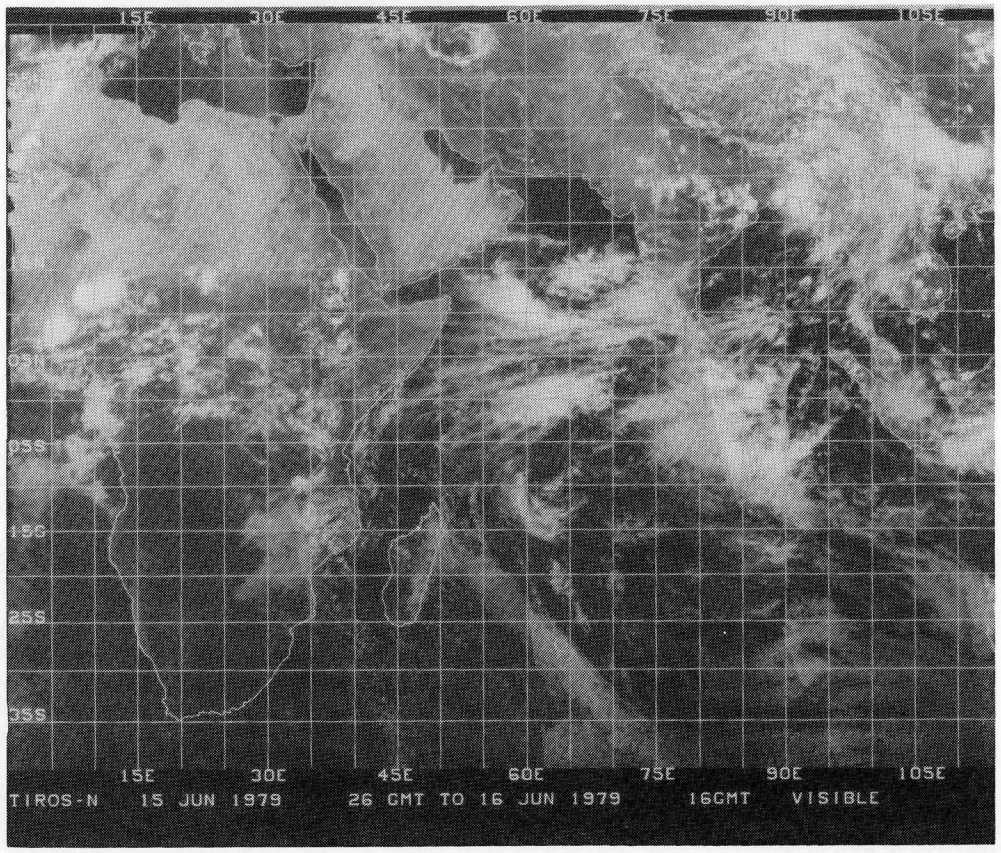

JUN 14, 1979 DATE=79165 NUMWND= 851 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

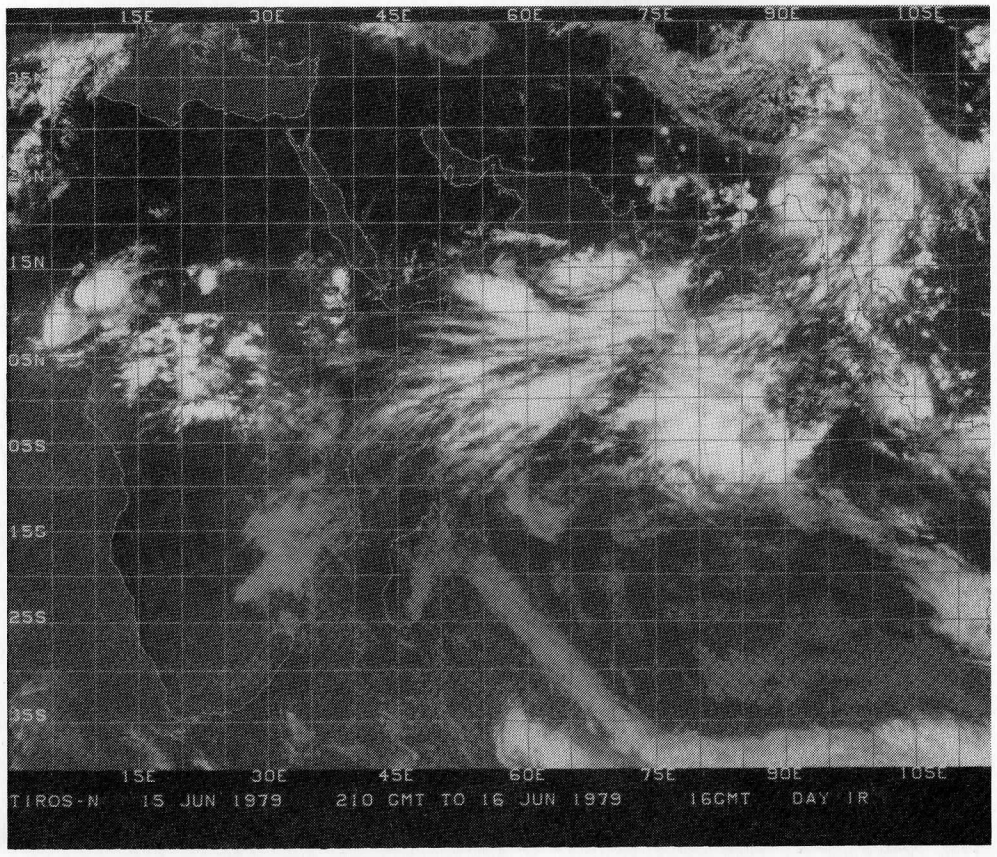

15E 30E 45E 60E 75E 90E 105E
TIROS-N 14 JUN 1979 37 GMT TO 15 JUN 1979 26GMT VISIBLE

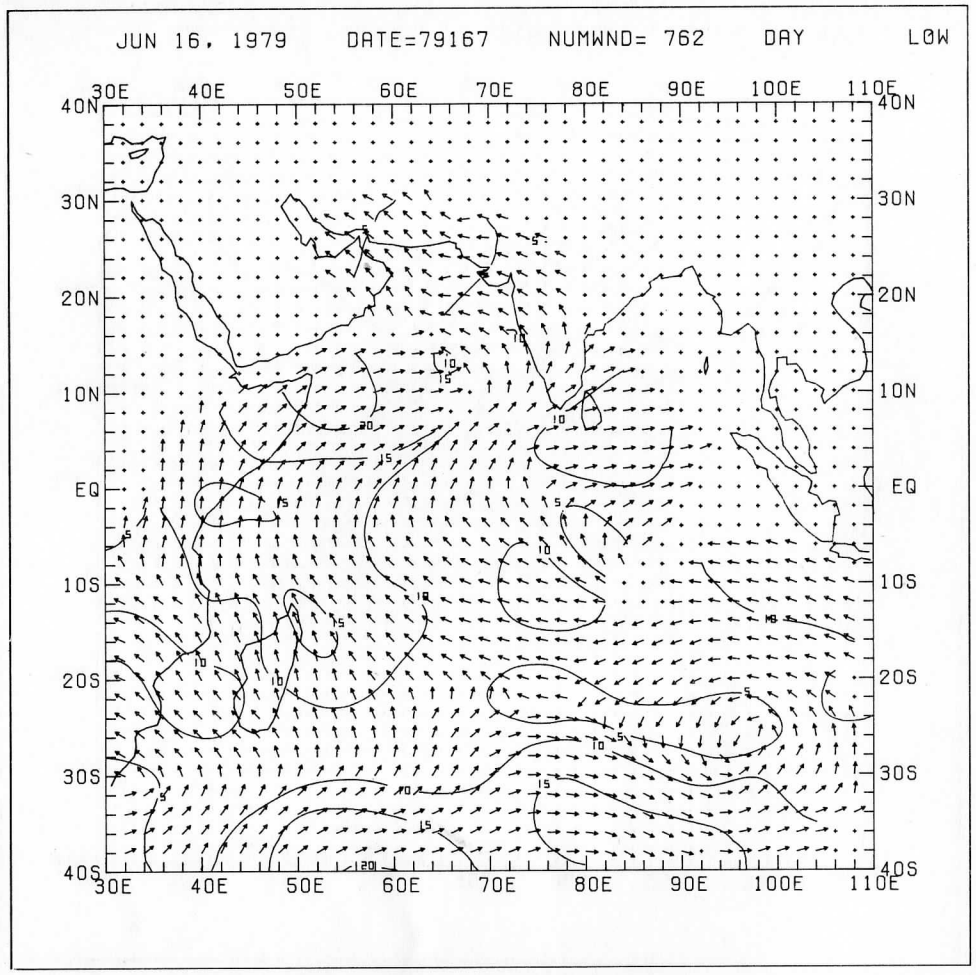

15E 30E 45E 60E 75E 90E 105E
TIROS-N 14 JUN 1979 221 GMT TO 15 JUN 1979 26GMT DAY IR

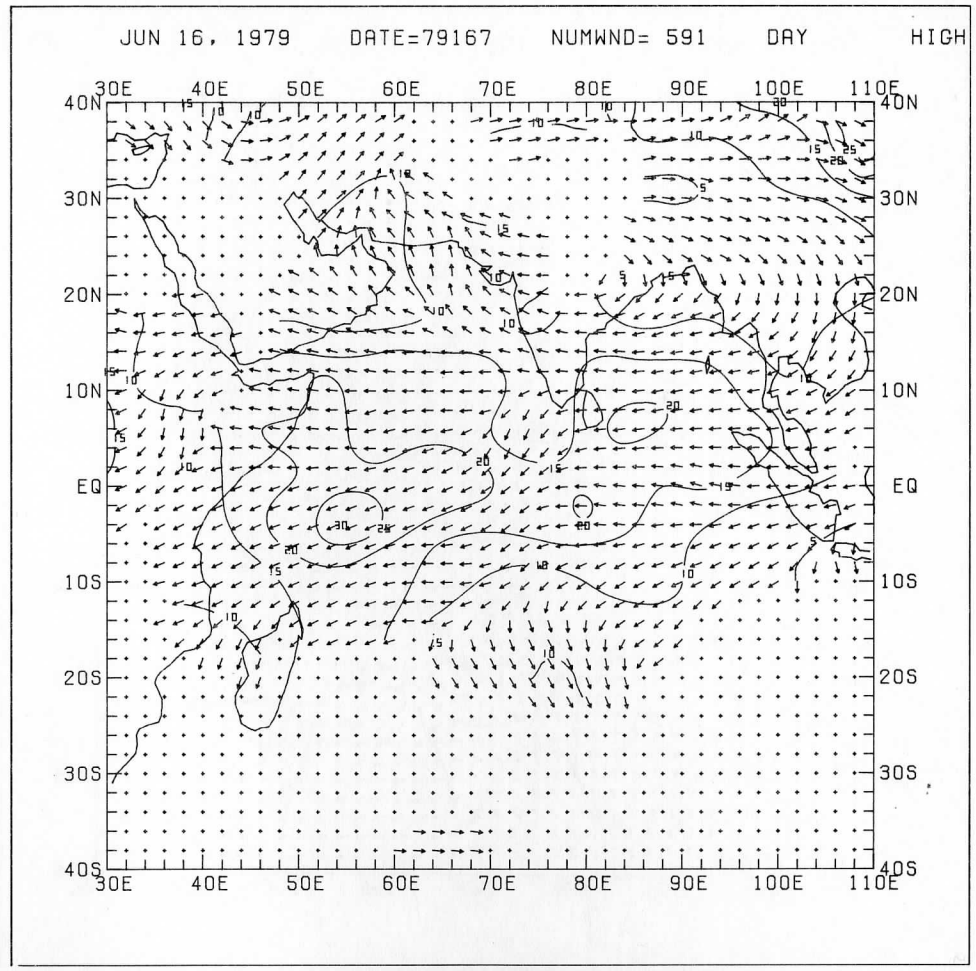

JUN 15, 1979 DATE=79166 NUMWND= 521 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

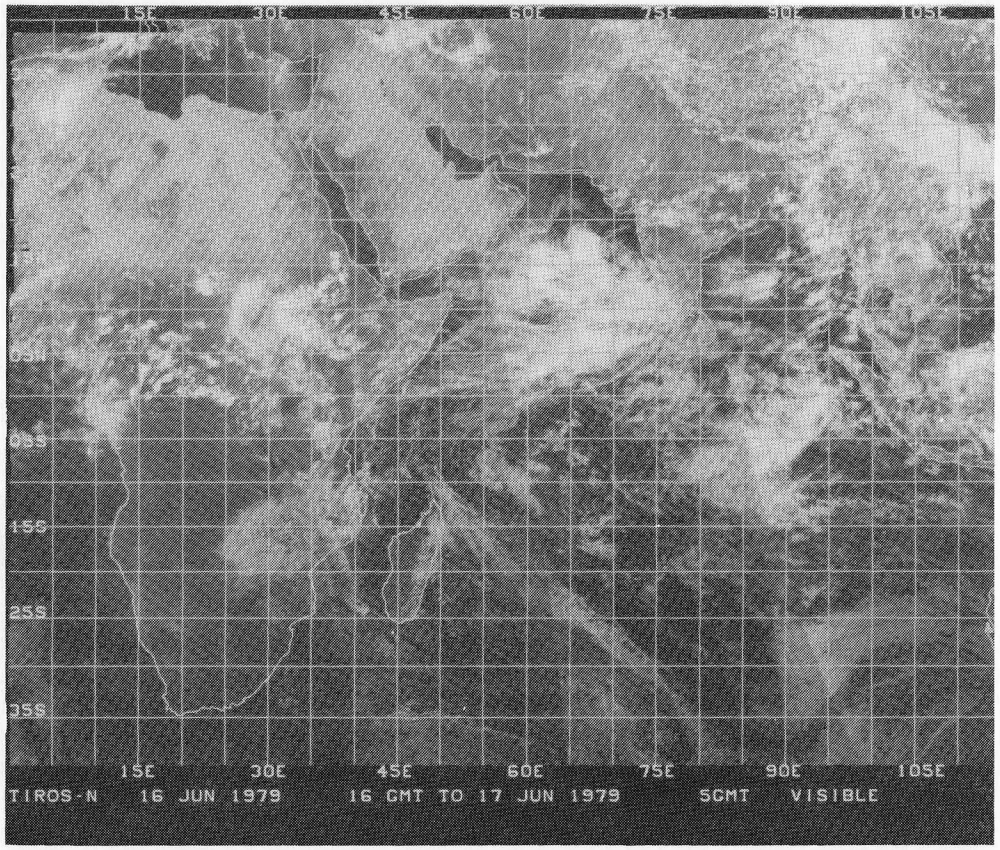

JUN 15, 1979 DATE=79166 NUMWND= 546 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

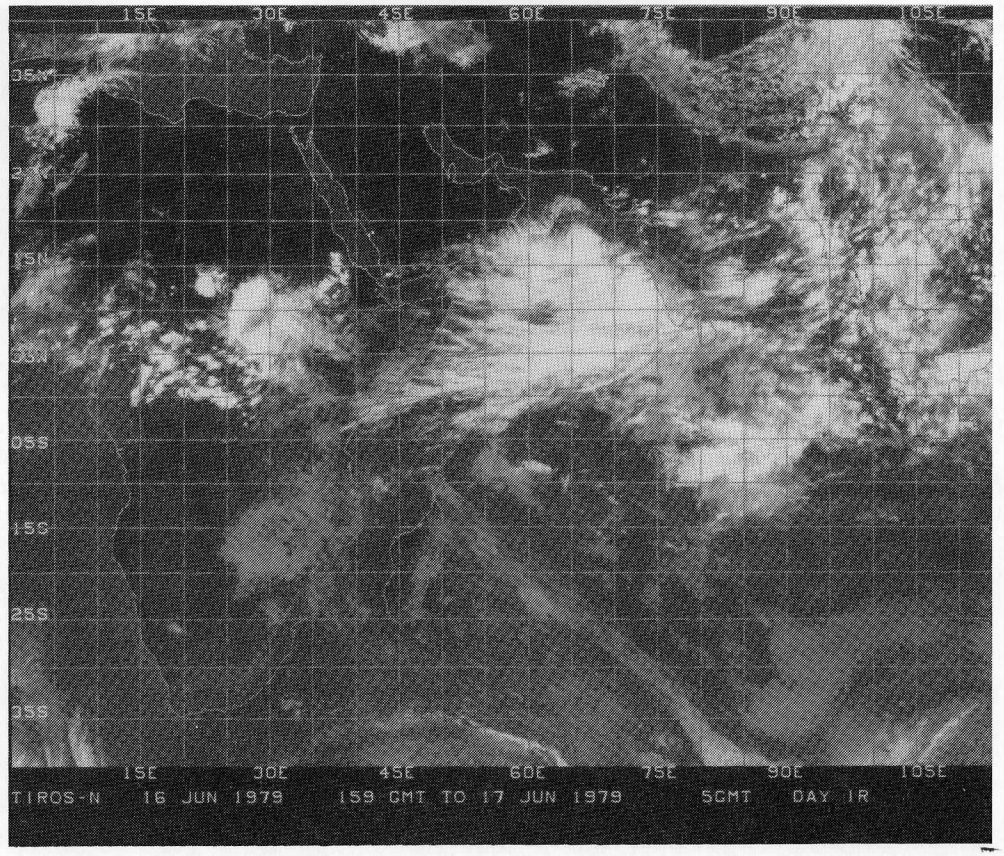

15E 30E 45E 60E 75E 90E 105E
TIROS-N 15 JUN 1979 26 GMT TO 16 JUN 1979 16GMT VISIBLE

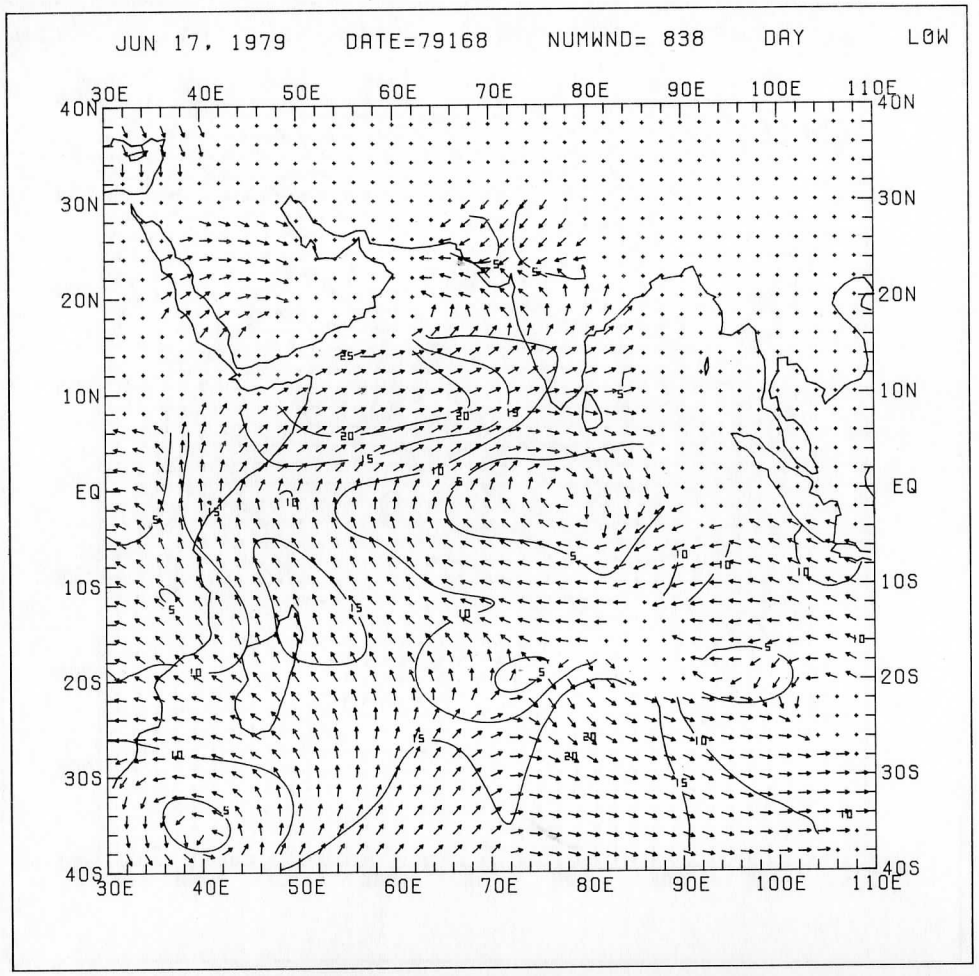

15E 30E 45E 60E 75E 90E 105E
TIROS-N 15 JUN 1979 210 GMT TO 16 JUN 1979 16GMT DAY IR

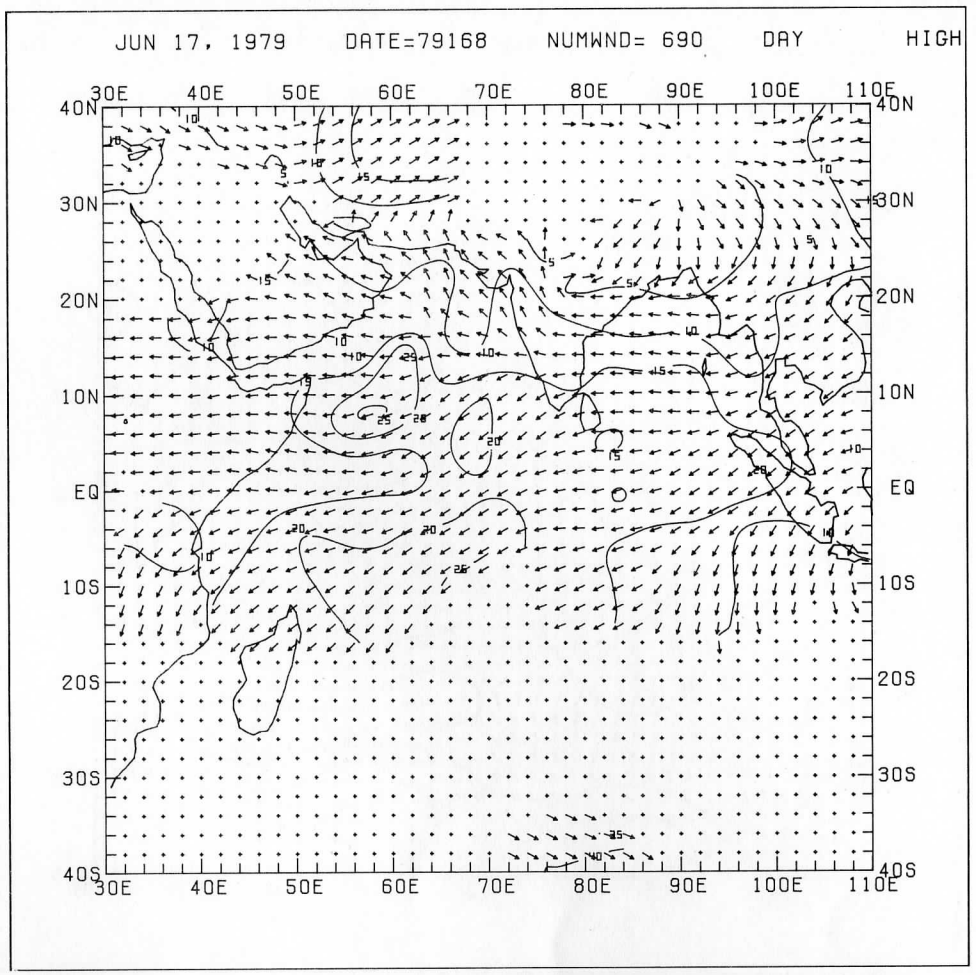

JUN 16, 1979 DATE=79167 NUMWND= 762 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

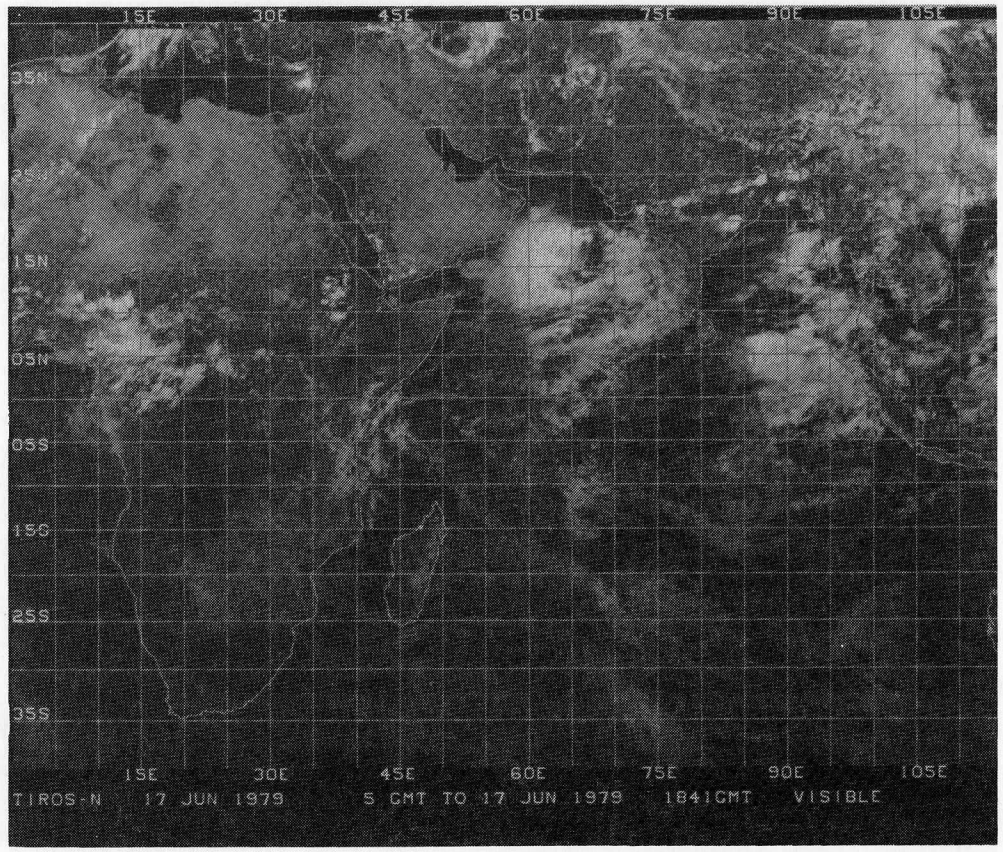

JUN 16, 1979 DATE=79167 NUMWND= 591 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

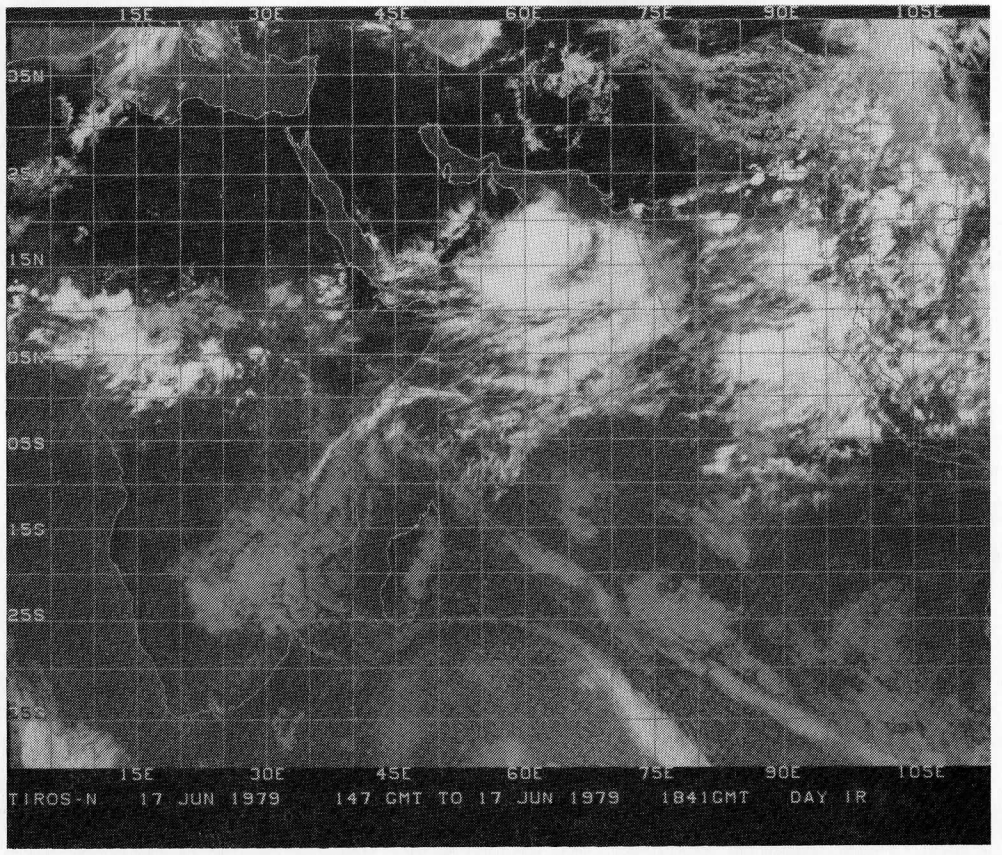

15E 30E 45E 60E 75E 90E 105E
TIROS-N 16 JUN 1979 16 GMT TO 17 JUN 1979 SGMT VISIBLE

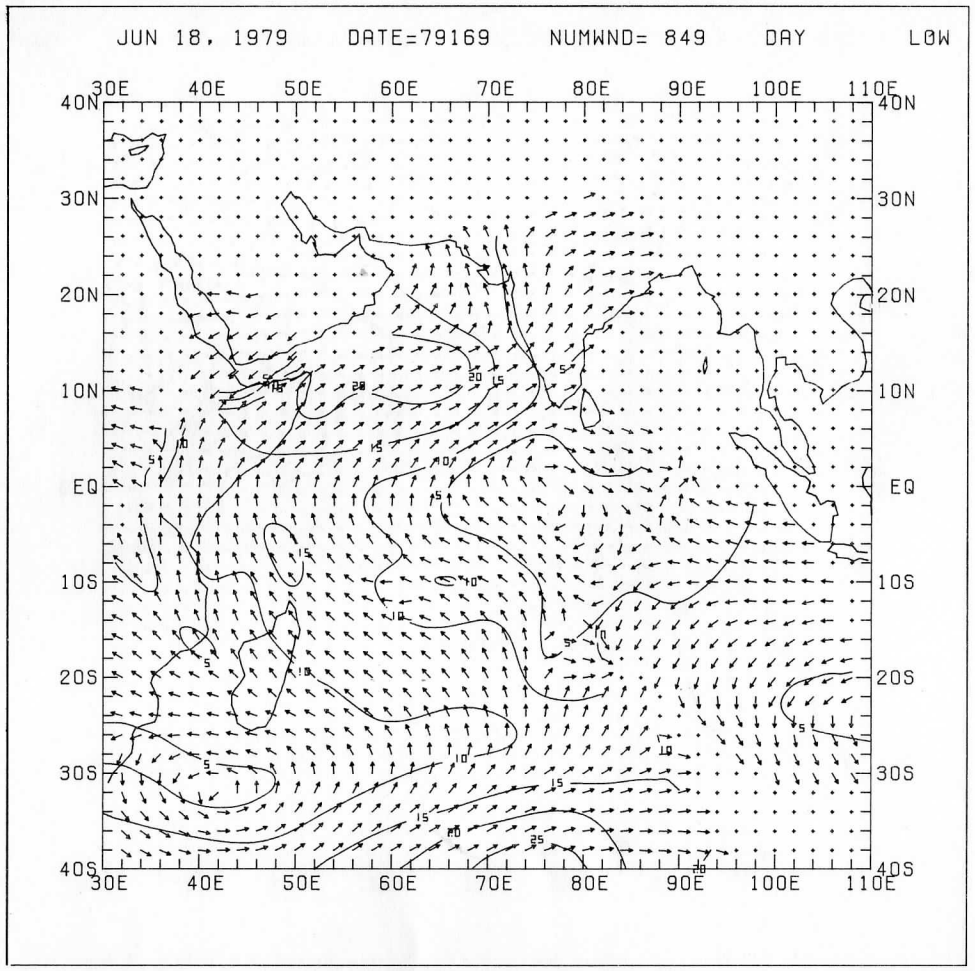

15E 30E 45E 60E 75E 90E 105E
TIROS-N 16 JUN 1979 159 GMT TO 17 JUN 1979 SGMT DAY IR

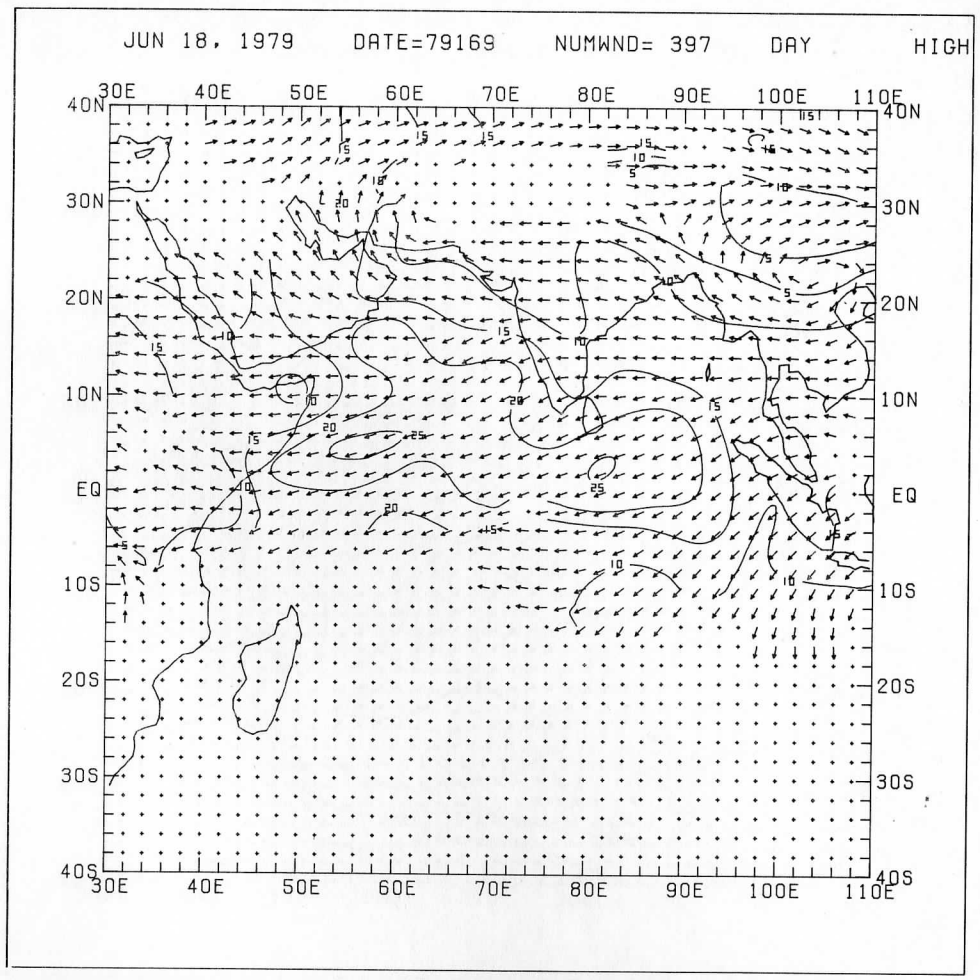

JUN 17, 1979 DATE=79168 NUMWND= 838 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

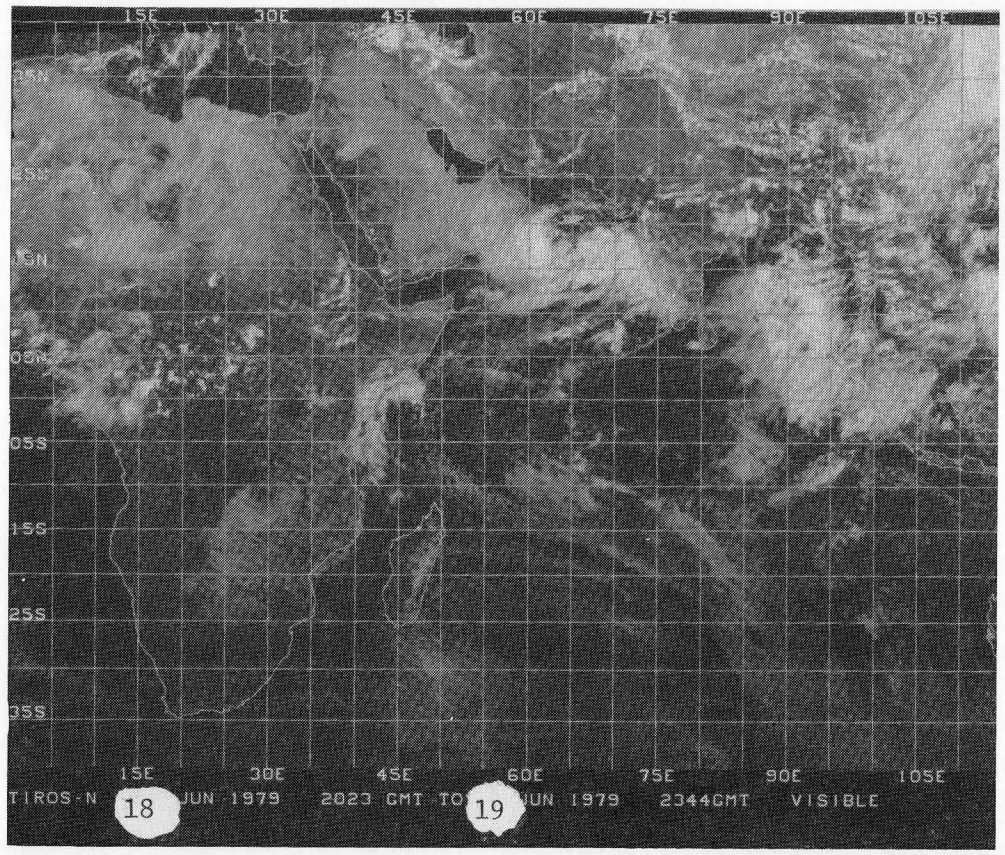

JUN 17, 1979 DATE=79168 NUMWND= 690 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

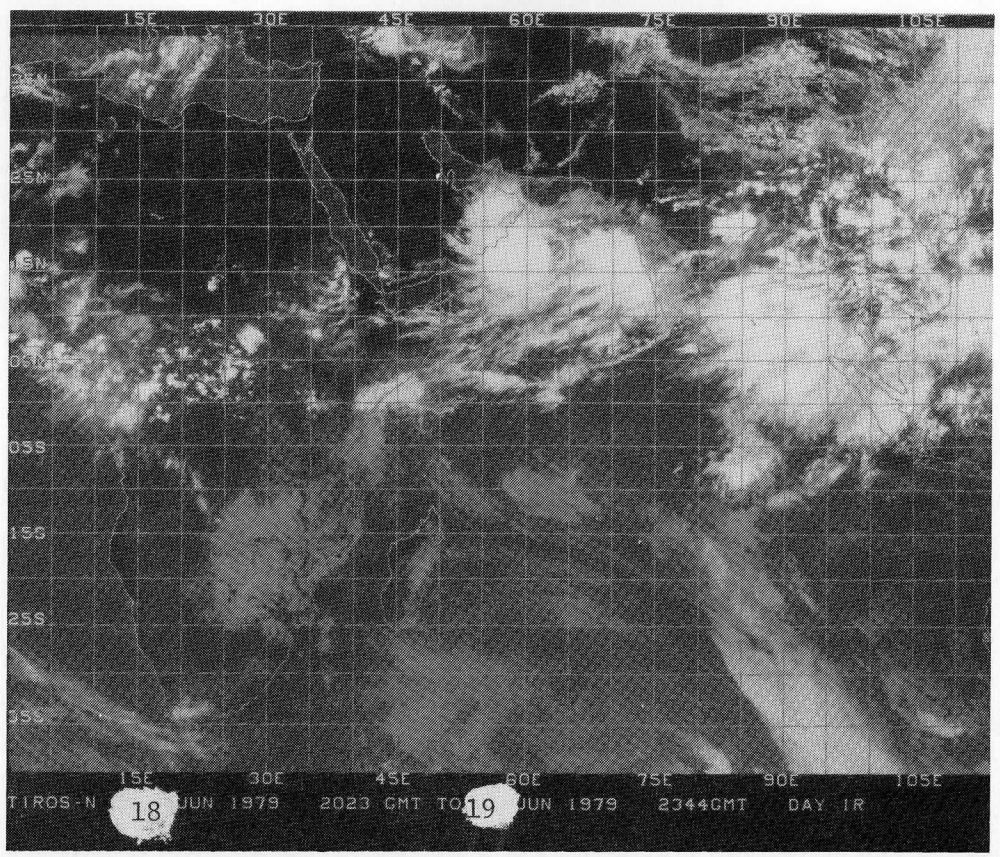

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 17 JUN 1979 5 GMT TO 17 JUN 1979 1841GMT VISIBLE

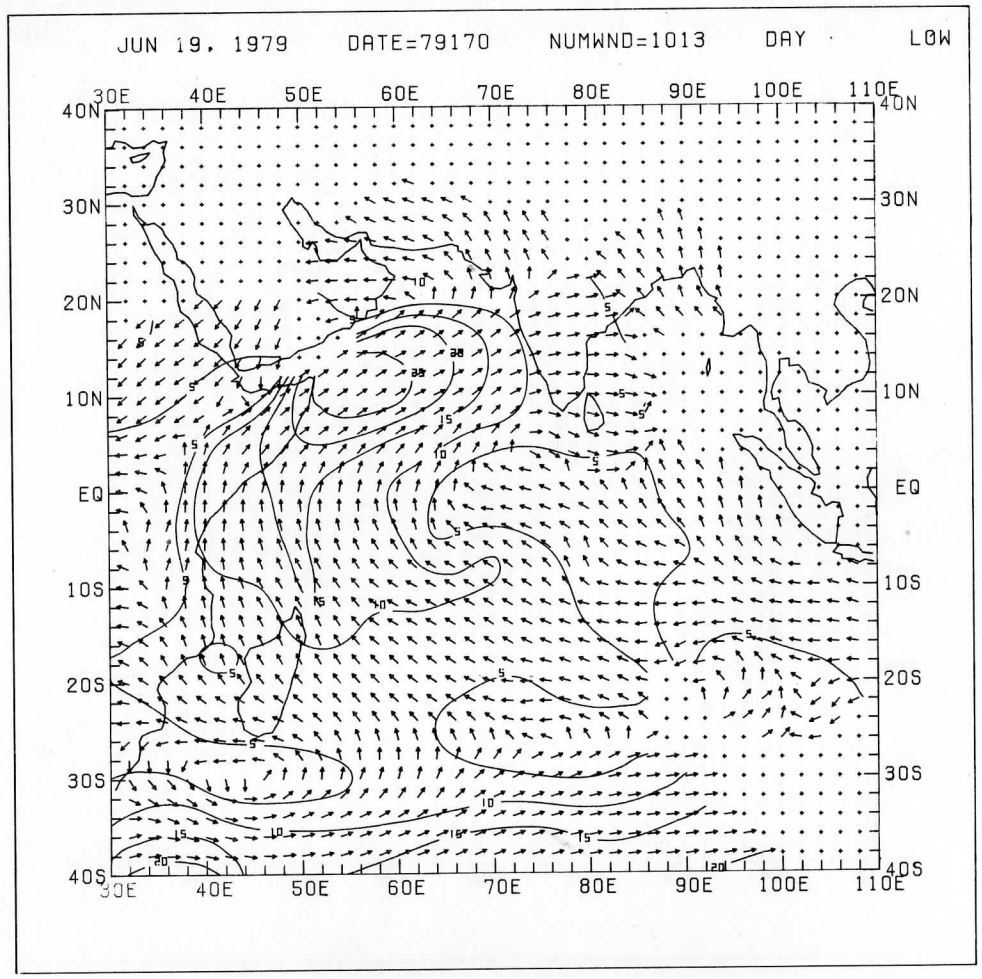

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S
TIROS-N 17 JUN 1979 147 GMT TO 17 JUN 1979 1841GMT DAY IR

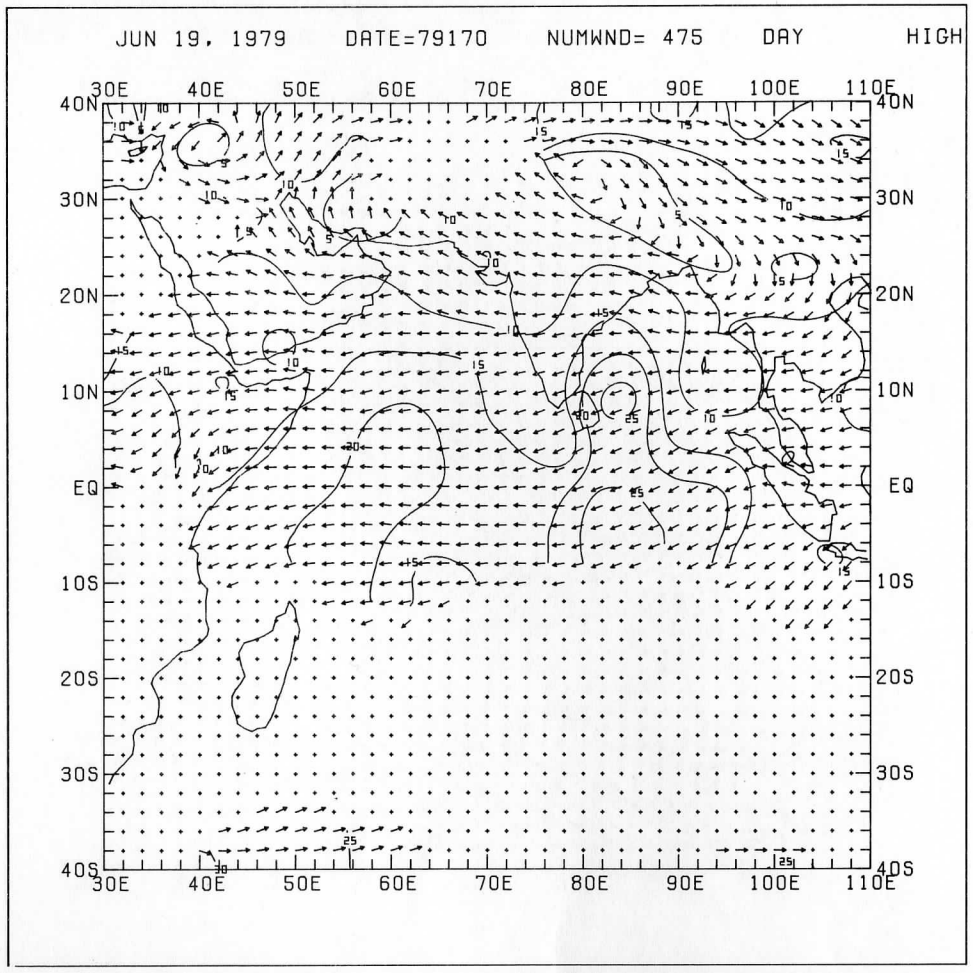

JUN 18, 1979 DATE=79169 NUMWND= 849 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

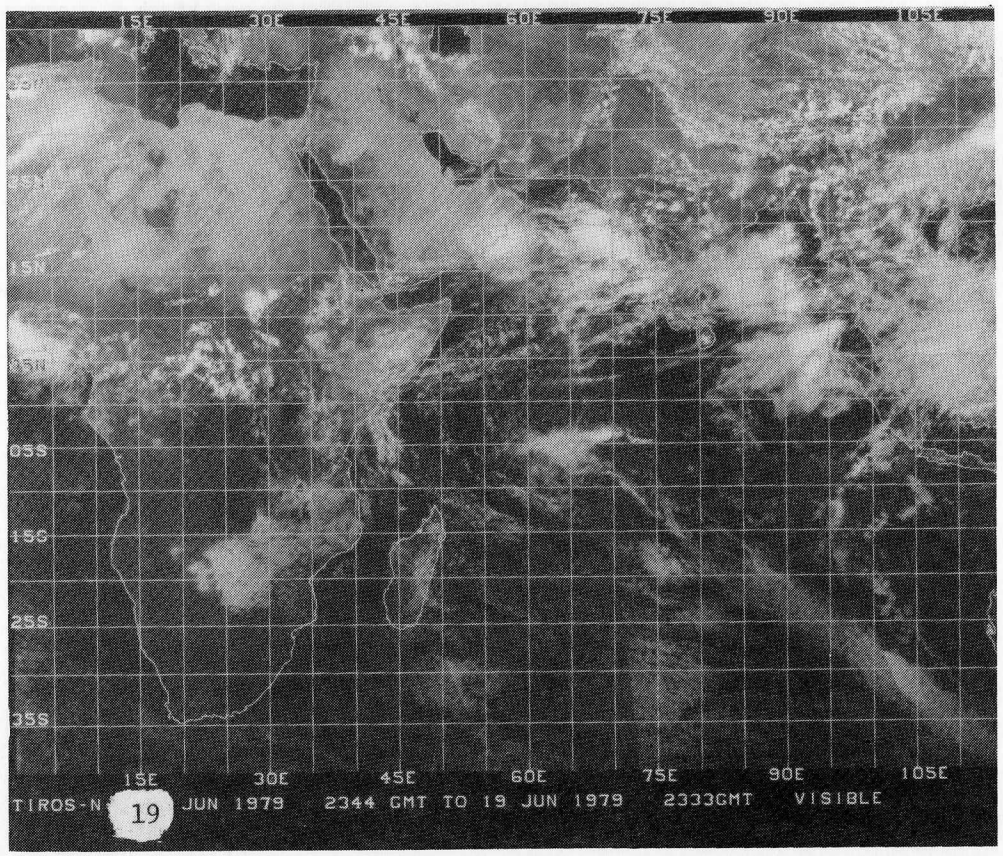

JUN 18, 1979 DATE=79169 NUMWND= 397 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

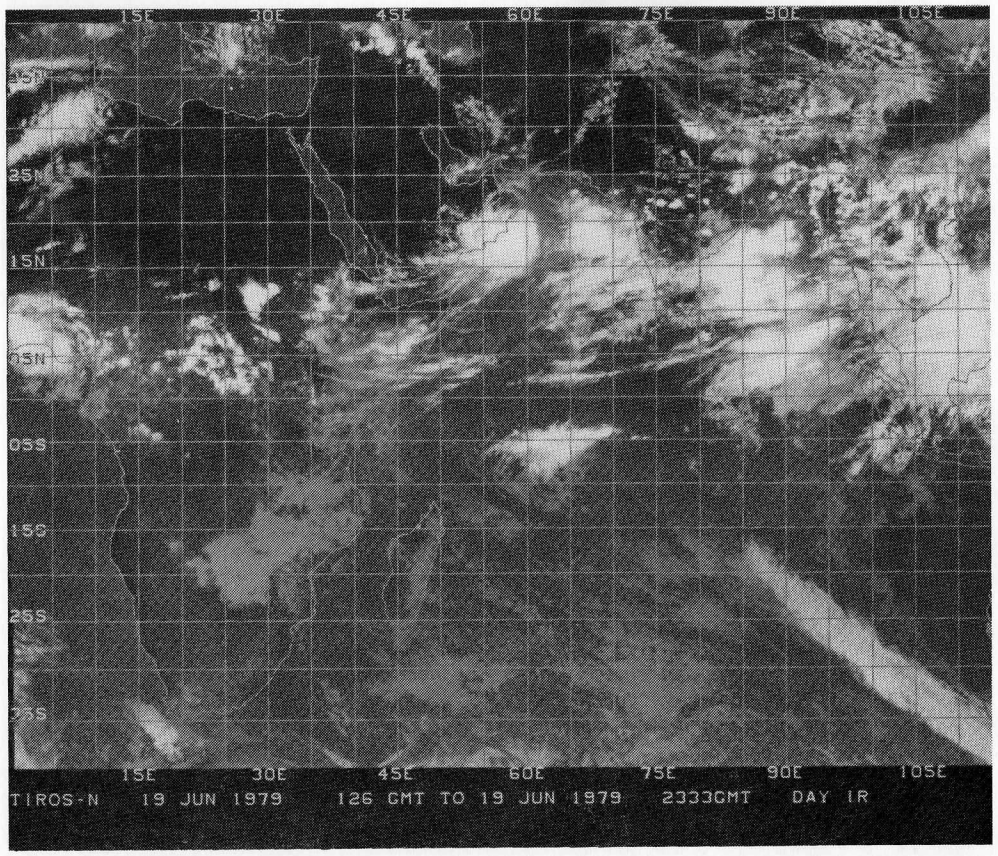

15E 30E 45E 60E 75E 90E 105E
TIROS-N 18 JUN 1979 2023 GMT TO 19 JUN 1979 2344GMT VISIBLE

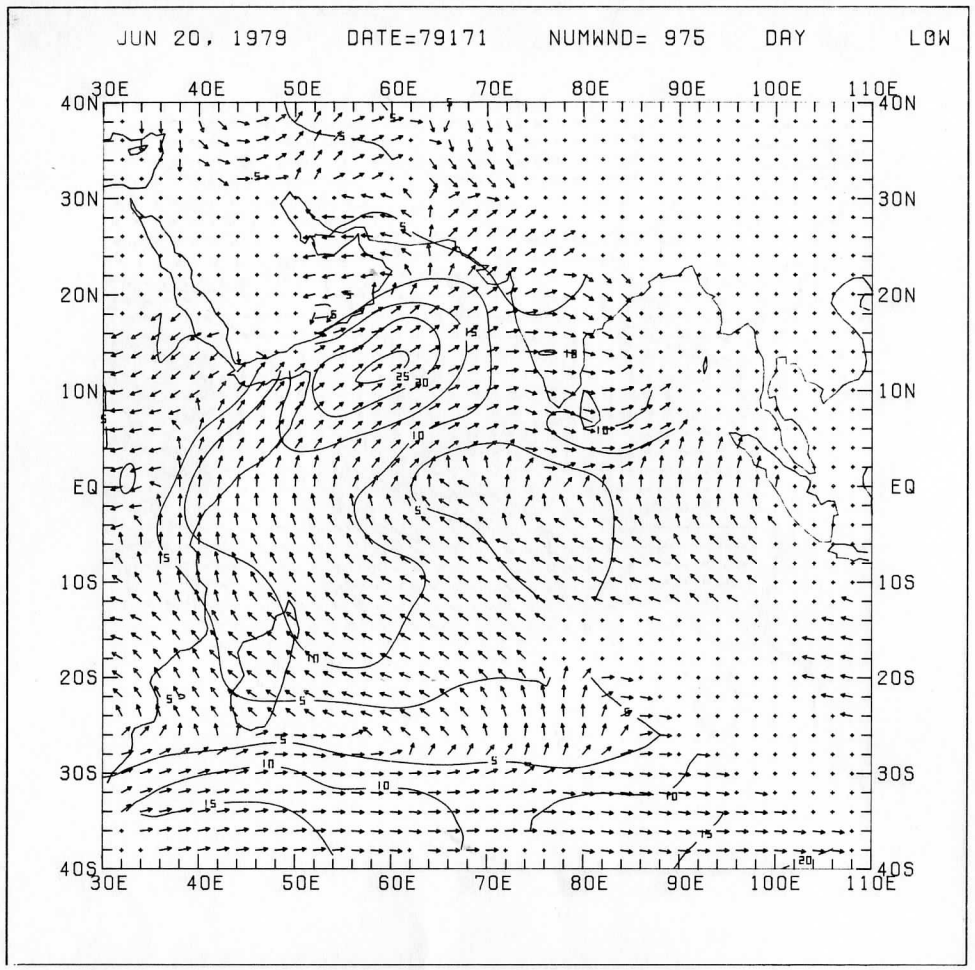

15E 30E 45E 60E 75E 90E 105E
TIROS-N 18 JUN 1979 2023 GMT TO 19 JUN 1979 2344GMT DAY IR

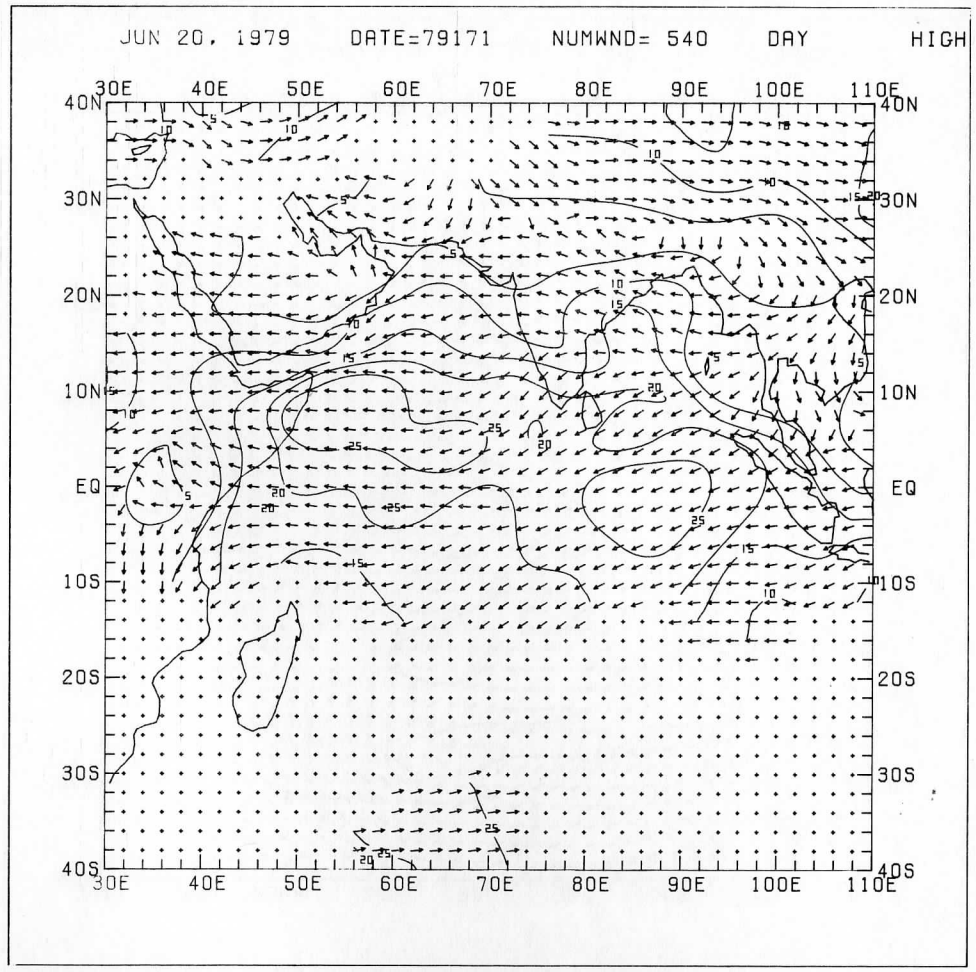

JUN 19, 1979 DATE=79170 NUMWND=1013 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

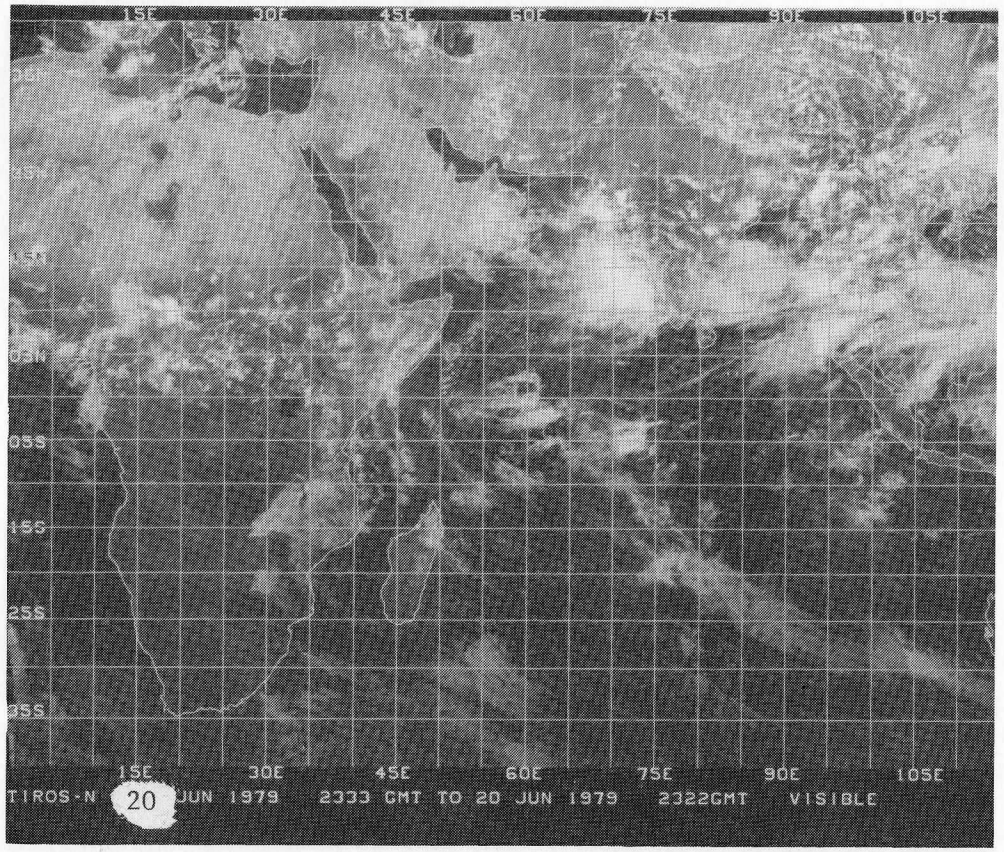

JUN 19, 1979 DATE=79170 NUMWND= 475 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

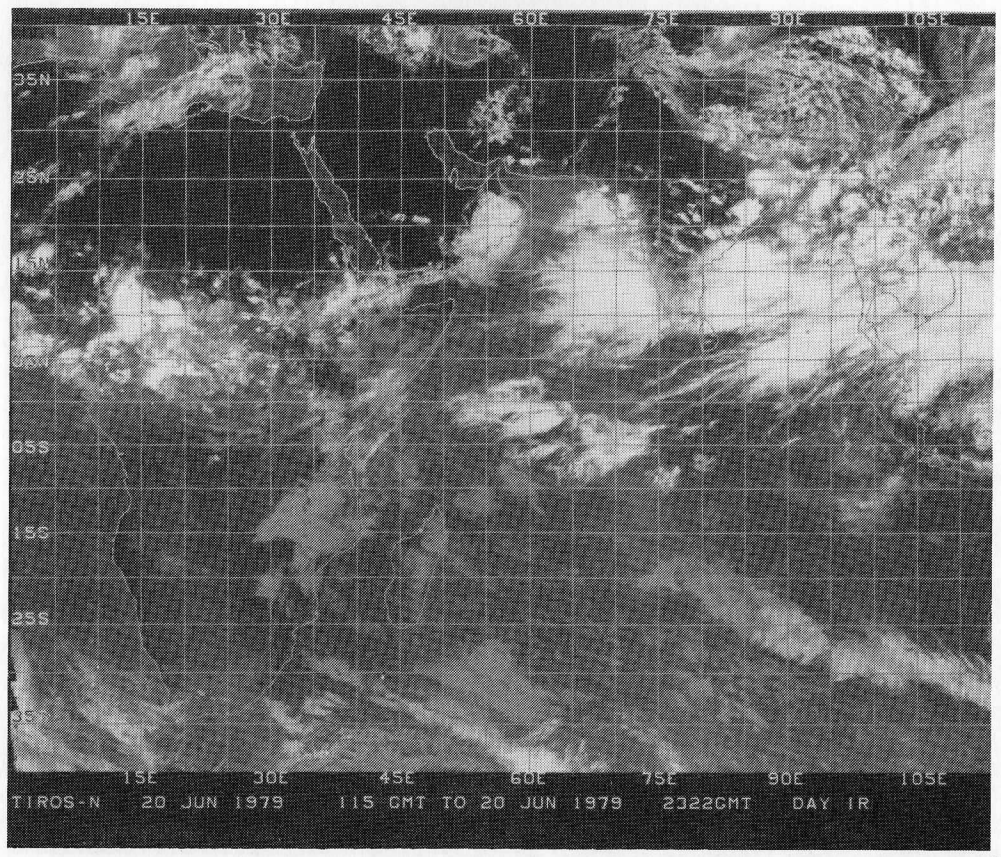

15E 30E 45E 60E 75E 90E 105E
TIROS-N 19 JUN 1979 2344 GMT TO 19 JUN 1979 2333GMT VISIBLE

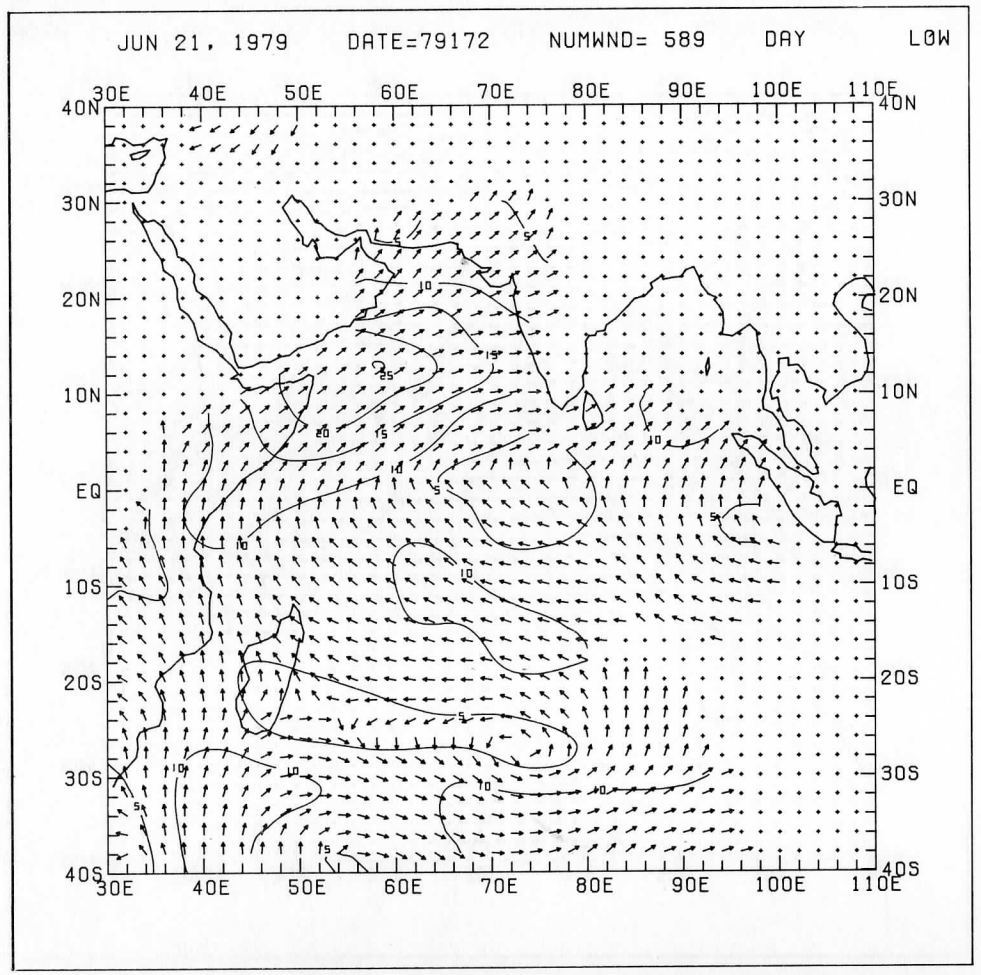

15E 30E 45E 60E 75E 90E 105E
TIROS-N 19 JUN 1979 126 GMT TO 19 JUN 1979 2333GMT DAY IR

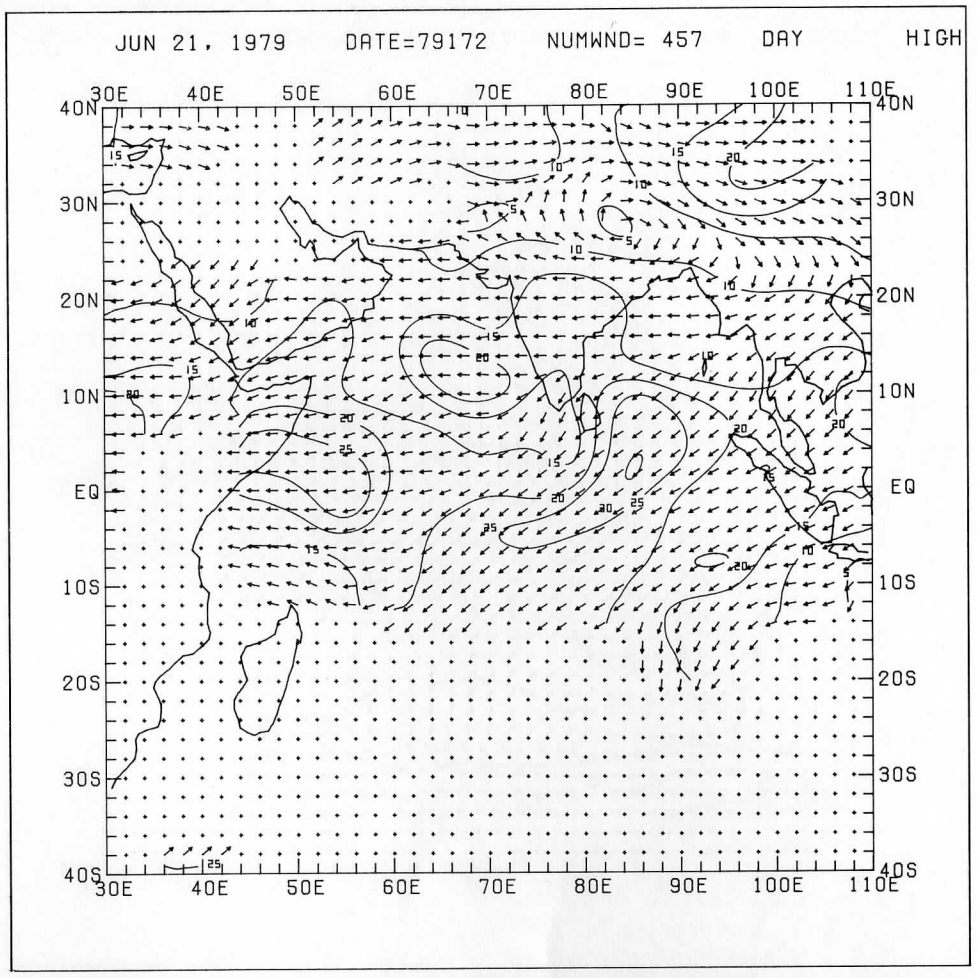

JUN 20, 1979 DATE=79171 NUMWND= 975 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

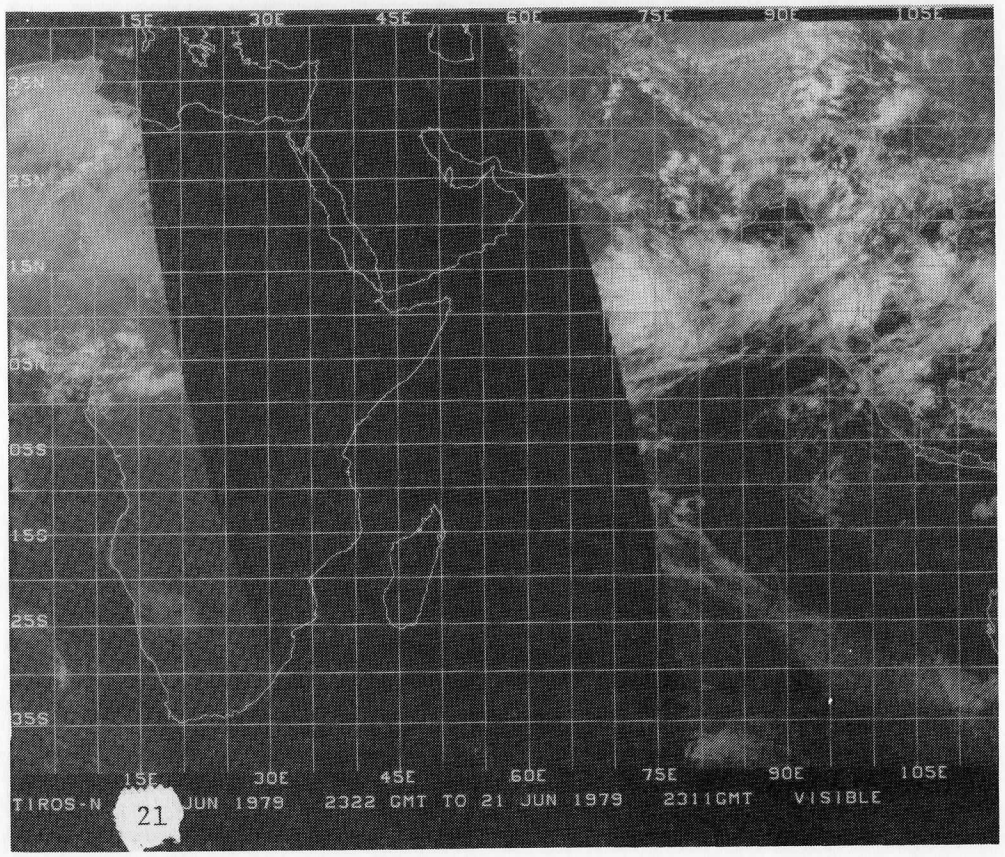

JUN 20, 1979 DATE=79171 NUMWND= 540 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

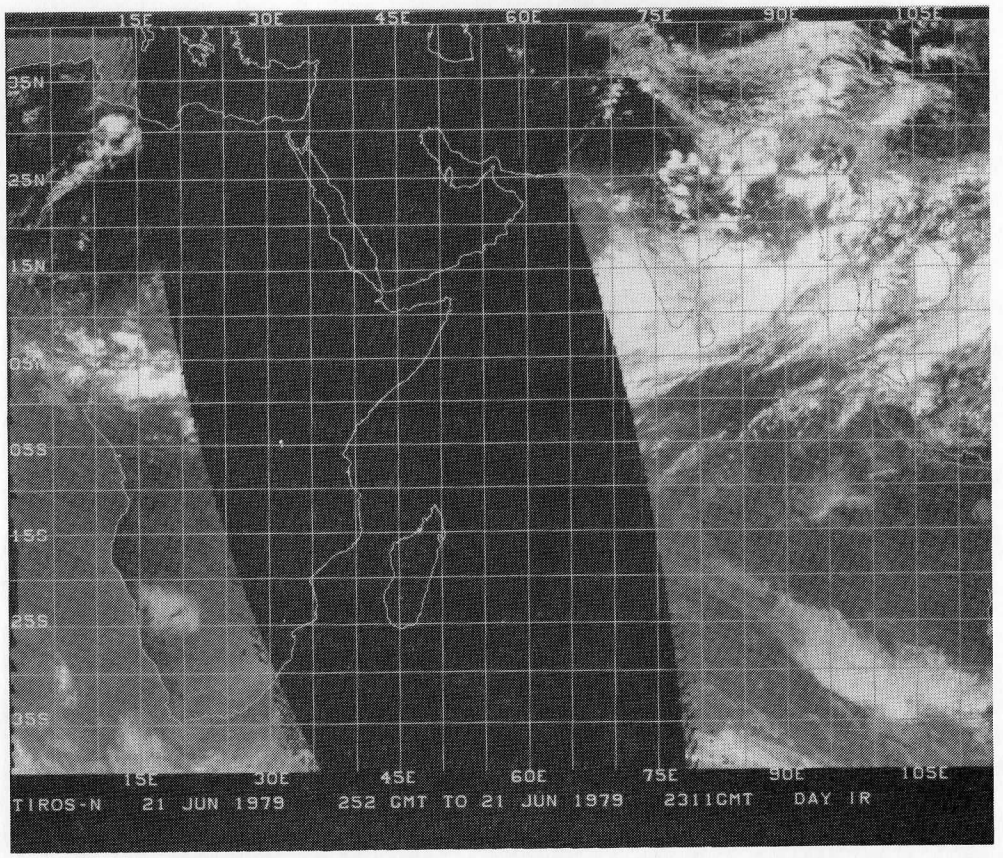

15E 30E 45E 60E 75E 90E 105E
TIROS-N 20 JUN 1979 2333 GMT TO 20 JUN 1979 2322GMT VISIBLE

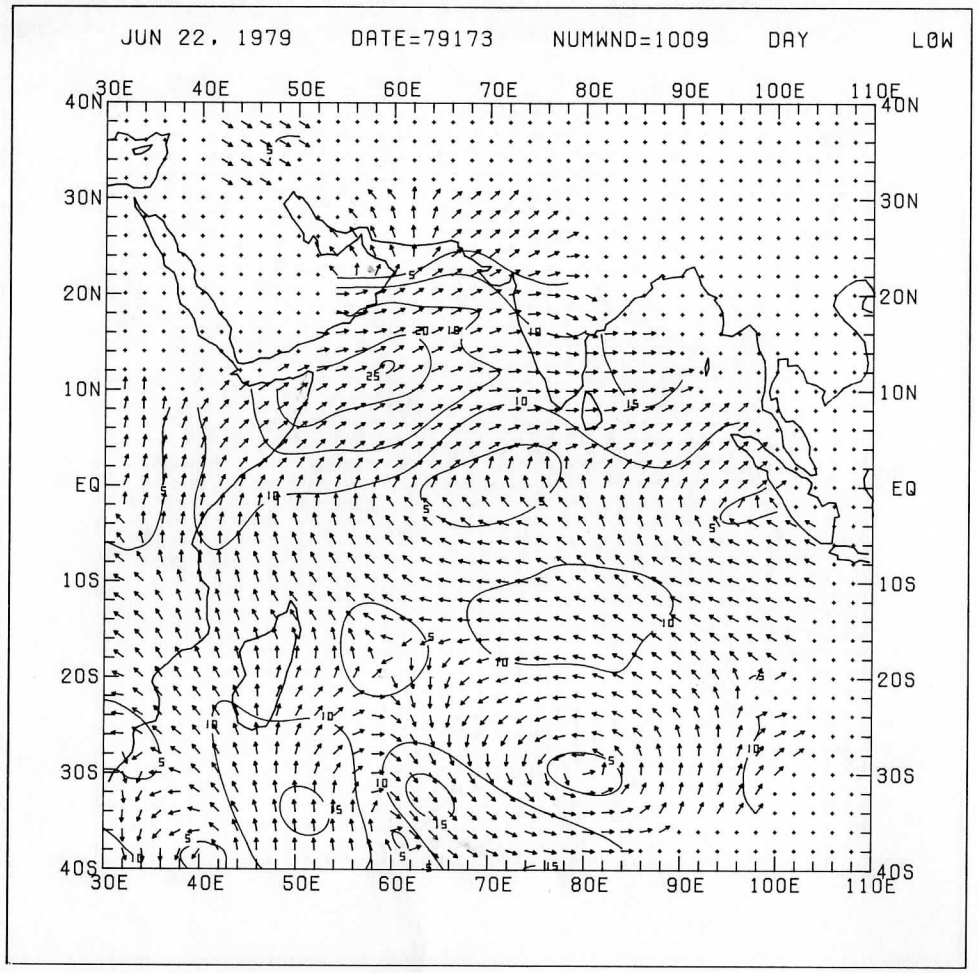

15E 30E 45E 60E 75E 90E 105E
TIROS-N 20 JUN 1979 115 GMT TO 20 JUN 1979 2322GMT DAY IR

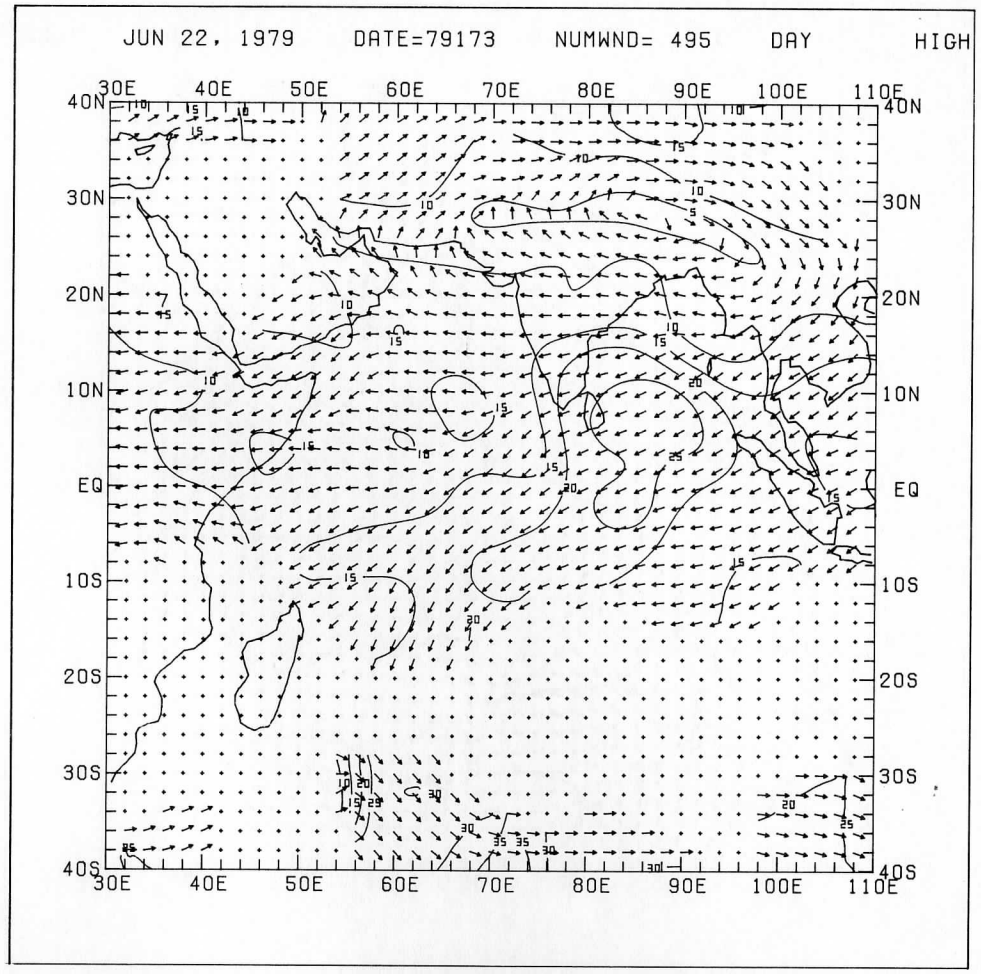

JUN 21, 1979 DATE=79172 NUMWND= 589 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

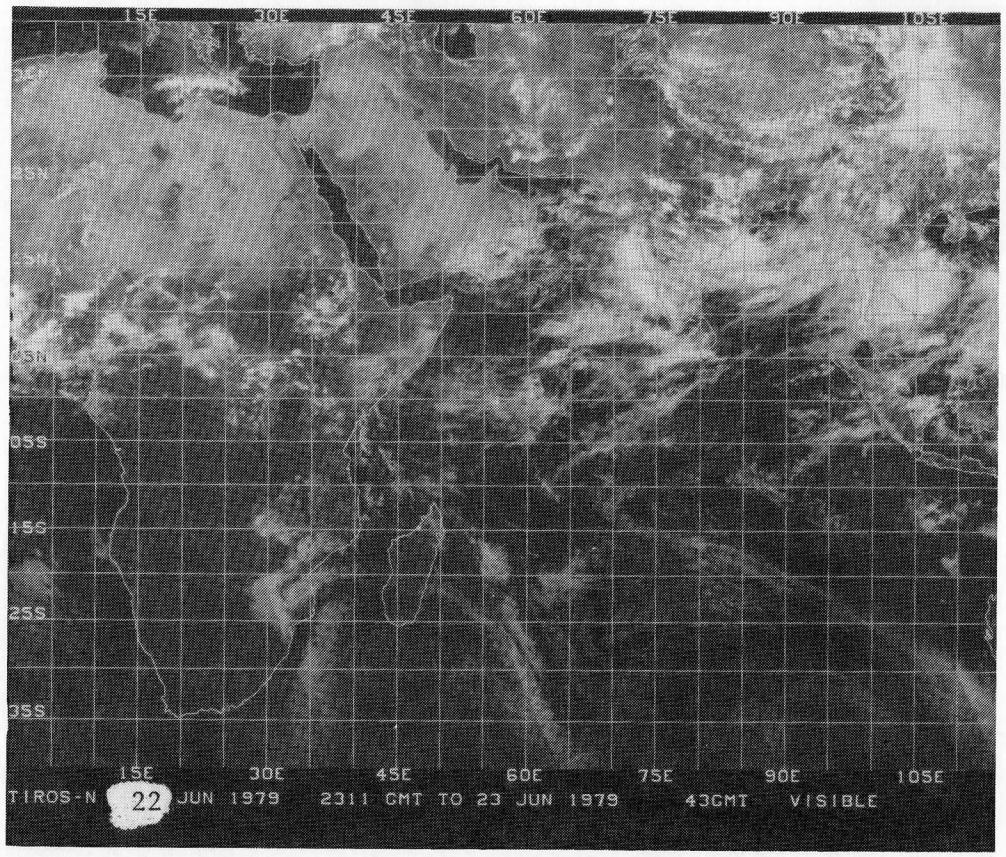

JUN 21, 1979 DATE=79172 NUMWND= 457 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

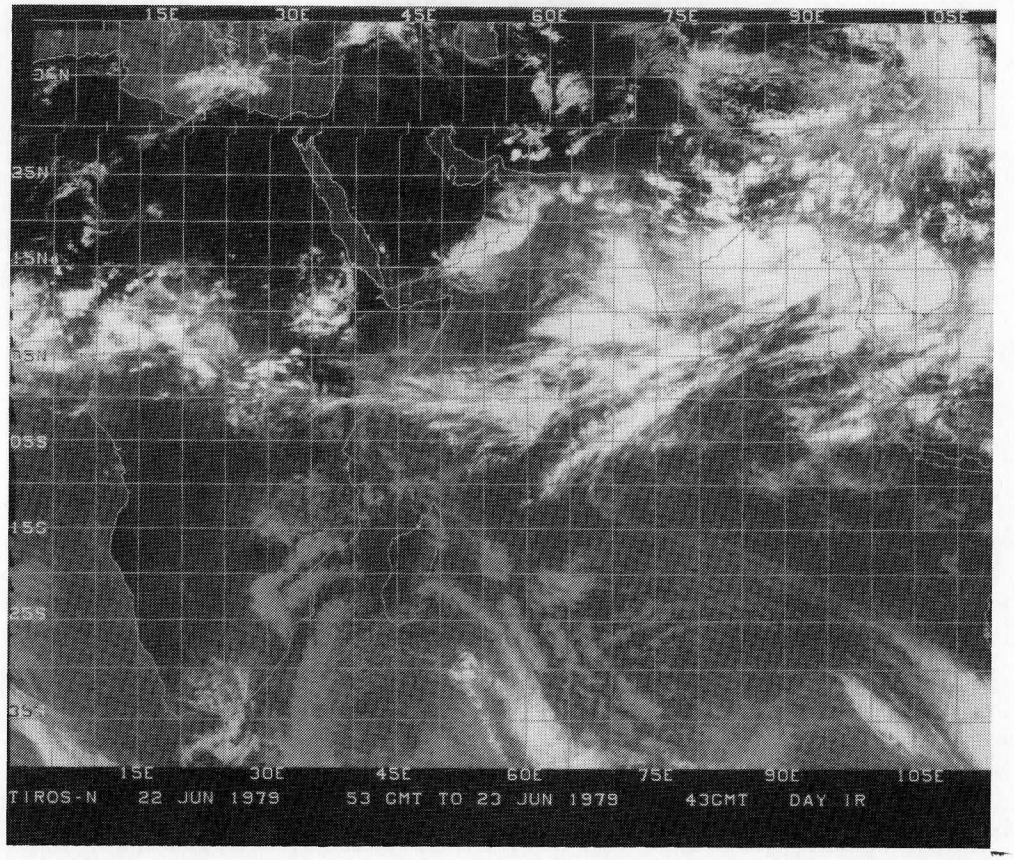

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 21 JUN 1979 2322 GMT TO 21 JUN 1979 2311GMT VISIBLE

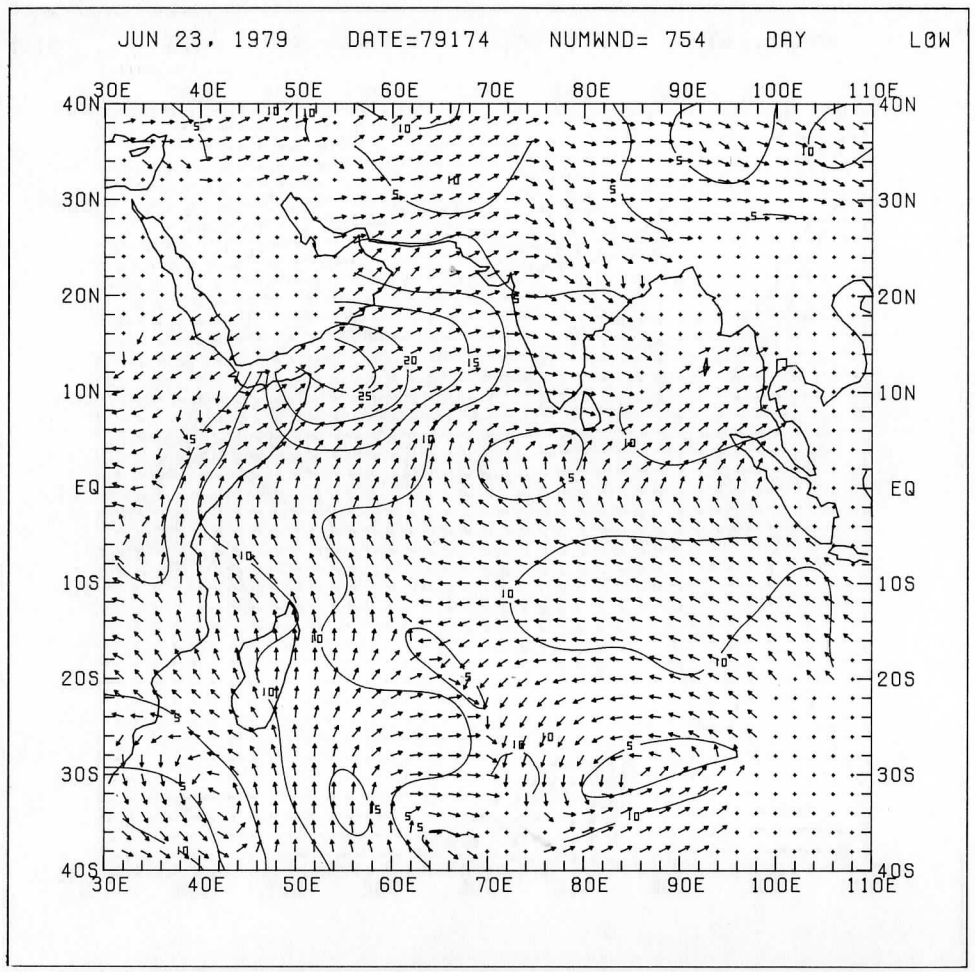

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 21 JUN 1979 252 GMT TO 21 JUN 1979 2311GMT DAY IR

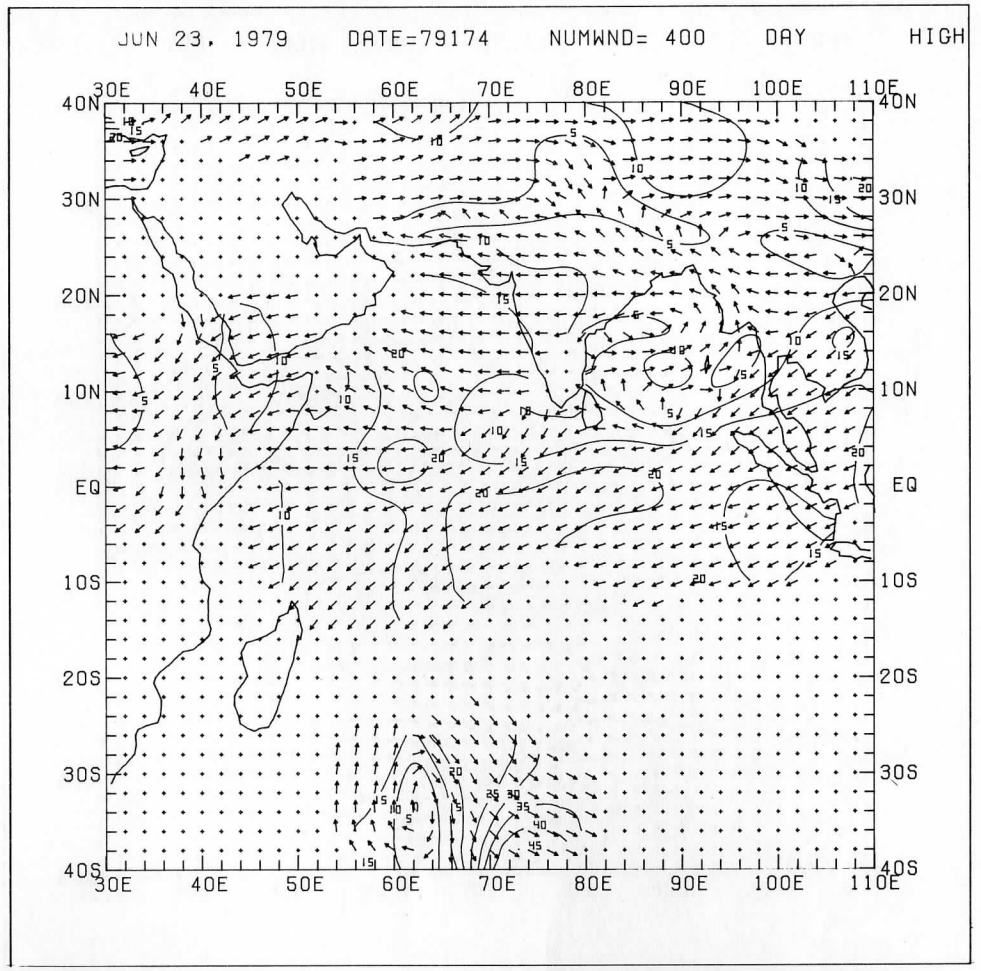

JUN 22, 1979 DATE=79173 NUMWND=1009 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

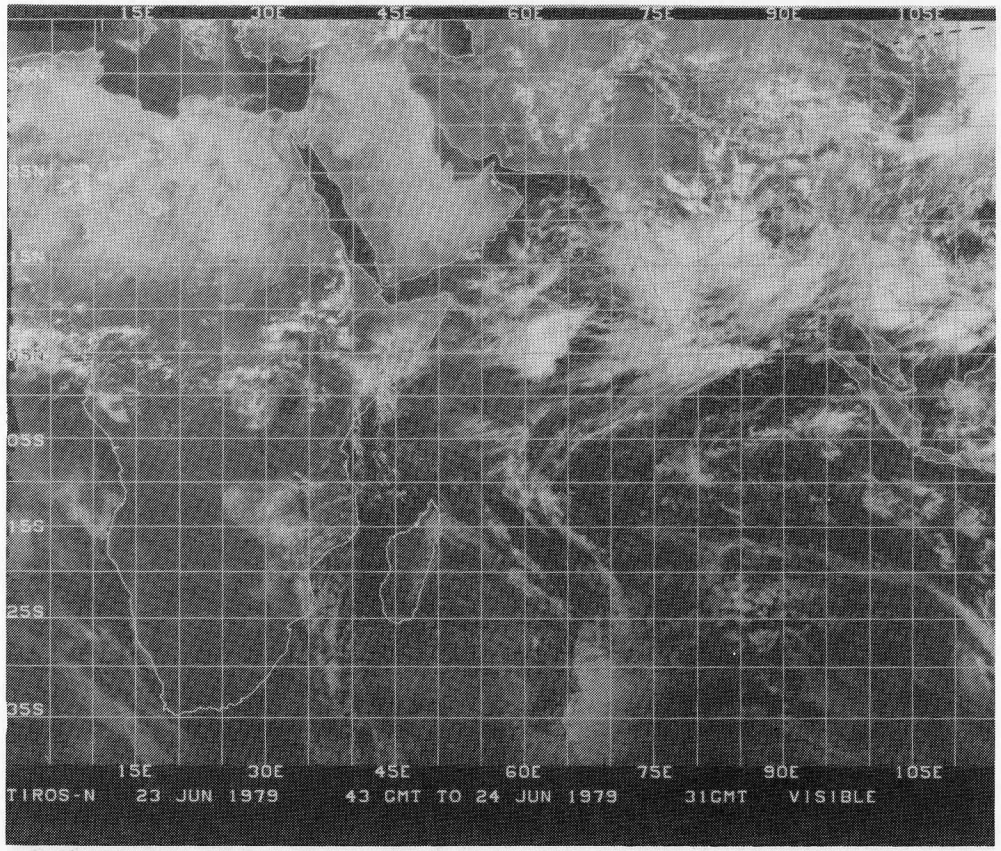

JUN 22, 1979 DATE=79173 NUMWND= 495 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

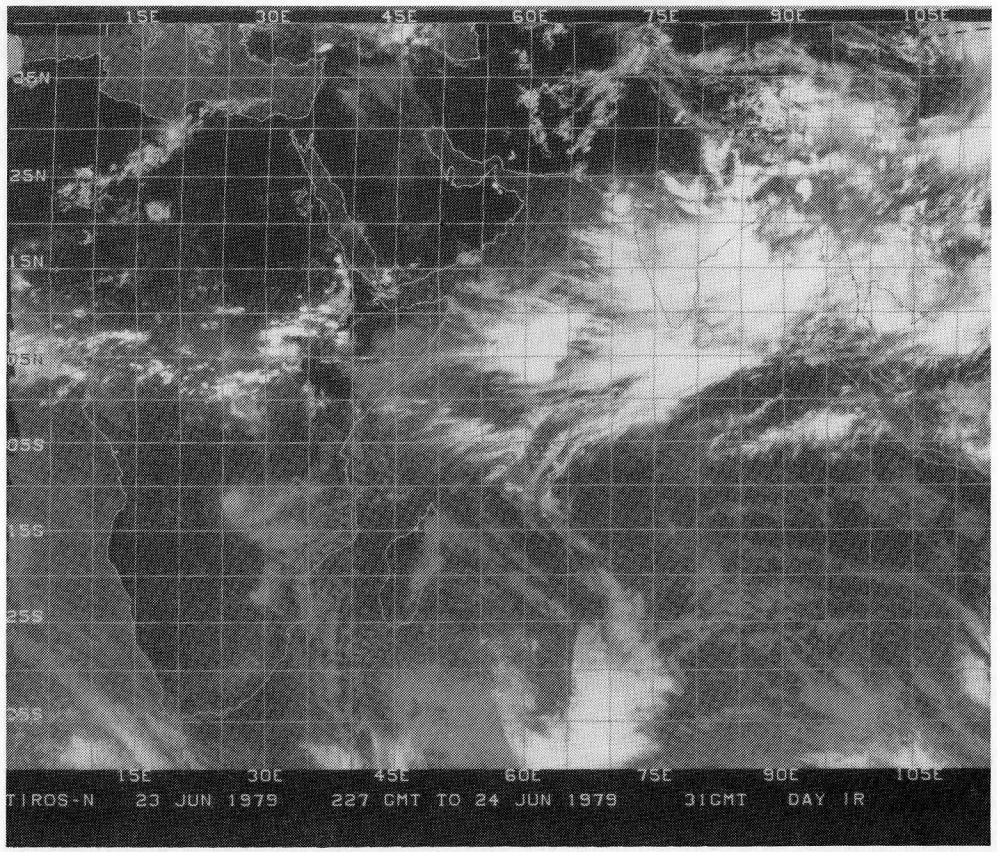

15E 30E 45E 60E 75E 90E 105E
TIROS-N 22 JUN 1979 2311 GMT TO 23 JUN 1979 43GMT VISIBLE

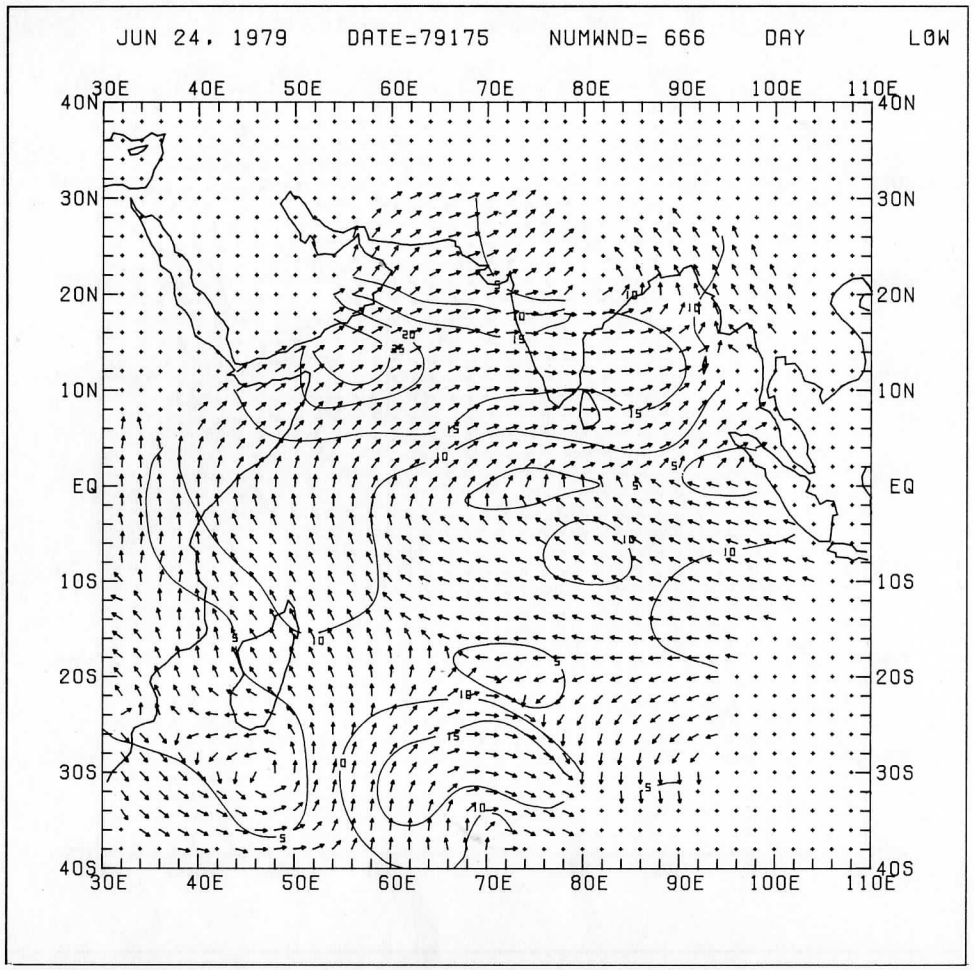

15E 30E 45E 60E 75E 90E 105E
TIROS-N 22 JUN 1979 53 GMT TO 23 JUN 1979 43GMT DAY IR

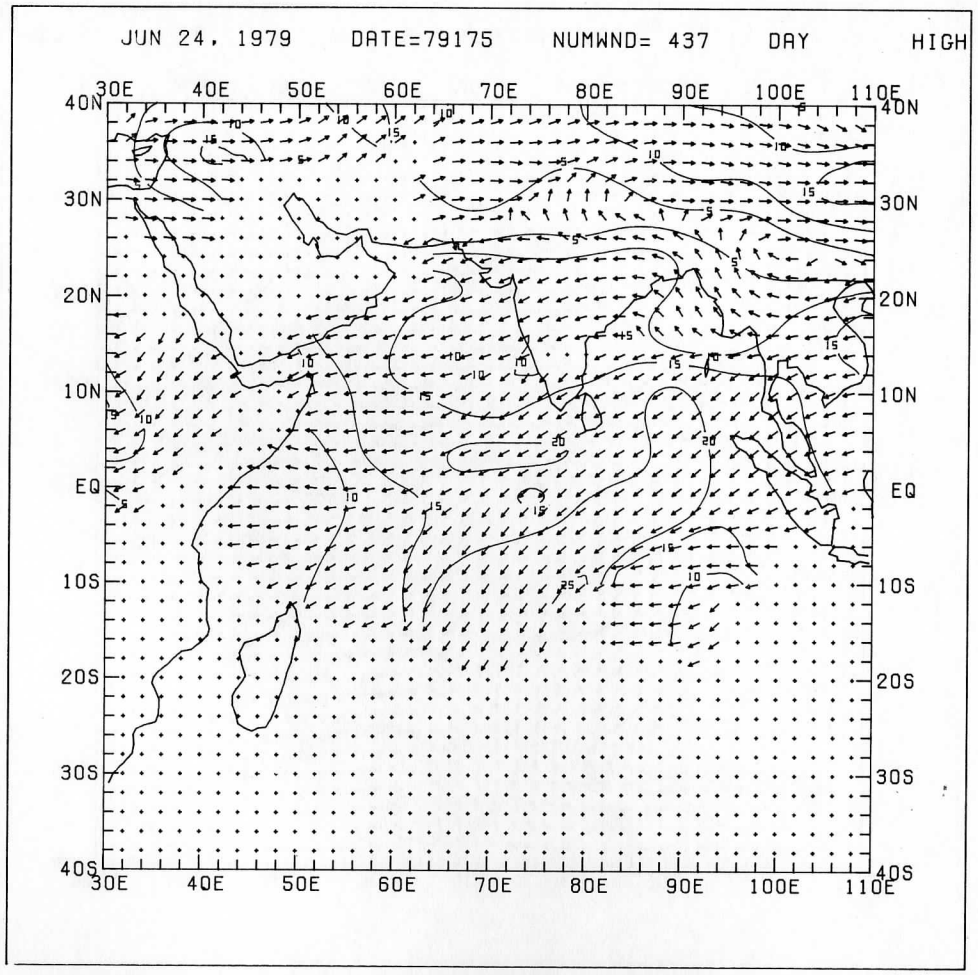

JUN 23, 1979 DATE=79174 NUMWND= 754 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

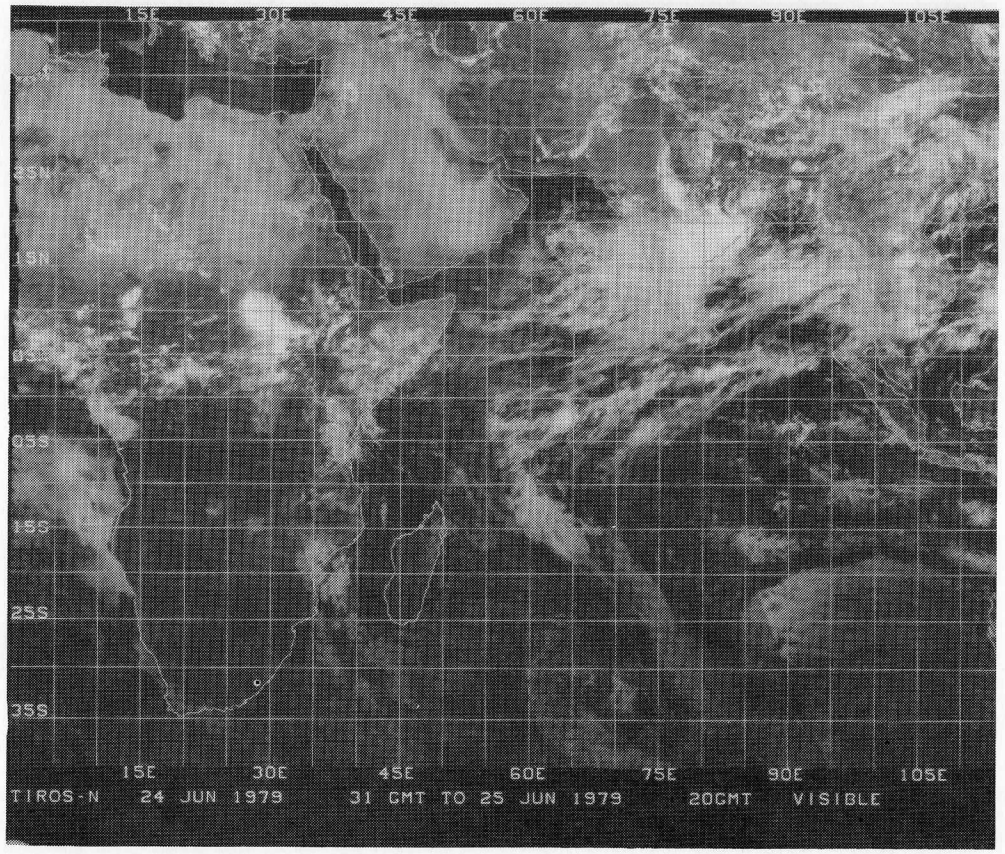

JUN 23, 1979 DATE=79174 NUMWND= 400 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

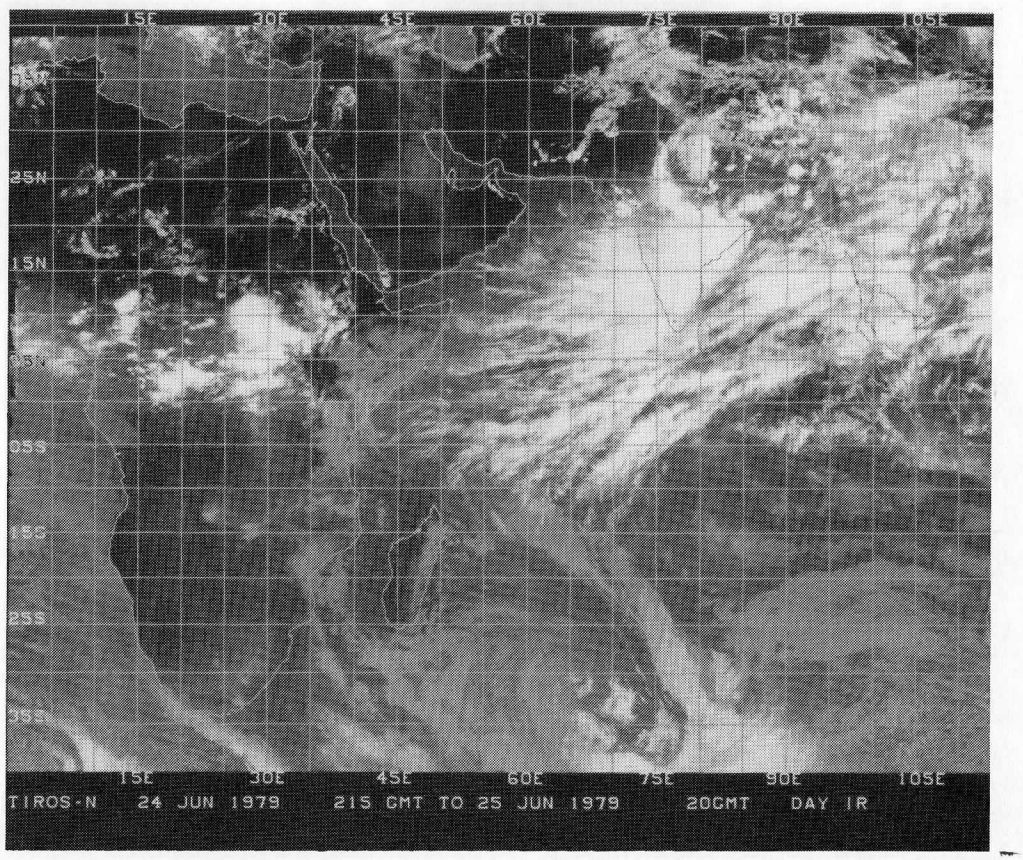

15E 30E 45E 60E 75E 90E 105E
TIROS-N 23 JUN 1979 43 GMT TO 24 JUN 1979 31GMT VISIBLE

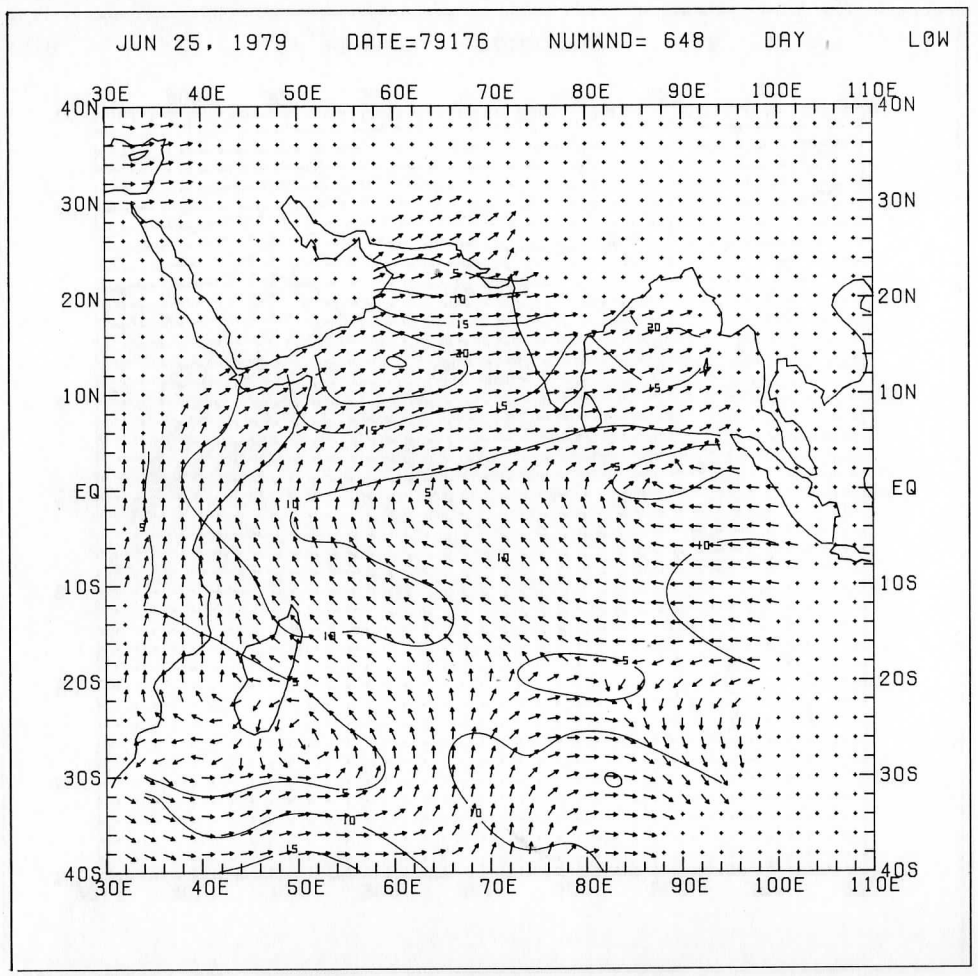

15E 30E 45E 60E 75E 90E 105E
TIROS-N 23 JUN 1979 227 GMT TO 24 JUN 1979 31GMT DAY IR

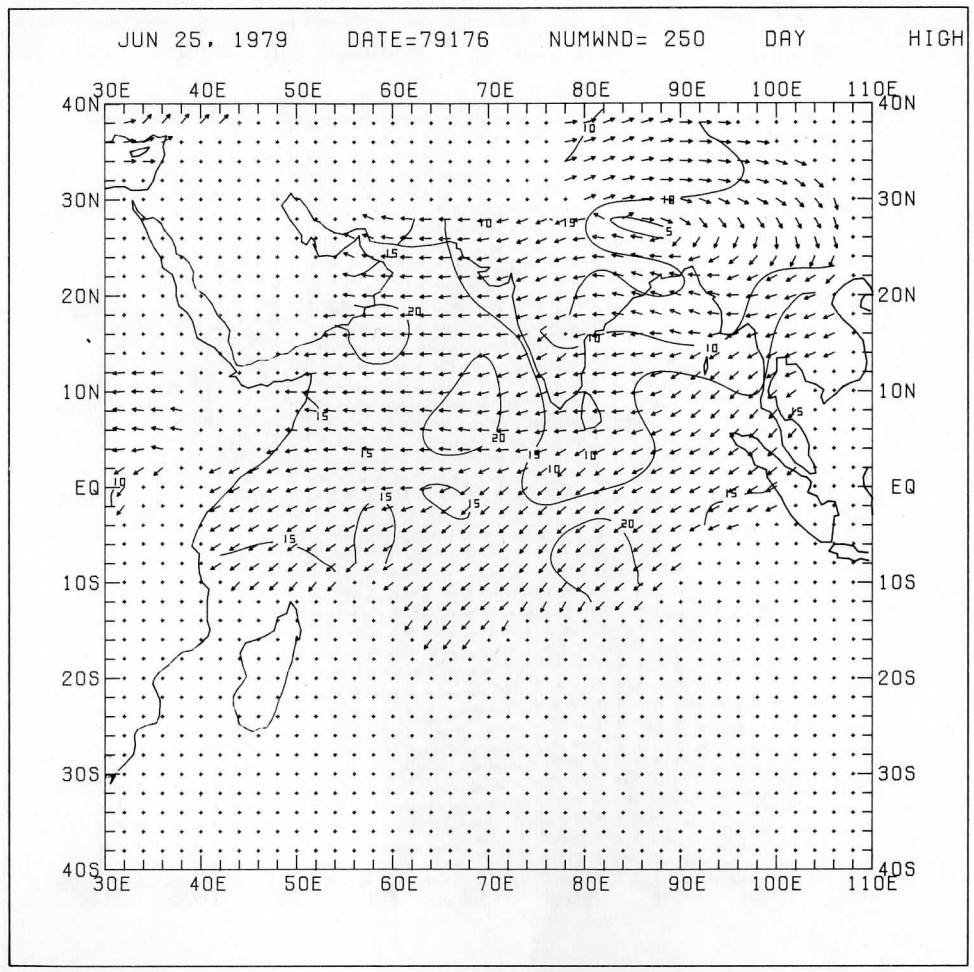

JUN 24, 1979 DATE=79175 NUMWND= 666 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

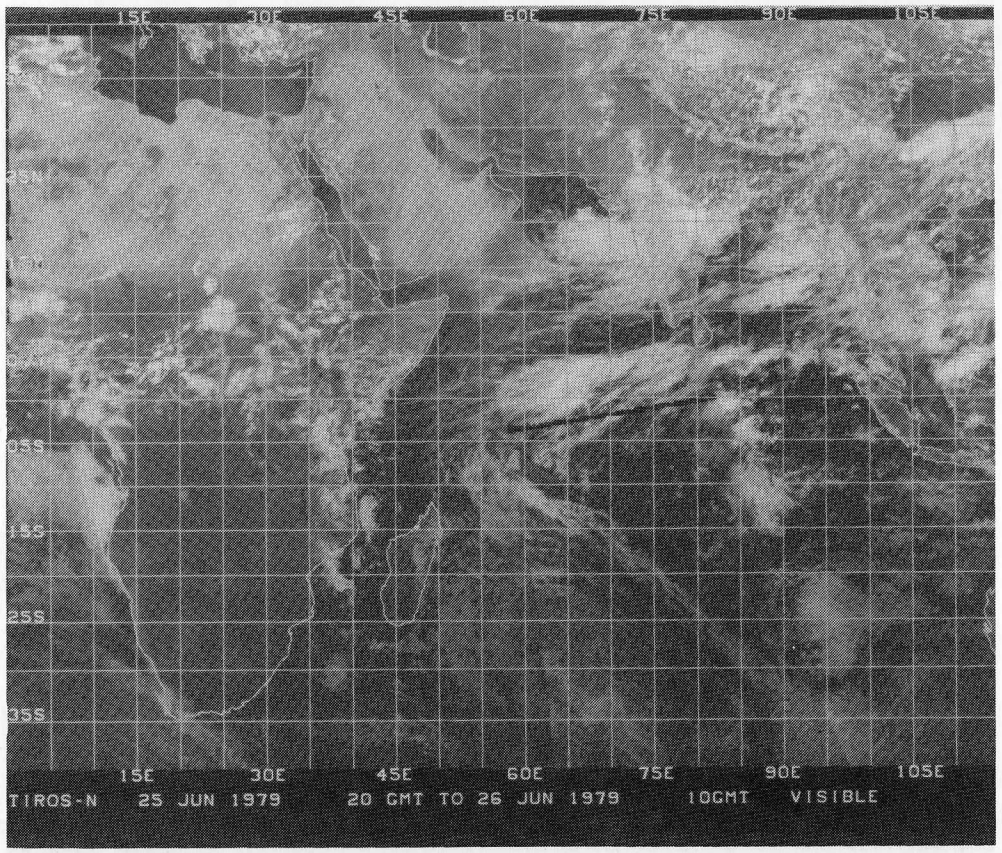

JUN 24, 1979 DATE=79175 NUMWND= 437 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

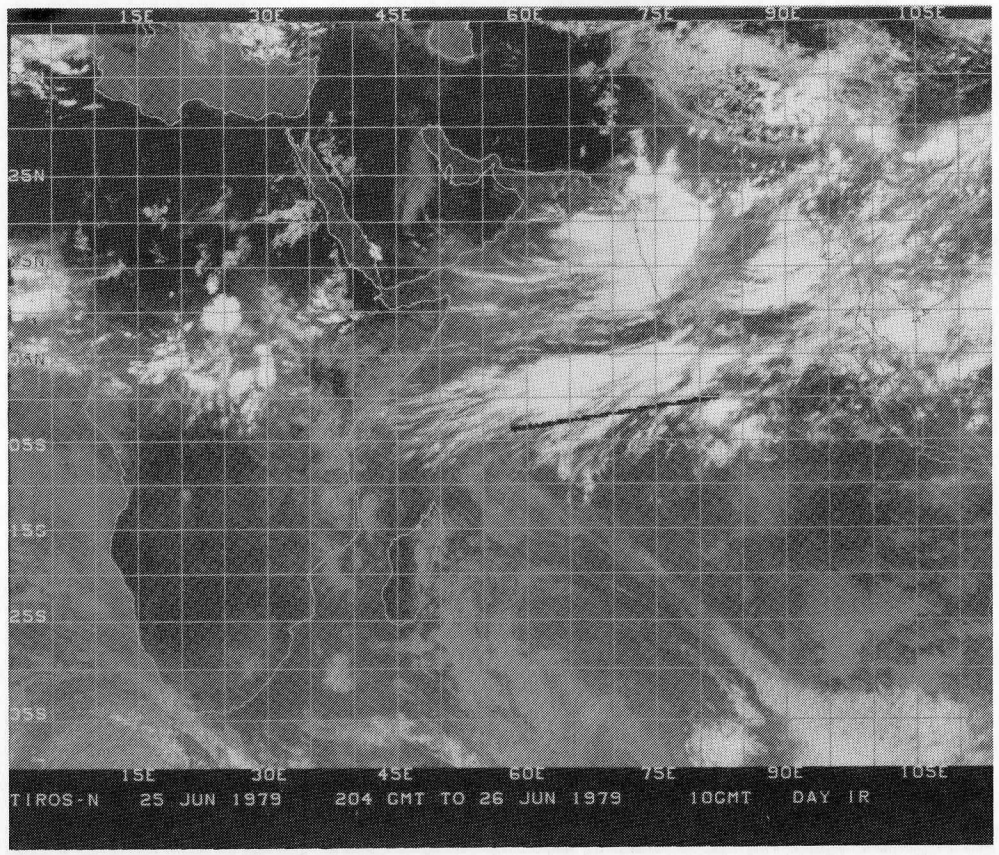

15E 30E 45E 60E 75E 90E 105E
15N 05N 05S 15S 25S 35S
TIROS-N 24 JUN 1979 31 GMT TO 25 JUN 1979 20GMT VISIBLE

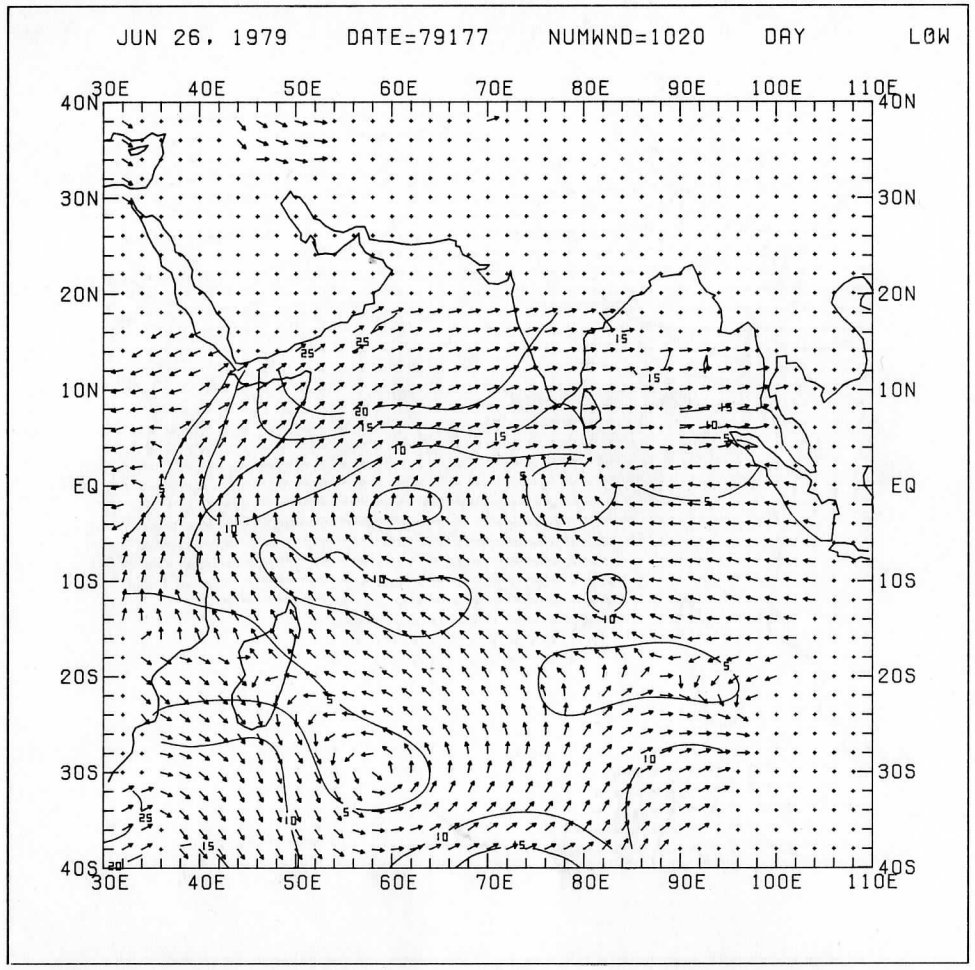

15E 30E 45E 60E 75E 90E 105E
25N 15N 05N 05S 15S 25S
TIROS-N 24 JUN 1979 215 GMT TO 25 JUN 1979 20GMT DAY IR

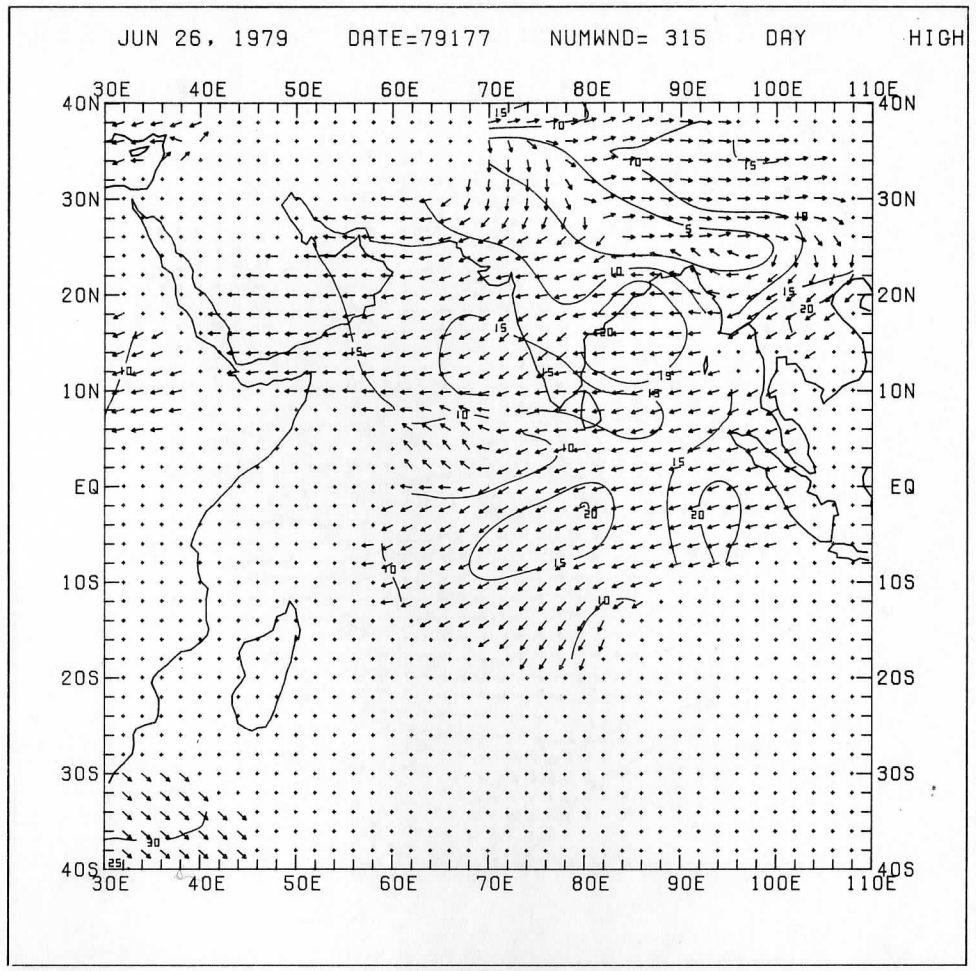

JUN 25, 1979 DATE=79176 NUMWND= 648 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

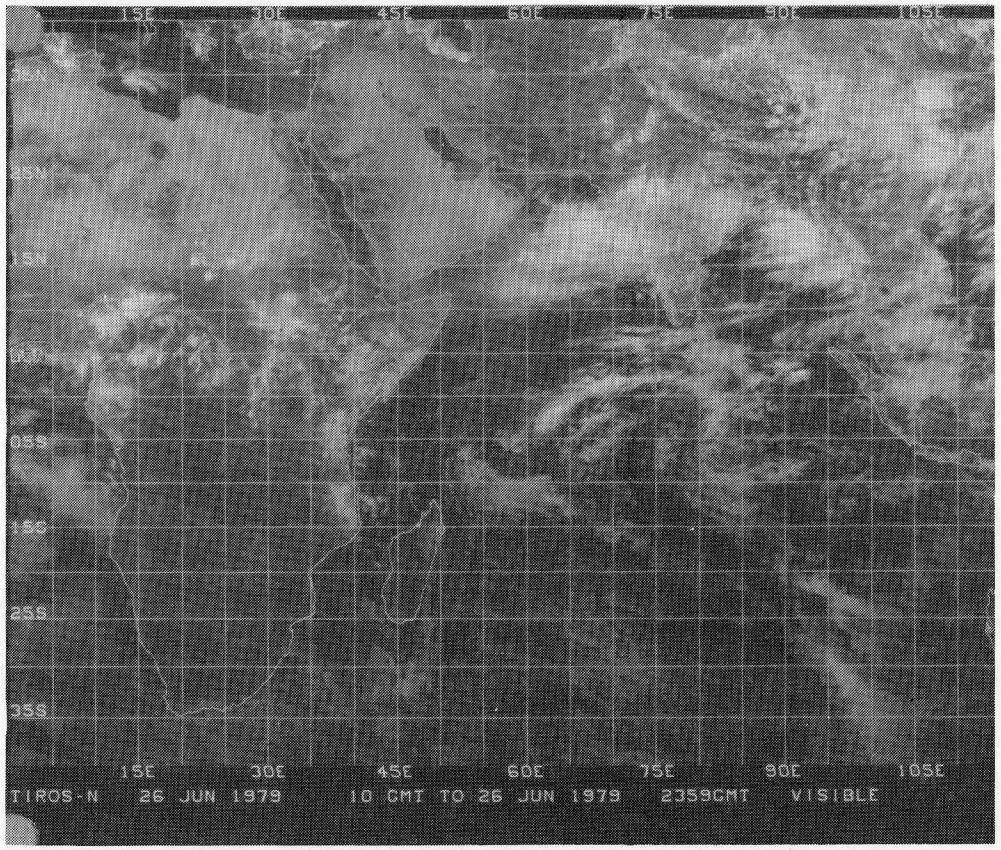

JUN 25, 1979 DATE=79176 NUMWND= 250 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

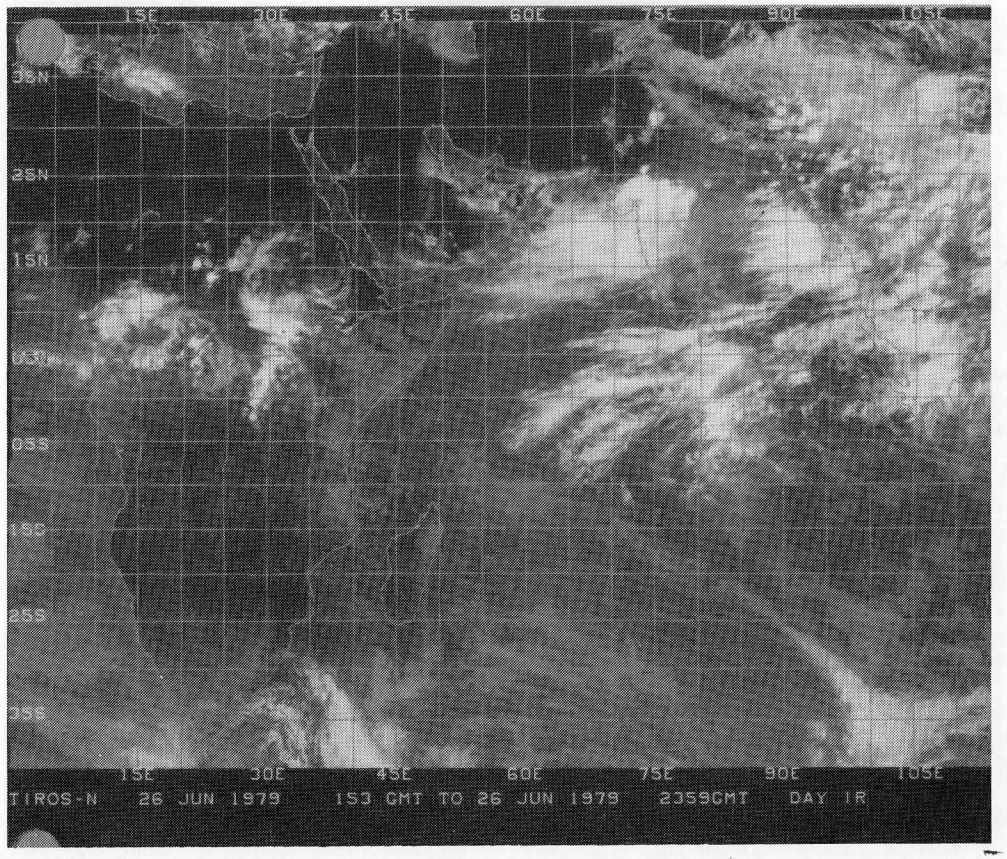

15E 30E 45E 60E 75E 90E 105E
TIROS-N 25 JUN 1979 20 GMT TO 26 JUN 1979 10GMT VISIBLE

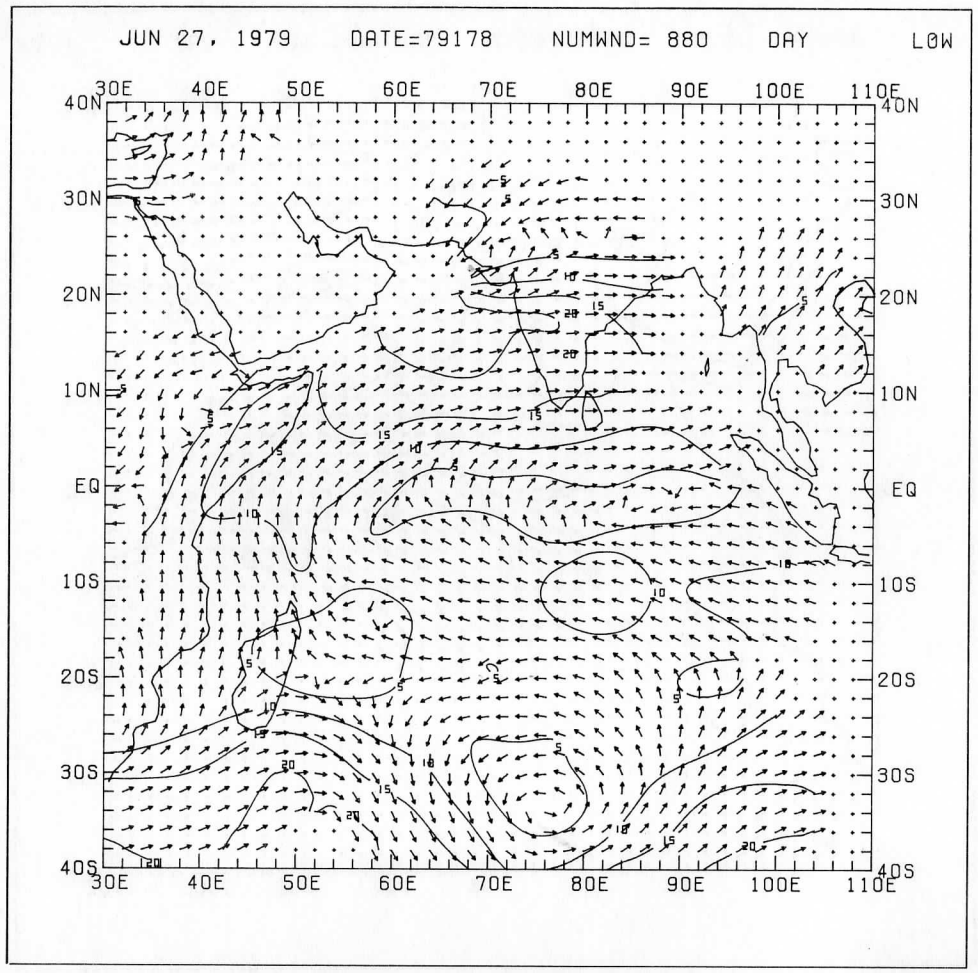

15E 30E 45E 60E 75E 90E 105E
TIROS-N 25 JUN 1979 204 GMT TO 26 JUN 1979 10GMT DAY IR

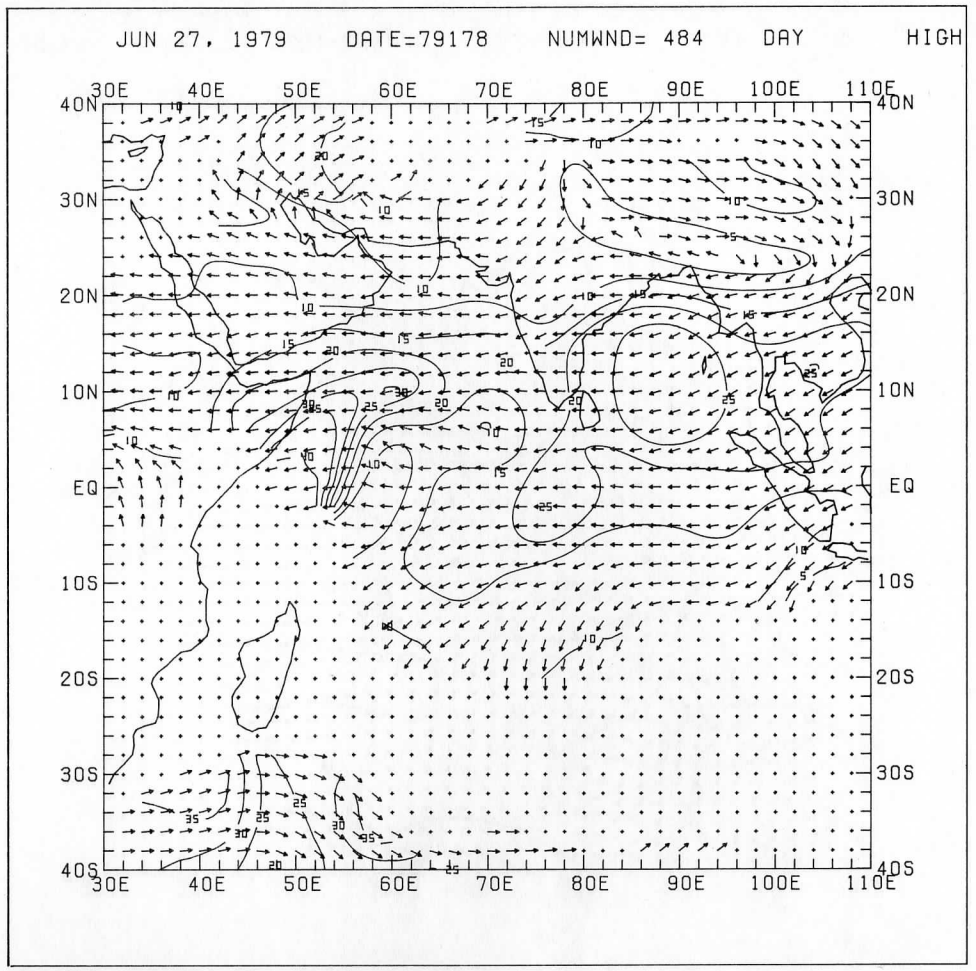

JUN 26, 1979 DATE=79177 NUMWND=1020 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

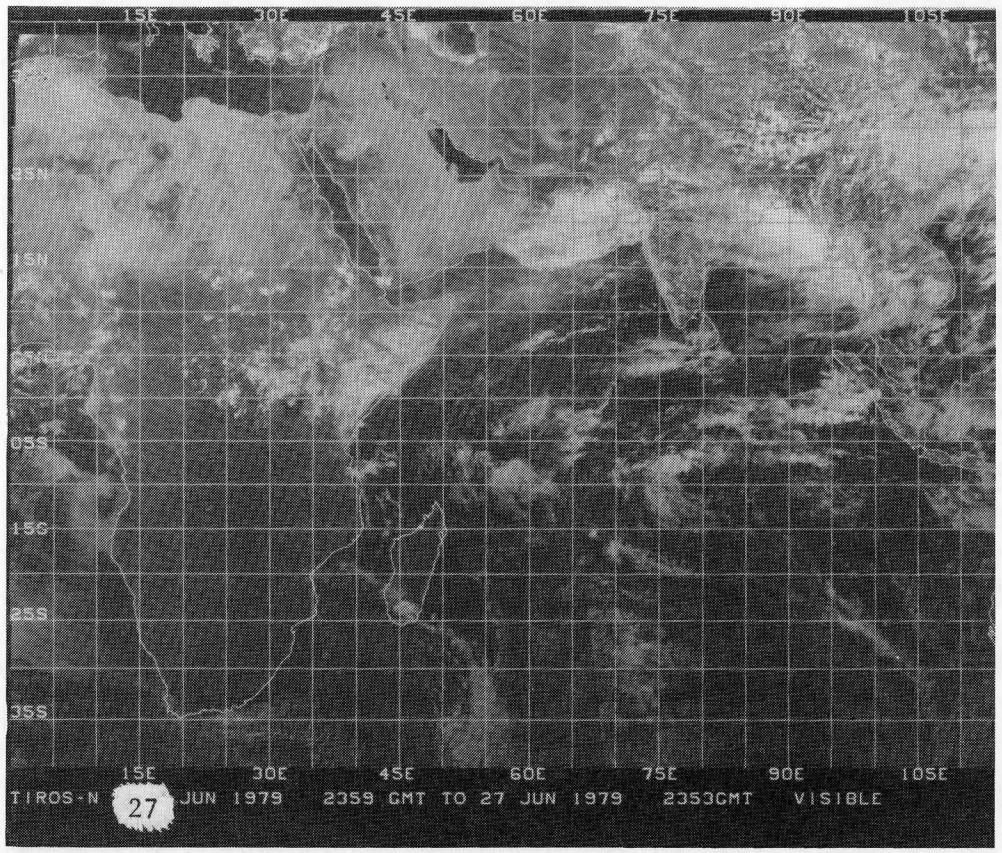

JUN 26, 1979 DATE=79177 NUMWND= 315 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

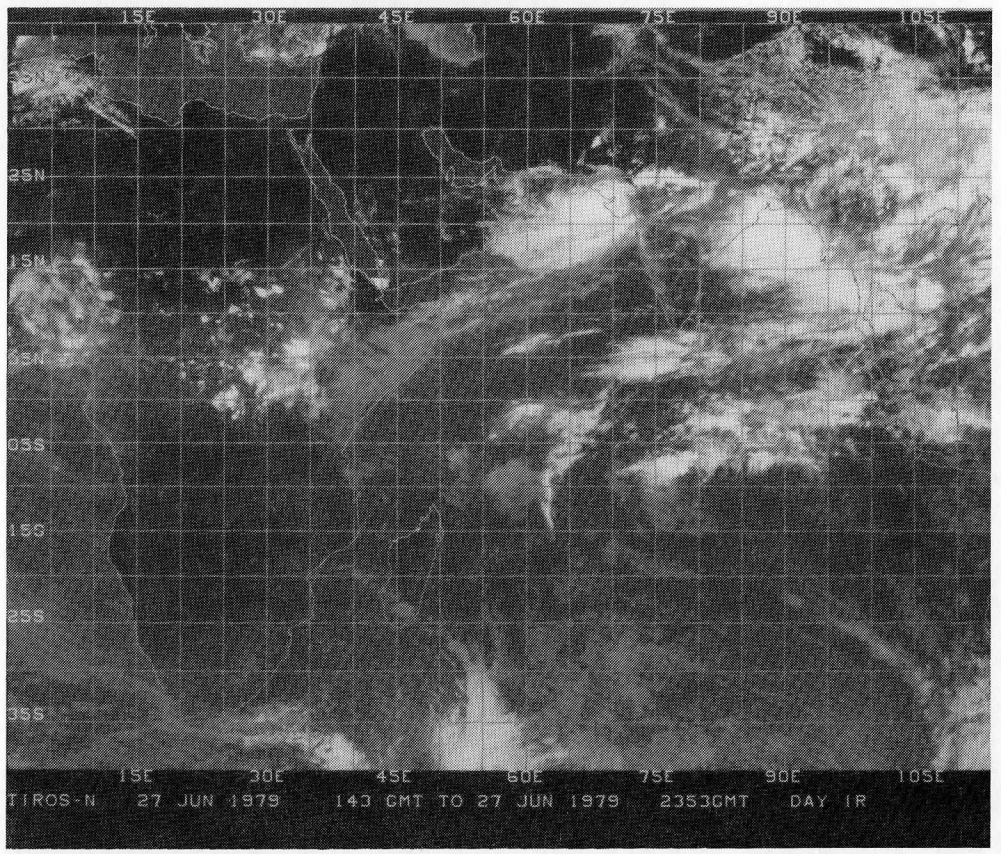

15E 30E 45E 60E 75E 90E 105E
TIROS-N 26 JUN 1979 10 GMT TO 26 JUN 1979 2359GMT VISIBLE

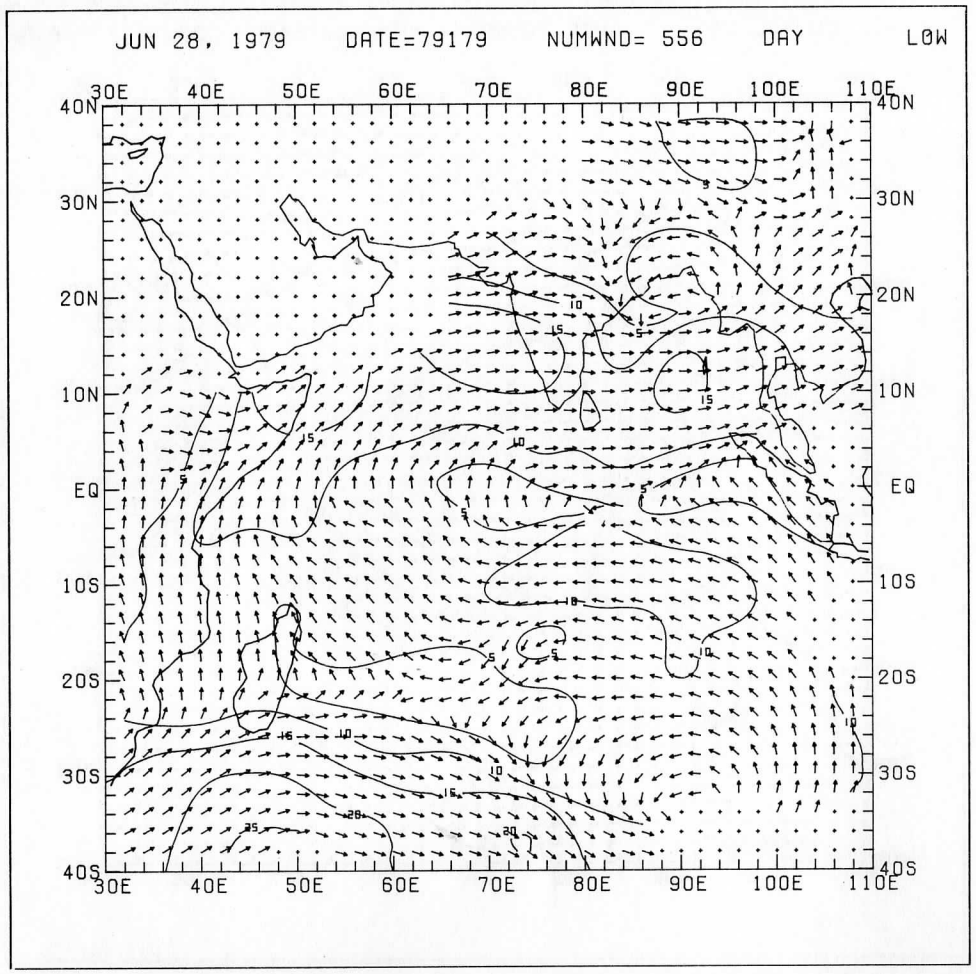

15E 30E 45E 60E 75E 90E 105E
TIROS-N 26 JUN 1979 153 GMT TO 26 JUN 1979 2359GMT DAY IR

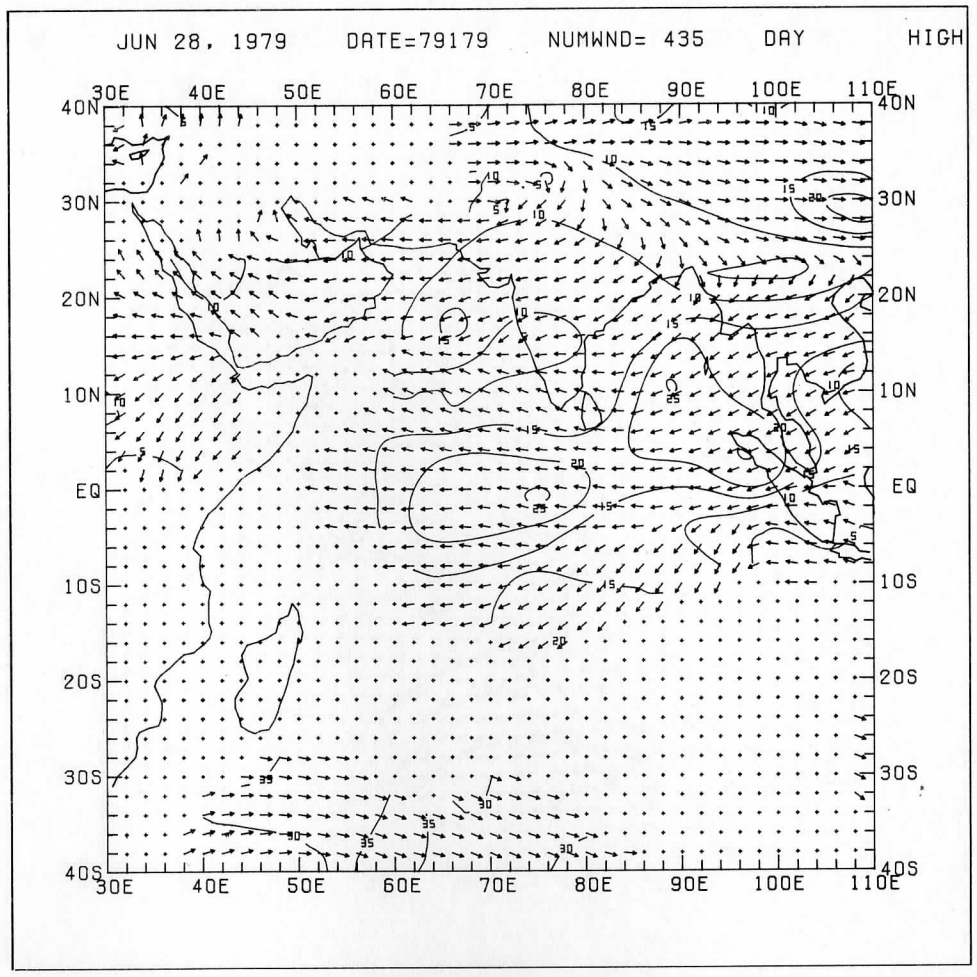

JUN 27, 1979 DATE=79178 NUMWND= 880 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

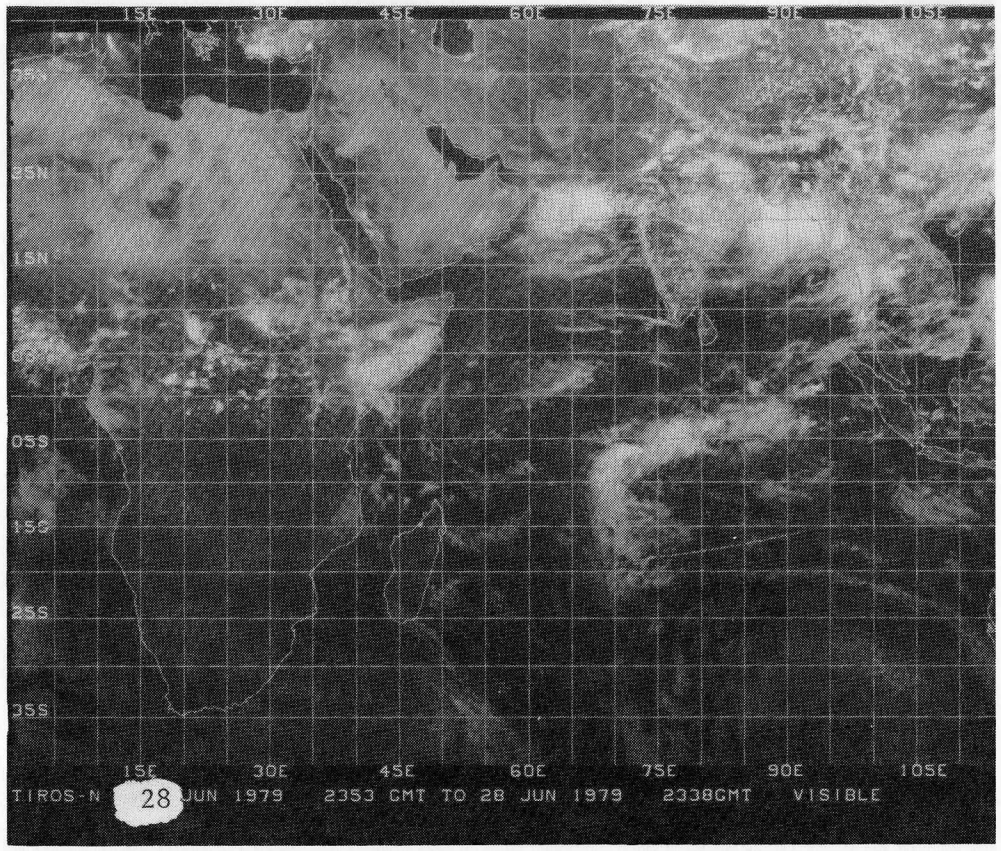

JUN 27, 1979 DATE=79178 NUMWND= 484 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

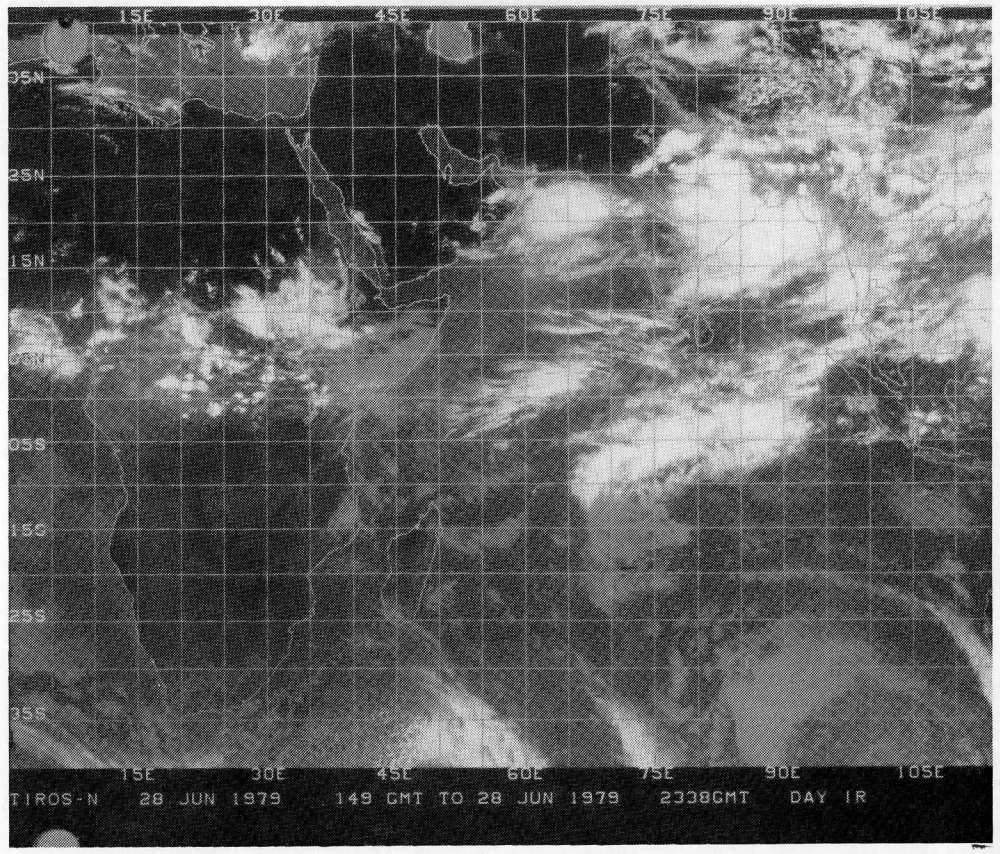

15E 30E 45E 60E 75E 90E 105E
TIROS-N 27 JUN 1979 2359 GMT TO 27 JUN 1979 2353GMT VISIBLE

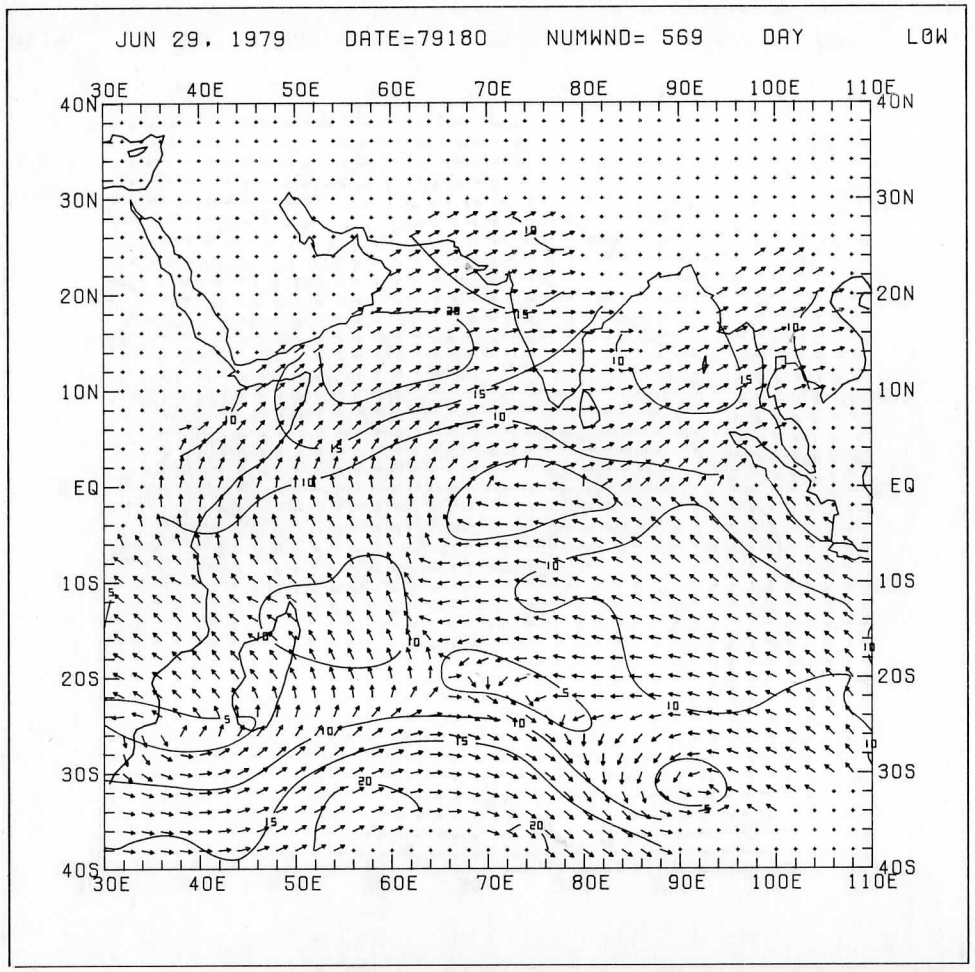

15E 30E 45E 60E 75E 90E 105E
TIROS-N 27 JUN 1979 143 GMT TO 27 JUN 1979 2353GMT DAY IR

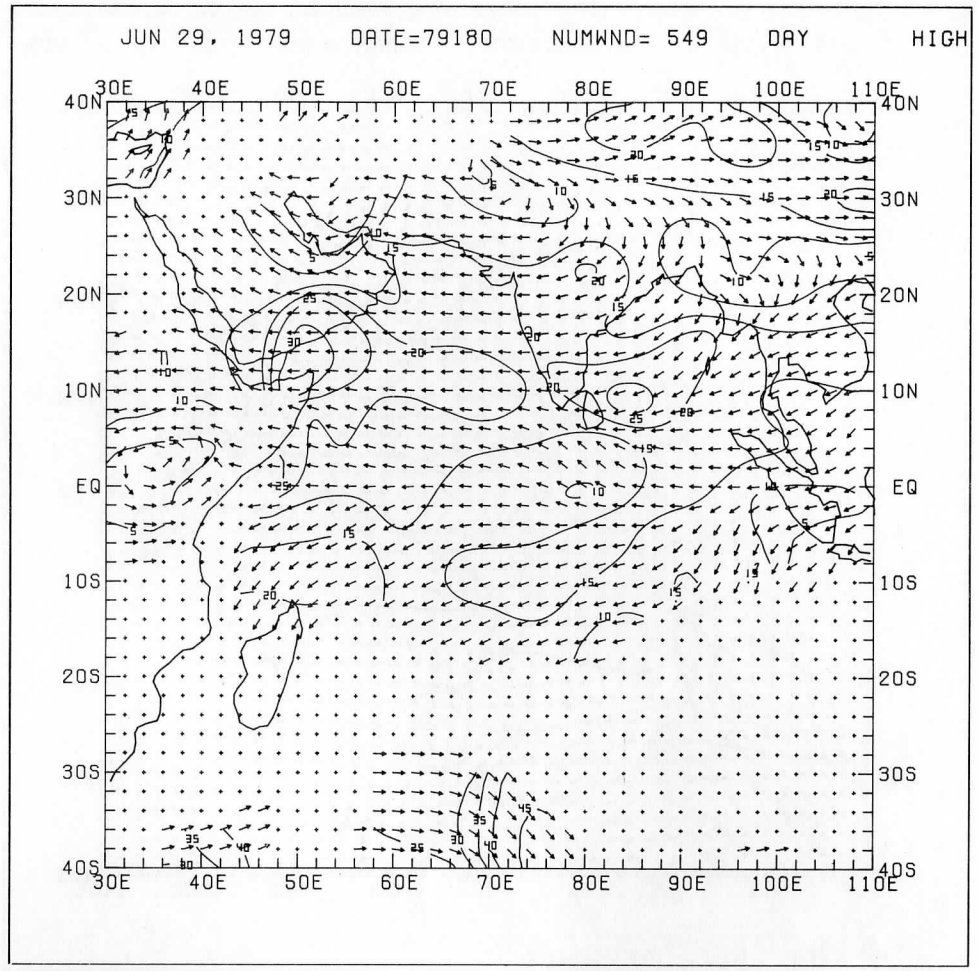

JUN 28, 1979 DATE=79179 NUMWND= 556 DAY L0W
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

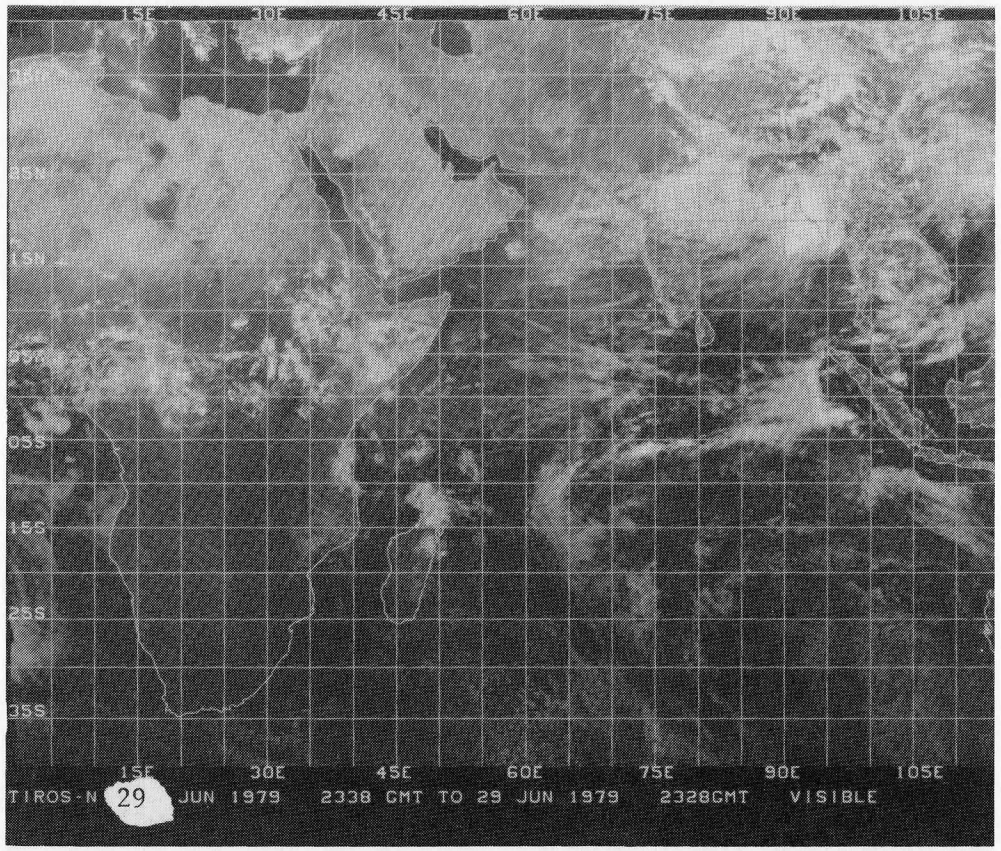

JUN 28, 1979 DATE=79179 NUMWND= 435 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

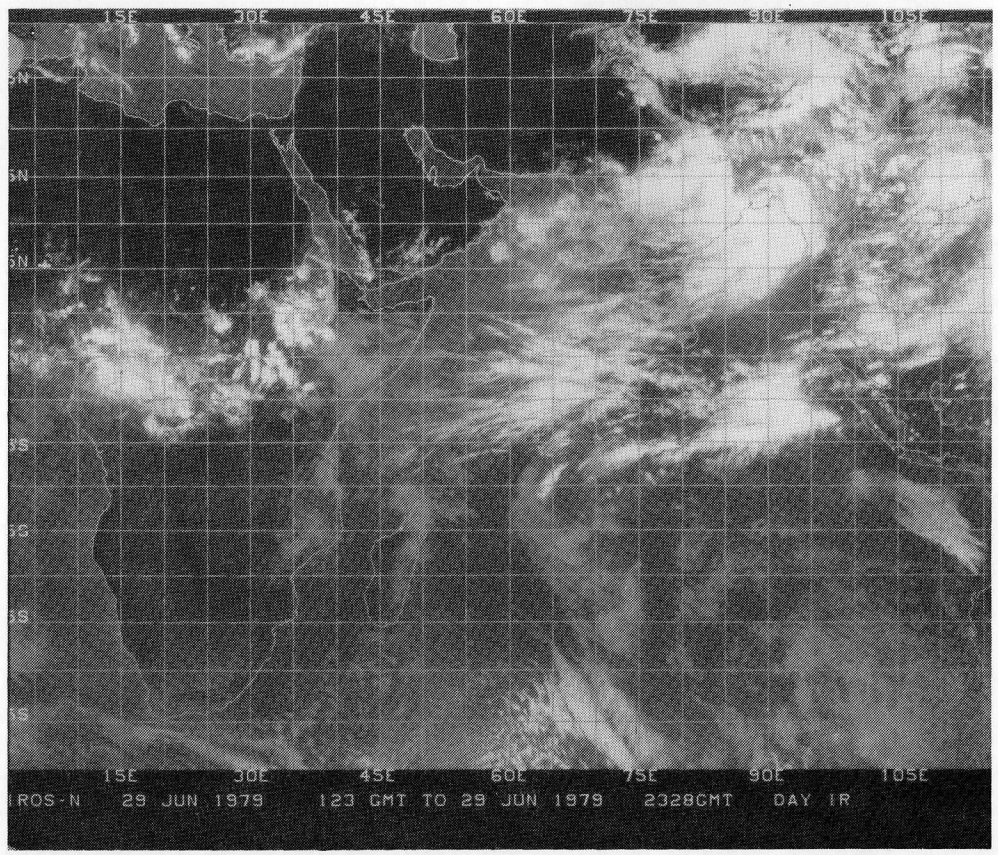

15E 30E 45E 60E 75E 90E 105E
25N 15N 05N 05S 15S 25S 35S
TIROS-N 28 JUN 1979 2353 GMT TO 28 JUN 1979 2330GMT VISIBLE

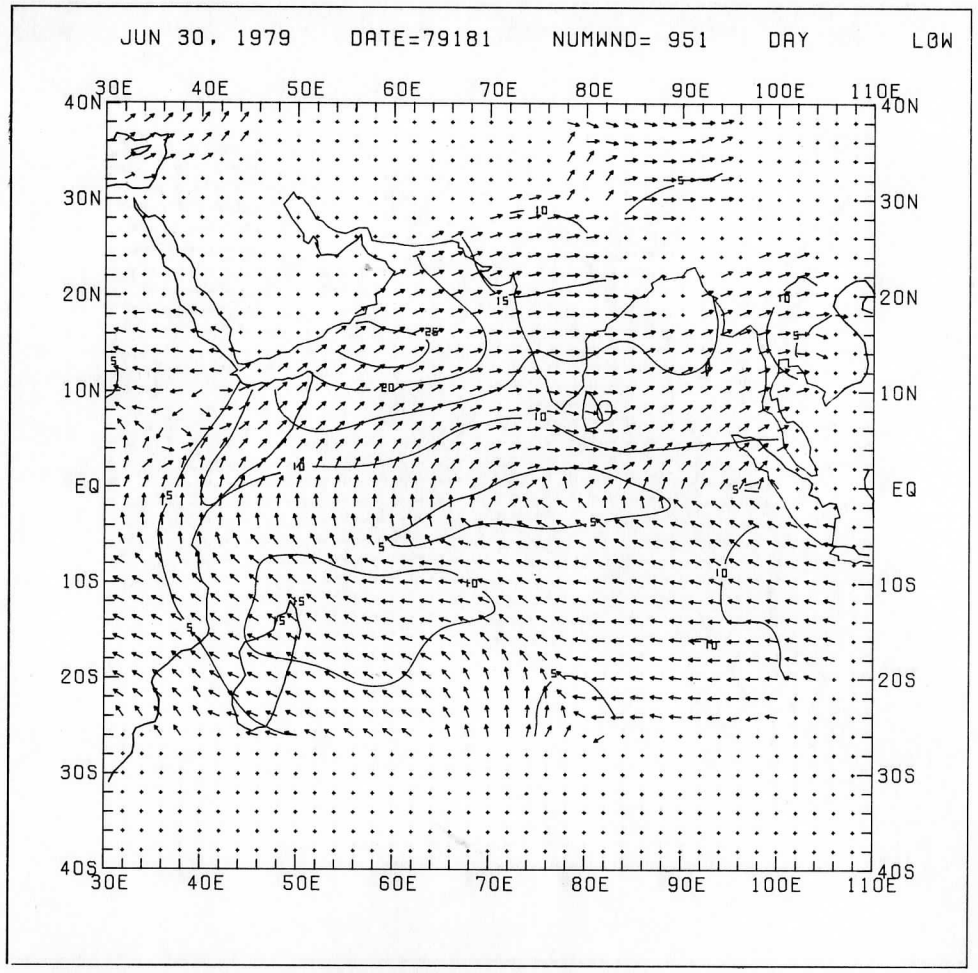

15E 30E 45E 60E 75E 90E 105E
25N 15N 05N 05S 15S 25S 35S
TIROS-N 28 JUN 1979 149 GMT TO 28 JUN 1979 2330GMT DAY IR

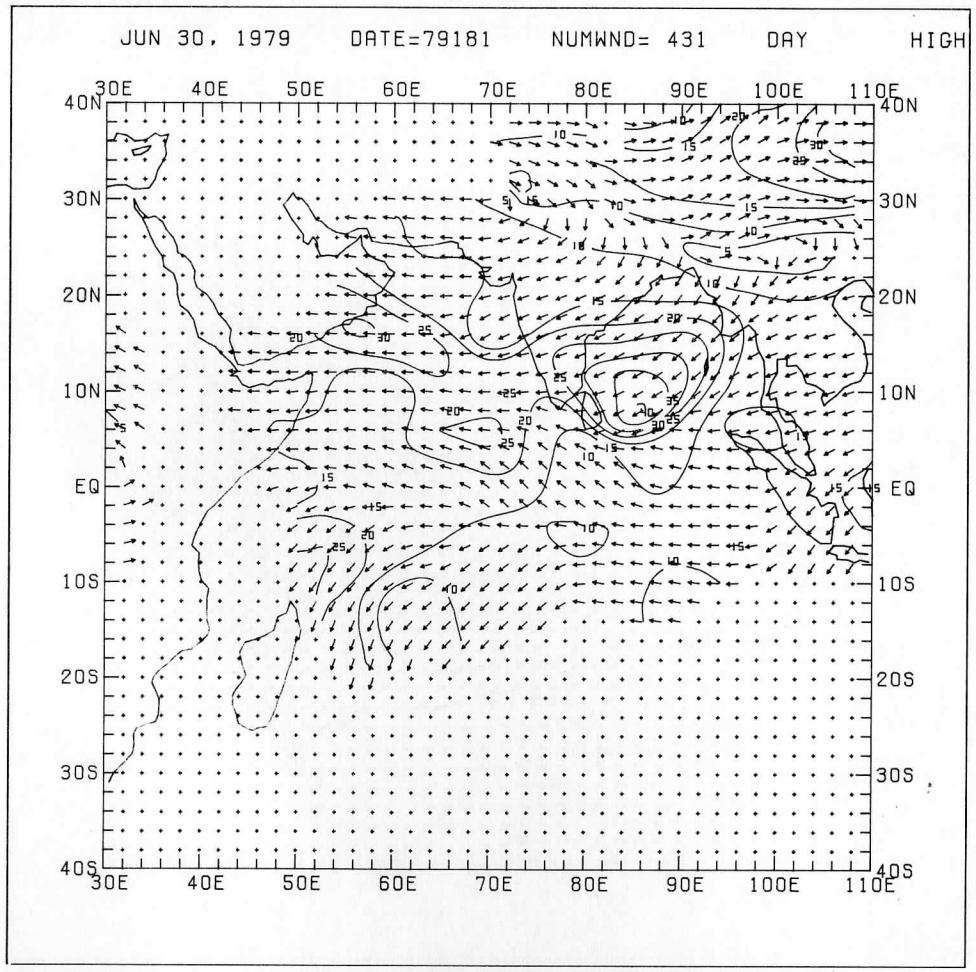

JUN 29, 1979 DATE=79180 NUMWND= 569 DAY L0W
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

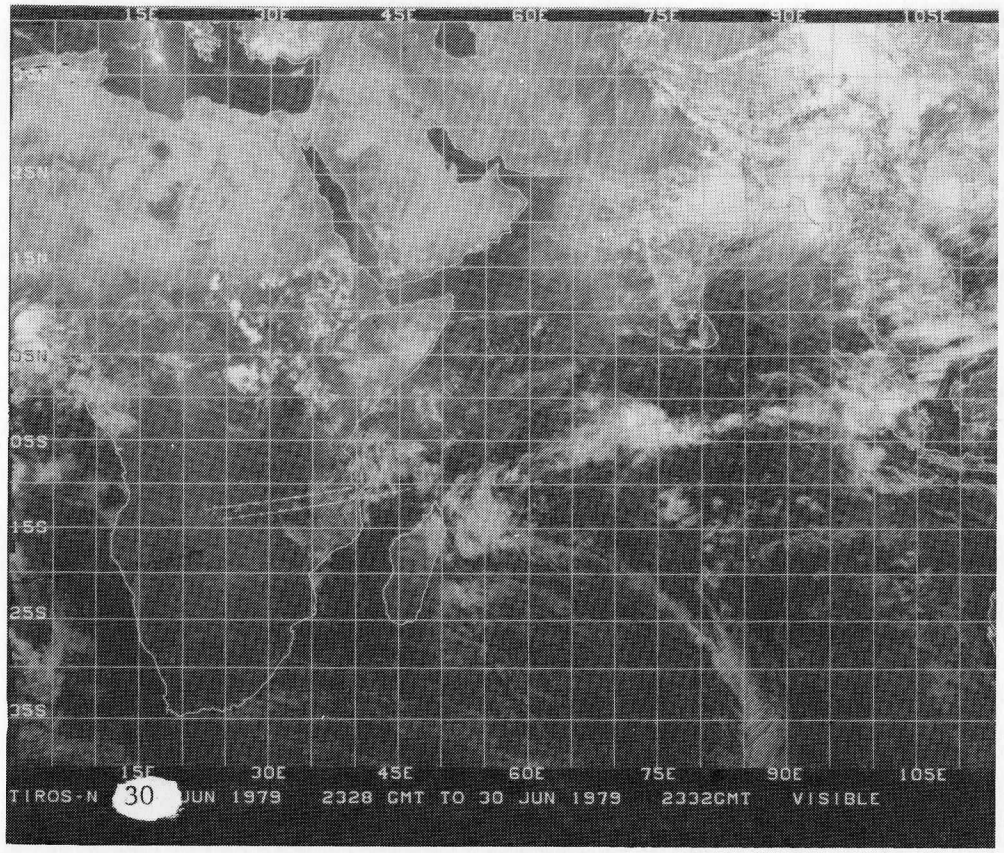

JUN 29, 1979 DATE=79180 NUMWND= 549 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

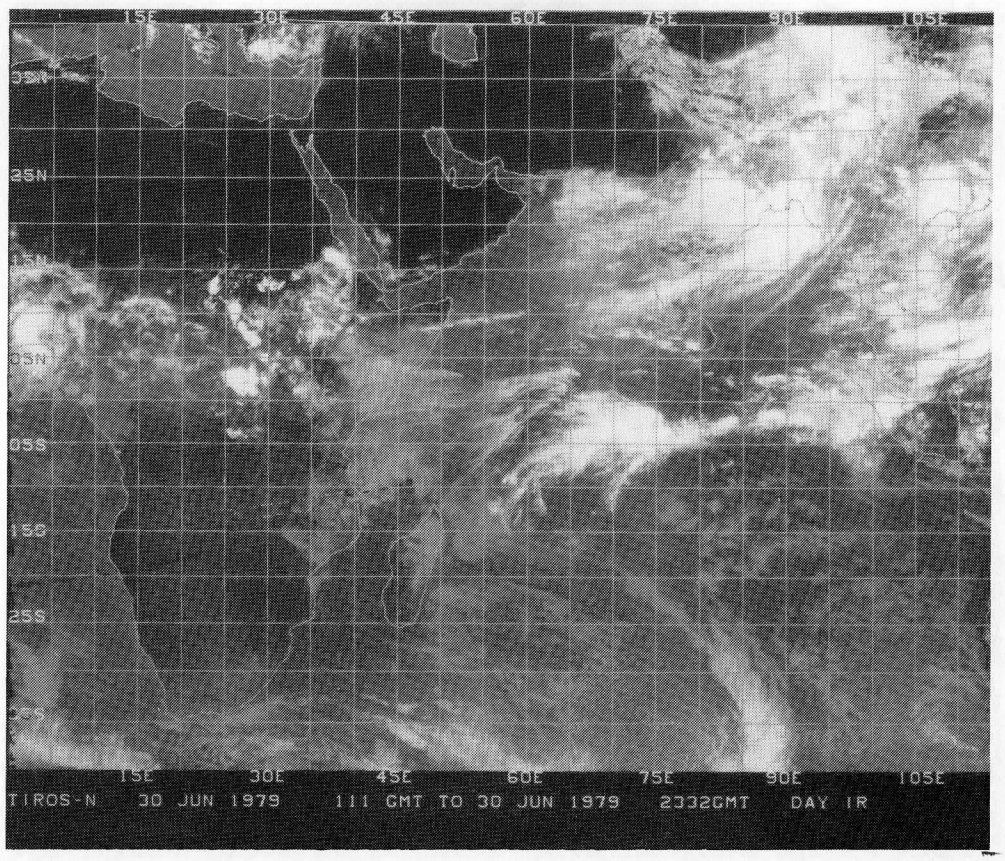

15E 30E 45E 60E 75E 90E 105E
15E 30E 45E 60E 75E 90E 105E
TIROS-N 29 JUN 1979 2338 GMT TO 29 JUN 1979 2328GMT VISIBLE

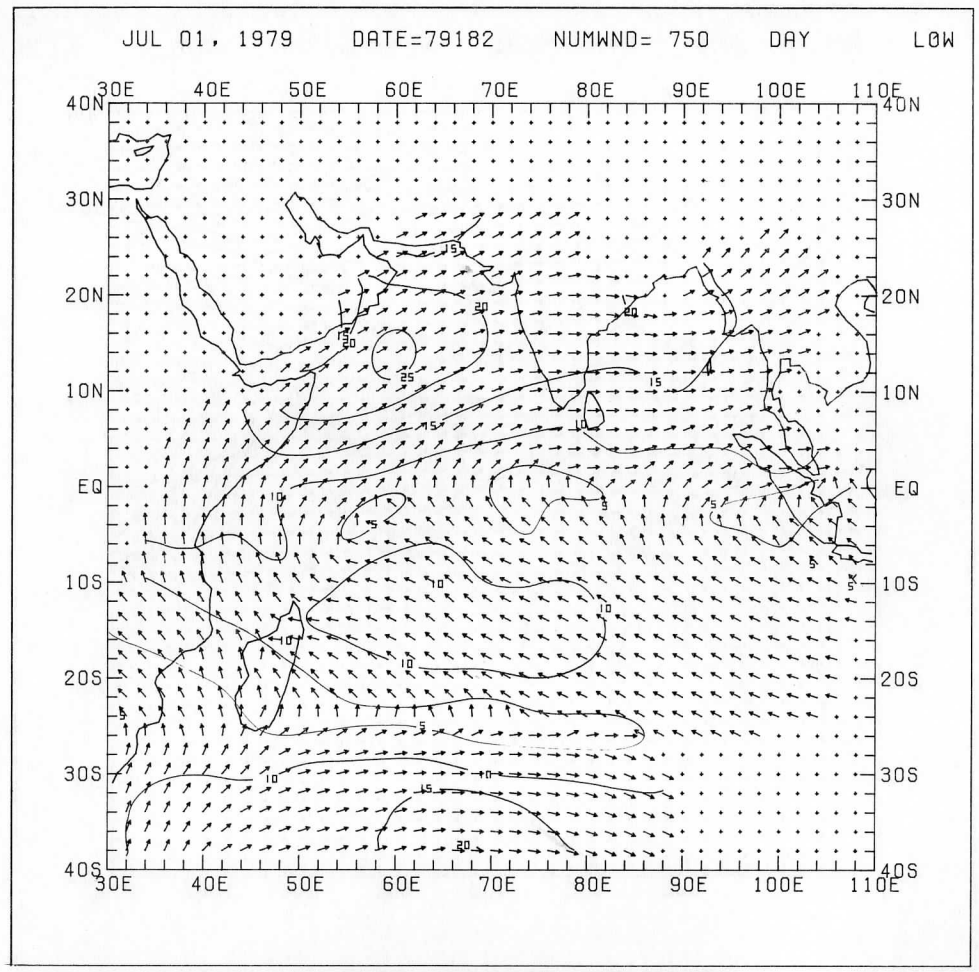

15E 30E 45E 60E 75E 90E 105E
15E 30E 45E 60E 75E 90E 105E
ROS-N 29 JUN 1979 123 GMT TO 29 JUN 1979 2328GMT DAY IR

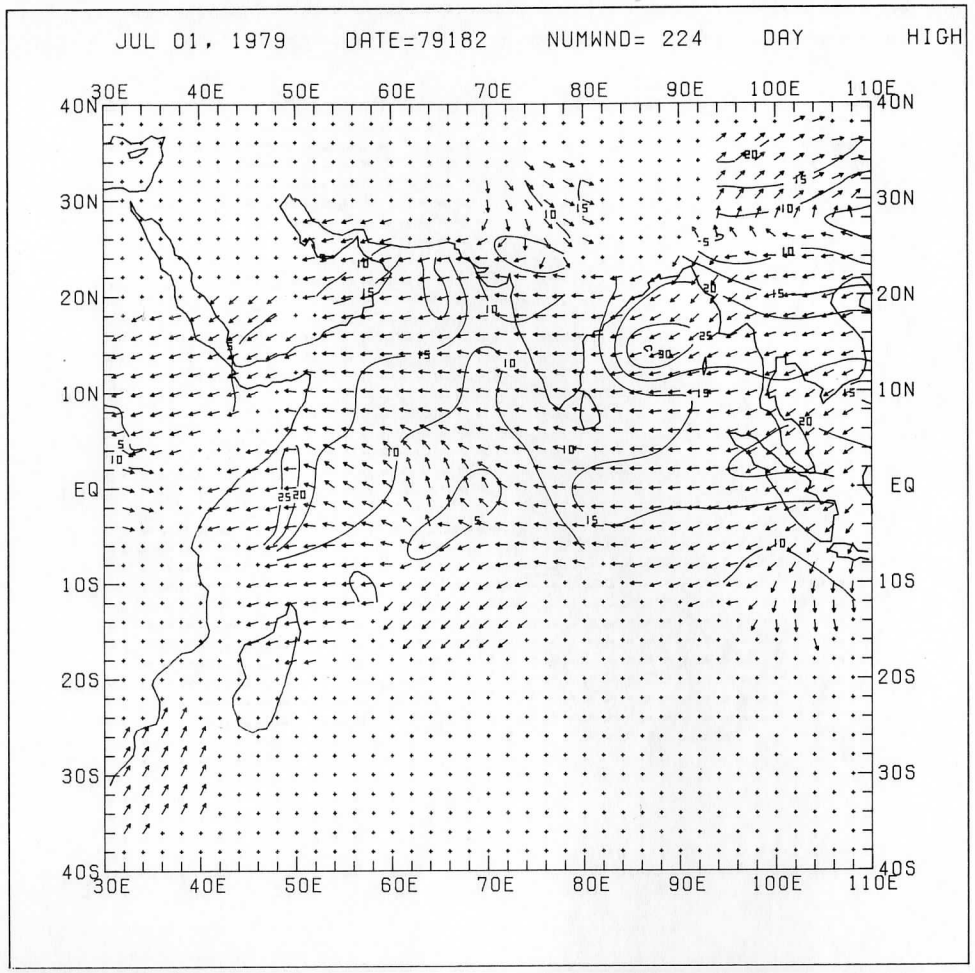

JUN 30, 1979 DATE=79181 NUMWND= 951 DAY L0W
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

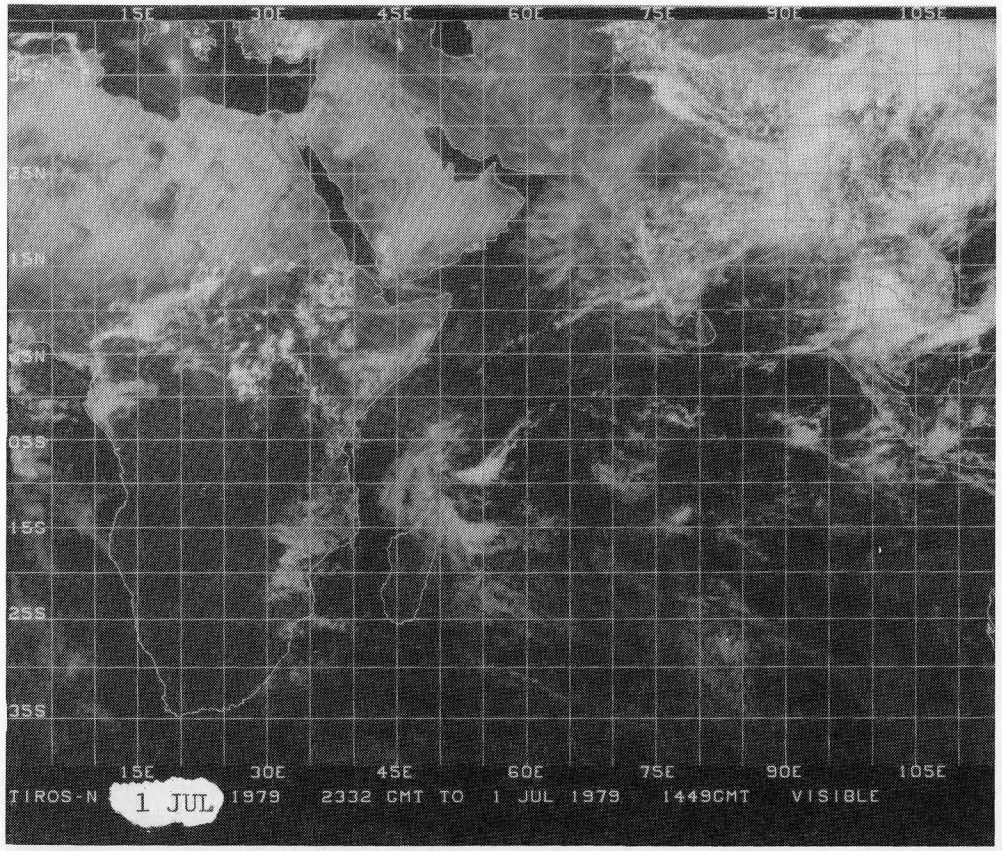

JUN 30, 1979 DATE=79181 NUMWND= 431 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

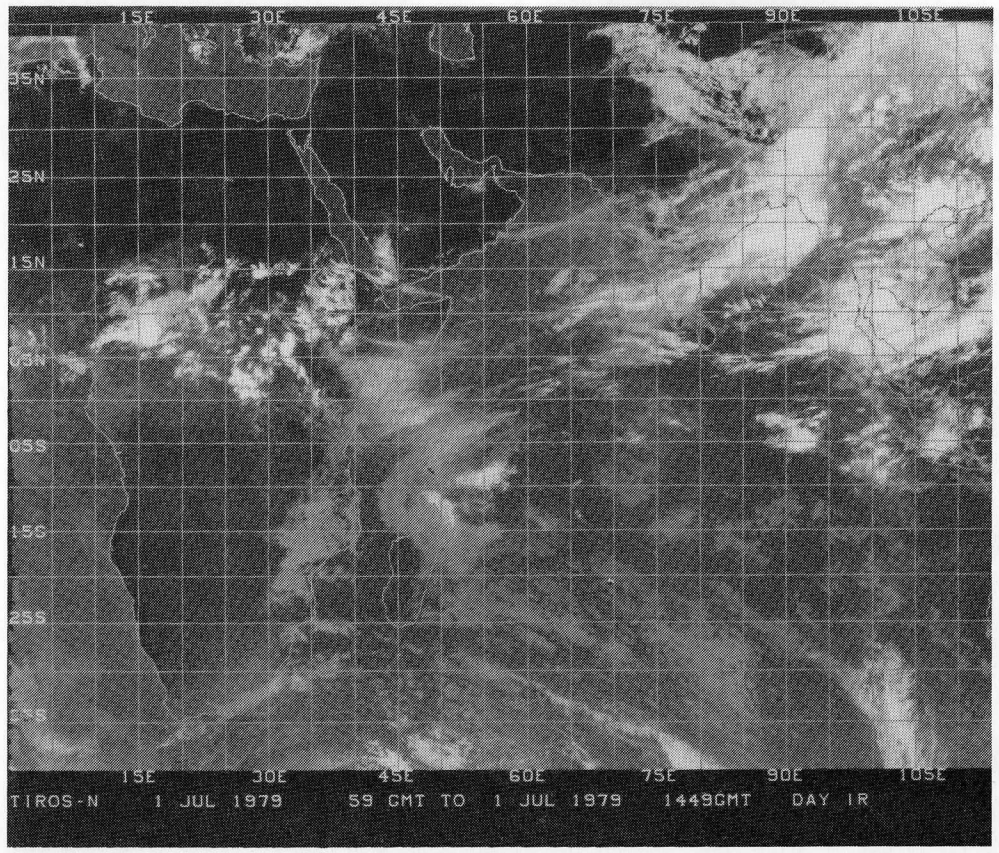

15E 30E 45E 60E 75E 90E 105E
25N 15N 05N 05S 15S 25S 35S
TIROS-N 30 JUN 1979 2328 GMT TO 30 JUN 1979 2332GMT VISIBLE

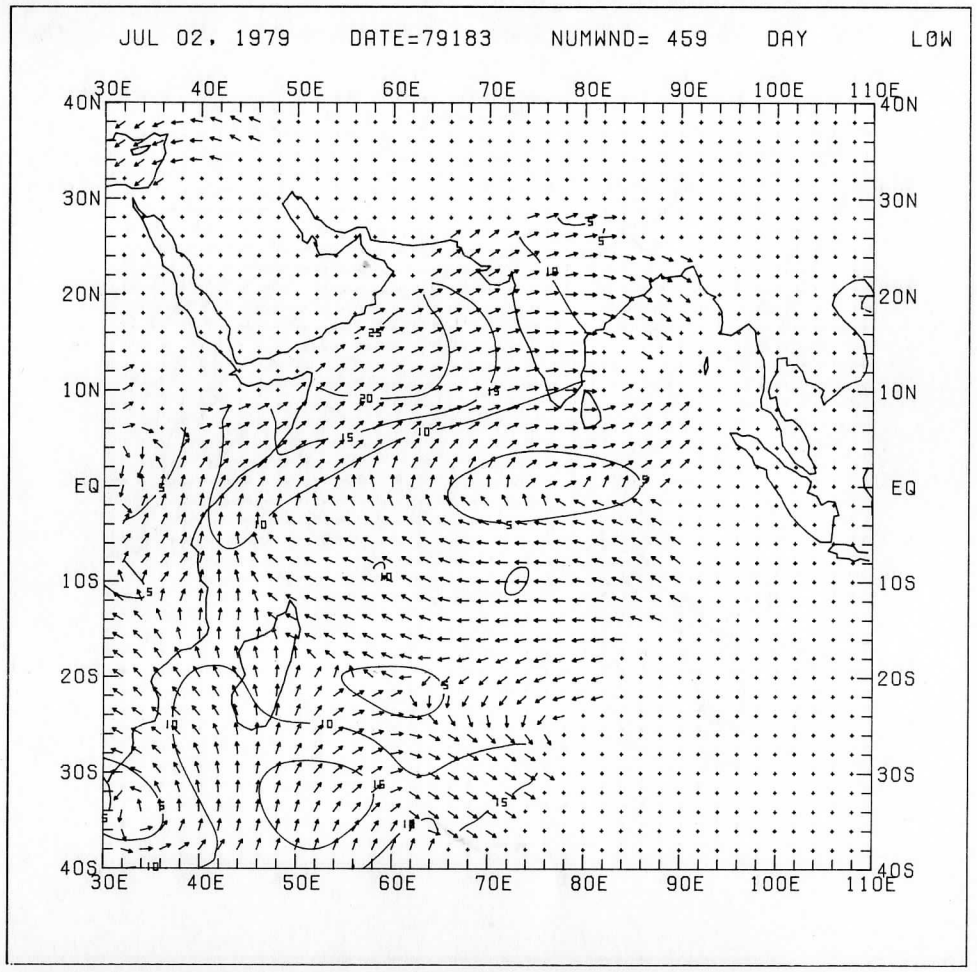

15E 30E 45E 60E 75E 90E 105E
25N 15N 05N 05S 15S 25S 35S
TIROS-N 30 JUN 1979 111 GMT TO 30 JUN 1979 2332GMT DAY IR

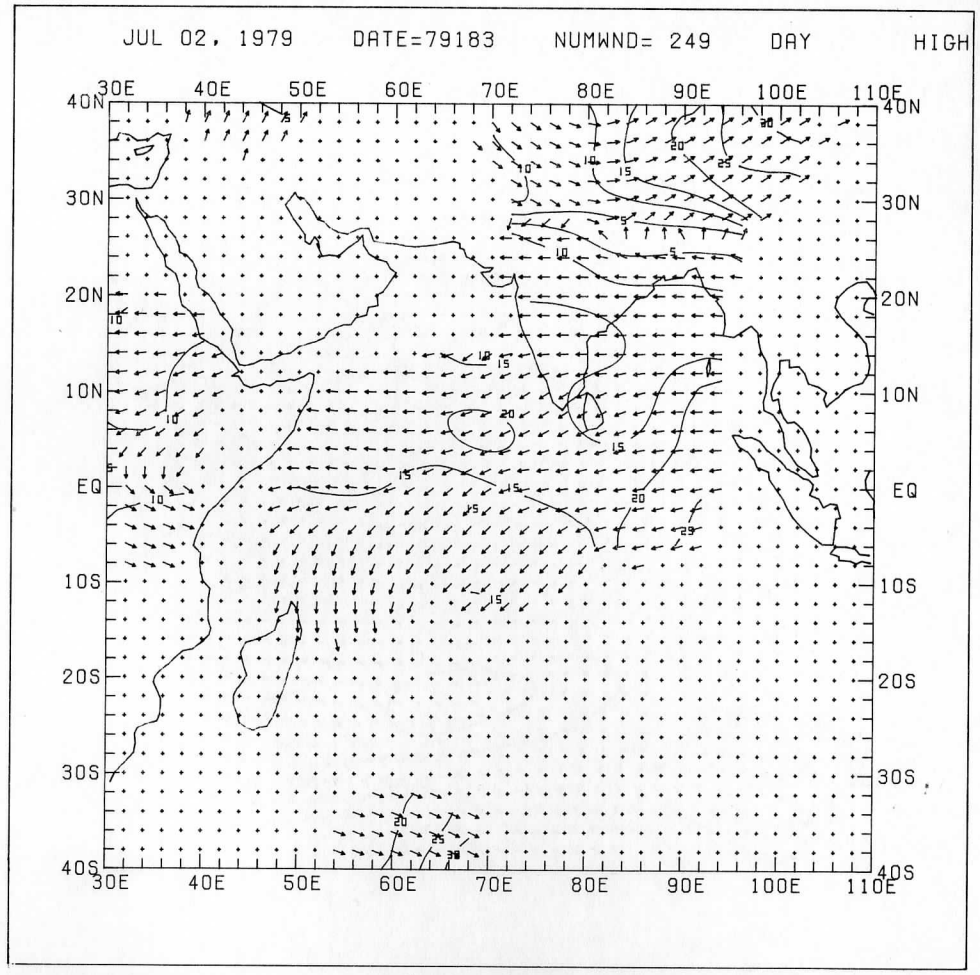

JUL 01, 1979 DATE=79182 NUMWND= 750 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

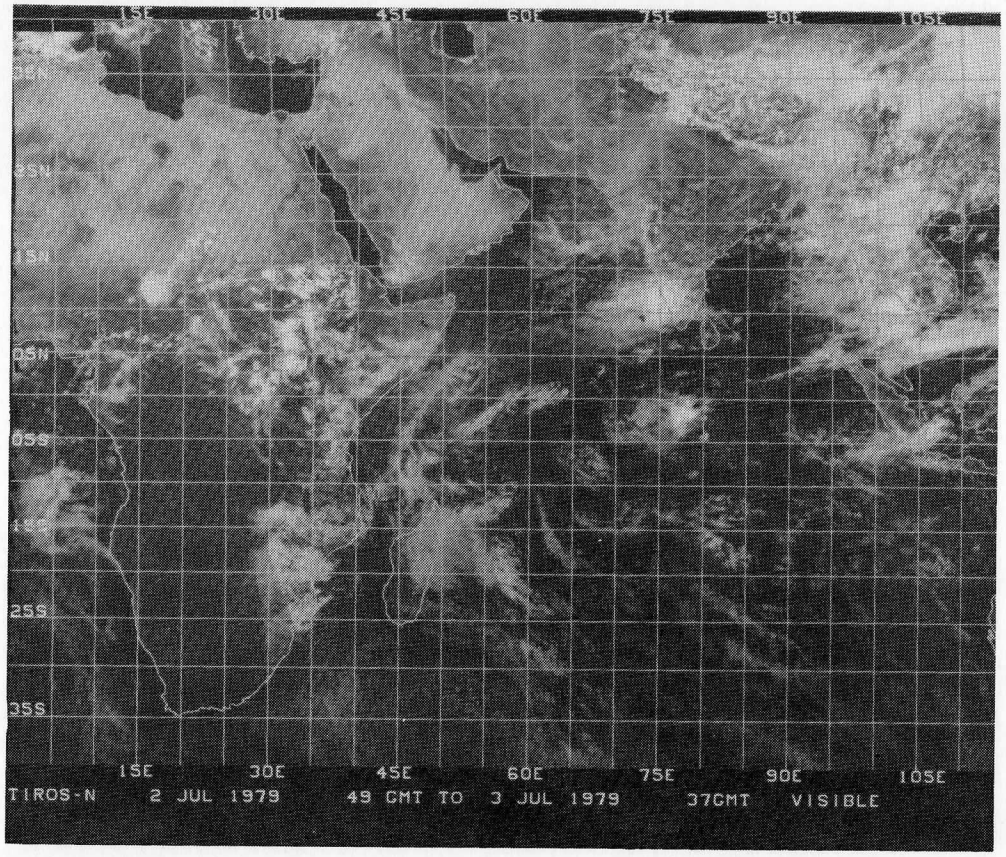

JUL 01, 1979 DATE=79182 NUMWND= 224 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

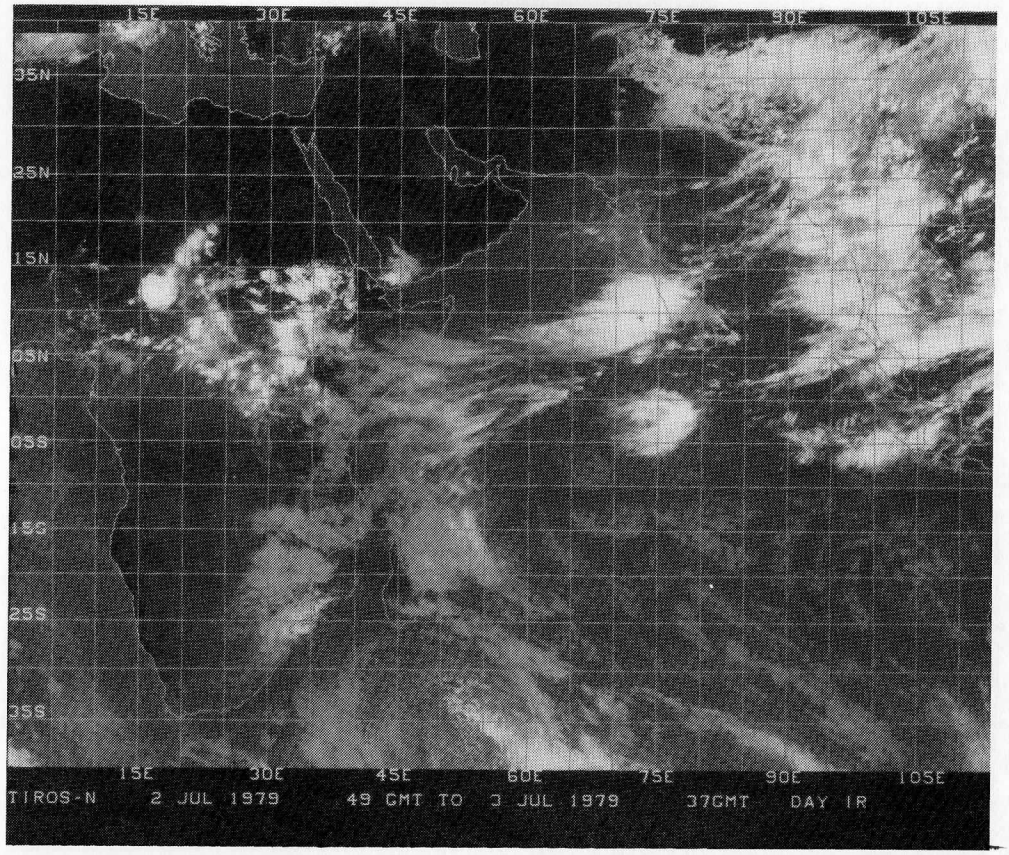

15E 30E 45E 60E 75E 90E 105E
TIROS-N 1 JUL 1979 2332 GMT TO 1 JUL 1979 1449GMT VISIBLE

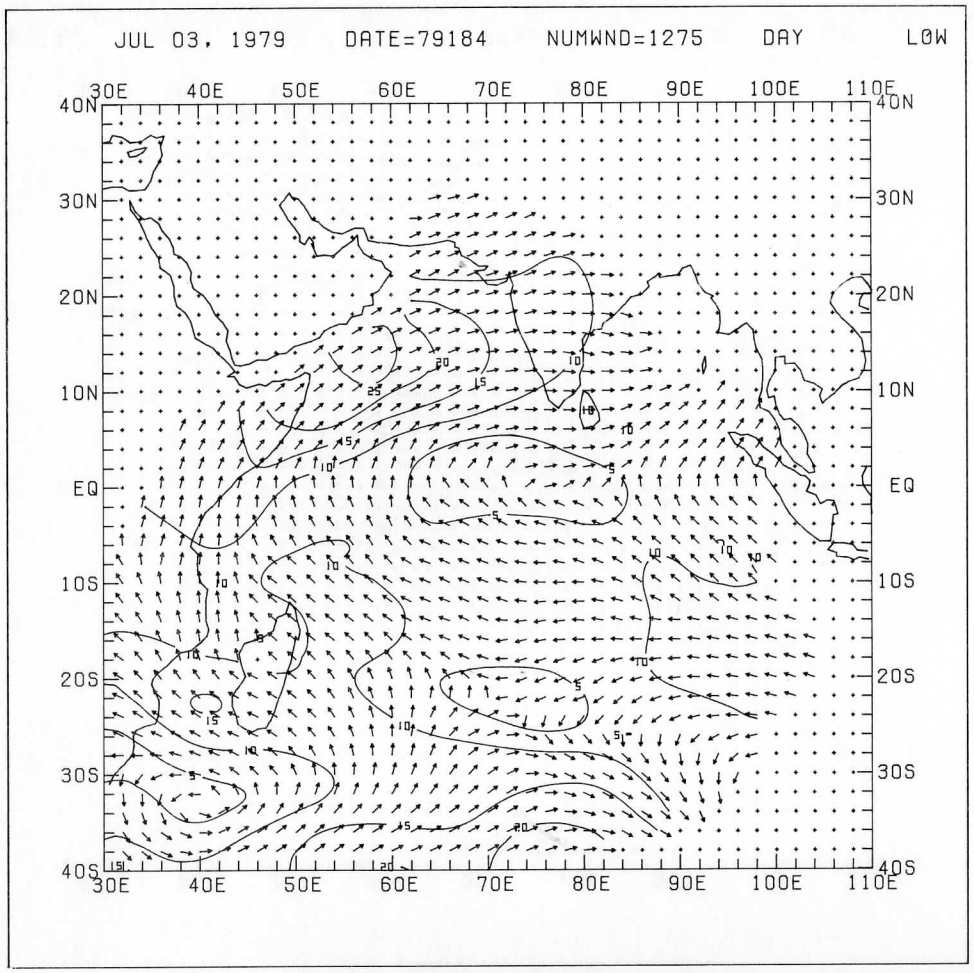

15E 30E 45E 60E 75E 90E 105E
TIROS-N 1 JUL 1979 59 GMT TO 1 JUL 1979 1449GMT DAY IR

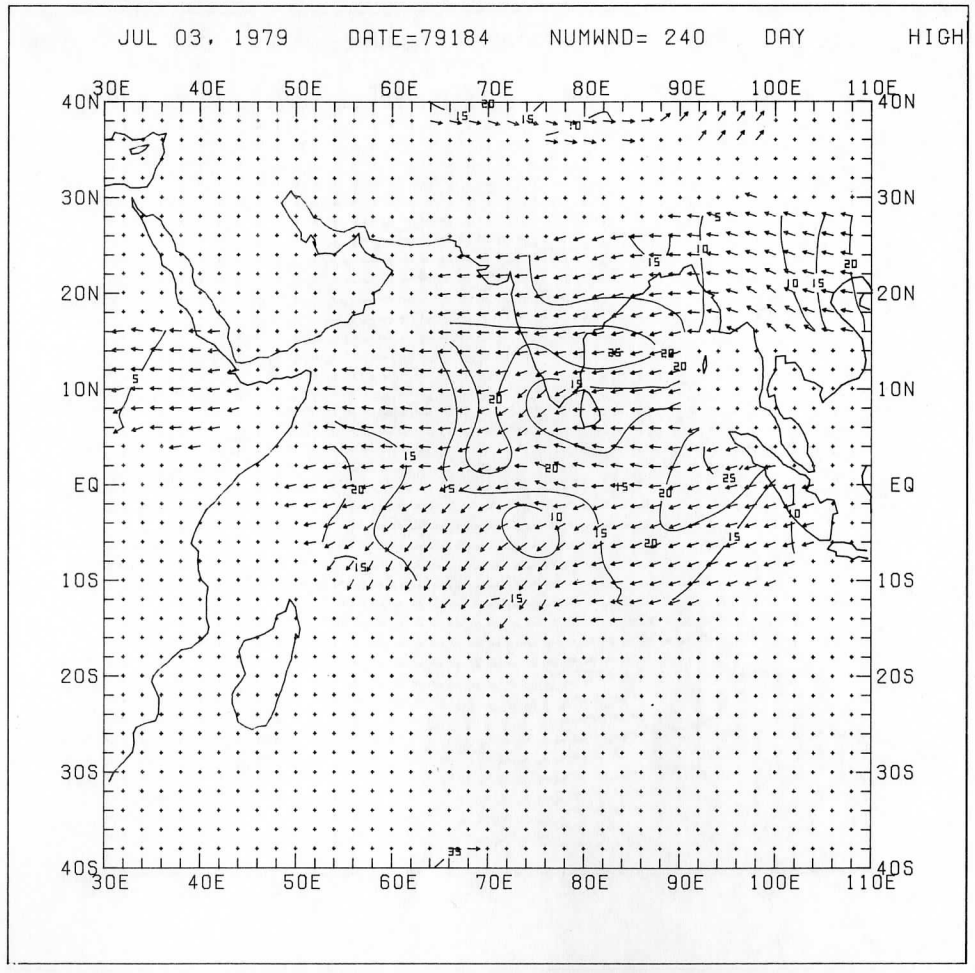

JUL 02, 1979 DATE=79183 NUMWND= 459 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

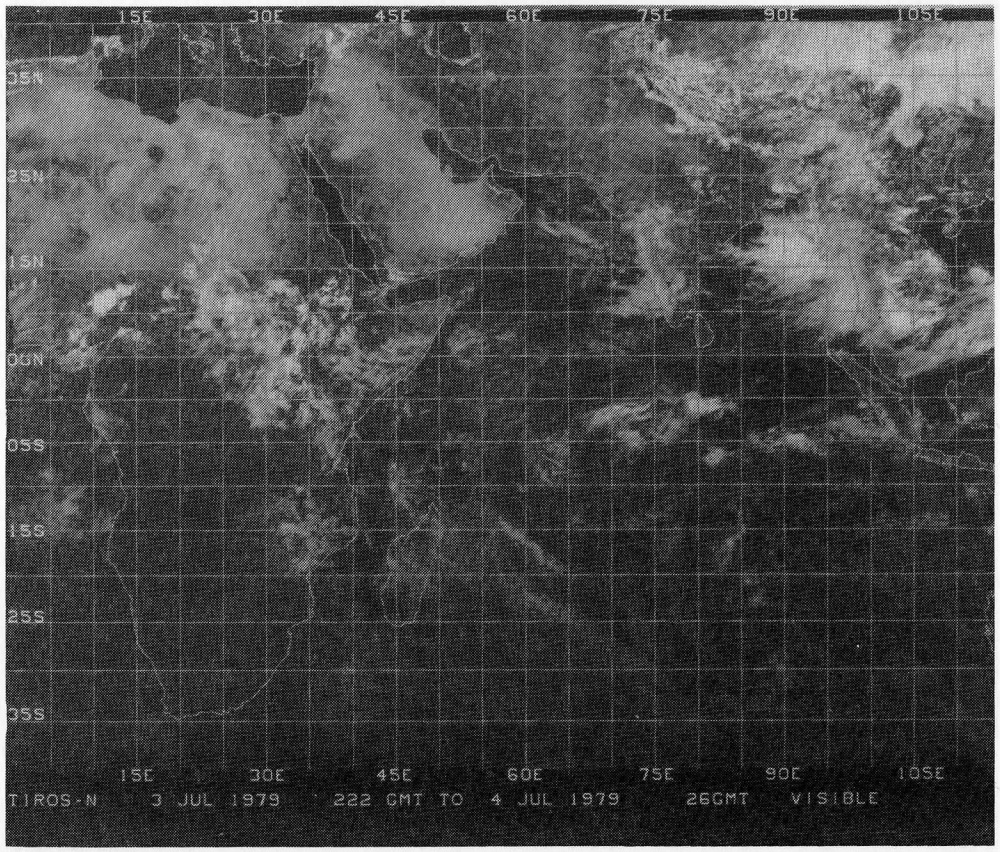

JUL 02, 1979 DATE=79183 NUMWND= 249 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

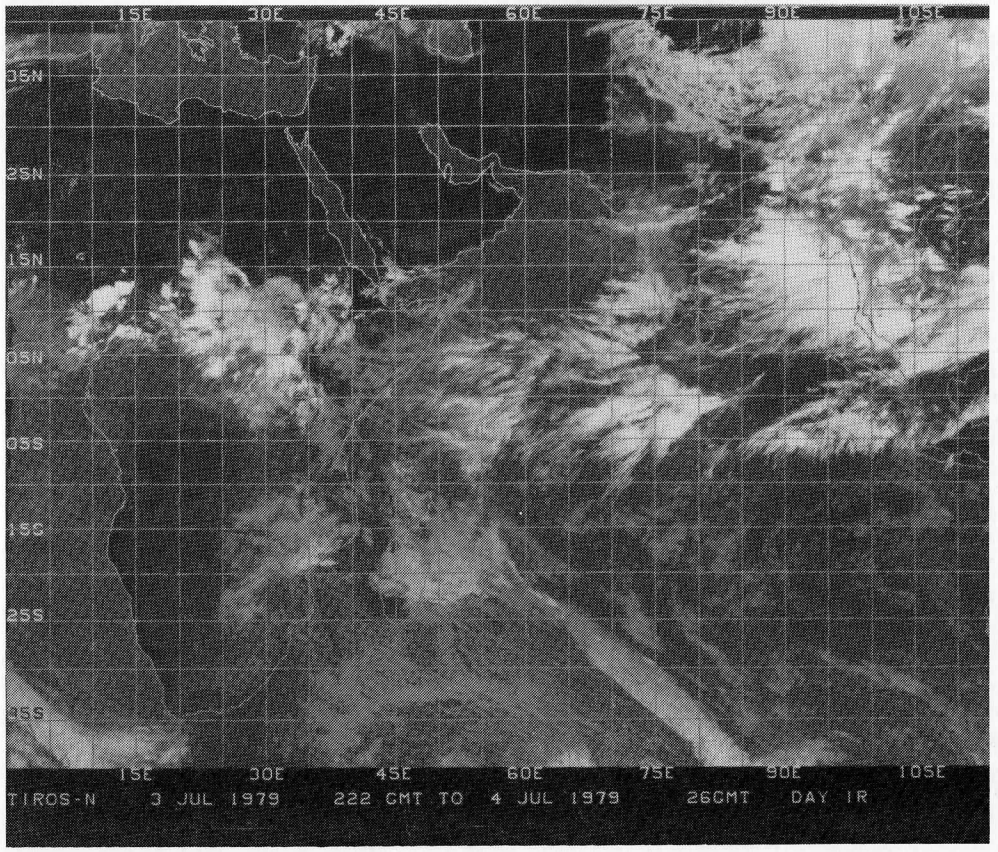

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 2 JUL 1979 49 GMT TO 3 JUL 1979 37GMT VISIBLE

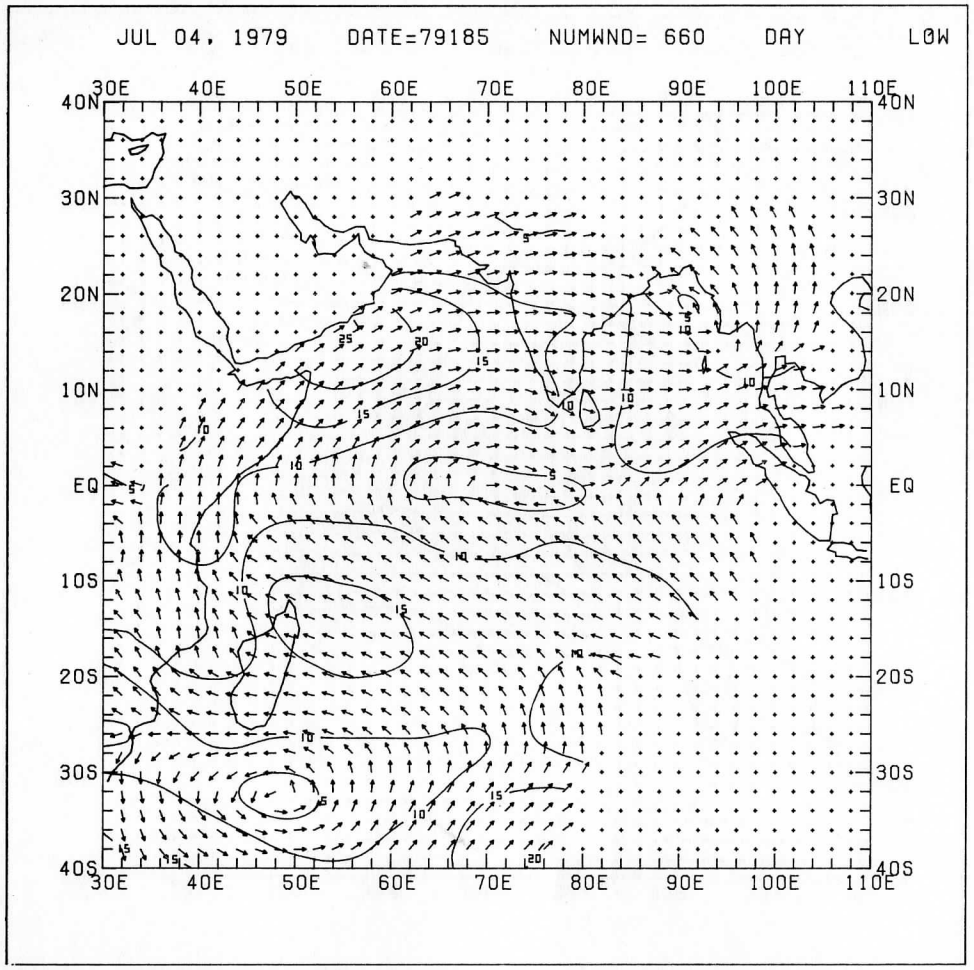

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 2 JUL 1979 49 GMT TO 3 JUL 1979 37GMT DAY IR

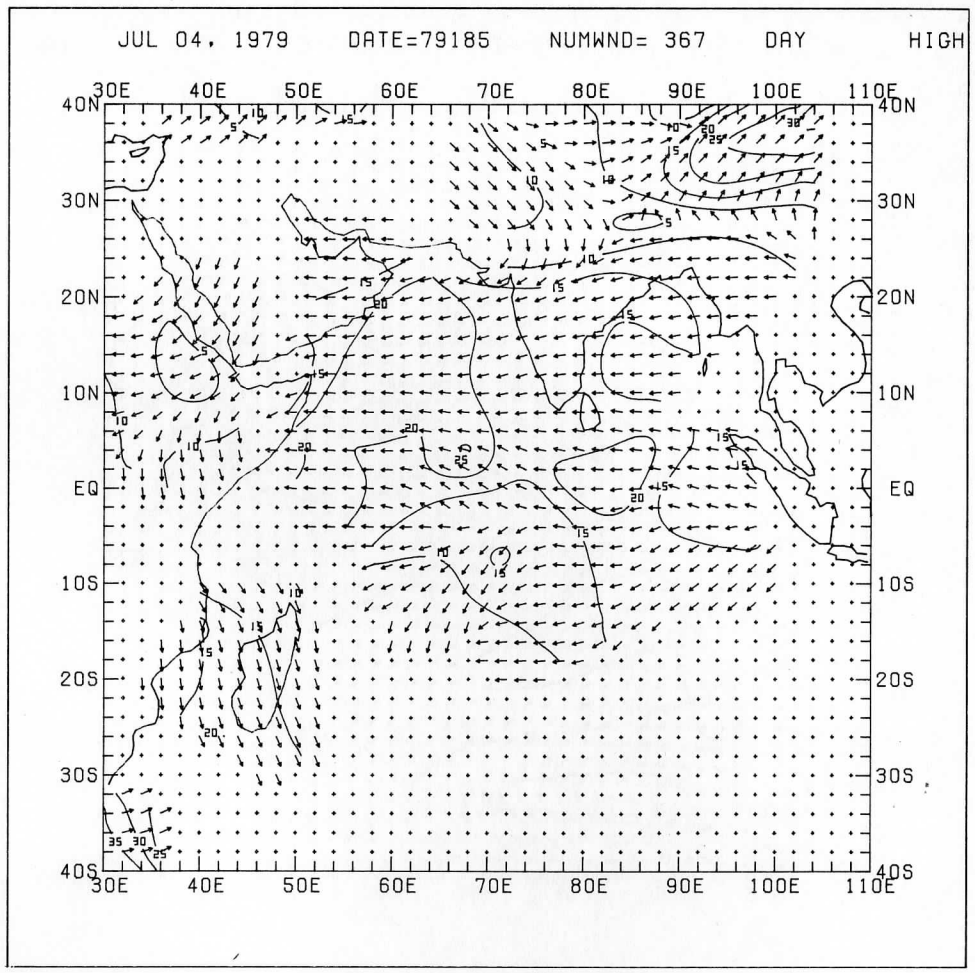

JUL 03, 1979 DATE=79184 NUMWND=1275 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

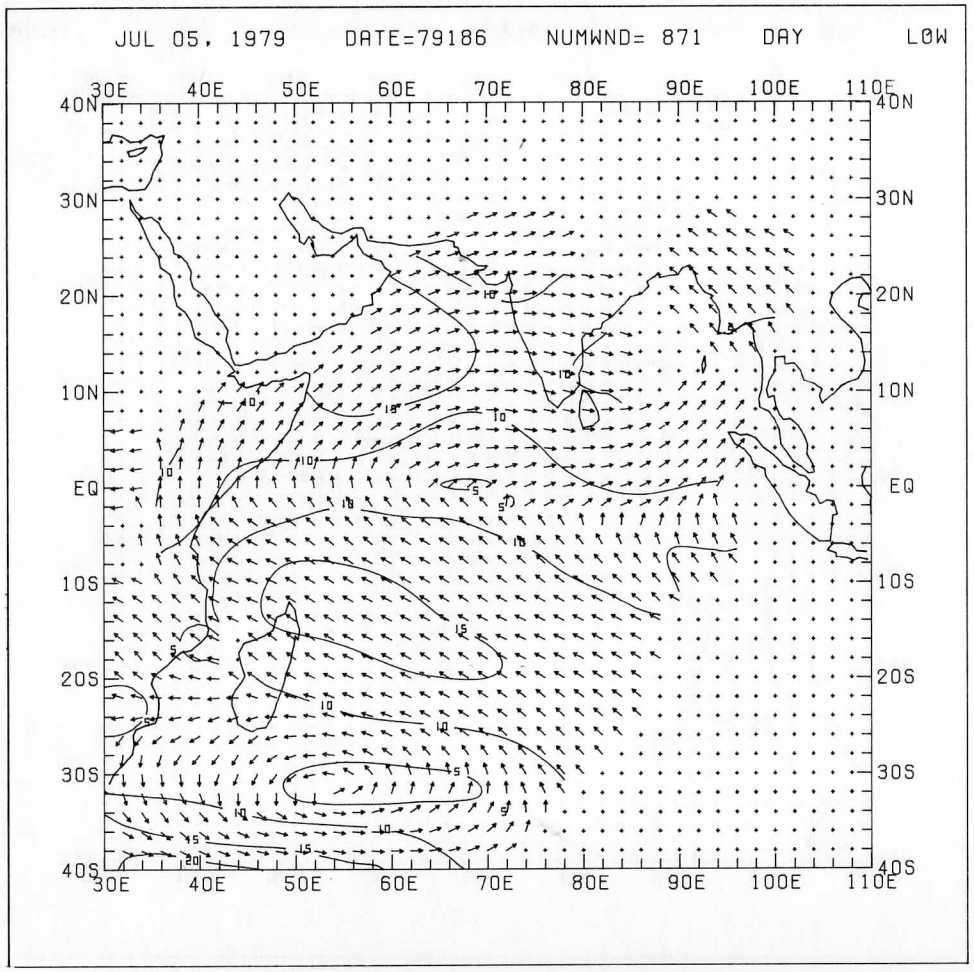

JUL 03, 1979 DATE=79184 NUMWND= 240 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

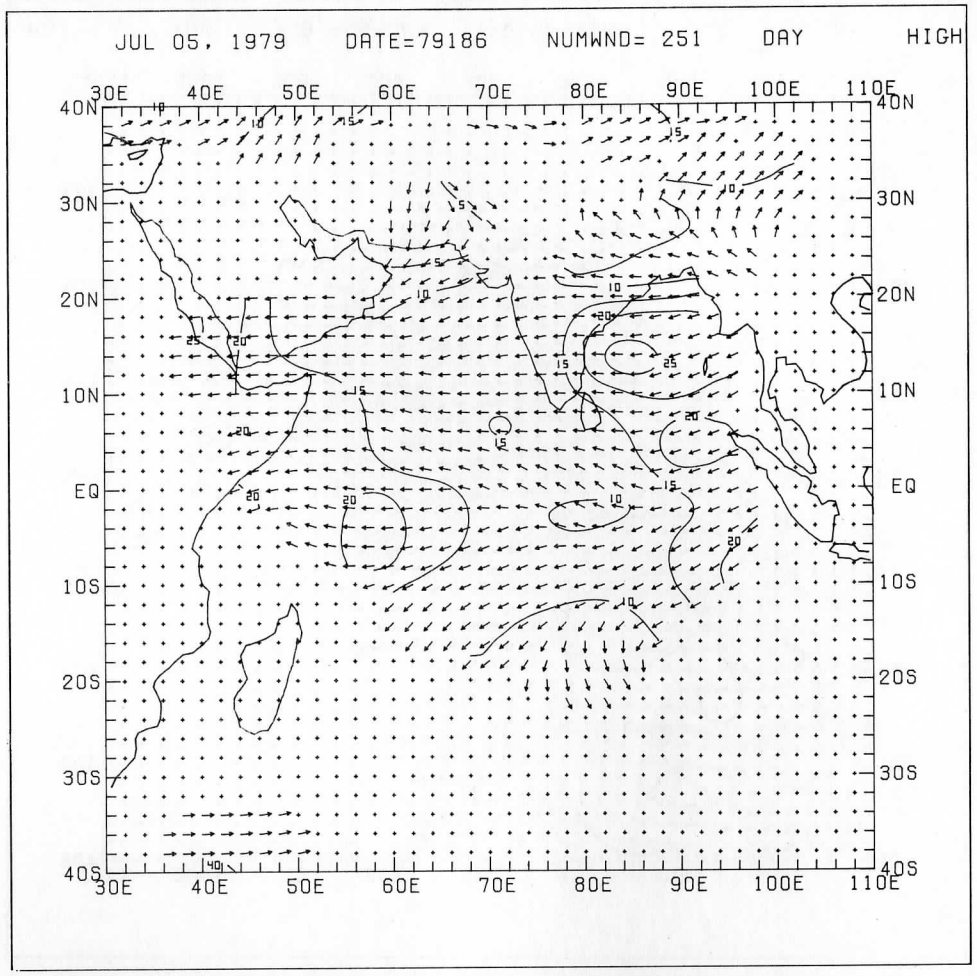

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 3 JUL 1979 222 GMT TO 4 JUL 1979 26GMT VISIBLE

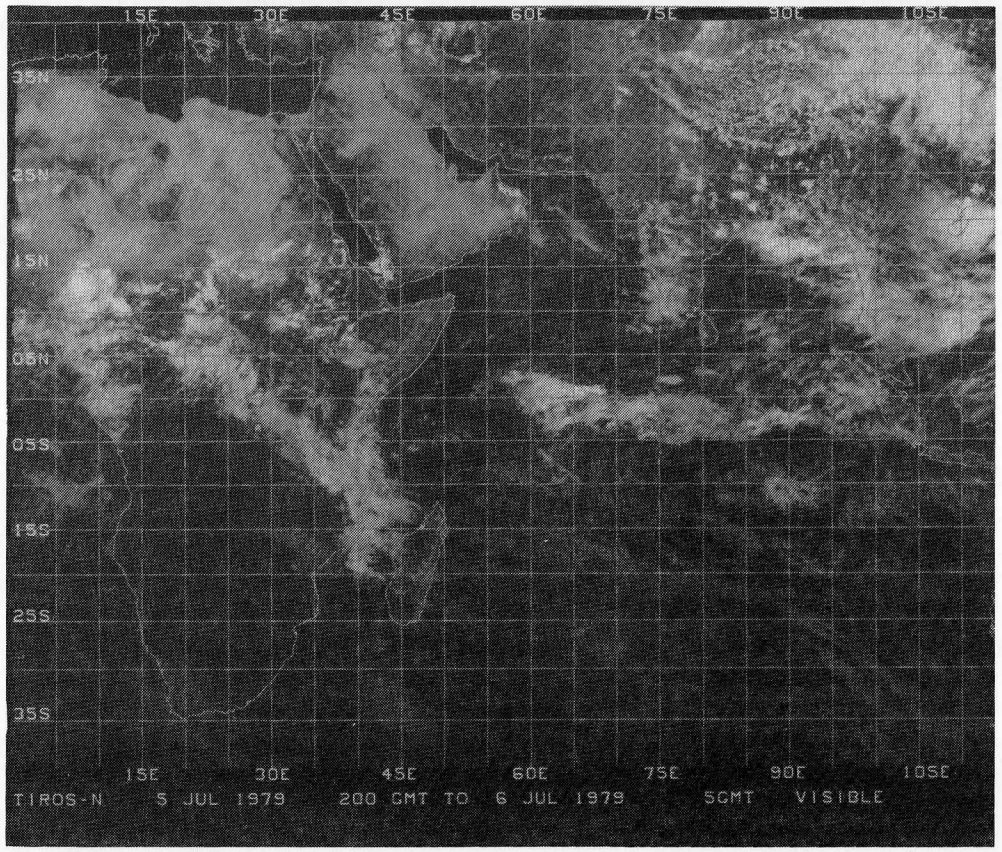

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 3 JUL 1979 222 GMT TO 4 JUL 1979 26GMT DAY IR

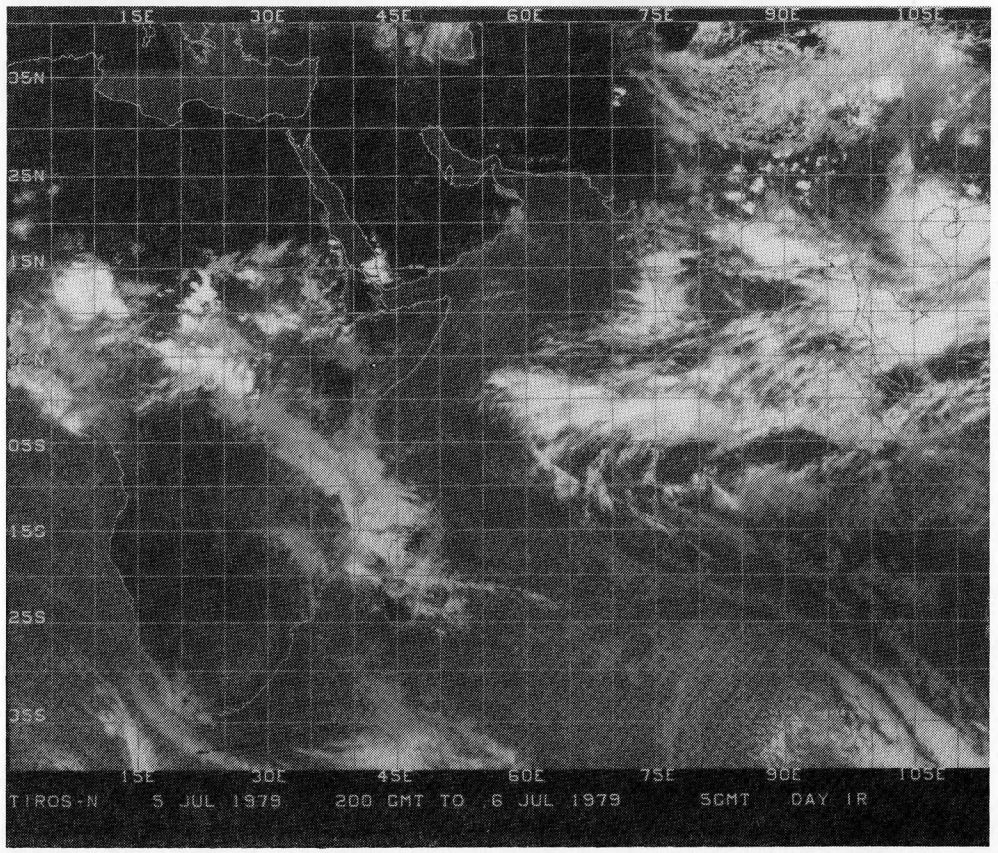

JUL 04, 1979 DATE=79185 NUMWND= 660 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

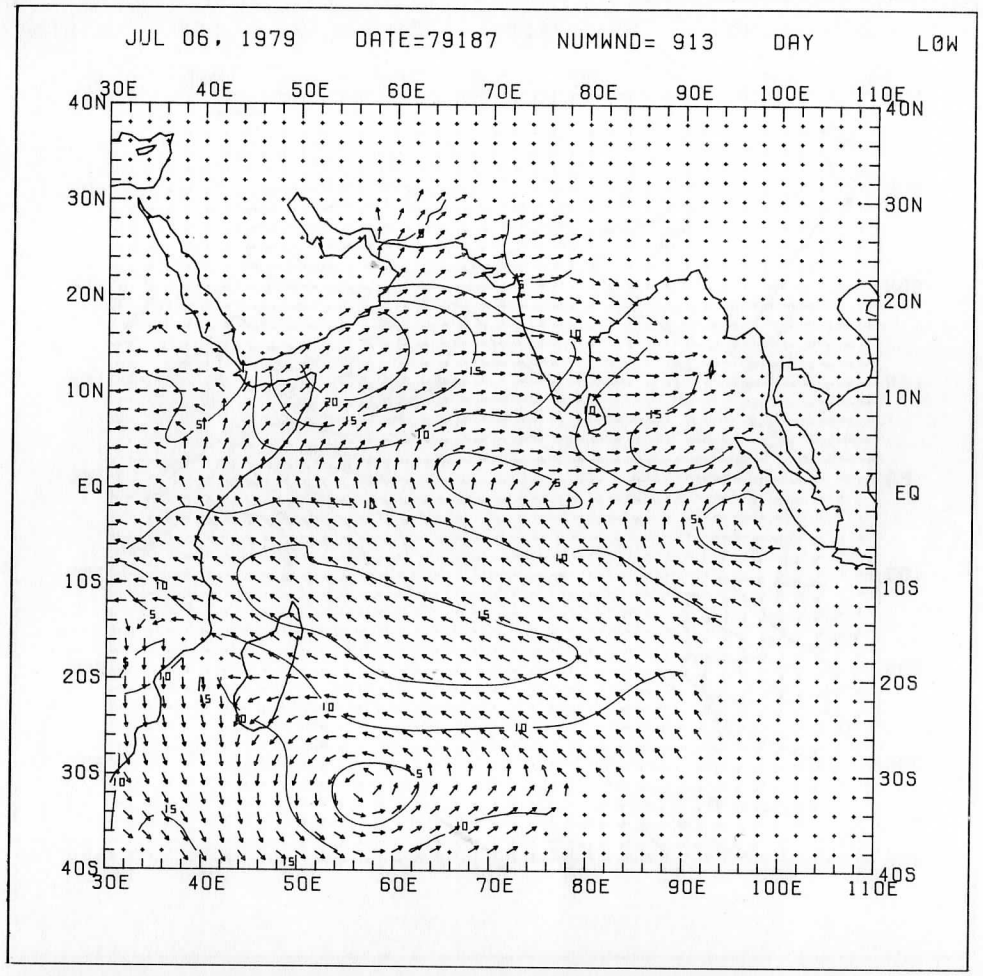

JUL 04, 1979 DATE=79185 NUMWND= 367 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

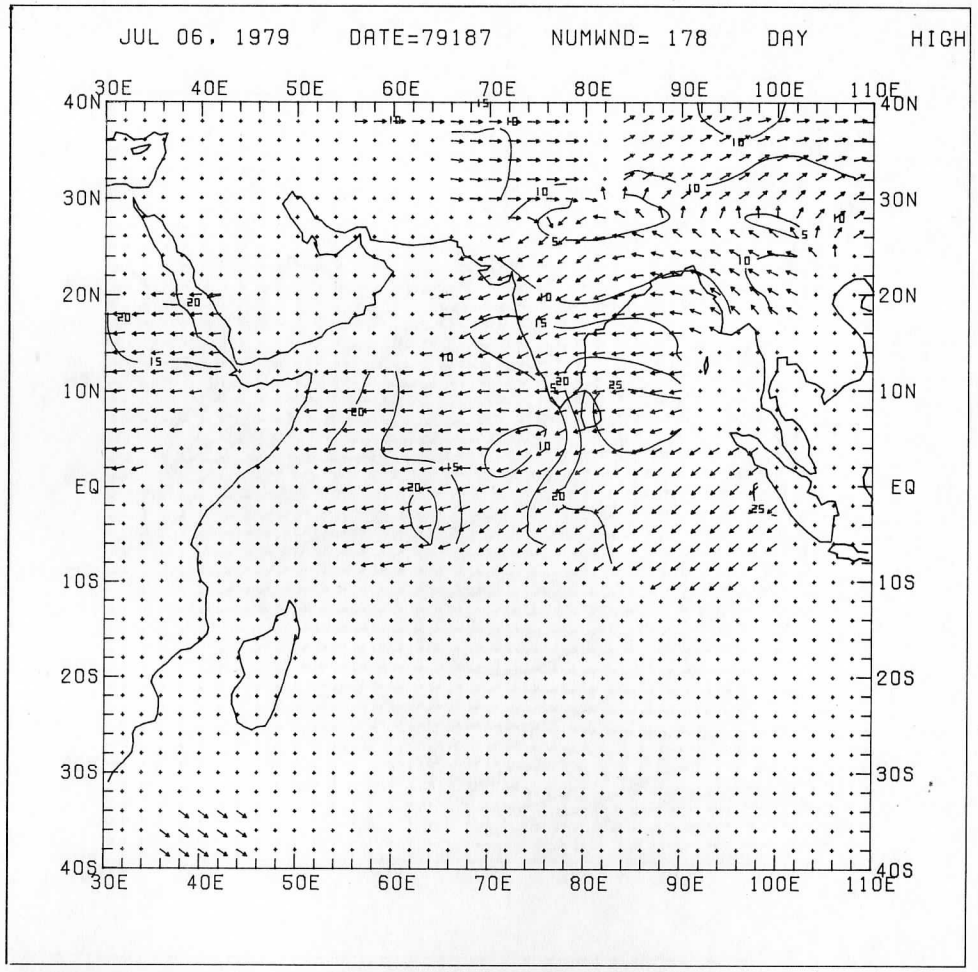

JUL 05, 1979 DATE=79186 NUMWND= 871 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

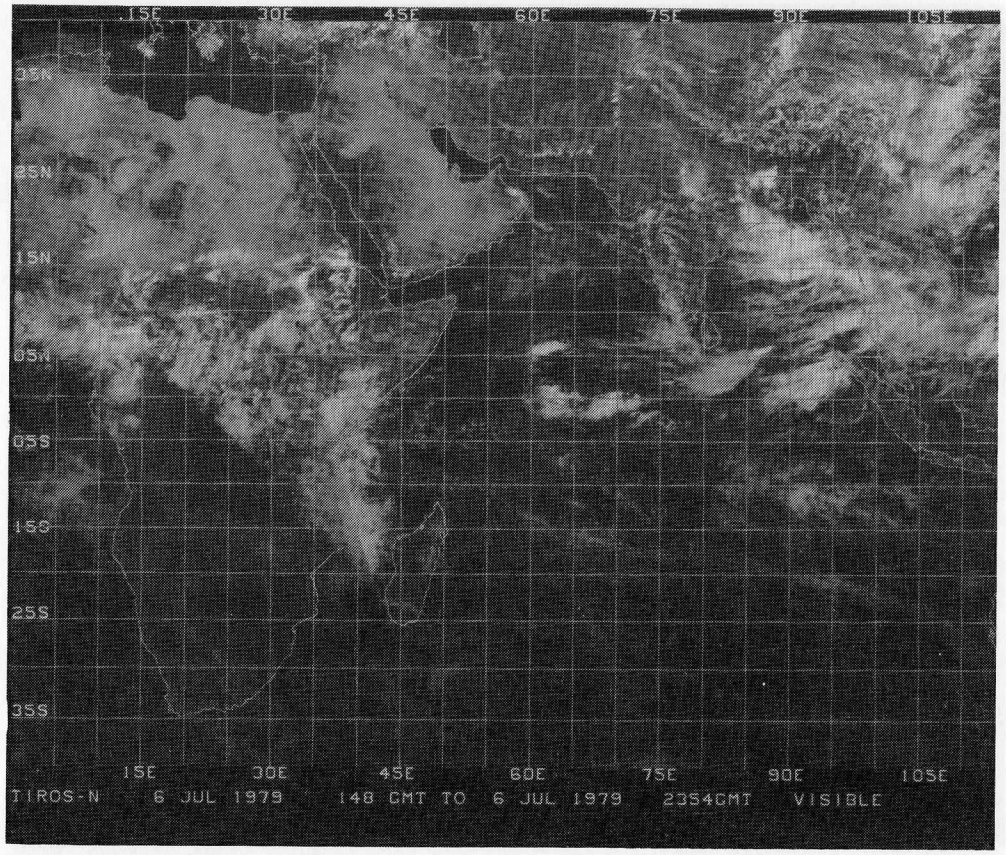

JUL 05, 1979 DATE=79186 NUMWND= 251 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

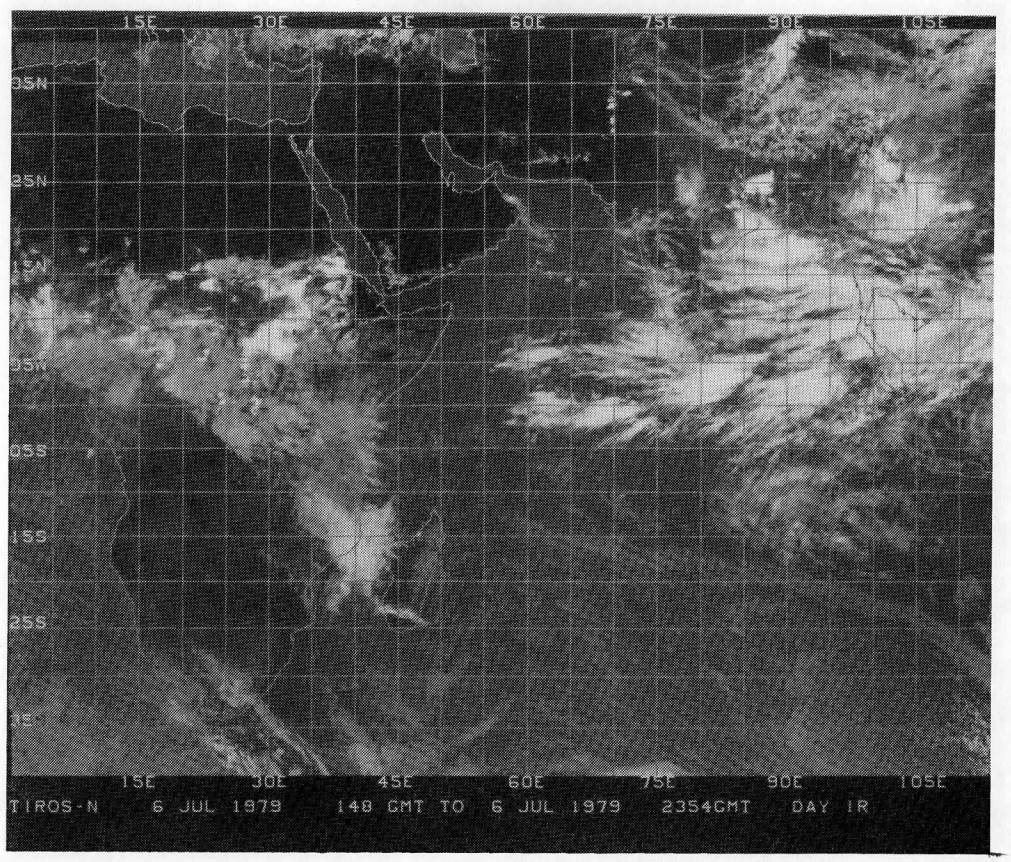

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 5 JUL 1979 200 GMT TO 6 JUL 1979 5GMT VISIBLE

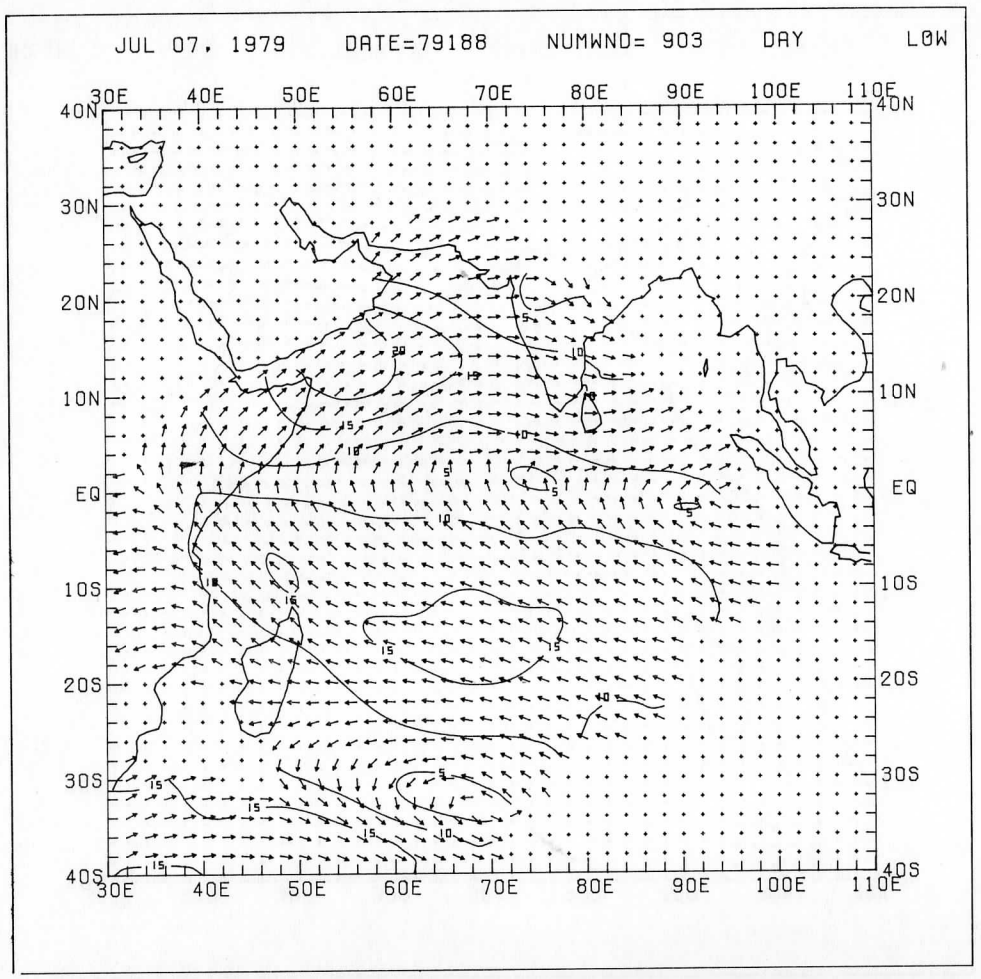

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 5 JUL 1979 200 GMT TO 6 JUL 1979 5GMT DAY IR

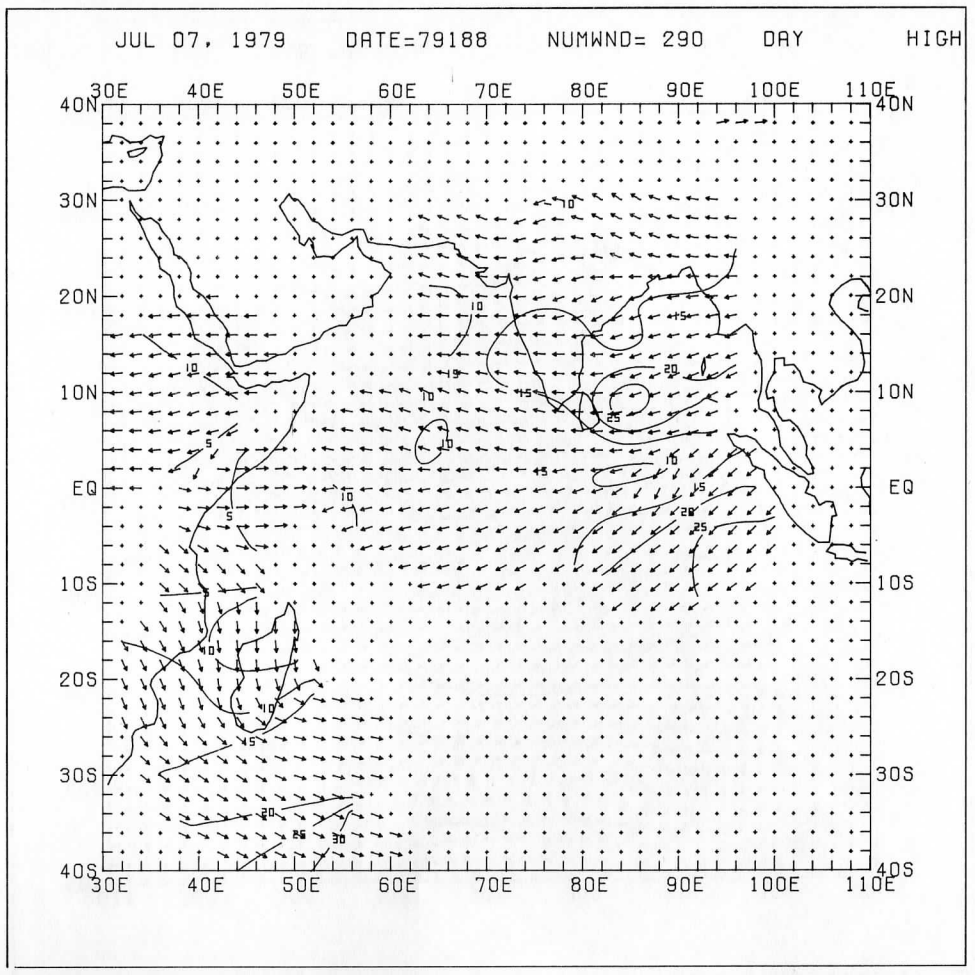

JUL 06, 1979 DATE=79187 NUMWND= 913 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

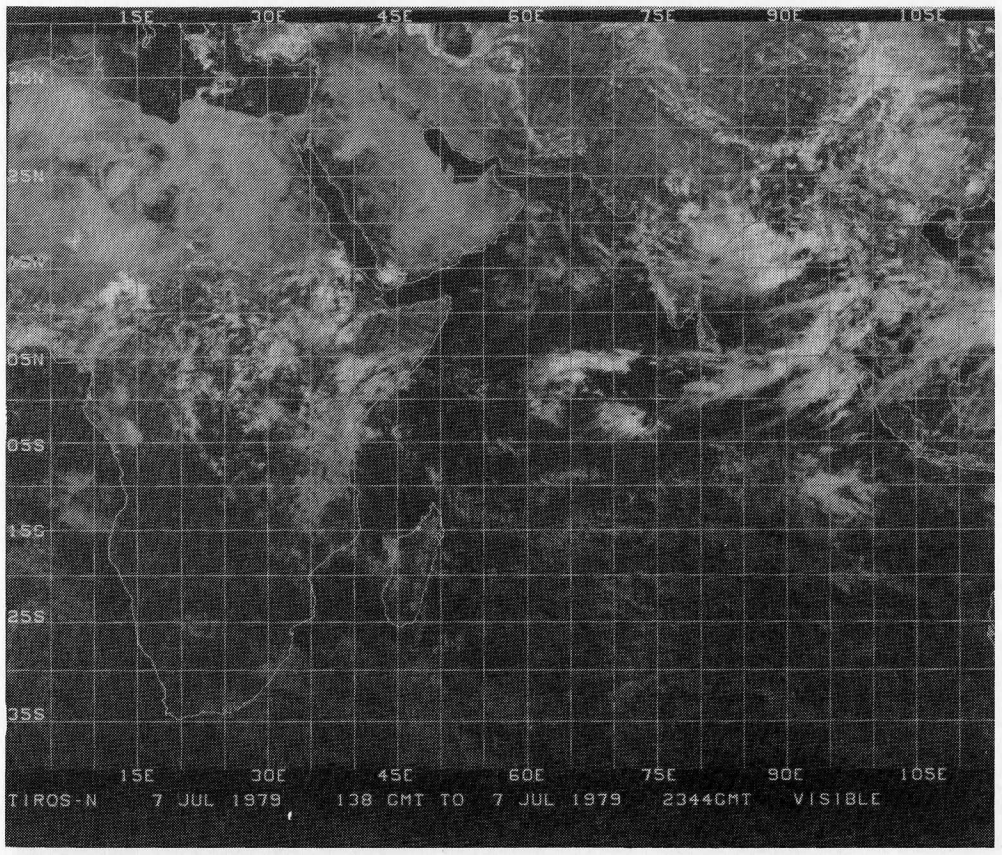

JUL 06, 1979 DATE=79187 NUMWND= 178 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

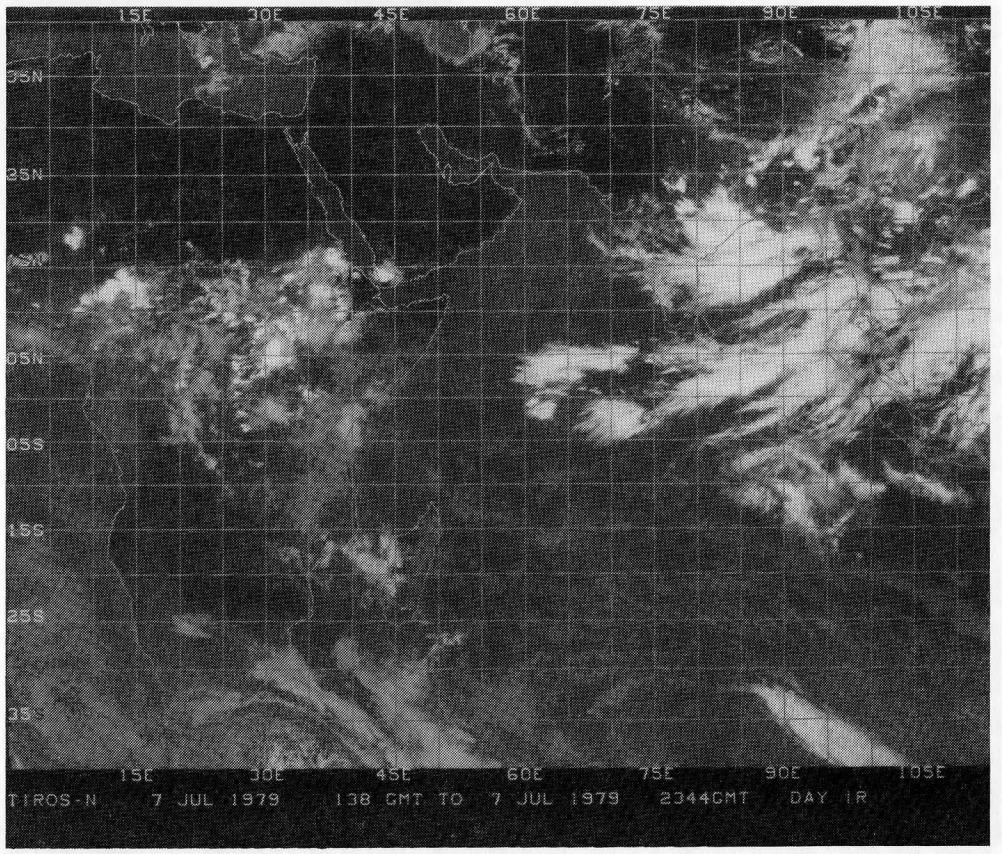

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 6 JUL 1979 148 GMT TO 6 JUL 1979 2354GMT VISIBLE


15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S
TIROS-N 6 JUL 1979 148 GMT TO 6 JUL 1979 2354GMT DAY IR


JUL 07, 1979 DATE=79188 NUMWND= 903 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S


JUL 07, 1979 DATE=79188 NUMWND= 290 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S


15E 30E 45E 60E 75E 90E 105E
TIROS-N 7 JUL 1979 138 GMT TO 7 JUL 1979 2344GMT VISIBLE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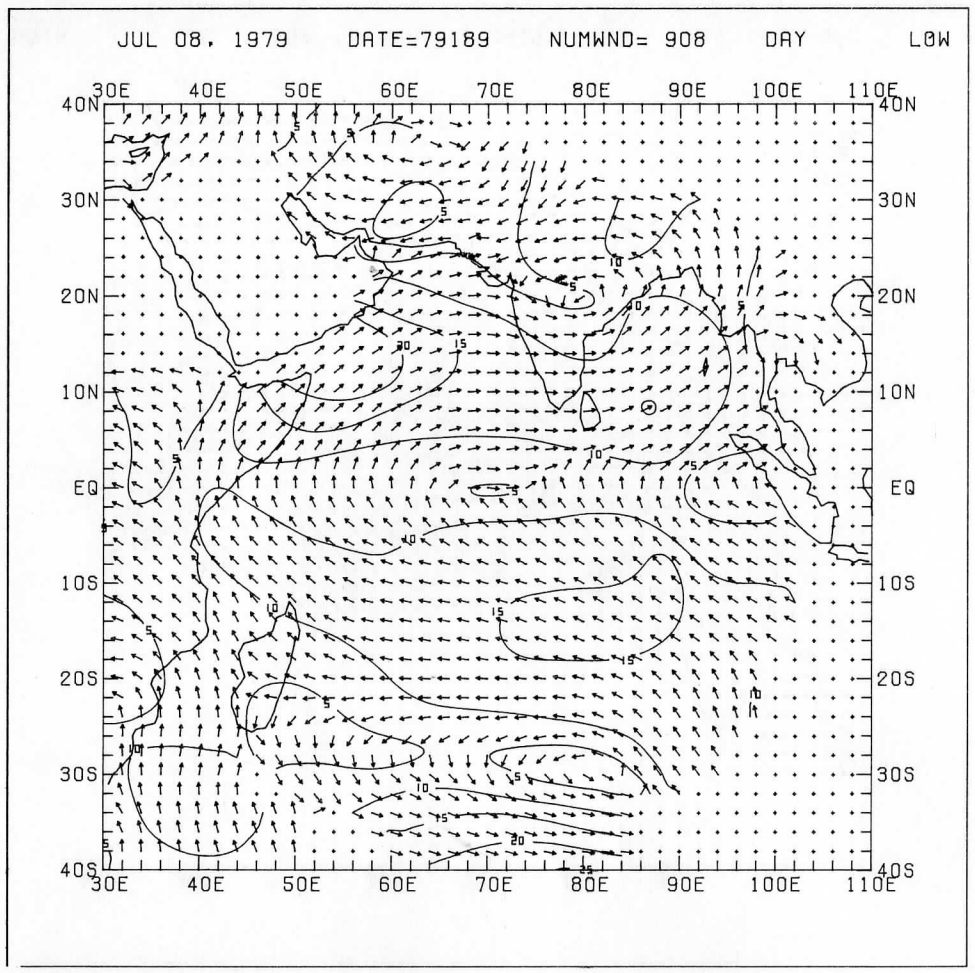
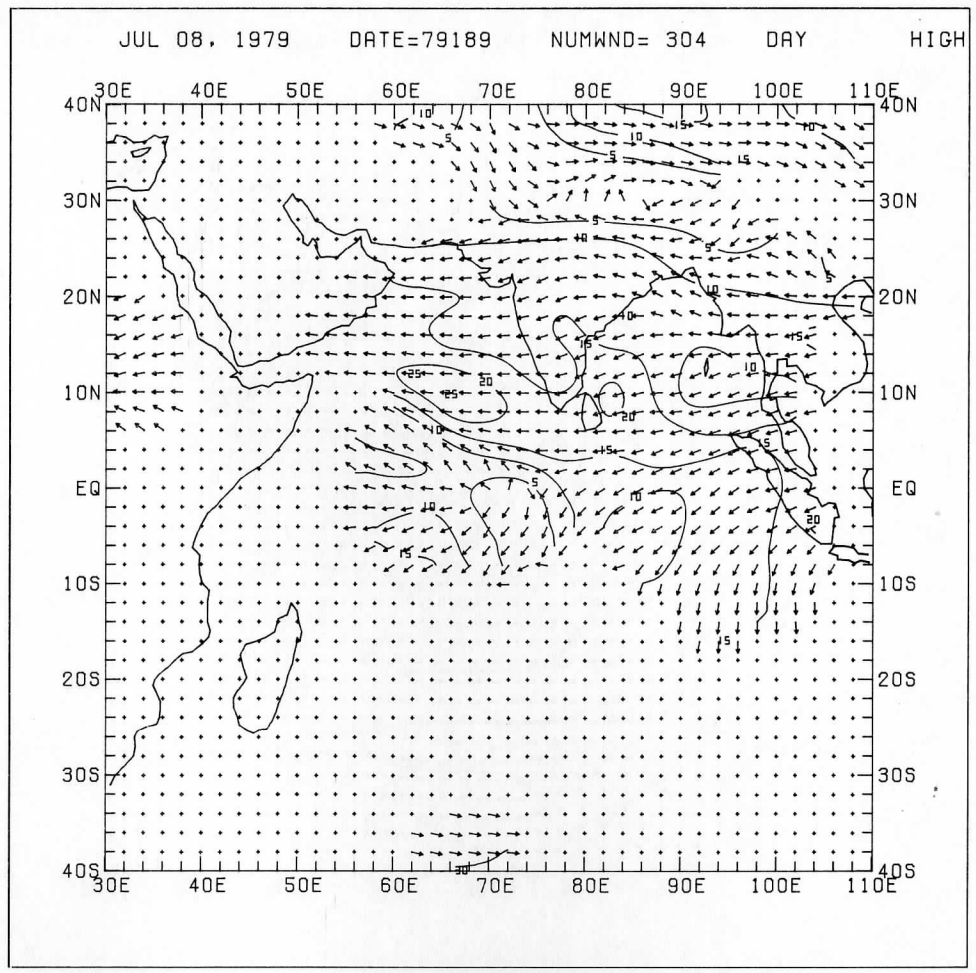
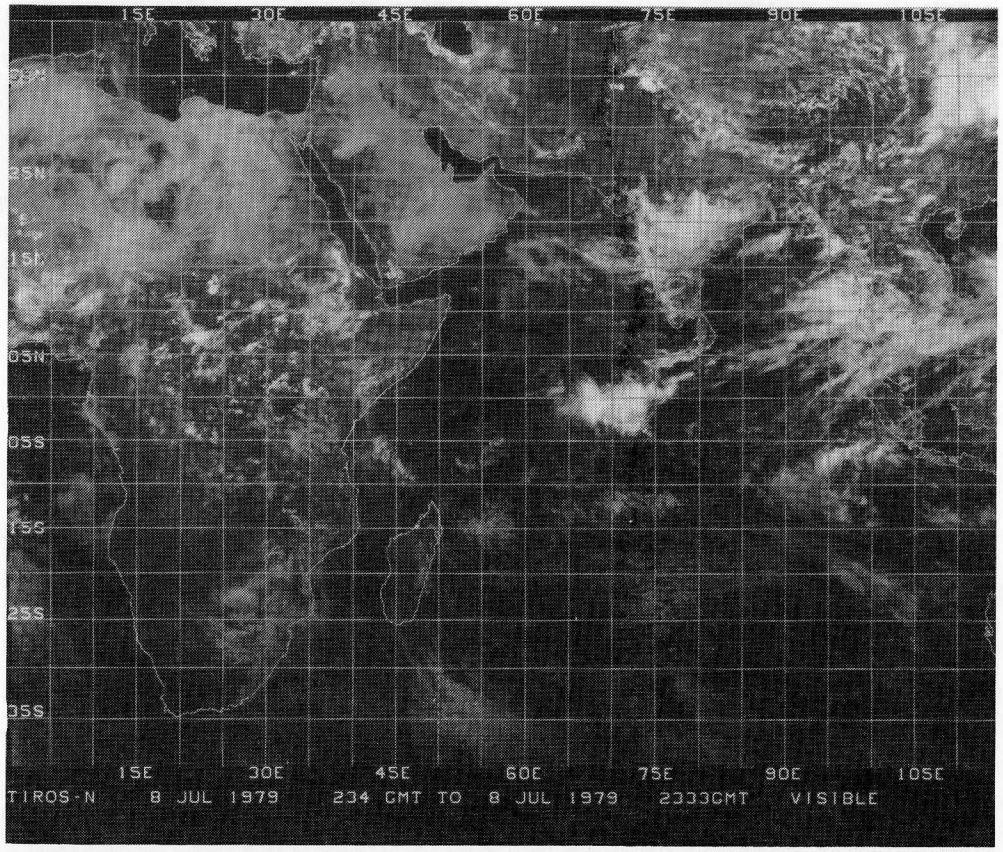
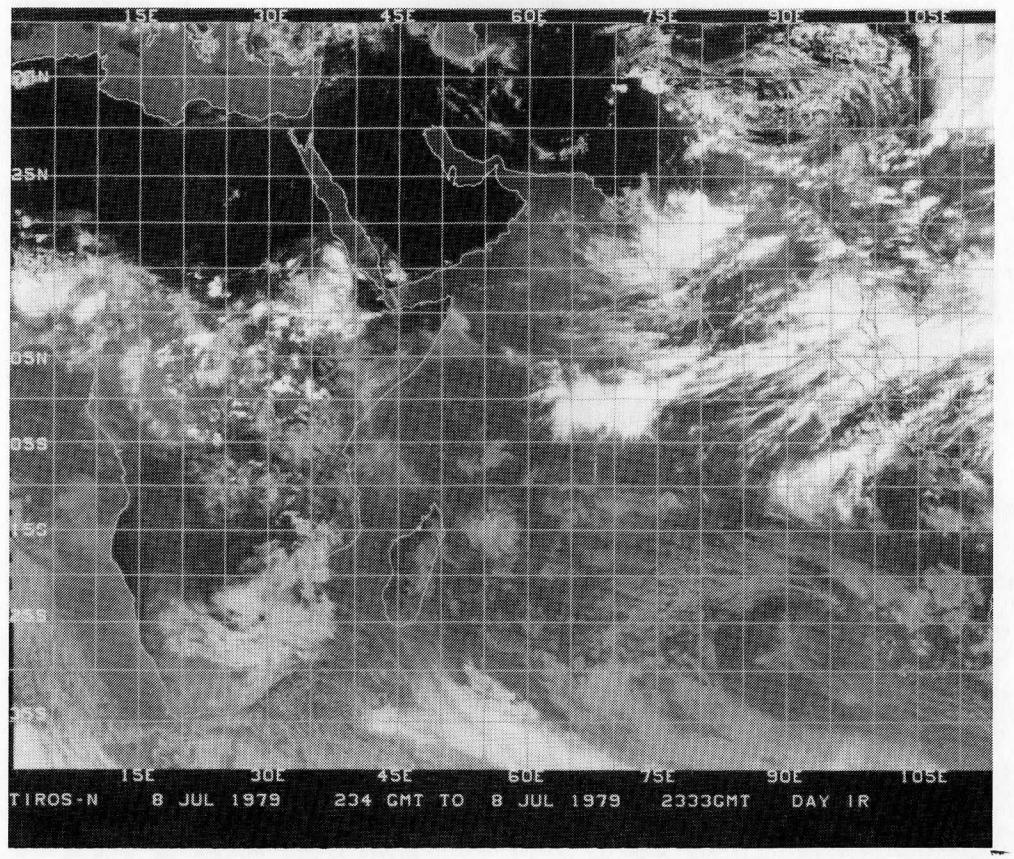
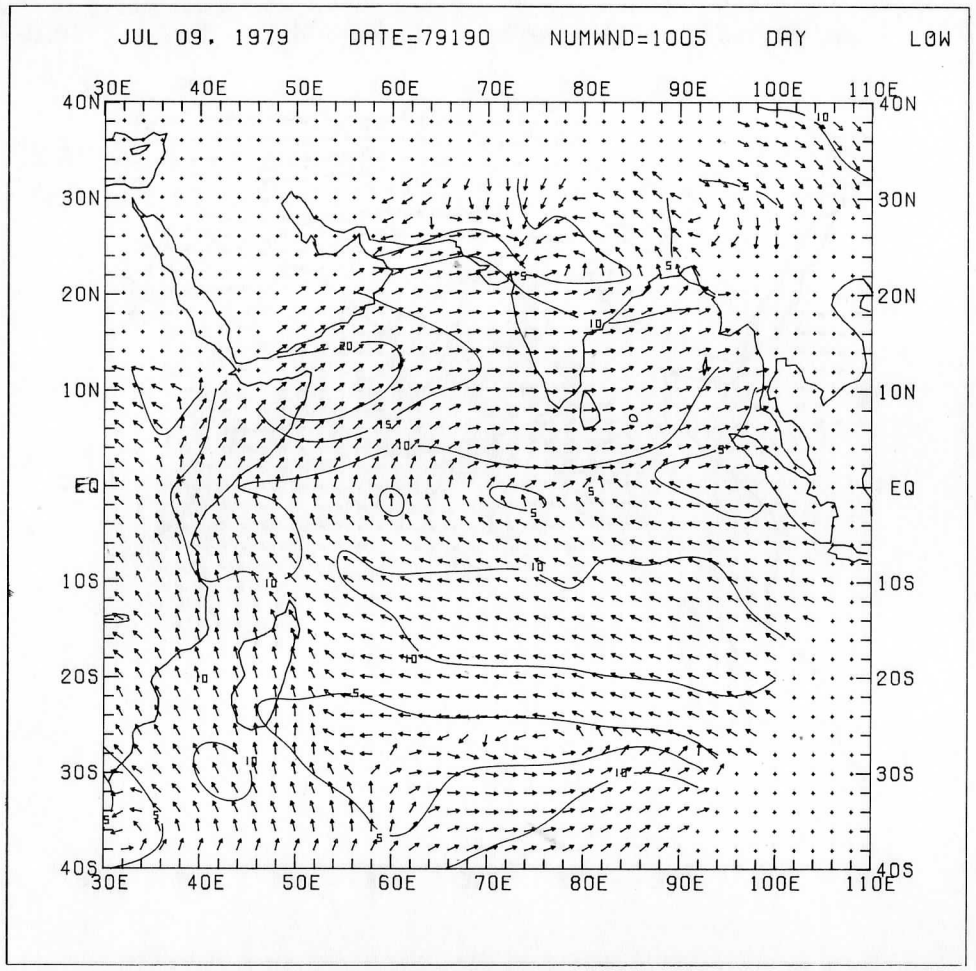
TIROS-N 7 JUL 1979 138 GMT TO 7 JUL 1979 2344GMT DAY IR

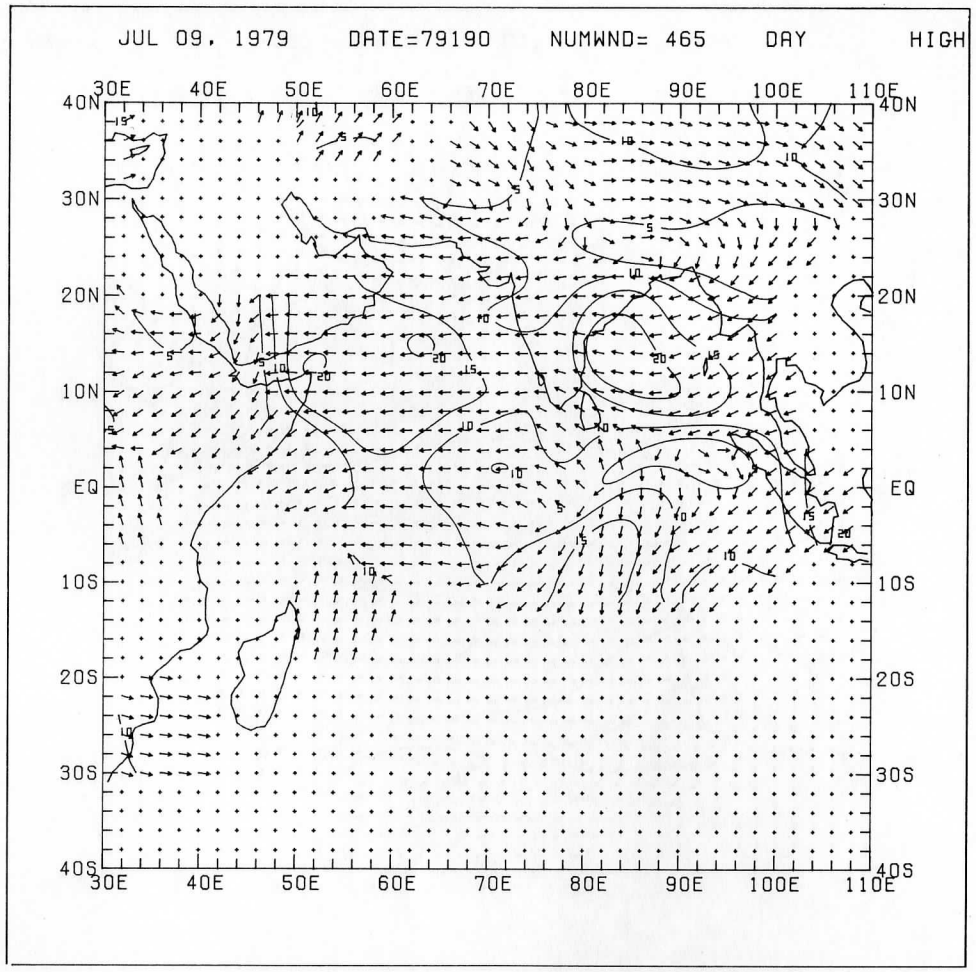

JUL 08, 1979 DATE=79189 NUMWND= 908 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

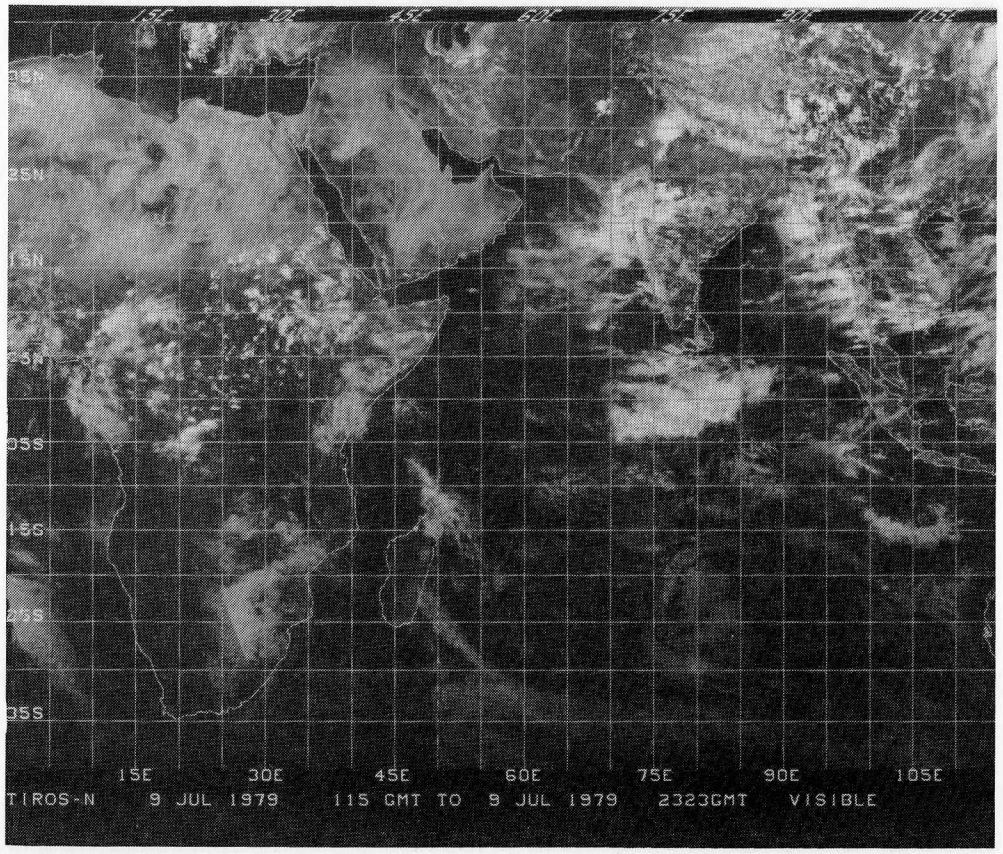

JUL 08, 1979 DATE=79189 NUMWND= 304 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

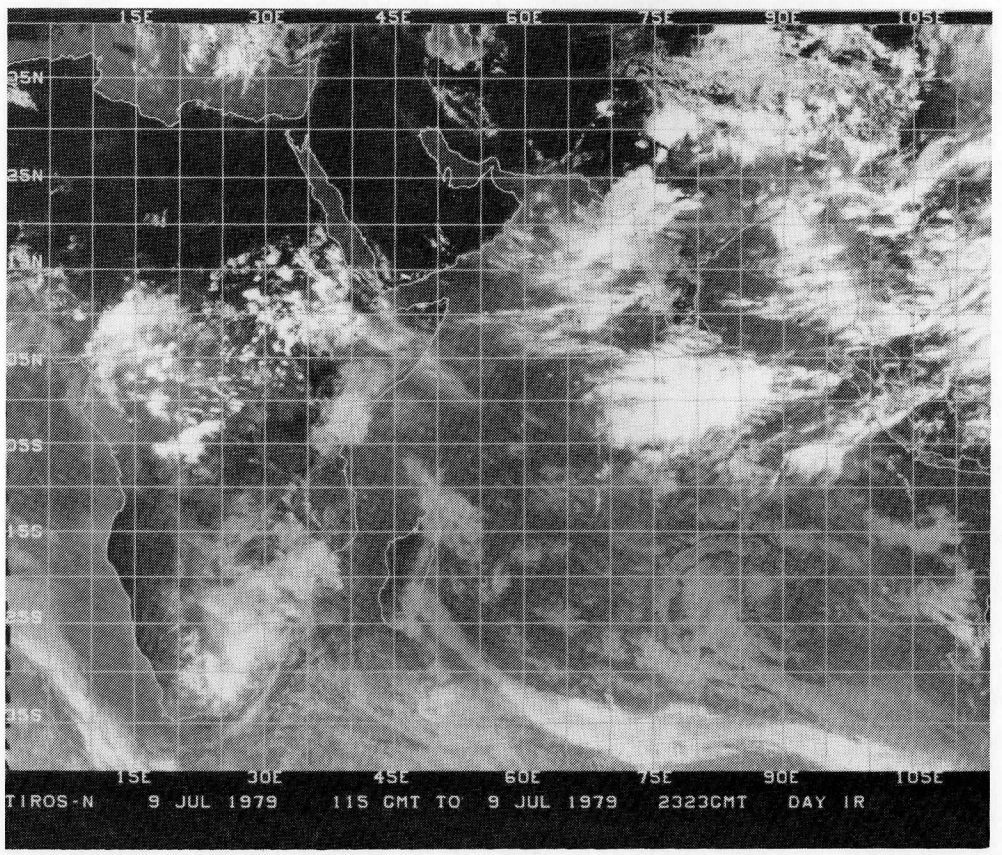

15E 30E 45E 60E 75E 90E 105E
TIROS-N 8 JUL 1979 234 GMT TO 8 JUL 1979 2333GMT VISIBLE


15E 30E 45E 60E 75E 90E 105E
TIROS-N 8 JUL 1979 234 GMT TO 8 JUL 1979 2333GMT DAY IR


JUL 09, 1979 DATE=79190 NUMWND=1005 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S


JUL 09, 1979 DATE=79190 NUMWND= 465 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S


15E 30E 45E 60E 75E 90E 105E
TIROS-N 9 JUL 1979 115 GMT TO 9 JUL 1979 2323GMT VISIBLE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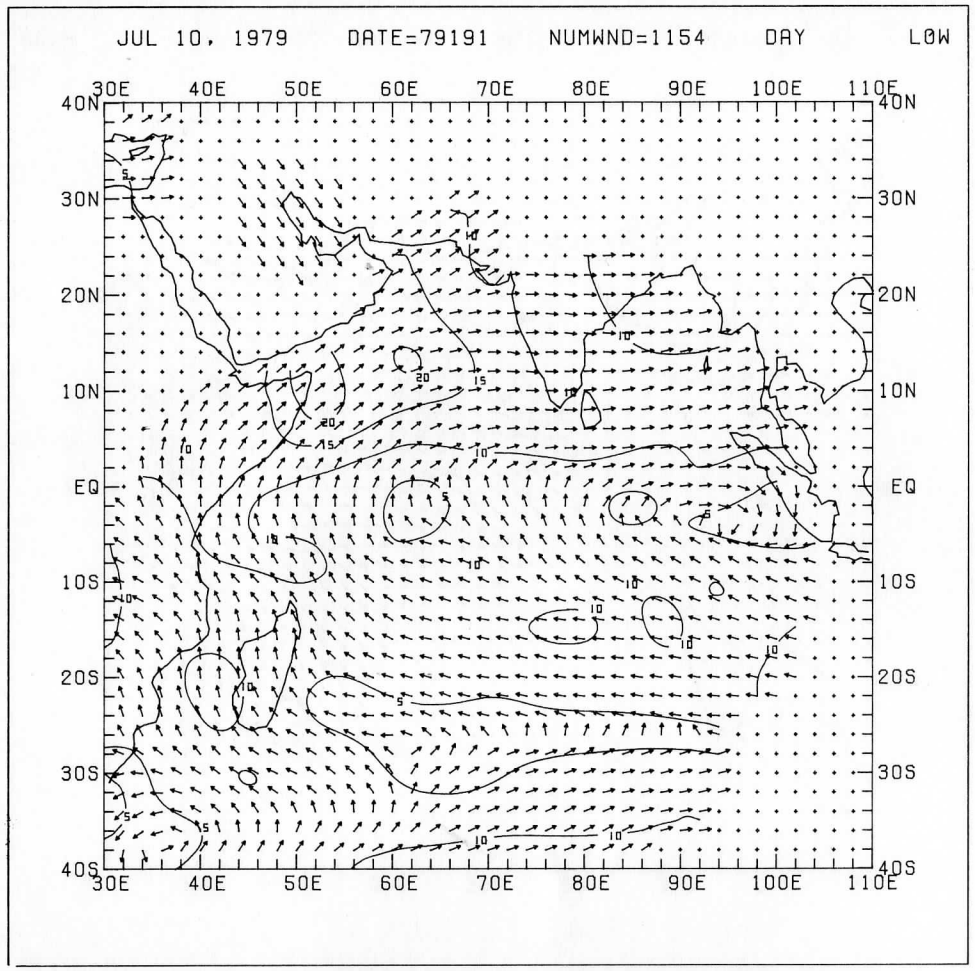
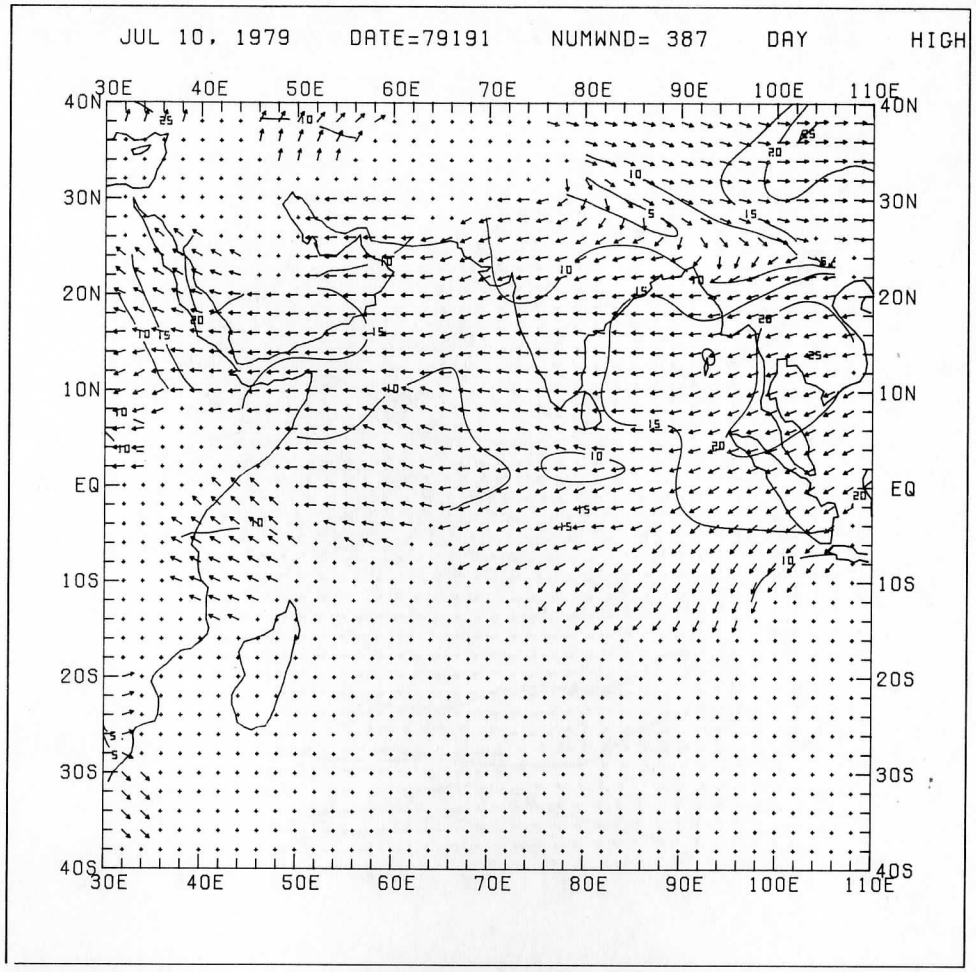
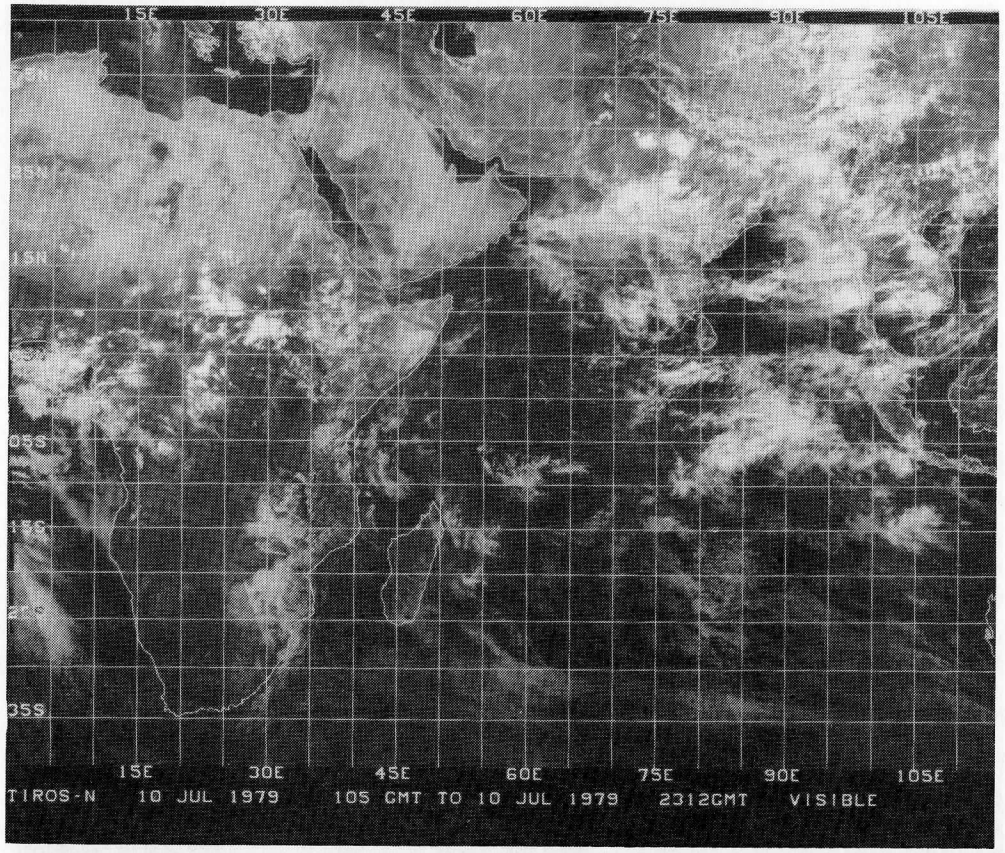
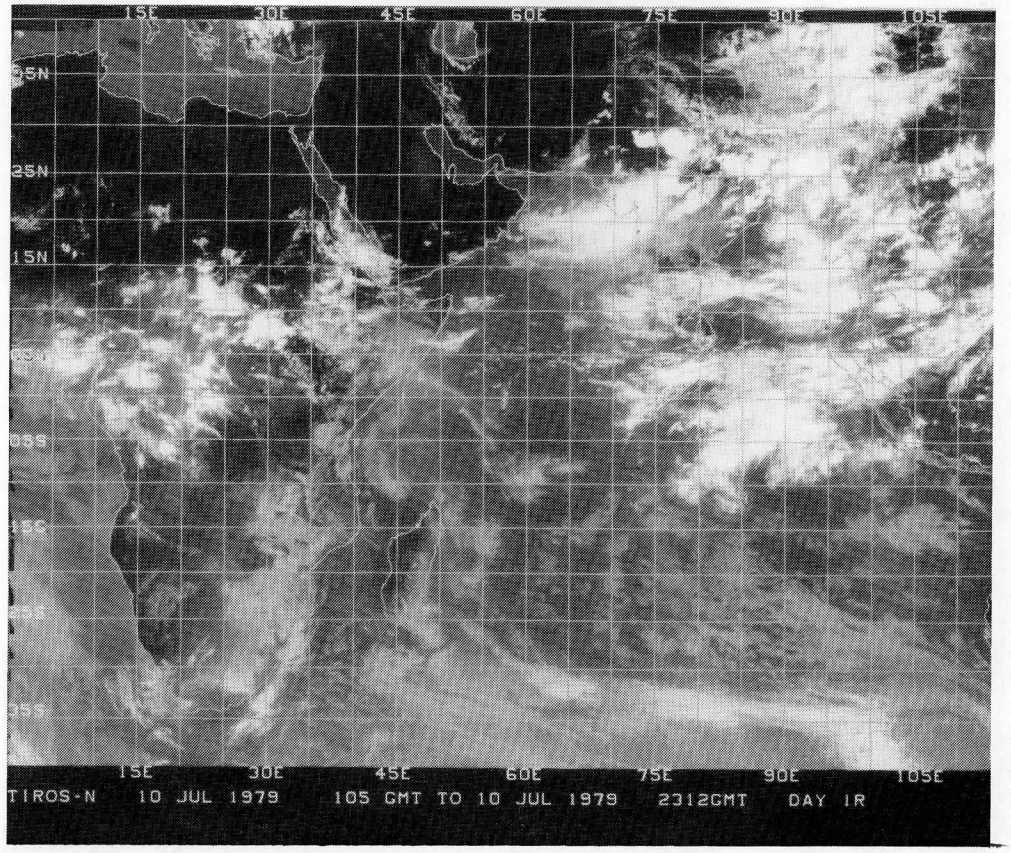
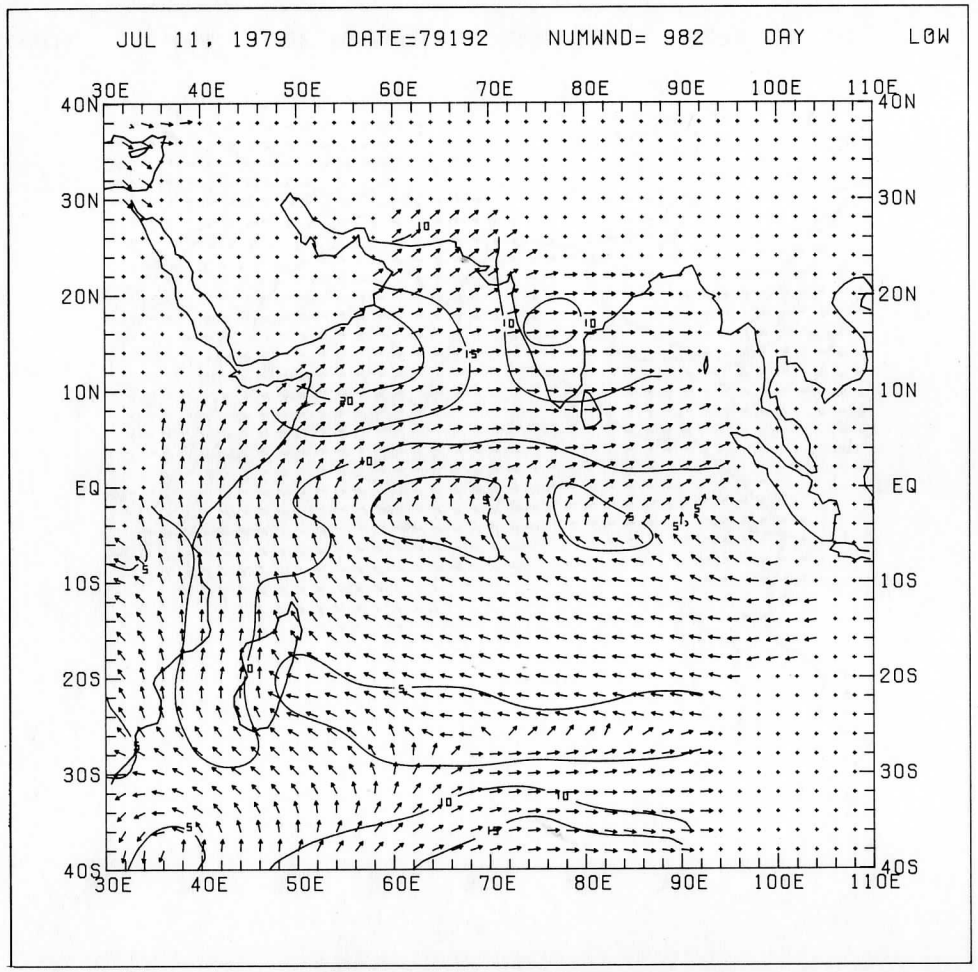
TIROS-N 9 JUL 1979 115 GMT TO 9 JUL 1979 2323GMT DAY IR

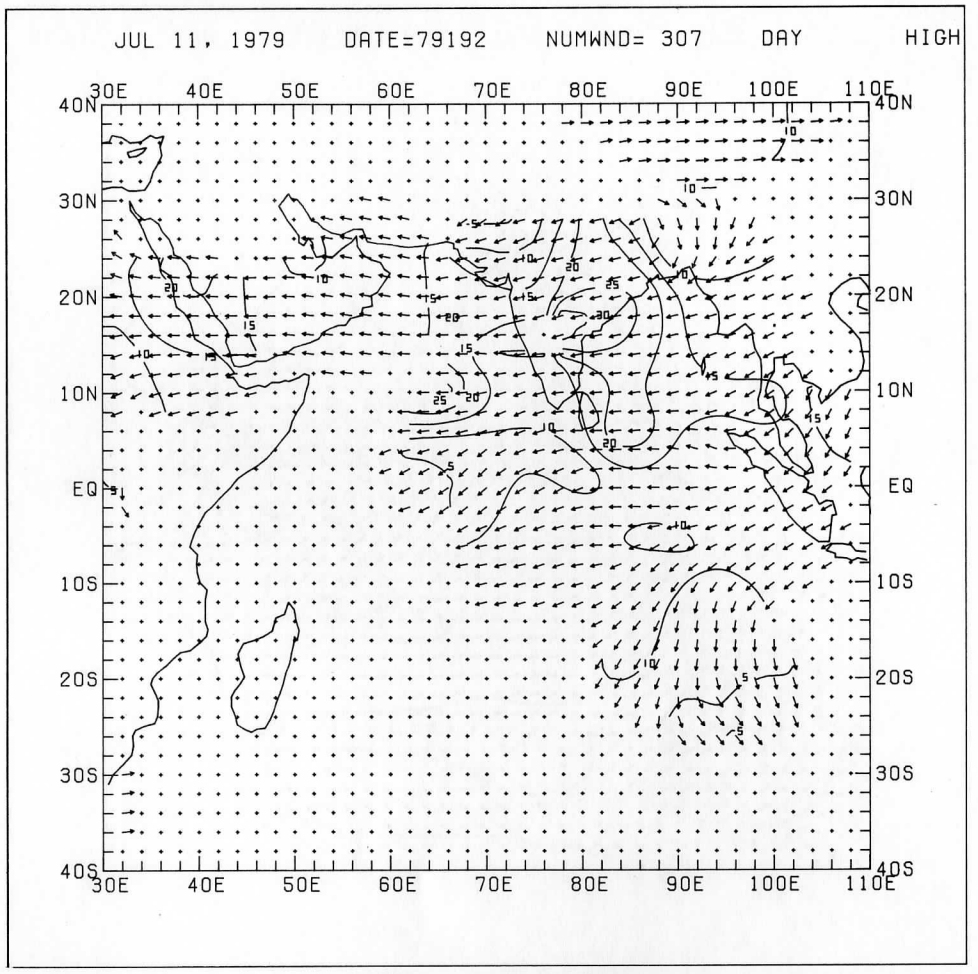

JUL 10, 1979 DATE=79191 NUMWND=1154 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

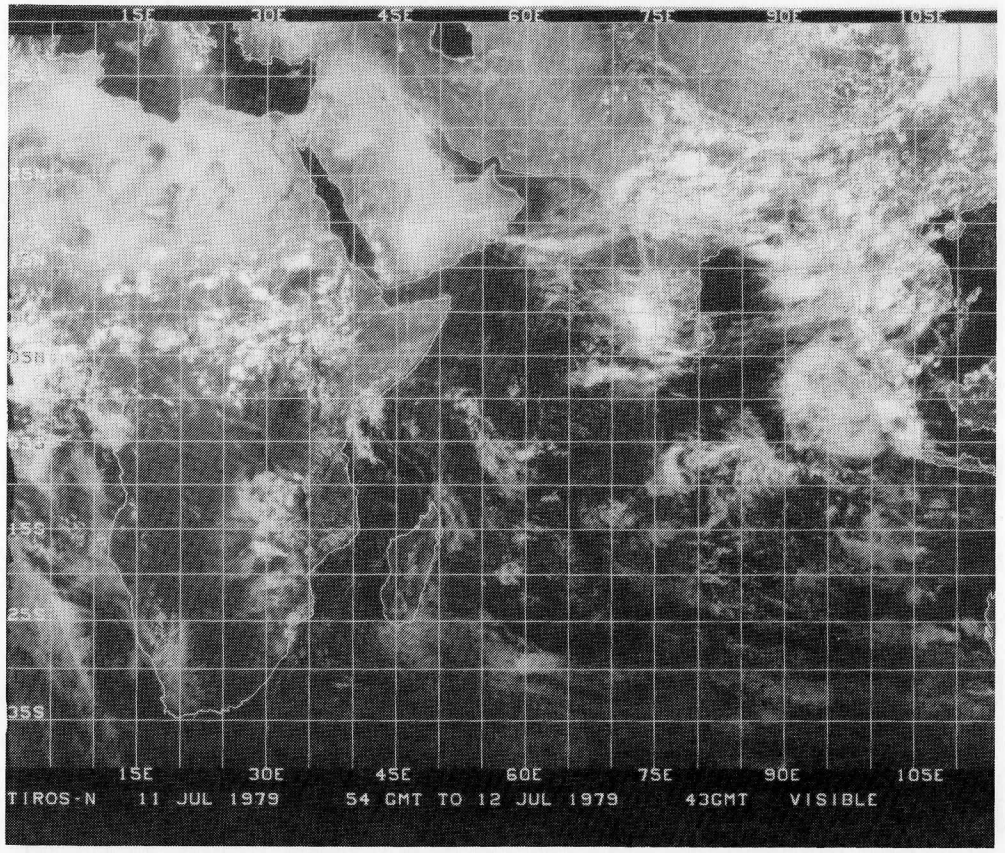

JUL 10, 1979 DATE=79191 NUMWND= 387 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

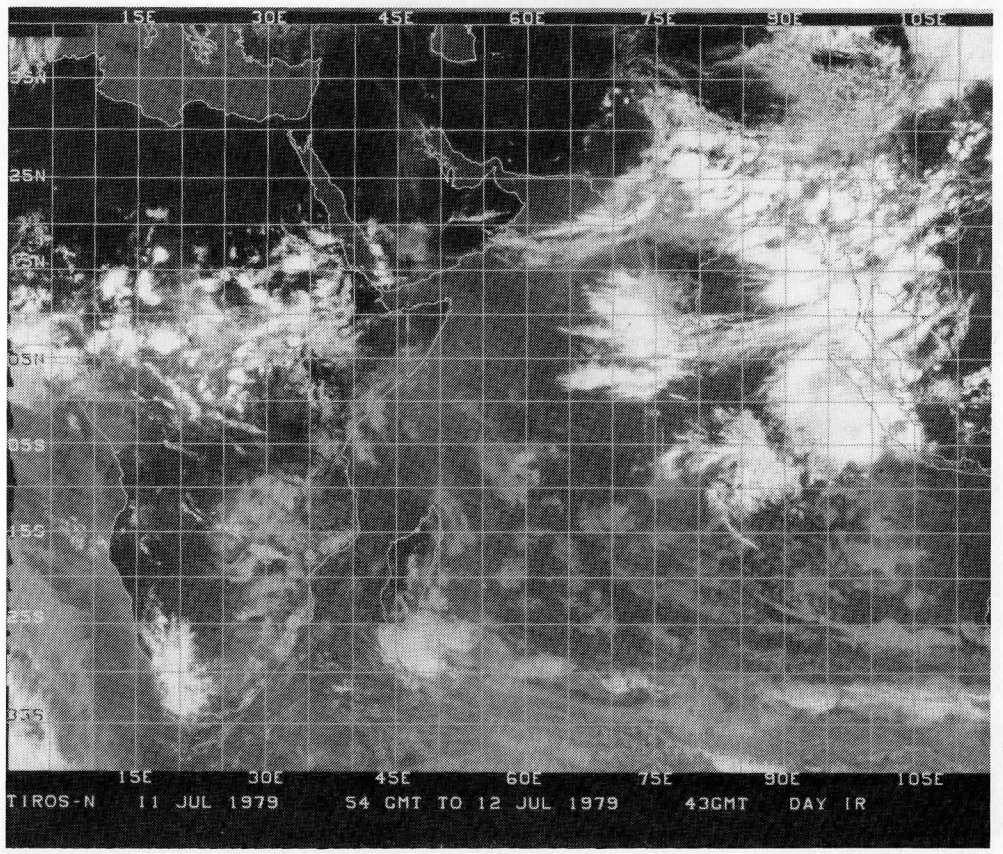

15E 30E 45E 60E 75E 90E 105E
TIROS-N 10 JUL 1979 105 GMT TO 10 JUL 1979 2312GMT VISIBLE

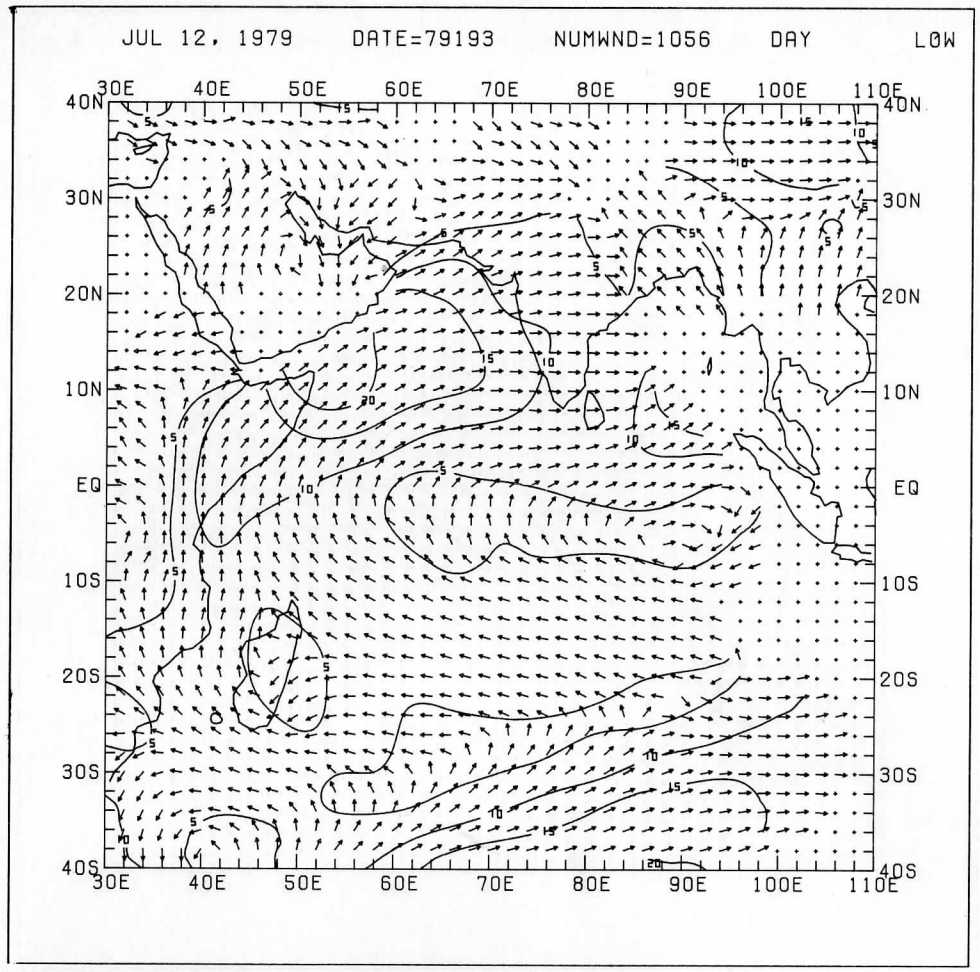

15E 30E 45E 60E 75E 90E 105E
TIROS-N 10 JUL 1979 105 GMT TO 10 JUL 1979 2312GMT DAY IR

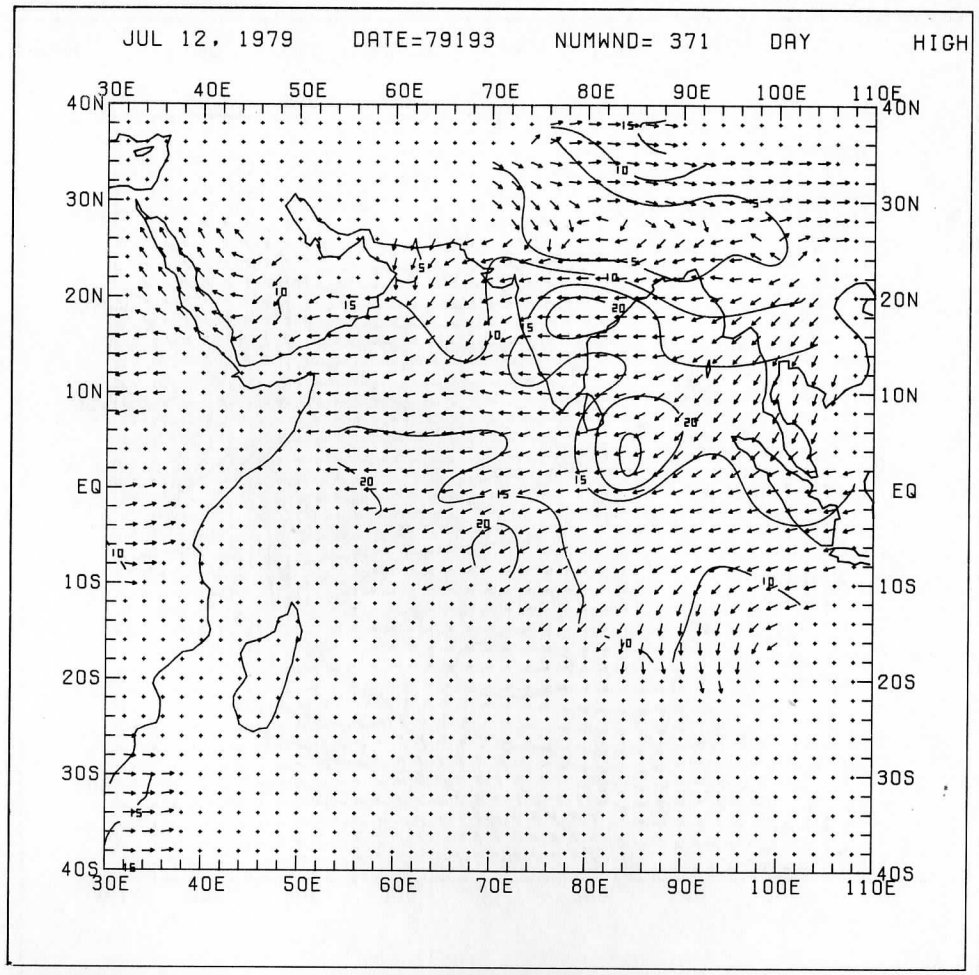

JUL 11, 1979 DATE=79192 NUMWND= 982 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

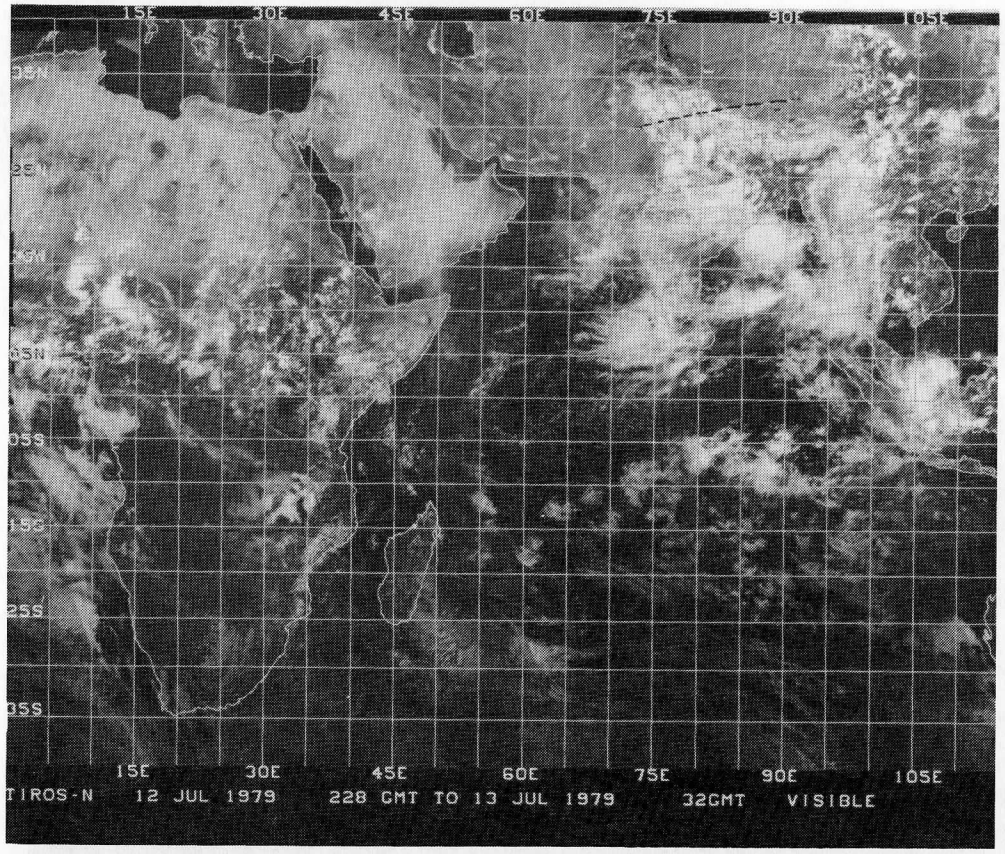

JUL 11, 1979 DATE=79192 NUMWND= 307 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

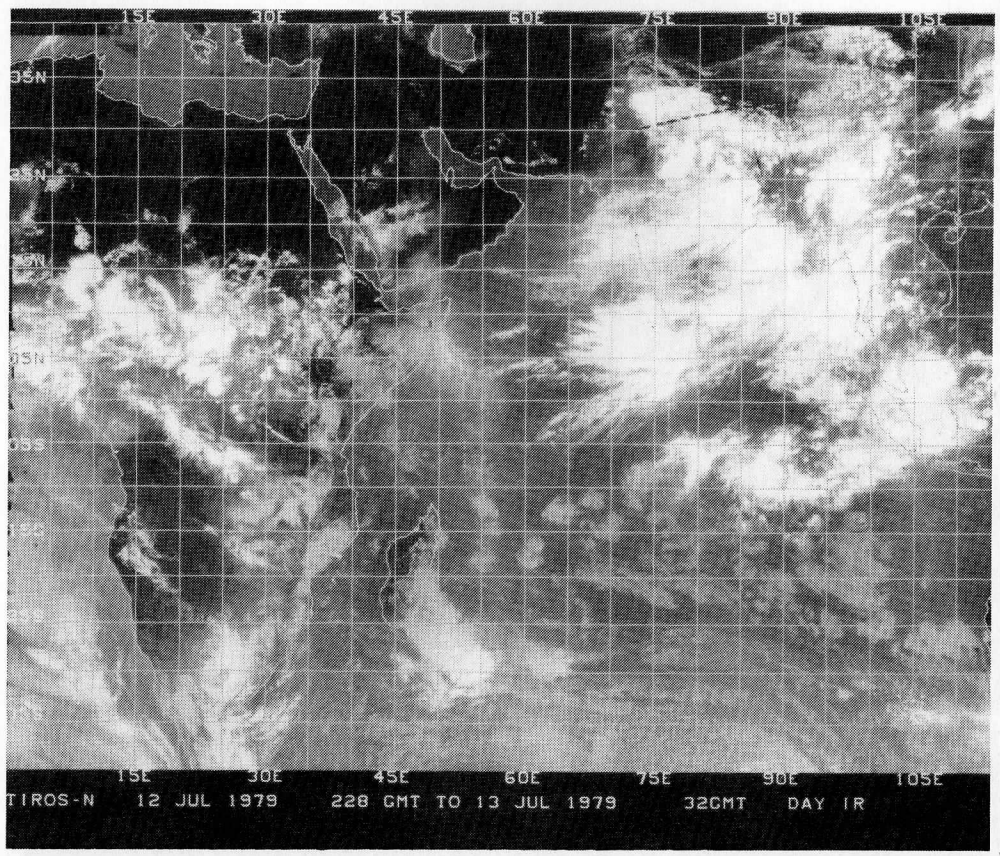

15E 30E 45E 60E 75E 90E 105E
TIROS-N 11 JUL 1979 54 GMT TO 12 JUL 1979 43GMT VISIBLE


15E 30E 45E 60E 75E 90E 105E
25N
TIROS-N 11 JUL 1979 54 GMT TO 12 JUL 1979 43GMT DAY IR


JUL 12, 1979 DATE=79193 NUMWND=1056 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S


JUL 12, 1979 DATE=79193 NUMWND= 371 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S


15E 30E 45E 60E 75E 90E 105E
TIROS-N 12 JUL 1979 228 GMT TO 13 JUL 1979 32GMT VISIBLE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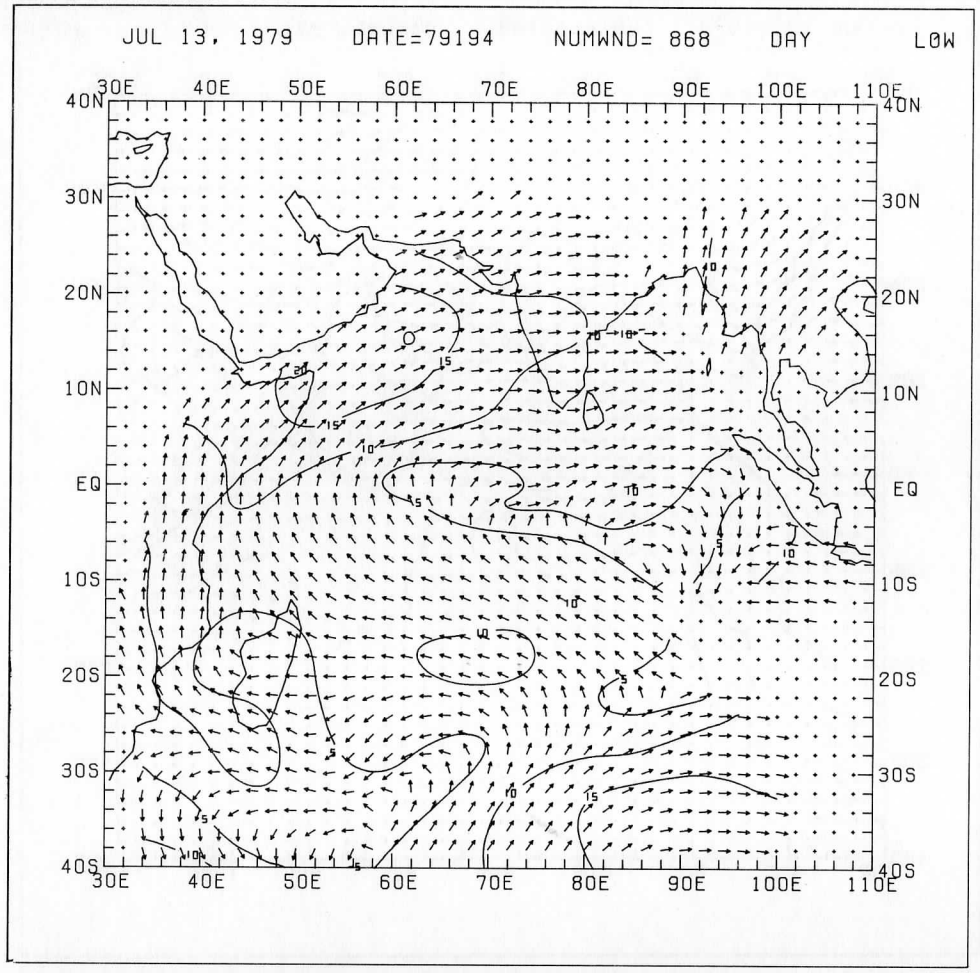
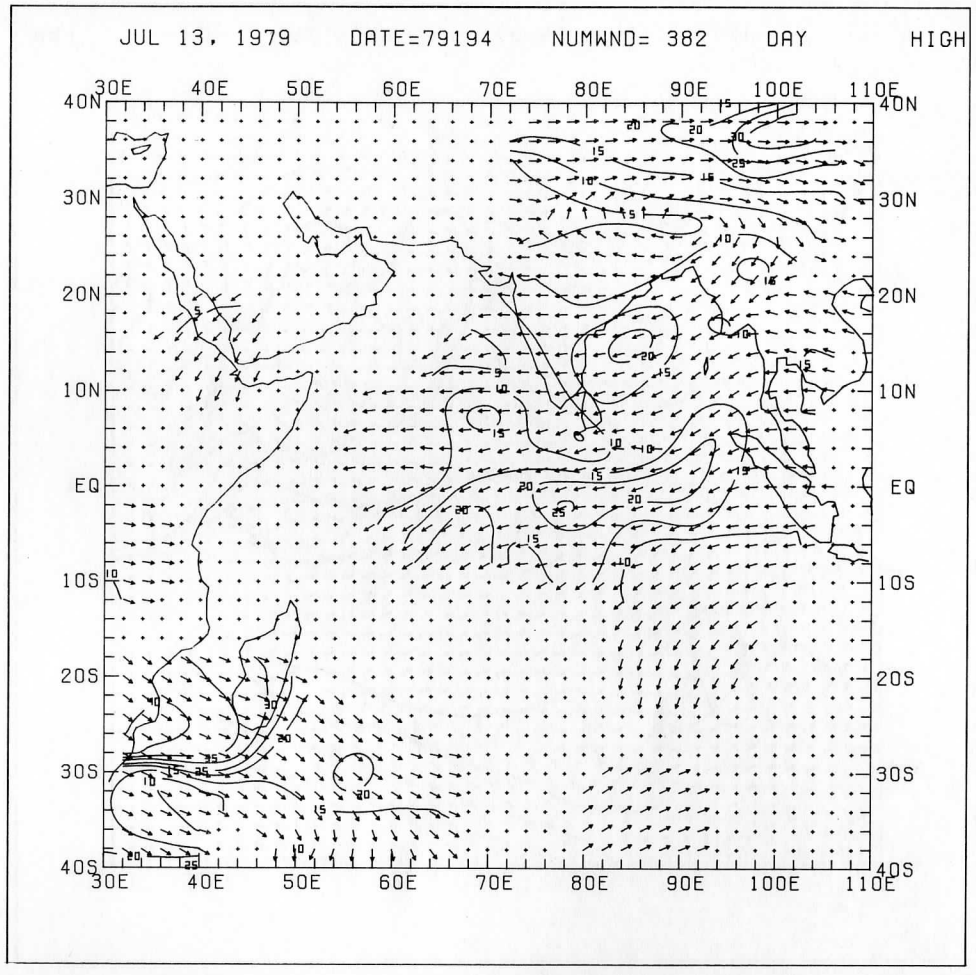
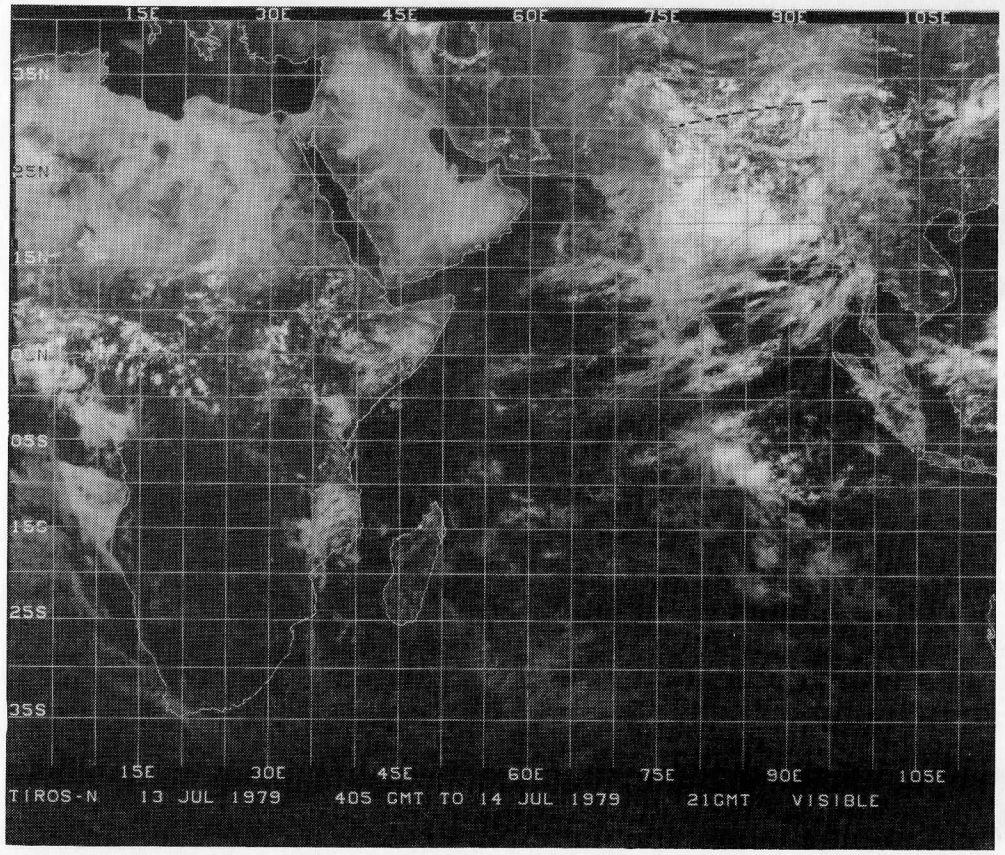
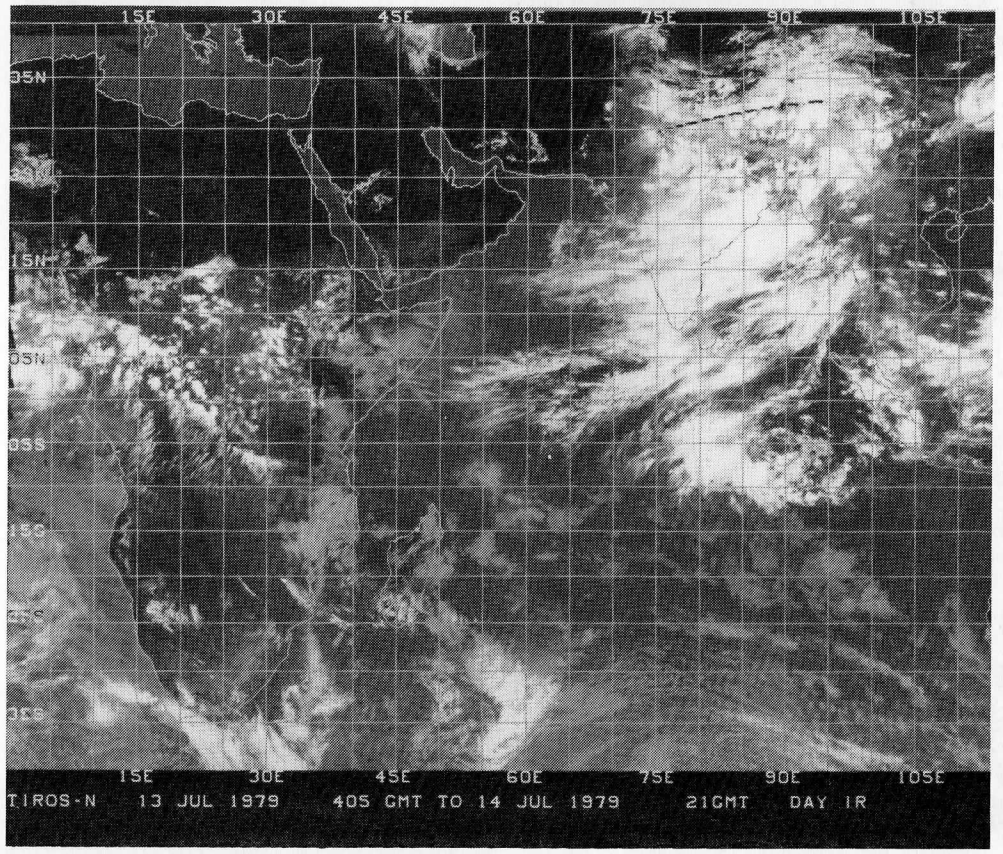
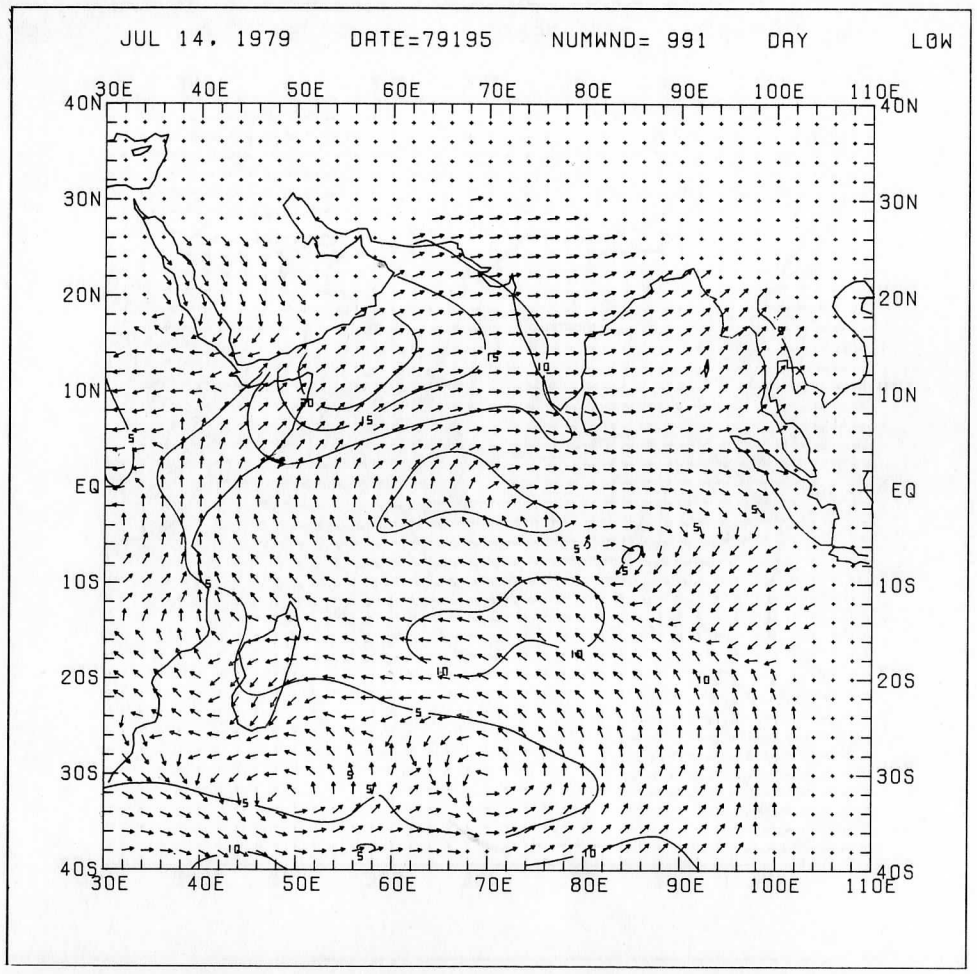
TIROS-N 12 JUL 1979 228 GMT TO 13 JUL 1979 32GMT DAY IR

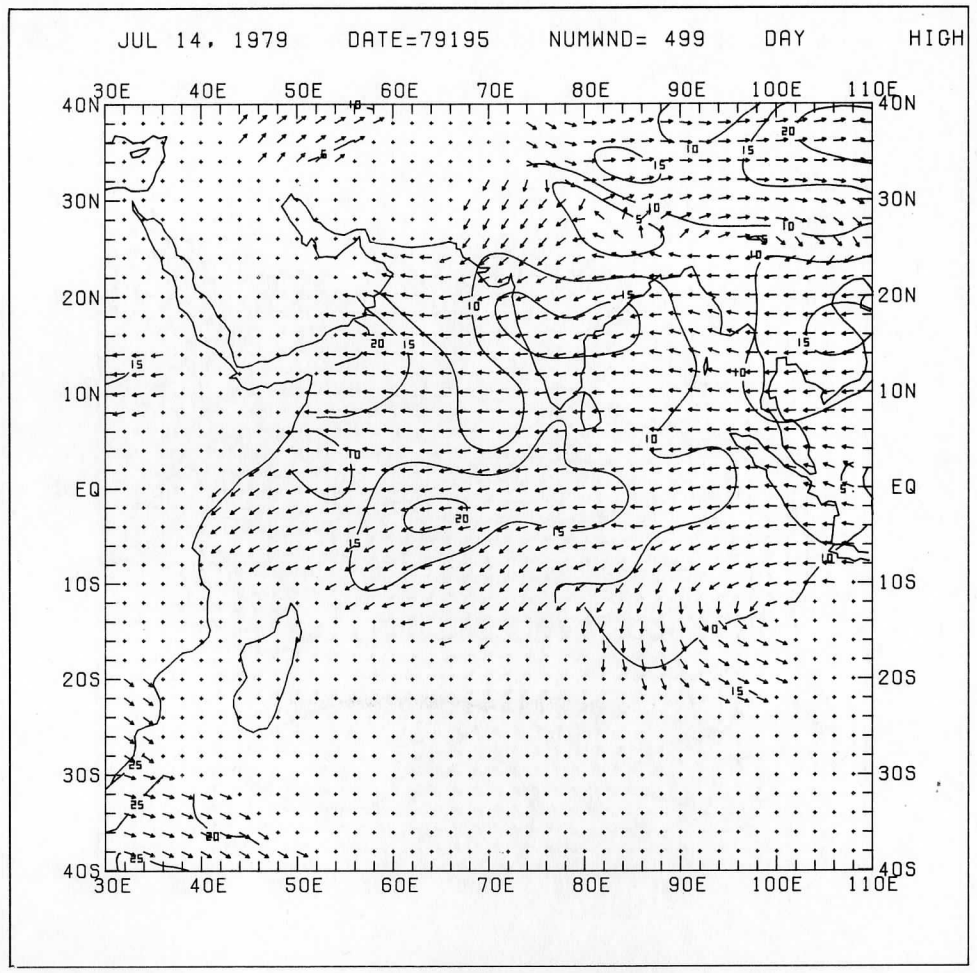

JUL 13, 1979 DATE=79194 NUMWND= 868 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

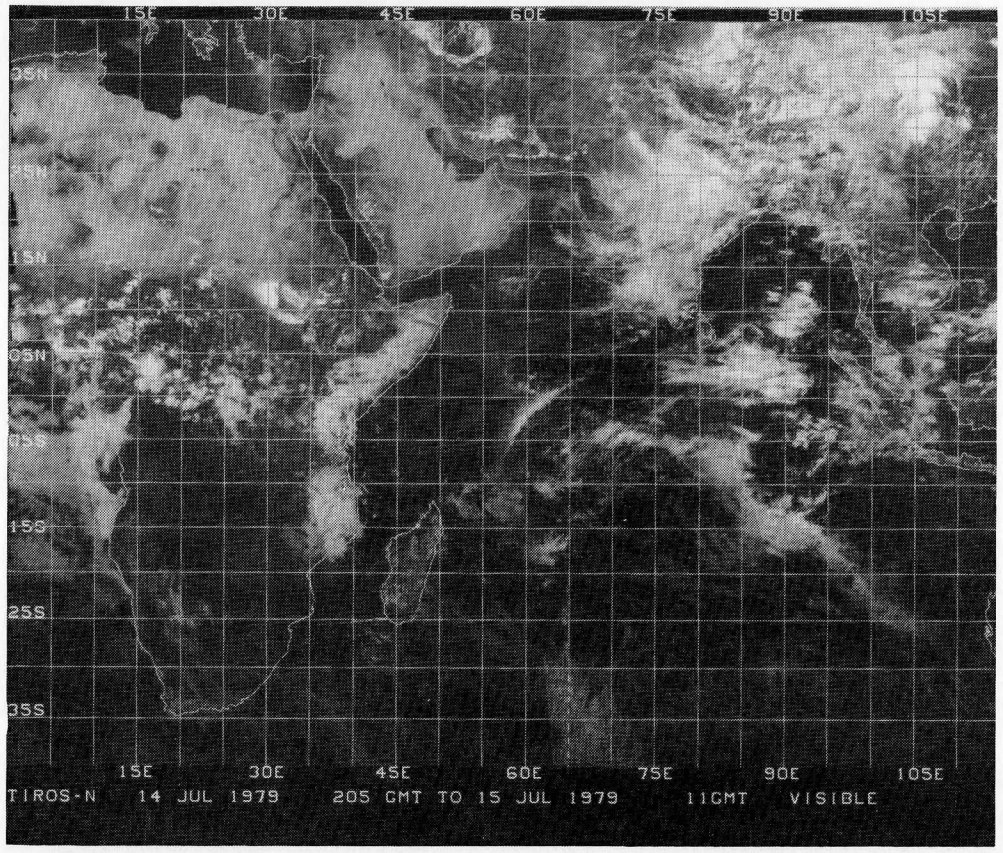

JUL 13, 1979 DATE=79194 NUMWND= 382 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

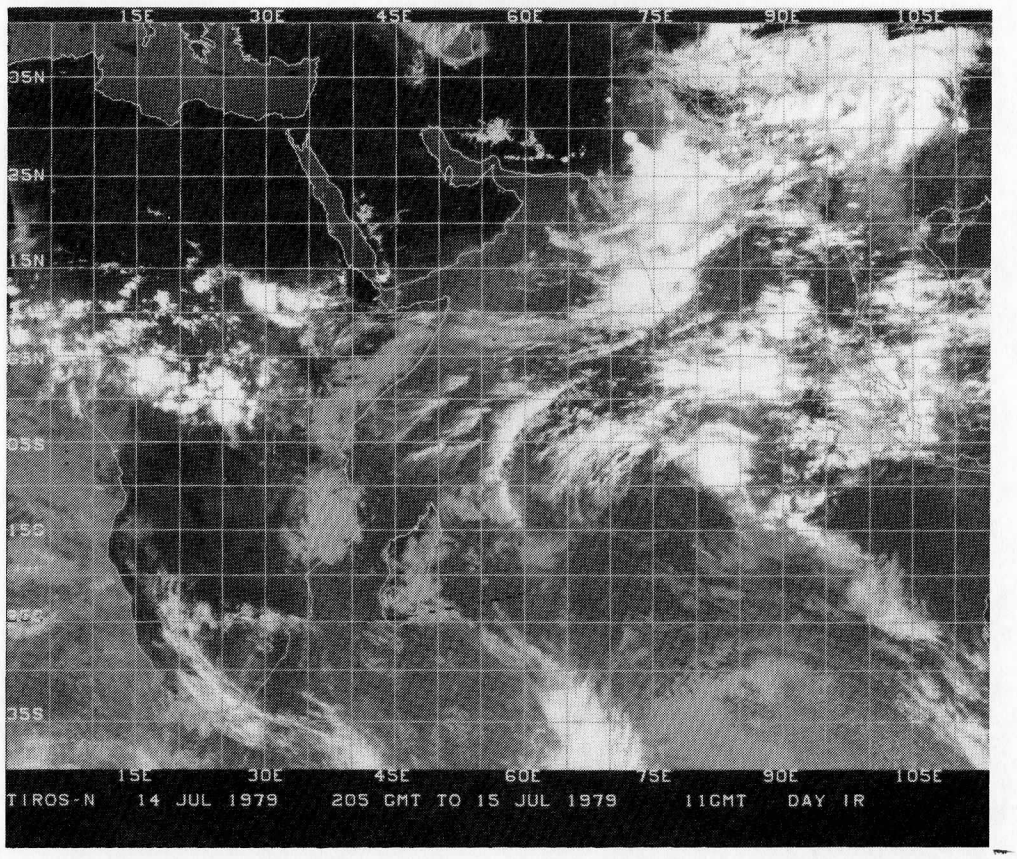

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 13 JUL 1979 405 GMT TO 14 JUL 1979 21GMT VISIBLE

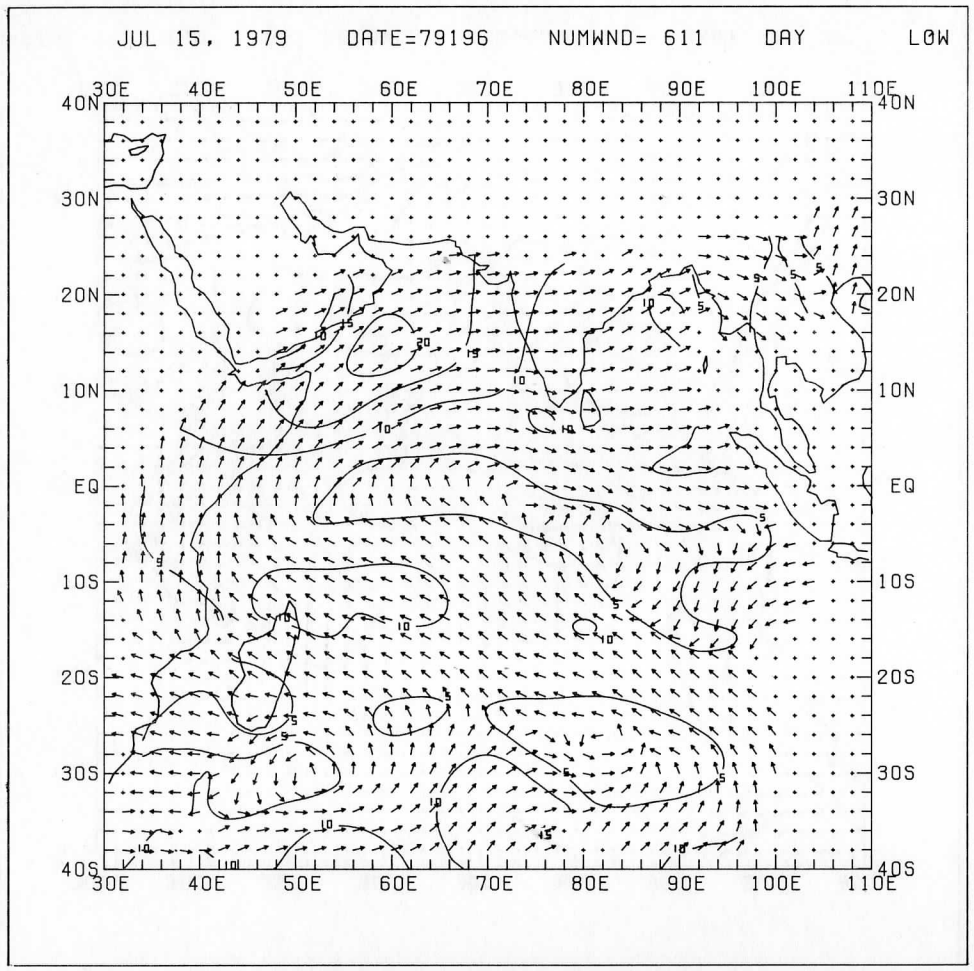

15E 30E 45E 60E 75E 90E 105E
35N 15N 05N 05S 15S
TIROS-N 13 JUL 1979 405 GMT TO 14 JUL 1979 21GMT DAY IR

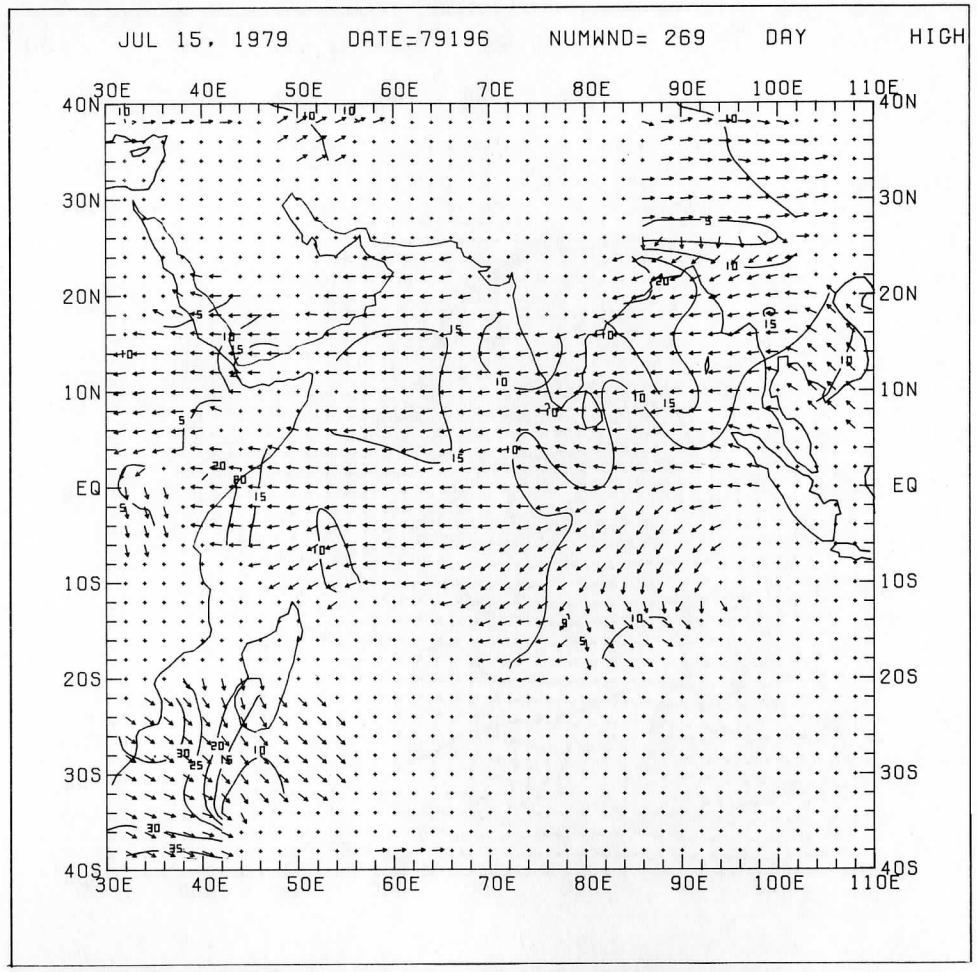

JUL 14, 1979 DATE=79195 NUMWND= 991 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

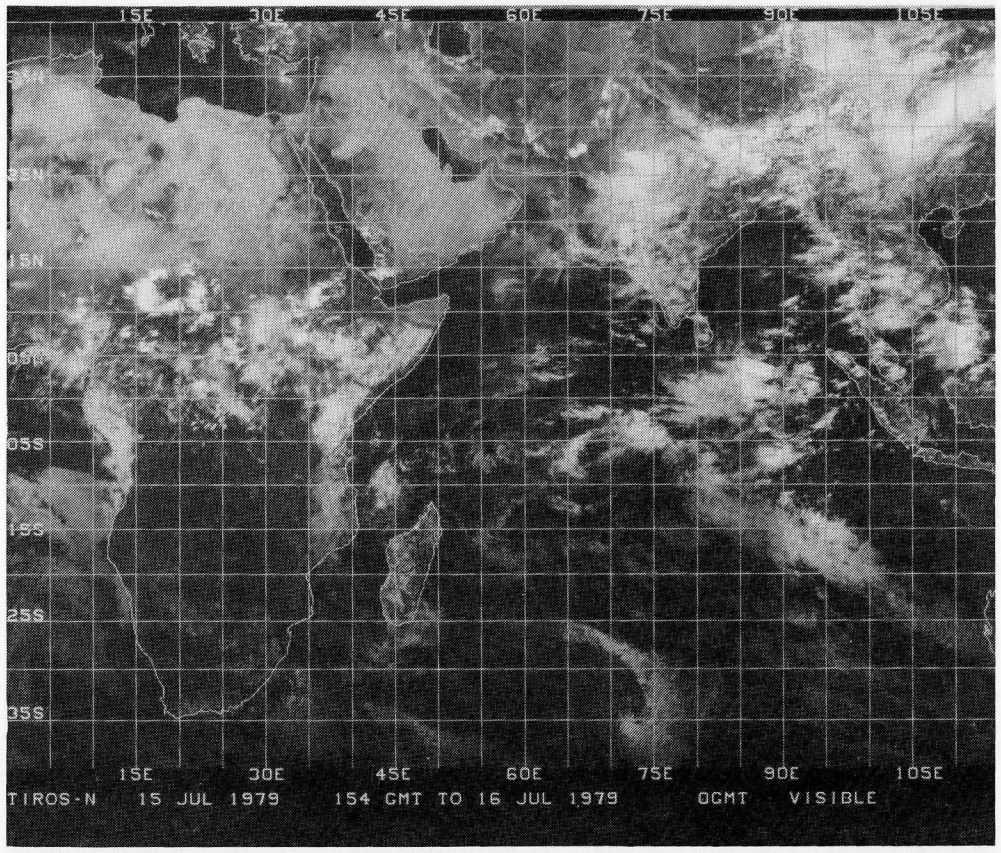

JUL 14, 1979 DATE=79195 NUMWND= 499 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

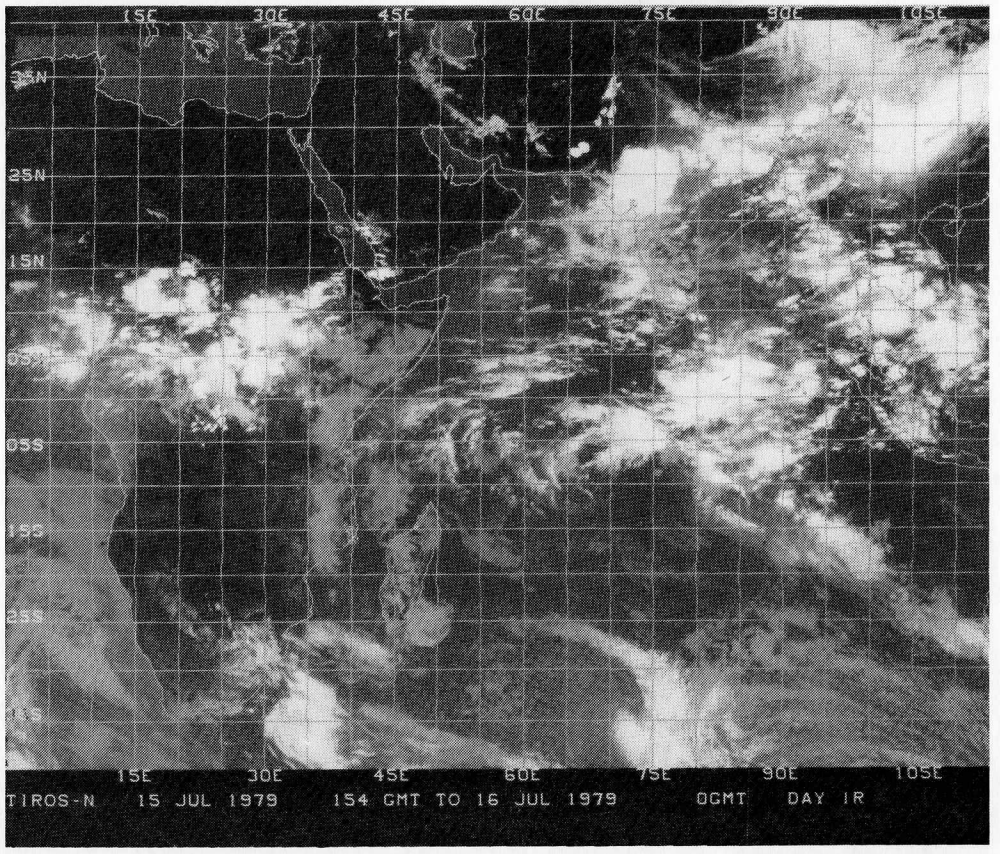

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 14 JUL 1979 205 GMT TO 15 JUL 1979 11GMT VISIBLE

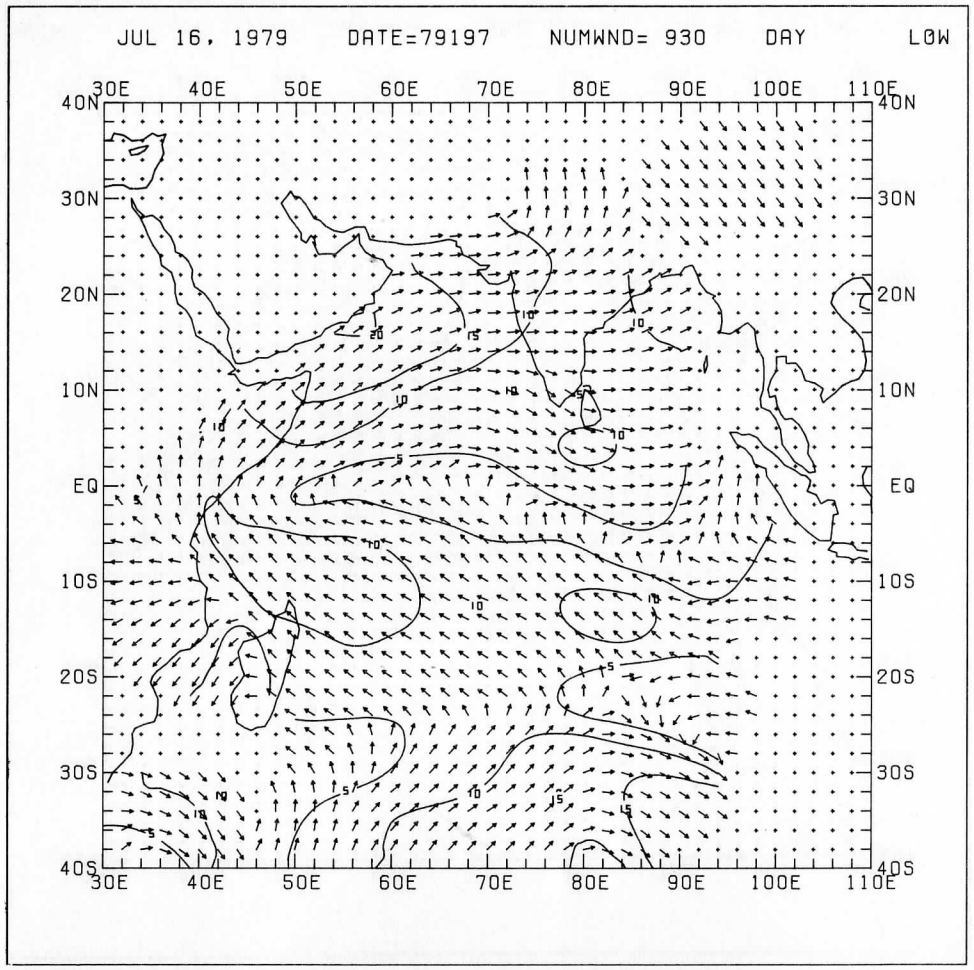

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 14 JUL 1979 205 GMT TO 15 JUL 1979 11GMT DAY IR

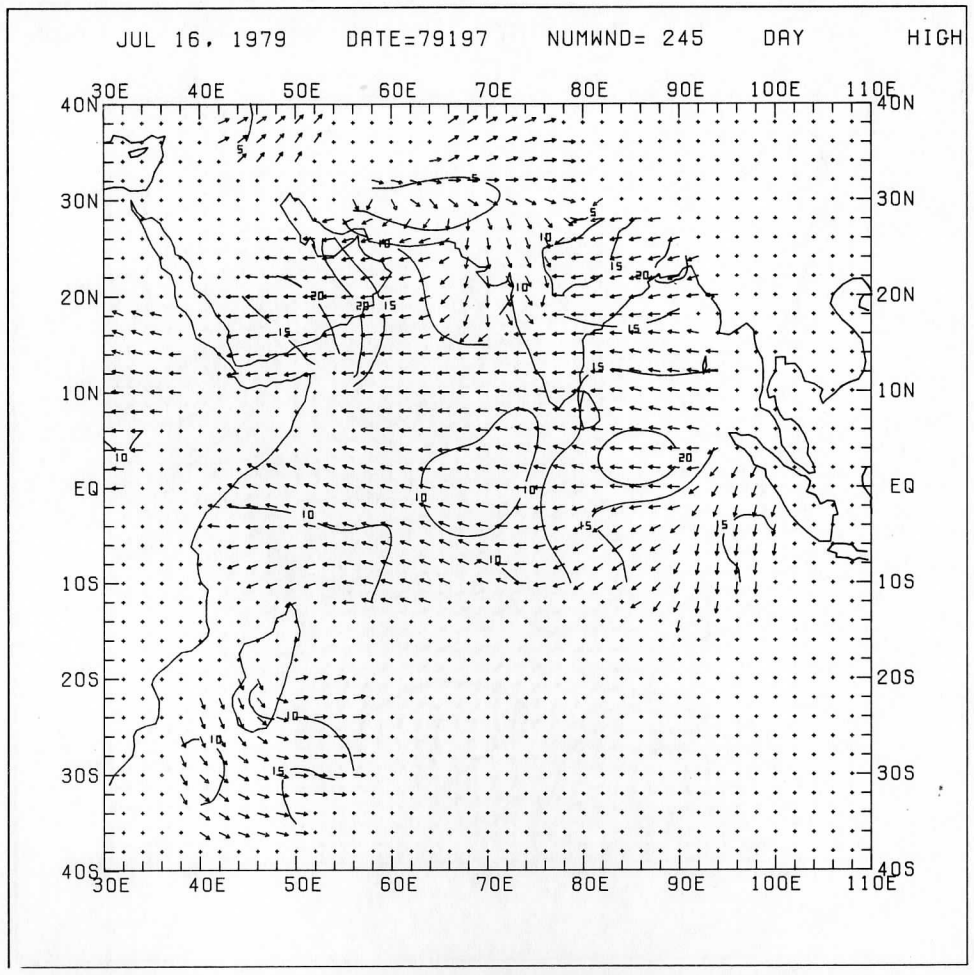

JUL 15, 1979 DATE=79196 NUMWND= 611 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

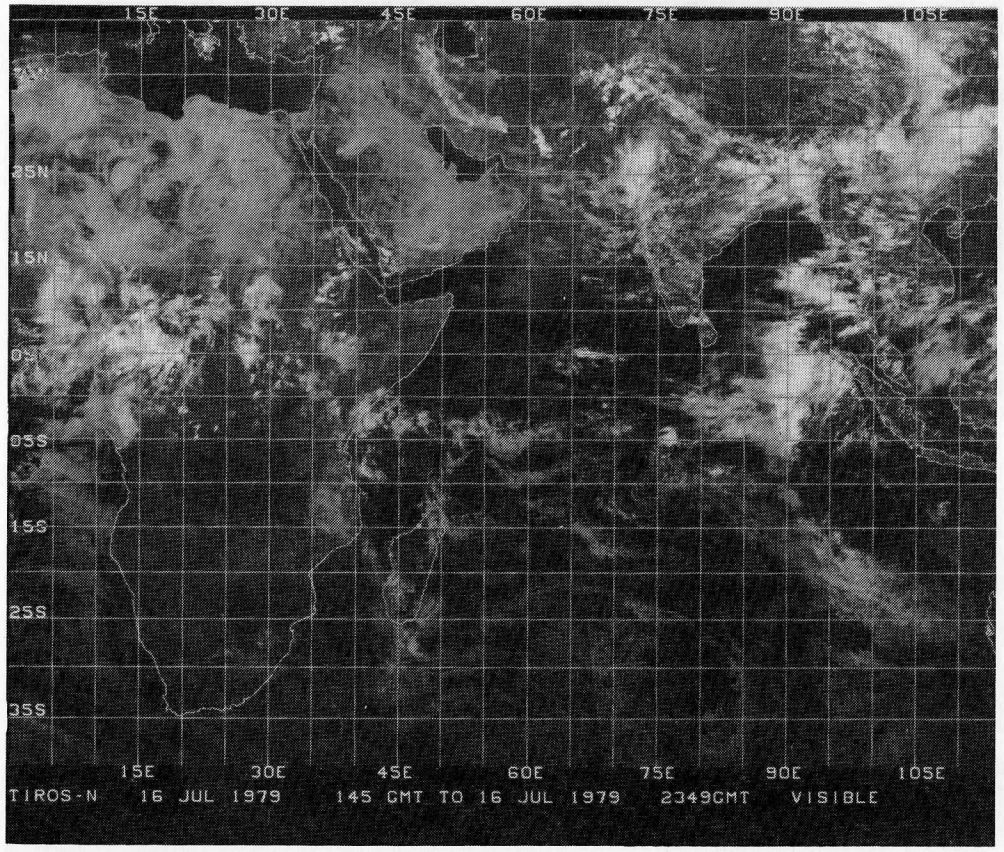

JUL 15, 1979 DATE=79196 NUMWND= 269 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

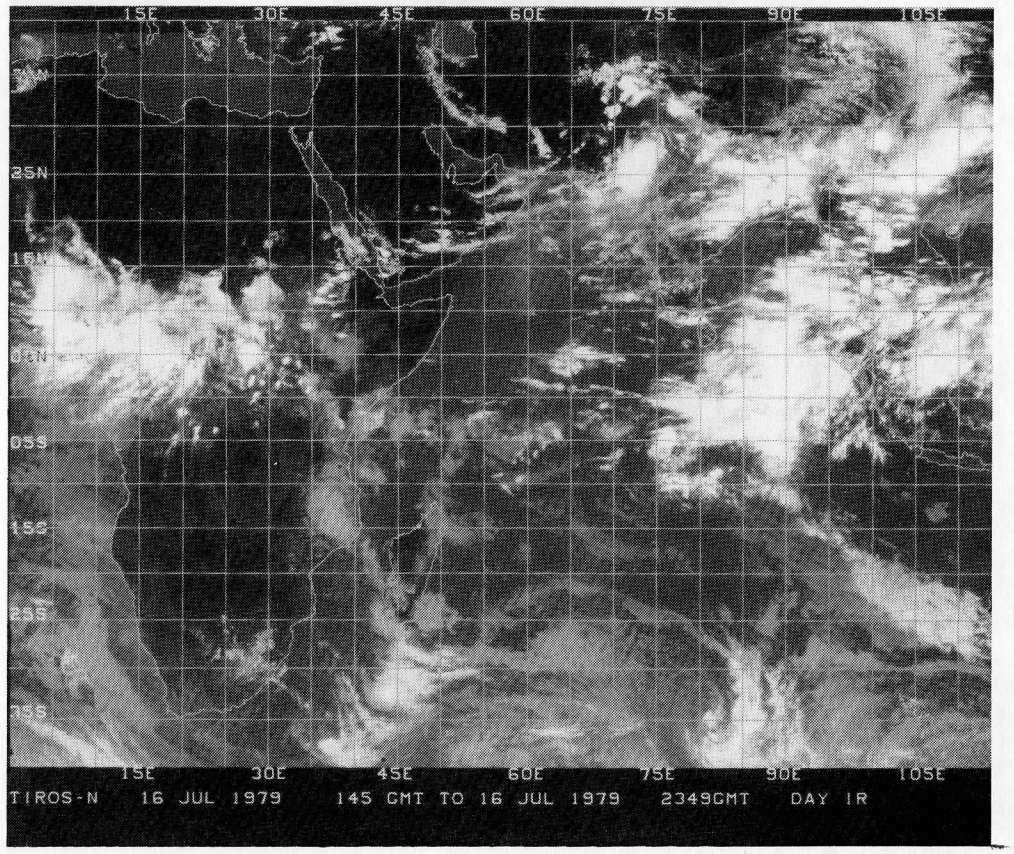

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 15 JUL 1979 154 GMT TO 16 JUL 1979 0GMT VISIBLE

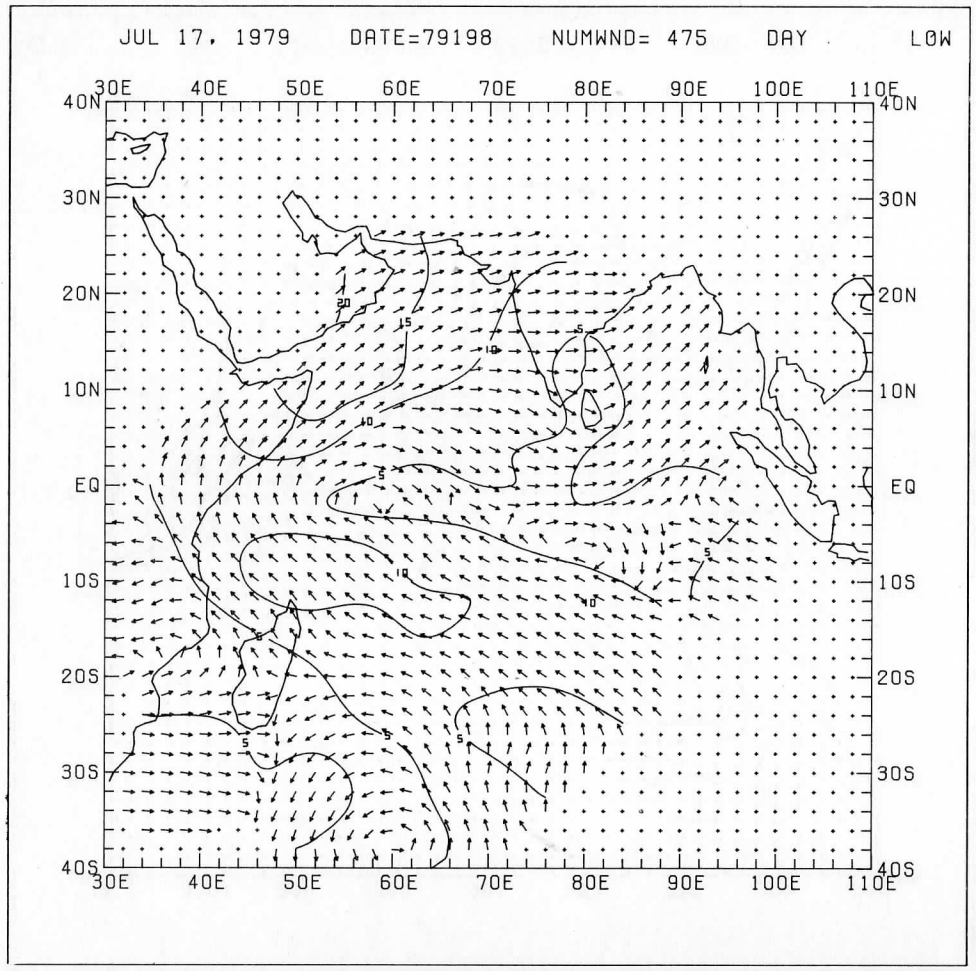

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S
TIROS-N 15 JUL 1979 154 GMT TO 16 JUL 1979 0GMT DAY IR

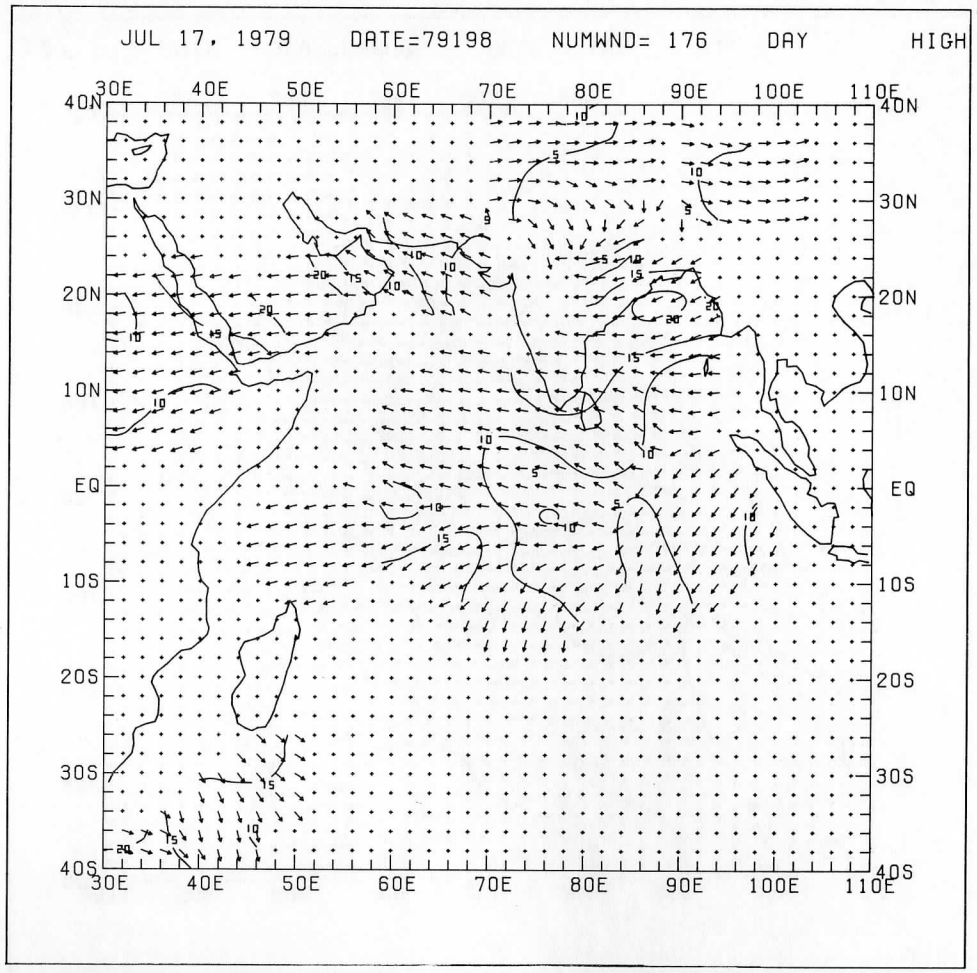

JUL 16, 1979 DATE=79197 NUMWND= 930 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

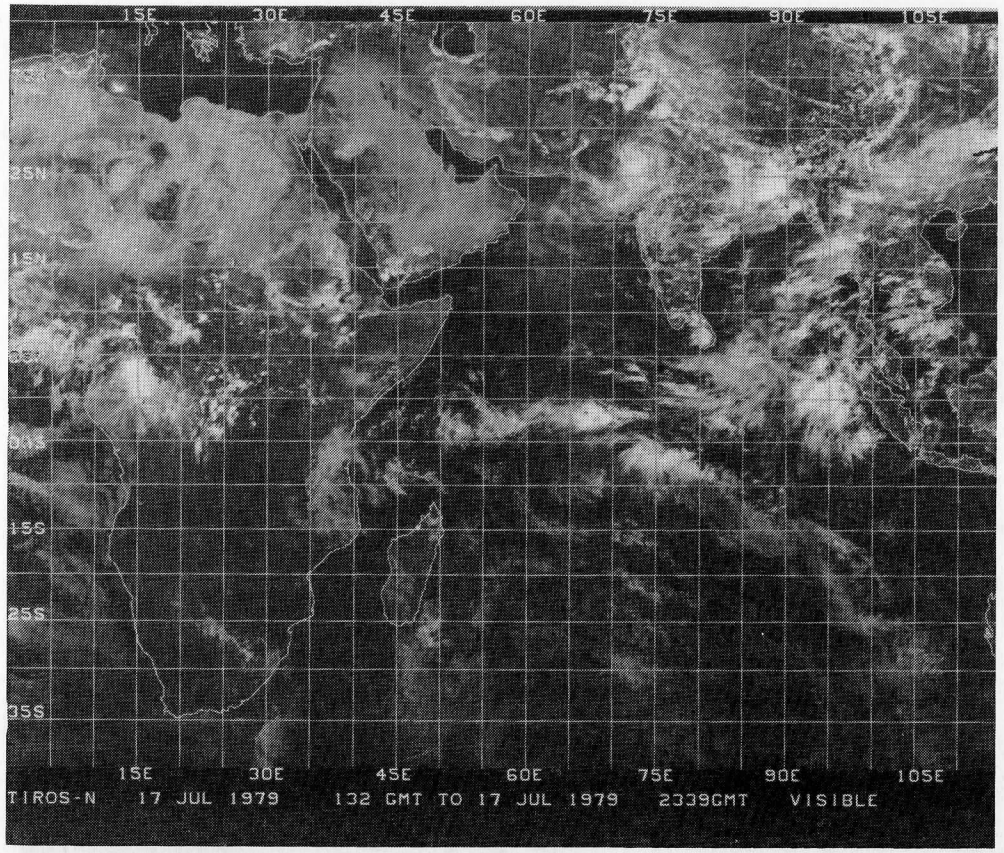

JUL 16, 1979 DATE=79197 NUMWND= 245 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

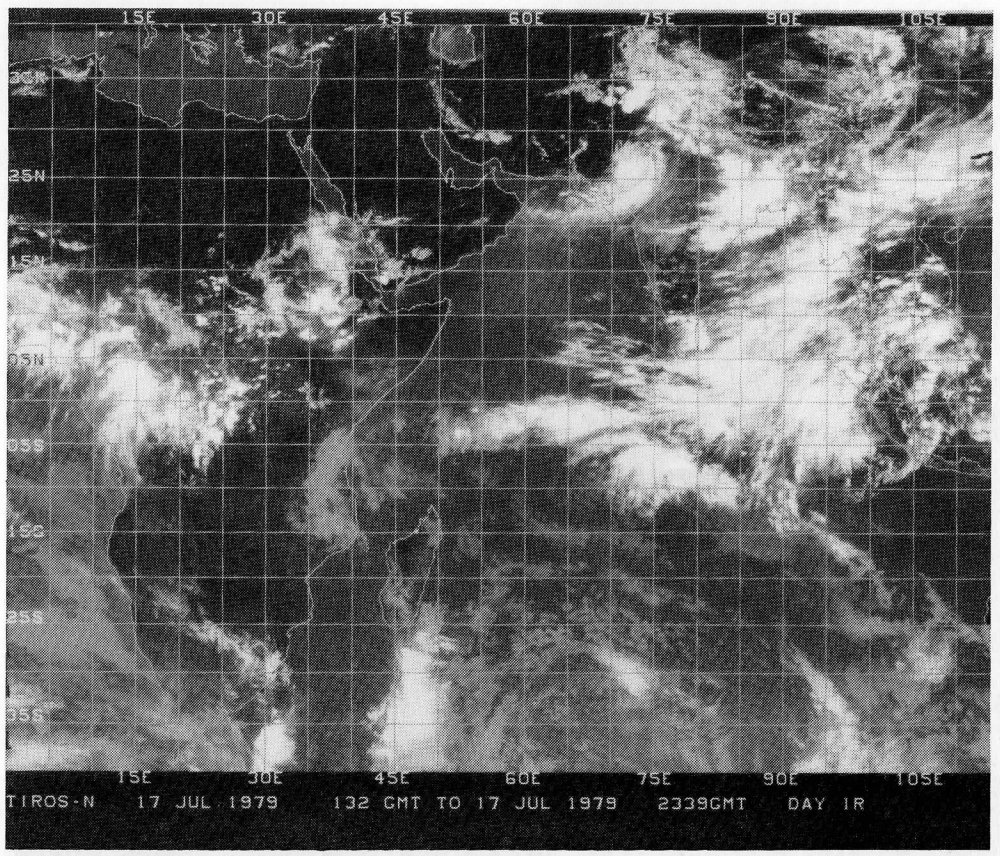

15E 30E 45E 60E 75E 90E 105E
25N 15N 05N 05S 15S 25S 35S
TIROS-N 16 JUL 1979 145 GMT TO 16 JUL 1979 2349GMT VISIBLE

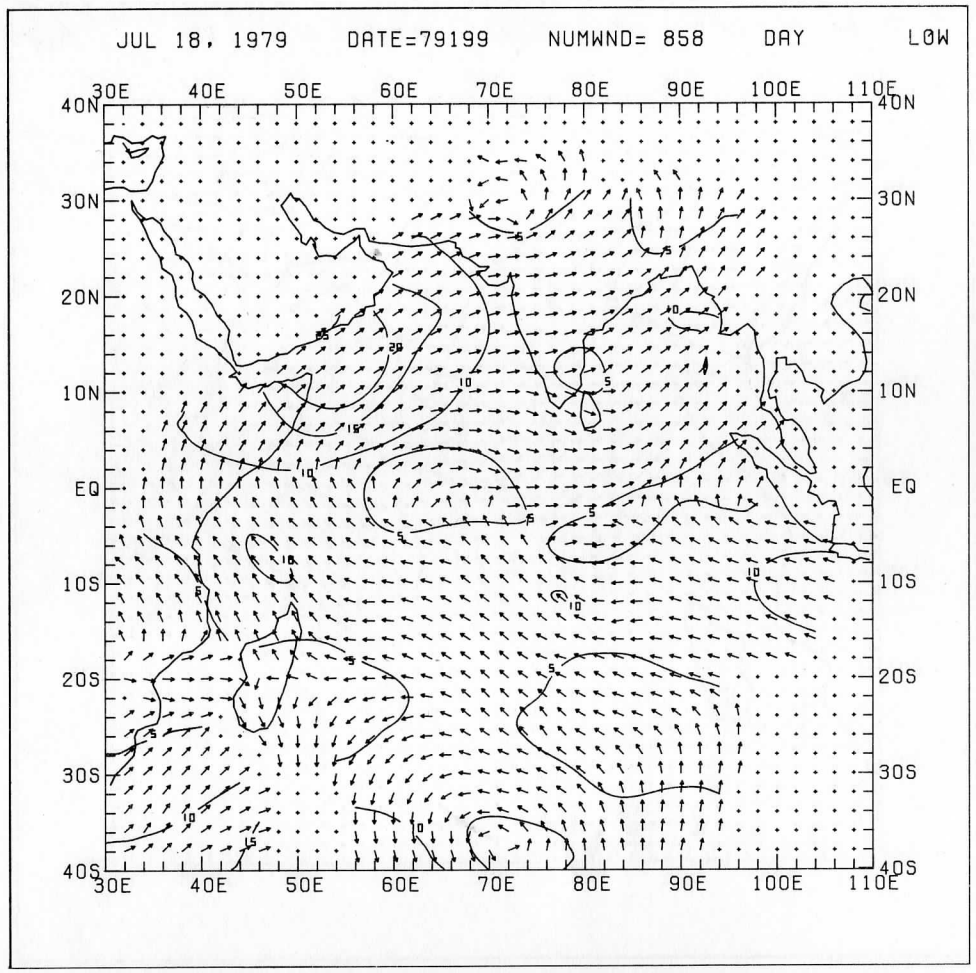

15E 30E 45E 60E 75E 90E 105E
25N 15N 05N 05S 15S 25S 35S
TIROS-N 16 JUL 1979 145 GMT TO 16 JUL 1979 2349GMT DAY IR

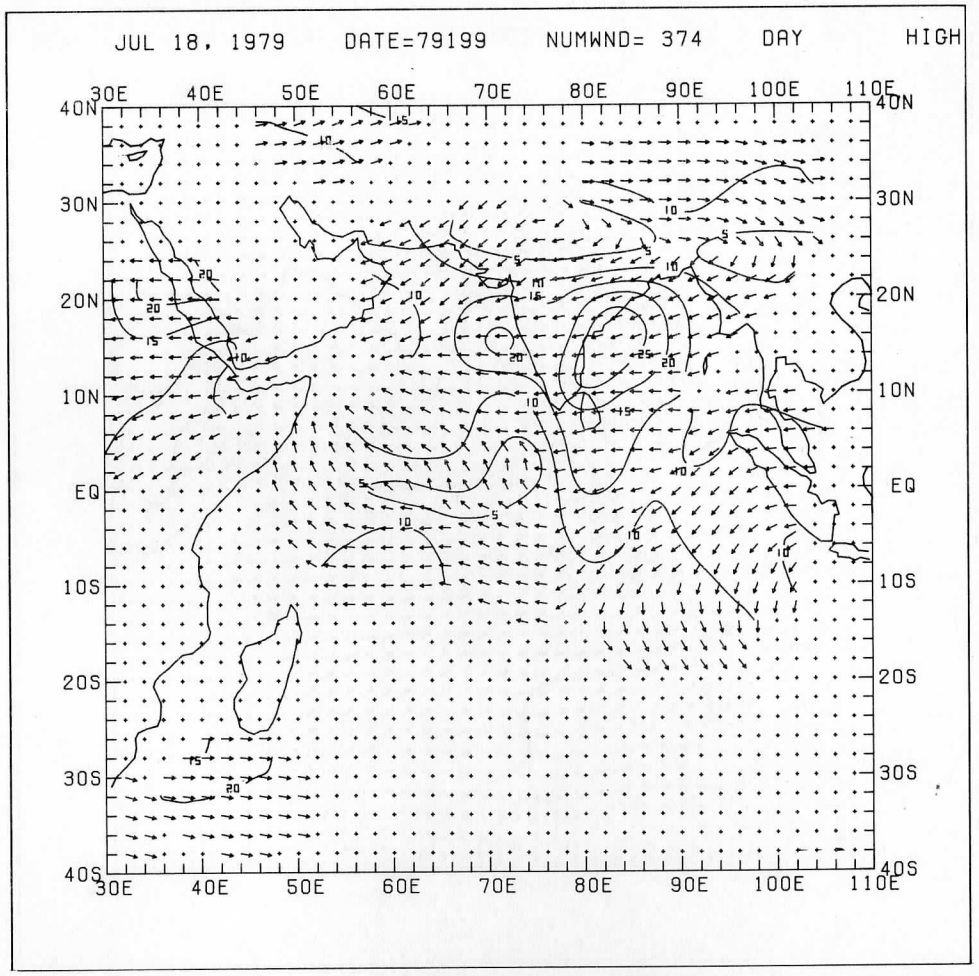

JUL 17, 1979 DATE=79198 NUMWND= 475 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

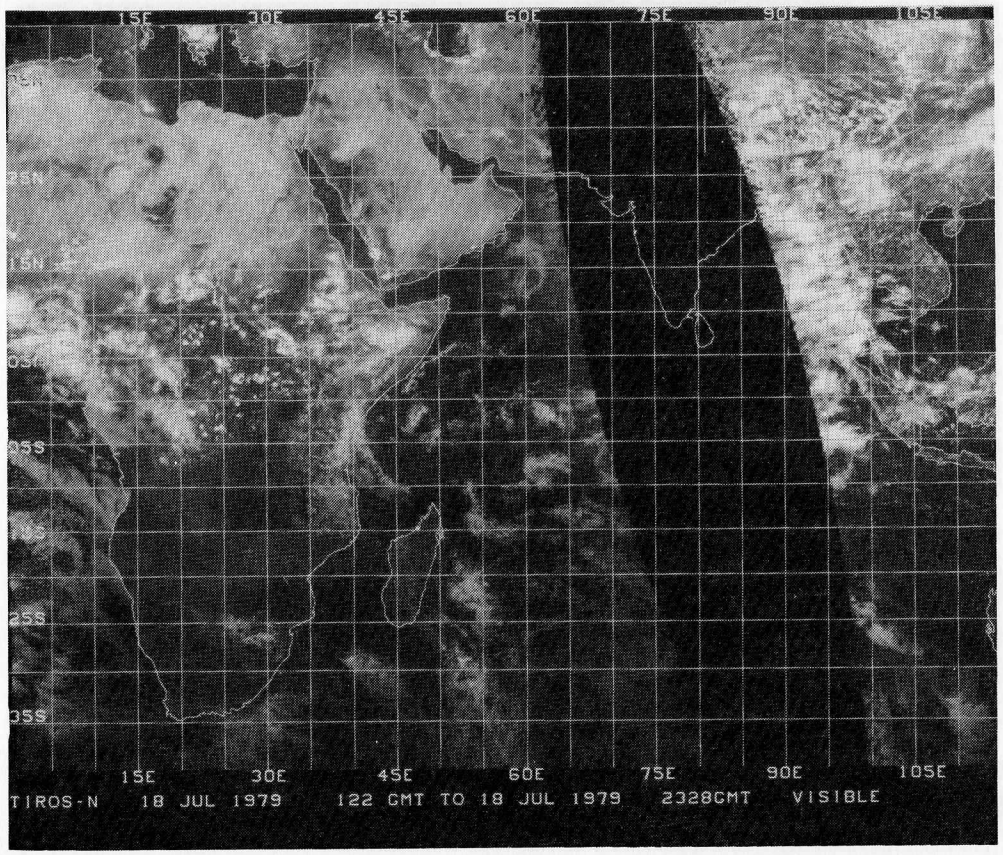

JUL 17, 1979 DATE=79198 NUMWND= 176 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

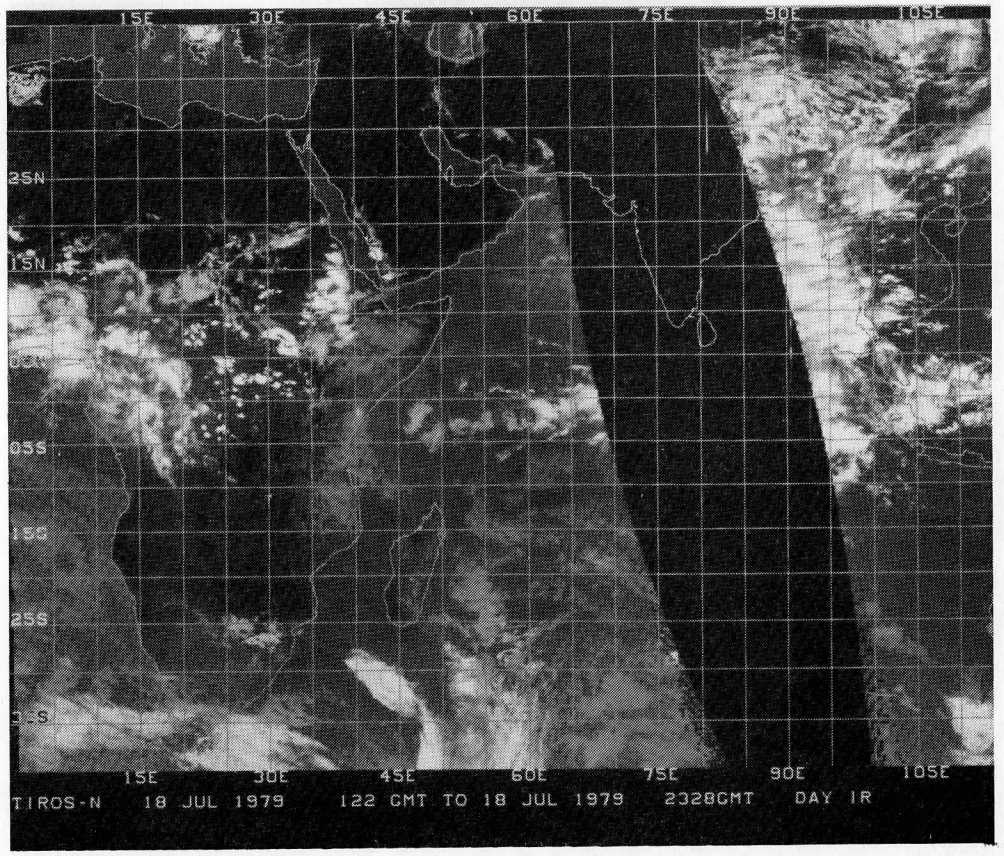

15E 30E 45E 60E 75E 90E 105E
25N 15N 5S 15S 25S 35S
TIROS-N 17 JUL 1979 132 GMT TO 17 JUL 1979 2339GMT VISIBLE

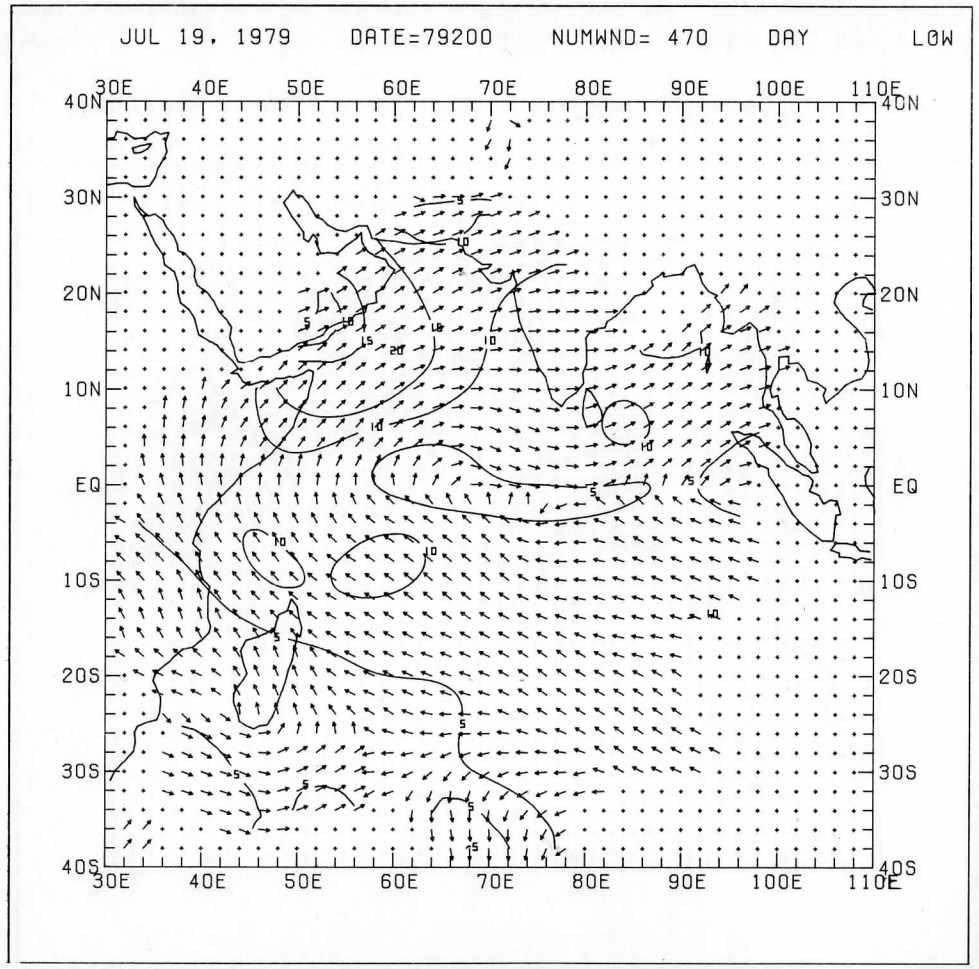

15E 30E 45E 60E 75E 90E 105E
25N 15N 5S 15S 25S 35S
TIROS-N 17 JUL 1979 132 GMT TO 17 JUL 1979 2339GMT DAY IR

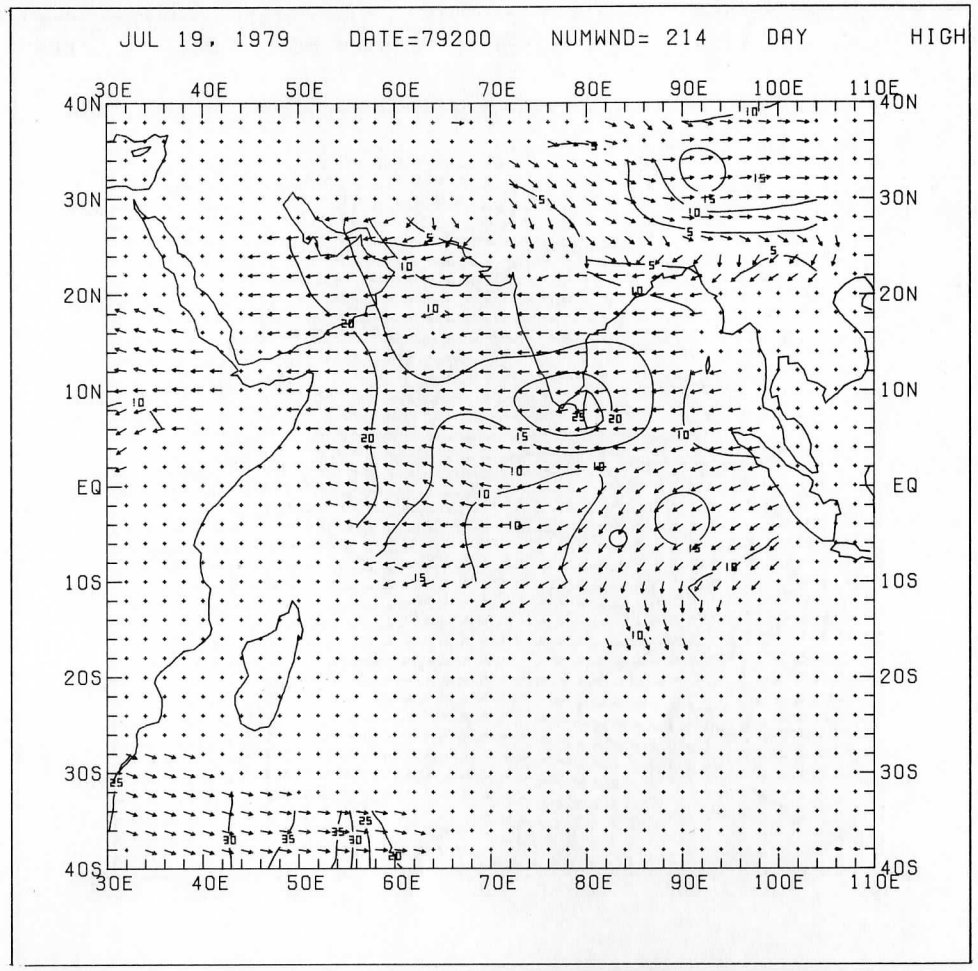

JUL 18, 1979 DATE=79199 NUMWND= 858 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

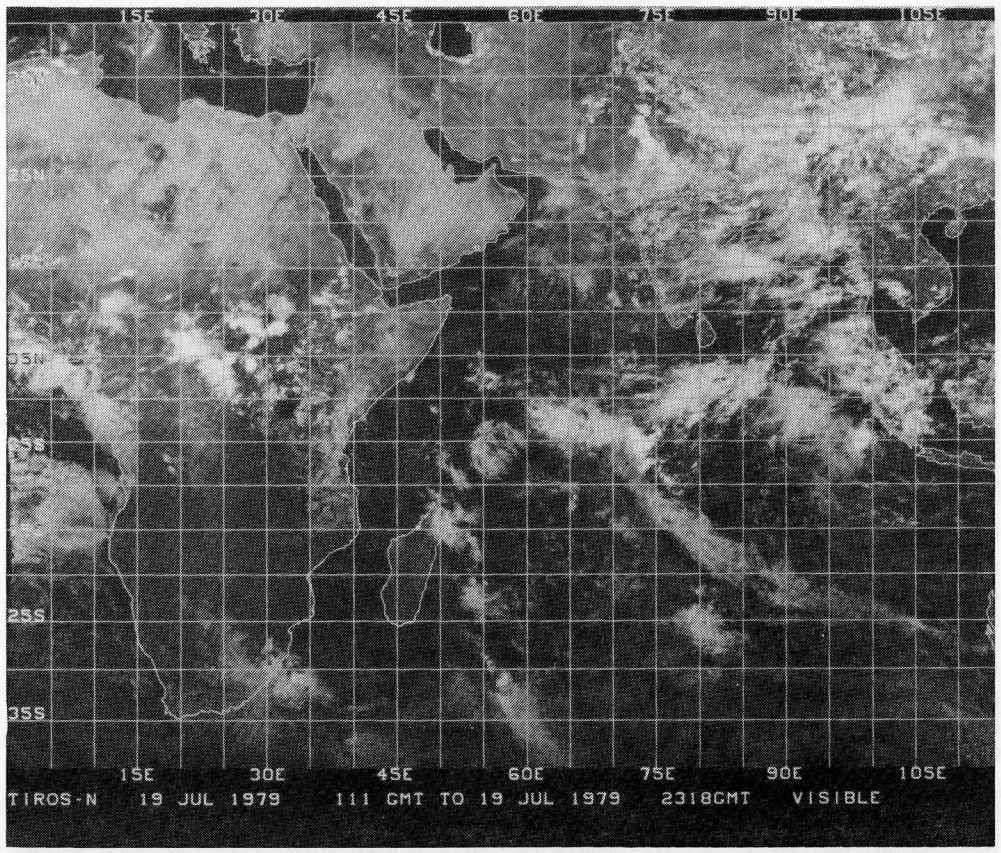

JUL 18, 1979 DATE=79199 NUMWND= 374 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

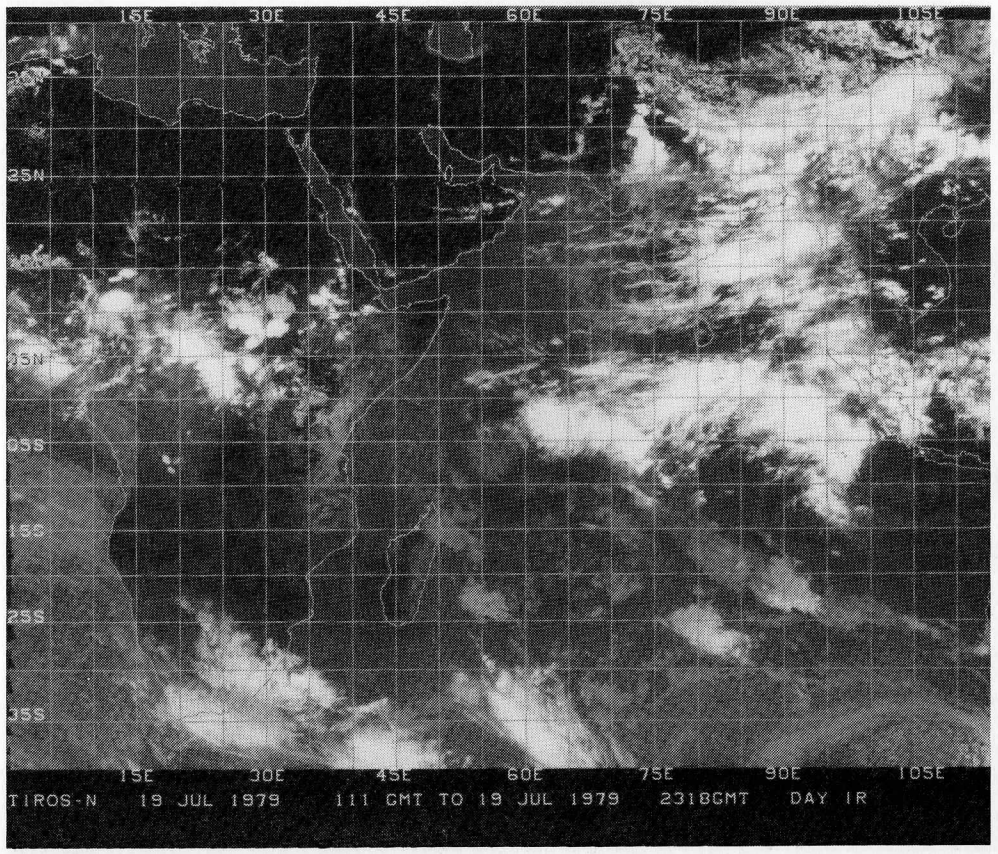

15E 30E 45E 60E 75E 90E 105E
TIROS-N 18 JUL 1979 122 GMT TO 18 JUL 1979 2328GMT VISIBLE

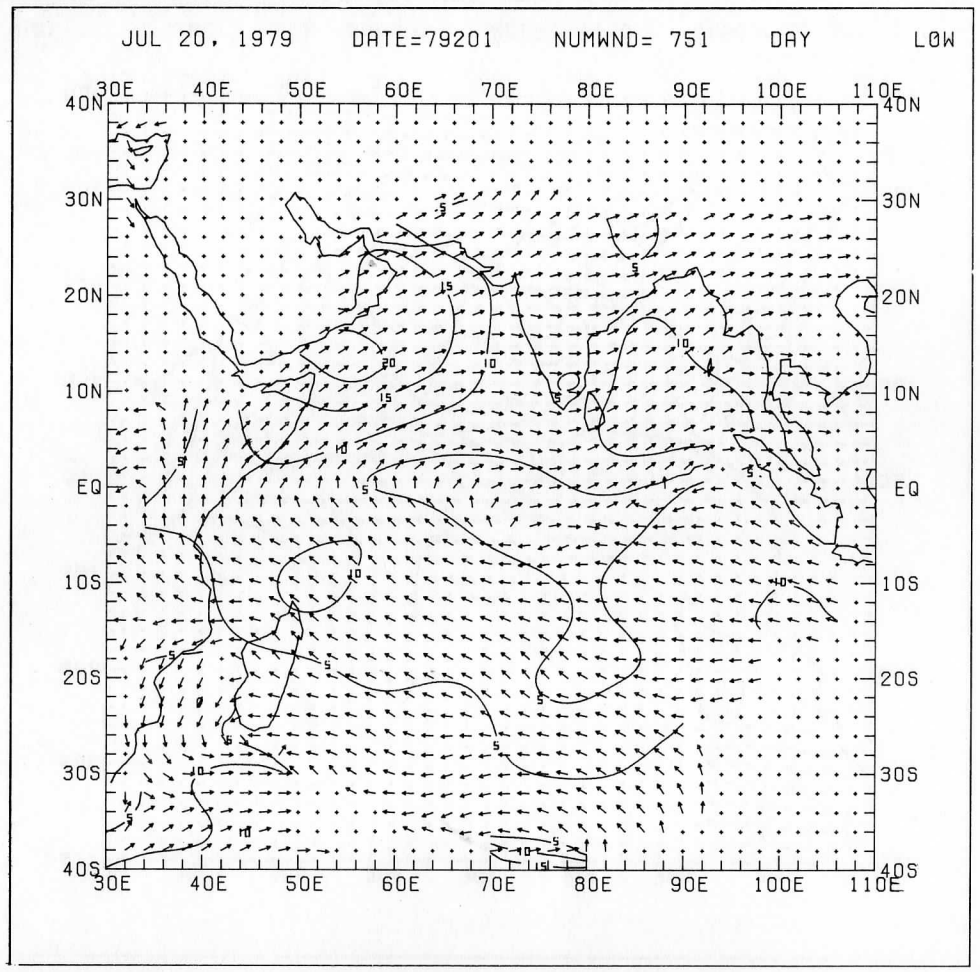

15E 30E 45E 60E 75E 90E 105E
TIROS-N 18 JUL 1979 122 GMT TO 18 JUL 1979 2328GMT DAY IR

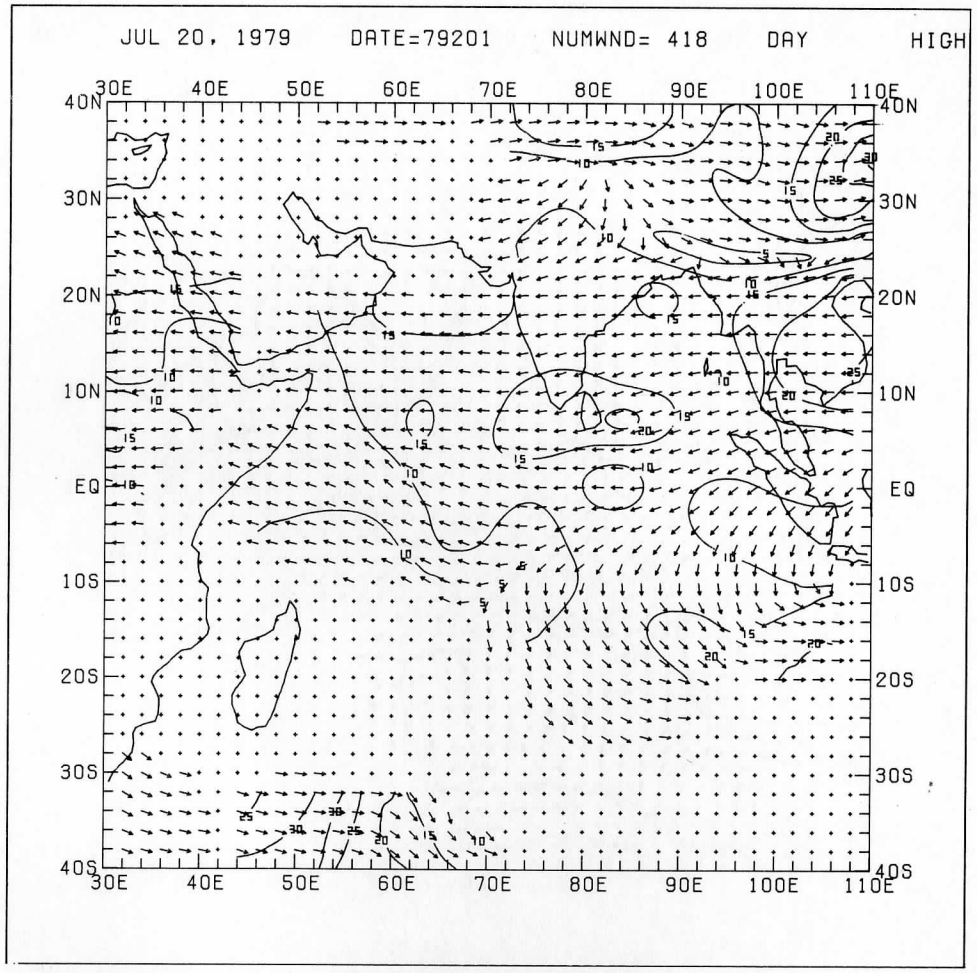

JUL 19, 1979 DATE=79200 NUMWND= 470 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

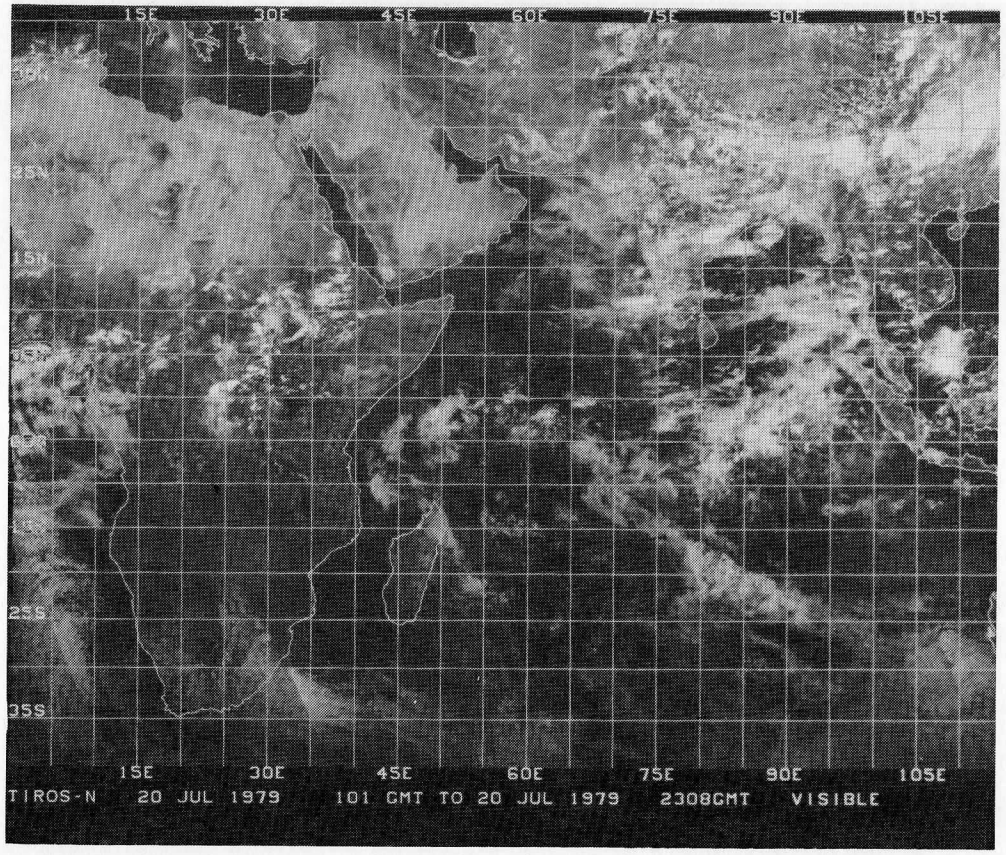

JUL 19, 1979 DATE=79200 NUMWND= 214 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

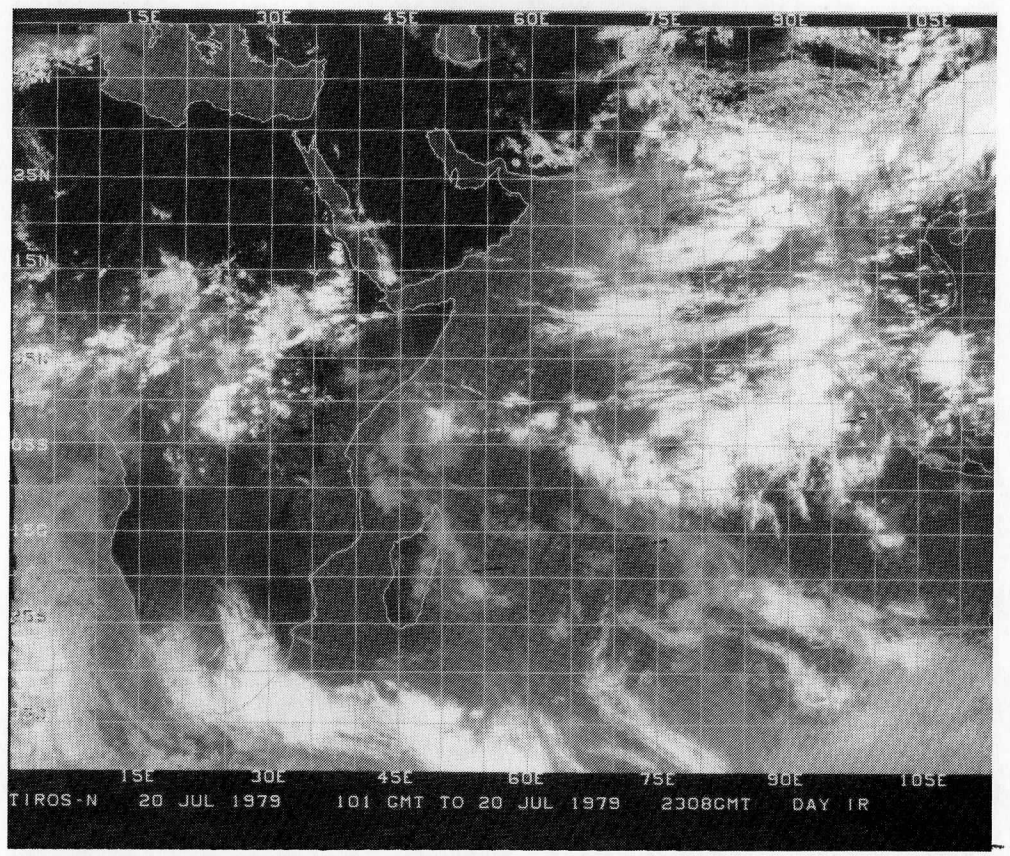

15E 30E 45E 60E 75E 90E 105E
25N
0S
25S
35S
TIROS-N 19 JUL 1979 111 GMT TO 19 JUL 1979 2318GMT VISIBLE

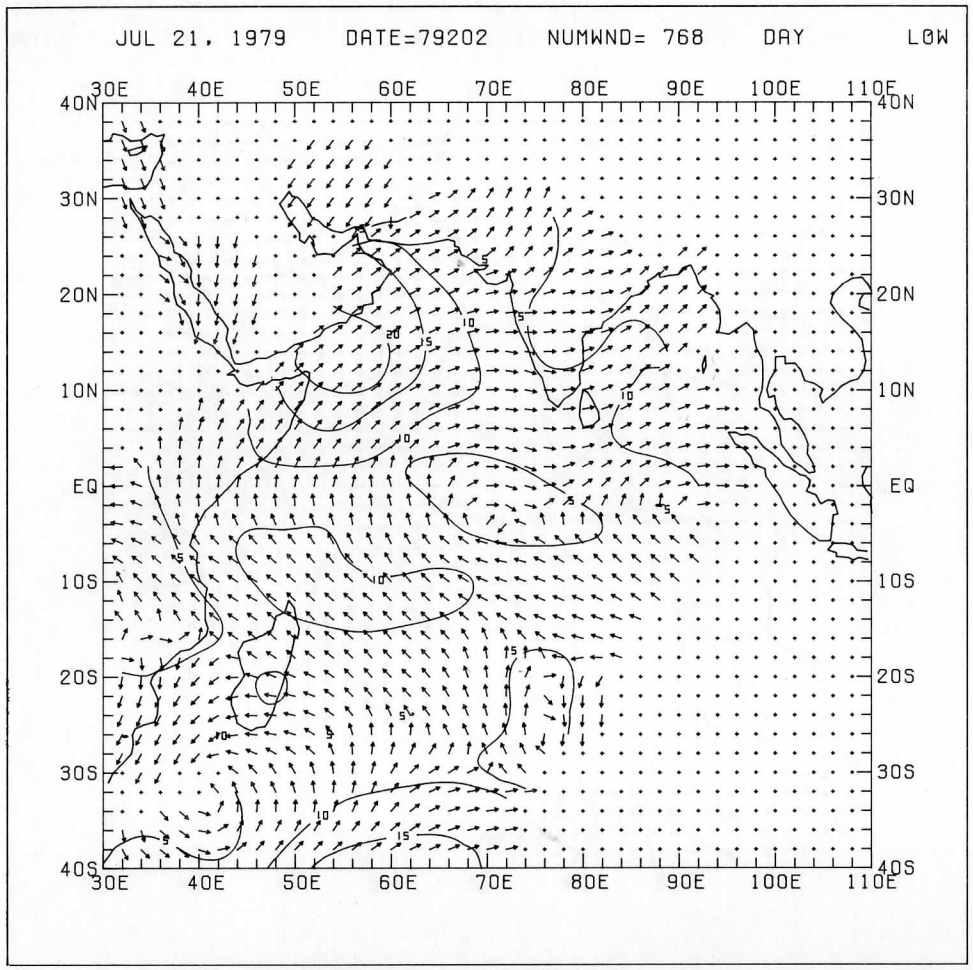

15E 30E 45E 60E 75E 90E 105E
25N
0S
25S
35S
TIROS-N 19 JUL 1979 111 GMT TO 19 JUL 1979 2318GMT DAY IR

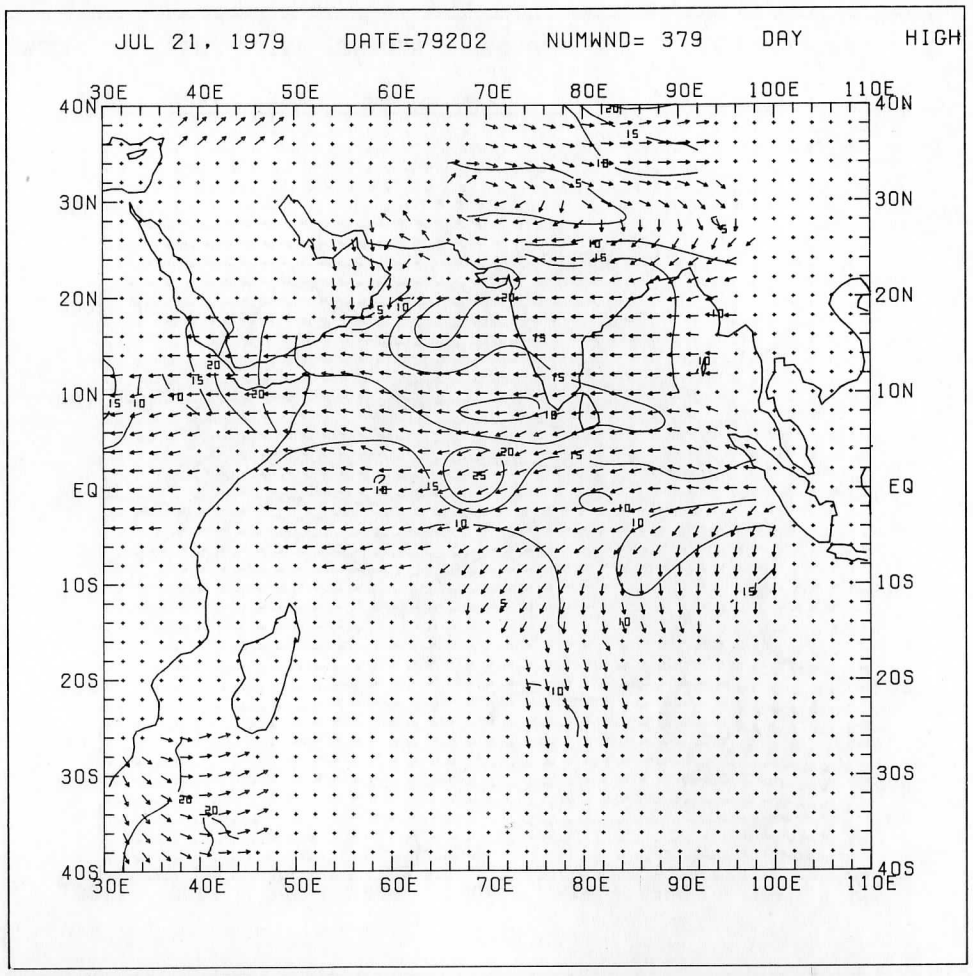

JUL 20, 1979 DATE=79201 NUMWND= 751 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

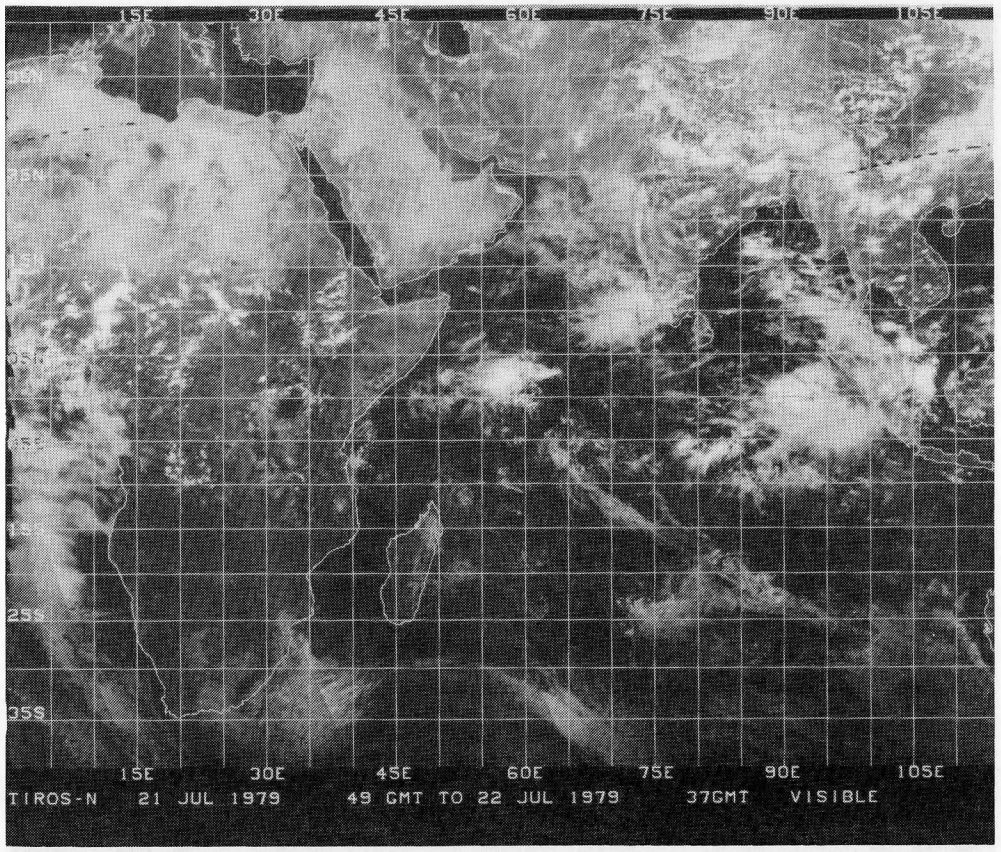

JUL 20, 1979 DATE=79201 NUMWND= 418 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

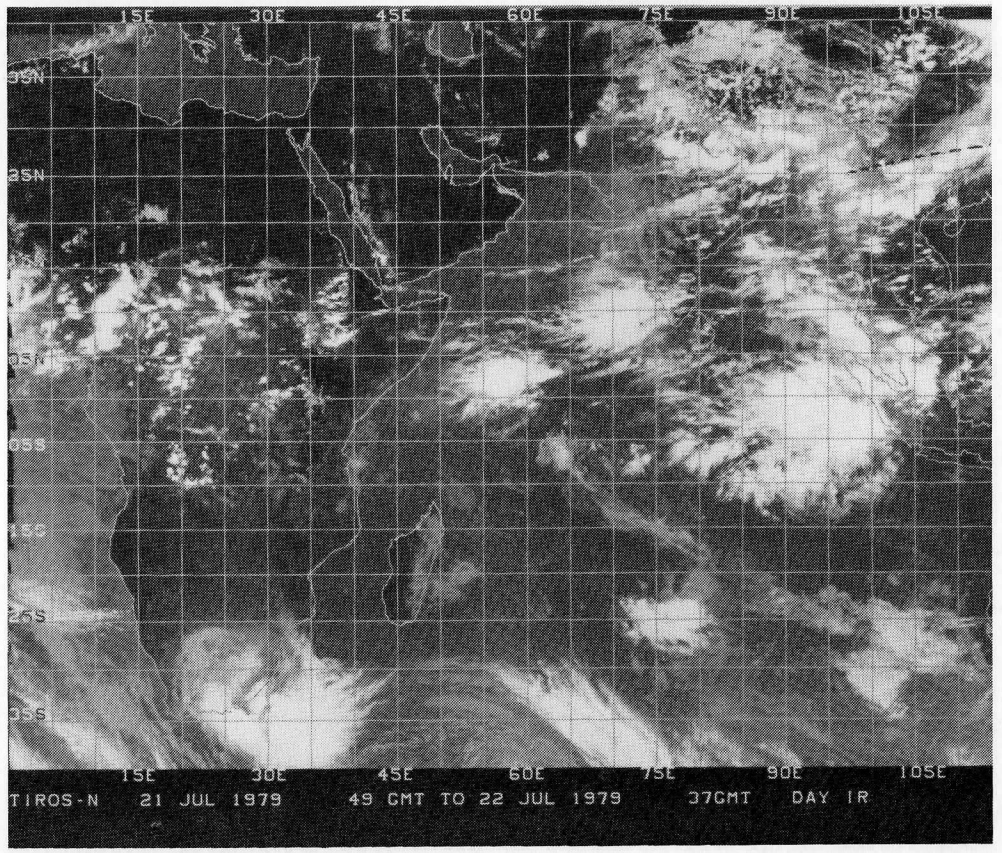

15E 30E 45E 60E 75E 90E 105E
25N 15N 05N 05S 15S 25S 35S
TIROS-N 20 JUL 1979 101 GMT TO 20 JUL 1979 2308GMT VISIBLE

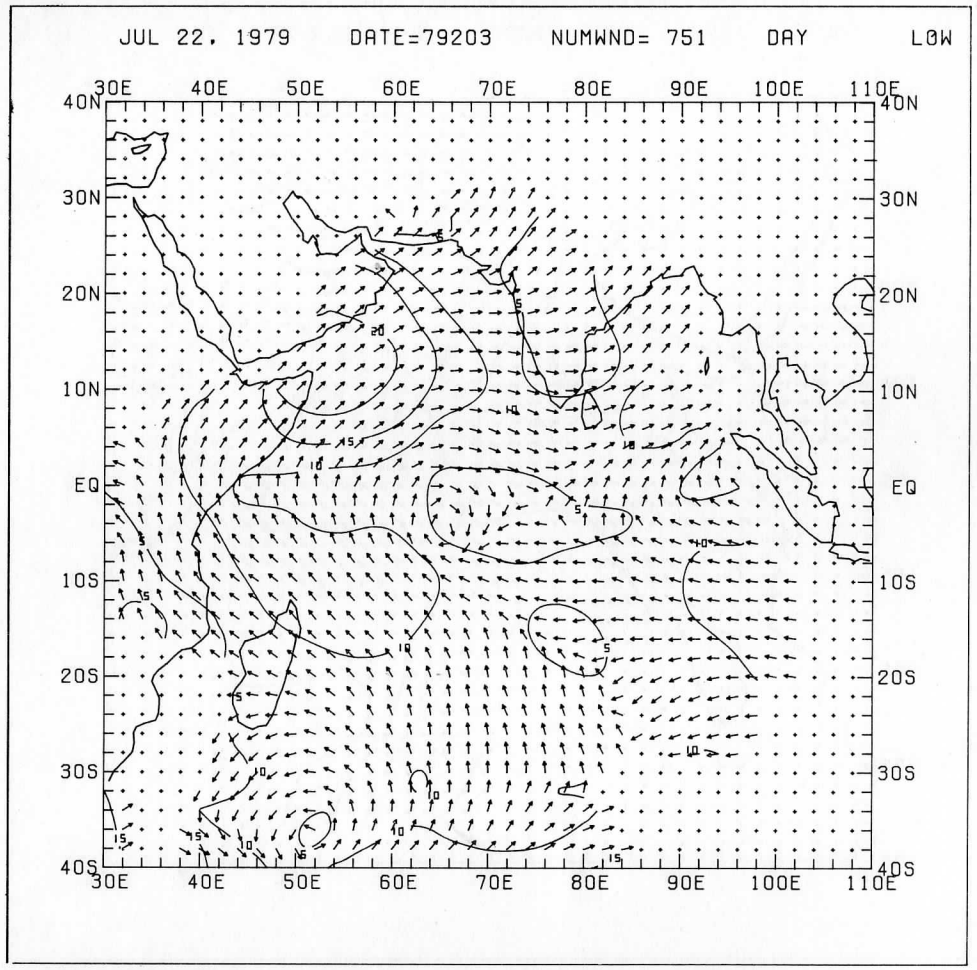

15E 30E 45E 60E 75E 90E 105E
25N 15N 05N 05S 15S 25S
TIROS-N 20 JUL 1979 101 GMT TO 20 JUL 1979 2308GMT DAY IR

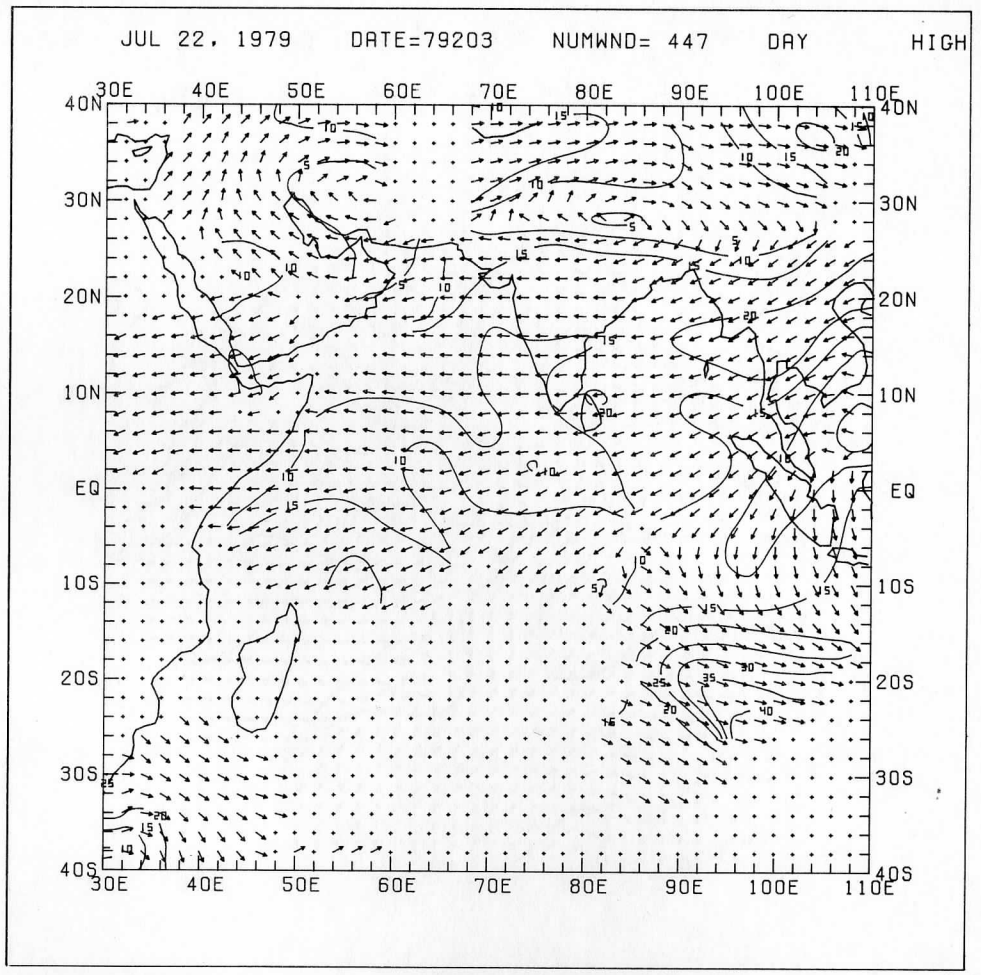

JUL 21, 1979 DATE=79202 NUMWND= 768 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

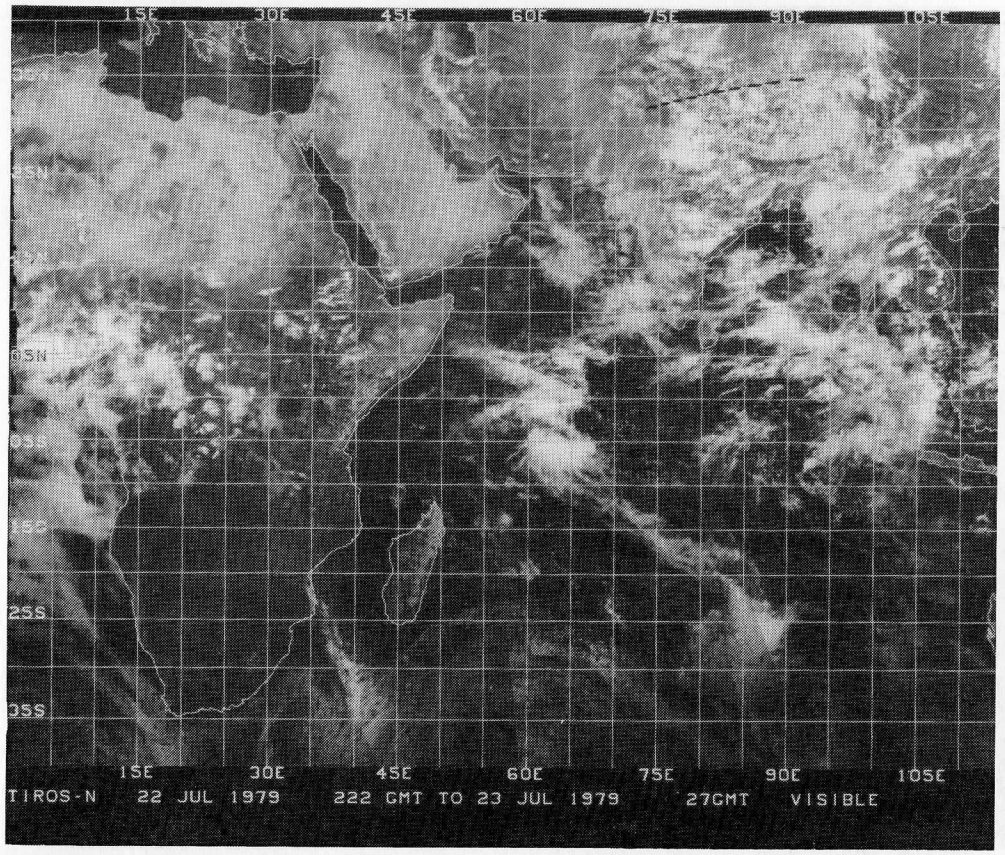

JUL 21, 1979 DATE=79202 NUMWND= 379 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

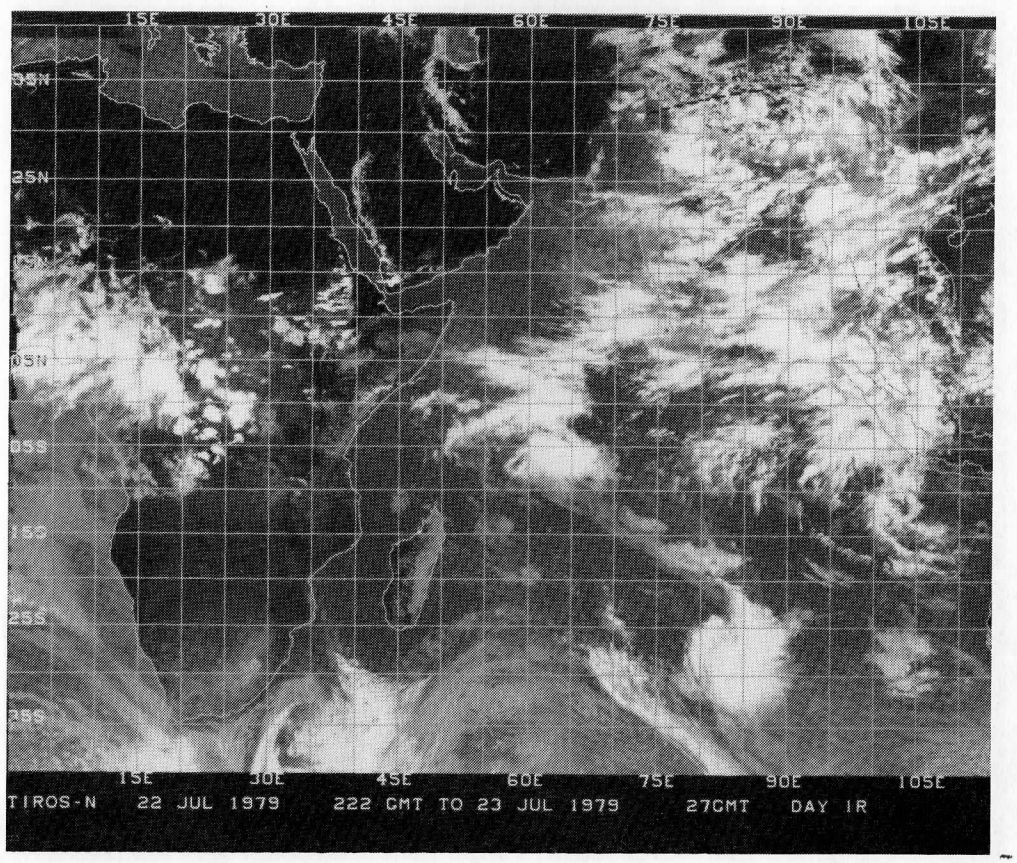

15E 30E 45E 60E 75E 90E 105E
TIROS-N 21 JUL 1979 49 GMT TO 22 JUL 1979 37GMT VISIBLE

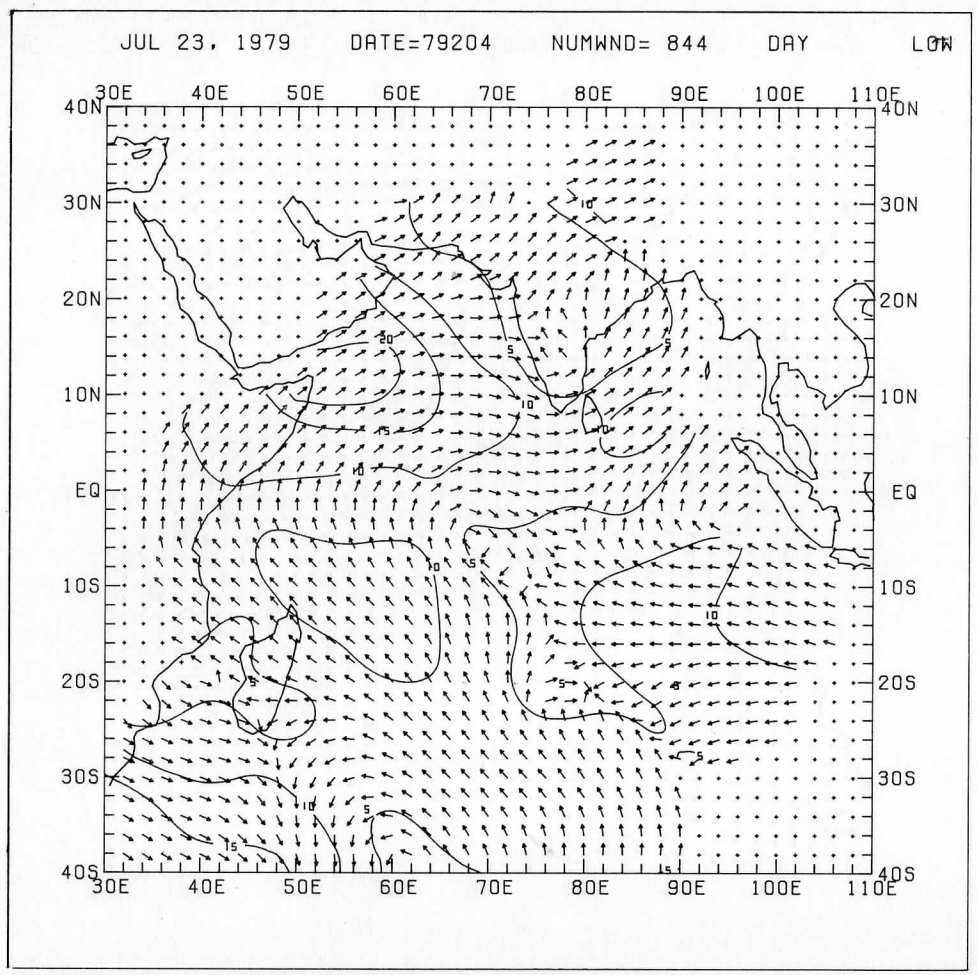

15E 30E 45E 60E 75E 90E 105E
TIROS-N 21 JUL 1979 49 GMT TO 22 JUL 1979 37GMT DAY IR

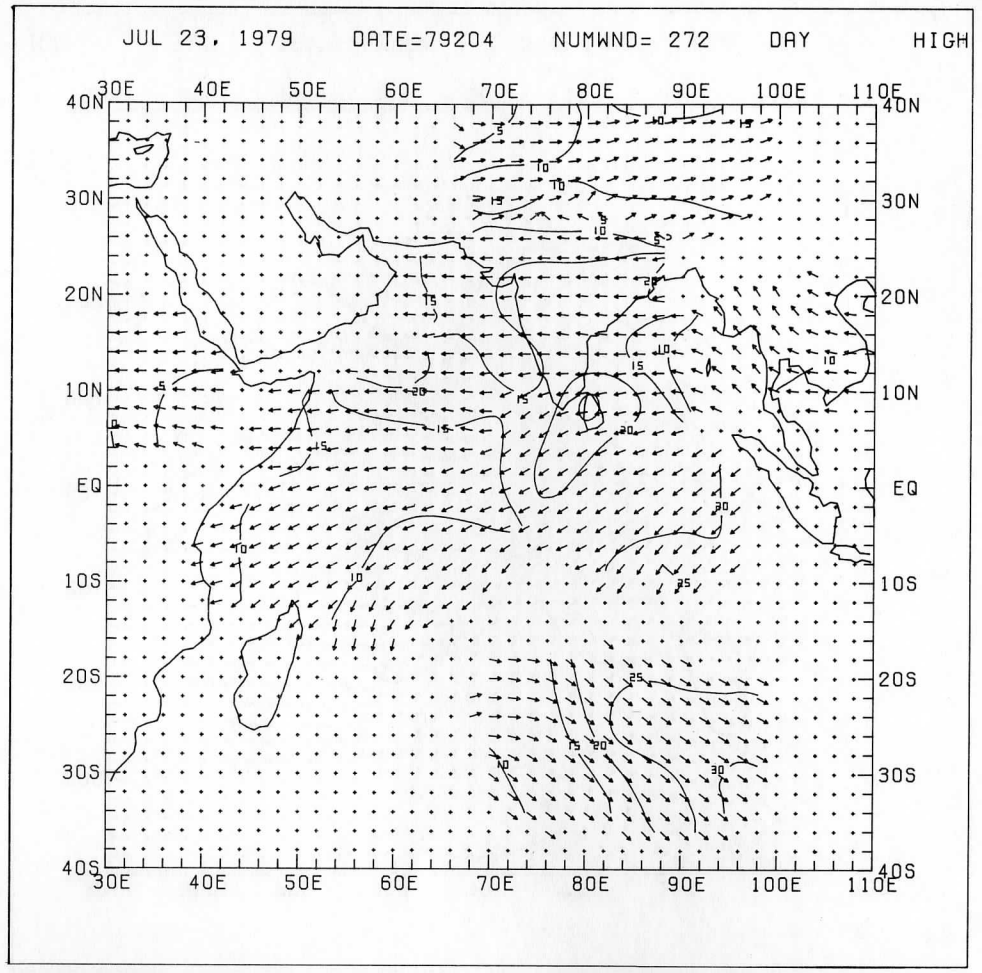

JUL 22, 1979 DATE=79203 NUMWND= 751 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

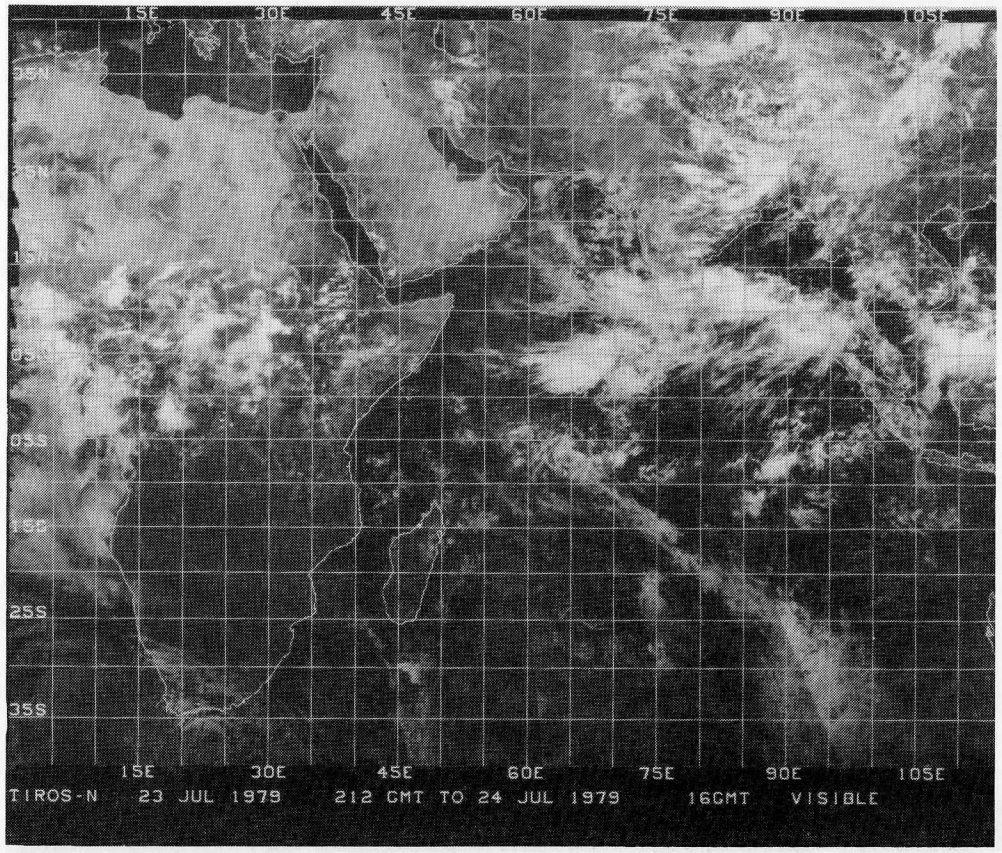

JUL 22, 1979 DATE=79203 NUMWND= 447 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

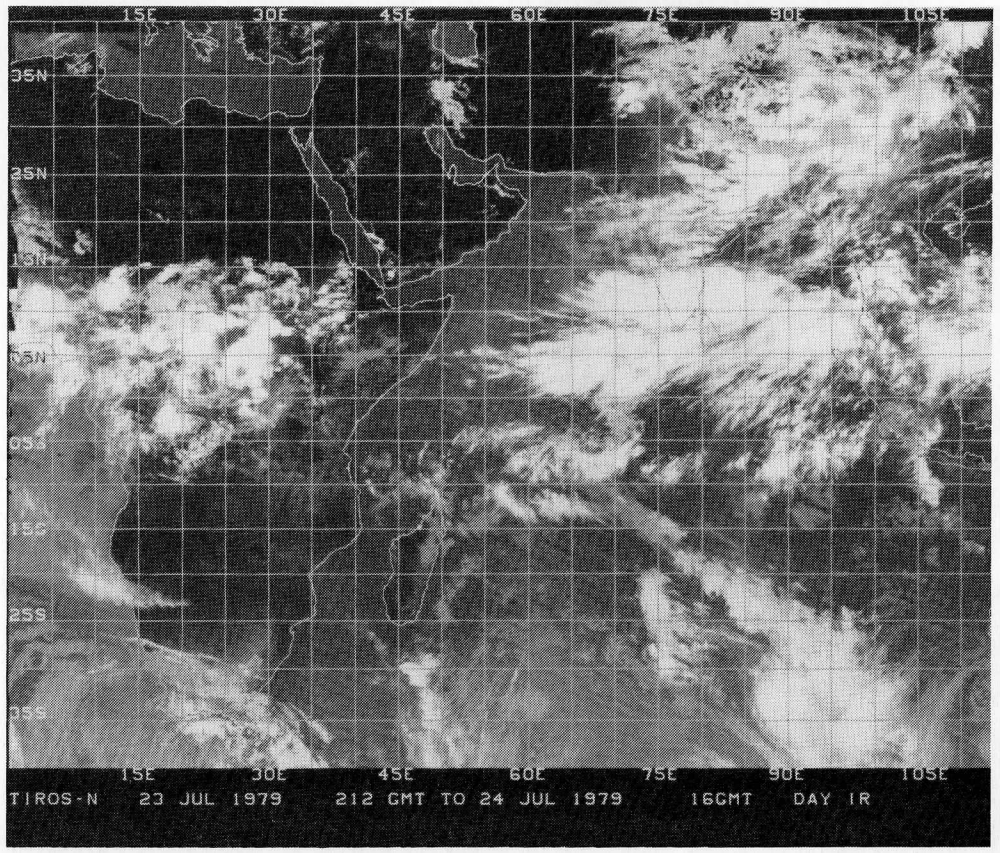

15E 30E 45E 60E 75E 90E 105E
TIROS-N 22 JUL 1979 222 GMT TO 23 JUL 1979 27GMT VISIBLE

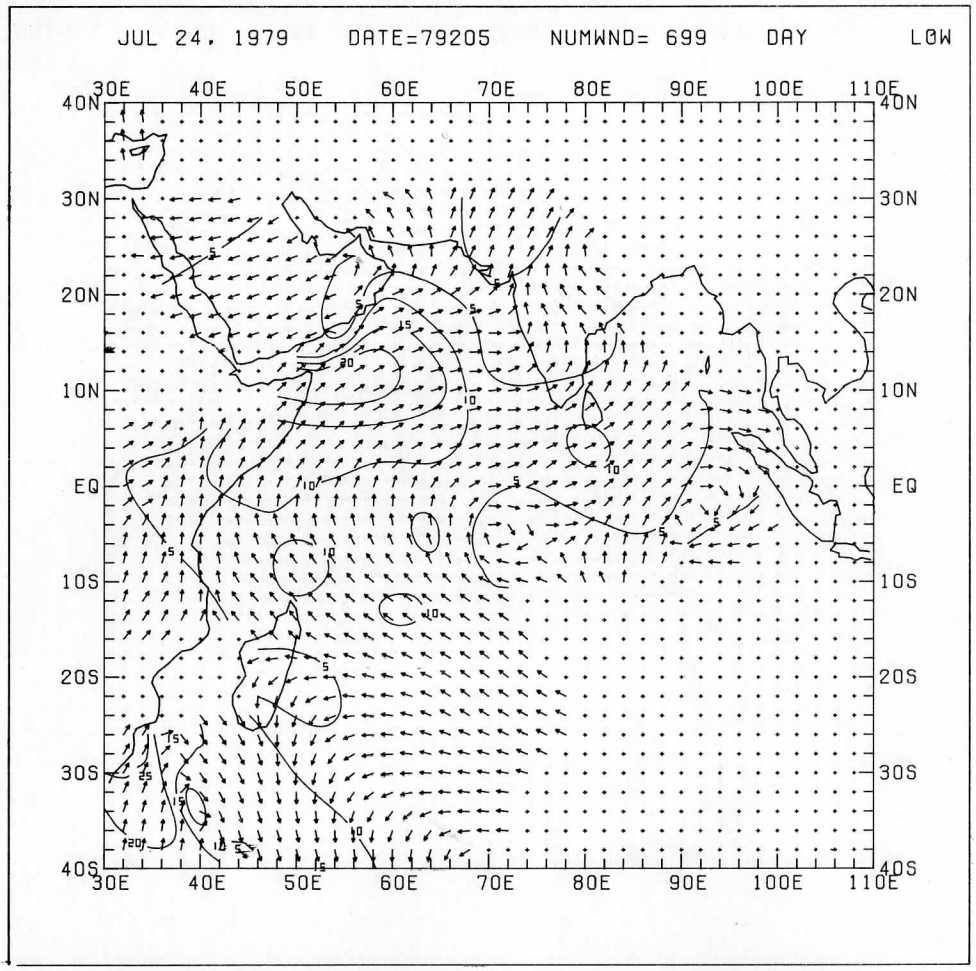

15E 30E 45E 60E 75E 90E 105E
TIROS-N 22 JUL 1979 222 GMT TO 23 JUL 1979 27GMT DAY IR

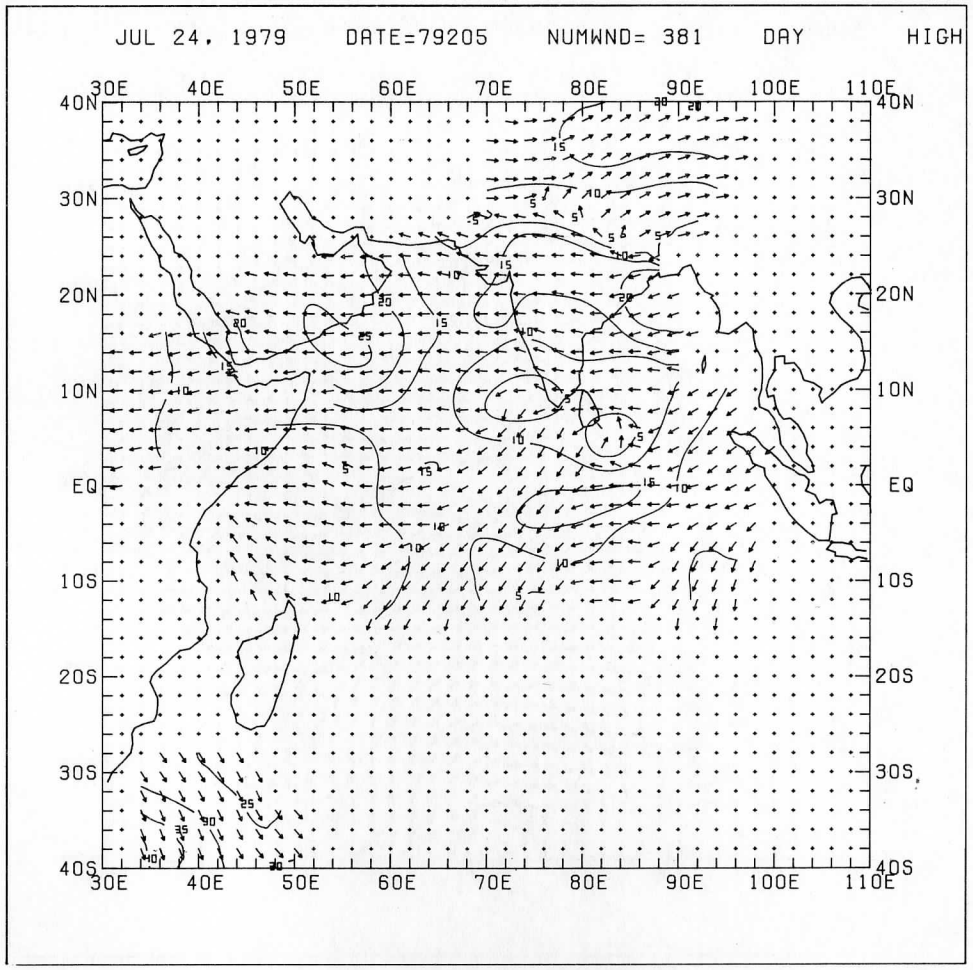

JUL 23, 1979 DATE=79204 NUMWND= 844 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

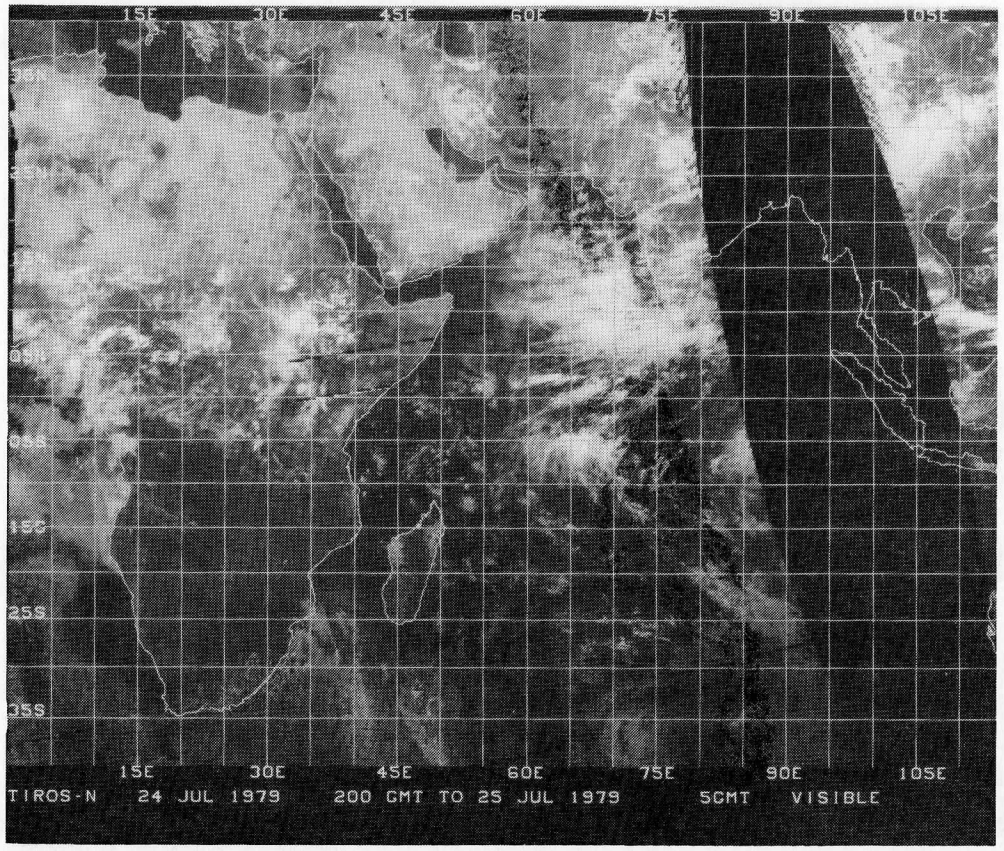

JUL 23, 1979 DATE=79204 NUMWND= 272 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

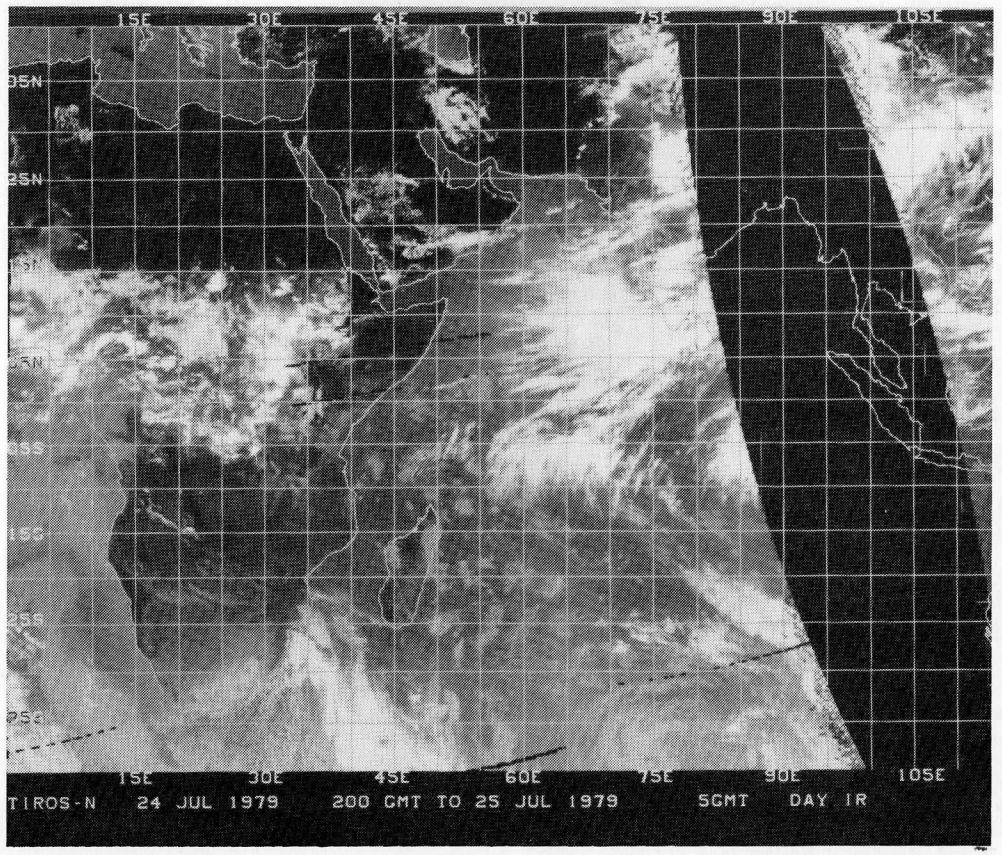

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 23 JUL 1979 212 GMT TO 24 JUL 1979 16GMT VISIBLE

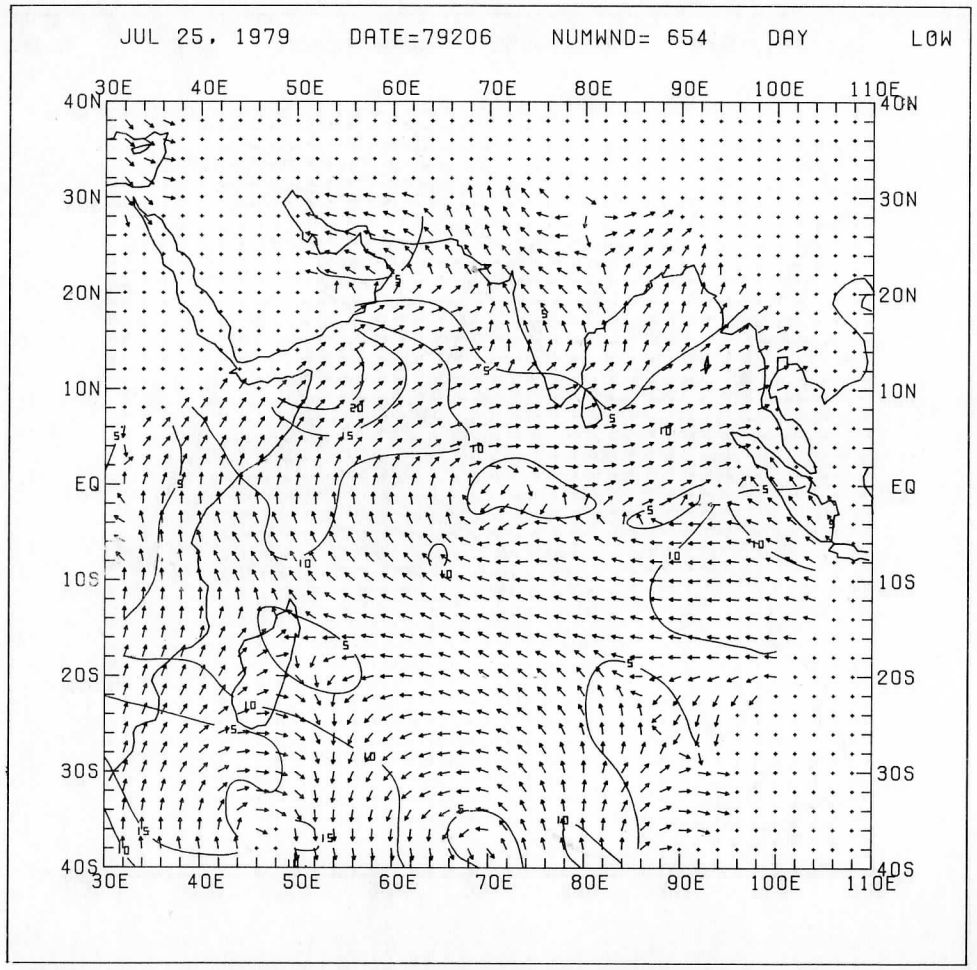

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 23 JUL 1979 212 GMT TO 24 JUL 1979 16GMT DAY IR

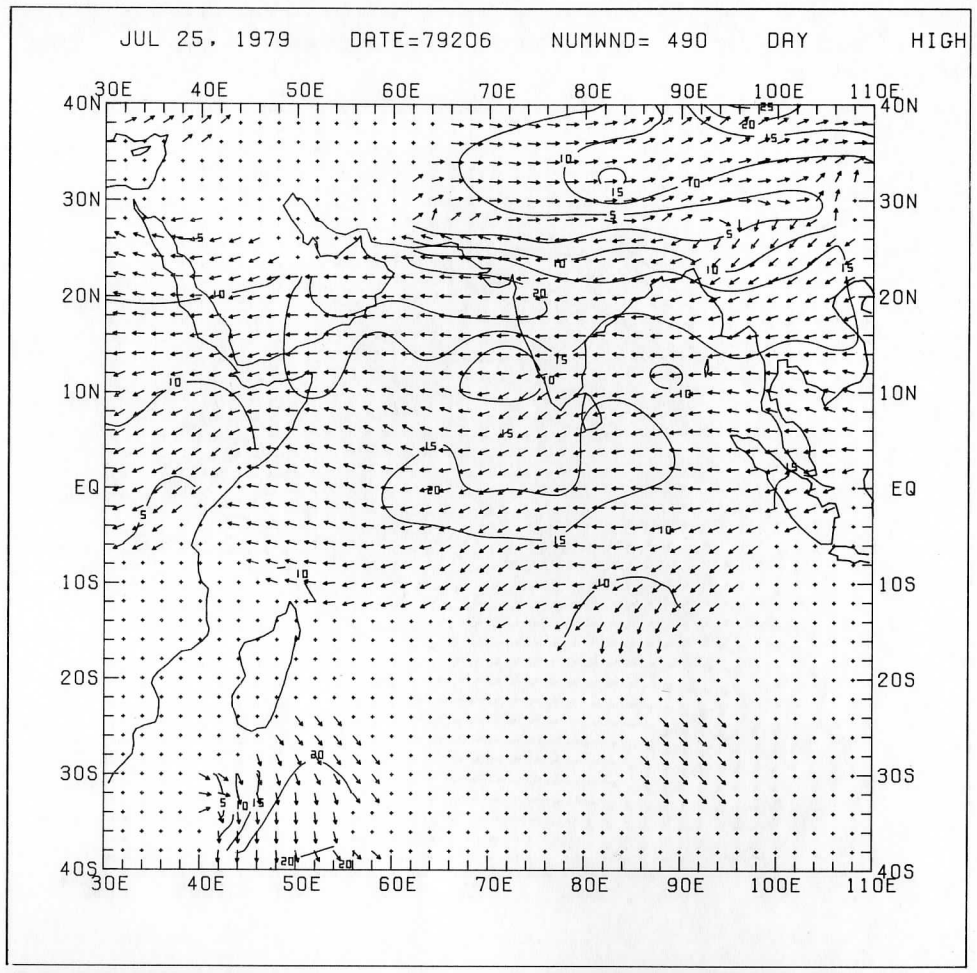

JUL 24, 1979 DATE=79205 NUMWND= 699 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

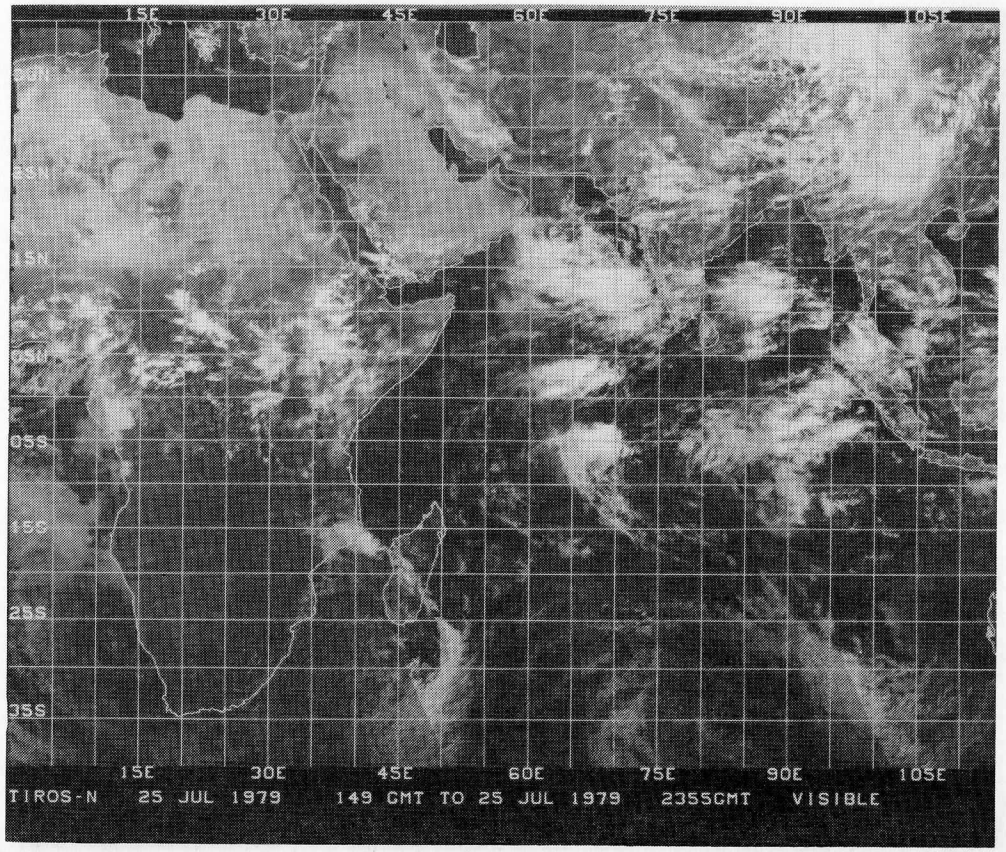

JUL 24, 1979 DATE=79205 NUMWND= 381 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

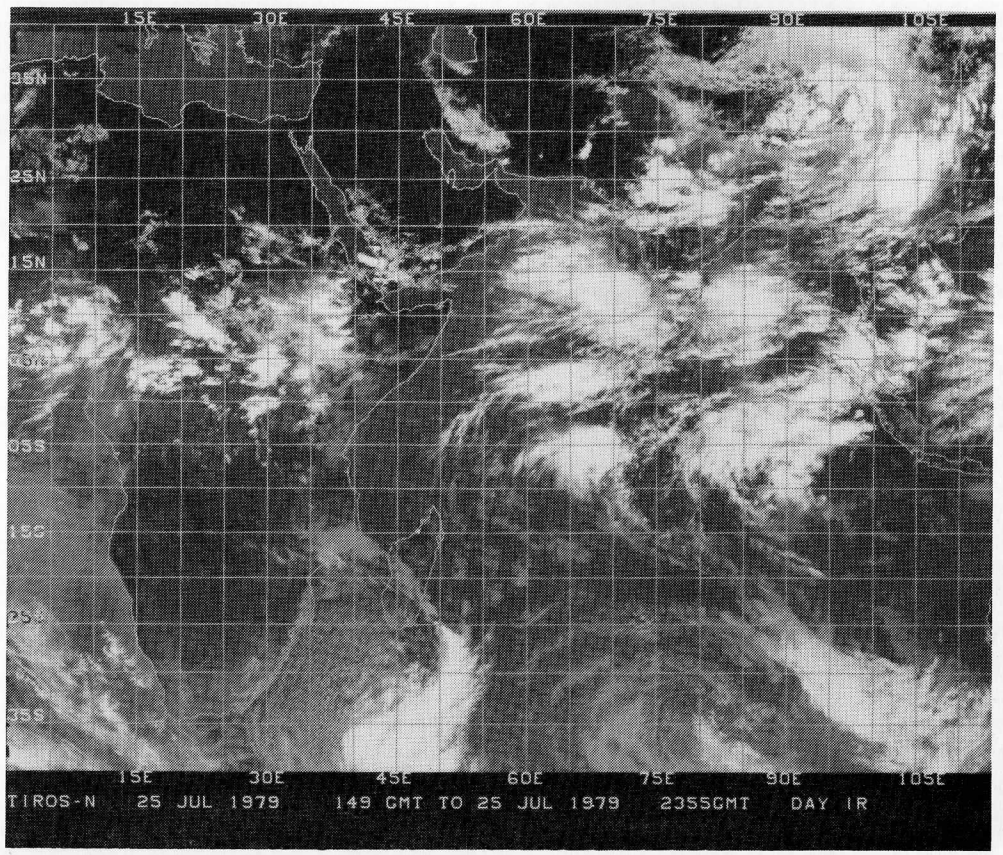

15E 30E 45E 60E 75E 90E 105E
25S
35S
TIROS-N 24 JUL 1979 200 GMT TO 25 JUL 1979 5GMT VISIBLE

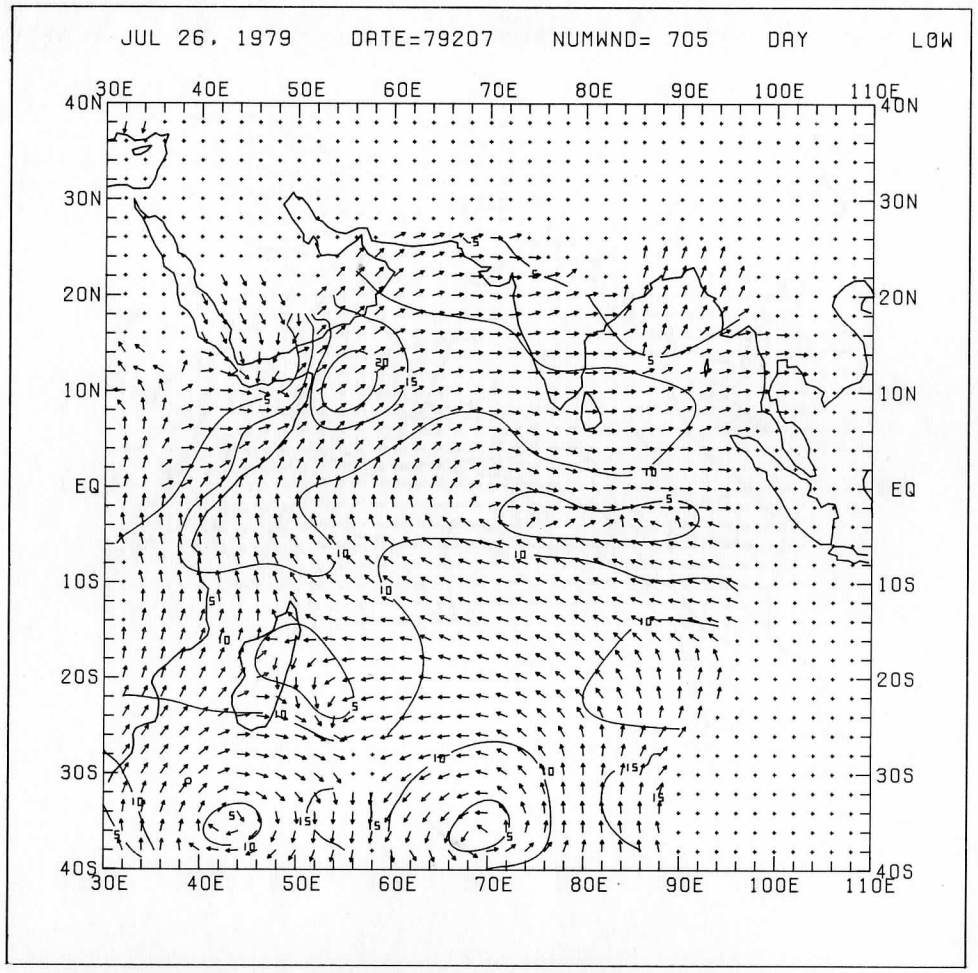

15E 30E 45E 60E 75E 90E 105E
TIROS-N 24 JUL 1979 200 GMT TO 25 JUL 1979 5GMT DAY IR

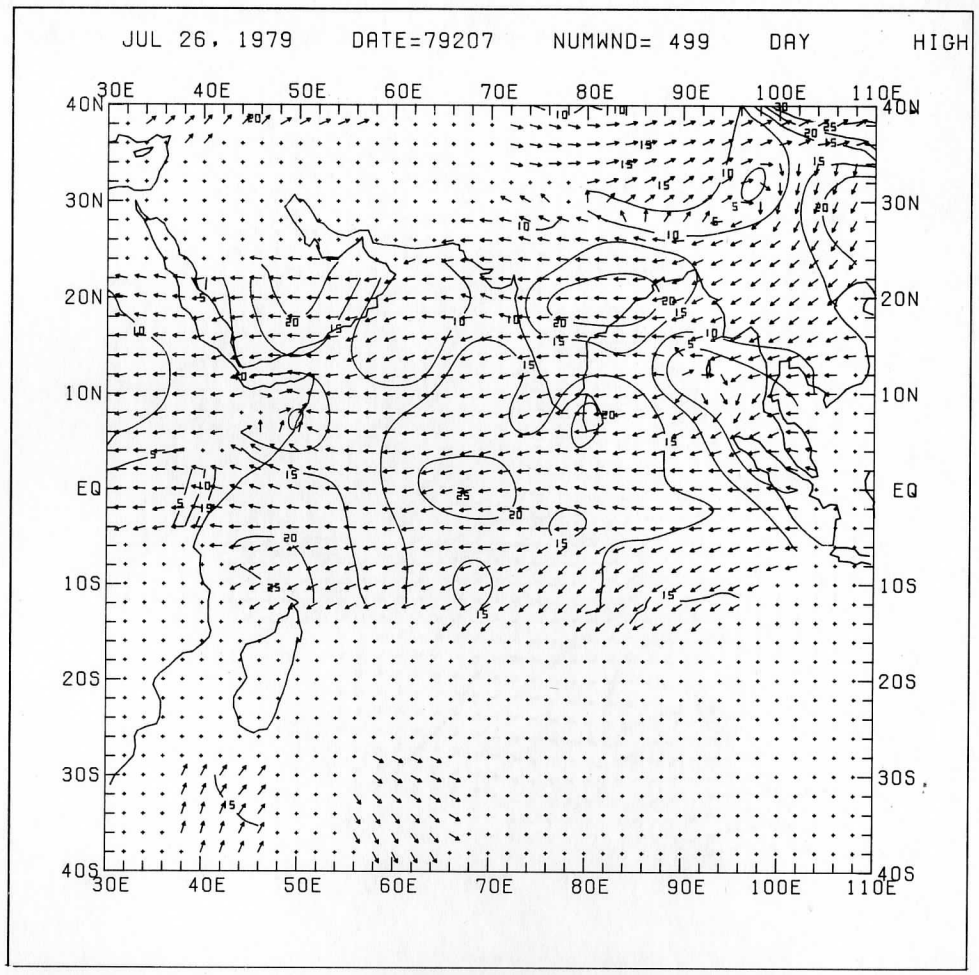

JUL 25, 1979 DATE=79206 NUMWND= 654 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

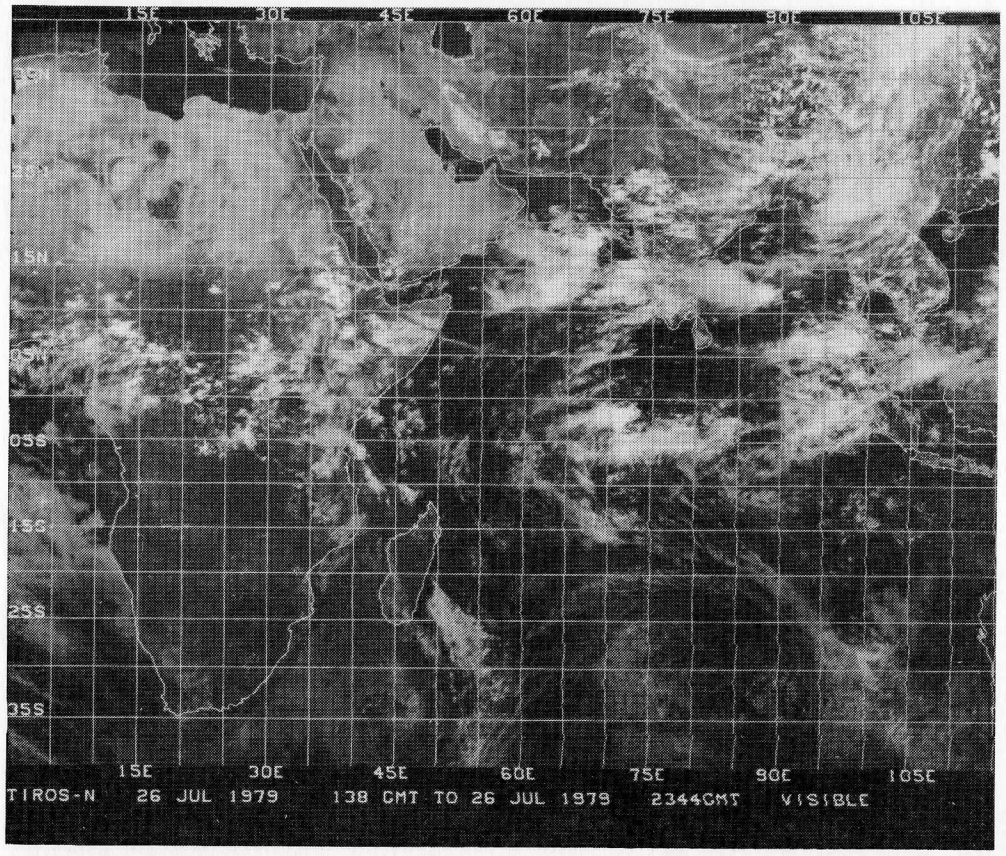

JUL 25, 1979 DATE=79206 NUMWND= 490 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

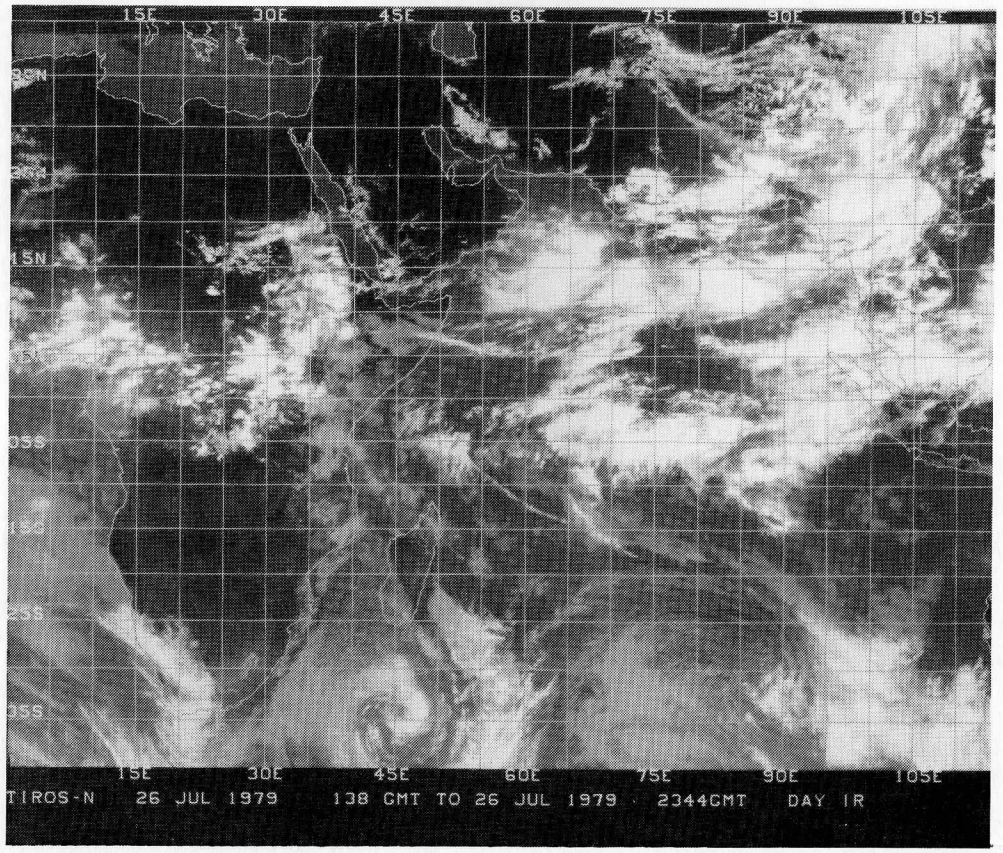

15E 30E 45E 60E 75E 90E 105E
TIROS-N 25 JUL 1979 149 GMT TO 25 JUL 1979 2355GMT VISIBLE

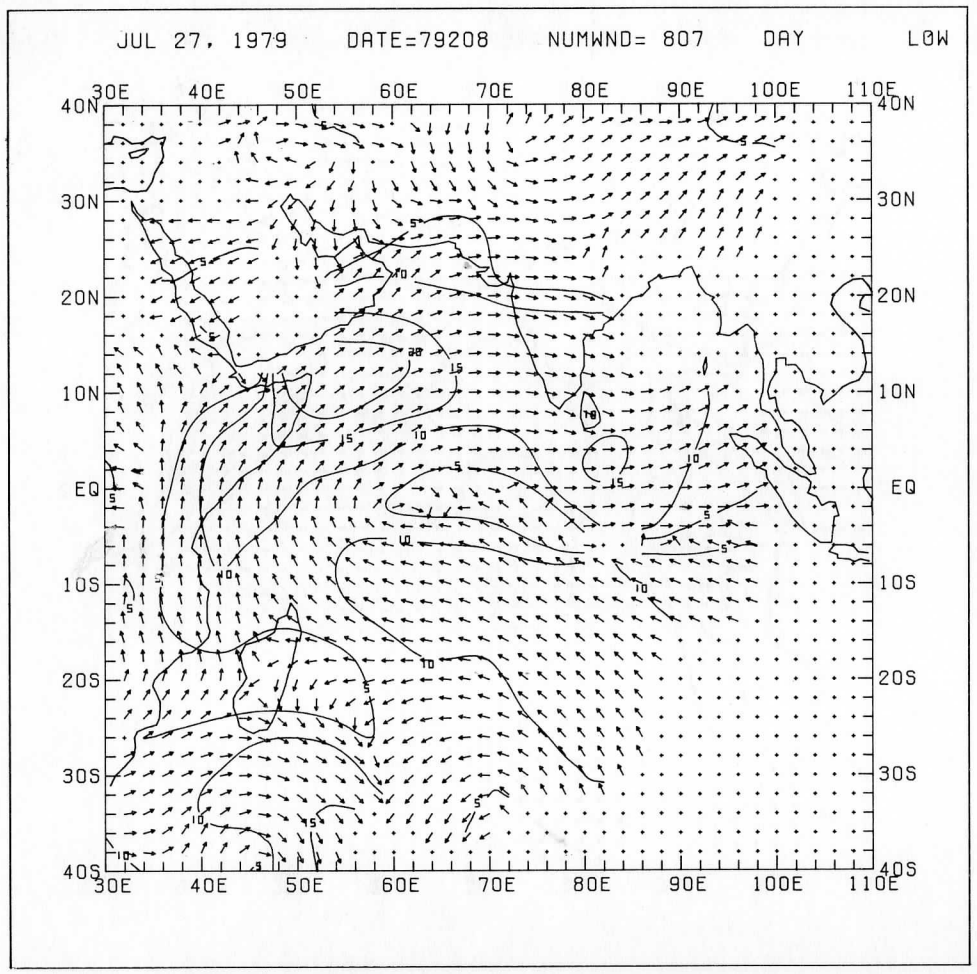

15E 30E 45E 60E 75E 90E 105E
TIROS-N 25 JUL 1979 149 GMT TO 25 JUL 1979 2355GMT DAY IR

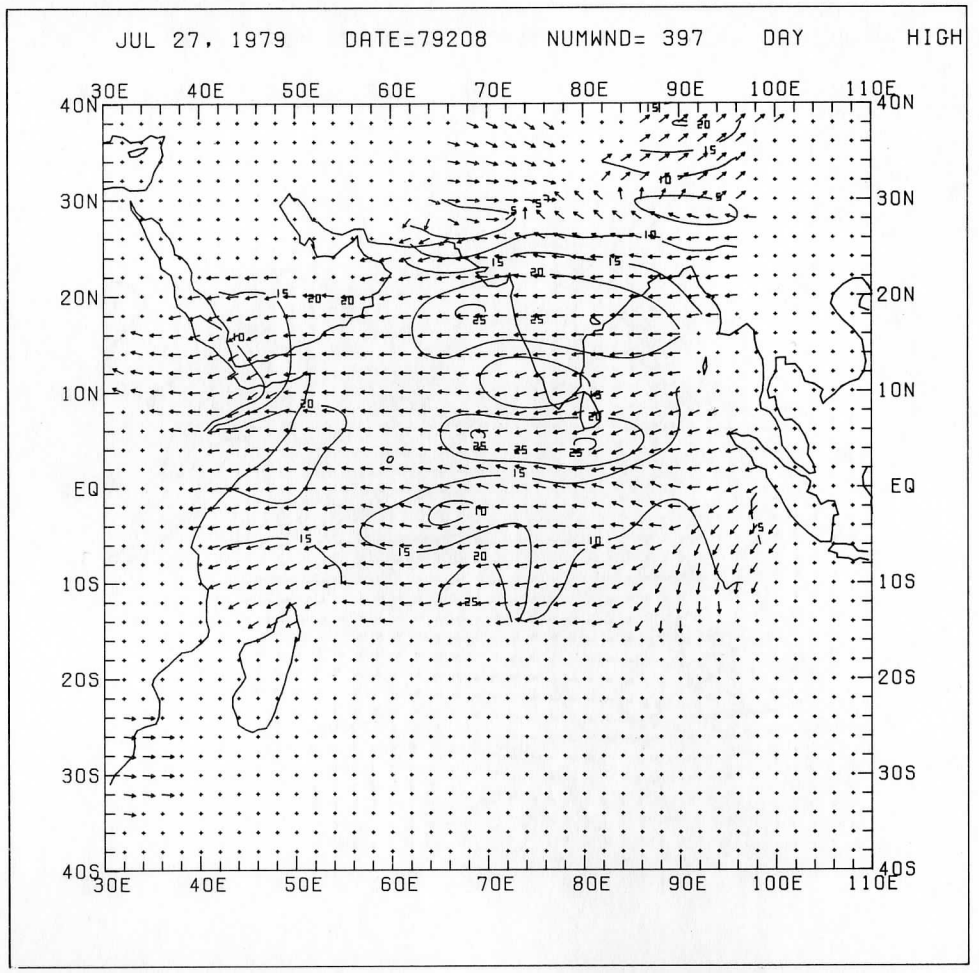

JUL 26, 1979 DATE=79207 NUMWND= 705 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

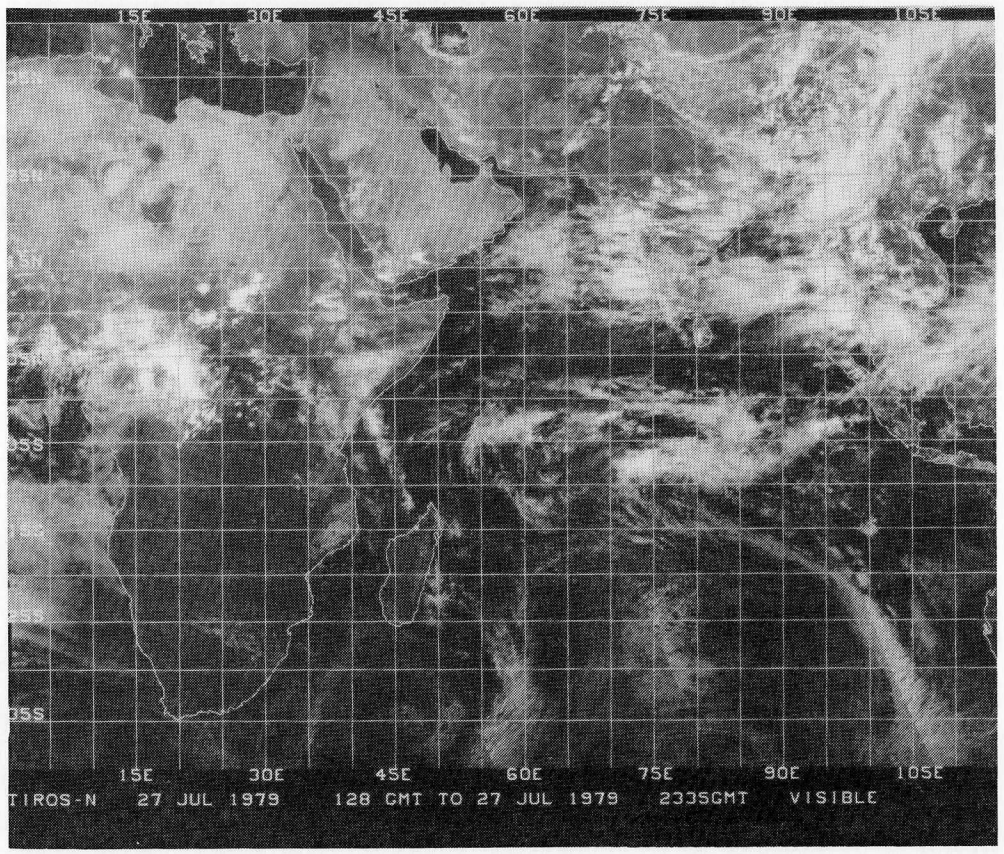

JUL 26, 1979 DATE=79207 NUMWND= 499 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

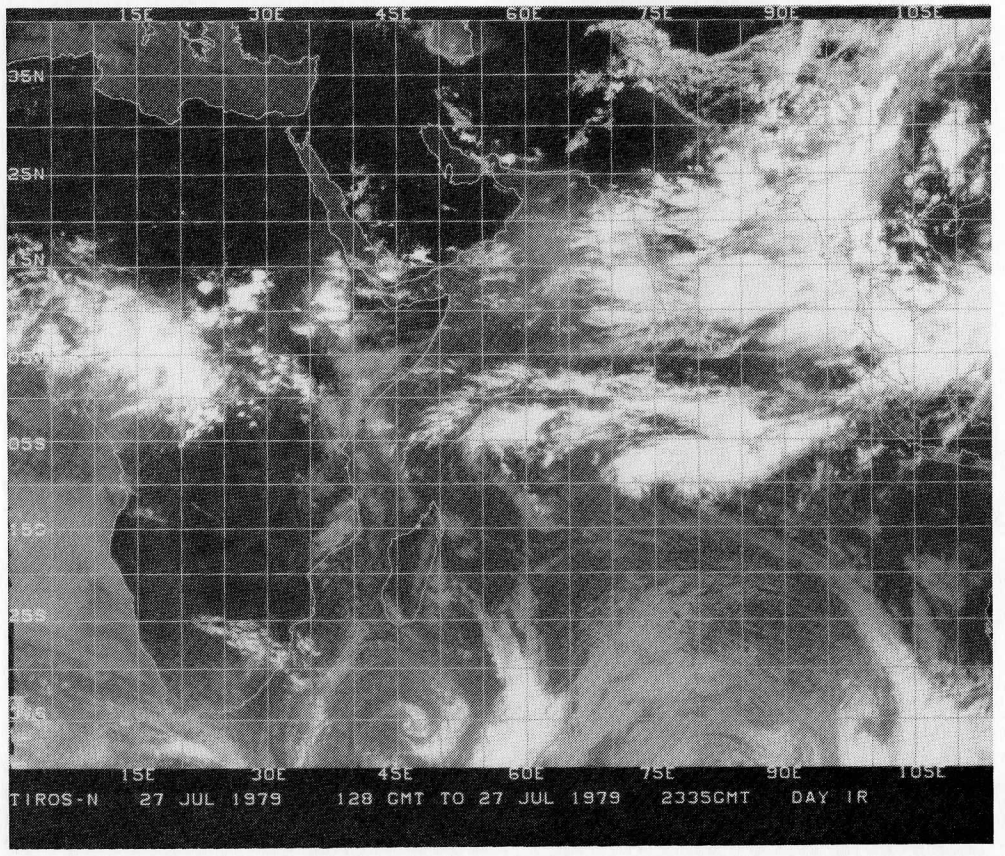

15E 30E 45E 60E 75E 90E 105E
TIROS-N 26 JUL 1979 138 GMT TO 26 JUL 1979 2344GMT VISIBLE

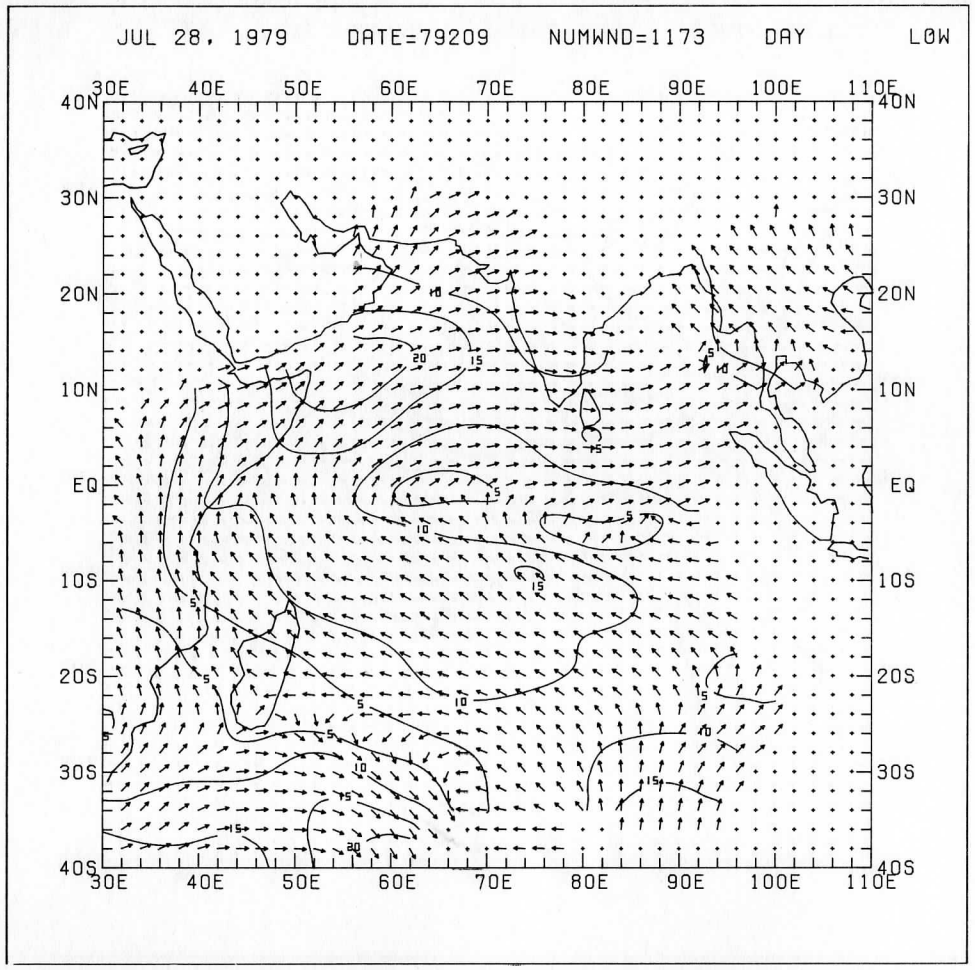

15E 30E 45E 60E 75E 90E 105E
TIROS-N 26 JUL 1979 138 GMT TO 26 JUL 1979 2344GMT DAY IR

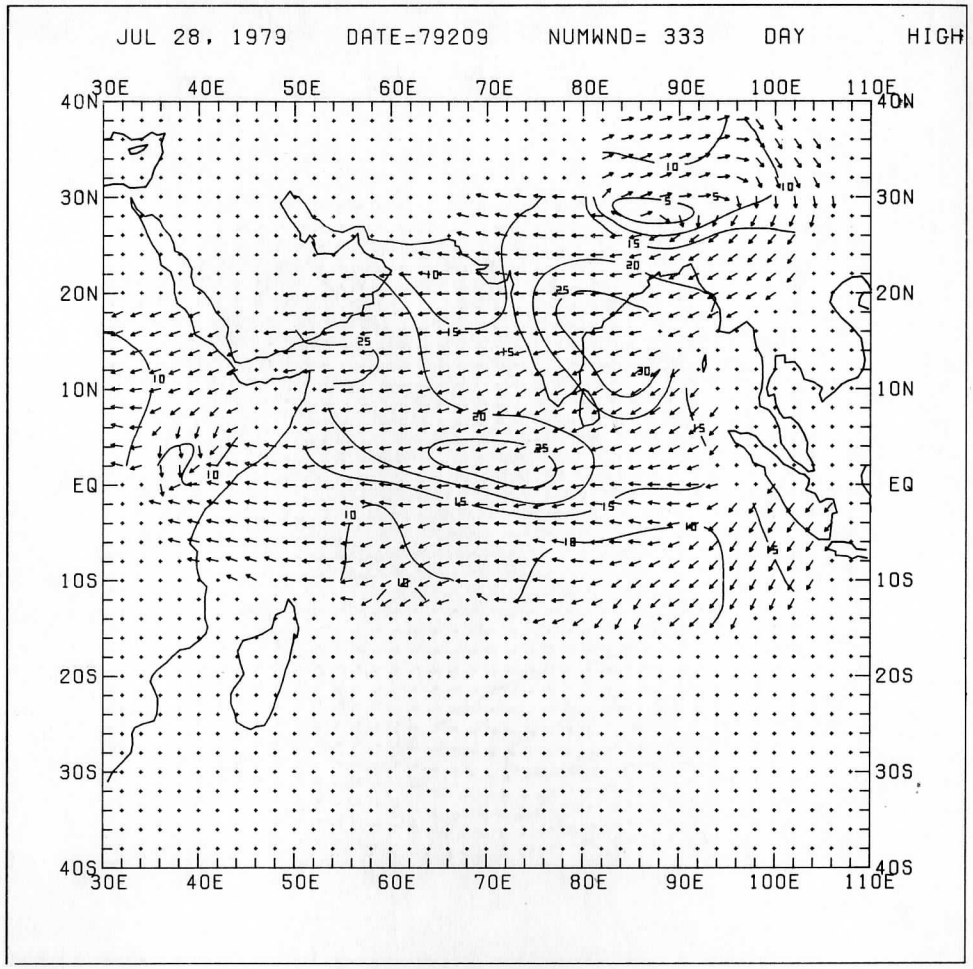

JUL 27, 1979 DATE=79208 NUMWND= 807 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

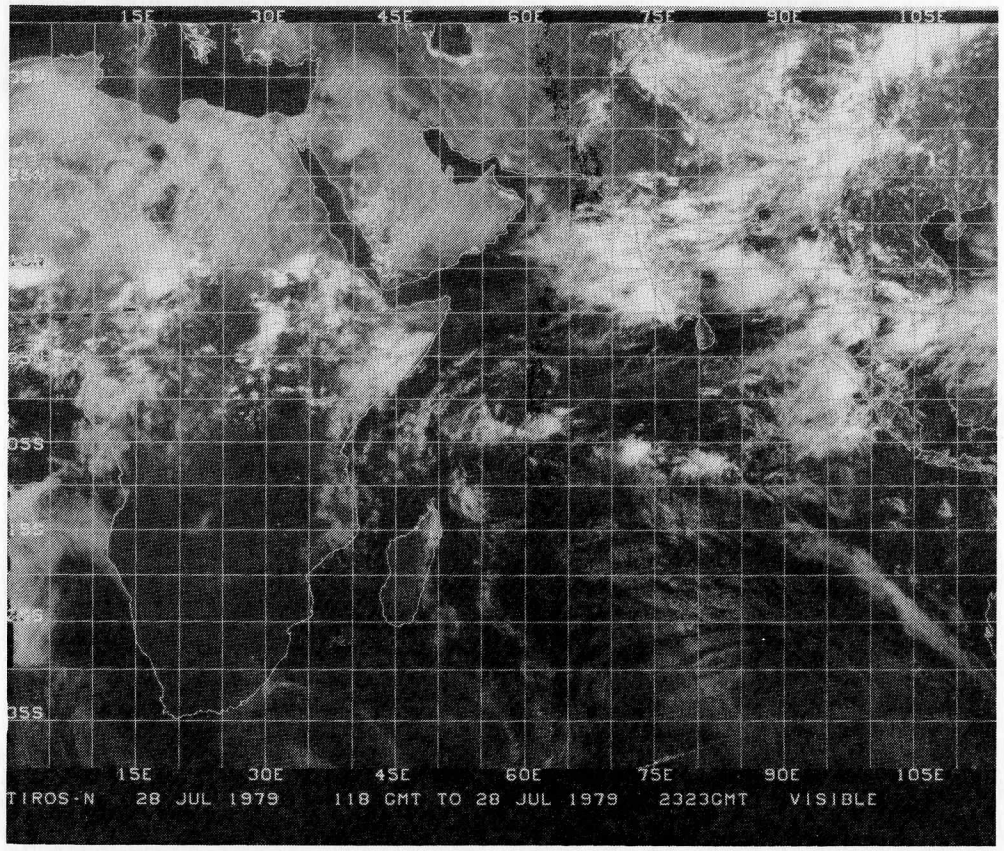

JUL 27, 1979 DATE=79208 NUMWND= 397 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

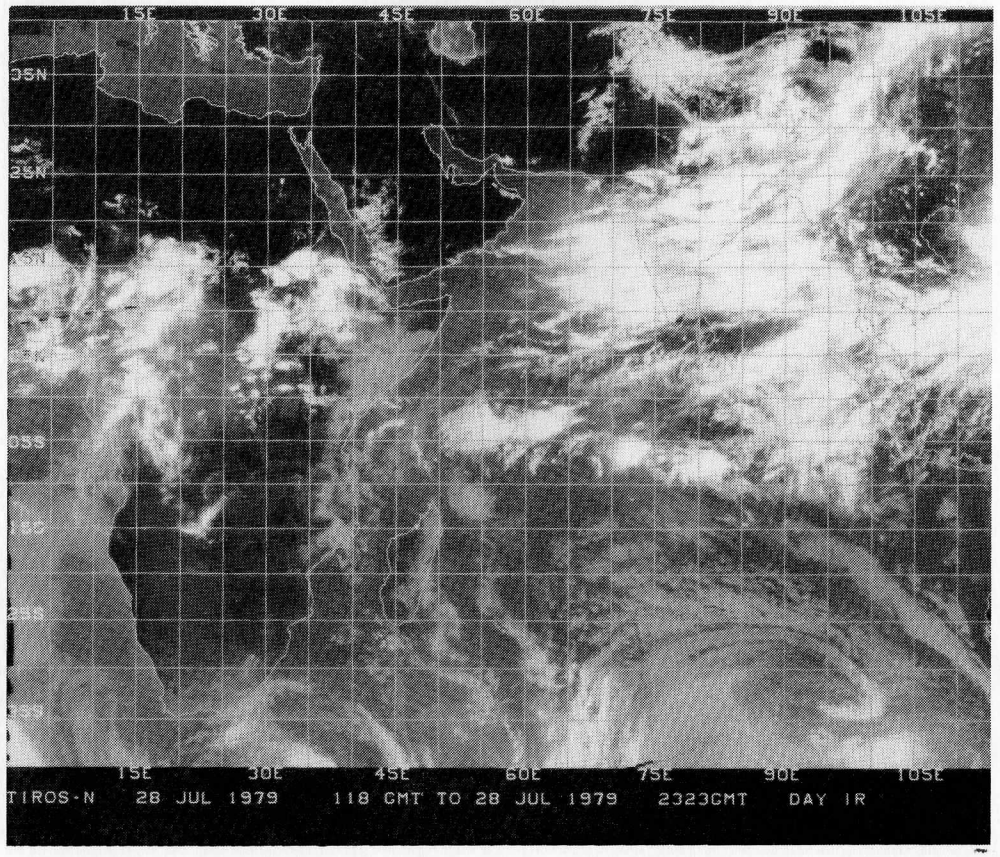

15E 30E 45E 60E 75E 90E 105E
TIROS-N 27 JUL 1979 128 GMT TO 27 JUL 1979 2335GMT VISIBLE

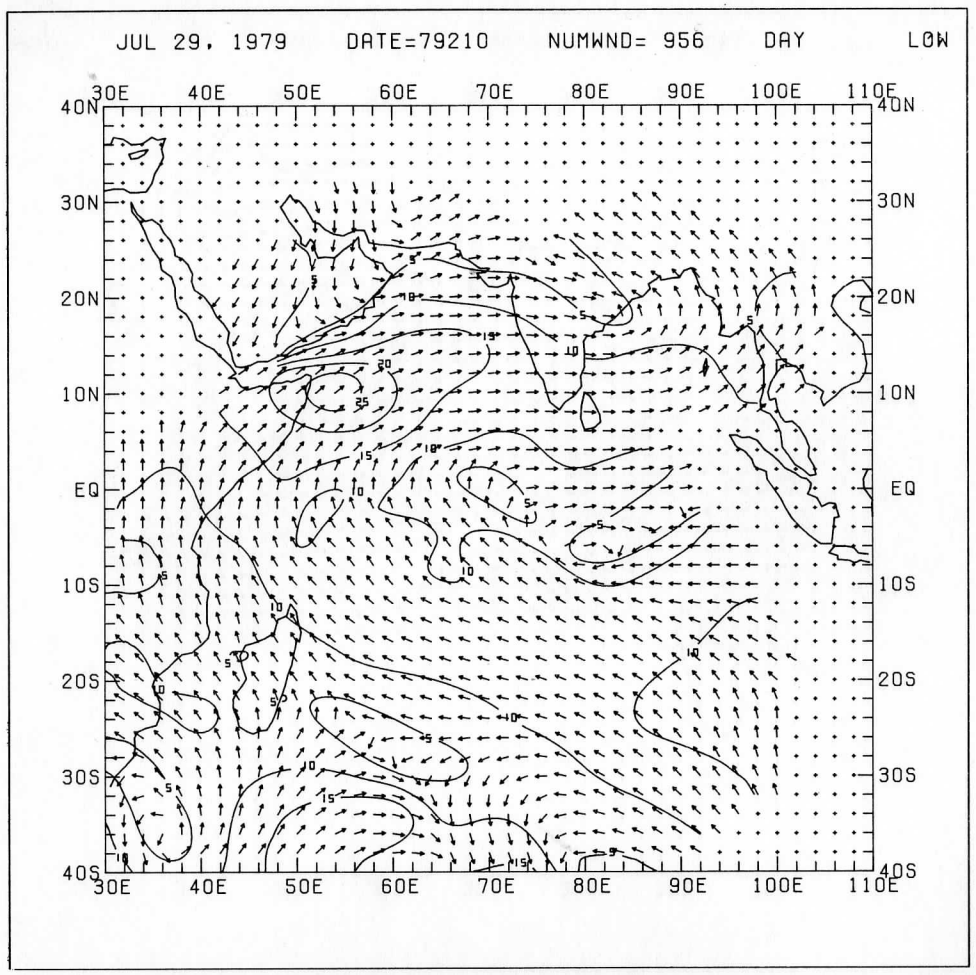

15E 30E 45E 60E 75E 90E 105E
35N 25N
TIROS-N 27 JUL 1979 128 GMT TO 27 JUL 1979 2335GMT DAY IR

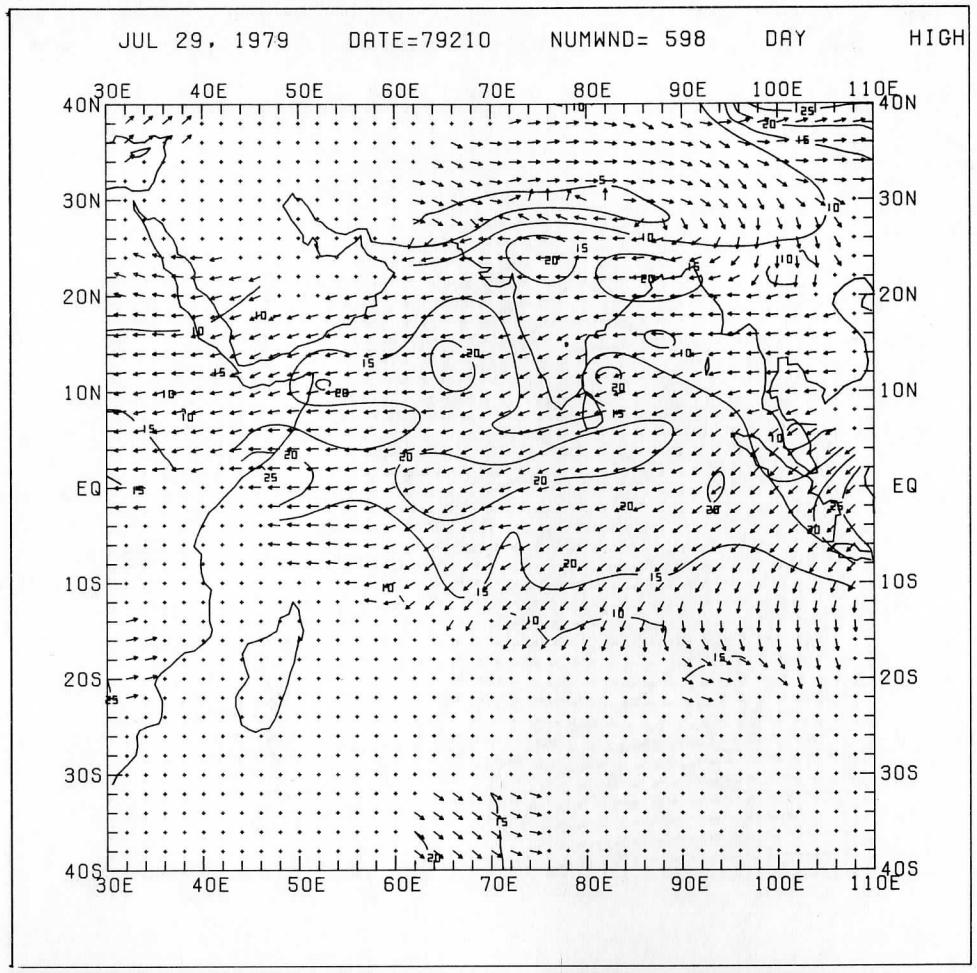

JUL 28, 1979 DATE=79209 NUMWND=1173 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

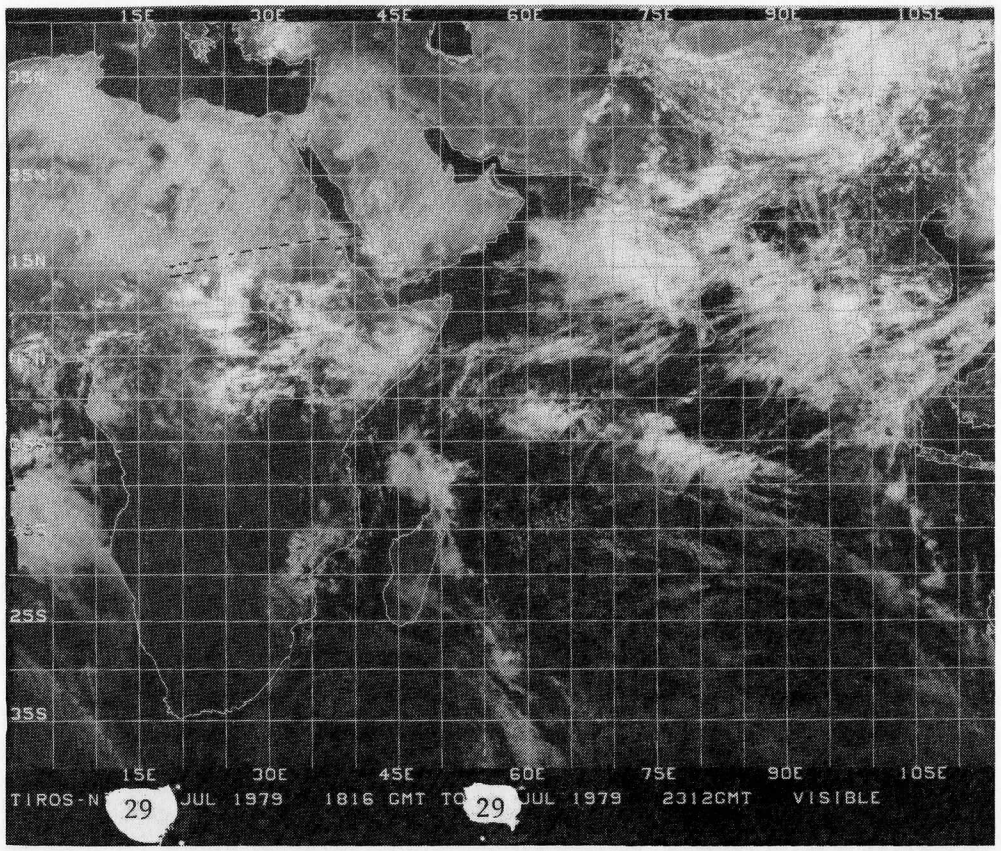

JUL 28, 1979 DATE=79209 NUMWND= 333 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

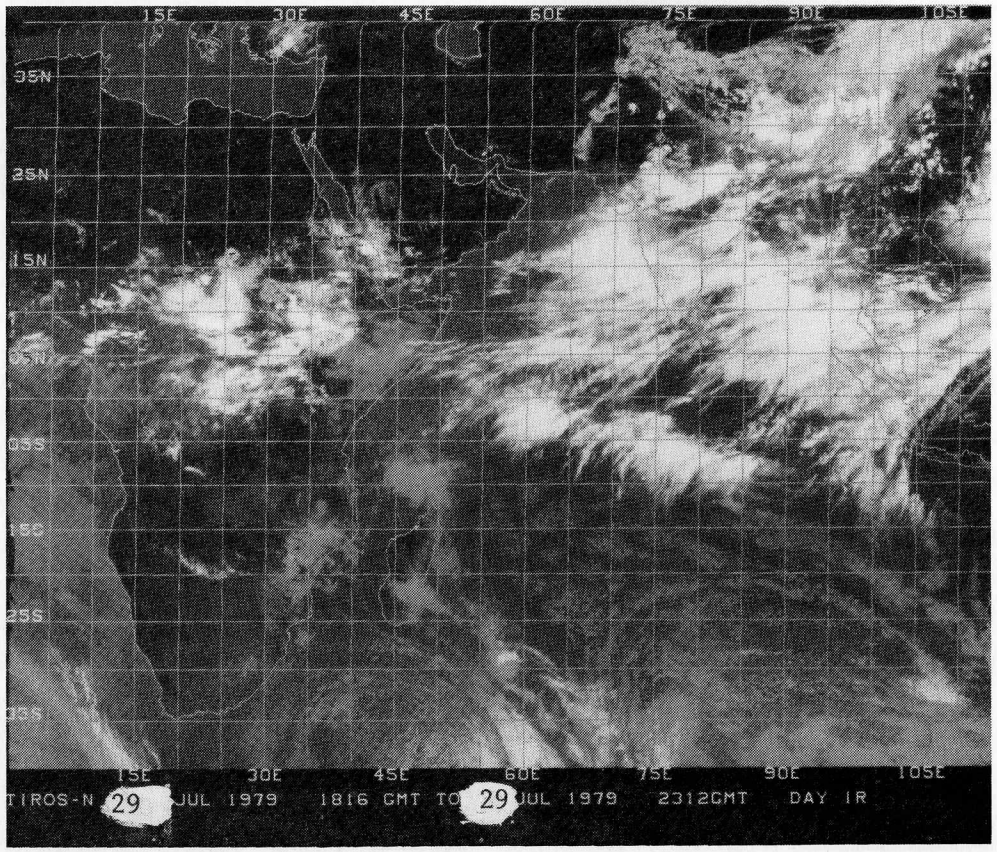

15E 30E 45E 60E 75E 90E 105E
TIROS-N 28 JUL 1979 118 GMT TO 28 JUL 1979 2323GMT VISIBLE

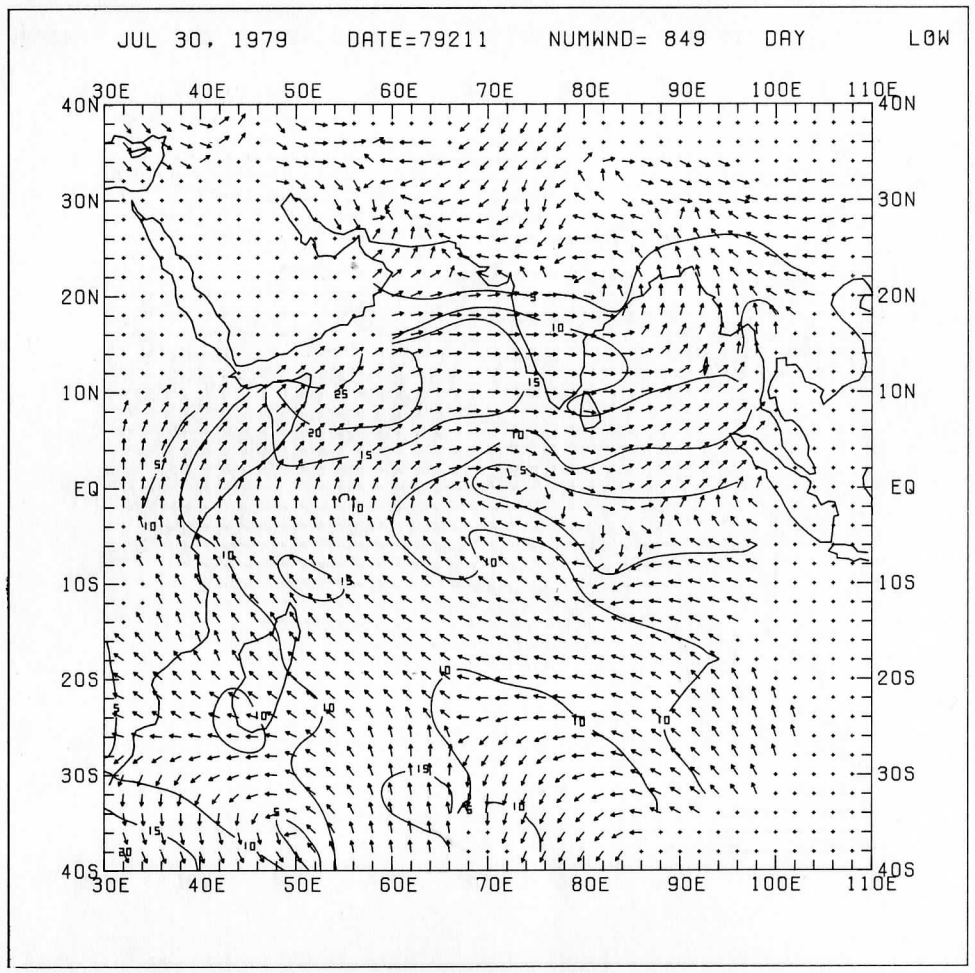

15E 30E 45E 60E 75E 90E 105E
TIROS-N 28 JUL 1979 118 GMT TO 28 JUL 1979 2323GMT DAY IR

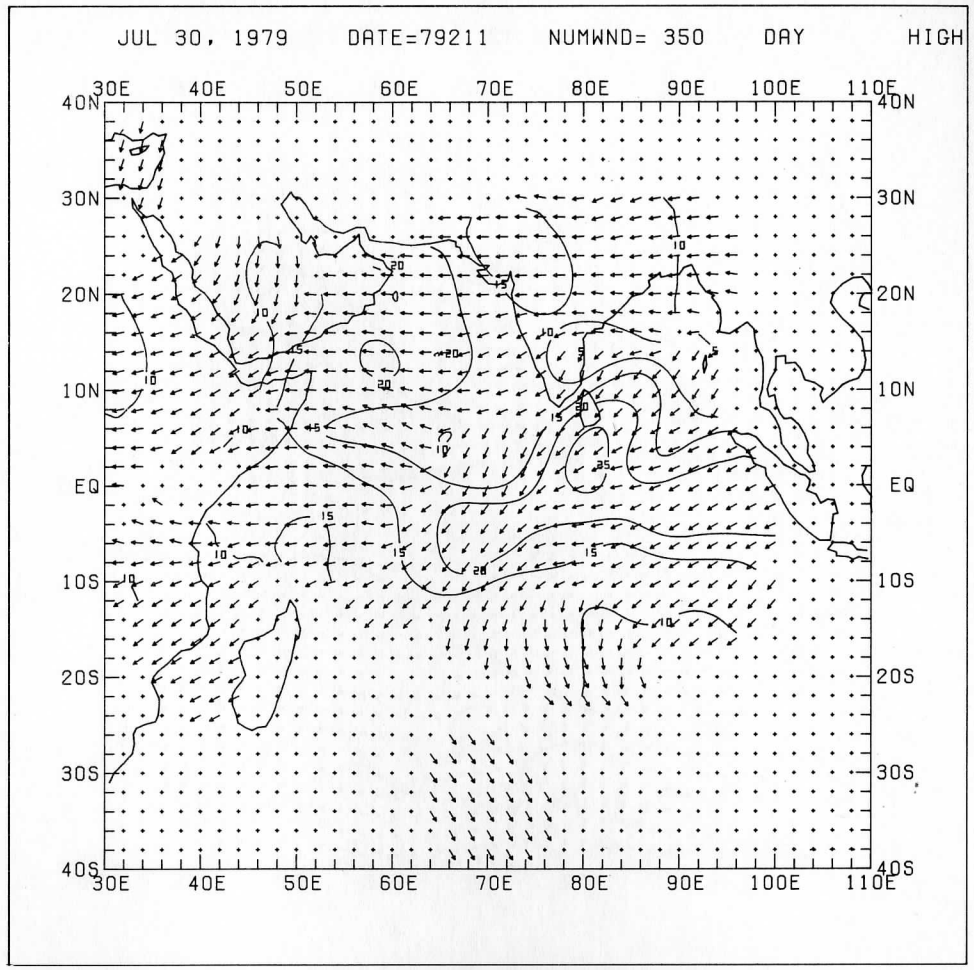

JUL 29, 1979 DATE=79210 NUMWND= 956 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

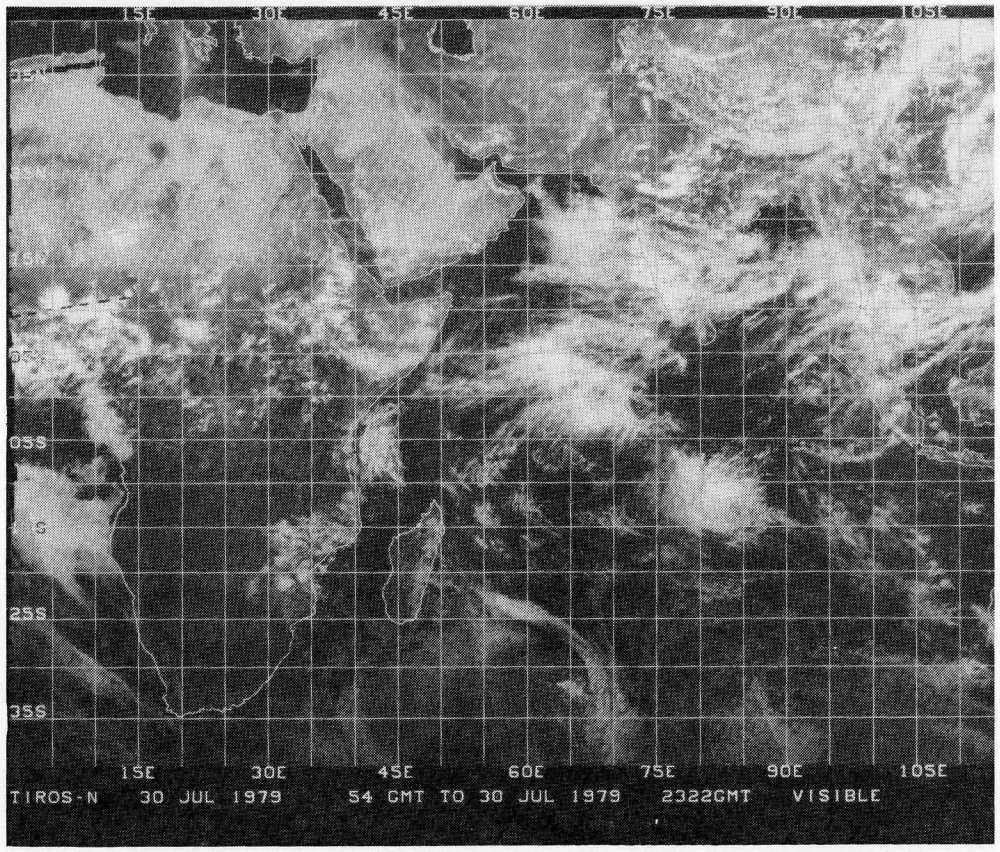

JUL 29, 1979 DATE=79210 NUMWND= 598 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

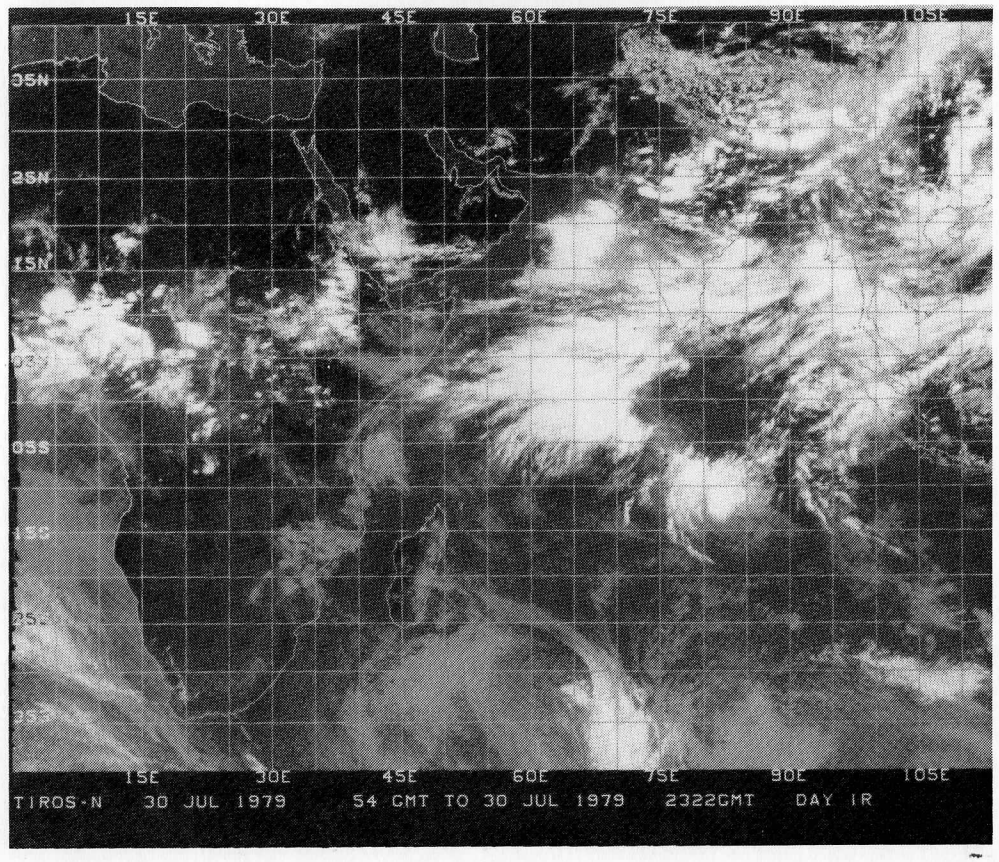

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 5N 5S 15S 25S 35S
TIROS-N 29 JUL 1979 1816 GMT TO 29 JUL 1979 2312GMT VISIBLE

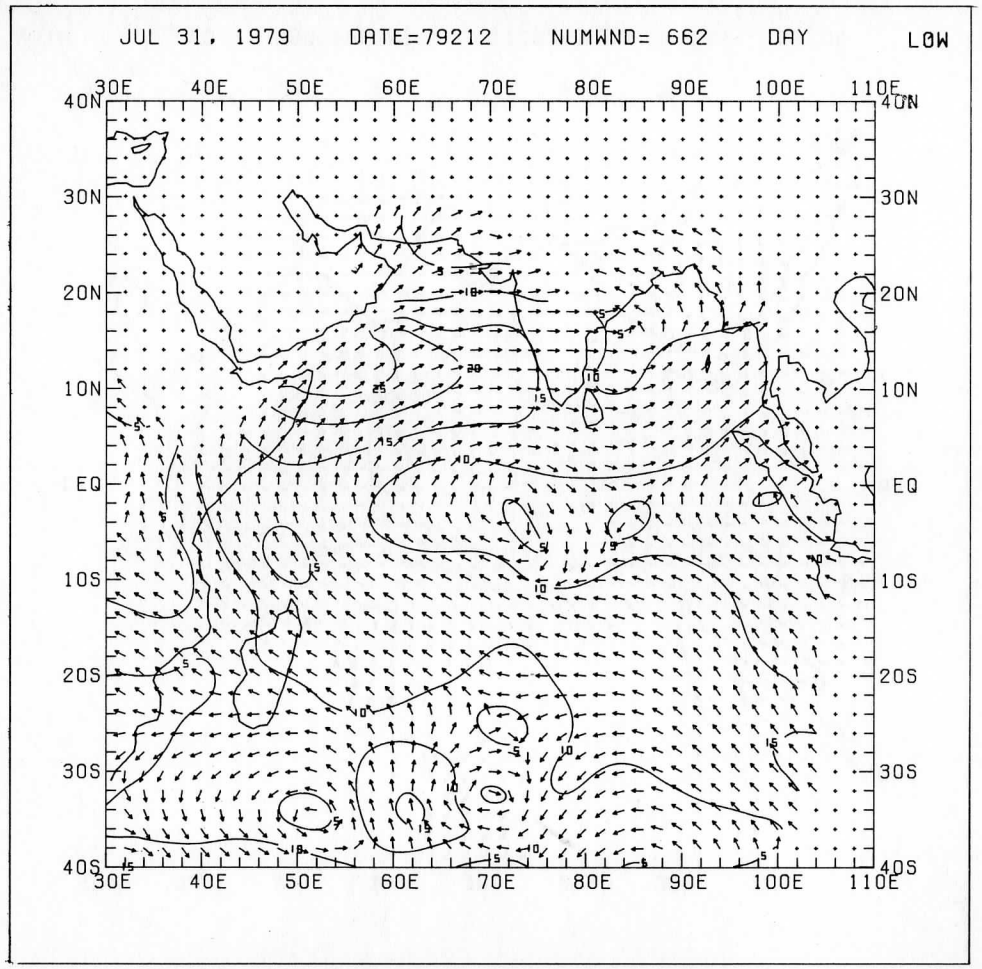

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 5N 5S 15S 25S 35S
TIROS-N 29 JUL 1979 1816 GMT TO 29 JUL 1979 2312GMT DAY IR

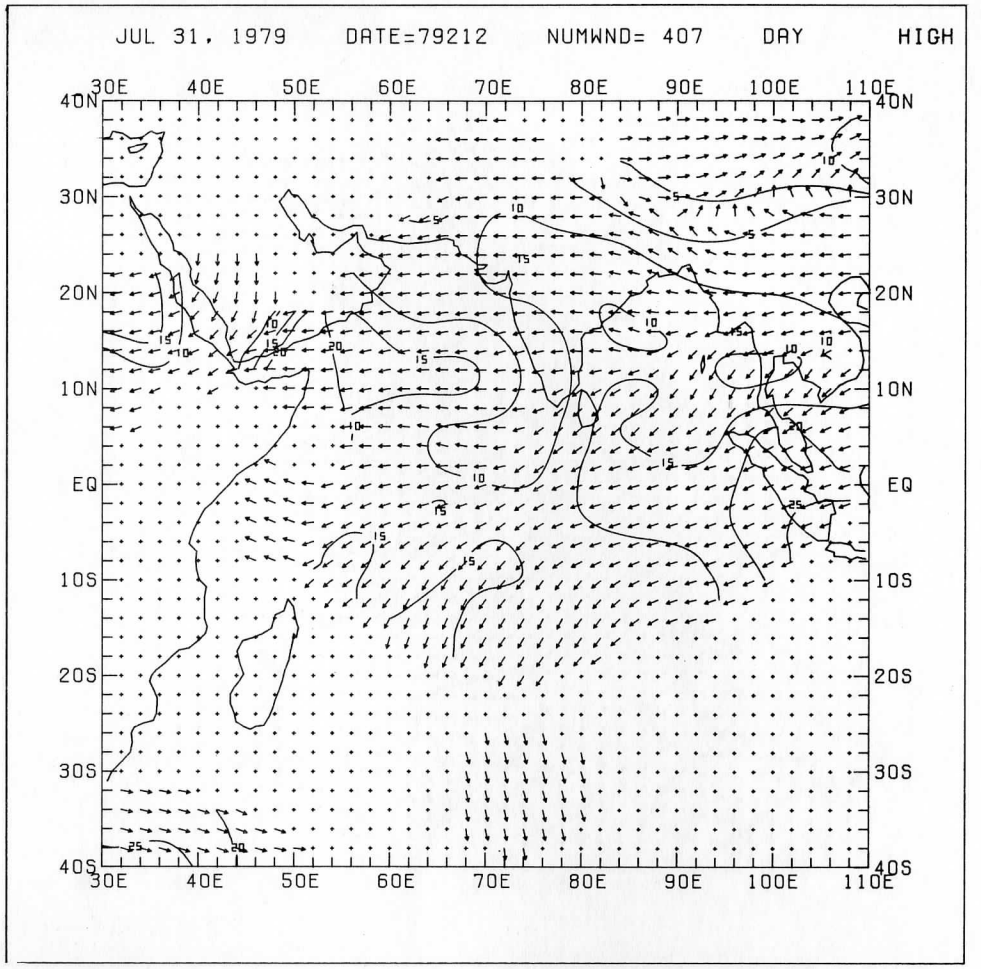

JUL 30, 1979 DATE=79211 NUMWND= 849 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

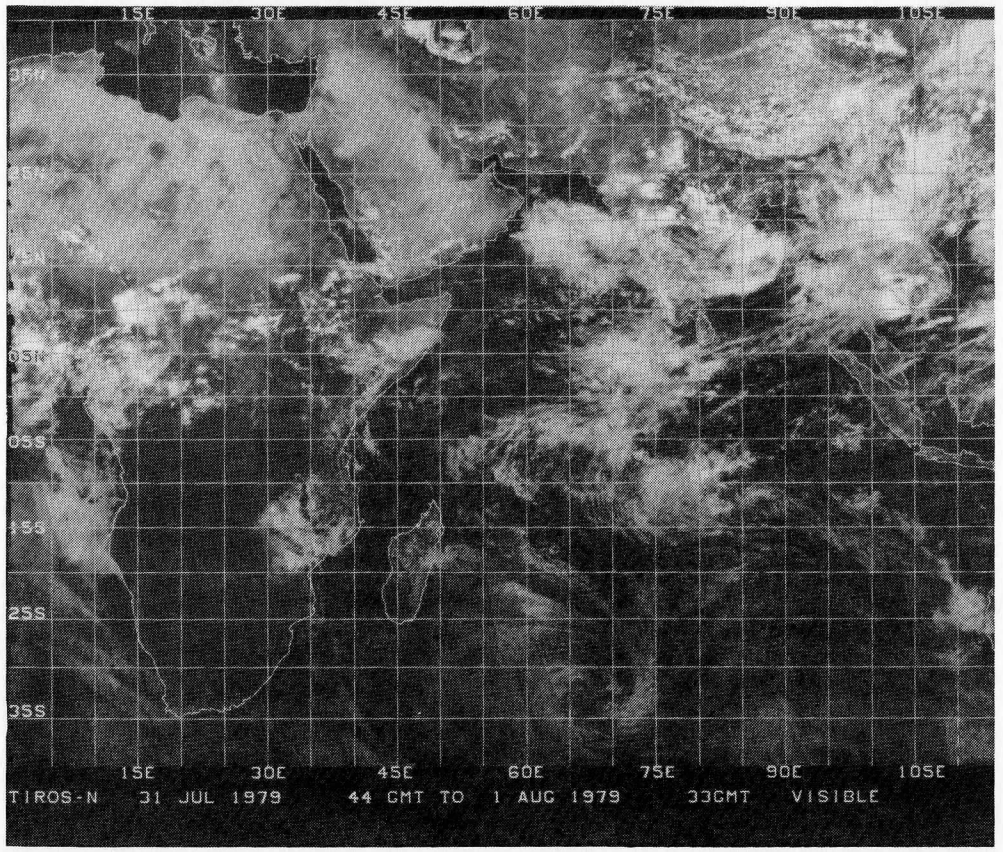

JUL 30, 1979 DATE=79211 NUMWND= 350 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

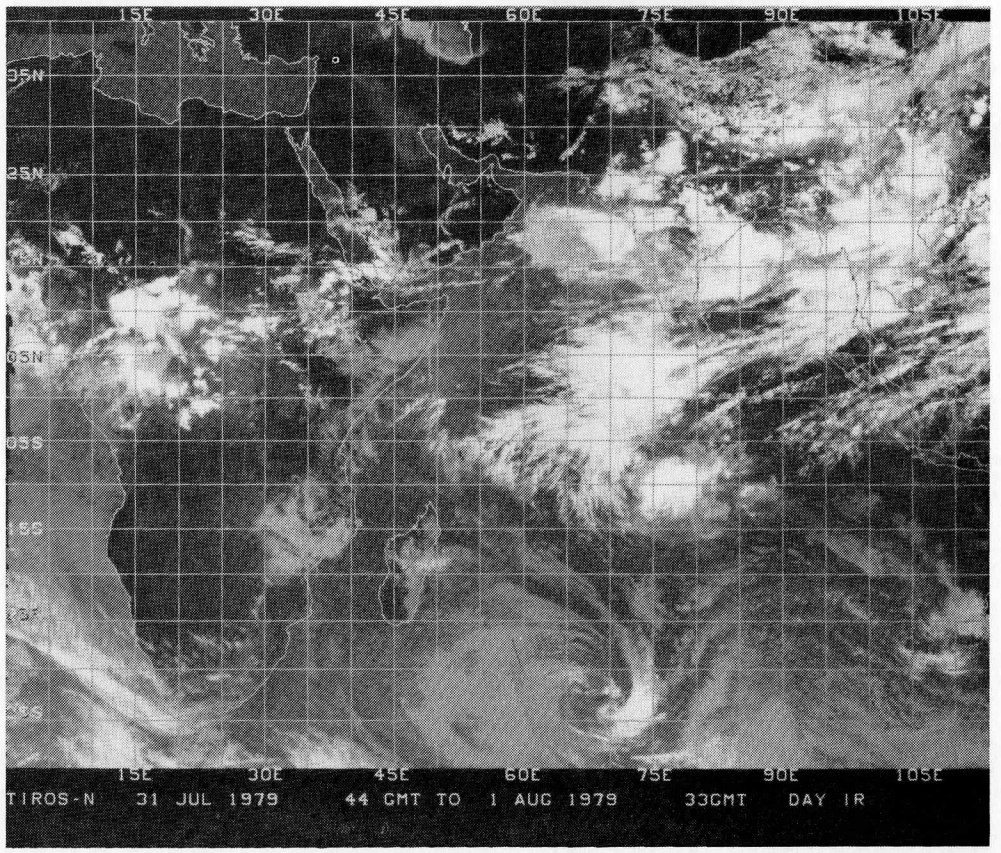

15E 30E 45E 60E 75E 90E 105E
TIROS-N 30 JUL 1979 54 GMT TO 30 JUL 1979 2322GMT VISIBLE


15E 30E 45E 60E 75E 90E 105E
TIROS-N 30 JUL 1979 54 GMT TO 30 JUL 1979 2322GMT DAY IR


JUL 31, 1979 DATE=79212 NUMWND= 662 DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

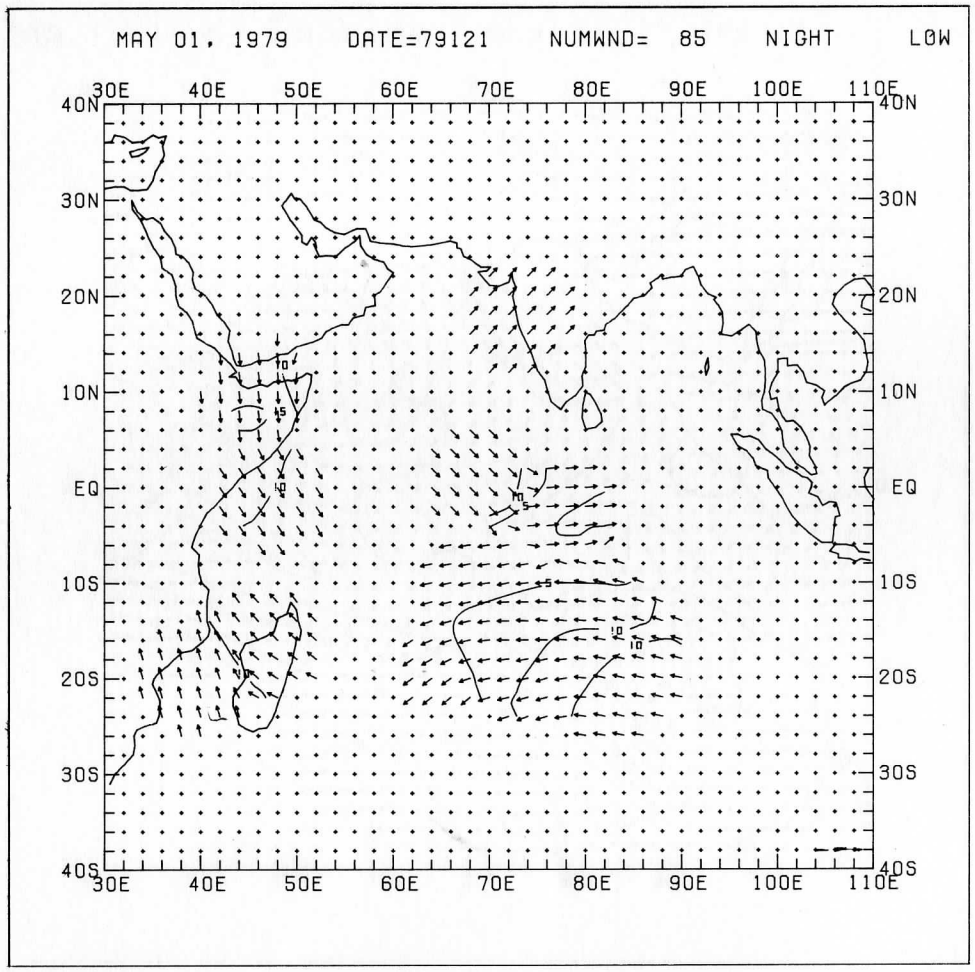

JUL 31, 1979 DATE=79212 NUMWND= 407 DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

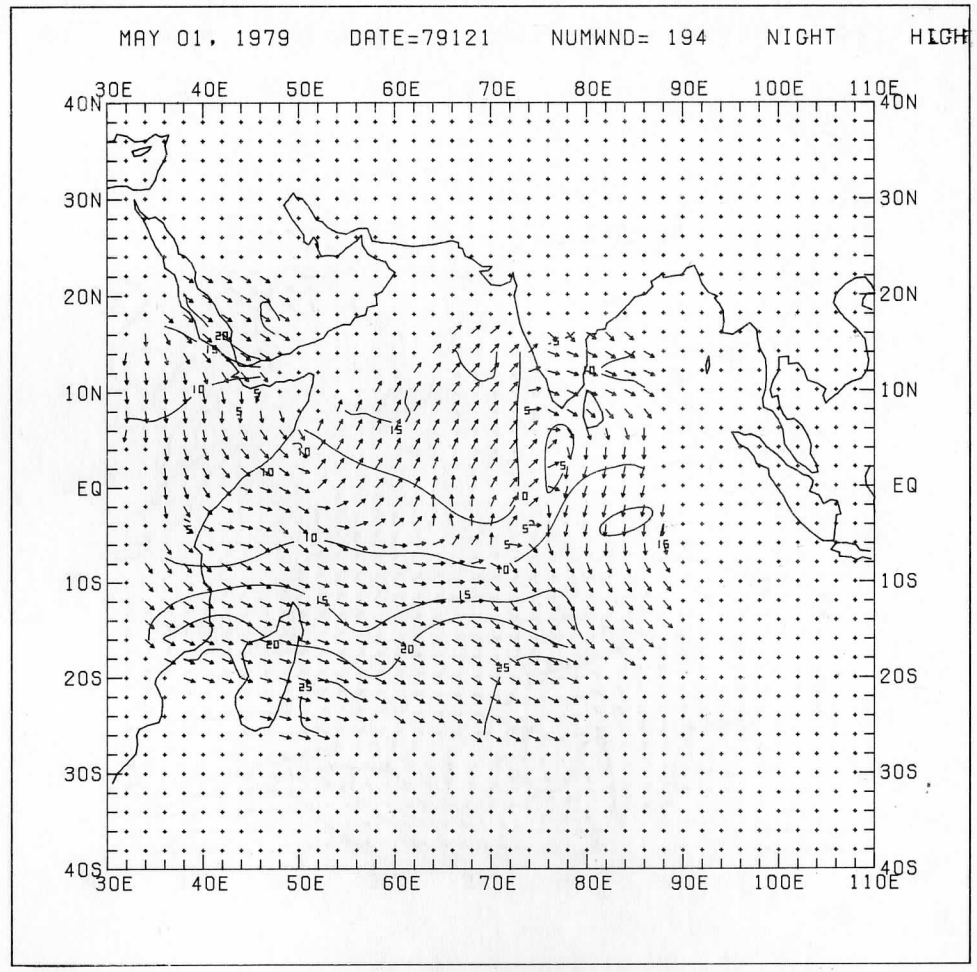

15E 30E 45E 60E 75E 90E 105E
15E 30E 45E 60E 75E 90E 105E
TIROS-N 31 JUL 1979 44 GMT TO 1 AUG 1979 33GMT VISIBLE

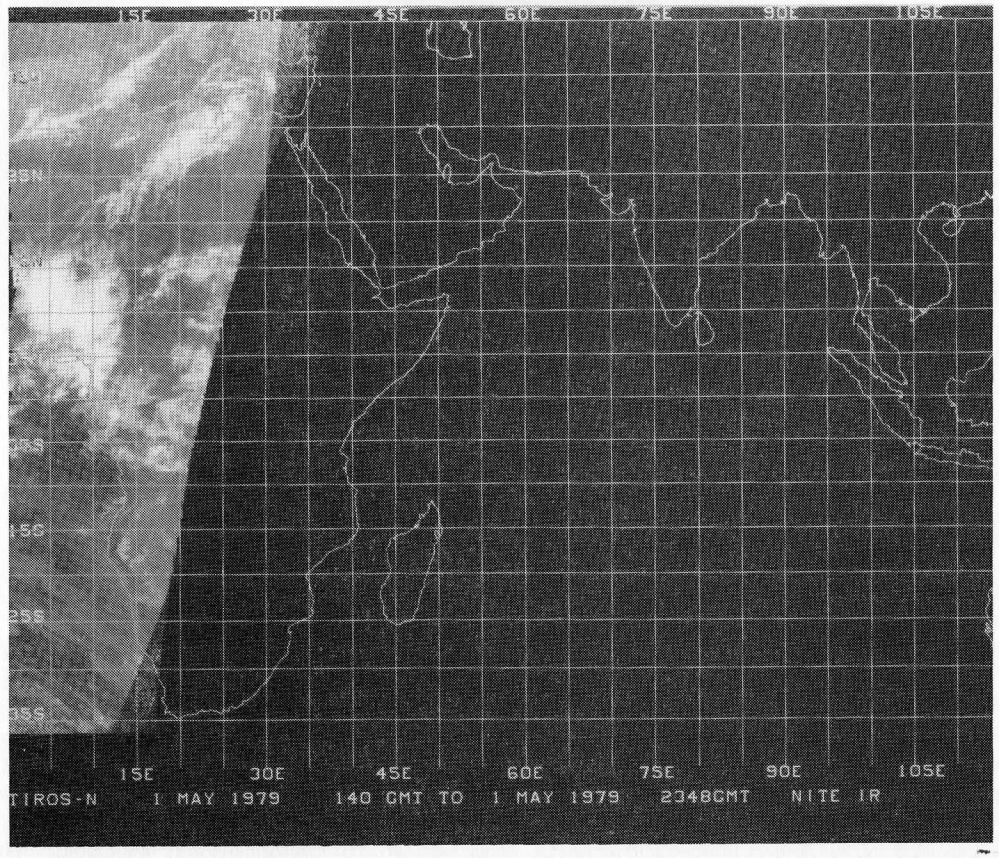

15E 30E 45E 60E 75E 90E 105E
15E 30E 45E 60E 75E 90E 105E
TIROS-N 31 JUL 1979 44 GMT TO 1 AUG 1979 33GMT DAY IR

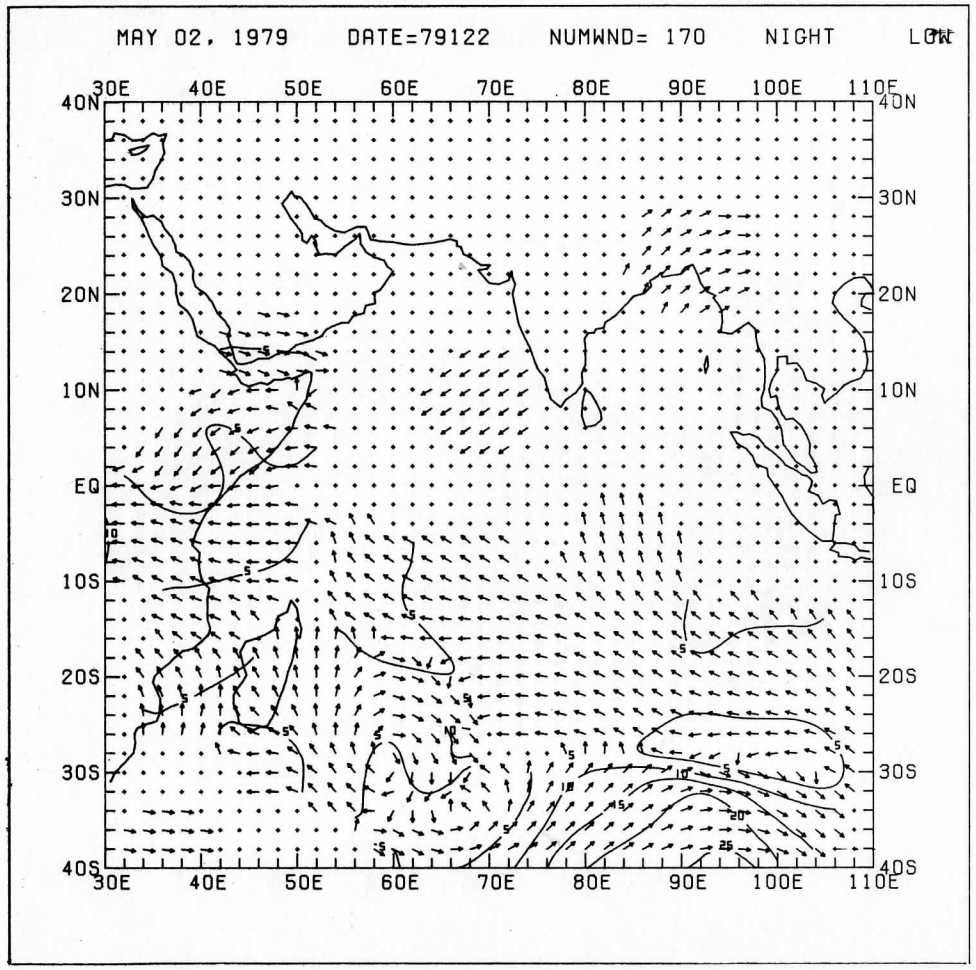
NIGHTTIME FIELDS

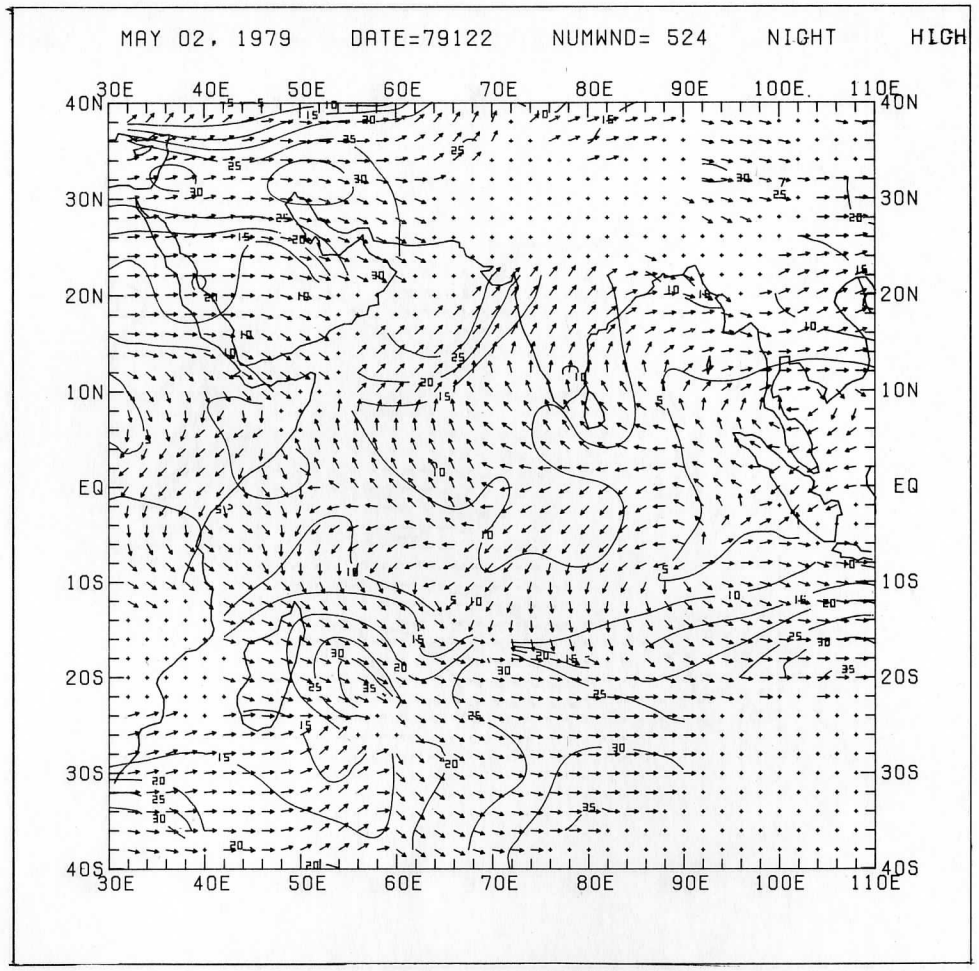
Plates 93-124

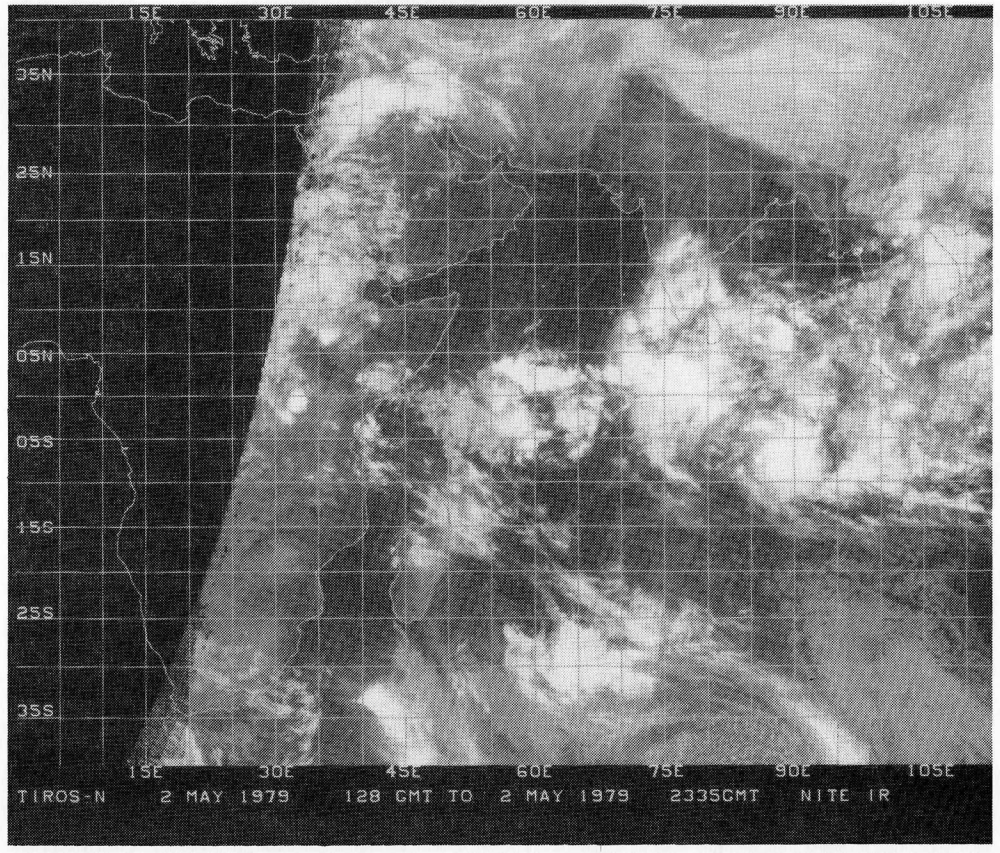

MAY 01, 1979 DATE=79121 NUMWND= 85 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

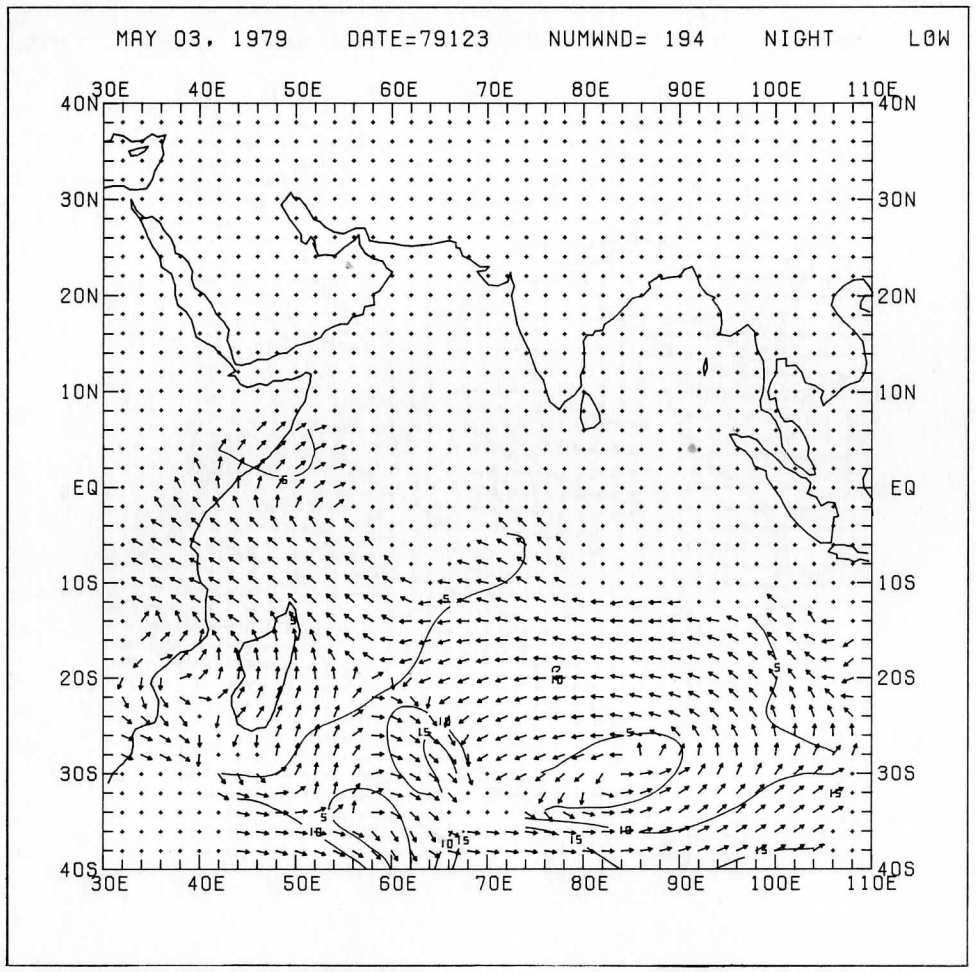

MAY 01, 1979 DATE=79121 NUMWND= 194 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

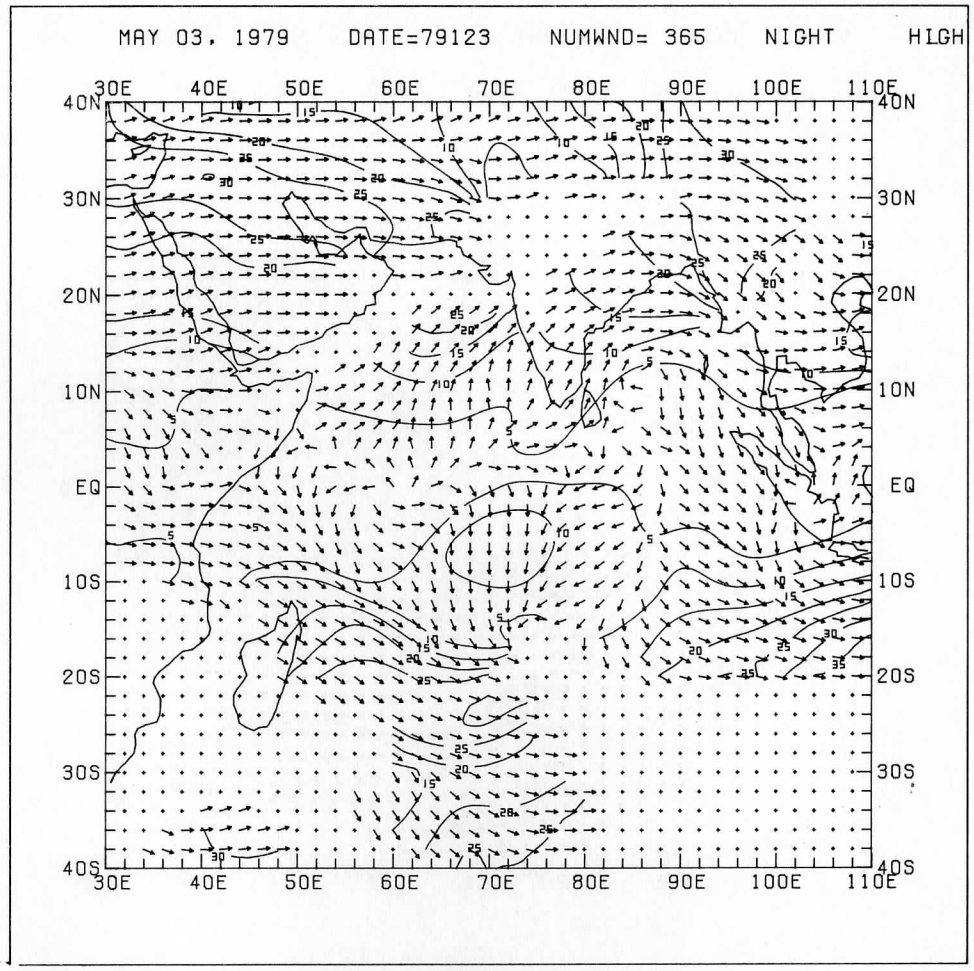

15E 30E 45E 60E 75E 90E 105E
TIROS-N 1 MAY 1979 140 GMT TO 1 MAY 1979 2348GMT NITE IR

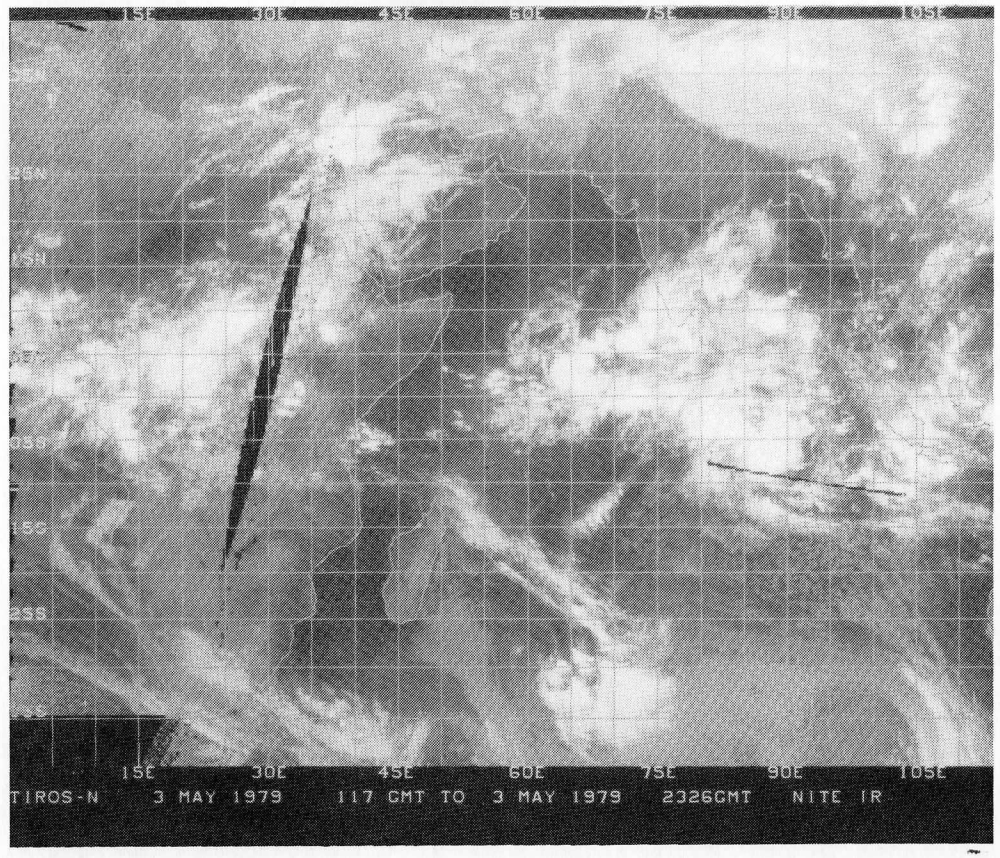

MAY 02, 1979 DATE=79122 NUMWND= 170 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

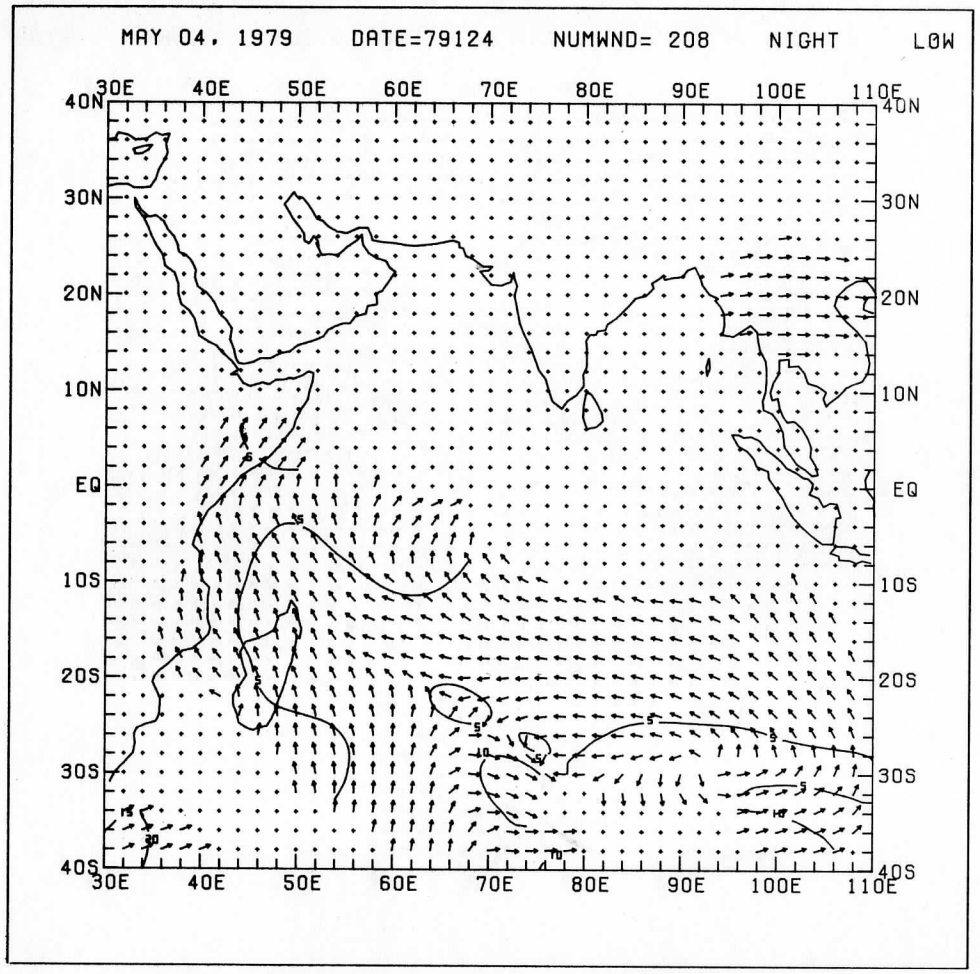

MAY 02, 1979 DATE=79122 NUMWND= 524 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

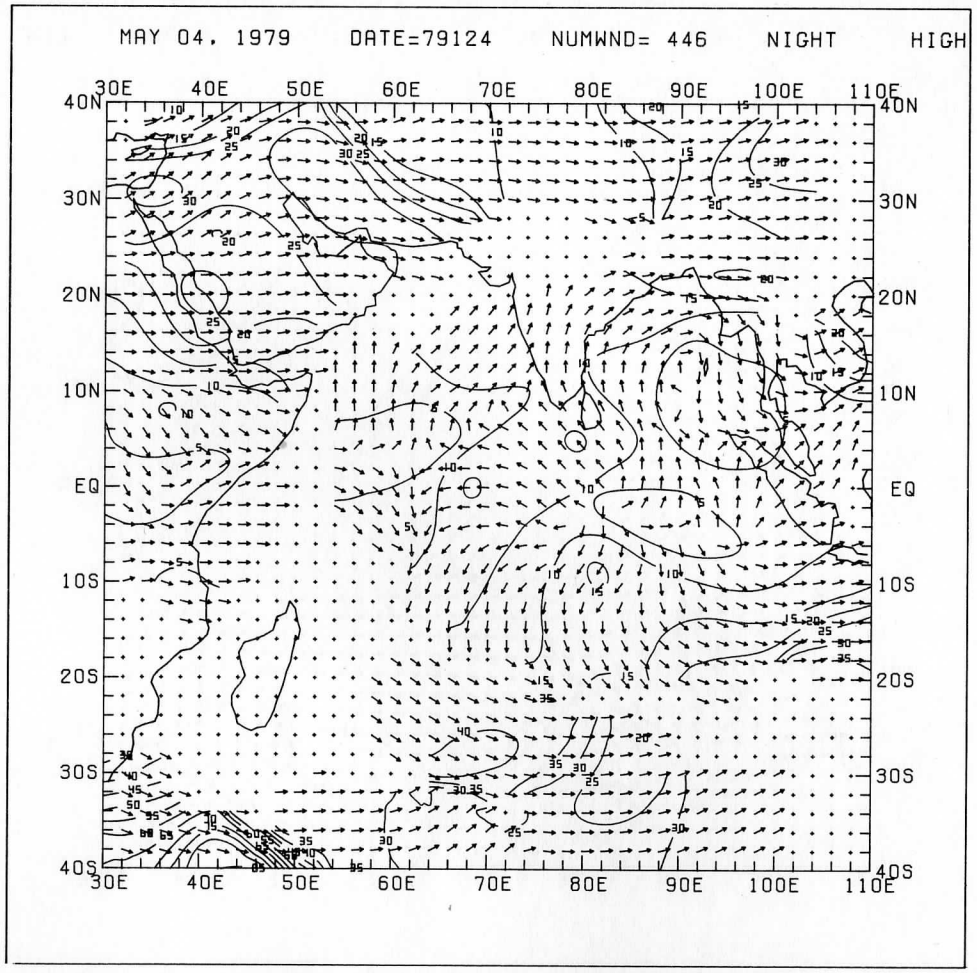

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 05N 05S 15S 25S 35S
TIROS-N 2 MAY 1979 128 GMT TO 2 MAY 1979 2335GMT NITE IR

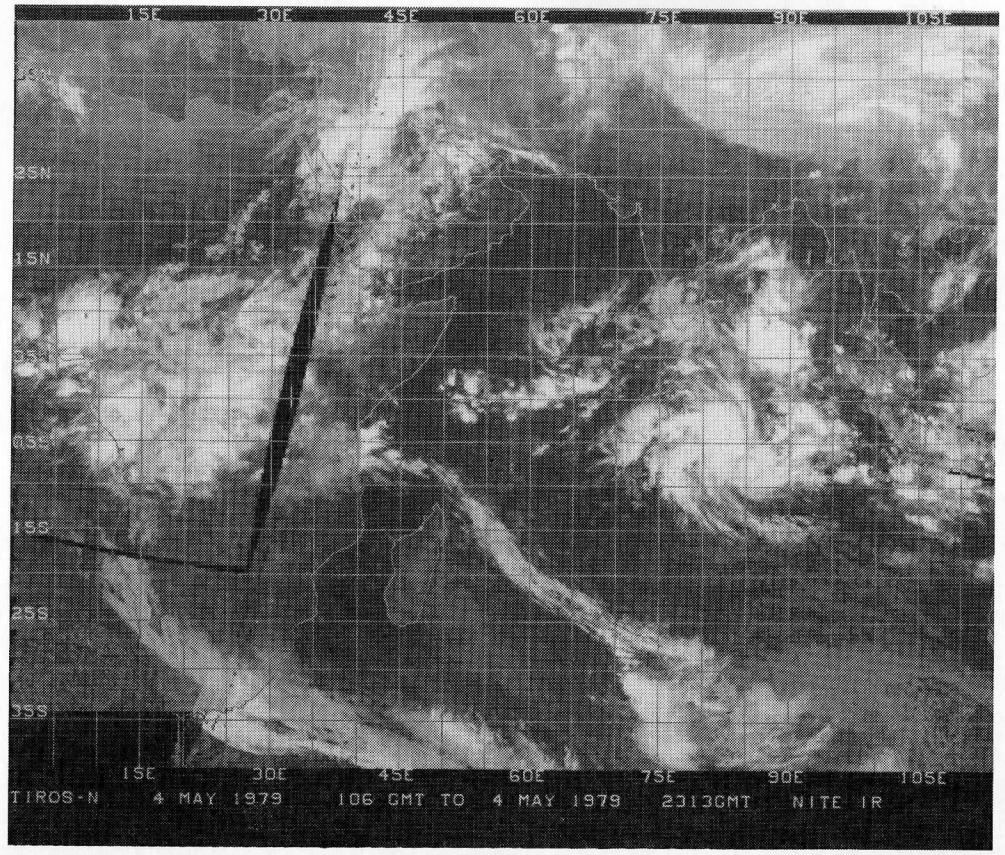

MAY 03, 1979 DATE=79123 NUMWND= 194 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

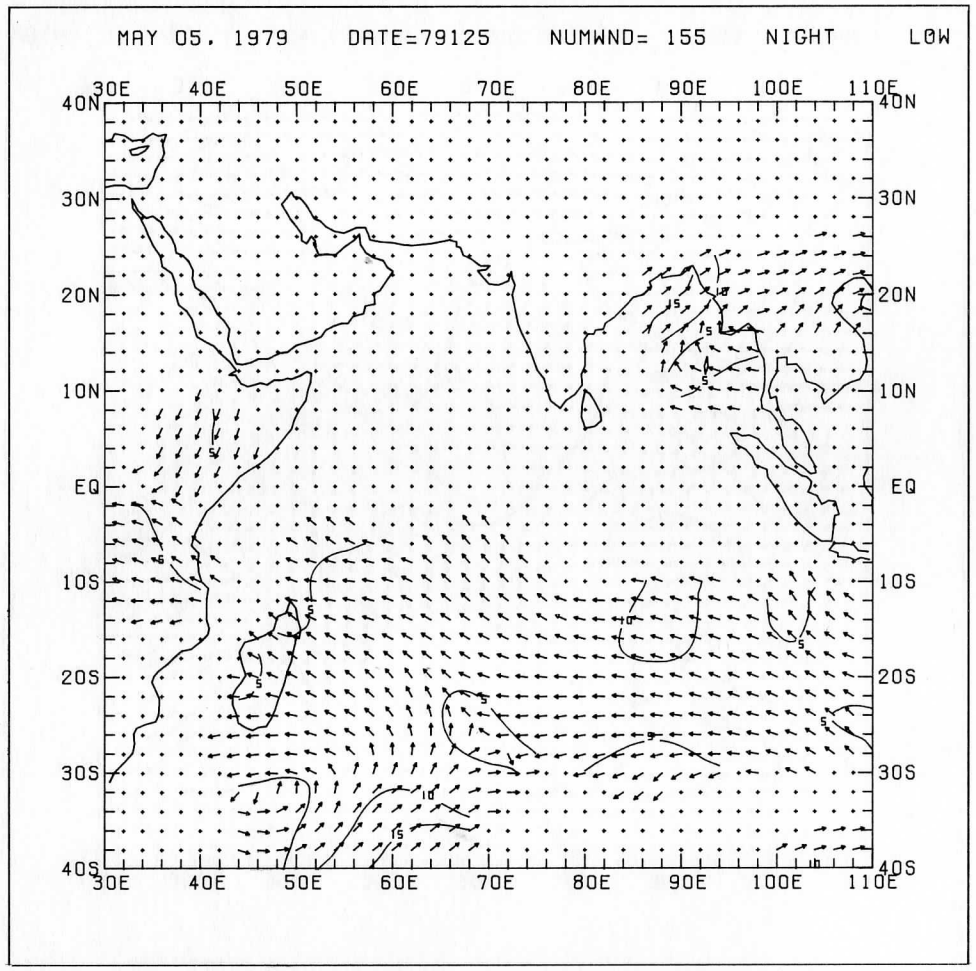

MAY 03, 1979 DATE=79123 NUMWND= 365 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

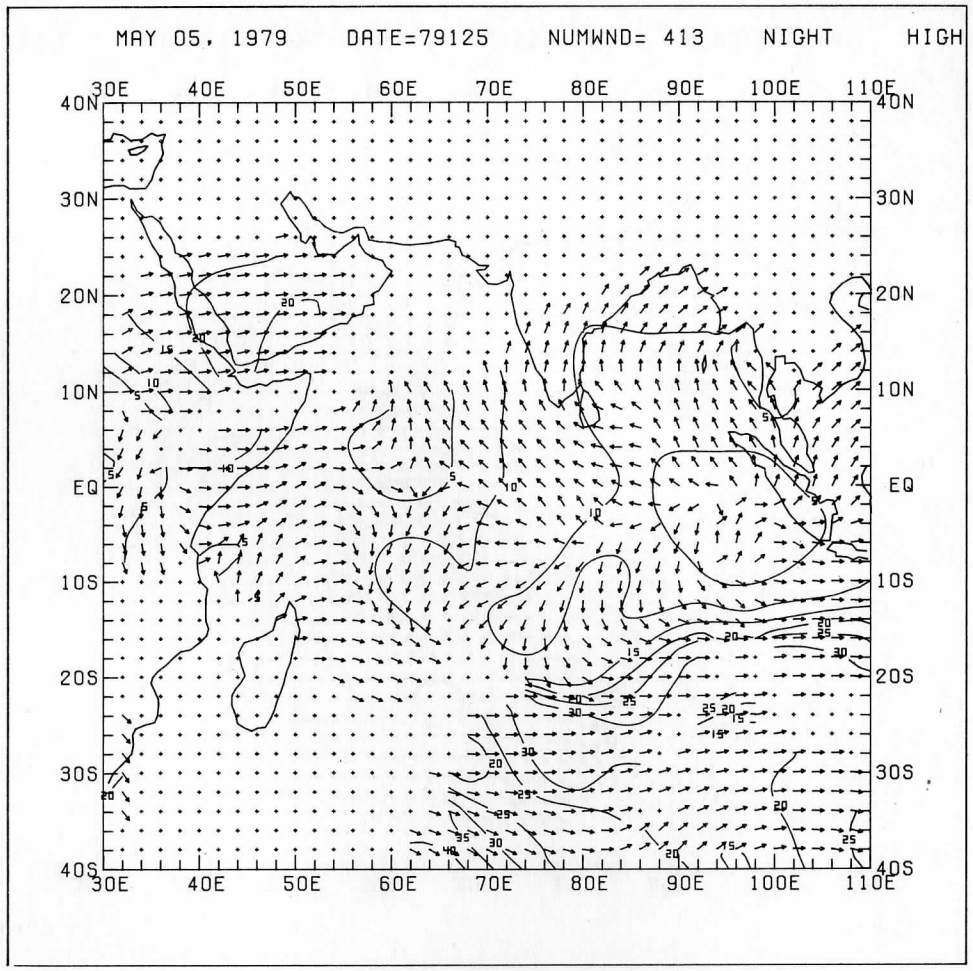

15E 30E 45E 60E 75E 90E 105E
TIROS-N 3 MAY 1979 117 GMT TO 3 MAY 1979 2326GMT NITE IR

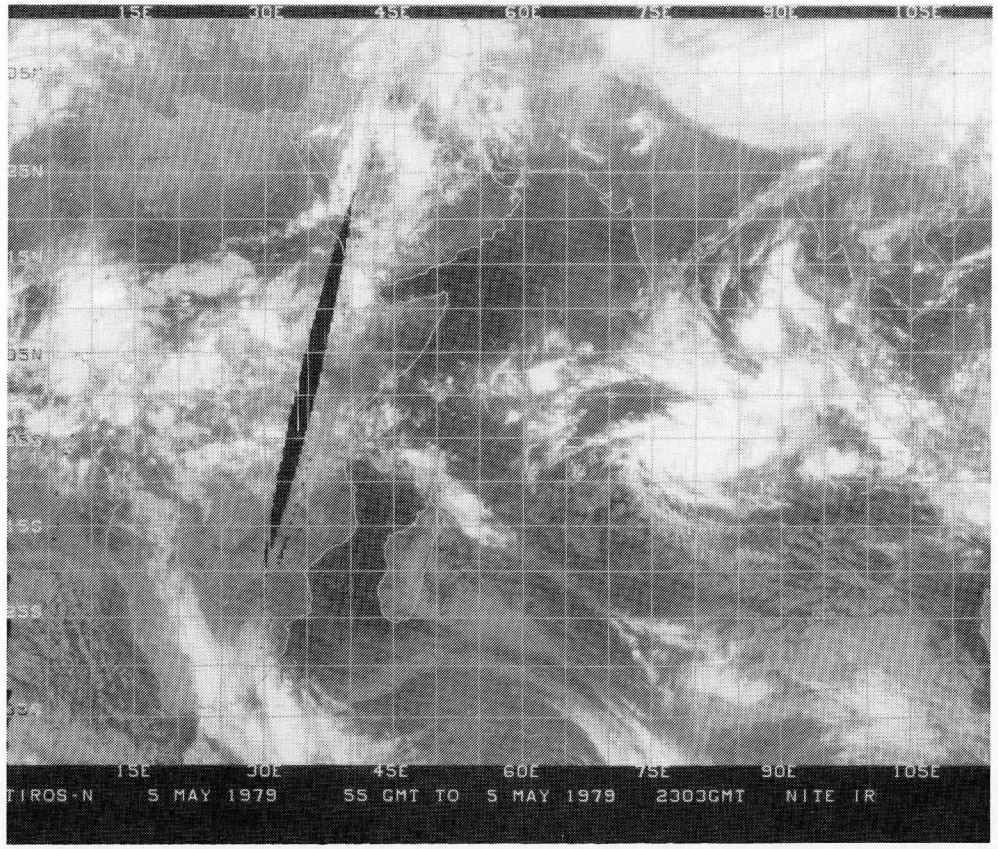

MAY 04, 1979 DATE=79124 NUMWND= 208 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

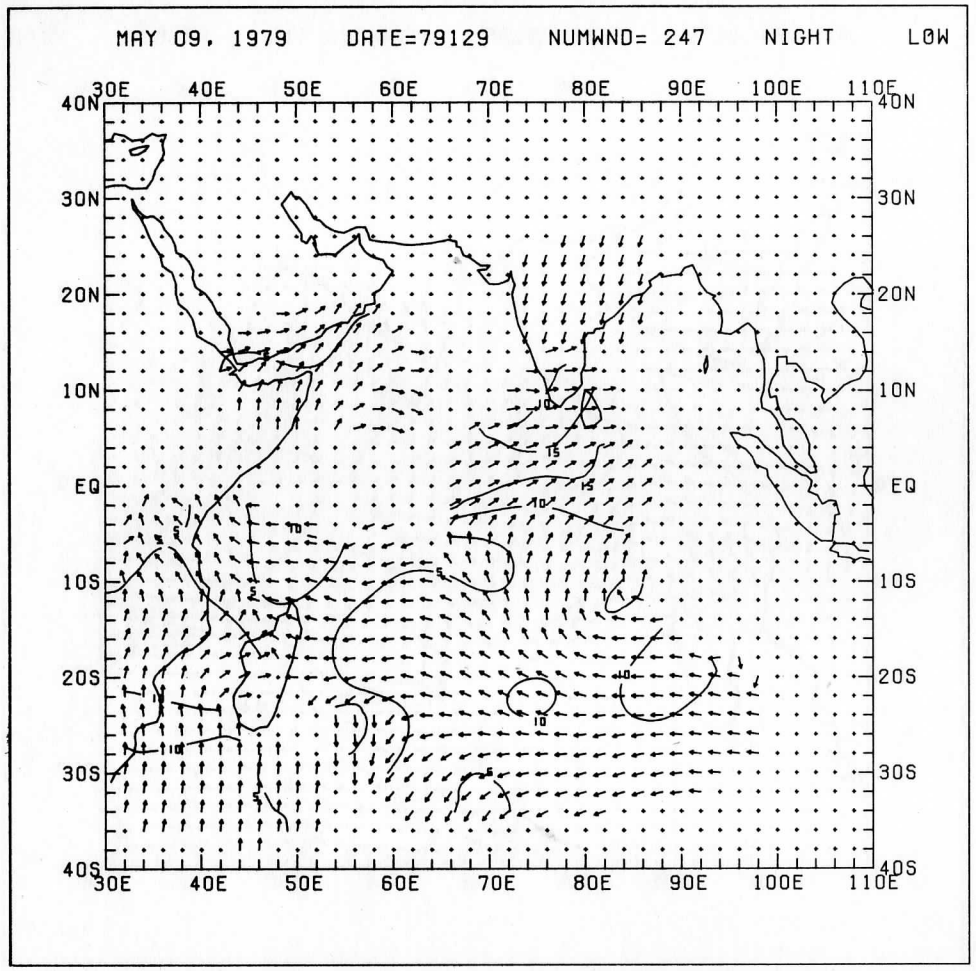

MAY 04, 1979 DATE=79124 NUMWND= 446 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

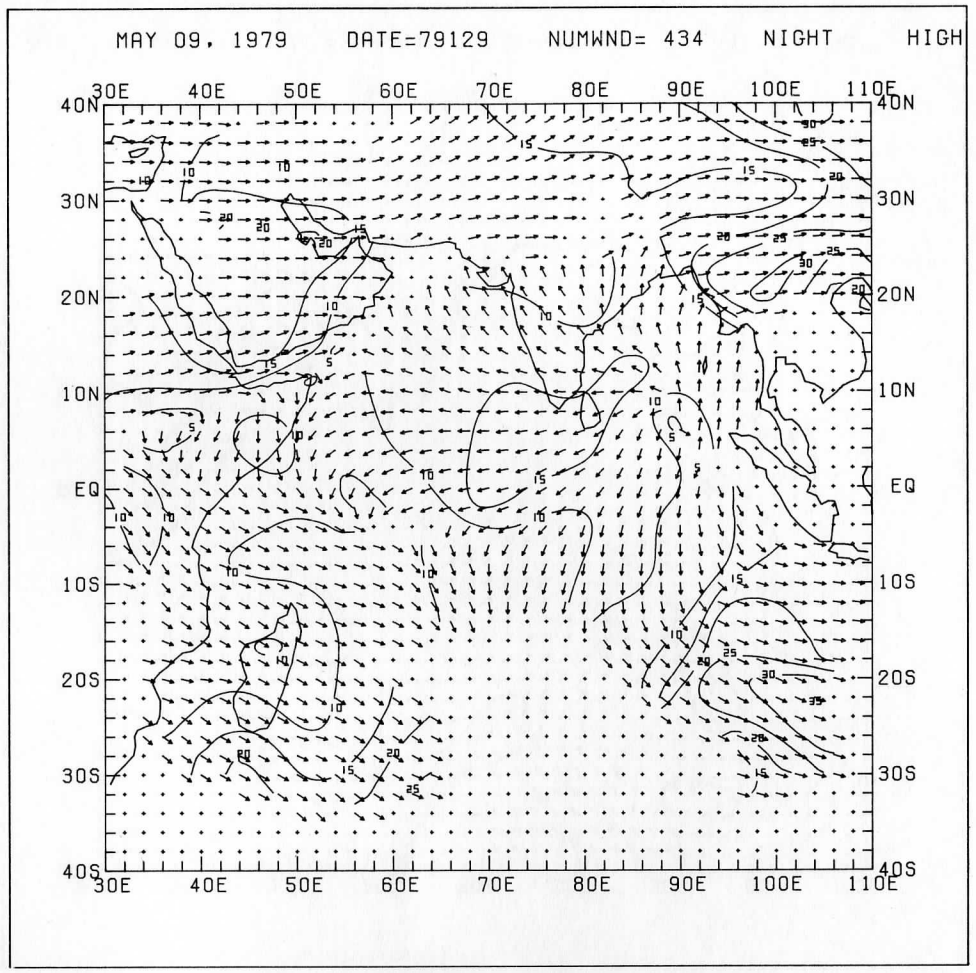

15E 30E 45E 60E 75E 90E 105E
25N
15N
5N
5S
15S
25S
35S
TIROS-N 4 MAY 1979 106 GMT TO 4 MAY 1979 2313GMT NITE IR

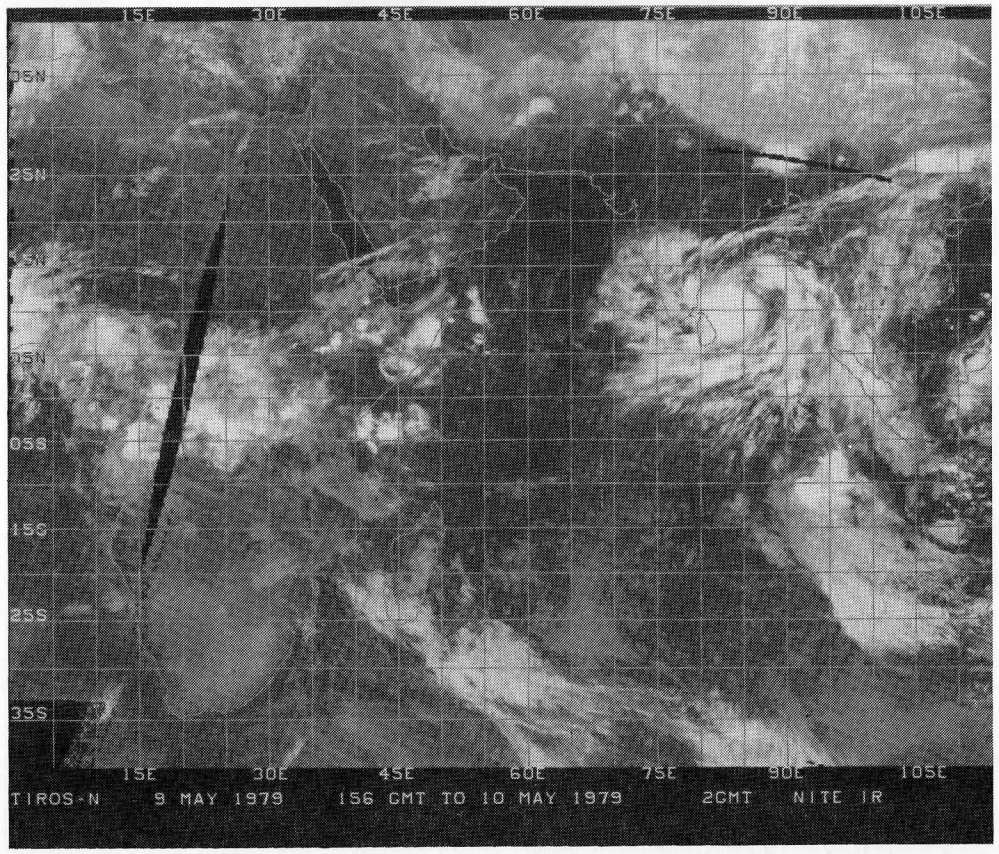

MAY 05, 1979 DATE=79125 NUMWND= 155 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

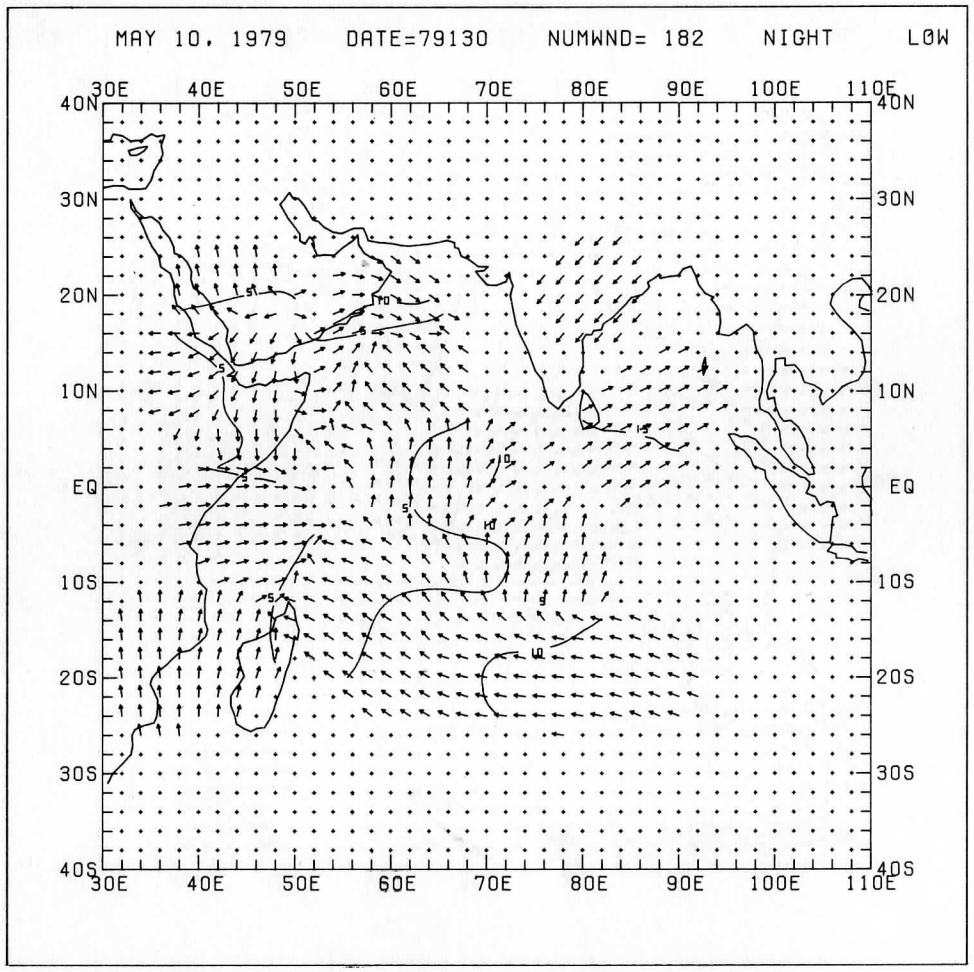

MAY 05, 1979 DATE=79125 NUMWND= 413 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

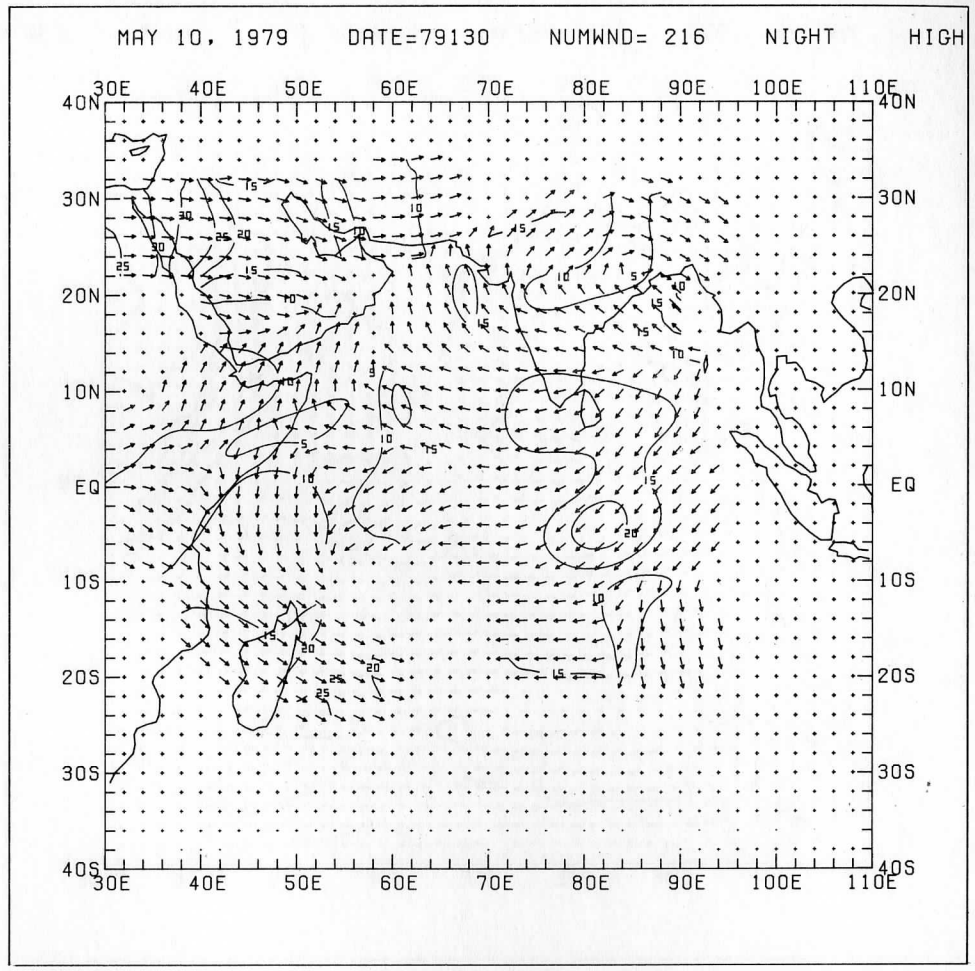

TIROS-N 5 MAY 1979 55 GMT TO 5 MAY 1979 2303GMT NITE IR

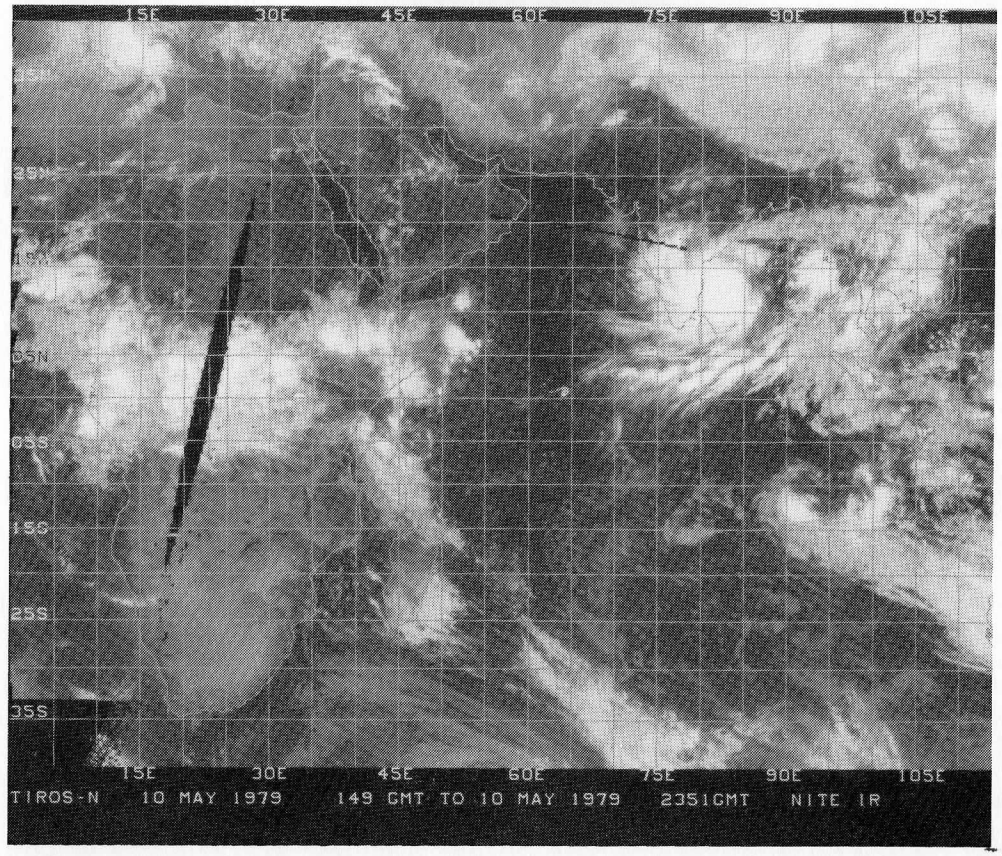

MAY 09, 1979 DATE=79129 NUMWND= 247 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

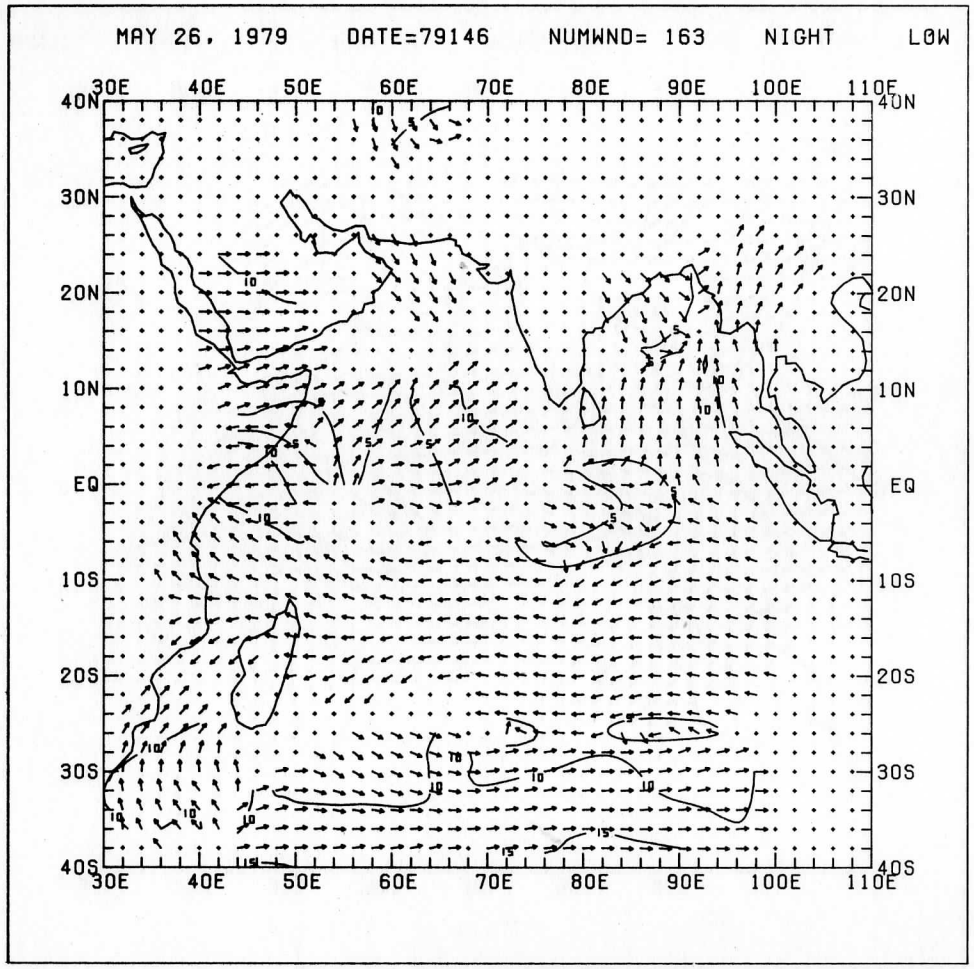

MAY 09, 1979 DATE=79129 NUMWND= 434 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

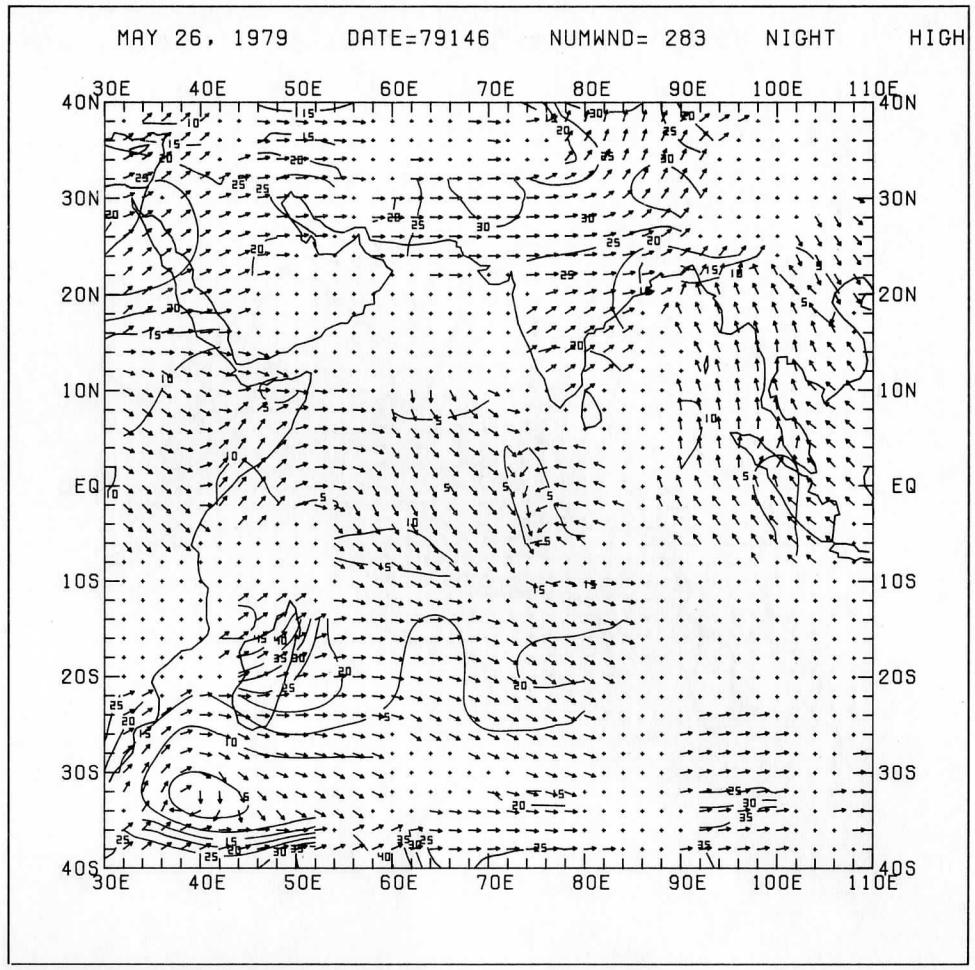

15E 30E 45E 60E 75E 90E 105E
TIROS-N 9 MAY 1979 156 GMT TO 10 MAY 1979 2GMT NITE IR

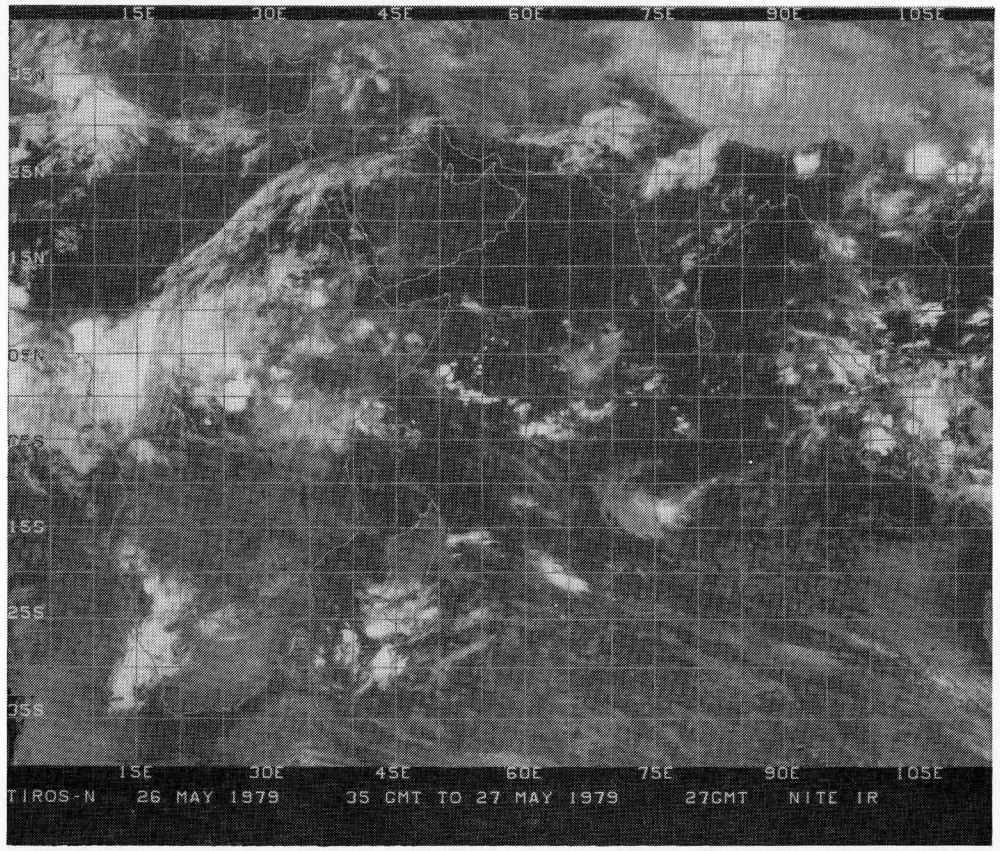

MAY 10, 1979 DATE=79130 NUMWND= 182 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

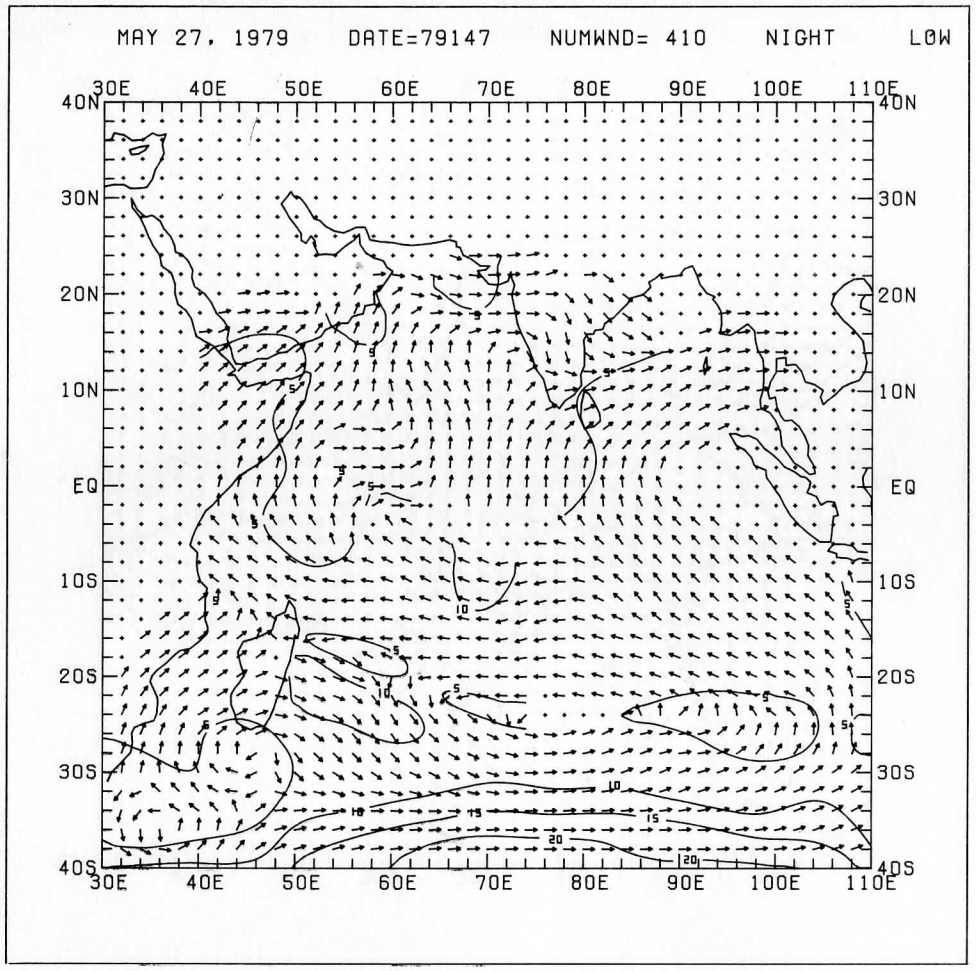

MAY 10, 1979 DATE=79130 NUMWND= 216 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

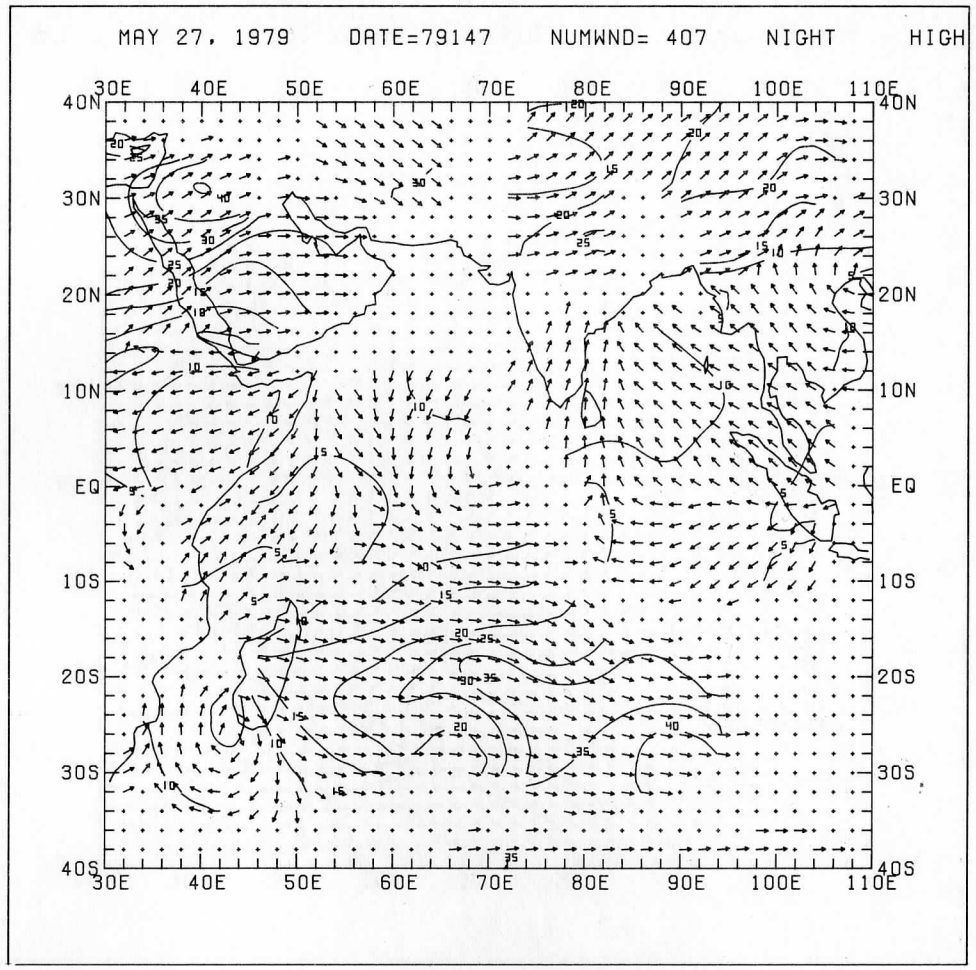

15E 30E 45E 60E 75E 90E 105E
TIROS-N 10 MAY 1979 149 GMT TO 10 MAY 1979 2351GMT NITE IR

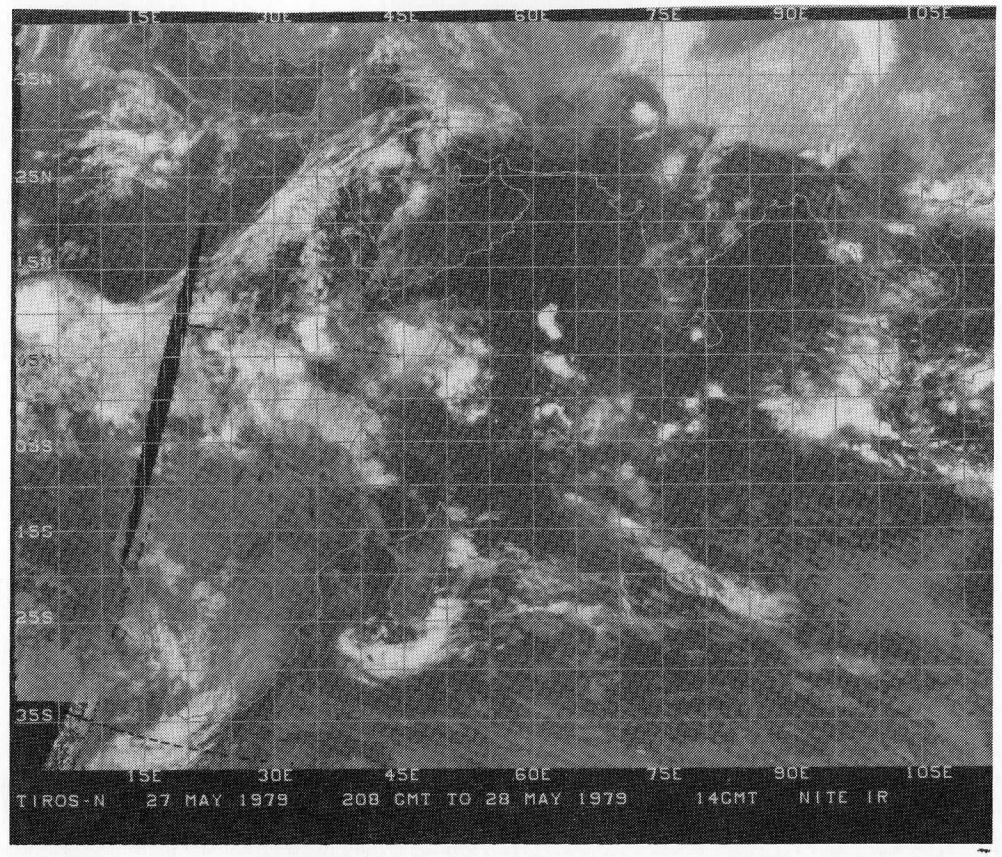

MAY 26, 1979 DATE=79146 NUMWND= 163 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

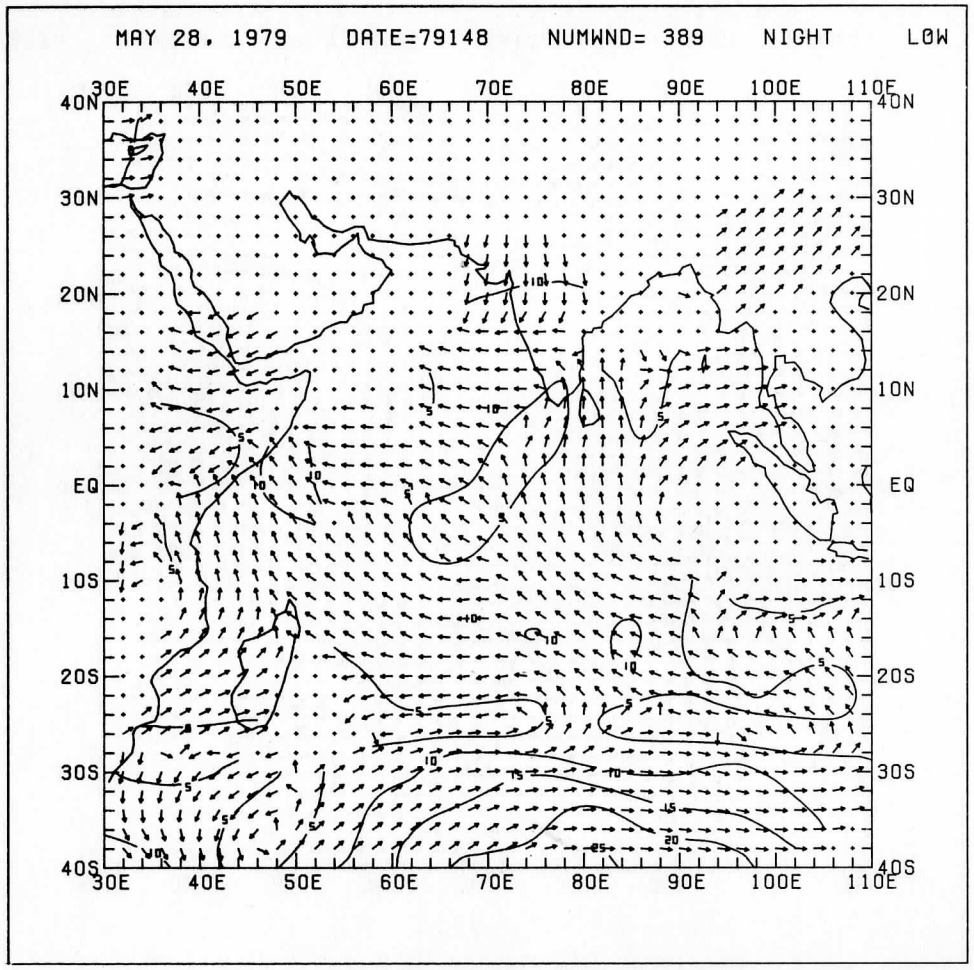

MAY 26, 1979 DATE=79146 NUMWND= 283 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

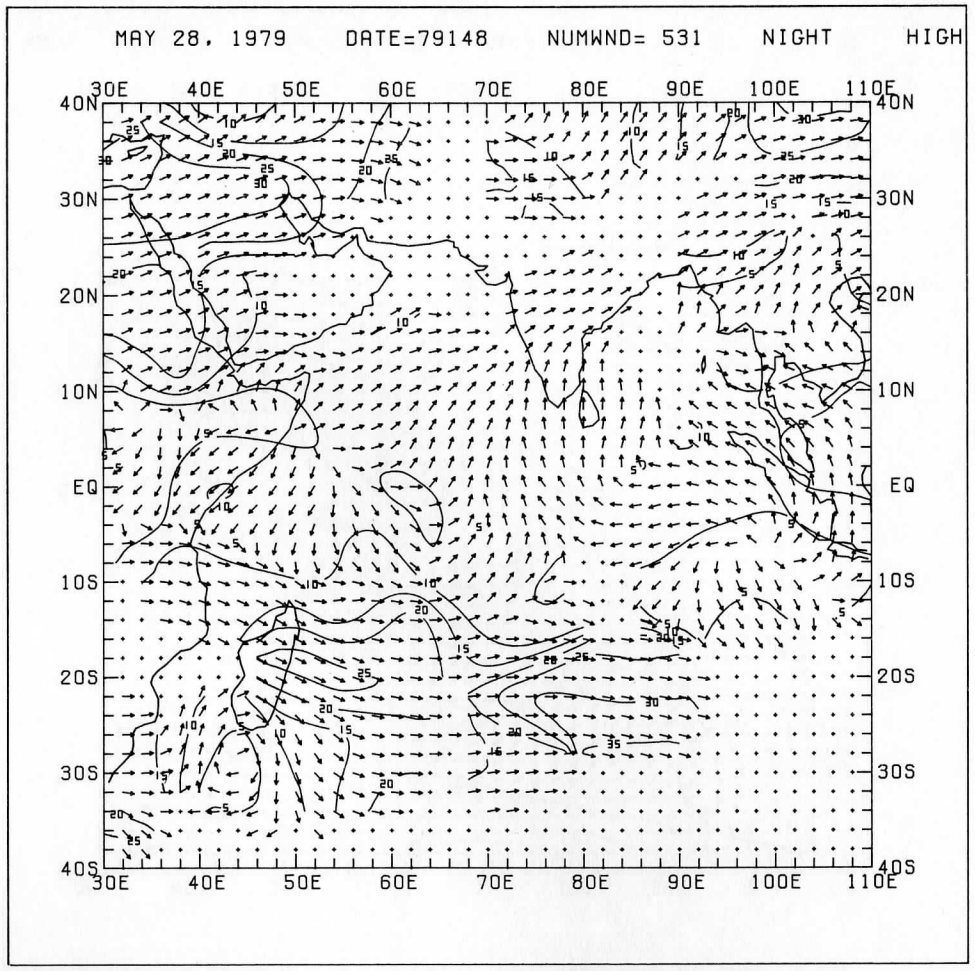

15E 30E 45E 60E 75E 90E 105E
TIROS-N 26 MAY 1979 35 GMT TO 27 MAY 1979 27GMT NITE IR

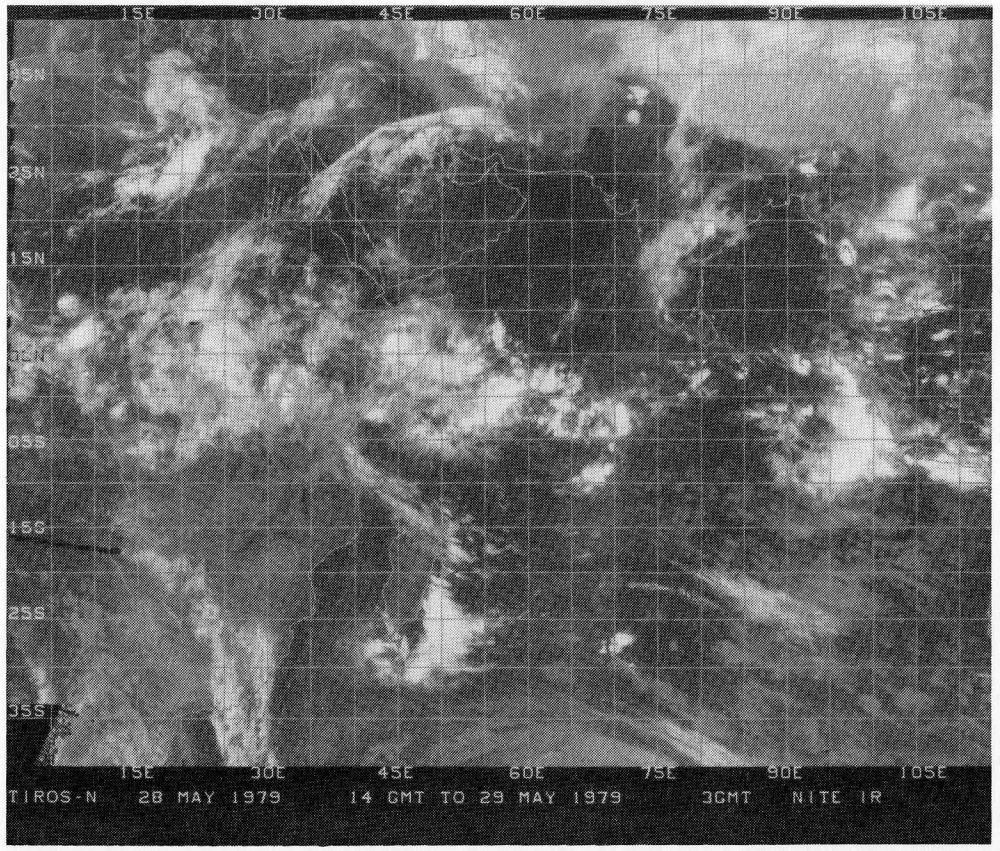

MAY 27, 1979 DATE=79147 NUMWND= 410 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

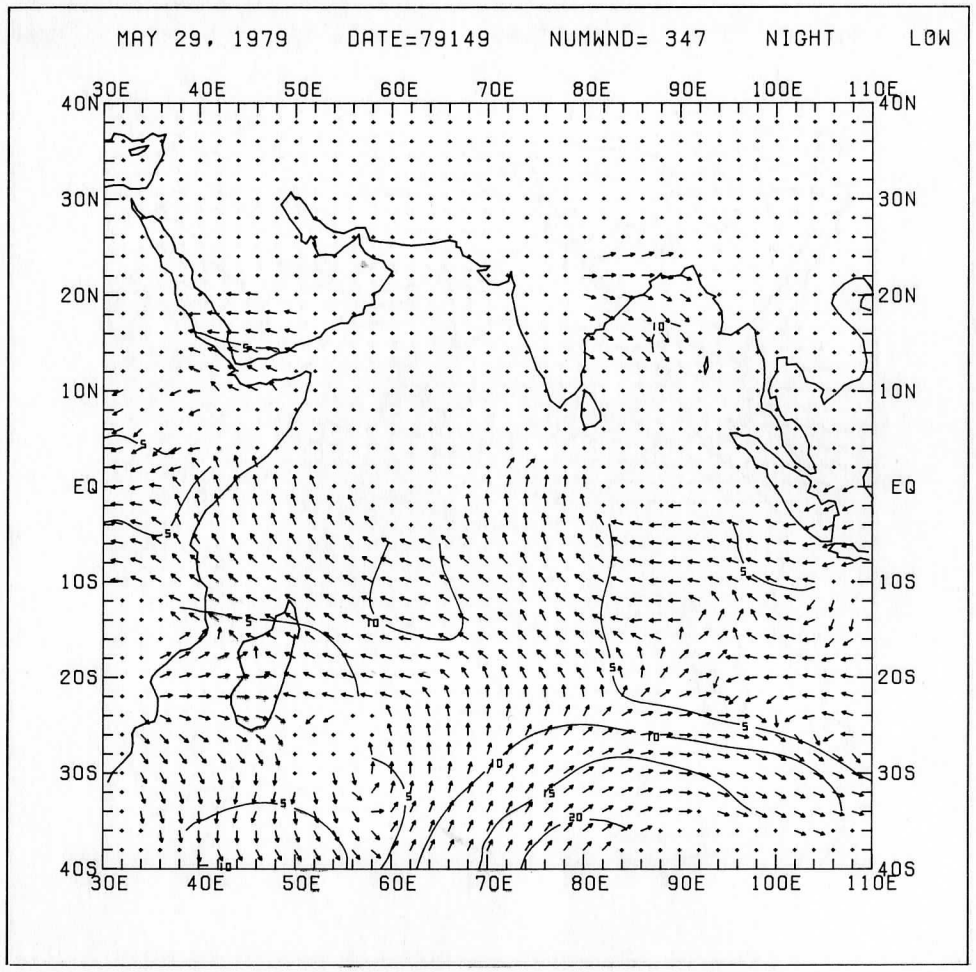

MAY 27, 1979 DATE=79147 NUMWND= 407 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

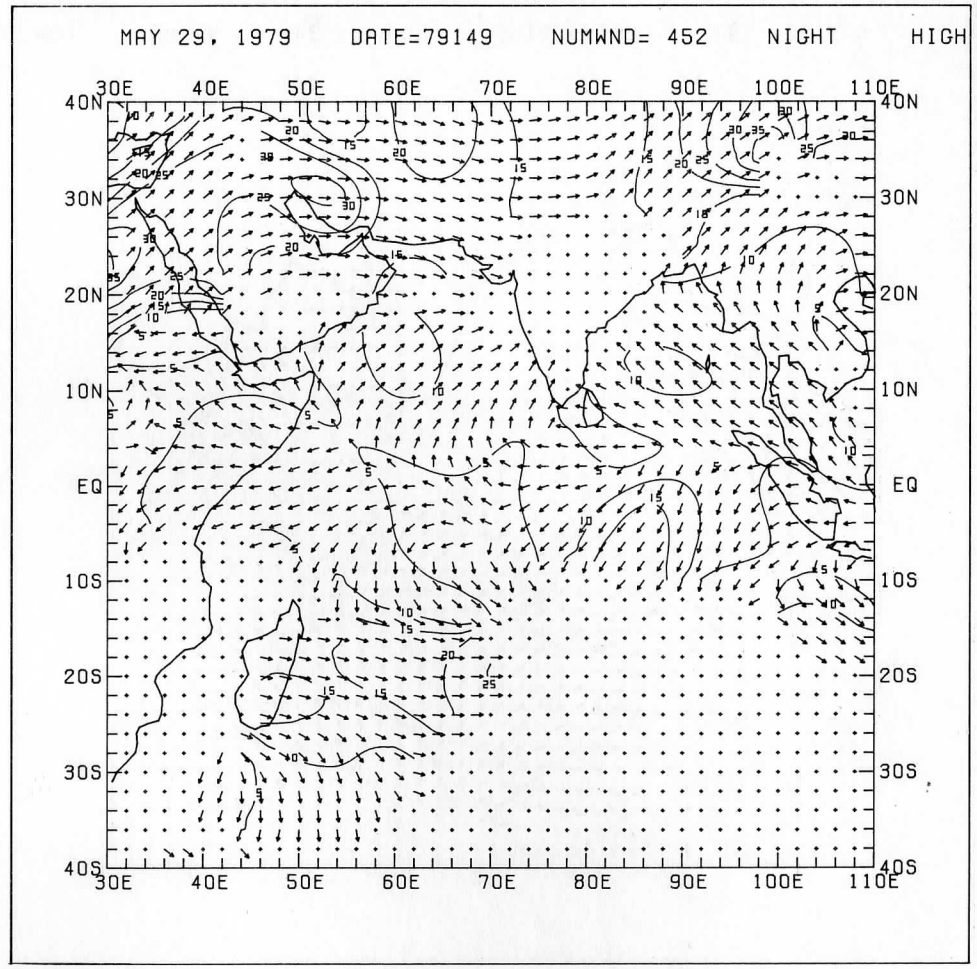

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N 5N 5S 15S 25S 35S
TIROS-N 27 MAY 1979 208 GMT TO 28 MAY 1979 14GMT NITE IR

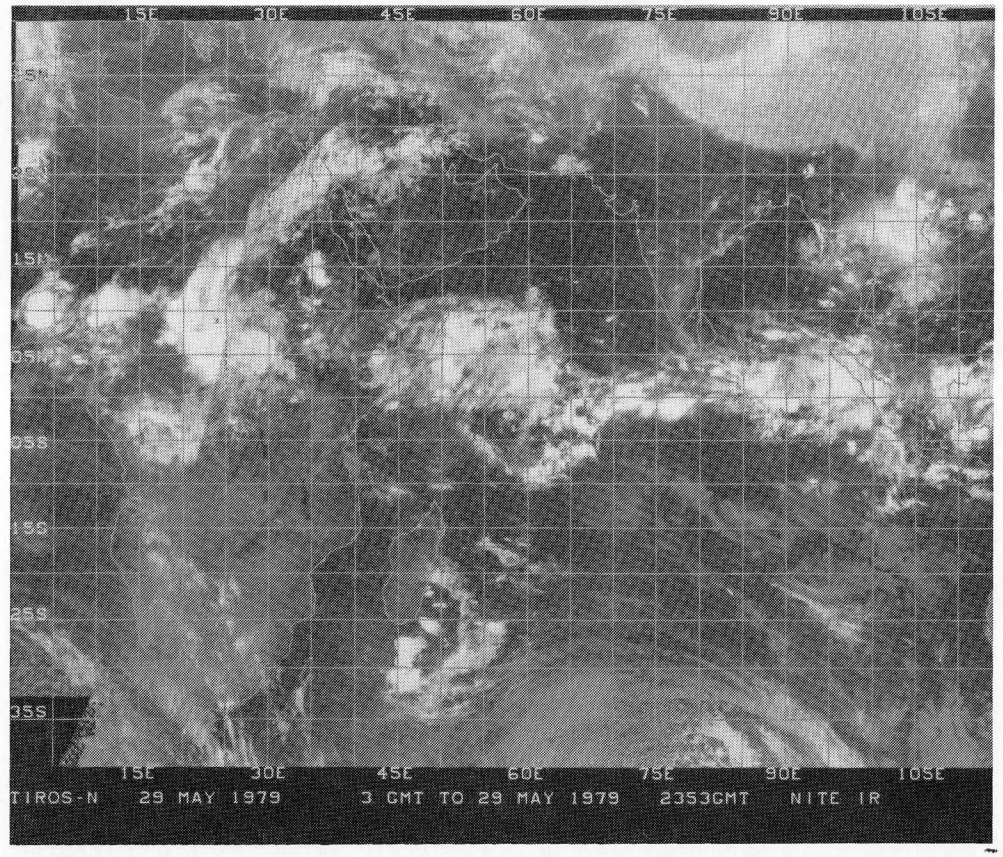

MAY 28, 1979 DATE=79148 NUMWND= 389 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

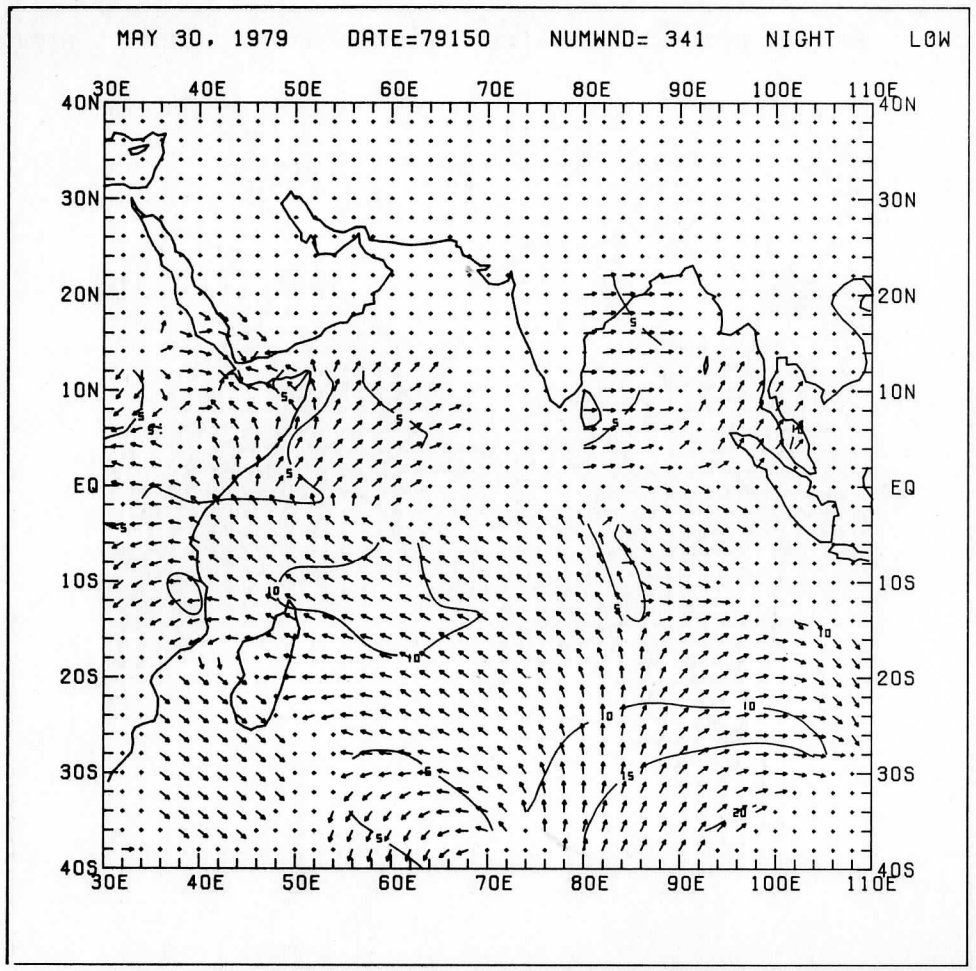

MAY 28, 1979 DATE=79148 NUMWND= 531 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

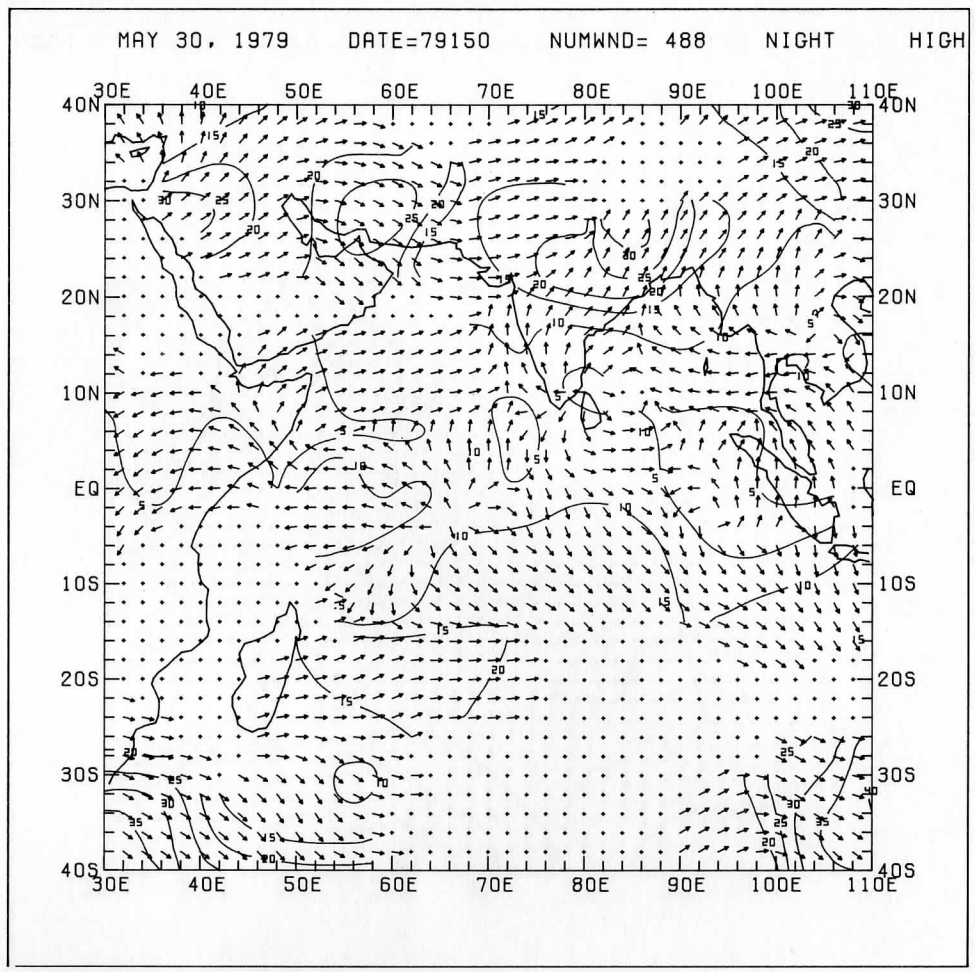

TIROS-N 28 MAY 1979 14 GMT TO 29 MAY 1979 3GMT NITE IR

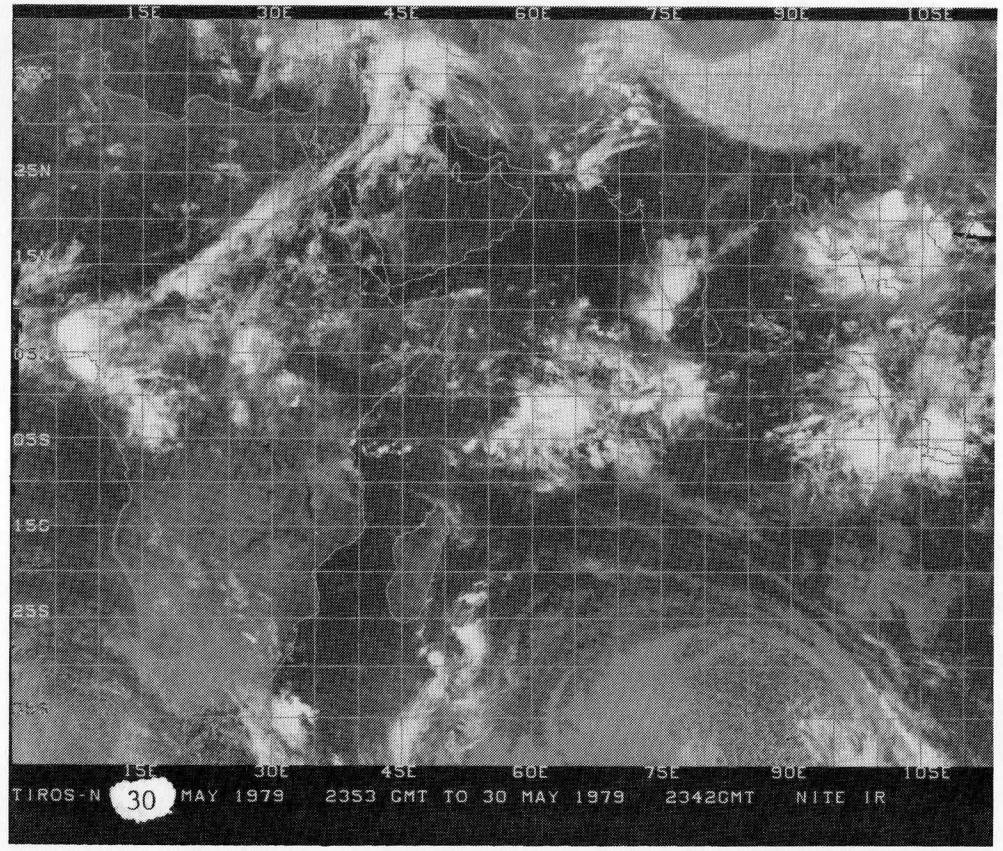

MAY 29, 1979 DATE=79149 NUMWND= 347 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

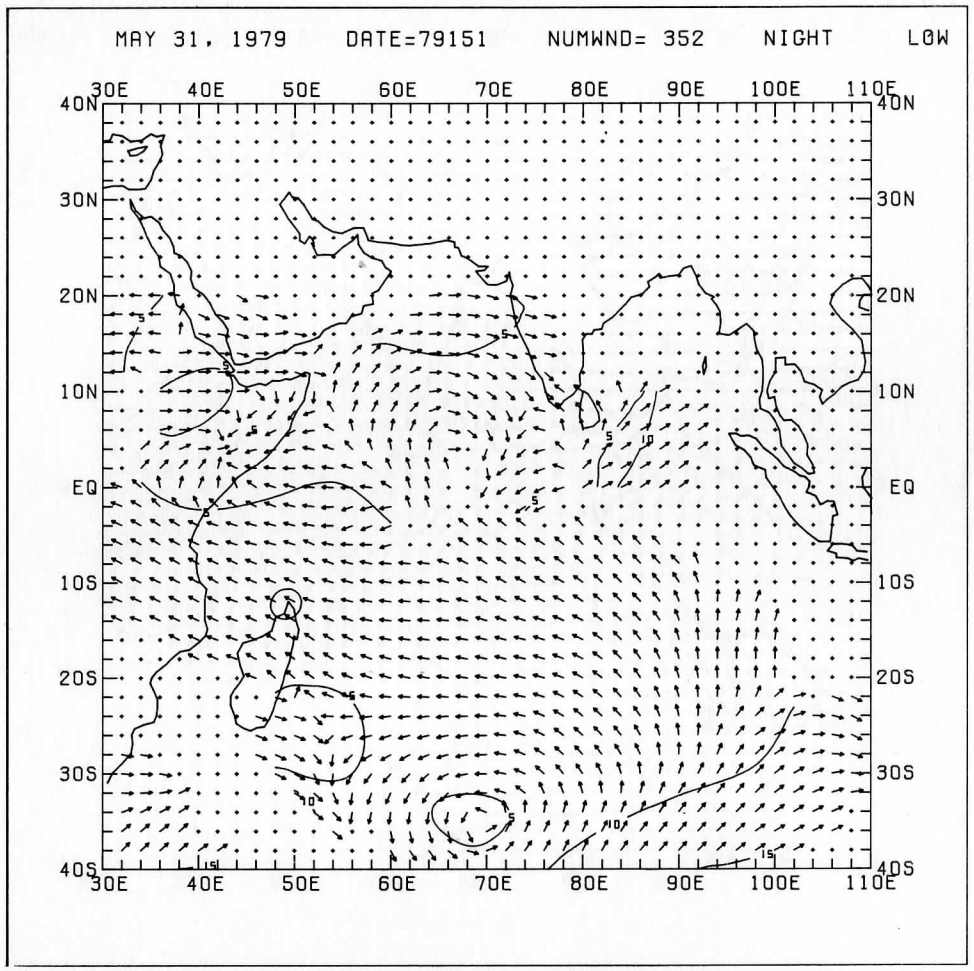

MAY 29, 1979 DATE=79149 NUMWND= 452 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

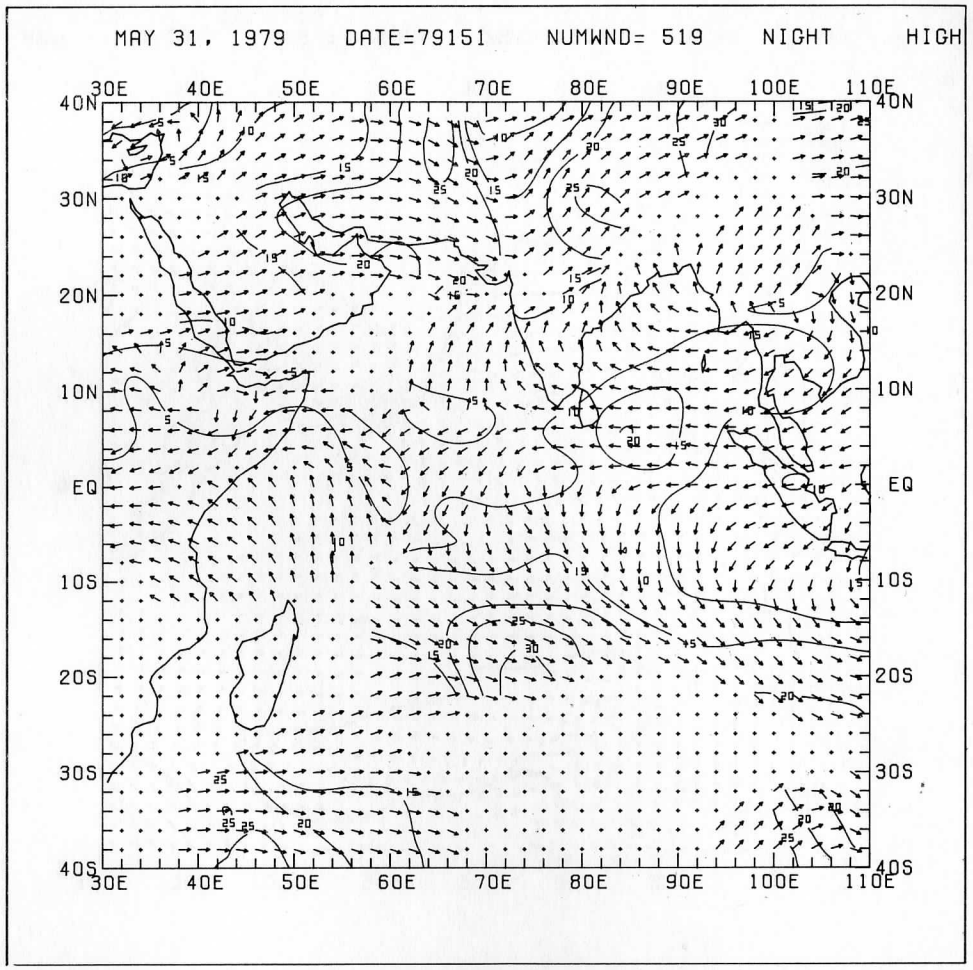

TIROS-N 29 MAY 1979 3 GMT TO 29 MAY 1979 2353GMT NITE IR

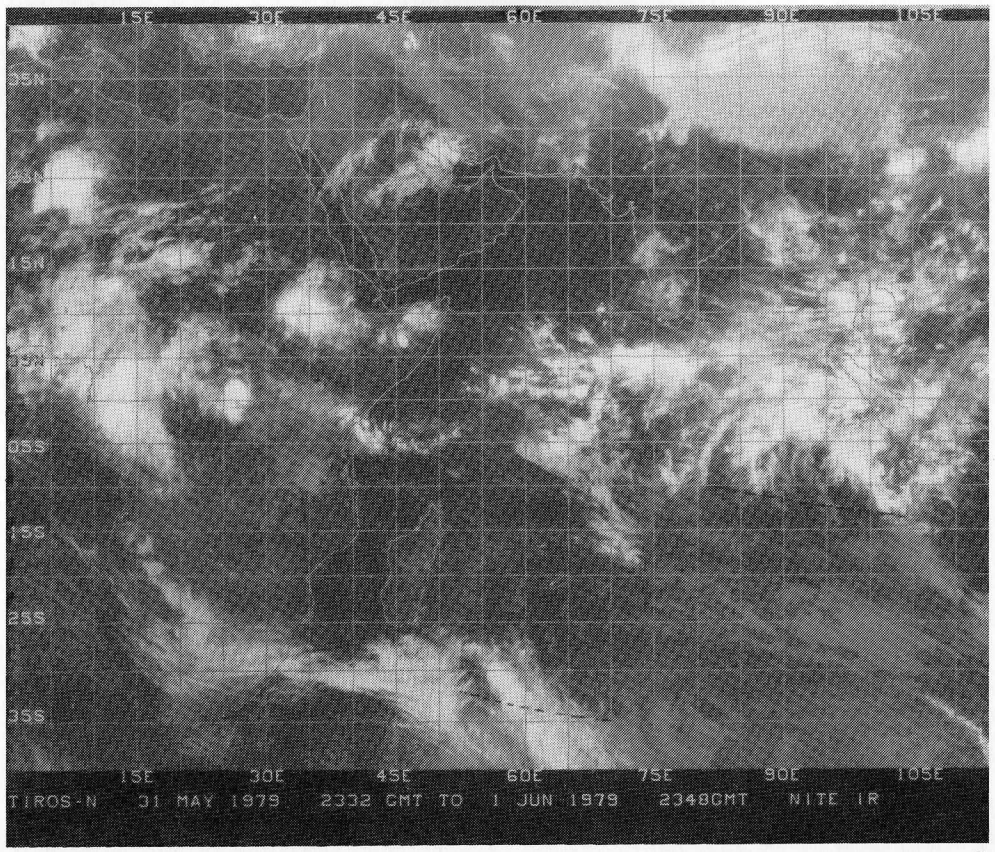

MAY 30, 1979 DATE=79150 NUMWND= 341 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

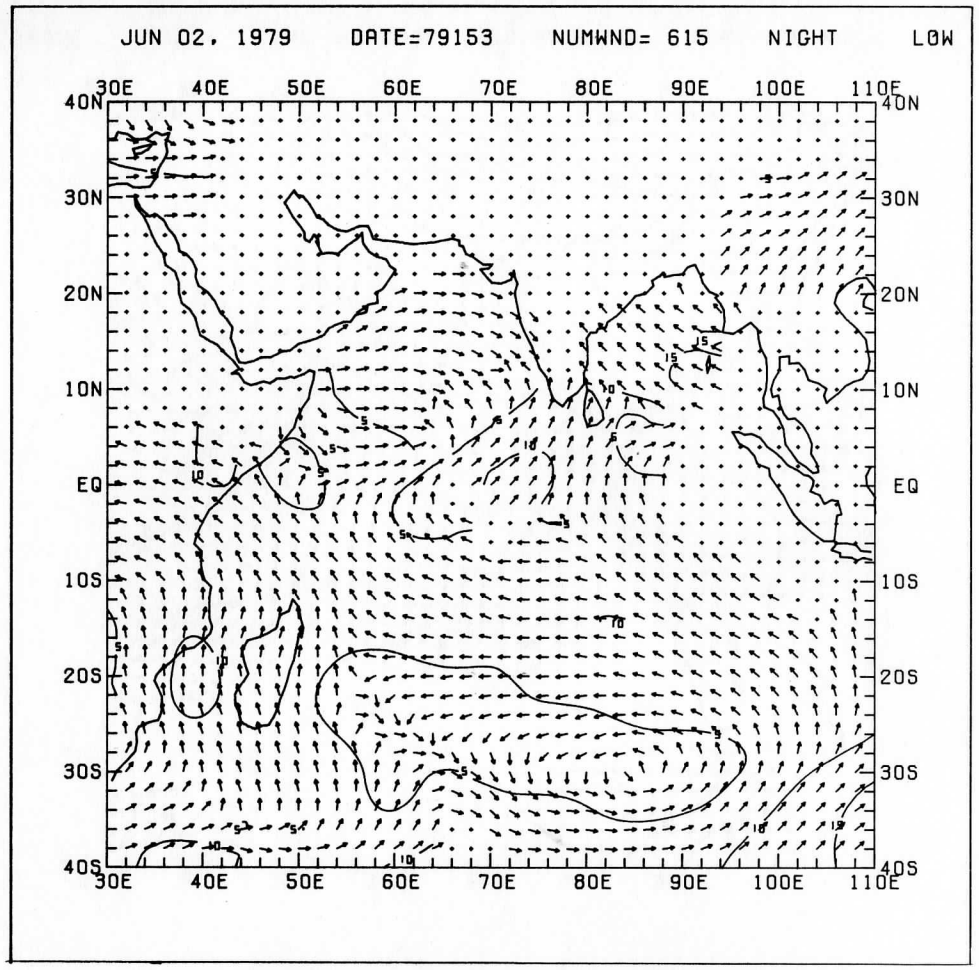

MAY 30, 1979 DATE=79150 NUMWND= 488 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

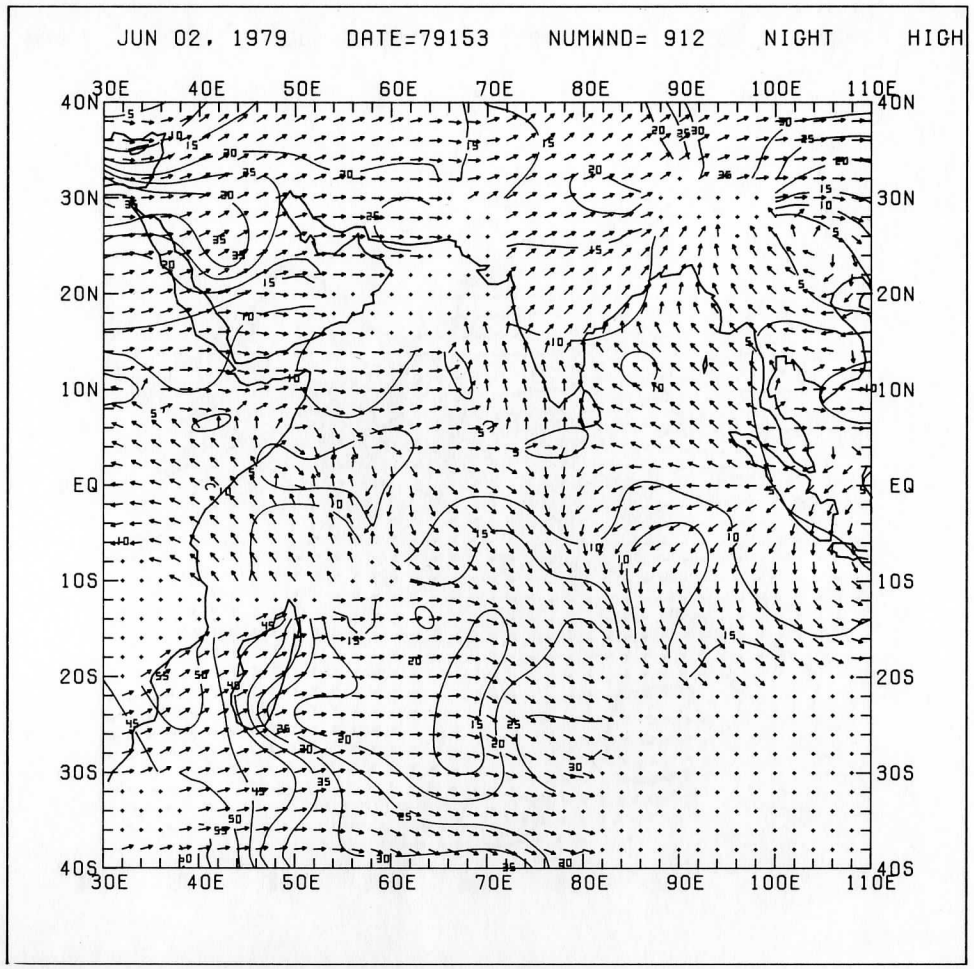

15E 30E 45E 60E 75E 90E 105E
25N
15N
05S
15S
25S
TIROS-N 30 MAY 1979 2353 GMT TO 30 MAY 1979 2342GMT NITE IR

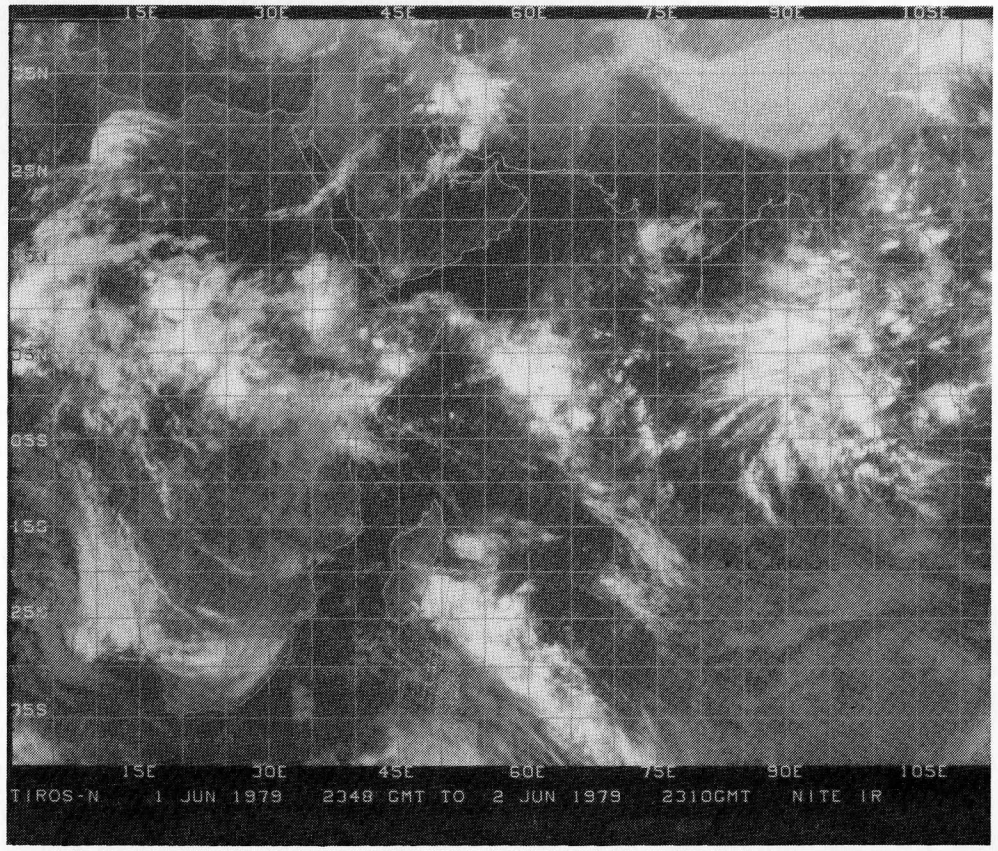

MAY 31, 1979 DATE=79151 NUMWND= 352 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

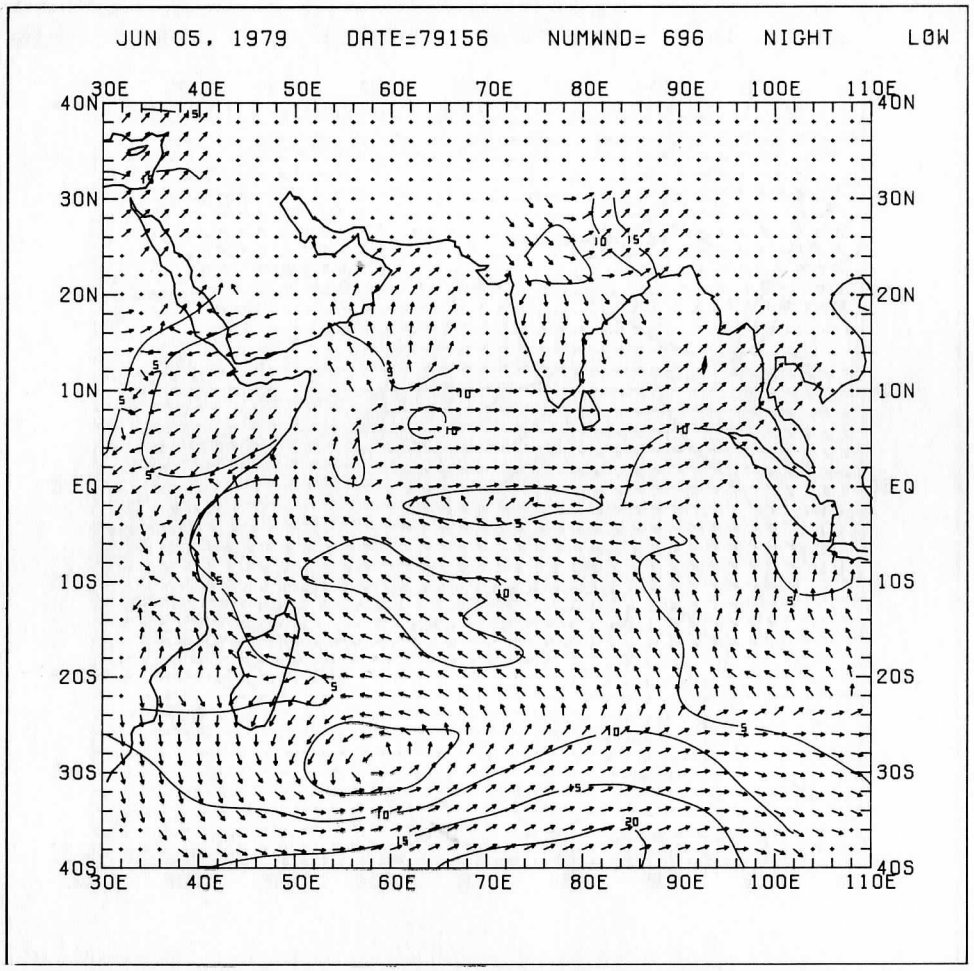

MAY 31, 1979 DATE=79151 NUMWND= 519 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

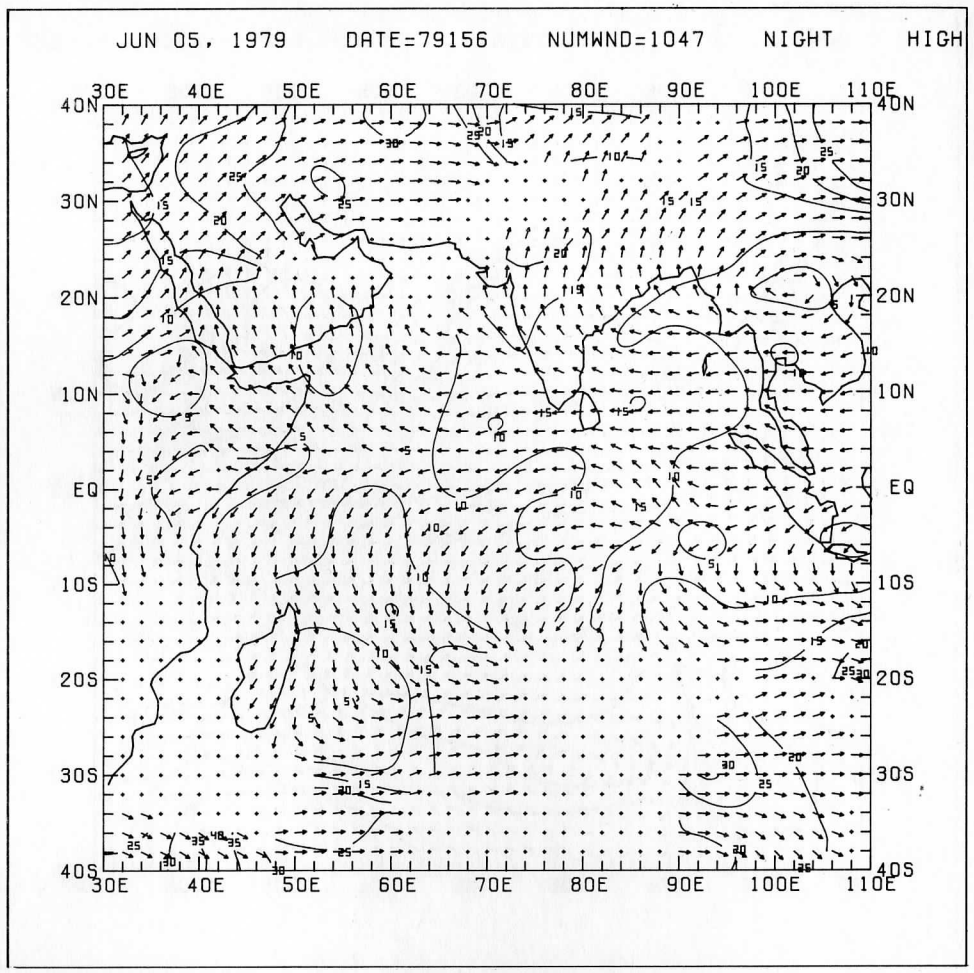

TIROS-N 31 MAY 1979 2332 GMT TO 1 JUN 1979 2348GMT NITE IR

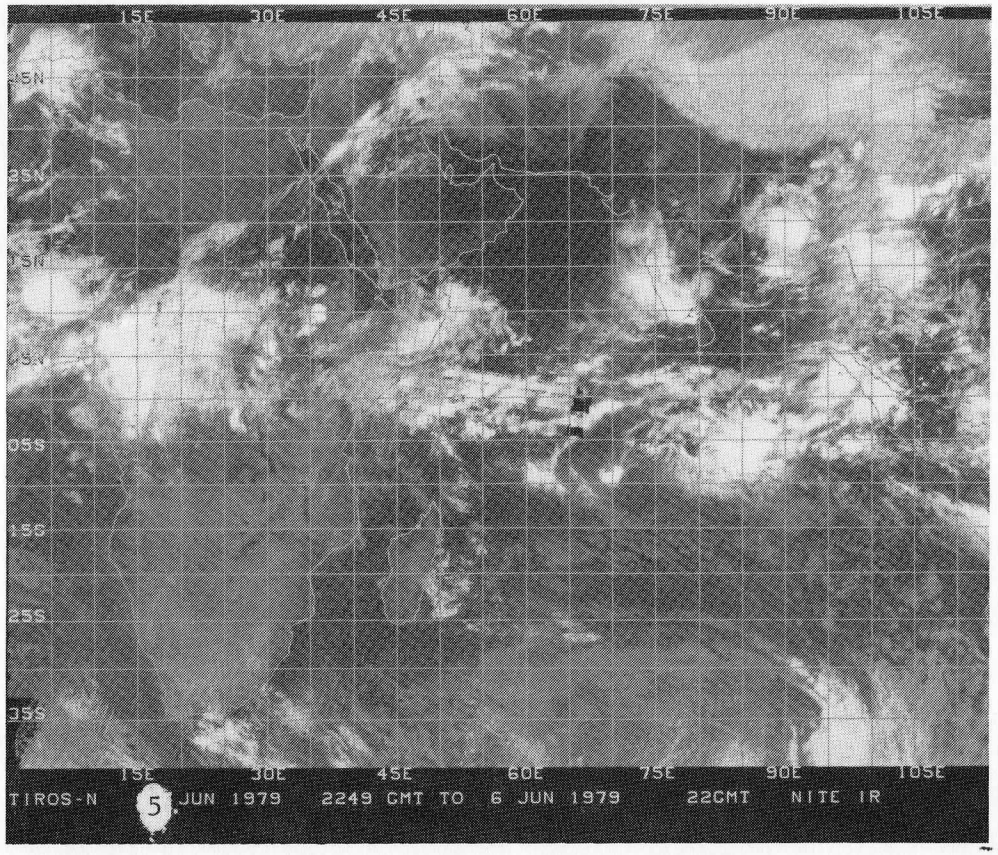

JUN 02, 1979 DATE=79153 NUMWND= 615 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

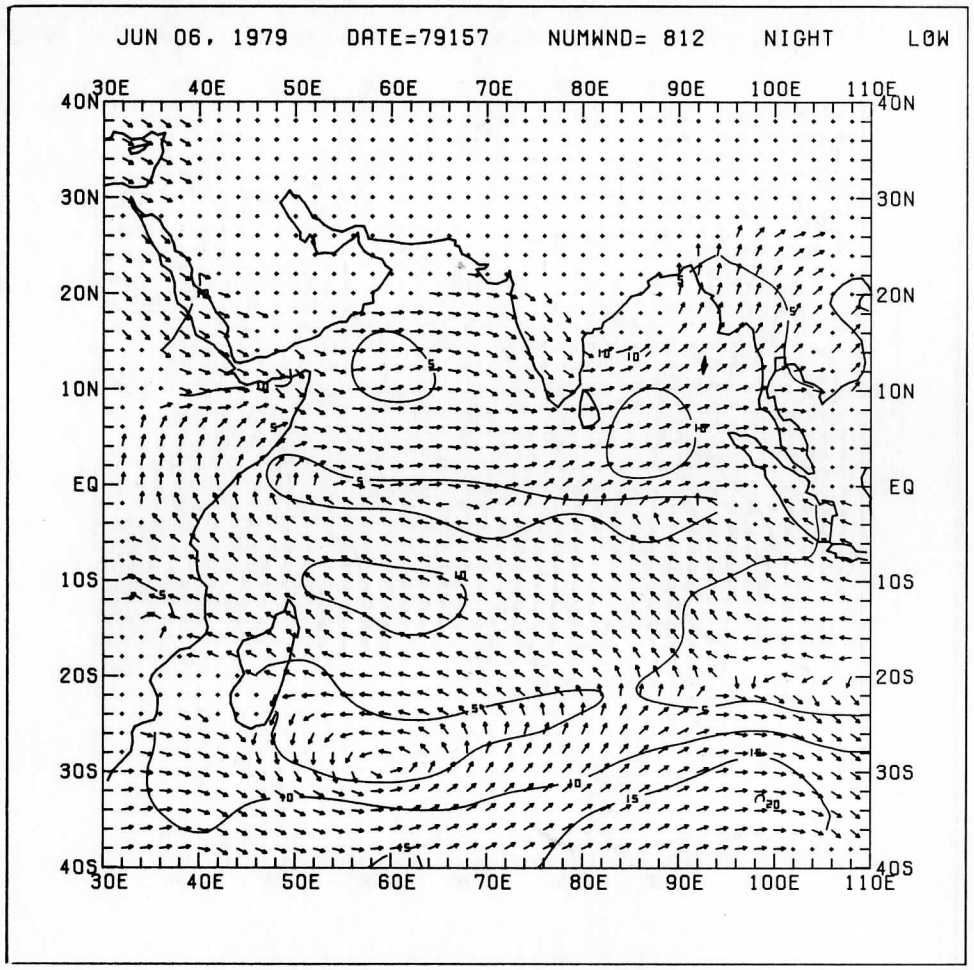

JUN 02, 1979 DATE=79153 NUMWND= 912 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

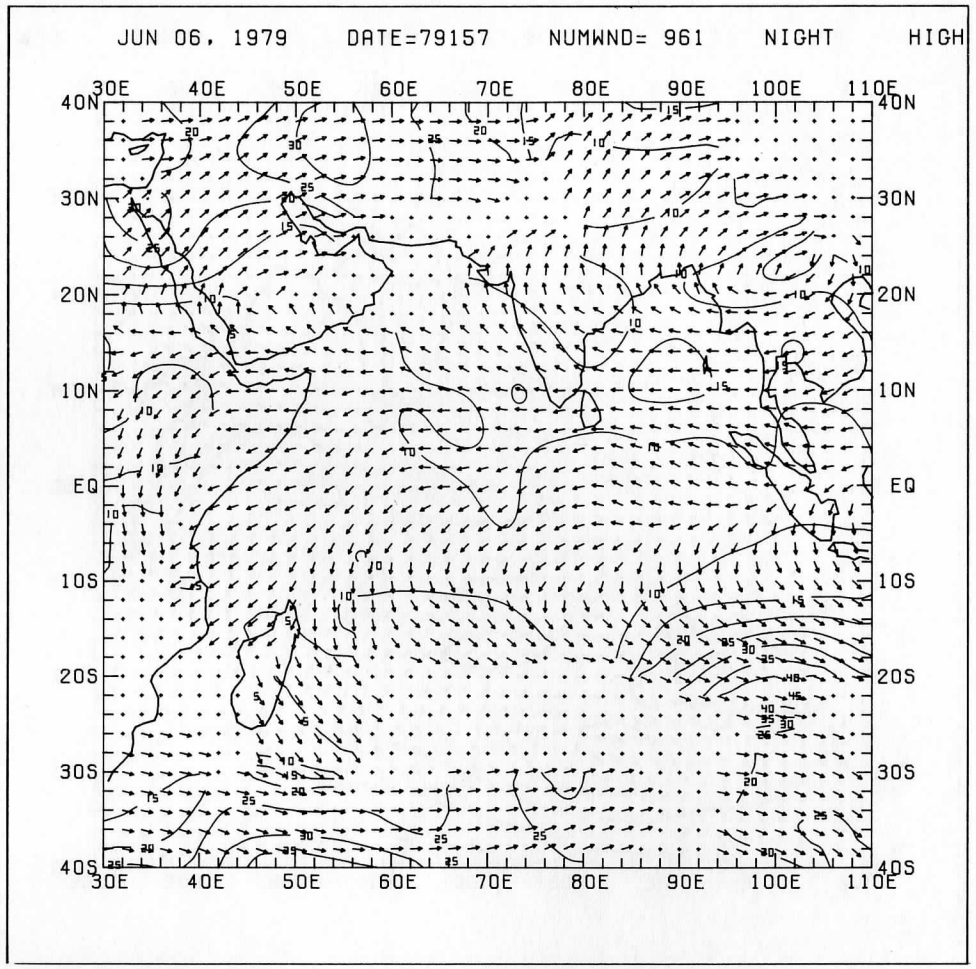

15E 30E 45E 60E 75E 90E 105E
TIROS-N 1 JUN 1979 2340 GMT TO 2 JUN 1979 2310GMT NITE IR

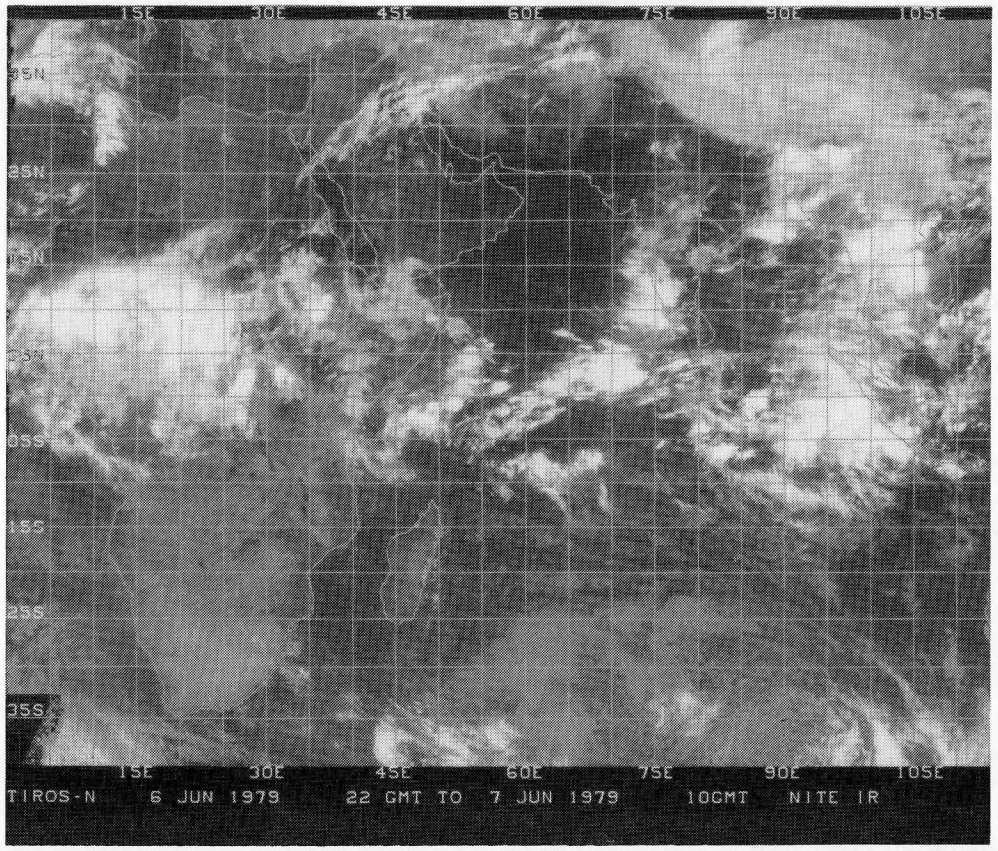

JUN 05, 1979 DATE=79156 NUMWND= 696 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

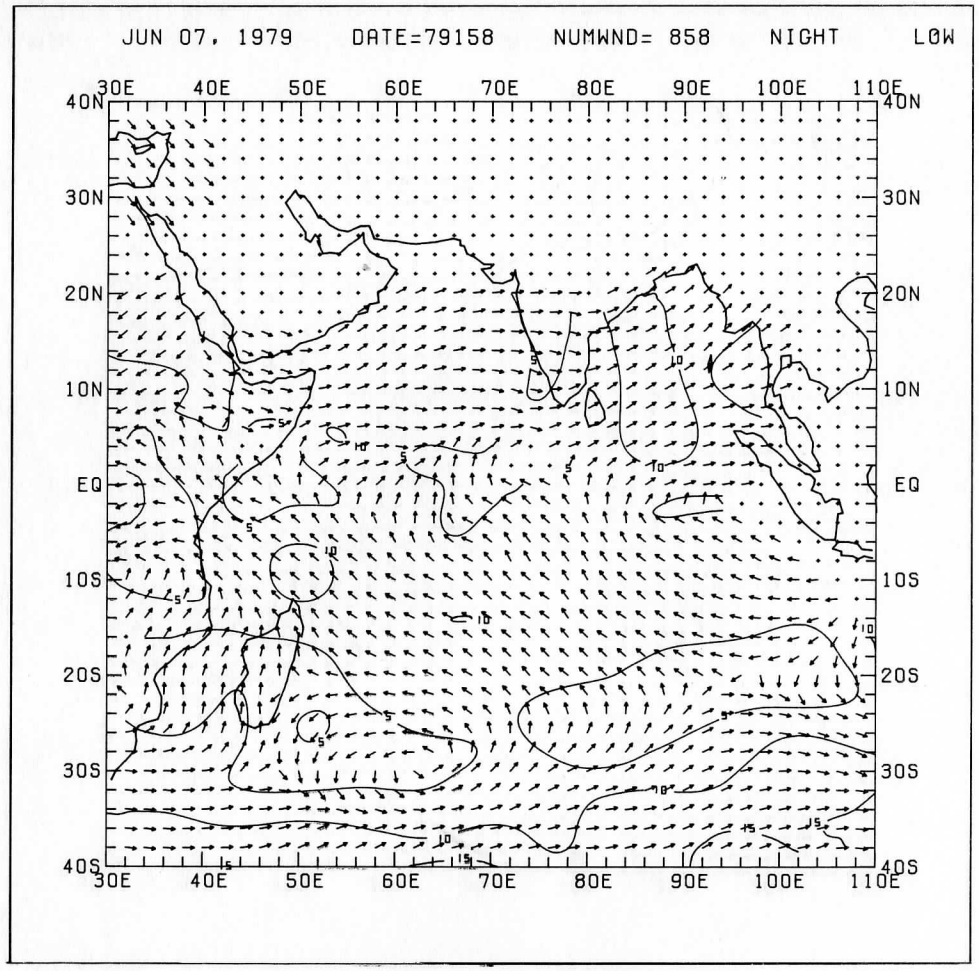

JUN 05, 1979 DATE=79156 NUMWND=1047 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

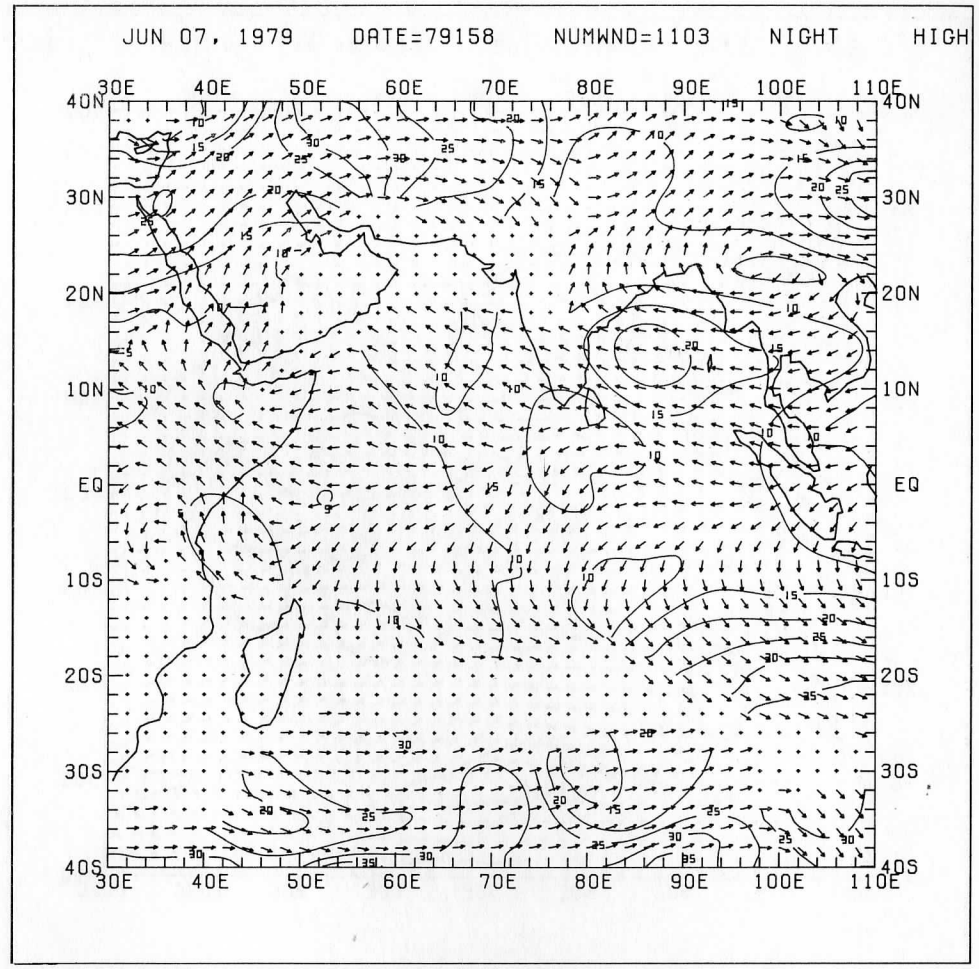

15E 30E 45E 60E 75E 90E 105E
TIROS-N 5 JUN 1979 2249 GMT TO 6 JUN 1979 22GMT NITE IR

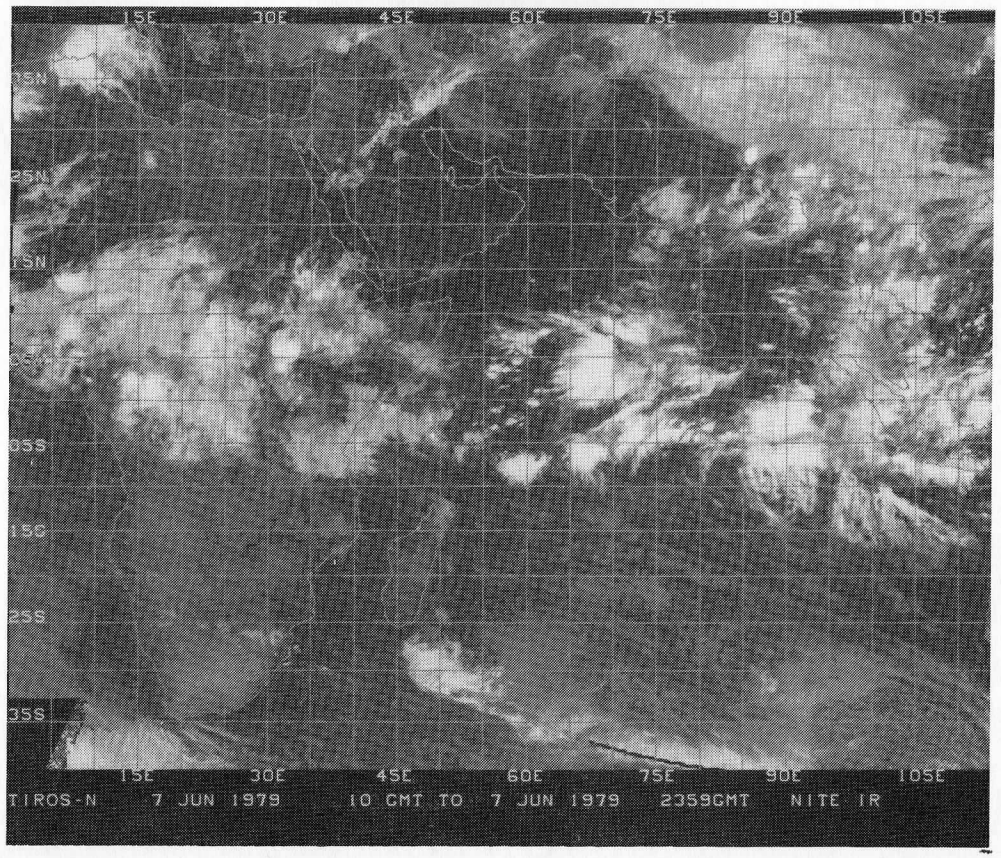

JUN 06, 1979 DATE=79157 NUMWND= 812 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

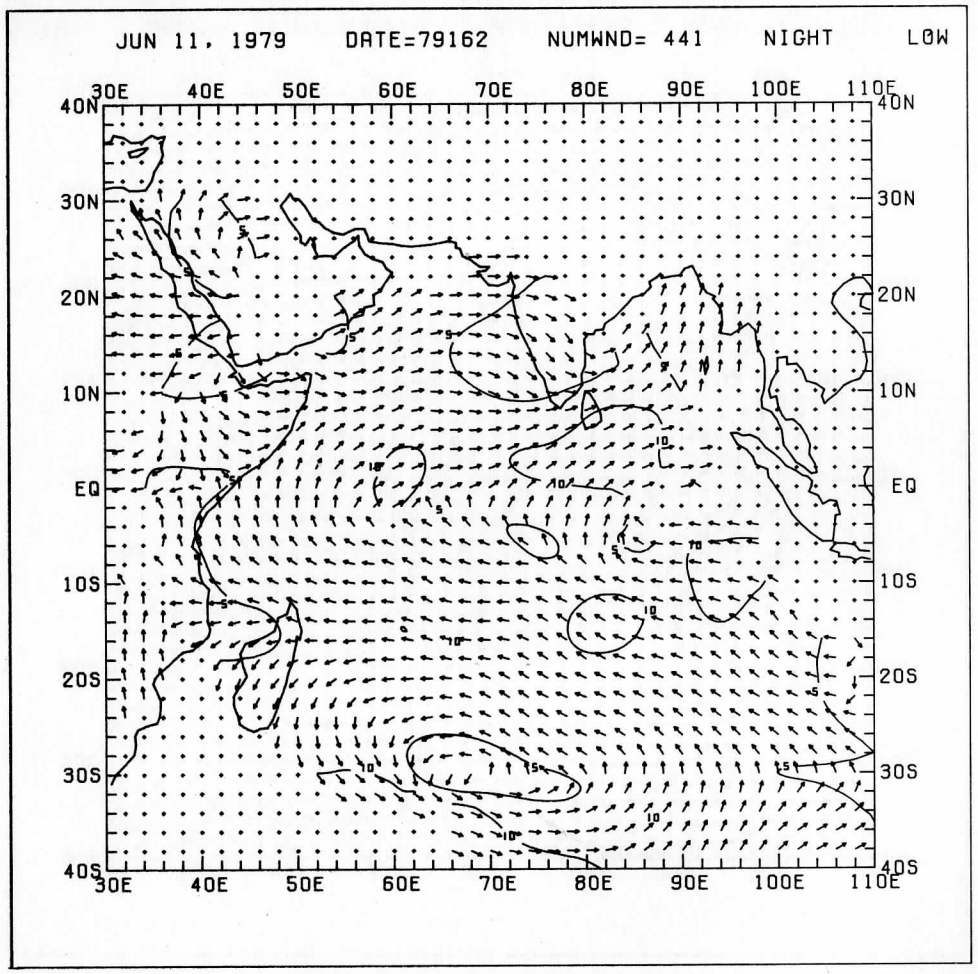

JUN 06, 1979 DATE=79157 NUMWND= 961 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

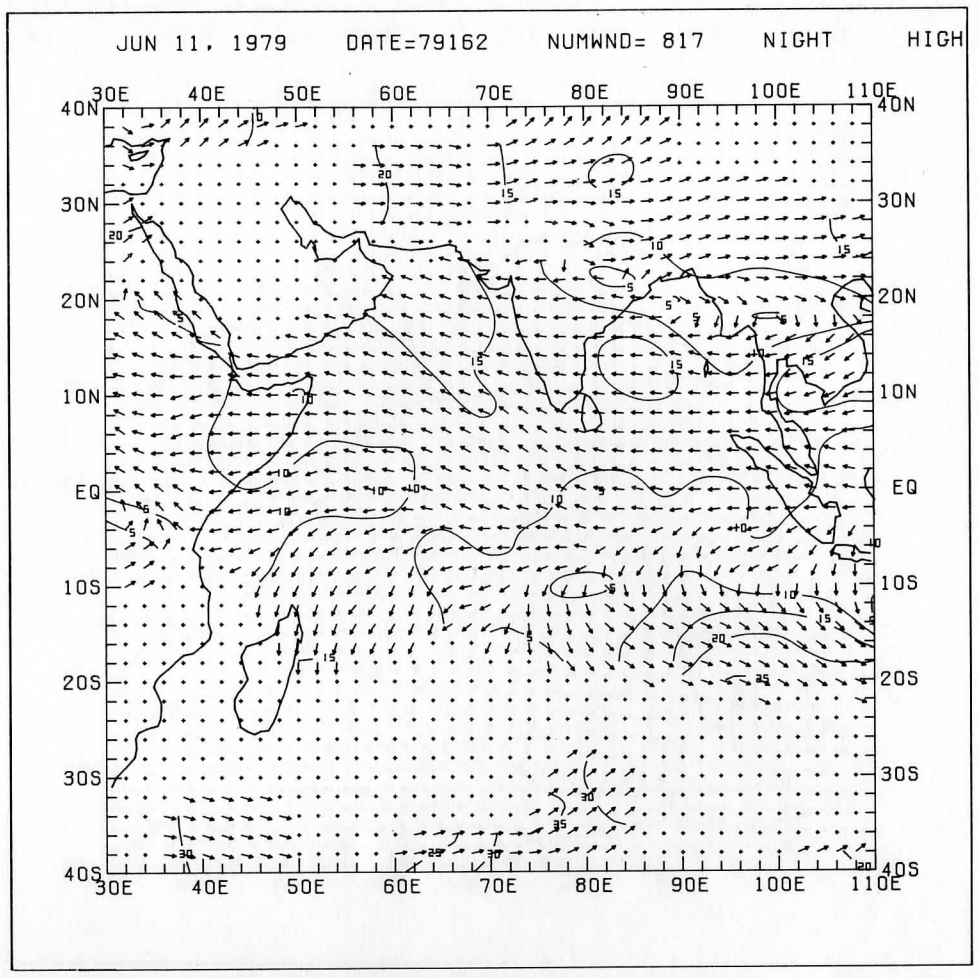

15E 30E 45E 60E 75E 90E 105E
TIROS-N 6 JUN 1979 22 GMT TO 7 JUN 1979 10GMT NITE IR

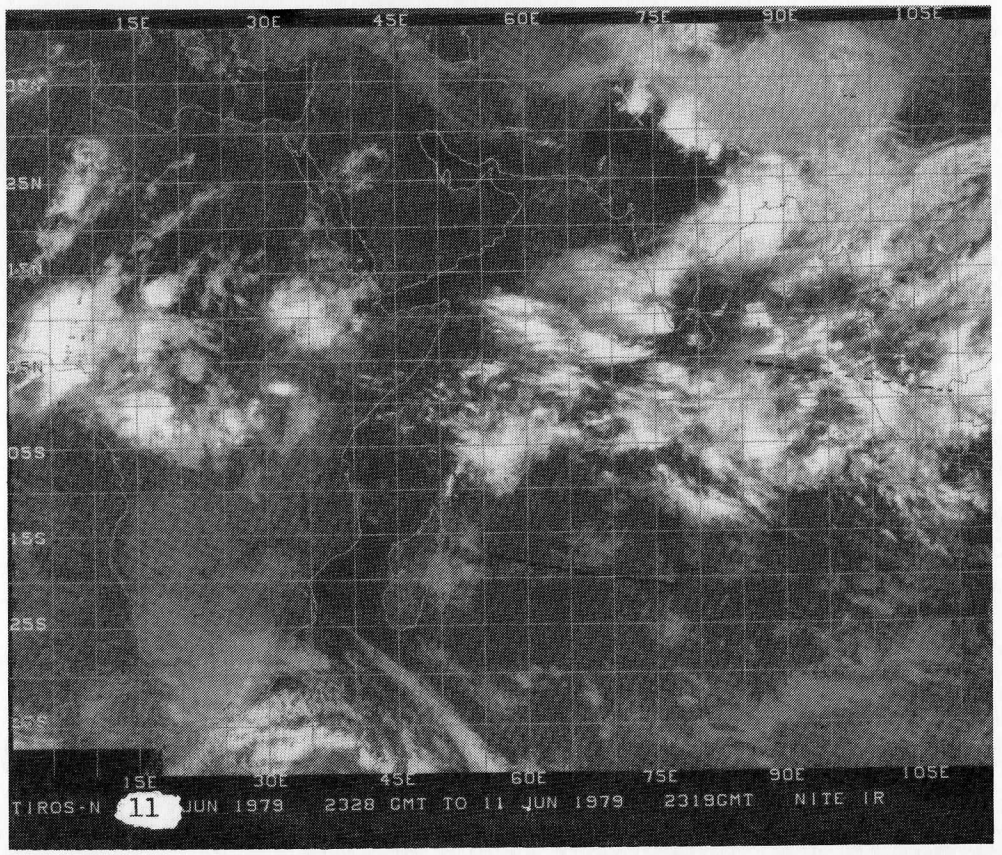

JUN 07, 1979 DATE=79158 NUMWND= 858 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

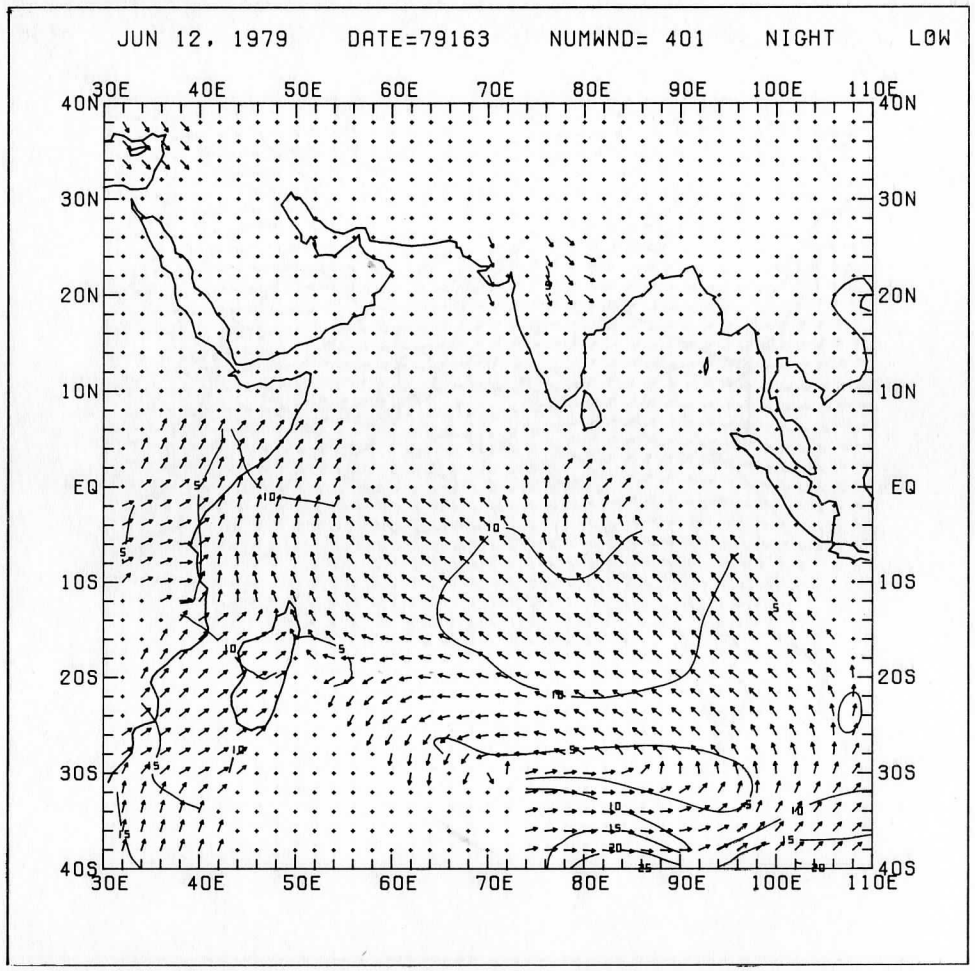

JUN 07, 1979 DATE=79158 NUMWND=1103 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

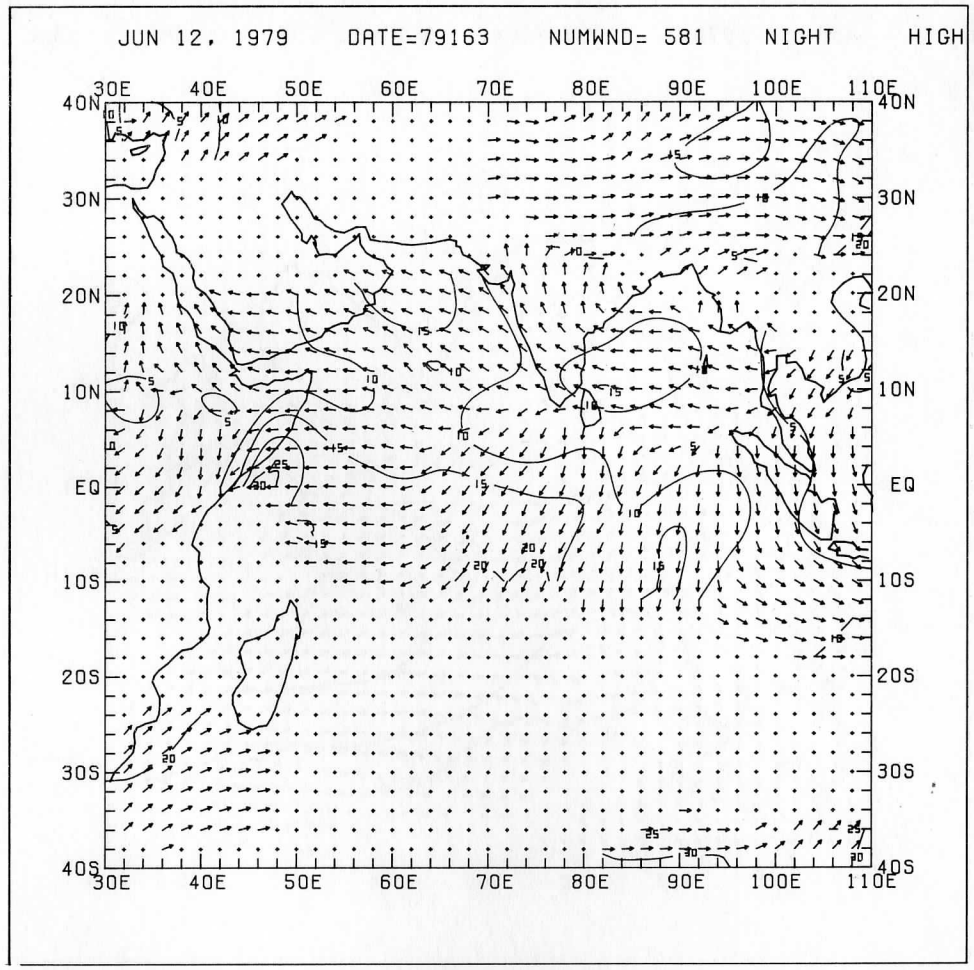

15E 30E 45E 60E 75E 90E 105E
TIROS-N 7 JUN 1979 10 GMT TO 7 JUN 1979 2359GMT NITE IR

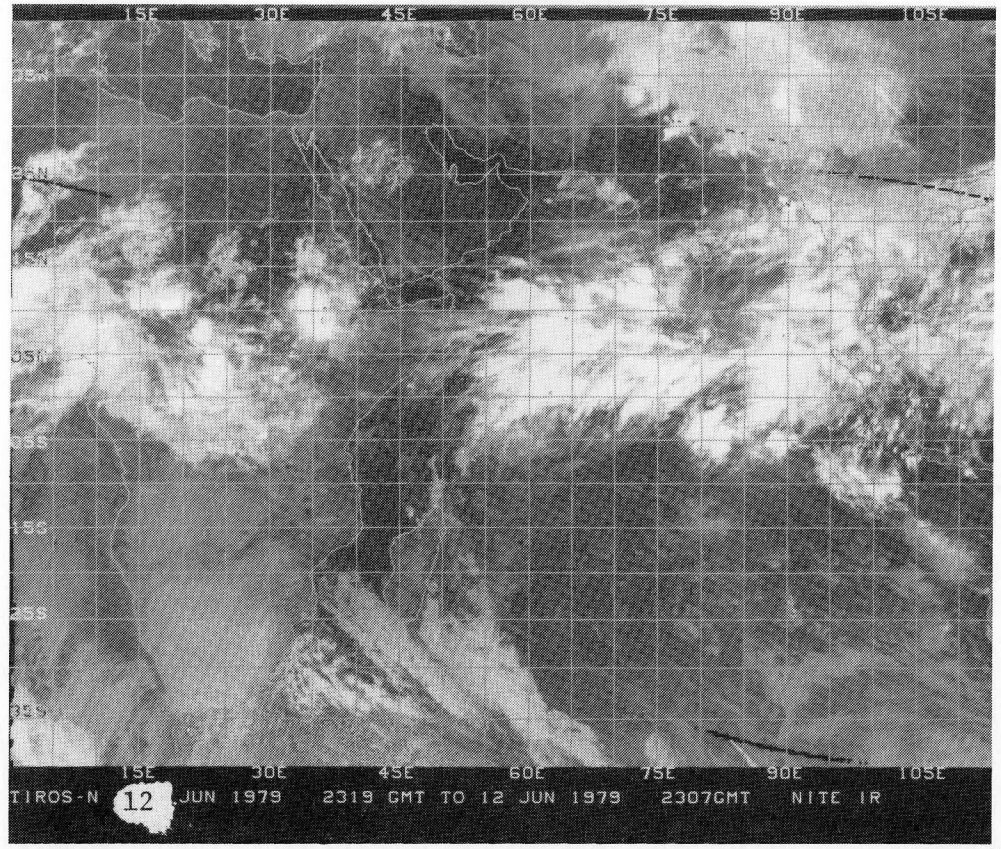

JUN 11, 1979 DATE=79162 NUMWND= 441 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

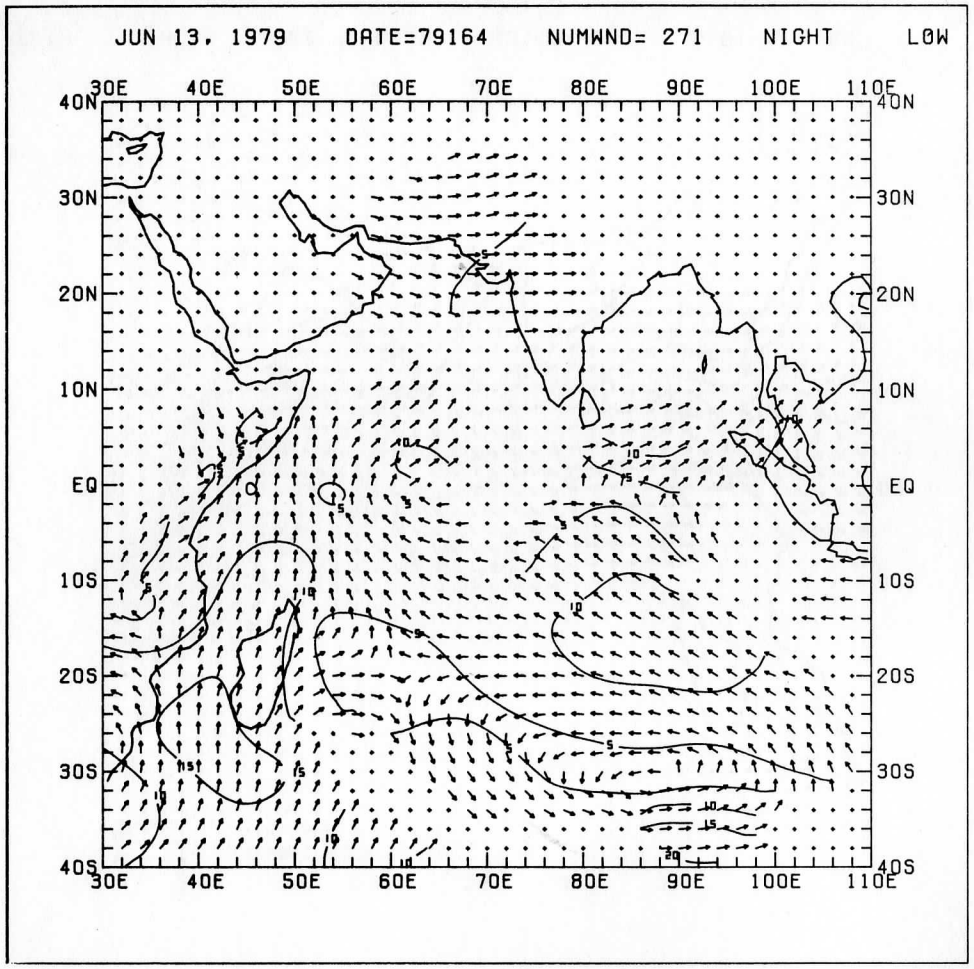

JUN 11, 1979 DATE=79162 NUMWND= 817 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

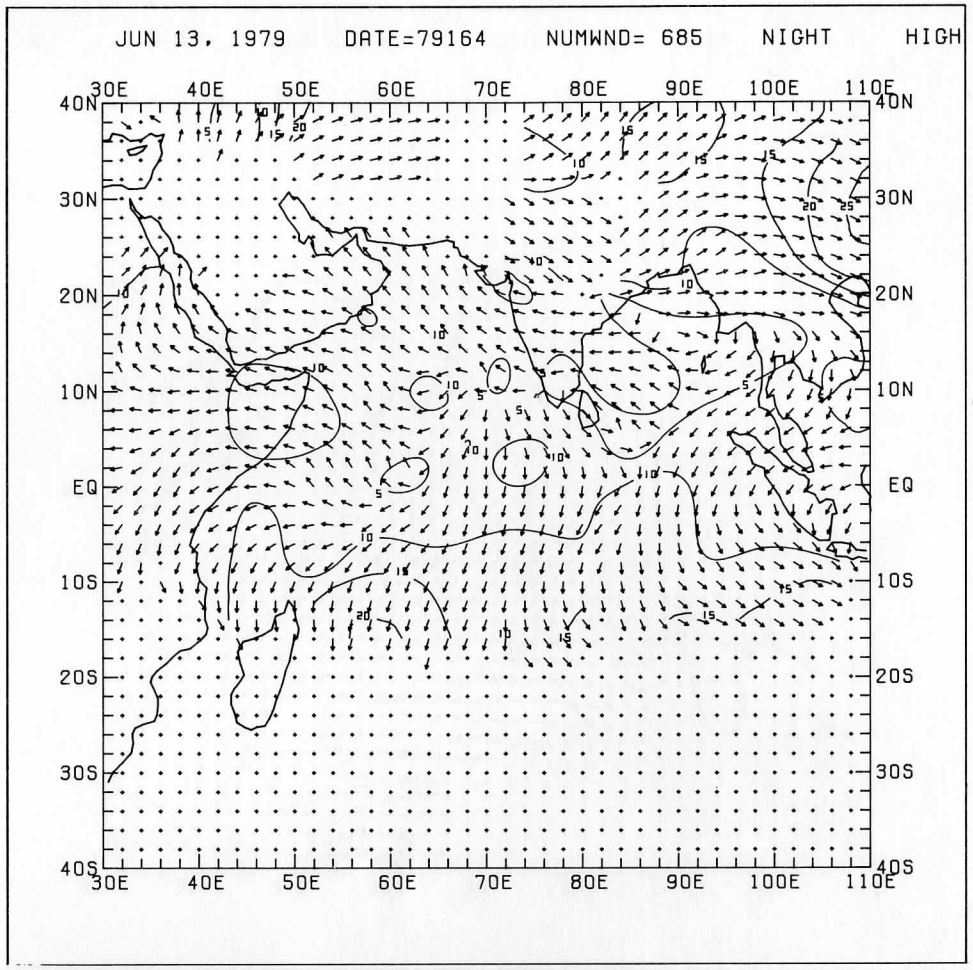

15E 30E 45E 60E 75E 90E 105E
25N
25S
TIROS-N 11 JUN 1979 2328 GMT TO 11 JUN 1979 2319GMT NITE IR

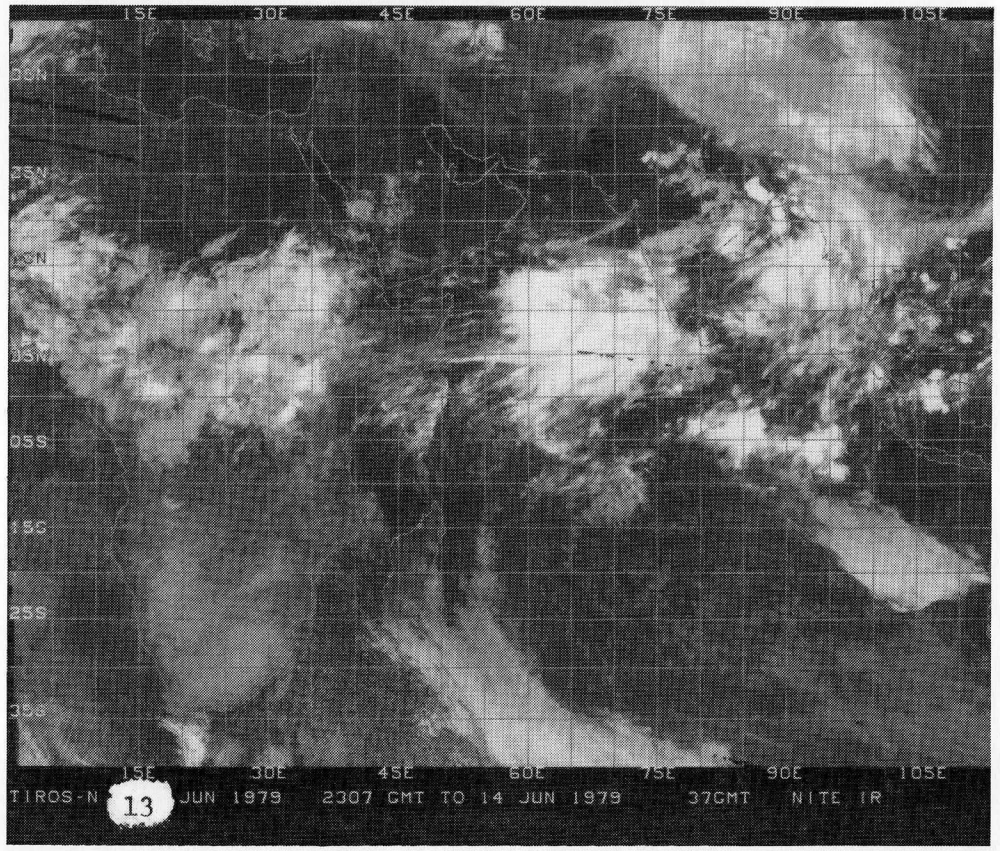

JUN 12, 1979 DATE=79163 NUMWND= 401 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

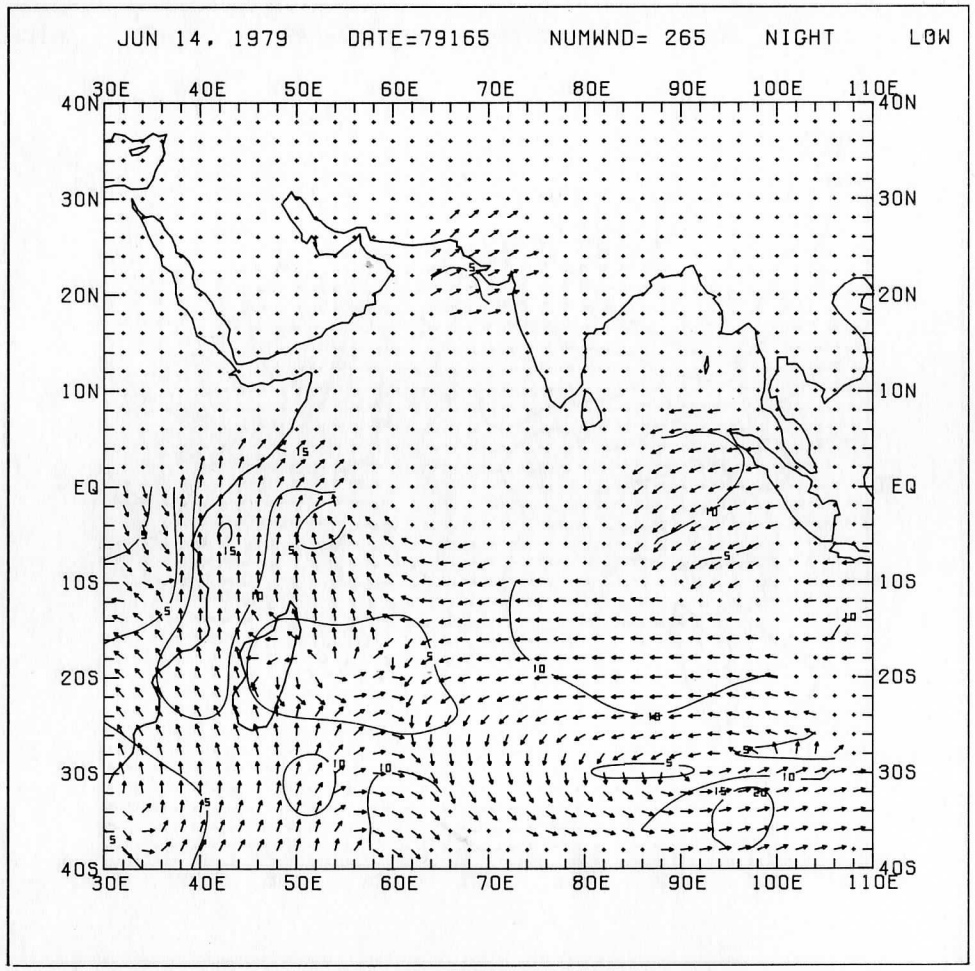

JUN 12, 1979 DATE=79163 NUMWND= 581 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

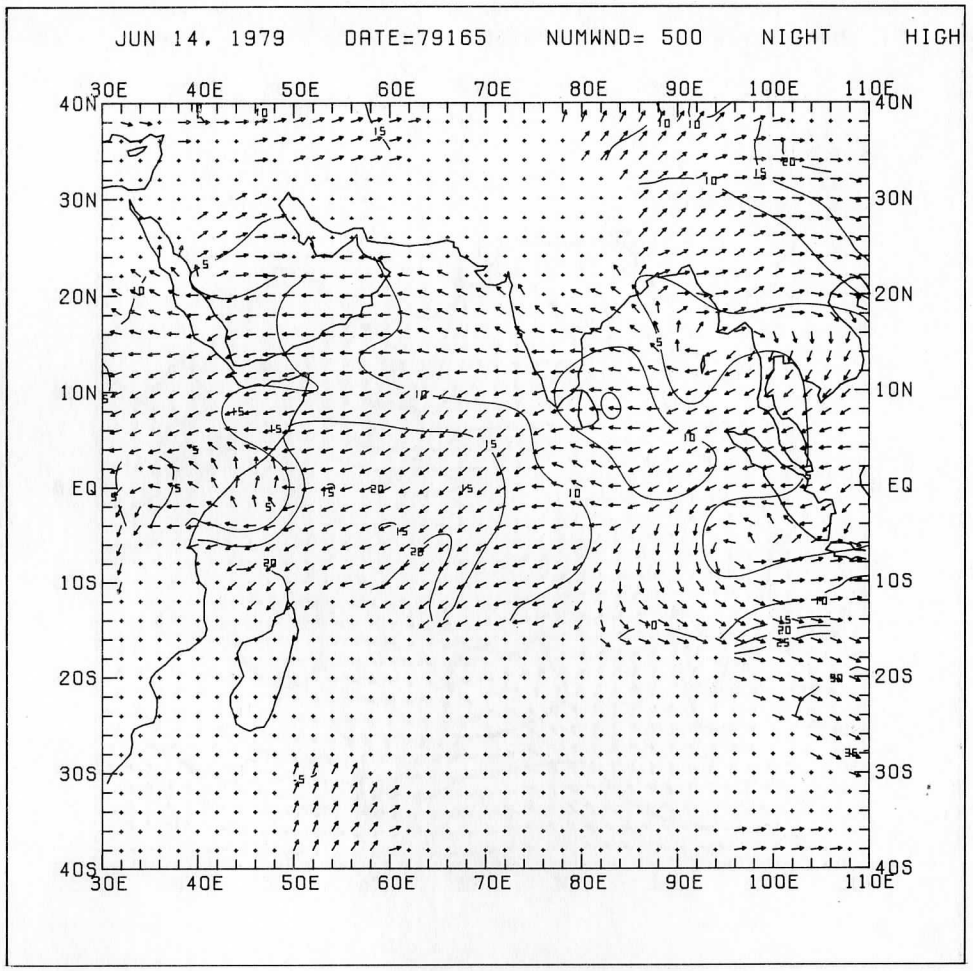

15E 30E 45E 60E 75E 90E 105E
TIROS-N 12 JUN 1979 2319 GMT TO 12 JUN 1979 2307GMT NITE IR

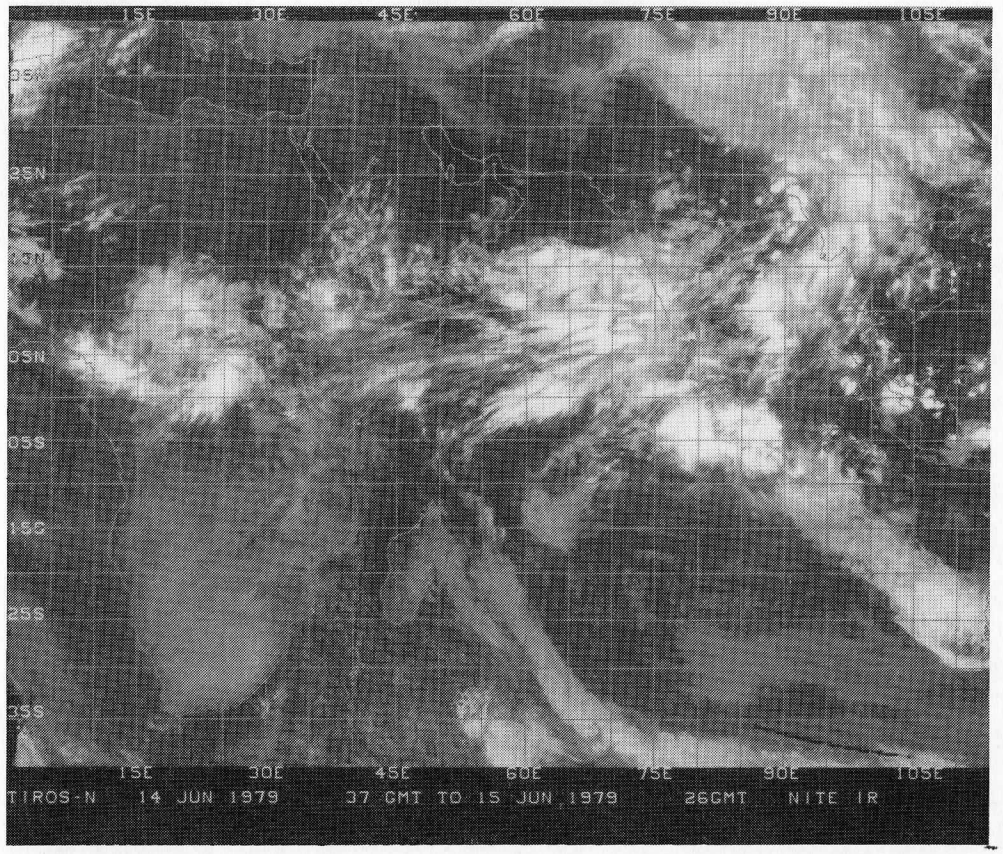

JUN 13, 1979 DATE=79164 NUMWND= 271 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

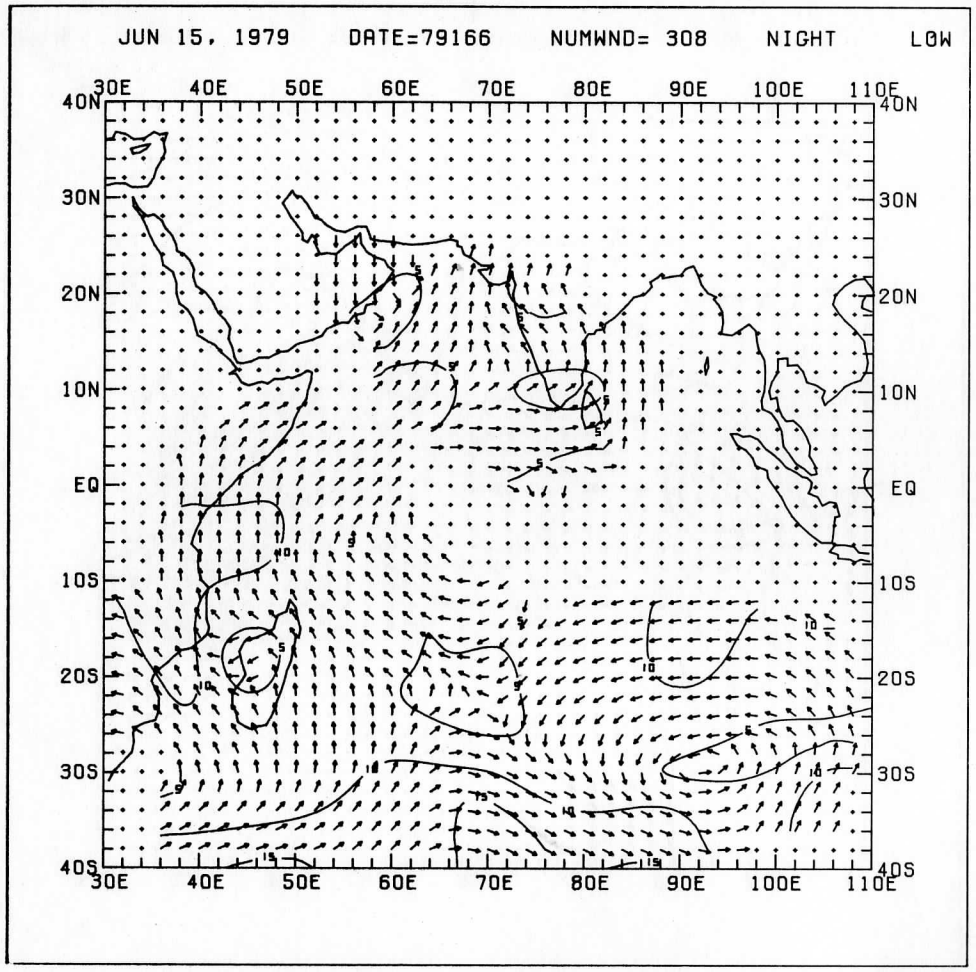

JUN 13, 1979 DATE=79164 NUMWND= 685 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

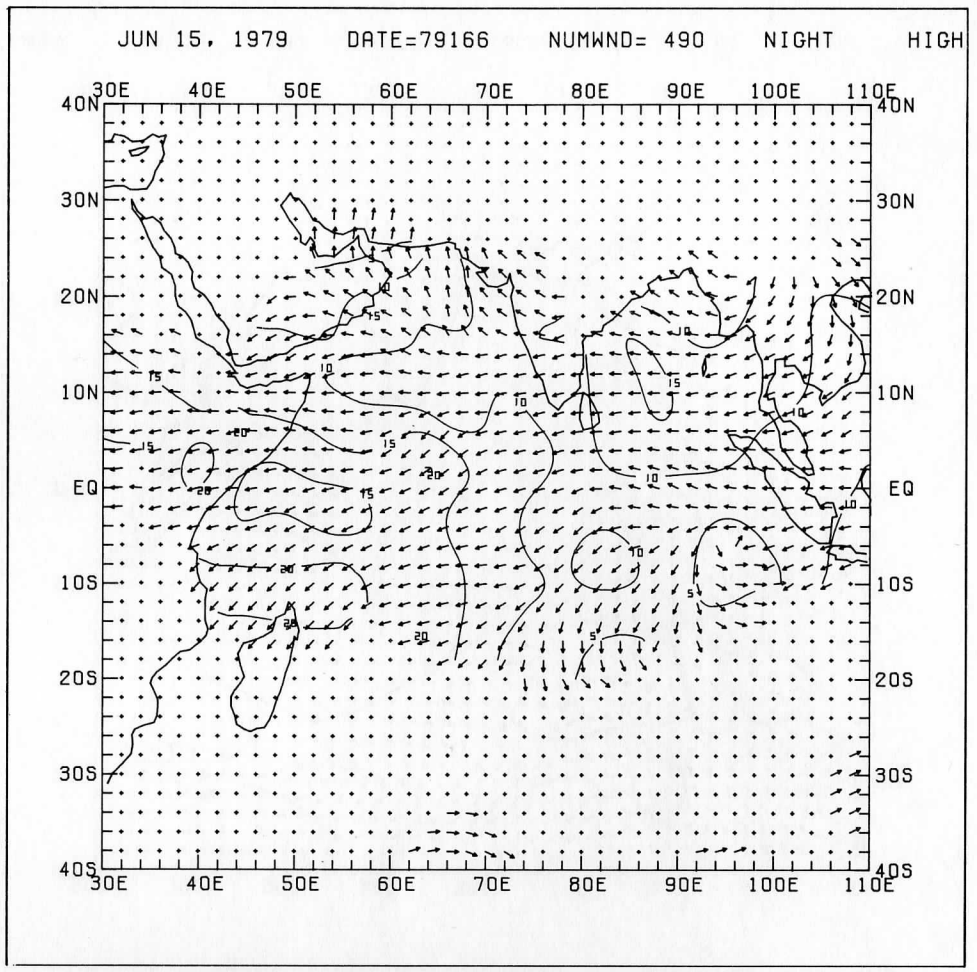

15E 30E 45E 60E 75E 90E 105E
TIROS-N 13 JUN 1979 2307 GMT TO 14 JUN 1979 37GMT NITE IR

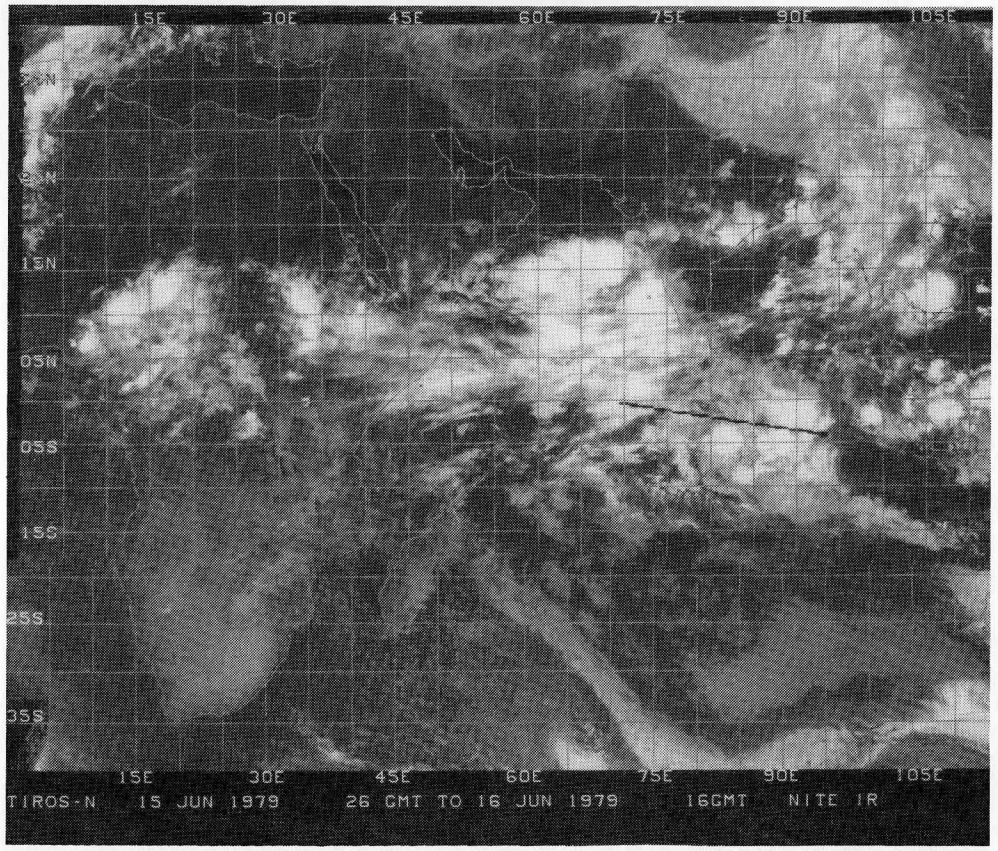

JUN 14, 1979 DATE=79165 NUMWND= 265 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

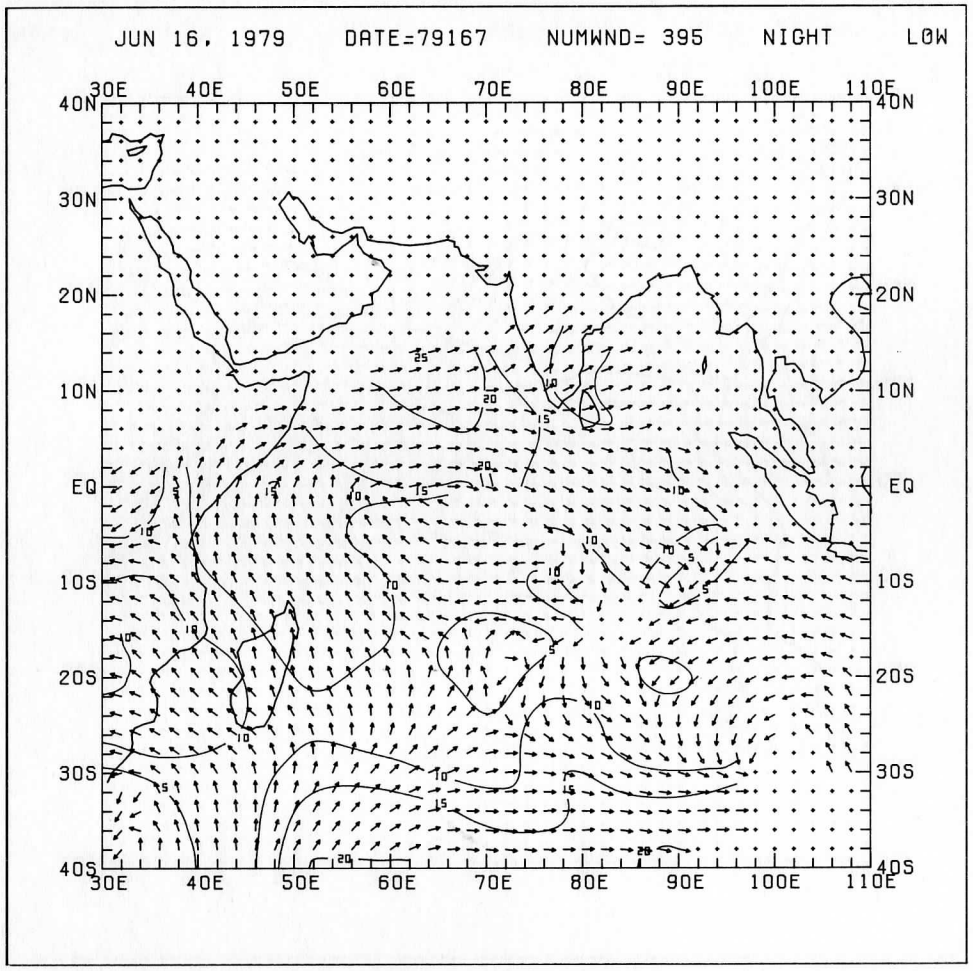

JUN 14, 1979 DATE=79165 NUMWND= 500 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

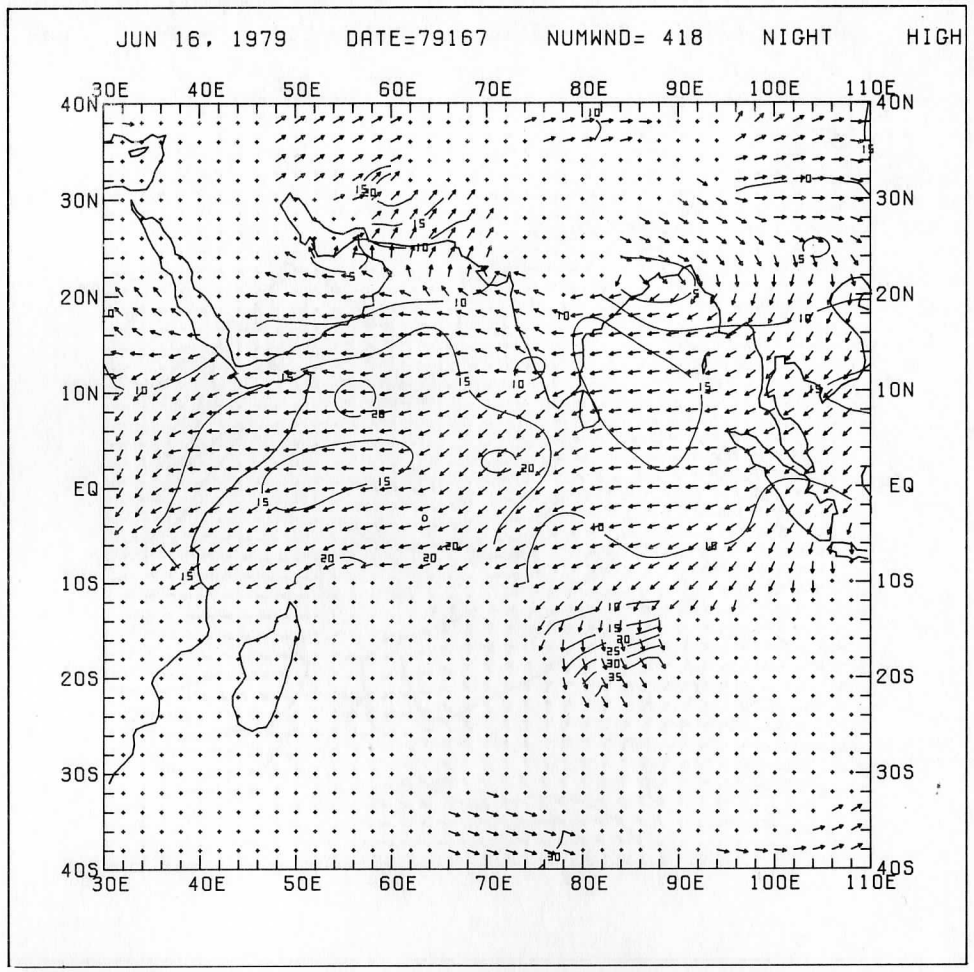

15E 30E 45E 60E 75E 90E 105E
TIROS-N 14 JUN 1979 07 GMT TO 15 JUN 1979 26GMT NITE IR

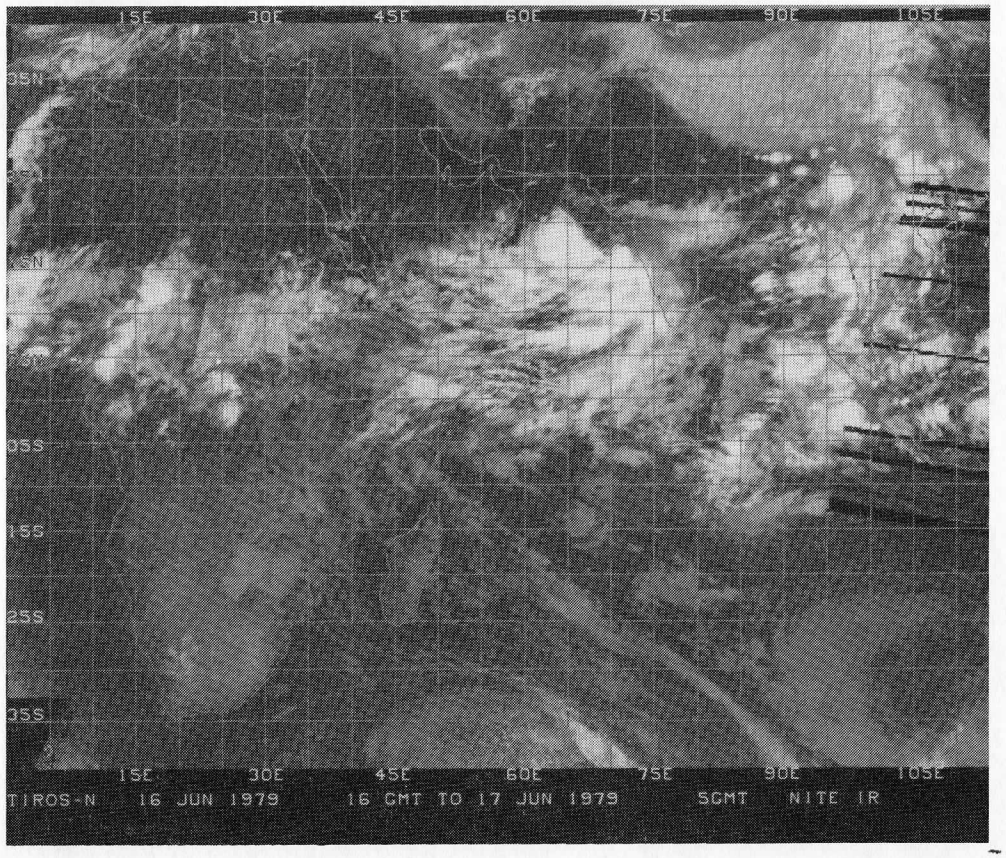

JUN 15, 1979 DATE=79166 NUMWND= 308 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

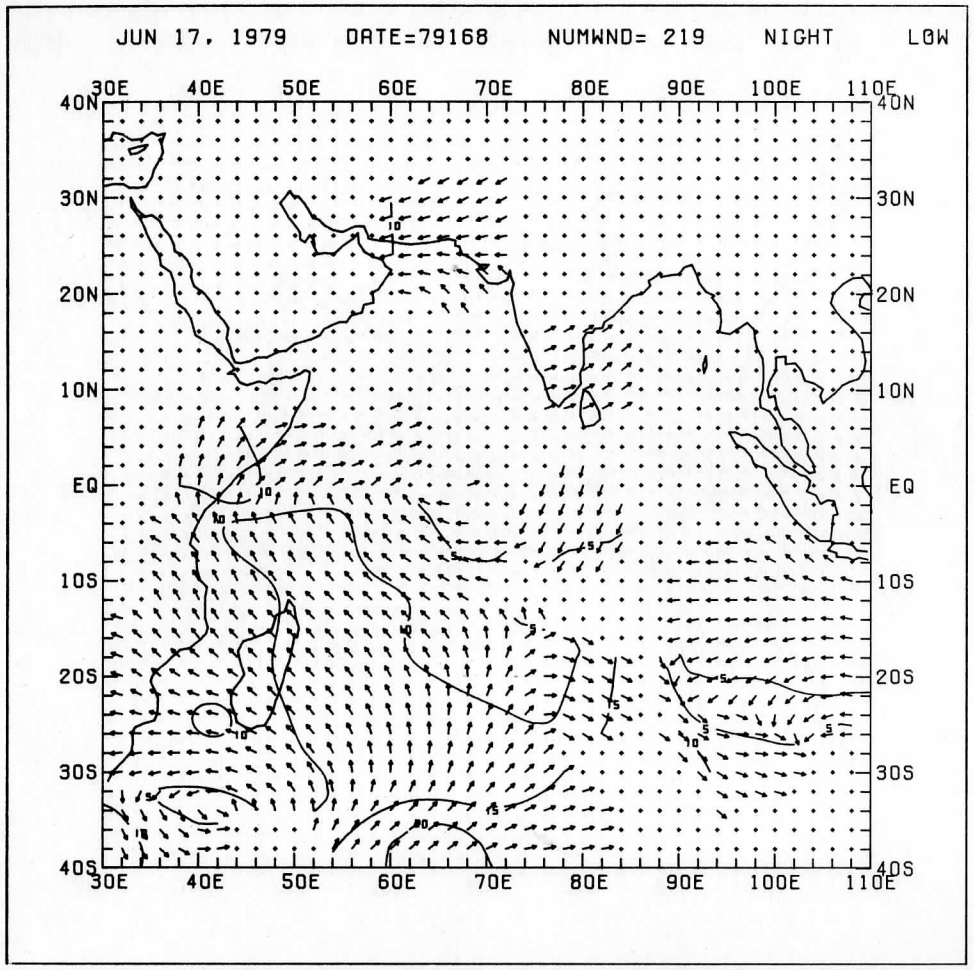

JUN 15, 1979 DATE=79166 NUMWND= 490 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

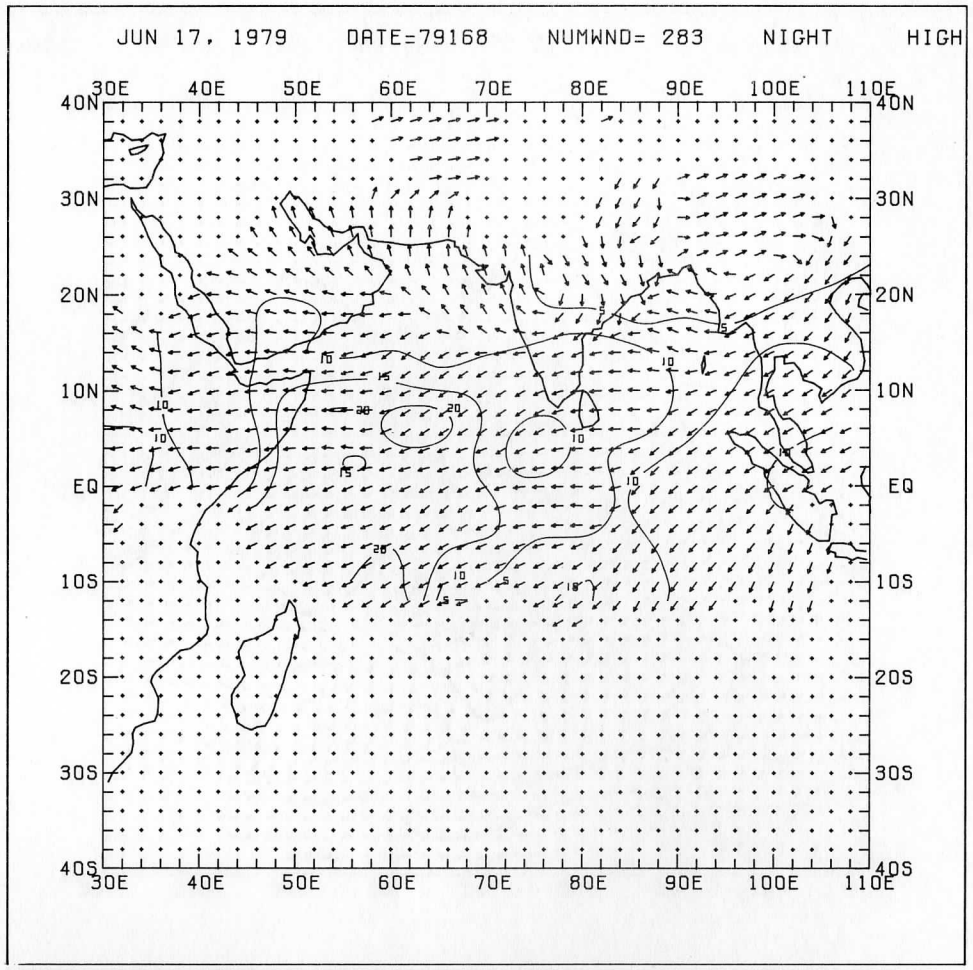

15E 30E 45E 60E 75E 90E 105E
15N
0N
15S
0SS
15S
25S
35S
TIROS-N 15 JUN 1979 26 GMT TO 16 JUN 1979 16GMT NITE IR

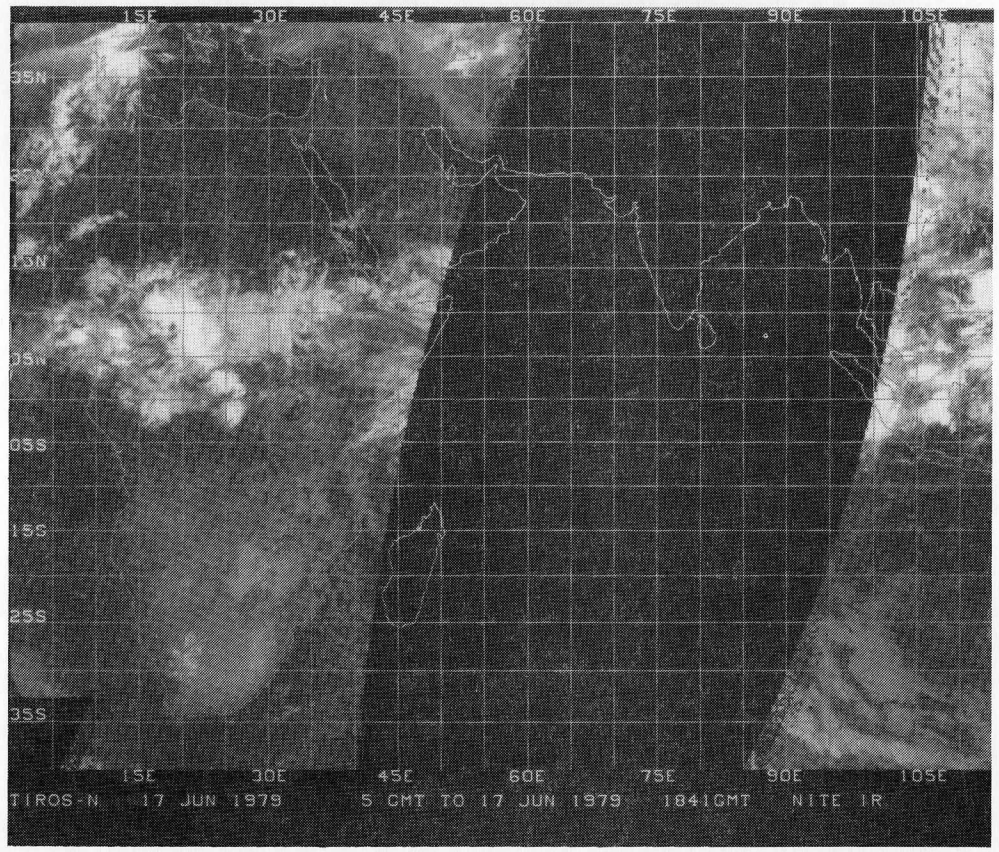

JUN 16, 1979 DATE=79167 NUMWND= 395 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

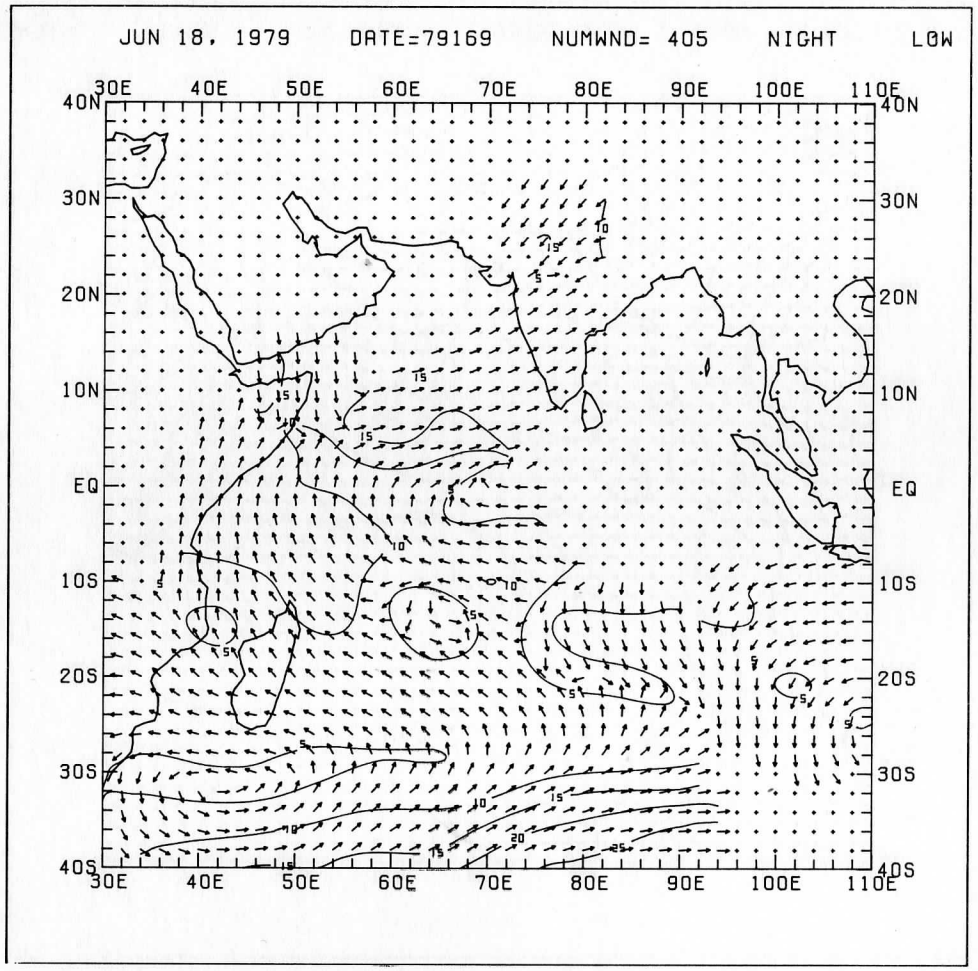

JUN 16, 1979 DATE=79167 NUMWND= 418 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

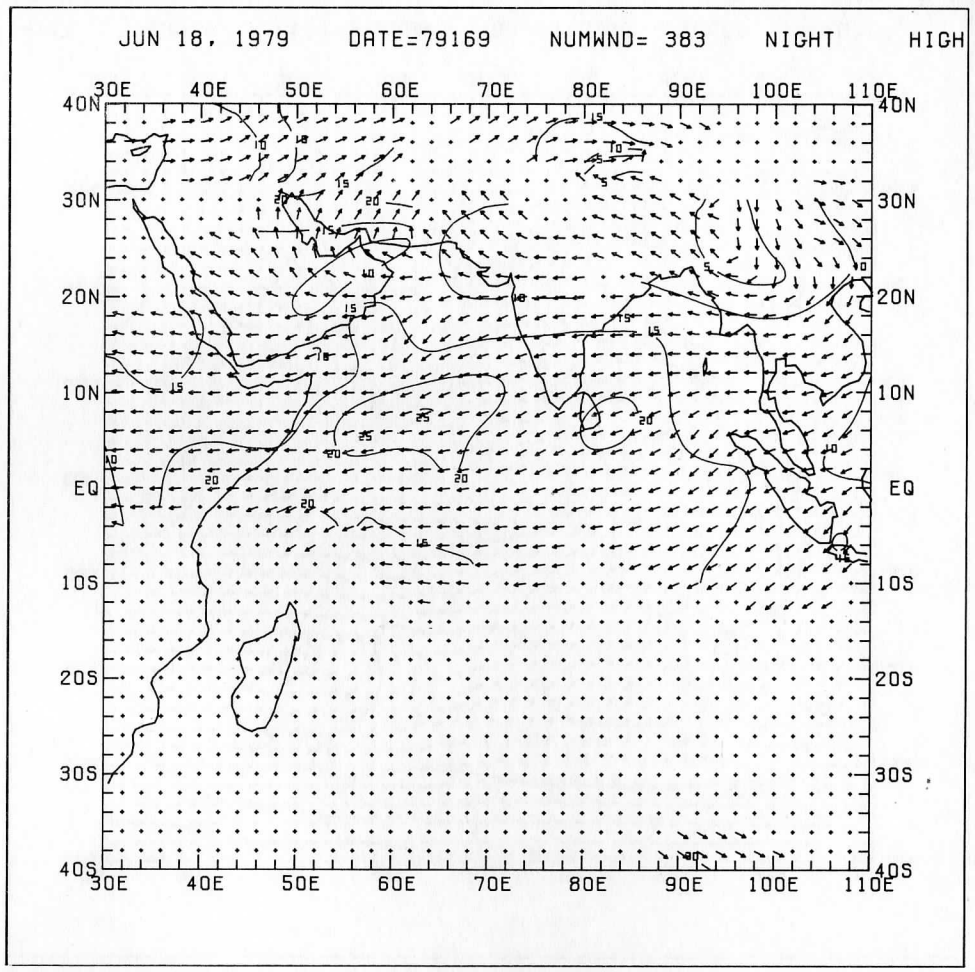

15E 30E 45E 60E 75E 90E 105E
TIROS-N 16 JUN 1979 16 GMT TO 17 JUN 1979 5GMT NITE IR

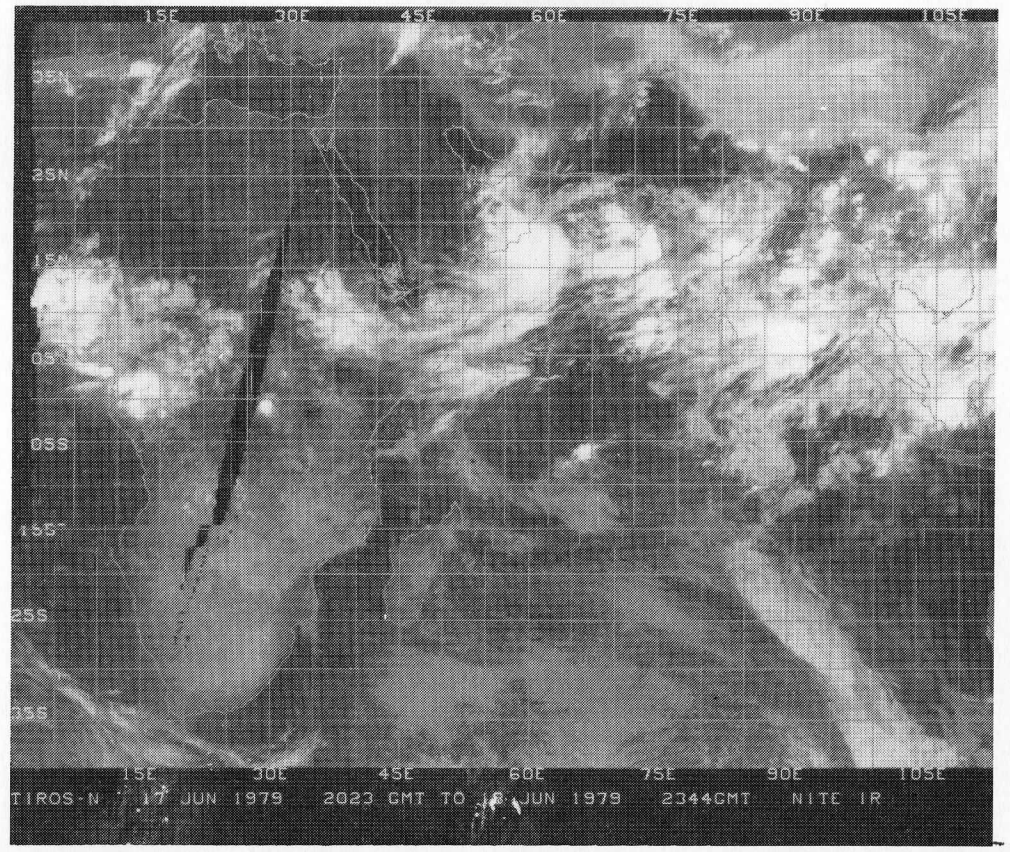

JUN 17, 1979 DATE=79168 NUMWND= 219 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

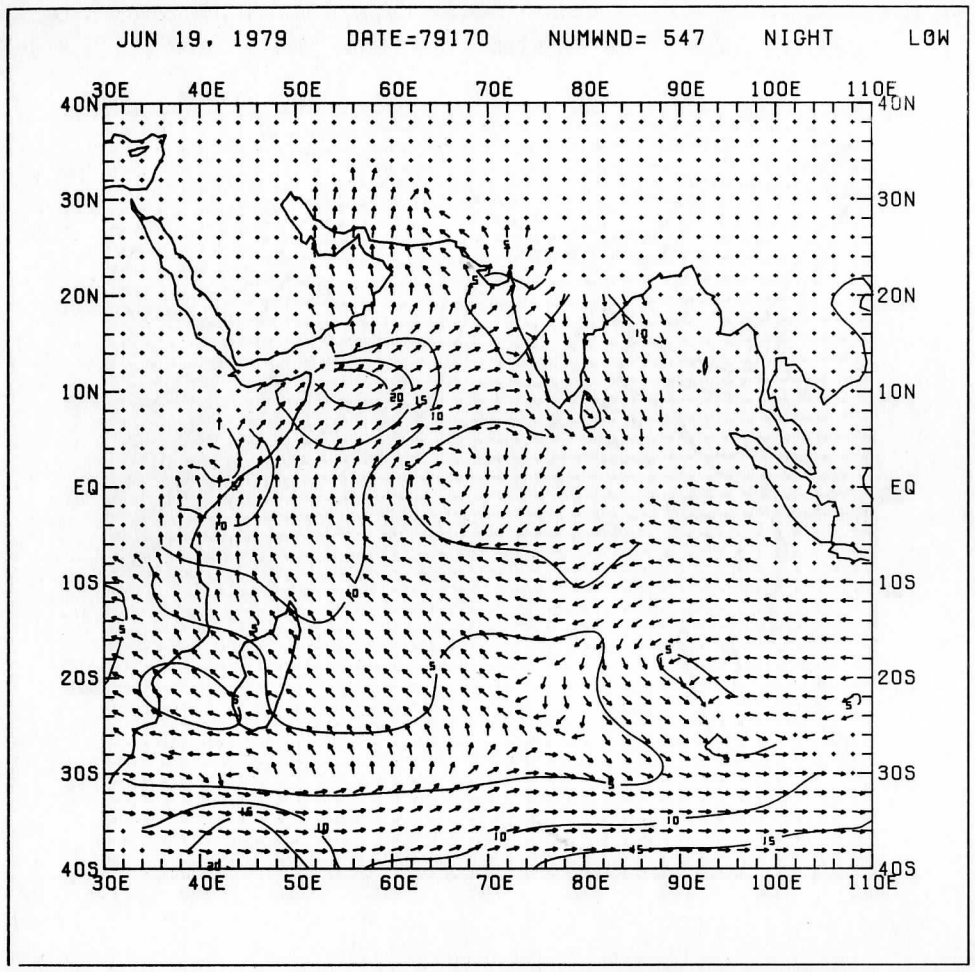

JUN 17, 1979 DATE=79168 NUMWND= 283 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

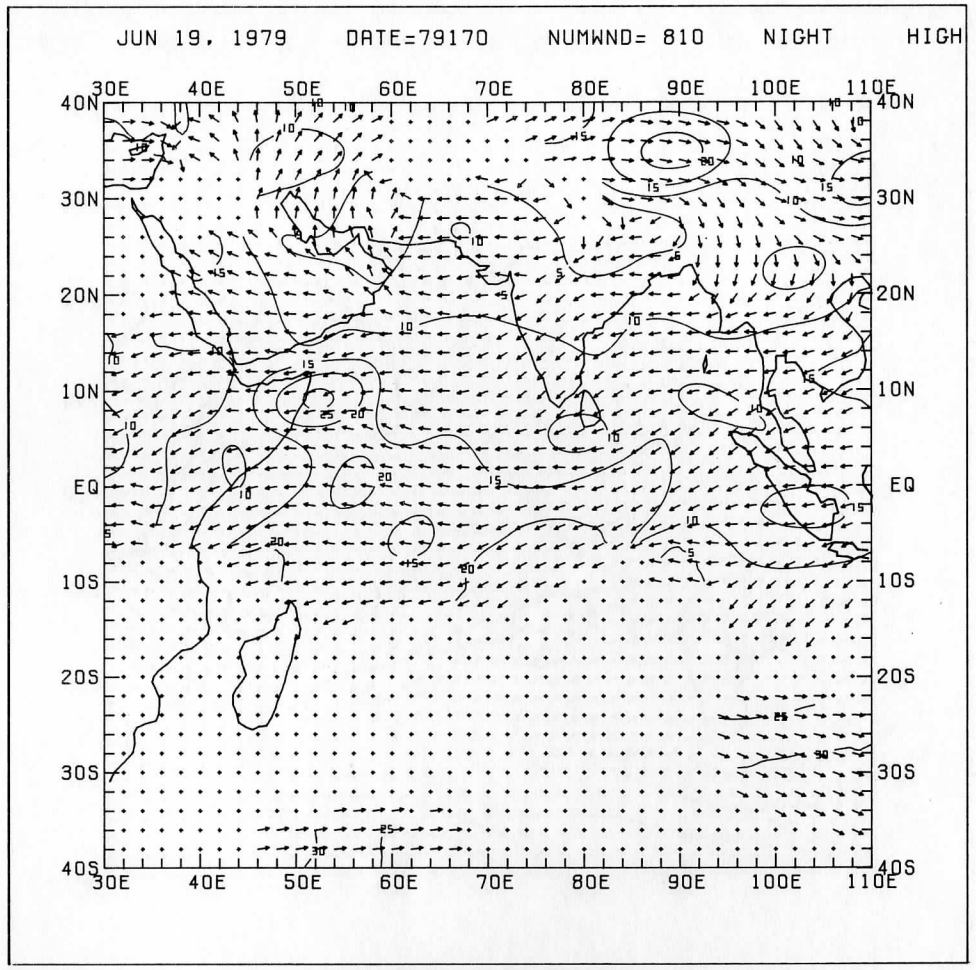

TIROS-N 17 JUN 1979 5 GMT TO 17 JUN 1979 1841GMT NITE IR

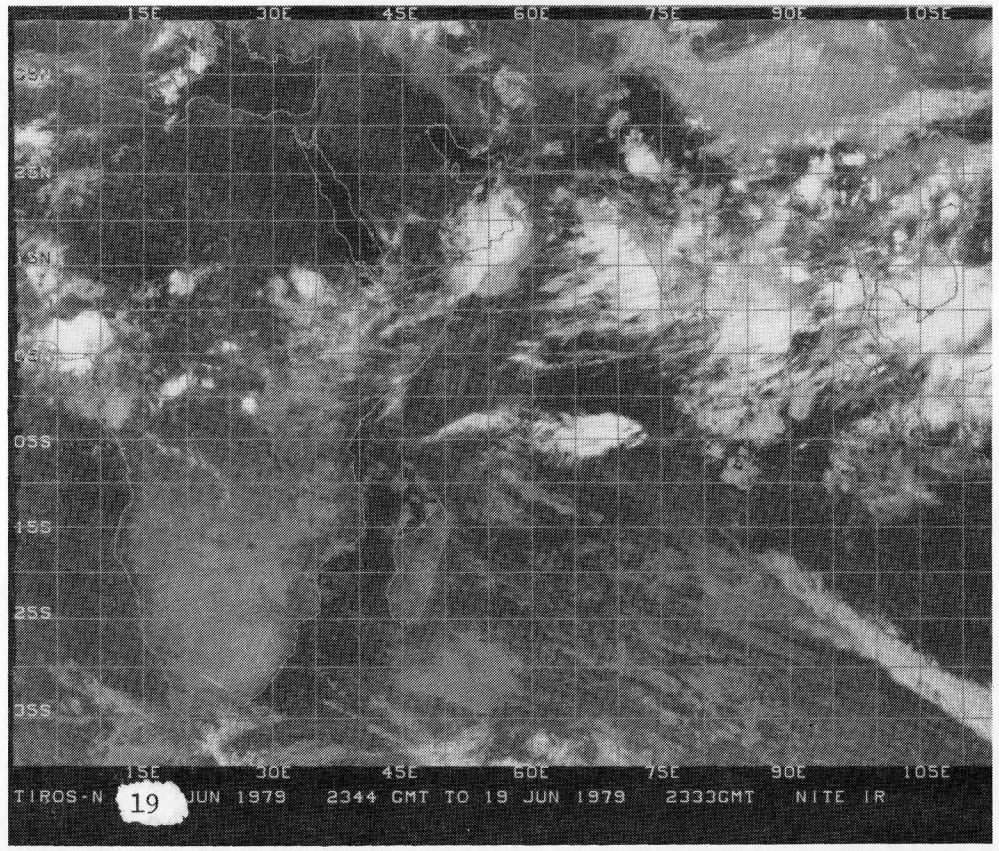

JUN 18, 1979 DATE=79169 NUMWND= 405 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

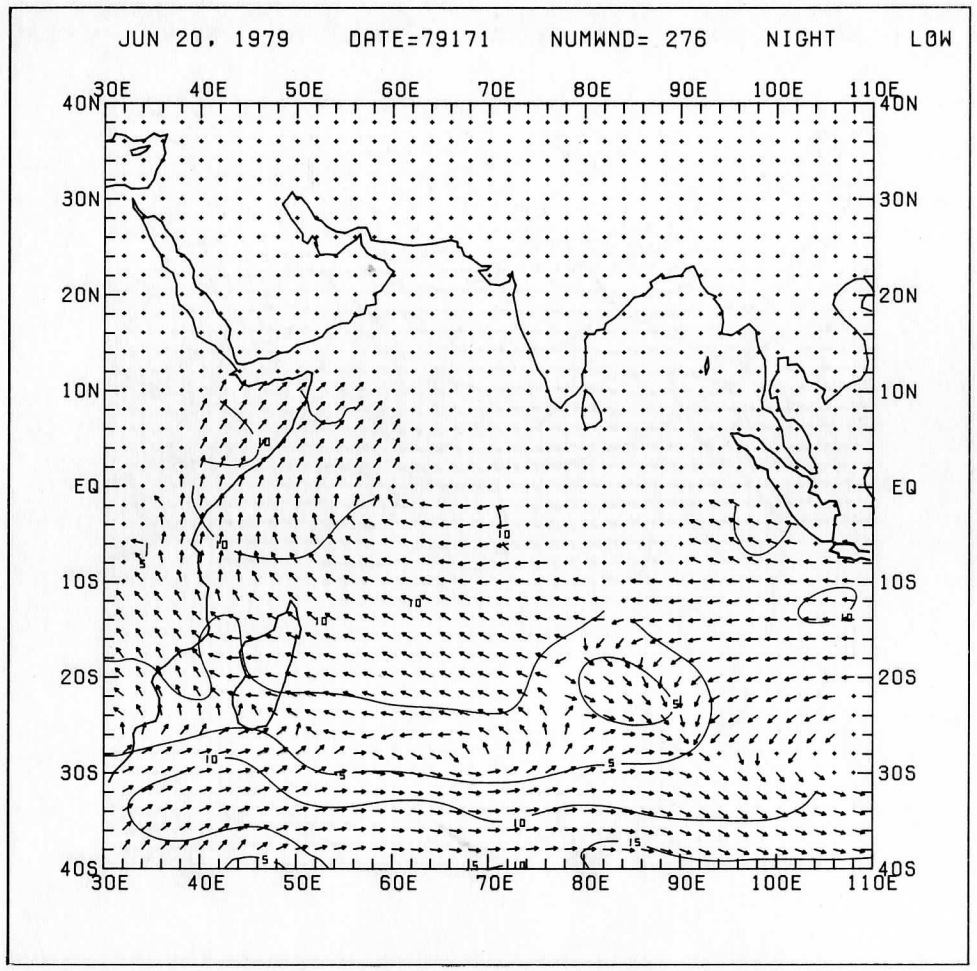

JUN 18, 1979 DATE=79169 NUMWND= 383 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

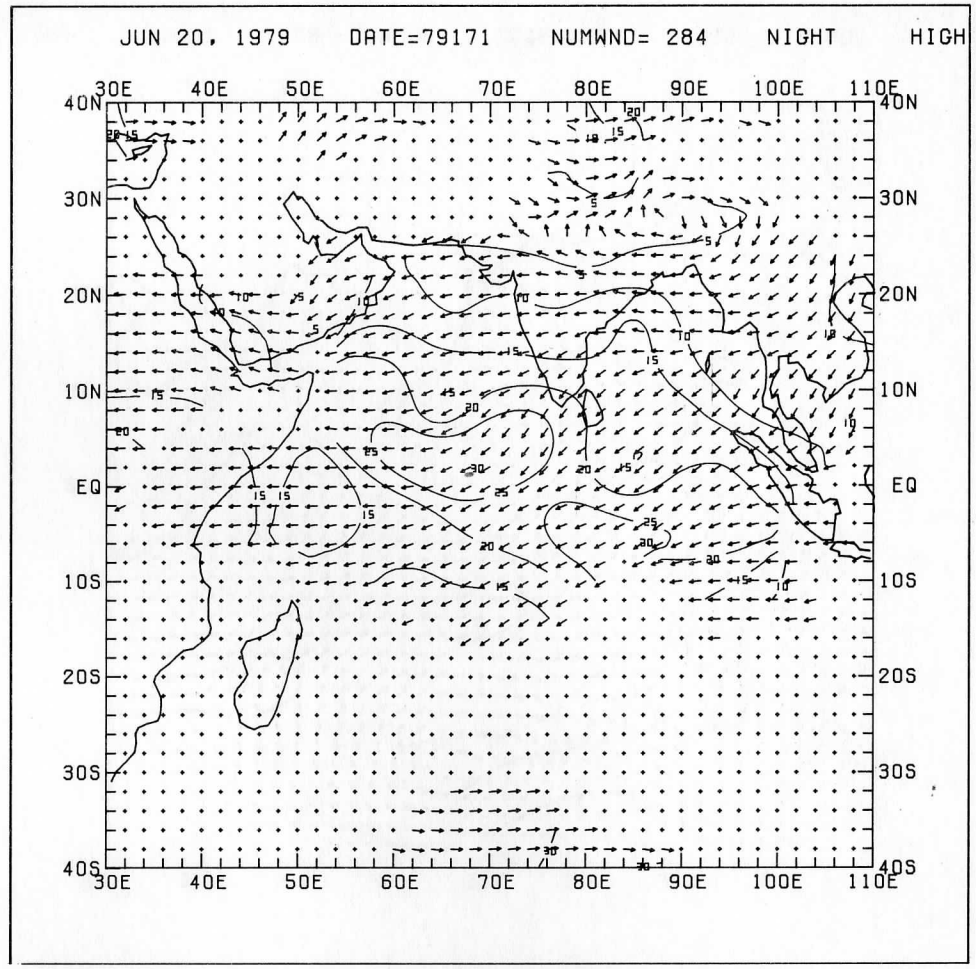

15E 30E 45E 60E 75E 90E 105E
35N
25N
15N
05N
05S
15S
25S
35S
TIROS-N 17 JUN 1979 2023 GMT TO 18 JUN 1979 2344GMT NITE IR

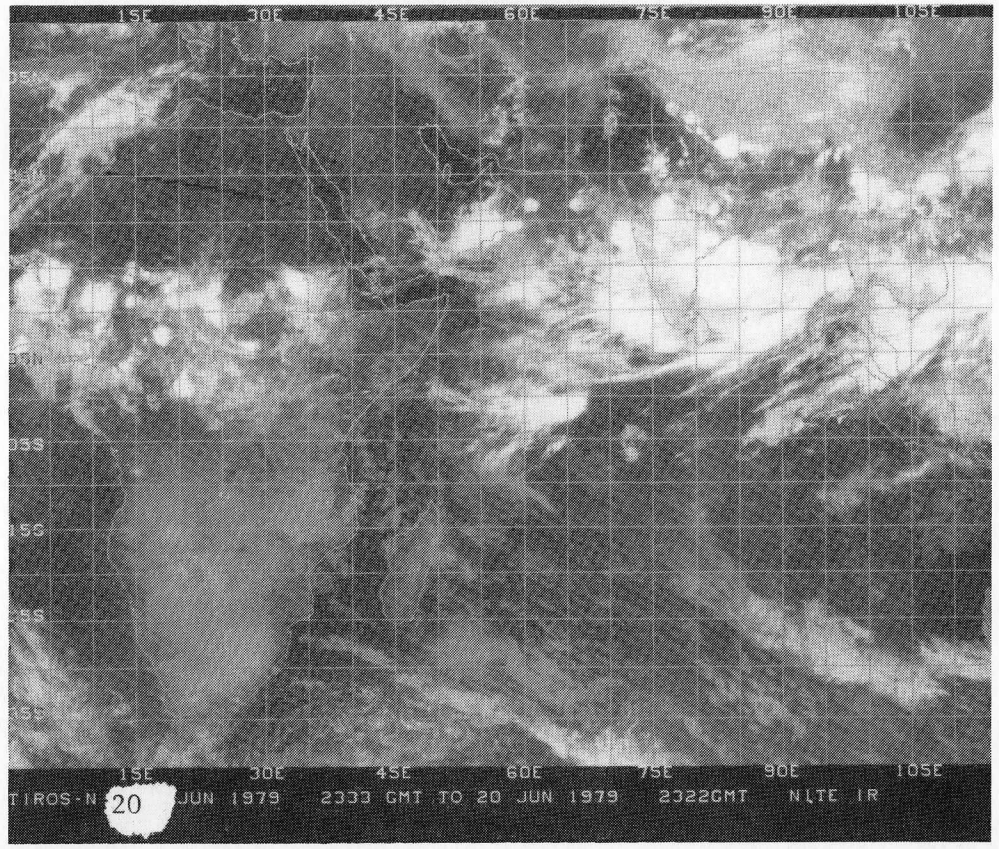

JUN 19, 1979 DATE=79170 NUMWND= 547 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

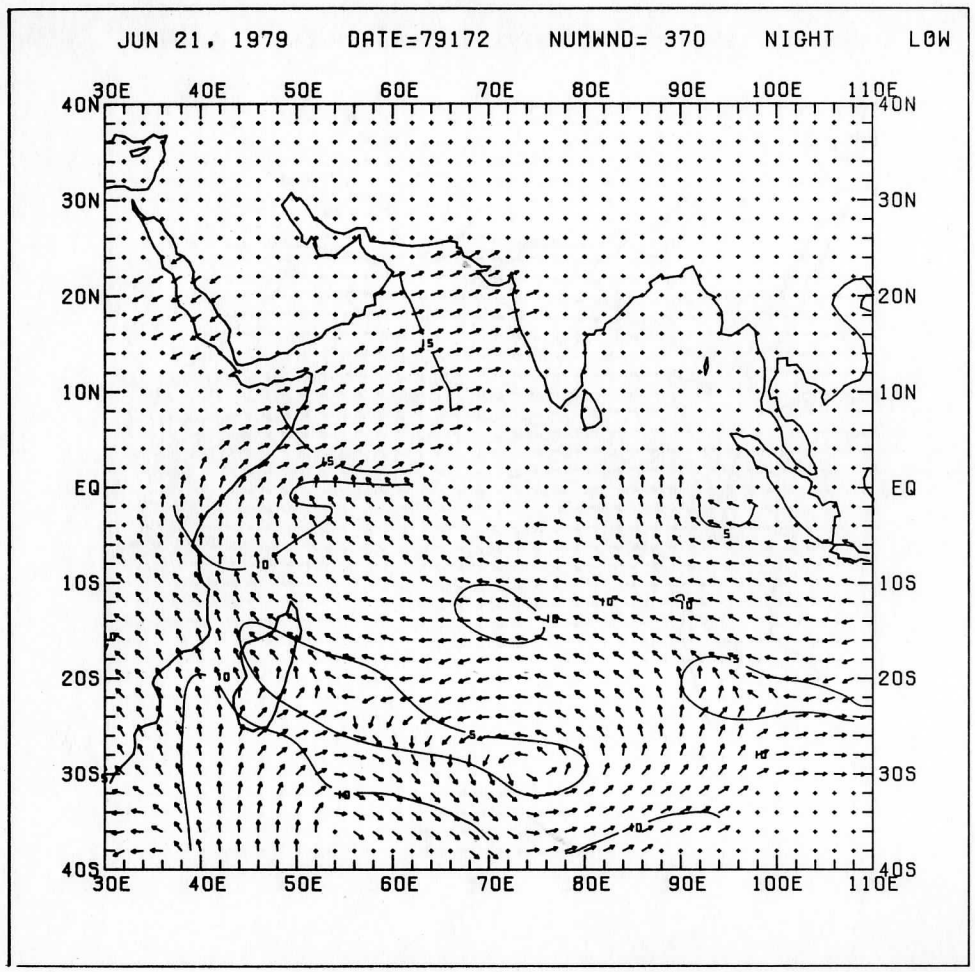

JUN 19, 1979 DATE=79170 NUMWND= 810 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

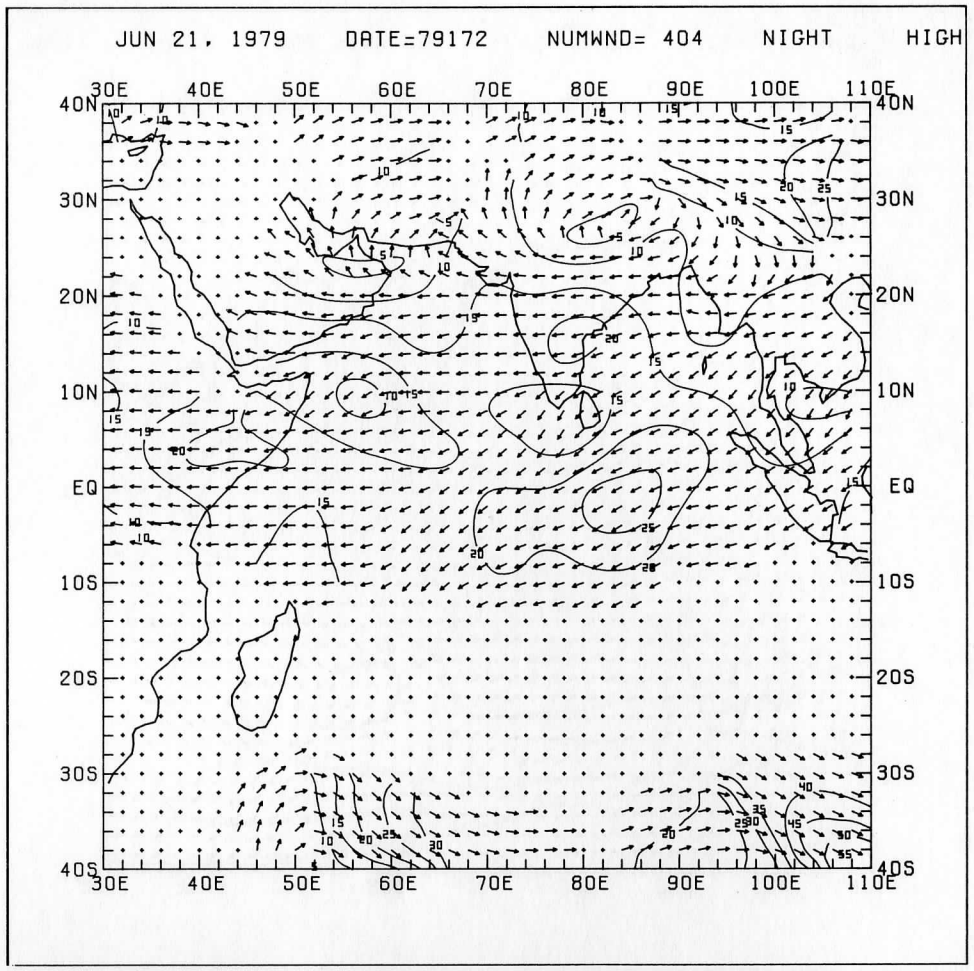

15E 30E 45E 60E 75E 90E 105E
TIROS-N 19 JUN 1979 2344 GMT TO 19 JUN 1979 2333GMT NITE IR

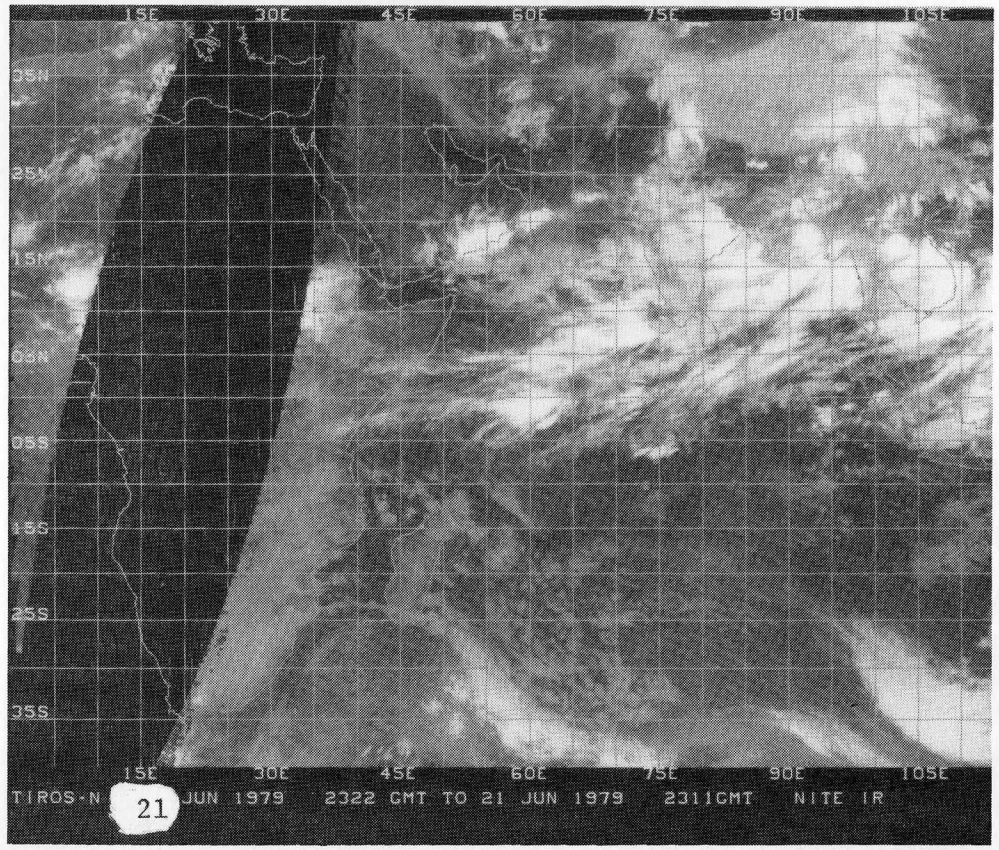

JUN 20, 1979 DATE=79171 NUMWND= 276 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

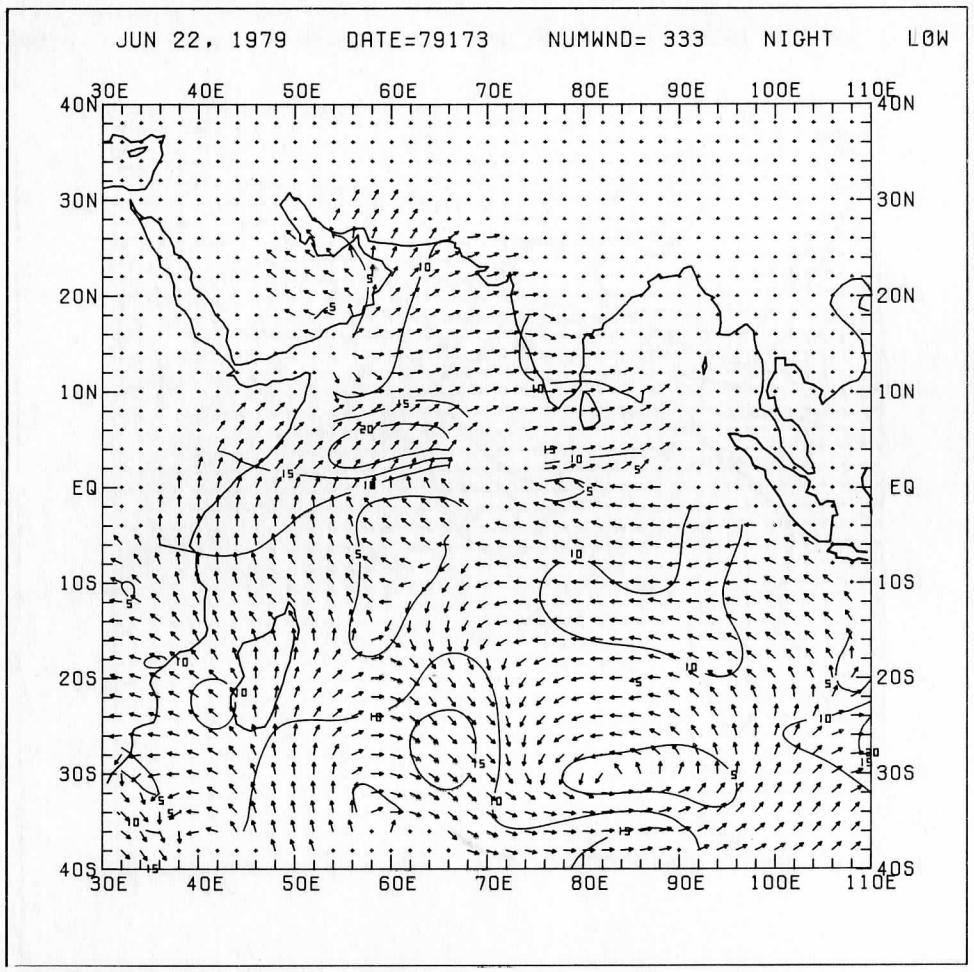

JUN 20, 1979 DATE=79171 NUMWND= 284 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

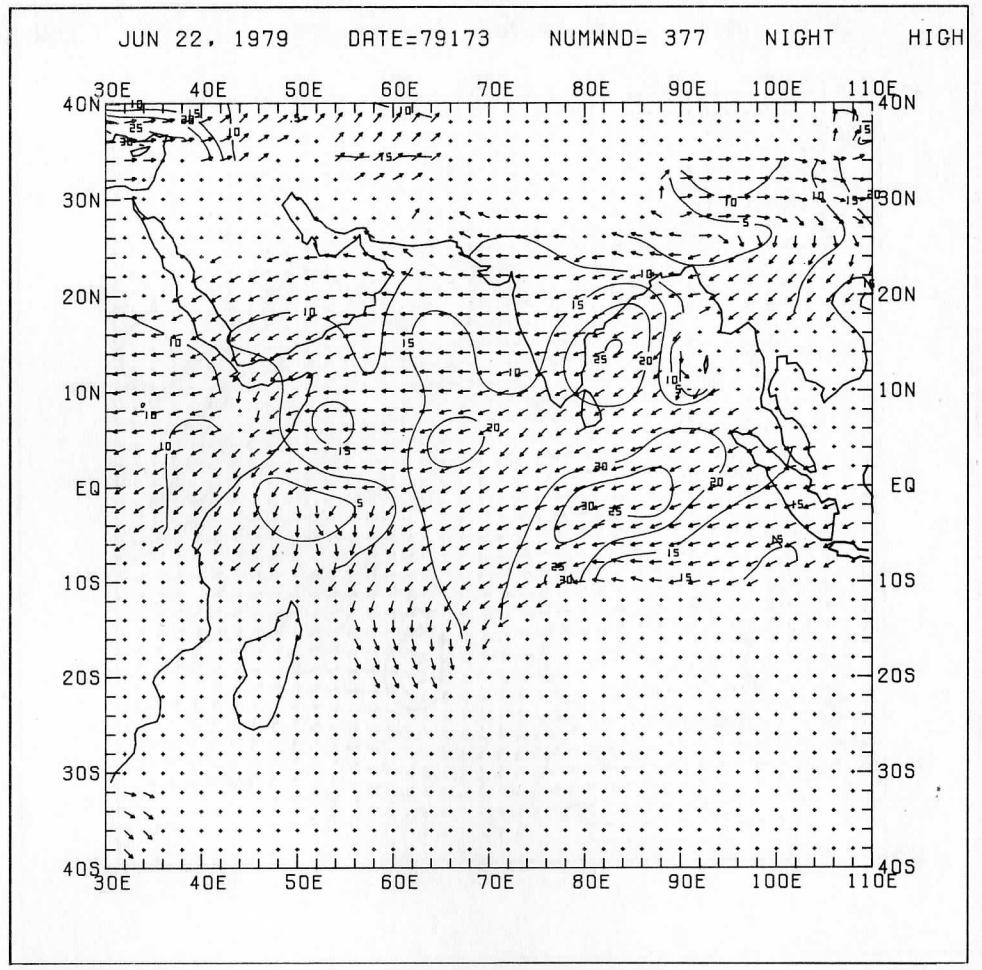

15E 30E 45E 60E 75E 90E 105E
TIROS-N 20 JUN 1979 2333 GMT TO 20 JUN 1979 2322GMT NITE IR

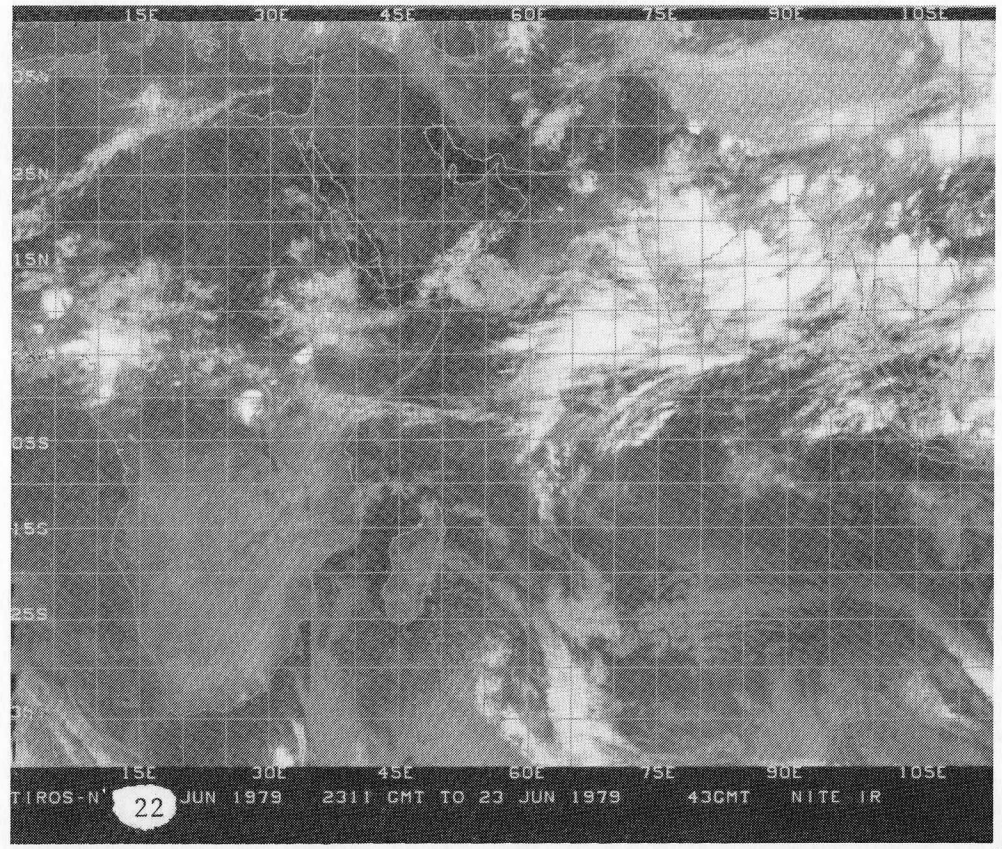

JUN 21, 1979 DATE=79172 NUMWND= 370 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

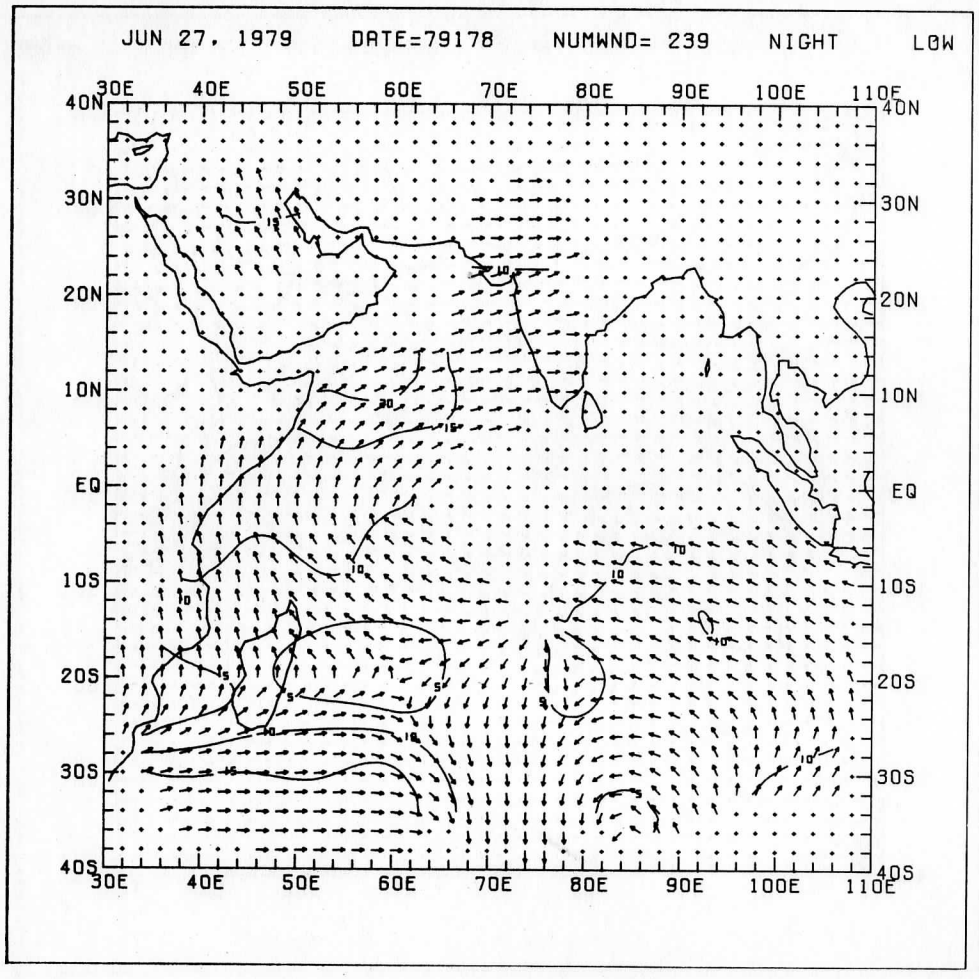

JUN 21, 1979 DATE=79172 NUMWND= 404 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

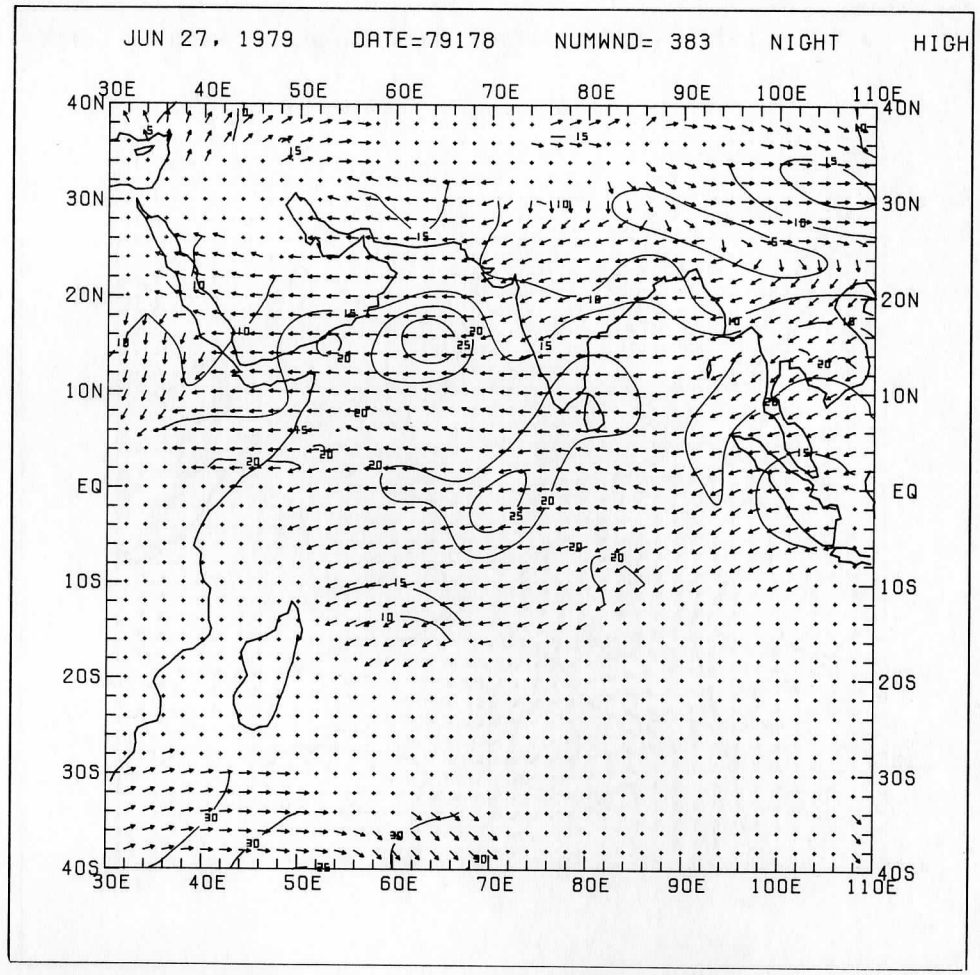

15E 30E 45E 60E 75E 90E 105E
25N 15N 05N 05S 15S 25S 35S
TIROS-N 21 JUN 1979 2322 GMT TO 21 JUN 1979 2311GMT NITE IR

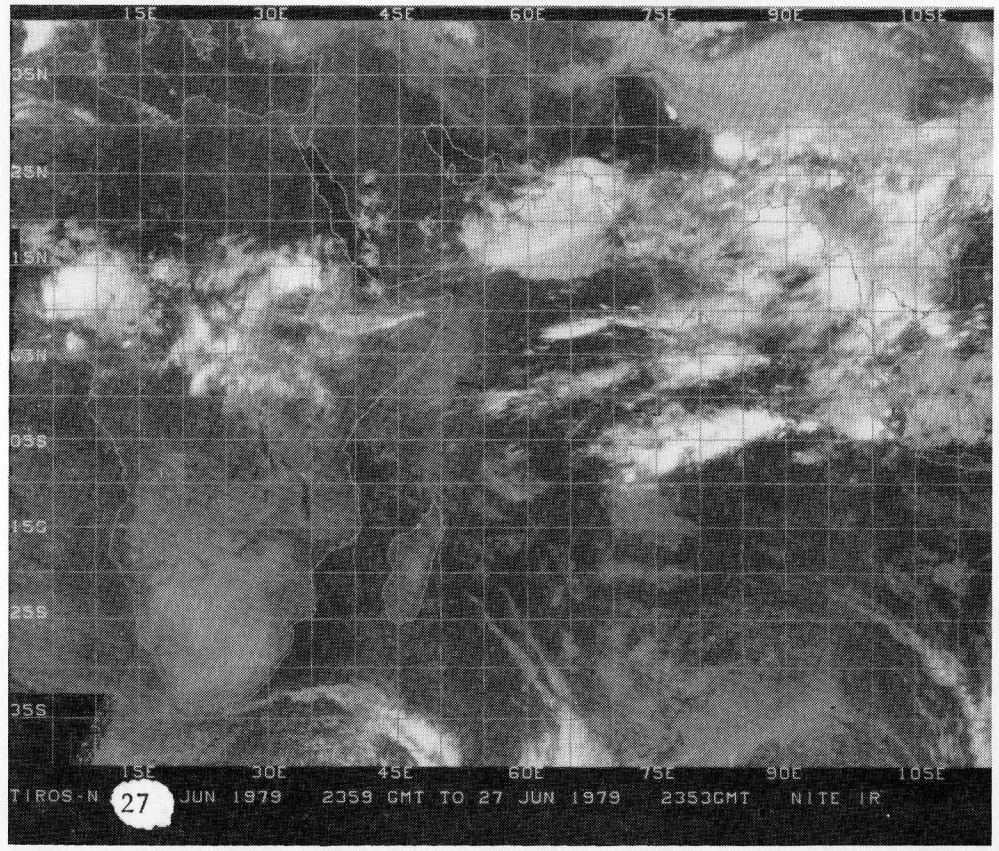

JUN 22, 1979 DATE=79173 NUMWND= 333 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

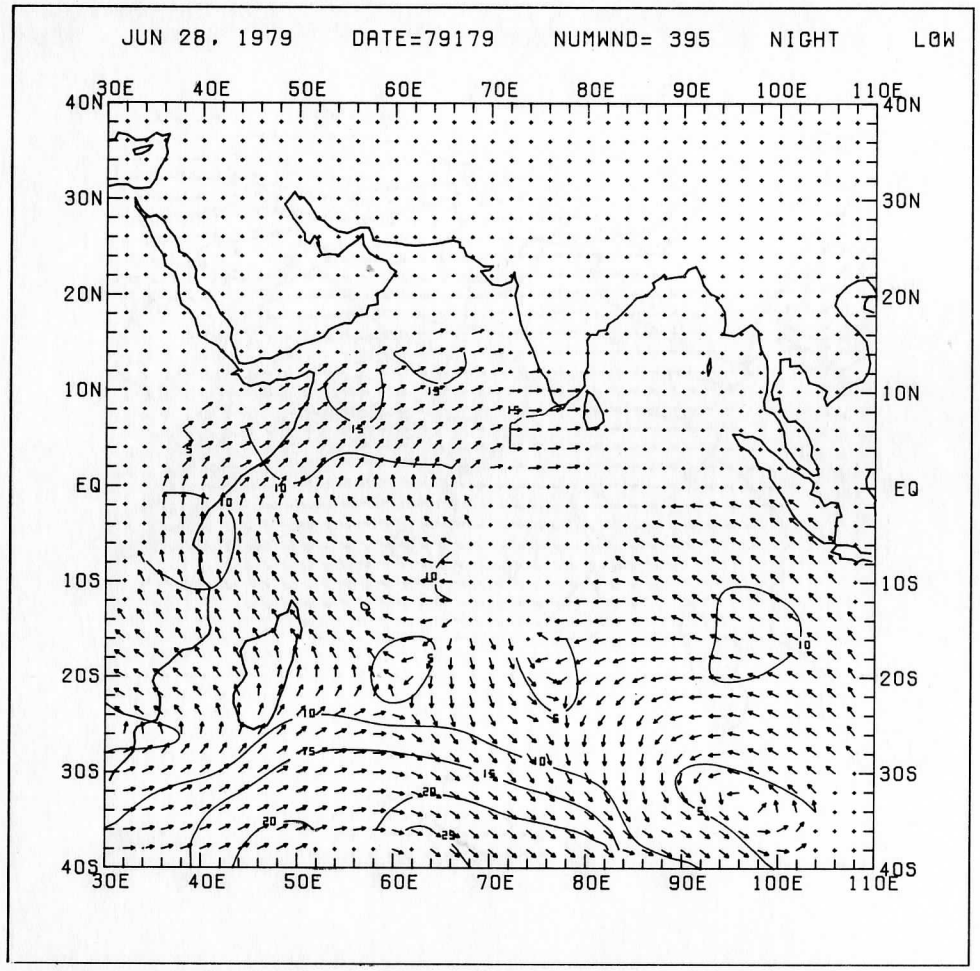

JUN 22, 1979 DATE=79173 NUMWND= 377 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

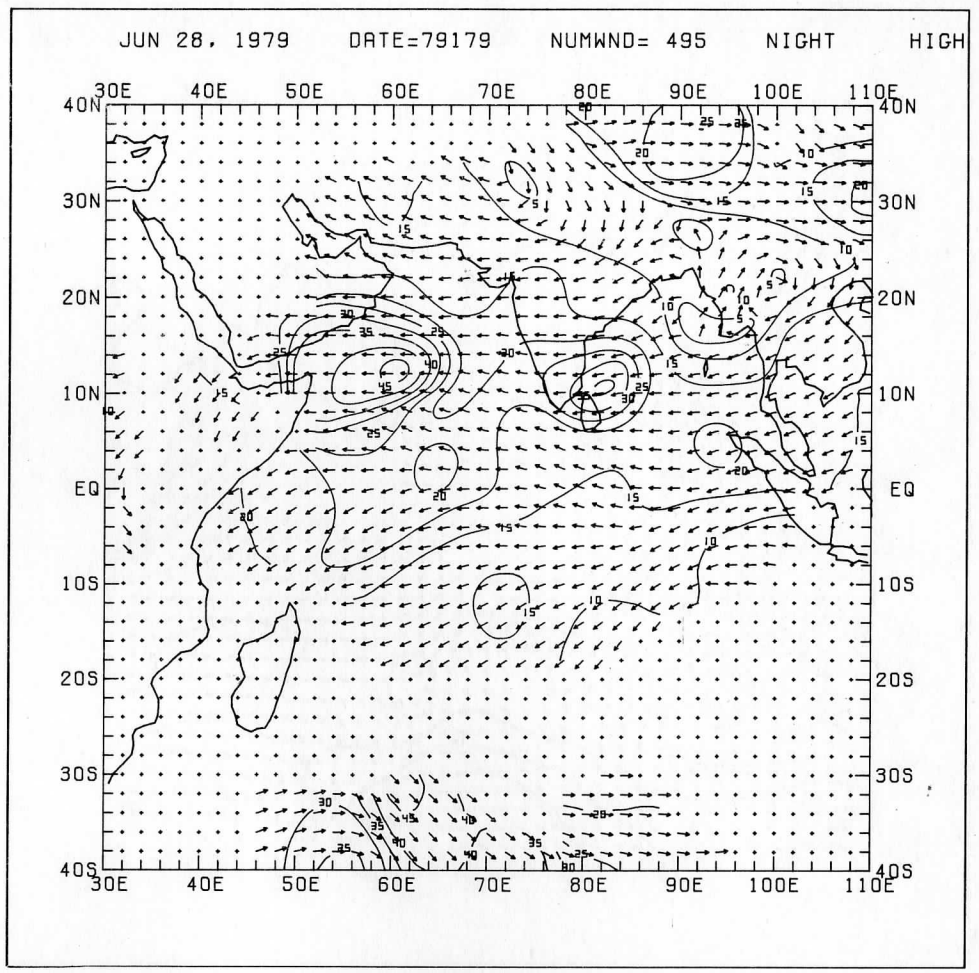

15E 30E 45E 60E 75E 90E 105E
TIROS-N 22 JUN 1979 2311 GMT TO 23 JUN 1979 43GMT NITE IR

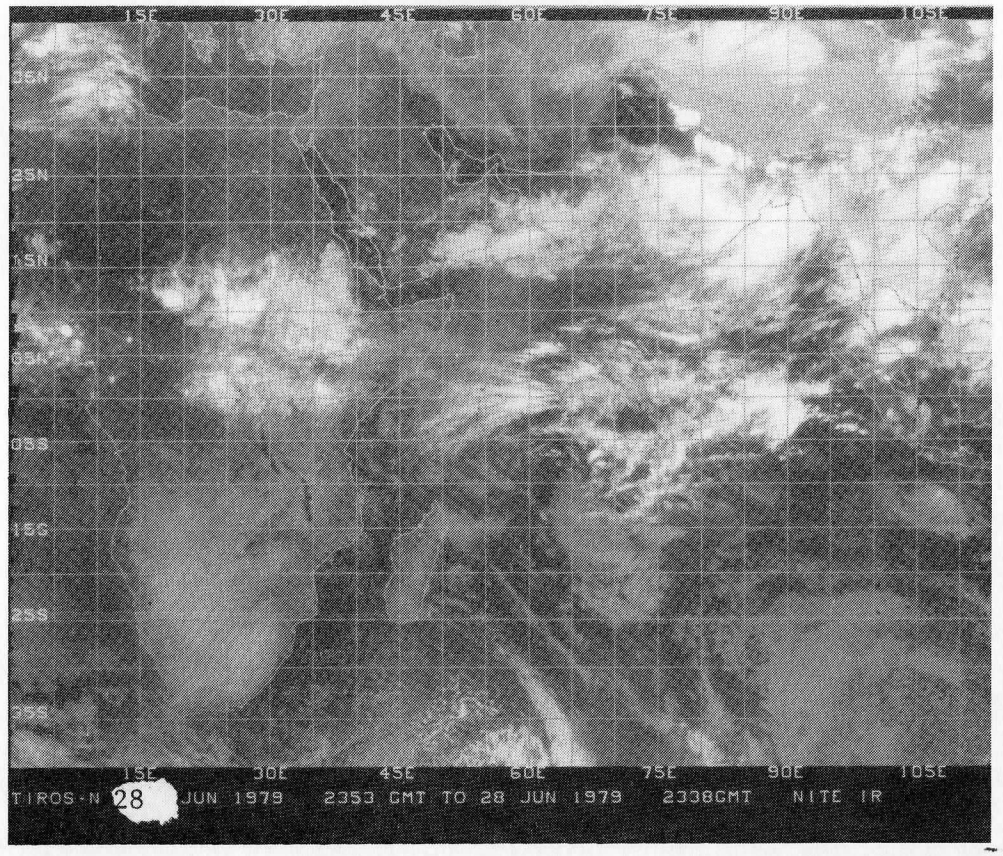

JUN 27, 1979 DATE=79178 NUMWND= 239 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

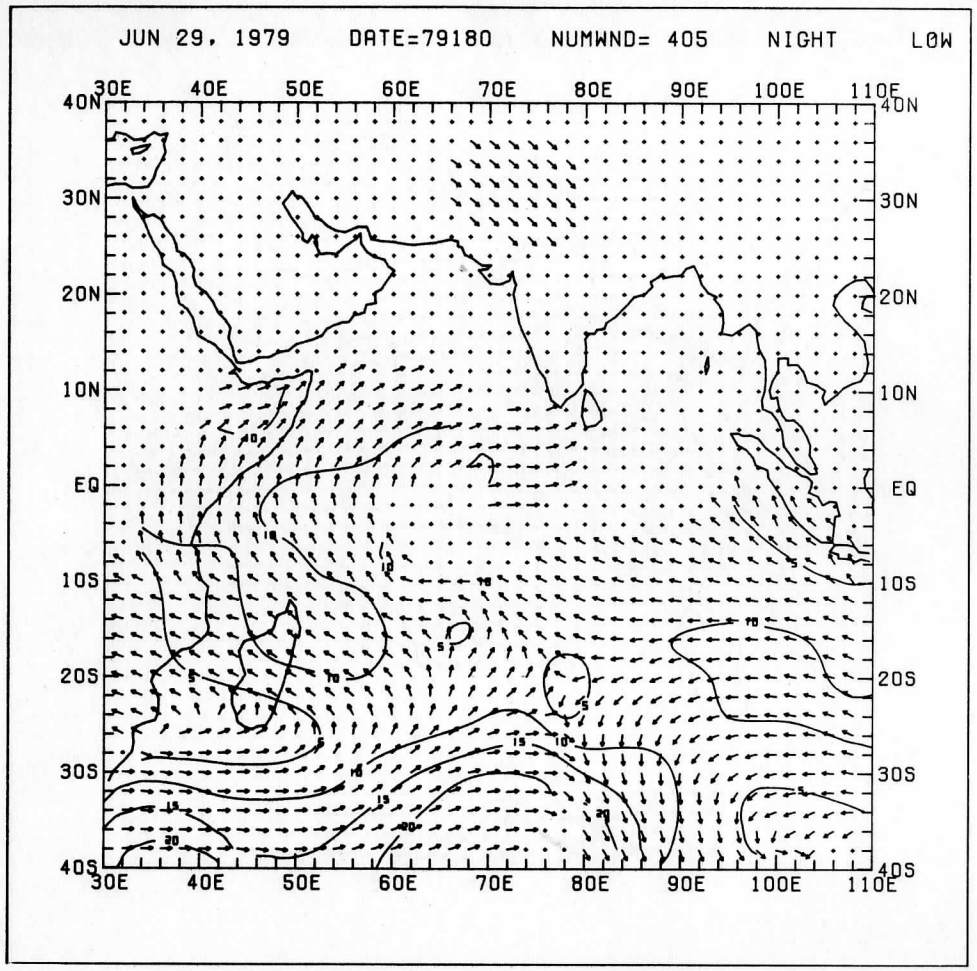

JUN 27, 1979 DATE=79178 NUMWND= 383 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

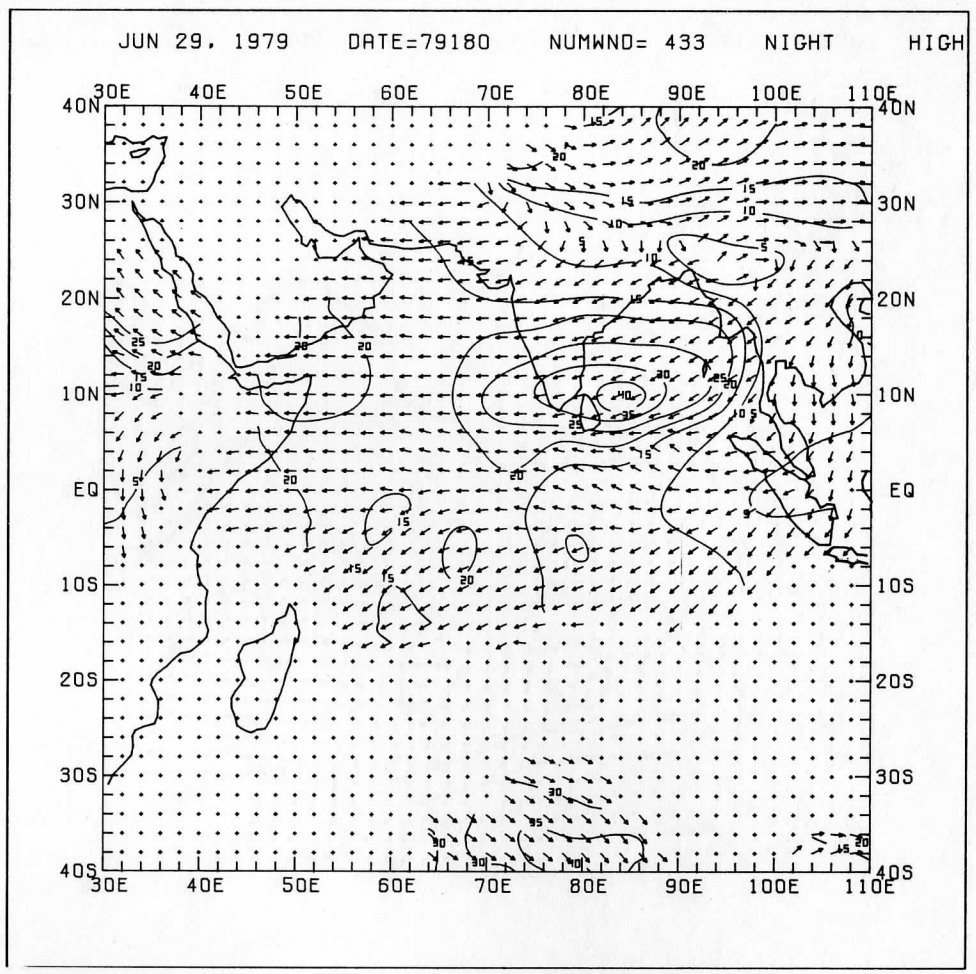

TIROS-N 27 JUN 1979 2359 GMT TO 27 JUN 1979 2353GMT NITE IR

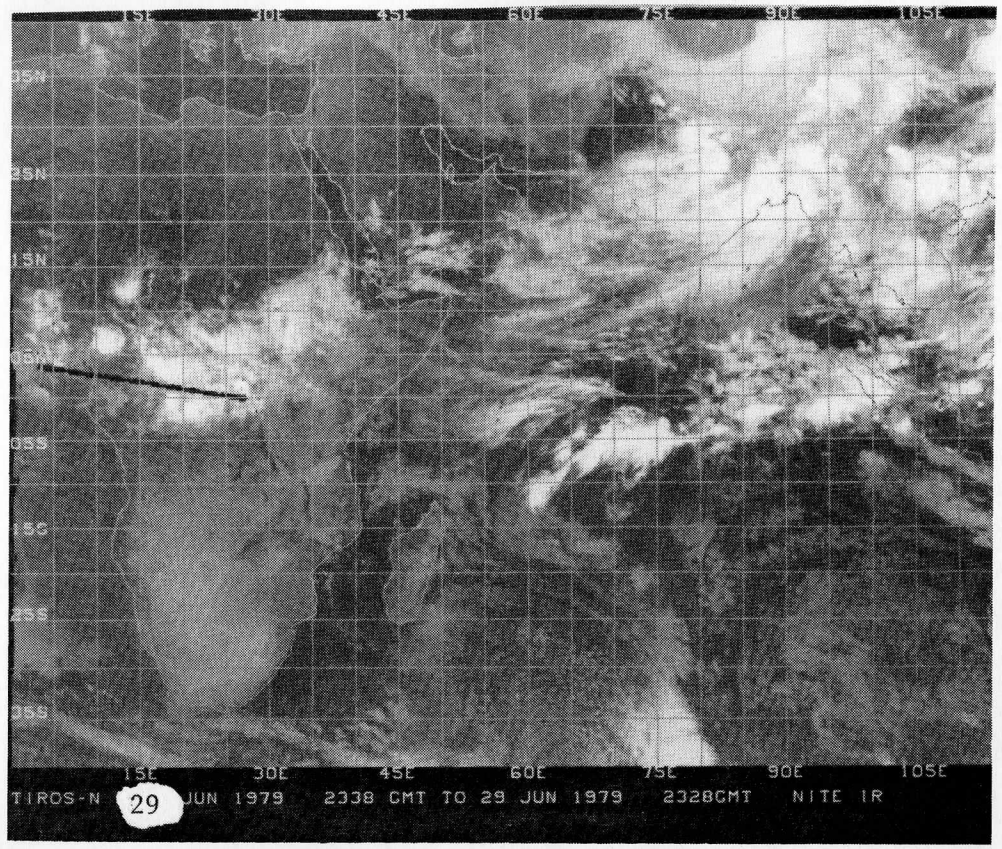

JUN 28, 1979 DATE=79179 NUMWND= 395 NIGHT LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S


JUN 28, 1979 DATE=79179 NUMWND= 495 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

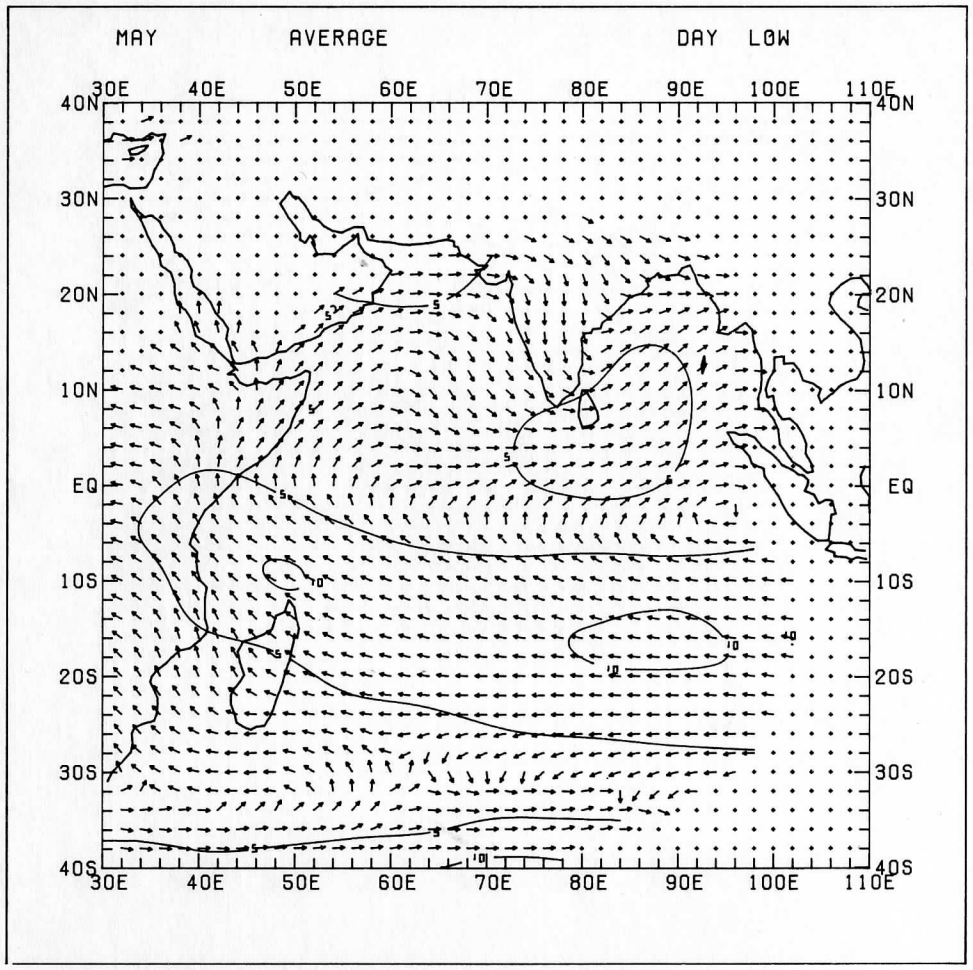

15E 30E 45E 60E 75E 90E 105E
35N 25N 15N EQ 05S 15S 25S 35S
TIROS-N 28 JUN 1979 2353 GMT TO 28 JUN 1979 2338GMT NITE IR

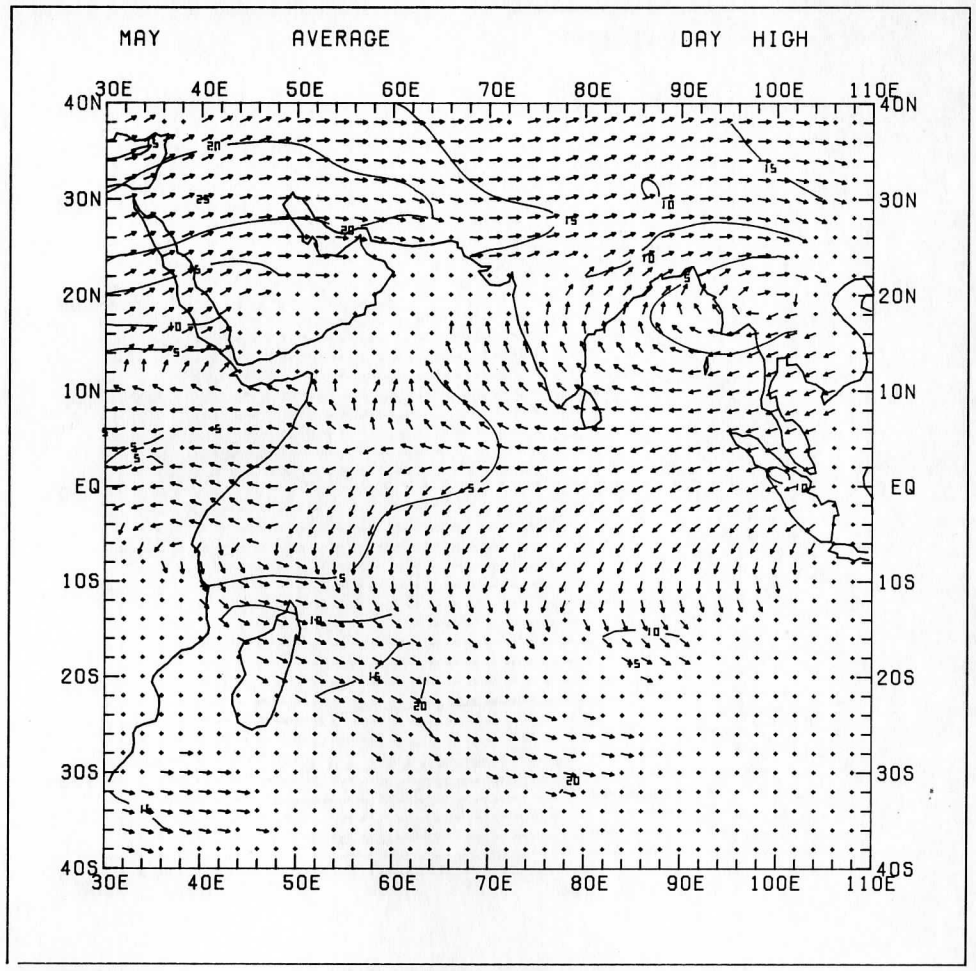

JUN 29, 1979 DATE=79180 NUMWND= 405 NIGHT L0W
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

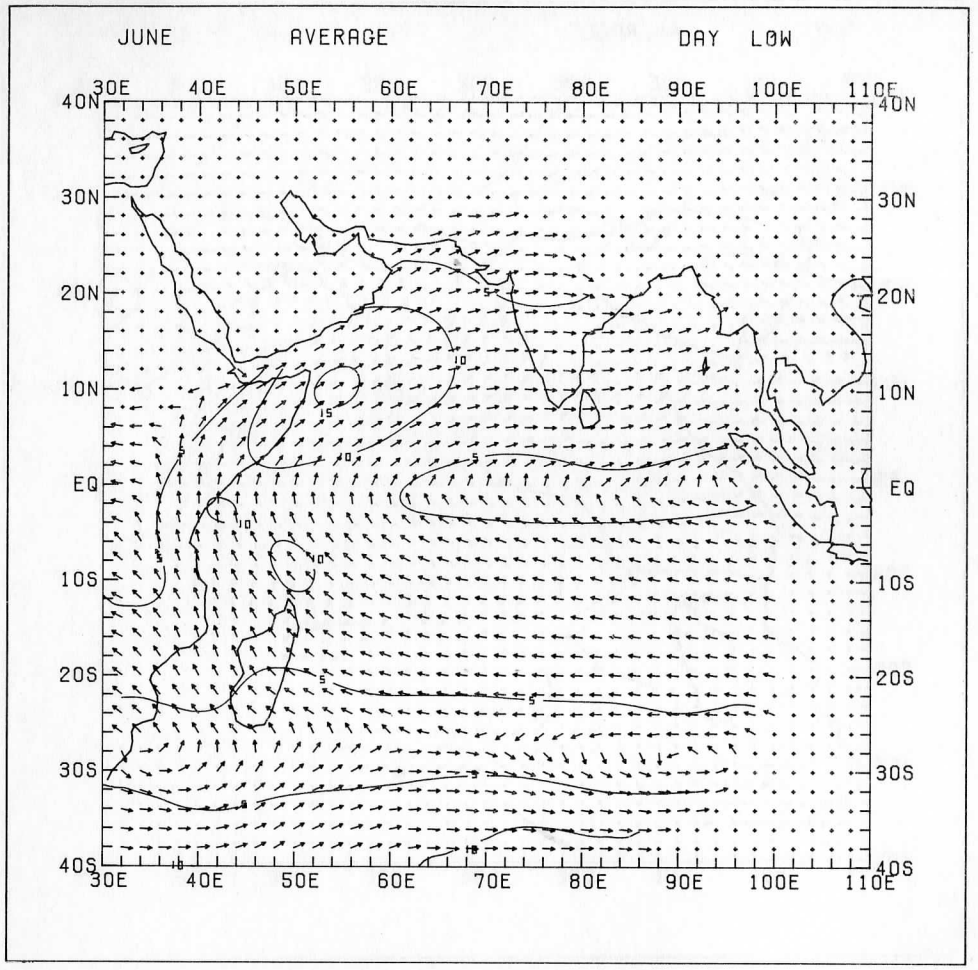

JUN 29, 1979 DATE=79180 NUMWND= 433 NIGHT HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S

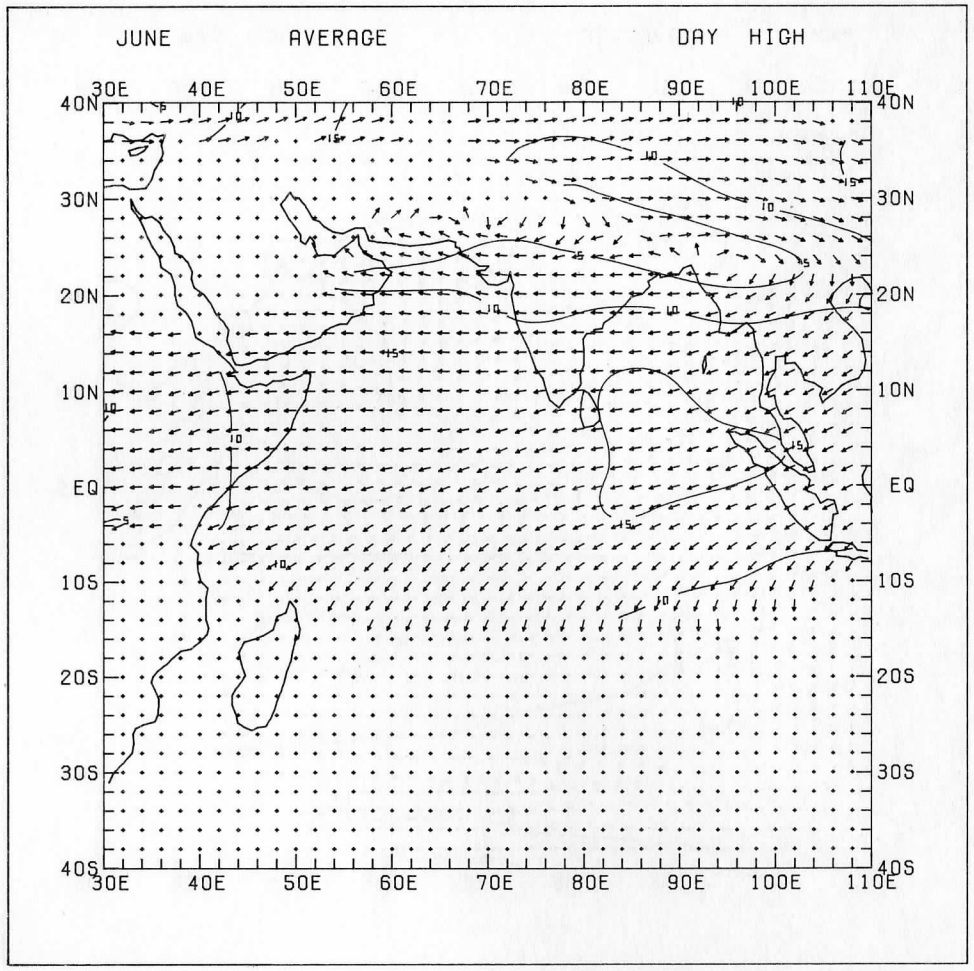

15E 30E 45E 60E 75E 90E 105E
TIROS-N 29 JUN 1979 2338 GMT TO 29 JUN 1979 2328GMT NITE IR

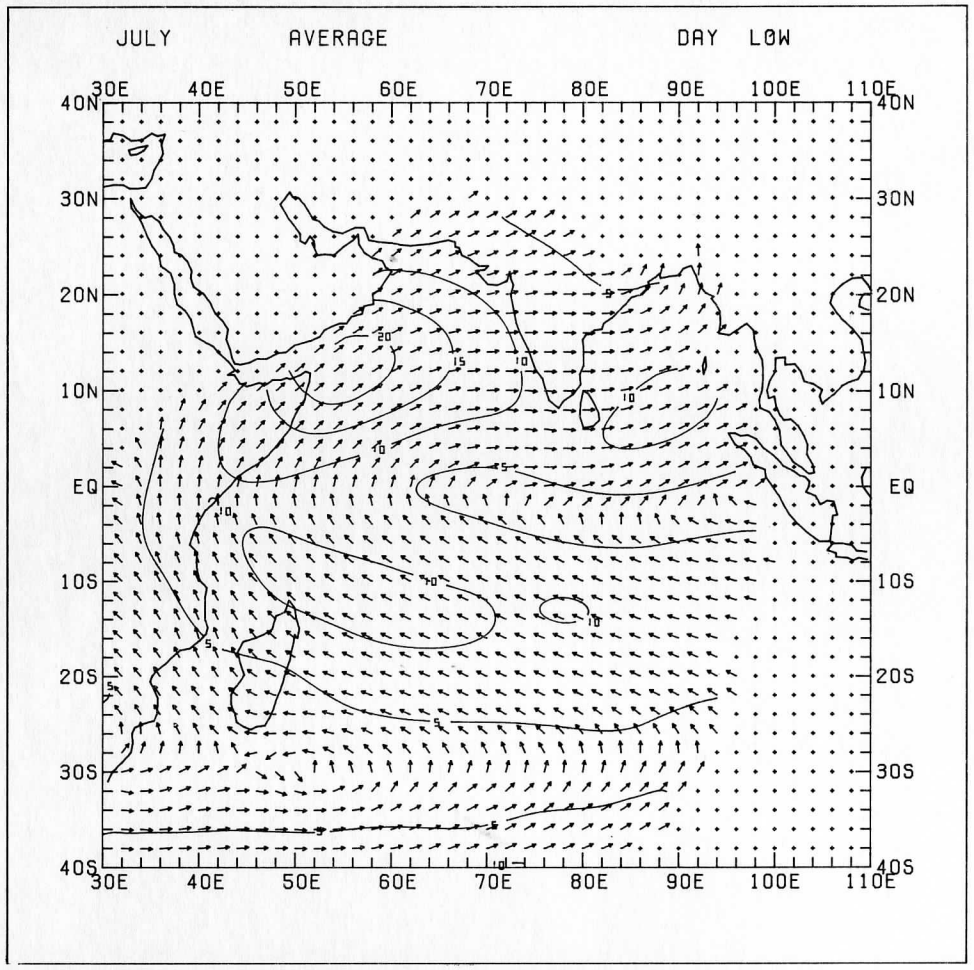
MONTHLY MEAN FIELDS
Plates 125-127

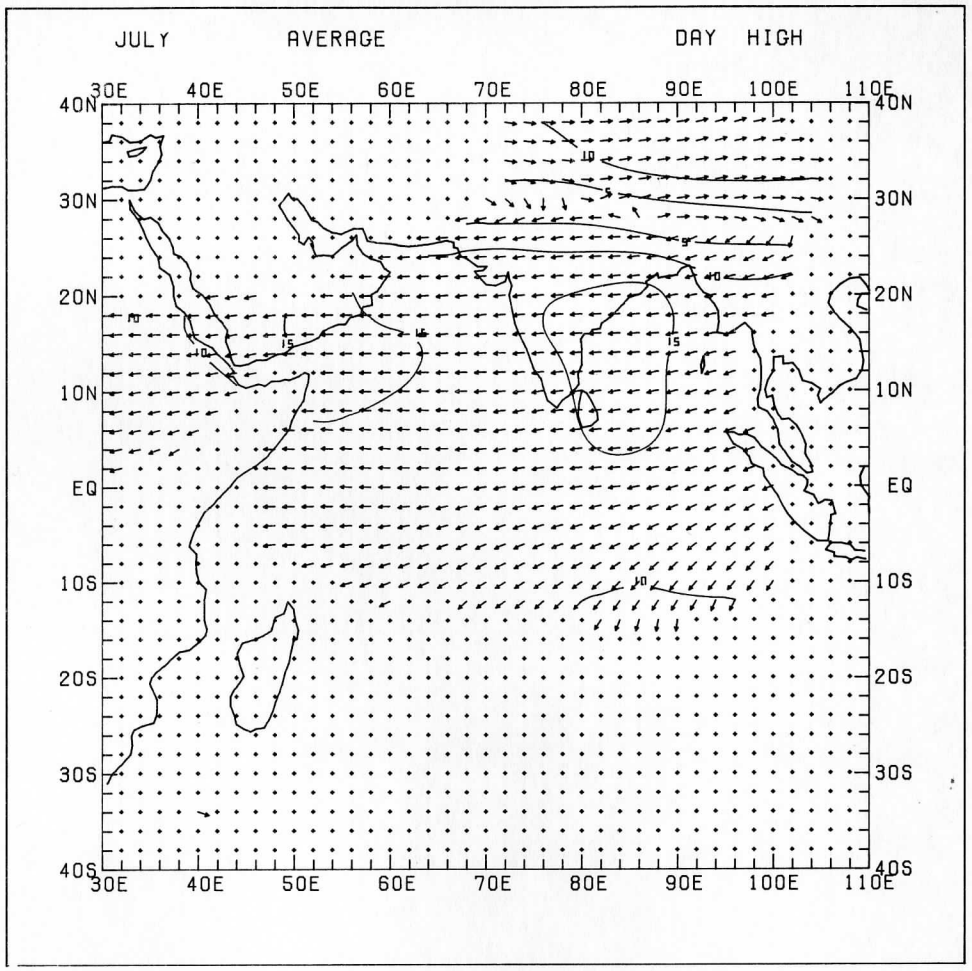

MAY AVERAGE DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S


MAY AVERAGE DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S


JUNE AVERAGE DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S


JUNE AVERAGE DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S


JULY AVERAGE DAY LOW
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S


JULY AVERAGE DAY HIGH
30E 40E 50E 60E 70E 80E 90E 100E 110E
40N 30N 20N 10N EQ 10S 20S 30S 40S