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**INTER-AMERICAN TROPICAL TUNA COMMISSION
COMISION INTERAMERICANA DEL ATUN TROPICAL**

Data Report — Informe de Datos
No. 4

**OCEANOGRAPHIC AND METEOROLOGICAL OBSERVATIONS
FOR PROJECT LITTLE WINDOW: MARCH 1970**

**OBSERVACIONES OCEANOGRAFICAS Y METEOROLOGICAS DEL
PROYECTO "LITTLE WINDOW": MARZO 1970**

by — por
M. R. Stevenson and/y F. R. Miller

La Jolla, California

1971

The Inter-American Tropical Tuna Commission was established by a Convention between the Governments of the Republic of Costa Rica and the United States of America. The Convention entered into force in 1950. The Commission's duties under the Convention (Art. II, 1.) include the conduct of:

"investigations concerning the abundance, biology, biometry, and ecology of yellowfin (*Neothunnus*) and skipjack (*Katsuwonus*) tuna in the waters of the eastern Pacific Ocean . . . and the kinds of fishes commonly used as bait in the tuna fisheries . . . and of other kinds of fish taken by tuna fishing vessels; and the effects of natural factors and human activities on the abundance of the populations of fishes supporting all of these fisheries."

and to

"Recommend from time to time, on the basis of scientific investigations, proposals for joint action . . . designed to keep populations of fishes covered by this Convention at those levels of abundance which will permit the maximum sustained catch."

The Commission initiated its investigations, which are conducted by a permanent international scientific staff, in 1951.

Provision is made in the Convention (Art. V, 3.) for:

"Any government, whose nationals participate in the fisheries covered by this Convention . . . Upon receiving the unanimous consent of the High Contracting Parties . . ."

to adhere. Under this provision the Republic of Panama adhered in 1953, the United Mexican States in 1964, and Canada in 1968.

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La Comisión Interamericana del Atún Tropical fue establecida por una Convención entre los Gobiernos de la República de Costa Rica y los Estados Unidos de América. La Convención entró en vigencia en el año de 1950. Las obligaciones de la Comisión bajo la Convención (Art. II, 1.) incluyen:

"Llevar a cabo investigaciones sobre la abundancia, biología, biometría y ecología de los atunes de aletas amarillas (*Neothunnus*) y bonitos (*Katsuwonus*) de las aguas del Pacífico Oriental . . . como también de las clases de pescado que generalmente se usan como carnada en la pesca del atún . . . y otras clases de peces que pescan las embarcaciones atuneras; y asimismo sobre los efectos de los factores naturales y de la acción del hombre en la abundancia de las poblaciones de peces que sostengan a todas estas pesquerías."

como también

"Recomendar en su oportunidad, a base de investigaciones científicas, la acción conjunta necesaria . . . para fines de mantener las poblaciones de peces que abarca esta Convención en el nivel de abundancia que permita la pesca máxima constante."

La Comisión inició sus investigaciones, las cuales son conducidas por un personal científico internacional permanente, en 1951.

Existe una disposición en la Convención (Art. V, 3.) por medio de la cual:

"Todo gobierno cuyos nacionales tomen parte en las operaciones de pesca que abarca esta Convención . . . Al recibir el consentimiento unánime de las Altas Partes Contratantes . . ."

puede adherirse. Bajo esta cláusula la República de Panamá se adhirió en 1953, los Estados Unidos Mexicanos en 1964, y Canadá en 1968.

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PROJECT LITTLE WINDOW-1

INTRODUCTION

Project Little Window was planned to provide some answers to the important scientific question of whether or not the HRIR (high resolution infrared radiometer) sensors aboard NASA and NOAA satellites can provide useful data for much of the oceanographic community. The sensors aboard these satellites were designed in response to the initial needs of meteorologists for temperature measurements integrated over a distance of 5-10 nautical miles and extending over a range from 30°C to about -75°C (+2-4°C). To this end the sensors have been a very powerful tool to the meteorologist in preparing daily weather advisories and in carrying out research.

Because of the availability of these remote sensors and the fact that these satellites pass over the world oceans, scientists in the oceanographic community have become interested in the possibility of utilizing these data in a number of their problem areas. Although research has shown that charts of sea-surface temperature covering large regions on a synoptic basis can be produced from data collected by spacecraft sensors, some questions remain as to the suitability of these sensors for oceanographic research. Because the oceanographer is interested in a temperature range of about one-tenth that required by the meteorologist, the implementation of these satellite sensors for oceanographic research provides a distinct challenge to the remote systems, since the oceanographic data requirements are close to or possibly exceed the engineering limits of the present satellite sensors. An important task then and one that is central to Project Little Window is to determine the areal resolution of the HRIR sensors and to estimate to what extent the infrared temperature values can be calibrated for a local region.

Project Little Window was designed to collect infrared data from remote sensors aboard NIMBUS-III (NASA) and ITOS-I (NOAA) satellites and an airborne research aircraft (NASA), and to obtain ground-truth data from research vessels operating directly below the spacecraft in the southern part of the Gulf of California (see Fig.1). Upon completion of the field work a comparison was to be made of the two sets of infrared data with the ground-truth data to determine the areal resolution and calibration factors corresponding to the HRIR remote sensors. The lower part of the Gulf of California was selected as the test range because of the optical clarity of the atmosphere overlying that part of the Gulf. The relative ease of logistic support for a field operation in the Gulf was also an important consideration in the selection of the test site.

The project was planned as an inter-agency study with scientists participating from the United States and Mexico. Those agencies providing personnel and/or support during the Little Window operation included: U.S. National Marine Fisheries Service (NMFS), U.S. Navy Oceanographic Office (NAVOCEANO), Inter-American Tropical Tuna Commission (IATTC), National Aeronautics and Space Administration (NASA), U.S. National Weather Service (NWS), the Dirección General de Pesca de México, the Servicio Nacional de Meteorología de México (meteorological stations in Mazatlan and Empalme, Sinaloa), Remote Sensors Detachment of the Mexican Navy and the Department of Oceanography of Oregon State University (through the presence and cooperation of the R/V CAYUSE during the project). Project Little Window was initiated by and under the general direction of Mr. Paul LaViolette of NAVOCEANO.

While some important measurements were not made because the research aircraft was not able to participate in the field work, the data collected aboard the surface vessels and from nearby meteorological stations in Mexico have provided valuable information on the oceanographic and meteorological conditions during the time of the investigation. Experience in working with these data has been helpful in developing the necessary techniques for use in the evaluation of information collected during the more comprehensive field operation Little Window-2, held in the same region during the summer of 1971.

Acknowledgments

Collection of the necessary ground-truth data for the project would not have been possible without the generous support of the NMFS in making available the R/V DAVID STARR JORDAN hereafter called the JORDAN. The considerable effort expended by Lt. Alberto Vasquez of the Remote Sensors Division of the Mexican Navy is acknowledged with appreciation as is the participation of the Mexican ships and its officers and crew. The cooperation of the Servicio Nacional de Meteorología de México in making special observations at Mazatlan and Empalme in support of the project is acknowledged with thanks. Special acknowledgment is given to the Overseas Operations Division, NWS for their generous assistance in providing personnel and equipment to obtain radiosonde observations aboard the JORDAN. Thanks are also expressed to Mr. Bruce Wyatt, Chief Scientist of the R/V CAYUSE for his cooperation in making additional observations and in making the data available for use in the project. Messrs. Robert Wagner and George Even and Miss Christine Dall of IATTC provided support in the handling and processing of field data. Assistance from the Shipboard Computer Group of the Scripps Institution of Oceanography is acknowledged with thanks. Financial assistance in the

preparation and publication of this report was provided through Spacecraft Oceanography (SPOC) Contract No. N62306-71-C-0120 to the IATTC and by NMFS Contract No. 14-07-001-2073 to the IATTC.

CRUISE INFORMATION

Cruise personnel

A number of agencies cooperated in the project through the direct participation of their scientists and equipment aboard the DAVID STARR JORDAN.

Merritt Stevenson	Chief Scientist	IATTC/NMFS
Forrest Miller	Chief Meteorologist	IATTC/NMFS
Robert Owen	Oceanographer	NMFS
Lloyd Farrar	Marine Supt.	NMFS
Robert Wagner	Phys. Technician	IATTC
Jack Brown	Electr. Technician	NMFS
Robert Brentano	Metr. Technician	
	(Radiosonde)	NWS
Charles Hill	Admin. Officer	NMFS
Lt. Ramón Zazueta M.	Officers from Corvette E-7 of the	
Lt. Sergio Huesca L.	Mexican Navy	
Lt. Alberto Vasquez	Remote Sensors Detach. Mexican Navy	

Cruise Description

The JORDAN left San Diego at 0930 hours PST on 12 March 1970, for the testing range in the southern part of the Gulf of California. Several of the scientific party accompanied the JORDAN on its southbound leg and measurements commenced shortly after departure from port and were made several times per day until the ship neared the southern extremity of Baja California. After nearing La Paz harbor the JORDAN began a transect across the Gulf while at the same time XBT (Expendable Bathythermograph System) stations were made at 10-mile intervals. During each passage of Nimbus-III and ITOS-I satellites, radiosondes were launched and STD (Salinity-Temperature-Depth recorder) casts were made in lieu of XBT drops. Weather observations were made principally from the bridge during this part of the cruise.

After completing the remaining transects of a rectangular track the JORDAN arrived at La Paz, Mexico at 1300 hours on 17 March to pick up the remainder of the scientific party that had traveled by air from San Diego to La Paz. After a brief conference among the participants, the JORDAN departed from La Paz and proceeded to its first station on the transect across the Gulf. There a time series consisting of STD casts was made at half-hour intervals together with weather observations for a period of 10 hours.

The JORDAN then made a rendezvous with the Mexican Corvette E-7, followed by an exchange of personnel and equipment. Upon completion of the transfer the JORDAN resumed its transect across the Gulf.

A schedule of hydrographic stations with detailed meteorological observations at 10-mile intervals was followed as the JORDAN completed its track across the Gulf each day (Fig.2). Radiosondes were launched at least twice a day and during passages by NIMBUS-III and ITOS-I satellites during this period. The JORDAN returned to La Paz at 0930 hours on 21 March so that its Mexican participants and some of the scientific party could leave the ship. At 1000 hours the following day the ship departed from La Paz and commenced an oblique transect to the southeast across the Gulf. By 1050 hours on March 23 the JORDAN was on the eastern side of the Gulf entrance and began a westward line of STD stations across the entrance to Cape San Lucas. The JORDAN arrived in San Diego at 0730 hours PST on 26 March 1970.

Weather conditions

Prior to 17 March 1970, weather over the Gulf was good with light northerly winds and clear skies. On March 18, surface winds shifted to the south, a thin veil of cirrus extended southward over the Gulf and by the 19th a weather front moved southward to 24.5°N over the Gulf bringing thick layers

of high, middle and low clouds. Early on the 19th the wind shifted to the northwest and light rain fell late in the evening; rain continued intermittently until 0700 hours on March 20. Thereafter surface winds from the northwest increased over the entire Gulf reaching speeds greater than 18 knots and increasing the sea state to over 5 feet as well as inducing considerable mixing in the surface layers of the Gulf. Skies were clear and dry enough, ocean-atmosphere exchange stable enough, and ocean wind mixing good enough by March 20th that infrared readings from satellites passing over the Gulf should have reflected actual surface temperatures associated with a fairly deep mixed-layer which was not affected by appreciable surface stratification or a marked diurnal variation in sea-surface temperature.

TREATMENT OF DATA

Surface marine observations were made aboard the JORDAN (Figs. 3-8), the Mexican mine sweeper DM-17 (Figs. 15-18), the Mexican Corvette E-7 (Figs. 20-24), and the Oregon State University R/V CAYUSE (Figs. 10-13) in the Gulf of California between 22°N and 25°N from 17 March to 25 March 1970. All oceanographic and meteorological observations made aboard the JORDAN and most of the data collected aboard the CAYUSE, the DM-17 and E-7 are contained in this report. Observations made from the CAYUSE for the period preceeding and following Project Little Window have not been included herein and will be published separately in the technical report series of the Department of Oceanography at Oregon State University.

Oceanographic Data

Thermo-salinograph -- The Bissett Berman Thermo-salinograph Model 6600 recorded near-surface (3m) values of temperature and salinity during the

were interpolated at 1 m intervals by the program and the output was used to produce the smoothed traces shown as part of the station data (Fig. 25). The conventional hydrographic printout was made by selecting data at standard depths and processing the punched cards in the normal manner with a hydrographic program (Table 1).

Before the final data processing was completed the data were checked to determine whether calibration corrections were needed. According to the manufacturer's manual, the temperature is known to within about $\pm 0.02^{\circ}\text{C}$ and the salinity to within $\pm 0.01\text{‰}$ - $\pm 0.03\text{‰}$ depending on whether calibration corrections were applied. A check of temperature data from the STD with the Nansen casts and bucket temperatures did not indicate the need for a calibration correction for temperature. A comparison of the salinity values from the STD with those samples of water collected at the sea surface and processed with a laboratory inductive salinometer indicated the STD values to be less than the salinometer data by 0.03‰ so this constant was added to the smoothed salinity data for each station.

XBT -- Expendable bathythermographs were used in lieu of mechanical BTs and were employed at alternate stations (Fig. 26). A bucket temperature and water sample were taken at each XBT station for the purpose of calibration. Comparison of XBT temperatures with readings taken with a bucket thermometer and a STD suggests that the temperatures from the XBT traces are known to within $\pm 0.2^{\circ}\text{C}$.

Meteorological data

Detailed meteorological observations were made every 6 hours from the JORDAN and CAYUSE by qualified scientists and/or ship's officers in accordance with prescribed regulations set forth in the W.M.O. code FM21.D and

on computational charts at 50 mb intervals from the surface to the top of each ascent. In addition, data from significant levels, where there were marked changes in temperature or humidity with height, were recorded. Because moisture could not be accurately measured at temperatures below -40°C (approximately 10 km above earth) with humidity indicators, statistical values for humidity, based on measured temperature and latitude, were used for higher elevations. Upper air humidities were converted to water vapor content (grams of water vapor/kg. of dry air) at 50 mb intervals, and the moisture content was integrated throughout the column to obtain a value of the total precipitable water vapor amount. Finally, the data were separated into sets of day and night and dry and wet (cloudy and/or rainy days) profiles. Statistical and graphical averages were obtained for each set at 50 mb intervals for the computation of temperature corrections to be applied to infrared data from the satellite sensors.

The Servicio Nacional de Meteorología de México, in cooperation with the Overseas Operations Division (U.S. NWS), obtained special radiosonde ascents from Mazatlan and Empalme at times corresponding to satellite passages over the Gulf. Data from these ascents (Tables 7 and 8) were processed in the same manner as described above for the data from the JORDAN. They have provided accurate and important data which will be compared with the JORDAN radiosonde data.

Table 6 contains data recorded and computed from radiosonde ascents made aboard the JORDAN. The temperatures and computed mixing ratio (moisture) given in the tables for the JORDAN were used to compute the average temperature and moisture profiles shown in Figure 28. These data provided the input for computing the temperature correction ($T_S - T_{BB}$)

research vessels which participated in the Project. Future studies will incorporate all data collected.

EXPLANATION OF DATA TABLES

Oceanographic Data

A blank space in the tables or headings indicates either that no observation ~~was~~ taken or that the measurement was not considered reliable enough to be used. Observations of present weather, visibility, clouds, sea, and swell appearing in the heading information have been coded according to the codes provided in the U.S. National Oceanographic Data Center Publication M-2 (1962). Abbreviations used in the tables and units in which the properties are expressed are explained below.

NAME OF VESSEL	The name of the vessel appears after IATTC
CR NO (cruise number)	Cruise numbers are assigned with the first two numbers for the year and the second two numbers for the month.
STA NO (station number)	Station numbers are assigned by the participants conducting the cruise.
LAT (latitude)	In degrees, minutes and tenths of minutes
LONG (longitude)	of arc
DATE	Local date of the first cast
TIME (time of cast)	Local time of the cast. If a second number appears, it is the time of the second cast.
WEATHER (present weather)	Coded according to NODC Publication M-2 (1962)
VISIB (visibility)	Coded according to NODC Publication M-2 (1962)
CLOUD TYPE	Coded according to NODC Publication M-2 (1962)
CLOUD COVER	Coded according to NODC Publication M-2 (1962)
WIND VEL-DIR (wind velocity and direction)	Velocity: the first number indicates knots, the number in parentheses indicates meters per second. Direction: numbers indicate range of direction in degrees true, from which wind was blowing.

SAL OF SURFACE

Salinity on the indicated isanostere in parts per thousand (‰)

Meteorological Data

The abbreviations and notations used in the meteorological tables follow the codes in W.M.O. FM21.D (1968). The units in which the properties are expressed are explained below.

LAT (latitude)	In degrees and tenths of arc
LONG (longitude)	
Q (geographical quadrant)	Location of ship according to W.M.O. code 3333
GMT (Greenwich Mean Time)	Time of the meteorological observation
TOT CLD (total cloud cover)	Estimated by an observer and recorded in eighths (Oktas) according to W.M.O. code 2700
WIND DIR-SPD (surface wind direction and speed)	Direction to nearest 5 degrees (W.M.O. code 0777) Speed to nearest knot (W.M.O. code 1100)
VIS (horizontal visibility)	Estimated by an observer and reported in code form according to W.M.O. code 4377
ww (present weather)	Present weather at or near the ship reported in code form according to W.M.O. code 4677
W (past weather)	Weather during last hour reported in code form according to W.M.O. code 4500
PPP (sea surface pressure)	Recorded with a precision aneroid barometer to the nearest tenth millibar
DRY TEMP (dry bulb air temperature)	Surface air temperature measured with a dry bulb thermometer to the nearest tenth degree Celsius
WET TEMP (wet bulb air temperature)	Surface air temperature measured with a wet bulb thermometer to the nearest tenth degree Celsius
DEW TEMP (dew point temperature)	Computed from the dry - wet bulb temperature difference to the nearest tenth degree Celsius
SEA TEMP (sea surface temperature)	Measured with a bucket thermometer to the nearest tenth degree Celsius
CLOUD GROUP (cloud group)	Reported in order: low cloud amount (Oktas), low cloud type, height of lowest cloud base, type of middle cloud and type of high cloud, according to W.M.O. codes 509, 513, 515, 1600 and 2700

PROYECTO LITTLE WINDOW-1

INTRODUCCION

El proyecto Little Window fue planeado para suministrar algunas respuestas al importante tema científico sobre si los captadores ("sensors") infrarrojos de alta resolución (IRAR) a bordo de los satélites NASA y NOAA, pueden o no proveer datos útiles para la mayoría de los oceanógrafos. Los captadores a bordo de estos satélites fueron concebidos en respuesta a las necesidades iniciales de los meteorólogos para obtener mediciones de temperatura integradas sobre una distancia de 5-10 millas náuticas, y entre 30°C y aproximadamente -75°C (+2-4°C). Con este fin los captadores han sido un instrumento poderoso para el meteorólogo en la preparación de las informaciones diarias de tiempo y en la realización de las investigaciones.

A causa de la accesibilidad de estos captadores remotos y al hecho de que estos satélites pasan sobre el océano mundial, los científicos de la comunidad oceanográfica están interesados en la posibilidad de utilizar estos datos para resolver ciertos problemas. Aunque la investigación ha demostrado que se pueden utilizar los datos colectados por captadores de vehículos espaciales, para hacer gráficos de temperatura de la superficie del mar que cubran grandes regiones en una base sinóptica, quedan algunas cuestiones acerca de la conveniencia de estos captadores para la investigación oceanográfica. Como el oceanógrafo está interesado en un rango de temperatura aproximadamente de una décima parte del rango que interesa al meteorólogo, el uso de estos captadores del satélite respecto a la investigación oceanográfica, provee un reto evidente a los sistemas remotos ya que los requisitos nuevos para datos oceanográficos se encuentran cercanos o posiblemente sobrepasan

meteorológicas en Mazatlán y Empalme, Sinaloa), el Destacamento de Captadores Remotos de la Marina de México y el Departamento de Oceanografía de la Universidad del Estado de Oregón (gracias a la presencia y cooperación del barco de investigación CAYUSE durante el proyecto). El Proyecto "Little Window" fue iniciado y está bajo la dirección general del Sr. Paul LaViolette del USN Oceanographic Office.

Aunque no se pudieron tomar algunas mediciones importantes debido a que el avión de investigación no pudo participar en el trabajo experimental, los datos obtenidos a bordo de los barcos y en estaciones meteorológicas cercanas en México, han provisto valiosa información sobre las condiciones oceanográficas y meteorológicas durante el tiempo que duró la investigación. La experiencia obtenida al trabajar con estos datos ha sido muy útil en el desarrollo de técnicas para usarlas en la evaluación de la información obtenida durante el trabajo experimental más completo de "Little Window-2", verificado en la misma región durante el verano de 1971.

Reconocimiento

No se hubieran podido obtener los datos terrestres auténticos, necesarios para el proyecto, sin el generoso apoyo del National Marine Fisheries Service mediante el préstamo del B/I DAVID STARR JORDAN. Se reconoce y aprecia el considerable esfuerzo brindado por el Tnte. Alberto Vasquez de la División de Captadores Remotos de la Marina de México. Se agradece profundamente la cooperación del Servicio Nacional de Meteorología de México, al hacer que sus estaciones en Mazatlán y Empalme colectaran observaciones especiales como ayuda al proyecto. Se reconoce en forma especial la generosa ayuda brindada por la División de Operaciones de Ultramar del National Weather Service, al proporcionar personal y equipo para obtener observaciones de radiosonda a bordo del B/I JORDAN. Además se extiende el agradecimiento

al puerto de La Paz, el JORDAN empezó un derrotero a través del golfo, realizando al mismo tiempo estaciones XBT a intervalos de 10 millas. Durante cada pasada de los satélites NIMBUS-III e ITOS-I, se lanzaron radiosondas y se hicieron lanzamientos de STD en lugar de los de XBT. Se hicieron observaciones del tiempo principalmente desde el puente del barco durante esta parte del crucero.

Después de terminar los derroteros restantes de un rumbo rectangular, el JORDAN llegó a La Paz a las 1300, el 17 de marzo, para recoger el resto del grupo científico que había viajado vía aérea de San Diego a La Paz. Después de una breve conferencia entre los participantes, el JORDAN salió de La Paz y prosiguió a la primera estación del derrotero a través del Golfo. Allí se hizo una serie de observaciones consistentes en lanzamientos STP a intervalos de media hora junto con observaciones del tiempo durante un período de 10 horas.

Luego el JORDAN se encontró con la corbeta mexicana E-7 donde se hizo un intercambio de personal y equipo. Después de terminar, el JORDAN reanudó nuevamente el derrotero a través del Golfo.

Cada día se siguió un programa de estaciones hidrográficas con observaciones detalladas meteorológicas a intervalos de 10 millas a medida que el JORDAN completaba su derrotero a través del Golfo (Fig.2). Durante este período se lanzaron radiosondas por lo menos dos veces al día y durante las pasadas de los satélites NIMBUS-III e ITOS-I. El JORDAN regresó a La Paz a las 0930 del 21 de marzo para desembarcar los participantes mexicanos y algunos del grupo científico. A las 1000 al día siguiente el barco salió de La Paz y comenzó un rumbo oblicuo a través del Golfo hacia el sureste. A las 1050 el 23 de marzo el JORDAN estaba en la parte oriental de la entrada del Golfo y comenzó una línea de estaciones de STP al oeste a

del Oregon State University (Figs. 10-13) en el Golfo de California entre los 22°N desde el 17 de marzo al 25 de marzo 1970. Todas las observaciones oceanográficas y meteorológicas efectuadas a bordo del JORDAN y la mayoría de los datos obtenidos a bordo del CAYUSE, el DM-17 y E-7 están incluidos en este informe. Las observaciones realizadas en el CAYUSE para el período anterior y después del Proyecto "Little Window" no se han incluido aquí y se publicarán separadamente en una serie técnica de informes del Departamento Oceanográfico en la Universidad del Estado de Oregón.

Datos Oceanográficos

Termosalinógrafo - El termosalinógrafo Bissett Berman Modelo 6600 registró valores cercanos a la superficie (3 metros) de temperatura y salinidad durante el período del crucero. A intervalos frecuentes durante el crucero se anotó en el papel registrador el tiempo y el número de la estación. Se tomó un número de muestras de agua del tubo de entrada del termosalinógrafo y se emplearon estas muestras para calibrar los datos de salinidad. Las muestras de agua fueron procesadas con un salinómetro de laboratorio con una precisión de $\pm 0.003 \text{ ‰}$ (Brown y Hamon, 1961). La comparación de estas dos series de valores indicó la necesidad de aumentar todos los valores del salinógrafo por un factor de 0.018 ‰ . Se usó un termómetro calibrado para examinar la calibración del captador de temperatura en el mismo tubo de entrada y se encontró que los datos de temperatura del termosalinógrafo eran inferiores por un factor de 0.08°C .

STP - Las medidas in situ de la temperatura del agua, la salinidad y de la profundidad fueron realizadas con un equipo STP Bissett Berman Modelo 9006. Los datos fueron registrados en forma análoga y con un registrador

depende si se aplicaron las correcciones de la calibración. Un examen de los datos de temperatura del equipo STP con los lanzamientos Nansen y las temperaturas del termómetro de cubo no indicaron que era necesario corregir los valores del STP. Una comparación de los valores de salinidad del equipo STP con aquellas muestras de agua obtenidas en la superficie del mar y procesadas con un salinómetro inductivo de laboratorio indicó que los valores STP eran inferiores a los datos del salinómetro por 0.03 ‰, y se agregó esta constante a los datos suavizados de salinidad, en cada estación.

XBT - Se emplearon batitermógrafos descartables en lugar de los BT mecánicos y se usaron en estaciones alternativas (Fig. 26). En cada estación XBT se tomó la temperatura del termómetro de cubo y una muestra de agua con fines de calibración. La comparación de las temperaturas XBT con las lecturas tomadas con el termómetro de cubo y la STP sugiere que las temperaturas de los trazos XBT tienen una precisión de $\pm 0.02^{\circ}\text{C}$.

Datos meteorológicos

Científicos expertos y/o oficiales de los barcos hicieron observaciones detalladas meteorológicas cada 6 horas en el JORDAN y el CAYUSE, de acuerdo a las regulaciones dictadas en el código del World Meteorological Organization (WMO), y otros formatos relativos al código para codificar los elementos necesarios del tiempo. Los oficiales de los barcos del DM-17 y E-7 observaron y codificaron un número limitado de parámetros meteorológicos y oceanográficos de acuerdo a los procedimientos del NODC (que sigue también los formatos en código de WMO) en cada estación hidrográfica. Todos los datos de las estaciones hidrográficas ocupadas por el JORDAN y el CAYUSE incluyeron también datos meteorológicos y oceanográficos de la superficie según lo dispuesto por NODC.

con los indicadores de humedad, los valores estadísticos para la humedad, basados en la latitud y medidas de temperatura, se emplearon para elevaciones más altas. La humedad del aire estratosférico se convirtió a contenido de vapor de agua (gramos de vapor/kg de aire seco) a intervalos de 50 mb y el contenido de humedad se integró a lo largo de la columna para obtener un valor de la cantidad total del vapor de agua precipitable. Finalmente, se separaron los datos en series de perfiles para el día, la noche, sequedad y humedad (días nebulosos y/o lluviosos). Se obtuvieron los promedios estadísticos y gráficos para cada serie a intervalos de 50 mb con el fin de computar las correcciones de temperatura que se han de aplicar a los datos infrarrojos de los captadores del satélite.

El servicio meteorológico de México, en colaboración con el Overseas Operations Section del U.S. National Weather Service, obtuvo a veces algunos ascensos especiales de radiosonda de Mazatlán y Empalme, de acuerdo a las pasadas del satélite sobre el Golfo. Los datos de estos ascensos (Tablas 7 y 8) fueron procesados del mismo modo que los datos del JORDAN. Han proporcionado datos importantes y precisos que se compararán con los datos de radiosonda del JORDAN.

La Tabla 6 contiene datos registrados y computados según ascensos de radiosonda realizados a bordo del JORDAN y en Mazatlán y Empalme, México. Las temperaturas y la proporción de la mezcla calculada (humedad) indicadas en las tablas del JORDAN, se emplearon para computar los perfiles del promedio de temperatura y humedad indicados en la Figura 28. Estos datos proveen la información de entrada para computar las curvas de la corrección de la temperatura ($T_S - T_{BB}$) preparadas en el Goddard Space Flight Center.

Solarímetro - Se registró continuamente a bordo del JORDAN la radiación de onda corta entrante en forma análoga mediante un solarímetro Eppley

se ha tratado de modificar, comparar o combinar los datos tomados a bordo de los diversos barcos de investigación científica que participaron en el proyecto. Se incorporará a estudios futuros todos los datos colectados.

EXPLICACION DE LA TABLA DE LOS DATOS

Un espacio en blanco en la tabla o en los títulos indica que no se ha efectuado observación alguna o que las mediciones no se consideran suficientemente fidedignas para ser empleadas. Las observaciones del tiempo actual, visibilidad, nubes, mar y oleaje que aparecen en el encabezamiento del informe han sido codificadas de acuerdo a los códigos provistos en la Publicación M-2 (1962) del U.S. National Oceanographic Data Center. Las abreviaturas usadas en la tabla y en las unidades que expresan las propiedades, se explican en seguida.

NAME OF VESSEL	El nombre de la nave aparece después de la entidad participante CIAT
CR NO (número del crucero)	Se asignaron los números del crucero: los dos primeros números correspondientes al año y los dos números siguientes al mes.
STA NO (número de la estación)	Los números de las estaciones fueron asignados por los participantes que realizaron el crucero.
LAT (latitud)	En grados y minutos del arco
LONG (longitud)	
DATE	Fecha local del primer lanzamiento
TIME (hora del lanzamiento)	Hora local del lanzamiento. Si aparece una segunda cifra ésta corresponde a la hora del segundo lanzamiento
WEATHER (tiempo actual)	Codificado de acuerdo a NODC, Publicación M-2 (1962)
VISIB (visibilidad)	Codificada de acuerdo a NODC, Publicación M-2 (1962)

DENSITY SURFACE	Superficie predeterminada isanostérica en cl/ton
DEPTH OF SURFACE	Profundidad isanostérica en metros
ACCEL POTENTIAL	Aceleración potencial entre la isanostérica y el nivel de referencia en metros dinámicos (montgomery & Stroup 1962)
TEMP OF SURFACE	Temperatura a la isanostérica indicada en grados Celsius
SAL OF SURFACE	Salinidad a la isanostérica indicada en partes por mil (‰)

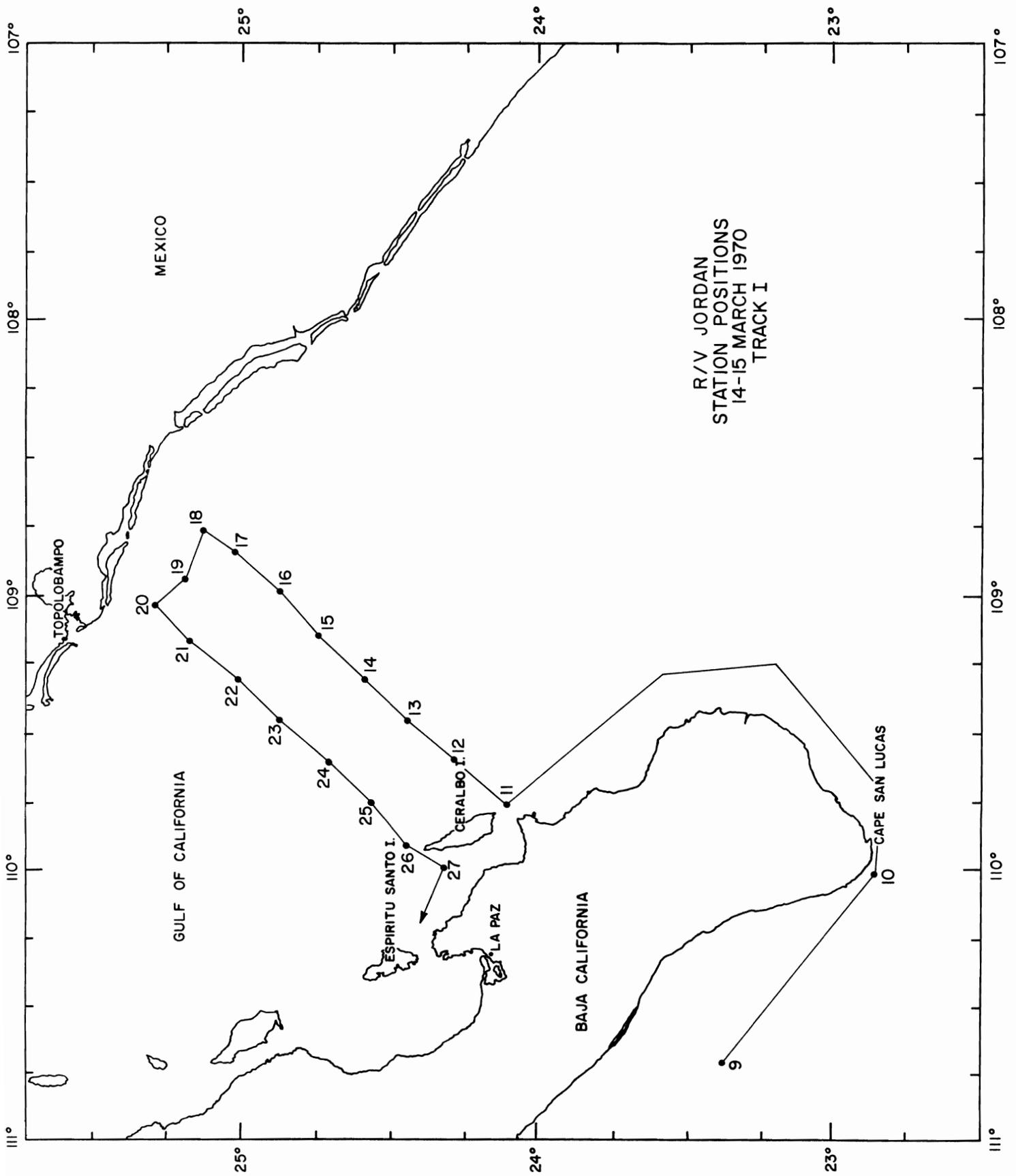
Datos Meteorológicos

Las abreviaturas y anotaciones usadas en las tablas meteorológicas están de acuerdo a los códigos del W.M.O. FM21.D (1968). Las unidades en las que se expresan las propiedades se explican más adelante.

LAT (latitud)	En grados y décimos del arco
LONG (longitud)	
Q (cuadrante geográfico)	Localidad del barco de acuerdo al código 3333 del W.M.O.
GMT (tiempo medio de Greenwich)	Hora de la observación meteorológica
TOT CLD (cubierta total de nubes)	Estimada por un observador y registrada en octavos (Oktas) de acuerdo al código 2700 del W.M.O.
WIND DIR-SPD (dirección y velocidad del viento superficial)	Dirección hasta los 5 grados más próximos (código 0777 W.M.O.). Velocidad hasta el nudo más próximo (código 1100 W.M.O.)
VIS (visibilidad horizontal)	Estimada por un observador y reportada en forma de código de acuerdo al código 4377 del W.M.O.
ww (tiempo actual)	Estado actual del tiempo donde se encuentra el barco o cerca a él, informado en forma de código de acuerdo al código 4677 del W.M.O.
W (estado pasado del tiempo)	Estado del tiempo durante la última hora informado en forma de código de acuerdo al código 4500 del W.M.O.
PPP (presión de la superficie del mar)	Registrada con un barómetro aneróide al $\pm 0.10^{\circ}\text{C}$

Lyr. -Capa de nubes
Bkn. -Cubierta interrumpida de nubes
Clrng. -Despejamiento de la cubierta de nubes
Cldy. -Cubierta parcial de nubes o nublado
Ovc. -Cielo nublado
Merg. -Capas de nubes fusionándose a diferentes niveles
Chpy. -Mar agitado

FIGURE 2



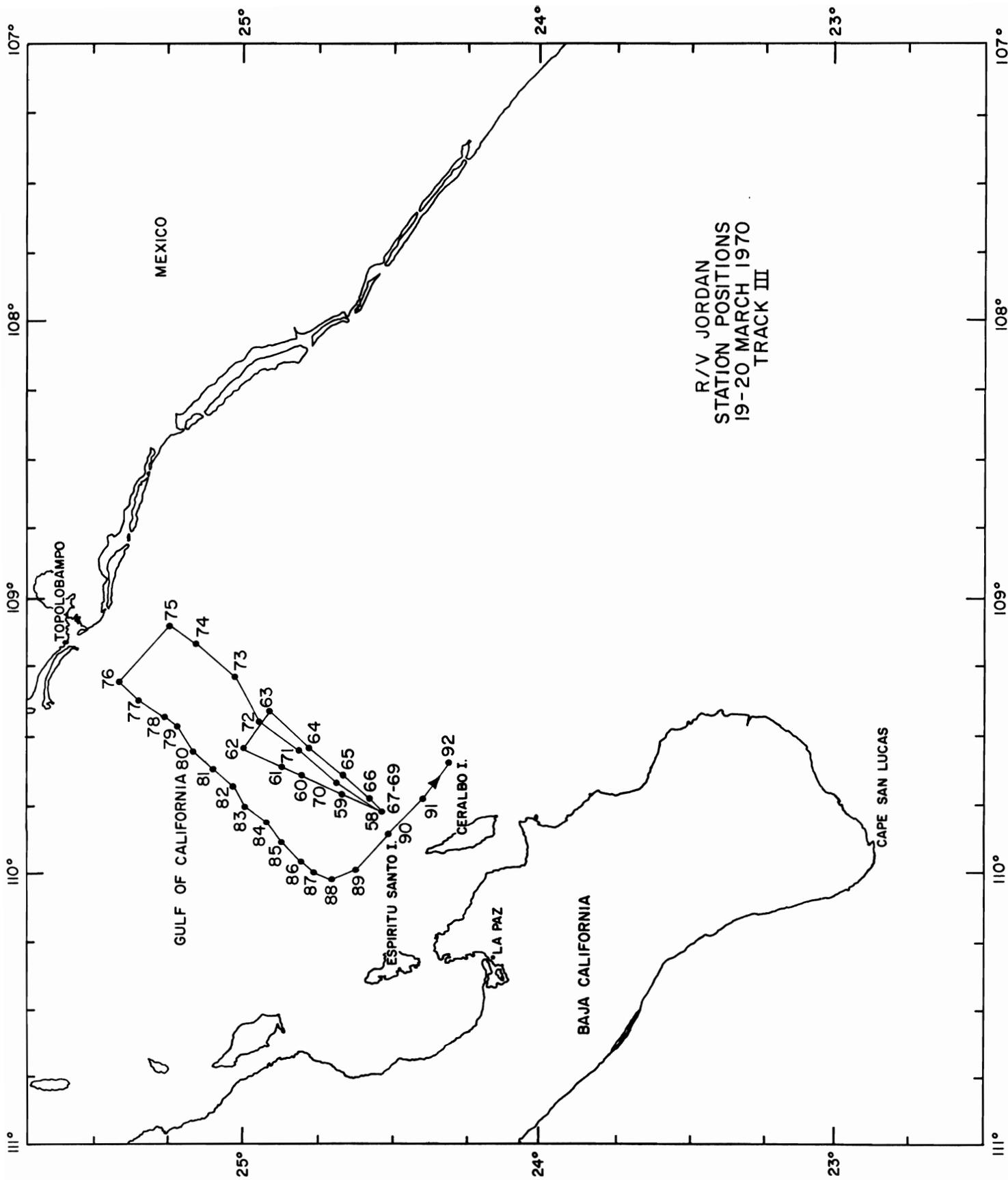
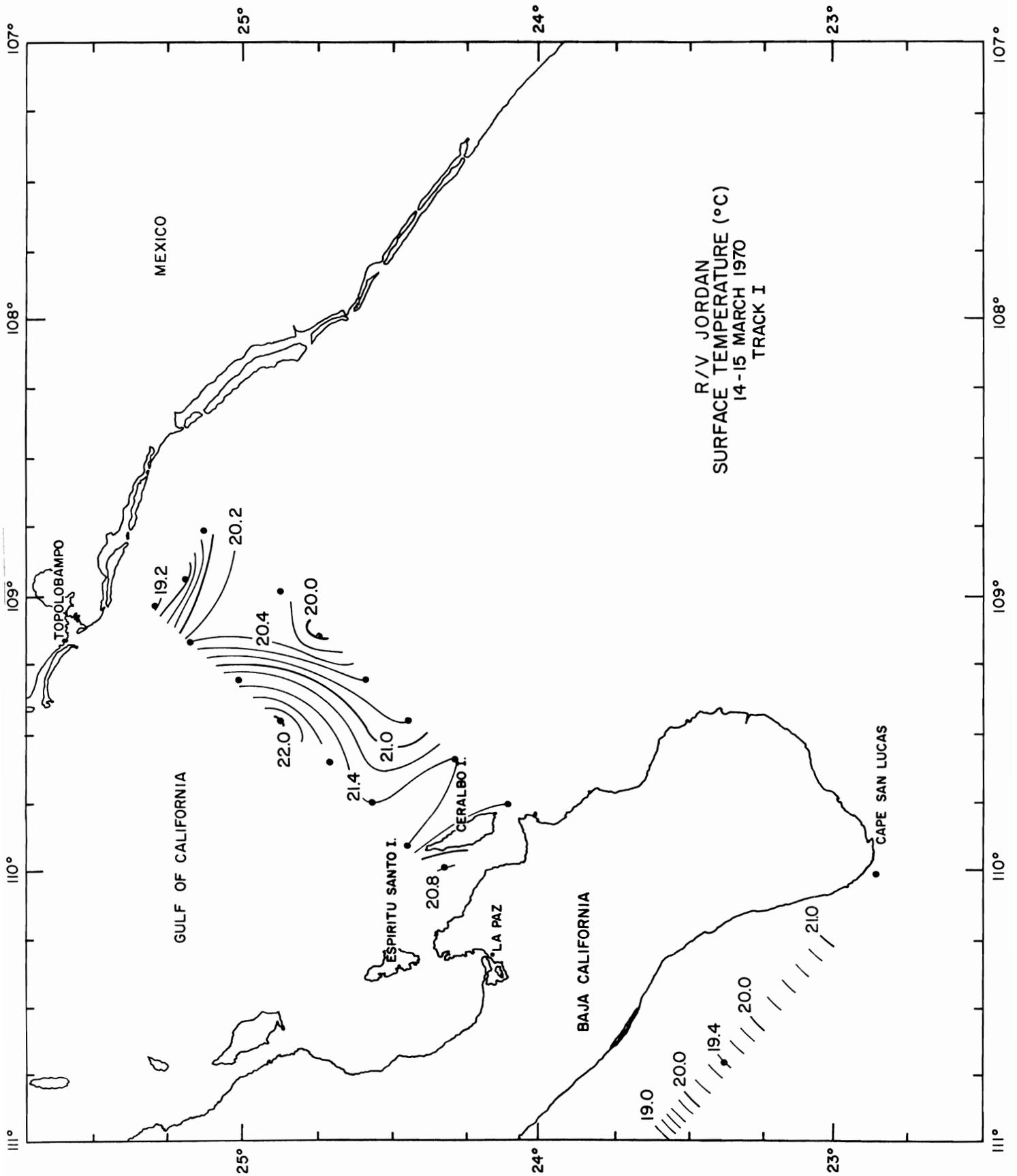


FIGURE 3



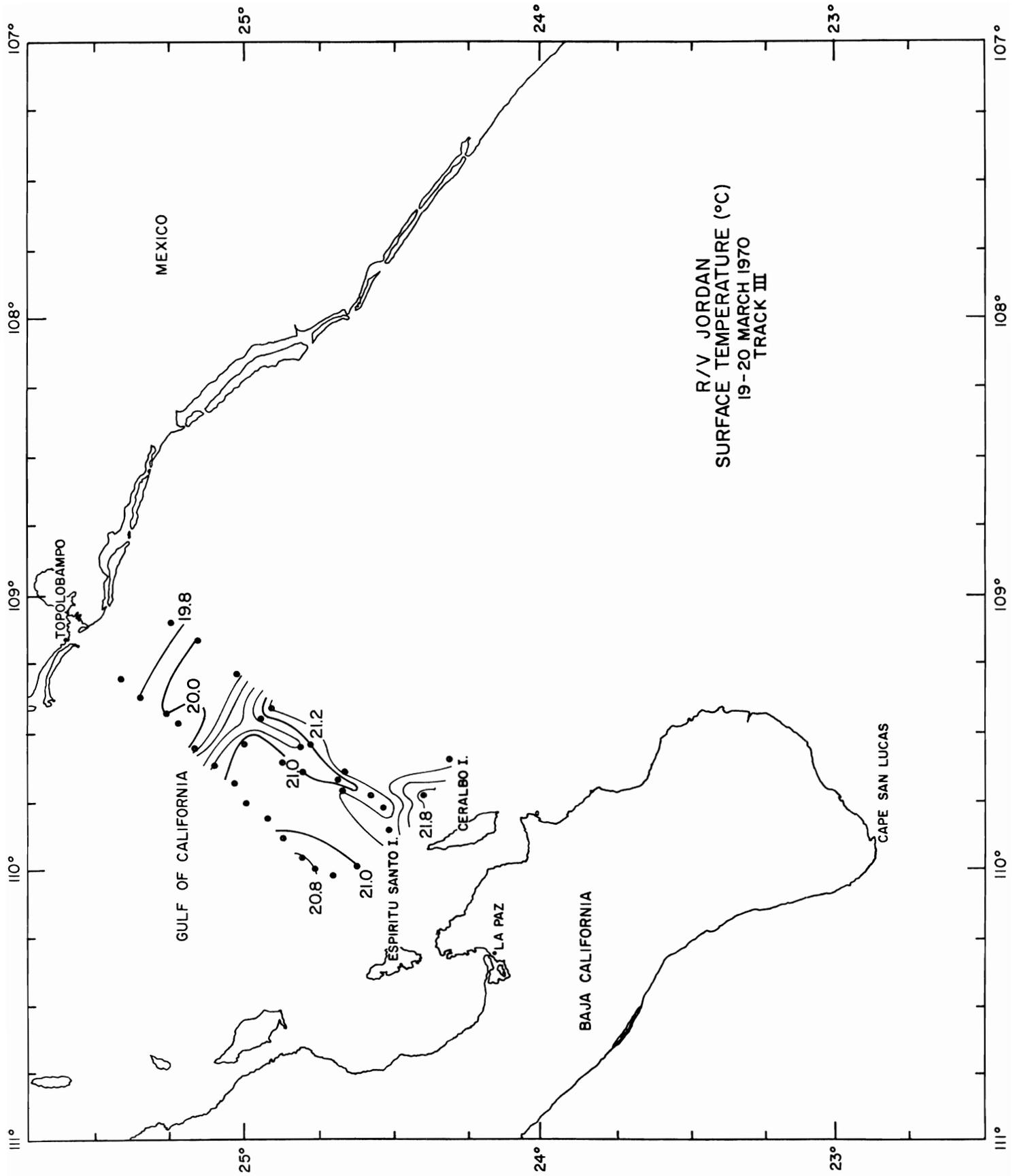
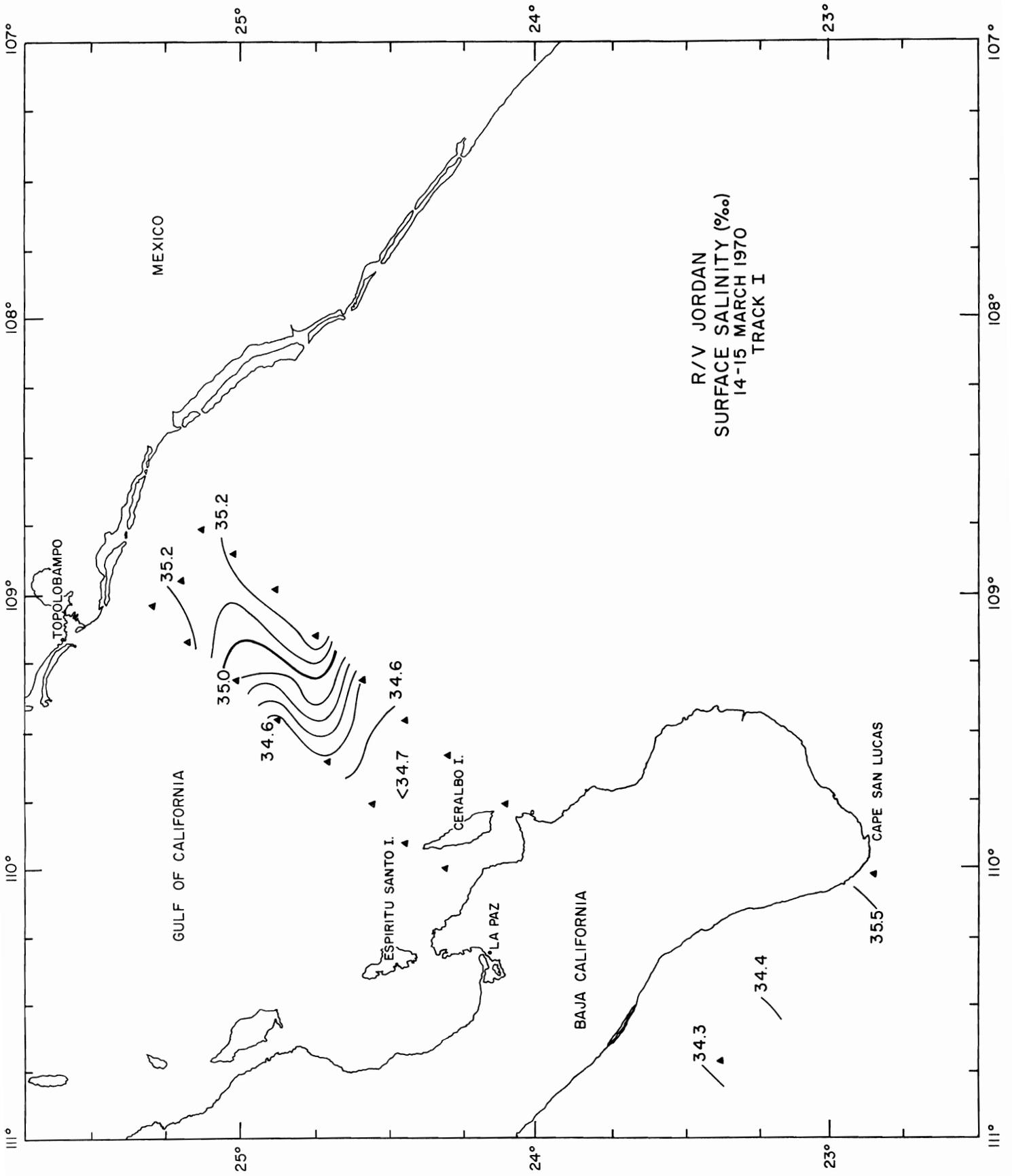


FIGURE 4



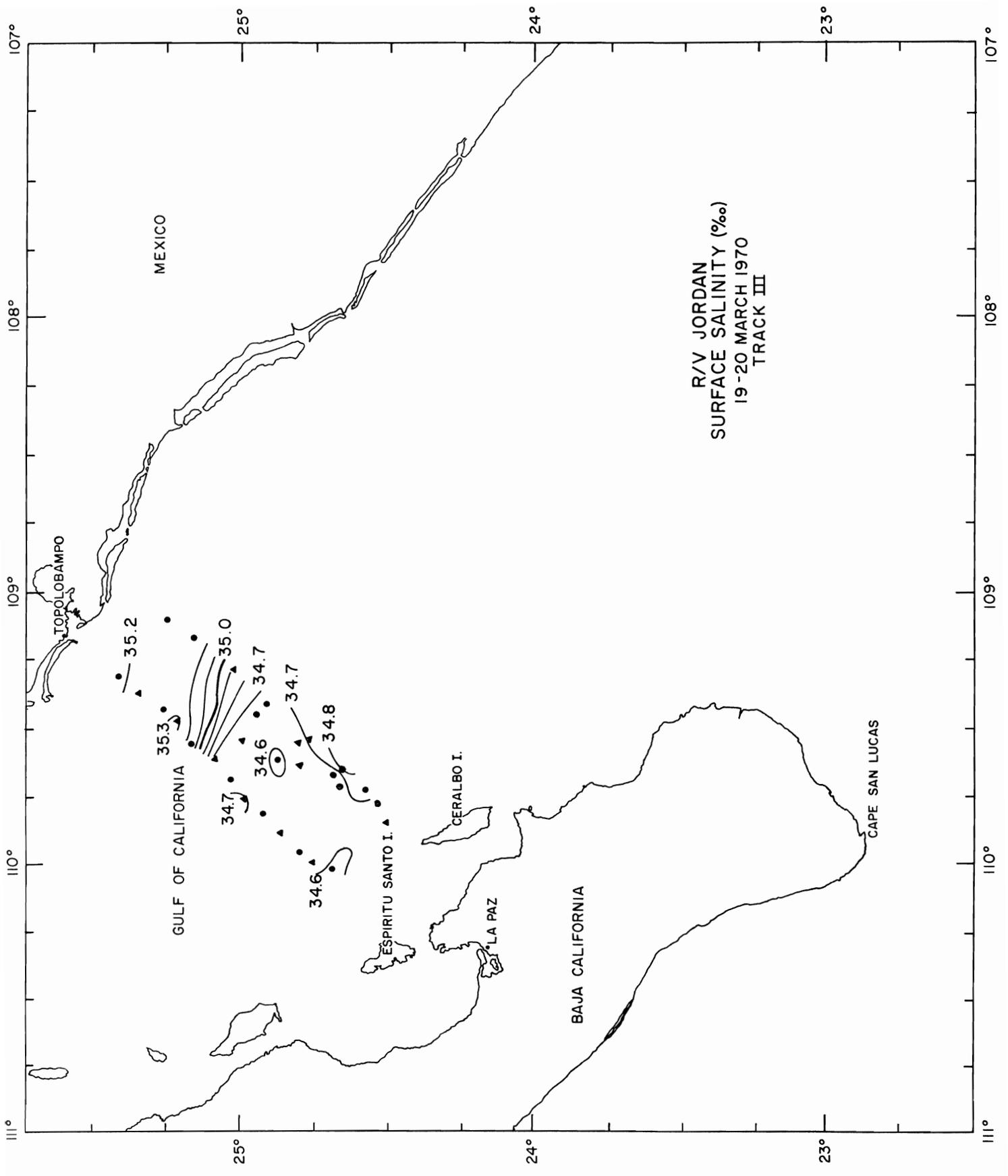
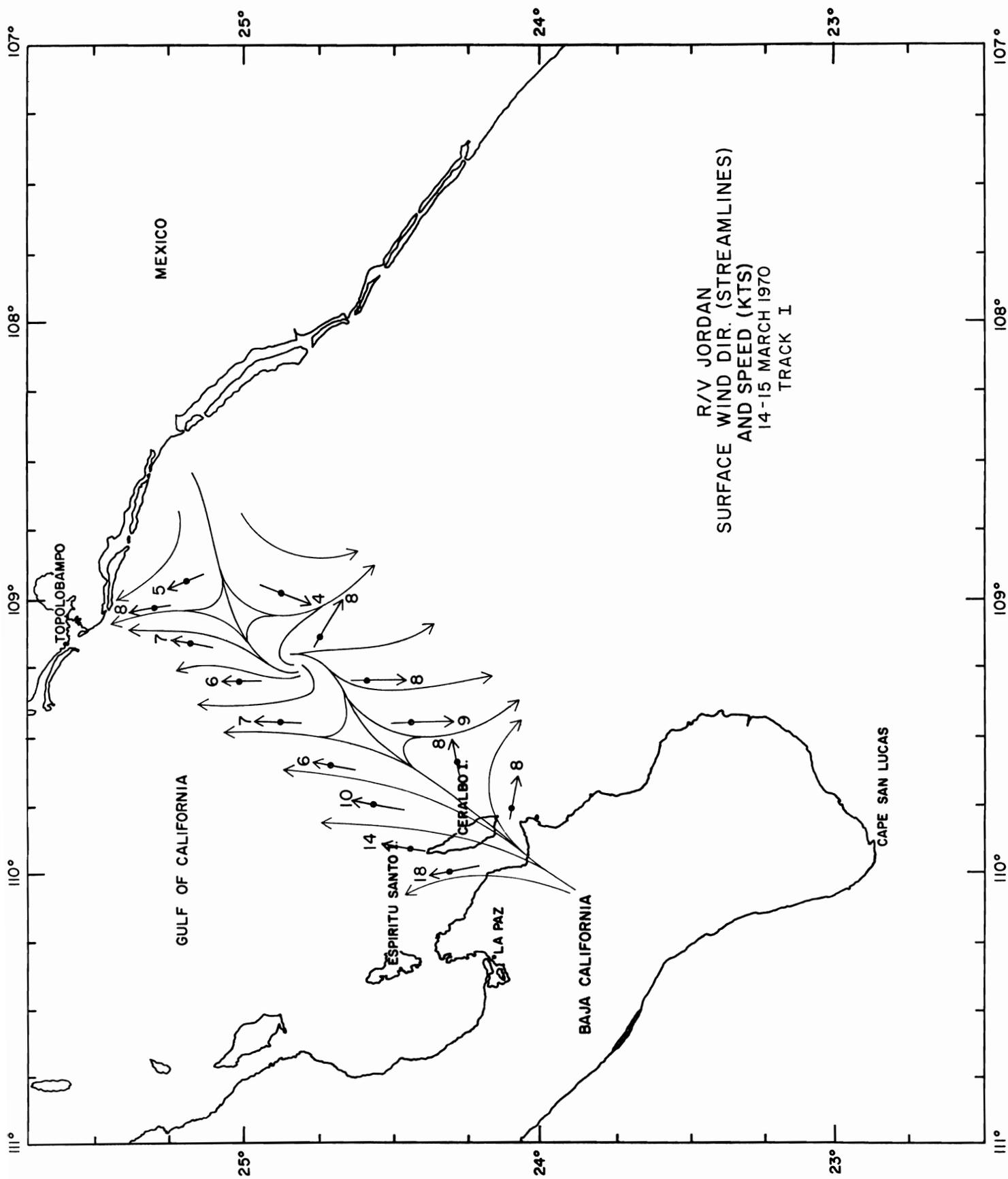
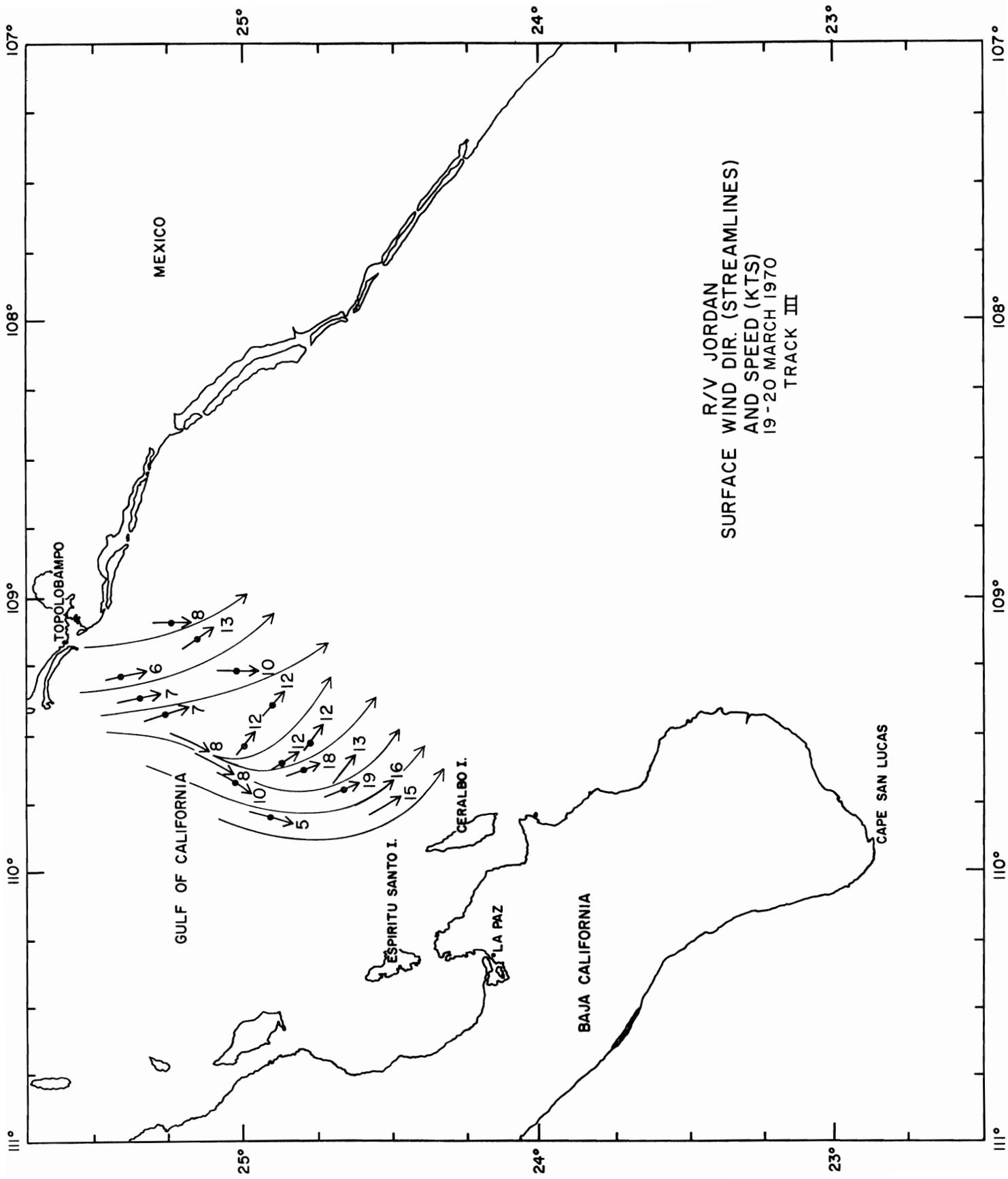


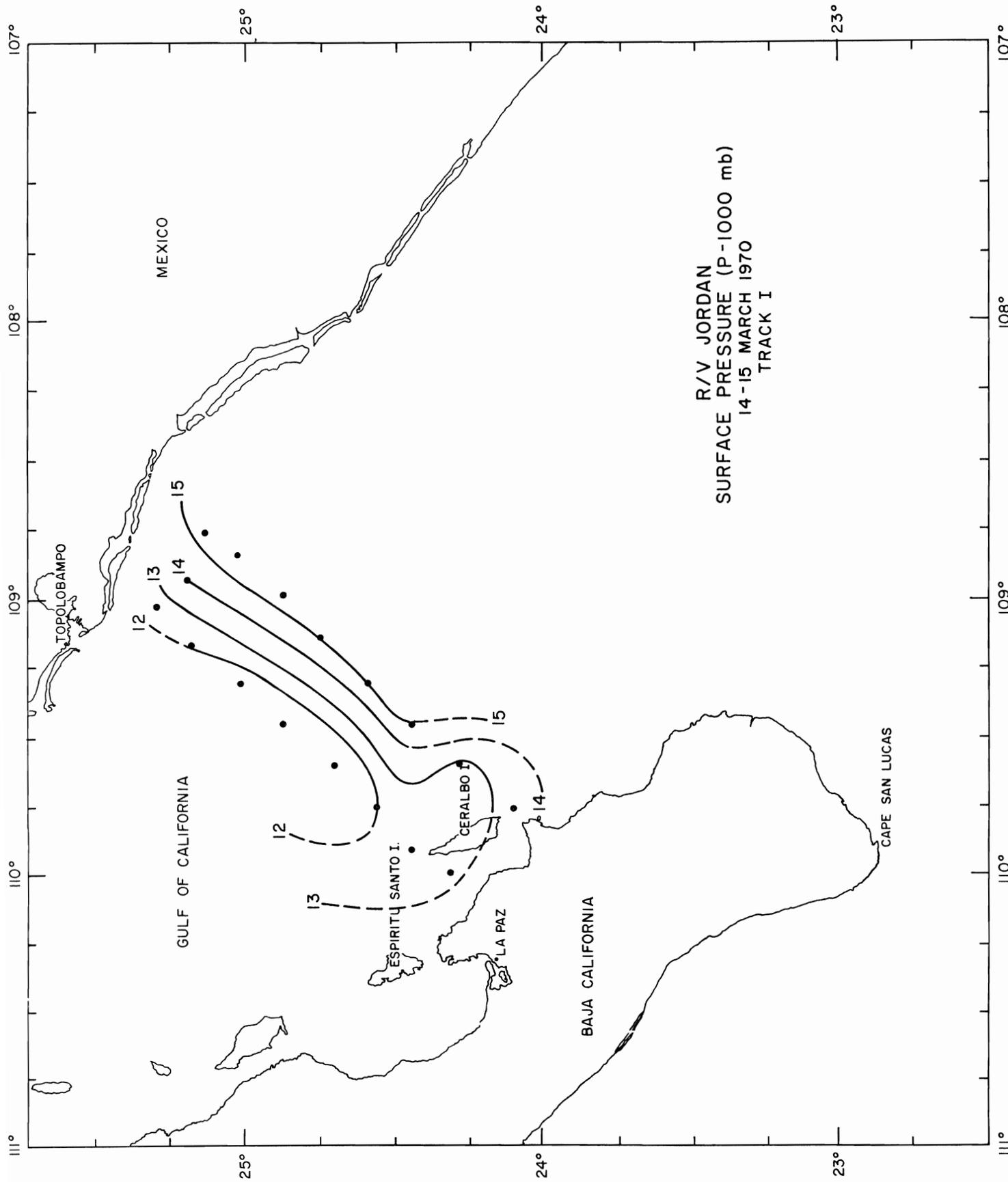
FIGURE 5





R/V JORDAN
 SURFACE WIND DIR. (STREAMLINES)
 AND SPEED (KTS)
 19 - 20 MARCH 1970
 TRACK III

FIGURE 6



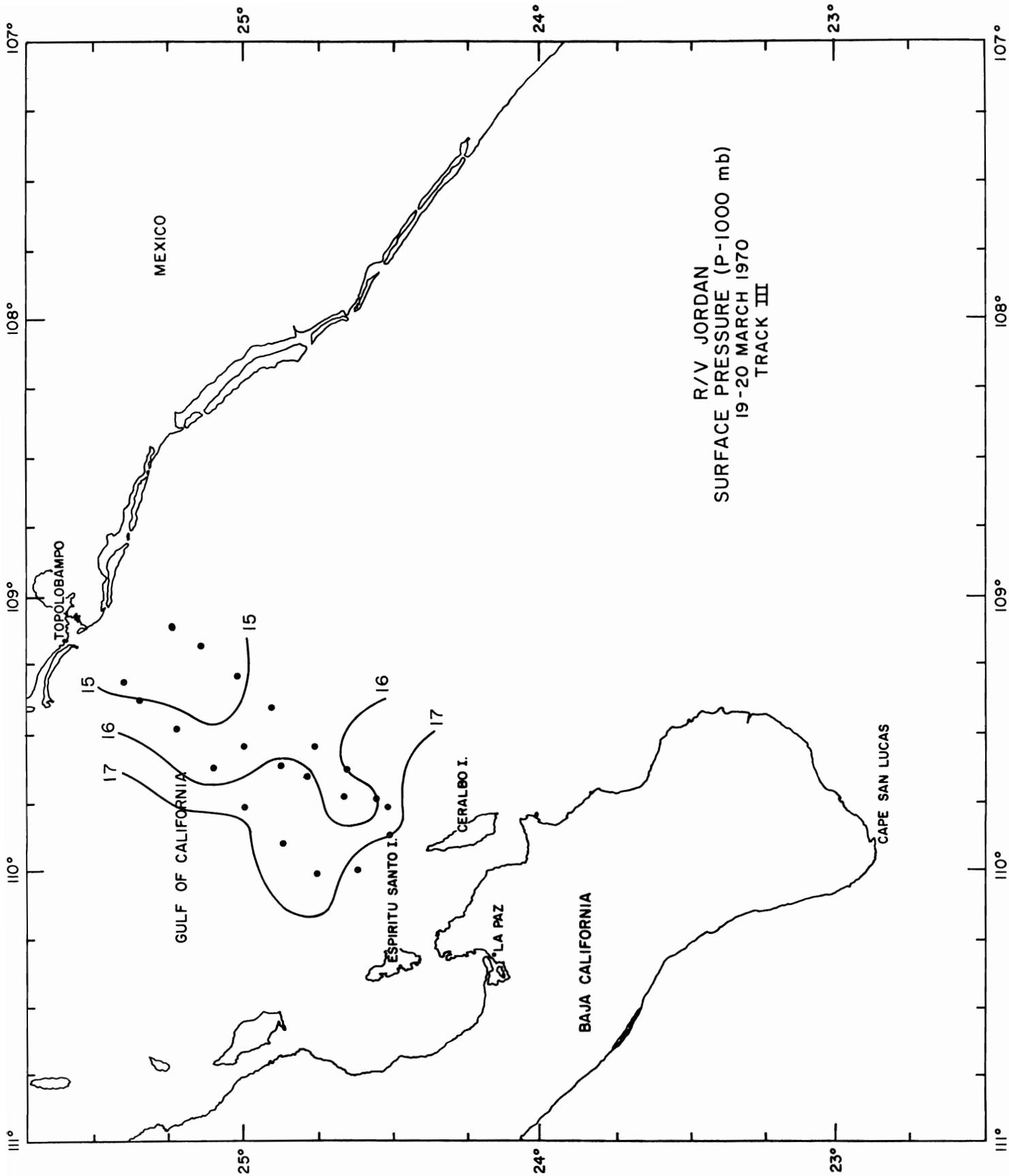
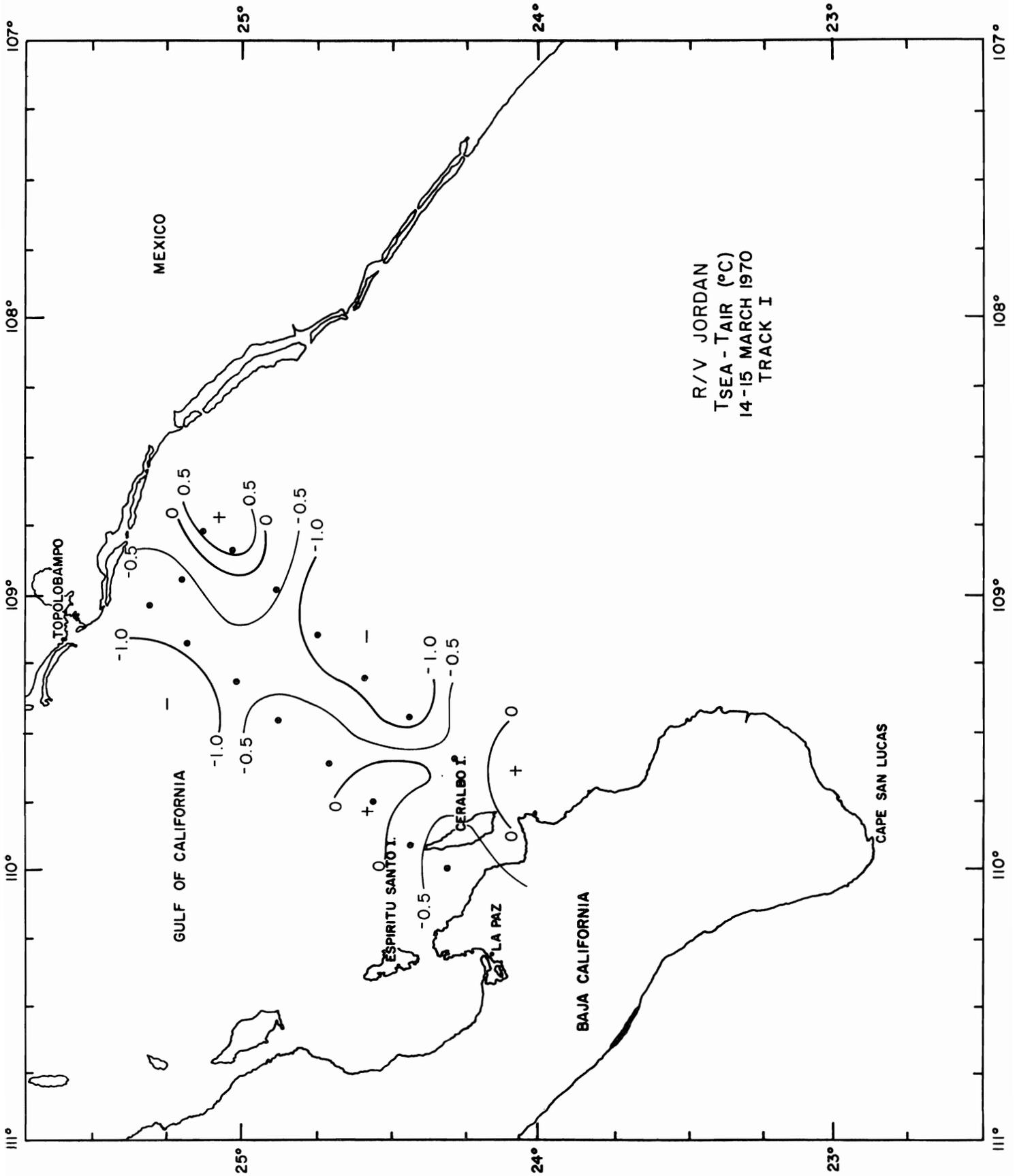


FIGURE 7



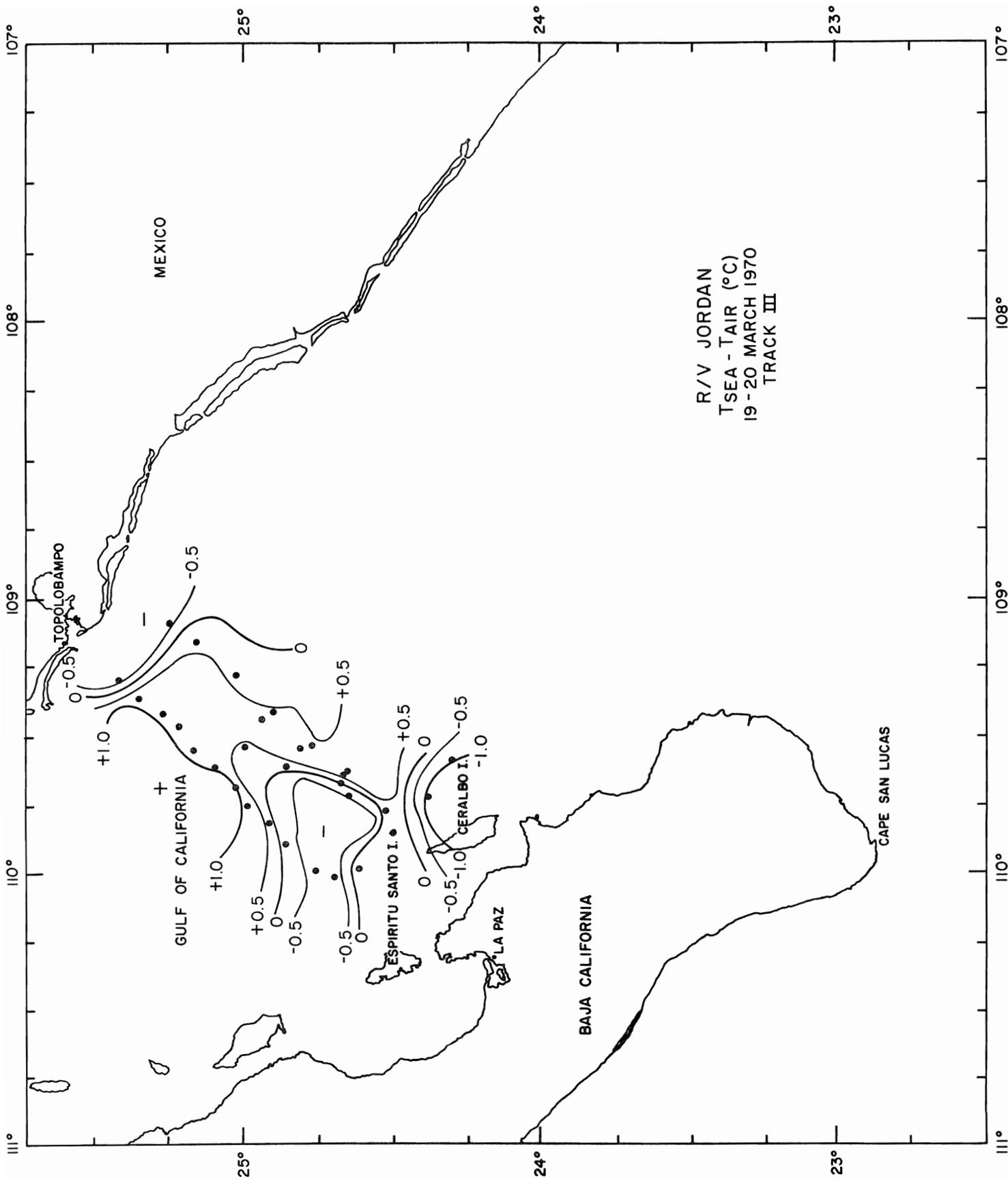
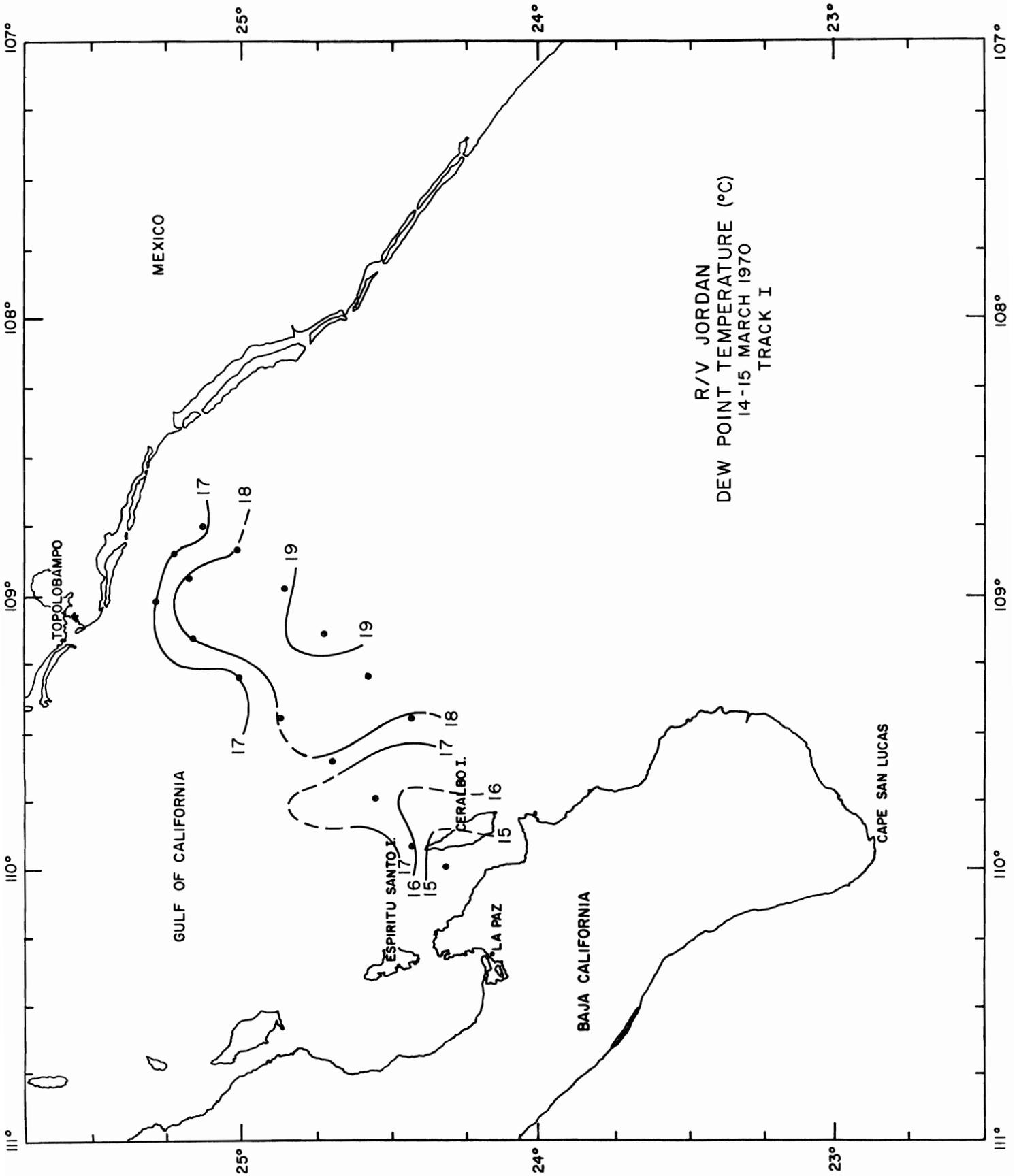


FIGURE 8



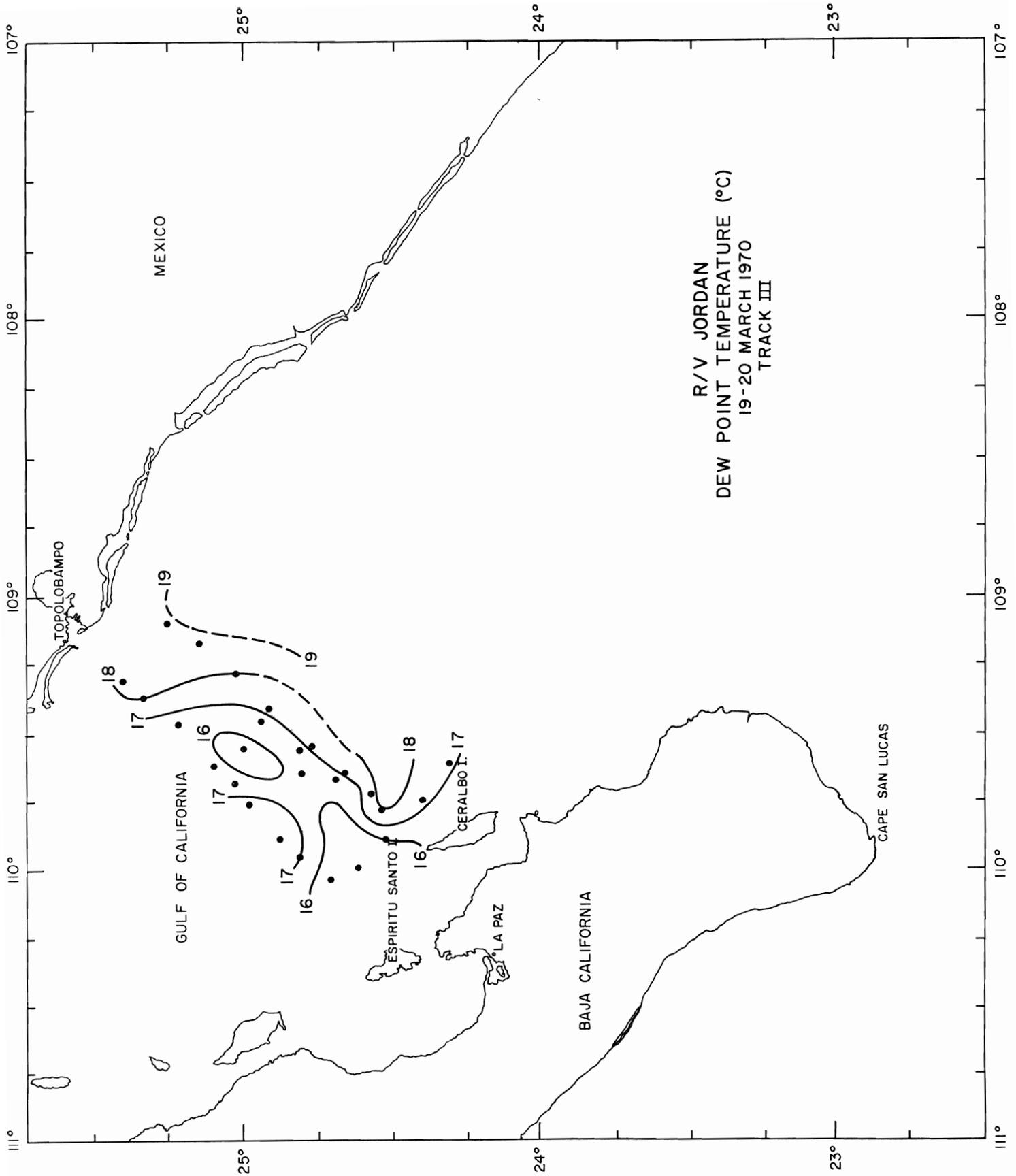


FIGURE 9

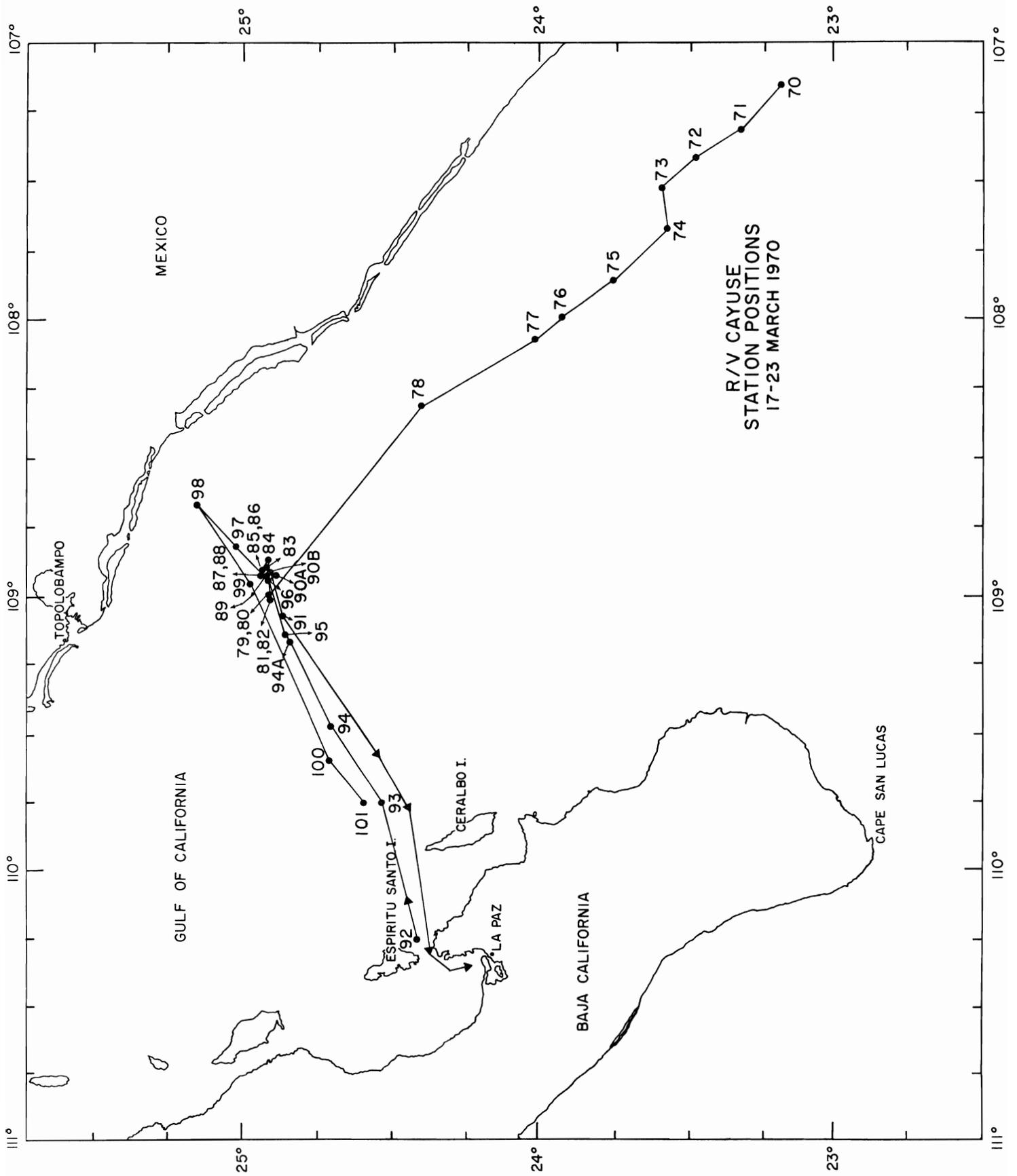


FIGURE 11

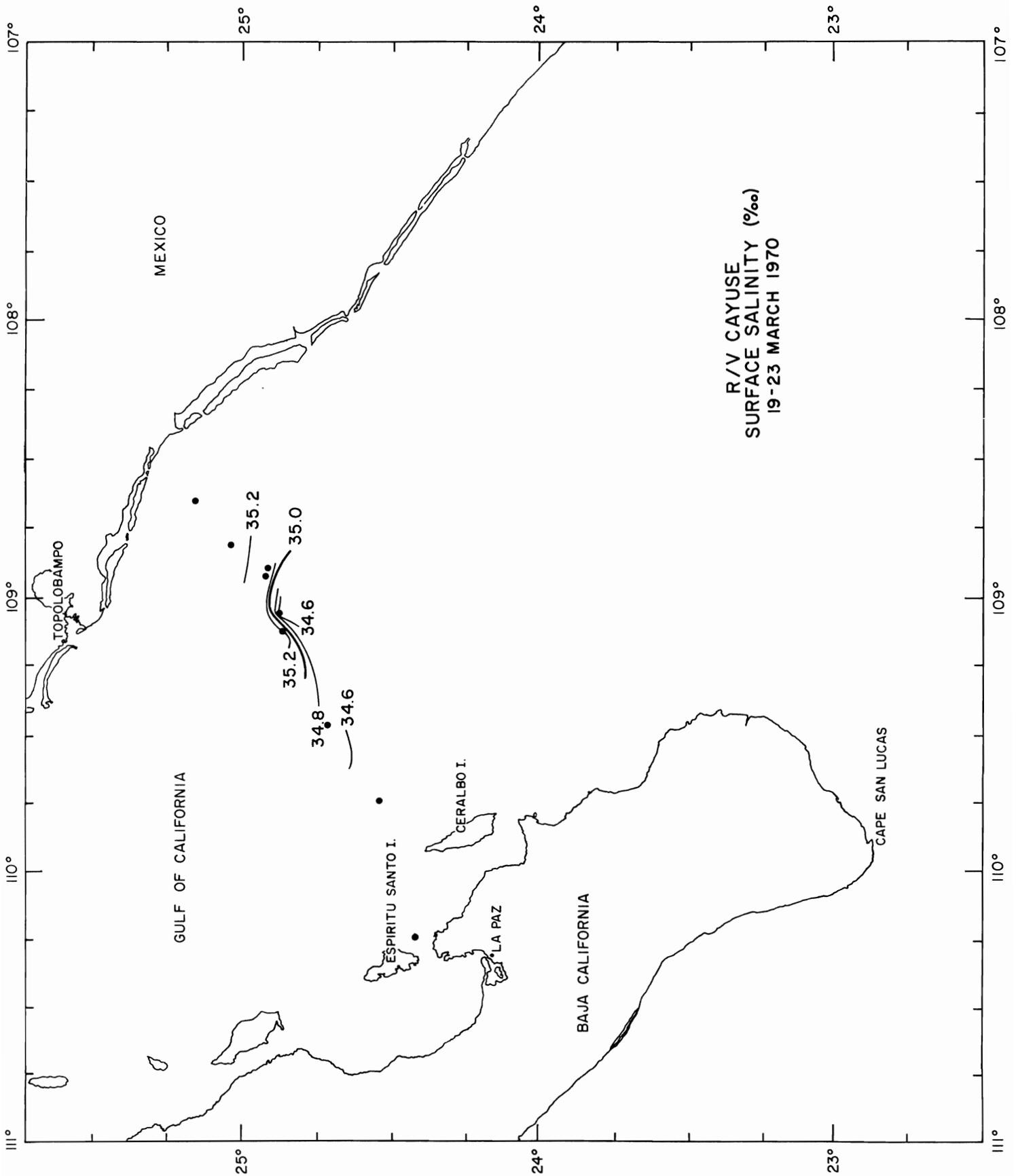


FIGURE 13

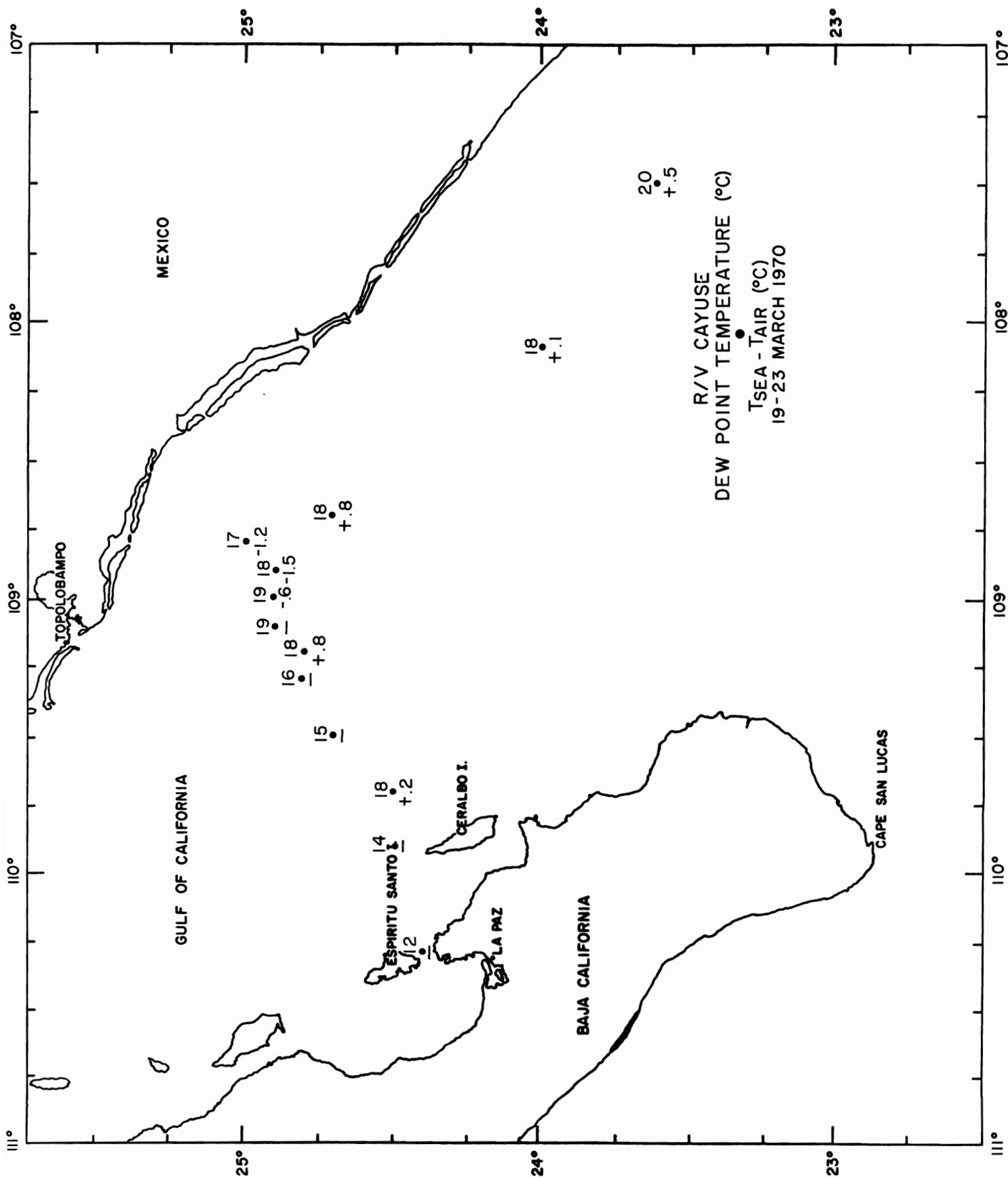


FIGURE 15

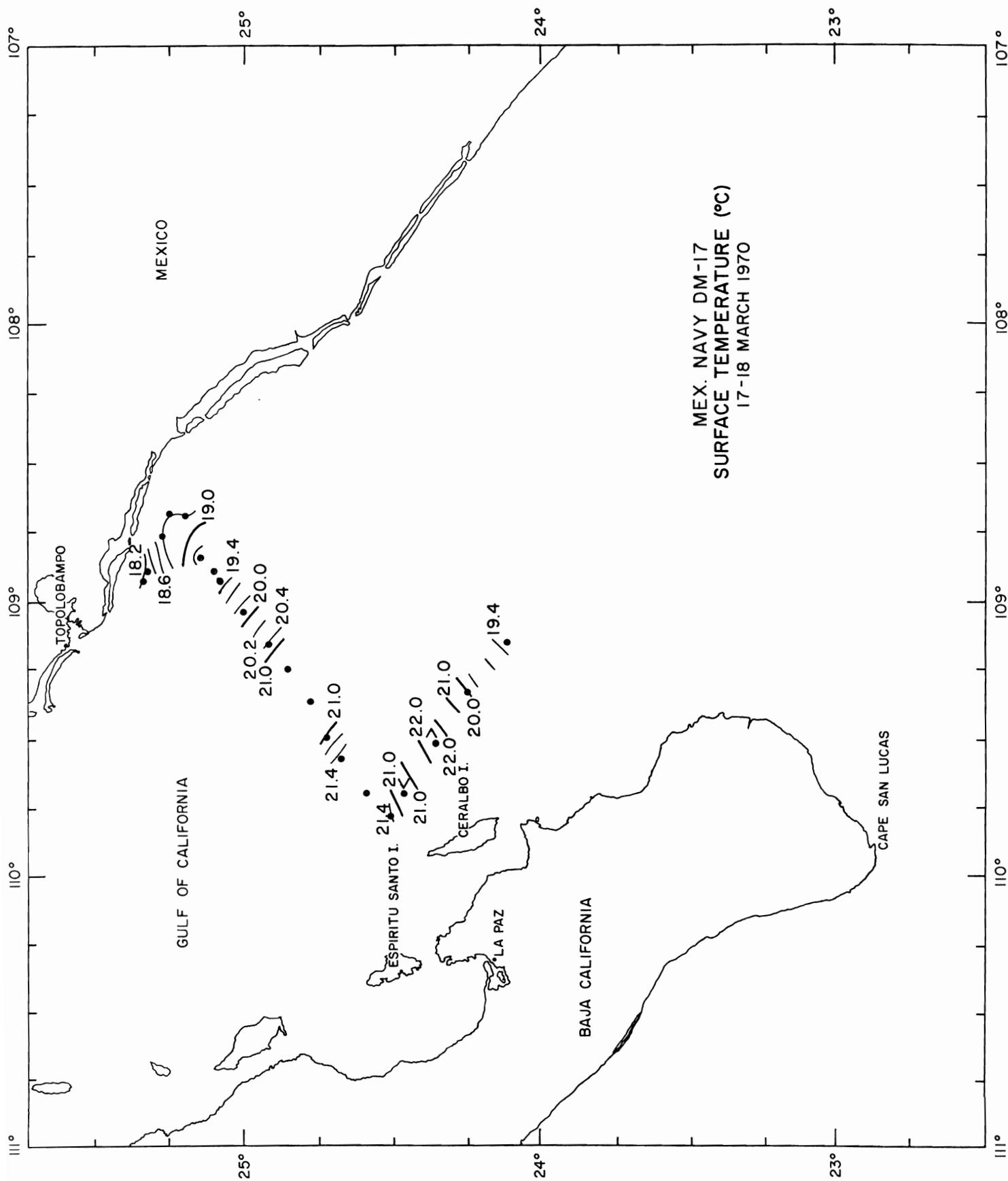


FIGURE 17

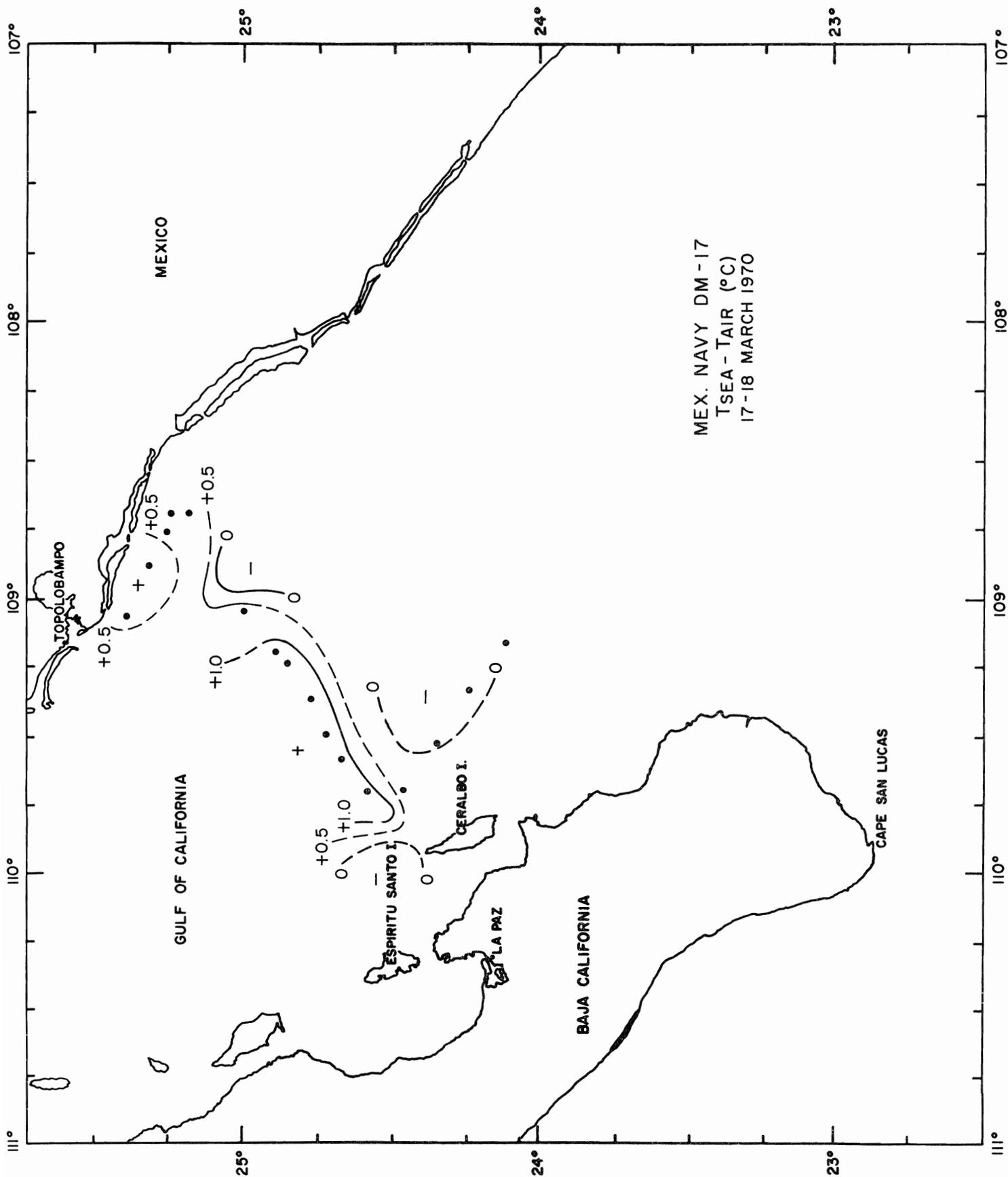


FIGURE 19

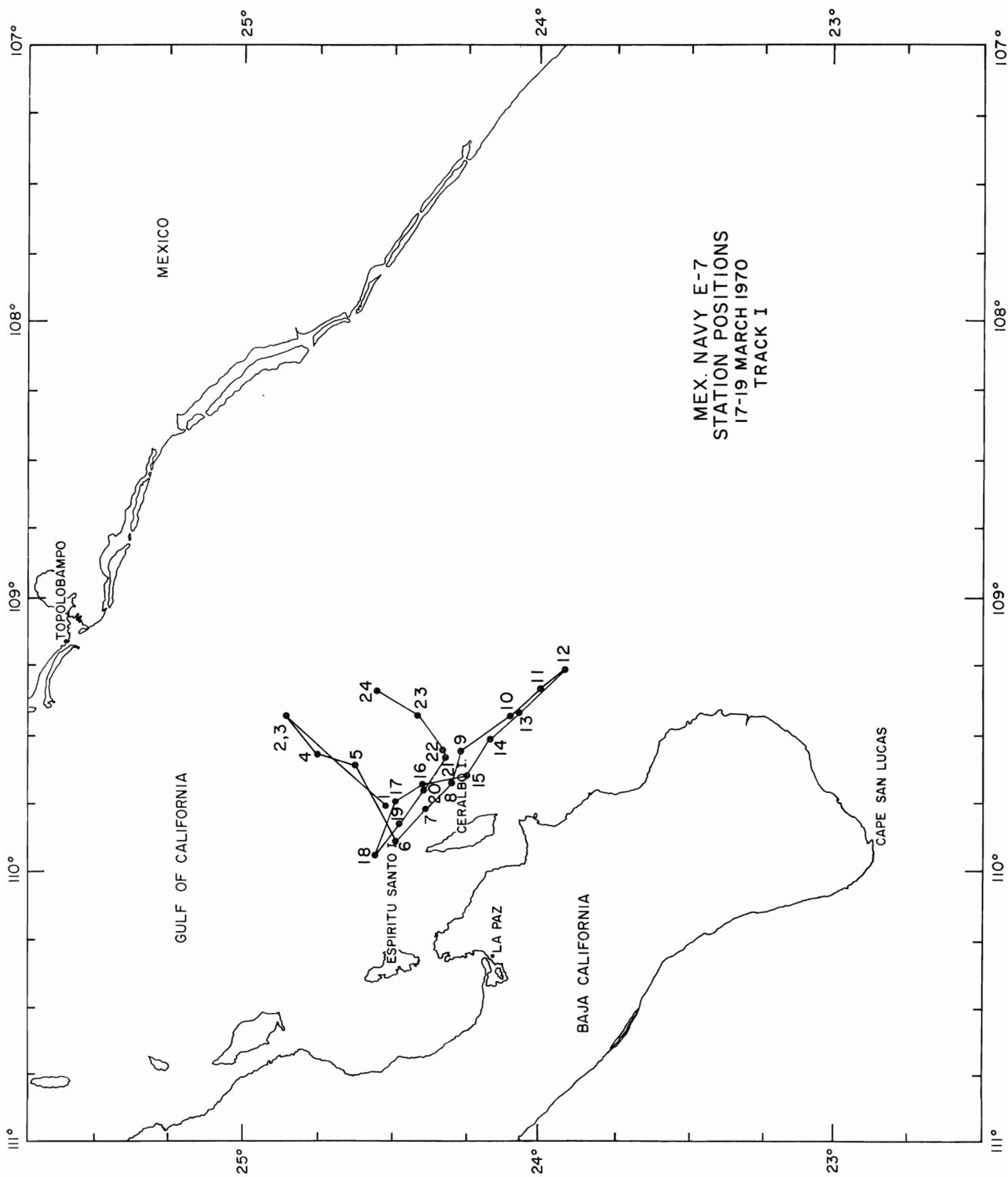


FIGURE 20

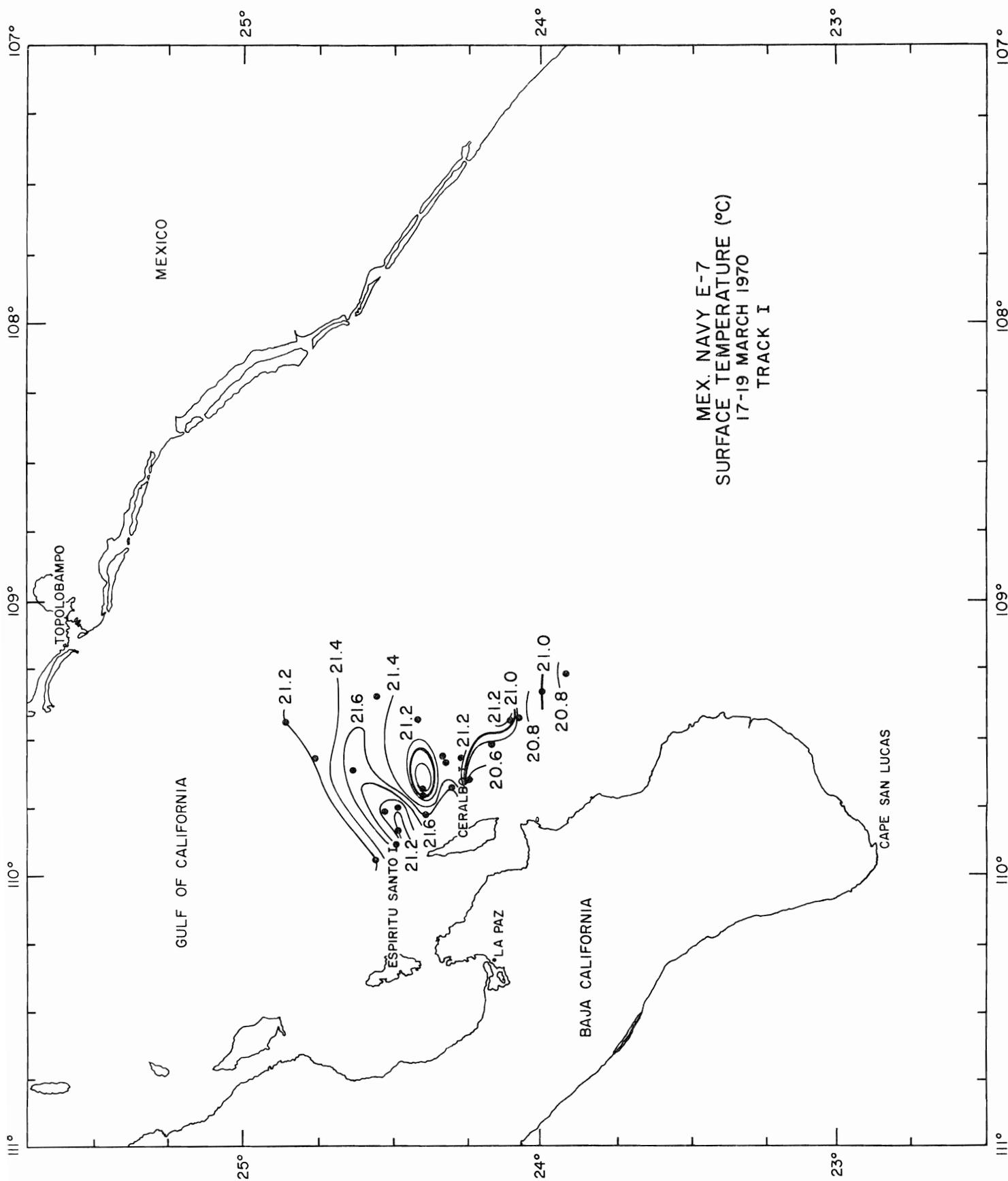


FIGURE 21

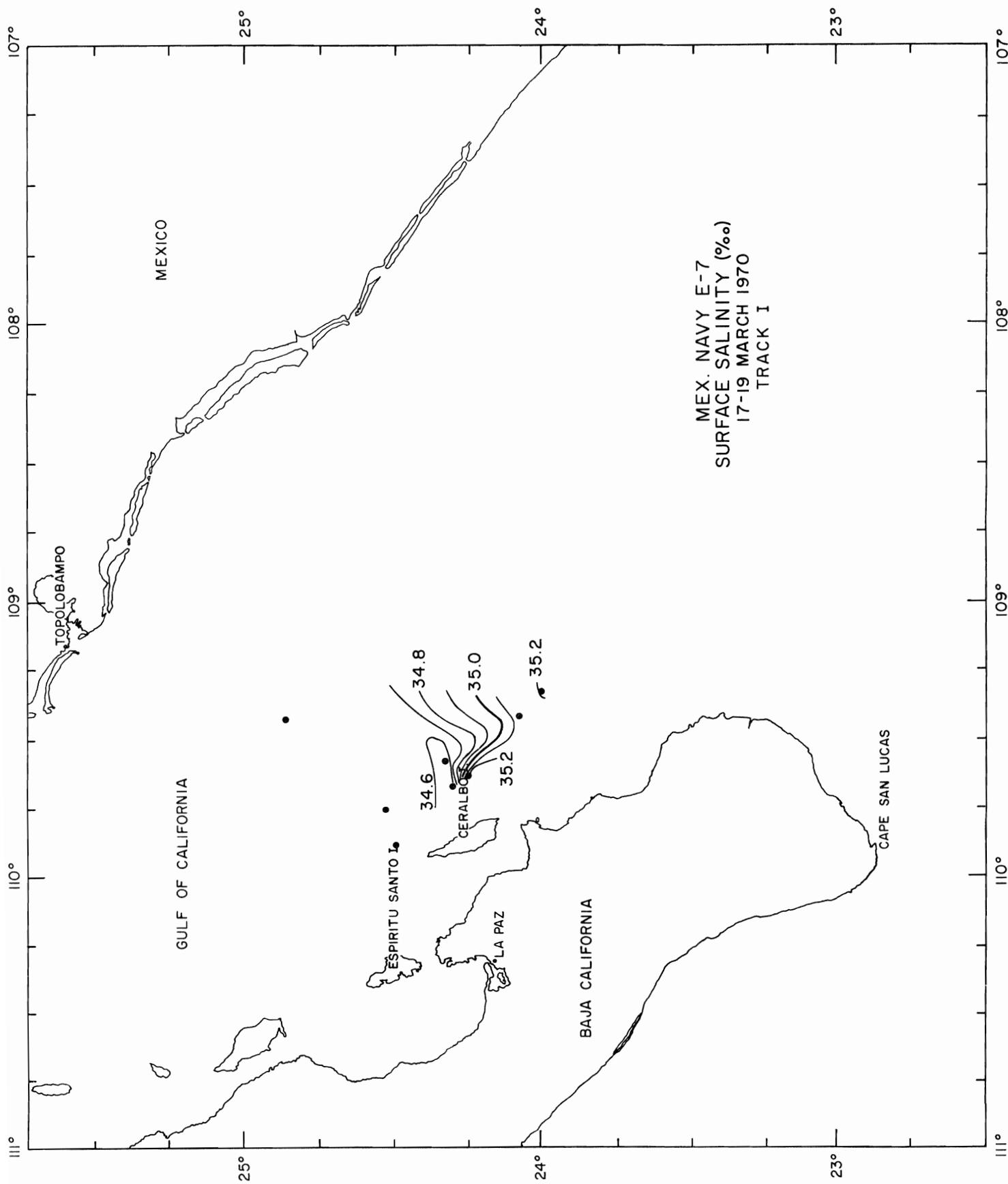


FIGURE 22

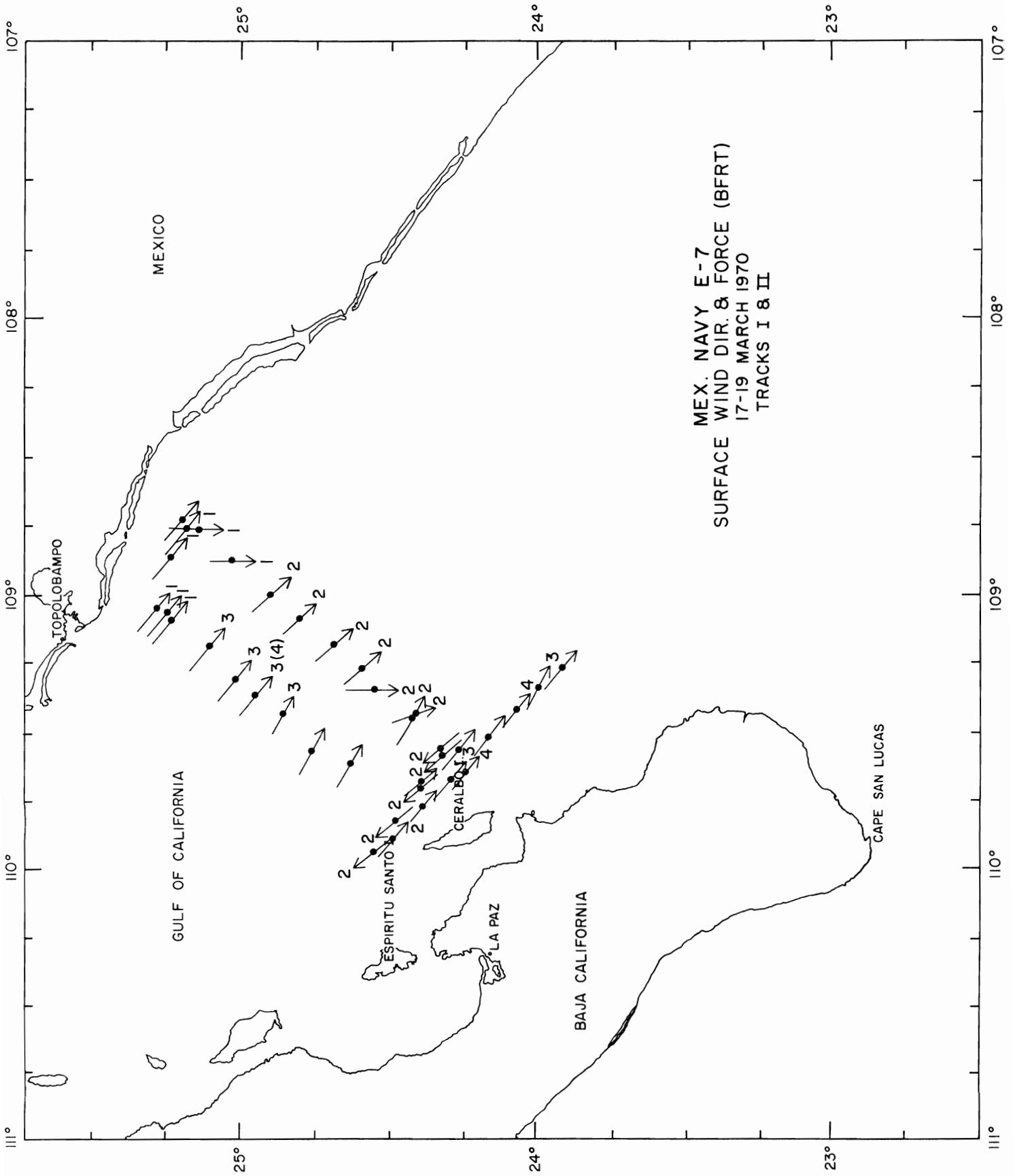


FIGURE 24

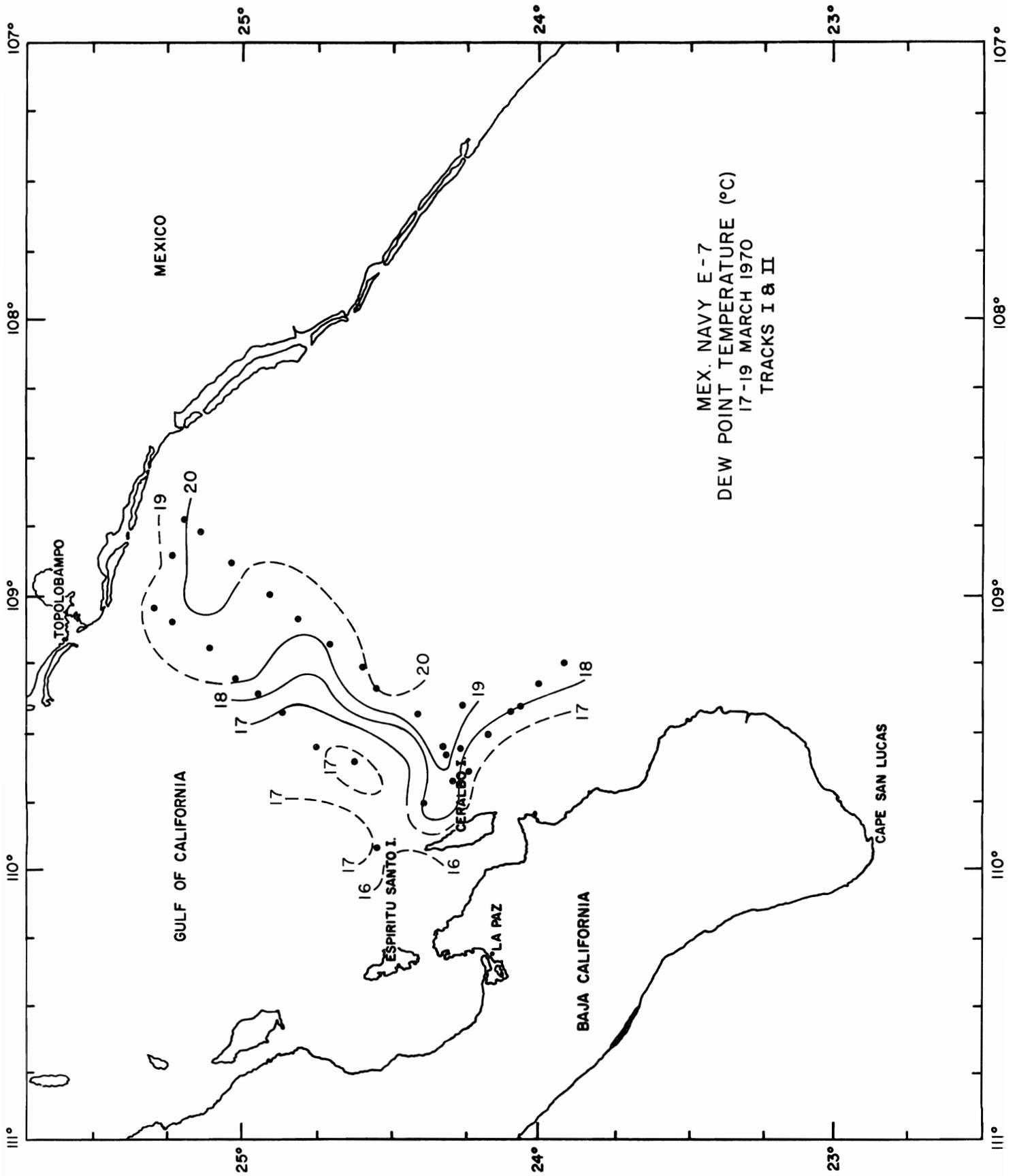


Table 1

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 34 LAT 25- 7.5N LONG 109-36.0W DATE 18 MARCH 70 TIME 0030,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 10 (5.0) DIR 225-235 BAR 1014
 AIR WET 18.8 AIR DRY 20.3 REL HUM 87 WAVE-DIR - HEIGHT PER SOUND 2380

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	20.69	34.591	24.29	364.64	0	
10	19.80	34.847	24.72	323.63	.0344	4305
20	19.21	35.198	25.14	283.62	.0648	4203
30	18.77	35.236	25.28	270.18	.0926	1400
50	17.80	35.196	25.49	250.10	.1449	1055
75	16.23	35.031	25.74	226.60	.2051	989
100	14.90	34.961	25.98	203.29	.2595	981
125	14.08	34.898	26.11	191.16	.3096	511
150	13.26	34.830	26.23	180.00	.3570	470
200	11.69	34.741	26.46	157.37	.4437	477
250	11.11	34.701	26.54	150.13	.5233	153
300	10.53	34.673	26.62	142.32	.5997	164
400	9.02	34.564	26.79	126.24	.7415	169
500	7.80	34.542	26.96	110.05	.8681	172

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
110.0	500	.550	7.80	34.542
160.0	194	.724	11.87	34.749
200.0	107	.784	14.68	34.943
240.0	61	.817	17.13	35.121
260.0	40	.827	18.28	35.214
300.0	16	.839	19.45	35.054
320.0	11	.841	19.75	34.878
340.0	6	.843	20.16	34.744
360.0	1	.844	20.59	34.619
364.6	0	.844	20.69	34.591

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 37 LAT 25- .5N LONG 109-21.8W DATE 18 MARCH 70 TIME 0315,
 WEATHER 2 VISIB 6 CLOUD TYPE 1 CLOUD COV. 7 WIND VEL 7 (3.5) DIR 135-145 BAR 1020
 AIR WET 19.1 AIR DRY 20.1 REL HUM 91 WAVE-DIR - HEIGHT PER SOUND 1737

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.07	34.587	24.18	374.71	0	
10	21.04	34.558	24.17	376.03	.0376	-139
20	19.93	34.319	24.28	365.15	.0747	1153
30	19.09	34.868	24.92	304.64	.1083	6341
50	17.83	34.812	25.19	278.72	.1669	1367
75	15.60	34.837	25.73	227.11	.2306	2166
100	14.39	34.782	25.95	205.91	.2854	892
125	13.63	34.781	26.11	190.80	.3358	636
150	12.96	34.749	26.22	180.20	.3832	447
200	11.95	34.732	26.41	162.71	.4712	369
250	11.25	34.698	26.51	152.78	.5529	209
300	10.35	34.667	26.65	139.77	.6293	274
400	8.81	34.595	26.85	120.77	.7669	200
500	7.61	34.554	27.00	106.51	.8889	152

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
106.5	500	.533	7.61	34.554
160.0	214	.723	11.76	34.722
200.0	110	.788	14.09	34.780
240.0	69	.824	16.16	34.825
260.0	59	.837	17.02	34.814
300.0	34	.855	18.86	34.856
320.0	27	.861	19.30	34.728
340.0	24	.866	19.58	34.546
360.0	21	.871	19.86	34.365
374.7	0	.872	21.07	34.587

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7001 STA NO 41 LAT 24-39.0N LONG 109-56.5W DATE 18 MARCH 70 TIME 0710,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 13 (6.5) DIR 215-225 BAR 1014
 AIR WET 18.8 AIR DRY 21.3 REL HUM 79 WAVE-DIR 215-225 HEIGHT 2 PER SOUND 650

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.17	34.637	24.19	373.69	0	
10	21.17	34.637	24.19	373.69	.0374	-12
20	21.11	34.626	24.20	372.93	.0748	80
30	20.42	34.589	24.36	357.91	.1114	1587
50	16.13	34.648	25.47	252.35	.1727	5544
75	15.33	34.865	25.81	219.32	.2322	1385
100	14.06	34.804	26.04	197.64	.2849	918
125	13.50	34.836	26.18	184.22	.3335	560
150	13.01	34.822	26.27	175.79	.3794	355
200	11.89	34.764	26.44	159.27	.4655	348
250	11.21	34.723	26.54	150.24	.5457	190
300	10.59	34.683	26.62	142.59	.6221	161
400	9.18	34.611	26.80	125.21	.7636	183
500	7.99	34.558	26.95	111.53	.8906	146

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
111.5	500	.558	7.99	34.558
160.0	198	.727	11.94	34.766
200.0	97	.786	14.20	34.809
240.0	59	.817	15.83	34.728
260.0	49	.828	16.44	34.636
300.0	41	.846	18.07	34.595
320.0	37	.854	18.88	34.586
340.0	33	.861	19.69	34.584
360.0	29	.867	20.52	34.594
373.7	0	.869	21.17	34.637

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 43 LAT 24-35.0N LONG 110- 5.0W DATE 18 MARCH 70 TIME 1100,
 WEATHER VISIB 8 CLOUD TYPE 2 CLOUD COV. 7 WIND VEL 10 (5.0) DIR 145-155 BAR 1013
 AIR WET 20.5 AIR DRY 22.5 REL HUM 84 WAVE-DIR 145-155 HEIGHT 2 PER SOUND 914

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	20.71	34.657	24.33	360.37	0	
10	20.70	34.658	24.33	360.05	.0360	23
20	20.16	34.432	24.31	362.72	.0722	-269
30	17.81	34.511	24.96	300.15	.1055	6569
50	15.78	34.758	25.63	236.74	.1594	3333
75	14.78	34.813	25.89	211.63	.2159	1057
100	13.87	34.839	26.11	191.29	.2669	856
125	13.50	34.850	26.19	183.20	.3145	336
150	12.89	34.806	26.28	174.68	.3602	359
200	11.82	34.751	26.45	158.96	.4459	331
250	11.05	34.688	26.54	150.05	.5260	188
300	10.42	34.666	26.64	141.01	.6019	191
400	9.43	34.603	26.76	129.69	.7449	119
500	7.83	34.541	26.96	110.54	.8737	203

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
110.5	500	.553	7.83	34.541
160.0	197	.725	11.89	34.754
200.0	89	.782	14.26	34.826
240.0	49	.810	15.88	34.744
260.0	43	.819	16.52	34.662
300.0	30	.834	17.81	34.511
320.0	27	.839	18.56	34.479
340.0	24	.844	19.31	34.453
360.0	20	.849	20.06	34.434
360.4	0	.849	20.71	34.657

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 44 LAT 24-32.0N LONG 109-46.5W DATE 18 MARCH 70 TIME 1800,
 WEATHER VISIB 8 CLOUD TYPE 2 CLOUD COV. 7 WIND VEL 8 (4.0) DIR 155-165 BAR 1013
 AIR WET 20.3 AIR DRY 22.7 REL HUM 81 WAVE-DIR - HEIGHT PER SOUND 732

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.19	34.594	24.15	377.32	0	-109
10	21.18	34.576	24.14	378.36	.0378	321
20	20.95	34.536	24.17	375.30	.0756	1215
30	20.20	34.432	24.29	363.72	.1126	2610
50	17.50	34.221	24.82	314.11	.1807	2314
75	15.35	34.327	25.40	259.06	.2528	2288
100	13.56	34.573	25.97	204.68	.3114	815
125	13.09	34.713	26.17	185.32	.3609	455
150	12.59	34.733	26.29	174.40	.4068	274
200	11.85	34.725	26.42	161.42	.4930	139
250	11.41	34.708	26.49	154.84	.5749	247
300	10.56	34.669	26.61	143.12	.6527	139
400	9.30	34.572	26.75	129.96	.7969	212
500	7.81	34.545	26.97	109.96	.9254	

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
110.0	500	.550	7.81	34.545
160.0	211	.728	11.76	34.721
200.0	106	.791	13.45	34.606
240.0	84	.829	14.72	34.409
260.0	75	.845	15.39	34.324
300.0	56	.871	16.95	34.243
320.0	48	.881	17.82	34.241
340.0	40	.890	18.91	34.320
360.0	32	.897	20.00	34.413
377.3	0	.900	21.19	34.594

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *
 CR NO 7003 STA NO 45 LAT 24-32.0N LONG 109-46.5W DATE 18 MARCH 70 TIME 1813,
 WEATHER VISIB 8 CLOUD TYPE 2 CLOUD COV. 7 WIND VEL 8 (4.0) DIR 275-285 BAR 1014
 AIR WET 20.2 AIR DRY 22.8 REL HUM 79 WAVE-DIR - HEIGHT PER SOUND 732

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.24	34.608	24.15	377.60	0	
10	21.23	34.605	24.15	377.56	.0378	5
20	21.05	34.560	24.16	376.15	.0755	148
30	20.41	34.415	24.23	370.26	.1130	618
50	18.01	34.154	24.64	330.78	.1834	2072
75	14.81	33.976	25.24	273.48	.2594	2412
100	13.58	34.588	25.97	203.97	.3197	2924
125	13.33	34.730	26.13	188.69	.3696	638
150	12.71	34.729	26.26	176.94	.4162	500
200	11.95	34.739	26.41	162.19	.5032	308
250	11.32	34.706	26.51	153.41	.5850	185
300	10.66	34.678	26.60	144.14	.6626	195
400	9.27	34.591	26.77	128.08	.8064	169
500	7.77	34.531	26.96	110.45	.9342	187

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
110.4	500	.552	7.77	34.531
160.0	212	.729	11.79	34.730
200.0	106	.793	13.52	34.624
240.0	87	.831	14.22	34.268
260.0	80	.848	14.57	34.093
300.0	63	.877	16.29	34.043
320.0	55	.888	17.41	34.111
340.0	45	.898	18.57	34.209
360.0	35	.906	19.79	34.340
377.6	0	.910	21.24	34.608

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 46 LAT 24-32.0N LONG 109-46.5W DATE 18 MARCH 70 TIME 2013,
 WEATHER VISIB 8 CLOUD TYPE 2 CLOUD COV. 7 WIND VEL 8 (4.0) DIR 275-285 BAR 1014
 AIR WET 20.0 AIR DRY 23.0 REL HUM 76 WAVE-DIR - HEIGHT PER SOUND 732

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.25	34.627	24.16	376.49	0	
10	21.20	34.601	24.15	377.07	.0377	-61
20	20.83	34.502	24.18	374.68	.0754	251
30	19.71	34.308	24.33	360.48	.1122	1501
50	17.95	34.464	24.89	306.83	.1792	2810
75	15.12	34.063	25.24	273.53	.2523	1404
100	13.86	34.539	25.88	213.07	.3137	2544
125	13.33	34.722	26.13	189.28	.3648	1002
150	12.68	34.742	26.28	175.42	.4113	584
200	11.98	34.744	26.41	162.37	.4980	273
250	11.37	34.722	26.51	153.11	.5797	195
300	10.64	34.678	26.61	143.80	.6572	196
400	9.20	34.591	26.78	127.00	.8002	177
500	7.84	34.561	26.97	109.19	.9269	189

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
109.2	500	.546	7.84	34.561
160.0	213	.727	11.82	34.738
200.0	114	.792	13.57	34.639
240.0	89	.833	14.42	34.325
260.0	81	.850	14.84	34.168
300.0	55	.877	17.37	34.373
320.0	45	.887	18.38	34.422
340.0	38	.895	19.04	34.363
360.0	30	.902	19.69	34.309
376.5	0	.905	21.25	34.627

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 47 LAT 24-32.0N LONG 109-46.5W DATE 18 MARCH 70 TIME 2113,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 8 (4.0) DIR 275-285 BAR 1015
 AIR WET 20.0 AIR DRY 23.0 REL HUM 76 WAVE-DIR - HEIGHT PER SOUND 732

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.07	34.592	24.18	374.35	0	
10	21.05	34.601	24.20	373.18	.0374	123
20	20.84	34.638	24.28	365.09	.0744	849
30	20.52	34.760	24.46	348.06	.1101	1774
50	18.78	34.350	24.60	334.76	.1787	704
75	15.63	34.628	25.56	243.01	.2514	3851
100	13.65	34.611	25.98	203.66	.3079	1661
125	12.85	34.731	26.23	179.43	.3565	1020
150	12.47	34.749	26.32	170.99	.4013	351
200	11.86	34.740	26.43	160.49	.4864	221
250	11.14	34.707	26.54	150.20	.5669	217
300	10.63	34.689	26.62	142.82	.6434	156
400	9.37	34.604	26.77	128.67	.7868	149
500	7.70	34.537	26.98	109.03	.9142	208

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
109.0	500	.545	7.70	34.537
160.0	202	.724	11.83	34.738
200.0	104	.785	13.53	34.628
240.0	77	.822	15.48	34.625
260.0	70	.836	16.21	34.568
300.0	59	.862	17.59	34.442
320.0	54	.874	18.27	34.387
340.0	42	.883	19.47	34.507
360.0	23	.890	20.74	34.674
374.3	0	.891	21.07	34.592

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 48 LAT 24-32.0N LONG 109-46.5W DATE 18 MARCH 70 TIME 2210,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 8 (4.0) DIR 275-285 BAR 1014
 AIR WET 19.2 AIR DRY 22.5 REL HUM 73 WAVE-DIR - HEIGHT PER SOUND 732

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.07	34.599	24.19	373.84	0	
10	21.06	34.622	24.21	371.92	.0373	202
20	20.81	34.664	24.31	362.43	.0741	995
30	20.55	34.762	24.45	348.68	.1097	1431
50	18.70	34.293	24.58	336.98	.1786	620
75	15.29	34.379	25.45	253.99	.2529	3488
100	13.59	34.617	26.00	202.04	.3106	2186
125	13.28	34.744	26.16	186.70	.3599	646
150	12.64	34.752	26.29	173.94	.4060	533
200	11.84	34.745	26.44	159.76	.4917	299
250	11.12	34.709	26.55	149.71	.5718	212
300	10.57	34.678	26.62	142.62	.6482	149
400	9.26	34.591	26.77	127.93	.7910	155
500	7.83	34.548	26.96	110.02	.9186	190

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
110.0	500	.550	7.83	34.548
160.0	199	.725	11.85	34.745
200.0	103	.785	13.55	34.633
240.0	82	.822	14.83	34.439
260.0	73	.838	15.54	34.368
300.0	61	.865	17.18	34.314
320.0	55	.876	18.00	34.299
340.0	45	.886	19.18	34.410
360.0	22	.893	20.76	34.681
373.8	0	.894	21.07	34.599

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 49 LAT 24-32.0N LONG 109-46.5W DATE 18 MARCH 70 TIME 2310,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 8 (4.0) DIR 275-285 BAR 1014
 AIR WET 18.2 AIR DRY 22.1 REL HUM 68 WAVE-DIR - HEIGHT PER SOUND 732

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	20.99	34.582	24.20	373.01	0	
10	21.02	34.617	24.22	371.25	.0372	184
20	20.87	34.694	24.32	361.80	.0739	991
30	20.60	34.769	24.44	349.45	.1096	1284
50	18.43	34.458	24.77	318.56	.1767	1627
75	15.91	34.651	25.52	247.35	.2479	2988
100	13.63	34.636	26.00	201.43	.3047	1938
125	12.82	34.730	26.24	178.94	.3530	947
150	12.56	34.761	26.31	171.78	.3977	297
200	11.96	34.756	26.42	161.12	.4833	225
250	11.29	34.715	26.52	152.22	.5644	187
300	10.61	34.686	26.62	142.71	.6414	201
400	9.08	34.589	26.80	125.31	.7830	183
500	7.82	34.545	26.96	110.10	.9092	162

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
110.1	500	.551	7.82	34.545
160.0	206	.727	11.88	34.750
200.0	102	.788	13.58	34.641
240.0	79	.824	15.54	34.644
260.0	71	.839	16.36	34.611
300.0	57	.865	17.77	34.501
320.0	49	.875	18.53	34.471
340.0	36	.884	19.94	34.668
360.0	21	.890	20.83	34.705
373.0	0	.891	20.99	34.582

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 50 LAT 24-32.0N LONG 109-46.5W DATE 19 MARCH 70 TIME 0010,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 7 (3.5) DIR 275-285 BAR 1014
 AIR WET 18.5 AIR DRY 21.6 REL HUM 68 WAVE-DIR - HEIGHT PER SOUND 732

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	20.96	34.563	24.15	373.61	0	
10	20.96	34.586	24.21	371.94	.0373	175
20	20.90	34.656	24.28	365.33	.0742	694
30	20.62	34.707	24.39	354.45	.1103	1129
50	18.18	34.284	24.70	325.30	.1786	1536
75	15.47	34.525	25.52	247.13	.2506	3286
100	13.45	34.642	26.04	197.48	.3068	2090
125	13.22	34.747	26.17	185.32	.3554	512
150	12.60	34.755	26.30	172.97	.4011	520
200	12.11	34.755	26.40	163.92	.4876	188
250	11.32	34.721	26.52	152.31	.5695	245
300	10.71	34.688	26.60	144.24	.6469	170
400	8.87	34.574	26.82	123.23	.7882	222
500	7.61	34.535	26.99	107.93	.9121	163

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
107.9	500	.540	7.61	34.535
160.0	217	.726	11.84	34.742
200.0	99	.789	13.55	34.635
240.0	79	.825	15.18	34.538
260.0	71	.840	15.92	34.479
300.0	58	.866	17.30	34.353
320.0	52	.877	18.00	34.297
340.0	40	.886	19.41	34.488
360.0	25	.892	20.76	34.681
373.6	0	.894	20.96	34.563

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 51 LAT 24-32.0N LONG 109-46.5W DATE 19 MARCH 70 TIME 0110,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 7 (3.5) DIR 275-285 BAR 1014
 AIR WET 18.0 AIR DRY 20.8 REL HUM 75 WAVE-DIR - HEIGHT PER SOUND 732

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.02	34.594	24.20	372.91	0	
10	21.02	34.616	24.22	371.32	.0372	167
20	20.87	34.678	24.30	362.96	.0740	877
30	20.59	34.747	24.43	350.79	.1098	1266
50	17.37	34.063	24.73	322.64	.1774	1483
75	14.55	34.464	25.68	232.44	.2473	3792
100	13.30	34.640	26.07	194.72	.3013	1588
125	13.16	34.727	26.17	185.64	.3496	382
150	12.69	34.749	26.28	175.10	.3956	444
200	12.07	34.752	26.40	163.41	.4825	244
250	11.36	34.737	26.52	151.83	.5641	244
300	10.60	34.696	26.63	141.80	.6408	211
400	9.03	34.597	26.82	123.95	.7812	188
500	7.56	34.548	27.00	106.27	.9047	188

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
106.3	500	.531	7.56	34.548
160.0	215	.723	11.86	34.747
200.0	96	.786	13.48	34.614
240.0	73	.819	14.79	34.427
260.0	67	.834	15.41	34.332
300.0	56	.858	16.66	34.155
320.0	51	.869	17.29	34.073
340.0	38	.878	19.36	34.470
360.0	22	.884	20.80	34.694
372.9	0	.885	21.02	34.594

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *
 CR NO 7003 STA NO 52 LAT 24-32.0N LONG 109-46.5W DATE 19 MARCH 70 TIME 0210,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 4 (2.0) DIR 275-285 BAR 1013
 AIR WET 18.5 AIR DRY 20.9 REL HUM 71 WAVE-DIR - HEIGHT PER SOUND 732

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	20.95	34.581	24.21	372.05	0	
10	20.96	34.612	24.23	370.06	.0371	208
20	20.84	34.675	24.31	362.41	.0738	803
30	20.55	34.740	24.44	350.28	.1095	1261
50	17.46	33.840	24.54	340.93	.1789	496
75	14.53	34.452	25.67	232.91	.2511	4540
100	13.47	34.623	26.02	199.26	.3058	1417
125	12.92	34.755	26.24	179.00	.3538	853
150	12.59	34.767	26.31	171.90	.3986	294
200	11.94	34.752	26.43	161.05	.4841	229
250	11.25	34.723	26.53	150.94	.5649	213
300	10.60	34.690	26.62	142.24	.6415	183
400	9.03	34.590	26.81	124.47	.7824	187
500	7.54	34.548	27.01	106.00	.9060	196

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
106.0	500	.530	7.54	34.548
160.0	205	.720	11.87	34.748
200.0	99	.781	13.49	34.619
240.0	73	.816	14.72	34.409
260.0	69	.830	15.26	34.289
300.0	59	.856	16.35	34.060
320.0	55	.867	16.89	33.951
340.0	50	.878	17.43	33.845
360.0	22	.885	20.78	34.688
372.0	0	.886	20.95	34.581

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 53 LAT 24-32.0N LONG 109-46.5W DATE 19 MARCH 70 TIME 0310,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 9 (4.5) DIR 325-335 BAR 1013
 AIR WET 17.8 AIR DRY 20.8 REL HUM 75 WAVE-DIR - HEIGHT PER SOUND 732

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	20.93	34.554	24.19	373.48	0	
10	20.90	34.553	24.20	372.78	.0373	85
20	20.60	34.692	24.39	355.03	.0738	1851
30	20.13	34.680	24.50	343.99	.1088	1158
50	16.93	34.382	25.08	289.45	.1725	2870
75	15.01	34.535	25.63	236.73	.2387	2217
100	13.41	34.618	26.03	198.46	.2937	1611
125	13.02	34.719	26.19	183.54	.3422	628
150	12.59	34.776	26.32	171.24	.3875	513
200	11.85	34.743	26.44	160.09	.4726	235
250	11.13	34.709	26.54	149.88	.5529	215
300	10.61	34.672	26.61	143.74	.6296	129
400	9.06	34.588	26.80	125.08	.7715	197
500	7.67	34.545	26.99	108.01	.8965	181

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
108.0	500	.540	7.67	34.545
160.0	200	.722	11.84	34.742
200.0	99	.782	13.47	34.614
240.0	73	.817	15.13	34.524
260.0	64	.830	15.86	34.462
300.0	46	.852	17.55	34.430
320.0	39	.861	18.72	34.534
340.0	31	.868	19.90	34.654
360.0	17	.873	20.68	34.653
373.5	0	.874	20.93	34.554

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 54 LAT 24-32.0N LONG 109-46.5W DATE 19 MARCH 70 TIME 0410,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 10 (5.0) DIR 335-345 BAR 1014
 AIR WET 18.7 AIR DRY 20.5 REL HUM 84 WAVE-DIR - HEIGHT PER SOUND 732

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	20.89	34.565	24.21	371.66	0	
10	20.92	34.579	24.21	371.42	.0372	14
20	20.55	34.572	24.31	362.44	.0739	953
30	20.42	34.642	24.40	354.07	.1099	867
50	17.46	34.171	24.79	316.83	.1772	1961
75	15.34	34.622	25.62	237.29	.2470	3339
100	13.49	34.584	25.99	202.51	.3026	1469
125	13.00	34.718	26.19	183.24	.3516	812
150	12.62	34.770	26.31	172.24	.3969	458
200	11.93	34.730	26.41	162.49	.4829	205
250	11.13	34.714	26.55	149.51	.5637	273
300	10.63	34.675	26.61	143.85	.6403	119
400	8.93	34.579	26.82	123.76	.7816	212
500	7.77	34.559	26.98	108.36	.9061	164

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
108.4	500	.542	7.77	34.559
160.0	210	.725	11.78	34.726
200.0	103	.788	13.43	34.601
240.0	74	.823	15.41	34.605
260.0	68	.837	15.95	34.488
300.0	55	.862	17.01	34.262
320.0	48	.872	17.71	34.207
340.0	38	.881	19.30	34.452
360.0	23	.887	20.51	34.592
371.7	0	.888	20.89	34.565

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *
 CR NO 7003 STA NO 55 LAT 24-32.0N LONG 109-46.5W DATE 19 MARCH 70 TIME 0510,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 10 (5.0) DIR 325-335 BAR 1014
 AIR WET 18.9 AIR DRY 20.7 REL HUM 92 WAVE-DIR - HEIGHT PER SOUND 732

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	20.92	34.568	24.21	372.21	0	
10	20.86	34.557	24.21	371.46	.0372	78
20	20.26	34.474	24.31	362.19	.0740	973
30	19.58	34.367	24.41	352.99	.1098	966
50	17.55	34.177	24.77	318.46	.1772	1819
75	15.72	34.702	25.60	239.54	.2475	3313
100	13.80	34.596	25.94	207.71	.3041	1344
125	13.37	34.747	26.14	188.22	.3543	821
150	12.64	34.766	26.30	172.91	.4004	640
200	11.85	34.756	26.45	159.13	.4857	290
250	11.03	34.713	26.56	147.86	.5652	238
300	10.67	34.694	26.61	143.13	.6412	100
400	8.94	34.597	26.83	122.58	.7816	217
500	7.82	34.557	26.97	109.21	.9060	142

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
109.2	500	.546	7.82	34.557
160.0	197	.723	11.90	34.756
200.0	110	.784	13.63	34.655
240.0	75	.821	15.73	34.698
260.0	69	.836	16.19	34.562
300.0	56	.861	17.12	34.296
320.0	49	.871	17.64	34.184
340.0	38	.880	18.82	34.290
360.0	22	.886	20.10	34.448
372.2	0	.887	20.92	34.568

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *
 CR NO 7003 STA NO 56 LAT 24-32.0N LONG 109-16.5W DATE 19 MARCH 70 TIME 0610,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 11 (5.5) DIR 325-335 BAR 1016
 AIR WET 18.8 AIR DRY 20.8 REL HUM 83 WAVE-DIR 325-335 HEIGHT 2 PER SOUND 732

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.02	34.630	24.23	370.31	0	
10	21.01	34.637	24.24	369.54	.0370	80
20	20.86	34.682	24.31	362.41	.0737	748
30	20.62	34.742	24.42	351.92	.1095	1090
50	17.66	34.805	24.84	311.67	.1761	2119
75	15.92	34.636	25.50	248.66	.2467	2644
100	14.21	34.558	25.82	218.67	.3057	1267
125	13.41	34.738	26.12	189.66	.3576	1216
150	12.76	34.734	26.25	177.51	.4044	517
200	11.93	34.752	26.43	160.87	.4913	348
250	11.17	34.709	26.54	150.58	.5719	217
300	10.70	34.698	26.61	143.34	.6487	153
400	9.20	34.606	26.80	125.89	.7909	184
500	7.94	34.542	26.94	112.02	.9185	148

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
112.0	500	.560	7.94	34.542
160.0	204	.729	11.87	34.748
200.0	116	.793	13.70	34.673
240.0	82	.833	15.43	34.609
260.0	71	.848	16.23	34.574
300.0	55	.873	17.34	34.363
320.0	46	.883	18.27	34.387
340.0	36	.891	19.74	34.602
360.0	22	.897	20.80	34.695
370.3	0	.898	21.02	34.630

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *
 CR NO 7003 STA NO 57 LAT 24-32.0N LONG 109-46.5W DATE 19 MARCH 70 TIME 0710,
 WEATHER VISIB 18.8 AIR DRY 21.0 REL HUM 82 WAVE-DIR 335-345 HEIGHT 2 PER SOUND 732
 CLOUD TYPE 15 (7.5) DIR 335-345 BAR 1016

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-t	THERM ANOMALY	DYN HEIGHT	STABILITY
0	20.99	34.616	24.22	370.54	0	
10	20.98	34.604	24.22	371.15	.0371	-52
20	20.84	34.636	24.28	365.23	.0740	621
30	20.59	34.775	24.45	348.76	.1098	1716
50	18.56	34.591	24.84	311.99	.1762	1930
75	15.19	34.516	25.58	241.88	.2459	2952
100	14.78	34.629	25.75	225.09	.3049	707
125	13.32	34.642	26.07	194.96	.3582	1268
150	12.73	34.728	26.25	177.39	.4057	735
200	11.67	34.723	26.45	158.34	.4919	401
250	11.11	34.703	26.54	149.98	.5717	176
300	10.64	34.679	26.61	143.73	.6484	132
400	9.15	34.599	26.80	125.64	.7907	191
500	8.00	34.560	26.95	111.53	.9179	150

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
111.5	500	.558	8.00	34.560
160.0	196	.726	11.76	34.722
200.0	121	.790	13.56	34.638
240.0	78	.829	15.14	34.528
260.0	69	.844	16.06	34.522
300.0	54	.868	17.98	34.568
320.0	46	.878	19.00	34.627
340.0	35	.886	20.11	34.727
360.0	23	.892	20.76	34.680
370.5	0	.893	20.99	34.616

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 58 LAT 24-32.0N LONG 109-46.5W DATE 19 MARCH 70 TIME 0810,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 15 (7.5) DIR 325-335 BAR 1016
 AIR WET 19.0 AIR DRY 21.6 REL HUM 80 WAVE-DIR 325-335 HEIGHT 4 PER SOUND 732

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.00	34.626	24.23	370.08	0	
10	20.96	34.626	24.24	369.05	.0370	108
20	20.74	34.695	24.35	358.39	.0734	1118
30	20.55	34.807	24.49	345.42	.1087	1349
50	17.41	34.428	25.00	296.98	.1732	2550
75	15.28	34.619	25.64	236.24	.2403	2554
100	14.54	34.635	25.81	219.72	.2980	690
125	13.33	34.606	26.04	197.79	.3510	928
150	12.85	34.717	26.22	180.46	.3992	730
200	11.74	34.730	26.45	159.07	.4863	448
250	11.06	34.699	26.55	149.41	.5662	204
300	10.59	34.684	26.62	142.52	.6425	145
400	9.12	34.603	26.81	124.88	.7837	186
500	7.85	34.537	26.95	111.12	.9103	146

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
111.1	500	.556	7.85	34.537
160.0	198	.726	11.79	34.729
200.0	122	.790	13.45	34.608
240.0	73	.829	15.41	34.605
260.0	65	.843	16.11	34.538
300.0	49	.866	17.61	34.448
320.0	40	.875	18.90	34.593
340.0	32	.882	20.20	34.759
360.0	18	.887	20.77	34.684
370.1	0	.888	21.00	34.626

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 61 LAT 24-52.0N LONG 109-36.5W DATE 19 MARCH 70 TIME 1035,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 12 (6.0) DIR 325-335 BAR 1017
 AIR WET 18.3 AIR DRY 21.2 REL HUM 76 WAVE-DIR 335-345 HEIGHT 3 PER SOUND 2012

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.07	34.607	24.20	373.26	0	
10	21.07	34.607	24.19	373.26	.0374	-12
20	20.84	34.561	24.22	370.66	.0746	273
30	20.05	34.477	24.37	356.70	.1111	1465
50	18.92	34.353	24.57	337.91	.1808	992
75	15.40	34.465	25.49	250.03	.2548	3693
100	14.62	34.584	25.75	225.09	.3149	1049
125	13.70	34.740	26.07	195.18	.3682	1259
150	13.01	34.803	26.26	177.19	.4157	753
200	11.94	34.754	26.43	160.91	.5025	343
250	11.00	34.698	26.56	148.45	.5826	262
300	10.43	34.670	26.64	140.88	.6582	160
400	8.92	34.617	26.85	120.80	.7965	212
500	7.53	34.578	27.03	103.63	.9170	182

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
103.6	500	.518	7.53	34.578
160.0	204	.716	11.87	34.749
200.0	121	.781	13.85	34.714
240.0	85	.823	15.09	34.512
260.0	72	.838	15.80	34.445
300.0	61	.865	17.40	34.383
320.0	55	.876	18.20	34.364
340.0	48	.887	19.05	34.366
360.0	28	.894	20.24	34.496
375.3	0	.896	21.07	34.607

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *
 CR NO 7003 STA NO 66 LAT 24-34.6N LONG 109-43.6W DATE 19 MARCH 70 TIME 1445,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 16 (8.0) DIR 325-335 BAR 1015
 AIR WET 17.9 AIR DRY 20.1 REL HUM 81 WAVE-DIR 335-345 HEIGHT 4 PER SOUND 1097

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	20.95	34.662	24.27	366.18	0	
10	20.91	34.666	24.28	364.86	.0366	127
20	20.65	34.652	24.34	359.20	.0728	594
30	19.90	34.553	24.47	347.44	.1083	1235
50	16.67	34.139	24.95	301.35	.1734	2425
75	15.04	34.632	25.70	230.26	.2404	2985
100	13.78	34.554	25.91	210.39	.2961	841
125	13.23	34.733	26.16	186.54	.3465	999
150	12.73	34.715	26.24	178.35	.3930	350
200	11.92	34.746	26.42	161.13	.4802	360
250	11.11	34.709	26.55	149.54	.5606	244
300	10.45	34.674	26.64	140.91	.6365	182
400	9.01	34.596	26.82	123.72	.7763	181
500	7.64	34.541	26.99	107.90	.9005	168

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
107.9	500	.539	7.64	34.541
160.0	205	.723	11.84	34.742
200.0	111	.786	13.54	34.631
240.0	72	.823	15.26	34.562
260.0	65	.836	15.72	34.422
300.0	50	.859	16.64	34.148
320.0	42	.869	17.98	34.291
340.0	33	.876	19.38	34.478
360.0	19	.881	20.69	34.654
366.2	0	.882	20.95	34.662

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *
 CR NO 7003 STA NO 75 LAT 25-15.0N LONG 109- 6.0W DATE 19 MARCH 70 TIME 2245,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 8 (4.0) DIR 355- 5 BAR 1016
 AIR WET 18.8 AIR DRY 20.3 REL HUM 87 WAVE-DIR - HEIGHT PER SOUND 403

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	19.65	35.266	25.08	289.52	0	
10	19.49	35.275	25.12	284.91	.0287	485
20	18.54	35.286	25.37	261.03	.0561	2498
30	17.63	35.247	25.57	242.45	.0814	1954
50	16.81	35.145	25.69	231.17	.1290	593
75	14.78	34.914	25.97	204.24	.1839	1133
100	13.69	34.835	26.14	188.02	.2336	683
125	12.88	34.826	26.30	173.03	.2795	632
150	12.57	34.803	26.34	168.88	.3232	175
200	12.06	34.783	26.43	160.95	.4080	167
250	11.53	34.758	26.51	153.27	.4894	162
300	10.77	34.708	26.61	143.78	.5669	203

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
143.8	300	.431	10.77	34.708
160.0	206	.472	11.99	34.779
200.0	82	.530	14.49	34.892
240.0	34	.553	17.45	35.224
260.0	21	.559	18.49	35.283
289.5	0	.562	19.65	35.266

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *
 CR NO 7003 STA NO 76 LAT 25-25.0N LONG 109-18.0W DATE 20 MARCH 70 TIME 0020,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 6 (3.0) DIR 345-355 BAR 1015
 AIR WET 18.8 AIR DRY 19.9 REL HUM 90 WAVE-DIR - HEIGHT PER SOUND 55

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	18.93	35.213	25.22	275.71	0	
10	17.65	35.183	25.52	247.56	.0262	2960
20	16.57	35.065	25.68	231.63	.0502	1675
30	16.21	35.036	25.75	225.80	.0732	626

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
225.8	30	.068	16.21	35.036
275.7	0	.075	18.93	35.213

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 78 LAT 25-16.0N LONG 109-25.5W DATE 20 MARCH 70 TIME 0125,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 7 (3.5) DIR 345-355 BAR 1015
 AIR WET 17.9 AIR DRY 19.2 REL HUM 88 WAVE-DIR - HEIGHT PER SOUND 2012

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	19.65	35.270	25.08	289.23	0	
10	19.17	35.204	25.15	282.20	.0286	739
20	18.85	35.184	25.22	275.88	.0566	664
30	18.02	35.161	25.41	257.79	.0833	1902
50	16.81	35.103	25.66	234.23	.1328	1239
75	15.38	34.976	25.89	212.27	.1892	924
100	14.30	34.927	26.08	193.47	.2405	792
125	13.38	34.865	26.23	179.76	.2880	577
150	12.83	34.830	26.31	171.78	.3329	336
200	11.84	34.785	26.47	156.82	.4174	315
250	11.10	34.730	26.57	147.81	.4963	190
300	10.42	34.693	26.66	139.01	.5712	186
400	9.17	34.612	26.81	124.98	.7108	148
500	7.90	34.559	26.96	110.19	.8370	156
600	6.98	34.543	27.08	98.85	.9509	120
800	5.42	34.529	27.27	80.72	1.1504	96
1000	4.57	34.546	27.38	70.11	1.3224	55

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
70.1	1000	.701	4.57	34.546
160.0	189	1.236	12.05	34.793
200.0	91	1.292	14.68	34.942
240.0	45	1.319	17.11	35.115
260.0	29	1.326	18.12	35.163
289.2	0	1.331	19.65	35.270

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 80 LAT 25-10.0N LONG 109-33.0W DATE 20 MARCH 70 TIME 0355,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 8 (4.0) DIR 25- 35 BAR 1015
 AIR WET 17.9 AIR DRY 19.5 REL HUM 87 WAVE-DIR - HEIGHT PER SOUND 2149

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	19.79	35.152	24.95	301.27	0	798
10	19.56	35.178	25.03	293.68	.0298	861
20	19.24	35.184	25.12	285.37	.0588	1379
30	18.69	35.181	25.26	272.25	.0868	1133
50	17.58	35.116	25.48	250.82	.1393	882
75	16.85	35.177	25.70	229.74	.1999	945
100	15.30	35.021	25.94	207.29	.2553	765
125	14.15	34.945	26.13	189.12	.3057	563
150	13.23	34.880	26.27	175.76	.3522	262
200	12.23	34.793	26.40	163.32	.4394	283
250	11.22	34.730	26.54	149.90	.5205	200
300	10.42	34.674	26.64	140.41	.5963	146
400	9.15	34.586	26.79	126.60	.7374	168
500	7.90	34.553	26.96	110.63	.8646	150
600	6.68	34.522	27.11	96.53	.9773	83
800	5.40	34.525	27.27	80.79	1.1741	57
1000	4.55	34.546	27.39	69.90	1.3458	

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
69.9	1000	.699	4.55	34.546
160.0	212	1.245	11.98	34.776
200.0	110	1.310	14.84	34.988
240.0	63	1.344	17.21	35.146
260.0	41	1.355	18.06	35.142
300.0	2	1.363	19.75	35.156
301.3	0	1.363	19.79	35.152

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *
 CR NO 7003 STA NO 82 LAT 25- 2.3N LONG 109-40.5W DATE 20 MARCH 70 TIME 0530,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 10 (5.0) DIR 25- 35 BAR 1015
 AIR WET 18.0 AIR DRY 19.9 REL HUM 84 WAVE-DIR 25- 35 HEIGHT 1 PER SOUND 1646

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.17	34.687	24.23	370.07	0	8
10	21.17	34.688	24.23	370.00	.0370	110
20	21.17	34.704	24.24	368.84	.0740	2032
30	20.10	34.594	24.44	349.47	.1100	3501
50	16.27	34.271	25.14	282.91	.1736	2399
75	14.63	34.576	25.74	225.88	.2376	950
100	14.16	34.754	25.98	203.31	.2919	656
125	13.50	34.788	26.15	187.74	.3416	449
150	12.94	34.788	26.26	176.95	.3881	292
200	12.08	34.759	26.40	163.08	.4754	179
250	11.58	34.752	26.49	154.60	.5577	216
300	10.77	34.700	26.60	144.37	.6358	190
400	9.28	34.616	26.79	126.39	.7788	201
500	7.77	34.573	26.99	107.32	.9043	124
600	6.77	34.550	27.12	95.59	1.0150	78
800	5.47	34.535	27.27	80.84	1.2111	58
1000	4.56	34.549	27.39	69.78	1.3830	

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
69.8	1000	.698	4.56	34.549
160.0	218	1.247	11.90	34.756
200.0	105	1.312	14.02	34.760
240.0	69	1.347	15.04	34.497
260.0	60	1.360	15.61	34.390
300.0	45	1.381	17.25	34.337
320.0	39	1.389	18.40	34.429
340.0	33	1.396	19.56	34.537
360.0	25	1.402	20.68	34.652
370.1	0	1.403	21.17	34.687

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 84 LAT 24-55.0N LONG 109-49.0W DATE 20 MARCH 70 TIME 0655,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 5 (2.5) DIR 5- 15 BAR 1016
 AIR WET 18.2 AIR DRY 20.5 REL HUM 80 WAVE-DIR 15- 25 HEIGHT 1 PER SOUND 1646

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.06	34.661	24.24	369.10	0	
10	21.04	34.655	24.24	369.01	.0369	9
20	21.01	34.651	24.25	368.53	.0739	63
30	20.72	34.690	24.35	358.24	.1103	1068
50	18.45	34.445	24.76	319.98	.1784	2014
75	15.02	34.488	25.59	240.37	.2489	3347
100	13.88	34.646	25.96	205.63	.3053	1462
125	13.34	34.746	26.15	187.71	.3553	755
150	12.77	34.779	26.29	174.40	.4015	556
200	12.12	34.772	26.41	162.85	.4881	243
250	11.43	34.734	26.51	153.28	.5700	202
300	10.63	34.680	26.61	143.48	.6474	206
400	9.07	34.589	26.80	125.15	.7893	193
500	7.75	34.550	26.98	108.75	.9148	173
600	6.60	34.523	27.12	95.43	1.0259	142
800	5.34	34.532	27.29	79.58	1.2202	84
1000	4.45	34.554	27.40	68.26	1.3888	59

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
68.3	1000	.683	4.45	34.554
160.0	215	1.240	11.91	34.760
200.0	108	1.304	13.71	34.677
240.0	75	1.341	15.01	34.489
260.0	69	1.355	15.87	34.464
300.0	56	1.380	17.59	34.443
320.0	50	1.391	18.45	34.445
340.0	40	1.400	19.64	34.565
360.0	28	1.407	20.77	34.683
369.1	0	1.408	21.06	34.661

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 86 LAT 24-48.0N LONG 109-57.0W DATE 20 MARCH 70 TIME 0815,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL () DIR 5-15 BAR 1018
 AIR WET 18.5 AIR DRY 21.3 REL HUM 84 WAVE-DIR 355- 5 HEIGHT 3 PER SOUND 1005

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	20.92	34.616	24.24	368.74	0	
10	20.85	34.639	24.28	365.27	.0367	352
20	20.53	34.543	24.29	364.04	.0732	141
30	19.75	34.610	24.55	339.57	.1085	2567
50	16.87	34.654	25.30	268.28	.1696	3744
75	14.46	34.719	25.89	211.94	.2301	2371
100	13.69	34.774	26.10	192.49	.2812	819
125	13.10	34.775	26.22	180.96	.3287	481
150	12.73	34.771	26.29	174.23	.3740	284
200	11.88	34.750	26.44	160.12	.4599	297
250	11.26	34.734	26.54	150.30	.5403	207
300	10.58	34.681	26.62	142.57	.6168	163
400	8.88	34.585	26.83	122.56	.7569	211
500	7.54	34.561	27.02	105.03	.8790	185
600	6.62	34.539	27.13	94.49	.9877	112
800	5.12	34.547	27.32	75.98	1.1772	97

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
76.0	800	.608	5.12	34.547
160.0	201	1.028	11.87	34.749
200.0	90	1.086	13.99	34.752
240.0	63	1.117	15.66	34.678
260.0	54	1.129	16.52	34.659
300.0	41	1.148	18.15	34.622
320.0	35	1.155	18.96	34.612
340.0	30	1.162	19.76	34.608
360.0	22	1.167	20.40	34.553
368.7	0	1.168	20.92	34.616

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 88 LAT 24-41.5N LONG 110- 2.5W DATE 20 MARCH 70 TIME 0935,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL () DIR 5- 15 BAR 1018
 AIR WET 18.0 AIR DRY 21.8 REL HUM 69 WAVE-DIR 325-335 HEIGHT 2 PER SOUND 914

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	20.81	34.637	24.29	364.39	0	
10	20.46	34.658	24.40	353.92	.0359	1086
20	20.21	34.657	24.46	347.67	.0711	656
30	19.06	34.553	24.68	326.77	.1049	2194
50	15.74	34.396	25.36	262.31	.1641	3392
75	15.25	34.833	25.81	219.97	.2248	1781
100	14.18	34.857	26.06	196.17	.2775	1002
125	13.50	34.859	26.20	182.54	.3256	569
150	12.98	34.835	26.29	174.27	.3712	348
200	11.95	34.776	26.44	159.47	.4569	312
250	11.10	34.730	26.57	147.81	.5366	246
300	10.52	34.686	26.63	141.20	.6120	140
400	9.04	34.604	26.82	123.58	.7520	186
500	7.72	34.565	26.99	107.22	.8759	173
600	6.52	34.539	27.14	93.22	.9851	149
800	5.26	34.540	27.30	78.07	1.1755	79

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
78.1	800	.625	5.26	34.540
160.0	198	1.033	11.99	34.777
200.0	96	1.092	14.35	34.852
240.0	63	1.124	15.48	34.626
260.0	51	1.136	15.71	34.419
300.0	38	1.154	17.68	34.472
320.0	32	1.161	18.71	34.530
340.0	24	1.166	19.79	34.617
360.0	4	1.169	20.66	34.645
364.4	0	1.169	20.81	34.637

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 94 LAT 24-29.4N LONG 109-24.0W DATE 20 MARCH 70 TIME 1445,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 5 (2.5) DIR 335-345 BAR 1016
 AIR WET 18.8 AIR DRY 22.3 REL HUM 72 WAVE-DIR 325-335 HEIGHT 3 PER SOUND 2195

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.42	34.682	24.16	376.95	0	
10	21.41	34.676	24.16	377.12	.0377	-6
20	21.31	34.683	24.19	374.00	.0753	316
30	21.27	34.672	24.19	373.76	.1128	26
50	18.96	34.377	24.57	337.13	.1842	1922
75	16.27	34.372	25.22	275.54	.2613	2592
100	14.72	34.535	25.69	230.73	.3253	1885
125	13.74	34.658	26.00	201.98	.3802	1210
150	12.64	34.711	26.26	176.95	.4284	1054
200	12.05	34.764	26.41	162.16	.5155	309
250	11.40	34.722	26.50	153.63	.5973	180
300	10.71	34.704	26.62	143.06	.6748	223
400	9.52	34.647	26.78	127.84	.8180	160
500	8.22	34.590	26.94	112.45	.9470	164

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
112.4	500	.562	8.22	34.590
160.0	213	.732	11.89	34.752
200.0	127	.800	13.65	34.661
240.0	95	.844	15.04	34.499
260.0	84	.862	15.73	34.425
300.0	65	.892	17.34	34.364
320.0	57	.904	18.21	34.367
340.0	48	.914	19.14	34.398
360.0	38	.923	20.40	34.554
376.9	0	.926	21.42	34.682

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 103 LAT 25- ON LONG 109-25.0W DATE 20 MARCH 70 TIME 2240,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 12 (6.0) DIR 345-355 BAR 1018
 AIR WET 17.0 AIR DRY 19.8 REL HUM 74 WAVE-DIR - HEIGHT PER SOUND 1463

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.18	34.672	24.22	371.41	0	
10	21.16	34.672	24.22	370.89	.0371	43
20	21.11	34.661	24.22	370.39	.0743	53
30	20.23	34.610	24.42	351.58	.1105	1974
50	16.55	34.445	25.21	276.38	.1735	3955
75	16.49	34.952	25.61	238.09	.2384	1605
100	14.68	34.879	25.97	204.74	.2944	1404
125	13.69	34.835	26.14	188.02	.3443	704
150	12.97	34.804	26.26	176.35	.3908	492
200	12.24	34.793	26.40	163.50	.4781	271
250	11.03	34.725	26.57	146.98	.5586	348
300	10.29	34.673	26.66	138.33	.6331	182
400	8.82	34.626	26.87	118.62	.7690	208
500	7.66	34.592	27.02	104.38	.8888	151

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
104.4	500	.522	7.66	34.592
160.0	211	.720	11.98	34.777
200.0	107	.783	14.40	34.865
240.0	74	.819	16.49	34.926
260.0	61	.833	16.52	34.662
300.0	44	.854	17.71	34.480
320.0	38	.862	18.68	34.521
340.0	33	.869	19.66	34.574
360.0	26	.875	20.62	34.631
371.4	0	.876	21.18	34.672

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *
 CR NO 7003 STA NO 106 LAT 24-41.5N LONG 109-52.0W DATE 21 MARCH 70 TIME 0135,
 WEATHER 1 VISIB 8 CLOUD TYPE 0 CLOUD COV. 2 WIND VEL 13 (6.5) DIR 335-345 BAR 1017
 AIR WET 16.2 AIR DRY 19.8 REL HUM 70 WAVE-DIR 325-335 HEIGHT 3 PER SOUND 1042

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.03	34.603	24.20	372.52	0	
10	21.03	34.604	24.20	372.45	.0373	8
20	20.69	34.621	24.31	362.47	.0741	1035
30	19.66	34.448	24.45	349.09	.1097	1416
50	17.90	34.683	25.07	289.74	.1739	3110
75	14.84	34.547	25.68	232.32	.2397	2419
100	13.76	34.732	26.05	196.95	.2939	1489
125	13.25	34.783	26.19	183.26	.3422	577
150	12.85	34.805	26.29	174.00	.3878	385
200	11.86	34.769	26.45	158.36	.4732	330
250	11.26	34.738	26.54	150.00	.5531	179

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
150.0	250	.375	11.26	34.738
160.0	195	.397	11.96	34.772
200.0	98	.456	13.85	34.715
240.0	72	.490	15.25	34.558
260.0	63	.503	16.32	34.598
300.0	47	.525	18.20	34.640
320.0	40	.534	18.80	34.559
340.0	33	.541	19.39	34.481
360.0	22	.546	20.50	34.588
372.5	0	.548	21.03	34.603

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 109 LAT 24-20.2N LONG 110- 7.8W DATE 22 MARCH 70 TIME 1200,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 6 (3.0) DIR 345-355 BAR 1016
 AIR WET 17.9 AIR DRY 22.7 REL HUM 64 WAVE-DIR 5- 15 HEIGHT 5 PER SOUND 645

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	20.75	34.549	24.24	369.22	0	
10	20.64	34.563	24.28	365.39	.0367	402
20	20.62	34.567	24.29	364.59	.0733	72
30	19.02	34.308	24.51	343.59	.1088	2215
50	17.34	35.060	25.50	249.37	.1684	4943
75	15.46	34.881	25.80	220.91	.2277	1203
100	14.40	34.904	26.05	197.18	.2806	994
125	13.62	34.882	26.19	183.20	.3290	589
150	13.33	34.878	26.25	177.84	.3751	226
200	12.72	34.840	26.34	168.97	.4642	187
250	11.96	34.800	26.46	157.88	.5488	234
300	10.83	34.707	26.60	144.88	.6278	277

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
144.9	300	.435	10.83	34.707
160.0	240	.475	12.11	34.807
200.0	97	.543	14.53	34.900
240.0	58	.574	16.72	34.996
260.0	48	.585	17.53	34.973
300.0	39	.602	18.24	34.652
320.0	35	.609	18.60	34.493
340.0	31	.616	18.96	34.336
360.0	22	.621	20.27	34.508
369.2	0	.622	20.75	34.549

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 116 LAT 23-47.5N LONG 109- 6.0W DATE 22 MARCH 70 TIME 1750,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 13 (6.5) DIR 315-325 BAR 1013
 AIR WET 17.6 AIR DRY 20.1 REL HUM 78 WAVE-DIR 315-325 HEIGHT 5 PER SOUND 2469

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	20.72	34.449	24.17	375.69	0	
10	20.59	34.512	24.25	367.81	.0372	827
20	20.51	34.560	24.31	362.29	.0738	579
30	20.02	34.596	24.47	347.32	.1093	1572
50	19.17	34.899	24.92	304.33	.1748	2257
75	18.29	35.086	25.28	269.61	.2471	1455
100	15.89	34.877	25.70	230.43	.3103	1648
125	14.24	34.816	26.01	200.38	.3650	1265
150	13.23	34.811	26.22	180.82	.4136	824
200	12.31	34.790	26.38	165.01	.5024	333
250	11.53	34.759	26.51	153.20	.5849	249
300	10.95	34.727	26.59	145.45	.6629	163
400	9.35	34.610	26.77	127.92	.8073	185
500	8.02	34.567	26.95	111.29	.9357	175
600	6.88	34.540	27.09	97.77	1.0496	143
800	5.49	34.533	27.27	81.22	1.2485	88
1000	4.50	34.557	27.40	68.56	1.4194	66

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
68.6	1000	.686	4.50	34.557
160.0	221	1.244	11.98	34.775
200.0	125	1.313	14.22	34.815
240.0	94	1.357	16.48	34.921
260.0	81	1.375	17.70	35.028
300.0	53	1.401	19.06	34.922
320.0	43	1.411	19.48	34.787
340.0	33	1.419	19.88	34.647
360.0	22	1.424	20.43	34.565
375.7	0	1.426	20.72	34.449

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 121 LAT 23-24.0N LONG 108-14.0W DATE 22 MARCH 70 TIME 2250,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 10 (5.0) DIR 315-325 BAR 1013
 AIR WET 18.1 AIR DRY 19.8 REL HUM 84 WAVE-DIR - HEIGHT PER SOUND 2469

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	20.17	35.174	24.87	309.20	0	
10	19.81	35.137	24.93	302.86	.0306	667
20	19.55	35.115	24.98	298.00	.0607	511
30	18.89	35.089	25.14	283.75	.0899	1509
50	17.82	35.123	25.43	255.88	.1442	1459
75	16.05	34.982	25.74	226.24	.2049	1247
100	14.61	34.863	25.97	204.47	.2595	916
125	13.74	34.851	26.14	187.84	.3093	706
150	13.43	34.869	26.22	180.44	.3563	307
200	12.49	34.806	26.36	167.17	.4456	279
250	11.25	34.702	26.52	152.48	.5284	309
300	10.52	34.660	26.61	143.12	.6055	197
400	8.89	34.580	26.83	123.09	.7461	211
500	7.50	34.536	27.00	106.34	.8692	177
600	6.47	34.516	27.13	94.31	.9783	128
800	5.26	34.527	27.29	79.05	1.1706	80
1000	4.41	34.545	27.40	68.53	1.3387	55

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
68.5	1000	.685	4.41	34.545
160.0	224	1.245	11.88	34.752
200.0	107	1.311	14.38	34.858
240.0	63	1.346	16.87	35.042
260.0	47	1.357	17.98	35.117
300.0	16	1.369	19.66	35.124
309.2	0	1.370	20.17	35.174

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *
 CR NO 7003 STA NO 124 LAT 23-11.0N LONG 107-43.0W DATE 23 MARCH 70 TIME 0150,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 6 (3.0) DIR 315-325 BAR 1012
 AIR WET 18.0 AIR DRY 20.2 REL HUM 83 WAVE-DIR - HEIGHT PER SOUND 2378

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.32	34.707	24.20	372.53	0	
10	21.26	34.743	24.25	368.36	.0371	437
20	21.23	34.781	24.28	364.83	.0738	370
30	21.00	34.884	24.42	351.40	.1097	1397
50	18.46	34.599	24.87	309.02	.1760	2225
75	15.03	34.556	25.64	235.61	.2446	3092
100	14.13	34.688	25.94	207.54	.3006	1181
125	13.30	34.743	26.15	187.16	.3508	858
150	12.84	34.782	26.27	175.50	.3970	486
200	11.93	34.744	26.42	161.46	.4836	296
250	11.08	34.695	26.54	150.05	.5642	240
300	10.45	34.661	26.63	141.87	.6404	172
400	8.91	34.577	26.82	123.61	.7807	193
500	7.67	34.538	26.98	108.53	.9052	159
600	6.73	34.519	27.10	97.39	1.0172	119
800	5.34	34.523	27.28	80.25	1.2142	90
1000	4.41	34.545	27.40	68.53	1.3836	61

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
68.5	1000	.685	4.41	34.545
160.0	206	1.237	11.82	34.737
200.0	109	1.300	13.82	34.707
240.0	74	1.337	15.24	34.554
260.0	67	1.351	16.17	34.555
300.0	53	1.375	18.04	34.586
320.0	45	1.384	19.12	34.665
340.0	35	1.392	20.32	34.800
360.0	24	1.398	21.15	34.818
372.5	0	1.400	21.32	34.707

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *
 CR NO 7003 STA NO 125 LAT 23-10.0N LONG 107-54.5W DATE 23 MARCH 70 TIME 0330,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 7 (3.5) DIR 315-325 BAR 1013
 AIR WET 18.1 AIR DRY 20.1 REL HUM 83 WAVE-DIR - HEIGHT PER SOUND 2469

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.58	34.777	24.18	374.28	0	
10	21.48	34.765	24.20	372.52	.0374	185
20	21.39	34.761	24.22	370.45	.0746	217
30	20.48	34.714	24.43	350.38	.1107	2106
50	17.52	34.583	25.09	288.22	.1749	3270
75	15.76	34.744	25.62	237.33	.2411	2140
100	14.21	34.756	25.97	204.17	.2969	1396
125	13.41	34.768	26.15	187.46	.3466	704
150	12.72	34.782	26.30	173.24	.3926	594
200	11.71	34.743	26.46	157.58	.4776	330
250	10.83	34.688	26.58	146.28	.5563	238
300	10.09	34.629	26.67	138.31	.6306	168
400	8.63	34.575	26.86	119.56	.7668	198
500	7.40	34.527	27.01	105.65	.8877	147
600	6.50	34.505	27.12	95.51	.9970	108
800	5.18	34.526	27.30	78.23	1.1896	91
1000	4.31	34.551	27.42	67.05	1.3550	58

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
67.0	1000	.670	4.31	34.551
160.0	192	1.225	11.87	34.748
200.0	106	1.284	14.01	34.758
240.0	74	1.320	15.85	34.734
260.0	64	1.334	16.54	34.668
300.0	46	1.356	18.08	34.600
320.0	40	1.365	19.03	34.637
340.0	33	1.372	19.99	34.685
360.0	25	1.378	20.92	34.735
374.3	0	1.380	21.58	34.777

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 126 LAT 23- 9.0N LONG 108- 5.5W DATE 23 MARCH 70 TIME 0505,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 12 (6.0) DIR 305-315 BAR 1014
 AIR WET 18.2 AIR DRY 20.2 REL HUM 83 WAVE-DIR - HEIGHT PER SOUND 2652

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.58	34.767	24.18	375.00	0	
10	21.58	34.765	24.18	375.15	.0375	-4
20	21.58	34.772	24.18	374.64	.0751	41
30	20.89	34.766	24.36	357.11	.1118	1839
50	18.64	34.709	24.91	305.33	.1783	2718
75	16.26	34.708	25.48	250.82	.2484	2296
100	14.66	34.748	25.87	213.91	.3071	1553
125	13.74	34.760	26.07	194.51	.3589	817
150	13.02	34.762	26.22	180.39	.4068	590
200	11.93	34.717	26.40	163.45	.4950	357
250	10.95	34.666	26.54	149.95	.5762	284
300	10.35	34.649	26.64	141.10	.6521	187
400	8.60	34.565	26.86	119.86	.7899	224
500	7.47	34.529	27.00	106.45	.9113	141
600	6.44	34.505	27.13	94.75	1.0207	125
800	5.19	34.517	27.29	79.01	1.2132	83
1000	4.37	34.551	27.41	67.66	1.3802	59

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
67.7	1000	.677	4.37	34.551
160.0	213	1.237	11.68	34.702
200.0	118	1.303	14.00	34.755
240.0	82	1.343	15.79	34.716
260.0	71	1.358	16.66	34.703
300.0	52	1.383	18.41	34.706
320.0	44	1.392	19.28	34.719
340.0	37	1.400	20.15	34.741
360.0	28	1.407	21.00	34.766
375.0	0	1.409	21.58	34.767

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 127 LAT 23- 6.7N LONG 108-16.0W DATE 23 MARCH 70 TIME 0635,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 13 (6.5) DIR 315-325 BAR 1015
 AIR WET 18.5 AIR DRY 21.2 REL HUM 78 WAVE-DIR 195-205 HEIGHT 3 PER SOUND 2926

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.34	34.673	24.17	375.51	0	
10	20.55	34.498	24.25	367.80	.0372	808
20	20.01	34.411	24.33	360.48	.0737	769
30	18.70	34.334	24.61	334.00	.1085	2791
50	16.88	34.606	25.26	272.01	.1694	3256
75	15.02	34.719	25.77	223.48	.2318	2041
100	14.22	34.762	25.97	203.93	.2858	818
125	13.45	34.759	26.13	188.89	.3357	638
150	12.70	34.770	26.29	173.74	.3820	633
200	11.80	34.718	26.43	161.03	.4680	268
250	10.95	34.693	26.56	147.96	.5480	275
300	10.27	34.642	26.64	140.30	.6233	162
400	8.62	34.573	26.86	119.56	.7605	219
500	7.42	34.531	27.01	105.62	.8813	147
600	6.58	34.529	27.12	94.73	.9904	115
800	5.11	34.527	27.31	77.37	1.1814	92
1000	4.32	34.562	27.42	66.32	1.3452	58

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
66.3	1000	.663	4.32	34.562
160.0	204	1.227	11.73	34.715
200.0	107	1.289	14.02	34.760
240.0	66	1.324	15.65	34.676
260.0	56	1.336	16.42	34.630
300.0	41	1.356	17.70	34.478
320.0	35	1.363	18.29	34.392
340.0	28	1.369	19.00	34.349
360.0	20	1.374	19.99	34.409
375.5	0	1.376	21.34	34.673

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 128 LAT 23- 6.5N LONG 108-28.0W DATE 23 MARCH 70 TIME 0805,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 5 (2.5) DIR 305-315 BAR 1015
 AIR WET 19.0 AIR DRY 21.1 REL HUM 83 WAVE-DIR 215-225 HEIGHT 4 PER .SOUND 2926

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	20.20	34.830	24.60	334.88	0	
10	20.02	34.916	24.71	324.12	.0330	1118
20	19.79	34.849	24.72	323.24	.0654	105
30	19.41	34.886	24.85	311.15	.0972	1269
50	18.42	35.065	25.23	274.22	.1560	1934
75	16.70	34.880	25.51	248.01	.2218	1102
100	14.44	34.613	25.81	219.29	.2809	1213
125	13.31	34.739	26.15	187.65	.3326	1333
150	12.63	34.781	26.31	171.62	.3784	670
200	11.70	34.693	26.43	161.08	.4638	225
250	10.90	34.695	26.57	146.96	.5436	295
300	10.08	34.637	26.67	137.55	.6179	198
400	8.53	34.548	26.86	120.09	.7539	184
500	7.36	34.528	27.02	105.03	.8746	159
600	6.45	34.521	27.14	93.68	.9827	121
800	5.18	34.521	27.30	78.60	1.1738	80
1000	4.33	34.554	27.42	67.03	1.3396	60

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
67.0	1000	.670	4.33	34.554
160.0	204	1.230	11.64	34.692
200.0	115	1.294	13.75	34.688
240.0	82	1.333	16.07	34.799
260.0	64	1.348	17.49	34.960
300.0	36	1.368	19.11	34.939
320.0	23	1.373	19.69	34.858
334.9	0	1.375	20.20	34.830

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *
 CR NO 7003 STA NO 129 LAT 23- 4.5N LONG 108-39.0W DATE 23 MARCH 70 TIME 0930,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 7 (3.5) DIR 325-335 BAR 1015
 AIR WET 19.5 AIR DRY 22.0 REL HUM 80 WAVE-DIR - HEIGHT 4 PER SOUND 2834

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	19.89	34.995	24.81	315.15	0	
10	19.25	35.068	25.03	294.03	.0305	2218
20	19.00	35.102	25.12	285.47	.0595	899
30	18.68	35.144	25.23	274.69	.0876	1120
50	18.02	35.084	25.35	263.39	.1417	594
75	16.46	34.792	25.50	249.09	.2063	601
100	14.54	34.691	25.85	215.62	.2651	1413
125	13.65	34.758	26.09	192.88	.3169	953
150	12.73	34.739	26.26	176.58	.3641	686
200	11.78	34.729	26.44	159.86	.4505	352
250	10.97	34.701	26.57	147.71	.5301	256
300	10.11	34.633	26.66	138.34	.6048	198
400	8.83	34.578	26.83	122.33	.7425	169
500	7.61	34.538	26.99	107.71	.8659	154
600	6.54	34.521	27.13	94.82	.9761	137
800	5.04	34.530	27.32	76.37	1.1659	97
1000	4.23	34.551	27.43	66.24	1.3283	53

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
66.2	1000	.662	4.23	34.551
160.0	200	1.225	11.79	34.729
200.0	117	1.288	13.93	34.736
240.0	82	1.328	15.94	34.760
260.0	56	1.342	17.65	35.012
300.0	7	1.354	19.43	35.047
315.1	0	1.355	19.89	34.995

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *
 CR NO 7003 STA NO 130 LAT 23- 2.0N LONG 108-48.5W DATE 23 MARCH 70 TIME 1055,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 10 (5.0) DIR 335-345 BAR 1015
 AIR WET 18.7 AIR DRY 22.0 REL HUM 73 WAVE-DIR 345-355 HEIGHT 4 PER SOUND 2926

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.24	34.692	24.21	371.53	0	
10	21.12	34.702	24.25	367.68	.0370	403
20	21.00	34.715	24.30	363.64	.0736	425
30	20.34	34.797	24.54	340.81	.1089	2395
50	18.80	34.857	24.98	298.42	.1731	2226
75	17.57	34.987	25.38	259.97	.2434	1611
100	15.66	34.509	25.47	252.34	.3082	326
125	13.49	34.631	26.03	199.06	.3654	2242
150	13.14	34.779	26.21	181.44	.4139	737
200	12.14	34.747	26.38	165.06	.5029	345
250	11.27	34.706	26.52	152.54	.5851	264
300	10.40	34.660	26.64	141.12	.6618	241
400	8.90	34.595	26.84	122.12	.8008	200
500	7.39	34.533	27.02	105.07	.9227	180
600	6.27	34.512	27.15	92.11	1.0300	138
800	5.19	34.527	27.30	78.26	1.2189	73
1000	4.53	34.542	27.39	70.00	1.3878	43

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
70.0	1000	.700	4.53	34.542
160.0	220	1.249	11.79	34.729
200.0	125	1.318	13.53	34.628
240.0	106	1.364	15.16	34.532
260.0	75	1.382	17.57	34.987
300.0	49	1.407	18.86	34.854
320.0	40	1.416	19.58	34.823
340.0	30	1.423	20.31	34.798
360.0	22	1.428	20.89	34.727
371.5	0	1.429	21.24	34.692

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 131 LAT 22-58.0N LONG 108-59.0W DATE 23 MARCH 70 TIME 1210,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 10 (5.0) DIR 345-355 BAR 1014
 AIR WET 18.8 AIR DRY 23.5 REL HUM 65 WAVE-DIR 335-345 HEIGHT 4 PER SOUND 2926

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.19	34.629	24.18	374.78	0	
10	21.07	34.635	24.22	371.24	.0373	372
20	20.98	34.636	24.24	368.84	.0744	252
30	20.88	34.688	24.31	362.49	.1110	665
50	19.31	34.750	24.77	318.57	.1794	2300
75	17.19	34.499	25.10	286.80	.2556	1340
100	14.35	34.555	25.79	221.71	.3199	2737
125	13.71	34.799	26.11	191.05	.3723	1291
150	13.36	34.806	26.19	183.70	.4201	305
200	11.91	34.739	26.42	161.47	.5087	468
250	11.19	34.700	26.53	151.59	.5897	208
300	10.39	34.651	26.63	141.62	.6663	210
400	8.94	34.567	26.81	124.81	.8069	177
500	7.60	34.546	27.00	106.97	.9312	188
600	6.52	34.527	27.13	94.12	1.0407	137
800	5.27	34.536	27.30	78.49	1.2323	82
1000	4.46	34.551	27.40	68.59	1.4000	52

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
68.6	1000	.686	4.46	34.551
160.0	207	1.238	11.80	34.732
200.0	118	1.303	13.90	34.727
240.0	93	1.345	15.15	34.529
260.0	85	1.363	16.02	34.510
300.0	65	1.393	18.07	34.597
320.0	49	1.404	19.36	34.747
340.0	40	1.413	20.08	34.716
360.0	31	1.420	20.79	34.690
374.8	0	1.423	21.19	34.629

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 132 LAT 22-56.5N LONG 109- 8.7W DATE 23 MARCH 70 TIME 1330,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 7 (3.5) DIR 345-355 BAR 1014
 AIR WET 18.3 AIR DRY 24.C REL HUM 58 WAVE-DIR 335-345 HEIGHT 4 PER SOUND 2195

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	20.80	34.531	24.21	371.81	0	
10	20.73	34.502	24.21	372.11	.0372	-32
20	20.66	34.477	24.21	372.13	.0745	-2
30	20.29	34.405	24.25	367.95	.1116	439
50	18.40	34.093	24.50	344.38	.1831	1243
75	15.22	34.138	25.28	270.14	.2604	3119
100	14.49	34.691	25.86	214.60	.3217	2337
125	13.53	34.700	26.07	194.78	.3736	835
150	13.06	34.737	26.20	182.99	.4218	497
200	11.90	34.757	26.44	159.96	.5098	482
250	10.98	34.711	26.57	147.15	.5894	270
300	10.41	34.675	26.65	140.17	.6644	147
400	9.09	34.602	26.81	124.50	.8043	165
500	7.61	34.529	26.98	108.38	.9291	171
600	6.58	34.532	27.13	94.50	1.0395	145
800	5.21	34.528	27.30	78.41	1.2315	86
1000	4.34	34.542	27.41	68.03	1.3982	54

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
68.0	1000	.680	4.34	34.542
160.0	200	1.232	11.90	34.757
200.0	118	1.296	13.78	34.696
240.0	89	1.337	14.82	34.437
260.0	80	1.354	15.09	34.238
300.0	65	1.383	16.50	34.105
320.0	58	1.395	17.36	34.094
340.0	51	1.406	18.21	34.092
360.0	37	1.415	19.65	34.295
371.8	0	1.417	20.80	34.531

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 133 LAT 22-54.2N LONG 109-20.5W DATE 23 MARCH 70 TIME 1450,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 5 (2.5) DIR 5- 15 BAR 1013
 AIR WET 17.9 AIR DRY 23.5 REL HUM 59 WAVE-DIR 5- 15 HEIGHT 3 PER SOUND 2012

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	20.75	34.454	24.17	376.10	0	
10	20.63	34.438	24.19	374.19	.0375	200
20	20.52	34.423	24.20	372.47	.0749	180
30	20.13	34.323	24.23	369.87	.1122	274
50	17.86	34.058	24.61	334.27	.1829	1874
75	14.69	34.194	25.44	255.06	.2570	3329
100	13.35	34.572	26.01	200.67	.3146	2289
125	13.50	34.733	26.10	191.78	.3644	375
150	12.87	34.761	26.25	177.61	.4115	597
200	12.04	34.791	26.44	160.00	.4982	369
250	10.80	34.666	26.57	147.39	.5778	266
300	10.13	34.641	26.67	138.07	.6523	196
400	8.60	34.553	26.85	120.75	.7890	183
500	7.18	34.525	27.04	102.84	.9089	189
600	6.44	34.521	27.14	93.56	1.0158	99
800	5.16	34.532	27.31	77.55	1.2056	84
1000	4.28	34.555	27.42	66.44	1.3696	58

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
66.4	1000	.664	4.28	34.555
160.0	200	1.226	12.04	34.791
200.0	102	1.286	13.36	34.584
240.0	82	1.323	14.32	34.296
260.0	73	1.338	14.89	34.182
300.0	61	1.365	16.49	34.102
320.0	55	1.377	17.29	34.074
340.0	47	1.387	18.23	34.096
360.0	36	1.395	19.50	34.243
376.1	0	1.398	20.75	34.454

* LITTLE WINDOW-1 *
 * IATTC/NMFS * JORDAN *

CR NO 7003 STA NO 134 LAT 22-52.0N LONG 109-30.0W DATE 23 MARCH 70 TIME 1605,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL () DIR 5-15 BAR 1014
 AIR WET 19.0 AIR DRY 22.8 REL HUM 70 WAVE-DIR - HEIGHT 2 PER SOUND 805

INTERPOLATED VALUES AT STANDARD DEPTHS

DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	21.10	34.493	24.10	382.29	0	394
10	20.63	34.378	24.14	378.54	.0381	1
20	20.35	34.280	24.14	378.52	.0760	1117
30	19.56	34.155	24.25	367.88	.1134	3143
50	16.77	34.077	24.88	308.10	.1813	2333
75	14.40	34.147	25.46	252.60	.2518	1269
100	13.23	34.244	25.78	222.43	.3118	1436
125	12.21	34.448	26.14	188.33	.3639	655
150	12.24	34.667	26.30	172.77	.4099	228
200	11.91	34.734	26.42	161.84	.4958	302
250	11.03	34.718	26.57	147.49	.5759	219
300	10.03	34.632	26.68	137.11	.6502	191
400	8.45	34.547	26.87	118.99	.7855	133
500	7.45	34.526	27.00	106.41	.9063	126
600	6.52	34.521	27.13	94.56	1.0157	

ISENTROPIC ANALYSIS

DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
94.6	600	.567	6.52	34.521
160.0	206	.831	11.80	34.731
200.0	116	.896	12.56	34.376
240.0	85	.936	13.91	34.185
260.0	72	.952	14.72	34.133
300.0	54	.977	16.42	34.083
320.0	46	.987	17.33	34.085
340.0	39	.995	18.26	34.107
360.0	33	1.003	19.19	34.139
382.3	0	1.006	21.10	34.493

* LITTLE WINDUCM-1 *
 * IATTC/NMFS * JORDAN *

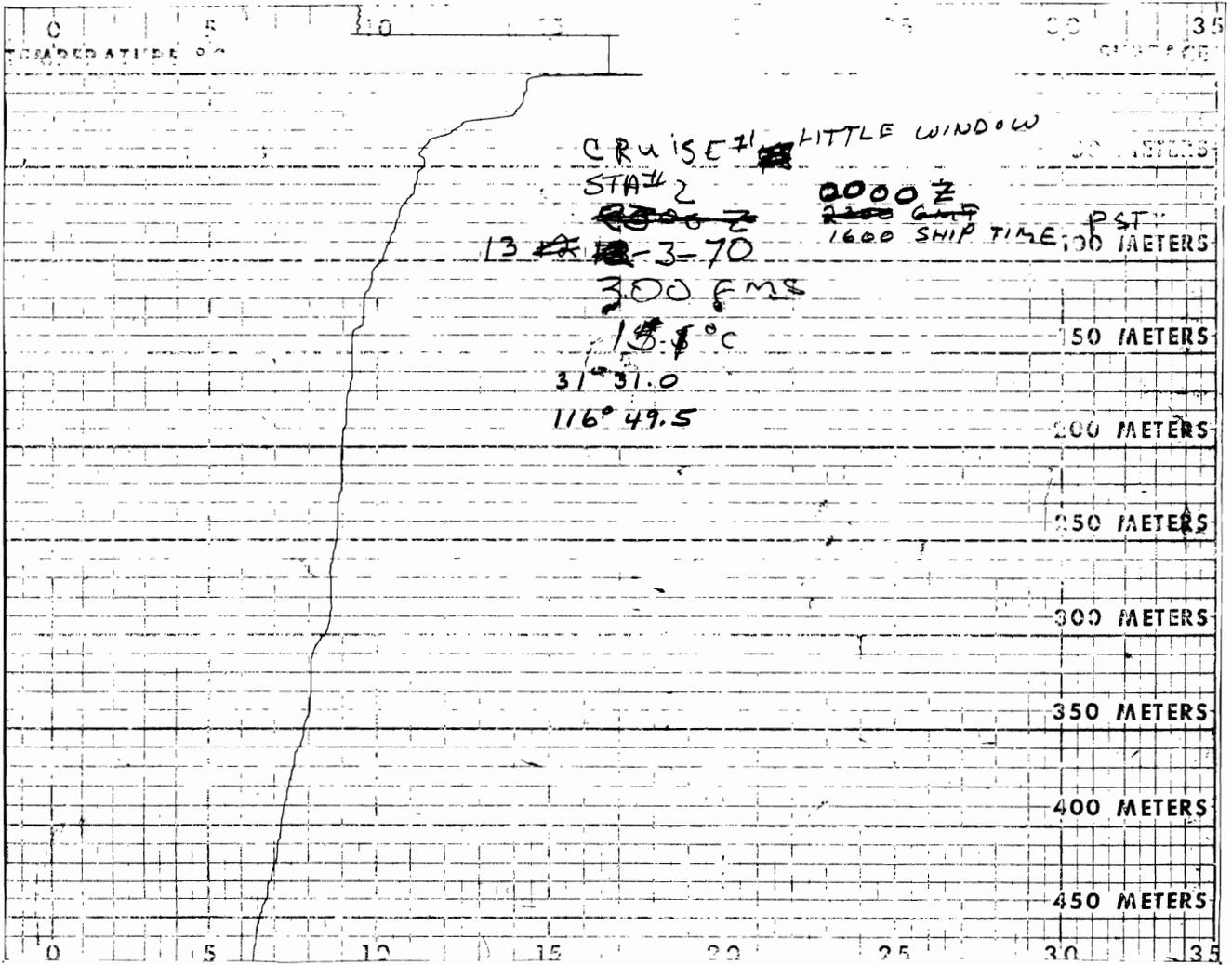
CR NO 7003 STA NO 135 LAT 22-48.5N LONG 109-46.0W DATE 23 MARCH 70 TIME 1745,
 WEATHER VISIB CLOUD TYPE CLOUD COV. WIND VEL 3 (1.5) DIR 235-245 BAR 1014
 AIR WET 18.5 AIR DRY 20.1 REL HUM 86 WAVE-DIR - HEIGHT 2 PER SOUND 1371

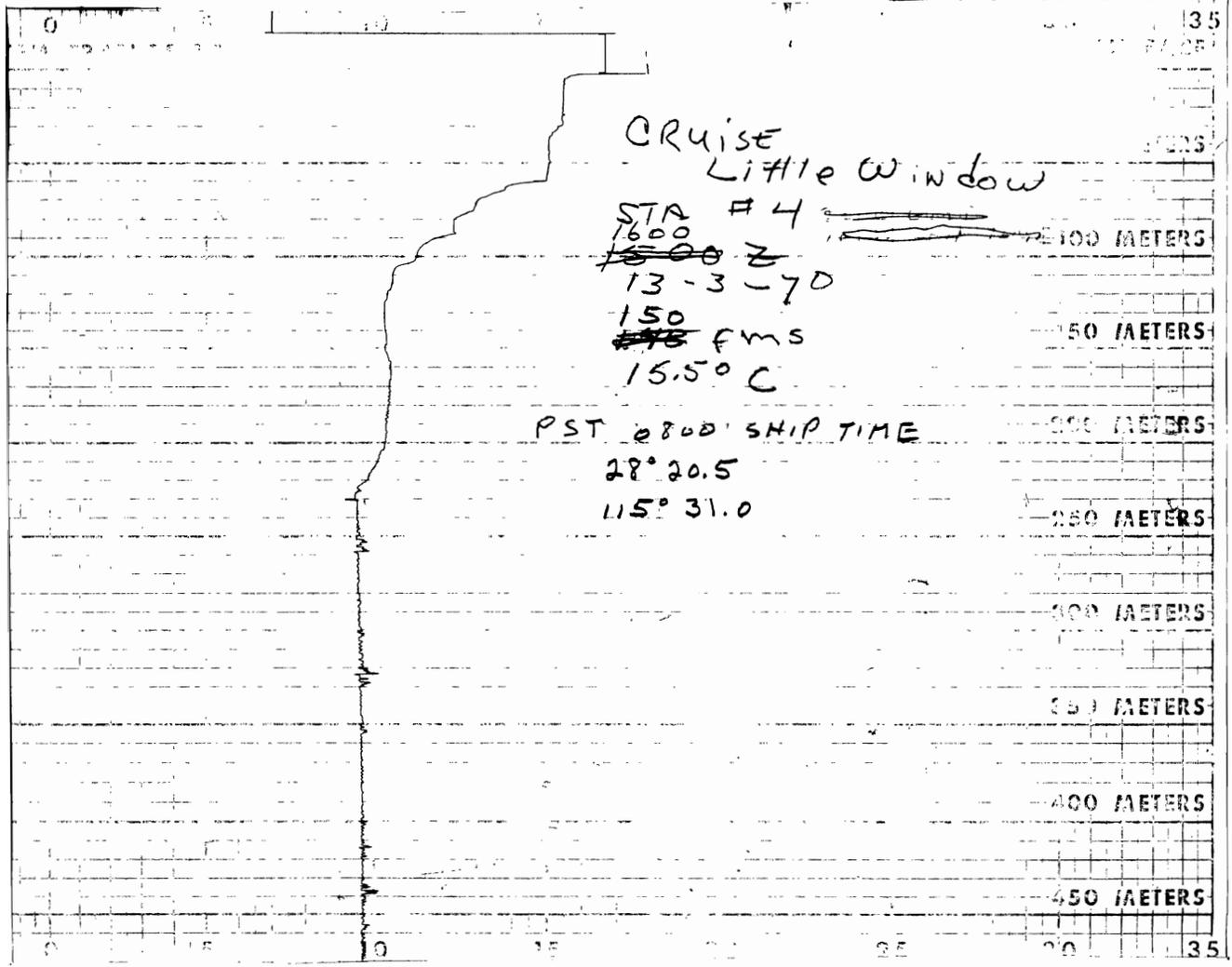
INTERPOLATED VALUES AT STANDARD DEPTHS

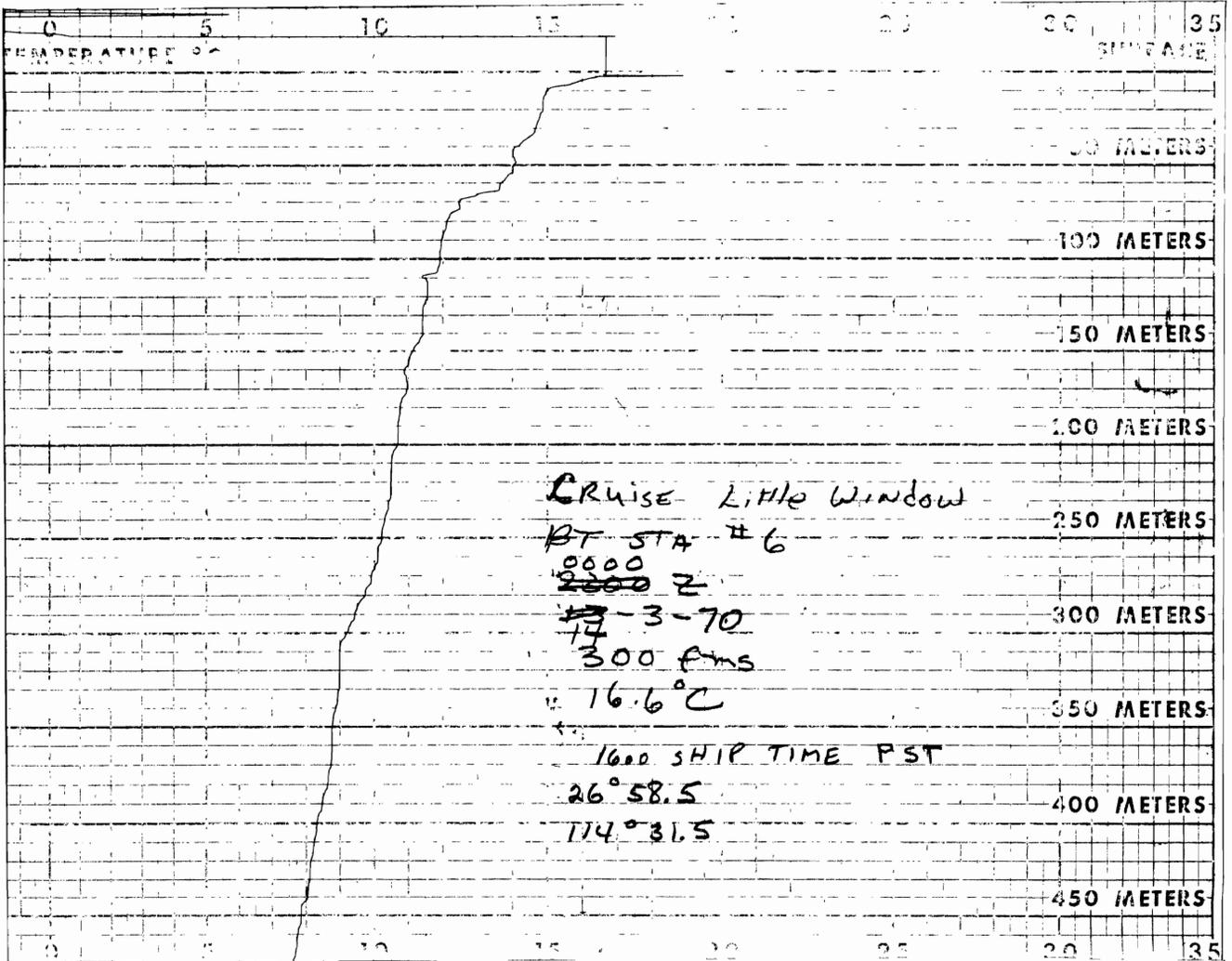
DEPTH	TEMP	SAL	SIGMA-T	THERM ANOMALY	DYN HEIGHT	STABILITY
0	20.46	34.386	24.19	373.63	0	696
10	20.16	34.373	24.26	356.99	.0371	-426
20	19.94	34.241	24.22	371.06	.0740	1575
30	19.21	34.200	24.38	356.04	.1105	2101
50	17.42	34.168	24.80	316.13	.1780	2623
75	14.98	34.294	25.45	253.73	.2497	1554
100	13.77	34.464	25.84	216.79	.3091	1135
125	13.20	34.682	26.12	189.71	.3607	425
150	12.45	34.625	26.23	179.73	.4078	403
200	11.48	34.648	26.43	160.49	.4951	128
250	10.96	34.606	26.50	154.55	.5766	250
300	10.42	34.645	26.62	142.56	.6540	211
400	8.67	34.543	26.83	122.53	.7939	211
500	7.17	34.526	27.04	102.63	.9146	103
600	6.43	34.530	27.15	92.76	1.0209	75
800	5.23	34.528	27.30	78.64	1.2112	61
1000	4.30	34.552	27.42	66.87	1.3770	

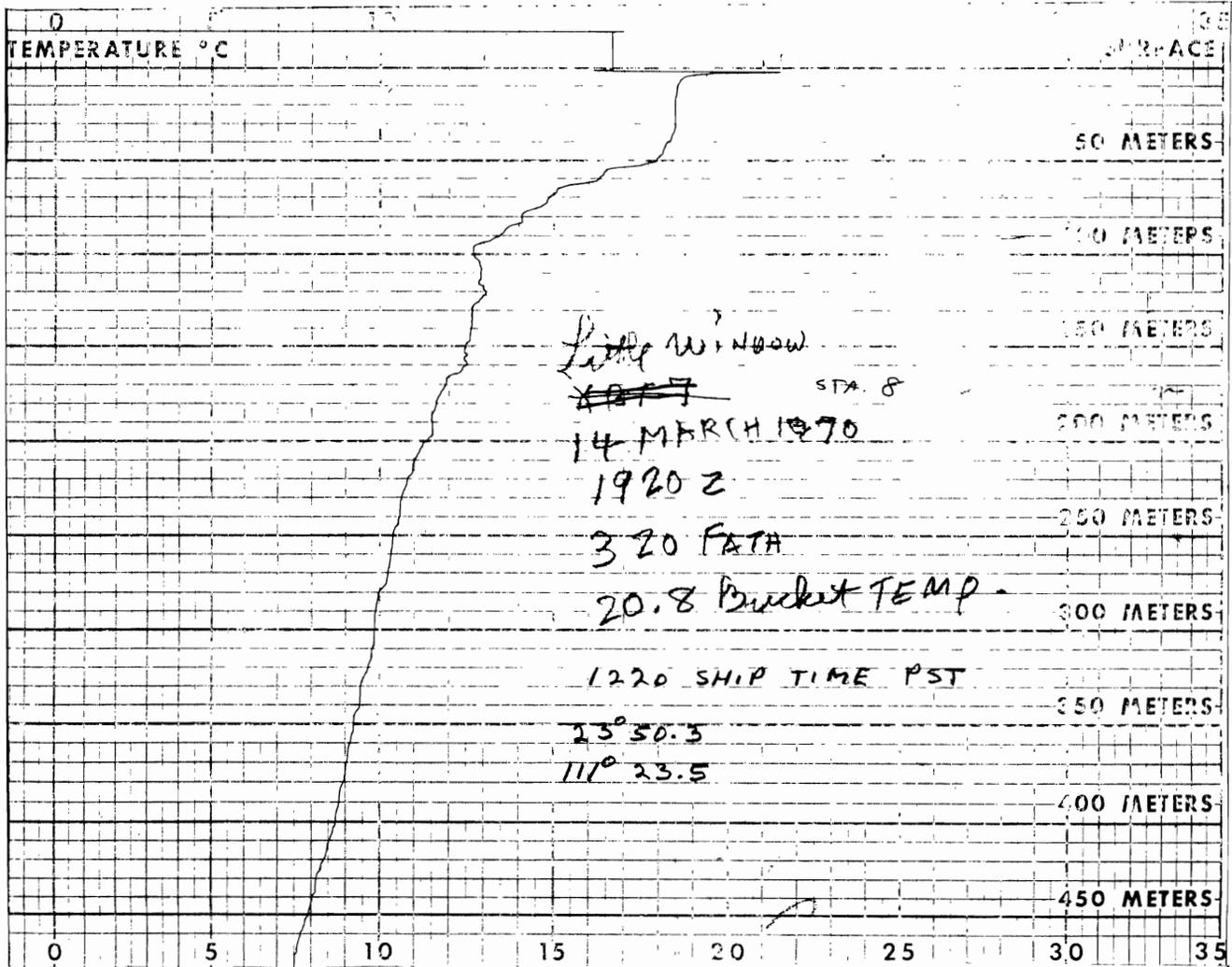
ISENTROPIC ANALYSIS

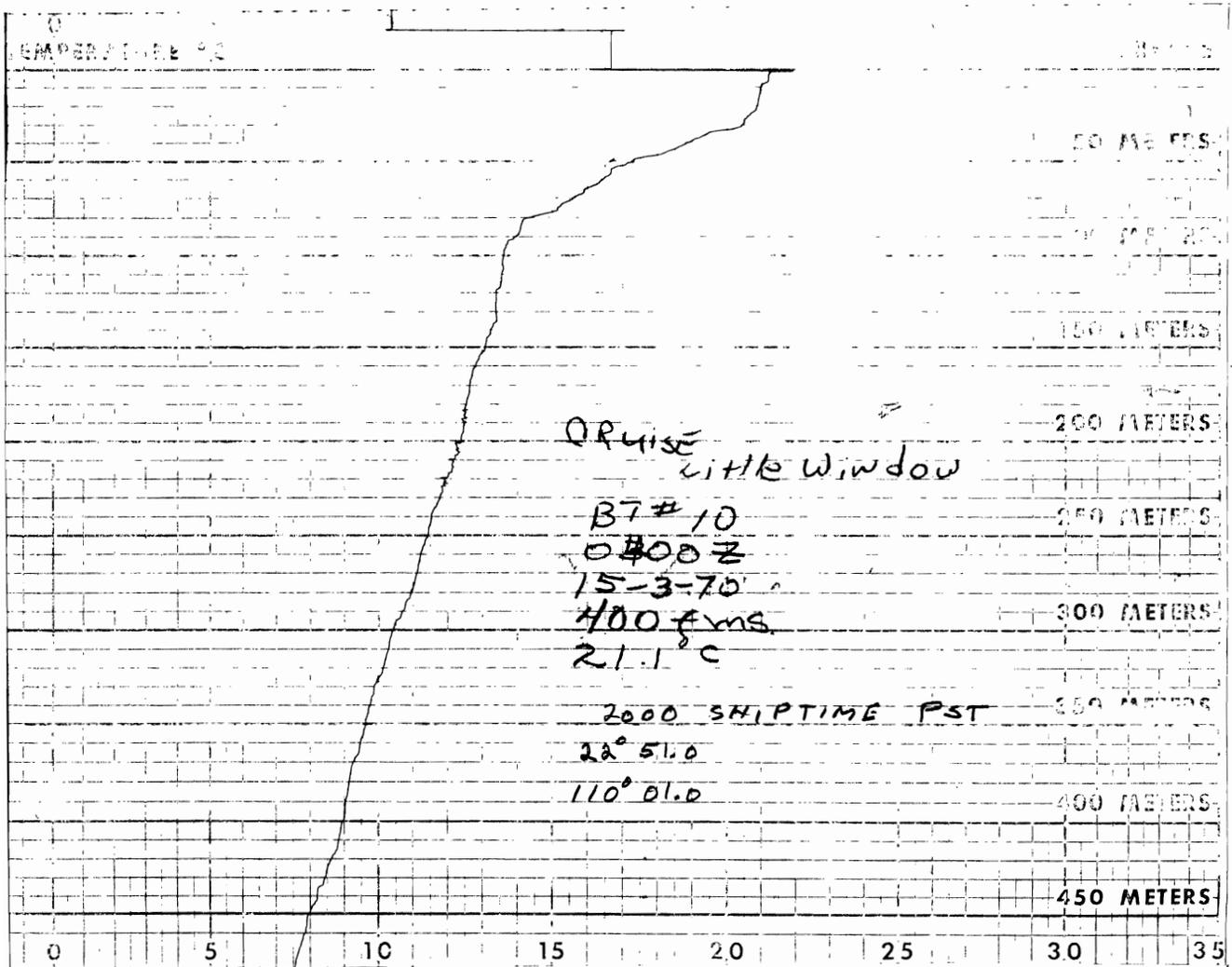
DENSITY SURFACE	DEPTH OF SURFACE	ACCEL POTENTIAL	TEMP OF SURFACE	SAL. OF SURFACE
66.9	1000	.669	4.30	34.552
160.0	204	1.229	11.44	34.644
200.0	116	1.293	13.42	34.598
240.0	84	1.333	14.53	34.355
260.0	72	1.349	15.23	34.278
300.0	56	1.375	16.79	34.194
320.0	48	1.385	17.59	34.169
340.0	38	1.394	18.49	34.182
360.0	27	1.400	19.40	34.210
373.6	0	1.402	20.46	34.386

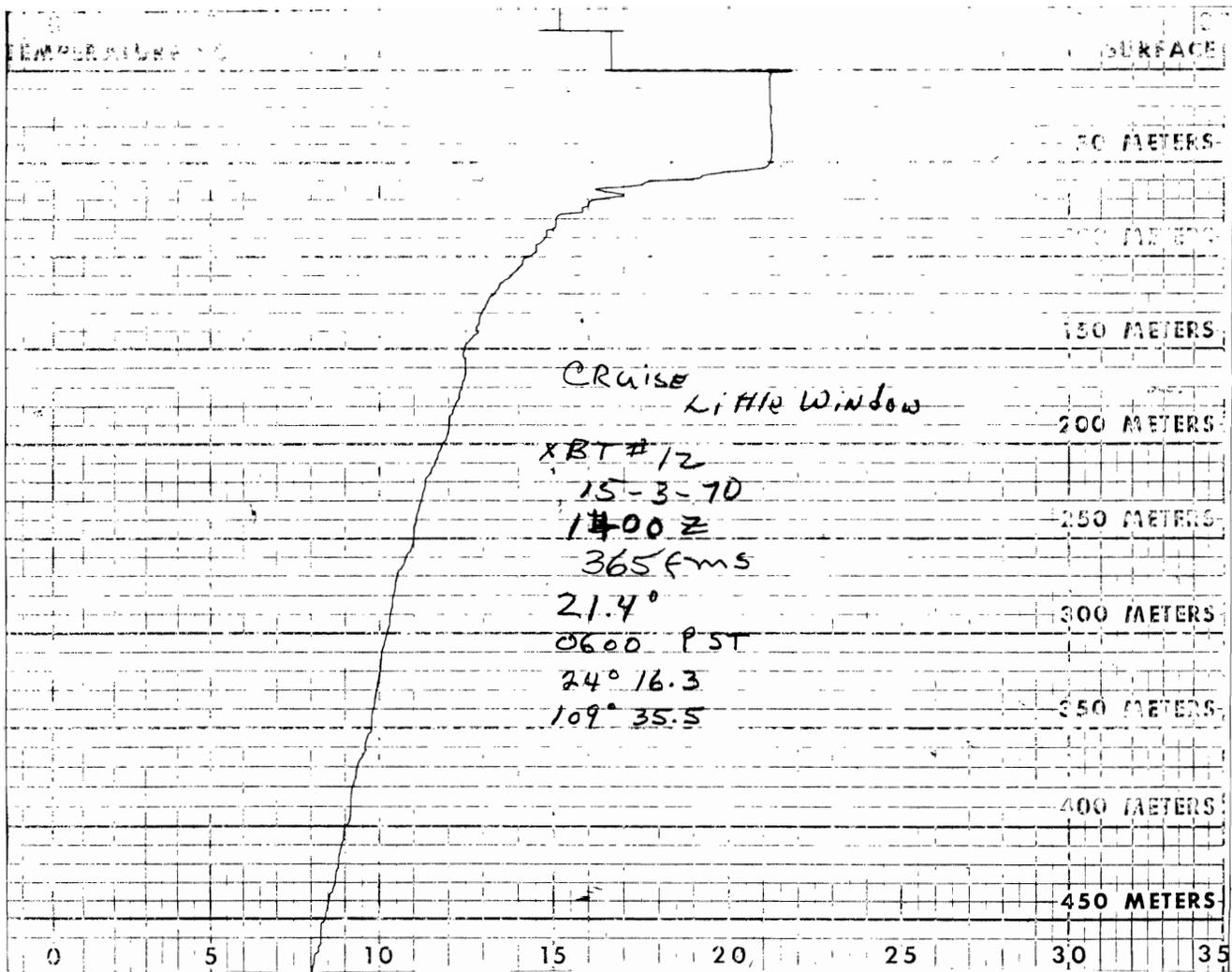


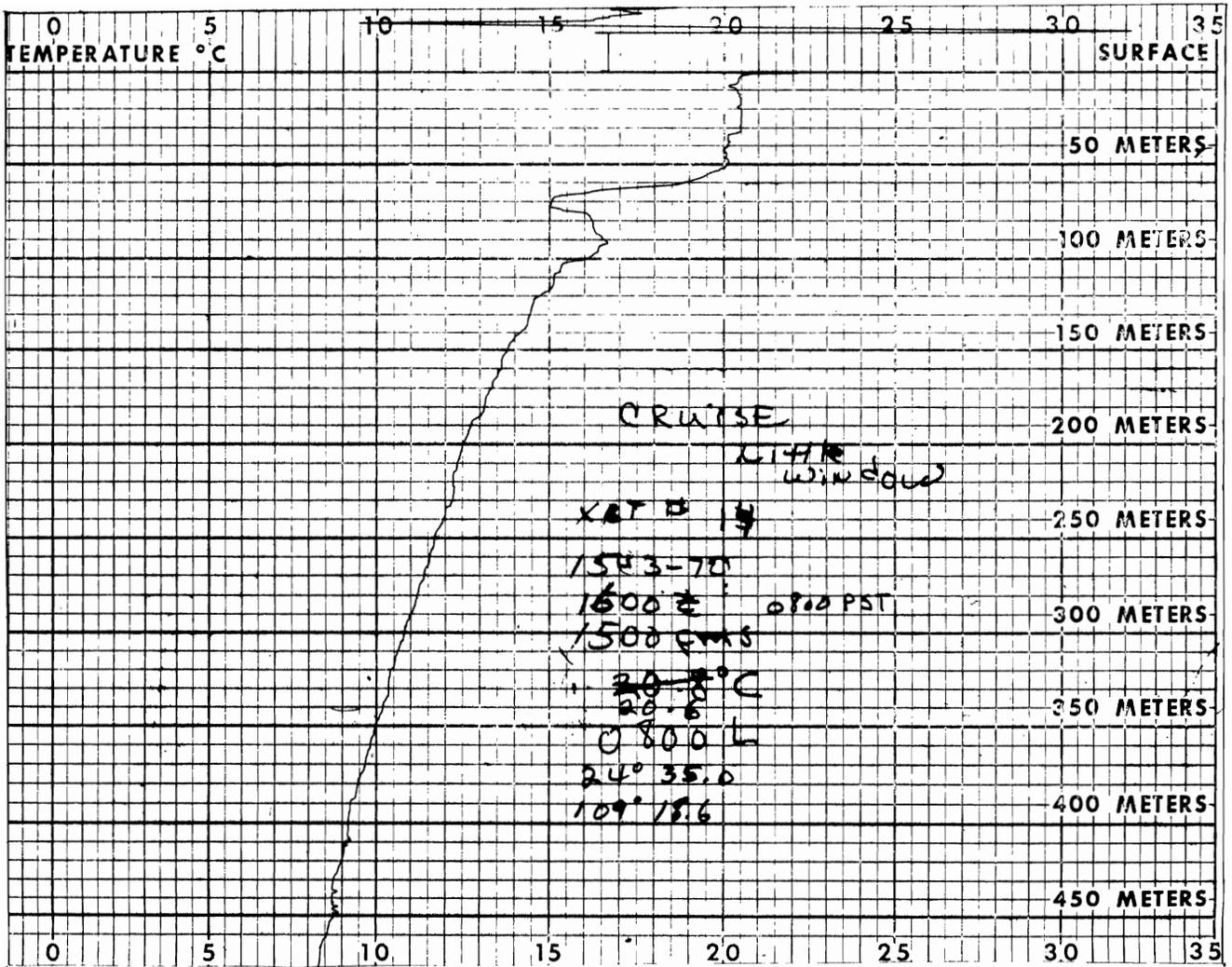


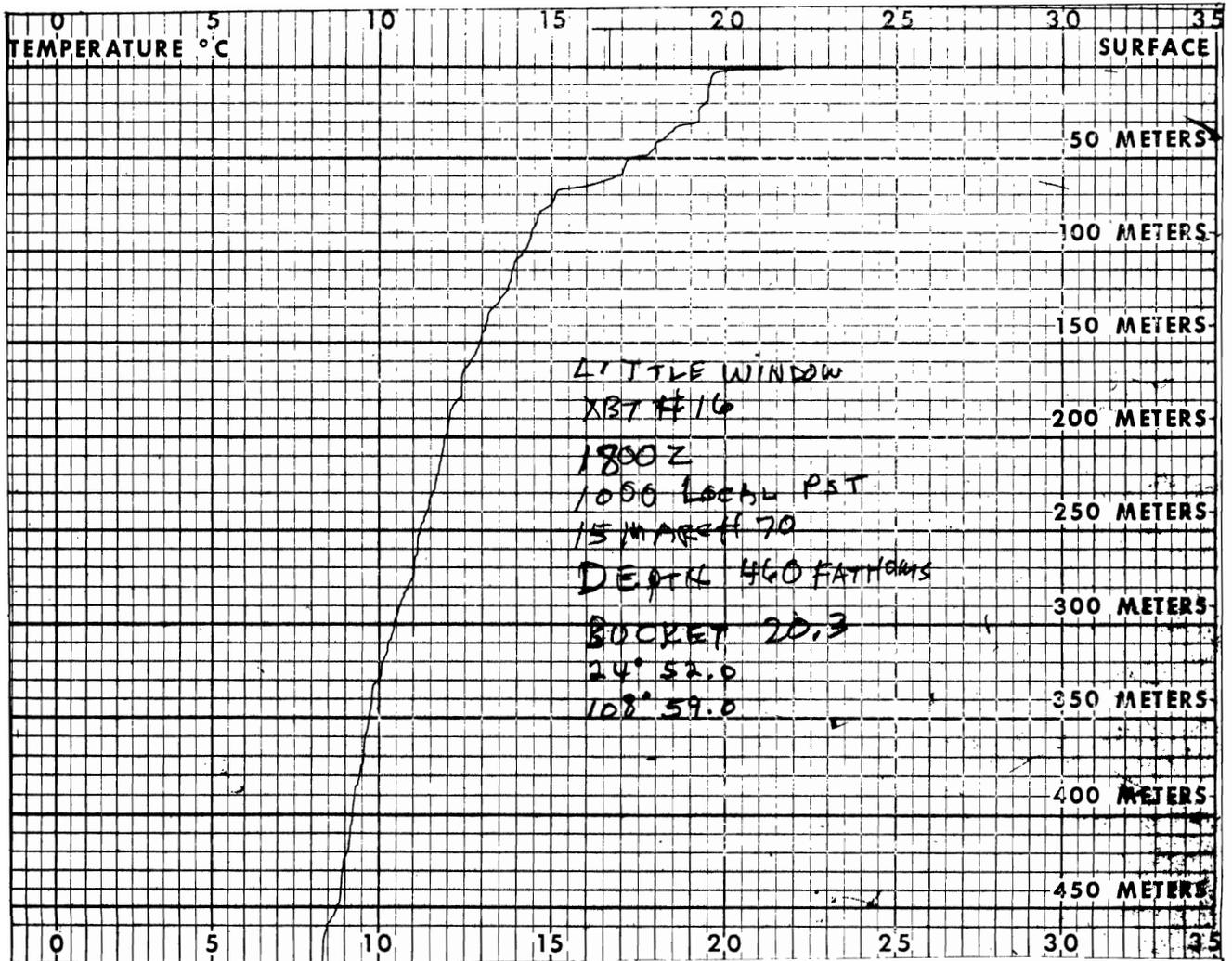


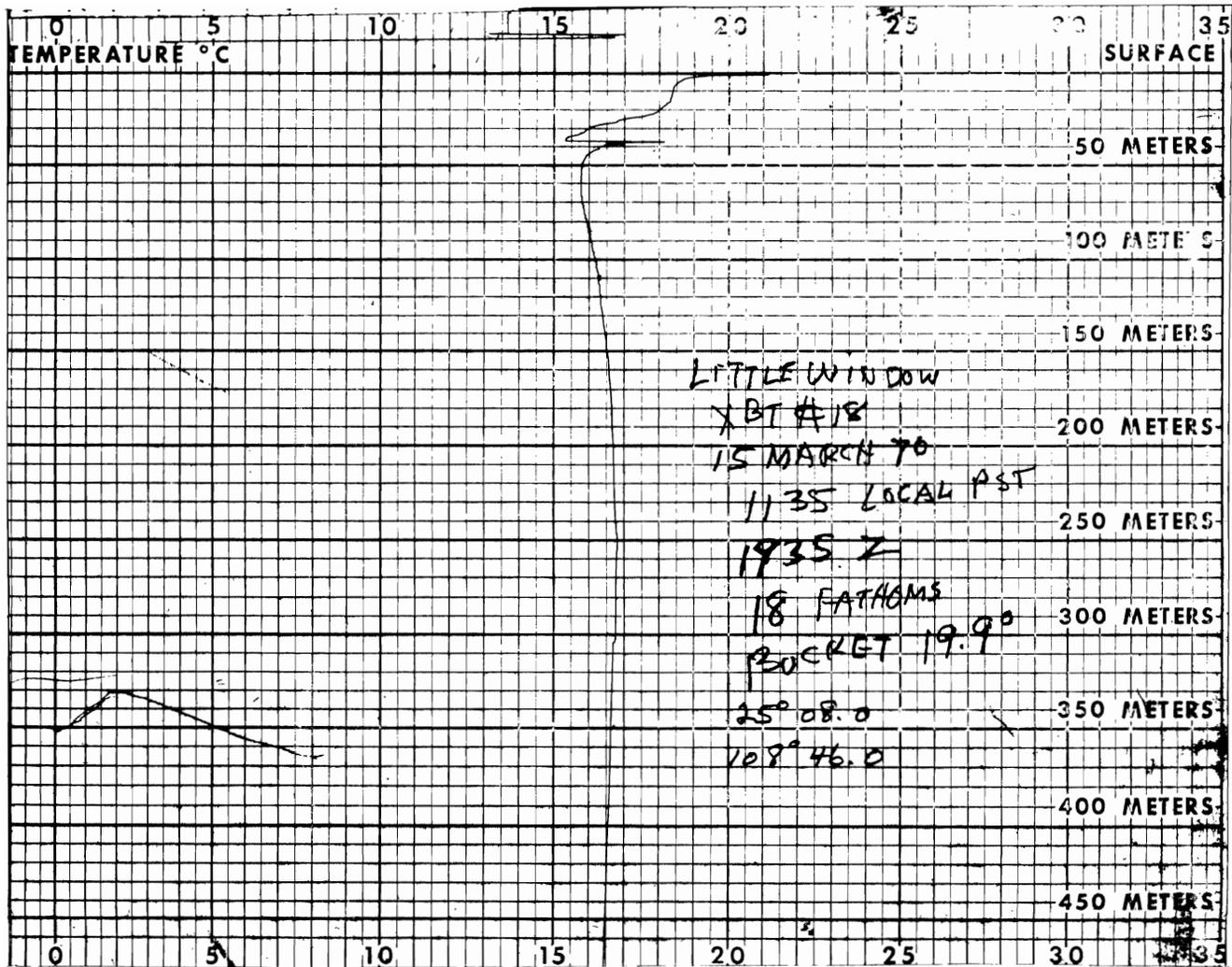


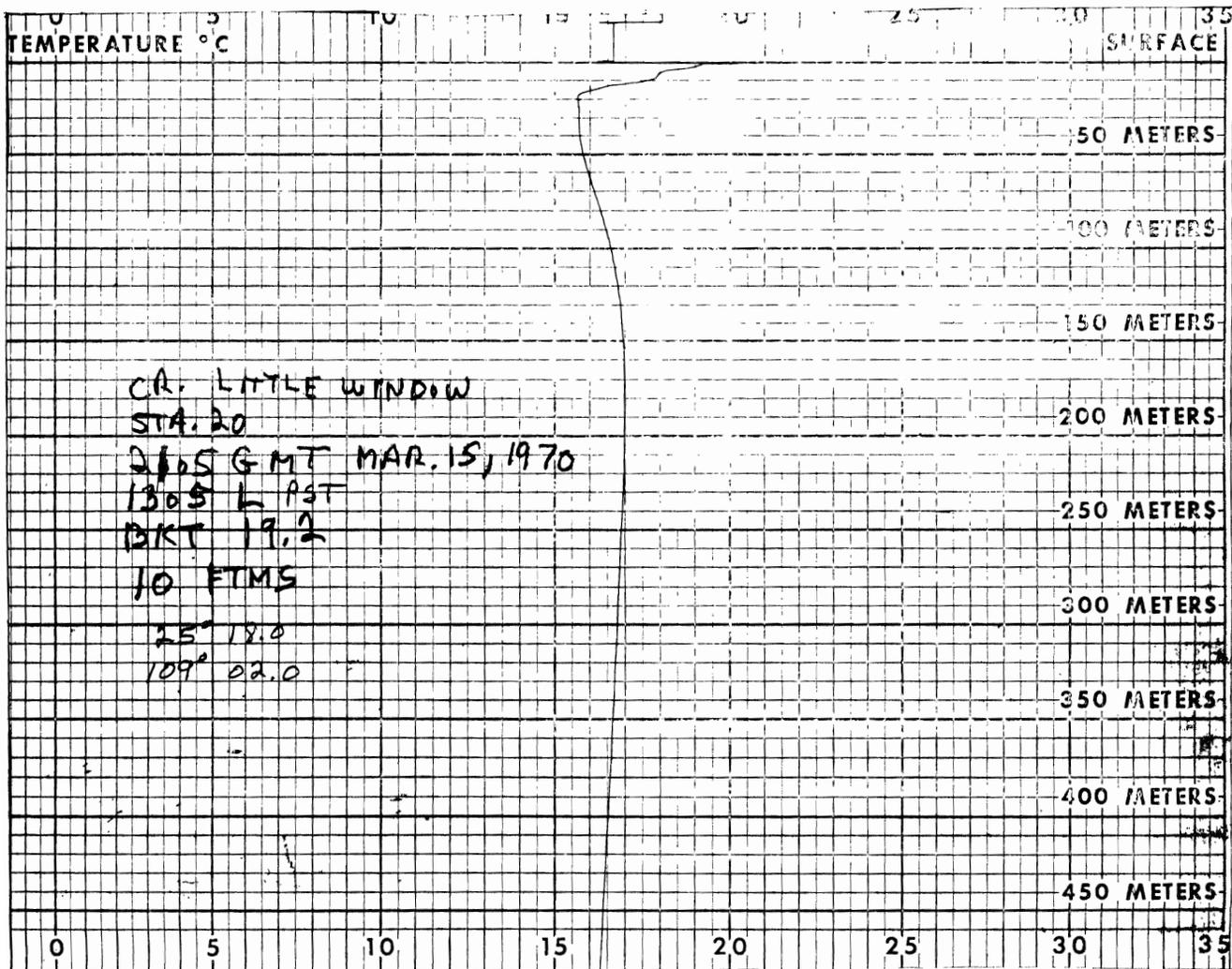


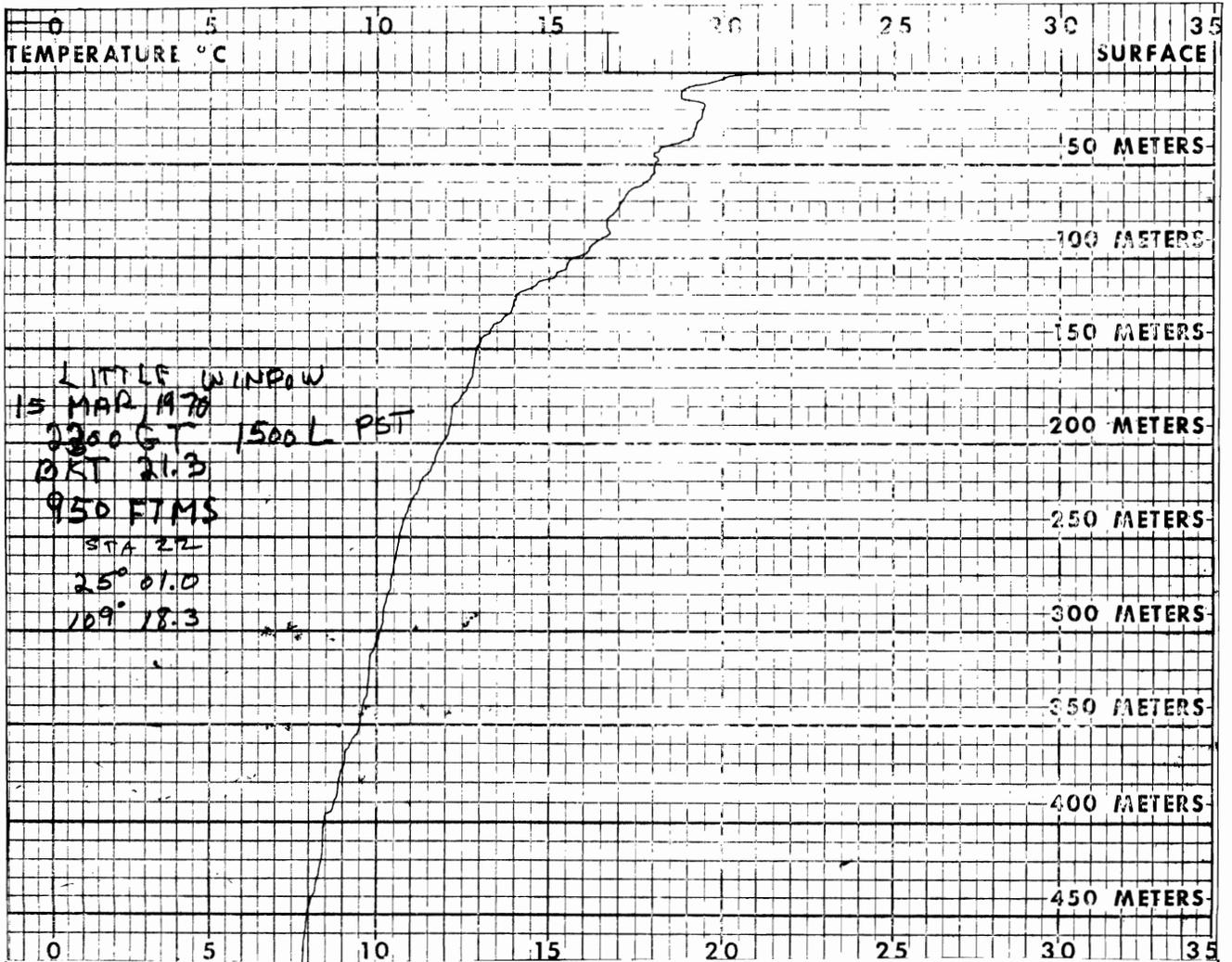


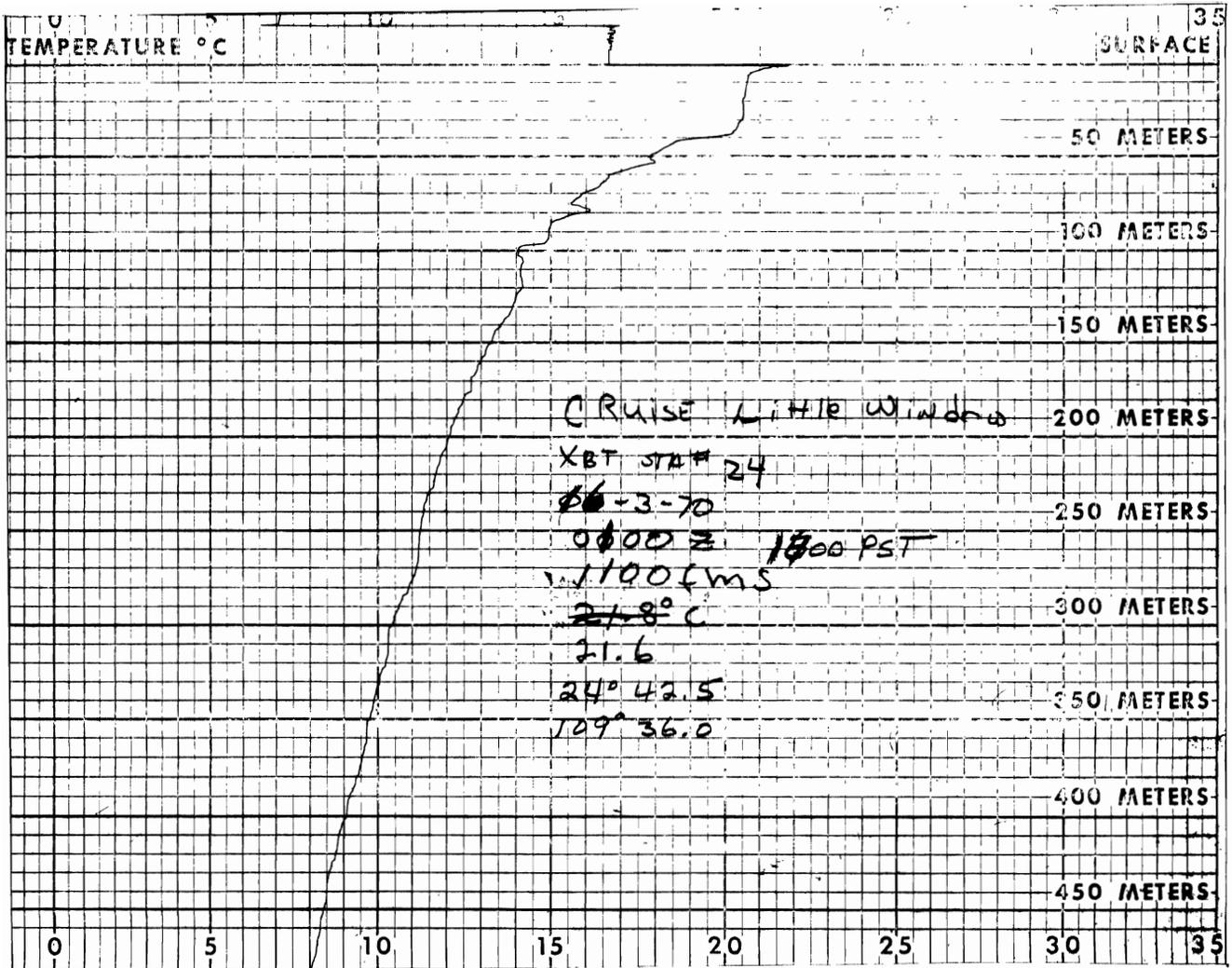


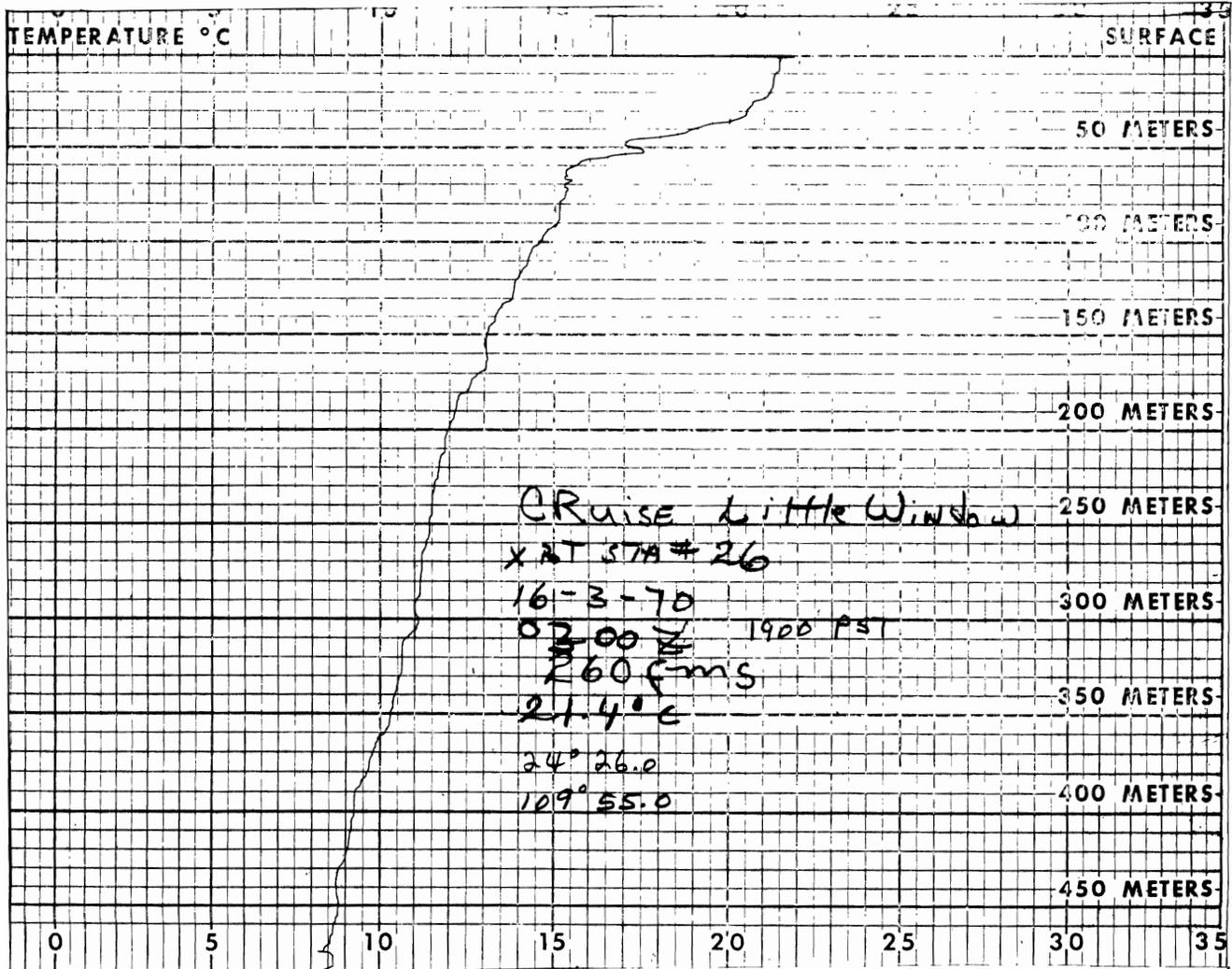


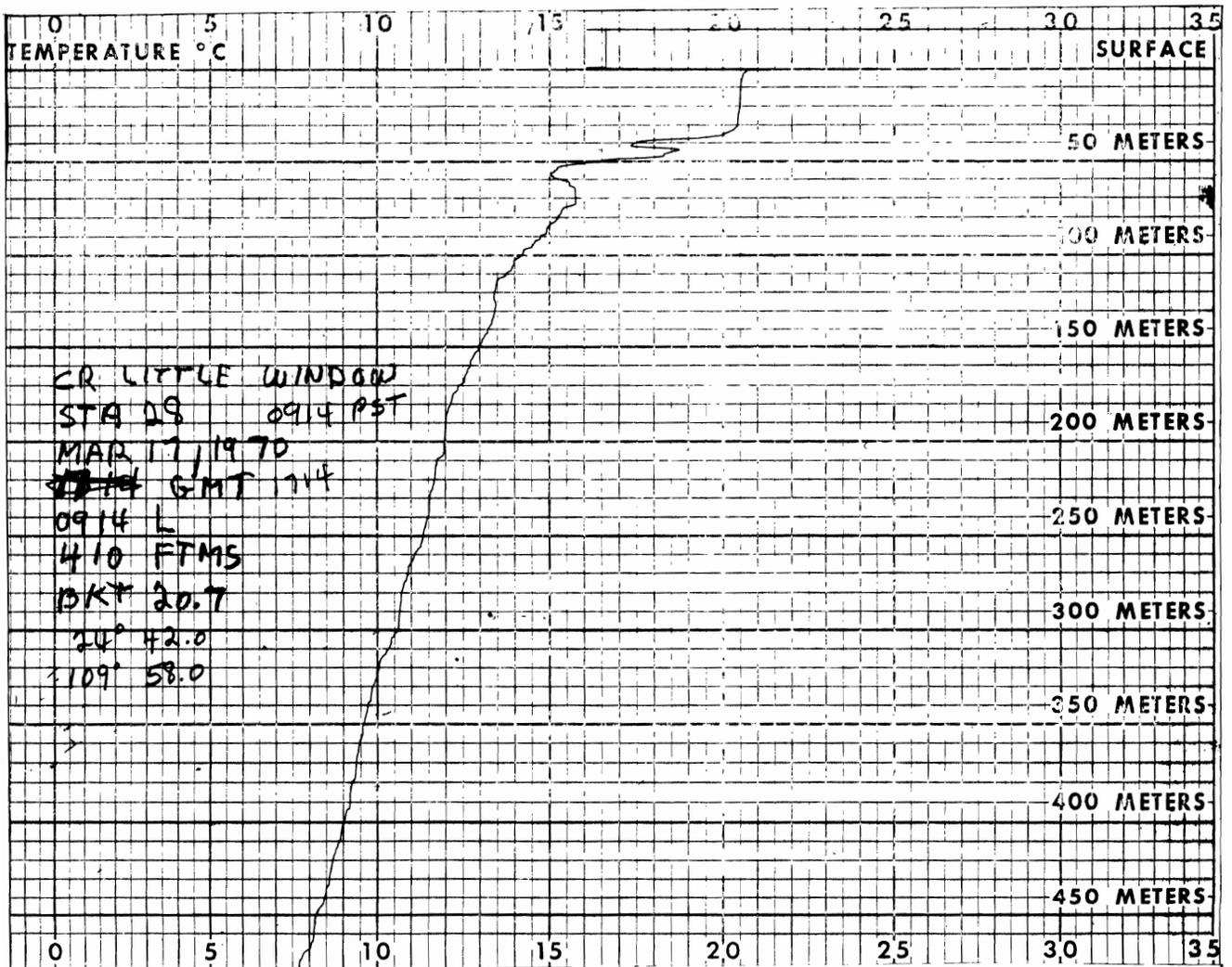


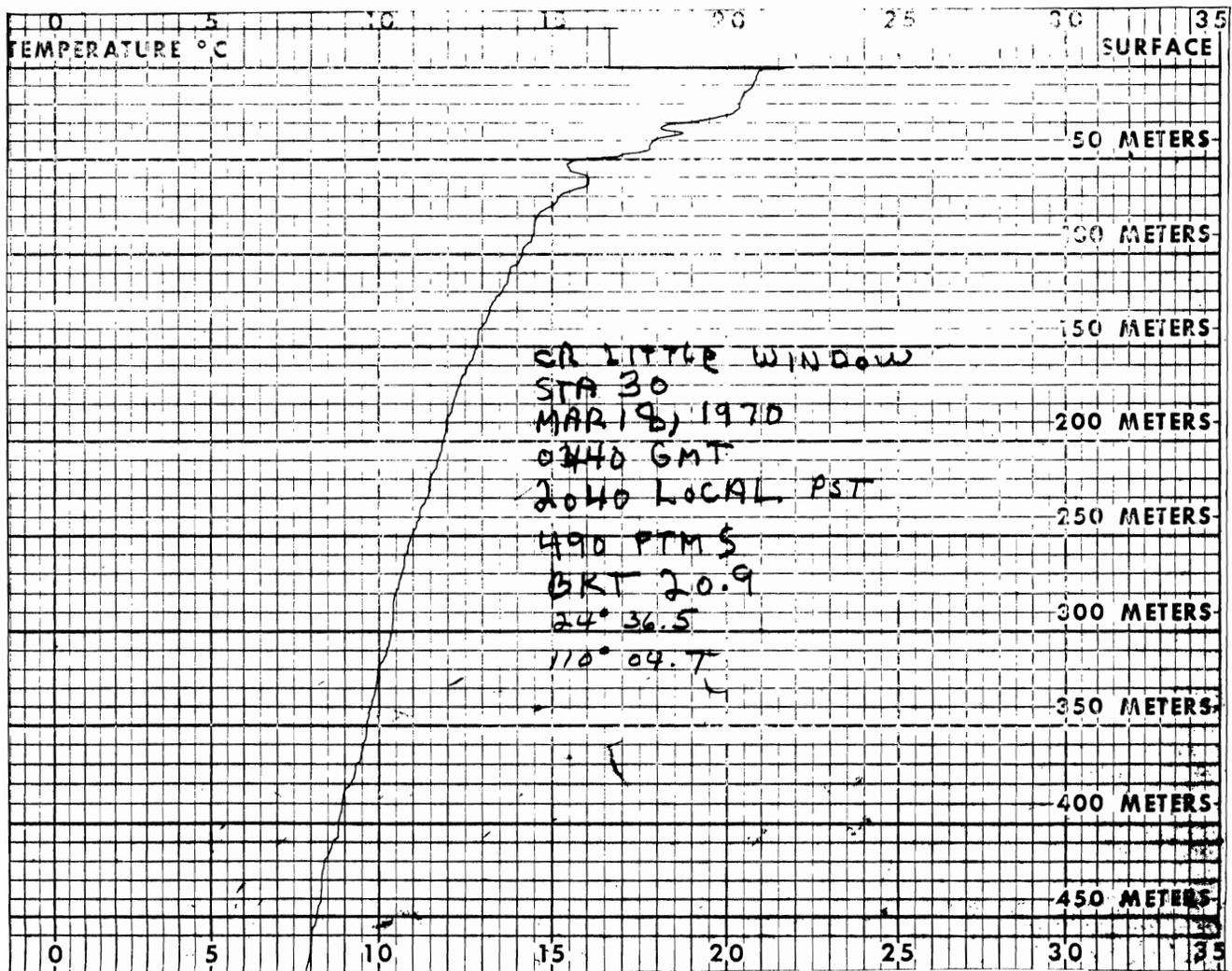


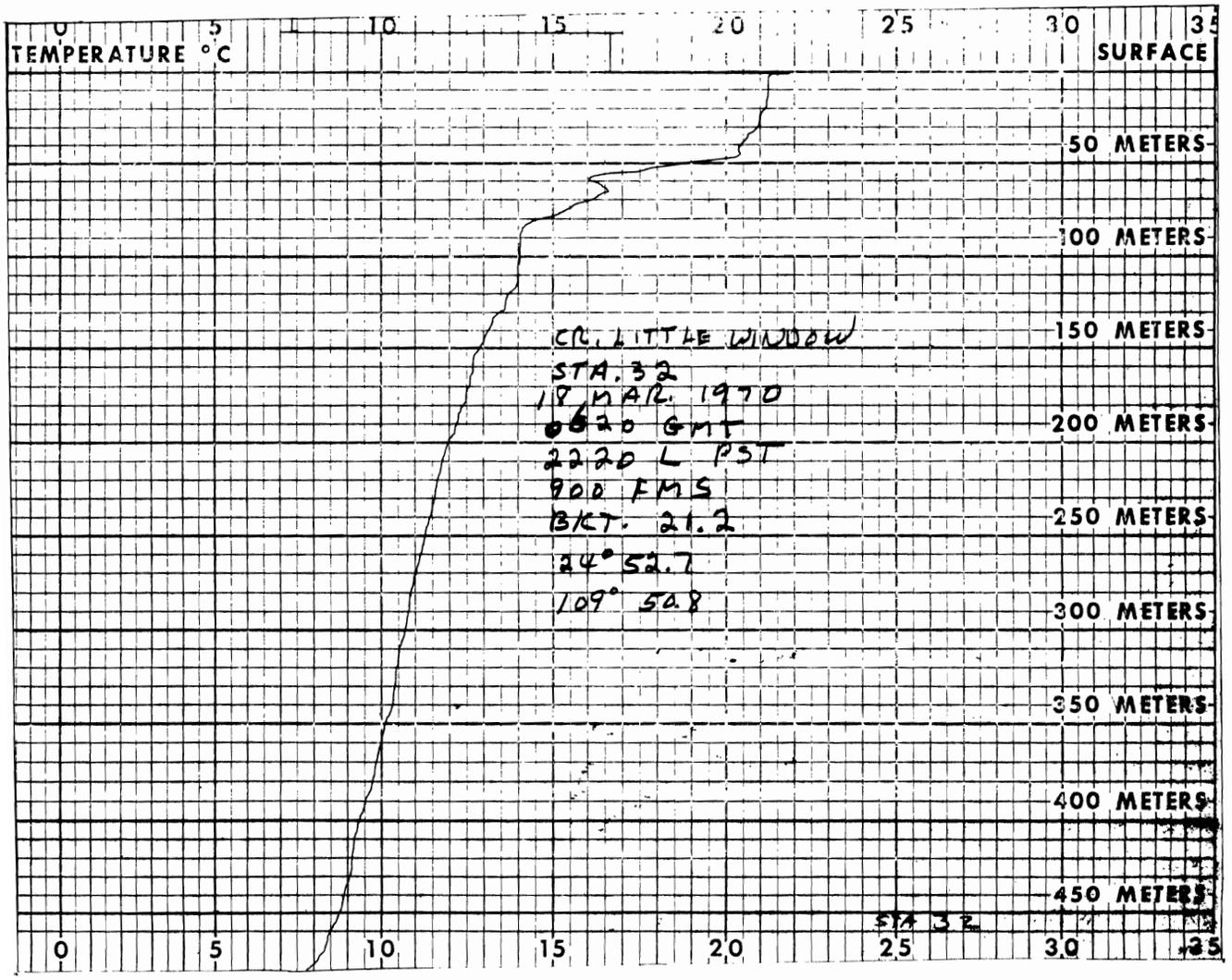


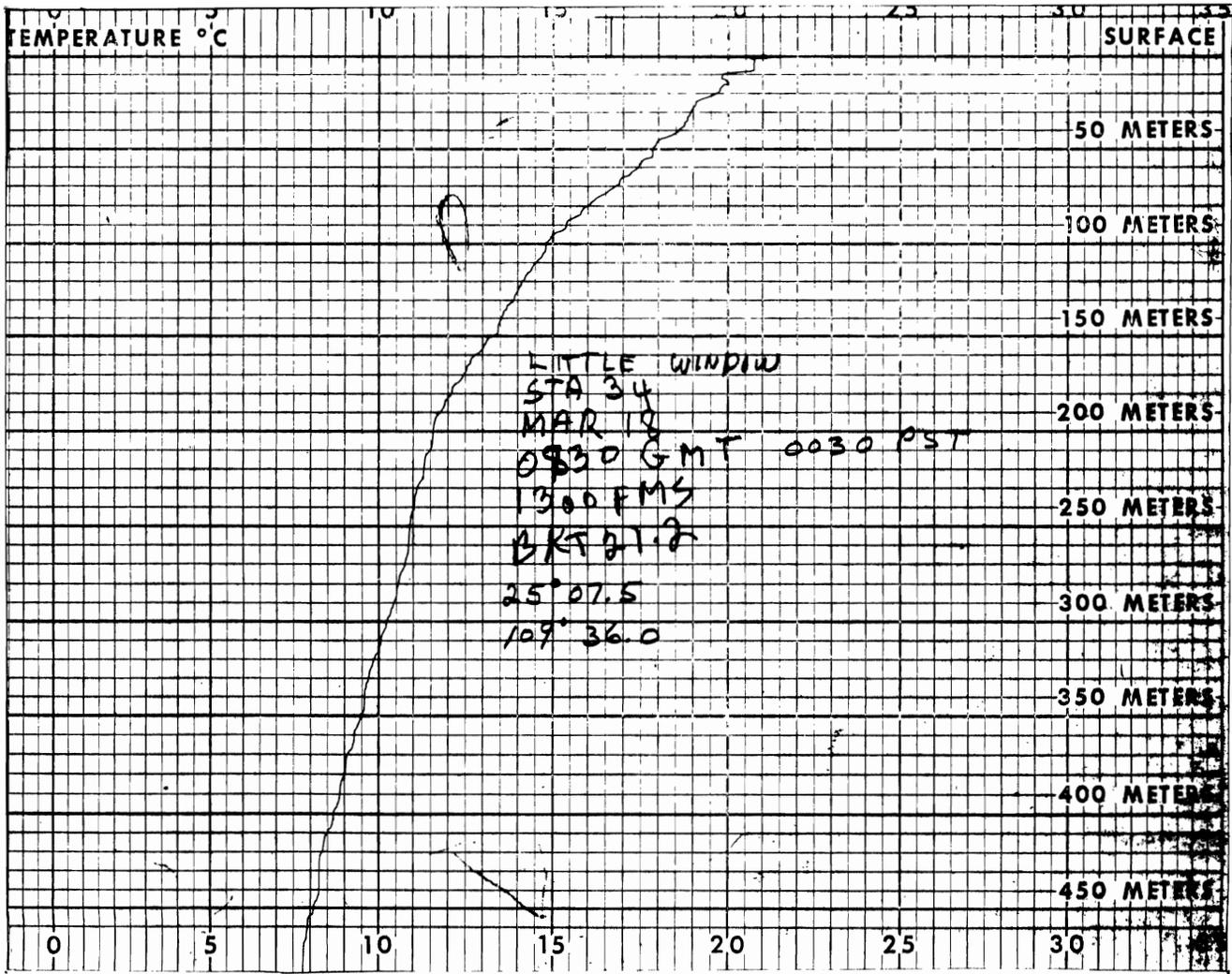


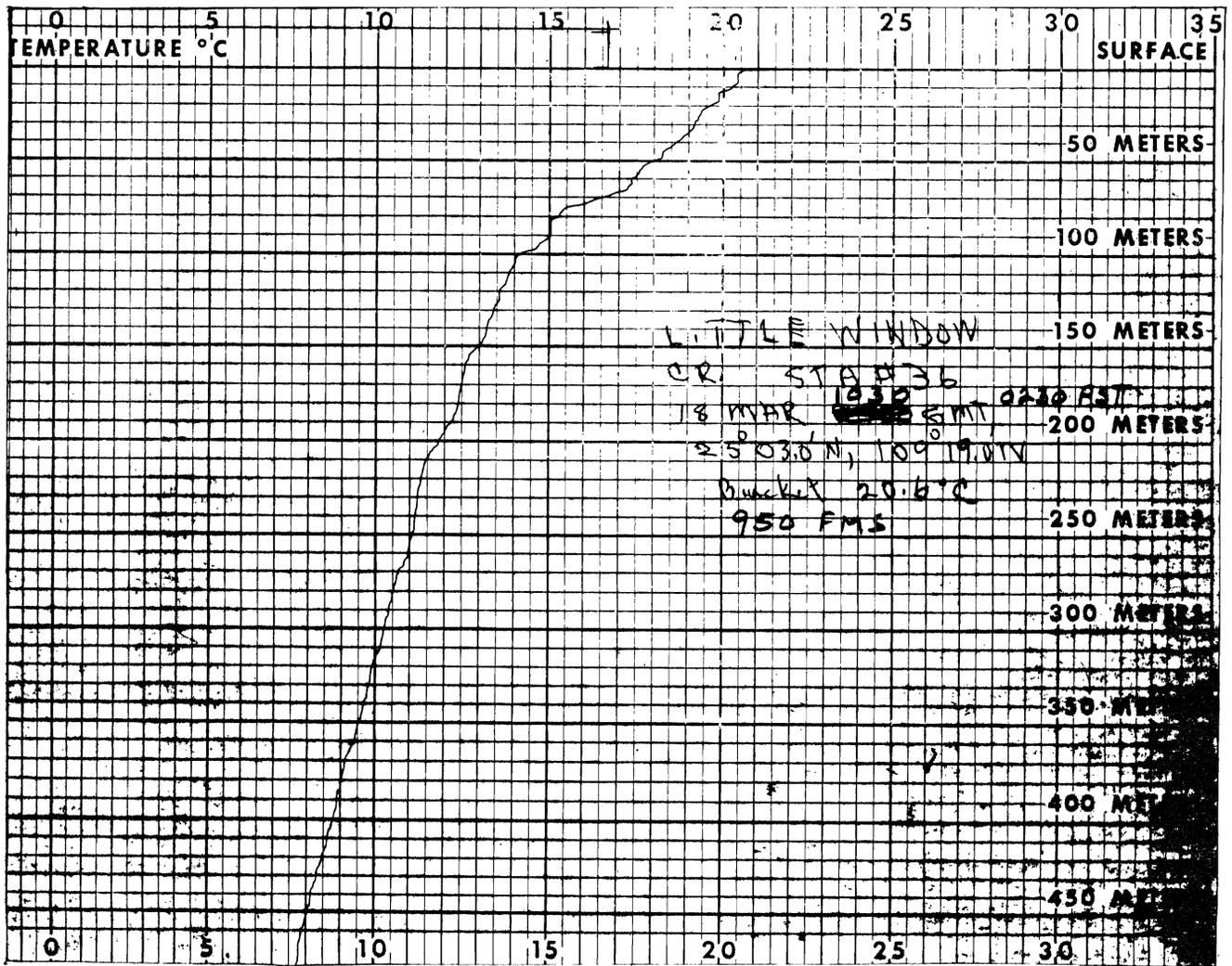


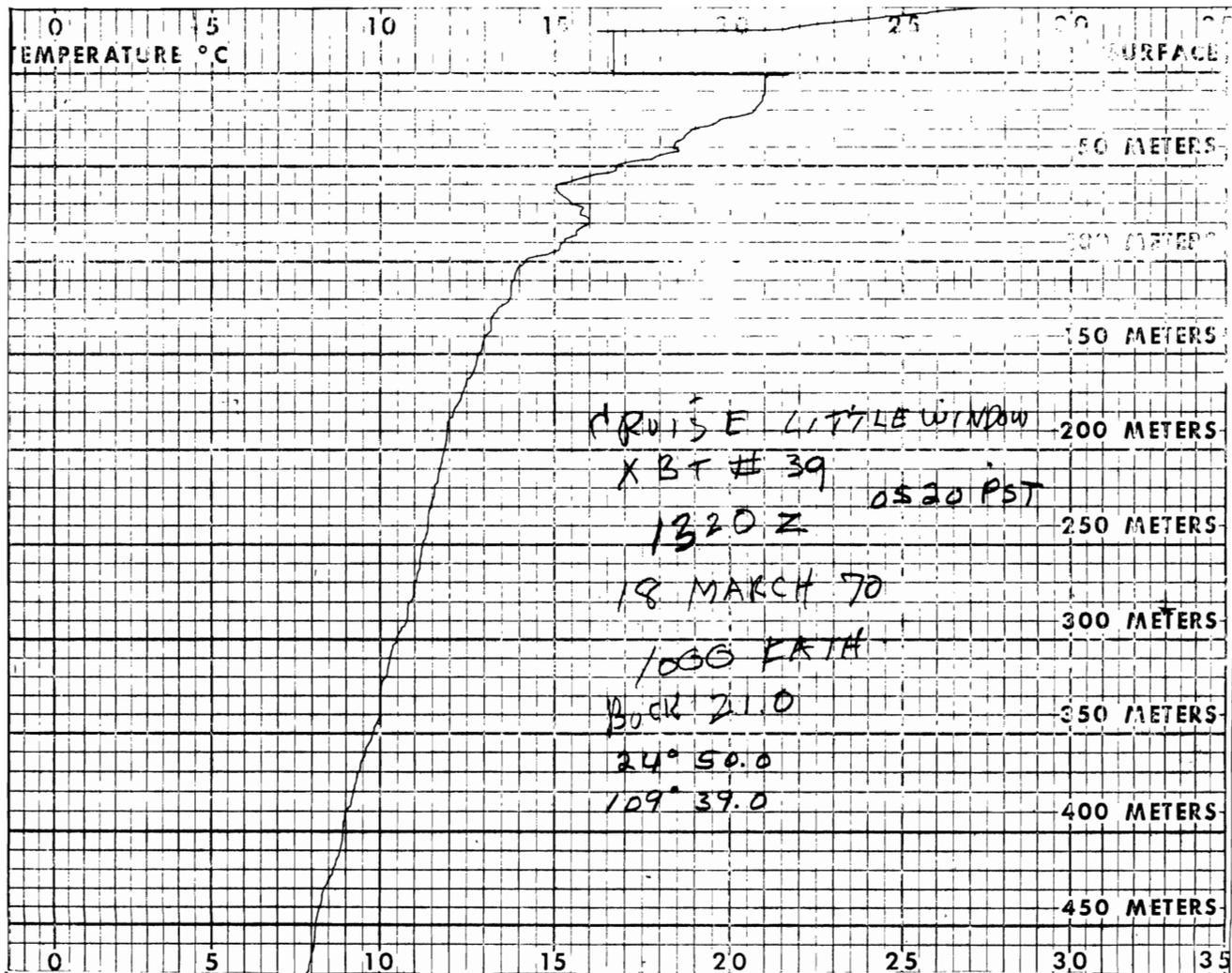


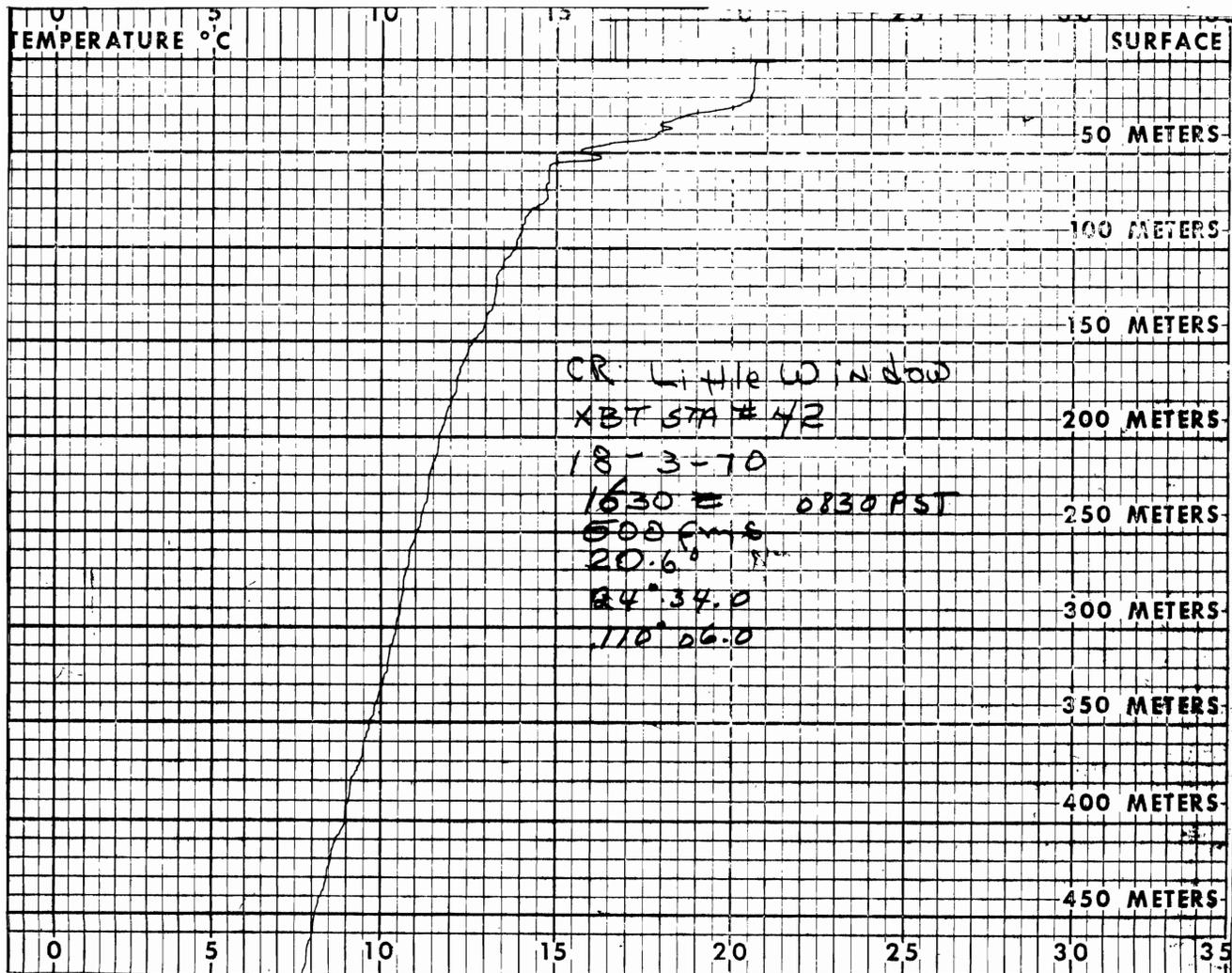


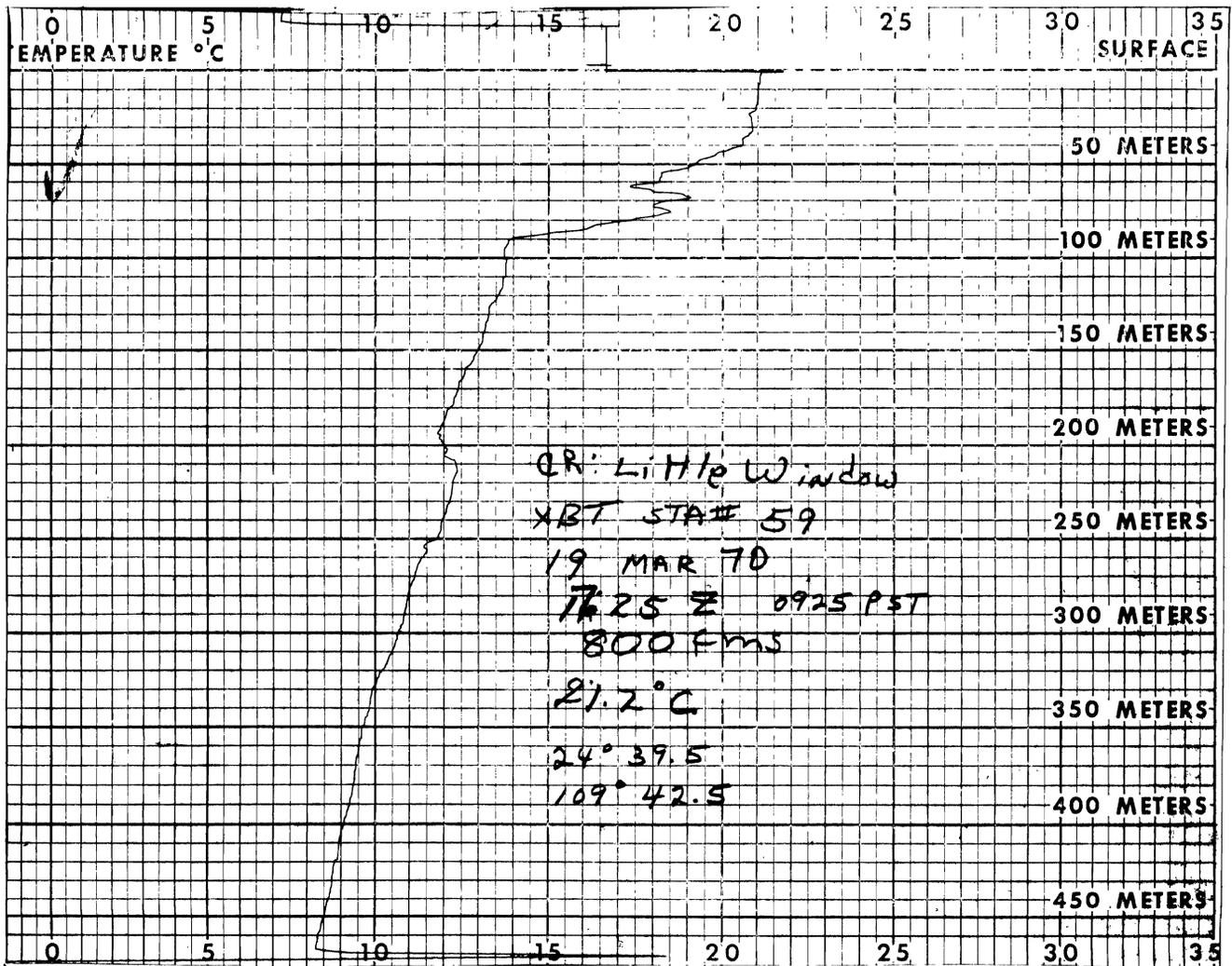


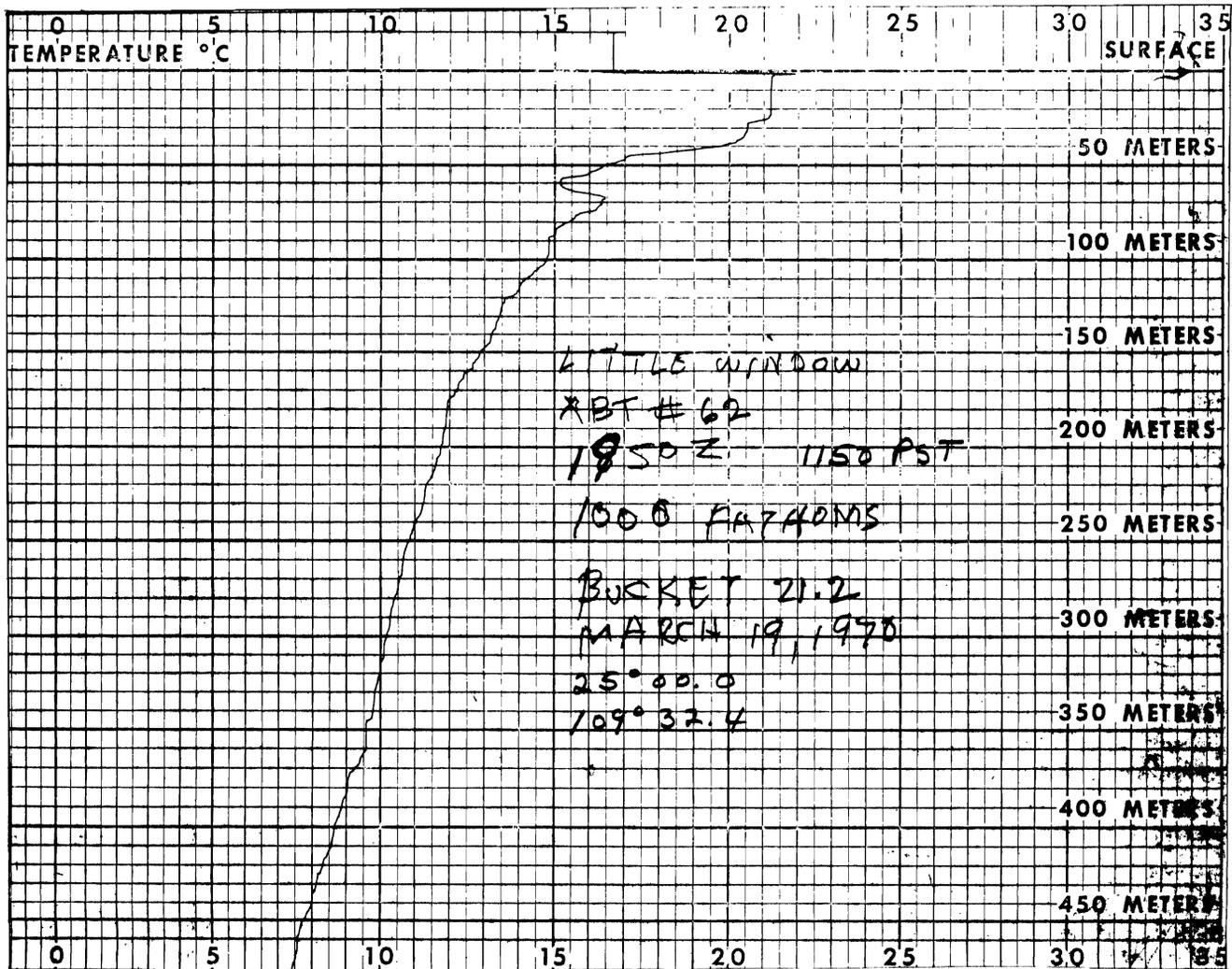


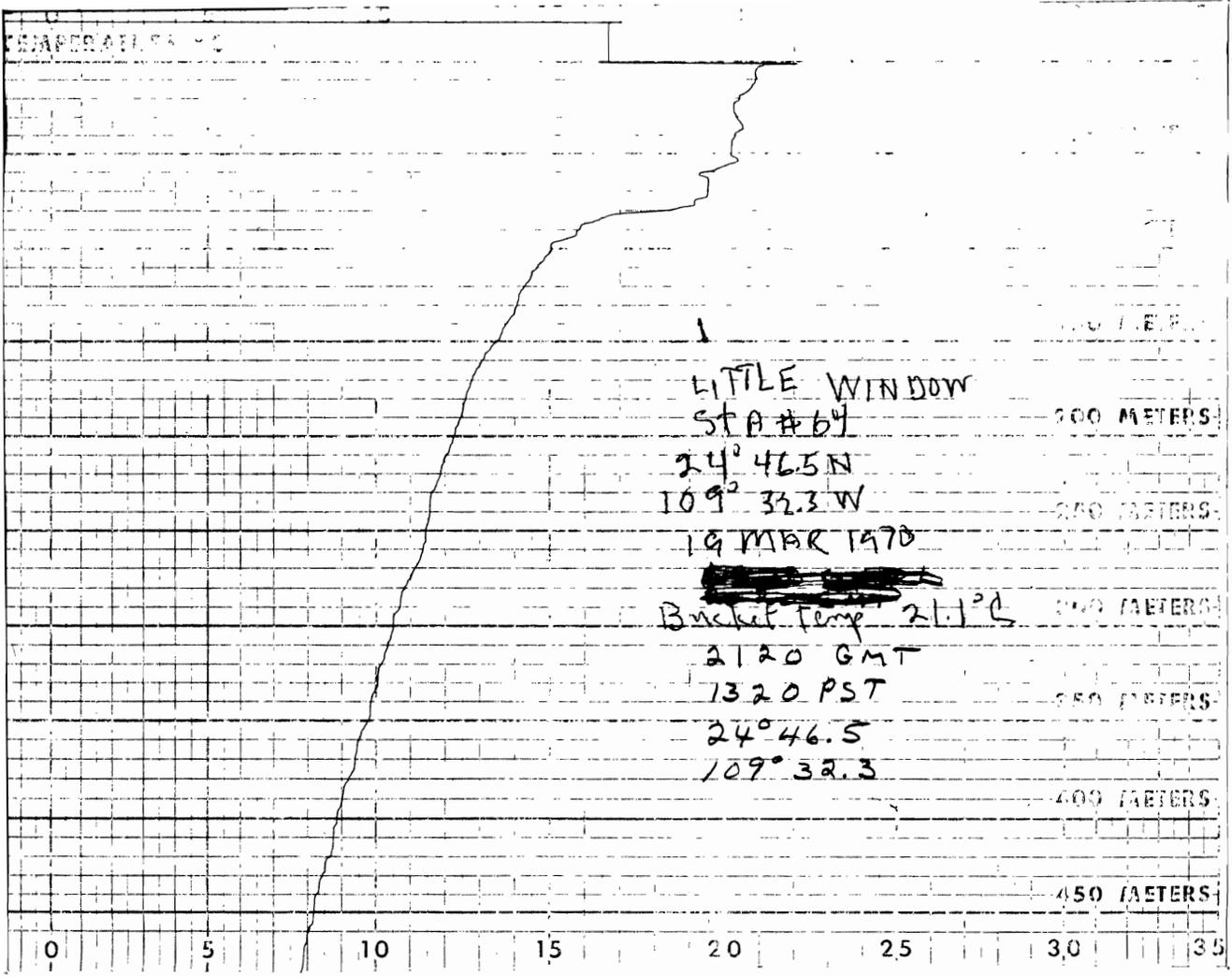


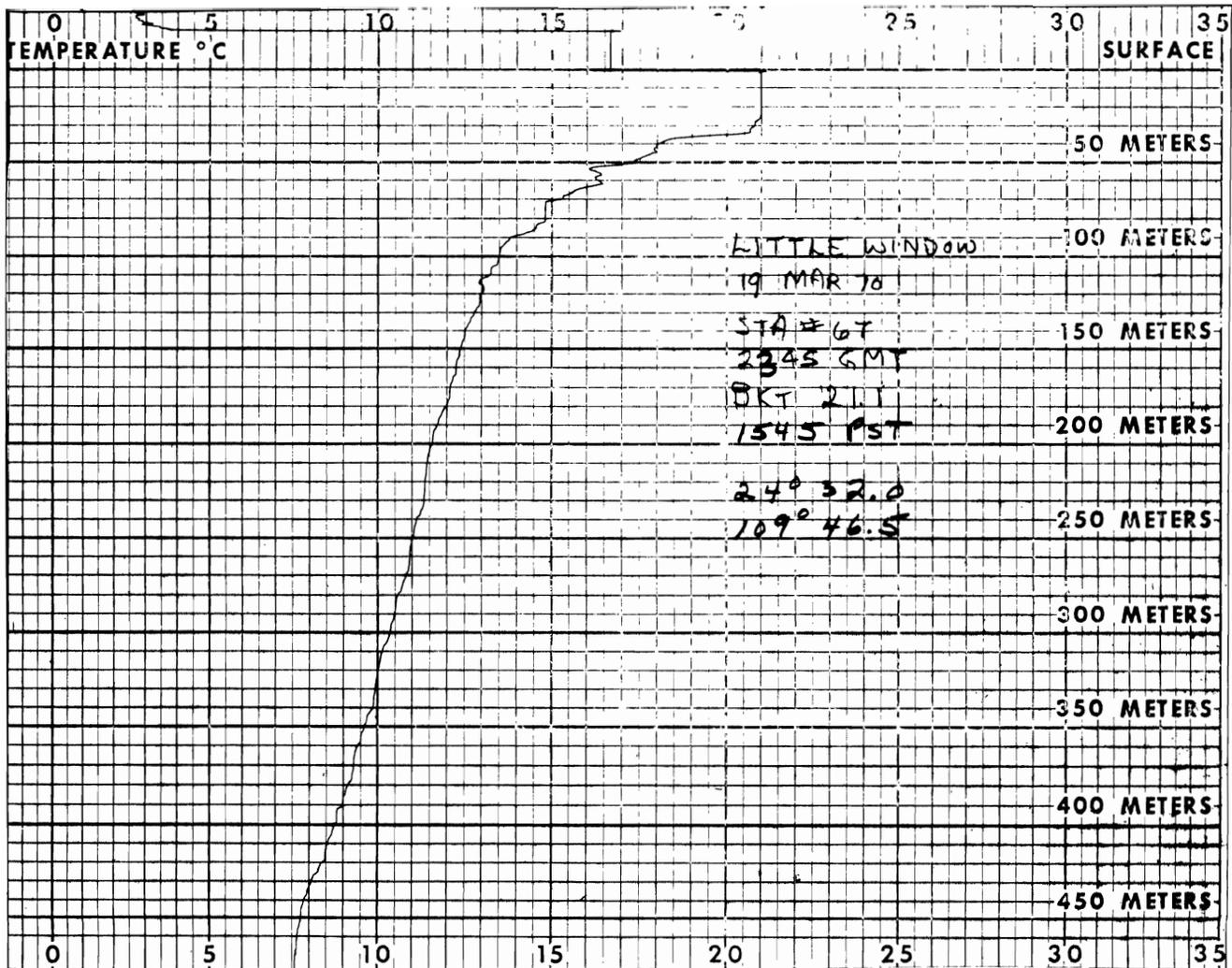


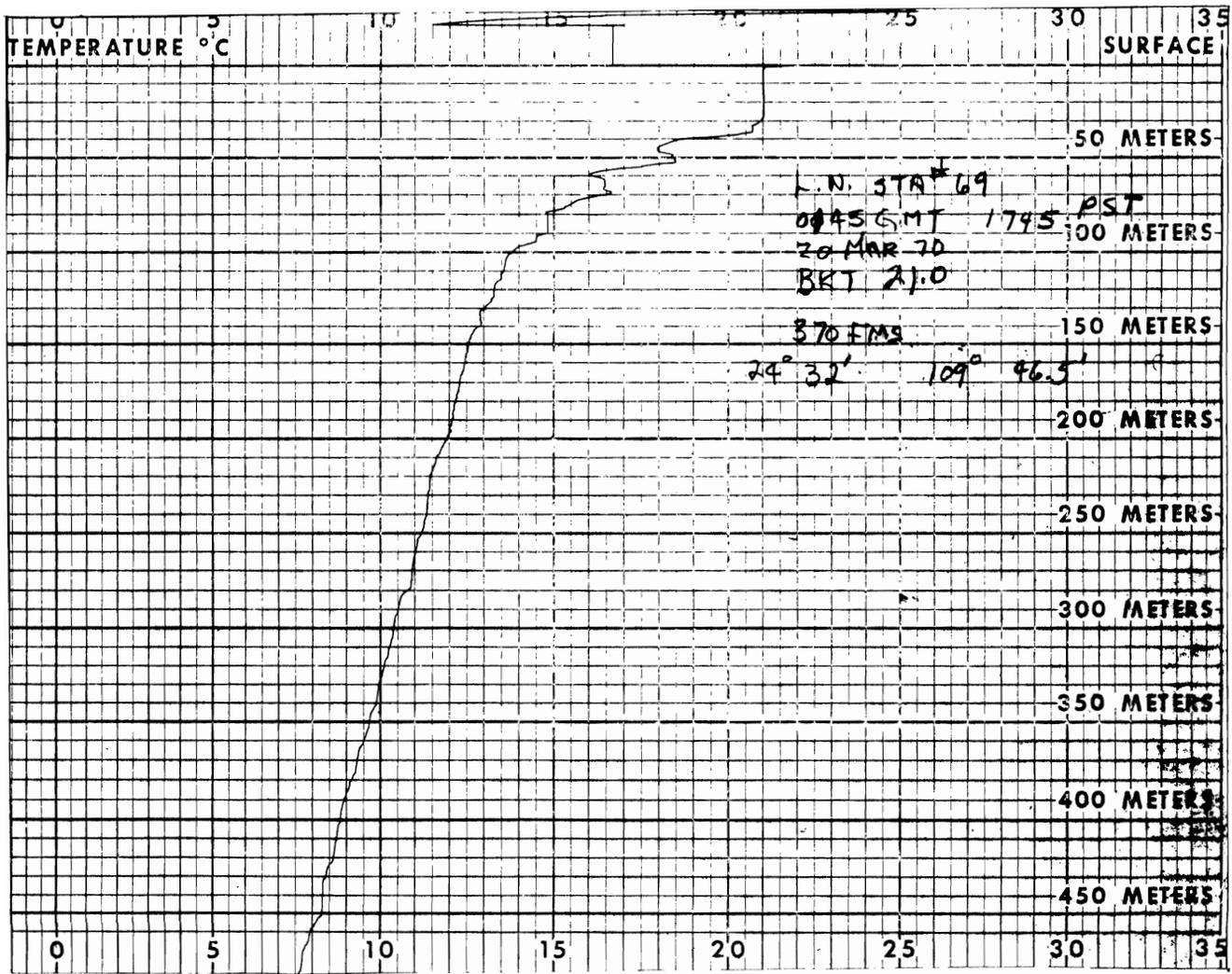


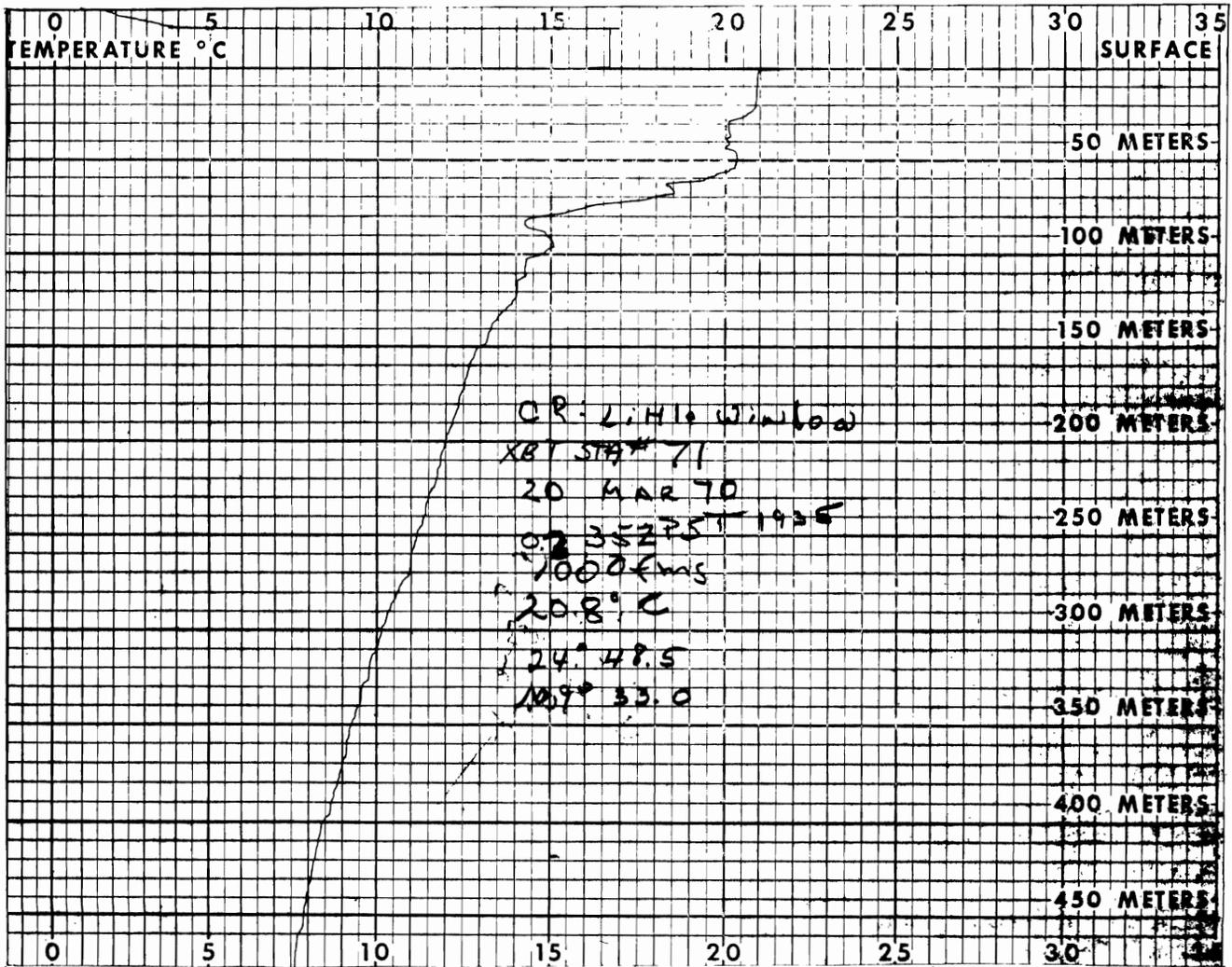


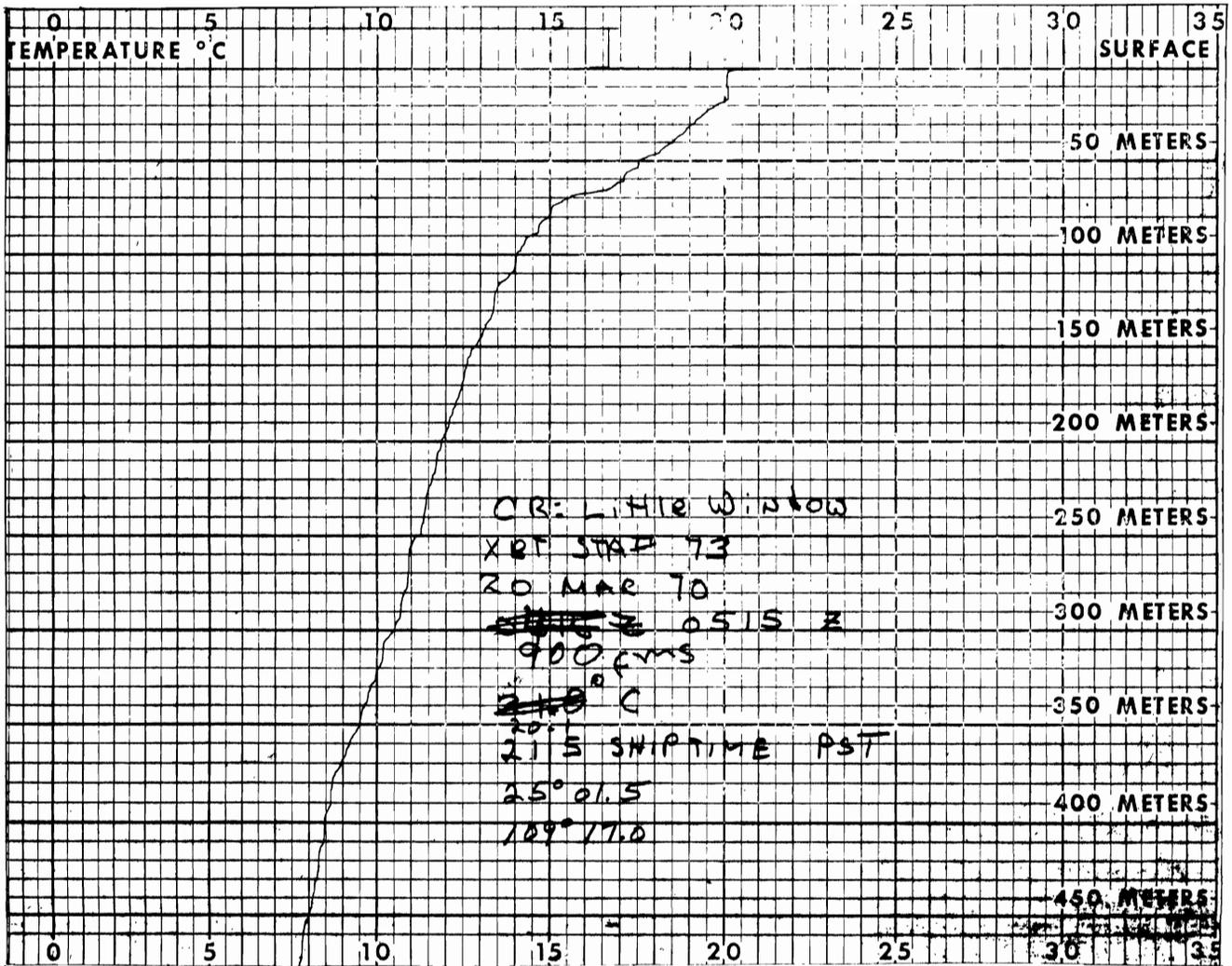


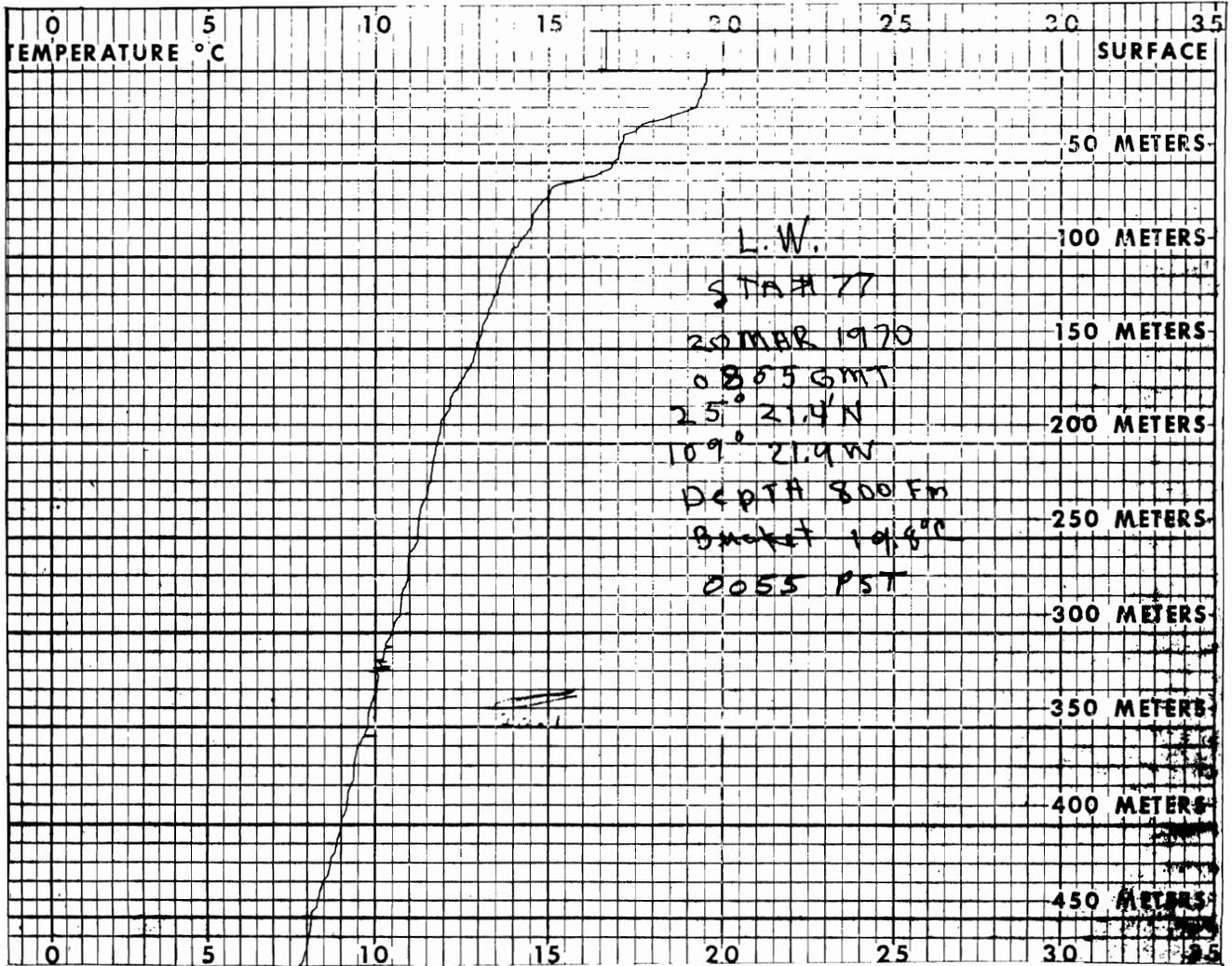


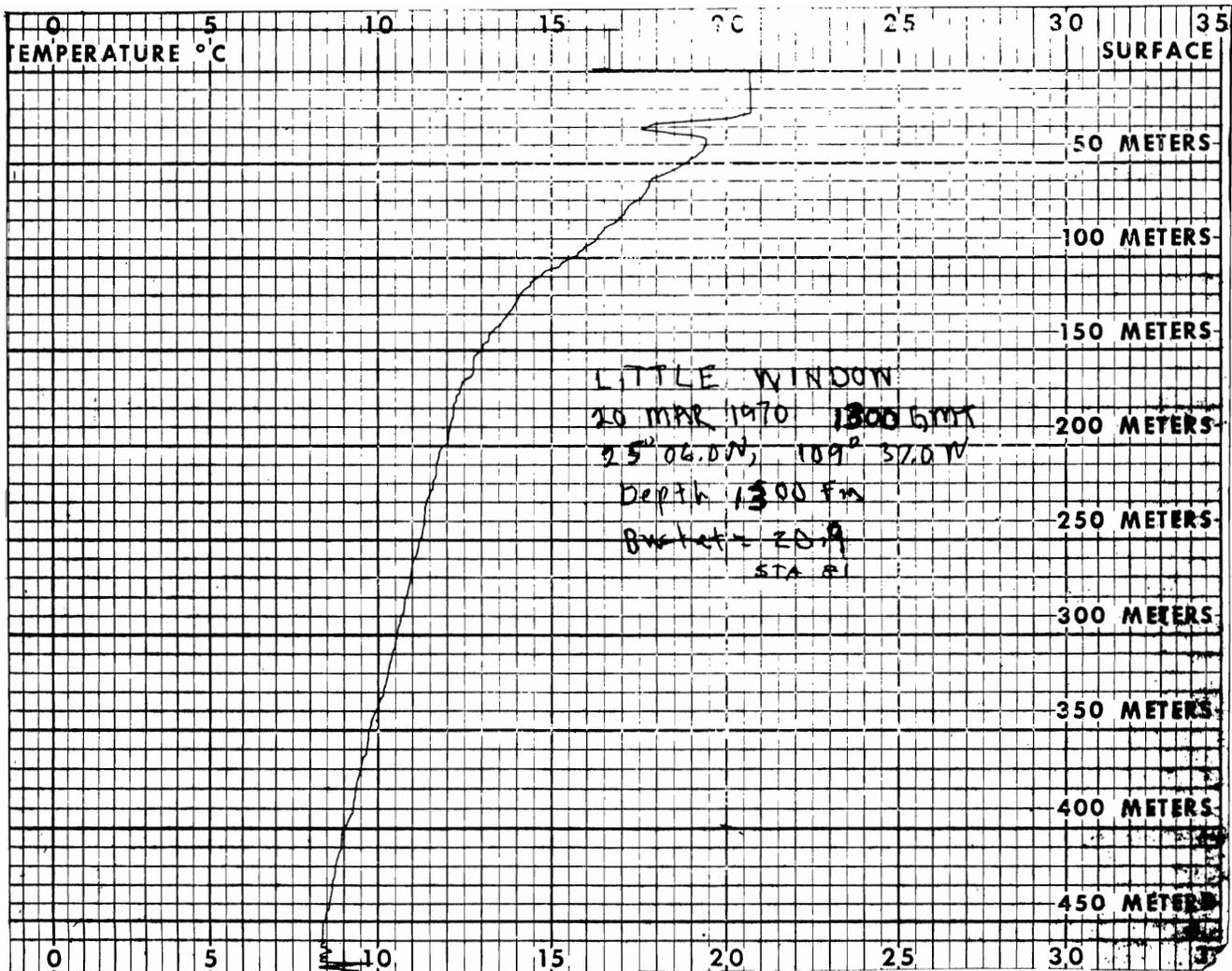


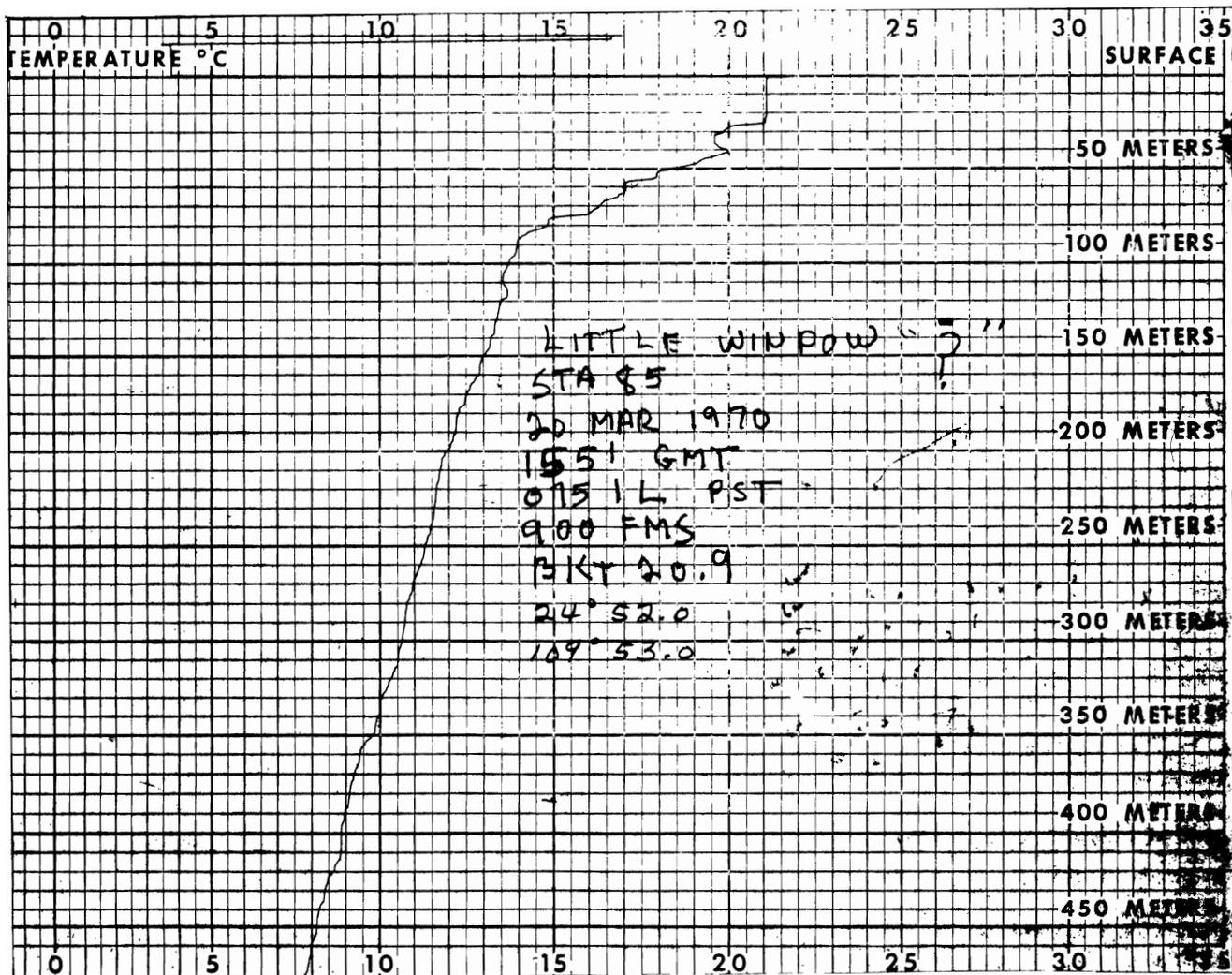


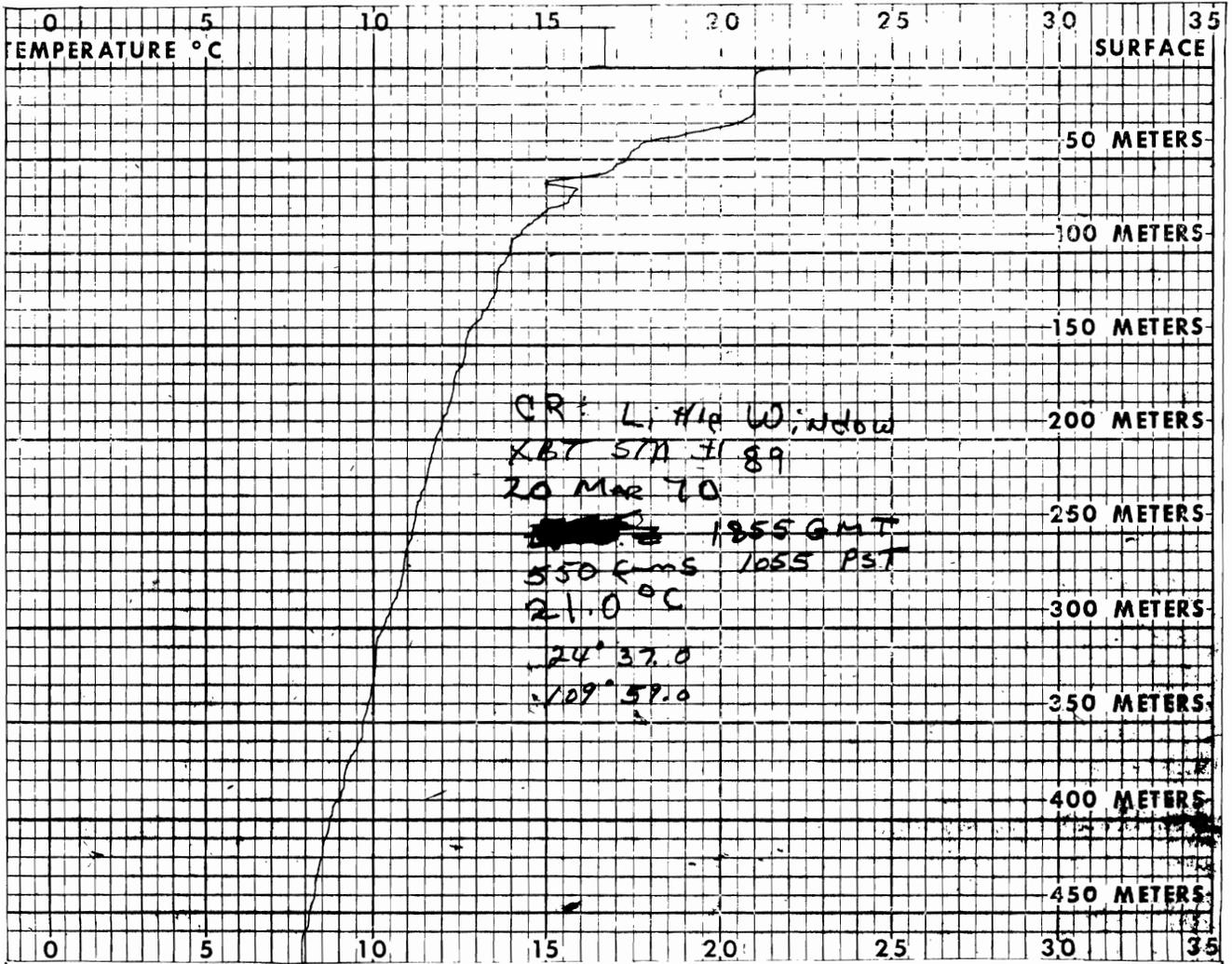


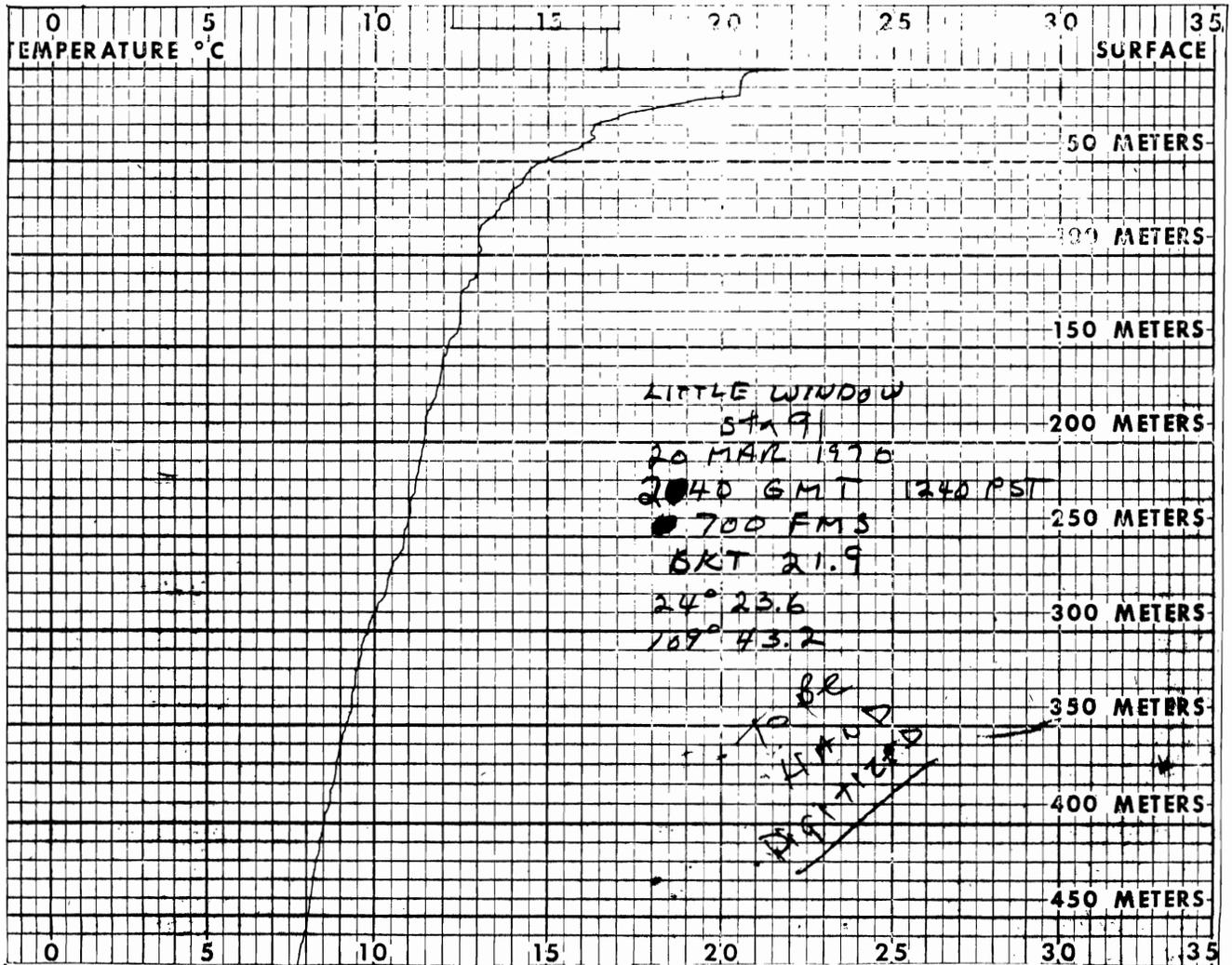


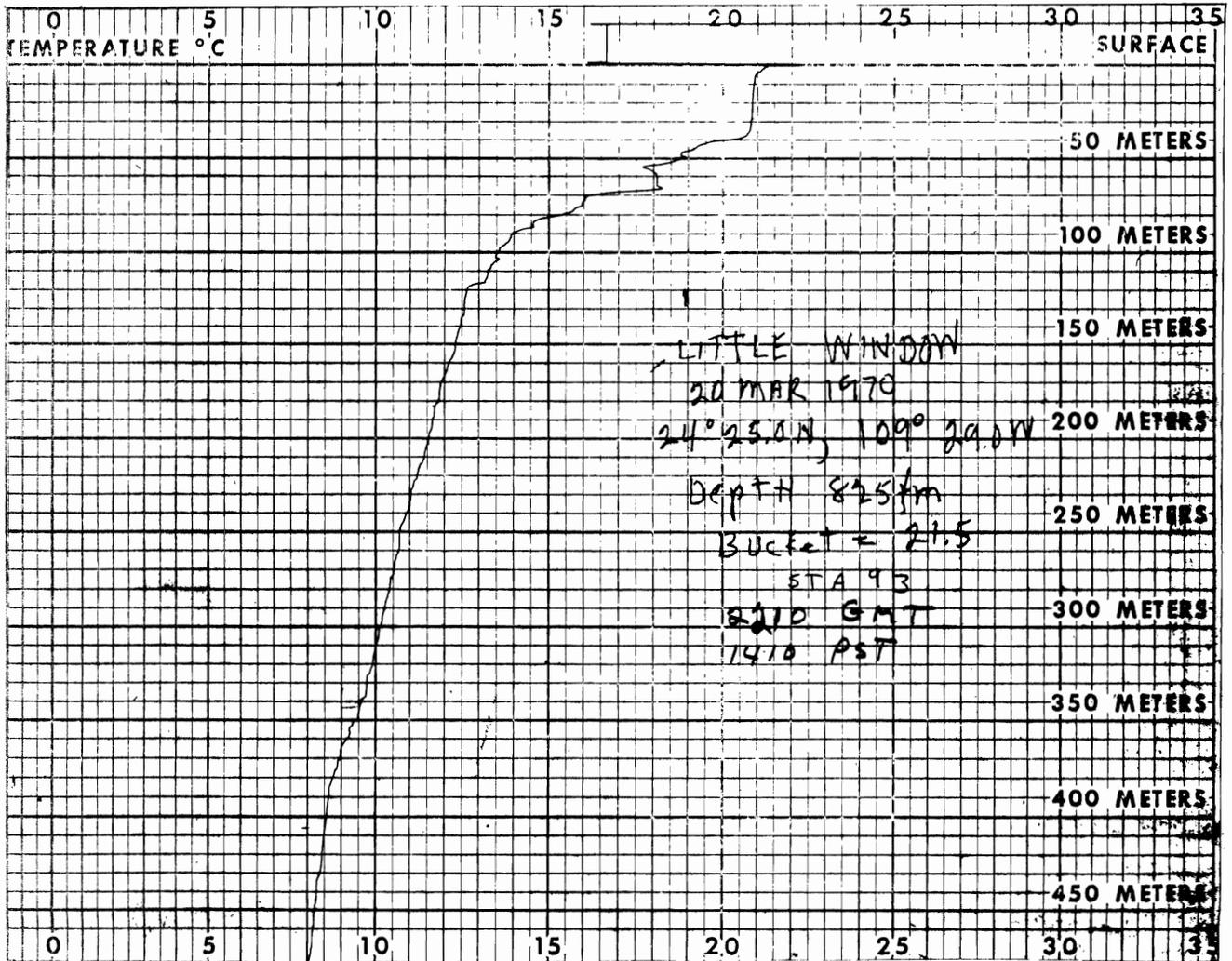


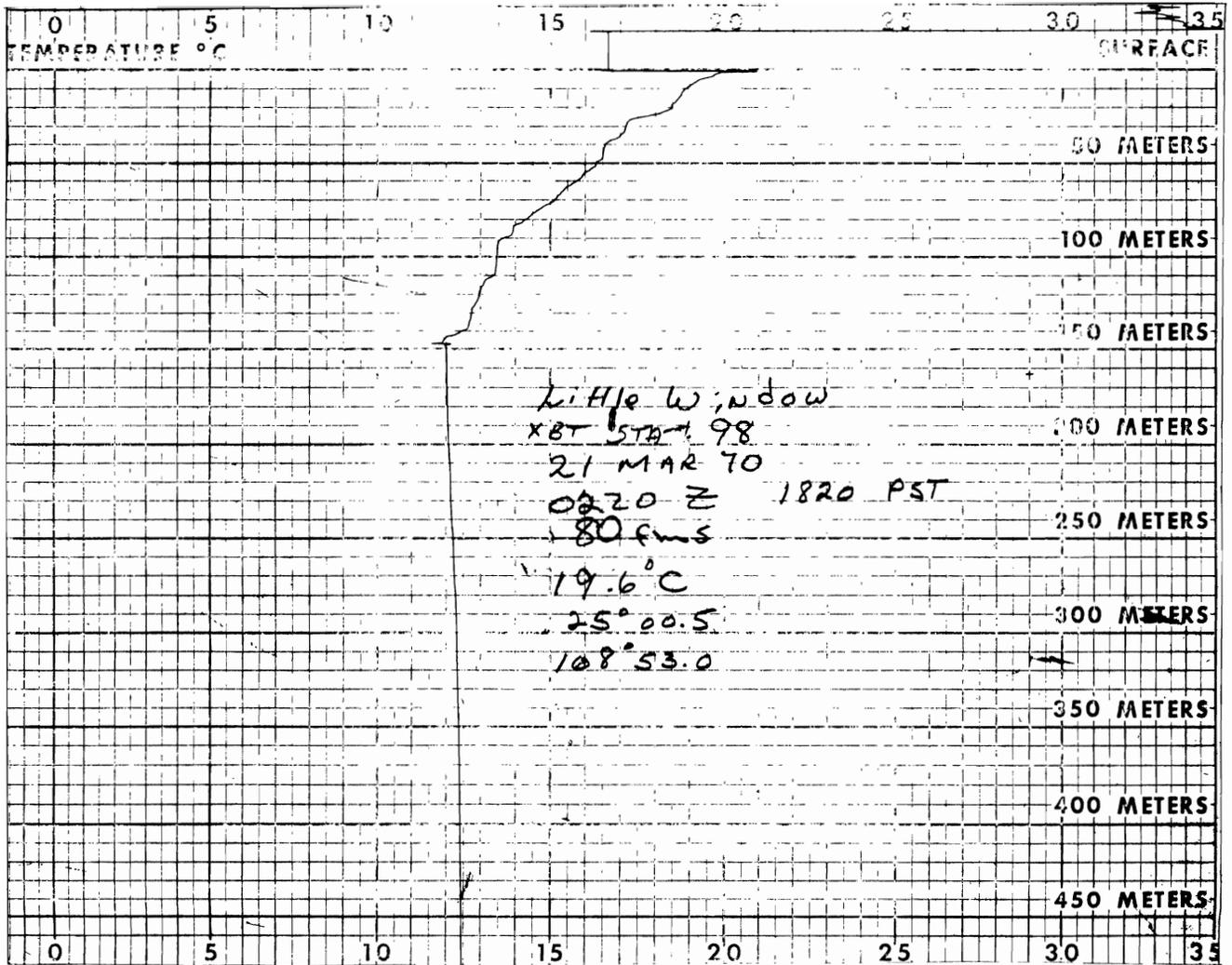


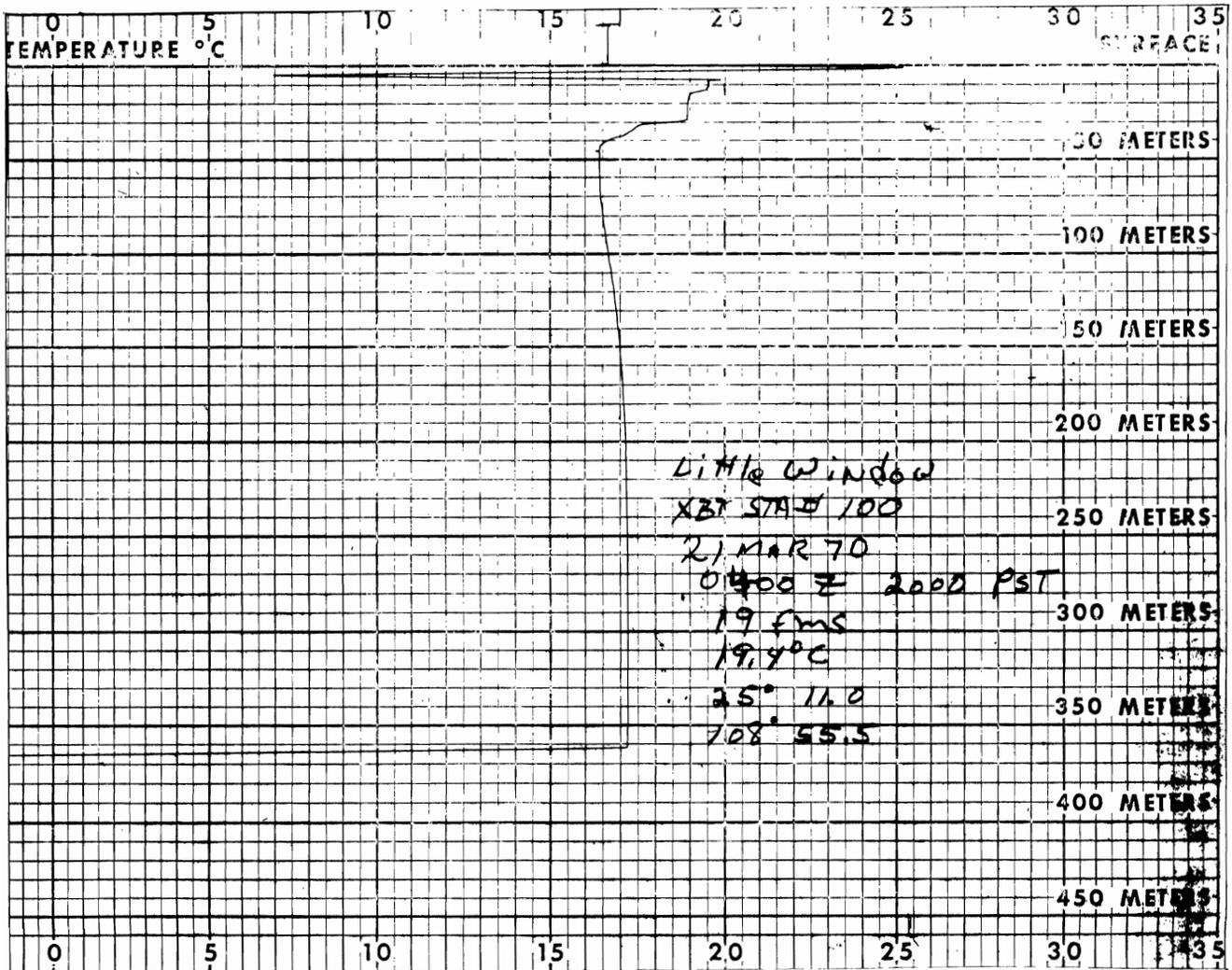


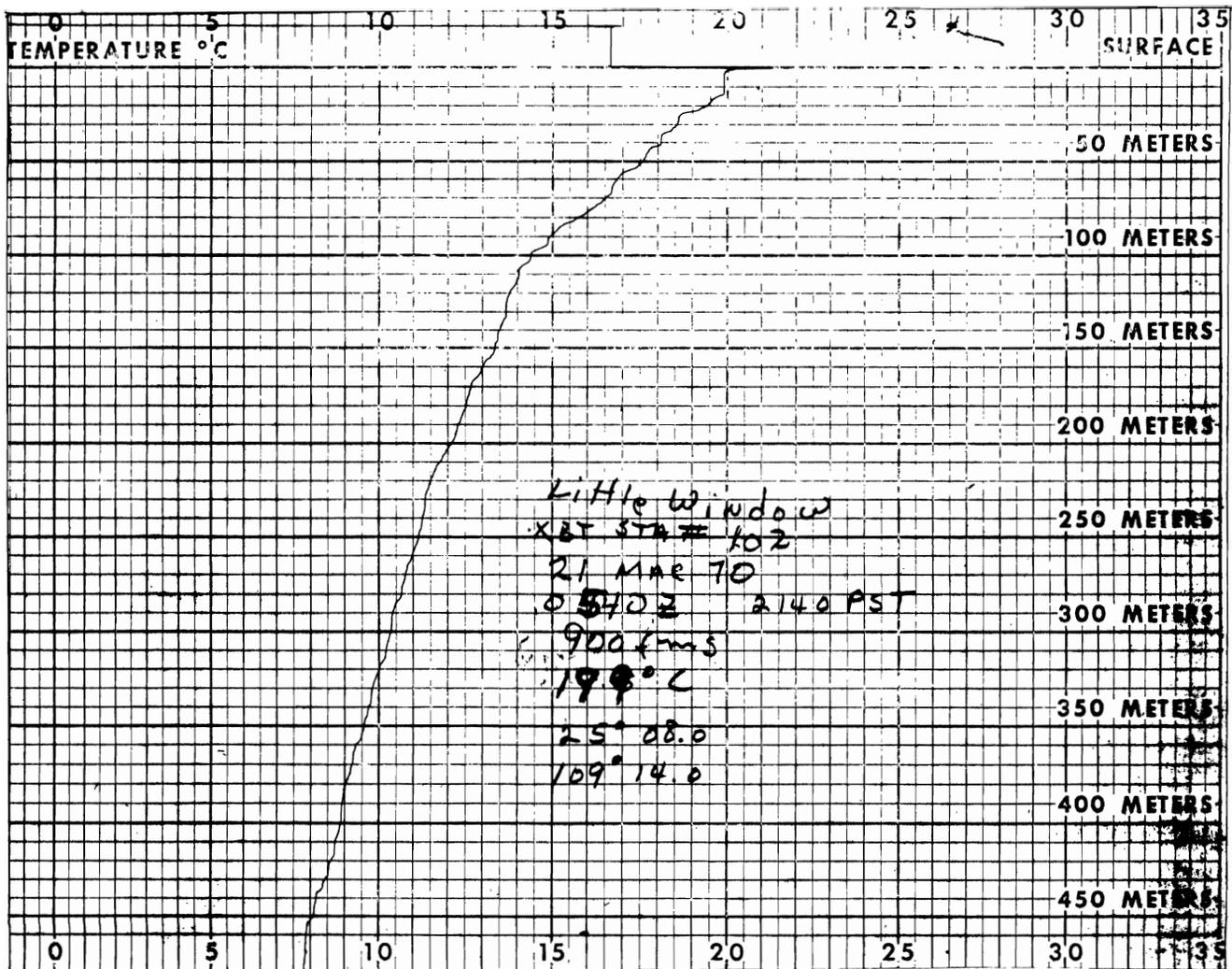


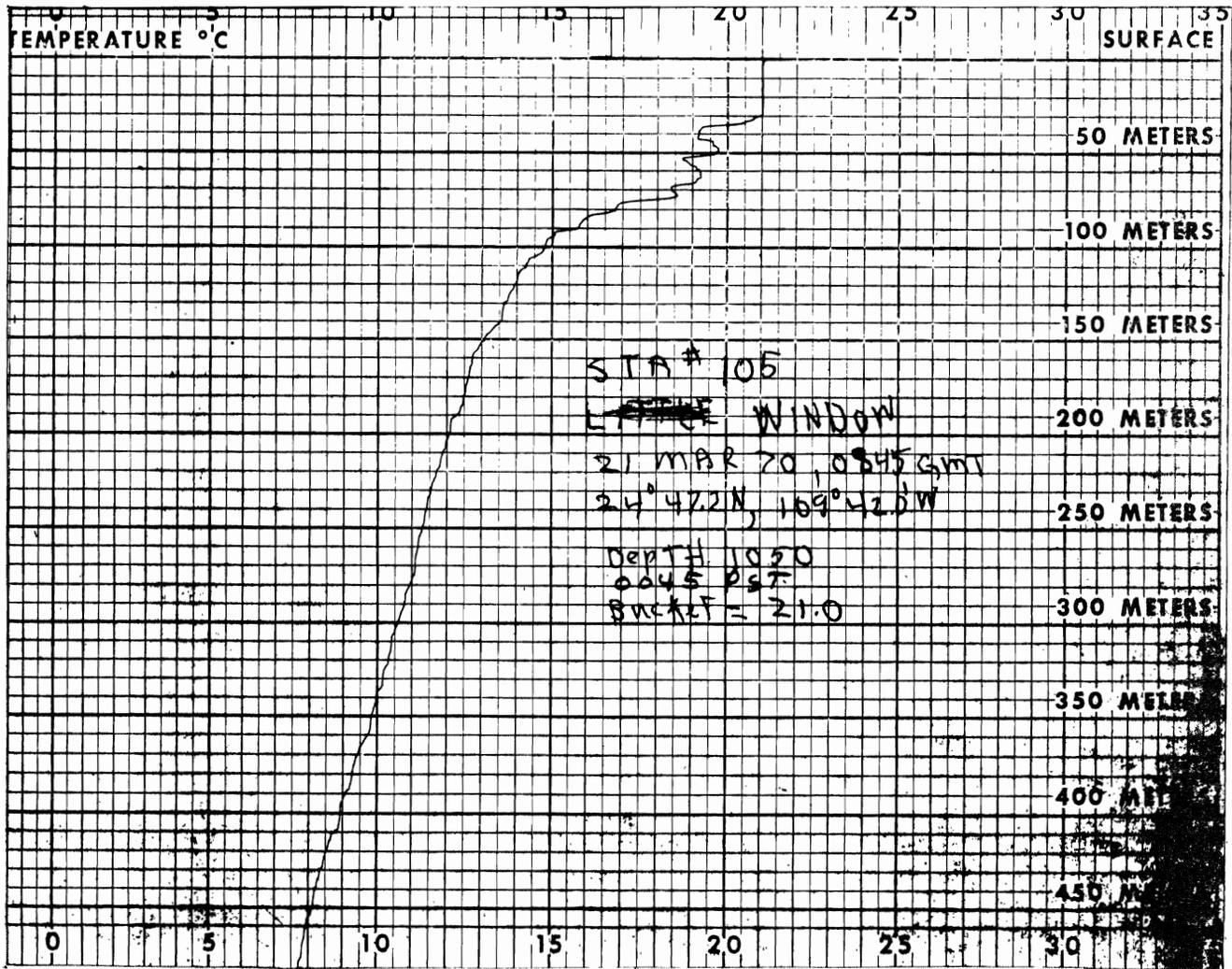


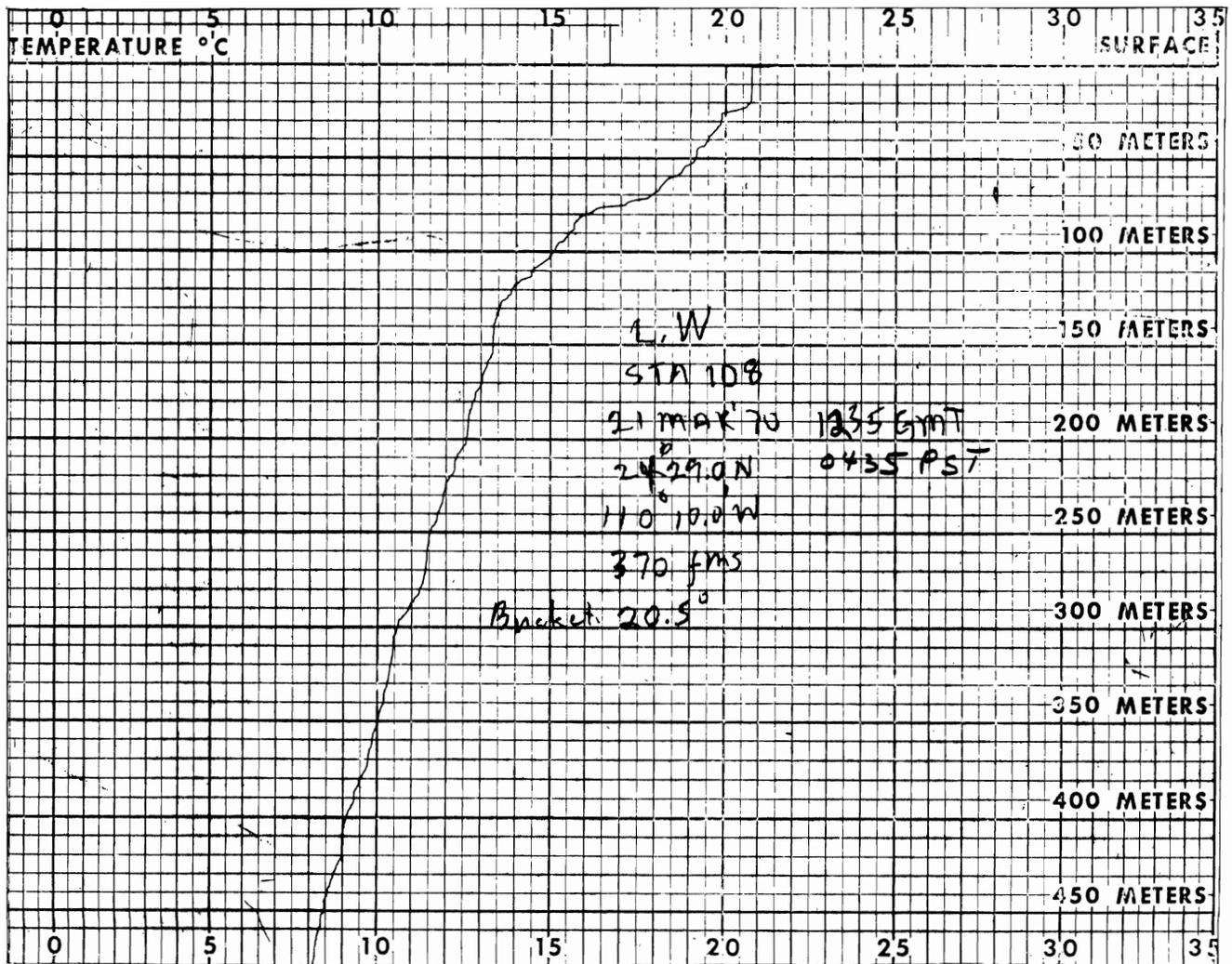


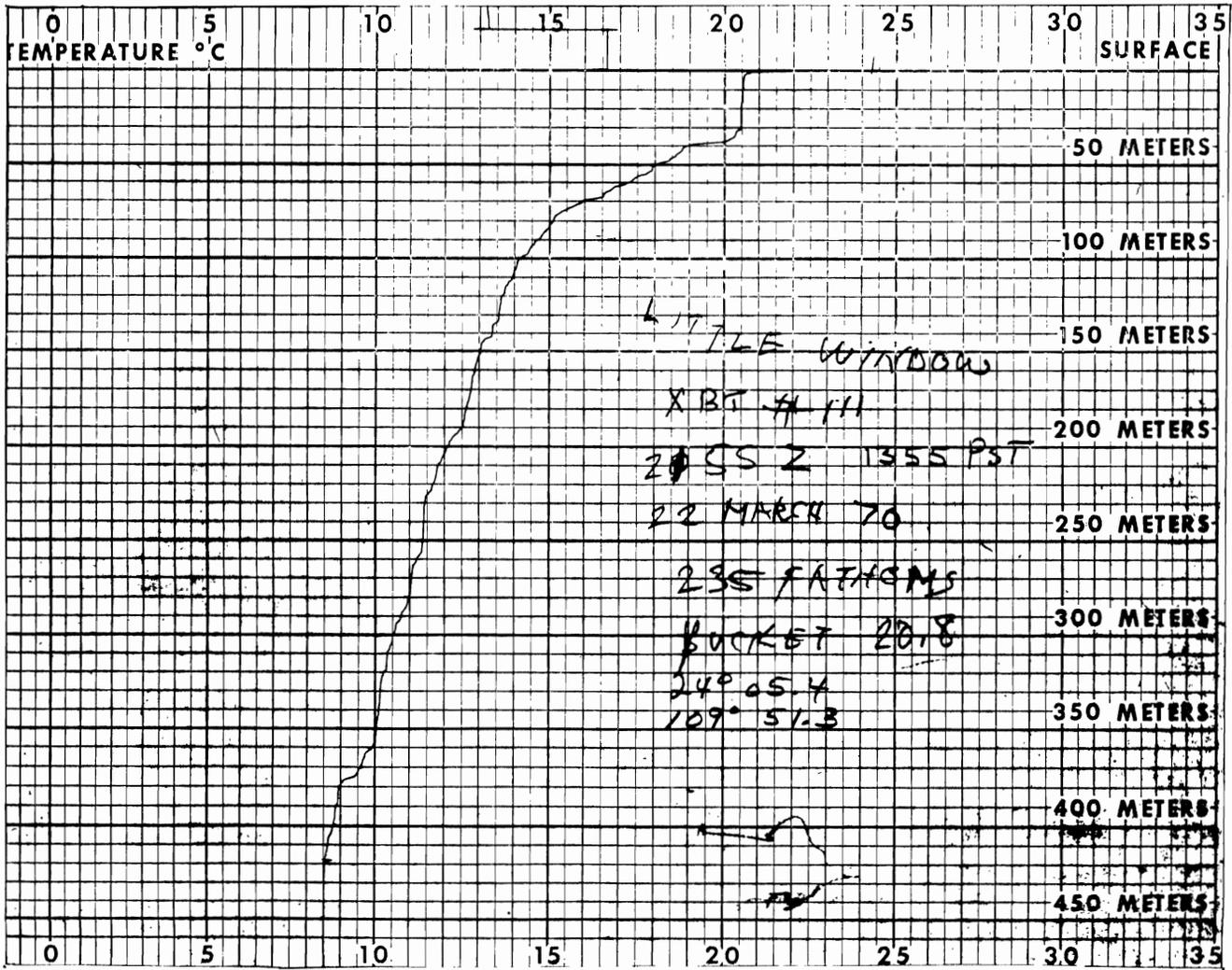


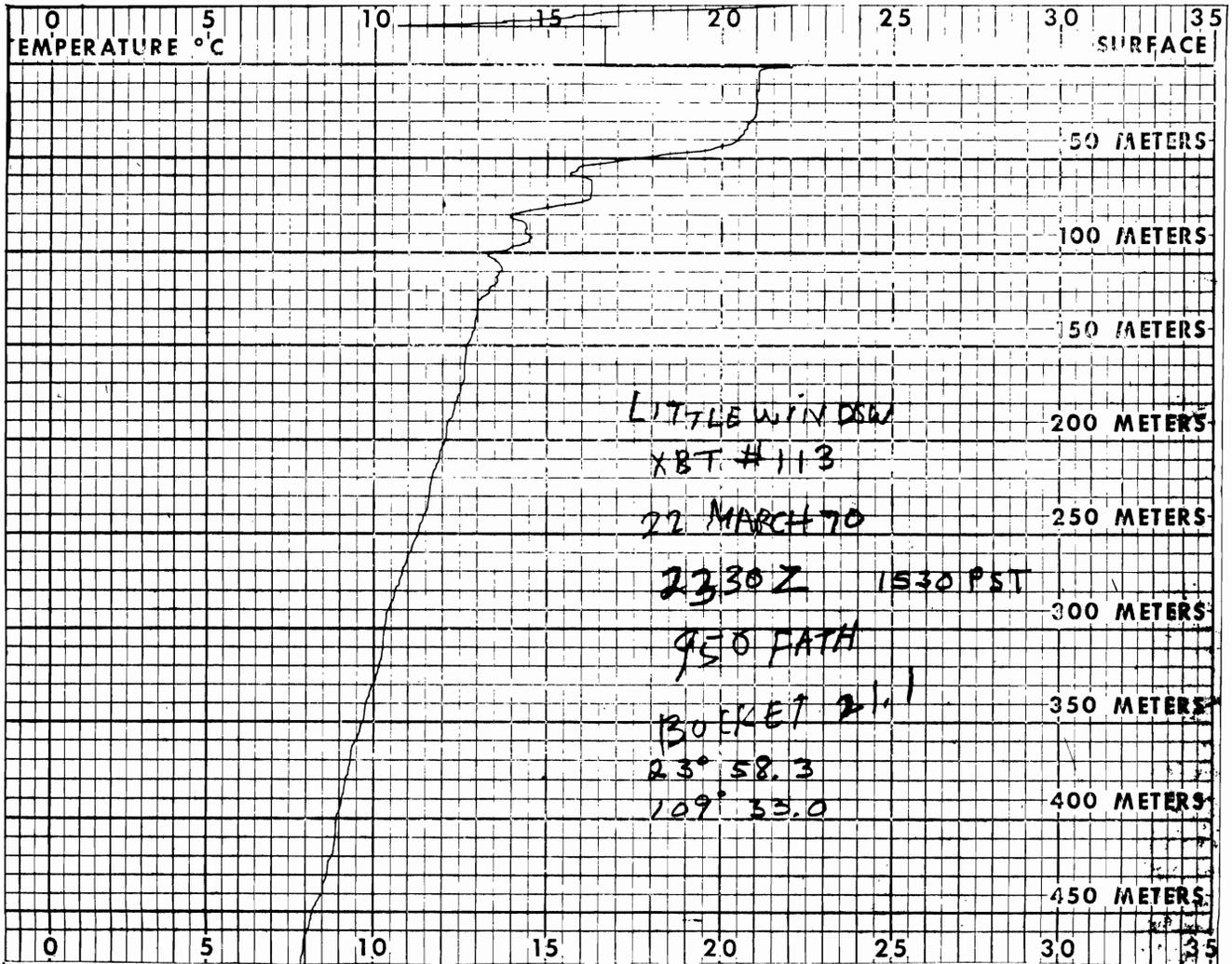


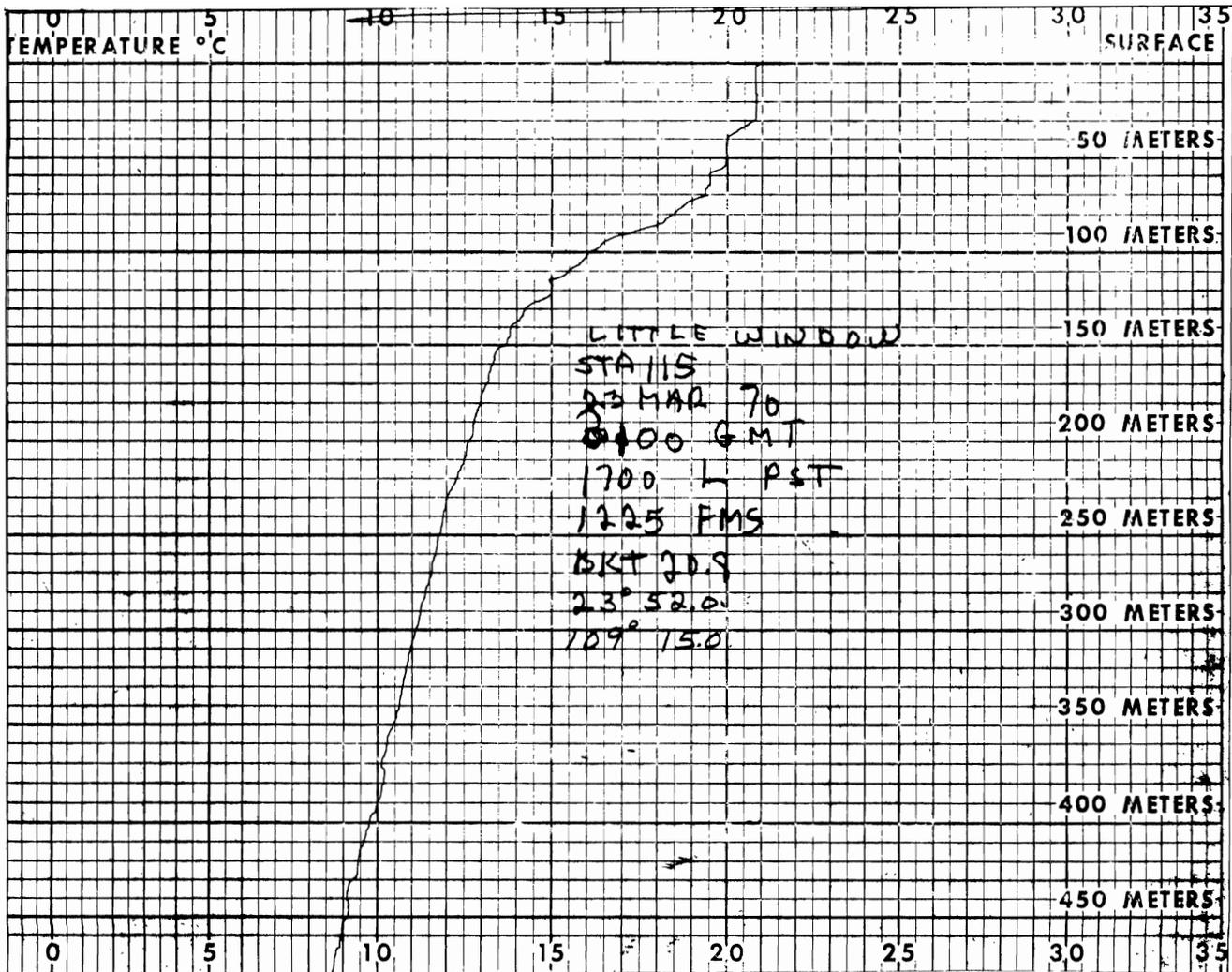


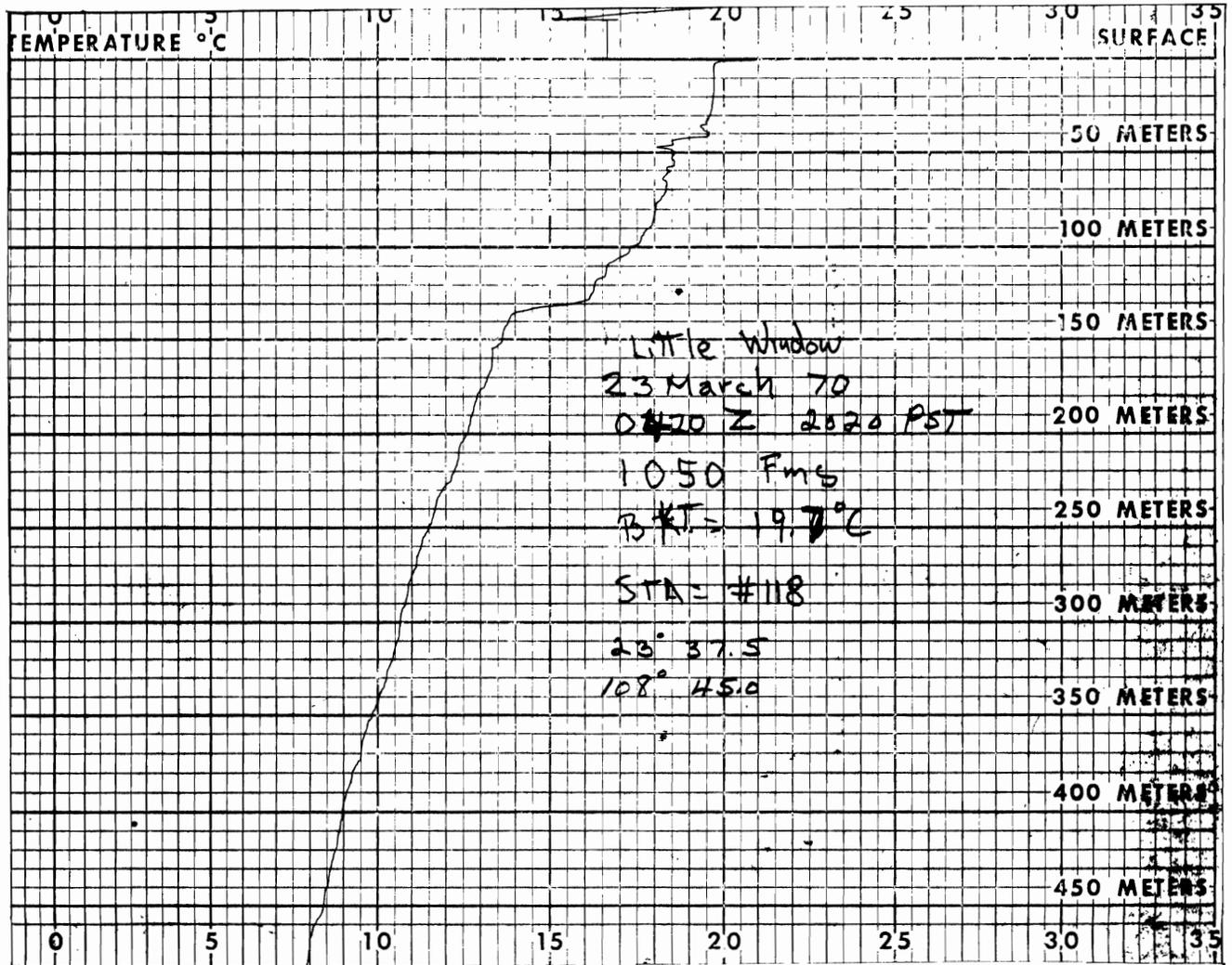


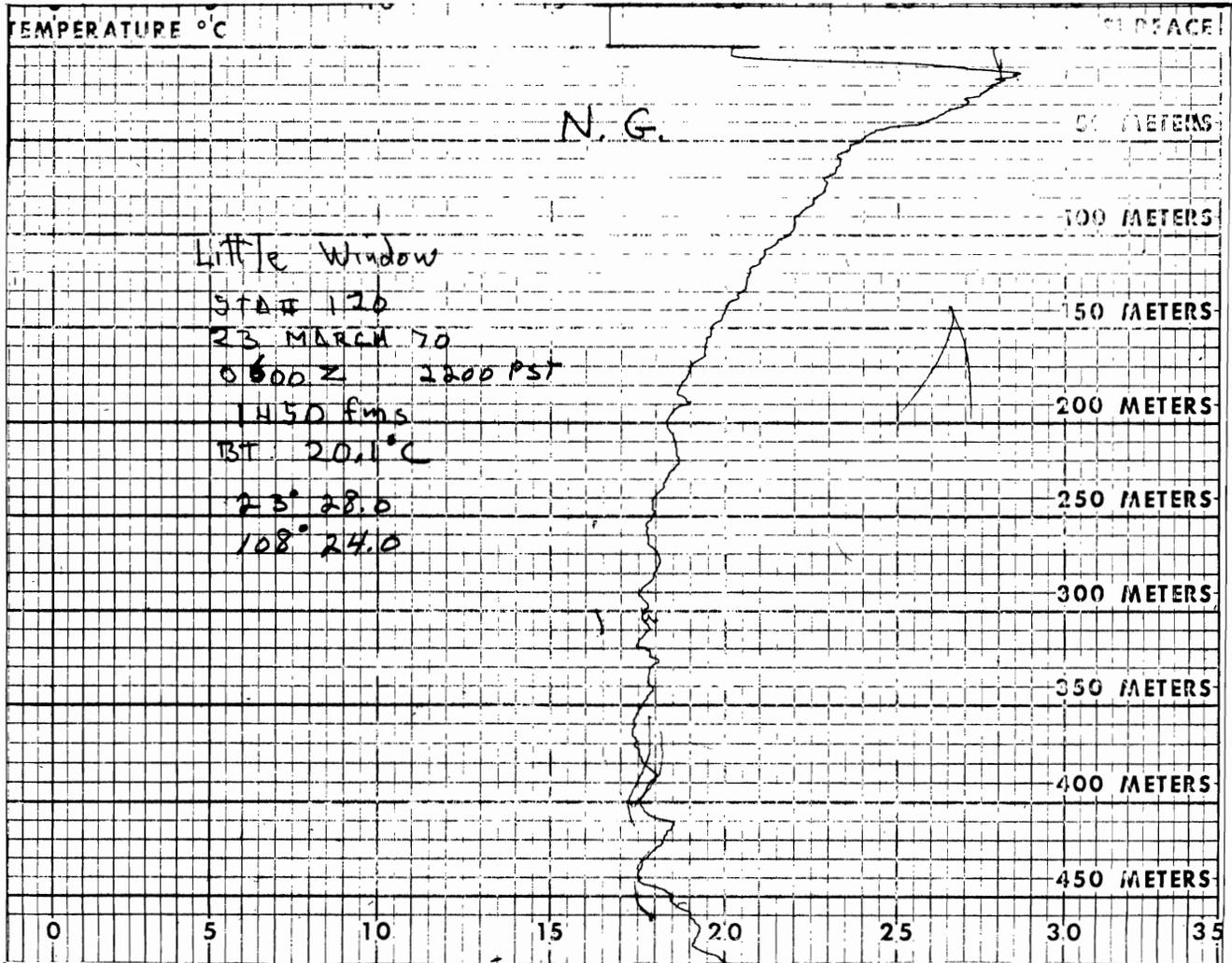


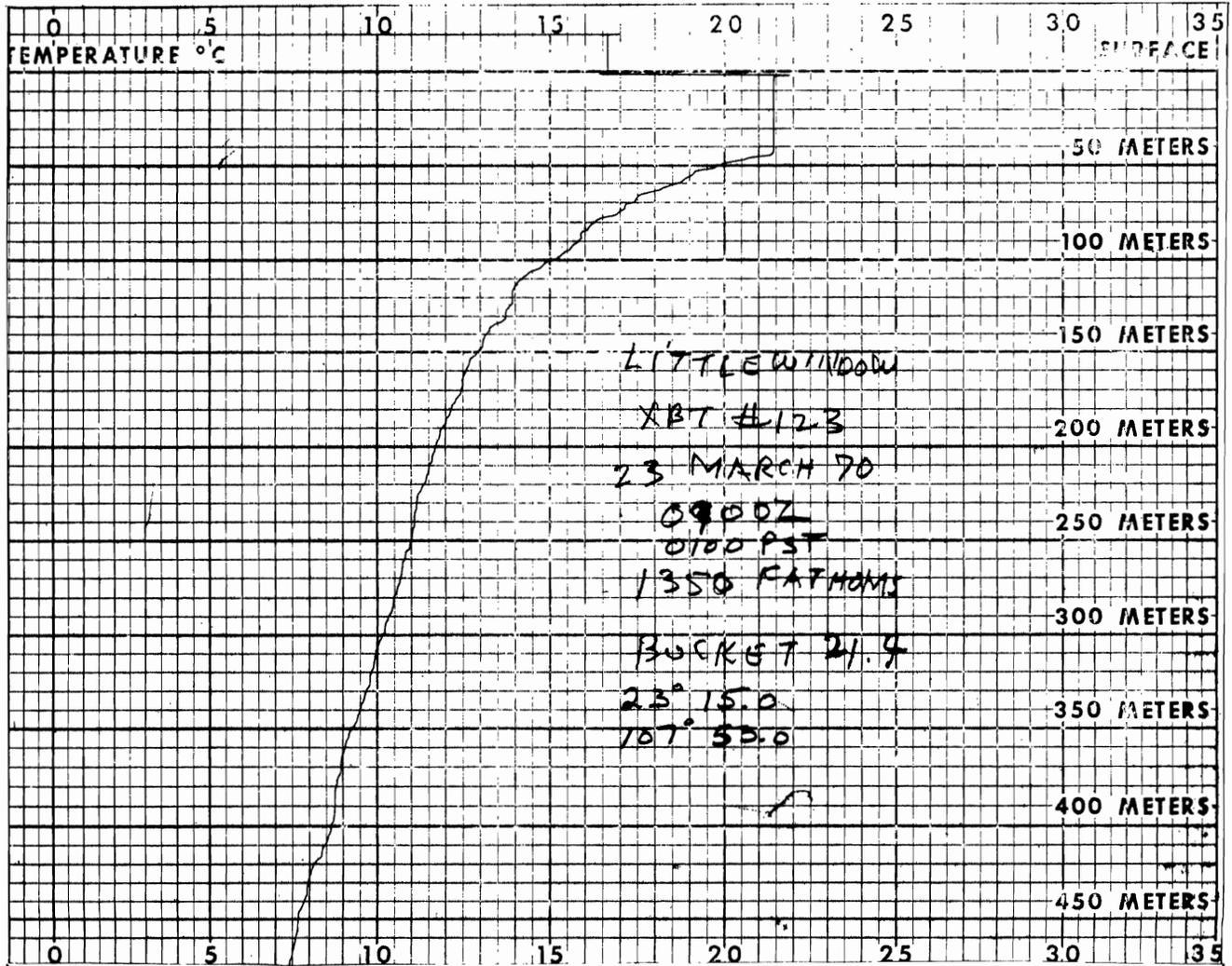


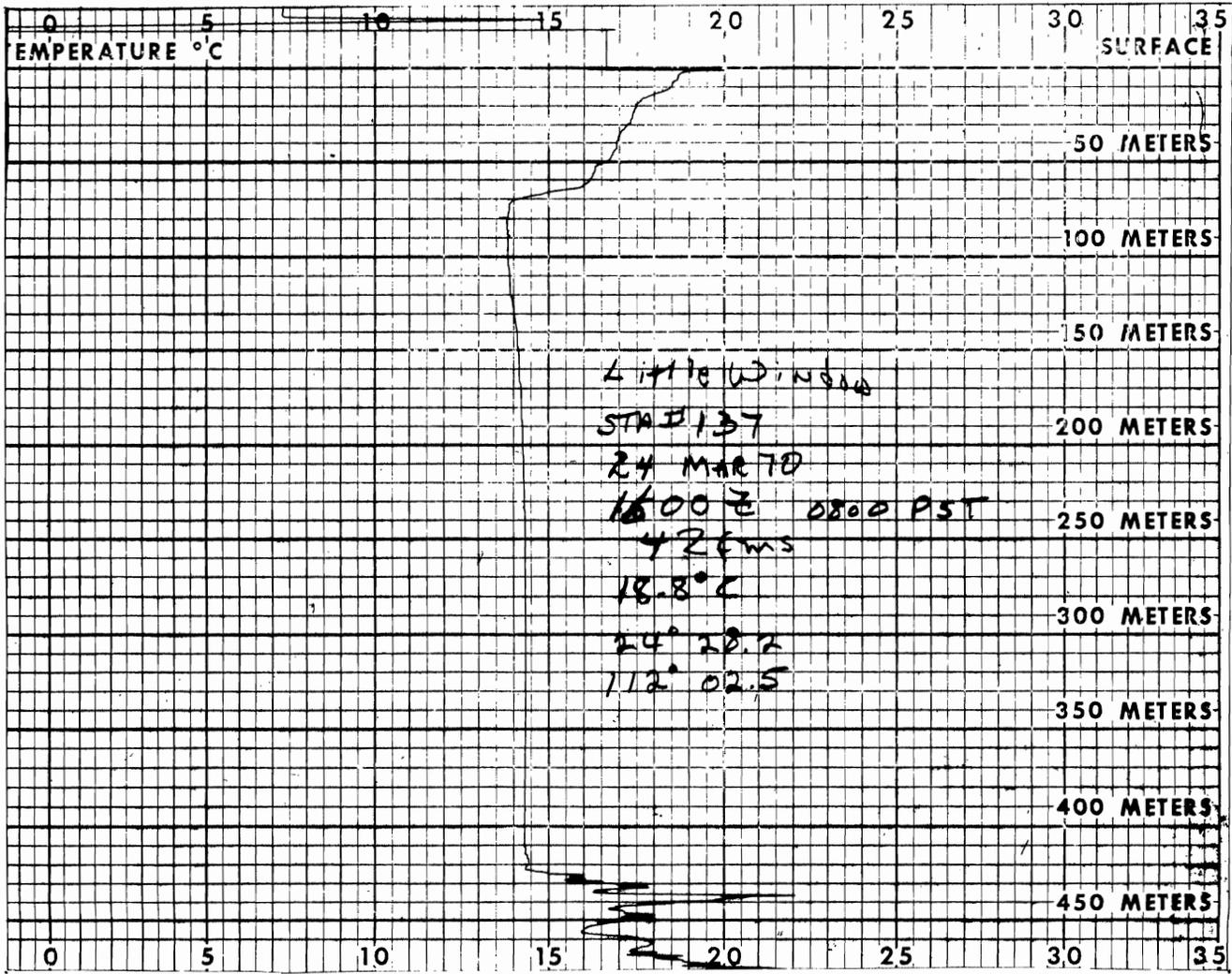


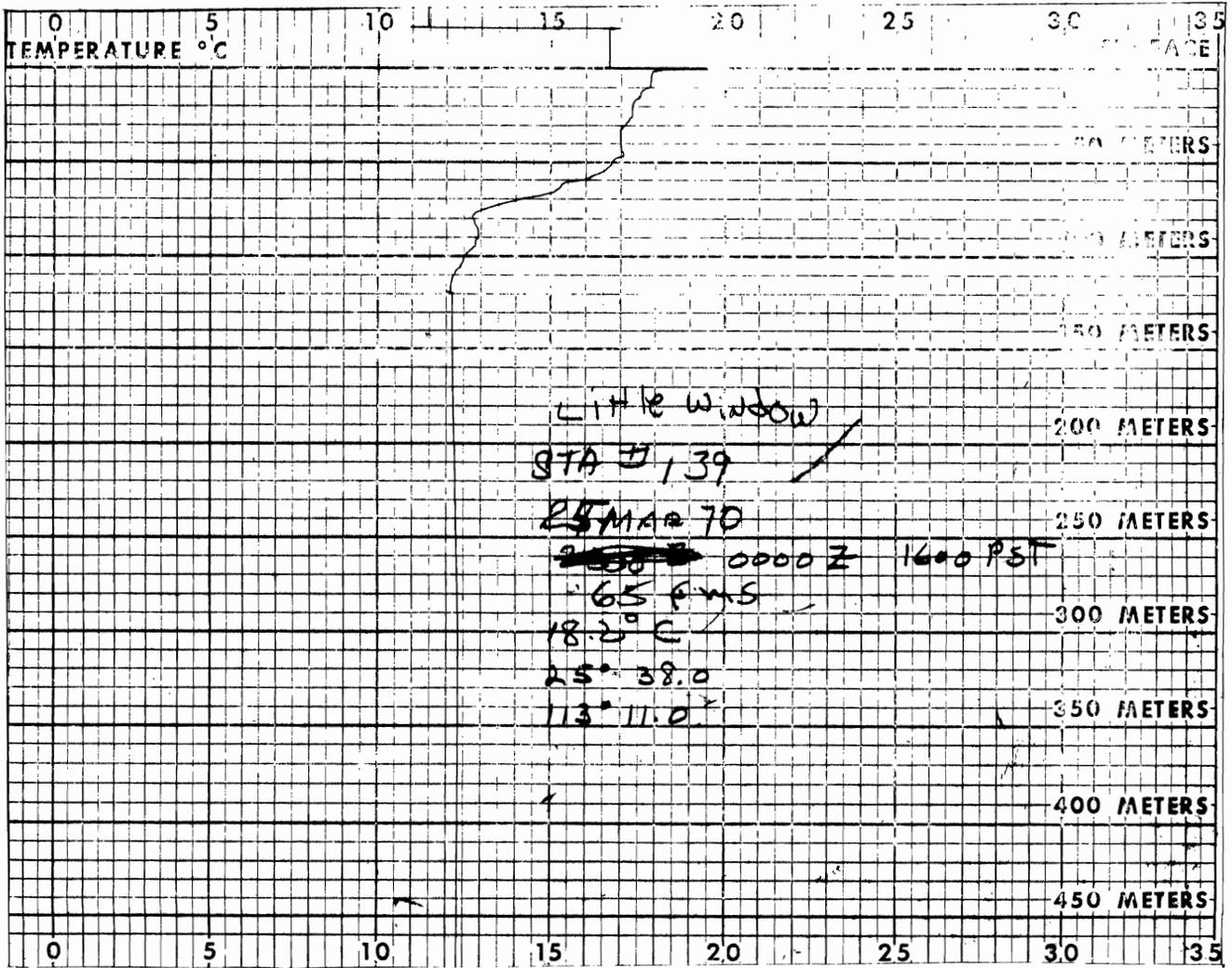


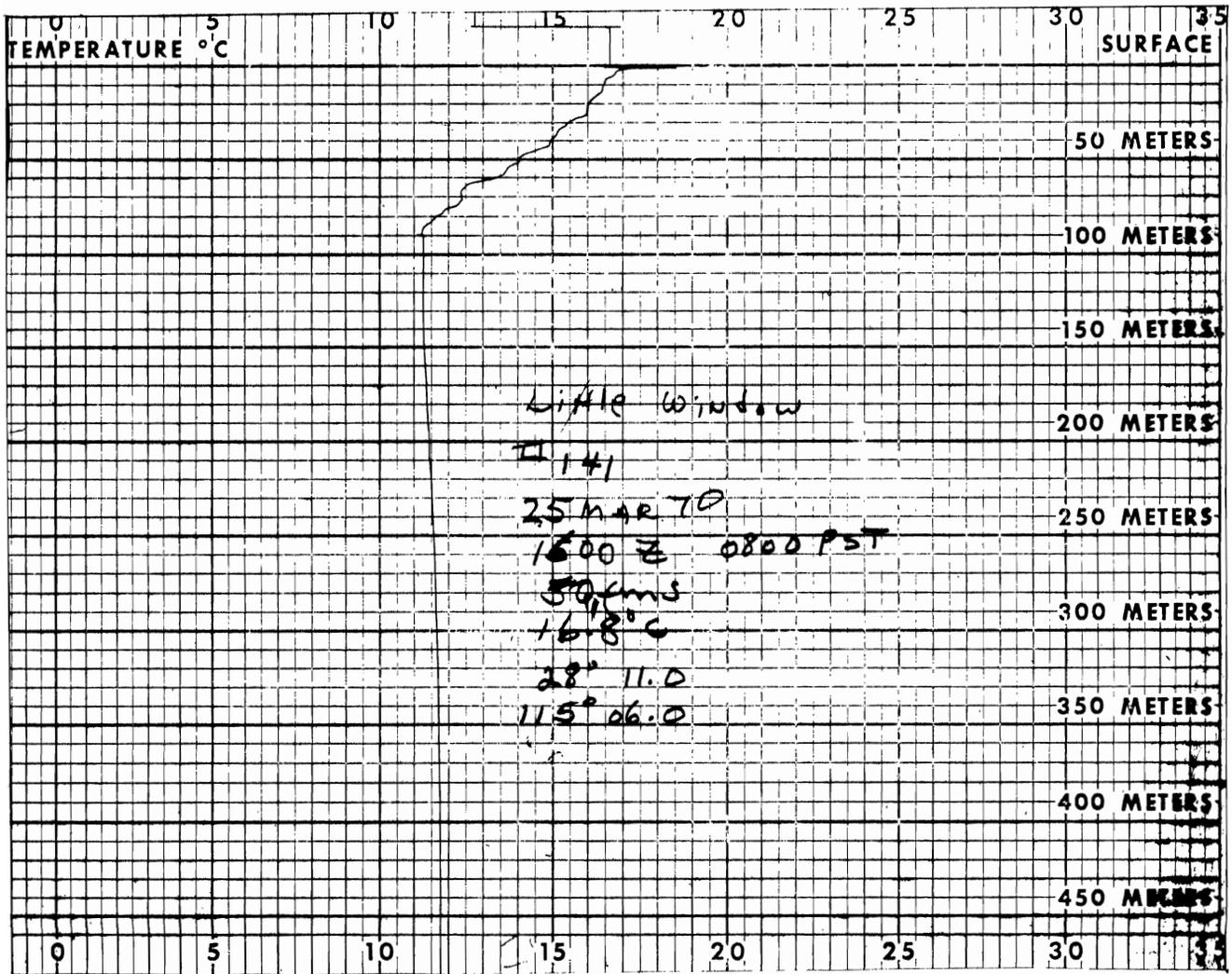












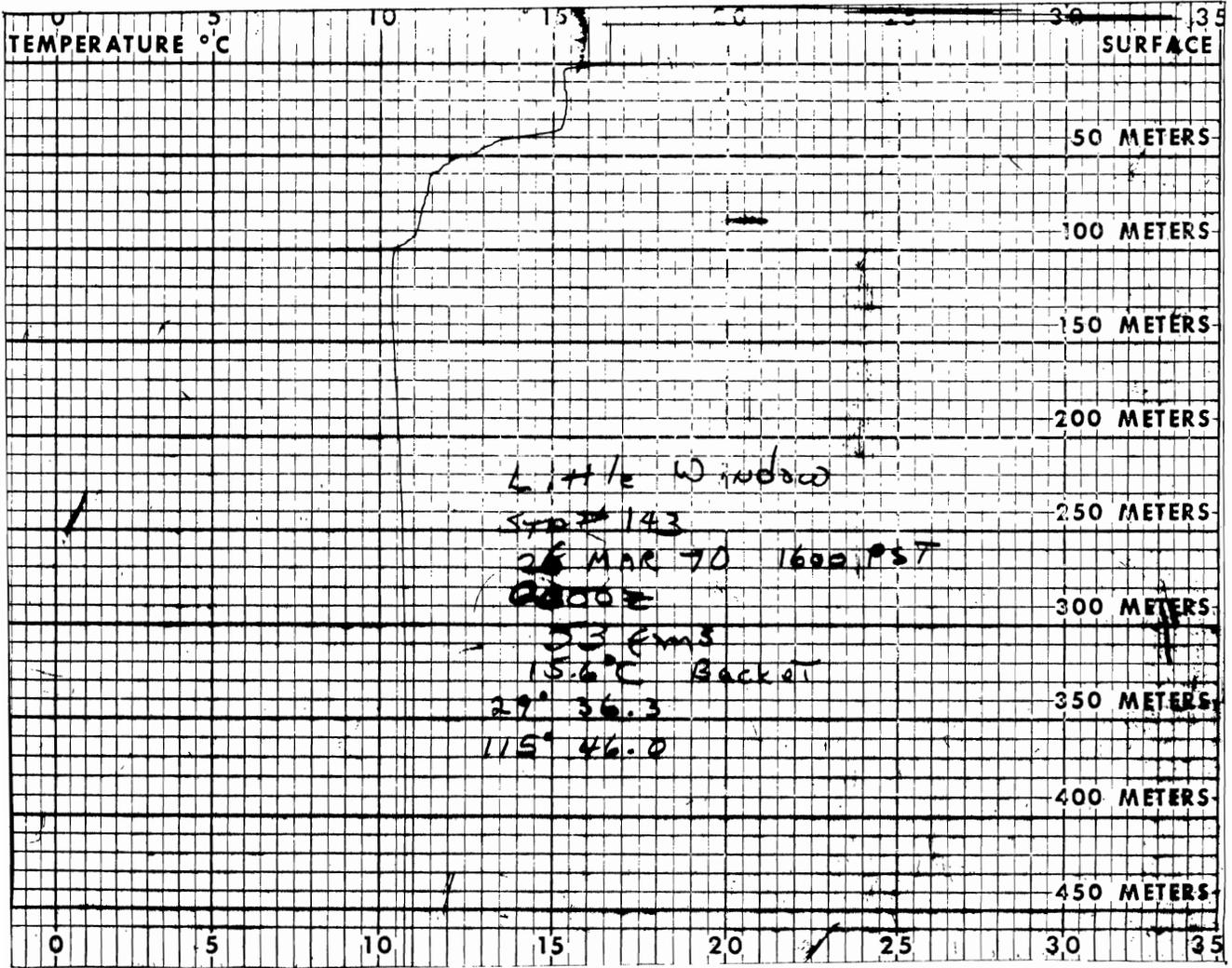


TABLE 2

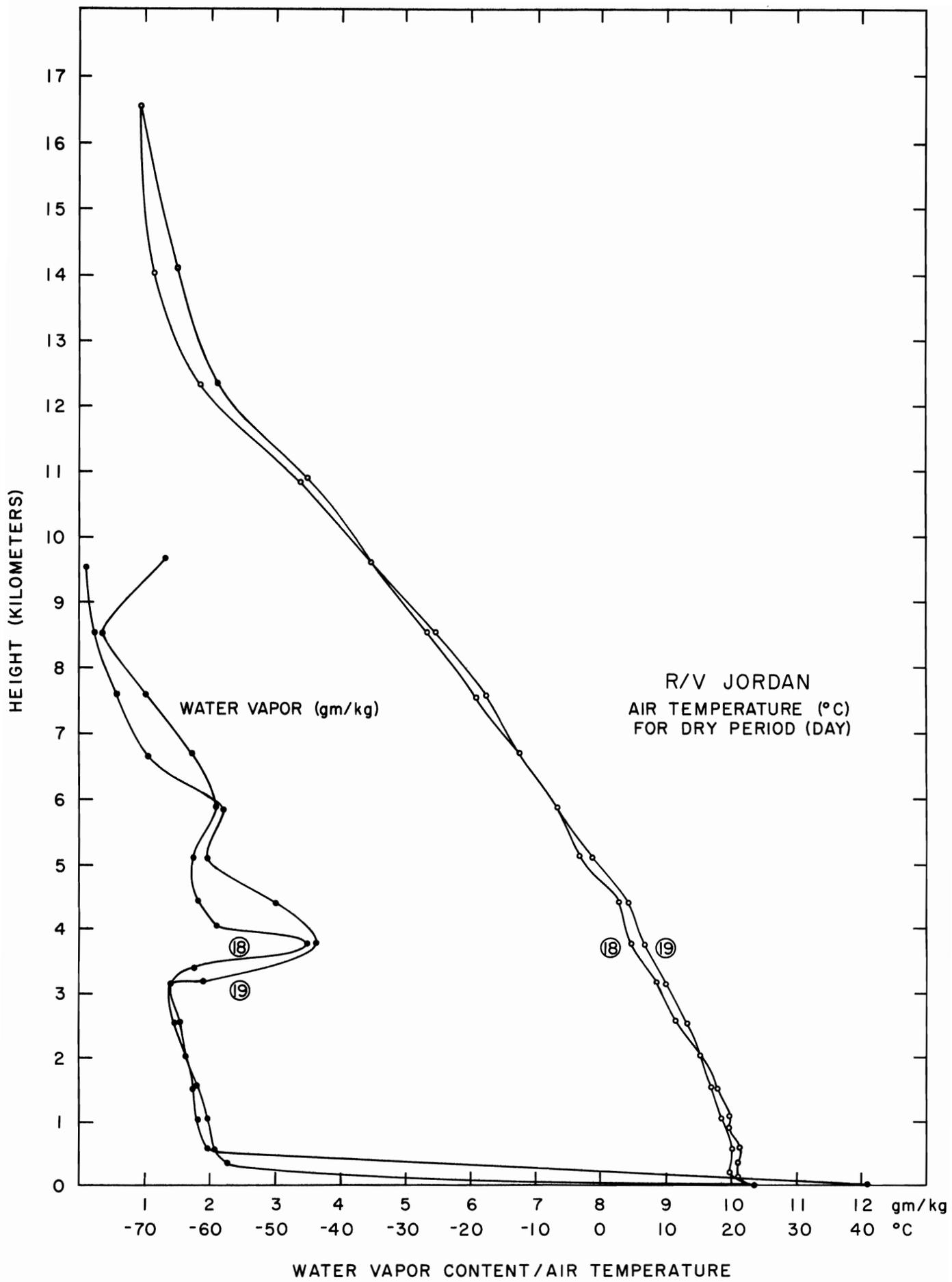
LAT	Q	LONG	DAY	GMT	TOT CLD	WIND DIR SPD	VIS	WW	W	PPP	DRY TEMP	WET TEMP	DEW TEMP	SEA TEMP	CLOUD GROUP	WIND WAVE	SWELL GROUP	REMARKS
24.7	7	110.0	18	05	6	220 08	98	02	2	1012.5	21.1	18.6	18.0	21.3	0/9/7	0000		Halo
24.9	7	109.7	18	07	7	210 08	98	02	2	1012.2	20.4	18.6	18.0	21.2	0/9/7	0000		Thin Cs Ovc
25.0	7	109.3	18	11	6	130 08	98	02	2	1012.2	20.1	19.1	19.0	20.6	0/9/7	0201		Thin Cs Lyr
24.7	7	109.8	18	13	7	220 09	98	02	2	1013.1	20.1	17.5	17.0	20.9	0/9/7	0201		Cs 35,000
24.6	7	110.1	18	16	8	140 08	98	03	2	1013.0	21.5	19.2	18.0	20.6	6/997	0201		As 12,000
24.6	7	110.1	18	19	7	140 08	98	03	2	1012.9	22.6	20.5	22.0	20.8	3/937	0201		As 12,000
24.7	7	110.1	18	23	8	140 10	98	03	2	1011.5	21.7	18.8	17.0	20.9	6/997	0201		As/Ac Ovc
24.5	7	109.8	19	02	8	160 05	98	03	2	1012.5	21.2	18.9	18.0	21.2	7/997	0201		Thick As
24.5	7	109.8	19	05	8	310 05	98	03	2	1013.5	22.5	19.2	21.0	21.0	6/997	0000		Choppy sea
24.5	7	109.8	19	07	8	310 05	98	03	2	1014.2	22.1	18.2	16.0	21.0	5/997	0000		As Bkn
24.5	7	109.8	19	11	8	285 05	98	03	2	1013.4	20.8	17.8	16.0	20.9	4/997	0000		Cs Ovc Halo
24.5	7	109.8	19	14	6	330 10	98	01	2	1015.9	20.8	18.8	18.0	21.0	5/935	0201	36503	Cs/Ac Less
24.9	7	109.6	19	19	8	300 12	97	03	2	1014.5	20.5	18.2	16.0	21.1	7/997		34503	
24.6	7	109.7	19	23	8	325 15	97	03	2	1013.7	20.1	17.9	17.0	21.1	7/997		32503	Thick As/Ac
24.6	7	109.7	20	02	8	330 12	96	50	2	1013.8	19.5	17.9	17.0	21.0	8/897			Wea Front
25.0	7	109.3	20	05	8	340 10	96	50	5	1014.5	19.8	18.5	18.0	20.1	7759/			Lgt Rain
25.3	7	109.4	20	11	8	355 10	96	50	5	1014.0	19.1	17.8	18.0	19.9	8/99/		35501	Lgt Drzl
25.0	7	109.7	20	14	8	040 08	97	01	5	1015.5	19.9	18.0	17.0	21.1	47597		02601	Sc Ovc
24.7	7	110.0	20	17	6	040 05	98	01	2	1016.0	20.8	18.0	16.0	20.8	37535		00000	Cling West
24.5	7	109.8	20	20	5	000 00	98	01	1	1016.5	21.1	18.1	16.0	21.3	17535		00000	As/Cs Ftchs 20,000

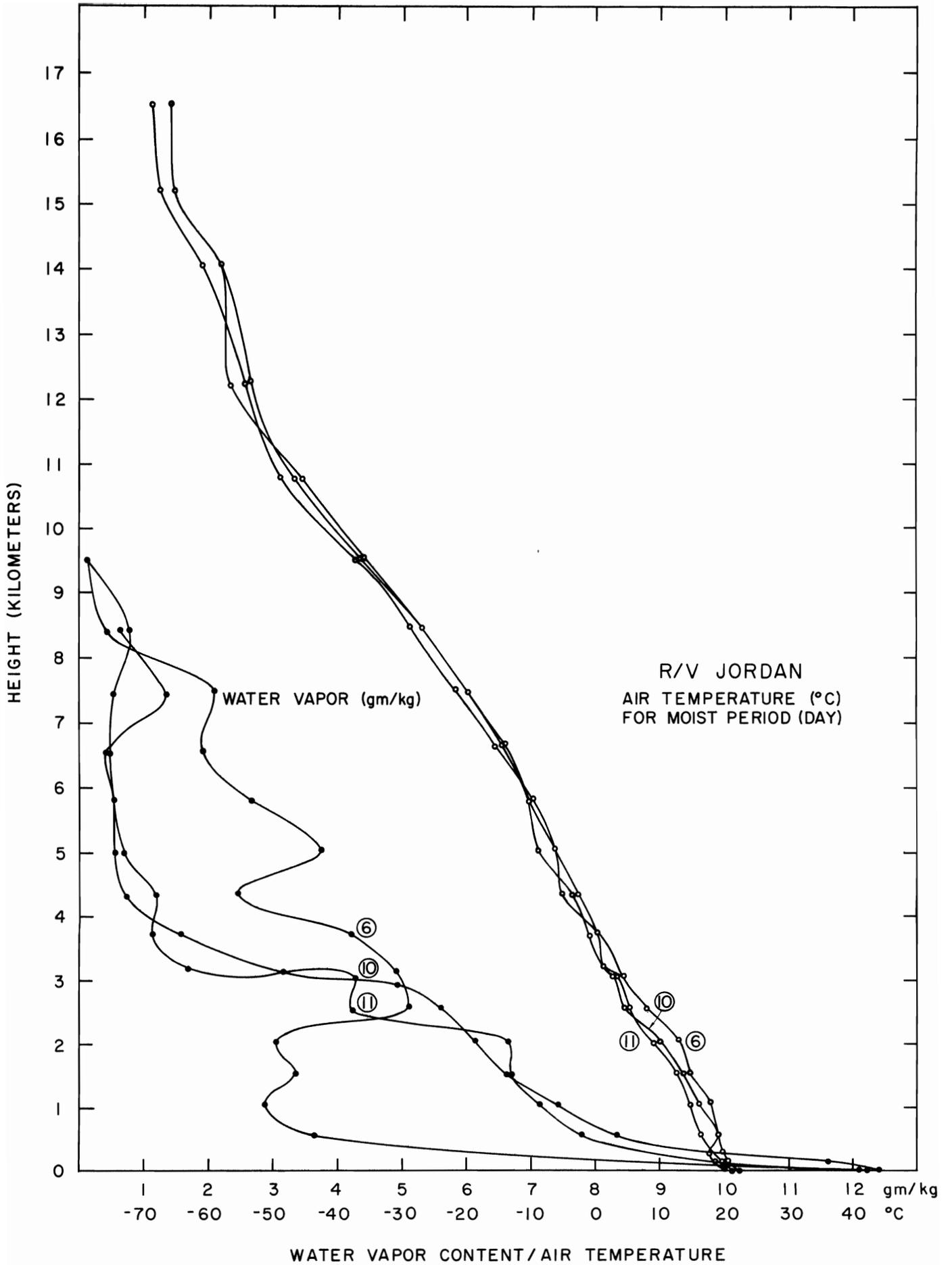
TABLE 3

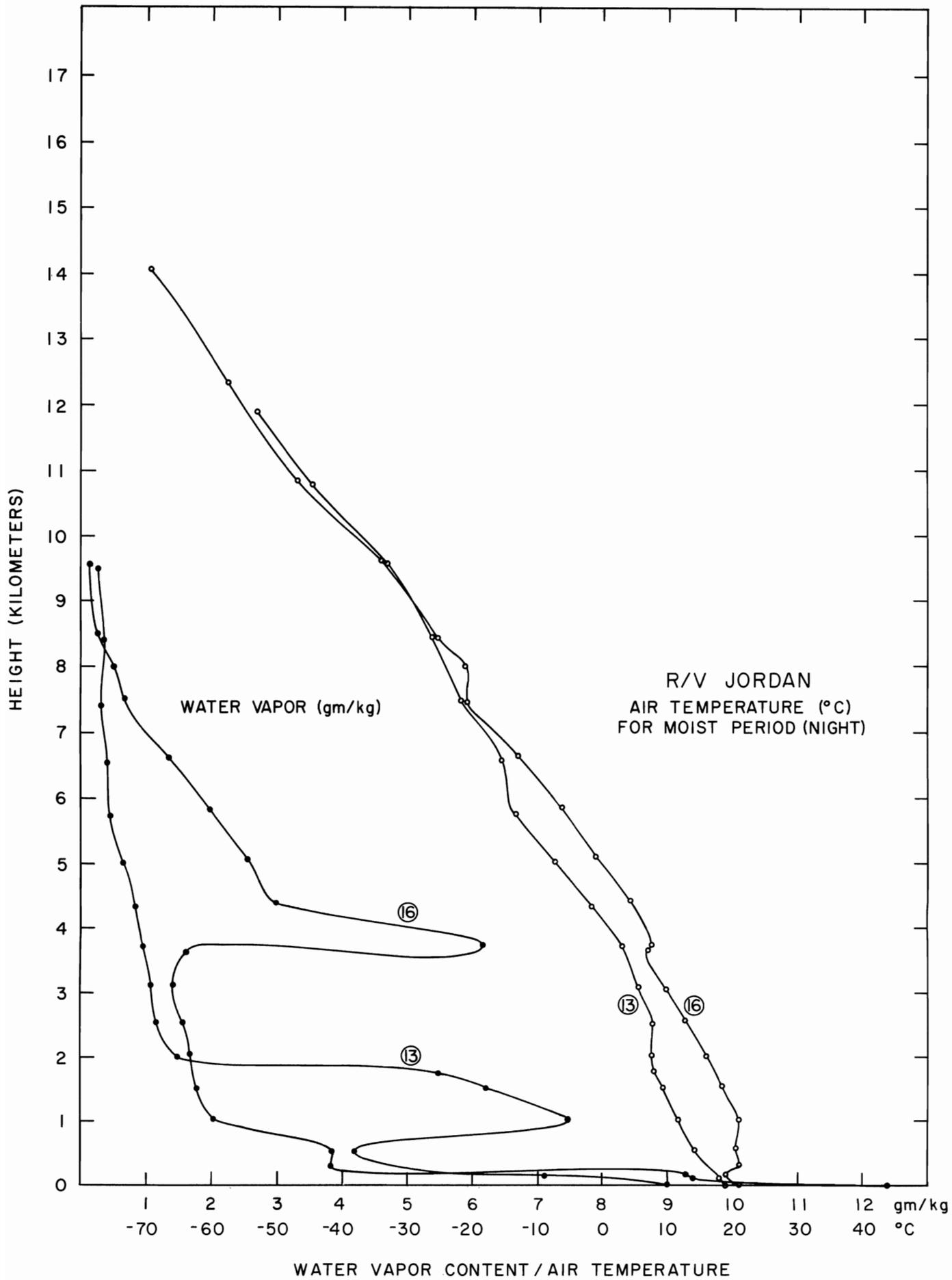
LAT	Q	LONG	DAY	GMT	TOT CLD	WIND DIR SPD	VIS	mw	W	PPP	DRY TEMP	WET TEMP	DEW TEMP	SEA TEMP	CLOUD GROUP	WIND WAVE	SWELL GROUP	REMARKS
23.6	7	107.5	17	18	6	330 06	98	05	2	1013.9	21.1	20.0	20.0	21.6	00902	0000	00000	
24.0	7	108.1	18	00	7	310 15	98	03	2	1009.5	21.2	18.8	18.0	21.3	24579	0202	00000	
24.7	7	108.7	18	06	3	310 05	98	02	0	1011.8	20.0	18.9	19.0	21.2	00902	0201	00000	
24.9	7	109.1	18	12	0	170 03	98	02	0	1012.3	19.4	18.9	19.0		00900	0000	00000	
24.9	7	109.0	19	00	8	210 04	98	14	2	1011.3	21.2	19.4	18.0	20.6	43469	0000	00000	
24.9	7	108.9	19	18	7	340 09	98	02	2	1015.3	21.7	18.9	17.0	20.2	70/7/	0101	00000	
24.8	7	109.2	20	06	8	340 18	98	80	8	1014.3	19.5	18.6	18.0	20.3	883//	0303	00000	
24.4	7	110.3	22	06	7	330 13	98	03	2	1014.0	20.0	15.0	12.0		00902	0101	04501	
24.5	7	109.9	22	12	0	330 15	98	02	0	1012.9	19.4	16.2	14.0		00900	0101	33403	
24.7	7	109.5	22	18	6	320 18	98	02	2	1013.9	20.0	16.7	15.0		00902	0101	34503	
25.0	7	108.8	23	06	7	310 10	98	03	2	1012.4	18.9	17.8	18.0	17.7	70230	0101	33502	
24.8	7	109.3	23	12	8	310 10	98	02	2	1012.1	20.6	17.7	16.0		55367	0101	34402	
24.5	7	109.7	24	06	2	310 07	98	01	0	1013.9	20.0	18.9	19.0	20.2	16220	0000	32301	

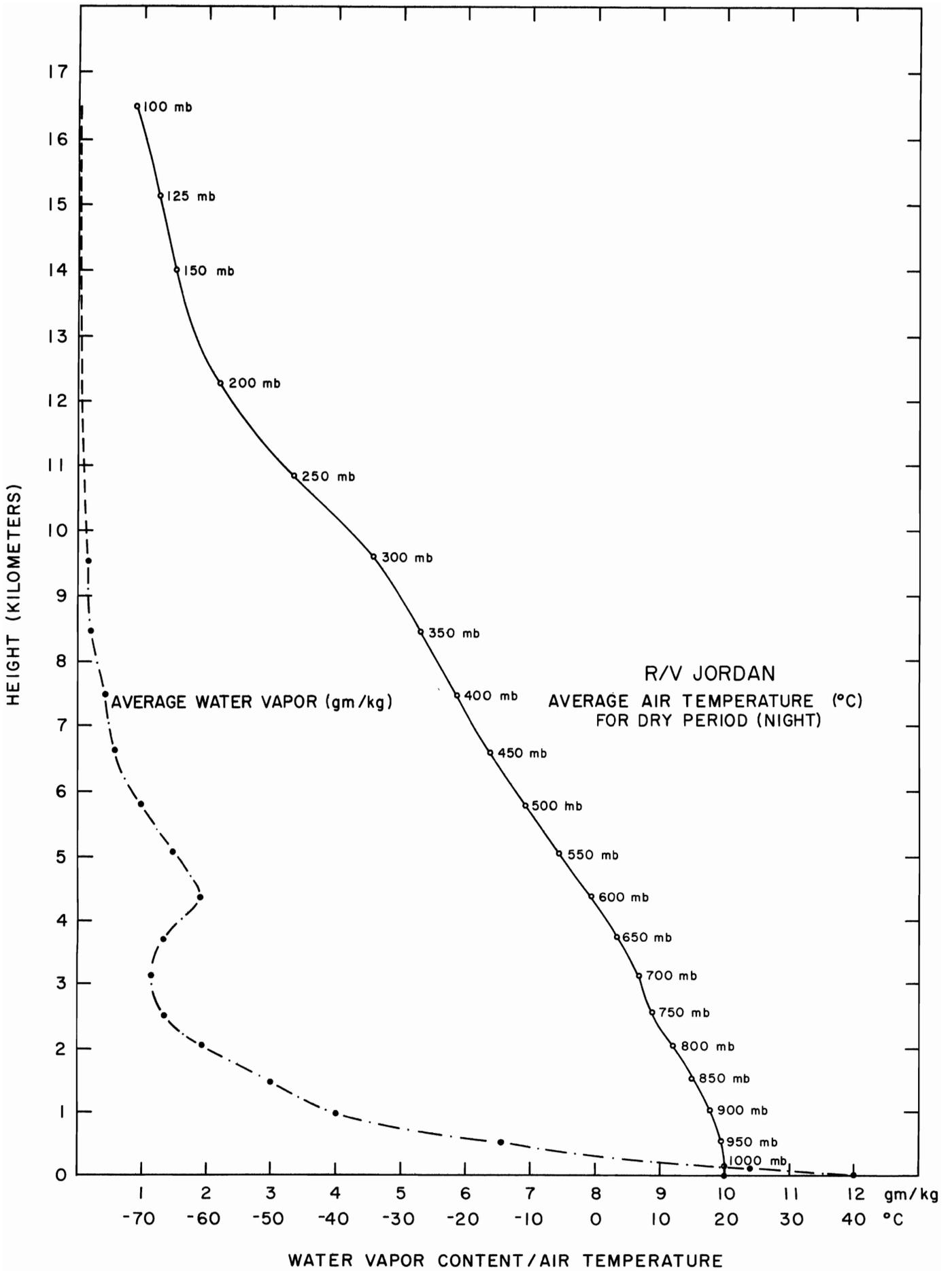
LAT	Q	LONG	DAY	GMT	TOT CLD	WIND DIR SPD	VIS	WV	W	PPF	DRY TEMP	WET TEMP	DEW TEMP	SEA TEMP	CLOUD GROUP	WIND WAVE	SWELL GROUP	REMARKS
25.3	7	108.9	18	10	7	315 02	97	02	2	1016	20.0	18.9	18.0	18.2	7/9/2		32///	
25.3	7	108.9	18	10	7	315 02	97	02	2	1016	20.0	18.9	18.0	18.2	7/9/2		32///	
25.3	7	108.9	18	11	7	315 02	97	02	2	1016	20.0	18.9	18.0	18.2	7/9/2		32///	
25.4	7	109.1	18	12	5	315 02	97	02	2	1016	20.6	18.9	18.0		5/9/2		14///	
25.4	7	109.2	18	13	4	315 02	97	02	2	1016	20.6	18.9	18.0		4/9/2		14///	
25.5	7	109.2	18	13	4	136 02	97	02	2	1016	20.6	18.9	18.0		4/9/2		14///	
25.3	7	109.3	18	14	8	135 02	97	02	2	1016	20.6	18.9	18.0		8/9/2		14///	
25.3	7	109.4	18	15	6	135 02	97	02	2	1016	20.6	18.9	18.0		6/9/2		14///	
25.2	7	109.5	18	16	6	225 02	97	02	2	1016	21.1	18.9	18.0		6/9/2		23///	
25.0	7	109.6	18	17	6	225 02	97	02	2	1016	21.7	18.9	18.0		6/9/2		23///	
24.9	7	109.8	18	18	6	180 02	97	02	2	1016	22.8	18.9	17.0		6/9/2		18///	
24.8	7	109.9	18	19	7	180 02	97	02	2	1016	23.3	18.9	17.0		7/9/2		18///	
24.8	7	109.9	18	20	8	180 02	97	02	2	1016	22.2	20.0	19.0		8/9/2		18///	
24.7	7	110.0	18	21	8	180 02	97	02	2	1016	22.2	20.0	19.0		8/9/2		18///	

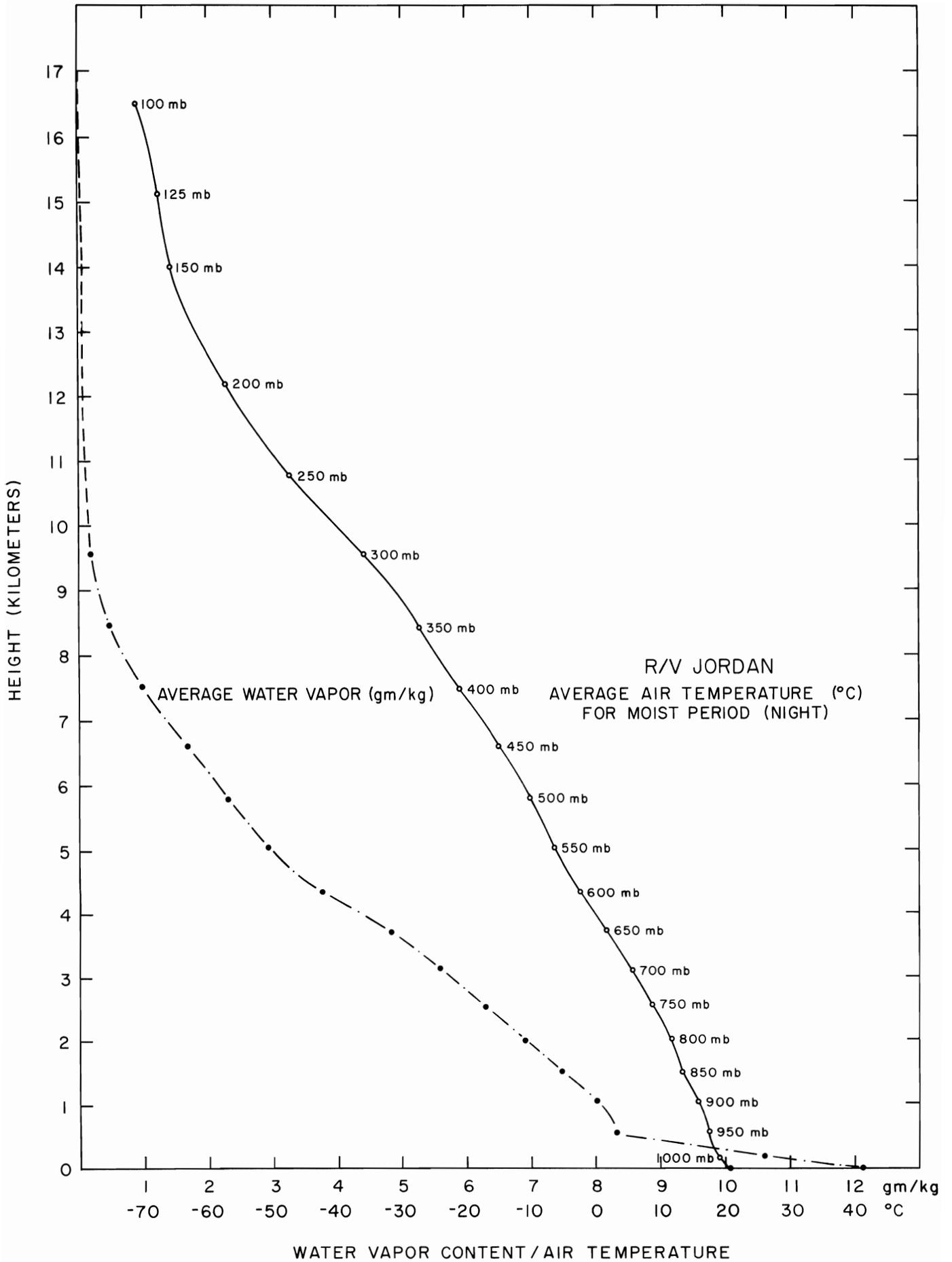
LAT	Q	LONG	DAY	GMT	TOT CLD	WIND DIR SPD	VIS	WV	W	PPP	DRY TEMP	WET TEMP	DEW TEMP	SEA TEMP	CLOUD GROUP	WIND WAVE	SWELL GROUP	REMARKS
24.6	7	109.3	19	07	8	360 06	97	01	2	1016	22.8	20.6	20.0	21.5	8/9/3		36///	
24.6	7	109.3	19	08	8	360 06	97	02	2	1016	22.8	20.6	20.0	21.5	8/9/3		36///	
24.6	7	109.3	19	08	8	320 06	97	02	2	1016	22.8	20.6	20.0	21.5	8/9/3		36///	
24.7	7	109.2	19	09	8	320 06	97	02	2	1014	22.2	20.0	19.0	21.4	8/9/3		36///	
24.8	7	109.1	19	10	8	320 06	97	02	2	1013	22.2	20.0	19.0	21.4	8/9/3		36///	
24.9	7	109.0	19	11	8	320 06	97	02	2	1013	22.2	20.0	19.0	21.3	8/9/3		36///	
24.9	7	109.0	19	11	8	320 06	97	02	2	1013	22.2	20.0	19.0	21.0	8/9/3		36///	
24.9	7	109.0	19	12	8	320 06	97	02	2	1014	21.1	20.0	20.0	21.0	8/9/3		36///	
25.0	7	108.9	19	13	8	360 02	97	02	2	1014	21.1	20.0	20.0	20.7	8/9/3		36///	
25.1	7	108.8	19	14	8	360 02	97	02	2	1016	21.1	20.0	20.0	20.7	8/9/3		36///	
25.2	7	108.7	19	14	8	310 02	97	02	2	1016	21.1	20.0	20.0	20.8	8/9/3		31///	
25.2	7	108.7	19	15	8	310 02	97	02	2	1016	21.1	20.0	20.0	20.7	8/9/3		31///	
25.2	7	108.9	19	16	8	310 02	97	02	2	1016	21.1	19.4	19.0	20.9	8/9/3		31///	
25.3	7	109.1	19	17	8	310 02	97	02	2	1016	21.1	20.0	20.0	21.2	8/9/3		31///	
25.2	7	109.1	19	18	8	310 02	97	02	2	1016	21.1	20.0	20.0	21.2	8/9/3		31///	
25.1	7	109.2	19	19	8	310 10	97	02	2	1016	21.1	20.0	20.0	21.3	8/9/3		31///	
25.0	7	109.3	19	20	8	310 10	97	03	2	1016	20.6	19.4	19.0	21.1	8/9/3		31///	
24.9	7	109.4	19	21	8	310 10	97	03	2	1016	20.6	19.4	19.0	21.1	8/9/3		31///	
24.9	7	109.4	19	21	8	310 15	97	03	2	1016	20.0	19.4	19.0	21.1	8/9/3		31///	











JORDAN 25°01N 109°20'W 1101 GMT March 18, 1970

Pressure Level Mb	Altitude Meters	Temperature °C	Dew Point Temperature °C	Relative Humidity %	Vapor Pressure Mb	Mixing Ratio gm/kg
1012	0	20.1	17.2	83	23.52	12.29
1000	108	20.0	16.5	80	23.37	11.91
950	540	19.0	5.4	41	21.96	6.04
900	1014	16.7	3.3	41	19.00	5.50
850	1498	14.3	-5.0	26	16.29	3.16
800	2007	11.0	-16.4	13*	13.12	1.35
750	2530	6.7	-19.8	13*	9.81	1.07
700	3103	4.1	-21.9	13*	8.19	0.96
650	3700	1.7	-23.0	14*	6.90	0.94
600	4345	-1.1	-25.3	14*	5.64	0.83
550	5010	-5.6	-28.2	15*	4.03	0.69
500	5774	-11.9	-32.6	16*	2.46	0.49
450	6560	-17.0	-36.4	17*	1.62	0.38
400	7453	-19.8	-41.3	17*	1.28	0.34
350	8423	-29.9	-46.2	19*	0.51	0.17
300	9503	-38.6	-43.2	62	0.15	0.19
250	10719	-49.0	--	--	--	--
200	12137	-59.4	--	--	--	--
150	13906	-67.4	--	--	--	--

JORDAN 24°32'N 109°47'W 0655 GMT March 19, 1970

Pressure Level Mb	Altitude Meters	Temperature °C	Dew Point Temperature °C	Relative Humidity %	Vapor Pressure Mb	Mixing Ratio gm/kg
1014	0	22.1	16.1	69	26.59	11.60
1000	123	20.1	10.0	52	23.52	7.75
950	570	20.9	-9.5	12*	24.71	1.95
900	1029	18.9	-11.1	12*	21.83	1.82
850	1517	16.6	-13.0	12*	18.88	1.65
800	2030	14.2	-14.9	12*	16.19	1.52
750	2590	10.0	-5.1	34	12.27	3.50
700	3140	6.2	-3.0	52	9.48	4.40
650	3740	0.9	-3.9	70	6.52	4.40
600	4380	-4.0	-6.3	84	4.55	3.95
550	5040	-6.3	-8.1	87	3.82	3.81
500	5805	-9.9	-11.8	86	2.89	3.10
450	6600	-15.4	-17.9	81	1.85	2.08
400	7490	-20.9	-24.2	75	1.16	1.85
350	8462	-28.4	-32.2	70	0.59	0.74
300	9547	-37.3	-41.8	63	0.25	0.33
250	10778	-47.8	--	--	--	--
200	12212	-59.7	--	--	--	--
166	13371	-61.0	--	--	--	--

JORDAN 24°52 'N 109°36 'W 1857 GMT March 19, 1970

Pressure Level Mb	Altitude Meters	Temperature °C	Dew Point Temperature °C	Relative Humidity %	Vapor Pressure Mb	Mixing Ratio gm/kg
1016	0	20.5	17.1	81	24.11	12.10
1000	142	19.0	15.6	81	21.96	11.35
950	590	19.2	-1.3	25	22.24	3.65
900	1047	18.0	-5.3	20	20.63	2.89
850	1533	14.9	-4.0	27	16.94	3.35
800	2044	13.0	-6.0	26	14.97	3.02
750	2580	8.4	-28.9	56	11.02	5.13
700	3150	4.0	-1.4	68	8.13	4.93
650	3730	0.4	-4.0	70	6.29	4.22
600	4389	-5.0	-12.4	56	4.22	2.47
550	5060	-6.0	-8.1	85	3.91	3.79
500	5815	-9.5	-13.6	72	2.98	2.69
450	6610	-15.1	-18.8	73	1.90	1.91
400	7502	-21.3	-25.6	68	1.12	1.19
350	8475	-28.3	-38.2	38	0.60	0.41
300	9562	-37.1	--	22*	--	0.12
250	10793	-48.7	--	--	--	--
200	12223	-54.1	--	--	--	--
150	14051	-60.6	--	--	--	--
100	16513	-68.8	--	--	--	--
50	20679	-61.0	--	--	--	--

JORDAN 25°15'N 109°06'W 0659 GMT March 20, 1970

Pressure Level Mb	Altitude Meters	Temperature °C	Dew Point Temperature °C	Relative Humidity %	Vapor Pressure Mb	Mixing Ratio gm/kg
1016	0	20.3	18.0	87	23.81	13.00
1000	137	19.0	14.4	75	21.96	10.45
950	590	16.5	10.8	69	18.76	8.60
900	1036	15.1	9.2	68	17.15	8.20
850	1519	11.5	7.1	74	13.56	7.46
800	2025	9.3	8.3	93	11.71	8.60
750	2560	5.9	4.9	93	9.28	7.22
700	3120	2.8	2.0	94	7.47	6.30
650	3720	0.7	-0.1	94	6.43	5.80
600	4360	-3.1	-5.7	82	4.86	4.15
550	5040	-6.1	-10.9	69	3.88	3.01
519	5158	-7.0	-12.0	68	3.62	2.98

JORDAN 24°37 'N 109°59 'W 1856 GMT March 20, 1970

Pressure Level Mb	Altitude Meters	Temperature °C	Dew Point Temperature °C	Relative Humidity %	Vapor Pressure Mb	Mixing Ratio gm/kg
1017	0	20.8	17.4	81	24.56	12.40
1000	144	19.8	16.0	79	23.09	11.60
950	590	16.5	10.4	67	18.76	8.39
900	1044	15.1	7.9	62	17.15	7.50
850	1520	12.8	5.4	61	14.77	6.65
800	2033	9.1	3.3	67	11.55	6.12
750	2590	5.5	1.5	74	9.03	5.62
718	2930	3.9	-1.2	70	8.07	4.92
700	3127	3.5	-6.3	49	7.85	3.45
685	3300	2.4	-16.7	23	7.26	1.51
650	3710	-0.5	-16.7	28	5.89	1.58
600	4361	-3.0	-26.8	14*	4.90	0.72
550	5010	-8.4	-30.4	15*	3.25	0.56
500	5781	-10.0	-31.8	15*	2.86	0.53
450	6580	-14.0	-34.4	16*	2.08	0.46
400	7474	-19.3	-24.3	65	1.33	1.35
350	8463	-26.5	-34.3	48	0.70	0.61
250	10797	-46.5	--	--	--	--
200	12228	-53.5	--	--	--	--
150	14063	-57.7	--	--	--	--
100	16538	-65.0	--	--	--	--
50	20672	-63.7	--	--	--	--
40	22057	-57.8	--	--	--	--

JORDAN		25°00'N	109°25'W	0701 GMT	March 21, 1970		
Pressure Level	Altitude	Temperature	Dew Point Temperature	Relative Humidity	Vapor Pressure	Mixing Ratio	
Mb	Meters	°C	°C	%	Mb	gm/kg	
1018	0	19.7	15.5	77	22.94	11.00	
1000	155	18.4	13.6	74	21.16	9.80	
950	590	16.6	10.1	66	18.88	8.25	
900	1054	14.1	8.1	67	16.08	7.59	
850	1535	10.5	6.3	75	12.69	7.05	
800	2038	7.1	3.0	75	10.08	5.95	
790	2140	6.2	-14.6	21	9.48	1.58	
750	2570	4.4	-16.0	21	8.36	1.45	
700	3130	3.9	-22.9	12*	8.07	0.86	
650	3730	1.4	-23.3	14*	6.76	0.91	
600	4370	-1.7	-25.6	14*	5.39	0.78	
550	5040	-6.8	-29.1	15*	3.67	0.62	
500	5793	-12.1	-32.8	16*	2.42	0.48	
450	6510	-18.2	-37.4	17*	1.46	0.35	
400	7463	-22.1	-40.0	18*	1.05	0.29	
350	8436	-27.2	-43.9	19*	0.66	0.23	
300	9537	-33.5	-48.4	21*	0.36	0.15	
250	10784	-45.0	--	--	--	--	
200	12234	-58.0	--	--	--	--	
150	14031	-60.6	--	--	--	--	
111	15859	-70.9	--	--	--	--	

JORDAN 24°20'N 110°08'W 2008 GMT March 22, 1970

Pressure Level Mb	Altitude Meters	Temperature °C	Dew Point Temperature °C	Relative Humidity %	Vapor Pressure Mb	Mixing Ratio gm/kg
1015	0	22.7	15.2	63	27.58	10.50
1000	133	19.5	9.6	53	22.66	7.55
974	370	17.6	7.7	52	20.12	6.80
950	590	17.9	-0.4	29	20.50	3.91
900	1033	16.5	-13.0	12*	18.76	1.56
850	1517	16.1	-13.4	12*	18.29	1.61
800	2030	15.4	-13.9	12*	17.49	1.62
750	2590	11.6	-16.8	12*	13.65	1.38
700	3149	9.1	-17.7	13*	11.55	1.35
650	3760	5.0	-21.2	13*	8.72	1.09
600	4409	3.3	-20.1	16	7.74	1.39
550	5100	-2.6	-12.2	48	5.05	2.75
500	5859	-6.4	-16.1	46	3.79	2.19
450	6670	-12.0	-21.5	45	2.44	1.51
400	7565	-17.0	-32.5	25	1.62	0.65
350	8552	-24.8	-36.3	34	0.82	0.49
300	9652	-34.5	-46.0	30	0.33	0.21
250	10898	-45.1	--	--	--	--
200	12346	-57.7	--	--	--	--
150	14119	-67.2	--	--	--	--
100	16539	-68.7	--	--	--	--
77	18103	-73.1	--	--	--	--

JORDAN

23°24'N 108°14'W

0645 GMT

March 23, 1970

Pressure Level Mb	Altitude Meters	Temperature °C	Dew Point Temperature °C	Relative Humidity %	Vapor Pressure Mb	Mixing Ratio gm/kg
1013	0	19.8	17.2	85	23.09	12.40
1000	112	19.2	14.4	74	22.24	10.40
990	200	19.0	13.1	69	21.96	10.30
977	310	21.5	-0.6	23	25.64	3.85
950	560	20.6	-0.6	24	24.26	3.89
900	1021	20.9	-9.6	12*	24.71	2.05
850	1512	18.3	-11.6	12*	21.02	1.75
800	2020	15.7	-13.6	12*	17.83	1.69
750	2570	12.9	-15.8	12*	14.87	1.49
700	3148	9.8	-17.4	13*	12.11	1.40
658	3660	7.0	-16.6	17	10.01	1.60
650	3760	7.6	0.4	60	10.43	6.19
600	4417	4.1	-9.9	35	8.19	3.00
550	5100	-1.0	-3.2	39	5.68	2.55
500	5862	-6.1	-17.3	41	3.88	1.99
450	6670	-13.2	-23.6	41	2.22	1.37
400	7562	-20.9	-31.8	37	1.16	0.67
375	8010	-21.2	-35.3	25	1.13	0.51
350	8543	-25.1	-42.6	18*	0.80	0.26
300	9641	-34.1	-48.9	21*	0.34	0.15
250	10890	-47.0	--	--	--	--
200	12343	-57.3	--	--	--	--
150	14097	-69.4	--	--	--	--
147	14218	-68.8	--	--	--	--

JORDAN 23°02'N 108°49'W 1851 GMT March 23, 1970

Pressure Level Mb	Altitude Meters	Temperature °C	Dew Point Temperature °C	Relative Humidity %	Vapor Pressure Mb	Mixing Ratio gm/kg
1015	0	22.0	16.9	73	26.43	12.10
1000	133	19.7	9.9	53	22.94	7.60
950	590	20.9	-9.6	12*	24.71	1.95
900	1042	18.8	-11.2	12*	21.69	1.82
850	1532	18.2	-11.6	12*	20.89	1.75
800	2048	15.2	-14.1	12*	17.26	1.61
750	2590	12.3	-16.3	12*	14.30	1.42
700	3167	10.1	-17.0	13*	12.36	1.42
682	3380	9.5	-14.3	17	11.87	1.75
650	3780	7.6	-6.8	35	10.43	3.52
629	4030	7.3	-13.5	21	10.22	2.14
600	4438	4.5	-16.0	21	8.42	1.82
550	5120	-1.5	-17.6	28	5.47	1.75
500	5890	-7.3	-16.5	48	3.54	2.12
450	6690	-14.3	-19.8	63	2.03	1.76
400	7585	-19.4	-26.6	53	1.32	1.09
350	8565	-25.5	-39.5	26	0.77	0.35
300	9661	-35.8	-35.8	21*	0.29	1.30
250	10901	-46.0	--	--	--	--
200	12343	-58.4	--	--	--	--
150	14111	-64.8	--	--	--	--
100	16546	-70.6	--	--	--	--
53	20284	-67.9	--	--	--	--

TABLE 7

MAZATLAN 23°11'N 106°25'W 1900 GMT March 19, 1970

Pressure Level Mb	Altitude Meters	Temperature °C	Dew Point Temperature °C	Relative Humidity %	Vapor Pressure Mb	Mixing Ratio gm/kg
1015	4	25.4	18.3	65	32.43	13.20
997	170	22.0	12.8	56	14.77	9.40
979	300	23.7	10.7	44	12.86	8.31
932	750	21.5	6.6	38	9.74	6.60
896	1090	21.5	-3.1	19	4.86	3.41
824	1800	18.3	-9.7	14	2.93	2.23
784	2310	14.2	-11.3	16	2.58	2.06
753	2560	13.3	-3.0	32	4.90	4.09
609	4300	1.5	-13.0	33	2.25	2.32
571	4820	-1.4	-16.3	31	1.72	1.88
498	5900	-9.5	-20.9	39	1.16	1.46
486	6100	-9.1	-18.9	45	1.41	1.82
441	6850	-13.4	-25.3	36	0.79	1.11
400	7570	-19.0	-29.0	41	0.56	0.87
311	10150	-31.5	--	21	--	--
272	11000	-40.0	--	20	--	--
229	11920	-49.3	--	--	--	--
143	14500	-65.3	--	--	--	--
138	14700	-64.6	--	--	--	--
131	15000	-66.4	--	--	--	--
121	15500	-62.8	--	--	--	--
100	16650	-71.0	--	--	--	--
95	16900	-72.6	--	--	--	--
90	17250	-71.0	--	--	--	--
70	18700	-73.8	--	--	--	--
65	19200	-71.5	--	--	--	--
51	19550	-60.6	--	--	--	--
47	20600	-60.9	--	--	--	--

MAZATLAN

23°11'N 106°25'W

1900 GMT

March 20, 1970

Pressure Level Mb	Altitude Meters	Temperature °C	Dew Point Temperature °C	Relative Humidity %	Vapor Pressure Mb	Mixing Ratio gm/kg
1017	4	21.6	18.6	83	25.79	13.40
997	180	21.0	16.0	73	18.17	11.60
976	370	18.5	14.1	76	16.08	10.46
936	710	18.5	9.6	56	11.95	8.08
866	1390	13.8	11.0	83	13.12	9.61
854	1500	14.2	11.6	84	13.65	10.15
831	1740	15.2	7.8	61	10.58	8.05
772	2350	12.5	2.9	52	7.52	6.15
717	2960	6.7	-0.1	62	6.06	5.33
641	3900	-0.6	-2.6	86	5.05	4.96
622	4100	0.2	-2.1	85	5.24	5.30
475	6250	-9.7	-14.3	69	2.03	2.67
457	6520	-10.4	-16.3	62	1.72	2.35
400	7550	-17.1	-25.5	48	0.77	1.21
353	8500	-23.9	-35.7	33	0.29	0.52
311	9400	-31.7	-48.2	18	0.05	0.10
268	10400	-40.0	-56.3	16	0.02	0.04
223	11170	-51.0	--	--	--	--
198	12400	-52.5	--	--	--	--
164	13600	-59.3	--	--	--	--
156	13900	-58.2	--	--	--	--
100	16650	-68.1	--	--	--	--
87	17450	-69.5	--	--	--	--
70	18250	-77.7	--	--	--	--
41	21400	-57.6	--	--	--	--
38	22400	-58.4	--	--	--	--
35	22950	-56.6	--	--	--	--

MAZATLAN		23°11'N	106°25'W	1900 GMT	March 21, 1970		
Pressure Level	Altitude	Temperature	Dew Point	Relative	Vapor	Mixing	
Mb	Meters	°C	Temperature	Humidity	Pressure	Ratio	
			°C	%	Mb	gm/kg	
1014	4	25.4	15.9	56	32.43	12.50	
1000	140	23.4	7.9	37	10.65	6.72	
978	300	24.5	7.2	33	10.15	6.55	
877	1250	20.4	-8.0	14	3.35	2.39	
673	3500	7.2	-21.4	11	1.11	1.03	
618	4200	3.5	-23.2	12	0.95	0.96	
576	4750	-0.1	-26.1	12	0.73	0.79	
499	5900	-4.6	-29.7	12	0.52	0.66	
445	6750	-10.0	-32.5	14	0.40	0.56	
400	7599	-16.3	-35.8	17	0.29	0.45	
353	8500	-24.9	-40.5	22	0.12	0.21	
338	8910	-25.8	-43.2	18	0.09	0.16	
267	10500	-40.0	-51.0	30	0.03	0.08	
220	11800	-51.5	--	--	--	--	
196	12550	-55.4	--	--	--	--	
161	13790	-63.6	--	--	--	--	
154	14050	-59.5	--	--	--	--	
129	15110	-64.0	--	--	--	--	
111	16040	-71.2	--	--	--	--	
106	16310	-69.0	--	--	--	--	
100	16658	-71.4	--	--	--	--	
90	17270	-72.8	--	--	--	--	
70	18750	-71.5	--	--	--	--	
54	20350	-60.2	--	--	--	--	
40	22222	-54.6	--	--	--	--	

MAZATLAN		23°11'N	106°25'W	1900 GMT	March 22, 1970		
Pressure Level	Altitude	Temperature	Dew Point	Relative	Vapor	Mixing	
Mb	Meters	°C	Temperature °C	Humidity %	Pressure Mb	Ratio gm/kg	
1014	4	24.9	15.8	57	31.48	11.10	
995	180	21.5	10.4	49	12.61	8.02	
982	300	20.2	8.9	48	11.40	7.33	
969	400	22.4	4.9	32	8.66	5.63	
956	600	22.4	2.4	27	7.26	4.78	
929	800	20.5	4.1	34	8.19	5.55	
893	1100	19.4	2.7	33	7.42	5.23	
875	1300	20.2	-2.9	21	4.93	3.54	
832	1720	16.6	-9.4	16	3.00	2.26	
815	1900	17.6	-9.3	15	3.03	2.33	
644	3850	6.0	-18.7	15	1.40	1.36	
624	4100	6.4	-18.4	15	1.44	1.44	
606	4350	5.4	-19.2	15	1.34	1.39	
591	4550	5.4	-18.4	16	1.44	1.52	
539	5300	-1.4	-16.3	31	1.72	2.00	
502	5815	-4.6	-18.8	32	1.28	1.59	
445	6800	-11.5	-26.8	27	0.69	0.96	
400	7600	-17.9	-32.8	26	0.39	0.61	
391	7800	-18.4	-34.5	23	0.33	0.53	
269	10400	-40.0	-54.4	20	0.02	0.05	
189	12730	-60.3	--	--	--	--	
181	13000	-59.7	--	--	--	--	
149	14200	-66.6	--	--	--	--	
126	15200	-65.2	--	--	--	--	
117	15700	-67.3	--	--	--	--	
110	16100	-65.2	--	--	--	--	
100	16600	-68.7	--	--	--	--	
96	16900	-67.8	--	--	--	--	
75	18300	-75.1	--	--	--	--	
67	19000	-75.4	--	--	--	--	
39	22300	-56.2	--	--	--	--	

EMPALME 27°47'N 110°48'W 0600 GMT March 20, 1970

Pressure Level	Altitude	Temperature	Dew Point Temperature	Relative Humidity	Vapor Pressure	Mixing Ratio
Mb	Meters	°C	°C	%	Mb	gm/kg
1017	12	17.0	11.5	70	13.56	8.44
981	325	16.8	-6.9	19	3.65	2.32
886	1180	10.8	1.6	53	6.86	4.87
817	1850	4.9	0.5	73	6.33	4.87
796	2075	5.9	5.9	100	9.28	7.36
699	3100	-0.2	-0.2	100	6.02	5.42
679	3330	0	0.0	100	6.11	5.66
528	5310	-12.0	-12.0	95	2.33	2.76
472	5960	-19.5	-27.7	48	0.63	0.83
434	6770	-21.5	-34.5	30	0.33	0.47
400	7380	-24.5	-37.5	29	0.24	0.38
385	8060	-26.0	-38.8	29	0.21	0.34
365	9130	-27.4	-31.7	66	0.43	0.74
291	11220	-40.0	-47.4	45	0.05	0.11
229	11700	-53.8	--	--	--	--
212	11900	-56.5	--	--	--	--
206	12540	-53.8	--	--	--	--
186	13620	-53.8	--	--	--	--
157	14350	-57.2	--	--	--	--
140	15840	-57.2	--	--	--	--
110	16410	-68.2	--	--	--	--
100	18550	-68.2	--	--	--	--
70	19272	-72.2	--	--	--	--
59	20148	-65.5	--	--	--	--
47	22776	-64.8	--	--	--	--
32	24528	-56.8	--	--	--	--
18	27034	-52.2	--	--	--	--

EMPALME 27°47'N 110°48'W 0600 GMT March 21, 1970

Pressure Level Mb	Altitude Meters	Temperature °C	Dew Point Temperature °C	Relative Humidity %	Vapor Pressure Mb	Mixing Ratio gm/kg
1019	12	15.5	-3.9	26	4.58	2.81
1003	150	15.5	-2.1	28	5.24	3.27
915	920	13.7	-5.4	26	4.09	2.80
816	1900	5.8	-12.2	26	2.40	1.84
775	2300	4.0	-17.0	20	1.62	1.30
751	2560	4.0	-18.2	18	1.46	1.21
695	3190	-0.3	-21.1	19	1.14	1.02
665	3550	-2.5	-19.5	18	1.31	1.23
576	4690	-4.6	-25.4	18	0.78	0.84
400	7430	-27.1	-43.3	20	0.09	0.13
317	9080	-40.0	-53.3	23	0.03	0.05
259	10420	-46.9	--	--	--	--
207	11920	-50.3	--	--	--	--
188	12550	-48.2	--	--	--	--
160	13590	-55.5	--	--	--	--
100	16485	-67.7	--	--	--	--
97	16675	-69.5	--	--	--	--
90	17120	-67.7	--	--	--	--
71	20925	-72.4	--	--	--	--
62	22185	-69.5	--	--	--	--
53	23445	-63.6	--	--	--	--
30	26665	-55.8	--	--	--	--
14	28836	-46.8	--	--	--	--

EMPALME

27°47'N 110°48'W

1800 GMT

March 22, 1970

Pressure Level Mb	Altitude Meters	Temperature °C	Dew Point Temperature °C	Relative Humidity %	Vapor Pressure Mb	Mixing Ratio gm/kg
1015	12	28.1	0.0	16	6.11	3.78
992	200	23.8	0.1	21	6.15	3.89
964	460	23.8	-0.5	20	5.89	3.83
850	1580	14.8	-8.6	19	3.20	2.35
732	2800	9.2	-13.9	18	2.09	1.79
650	3780	0.8	-19.1	21	1.35	1.30
627	4060	0.8	-20.8	18	1.17	1.16
557	5000	-6.5	-26.4	19	0.71	0.79
513	5620	-10.4	-18.3	52	1.45	1.77
504	5780	-10.7	-15.3	69	1.87	2.31
474	6250	-11.1	-23.6	35	0.91	1.20
436	6870	-14.5	-28.3	30	0.60	0.85
414	7290	-18.7	-30.4	35	0.49	0.73
400	7528	-19.4	-32.0	32	0.42	0.65
367	8180	-23.5	-38.1	25	0.23	0.39
285	9960	-40.0	-50.2	33	0.04	0.08
195	12930	-61.8	--	--	--	--
177	13020	-64.4	--	--	--	--
161	13110	-62.6	--	--	--	--
131	14880	-65.9	--	--	--	--
127	15080	-64.4	--	--	--	--
100	16505	-66.4	--	--	--	--
84	17550	-70.8	--	--	--	--
61	22311	-68.5	--	--	--	--
45	24955	-62.1	--	--	--	--
28	27760	-50.2	--	--	--	--
11	30610	-37.0	--	--	--	--

TABLE 9

Incident Solar Energy Measurements
For Project Little Window

Date	Mar. 13, 1970	Mar. 14, 1970	Mar. 16, 1970	Mar. 17, 1970	Mar. 21, 1970	Mar. 22, 1970	Mar. 24, 1970
Sunrise	0649	0630	0623	0612	0619	0607	0611
Sunset	1911	1845	1850	1835	1849	1842	1922
Energy AM	364	347	334	300	313	281	355
Energy PM	193	237	247	242	236	266	263
Energy Total	557	583	581	541	578	547	618
0600-0700	0	1	1	2	2	4	2
0700-0800	5	12	14	16	15	19	18
0800-0900	21	31	34	34	35	36	38
0900-1000	40	51	53	47	46	57	55
1000-1100	58	67	68	66	61	70	71
1100-1200	70	77	77	78	78	82	75
1200-1300	76	80	80	81	81	82	84
1300-1400	76	79	77	75	79	61	79
1400-1500	71	70	69	59	71	57	70
1500-1600	62	57	55	44	57	36	57
1600-1700	41	38	35	26	38	25	39
1700-1800	25	19	16	13	16	8	22
1800-1900	6	2	1	1	1	1	5
1900-2000	0						0

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