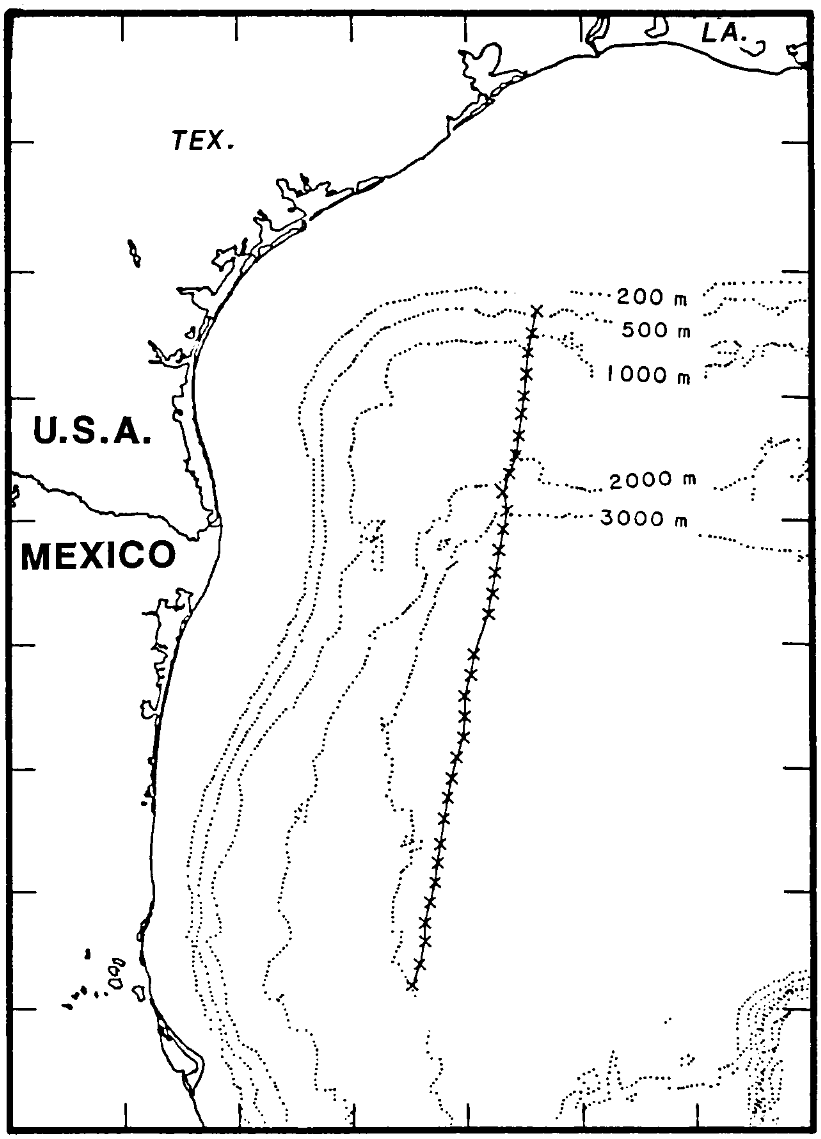
OCS Study
MMS 89-0013

Gulf of Mexico Ship-of-Opportunity Data Report, Update: October 1985 - March 1988



MMS
U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region

OCS Study
MMS 89-0013

Gulf of Mexico Ship-of-Opportunity Data Report, Update: October 1985 - March 1988

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INTRODUCTION

This report is the second of two which document the Minerals Management Service (MMS) ship-of-opportunity (SOOP) program in the Gulf of Mexico for the period between January 1983 and March 1988. The earlier report (U.S. Department of the Interior, 1986) covered the period from January 1983 to mid-October 1985. Both reports consist of station location, vertical temperature section, and sea surface temperature plots from T-7 or T-6 expendable bathythermograph (XBT) probes.

The data presented here include the E.M. QUEENY transect between Galveston, Texas and the Florida Keys which was obtained as part of a cooperative effort between the National Marine Fisheries Service (NMFS) and MMS. These same (QUEENY) data are also documented in a series of announcements issued by NMFS Narragansett.

Most of the data were obtained by two vessels, the M/V AMBASSADOR and the M/V SENATOR, operated by Coordinated Carribean Transport (CCT) or its successor Crowley Carribean Transport. In October 1986, the cruise track for this section shifted its U.S. destination west from New Orleans, to Lake Charles, Louisiana, but continued a southerly transit to the Yucatan Strait. Among the other vessels that periodically provided data were vessels operated by Florida Institute of Oceanography (the R/V SUNCOASTER), Louisiana Universities Marine Consortium (the R/V PELICAN), Texas A&M University (the R/V GYRE), Autonomous National University of Mexico (the R/V JUSTO SIERRA), the Mexican Navy (the B/O ALTAIR and the HO-2), Exxon Corporation (the M/V EXXON JAMESTOWN) and Bollinger Offshore Boats, Inc. (the M/V ERICA).

Science Applications International Corporation (SAIC) and MMS are grateful to the above institutions and corporations, and the Mexican Navy for their participation. In addition, particular thanks are extended to the officers and crews of these vessels for their efforts which were vital to the success of this program.

1985 SOOP DATA BY VESSEL

ID	Cruise	Dates		
AL85-02	B/O Altair Cruise 85-02	10/18/85	to	10/21/85
AL85-03	B/O Altair Cruise 85-02	11/01/85	to	11/02/85
AM85-06	M/V Ambassador Cruise 85-06	11/27/85	to	11/29/85
AM85-07	M/V Ambassador Cruise 85-07	12/07/85	to	12/08/85
AM85-08	M/V Ambassador Cruise 85-08	10/31/85	to	11/06/85
AM85-09	M/V Ambassador Cruise 85-09	11/16/85	to	11/17/85
AM85-10	M/V Ambassador Cruise 85-10	11/25/85	to	11/26/85
AM85-11	M/V Ambassador Cruise 85-11	12/09/85	to	12/10/85
AM85-12	M/V Ambassador Cruise 85-12	12/17/85	to	12/18/85
AM85-13	M/V Ambassador Cruise 85-13	12/20/85	to	12/21/85
QU85-13	E.M. Queeny Cruise 85-13	12/13/85	to	12/14/85
QU85-14	E.M. Queeny Cruise 85-14	12/21/85	to	12/22/85

1986 SOOP DATA BY VESSEL

ID	Cruise	Dates		
AL86-02	B/O Altair Cruise 86-02	02/13/86	to	02/14/86
AL86-03	B/O Altair Cruise 86-03	04/27/86	to	04/28/86
AL86-04	B/O Altair Cruise 86-04	05/01/86	to	05/06/86
AL86-05	B/O Altair Cruise 86-05	05/13/86	to	05/14/86
AL86-06	B/O Altair Cruise 86-06	07/15/86	to	07/17/86
AL86-07	B/O Altair Cruise 86-07	09/01/86	to	09/03/86
AM86-01	M/V Ambassador Cruise 86-01	01/03/86	to	01/04/86
AM86-02	M/V Ambassador Cruise 86-02	01/17/86	to	01/18/86
AM86-03	M/V Ambassador Cruise 86-03	01/26/86	to	01/27/86
AM86-04	M/V Ambassador Cruise 86-04	02/10/86	to	02/12/86
AM86-05	M/V Ambassador Cruise 86-05	03/02/86	to	03/03/86
AM86-06	M/V Ambassador Cruise 86-06	03/15/86	to	03/16/86
AM86-07	M/V Ambassador Cruise 86-07	03/29/86	to	03/30/86
AM86-08	M/V Ambassador Cruise 86-08	04/12/86	to	04/13/86
AM86-09	M/V Ambassador Cruise 86-09	04/26/86	to	04/27/86
AM86-10	M/V Ambassador Cruise 86-10	05/05/86	to	05/05/86
AM86-11	M/V Ambassador Cruise 86-11	05/07/86	to	05/08/86
AM86-12	M/V Ambassador Cruise 86-12	05/17/86	to	05/19/86
AM86-13	M/V Ambassador Cruise 86-13	05/30/86	to	05/31/86
AM86-14	M/V Ambassador Cruise 86-14	06/11/86	to	06/12/86
AM86-15	M/V Ambassador Cruise 86-15	06/22/86	to	06/23/86
AM86-16	M/V Ambassador Cruise 86-16	07/03/86	to	07/04/86
AM86-17	M/V Ambassador Cruise 86-17	07/19/86	to	07/20/86
AM86-18	M/V Ambassador Cruise 86-18	08/12/86	to	08/13/86
AM86-19	M/V Ambassador Cruise 86-19	08/23/86	to	08/24/86
AM86-20	M/V Ambassador Cruise 86-20	09/04/86	to	09/05/86
AM86-21	M/V Ambassador Cruise 86-21	09/15/86	to	09/15/86
AM86-22	M/V Ambassador Cruise 86-22	09/26/86	to	09/27/86
EJ86-01	Exxon Jamestown Cruise 86-01	05/03/86	to	05/04/86
EJ86-02	Exxon Jamestown Cruise 86-02	05/06/86	to	05/07/86
ER86-01	M/V Erica Cruise 86-01	03/06/86	to	03/08/86
H286-01	HO-2 Cruise 86-01	08/17/86	to	08/21/86
QU86-01	E.M. Queeny Cruise 86-01	01/04/86	to	01/05/86
QU86-02	E.M. Queeny Cruise 86-02	01/11/86	to	01/12/86
QU86-03	E.M. Queeny Cruise 86-03	02/05/86	to	02/06/86
QU86-04	E.M. Queeny Cruise 86-04	02/20/86	to	02/21/86
QU86-05	E.M. Queeny Cruise 86-05	04/06/86	to	04/07/86
QU86-06	E.M. Queeny Cruise 86-06	04/12/86	to	04/13/86
QU86-07	E.M. Queeny Cruise 86-07	05/03/86	to	05/04/86
QU86-08	E.M. Queeny Cruise 86-08	05/17/86	to	05/17/86
QU86-09	E.M. Queeny Cruise 86-09	06/07/86	to	06/08/86
QU86-10	E.M. Queeny Cruise 86-10	06/25/86	to	06/26/86
QU86-11	E.M. Queeny Cruise 86-11	07/17/86	to	07/18/86
QU86-12	E.M. Queeny Cruise 86-12	08/07/86	to	08/08/86

QU86-13	E.M. Queeny Cruise 86-13	09/01/86	to	09/02/86
QU86-14	E.M. Queeny Cruise 86-14	09/21/86	to	09/22/86
QU86-15	E.M. Queeny Cruise 86-15	10/26/86	to	10/27/86
QU86-16	E.M. Queeny Cruise 86-16	11/02/86	to	11/03/86
QU86-17	E.M. Queeny Cruise 86-17	11/23/86	to	11/24/86
SC86-08	R/V Suncoaster Cruise 86-08	05/01/86	to	05/10/86
SN86-01	M/V Senator Cruise 86-01	10/13/86	to	10/14/86
SN86-02	M/V Senator Cruise 86-02	10/23/86	to	10/23/86
SN86-03	M/V Senator Cruise 86-03	11/04/86	to	11/05/86
SN86-04	M/V Senator Cruise 86-04	11/16/86	to	11/17/86
SN86-05	M/V Senator Cruise 86-05	11/28/86	to	11/29/86
SN86-06	M/V Senator Cruise 86-06	12/10/86	to	12/11/86
SN86-07	M/V Senator Cruise 86-07	12/23/86	to	12/23/86

1987 SOOP DATA BY VESSEL

ID	Cruise	Dates		
87-G3	Gyre Cruise 87-G3	04/02/87	to	04/02/87
87-G4	Gyre Cruise 87-G4	04/12/87	to	04/17/87
JS87-01	Justo Sierra Cruise 87-01	05/03/87	to	06/11/87
JS87-02	Justo Sierra Cruise 87-02	10/14/87	to	11/16/87
PN87-11	R/V Pelican Cruise 87-11	01/13/87	to	01/14/87
QU87-01	E.M. Queeny Cruise 87-01	01/04/87	to	01/05/87
QU87-02	E.M. Queeny Cruise 87-02	01/19/87	to	01/20/87
QU87-03	E.M. Queeny Cruise 87-03	02/09/87	to	02/10/87
QU87-04	E.M. Queeny Cruise 87-04	03/27/87	to	03/28/87
QU87-05	E.M. Queeny Cruise 87-05	04/06/87	to	04/07/87
QU87-06	E.M. Queeny Cruise 87-06	04/20/87	to	04/21/87
QU87-07	E.M. Queeny Cruise 87-07	05/11/87	to	05/12/87
QU87-08	E.M. Queeny Cruise 87-08	05/19/87	to	05/20/87
QU87-09	E.M. Queeny Cruise 87-09	06/12/87	to	06/13/87
SC87-05	R/V Suncoaster Cruise 87-05	03/13/87	to	03/17/87
SC87-20	R/V Suncoaster Cruise 87-20	09/24/87	to	09/29/87
SN87-01	M/V Senator Cruise 87-01	01/04/87	to	01/04/87
SN87-02	M/V Senator Cruise 87-02	01/16/87	to	01/17/87
SN87-03	M/V Senator Cruise 87-03	01/28/87	to	01/29/87
SN87-04	M/V Senator Cruise 87-04	02/08/87	to	02/09/87
SN87-05	M/V Senator Cruise 87-05	02/20/87	to	02/21/87
SN87-06	M/V Senator Cruise 87-06	03/03/87	to	03/04/87
SN87-07	M/V Senator Cruise 87-07	03/16/87	to	03/17/87
SN87-09	M/V Senator Cruise 87-09	04/12/87	to	04/13/87
SN87-10	M/V Senator Cruise 87-10	04/23/87	to	04/24/87
SN87-11	M/V Senator Cruise 87-11	05/04/87	to	05/05/87
SN87-12	M/V Senator Cruise 87-12	05/15/87	to	05/16/87
SN87-13	M/V Senator Cruise 87-13	05/27/87	to	05/28/87
SN87-14	M/V Senator Cruise 87-14	06/08/87	to	06/08/87
SN87-15	M/V Senator Cruise 87-15	06/19/87	to	06/20/87
SN87-17	M/V Senator Cruise 87-17	07/13/87	to	07/14/87
SN87-18	M/V Senator Cruise 87-18	07/26/87	to	07/27/87
SN87-19	M/V Senator Cruise 87-19	08/07/87	to	08/08/87
SN87-20	M/V Senator Cruise 87-20	08/18/87	to	08/19/87
SN87-21	M/V Senator Cruise 87-21	08/30/87	to	08/30/87
SN87-22	M/V Senator Cruise 87-22	09/11/87	to	09/11/87
SN87-23	M/V Senator Cruise 87-23	09/21/87	to	09/22/87
SN87-24	M/V Senator Cruise 87-24	10/04/87	to	10/05/87
SN87-25	M/V Senator Cruise 87-25	10/16/87	to	10/17/87
SN87-26	M/V Senator Cruise 87-26	10/28/87	to	10/29/87
SN87-27	M/V Senator Cruise 87-27	11/10/87	to	11/11/87

1988 SOOP DATA BY VESSEL

ID	Cruise	Dates		
AM88-00	M/V Ambassador Cruise 88-00	01/12/88	to	01/12/88
AM88-02	M/V Ambassador Cruise 88-02	01/23/88	to	01/24/88
AM88-03	M/V Ambassador Cruise 88-03	02/03/88	to	02/04/88
AM88-04	M/V Ambassador Cruise 88-04	02/16/88	to	02/17/88
AM88-06	M/V Ambassador Cruise 88-06	03/25/88	to	03/26/88

1985 CHRONOLOGICAL SOOP DATA LISTING

ID	Cruise	Dates		
AL85-02	B/O Altair Cruise 85-02	10/18/85	to	10/21/85
AM85-08	M/V Ambassador Cruise 85-08	10/31/85	to	11/06/85
AL85-03	B/O Altair Cruise 85-02	11/01/85	to	11/02/85
AM85-09	M/V Ambassador Cruise 85-09	11/16/85	to	11/17/85
AM85-10	M/V Ambassador Cruise 85-10	11/25/85	to	11/26/85
AM85-06	M/V Ambassador Cruise 85-06	11/27/85	to	11/29/85
AM85-07	M/V Ambassador Cruise 85-07	12/07/85	to	12/08/85
AM85-11	M/V Ambassador Cruise 85-11	12/09/85	to	12/10/85
QU85-13	E.M. Queeny Cruise 85-13	12/13/85	to	12/14/85
AM85-12	M/V Ambassador Cruise 85-12	12/17/85	to	12/18/85
AM85-13	M/V Ambassador Cruise 85-13	12/20/85	to	12/21/85
QU85-14	E.M. Queeny Cruise 85-14	12/21/85	to	12/22/85

1986 CHRONOLOGICAL SOOP DATA LISTING

ID	Cruise	Dates		
AM86-01	M/V Ambassador Cruise 86-01	01/03/86	to	01/04/86
QU86-01	E.M. Queeny Cruise 86-01	01/04/86	to	01/05/86
QU86-02	E.M. Queeny Cruise 86-02	01/11/86	to	01/12/86
AM86-02	M/V Ambassador Cruise 86-02	01/17/86	to	01/18/86
AM86-03	M/V Ambassador Cruise 86-03	01/26/86	to	01/27/86
QU86-03	E.M. Queeny Cruise 86-03	02/05/86	to	02/06/86
AM86-04	M/V Ambassador Cruise 86-04	02/10/86	to	02/12/86
AL86-02	B/O Altair Cruise 86-02	02/13/86	to	02/14/86
QU86-04	E.M. Queeny Cruise 86-04	02/20/86	to	02/21/86
AM86-05	M/V Ambassador Cruise 86-05	03/02/86	to	03/03/86
ER86-01	M/V Erica Cruise 86-01	03/06/86	to	03/08/86
AM86-06	M/V Ambassador Cruise 86-06	03/15/86	to	03/16/86
AM86-07	M/V Ambassador Cruise 86-07	03/29/86	to	03/30/86
QU86-05	E.M. Queeny Cruise 86-05	04/06/86	to	04/07/86
AM86-08	M/V Ambassador Cruise 86-08	04/12/86	to	04/13/86
QU86-06	E.M. Queeny Cruise 86-06	04/12/86	to	04/13/86
AM86-09	M/V Ambassador Cruise 86-09	04/26/86	to	04/27/86
AL86-03	B/O Altair Cruise 86-03	04/27/86	to	04/28/86
AL86-04	B/O Altair Cruise 86-04	05/01/86	to	05/06/86
SC86-08	R/V Suncoaster Cruise 86-08	05/01/86	to	05/10/86
EJ86-01	Exxon Jamestown Cruise 86-01	05/03/86	to	05/04/86
QU86-07	E.M. Queeny Cruise 86-07	05/03/86	to	05/04/86
AM86-10	M/V Ambassador Cruise 86-10	05/05/86	to	05/05/86
EJ86-02	Exxon Jamestown Cruise 86-02	05/06/86	to	05/07/86
AM86-11	M/V Ambassador Cruise 86-11	05/07/86	to	05/08/86
AL86-05	B/O Altair Cruise 86-05	05/13/86	to	05/14/86
QU86-08	E.M. Queeny Cruise 86-08	05/17/86	to	05/17/86
AM86-12	M/V Ambassador Cruise 86-12	05/17/86	to	05/19/86
AM86-13	M/V Ambassador Cruise 86-13	05/30/86	to	05/31/86
QU86-09	E.M. Queeny Cruise 86-09	06/07/86	to	06/08/86
AM86-14	M/V Ambassador Cruise 86-14	06/11/86	to	06/12/86
AM86-15	M/V Ambassador Cruise 86-15	06/22/86	to	06/23/86
QU86-10	E.M. Queeny Cruise 86-10	06/25/86	to	06/26/86
AM86-16	M/V Ambassador Cruise 86-16	07/03/86	to	07/04/86
AL86-06	B/O Altair Cruise 86-06	07/15/86	to	07/17/86
QU86-11	E.M. Queeny Cruise 86-11	07/17/86	to	07/18/86
AM86-17	M/V Ambassador Cruise 86-17	07/19/86	to	07/20/86
QU86-12	E.M. Queeny Cruise 86-12	08/07/86	to	08/08/86
AM86-18	M/V Ambassador Cruise 86-18	08/12/86	to	08/13/86
H286-01	HO-2 Cruise 86-01	08/17/86	to	08/21/86
AM86-19	M/V Ambassador Cruise 86-19	08/23/86	to	08/24/86
QU86-13	E.M. Queeny Cruise 86-13	09/01/86	to	09/02/86
AL86-07	B/O Altair Cruise 86-07	09/01/86	to	09/03/86
AM86-20	M/V Ambassador Cruise 86-20	09/04/86	to	09/05/86
AM86-21	M/V Ambassador Cruise 86-21	09/15/86	to	09/15/86
QU86-14	E.M. Queeny Cruise 86-14	09/21/86	to	09/22/86
AM86-22	M/V Ambassador Cruise 86-22	09/26/86	to	09/27/86
SN86-01	M/V Senator Cruise 86-01	10/13/86	to	10/14/86
SN86-02	M/V Senator Cruise 86-02	10/23/86	to	10/23/86

QU86-15	E.M. Queeny Cruise 86-15	10/26/86	to	10/27/86
QU86-16	E.M. Queeny Cruise 86-16	11/02/86	to	11/03/86
SN86-03	M/V Senator Cruise 86-03	11/04/86	to	11/05/86
SN86-04	M/V Senator Cruise 86-04	11/16/86	to	11/17/86
QU86-17	E.M. Queeny Cruise 86-17	11/23/86	to	11/24/86
SN86-05	M/V Senator Cruise 86-05	11/28/86	to	11/29/86
SN86-06	M/V Senator Cruise 86-06	12/10/86	to	12/11/86
SN86-07	M/V Senator Cruise 86-07	12/23/86	to	12/23/86

1987 CHRONOLOGICAL SOOP DATA LISTING

ID	Cruise	Dates		
SN87-01	M/V Senator Cruise 87-01	01/04/87	to	01/04/87
QU87-01	E.M. Queeny Cruise 87-01	01/04/87	to	01/05/87
PN87-11	R/V Pelican Cruise 87-11	01/13/87	to	01/14/87
SN87-02	M/V Senator Cruise 87-02	01/16/87	to	01/17/87
QU87-02	E.M. Queeny Cruise 87-02	01/19/87	to	01/20/87
SN87-03	M/V Senator Cruise 87-03	01/28/87	to	01/29/87
SN87-04	M/V Senator Cruise 87-04	02/08/87	to	02/09/87
QU87-03	E.M. Queeny Cruise 87-03	02/09/87	to	02/10/87
SN87-05	M/V Senator Cruise 87-05	02/20/87	to	02/21/87
SN87-06	M/V Senator Cruise 87-06	03/03/87	to	03/04/87
SC87-05	R/V Suncoaster Cruise 87-05	03/13/87	to	03/17/87
SN87-07	M/V Senator Cruise 87-07	03/16/87	to	03/17/87
QU87-04	E.M. Queeny Cruise 87-04	03/27/87	to	03/28/87
87-G3	Gyre Cruise 87-G3	04/02/87	to	04/02/87
QU87-05	E.M. Queeny Cruise 87-05	04/06/87	to	04/07/87
SN87-09	M/V Senator Cruise 87-09	04/12/87	to	04/13/87
87-G4	Gyre Cruise 87-G4	04/12/87	to	04/17/87
QU87-06	E.M. Queeny Cruise 87-06	04/20/87	to	04/21/87
SN87-10	M/V Senator Cruise 87-10	04/23/87	to	04/24/87
JS87-01	Justo Sierra Cruise 87-01	05/03/87	to	06/11/87
SN87-11	M/V Senator Cruise 87-11	05/04/87	to	05/05/87
QU87-07	E.M. Queeny Cruise 87-07	05/11/87	to	05/12/87
SN87-12	M/V Senator Cruise 87-12	05/15/87	to	05/16/87
QU87-08	E.M. Queeny Cruise 87-08	05/19/87	to	05/20/87
SN87-13	M/V Senator Cruise 87-13	05/27/87	to	05/28/87
SN87-14	M/V Senator Cruise 87-14	06/08/87	to	06/08/87
QU87-09	E.M. Queeny Cruise 87-09	06/12/87	to	06/13/87
SN87-15	M/V Senator Cruise 87-15	06/19/87	to	06/20/87
SN87-17	M/V Senator Cruise 87-17	07/13/87	to	07/14/87
SN87-18	M/V Senator Cruise 87-18	07/26/87	to	07/27/87
SN87-19	M/V Senator Cruise 87-19	08/07/87	to	08/08/87
SN87-20	M/V Senator Cruise 87-20	08/18/87	to	08/19/87
SN87-21	M/V Senator Cruise 87-21	08/30/87	to	08/30/87
SN87-22	M/V Senator Cruise 87-22	09/11/87	to	09/11/87
SN87-23	M/V Senator Cruise 87-23	09/21/87	to	09/22/87
SC87-20	R/V Suncoaster Cruise 87-20	09/24/87	to	09/29/87
SN87-24	M/V Senator Cruise 87-24	10/04/87	to	10/05/87
JS87-02	Justo Sierra Cruise 87-02	10/14/87	to	11/16/87
SN87-25	M/V Senator Cruise 87-25	10/16/87	to	10/17/87
SN87-26	M/V Senator Cruise 87-26	10/28/87	to	10/29/87
SN87-27	M/V Senator Cruise 87-27	11/10/87	to	11/11/87

1988 CHRONOLOGICAL SOOP DATA LISTING

ID	Cruise	Dates		
AM88-00	M/V Ambassador Cruise 88-00	01/12/88	to	01/12/88
AM88-02	M/V Ambassador Cruise 88-02	01/23/88	to	01/24/88
AM88-03	M/V Ambassador Cruise 88-03	02/03/88	to	02/04/88
AM88-04	M/V Ambassador Cruise 88-04	02/16/88	to	02/17/88
AM88-06	M/V Ambassador Cruise 88-06	03/25/88	to	03/26/88

REFERENCES

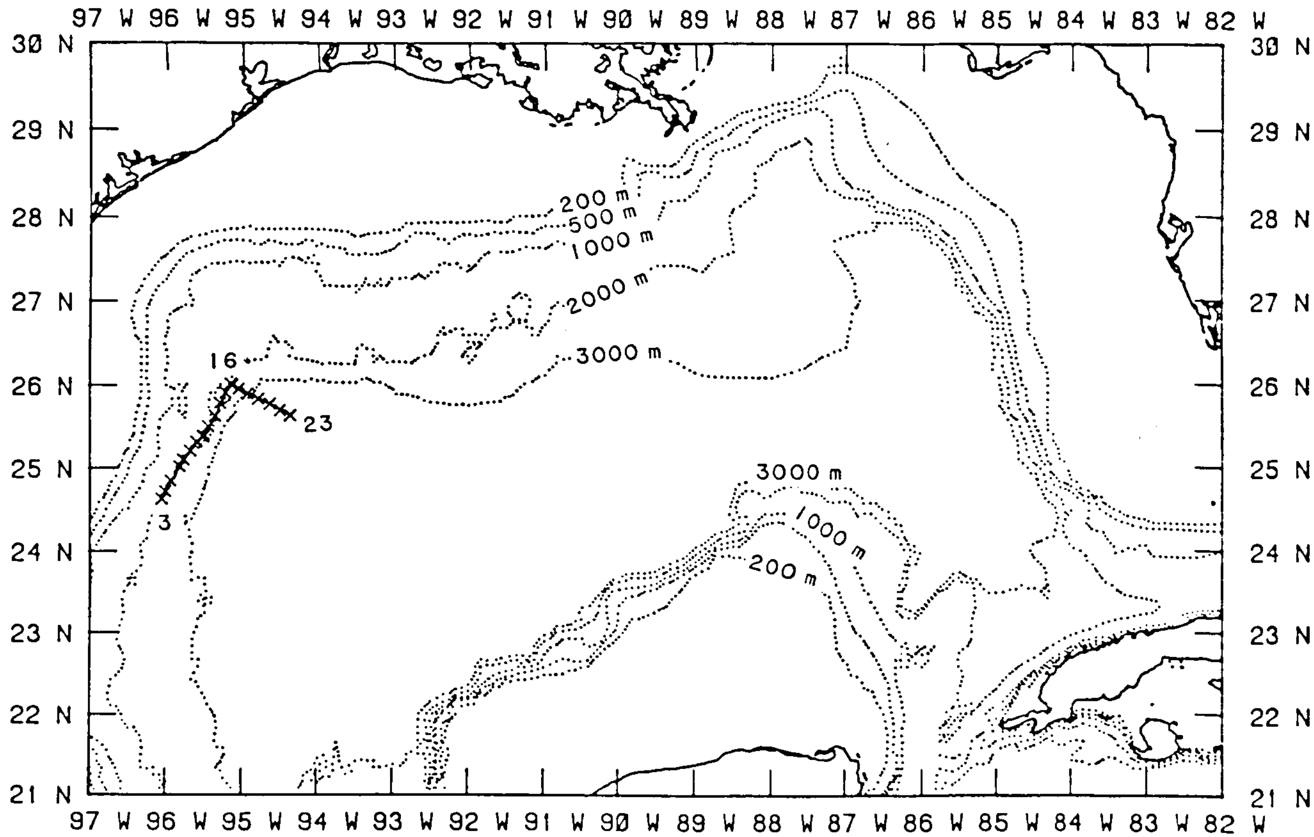
U.S. Department of the Interior, 1986. Gulf of Mexico Ship-Of-Opportunity Data Report, January 1983 - October 1985. U.S. Department of the Interior/Minerals Management Service, New Orleans, LA (Contract No.14-12-0001-29158), 632pp.

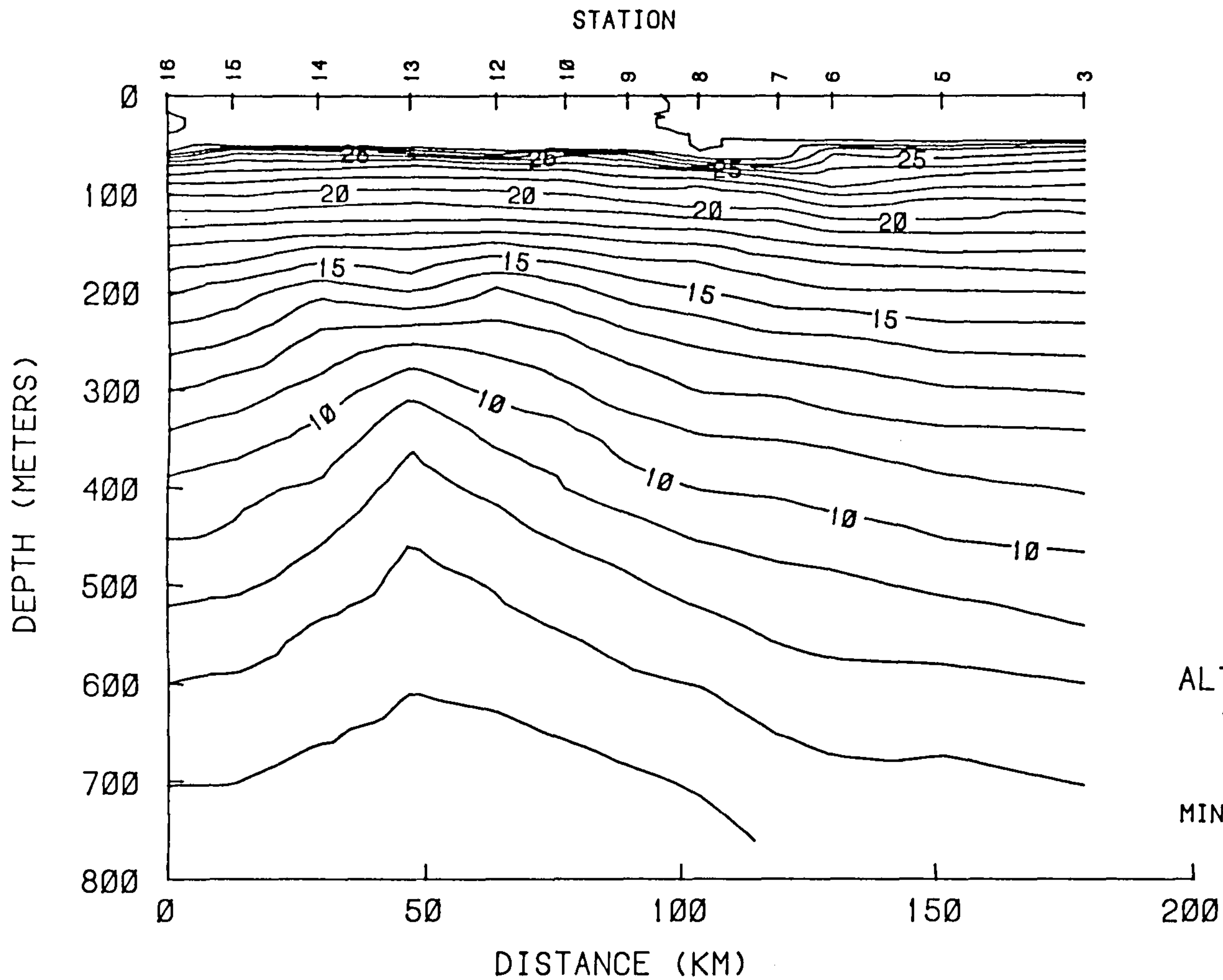
DATA PRODUCTS

1985 SOOP DATA BY VESSEL

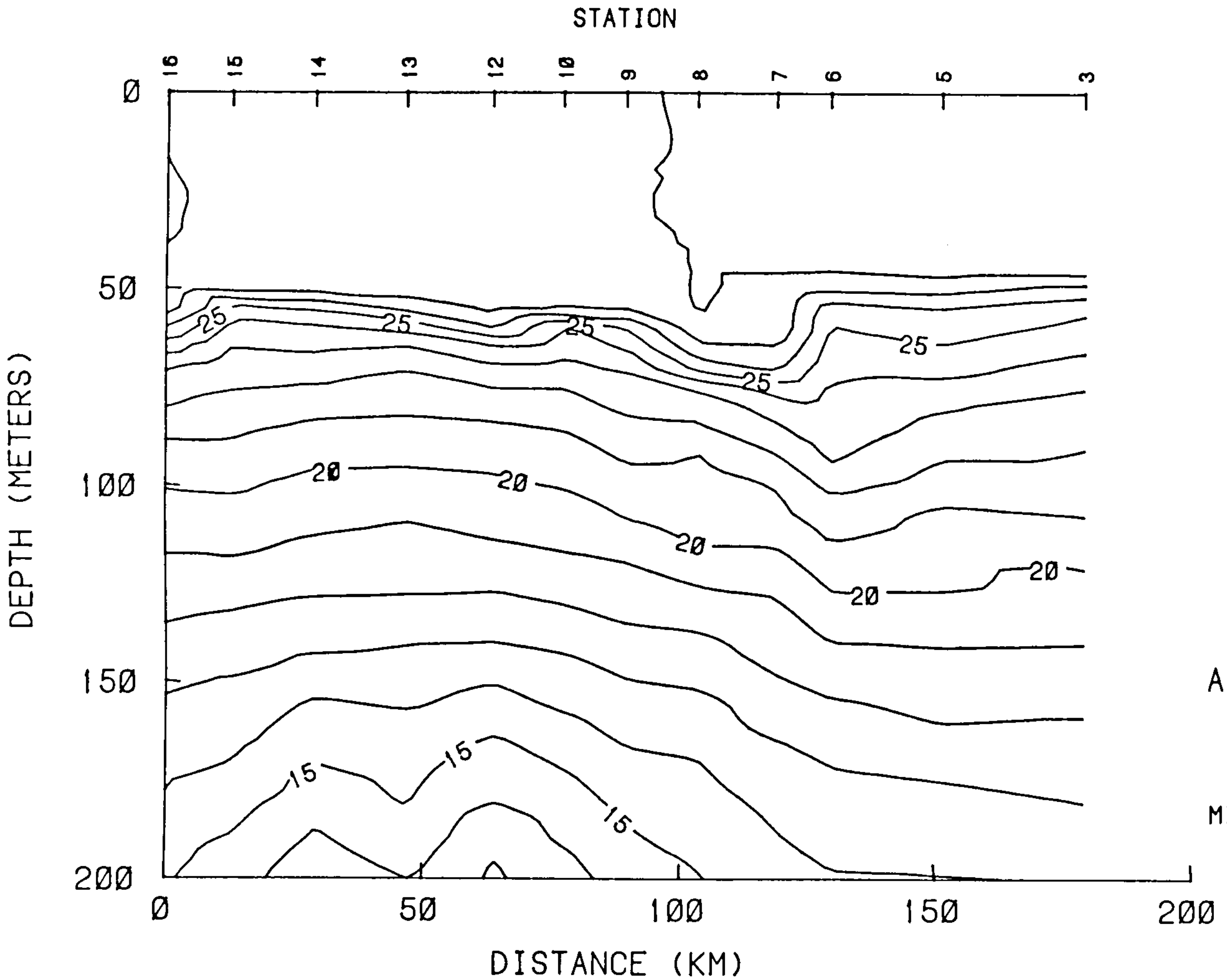
ID	Cruise	Dates		
AL85-02	B/O Altair Cruise 85-02	10/18/85	to	10/21/85
AL85-03	B/O Altair Cruise 85-02	11/01/85	to	11/02/85
AM85-06	M/V Ambassador Cruise 85-06	11/27/85	to	11/29/85
AM85-07	M/V Ambassador Cruise 85-07	12/07/85	to	12/08/85
AM85-08	M/V Ambassador Cruise 85-08	10/31/85	to	11/06/85
AM85-09	M/V Ambassador Cruise 85-09	11/16/85	to	11/17/85
AM85-10	M/V Ambassador Cruise 85-10	11/25/85	to	11/26/85
AM85-11	M/V Ambassador Cruise 85-11	12/09/85	to	12/10/85
AM85-12	M/V Ambassador Cruise 85-12	12/17/85	to	12/18/85
AM85-13	M/V Ambassador Cruise 85-13	12/20/85	to	12/21/85
QU85-13	E.M. Queeny Cruise 85-13	12/13/85	to	12/14/85
QU85-14	E.M. Queeny Cruise 85-14	12/21/85	to	12/22/85

ALTAIR CRUISE 85-02 10/17/85 TO 10/21/85

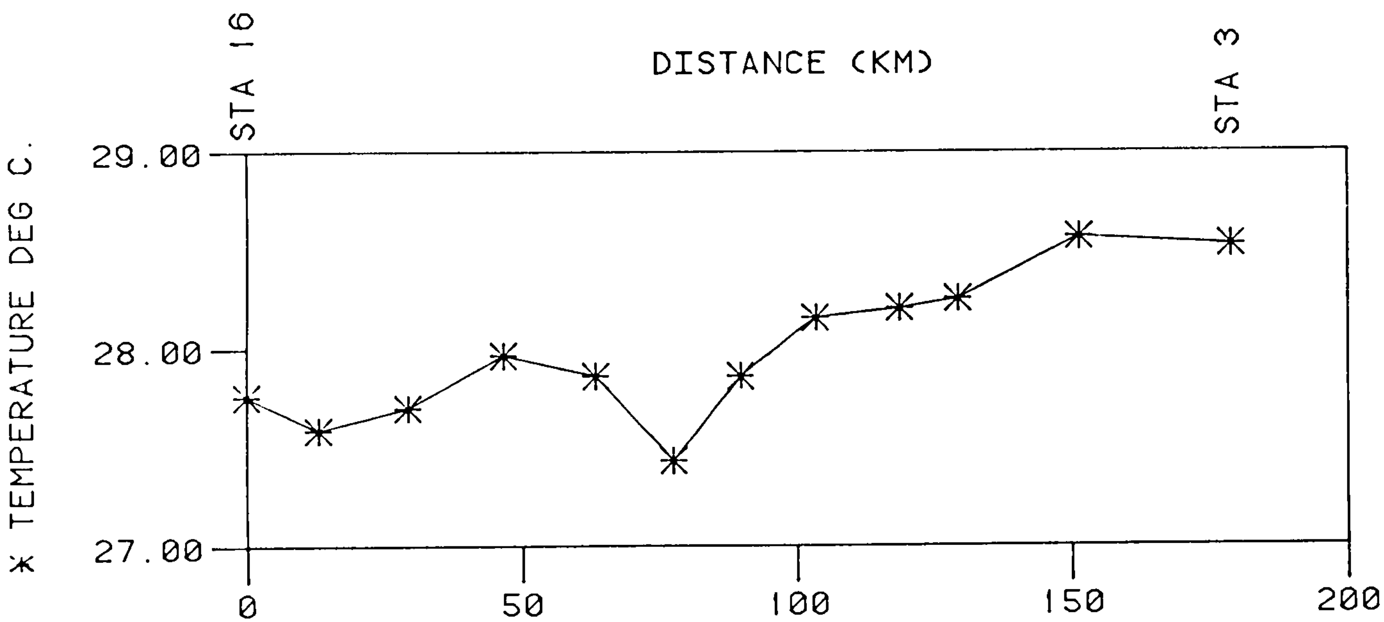




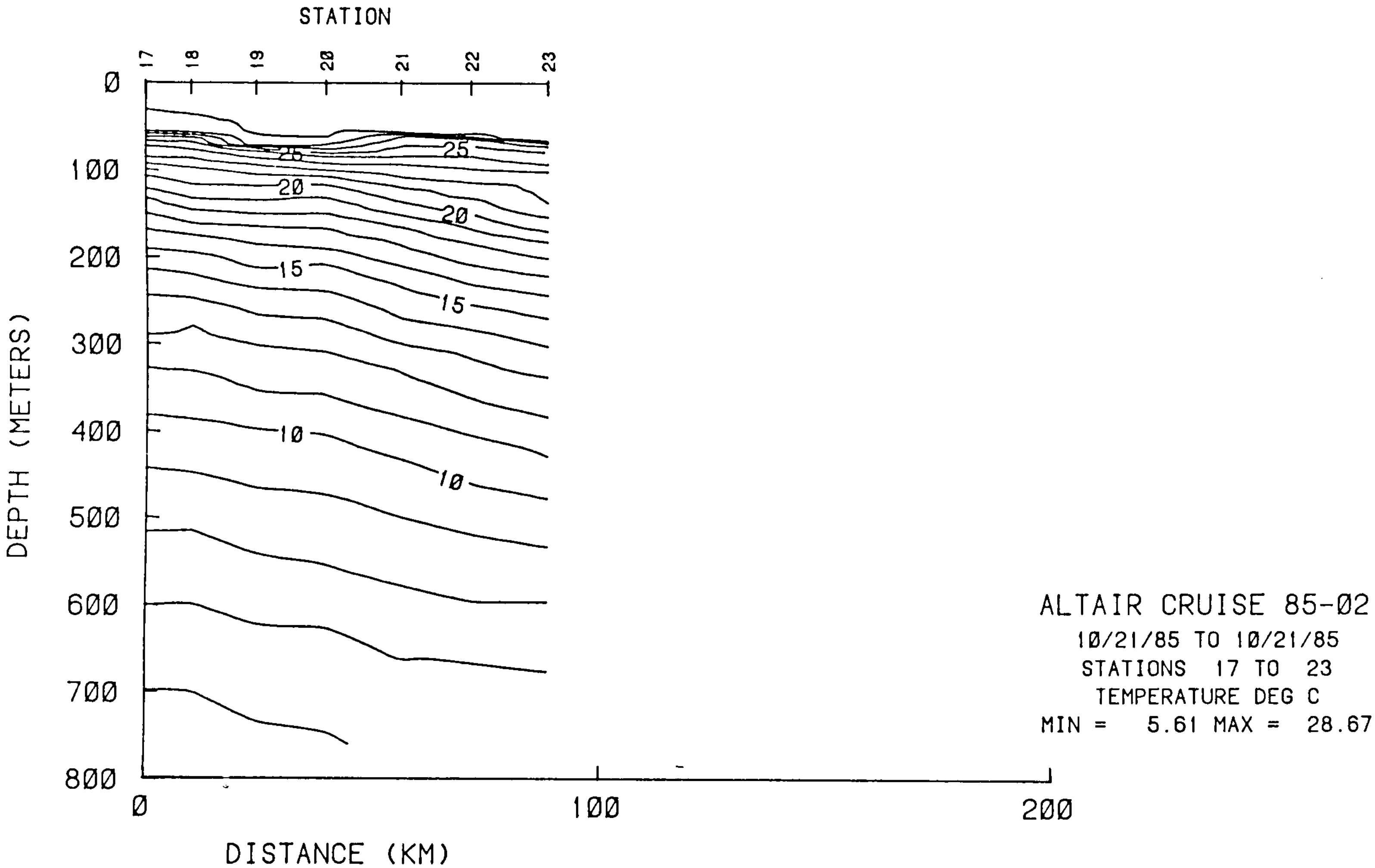
ALTAIR CRUISE 85-Ø2
1Ø/18/85 TO 1Ø/19/85
STATIONS 3 TO 16
TEMPERATURE DEG C
MIN = 5.31 MAX = 28.57

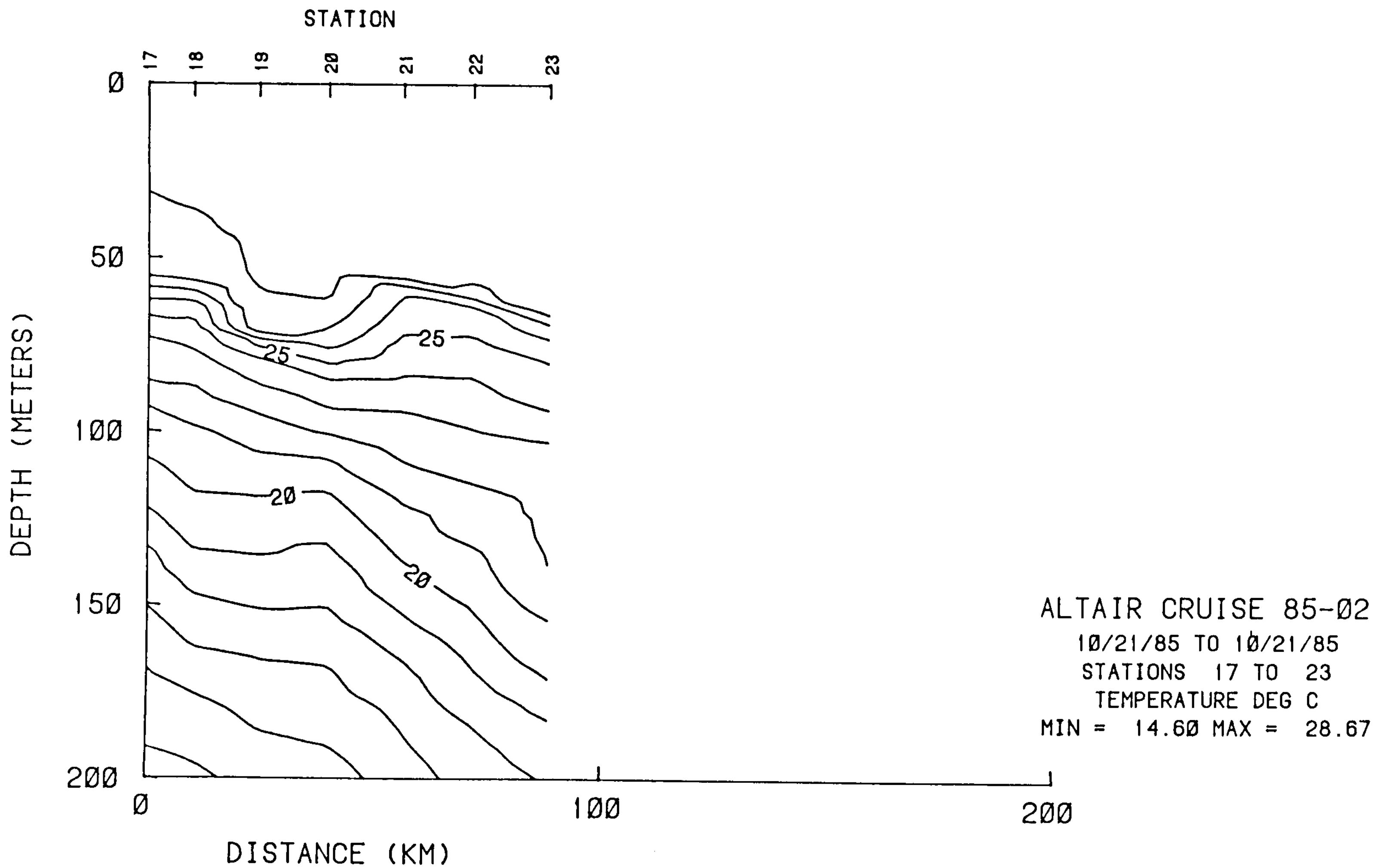


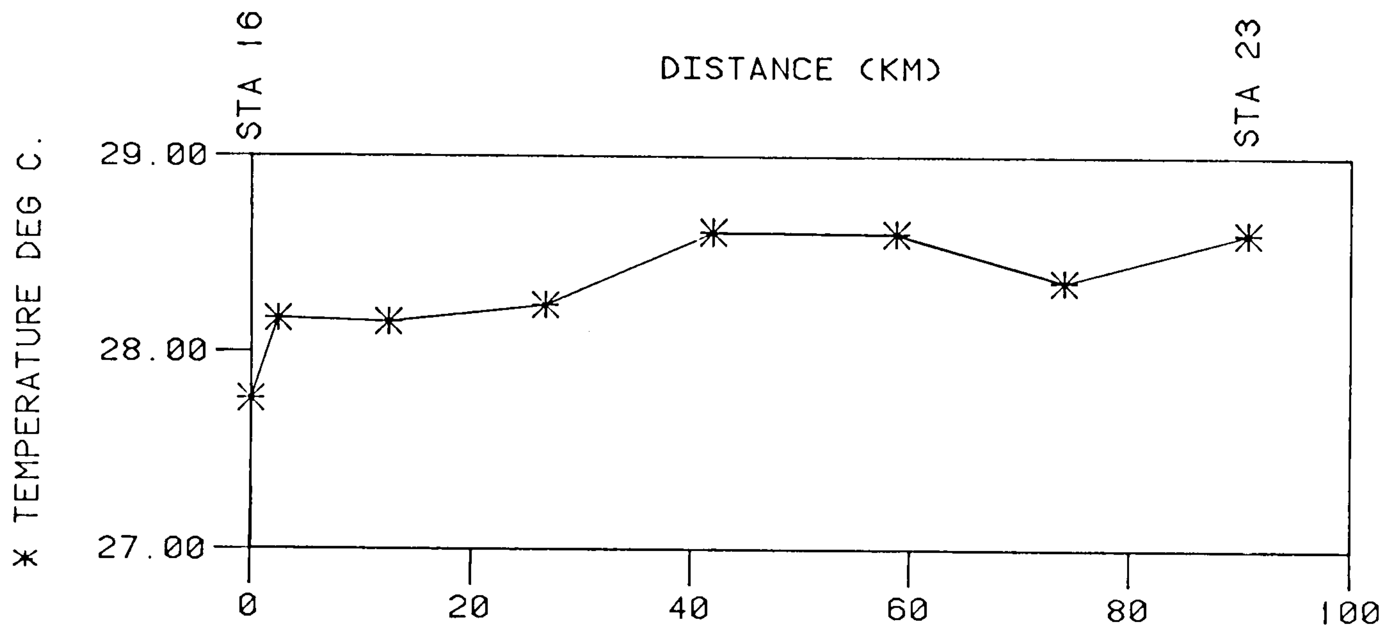
ALTAIR CRUISE 85-02
10/18/85 TO 10/19/85
STATIONS 3 TO 16
TEMPERATURE DEG C
MIN = 12.87 MAX = 28.57



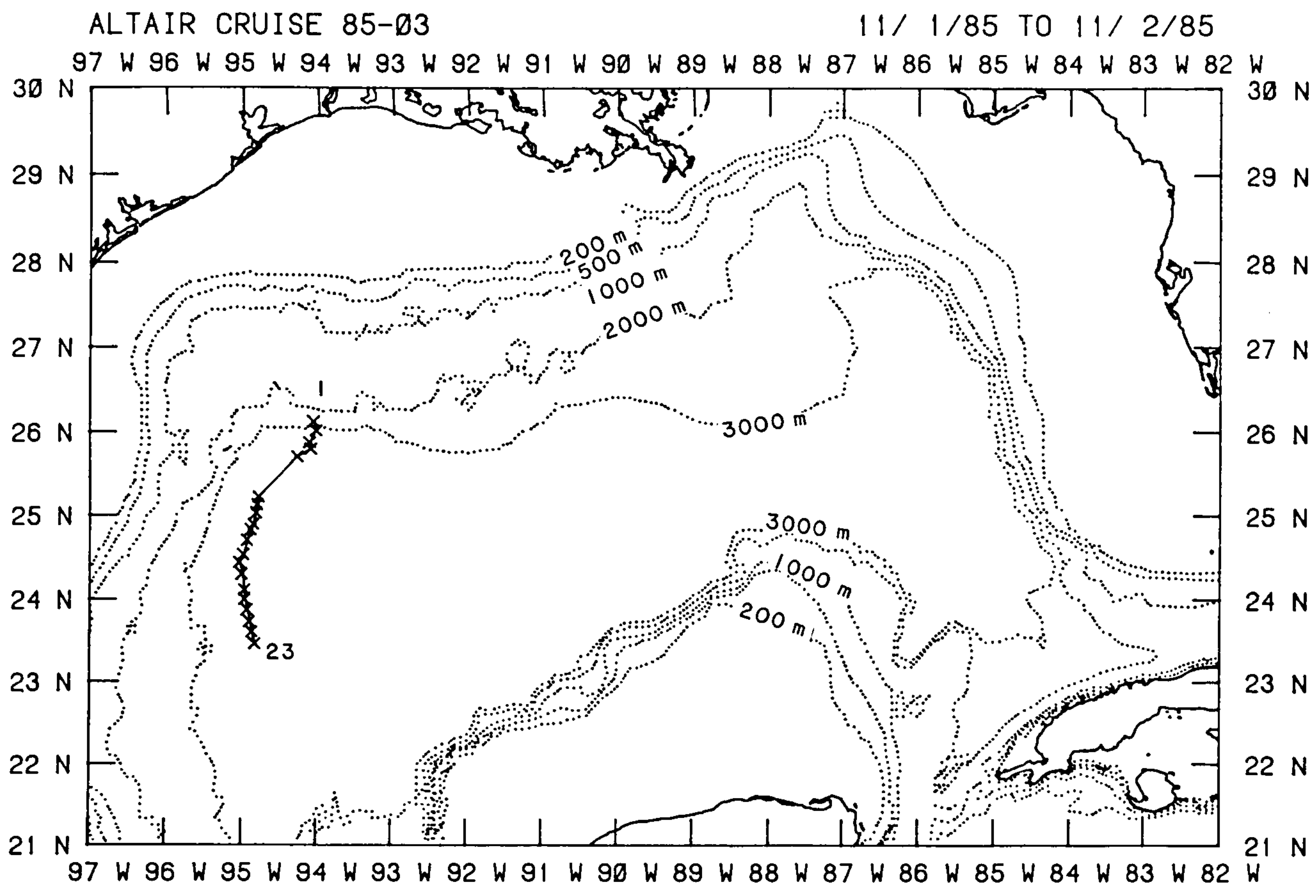
PARAMETERS AT SURFACE ALTAIR CRUISE 85-02

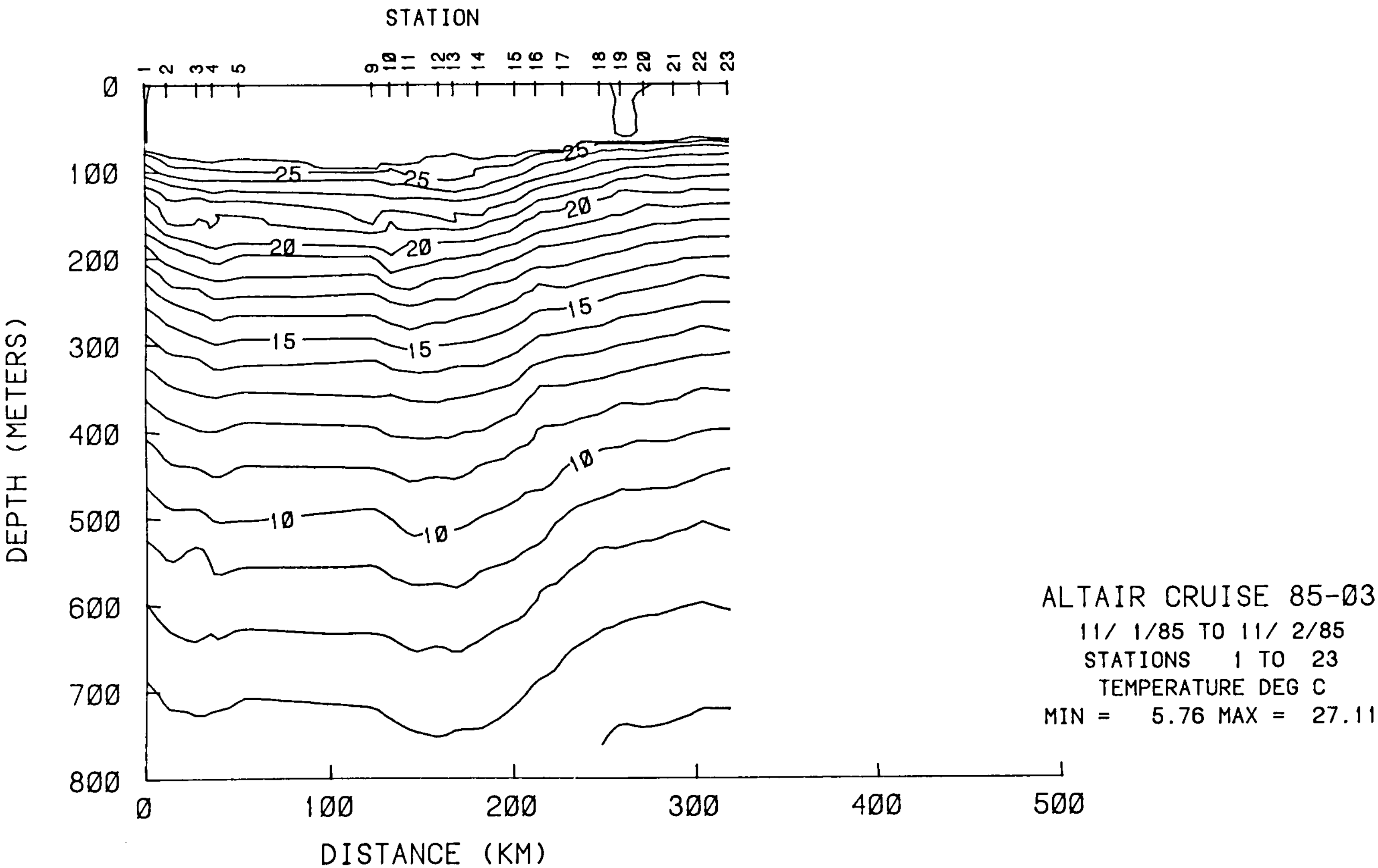

STATION
17
18
19
20
21
22
23
0
100
200
300
400
500
600
700
800
DEPTH (METERS)
25
20
15
10
0
100
200
DISTANCE (KM)
ALTAIR CRUISE 85-02
10/21/85 TO 10/21/85
STATIONS 17 TO 23
TEMPERATURE DEG C
MIN = 5.61 MAX = 28.67

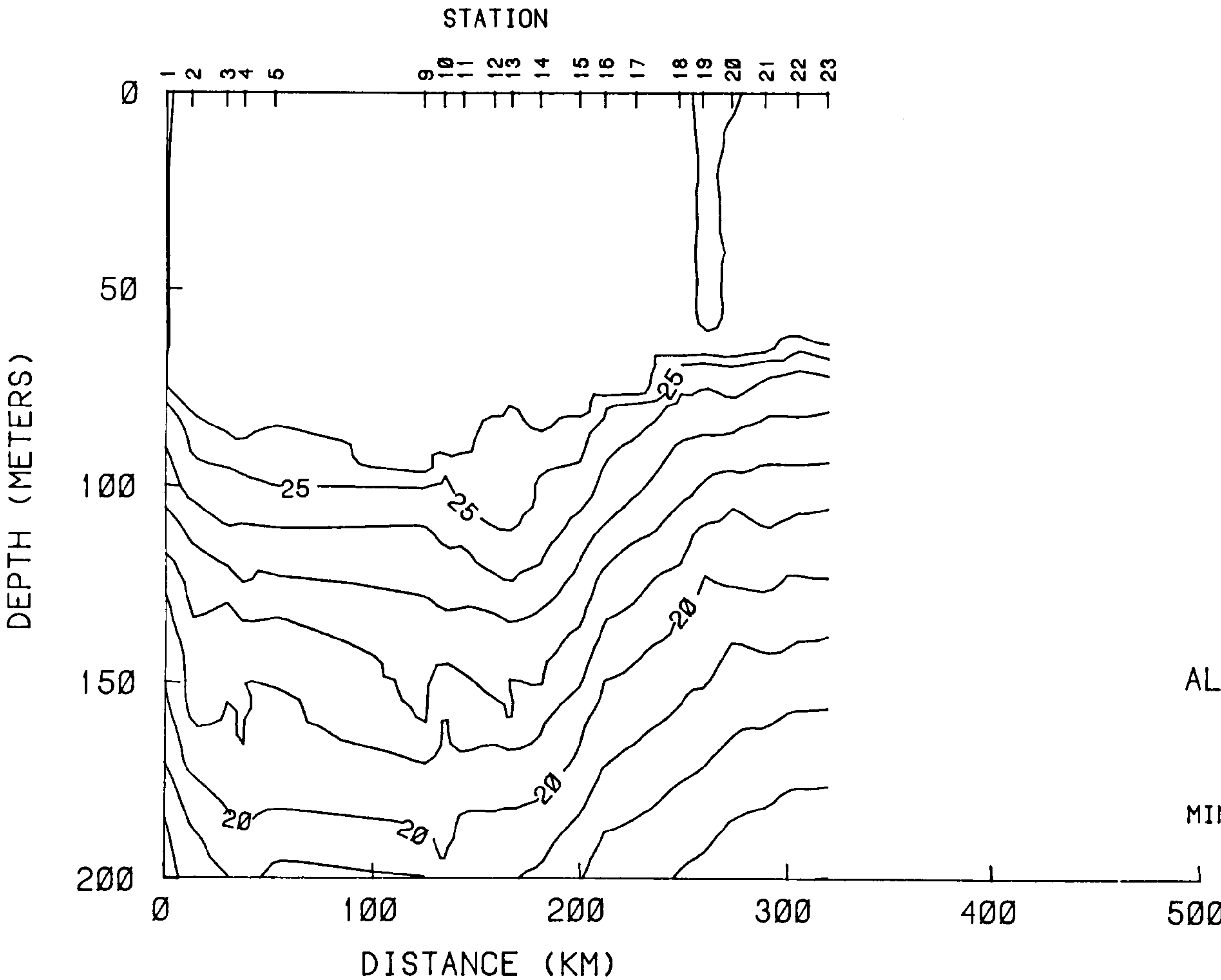

STATION
17
18
19
20
21
22
23
0
50
100
150
200
DEPTH (METERS)
25
25
20
20
0
100
200
DISTANCE (KM)
ALTAIR CRUISE 85-02
10/21/85 TO 10/21/85
STATIONS 17 TO 23
TEMPERATURE DEG C
MIN = 14.60 MAX = 28.67



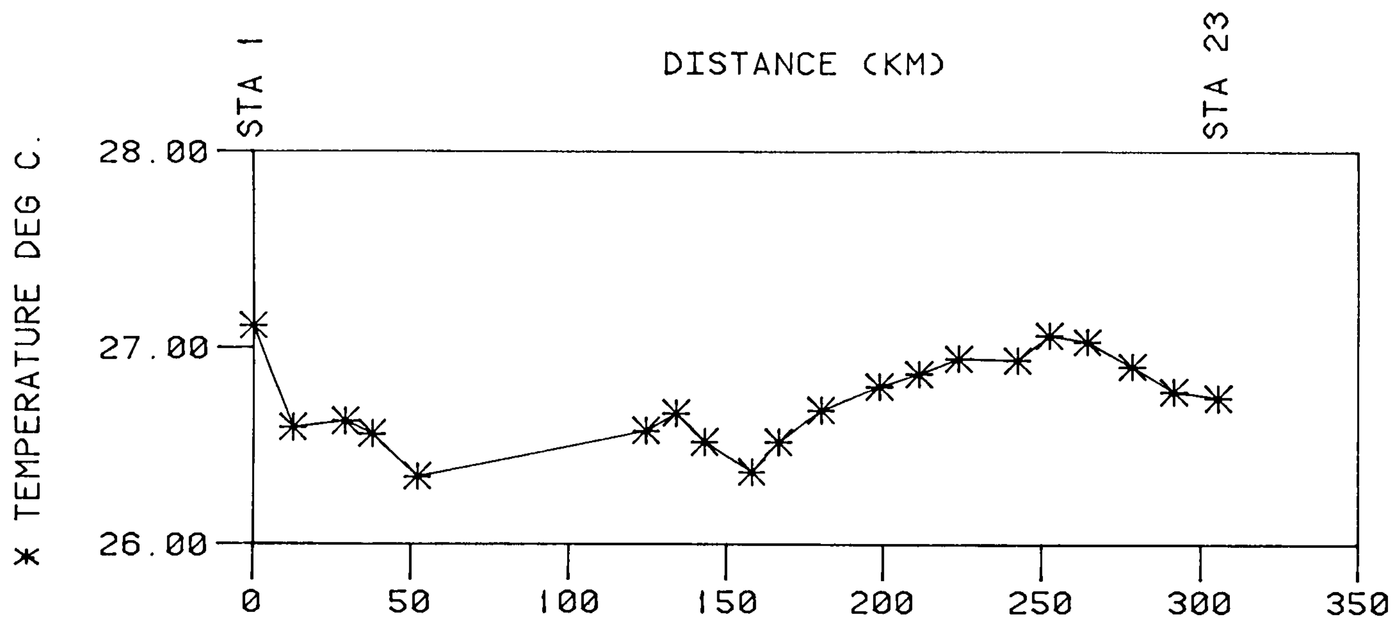
PARAMETERS AT SURFACE ALTAIR CRUISE 85-02


ALTAIR CRUISE 85-Ø3
11/ 1/85 TO 11/ 2/85
97 W 96 W 95 W 94 W 93 W 92 W 91 W 9Ø W 89 W 88 W 87 W 86 W 85 W 84 W 83 W 82 W
3Ø N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
3000 m
1000 m
200 m
1
23

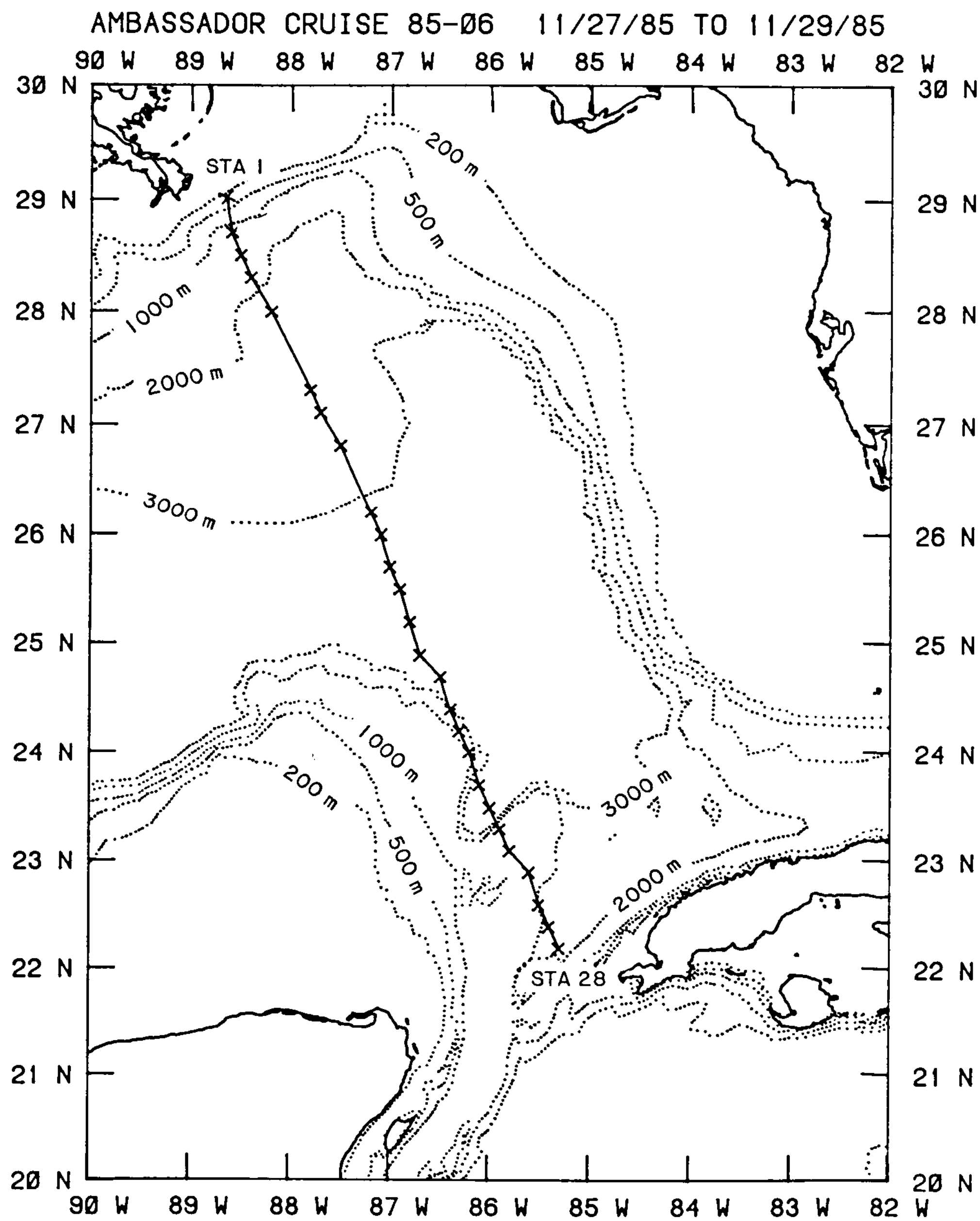

STATION
1 2 3 4 5 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
DEPTH (METERS)
0
100
200
300
400
500
600
700
800
DISTANCE (KM)
0
100
200
300
400
500
25
20
15
10
ALTAIR CRUISE 85-03
11/ 1/85 TO 11/ 2/85
STATIONS 1 TO 23
TEMPERATURE DEG C
MIN = 5.76 MAX = 27.11

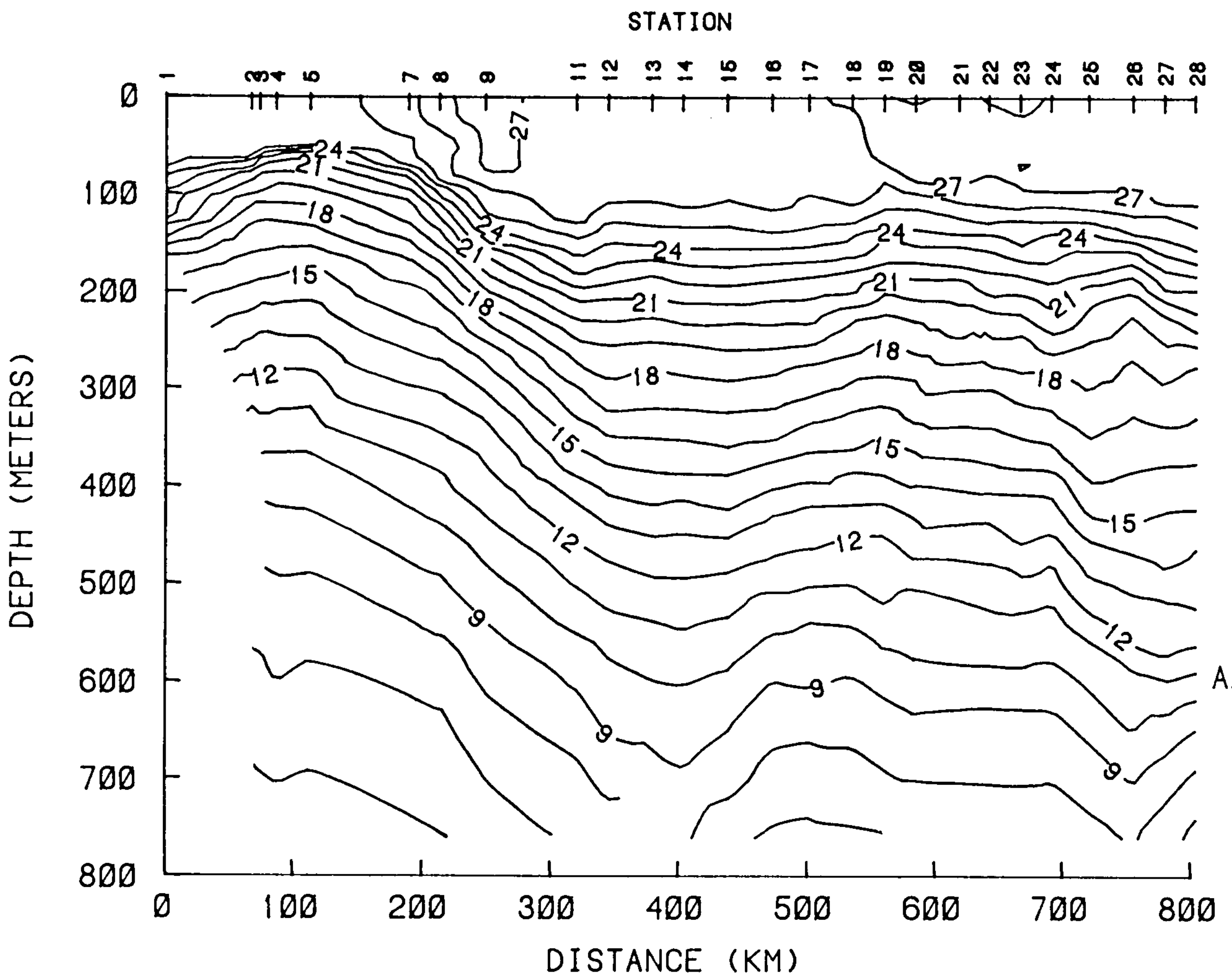


ALTAIR CRUISE 85-03
11/ 1/85 TO 11/ 2/85
STATIONS 1 TO 23
TEMPERATURE DEG C
MIN = 15.98 MAX = 27.11

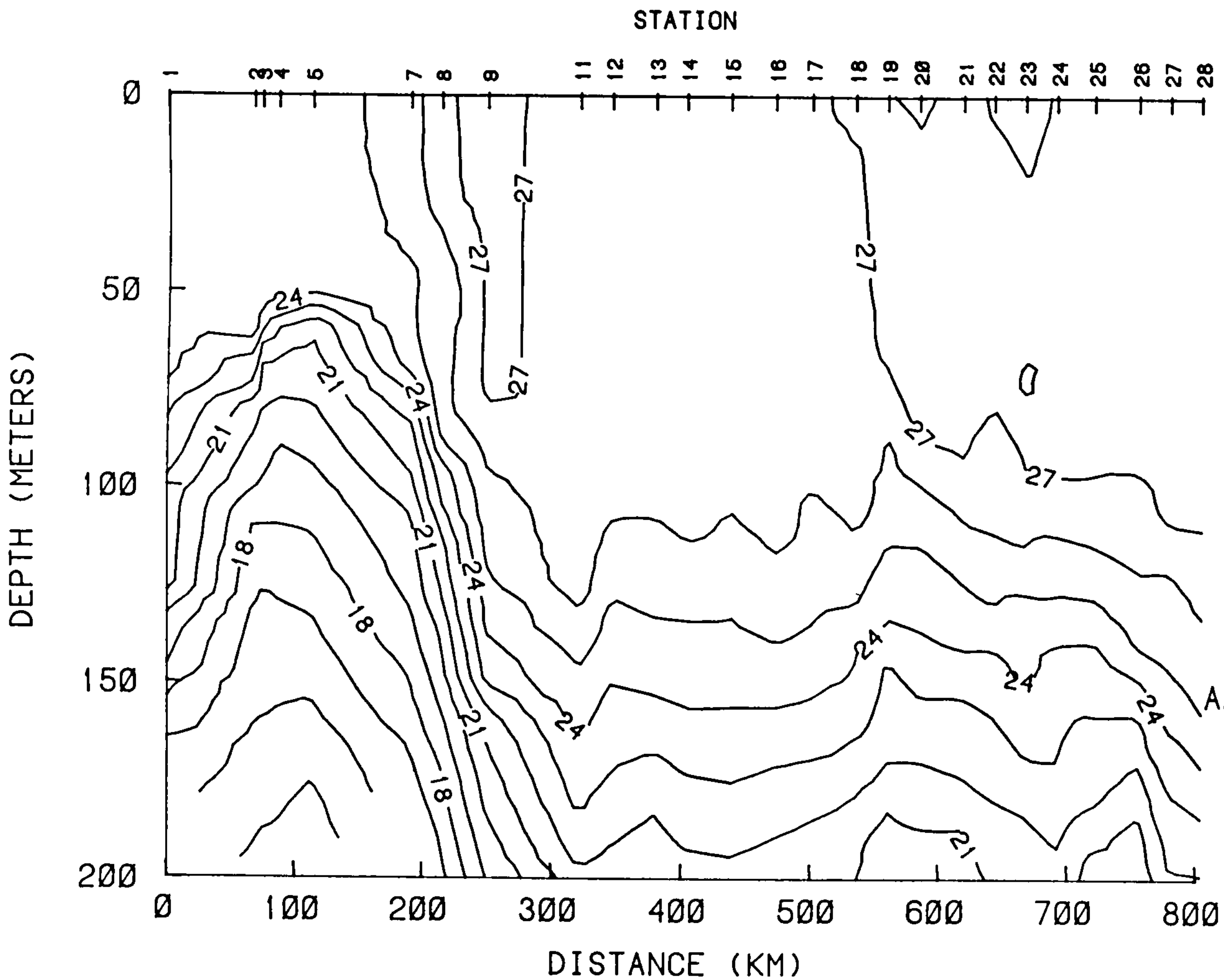


PARAMETERS AT SURFACE ALTAIR CRUISE 85-03

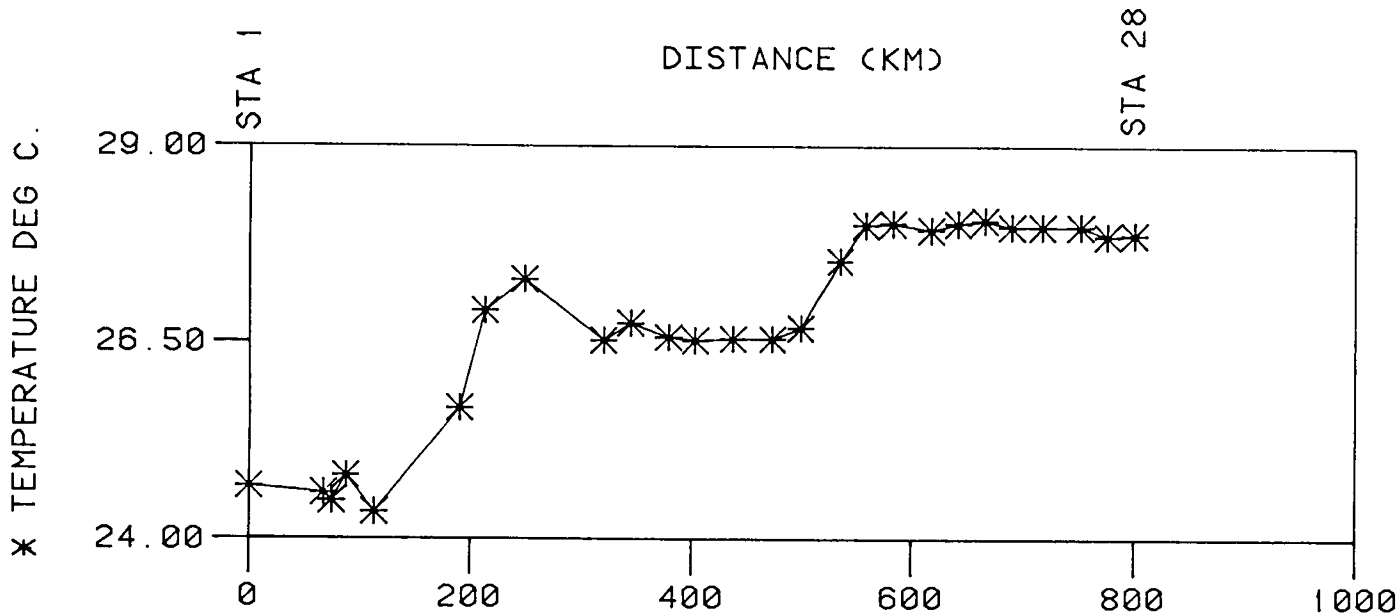

AMBASSADOR CRUISE 85-Ø6 11/27/85 TO 11/29/85
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
20 N
STA 1
STA 28
200 m
500 m
1000 m
2000 m
3000 m



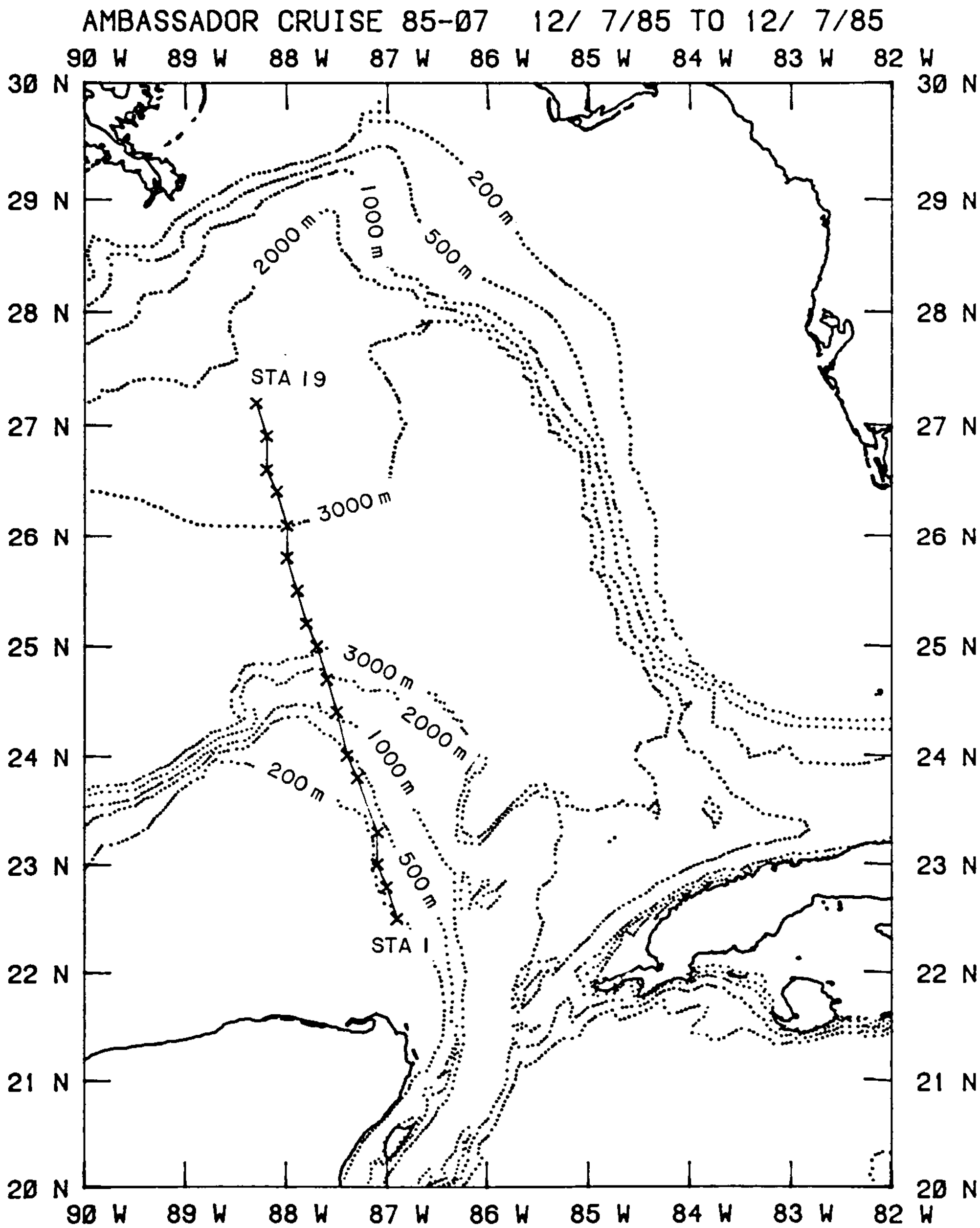
AMBASSADOR CRUISE 85-06
11/27/85 TO 11/29/85
STATIONS 1 TO 28
TEMPERATURE DEG C
MIN = 5.64 MAX = 28.07

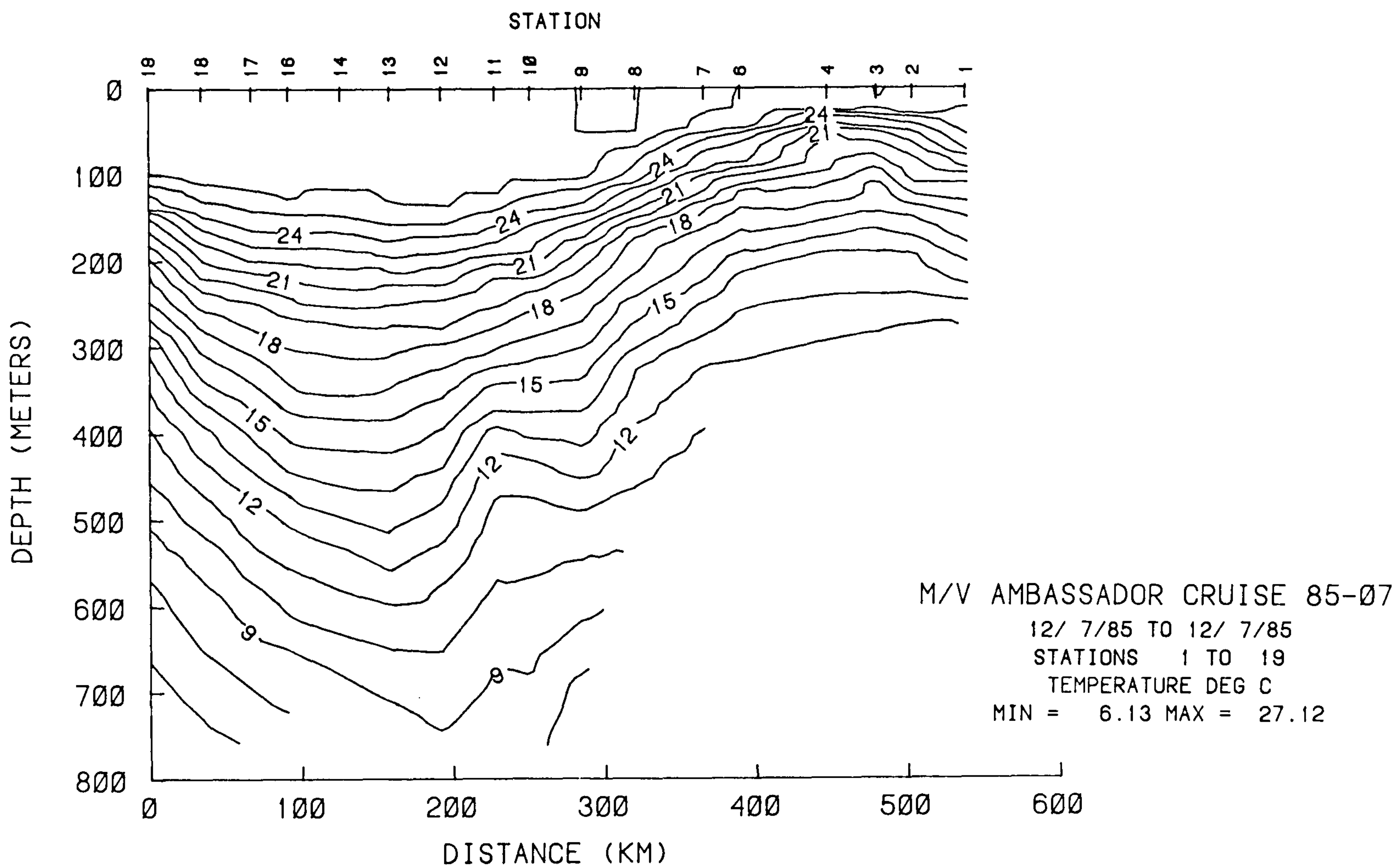


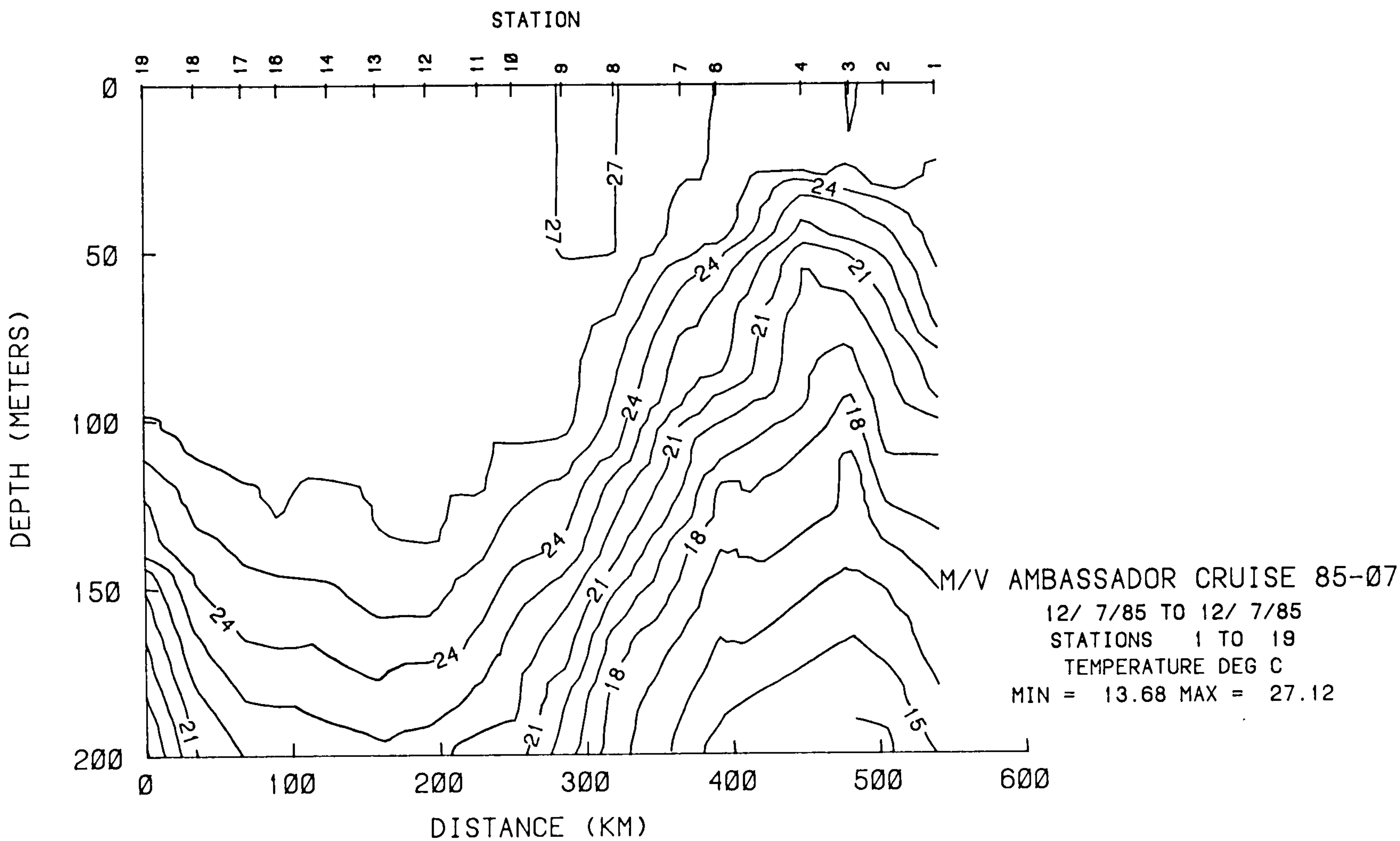
AMBASSADOR CRUISE 85-06
11/27/85 TO 11/29/85
STATIONS 1 TO 28
TEMPERATURE DEG C
MIN = 14.15 MAX = 28.07

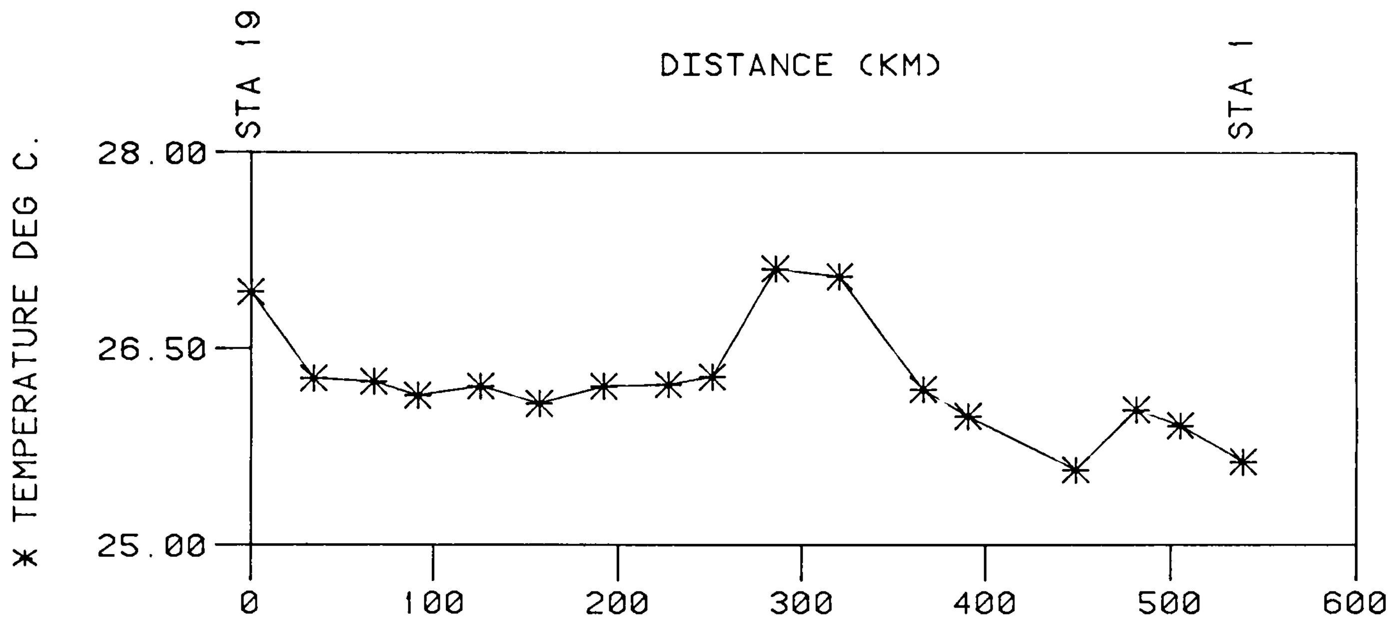


PARAMETERS AT SURFACE AMBASSADOR CRUISE 85-06

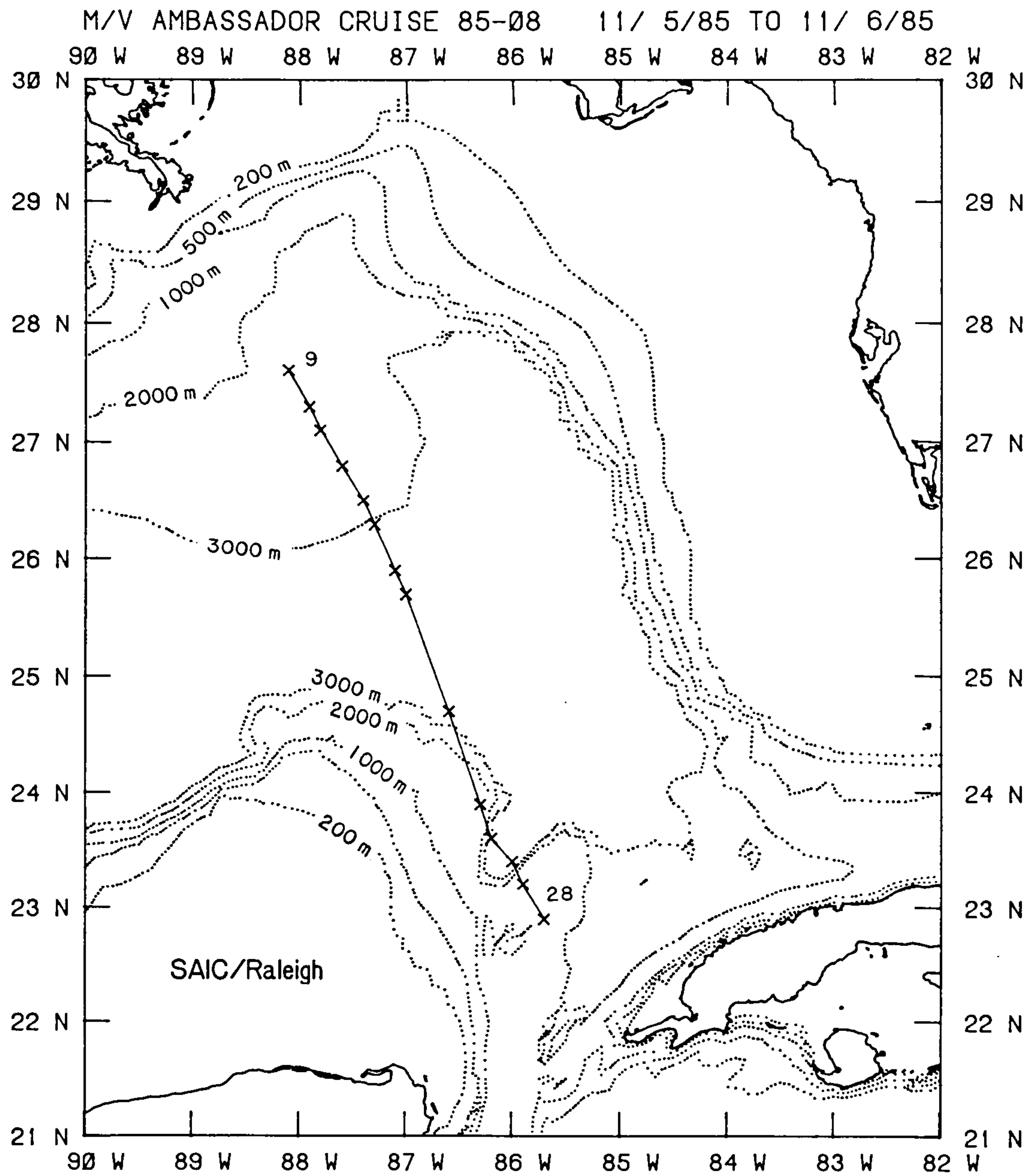

AMBASSADOR CRUISE 85-Ø7 12/ 7/85 TO 12/ 7/85
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
20 N
200 m
500 m
1000 m
2000 m
3000 m
STA 19
STA 1


STATION
19 18 17 16 14 13 12 11 10 9 8 7 6 4 3 2 1
DEPTH (METERS)
0
100
200
300
400
500
600
700
800
DISTANCE (KM)
0
100
200
300
400
500
600
24
21
18
15
12
9
M/V AMBASSADOR CRUISE 85-07
12/ 7/85 TO 12/ 7/85
STATIONS 1 TO 19
TEMPERATURE DEG C
MIN = 6.13 MAX = 27.12

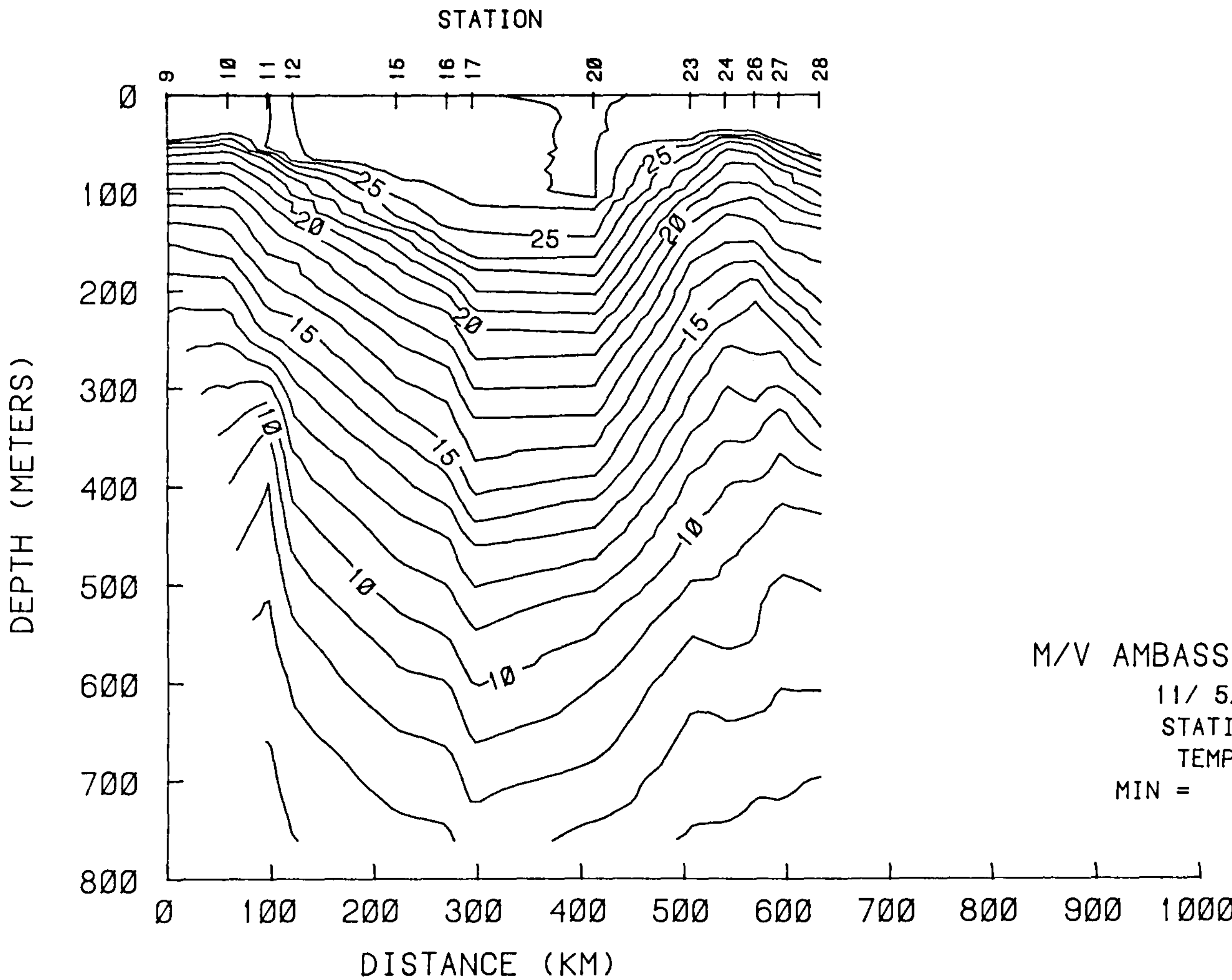

STATION
19 18 17 16 14 13 12 11 10 9 8 7 6 4 3 2 1
DEPTH (METERS)
0
50
100
150
200
DISTANCE (KM)
0 100 200 300 400 500 600
27
24
21
18
15
M/V AMBASSADOR CRUISE 85-07
12/ 7/85 TO 12/ 7/85
STATIONS 1 TO 19
TEMPERATURE DEG C
MIN = 13.68 MAX = 27.12



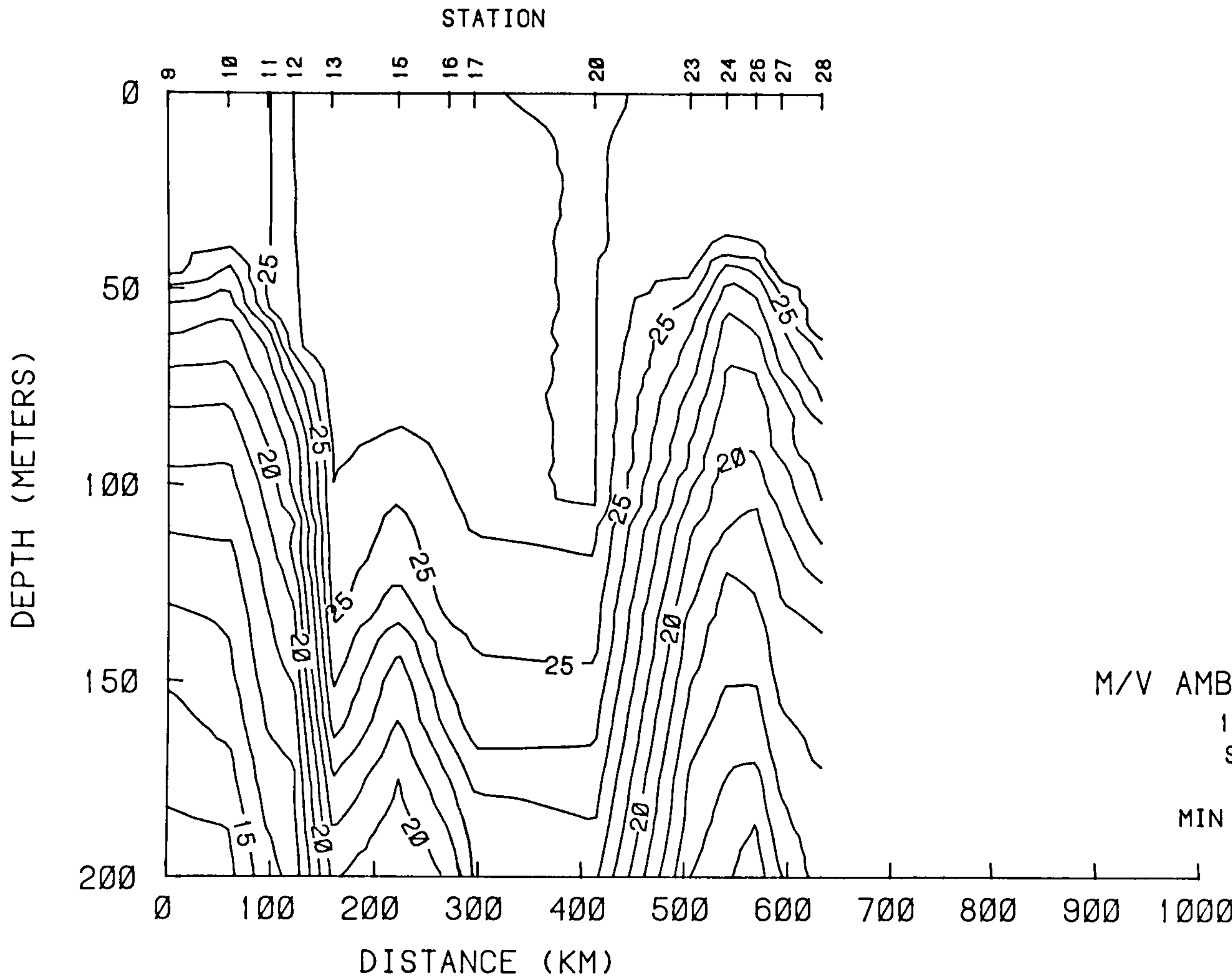
PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 85-07



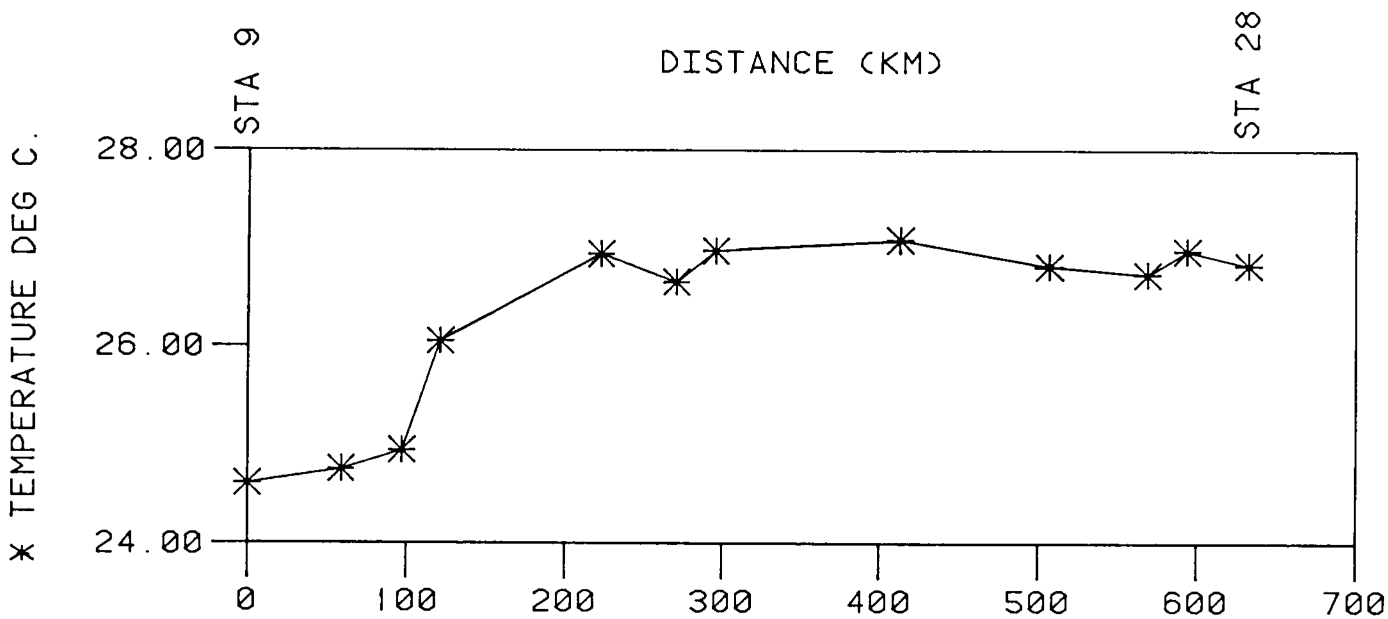
M/V AMBASSADOR CRUISE 85-Ø8 11/ 5/85 TO 11/ 6/85
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
9
28
SAIC/Raleigh



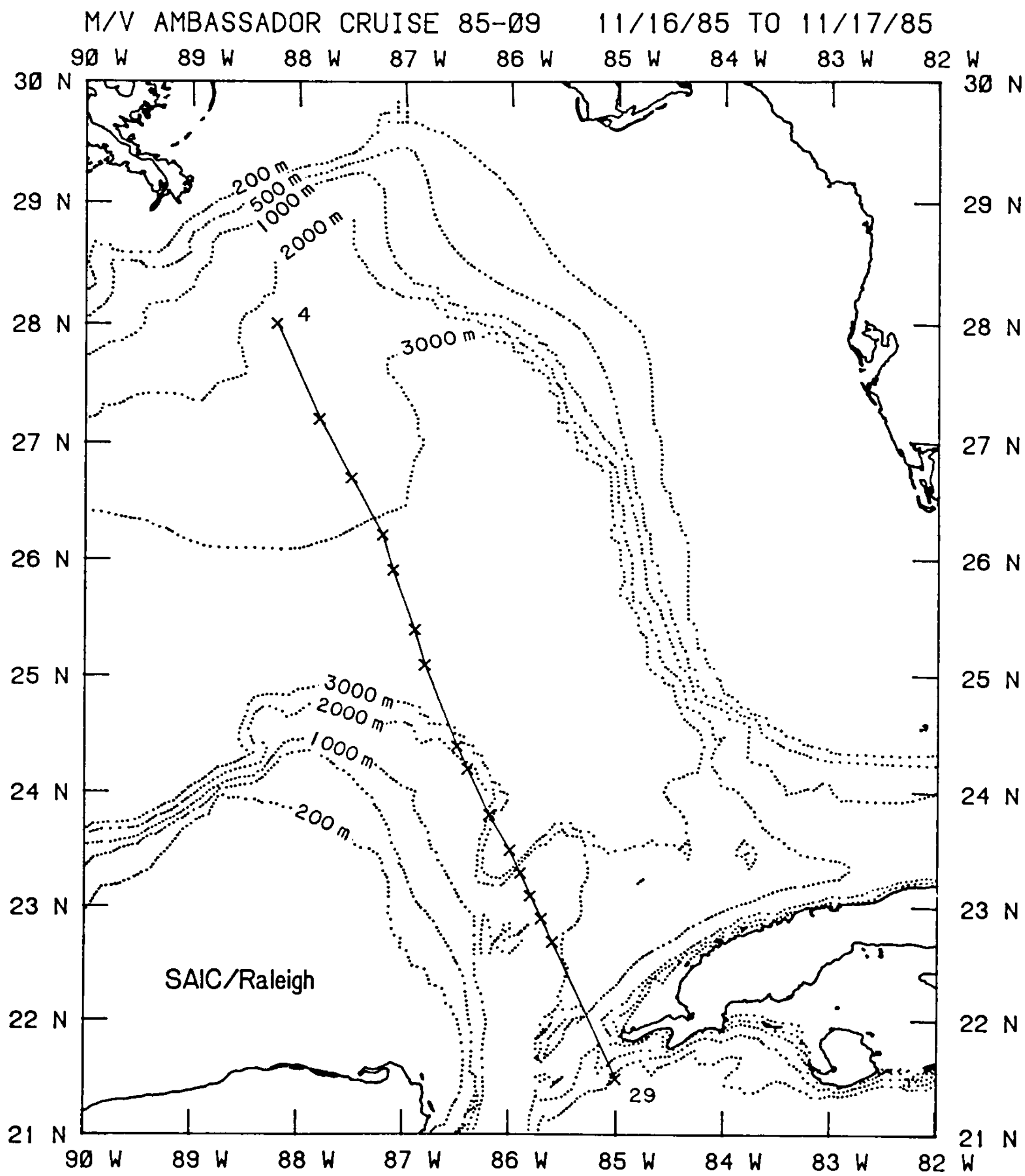
M/V AMBASSADOR CRUISE 85-08
11/ 5/85 TO 11/ 6/85
STATIONS 9 TO 28
TEMPERATURE DEG C
MIN = 5.49 MAX = 27.09

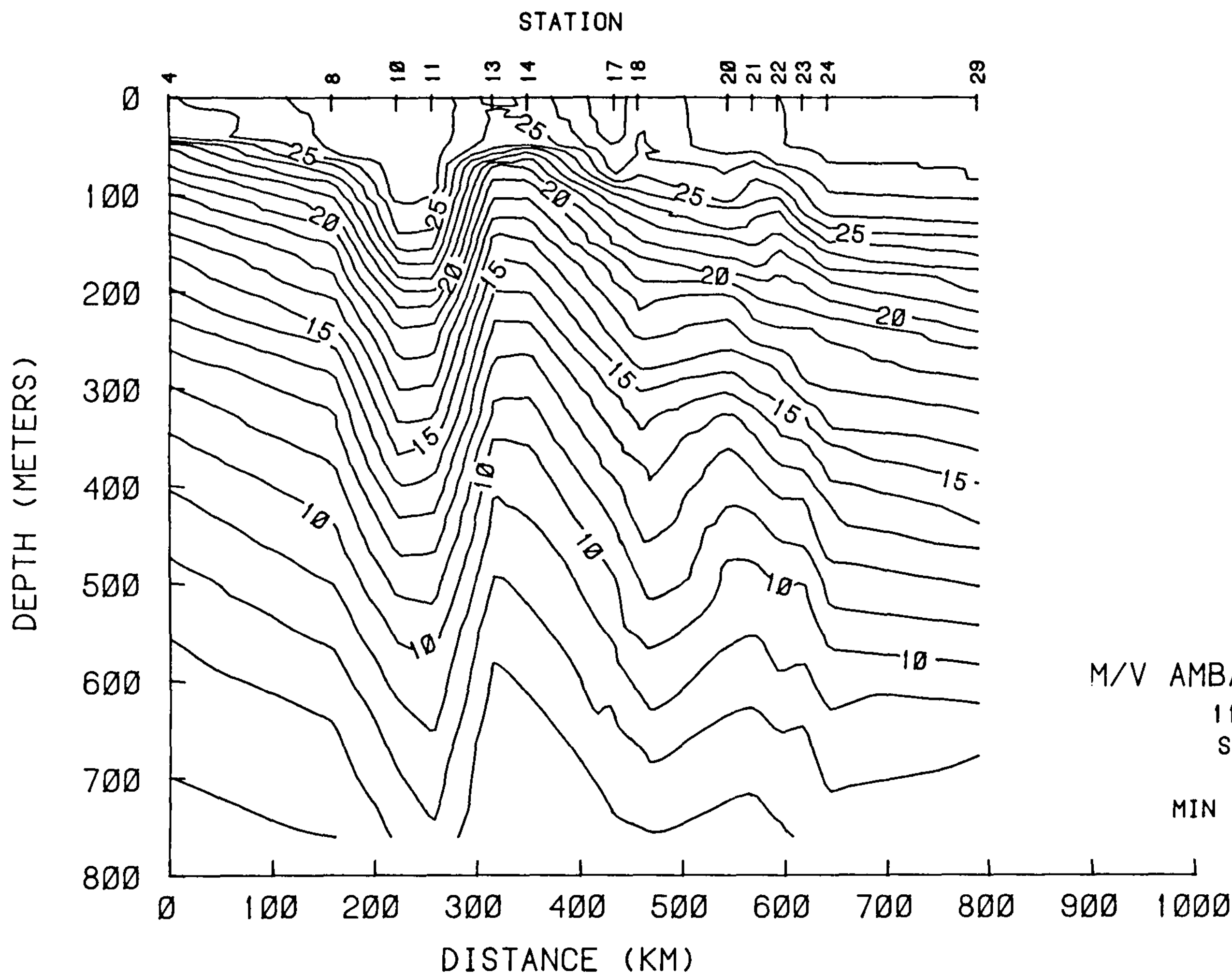


M/V AMBASSADOR CRUISE 85-08
11/ 5/85 TO 11/ 6/85
STATIONS 9 TO 28
TEMPERATURE DEG C
MIN = 13.51 MAX = 27.09

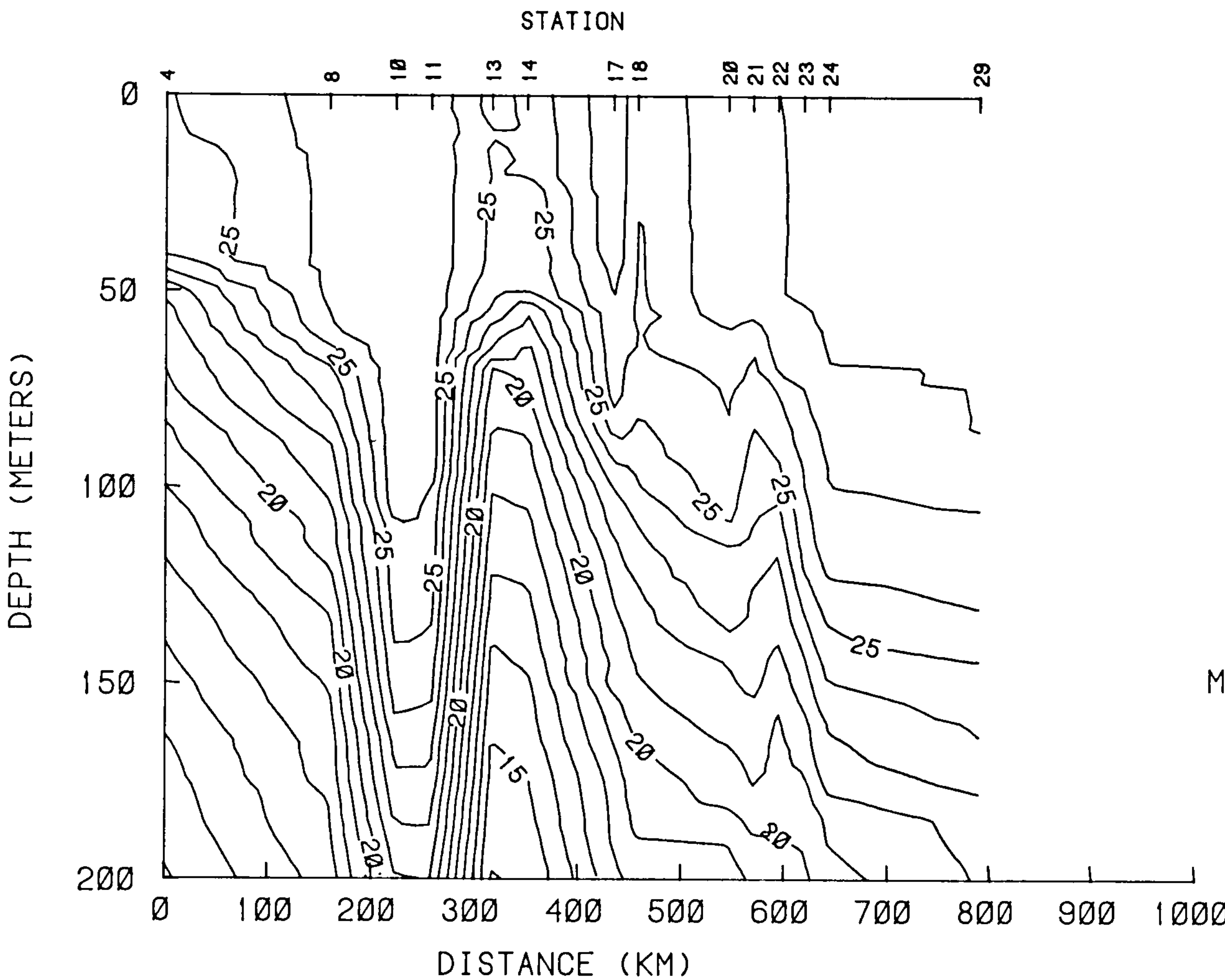


PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 85-08

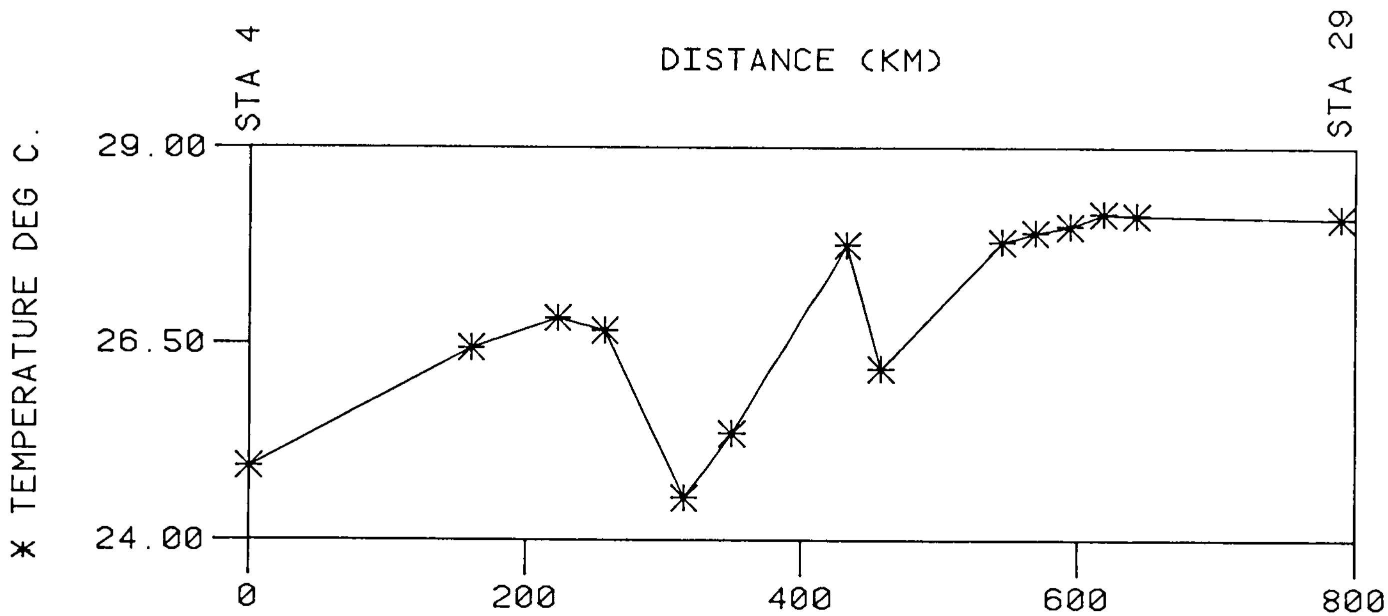

M/V AMBASSADOR CRUISE 85-Ø9 11/16/85 TO 11/17/85
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
4
29
SAIC/Raleigh



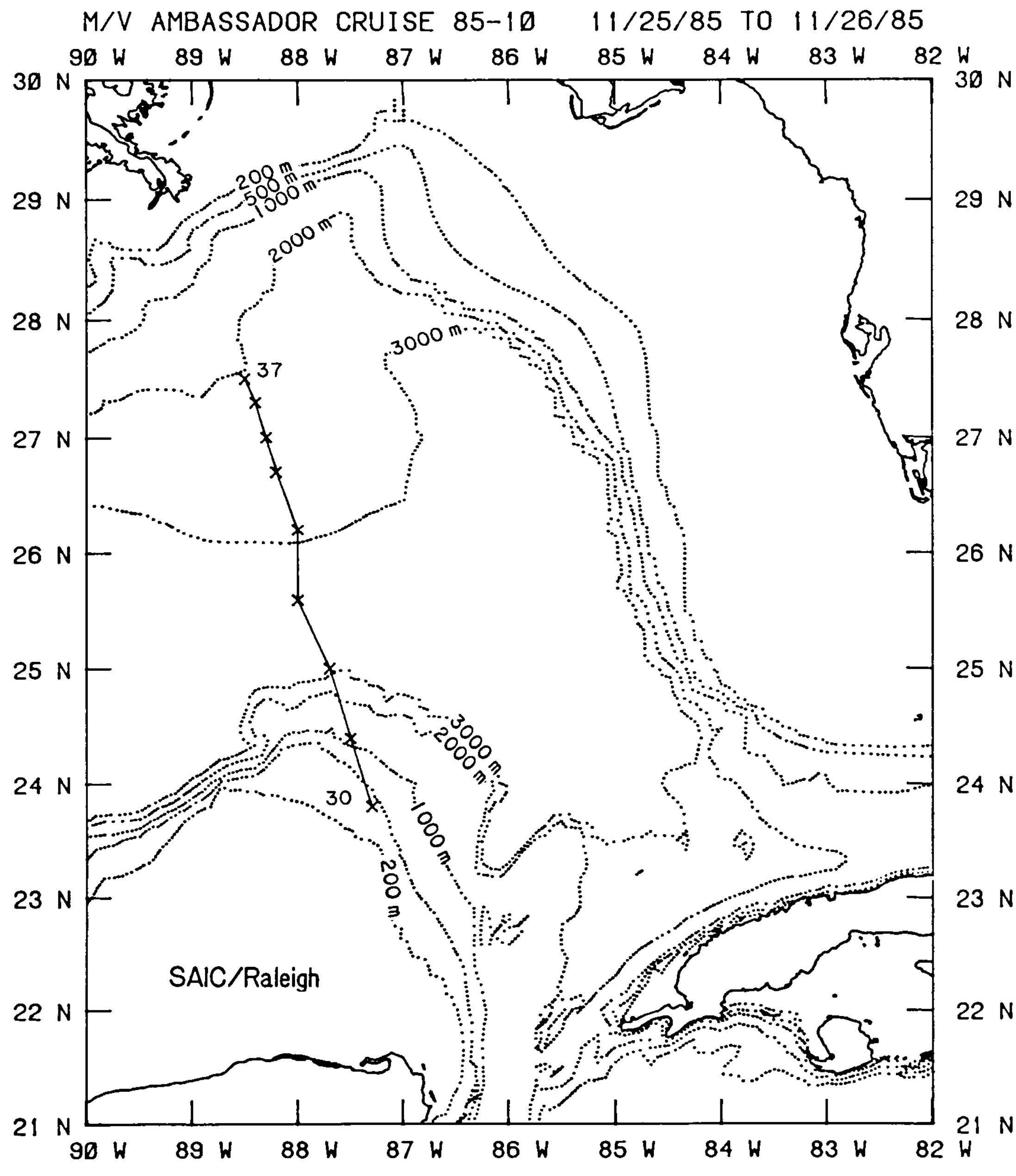
M/V AMBASSADOR CRUISE 85-09
11/16/85 TO 11/17/85
STATIONS 4 TO 29
TEMPERATURE DEG C
MIN = 5.67 MAX = 28.19

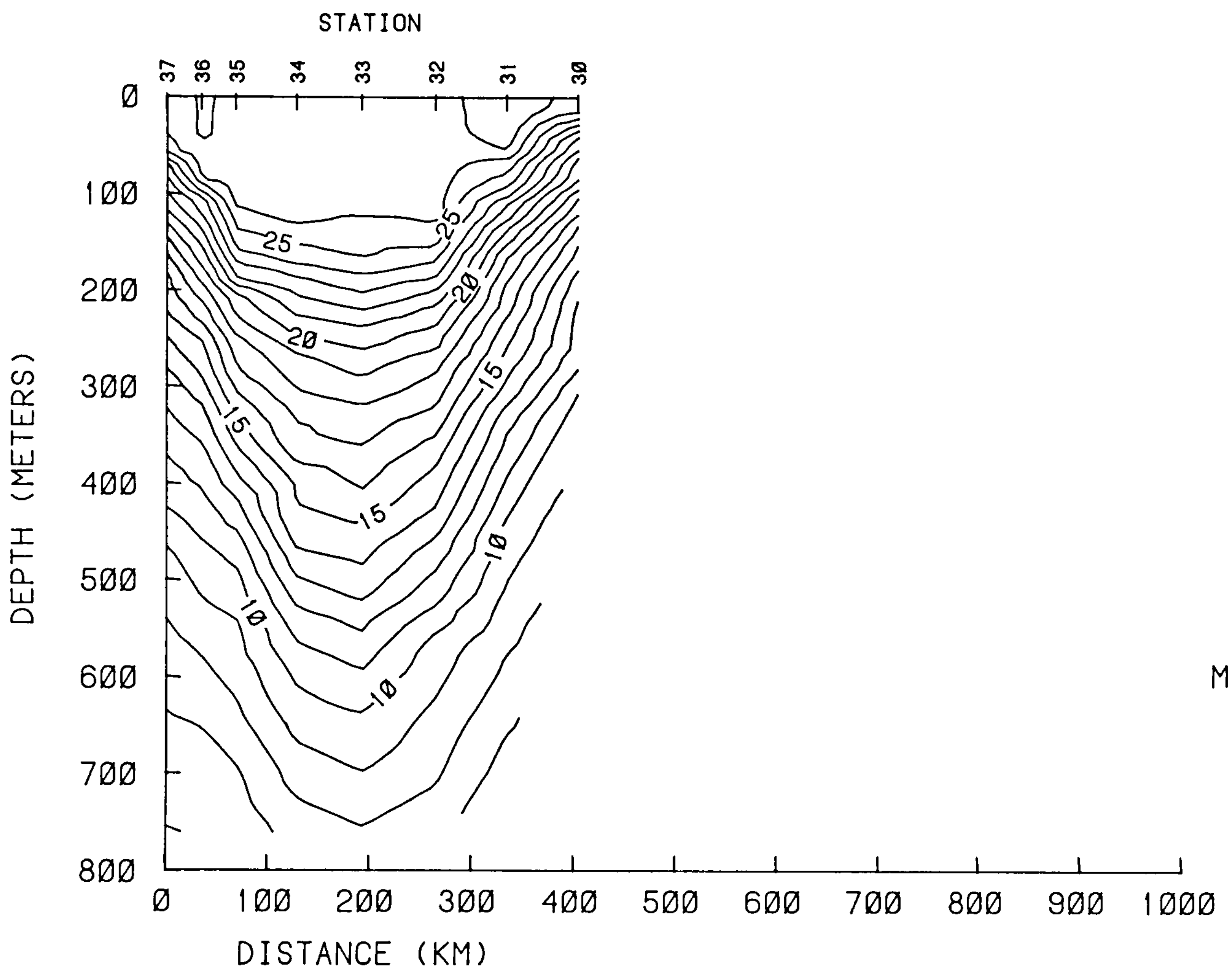


M/V AMBASSADOR CRUISE 85-09
11/16/85 TO 11/17/85
STATIONS 4 TO 29
TEMPERATURE DEG C
MIN = 13.87 MAX = 28.19



PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 85-09


M/V AMBASSADOR CRUISE 85-10   11/25/85 TO 11/26/85
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
37
30
3000 m
2000 m
1000 m
200 m
SAIC/Raleigh



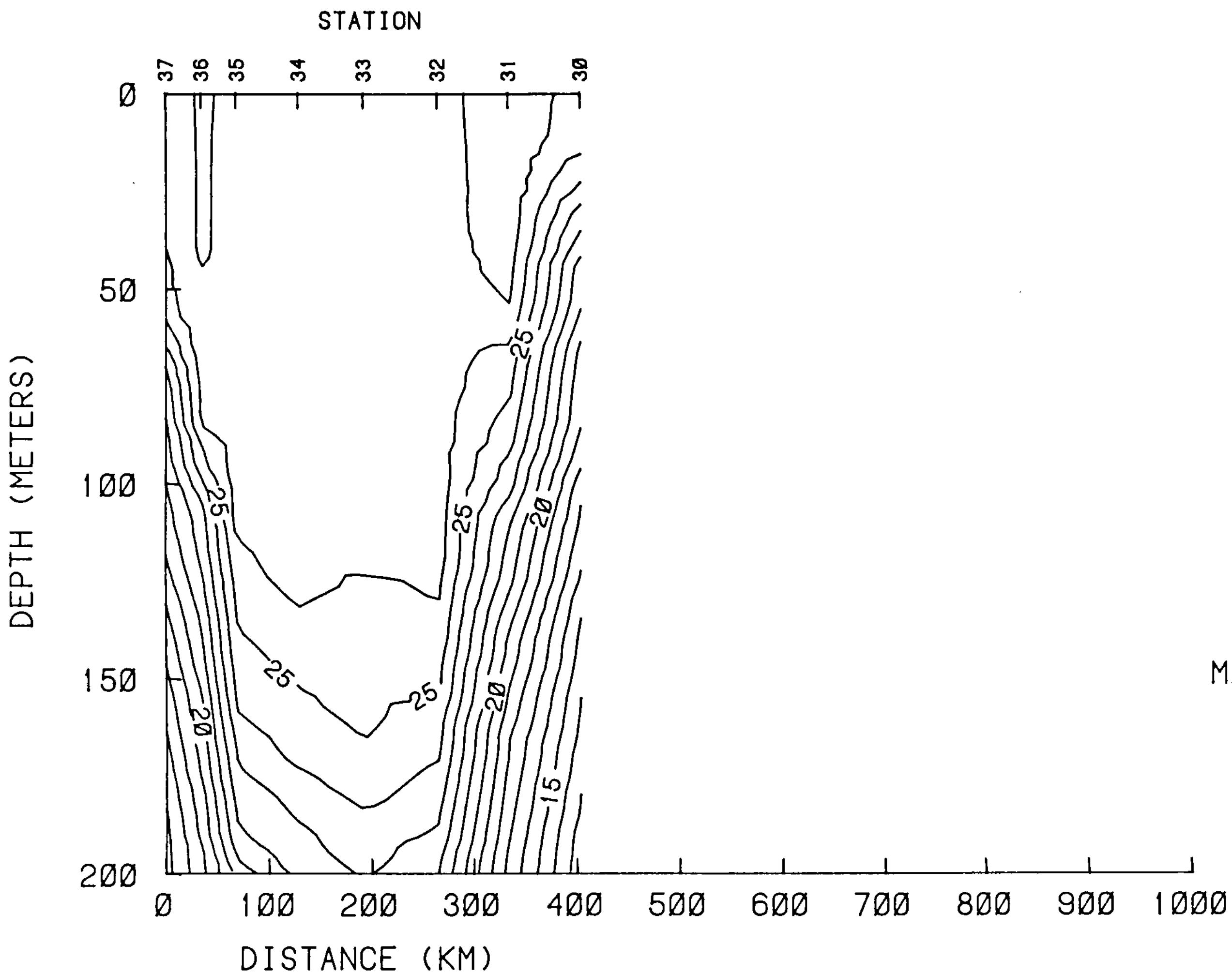
M/V AMBASSADOR CRUISE 85-10

11/25/85 TO 11/26/85

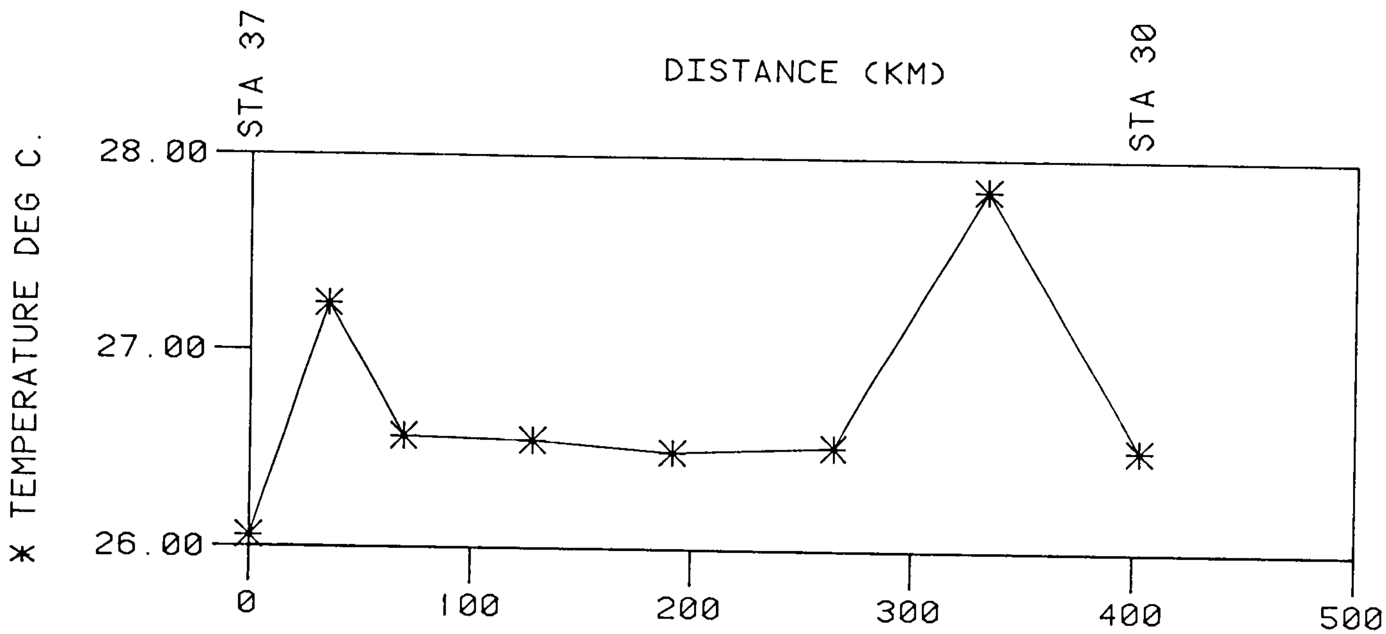
STATIONS 30 TO 37

TEMPERATURE DEG C

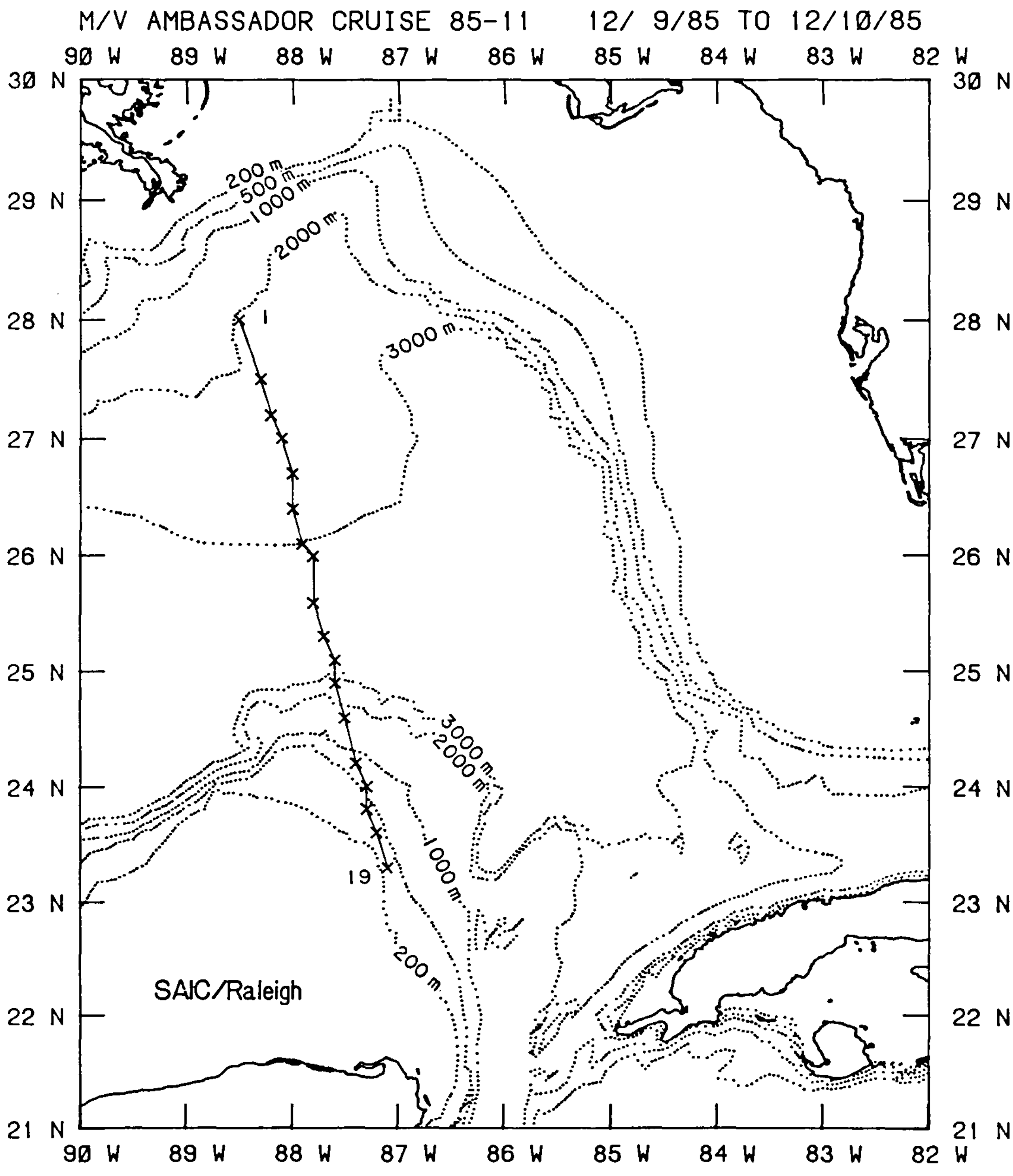
MIN = 5.97 MAX = 27.84

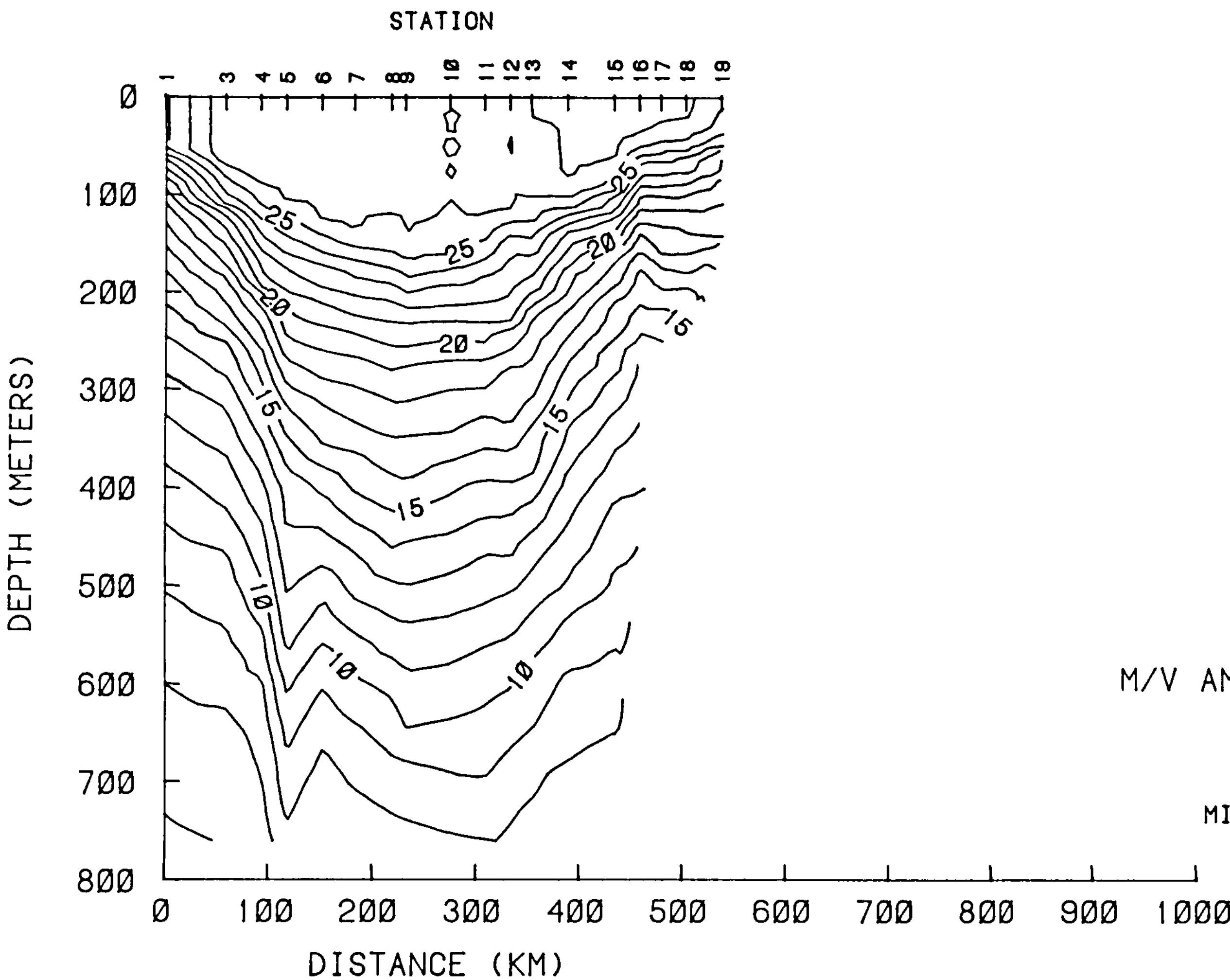


M/V AMBASSADOR CRUISE 85-10
11/25/85 TO 12/18/85
STATIONS 30 TO 37
TEMPERATURE DEG C
MIN = 12.36 MAX = 27.84

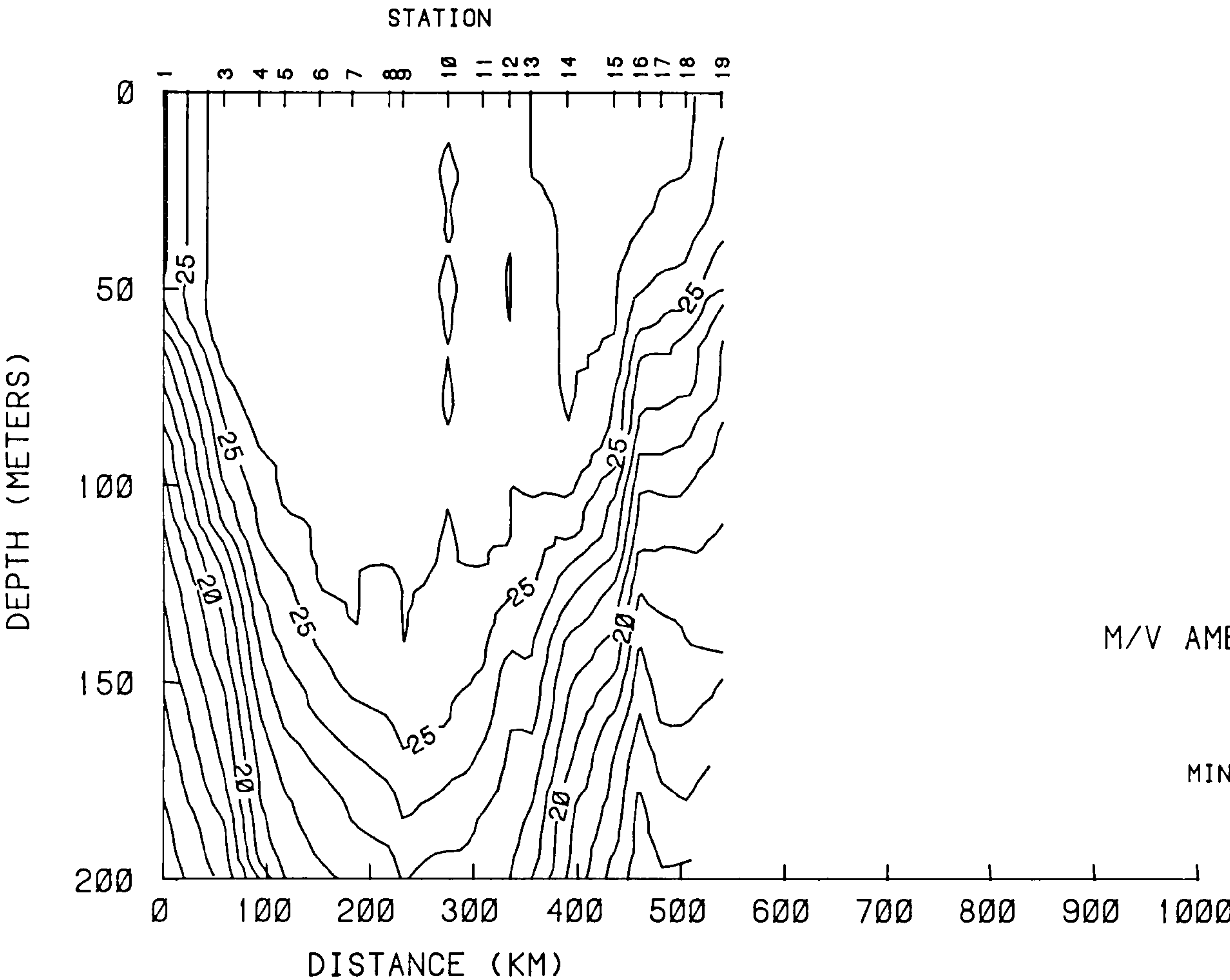


PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 85-10

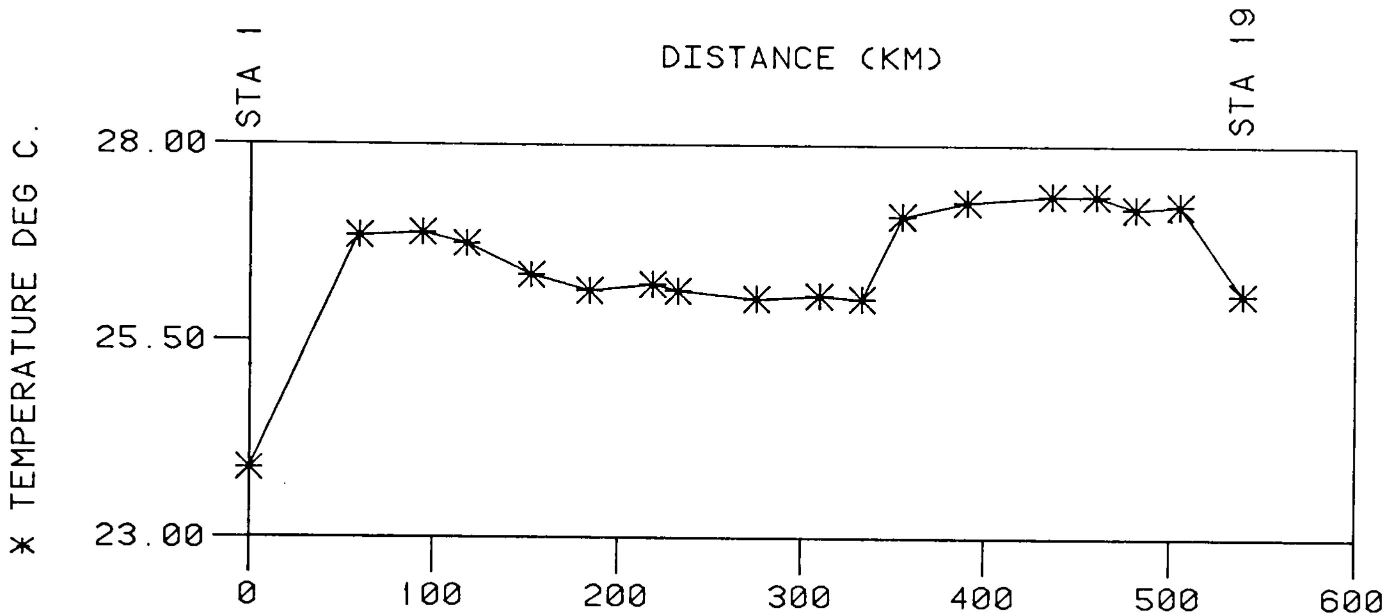

M/V AMBASSADOR CRUISE 85-11 12/ 9/85 TO 12/10/85
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
1
19
SAIC/Raleigh



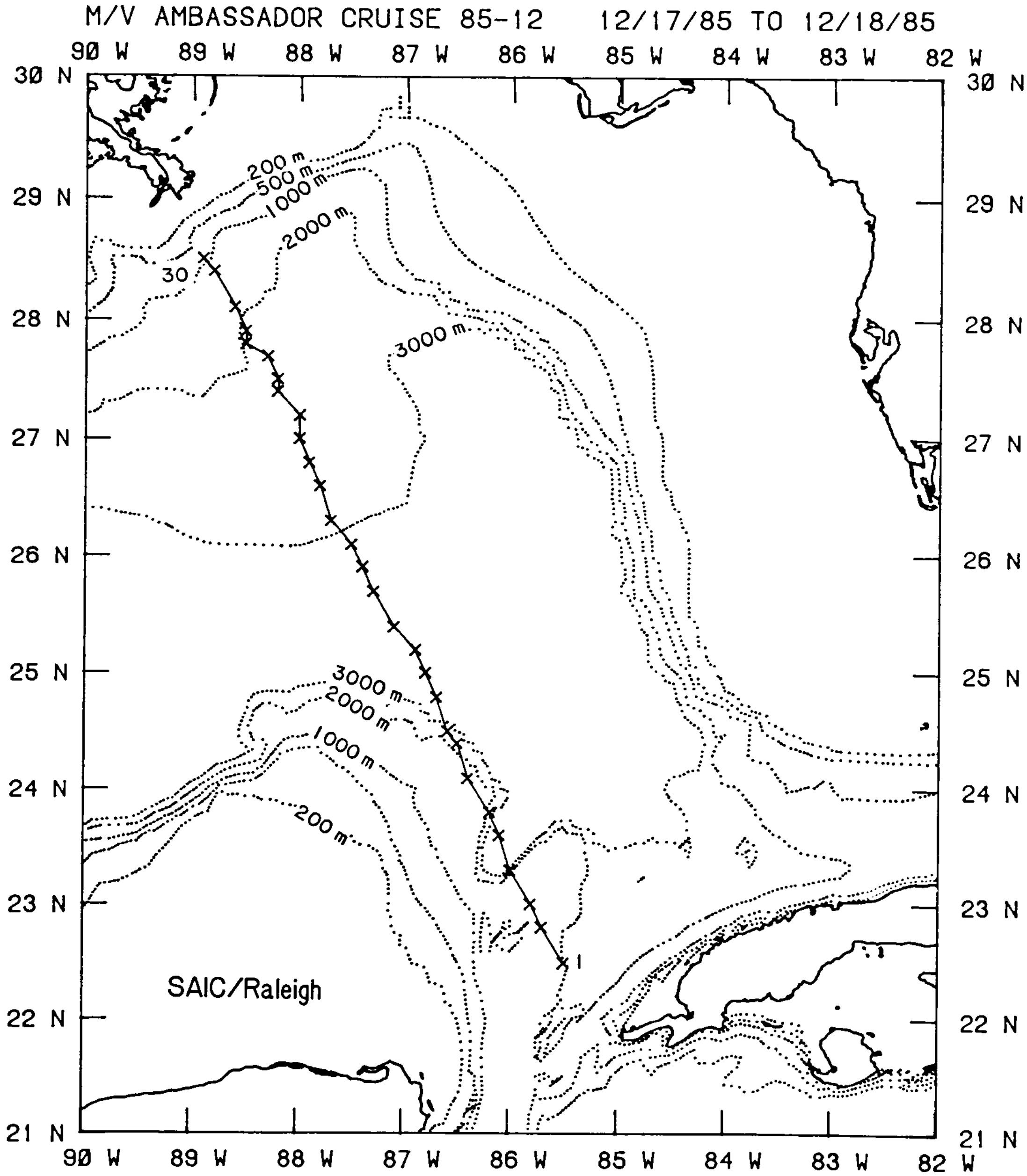
M/V AMBASSADOR CRUISE 85-11
12/ 9/85 TO 12/10/85
STATIONS 1 TO 19
TEMPERATURE DEG C
MIN = 5.83 MAX = 27.37

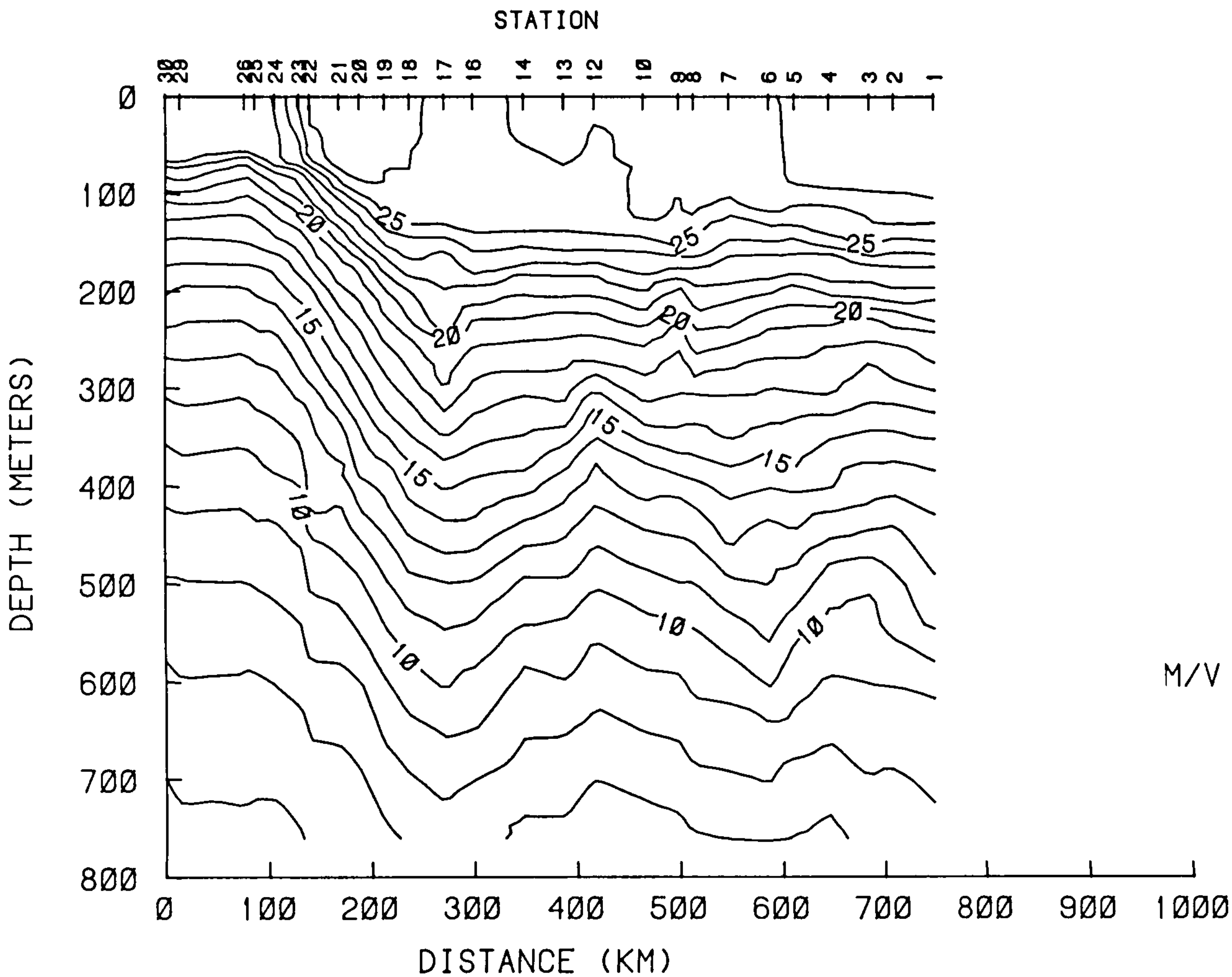


M/V AMBASSADOR CRUISE 85-11
12/ 9/85 TO 12/10/85
STATIONS 1 TO 19
TEMPERATURE DEG C
MIN = 14.32 MAX = 27.37

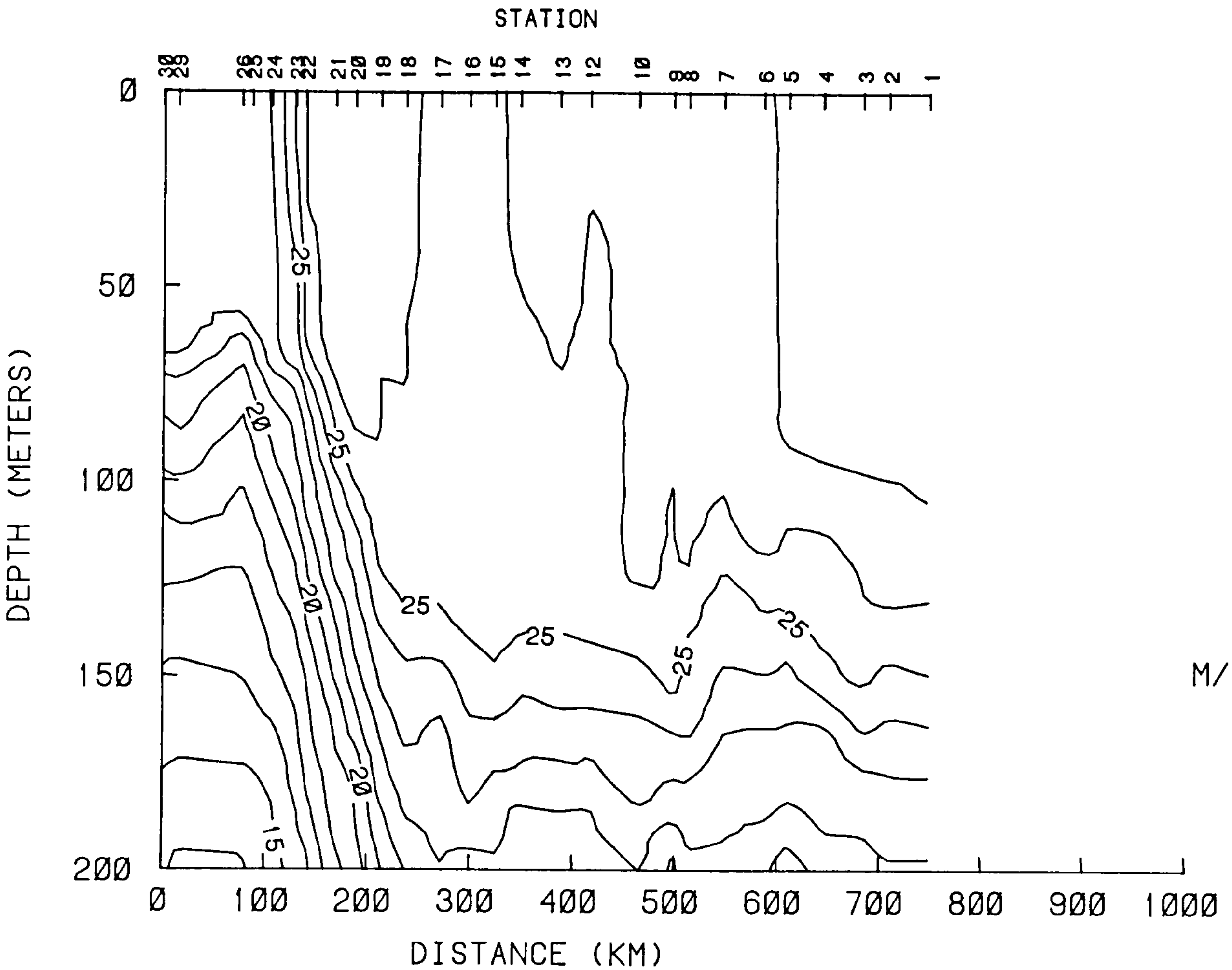


PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 85-11

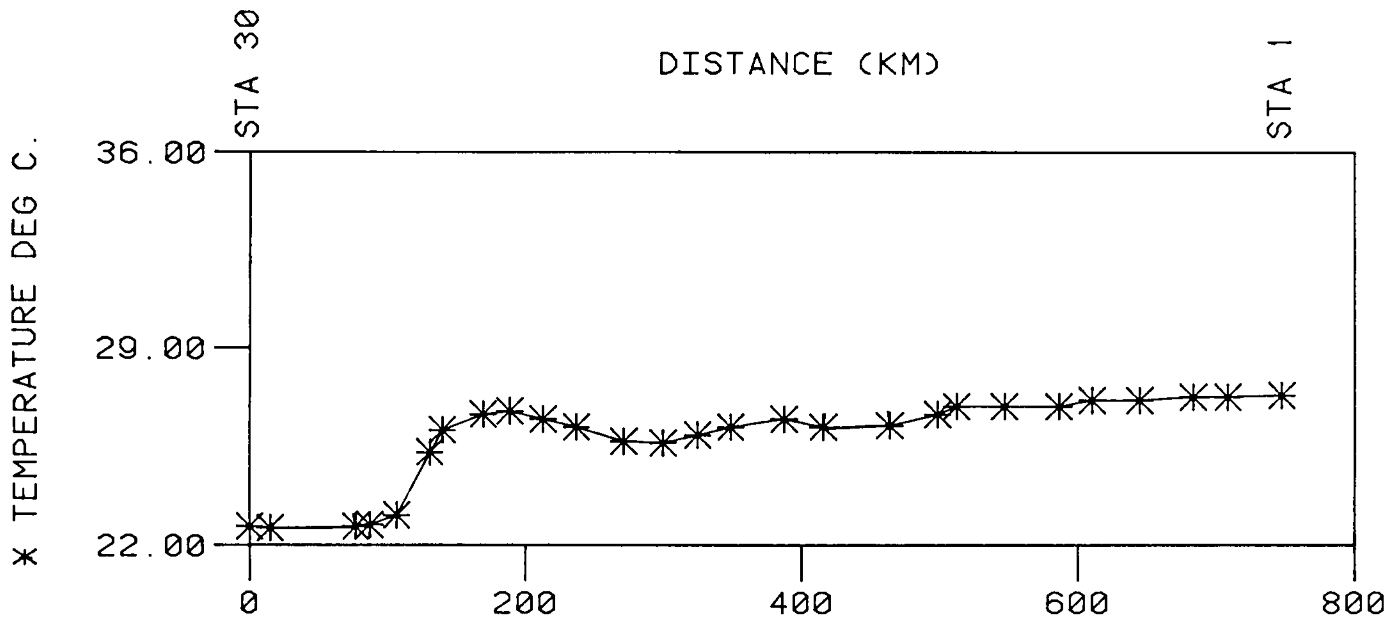

M/V AMBASSADOR CRUISE 85-12 12/17/85 TO 12/18/85
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
30
1
SAIC/Raleigh



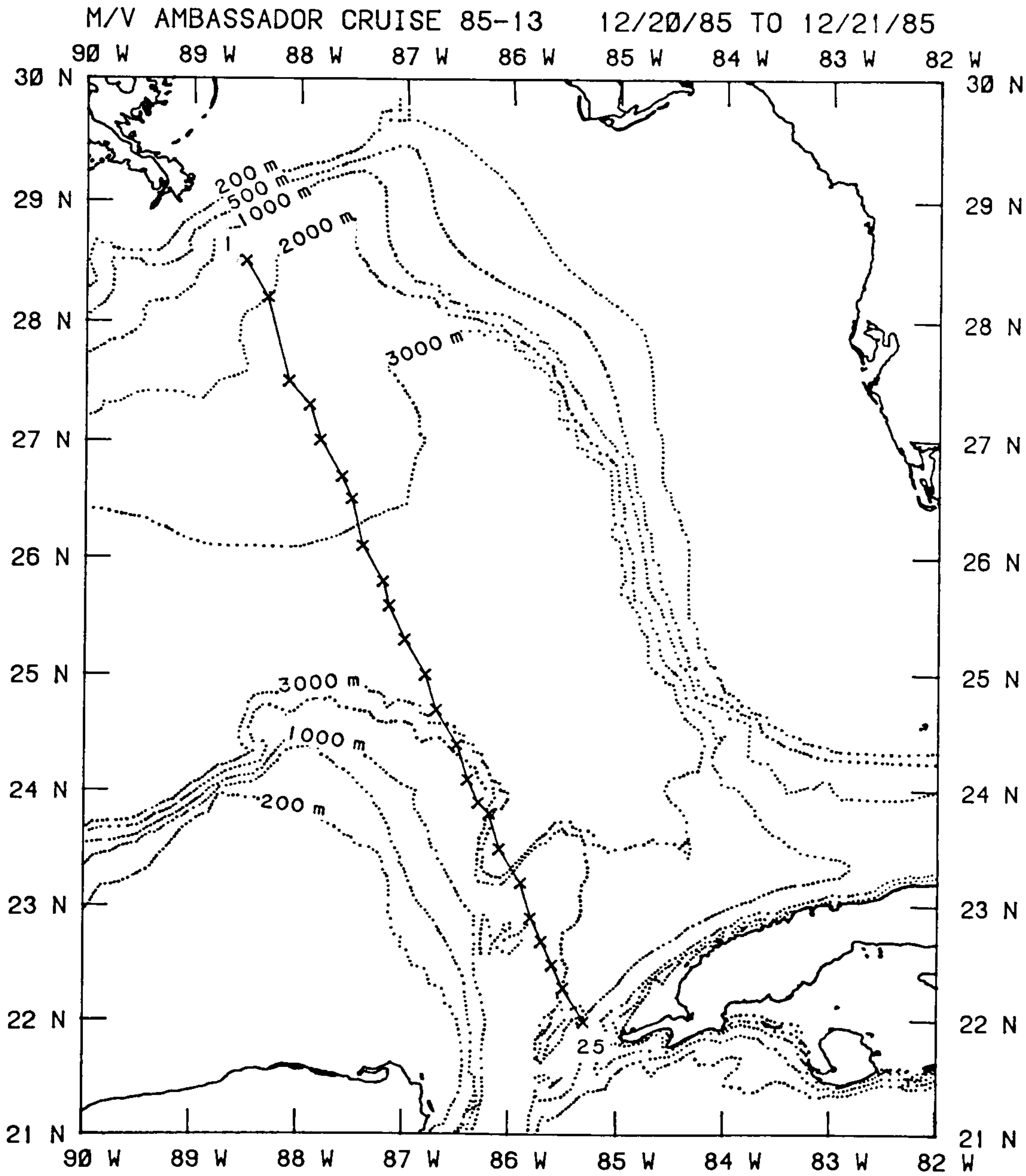
M/V AMBASSADOR CRUISE 85-12
12/18/80 TO 12/18/85
STATIONS 1 TO 30
TEMPERATURE DEG C
MIN = 5.69 MAX = 27.33

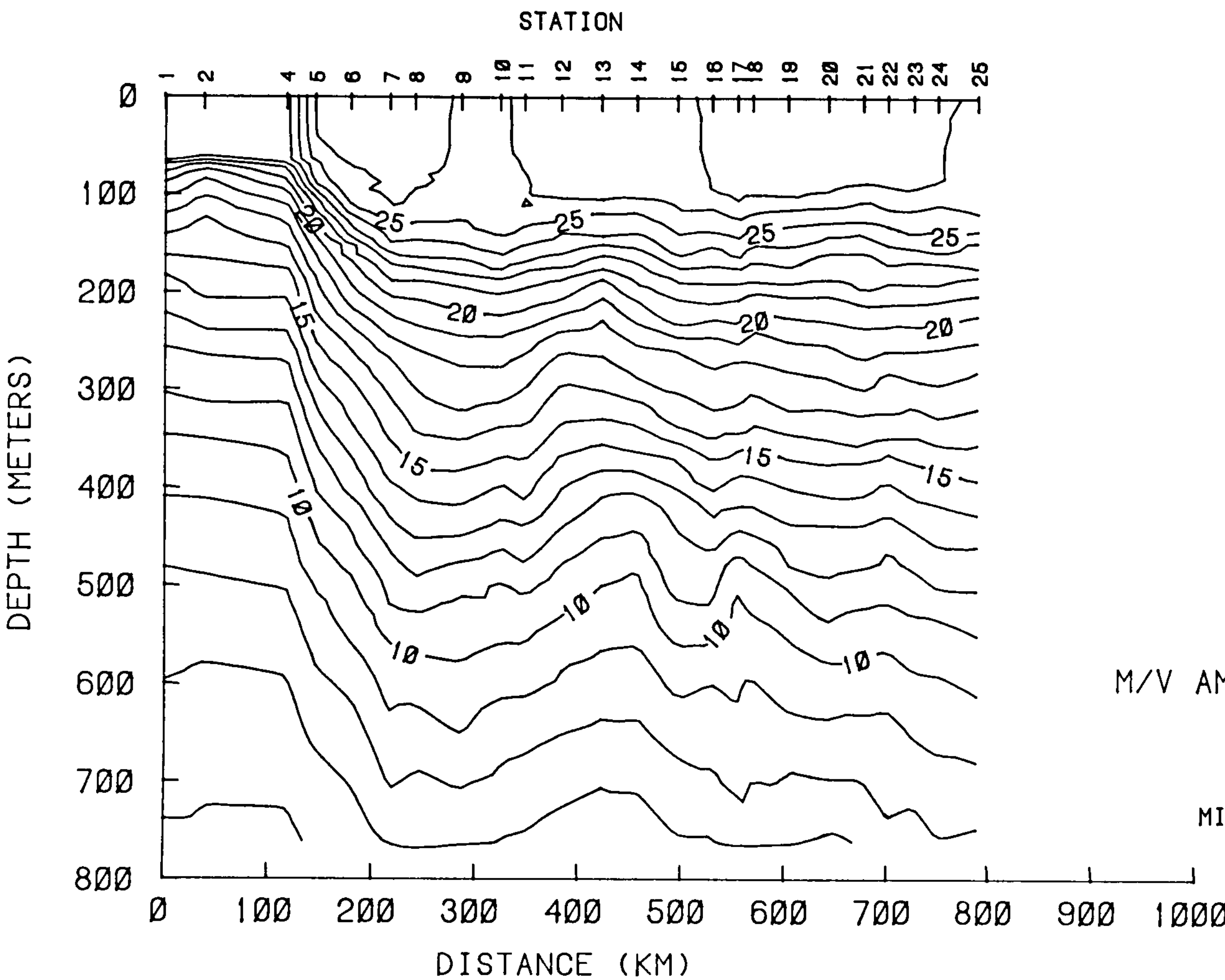


M/V AMBASSADOR CRUISE 85-12
12/18/8Ø TO 12/18/85
STATIONS 1 TO 3Ø
TEMPERATURE DEG C
MIN = 13.83 MAX = 27.33

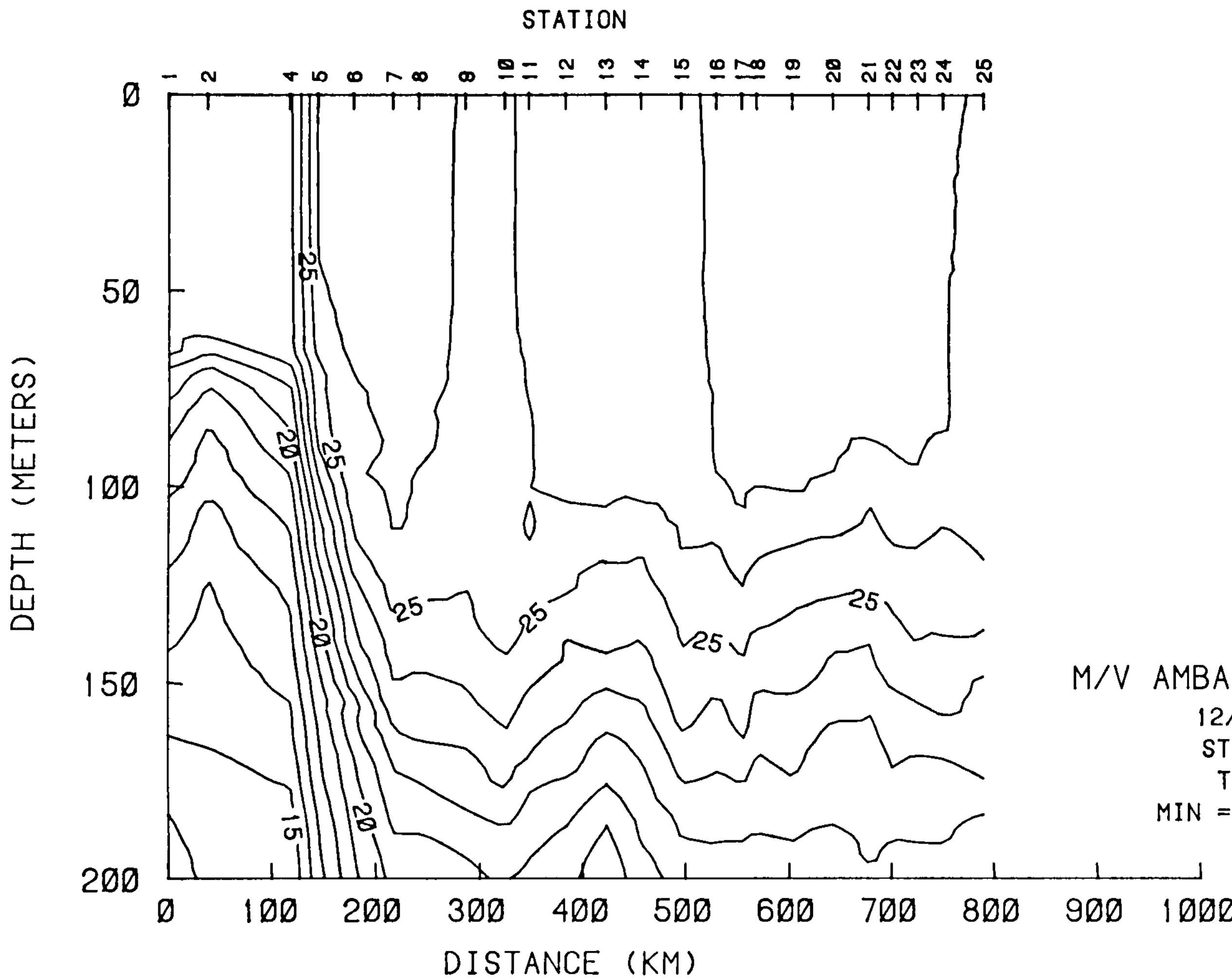


PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 85-12


M/V AMBASSADOR CRUISE 85-13   12/20/85 TO 12/21/85
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
3000 m
1000 m
200 m
1
25



M/V AMBASSADOR CRUISE 85-13
12/20/85 TO 12/21/85
STATIONS 1 TO 25
TEMPERATURE DEG C
MIN = 5.84 MAX = 27.18



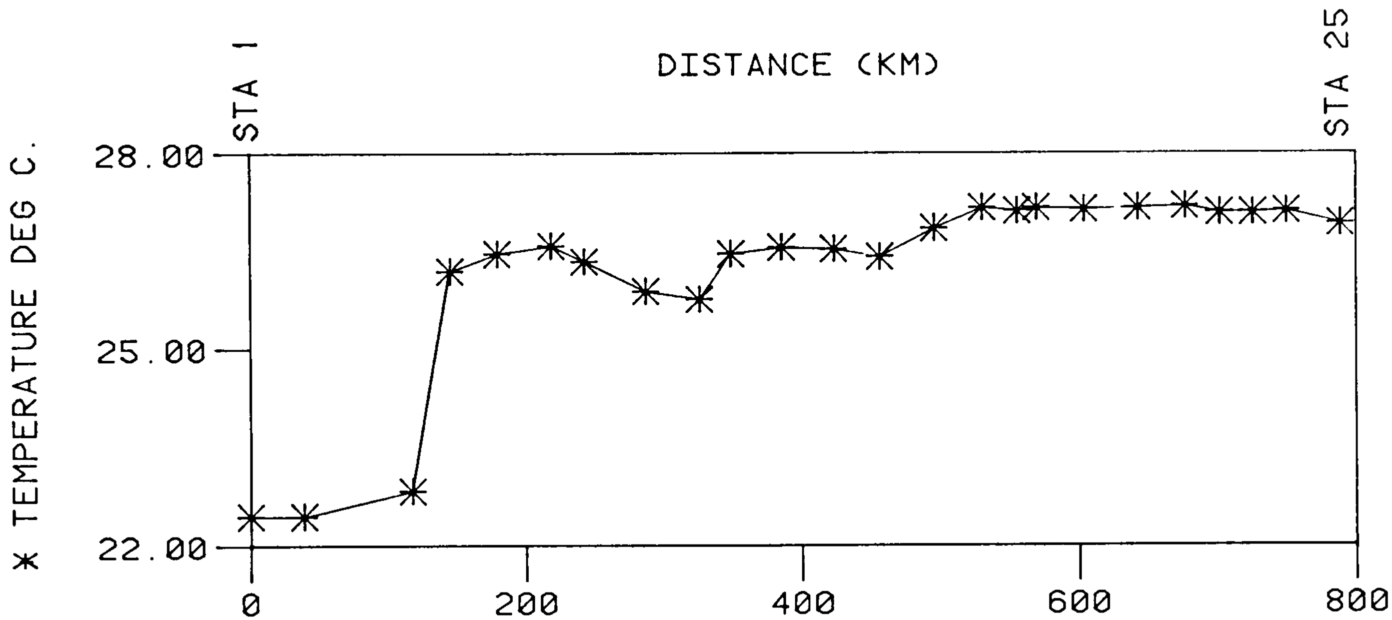
M/V AMBASSADOR CRUISE 85-13

12/20/85 TO 12/21/85

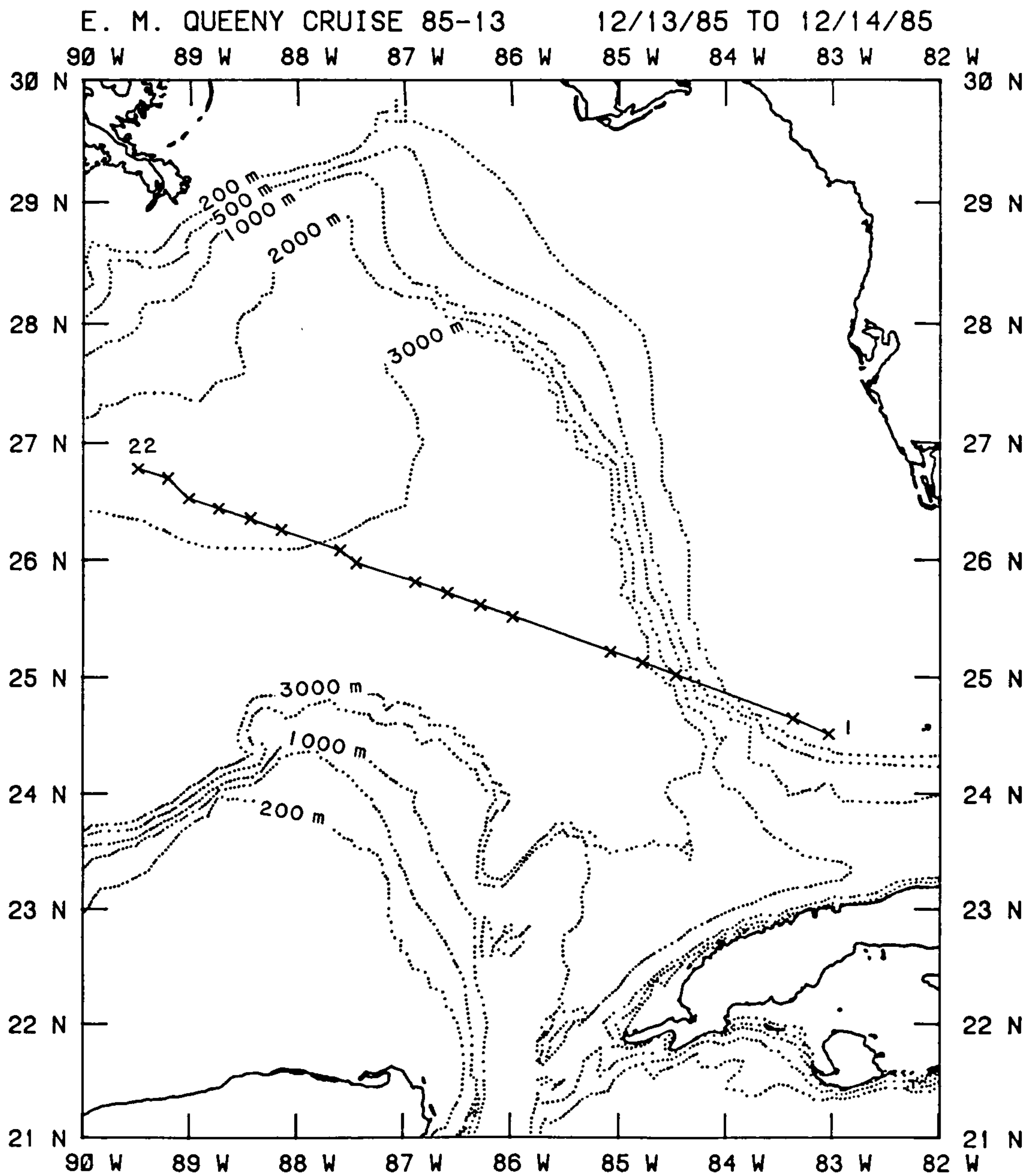
STATIONS 1 TO 25

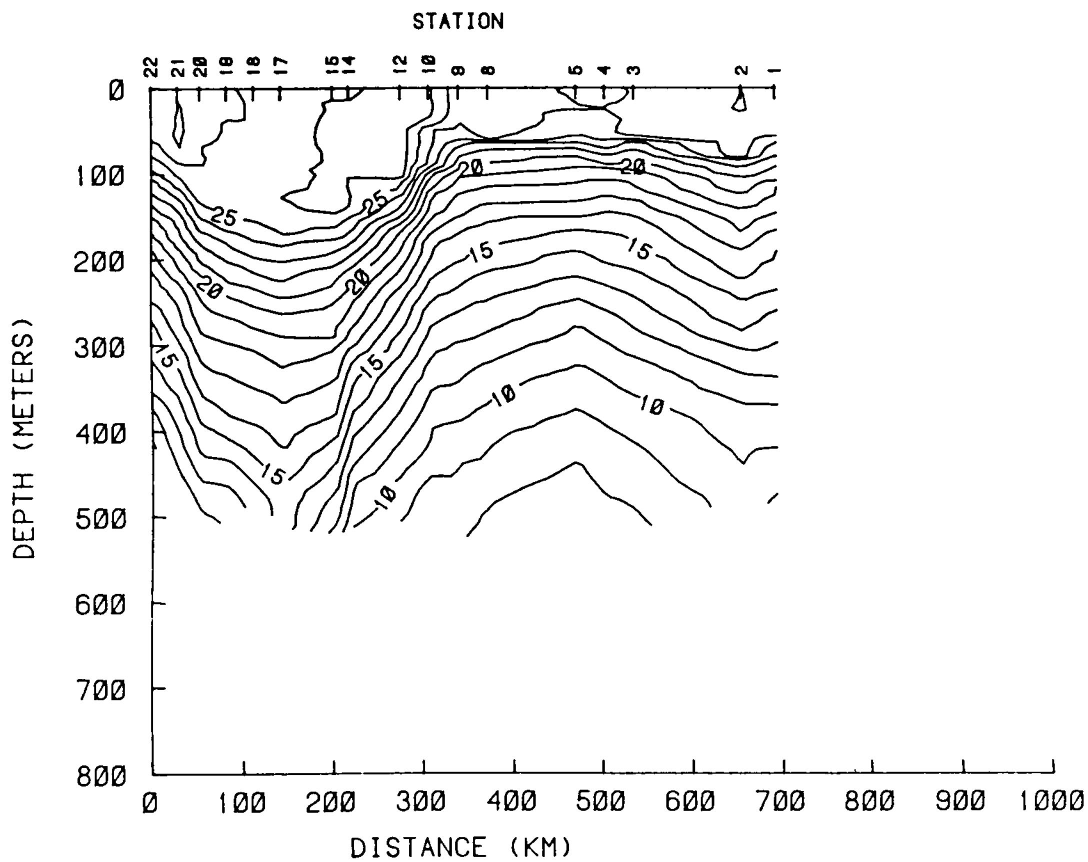
TEMPERATURE DEG C

MIN = 13.71 MAX = 27.18

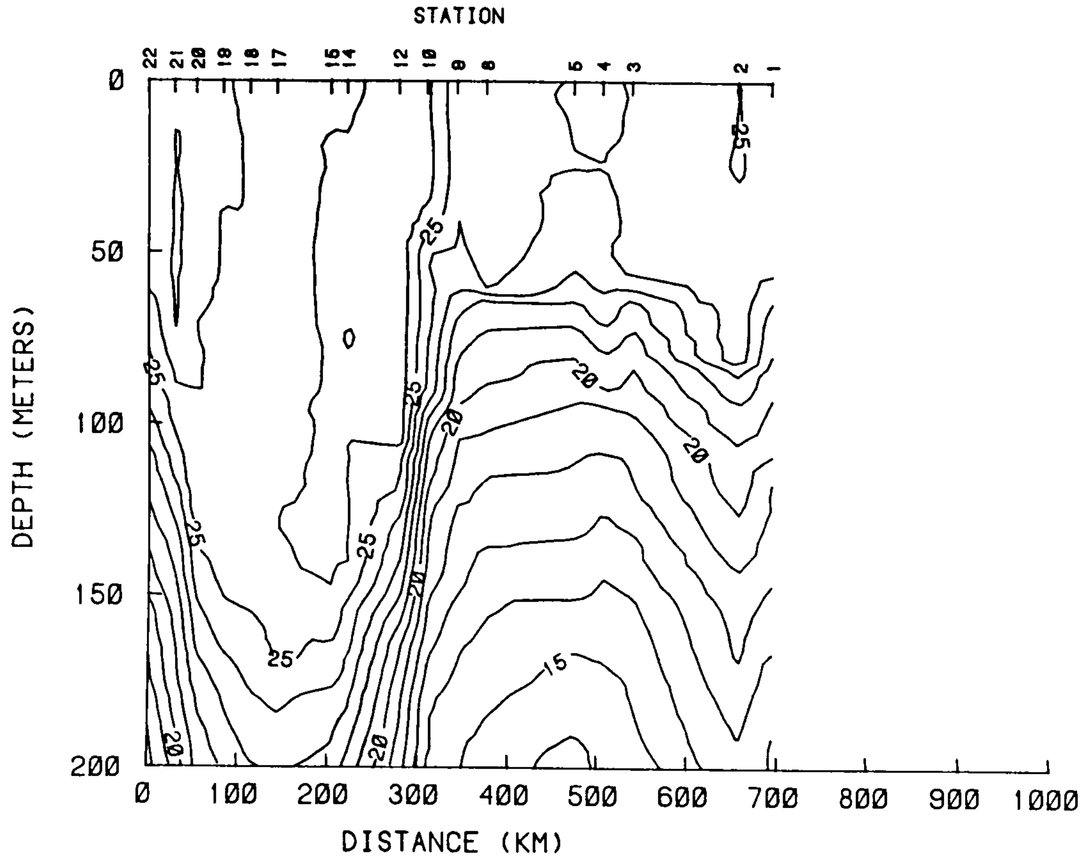


PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 85-13

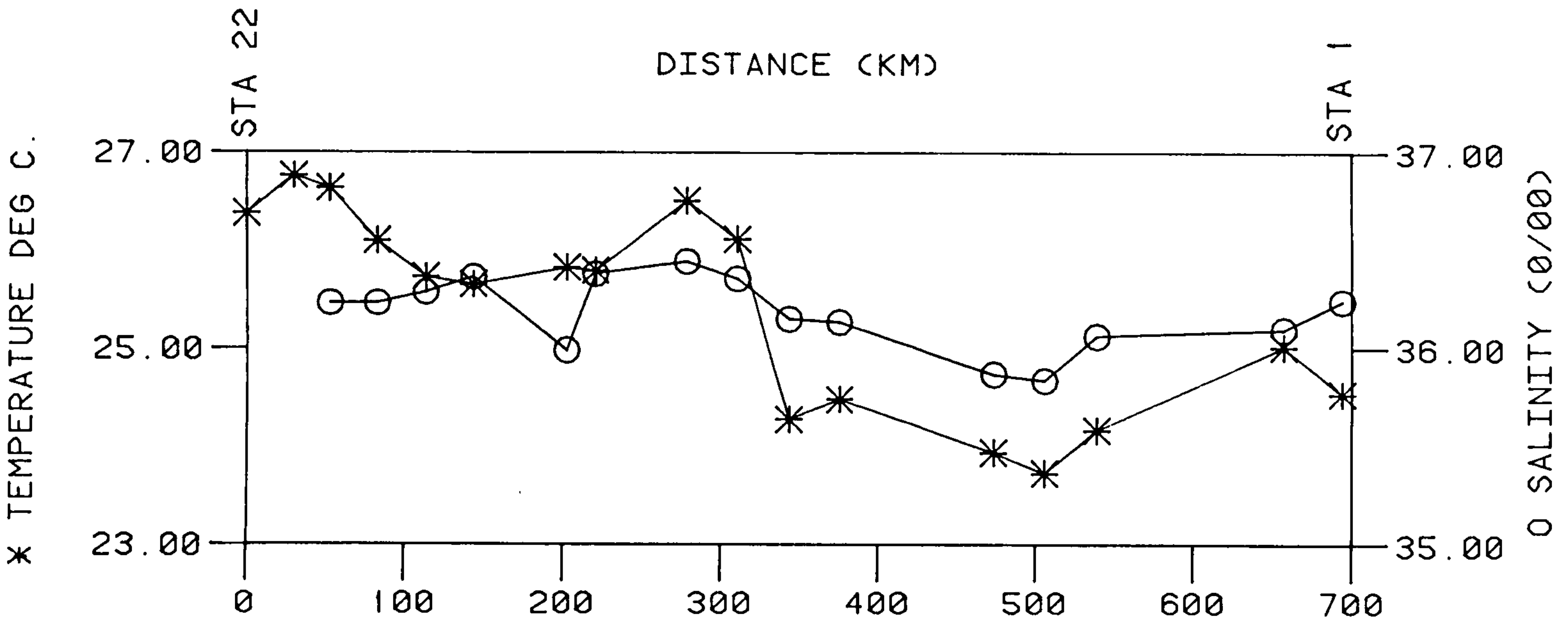

E. M. QUEENY CRUISE 85-13 12/13/85 TO 12/14/85
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
22
1
3000 m
1000 m
200 m



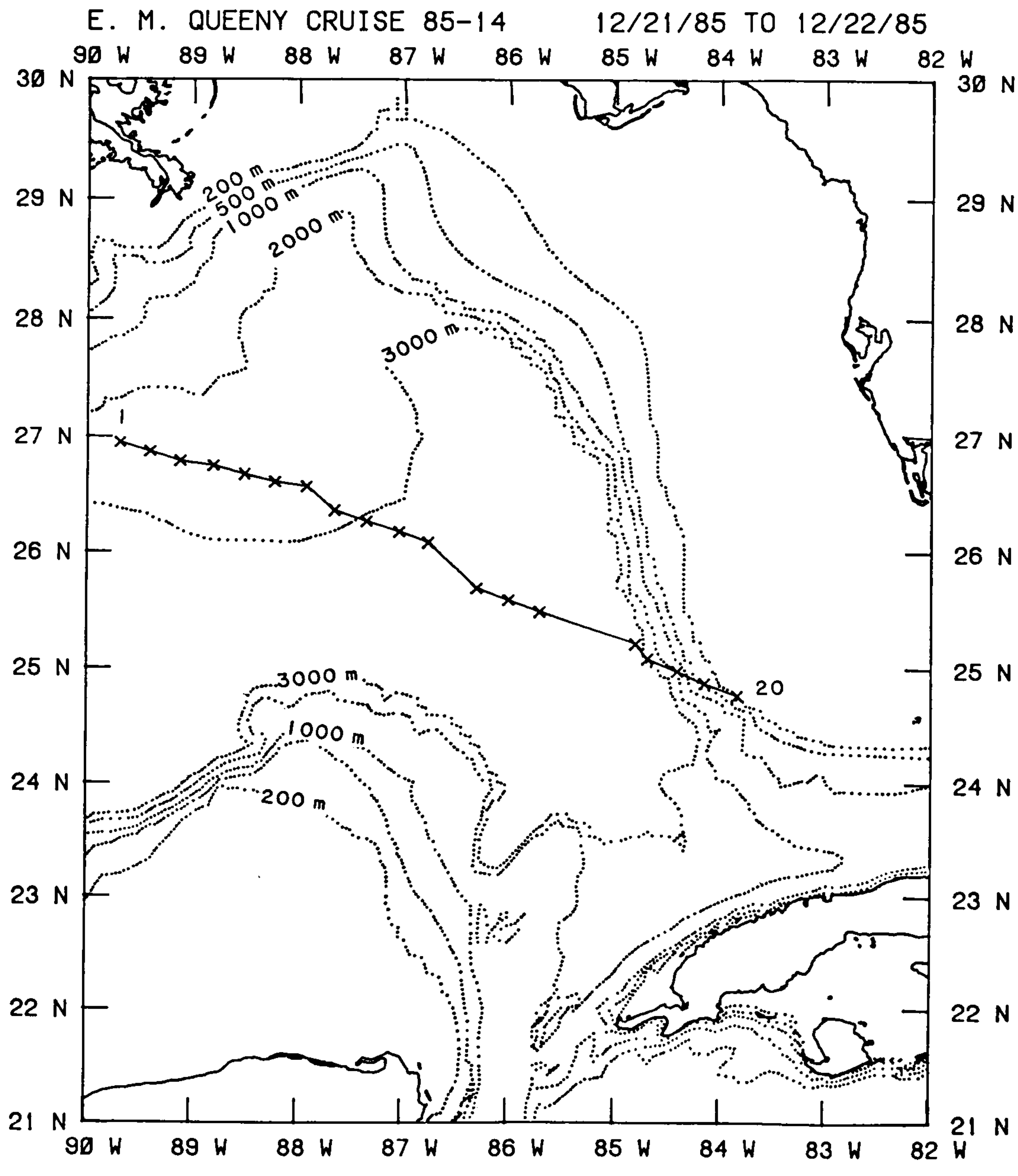
E. M. QUEENY CRUISE 85-13
12/13/85 TO 12/14/85
STATIONS 1 TO 22
TEMPERATURE DEG C
MIN = 6.85 MAX = 27.13

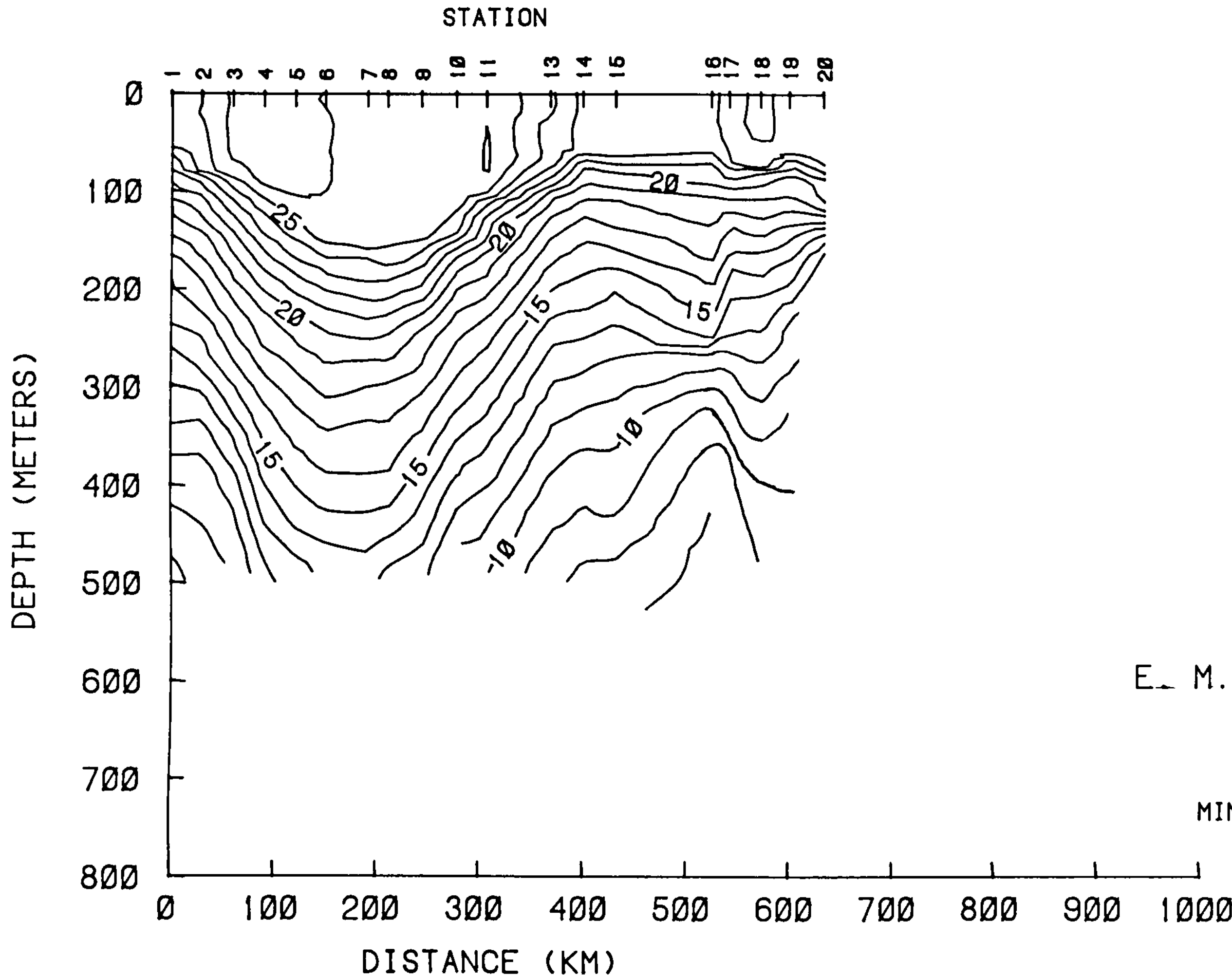


E. M. QUEENY CRUISE 85-13
12/13/85 TO 12/14/85
STATIONS 1 TO 22
TEMPERATURE DEG C
MIN = 13.61 MAX = 27.13



PARAMETERS AT SURFACE E. M. QUEENY CRUISE 85-13


E. M. QUEENY CRUISE 85-14 12/21/85 TO 12/22/85
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
1
20
3000 m
1000 m
200 m



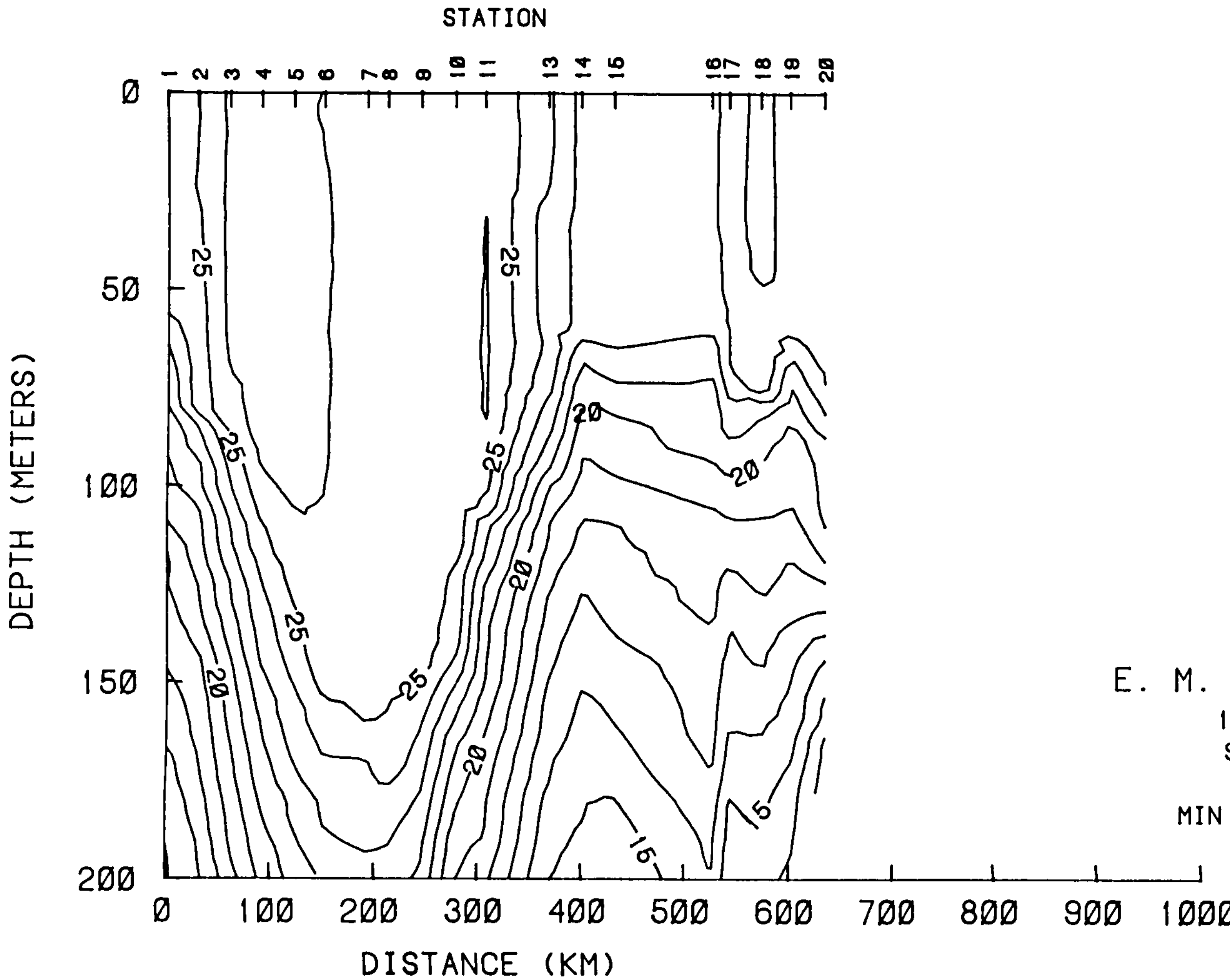
E. M. QUEENY CRUISE 85-14

12/21/85 TO 12/22/85

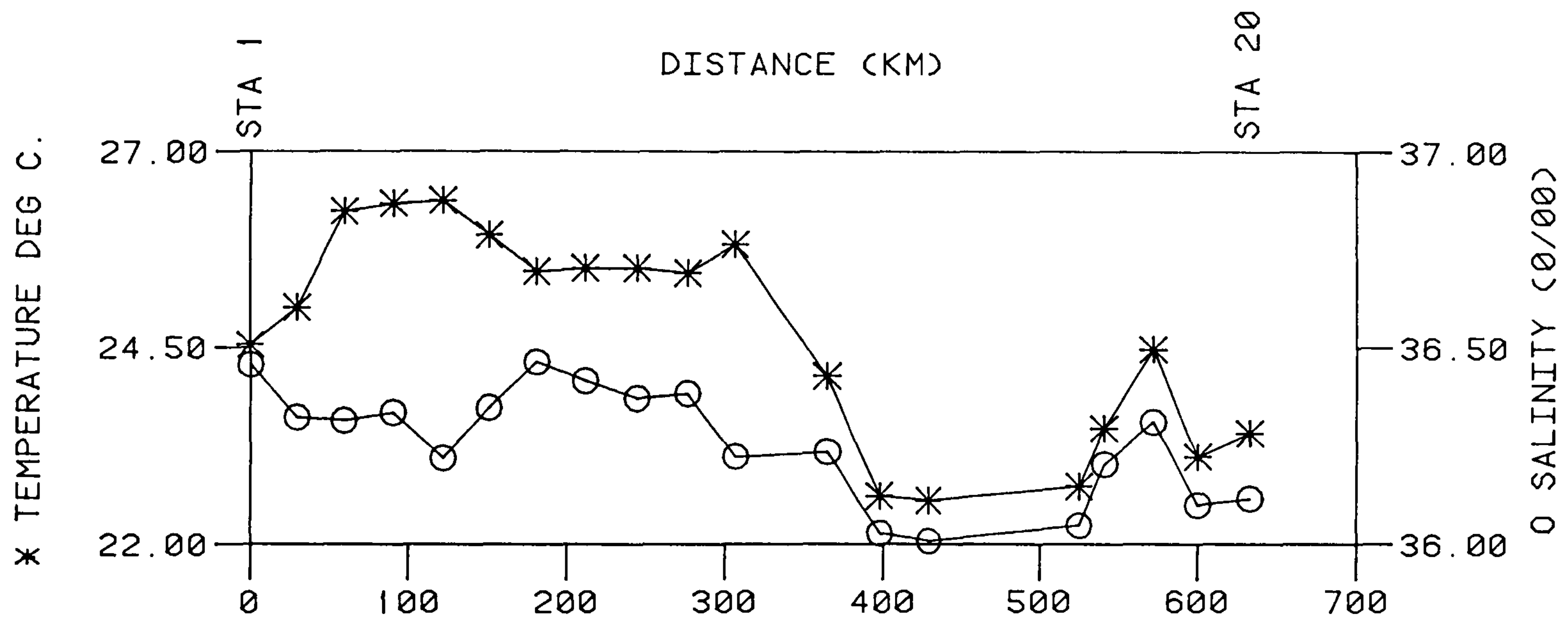
STATIONS 1 TO 20

TEMPERATURE DEG C

MIN = 6.42 MAX = 26.57



E. M. QUEENY CRUISE 85-14
12/21/85 TO 12/22/85
STATIONS 1 TO 20
TEMPERATURE DEG C
MIN = 12.73 MAX = 26.57



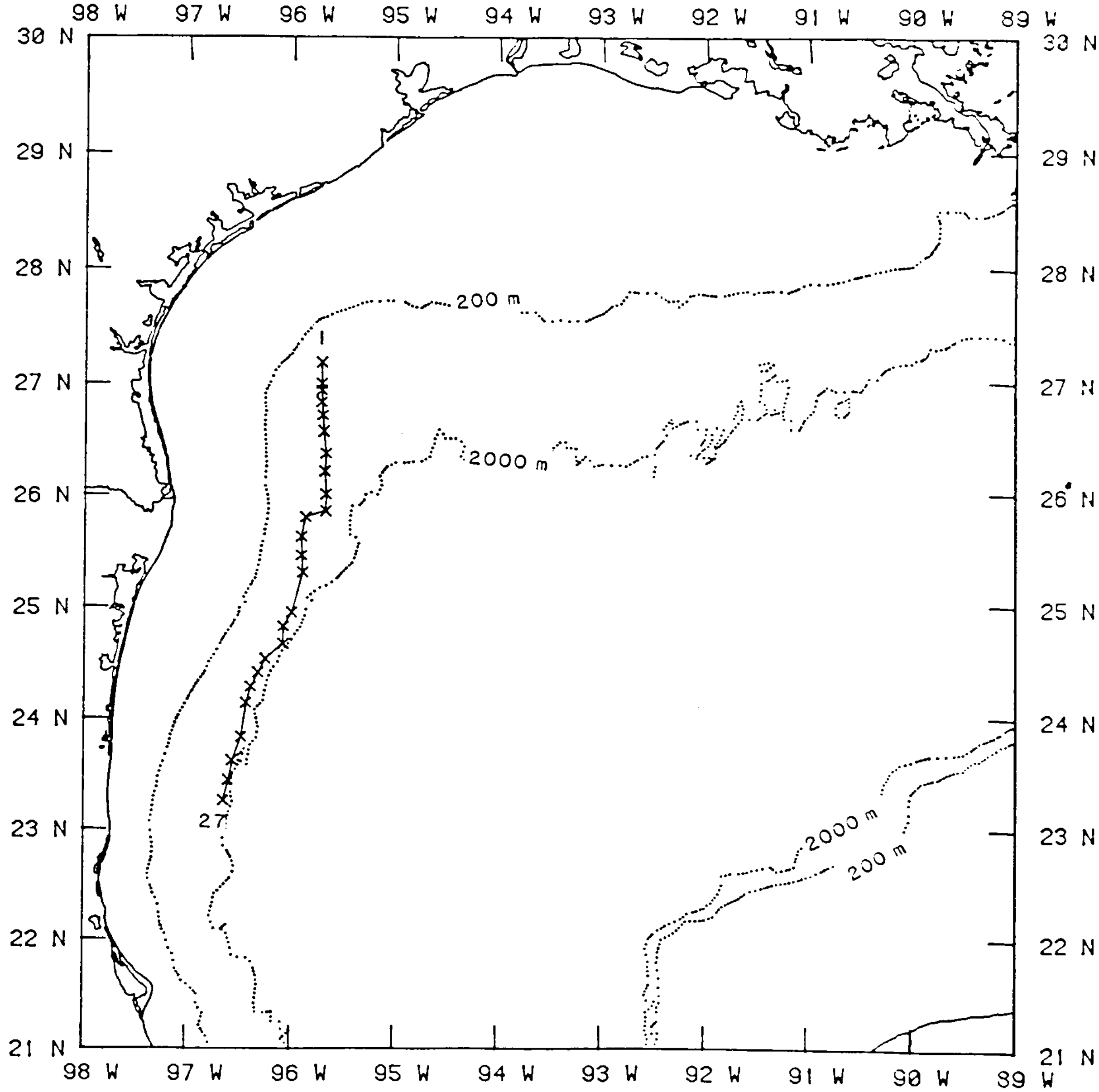
PARAMETERS AT SURFACE E. M. QUEENY CRUISE 85-14

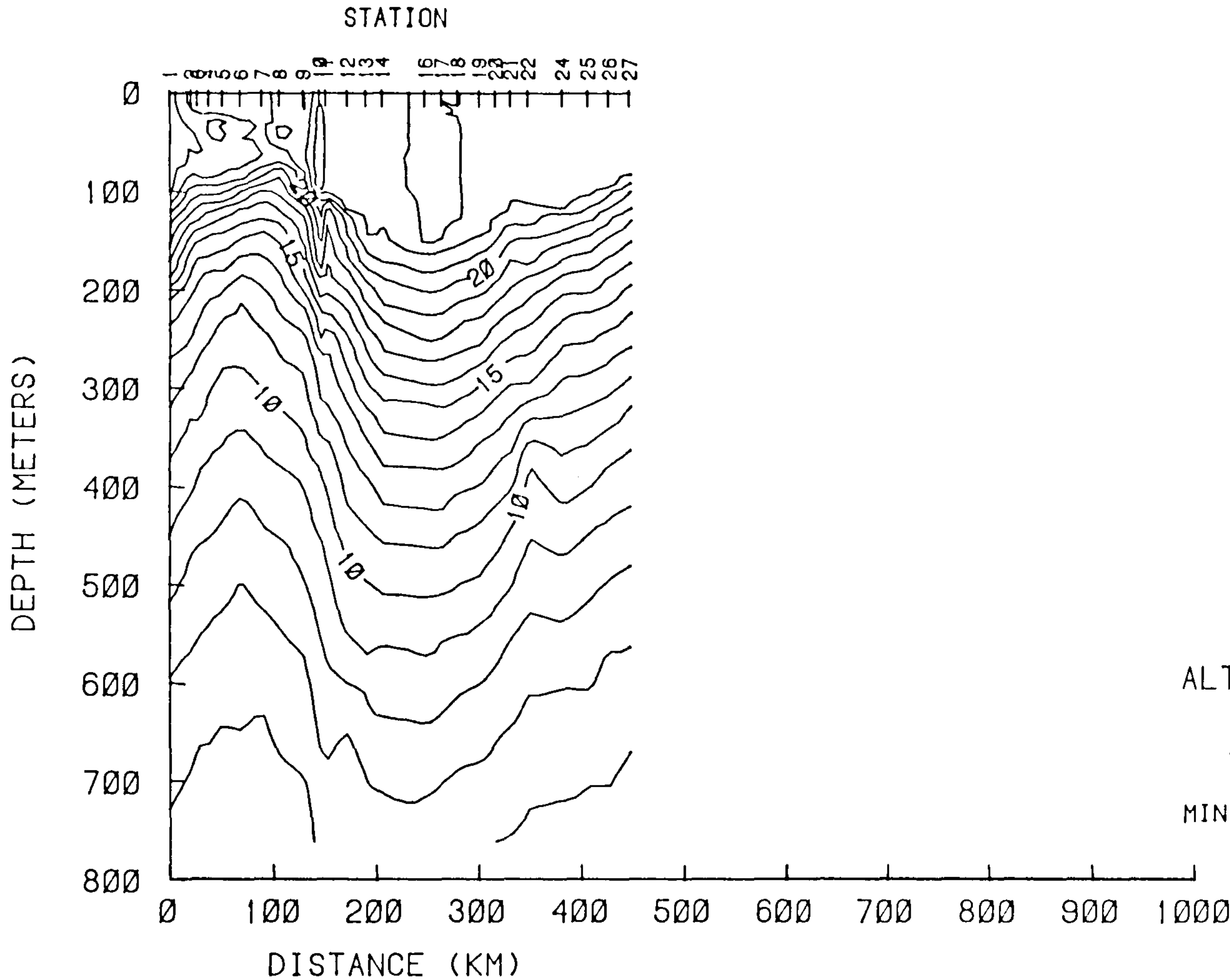
1986 SOOP DATA BY VESSEL

ID	Cruise	Dates		
AL86-02	B/O Altair Cruise 86-02	02/13/86	to	02/14/86
AL86-03	B/O Altair Cruise 86-03	04/27/86	to	04/28/86
AL86-04	B/O Altair Cruise 86-04	05/01/86	to	05/06/86
AL86-05	B/O Altair Cruise 86-05	05/13/86	to	05/14/86
AL86-06	B/O Altair Cruise 86-06	07/15/86	to	07/17/86
AL86-07	B/O Altair Cruise 86-07	09/01/86	to	09/03/86
AM86-01	M/V Ambassador Cruise 86-01	01/03/86	to	01/04/86
AM86-02	M/V Ambassador Cruise 86-02	01/17/86	to	01/18/86
AM86-03	M/V Ambassador Cruise 86-03	01/26/86	to	01/27/86
AM86-04	M/V Ambassador Cruise 86-04	02/10/86	to	02/12/86
AM86-05	M/V Ambassador Cruise 86-05	03/02/86	to	03/03/86
AM86-06	M/V Ambassador Cruise 86-06	03/15/86	to	03/16/86
AM86-07	M/V Ambassador Cruise 86-07	03/29/86	to	03/30/86
AM86-08	M/V Ambassador Cruise 86-08	04/12/86	to	04/13/86
AM86-09	M/V Ambassador Cruise 86-09	04/26/86	to	04/27/86
AM86-10	M/V Ambassador Cruise 86-10	05/05/86	to	05/05/86
AM86-11	M/V Ambassador Cruise 86-11	05/07/86	to	05/08/86
AM86-12	M/V Ambassador Cruise 86-12	05/17/86	to	05/19/86
AM86-13	M/V Ambassador Cruise 86-13	05/30/86	to	05/31/86
AM86-14	M/V Ambassador Cruise 86-14	06/11/86	to	06/12/86
AM86-15	M/V Ambassador Cruise 86-15	06/22/86	to	06/23/86
AM86-16	M/V Ambassador Cruise 86-16	07/03/86	to	07/04/86
AM86-17	M/V Ambassador Cruise 86-17	07/19/86	to	07/20/86
AM86-18	M/V Ambassador Cruise 86-18	08/12/86	to	08/13/86
AM86-19	M/V Ambassador Cruise 86-19	08/23/86	to	08/24/86
AM86-20	M/V Ambassador Cruise 86-20	09/04/86	to	09/05/86
AM86-21	M/V Ambassador Cruise 86-21	09/15/86	to	09/15/86
AM86-22	M/V Ambassador Cruise 86-22	09/26/86	to	09/27/86
EJ86-01	Exxon Jamestown Cruise 86-01	05/03/86	to	05/04/86
EJ86-02	Exxon Jamestown Cruise 86-02	05/06/86	to	05/07/86
ER86-01	M/V Erica Cruise 86-01	03/06/86	to	03/08/86
H286-01	HO-2 Cruise 86-01	08/17/86	to	08/21/86
QU86-01	E.M. Queeny Cruise 86-01	01/04/86	to	01/05/86
QU86-02	E.M. Queeny Cruise 86-02	01/11/86	to	01/12/86
QU86-03	E.M. Queeny Cruise 86-03	02/05/86	to	02/06/86
QU86-04	E.M. Queeny Cruise 86-04	02/20/86	to	02/21/86
QU86-05	E.M. Queeny Cruise 86-05	04/06/86	to	04/07/86
QU86-06	E.M. Queeny Cruise 86-06	04/12/86	to	04/13/86
QU86-07	E.M. Queeny Cruise 86-07	05/03/86	to	05/04/86
QU86-08	E.M. Queeny Cruise 86-08	05/17/86	to	05/17/86
QU86-09	E.M. Queeny Cruise 86-09	06/07/86	to	06/08/86
QU86-10	E.M. Queeny Cruise 86-10	06/25/86	to	06/26/86
QU86-11	E.M. Queeny Cruise 86-11	07/17/86	to	07/18/86
QU86-12	E.M. Queeny Cruise 86-12	08/07/86	to	08/08/86

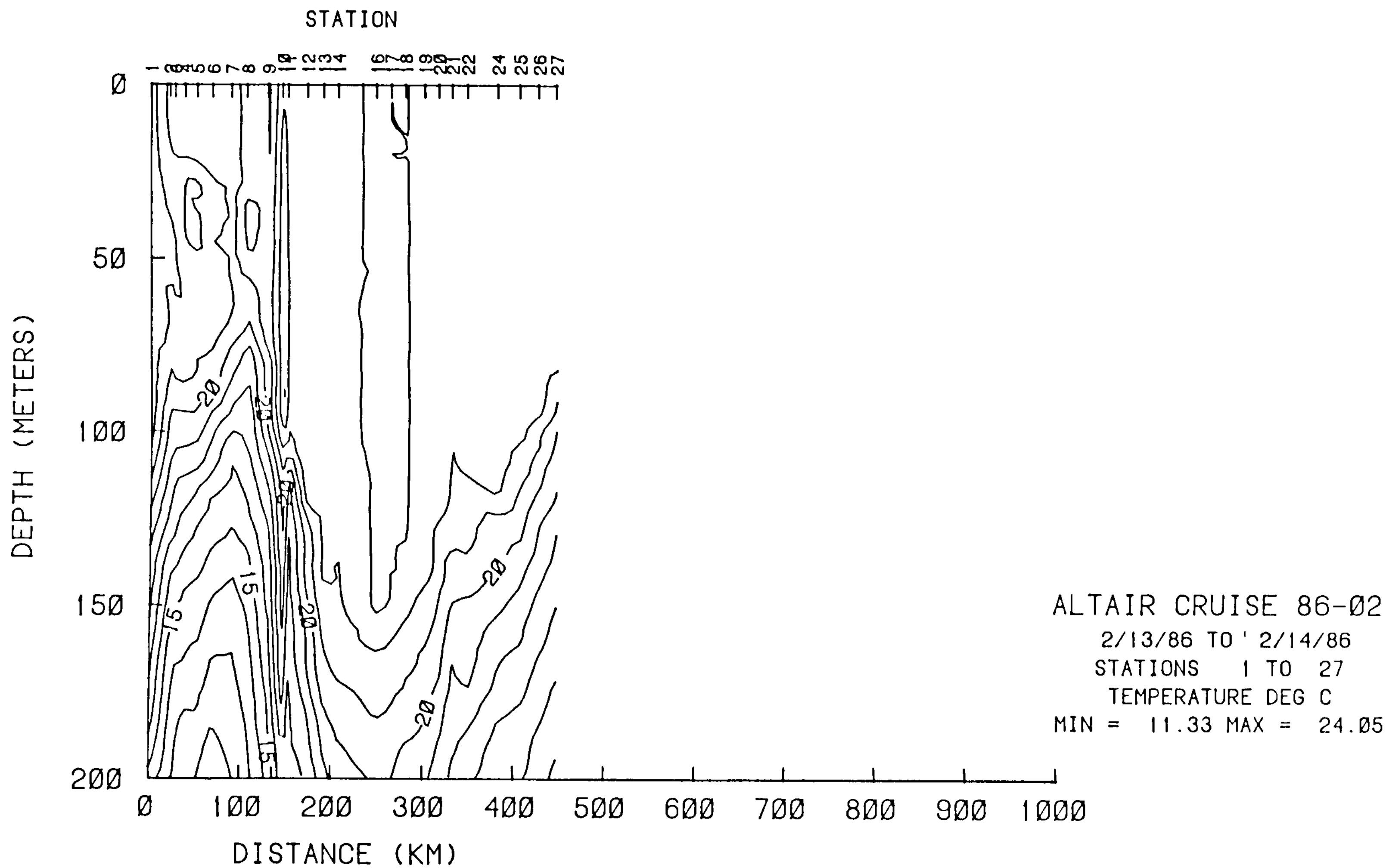
QU86-13	E.M. Queeny Cruise 86-13	09/01/86	to	09/02/86
QU86-14	E.M. Queeny Cruise 86-14	09/21/86	to	09/22/86
QU86-15	E.M. Queeny Cruise 86-15	10/26/86	to	10/27/86
QU86-16	E.M. Queeny Cruise 86-16	11/02/86	to	11/03/86
QU86-17	E.M. Queeny Cruise 86-17	11/23/86	to	11/24/86
SC86-08	R/V Suncoaster Cruise 86-08	05/01/86	to	05/10/86
SN86-01	M/V Senator Cruise 86-01	10/13/86	to	10/14/86
SN86-02	M/V Senator Cruise 86-02	10/23/86	to	10/23/86
SN86-03	M/V Senator Cruise 86-03	11/04/86	to	11/05/86
SN86-04	M/V Senator Cruise 86-04	11/16/86	to	11/17/86
SN86-05	M/V Senator Cruise 86-05	11/28/86	to	11/29/86
SN86-06	M/V Senator Cruise 86-06	12/10/86	to	12/11/86
SN86-07	M/V Senator Cruise 86-07	12/23/86	to	12/23/86

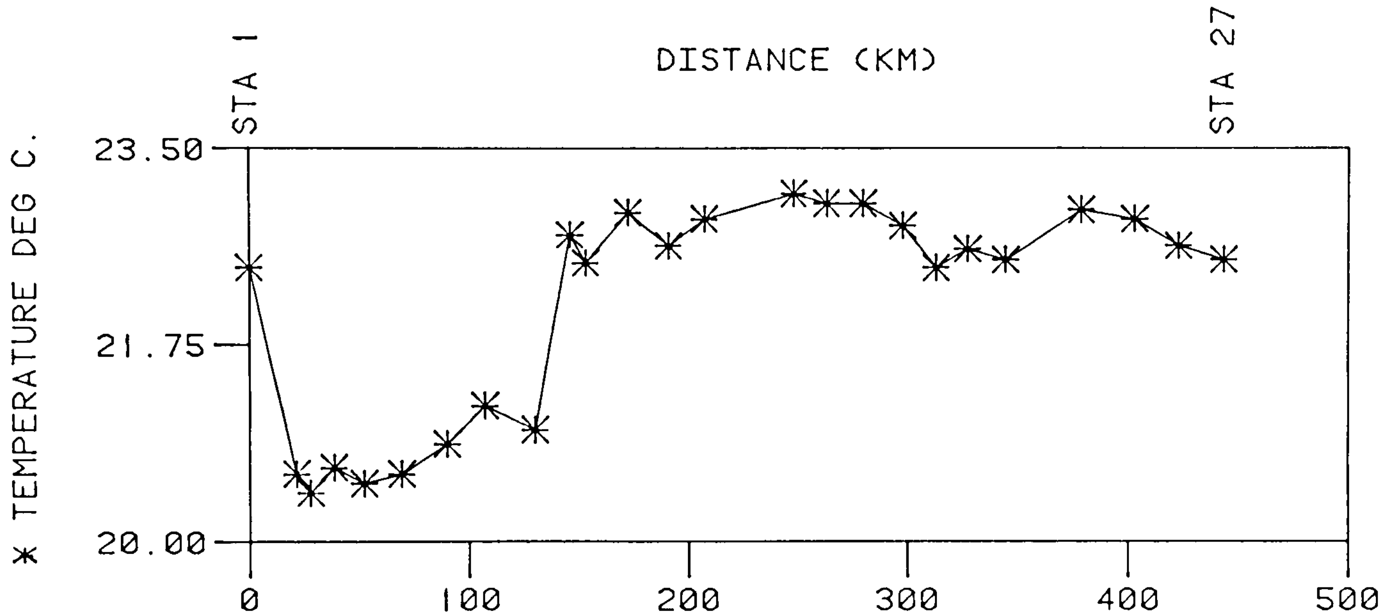
ALTAIR CRUISE 86-02 2/13/86 TO 2/14/86



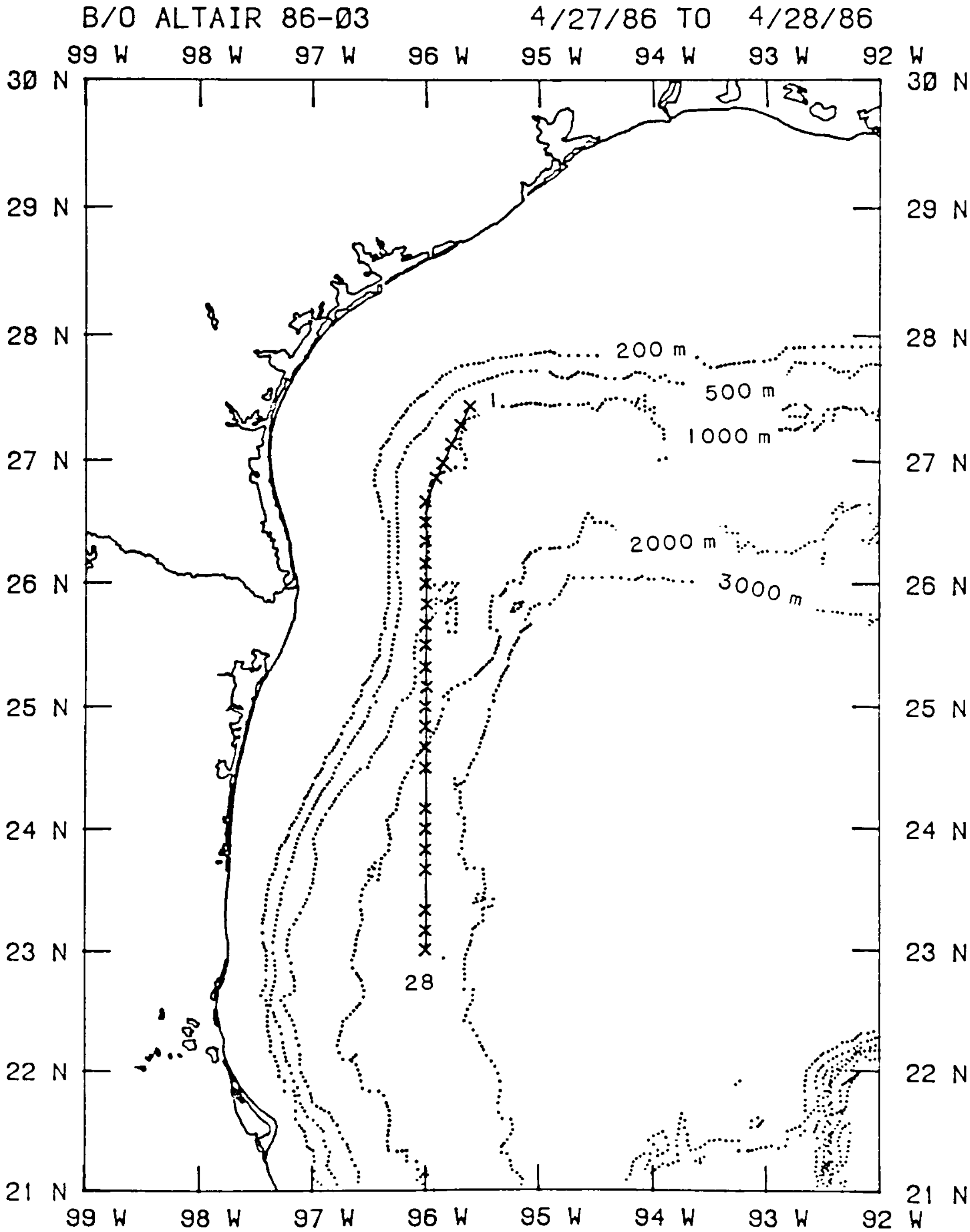


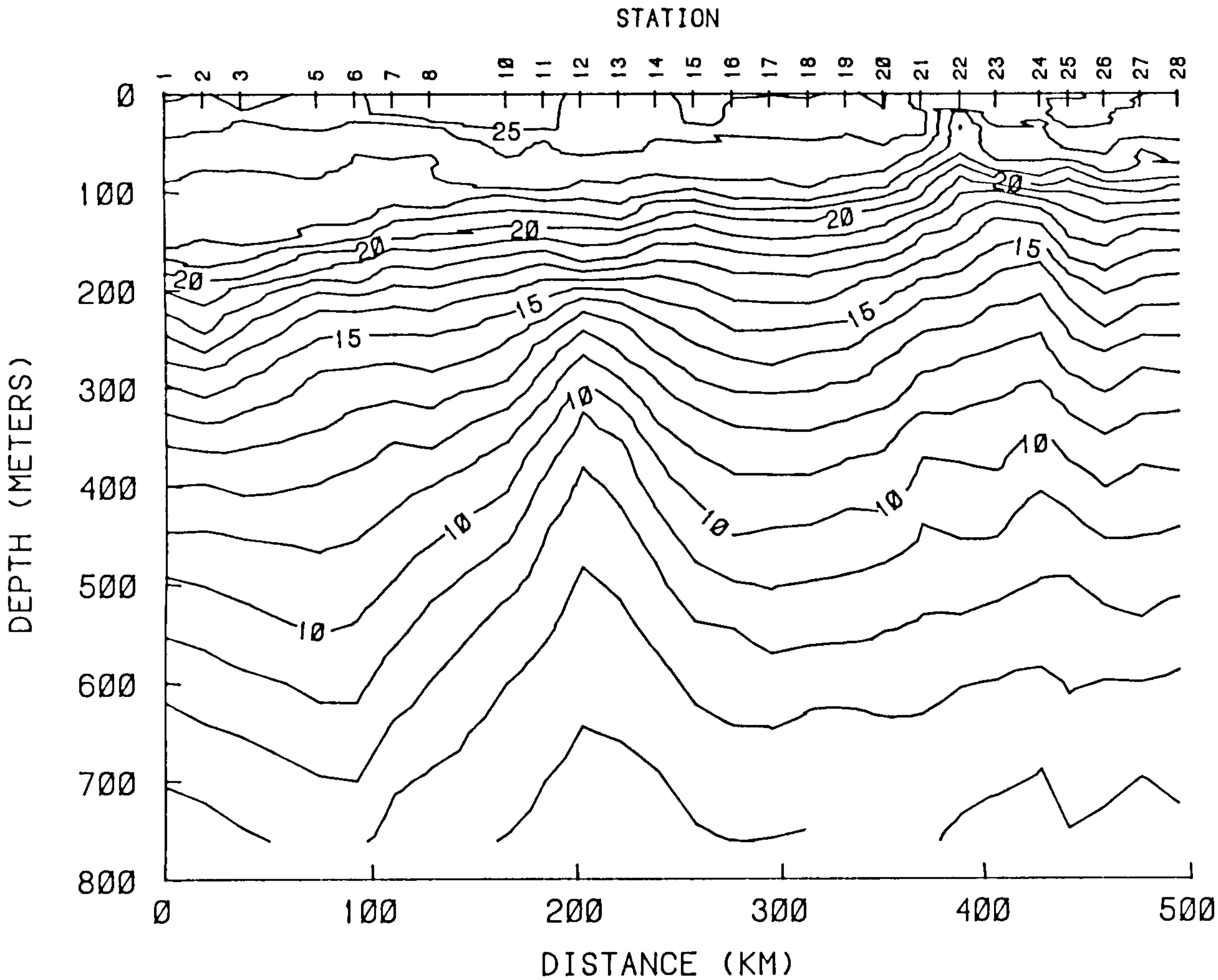
ALTAIR CRUISE 86-02
2/13/86 TO 2/14/86
STATIONS 1 TO 27
TEMPERATURE DEG C
MIN = 5.24 MAX = 24.05


STATION
1
2
3
4
5
6
7
8
9
10
11
12
13
14
16
17
18
19
20
21
22
24
25
26
27
DEPTH (METERS)
Ø
5Ø
1ØØ
15Ø
2ØØ
2Ø
15
DISTANCE (KM)
Ø
1ØØ
2ØØ
3ØØ
4ØØ
5ØØ
6ØØ
7ØØ
8ØØ
9ØØ
1ØØØ
ALTAIR CRUISE 86-Ø2
2/13/86 TO ' 2/14/86
STATIONS 1 TO 27
TEMPERATURE DEG C
MIN = 11.33 MAX = 24.Ø5

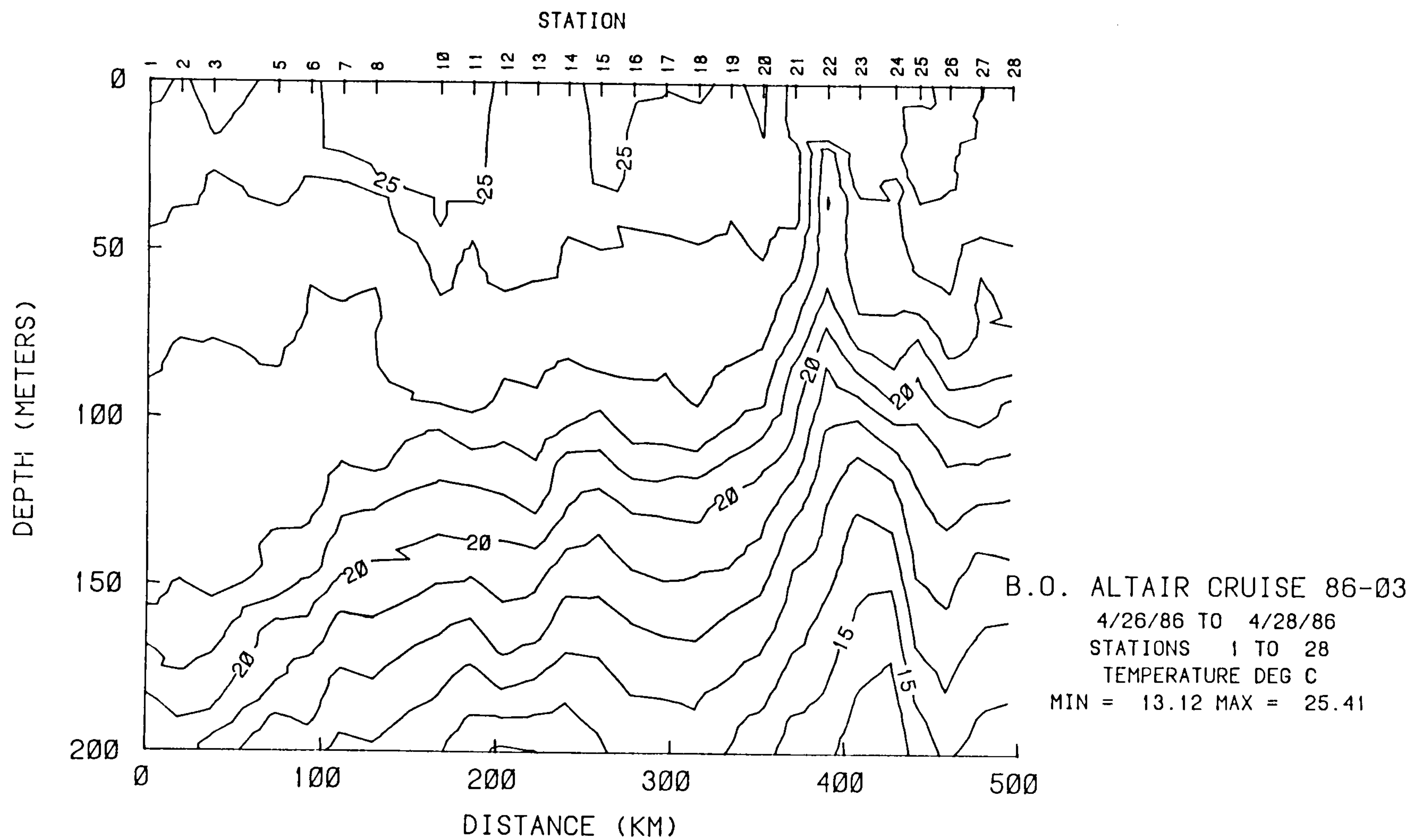


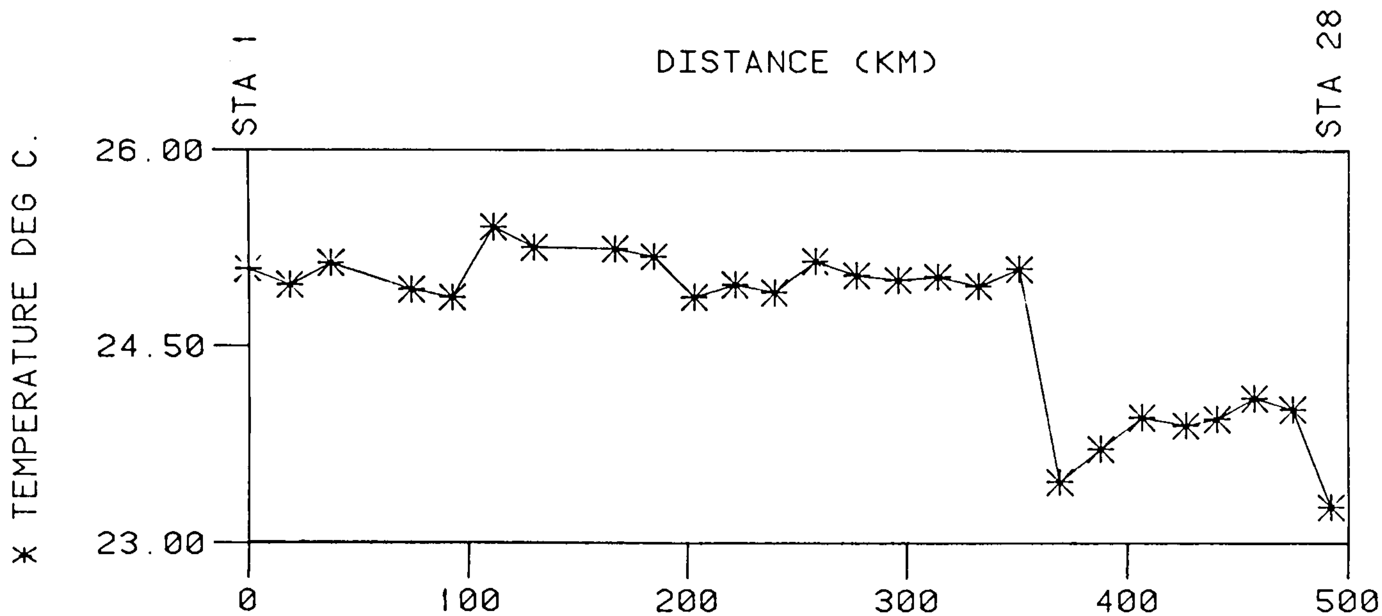
PARAMETERS AT SURFACE ALTAIR CRUISE 86-02


B/O ALTAIR 86-Ø3
4/27/86 TO 4/28/86
99 W
98 W
97 W
96 W
95 W
94 W
93 W
92 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
28



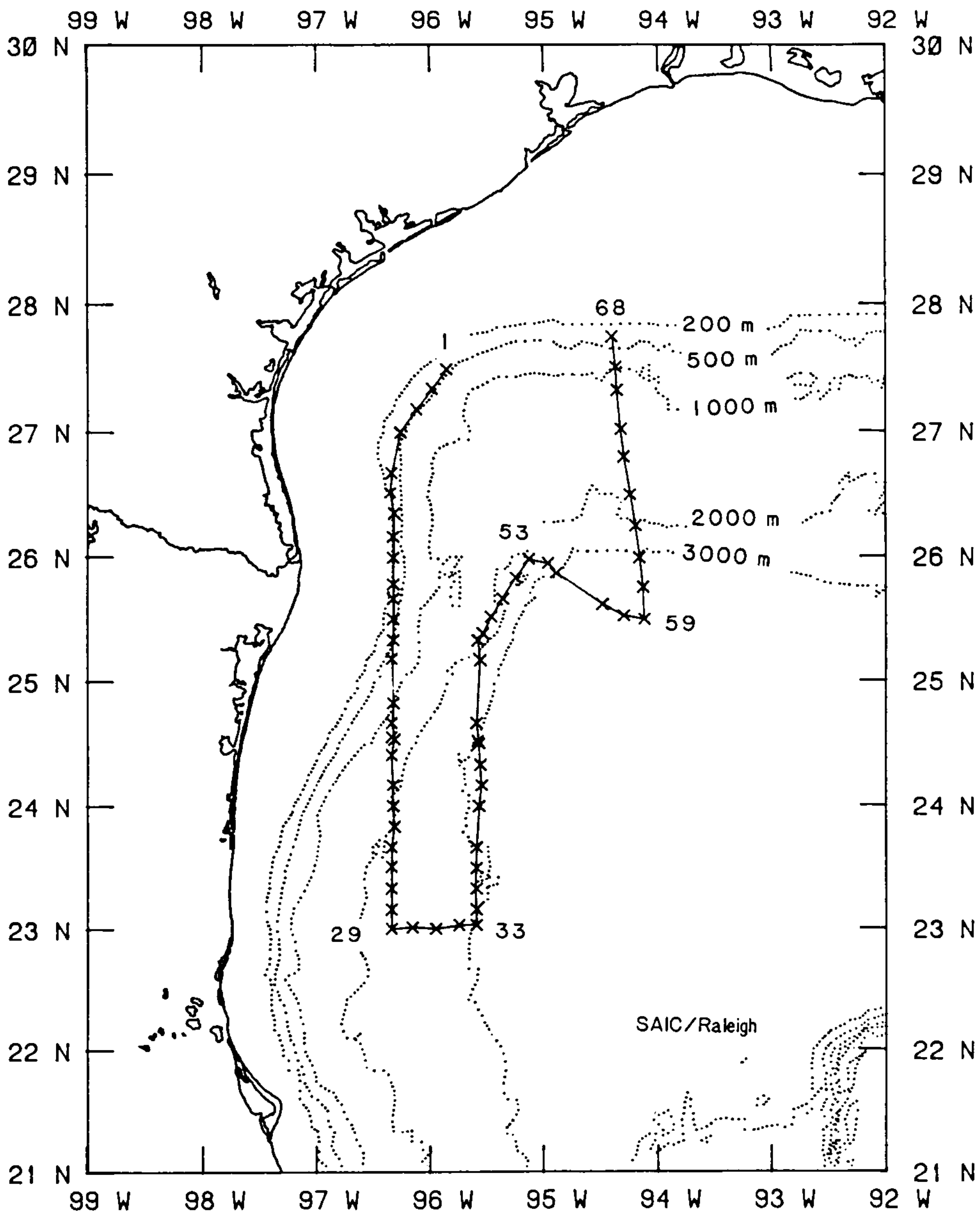
B.O. ALTAIR CRUISE 86-03
4/26/86 TO 4/28/86
STATIONS 1 TO 28
TEMPERATURE DEG C
MIN = 5.42 MAX = 25.41

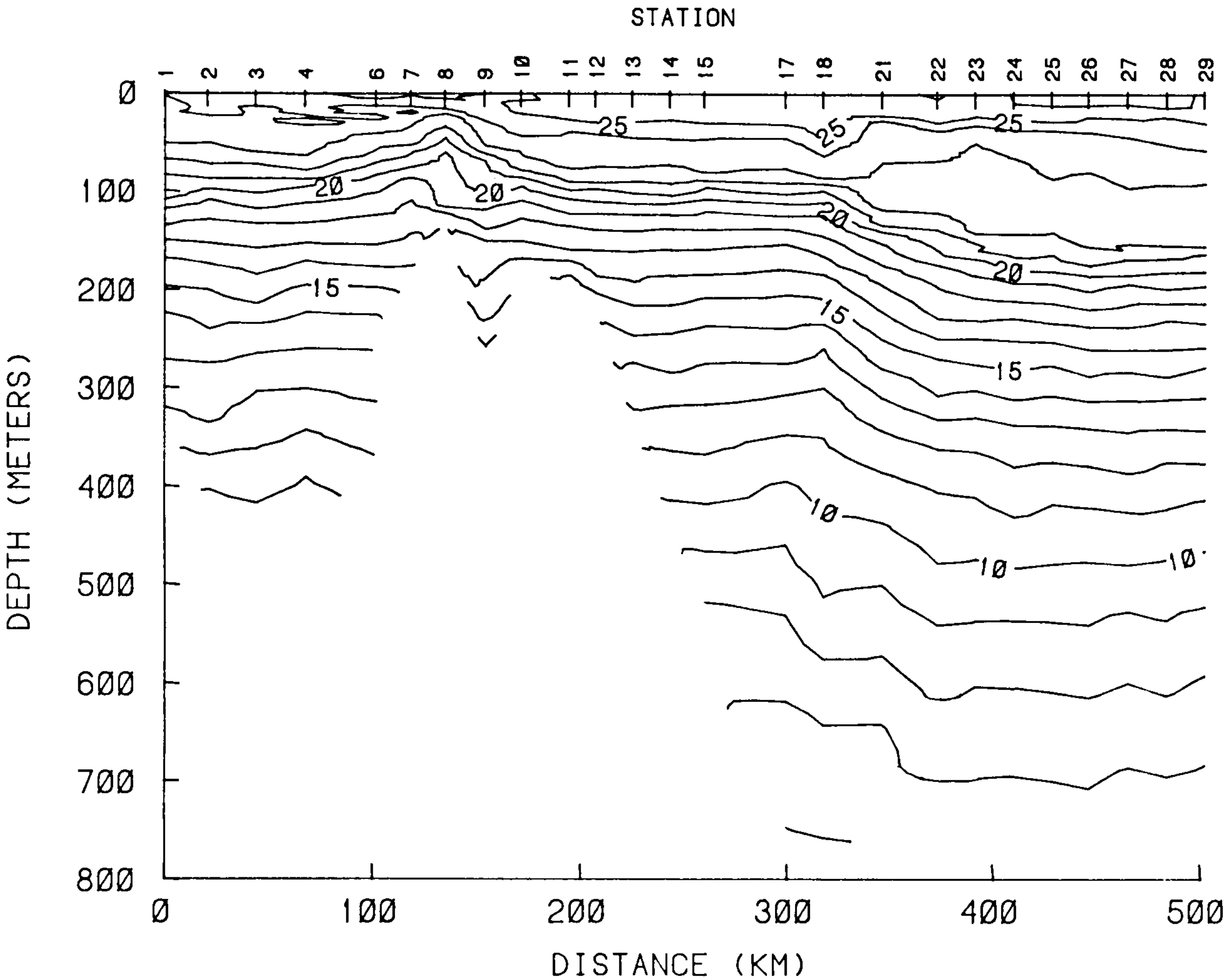

STATION
DEPTH (METERS)
DISTANCE (KM)
B.O. ALTAIR CRUISE 86-03
4/26/86 TO 4/28/86
STATIONS 1 TO 28
TEMPERATURE DEG C
MIN = 13.12 MAX = 25.41



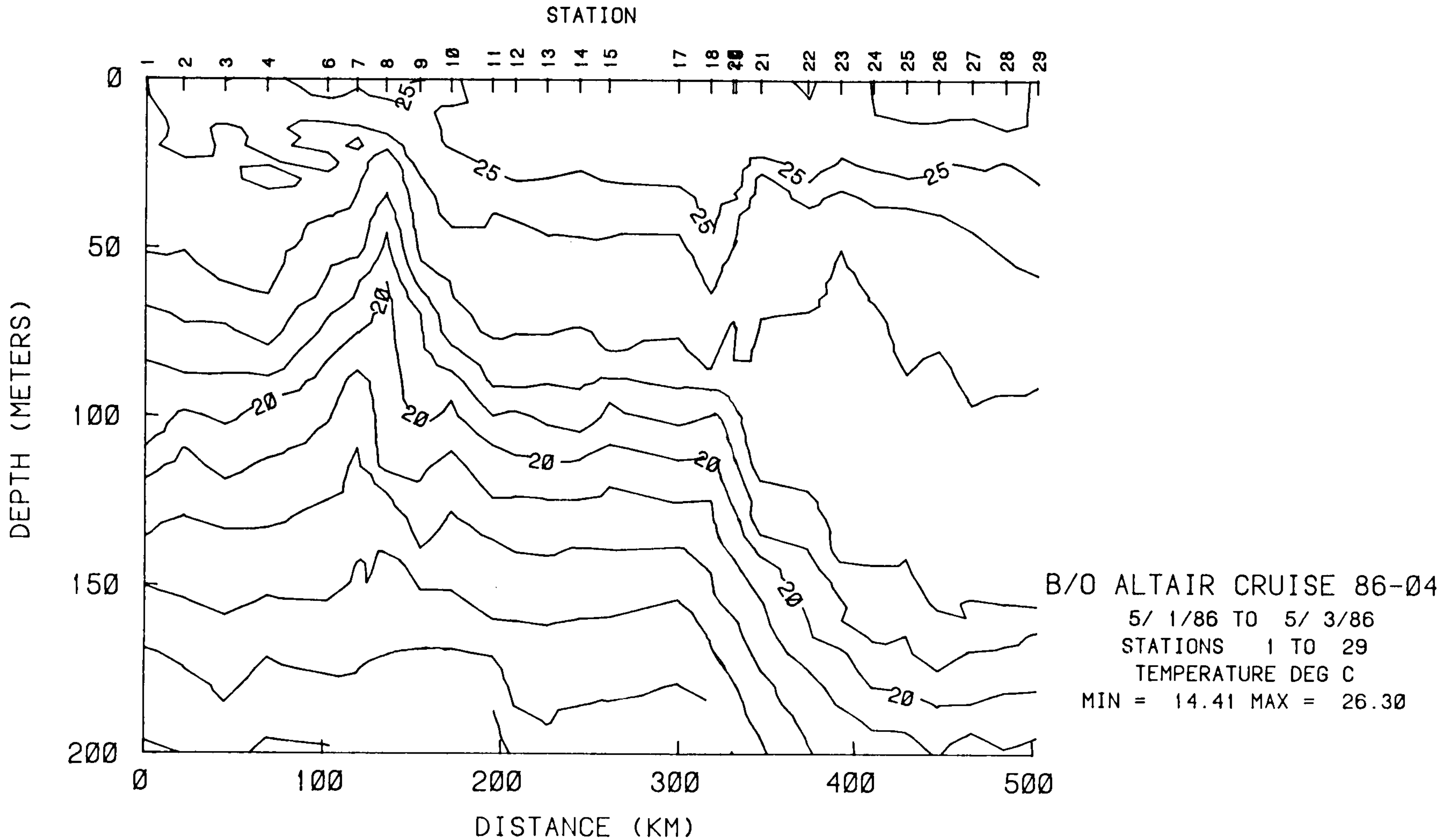
PARAMETERS AT SURFACE B.O. ALTAIR CRUISE 86-03

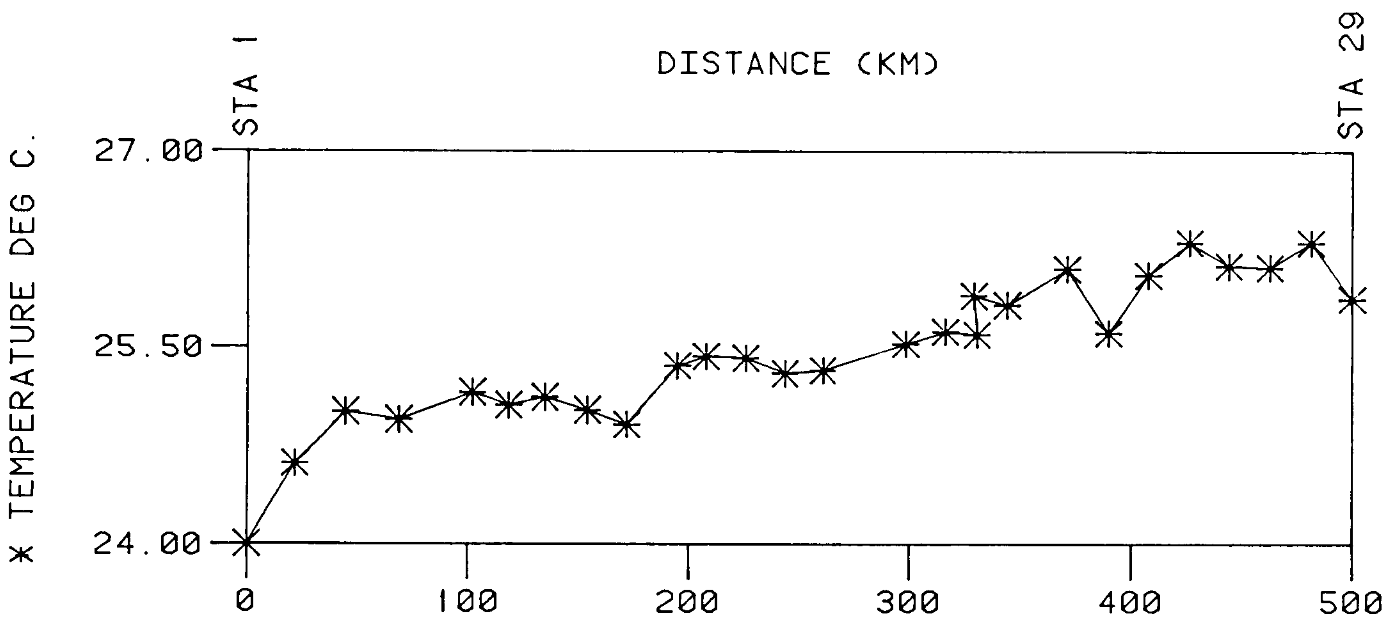
B/O ALTAIR CRUISE 86-Ø4 5/ 1/86 TO 5/ 6/86



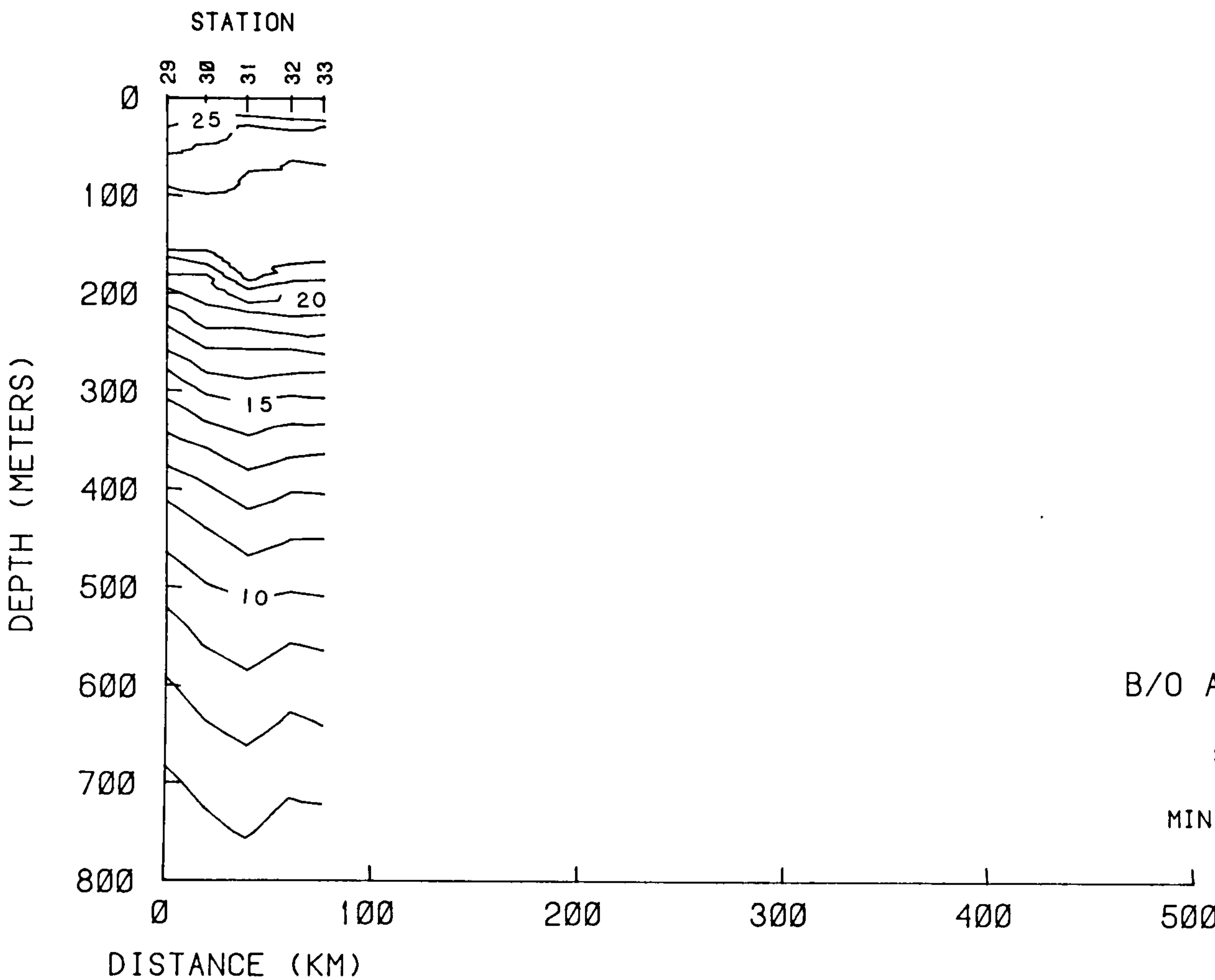


B/O ALTAIR CRUISE 86-04
5/ 1/86 TO 5/ 3/86
STATIONS 1 TO 29
TEMPERATURE DEG C
MIN = 5.96 MAX = 26.30

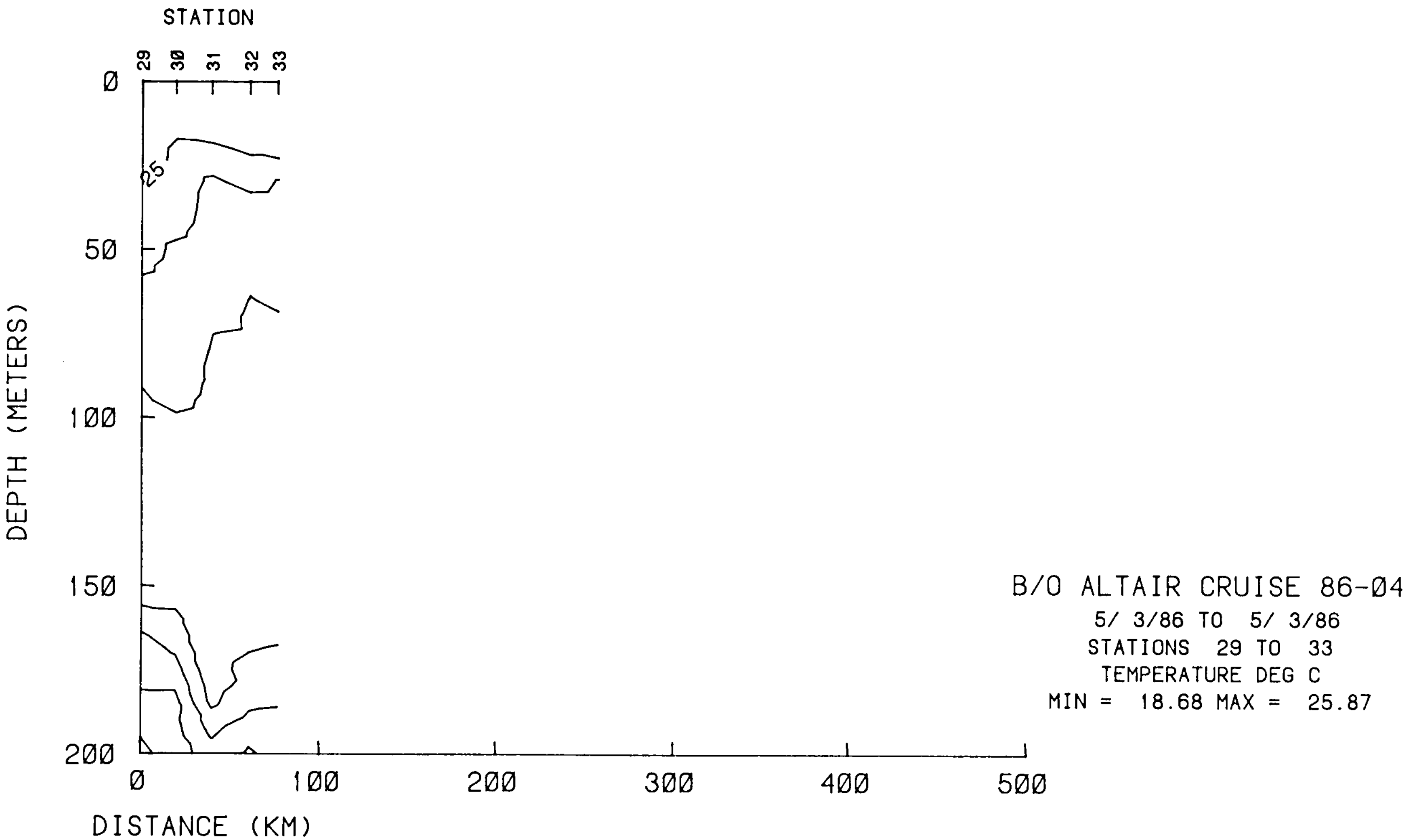

STATION
DEPTH (METERS)
DISTANCE (KM)
B/O ALTAIR CRUISE 86-04
5/ 1/86 TO 5/ 3/86
STATIONS 1 TO 29
TEMPERATURE DEG C
MIN = 14.41 MAX = 26.30

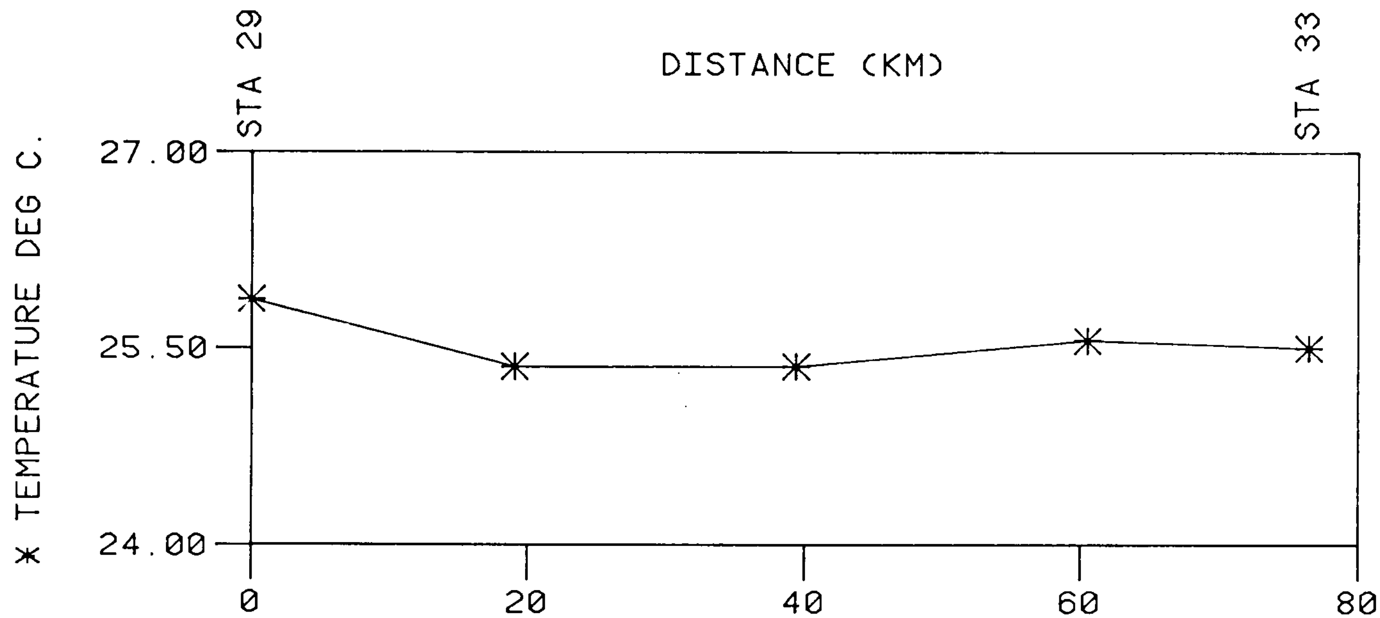


PARAMETERS AT SURFACE B/O ALTAIR CRUISE 86-04

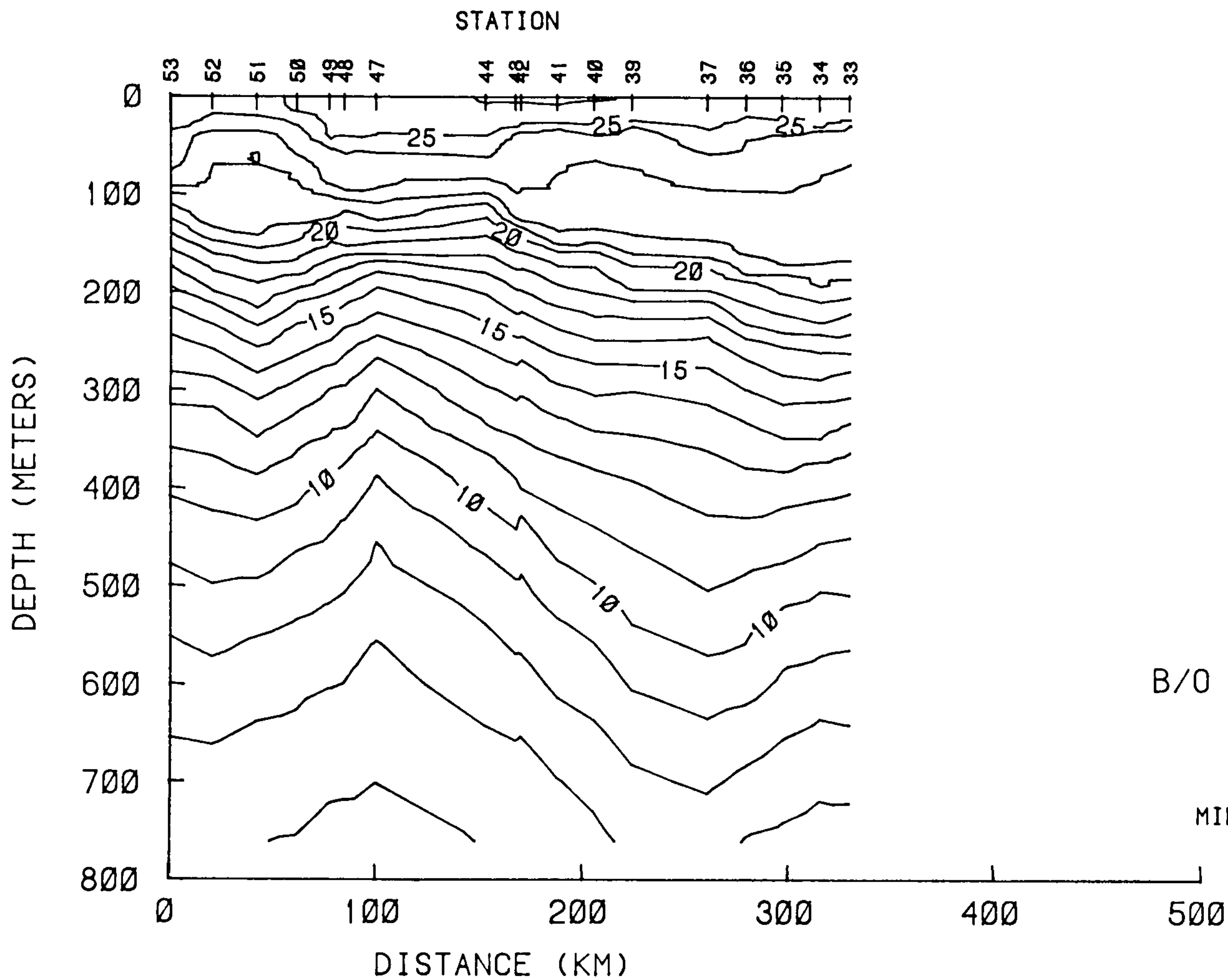


B/O ALTAIR CRUISE 86-04
5/ 3/86 TO 5/ 3/86
STATIONS 29 TO 33
TEMPERATURE DEG C
MIN = 6.33 MAX = 25.87


STATION
29
30
31
32
33
25
DEPTH (METERS)
0
50
100
150
200
DISTANCE (KM)
0
100
200
300
400
500
B/O ALTAIR CRUISE 86-04
5/ 3/86 TO 5/ 3/86
STATIONS 29 TO 33
TEMPERATURE DEG C
MIN = 18.68 MAX = 25.87



PARAMETERS AT SURFACE B/O ALTAIR CRUISE 86-04



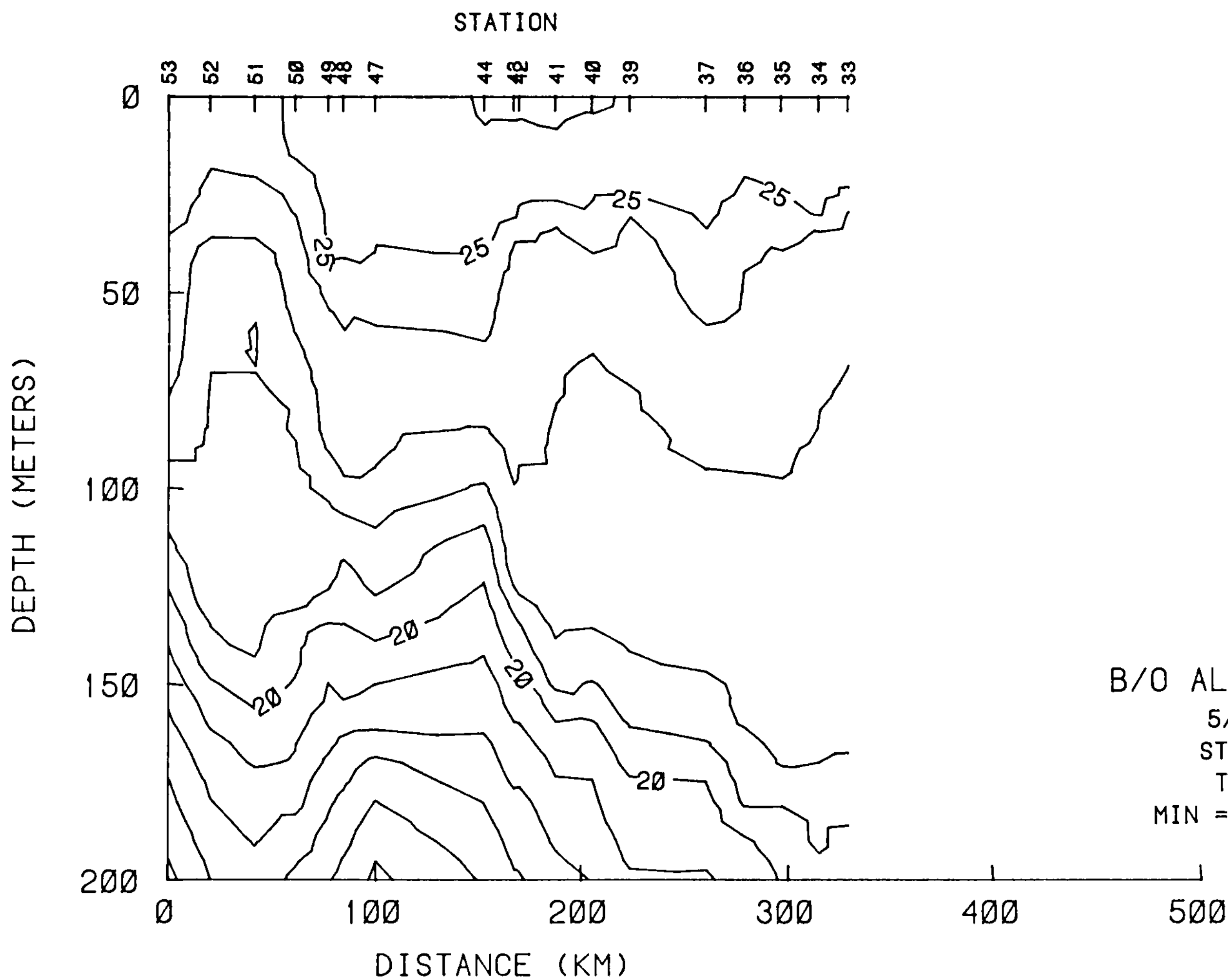
B/O ALTAIR CRUISE 86-04

5/ 3/86 TO 5/ 4/86

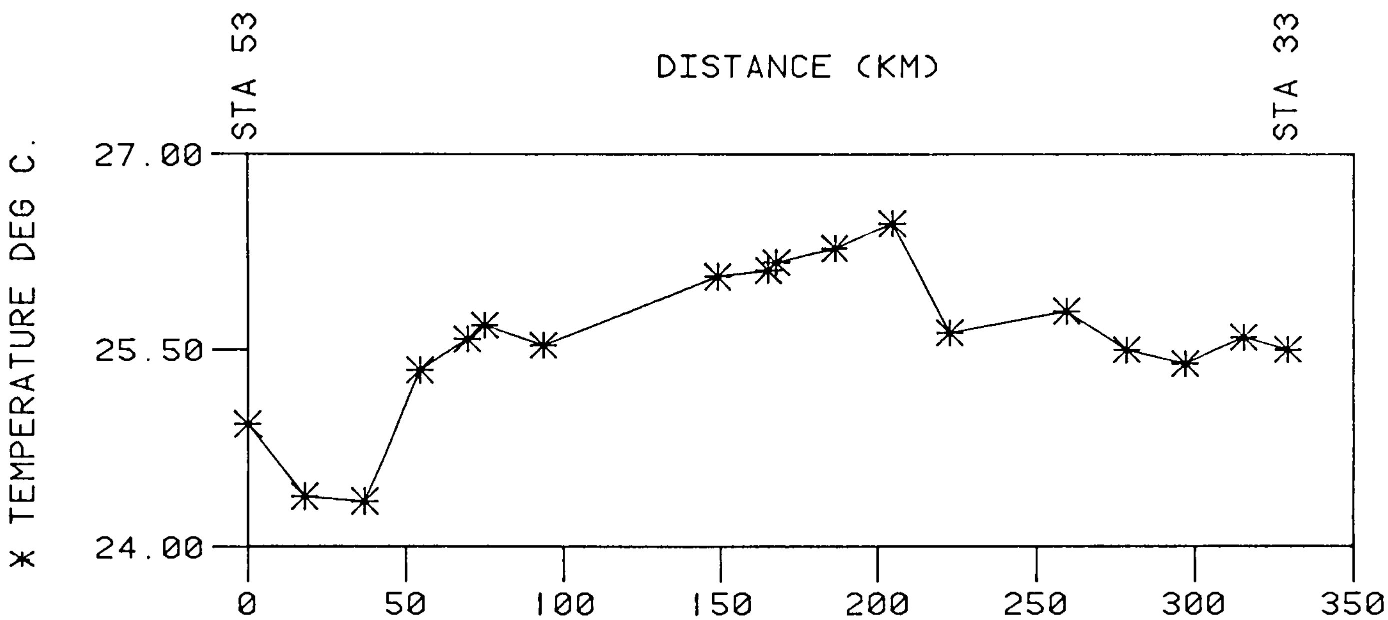
STATIONS 33 TO 53

TEMPERATURE DEG C

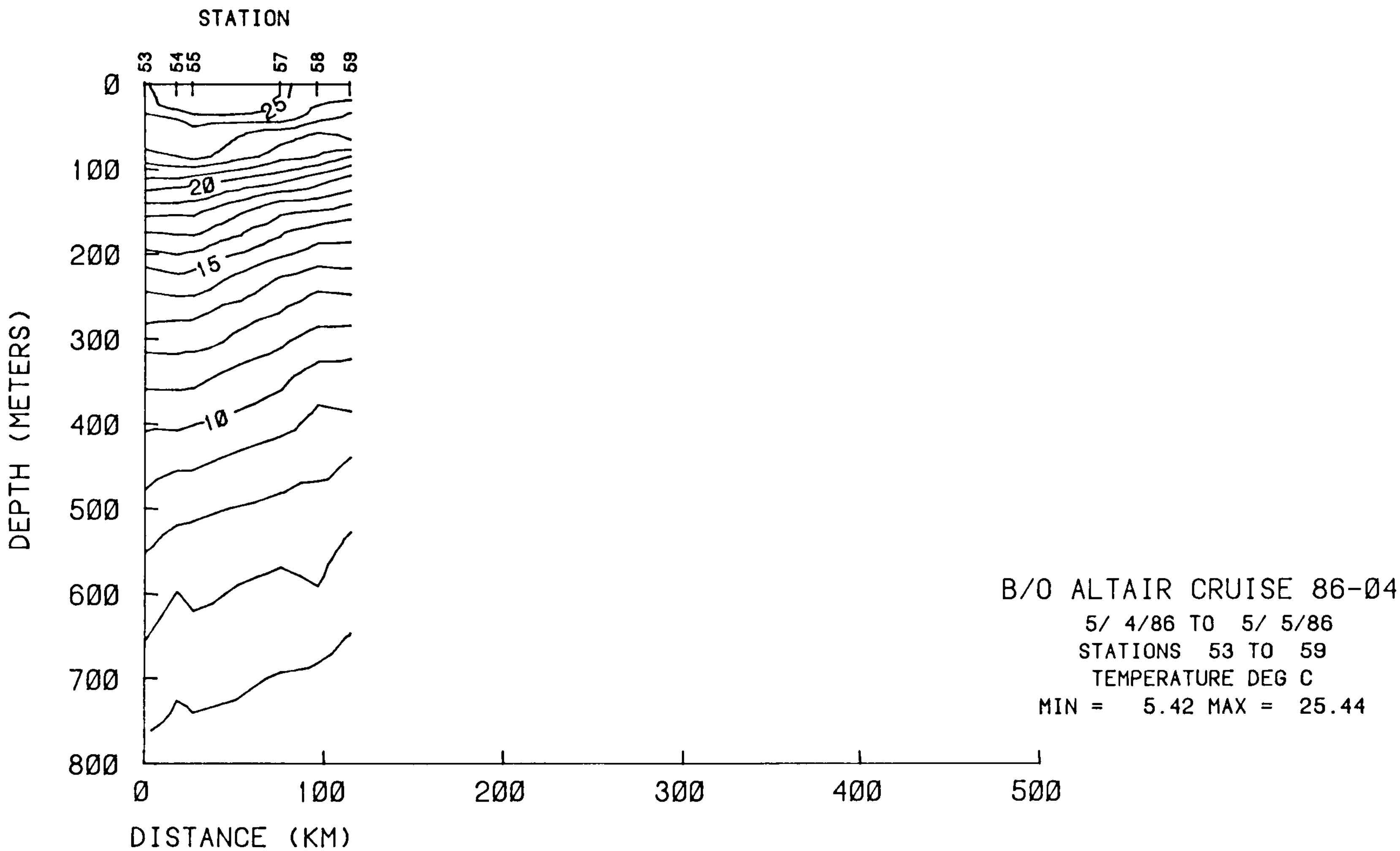
MIN = 5.72 MAX = 26.47

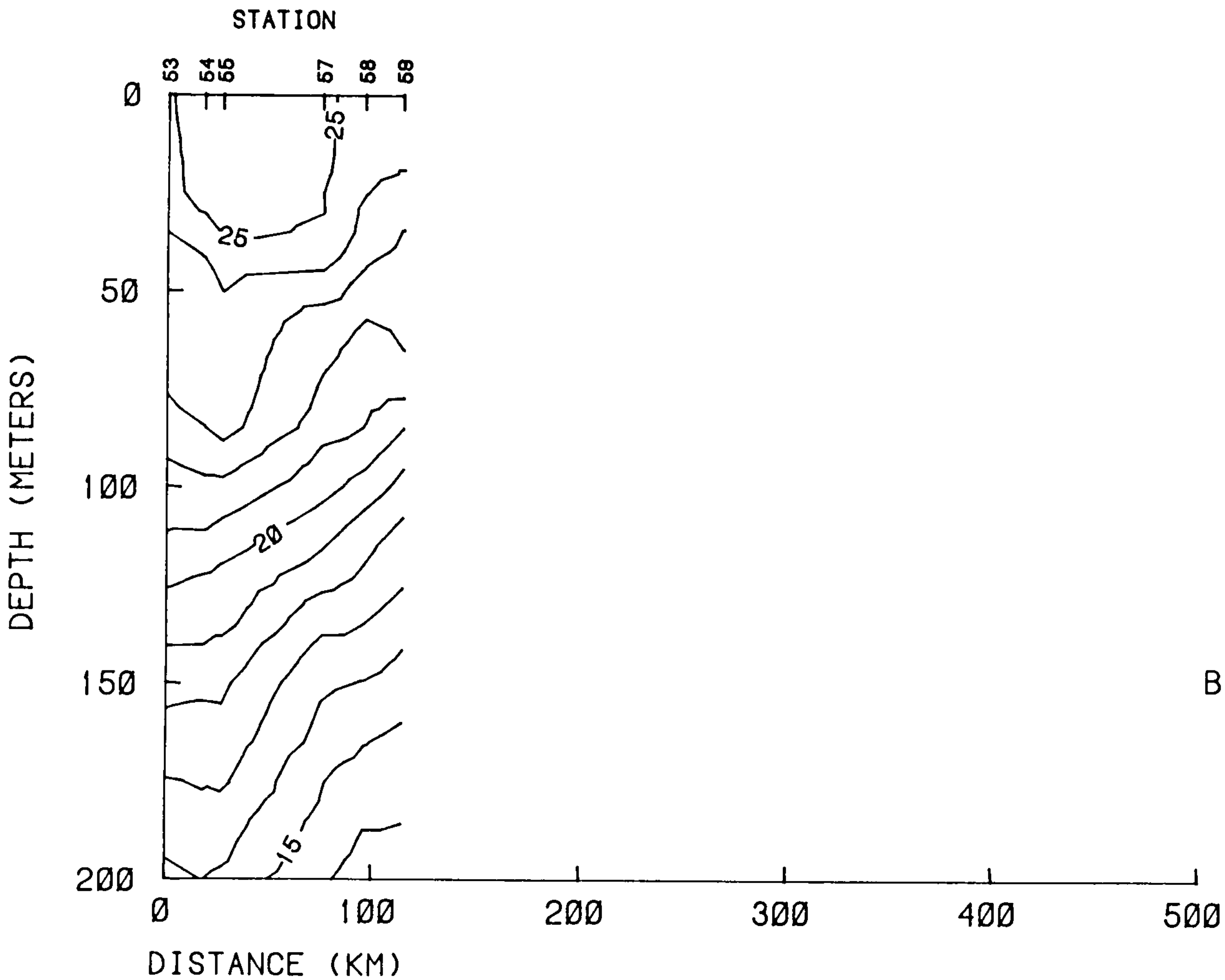


B/O ALTAIR CRUISE 86-04
5/ 3/86 TO 5/ 4/86
STATIONS 33 TO 53
TEMPERATURE DEG C
MIN = 14.79 MAX = 26.47

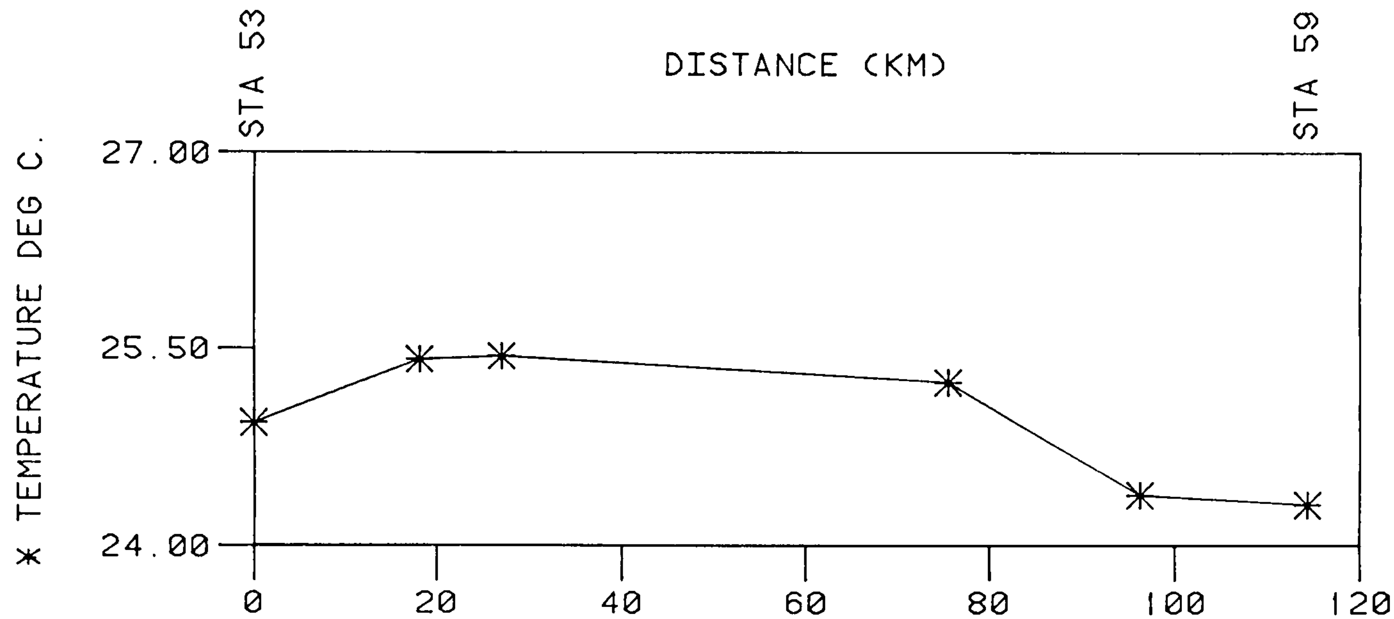


PARAMETERS AT SURFACE B/O ALTAIR CRUISE 86-04

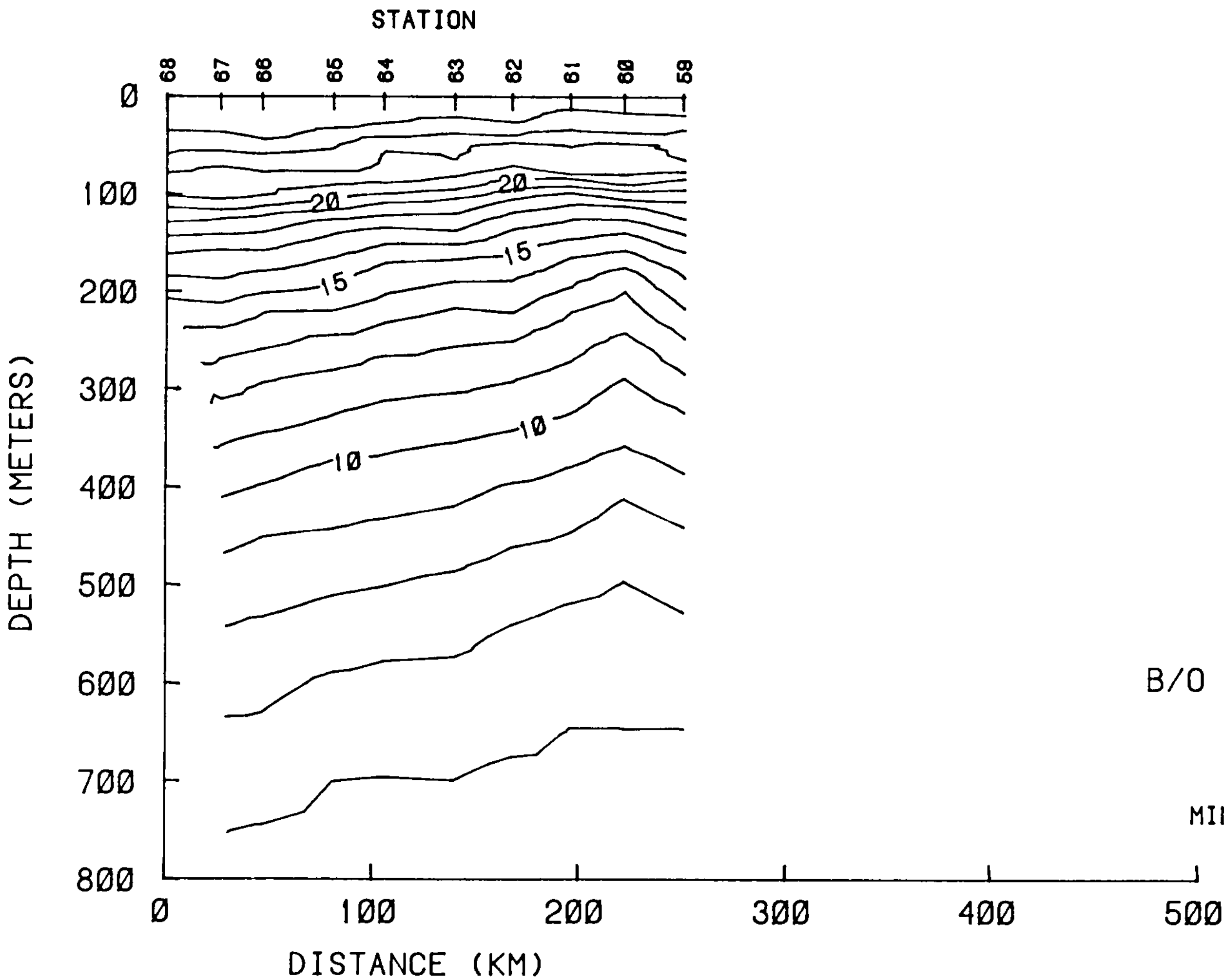

STATION
53
54
55
57
58
59
25
20
15
10
DEPTH (METERS)
Ø
100
200
300
400
500
600
700
800
Ø
100
200
300
400
500
DISTANCE (KM)
B/O ALTAIR CRUISE 86-Ø4
5/ 4/86 TO 5/ 5/86
STATIONS 53 TO 59
TEMPERATURE DEG C
MIN = 5.42 MAX = 25.44



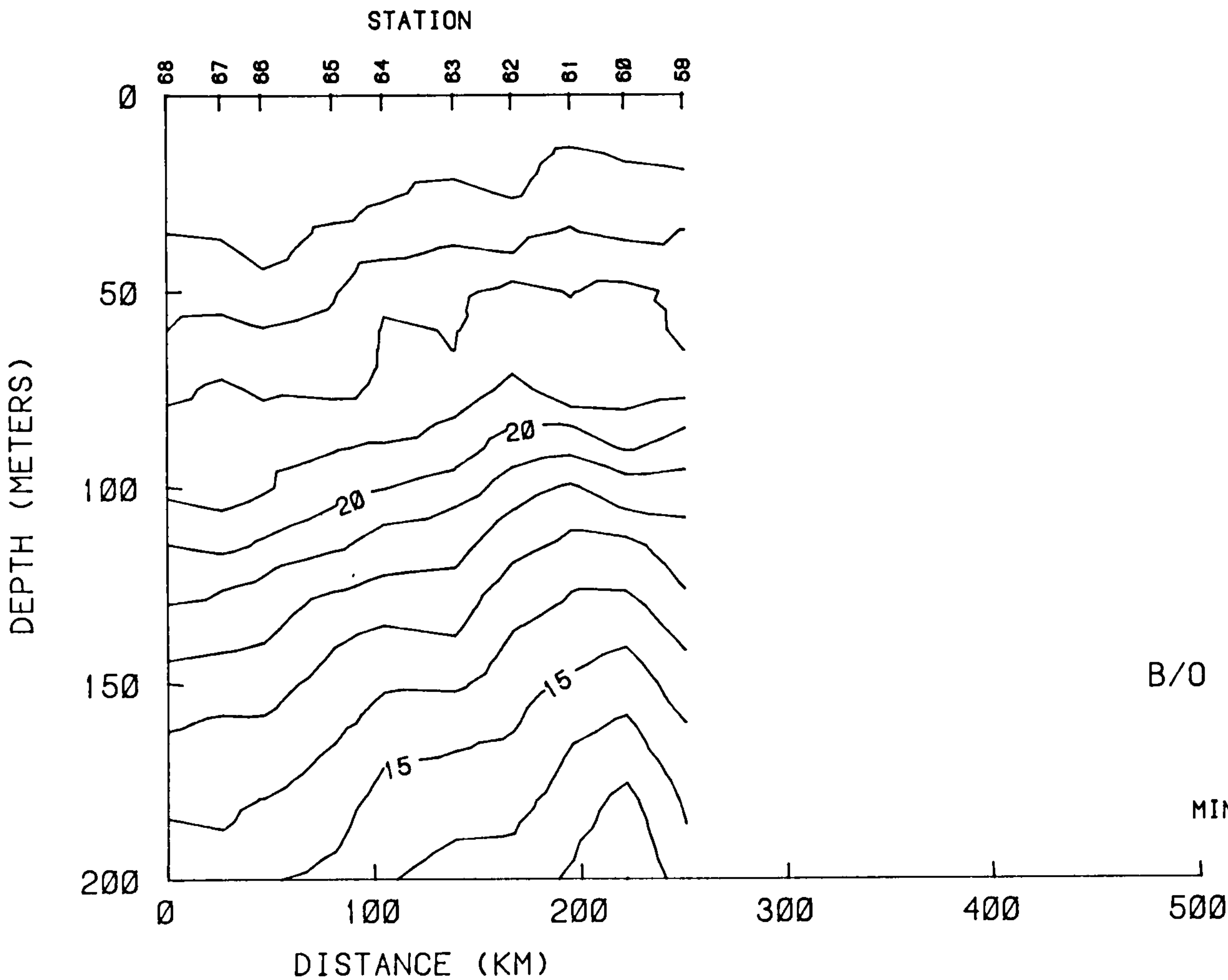
B/O ALTAIR CRUISE 86-04
5/ 4/86 TO 5/ 5/86
STATIONS 53 TO 59
TEMPERATURE DEG C
MIN = 13.53 MAX = 25.44



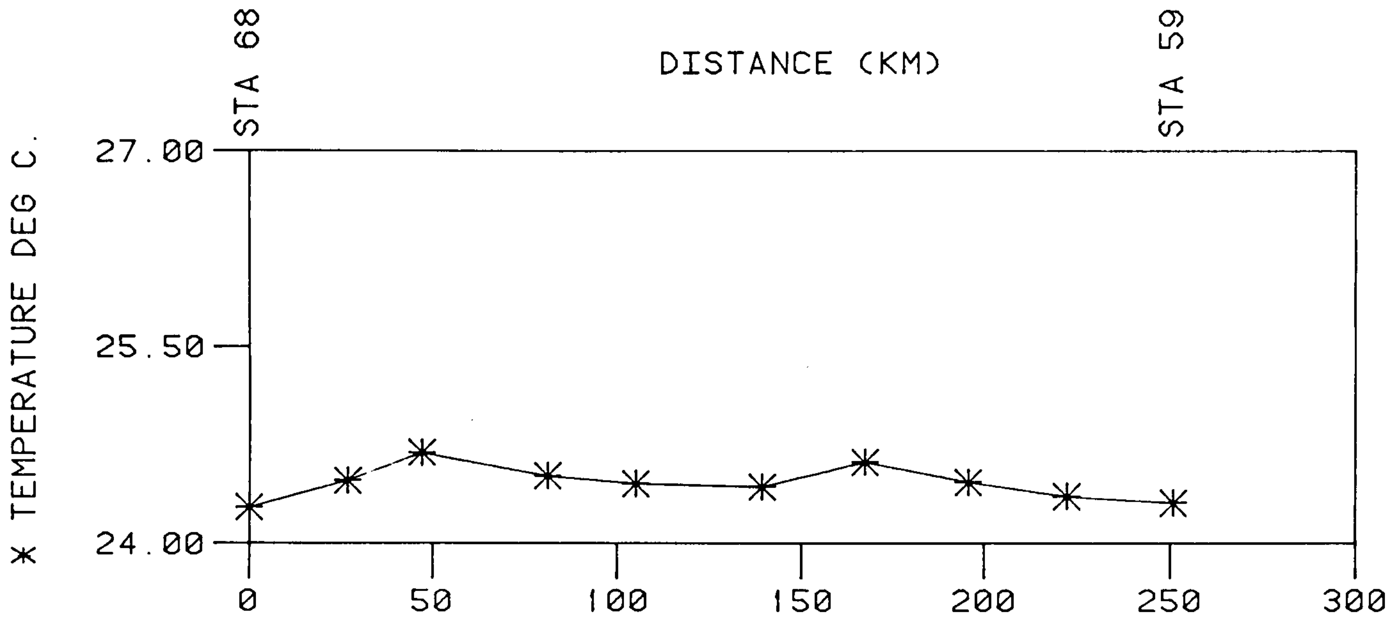
PARAMETERS AT SURFACE B/O ALTAIR CRUISE 86-04



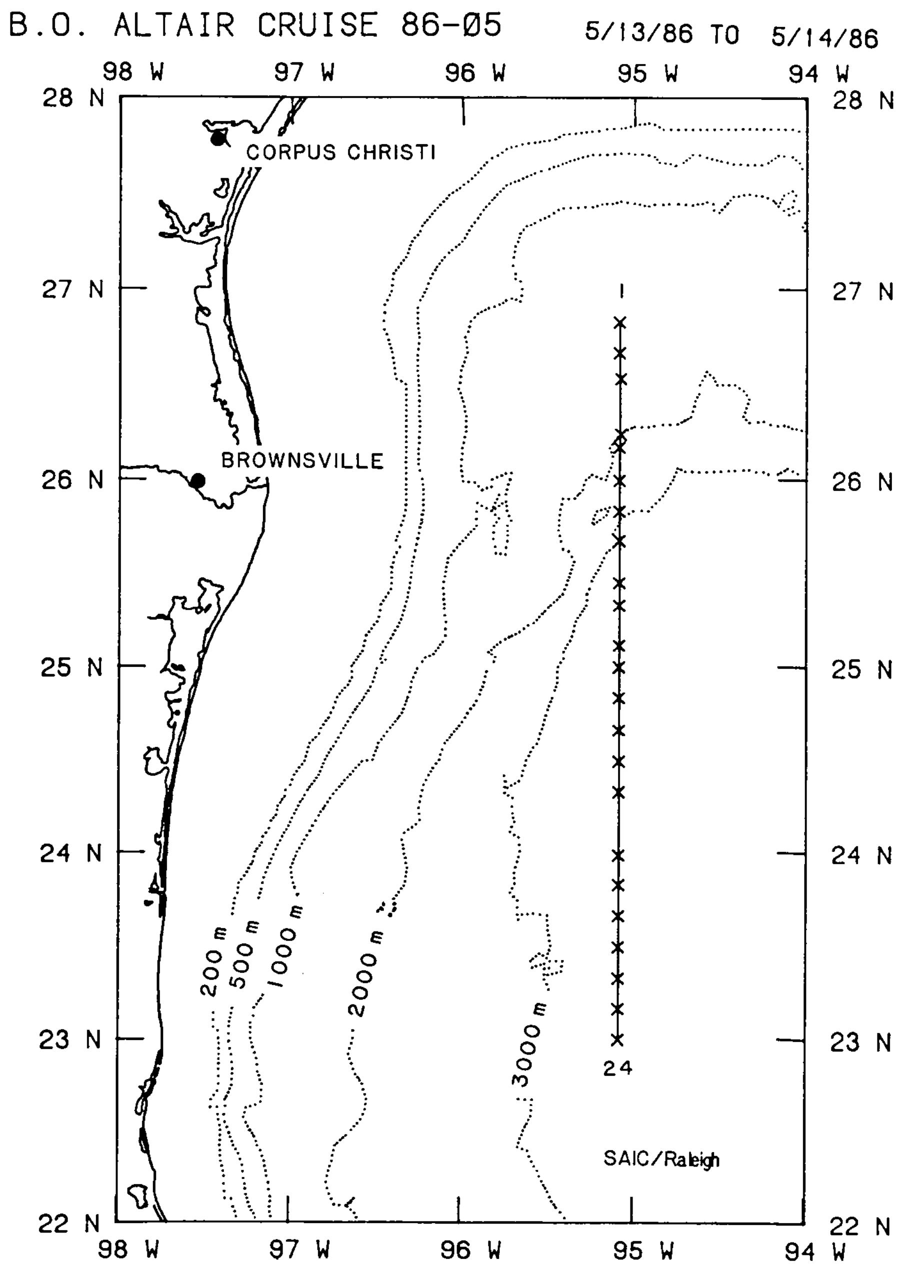
B/O ALTAIR CRUISE 86-04
5/ 5/86 TO 5/ 6/86
STATIONS 59 TO 68
TEMPERATURE DEG C
MIN = 5.40 MAX = 24.70

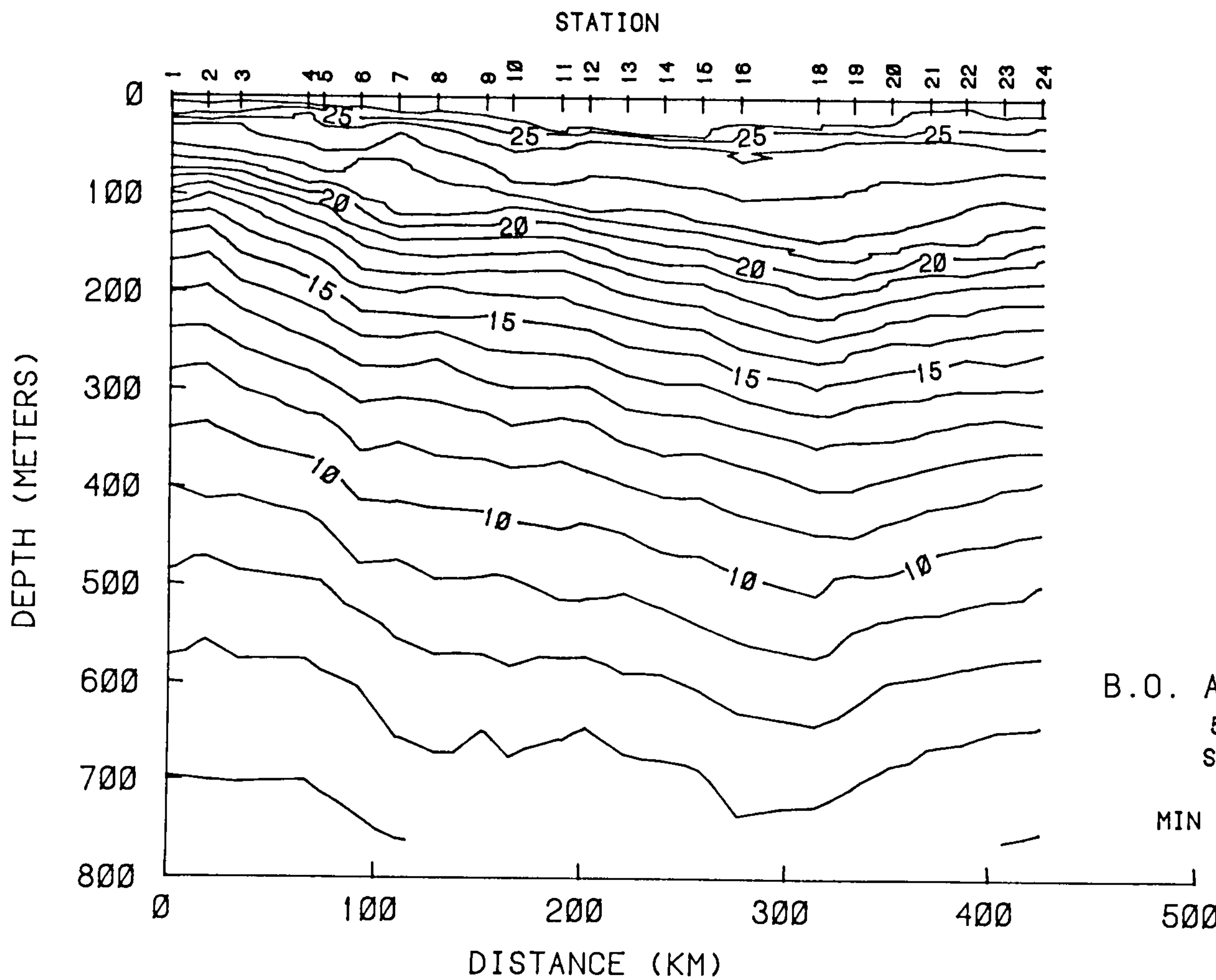


B/O ALTAIR CRUISE 86-04
5/ 5/86 TO 5/ 6/86
STATIONS 59 TO 68
TEMPERATURE DEG C
MIN = 11.99 MAX = 24.70

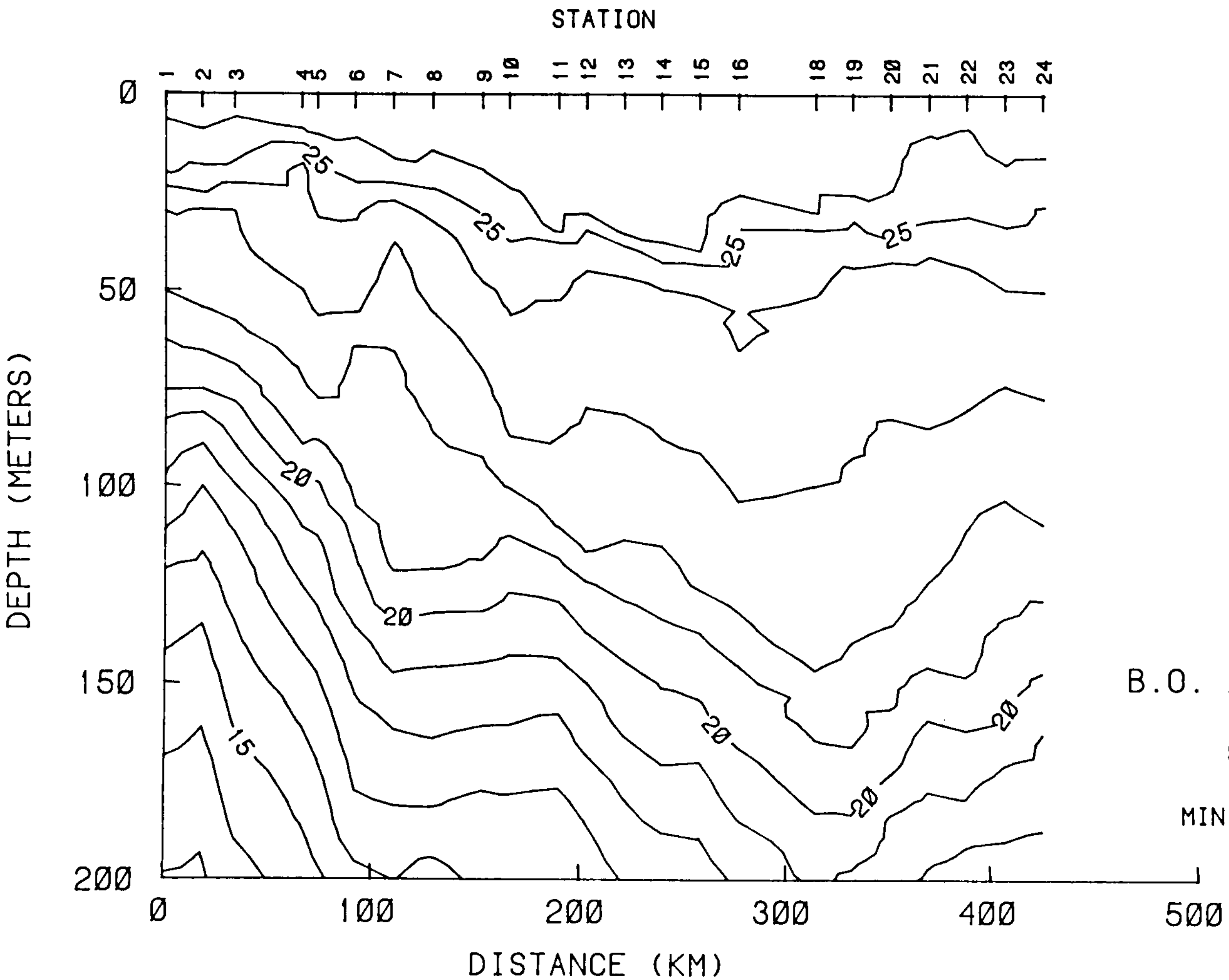


PARAMETERS AT SURFACE B/O ALTAIR CRUISE 86-04


B.O. ALTAIR CRUISE 86-Ø5
5/13/86 TO 5/14/86
98 W
97 W
96 W
95 W
94 W
28 N
27 N
26 N
25 N
24 N
23 N
22 N
CORPUS CHRISTI
BROWNSVILLE
200 m
500 m
1000 m
2000 m
3000 m
1
24
SAIC/Raleigh



B.O. ALTAIR CRUISE 86-05
5/13/86 TO 5/14/86
STATIONS 1 TO 24
TEMPERATURE DEG C
MIN = 5.66 MAX = 26.67



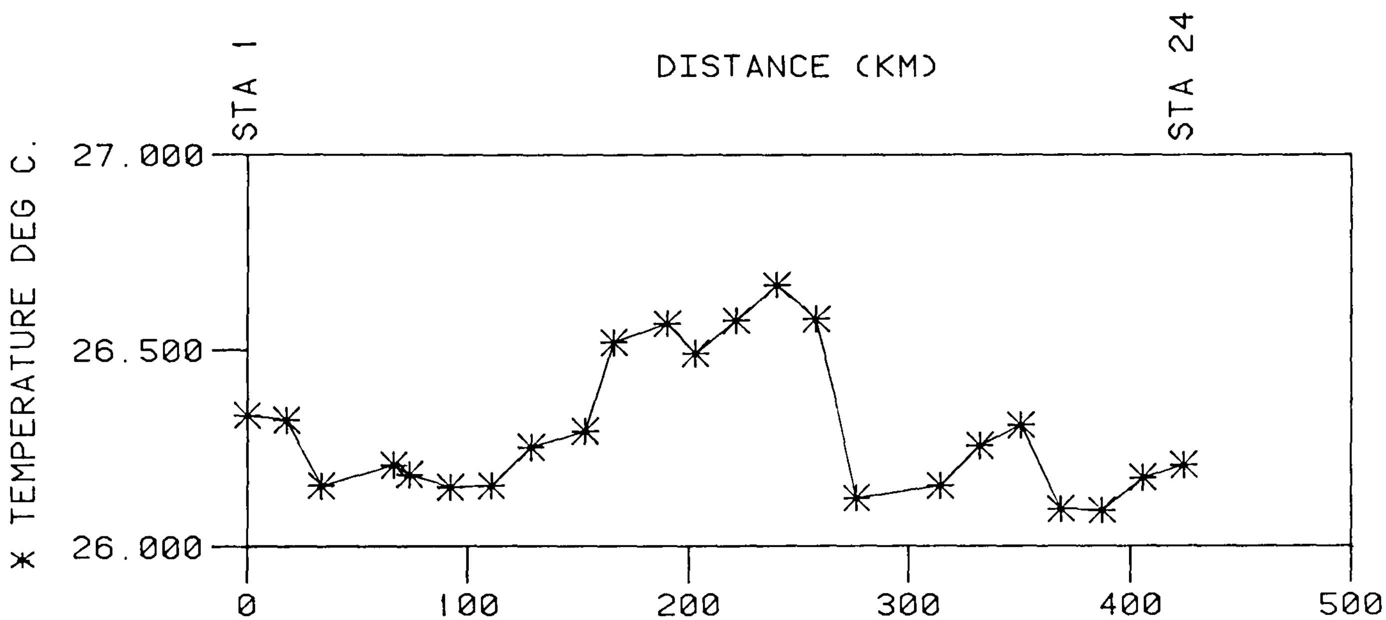
B.O. ALTAIR CRUISE 86-05

5/13/86 TO 5/14/86

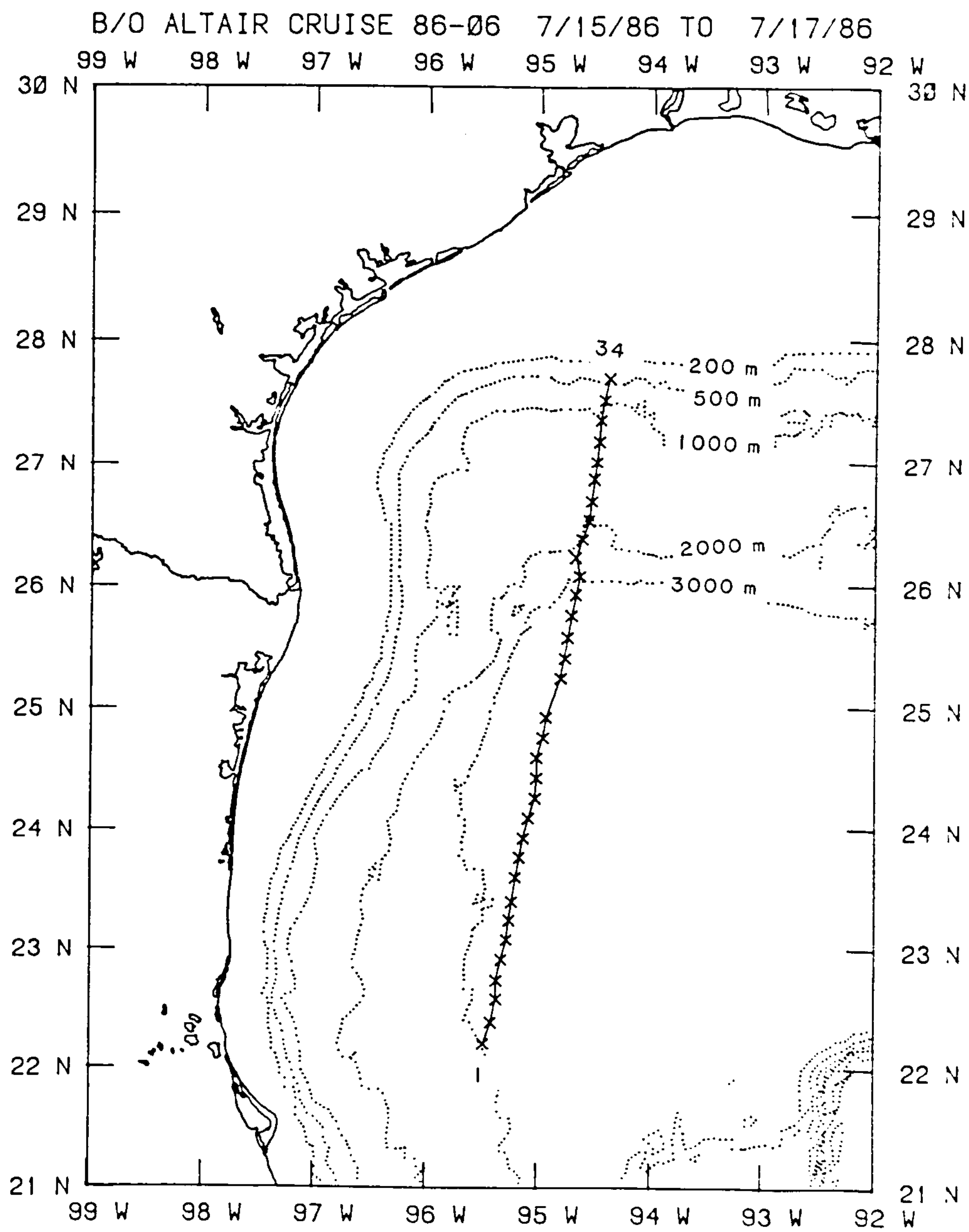
STATIONS 1 TO 24

TEMPERATURE DEG C

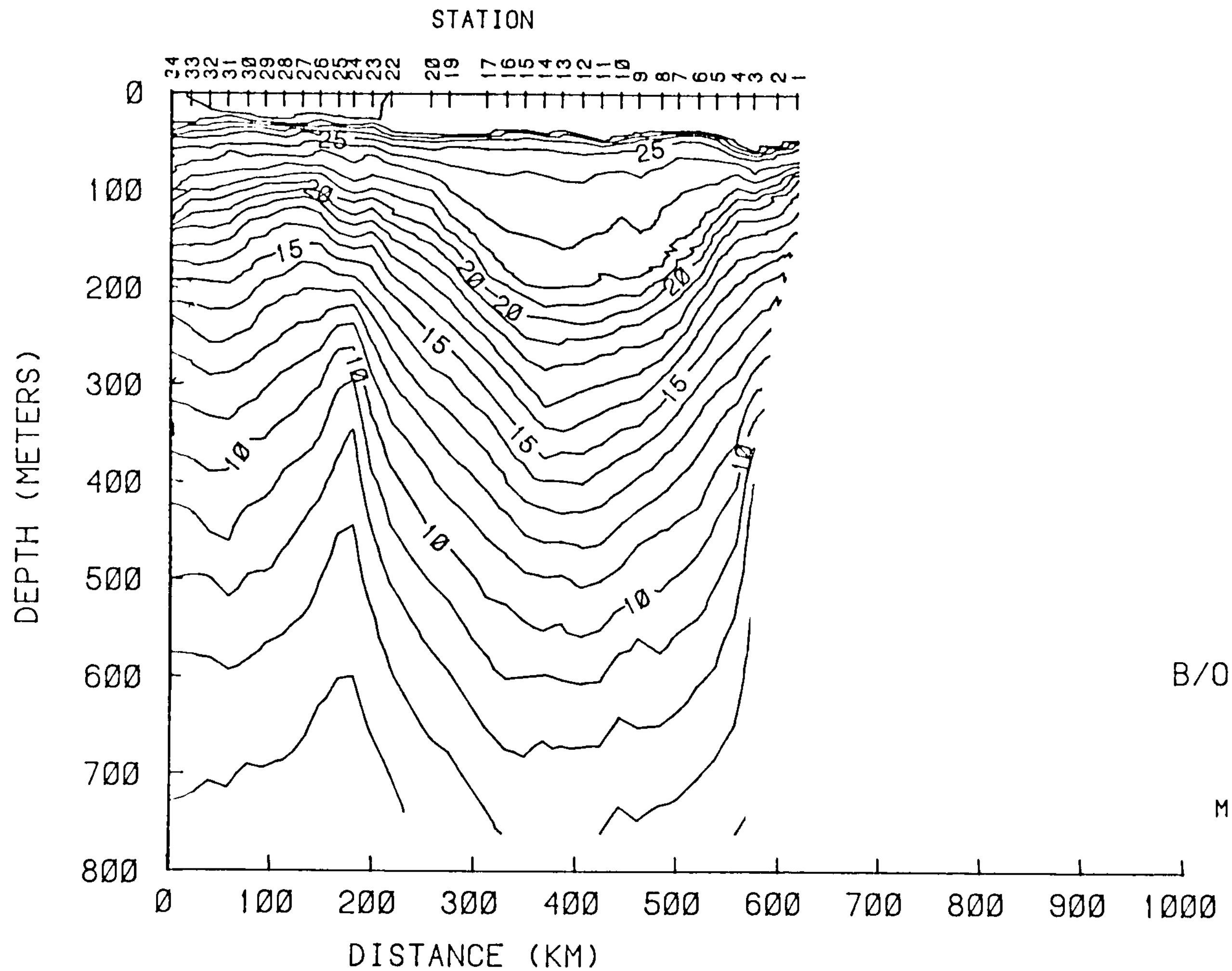
MIN = 12.85 MAX = 26.67



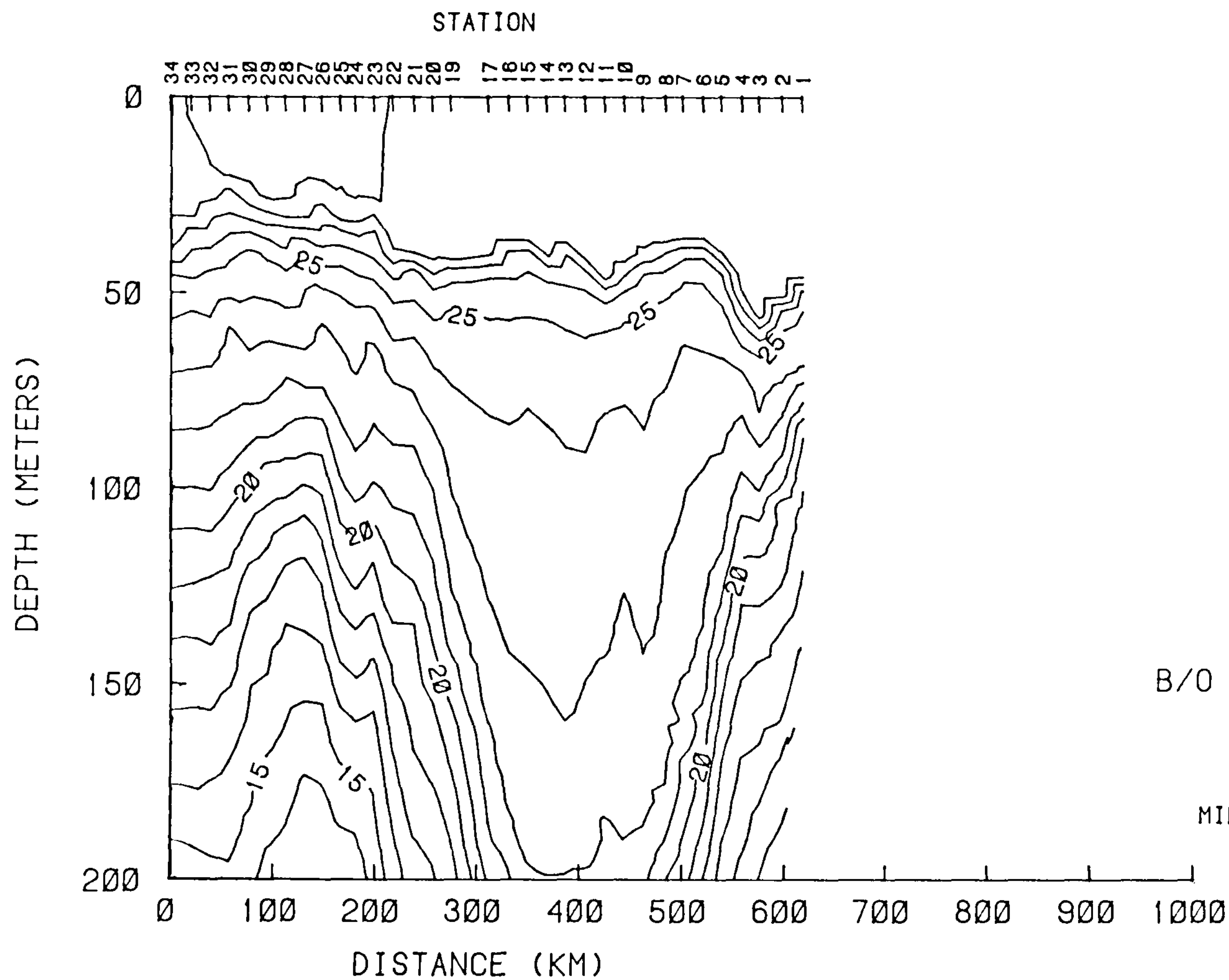
PARAMETERS AT SURFACE B.O. ALTAIR CRUISE 86-05



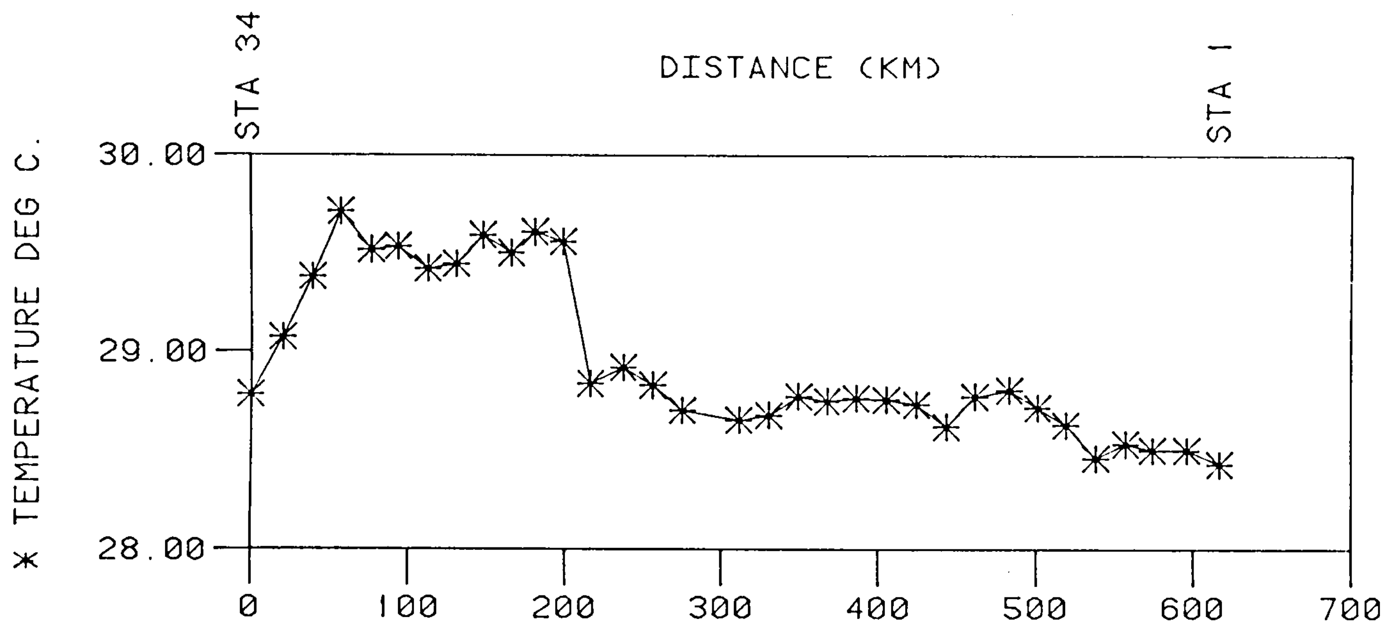
B/O ALTAIR CRUISE 86-Ø6 7/15/86 TO 7/17/86
99 W
98 W
97 W
96 W
95 W
94 W
93 W
92 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
34
1
200 m
500 m
1000 m
2000 m
3000 m



B/O ALTAIR CRUISE 86-06
7/15/86 TO 7/17/86
STATIONS 1 TO 34
TEMPERATURE DEG C
MIN = 5.22 MAX = 29.71

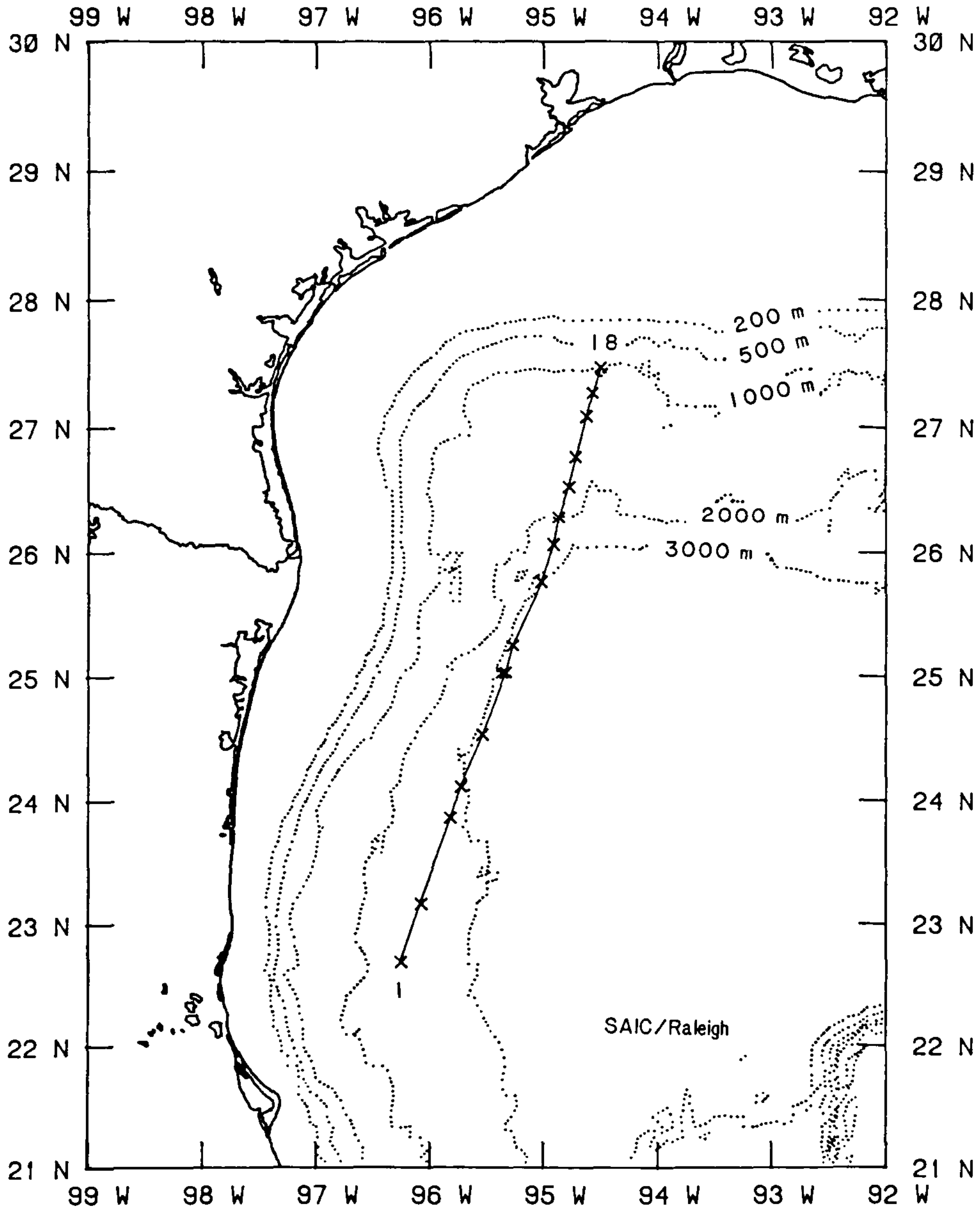


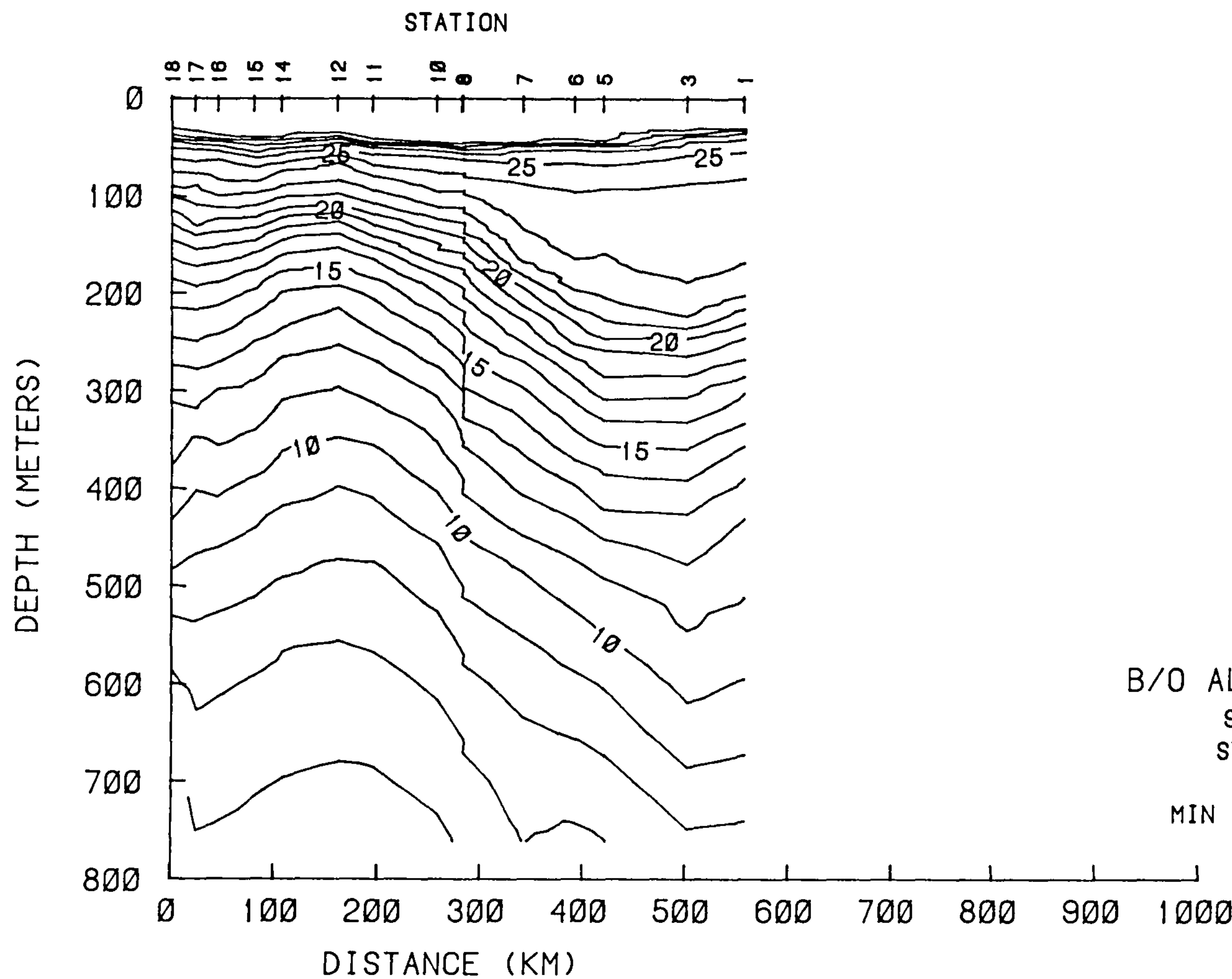
B/O ALTAIR CRUISE 86-06
7/15/86 TO 7/17/86
STATIONS 1 TO 34
TEMPERATURE DEG C
MIN = 13.04 MAX = 29.71



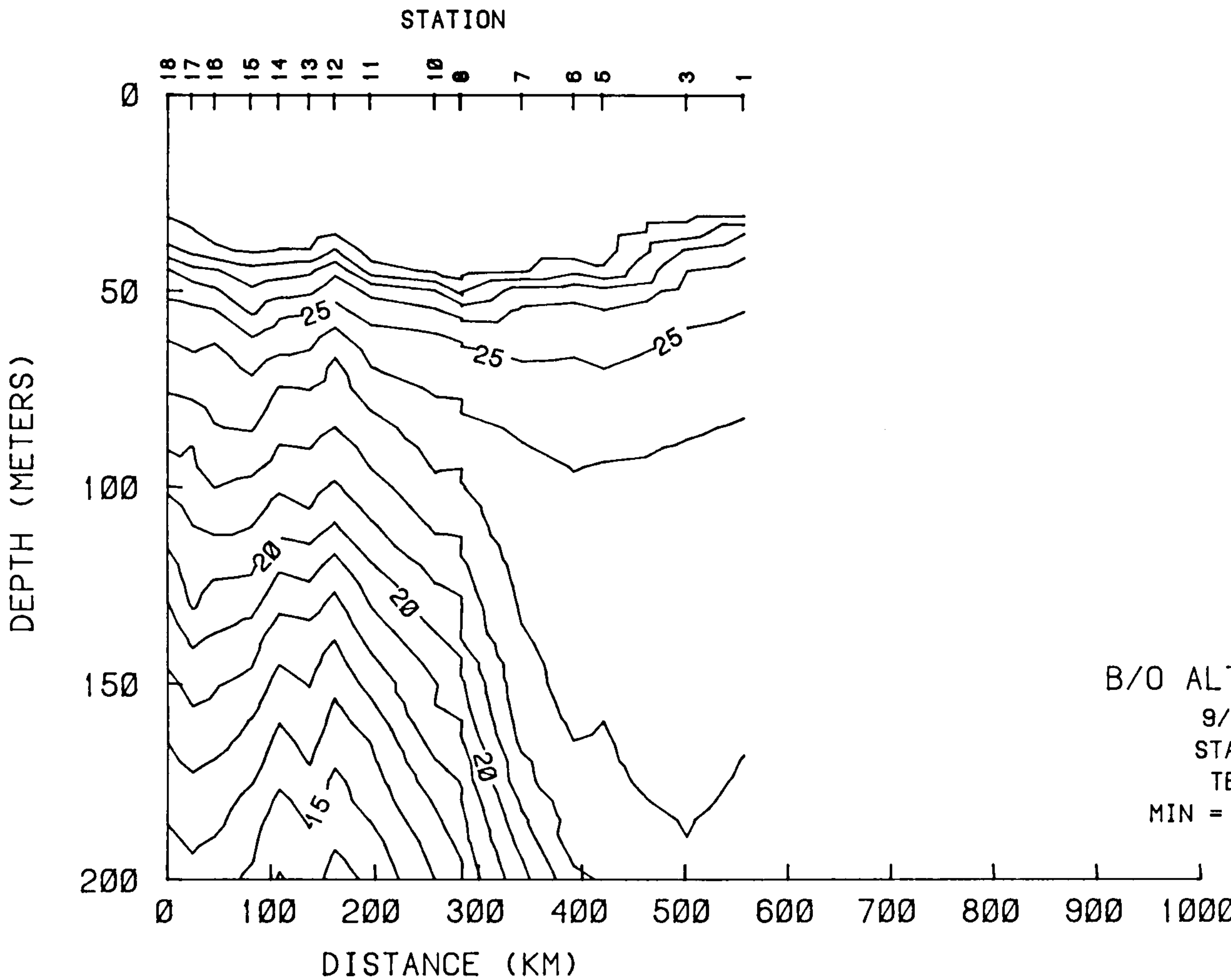
PARAMETERS AT SURFACE B/O ALTAIR CRUISE 86-06

B/O ALTAIR CRUISE 86-Ø7 9/ 1/86 TO 9/ 3/86

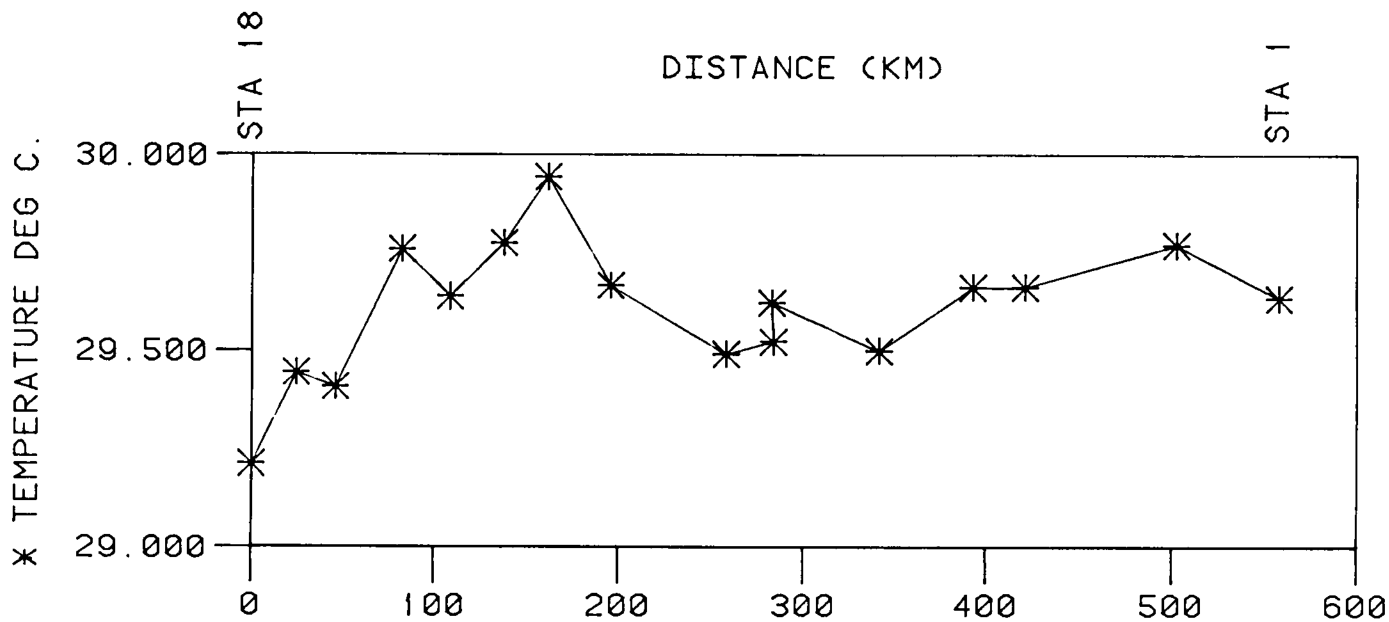




B/O ALTAIR CRUISE 86-07
9/ 1/86 TO 9/ 3/86
STATIONS 1 TO 18
TEMPERATURE DEG C
MIN = 5.52 MAX = 29.94

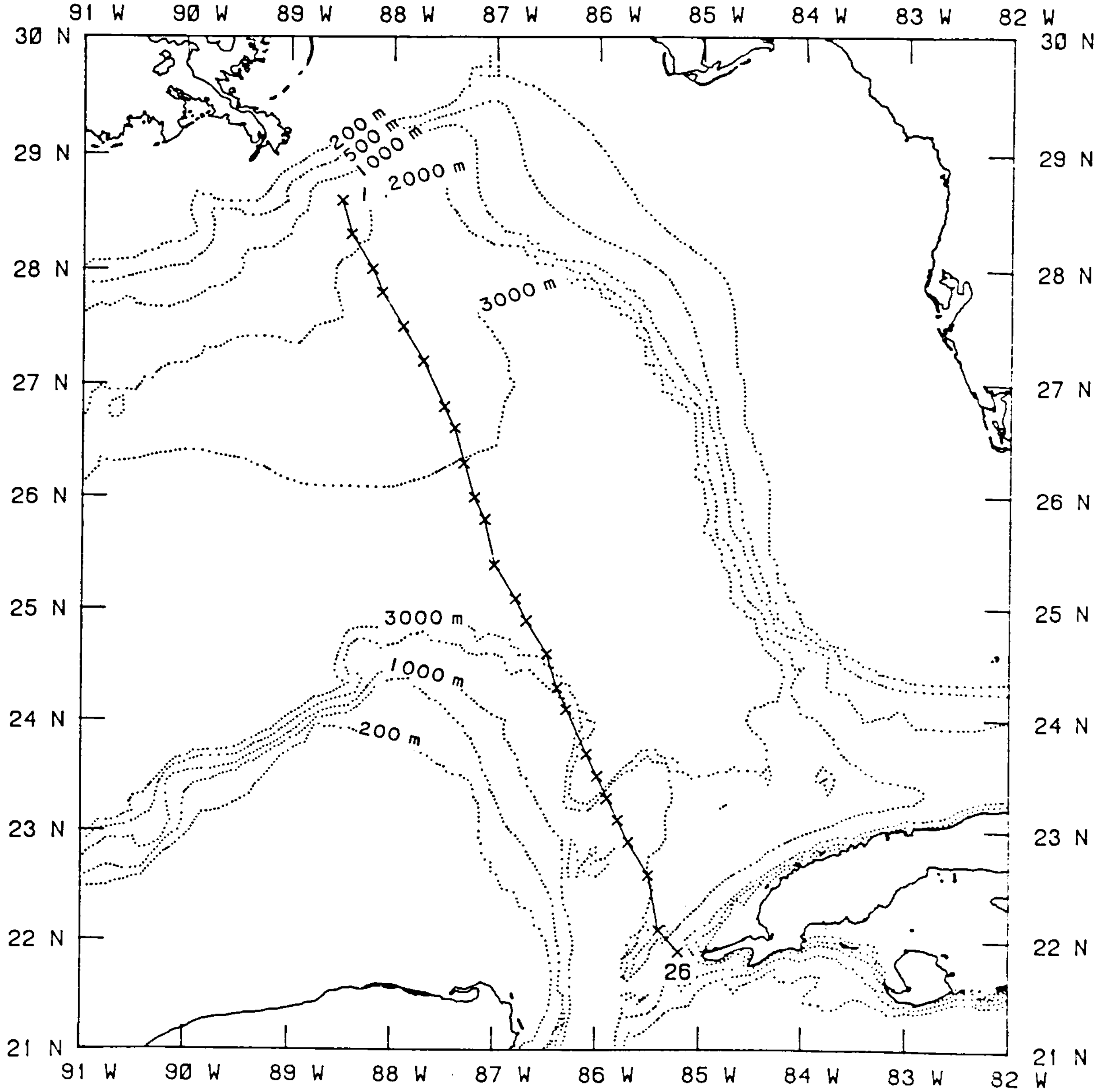


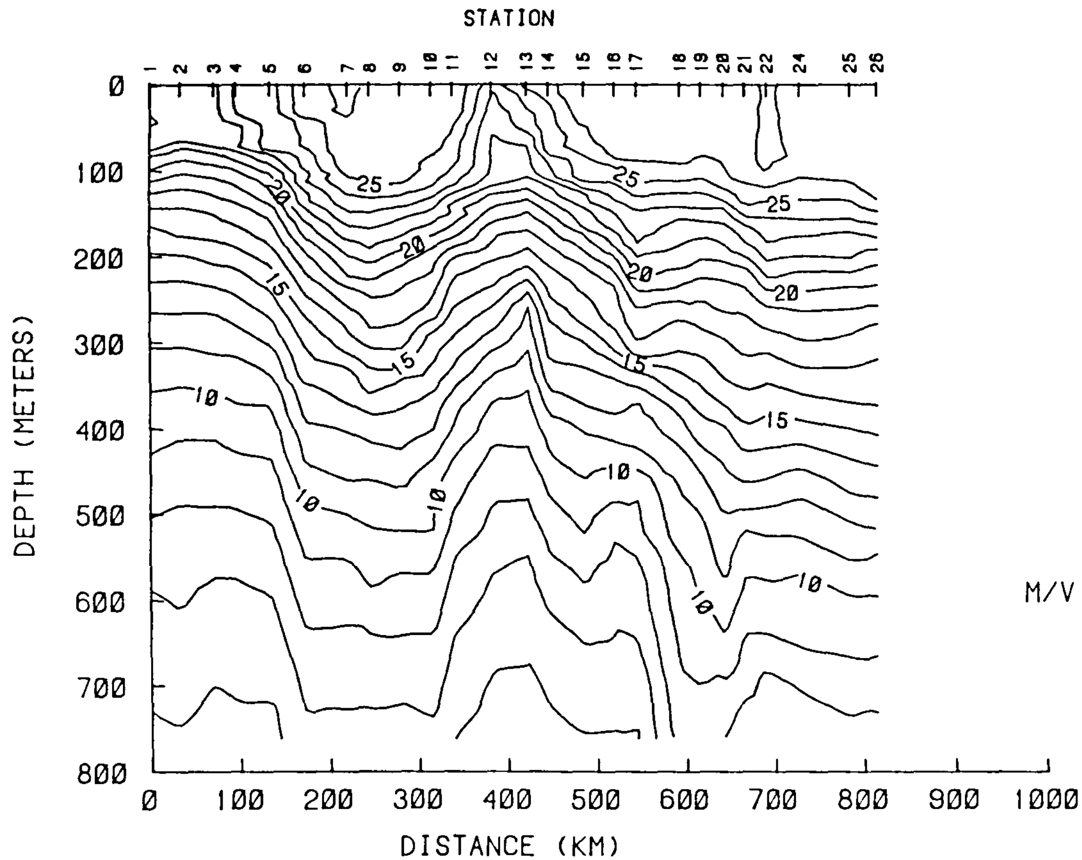
B/O ALTAIR CRUISE 86-07
9/ 1/86 TO 9/ 3/86
STATIONS 1 TO 18
TEMPERATURE DEG C
MIN = 13.55 MAX = 29.94



PARAMETERS AT SURFACE B/O ALTAIR CRUISE 86-07

M/V AMBASSADOR CRUISE 86-Ø1 1/ 3/86 TO 1/ 4/86





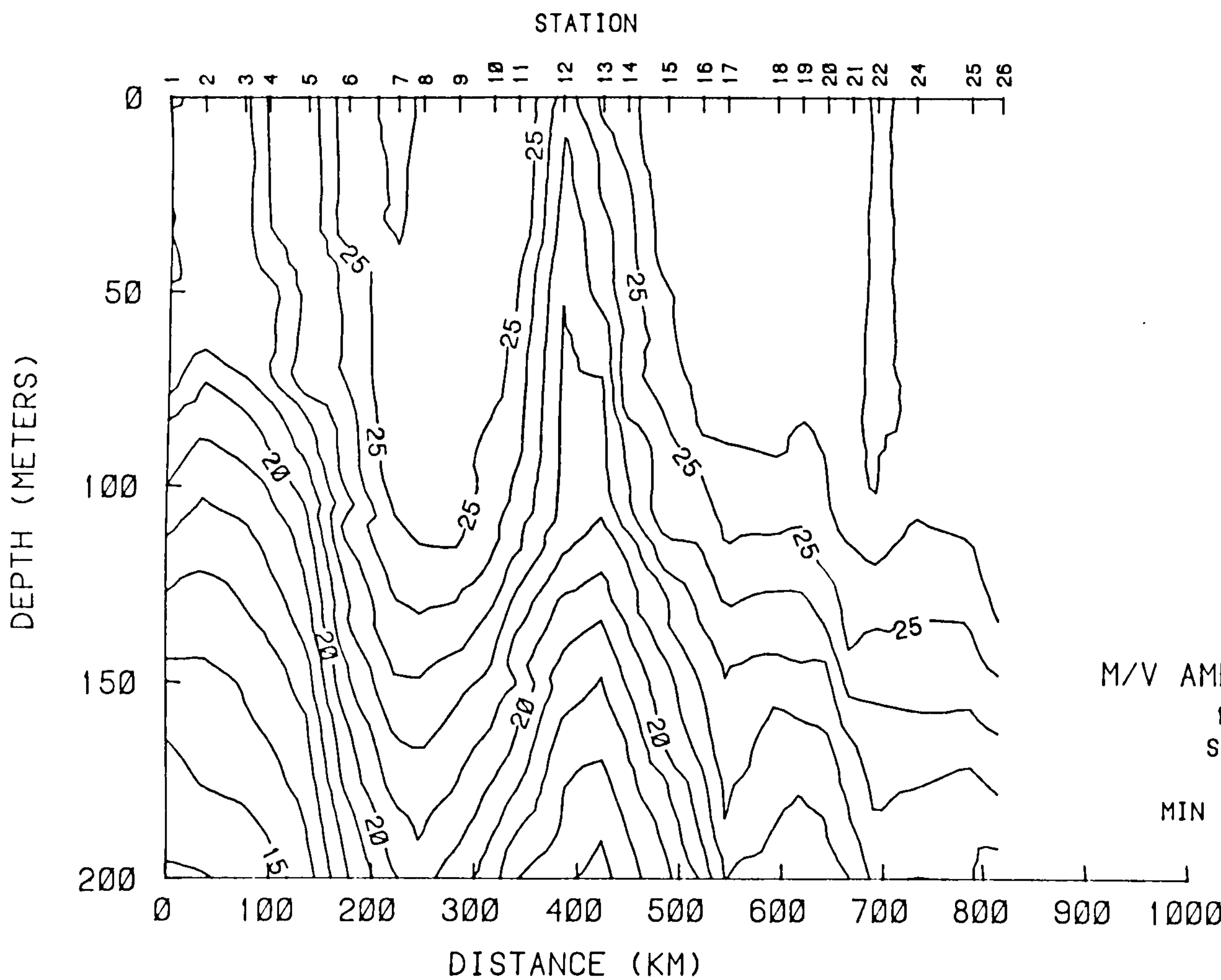
M/V AMBASSADOR CRUISE 86-01

1/ 3/86 TO 1/ 4/86

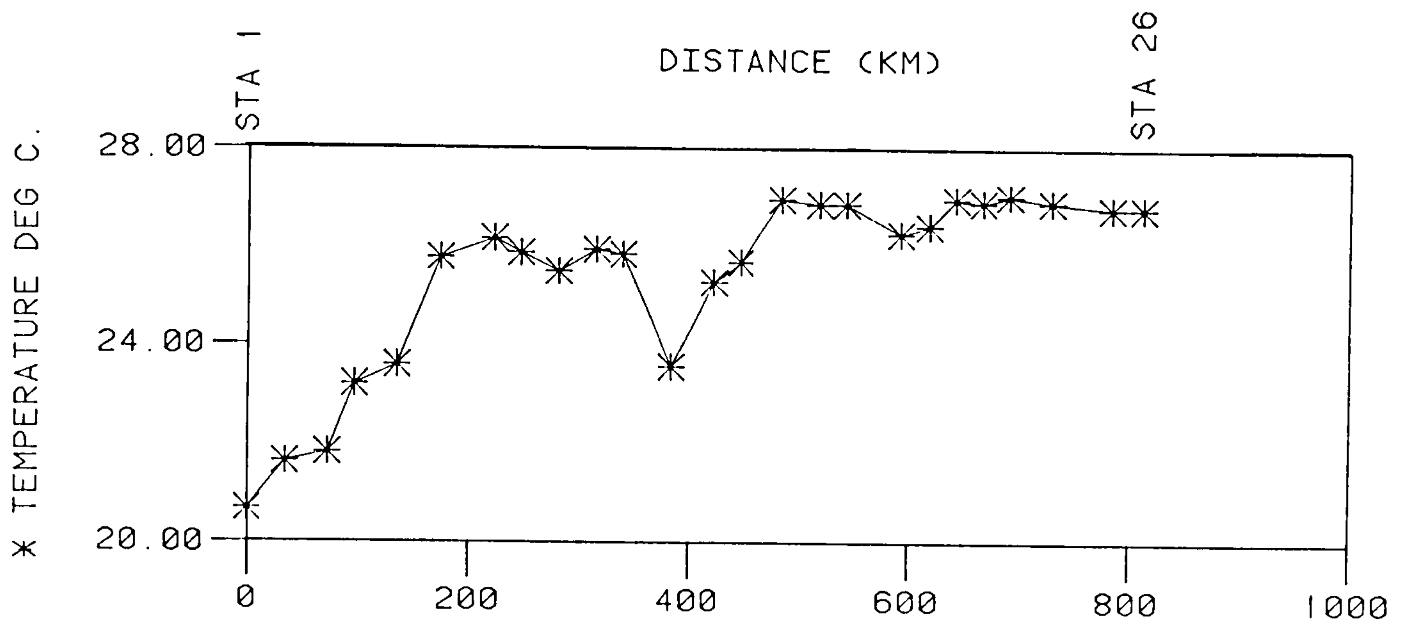
STATIONS 1 TO 26

TEMPERATURE DEG C

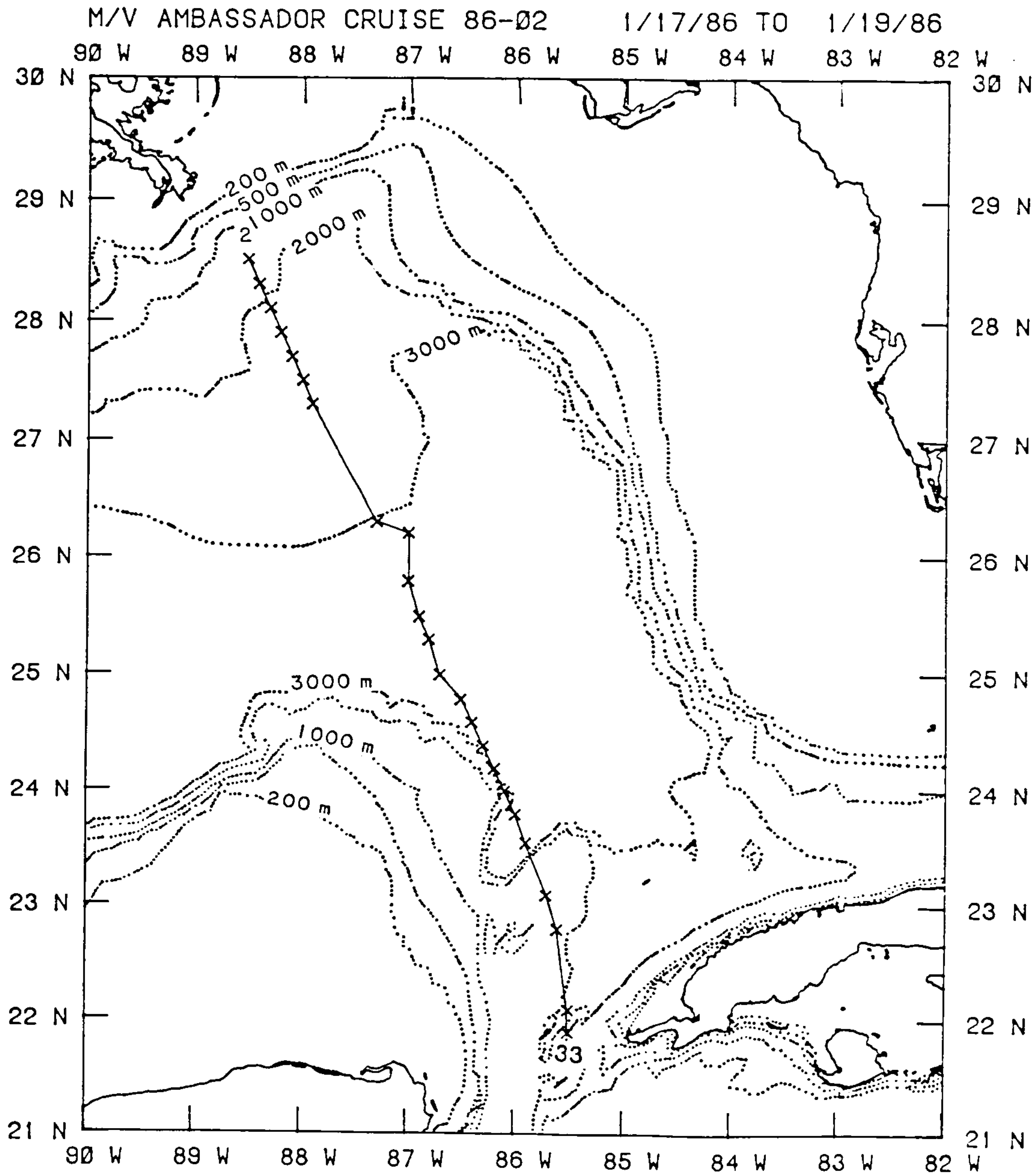
MIN = 5.48 MAX = 27.07

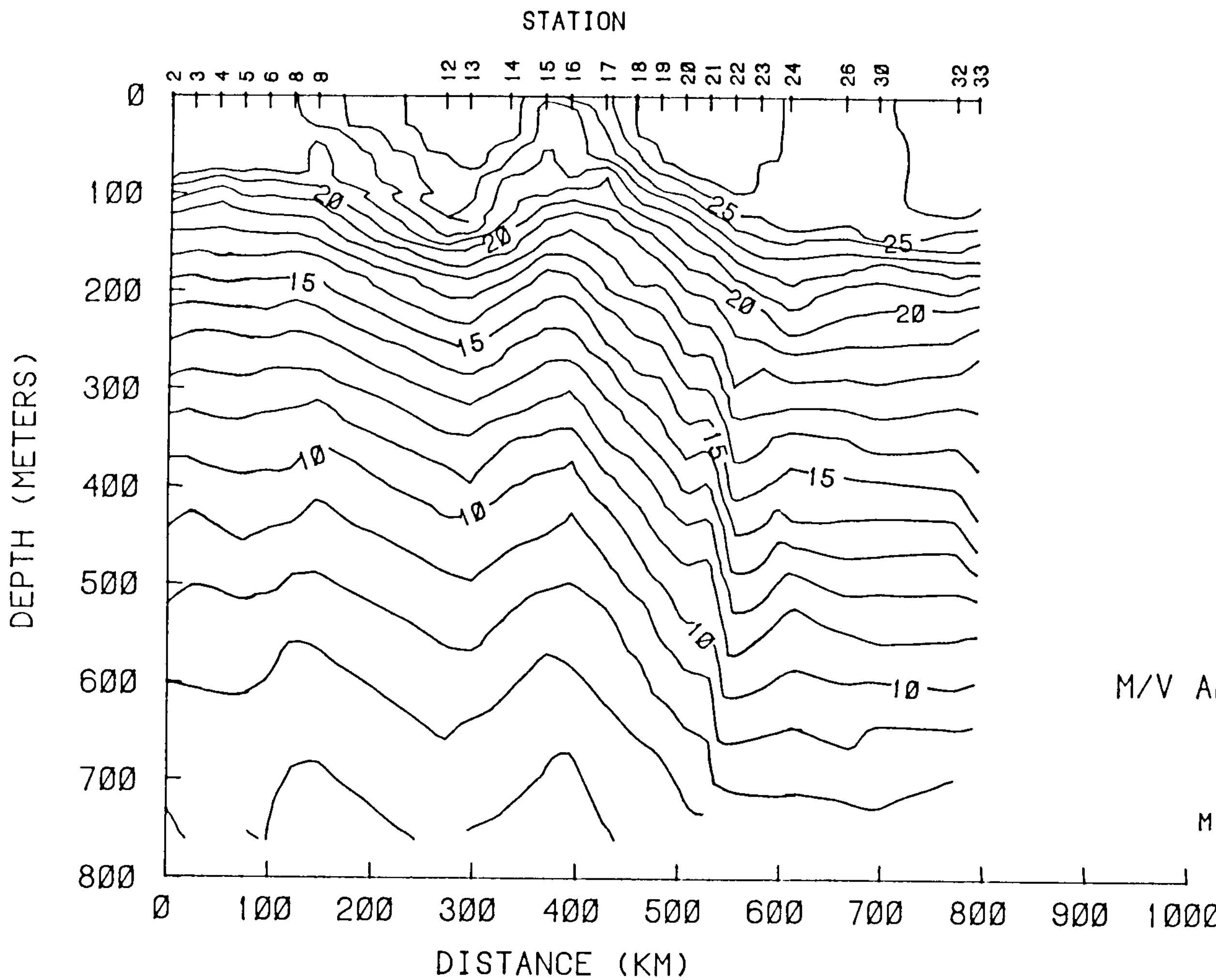


M/V AMBASSADOR CRUISE 86-01
1/ 3/86 TO 1/ 4/86
STATIONS 1 TO 26
TEMPERATURE DEG C
MIN = 13.85 MAX = 27.07

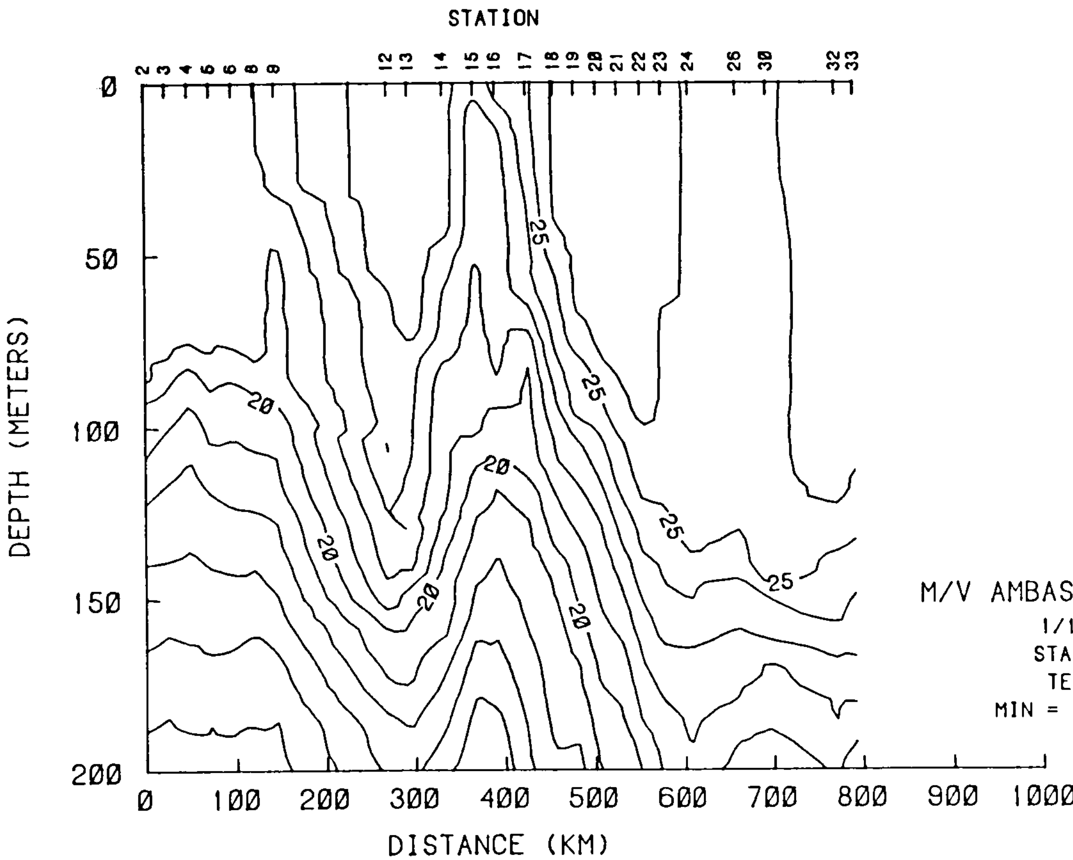


PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 86-01


M/V AMBASSADOR CRUISE 86-Ø2 1/17/86 TO 1/19/86
9Ø W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
3Ø N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
3000 m
1000 m
200 m
33



M/V AMBASSADOR CRUISE 86-02
1/17/86 TO 1/19/86
STATIONS 2 TO 33
TEMPERATURE DEG C
MIN = 5.43 MAX = 26.59



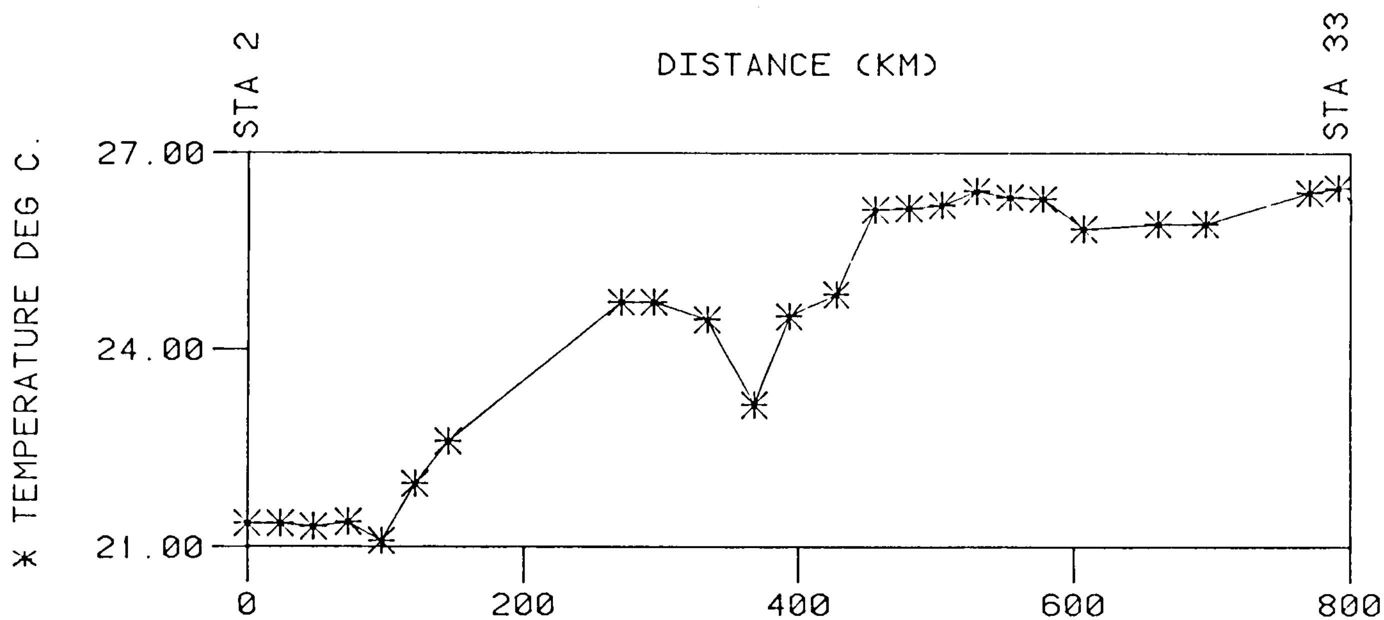
M/V AMBASSADOR CRUISE 86-02

1/17/86 TO 1/19/86

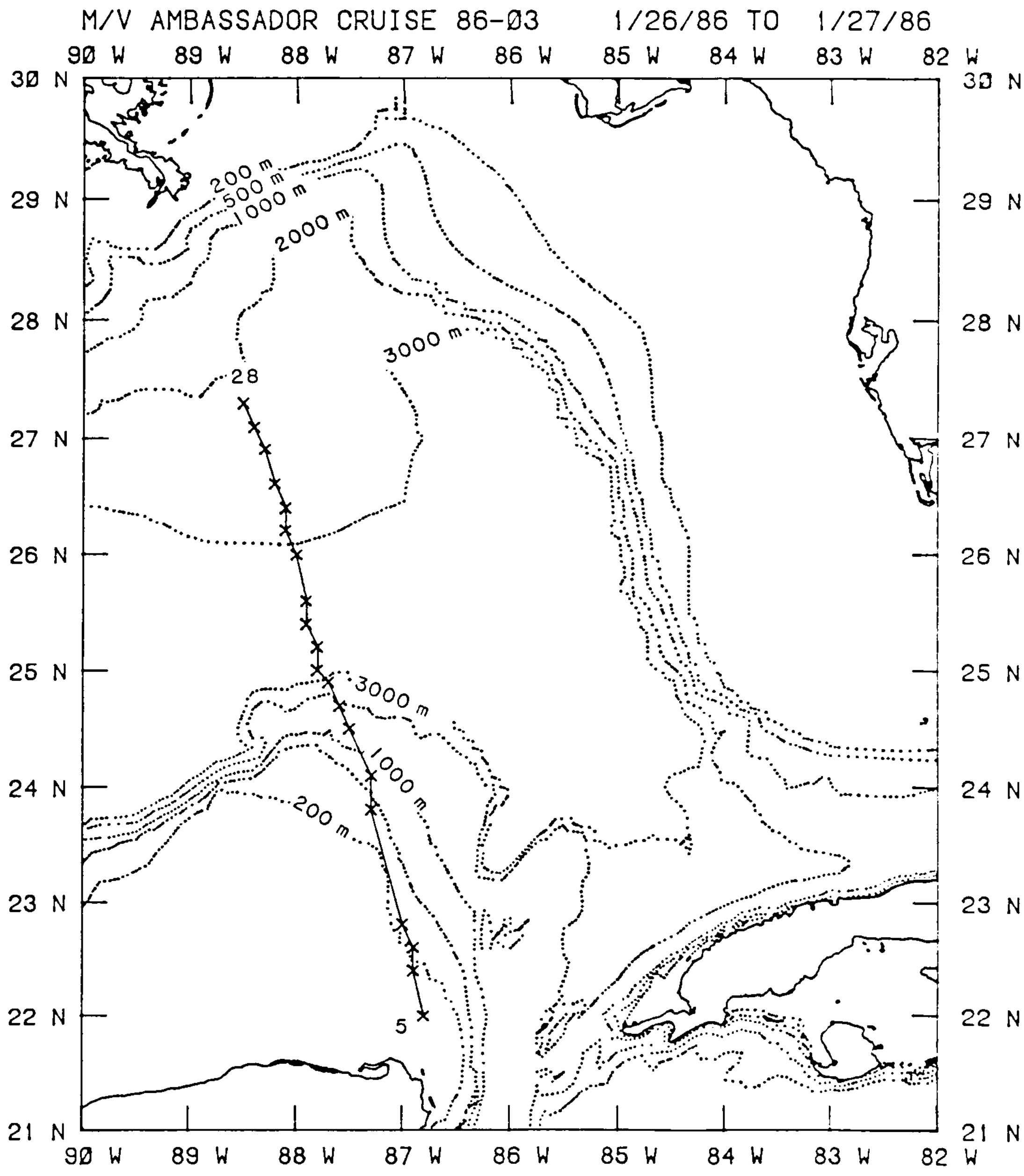
STATIONS 2 TO 33

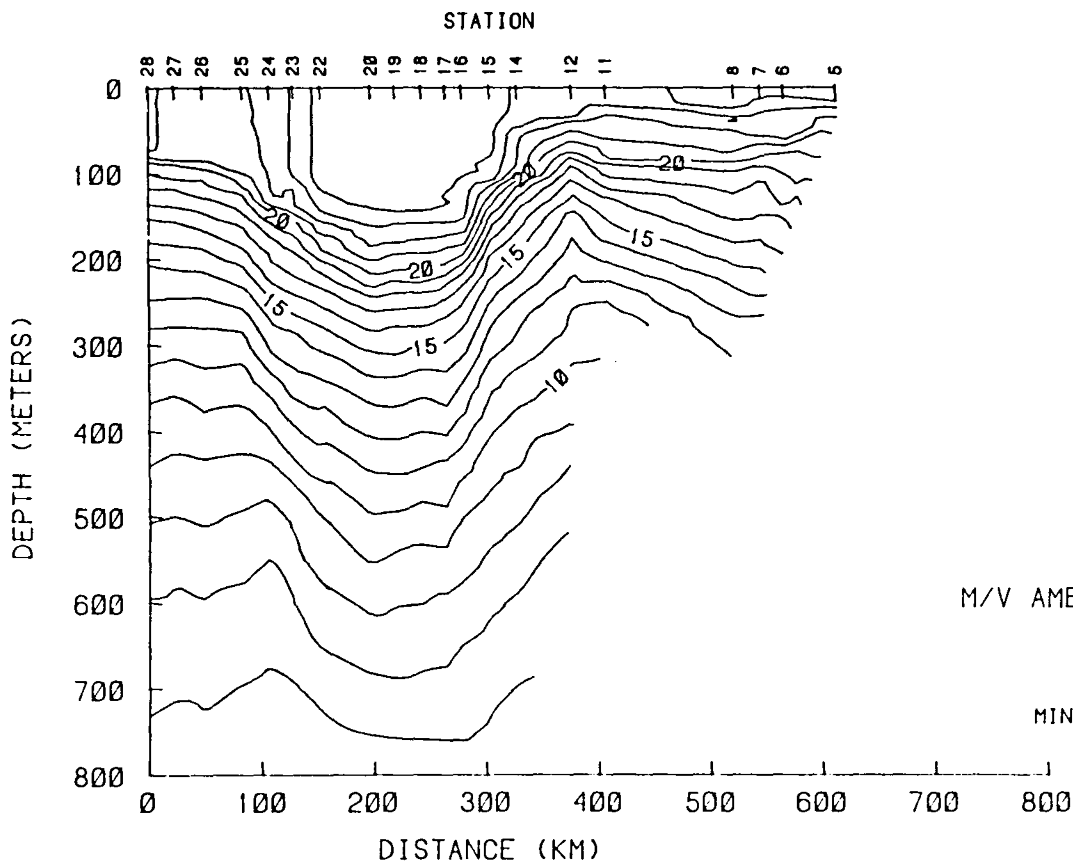
TEMPERATURE DEG C

MIN = 14.44 MAX = 26.59

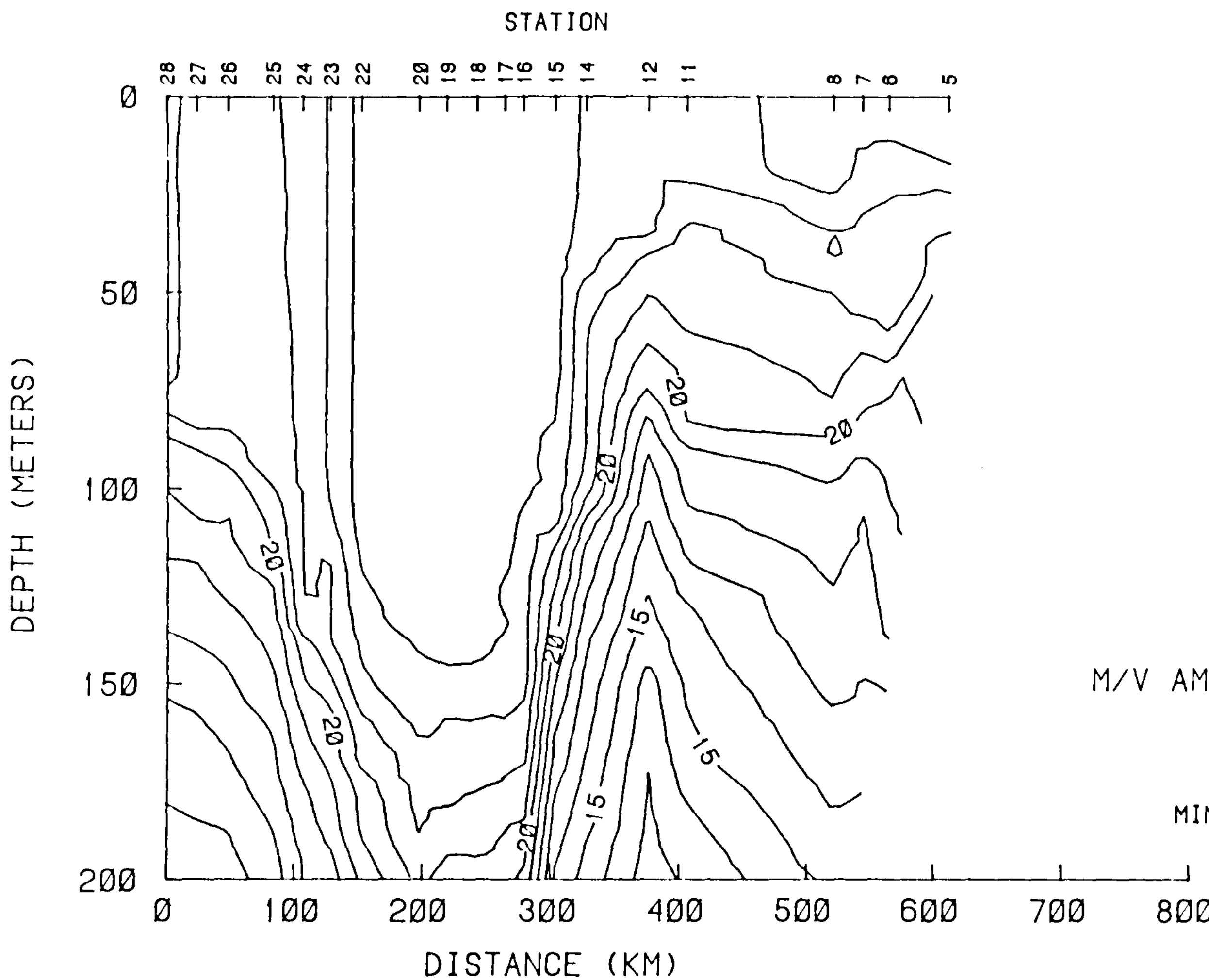


PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 86-02

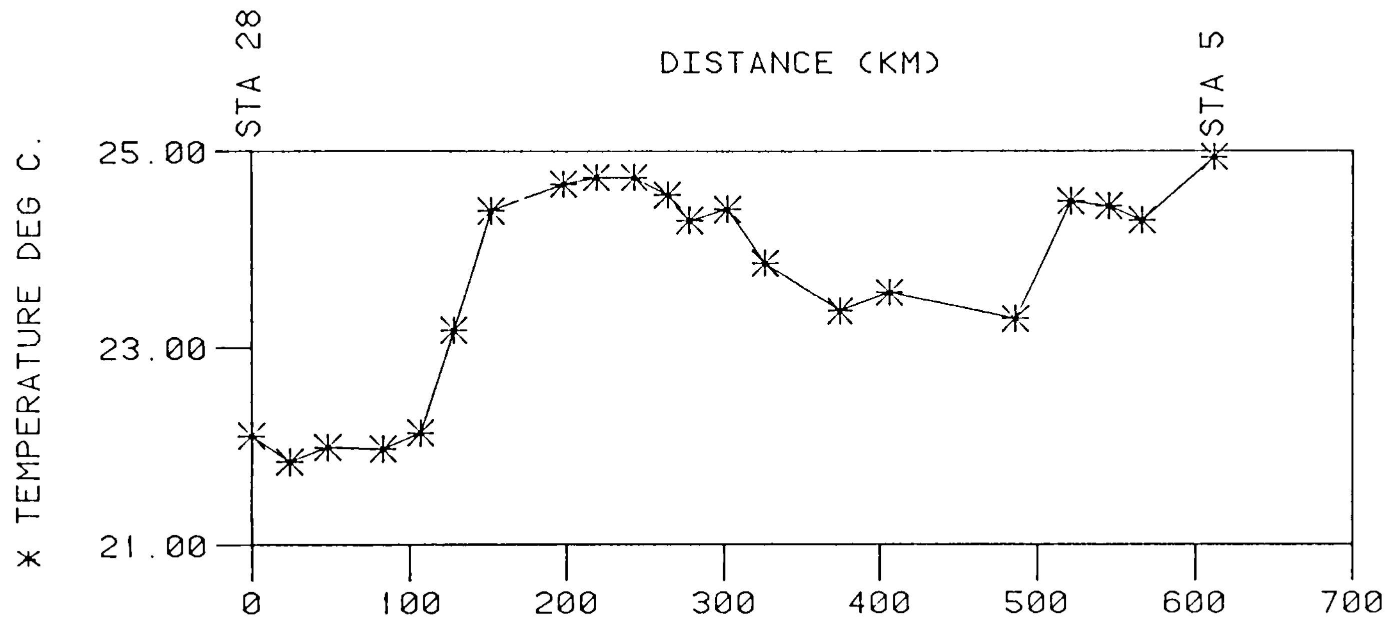

M/V AMBASSADOR CRUISE 86-Ø3 1/26/86 TO 1/27/86
9Ø W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
3Ø N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
28
5



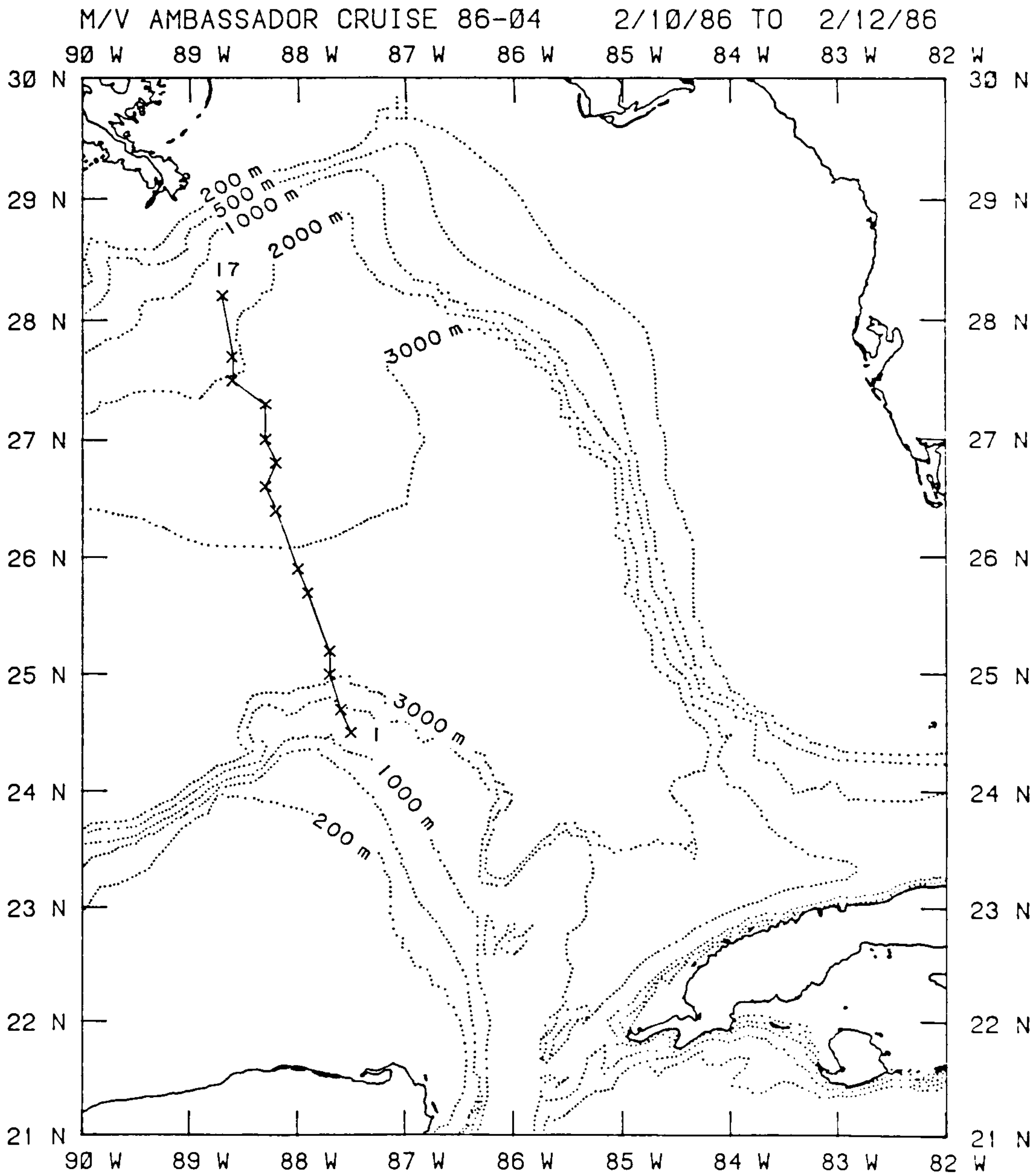
M/V AMBASSADOR CRUISE 86-03
1/26/86 TO 1/27/86
STATIONS 5 TO 28
TEMPERATURE DEG C
MIN = 5.54 MAX = 24.94



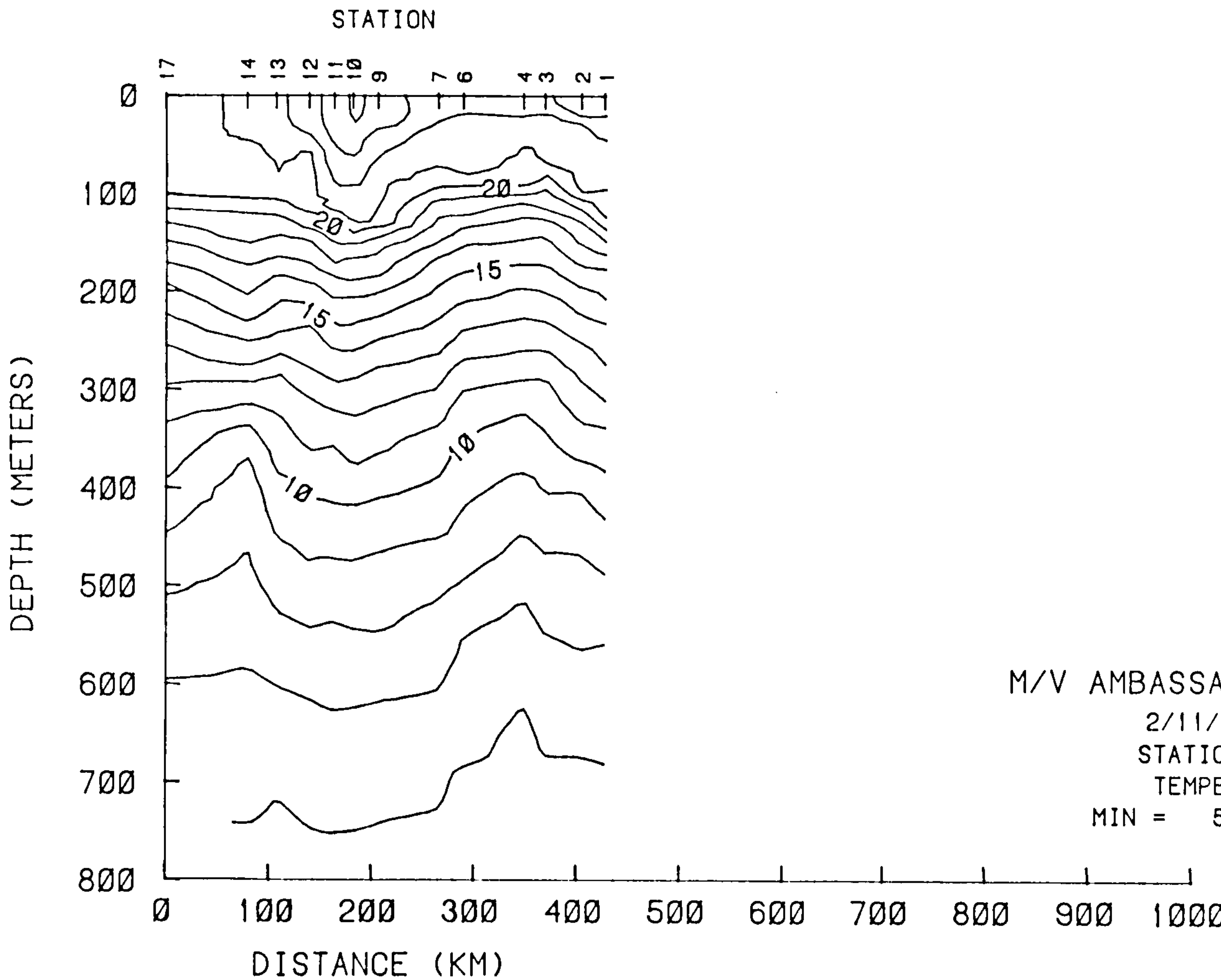
M/V AMBASSADOR CRUISE 86-Ø3
1/26/86 TO 1/27/86
STATIONS 5 TO 28
TEMPERATURE DEG C
MIN = 12.52 MAX = 24.94



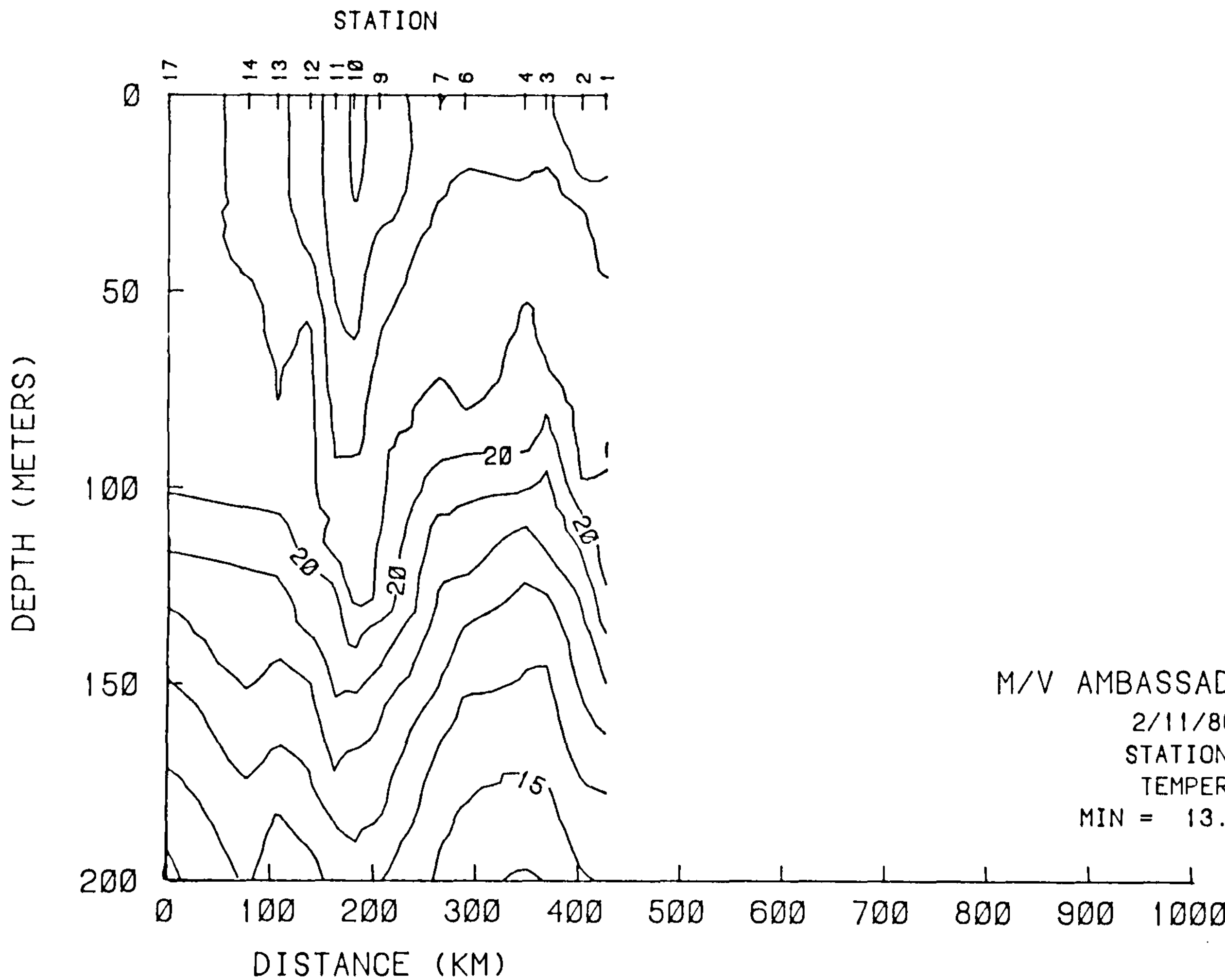
PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 86-03



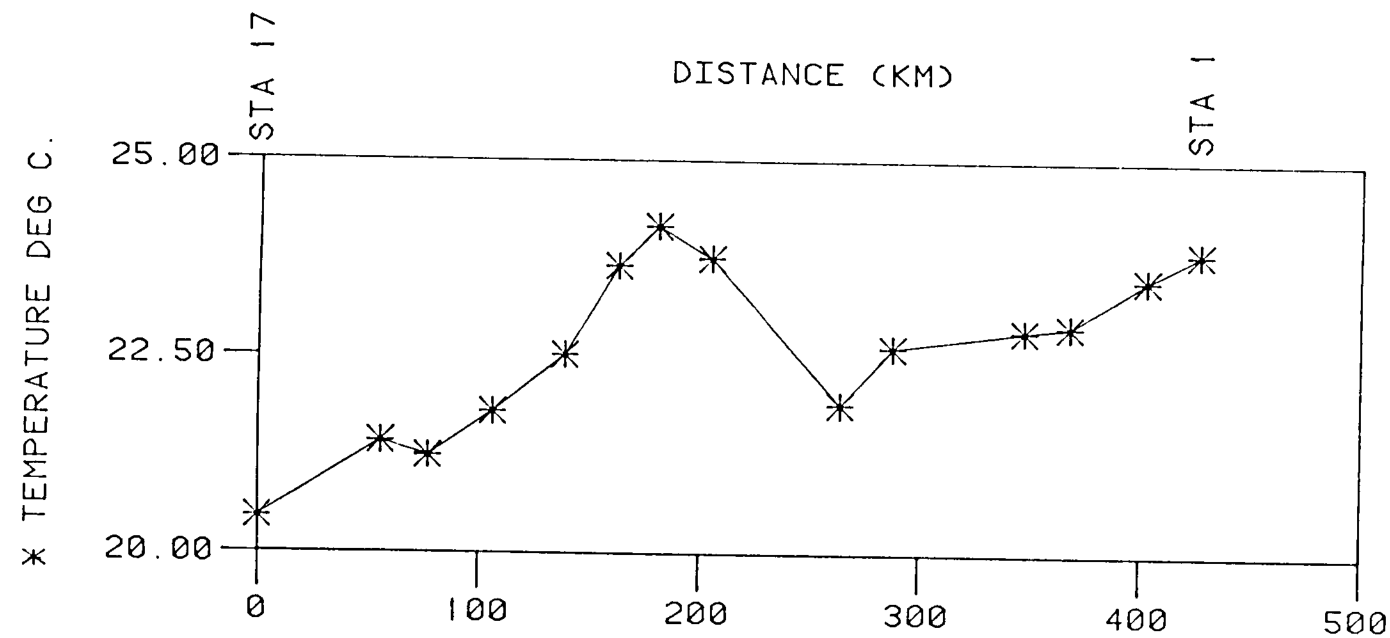
M/V AMBASSADOR CRUISE 86-Ø4 2/1Ø/86 TO 2/12/86
9Ø W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
3Ø N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
17
1
3000 m
1000 m
200 m



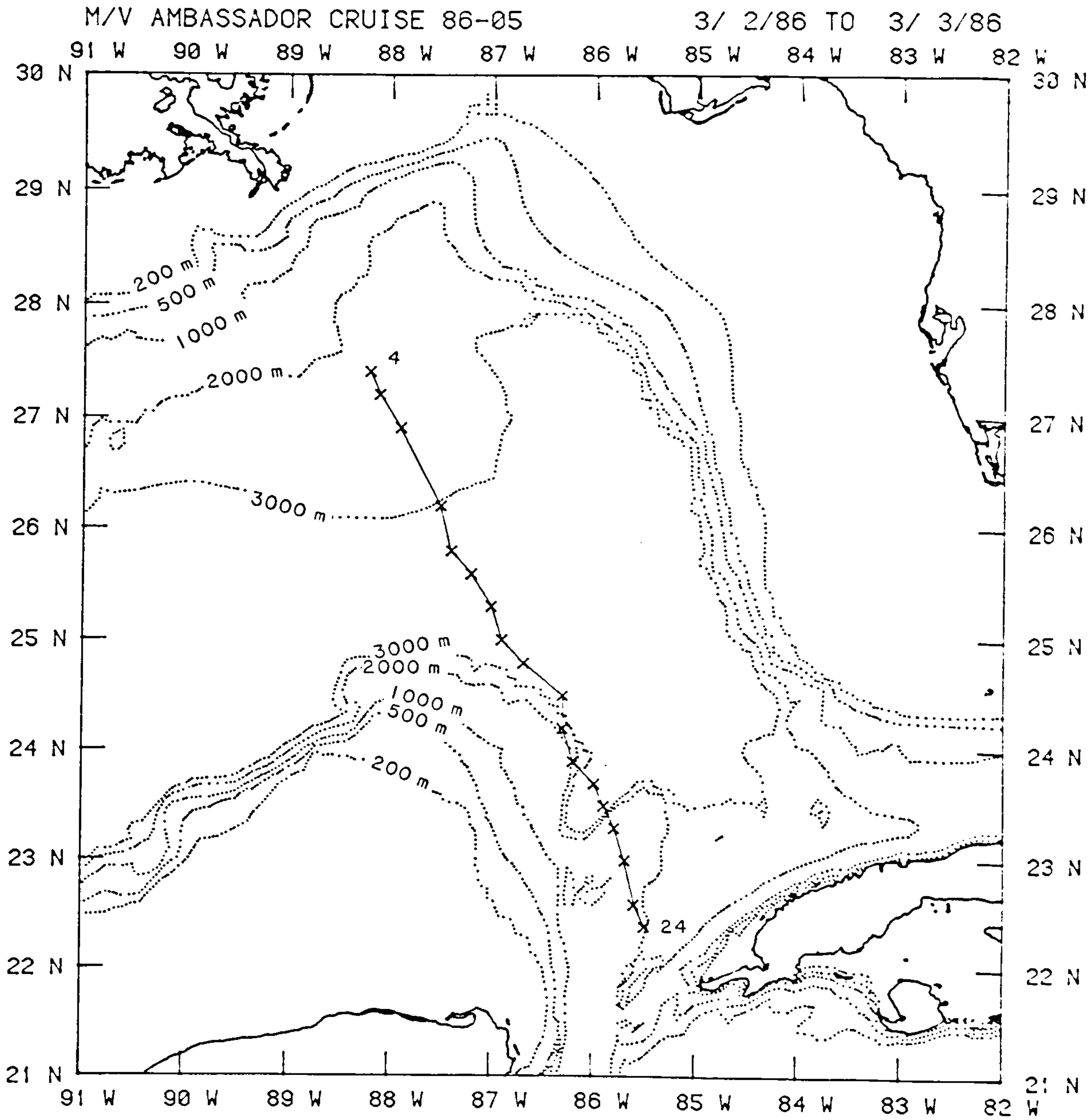
M/V AMBASSADOR CRUISE 86-04
2/11/86 TO 2/12/86
STATIONS 1 TO 17
TEMPERATURE DEG C
MIN = 5.35 MAX = 24.16

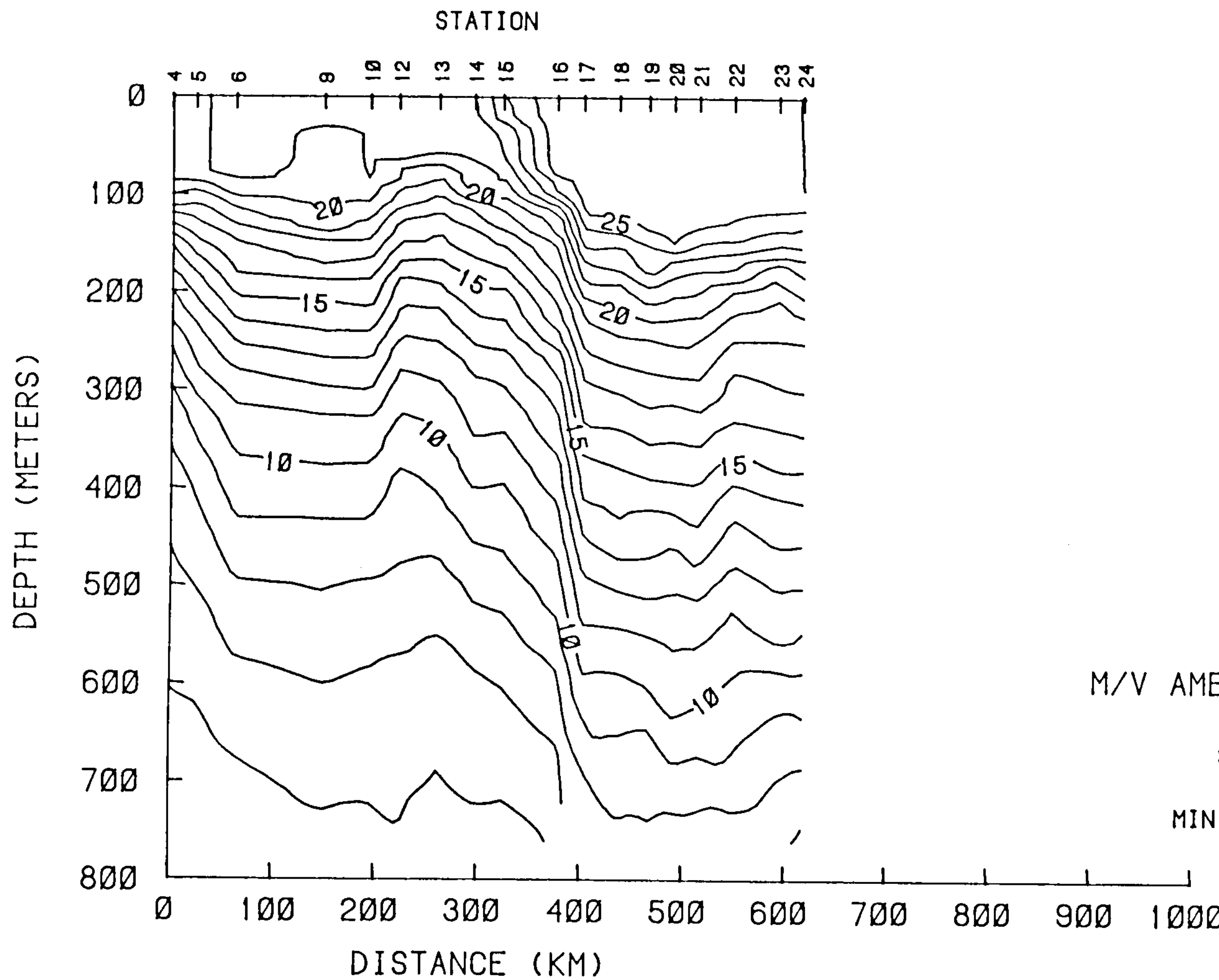


M/V AMBASSADOR CRUISE 86-04
2/11/86 TO 2/12/86
STATIONS 1 TO 17
TEMPERATURE DEG C
MIN = 13.80 MAX = 24.16

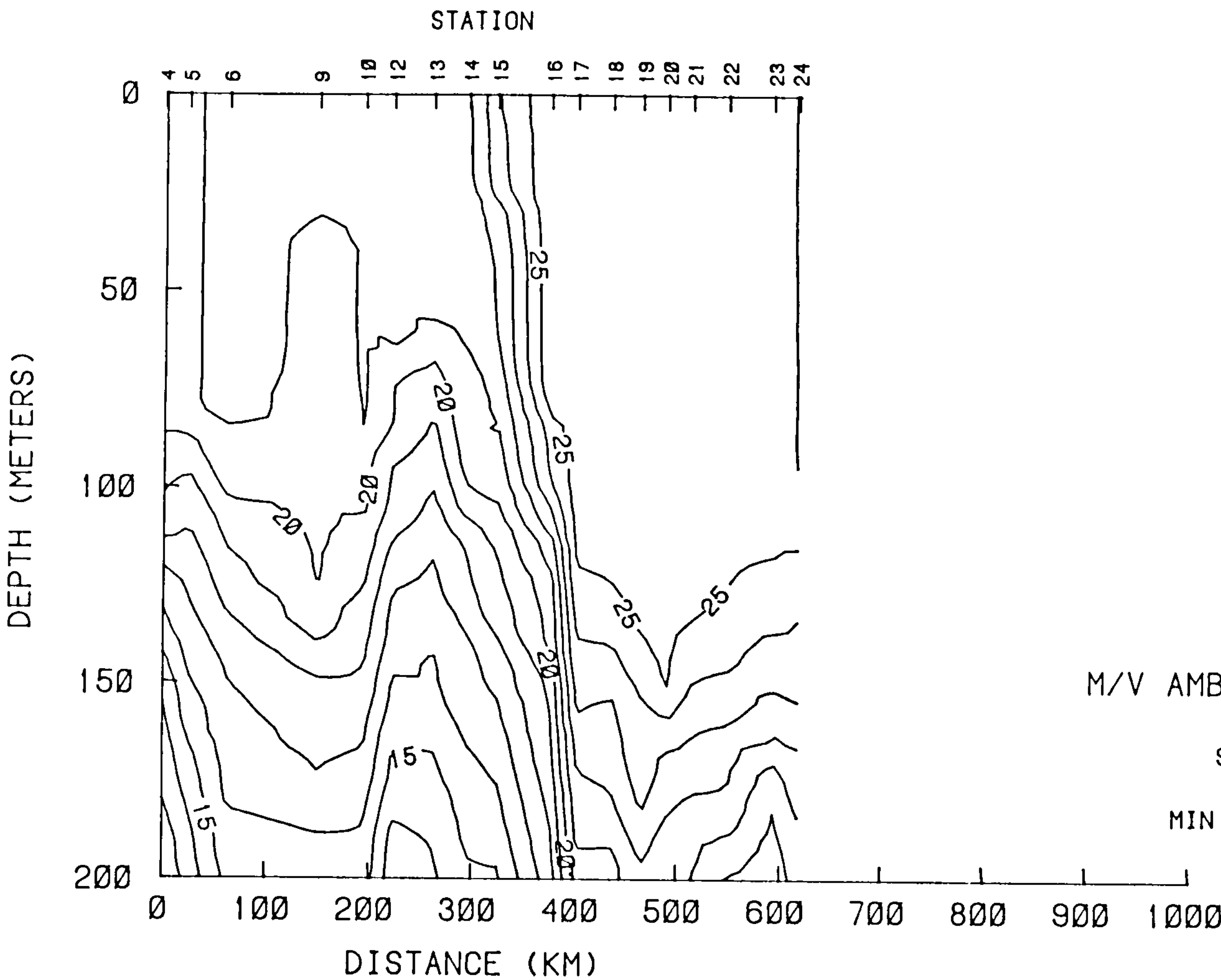


PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 86-04

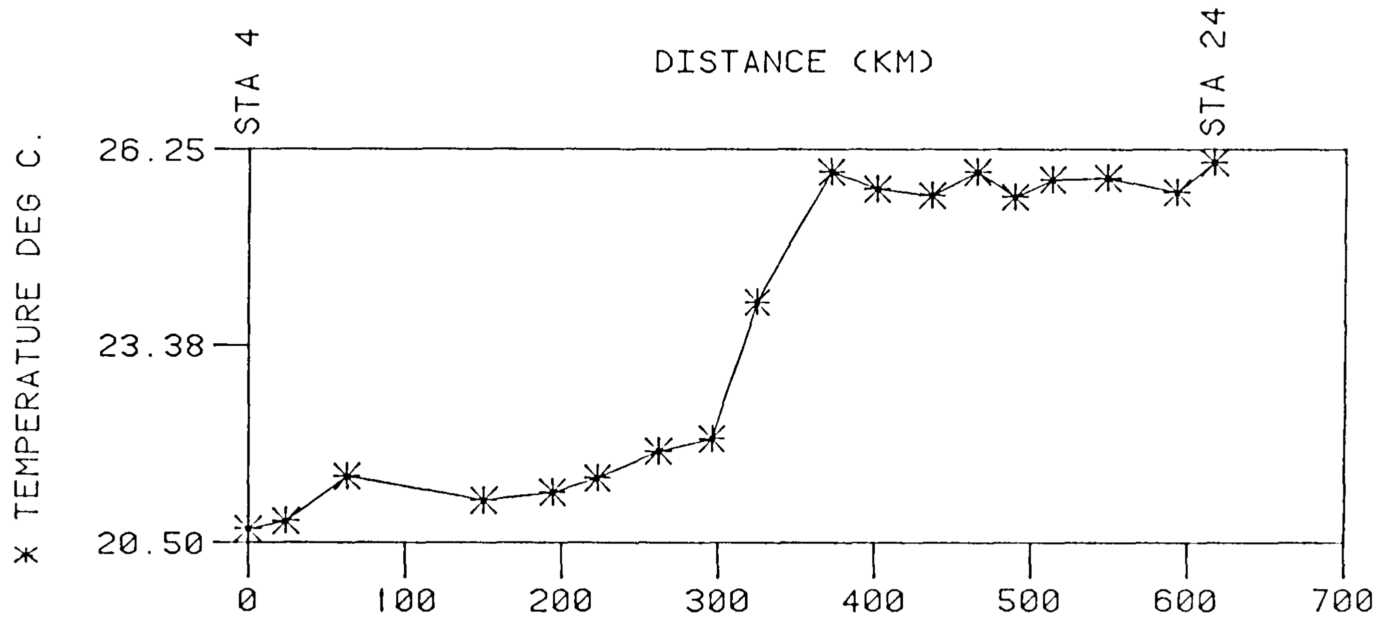

M/V AMBASSADOR CRUISE 86-05
3/ 2/86 TO 3/ 3/86
91 W
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
4
24



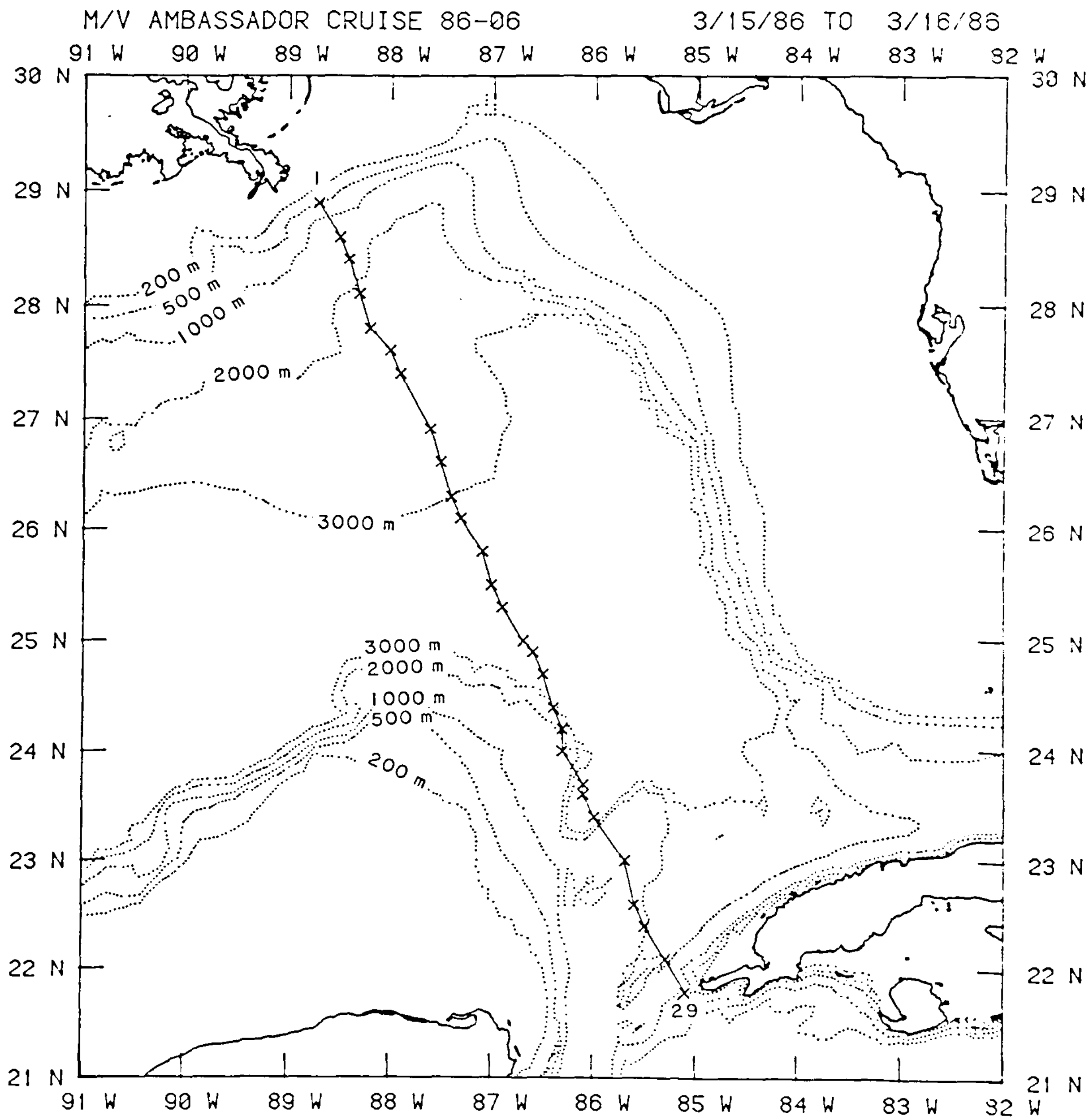
M/V AMBASSADOR CRUISE 86-05
3/ 2/86 TO 3/ 3/86
STATIONS 4 TO 24
TEMPERATURE DEG C
MIN = 5.24 MAX = 26.09

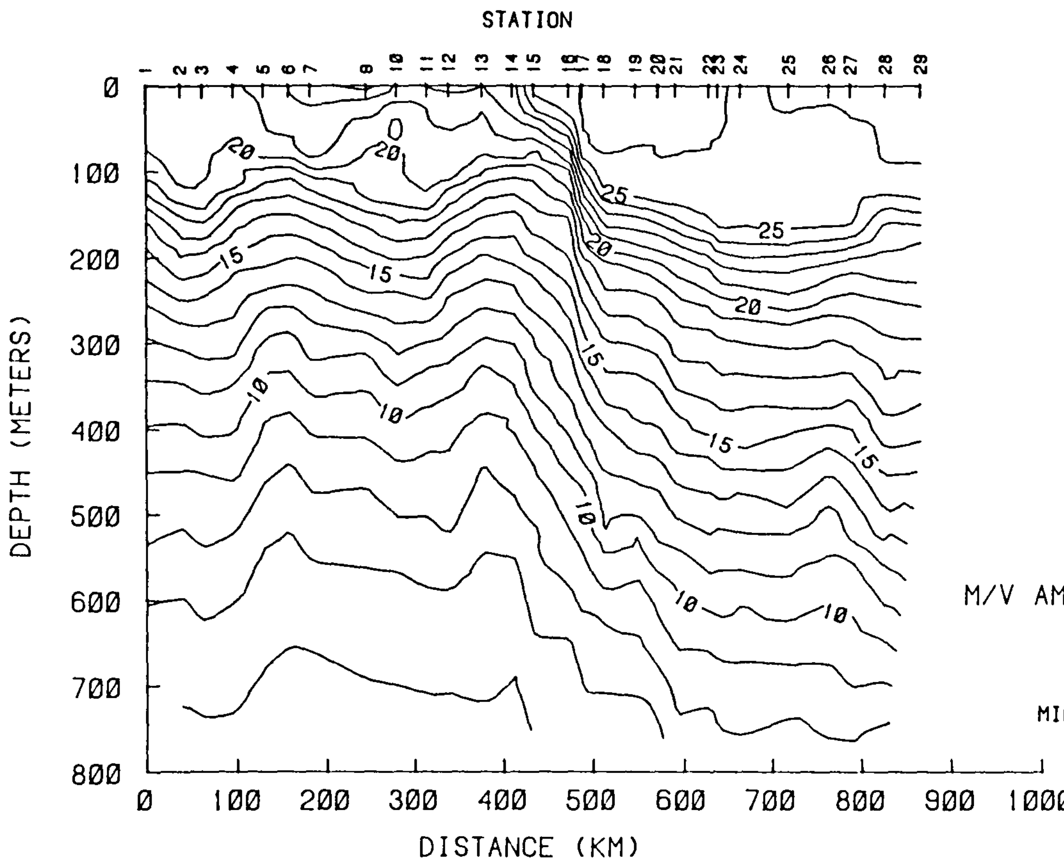


M/V AMBASSADOR CRUISE 86-05
3/ 2/86 TO 3/ 3/86
STATIONS 4 TO 24
TEMPERATURE DEG C
MIN = 11.98 MAX = 26.09

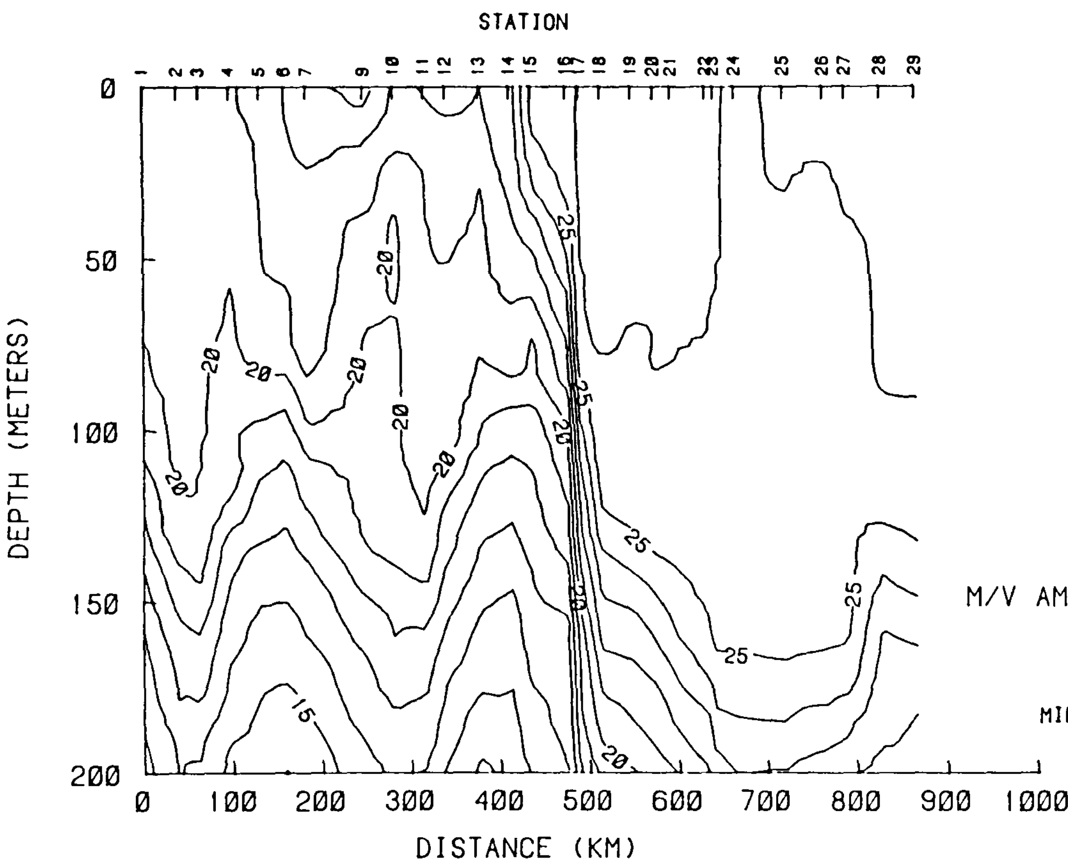


PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 86-05

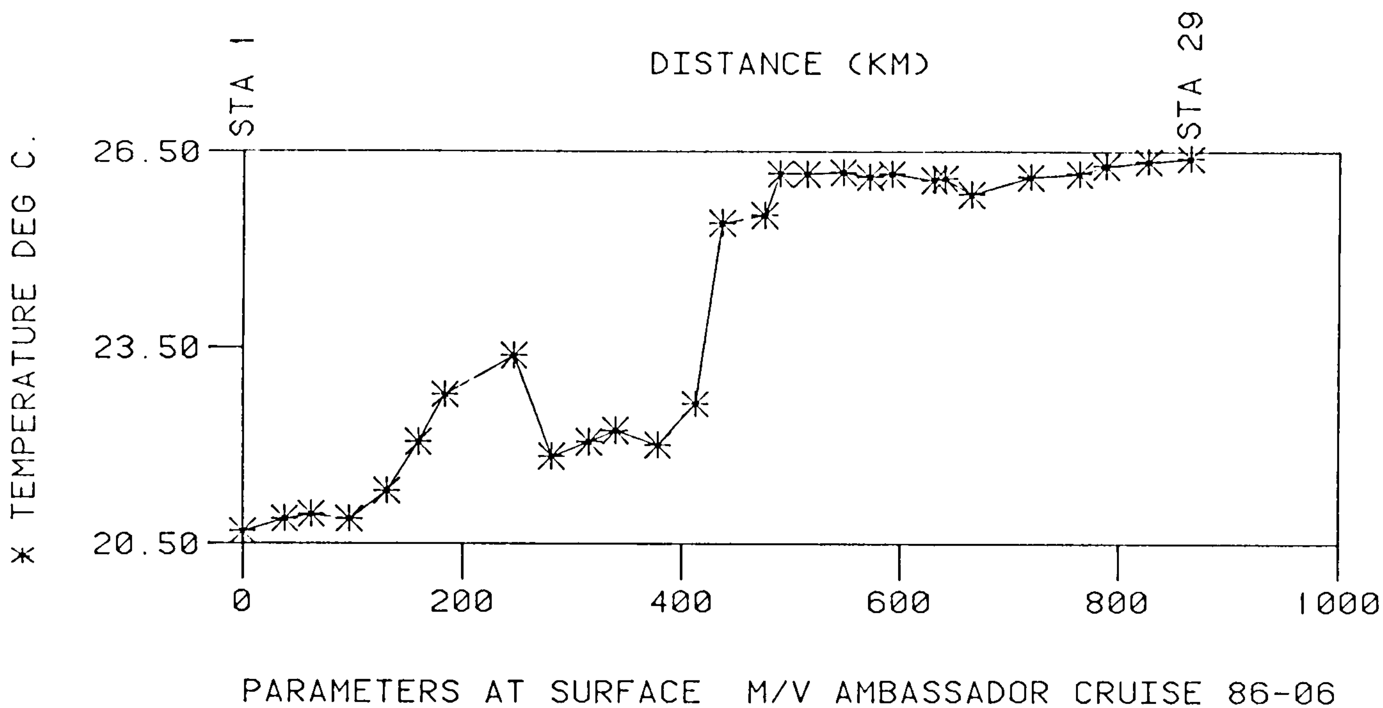

M/V AMBASSADOR CRUISE 86-06
3/15/86 TO 3/16/86
91 W
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
3000 m
2000 m
1000 m
500 m
200 m
1
29



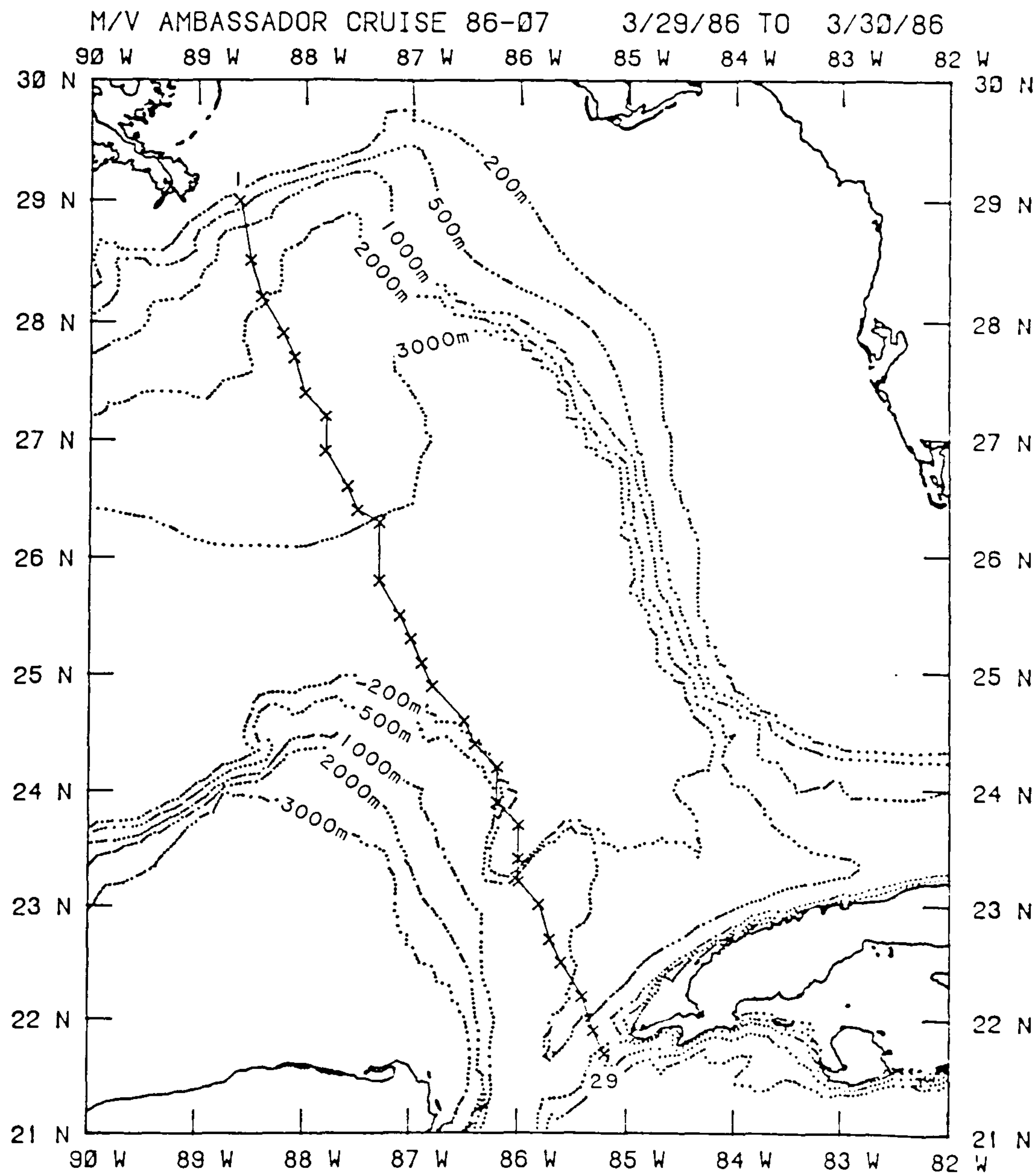
M/V AMBASSADOR CRUISE 86-06
3/15/86 TO 3/16/86
STATIONS 1 TO 29
TEMPERATURE DEG C
MIN = 5.47 MAX = 26.40



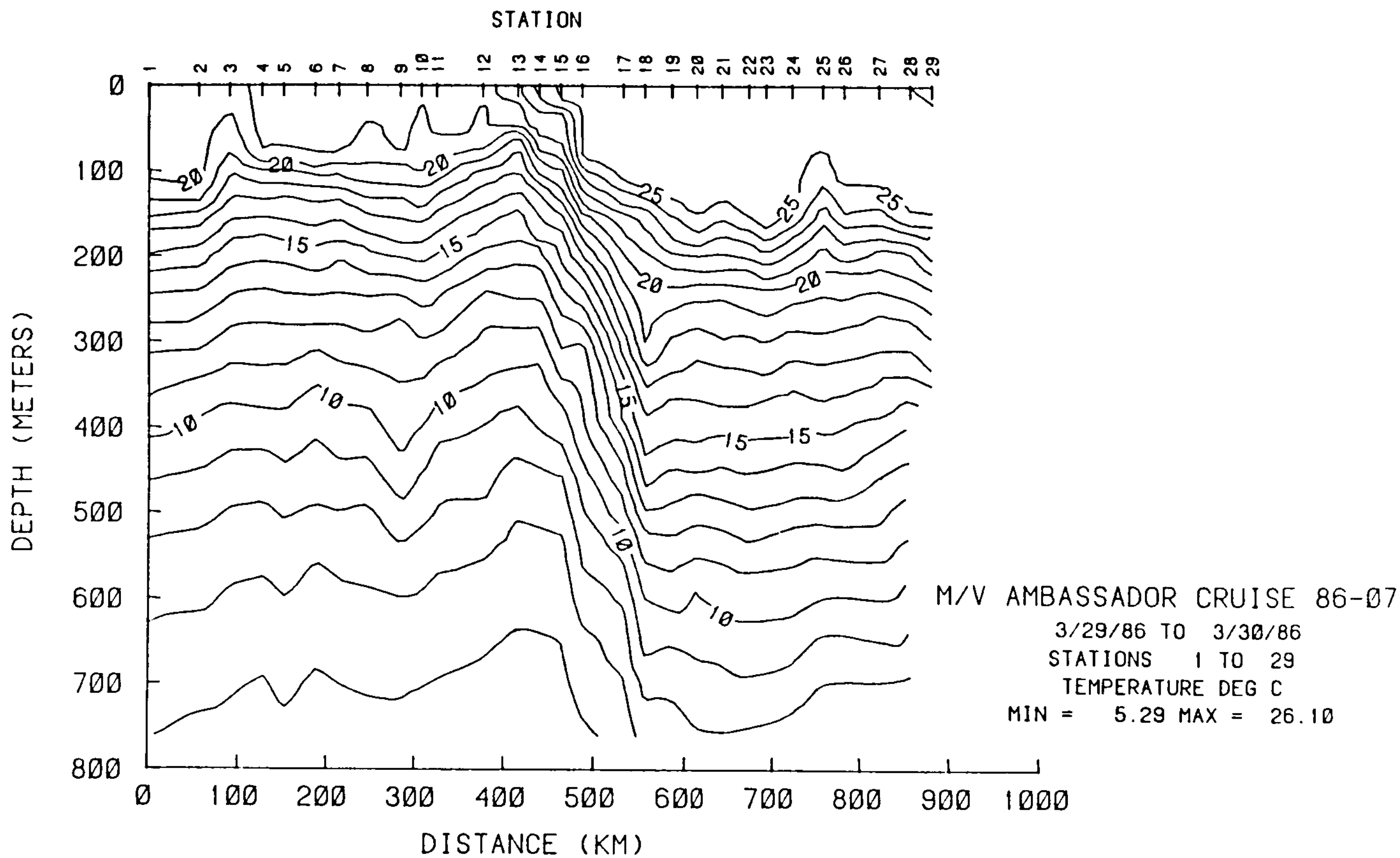
M/V AMBASSADOR CRUISE 86-06
3/15/86 TO 3/16/86
STATIONS 1 TO 29
TEMPERATURE DEG C
MIN = 13.80 MAX = 26.40

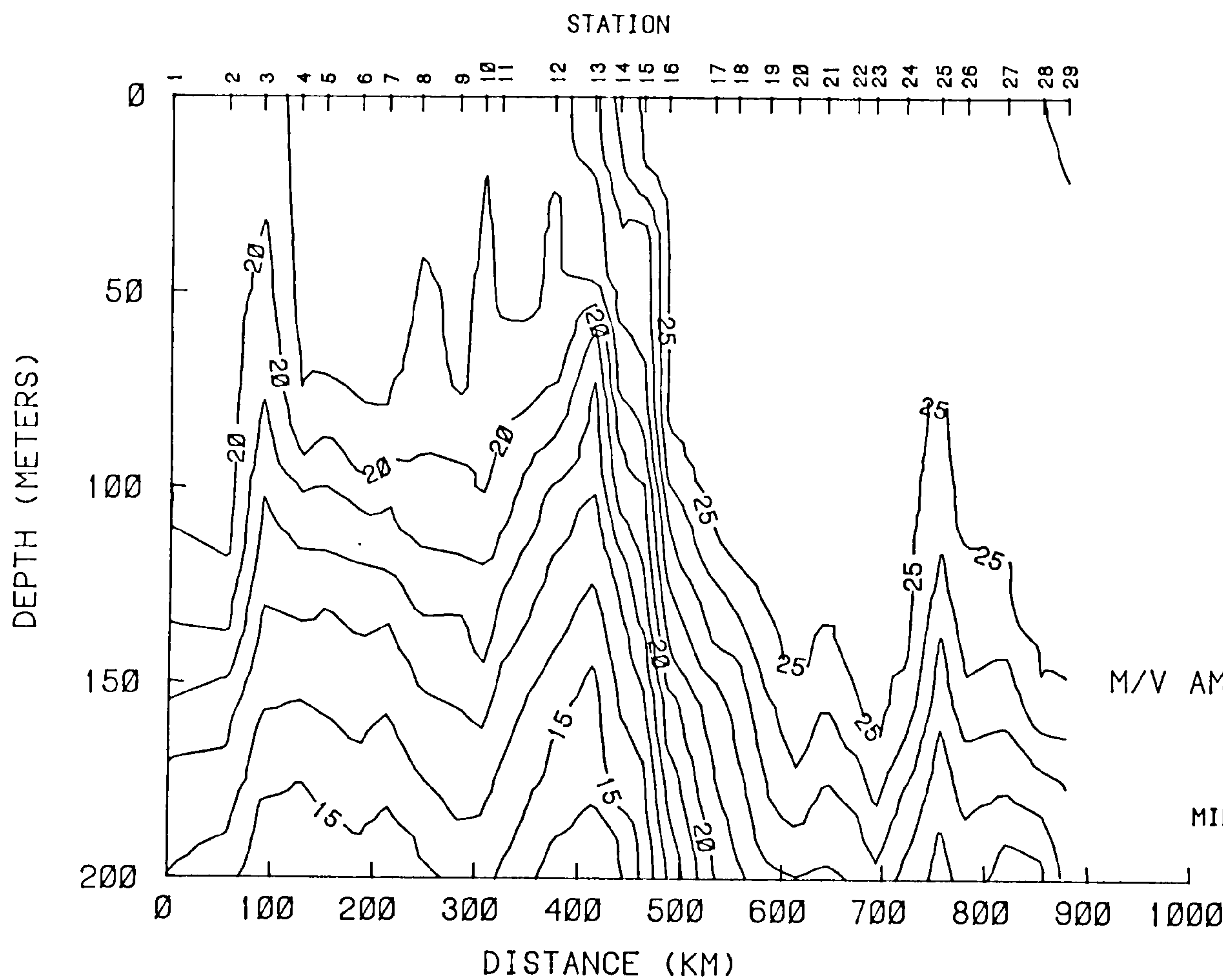


STA 1
DISTANCE (KM)
STA 29
26.50
23.50
20.50
* TEMPERATURE DEG C.
0
200
400
600
800
1000
PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 86-06

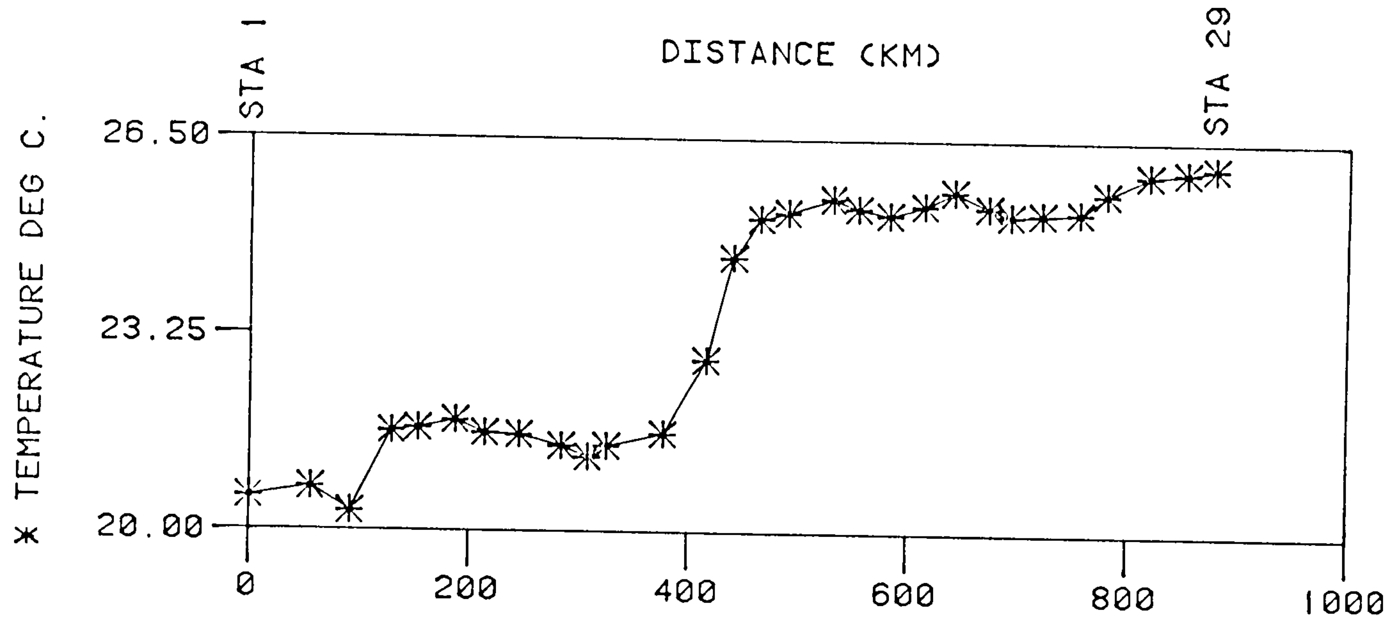


M/V AMBASSADOR CRUISE 86-Ø7 3/29/86 TO 3/3Ø/86
9Ø W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
3Ø N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200m
500m
1000m
2000m
3000m
1
29

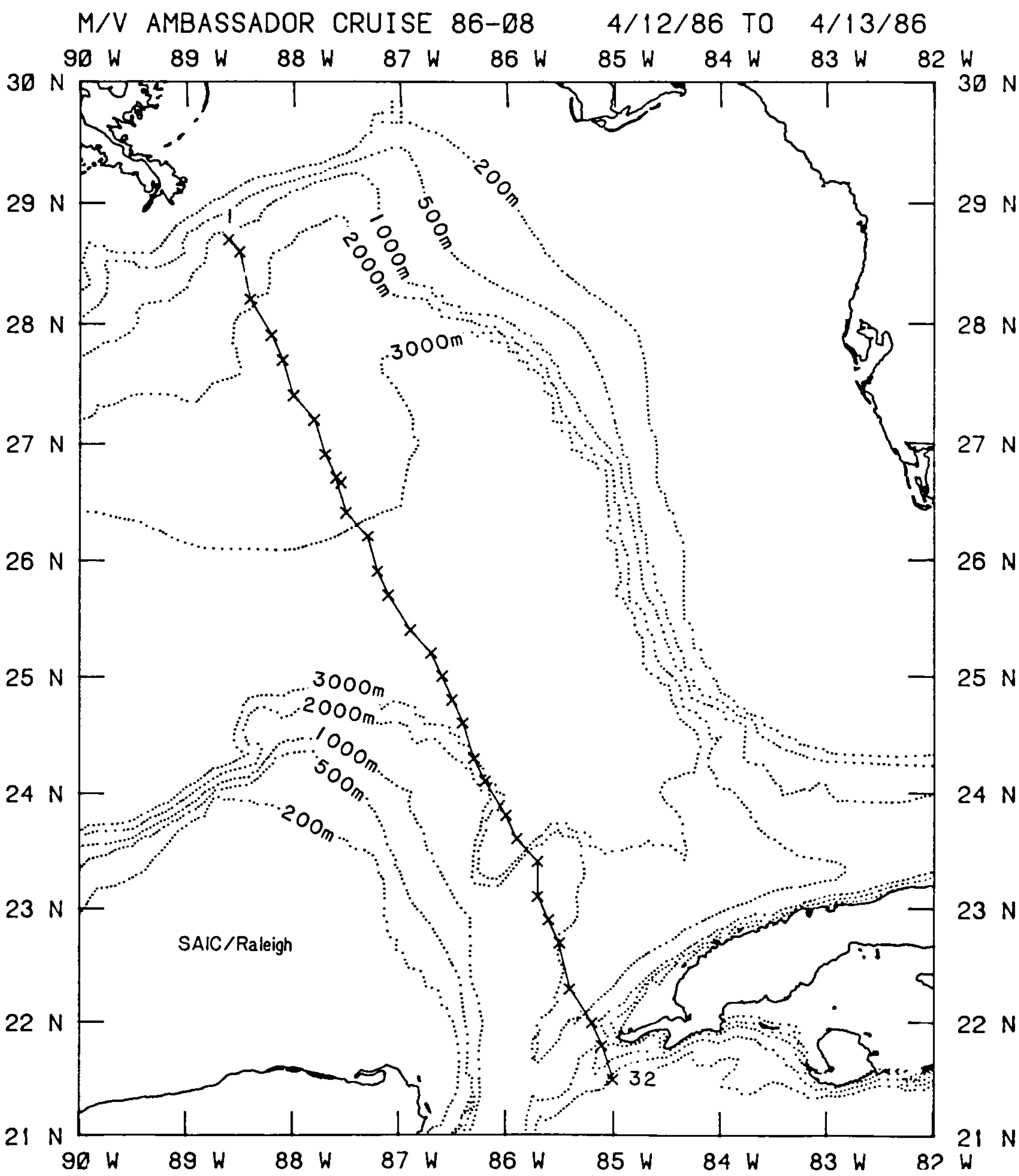

STATION
DEPTH (METERS)
DISTANCE (KM)
M/V AMBASSADOR CRUISE 86-07
3/29/86 TO 3/30/86
STATIONS 1 TO 29
TEMPERATURE DEG C
MIN = 5.29 MAX = 26.10

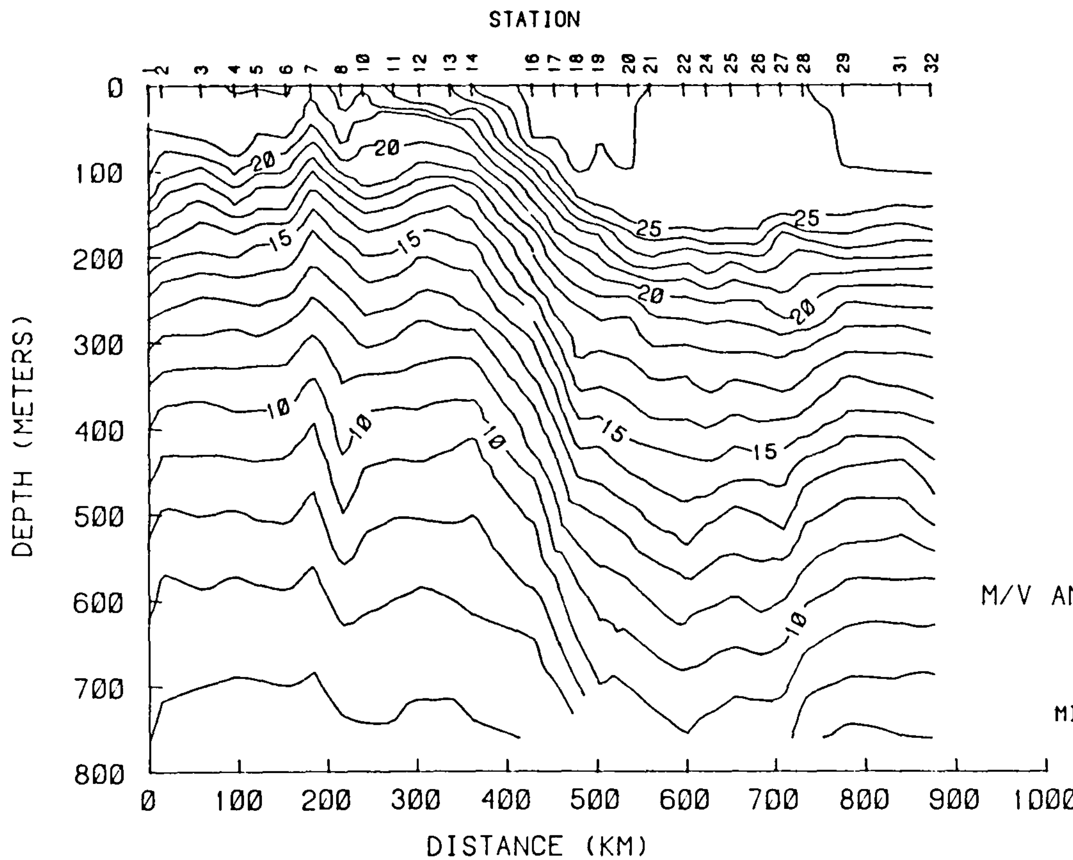


M/V AMBASSADOR CRUISE 86-07
3/29/86 TO 3/30/86
STATIONS 1 TO 29
TEMPERATURE DEG C
MIN = 13.40 MAX = 26.10

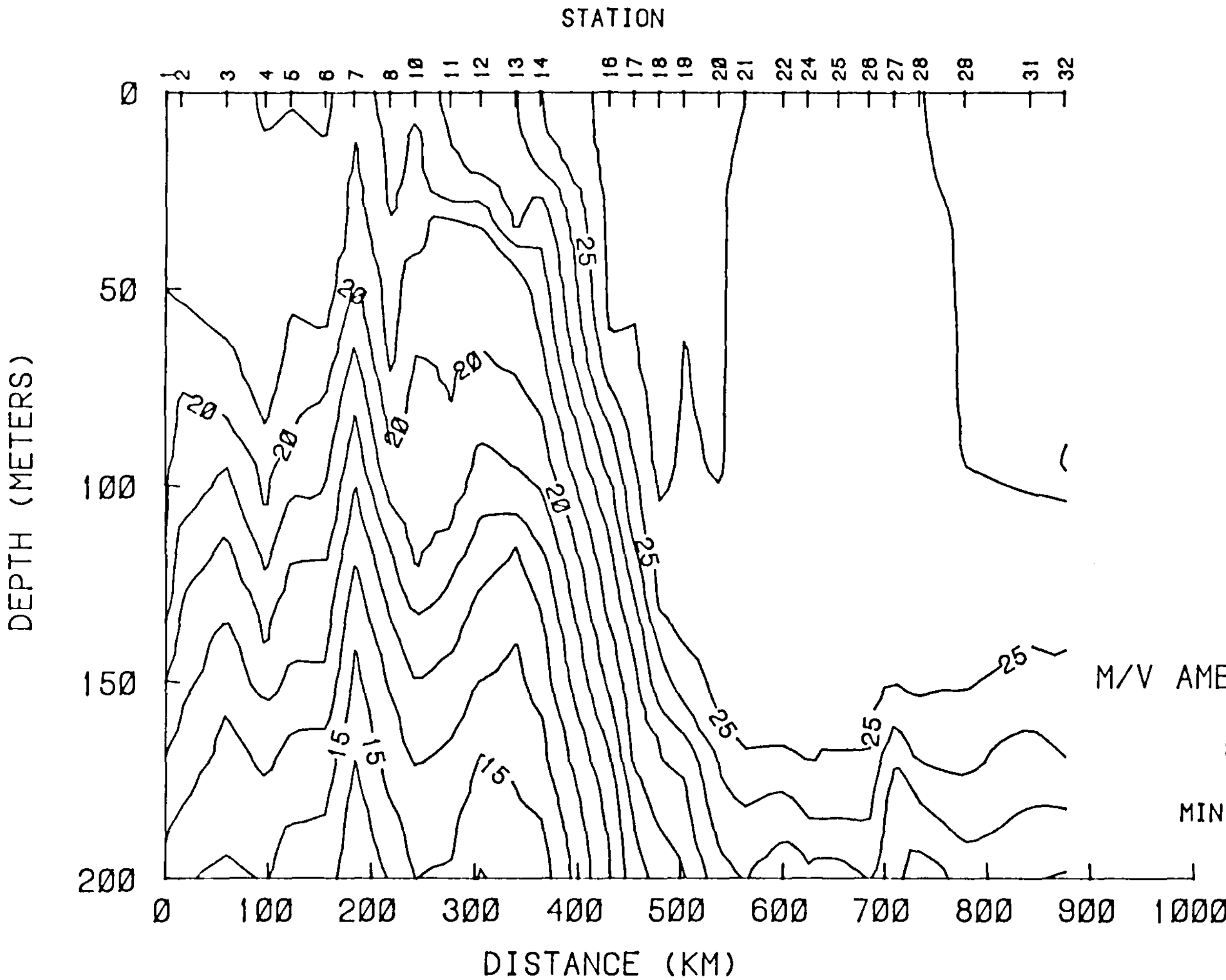


PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 86-07

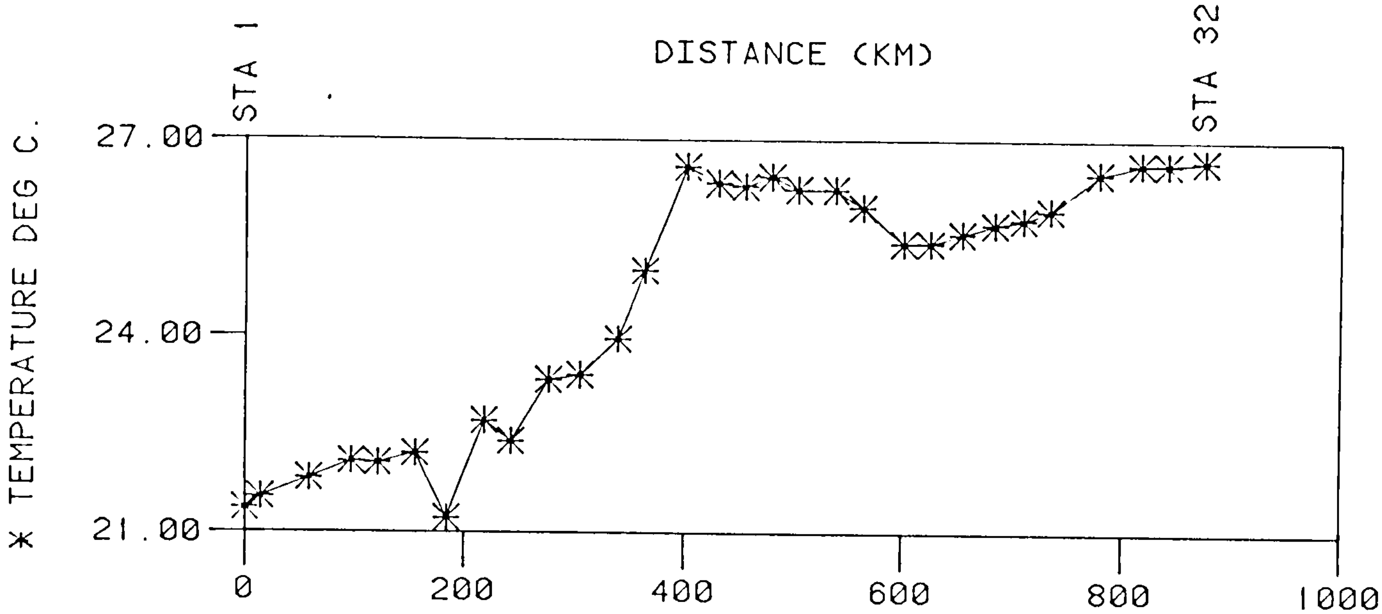

M/V AMBASSADOR CRUISE 86-Ø8 4/12/86 TO 4/13/86
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200m
500m
1000m
2000m
3000m
1
32
SAIC/Raleigh



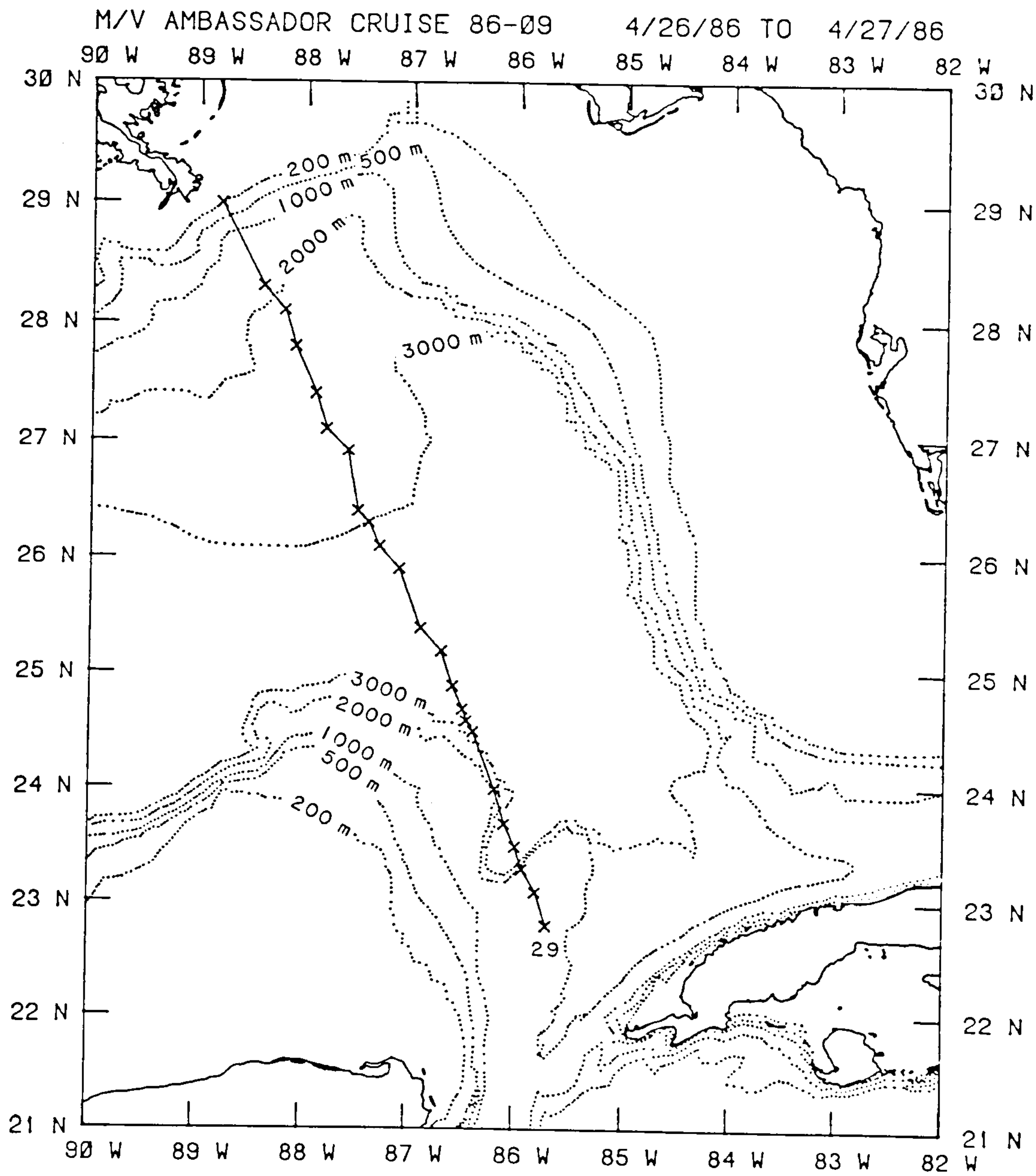
M/V AMBASSADOR CRUISE 86-08
4/12/86 TO 4/13/86
STATIONS 1 TO 32
TEMPERATURE DEG C
MIN = 5.58 MAX = 26.70

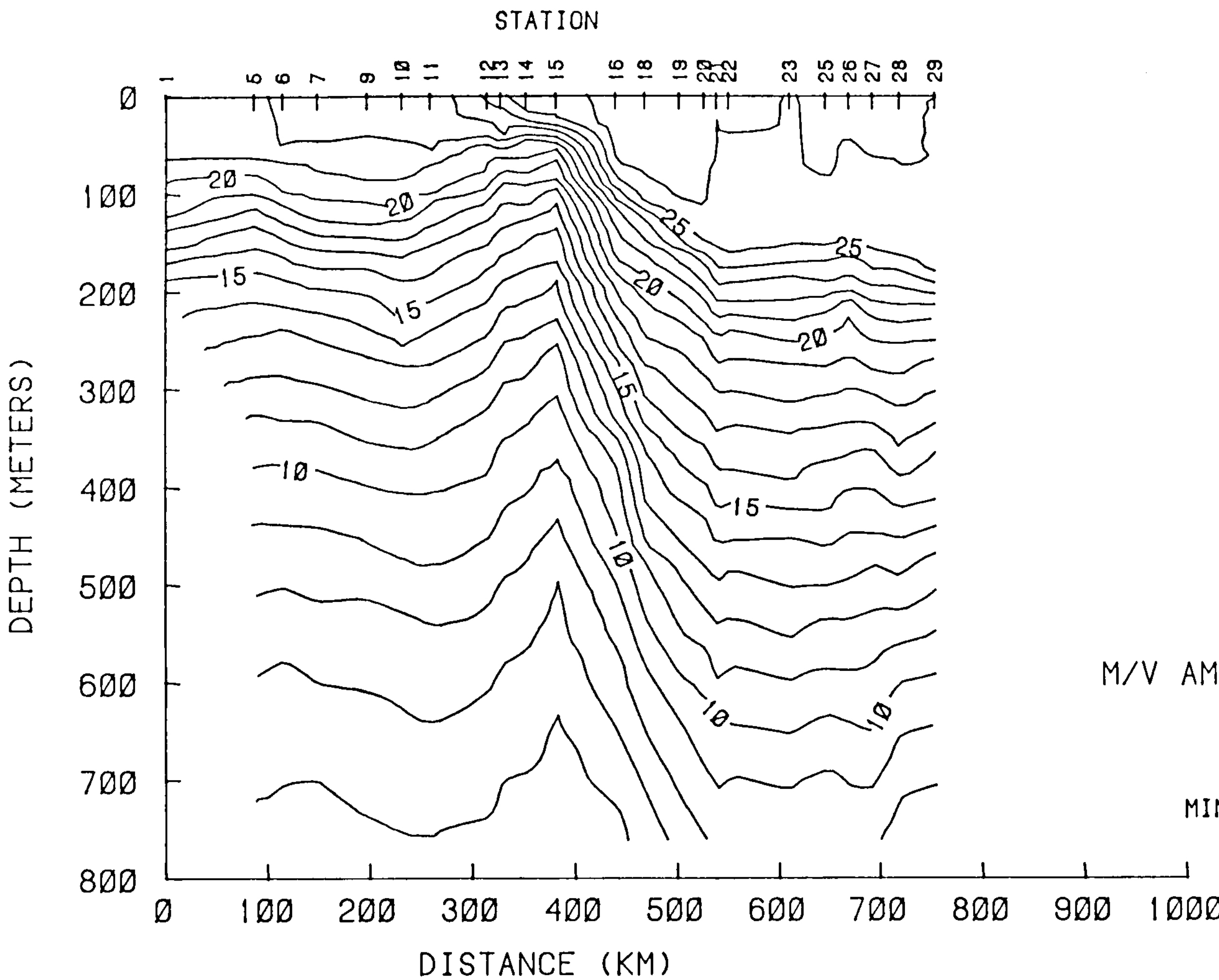


M/V AMBASSADOR CRUISE 86-08
4/12/86 TO 4/13/86
STATIONS 1 TO 32
TEMPERATURE DEG C
MIN = 13.25 MAX = 26.70

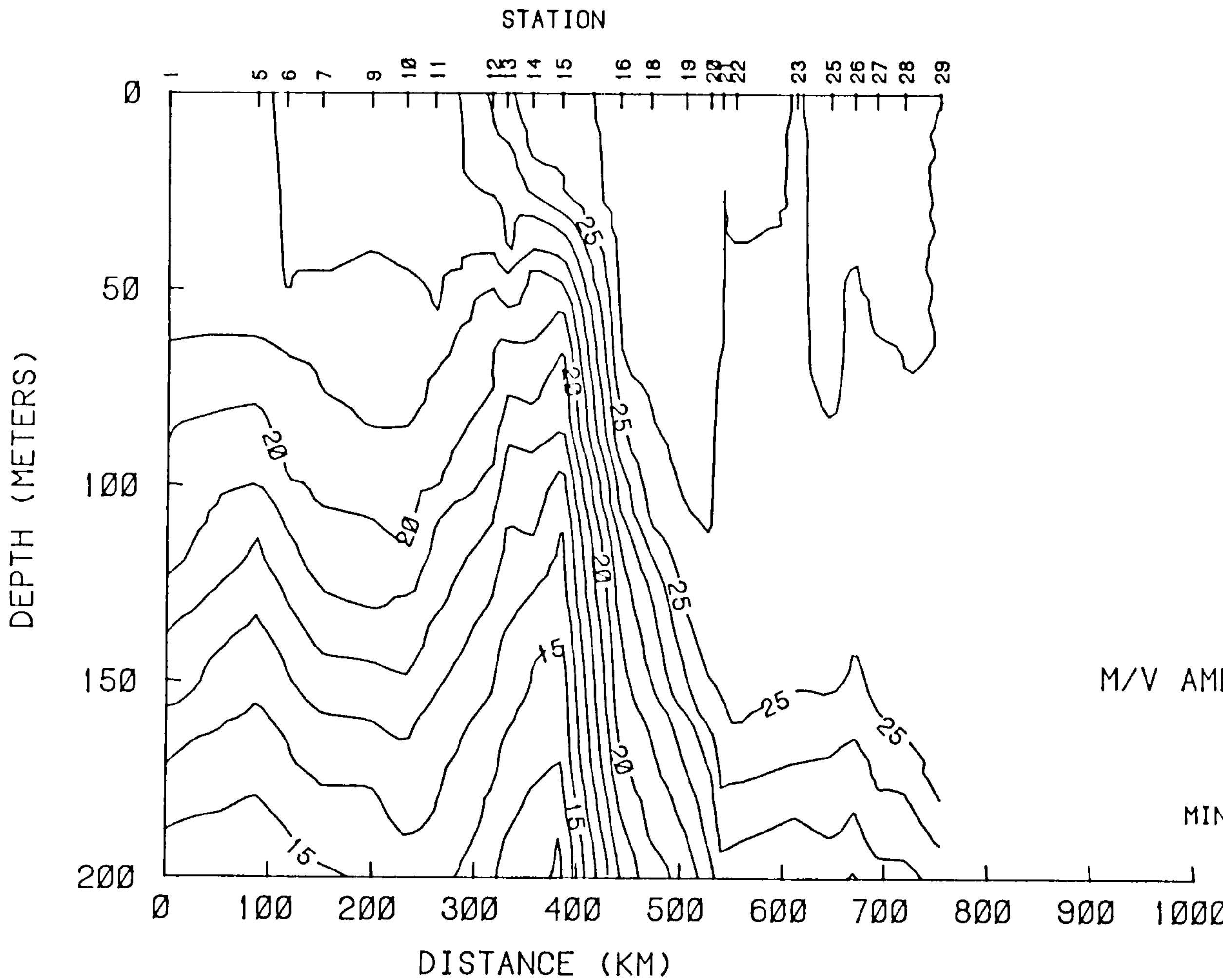


PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 86-08

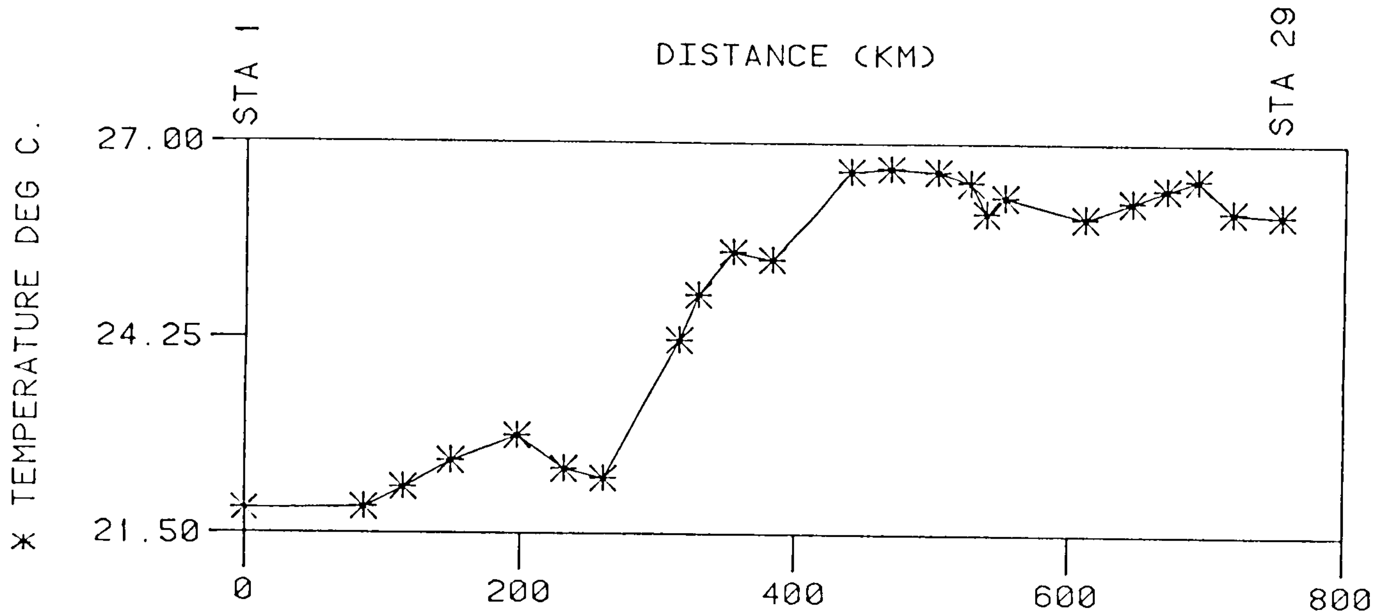

M/V AMBASSADOR CRUISE 86-09 4/26/86 TO 4/27/86
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
3000 m
2000 m
1000 m
500 m
200 m
29



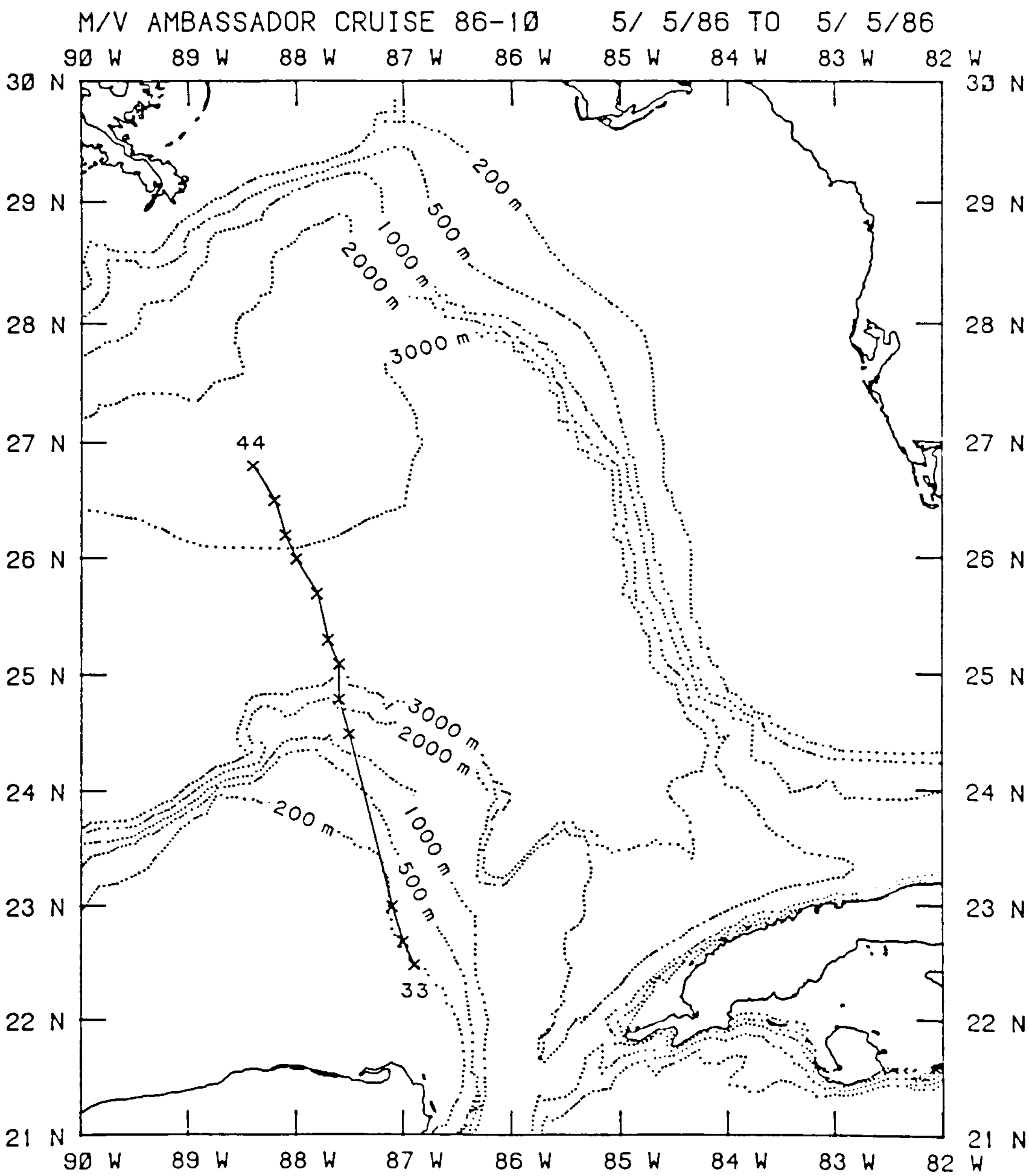
M/V AMBASSADOR CRUISE 86-09
4/26/86 TO 4/27/86
STATIONS 1 TO 29
TEMPERATURE DEG C
MIN = 5.40 MAX = 26.65



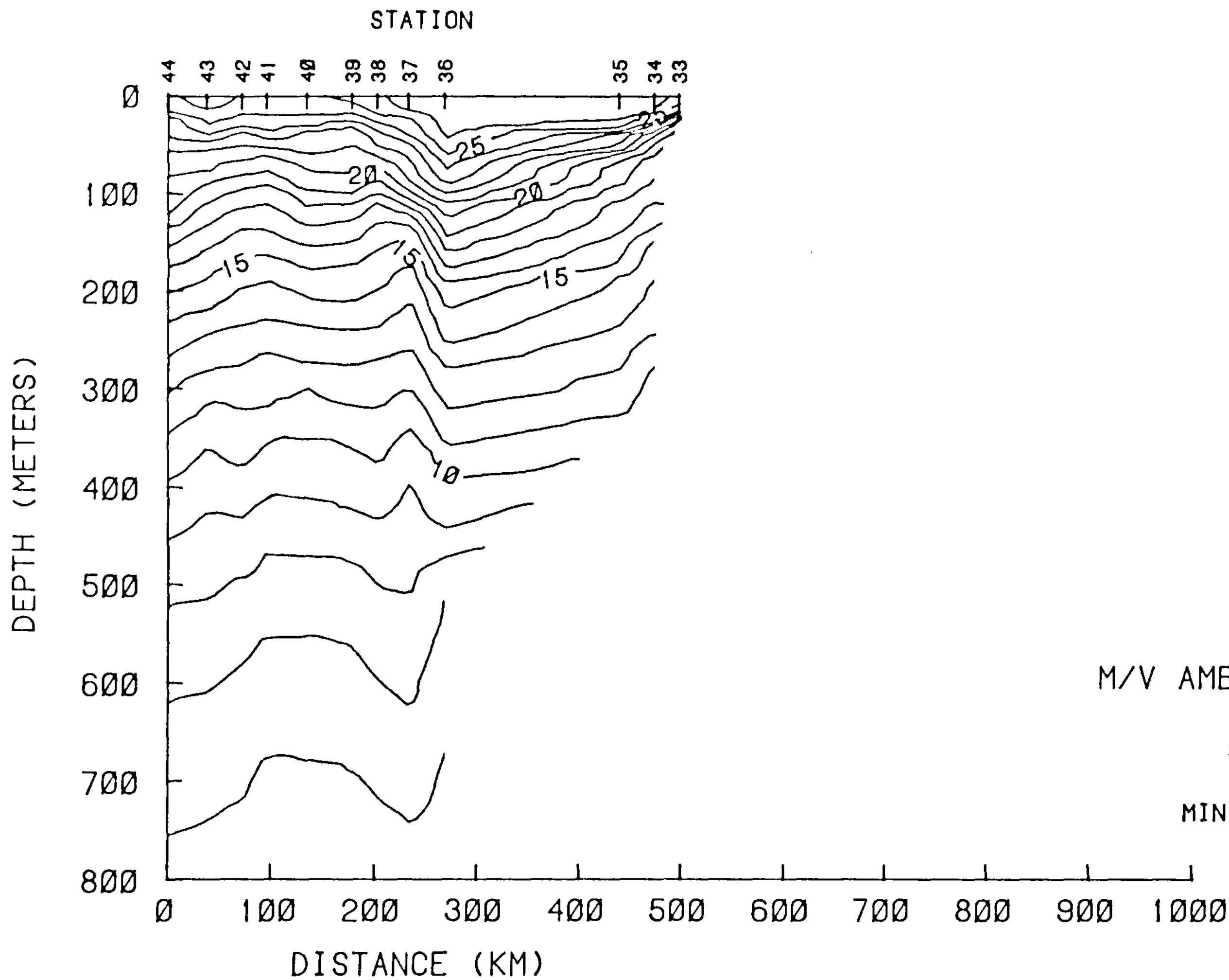
M/V AMBASSADOR CRUISE 86-09
4/26/86 TO 4/27/86
STATIONS 1 TO 29
TEMPERATURE DEG C
MIN = 12.83 MAX = 26.65



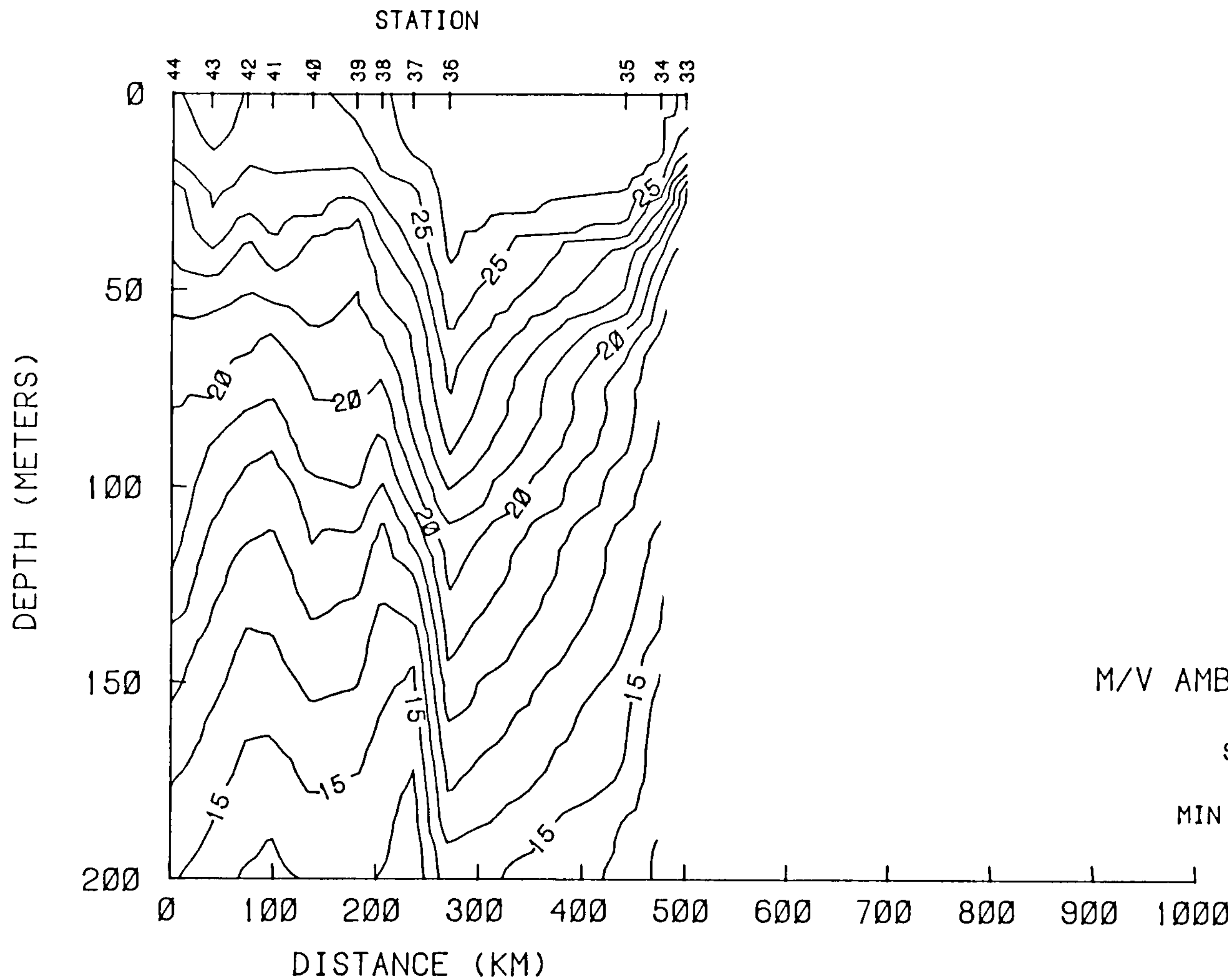
PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 86-09



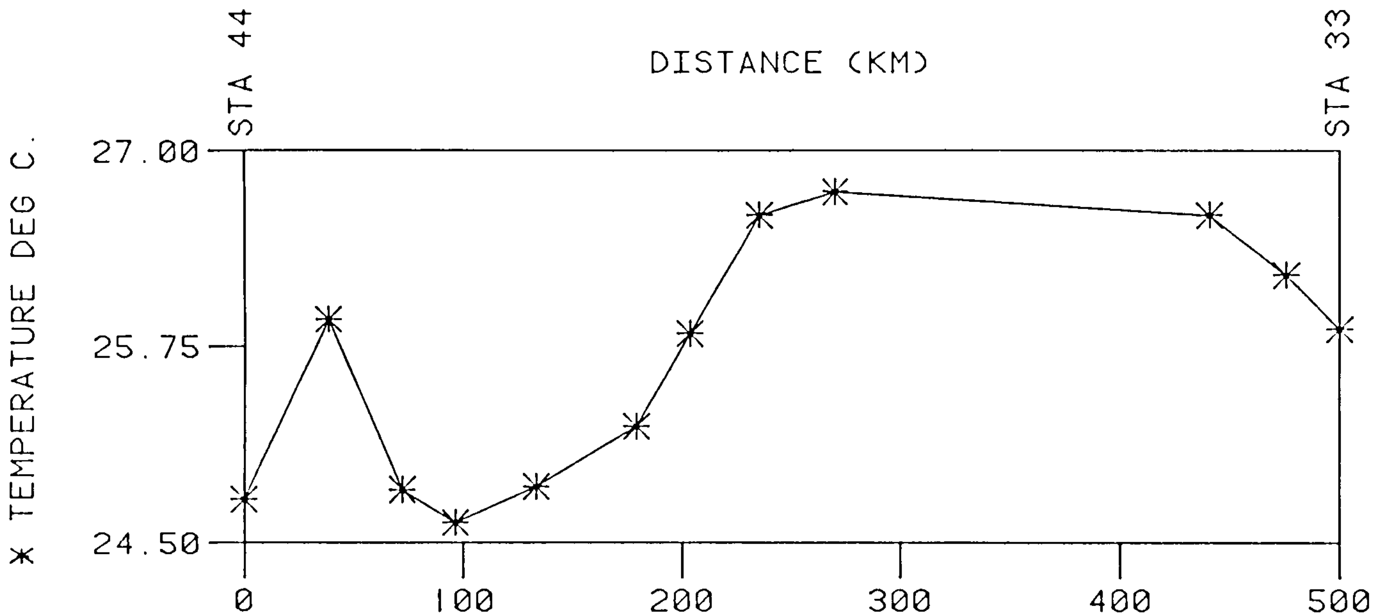
M/V AMBASSADOR CRUISE 86-10 5/ 5/86 TO 5/ 5/86
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
44
33



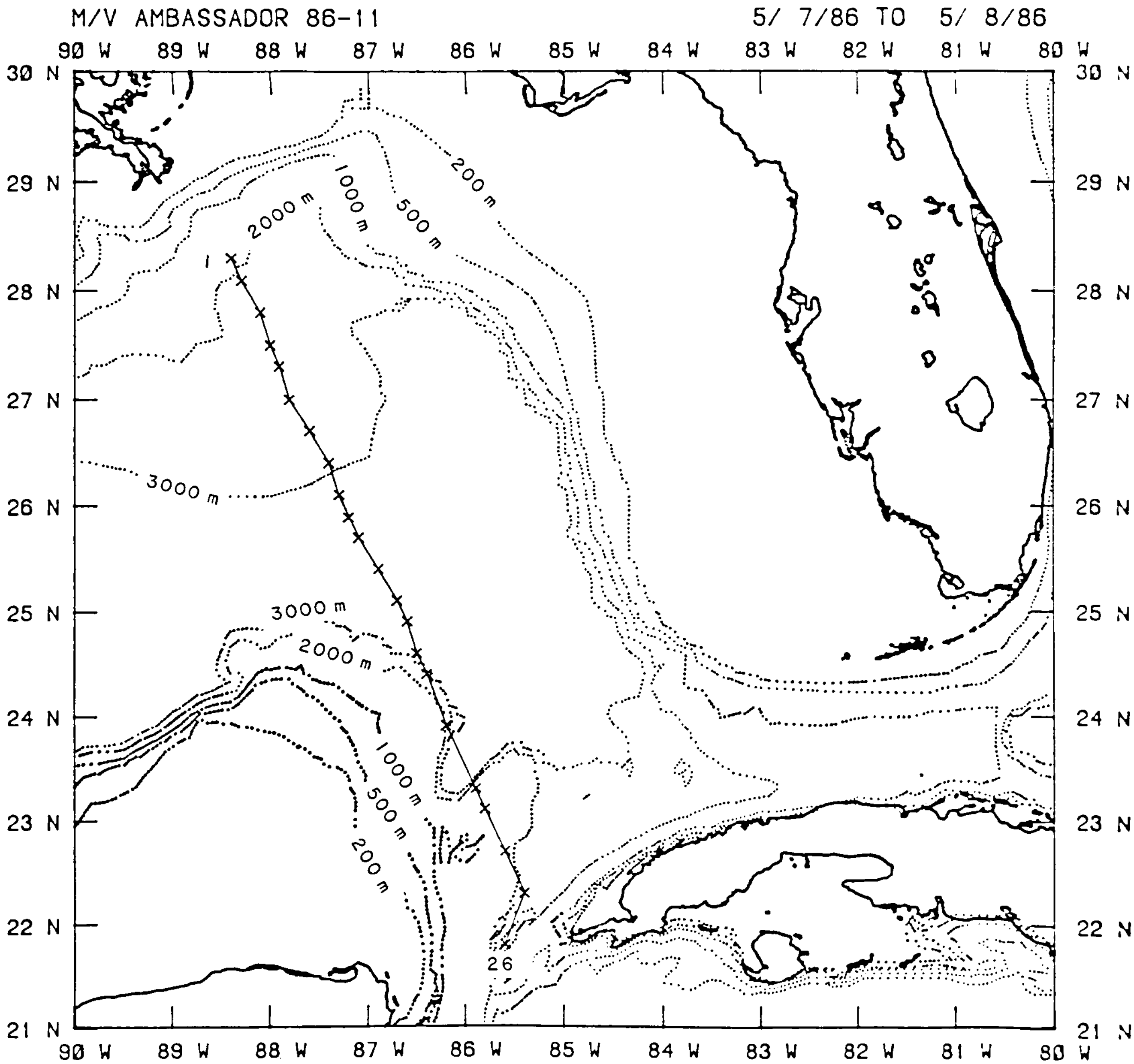
M/V AMBASSADOR CRUISE 86-10
5/ 5/86 TO 5/ 5/86
STATIONS 33 TO 44
TEMPERATURE DEG C
MIN = 5.50 MAX = 26.74

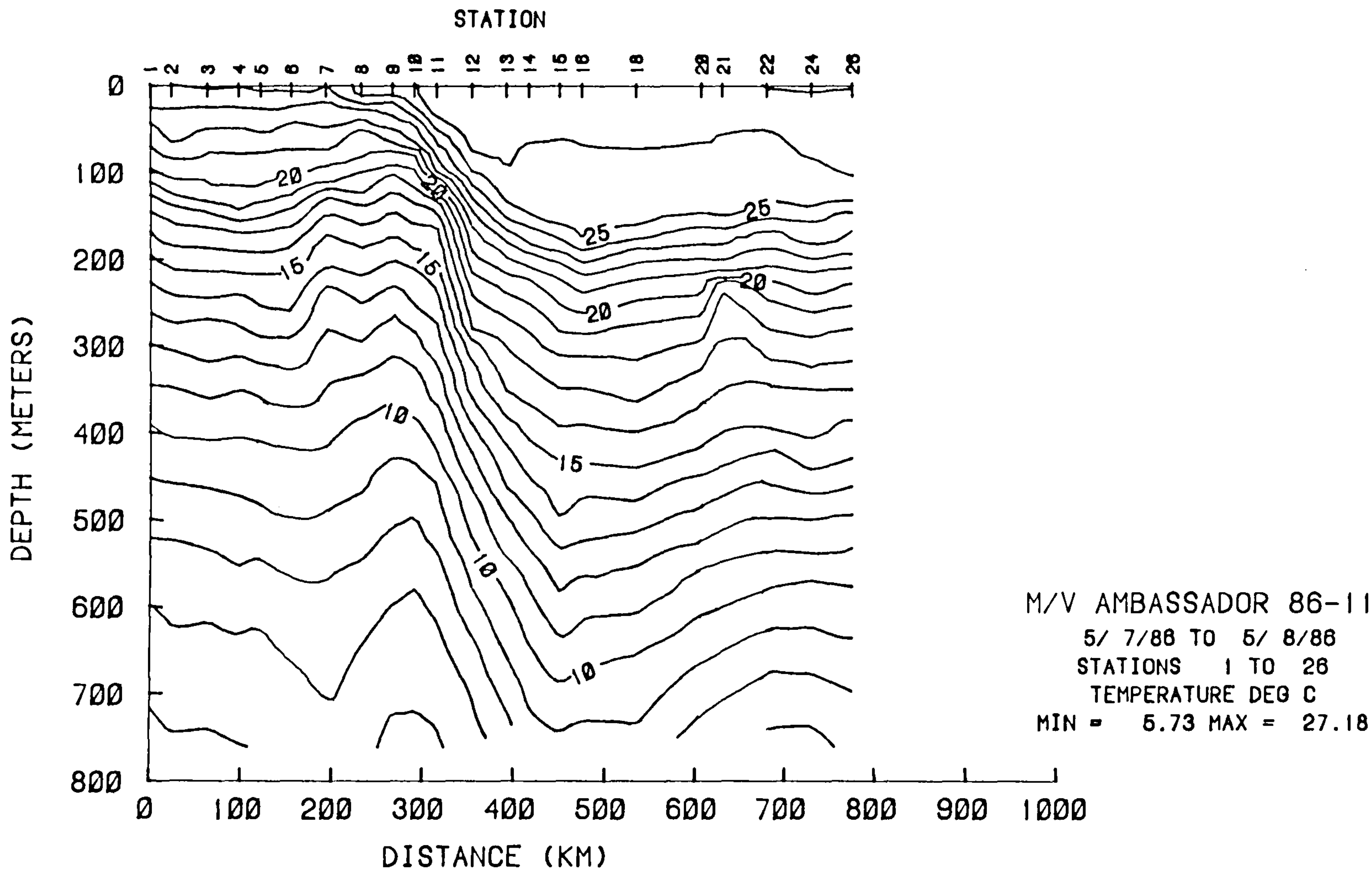


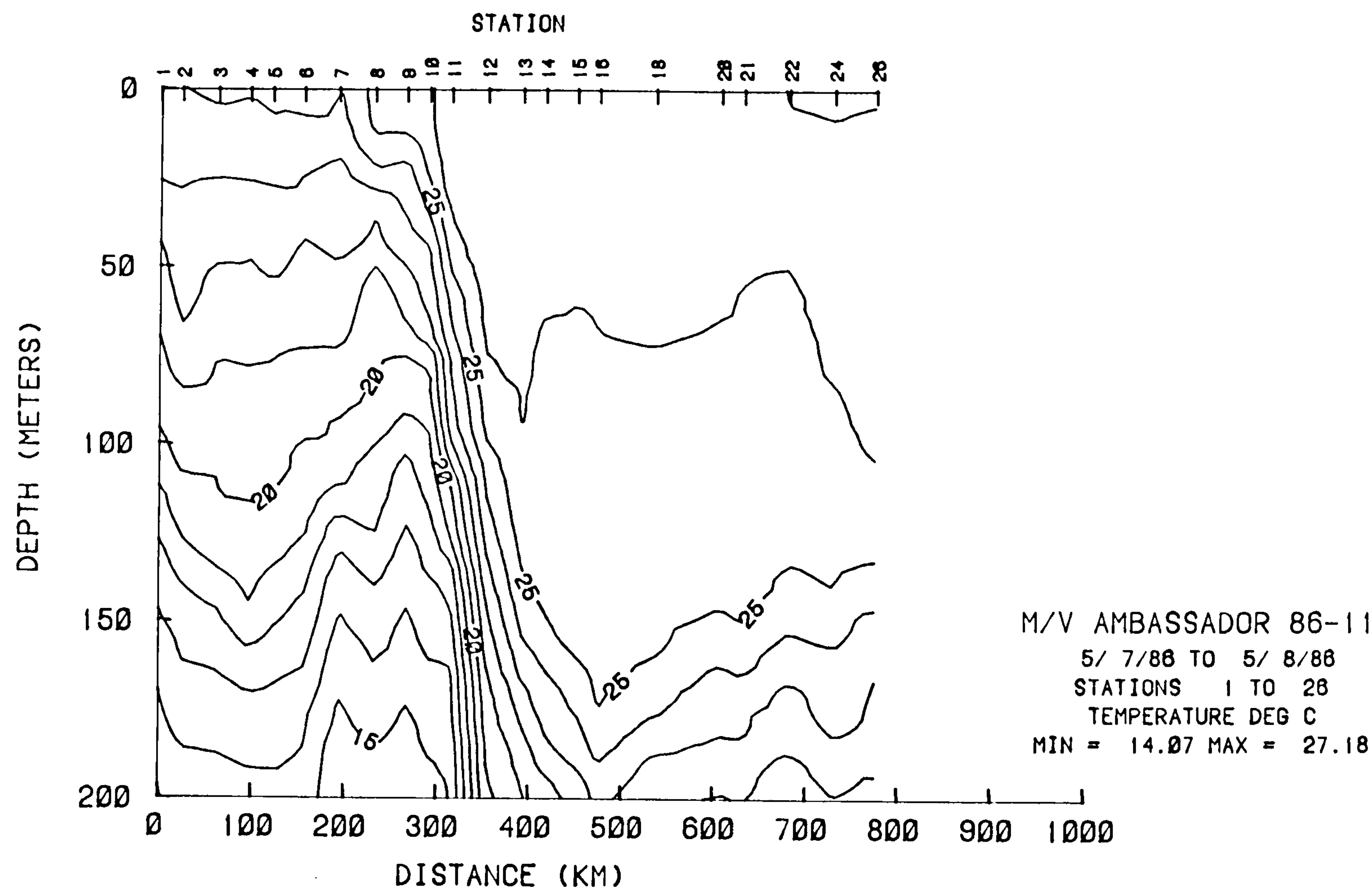
M/V AMBASSADOR CRUISE 86-10
5/ 5/86 TO 5/ 5/86
STATIONS 33 TO 44
TEMPERATURE DEG C
MIN = 12.76 MAX = 26.74

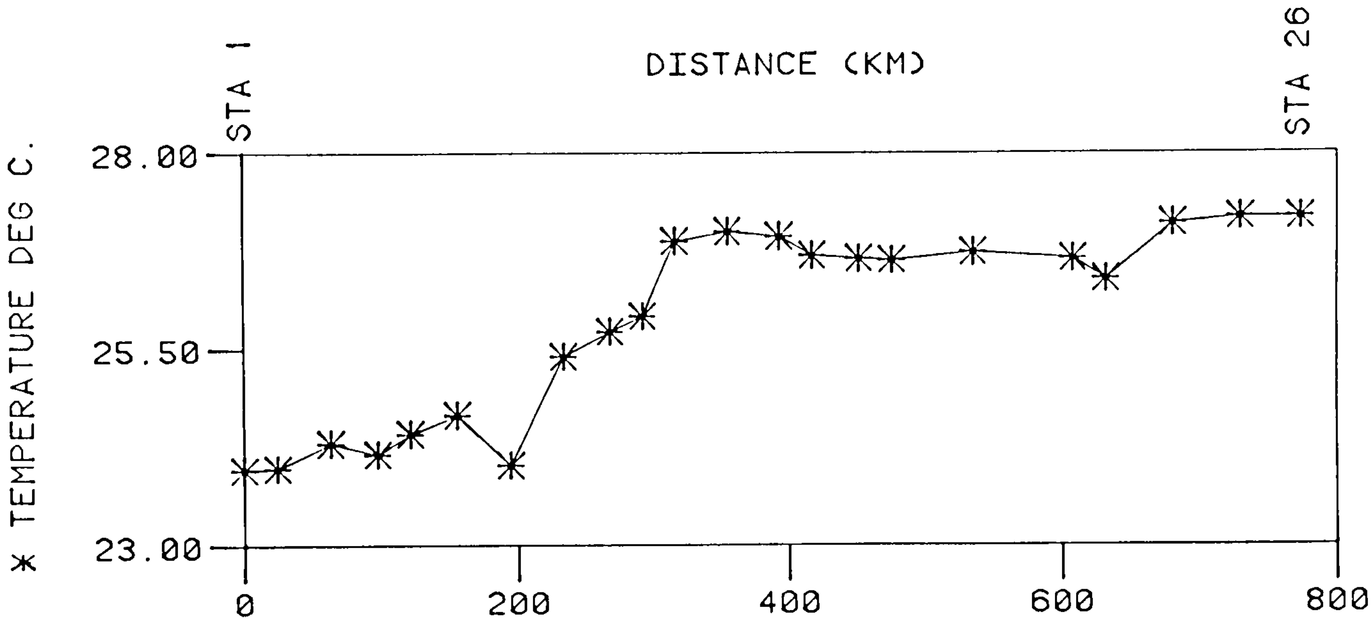


PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 86-10

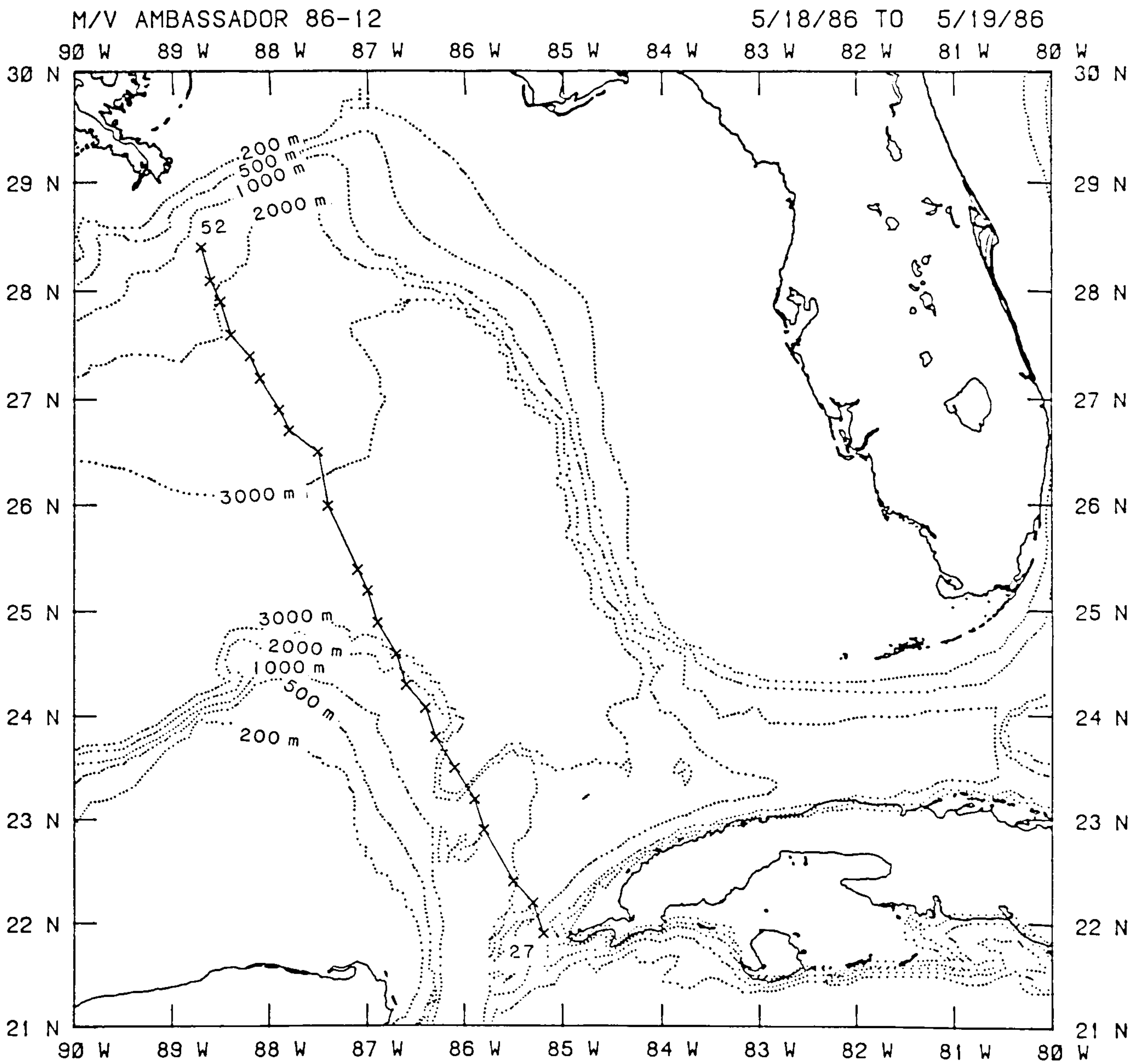

M/V AMBASSADOR 86-11
5/ 7/86 TO 5/ 8/86
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
81 W
80 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
3000 m
2000 m
1000 m
500 m
200 m
26

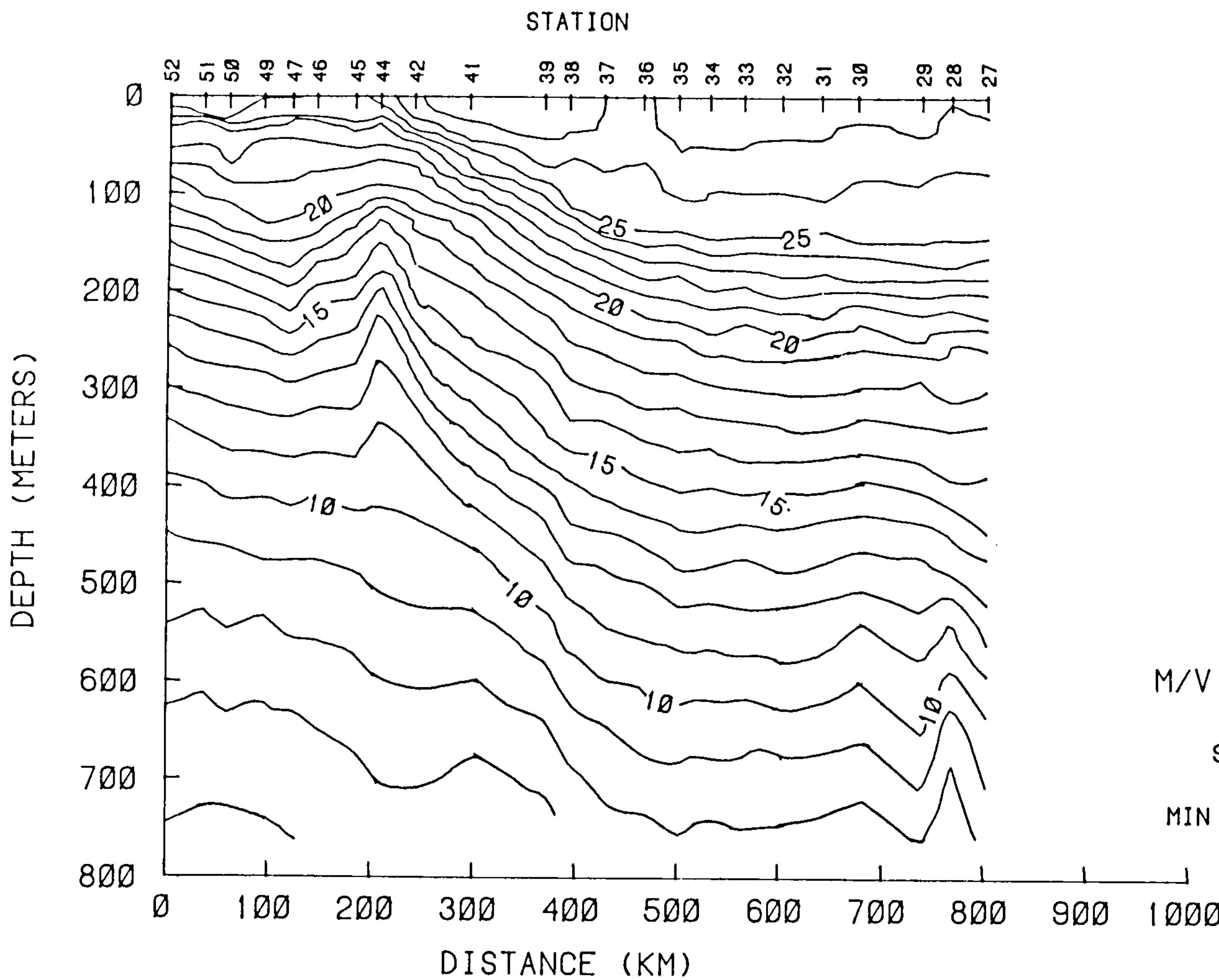

STATION
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 18 20 21 22 24 26
DEPTH (METERS)
0
100
200
300
400
500
600
700
800
DISTANCE (KM)
0 100 200 300 400 500 600 700 800 900 1000
20
25
15
10
M/V AMBASSADOR 86-11
5/ 7/86 TO 5/ 8/86
STATIONS 1 TO 26
TEMPERATURE DEG C
MIN = 5.73 MAX = 27.18


STATION
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 18 20 21 22 24 26
DEPTH (METERS)
0
50
100
150
200
DISTANCE (KM)
0 100 200 300 400 500 600 700 800 900 1000
25
20
15
M/V AMBASSADOR 86-11
5/ 7/86 TO 5/ 8/86
STATIONS 1 TO 26
TEMPERATURE DEG C
MIN = 14.07 MAX = 27.18

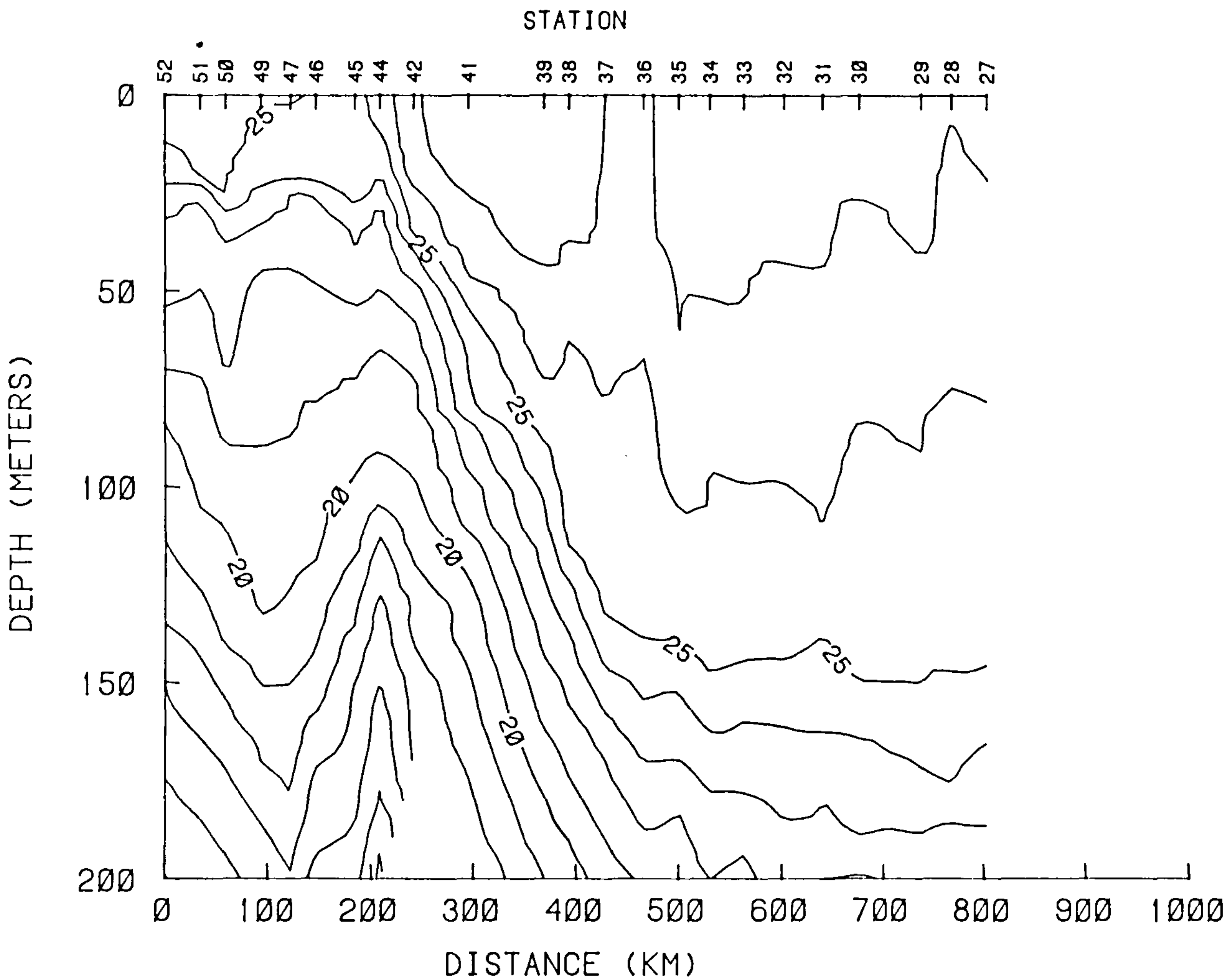


PARAMETERS AT SURFACE M/V AMBASSADOR 86-11

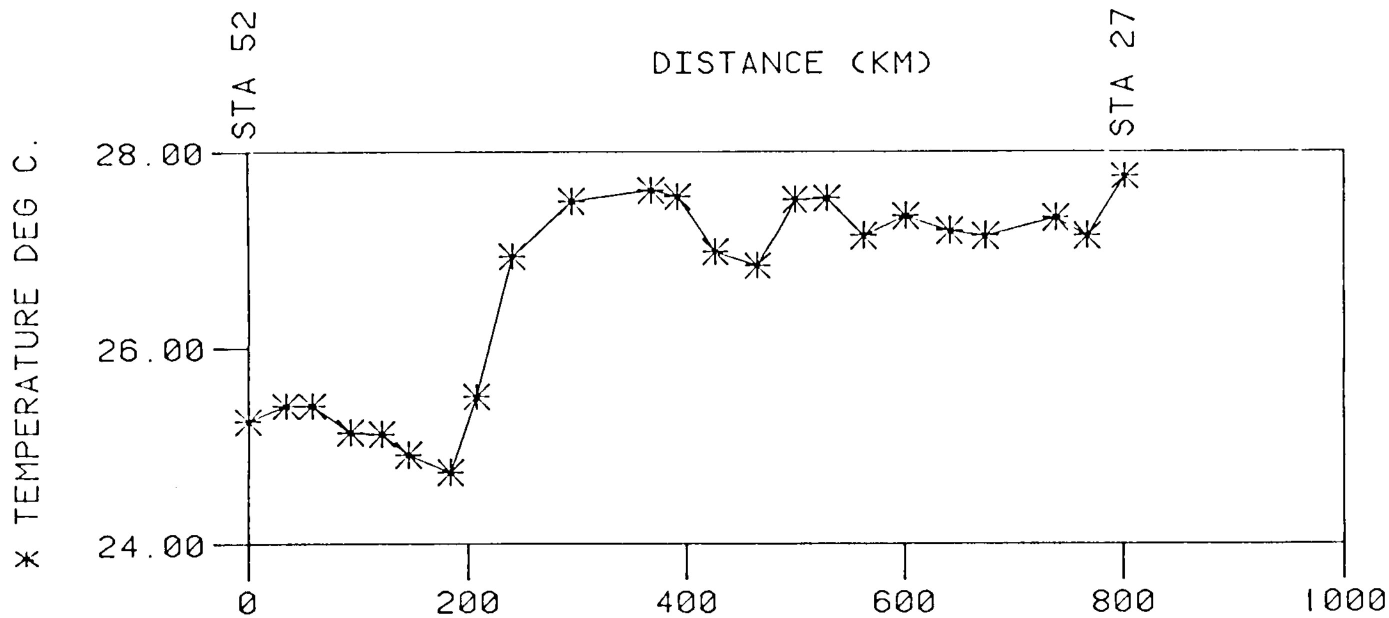

M/V AMBASSADOR 86-12
5/18/86 TO 5/19/86
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
81 W
80 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
52
27



M/V AMBASSADOR 86-12
5/17/86 TO 5/19/86
STATIONS 27 TO 52
TEMPERATURE DEG C
MIN = 5.81 MAX = 27.76

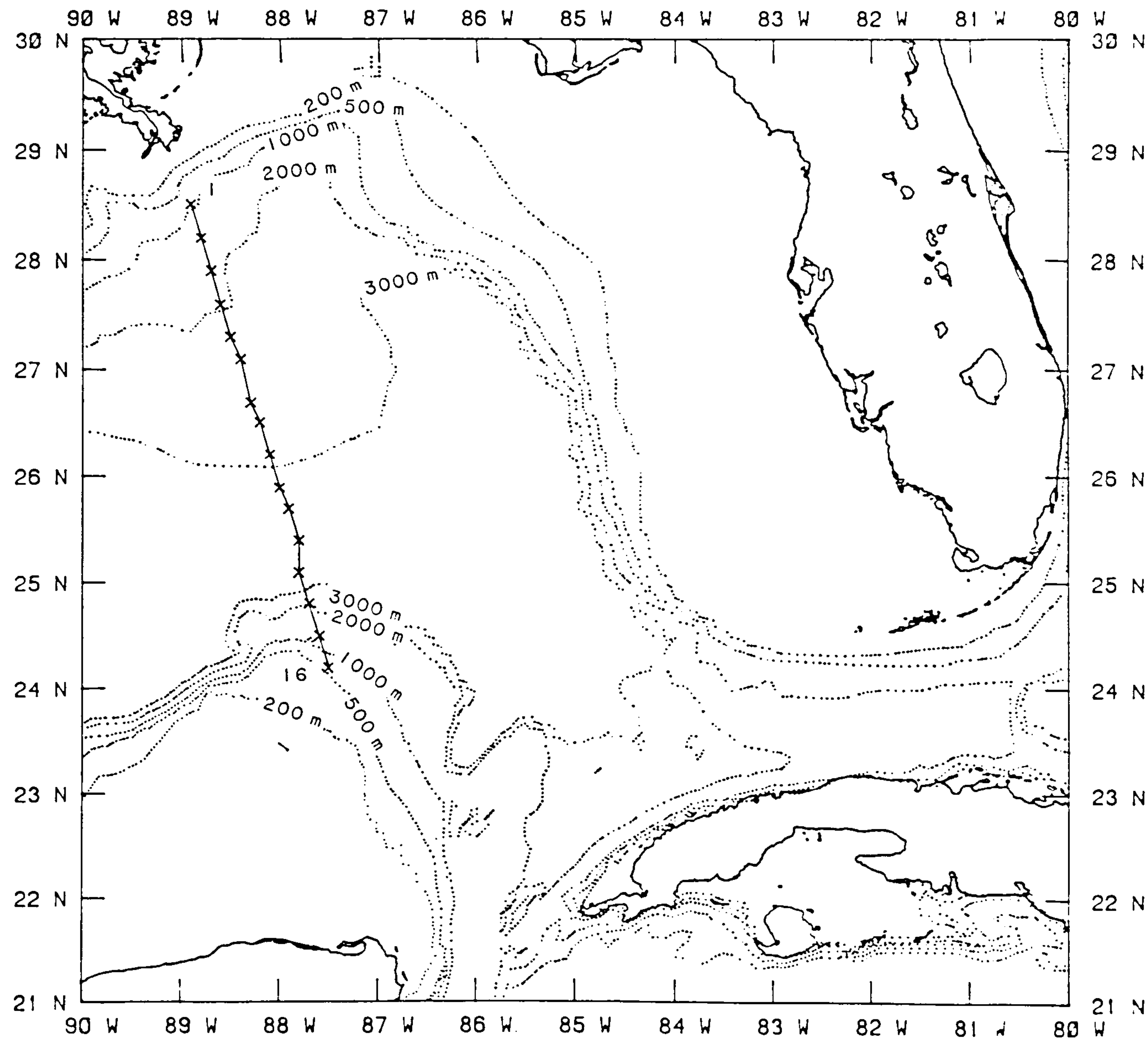


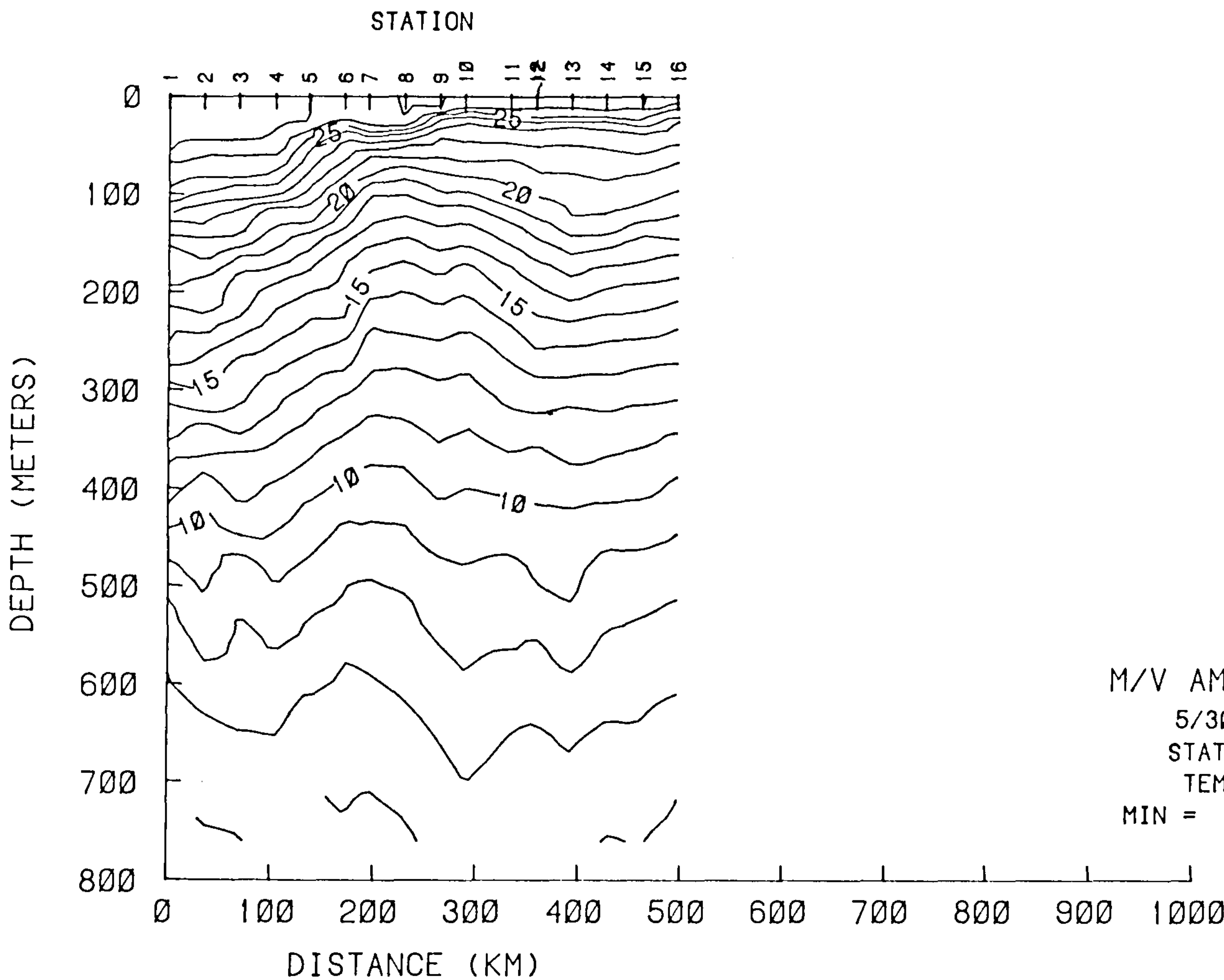
M/V AMBASSADOR 86-12
5/17/86 TO 5/19/86
STATIONS 27 TO 52
TEMPERATURE DEG C
MIN = 13.78 MAX = 27.76



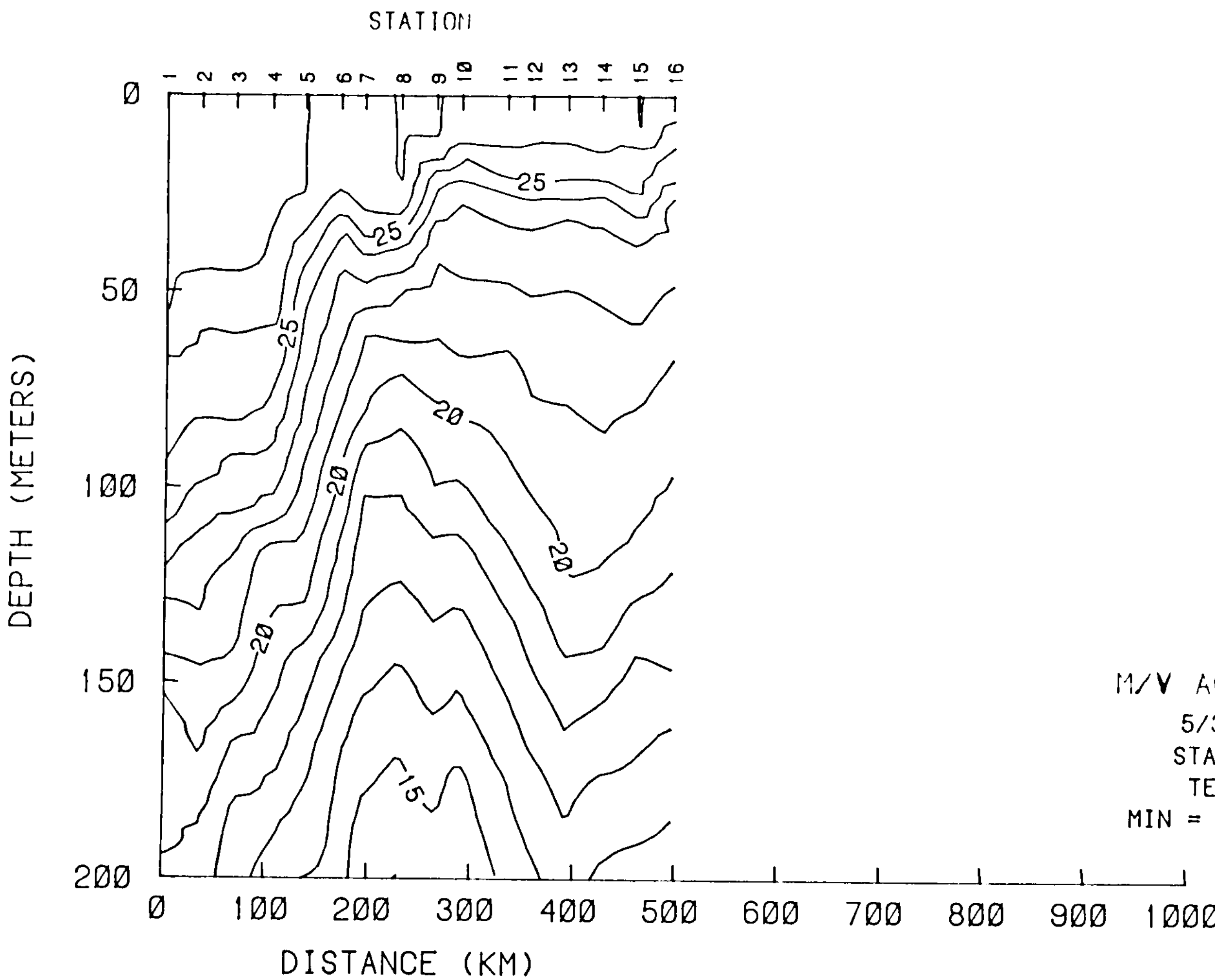
PARAMETERS AT SURFACE M/V AMBASSADOR 86-12

M/V AMBASSADOR 86-13 5/30/86 TO 5/31/86

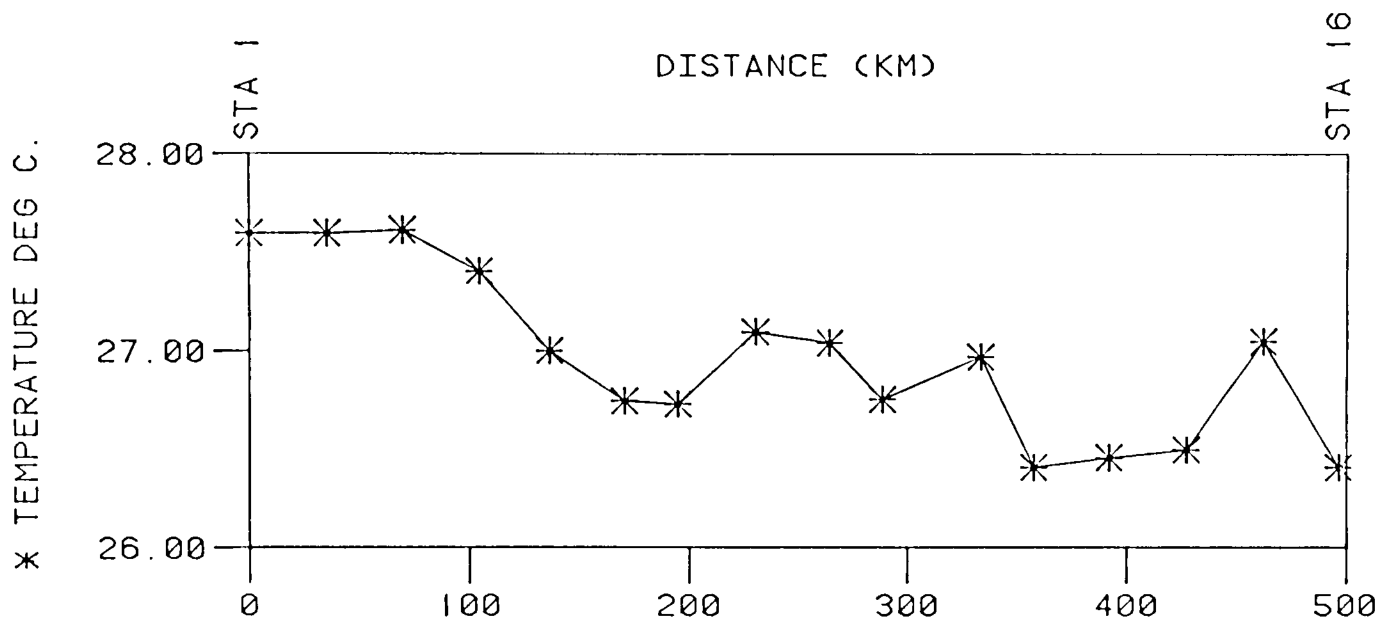




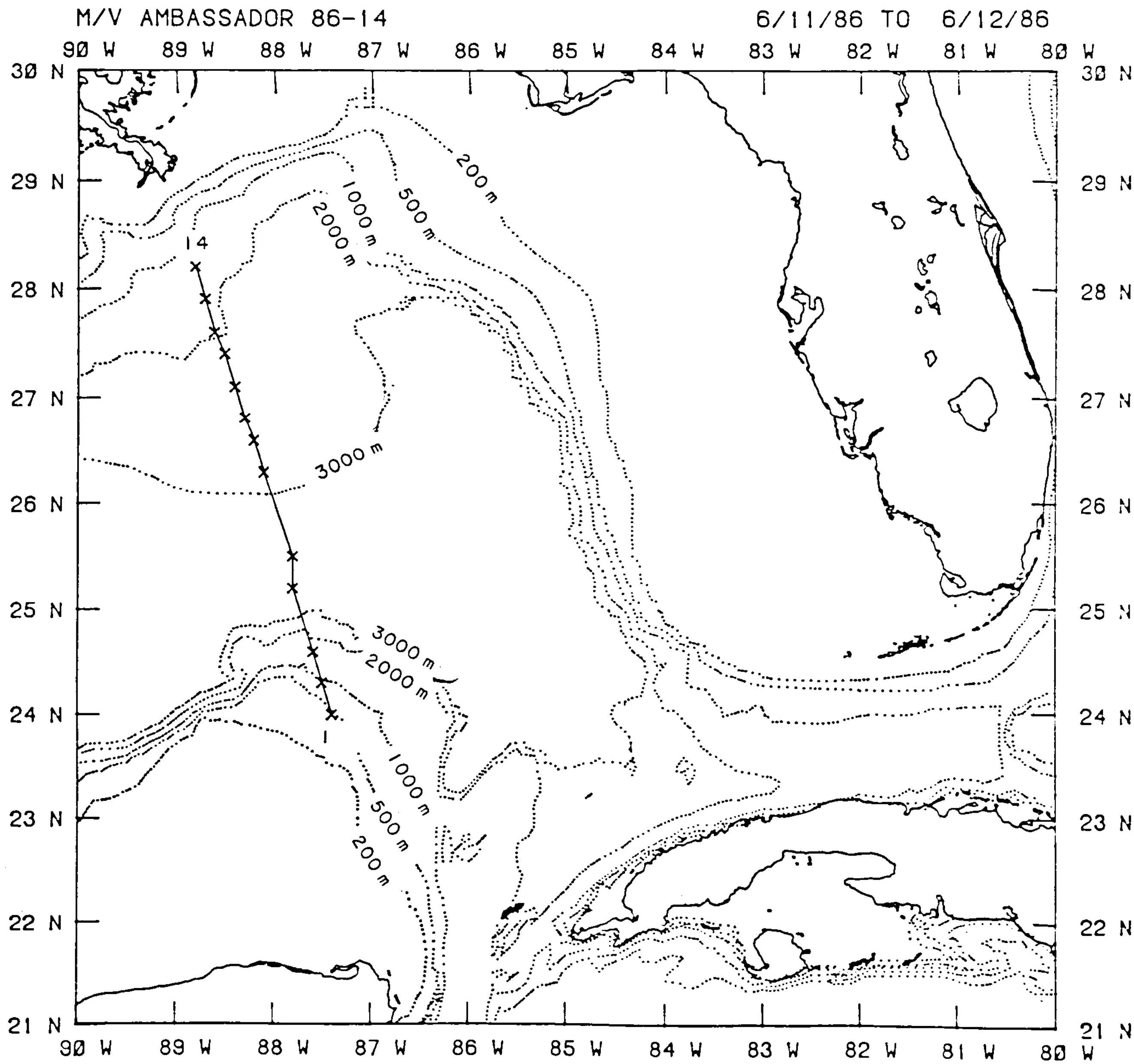
M/V AMBASSADOR 86-13
5/30/86 TO 5/31/86
STATIONS 1 TO 16
TEMPERATURE DEG C
MIN = 5.66 MAX = 27.62

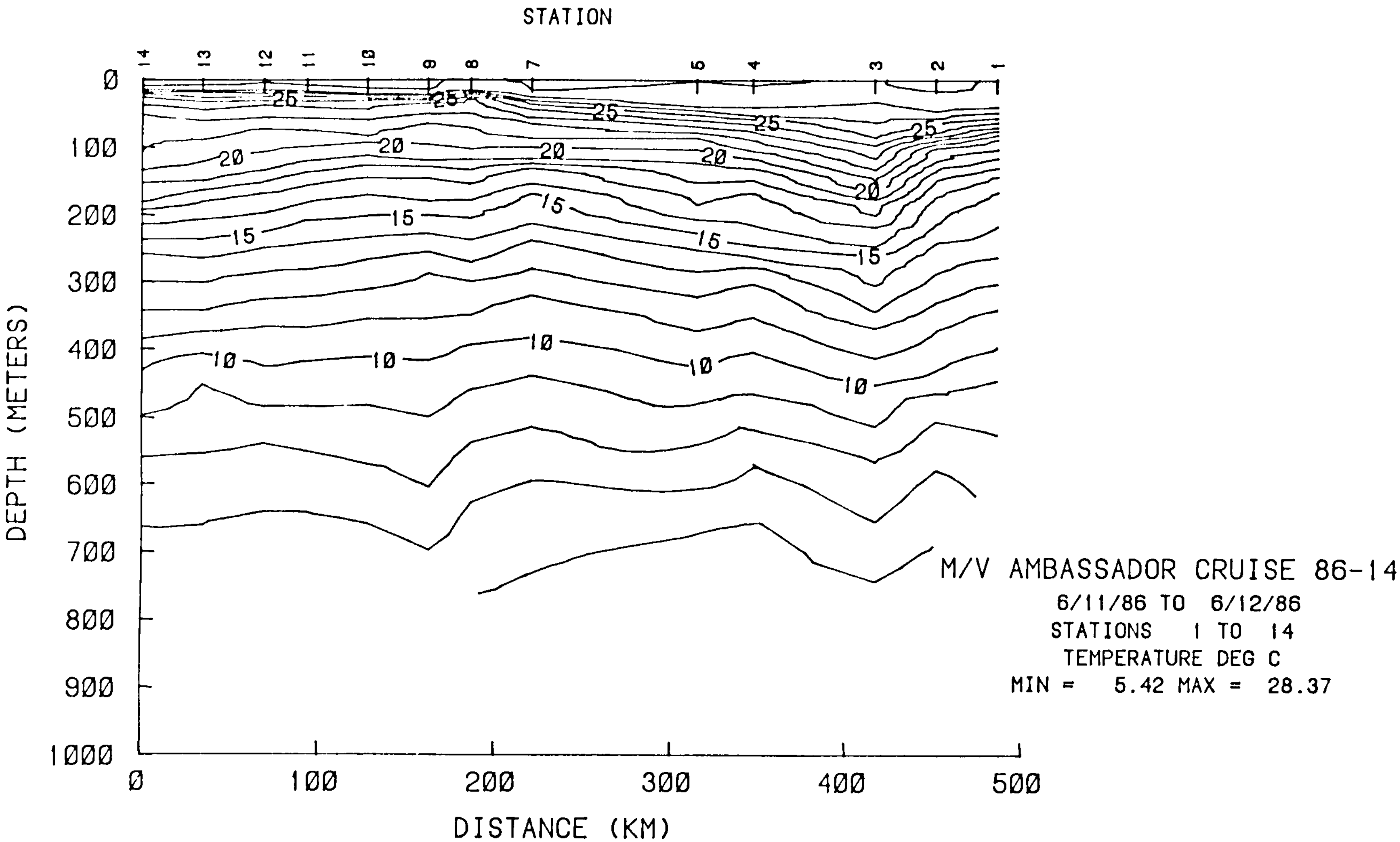


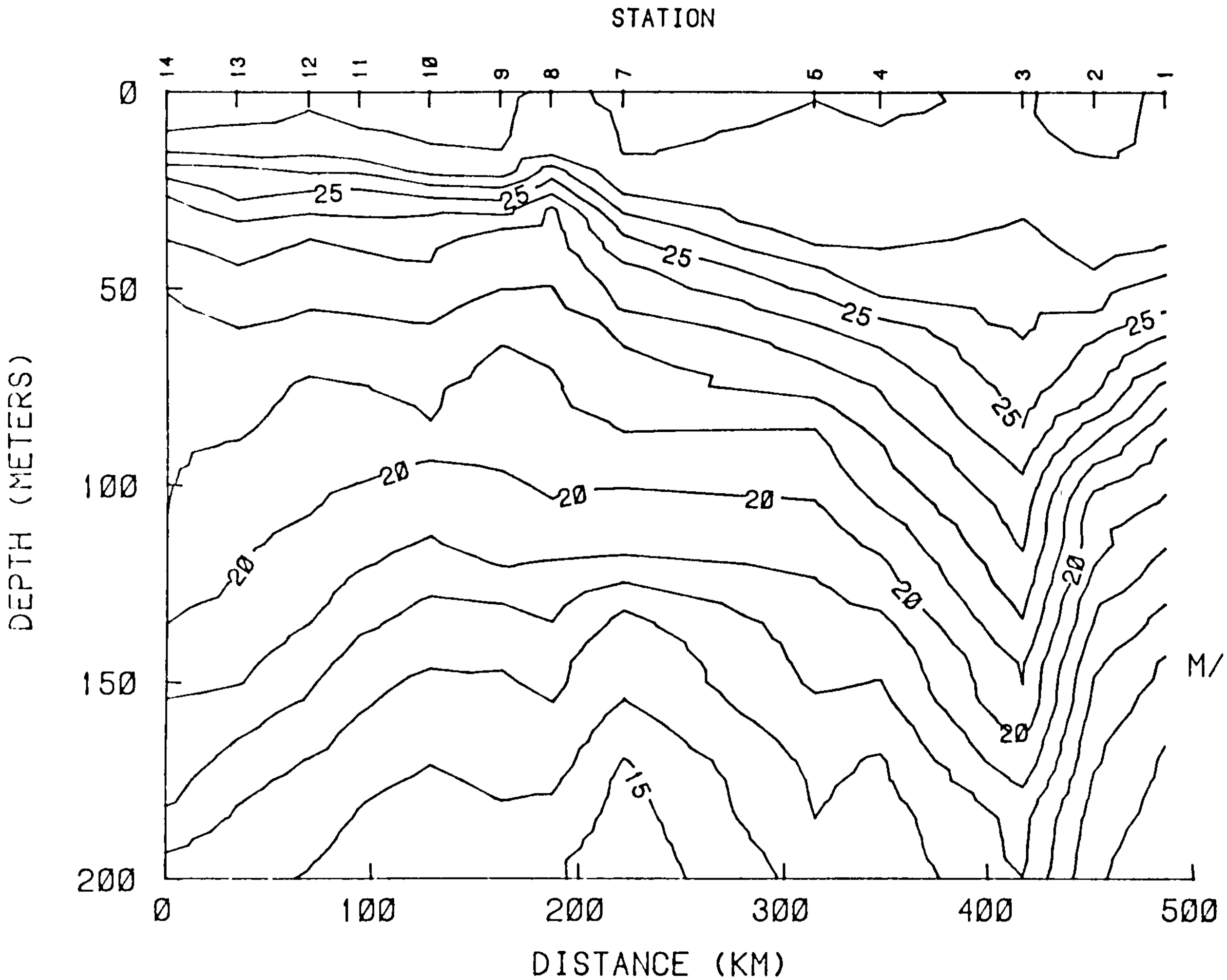
M/V AMBASSADOR 86-13
5/30/86 TO 5/31/86
STATIONS 1 TO 16
TEMPERATURE DEG C
MIN = 13.98 MAX = 27.62



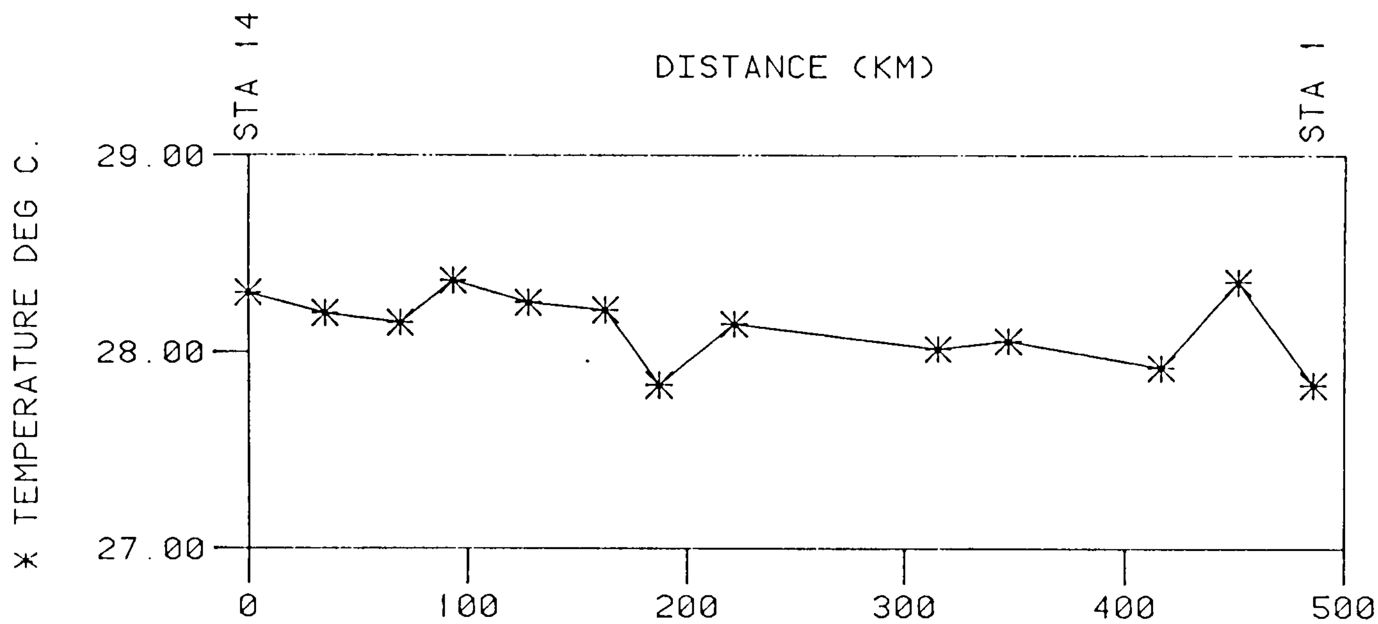
PARAMETERS AT SURFACE M/V AMBASSADOR 86-13


M/V AMBASSADOR 86-14
6/11/86 TO 6/12/86
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
81 W
80 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
14
1

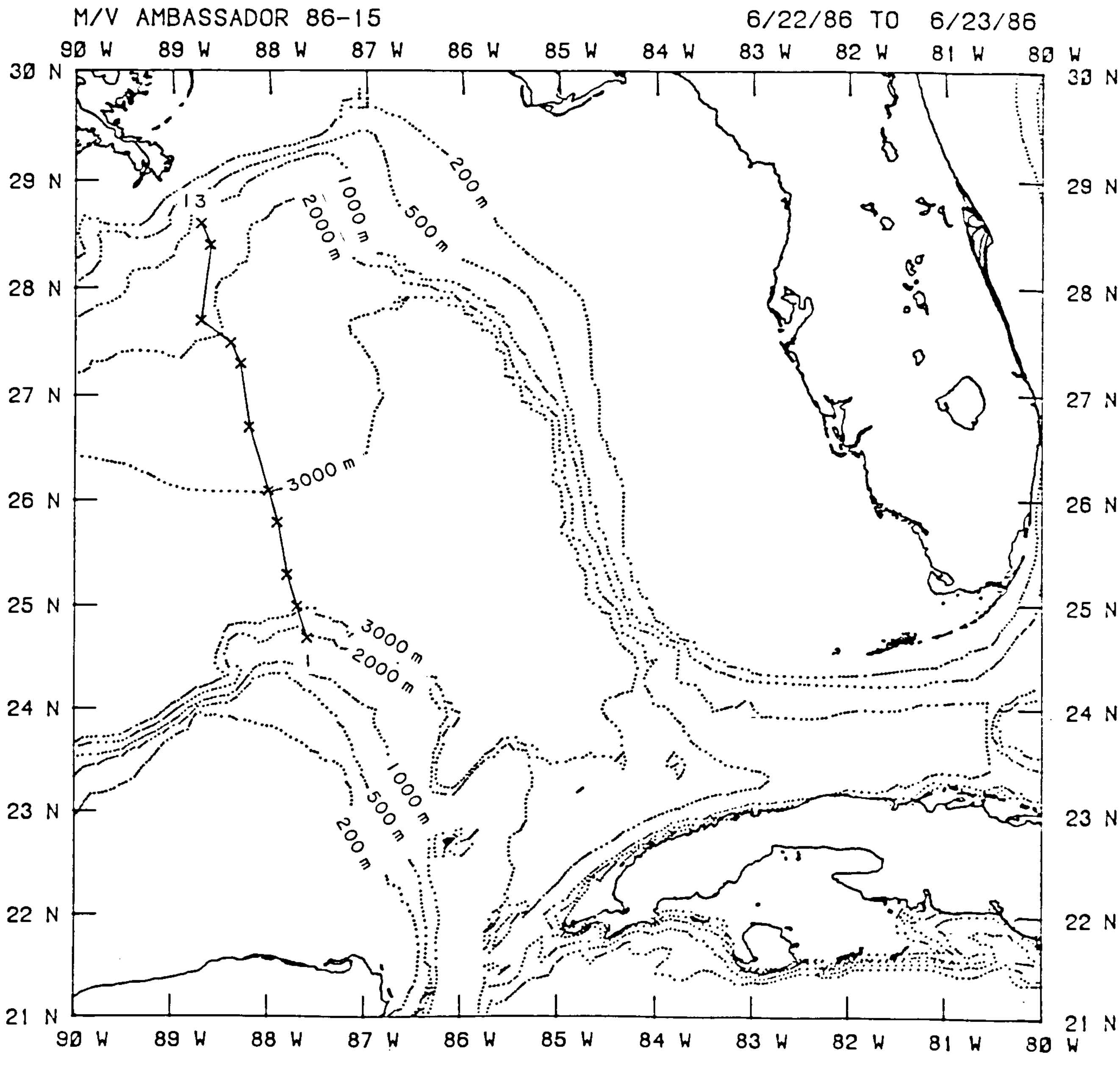

STATION
14 13 12 11 10 9 8 7 5 4 3 2 1
25 25 25 25 25
20 20 20 20 20
15 15 15 15 15
10 10 10 10 10
DEPTH (METERS)
0 100 200 300 400 500 600 700 800 900 1000
DISTANCE (KM)
0 100 200 300 400 500
M/V AMBASSADOR CRUISE 86-14
6/11/86 TO 6/12/86
STATIONS 1 TO 14
TEMPERATURE DEG C
MIN = 5.42 MAX = 28.37



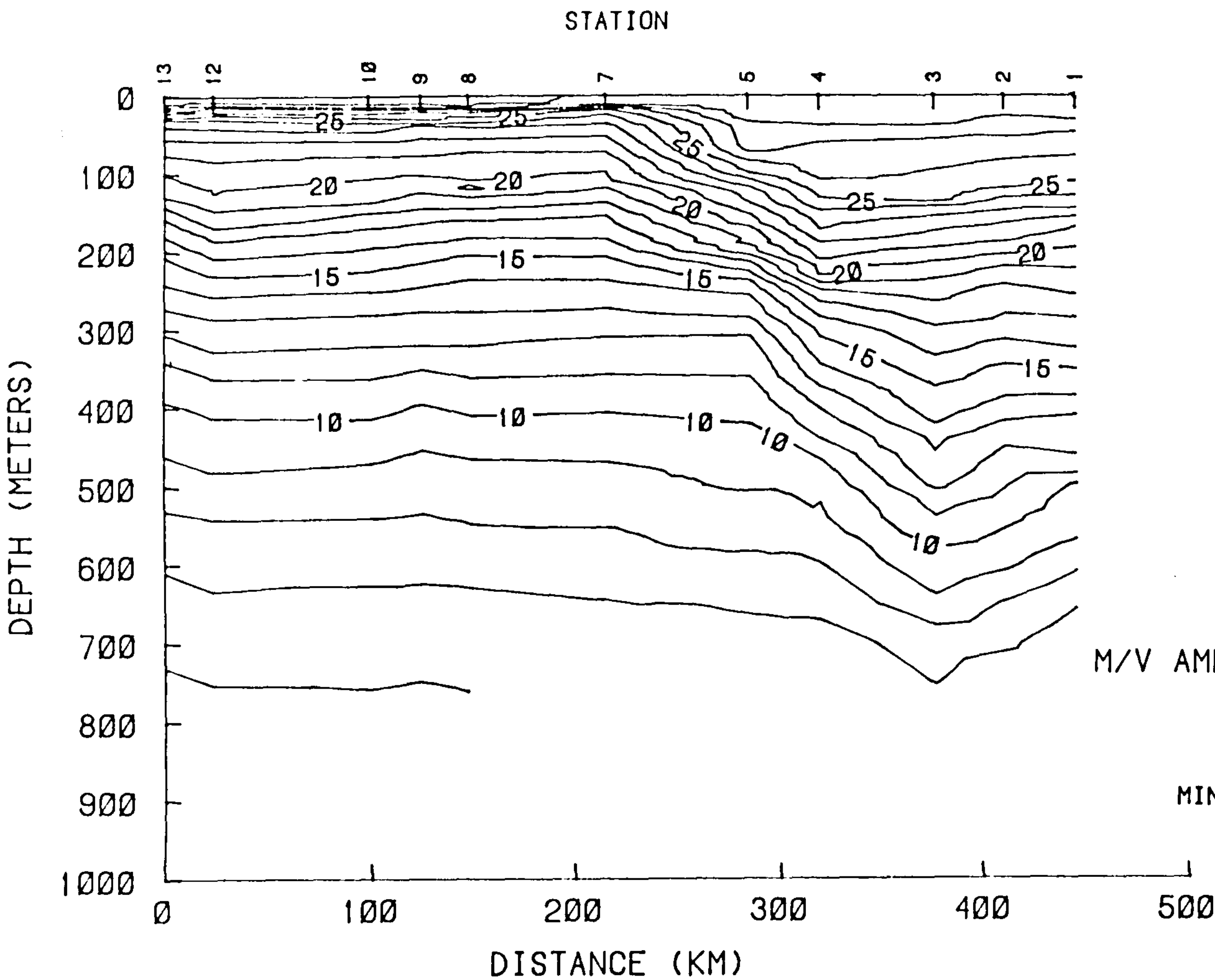
M/V AMBASSADOR CRUISE 86-14
6/11/86 TO 6/12/86
STATIONS 1 TO 14
TEMPERATURE DEG C
MIN = 14.19 MAX = 28.37



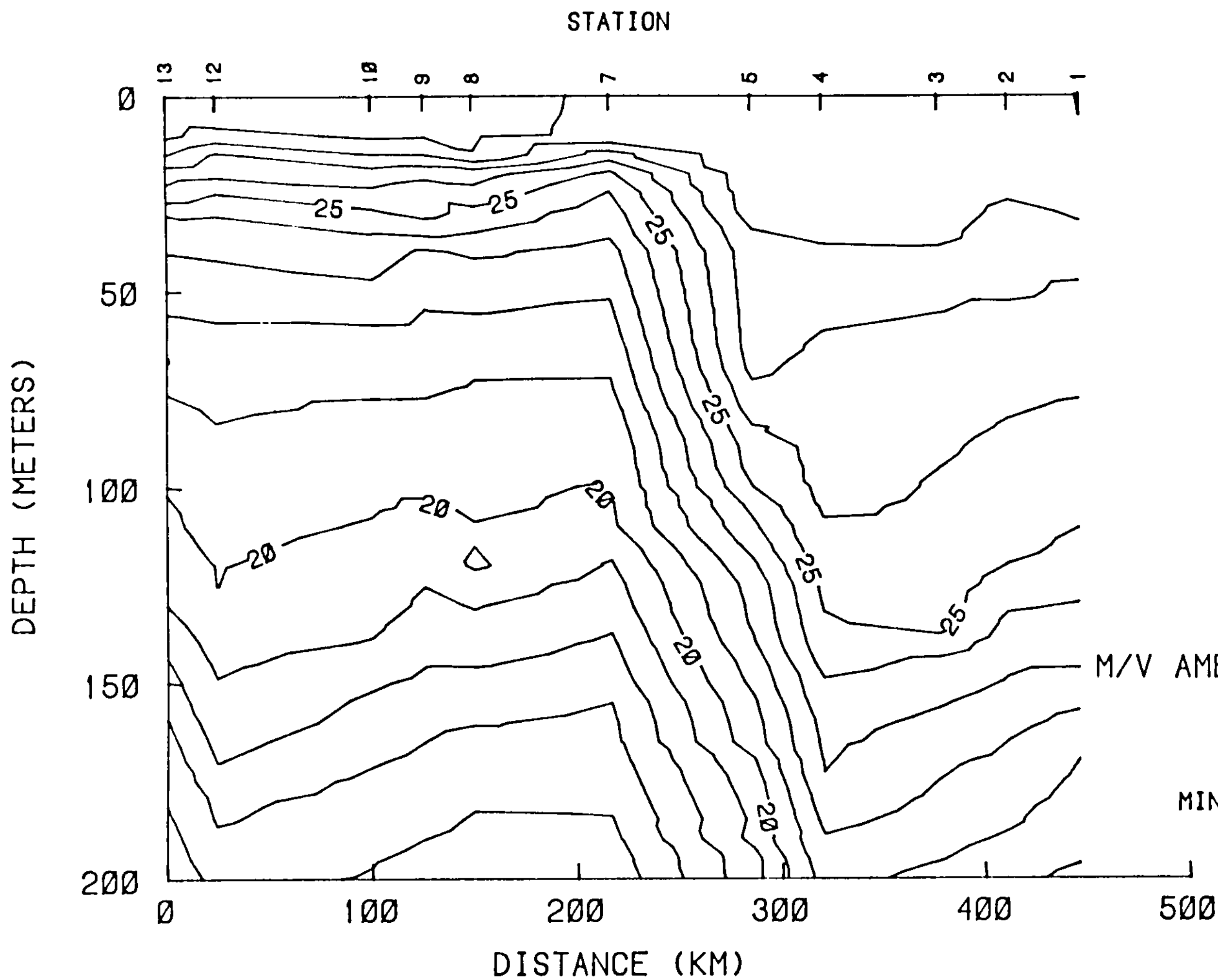
PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 86-14



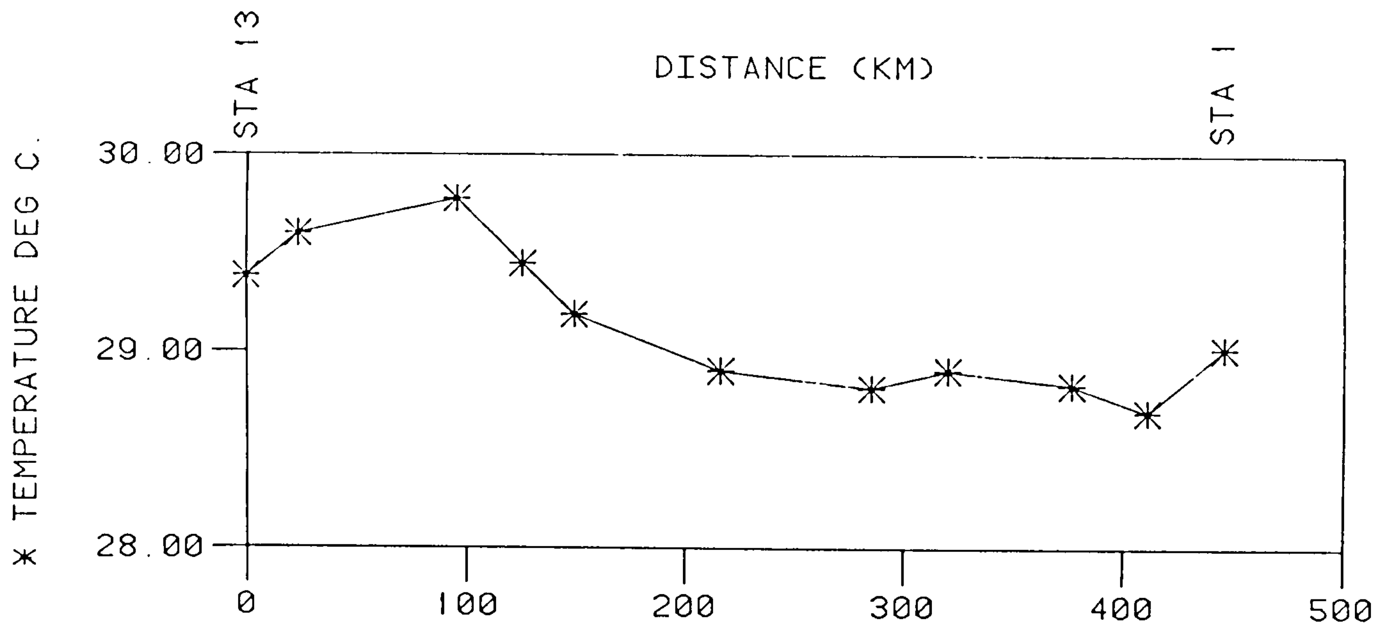
M/V AMBASSADOR 86-15
6/22/86 TO 6/23/86
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
81 W
80 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
13
1
200 m
500 m
1000 m
2000 m
3000 m



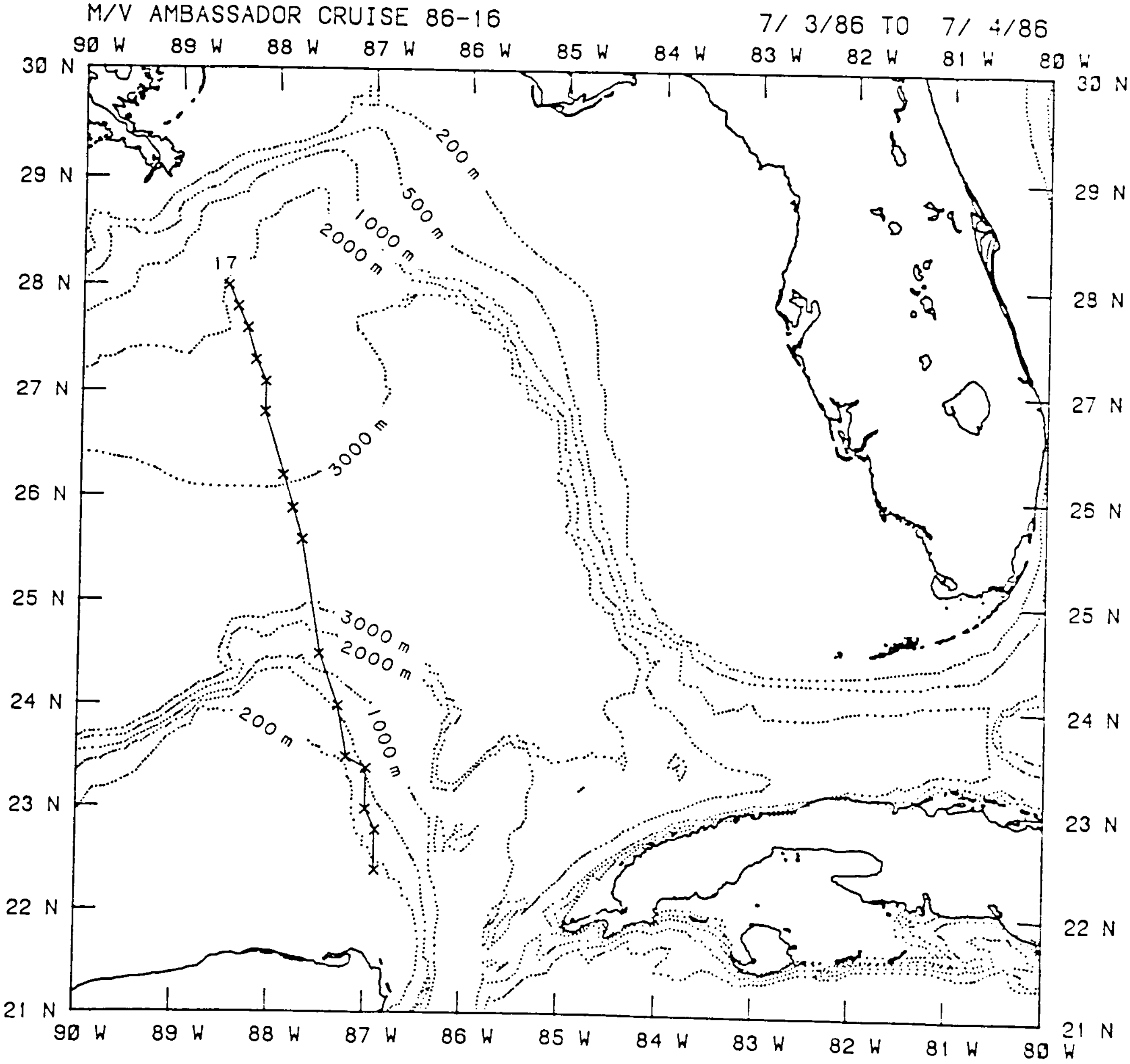
M/V AMBASSADOR CRUISE 86-15
6/22/86 TO 6/23/86
STATIONS 1 TO 13
TEMPERATURE DEG C
MIN = 5.81 MAX = 29.78



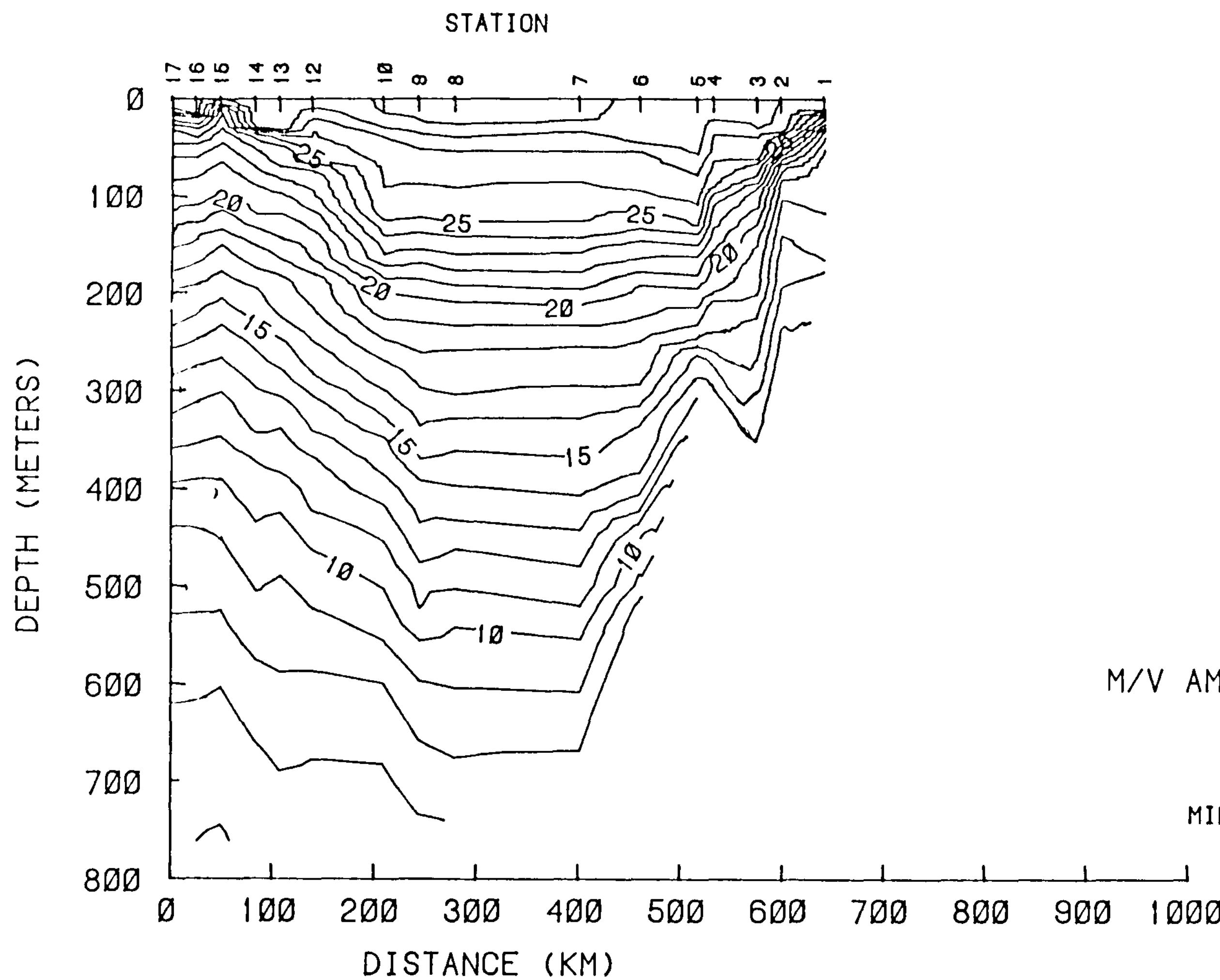
M/V AMBASSADOR CRUISE 86-15
6/22/86 TO 6/23/86
STATIONS 1 TO 13
TEMPERATURE DEG C
MIN = 15.25 MAX = 29.78



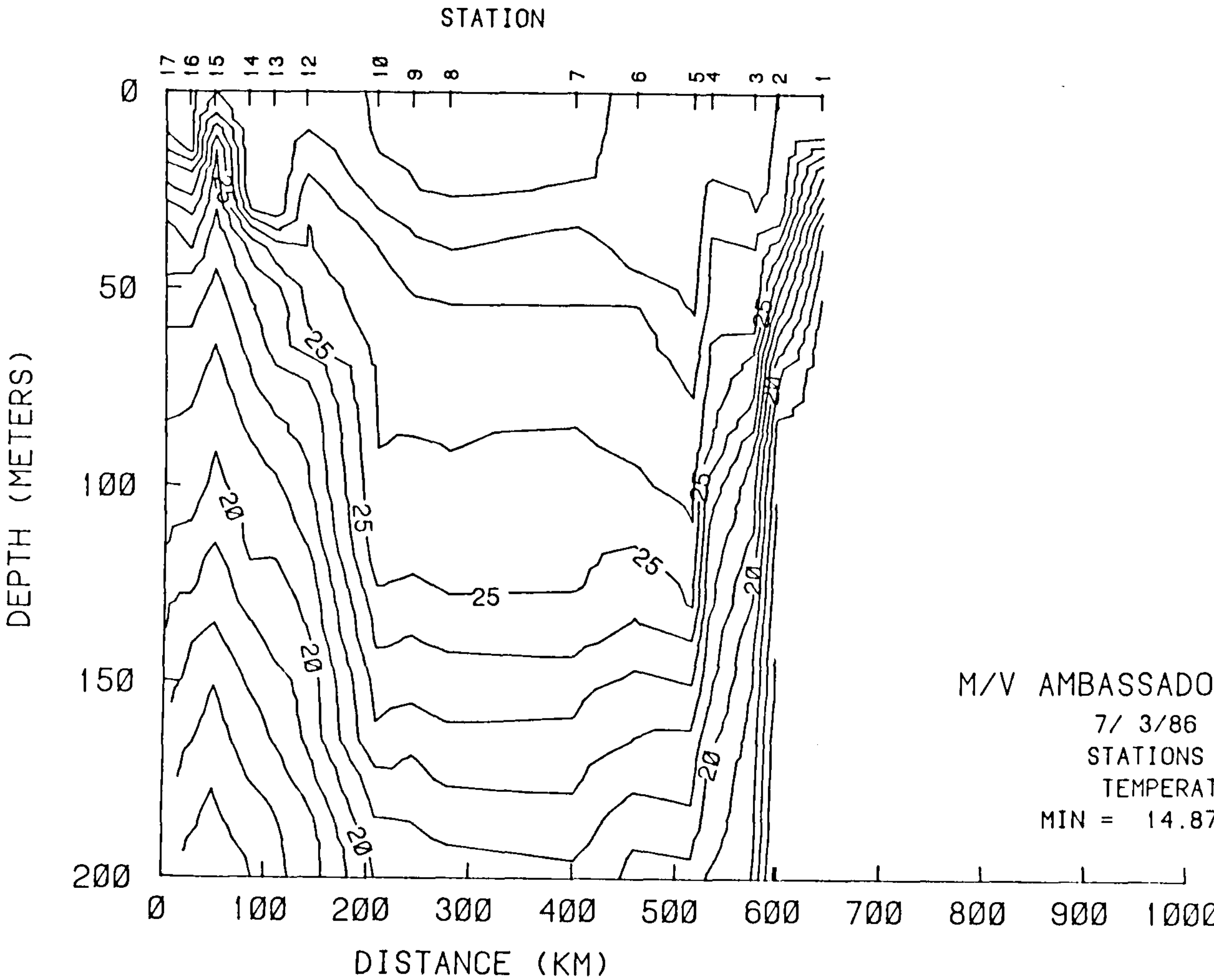
PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 86-15



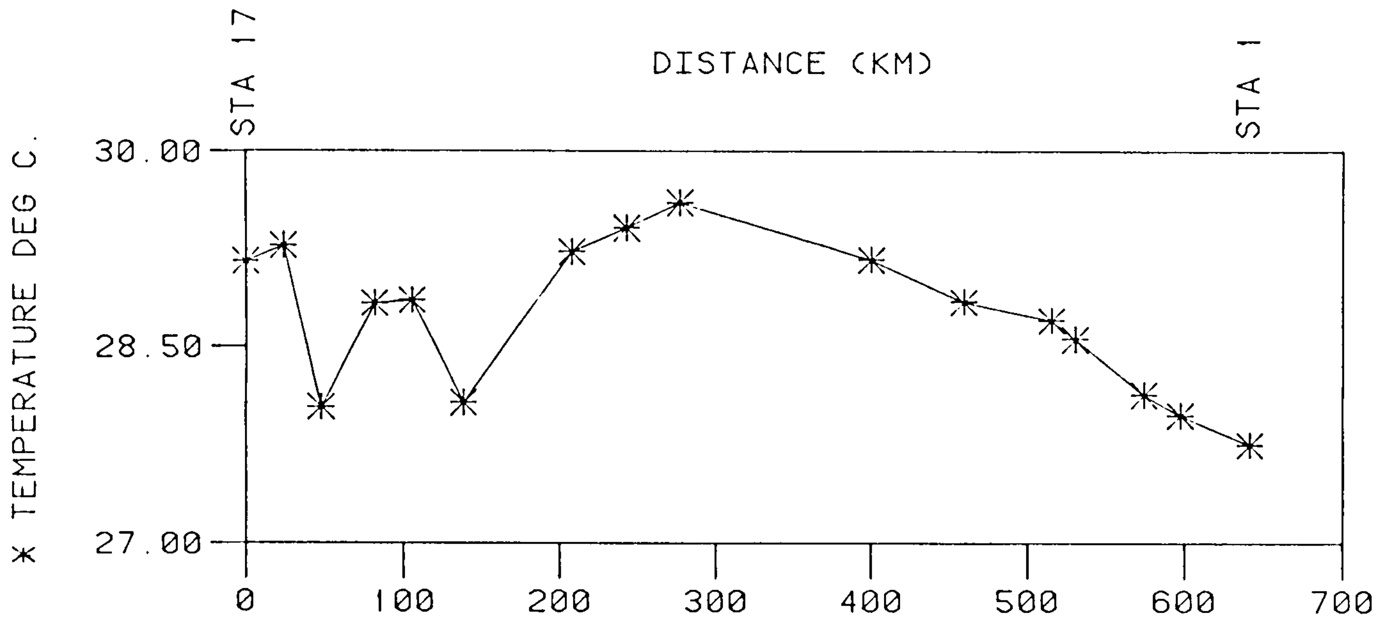
M/V AMBASSADOR CRUISE 86-16
7/ 3/86 TO 7/ 4/86
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
81 W
80 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
17
200 m
500 m
1000 m
2000 m
3000 m
3000 m
2000 m
1000 m
200 m



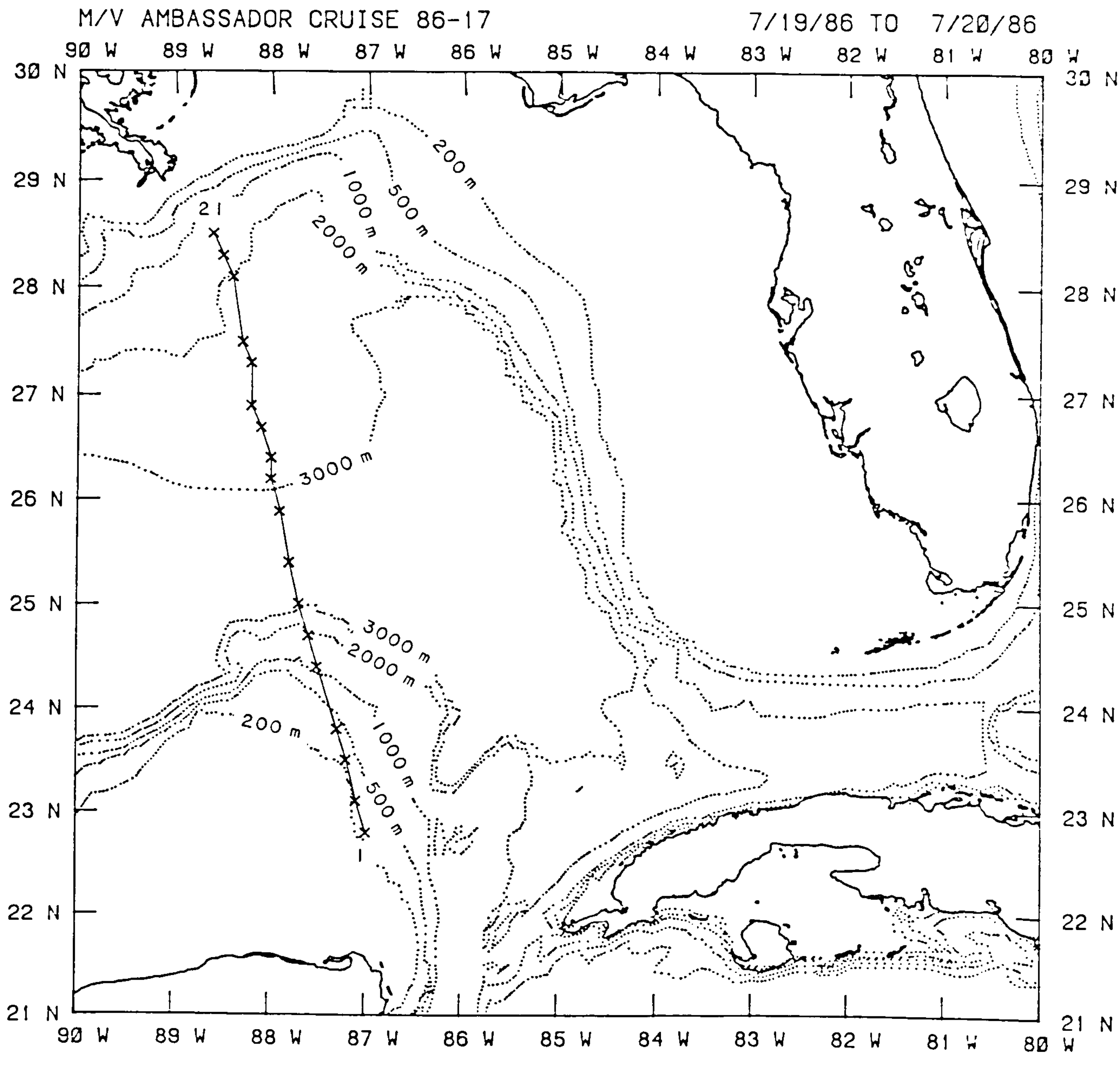
M/V AMBASSADOR CRUISE 86-16
7/ 3/86 TO 7/ 4/86
STATIONS 1 TO 17
TEMPERATURE DEG C
MIN = 5.92 MAX = 29.61

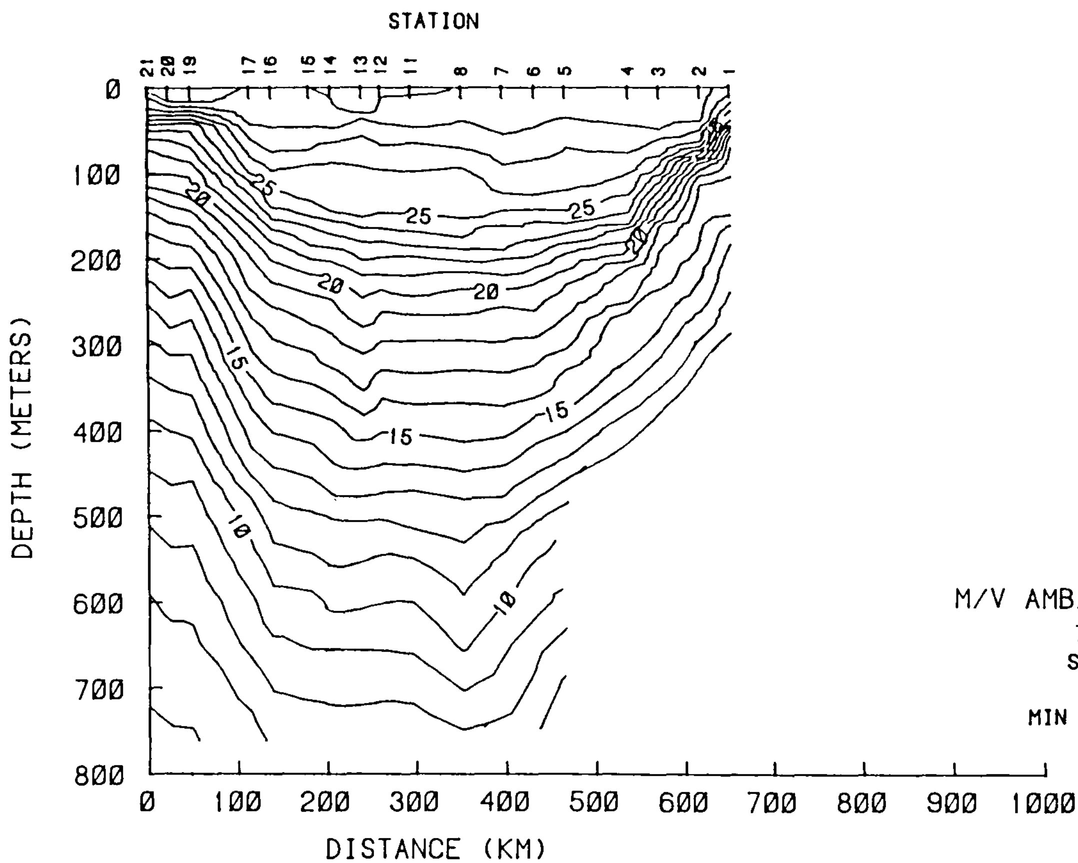


M/V AMBASSADOR CRUISE 86-16
7/ 3/86 TO 7/ 4/86
STATIONS 1 TO 17
TEMPERATURE DEG C
MIN = 14.87 MAX = 29.61

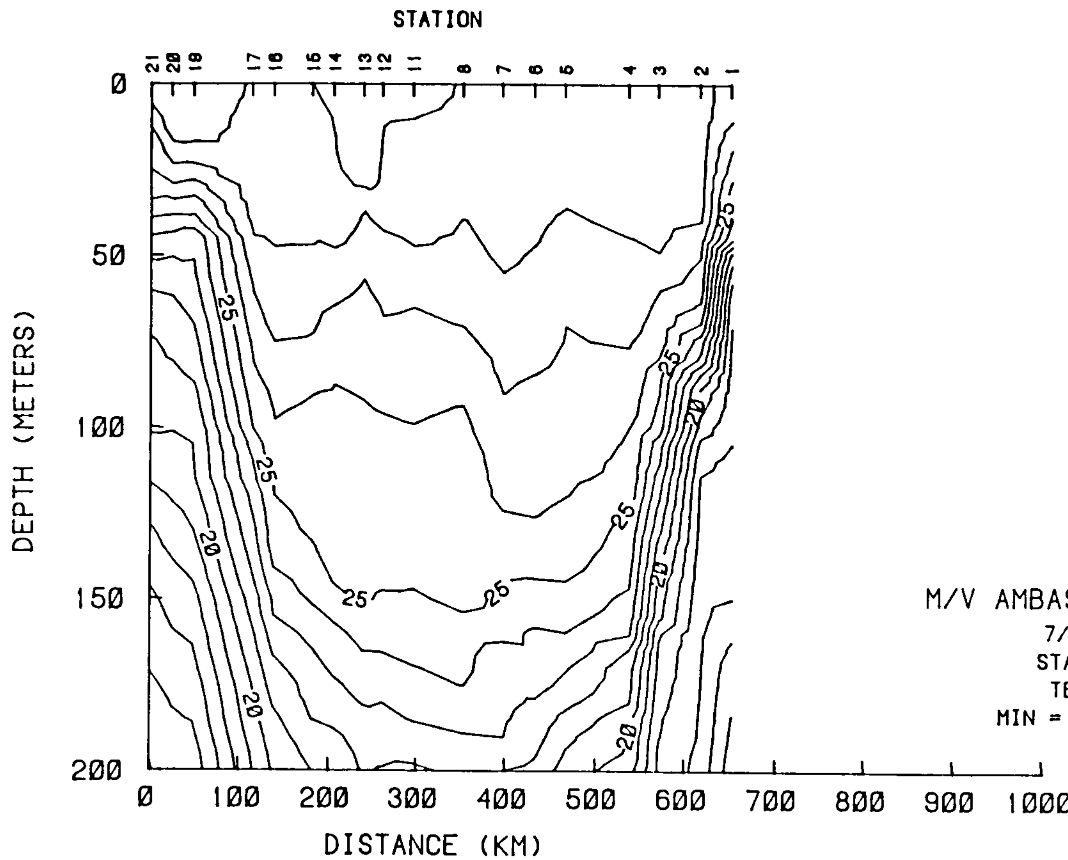


PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 86-16

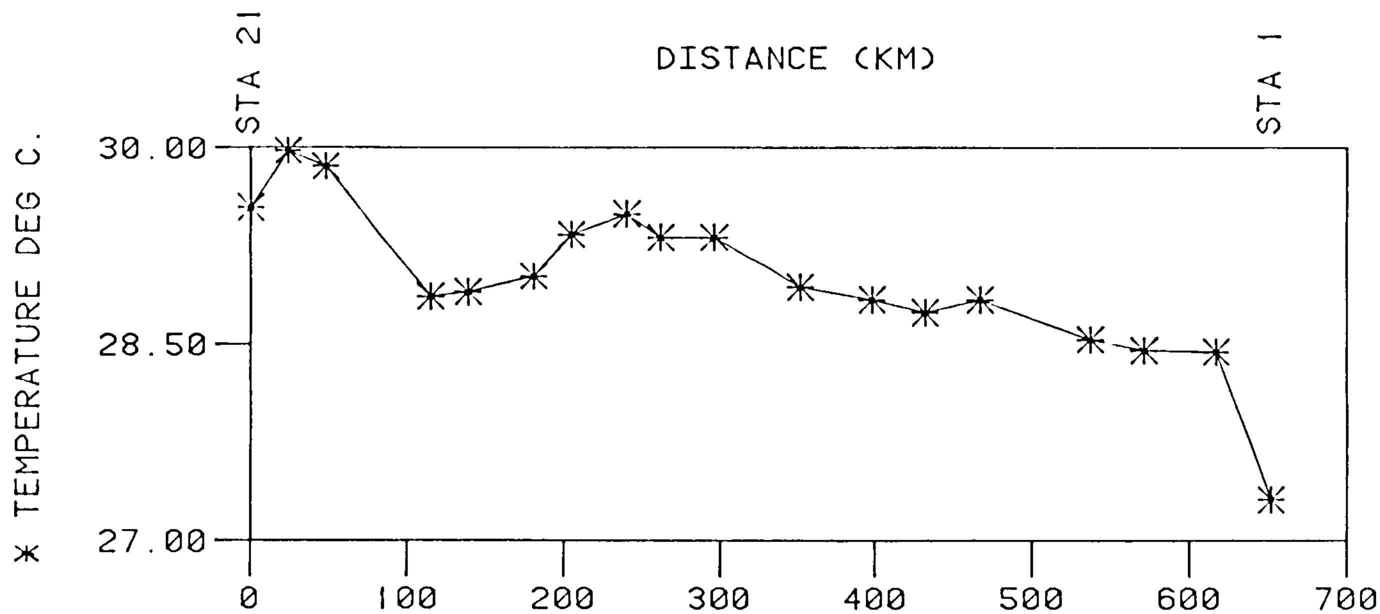

M/V AMBASSADOR CRUISE 86-17
7/19/86 TO 7/20/86
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
81 W
80 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
21
1



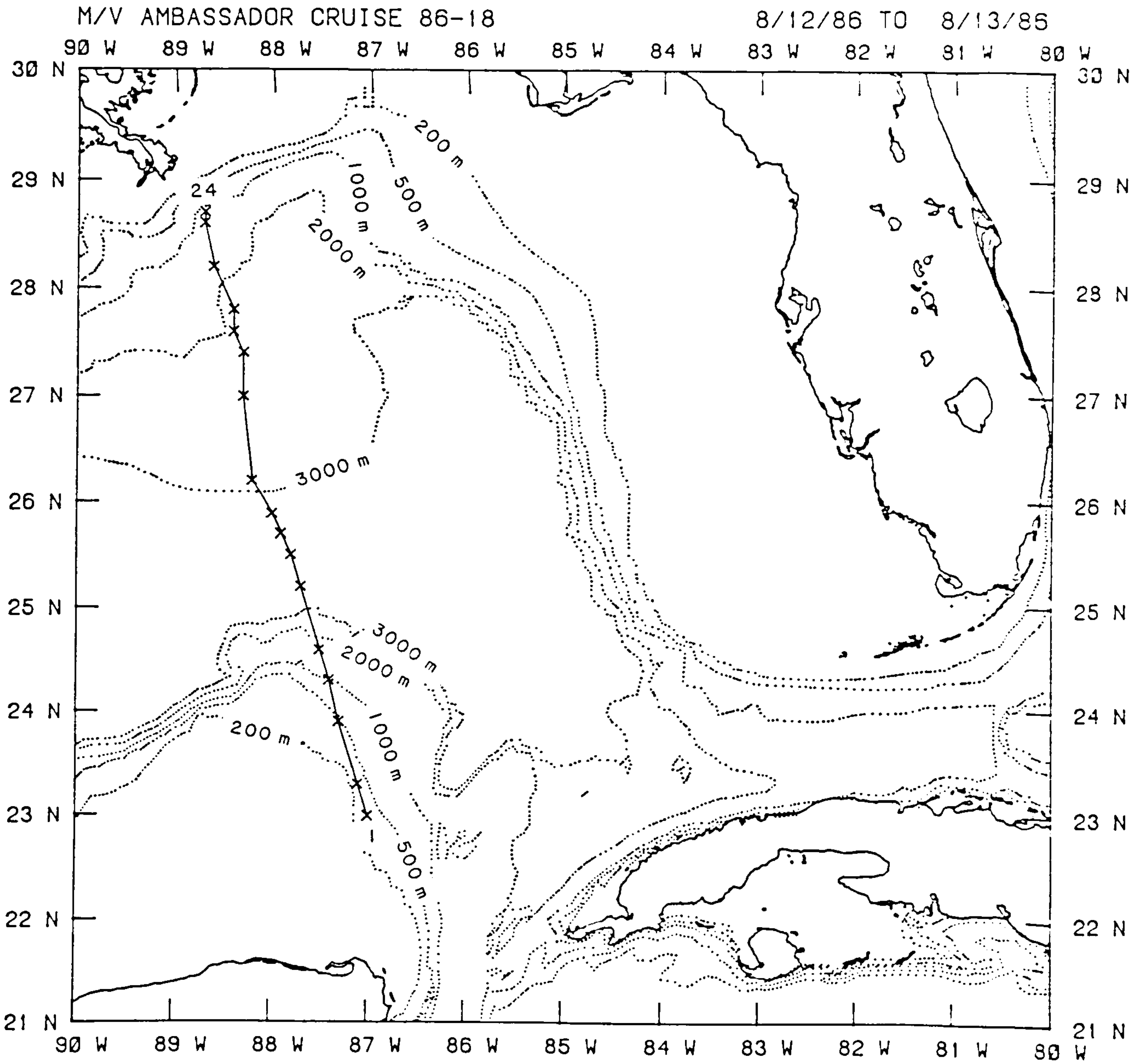
M/V AMBASSADOR CRUISE 86-17
7/19/86 TO 7/20/86
STATIONS 1 TO 21
TEMPERATURE DEG C
MIN = 5.76 MAX = 29.97



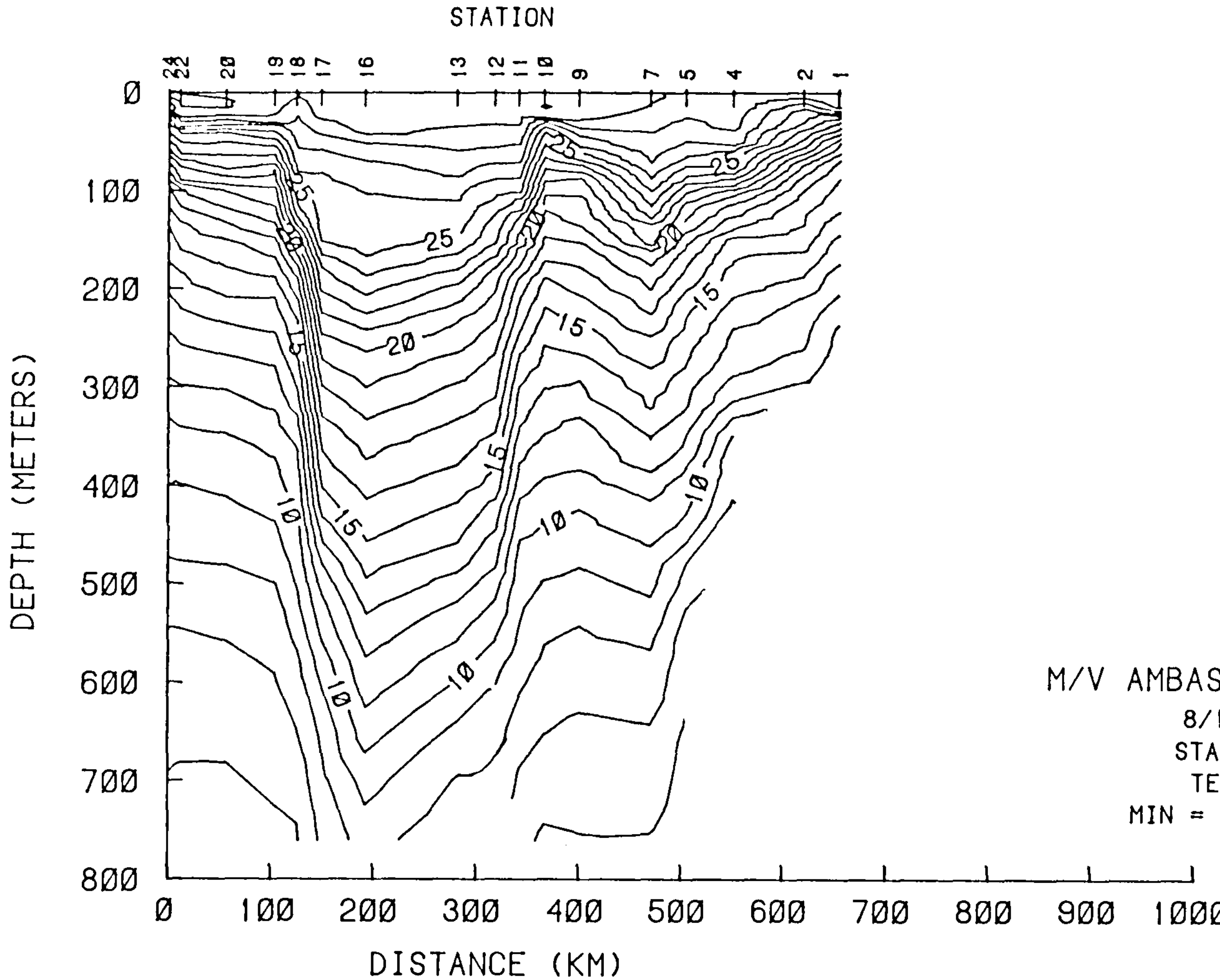
M/V AMBASSADOR CRUISE 86-17
7/19/86 TO 7/20/86
STATIONS 1 TO 21
TEMPERATURE DEG C
MIN = 13.50 MAX = 29.97



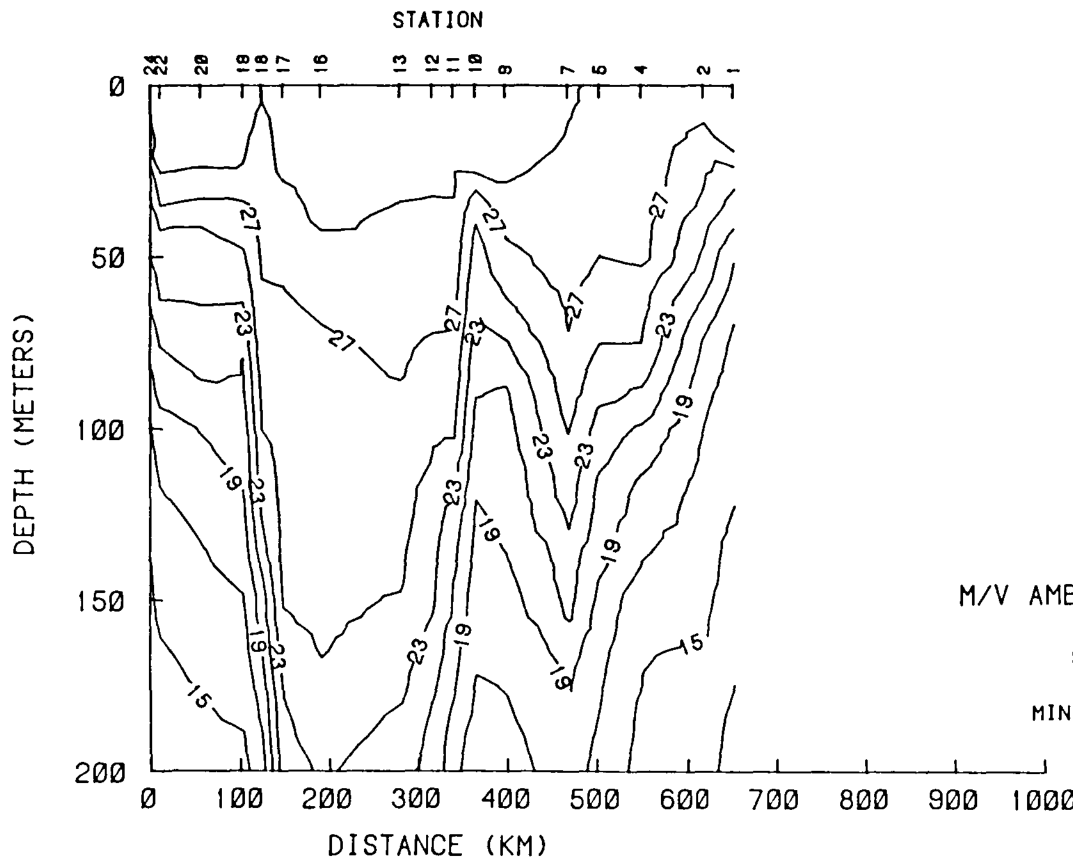
PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 86-17



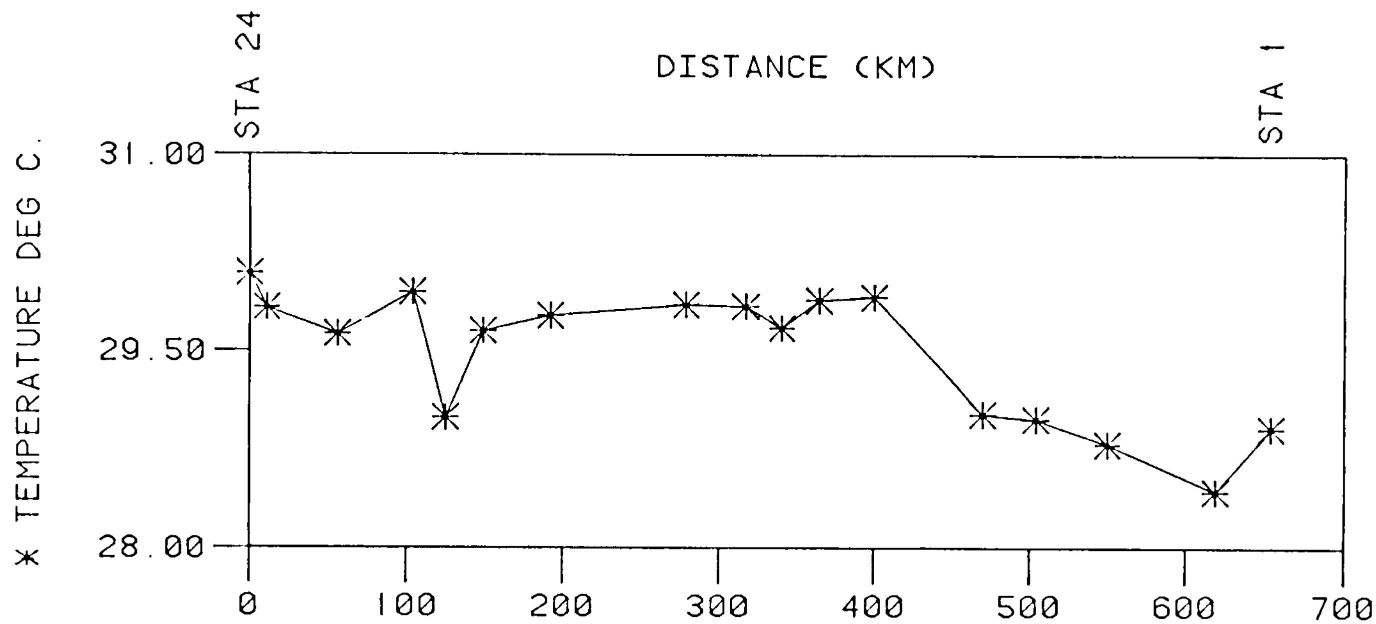
M/V AMBASSADOR CRUISE 86-18
8/12/86 TO 8/13/85
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
81 W
80 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
24
200 m
500 m
1000 m
2000 m
3000 m
3000 m
2000 m
1000 m
200 m
500 m



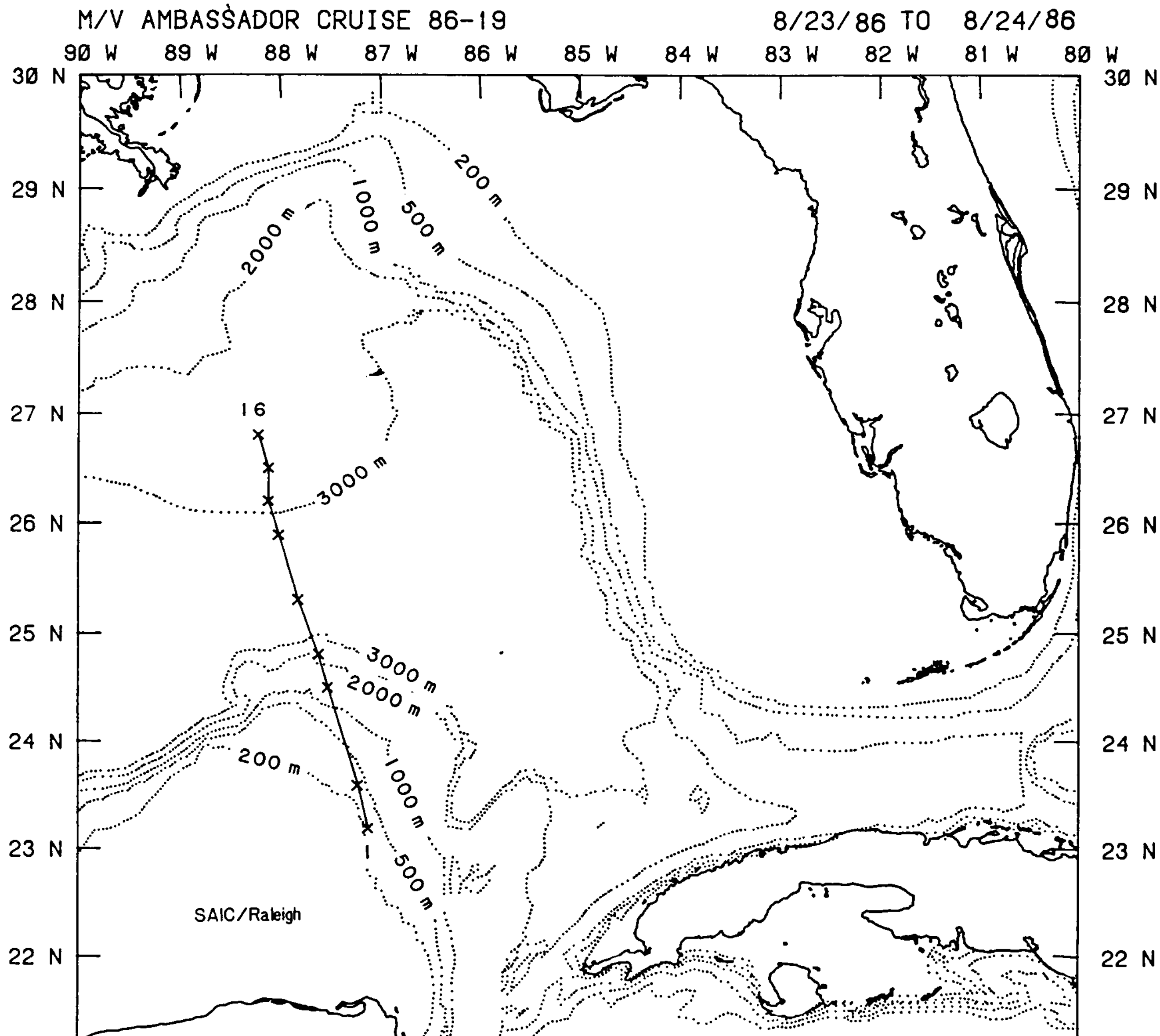
M/V AMBASSADOR CRUISE 86-18
8/12/86 TO 8/13/86
STATIONS 1 TO 24
TEMPERATURE DEG C
MIN = 5.45 MAX = 3Ø.19

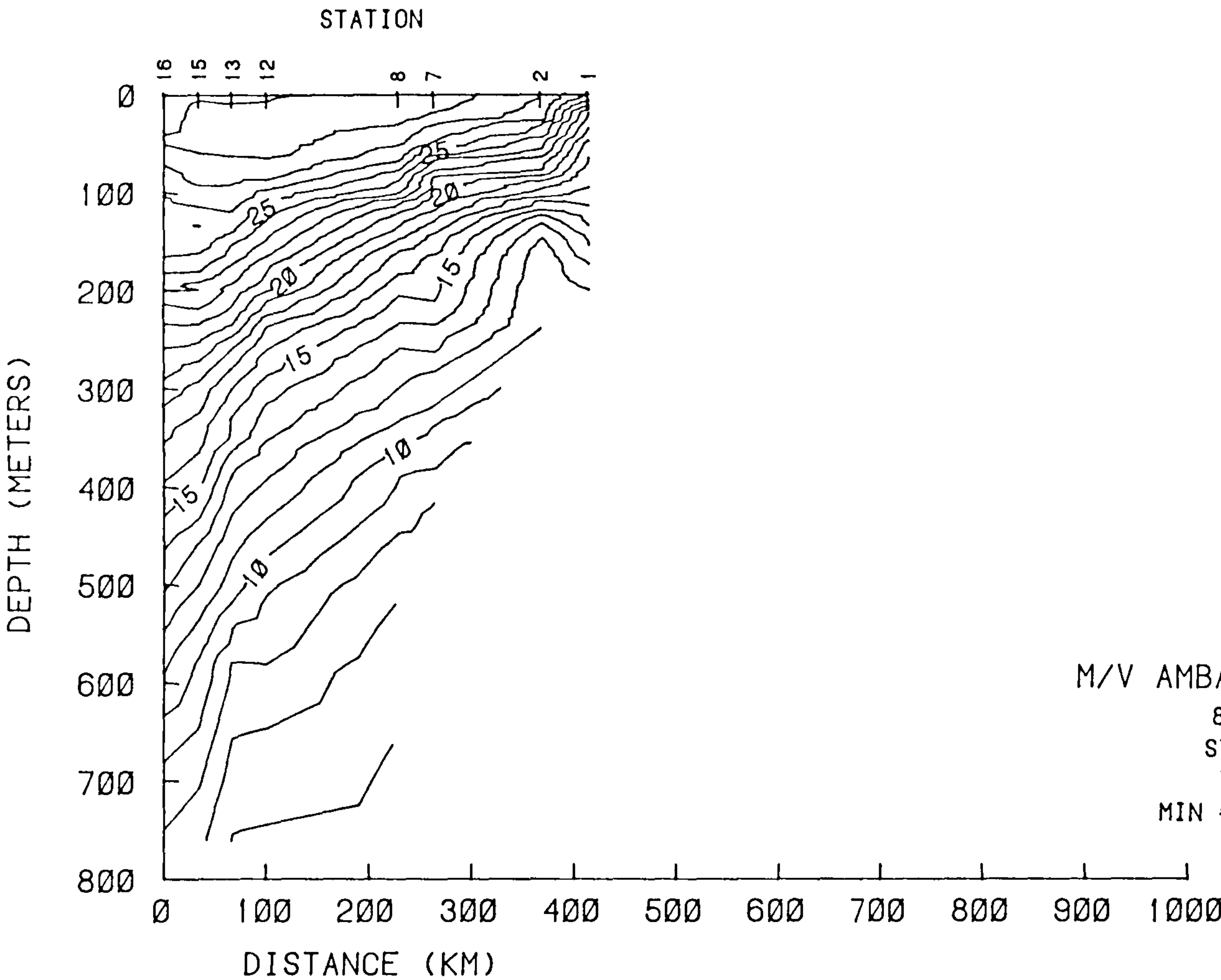


M/V AMBASSADOR CRUISE 86-18
8/12/86 TO 8/13/86
STATIONS 1 TO 24
TEMPERATURE DEG C
MIN = 12.25 MAX = 30.19

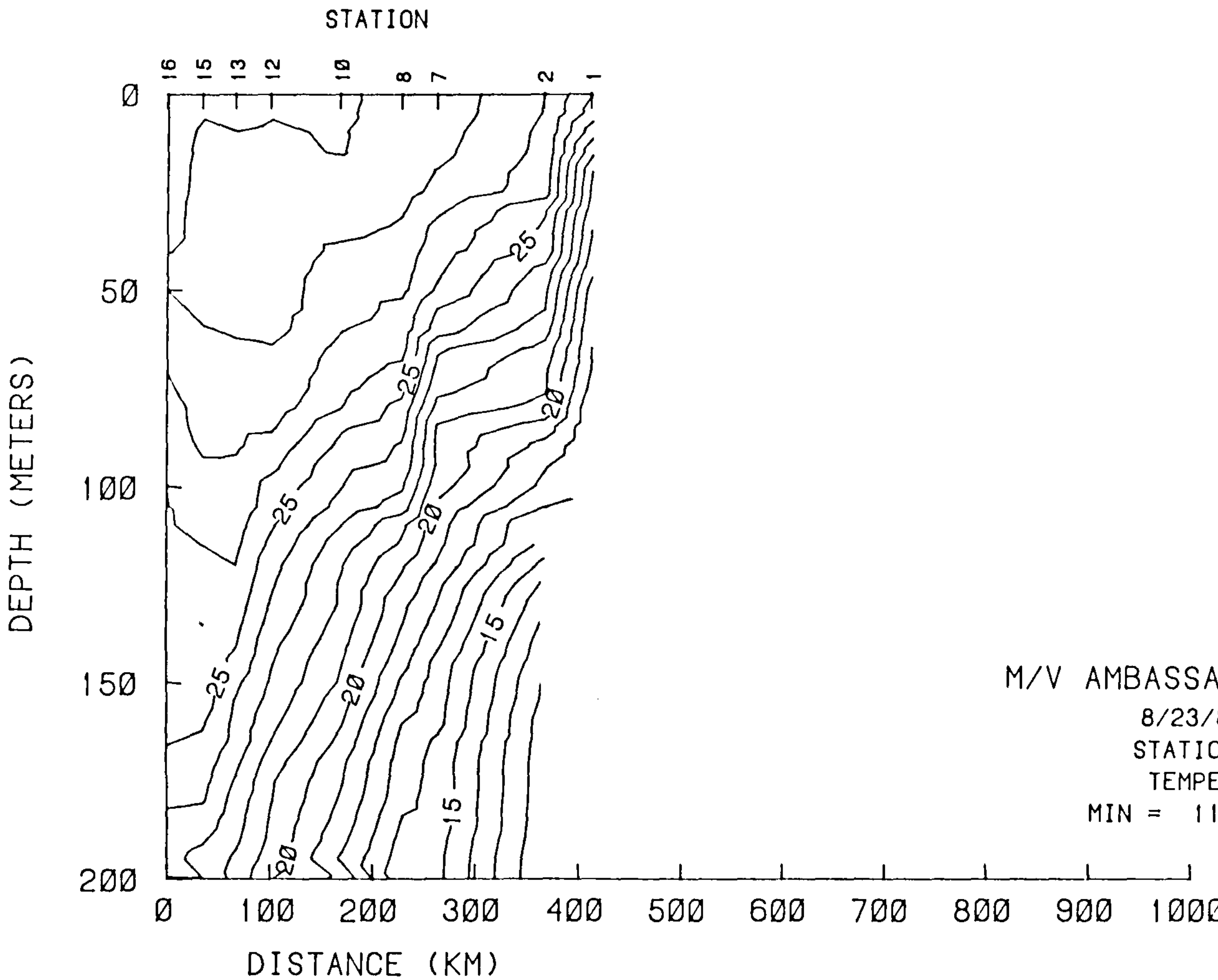


PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 86-18

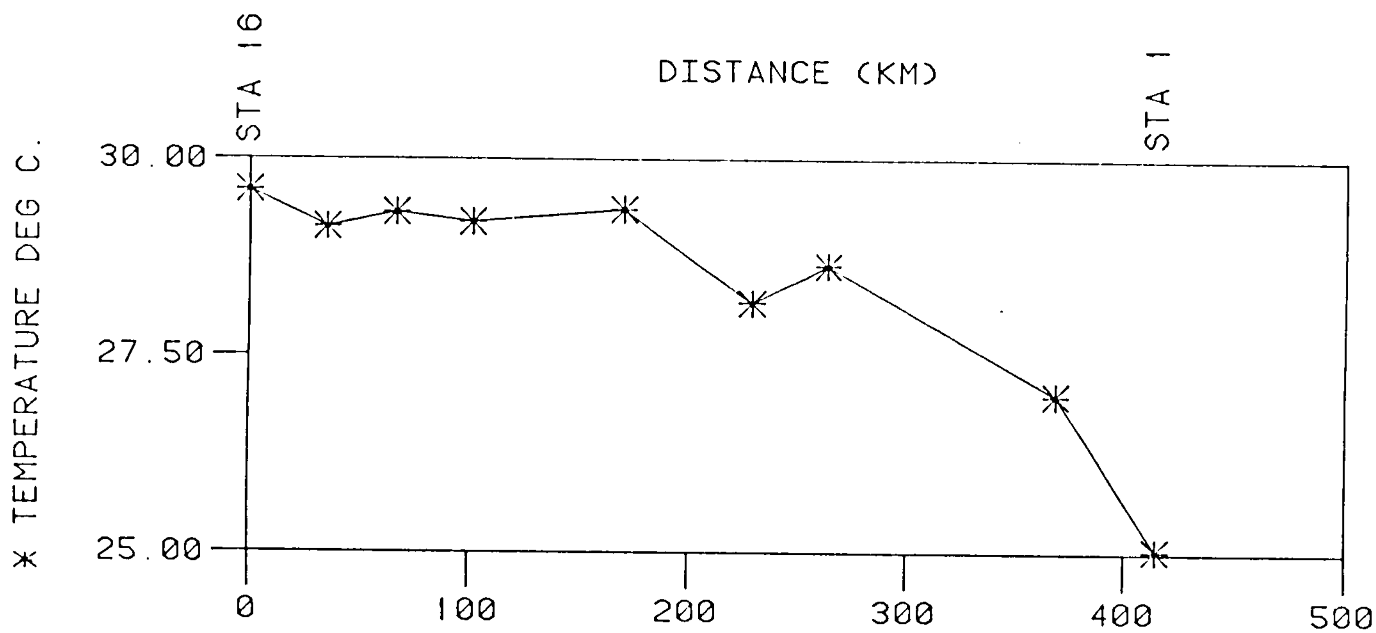

M/V AMBASSADOR CRUISE 86-19
8/23/86 TO 8/24/86
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
81 W
80 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
16
SAIC/Raleigh



M/V AMBASSADOR CRUISE 86-19
8/23/86 TO 8/24/86
STATIONS 1 TO 16
TEMPERATURE DEG C
MIN = 5.64 MAX = 29.6Ø

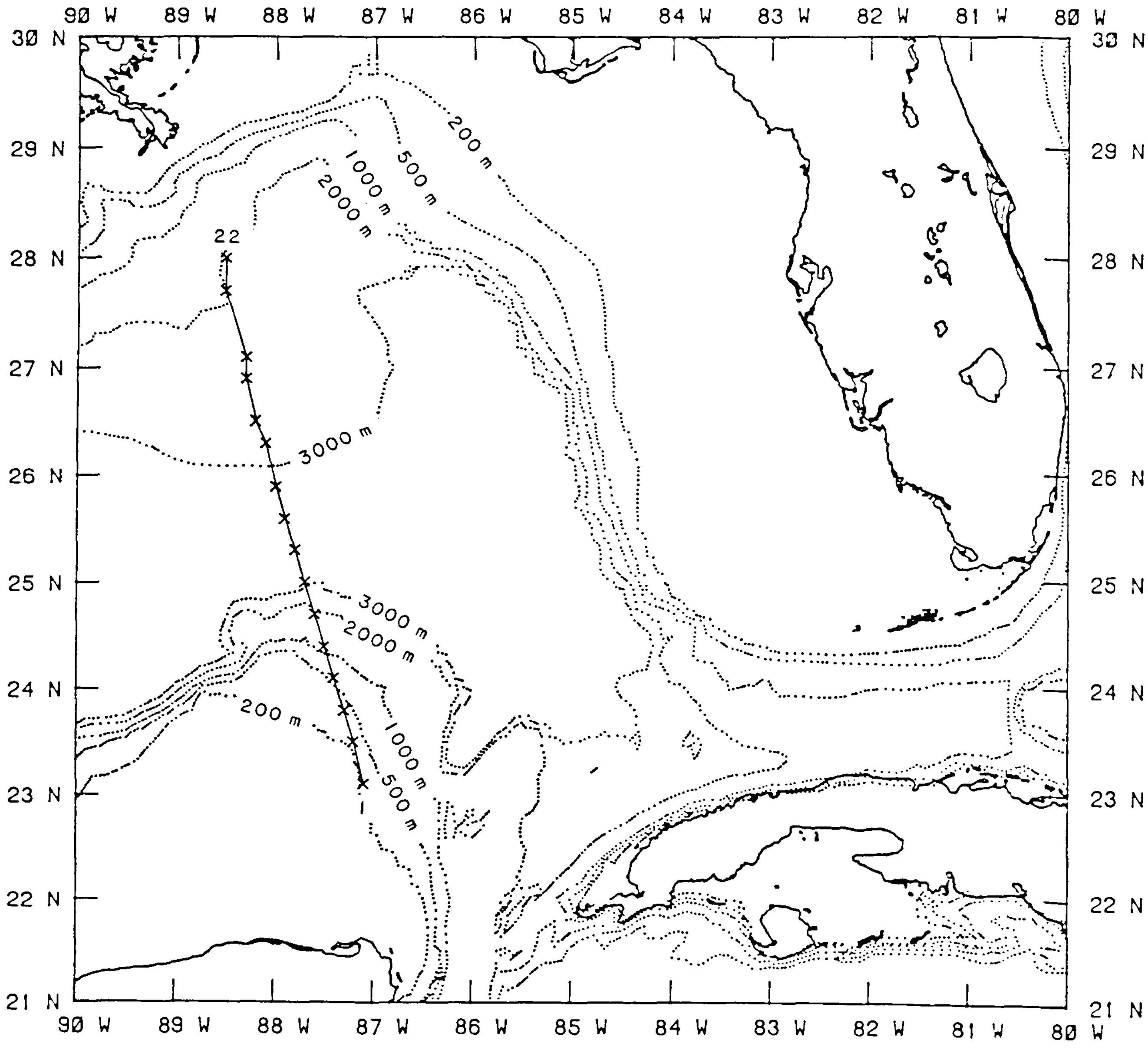


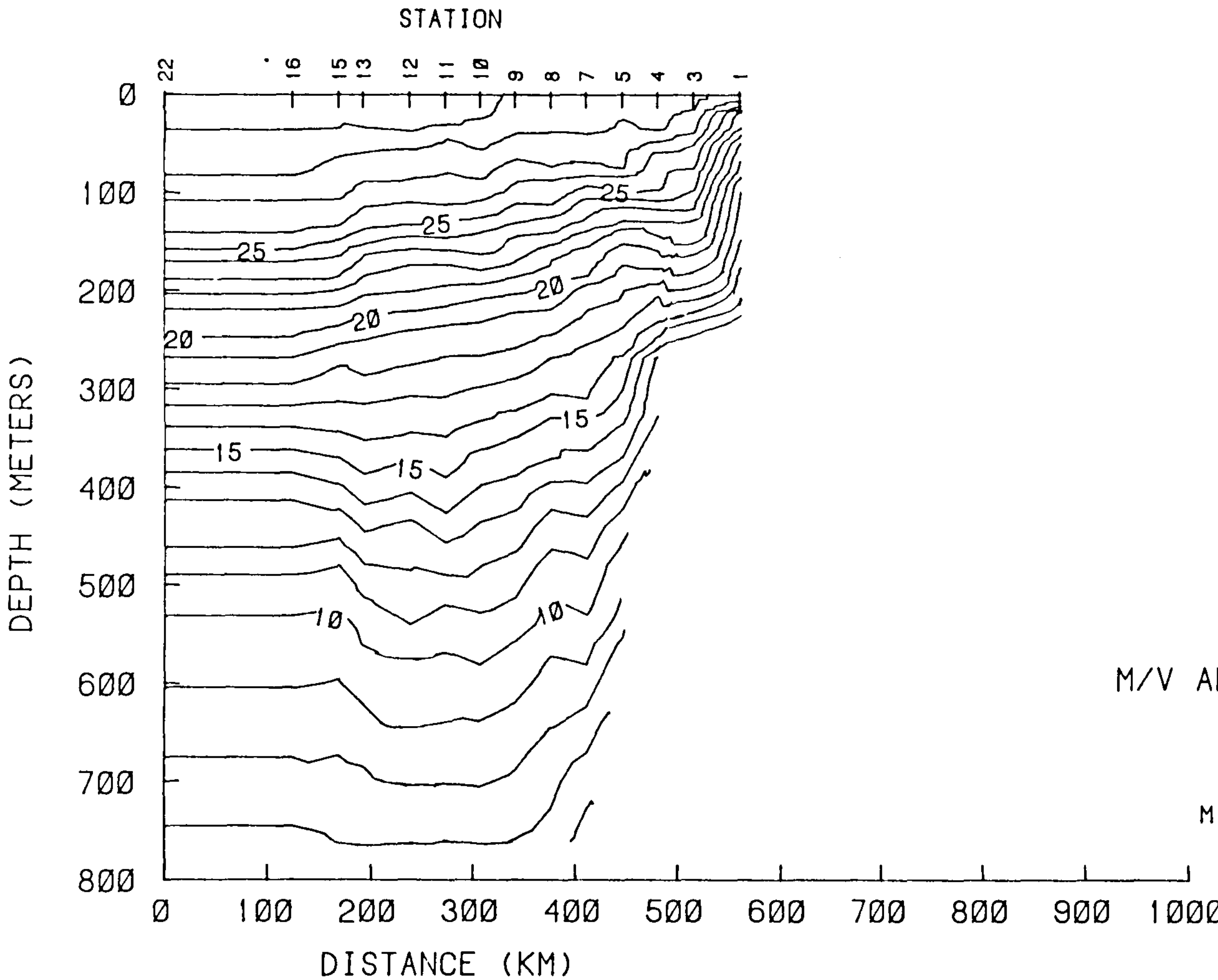
M/V AMBASSADOR CRUISE 86-19
8/23/86 TO 8/24/86
STATIONS 1 TO 16
TEMPERATURE DEG C
MIN = 11.01 MAX = 29.60



PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 86-19

M/V AMBASSADOR CRUISE 86-2Ø 9/ 4/86 TO 9/ 5/86





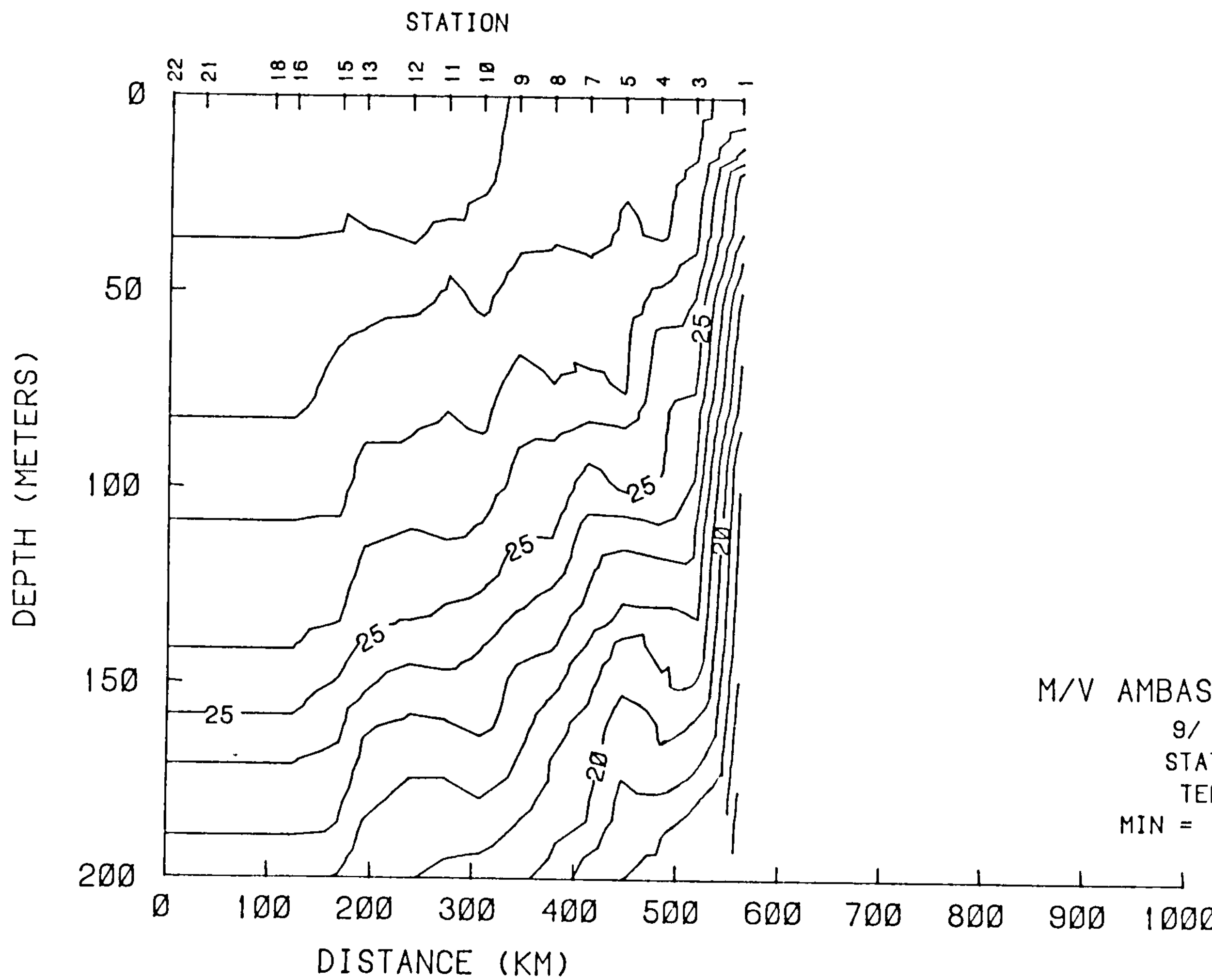
M/V AMBASSADOR CRUISE 86-2Ø

9/ 4/86 TO 9/ 5/86

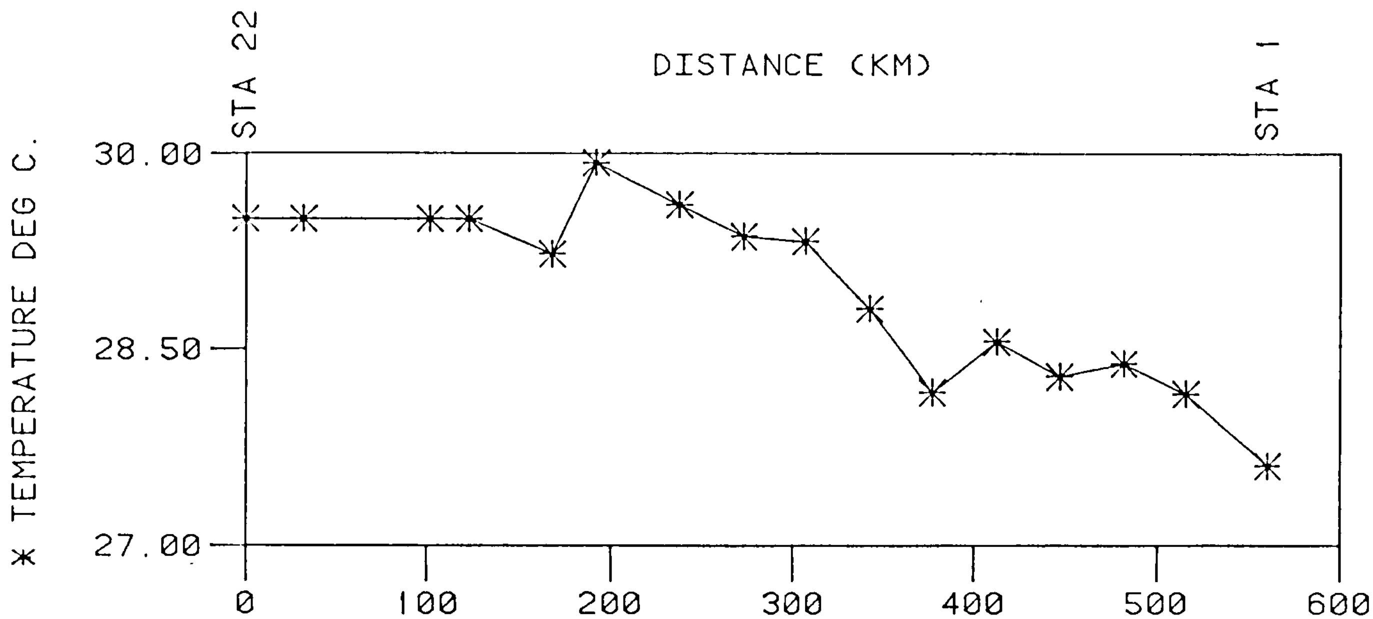
STATIONS 1 TO 22

TEMPERATURE DEG C

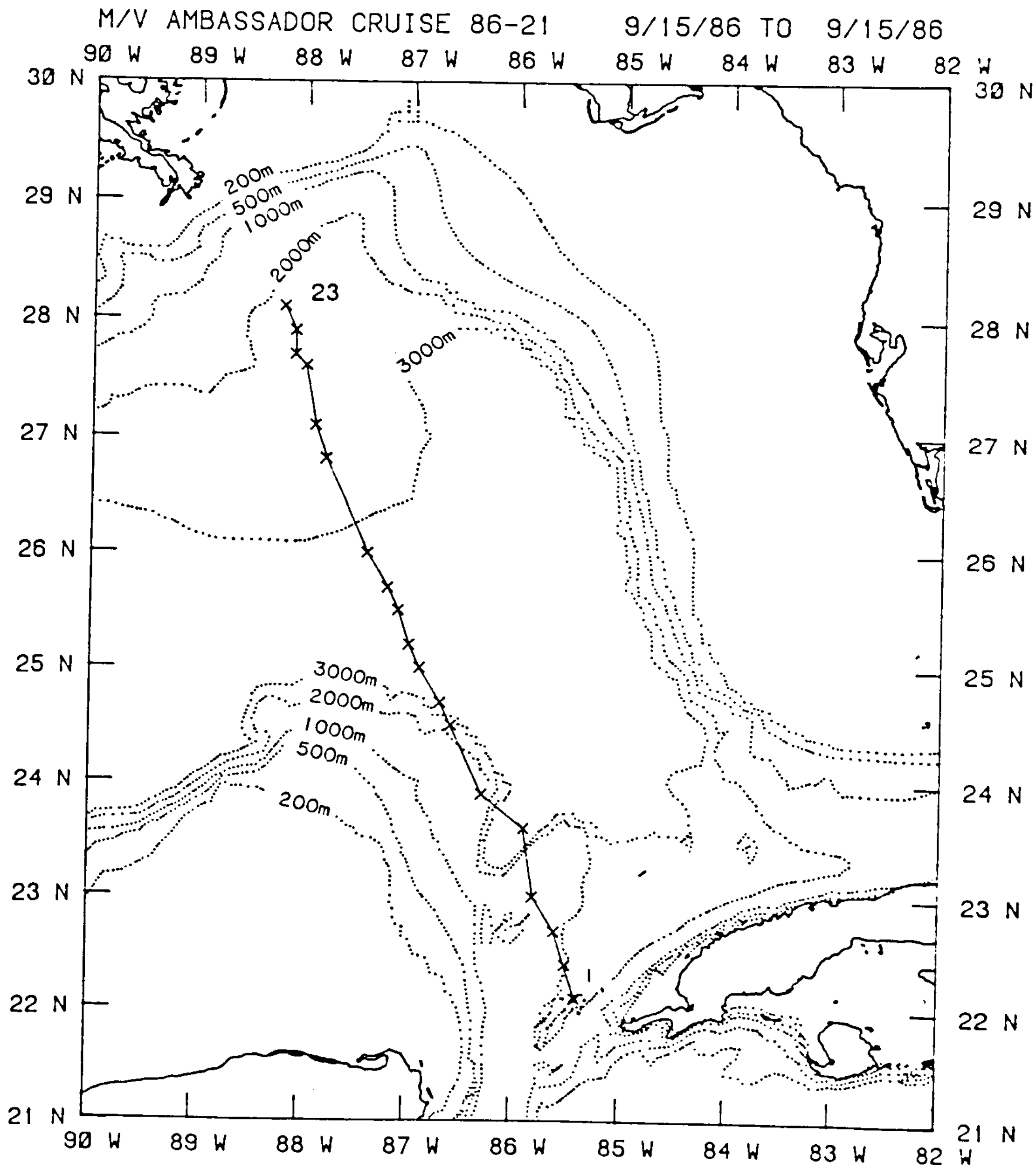
MIN = 5.58 MAX = 29.92



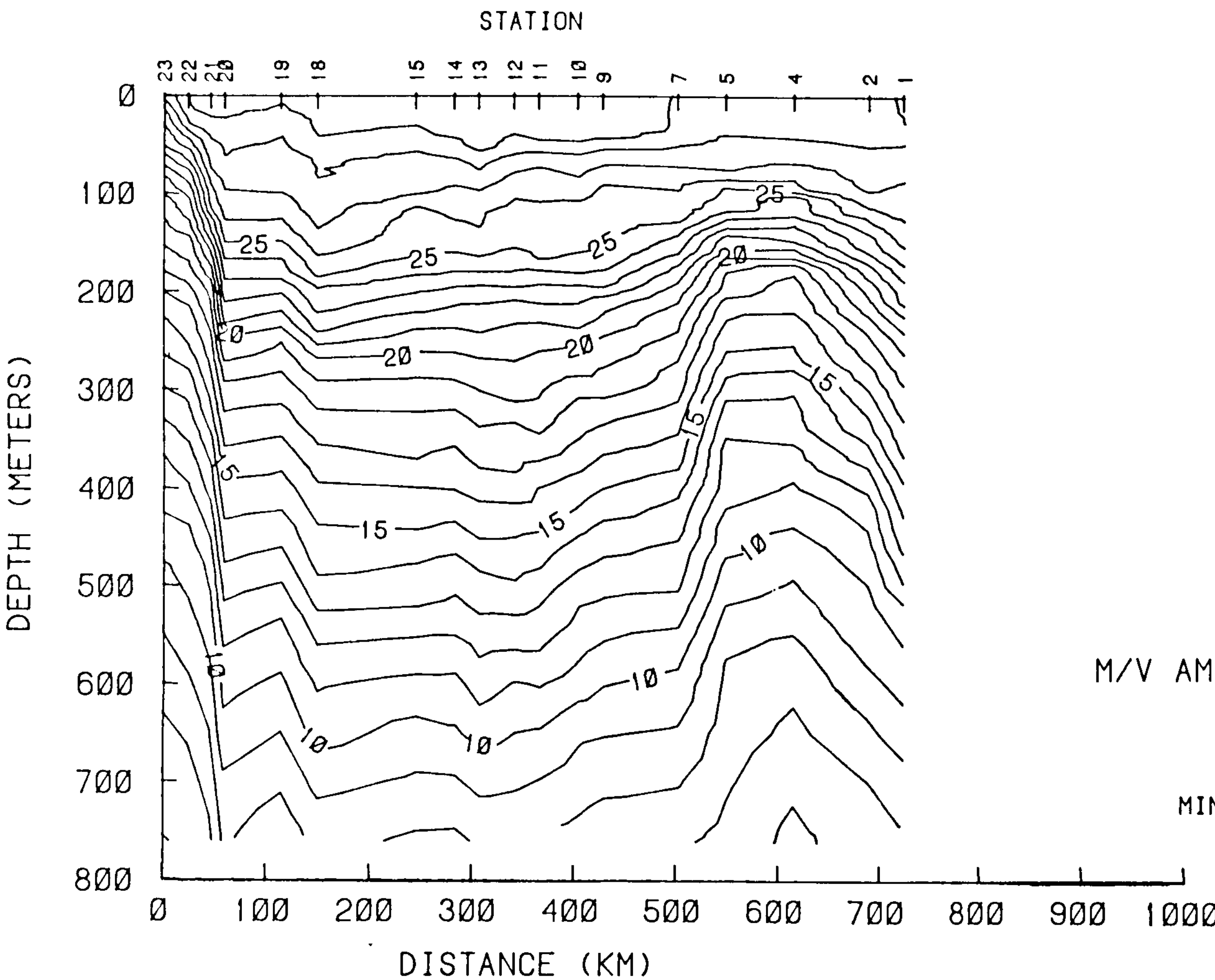
M/V AMBASSADOR CRUISE 86-20
9/ 4/86 TO 9/ 5/86
STATIONS 1 TO 22
TEMPERATURE DEG C
MIN = 15.29 MAX = 29.92



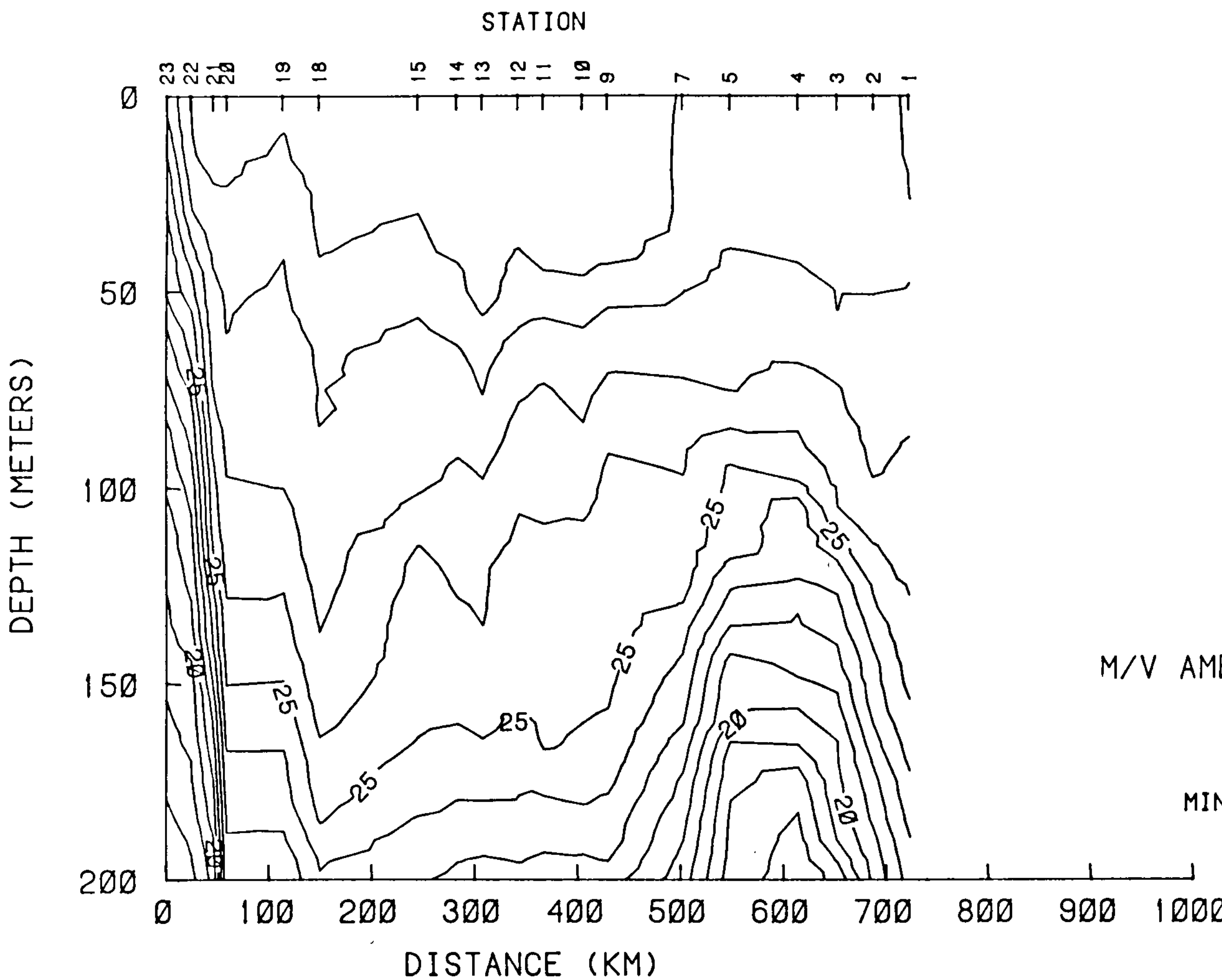
PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 86-20



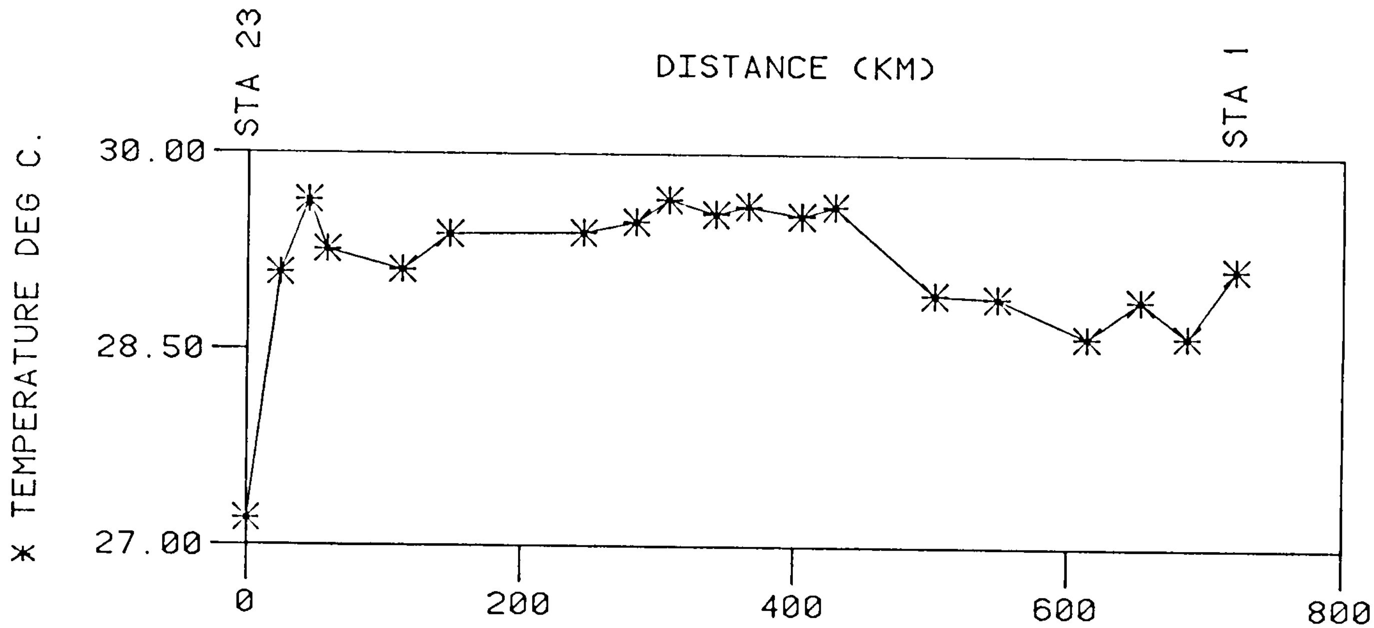
M/V AMBASSADOR CRUISE 86-21 9/15/86 TO 9/15/86
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200m
500m
1000m
2000m
3000m
23
1



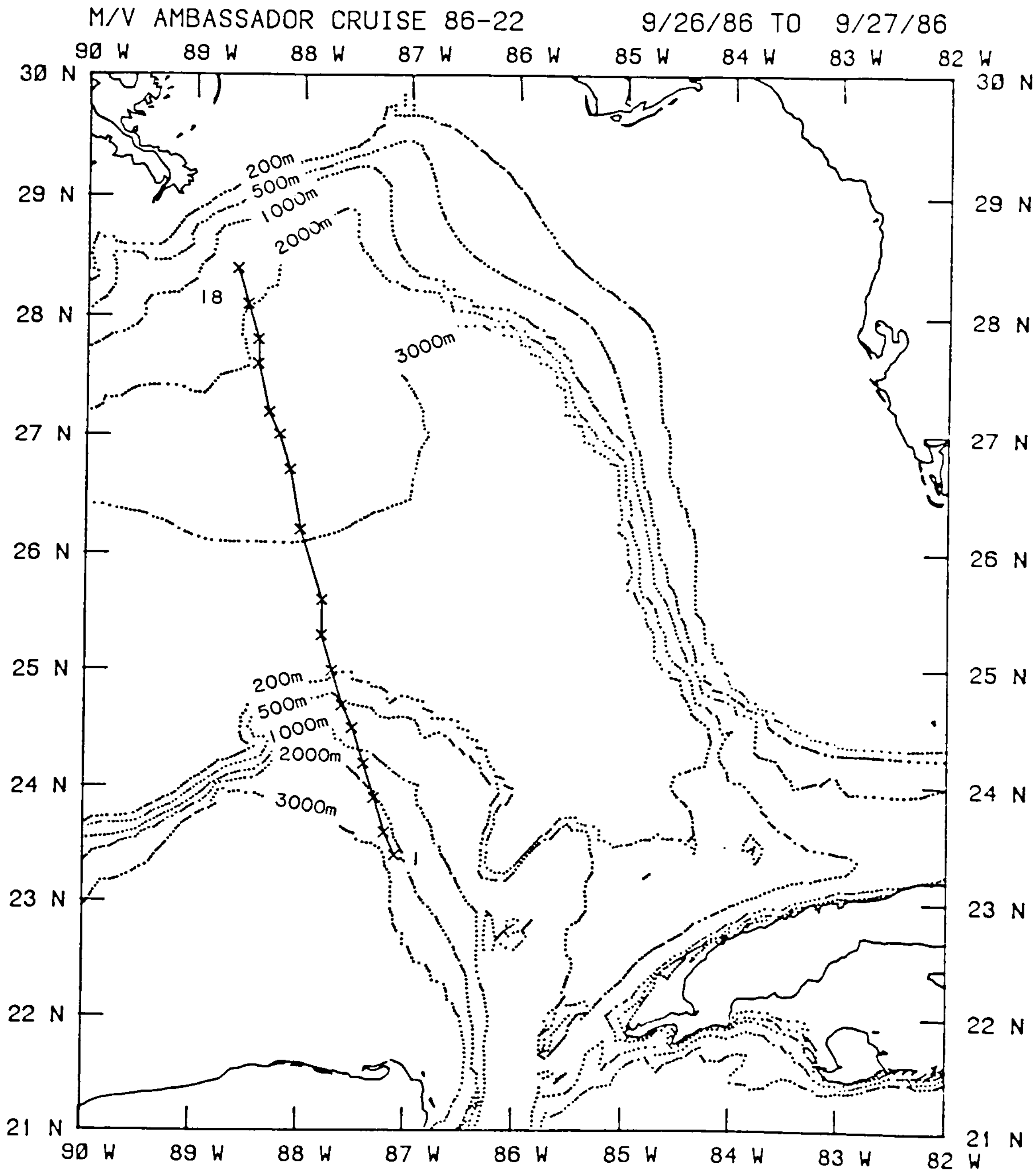
M/V AMBASSADOR CRUISE 86-21
9/15/86 TO 9/15/86
STATIONS 1 TO 23
TEMPERATURE DEG C
MIN = 5.75 MAX = 29.65

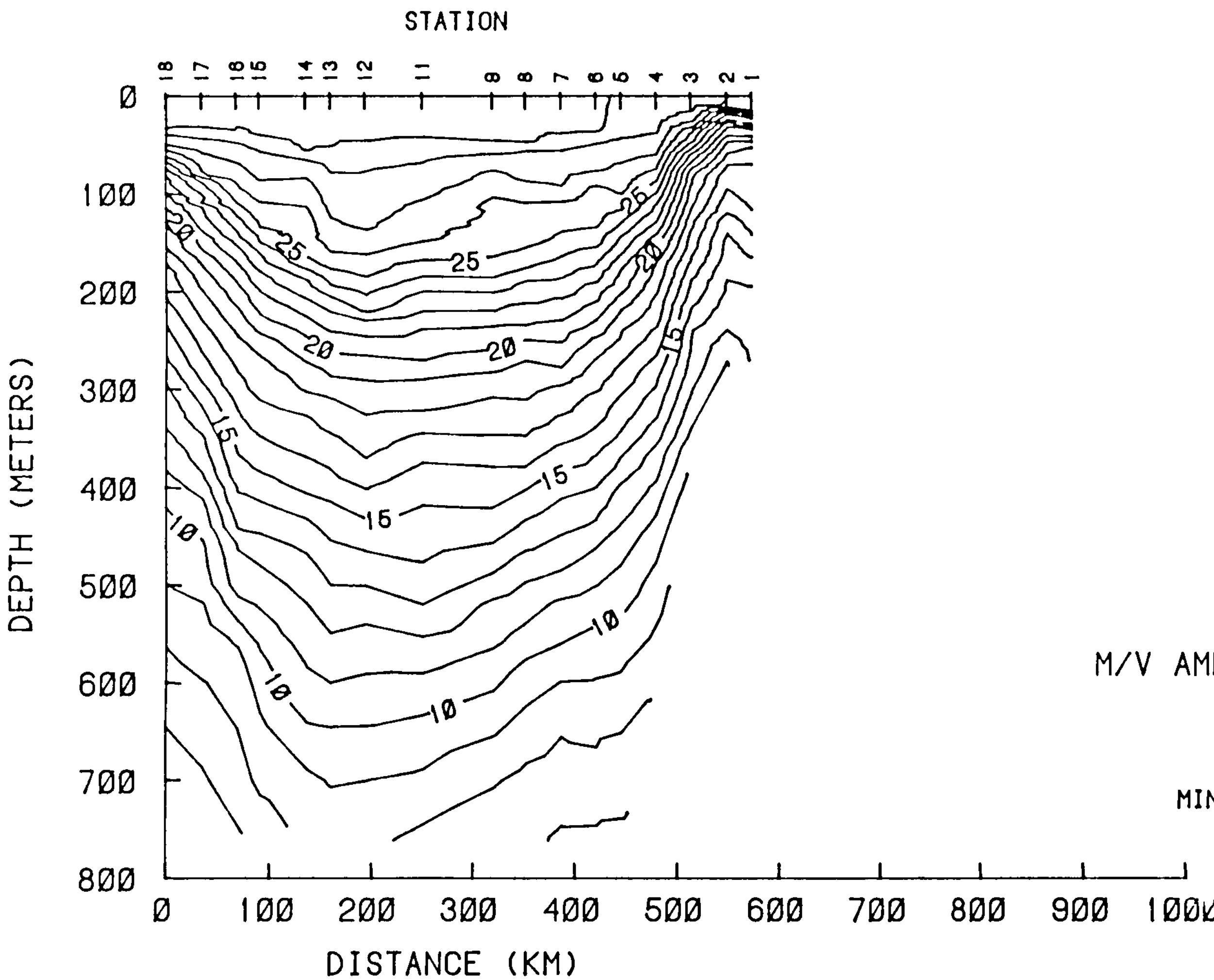


M/V AMBASSADOR CRUISE 86-21
9/15/86 TO 9/15/86
STATIONS 1 TO 23
TEMPERATURE DEG C
MIN = 16.Ø5 MAX = 29.65

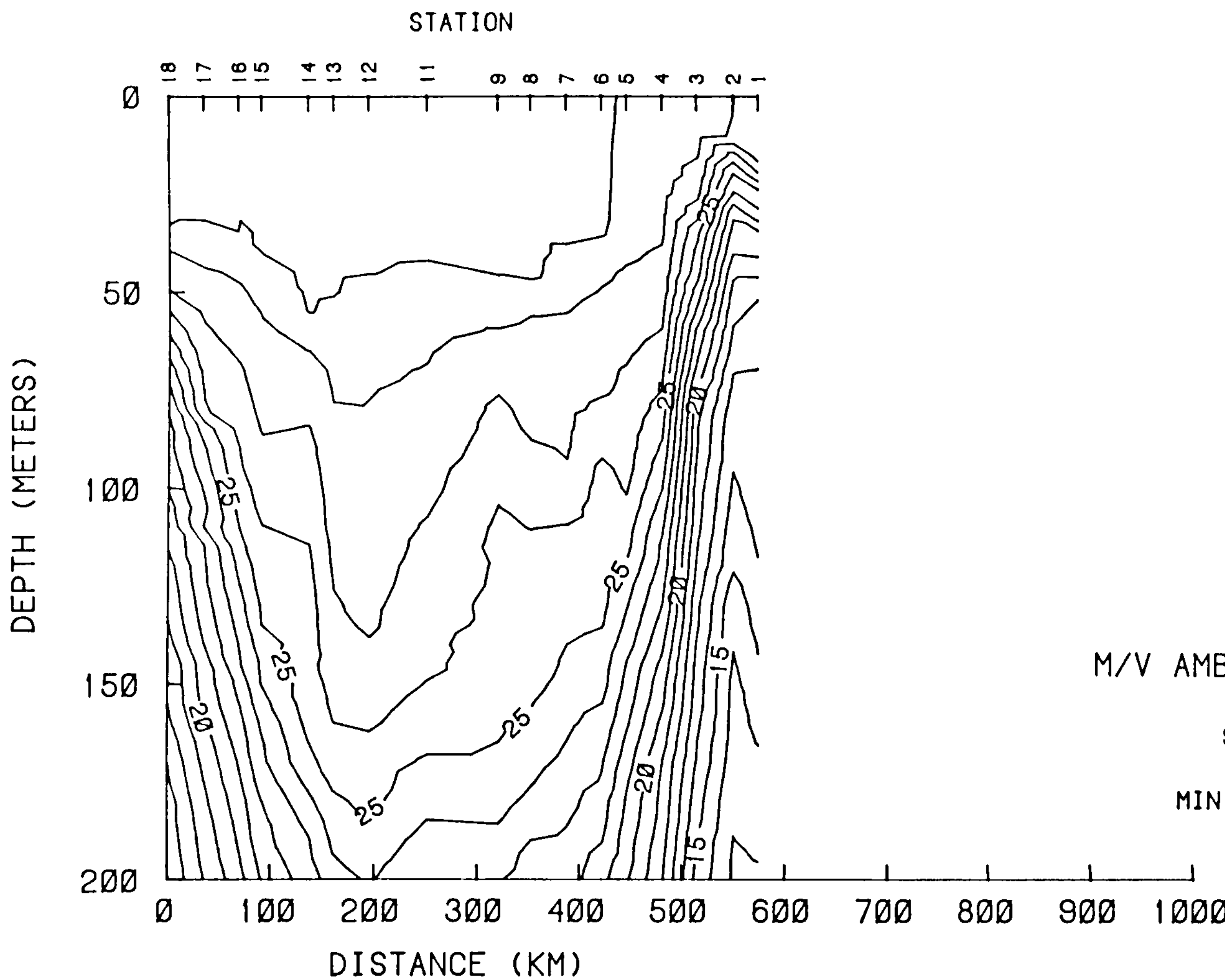


PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 86-21

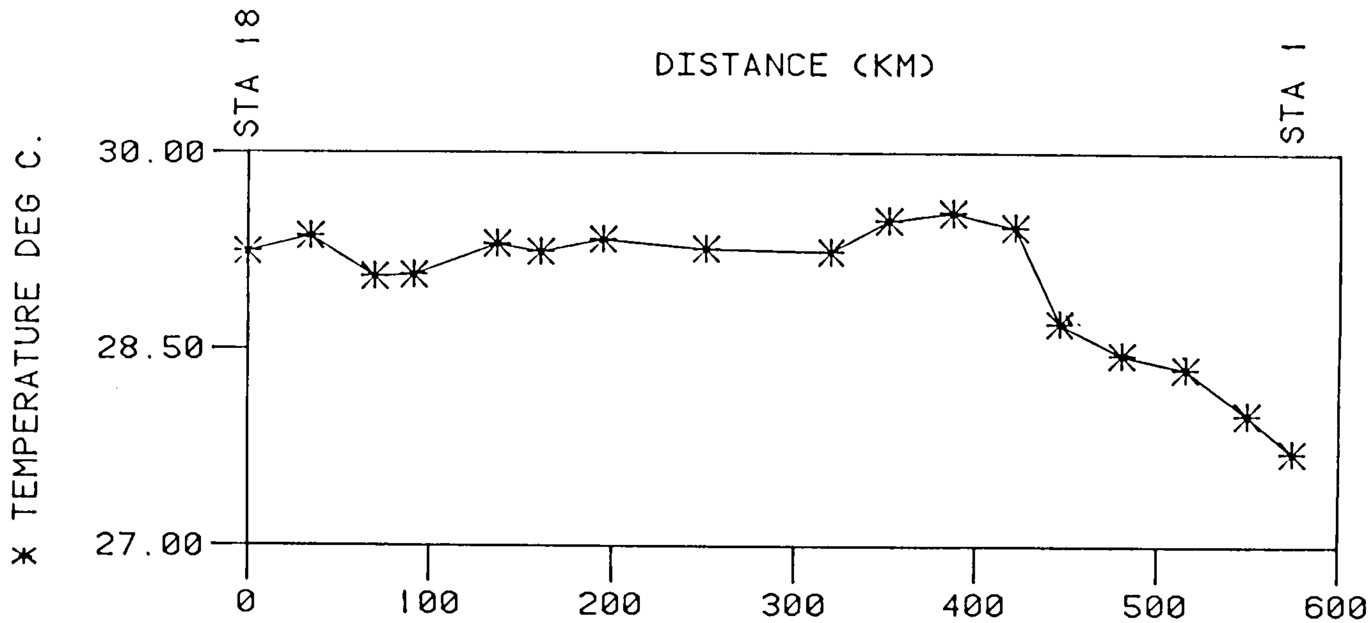

M/V AMBASSADOR CRUISE 86-22
9/26/86 TO 9/27/86
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200m
500m
1000m
2000m
3000m
18
1



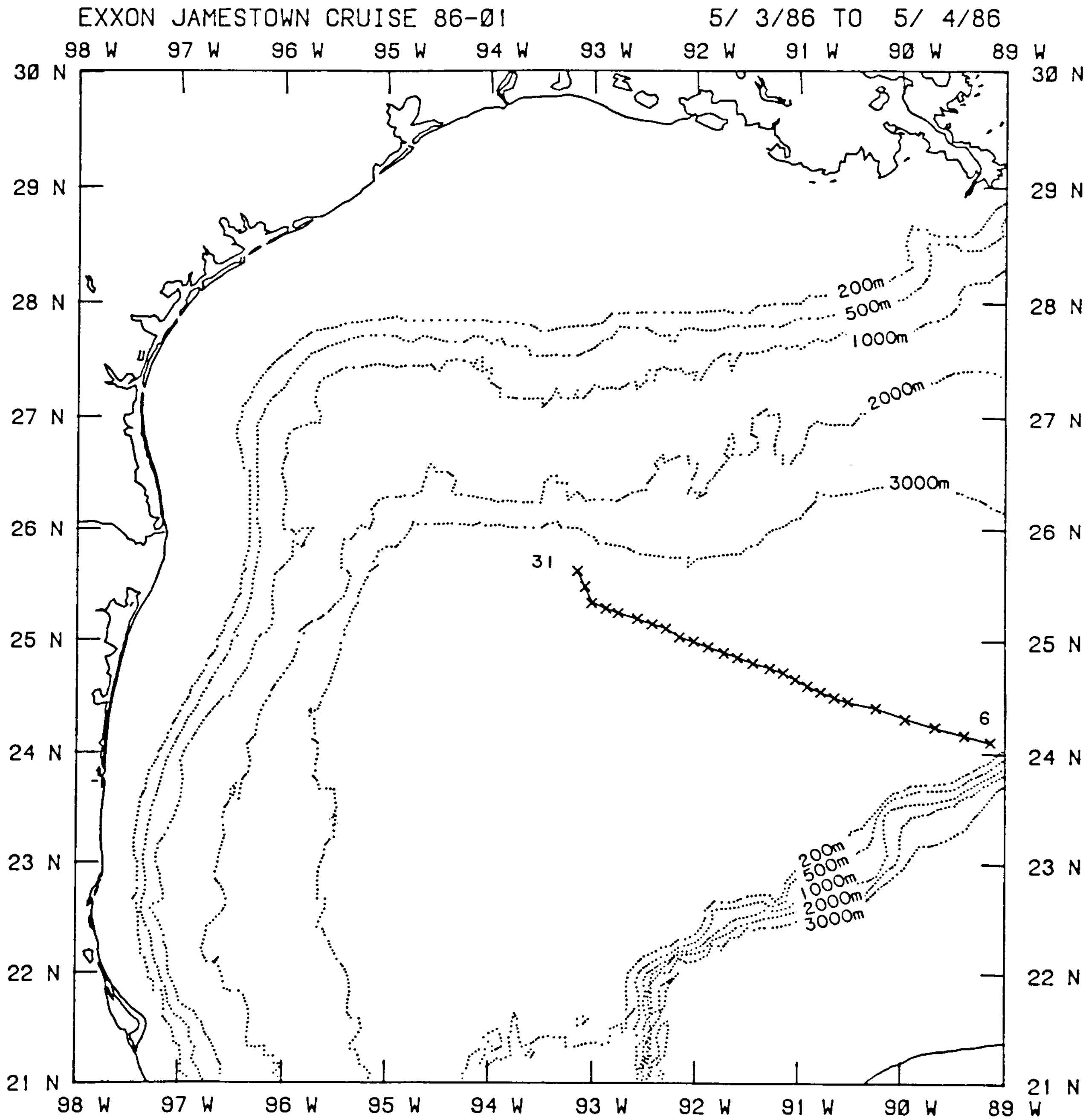
M/V AMBASSADOR CRUISE 86-22
9/26/86 TO 9/27/86
STATIONS 1 TO 18
TEMPERATURE DEG C
MIN = 6.09 MAX = 29.54



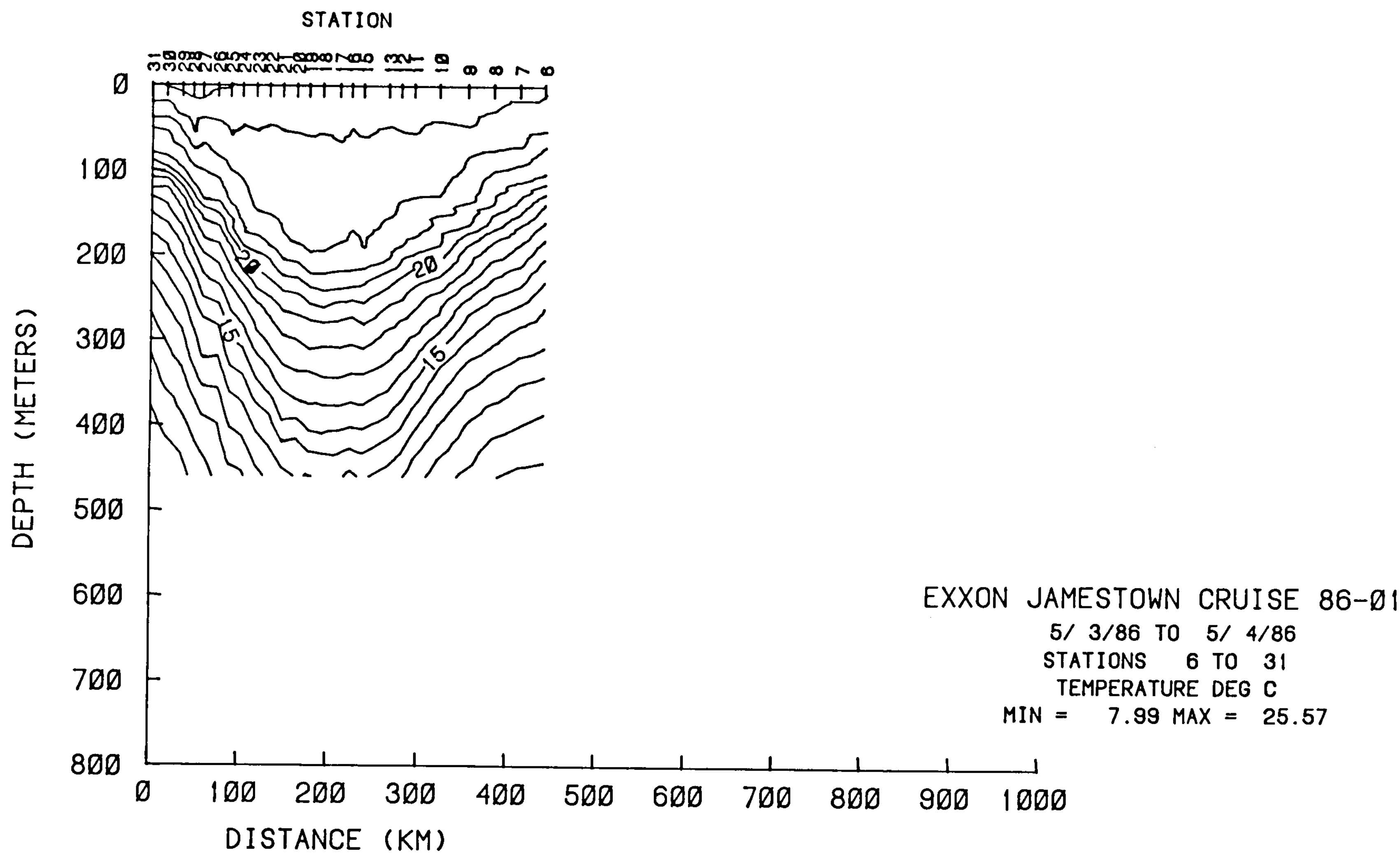
M/V AMBASSADOR CRUISE 86-22
9/26/86 TO 9/27/86
STATIONS 1 TO 18
TEMPERATURE DEG C
MIN = 12.79 MAX = 29.54



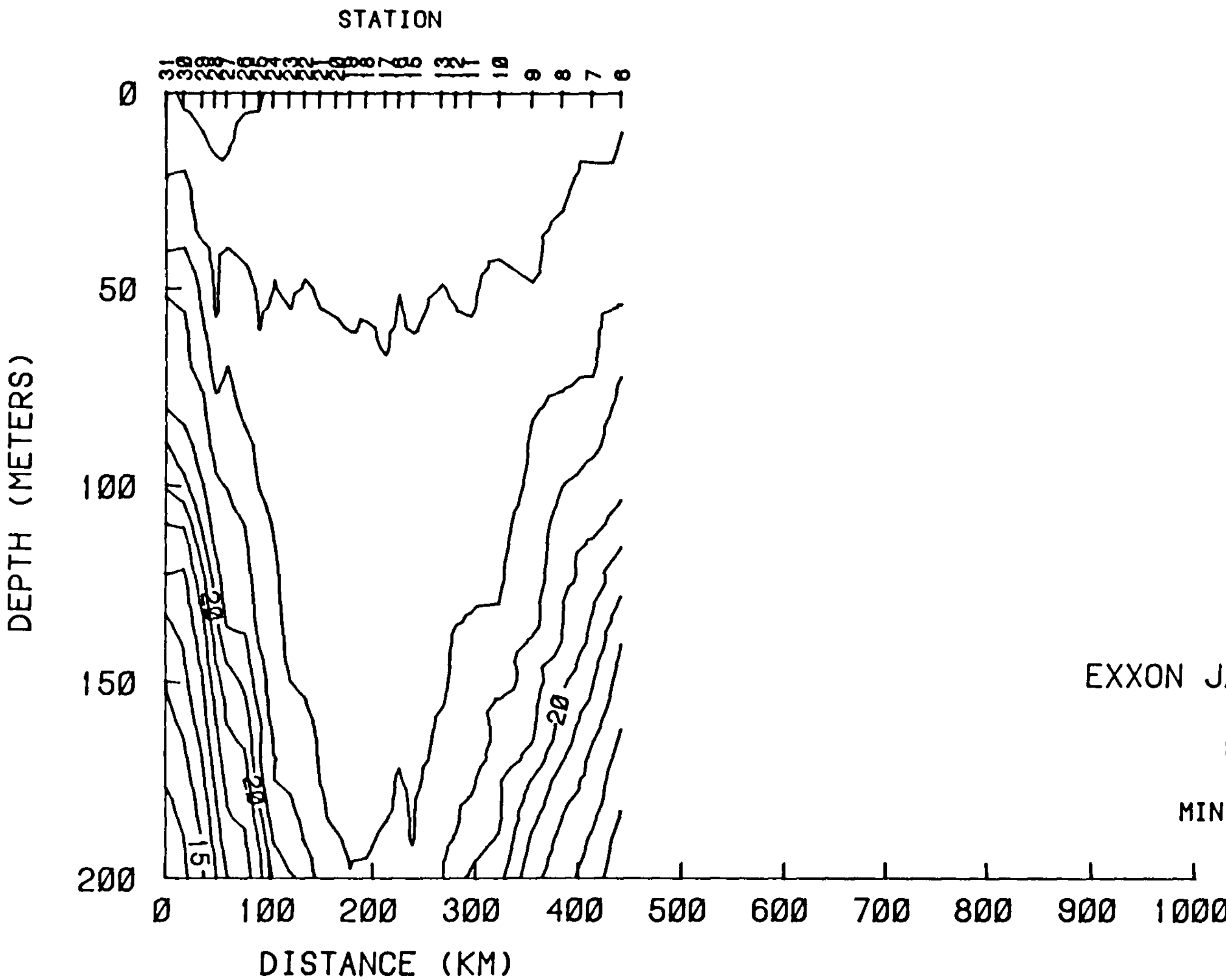
PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 86-22



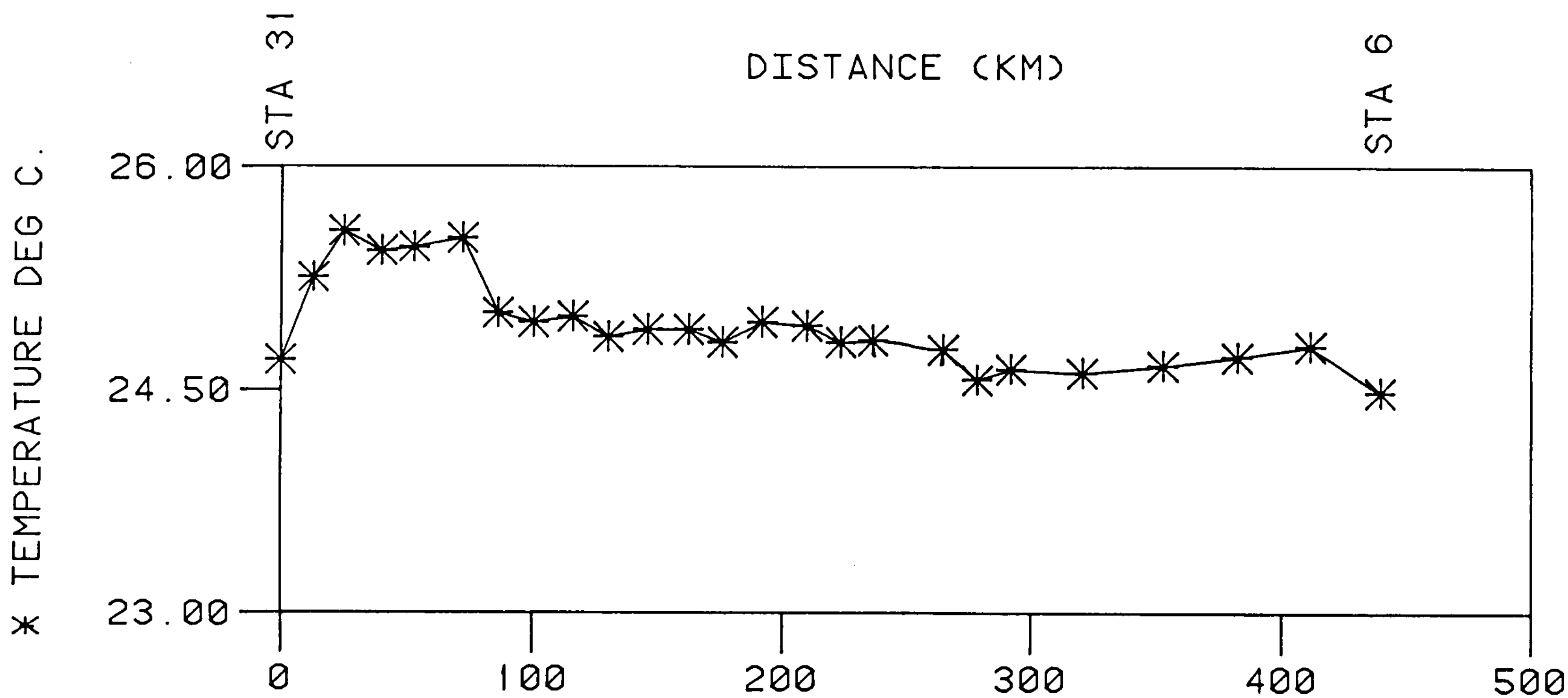
EXXON JAMESTOWN CRUISE 86-01
5/ 3/86 TO 5/ 4/86
98 W
97 W
96 W
95 W
94 W
93 W
92 W
91 W
90 W
89 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200m
500m
1000m
2000m
3000m
31
6



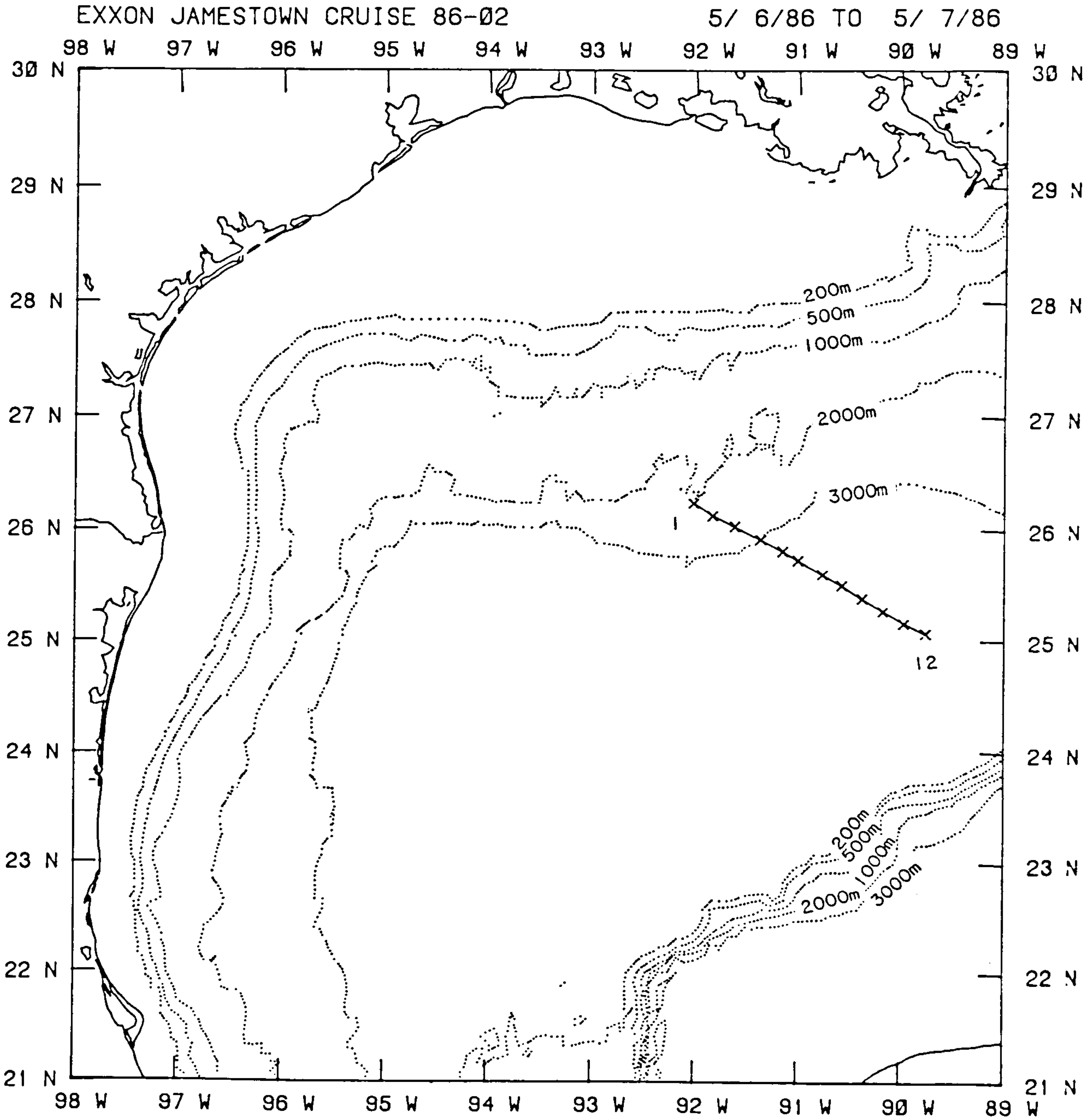
STATION
DEPTH (METERS)
DISTANCE (KM)
Ø
100
200
300
400
500
600
700
800
0
100
200
300
400
500
600
700
800
900
1000
20
20
15
15
EXXON JAMESTOWN CRUISE 86-Ø1
5/ 3/86 TO 5/ 4/86
STATIONS 6 TO 31
TEMPERATURE DEG C
MIN = 7.99 MAX = 25.57

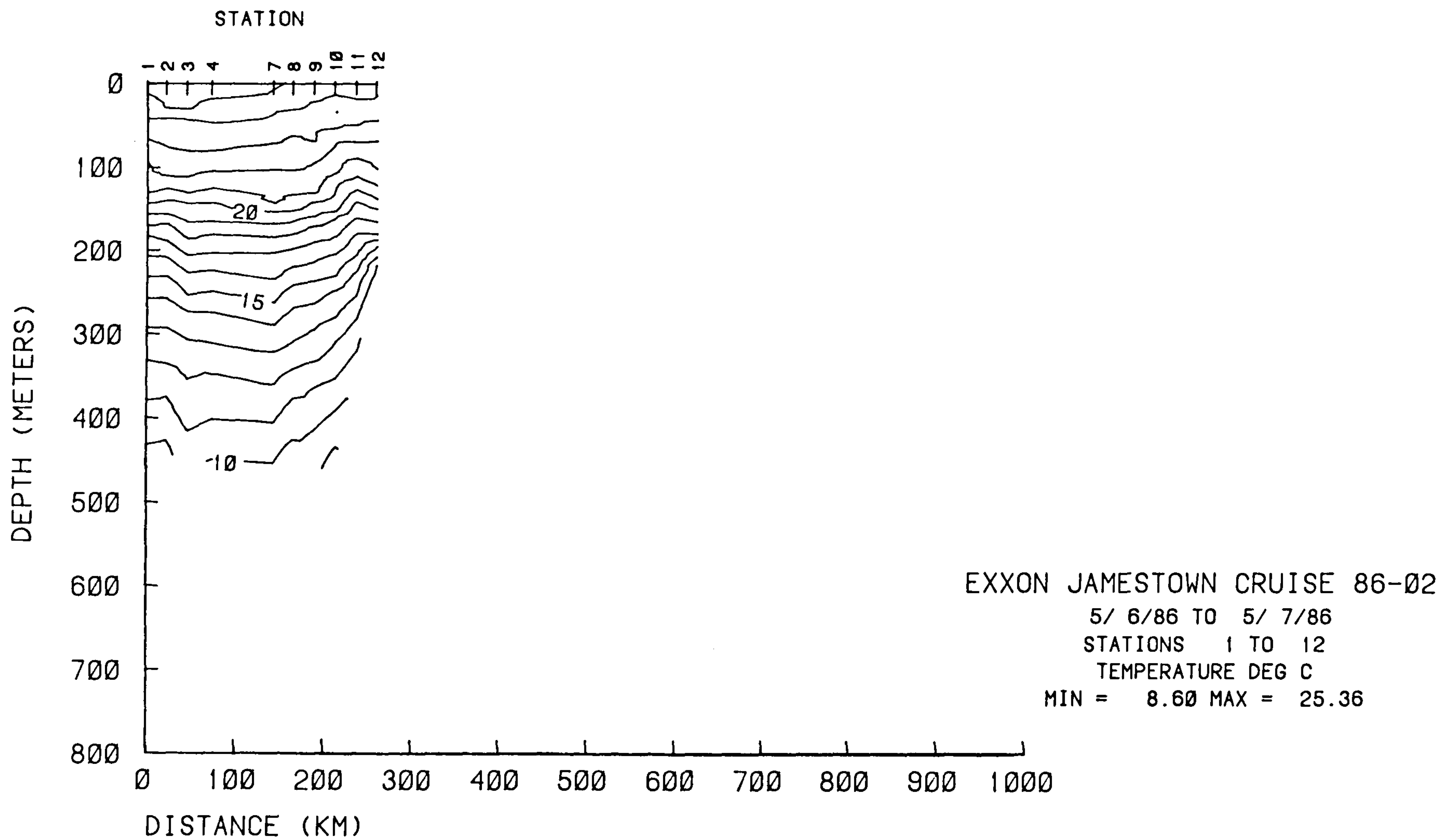


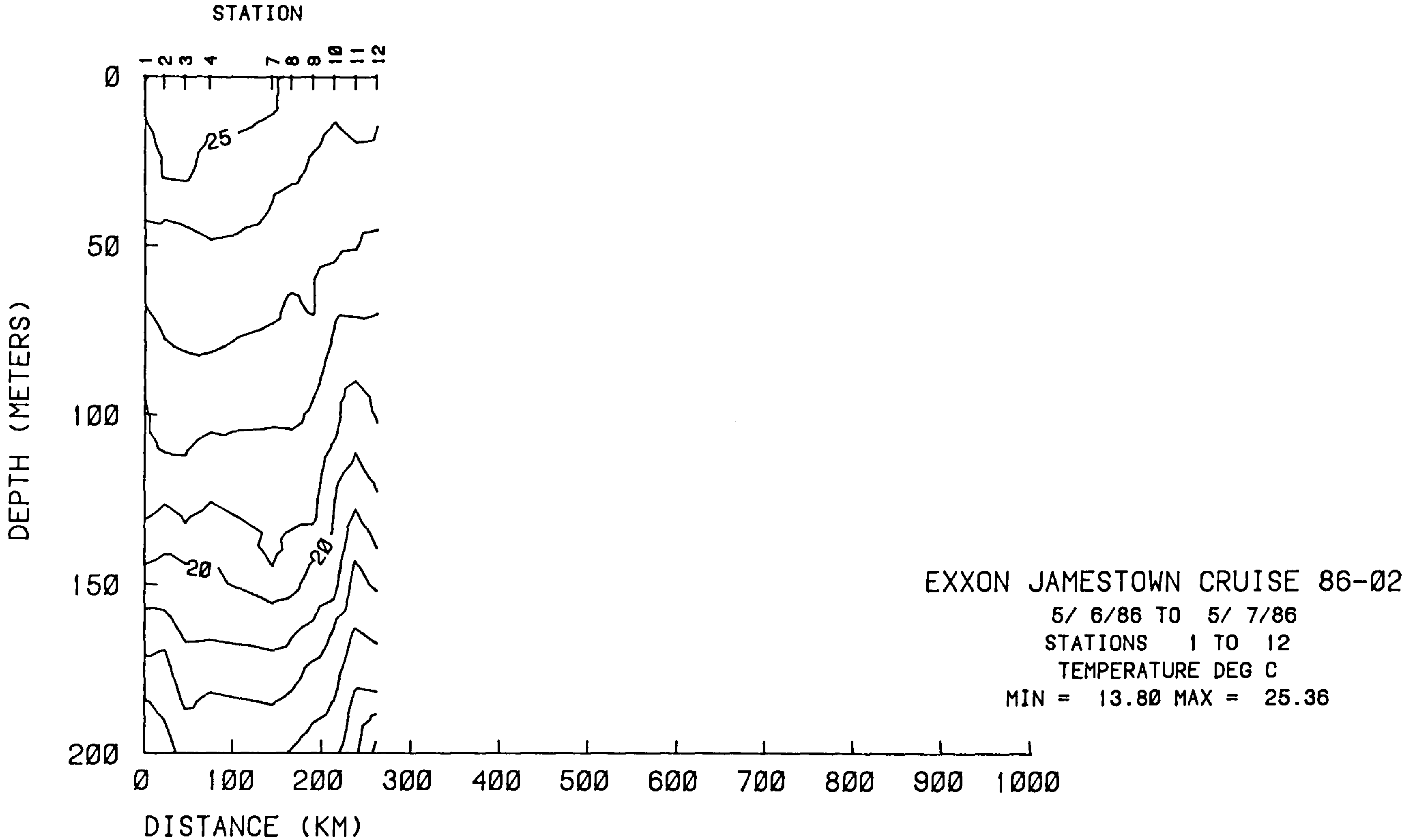
EXXON JAMESTOWN CRUISE 86-01
5/ 3/86 TO 5/ 4/86
STATIONS 6 TO 31
TEMPERATURE DEG C
MIN = 13.06 MAX = 25.57

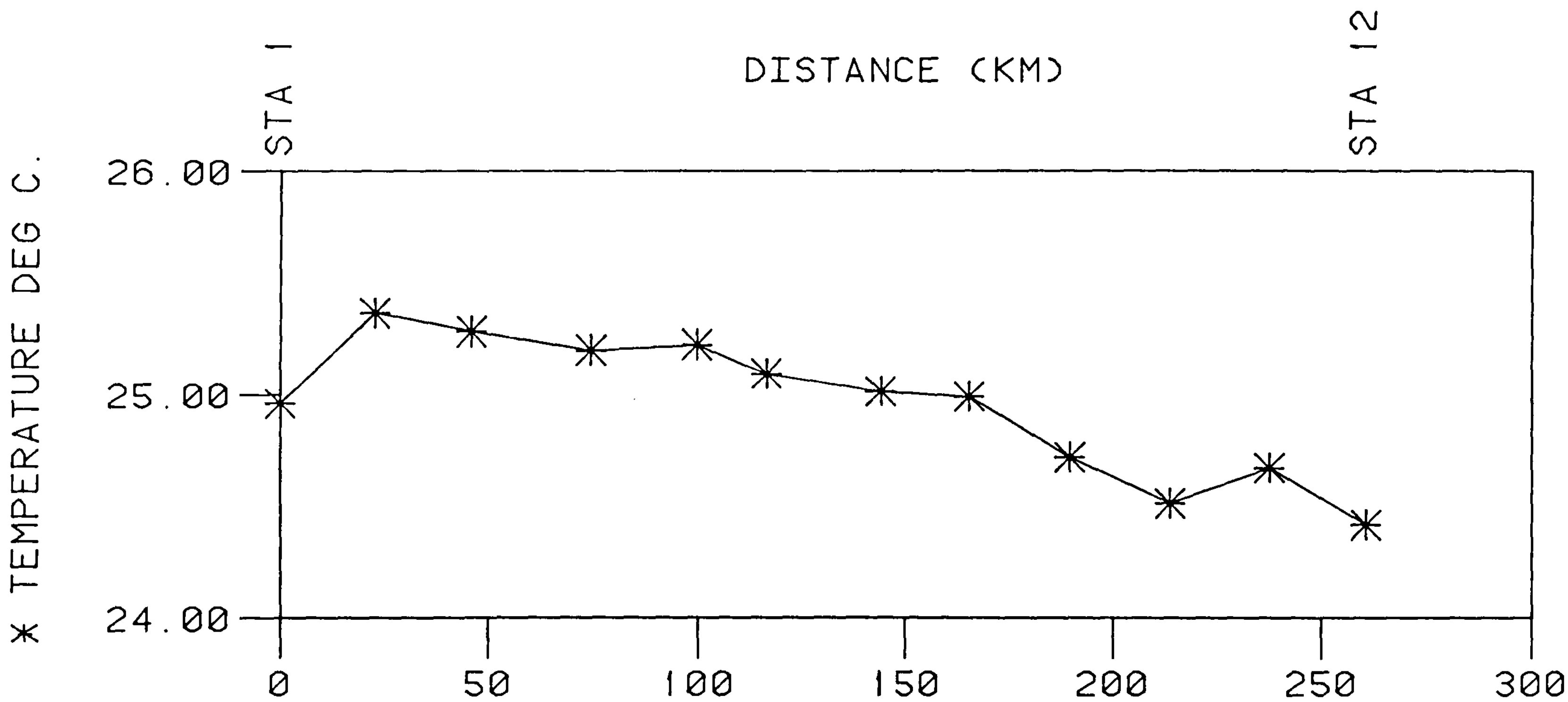


PARAMETERS AT SURFACE EXXON JAMESTOWN CRUISE 86-01

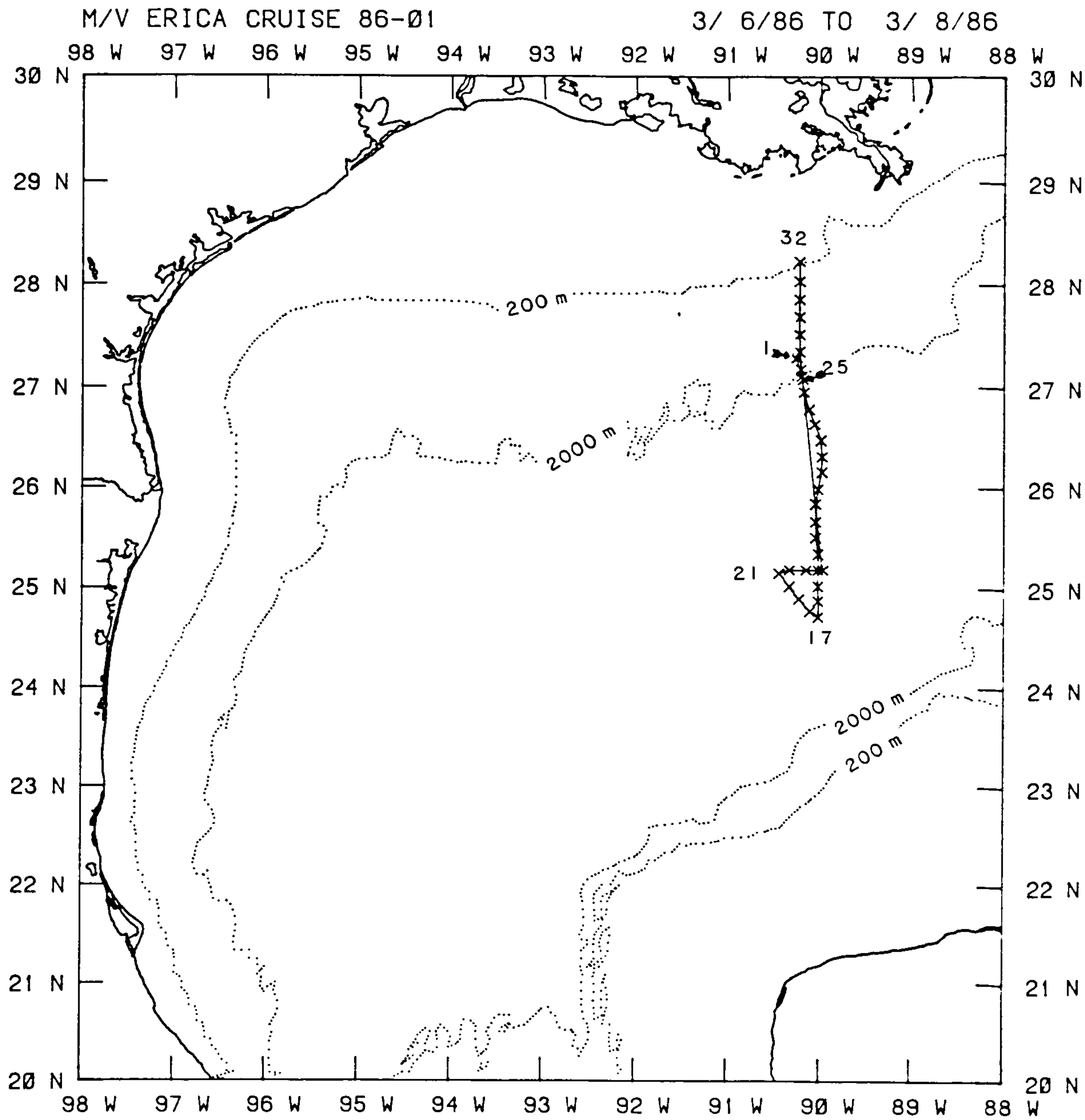

EXXON JAMESTOWN CRUISE 86-Ø2
5/ 6/86 TO 5/ 7/86
98 W
97 W
96 W
95 W
94 W
93 W
92 W
91 W
9Ø W
89 W
3Ø N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200m
500m
1000m
2000m
3000m
1
12


STATION
1 2 3 4 7 8 9 10 11 12
20
15
10
DEPTH (METERS)
0
100
200
300
400
500
600
700
800
0 100 200 300 400 500 600 700 800 900 1000
DISTANCE (KM)
EXXON JAMESTOWN CRUISE 86-02
5/ 6/86 TO 5/ 7/86
STATIONS 1 TO 12
TEMPERATURE DEG C
MIN = 8.60 MAX = 25.36

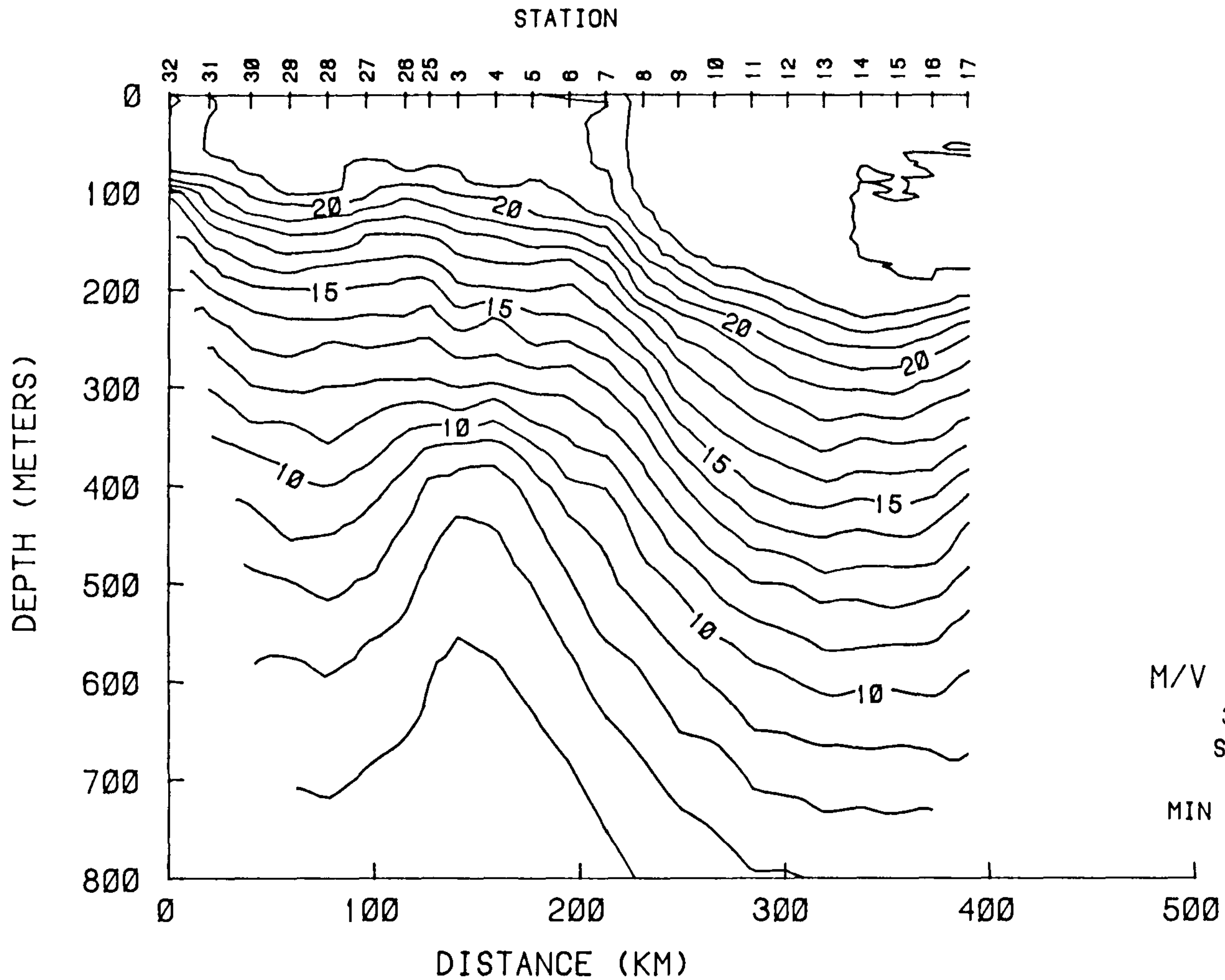

STATION
1 2 3 4 7 8 9 10 11 12
DEPTH (METERS)
Ø
50
100
150
200
25
20
20
Ø 100 200 300 400 500 600 700 800 900 1000
DISTANCE (KM)
EXXON JAMESTOWN CRUISE 86-Ø2
5/ 6/86 TO 5/ 7/86
STATIONS 1 TO 12
TEMPERATURE DEG C
MIN = 13.8Ø MAX = 25.36



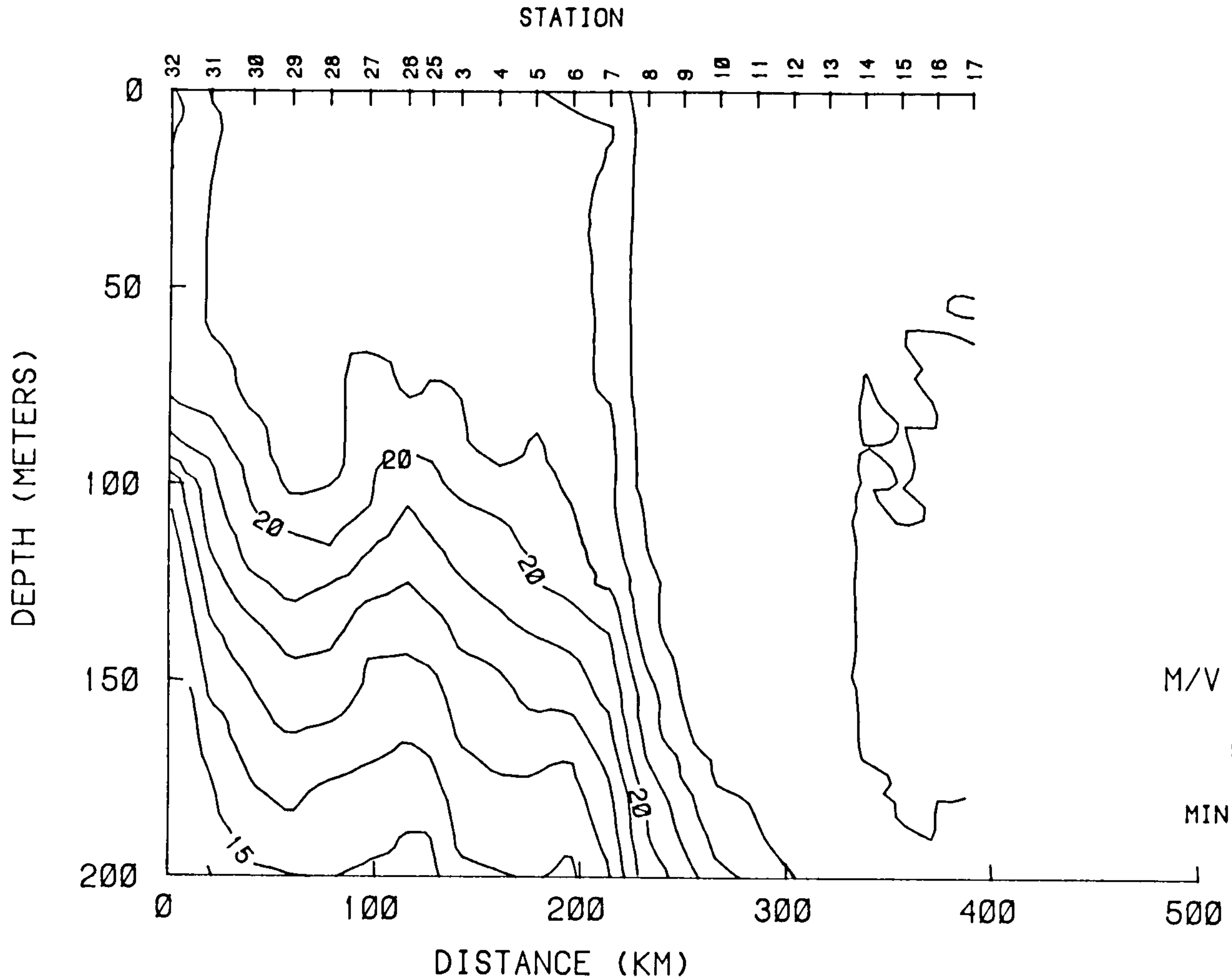
PARAMETERS AT SURFACE EXXON JAMESTOWN CRUISE 86-02



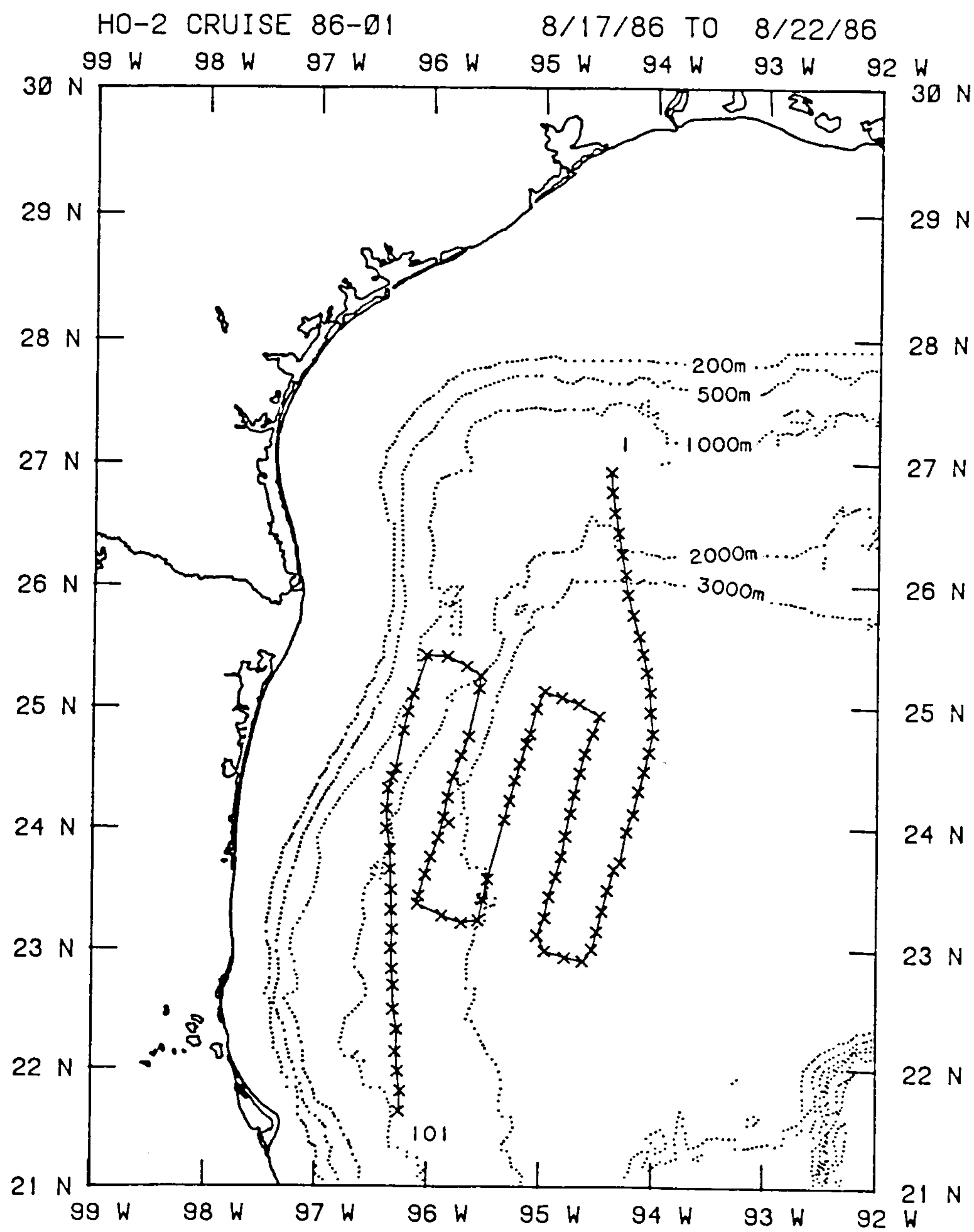
M/V ERICA CRUISE 86-Ø1
3/ 6/86 TO 3/ 8/86
98 W
97 W
96 W
95 W
94 W
93 W
92 W
91 W
9Ø W
89 W
88 W
3Ø N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
2Ø N
200 m
2000 m
32
1
25
21
17

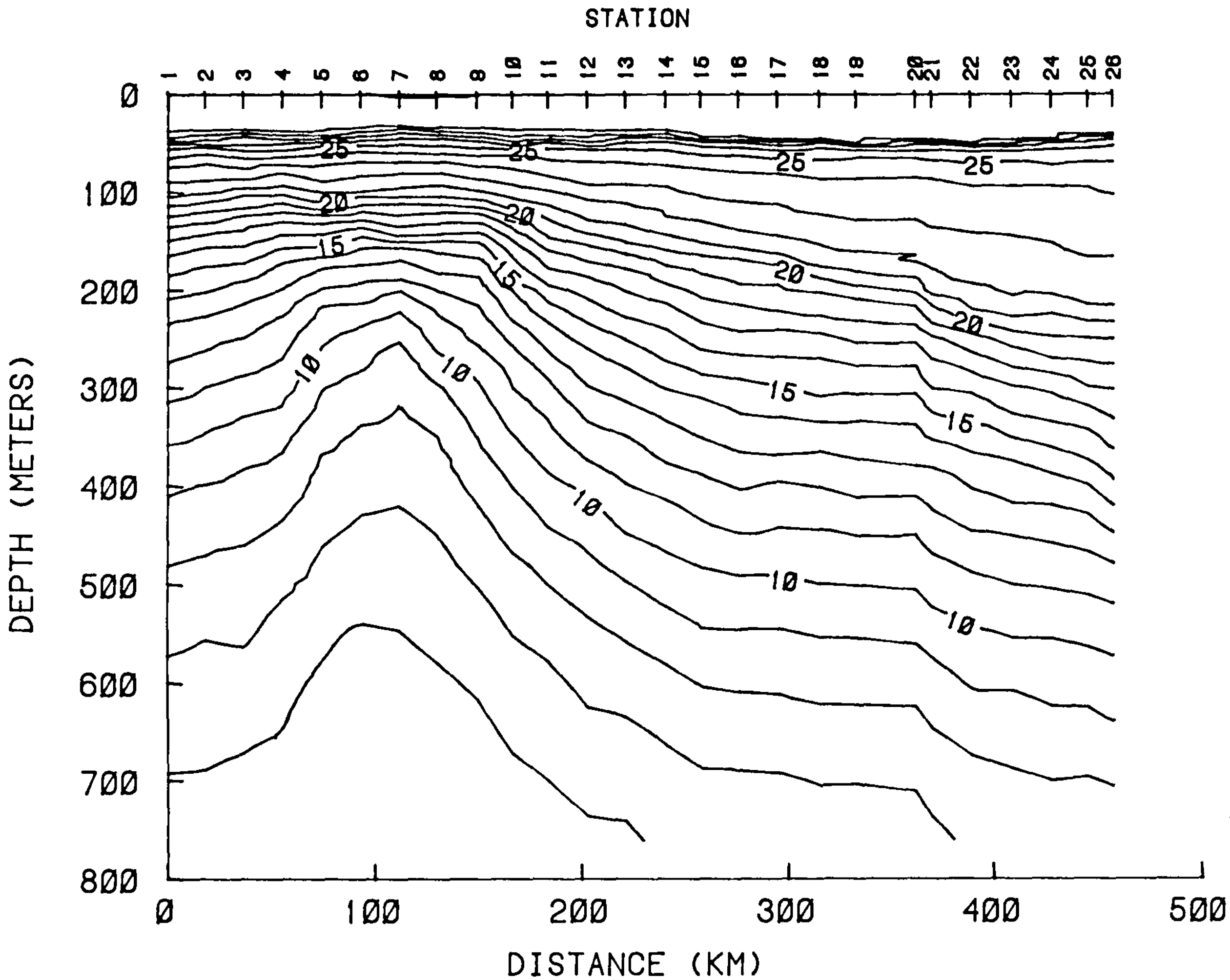


M/V ERICA CRUISE 86-01
3/ 6/86 TO 3/ 8/86
STATIONS 17 TO 32
TEMPERATURE DEG C
MIN = 5.02 MAX = 24.06

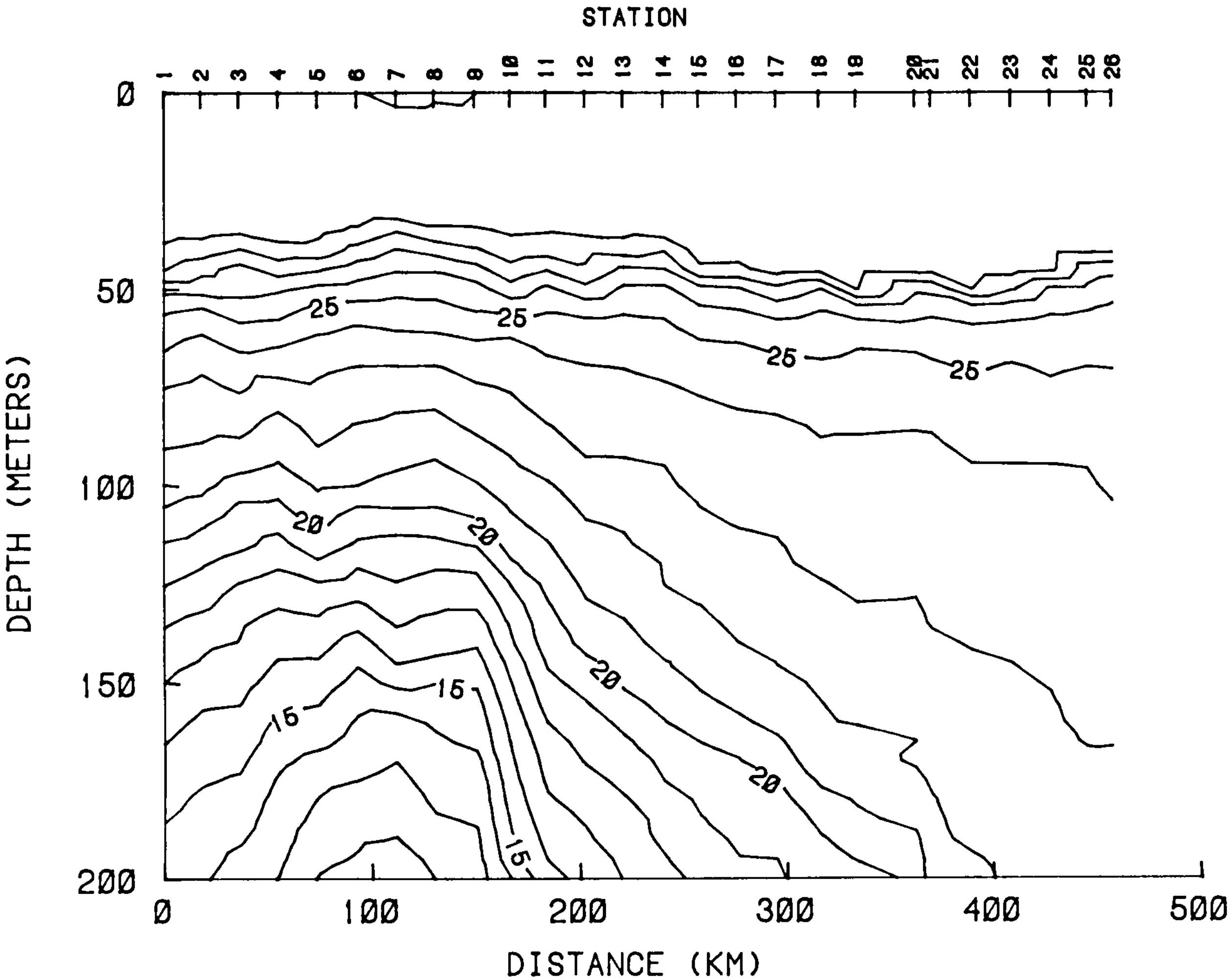


M/V ERICA CRUISE 86-01
3/ 6/86 TO 3/ 8/86
STATIONS 17 TO 32
TEMPERATURE DEG C
MIN = 13.95 MAX = 24.06

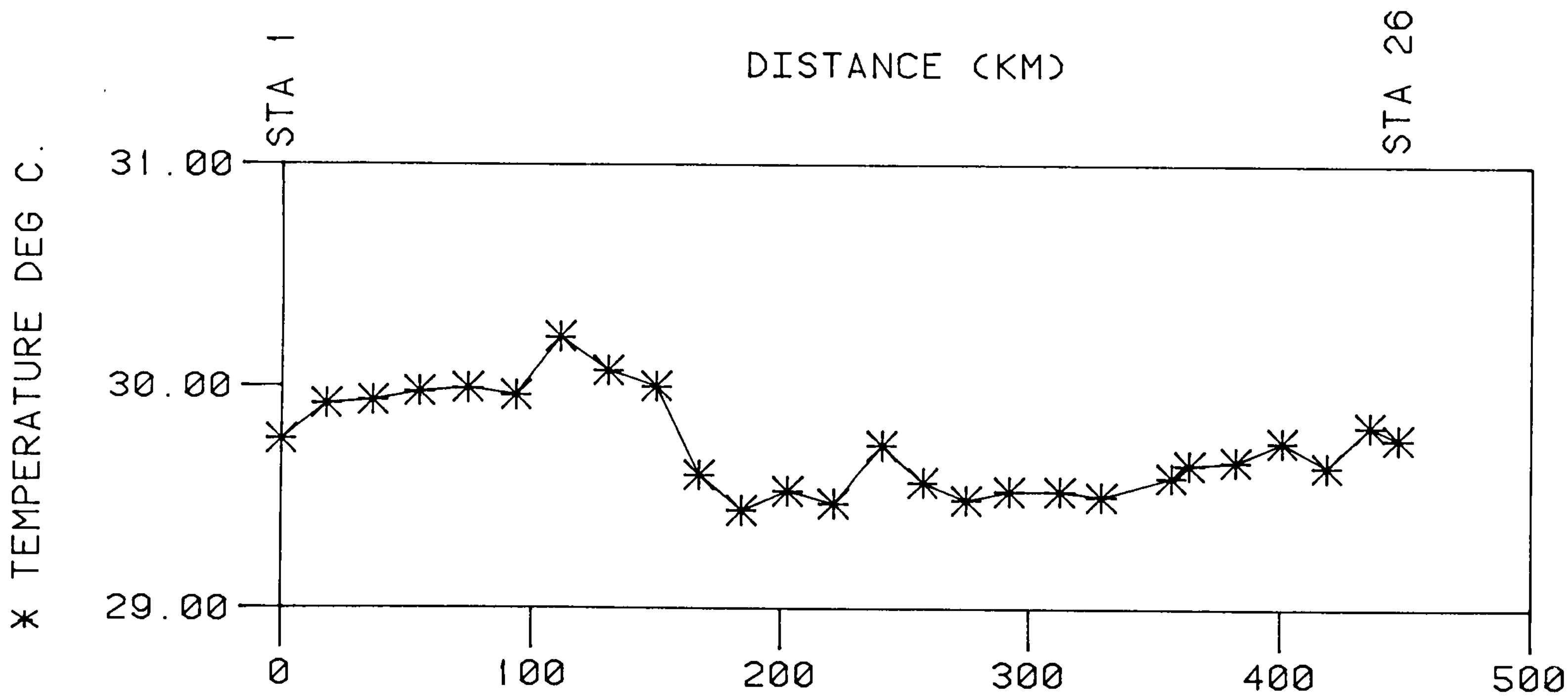

HO-2 CRUISE 86-Ø1
8/17/86 TO 8/22/86
99 W
98 W
97 W
96 W
95 W
94 W
93 W
92 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200m
500m
1000m
2000m
3000m
1
101



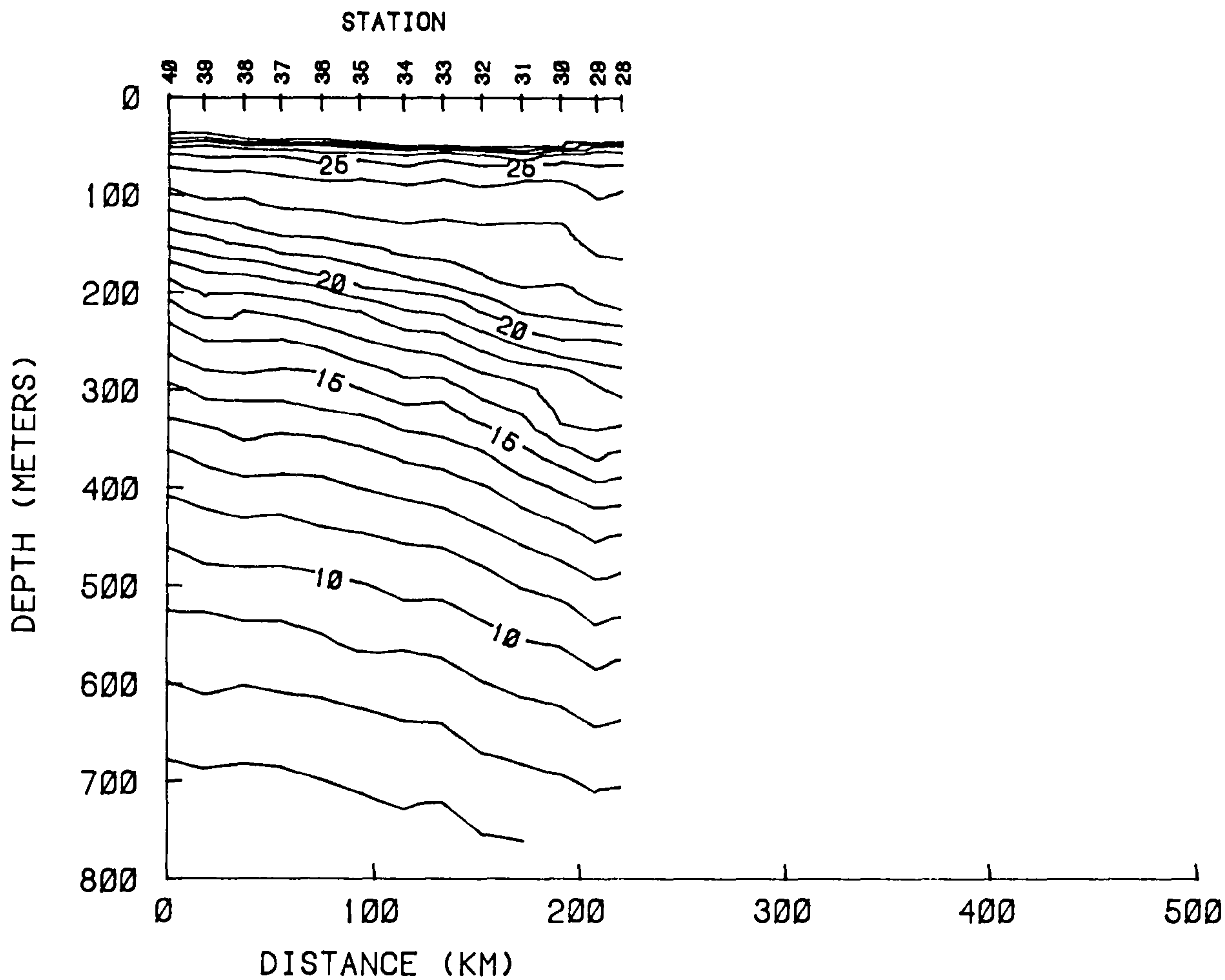
HO-2 CRUISE 86-01
8/17/86 TO 8/19/86
STATIONS 1 TO 26
TEMPERATURE DEG C
MIN = 5.13 MAX = 30.23



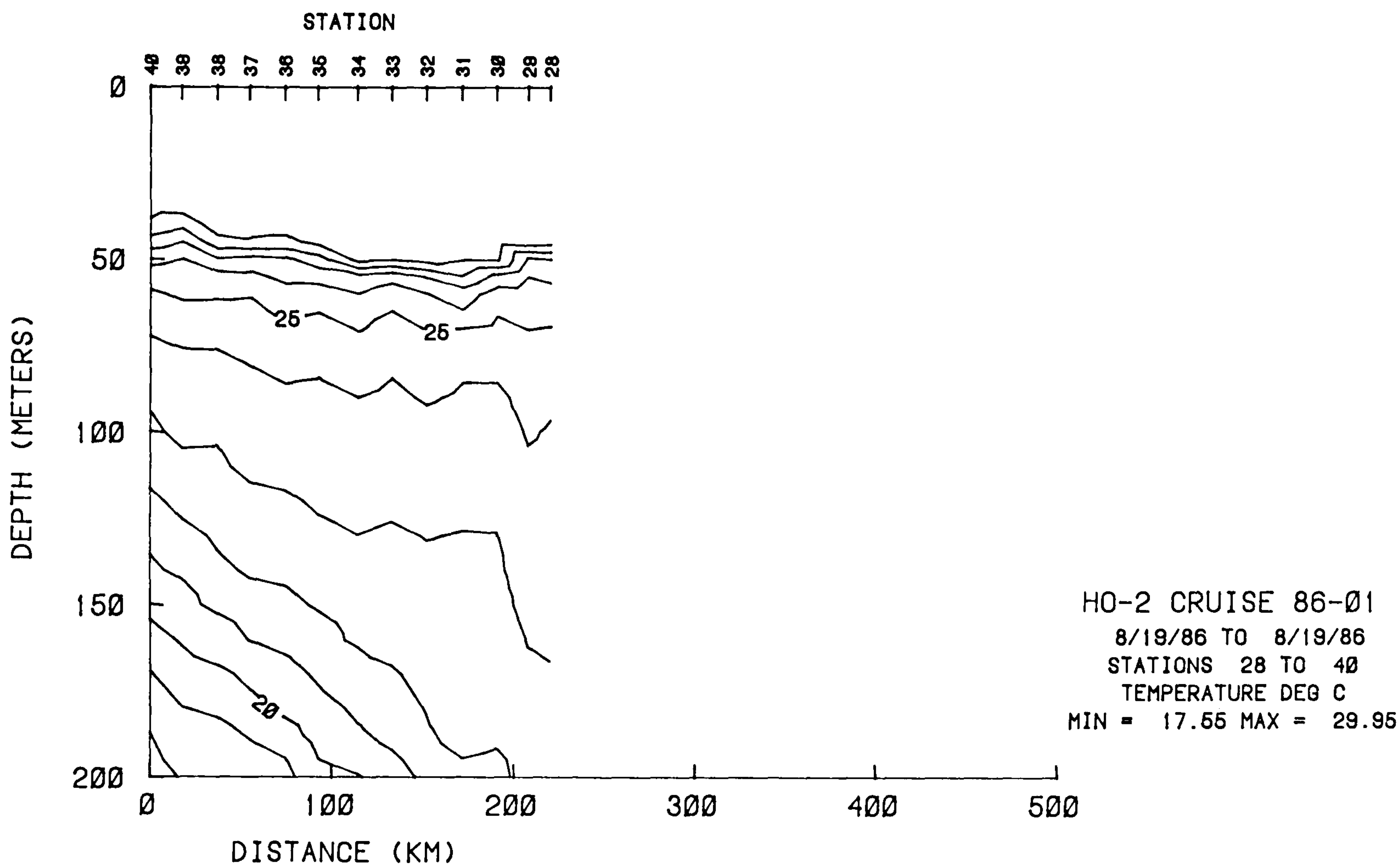
HO-2 CRUISE 86-01
8/17/86 TO 8/19/86
STATIONS 1 TO 26
TEMPERATURE DEG C
MIN = 11.05 MAX = 30.23

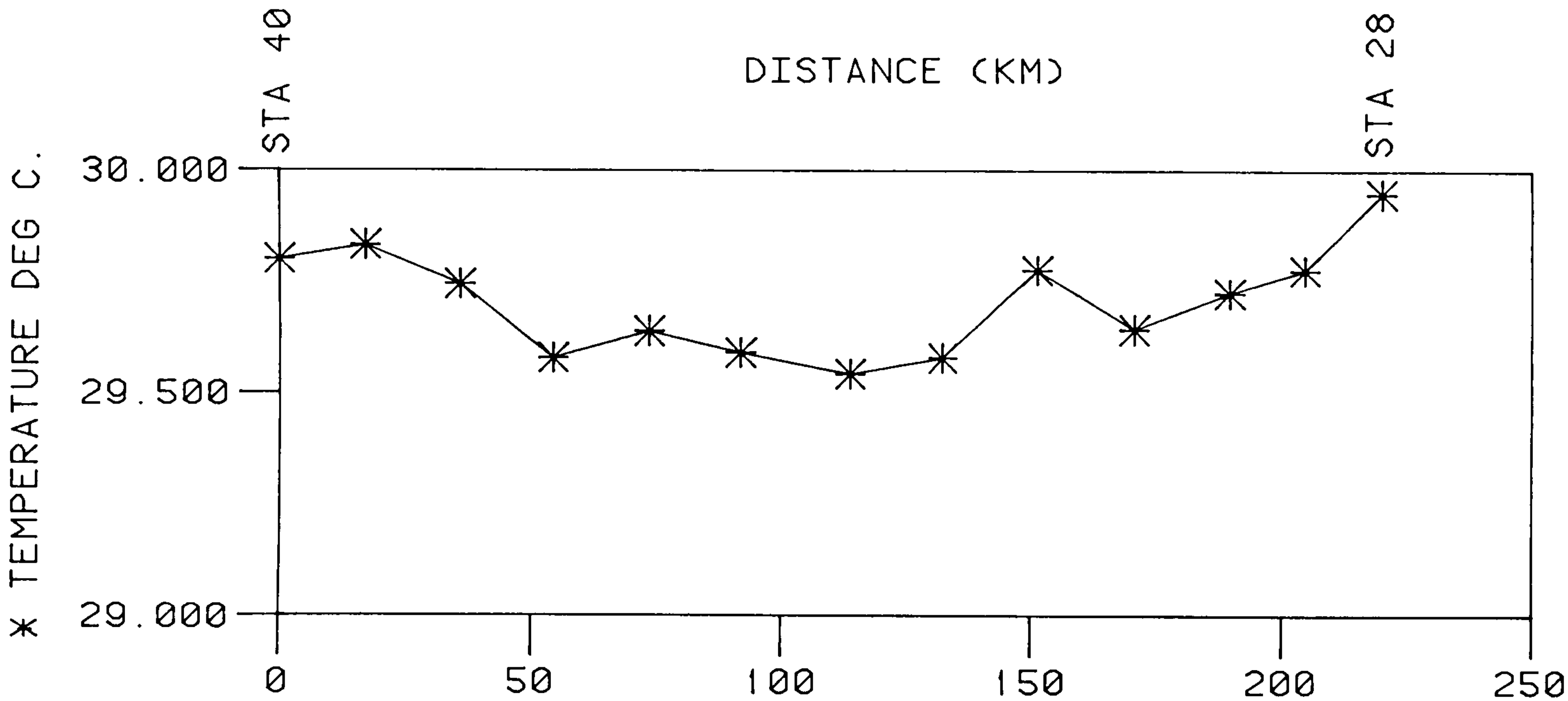


PARAMETERS AT SURFACE HO-2 CRUISE 86-01

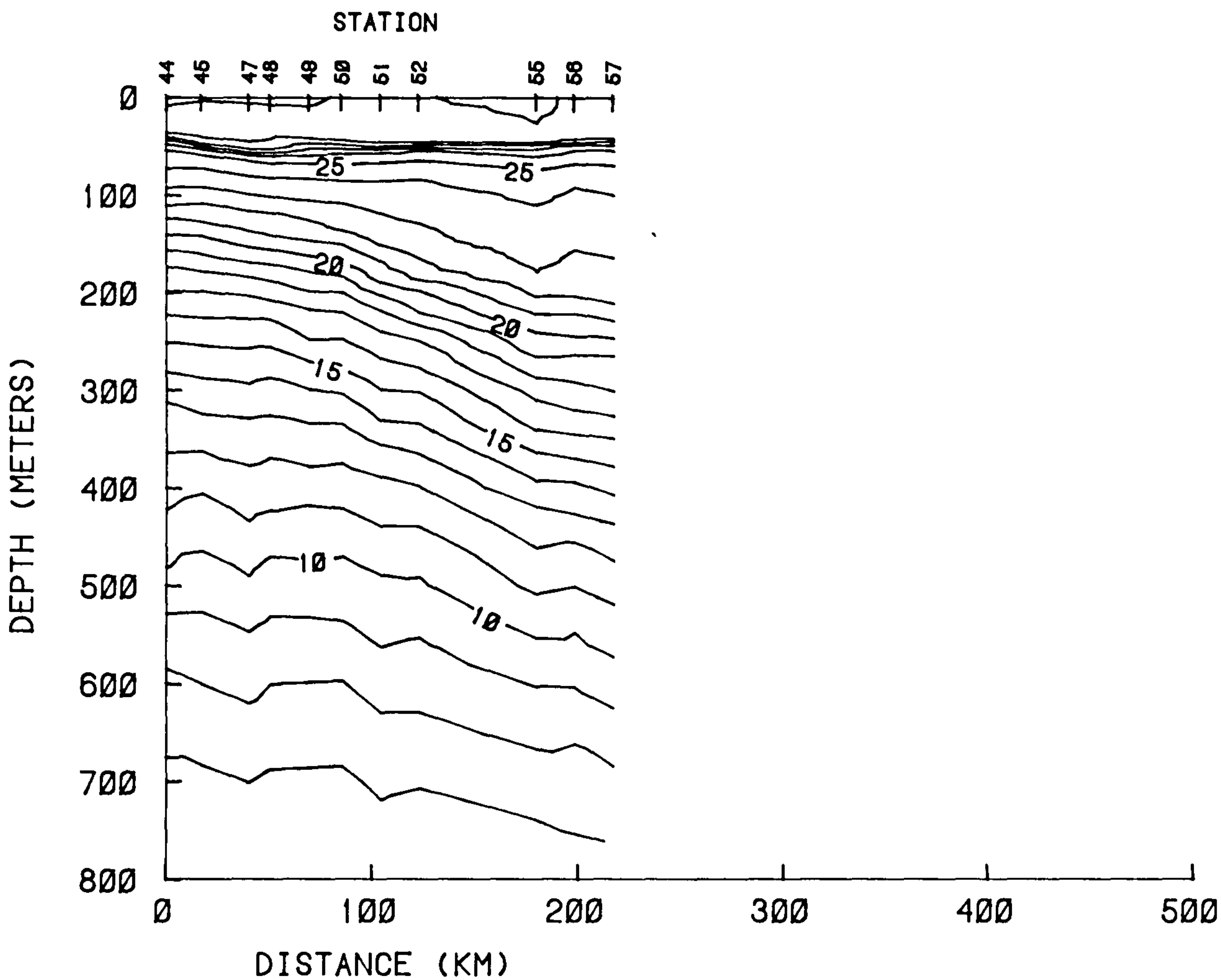


HO-2 CRUISE 86-01
8/19/86 TO 8/19/86
STATIONS 28 TO 40
TEMPERATURE DEG C
MIN = 6.22 MAX = 29.86

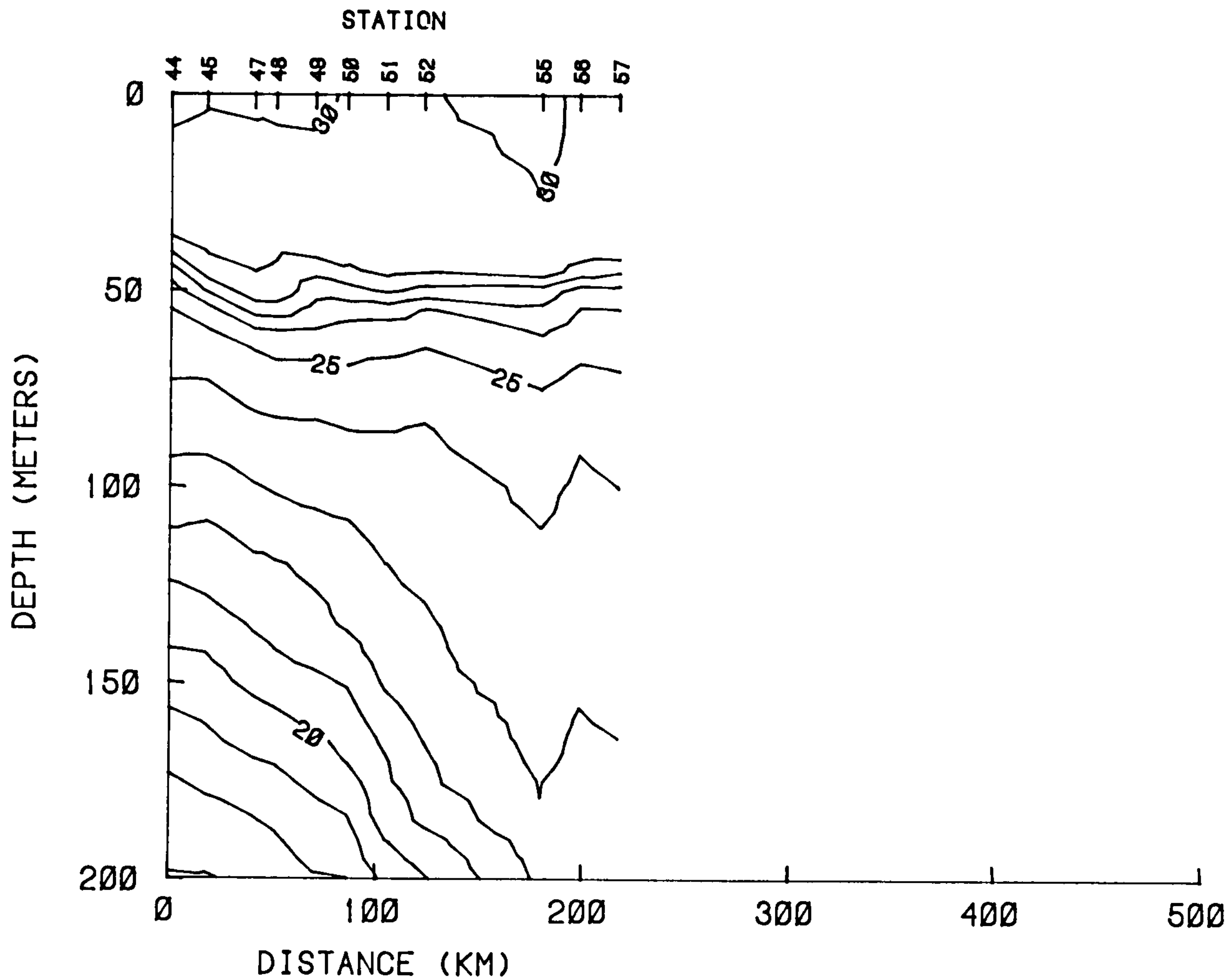

STATION
40 39 38 37 36 35 34 33 32 31 30 29 28
Ø
5Ø
1ØØ
15Ø
2ØØ
DEPTH (METERS)
25
25
2Ø
Ø
1ØØ
2ØØ
3ØØ
4ØØ
5ØØ
DISTANCE (KM)
HO-2 CRUISE 86-Ø1
8/19/86 TO 8/19/86
STATIONS 28 TO 4Ø
TEMPERATURE DEG C
MIN = 17.55 MAX = 29.95



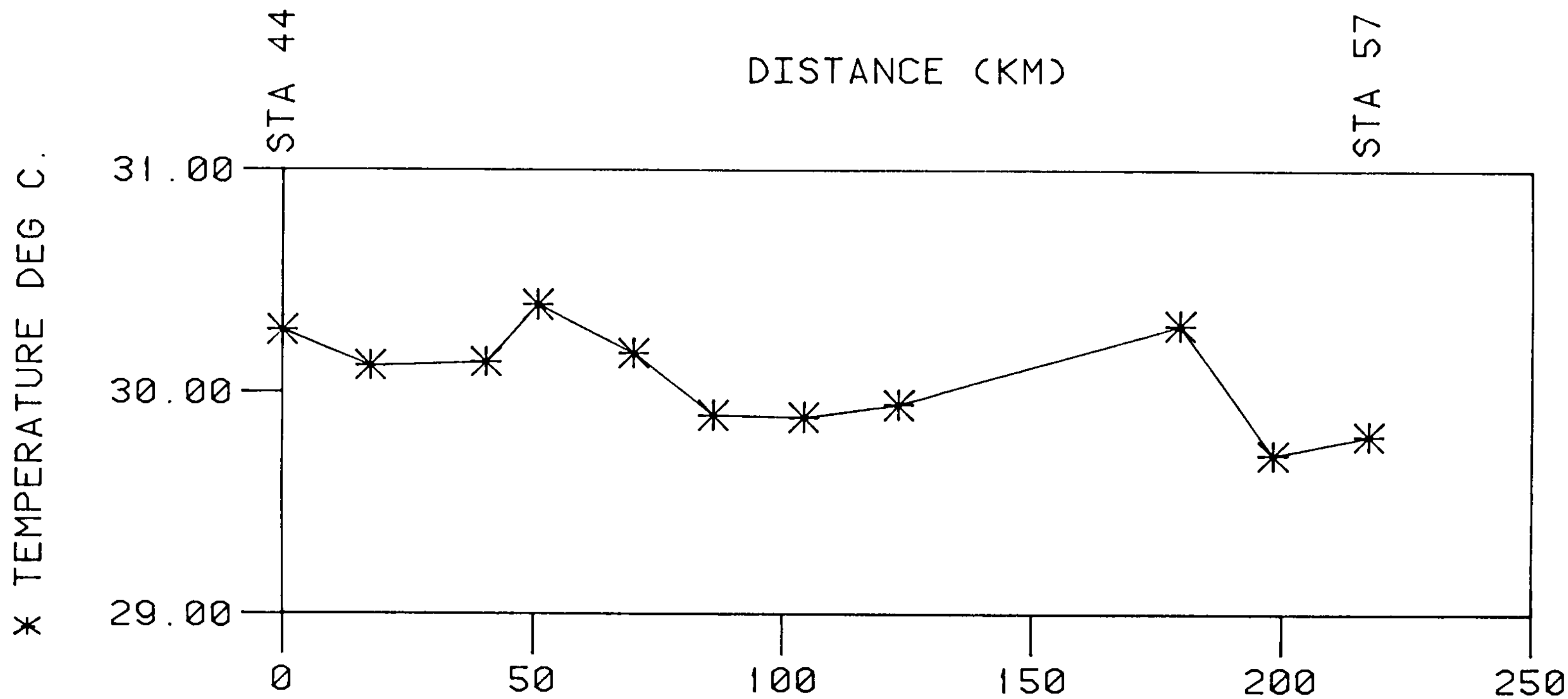
PARAMETERS AT SURFACE HO-2 CRUISE 86-01



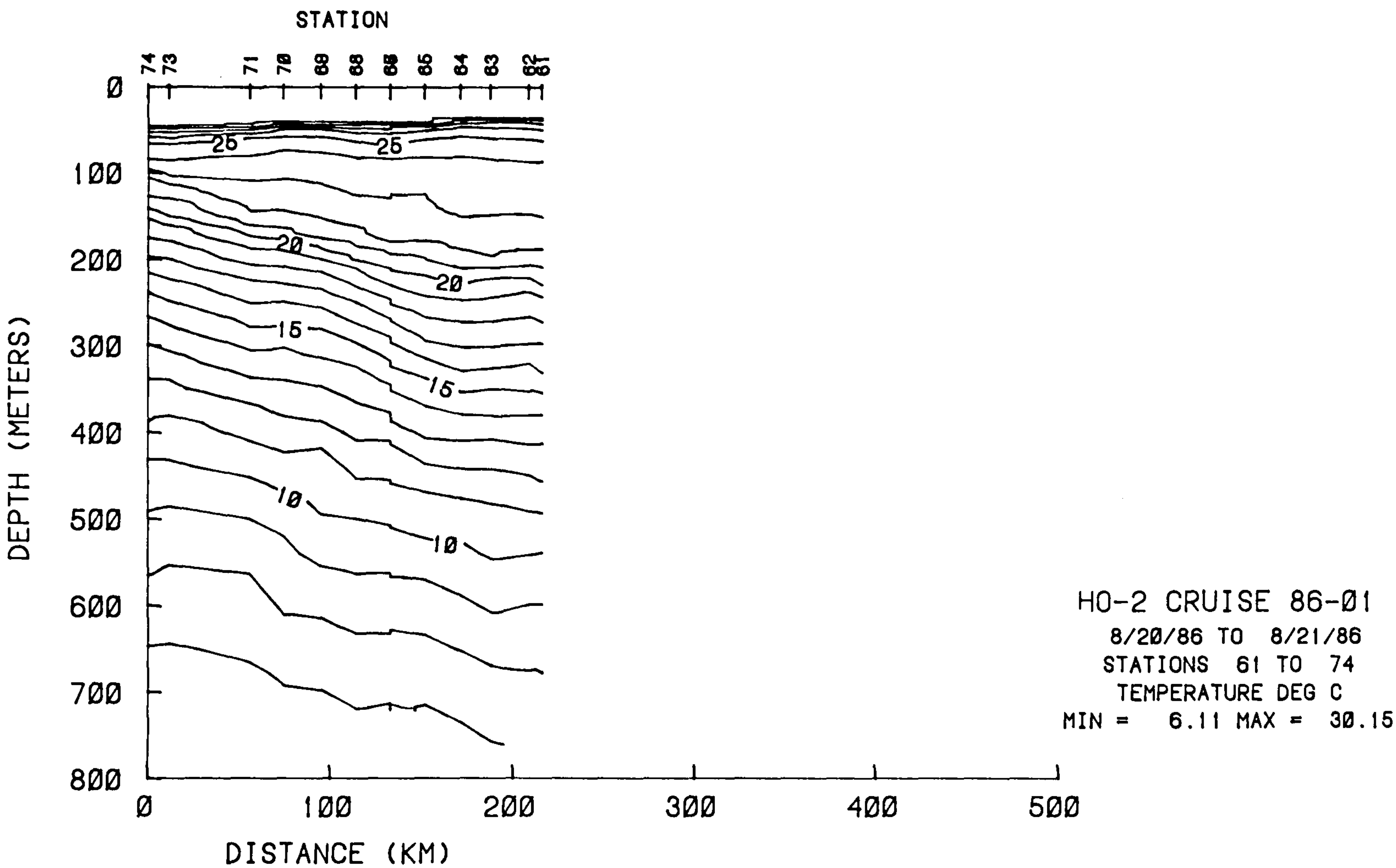
HO-2 CRUISE 86-01
8/19/86 TO 8/20/86
STATIONS 44 TO 57
TEMPERATURE DEG C
MIN = 6.26 MAX = 30.39

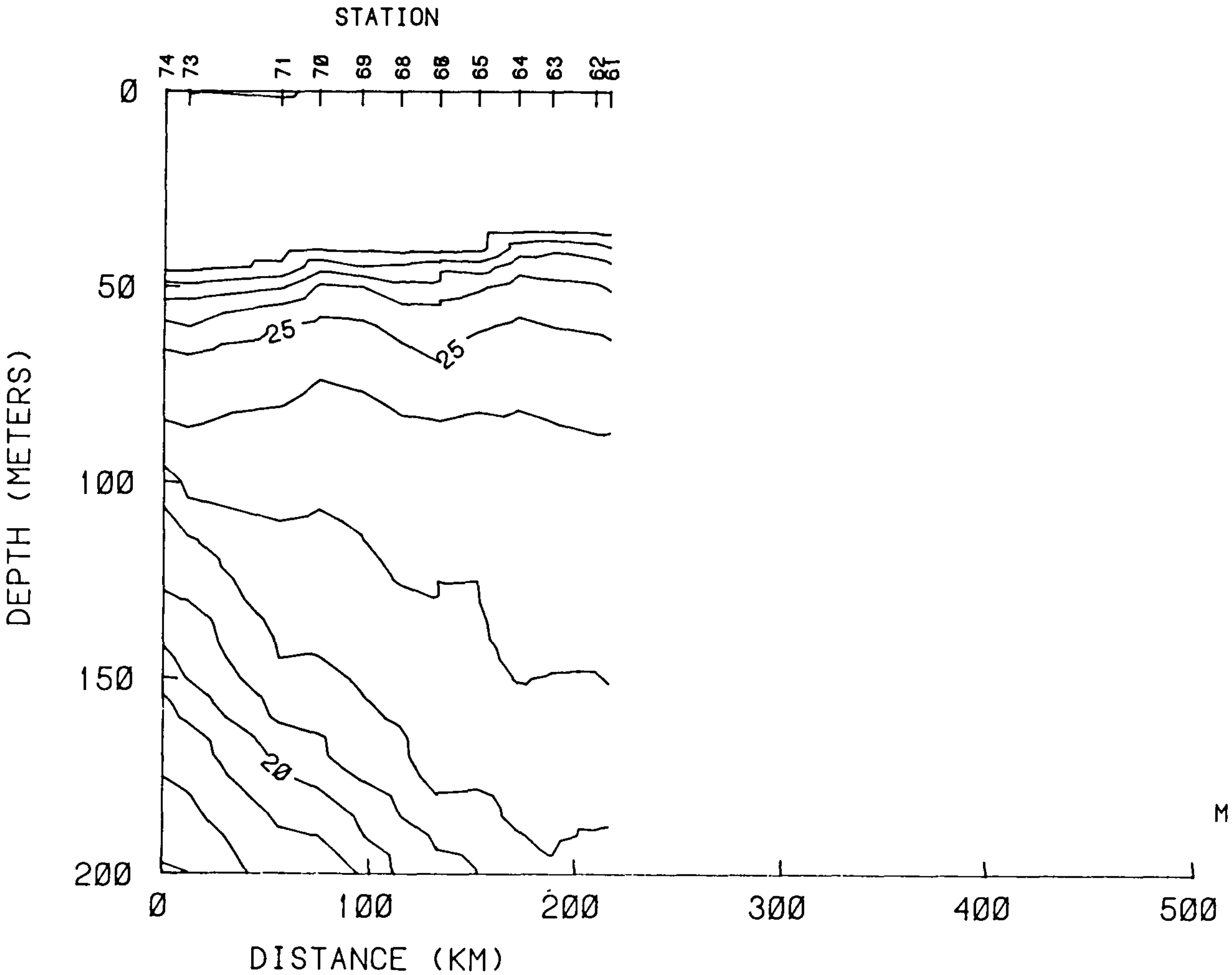


HO-2 CRUISE 86-01
8/19/86 TO 8/20/86
STATIONS 44 TO 57
TEMPERATURE DEG C
MIN = 16.90 MAX = 30.39

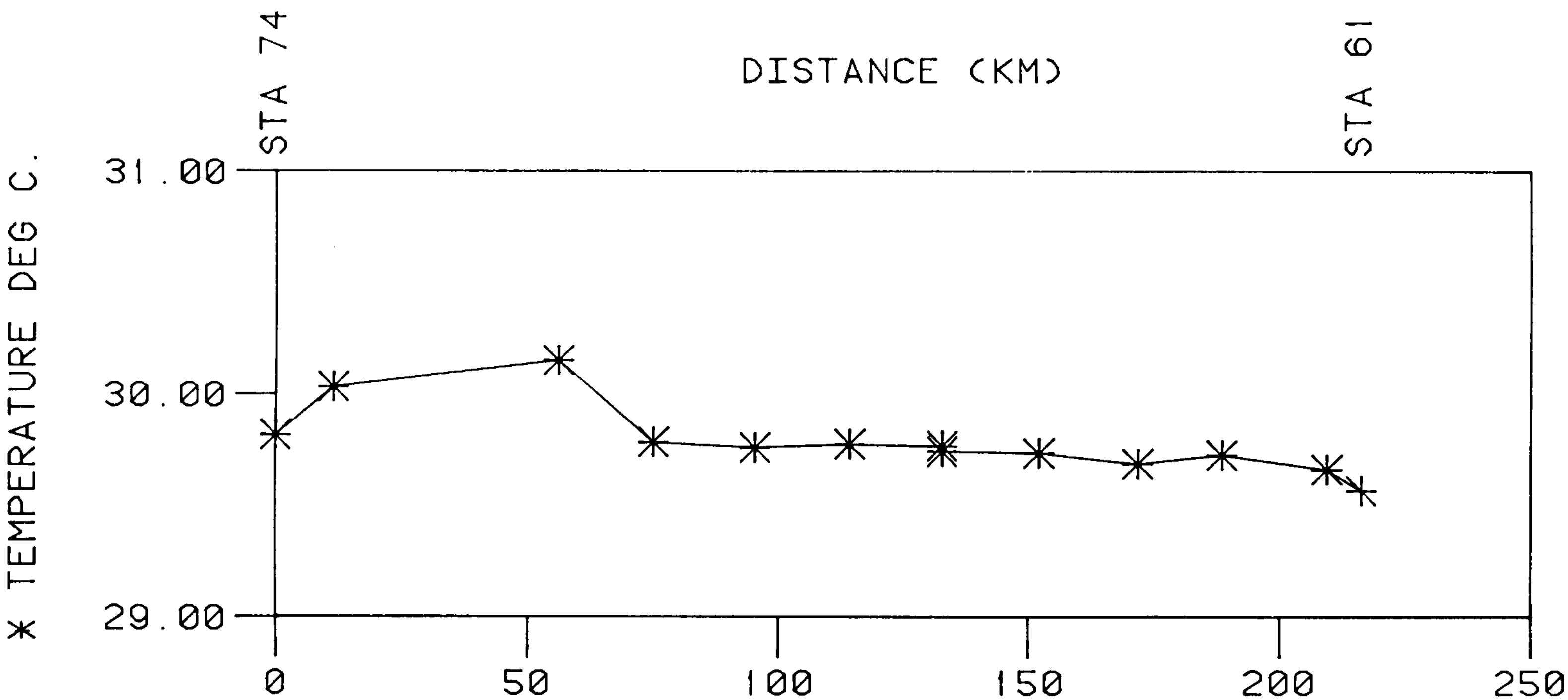


PARAMETERS AT SURFACE HO-2 CRUISE 86-01

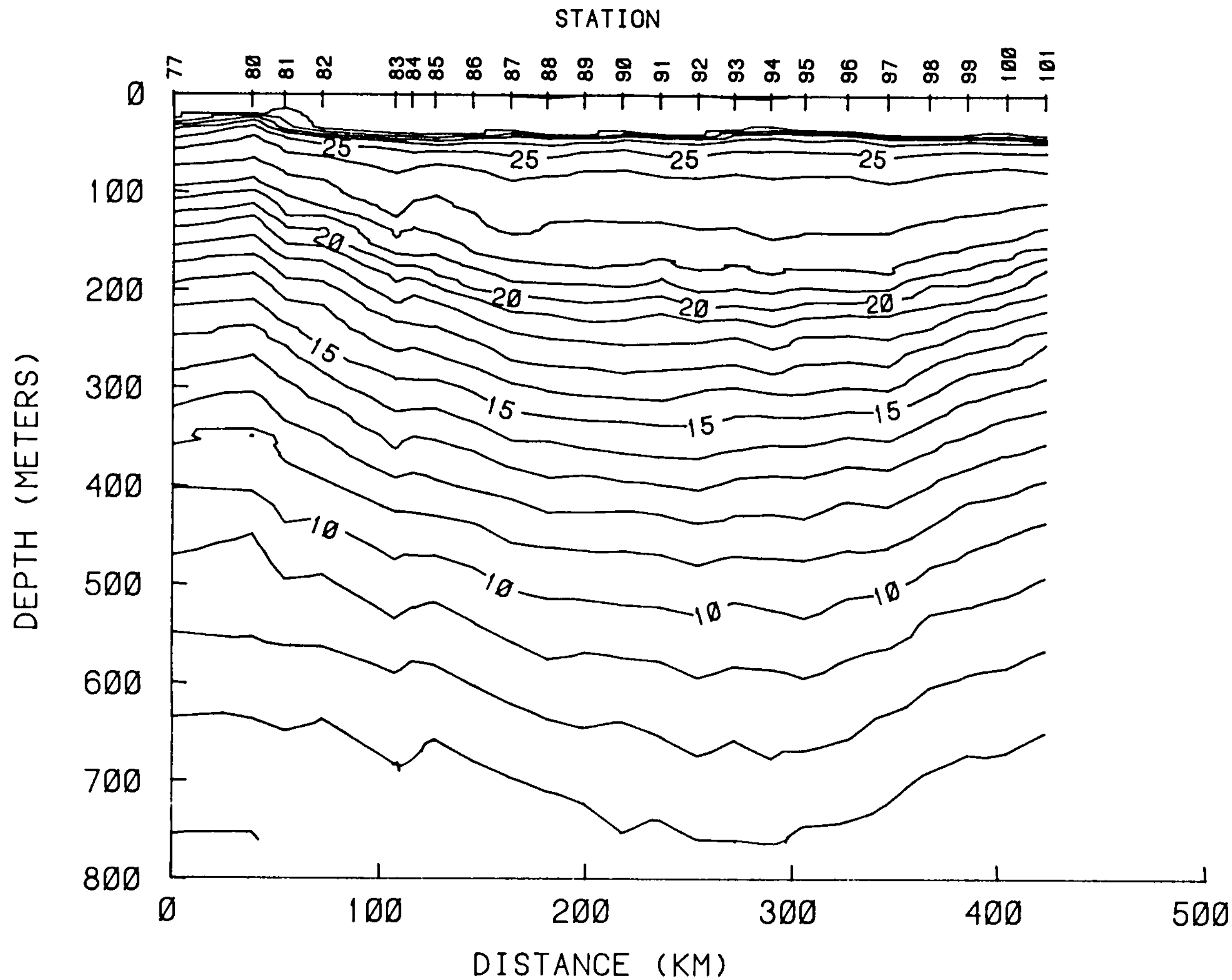

STATION
74
73
71
70
69
68
66
65
64
63
62
61
25
25
20
20
15
15
10
10
DEPTH (METERS)
Ø
100
200
300
400
500
600
700
800
Ø
100
200
300
400
500
DISTANCE (KM)
HO-2 CRUISE 86-Ø1
8/2Ø/86 TO 8/21/86
STATIONS 61 TO 74
TEMPERATURE DEG C
MIN = 6.11 MAX = 3Ø.15



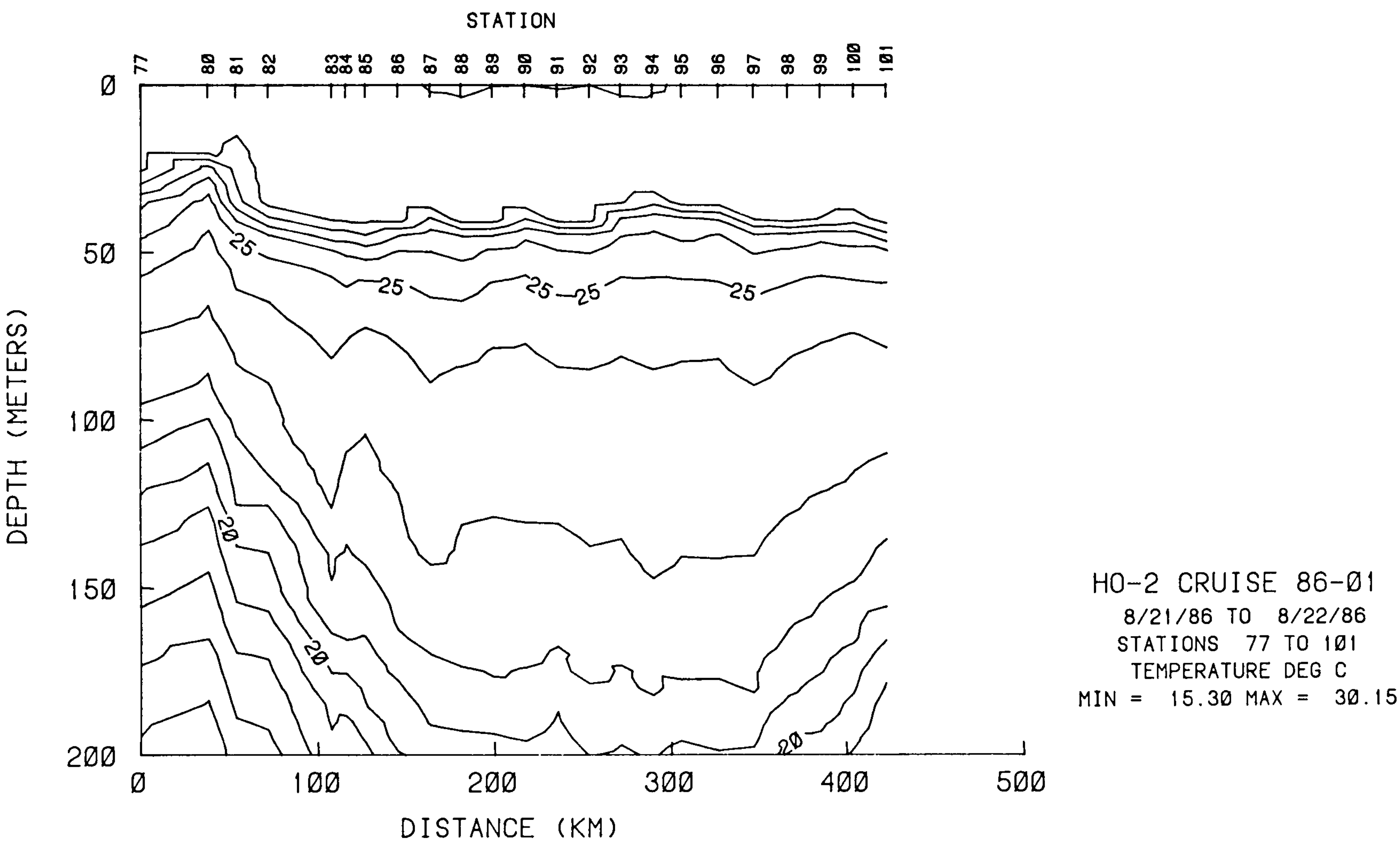
HO-2 CRUISE 86-01
8/20/86 TO 8/21/86
STATIONS 61 TO 74
TEMPERATURE DEG C
MIN = 16.87 MAX = 30.15

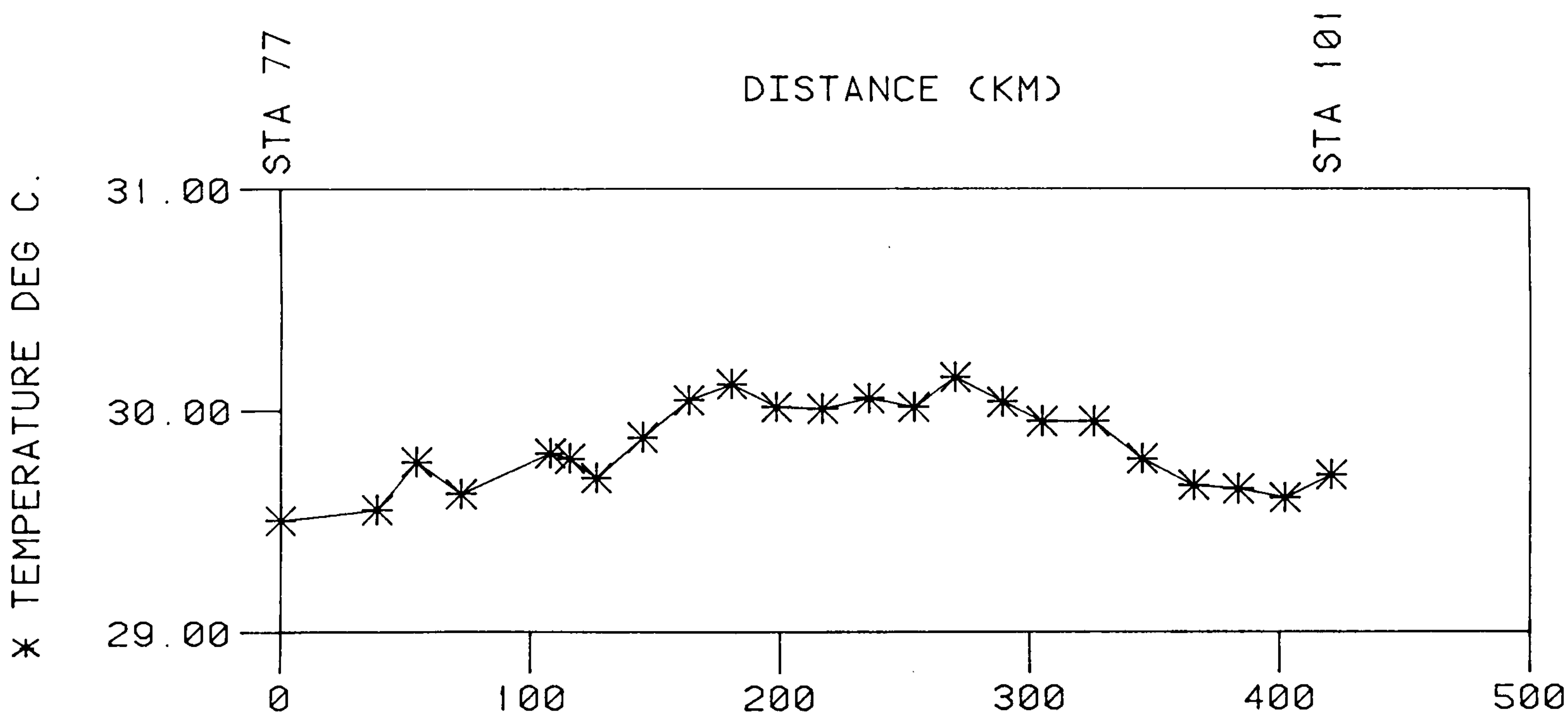


PARAMETERS AT SURFACE HO-2 CRUISE 86-01

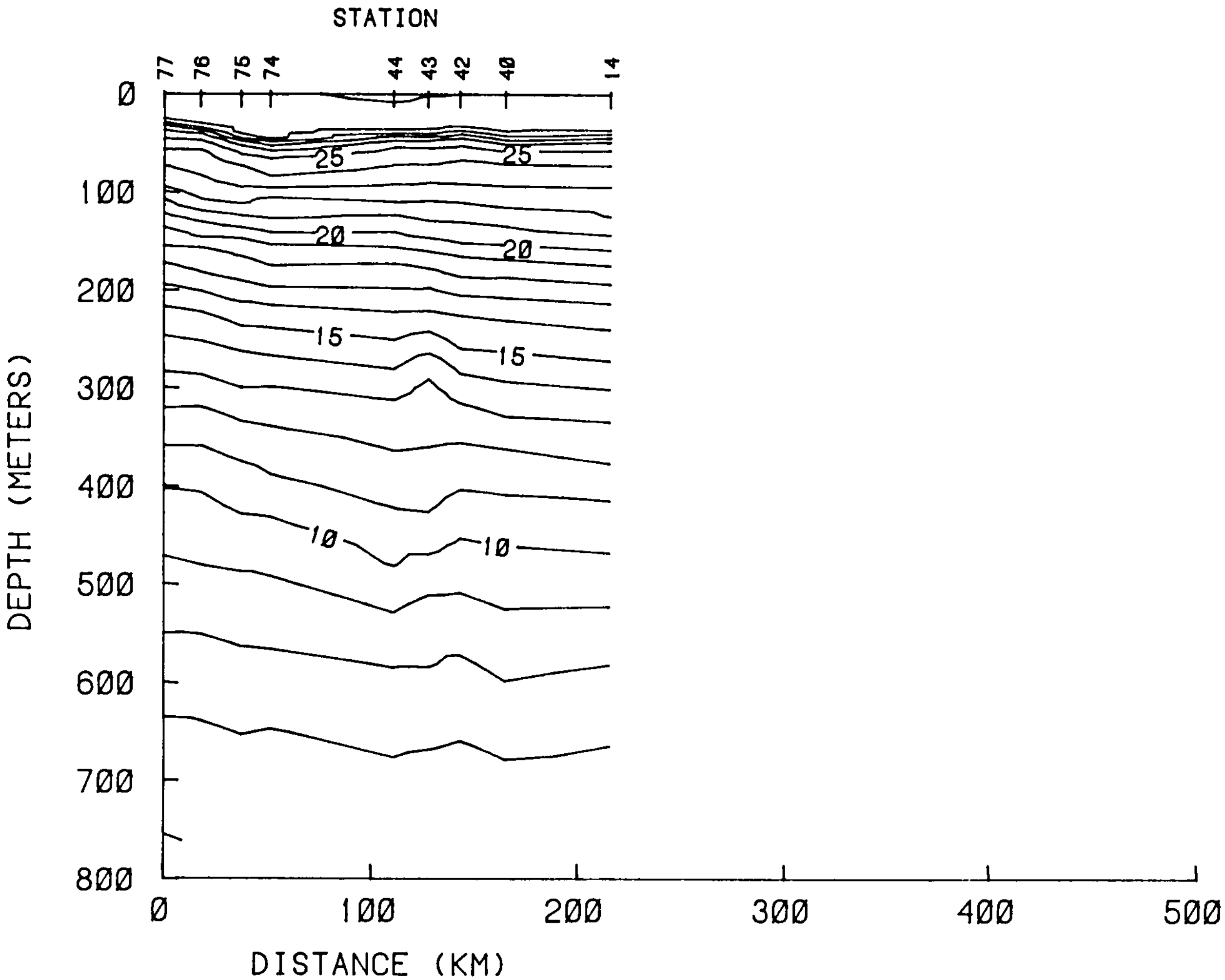


HO-2 CRUISE 86-01
8/21/86 TO 8/22/86
STATIONS 77 TO 101
TEMPERATURE DEG C
MIN = 5.88 MAX = 30.15

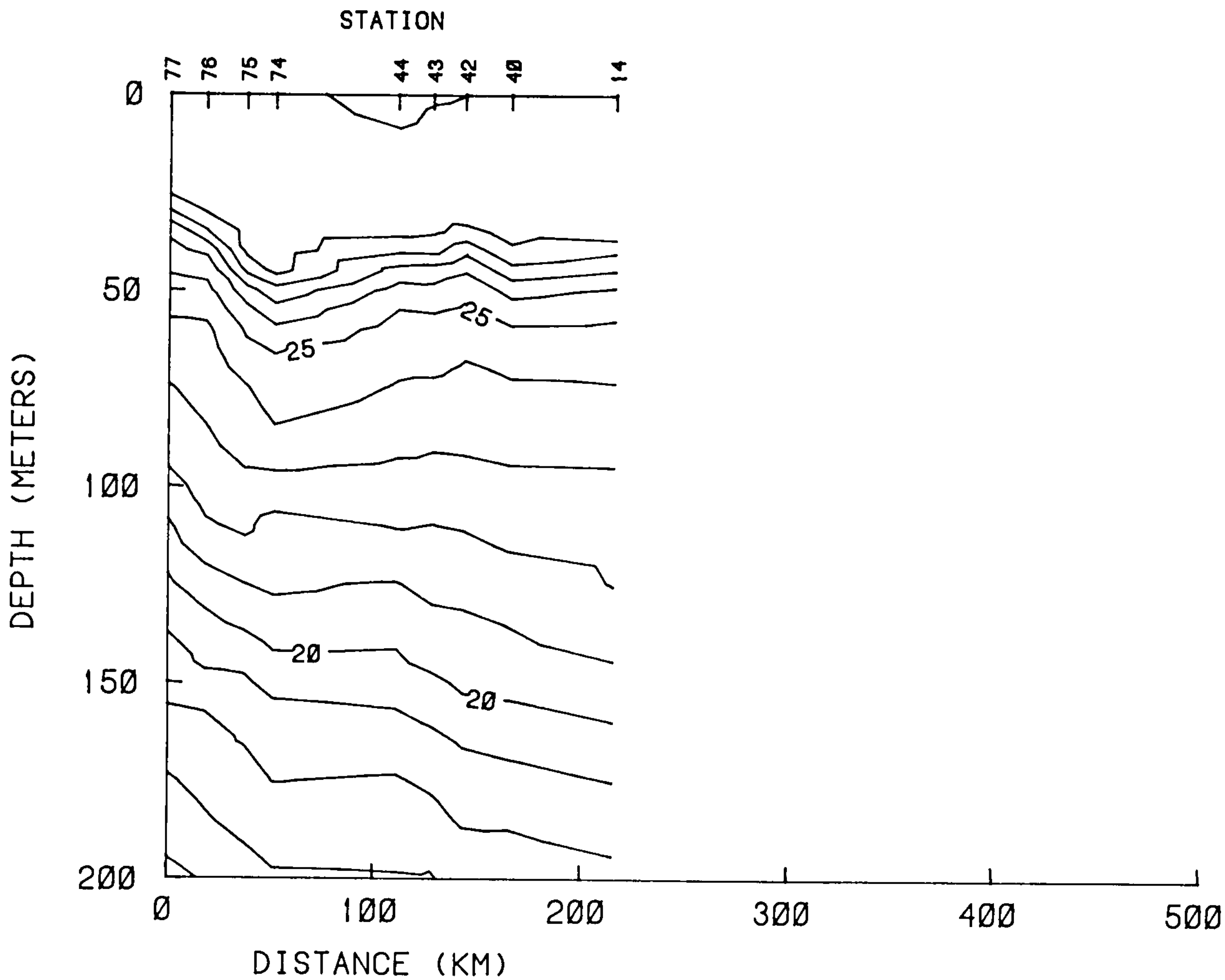

STATION
77 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101
DEPTH (METERS)
0
50
100
150
200
25
25
25
25
25
20
20
20
0
100
200
300
400
500
DISTANCE (KM)
HO-2 CRUISE 86-01
8/21/86 TO 8/22/86
STATIONS 77 TO 101
TEMPERATURE DEG C
MIN = 15.30 MAX = 30.15



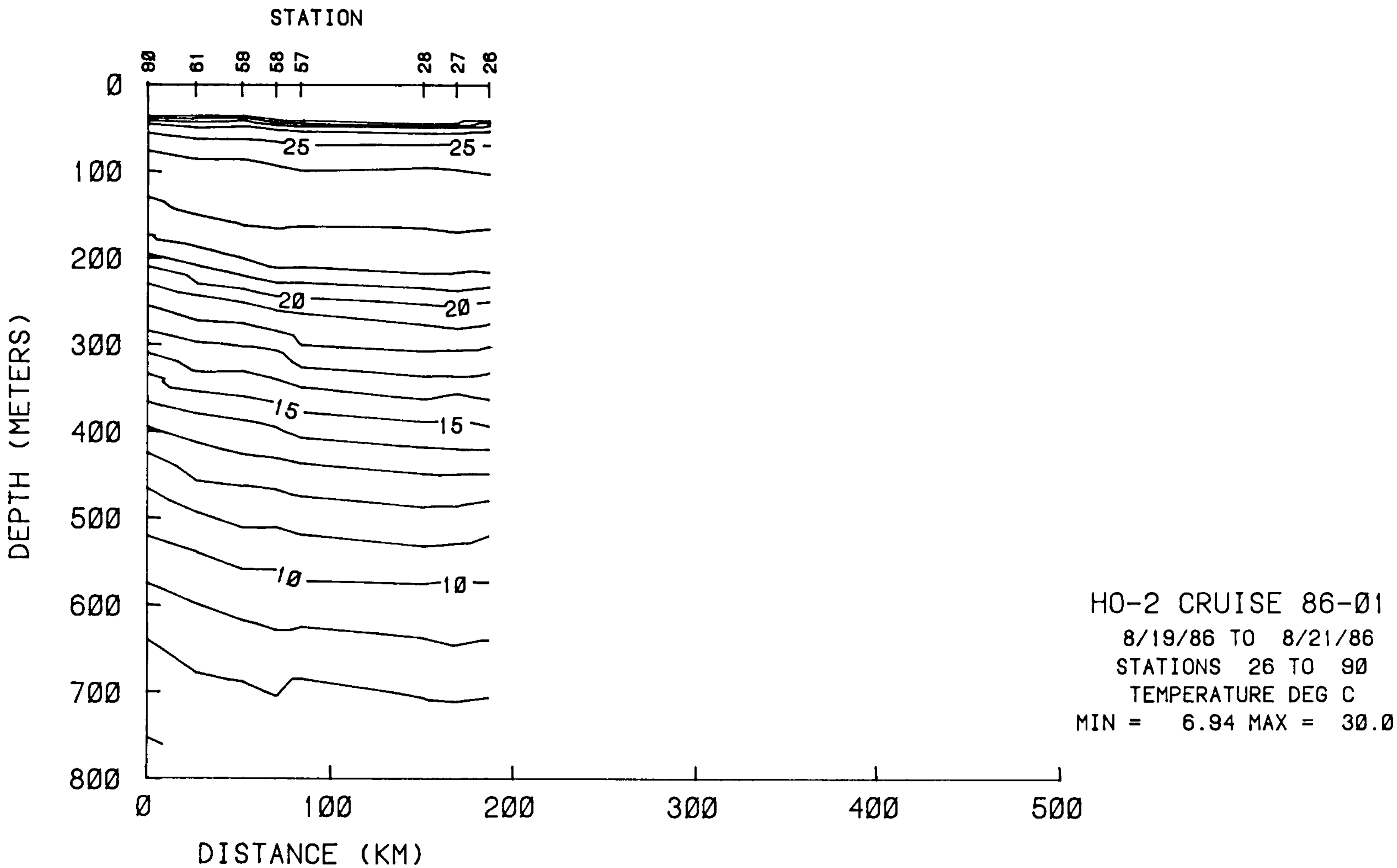
PARAMETERS AT SURFACE HO-2 CRUISE 86-01

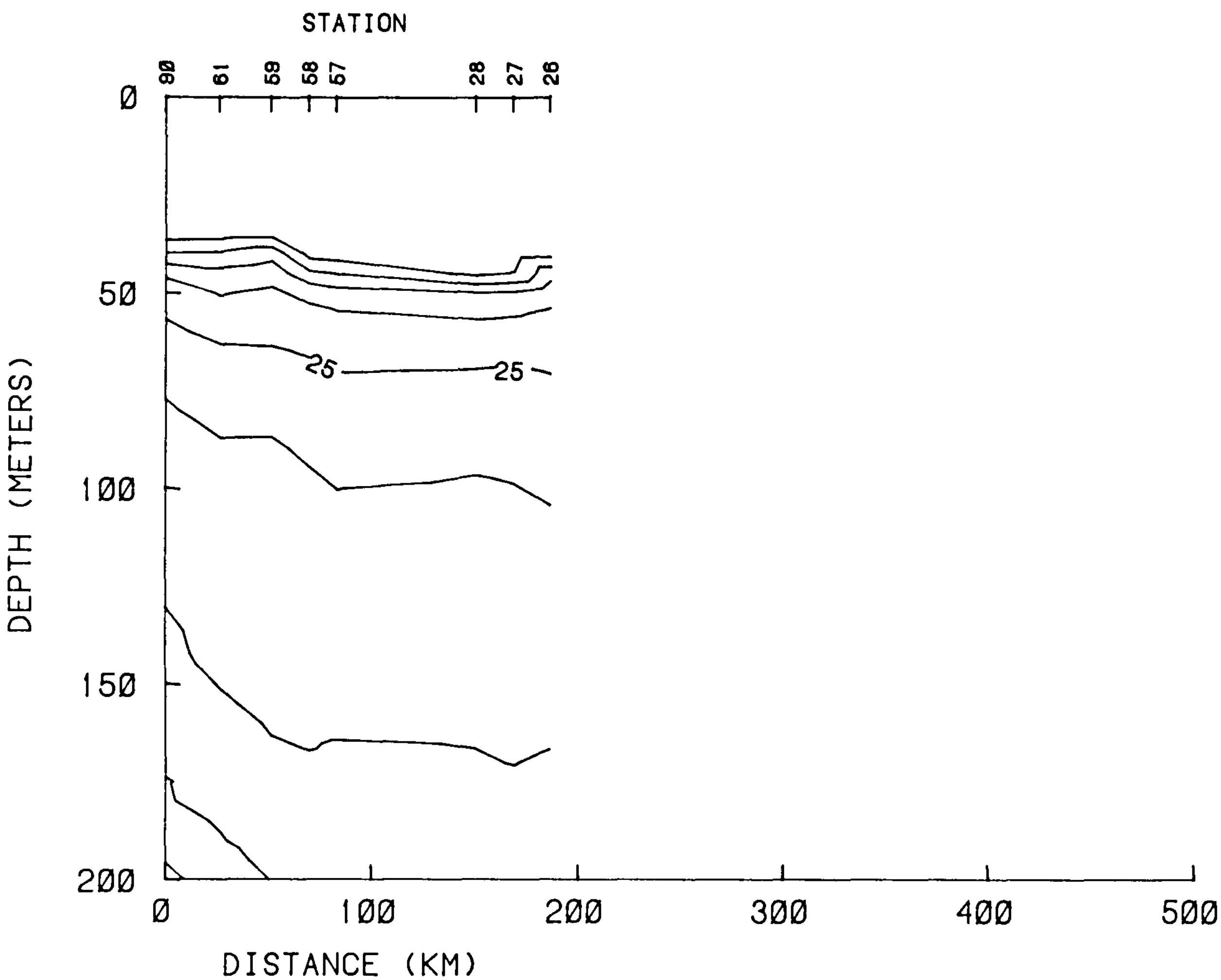


HO-2 CRUISE 86-01
8/18/86 TO 8/21/86
STATIONS 14 TO 77
TEMPERATURE DEG C
MIN = 5.94 MAX = 30.28

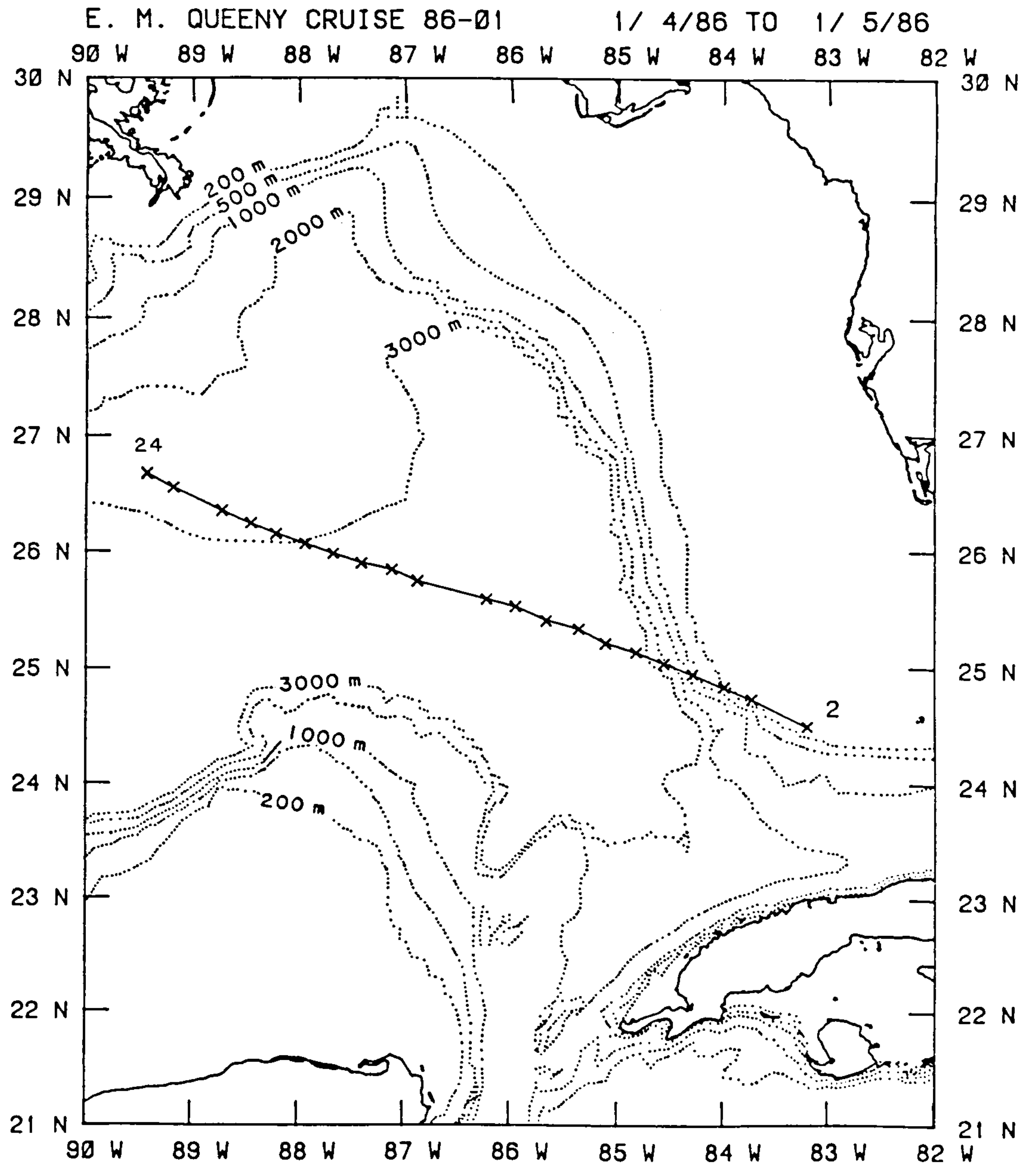


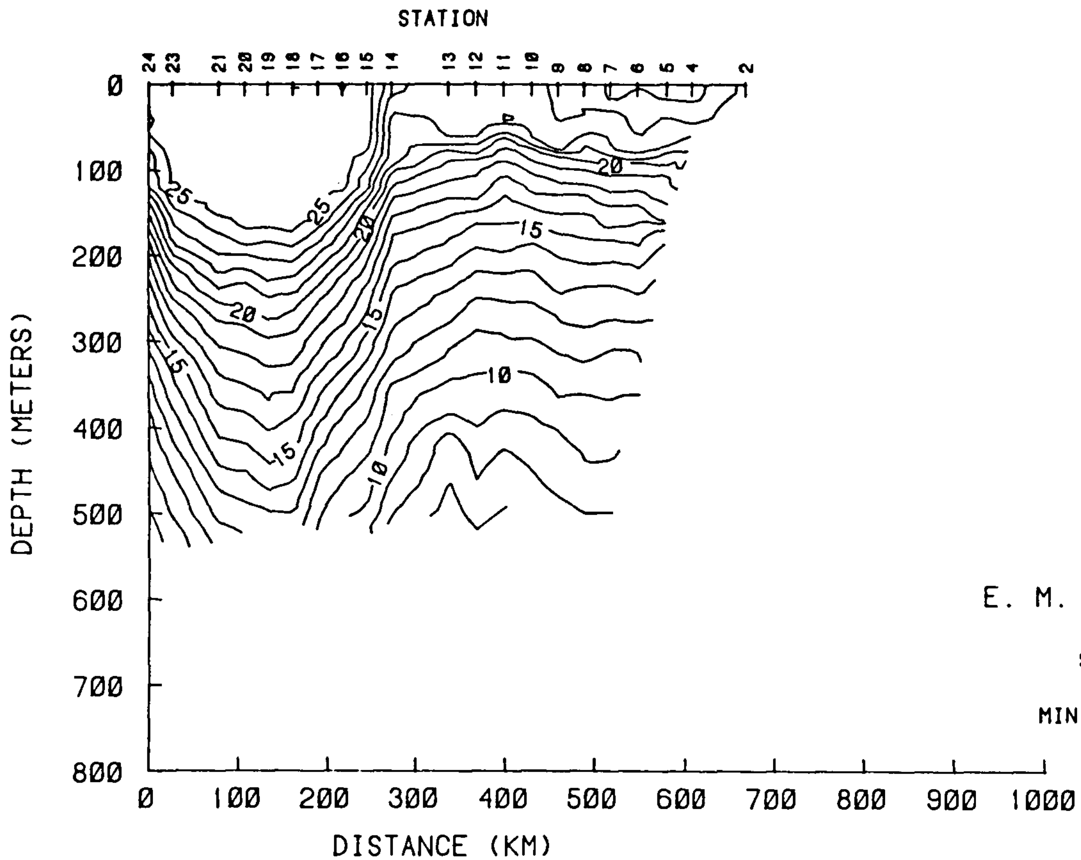
HO-2 CRUISE 86-01
8/18/86 TO 8/21/86
STATIONS 14 TO 77
TEMPERATURE DEG C
MIN = 15.80 MAX = 30.28


STATION
90
61
59
58
57
28
27
26
25
25
20
20
15
15
10
10
DEPTH (METERS)
0
100
200
300
400
500
600
700
800
DISTANCE (KM)
0
100
200
300
400
500
HO-2 CRUISE 86-01
8/19/86 TO 8/21/86
STATIONS 26 TO 90
TEMPERATURE DEG C
MIN = 6.94 MAX = 30.01

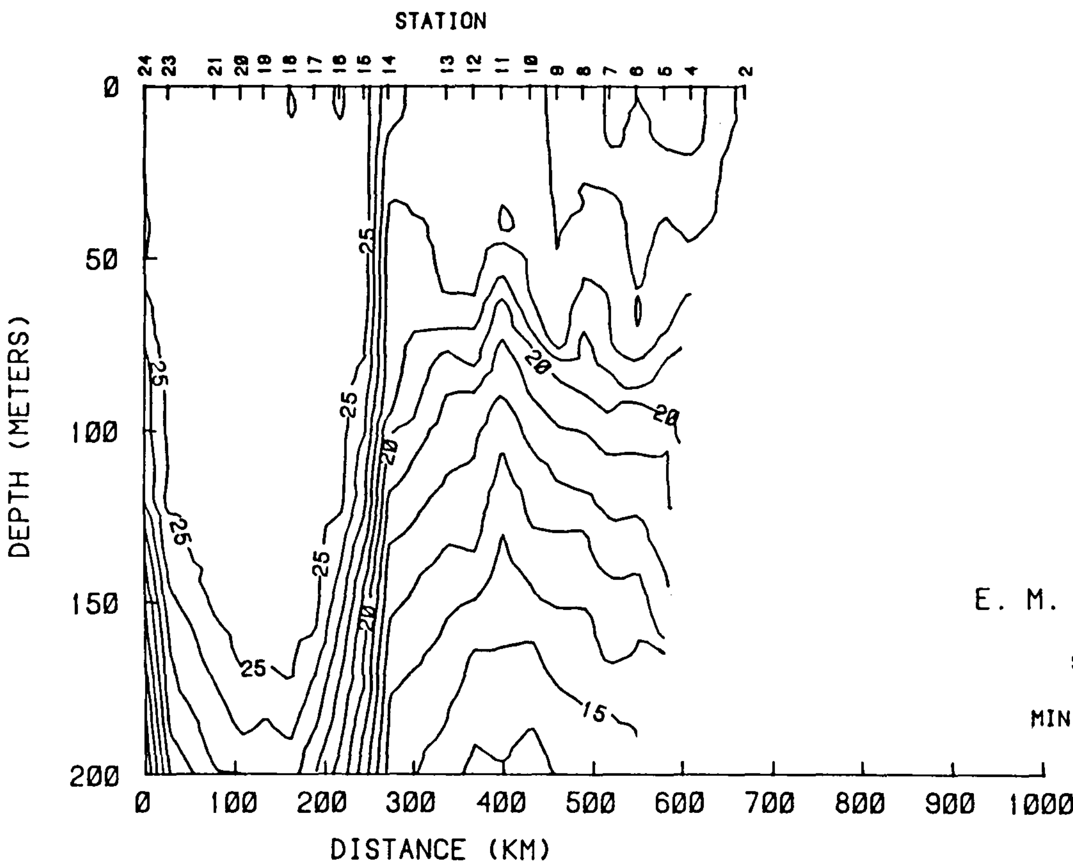


HO-2 CRUISE 86-01
8/19/86 TO 8/21/86
STATIONS 26 TO 90
TEMPERATURE DEG C
MIN = 20.72 MAX = 30.01

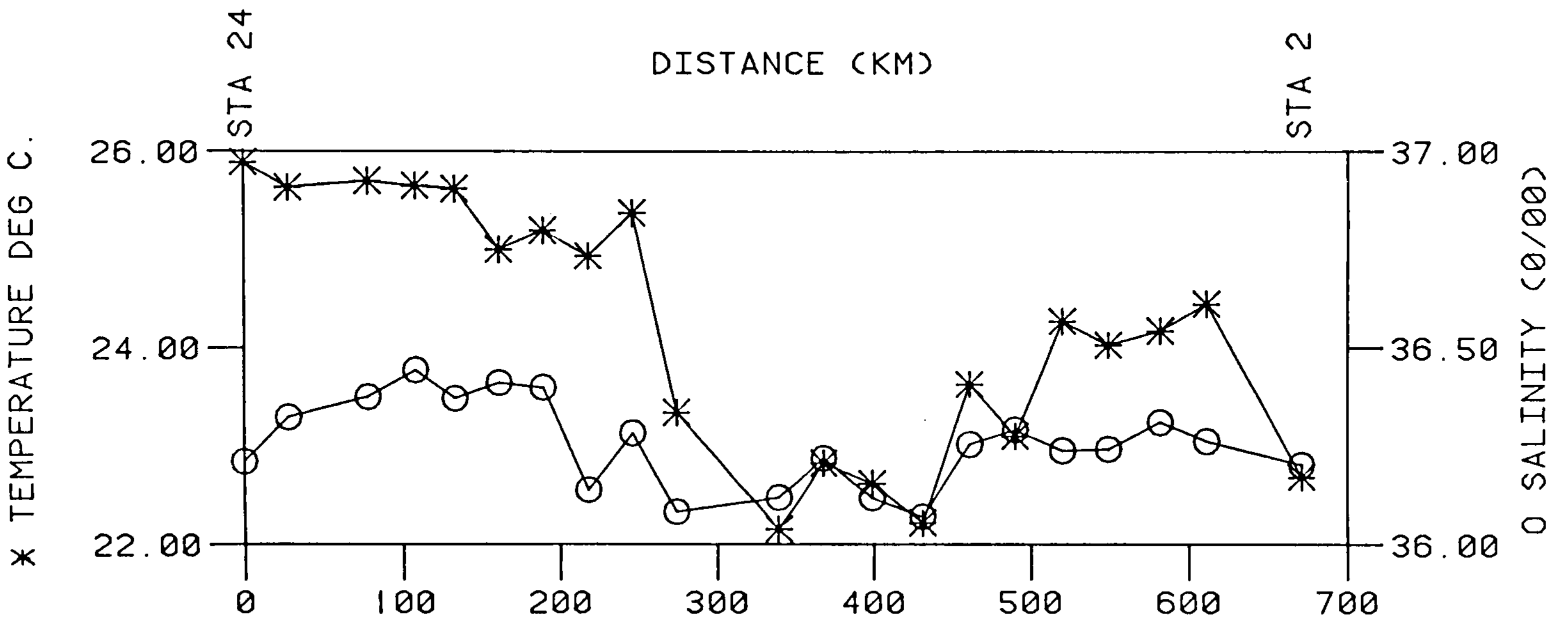

E. M. QUEENY CRUISE 86-01 1/ 4/86 TO 1/ 5/86
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
24
2
3000 m
1000 m
200 m



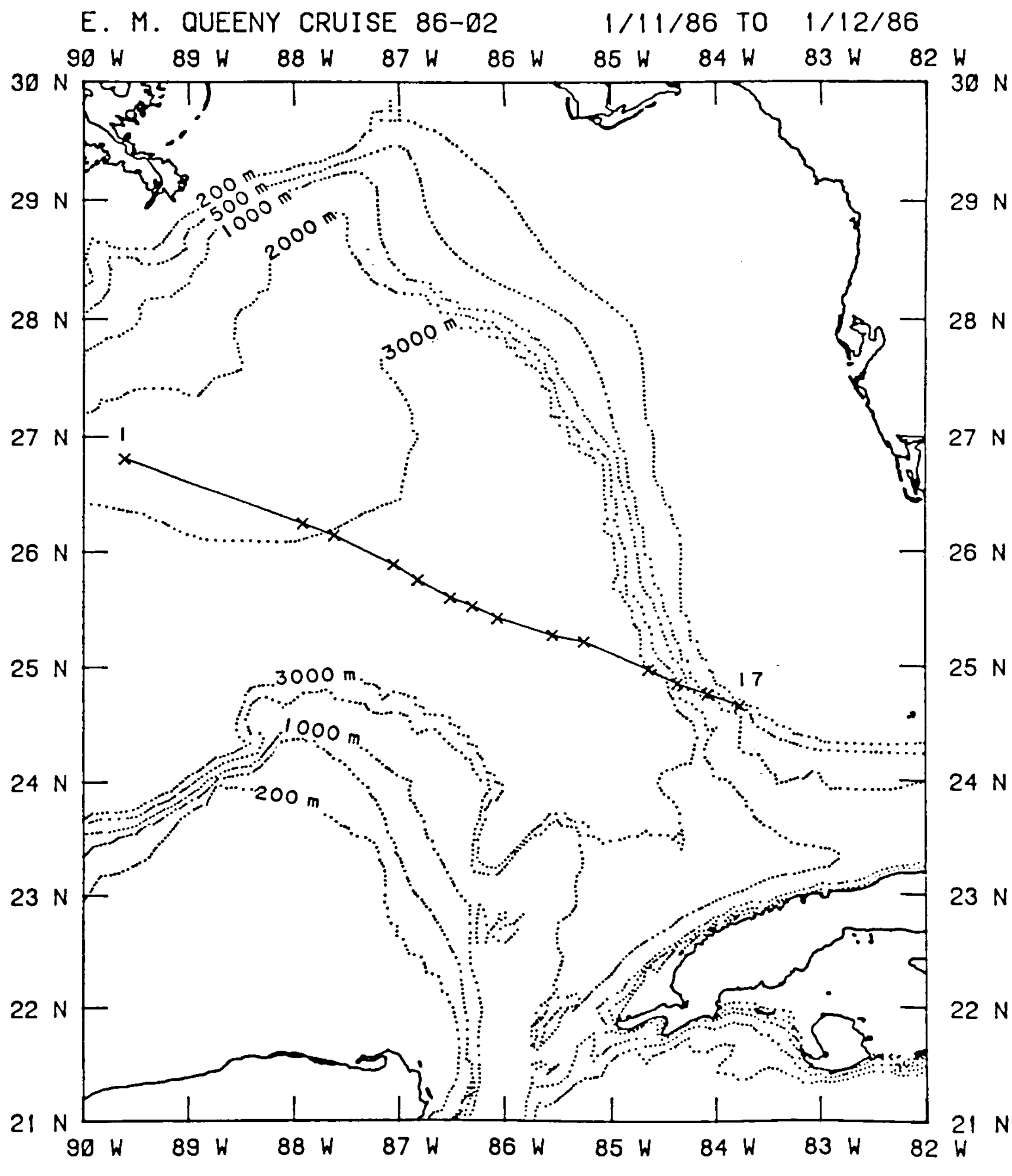
E. M. QUEENY CRUISE 86-01
1/ 4/86 TO 1/ 5/86
STATIONS 2 TO 24
TEMPERATURE DEG C
MIN = 6.62 MAX = 26.07

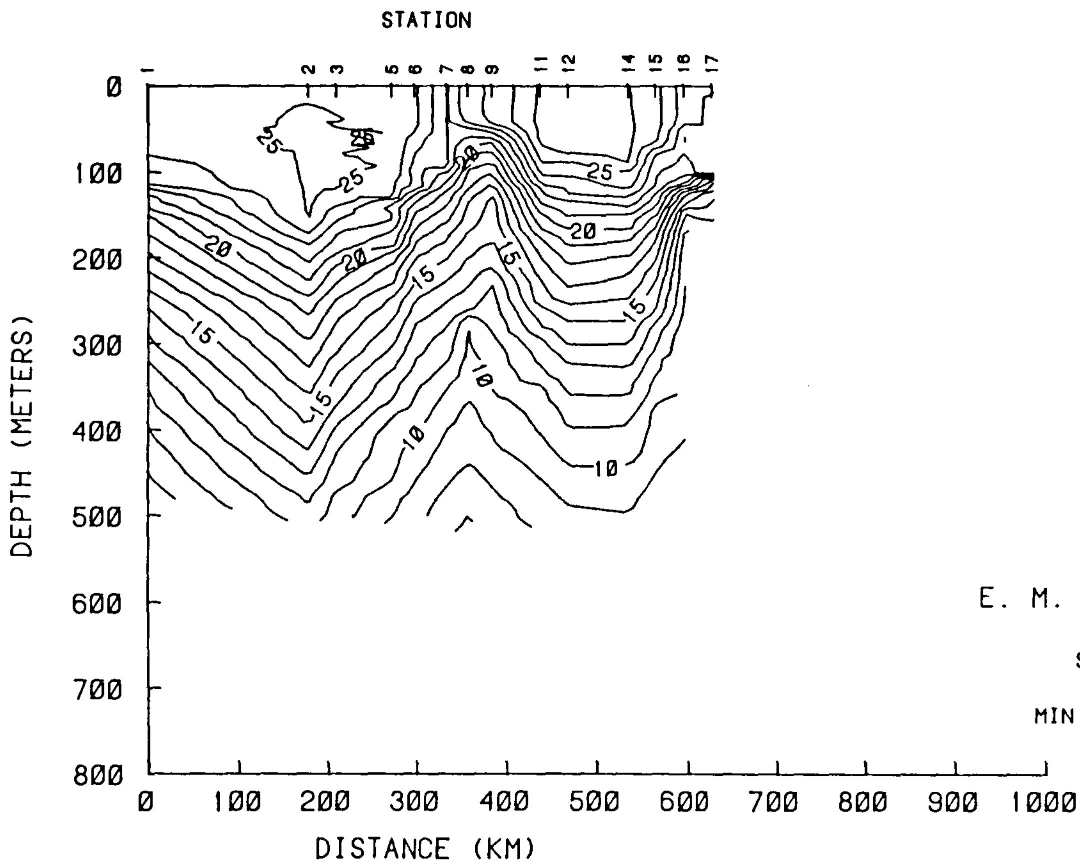


E. M. QUEENY CRUISE 86-01
1/ 4/86 TO 1/ 5/86
STATIONS 2 TO 24
TEMPERATURE DEG C
MIN = 13.55 MAX = 26.07

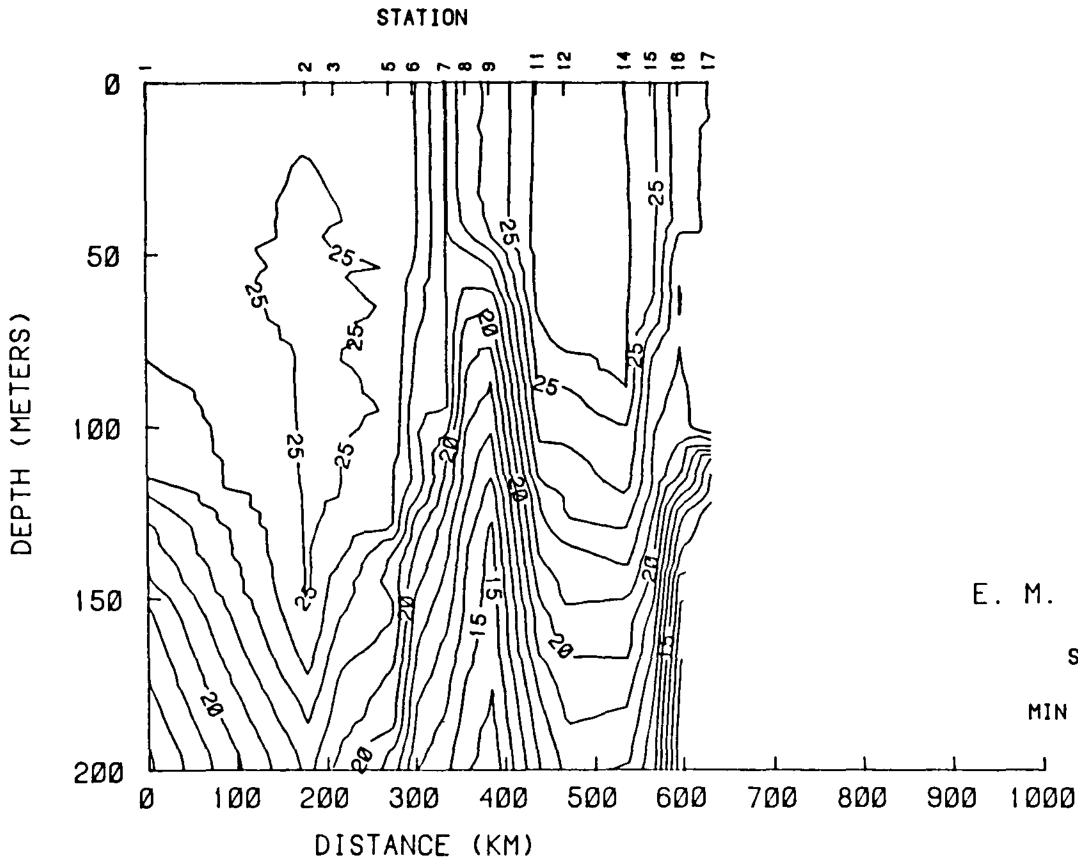


PARAMETERS AT SURFACE E. M. QUEENY CRUISE 86-01

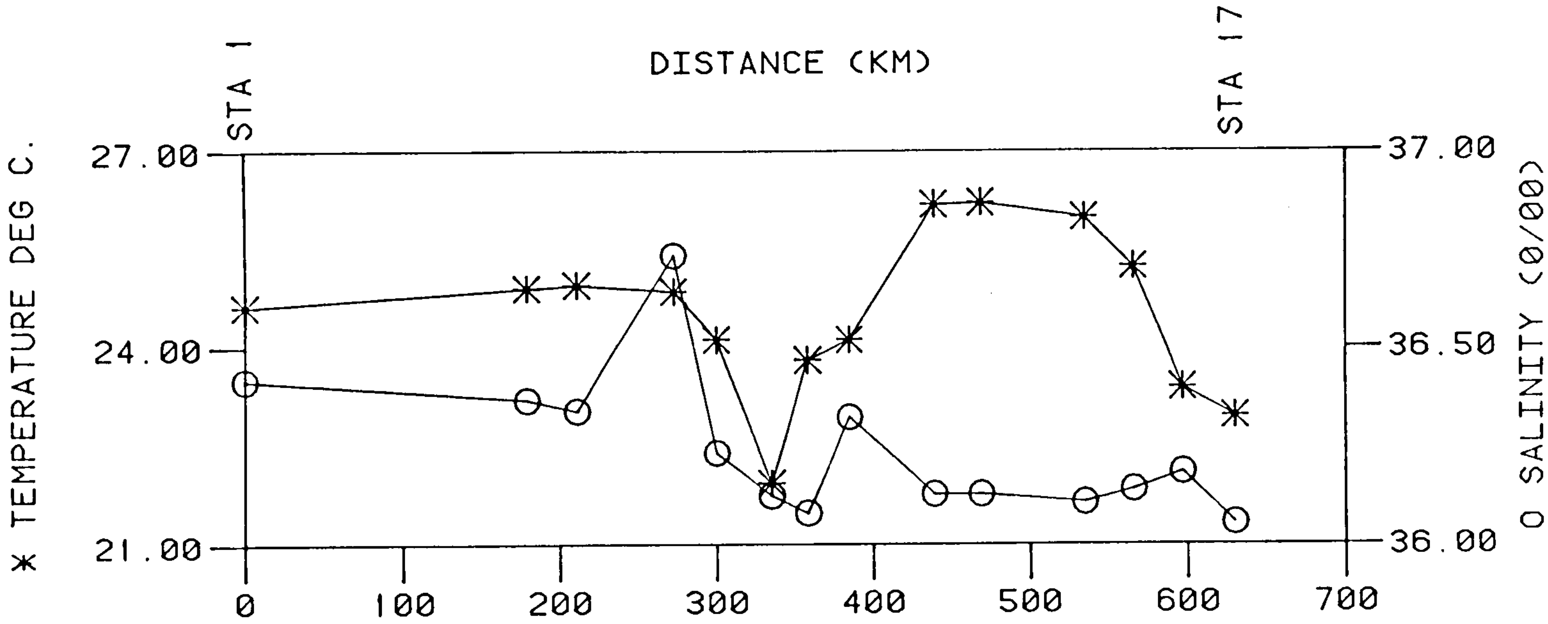

E. M. QUEENY CRUISE 86-02 1/11/86 TO 1/12/86
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
1
17
3000 m
1000 m
200 m



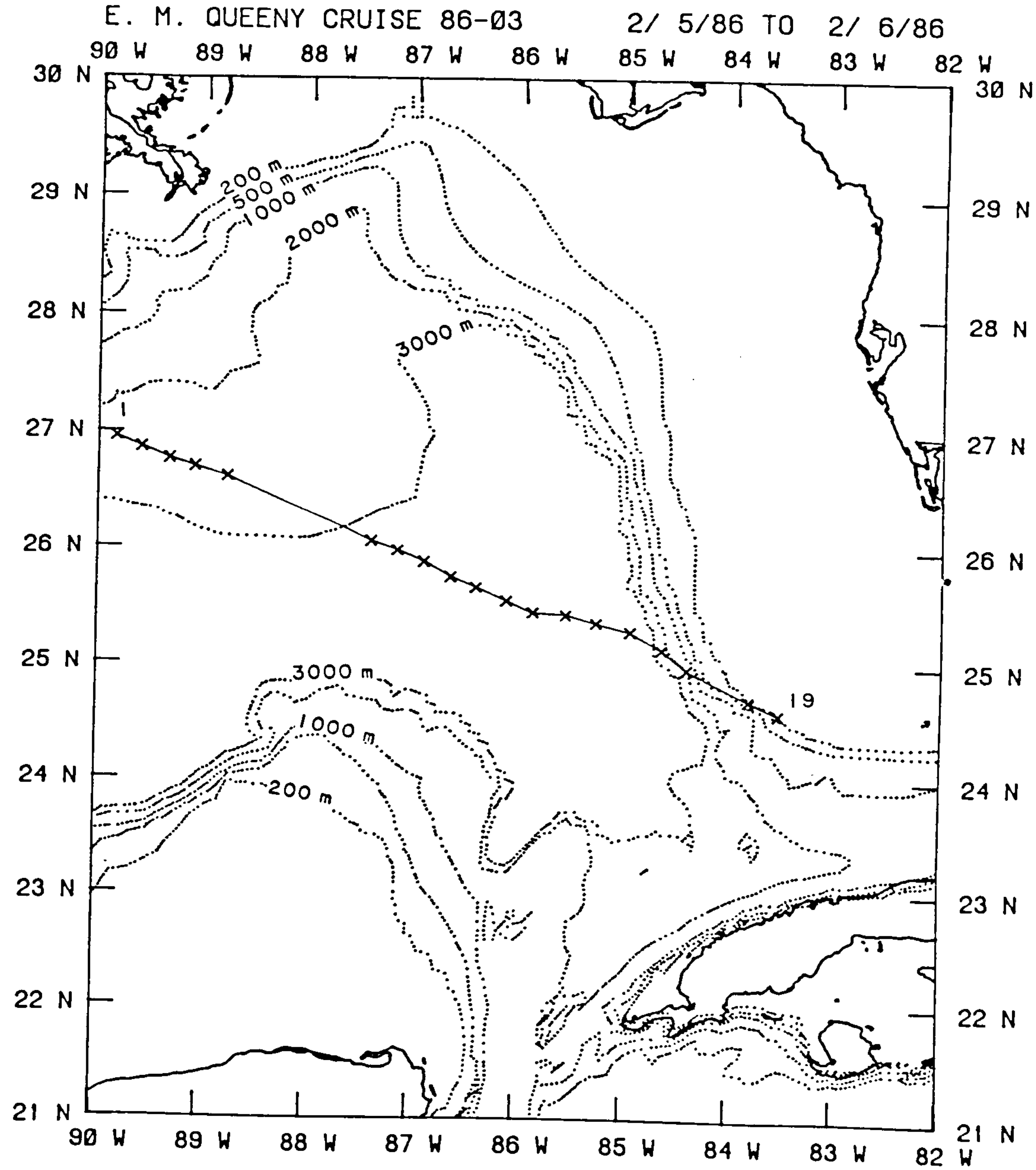
E. M. QUEENY CRUISE 86-02
1/11/86 TO 1/12/86
STATIONS 1 TO 17
TEMPERATURE DEG C
MIN = 6.91 MAX = 26.43

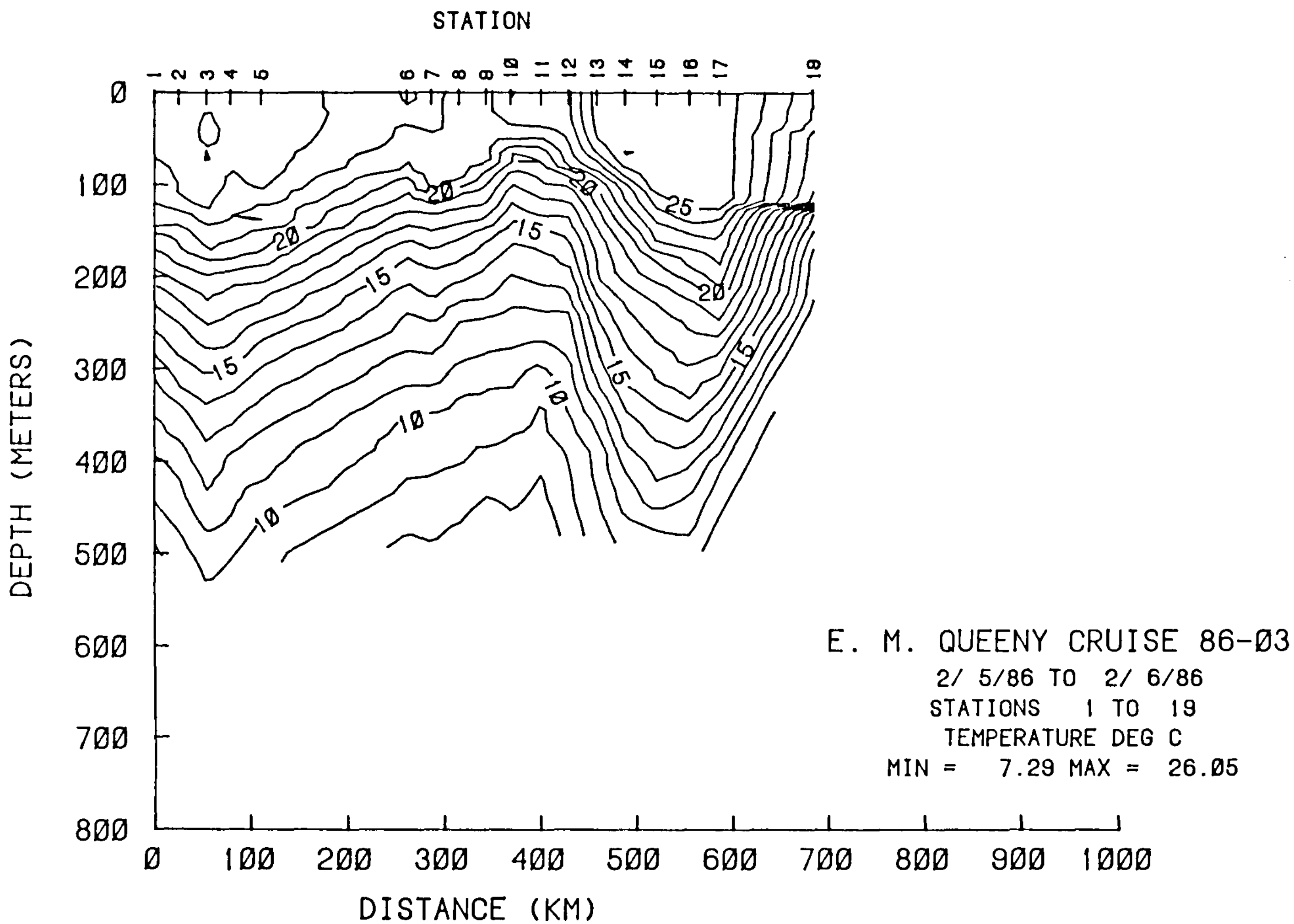


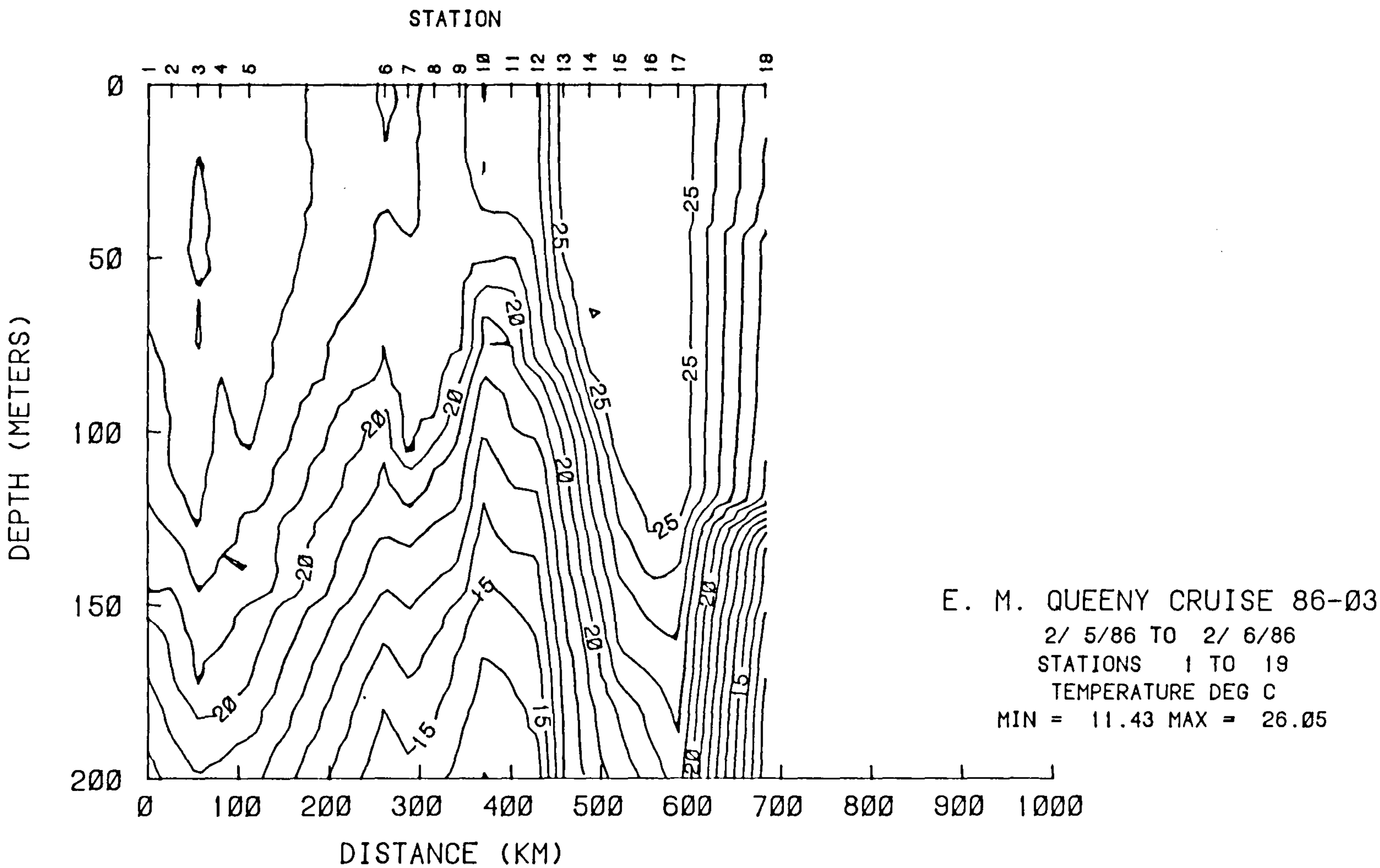
E. M. QUEENY CRUISE 86-02
1/11/86 TO 1/12/86
STATIONS 1 TO 17
TEMPERATURE DEG C
MIN = 11.16 MAX = 26.43

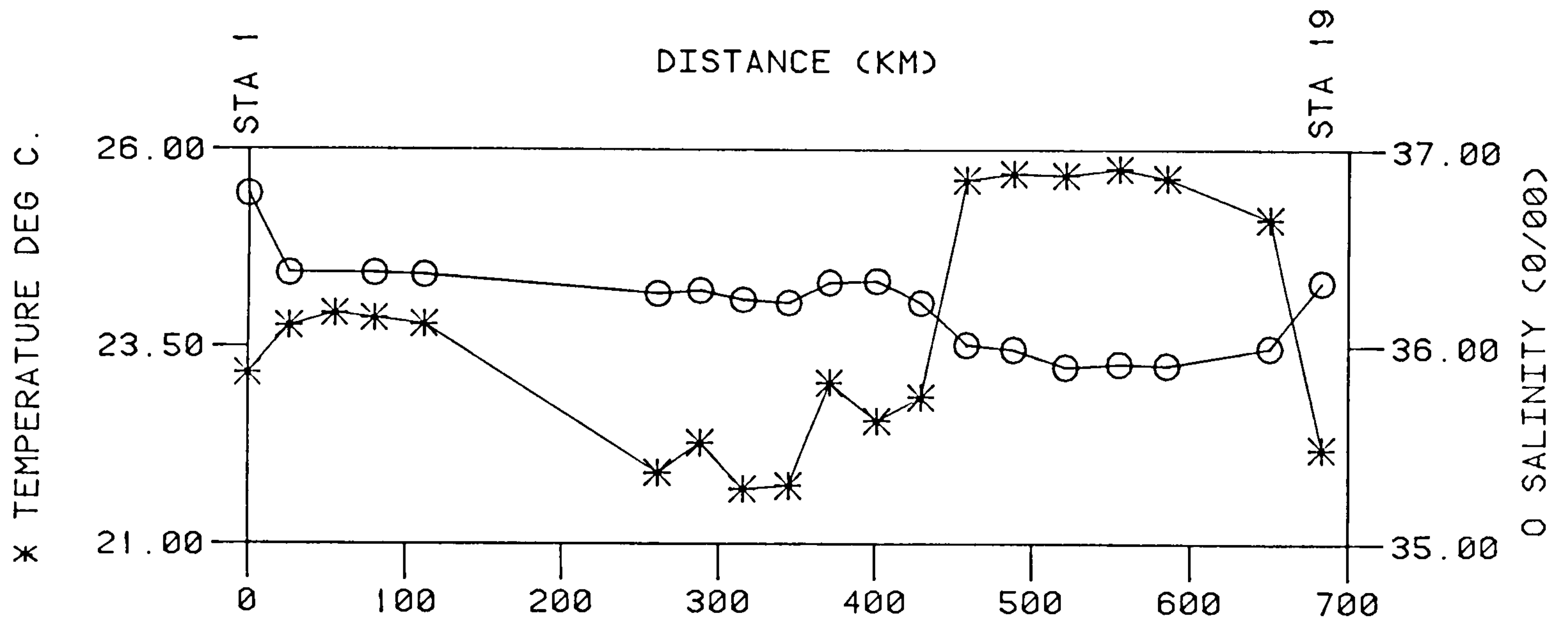


PARAMETERS AT SURFACE E. M. QUEENY CRUISE 86-02

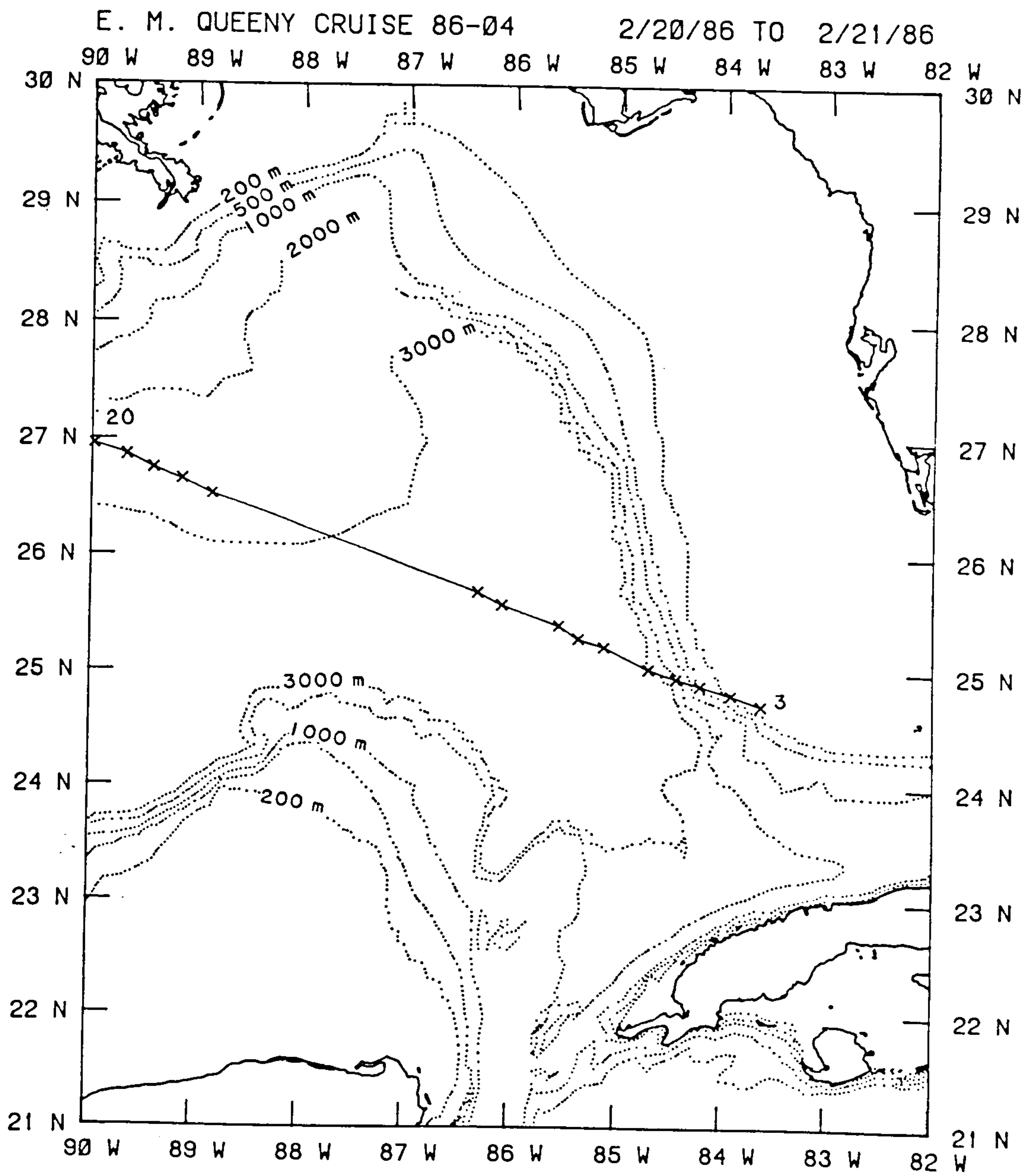

E. M. QUEENY CRUISE 86-03
2/ 5/86 TO 2/ 6/86
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
1
19
3000 m
1000 m
200 m

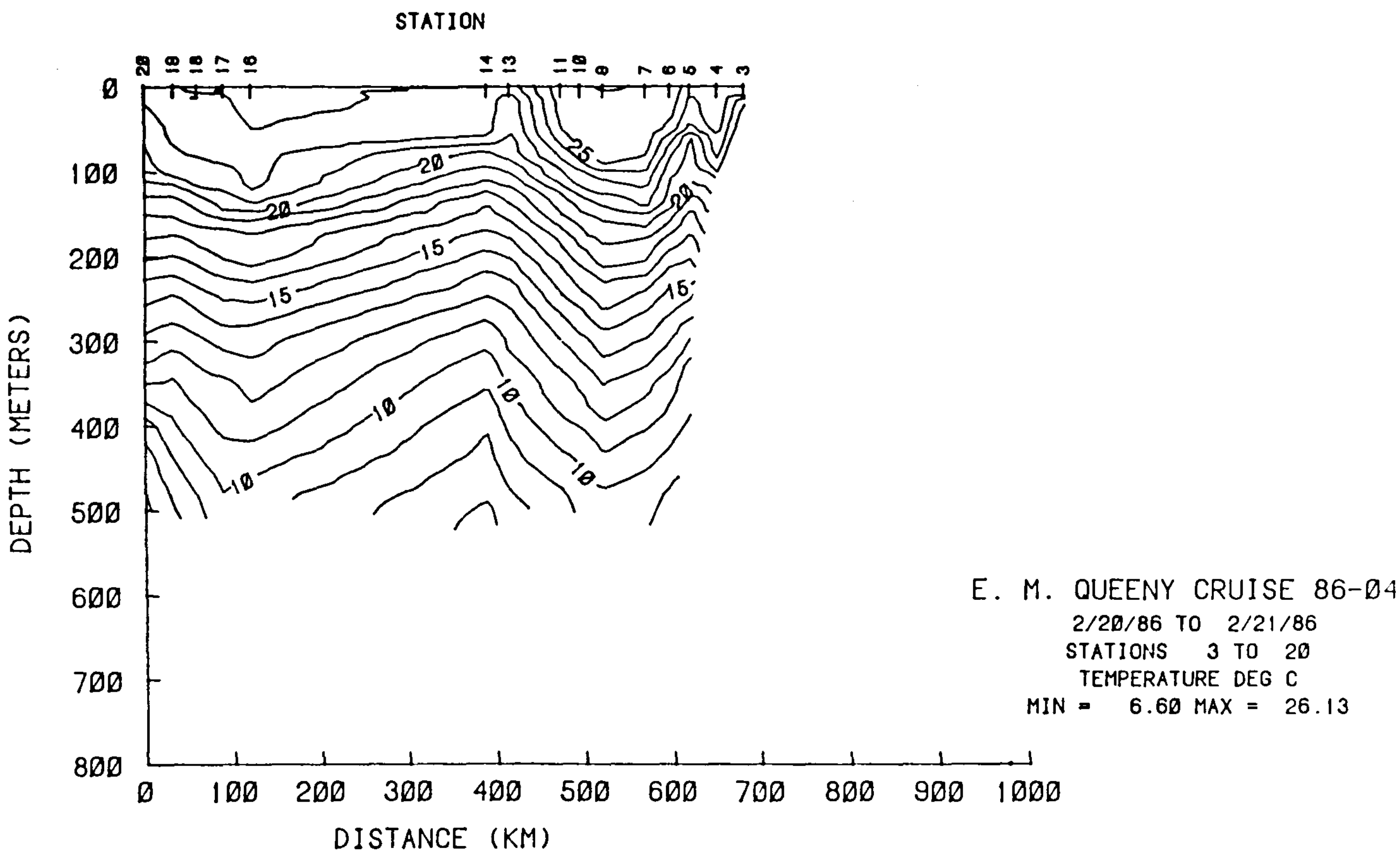

STATION
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 19
DEPTH (METERS)
0 100 200 300 400 500 600 700 800
DISTANCE (KM)
0 100 200 300 400 500 600 700 800 900 1000
25
20
15
10
E. M. QUEENY CRUISE 86-03
2/ 5/86 TO 2/ 6/86
STATIONS 1 TO 19
TEMPERATURE DEG C
MIN = 7.29 MAX = 26.05

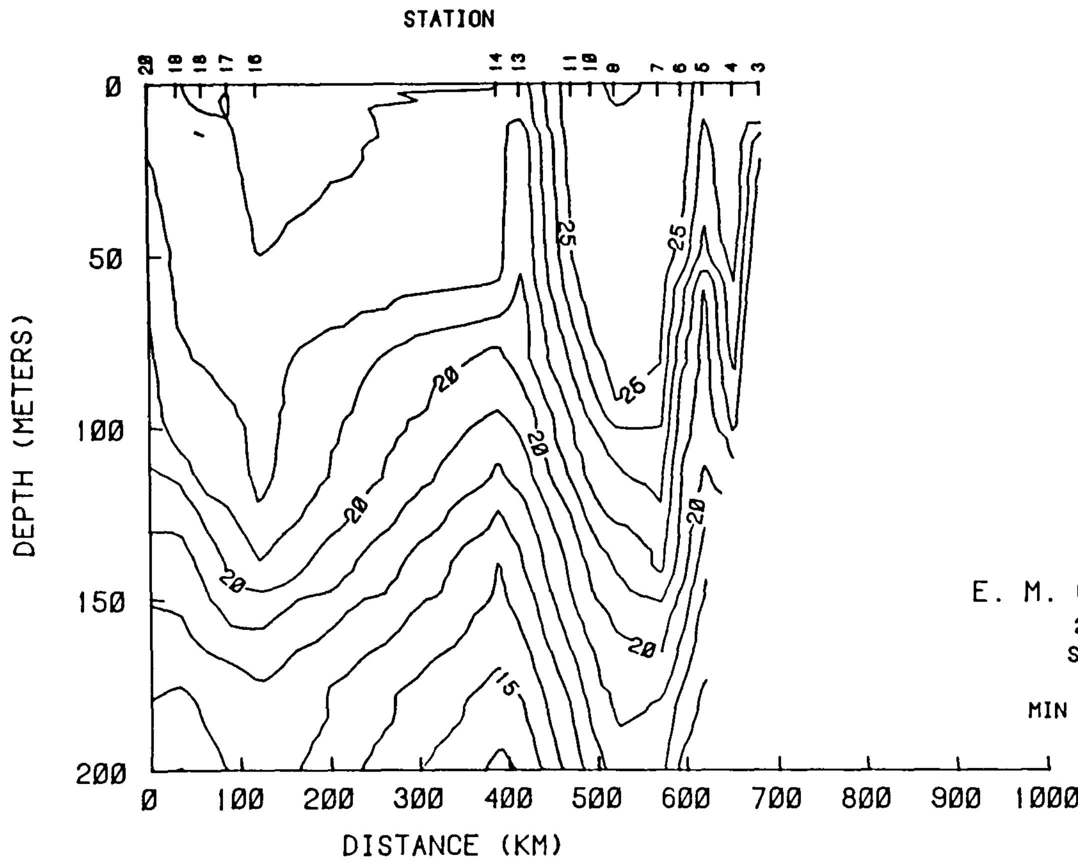

STATION
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
DEPTH (METERS)
0 50 100 150 200
DISTANCE (KM)
0 100 200 300 400 500 600 700 800 900 1000
E. M. QUEENY CRUISE 86-03
2/ 5/86 TO 2/ 6/86
STATIONS 1 TO 19
TEMPERATURE DEG C
MIN = 11.43 MAX = 26.05



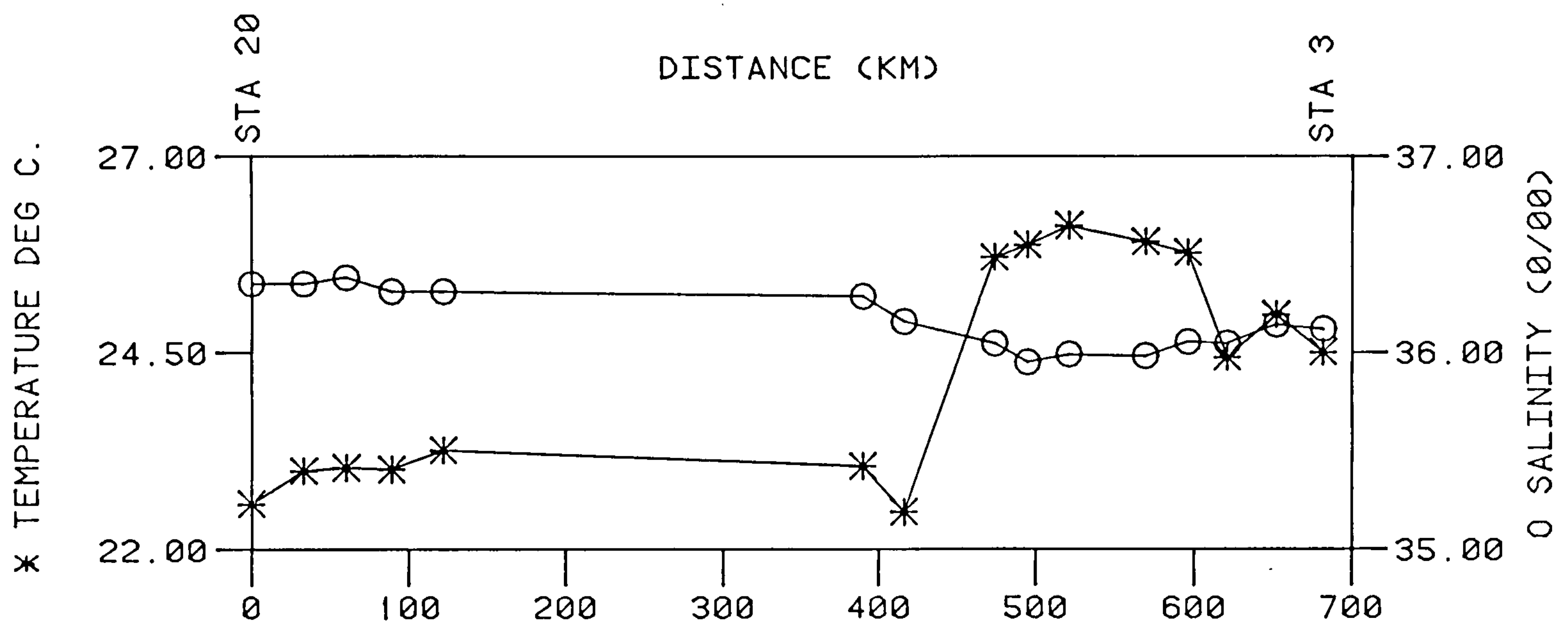
PARAMETERS AT SURFACE E. M. QUEENY CRUISE 86-03


E. M. QUEENY CRUISE 86-04
2/20/86 TO 2/21/86
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
20
3
3000 m
1000 m
200 m

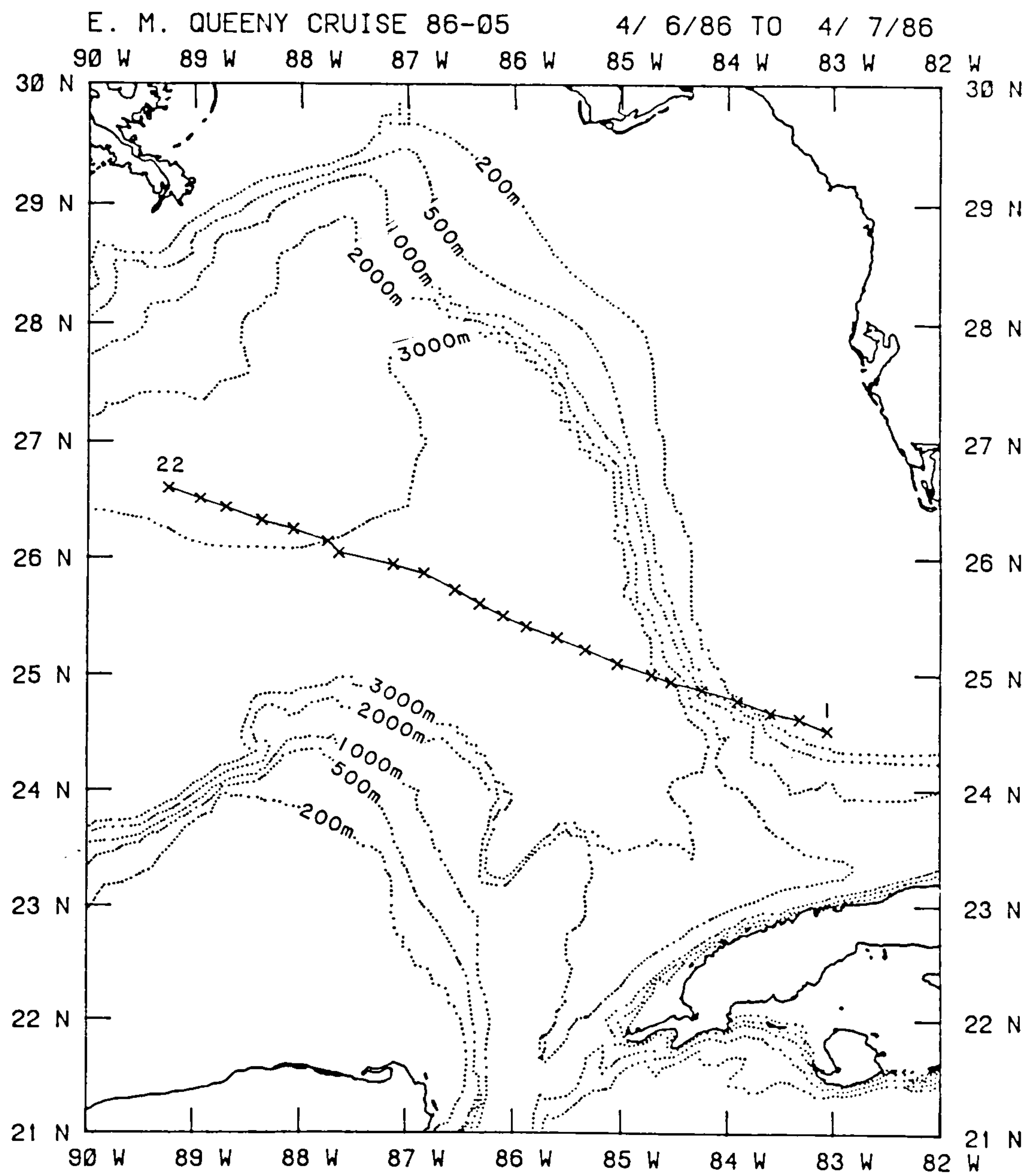

STATION
20 19 18 17 16 14 13 11 10 9 7 6 5 4 3
DEPTH (METERS)
0
100
200
300
400
500
600
700
800
0 100 200 300 400 500 600 700 800 900 1000
DISTANCE (KM)
25
20
15
10
E. M. QUEENY CRUISE 86-04
2/20/86 TO 2/21/86
STATIONS 3 TO 20
TEMPERATURE DEG C
MIN = 6.60 MAX = 26.13

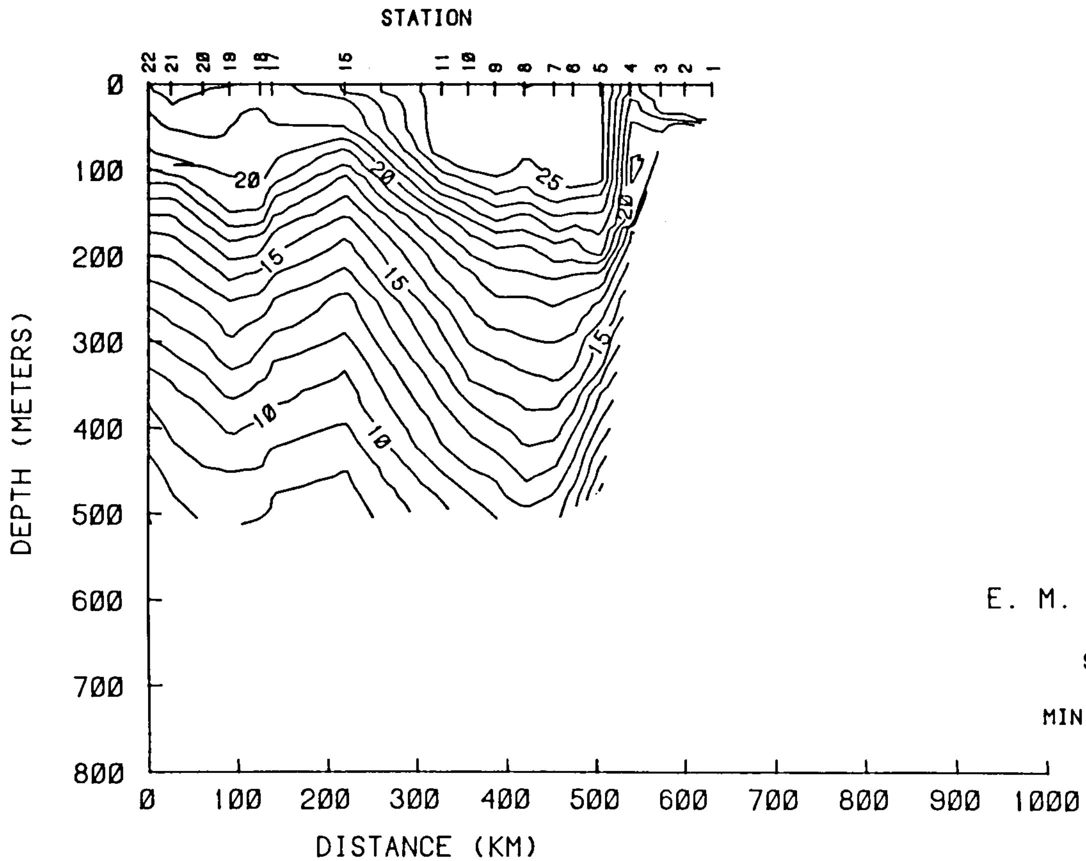


E. M. QUEENY CRUISE 86-04
2/20/86 TO 2/21/86
STATIONS 3 TO 20
TEMPERATURE DEG C
MIN = 13.72 MAX = 26.13

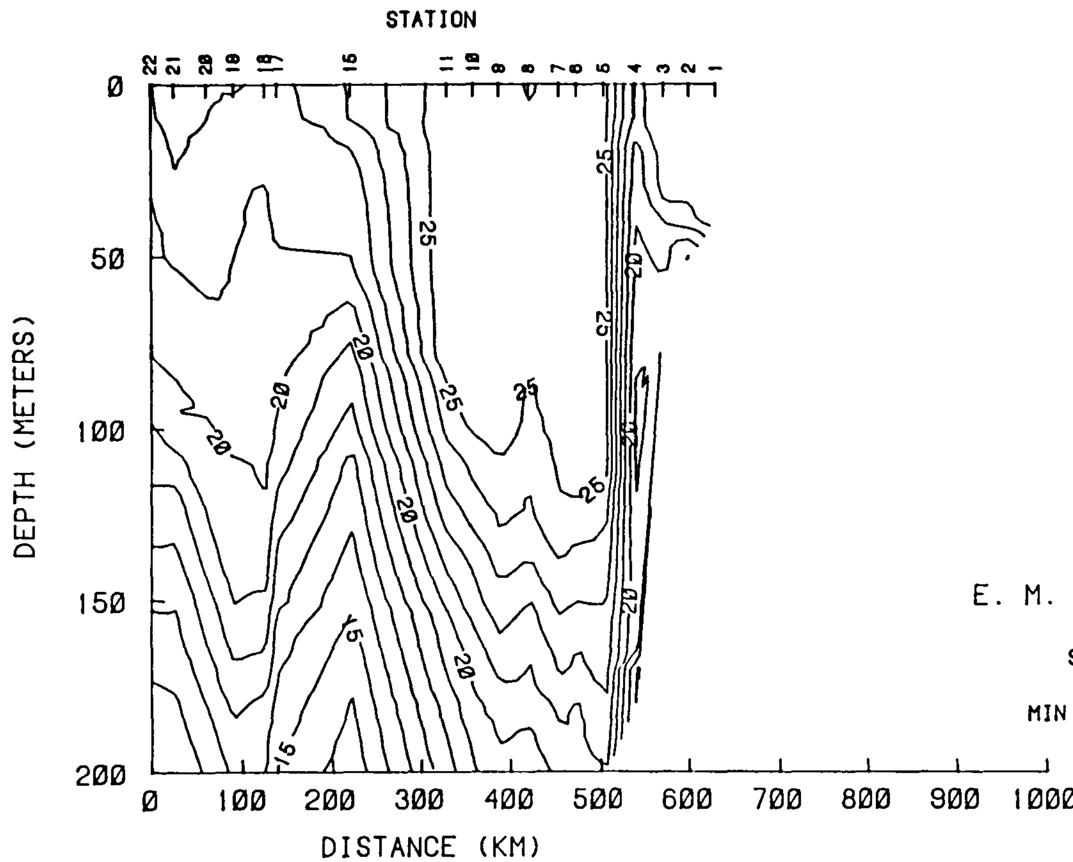


PARAMETERS AT SURFACE E. M. QUEENY CRUISE 86-04


E. M. QUEENY CRUISE 86-05 4/ 6/86 TO 4/ 7/86
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200m
500m
1000m
2000m
3000m
22
1



E. M. QUEENY CRUISE 86-05
4/ 6/86 TO 4/ 7/86
STATIONS 1 TO 22
TEMPERATURE DEG C
MIN = 6.90 MAX = 25.79



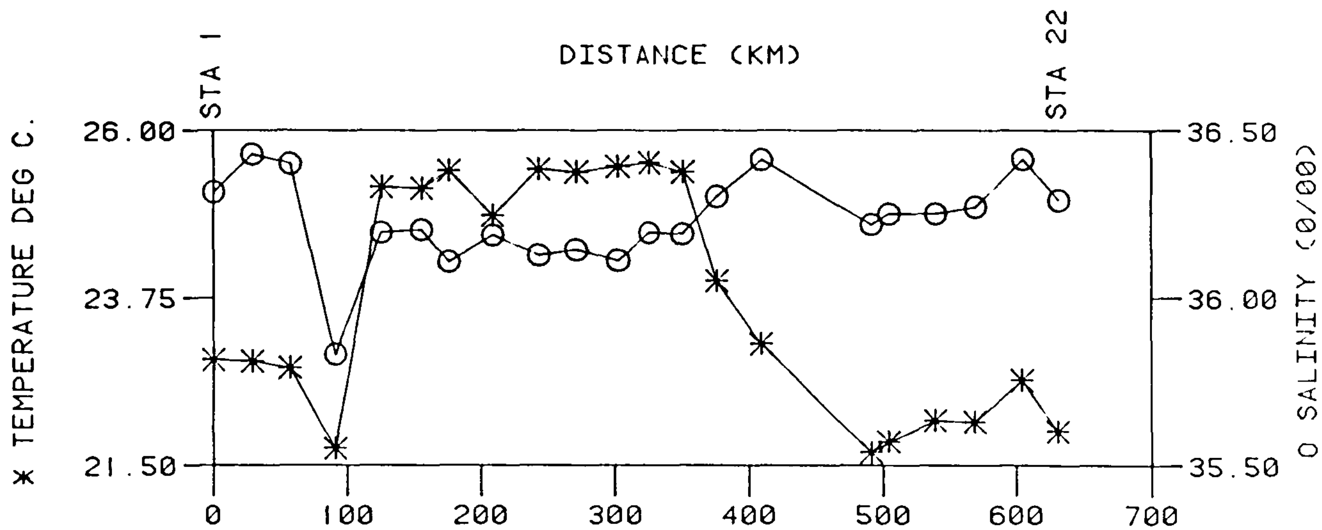
E. M. QUEENY CRUISE 86-05

4/ 6/86 TO 4/ 7/86

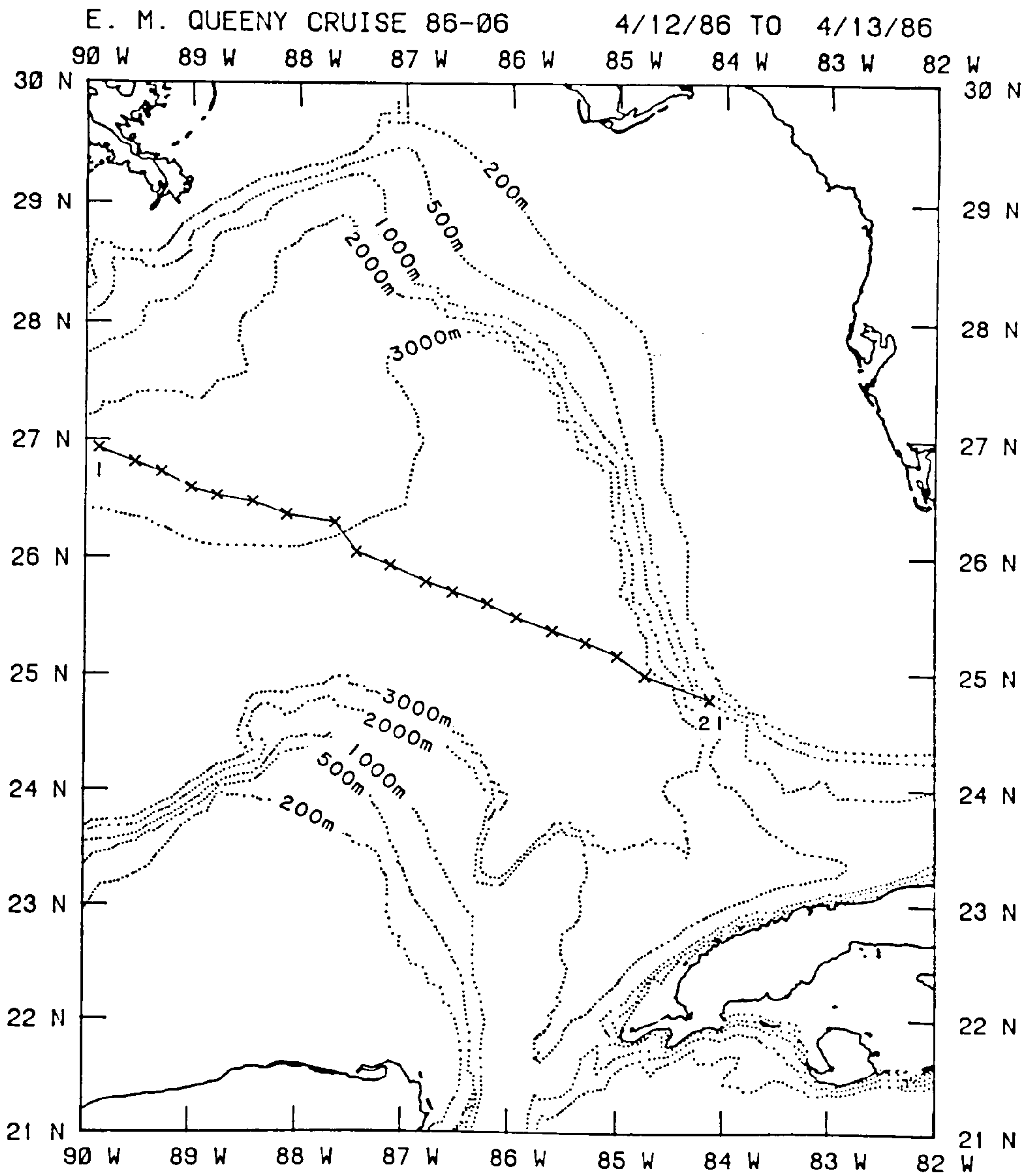
STATIONS 1 TO 22

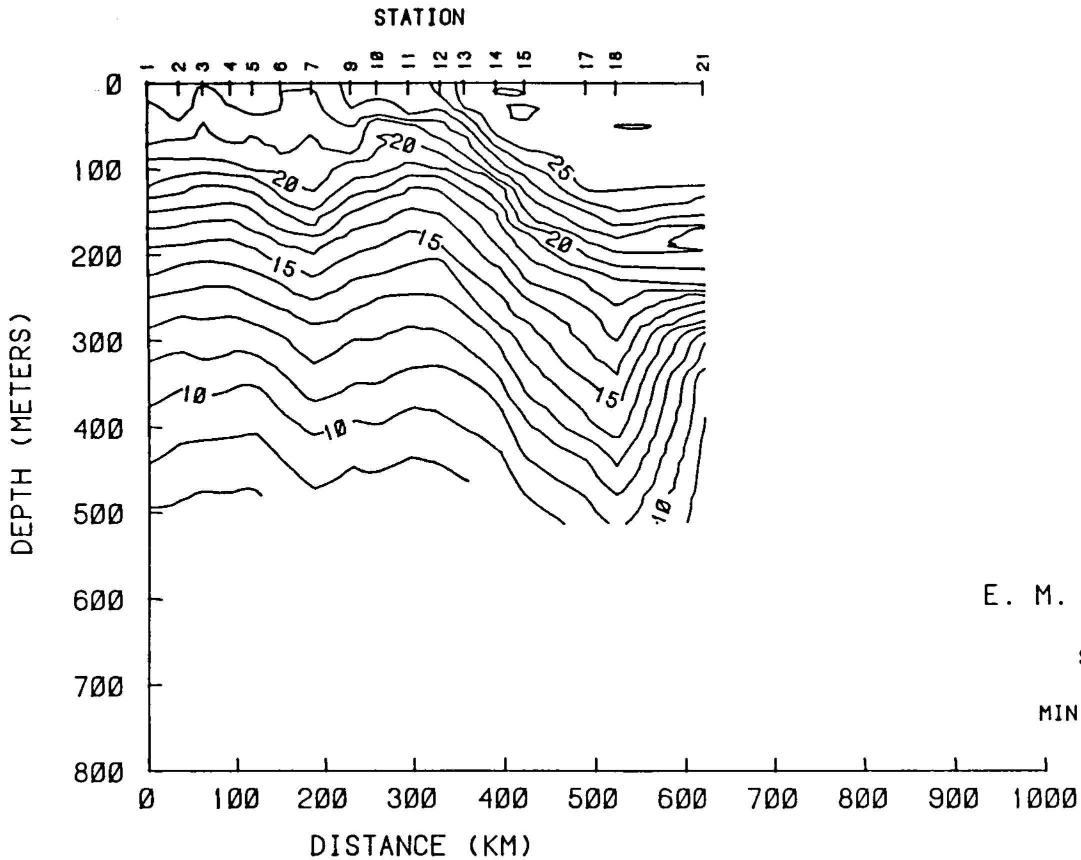
TEMPERATURE DEG C

MIN = 13.40 MAX = 25.79

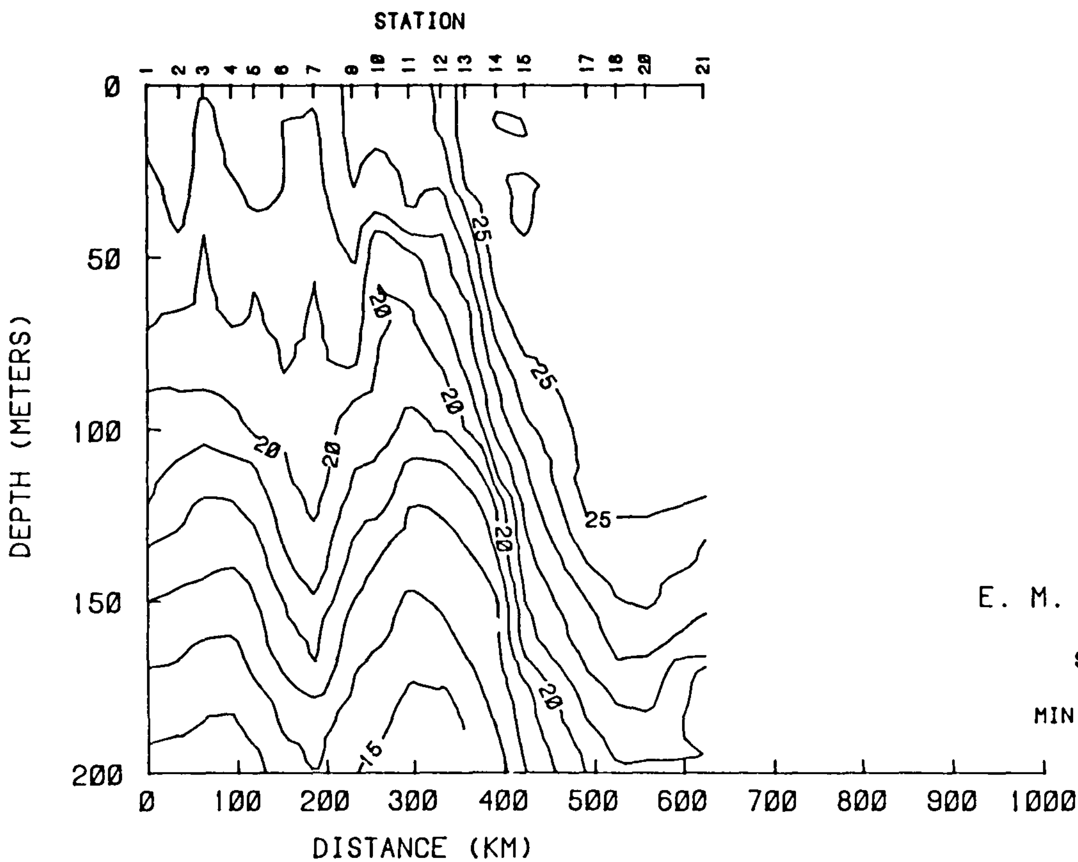


PARAMETERS AT SURFACE E. M. QUEENY CRUISE 86-05

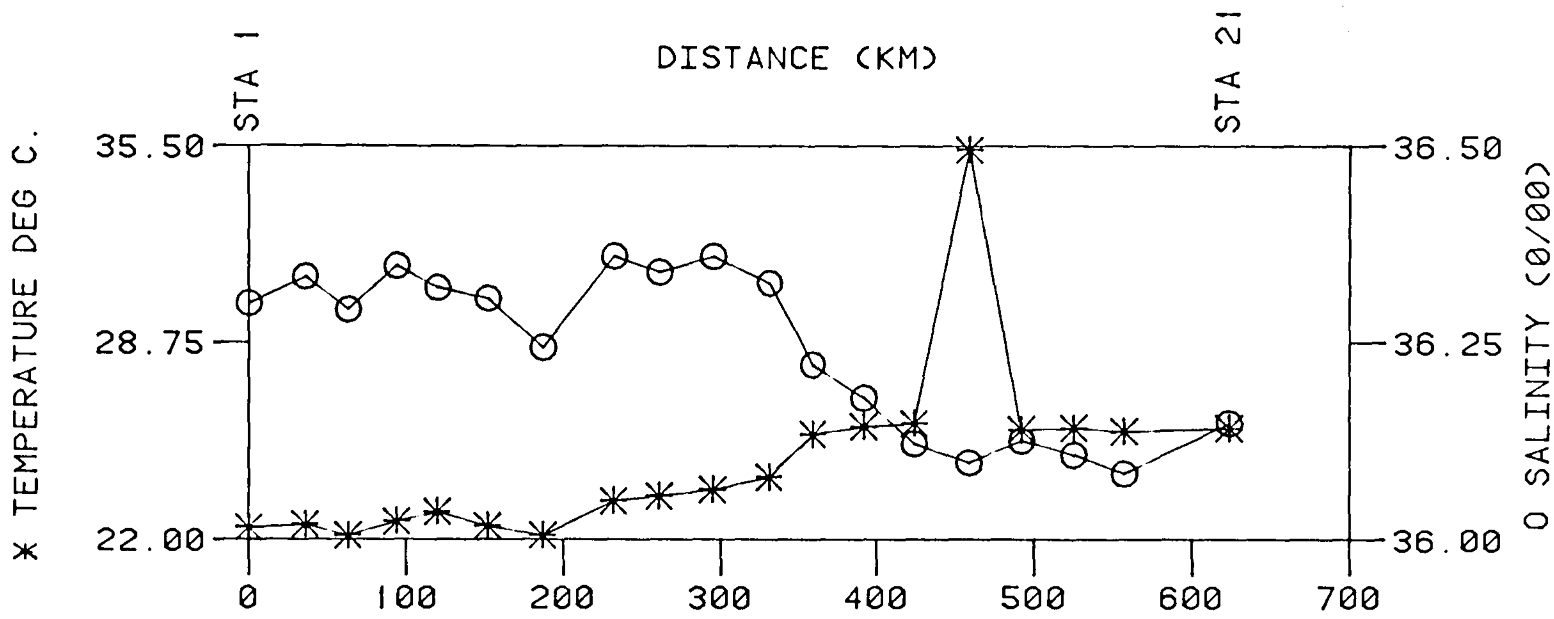

E. M. QUEENY CRUISE 86-Ø6 4/12/86 TO 4/13/86
9Ø W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
3Ø N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200m
500m
1000m
2000m
3000m
1
21



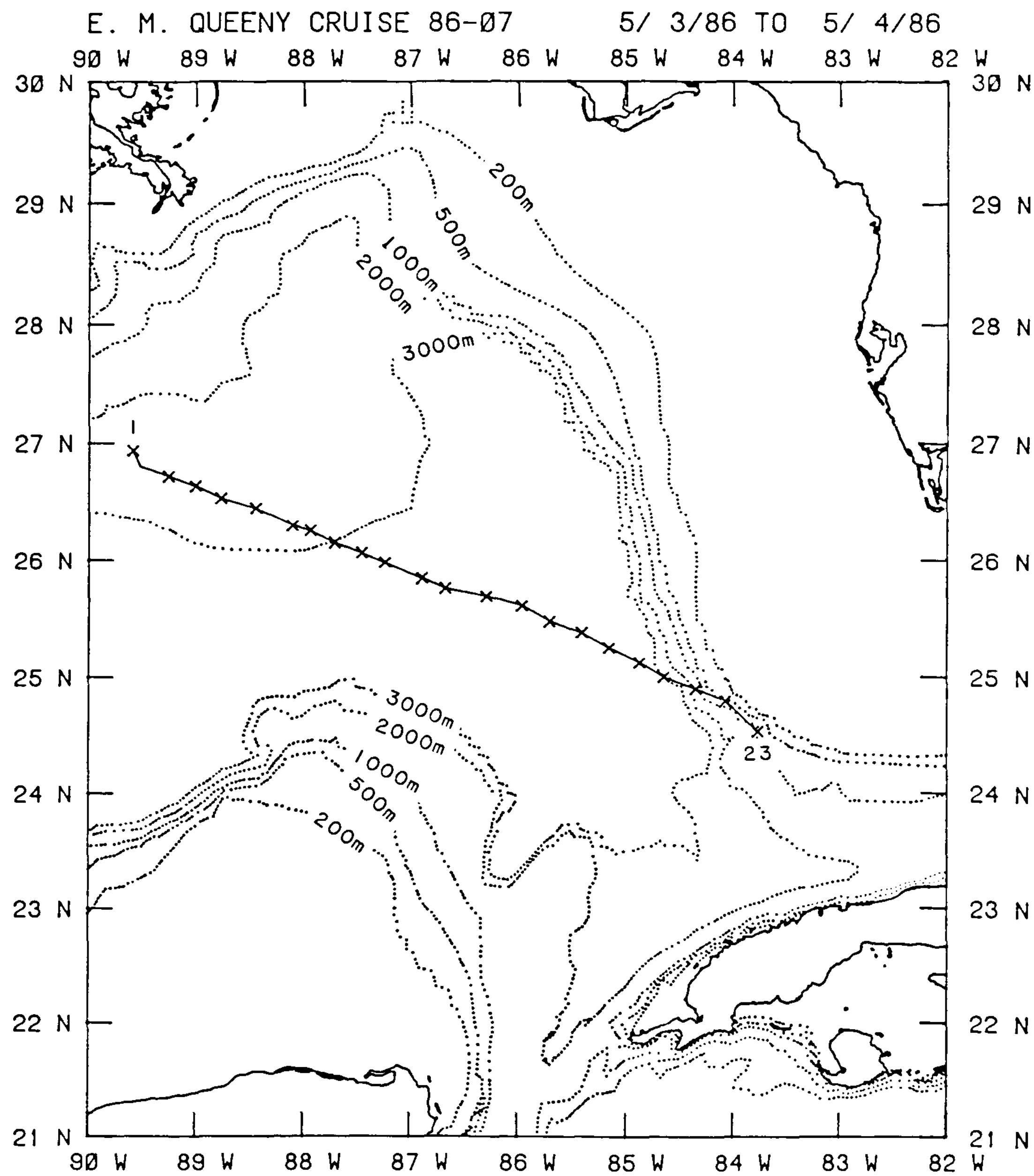
E. M. QUEENY CRUISE 86-06
4/12/86 TO 4/13/86
STATIONS 1 TO 21
TEMPERATURE DEG C
MIN = 7.67 MAX = 26.06

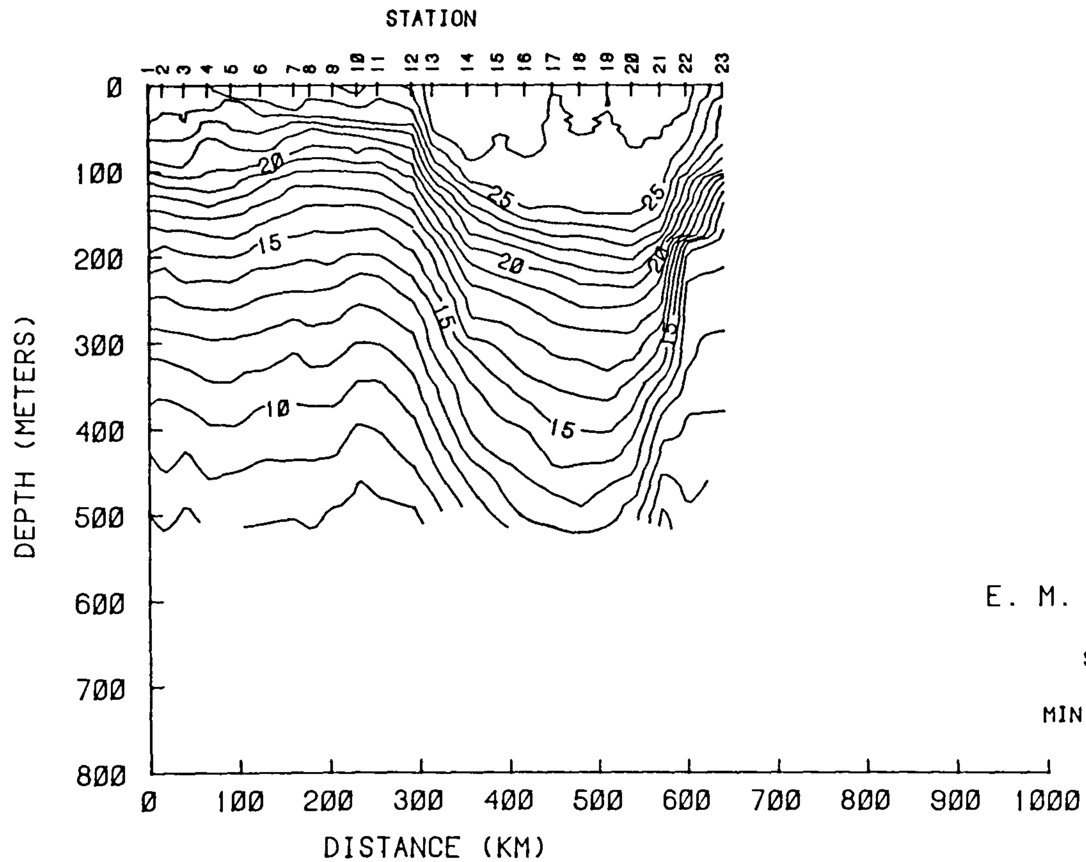


E. M. QUEENY CRUISE 86-06
4/12/86 TO 4/13/86
STATIONS 1 TO 21
TEMPERATURE DEG C
MIN = 14.09 MAX = 26.06

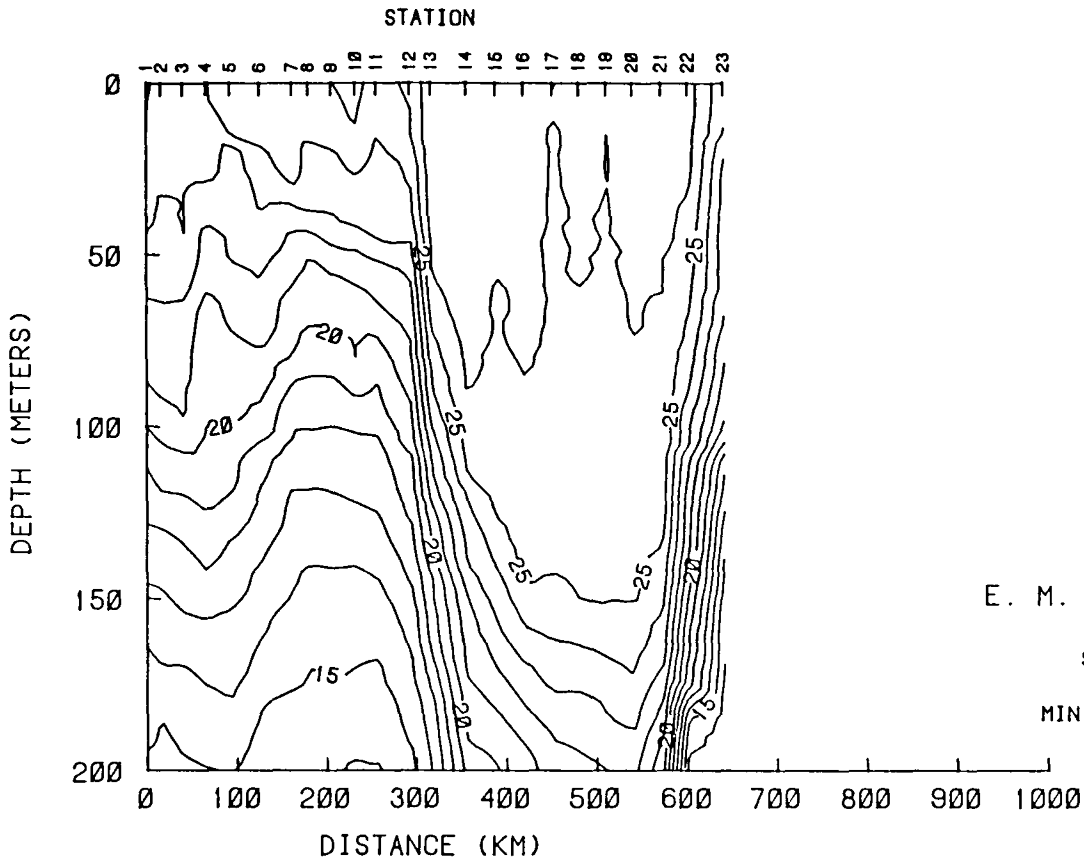


PARAMETERS AT SURFACE E. M. QUEENY CRUISE 86-06

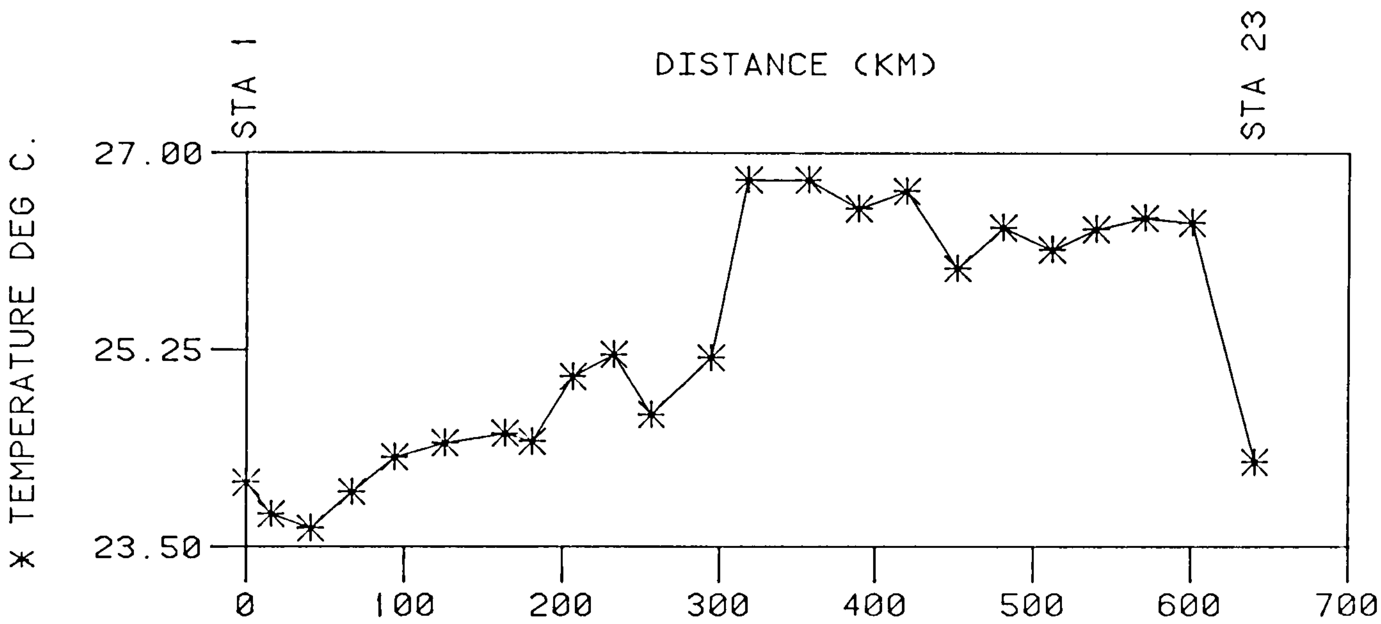

E. M. QUEENY CRUISE 86-Ø7 5/ 3/86 TO 5/ 4/86
9Ø W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
3Ø N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200m
500m
1000m
2000m
3000m
1
23



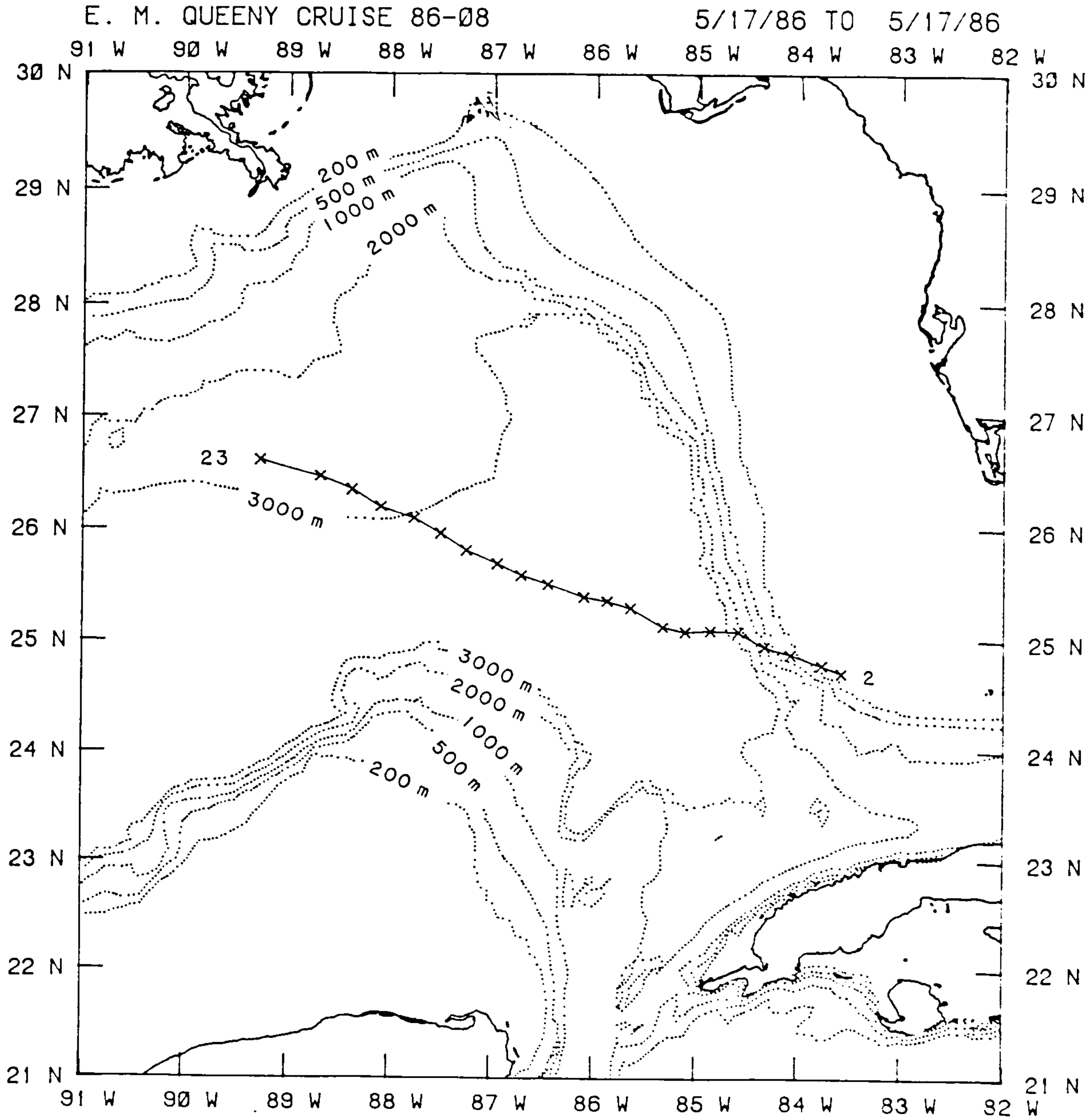
E. M. QUEENY CRUISE 86-07
5/ 3/86 TO 5/ 4/86
STATIONS 1 TO 23
TEMPERATURE DEG C
MIN = 7.44 MAX = 26.91



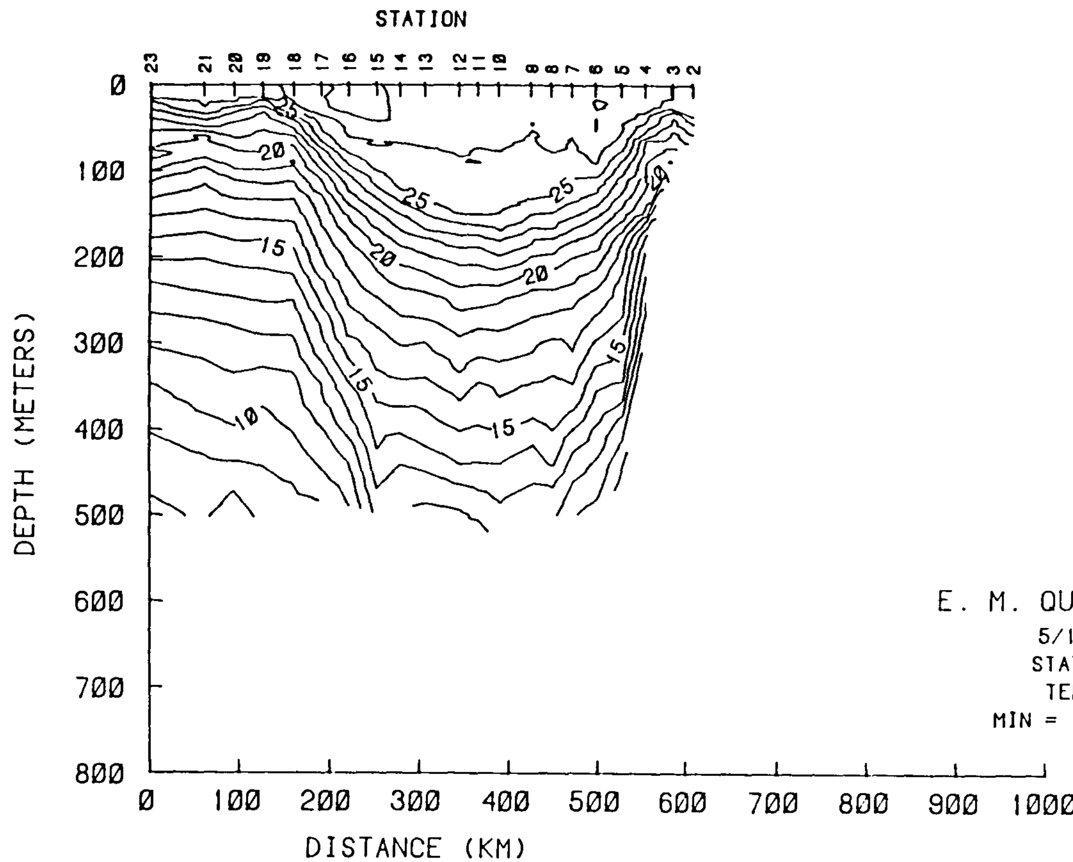
E. M. QUEENY CRUISE 86-07
5/ 3/86 TO 5/ 4/86
STATIONS 1 TO 23
TEMPERATURE DEG C
MIN = 13.43 MAX = 26.91



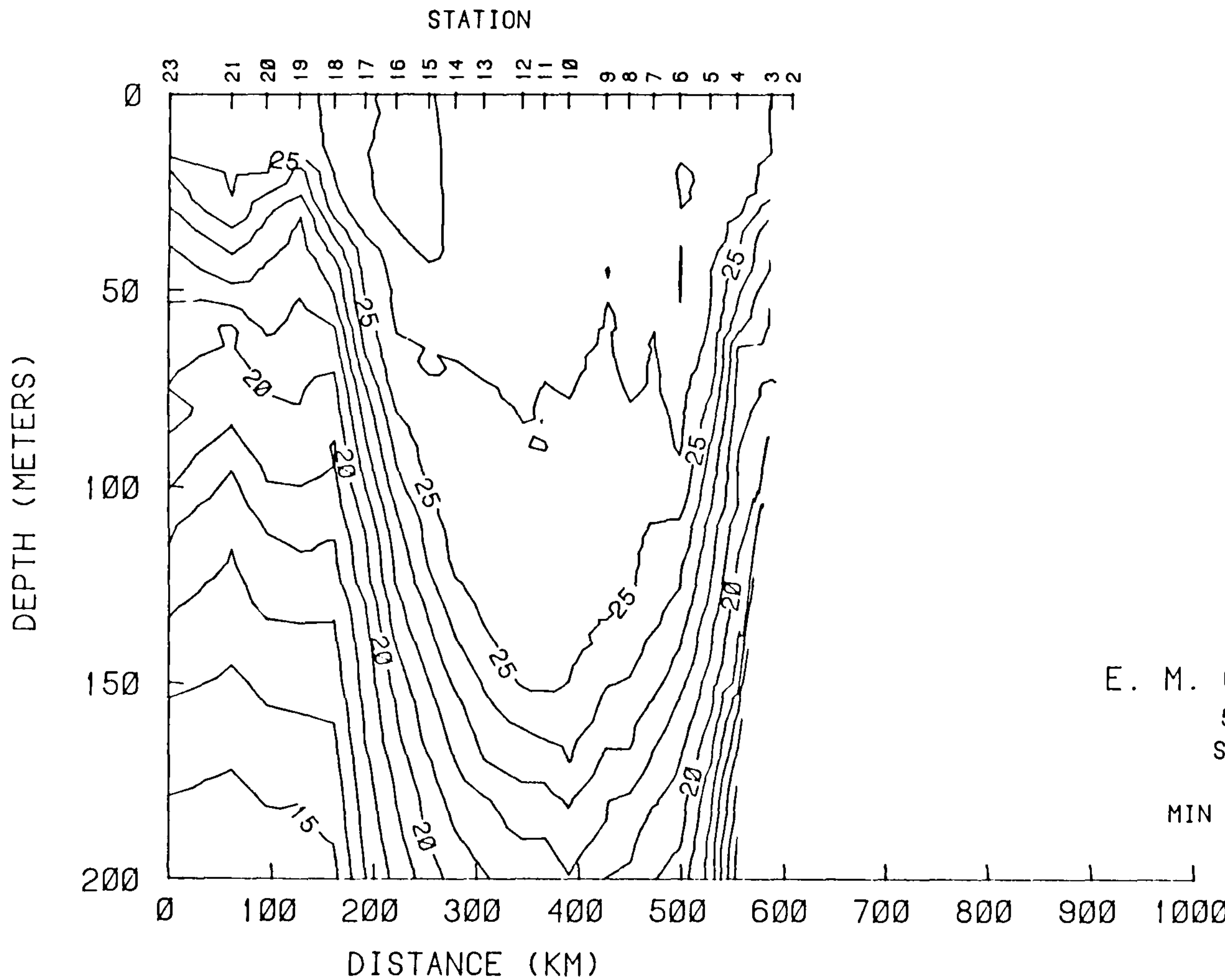
PARAMETERS AT SURFACE E. M. QUEENY CRUISE 86-07



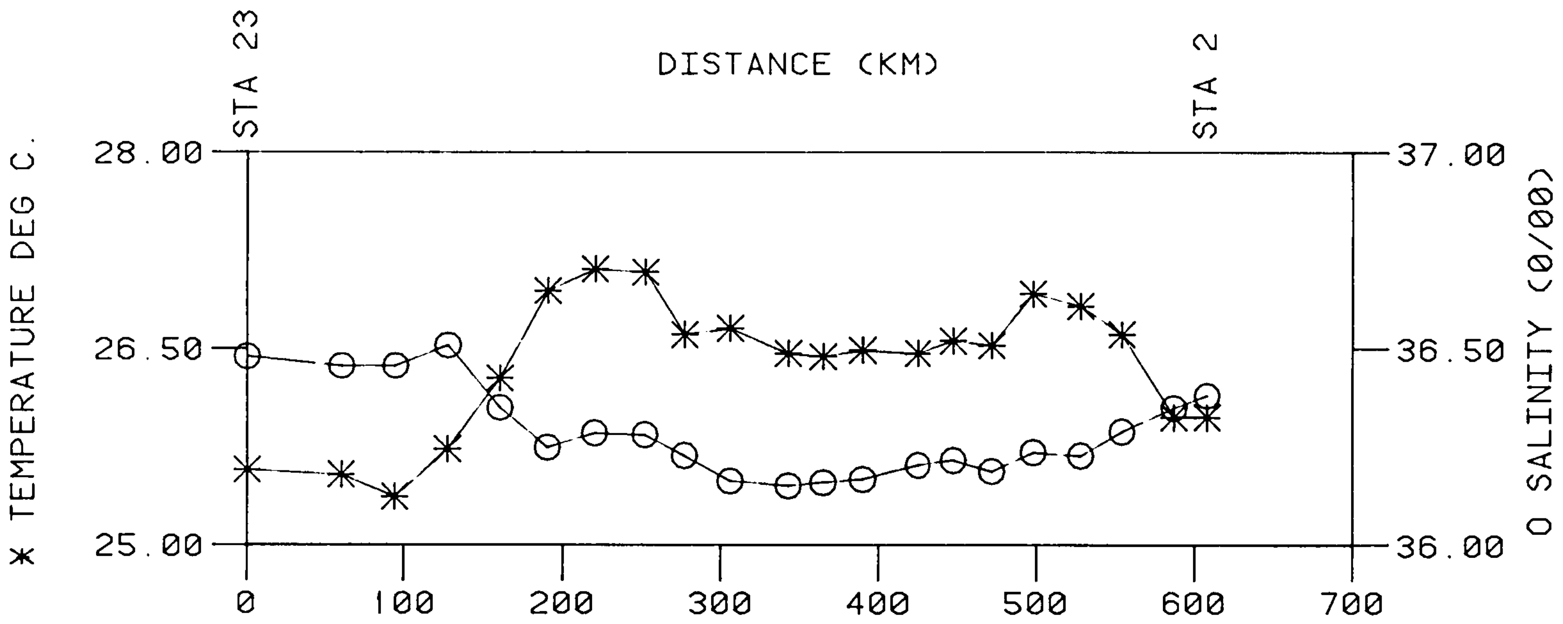
E. M. QUEENY CRUISE 86-Ø8
5/17/86 TO 5/17/86
91 W
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
23
2



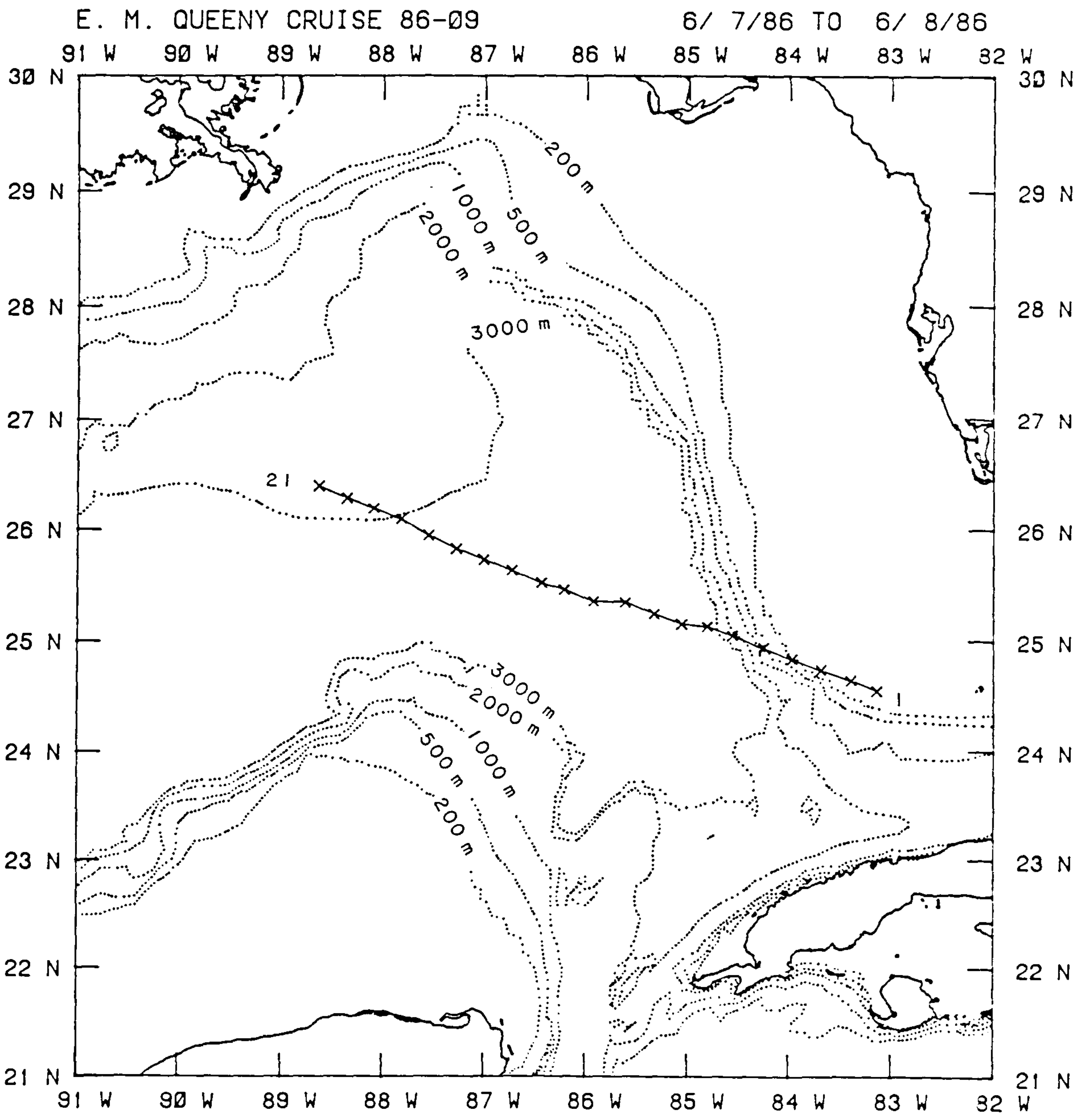
E. M. QUEENY CRUISE 86-08
5/17/86 TO 5/17/86
STATIONS 2 TO 23
TEMPERATURE DEG C
MIN = 7.37 MAX = 27.34

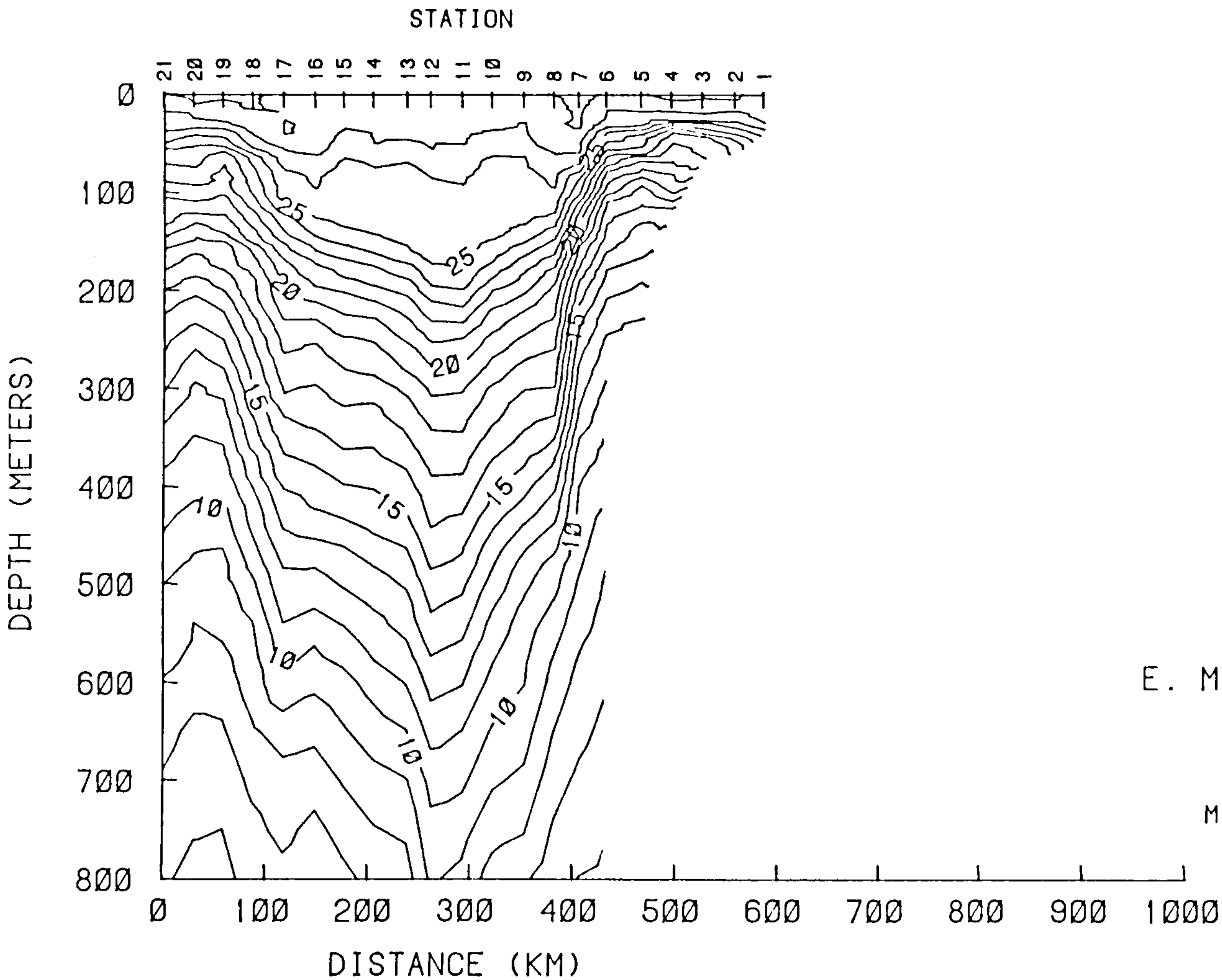


E. M. QUEENY CRUISE 86-08
5/17/86 TO 5/17/86
STATIONS 2 TO 23
TEMPERATURE DEG C
MIN = 13.50 MAX = 27.34

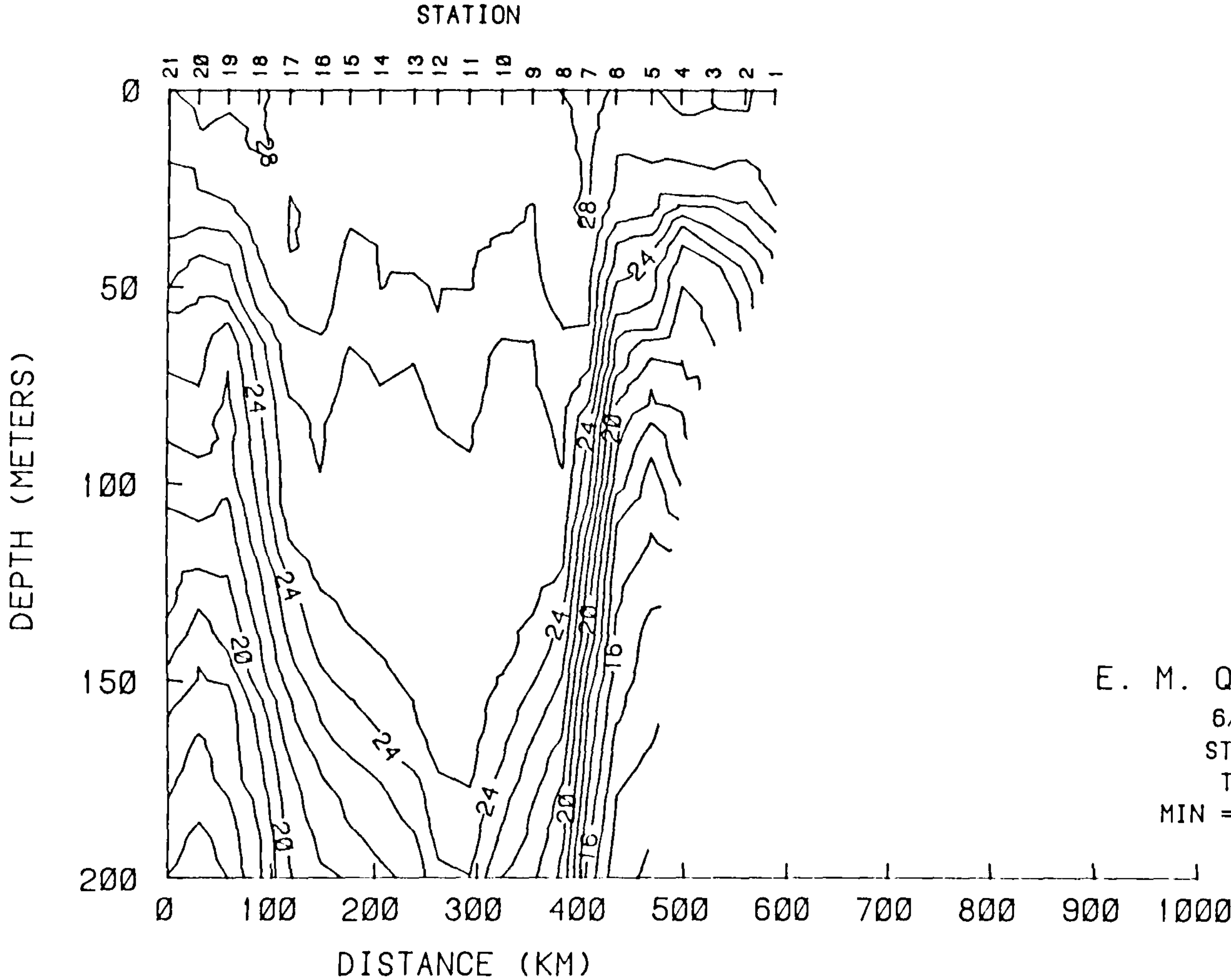


PARAMETERS AT SURFACE E. M. QUEENY CRUISE 86-08


E. M. QUEENY CRUISE 86-09
6/ 7/86 TO 6/ 8/86
91 W
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
21
1



E. M. QUEENY CRUISE 86-09
6/ 7/86 TO 6/ 8/86
STATIONS 1 TO 21
TEMPERATURE DEG C
MIN = 5.70 MAX = 28.29



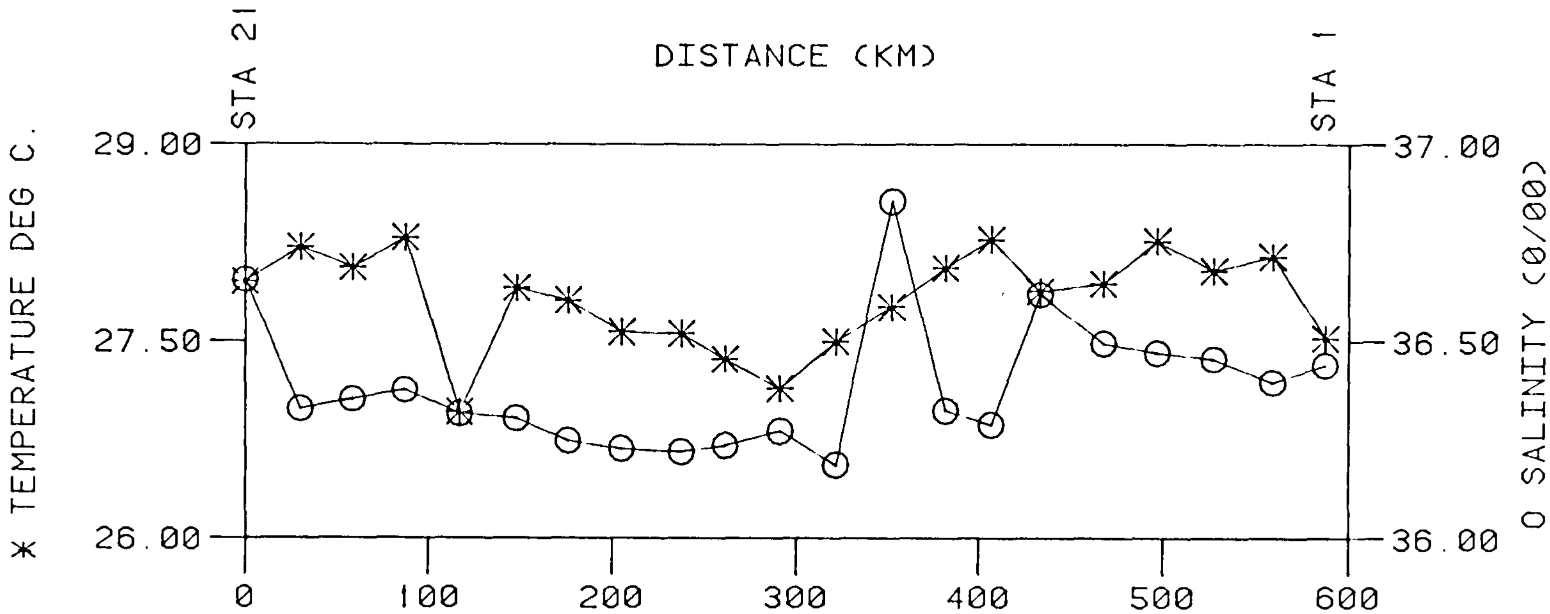
E. M. QUEENY CRUISE 86-09

6/ 7/86 TO 6/ 8/86

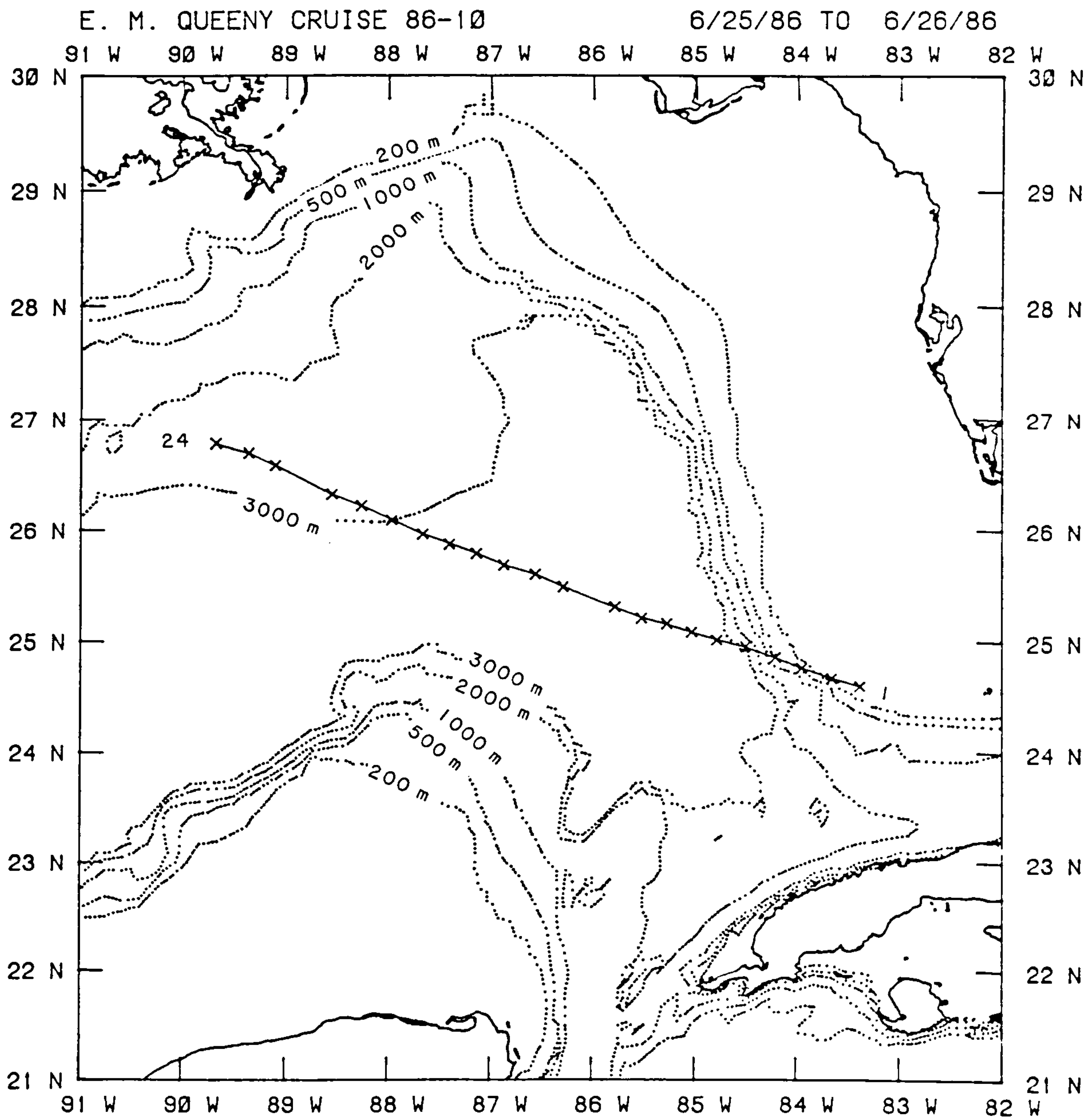
STATIONS 1 TO 21

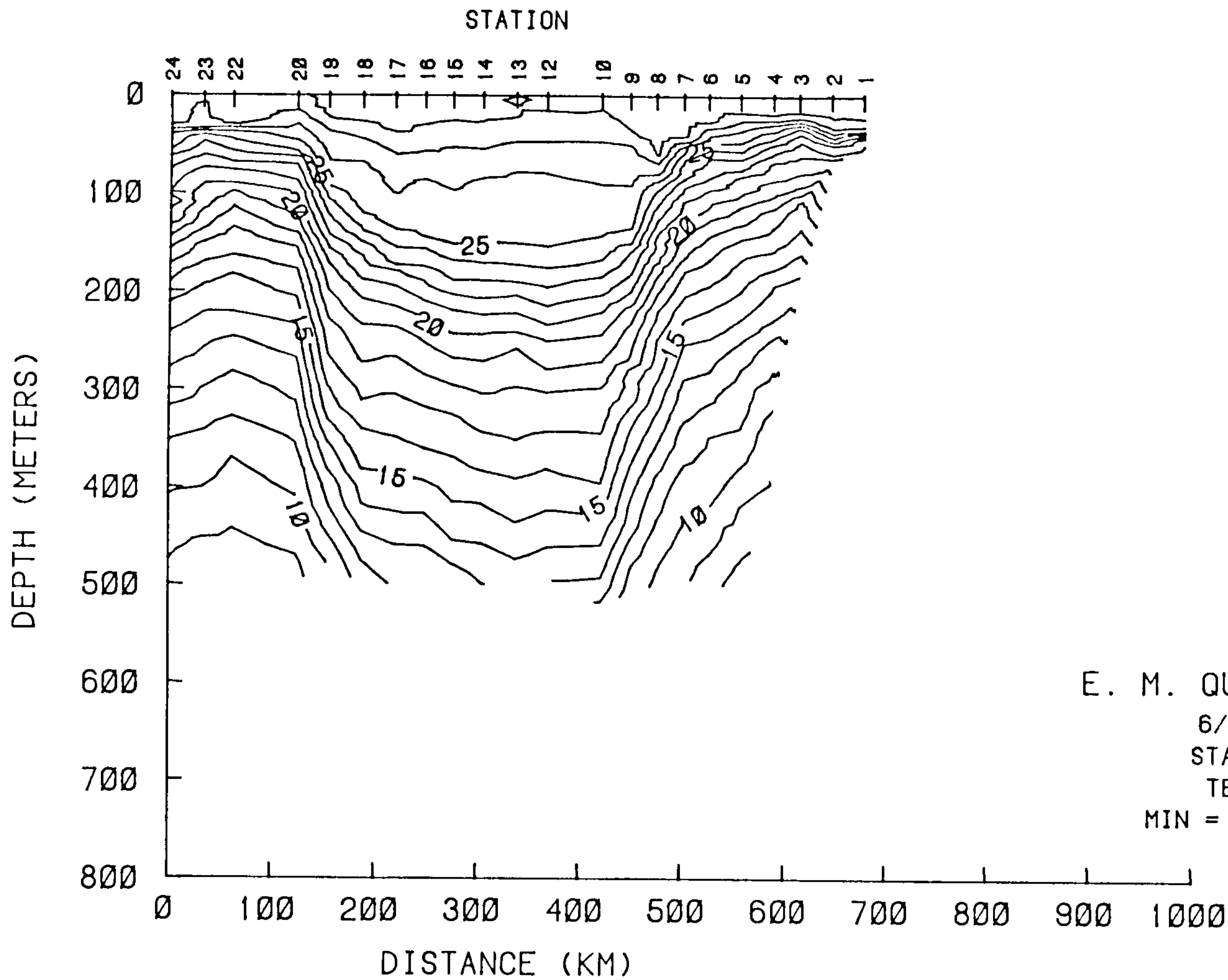
TEMPERATURE DEG C

MIN = 12.78 MAX = 28.29

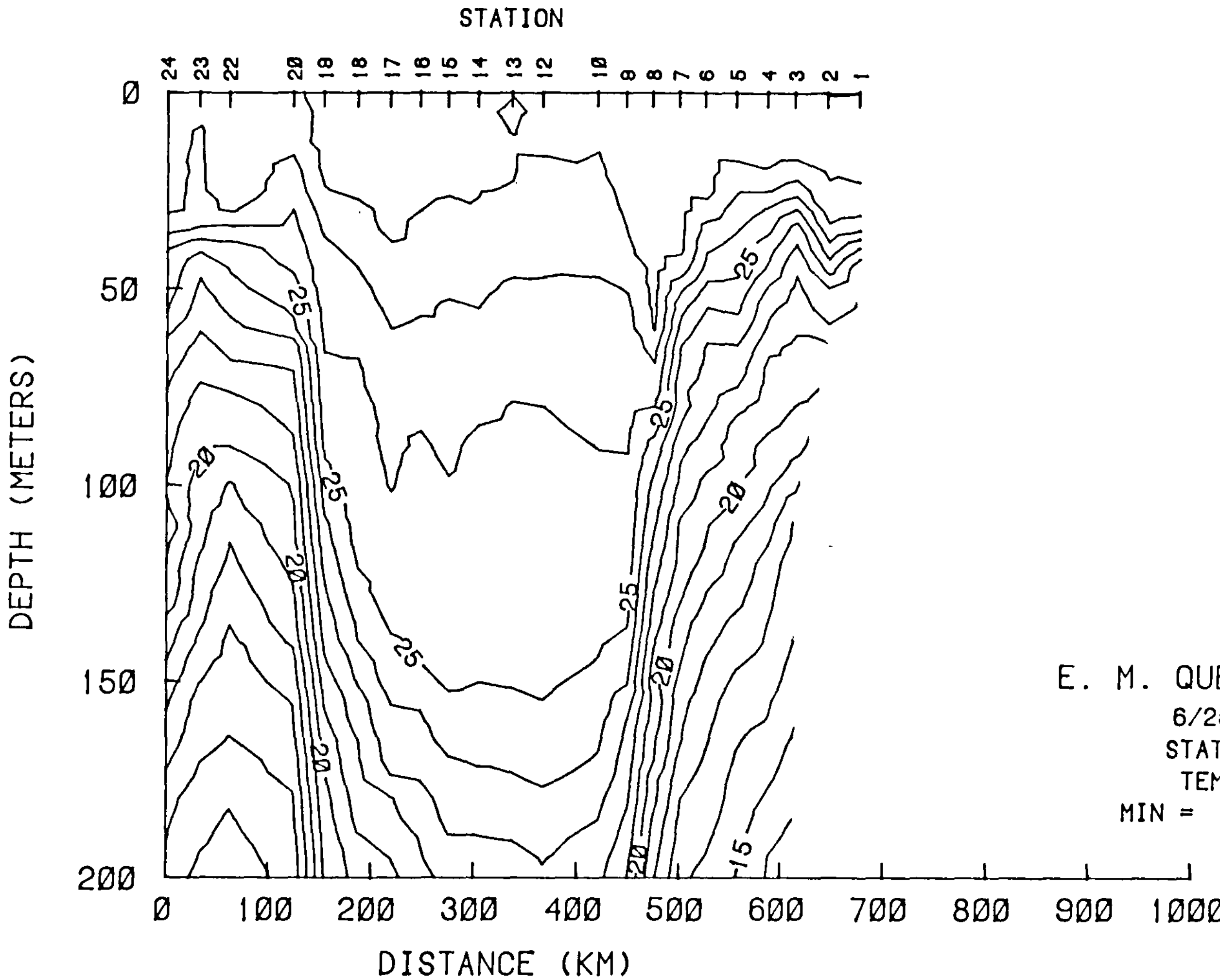


PARAMETERS AT SURFACE E. M. QUEENY CRUISE 86-09

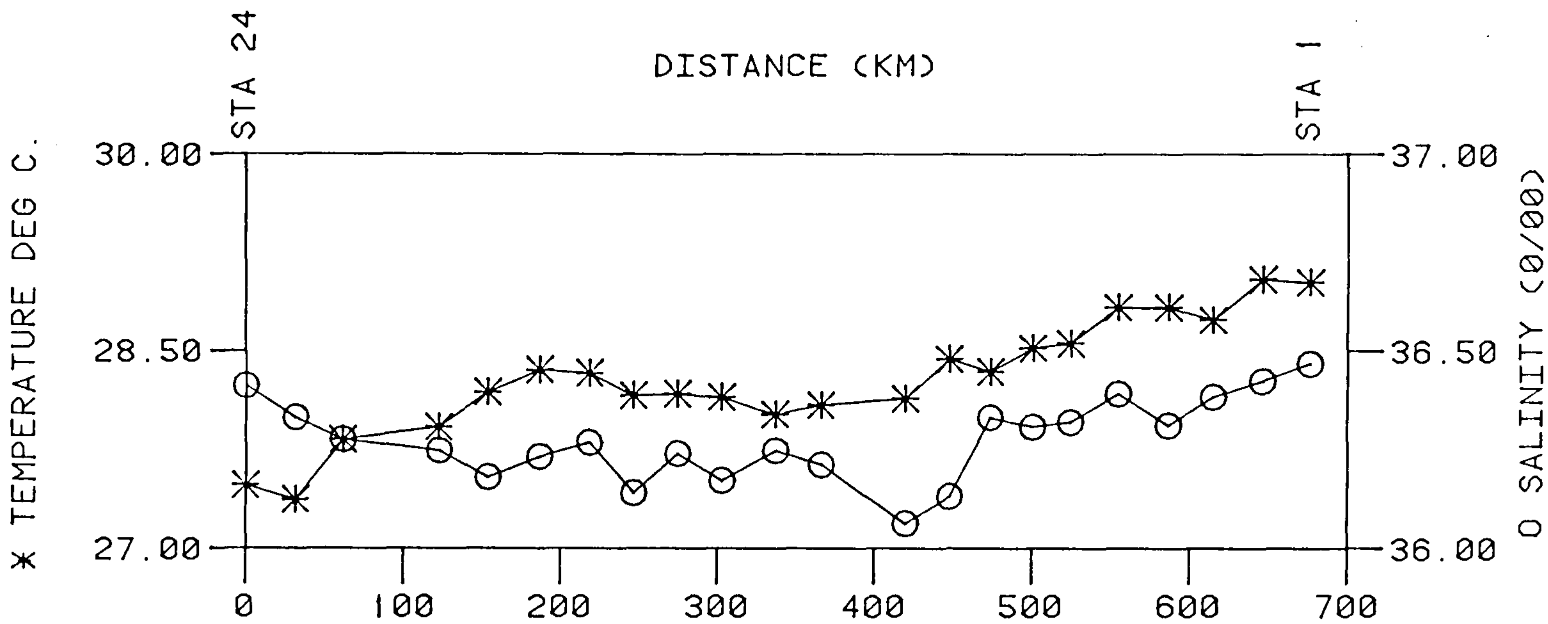

E. M. QUEENY CRUISE 86-1Ø
6/25/86 TO 6/26/86
91 W
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
24
1



E. M. QUEENY CRUISE 86-10
6/25/86 TO 6/26/86
STATIONS 1 TO 24
TEMPERATURE DEG C
MIN = 7.53 MAX = 29.06

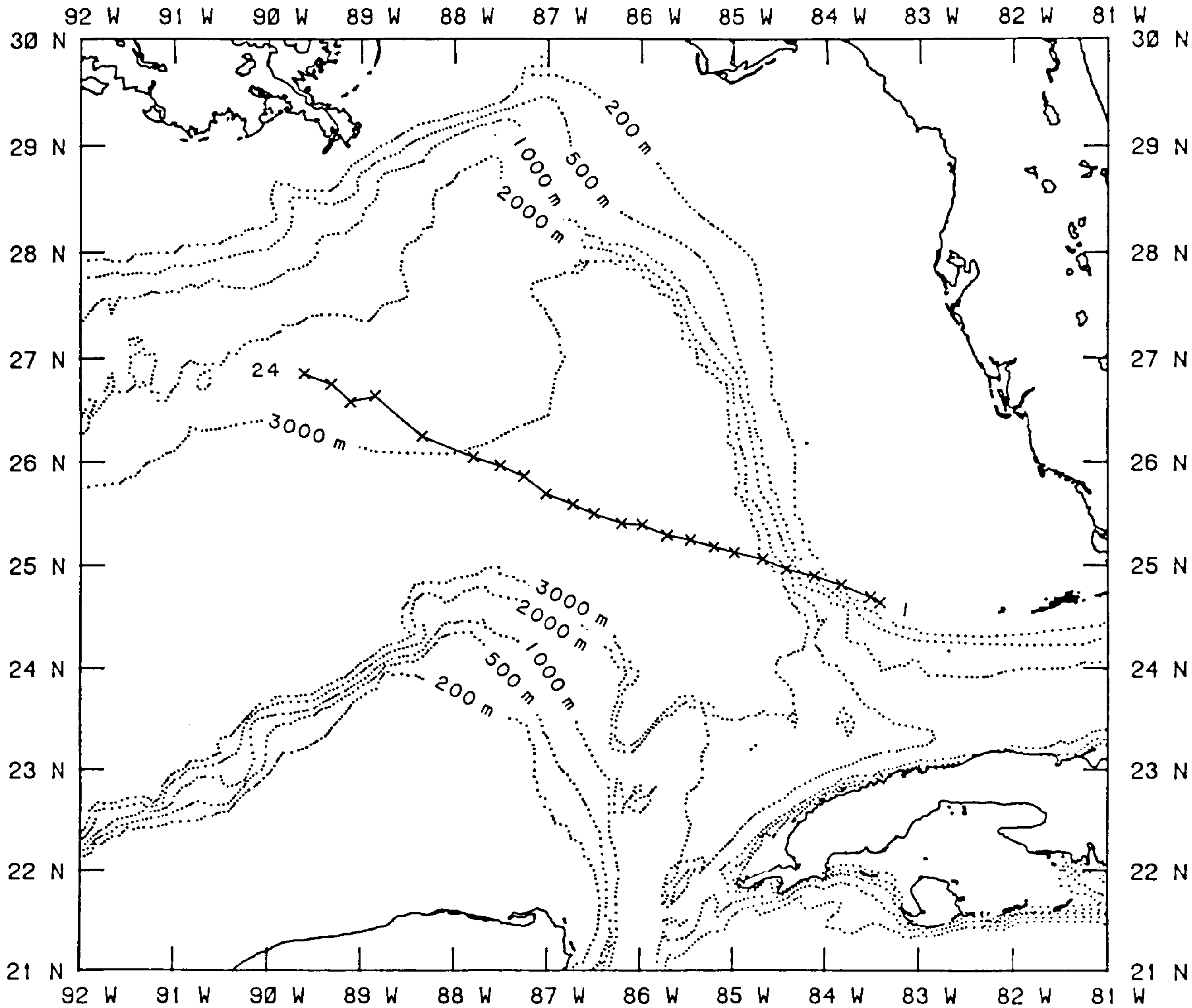


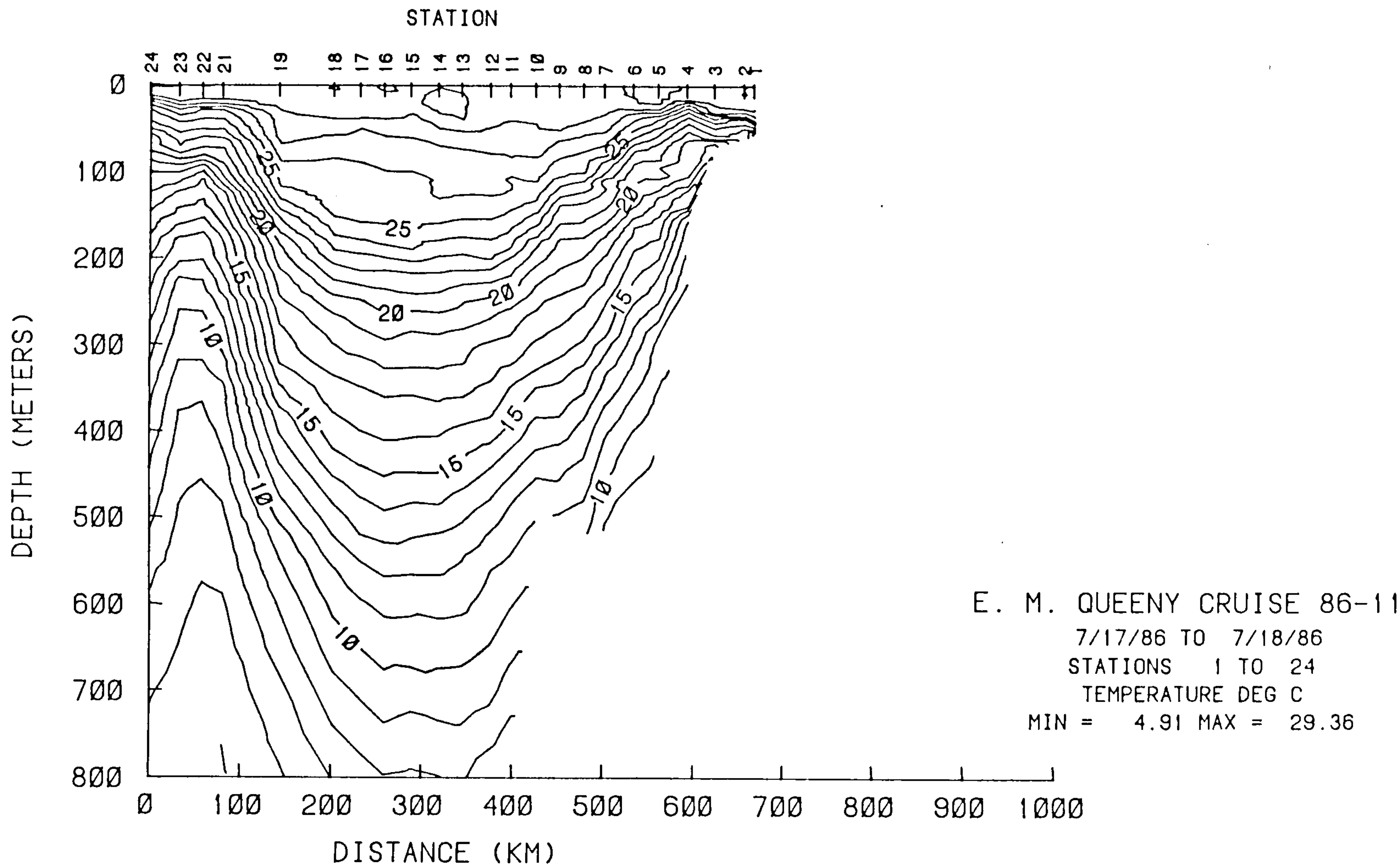
E. M. QUEENY CRUISE 86-10
6/25/86 TO 6/26/86
STATIONS 1 TO 24
TEMPERATURE DEG C
MIN = 13.84 MAX = 29.06

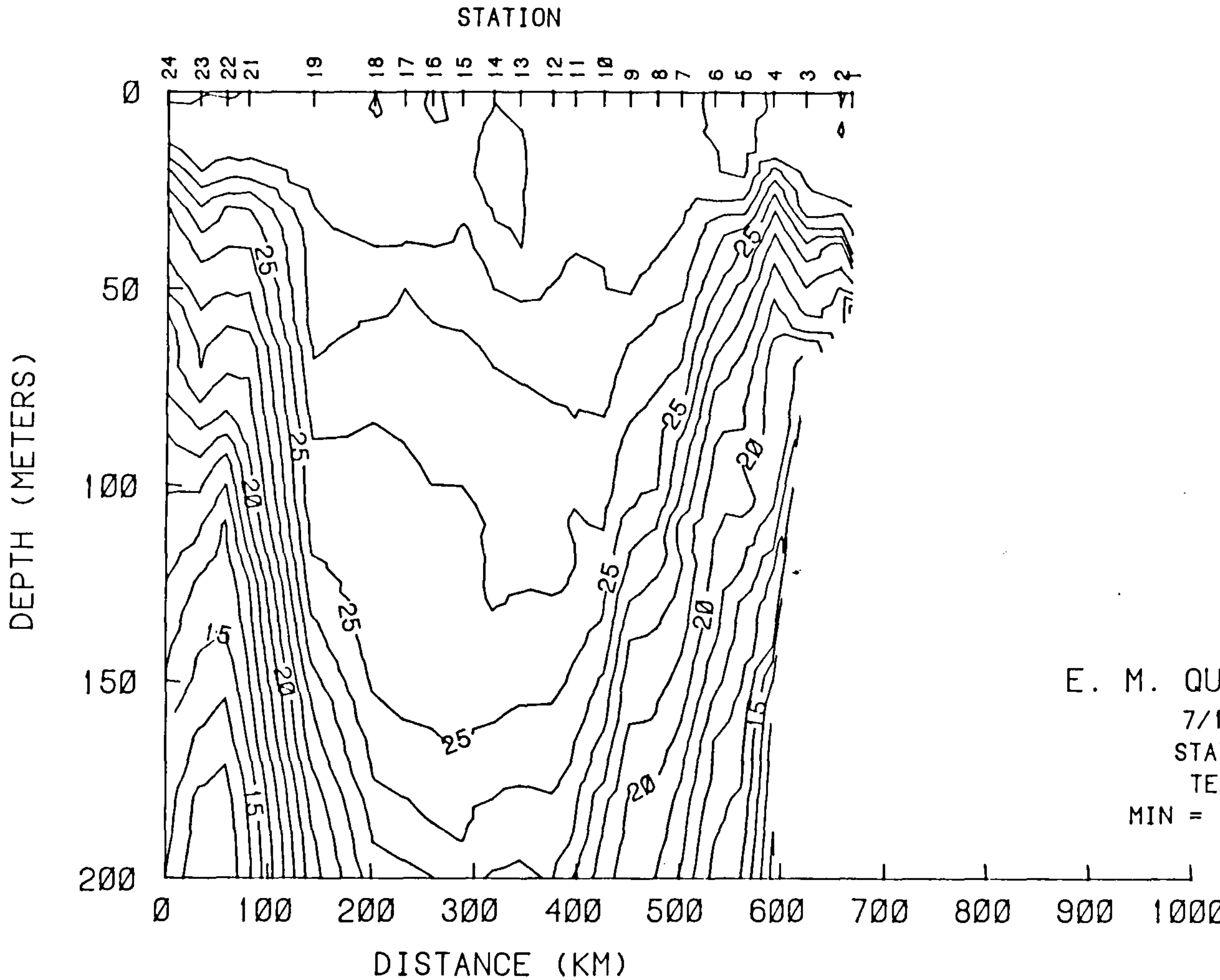


PARAMETERS AT SURFACE E. M. QUEENY CRUISE 86-10

E. M. QUEENY CRUISE 86-11 7/17/86 TO 7/18/86




STATION
24 23 22 21 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
DEPTH (METERS)
0
100
200
300
400
500
600
700
800
DISTANCE (KM)
0 100 200 300 400 500 600 700 800 900 1000
25
20
15
10
E. M. QUEENY CRUISE 86-11
7/17/86 TO 7/18/86
STATIONS 1 TO 24
TEMPERATURE DEG C
MIN = 4.91 MAX = 29.36



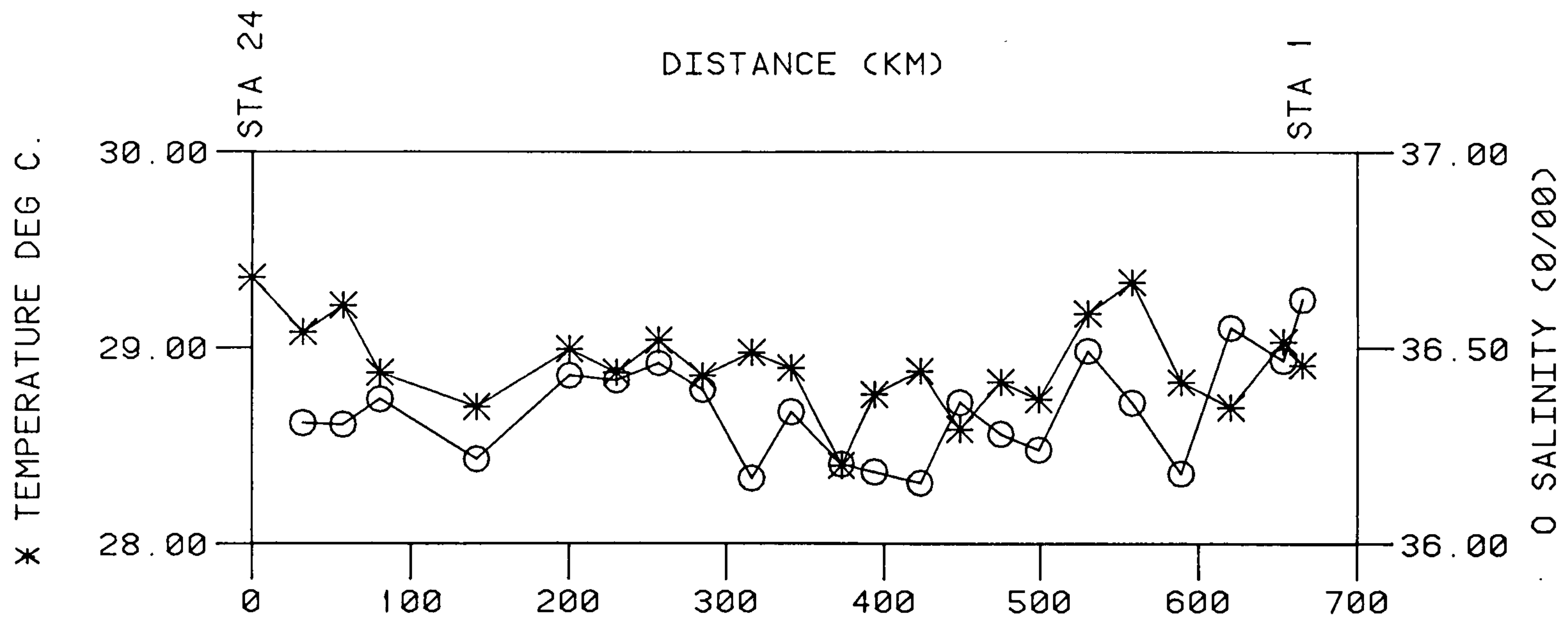
E. M. QUEENY CRUISE 86-11

7/17/86 TO 7/18/86

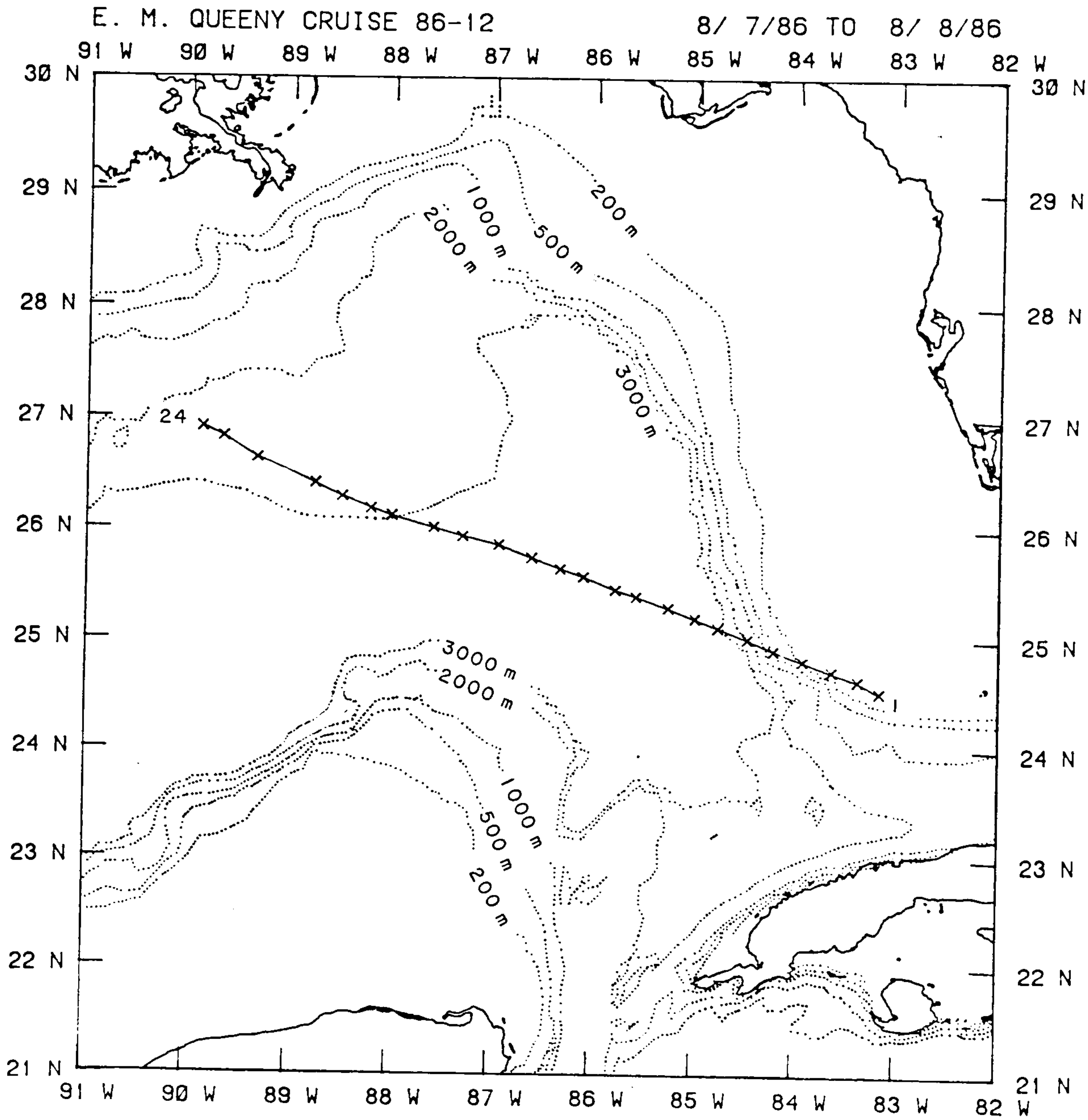
STATIONS 1 TO 24

TEMPERATURE DEG C

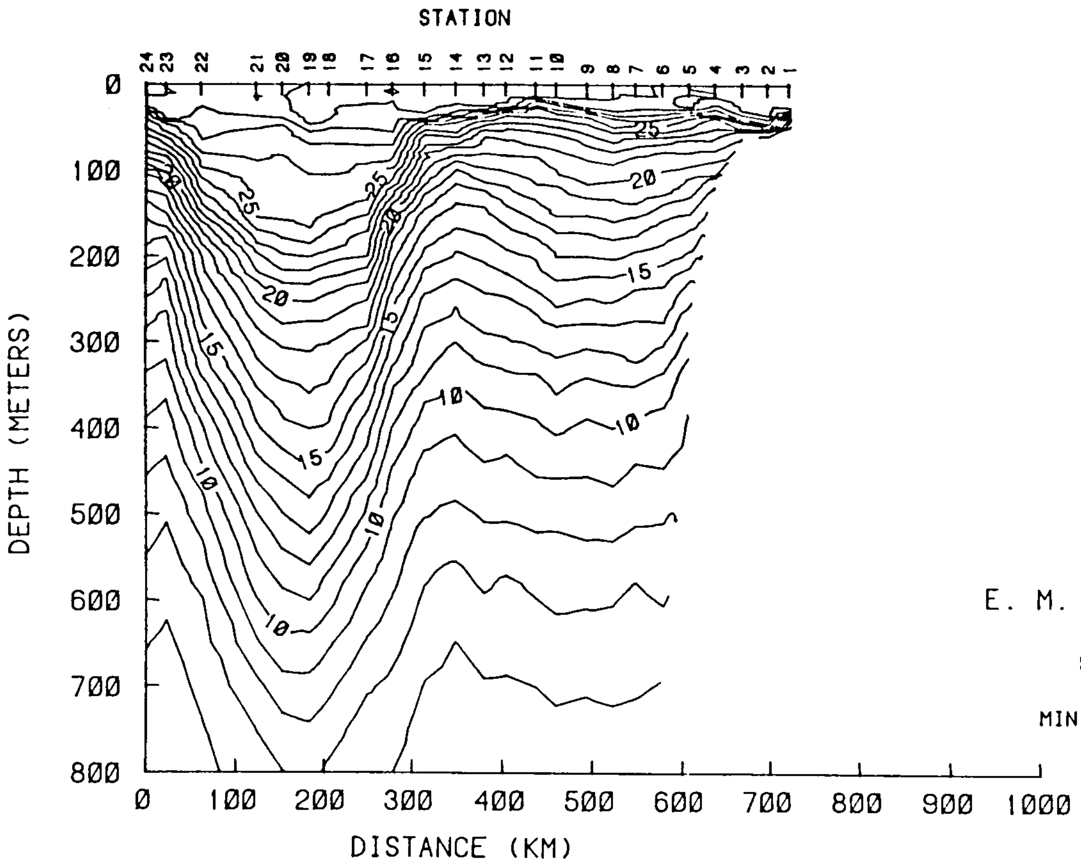
MIN = 11.67 MAX = 29.36



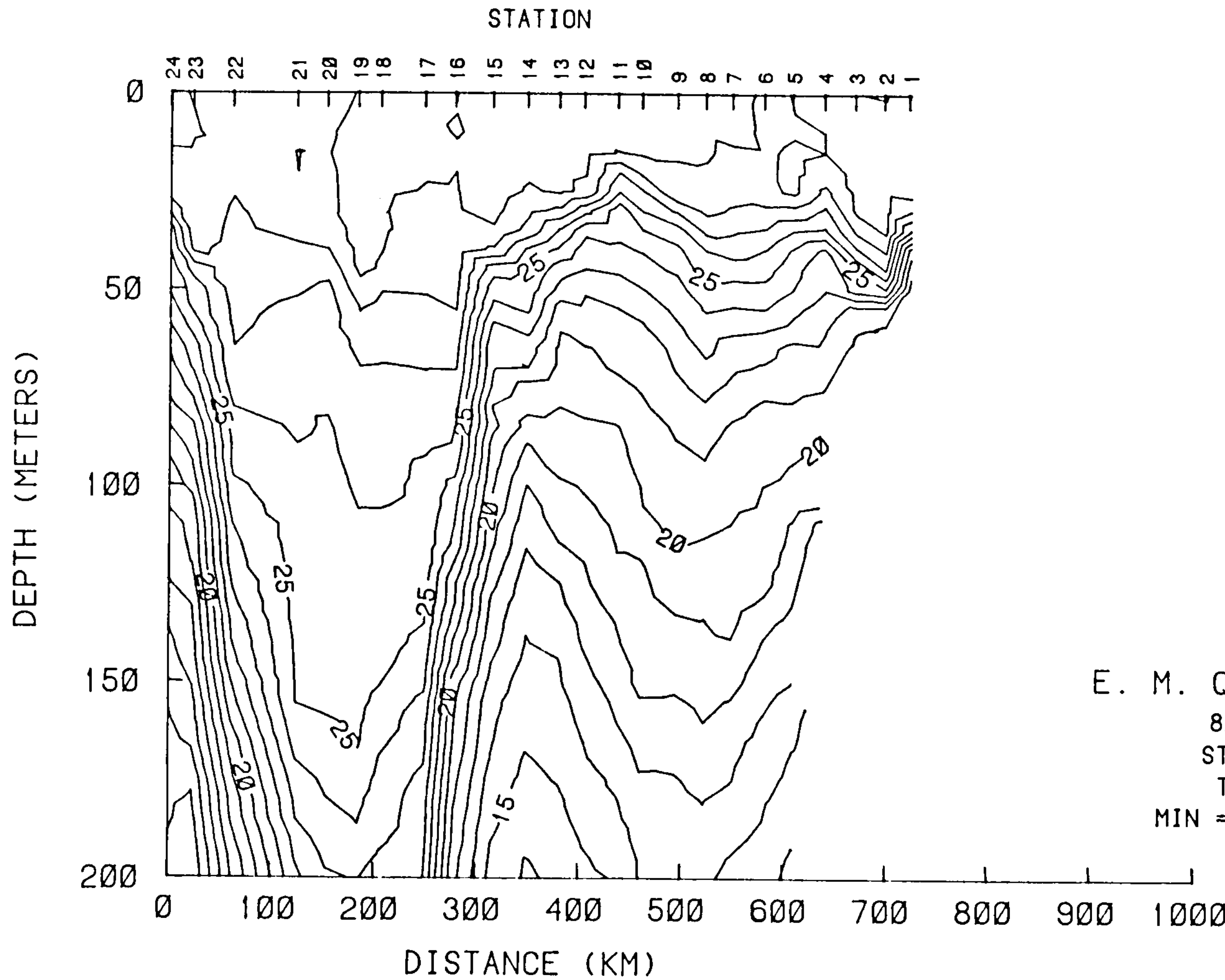
PARAMETERS AT SURFACE E. M. QUEENY CRUISE 86-11



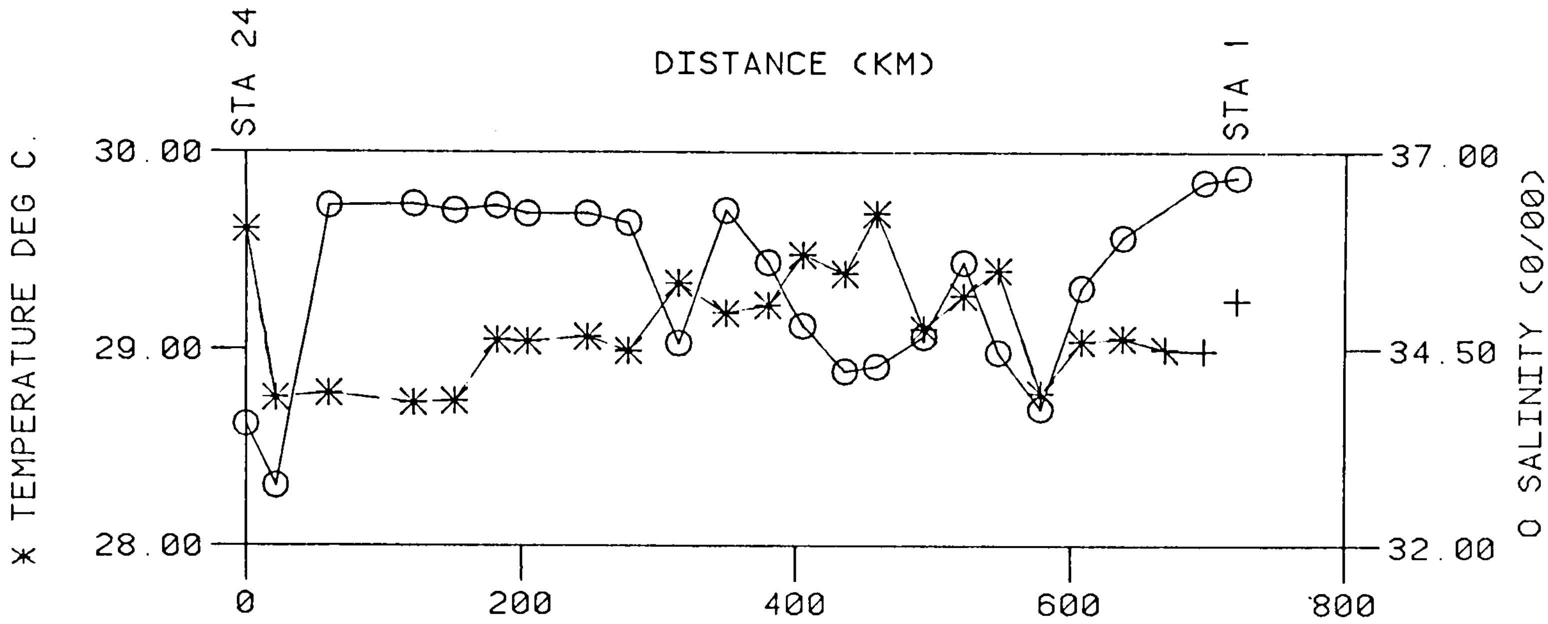
E. M. QUEENY CRUISE 86-12
8/ 7/86 TO 8/ 8/86
91 W
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
24
1



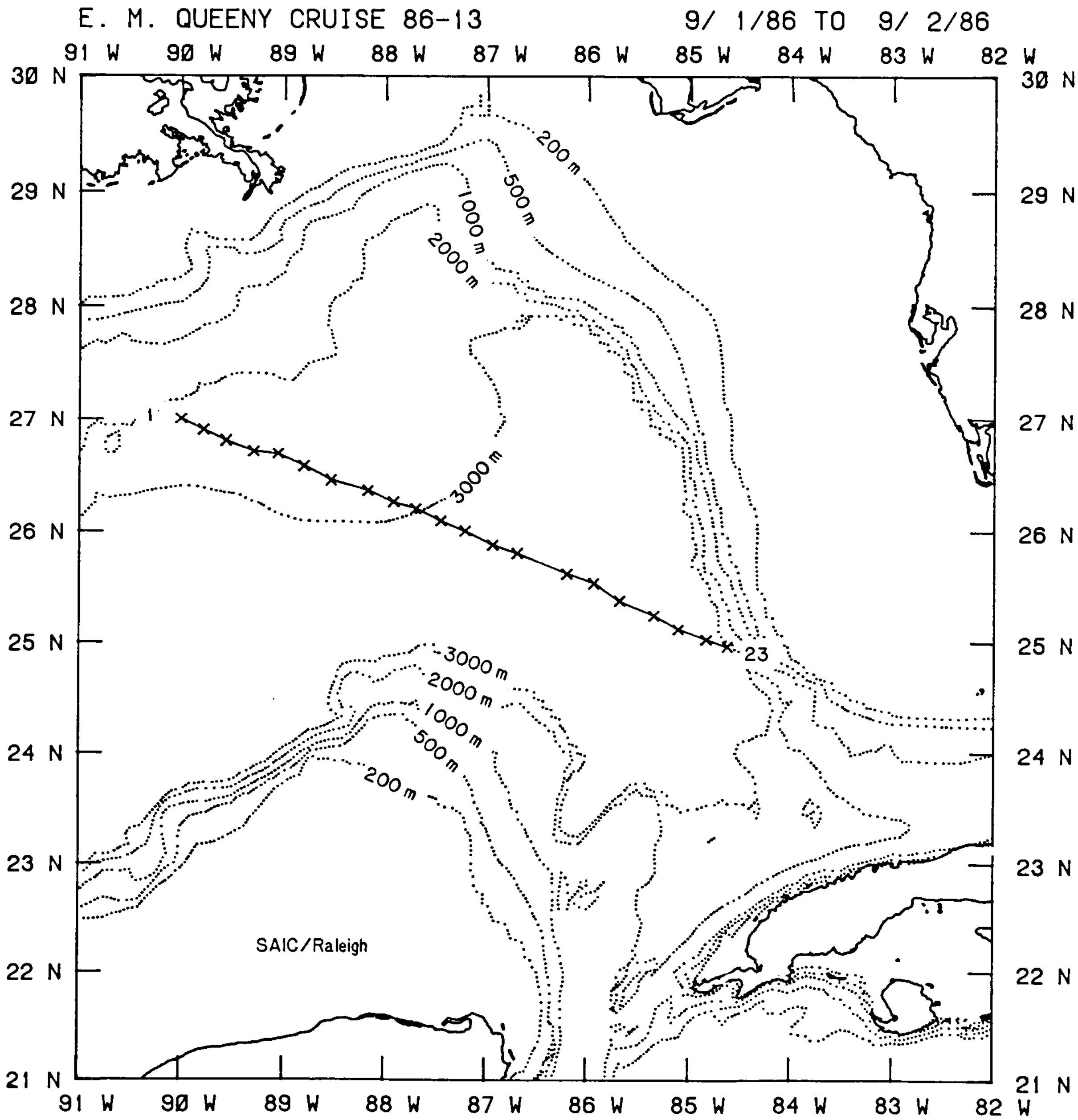
E. M. QUEENY CRUISE 86-12
8/ 7/86 TO 8/ 8/86
STATIONS 1 TO 24
TEMPERATURE DEG C
MIN = 5.06 MAX = 29.69



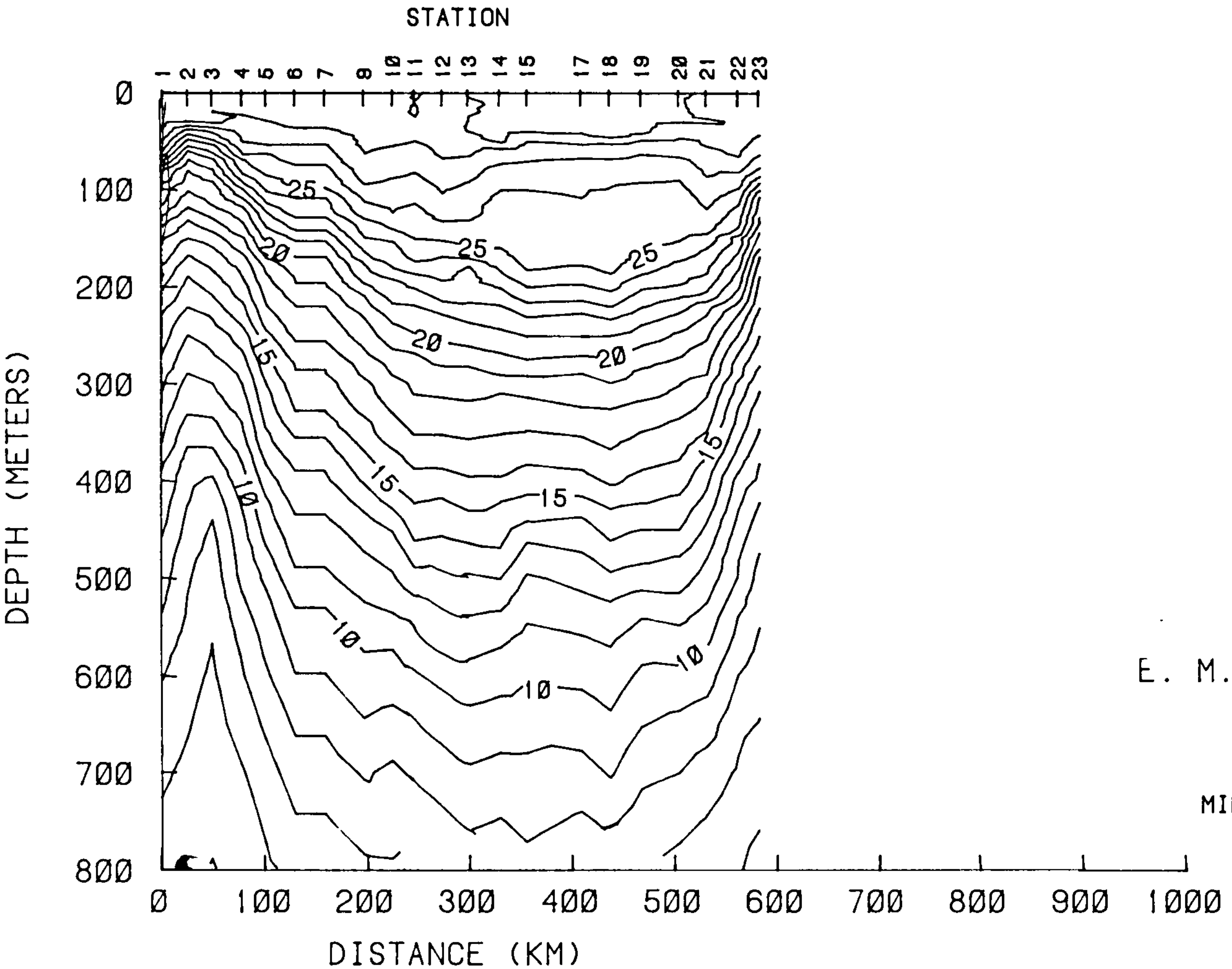
E. M. QUEENY CRUISE 86-12
8/ 7/86 TO 8/ 8/86
STATIONS 1 TO 24
TEMPERATURE DEG C
MIN = 13.06 MAX = 29.69



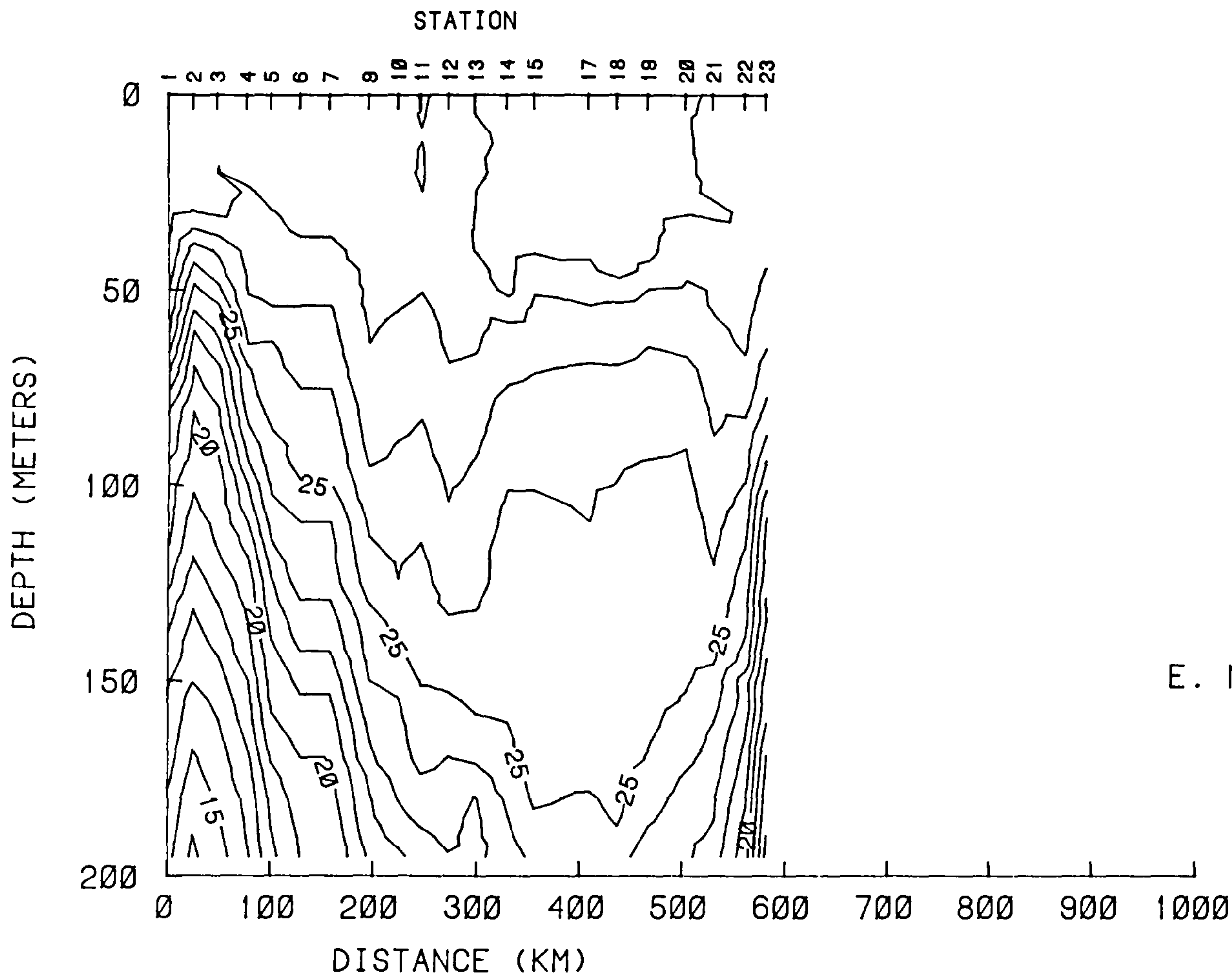
PARAMETERS AT SURFACE E. M. QUEENY CRUISE 86-12



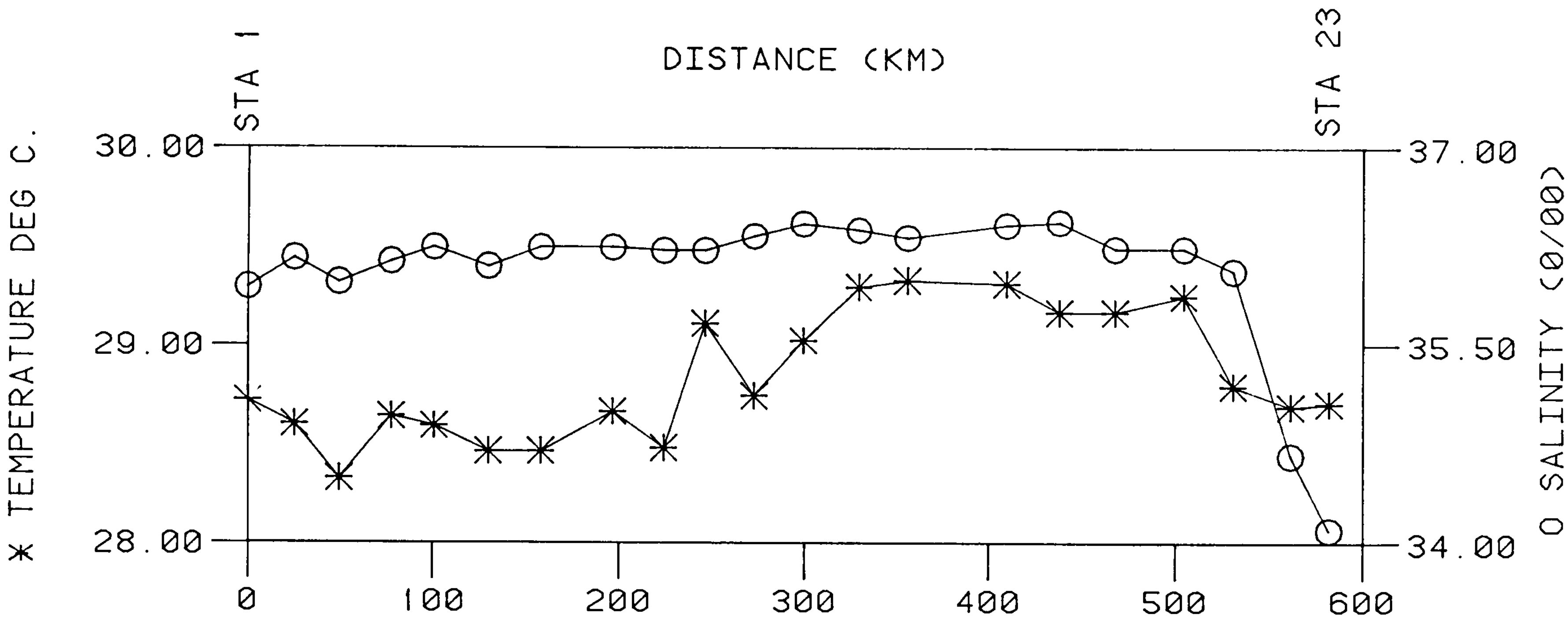
E. M. QUEENY CRUISE 86-13
9/ 1/86 TO 9/ 2/86
91 W
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
23
SAIC/Raleigh



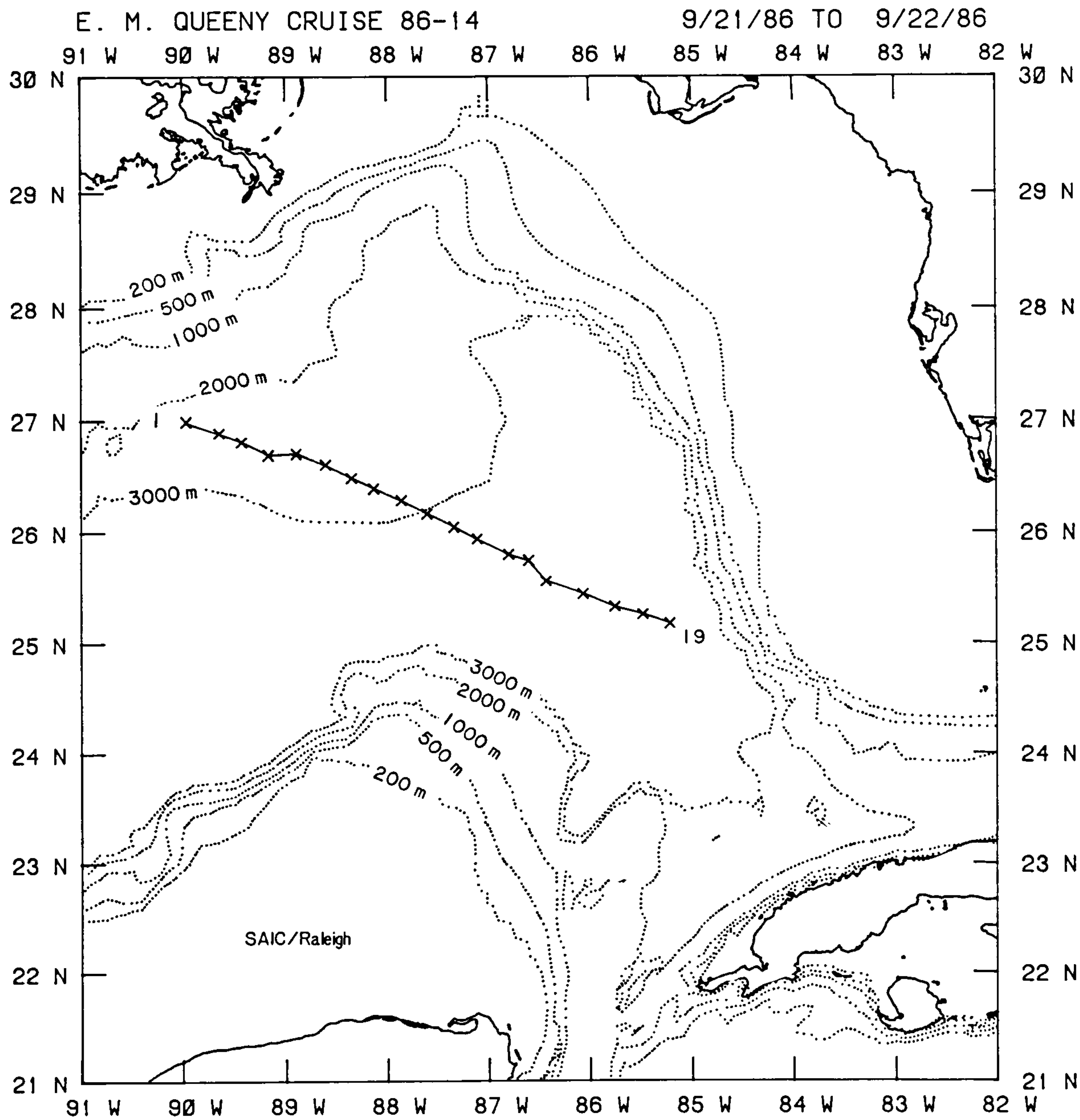
E. M. QUEENY CRUISE 86-13
9/ 1/86 TO 9/ 2/86
STATIONS 1 TO 23
TEMPERATURE DEG C
MIN = 4.95 MAX = 29.37

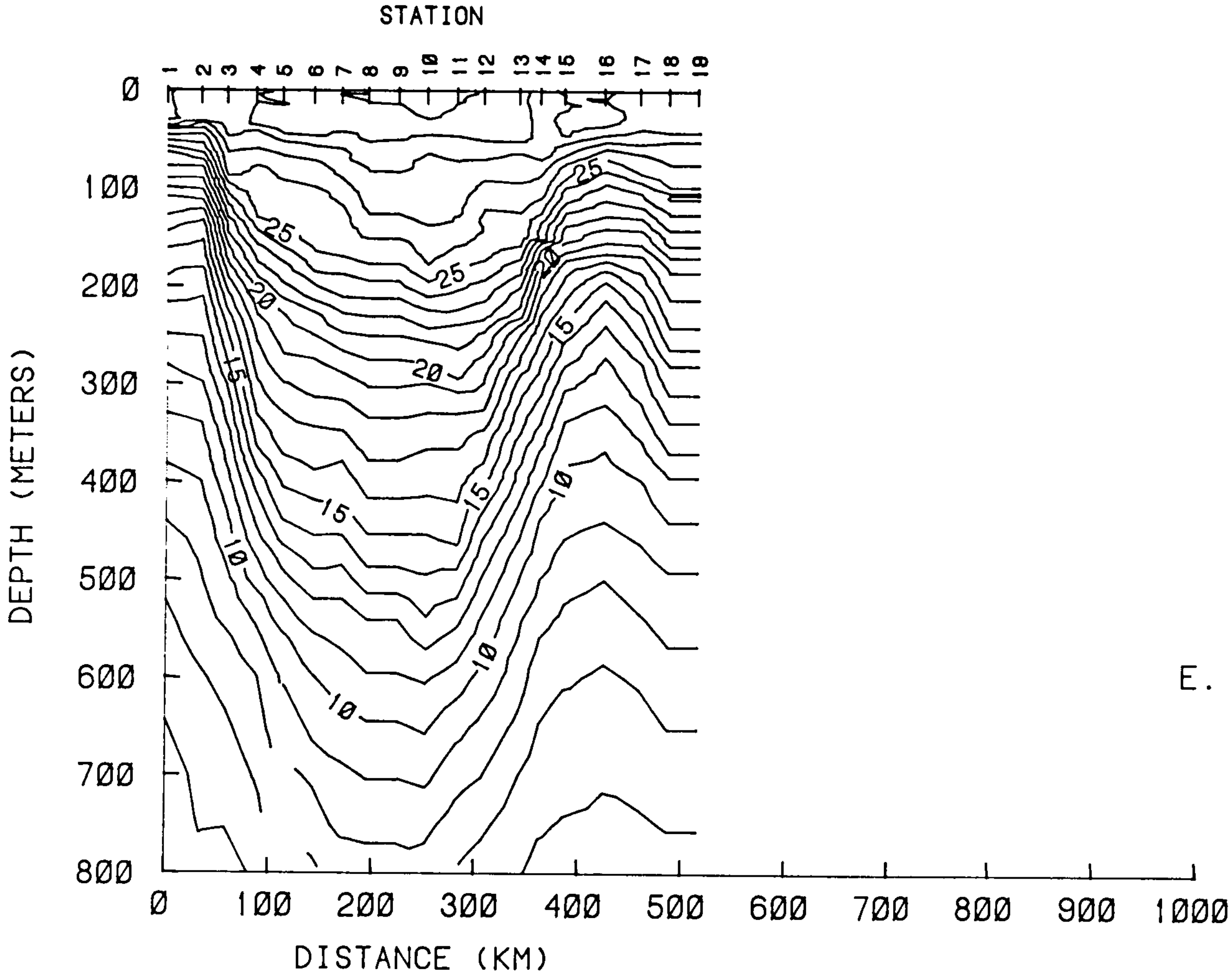


E. M. QUEENY CRUISE 86-13
9/ 1/86 TO 9/ 2/86
STATIONS 1 TO 23
TEMPERATURE DEG C
MIN = 13.81 MAX = 29.37



PARAMETERS AT SURFACE E. M. QUEENY CRUISE 86-13


E. M. QUEENY CRUISE 86-14
9/21/86 TO 9/22/86
91 W
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
1
19
SAIC/Raleigh



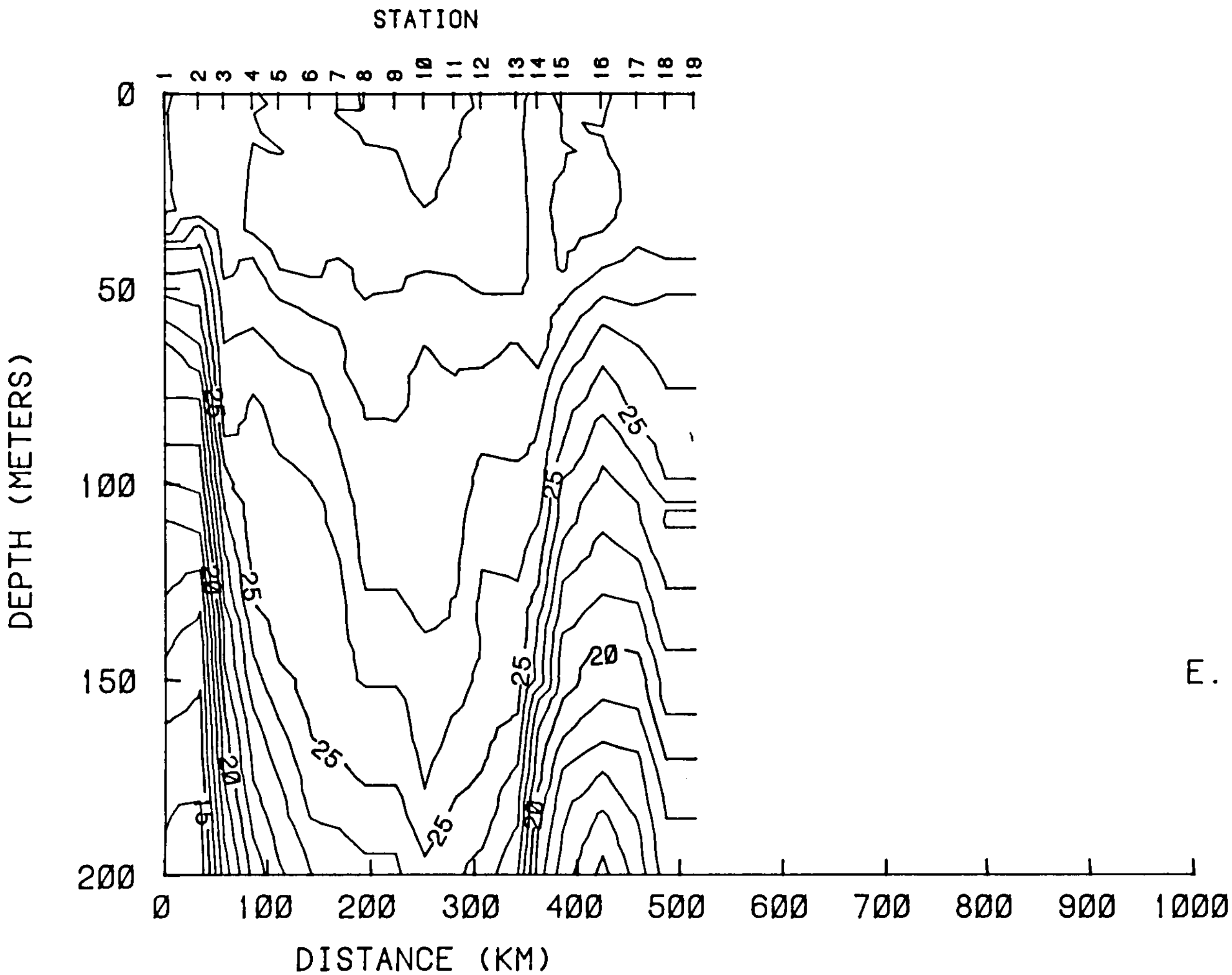
E. M. QUEENY CRUISE 86-14

9/21/86 TO 9/21/86

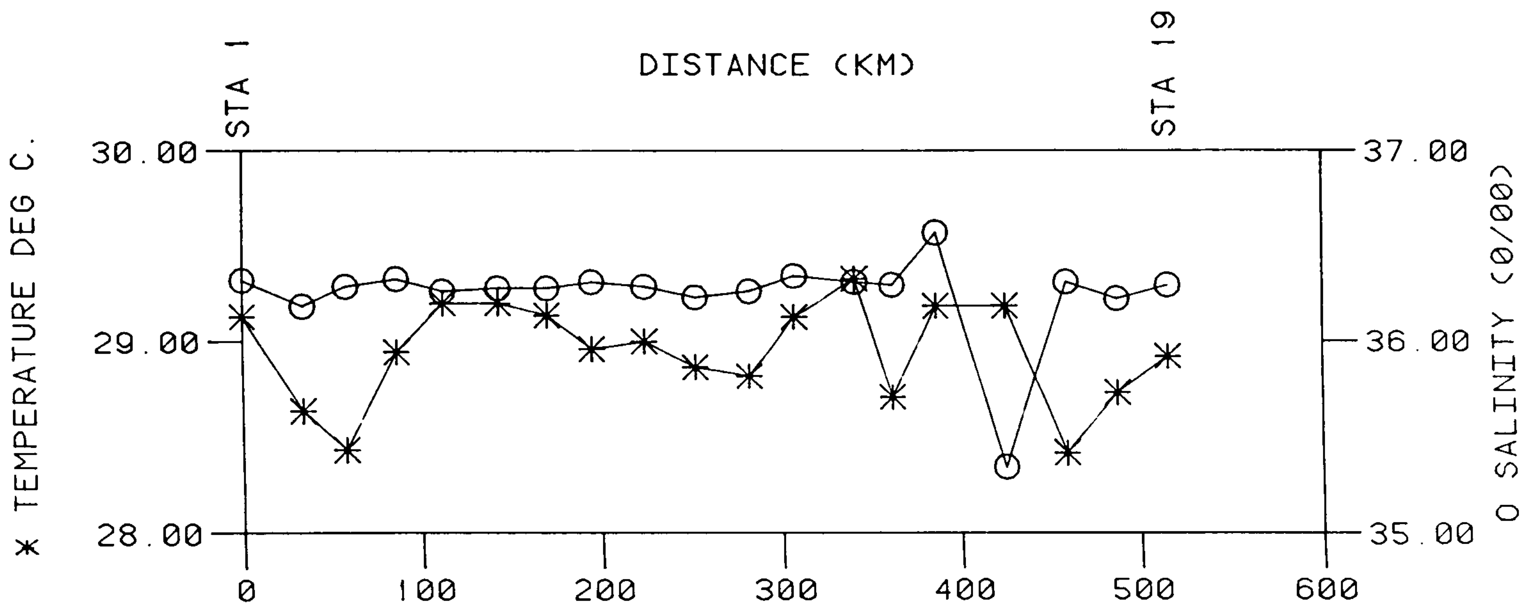
STATIONS 1 TO 19

TEMPERATURE DEG C

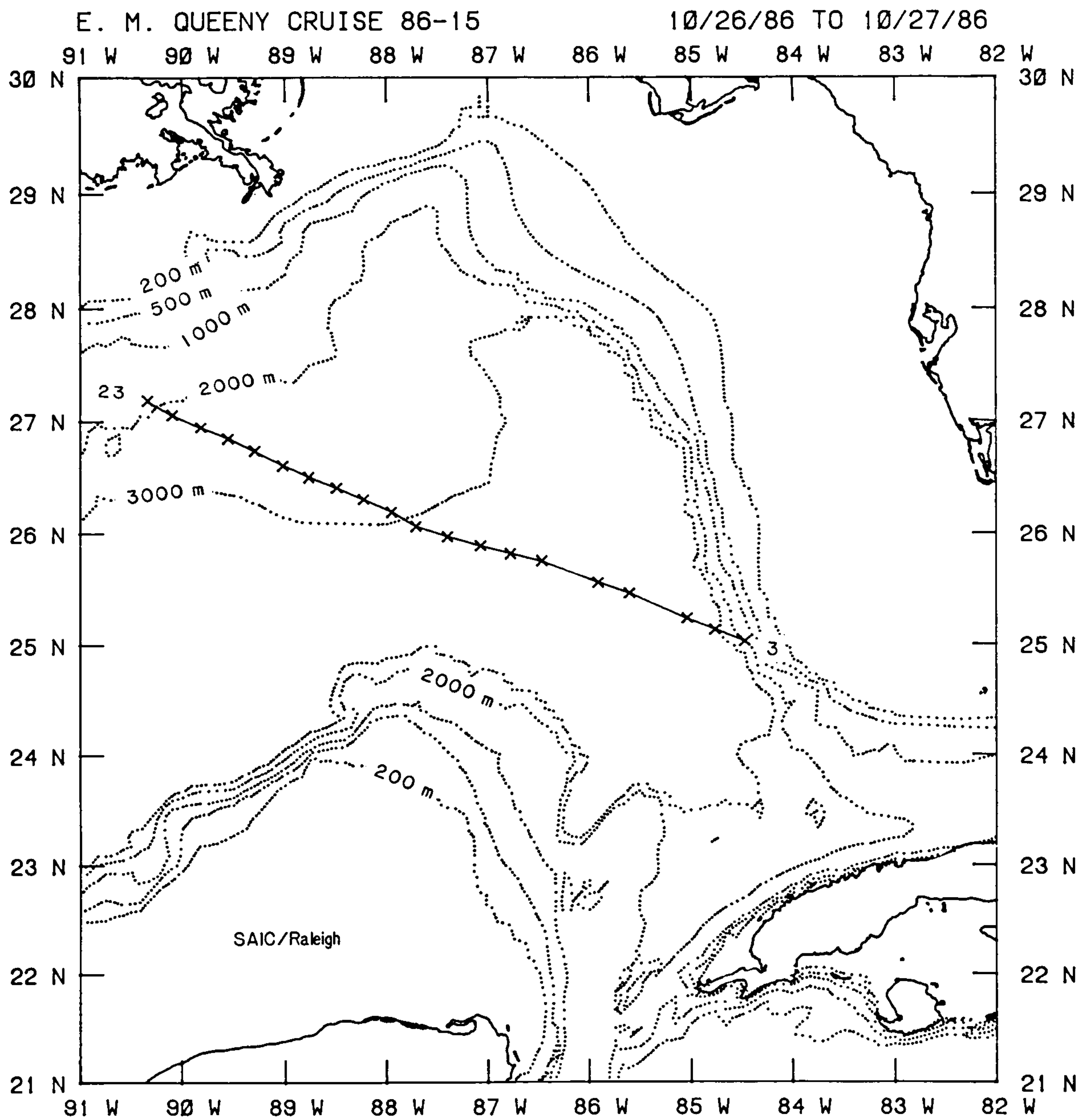
MIN = 5.17 MAX = 29.52



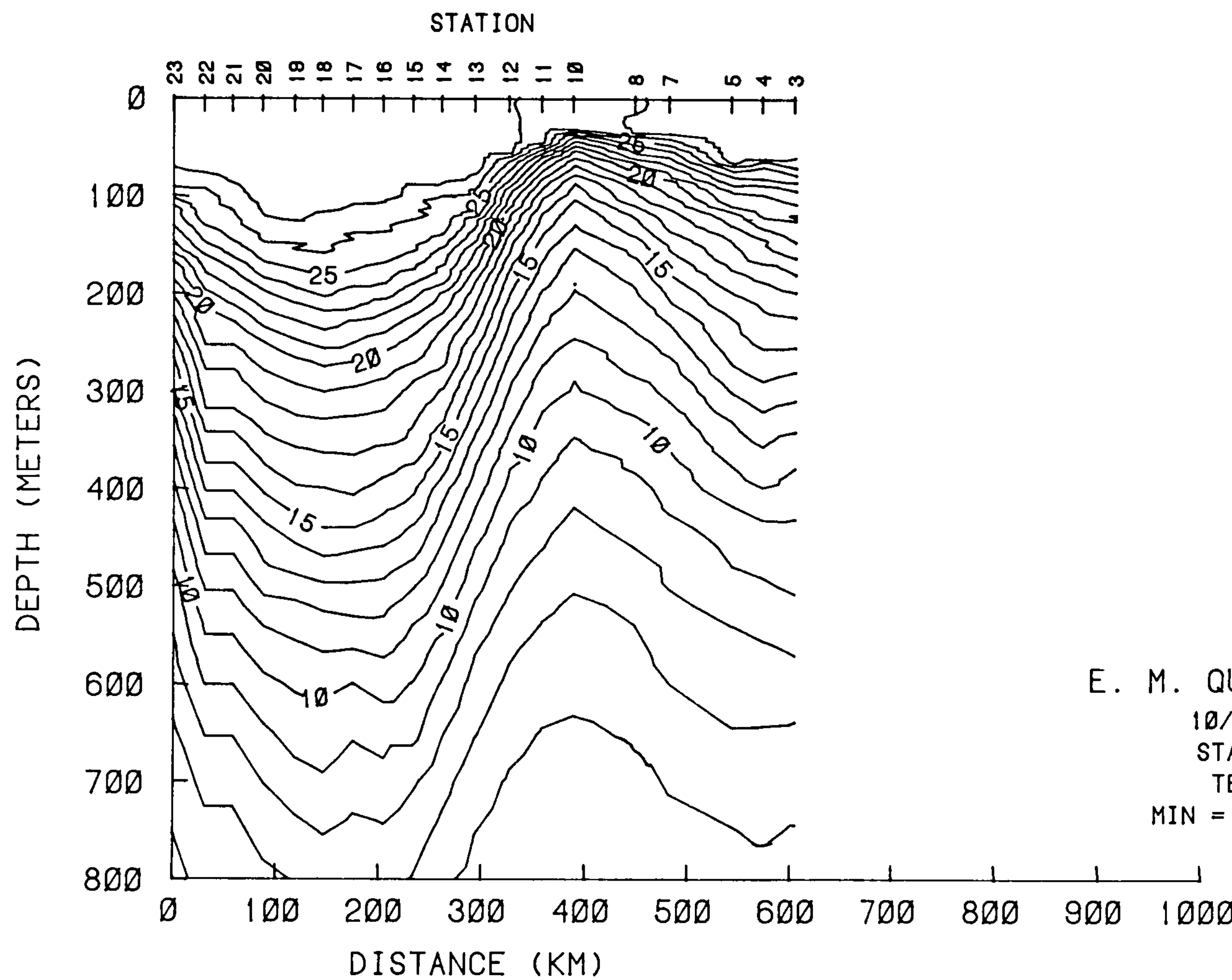
E. M. QUEENY CRUISE 86-14
9/21/86 TO 9/21/86
STATIONS 1 TO 19
TEMPERATURE DEG C
MIN = 13.32 MAX = 29.52



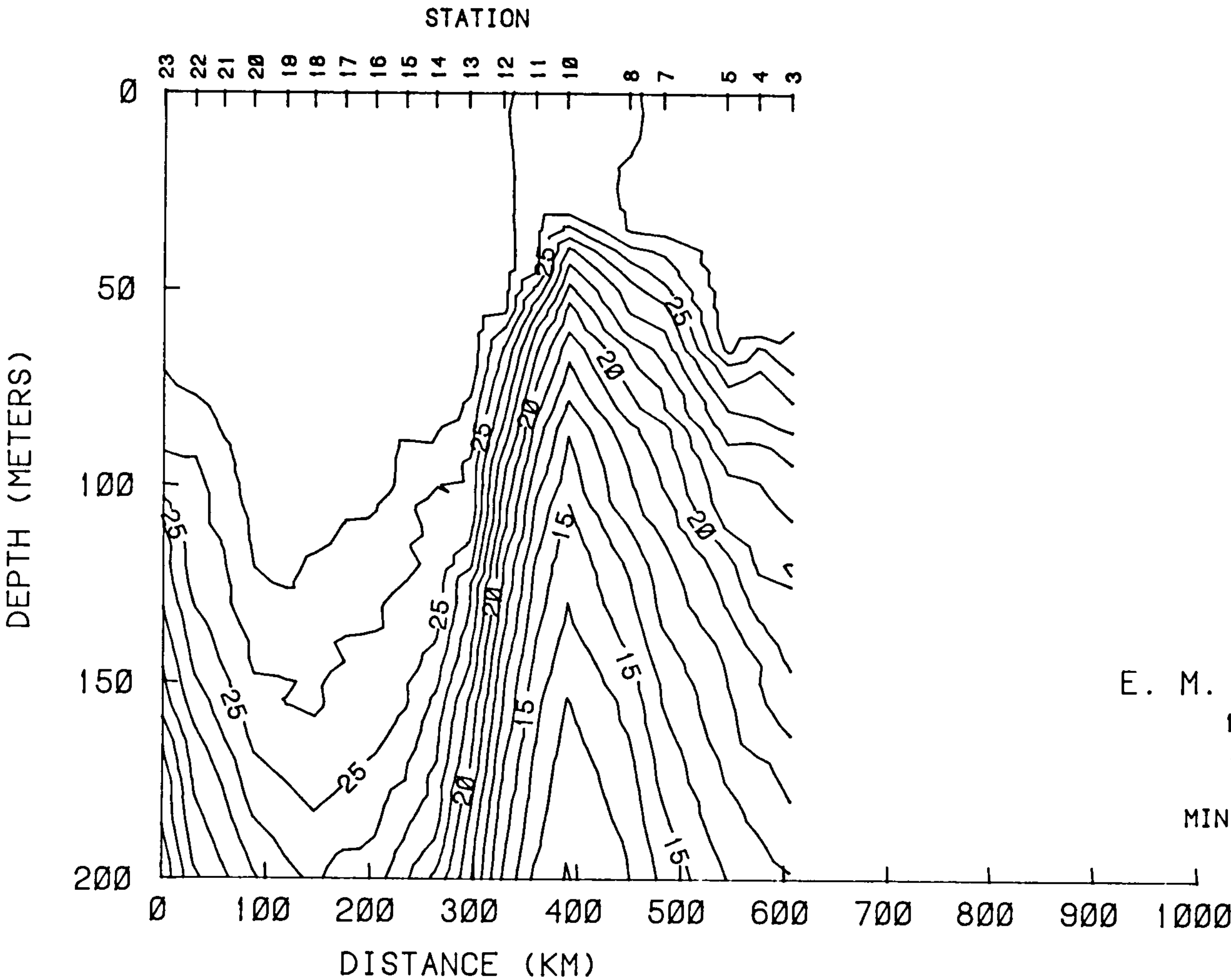
PARAMETERS AT SURFACE E. M. QUEENY CRUISE 86-14



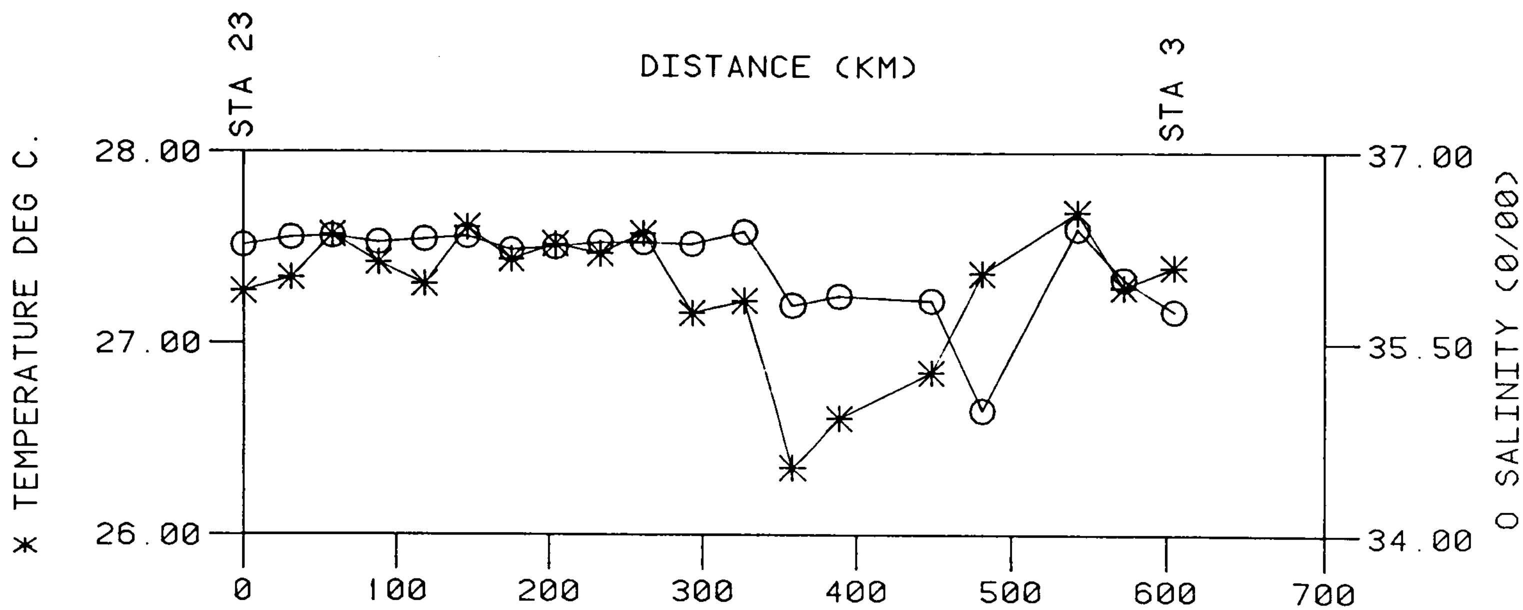
E. M. QUEENY CRUISE 86-15
10/26/86 TO 10/27/86
91 W
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
23
3
2000 m
200 m
SAIC/Raleigh



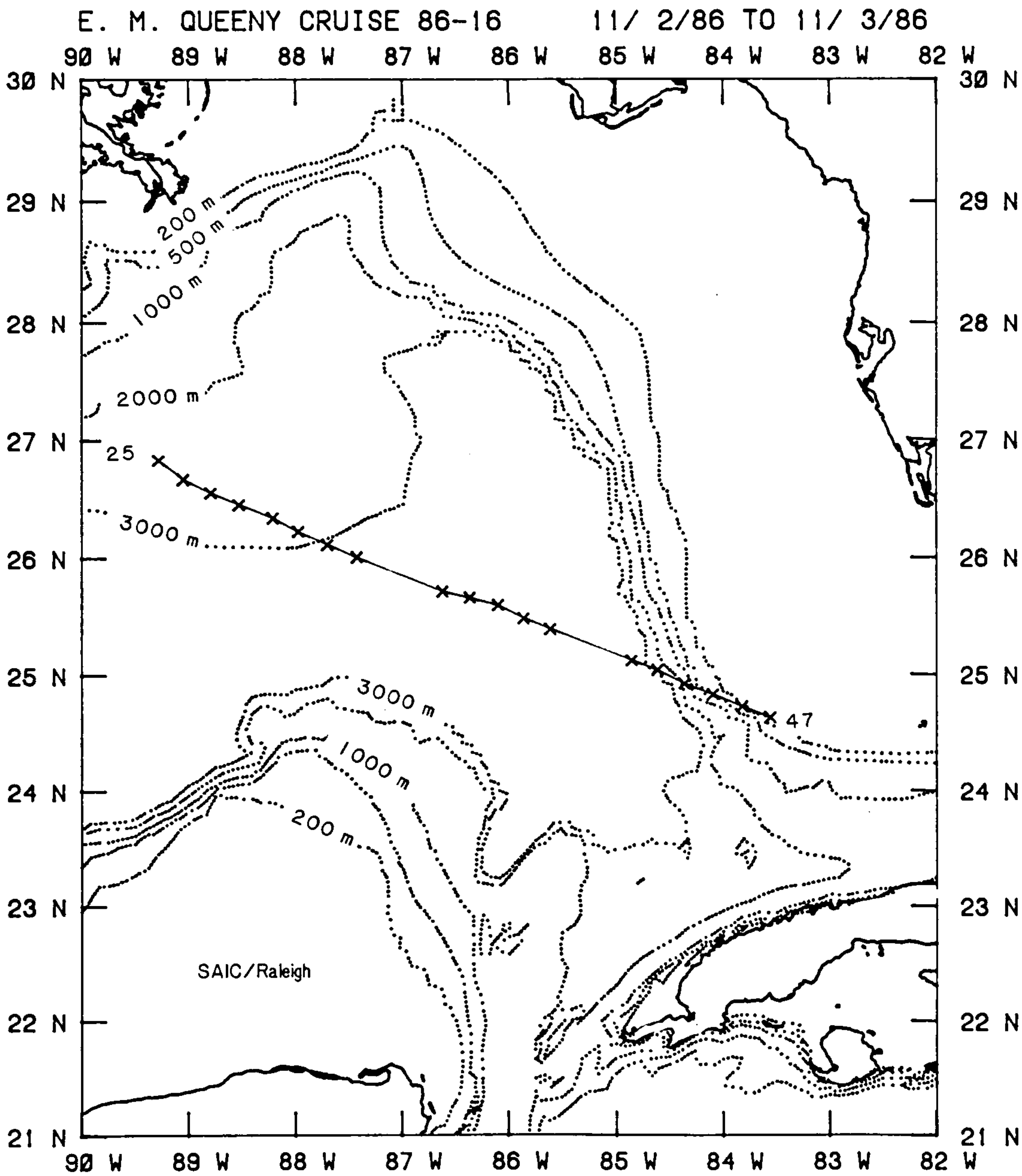
E. M. QUEENY CRUISE 86-15
10/27/85 TO 10/27/86
STATIONS 3 TO 23
TEMPERATURE DEG C
MIN = 5.05 MAX = 27.82

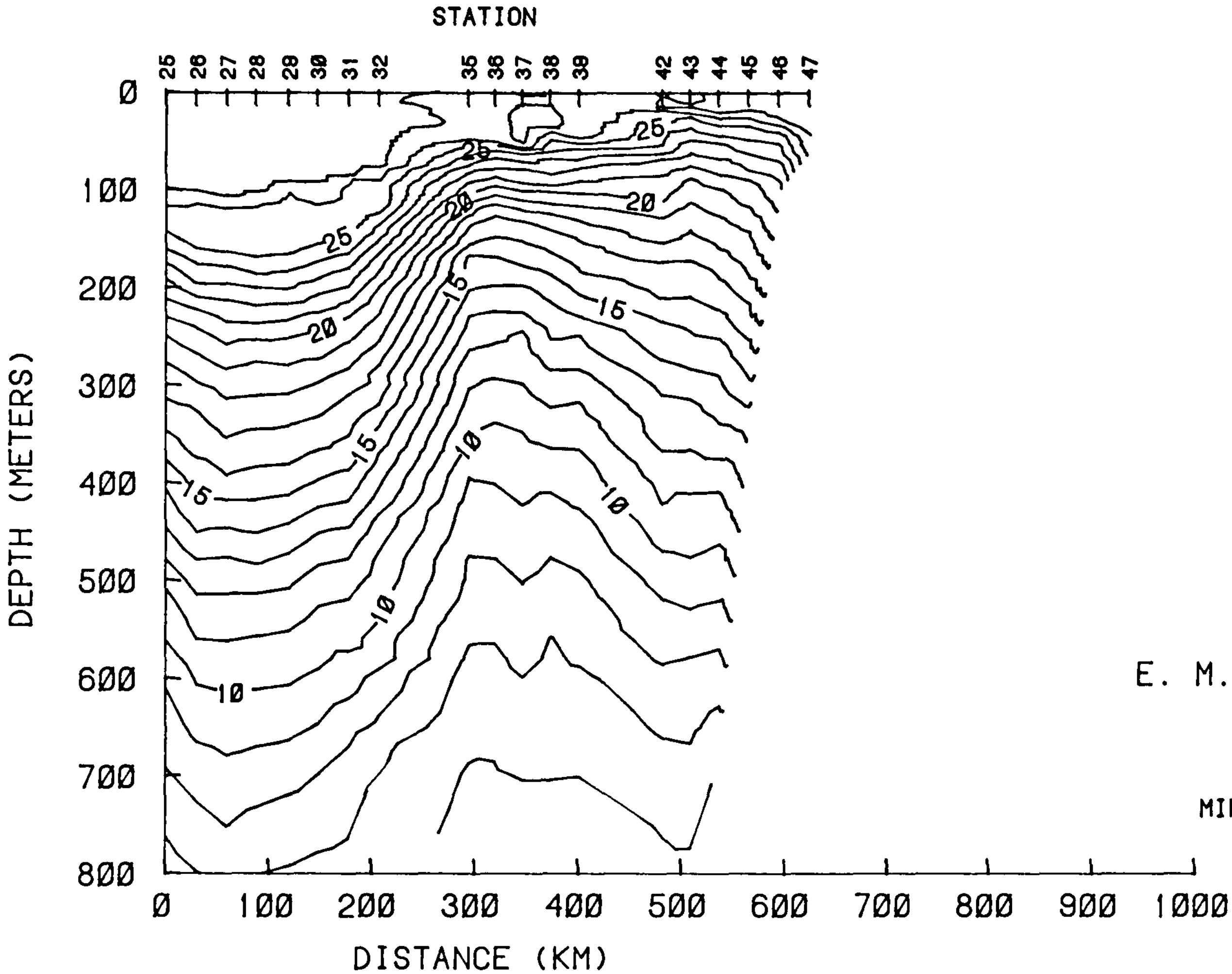


E. M. QUEENY CRUISE 86-15
10/27/85 TO 10/27/86
STATIONS 3 TO 23
TEMPERATURE DEG C
MIN = 11.92 MAX = 27.82

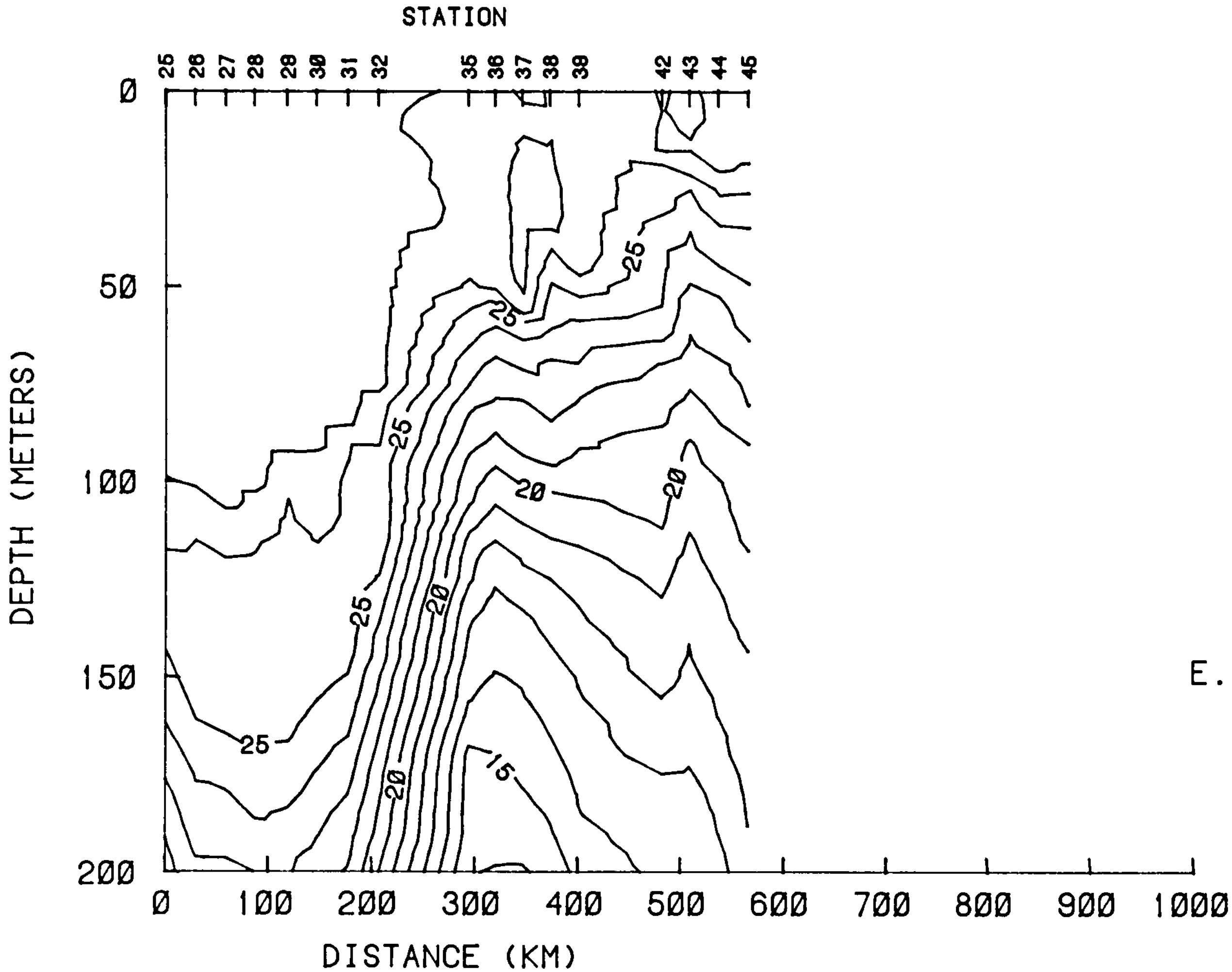


PARAMETERS AT SURFACE E. M. QUEENY CRUISE 86-15

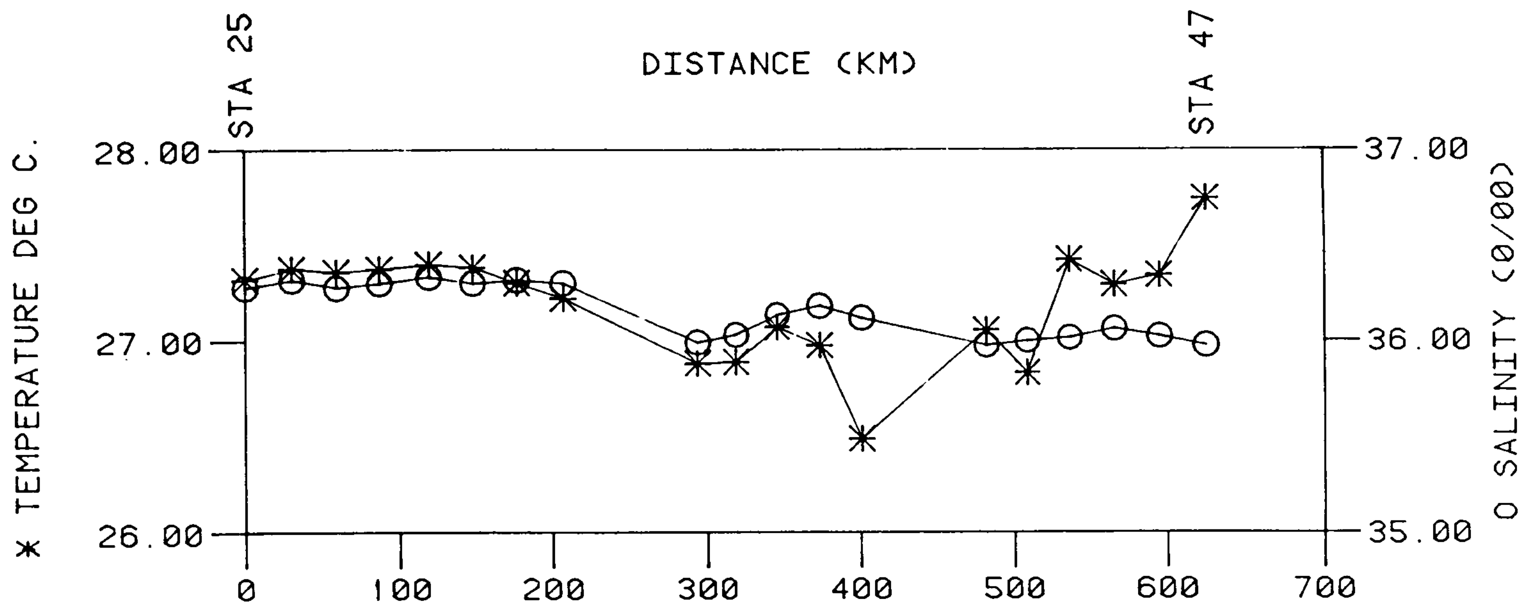

E. M. QUEENY CRUISE 86-16 11/ 2/86 TO 11/ 3/86
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
25
47
3000 m
1000 m
200 m
SAIC/Raleigh



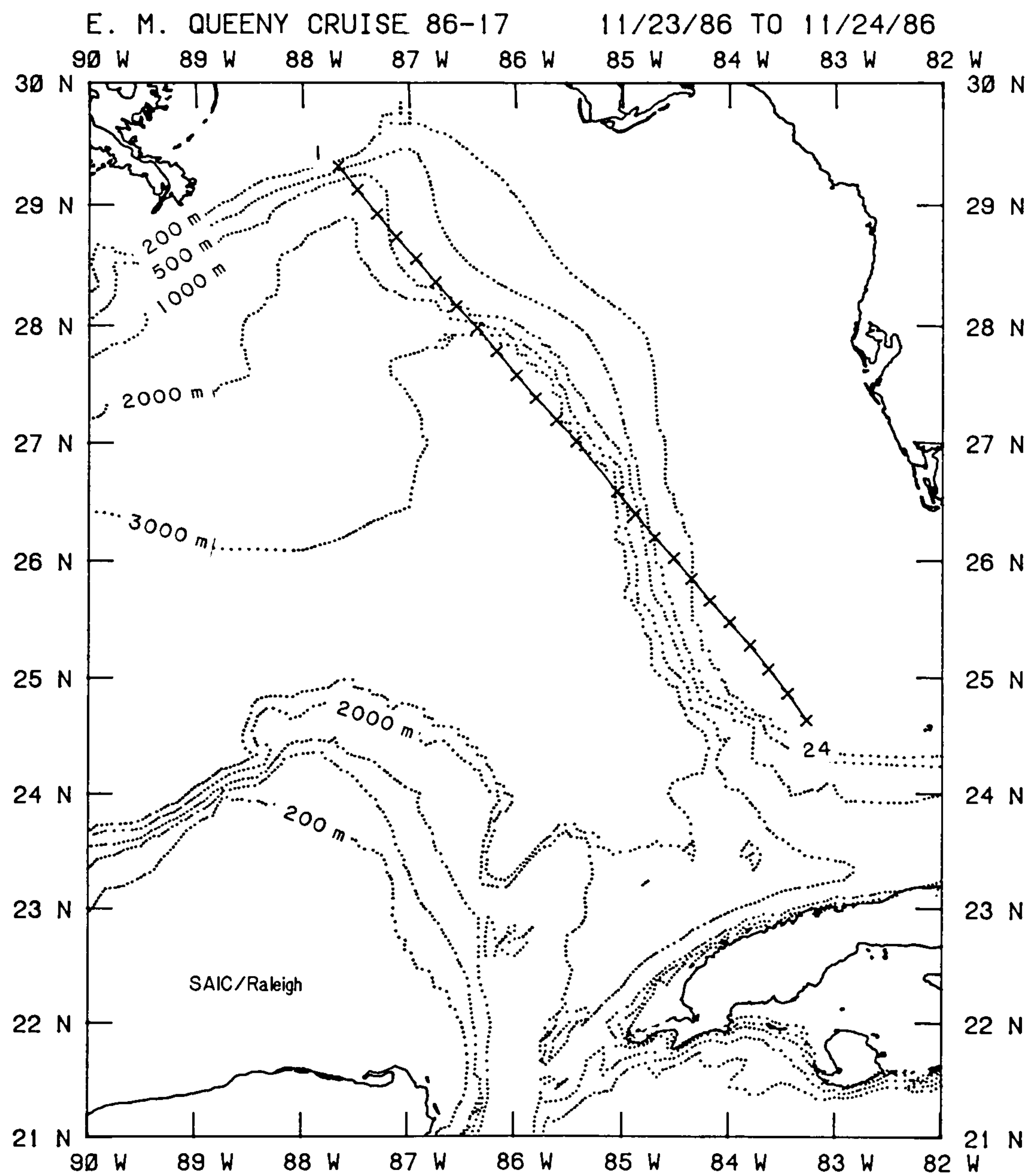
E. M. QUEENY CRUISE 86-16
11/ 2/86 TO 11/ 3/86
STATIONS 25 TO 47
TEMPERATURE DEG C
MIN = 5.37 MAX = 27.96

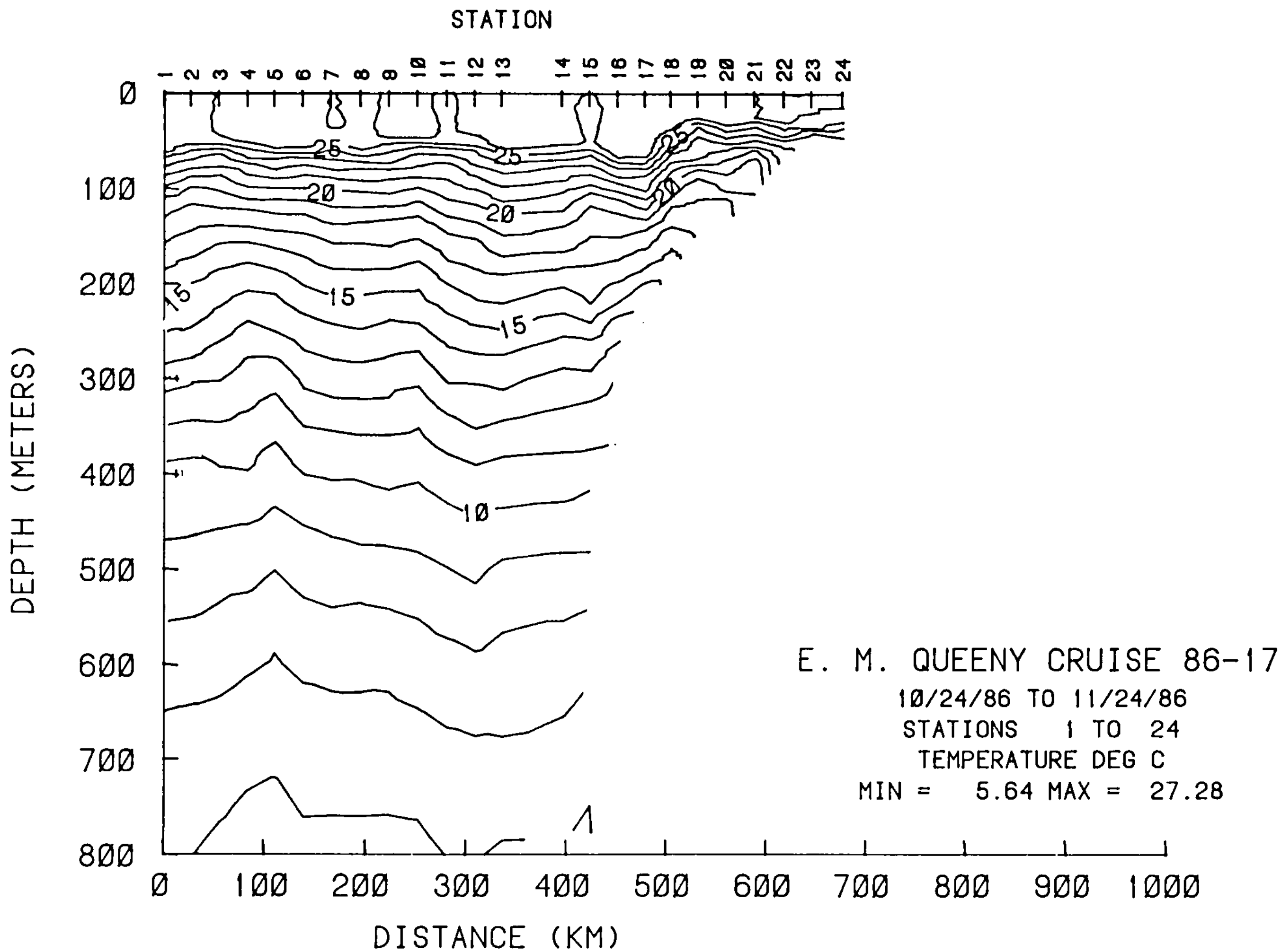


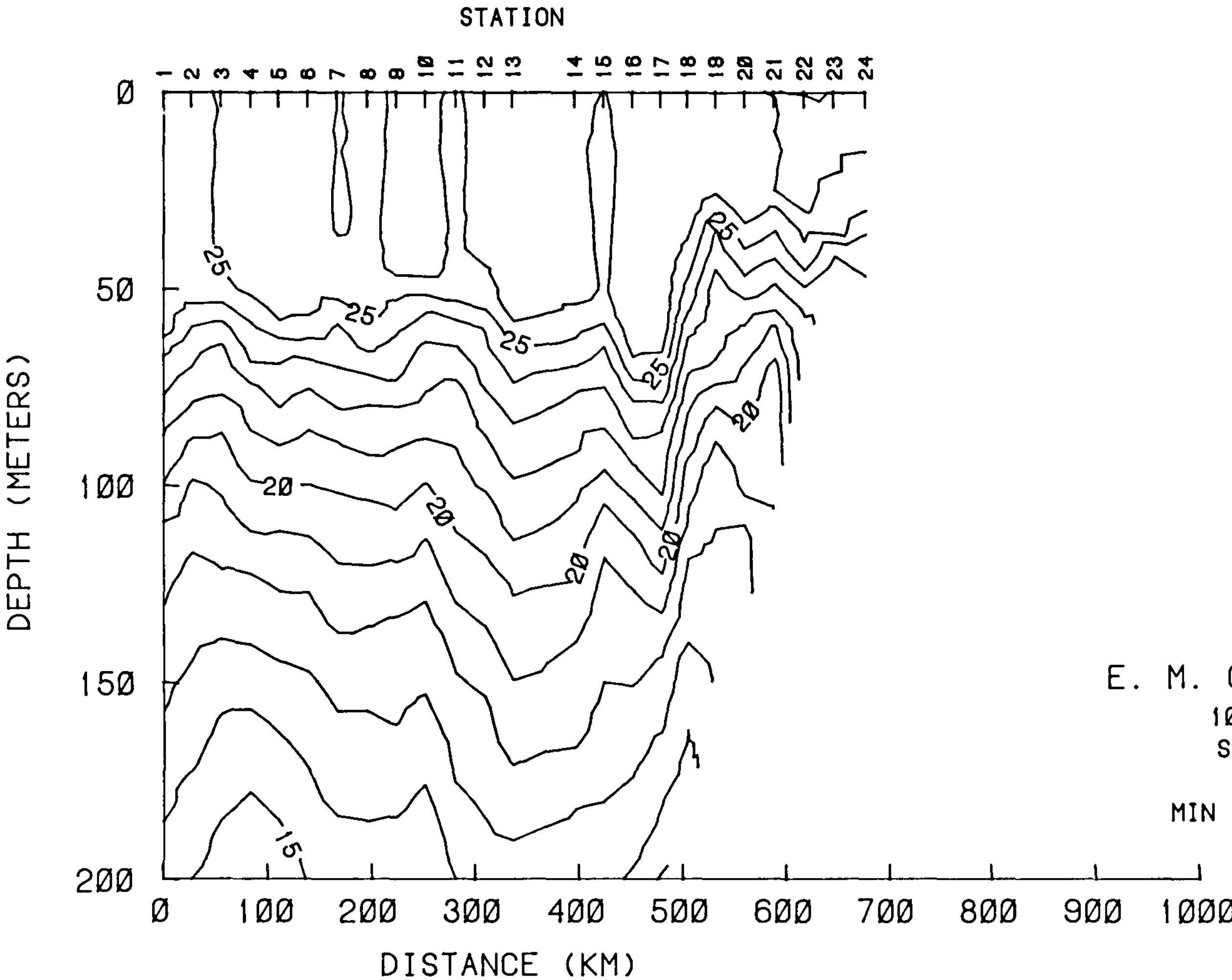
E. M. QUEENY CRUISE 86-16
11/ 2/86 TO 11/ 3/86
STATIONS 25 TO 45
TEMPERATURE DEG C
MIN = 13.86 MAX = 27.52



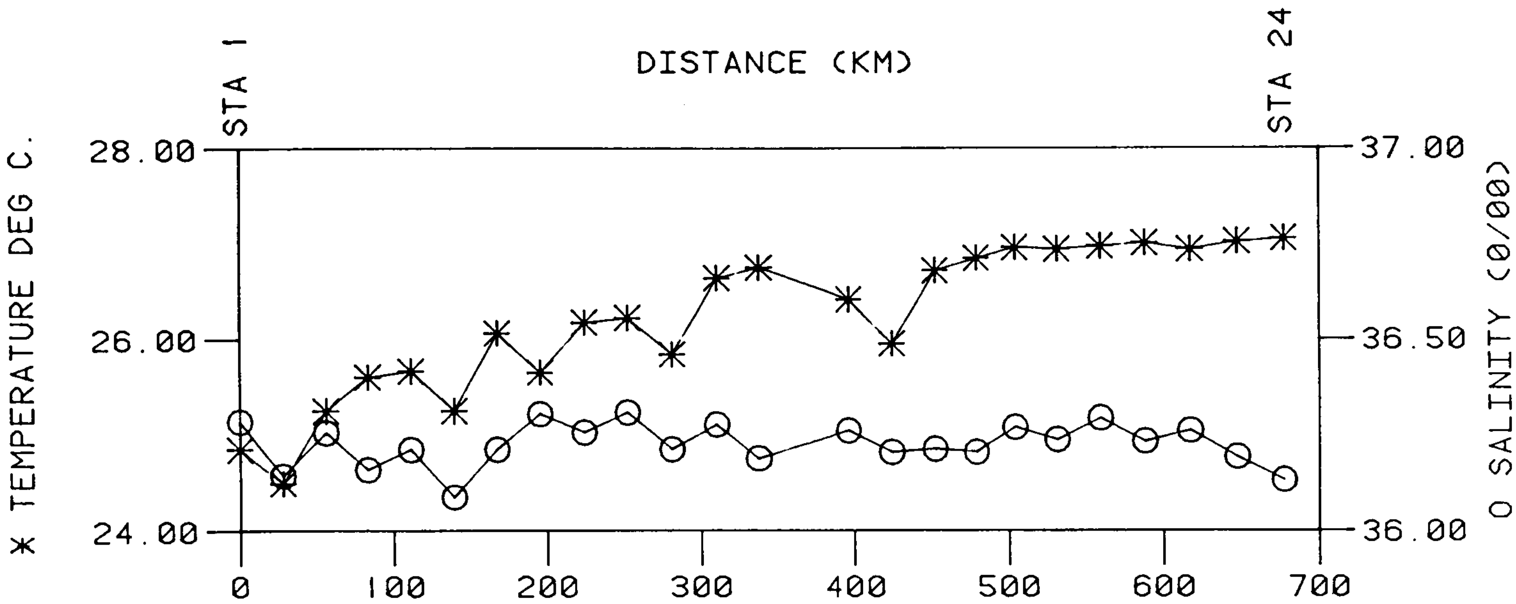
PARAMETERS AT SURFACE E. M. QUEENY CRUISE 86-16


E. M. QUEENY CRUISE 86-17 11/23/86 TO 11/24/86
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
2000 m
200 m
1
24
SAIC/Raleigh

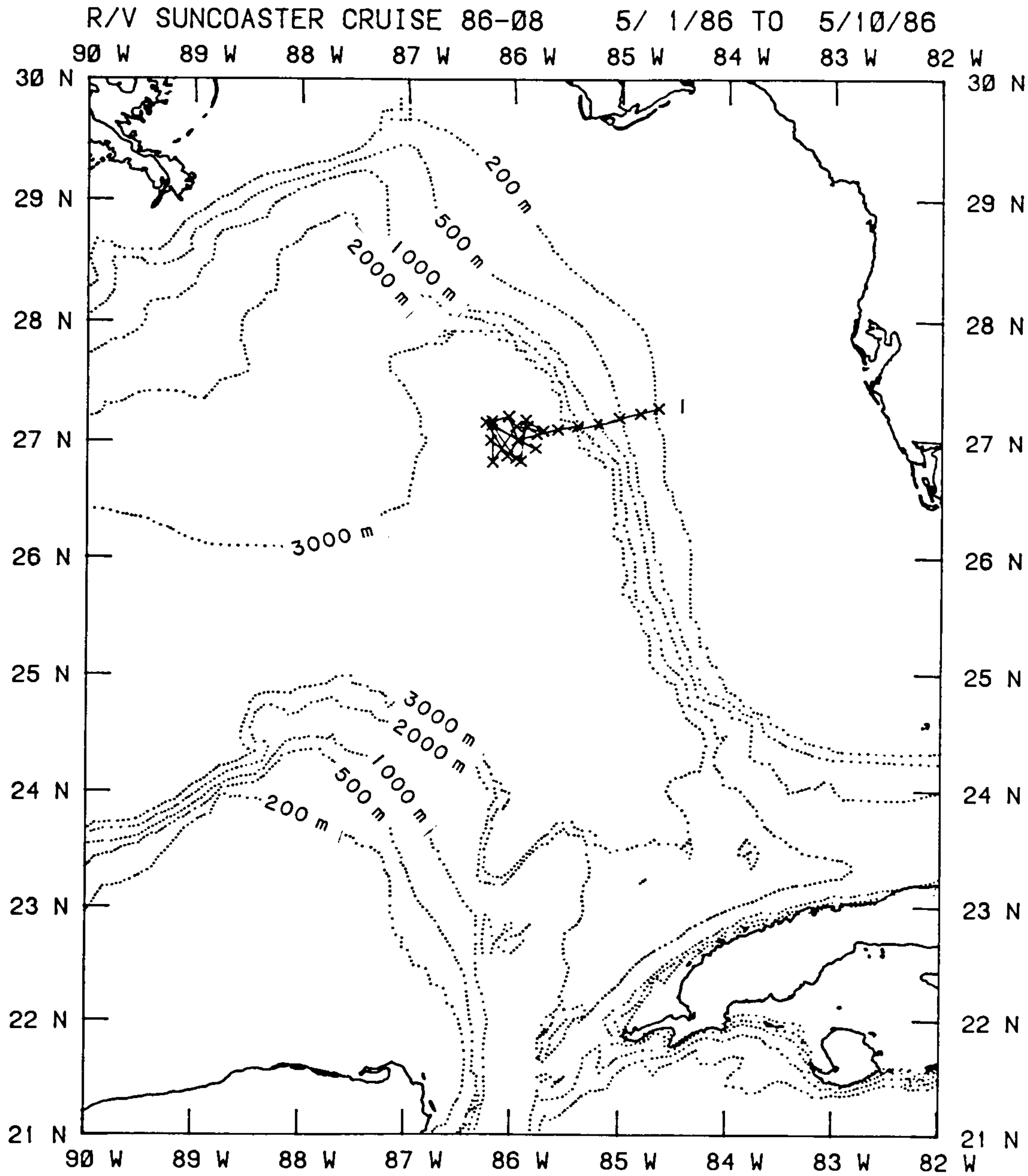

STATION
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
DEPTH (METERS)
0 100 200 300 400 500 600 700 800
DISTANCE (KM)
0 100 200 300 400 500 600 700 800 900 1000
25
20
15
10
E. M. QUEENY CRUISE 86-17
10/24/86 TO 11/24/86
STATIONS 1 TO 24
TEMPERATURE DEG C
MIN = 5.64 MAX = 27.28

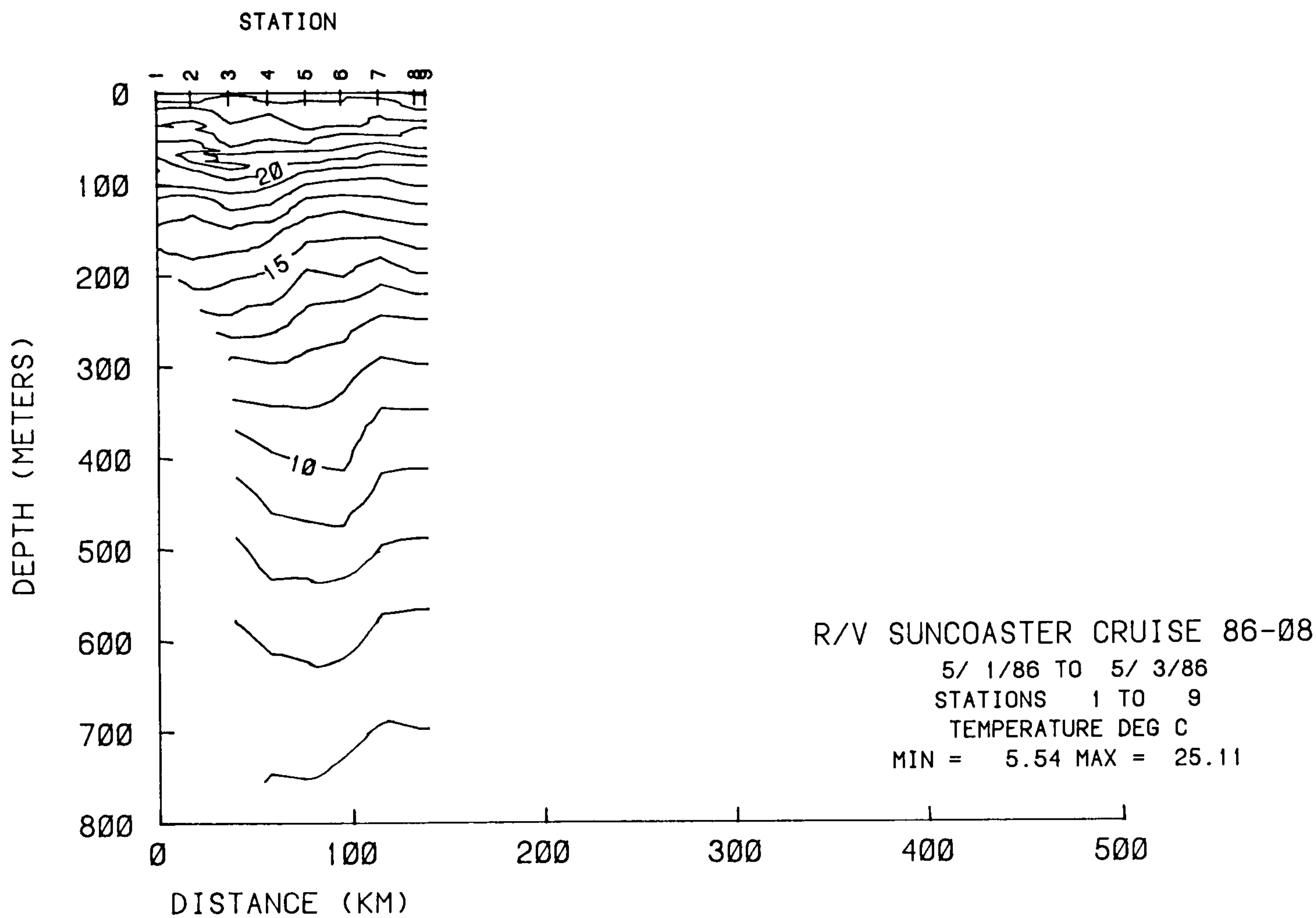


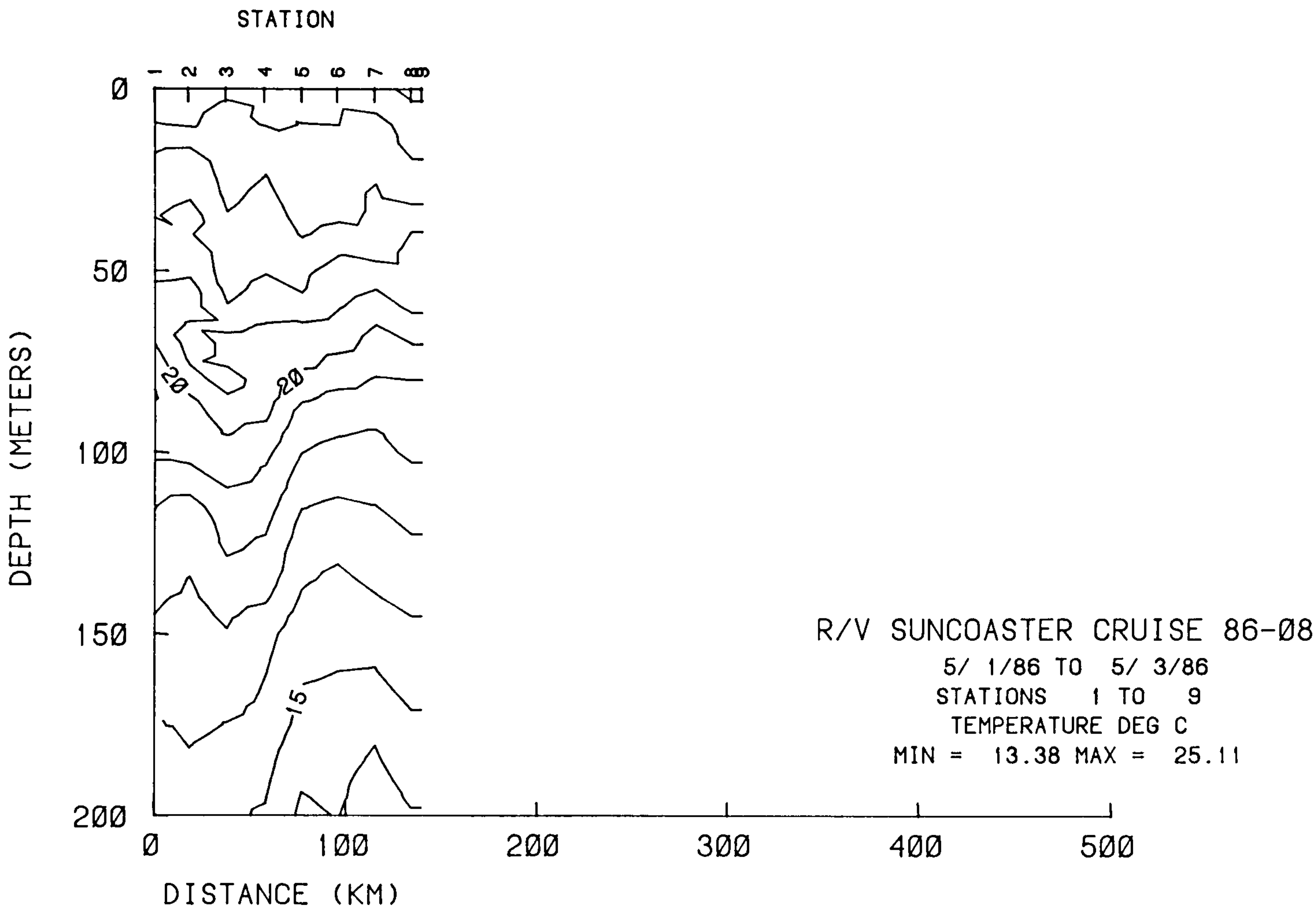
E. M. QUEENY CRUISE 86-17
1Ø/24/86 TO 11/24/86
STATIONS 1 TO 24
TEMPERATURE DEG C
MIN = 14.26 MAX = 27.28

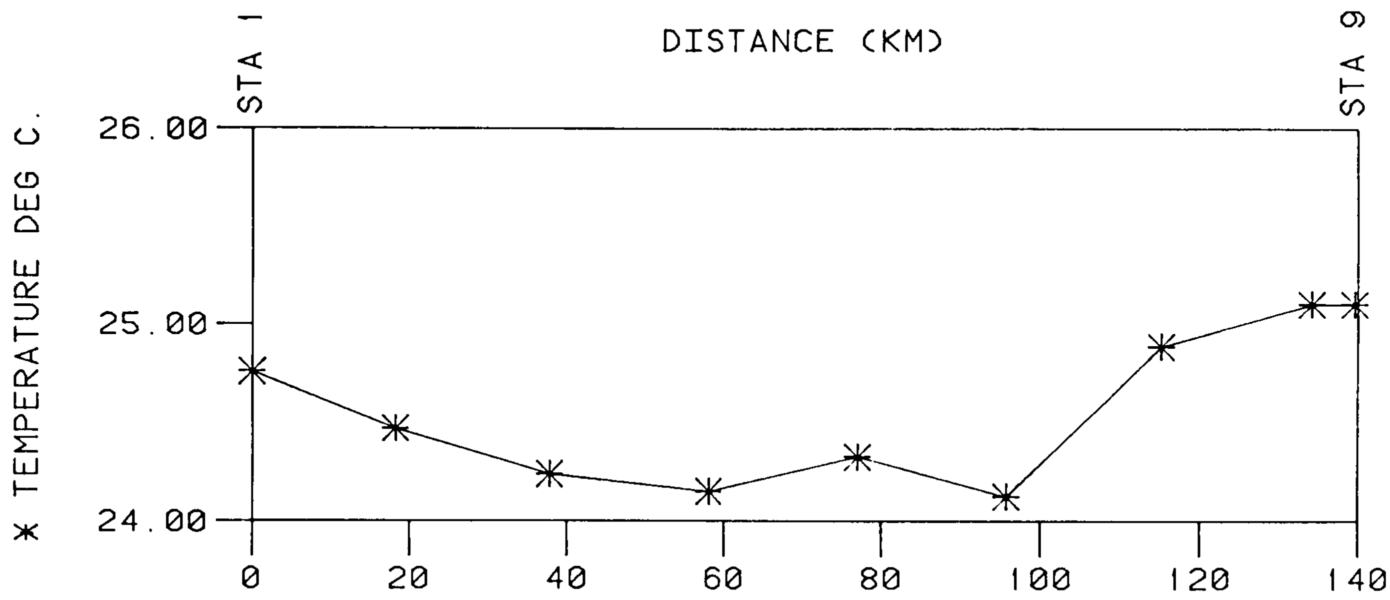


PARAMETERS AT SURFACE E. M. QUEENY CRUISE 86-17

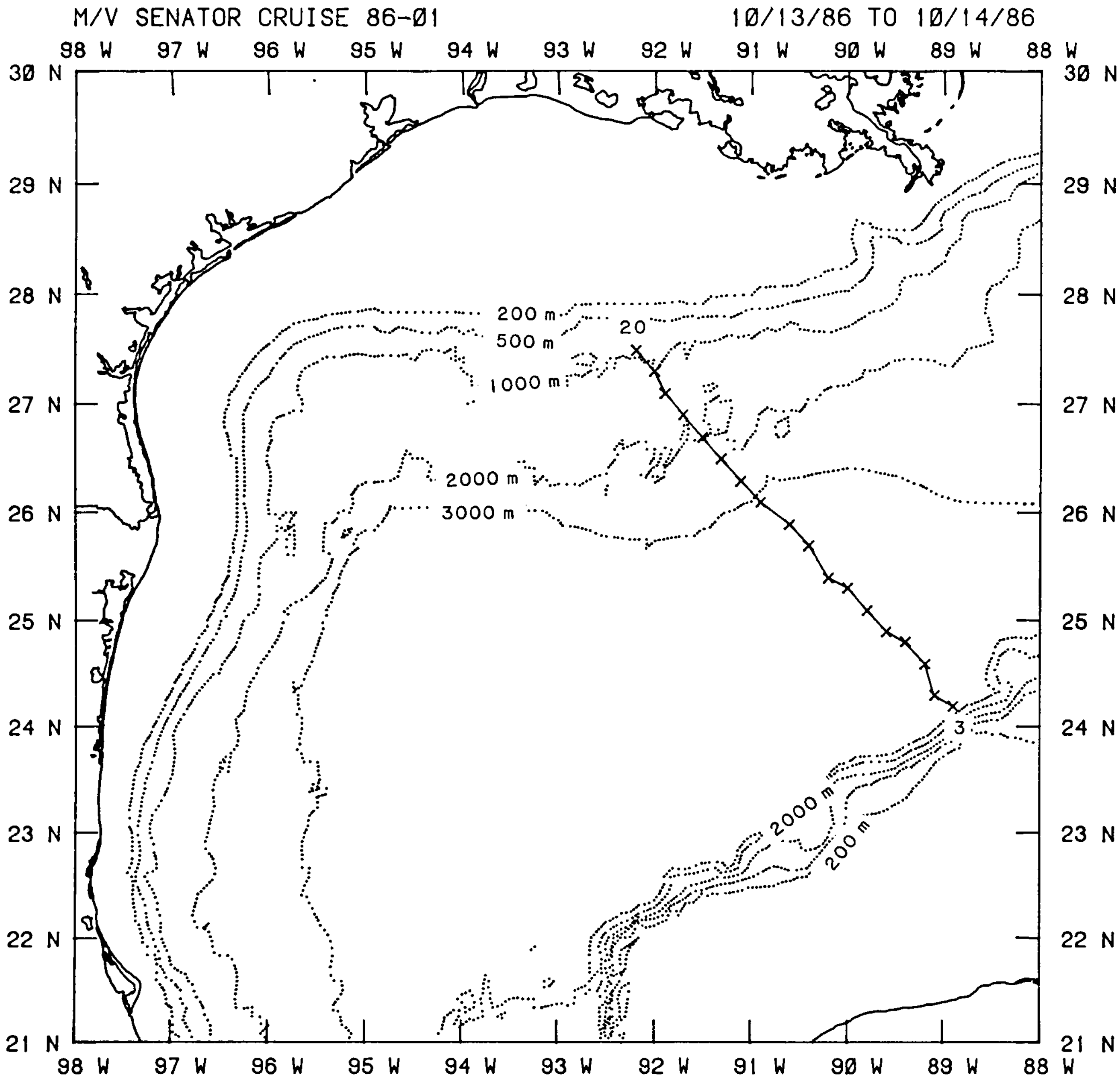

R/V SUNCOASTER CRUISE 86-08 5/ 1/86 TO 5/10/86
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
3000 m
2000 m
1000 m
500 m
200 m

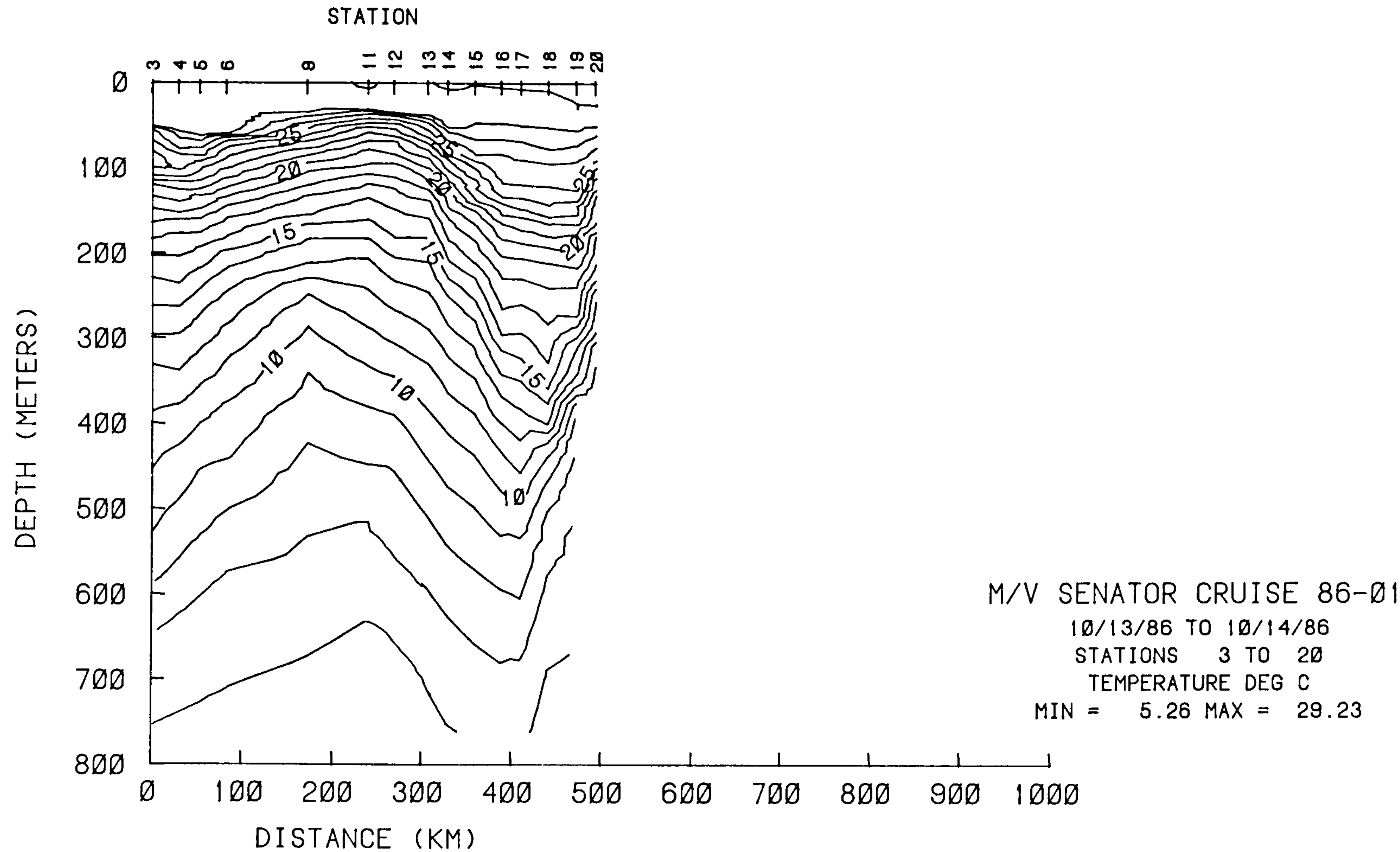

STATION
1 2 3 4 5 6 7 8 9
20
15
10
DEPTH (METERS)
0
100
200
300
400
500
600
700
800
DISTANCE (KM)
0
100
200
300
400
500
R/V SUNCOASTER CRUISE 86-08
5/ 1/86 TO 5/ 3/86
STATIONS 1 TO 9
TEMPERATURE DEG C
MIN = 5.54 MAX = 25.11

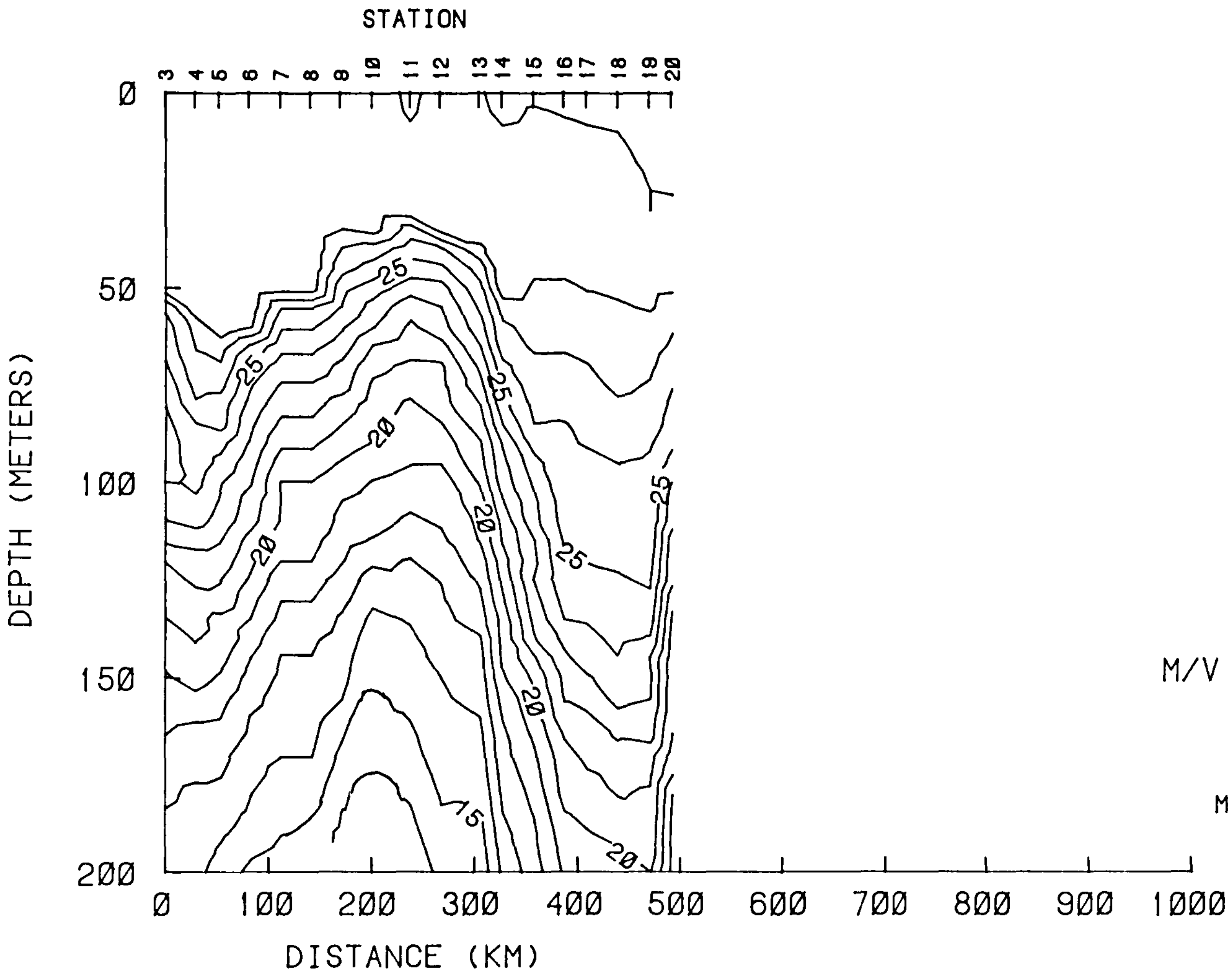

STATION
1 2 3 4 5 6 7 8 9
DEPTH (METERS)
Ø
5Ø
1ØØ
15Ø
2ØØ
2Ø
2Ø
15
Ø
1ØØ
2ØØ
3ØØ
4ØØ
5ØØ
DISTANCE (KM)
R/V SUNCOASTER CRUISE 86-Ø8
5/ 1/86 TO 5/ 3/86
STATIONS 1 TO 9
TEMPERATURE DEG C
MIN = 13.38 MAX = 25.11



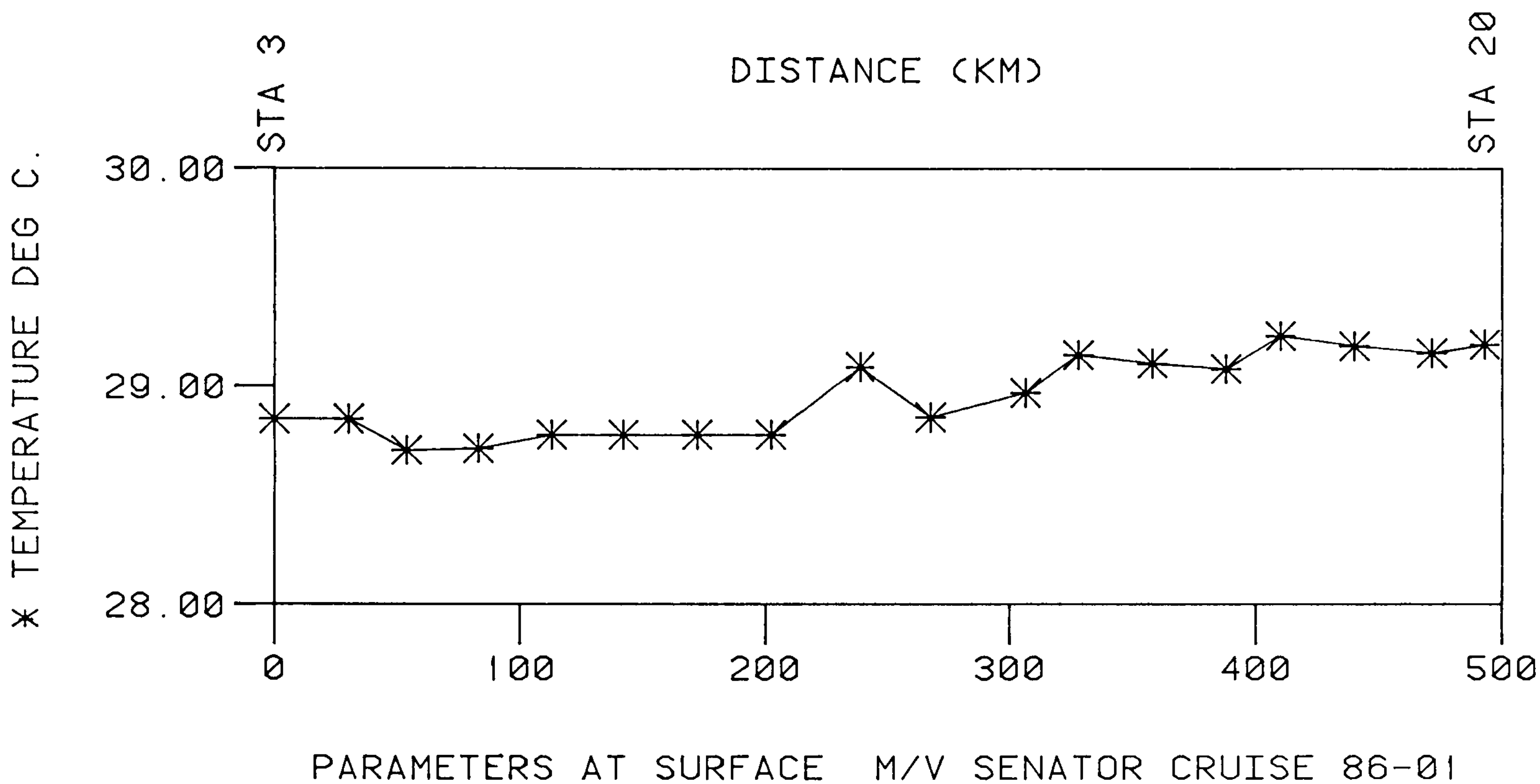
PARAMETERS AT SURFACE R/V SUNCOASTER CRUISE 86-08

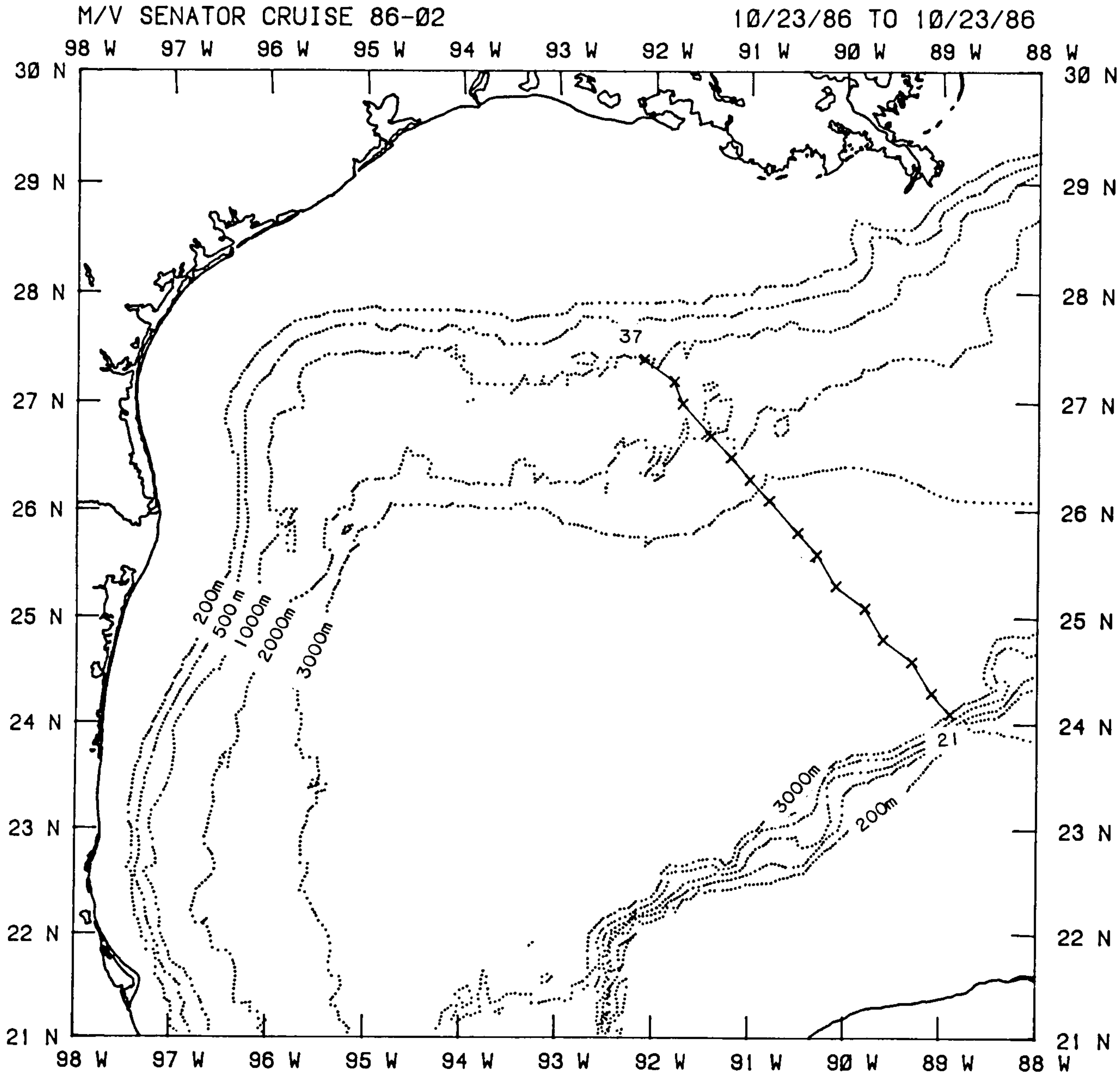

M/V SENATOR CRUISE 86-Ø1
1Ø/13/86 TO 1Ø/14/86
98 W
97 W
96 W
95 W
94 W
93 W
92 W
91 W
9Ø W
89 W
88 W
3Ø N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
20
3
2000 m
200 m

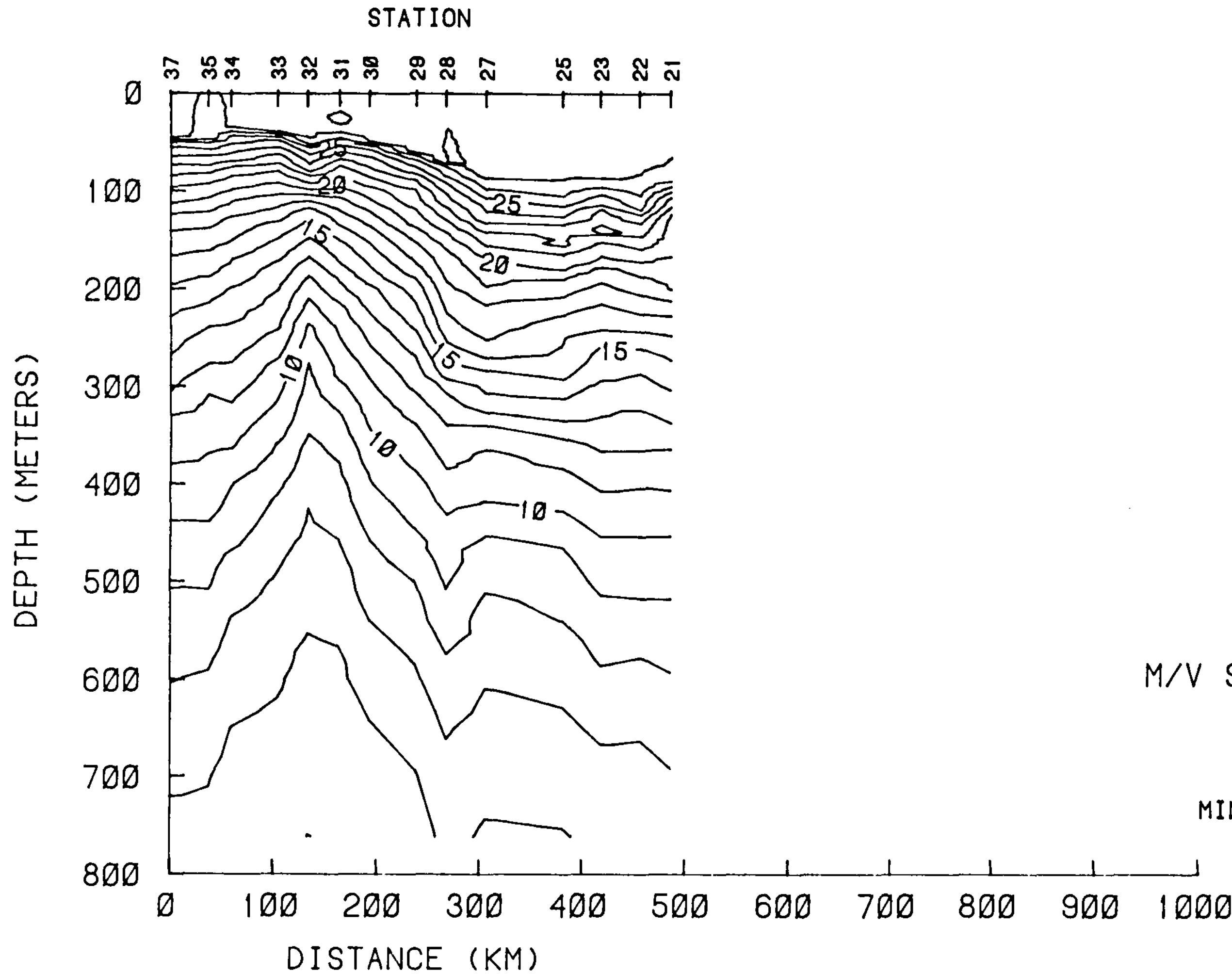

STATION
3 4 5 6 8 11 12 13 14 15 16 17 18 19 20
DEPTH (METERS)
0 100 200 300 400 500 600 700 800
DISTANCE (KM)
0 100 200 300 400 500 600 700 800 900 1000
25
20
15
10
M/V SENATOR CRUISE 86-01
10/13/86 TO 10/14/86
STATIONS 3 TO 20
TEMPERATURE DEG C
MIN = 5.26 MAX = 29.23



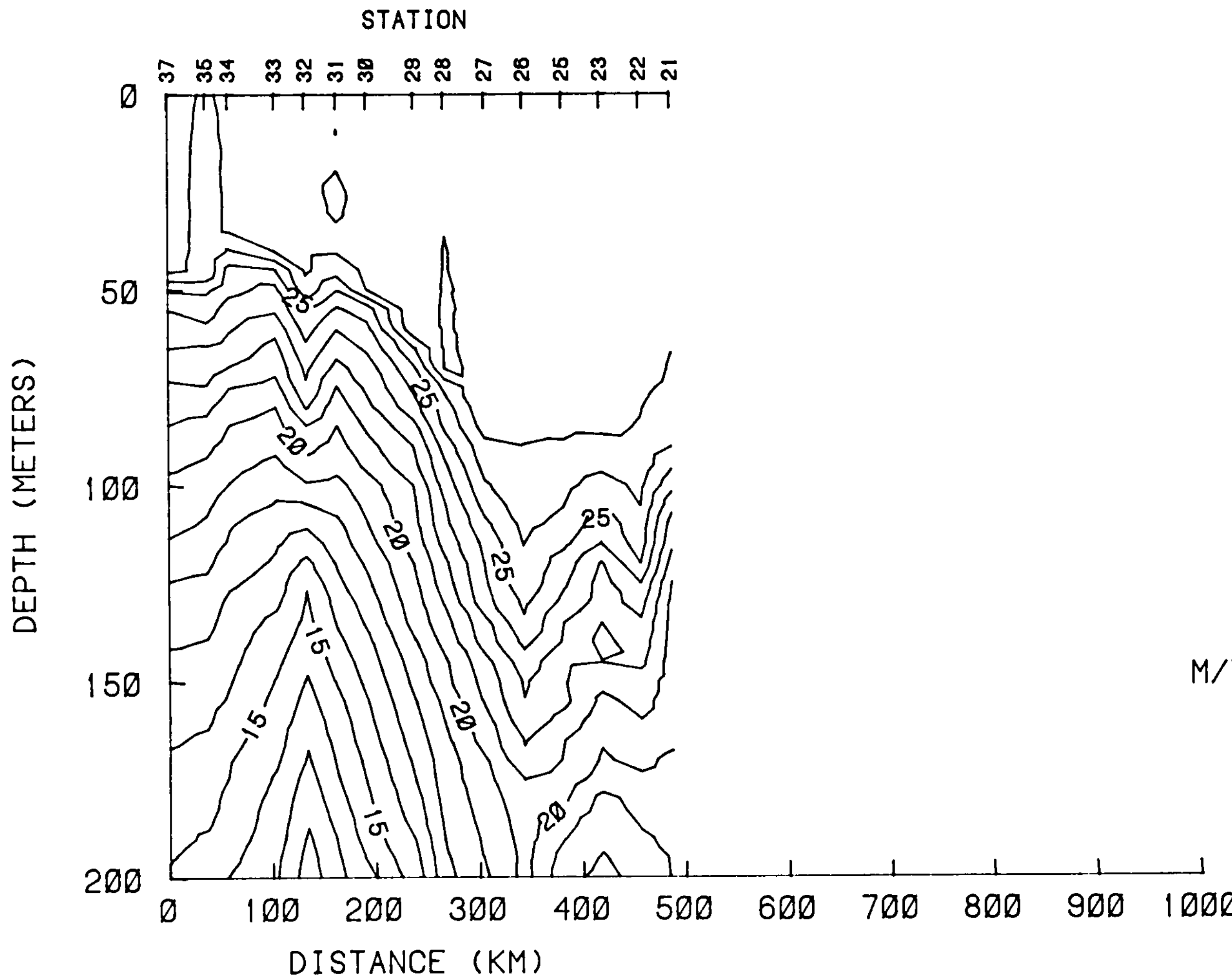
M/V SENATOR CRUISE 86-01
10/13/86 TO 10/14/86
STATIONS 3 TO 20
TEMPERATURE DEG C
MIN = 13.22 MAX = 29.23


STA 3
STA 20
DISTANCE (KM)
* TEMPERATURE DEG C.
30.00
29.00
28.00
0
100
200
300
400
500
PARAMETERS AT SURFACE M/V SENATOR CRUISE 86-01

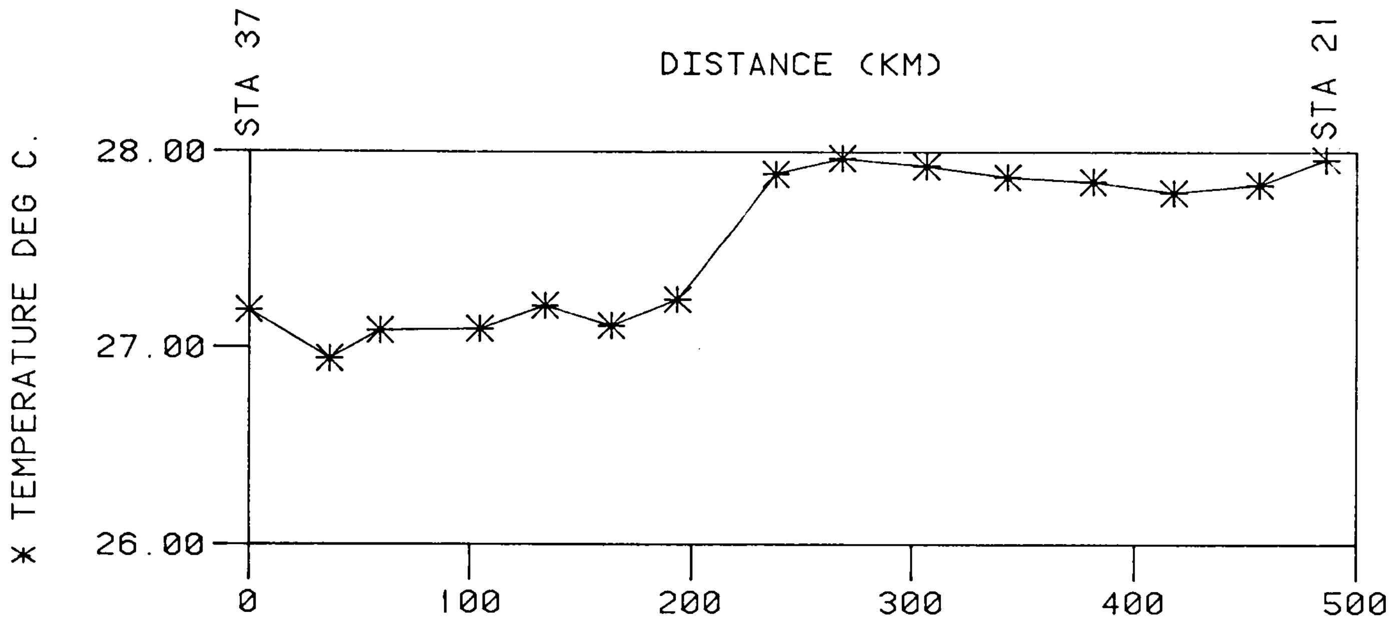

M/V SENATOR CRUISE 86-02
10/23/86 TO 10/23/86
98 W
97 W
96 W
95 W
94 W
93 W
92 W
91 W
90 W
89 W
88 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
37
21
200m
500m
1000m
2000m
3000m
3000m
200m



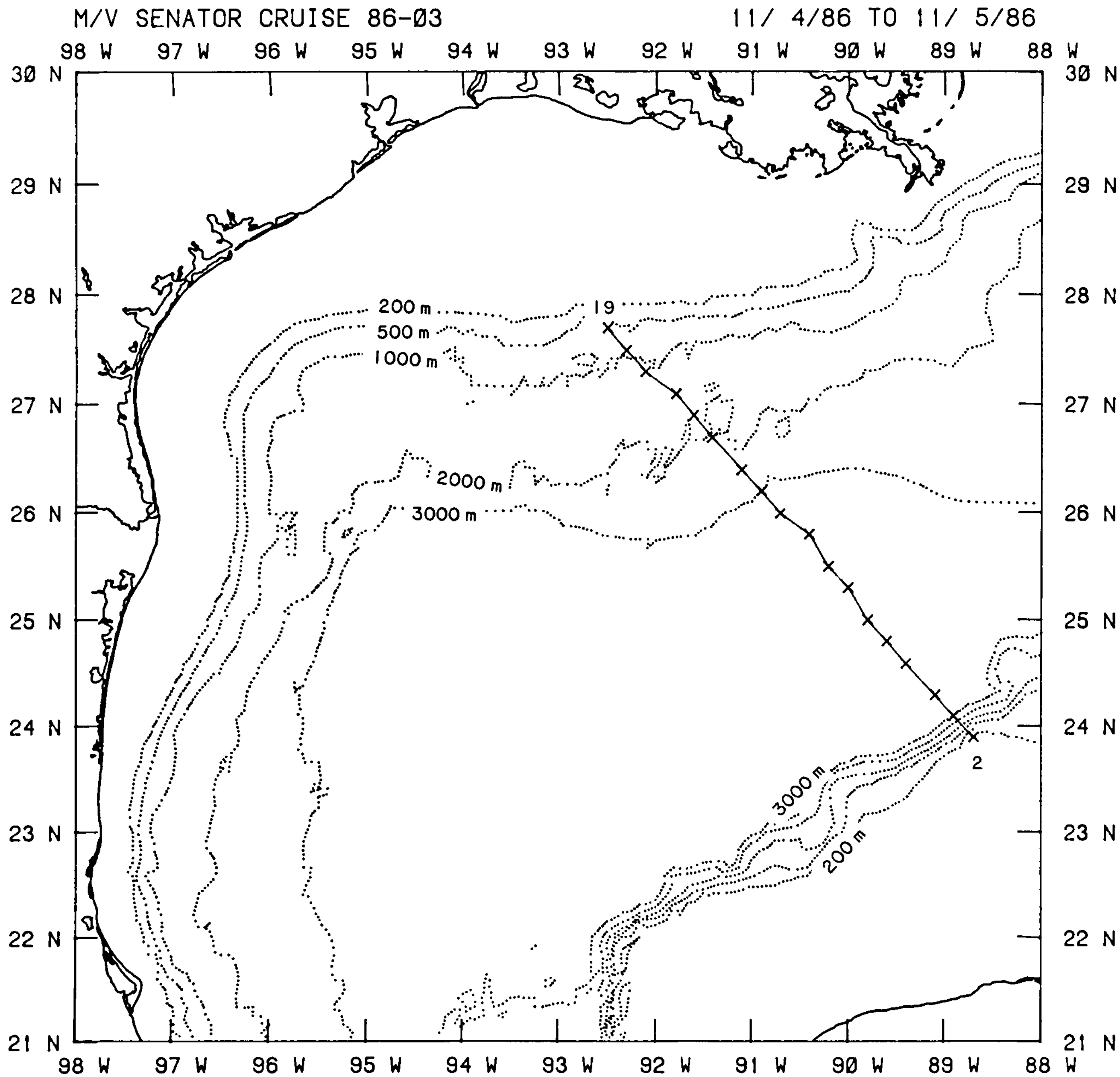
M/V SENATOR CRUISE 86-02
10/23/86 TO 10/23/86
STATIONS 21 TO 37
TEMPERATURE DEG C
MIN = 4.99 MAX = 28.04



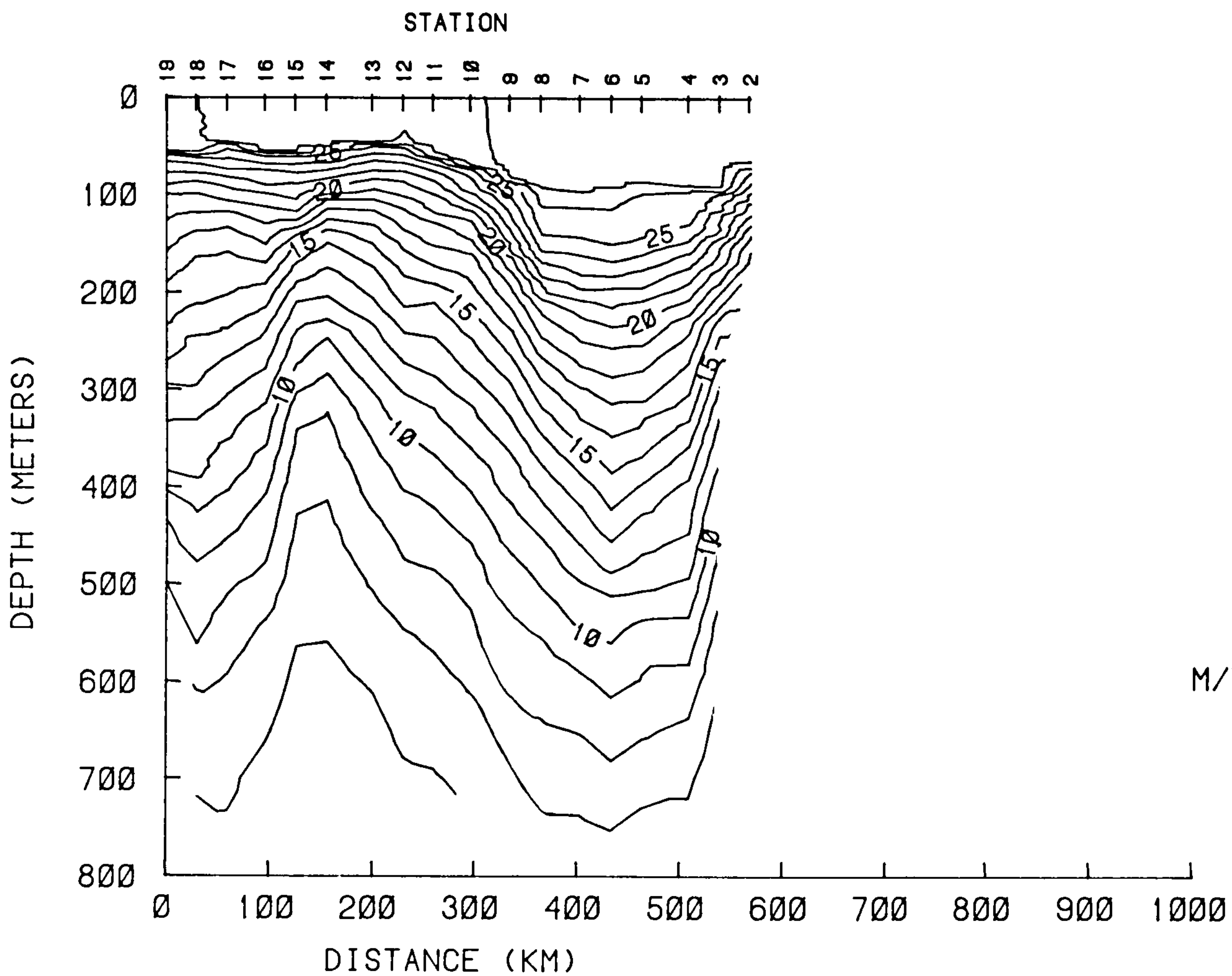
M/V SENATOR CRUISE 86-02
10/23/86 TO 10/23/86
STATIONS 21 TO 37
TEMPERATURE DEG C
MIN = 11.47 MAX = 28.04



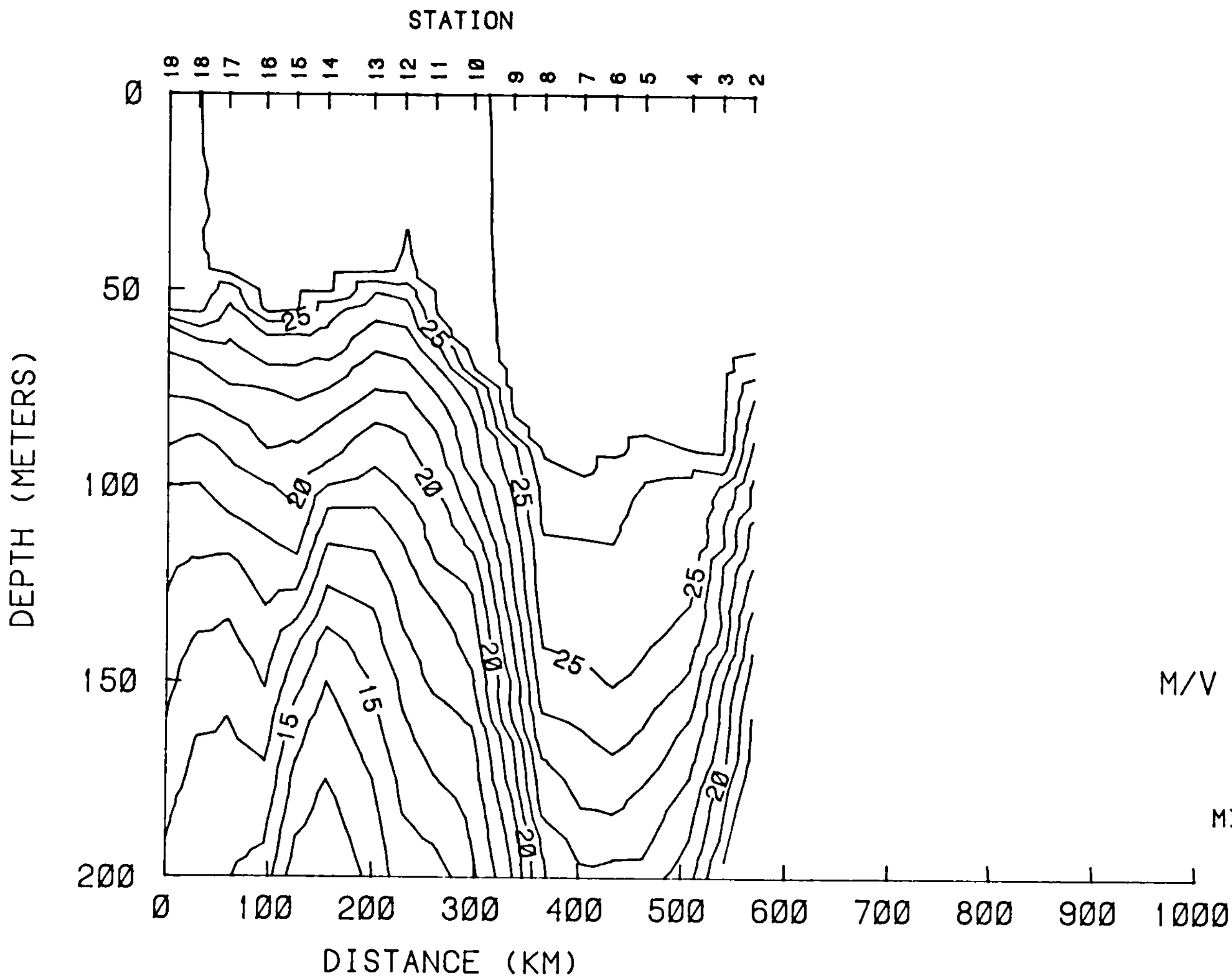
PARAMETERS AT SURFACE M/V SENATOR CRUISE 86-02



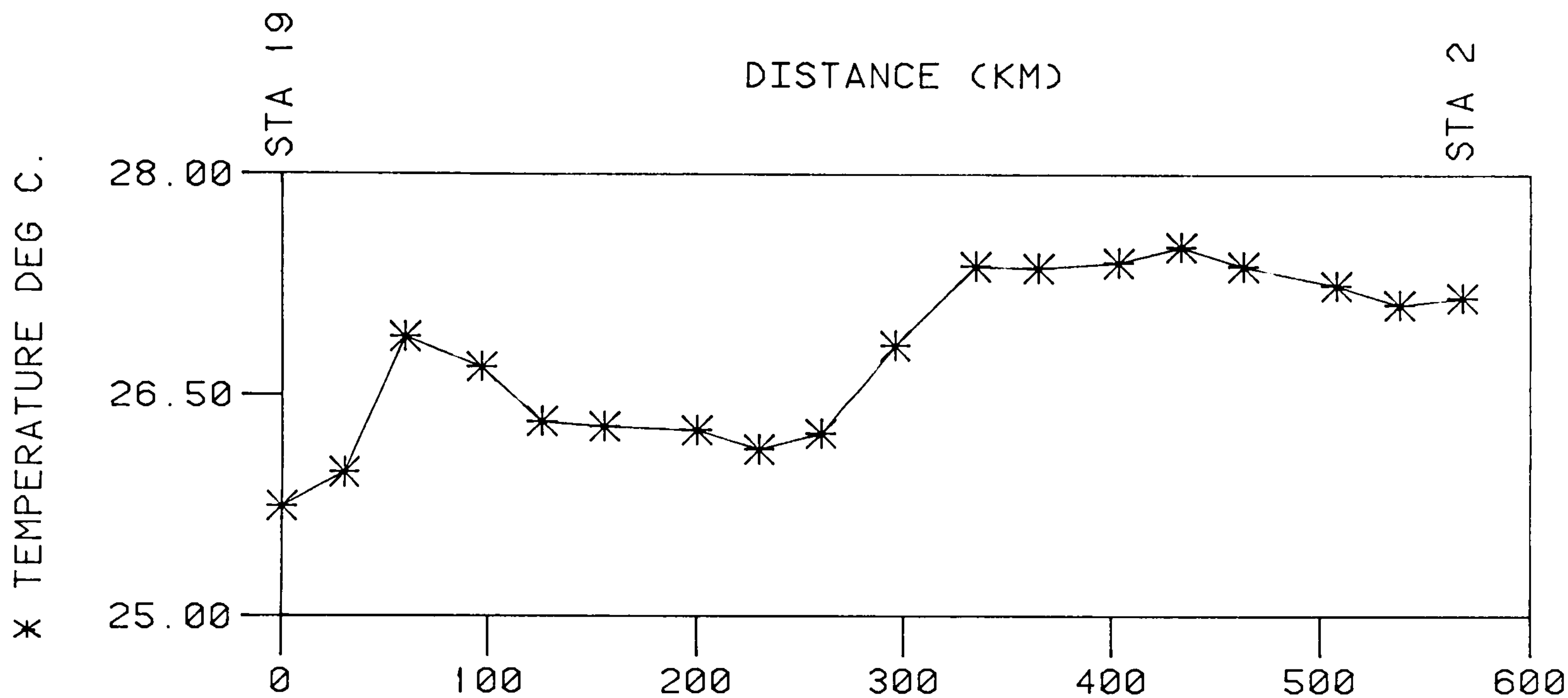
M/V SENATOR CRUISE 86-Ø3
11/ 4/86 TO 11/ 5/86
98 W
97 W
96 W
95 W
94 W
93 W
92 W
91 W
9Ø W
89 W
88 W
3Ø N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
19
2
3000 m
200 m



M/V SENATOR CRUISE 86-03
11/ 4/86 TO 11/ 5/86
STATIONS 2 TO 19
TEMPERATURE DEG C
MIN = 5.09 MAX = 27.51

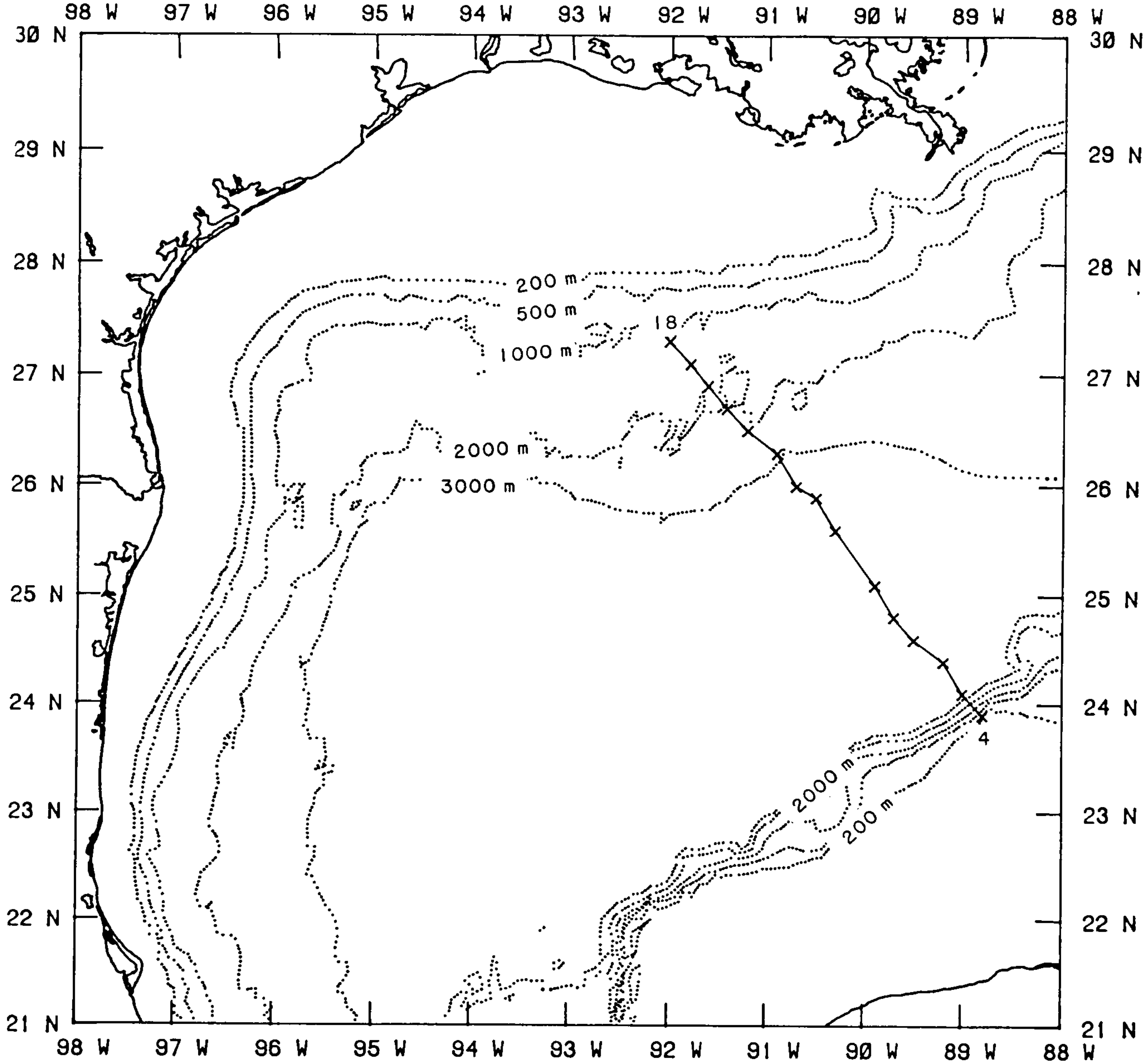


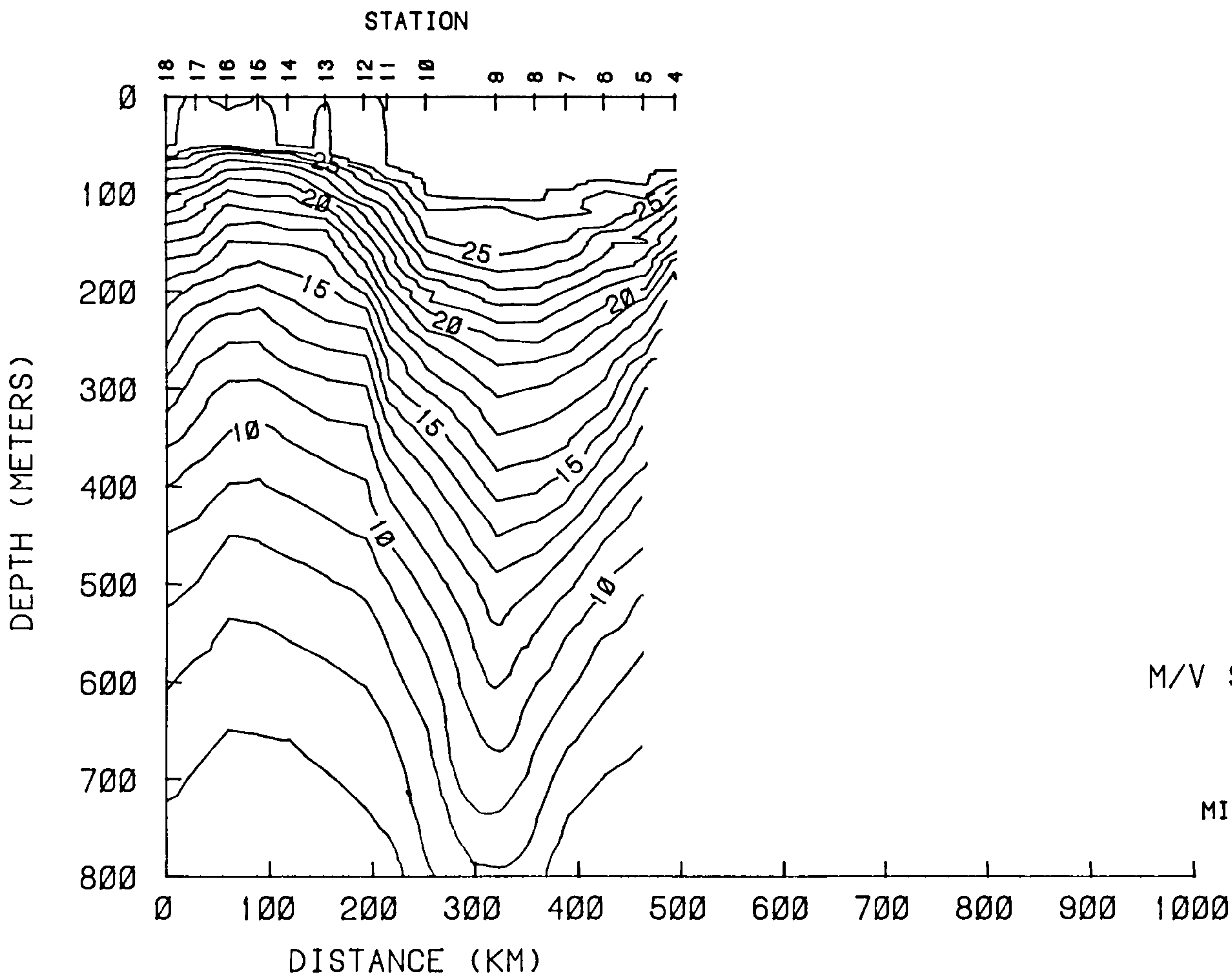
M/V SENATOR CRUISE 86-03
11/ 4/86 TO 11/ 5/86
STATIONS 2 TO 19
TEMPERATURE DEG C
MIN = 12.18 MAX = 27.51



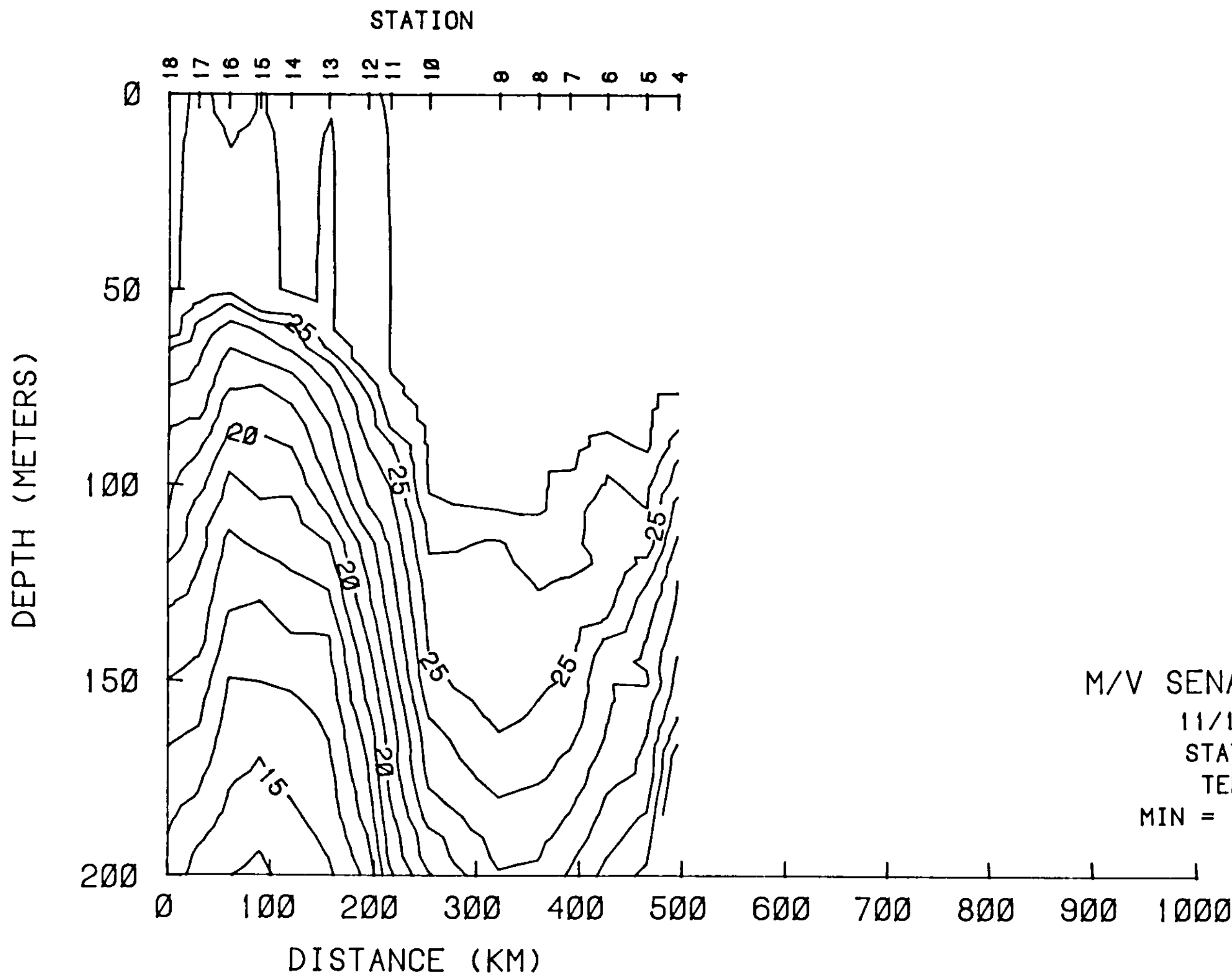
PARAMETERS AT SURFACE M/V SENATOR CRUISE 86-03

M/V SENATOR CRUISE 86-Ø4 11/16/86 TO 11/17/86





M/V SENATOR CRUISE 86-Ø4
11/16/86 TO 11/17/86
STATIONS 4 TO 18
TEMPERATURE DEG C
MIN = 5.4Ø MAX = 27.51



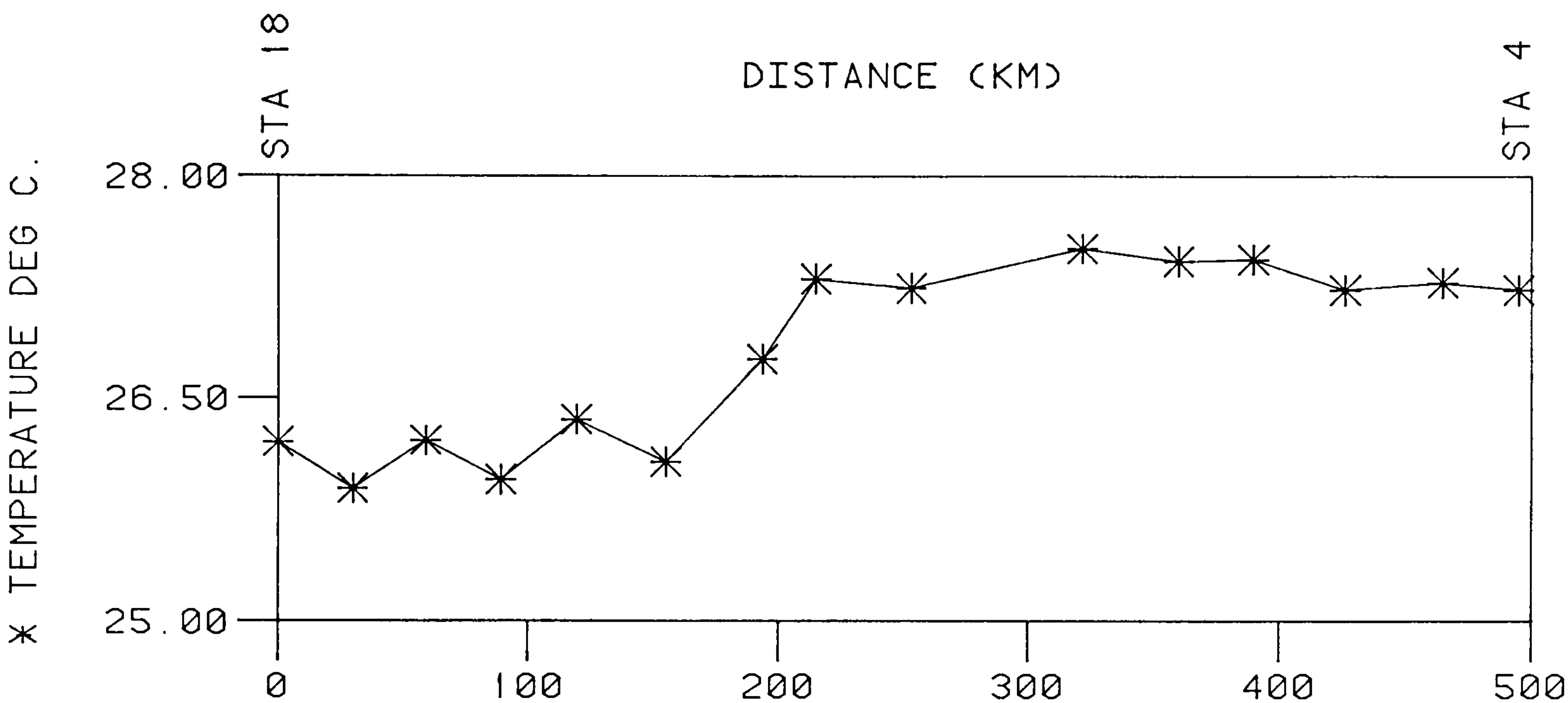
M/V SENATOR CRUISE 86-Ø4

11/16/86 TO 11/17/86

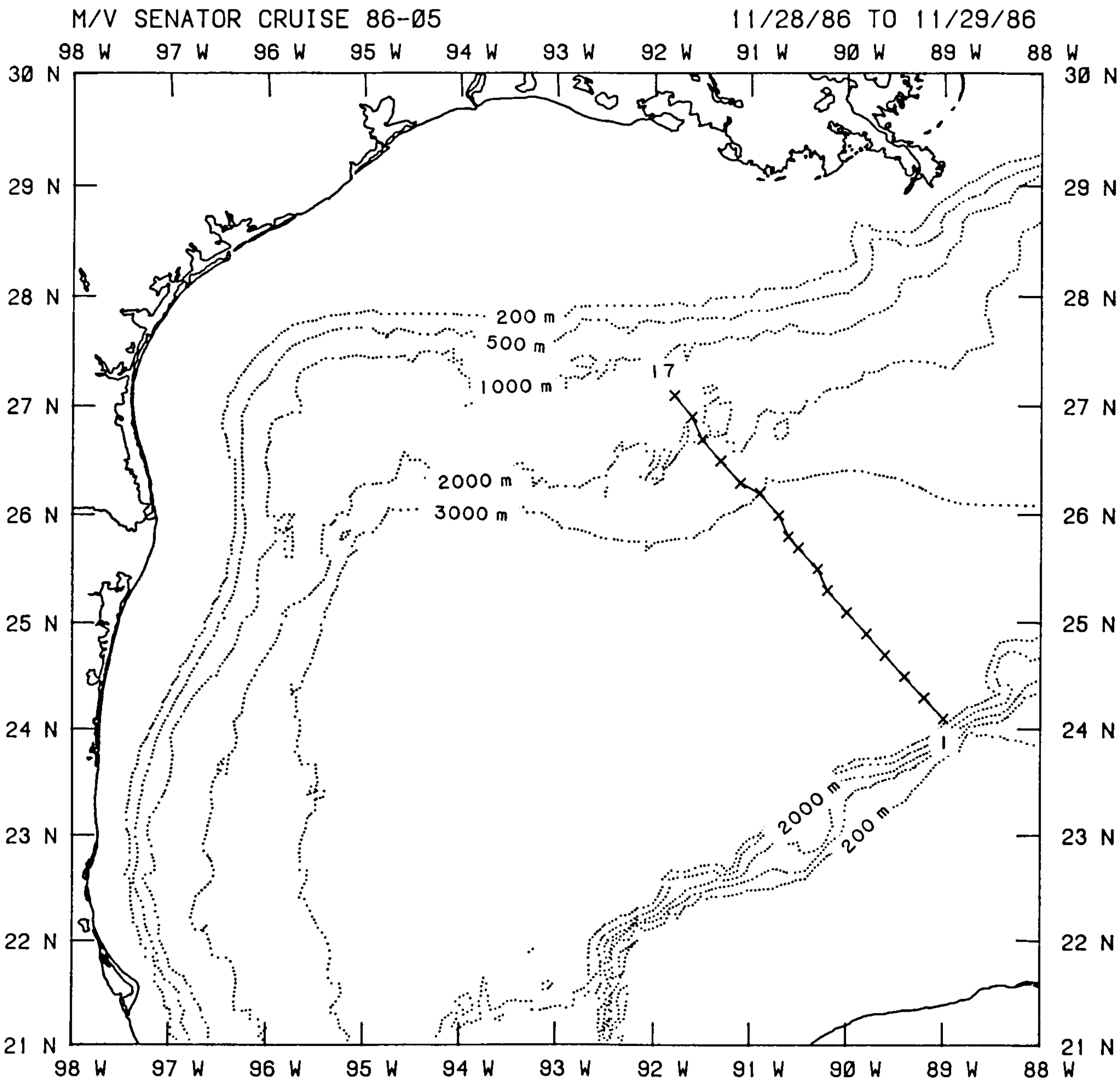
STATIONS 4 TO 18

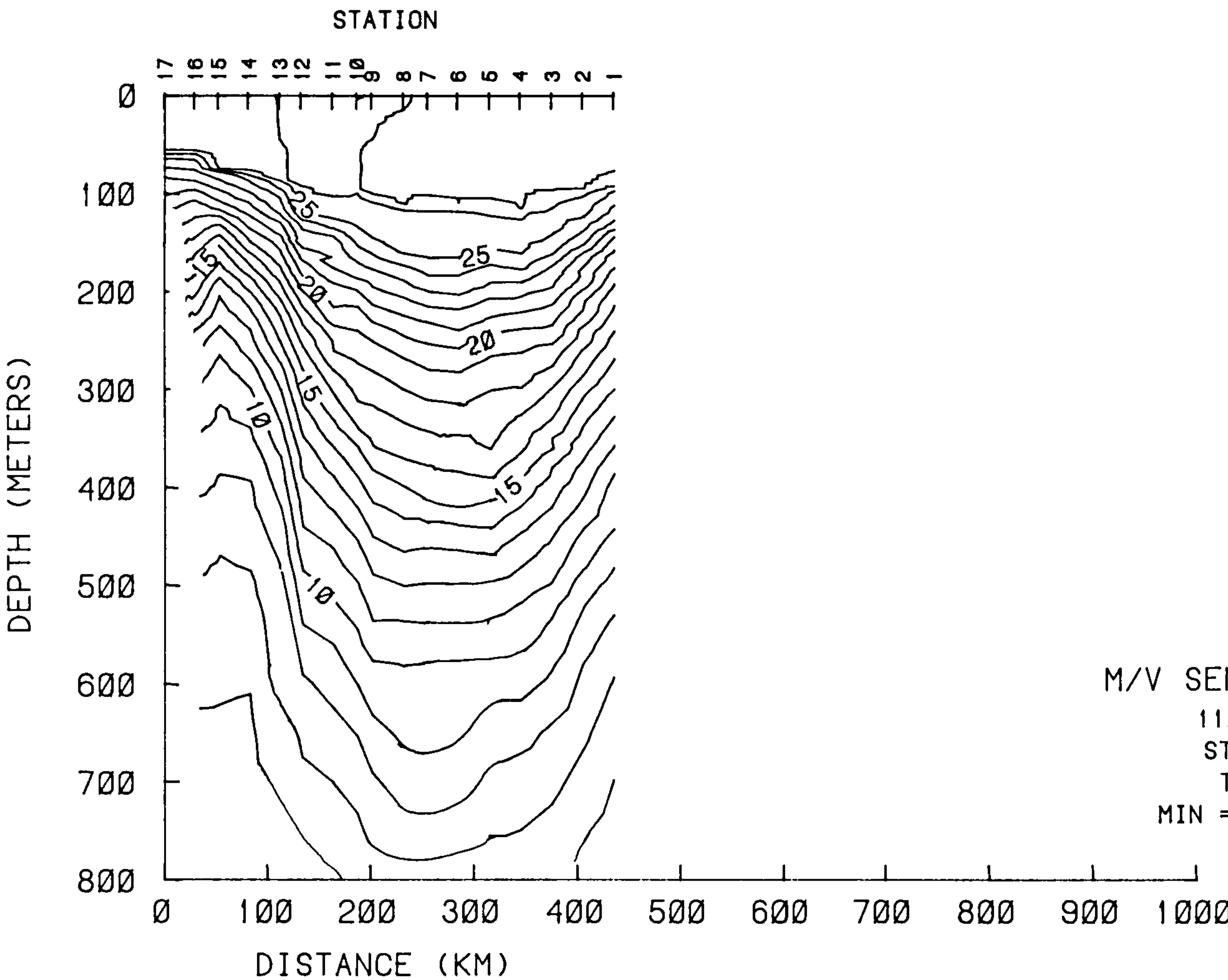
TEMPERATURE DEG C

MIN = 13.74 MAX = 27.51

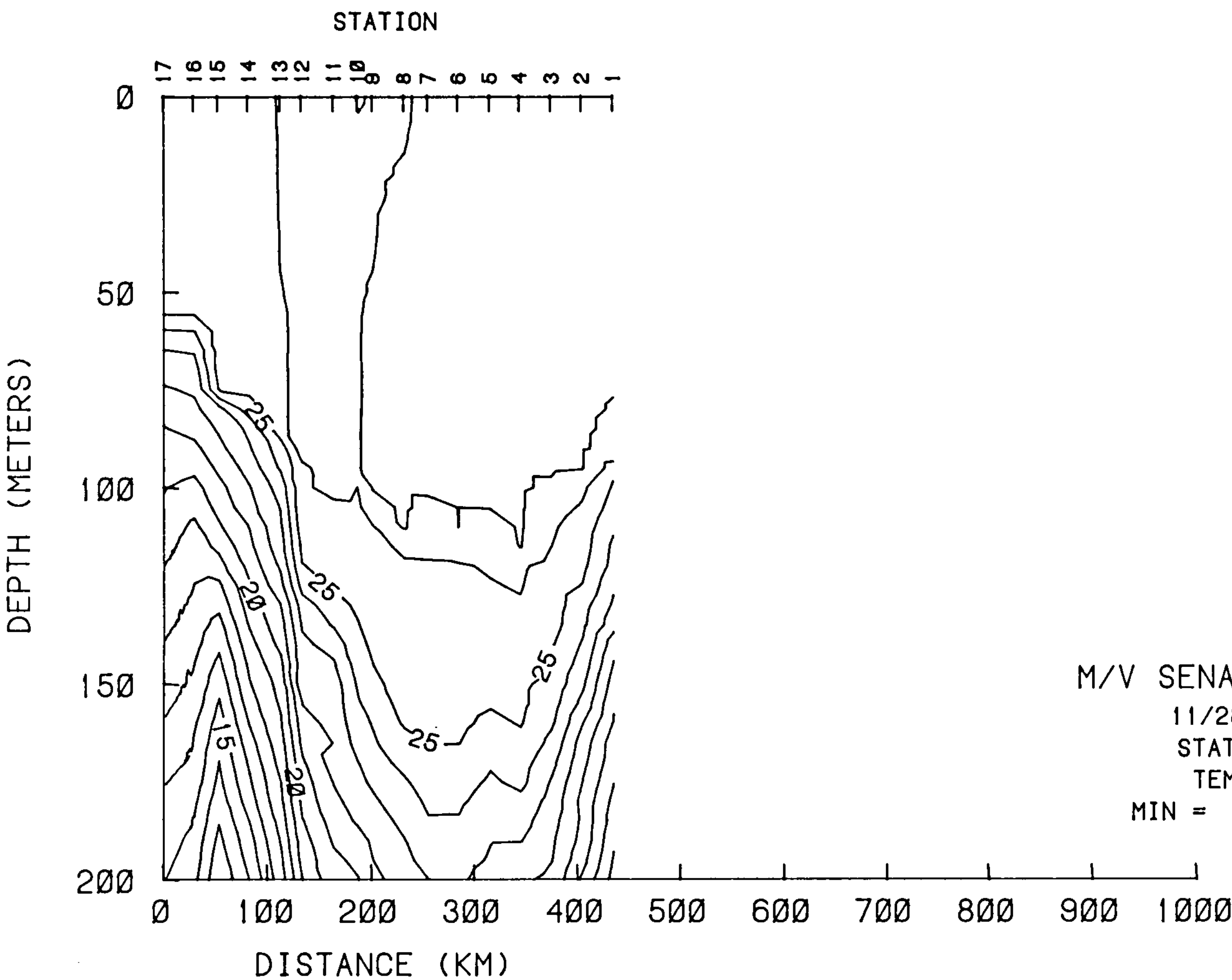


PARAMETERS AT SURFACE M/V SENATOR CRUISE 86-04

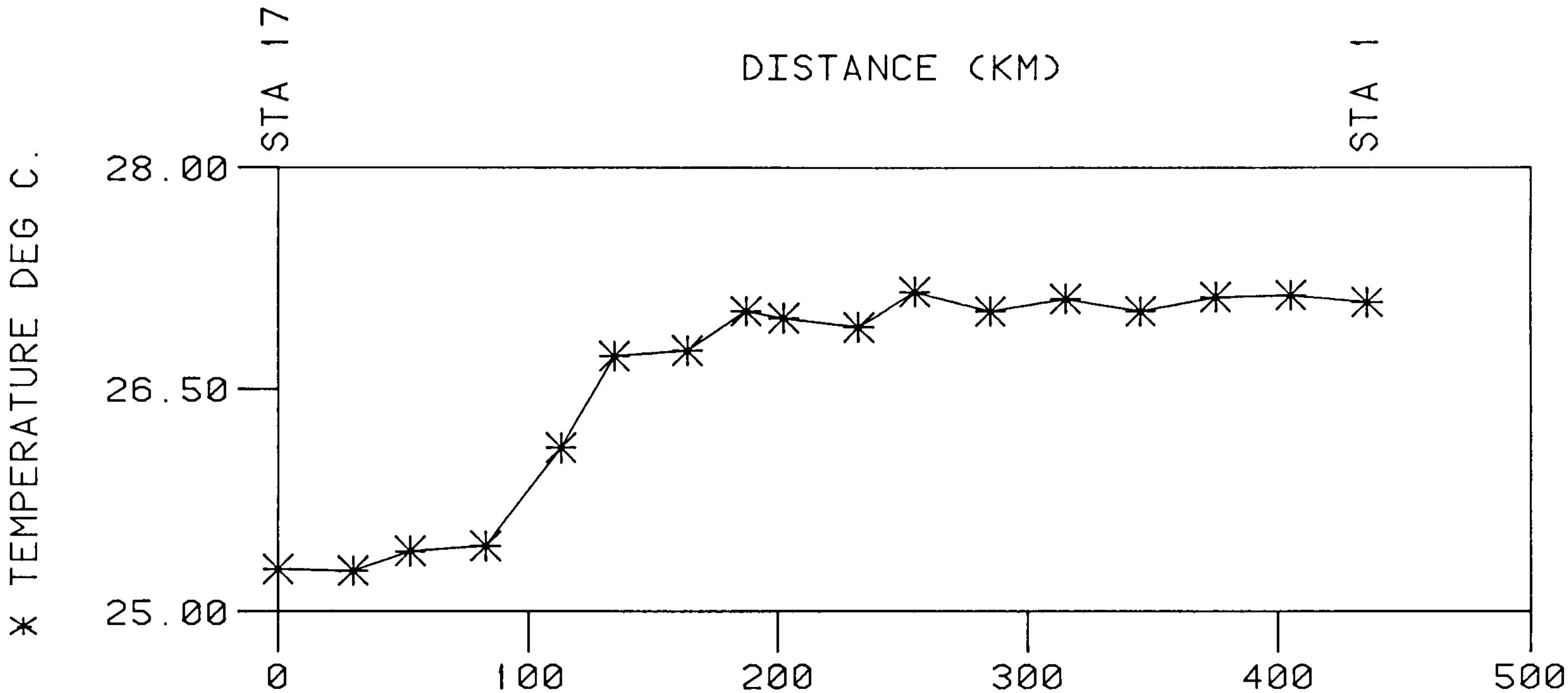

M/V SENATOR CRUISE 86-Ø5
11/28/86 TO 11/29/86
98 W
97 W
96 W
95 W
94 W
93 W
92 W
91 W
9Ø W
89 W
88 W
3Ø N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
17
1
2000 m
200 m



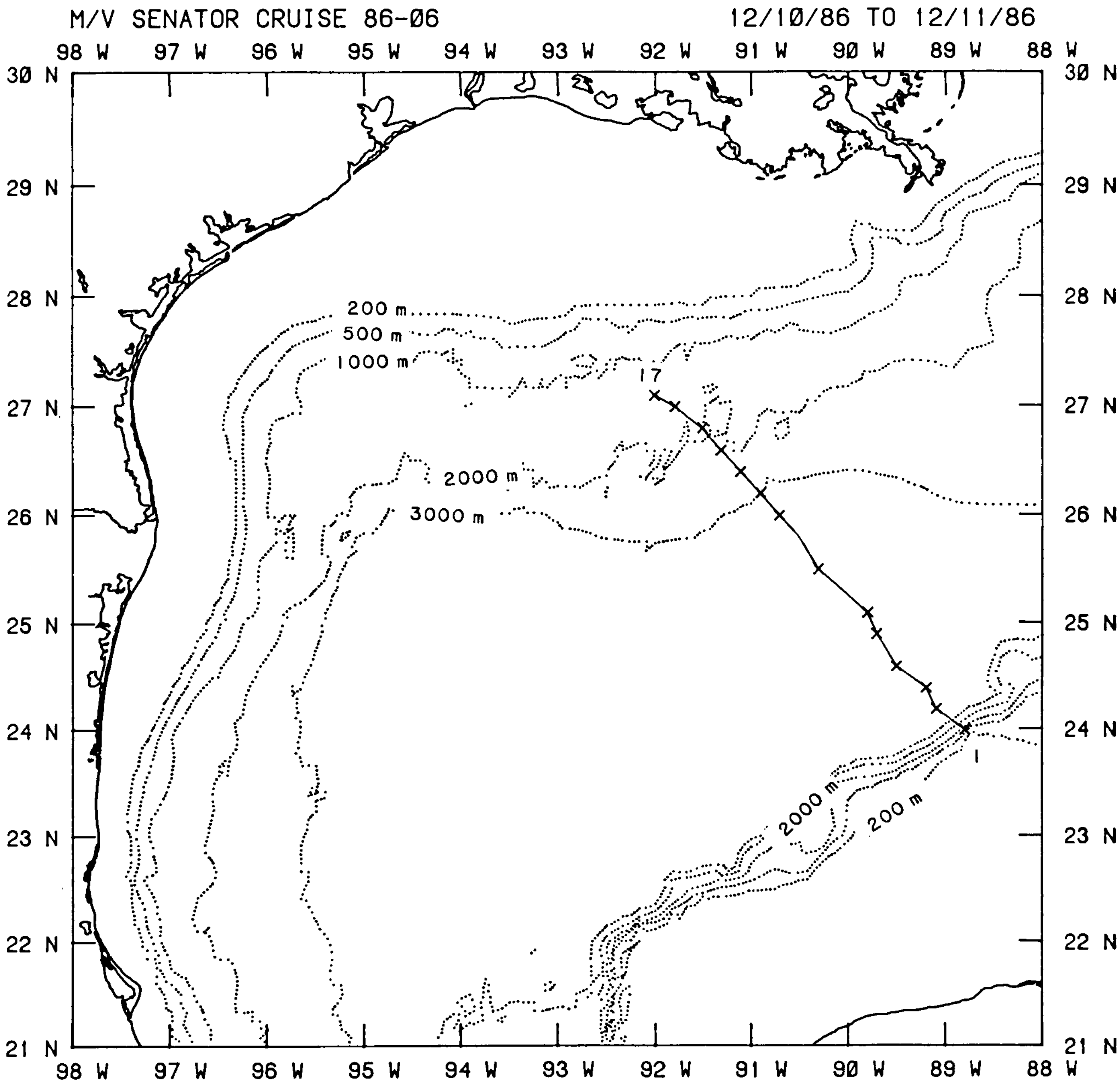
M/V SENATOR CRUISE 86-05
11/28/86 TO 11/29/86
STATIONS 1 TO 17
TEMPERATURE DEG C
MIN = 5.21 MAX = 27.17

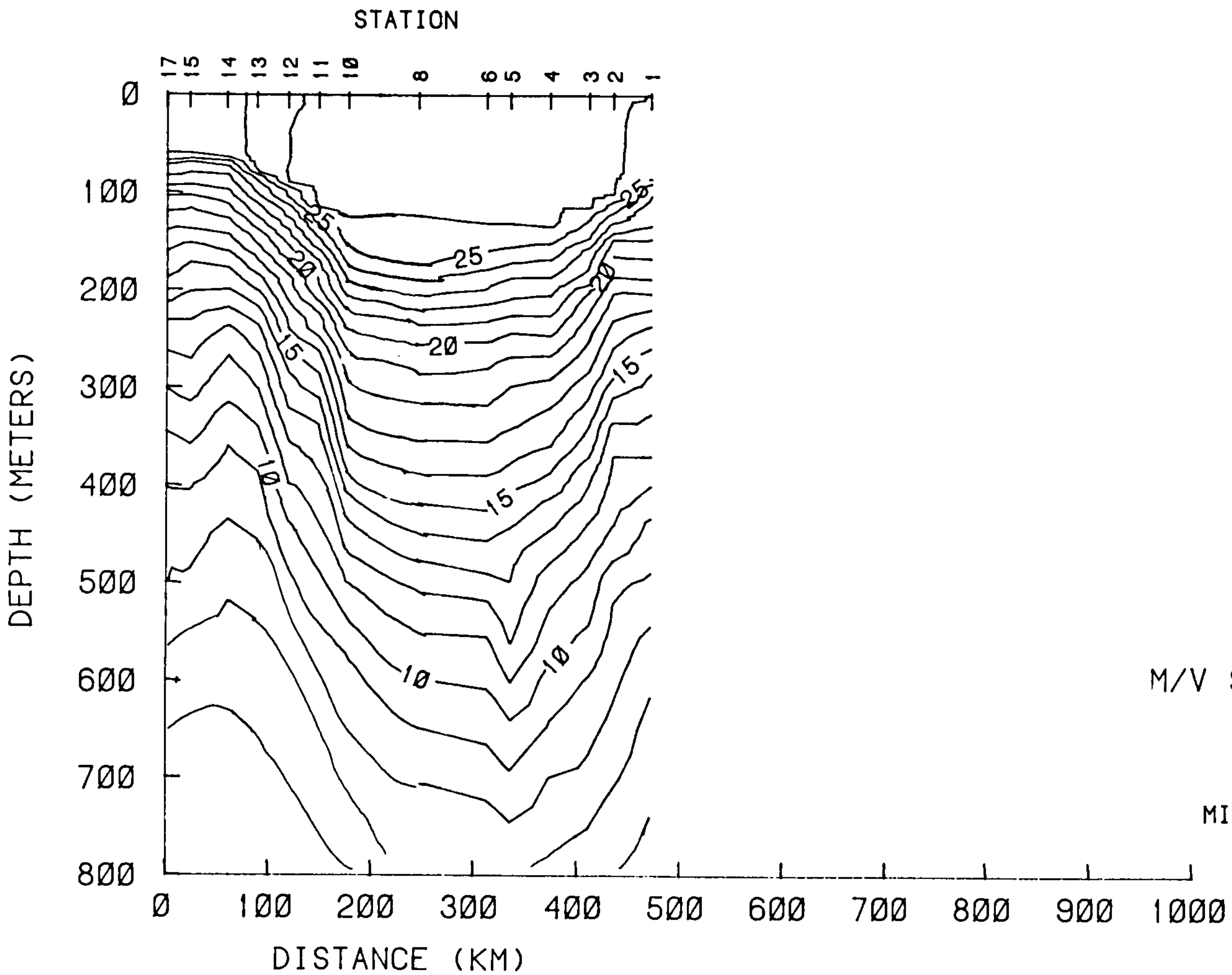


M/V SENATOR CRUISE 86-Ø5
11/28/86 TO 11/29/86
STATIONS 1 TO 17
TEMPERATURE DEG C
MIN = 12.13 MAX = 27.17

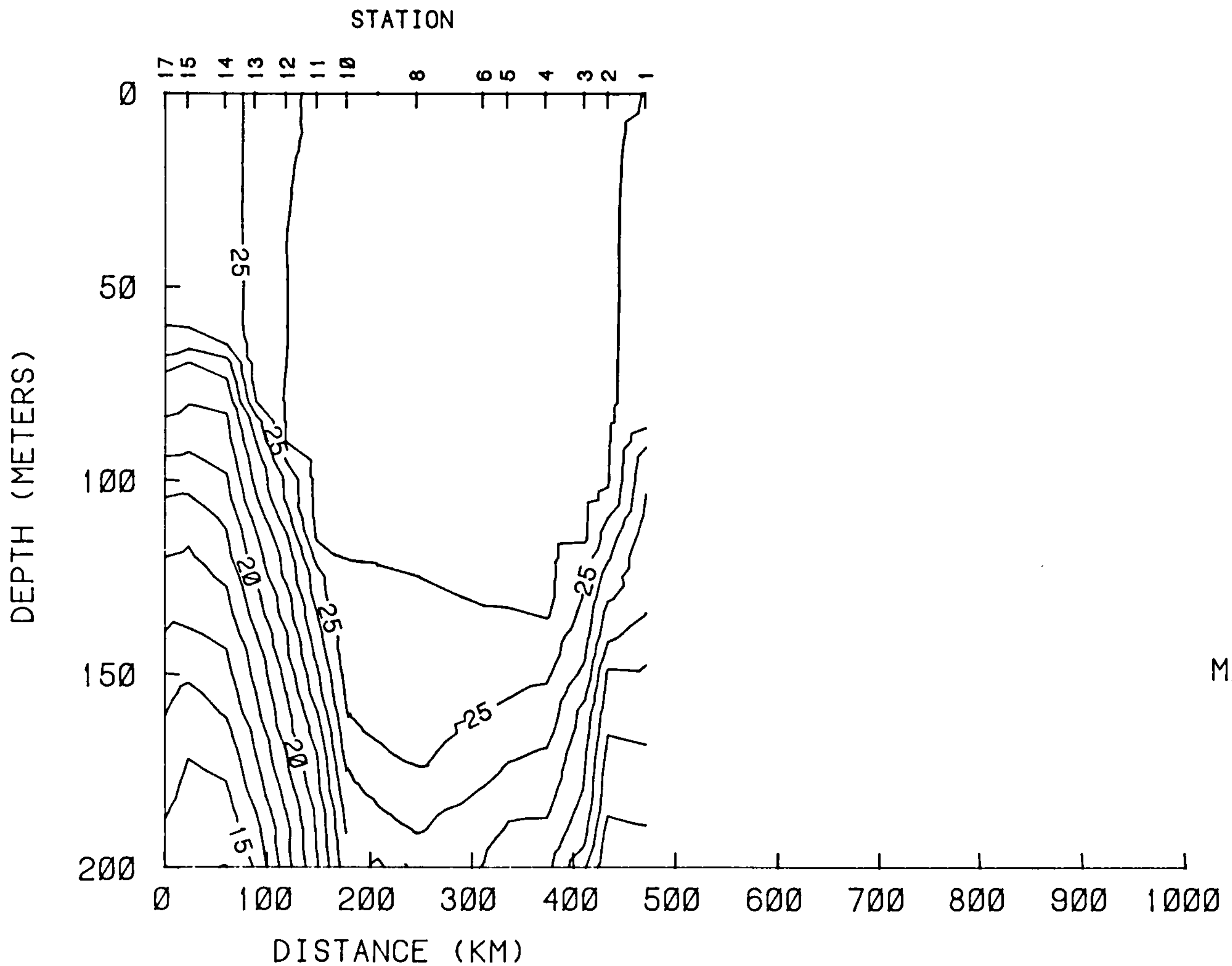


PARAMETERS AT SURFACE M/V SENATOR CRUISE 86-05

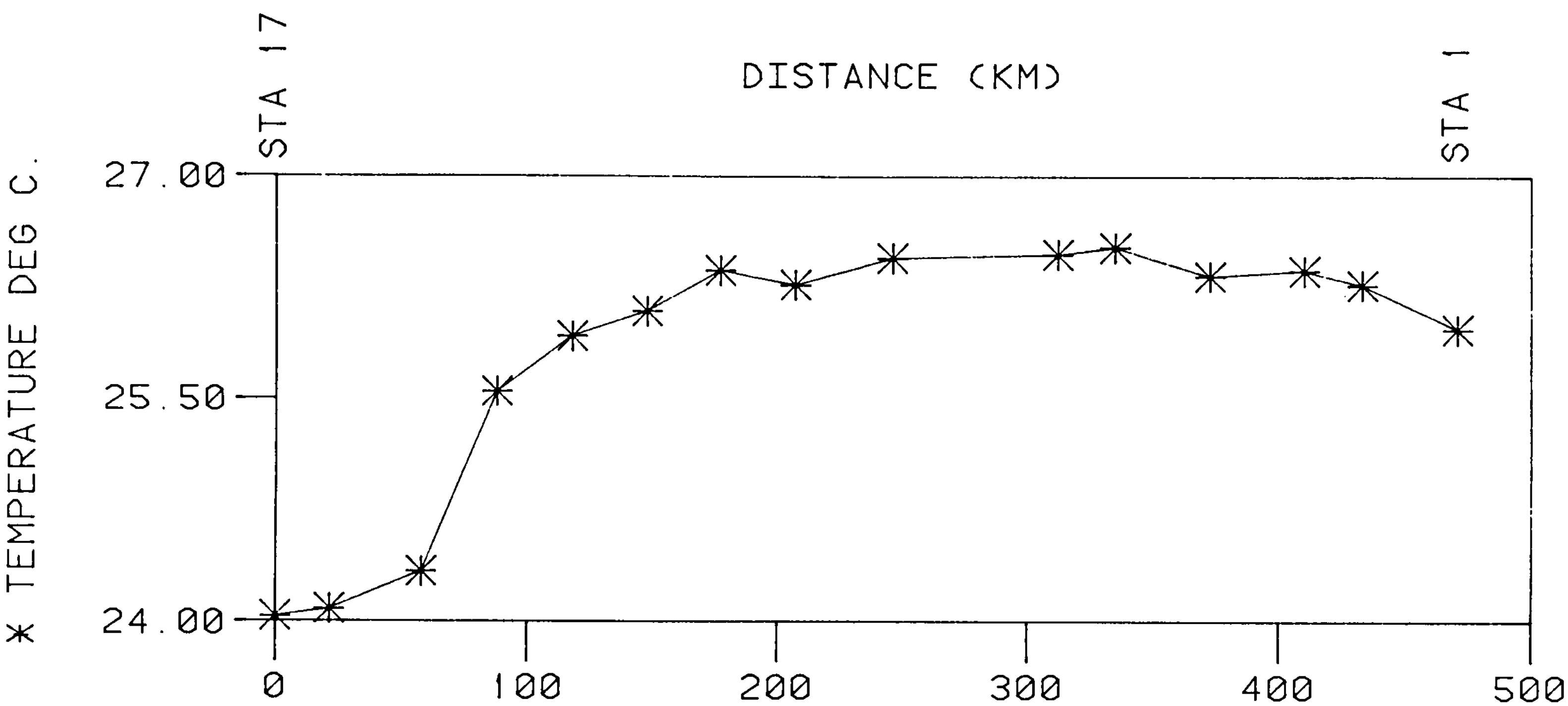

M/V SENATOR CRUISE 86-06
12/10/86 TO 12/11/86
98 W
97 W
96 W
95 W
94 W
93 W
92 W
91 W
90 W
89 W
88 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
17
1
2000 m
200 m



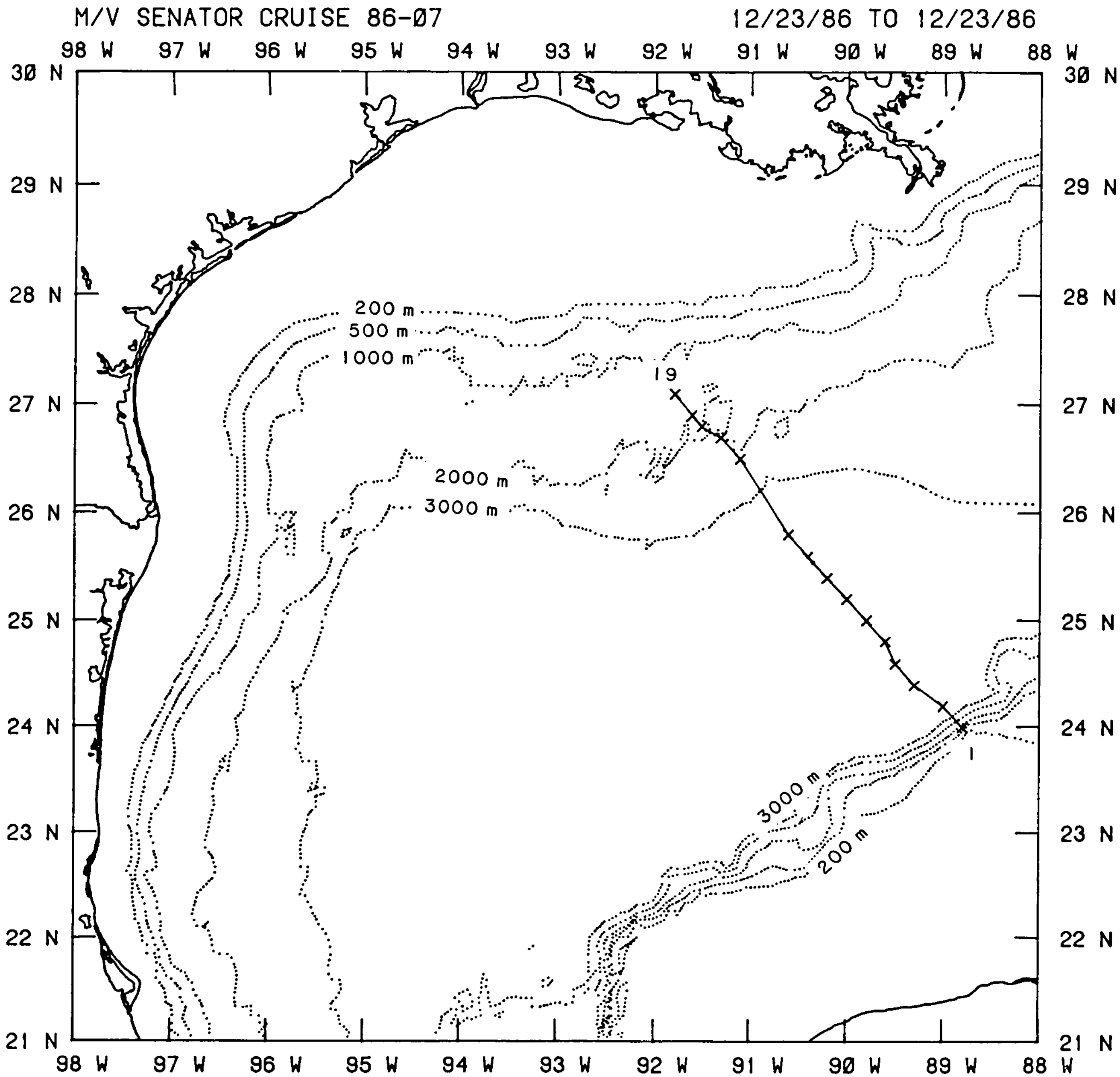
M/V SENATOR CRUISE 86-06
12/10/86 TO 12/11/86
STATIONS 1 TO 17
TEMPERATURE DEG C
MIN = 5.32 MAX = 26.52

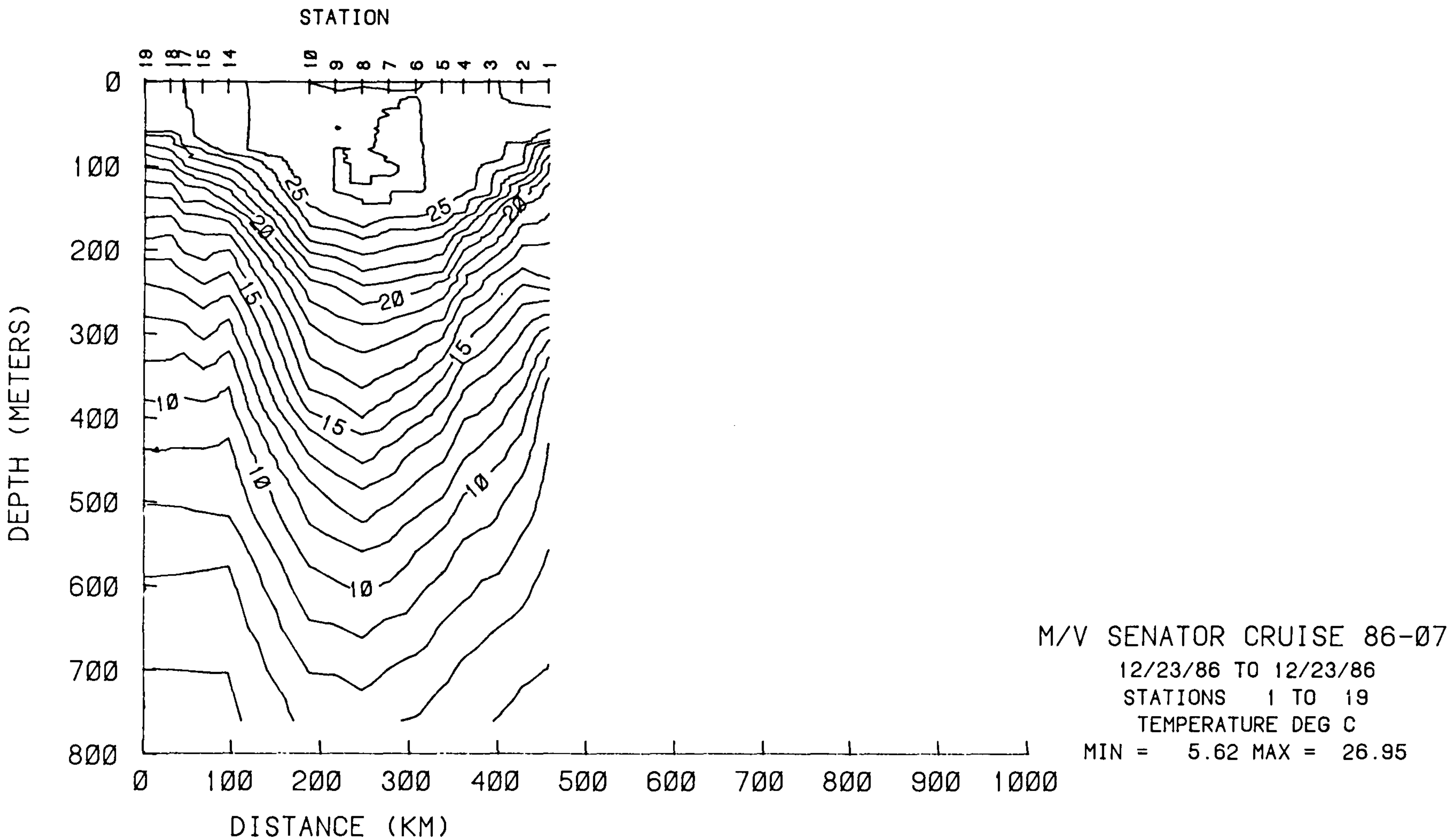


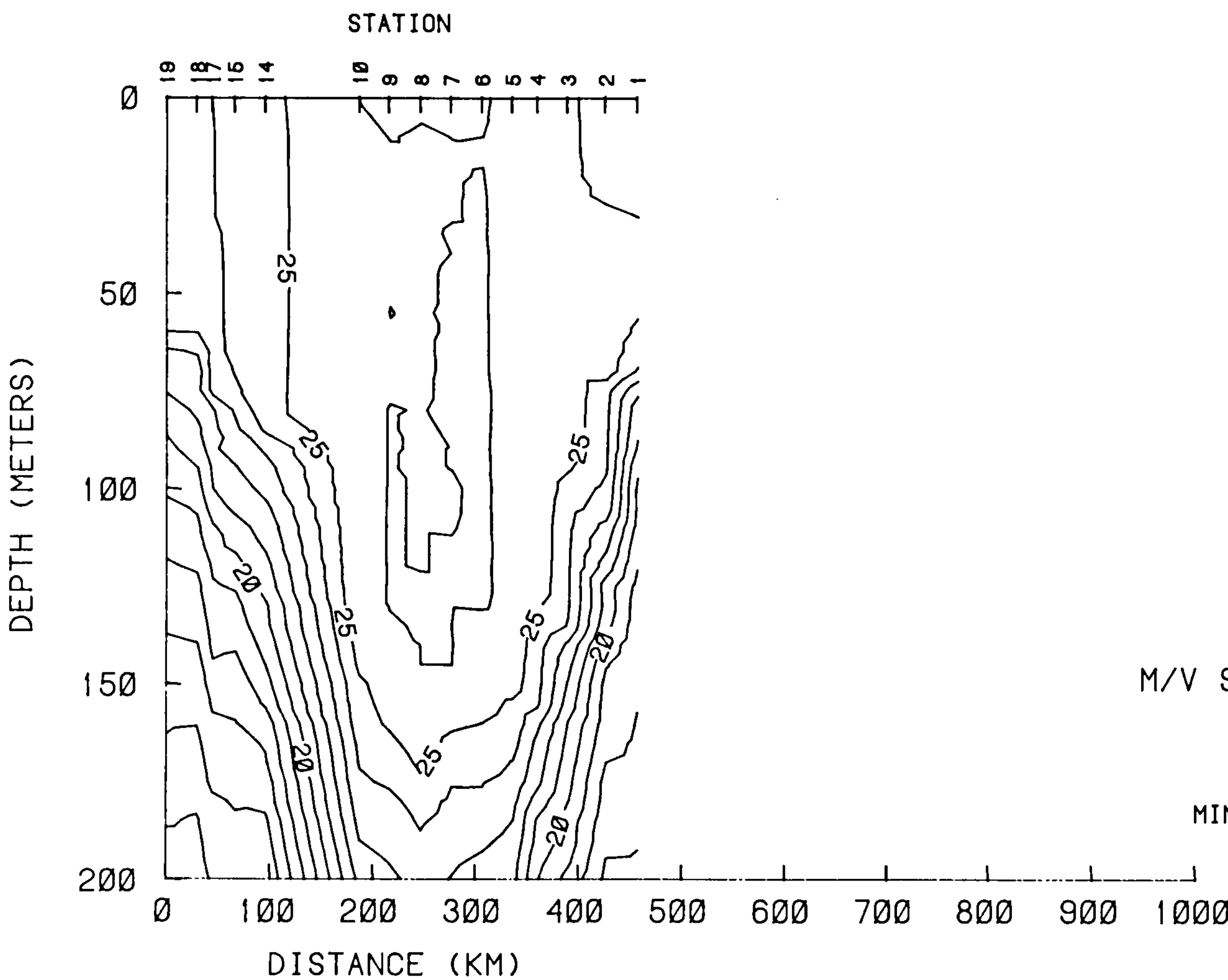
M/V SENATOR CRUISE 86-06
12/10/86 TO 12/11/86
STATIONS 1 TO 17
TEMPERATURE DEG C
MIN = 13.98 MAX = 26.52



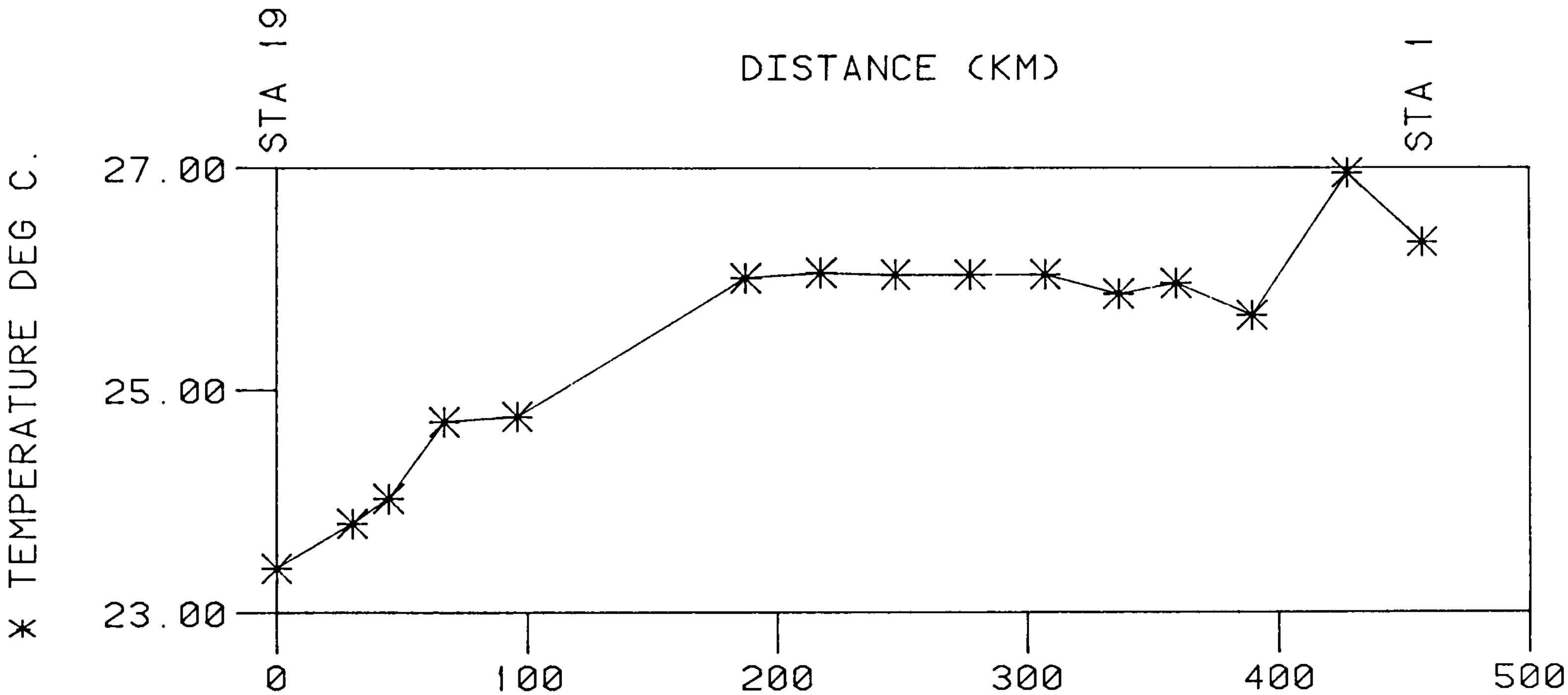
PARAMETERS AT SURFACE M/V SENATOR CRUISE 86-06


M/V SENATOR CRUISE 86-07
12/23/86 TO 12/23/86
98 W
97 W
96 W
95 W
94 W
93 W
92 W
91 W
90 W
89 W
88 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
19
1
3000 m
200 m


STATION
19 18 17 15 14 10 9 8 7 6 5 4 3 2 1
DEPTH (METERS)
0
100
200
300
400
500
600
700
800
25
20
15
10
DISTANCE (KM)
0 100 200 300 400 500 600 700 800 900 1000
M/V SENATOR CRUISE 86-07
12/23/86 TO 12/23/86
STATIONS 1 TO 19
TEMPERATURE DEG C
MIN = 5.62 MAX = 26.95



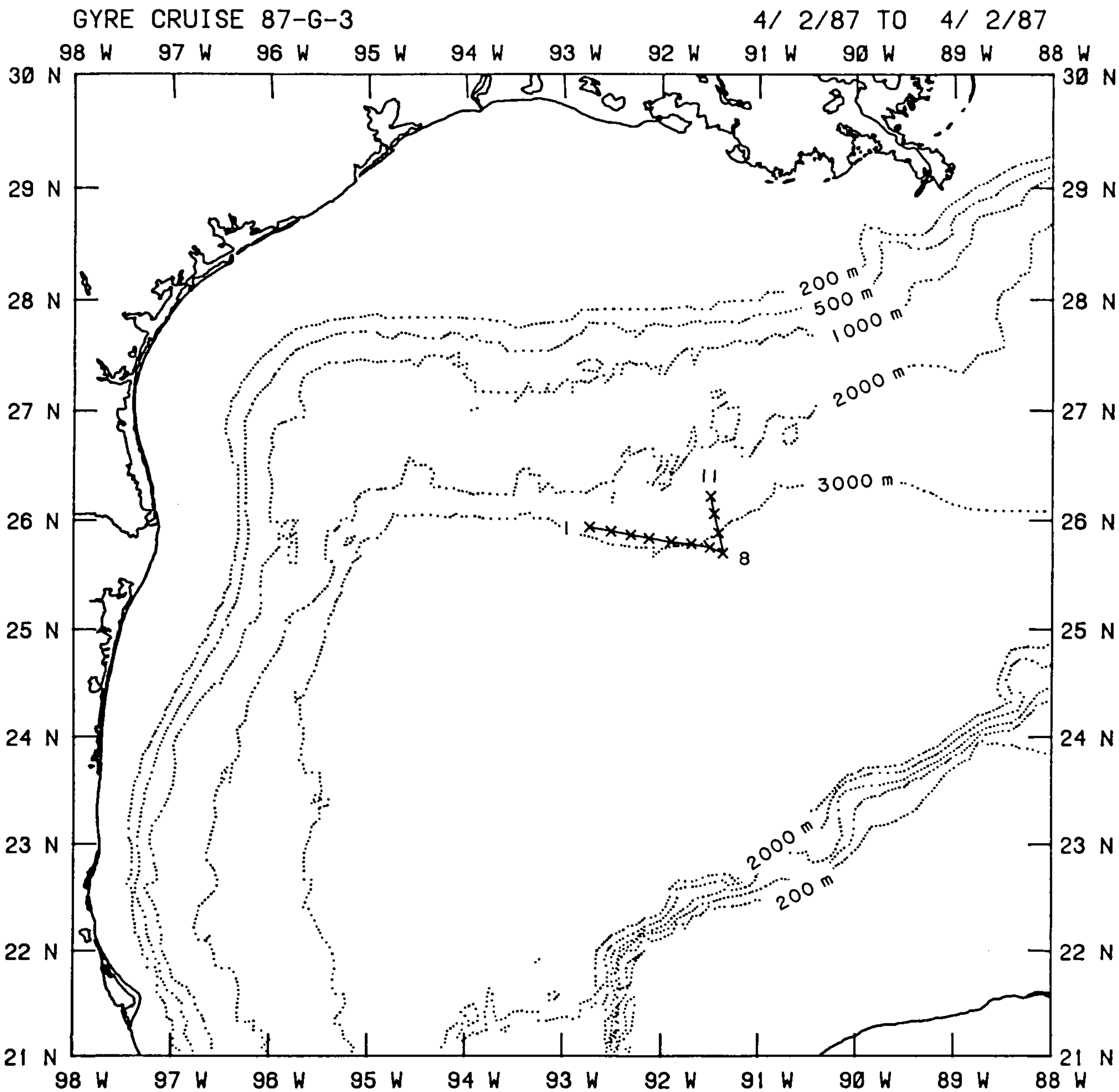
M/V SENATOR CRUISE 86-07
12/23/86 TO 12/23/86
STATIONS 1 TO 19
TEMPERATURE DEG C
MIN = 14.36 MAX = 26.95

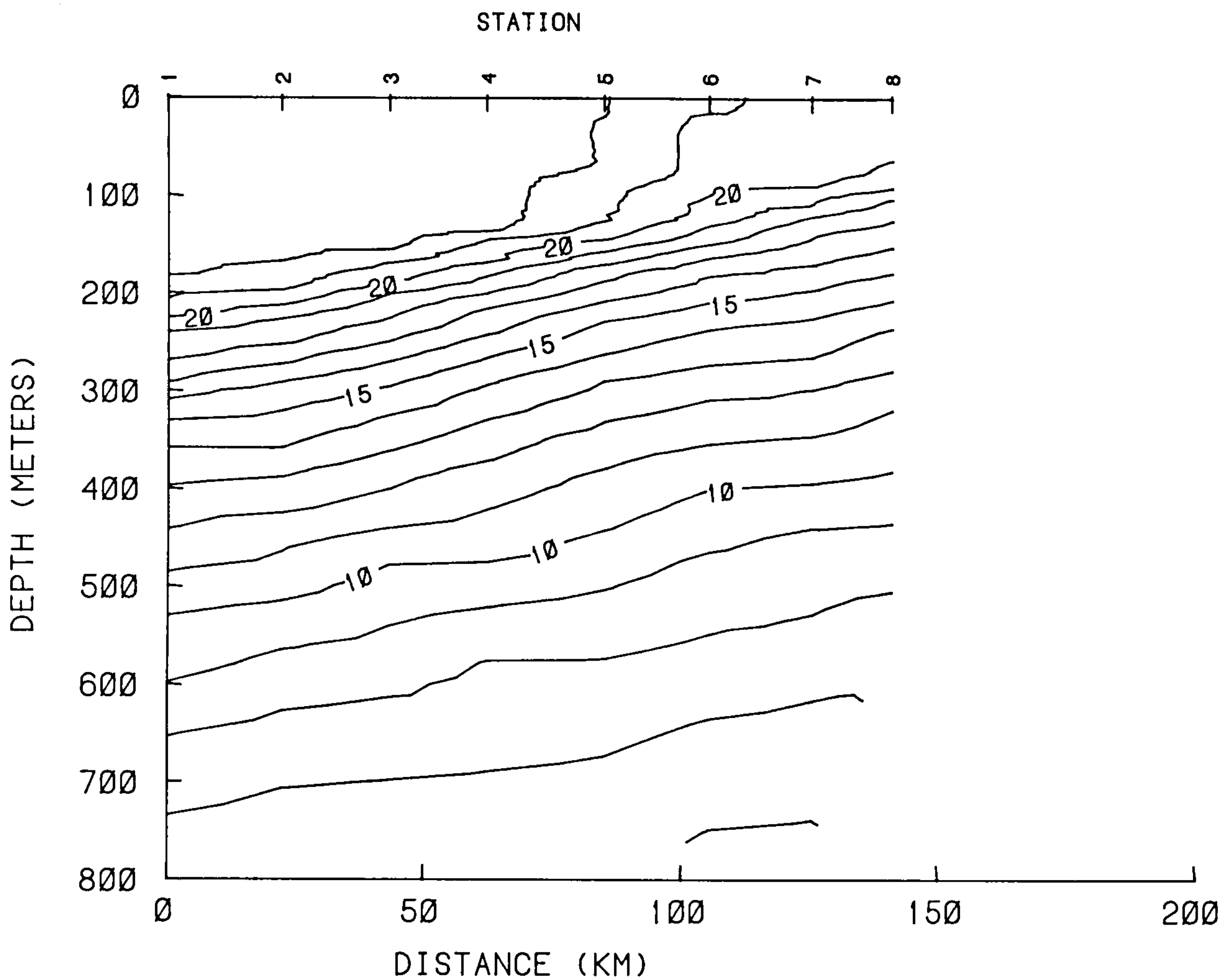


PARAMETERS AT SURFACE M/V SENATOR CRUISE 86-07

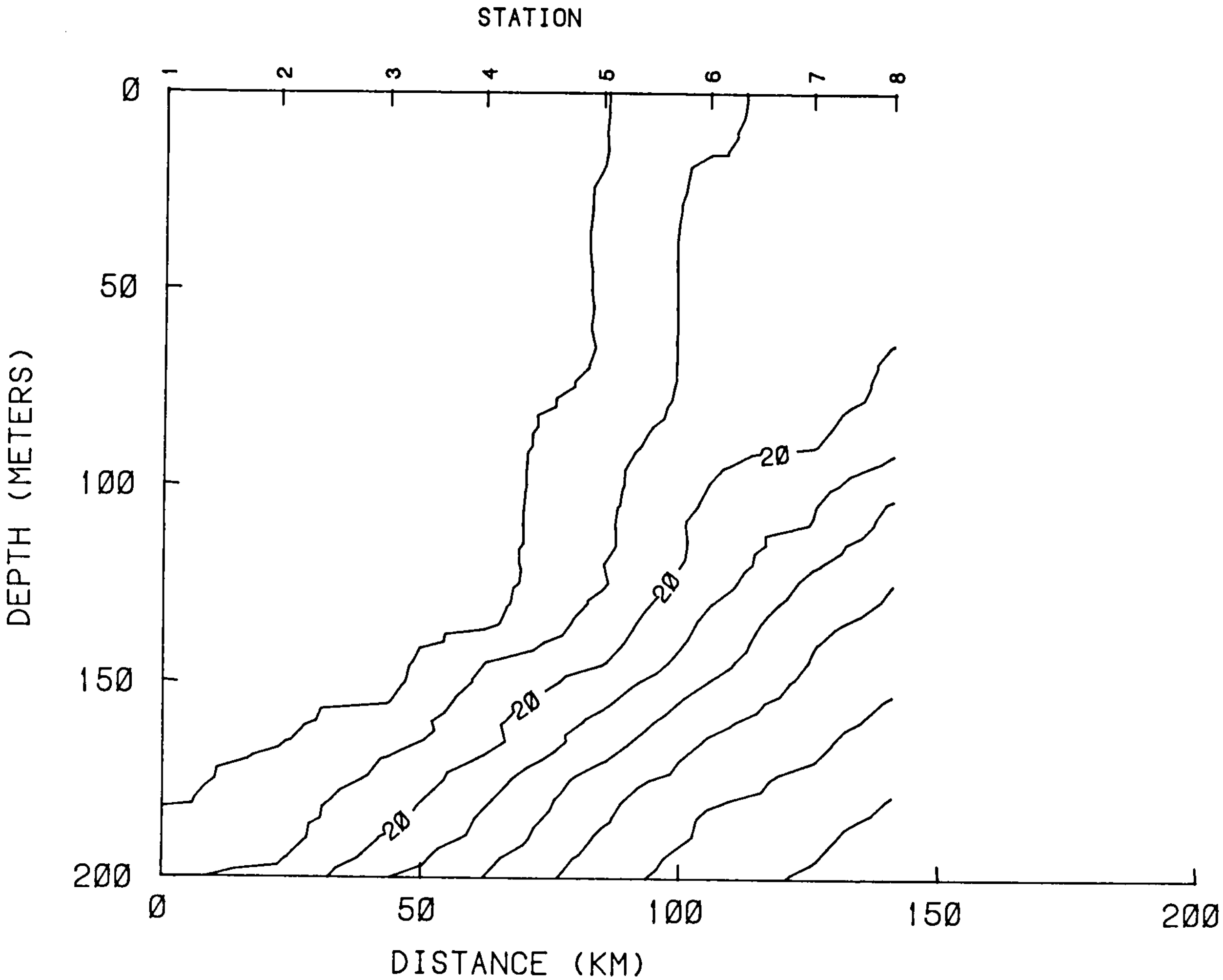
1987 SOOP DATA BY VESSEL

ID	Cruise	Dates		
87-G3	Gyre Cruise 87-G3	04/02/87	to	04/02/87
87-G4	Gyre Cruise 87-G4	04/12/87	to	04/17/87
JS87-01	Justo Sierra Cruise 87-01	05/03/87	to	06/11/87
JS87-02	Justo Sierra Cruise 87-02	10/14/87	to	11/16/87
PN87-11	R/V Pelican Cruise 87-11	01/13/87	to	01/14/87
QU87-01	E.M. Queeny Cruise 87-01	01/04/87	to	01/05/87
QU87-02	E.M. Queeny Cruise 87-02	01/19/87	to	01/20/87
QU87-03	E.M. Queeny Cruise 87-03	02/09/87	to	02/10/87
QU87-04	E.M. Queeny Cruise 87-04	03/27/87	to	03/28/87
QU87-05	E.M. Queeny Cruise 87-05	04/06/87	to	04/07/87
QU87-06	E.M. Queeny Cruise 87-06	04/20/87	to	04/21/87
QU87-07	E.M. Queeny Cruise 87-07	05/11/87	to	05/12/87
QU87-08	E.M. Queeny Cruise 87-08	05/19/87	to	05/20/87
QU87-09	E.M. Queeny Cruise 87-09	06/12/87	to	06/13/87
SC87-05	R/V Suncoaster Cruise 87-05	03/13/87	to	03/17/87
SC87-20	R/V Suncoaster Cruise 87-20	09/24/87	to	09/29/87
SN87-01	M/V Senator Cruise 87-01	01/04/87	to	01/04/87
SN87-02	M/V Senator Cruise 87-02	01/16/87	to	01/17/87
SN87-03	M/V Senator Cruise 87-03	01/28/87	to	01/29/87
SN87-04	M/V Senator Cruise 87-04	02/08/87	to	02/09/87
SN87-05	M/V Senator Cruise 87-05	02/20/87	to	02/21/87
SN87-06	M/V Senator Cruise 87-06	03/03/87	to	03/04/87
SN87-07	M/V Senator Cruise 87-07	03/16/87	to	03/17/87
SN87-09	M/V Senator Cruise 87-09	04/12/87	to	04/13/87
SN87-10	M/V Senator Cruise 87-10	04/23/87	to	04/24/87
SN87-11	M/V Senator Cruise 87-11	05/04/87	to	05/05/87
SN87-12	M/V Senator Cruise 87-12	05/15/87	to	05/16/87
SN87-13	M/V Senator Cruise 87-13	05/27/87	to	05/28/87
SN87-14	M/V Senator Cruise 87-14	06/08/87	to	06/08/87
SN87-15	M/V Senator Cruise 87-15	06/19/87	to	06/20/87
SN87-17	M/V Senator Cruise 87-17	07/13/87	to	07/14/87
SN87-18	M/V Senator Cruise 87-18	07/26/87	to	07/27/87
SN87-19	M/V Senator Cruise 87-19	08/07/87	to	08/08/87
SN87-20	M/V Senator Cruise 87-20	08/18/87	to	08/19/87
SN87-21	M/V Senator Cruise 87-21	08/30/87	to	08/30/87
SN87-22	M/V Senator Cruise 87-22	09/11/87	to	09/11/87
SN87-23	M/V Senator Cruise 87-23	09/21/87	to	09/22/87
SN87-24	M/V Senator Cruise 87-24	10/04/87	to	10/05/87
SN87-25	M/V Senator Cruise 87-25	10/16/87	to	10/17/87
SN87-26	M/V Senator Cruise 87-26	10/28/87	to	10/29/87
SN87-27	M/V Senator Cruise 87-27	11/10/87	to	11/11/87

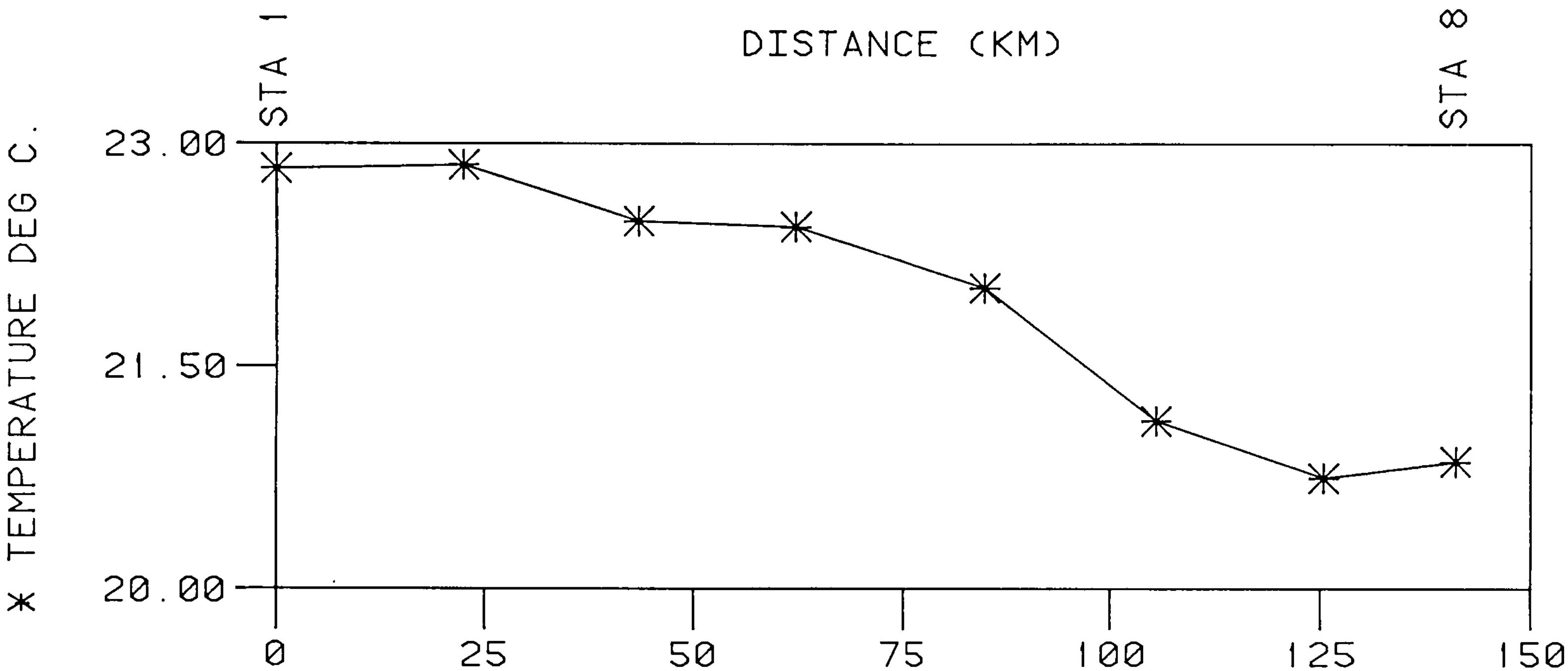

GYRE CRUISE 87-G-3
4/ 2/87 TO 4/ 2/87
98 W
97 W
96 W
95 W
94 W
93 W
92 W
91 W
90 W
89 W
88 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
2000 m
200 m
1
8
11



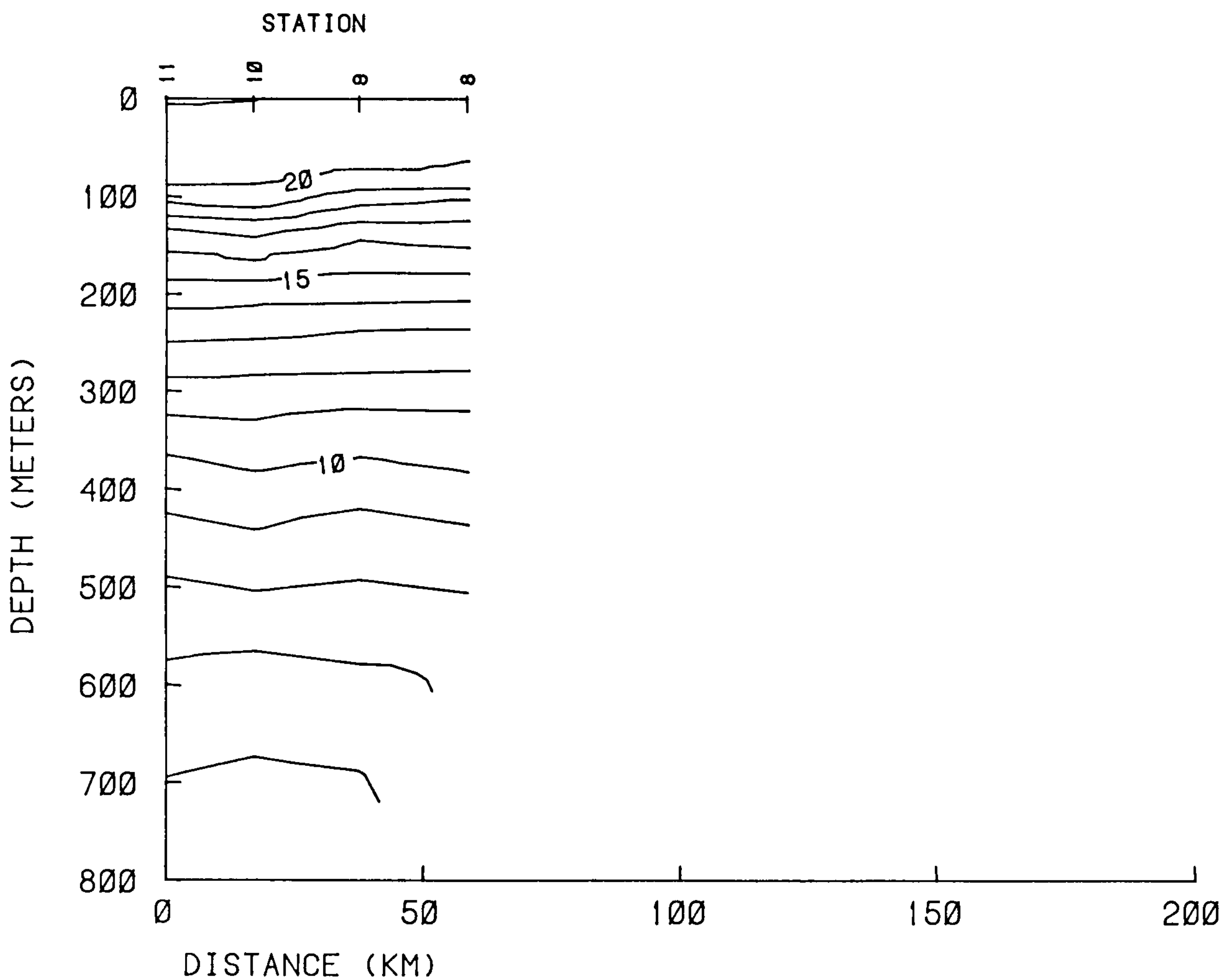
GYRE CRUISE 87-G-3
4/ 2/87 TO 4/ 2/87
STATIONS 1 TO 8
TEMPERATURE DEG C
MIN = 5.86 MAX = 22.85



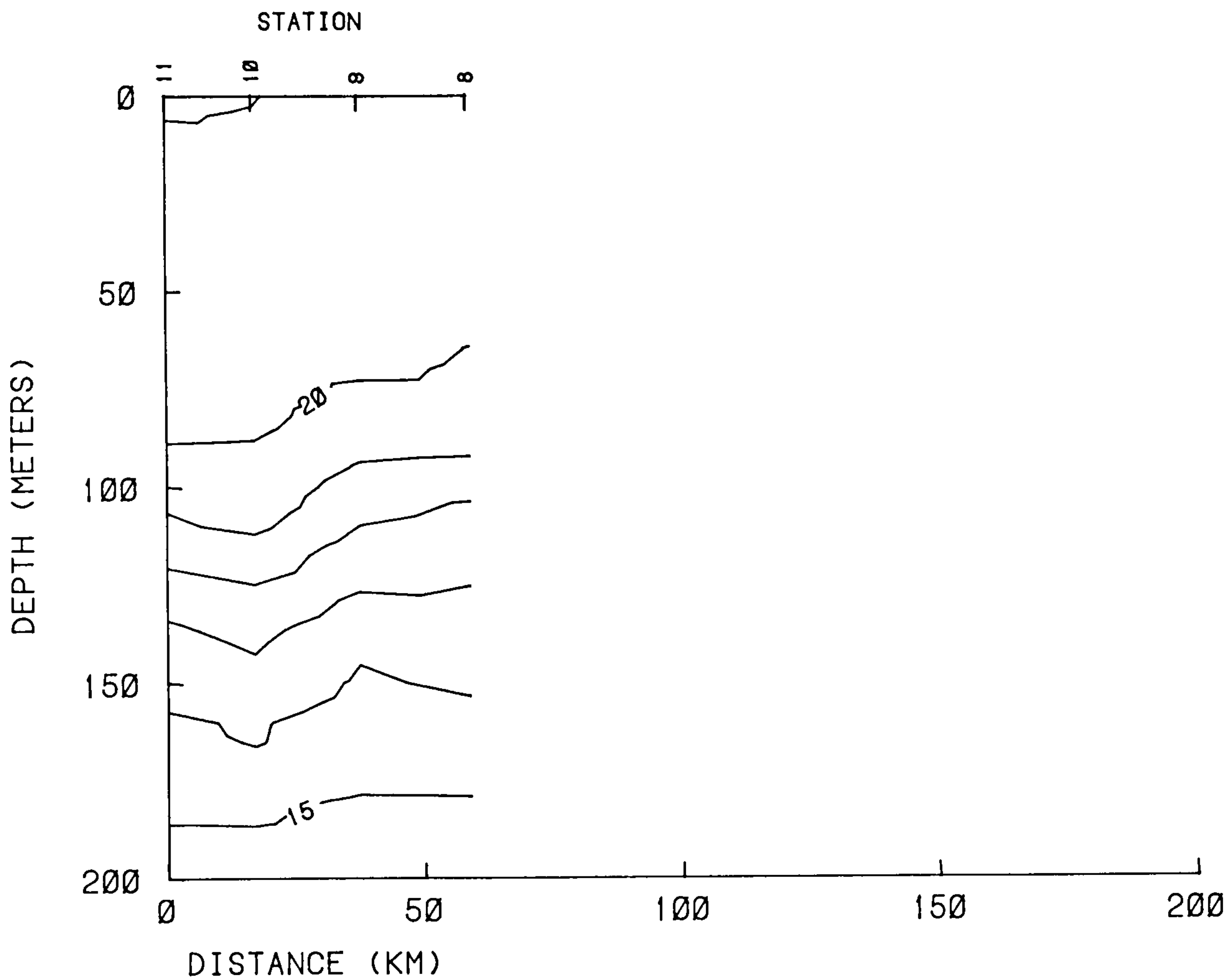
GYRE CRUISE 87-G-3
4/ 2/87 TO 4/ 2/87
STATIONS 1 TO 8
TEMPERATURE DEG C
MIN = 14.2Ø MAX = 22.85



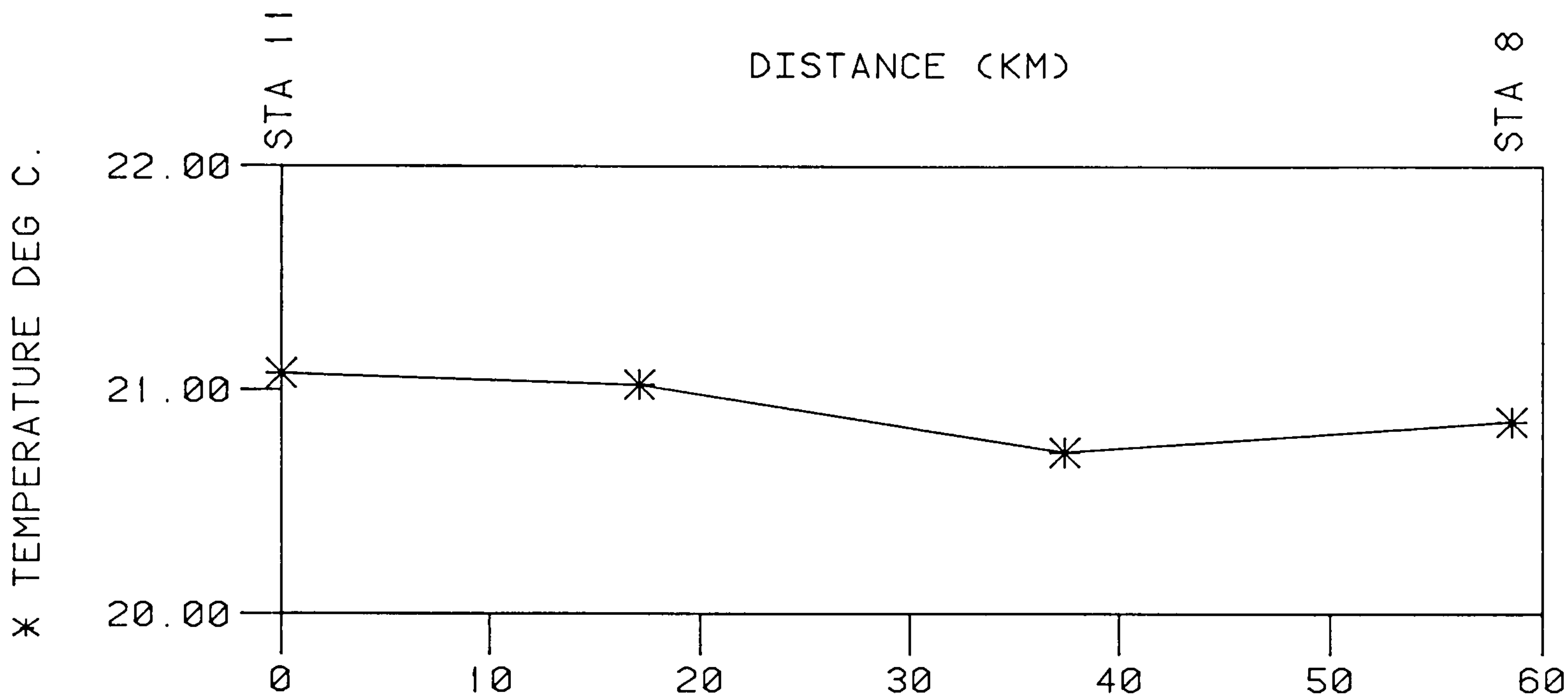
PARAMETERS AT SURFACE GYRE CRUISE 87-G-3



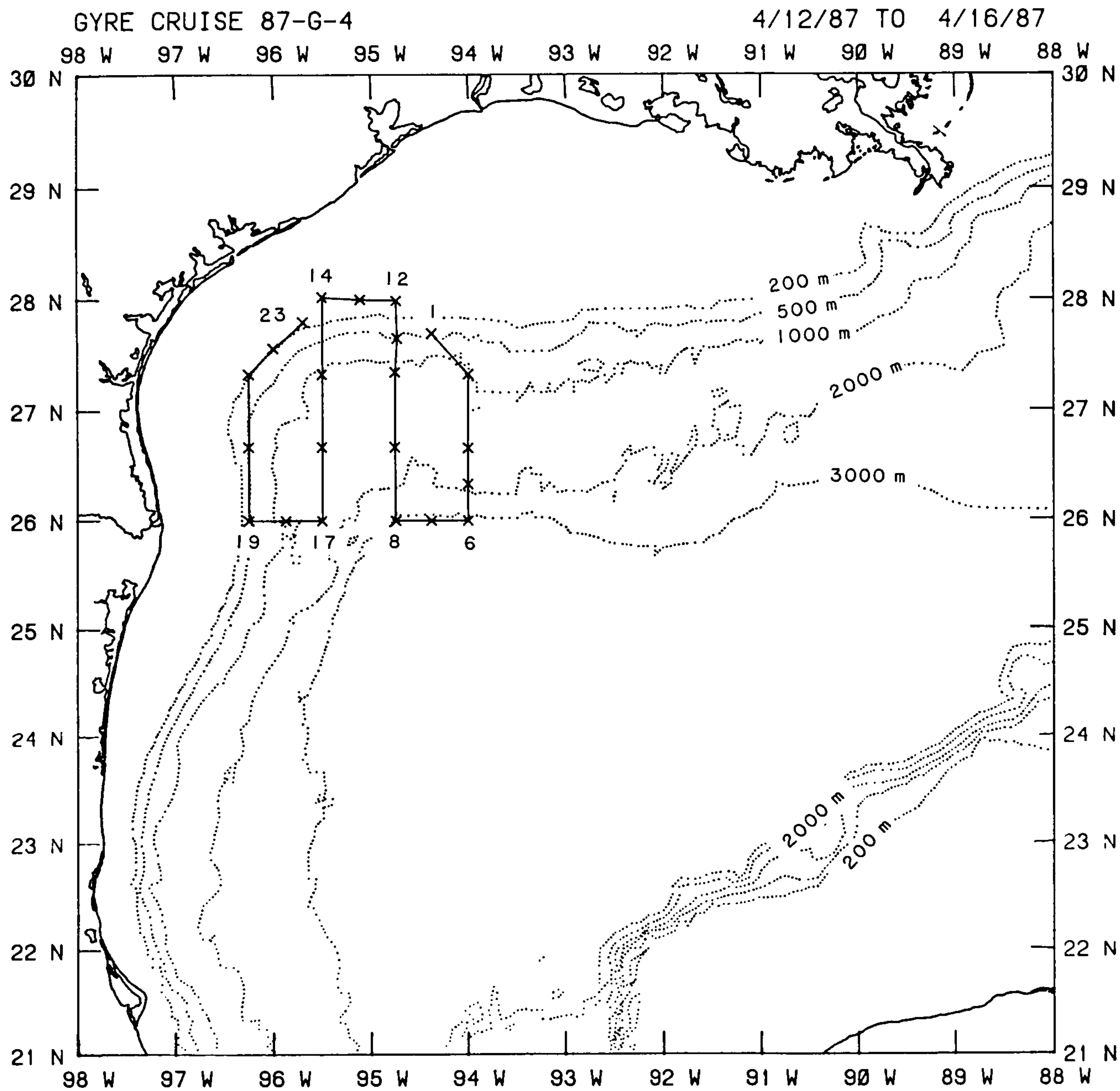
GYRE CRUISE 87-G-3
4/ 2/87 TO 4/ 2/87
STATIONS 8 TO 11
TEMPERATURE DEG C
MIN = 5.59 MAX = 21.07

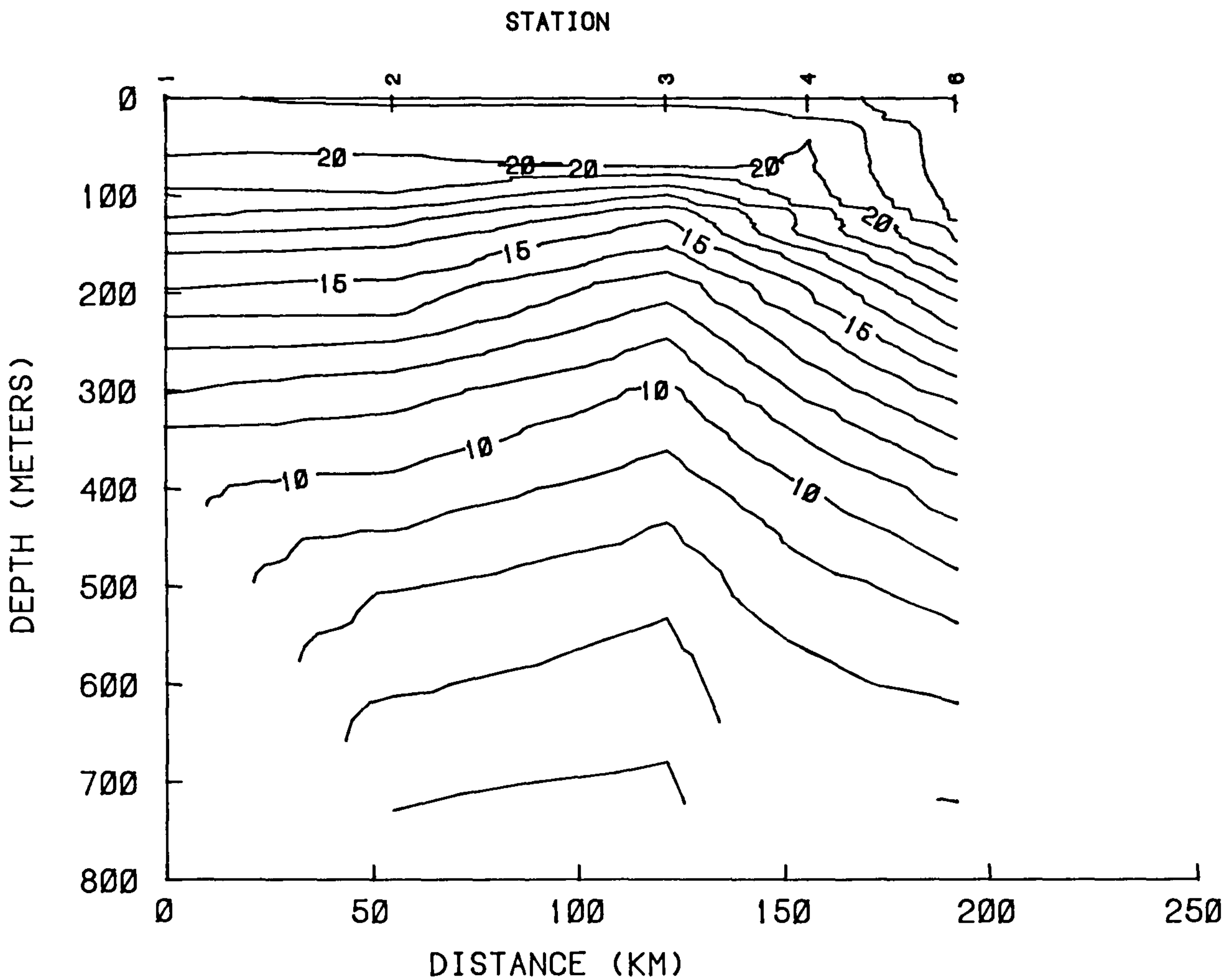


GYRE CRUISE 87-G-3
4/ 2/87 TO 4/ 2/87
STATIONS 8 TO 11
TEMPERATURE DEG C
MIN = 14.20 MAX = 21.07

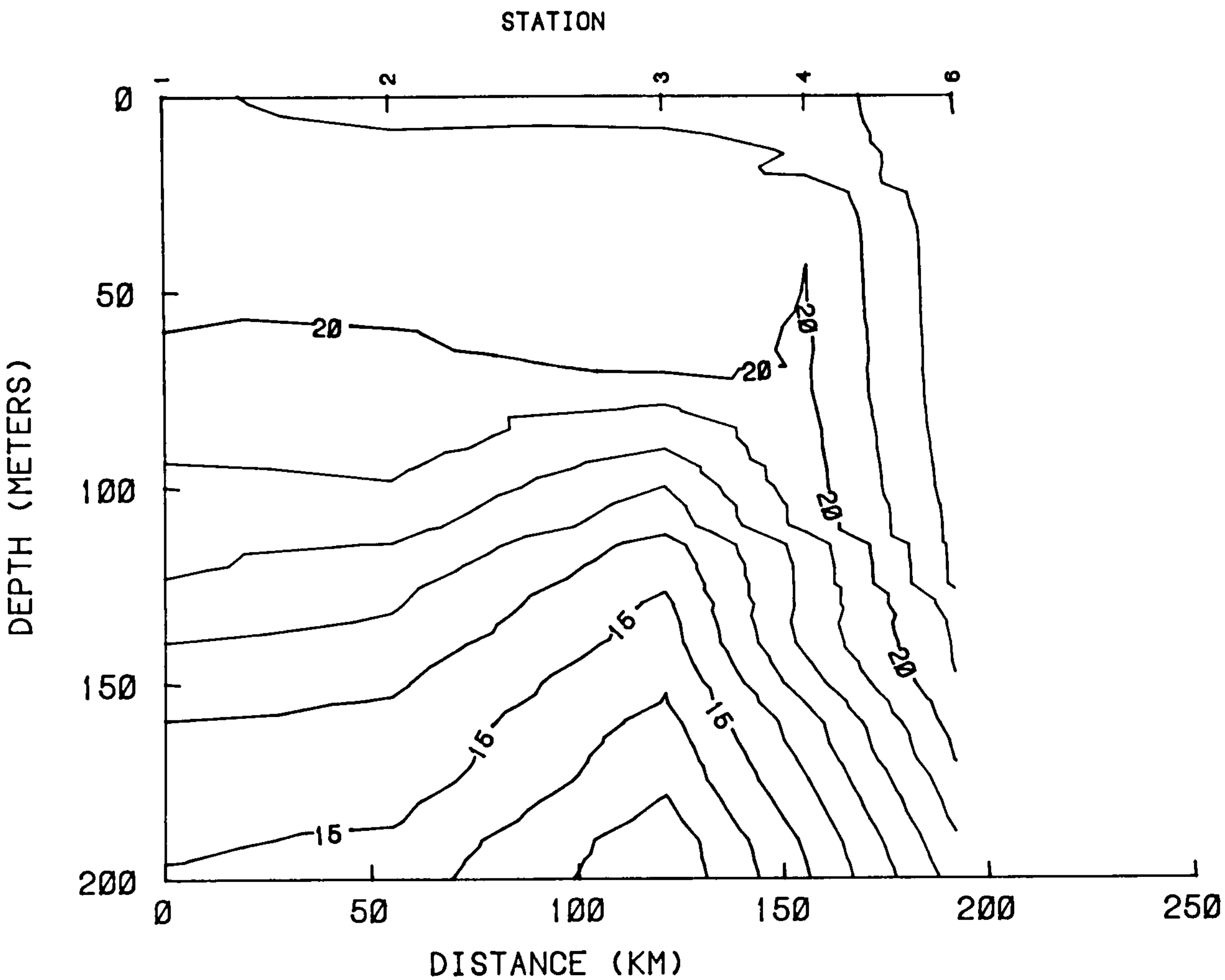


PARAMETERS AT SURFACE GYRE CRUISE 87-G-3

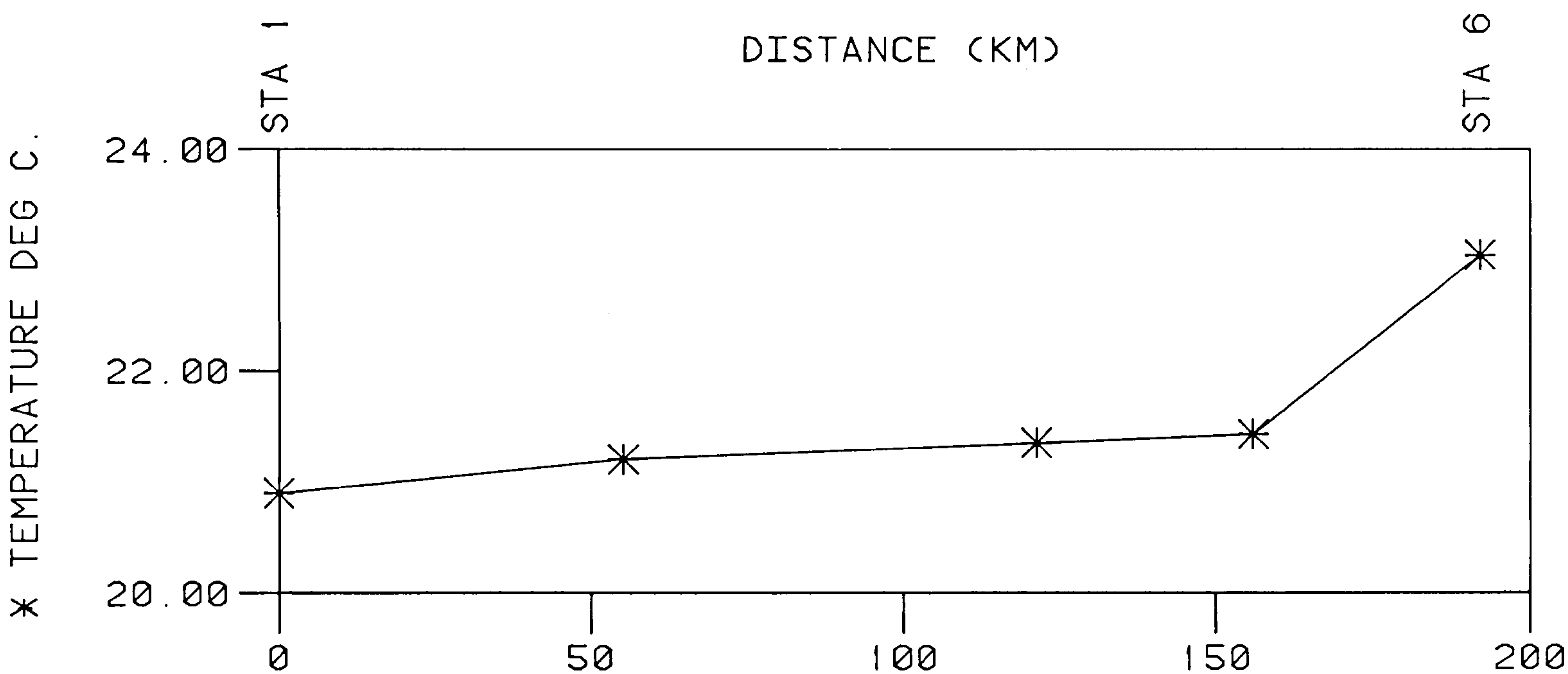

GYRE CRUISE 87-G-4
4/12/87 TO 4/16/87
98 W
97 W
96 W
95 W
94 W
93 W
92 W
91 W
90 W
89 W
88 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
14
12
1
23
19
17
8
6
200 m
500 m
1000 m
2000 m
3000 m
2000 m
200 m



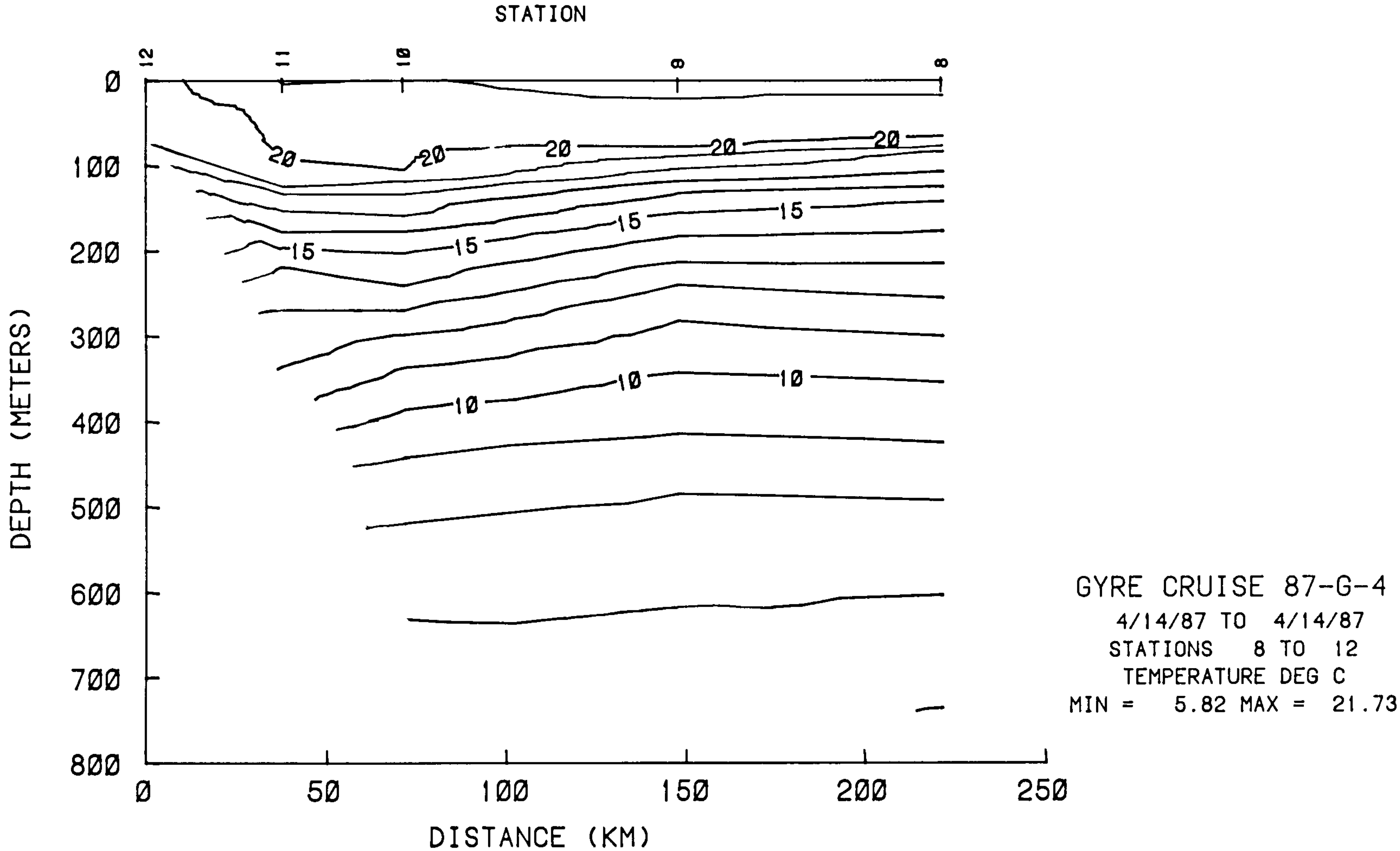
GYRE CRUISE 87-G-4
4/12/87 TO 4/13/87
STATIONS 1 TO 6
TEMPERATURE DEG C
MIN = 5.53 MAX = 23.04

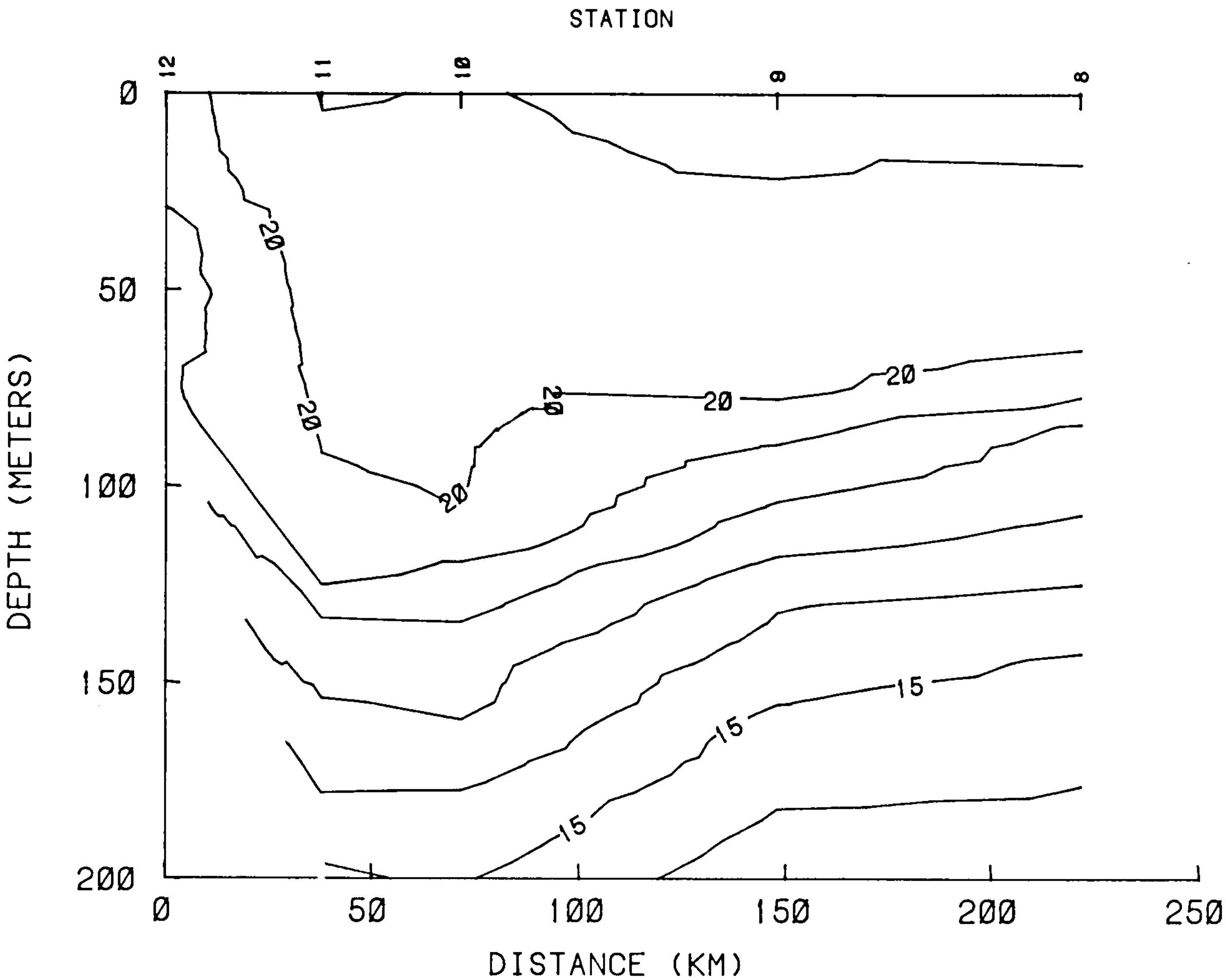


GYRE CRUISE 87-G-4
4/12/87 TO 4/13/87
STATIONS 1 TO 6
TEMPERATURE DEG C
MIN = 12.22 MAX = 23.04

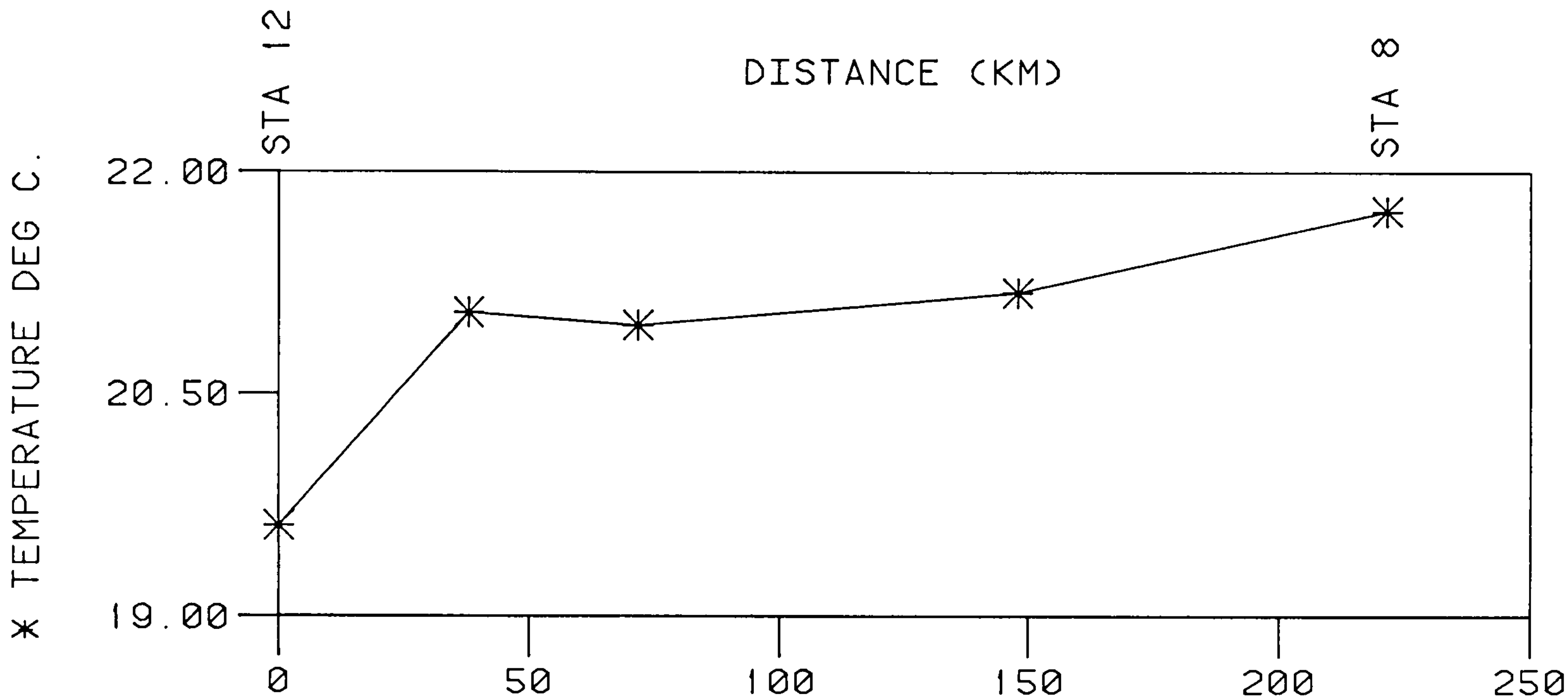


PARAMETERS AT SURFACE GYRE CRUISE 87-G-4

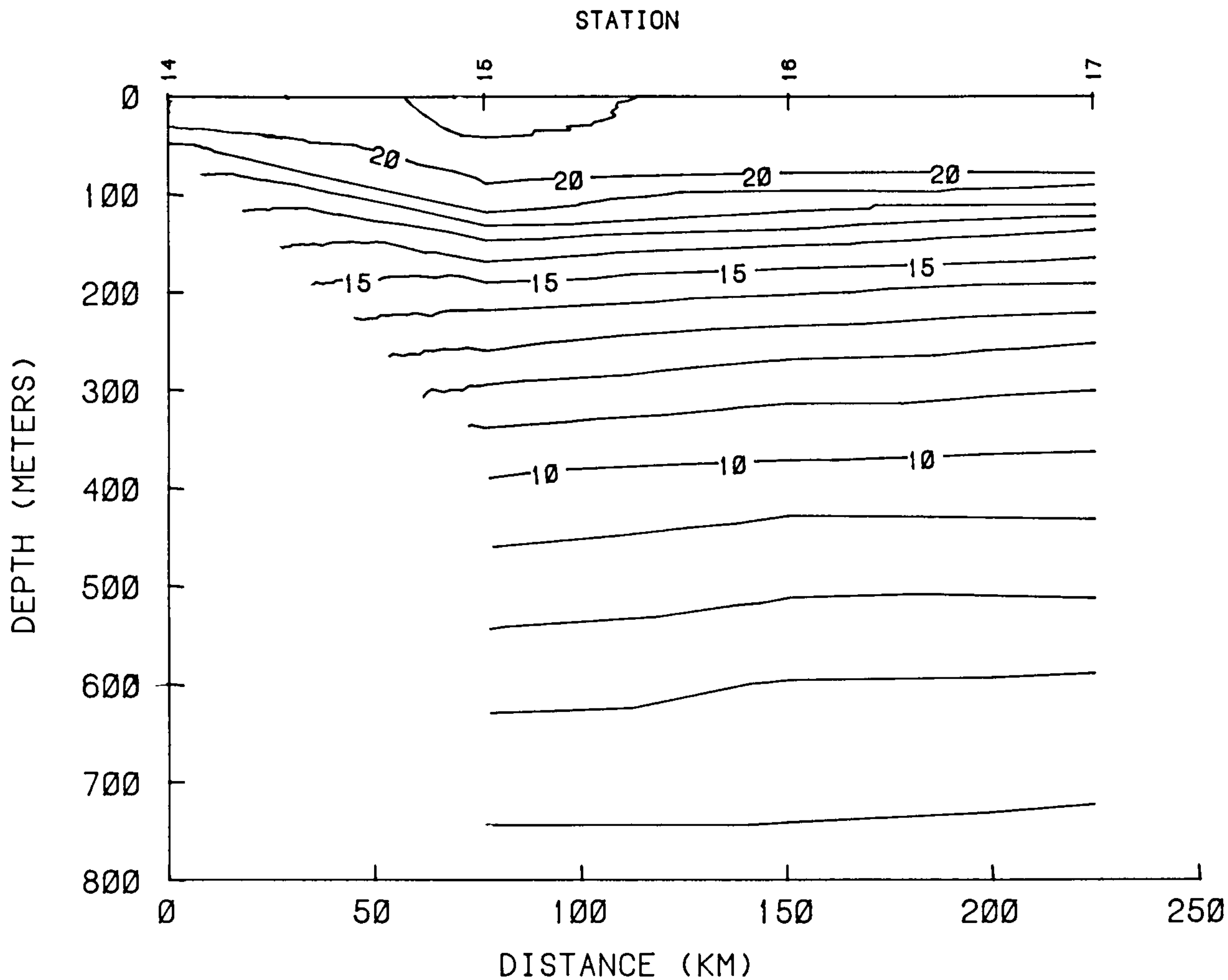

STATION
12
11
10
9
8
0
100
200
300
400
500
600
700
800
DEPTH (METERS)
20
15
10
0
50
100
150
200
250
DISTANCE (KM)
GYRE CRUISE 87-G-4
4/14/87 TO 4/14/87
STATIONS 8 TO 12
TEMPERATURE DEG C
MIN = 5.82 MAX = 21.73



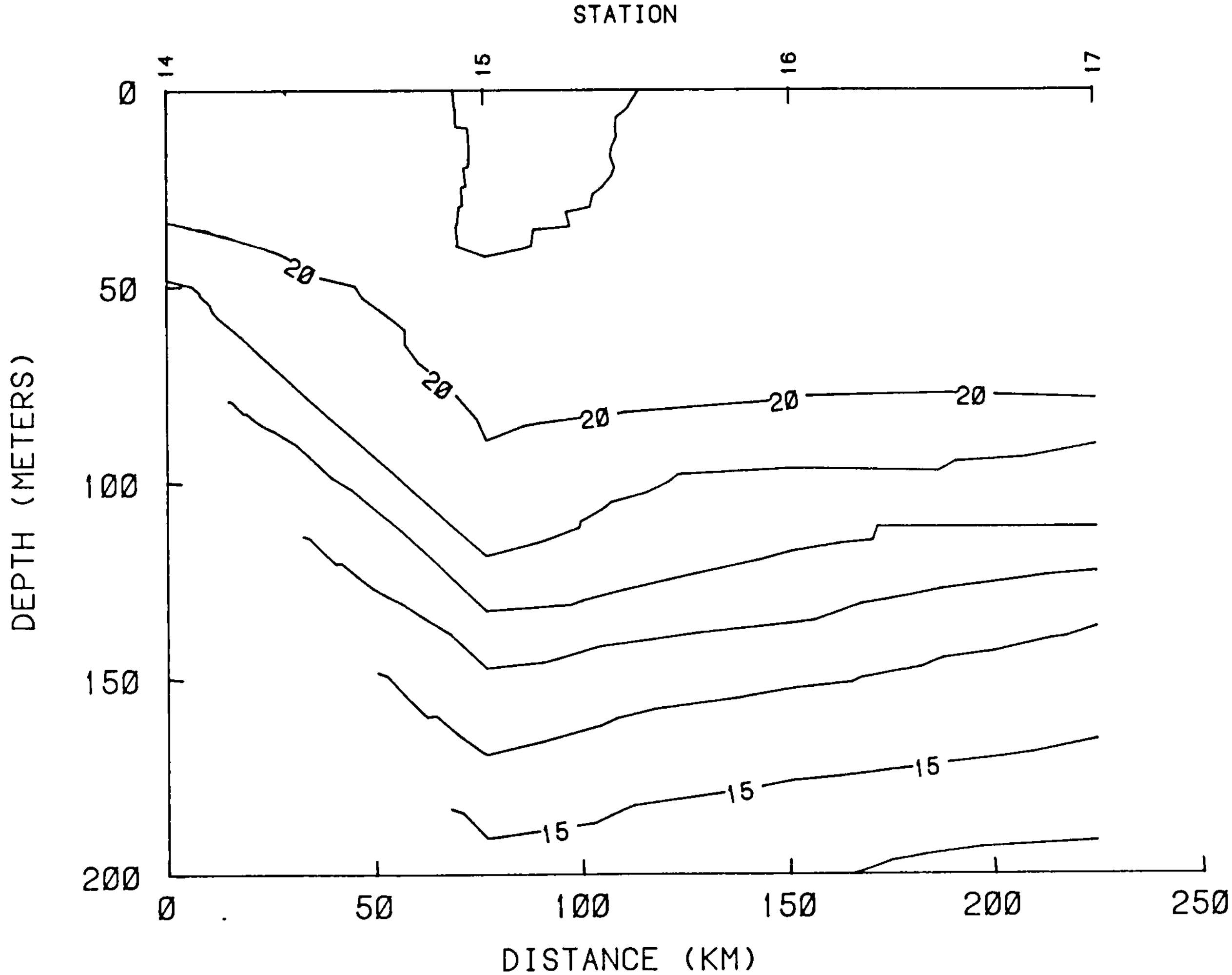
GYRE CRUISE 87-G-4
4/14/87 TO 4/14/87
STATIONS 8 TO 12
TEMPERATURE DEG C
MIN = 13.30 MAX = 21.73



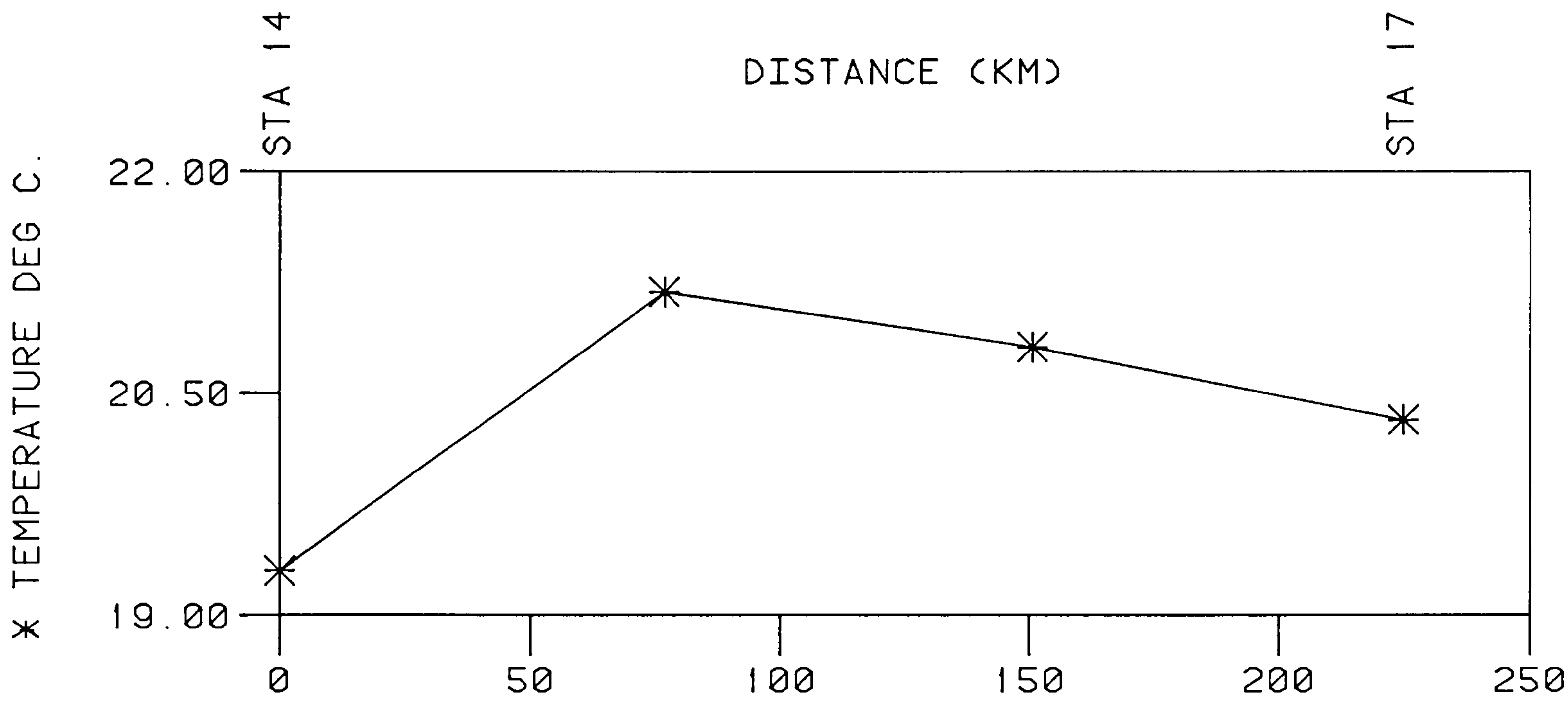
PARAMETERS AT SURFACE GYRE CRUISE 87-G-4



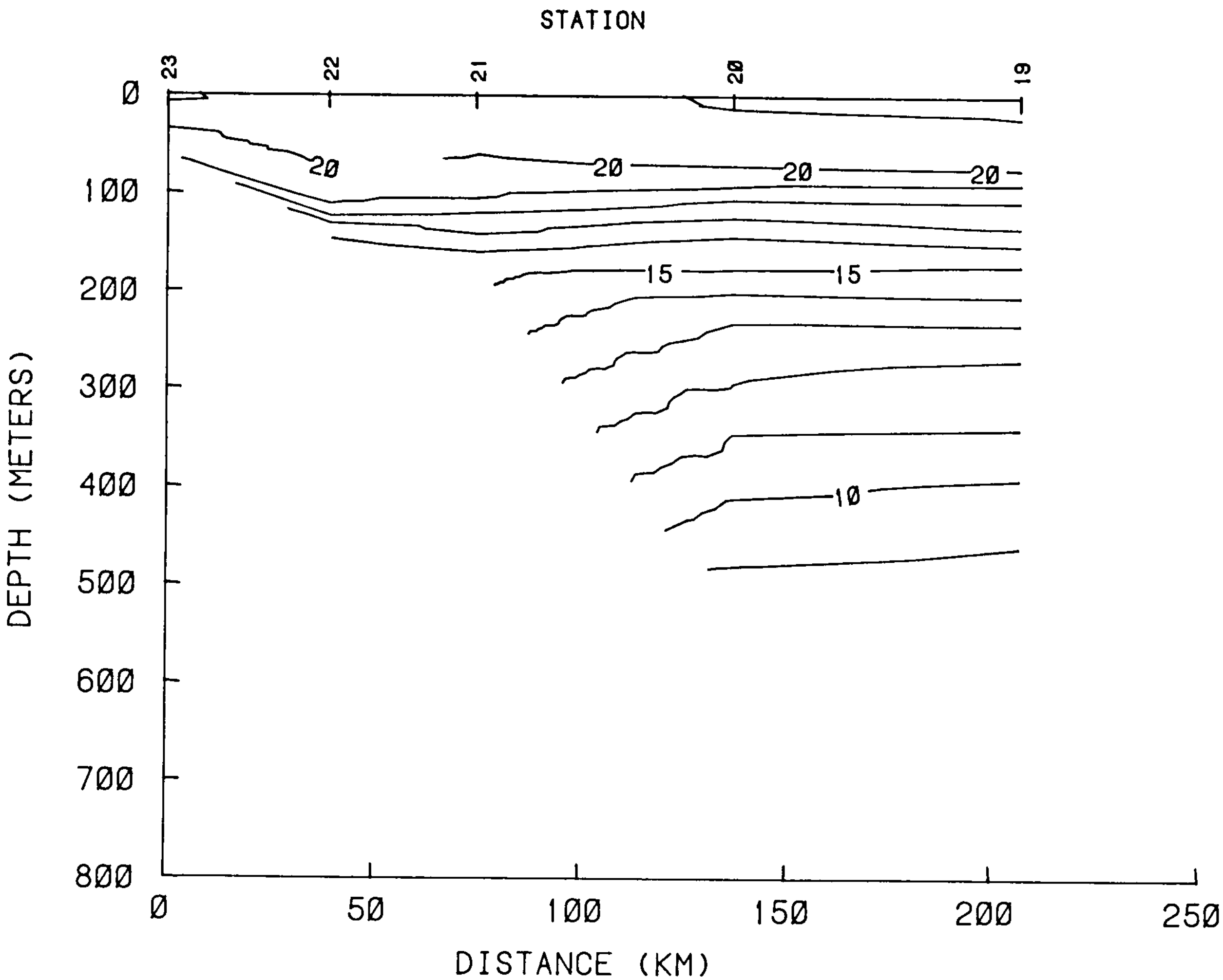
GYRE CRUISE 87-G-4
4/15/87 TO 4/15/87
STATIONS 14 TO 17
TEMPERATURE DEG C
MIN = 5.77 MAX = 21.19



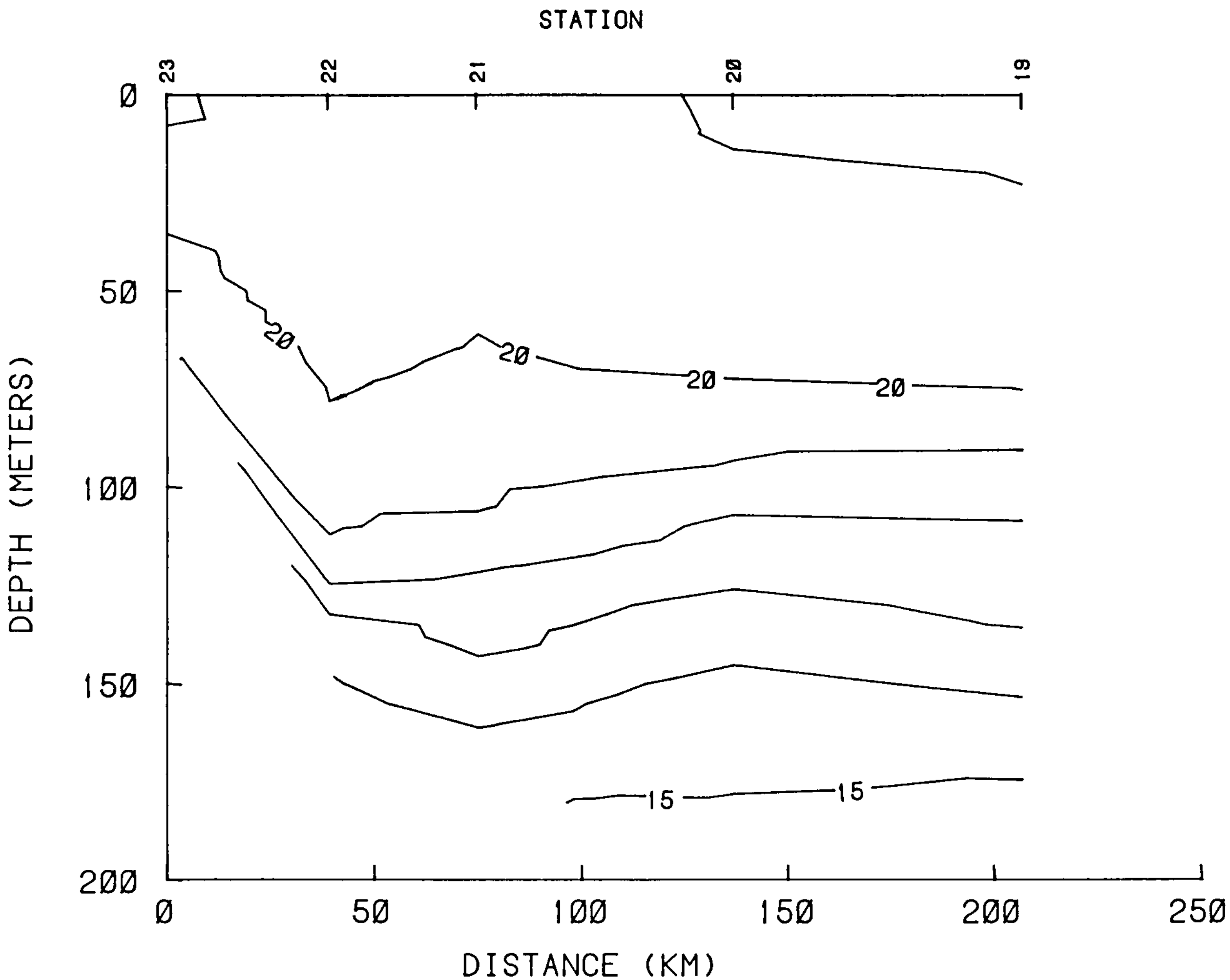
GYRE CRUISE 87-G-4
4/15/87 TO 4/15/87
STATIONS 14 TO 17
TEMPERATURE DEG C
MIN = 13.63 MAX = 21.19



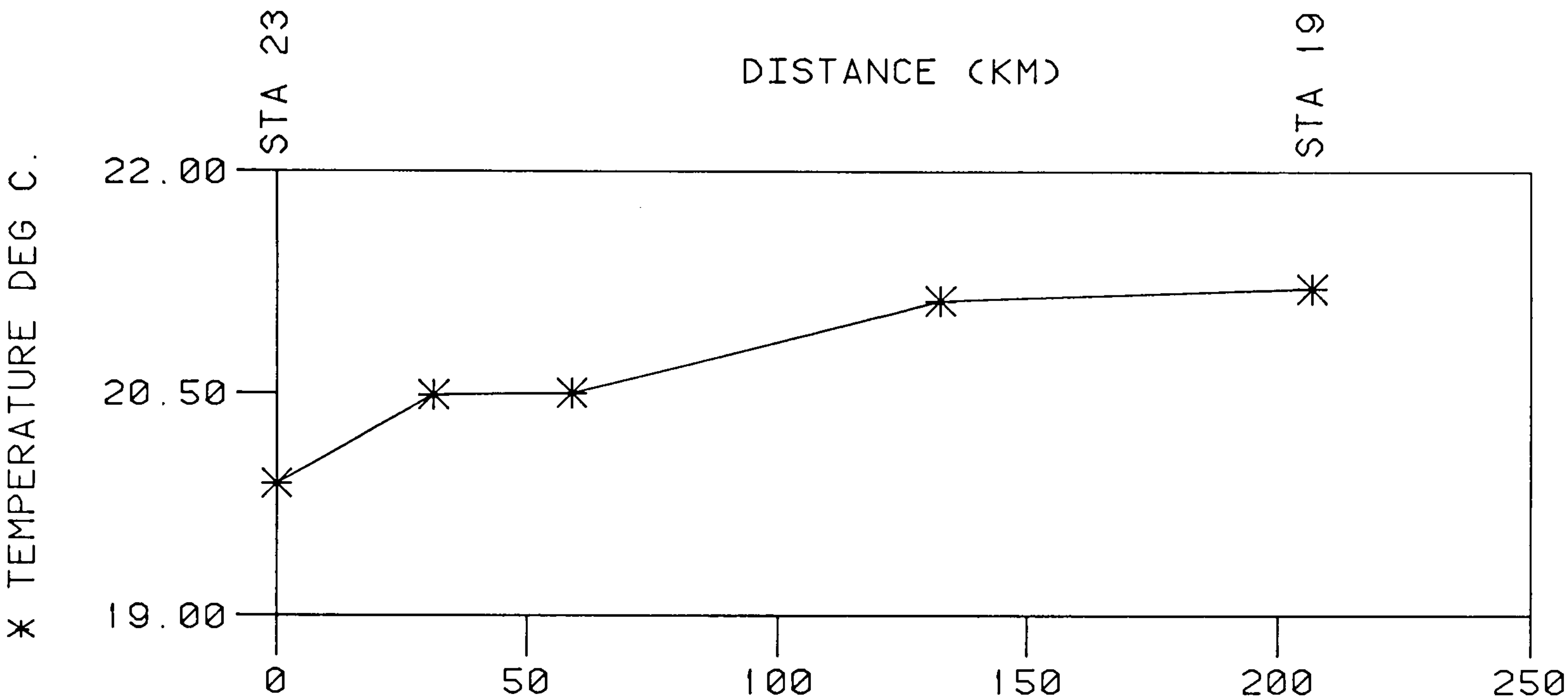
PARAMETERS AT SURFACE GYRE CRUISE 87-G-4



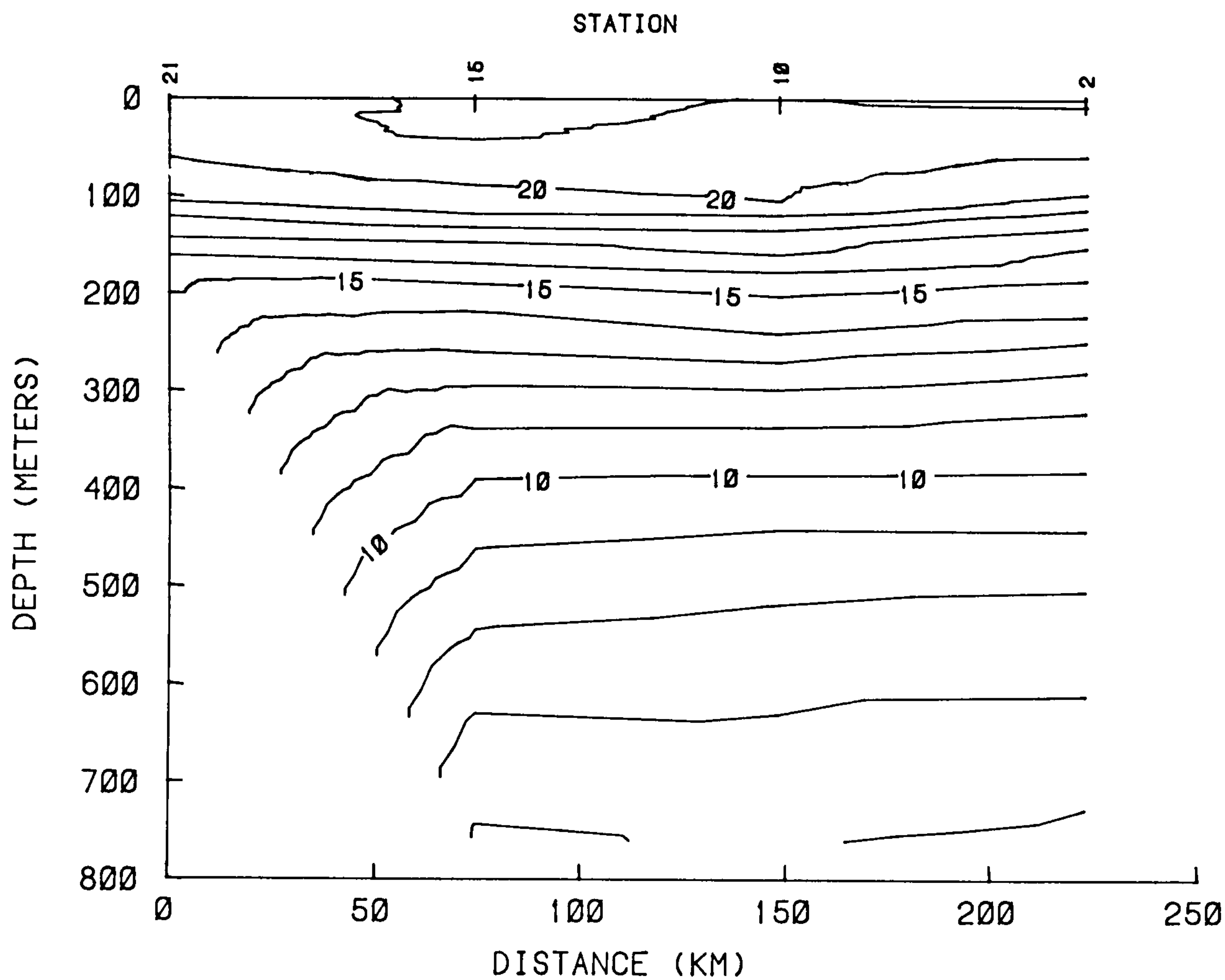
GYRE CRUISE 87-G-4
4/15/87 TO 4/16/87
STATIONS 19 TO 23
TEMPERATURE DEG C
MIN = 8.ØØ MAX = 21.2Ø



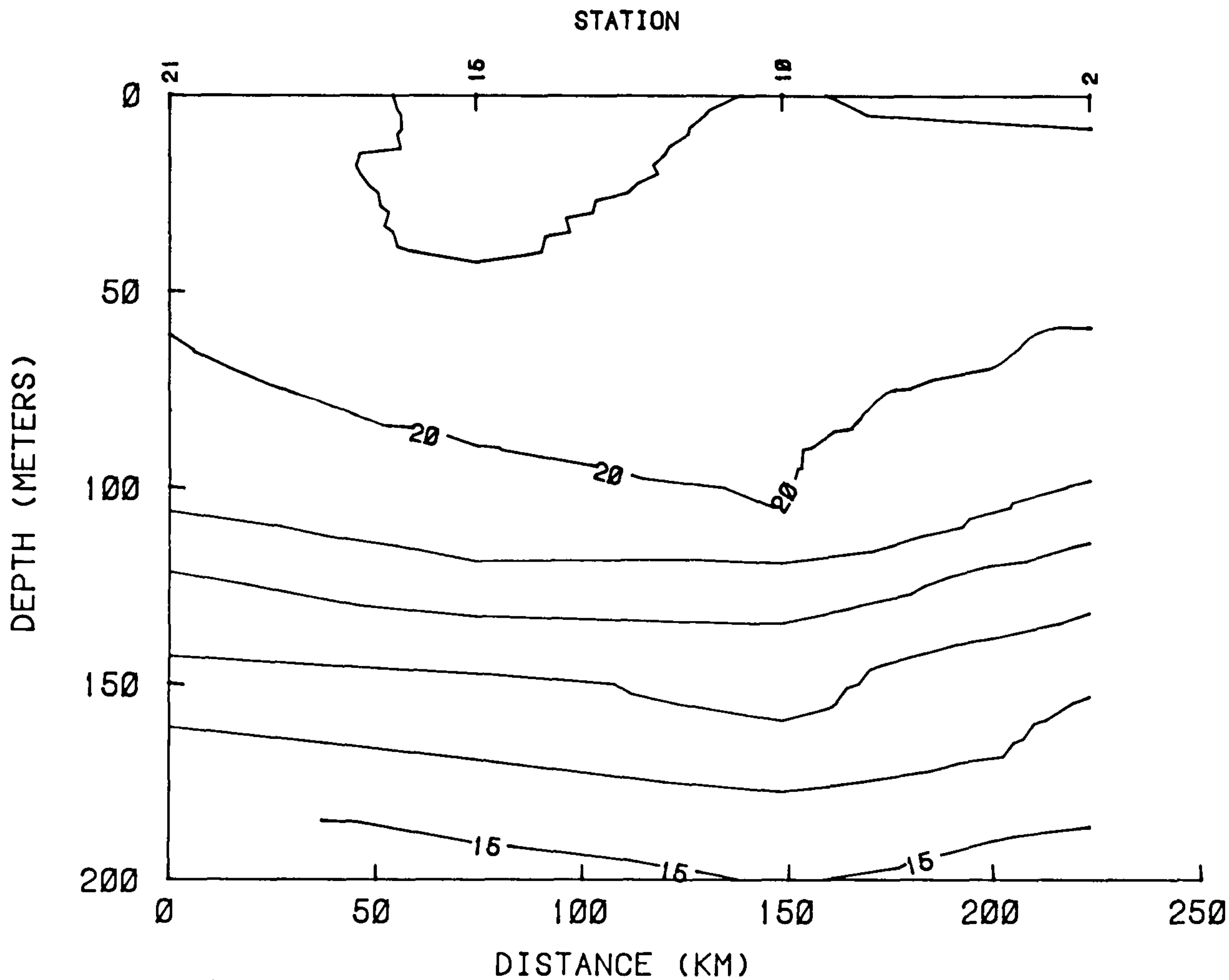
GYRE CRUISE 87-G-4
4/15/87 TO 4/16/87
STATIONS 19 TO 23
TEMPERATURE DEG C
MIN = 14.07 MAX = 21.20



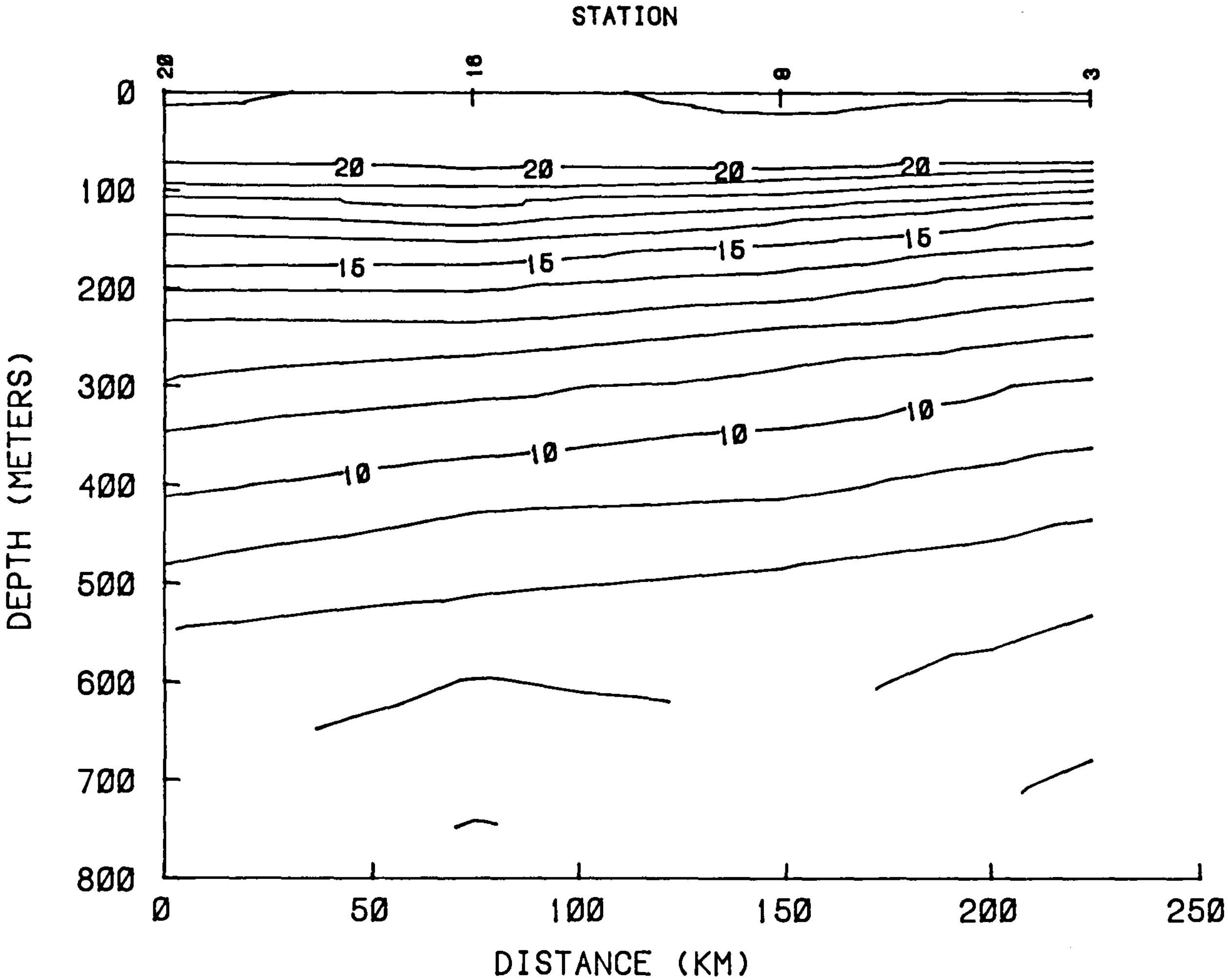
PARAMETERS AT SURFACE GYRE CRUISE 87-G-4



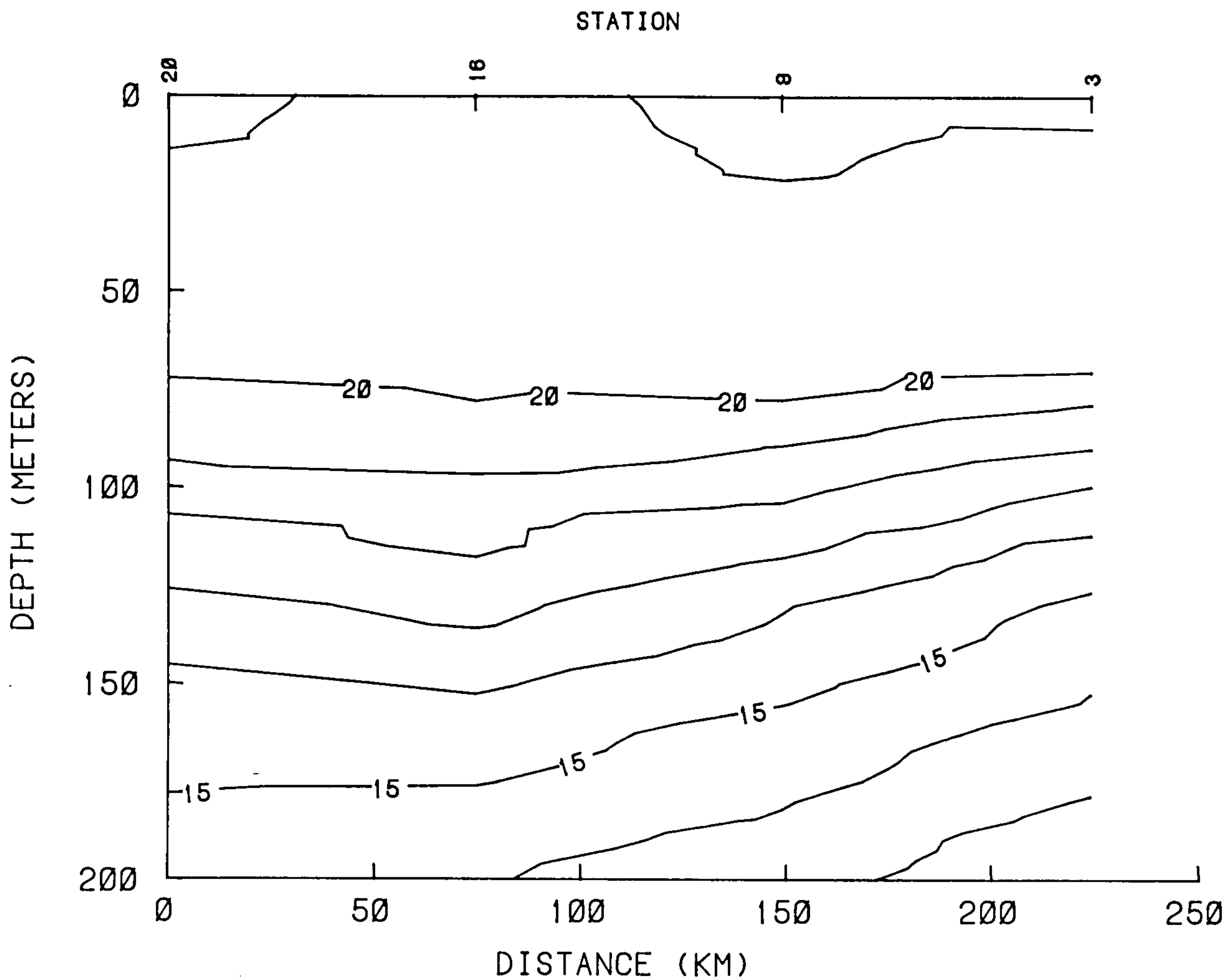
GYRE CRUISE 87-G-4
4/13/87 TO 4/16/87
STATIONS 2 TO 21
TEMPERATURE DEG C
MIN = 5.78 MAX = 21.20



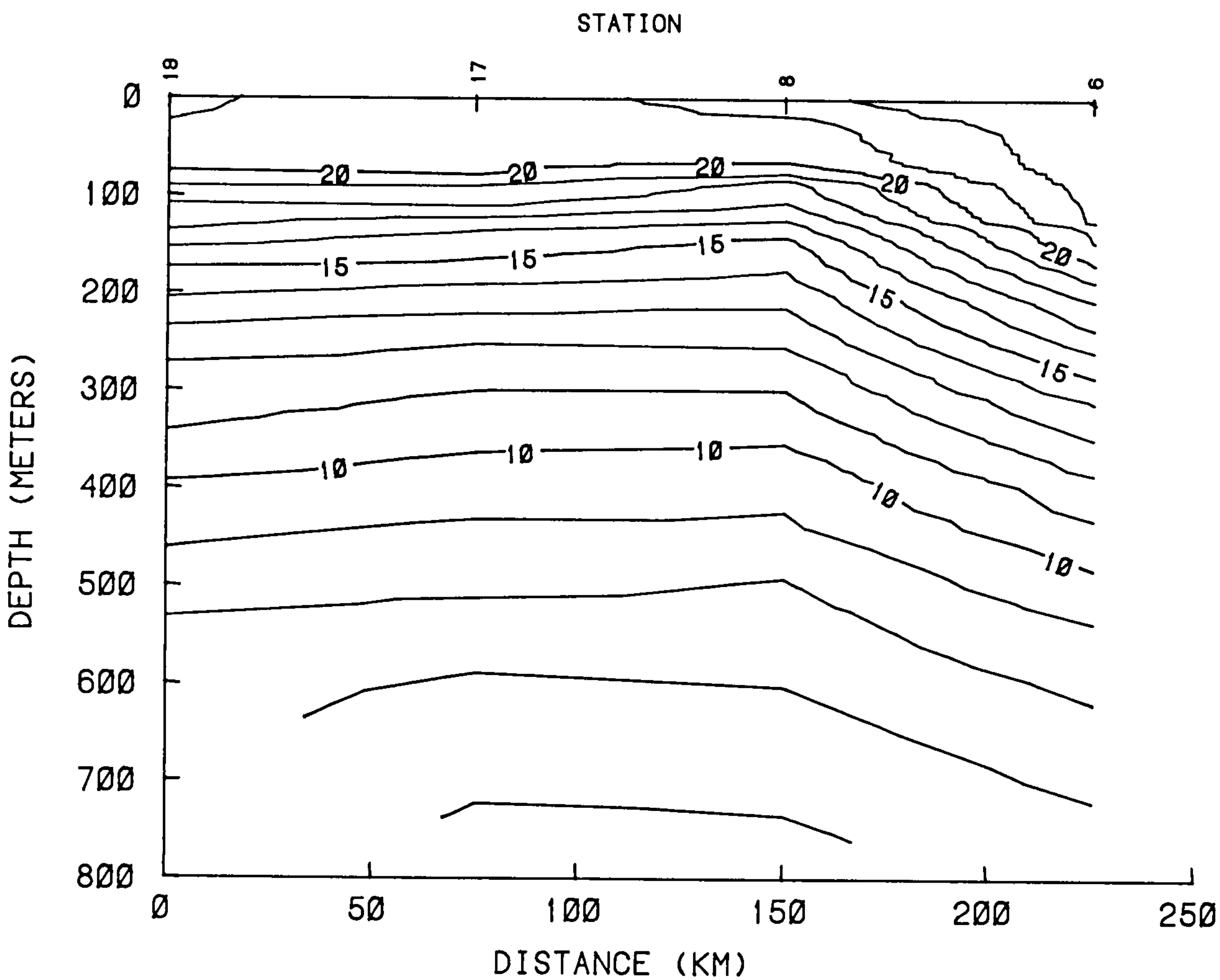
GYRE CRUISE 87-G-4
4/13/87 TO 4/16/87
STATIONS 2 TO 21
TEMPERATURE DEG C
MIN = 14.48 MAX = 21.20



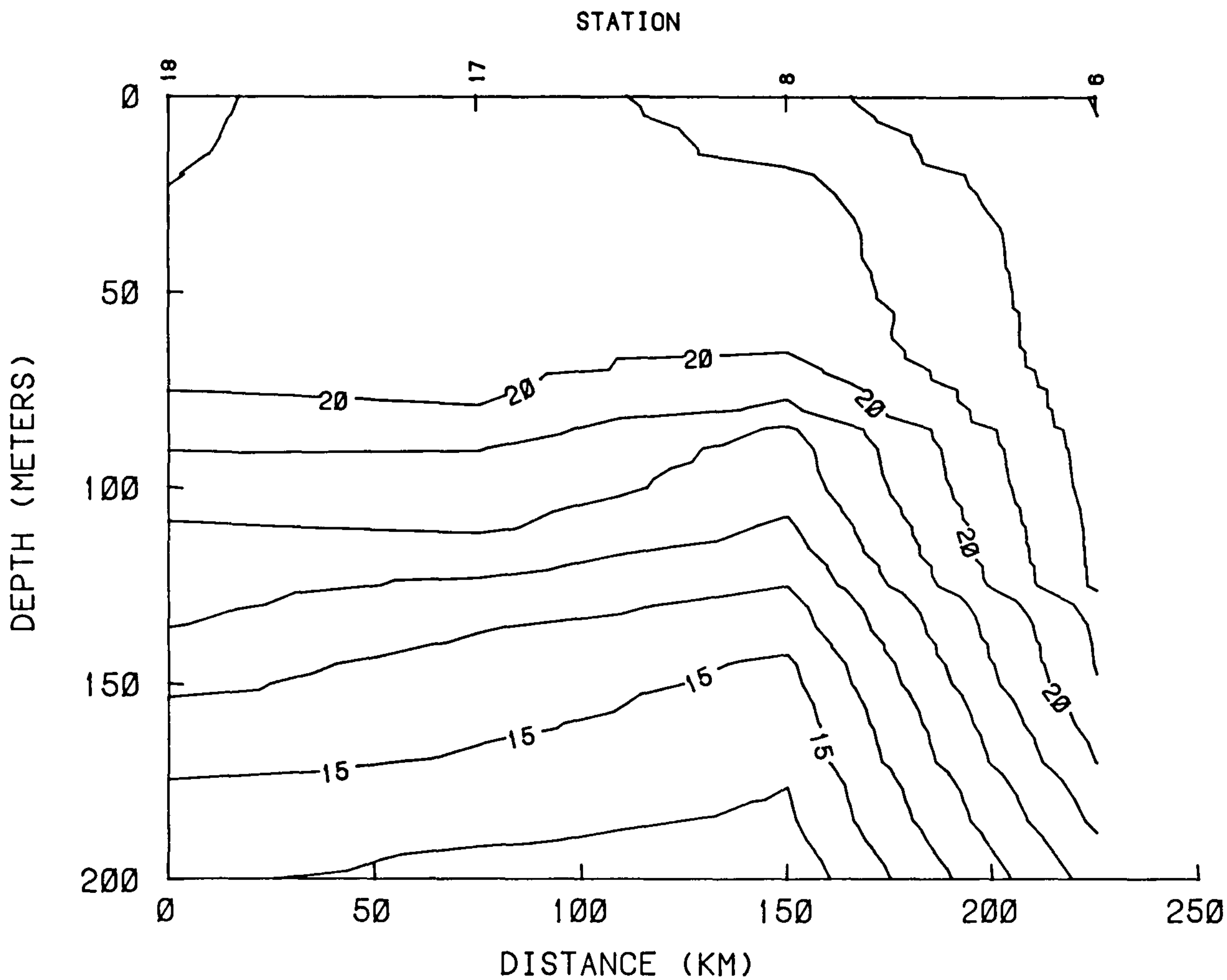
GYRE CRUISE 87-G-4
4/13/87 TO 4/16/87
STATIONS 3 TO 20
TEMPERATURE DEG C
MIN = 5.53 MAX = 21.35



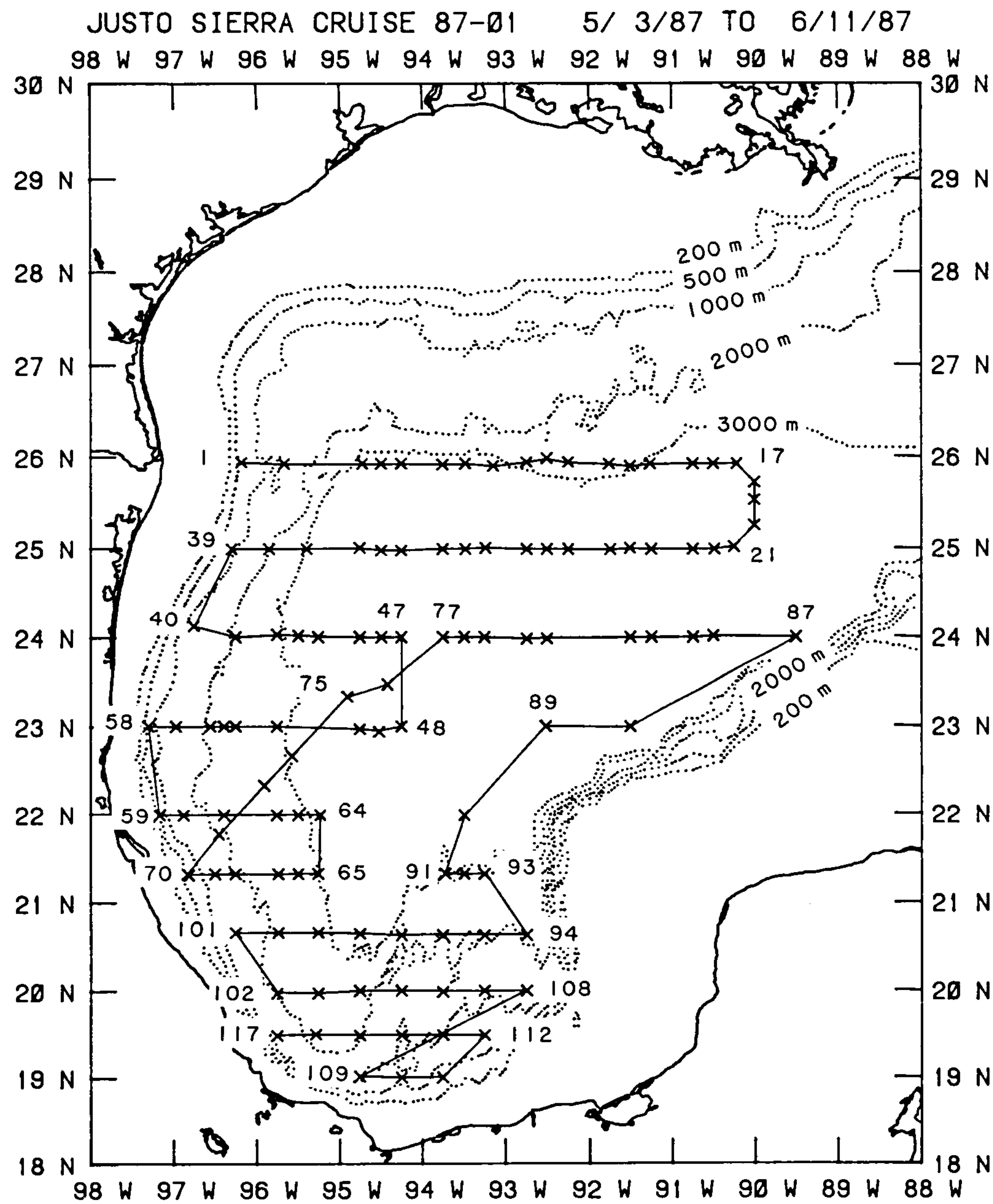
GYRE CRUISE 87-G-4
4/13/87 TO 4/16/87
STATIONS 3 TO 2Ø
TEMPERATURE DEG C
MIN = 12.22 MAX = 21.35

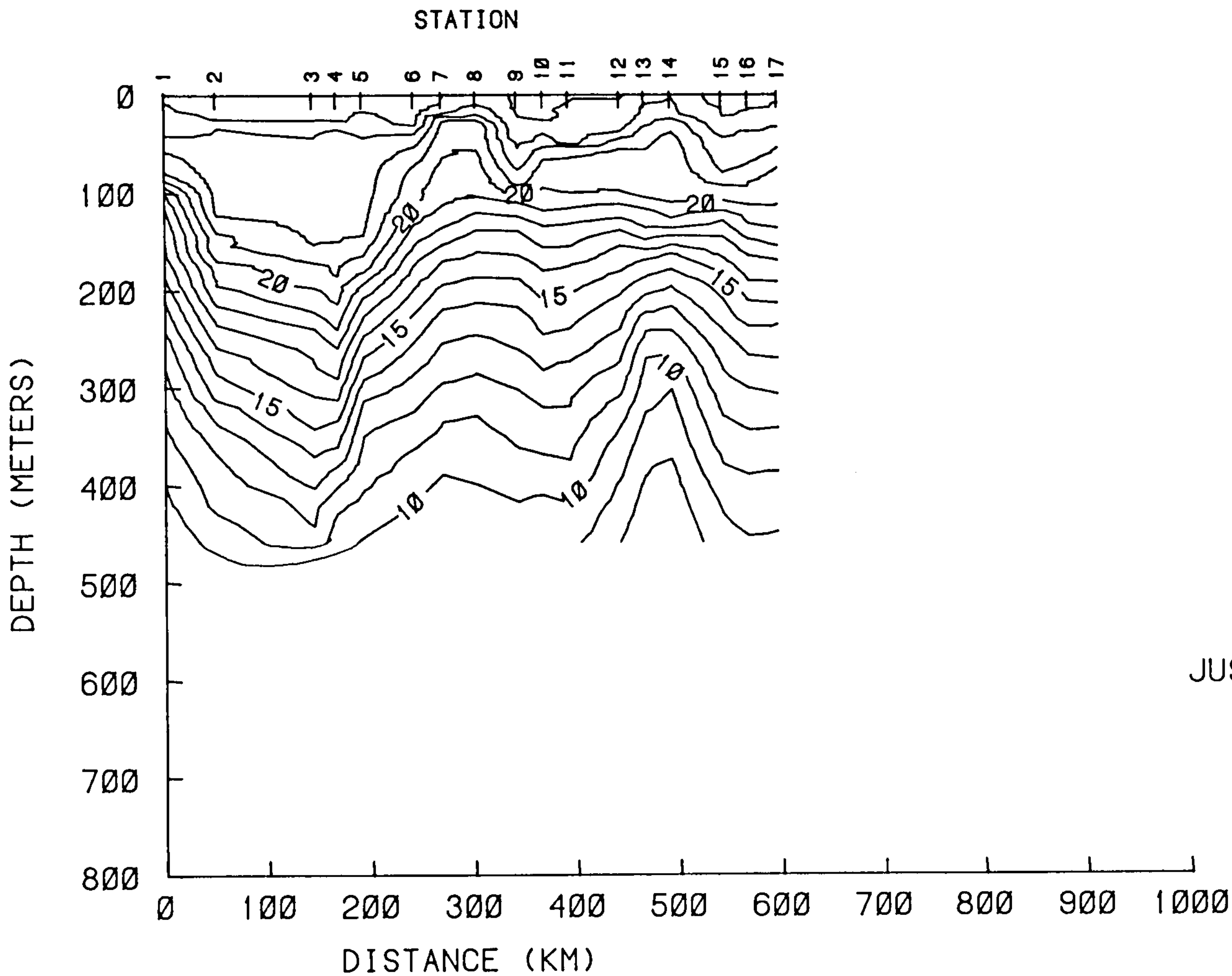


GYRE CRUISE 87-G-4
4/13/87 TO 4/15/87
STATIONS 6 TO 19
TEMPERATURE DEG C
MIN = 5.77 MAX = 23.04

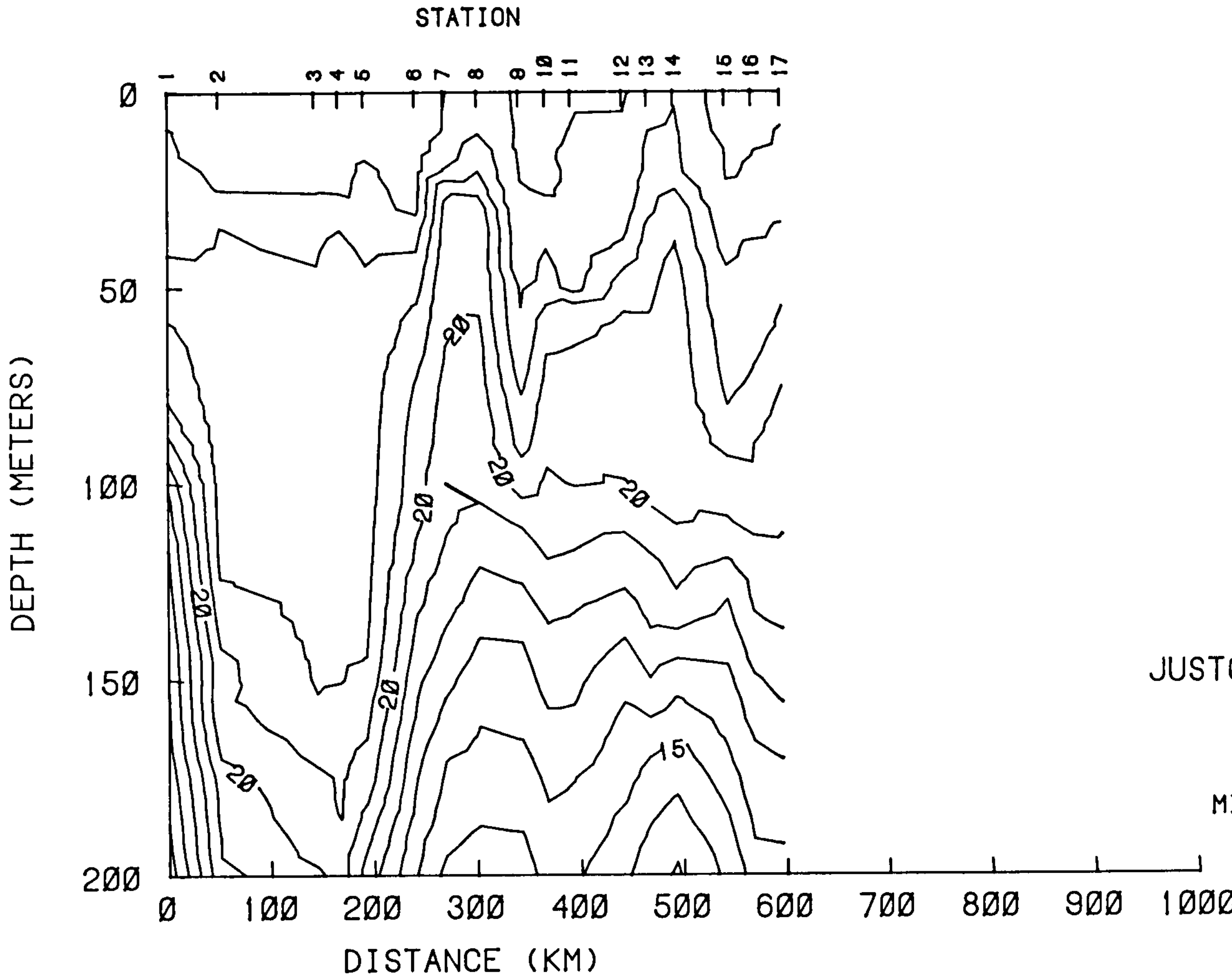


GYRE CRUISE 87-G-4
4/13/87 TO 4/15/87
STATIONS 6 TO 19
TEMPERATURE DEG C
MIN = 13.3Ø MAX = 23.Ø4


JUSTO SIERRA CRUISE 87-01 5/ 3/87 TO 6/11/87
98 W 97 W 96 W 95 W 94 W 93 W 92 W 91 W 90 W 89 W 88 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
20 N
19 N
18 N
200 m
500 m
1000 m
2000 m
3000 m
1
17
21
39
40
47
77
87
75
48
58
89
59
64
70
65
91
93
101
94
102
108
117
112
109
2000 m
200 m



JUSTO SIERRA CRUISE 87-01
5/ 3/87 TO 5/ 6/87
STATIONS 1 TO 17
TEMPERATURE DEG C
MIN = 7.01 MAX = 24.55



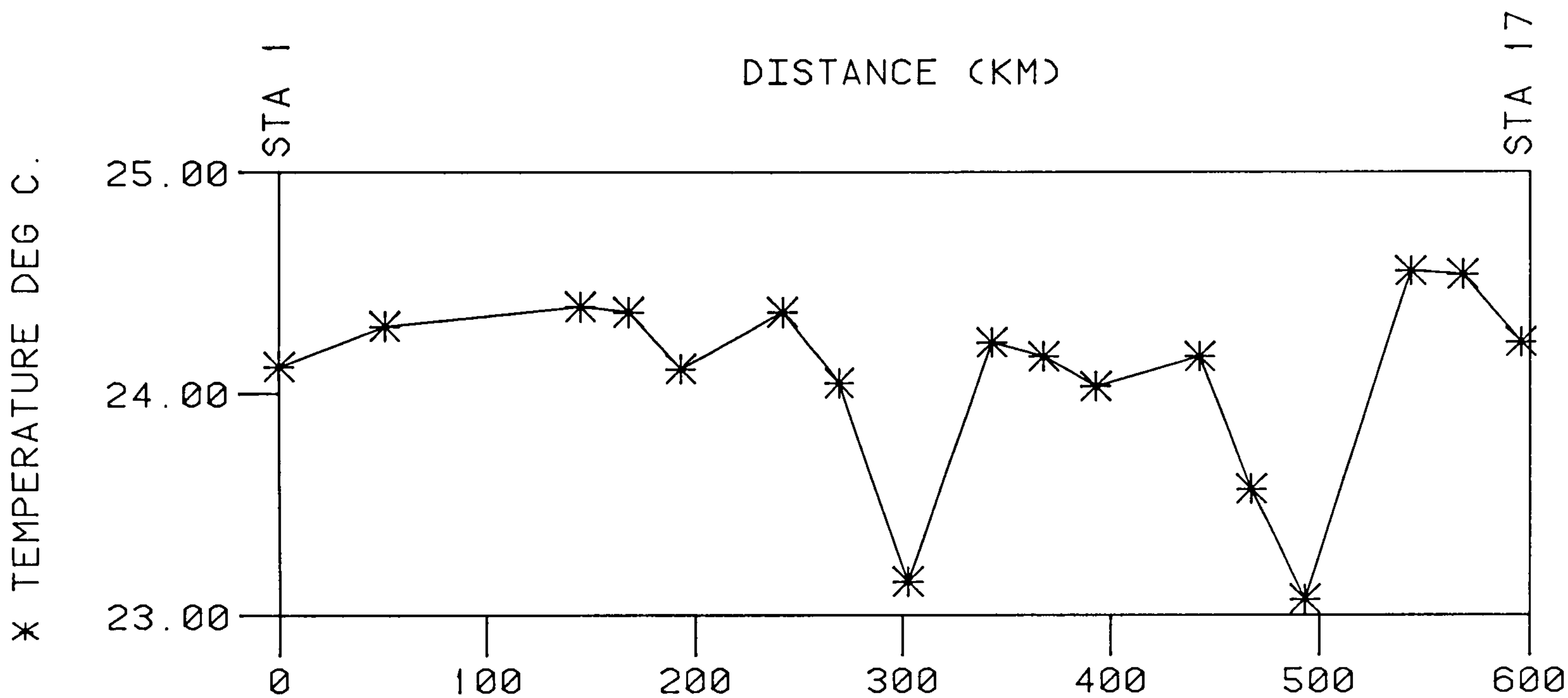
JUSTO SIERRA CRUISE 87-01

5/ 3/87 TO 5/ 6/87

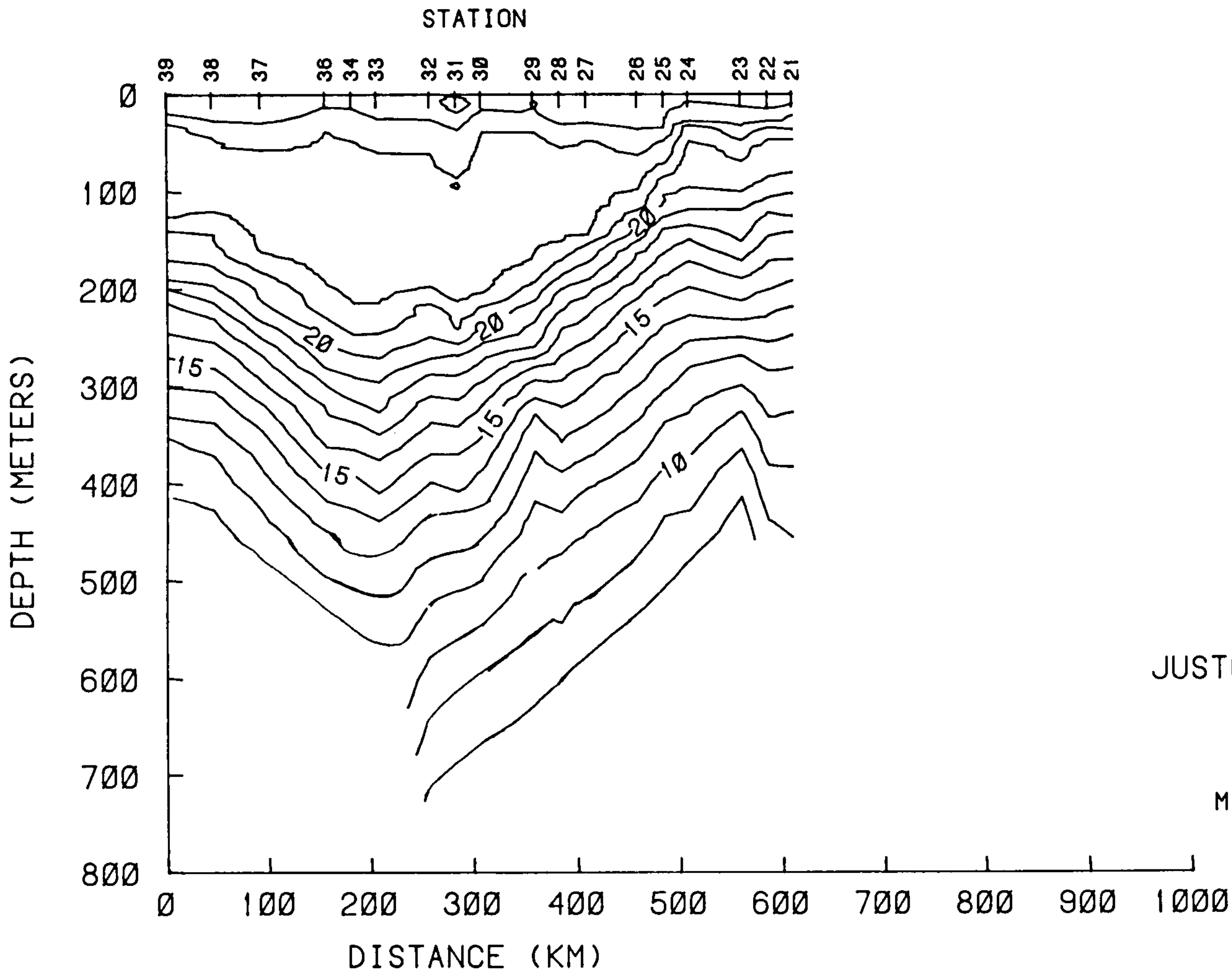
STATIONS 1 TO 17

TEMPERATURE DEG C

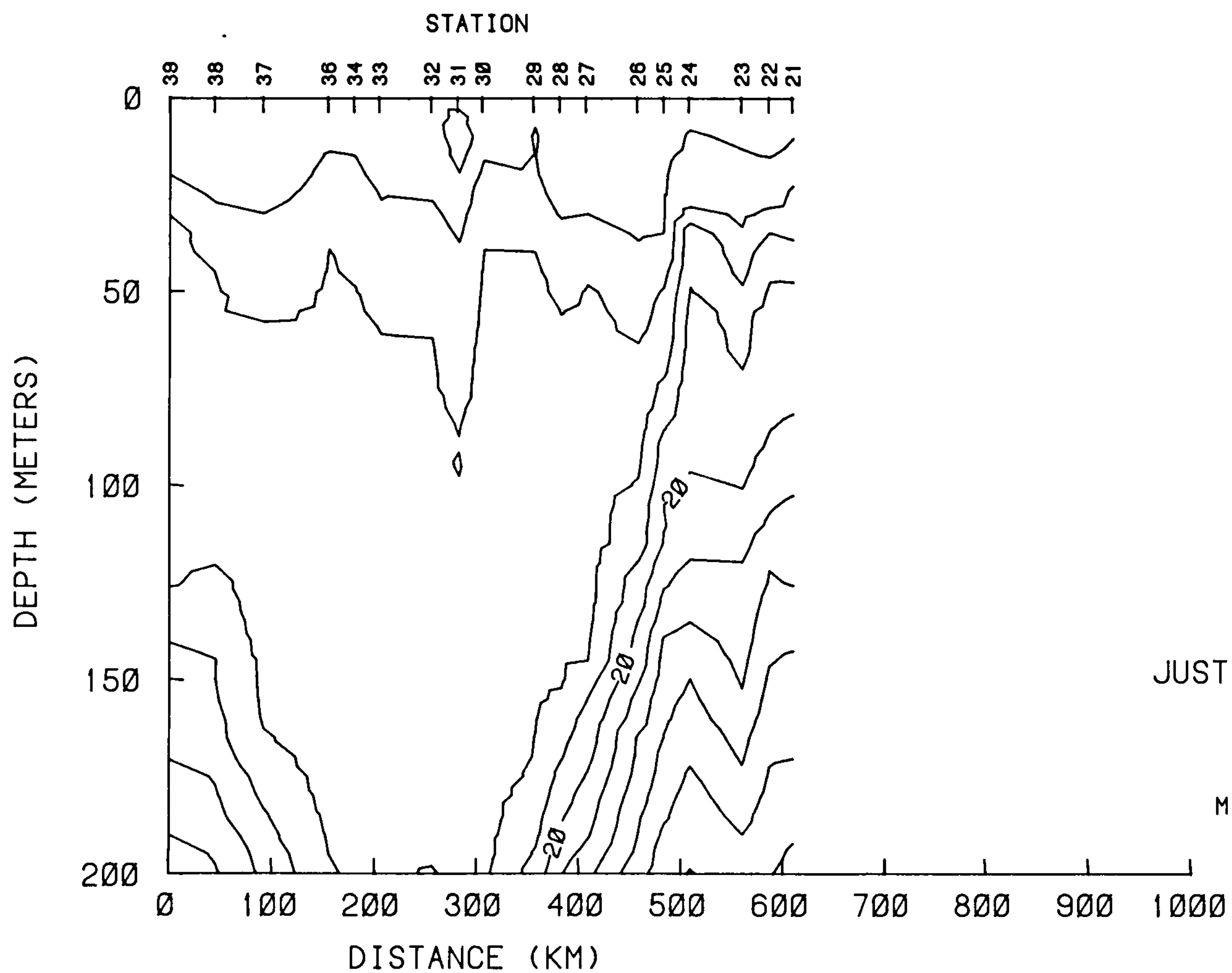
MIN = 12.90 MAX = 24.55



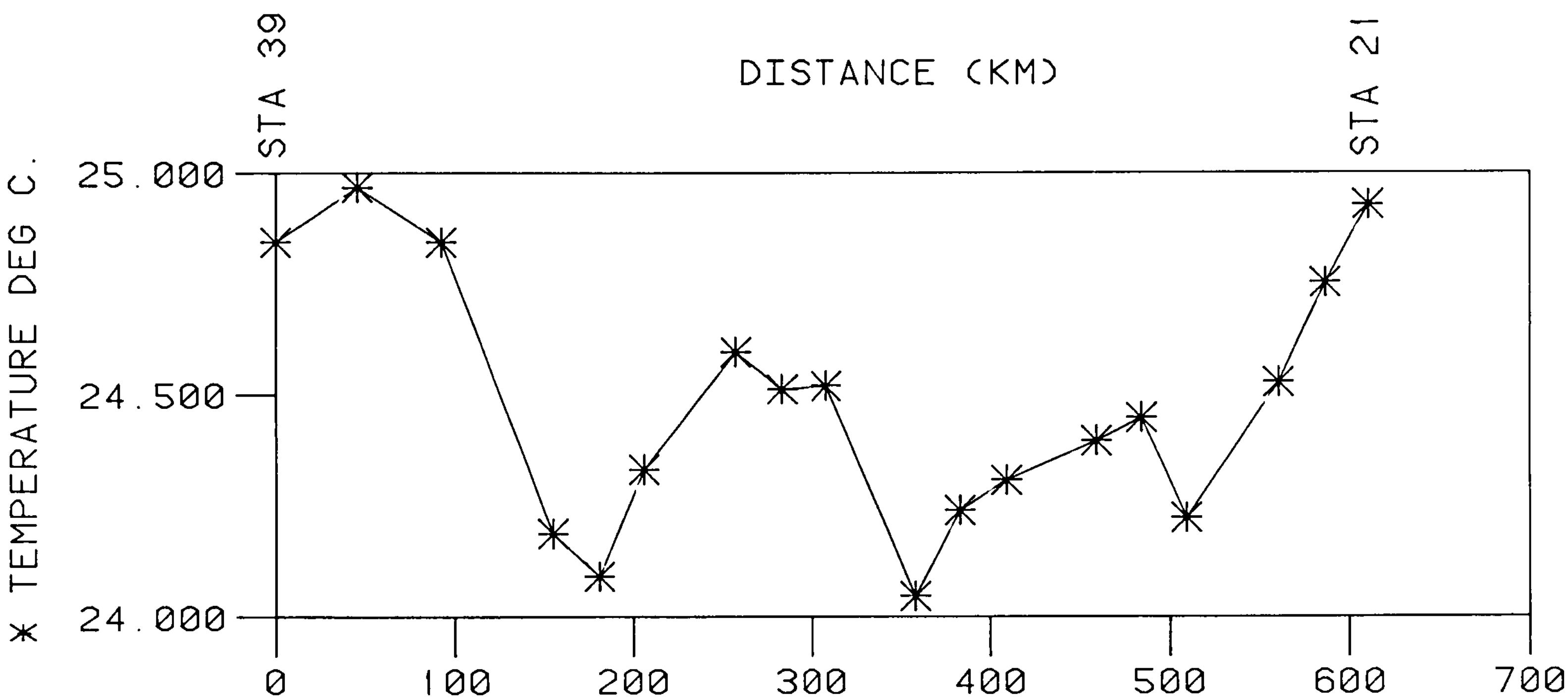
PARAMETERS AT SURFACE JUSTO SIERRA CRUISE 87-01



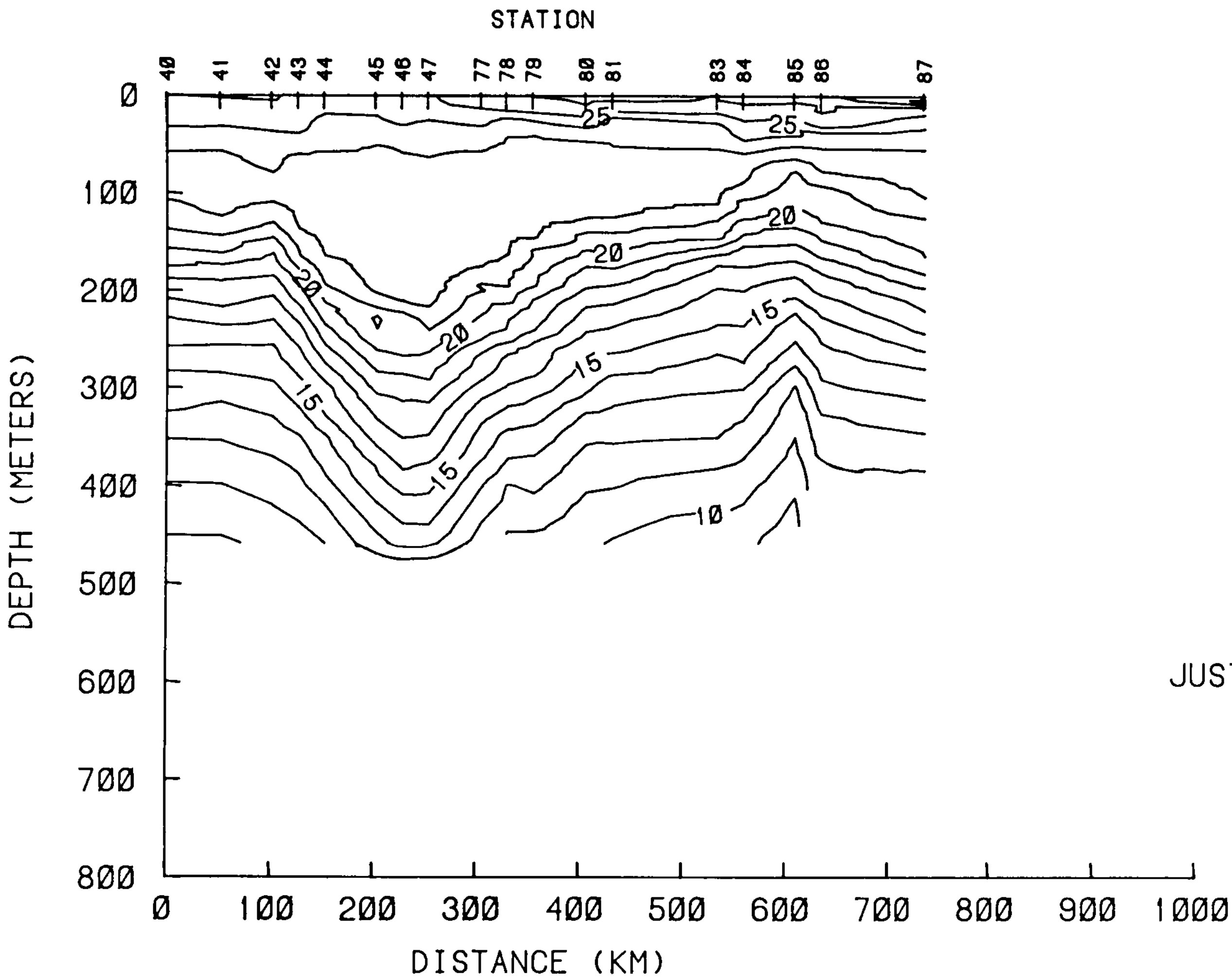
JUSTO SIERRA CRUISE 87-01
5/ 6/87 TO 5/ 8/87
STATIONS 21 TO 39
TEMPERATURE DEG C
MIN = 6.34 MAX = 25.76



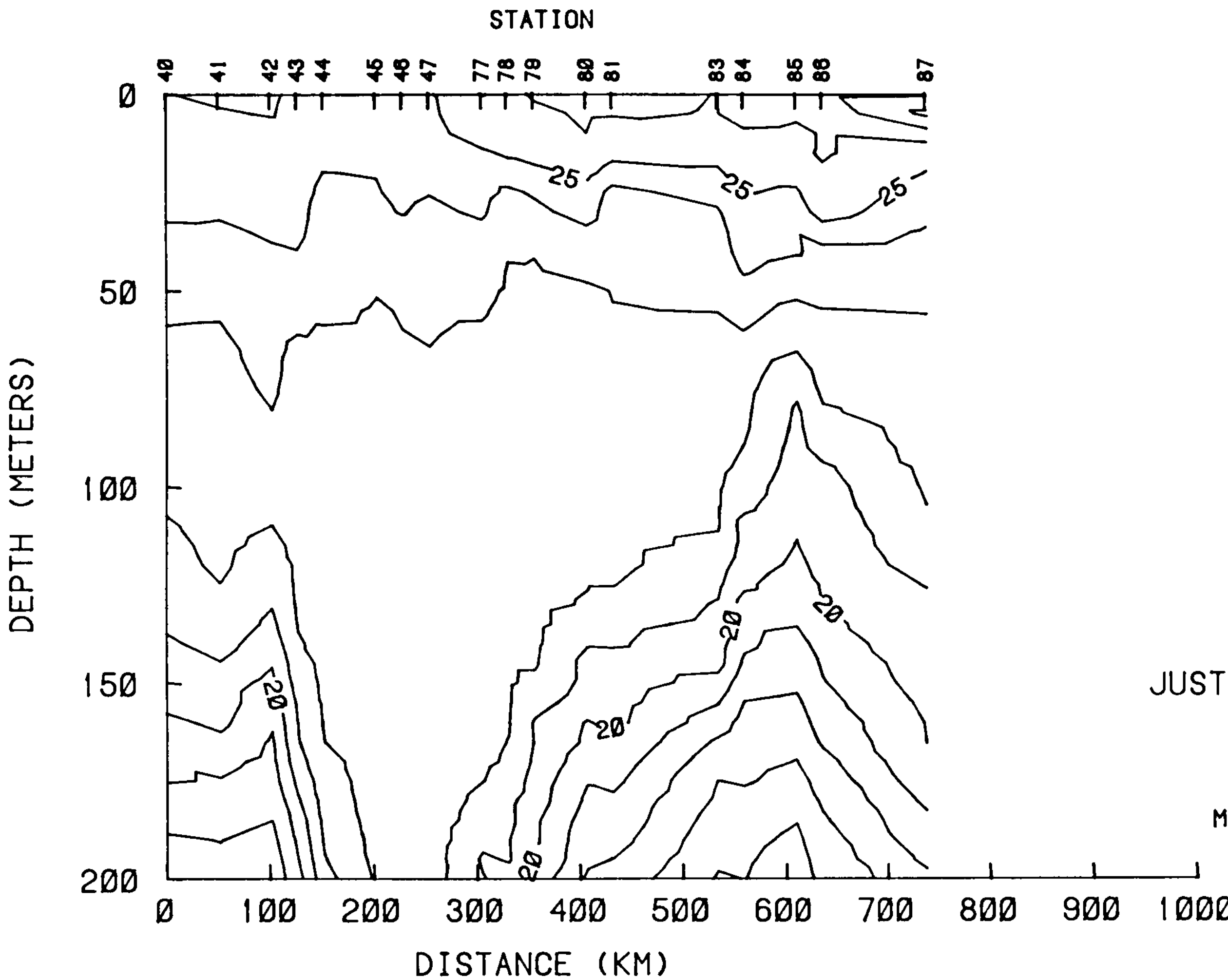
JUSTO SIERRA CRUISE 87-01
5/ 6/87 TO 5/ 8/87
STATIONS 21 TO 39
TEMPERATURE DEG C
MIN = 14.68 MAX = 25.76



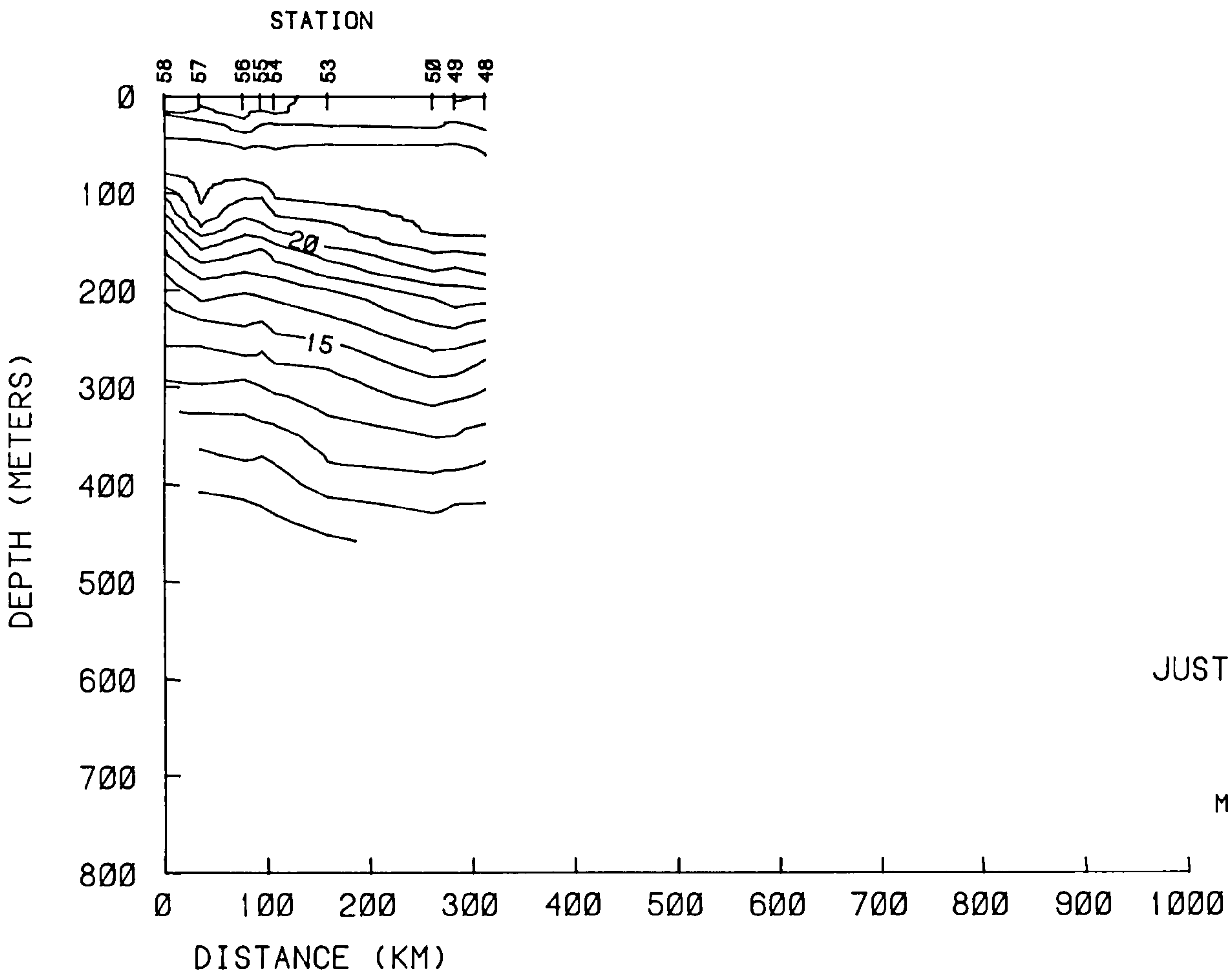
PARAMETERS AT SURFACE JUSTO SIERRA CRUISE 87-01



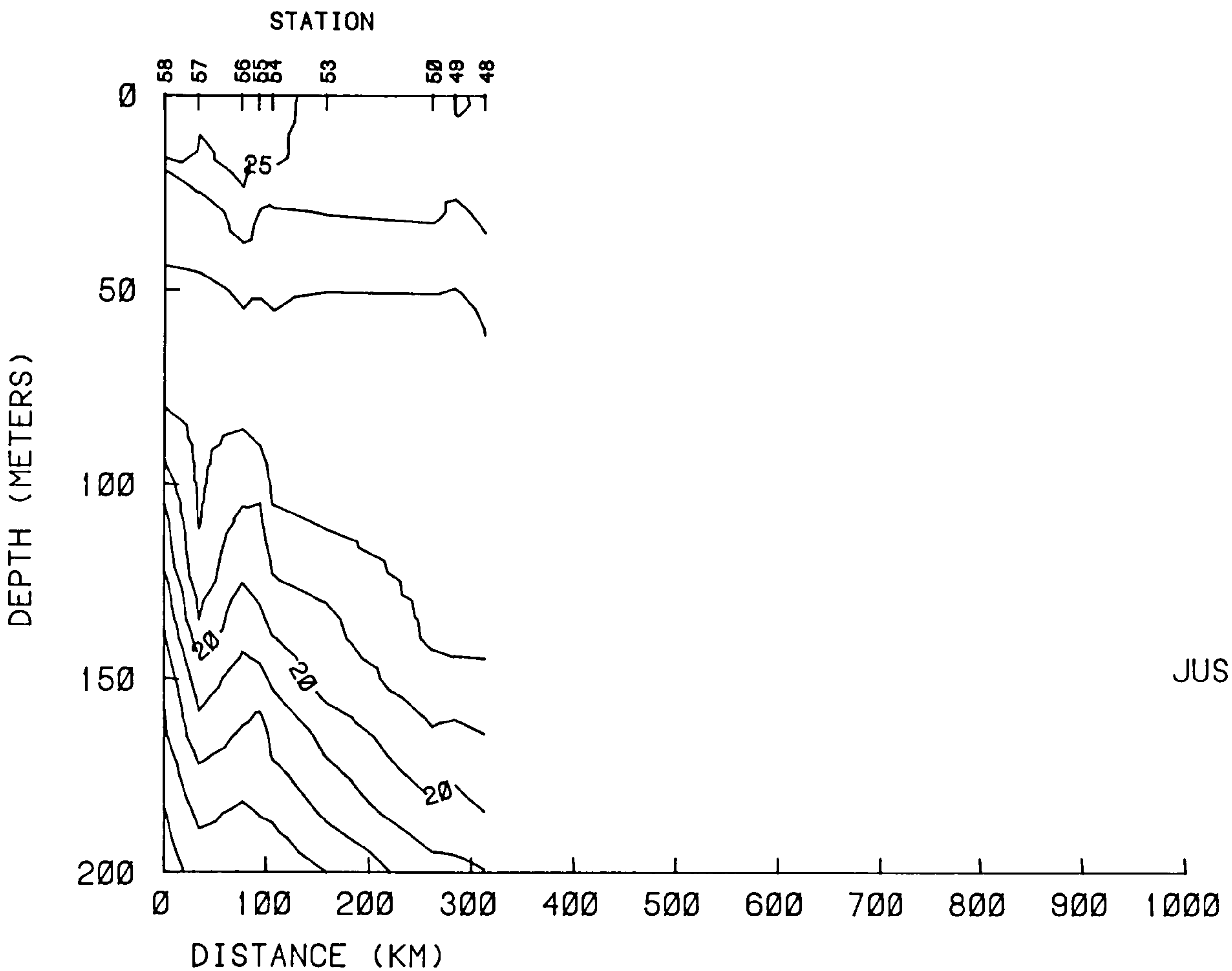
JUSTO SIERRA CRUISE 87-01
5/ 9/87 TO 5/17/87
STATIONS 40 TO 87
TEMPERATURE DEG C
MIN = 8.48 MAX = 28.23



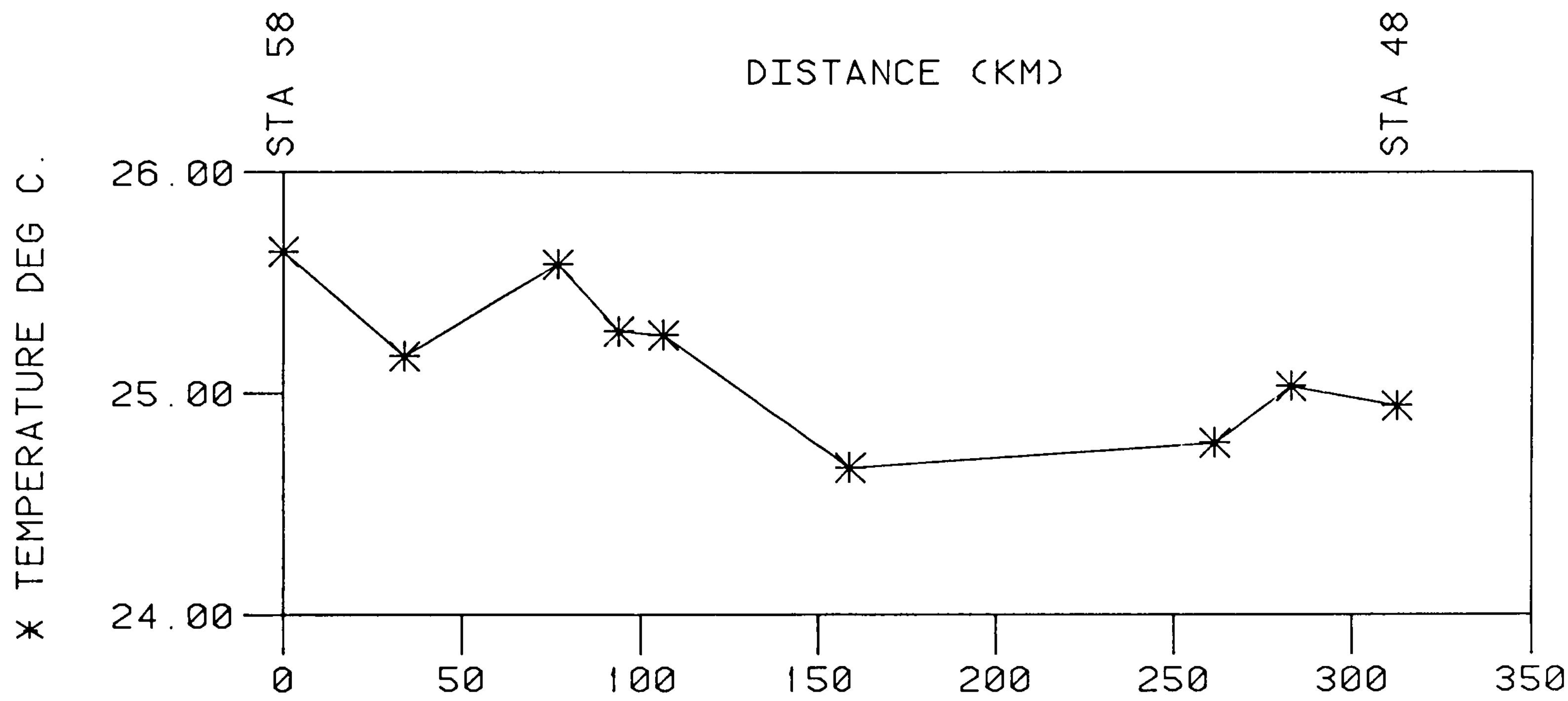
JUSTO SIERRA CRUISE 87-01
5/ 9/87 TO 5/17/87
STATIONS 40 TO 87
TEMPERATURE DEG C
MIN = 15.45 MAX = 28.23



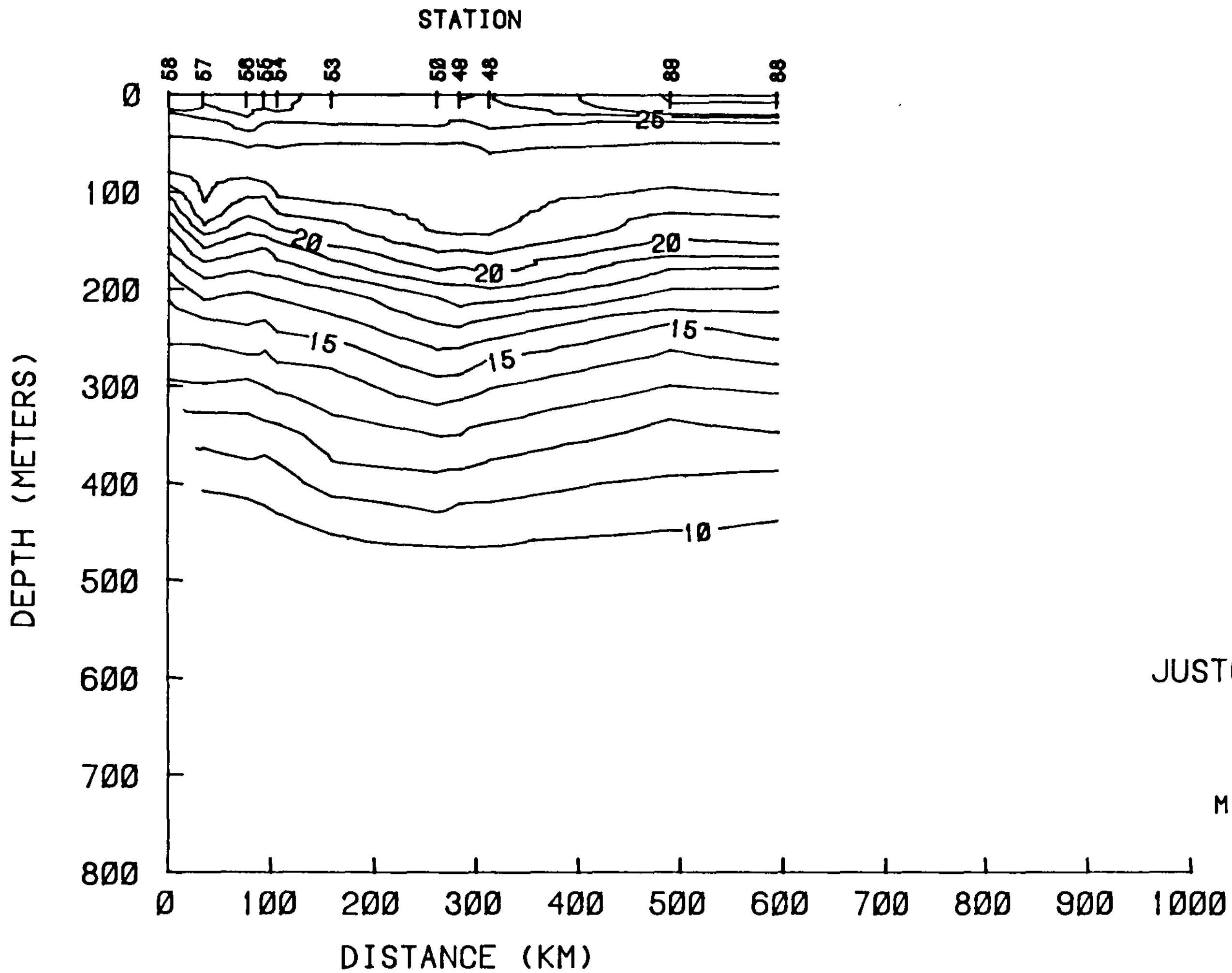
JUSTO SIERRA CRUISE 87-Ø1
5/1Ø/87 TO 5/12/87
STATIONS 48 TO 58
TEMPERATURE DEG C
MIN = 9.Ø4 MAX = 25.64



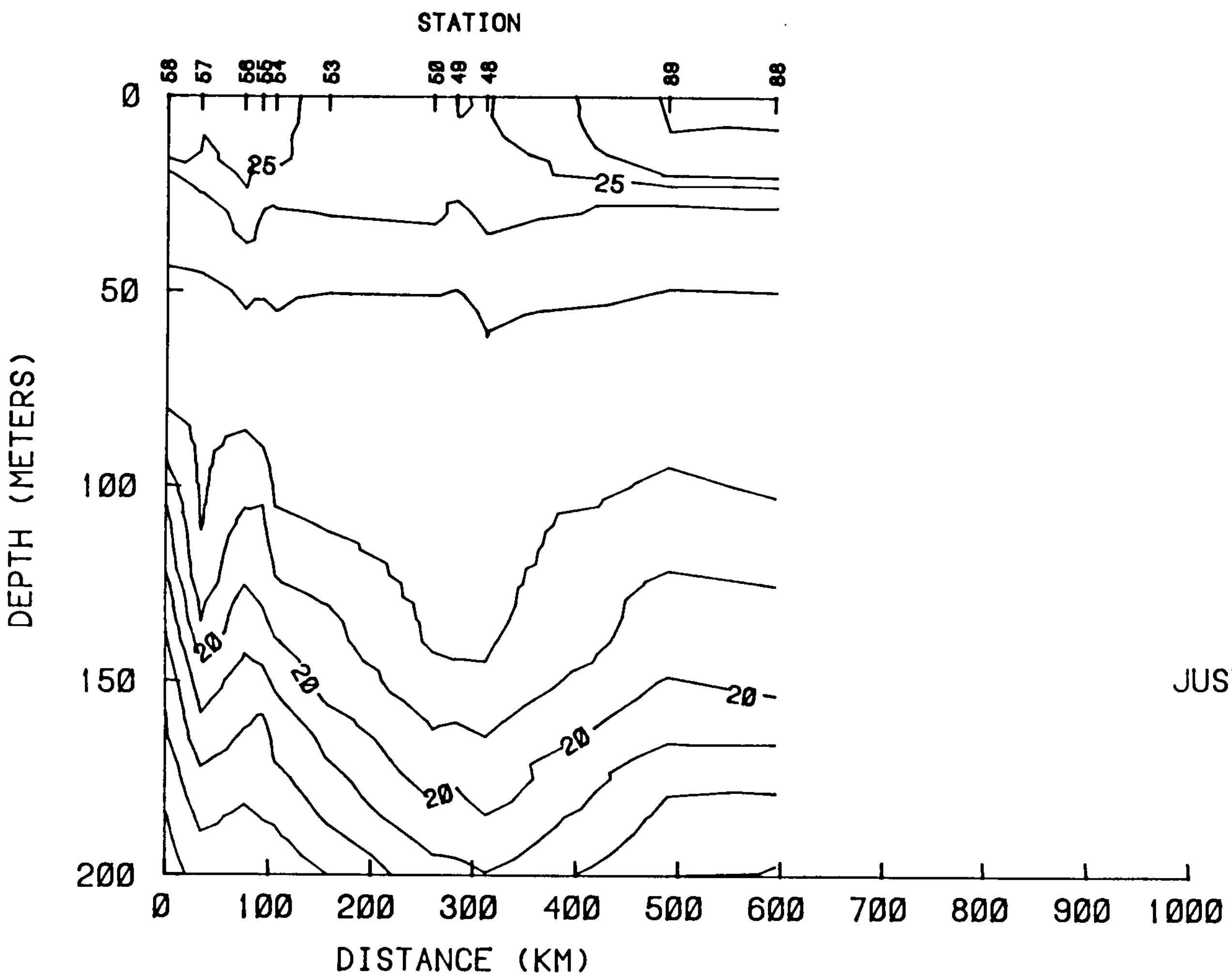
JUSTO SIERRA CRUISE 87-Ø1
5/1Ø/87 TO 5/12/87
STATIONS 48 TO 58
TEMPERATURE DEG C
MIN = 15.36 MAX = 25.64



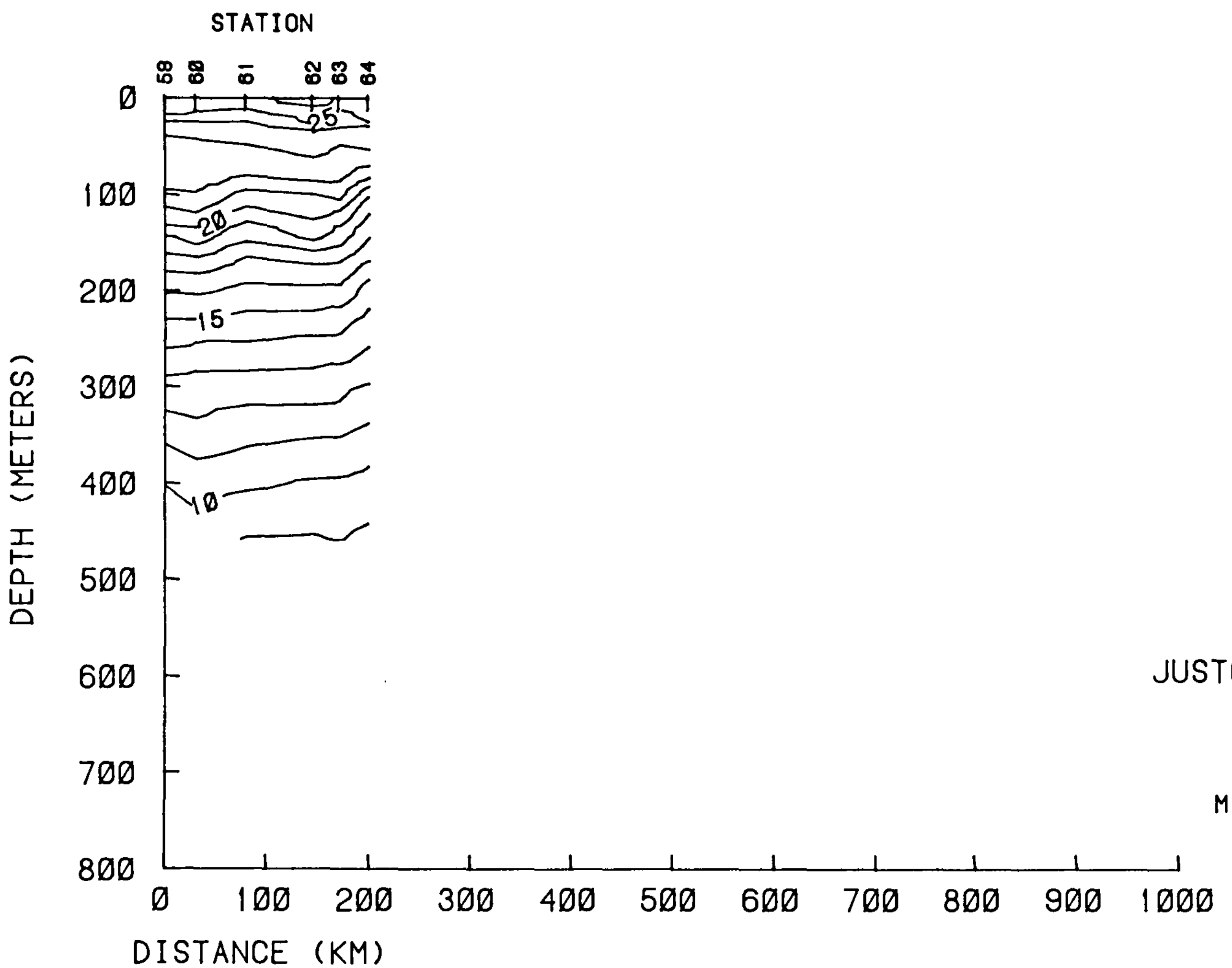
PARAMETERS AT SURFACE JUSTO SIERRA CRUISE 87-01



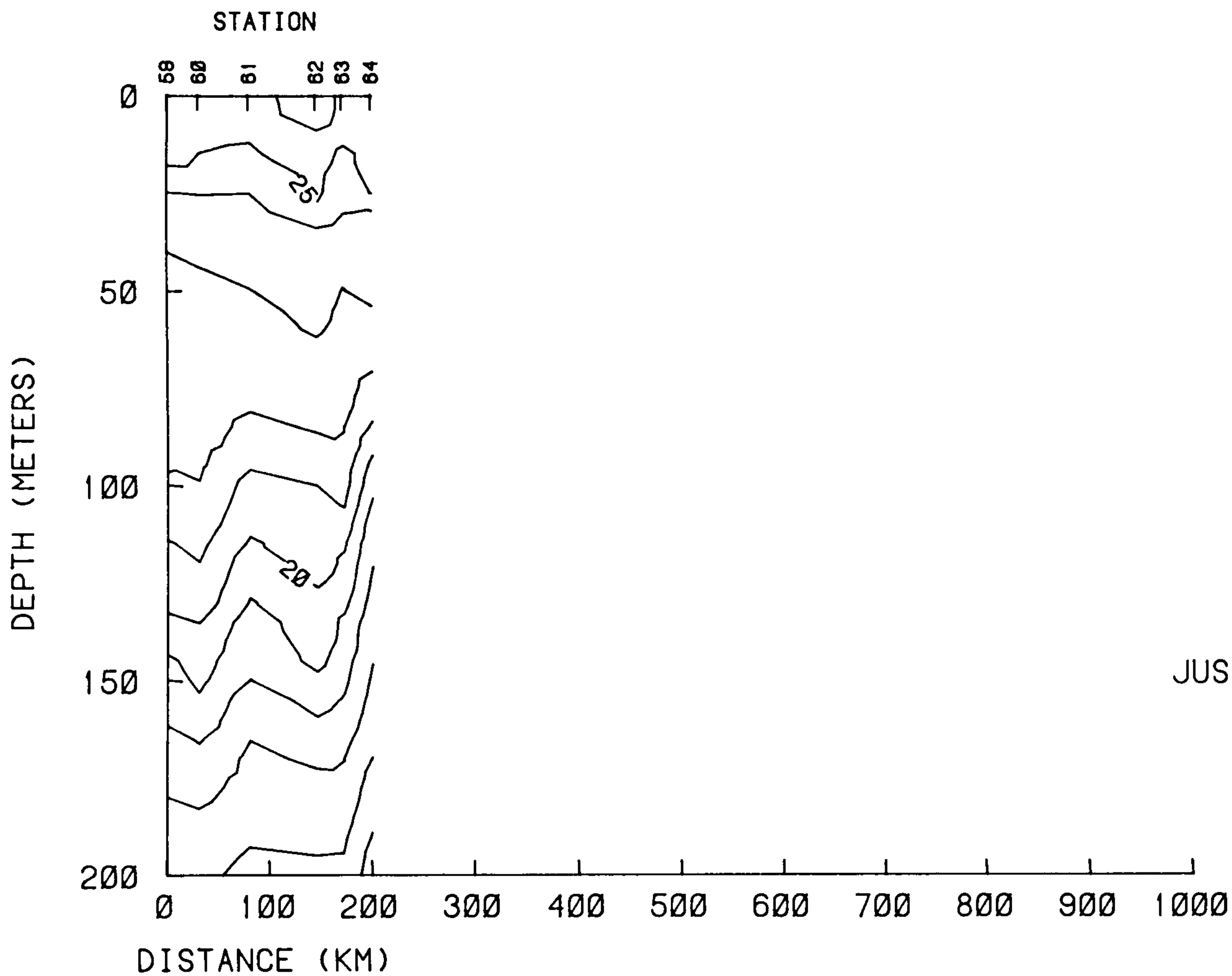
JUSTO SIERRA CRUISE 87-01
5/10/87 TO 5/23/87
STATIONS 58 TO 88
TEMPERATURE DEG C
MIN = 9.04 MAX = 27.25



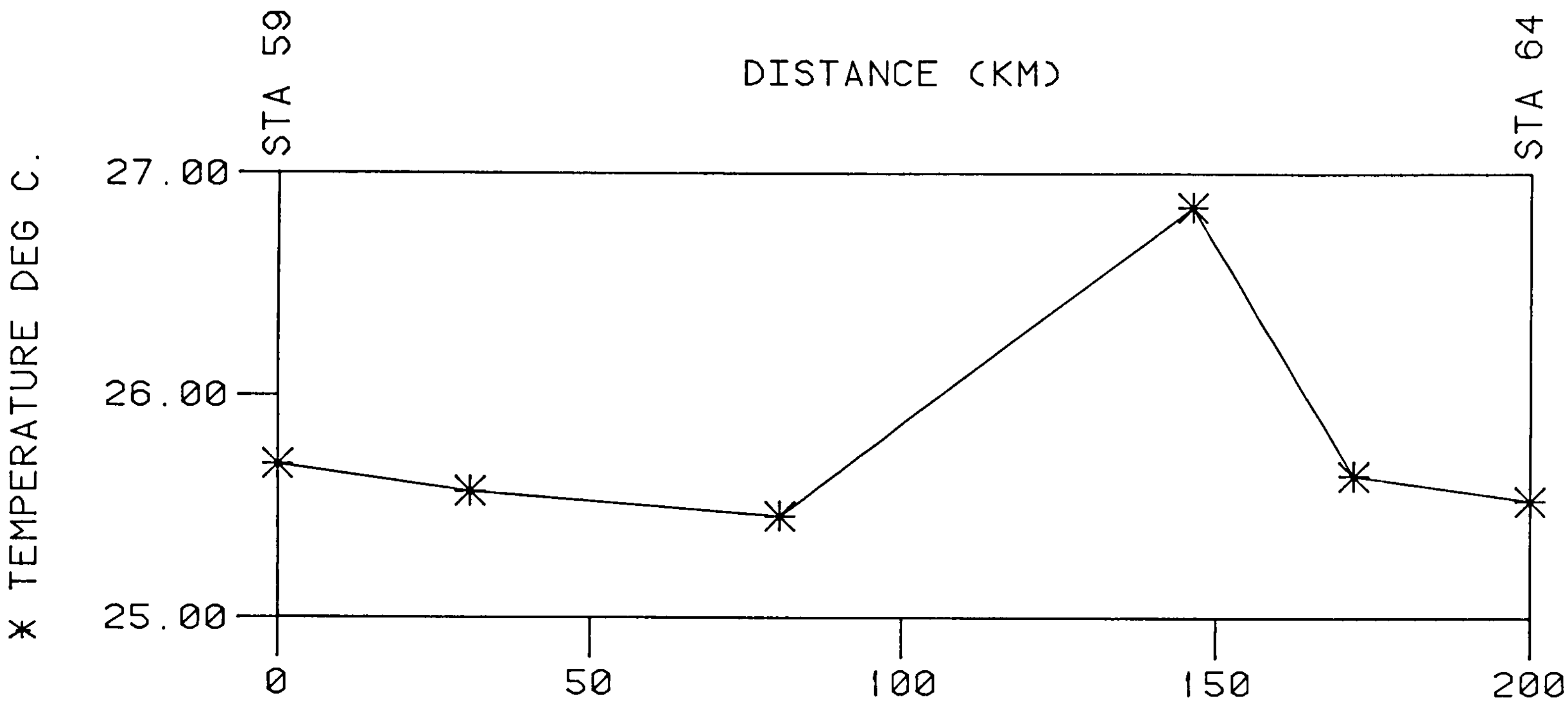
JUSTO SIERRA CRUISE 87-01
5/10/87 TO 5/23/87
STATIONS 58 TO 88
TEMPERATURE DEG C
MIN = 15.36 MAX = 27.25



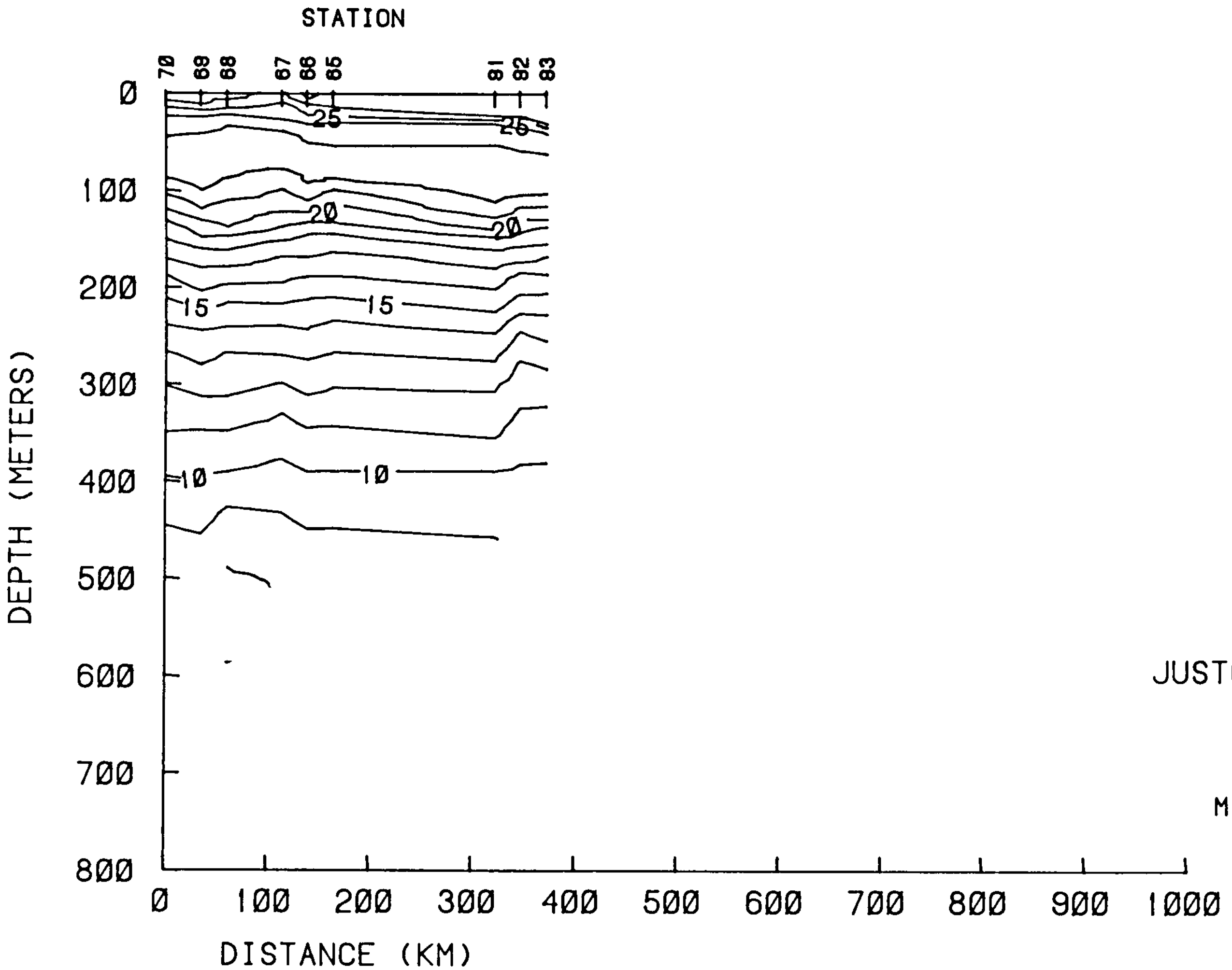
JUSTO SIERRA CRUISE 87-Ø1
5/12/87 TO 5/13/87
STATIONS 58 TO 64
TEMPERATURE DEG C
MIN = 8.71 MAX = 26.85



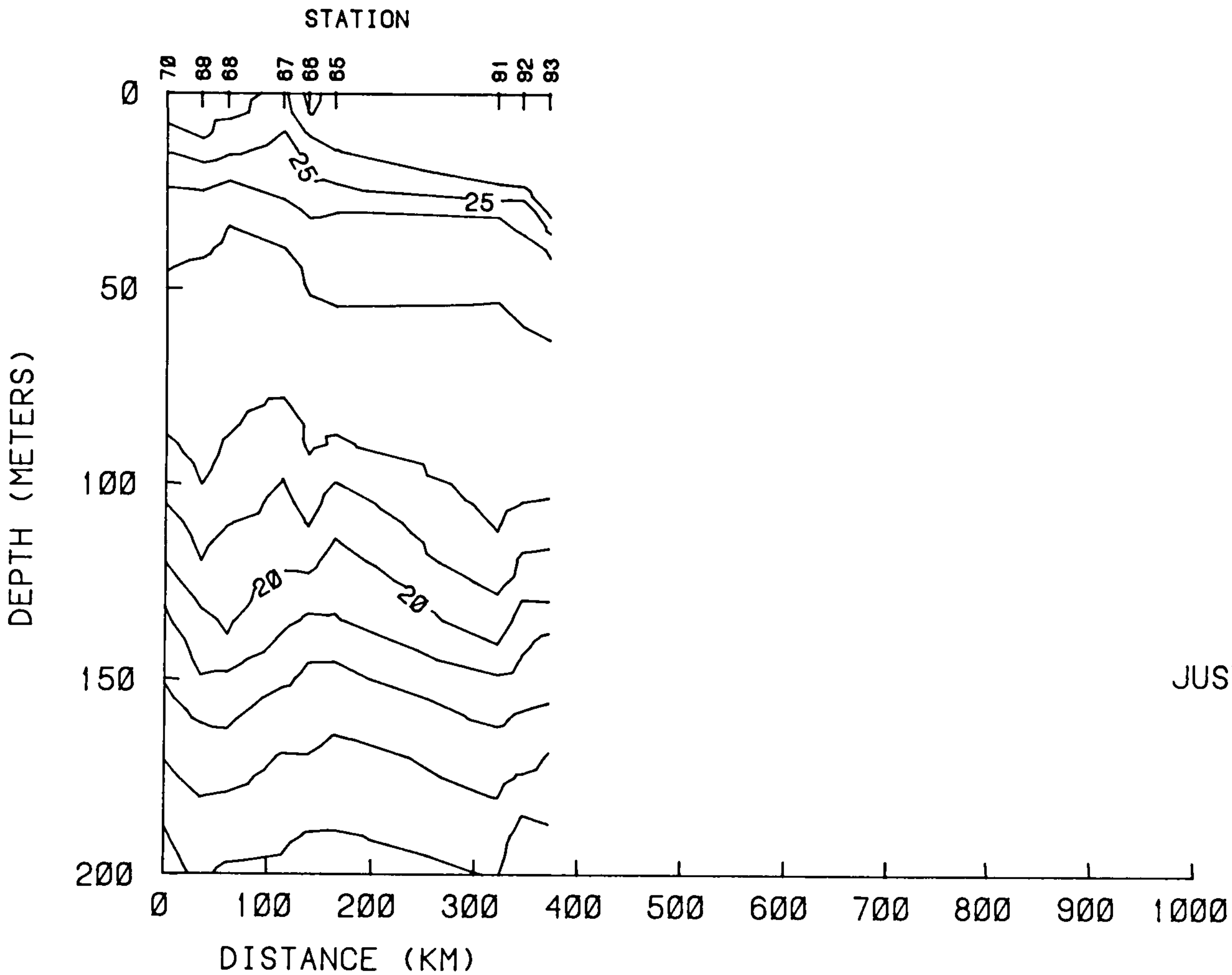
JUSTO SIERRA CRUISE 87-01
5/12/87 TO 5/13/87
STATIONS 59 TO 64
TEMPERATURE DEG C
MIN = 14.50 MAX = 26.85



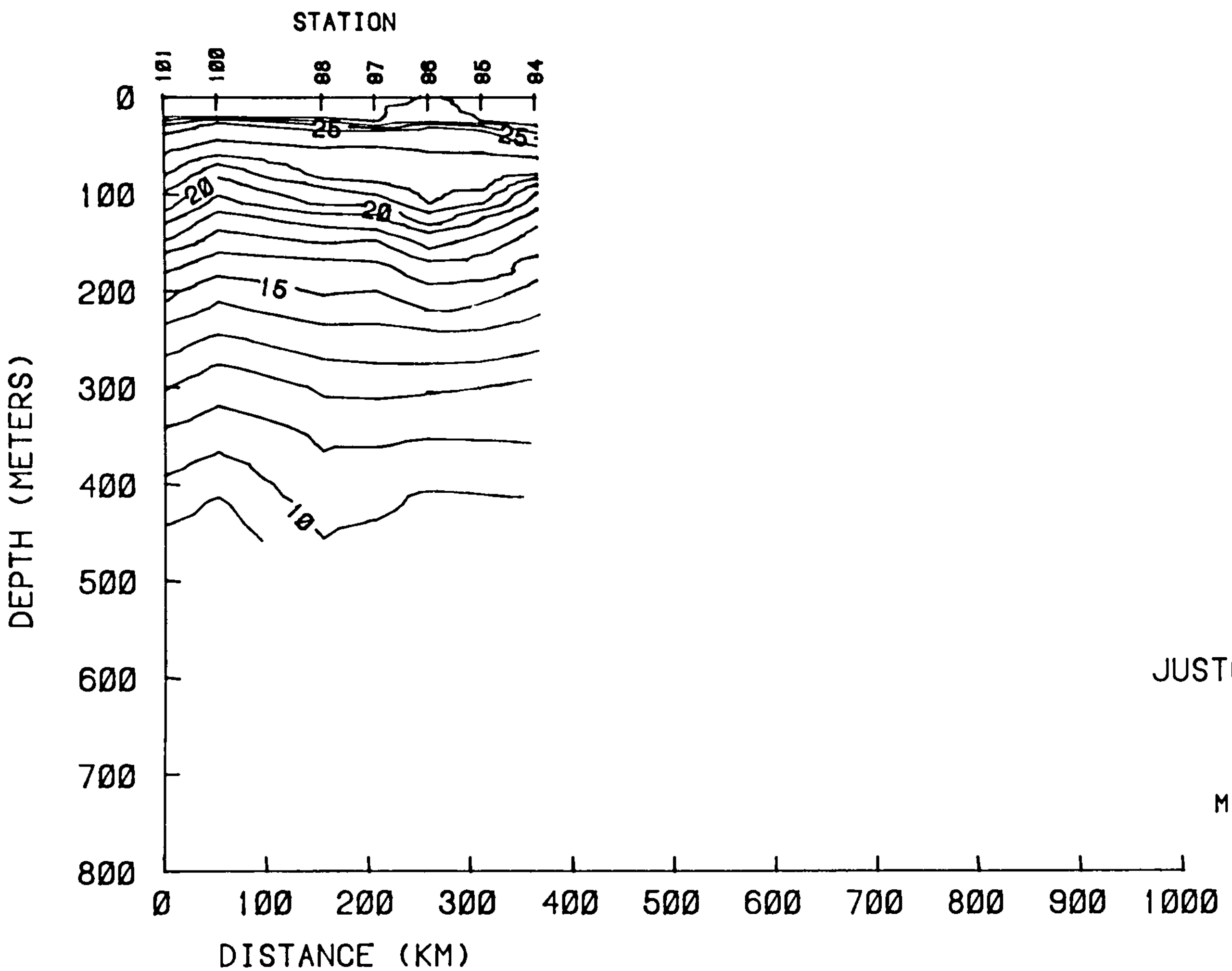
PARAMETERS AT SURFACE JUSTO SIERRA CRUISE 87-01



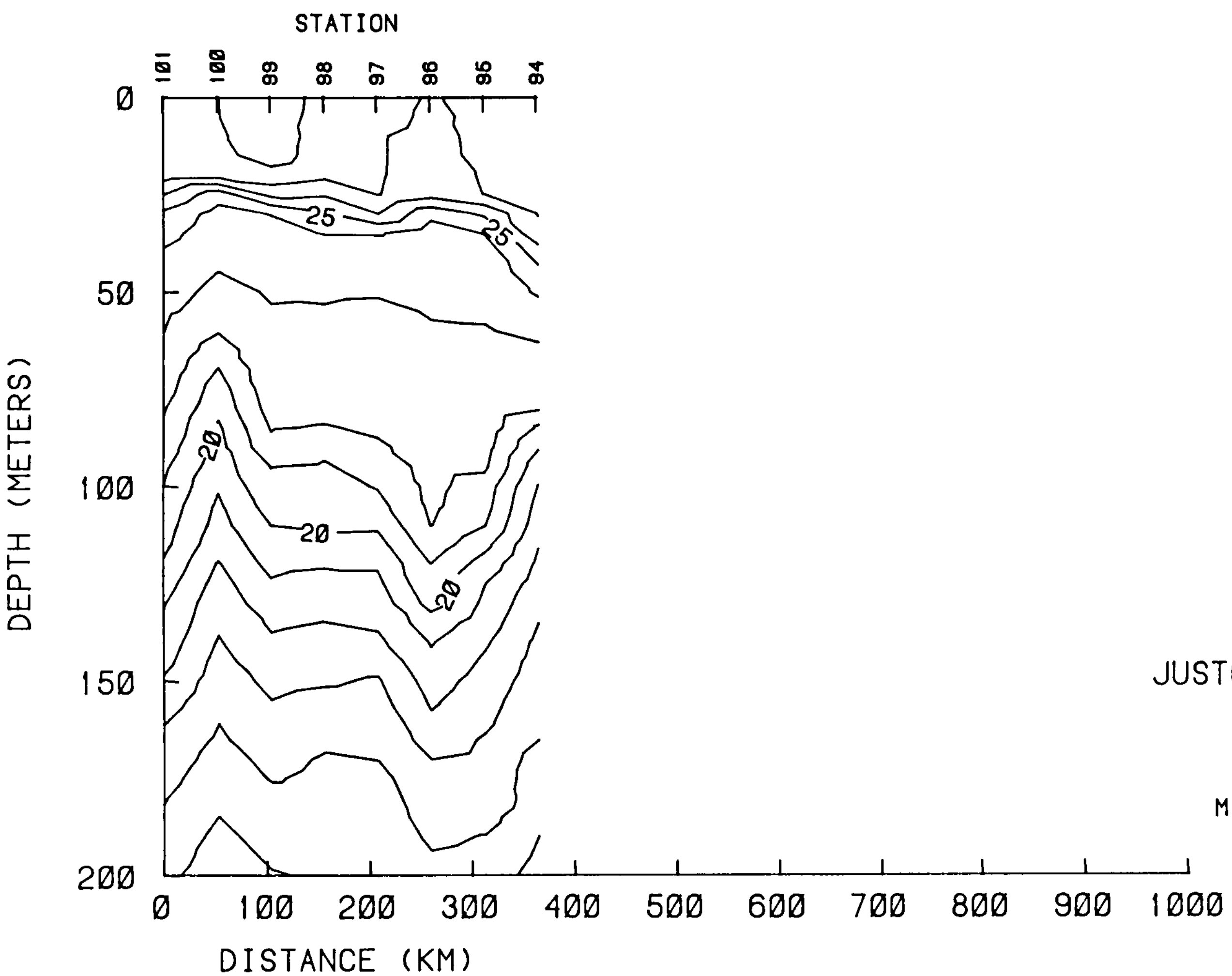
JUSTO SIERRA CRUISE 87-Ø1
5/13/87 TO 5/3Ø/87
STATIONS 7Ø TO 93
TEMPERATURE DEG C
MIN = 5.71 MAX = 27.38



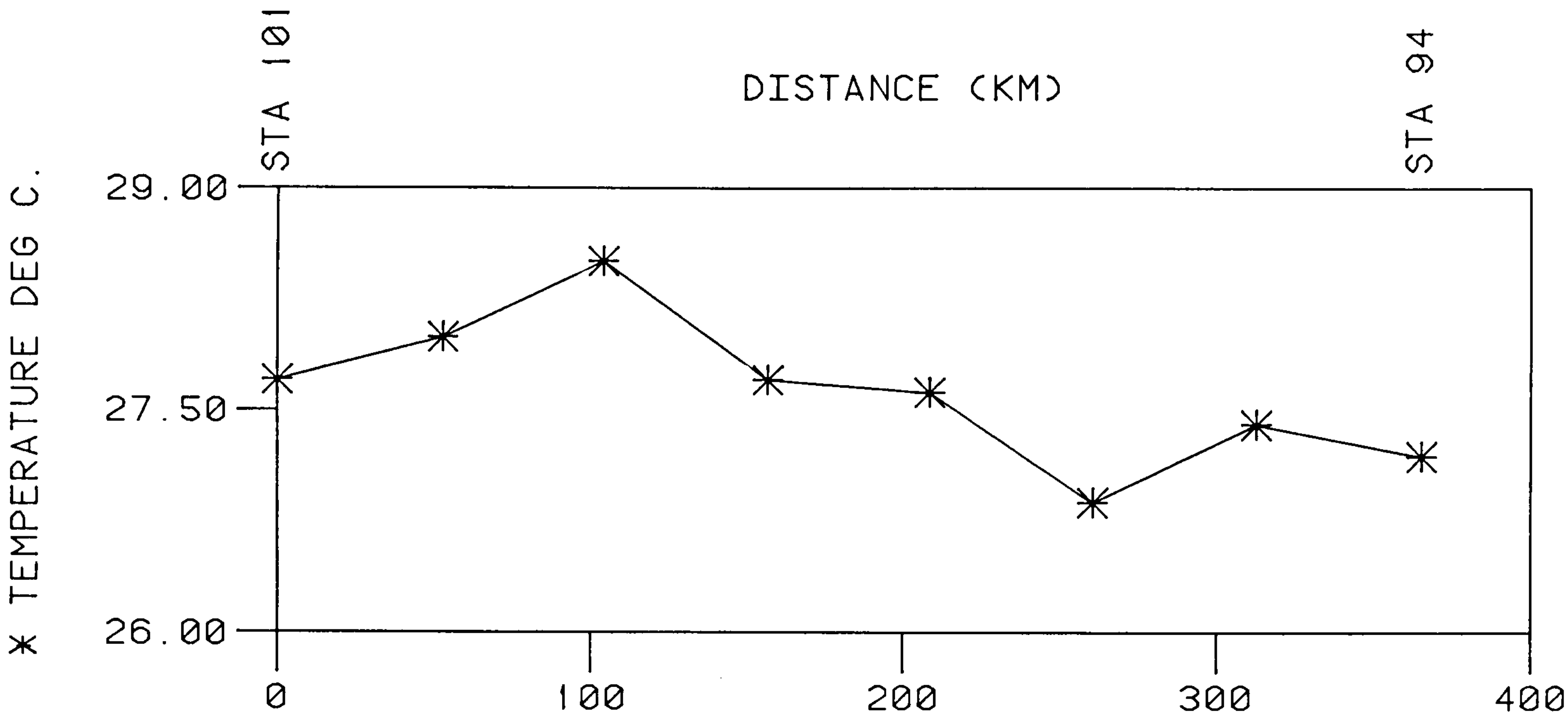
JUSTO SIERRA CRUISE 87-Ø1
5/13/87 TO 5/30/87
STATIONS 7Ø TO 93
TEMPERATURE DEG C
MIN = 15.27 MAX = 27.38



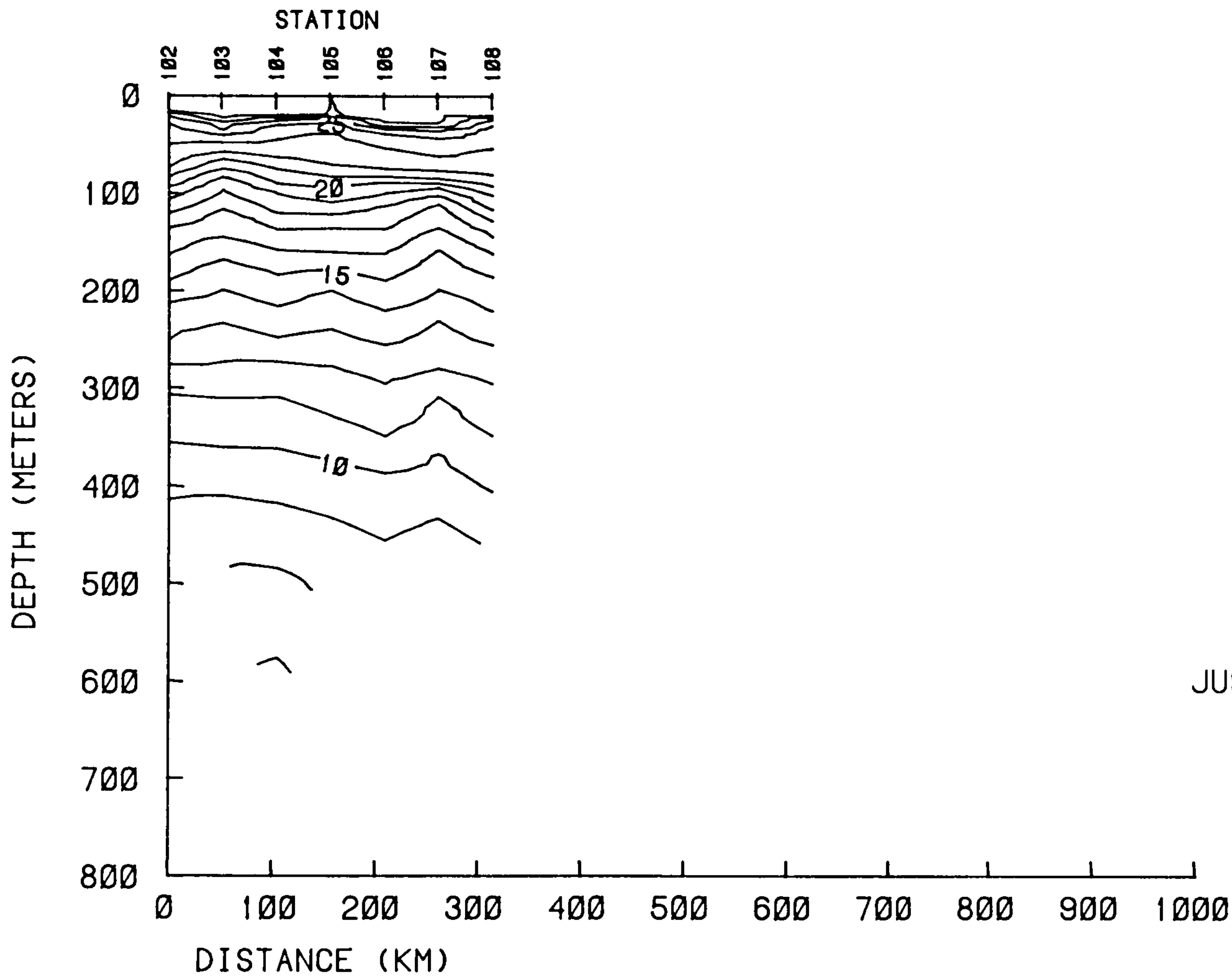
JUSTO SIERRA CRUISE 87-01
5/ 2/87 TO 6/ 3/87
STATIONS 94 TO 101
TEMPERATURE DEG C
MIN = 8.32 MAX = 27.99



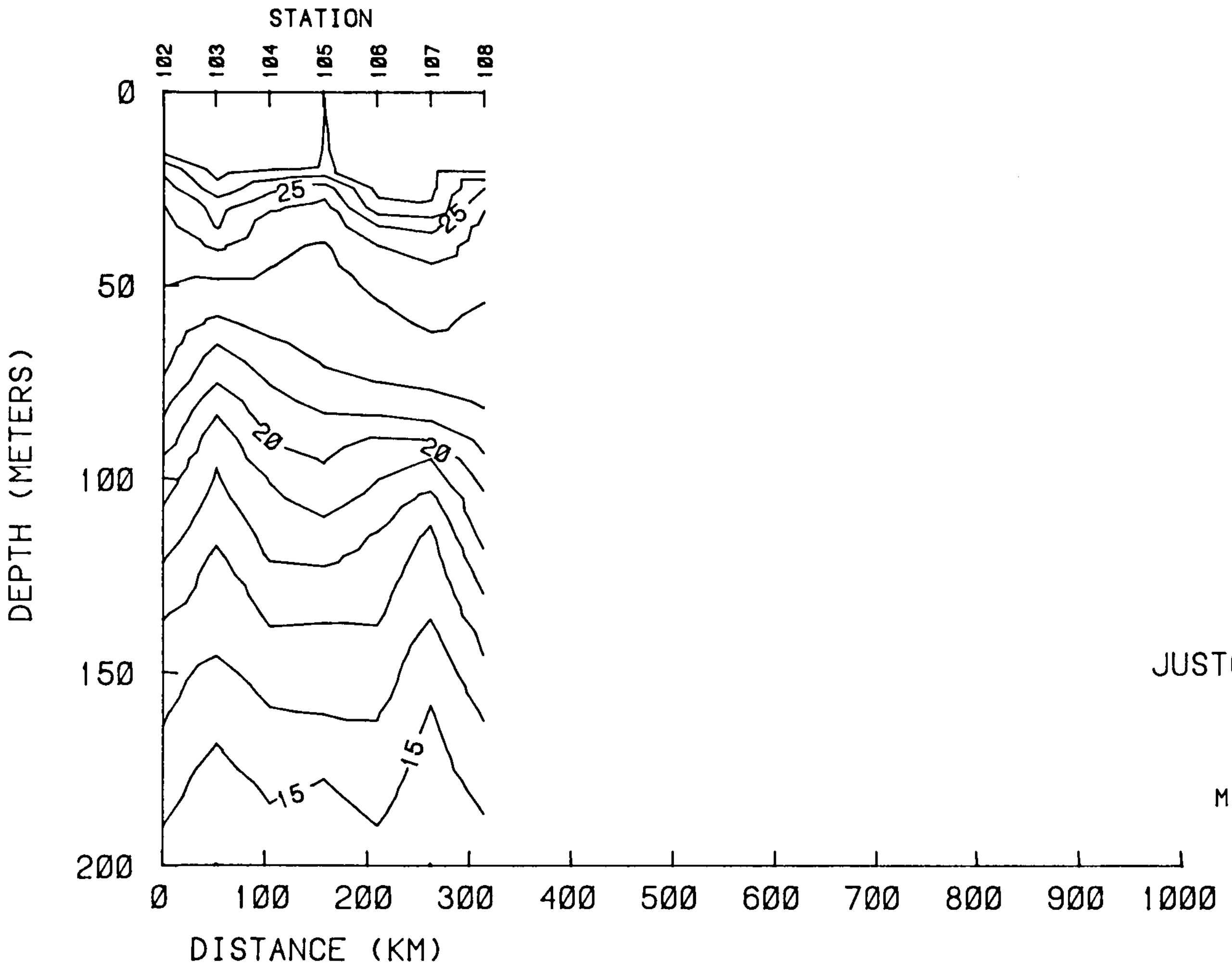
JUSTO SIERRA CRUISE 87-01
5/ 2/87 TO 6/ 3/87
STATIONS 94 TO 101
TEMPERATURE DEG C
MIN = 14.31 MAX = 28.51



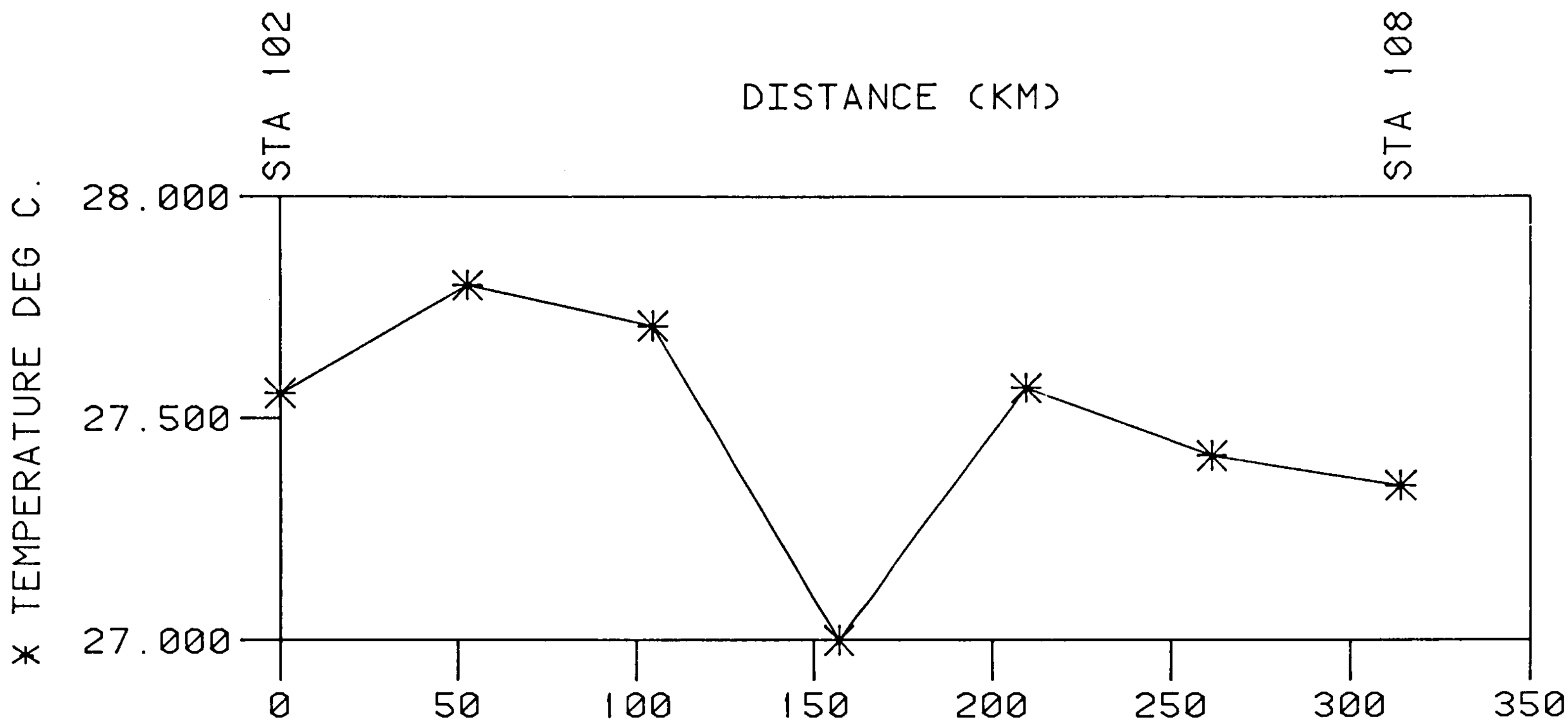
PARAMETERS AT SURFACE JUSTO SIERRA CRUISE 87-01



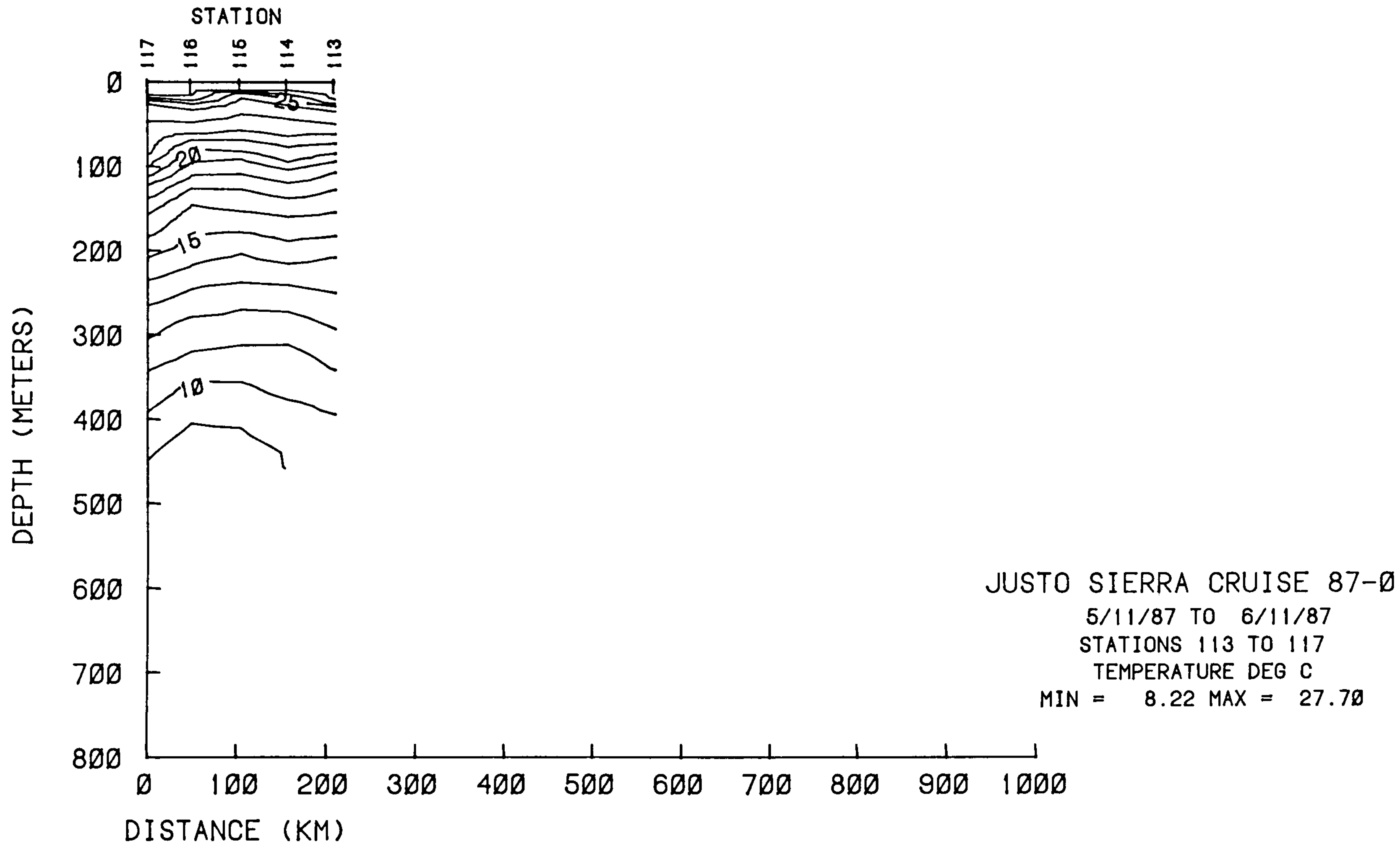
JUSTO SIERRA CRUISE 87-01
6/ 5/87 TO 6/ 6/87
STATIONS 102 TO 108
TEMPERATURE DEG C
MIN = 5.63 MAX = 27.80



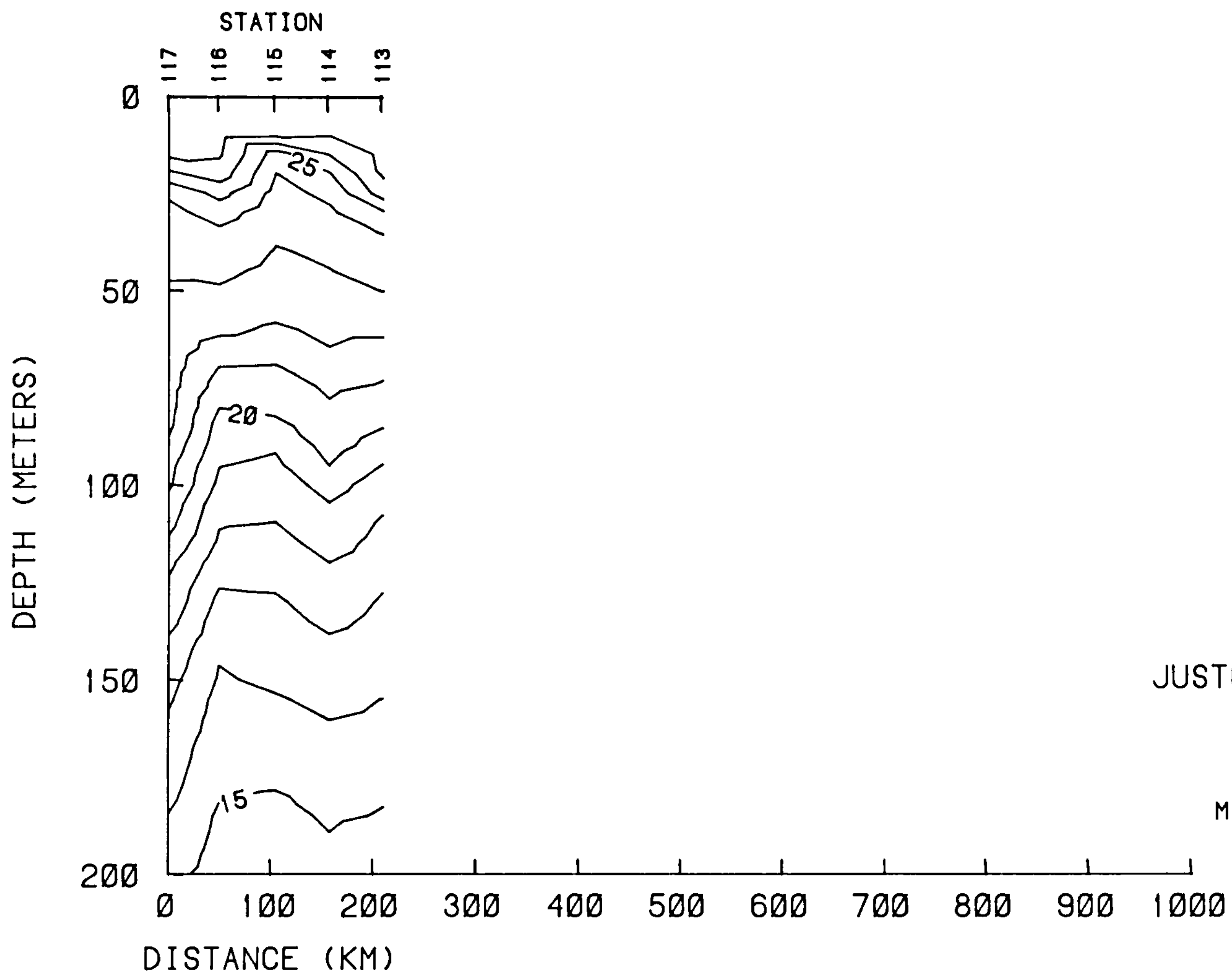
JUSTO SIERRA CRUISE 87-Ø1
6/ 5/87 TO 6/ 6/87
STATIONS 1Ø2 TO 1Ø8
TEMPERATURE DEG C
MIN = 13.98 MAX = 27.8Ø



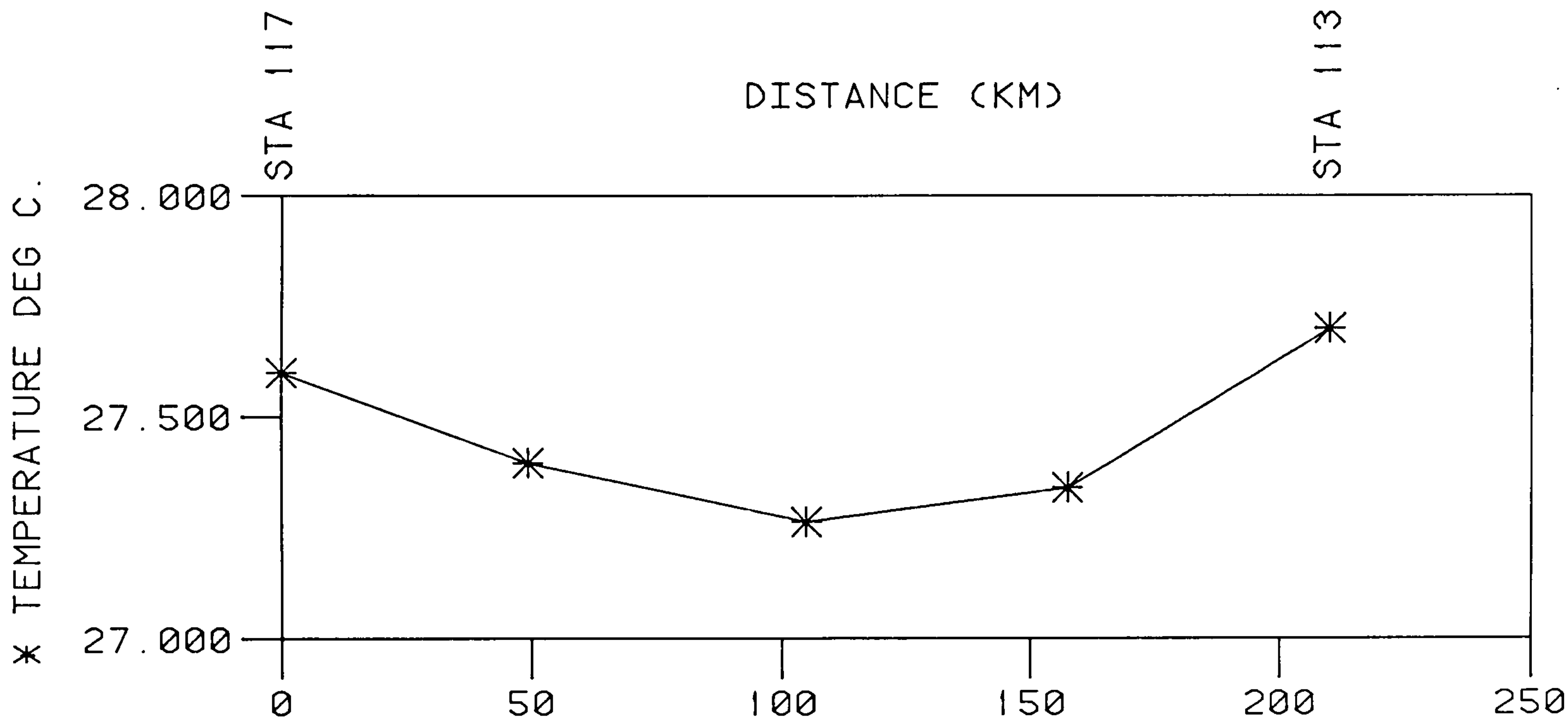
PARAMETERS AT SURFACE JUSTO SIERRA CRUISE 87-01



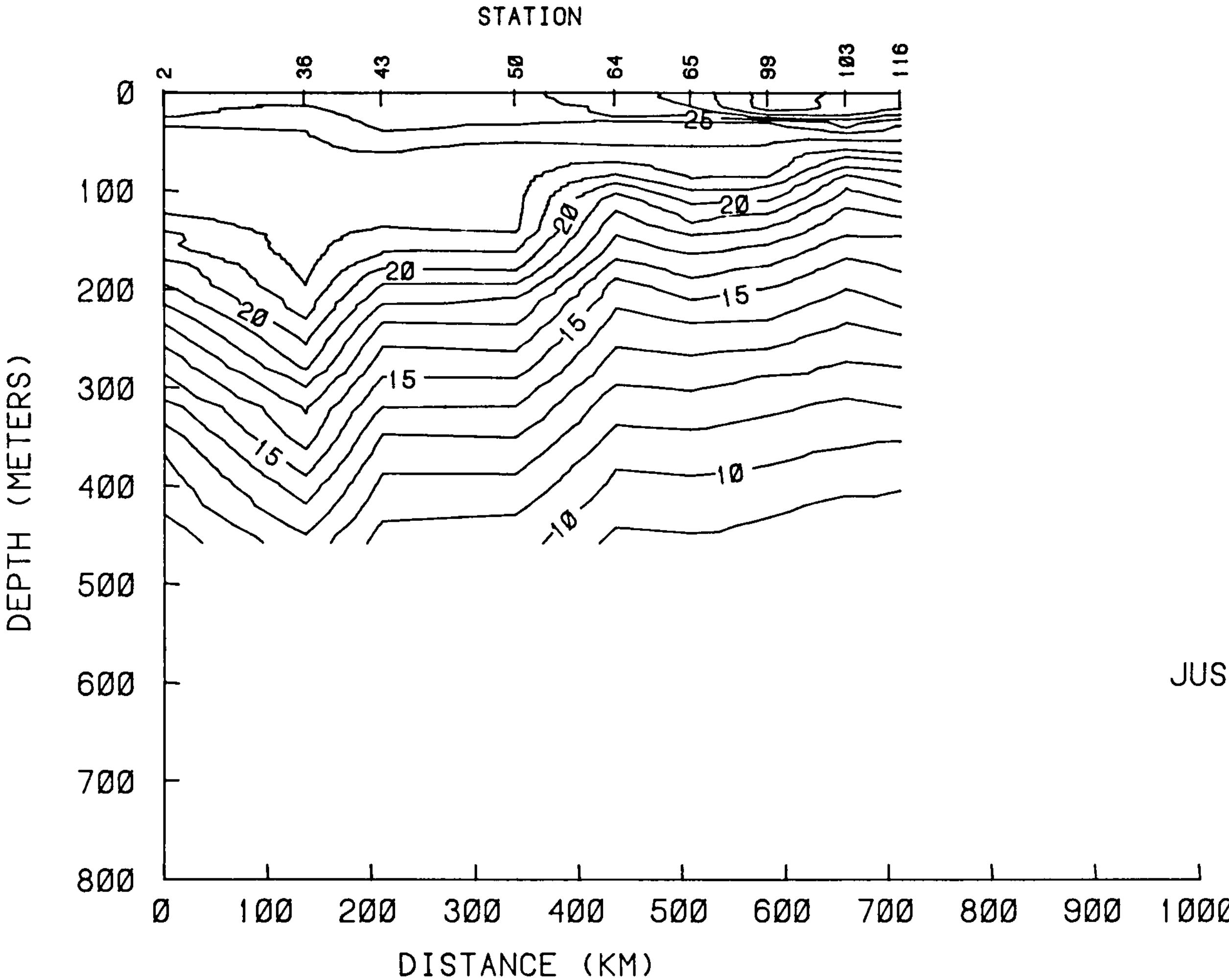
STATION
117
116
115
114
113
25
20
15
10
DEPTH (METERS)
0
100
200
300
400
500
600
700
800
DISTANCE (KM)
0
100
200
300
400
500
600
700
800
900
1000
JUSTO SIERRA CRUISE 87-01
5/11/87 TO 6/11/87
STATIONS 113 TO 117
TEMPERATURE DEG C
MIN = 8.22 MAX = 27.70



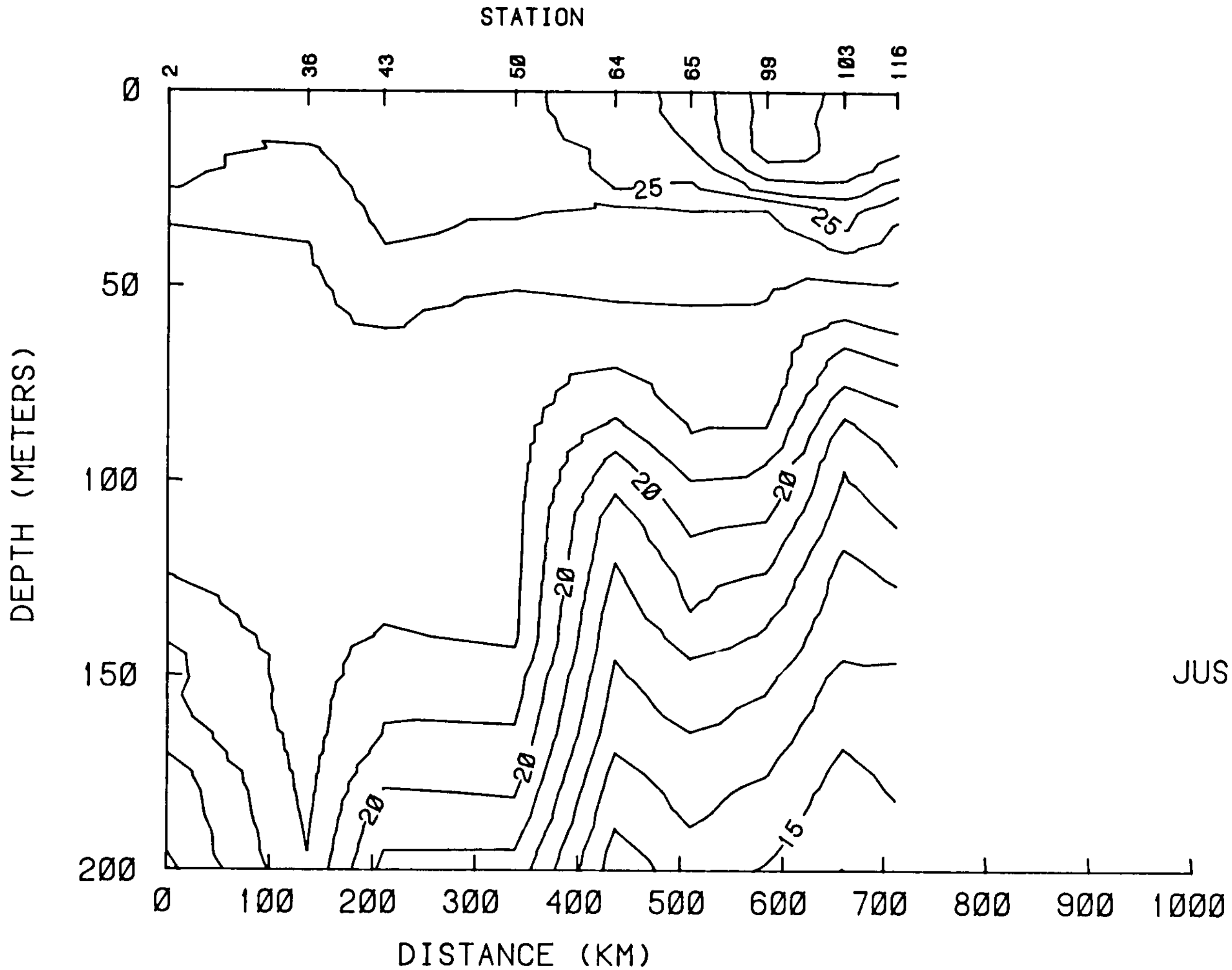
JUSTO SIERRA CRUISE 87-01
5/11/87 TO 6/11/87
STATIONS 113 TO 117
TEMPERATURE DEG C
MIN = 14.10 MAX = 27.70



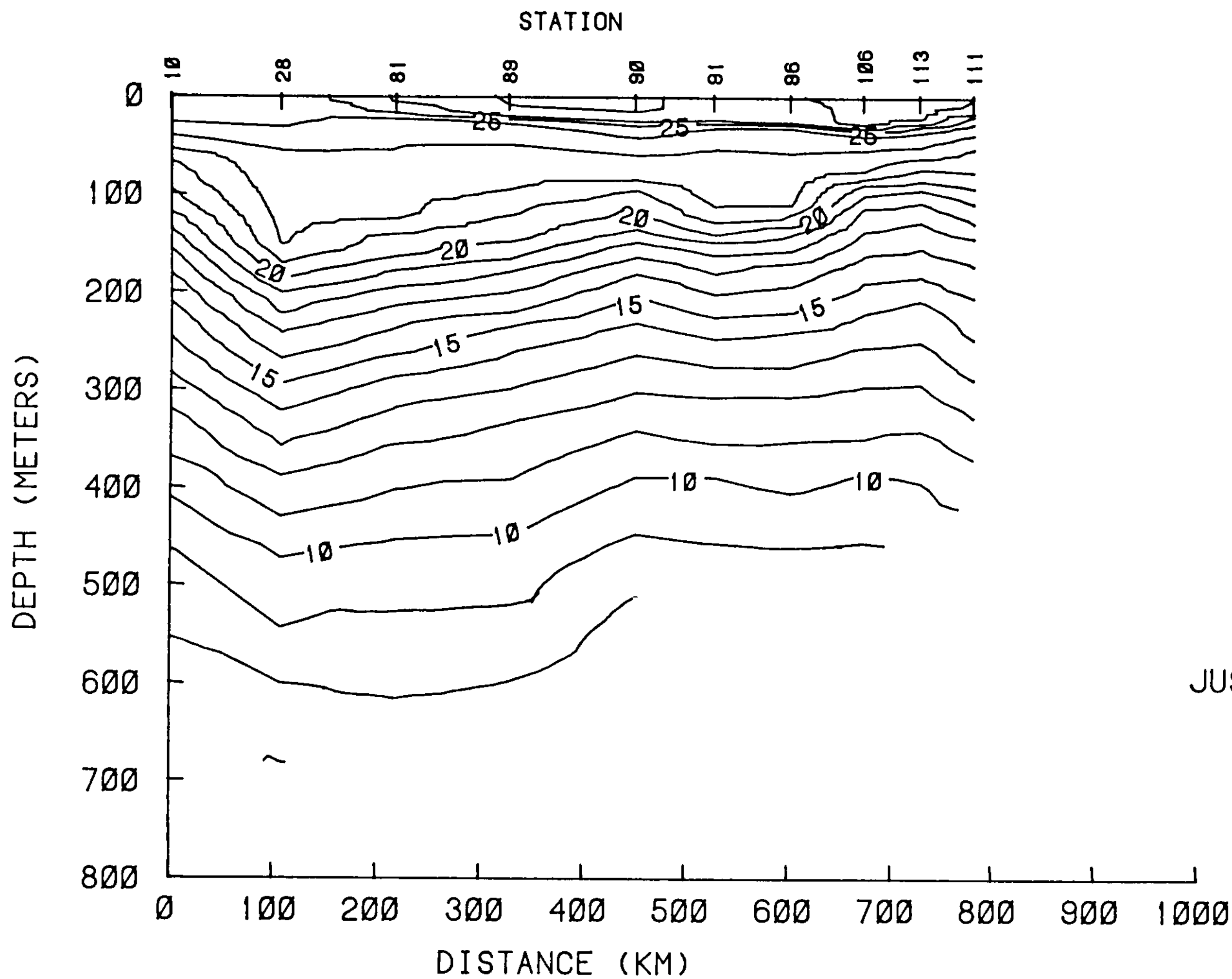
PARAMETERS AT SURFACE JUSTO SIERRA CRUISE 87-01



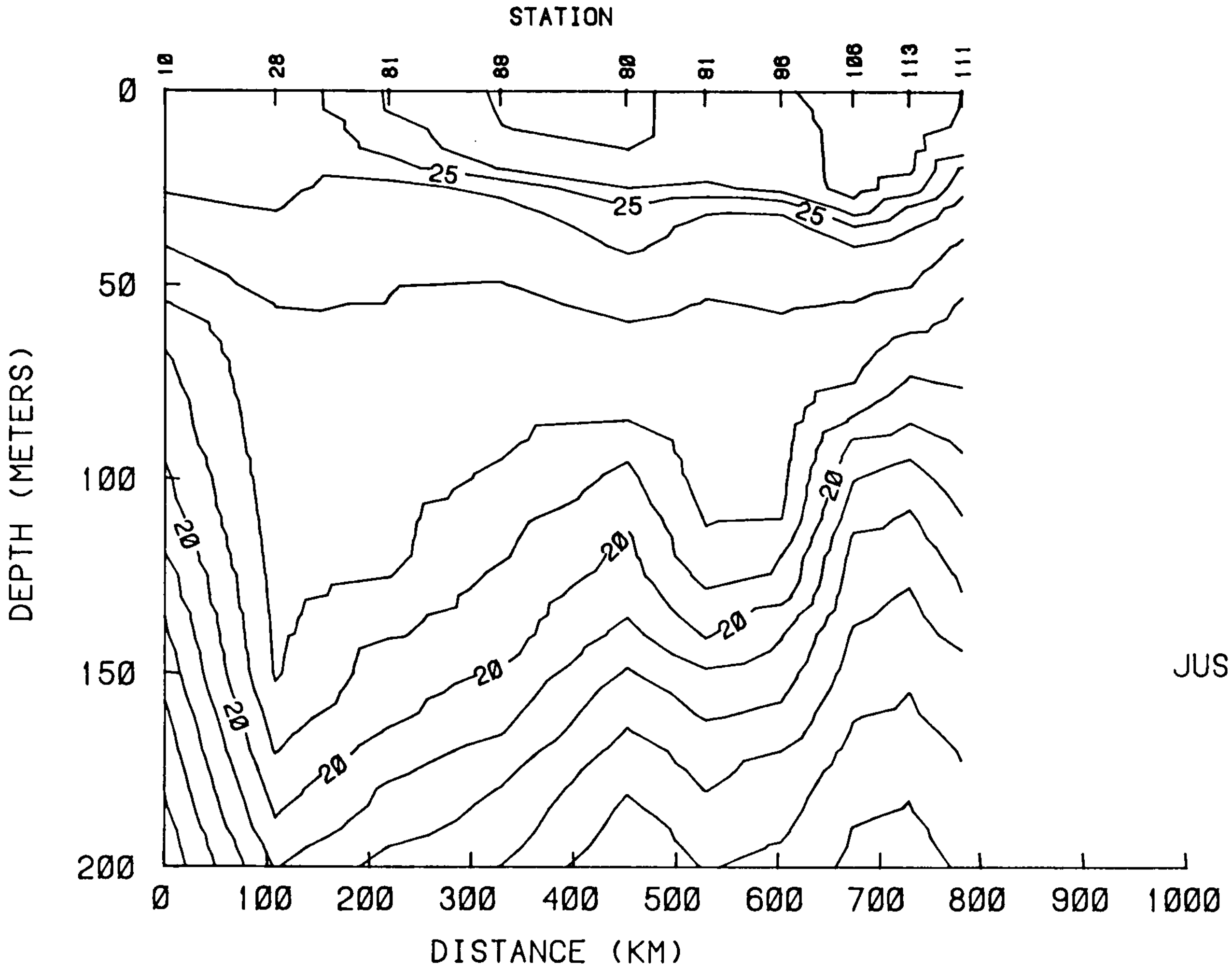
JUSTO SIERRA CRUISE 87-01
5/ 4/87 TO 6/11/87
STATIONS 2 TO 116
TEMPERATURE DEG C
MIN = 8.22 MAX = 28.51



JUSTO SIERRA CRUISE 87-01
5/ 4/87 TO 6/11/87
STATIONS 2 TO 116
TEMPERATURE DEG C
MIN = 13.98 MAX = 28.51



JUSTO SIERRA CRUISE 87-01
5/ 5/87 TO 6/10/87
STATIONS 10 TO 111
TEMPERATURE DEG C
MIN = 5.71 MAX = 27.70



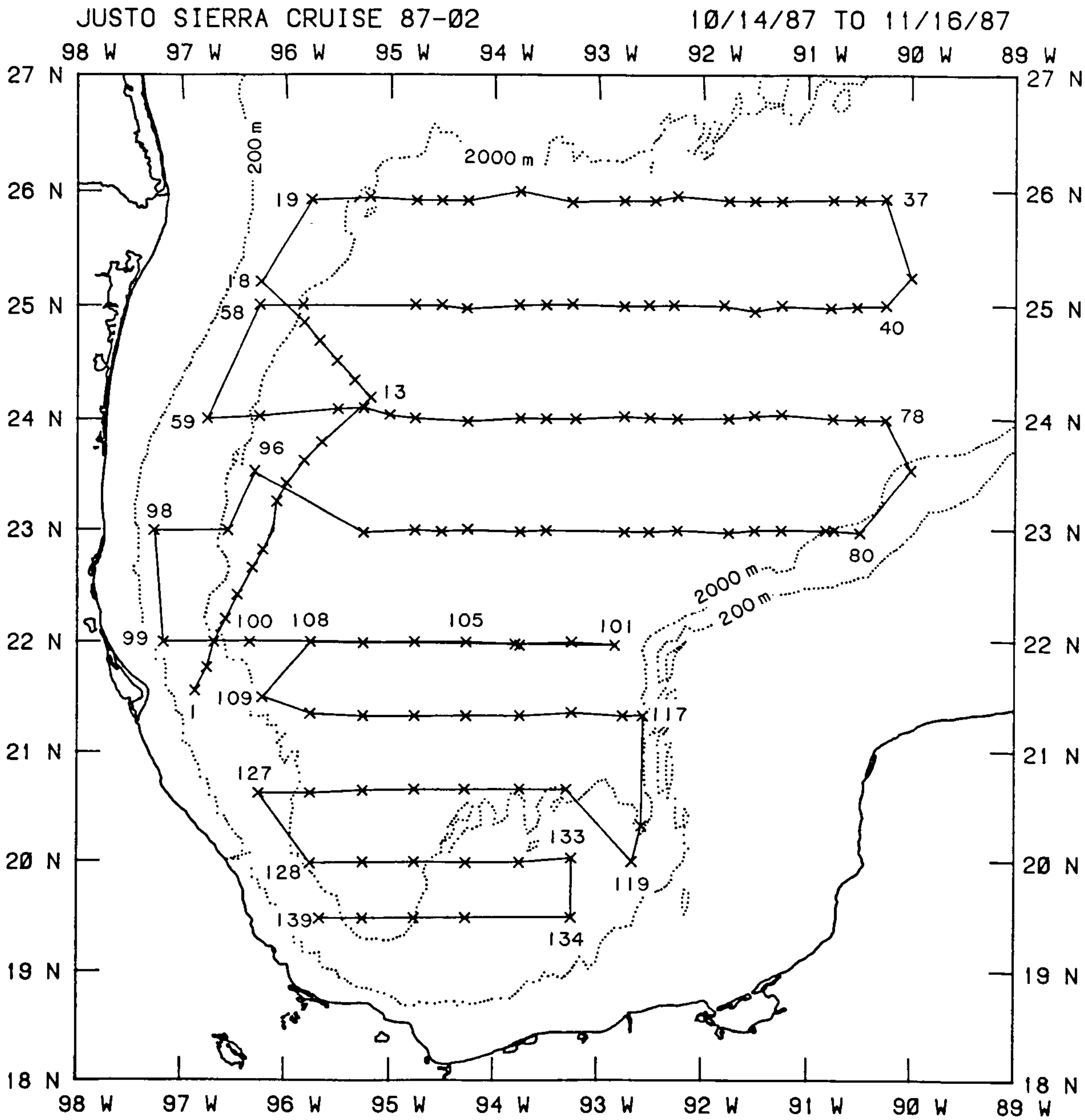
JUSTO SIERRA CRUISE 87-01

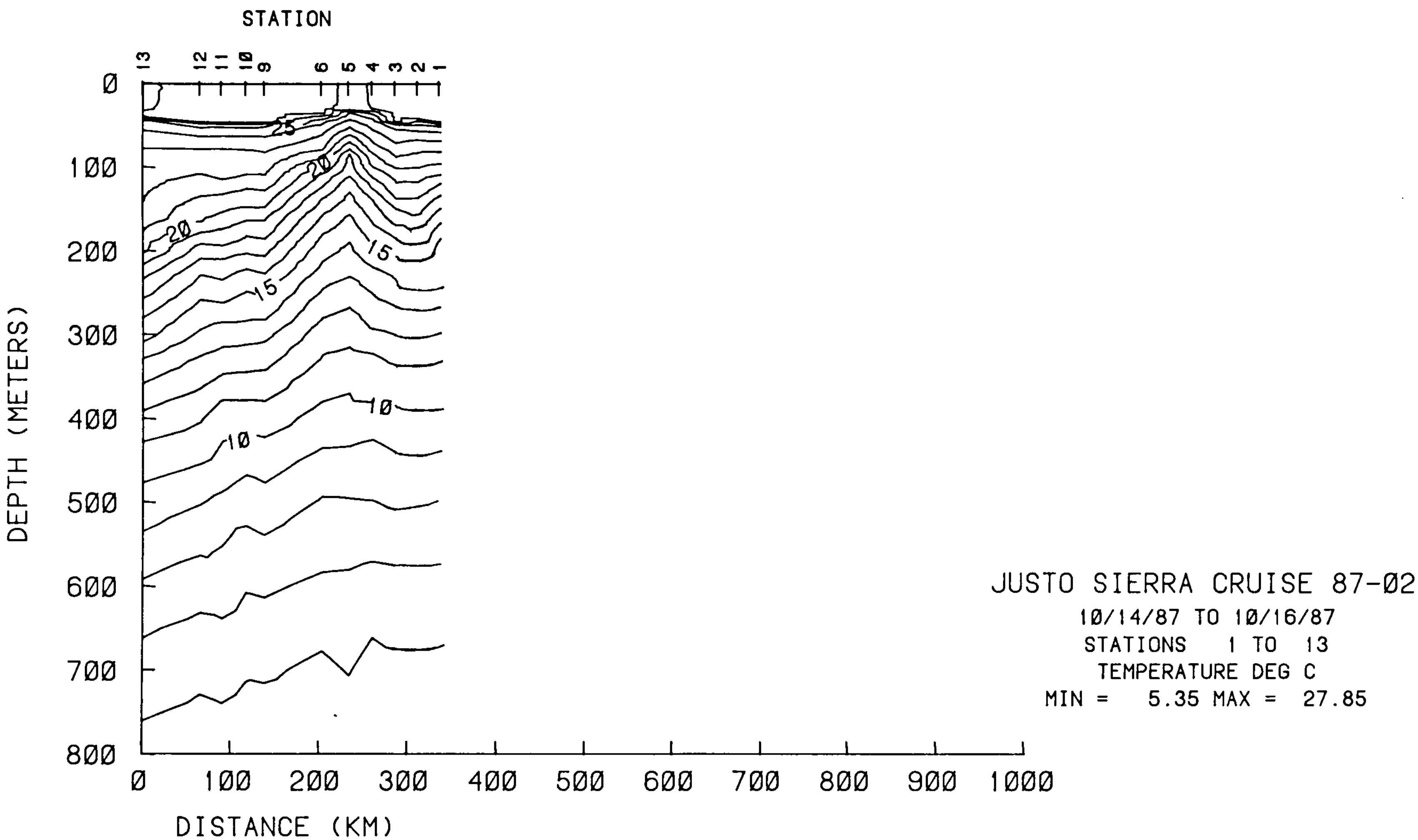
5/ 5/87 TO 6/10/87

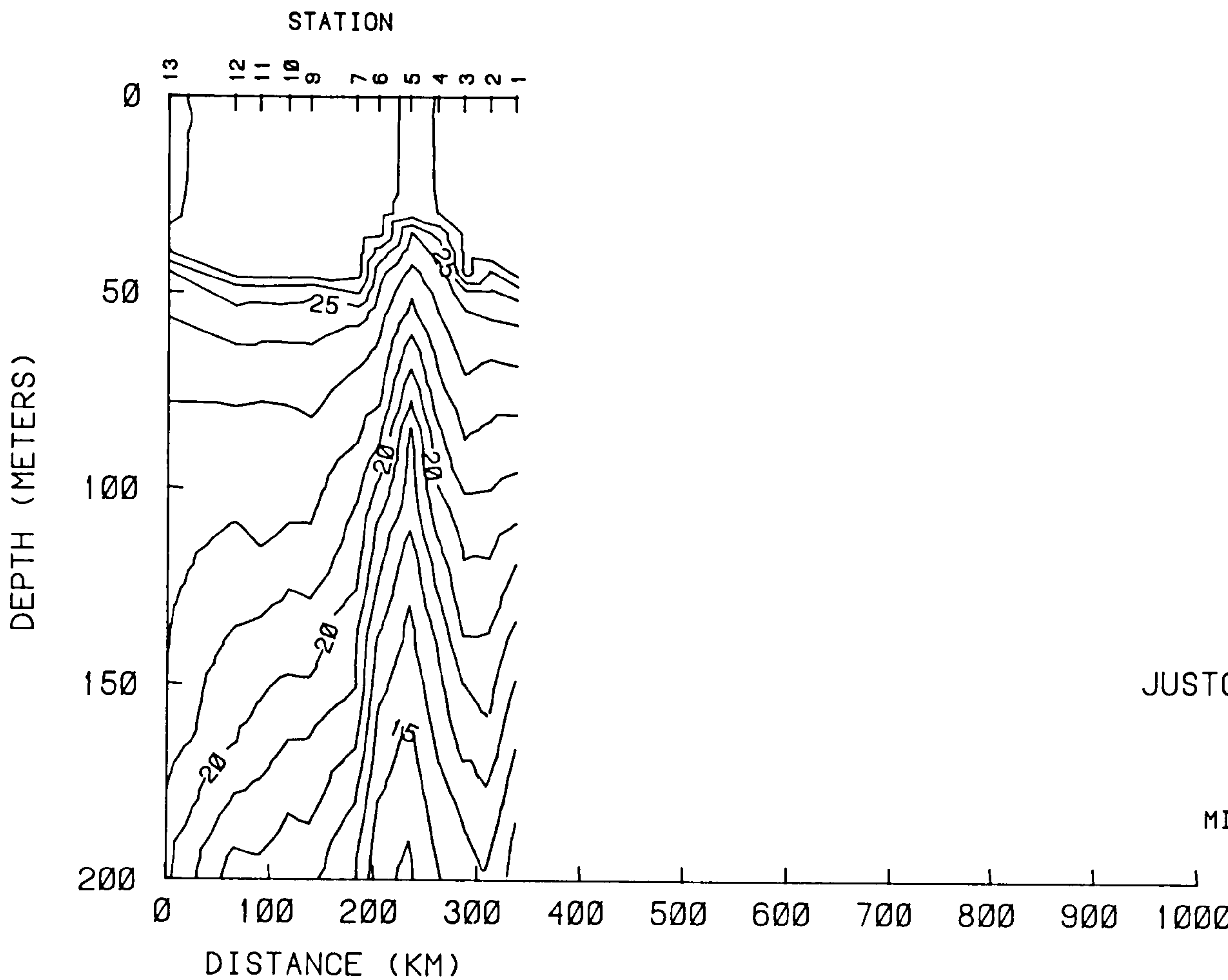
STATIONS 10 TO 111

TEMPERATURE DEG C

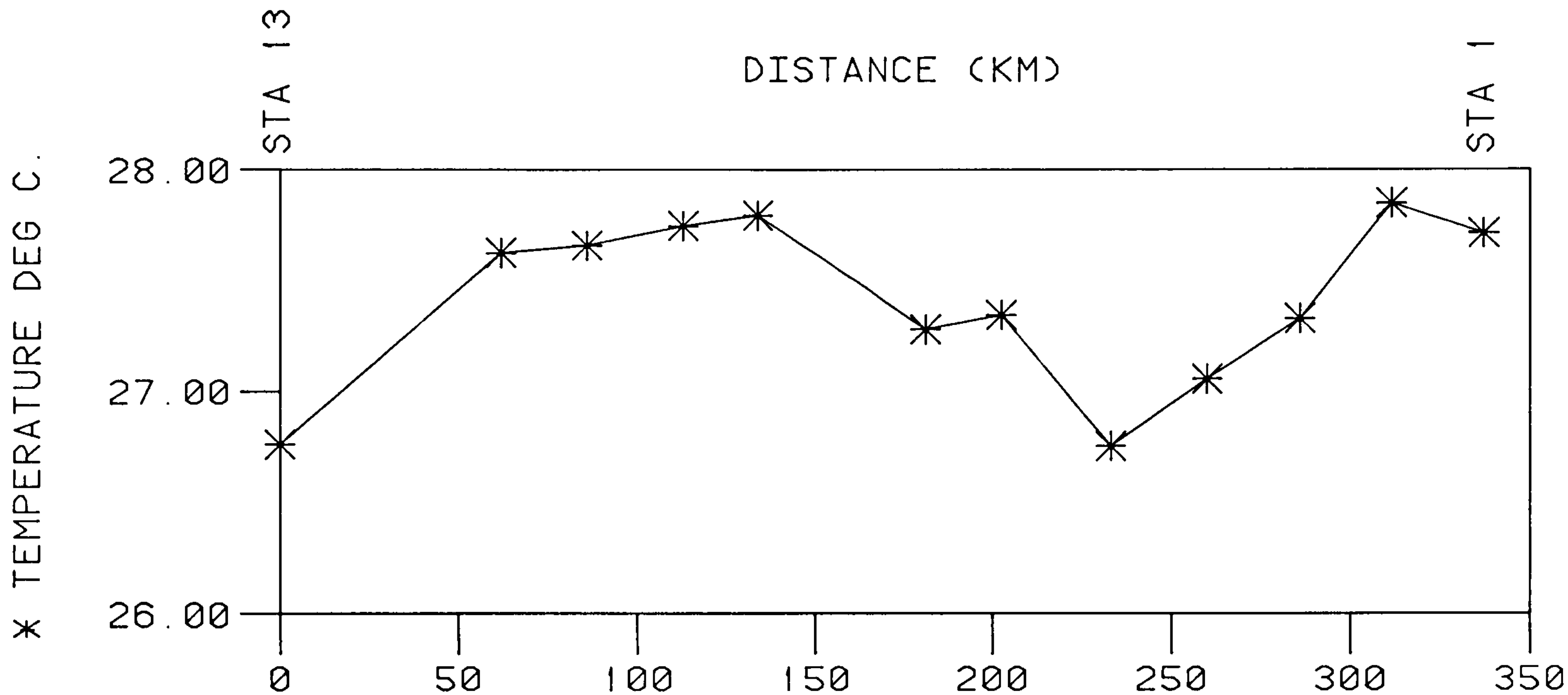
MIN = 14.41 MAX = 27.70


JUSTO SIERRA CRUISE 87-Ø2
1Ø/14/87 TO 11/16/87
98 W
97 W
96 W
95 W
94 W
93 W
92 W
91 W
9Ø W
89 W
27 N
26 N
25 N
24 N
23 N
22 N
21 N
2Ø N
19 N
18 N
200 m
2000 m
19
37
18
58
40
13
59
78
96
98
80
99
100
108
105
101
109
117
1
127
133
128
119
139
134

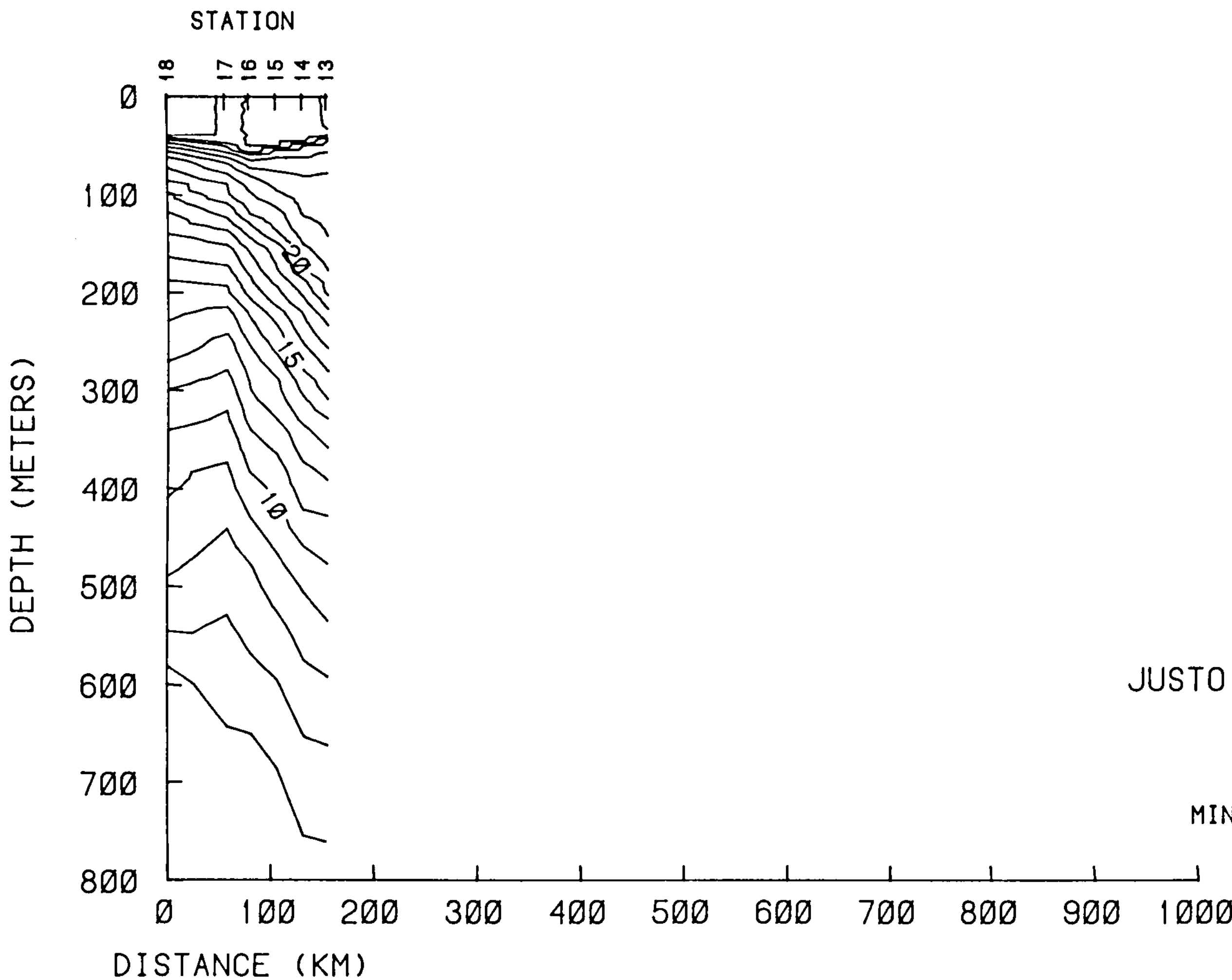

STATION
13 12 11 10 9 6 5 4 3 2 1
DEPTH (METERS)
0 100 200 300 400 500 600 700 800
25
20
20
15
15
10
10
0 100 200 300 400 500 600 700 800 900 1000
DISTANCE (KM)
JUSTO SIERRA CRUISE 87-02
10/14/87 TO 10/16/87
STATIONS 1 TO 13
TEMPERATURE DEG C
MIN = 5.35 MAX = 27.85



JUSTO SIERRA CRUISE 87-02
10/14/87 TO 10/16/87
STATIONS 1 TO 13
TEMPERATURE DEG C
MIN = 13.81 MAX = 27.85



PARAMETERS AT SURFACE JUSTO SIERRA CRUISE 87-02



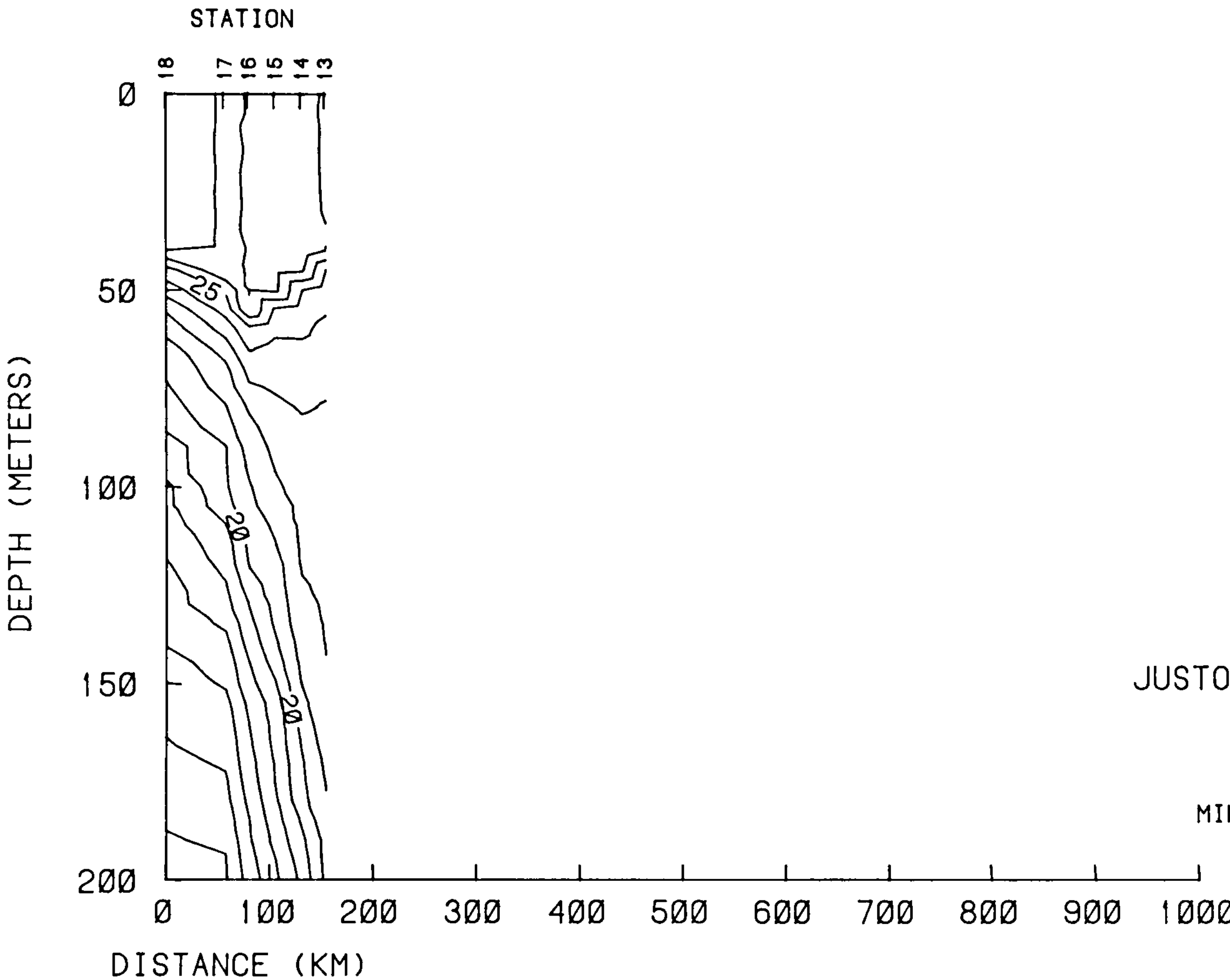
JUSTO SIERRA CRUISE 87-02

10/16/87 TO 10/16/87

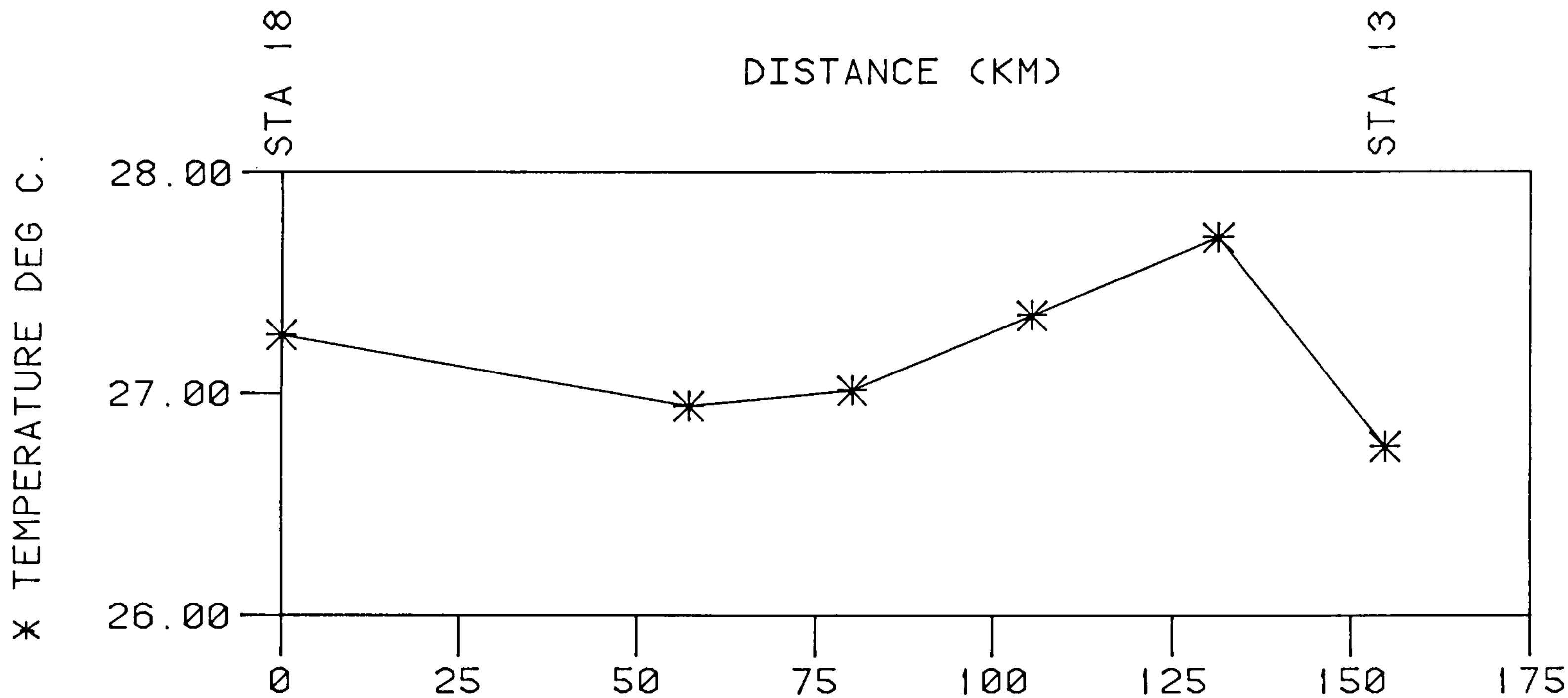
STATIONS 13 TO 18

TEMPERATURE DEG C

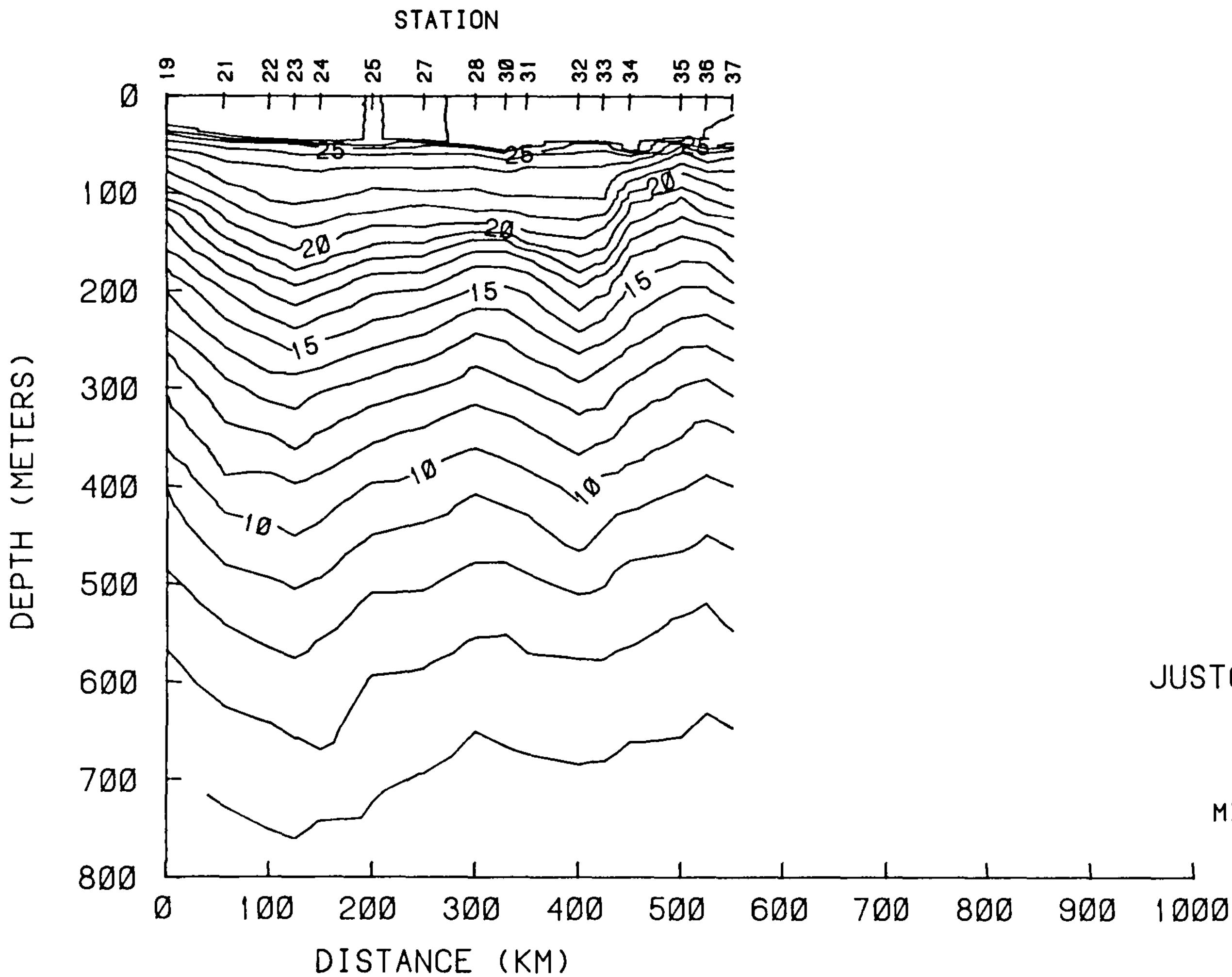
MIN = 5.06 MAX = 27.71



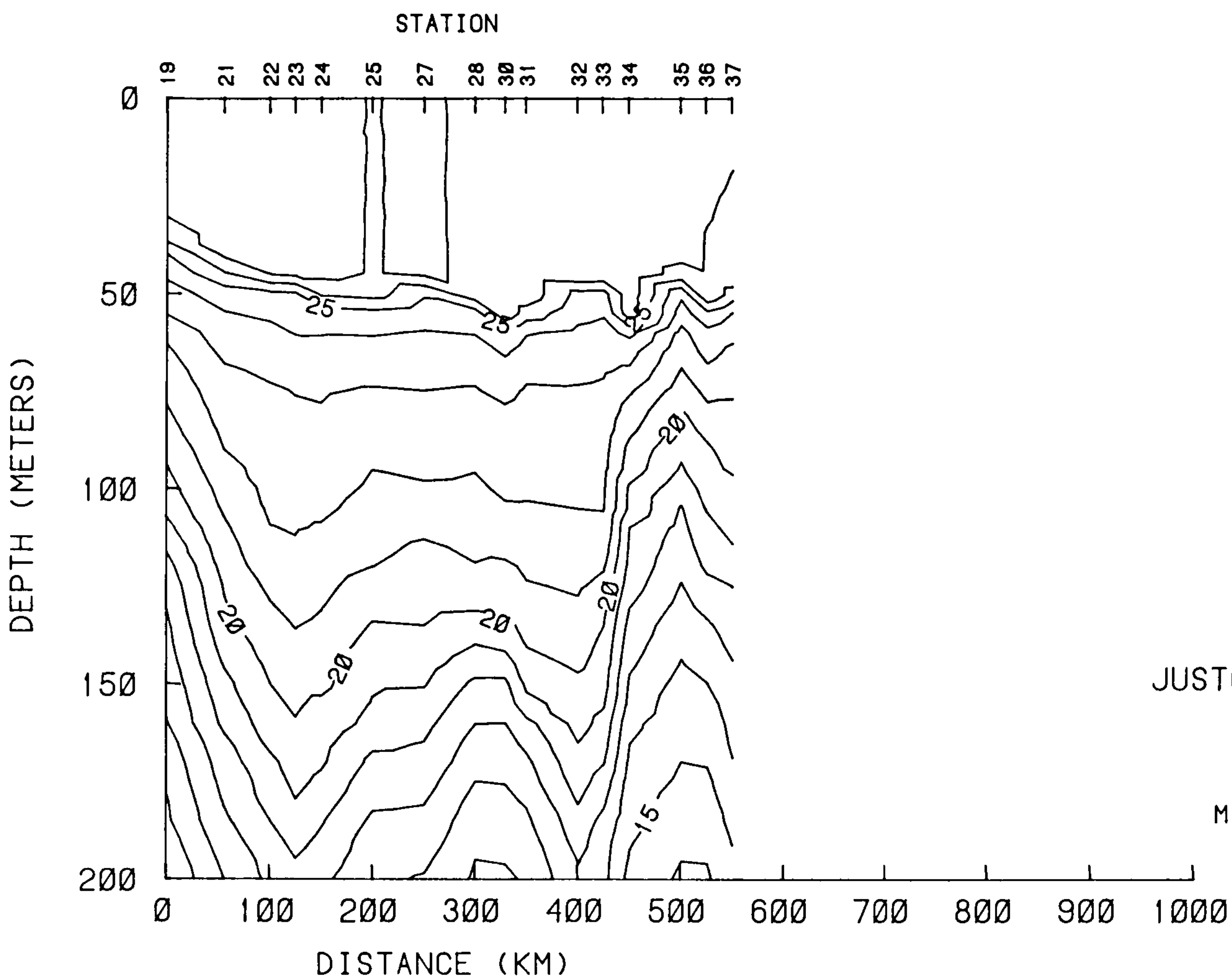
JUSTO SIERRA CRUISE 87-Ø2
1Ø/16/87 TO 1Ø/16/87
STATIONS 13 TO 18
TEMPERATURE DEG C
MIN = 13.68 MAX = 27.71



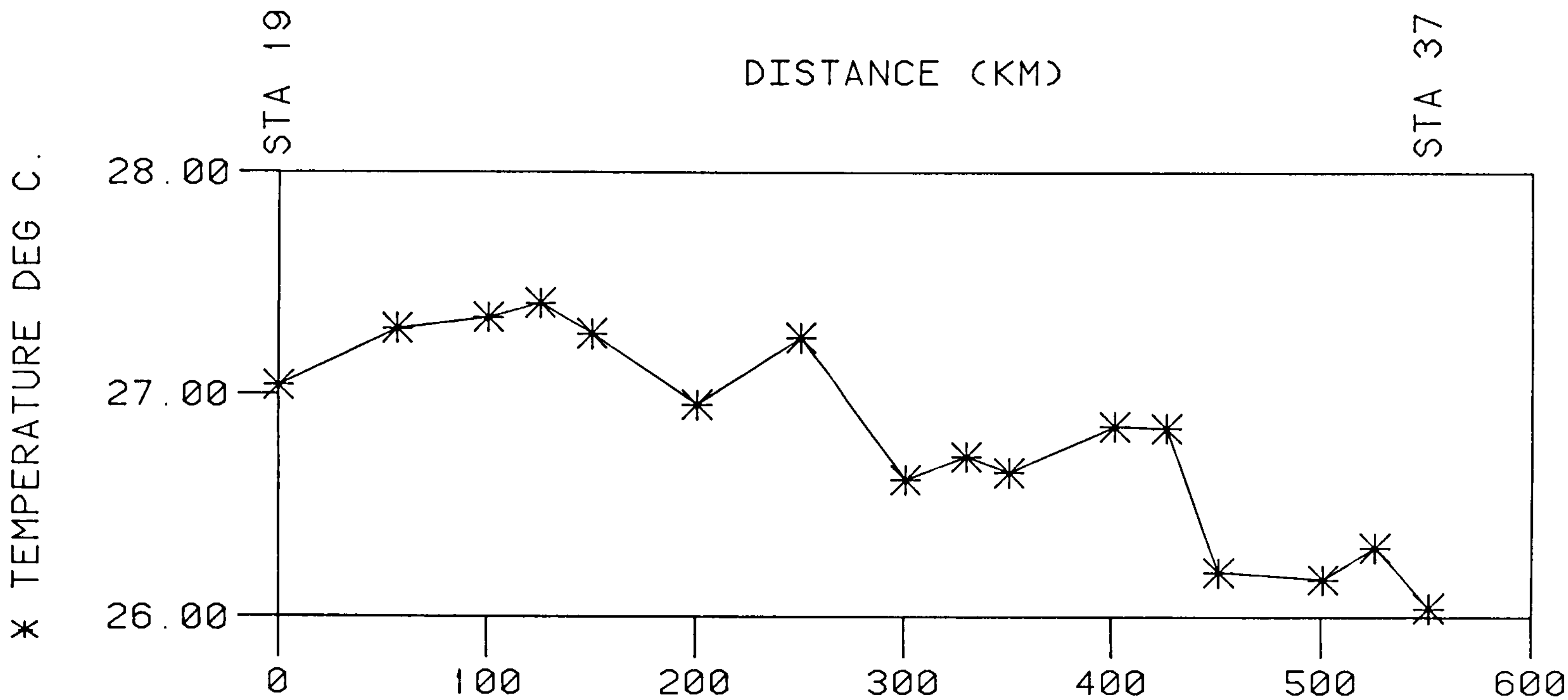
PARAMETERS AT SURFACE JUSTO SIERRA CRUISE 87-02



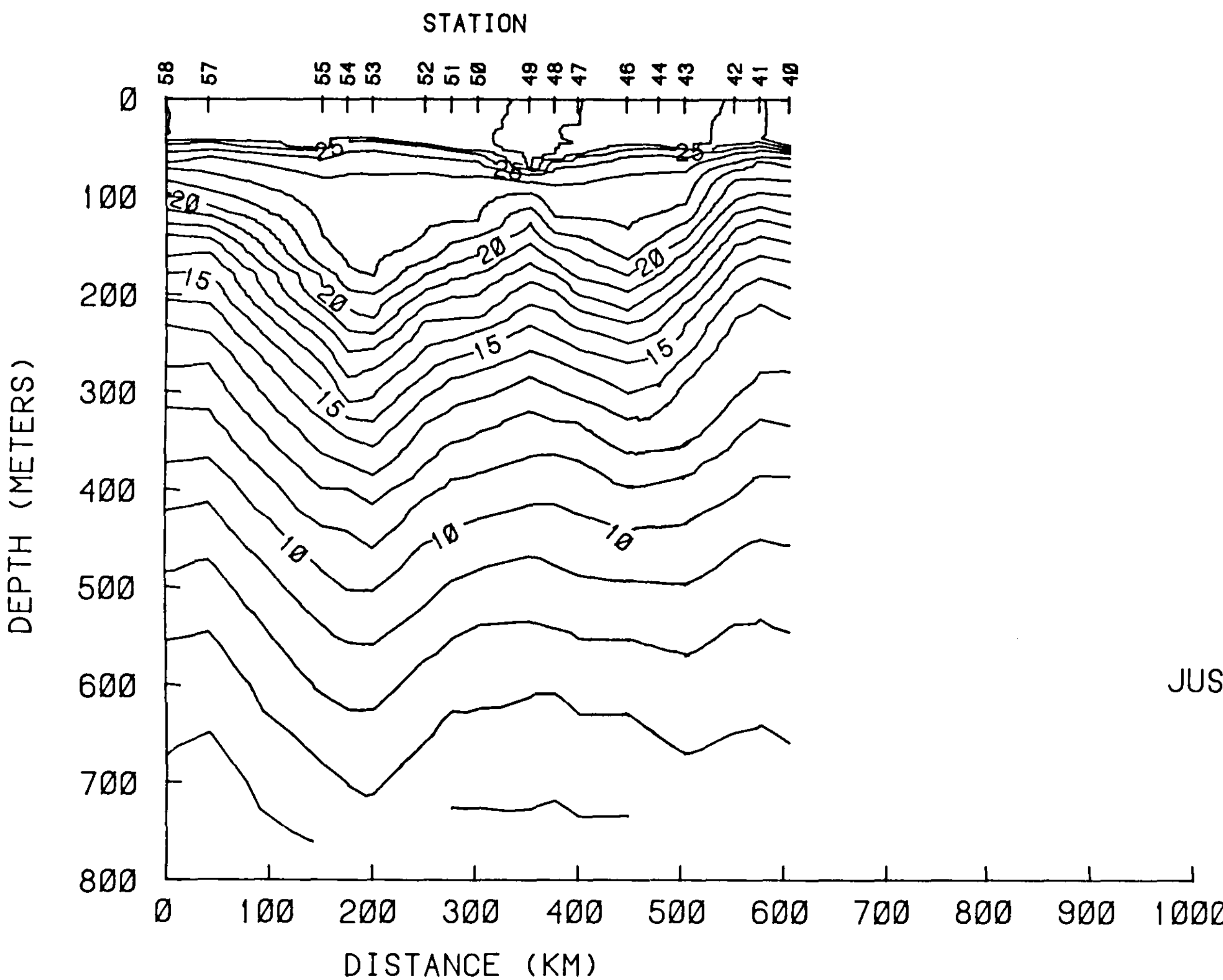
JUSTO SIERRA CRUISE 87-02
10/17/87 TO 10/18/87
STATIONS 19 TO 37
TEMPERATURE DEG C
MIN = 5.18 MAX = 27.42



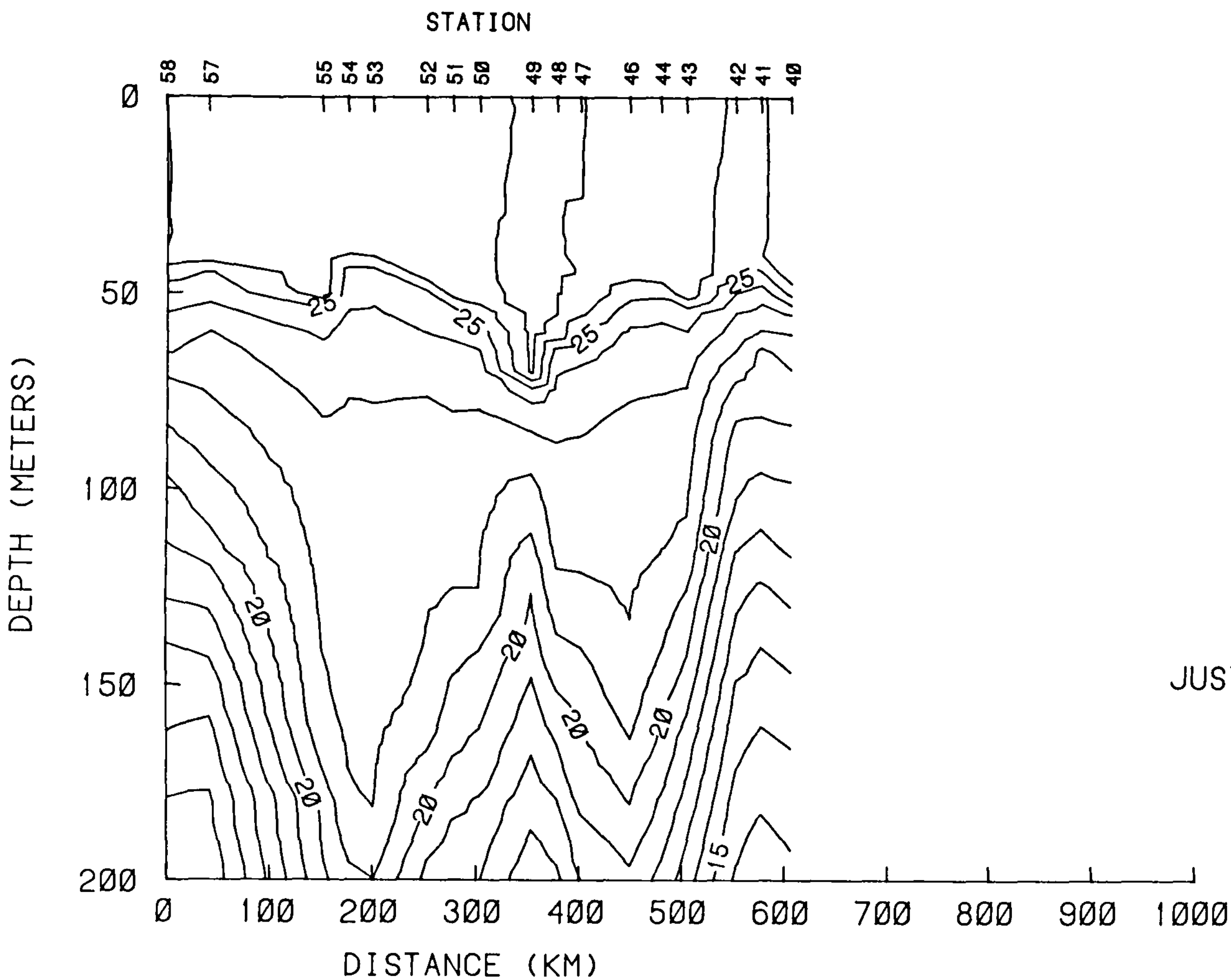
JUSTO SIERRA CRUISE 87-02
10/17/87 TO 10/18/87
STATIONS 19 TO 37
TEMPERATURE DEG C
MIN = 13.84 MAX = 27.42



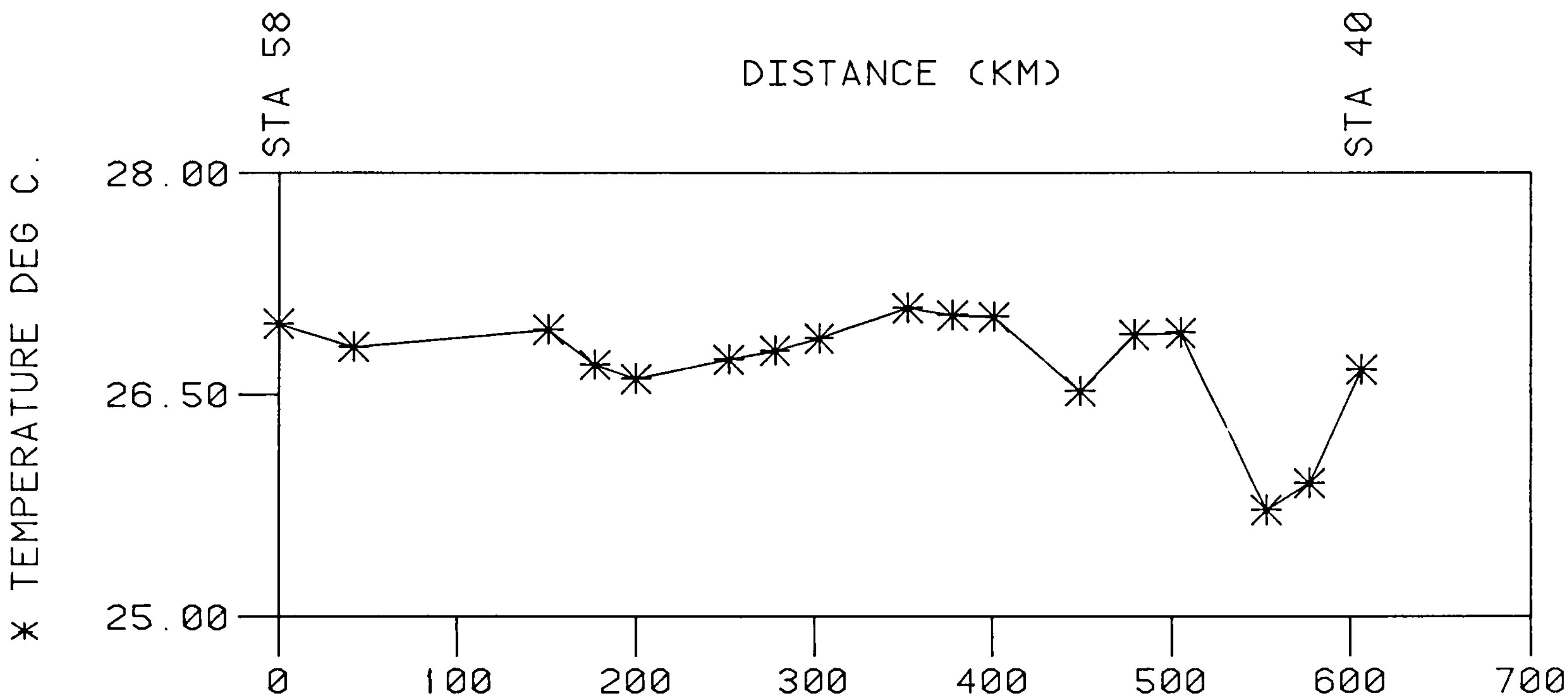
PARAMETERS AT SURFACE JUSTO SIERRA CRUISE 87-02



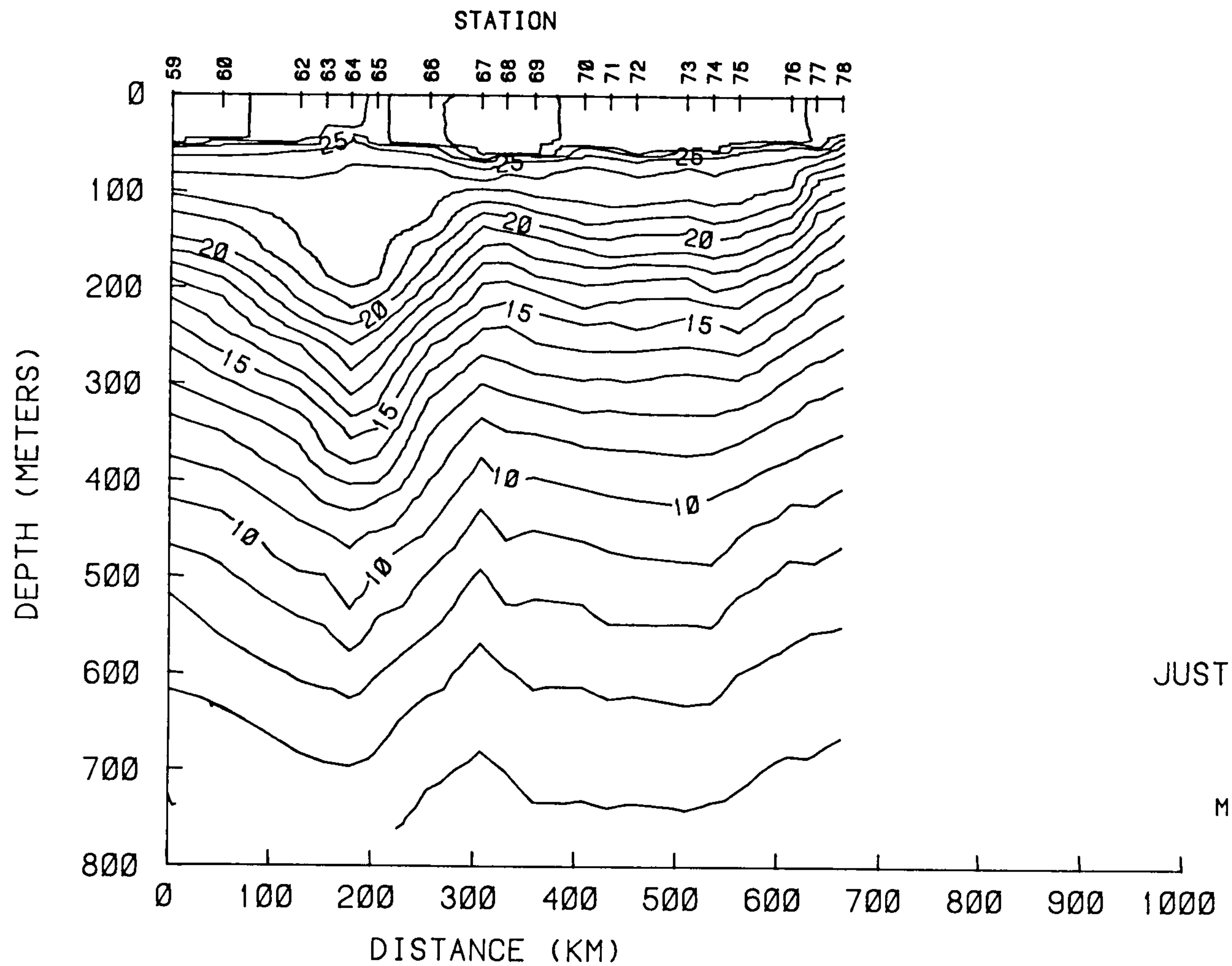
JUSTO SIERRA CRUISE 87-02
10/19/87 TO 10/21/87
STATIONS 40 TO 58
TEMPERATURE DEG C
MIN = 5.29 MAX = 27.25



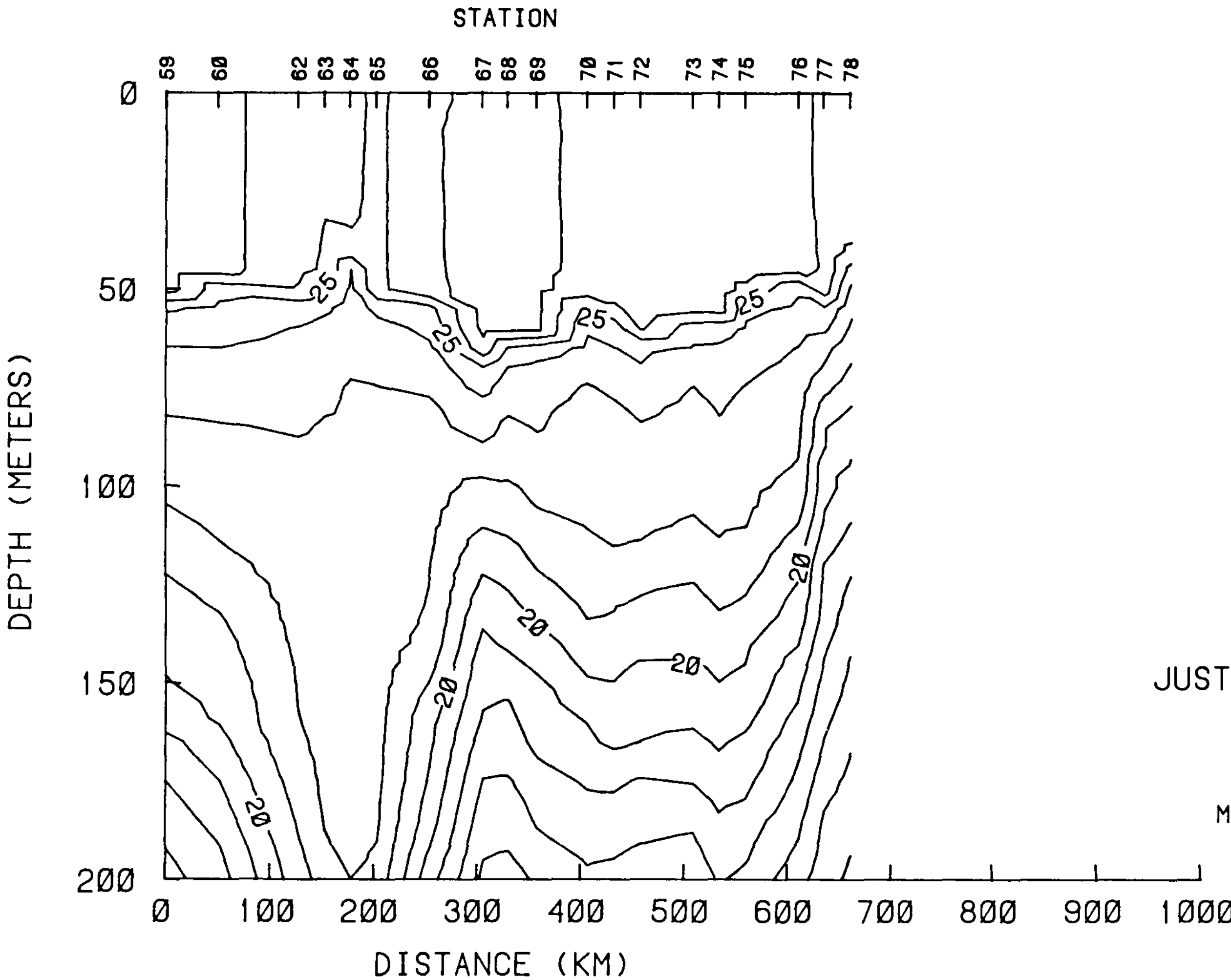
JUSTO SIERRA CRUISE 87-02
10/19/87 TO 10/21/87
STATIONS 40 TO 58
TEMPERATURE DEG C
MIN = 13.36 MAX = 27.25



PARAMETERS AT SURFACE JUSTO SIERRA CRUISE 87-02



JUSTO SIERRA CRUISE 87-02
10/21/87 TO 10/24/87
STATIONS 59 TO 78
TEMPERATURE DEG C
MIN = 5.36 MAX = 27.51



JUSTO SIERRA CRUISE 87-02

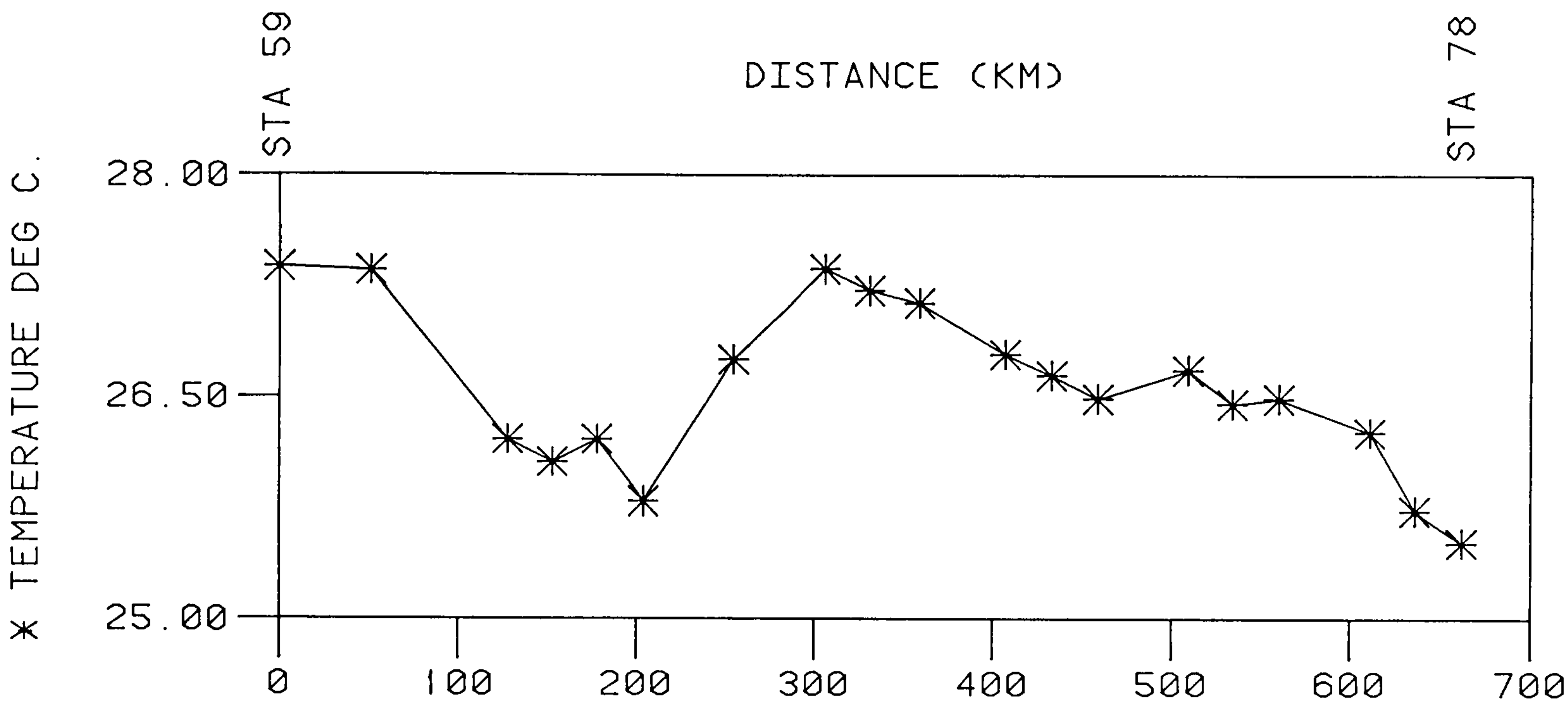
10/21/87 TO 10/24/87

STATIONS 59 TO 78

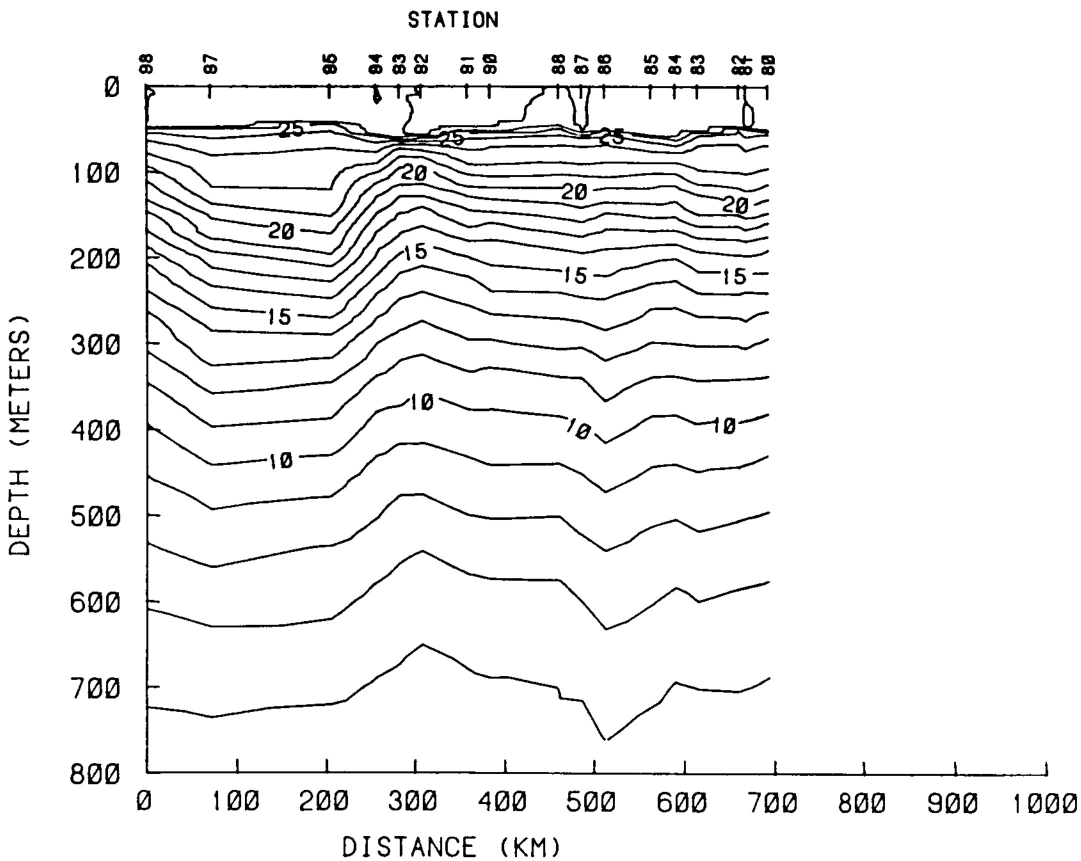
TEMPERATURE DEG C

MIN = 13.81 MAX = 27.51

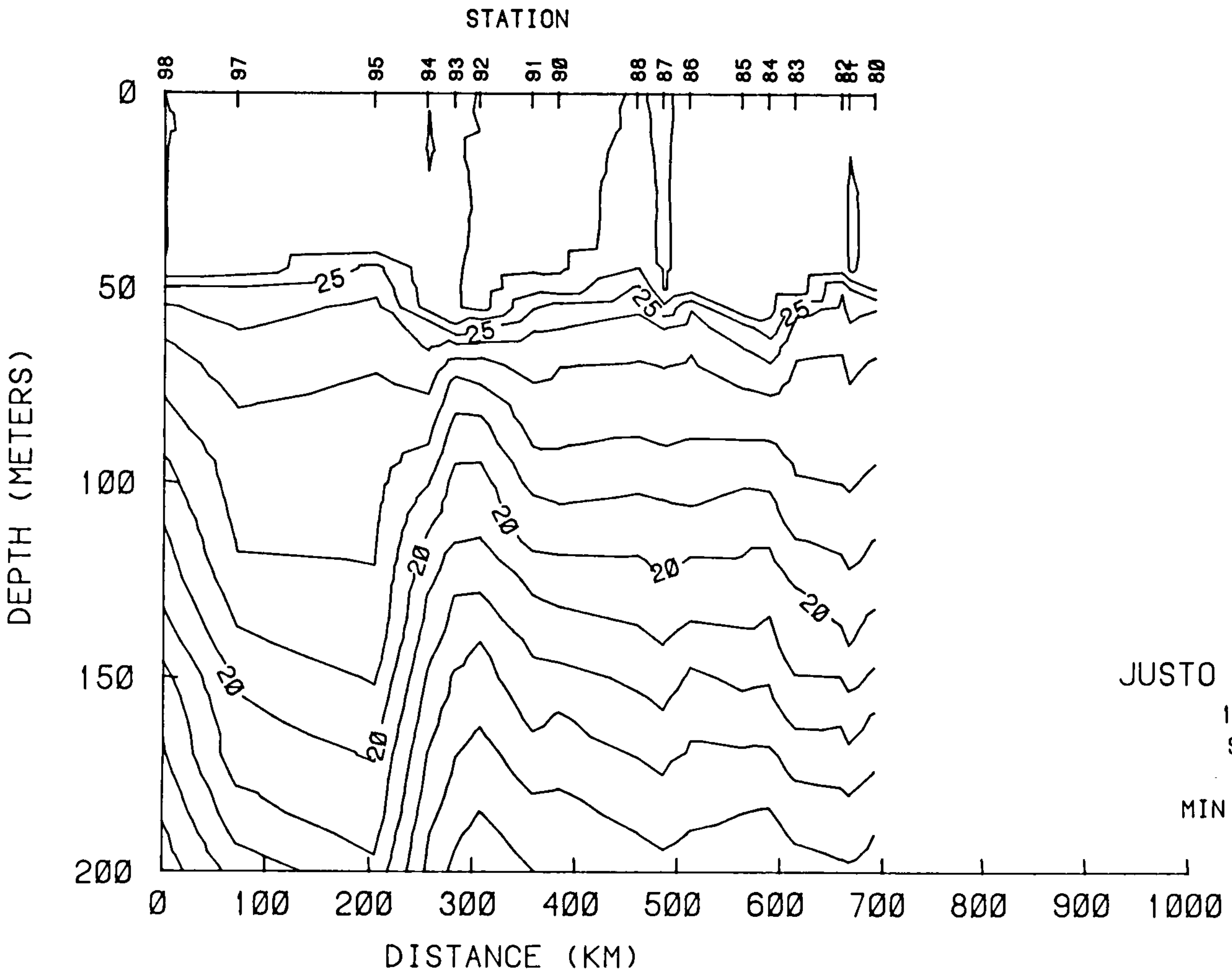
389



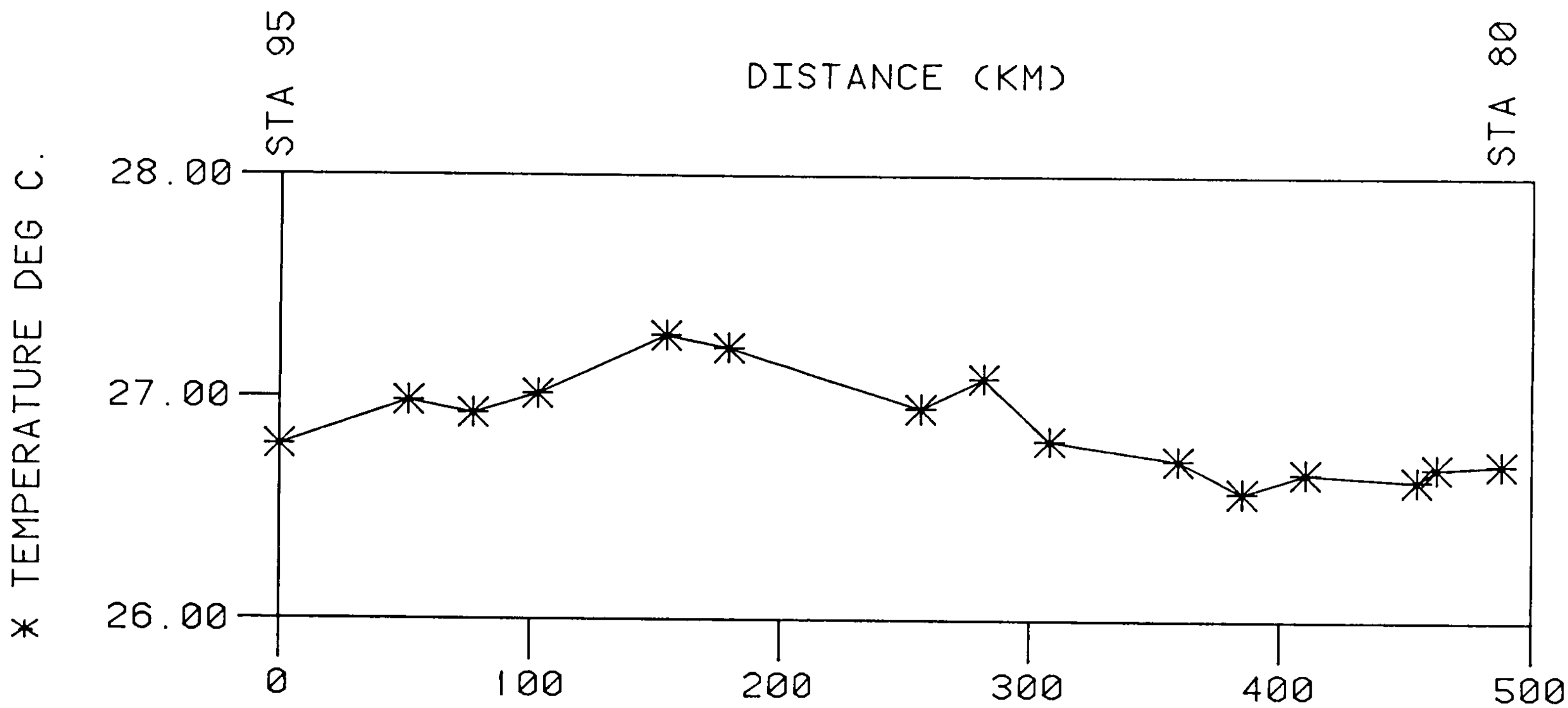
PARAMETERS AT SURFACE JUSTO SIERRA CRUISE 87-02



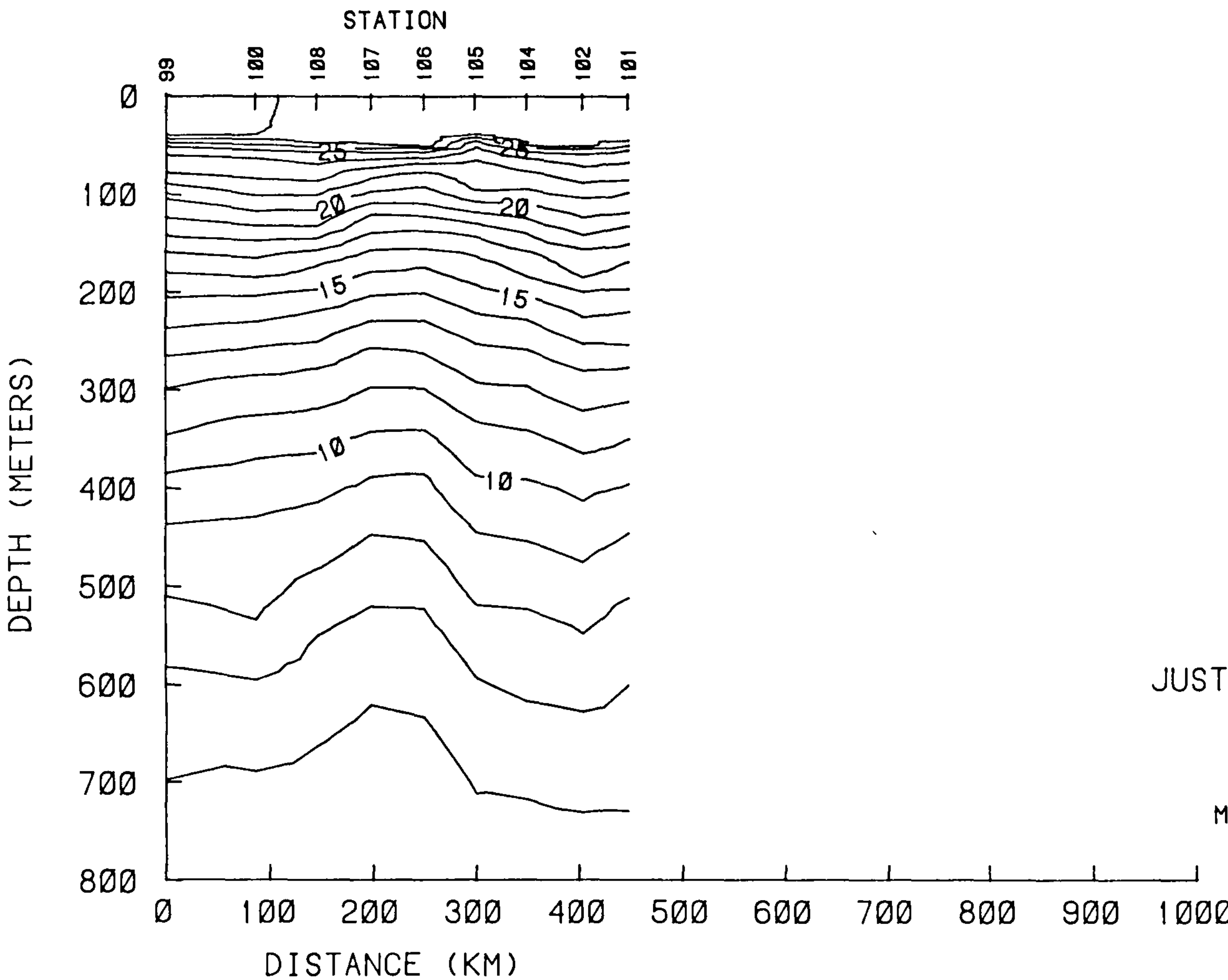
JUSTO SIERRA CRUISE 87-02
10/24/87 TO 10/28/87
STATIONS 80 TO 98
TEMPERATURE DEG C
MIN = 5.28 MAX = 27.42



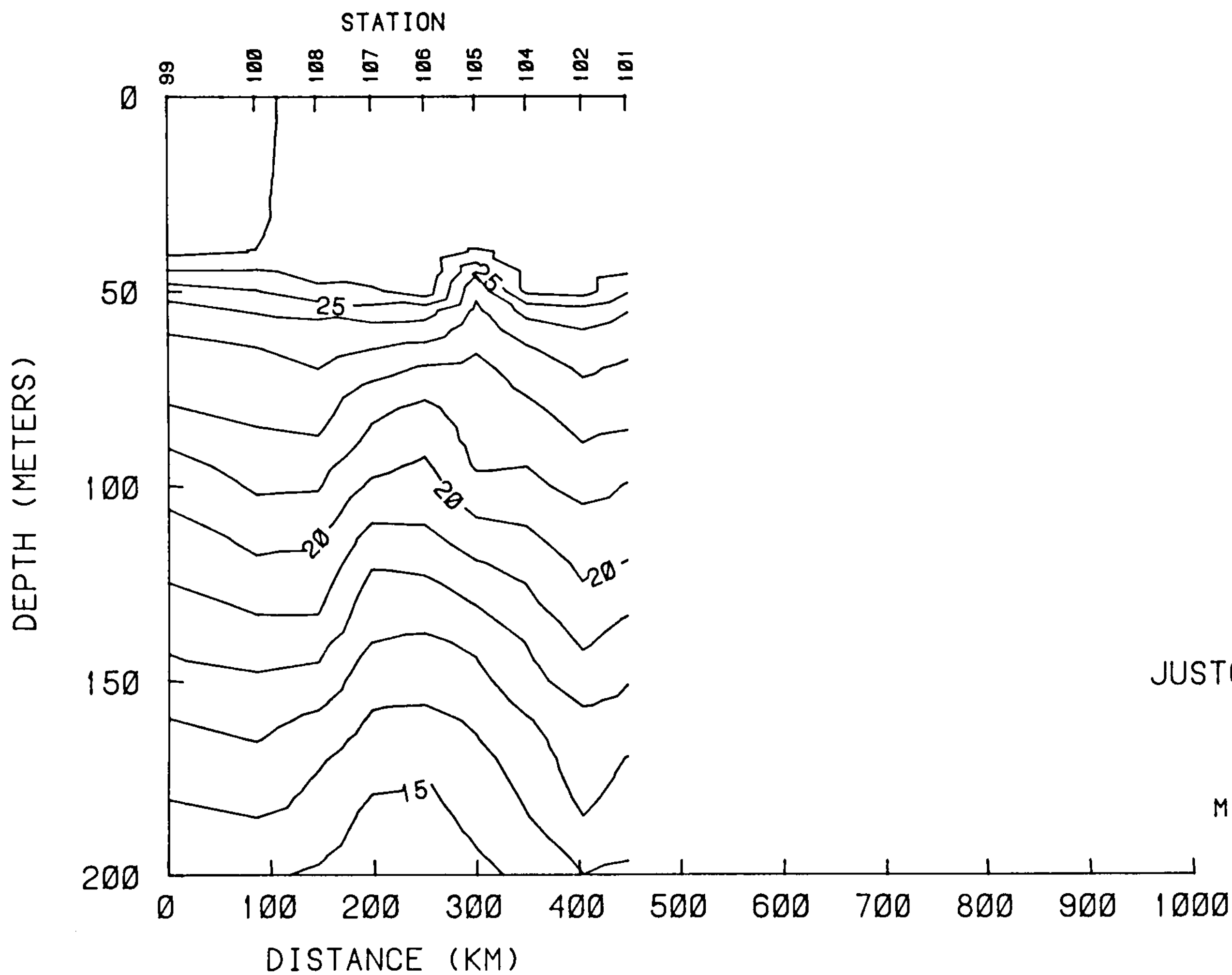
JUSTO SIERRA CRUISE 87-02
10/24/87 TO 10/28/87
STATIONS 80 TO 98
TEMPERATURE DEG C
MIN = 14.40 MAX = 27.42



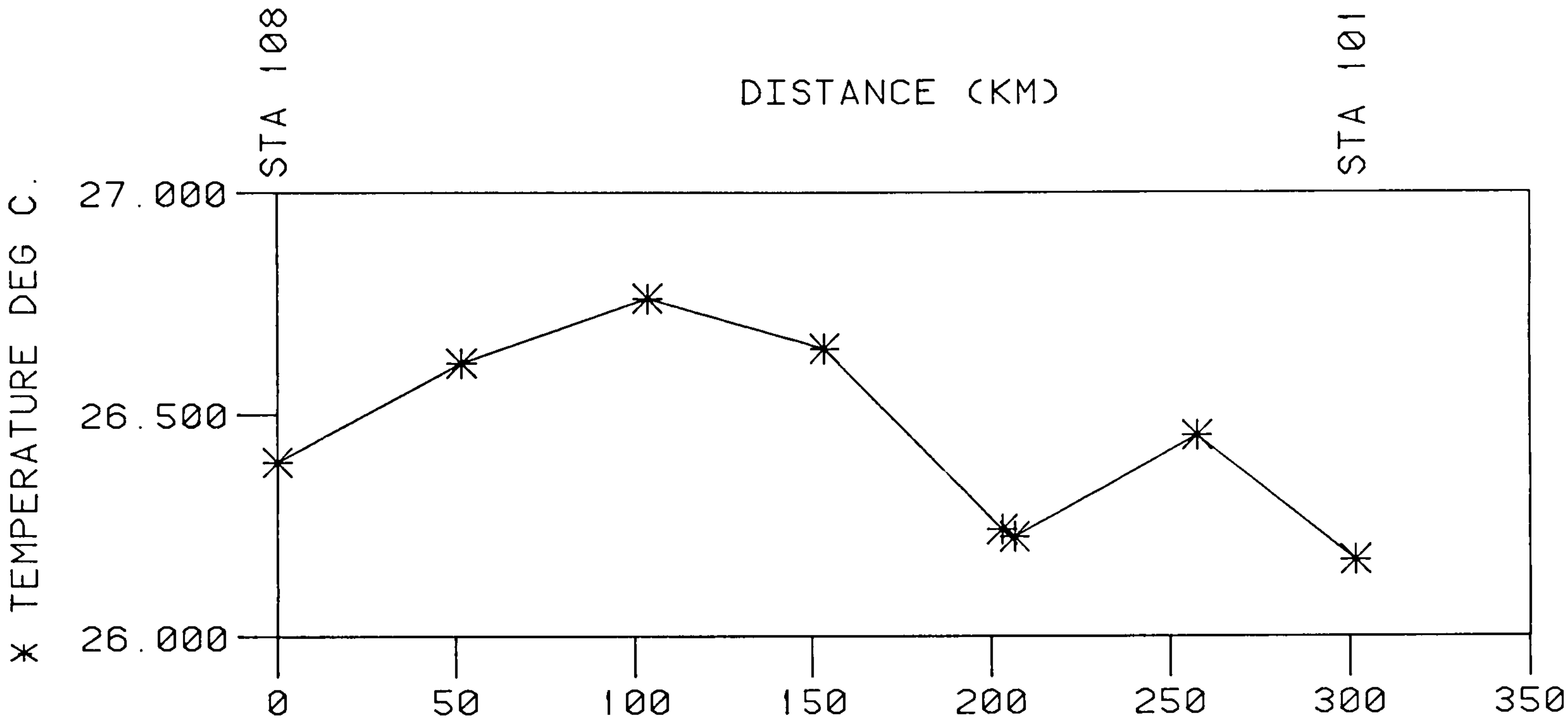
PARAMETERS AT SURFACE JUSTO SIERRA CRUISE 87-02



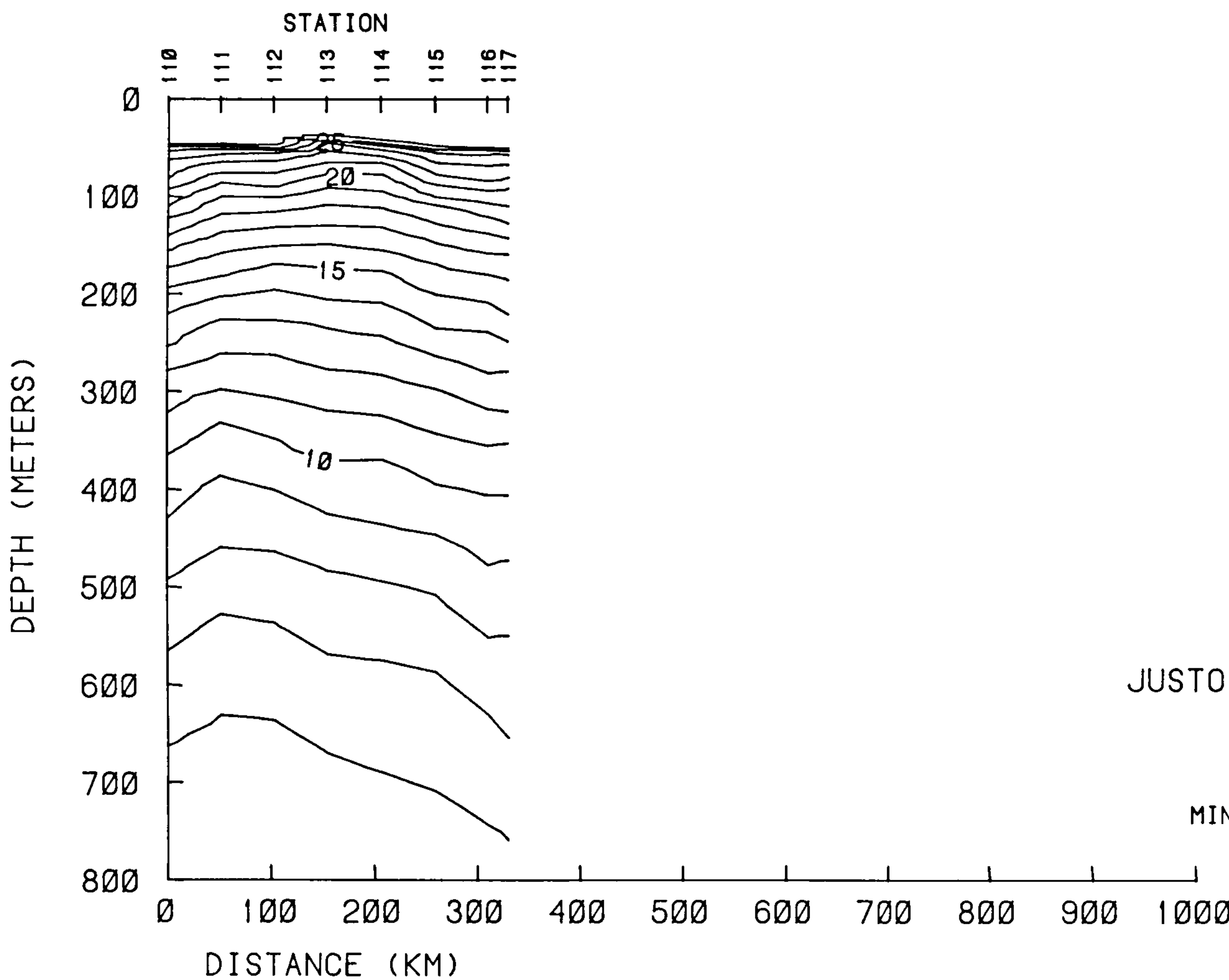
JUSTO SIERRA CRUISE 87-02
10/29/87 TO 11/ 6/87
STATIONS 99 TO 101
TEMPERATURE DEG C
MIN = 5.09 MAX = 27.33



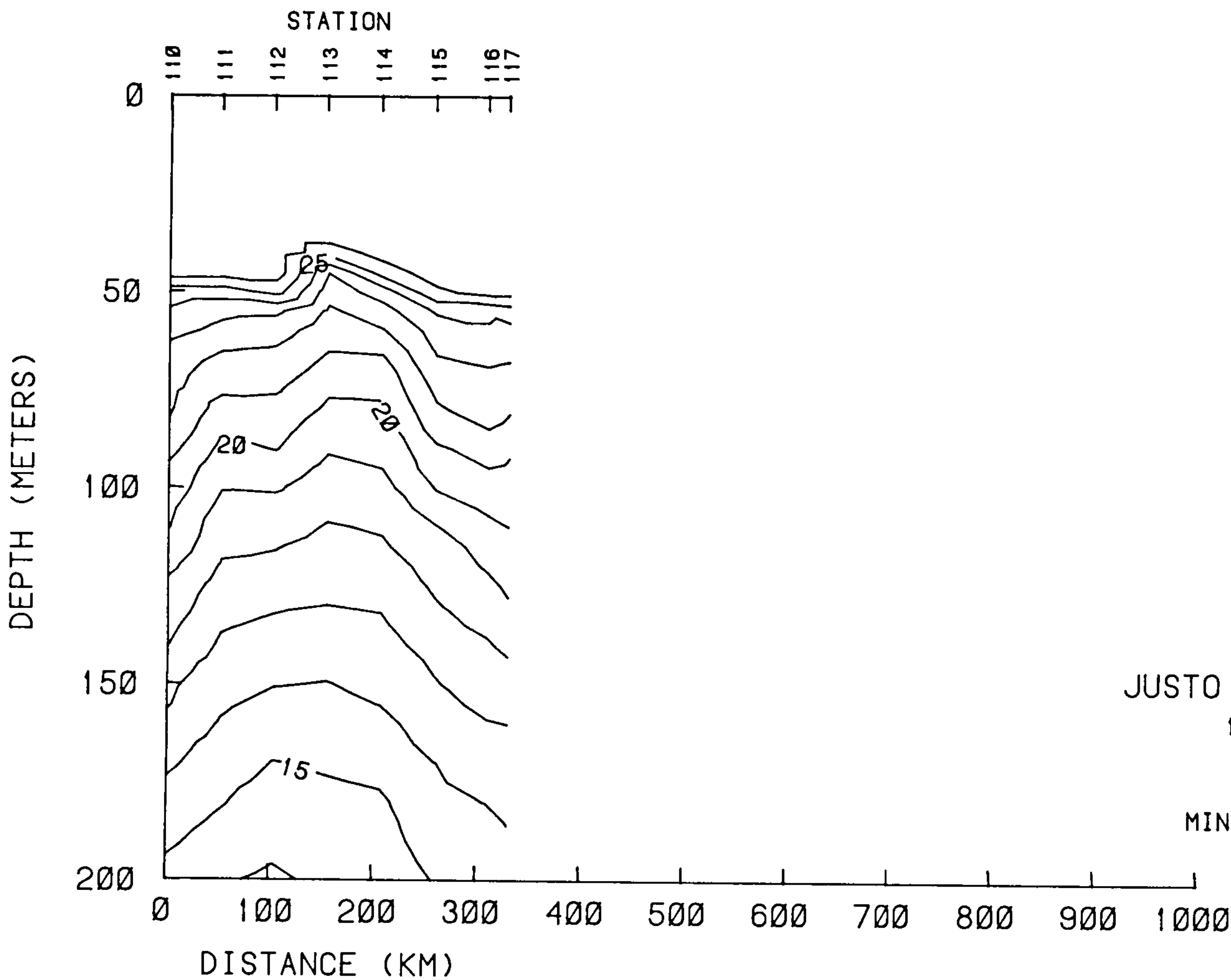
JUSTO SIERRA CRUISE 87-02
10/29/87 TO 11/ 6/87
STATIONS 99 TO 101
TEMPERATURE DEG C
MIN = 14.03 MAX = 27.33



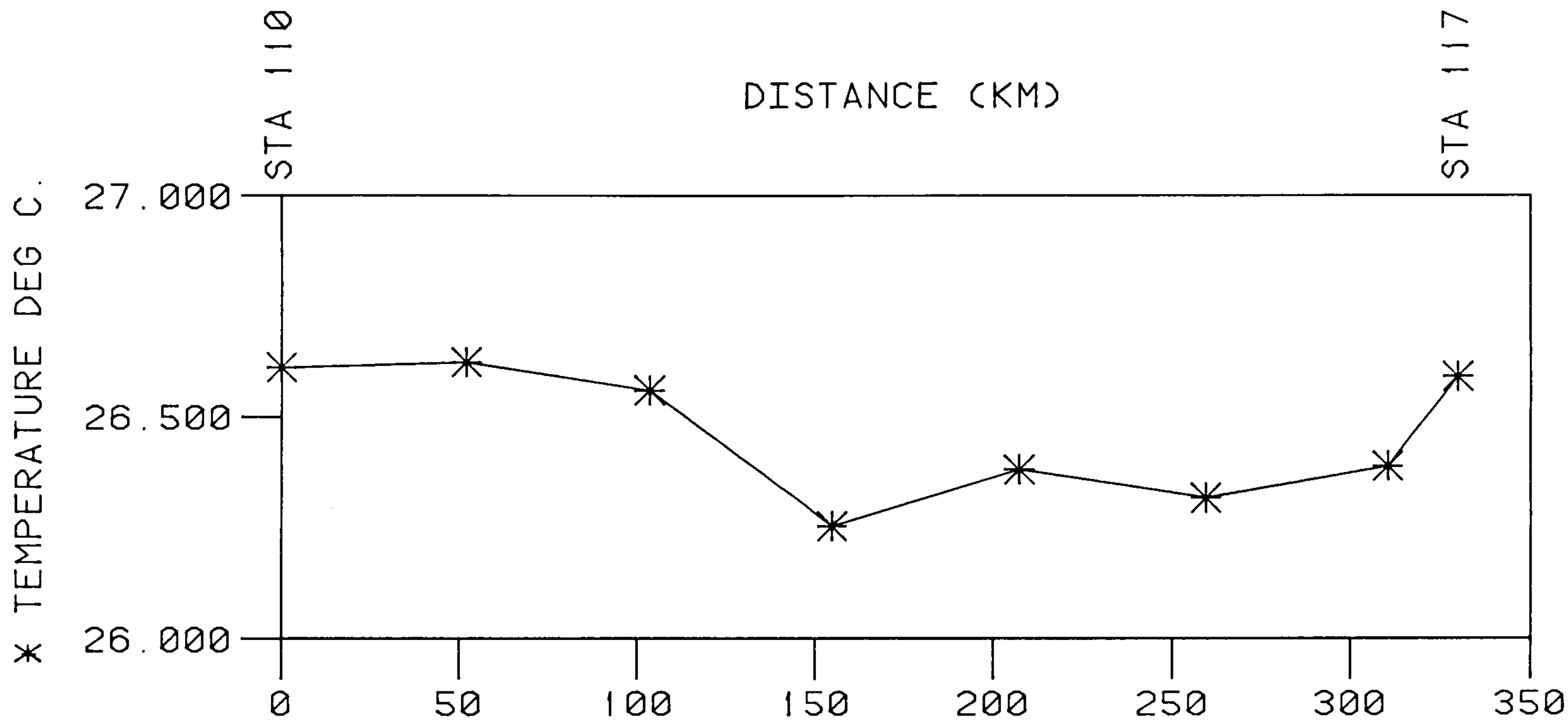
PARAMETERS AT SURFACE JUSTO SIERRA CRUISE 87-02



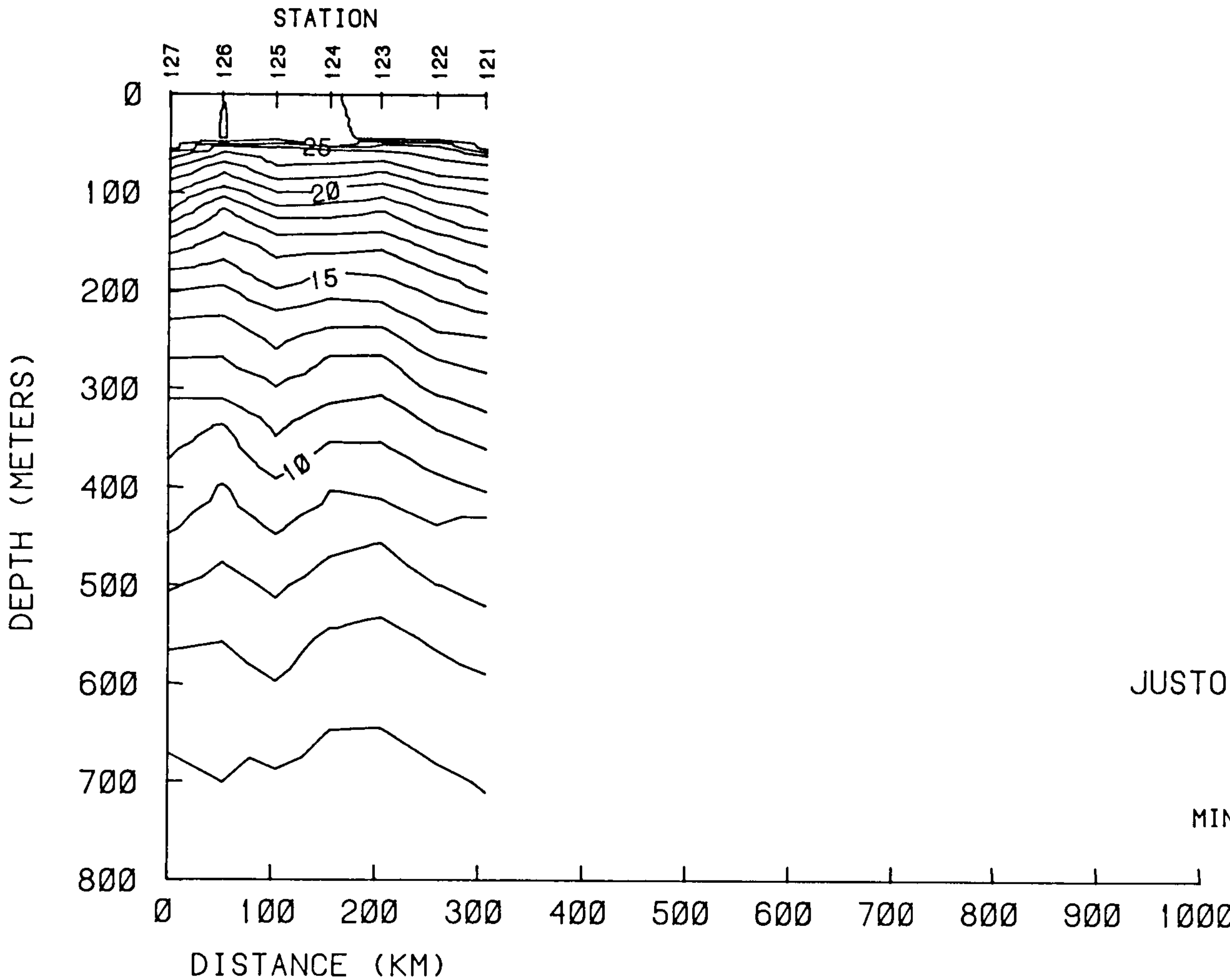
JUSTO SIERRA CRUISE 87-02
11/ 7/87 TO 11/ 8/87
STATIONS 110 TO 117
TEMPERATURE DEG C
MIN = 5.19 MAX = 26.80



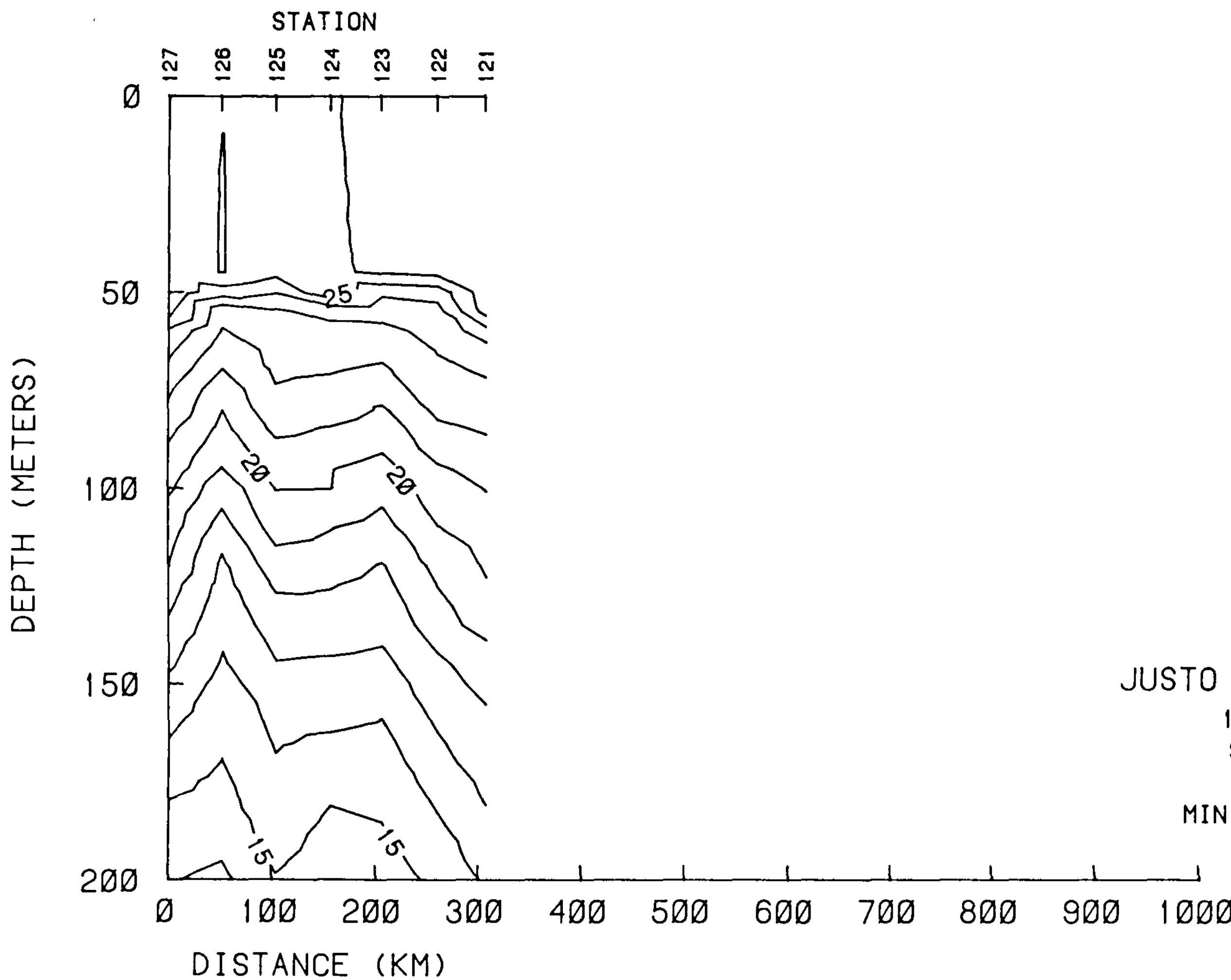
JUSTO SIERRA CRUISE 87-02
11/ 7/87 TO 11/ 8/87
STATIONS 110 TO 117
TEMPERATURE DEG C
MIN = 13.84 MAX = 26.80



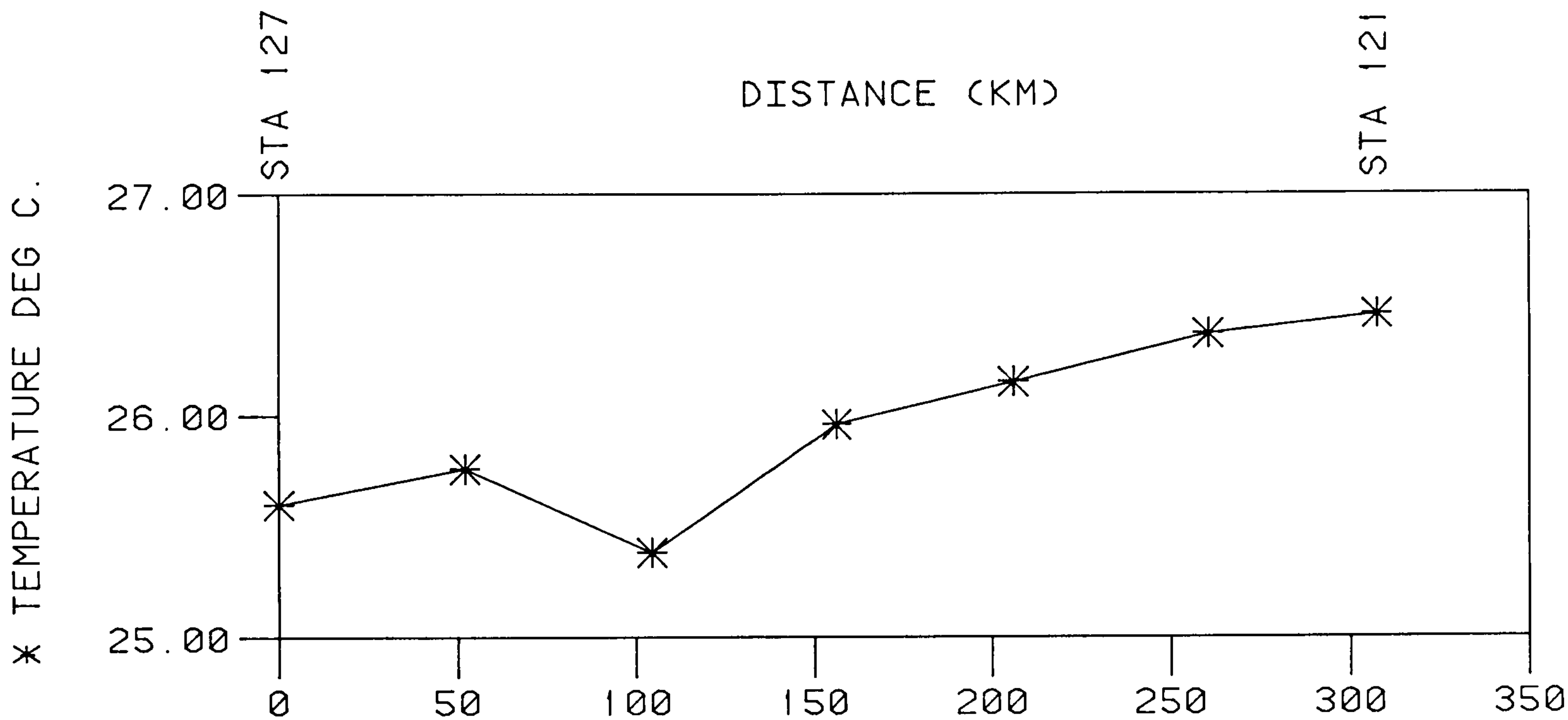
PARAMETERS AT SURFACE JUSTO SIERRA CRUISE 87-02



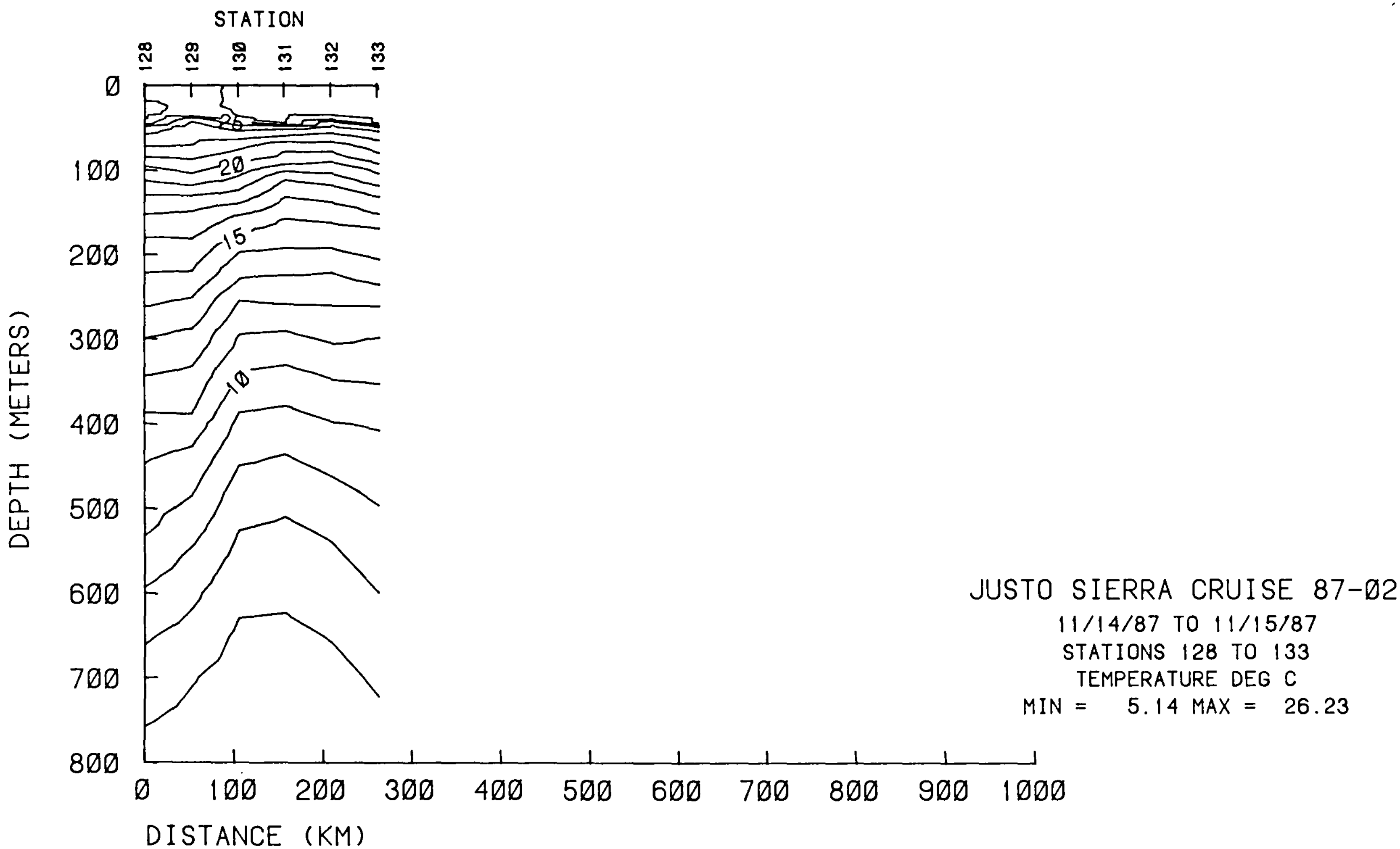
JUSTO SIERRA CRUISE 87-02
11/12/87 TO 11/13/87
STATIONS 121 TO 127
TEMPERATURE DEG C
MIN = 5.23 MAX = 26.61

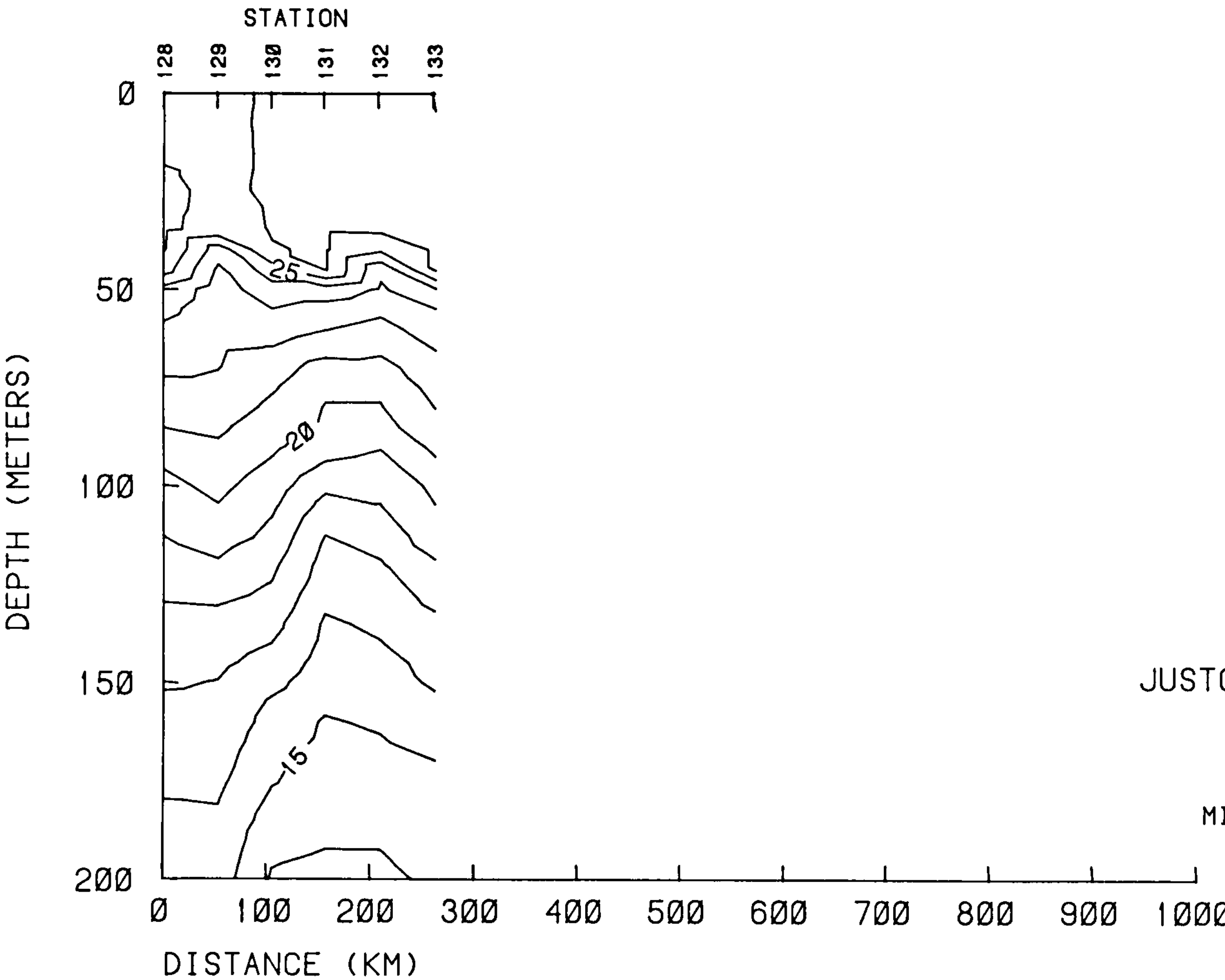


JUSTO SIERRA CRUISE 87-02
11/12/87 TO 11/13/87
STATIONS 121 TO 127
TEMPERATURE DEG C
MIN = 13.77 MAX = 26.61

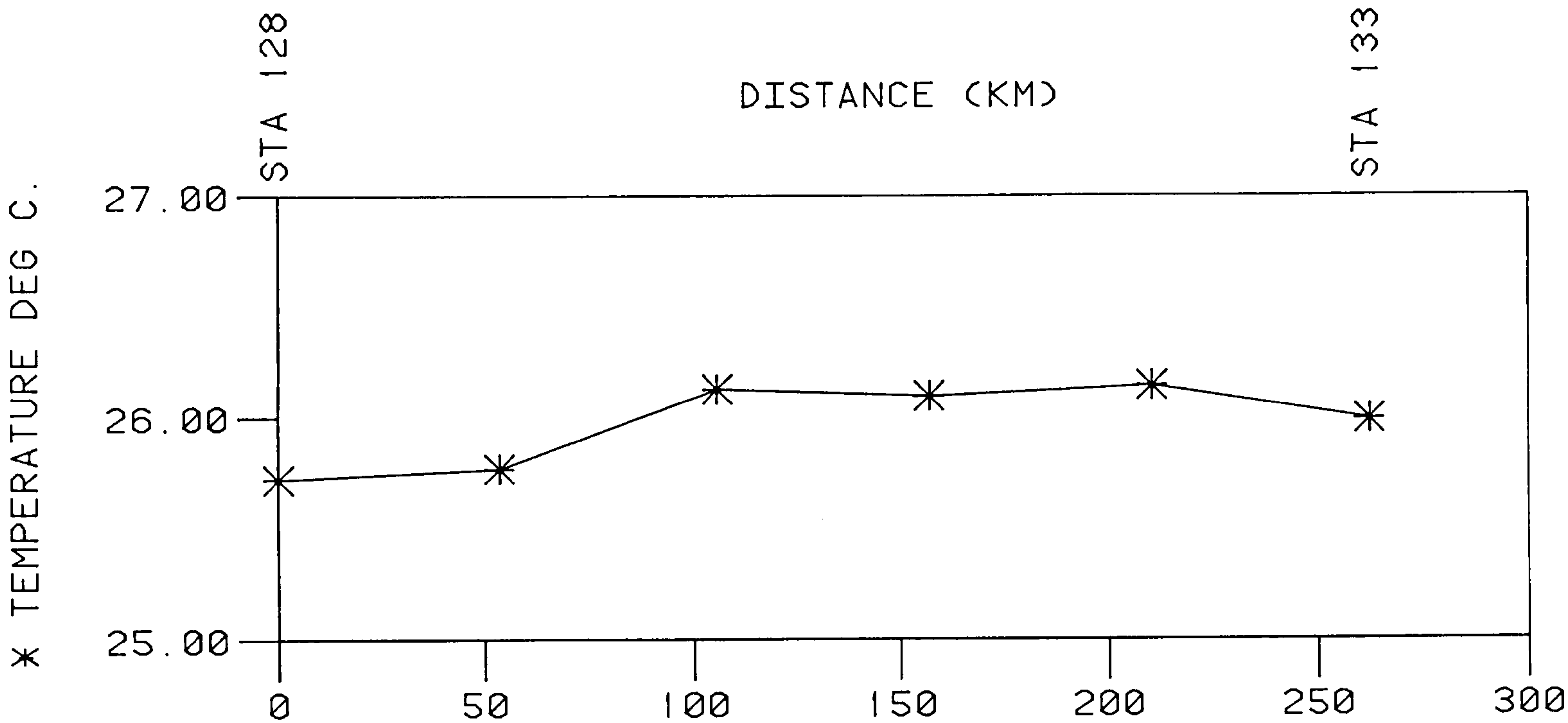


PARAMETERS AT SURFACE JUSTO SIERRA CRUISE 87-02

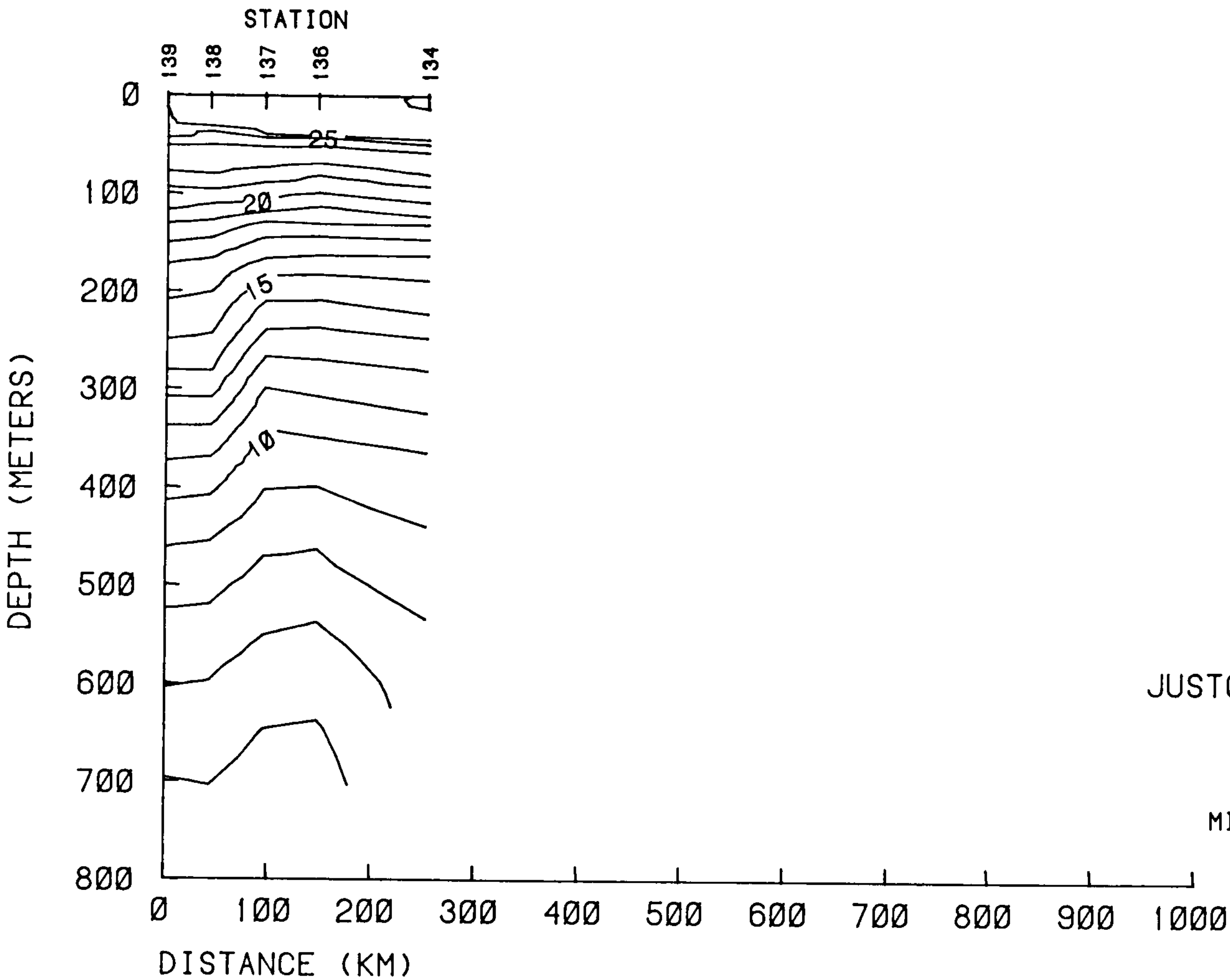

STATION
128 129 130 131 132 133
DEPTH (METERS)
0
100
200
300
400
500
600
700
800
20
15
10
0 100 200 300 400 500 600 700 800 900 1000
DISTANCE (KM)
JUSTO SIERRA CRUISE 87-02
11/14/87 TO 11/15/87
STATIONS 128 TO 133
TEMPERATURE DEG C
MIN = 5.14 MAX = 26.23



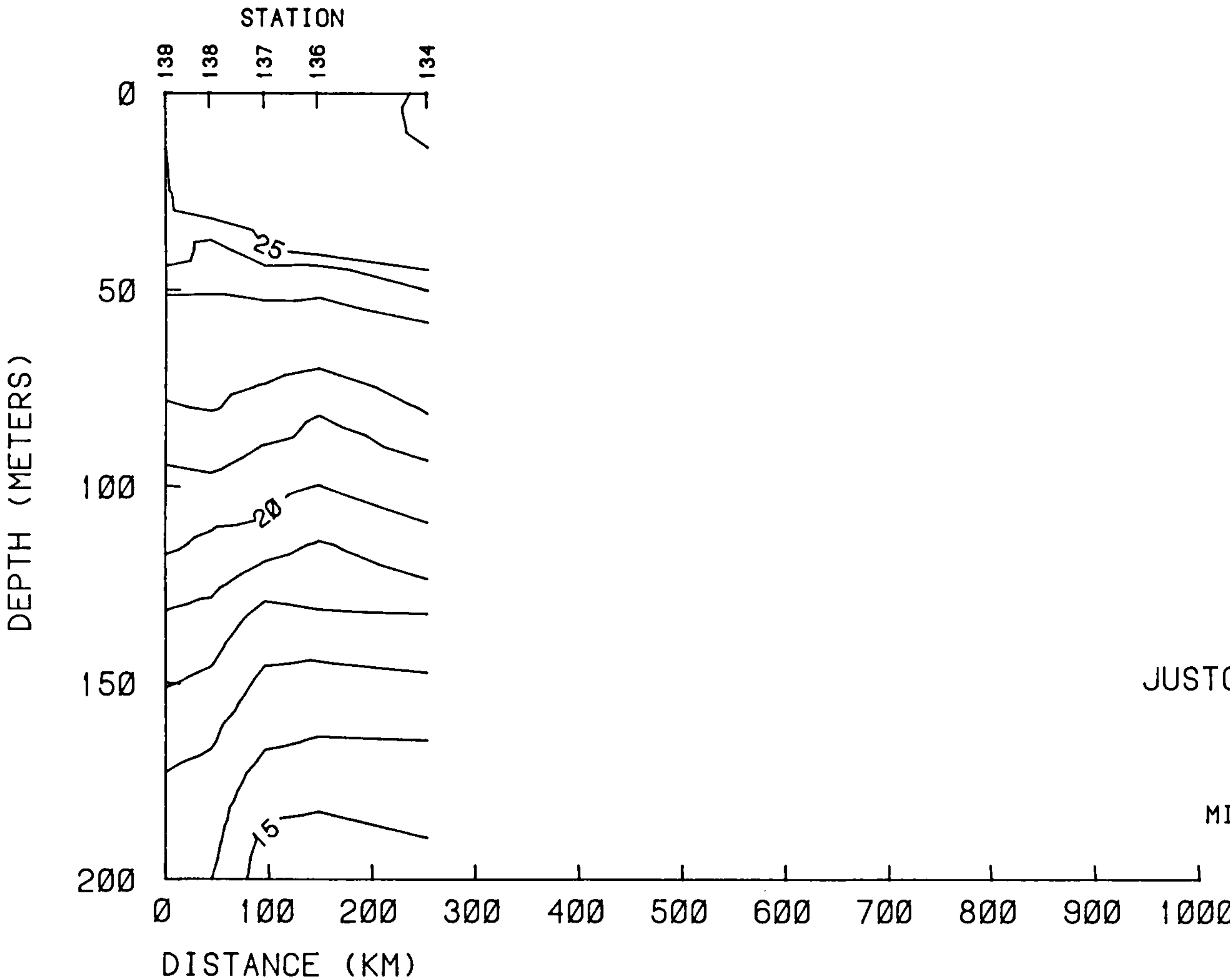
JUSTO SIERRA CRUISE 87-02
11/14/87 TO 11/15/87
STATIONS 128 TO 133
TEMPERATURE DEG C
MIN = 13.70 MAX = 26.23



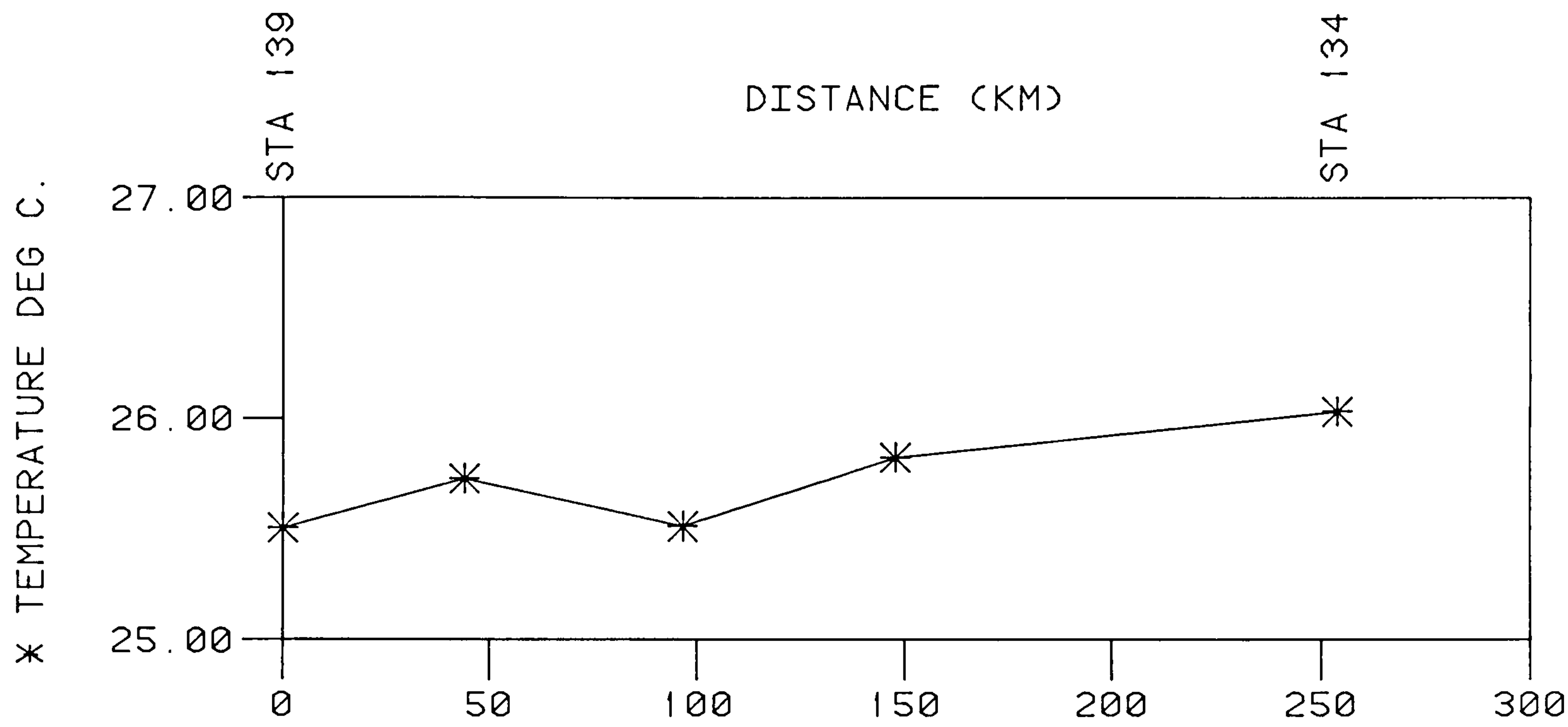
PARAMETERS AT SURFACE JUSTO SIERRA CRUISE 87-02



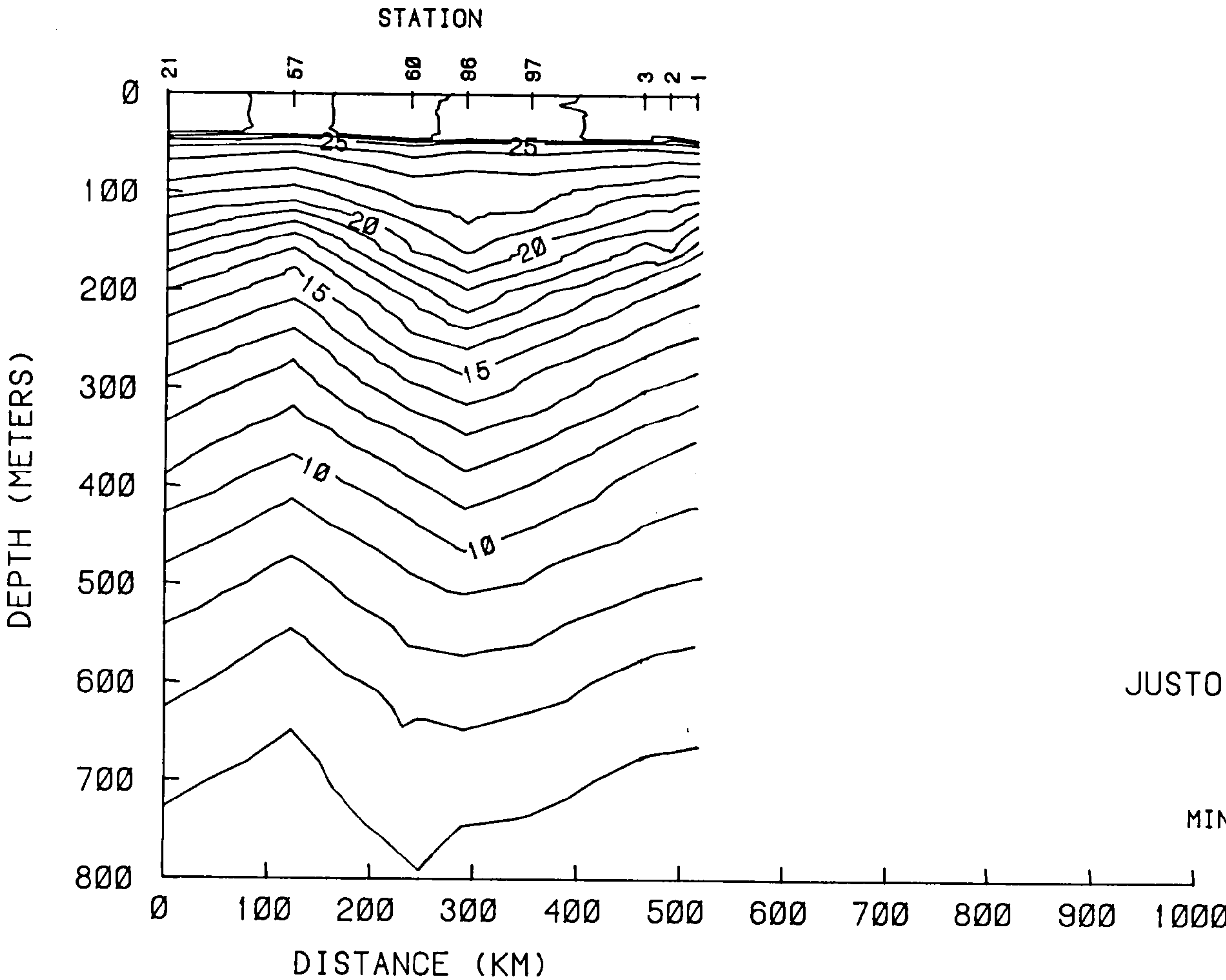
JUSTO SIERRA CRUISE 87-Ø2
11/15/87 TO 11/16/87
STATIONS 134 TO 139
TEMPERATURE DEG C
MIN = 5.27 MAX = 26.Ø6



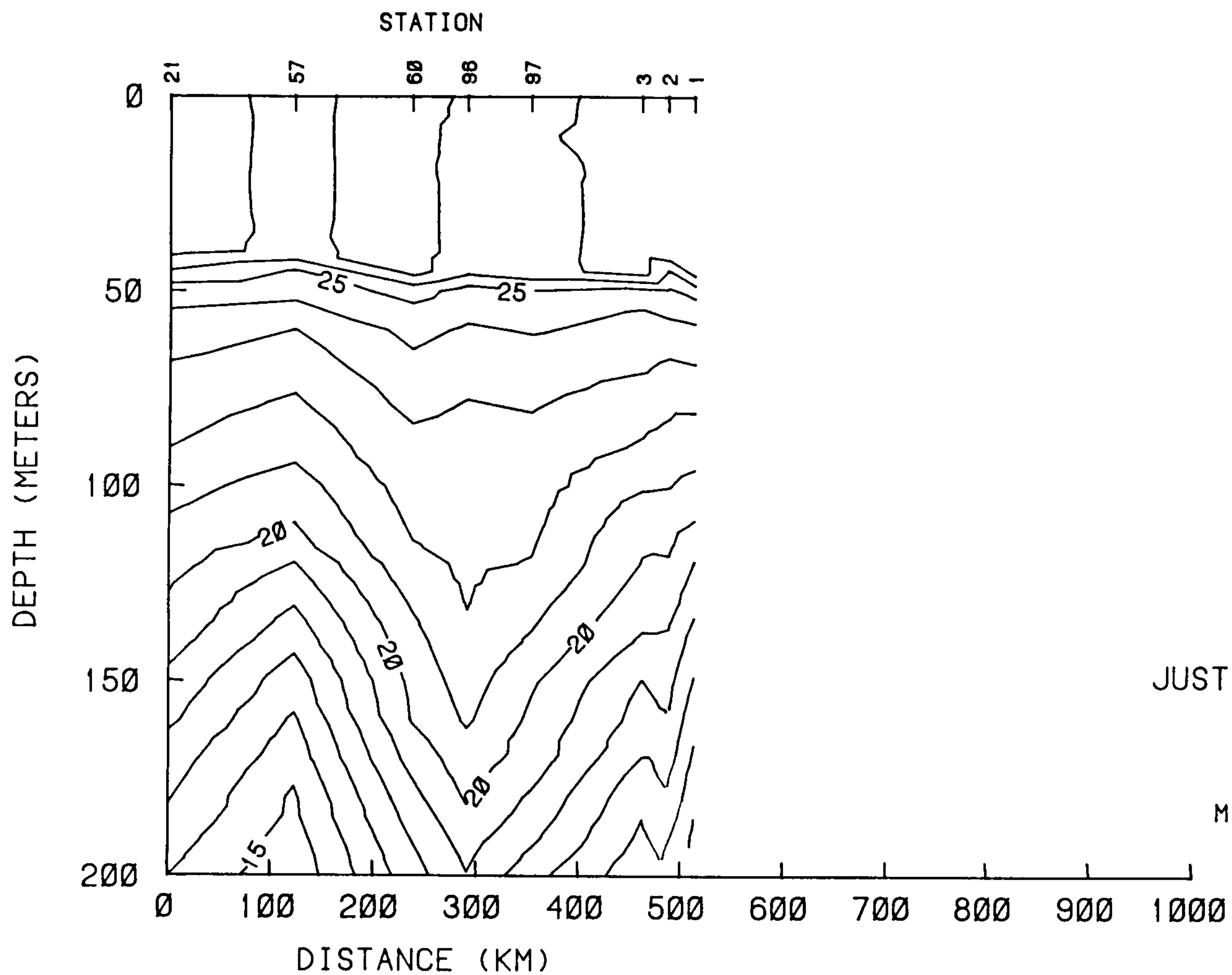
JUSTO SIERRA CRUISE 87-Ø2
11/15/87 TO 11/16/87
STATIONS 134 TO 139
TEMPERATURE DEG C
MIN = 14.35 MAX = 26.Ø6



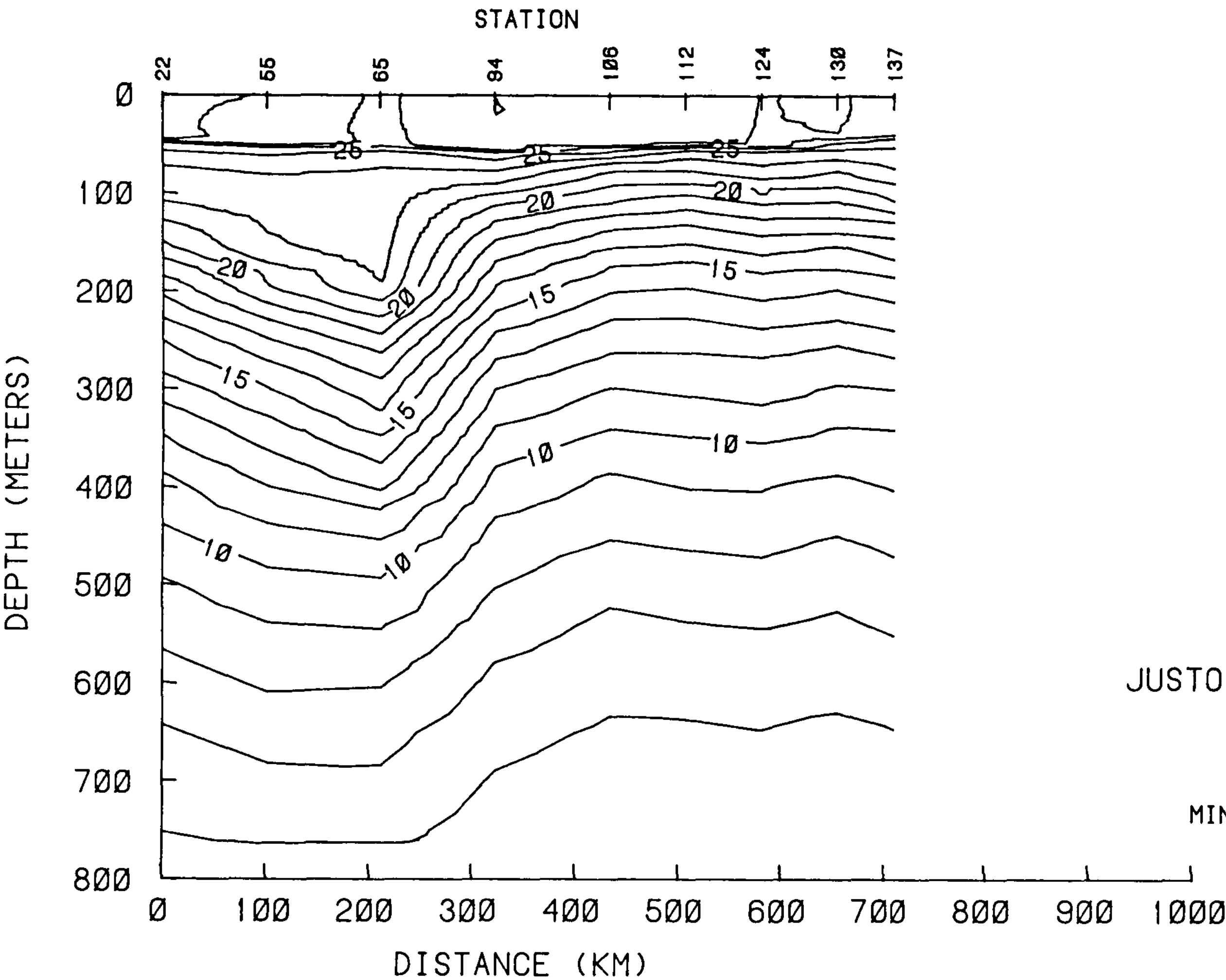
PARAMETERS AT SURFACE JUSTO SIERRA CRUISE 87-02



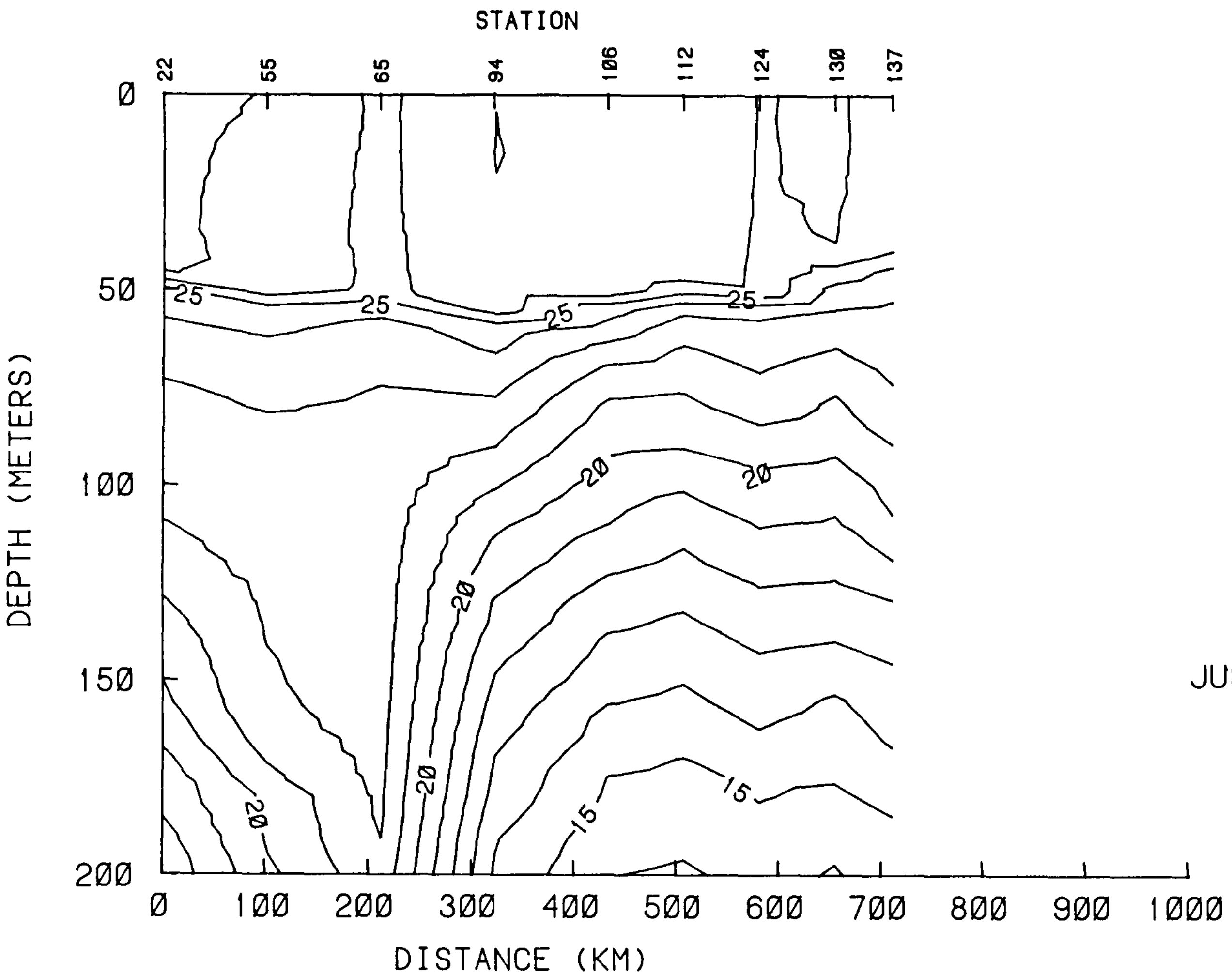
JUSTO SIERRA CRUISE 87-02
10/14/87 TO 10/28/87
STATIONS 1 TO 21
TEMPERATURE DEG C
MIN = 5.32 MAX = 27.85



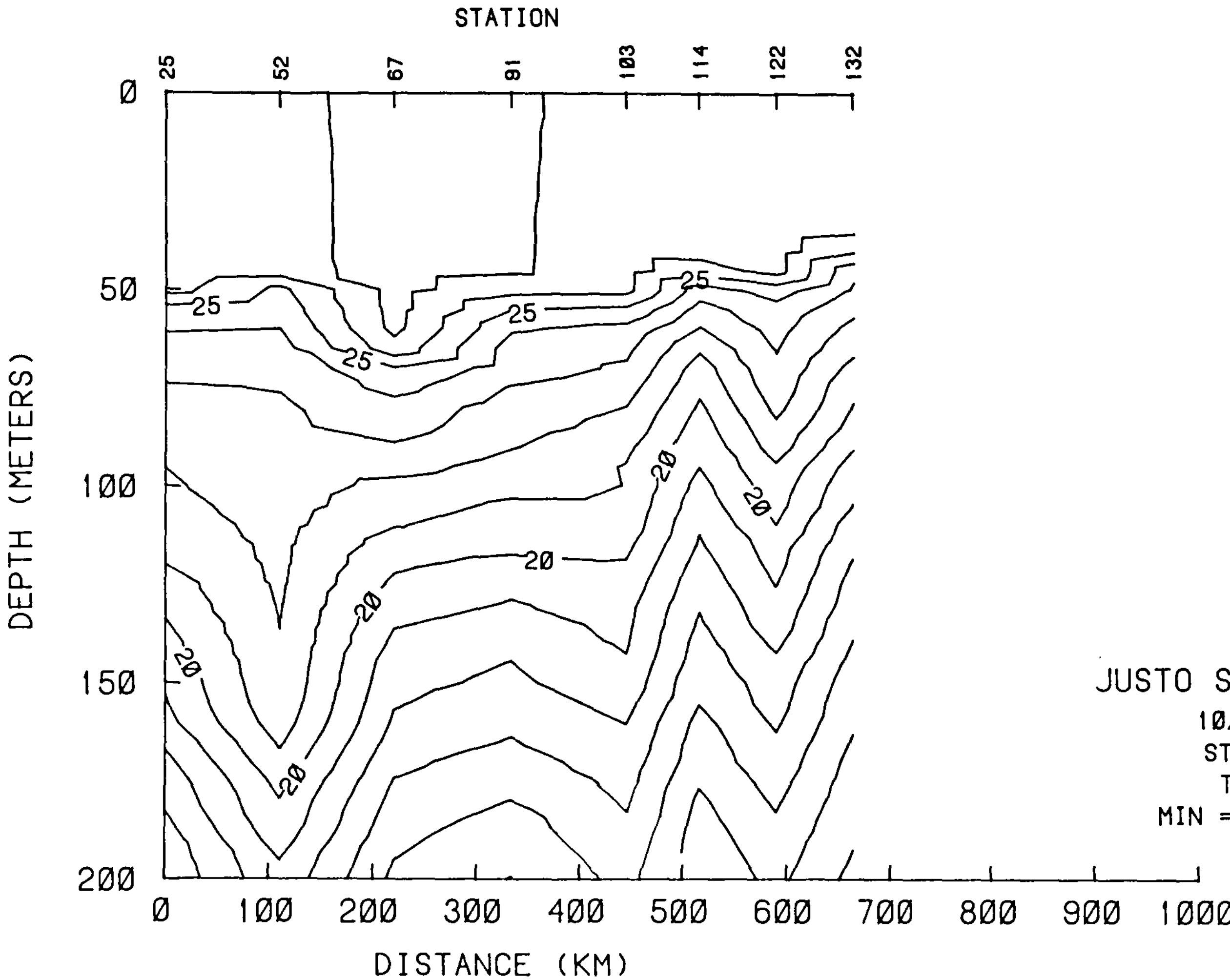
JUSTO SIERRA CRUISE 87-02
10/14/87 TO 10/28/87
STATIONS 1 TO 21
TEMPERATURE DEG C
MIN = 14.27 MAX = 27.85



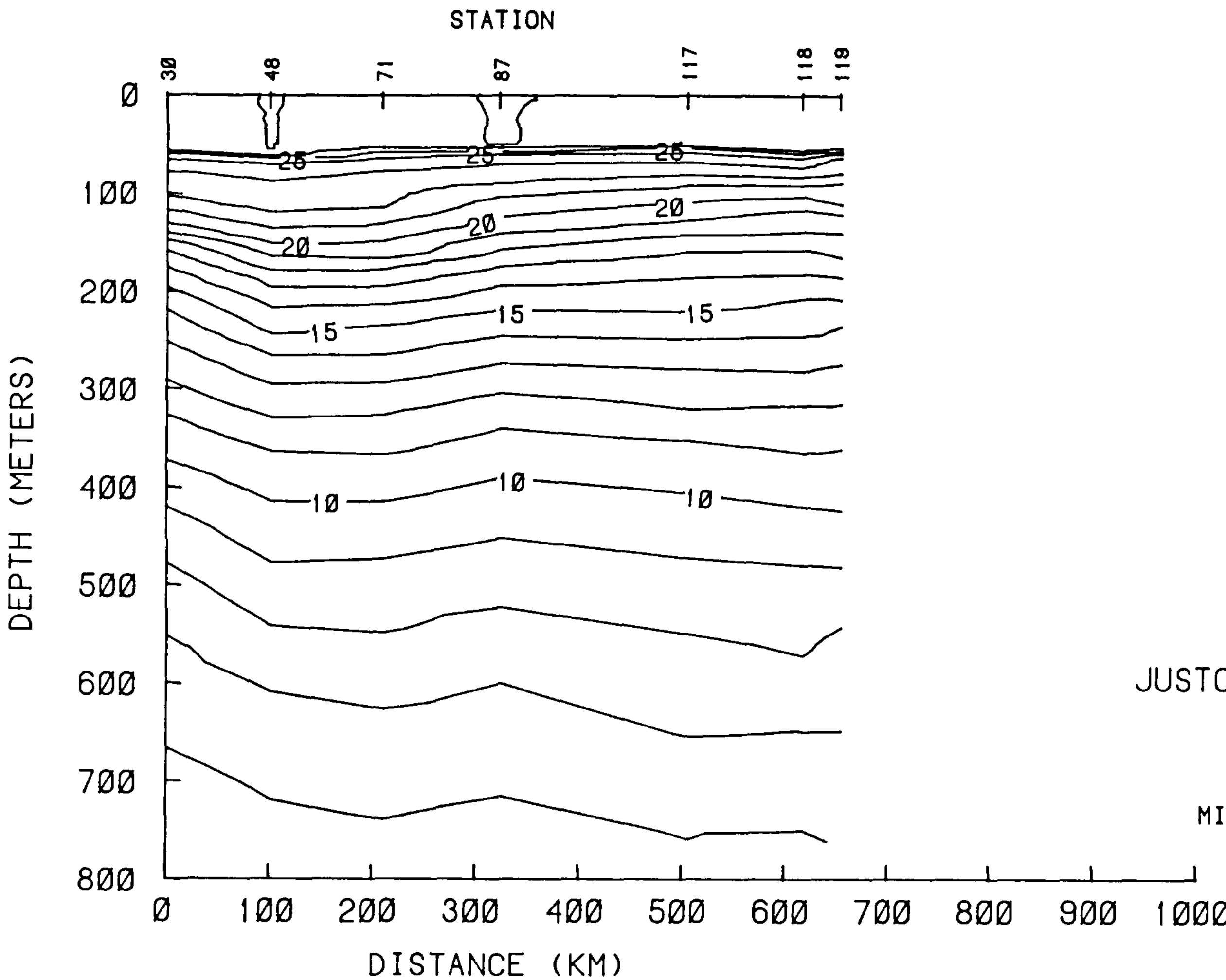
JUSTO SIERRA CRUISE 87-02
10/17/87 TO 11/16/87
STATIONS 22 TO 137
TEMPERATURE DEG C
MIN = 5.14 MAX = 27.36



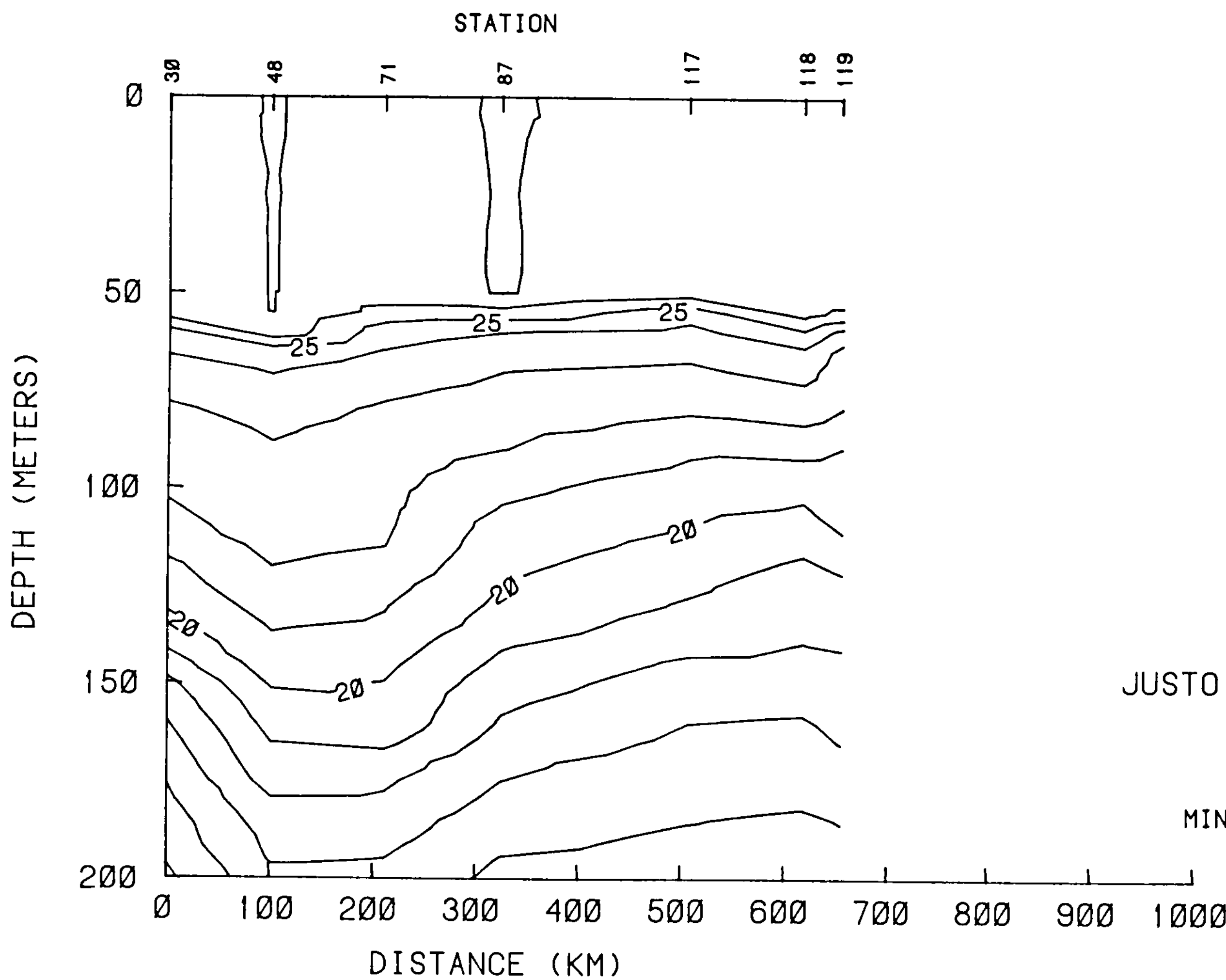
JUSTO SIERRA CRUISE 87-Ø2
1Ø/17/87 TO 11/16/87
STATIONS 22 TO 137
TEMPERATURE DEG C
MIN = 13.84 MAX = 27.36



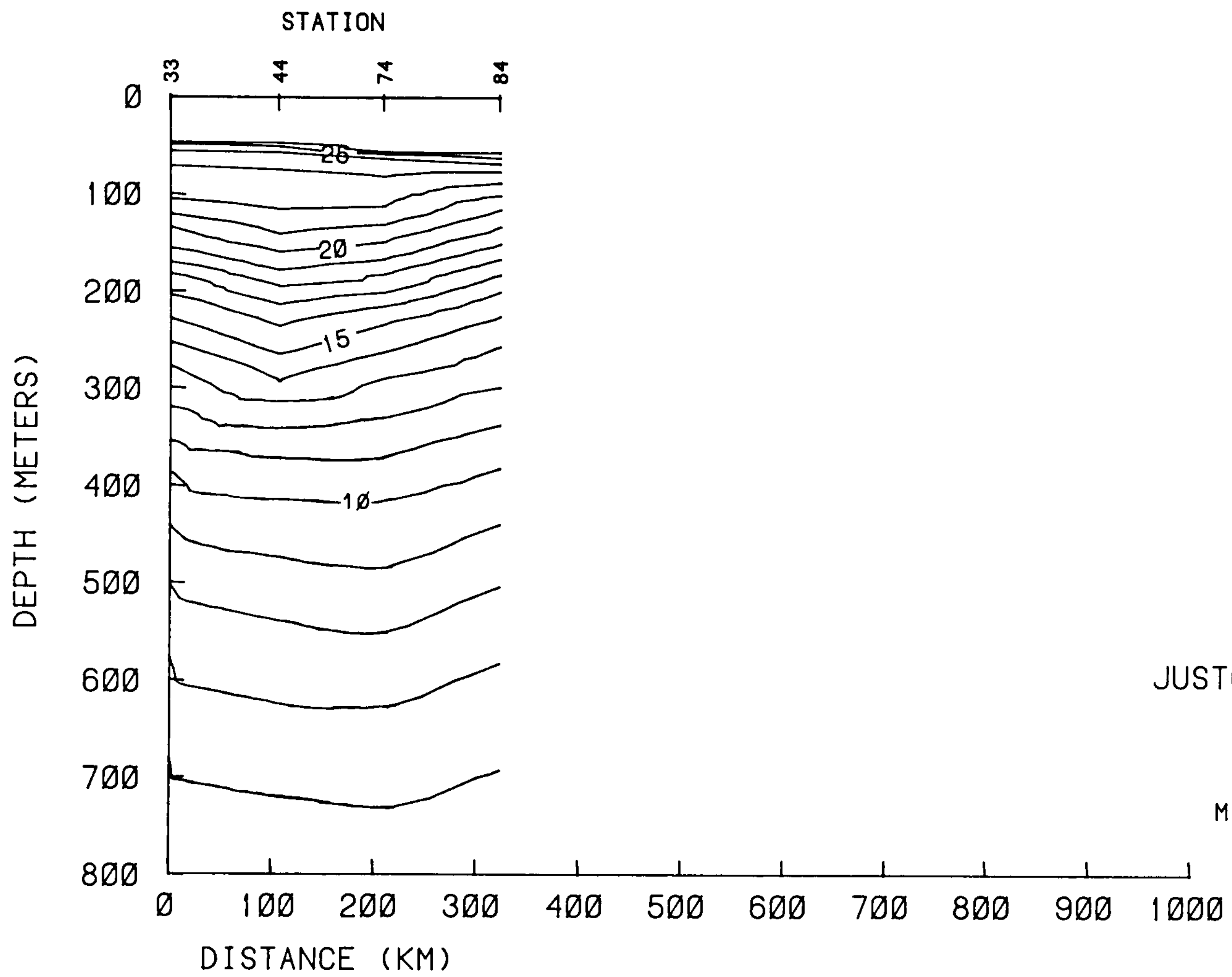
JUSTO SIERRA CRUISE 87-02
10/17/87 TO 11/15/87
STATIONS 25 TO 132
TEMPERATURE DEG C
MIN = 13.74 MAX = 27.36



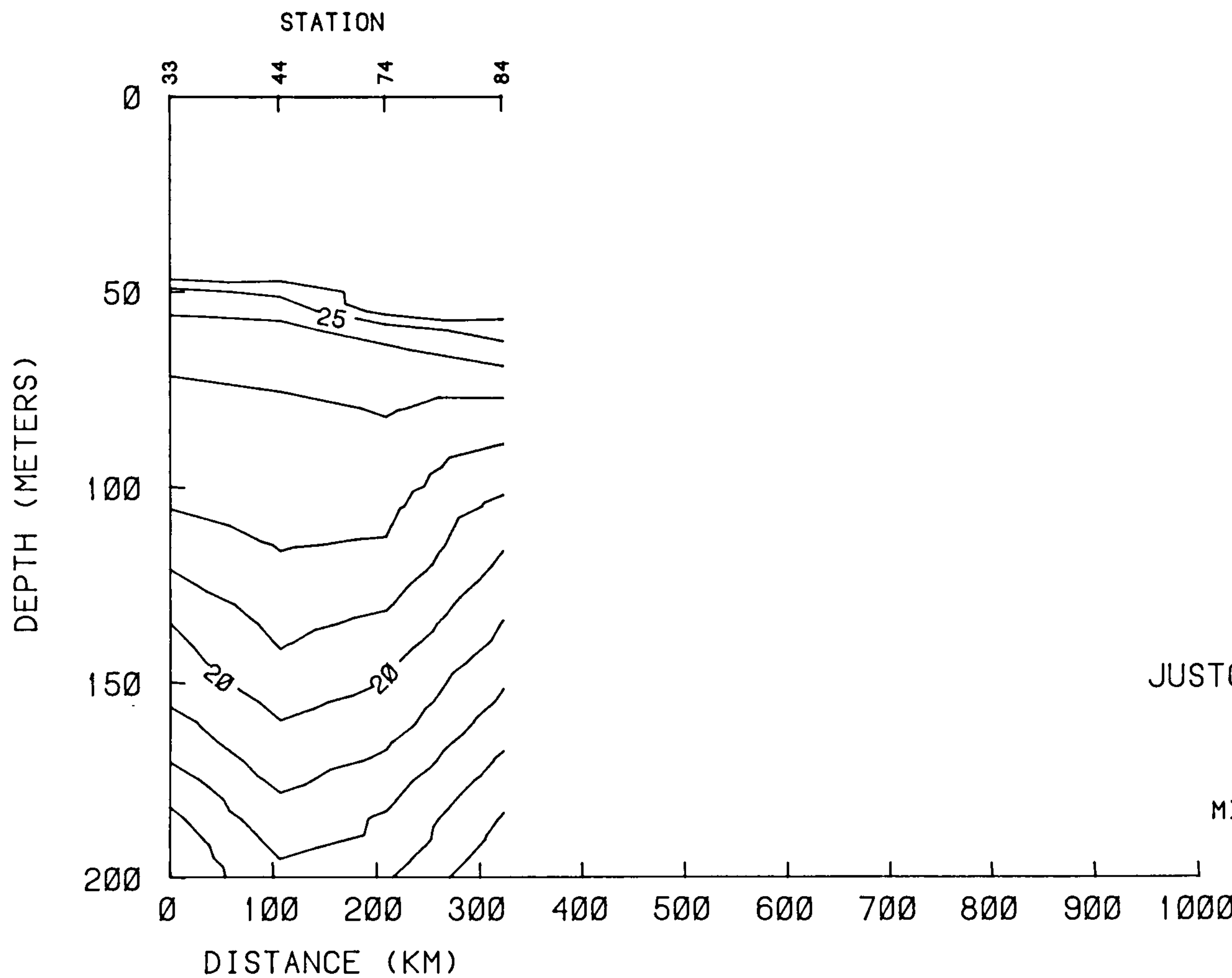
JUSTO SIERRA CRUISE 87-02
10/18/87 TO 11/ 9/87
STATIONS 30 TO 119
TEMPERATURE DEG C
MIN = 5.35 MAX = 27.10



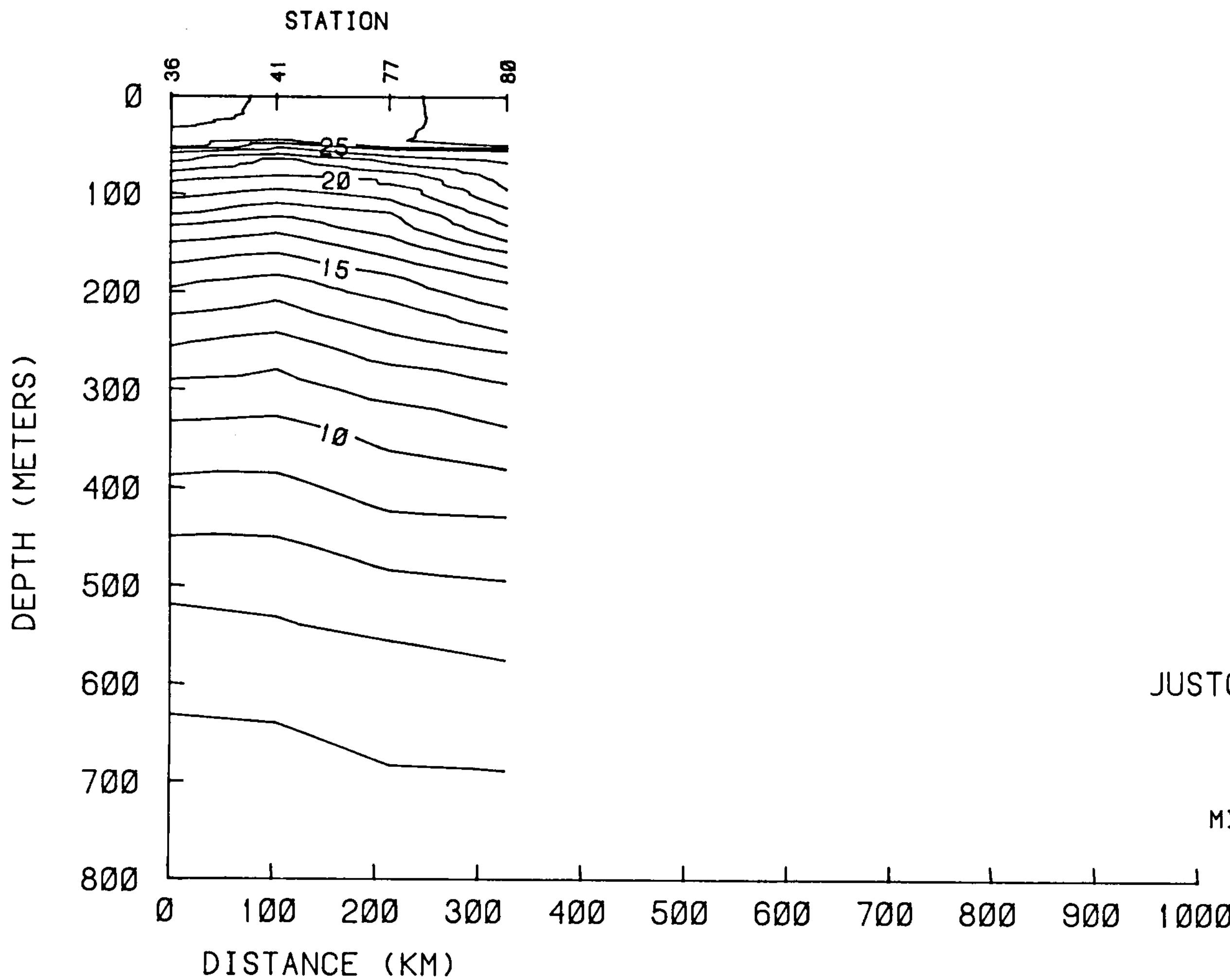
JUSTO SIERRA CRUISE 87-02
10/18/87 TO 11/ 9/87
STATIONS 30 TO 119
TEMPERATURE DEG C
MIN = 14.82 MAX = 27.10



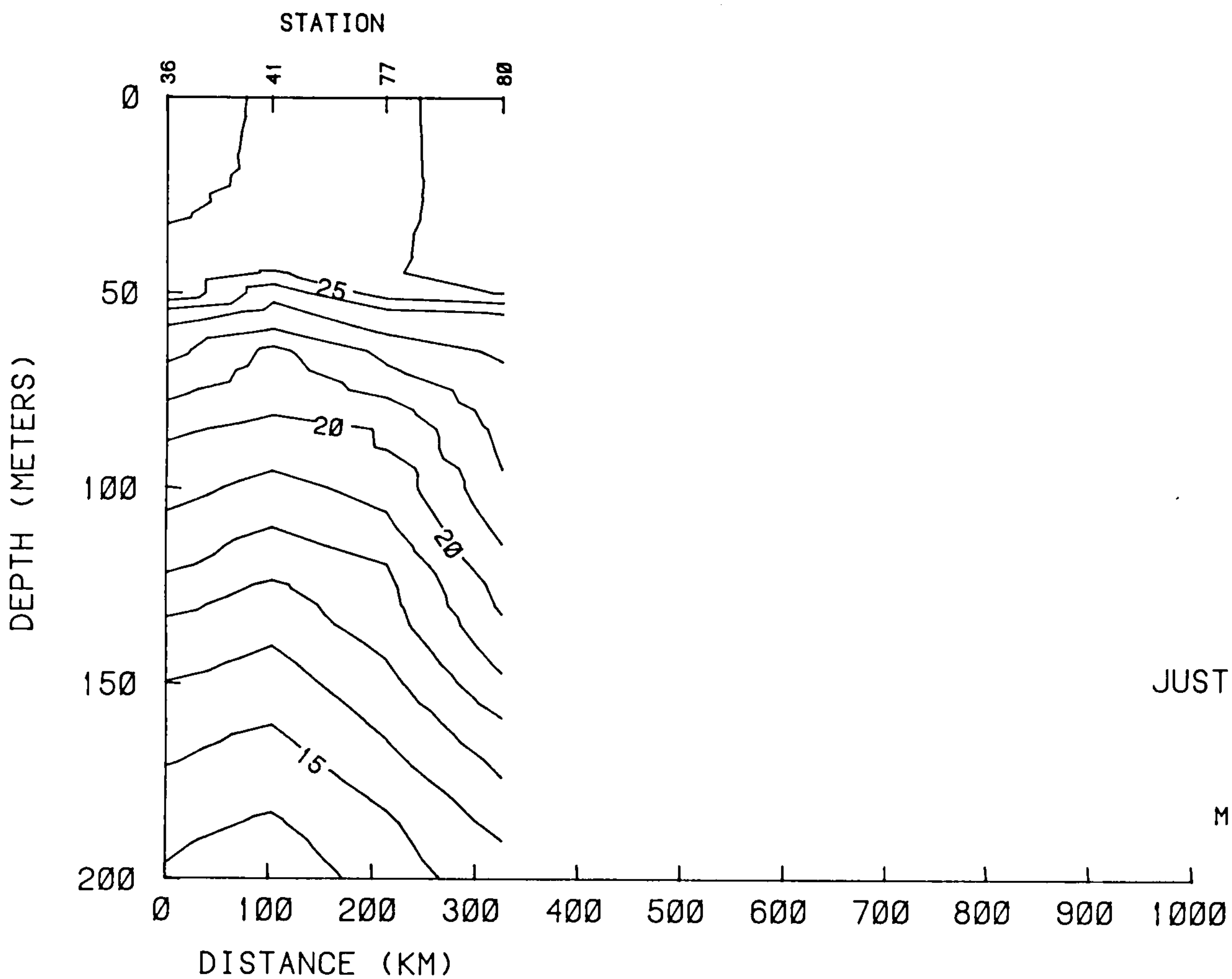
JUSTO SIERRA CRUISE 87-02
10/18/87 TO 10/25/87
STATIONS 33 TO 84
TEMPERATURE DEG C
MIN = 5.52 MAX = 26.91



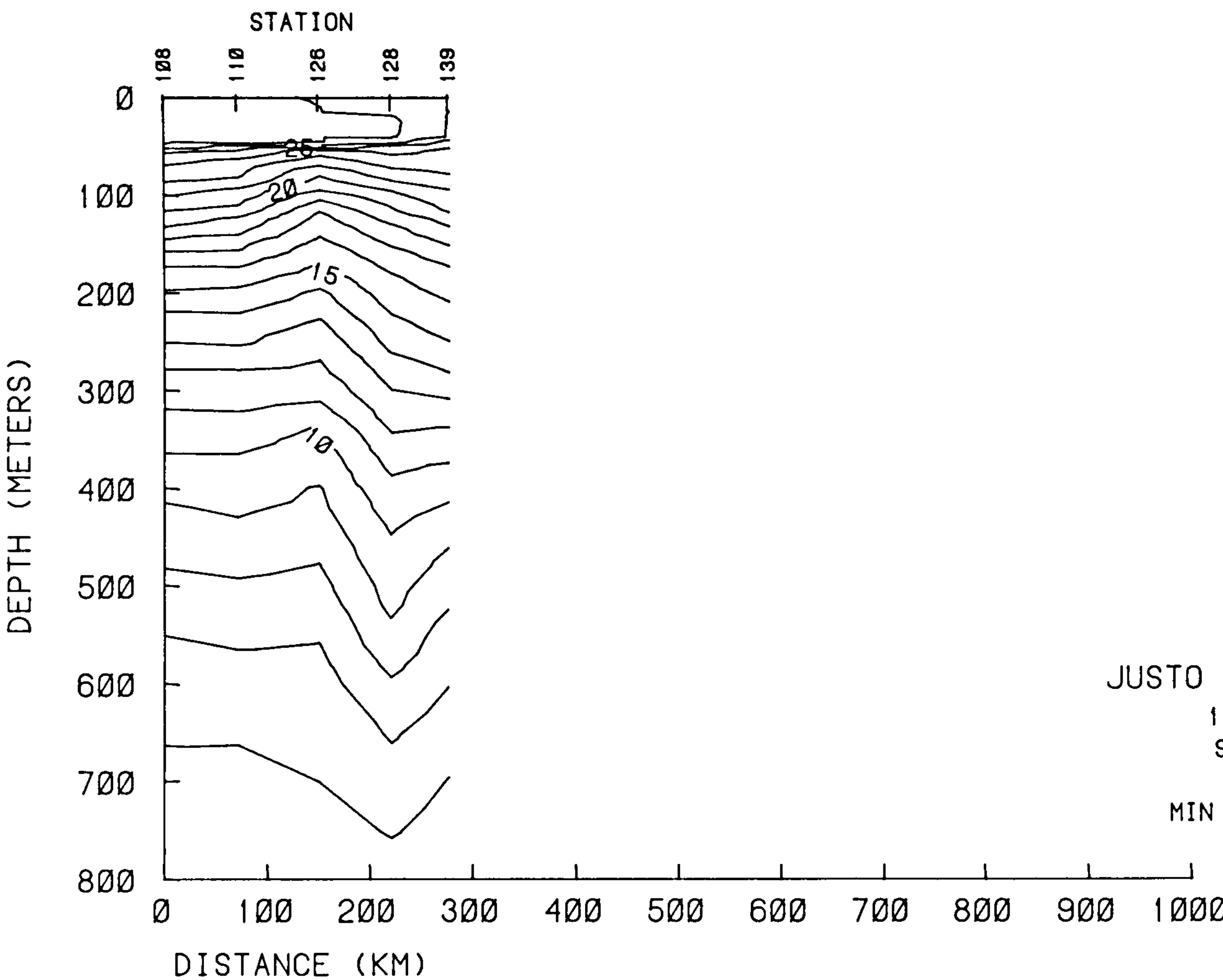
JUSTO SIERRA CRUISE 87-Ø2
1Ø/18/87 TO 1Ø/25/87
STATIONS 33 TO 84
TEMPERATURE DEG C
MIN = 15.Ø4 MAX = 26.91



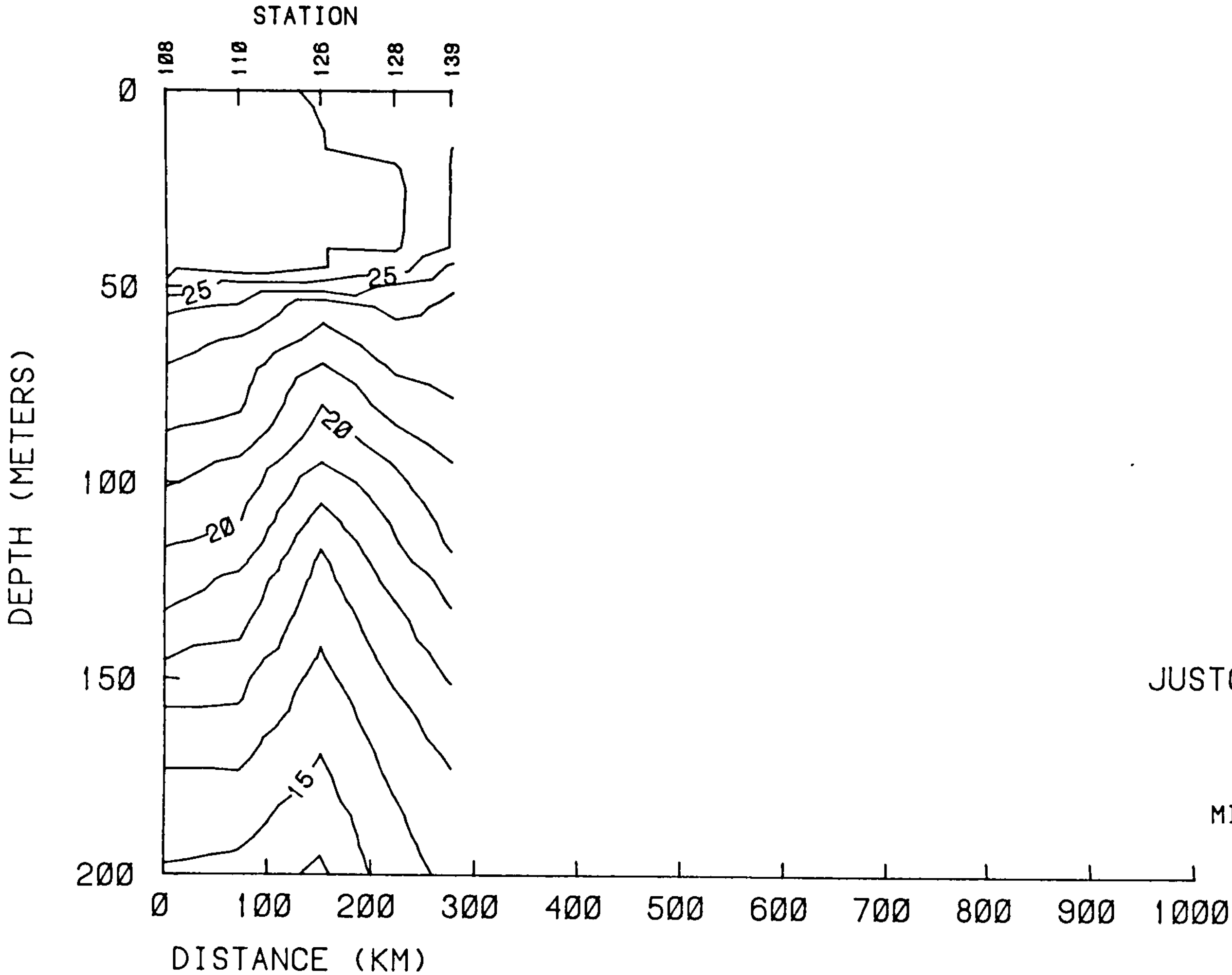
JUSTO SIERRA CRUISE 87-02
10/18/87 TO 10/24/87
STATIONS 36 TO 80
TEMPERATURE DEG C
MIN = 5.18 MAX = 26.71



JUSTO SIERRA CRUISE 87-02
10/18/87 TO 10/24/87
STATIONS 36 TO 80
TEMPERATURE DEG C
MIN = 13.36 MAX = 26.71

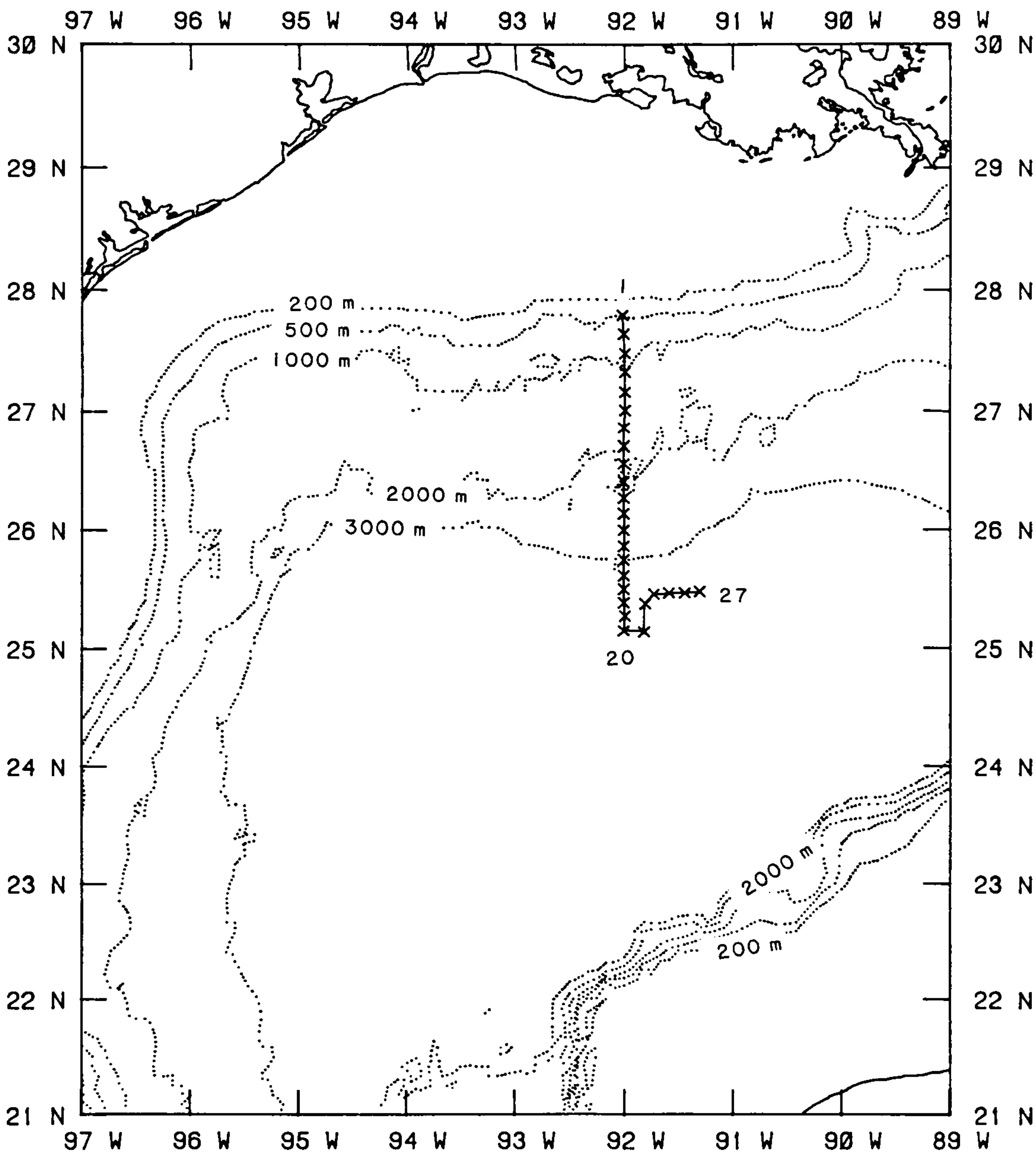


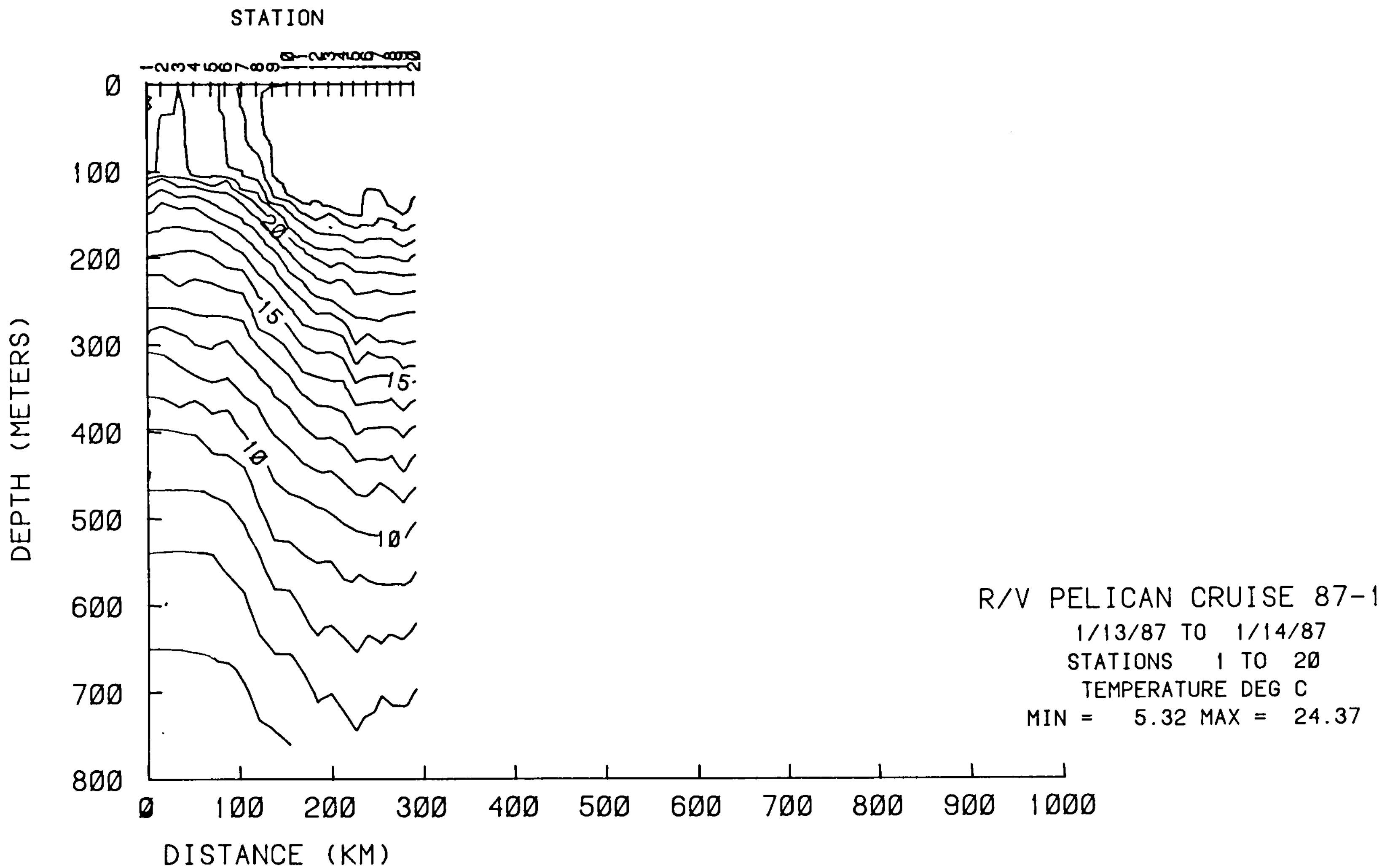
JUSTO SIERRA CRUISE 87-02
11/ 6/87 TO 11/16/87
STATIONS 108 TO 139
TEMPERATURE DEG C
MIN = 5.31 MAX = 26.80

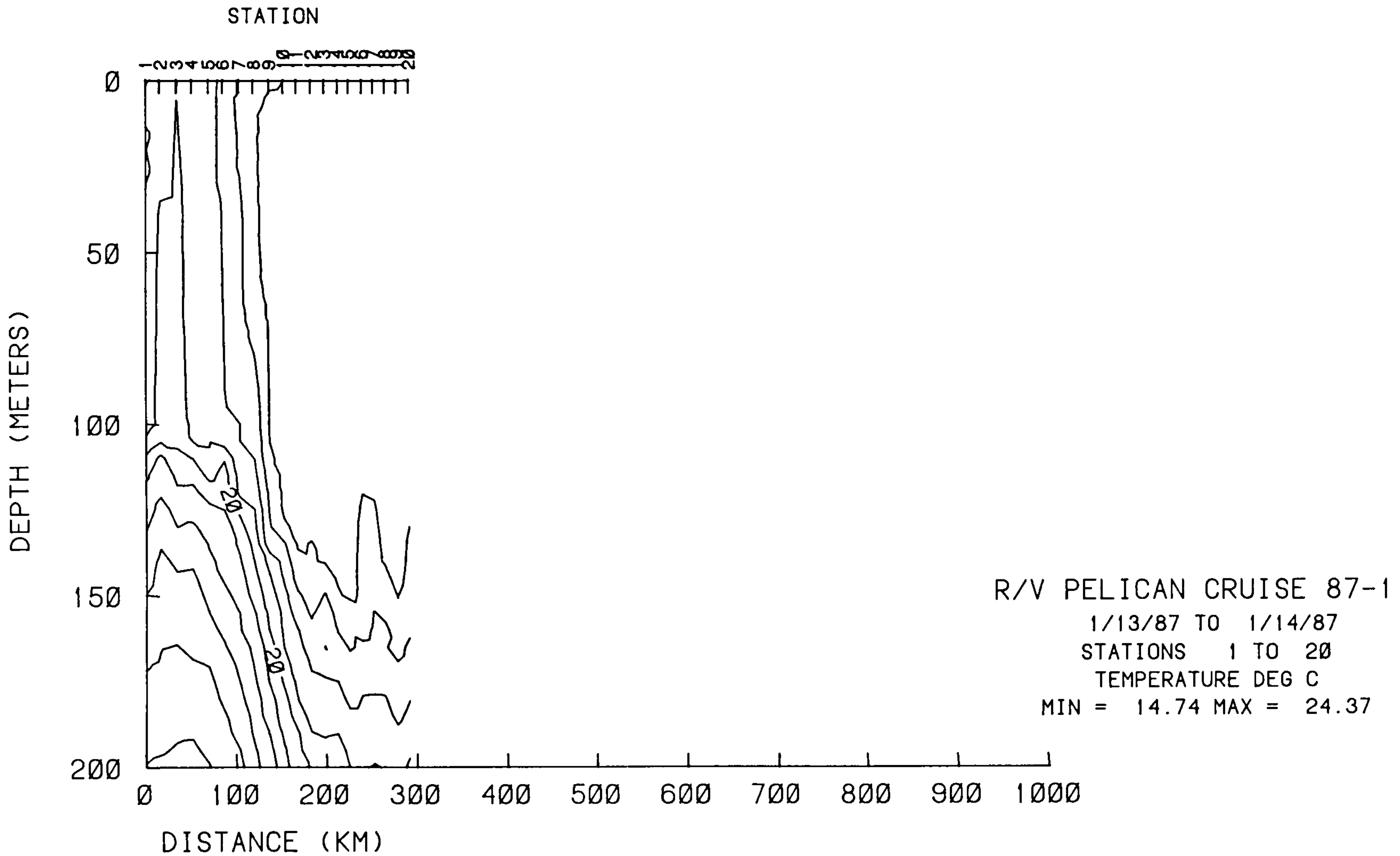


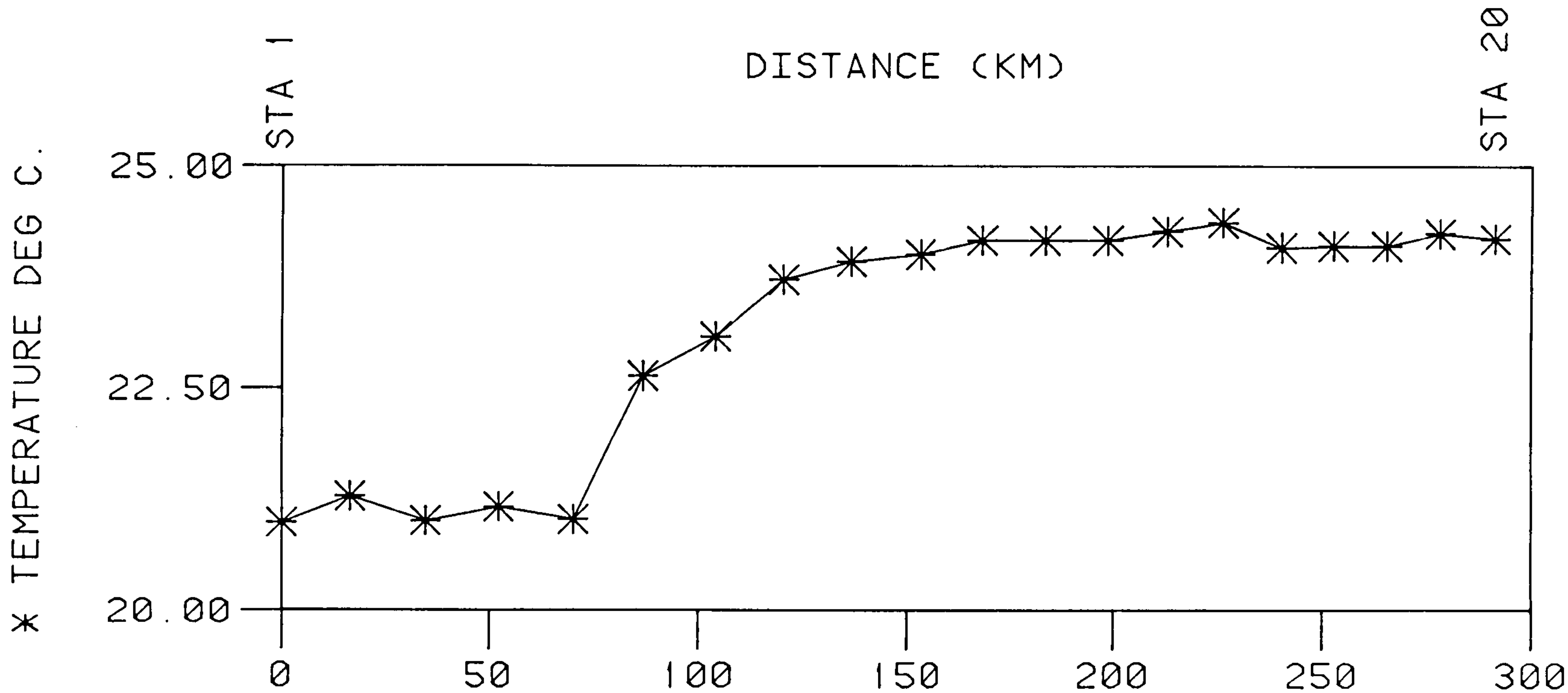
JUSTO SIERRA CRUISE 87-02
11/ 6/87 TO 11/16/87
STATIONS 108 TO 139
TEMPERATURE DEG C
MIN = 13.77 MAX = 26.80

R/V PELICAN CRUISE 87-11 1/13/87 TO 1/14/87

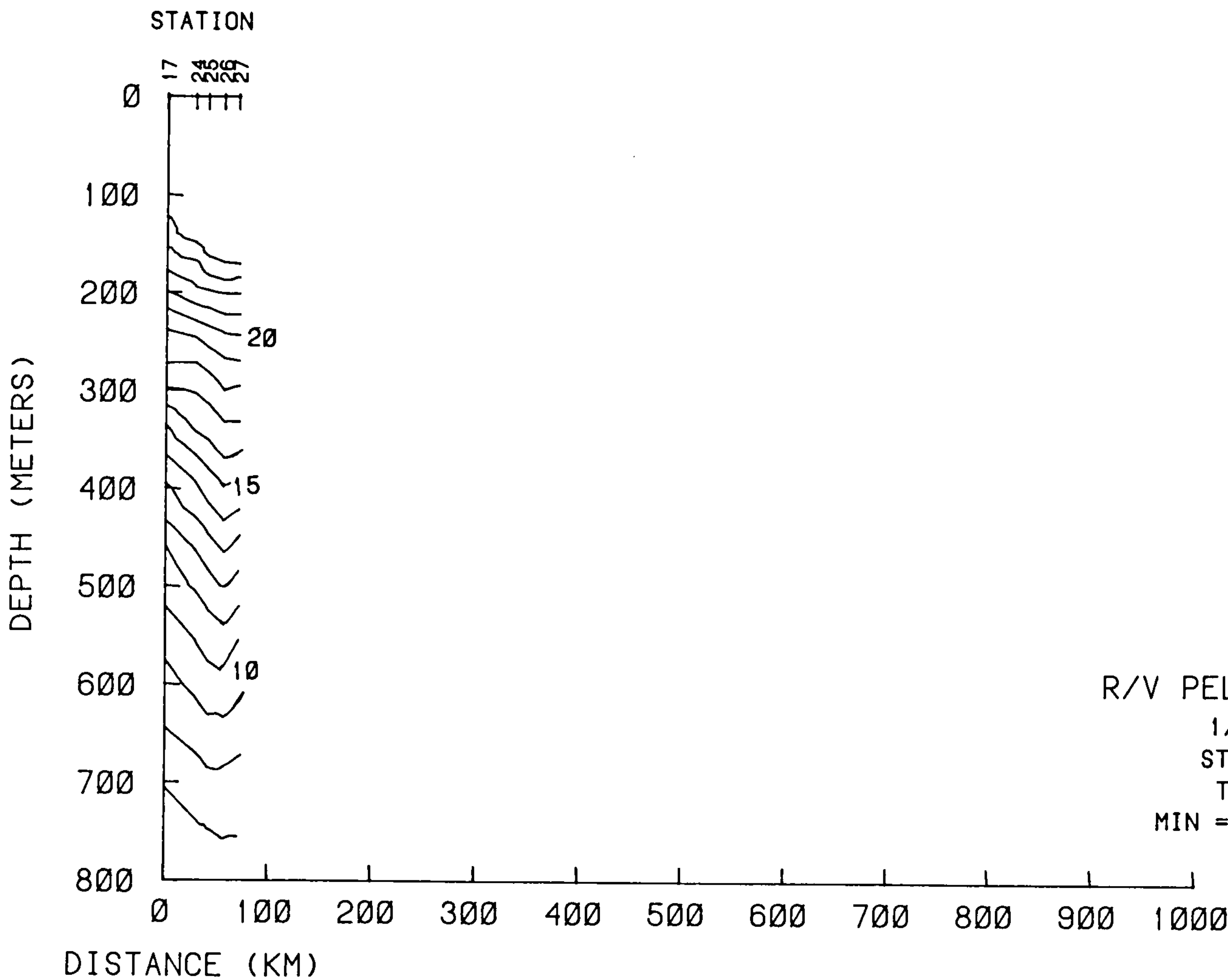



STATION
DEPTH (METERS)
DISTANCE (KM)
R/V PELICAN CRUISE 87-11
1/13/87 TO 1/14/87
STATIONS 1 TO 20
TEMPERATURE DEG C
MIN = 5.32 MAX = 24.37

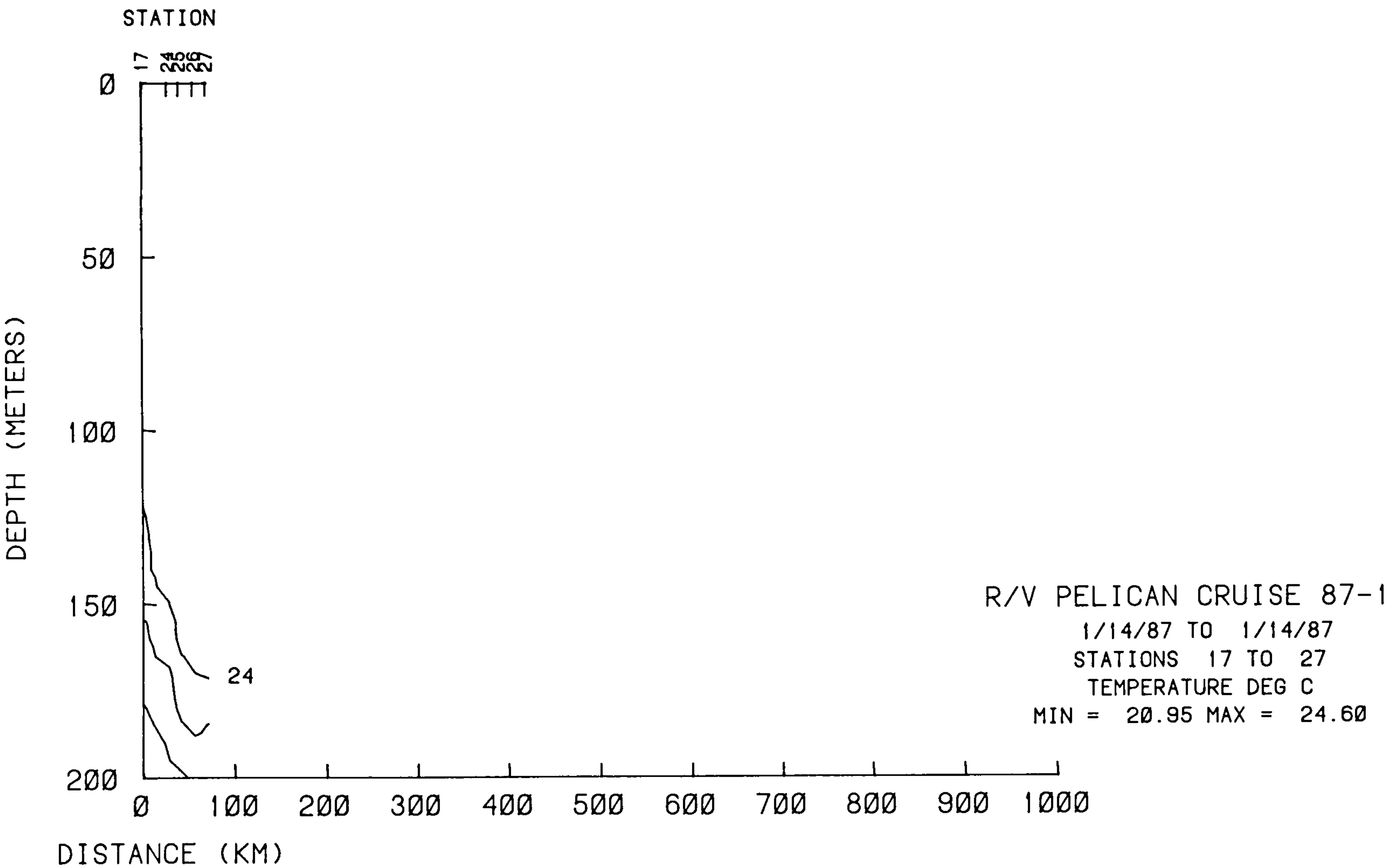

STATION
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
DEPTH (METERS)
0
50
100
150
200
20
20
0 100 200 300 400 500 600 700 800 900 1000
DISTANCE (KM)
R/V PELICAN CRUISE 87-11
1/13/87 TO 1/14/87
STATIONS 1 TO 20
TEMPERATURE DEG C
MIN = 14.74 MAX = 24.37

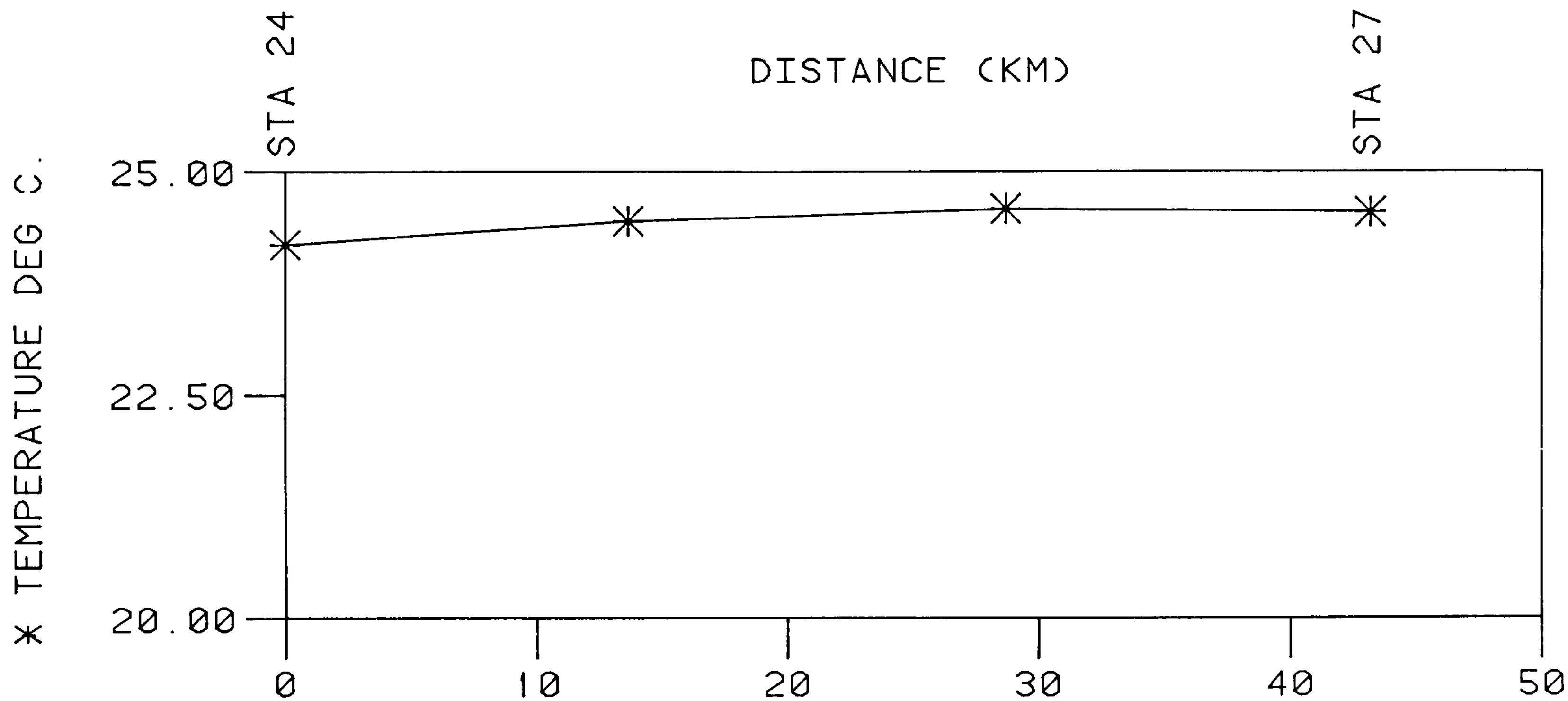


PARAMETERS AT SURFACE R/V PELICAN CRUISE 87-11

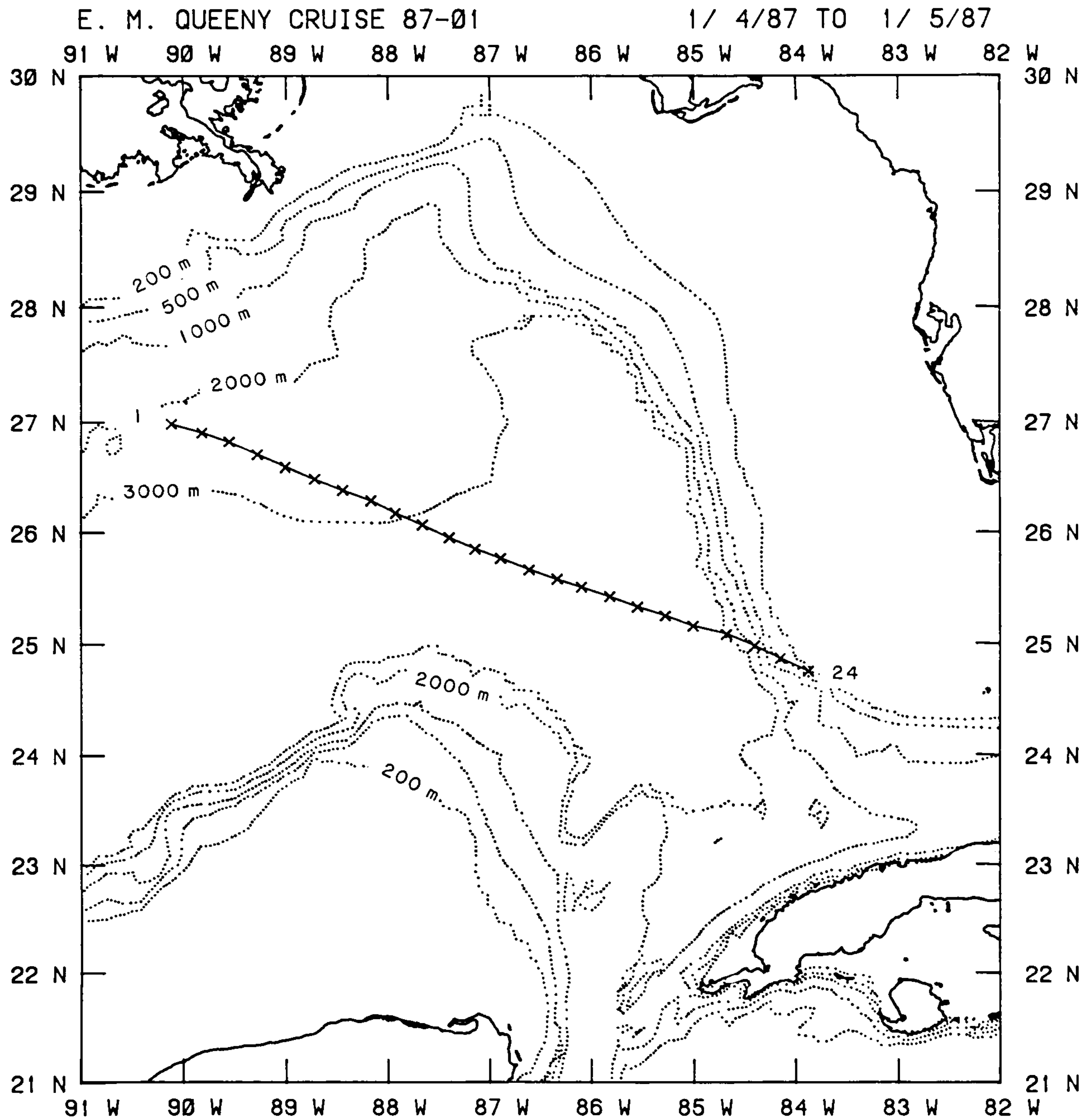


R/V PELICAN CRUISE 87-11
1/14/87 TO 1/14/87
STATIONS 17 TO 27
TEMPERATURE DEG C
MIN = 6.53 MAX = 24.6Ø

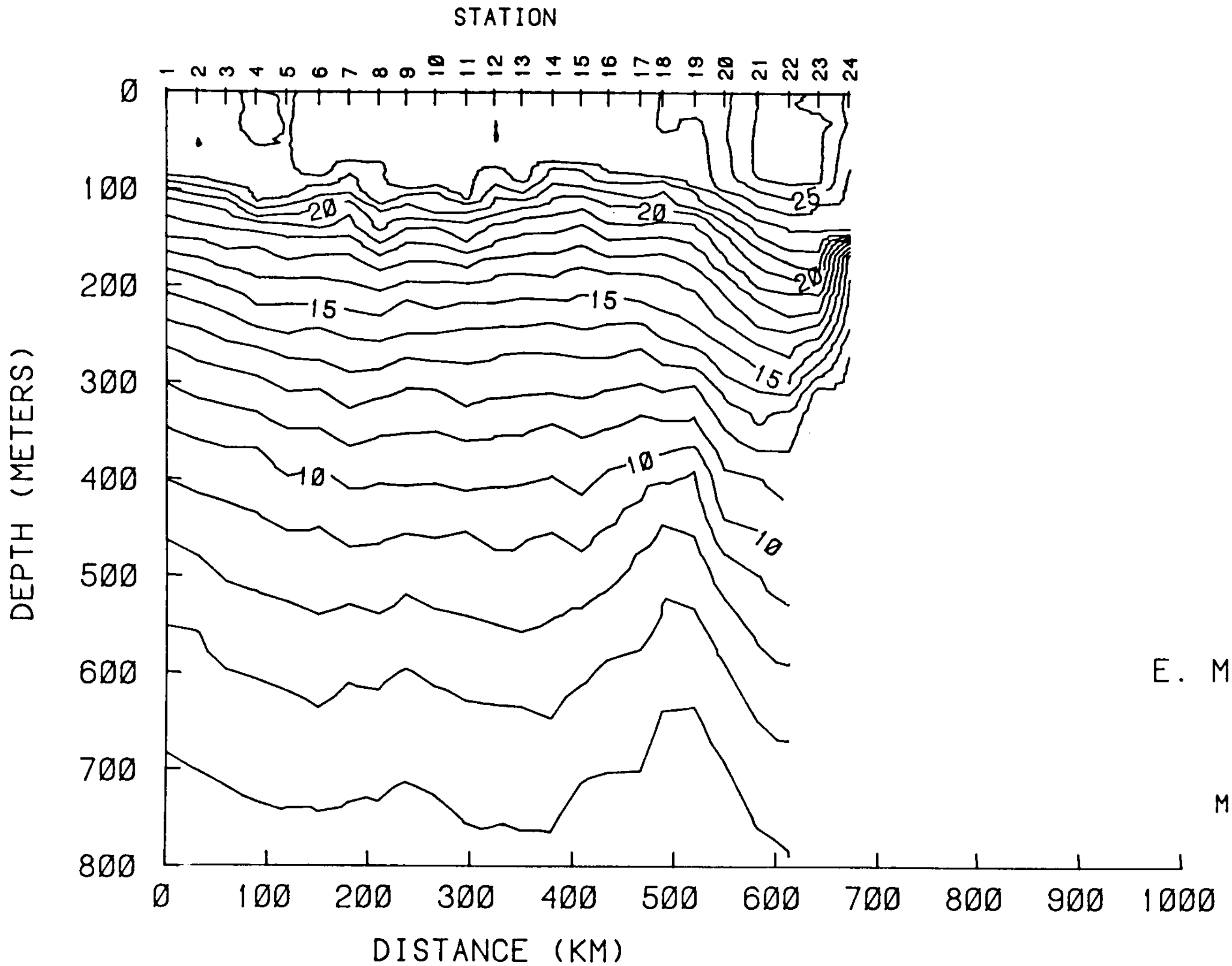

STATION
17
24
25
26
27
0
50
100
150
200
DEPTH (METERS)
24
0
100
200
300
400
500
600
700
800
900
1000
DISTANCE (KM)
R/V PELICAN CRUISE 87-11
1/14/87 TO 1/14/87
STATIONS 17 TO 27
TEMPERATURE DEG C
MIN = 20.95 MAX = 24.60



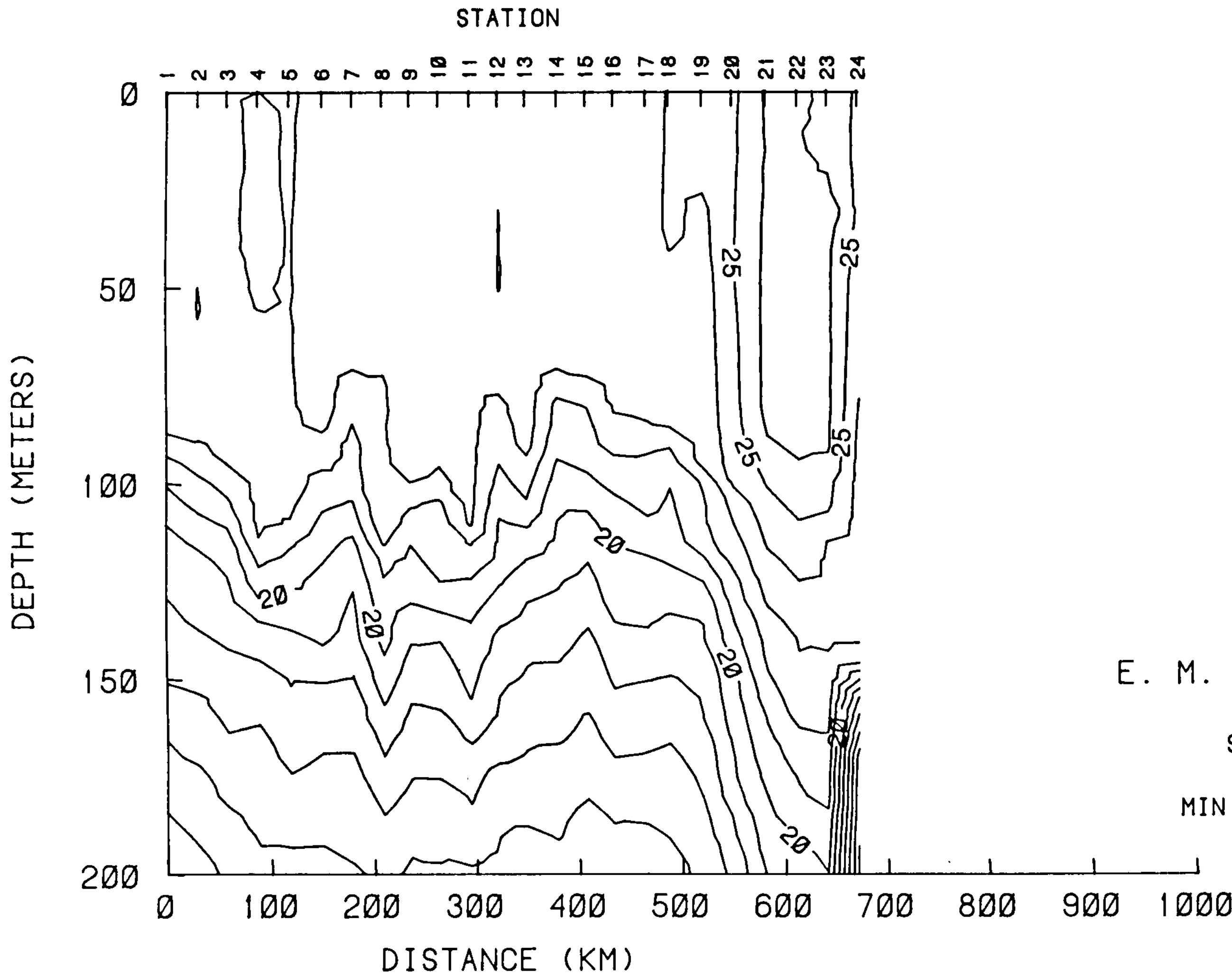
PARAMETERS AT SURFACE R/V PELICAN CRUISE 87-11



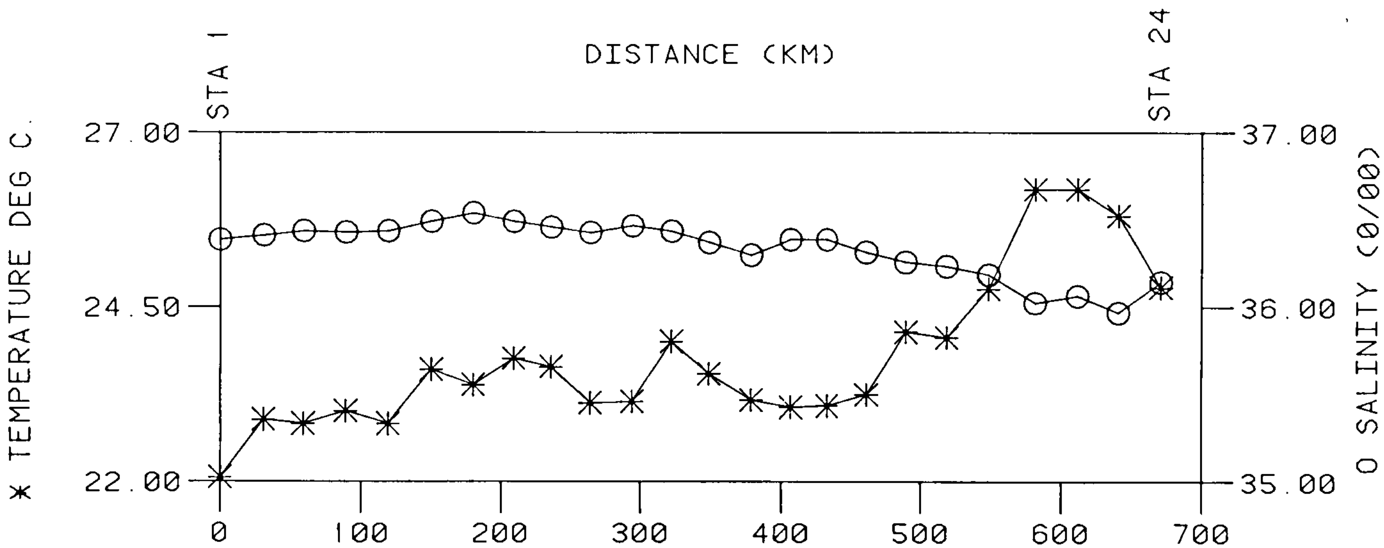
E. M. QUEENY CRUISE 87-Ø1
1/ 4/87 TO 1/ 5/87
91 W
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
1
24
2000 m
200 m



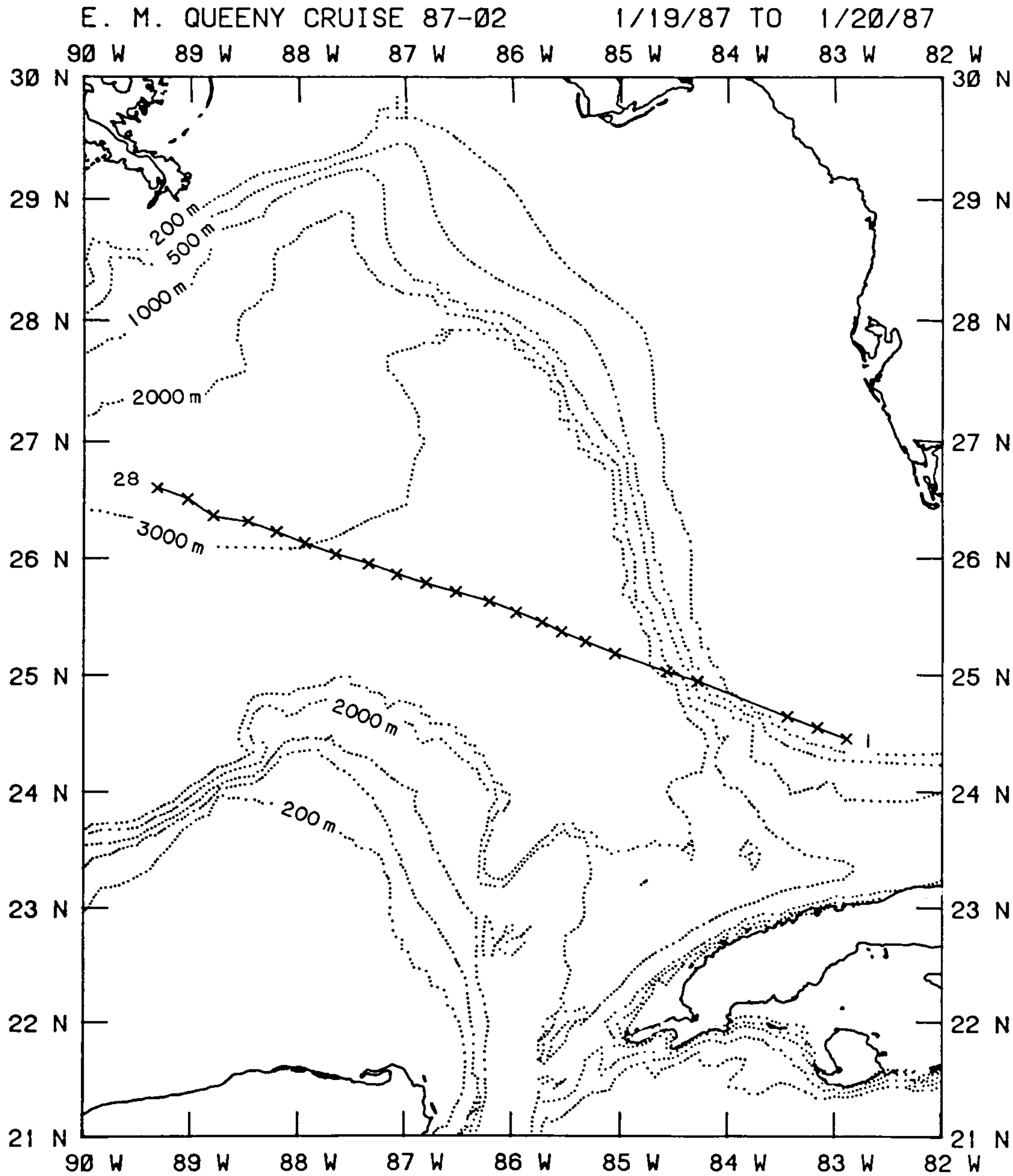
E. M. QUEENY CRUISE 87-01
1/ 4/87 TO 1/ 5/87
STATIONS 1 TO 24
TEMPERATURE DEG C
MIN = 5.09 MAX = 26.75

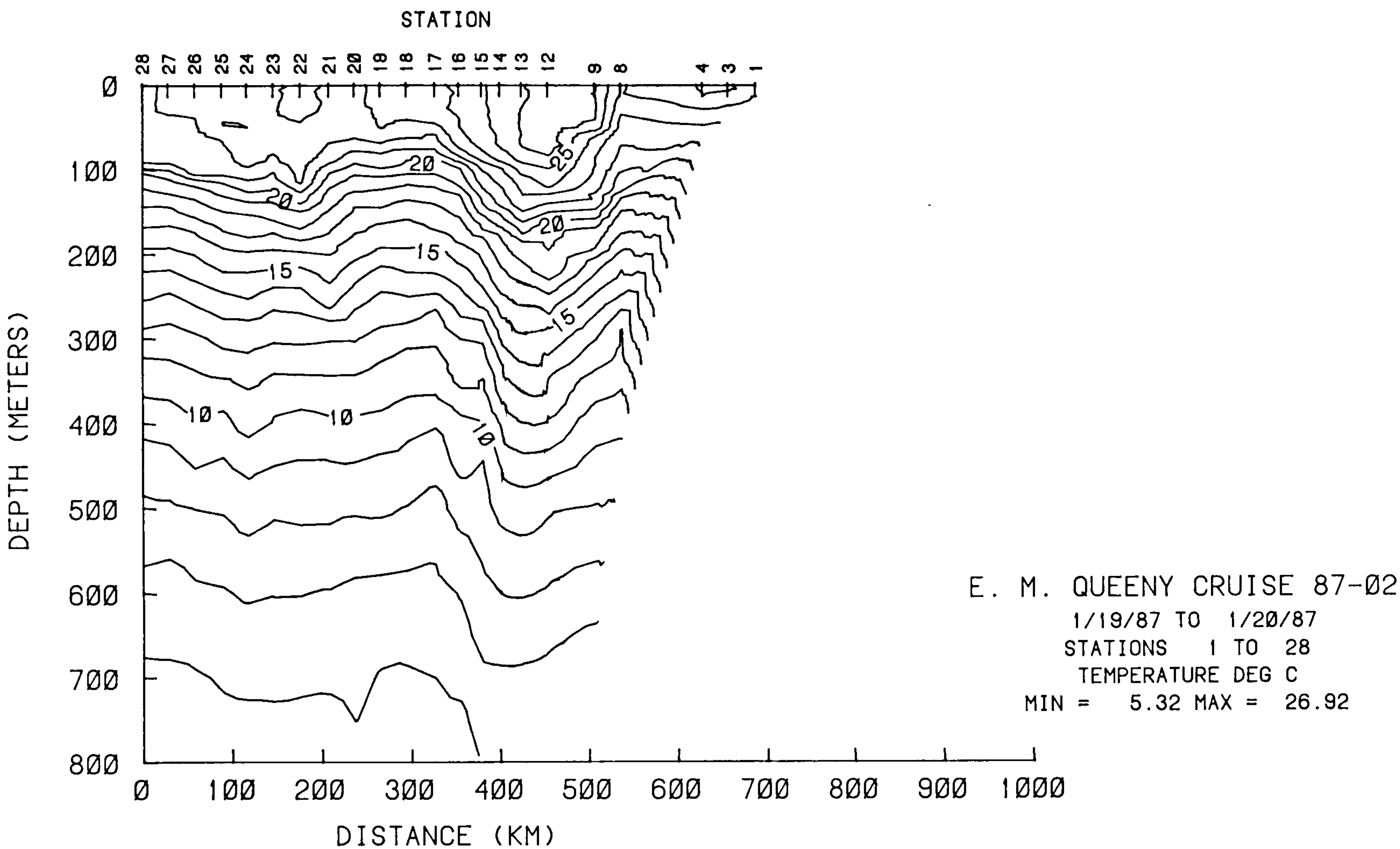


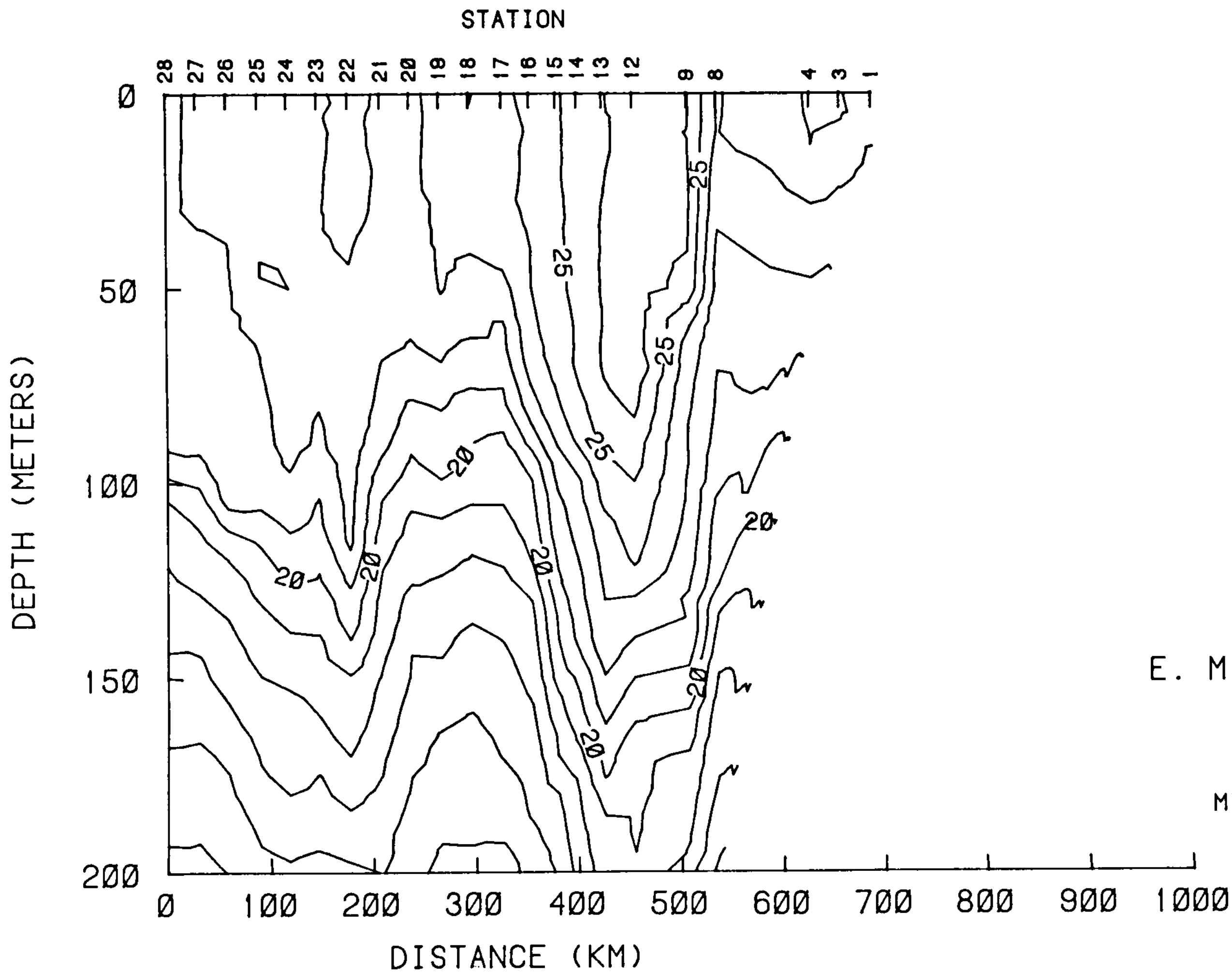
E. M. QUEENY CRUISE 87-01
1/ 4/87 TO 1/ 5/87
STATIONS 1 TO 24
TEMPERATURE DEG C
MIN = 13.91 MAX = 26.75



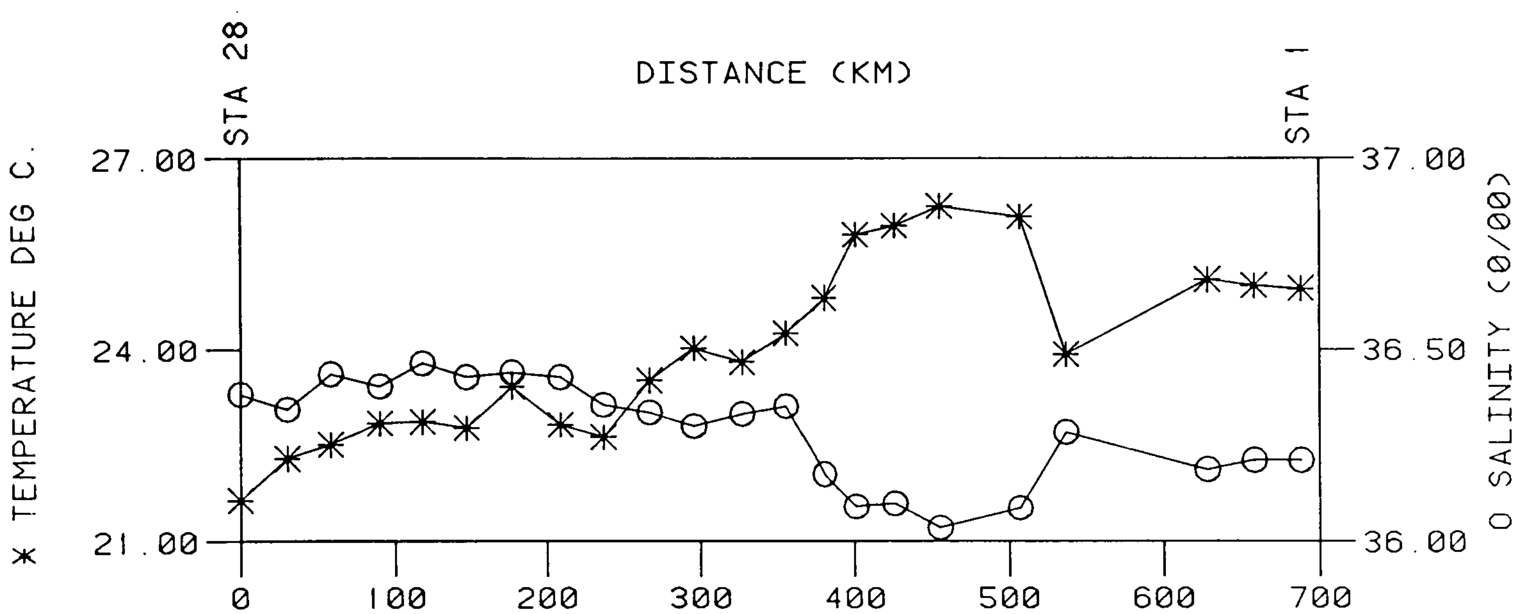
PARAMETERS AT SURFACE E. M. QUEENY CRUISE 87-01


E. M. QUEENY CRUISE 87-Ø2 1/19/87 TO 1/2Ø/87
9Ø W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
3Ø N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
28
3000 m
2000 m
200 m
1

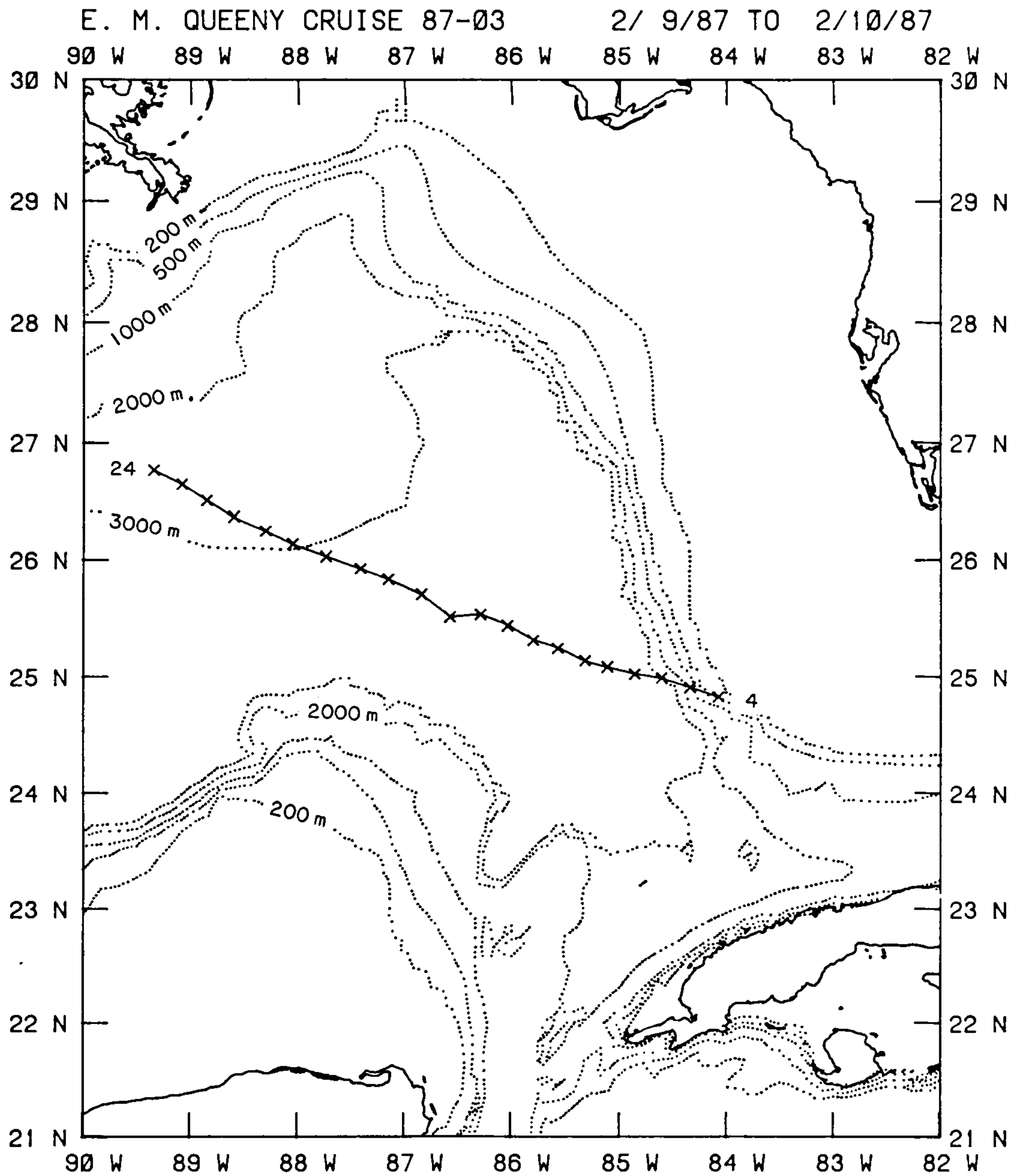

STATION
28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 9 8 4 3 1
DEPTH (METERS)
0
100
200
300
400
500
600
700
800
DISTANCE (KM)
0 100 200 300 400 500 600 700 800 900 1000
25
20
15
10
E. M. QUEENY CRUISE 87-02
1/19/87 TO 1/20/87
STATIONS 1 TO 28
TEMPERATURE DEG C
MIN = 5.32 MAX = 26.92



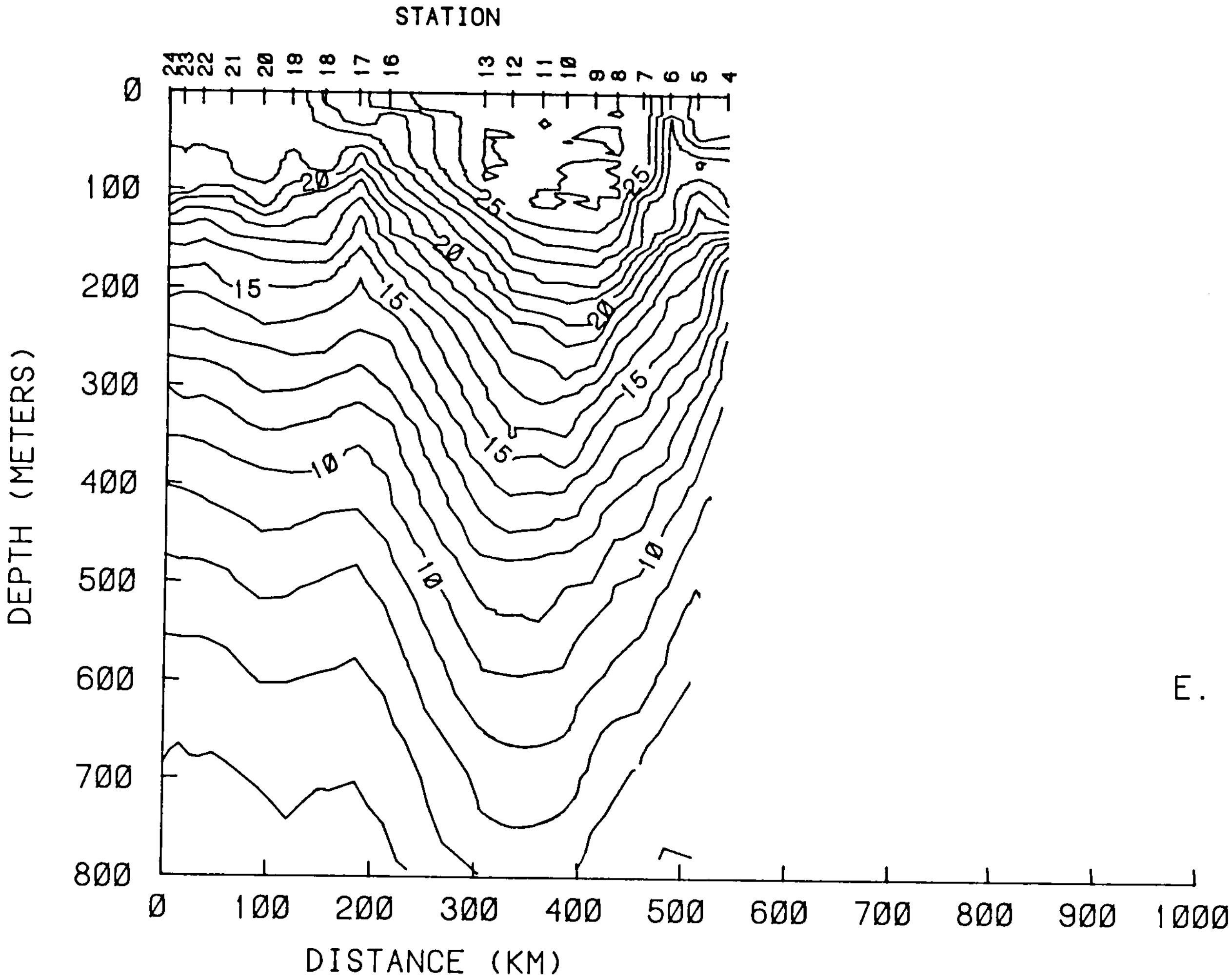
E. M. QUEENY CRUISE 87-02
1/19/87 TO 1/20/87
STATIONS 1 TO 28
TEMPERATURE DEG C
MIN = 14.62 MAX = 26.92



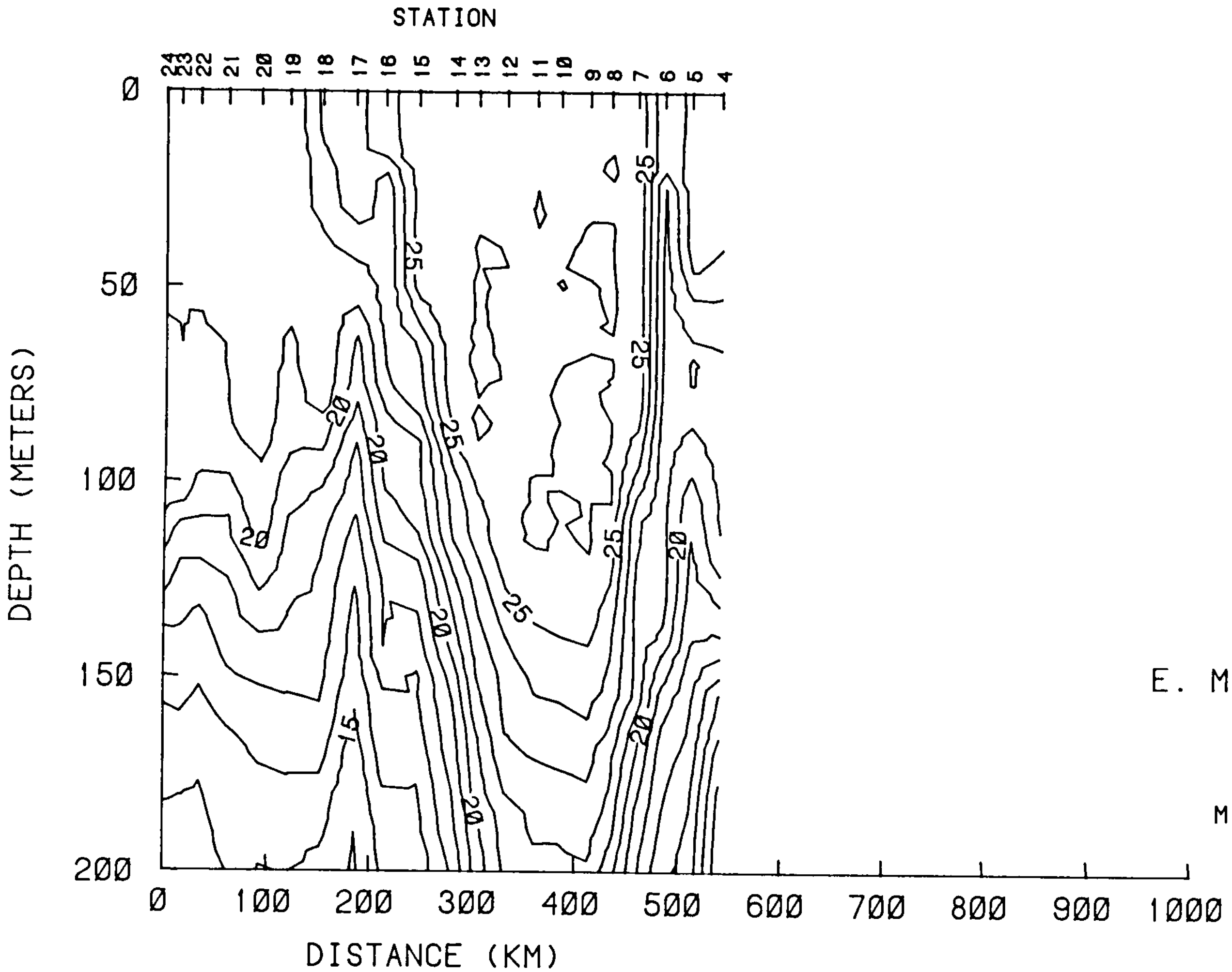
PARAMETERS AT SURFACE E. M. QUEENY CRUISE 87-02



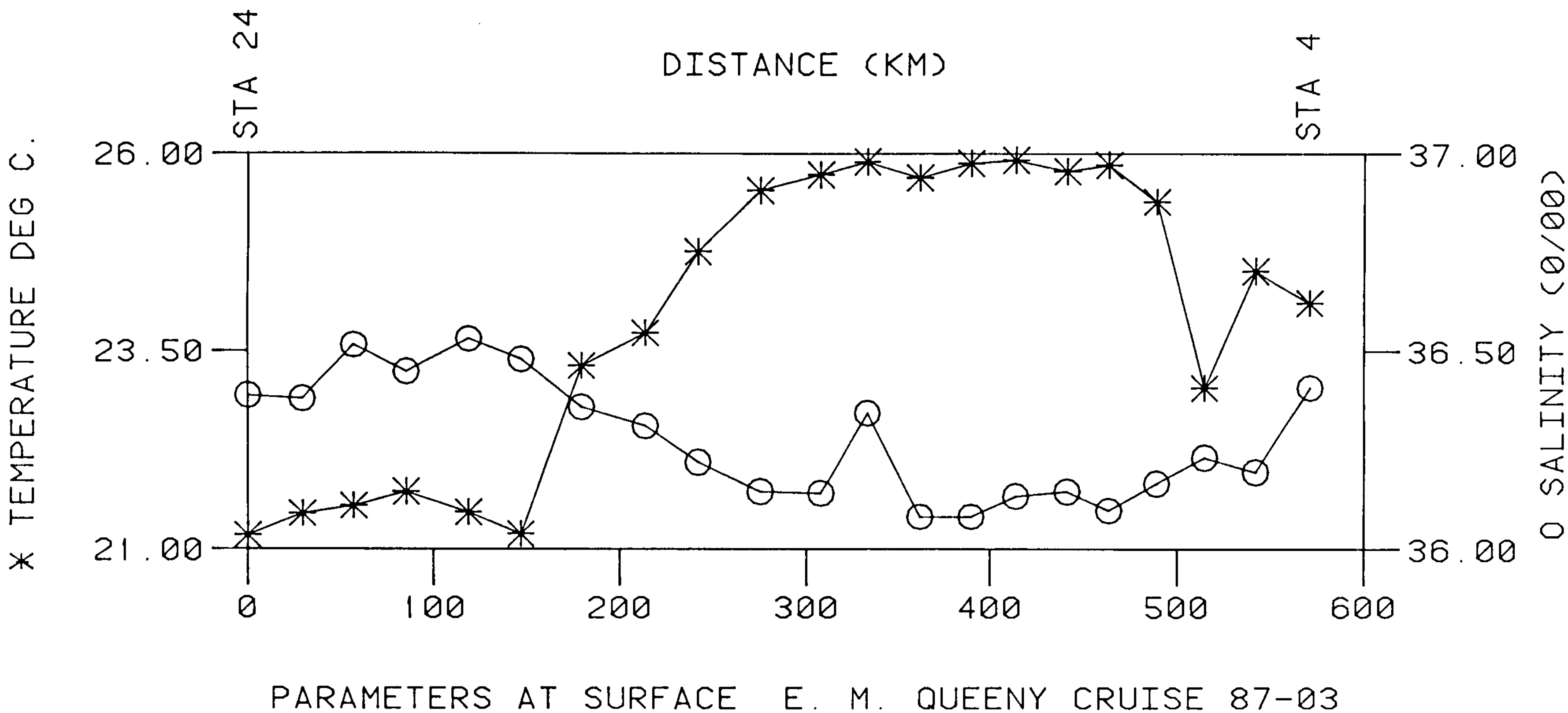
E. M. QUEENY CRUISE 87-Ø3 2/ 9/87 TO 2/1Ø/87
9Ø W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
3Ø N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
2000 m
200 m
24
4

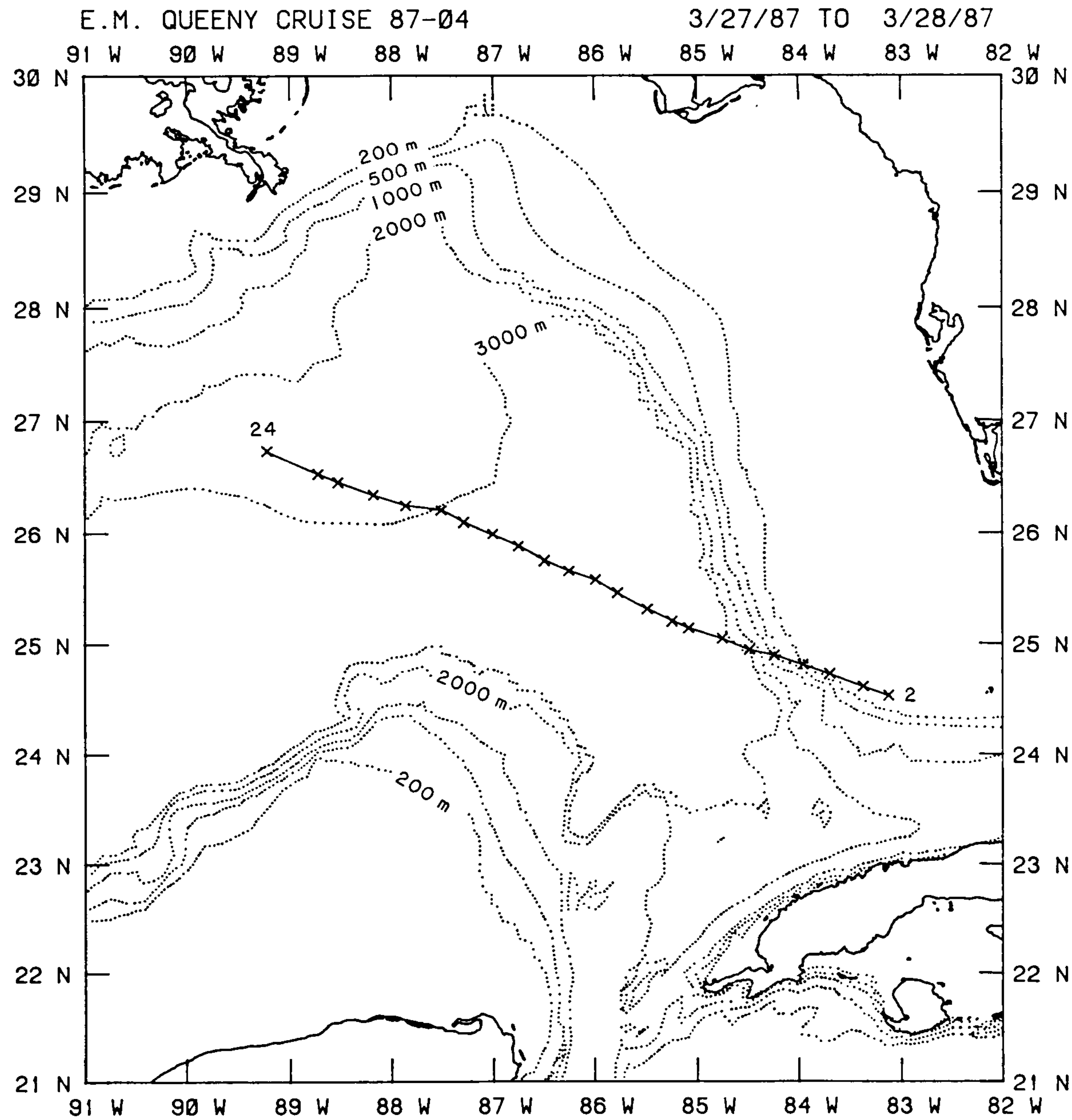


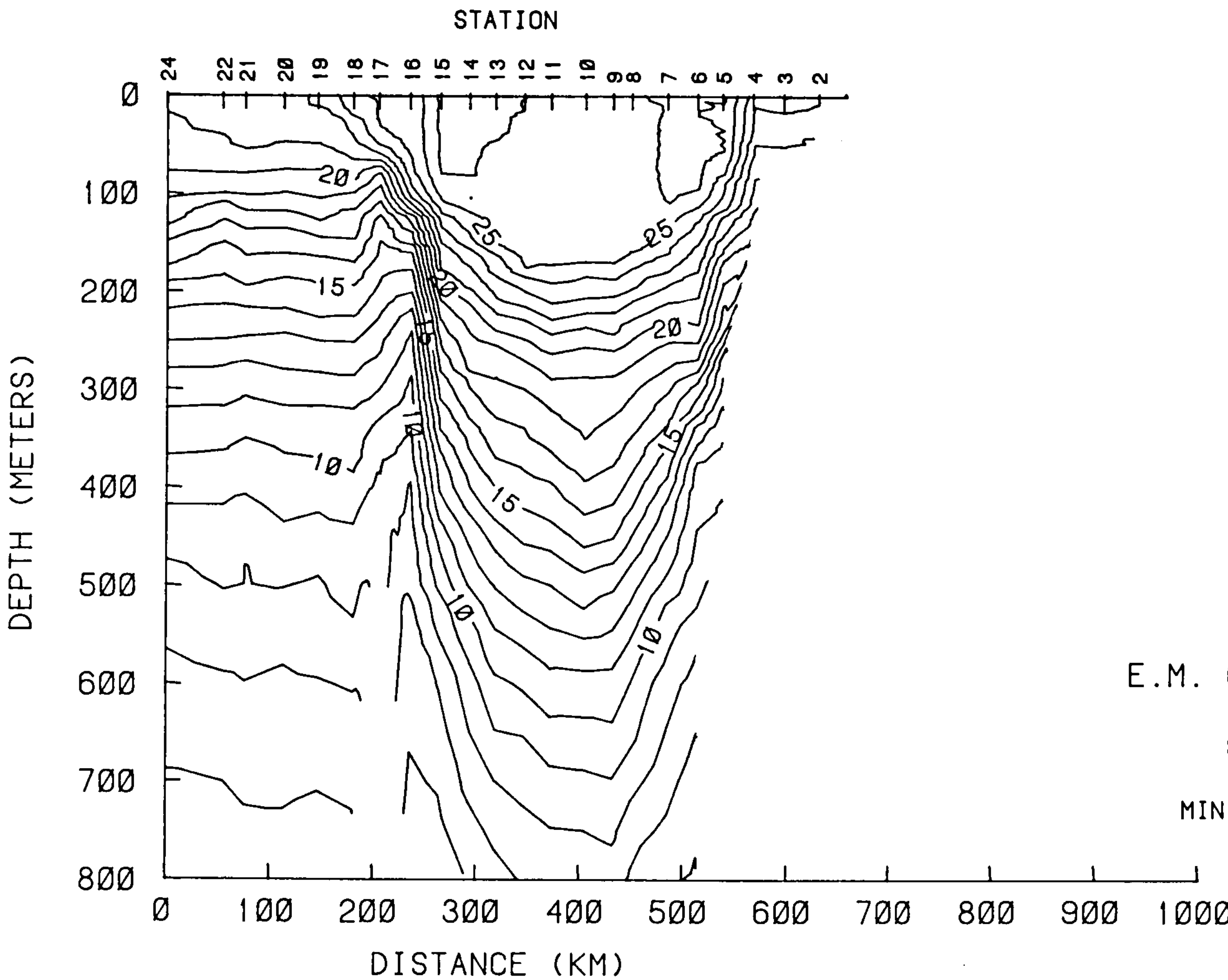
E. M. QUEENY CRUISE 87-03
3/ 2/ 7 TO 3/ 2/ 7
STATIONS 4 TO 24
TEMPERATURE DEG C
MIN = 5.25 MAX = 26.18



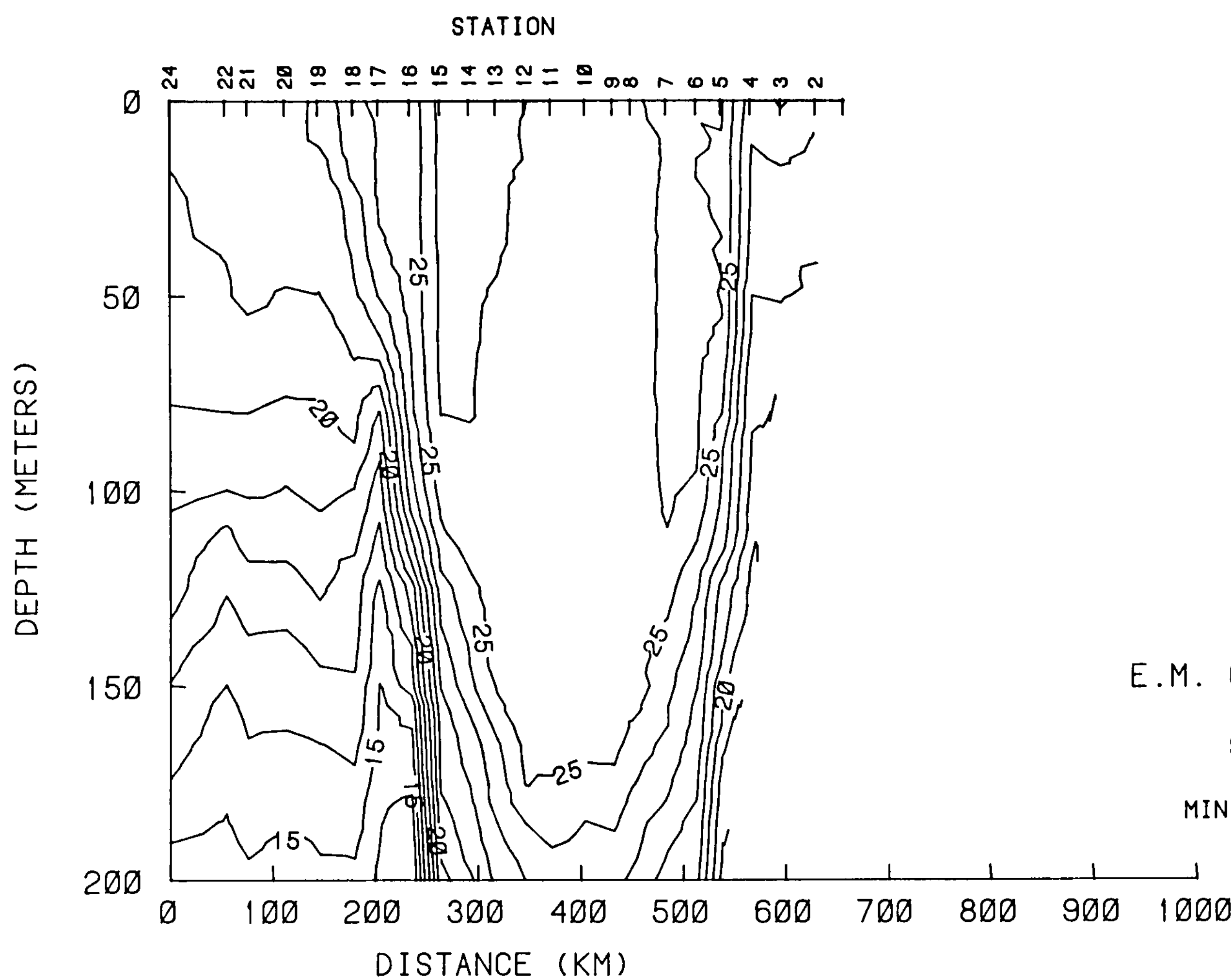
E. M. QUEENY CRUISE 87-03
3/ 2/ 7 TO 3/ 2/ 7
STATIONS 4 TO 24
TEMPERATURE DEG C
MIN = 12.31 MAX = 26.18


STA 24
DISTANCE (KM)
STA 4
26.00
23.50
21.00
* TEMPERATURE DEG C.
37.00
36.50
36.00
O SALINITY (0/00)
0
100
200
300
400
500
600
PARAMETERS AT SURFACE E. M. QUEENY CRUISE 87-03

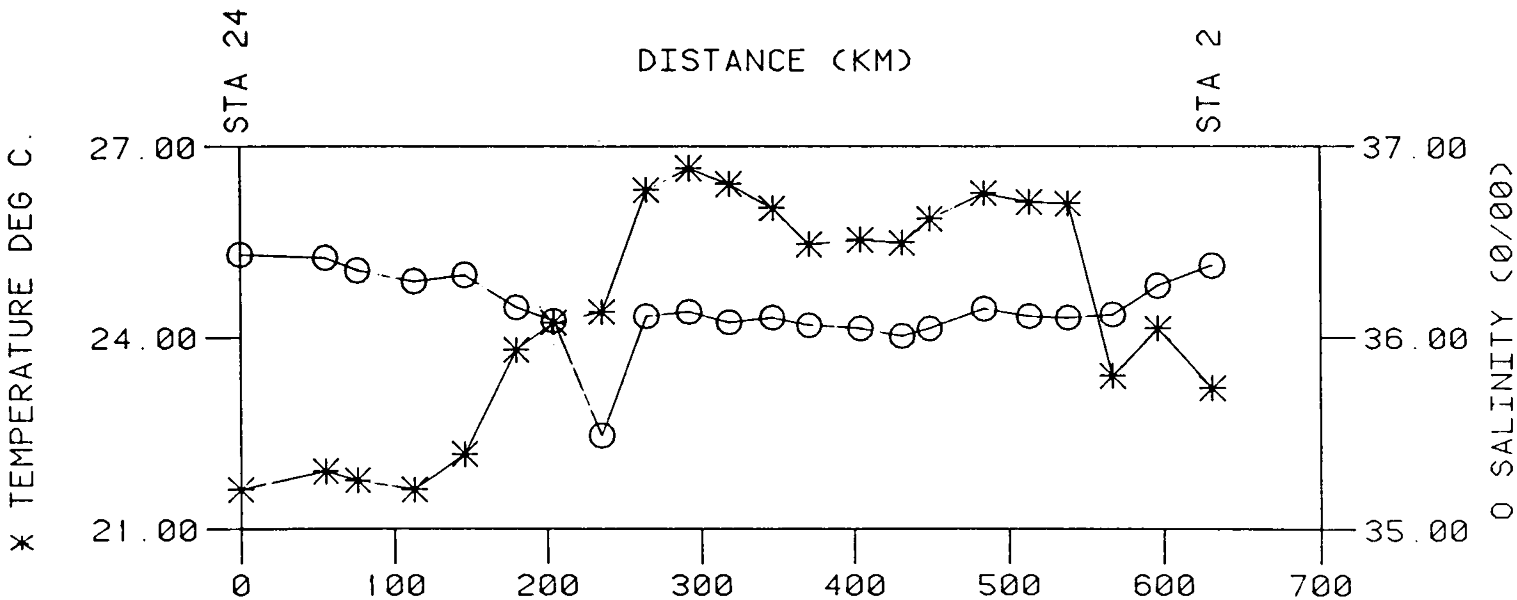

E.M. QUEENY CRUISE 87-Ø4
3/27/87 TO 3/28/87
91 W
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
2000 m
200 m
24
2



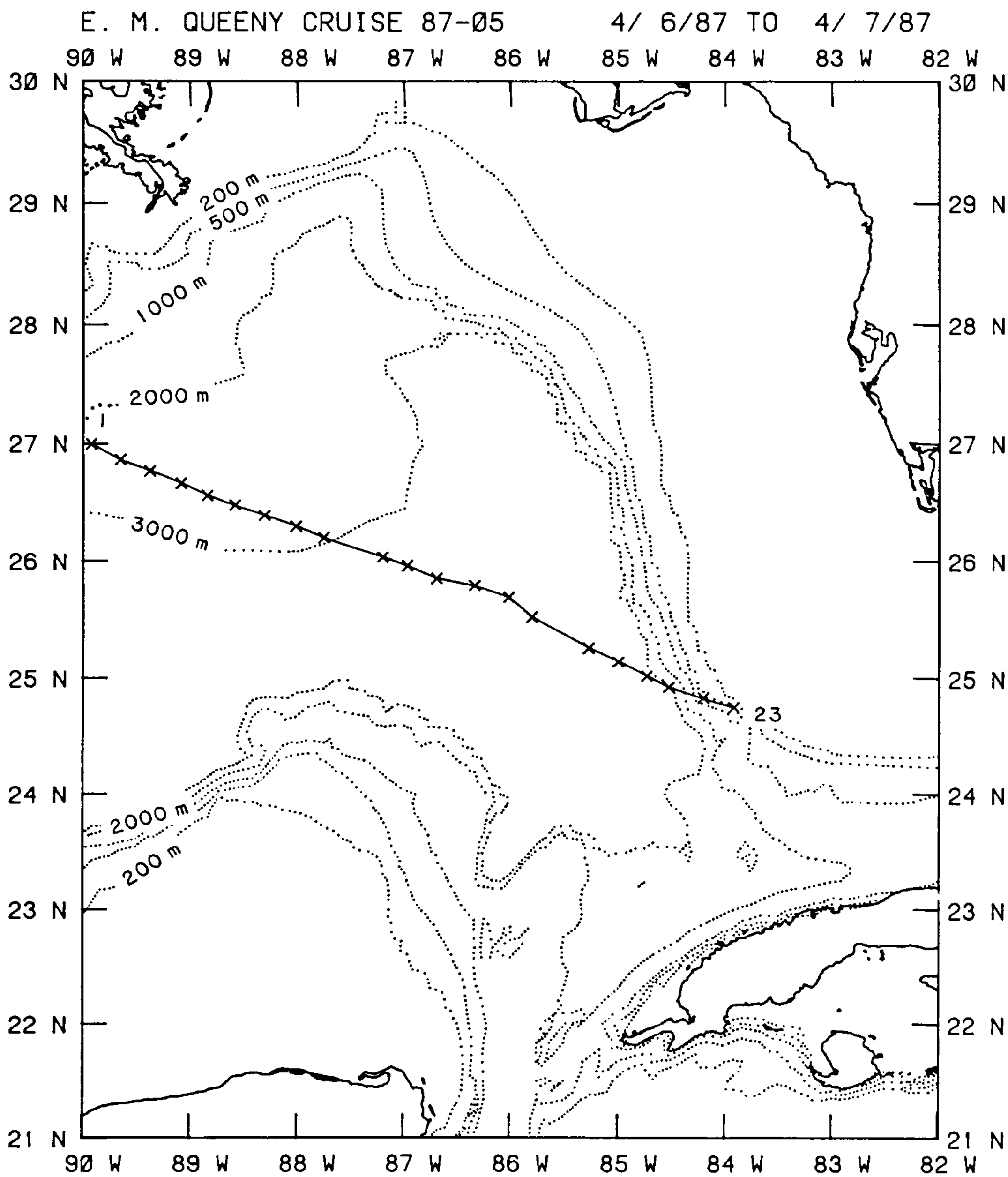
E.M. QUEENY CRUISE 87-04
3/27/87 TO 3/28/87
STATIONS 1 TO 24
TEMPERATURE DEG C
MIN = 5.41 MAX = 26.65

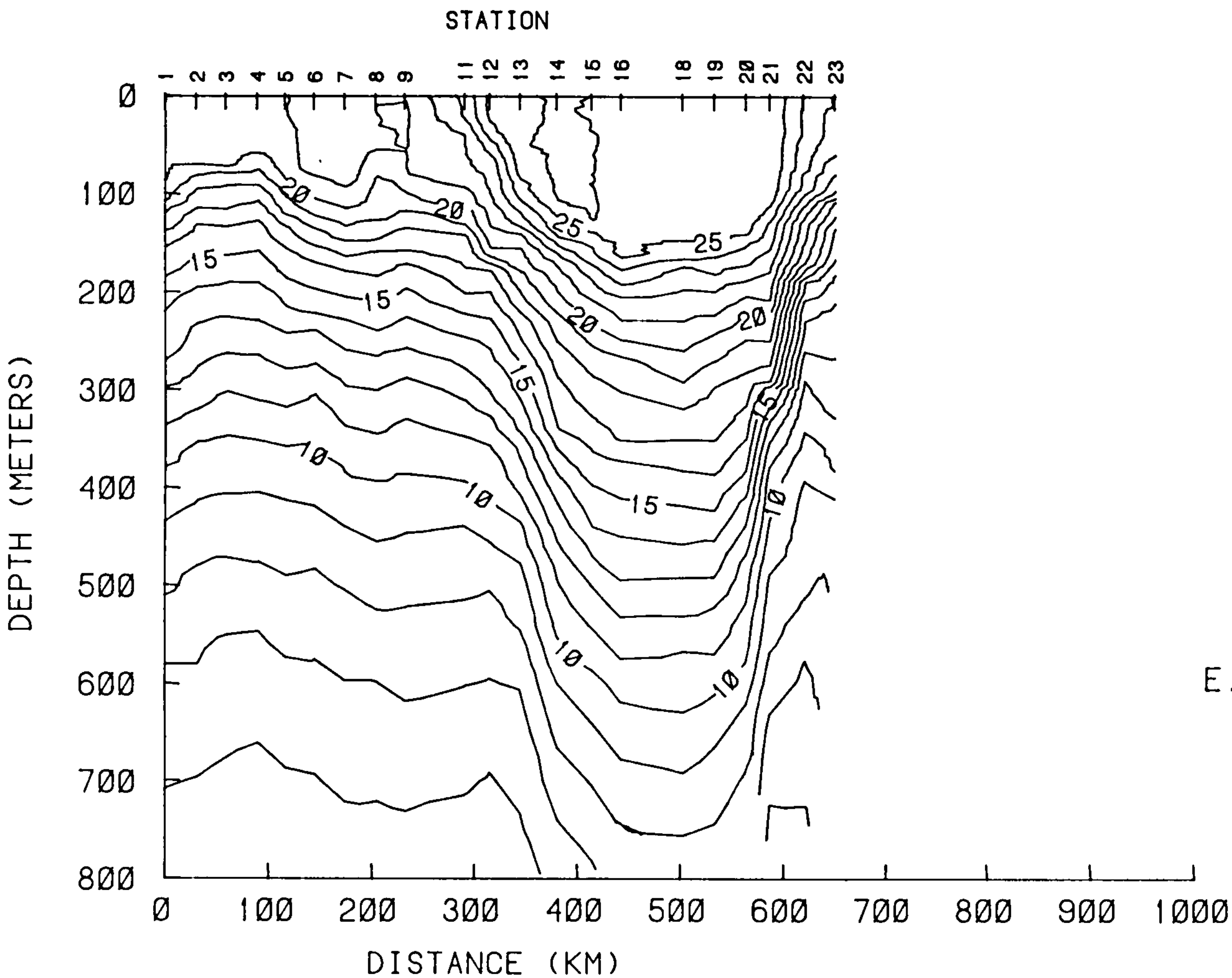


E.M. QUEENY CRUISE 87-04
3/27/87 TO 3/28/87
STATIONS 1 TO 24
TEMPERATURE DEG C
MIN = 13.06 MAX = 26.65

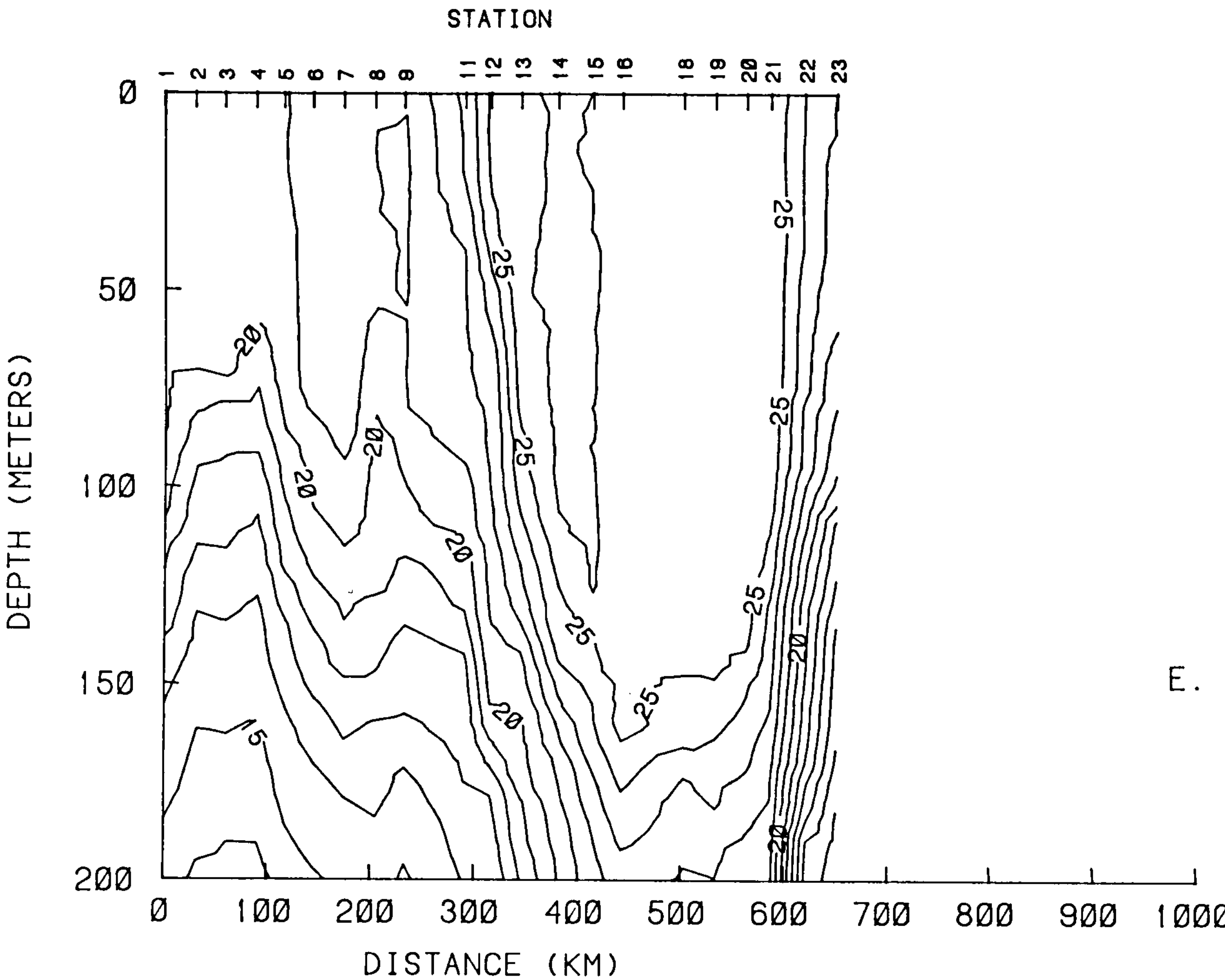


PARAMETERS AT SURFACE E.M. QUEENY CRUISE 87-04

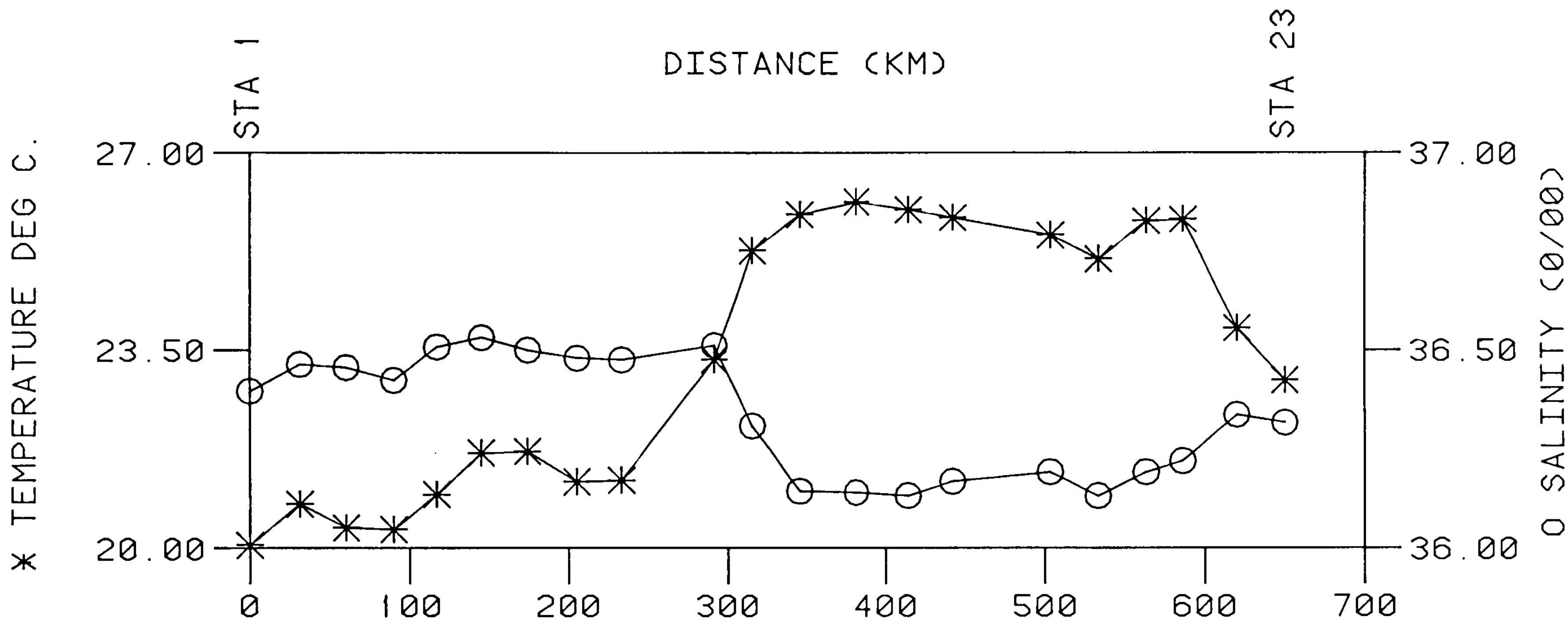

E. M. QUEENY CRUISE 87-05 4/ 6/87 TO 4/ 7/87
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
1
23
2000 m
200 m



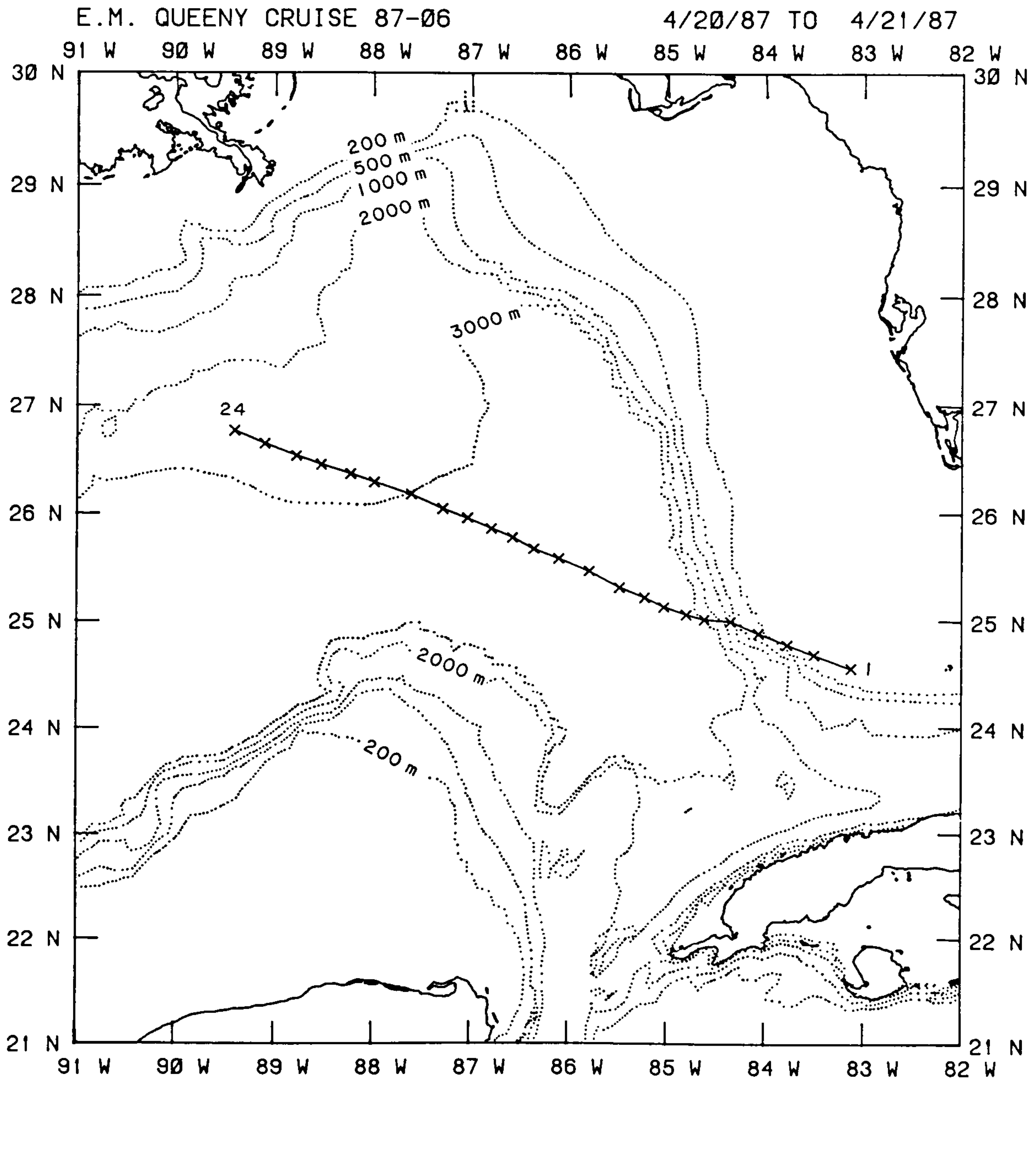
E. M. QUEENY CRUISE 87-Ø5
4/ 6/87 TO 4/ 7/87
STATIONS 1 TO 23
TEMPERATURE DEG C
MIN = 5.27 MAX = 26.21



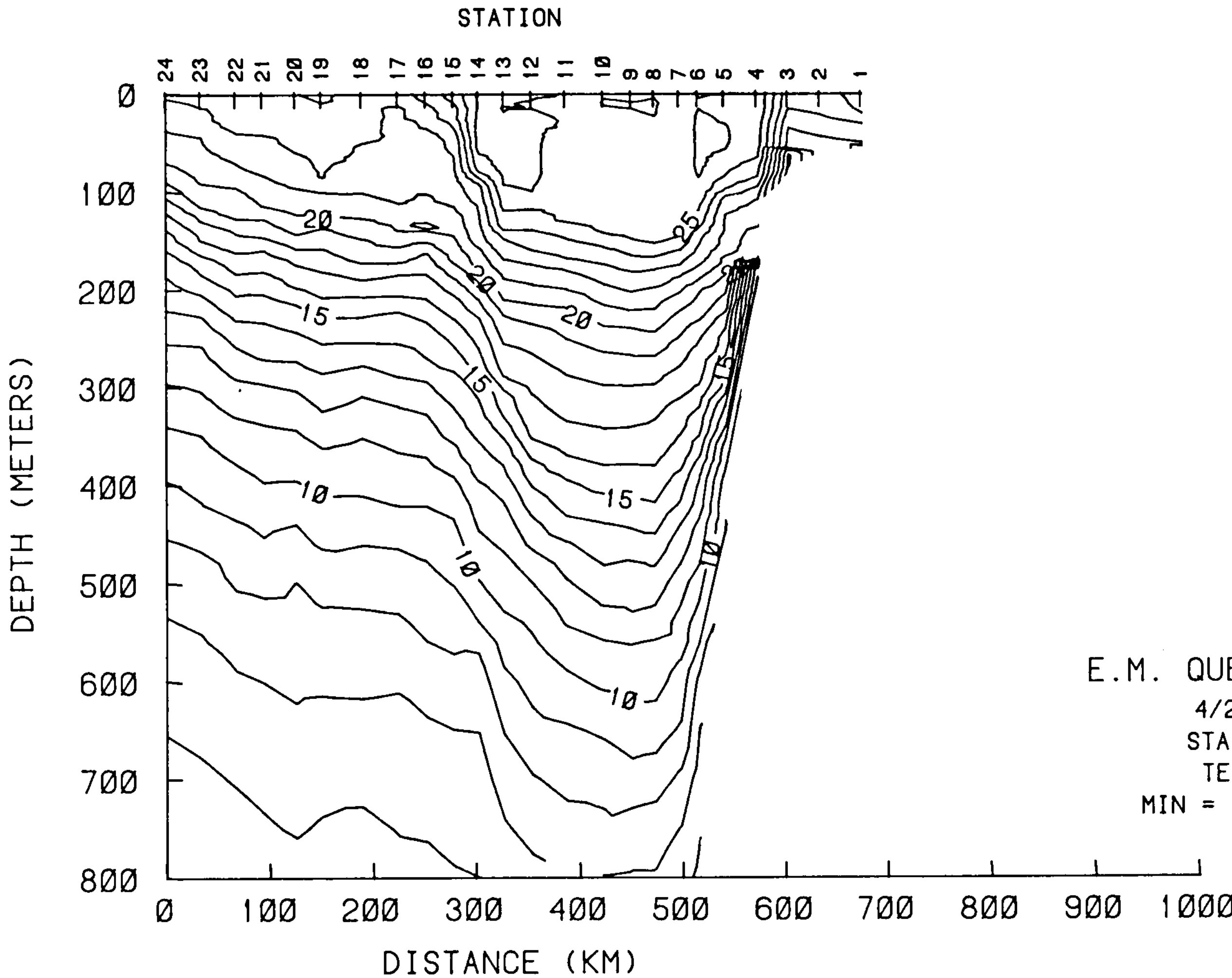
E. M. QUEENY CRUISE 87-05
4/ 6/87 TO 4/ 7/87
STATIONS 1 TO 23
TEMPERATURE DEG C
MIN = 13.47 MAX = 26.21



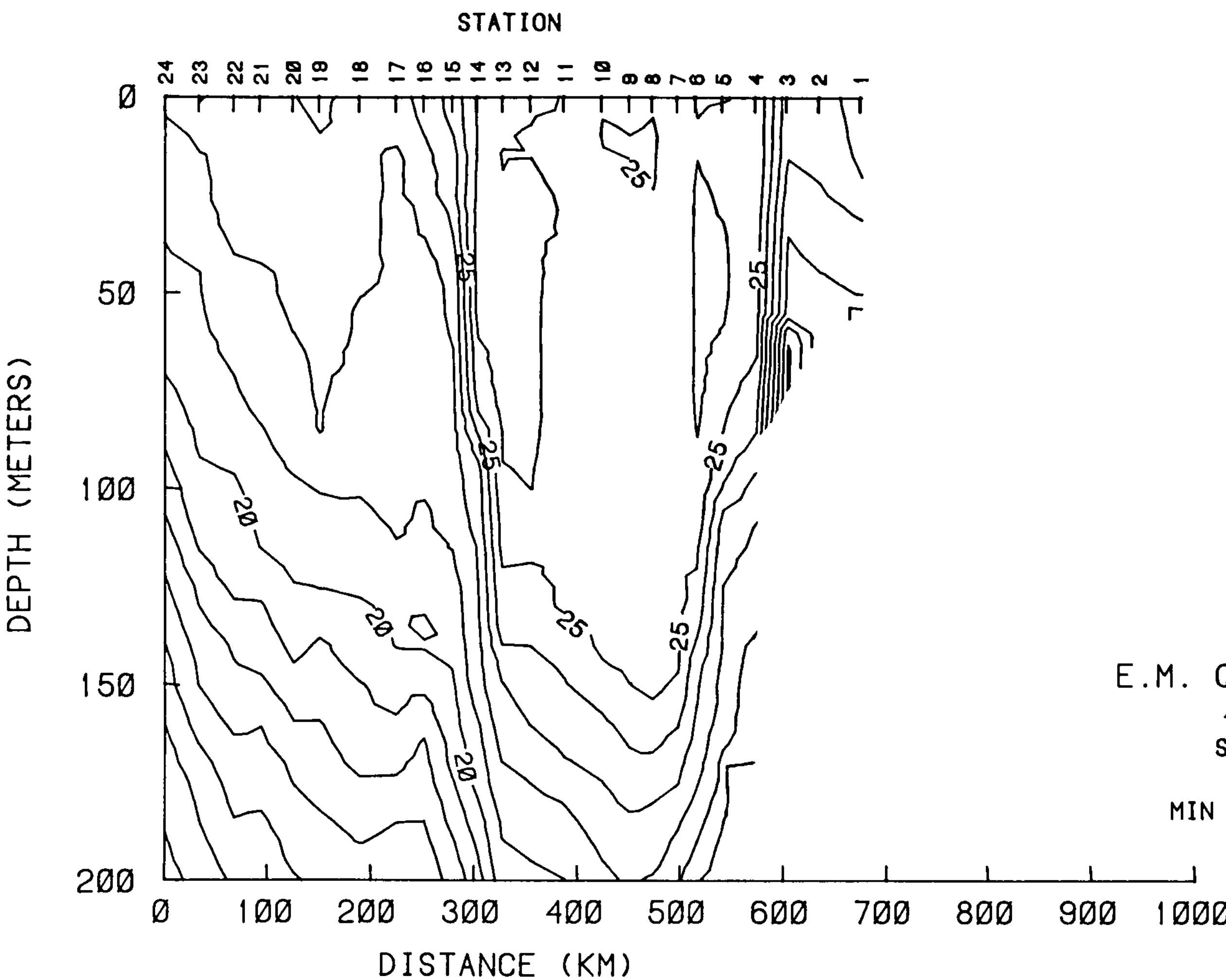
PARAMETERS AT SURFACE E. M. QUEENY CRUISE 87-05



E.M. QUEENY CRUISE 87-06
4/20/87 TO 4/21/87
91 W
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
24
1
2000 m
200 m

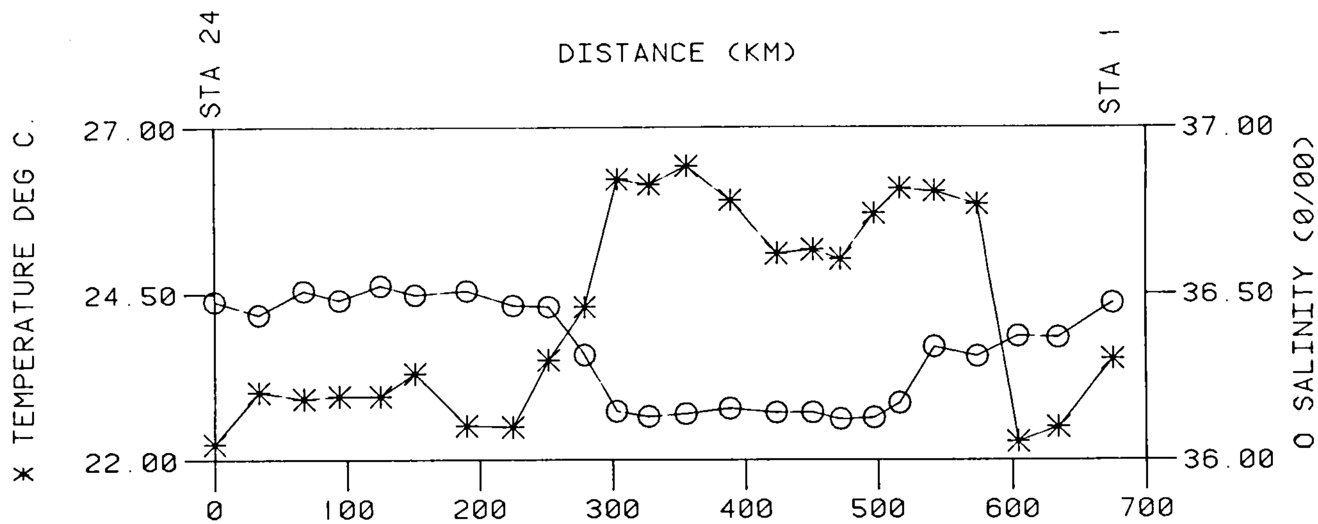


E.M. QUEENY CRUISE 87-06
4/20/87 TO 4/21/87
STATIONS 1 TO 24
TEMPERATURE DEG C
MIN = 5.31 MAX = 26.46



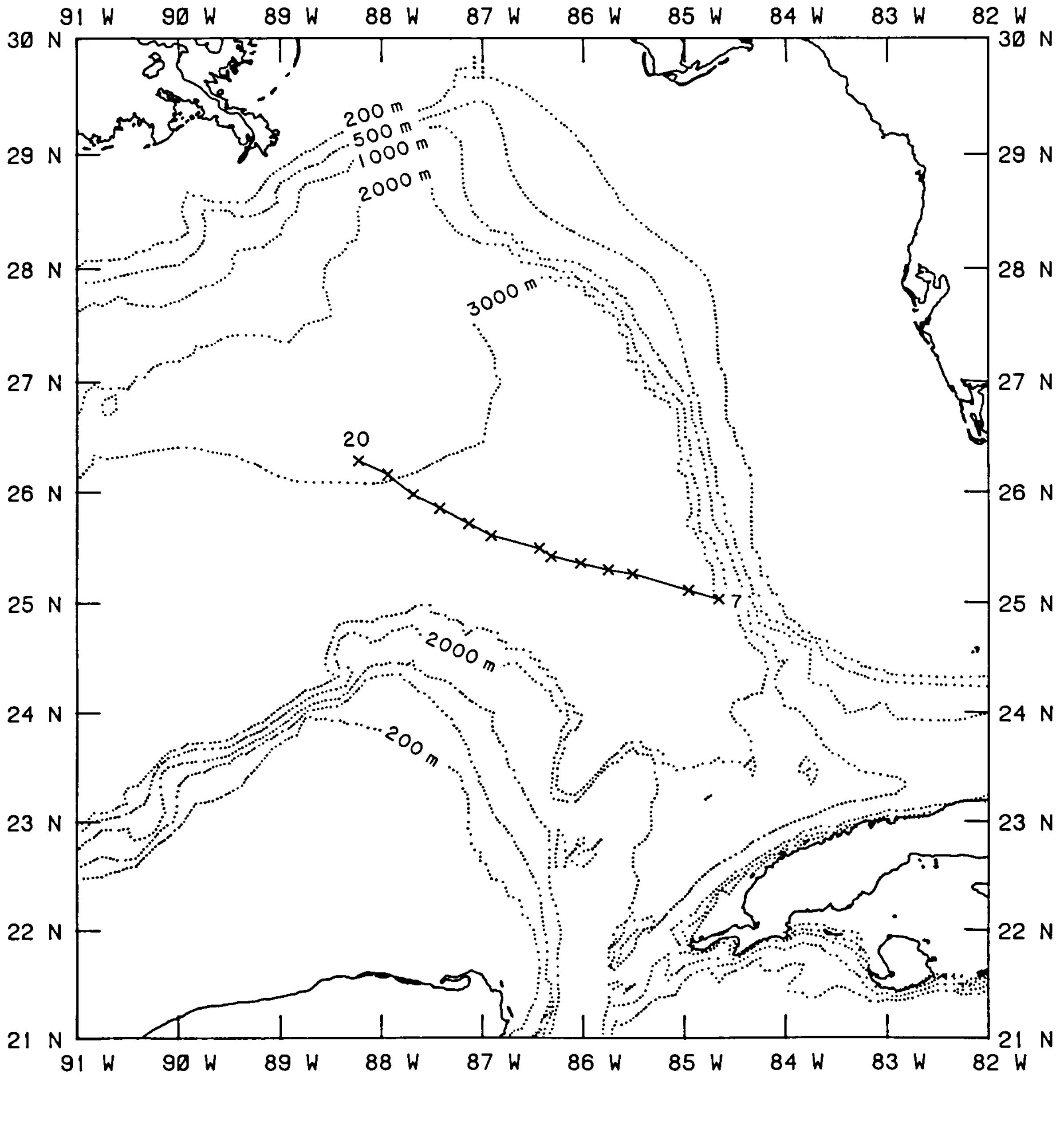
E.M. QUEENY CRUISE 87-06
4/20/87 TO 4/21/87
STATIONS 1 TO 24
TEMPERATURE DEG C
MIN = 10.94 MAX = 26.46

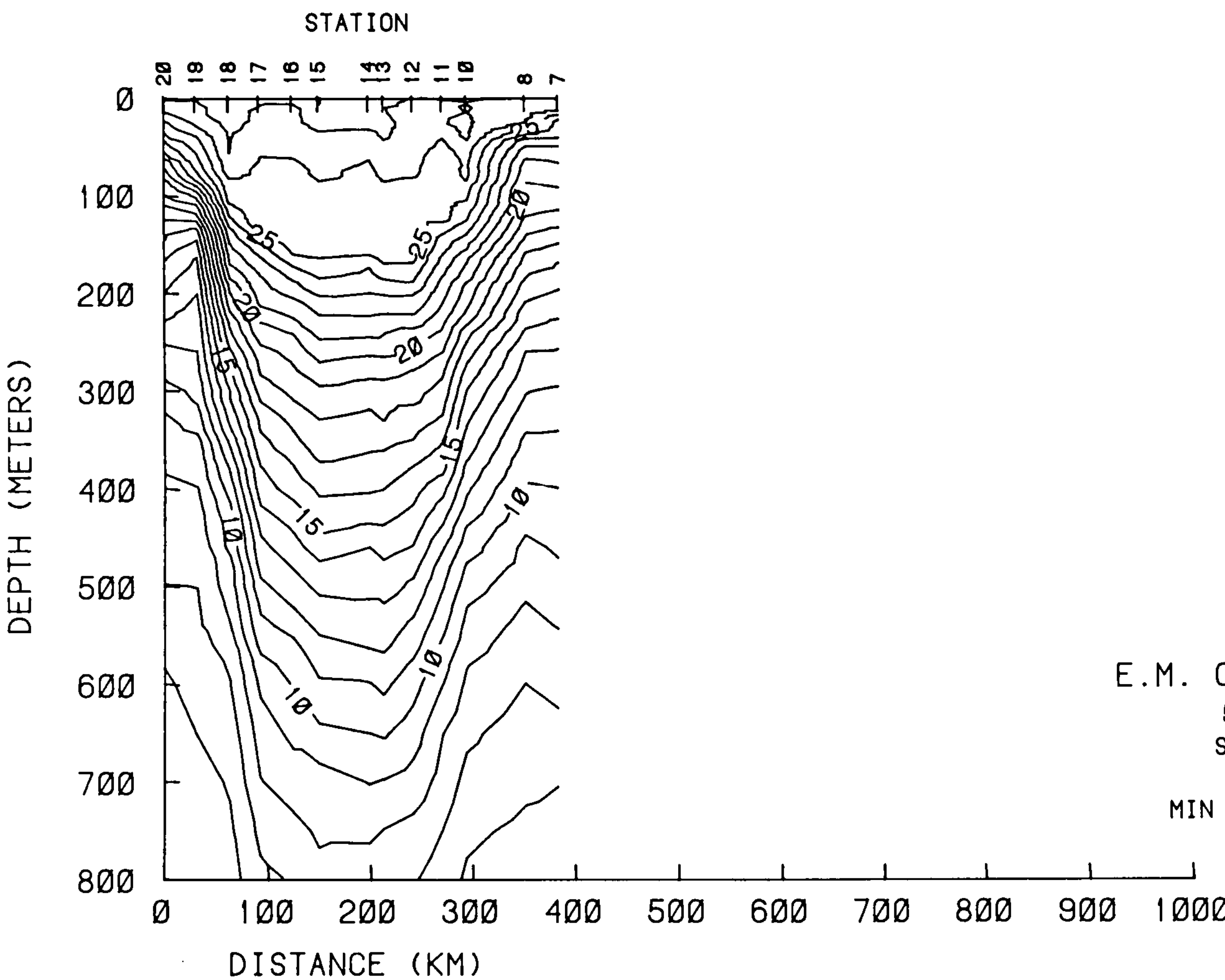
452



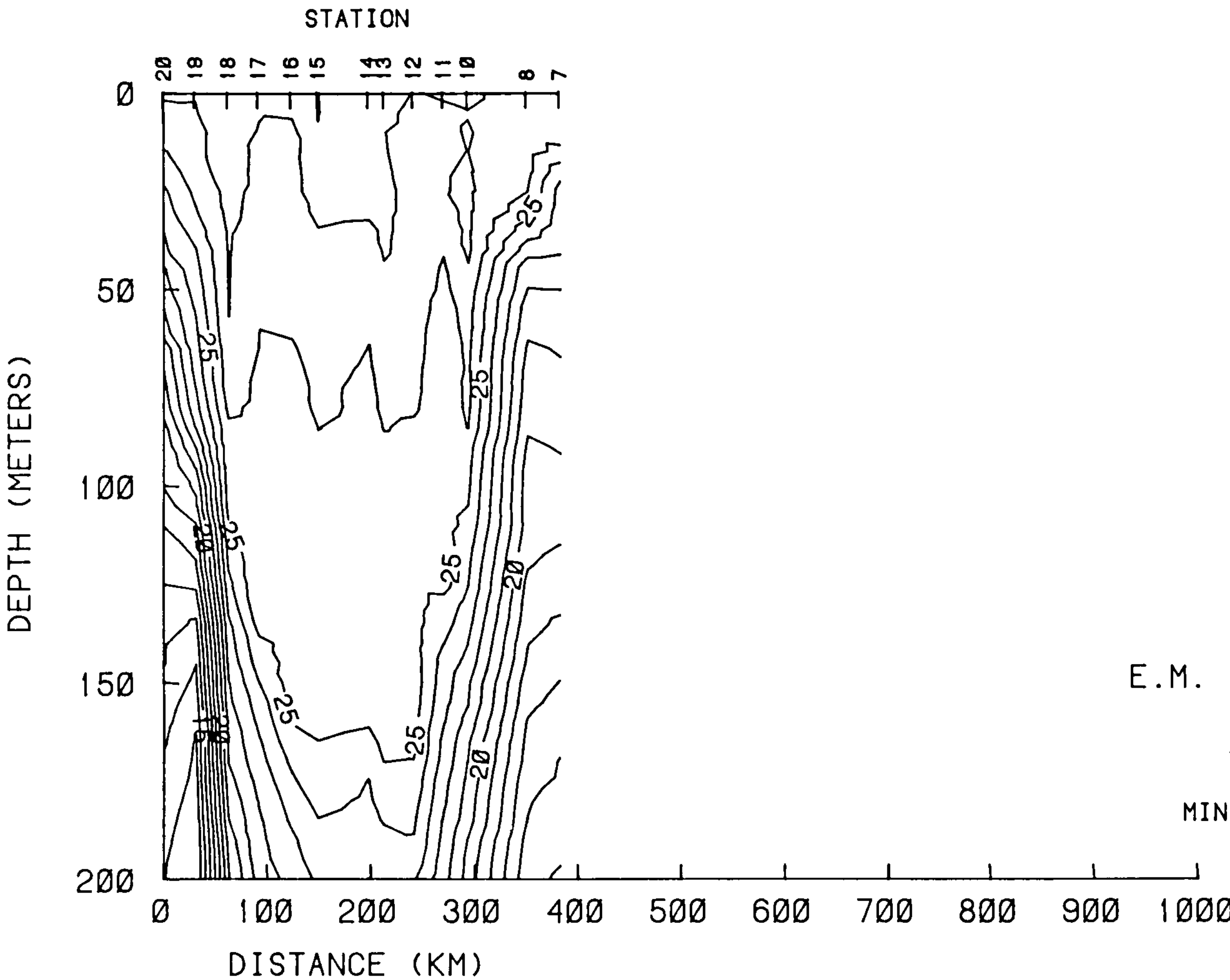
PARAMETERS AT SURFACE E.M. QUEENY CRUISE 87-06

E.M. QUEENY CRUISE 87-Ø7 5/11/87 TO 5/12/87

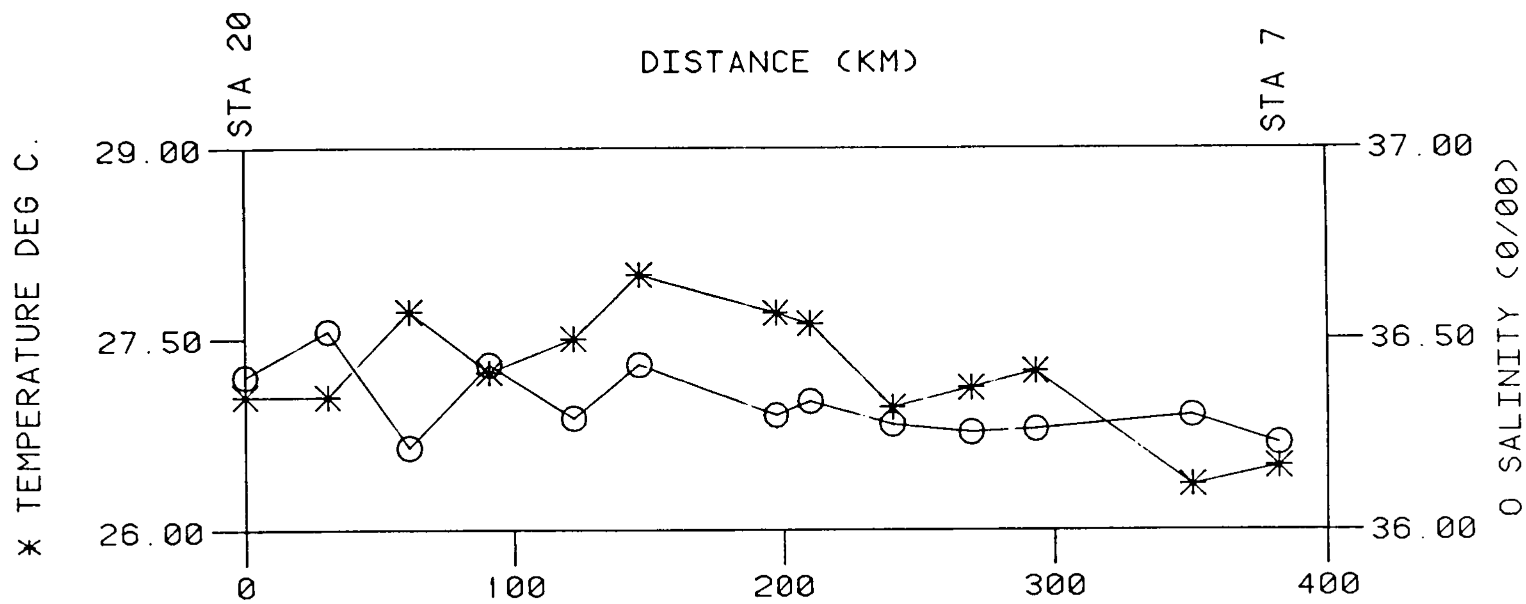




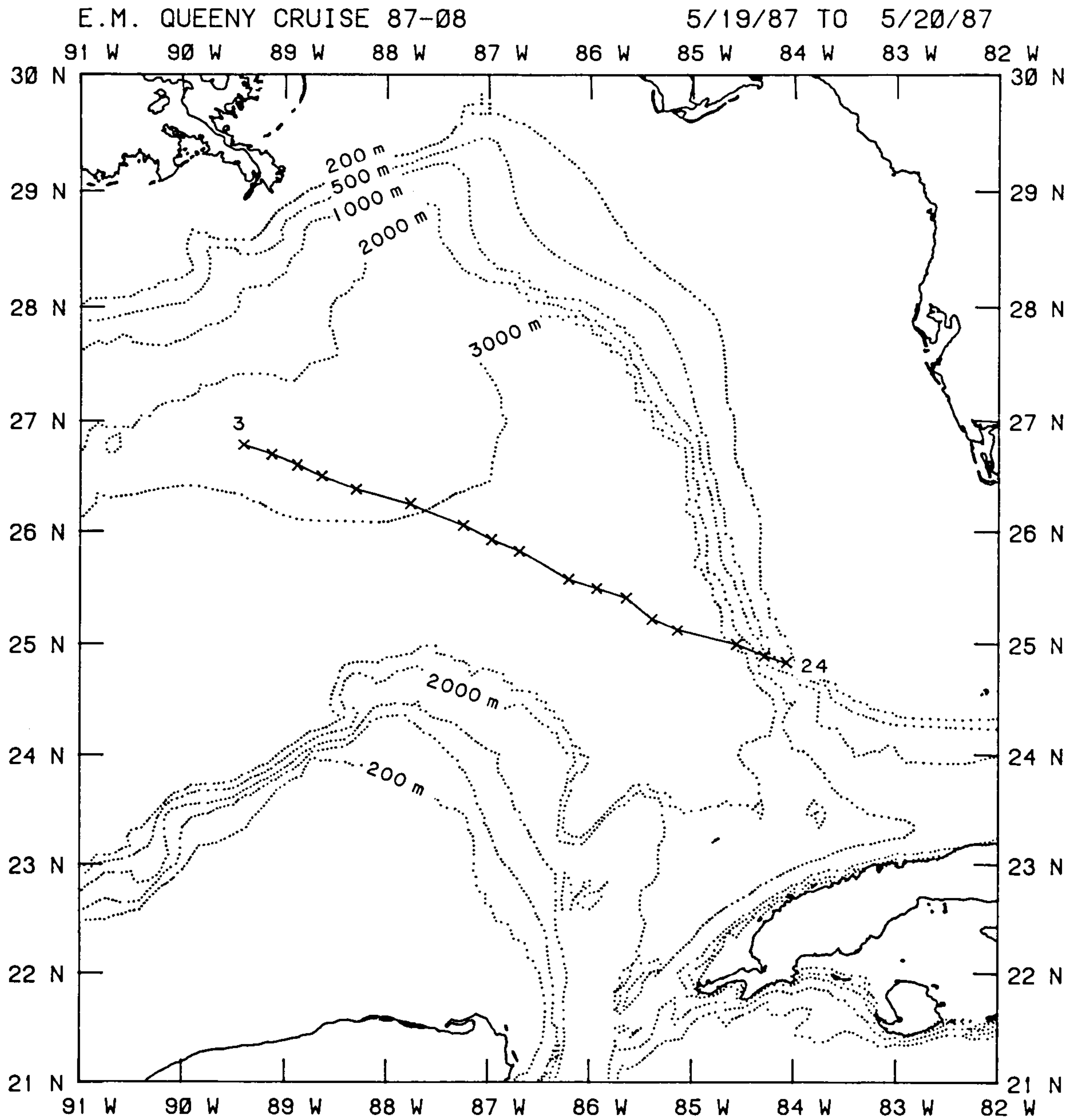
E.M. QUEENY CRUISE 87-Ø7
5/11/87 TO 5/12/87
STATIONS 7 TO 2Ø
TEMPERATURE DEG C
MIN = 5.44 MAX = 28.Ø2

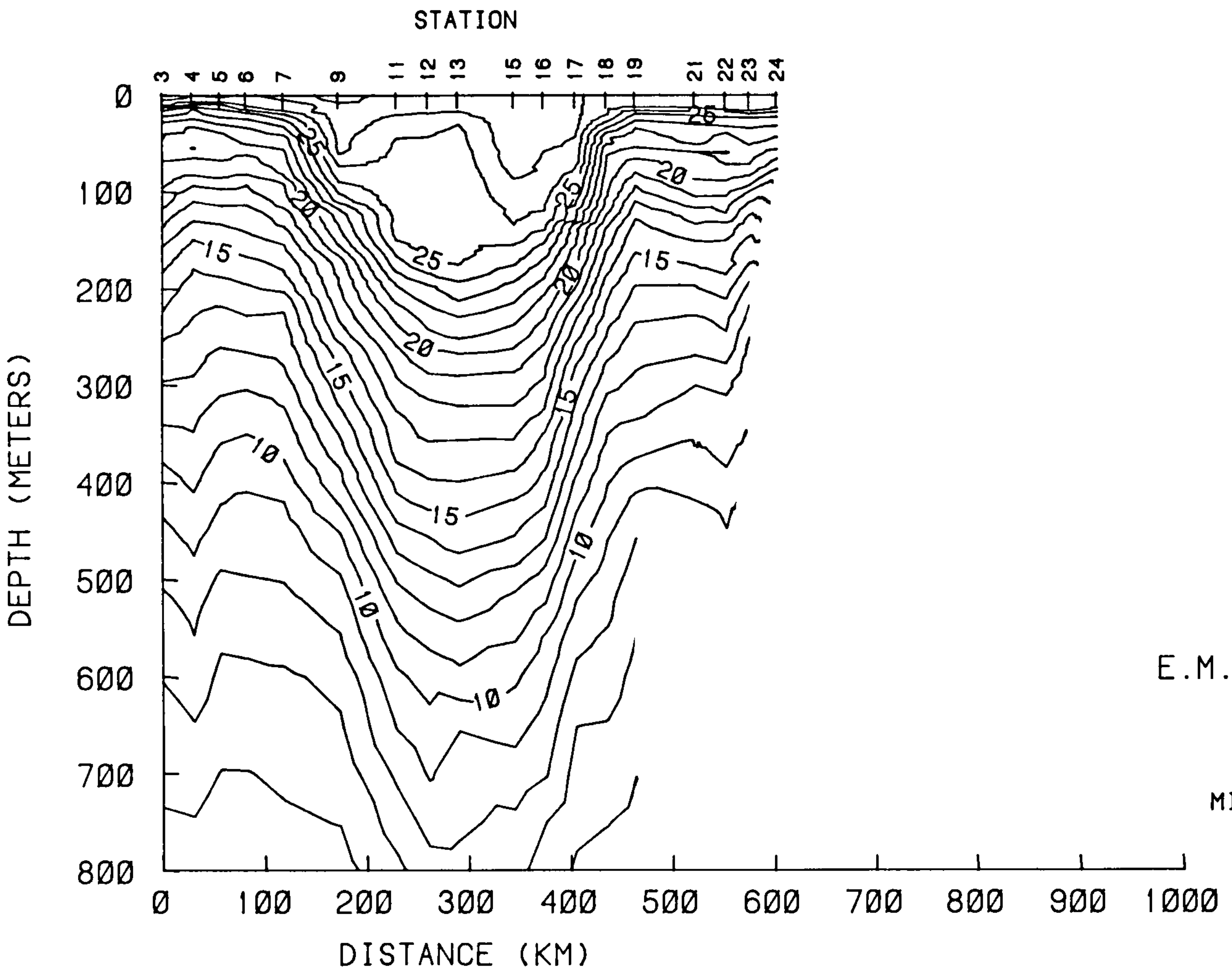


E.M. QUEENY CRUISE 87-07
5/11/87 TO 5/12/87
STATIONS 7 TO 20
TEMPERATURE DEG C
MIN = 12.01 MAX = 28.02

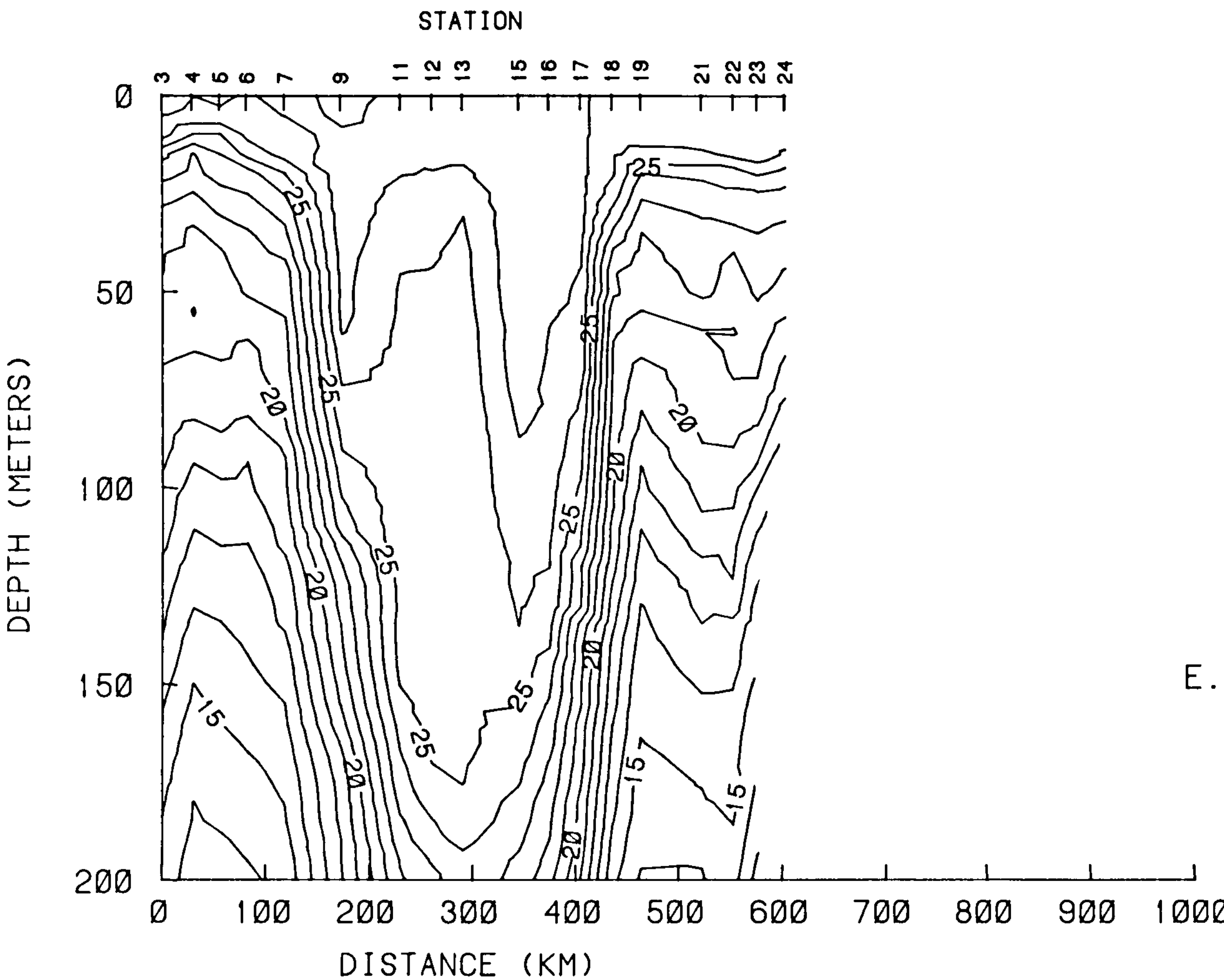


PARAMETERS AT SURFACE E.M. QUEENY CRUISE 87-07


E.M. QUEENY CRUISE 87-Ø8
5/19/87 TO 5/2Ø/87
91 W
9Ø W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
3
24
2000 m
200 m

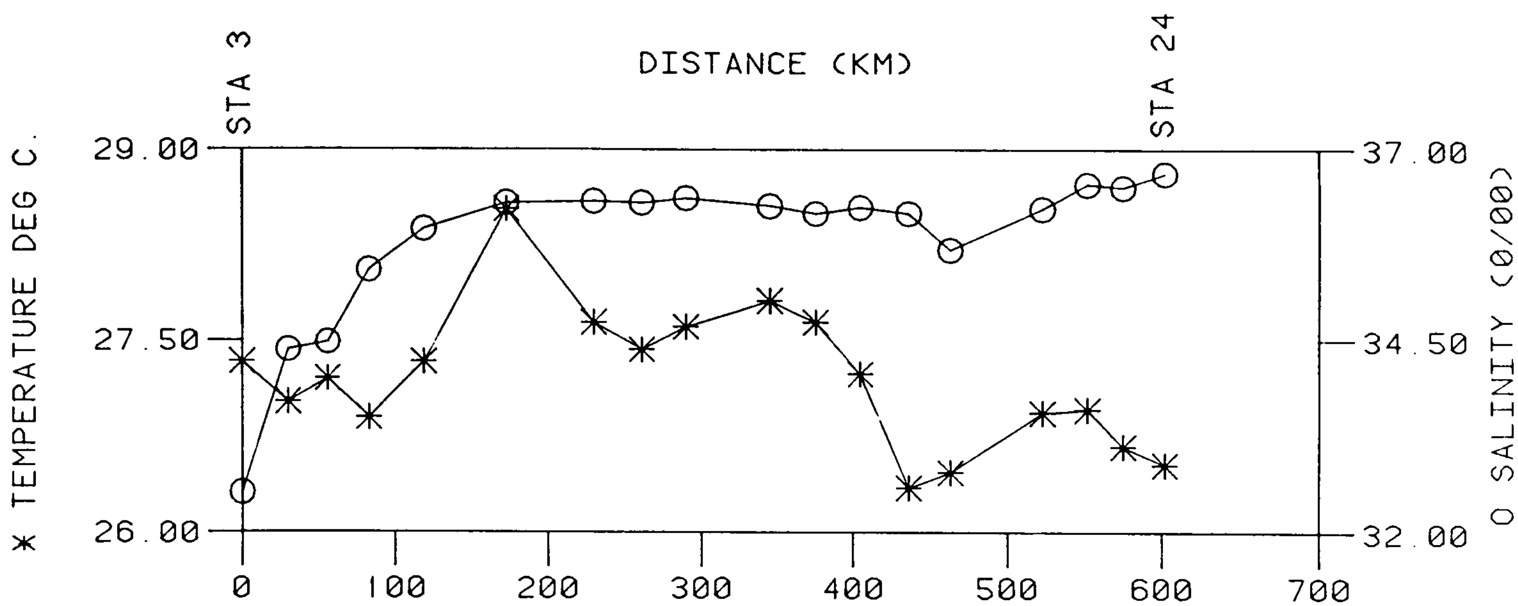


E.M. QUEENY CRUISE 87-08
5/19/87 TO 5/20/87
STATIONS 3 TO 24
TEMPERATURE DEG C
MIN = 5.52 MAX = 28.54

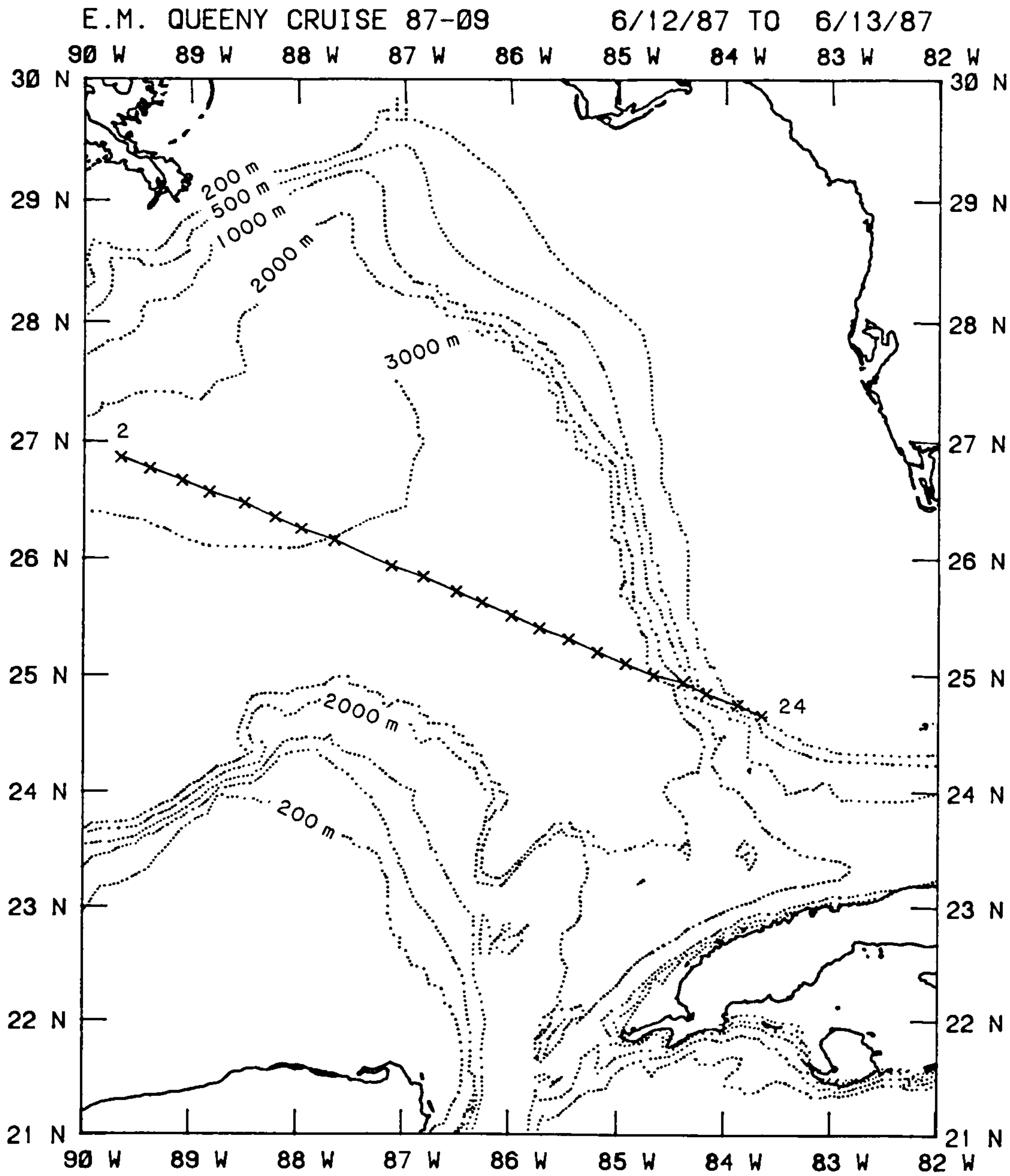


E.M. QUEENY CRUISE 87-Ø8
5/19/87 TO 5/2Ø/87
STATIONS 3 TO 24
TEMPERATURE DEG C
MIN = 12.67 MAX = 28.54

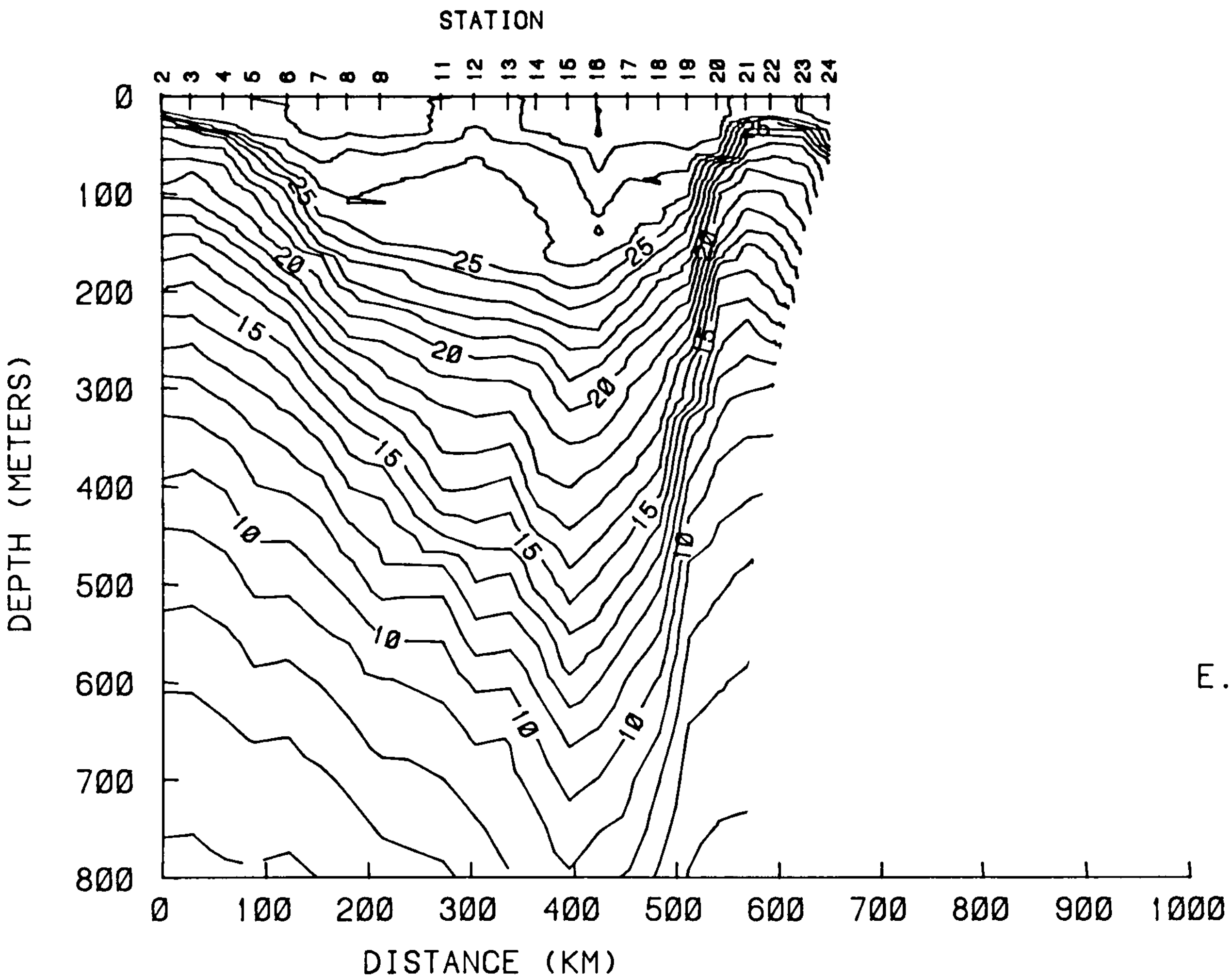
460



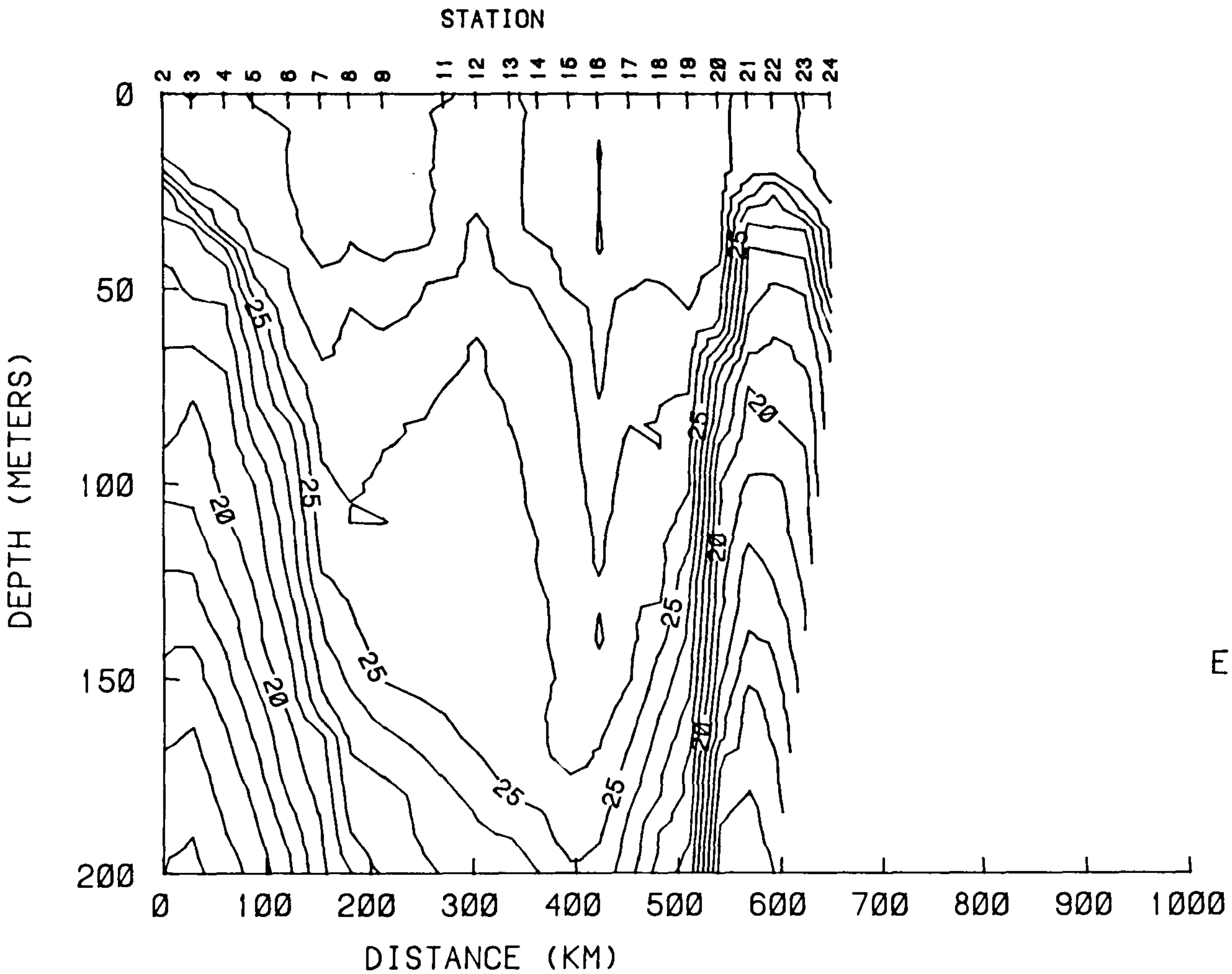
PARAMETERS AT SURFACE E.M. QUEENY CRUISE 87-08



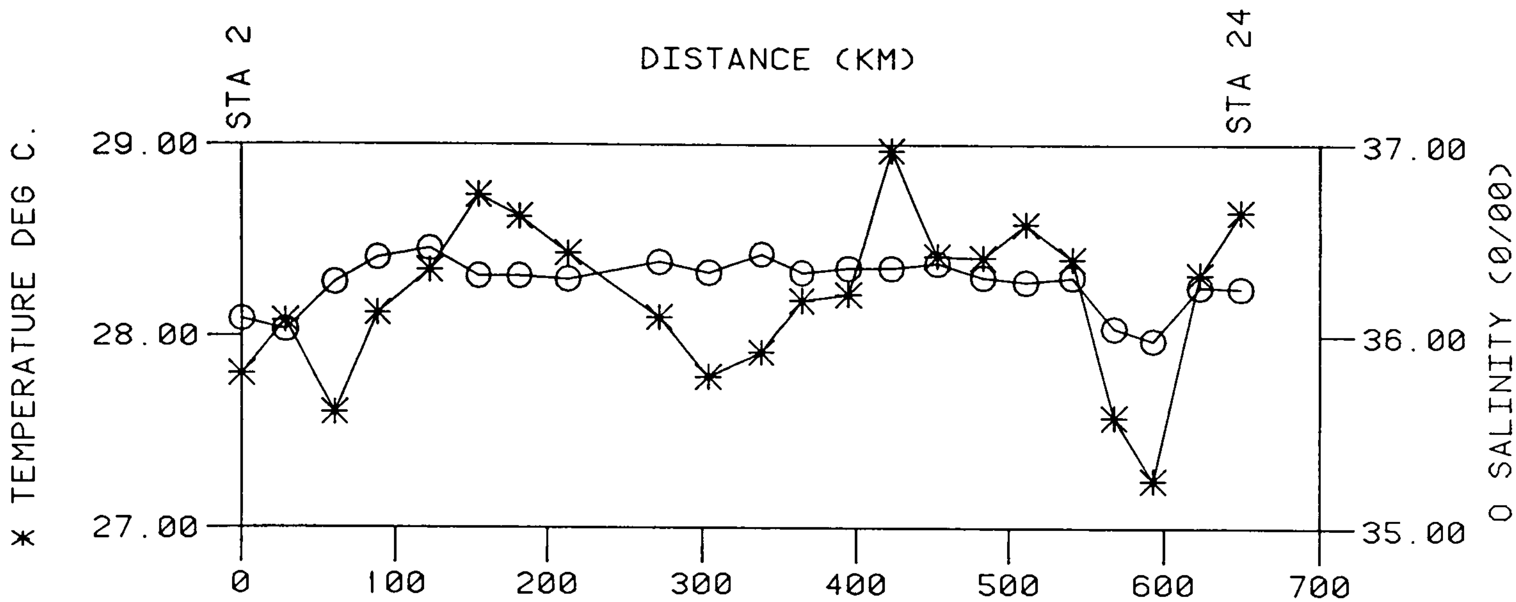
E.M. QUEENY CRUISE 87-09 6/12/87 TO 6/13/87
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
2
24
2000 m
200 m



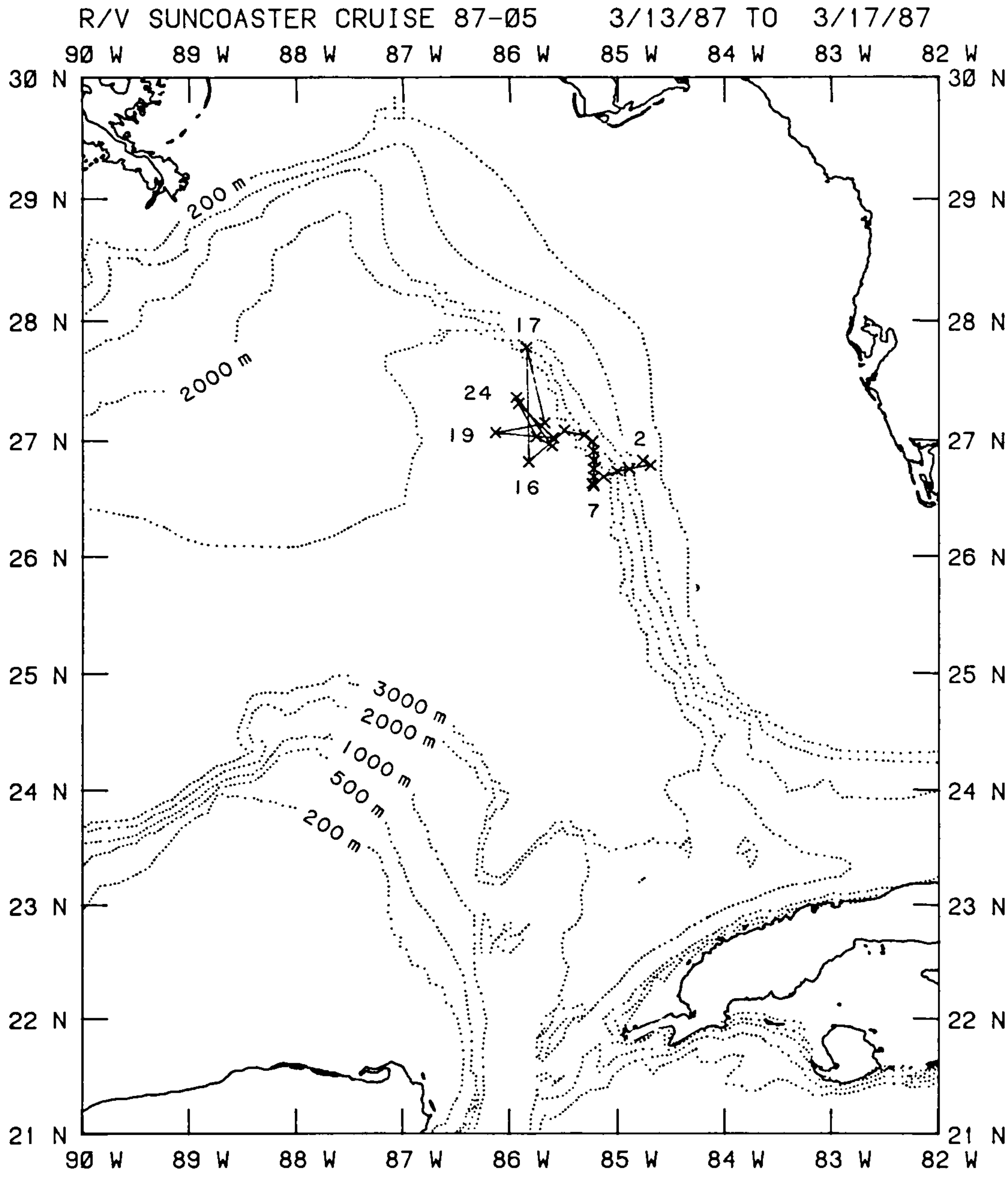
E.M. QUEENY CRUISE 87-09
6/12/87 TO 6/13/87
STATIONS 2 TO 24
TEMPERATURE DEG C
MIN = 5.70 MAX = 29.06



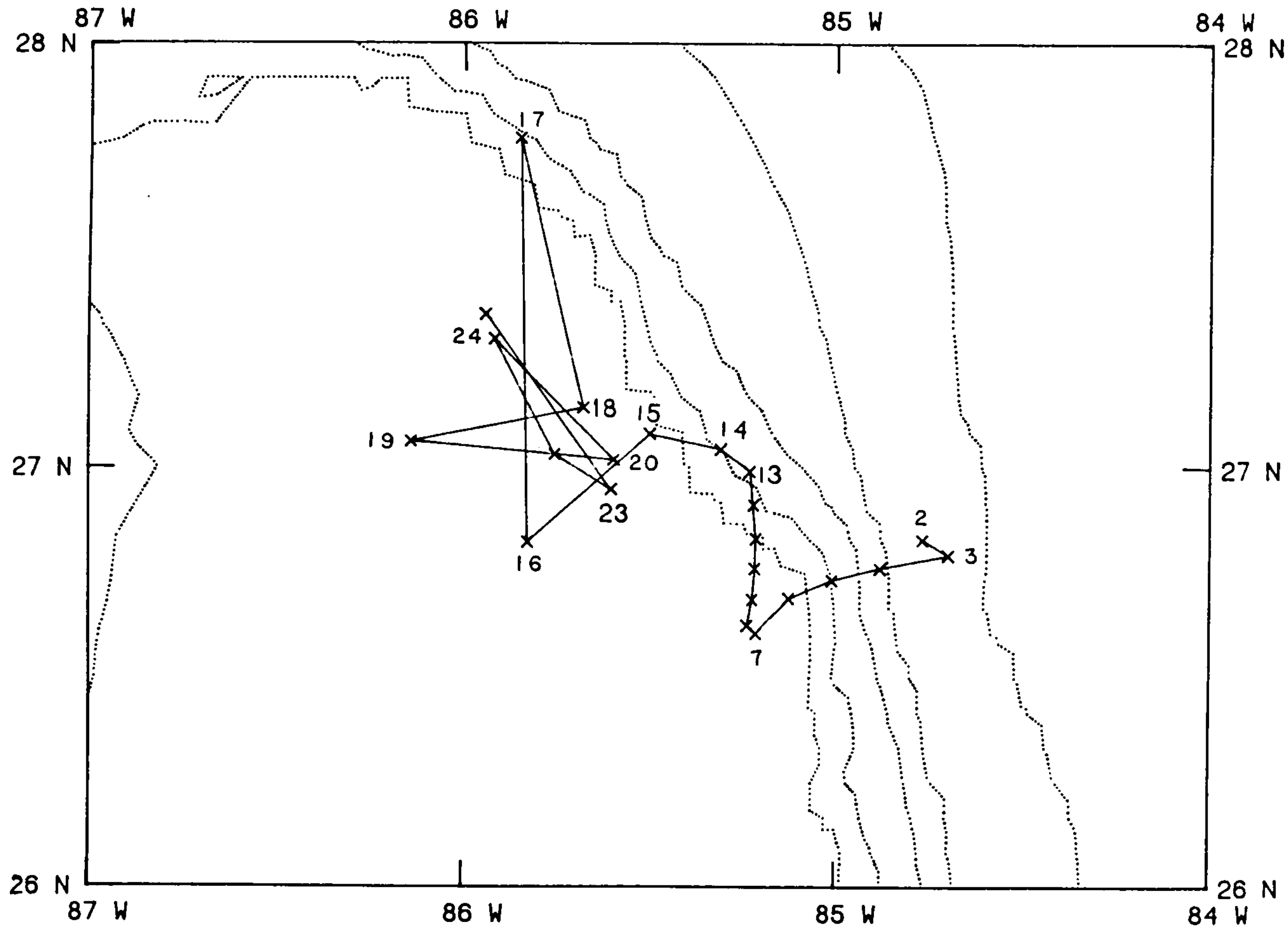
E.M. QUEENY CRUISE 87-09
6/12/87 TO 6/13/87
STATIONS 2 TO 24
TEMPERATURE DEG C
MIN = 14.31 MAX = 29.06

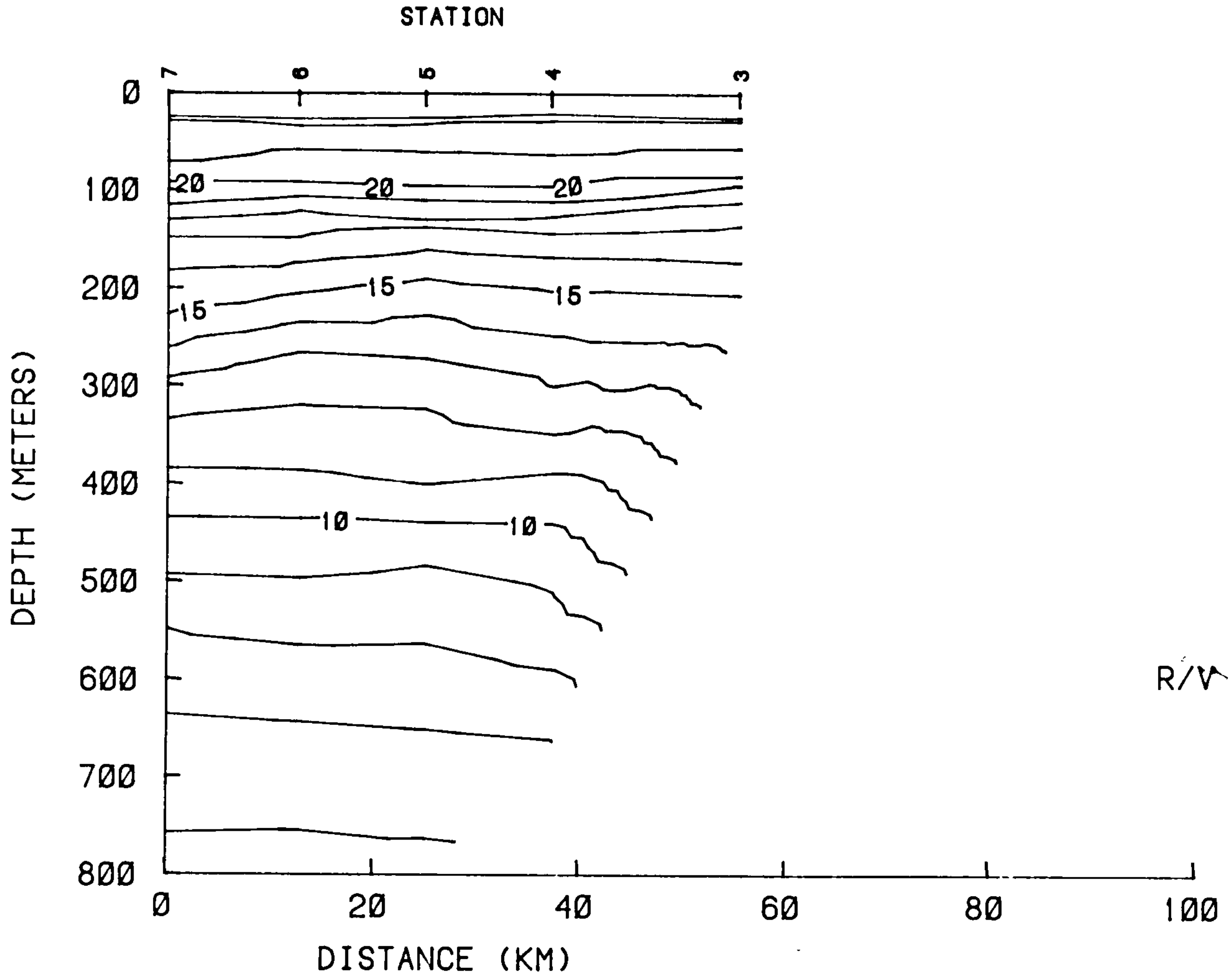


PARAMETERS AT SURFACE E.M. QUEENY CRUISE 87-09

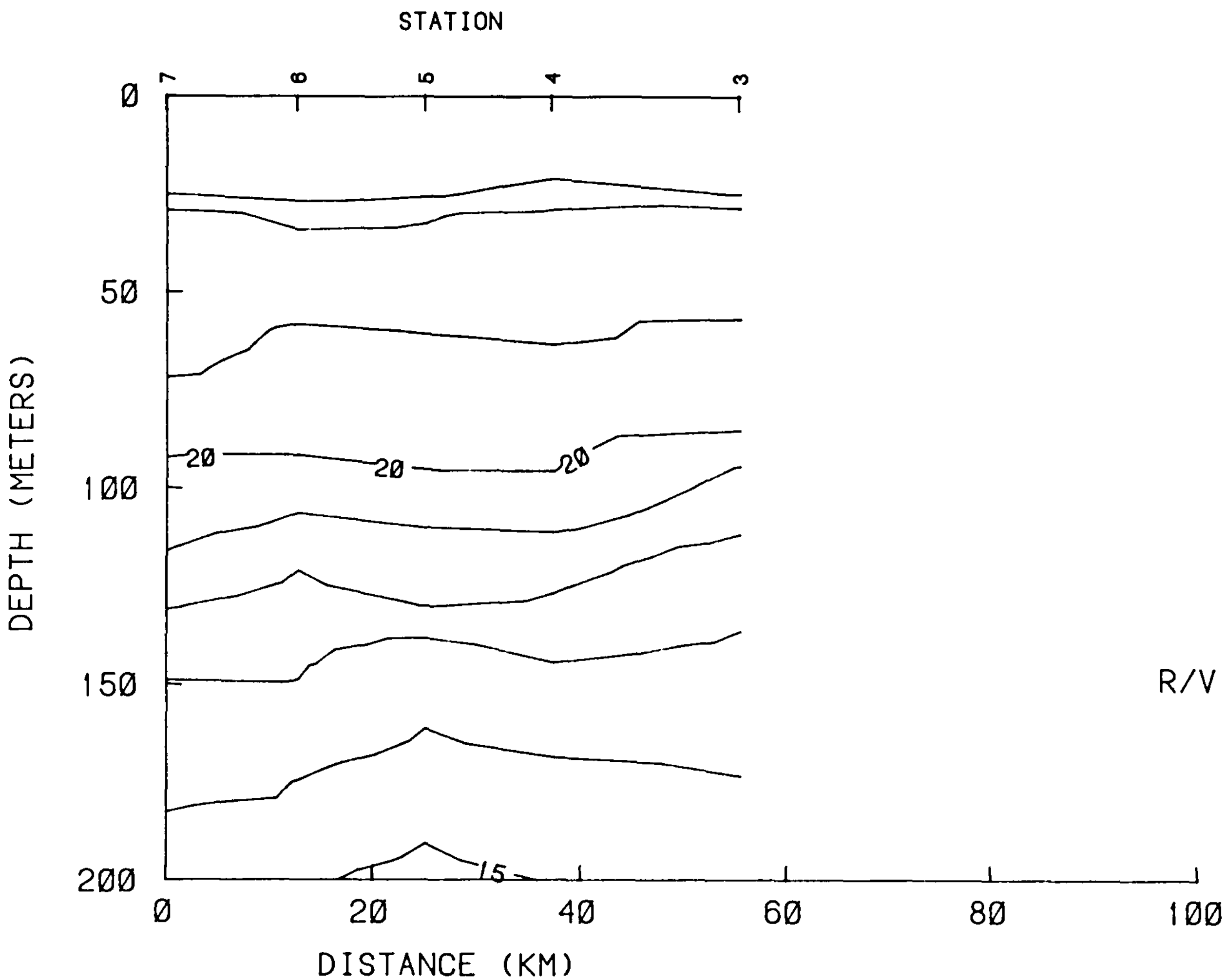

R/V SUNCOASTER CRUISE 87-Ø5 3/13/87 TO 3/17/87
9Ø W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
3Ø N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
2000 m
3000 m
2000 m
1000 m
500 m
200 m
17
24
19
16
7
2

R/V SUNCOASTER CRUISE 87-Ø5 3/13/87 TO 3/17/87

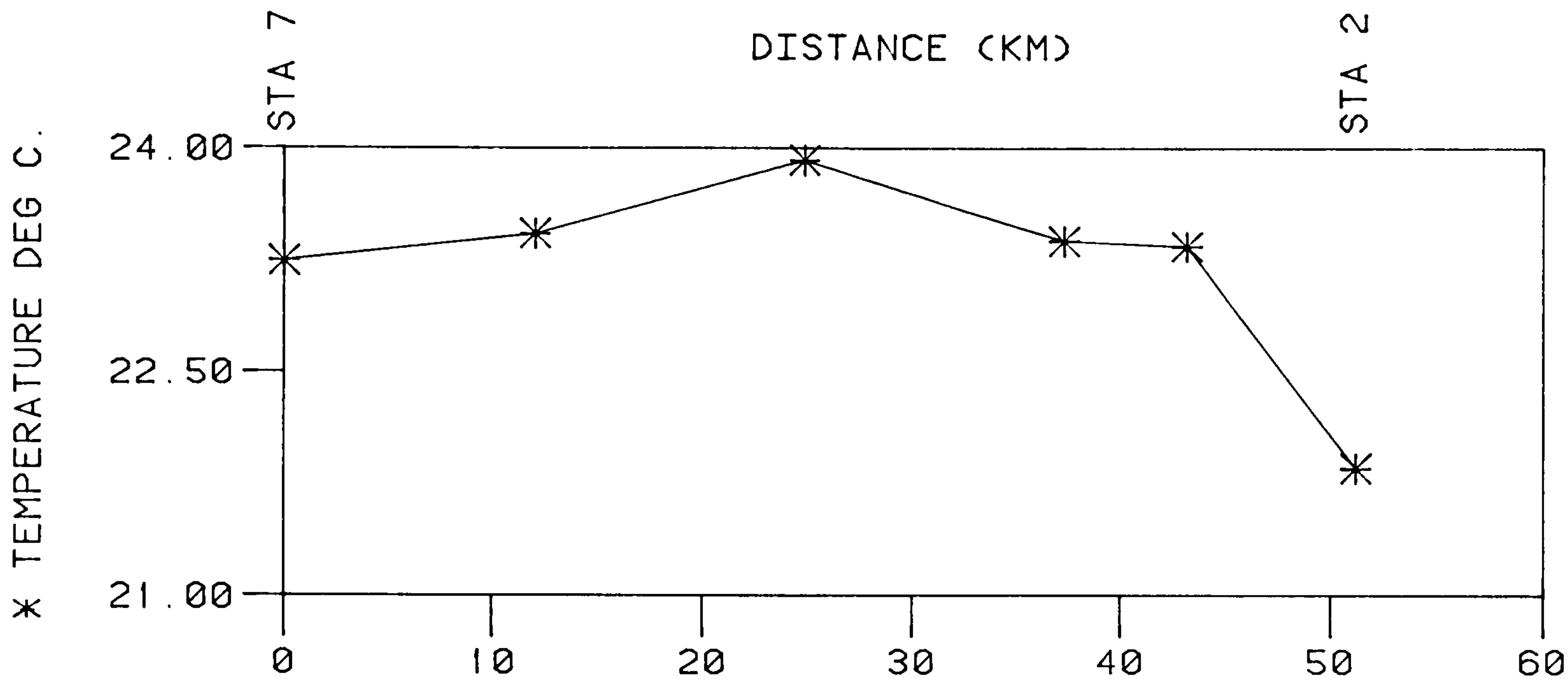




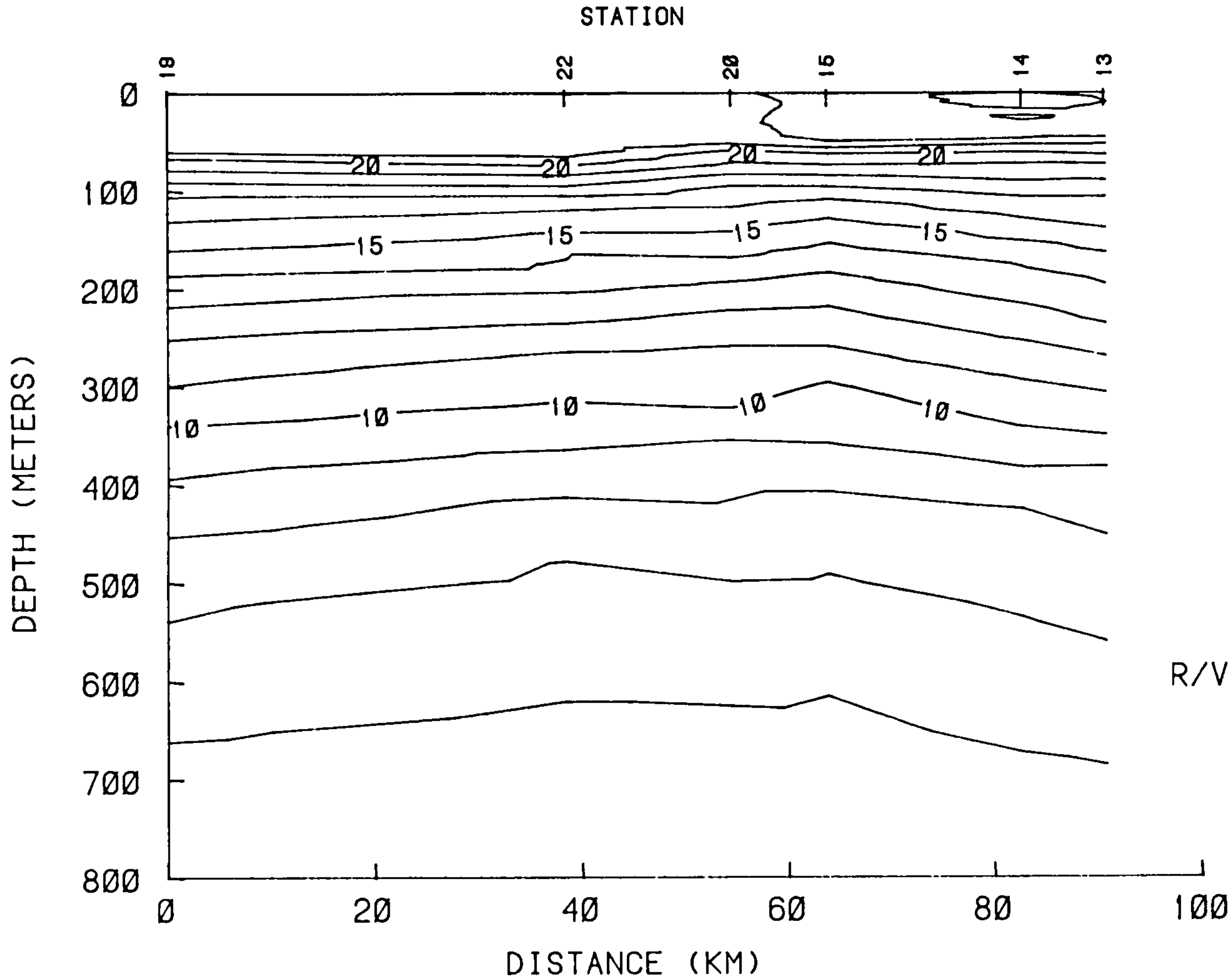
R/V SUNCOASTER CRUISE 87-Ø5
3/13/87 TO 3/13/87
STATIONS 3 TO 7
TEMPERATURE DEG C
MIN = 5.68 MAX = 23.91



R/V SUNCOASTER CRUISE 87-05
3/13/87 TO 3/13/87
STATIONS 3 TO 7
TEMPERATURE DEG C
MIN = 14.63 MAX = 23.91



PARAMETERS AT SURFACE R/V SUNCOASTER CRUISE 87-05



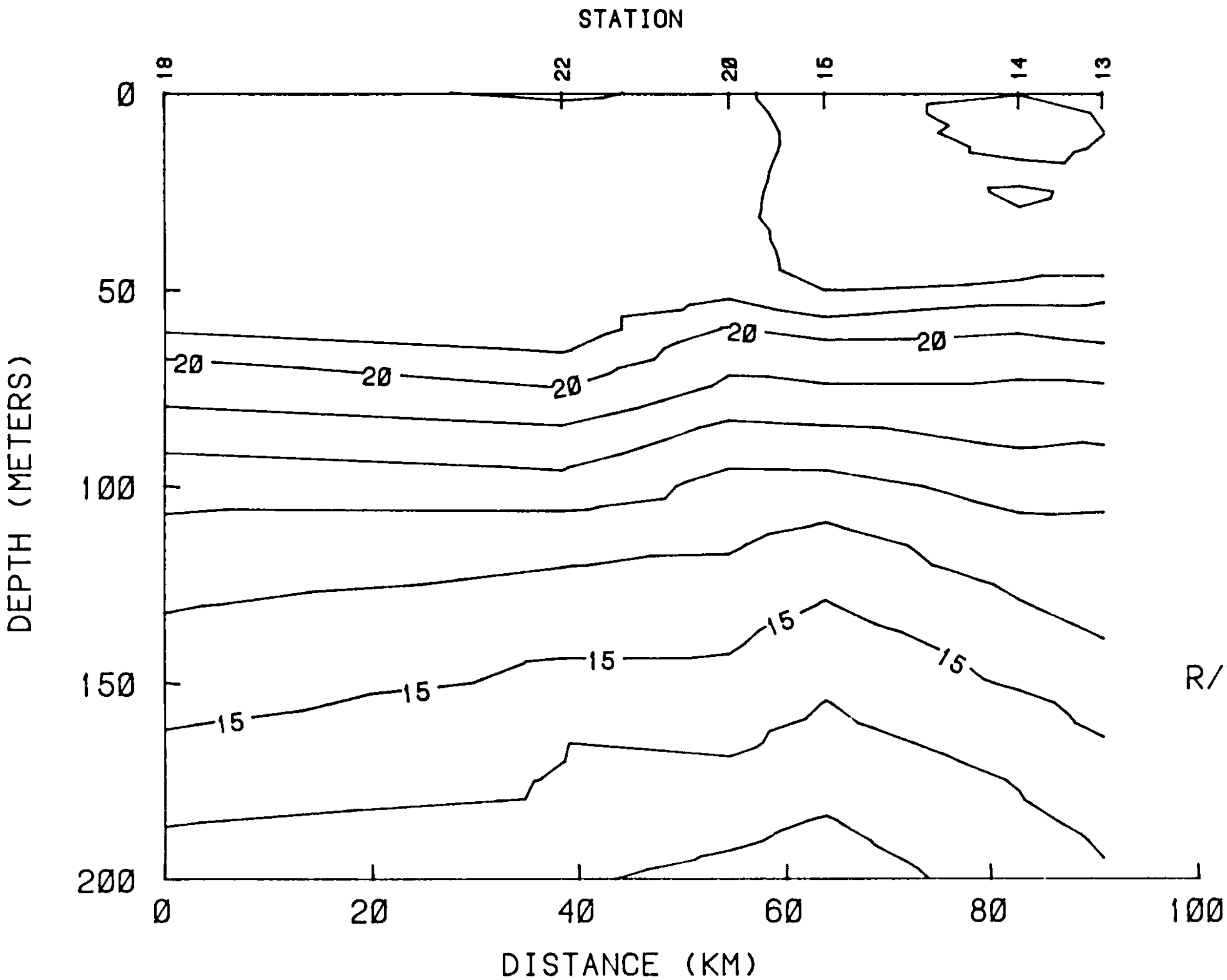
R/V SUNCOASTER CRUISE 87-05

3/13/87 TO 3/16/87

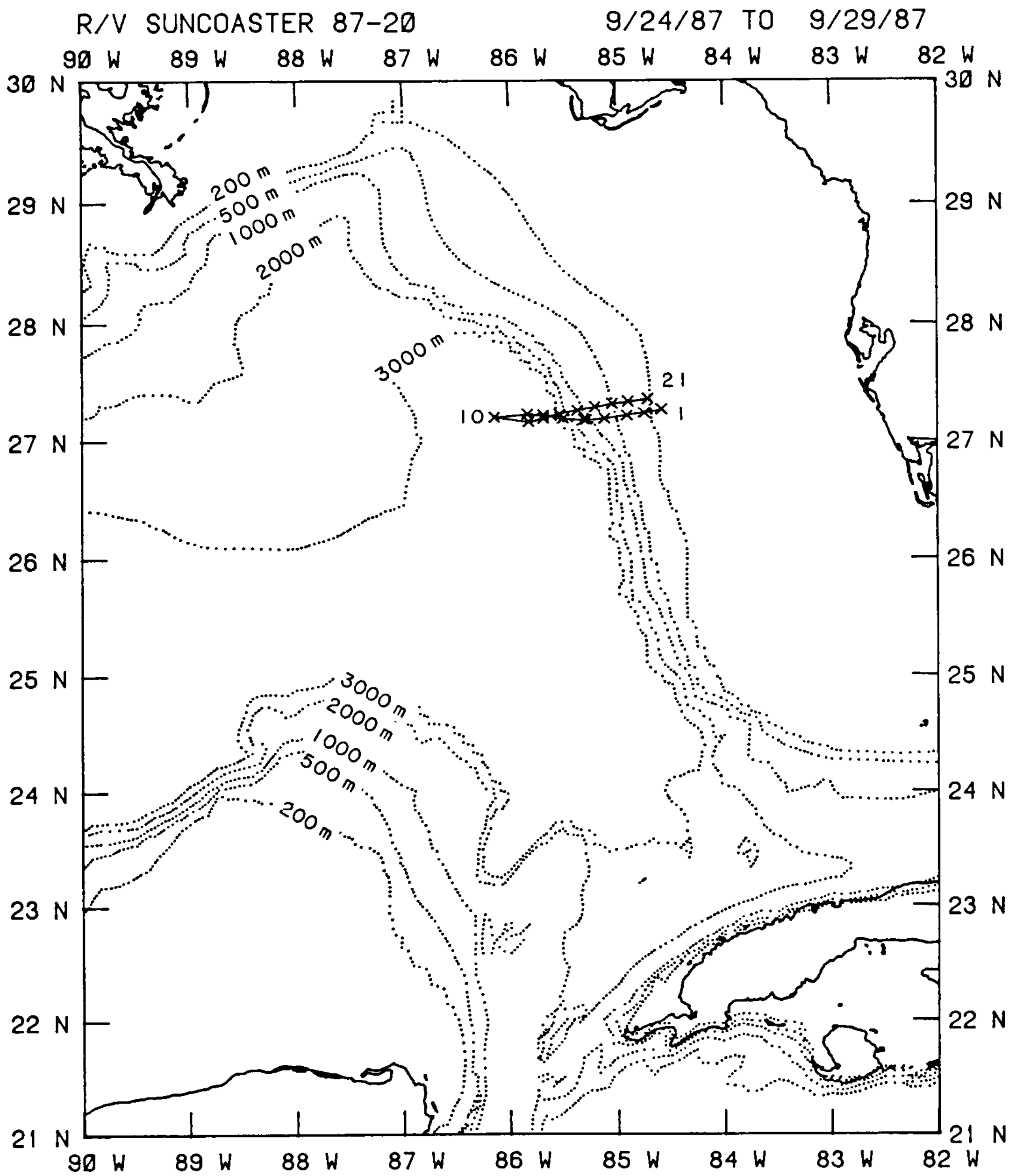
STATIONS 13 TO 19

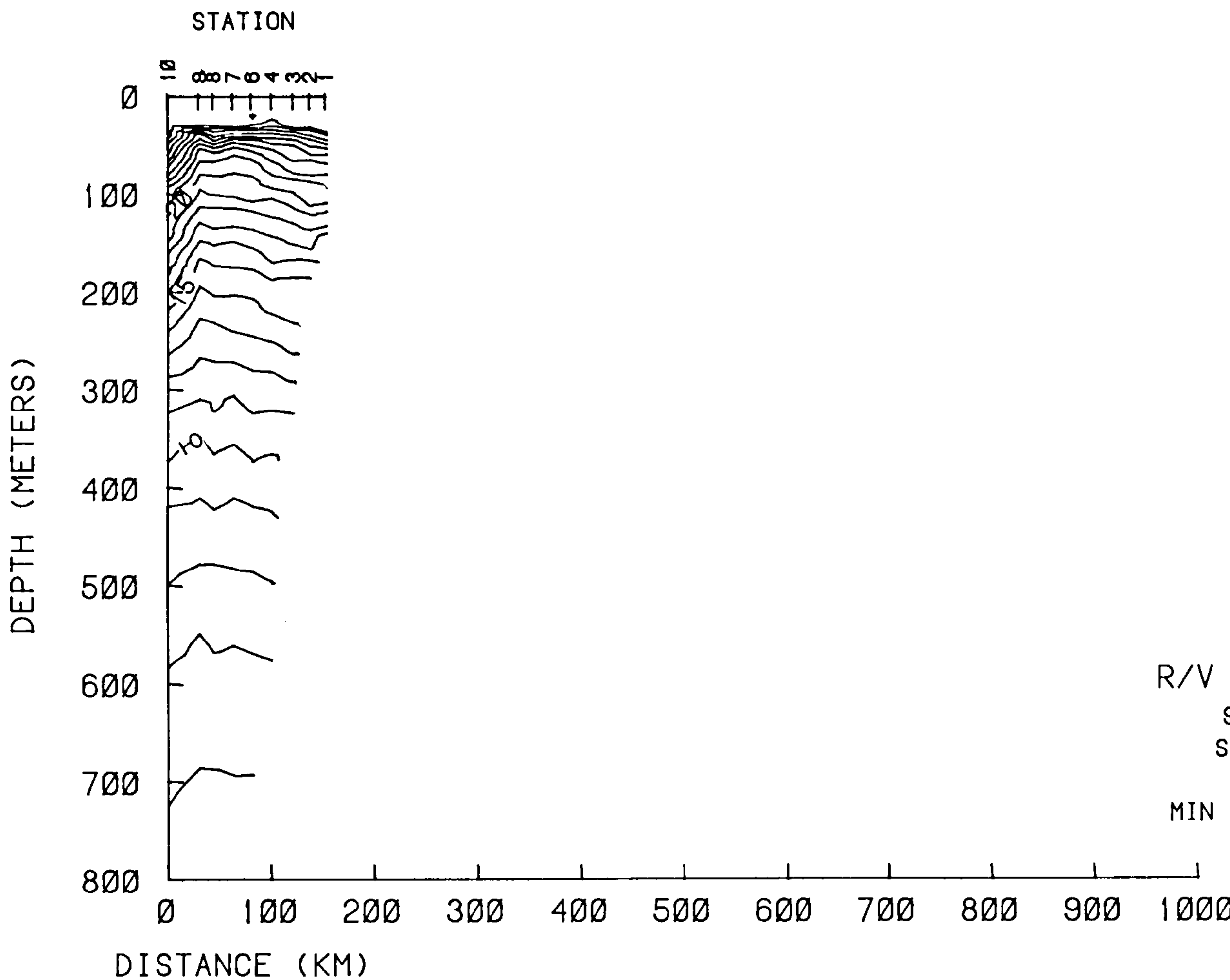
TEMPERATURE DEG C

MIN = 5.06 MAX = 22.62

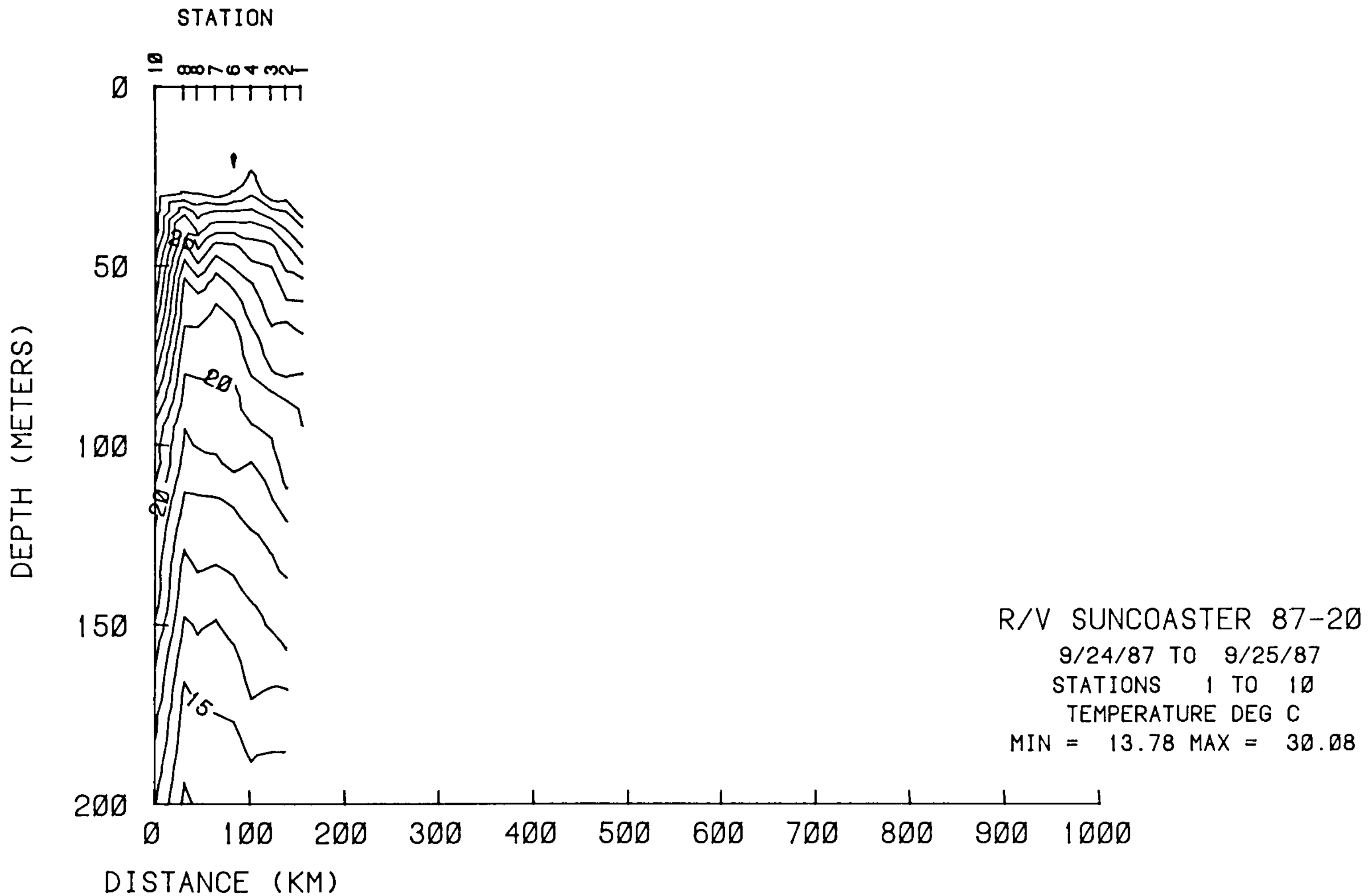


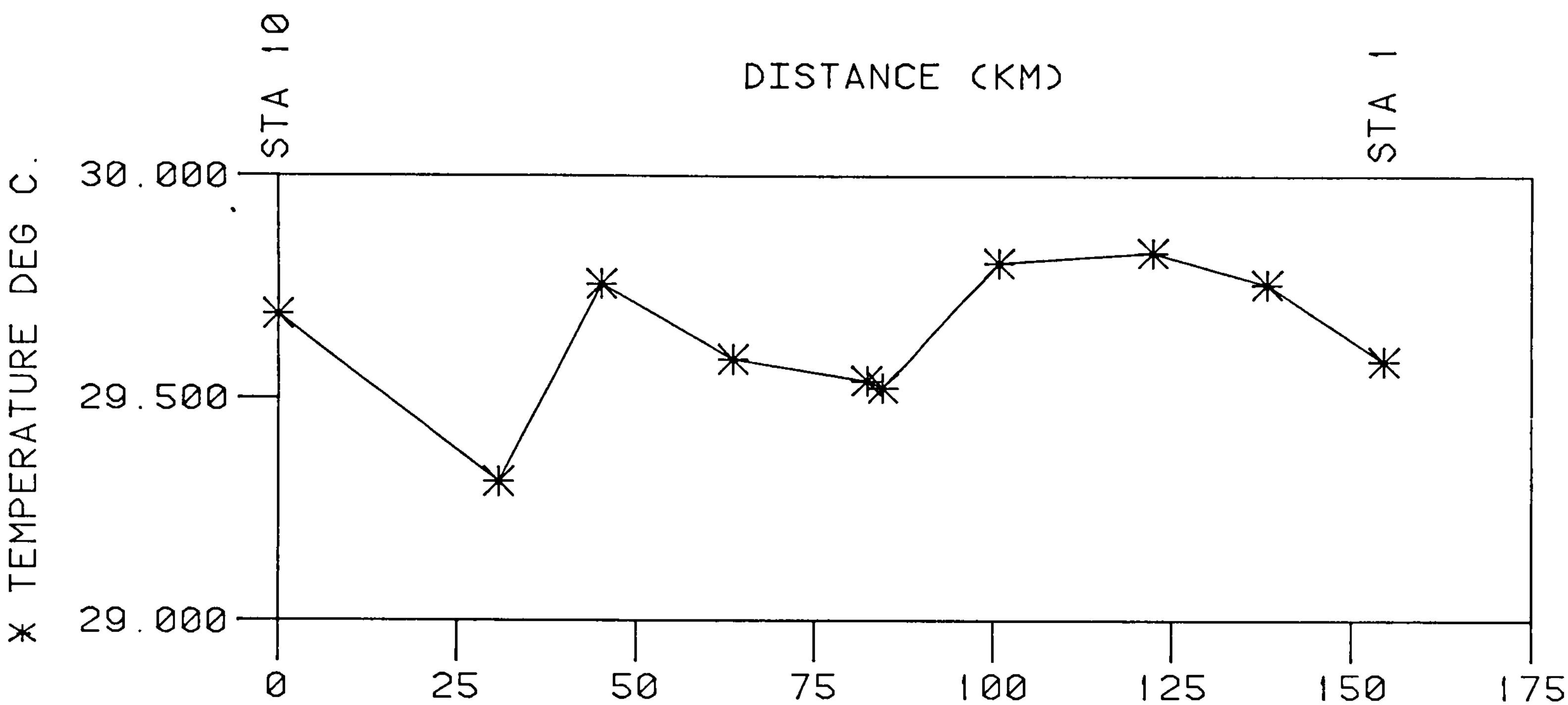
R/V SUNCOASTER CRUISE 87-05
3/13/87 TO 3/16/87
STATIONS 13 TO 19
TEMPERATURE DEG C
MIN = 12.51 MAX = 22.62


R/V SUNCOASTER 87-20
9/24/87 TO 9/29/87
90 W
89 W
88 W
87 W
86 W
85 W
84 W
83 W
82 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
21
10
1

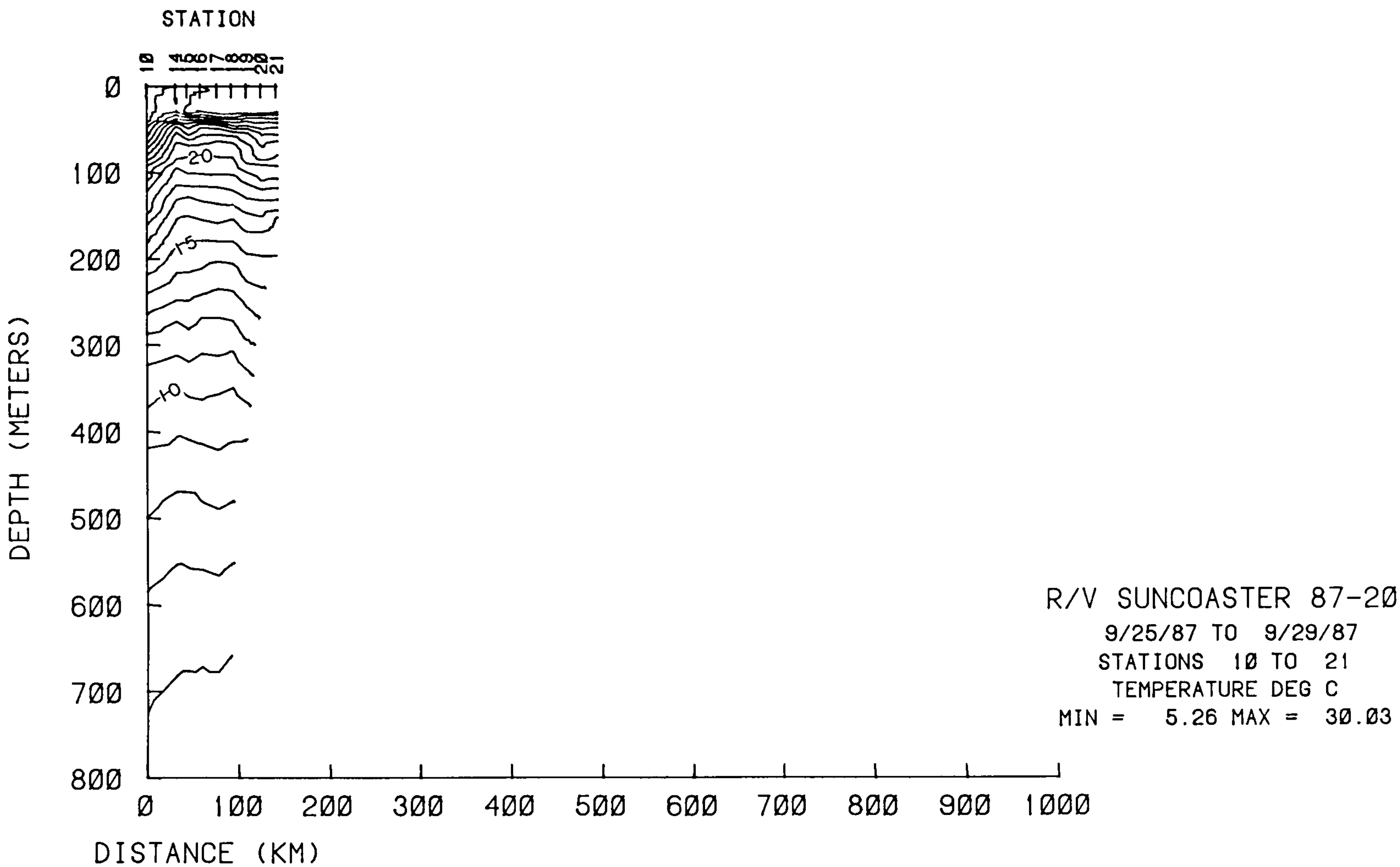


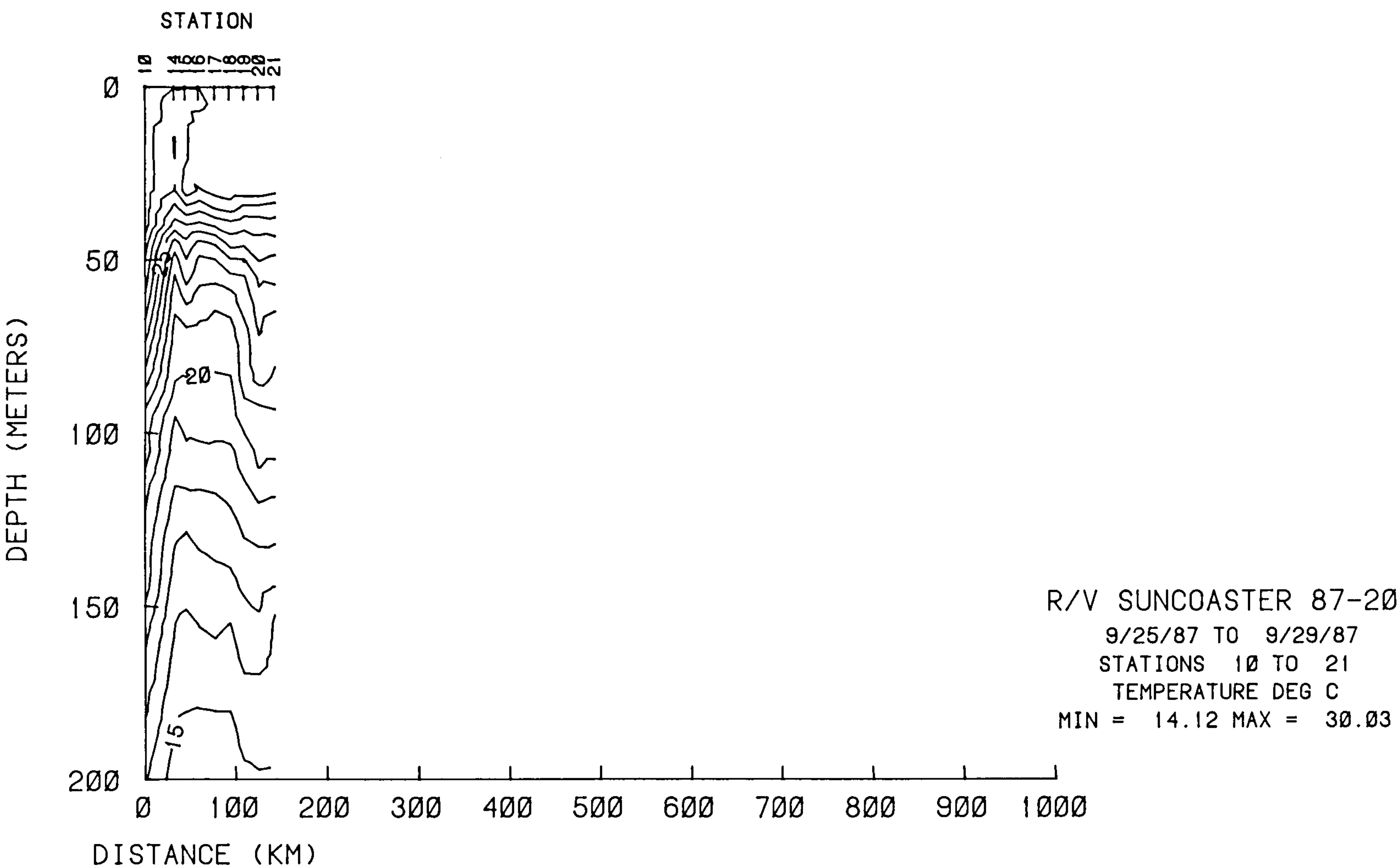
R/V SUNCOASTER 87-20
9/24/87 TO 9/25/87
STATIONS 1 TO 10
TEMPERATURE DEG C
MIN = 5.37 MAX = 30.08

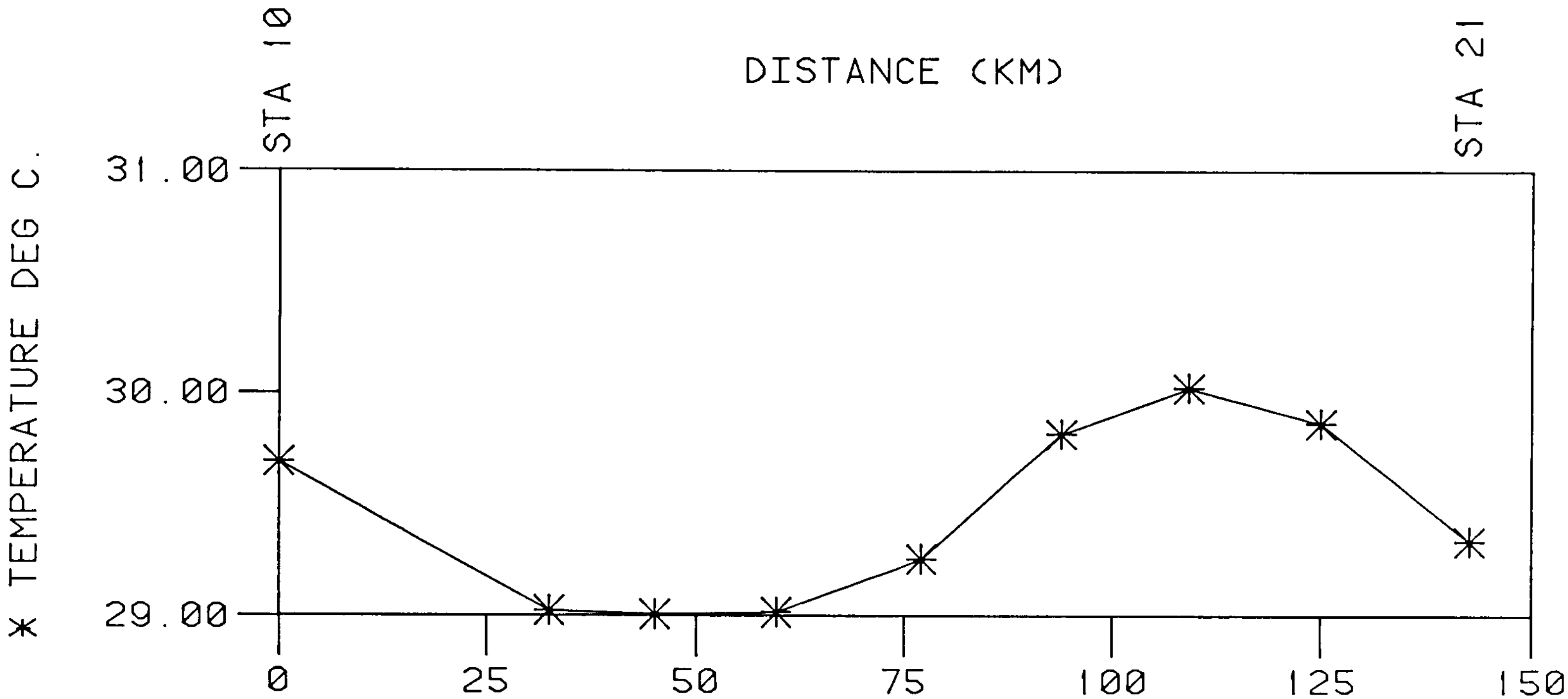

STATION
10 8 8 7 6 4 3 2 1
0
50
100
150
200
DEPTH (METERS)
26
20
20
15
0 100 200 300 400 500 600 700 800 900 1000
DISTANCE (KM)
R/V SUNCOASTER 87-20
9/24/87 TO 9/25/87
STATIONS 1 TO 10
TEMPERATURE DEG C
MIN = 13.78 MAX = 30.08



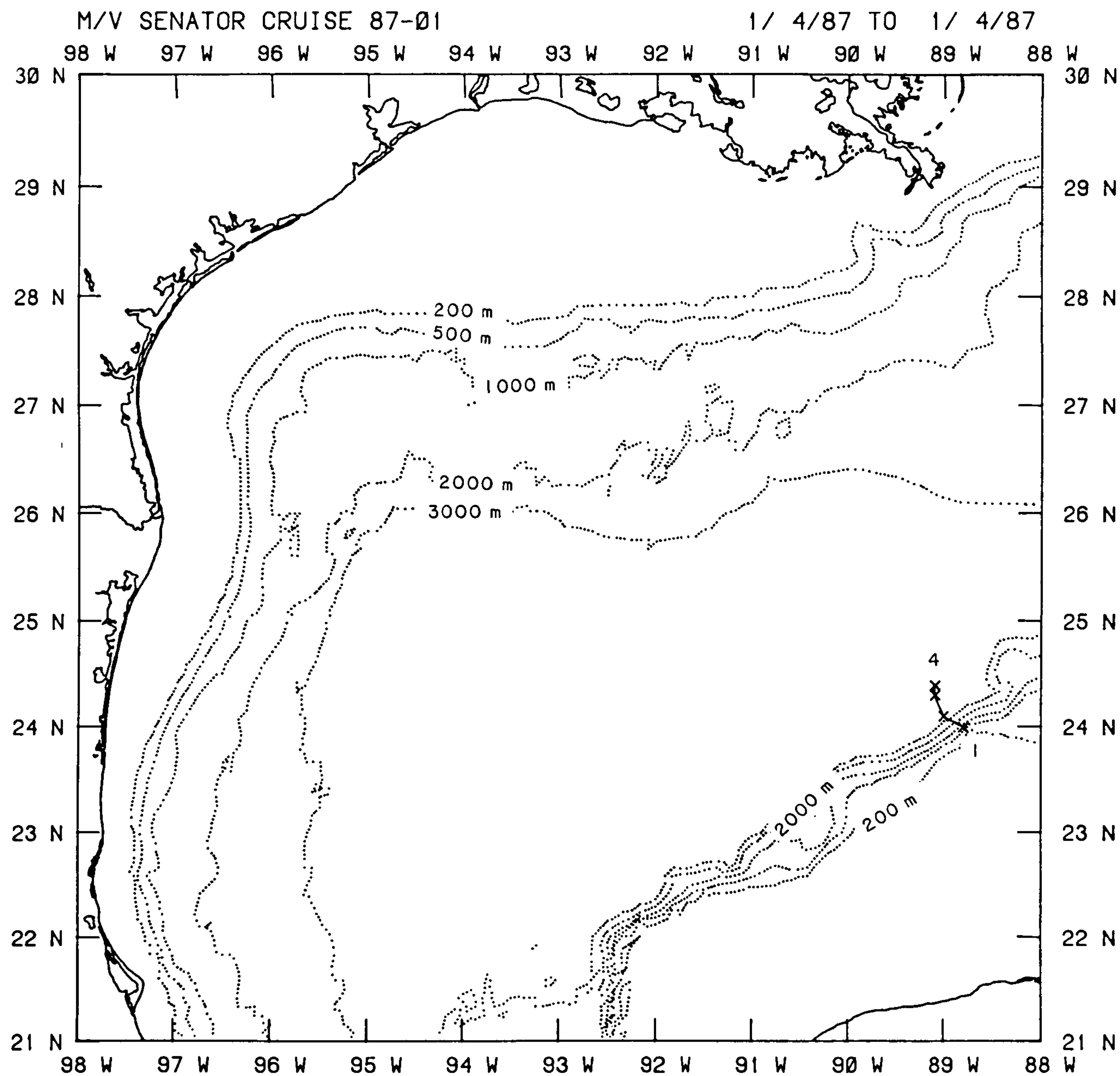
PARAMETERS AT SURFACE R/V SUNCOASTER 87-20

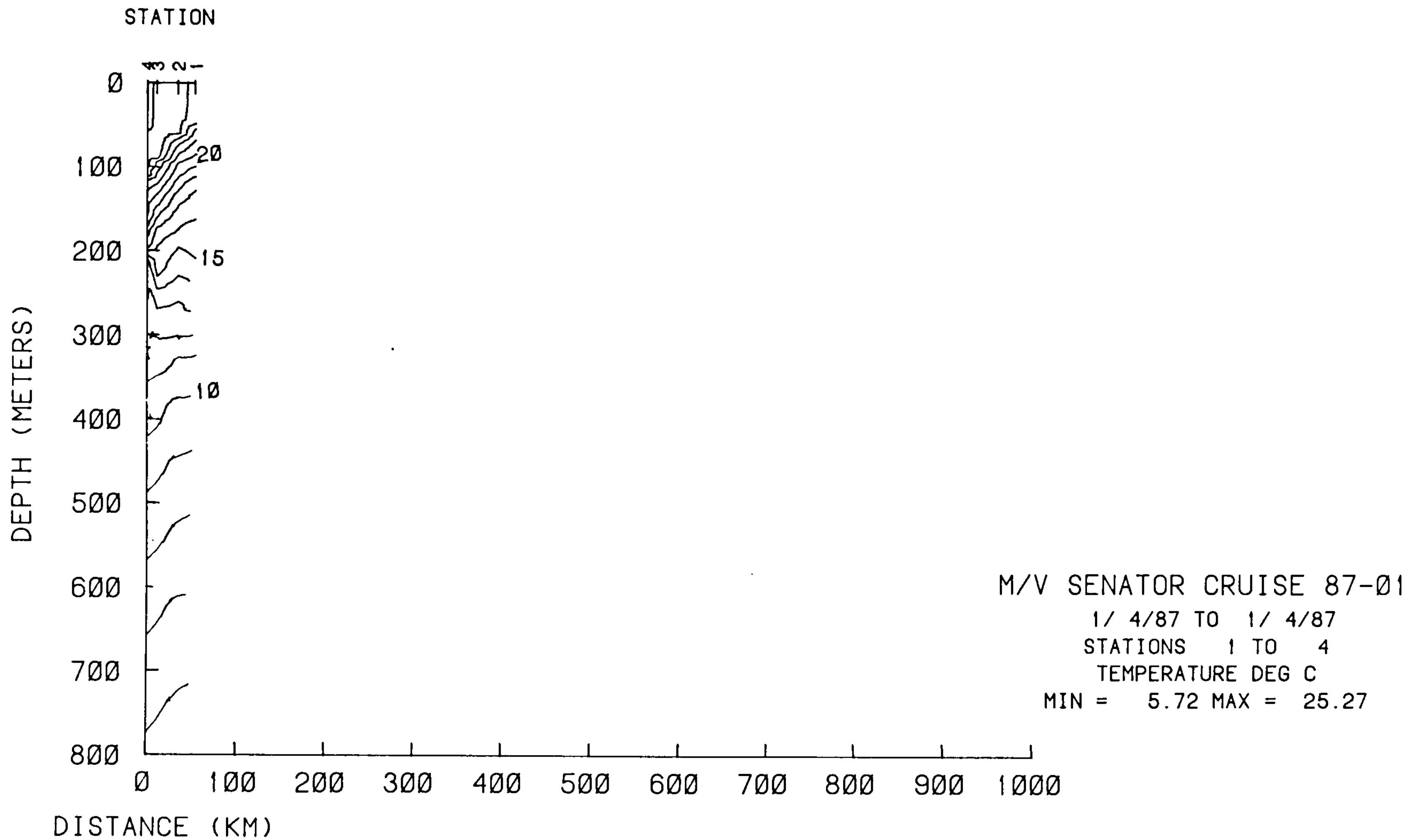

STATION
10 14 15 16 17 18 19 20 21
20
15
10
0
100
200
300
400
500
600
700
800
DEPTH (METERS)
0
100
200
300
400
500
600
700
800
900
1000
DISTANCE (KM)
R/V SUNCOASTER 87-20
9/25/87 TO 9/29/87
STATIONS 10 TO 21
TEMPERATURE DEG C
MIN = 5.26 MAX = 30.03

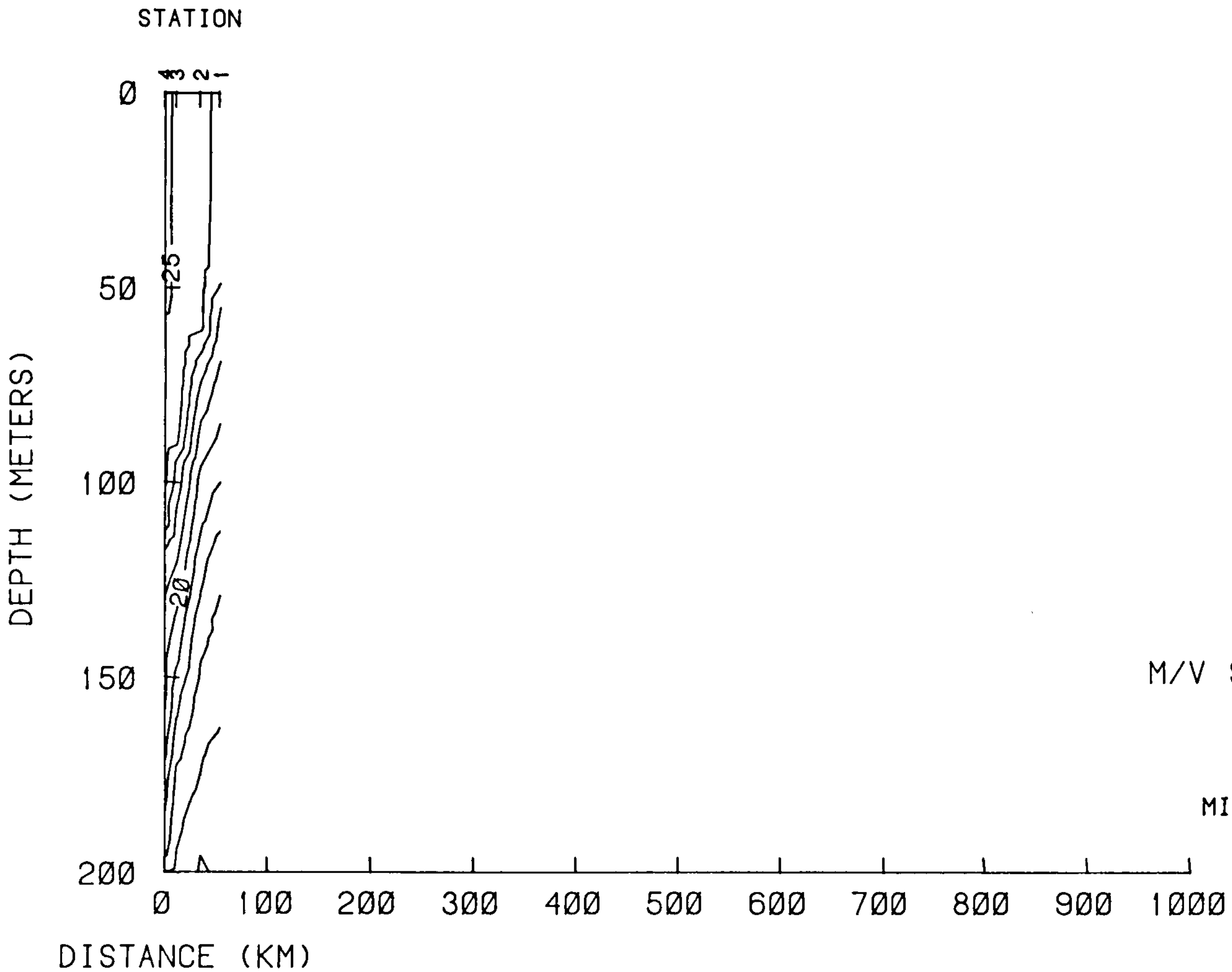

STATION
10
14
15
16
17
18
19
20
21
DEPTH (METERS)
0
50
100
150
200
1
20
15
0
100
200
300
400
500
600
700
800
900
1000
DISTANCE (KM)
R/V SUNCOASTER 87-20
9/25/87 TO 9/29/87
STATIONS 10 TO 21
TEMPERATURE DEG C
MIN = 14.12 MAX = 30.03



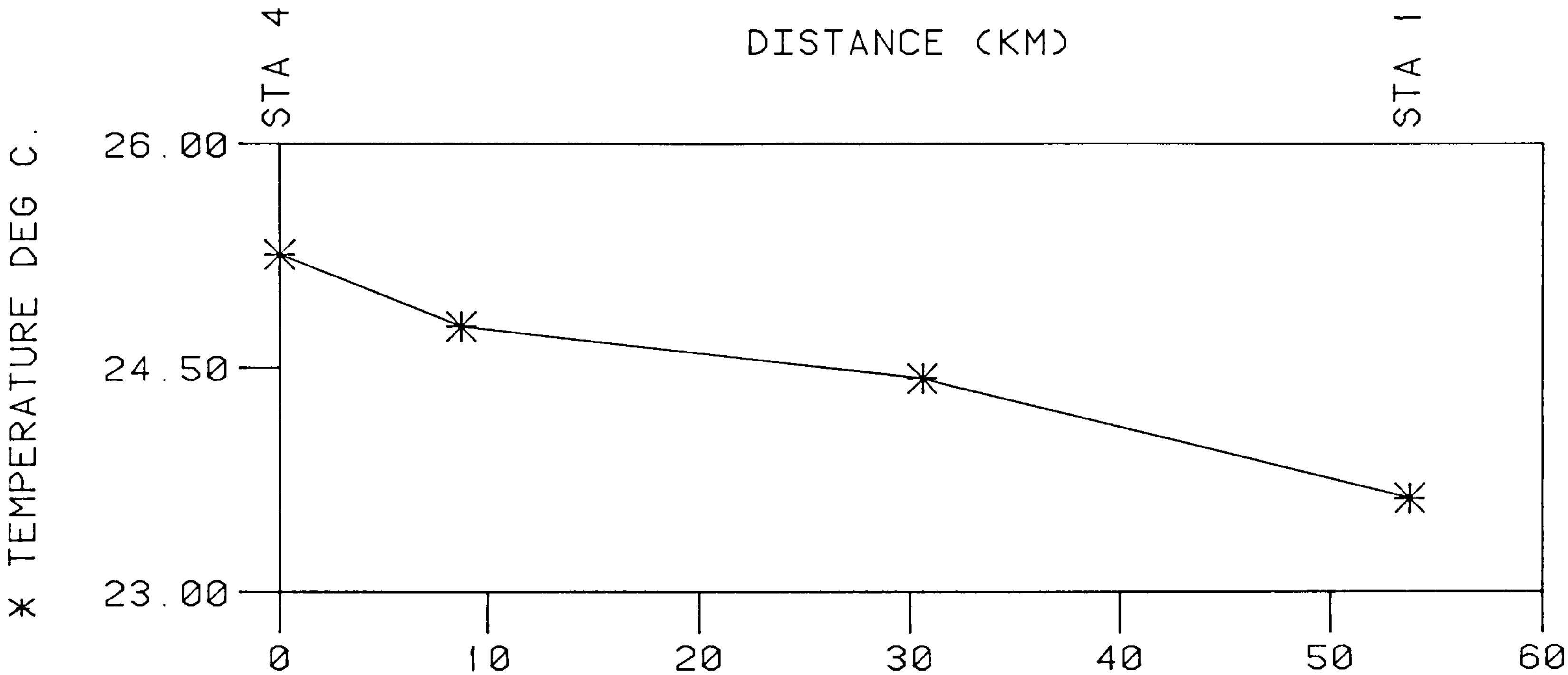
PARAMETERS AT SURFACE R/V SUNCOASTER 87-20


M/V SENATOR CRUISE 87-Ø1
1/ 4/87 TO 1/ 4/87
98 W
97 W
96 W
95 W
94 W
93 W
92 W
91 W
90 W
89 W
88 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
4
1
2000 m
200 m

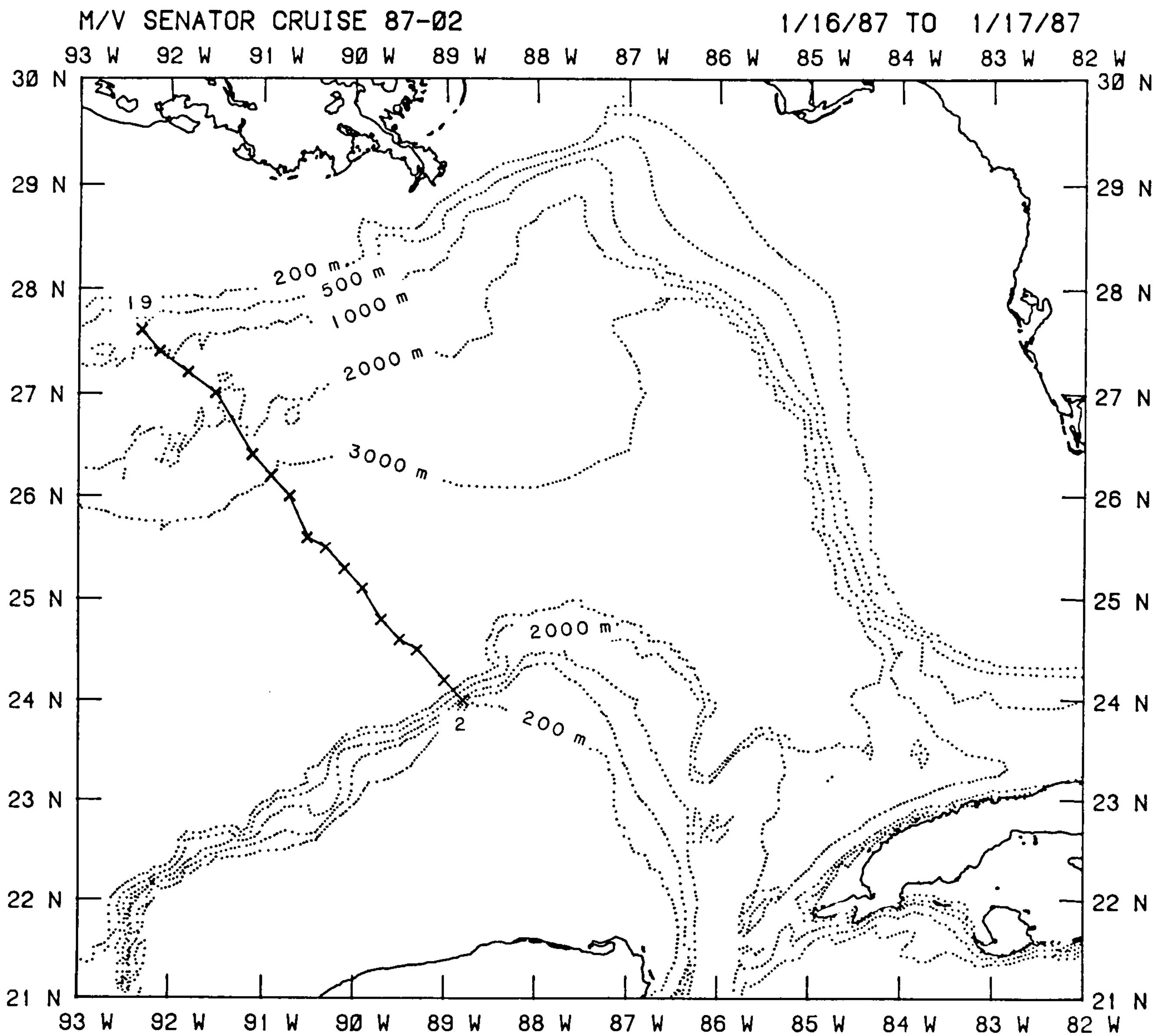

STATION
4 3 2 1
20
15
10
DEPTH (METERS)
Ø
1ØØ
2ØØ
3ØØ
4ØØ
5ØØ
6ØØ
7ØØ
8ØØ
Ø 1ØØ 2ØØ 3ØØ 4ØØ 5ØØ 6ØØ 7ØØ 8ØØ 9ØØ 1ØØØ
DISTANCE (KM)
M/V SENATOR CRUISE 87-Ø1
1/ 4/87 TO 1/ 4/87
STATIONS 1 TO 4
TEMPERATURE DEG C
MIN = 5.72 MAX = 25.27

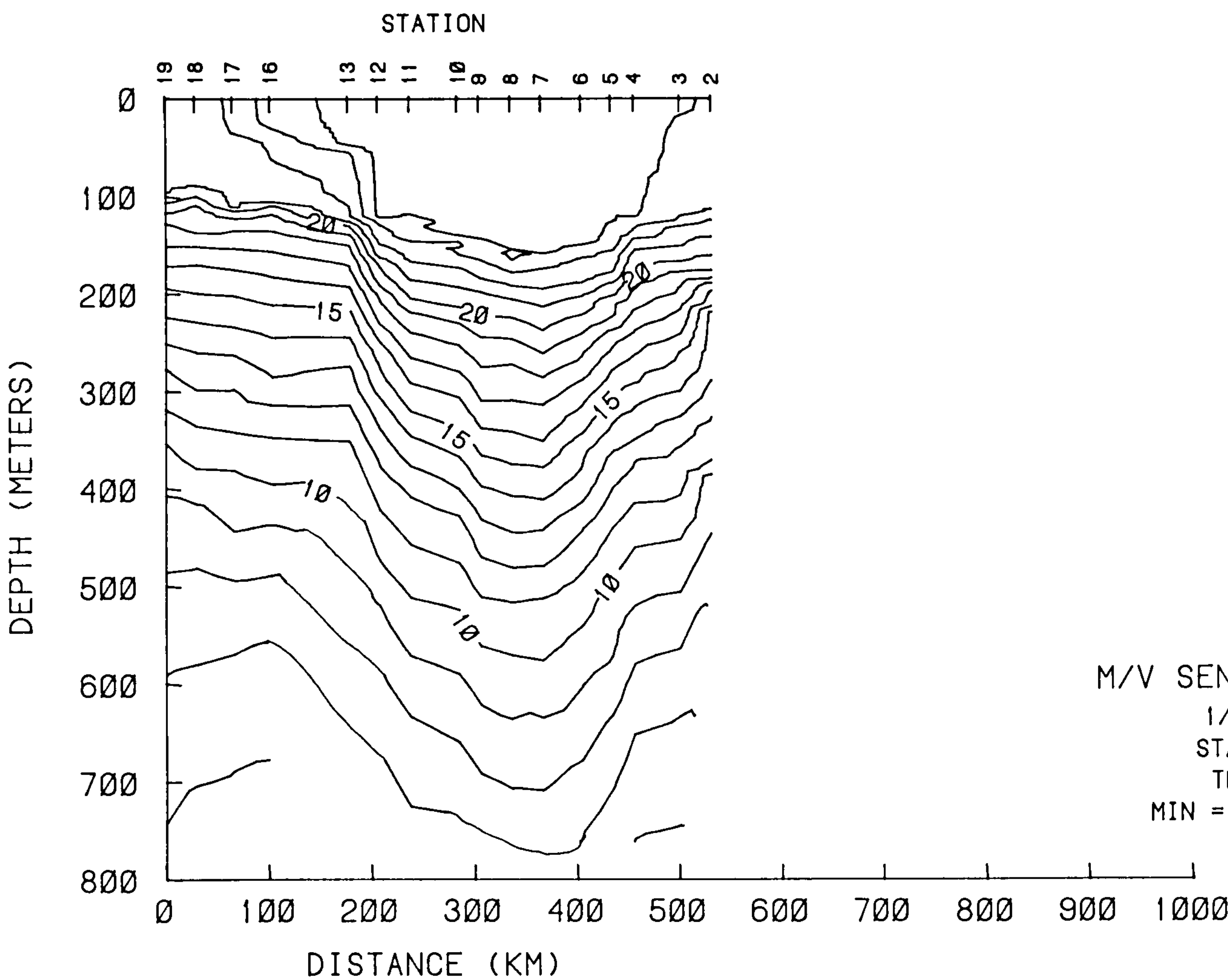


M/V SENATOR CRUISE 87-Ø1
1/ 4/87 TO 1/ 4/87
STATIONS 1 TO 4
TEMPERATURE DEG C
MIN = 14.89 MAX = 25.27

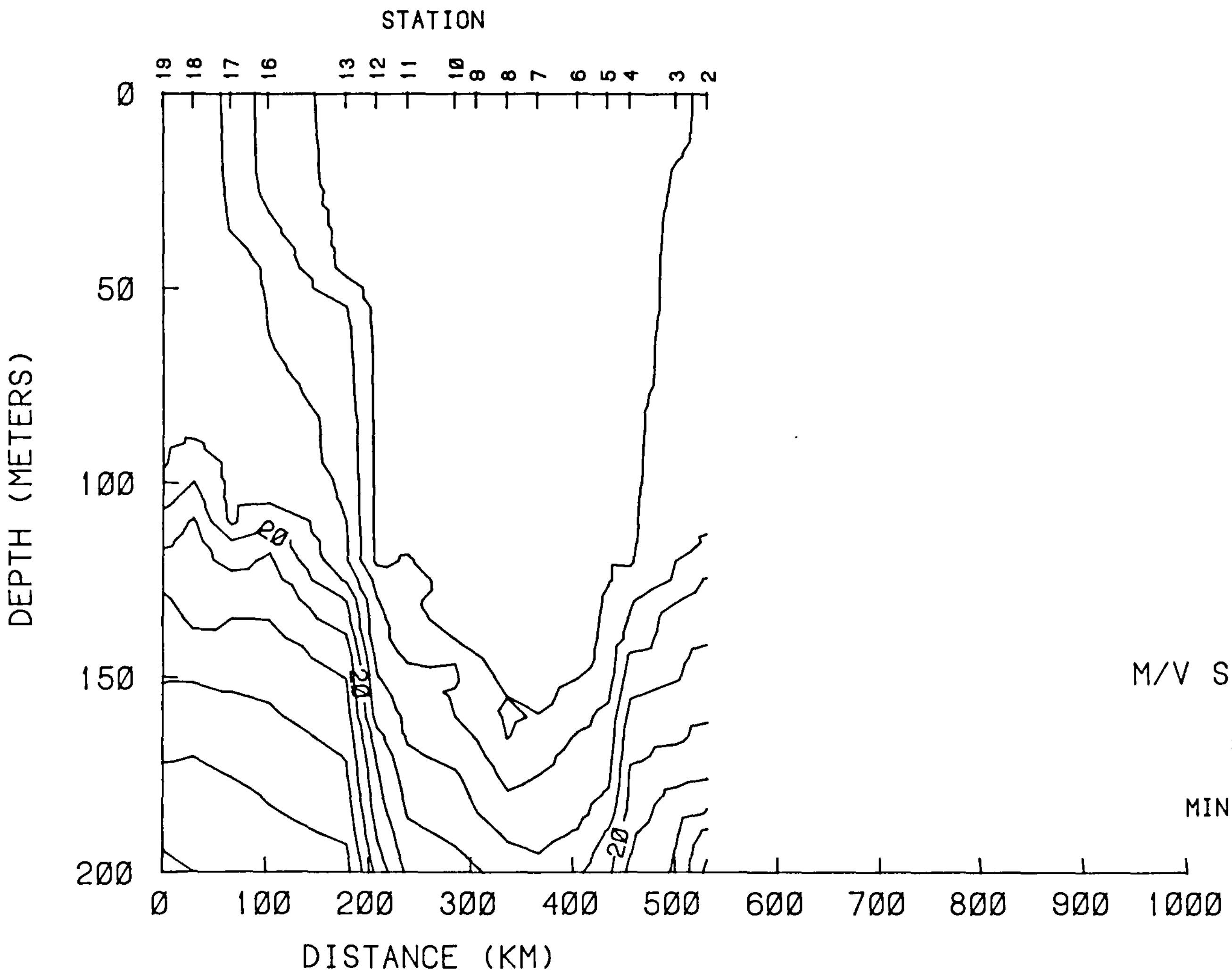


PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-01

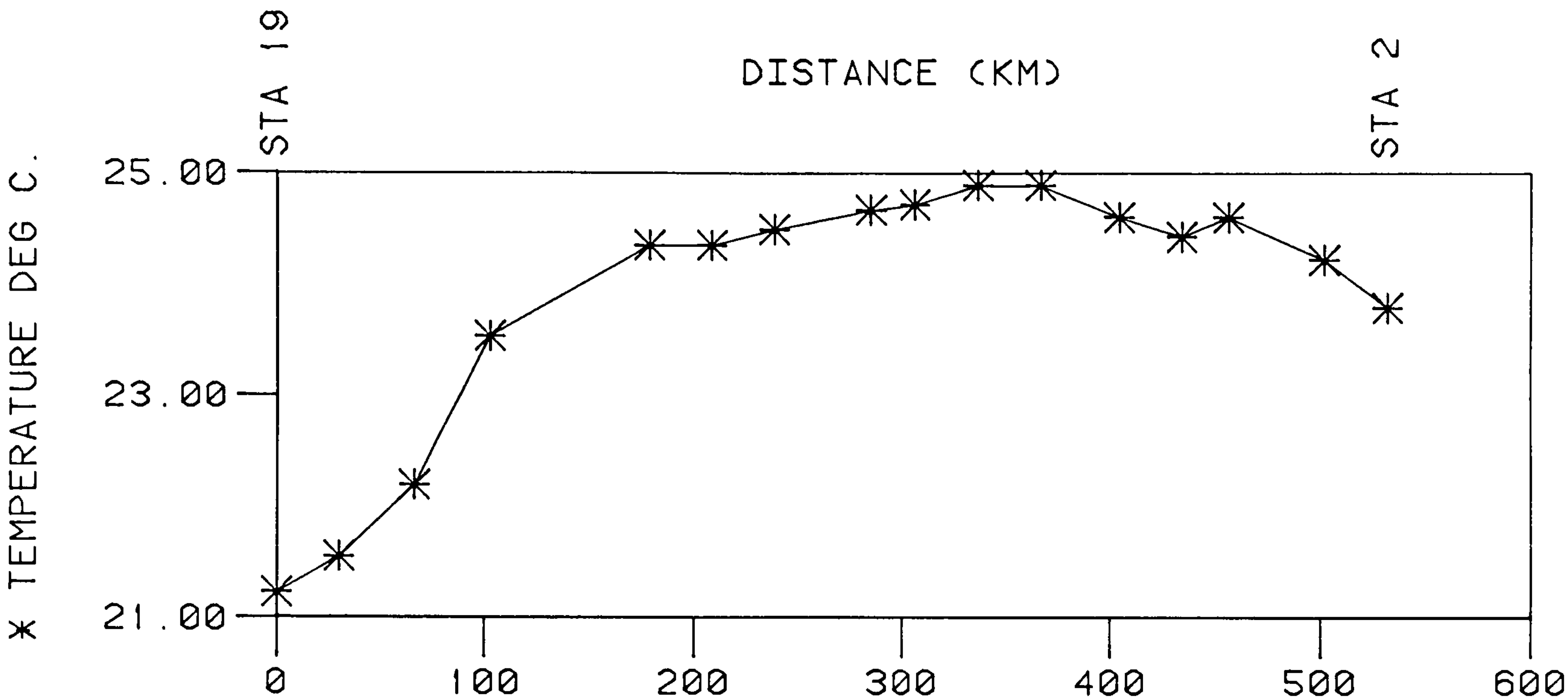

M/V SENATOR CRUISE 87-Ø2
1/16/87 TO 1/17/87
93 W 92 W 91 W 9Ø W 89 W 88 W 87 W 86 W 85 W 84 W 83 W 82 W
3Ø N 29 N 28 N 27 N 26 N 25 N 24 N 23 N 22 N 21 N
200 m
500 m
1000 m
2000 m
3000 m
2000 m
200 m
19
2



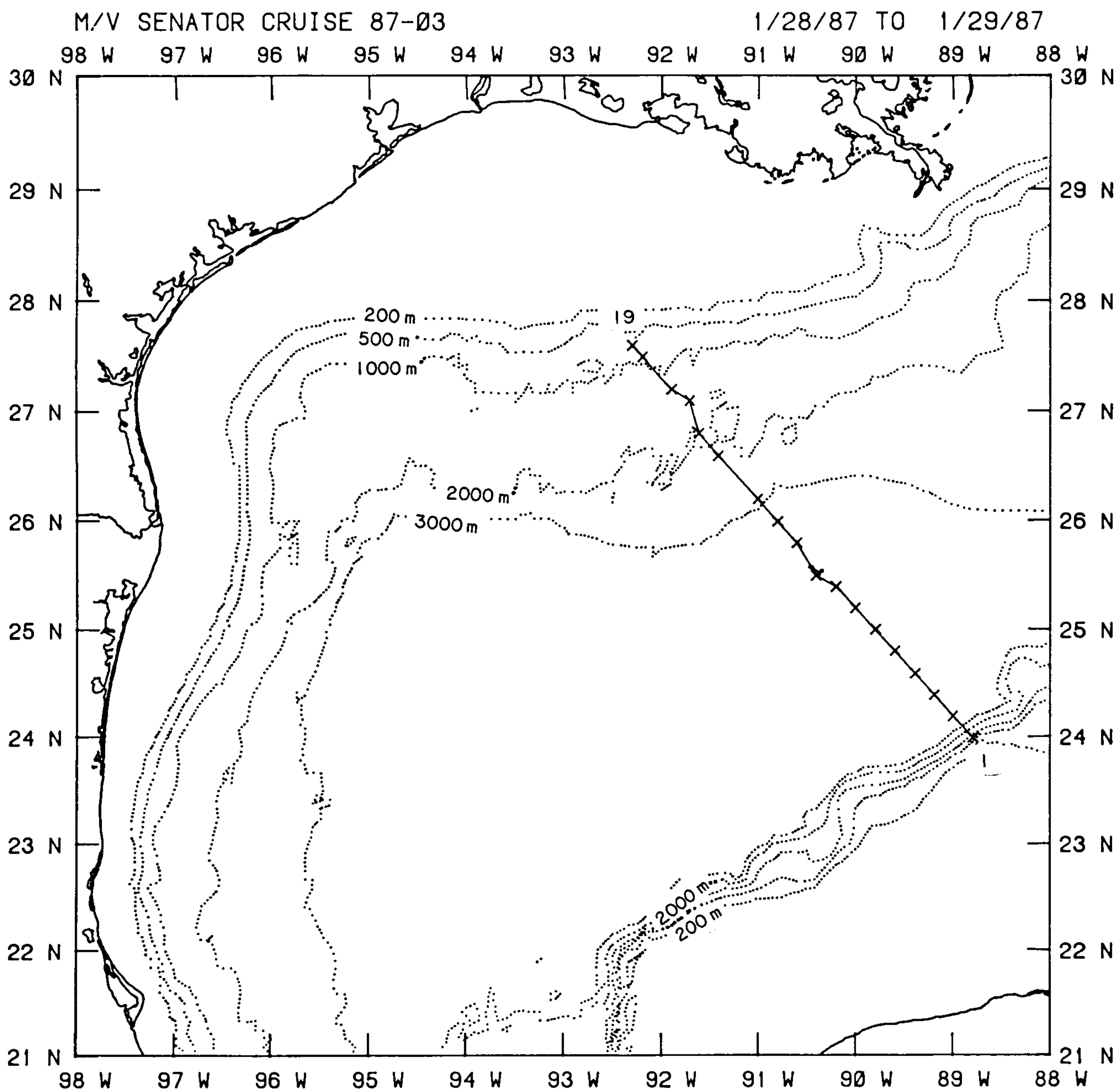
M/V SENATOR CRUISE 87-Ø2
1/16/87 TO 1/17/87
STATIONS 2 TO 19
TEMPERATURE DEG C
MIN = 5.53 MAX = 24.89



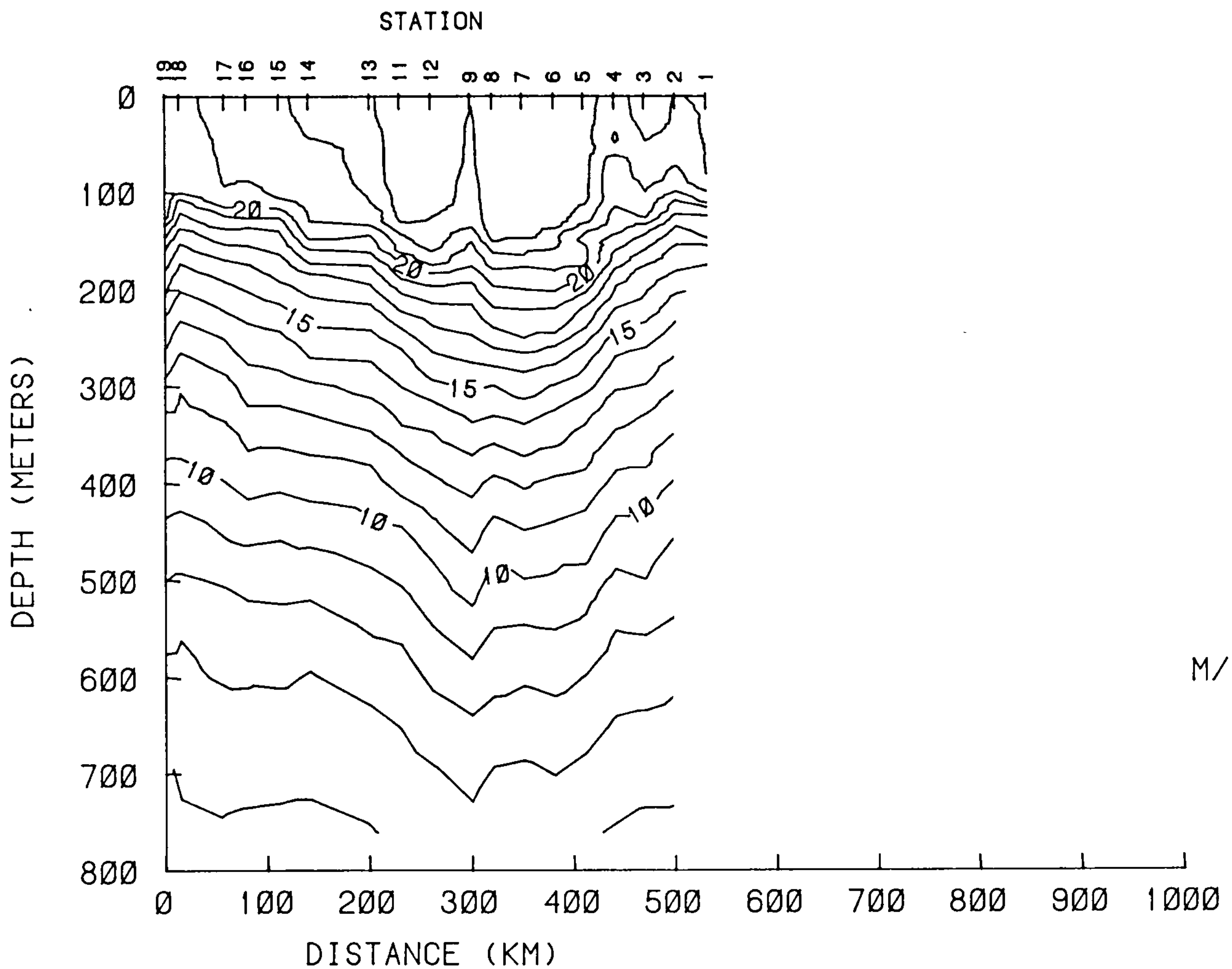
M/V SENATOR CRUISE 87-02
1/16/87 TO 1/17/87
STATIONS 2 TO 19
TEMPERATURE DEG C
MIN = 14.88 MAX = 24.89



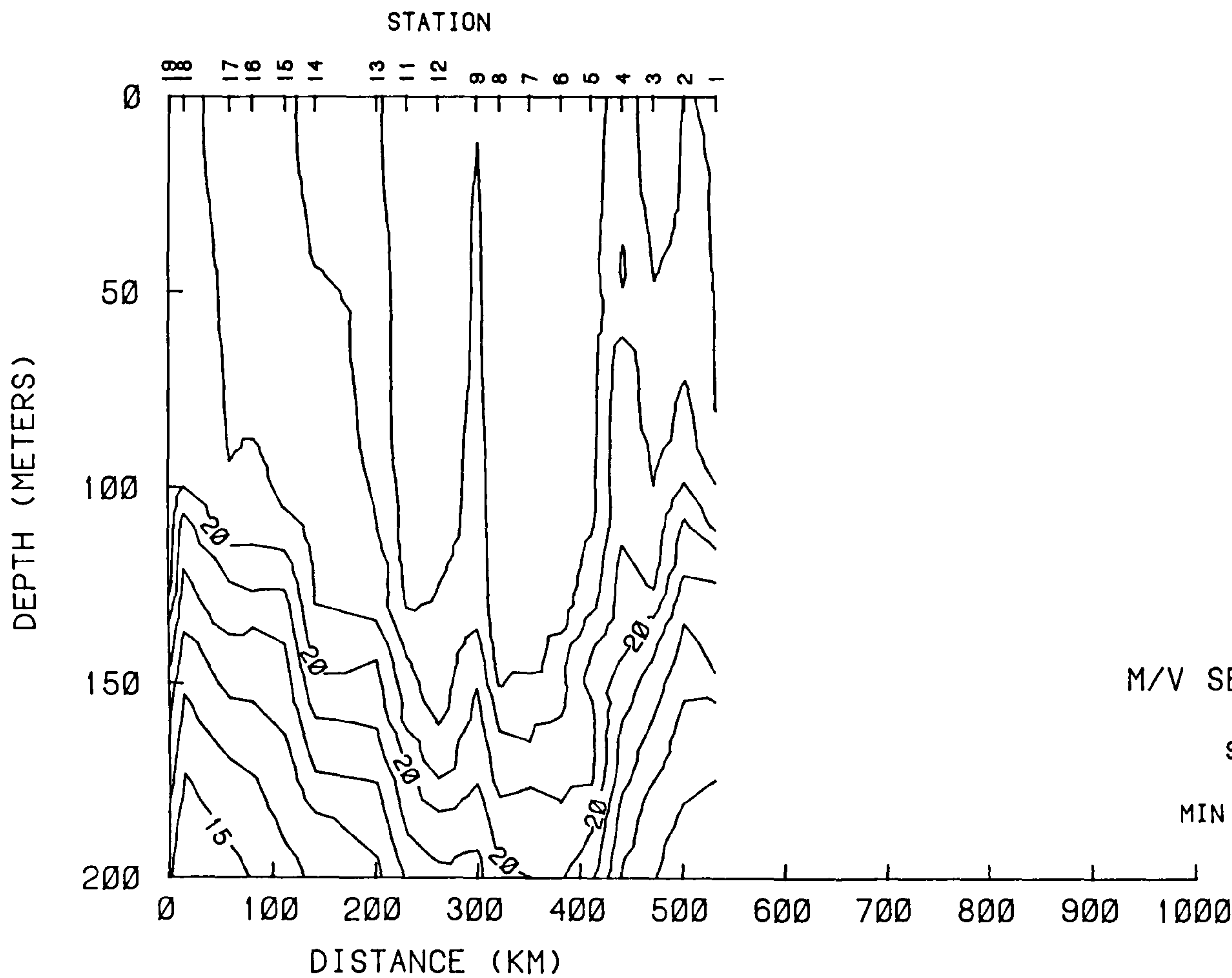
PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-02



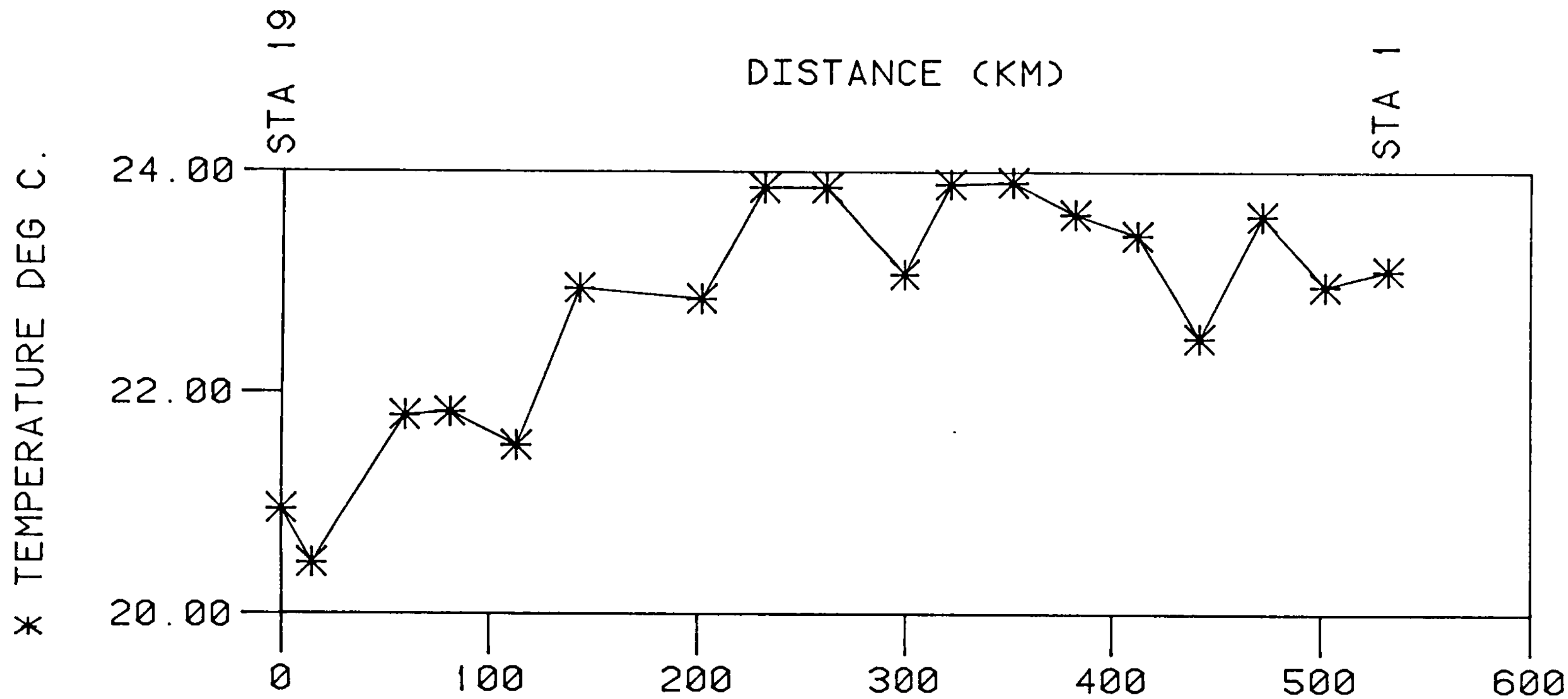
M/V SENATOR CRUISE 87-03
1/28/87 TO 1/29/87
98 W
97 W
96 W
95 W
94 W
93 W
92 W
91 W
90 W
89 W
88 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
19
1
2000 m
200 m



M/V SENATOR CRUISE 87-Ø3
1/28/87 TO 1/29/87
STATIONS 1 TO 19
TEMPERATURE DEG C
MIN = 5.59 MAX = 23.91

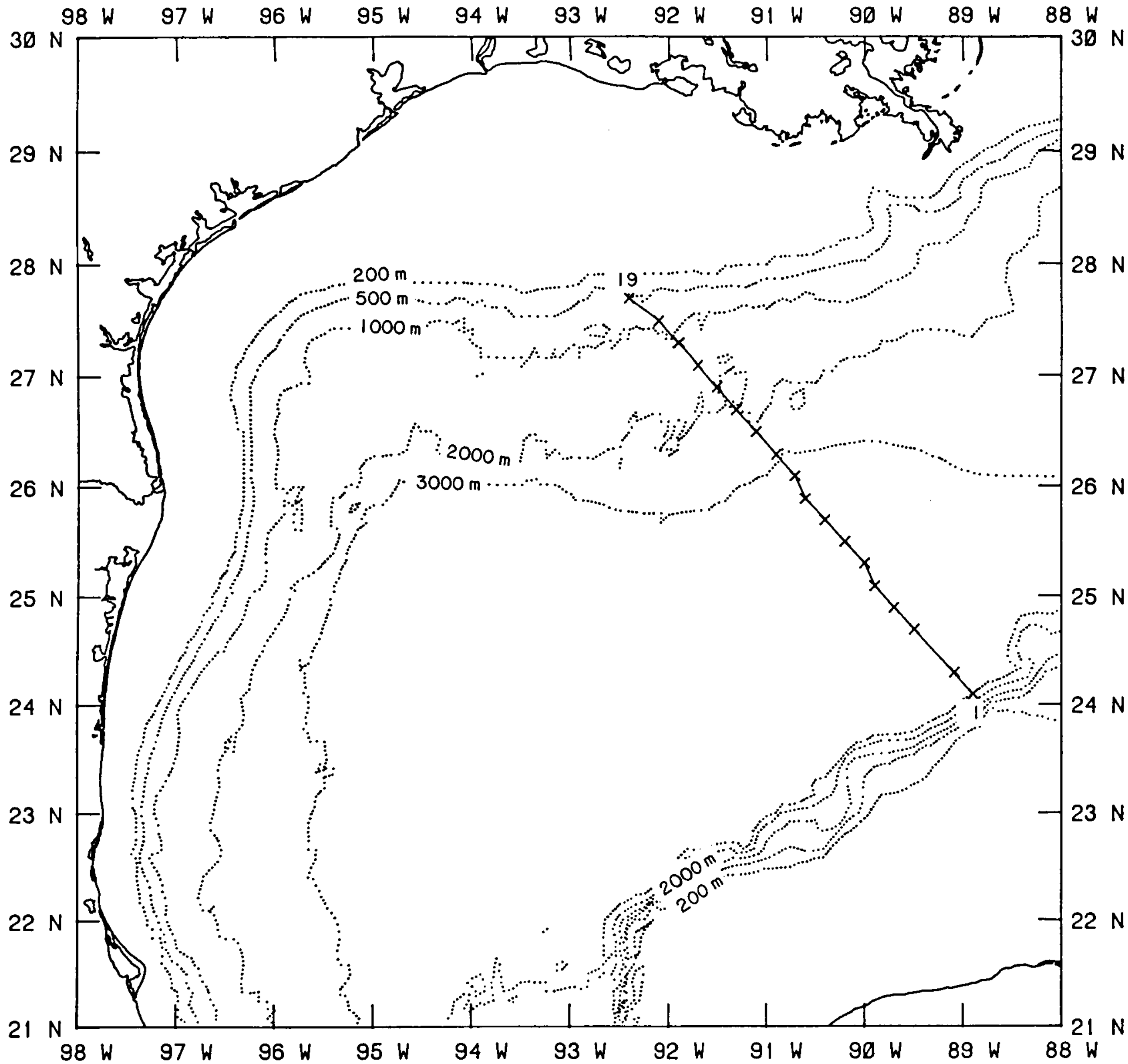


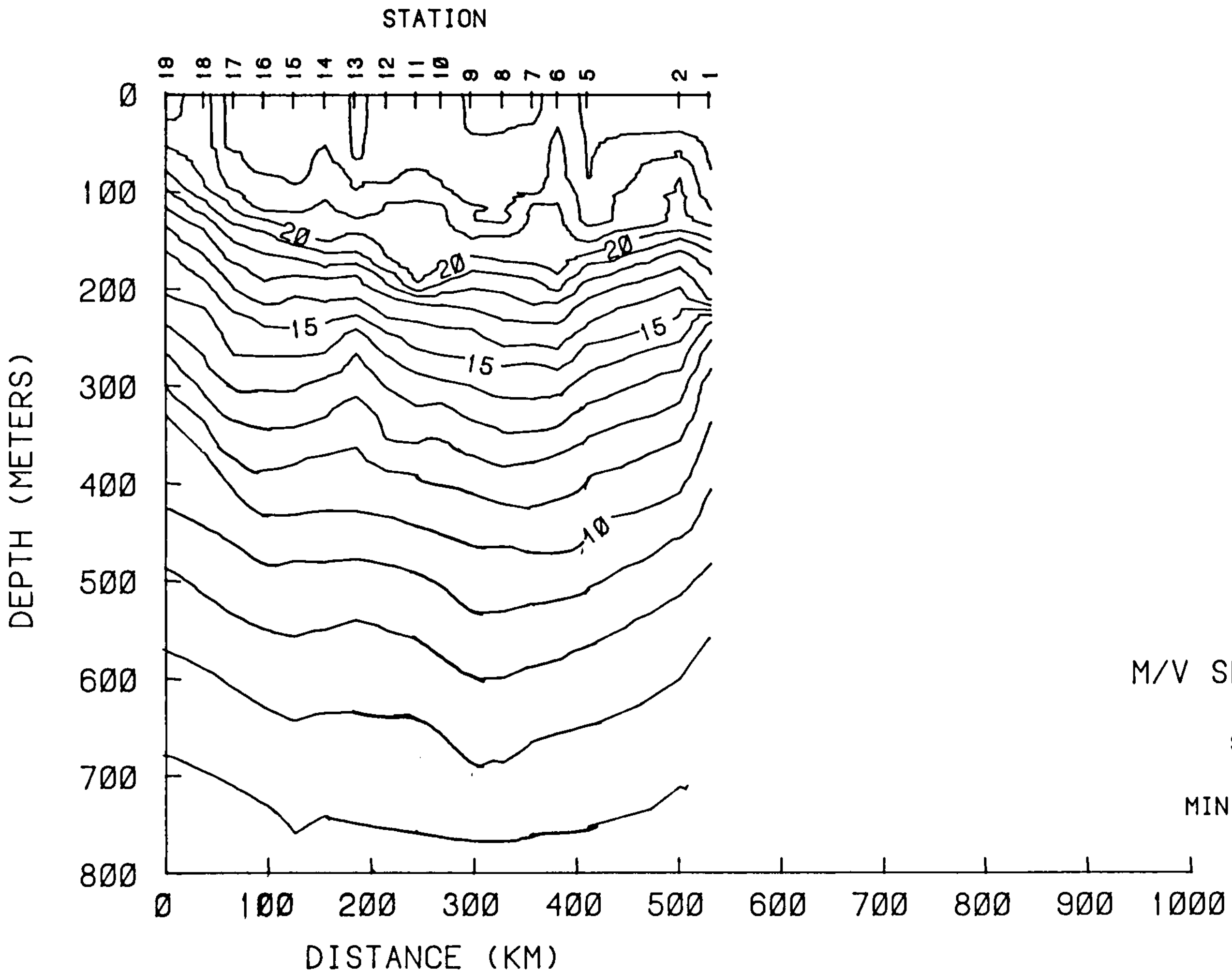
M/V SENATOR CRUISE 87-03
1/28/87 TO 1/29/87
STATIONS 1 TO 19
TEMPERATURE DEG C
MIN = 14.08 MAX = 23.91



PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-03

M/V SENATOR CRUISE 87-Ø4 2/ 8/87 TO 2/ 9/87





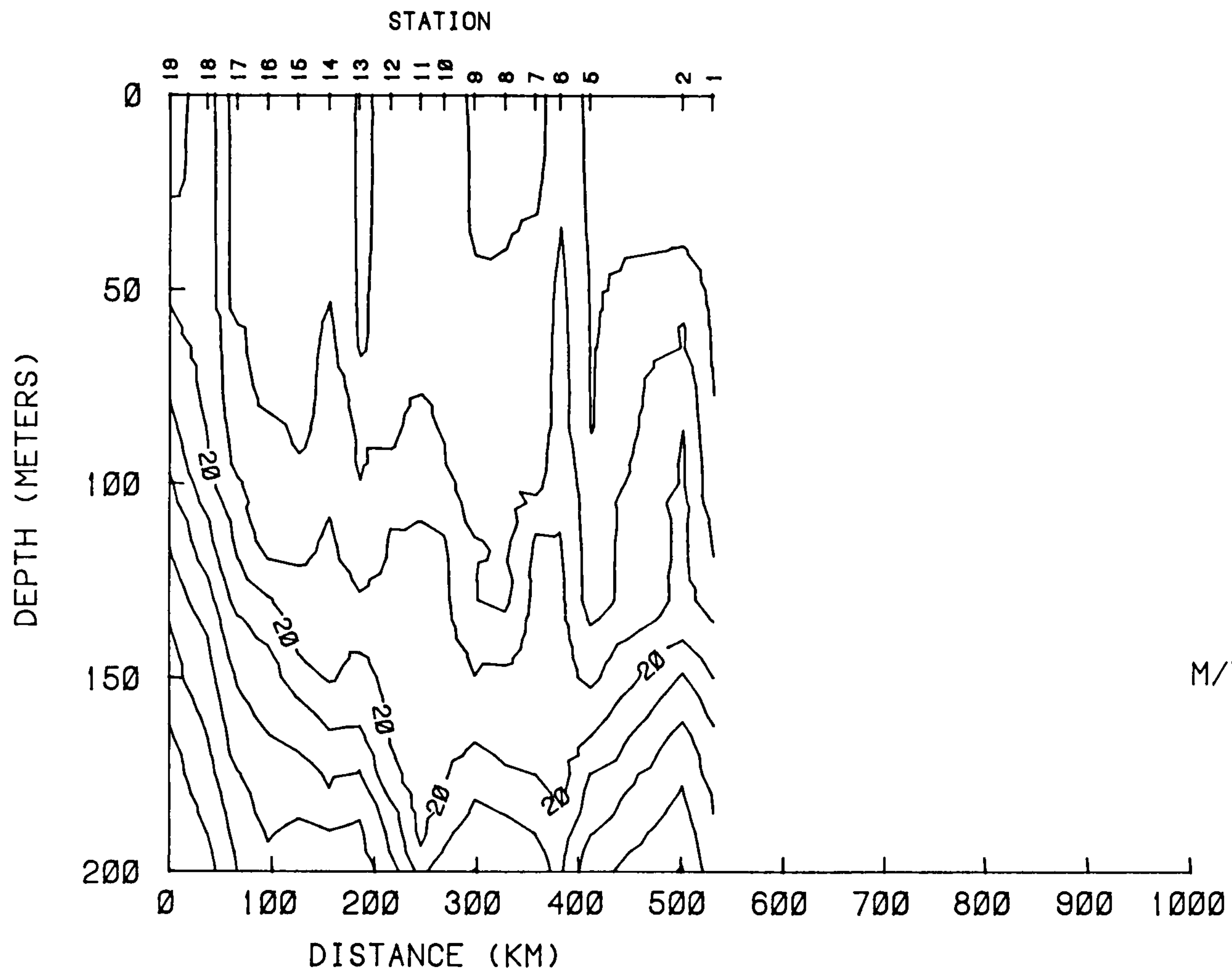
M/V SENATOR CRUISE 87-04

2/ 8/87 TO 2/ 9/87

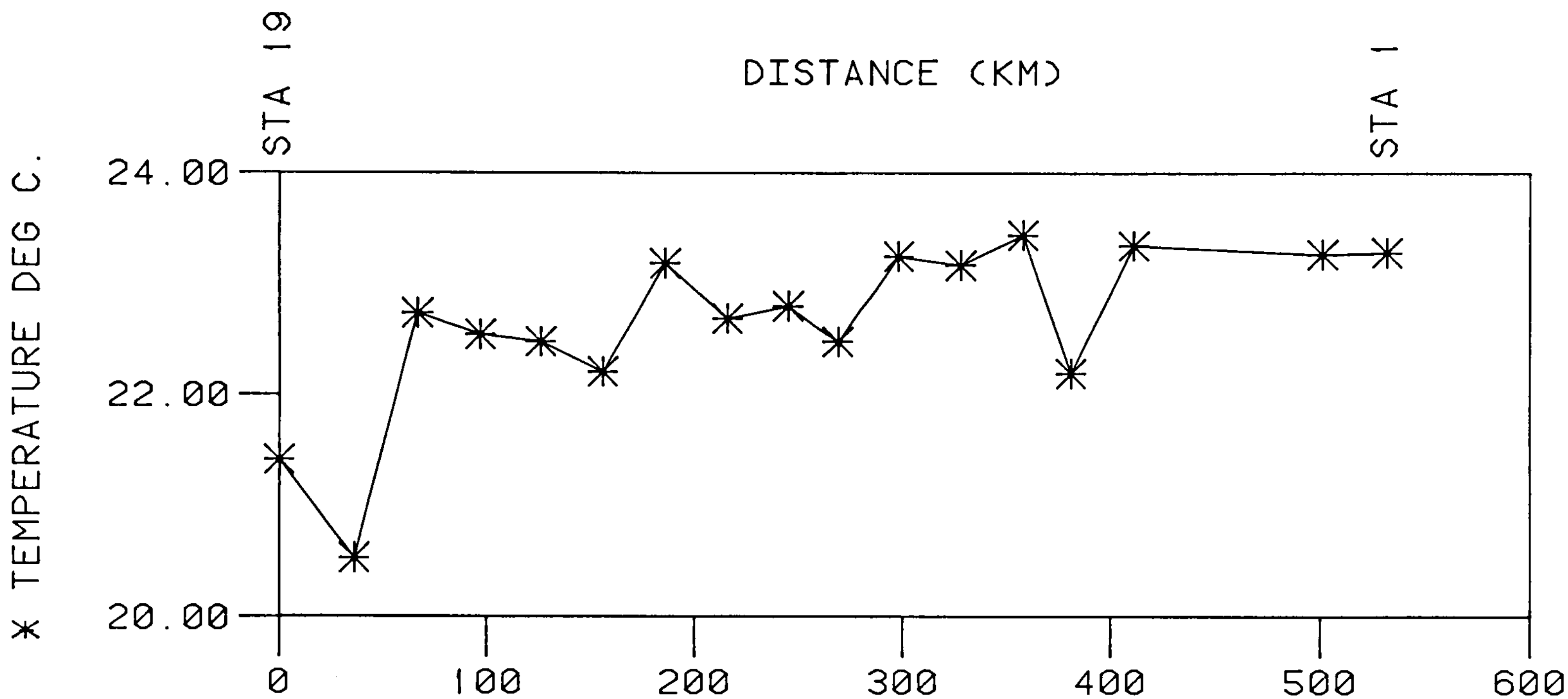
STATIONS 1 TO 19

TEMPERATURE DEG C

MIN = 5.66 MAX = 23.45

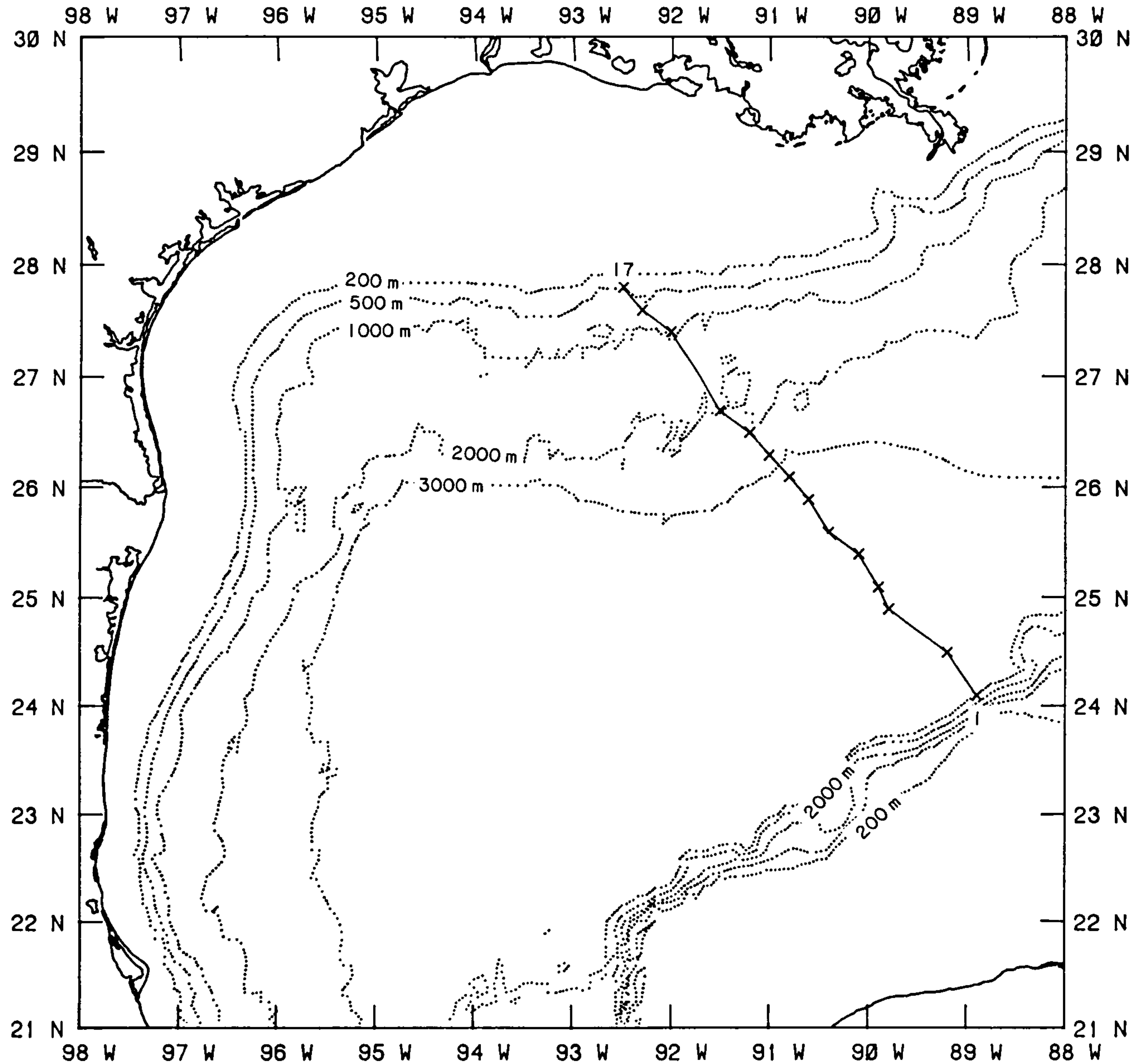


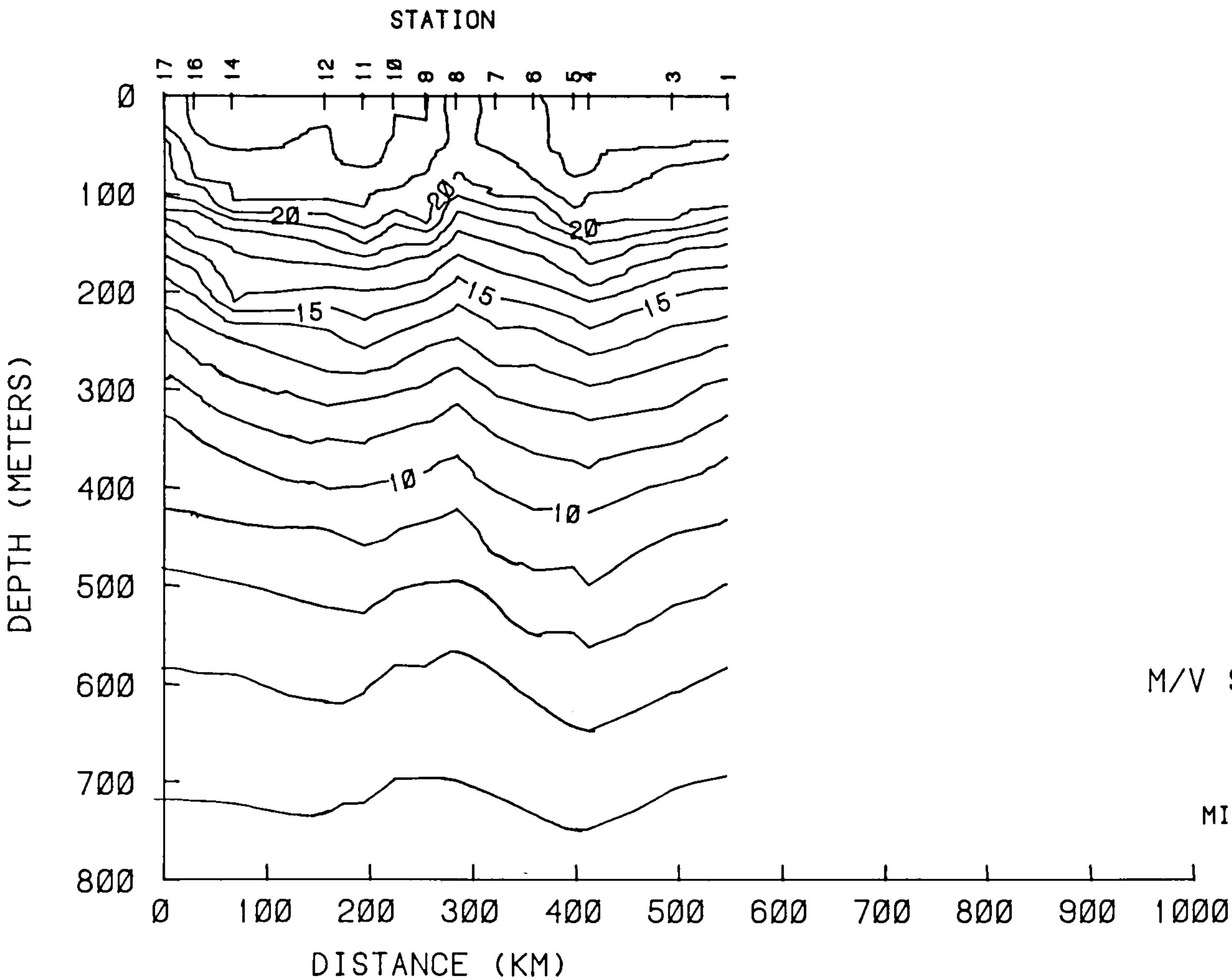
M/V SENATOR CRUISE 87-04
2/ 8/87 TO 2/ 9/87
STATIONS 1 TO 19
TEMPERATURE DEG C
MIN = 14.18 MAX = 23.45



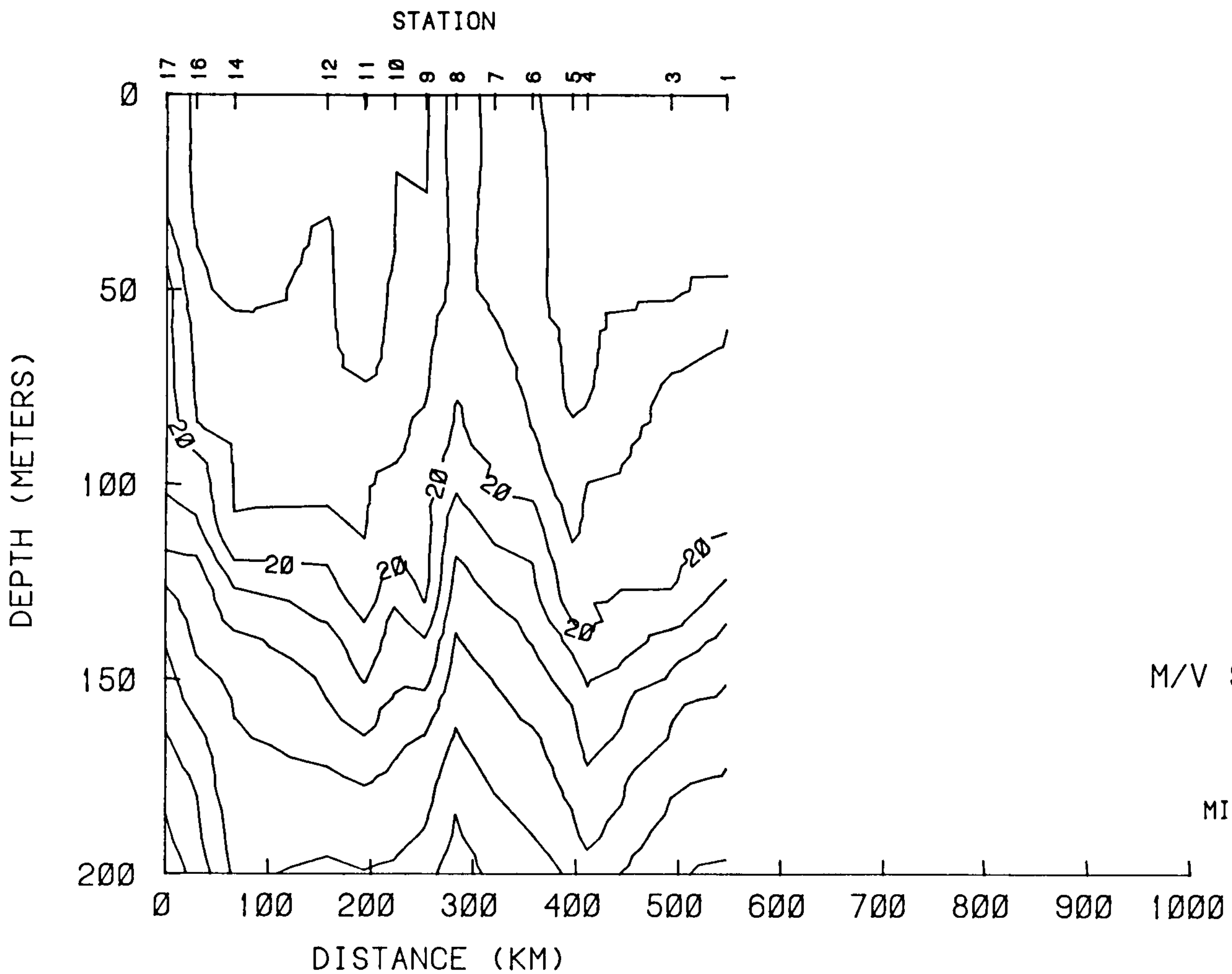
PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-04

M/V SENATOR CRUISE 87-05 2/20/87 TO 2/21/87

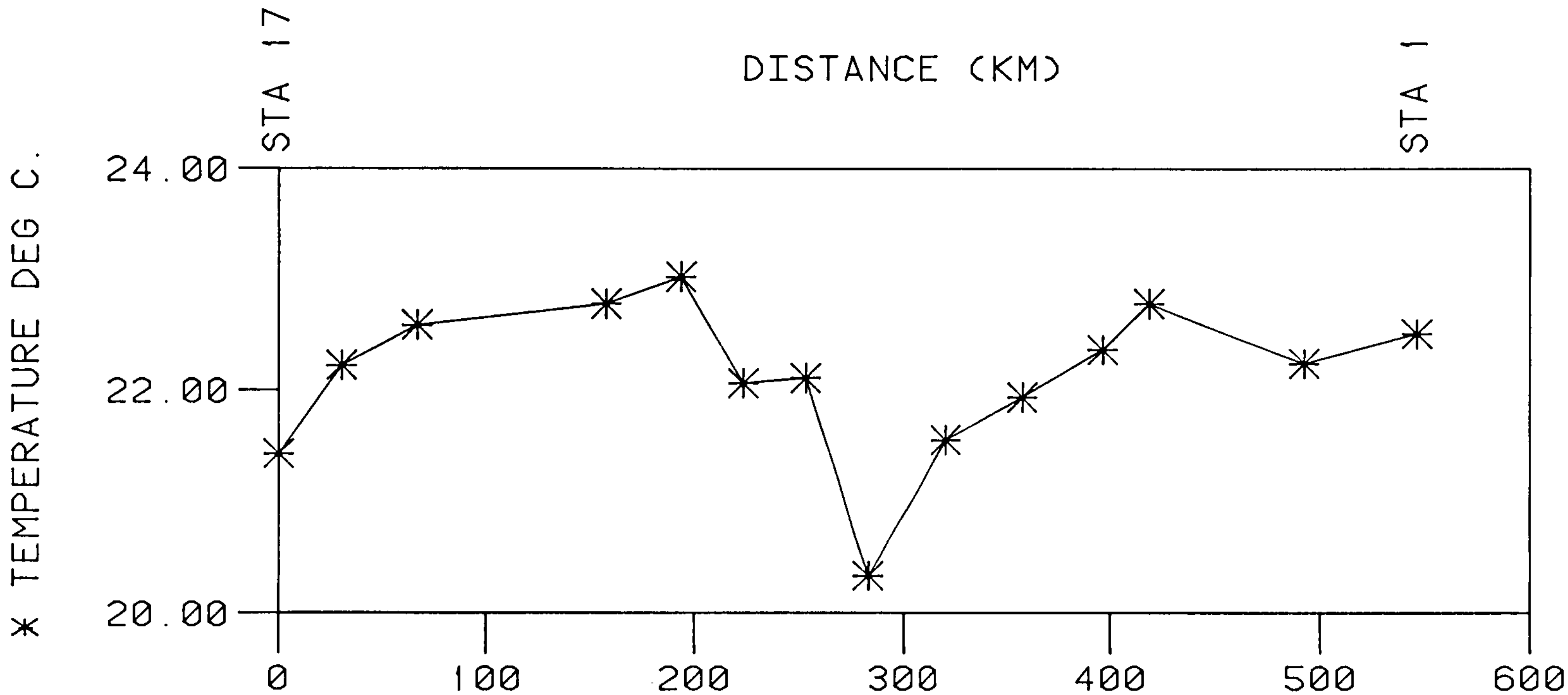




M/V SENATOR CRUISE 87-05
2/20/87 TO 2/21/87
STATIONS 1 TO 17
TEMPERATURE DEG C
MIN = 5.55 MAX = 23.02

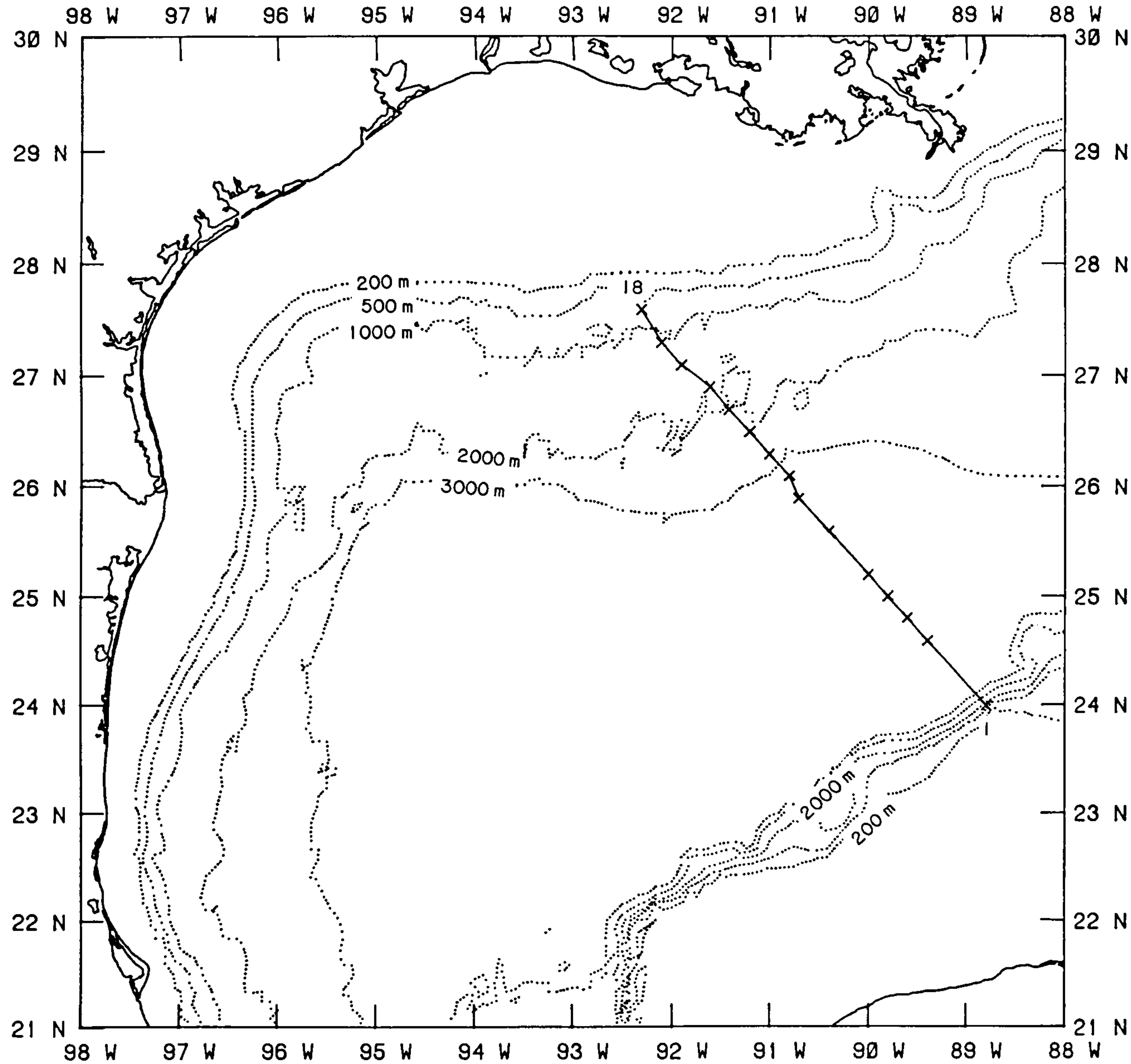


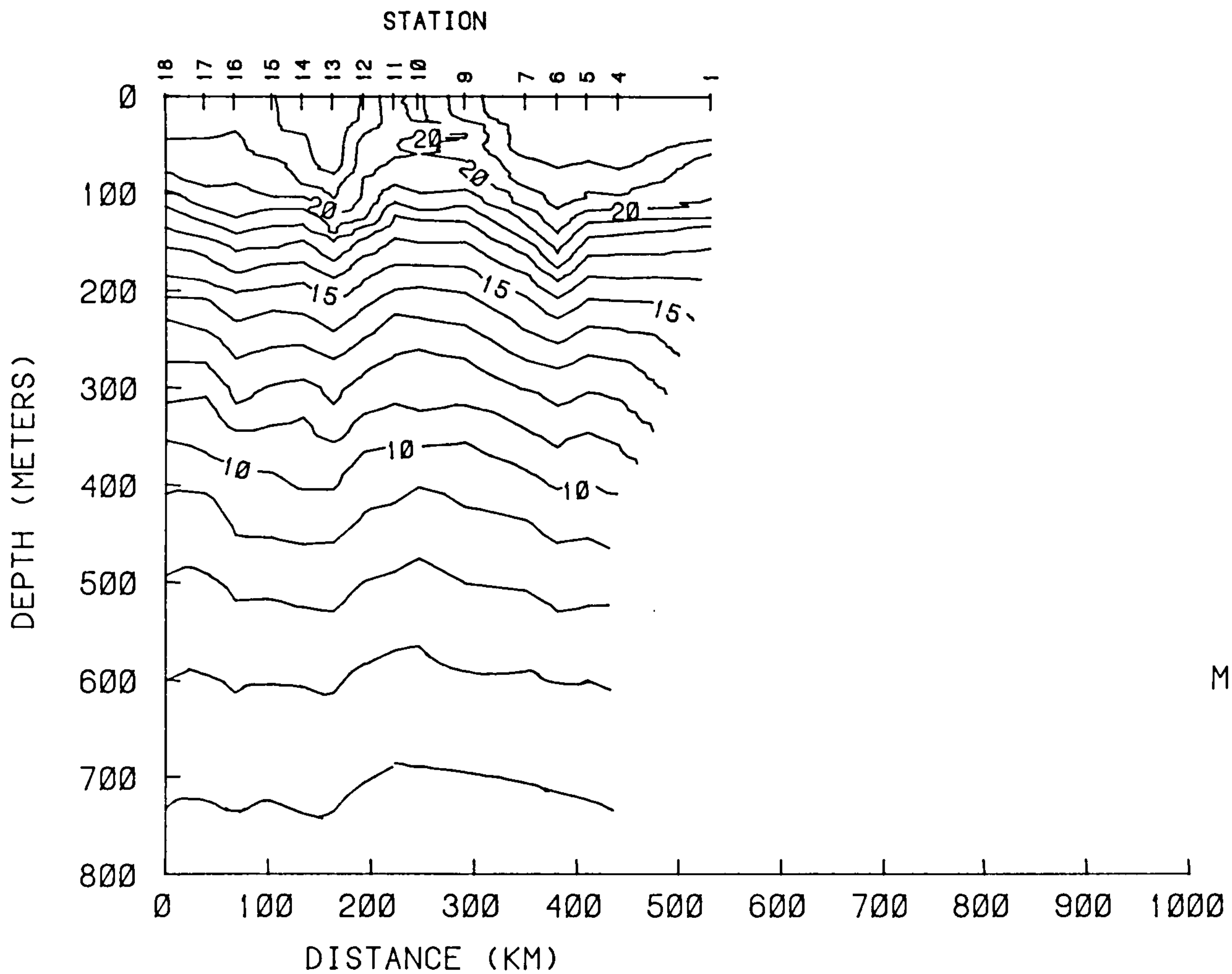
M/V SENATOR CRUISE 87-05
2/20/87 TO 2/21/87
STATIONS 1 TO 17
TEMPERATURE DEG C
MIN = 13.36 MAX = 23.02



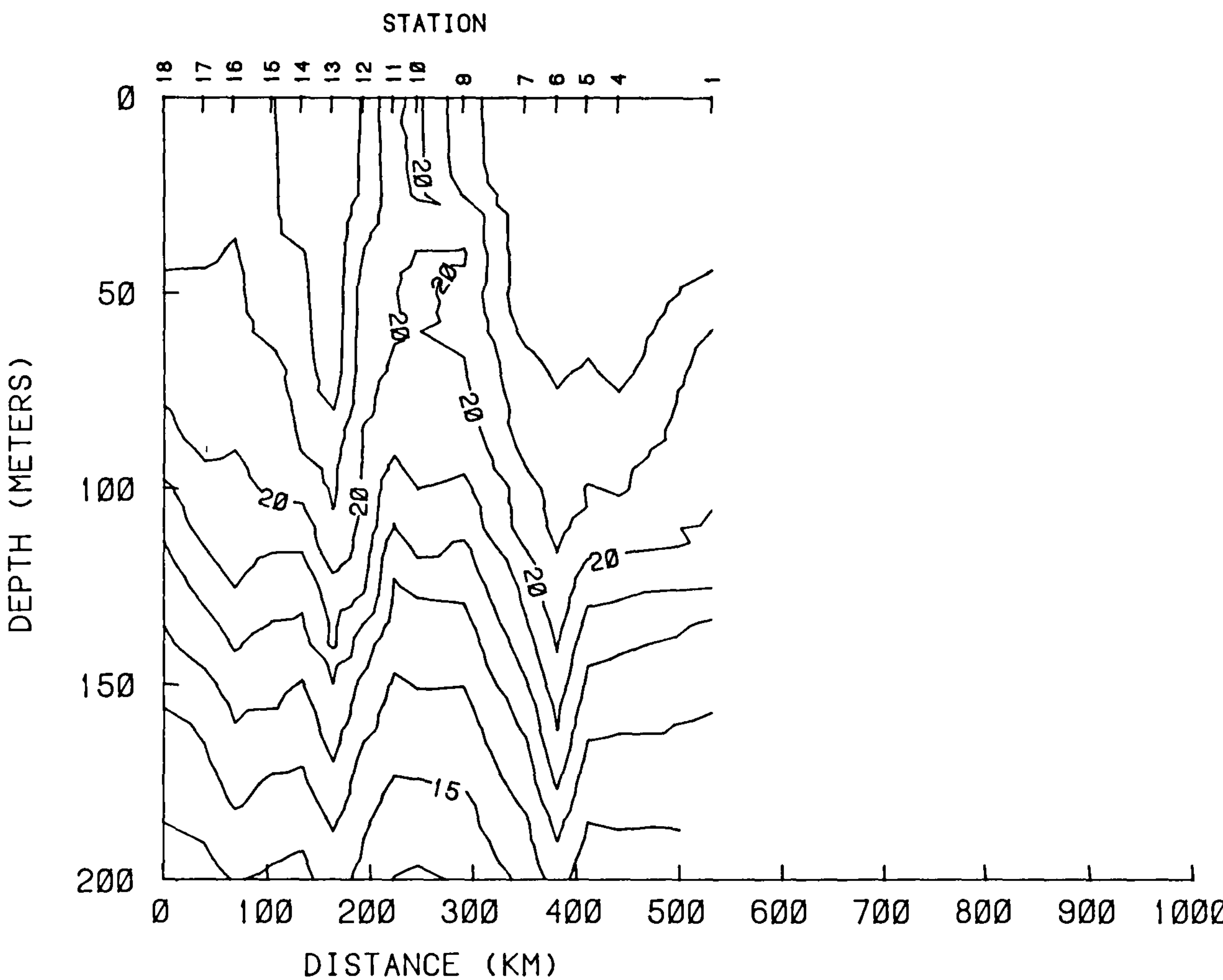
PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-05

M/V SENATOR CRUISE 87-Ø6 3/ 3/87 TO 3/ 4/87

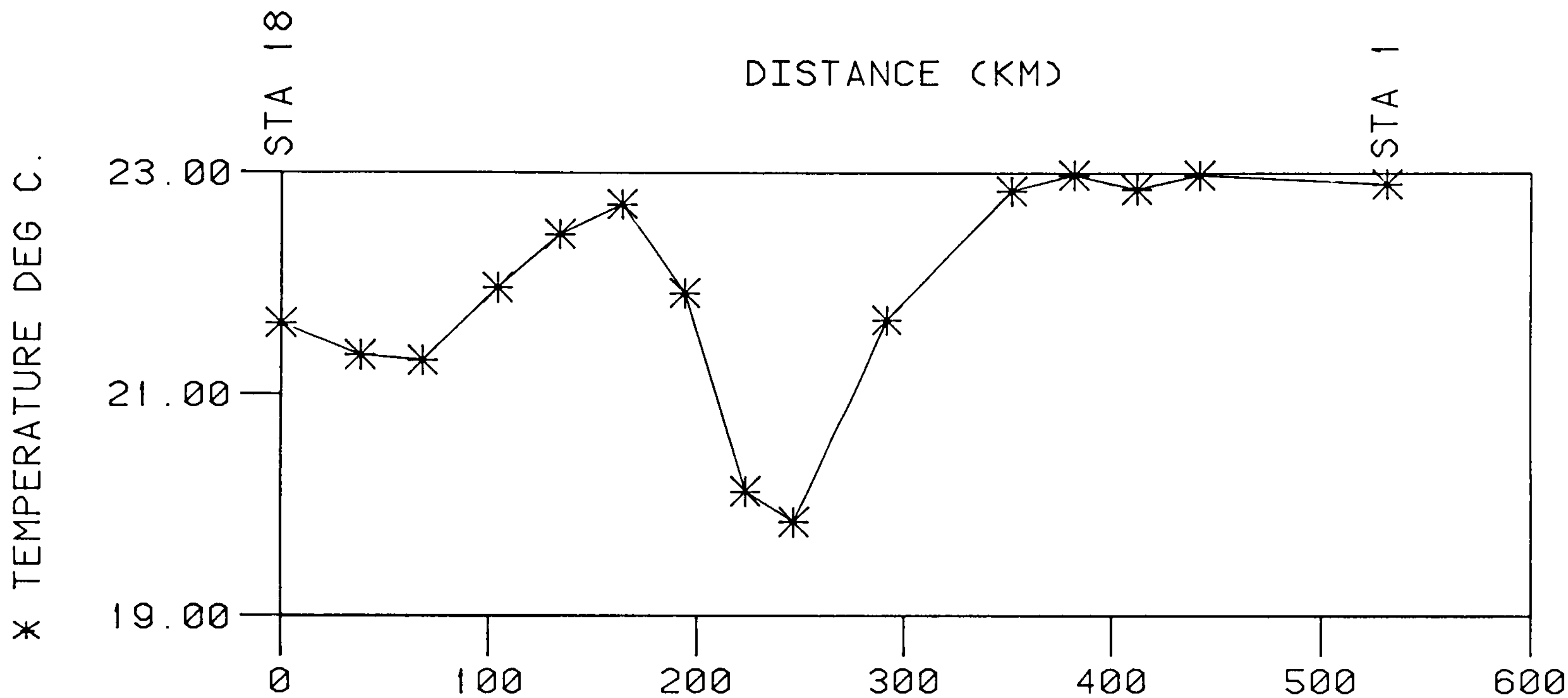




M/V SENATOR CRUISE 87-06
3/ 3/87 TO 3/ 4/87
STATIONS 1 TO 18
TEMPERATURE DEG C
MIN = 5.54 MAX = 22.99

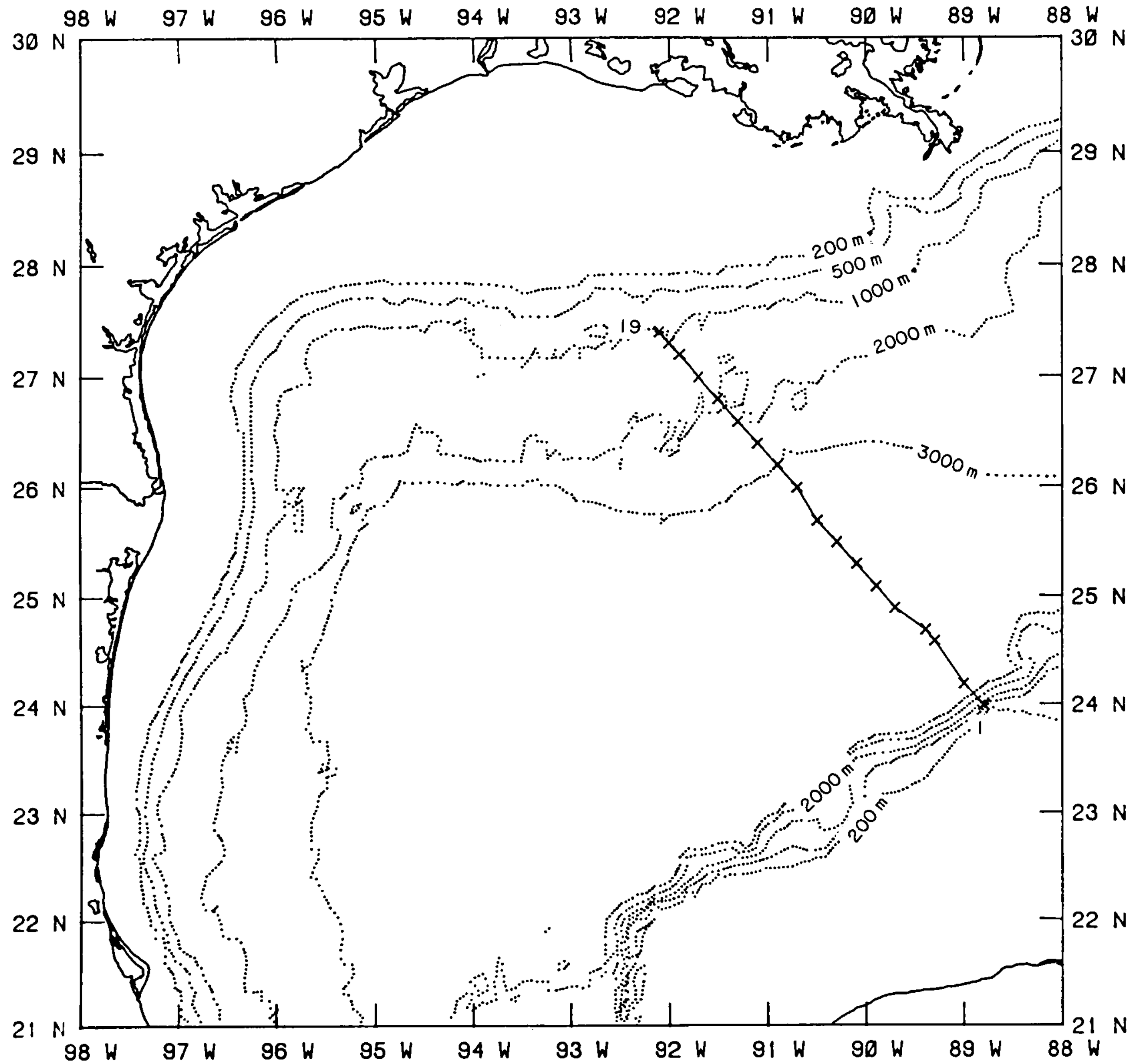


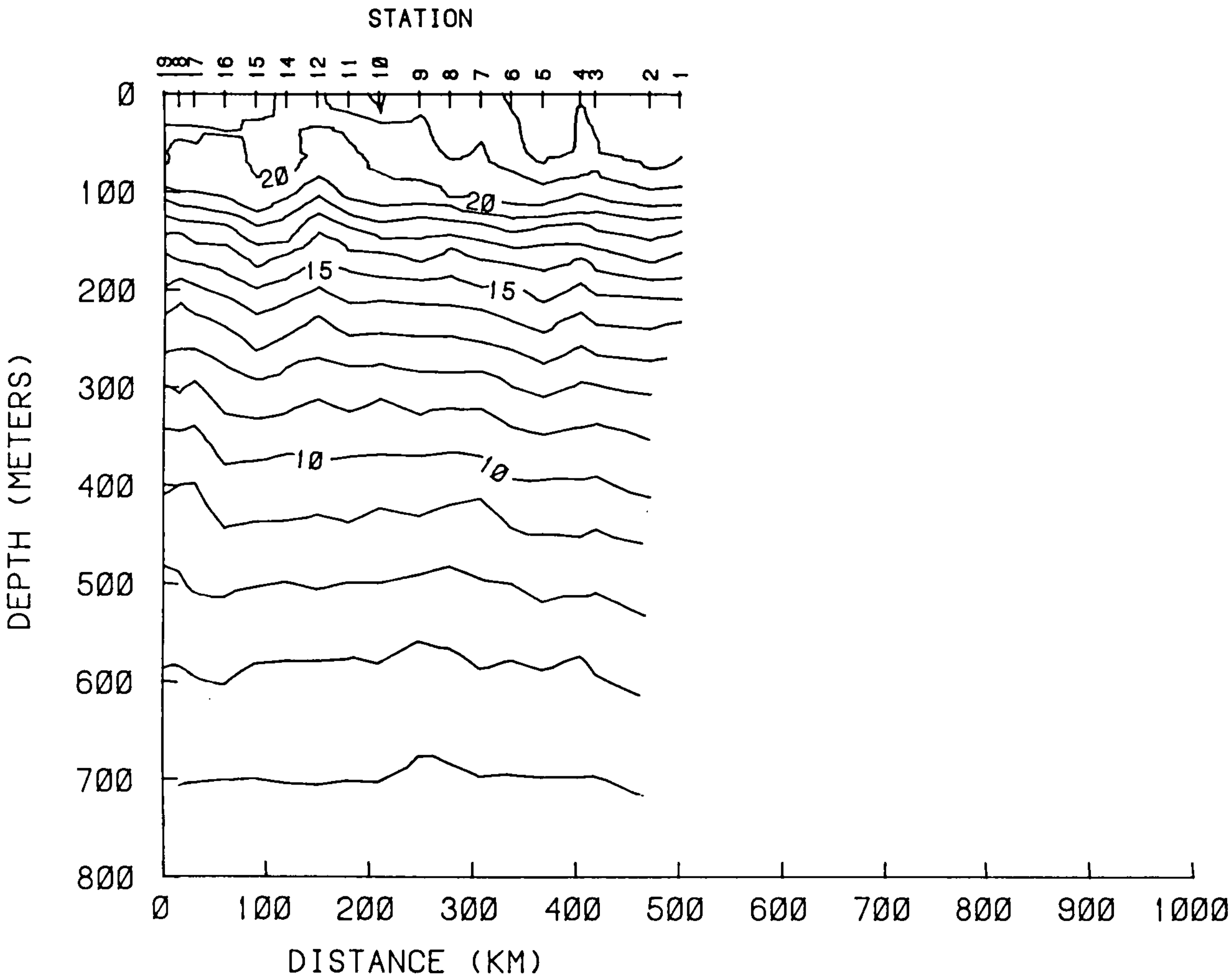
M/V SENATOR CRUISE 87-06
3/ 3/87 TO 3/ 4/87
STATIONS 1 TO 18
TEMPERATURE DEG C
MIN = 13.85 MAX = 22.99



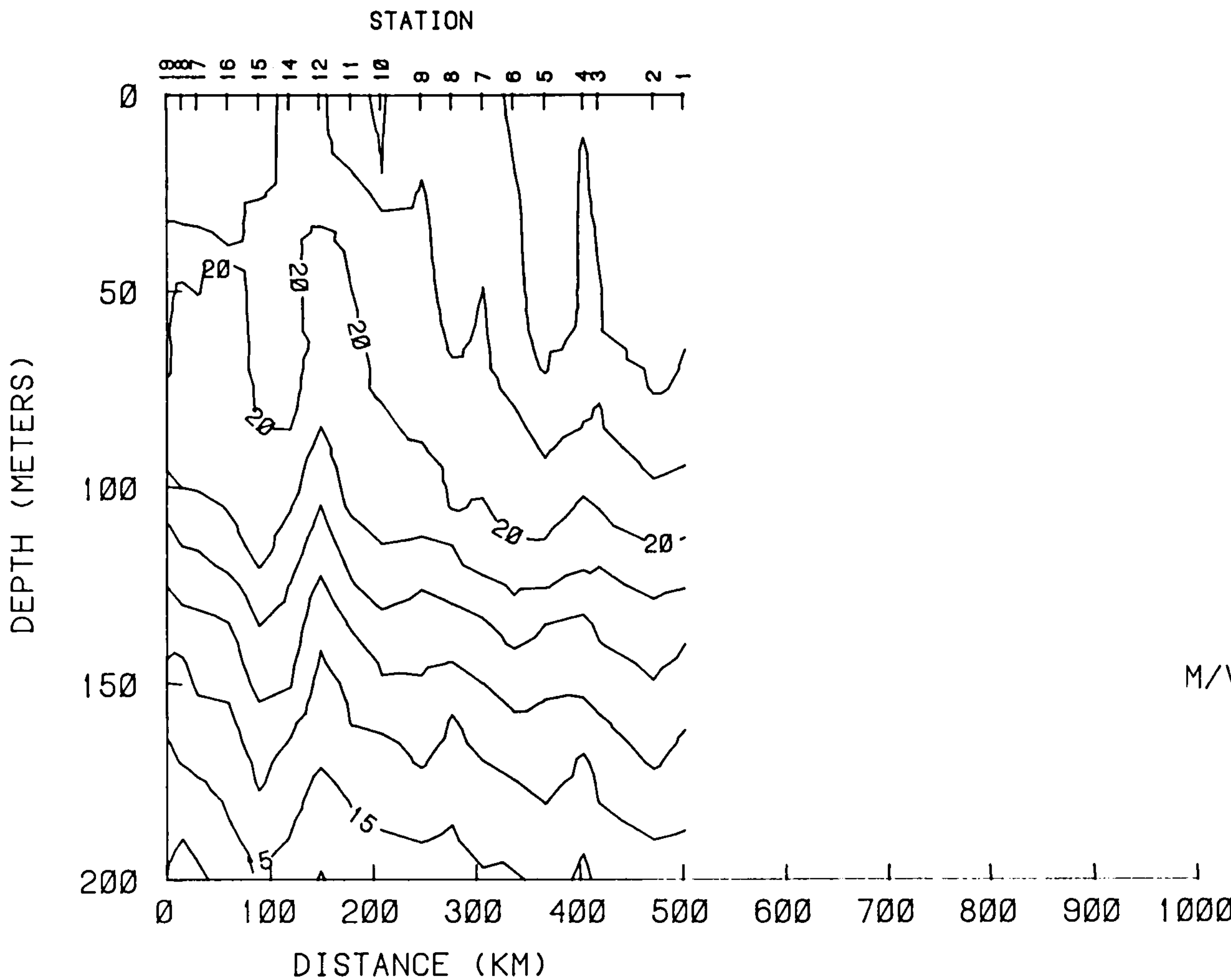
PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-06

M/V SENATOR CRUISE 87-Ø7 3/16/87 TO 3/17/87





M/V SENATOR CRUISE 87-07
3/16/87 TO 3/17/87
STATIONS 1 TO 19
TEMPERATURE DEG C
MIN = 5.51 MAX = 22.37



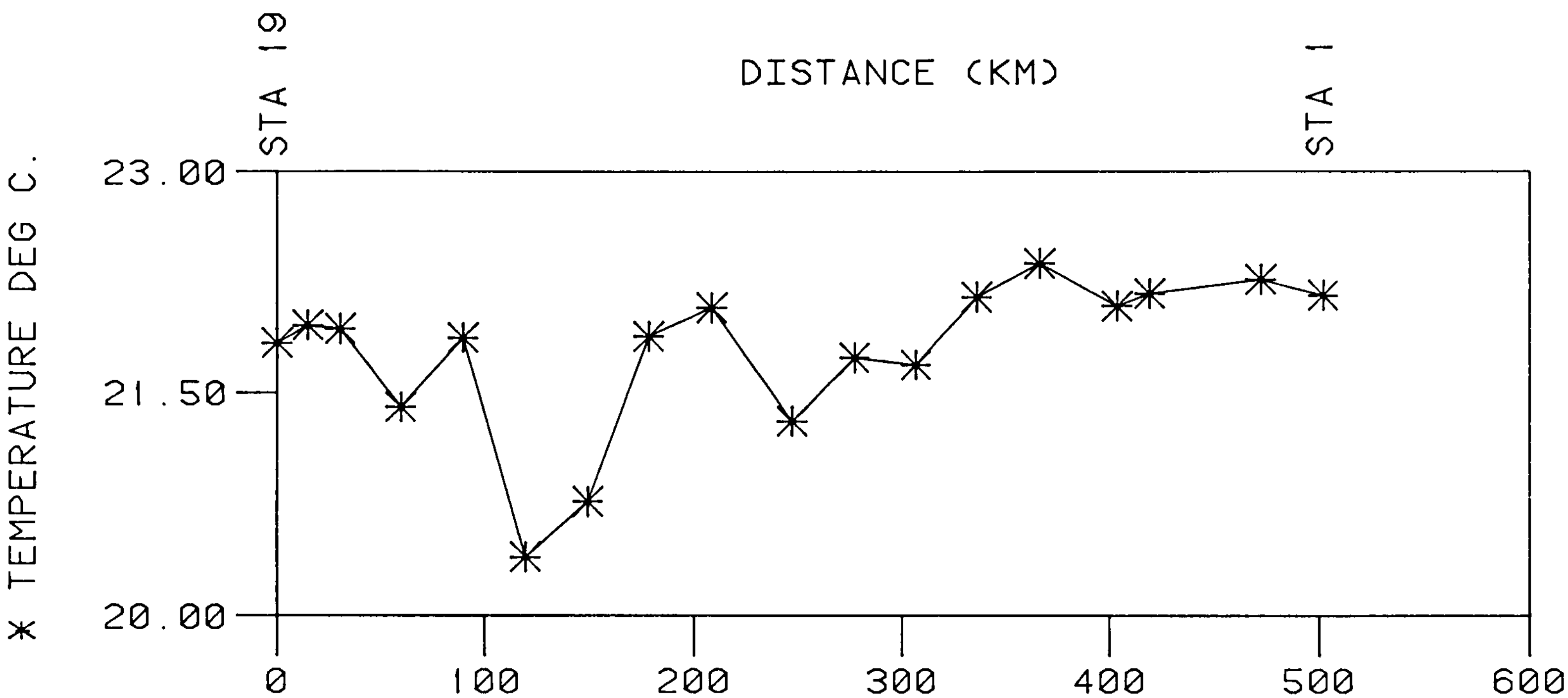
M/V SENATOR CRUISE 87-07

3/16/87 TO 3/17/87

STATIONS 1 TO 19

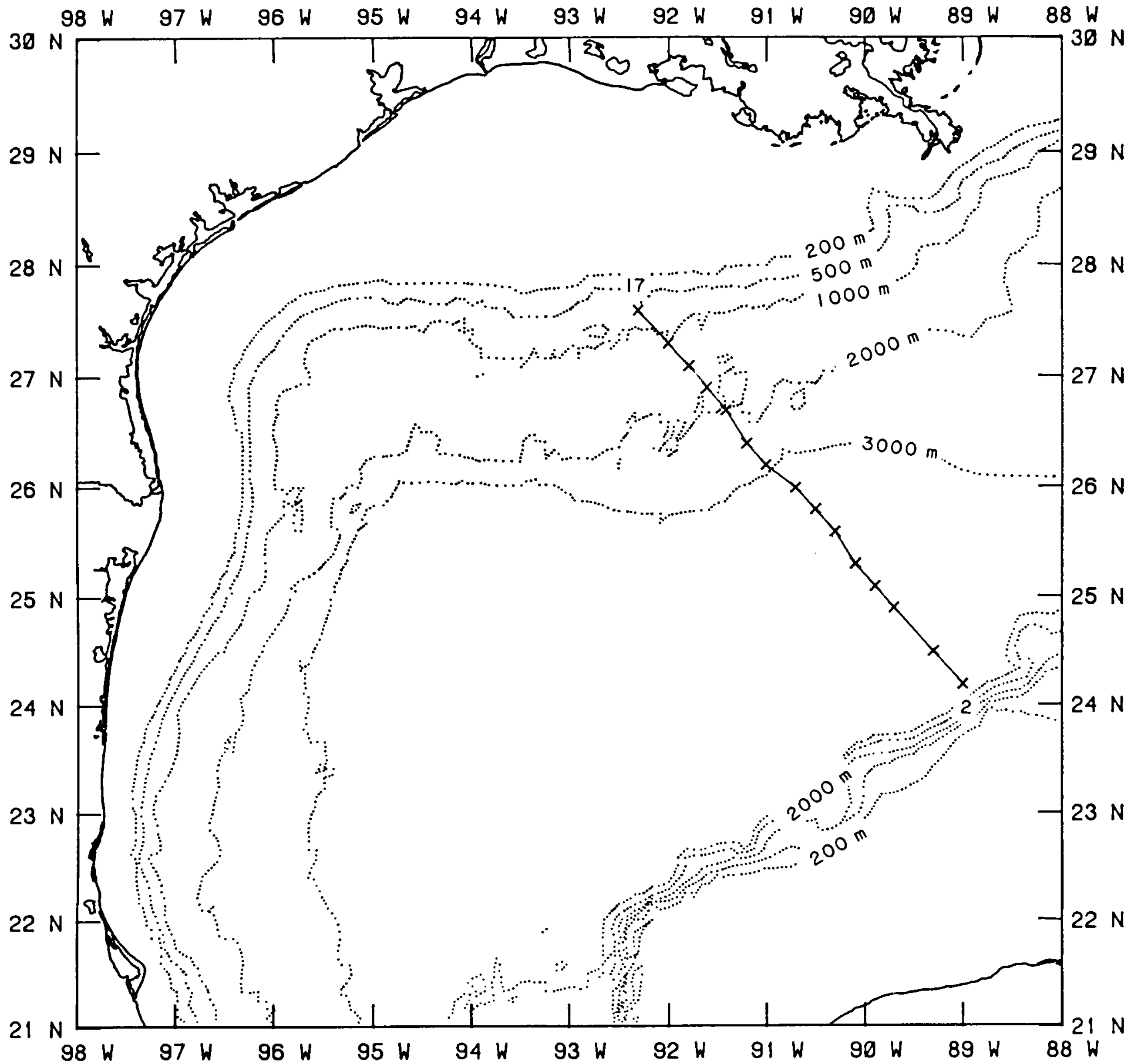
TEMPERATURE DEG C

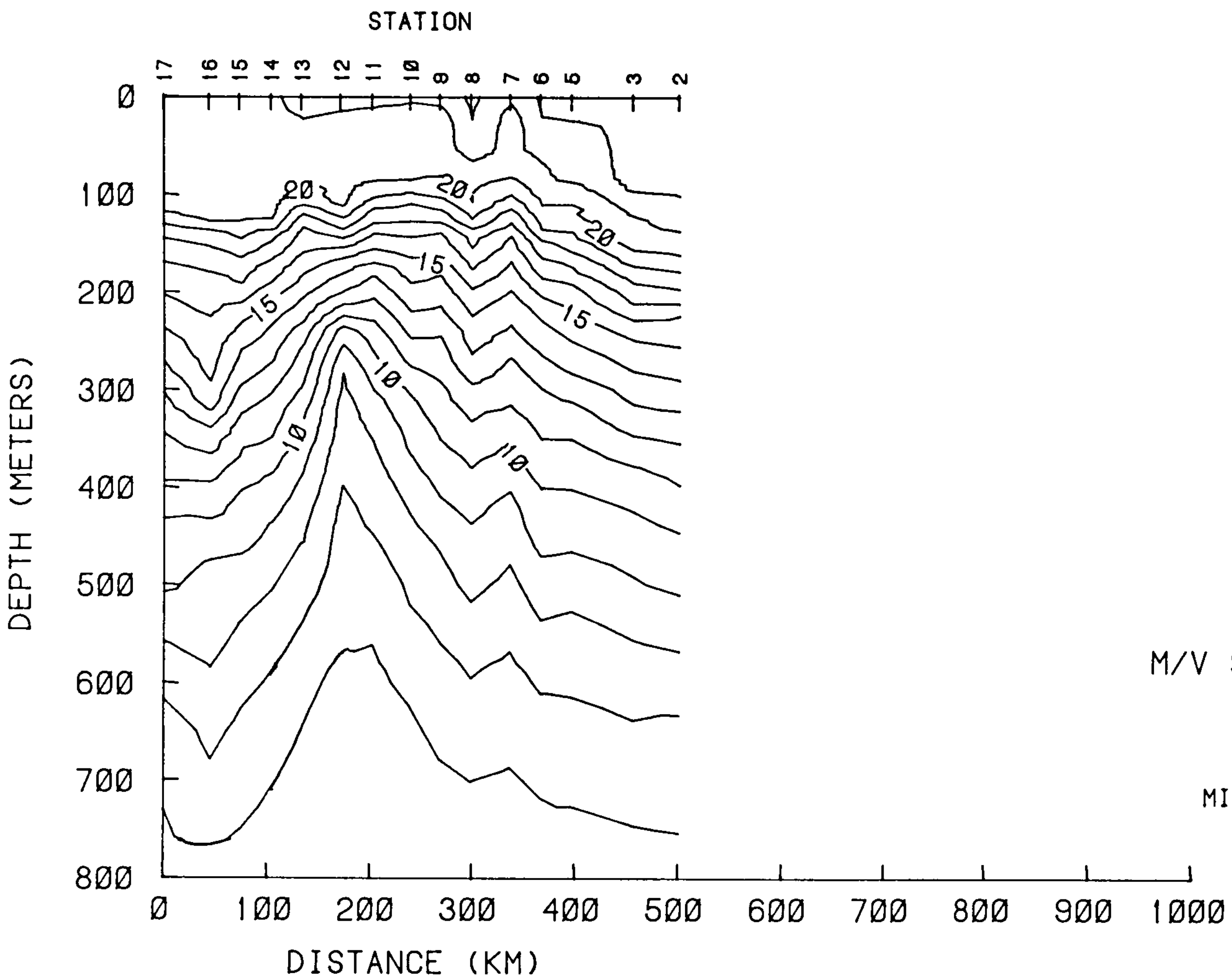
MIN = 13.40 MAX = 22.37



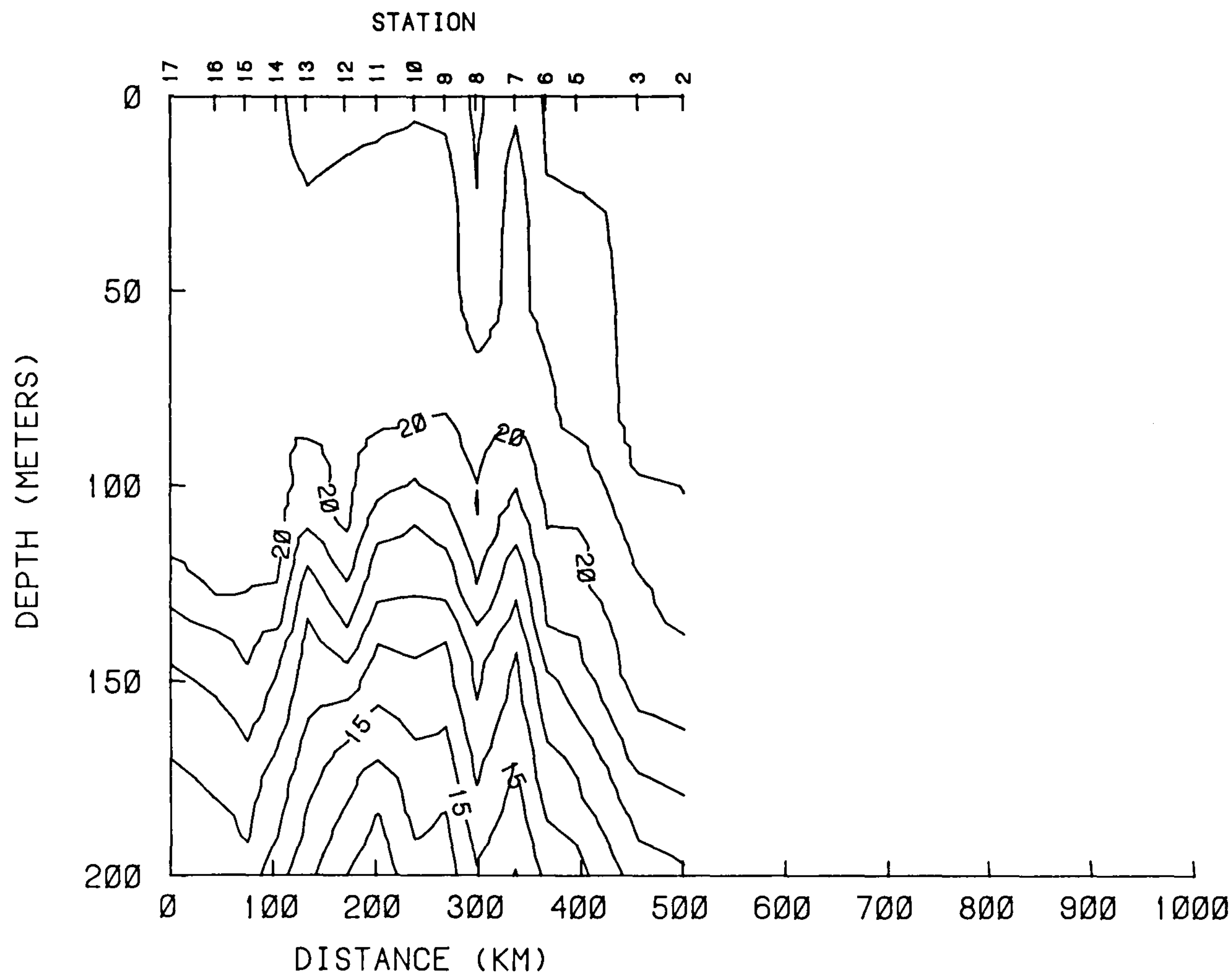
PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-07

M/V SENATOR CRUISE 87-09 4/12/87 TO 4/13/87

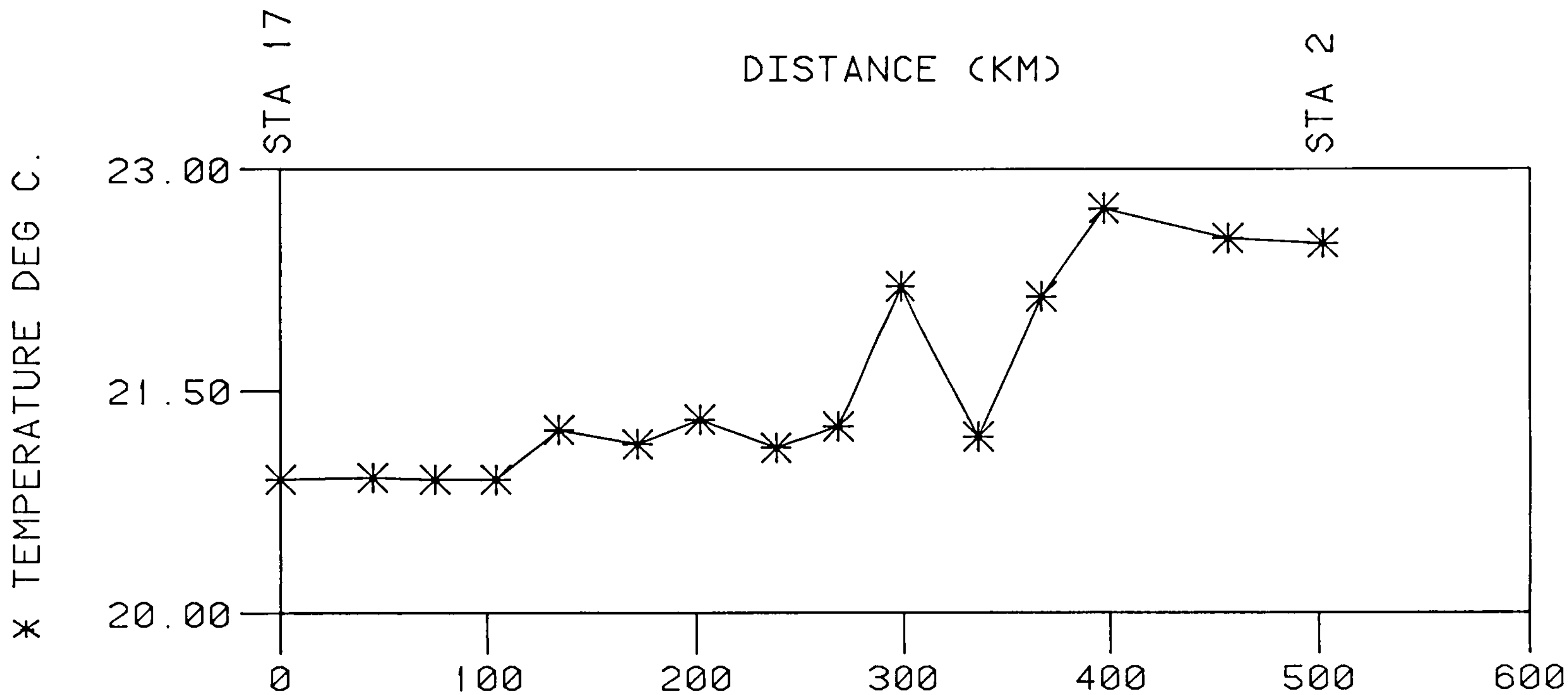




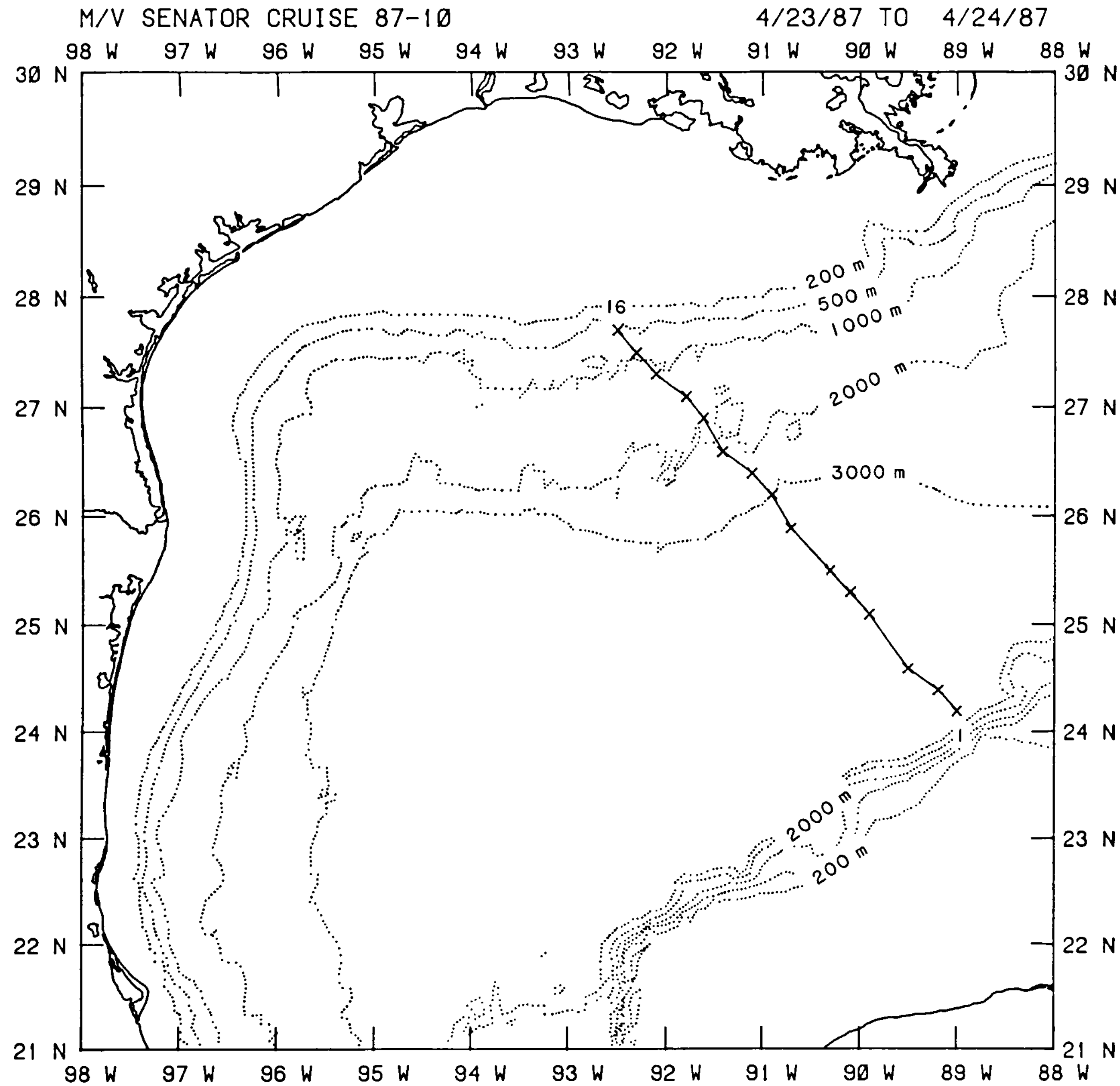
M/V SENATOR CRUISE 87-09
12/12/86 TO 4/13/87
STATIONS 2 TO 17
TEMPERATURE DEG C
MIN = 5.10 MAX = 22.74



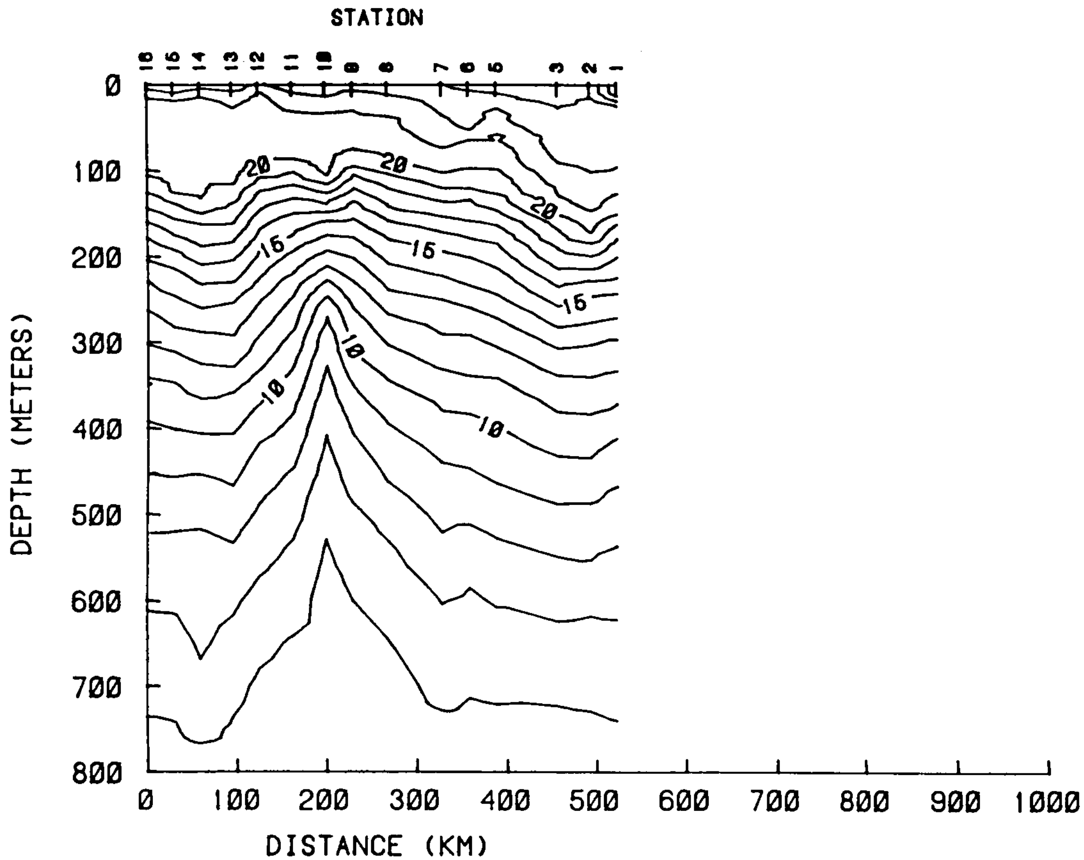
M/V SENATOR CRUISE 87-09
12/12/86 TO 4/13/87
STATIONS 2 TO 17
TEMPERATURE DEG C
MIN = 12.32 MAX = 22.74



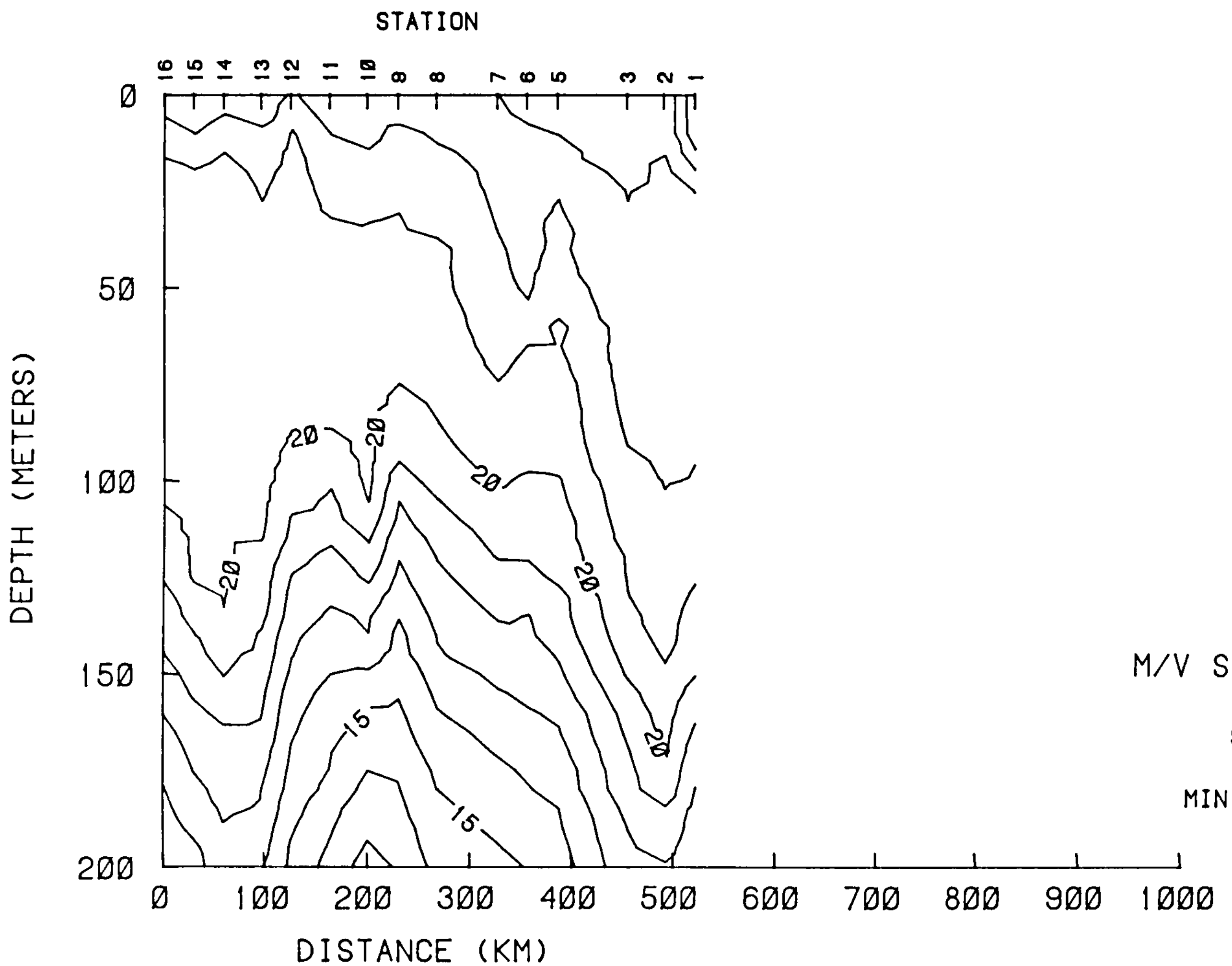
PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-09



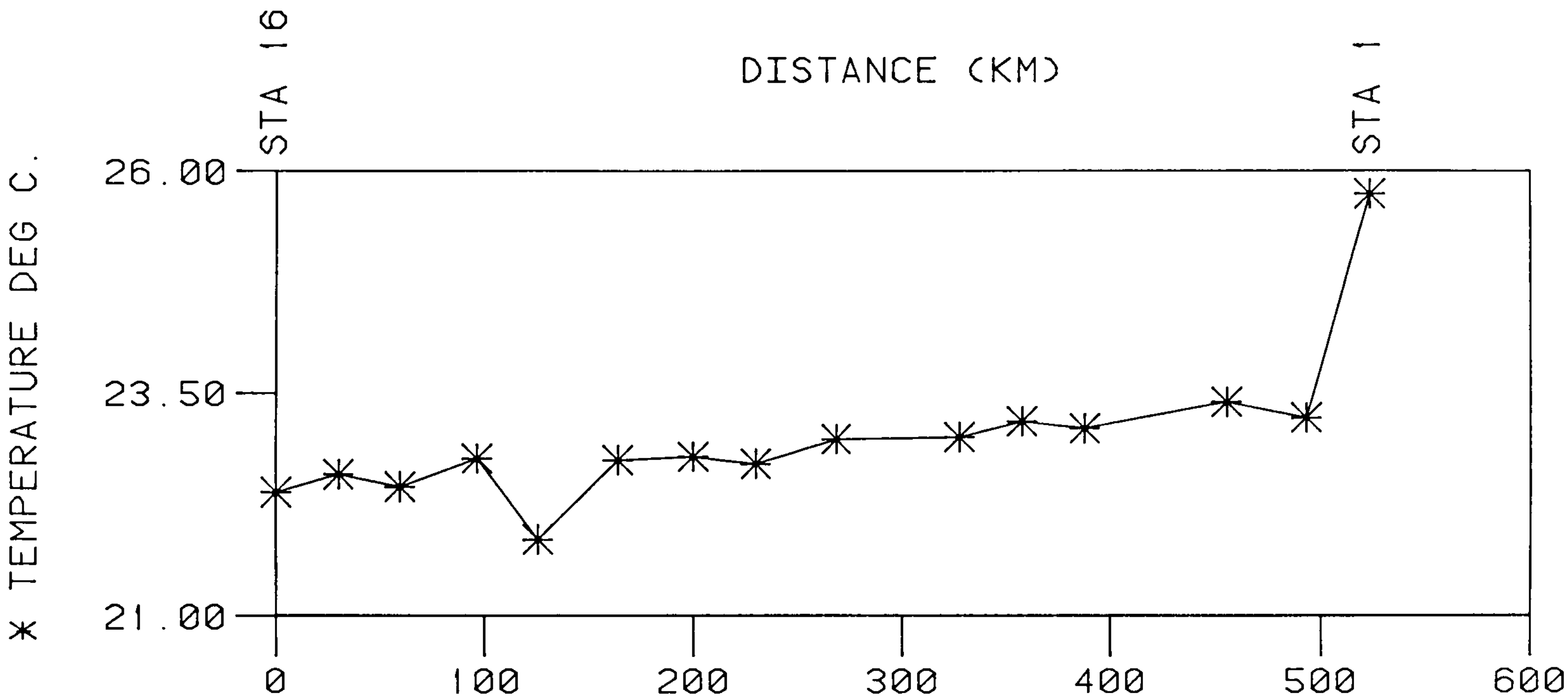
M/V SENATOR CRUISE 87-1Ø
4/23/87 TO 4/24/87
98 W
97 W
96 W
95 W
94 W
93 W
92 W
91 W
9Ø W
89 W
88 W
3Ø N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
16
1
200 m
500 m
1000 m
2000 m
3000 m
2000 m
200 m



M/V SENATOR CRUISE 87-10
4/23/87 TO 4/24/87
STATIONS 1 TO 16
TEMPERATURE DEG C
MIN = 5.10 MAX = 25.74

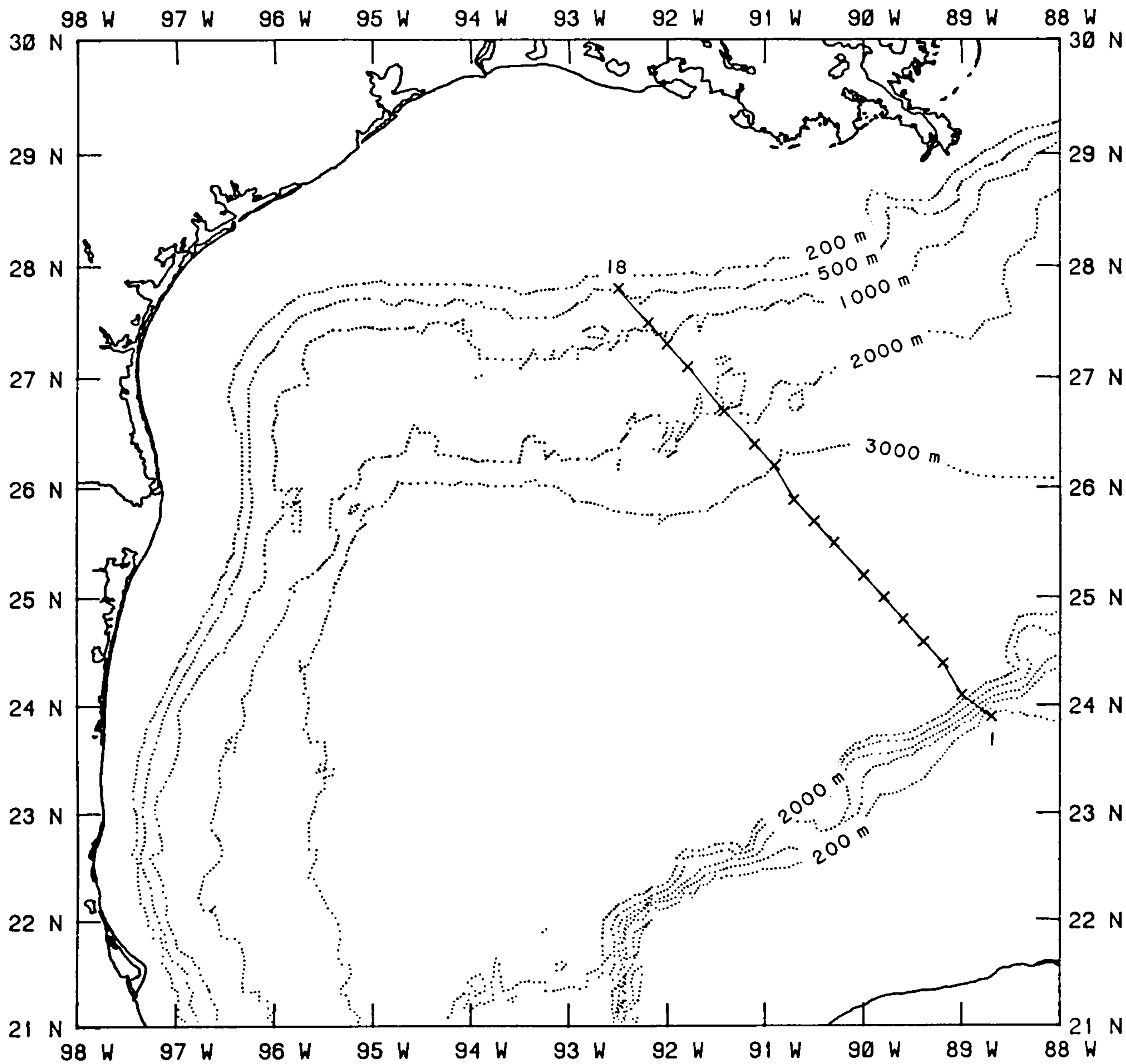


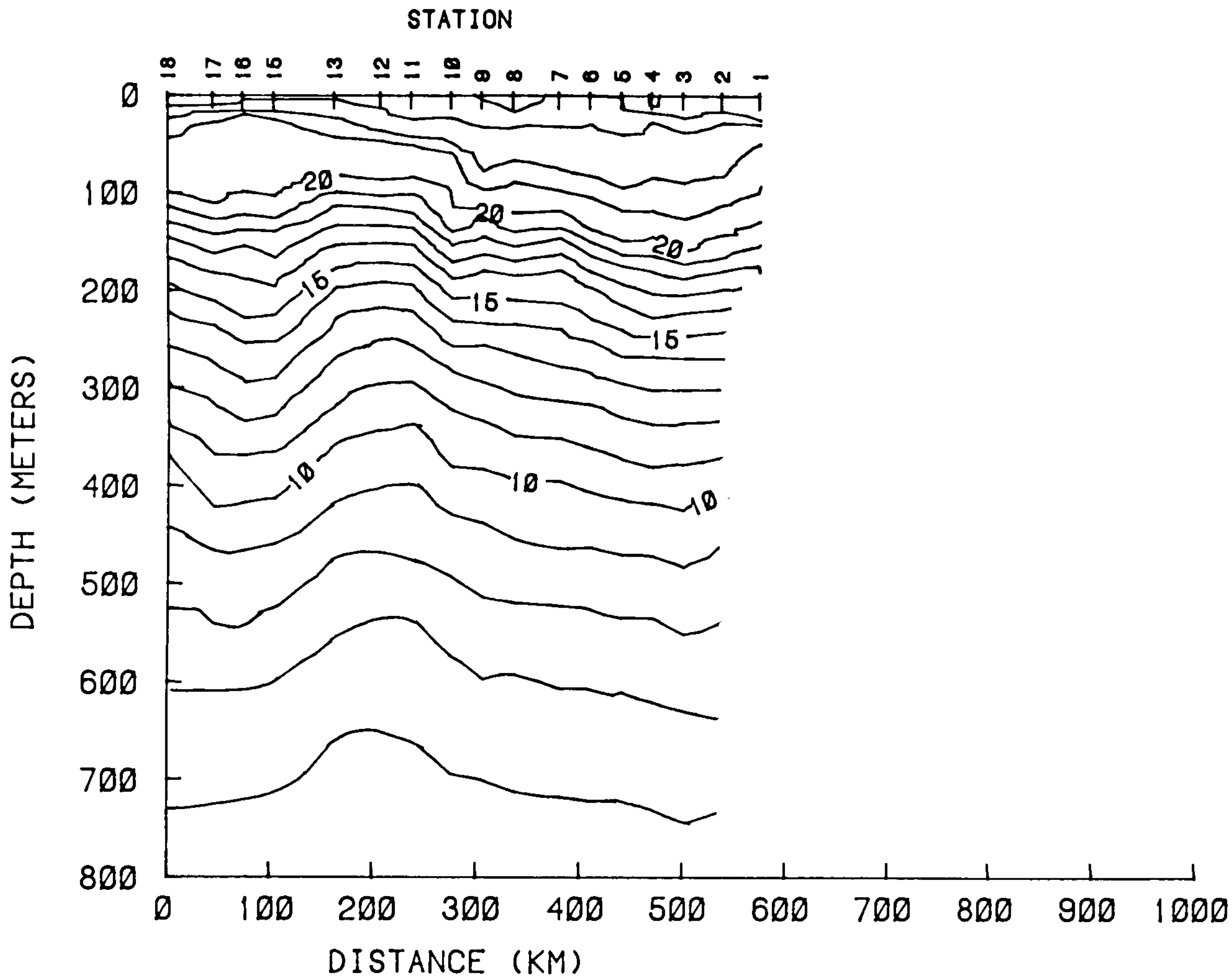
M/V SENATOR CRUISE 87-10
4/23/87 TO 4/24/87
STATIONS 1 TO 16
TEMPERATURE DEG C
MIN = 12.57 MAX = 25.74



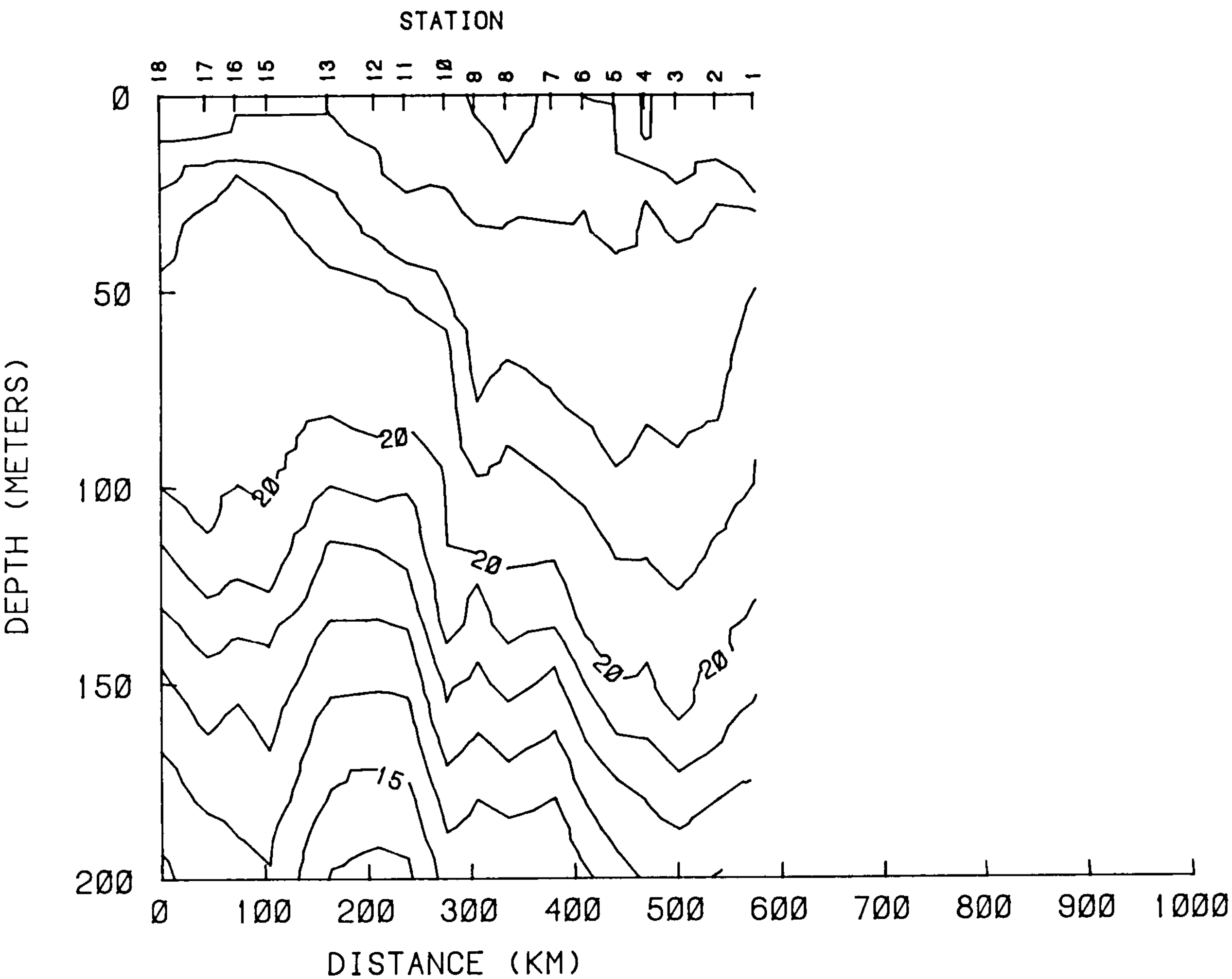
PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-10

M/V SENATOR CRUISE 87-11 5/ 4/87 TO 5/ 5/87

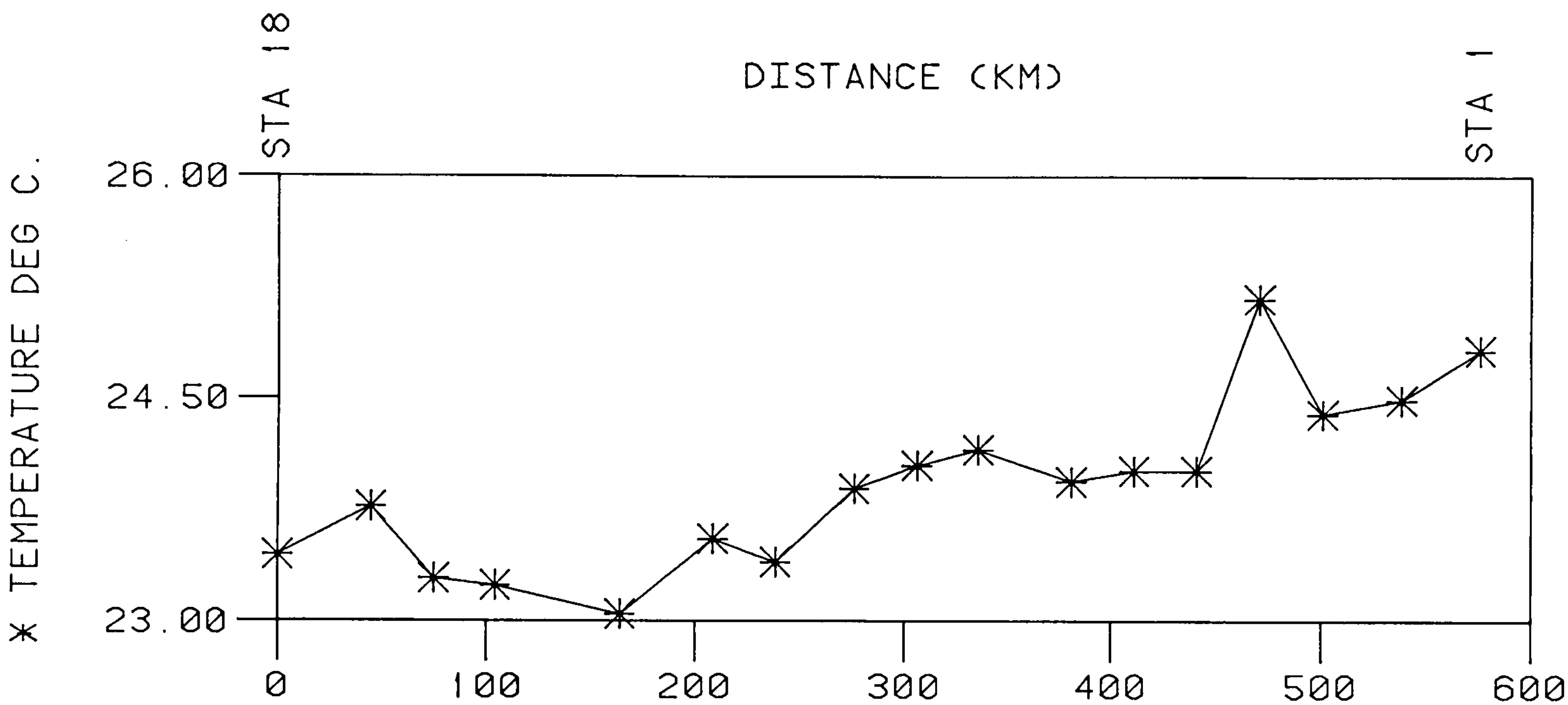




M/V SENATOR CRUISE 87-11
5/ 4/87 TO 5/ 5/87
STATIONS 1 TO 18
TEMPERATURE DEG C
MIN = 5.44 MAX = 25.17

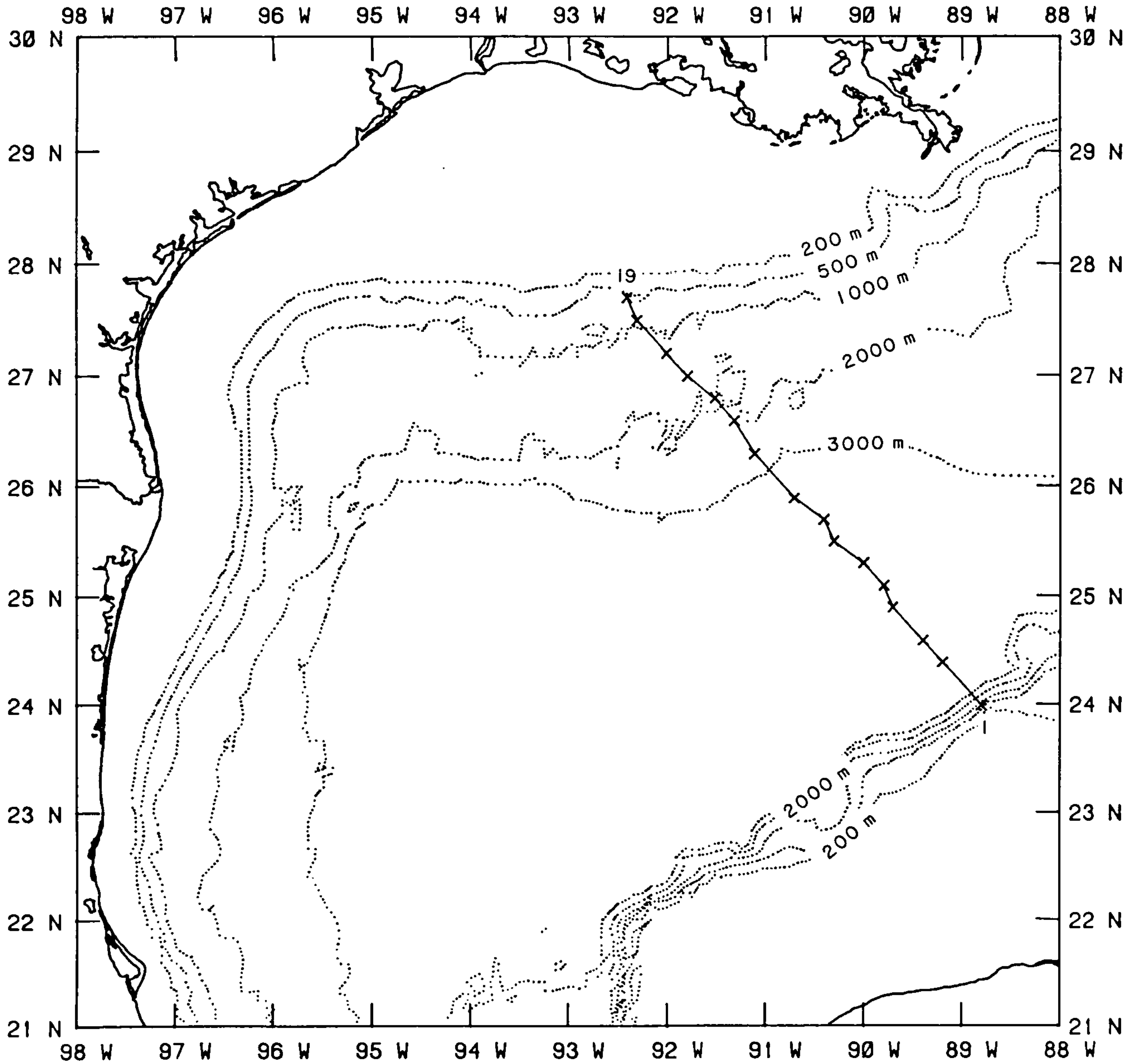


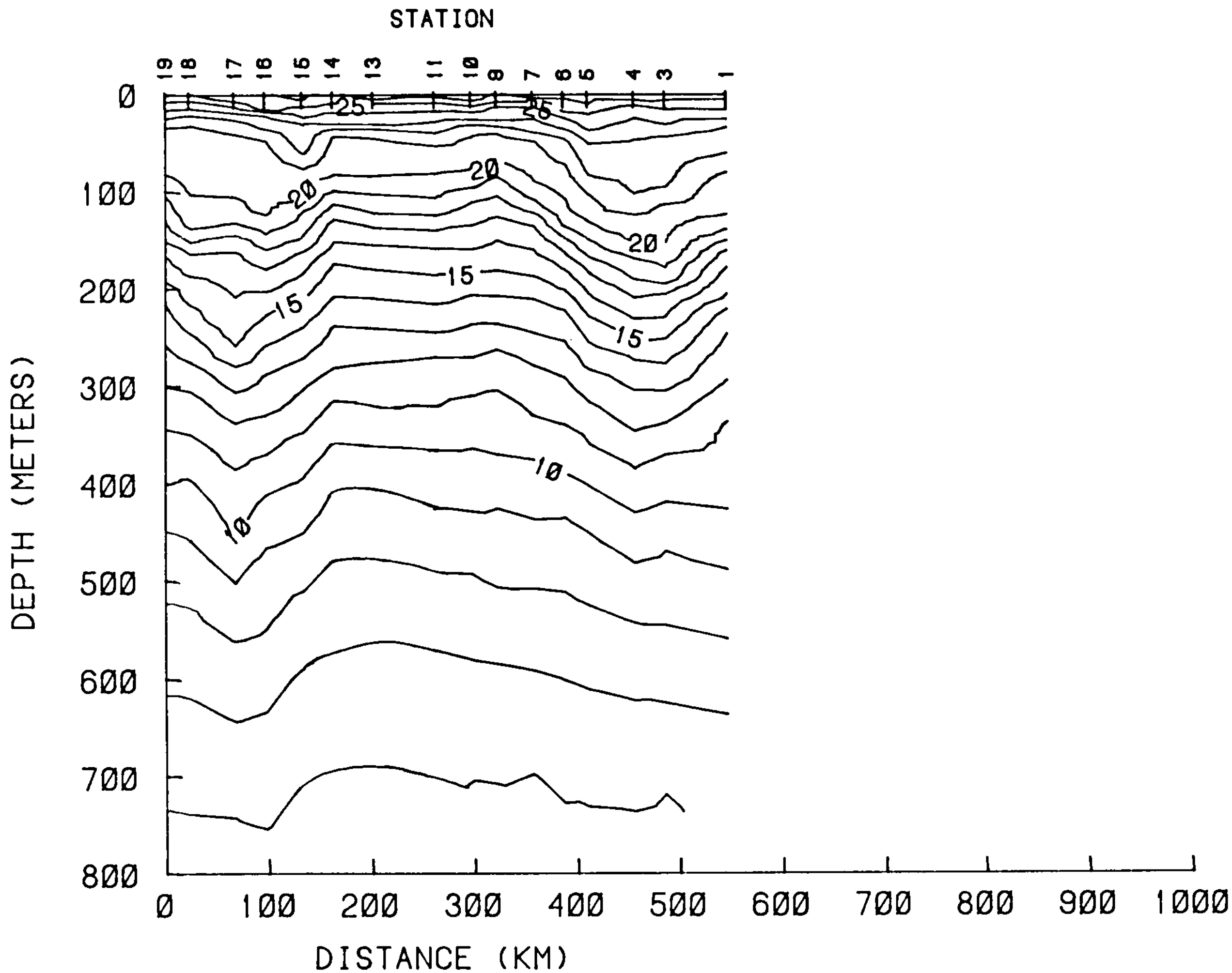
M/V SENATOR CRUISE 87-11
5/ 4/87 TO 5/ 5/87
STATIONS 1 TO 18
TEMPERATURE DEG C
MIN = 13.76 MAX = 25.17



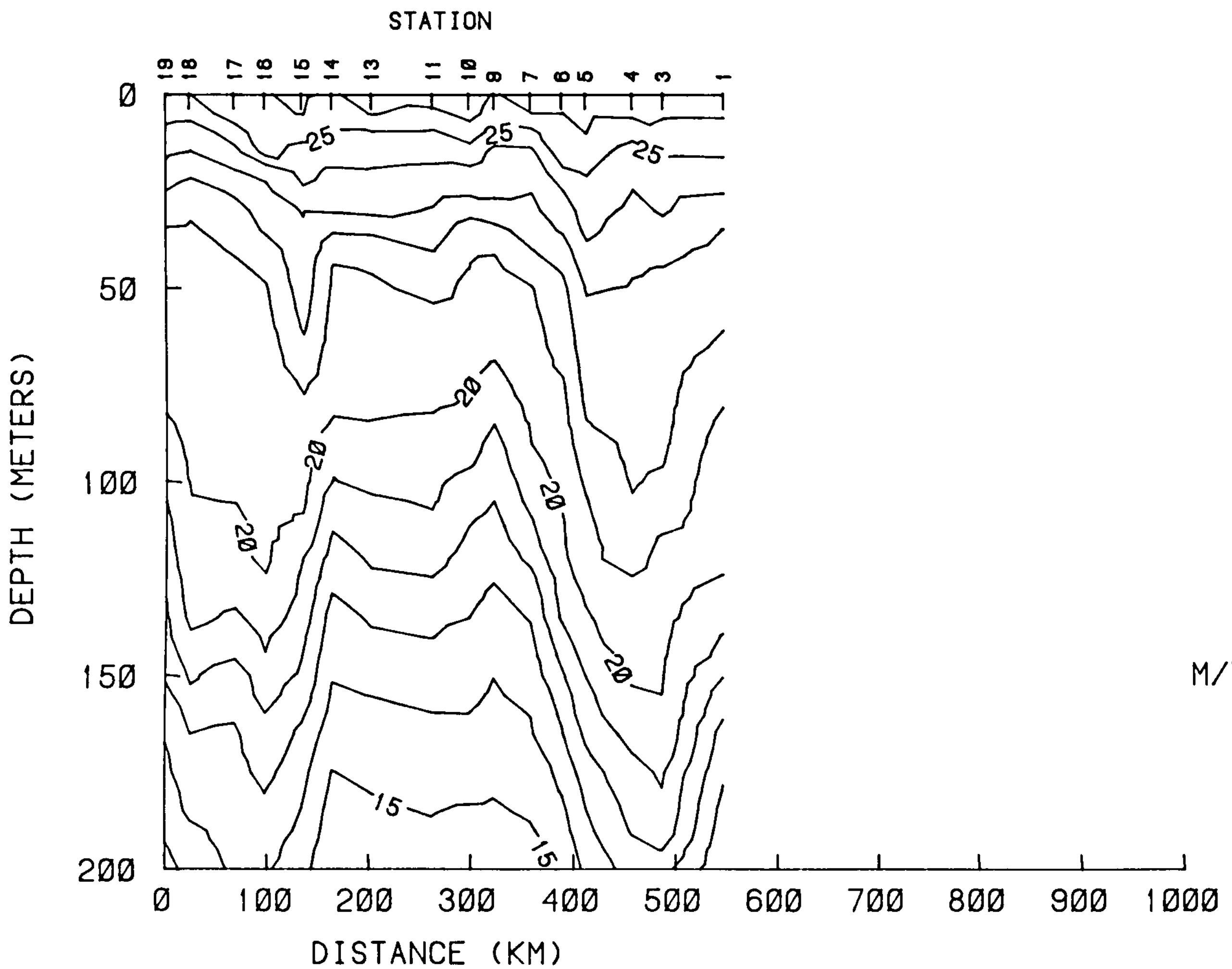
PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-11

M/V SENATOR CRUISE 87-12 5/15/87 TO 5/16/87

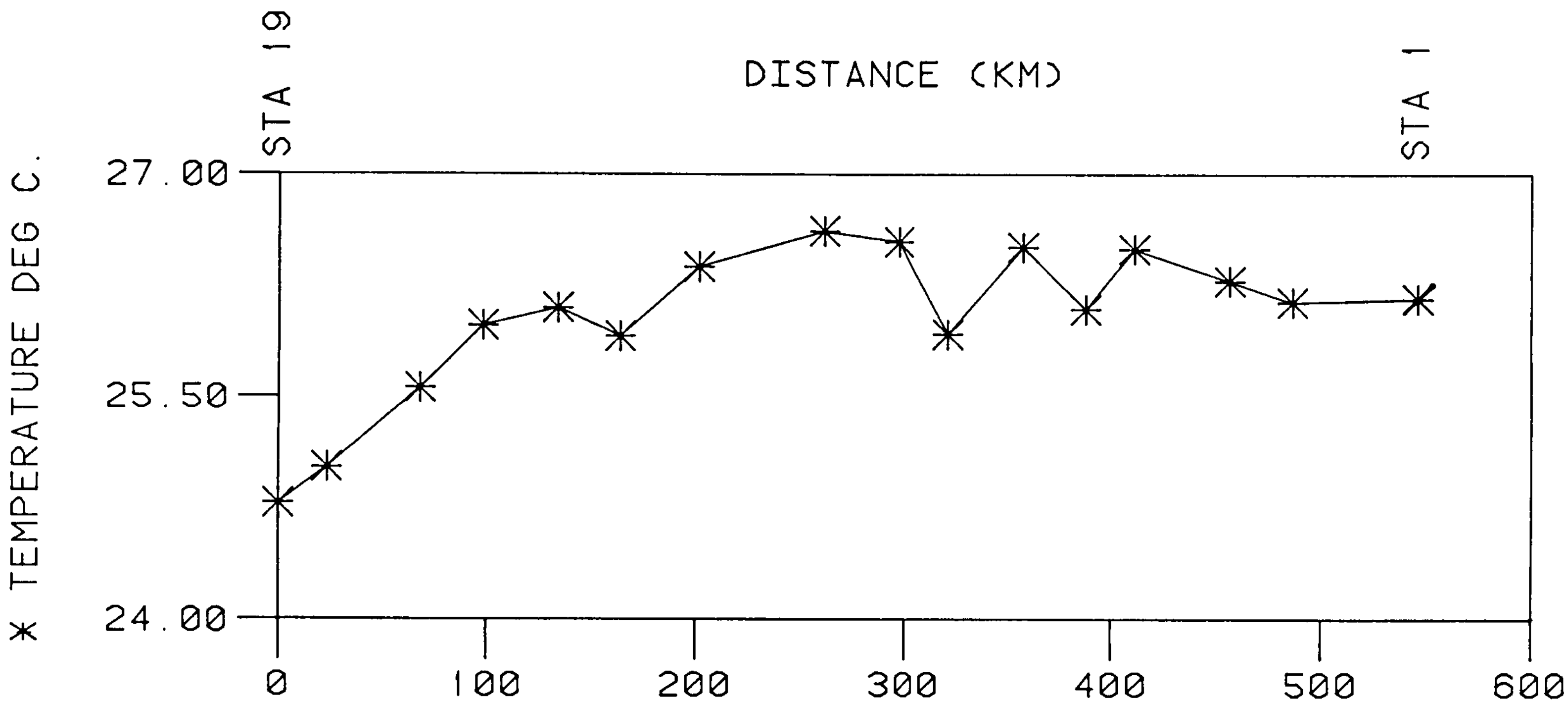




M/V SENATOR CRUISE 87-12
5/15/87 TO 5/16/87
STATIONS 1 TO 19
TEMPERATURE DEG C
MIN = 5.58 MAX = 26.62

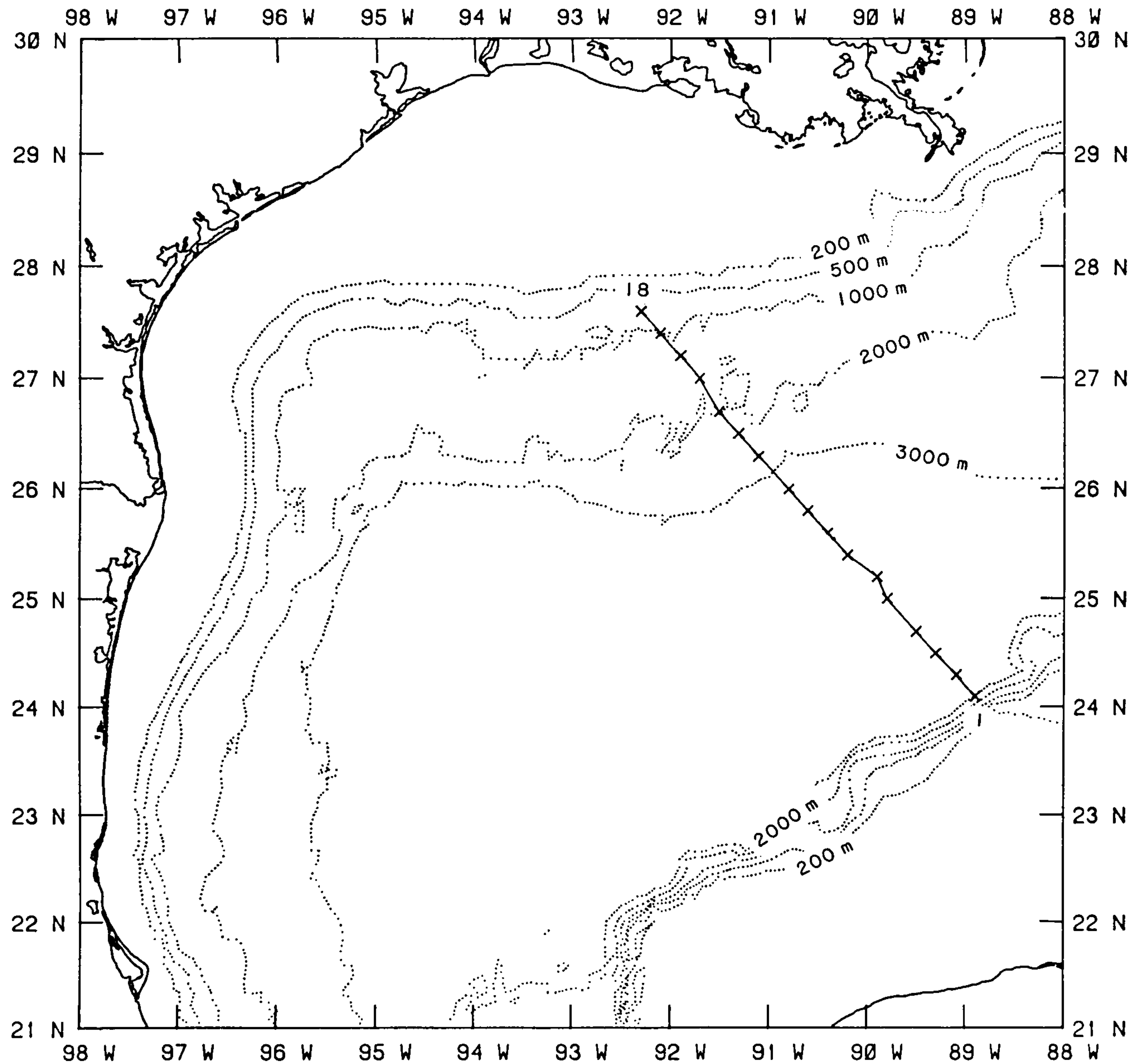


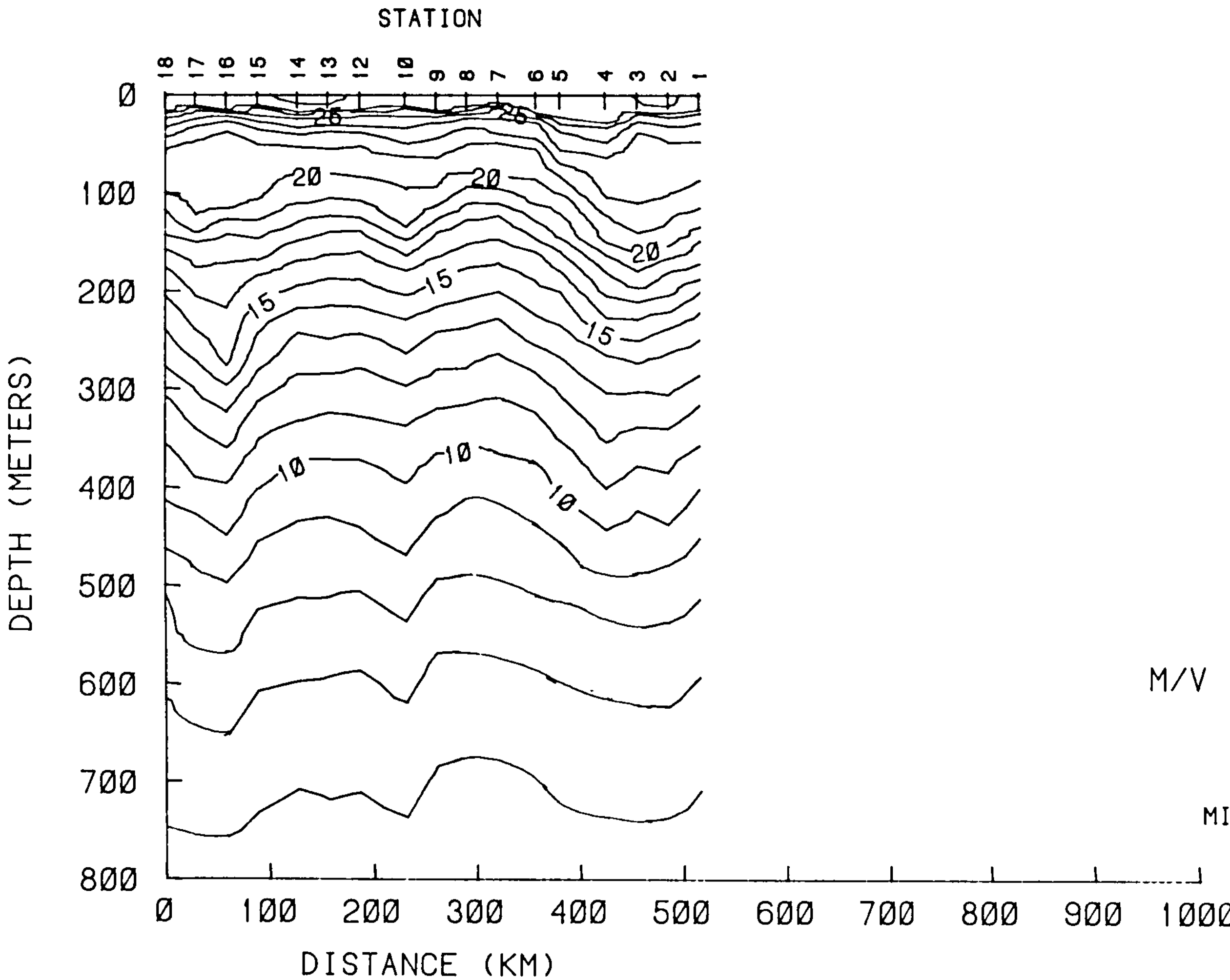
M/V SENATOR CRUISE 87-12
5/15/87 TO 5/16/87
STATIONS 1 TO 19
TEMPERATURE DEG C
MIN = 14.24 MAX = 26.62



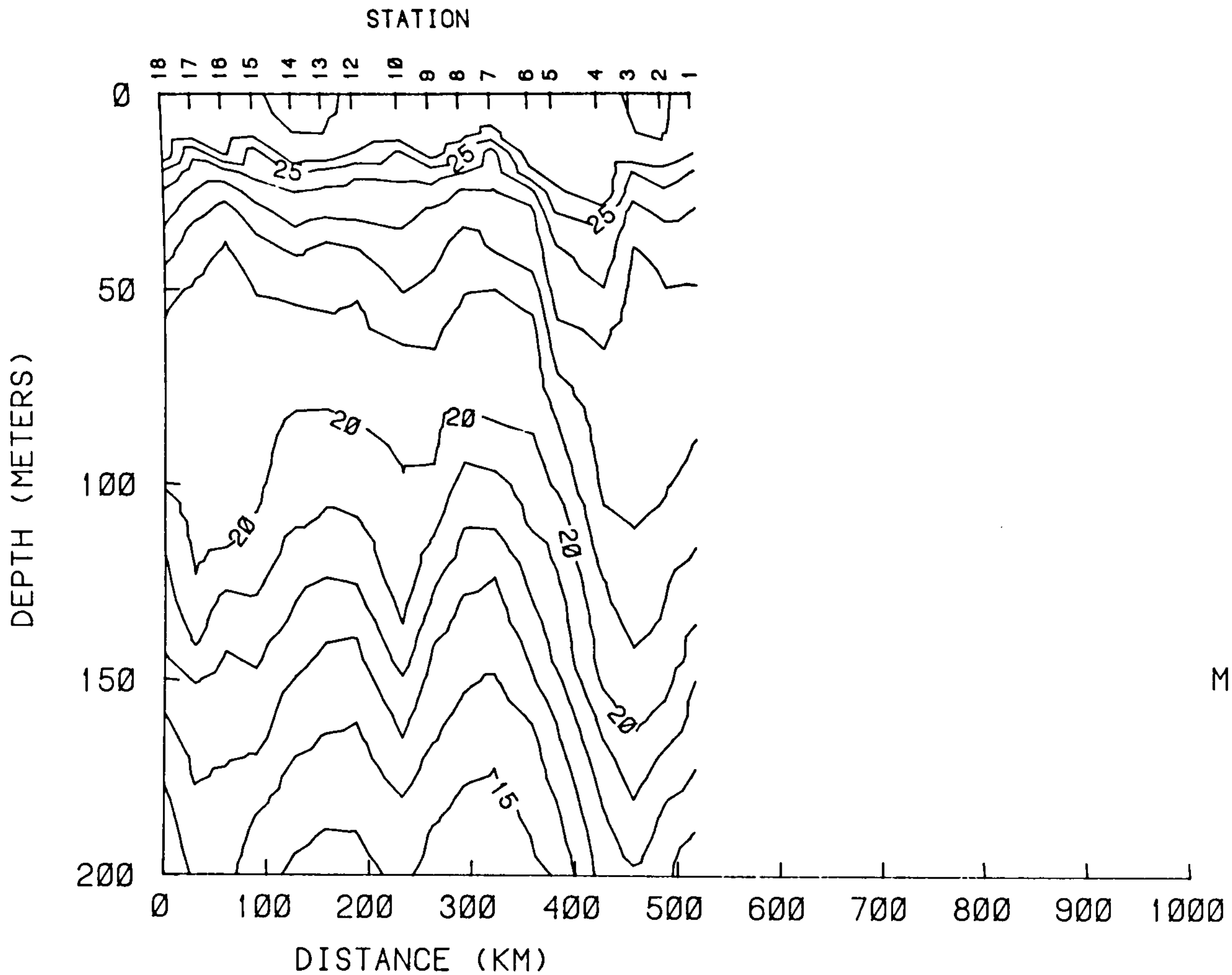
PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-12

M/V SENATOR CRUISE 87-13 5/27/87 TO 5/28/87

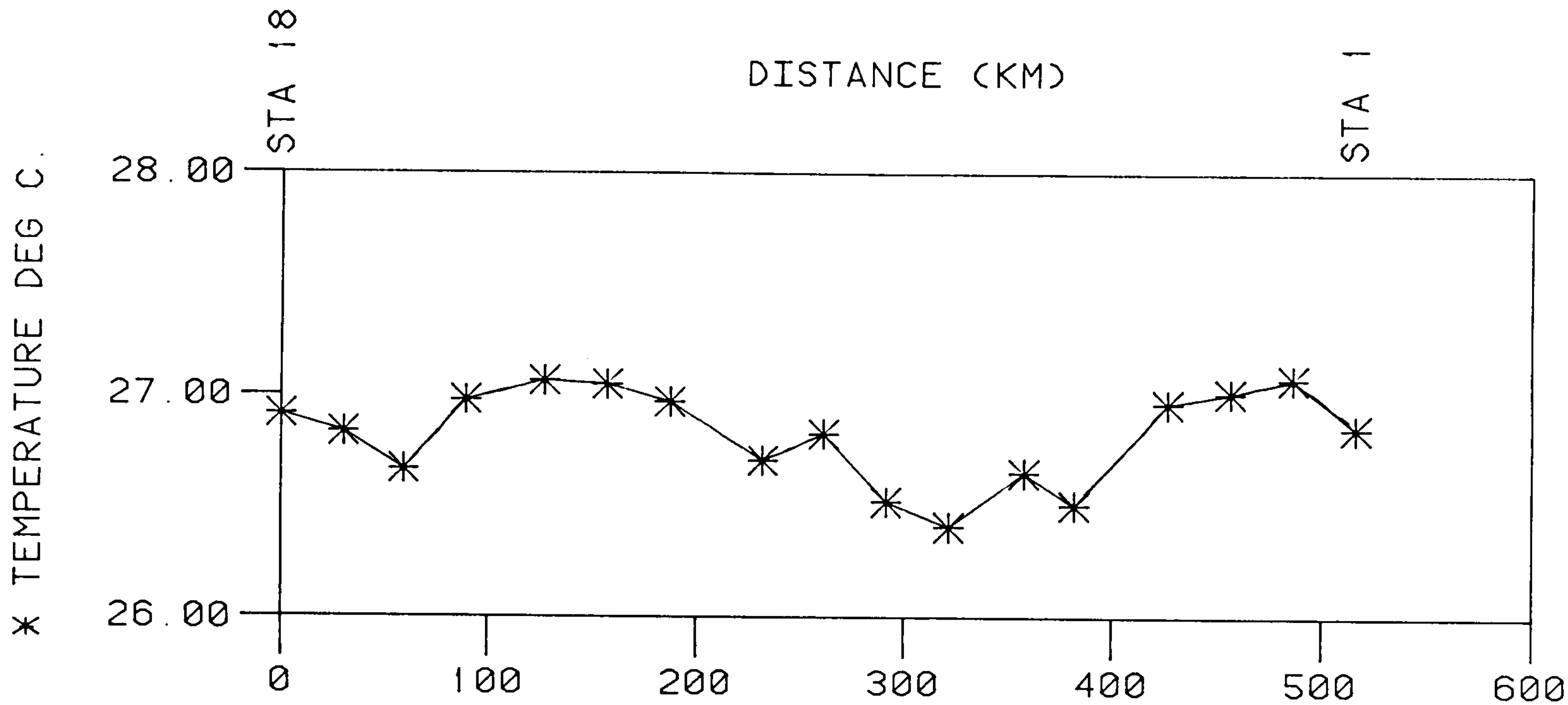




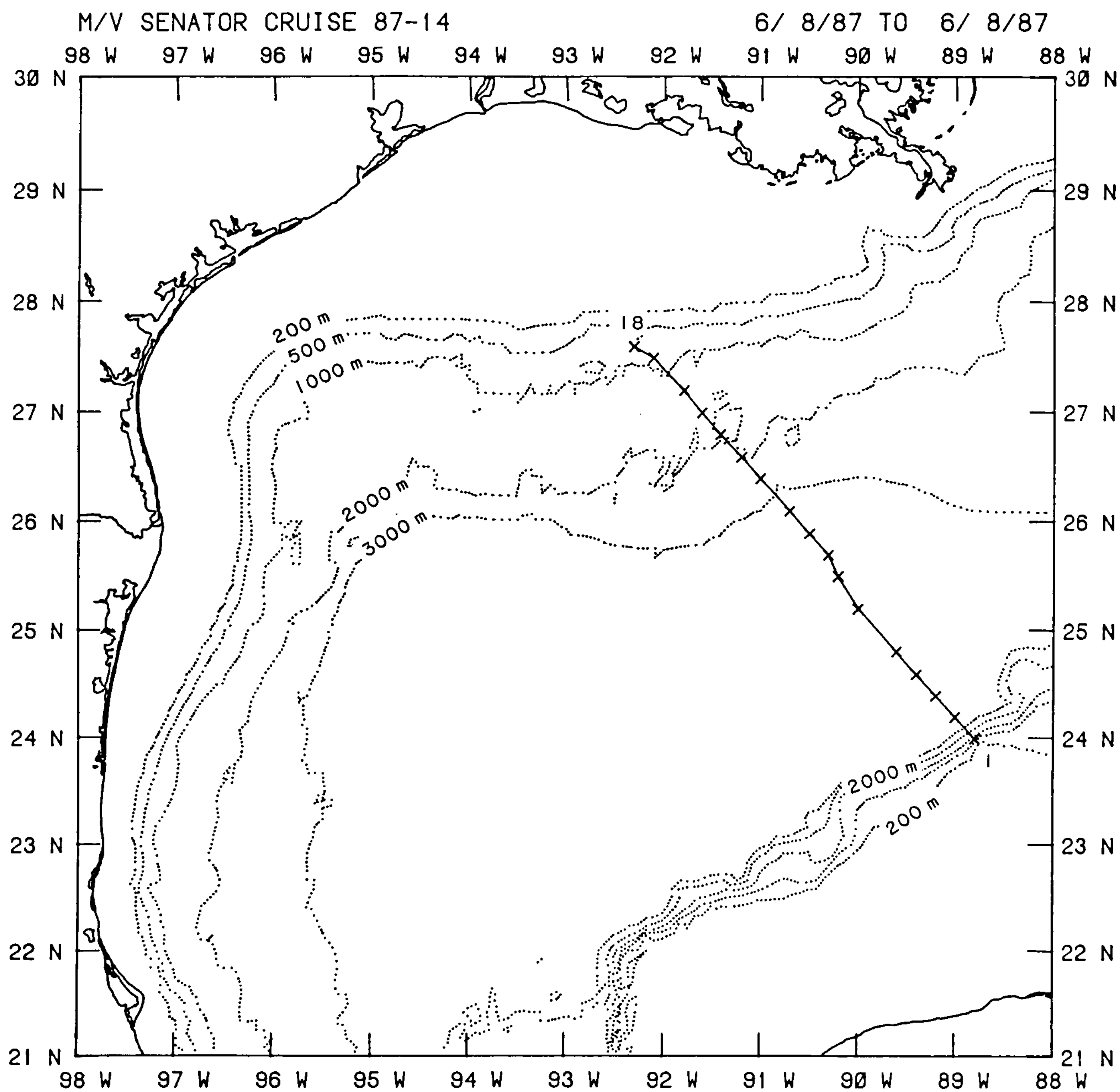
M/V SENATOR CRUISE 87-13
5/27/87 TO 5/28/87
STATIONS 1 TO 18
TEMPERATURE DEG C
MIN = 5.45 MAX = 27.07



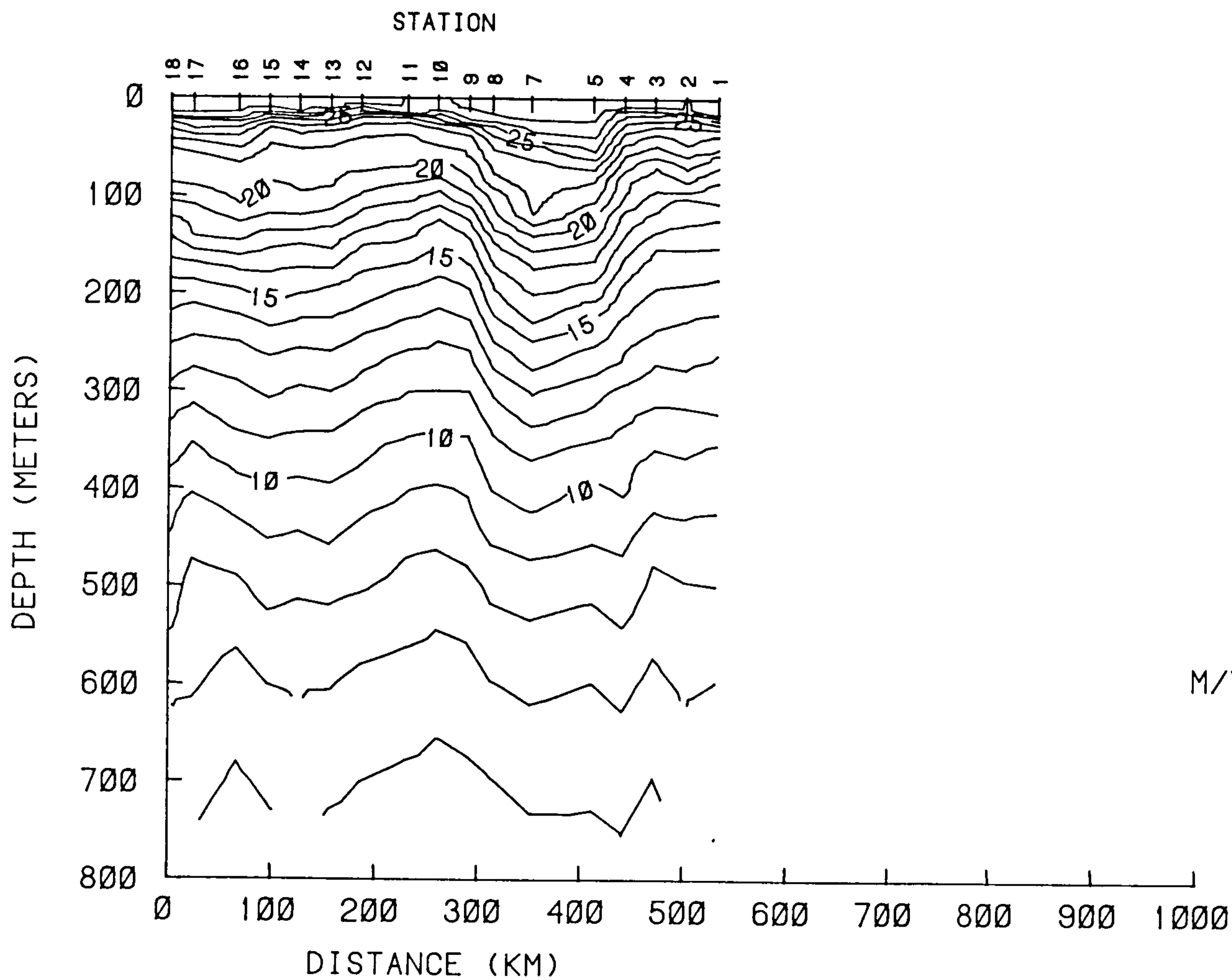
M/V SENATOR CRUISE 87-13
5/27/87 TO 5/28/87
STATIONS 1 TO 18
TEMPERATURE DEG C
MIN = 14.02 MAX = 27.07



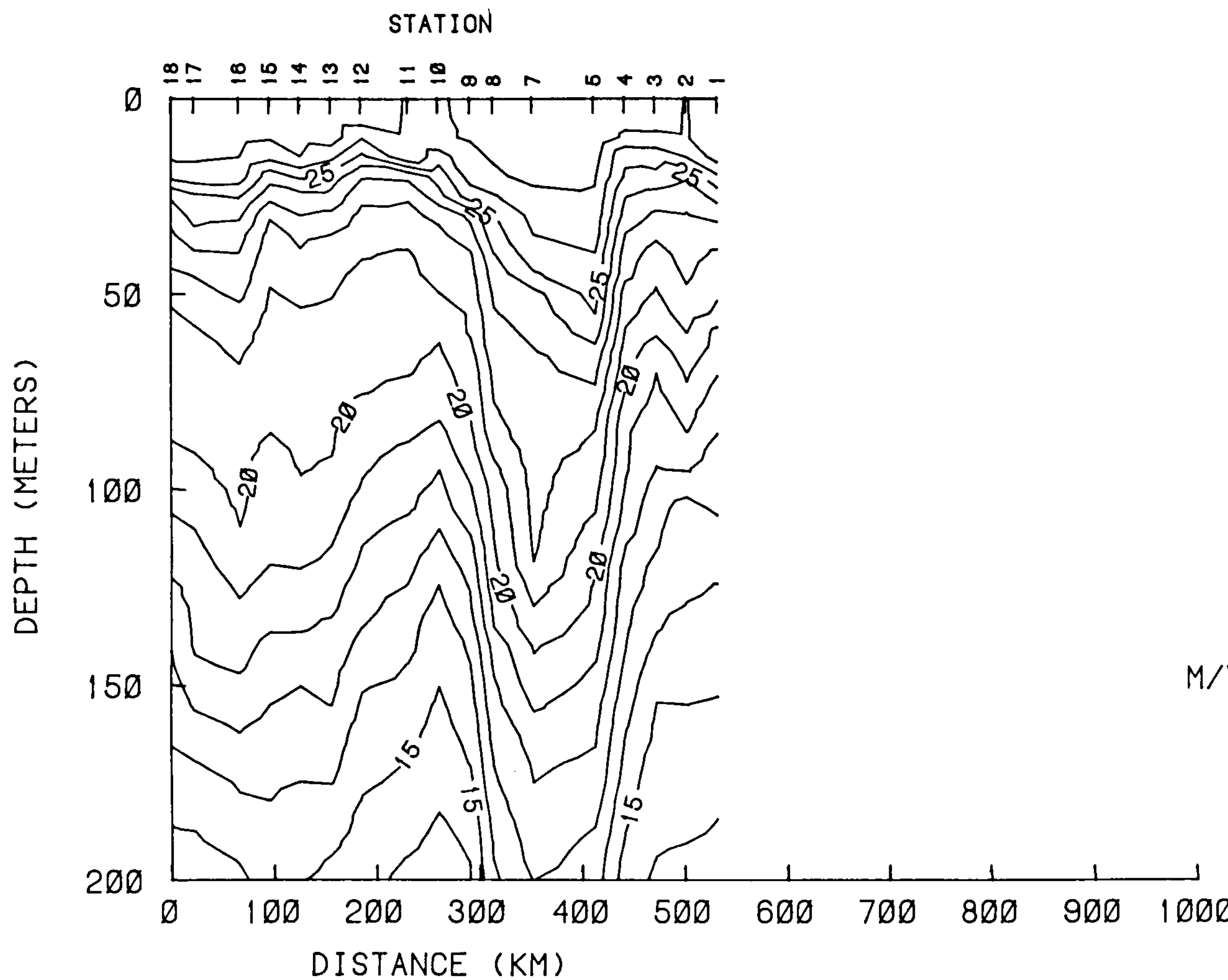
PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-13



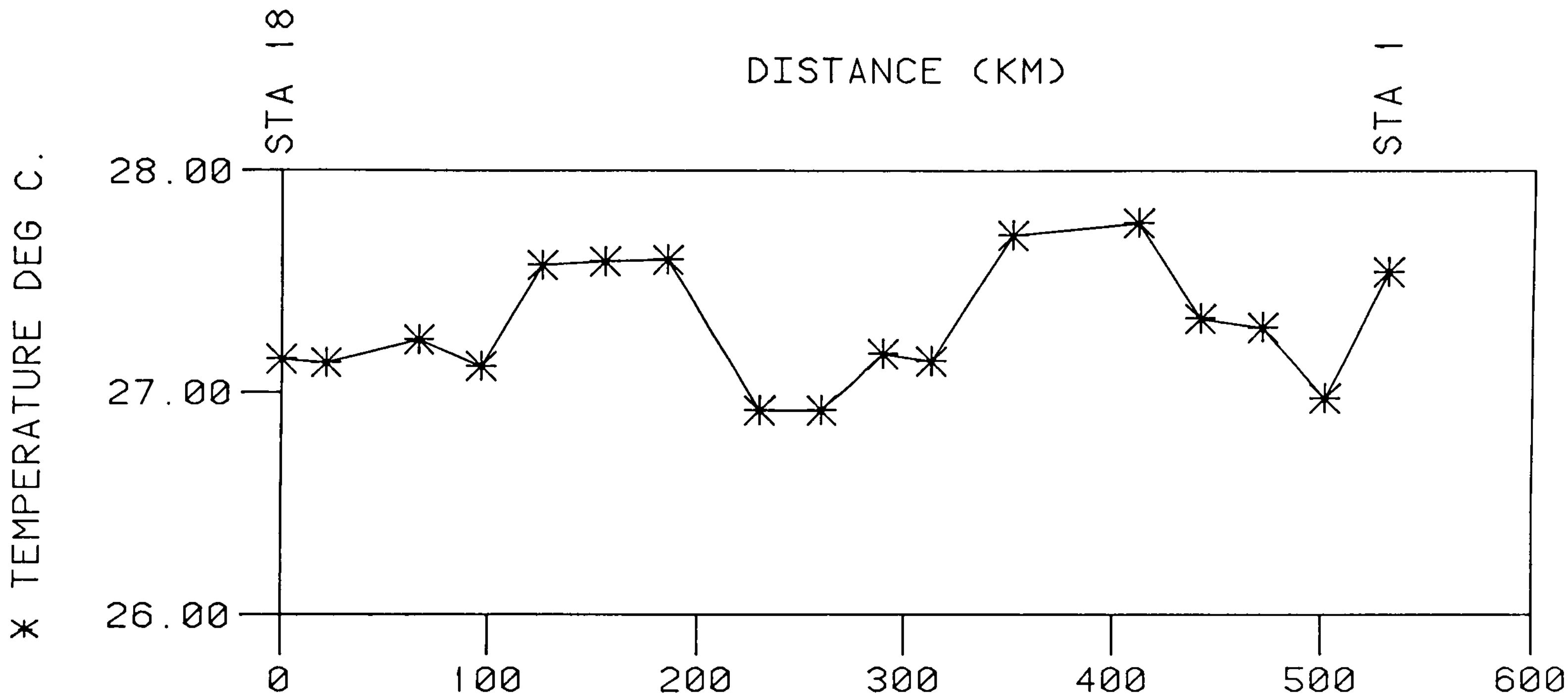
M/V SENATOR CRUISE 87-14
6/ 8/87 TO 6/ 8/87
98 W
97 W
96 W
95 W
94 W
93 W
92 W
91 W
90 W
89 W
88 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
18
1
2000 m
200 m



M/V SENATOR CRUISE 87-14
6/ 8/87 TO 6/ 8/87
STATIONS 1 TO 18
TEMPERATURE DEG C
MIN = 5.45 MAX = 27.77

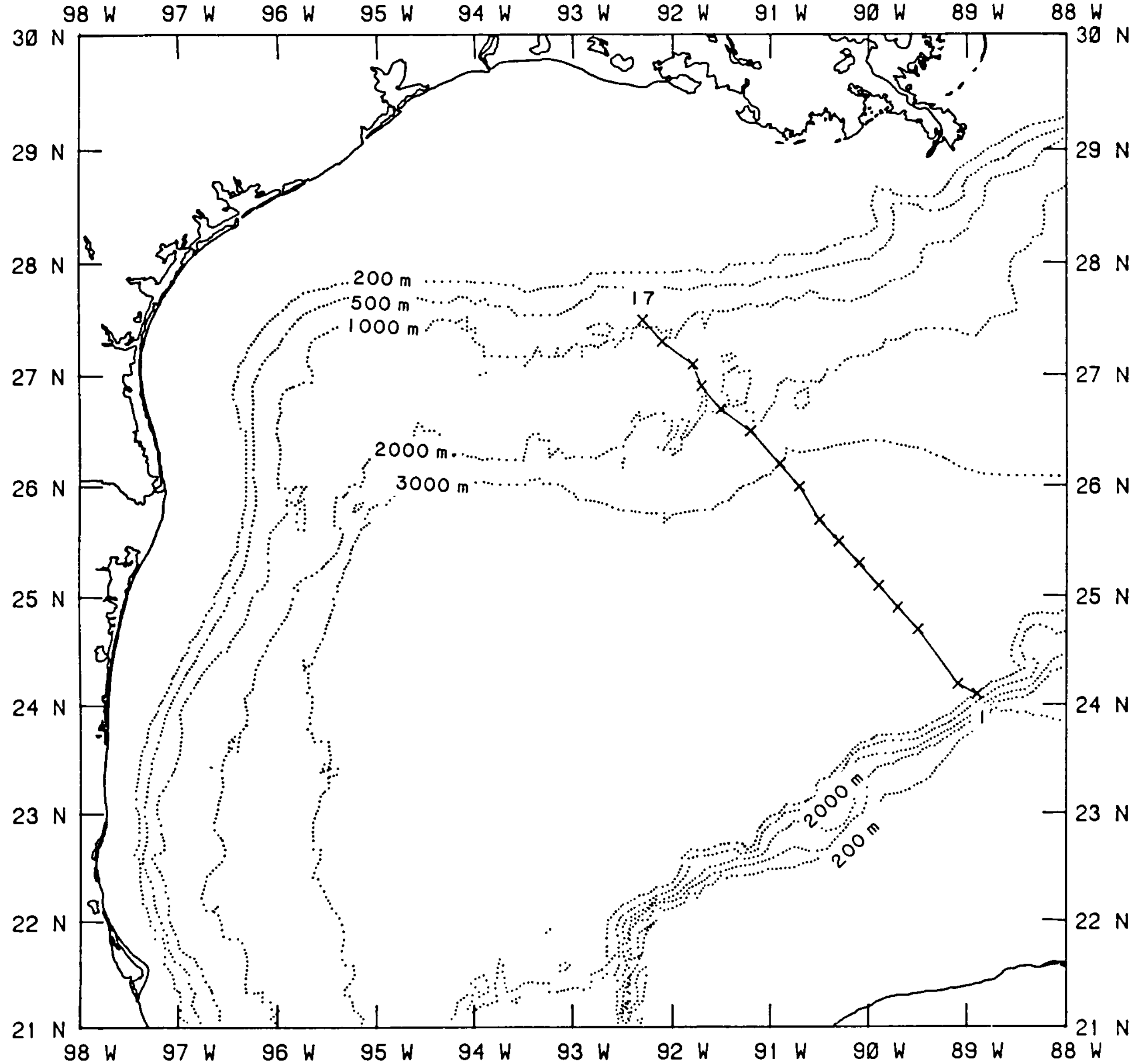


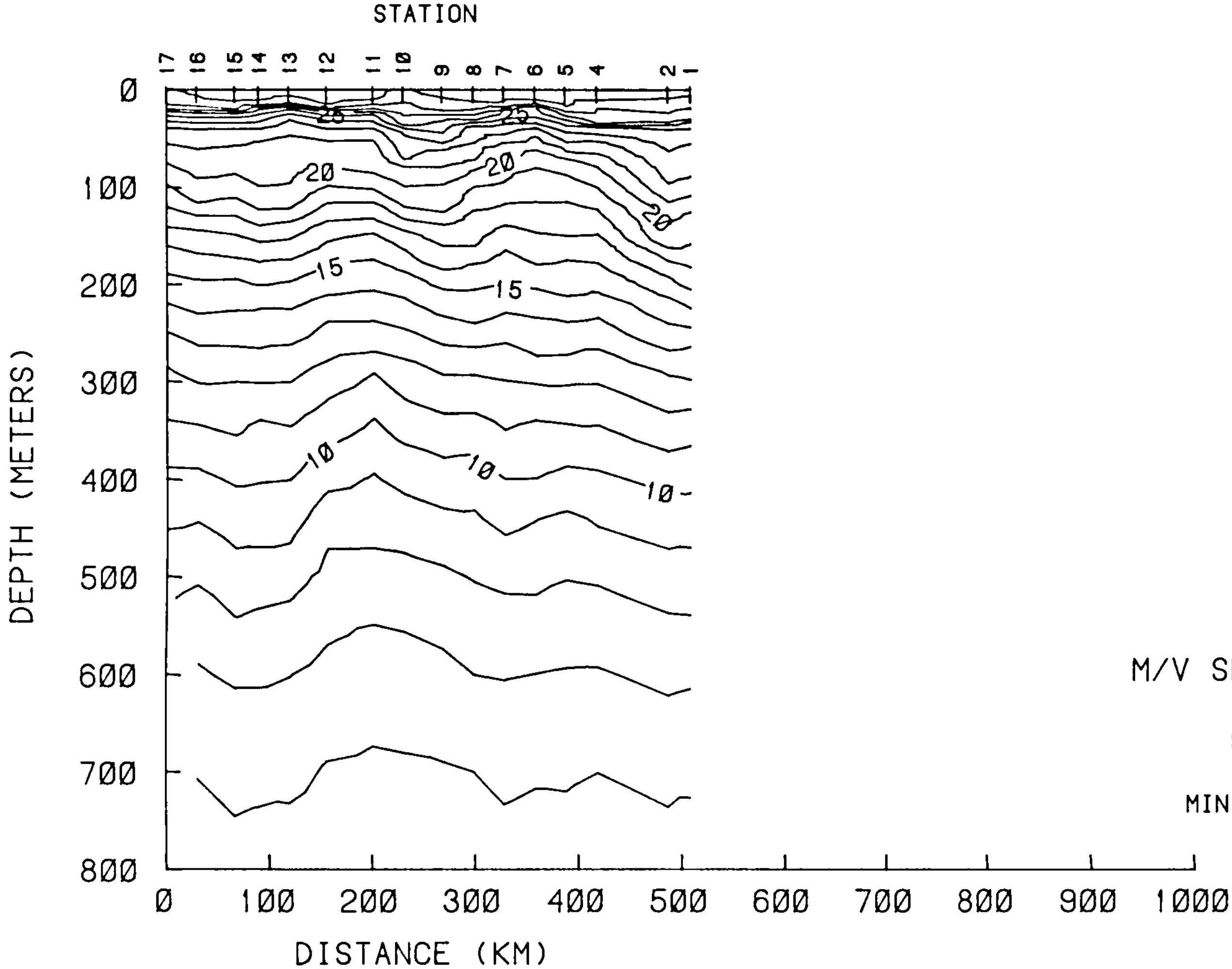
M/V SENATOR CRUISE 87-14
6/ 8/87 TO 6/ 8/87
STATIONS 1 TO 18
TEMPERATURE DEG C
MIN = 13.43 MAX = 27.77



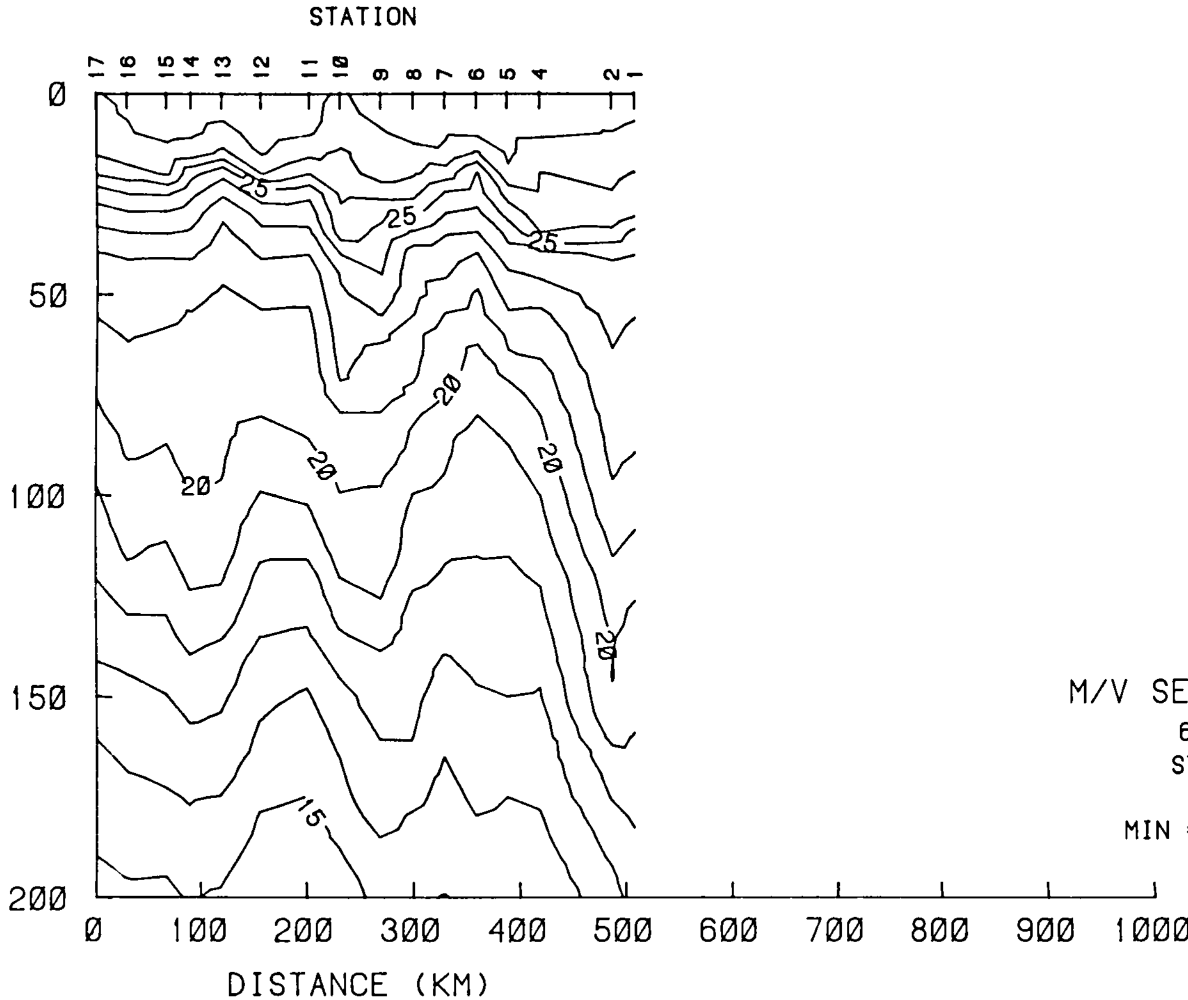
PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-14

M/V SENATOR CRUISE 87-15 6/19/87 TO 6/20/87

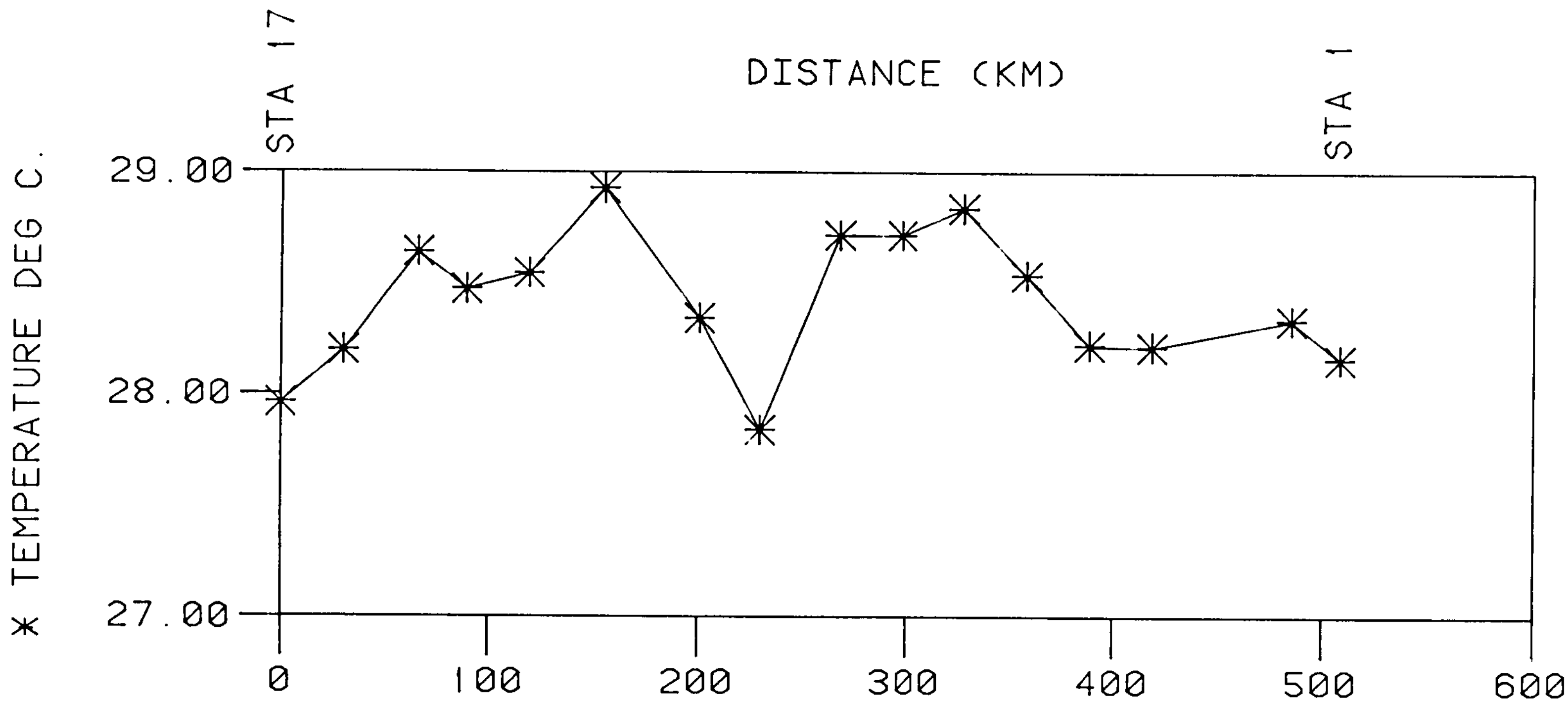




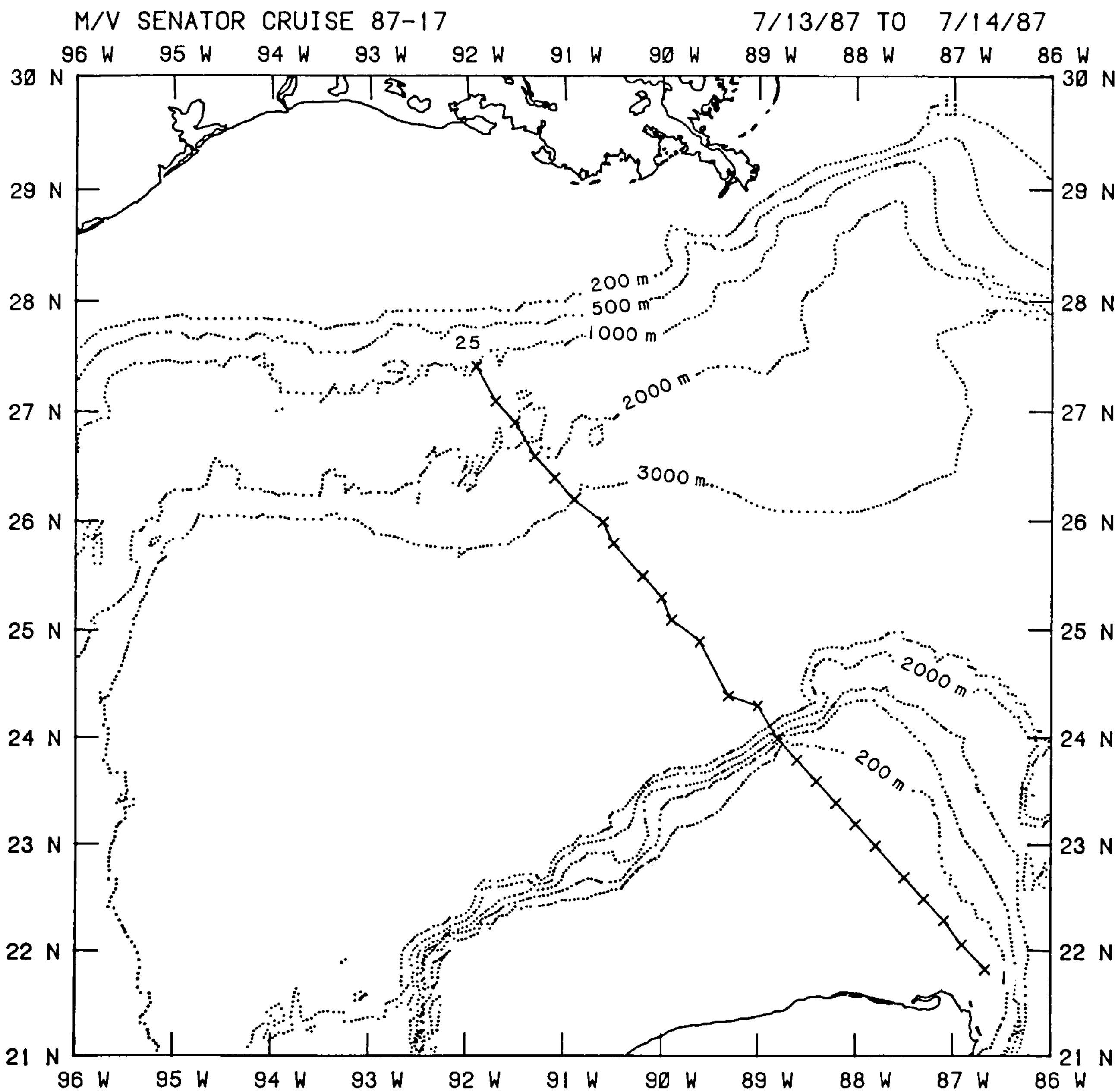
M/V SENATOR CRUISE 87-15
6/19/87 TO 6/20/87
STATIONS 1 TO 17
TEMPERATURE DEG C
MIN = 5.56 MAX = 28.93

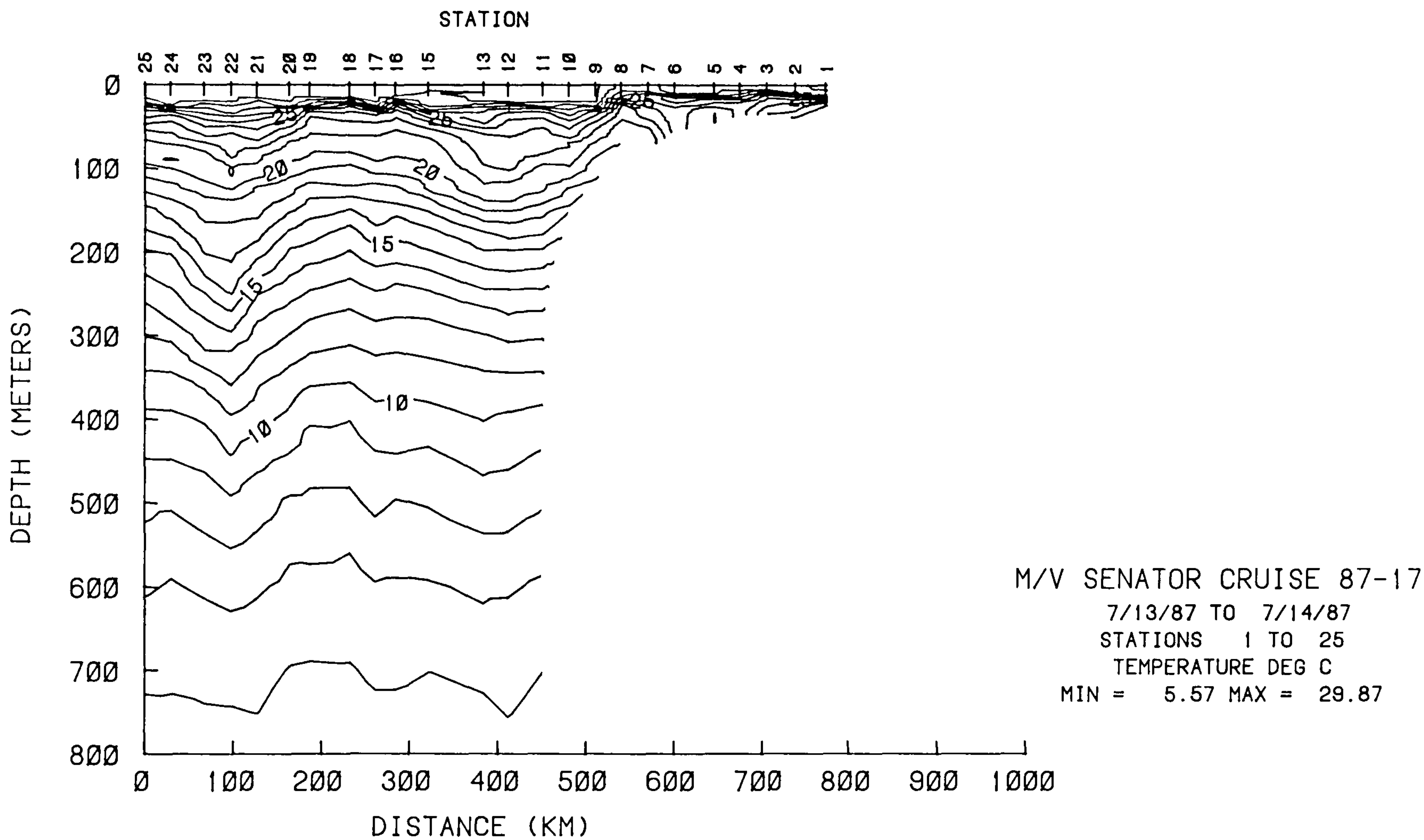


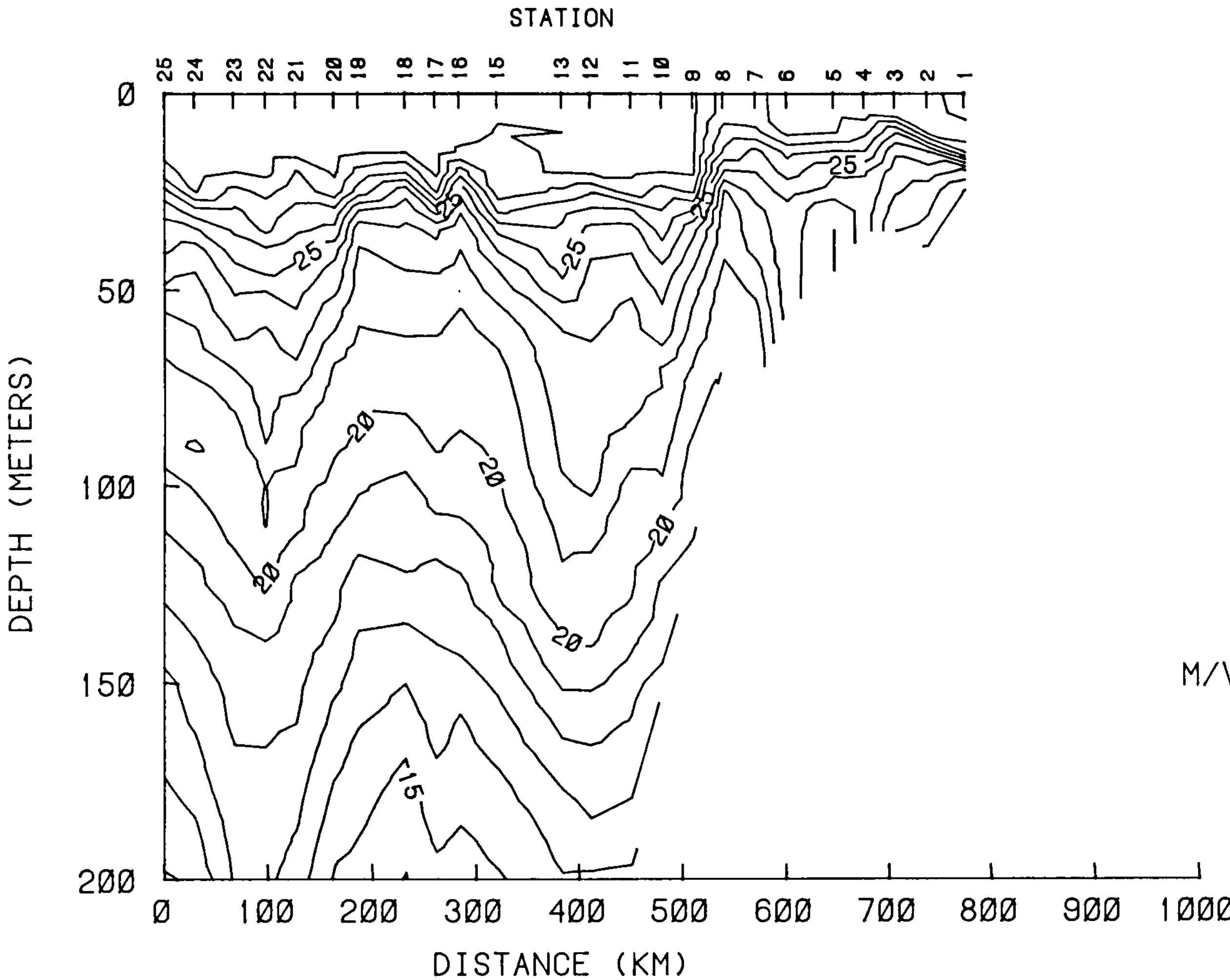
M/V SENATOR CRUISE 87-15
6/19/87 TO 6/20/87
STATIONS 1 TO 17
TEMPERATURE DEG C
MIN = 14.23 MAX = 28.93



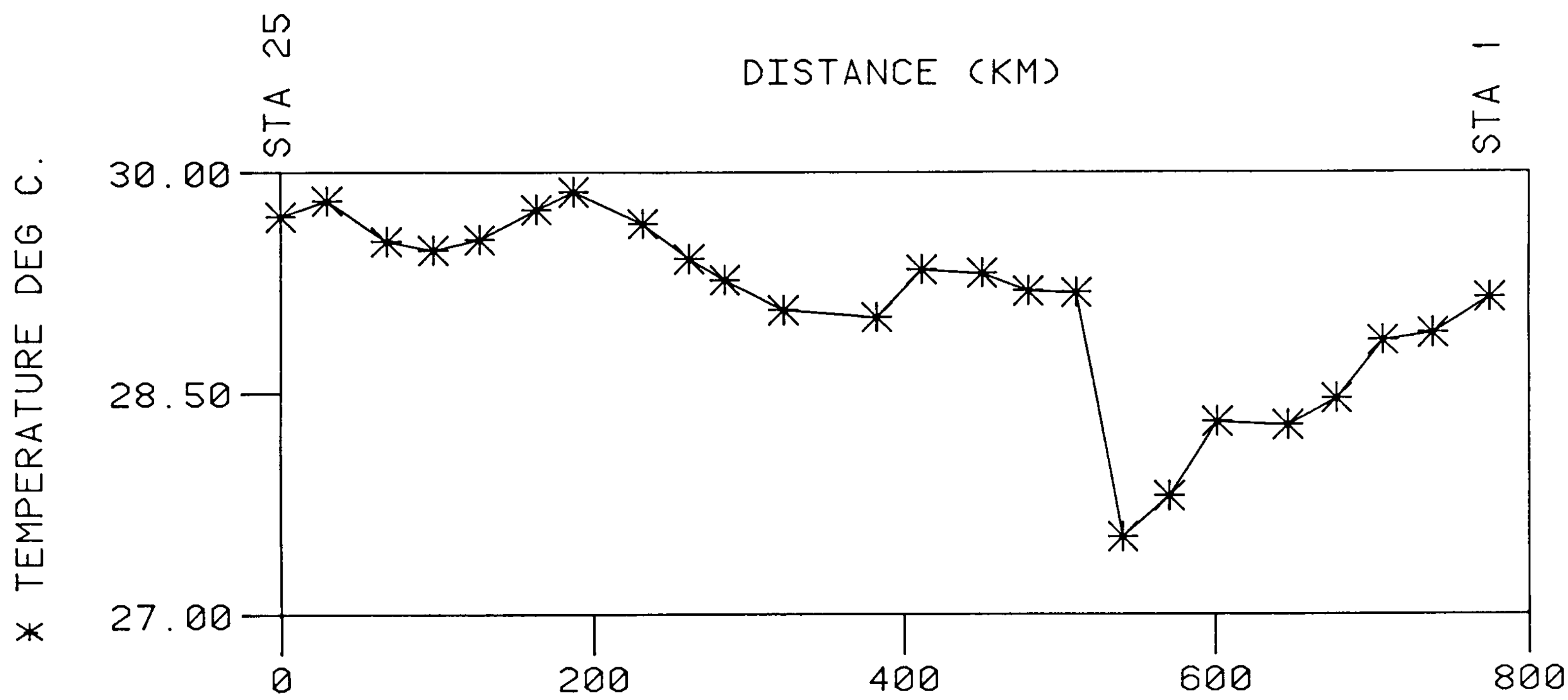
PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-15


M/V SENATOR CRUISE 87-17
7/13/87 TO 7/14/87
96 W
95 W
94 W
93 W
92 W
91 W
90 W
89 W
88 W
87 W
86 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
25
2000 m
200 m


STATION
25 24 23 22 21 20 19 18 17 16 15 13 12 11 10 9 8 7 6 5 4 3 2 1
DEPTH (METERS)
0 100 200 300 400 500 600 700 800
DISTANCE (KM)
0 100 200 300 400 500 600 700 800 900 1000
25
20
15
10
M/V SENATOR CRUISE 87-17
7/13/87 TO 7/14/87
STATIONS 1 TO 25
TEMPERATURE DEG C
MIN = 5.57 MAX = 29.87

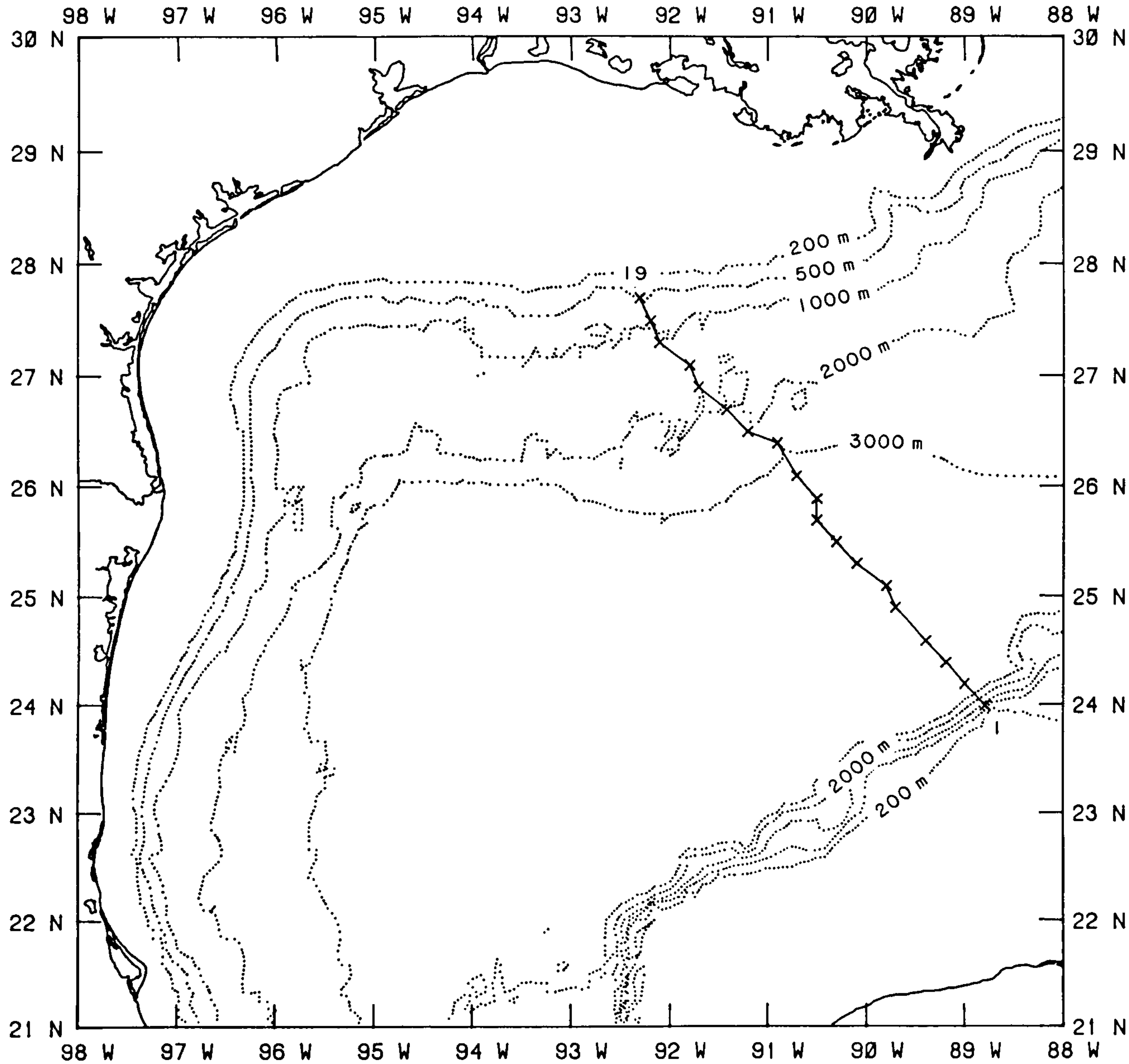


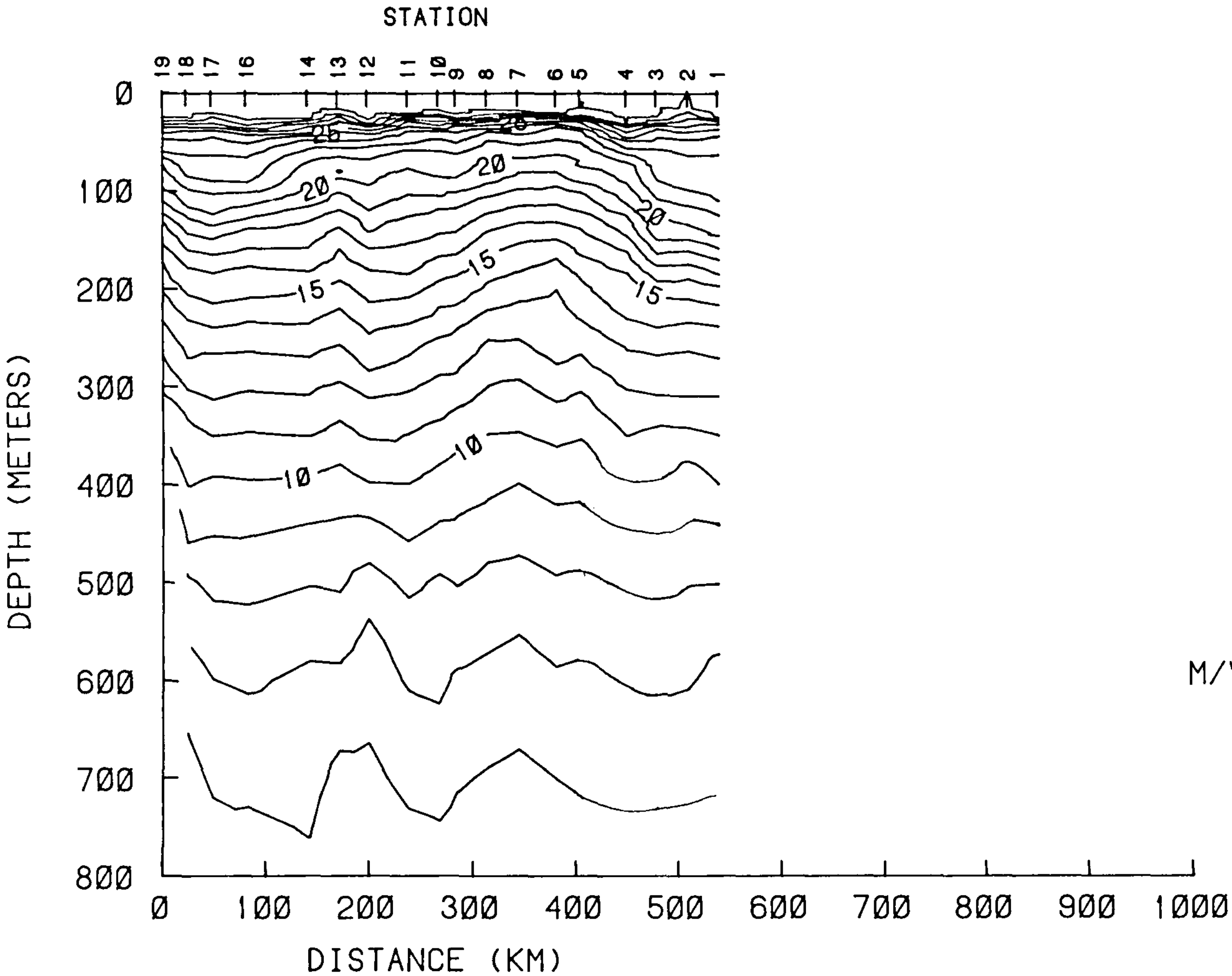
M/V SENATOR CRUISE 87-17
7/13/87 TO 7/14/87
STATIONS 1 TO 25
TEMPERATURE DEG C
MIN = 13.96 MAX = 29.87



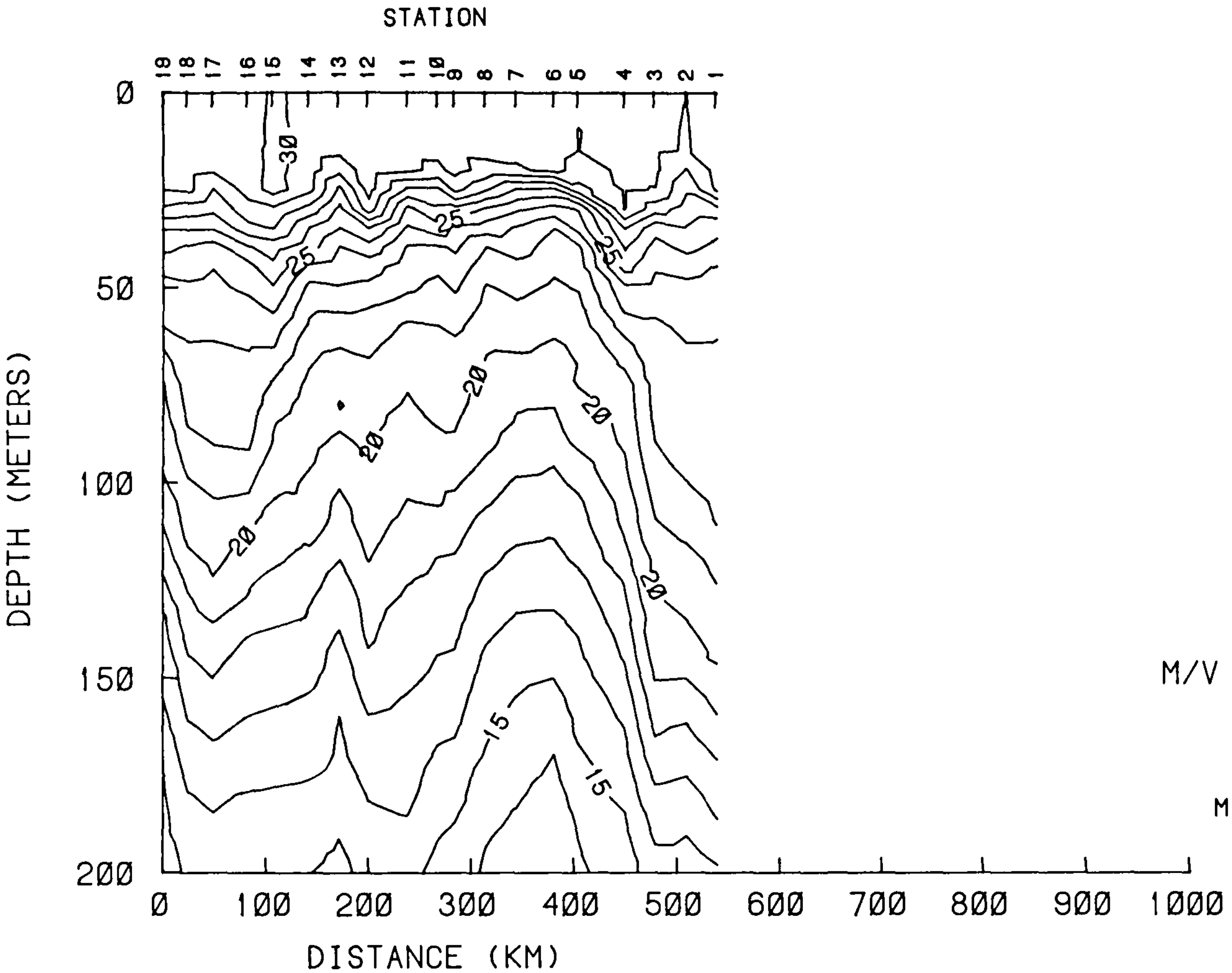
PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-17

M/V SENATOR CRUISE 87-18 7/26/87 TO 7/27/87

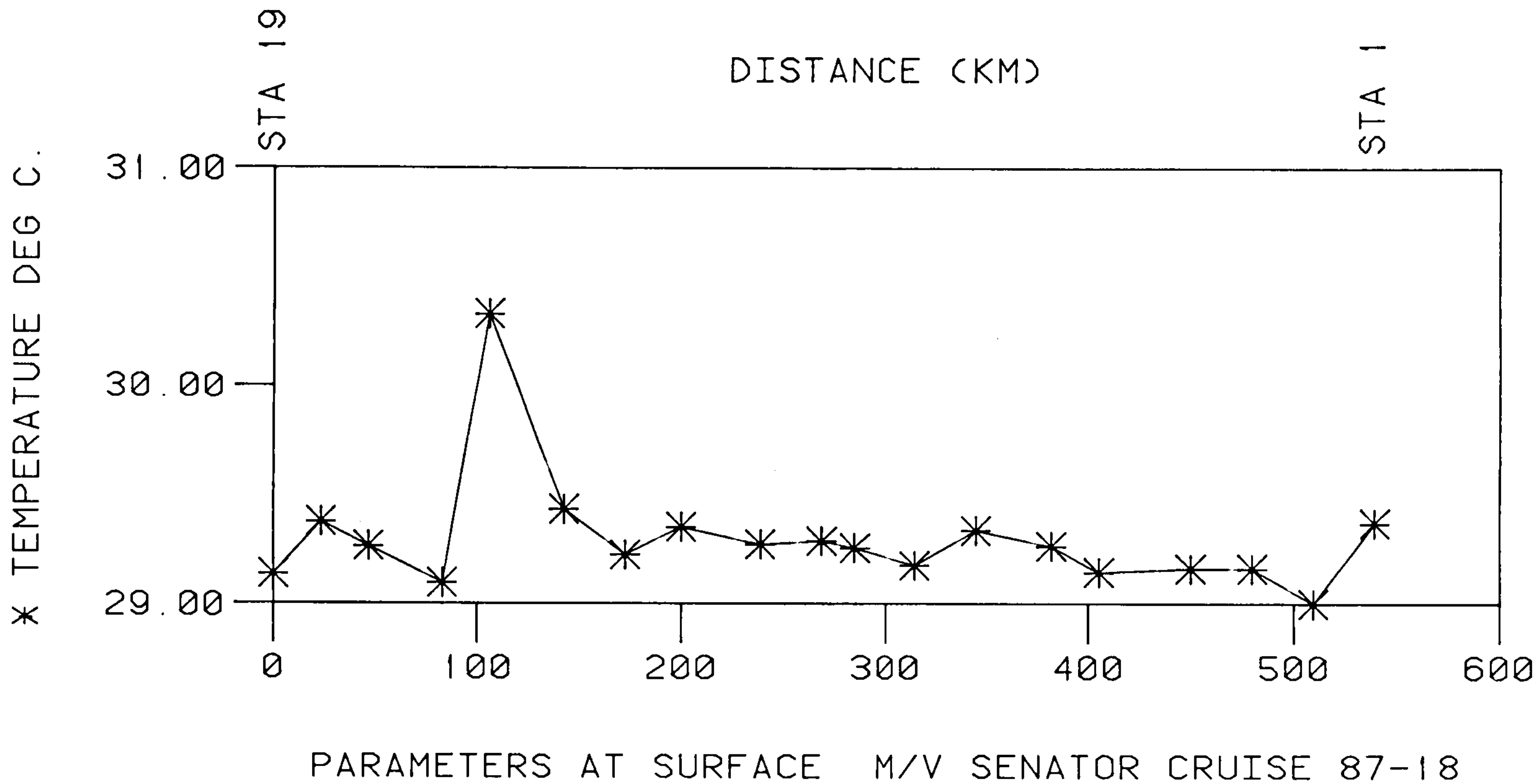




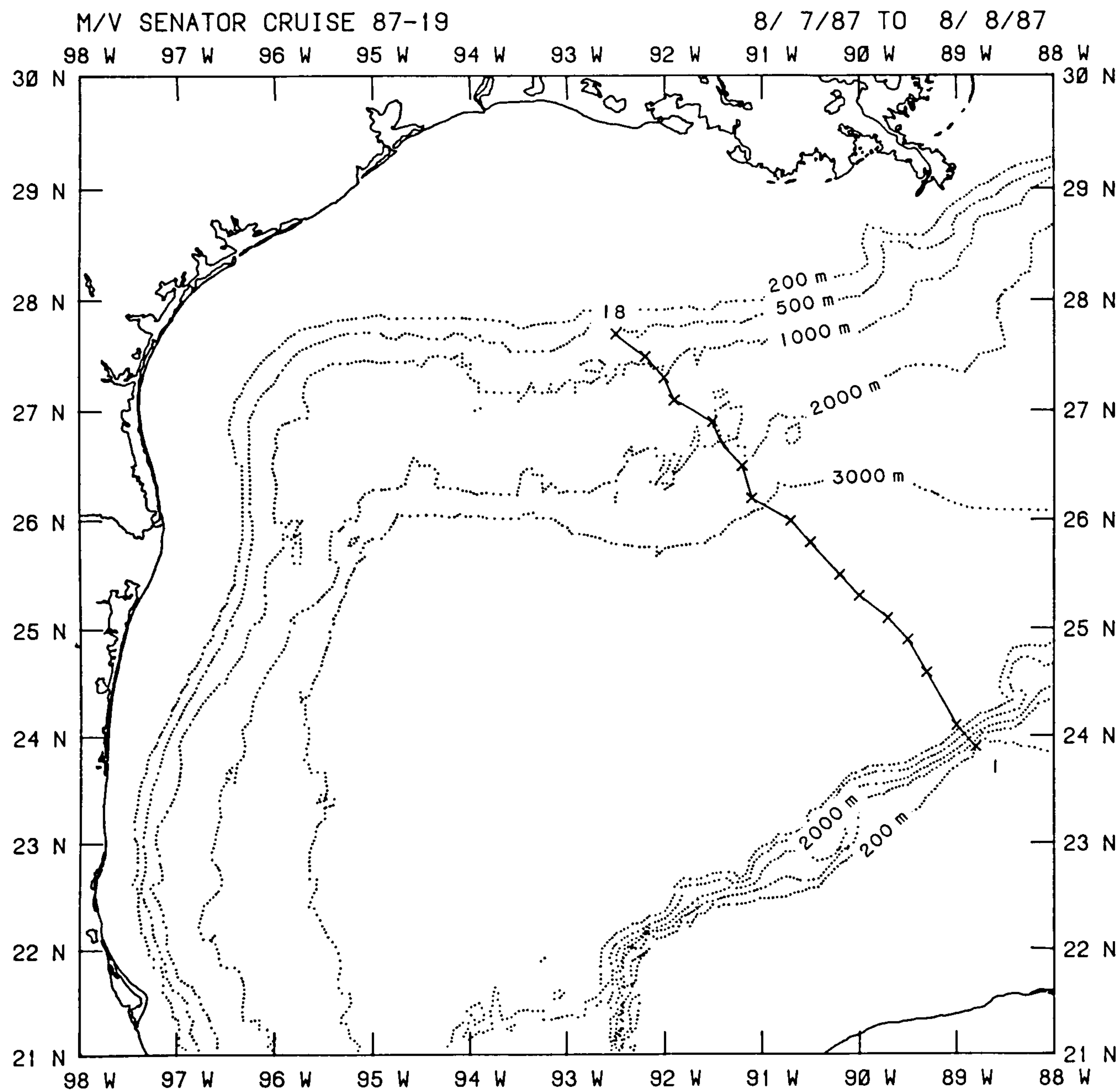
M/V SENATOR CRUISE 87-18
7/26/87 TO 7/27/87
STATIONS 1 TO 19
TEMPERATURE DEG C
MIN = 5.49 MAX = 29.57



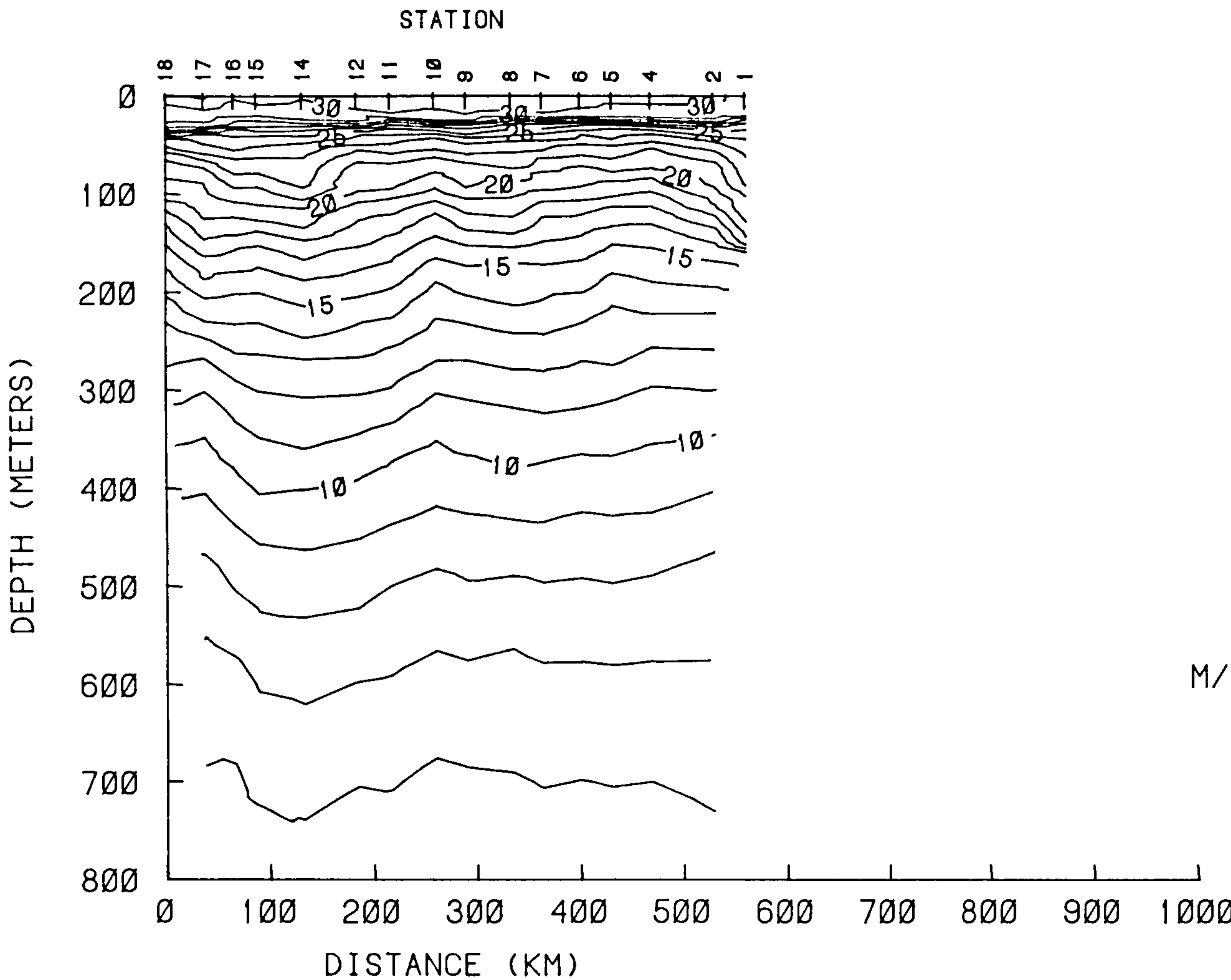
M/V SENATOR CRUISE 87-18
7/26/87 TO 7/27/87
STATIONS 1 TO 19
TEMPERATURE DEG C
MIN = 13.02 MAX = 30.48



STA 19
DISTANCE (KM)
STA 1
31.00
30.00
29.00
* TEMPERATURE DEG C.
0
100
200
300
400
500
600
PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-18



M/V SENATOR CRUISE 87-19
8/ 7/87 TO 8/ 8/87
98 W
97 W
96 W
95 W
94 W
93 W
92 W
91 W
90 W
89 W
88 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
18
1
2000 m
200 m



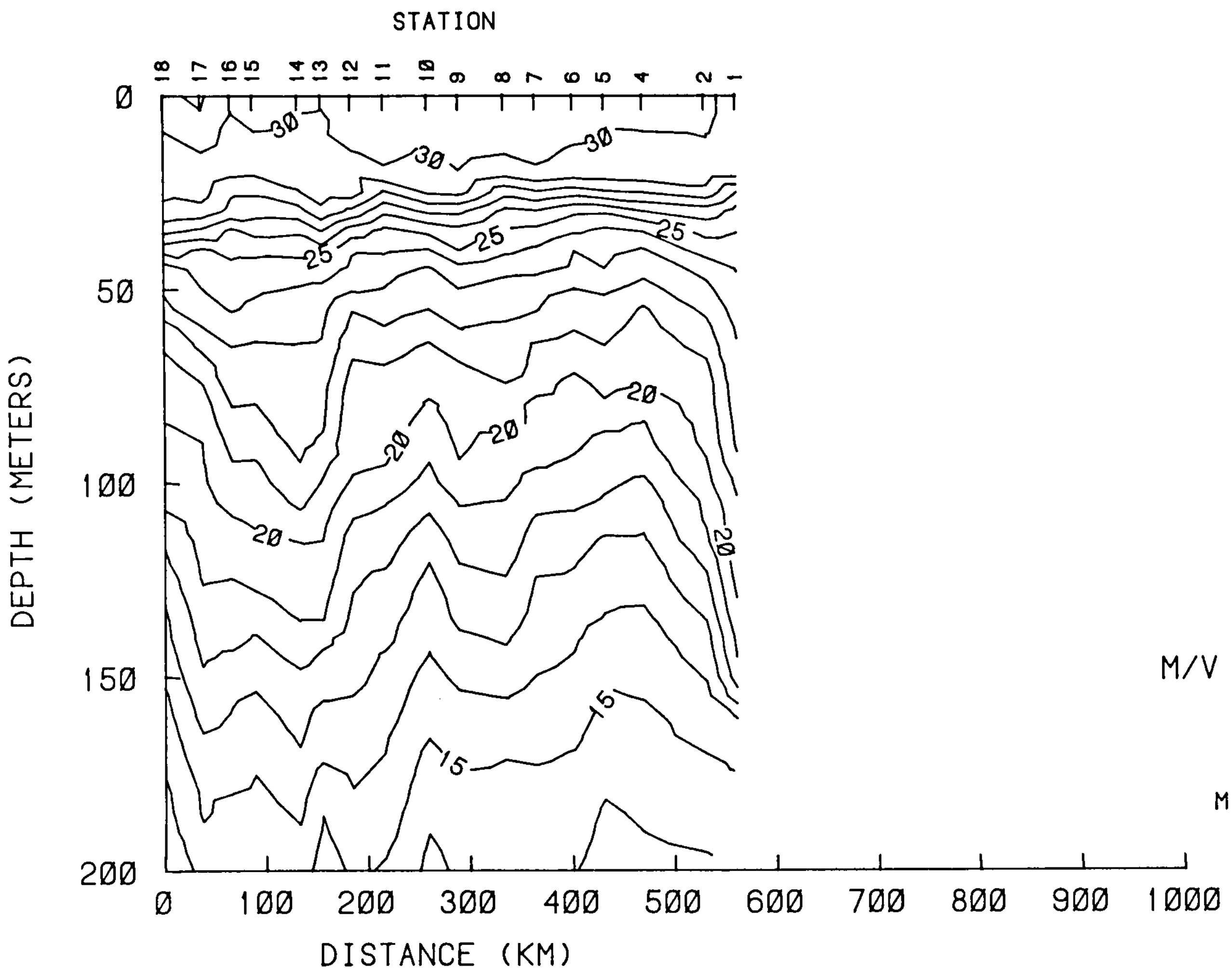
M/V SENATOR CRUISE 87-19

8/ 7/87 TO 8/ 8/87

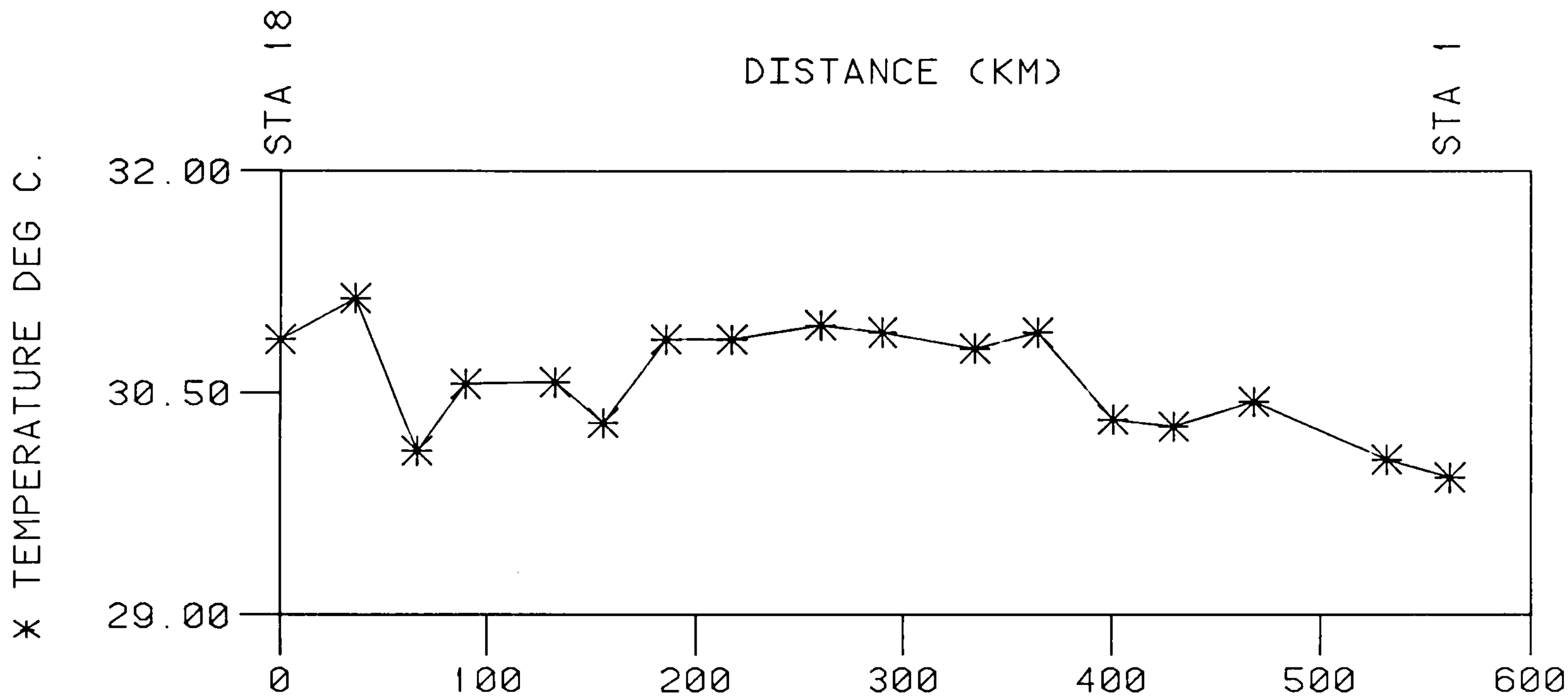
STATIONS 1 TO 18

TEMPERATURE DEG C

MIN = 5.48 MAX = 31.13

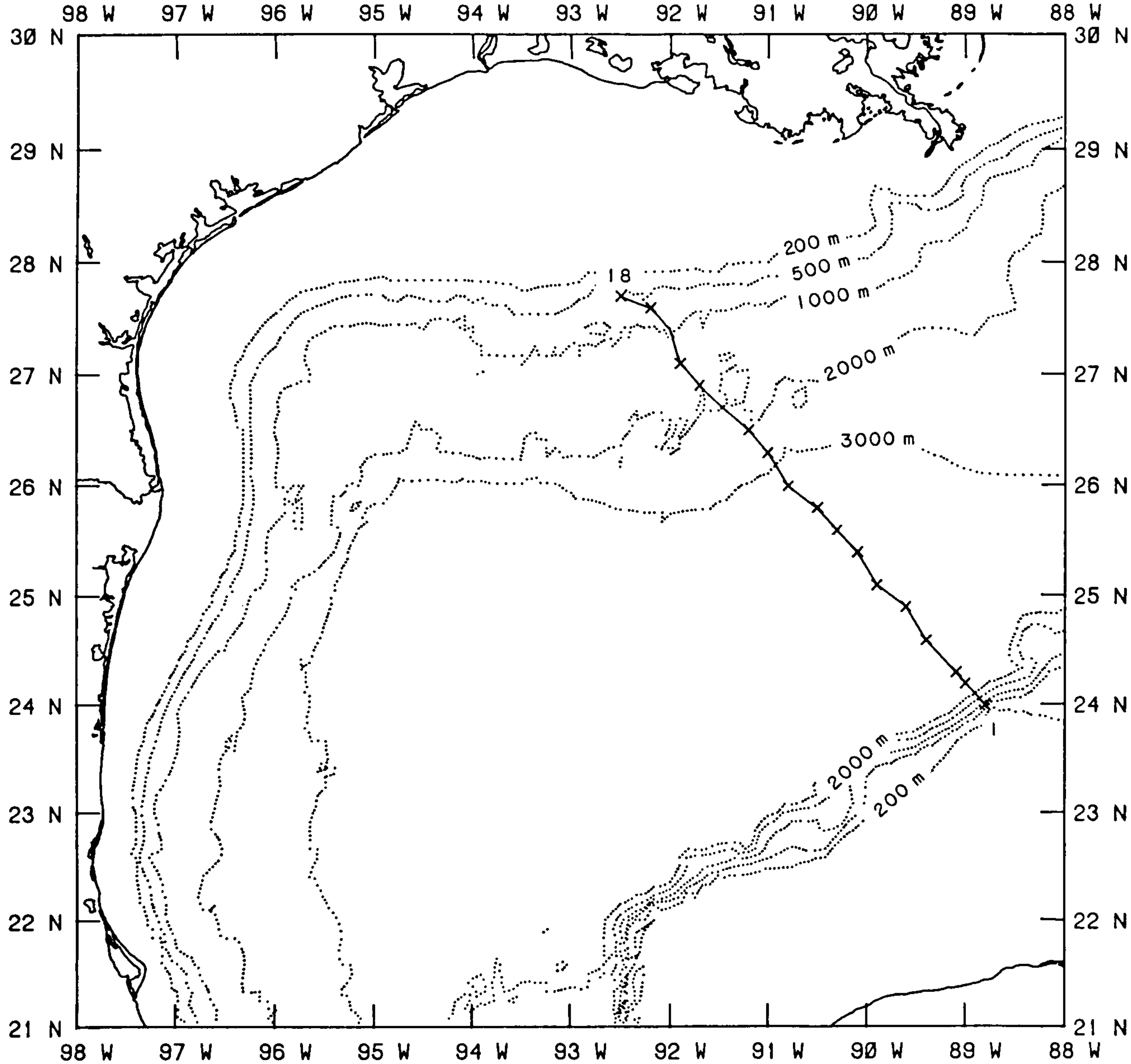


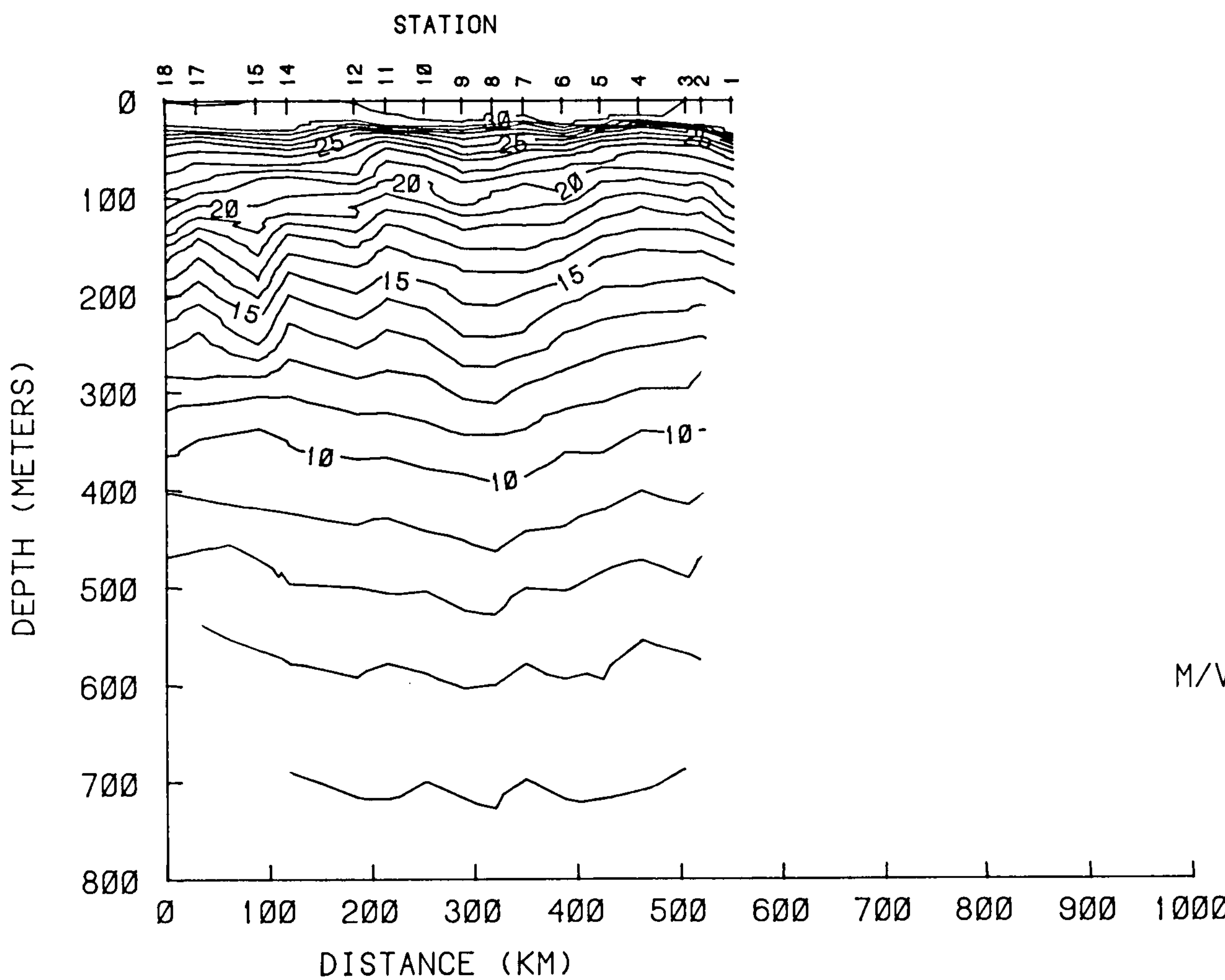
M/V SENATOR CRUISE 87-19
8/ 7/87 TO 8/ 8/87
STATIONS 1 TO 18
TEMPERATURE DEG C
MIN = 13.40 MAX = 31.13



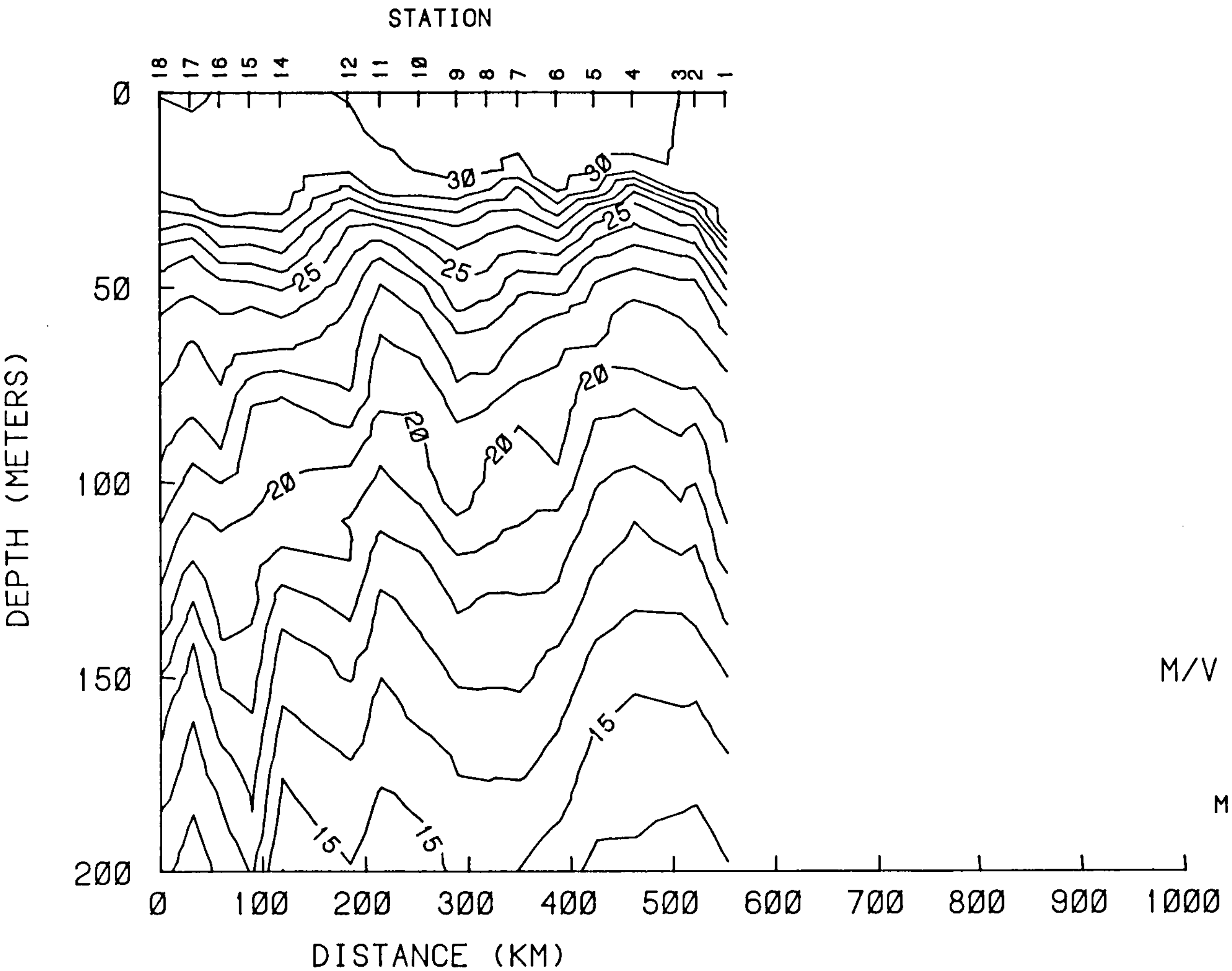
PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-19

M/V SENATOR CRUISE 87-20 8/18/87 TO 8/19/87

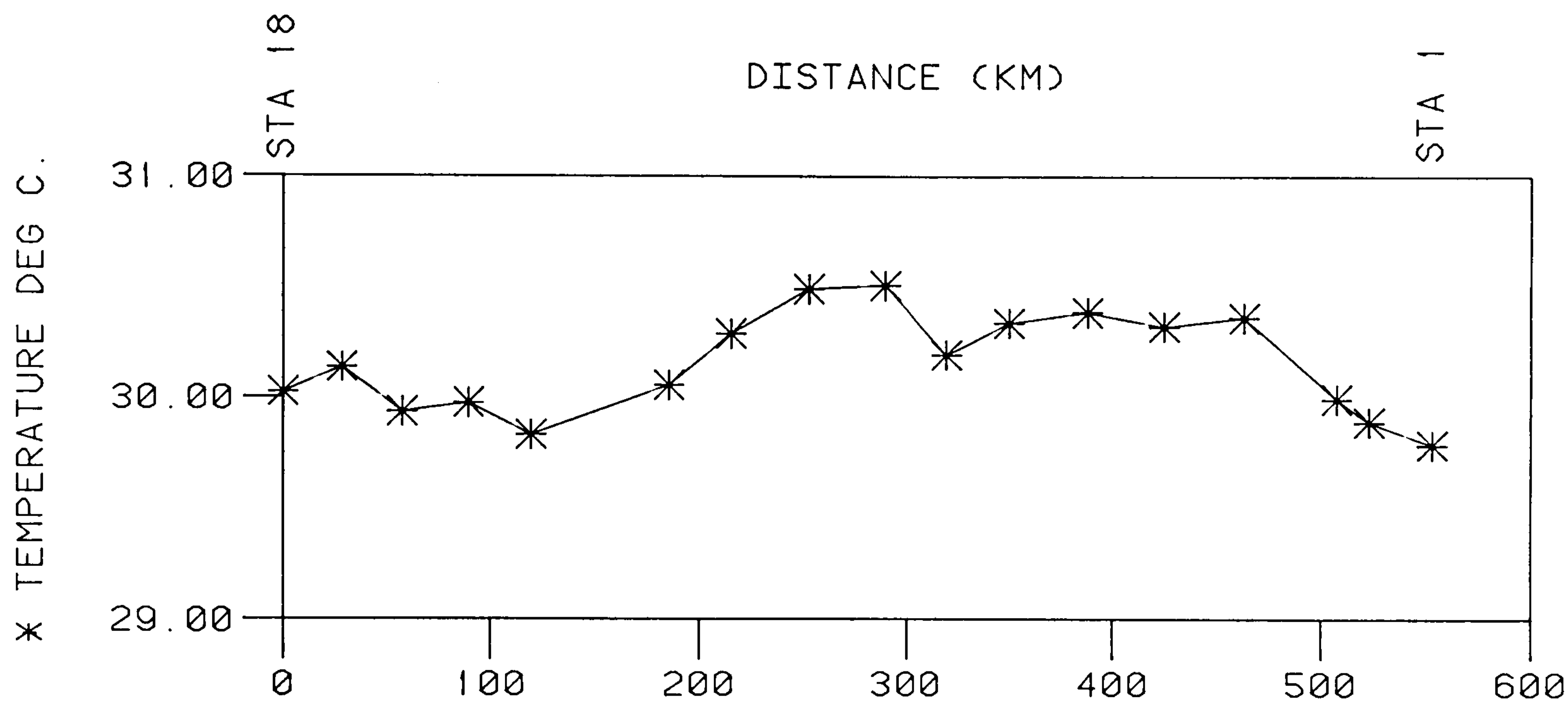




M/V SENATOR CRUISE 87-20
8/18/87 TO 8/19/87
STATIONS 1 TO 18
TEMPERATURE DEG C
MIN = 5.54 MAX = 30.53

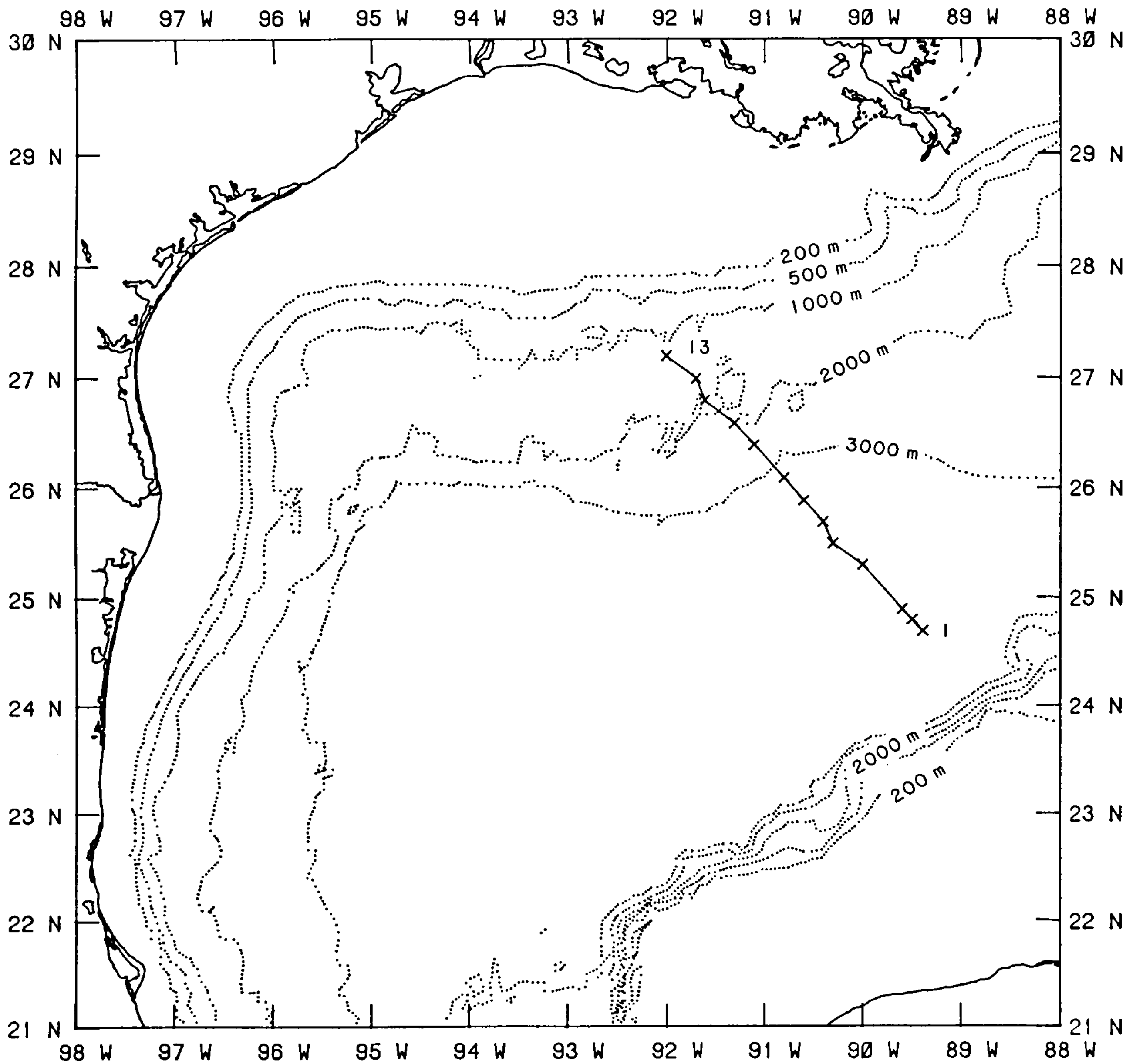


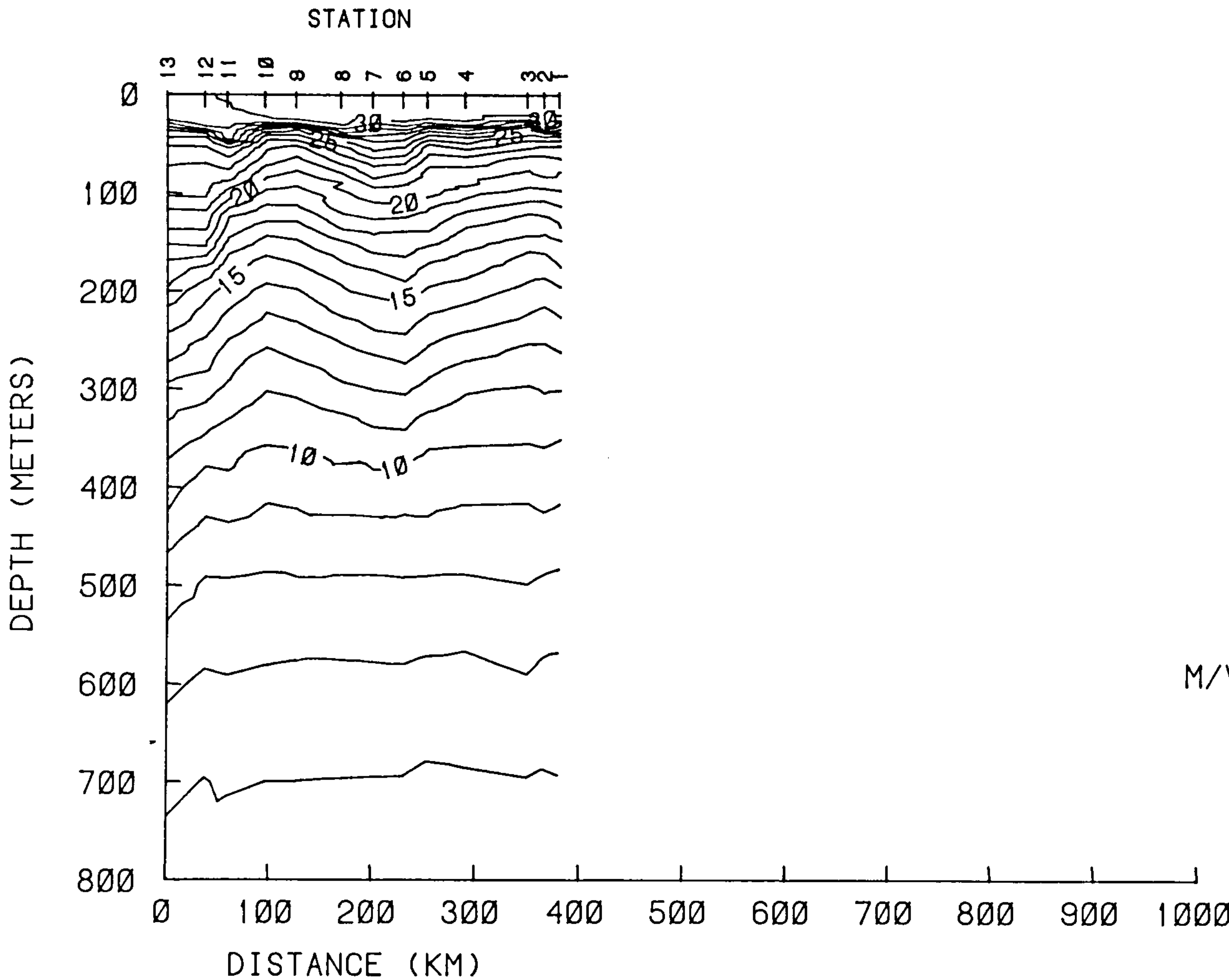
M/V SENATOR CRUISE 87-20
8/18/87 TO 8/19/87
STATIONS 1 TO 18
TEMPERATURE DEG C
MIN = 13.33 MAX = 30.53



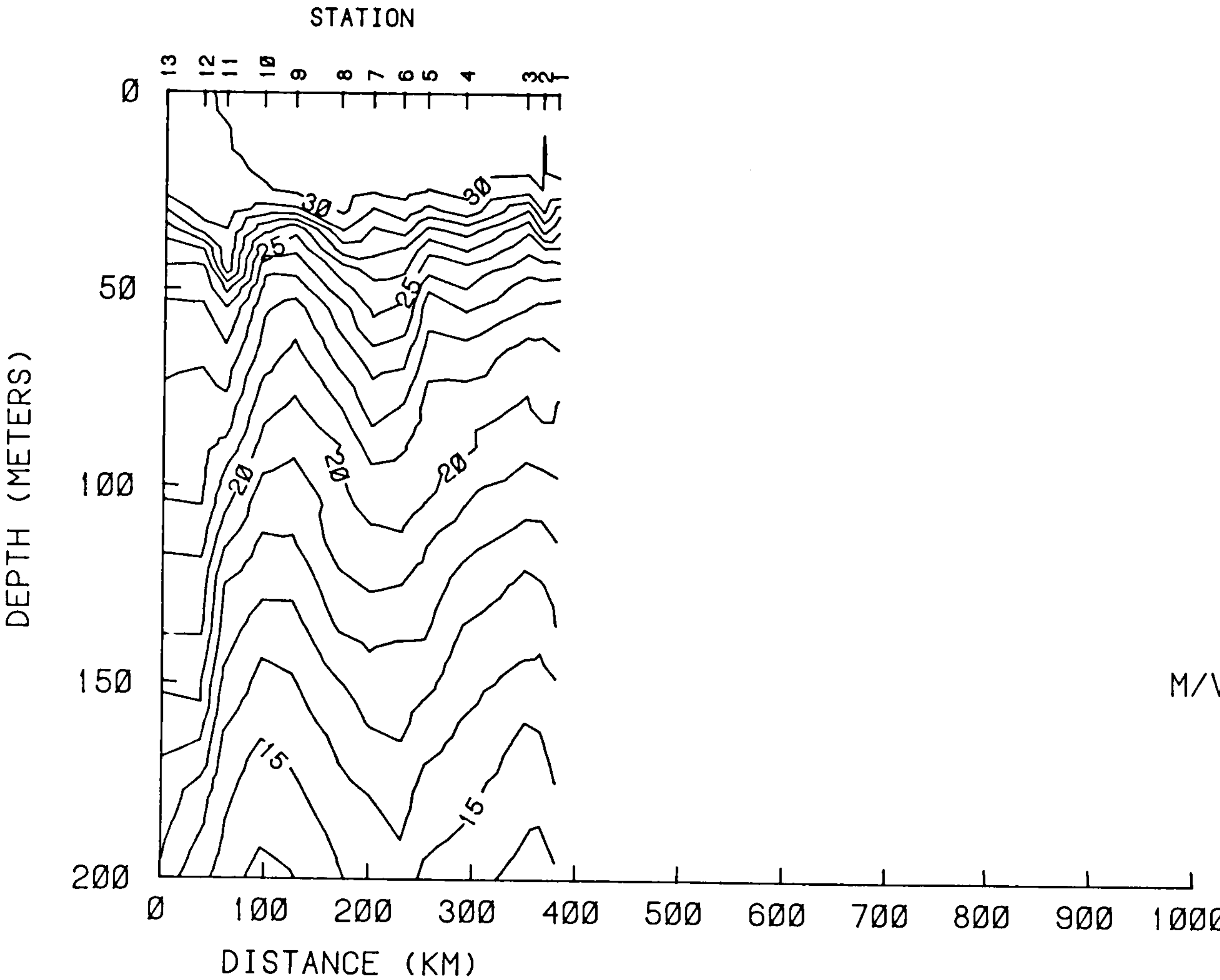
PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-20

M/V SENATOR CRUISE 87-21 8/30/87 TO 8/30/87

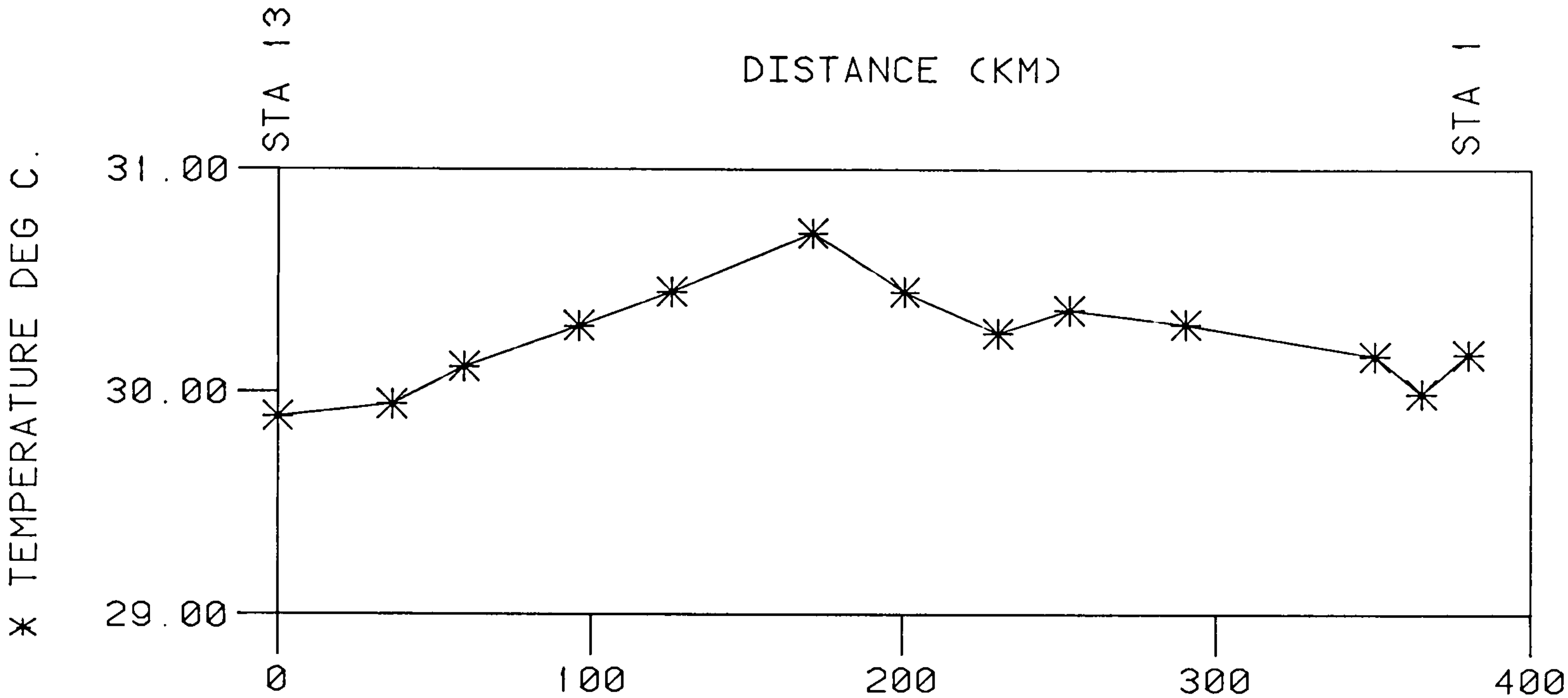




M/V SENATOR CRUISE 87-21
8/30/87 TO 8/30/87
STATIONS 1 TO 13
TEMPERATURE DEG C
MIN = 5.51 MAX = 30.71

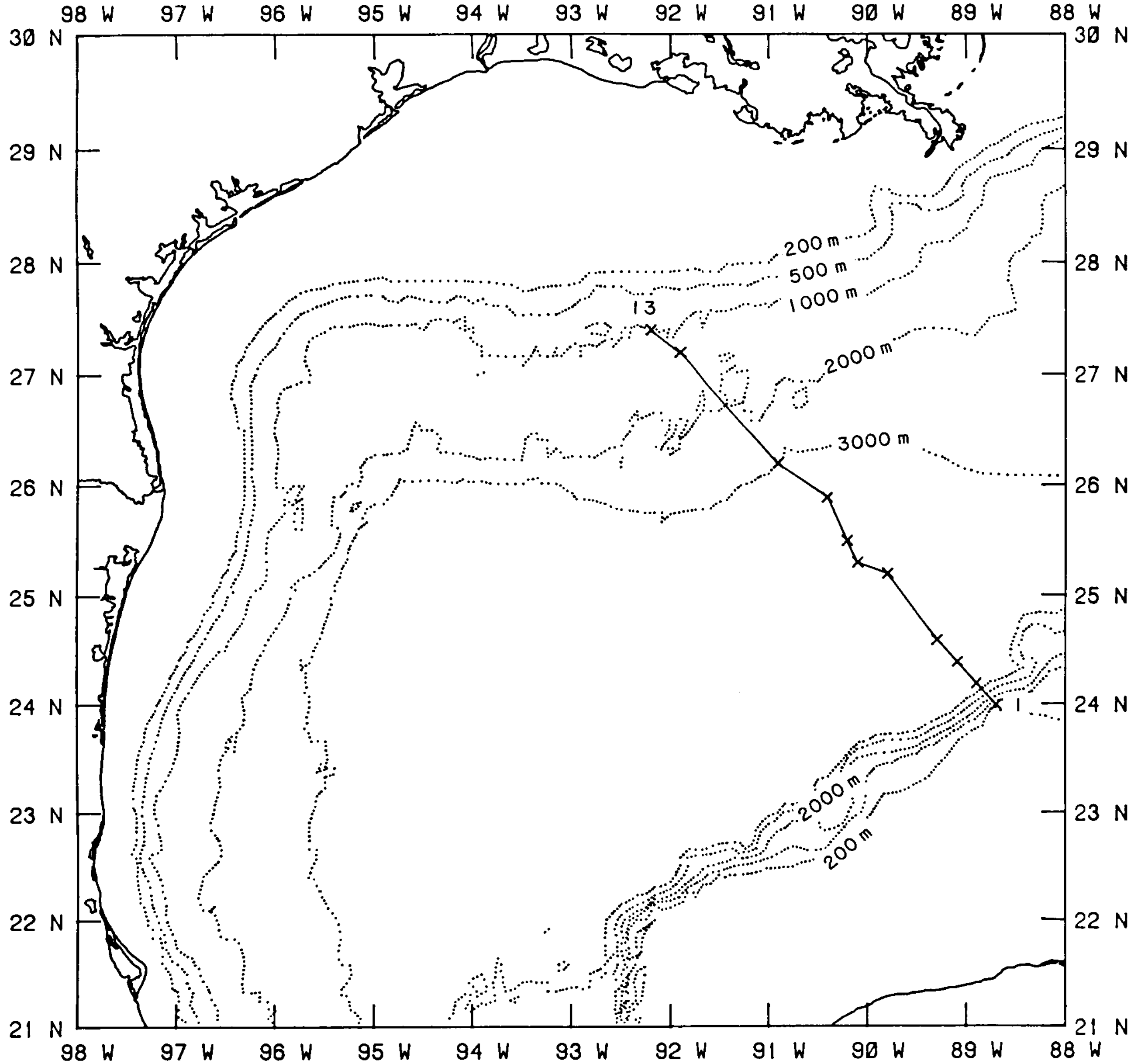


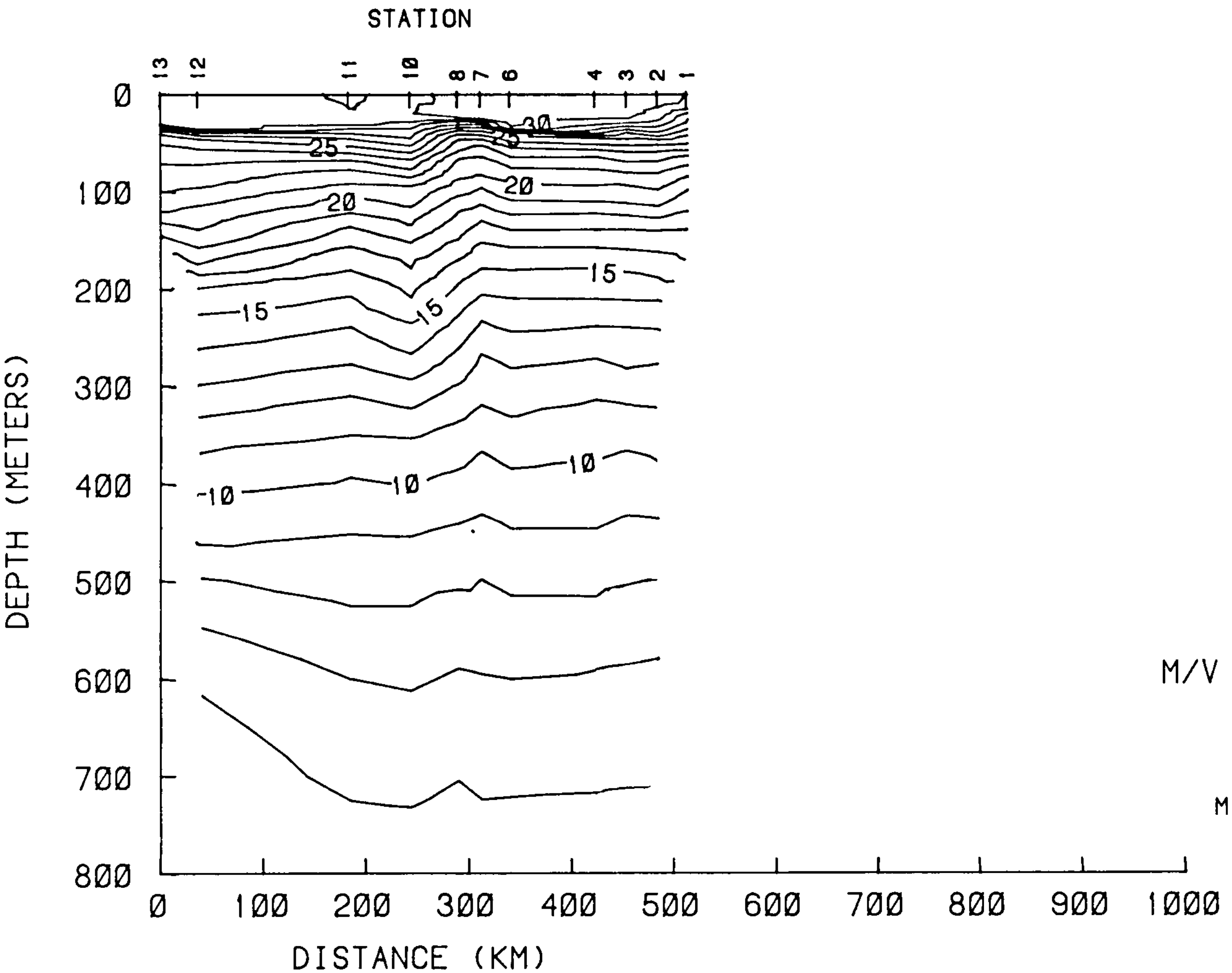
M/V SENATOR CRUISE 87-21
8/30/87 TO 8/30/87
STATIONS 1 TO 13
TEMPERATURE DEG C
MIN = 13.57 MAX = 30.71



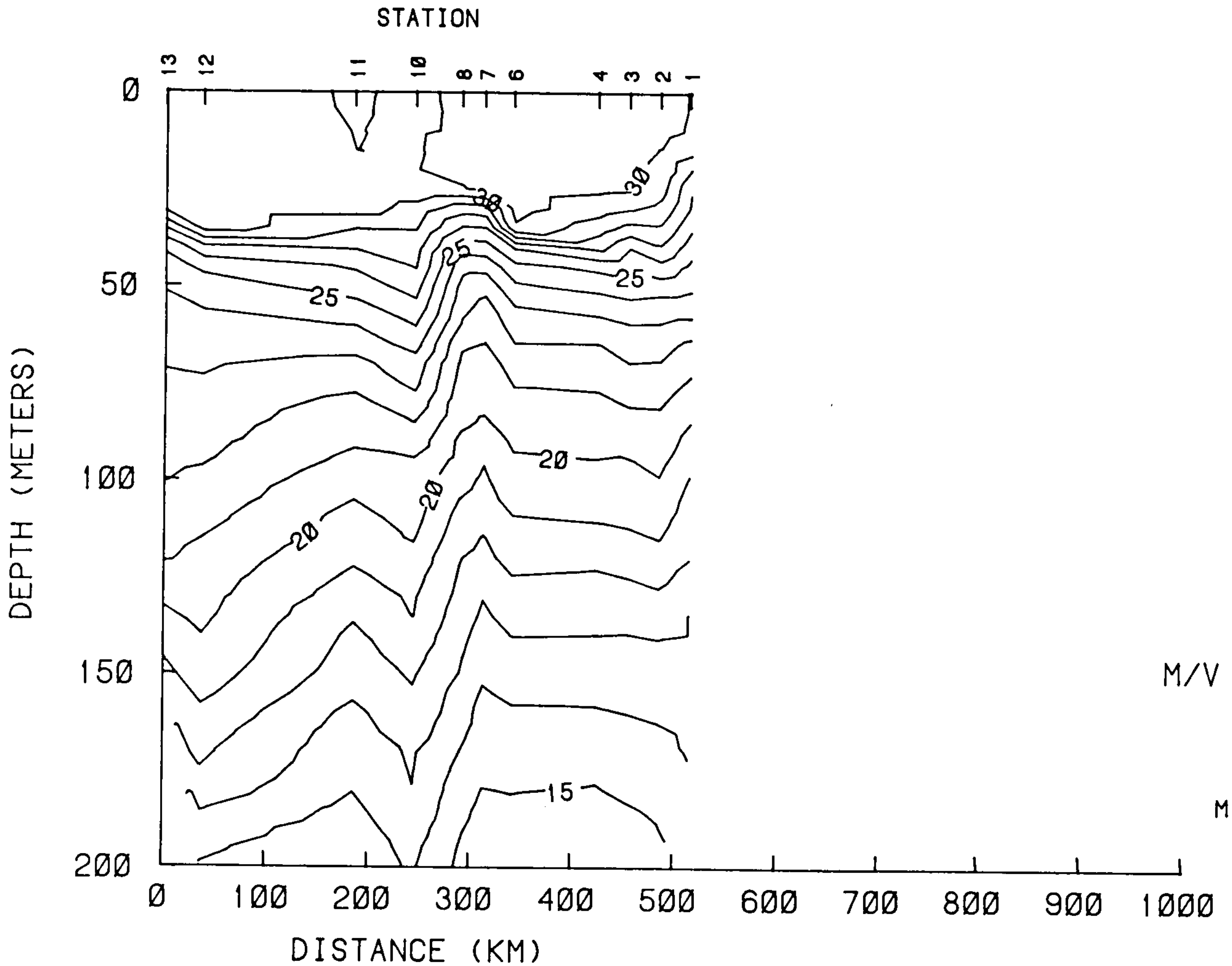
PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-21

M/V SENATOR CRUISE 87-22 9/11/87 TO 9/11/87

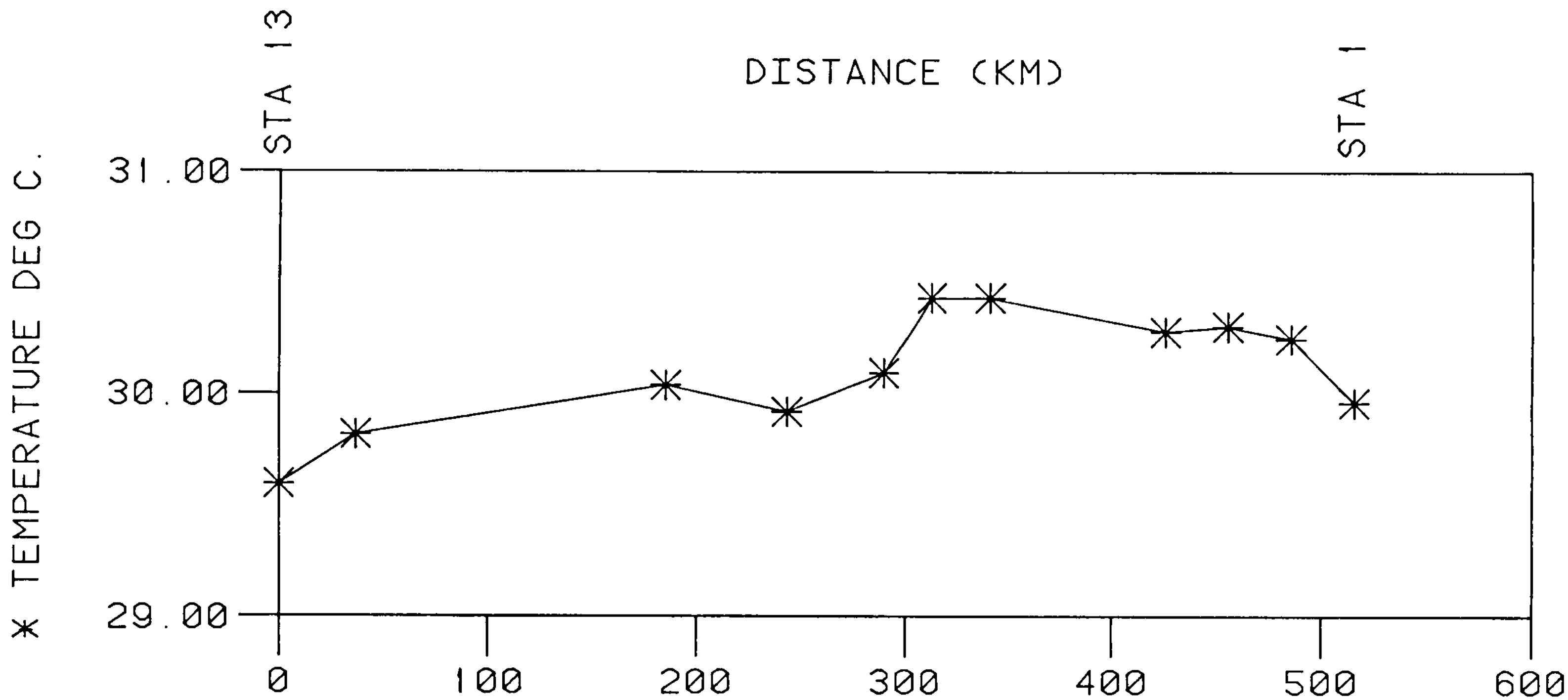




M/V SENATOR CRUISE 87-22
9/11/87 TO 9/11/87
STATIONS 1 TO 13
TEMPERATURE DEG C
MIN = 5.33 MAX = 30.46

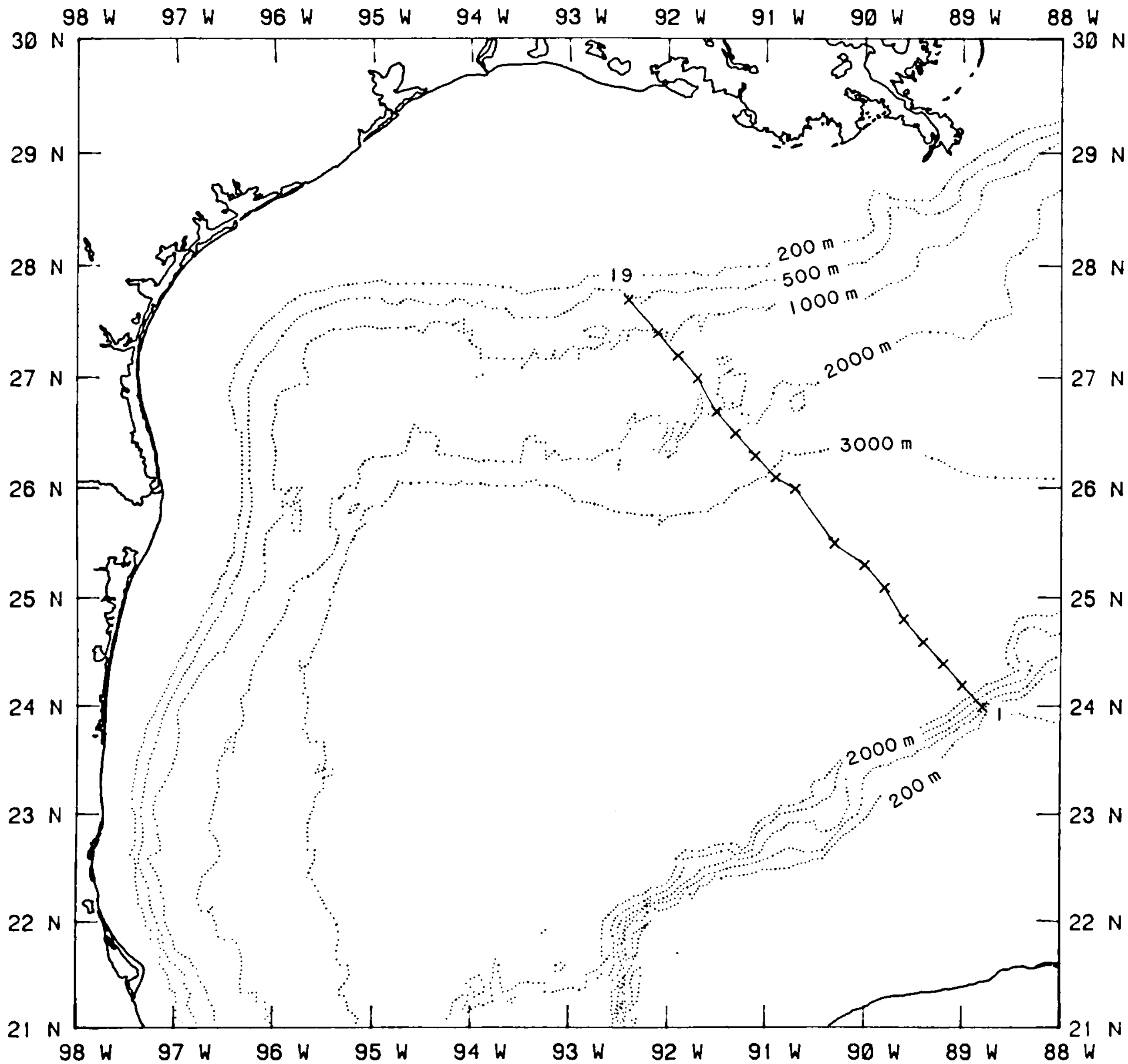


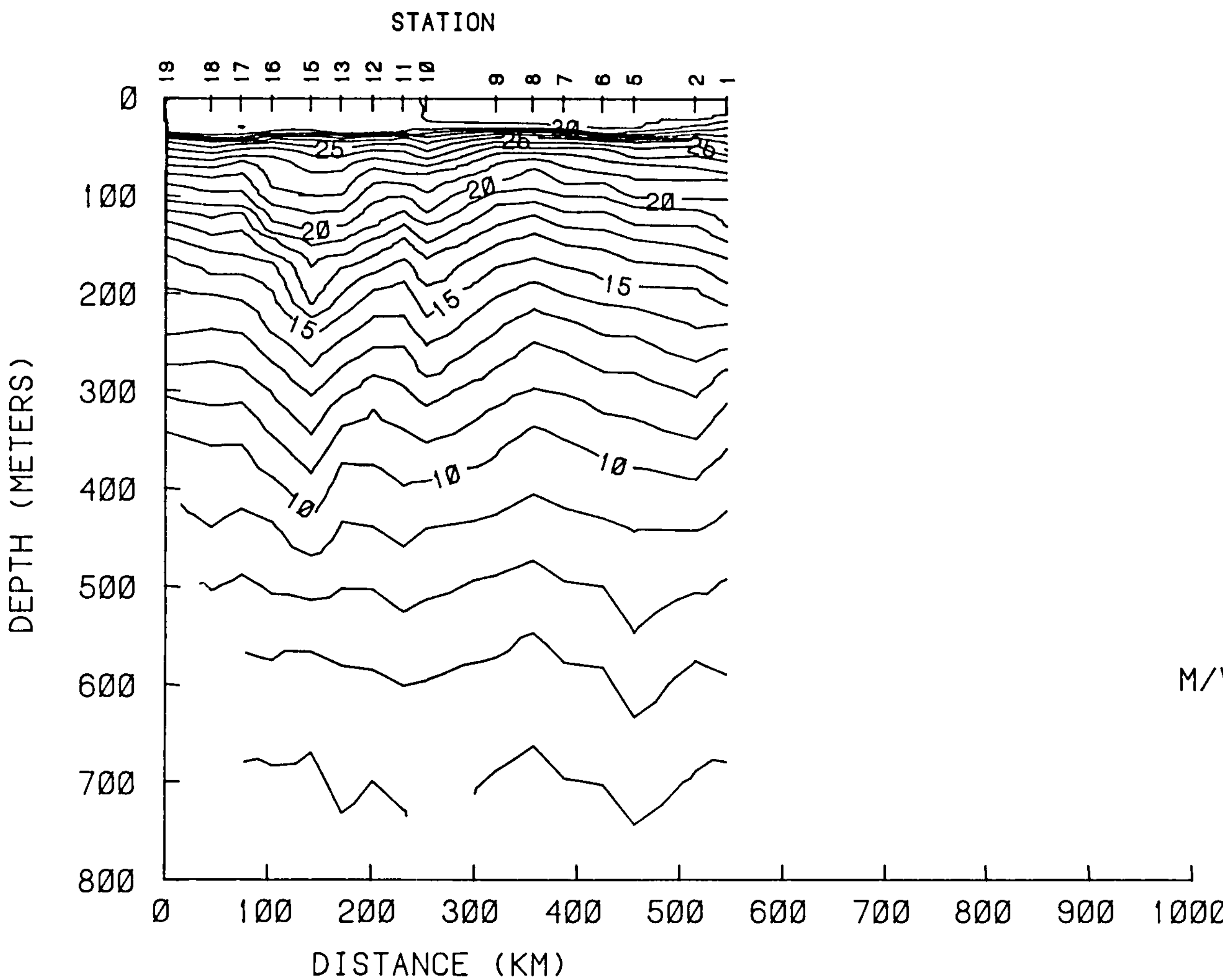
M/V SENATOR CRUISE 87-22
9/11/87 TO 9/11/87
STATIONS 1 TO 13
TEMPERATURE DEG C
MIN = 14.23 MAX = 30.46



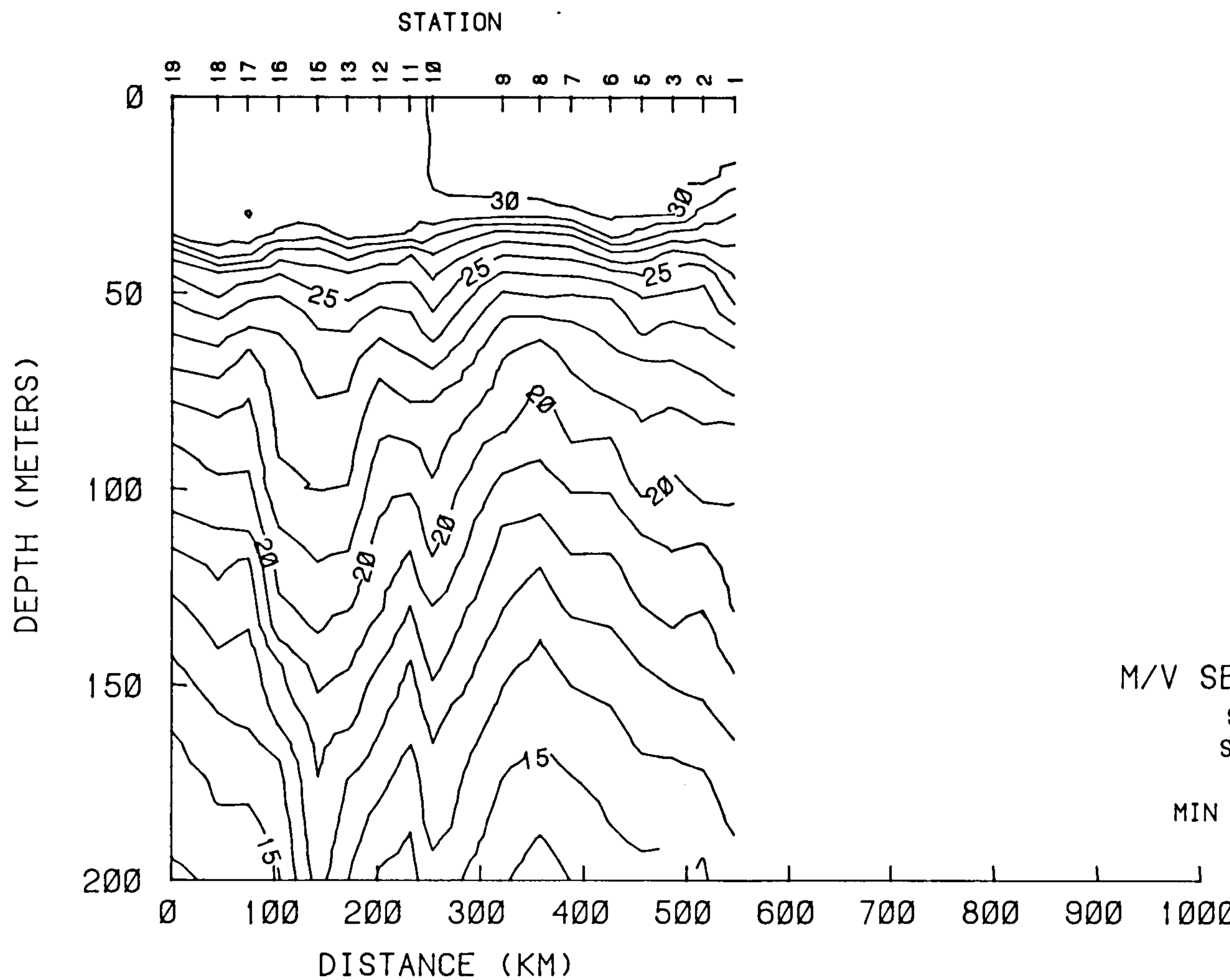
PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-22

M/V SENATOR CRUISE 87-23 9/21/87 TO 9/22/87





M/V SENATOR CRUISE 87-23
9/21/87 TO 9/22/87
STATIONS 1 TO 19
TEMPERATURE DEG C
MIN = 5.45 MAX = 30.65



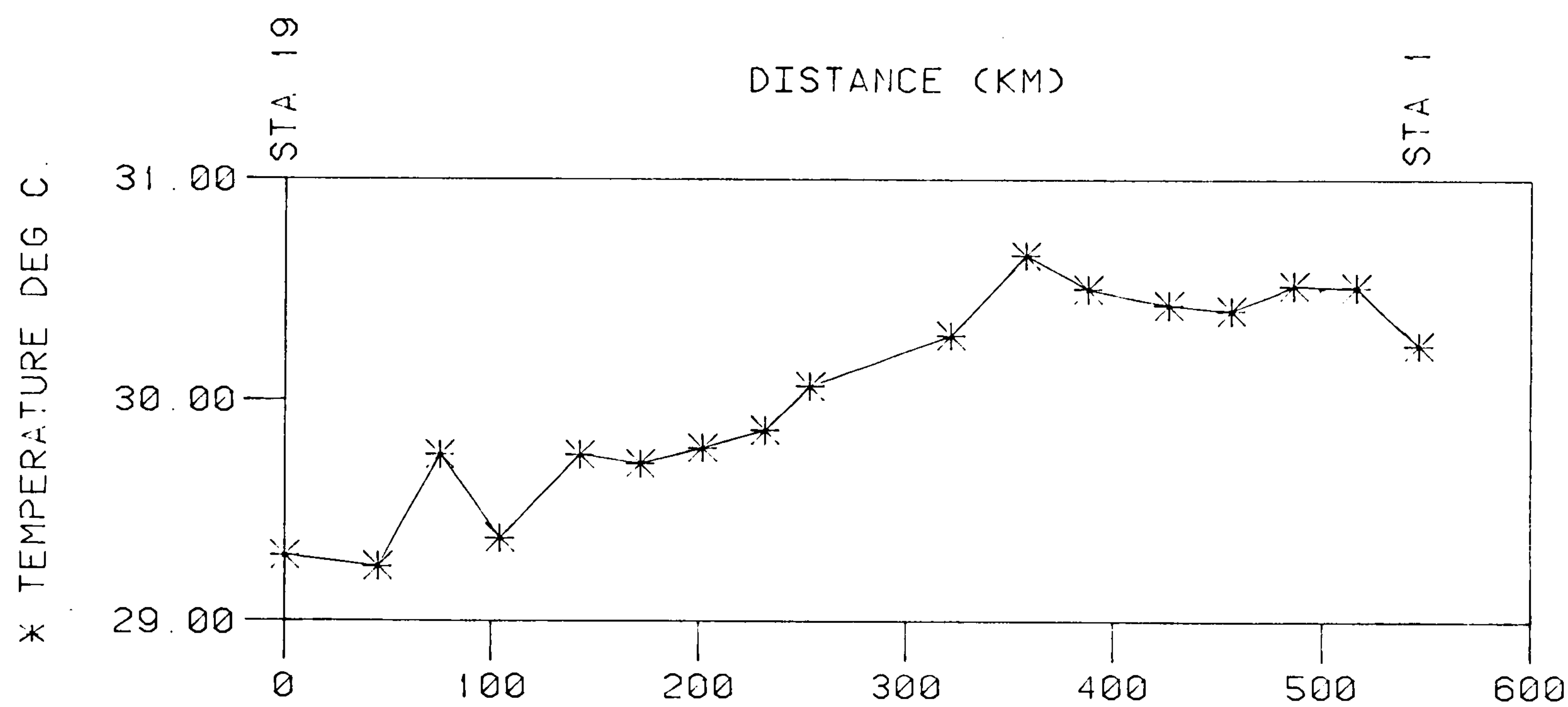
M/V SENATOR CRUISE 87-23

9/21/87 TO 9/22/87

STATIONS 1 TO 19

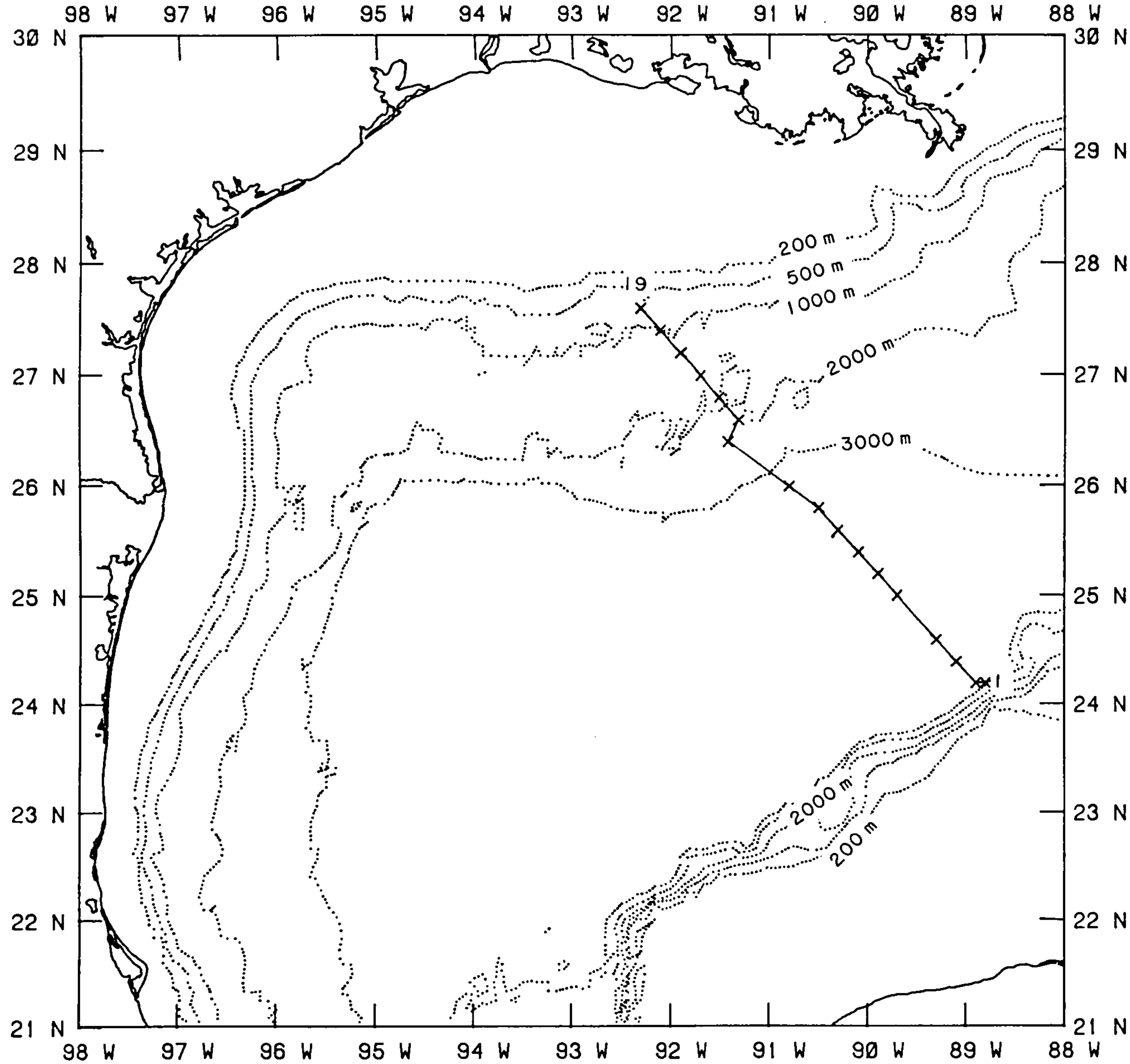
TEMPERATURE DEG C

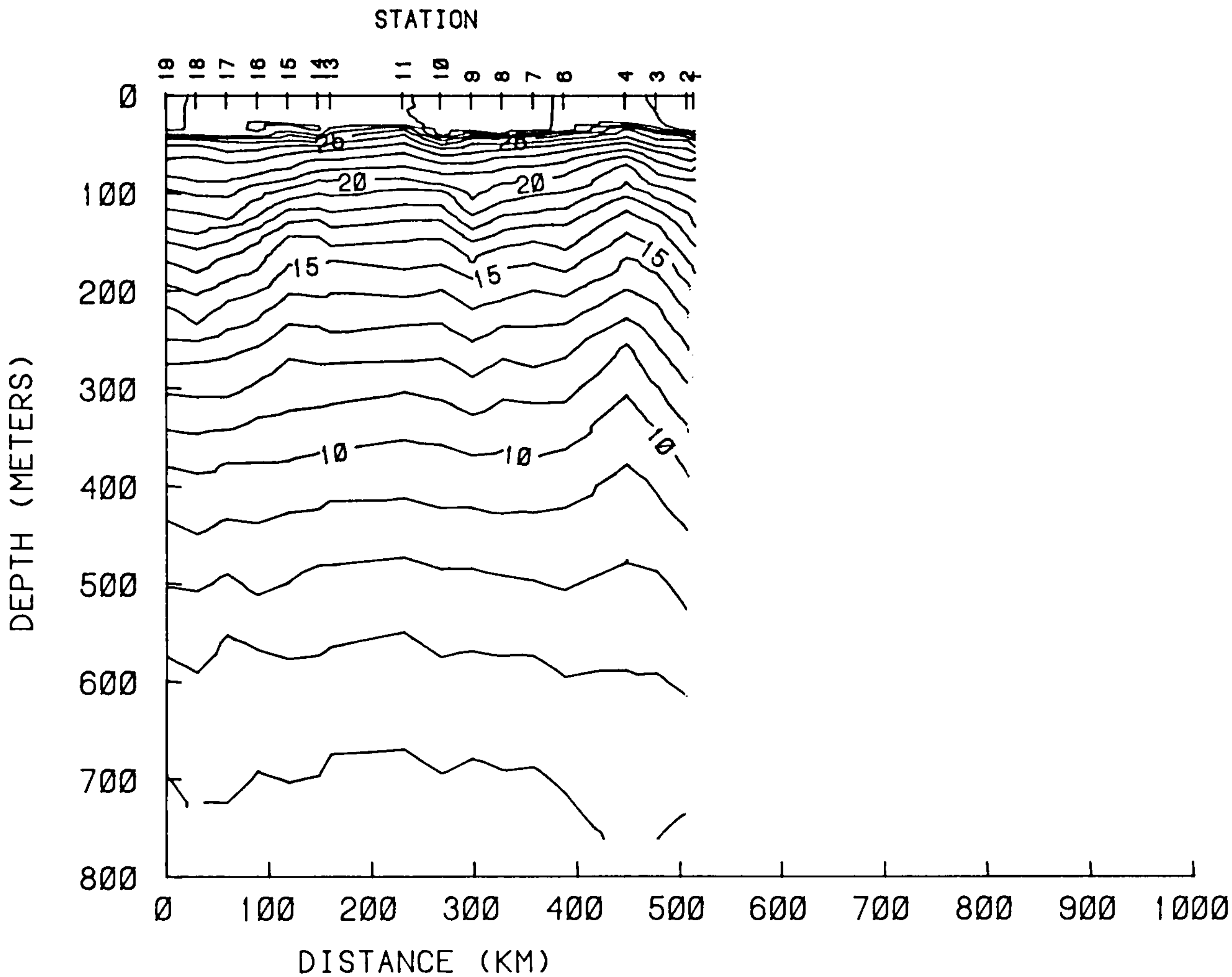
MIN = 13.49 MAX = 30.65

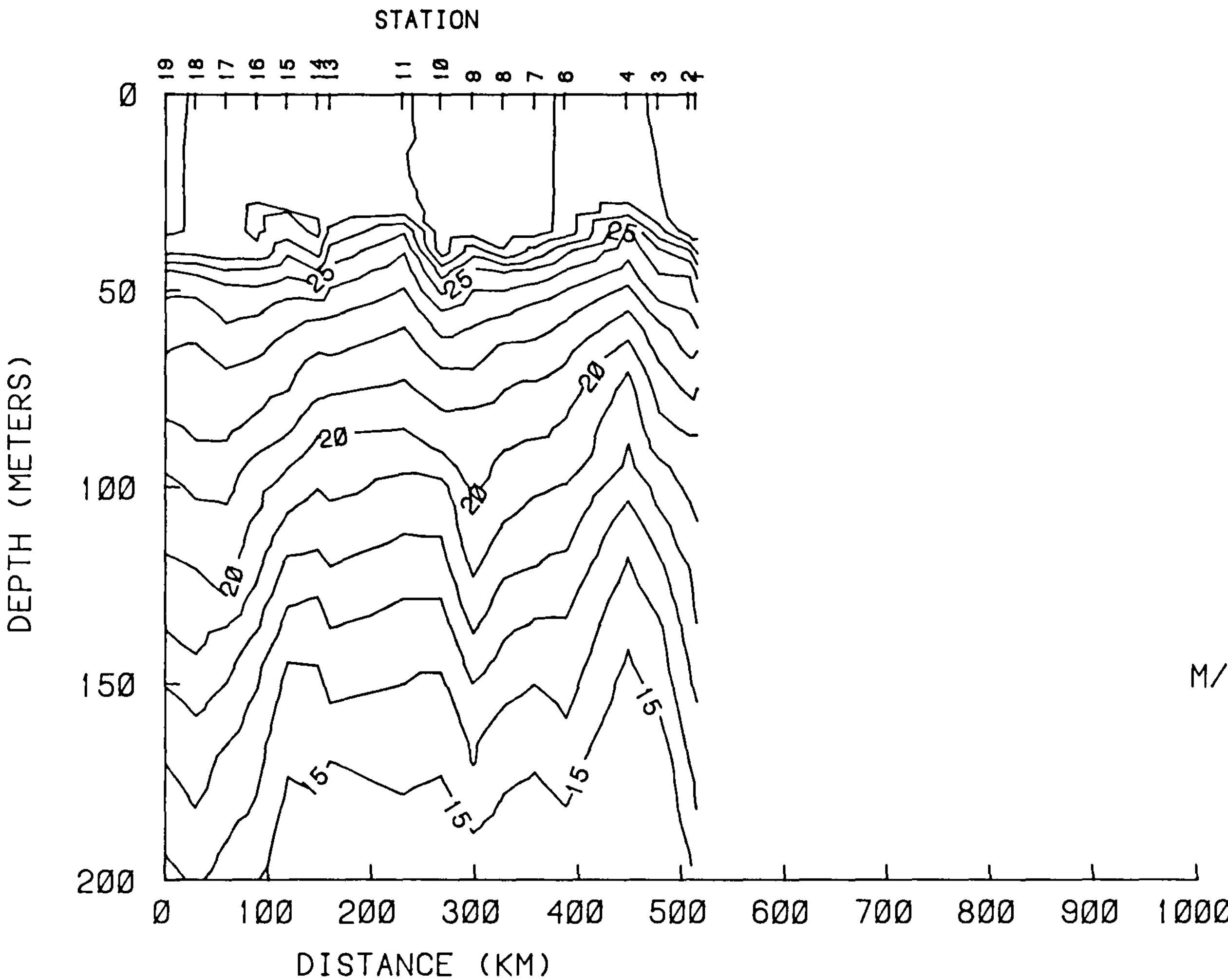


PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-23

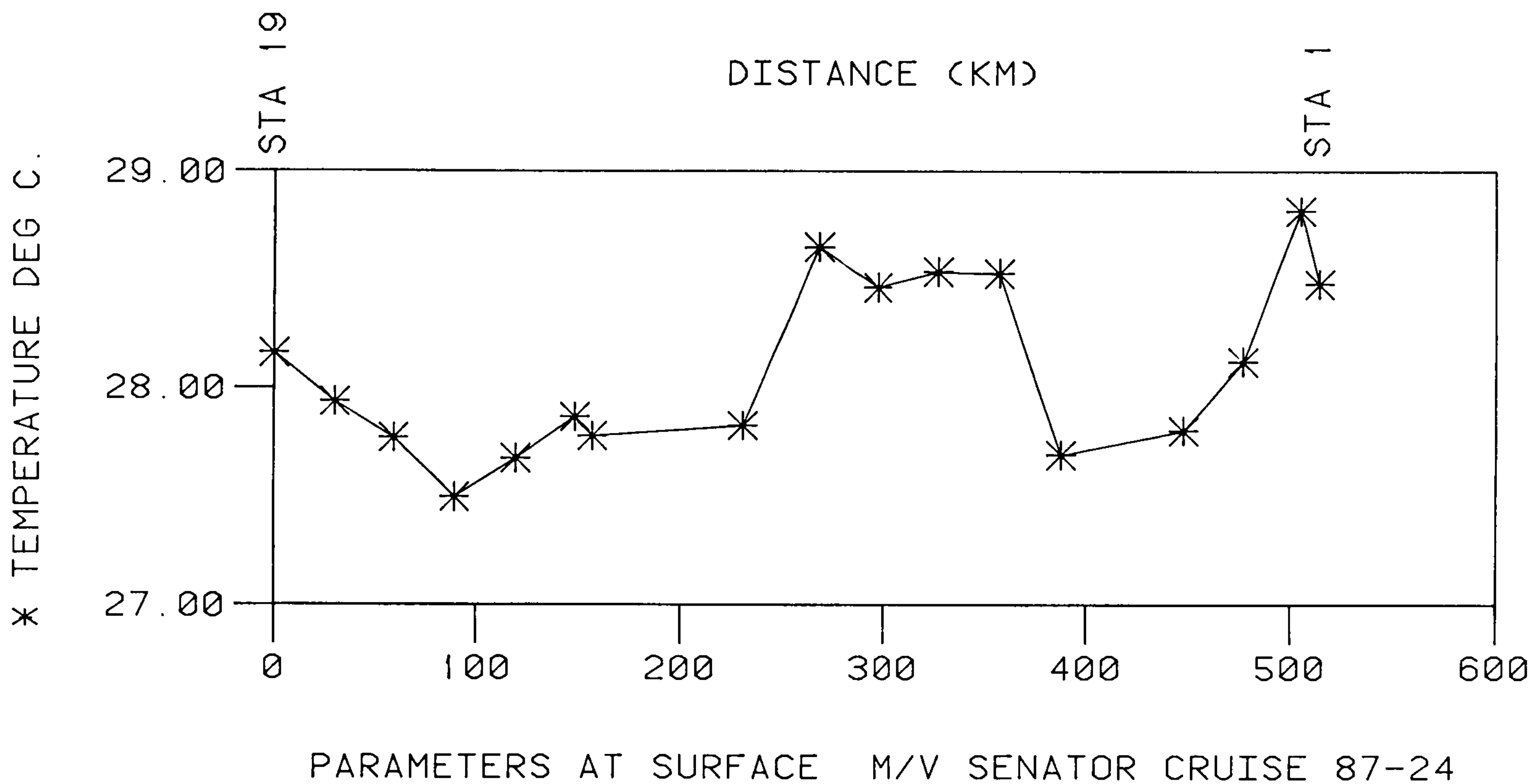
M/V SENATOR CRUISE 87-24 10/ 4/87 TO 10/ 5/87




STATION
19 18 17 16 15 14 13 11 10 9 8 7 6 4 3 2
20
20
20
20
15
15
15
10
10
10
DEPTH (METERS)
0
100
200
300
400
500
600
700
800
DISTANCE (KM)
0
100
200
300
400
500
600
700
800
900
1000

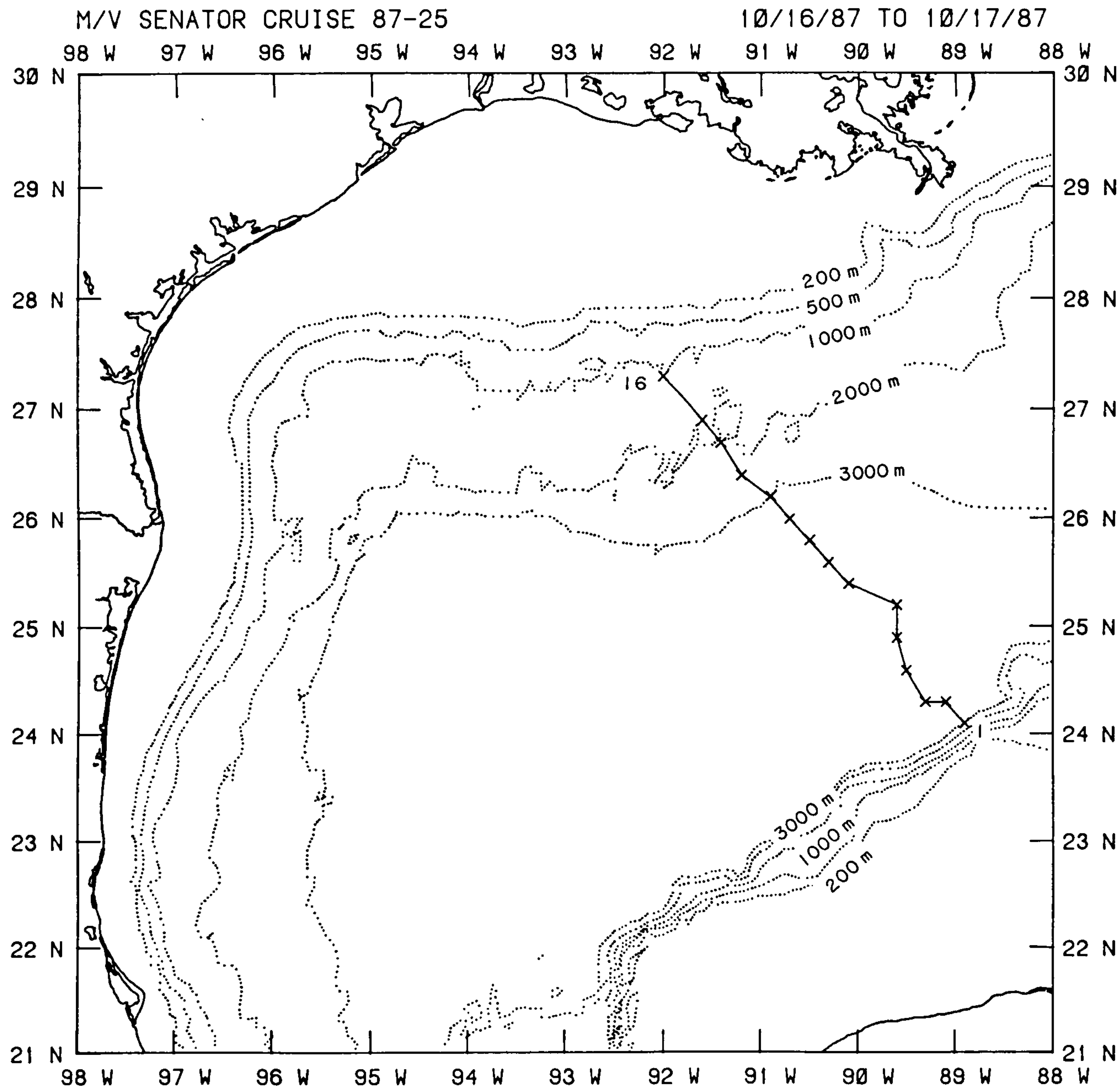


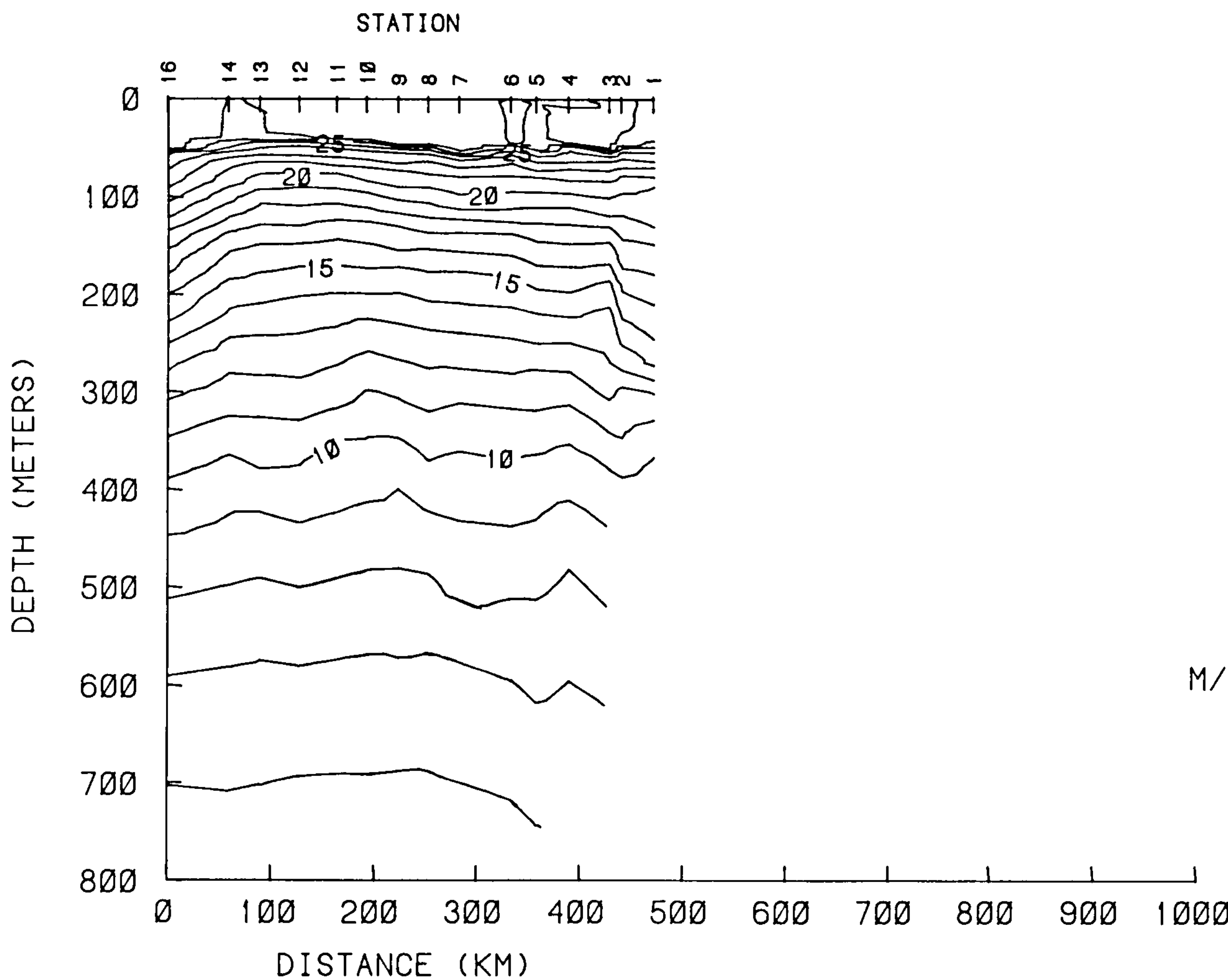
M/V SENATOR CRUISE 87-24
10/ 4/87 TO 10/ 5/87
STATIONS 1 TO 19
TEMPERATURE DEG C
MIN = 12.94 MAX = 28.83



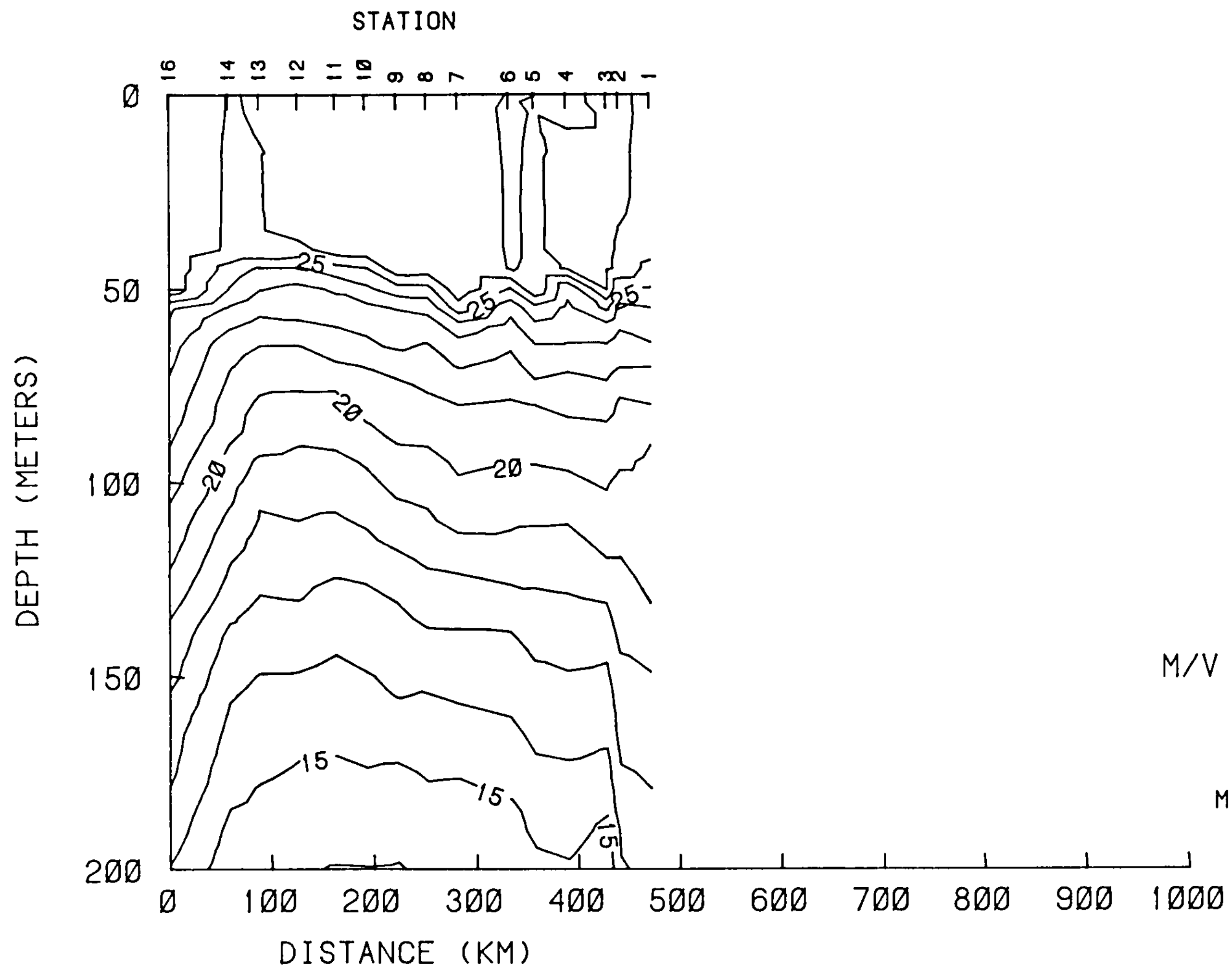
STA 19
DISTANCE (KM)
STA 1
* TEMPERATURE DEG C.
29.00
28.00
27.00
0
100
200
300
400
500
600
PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-24

566

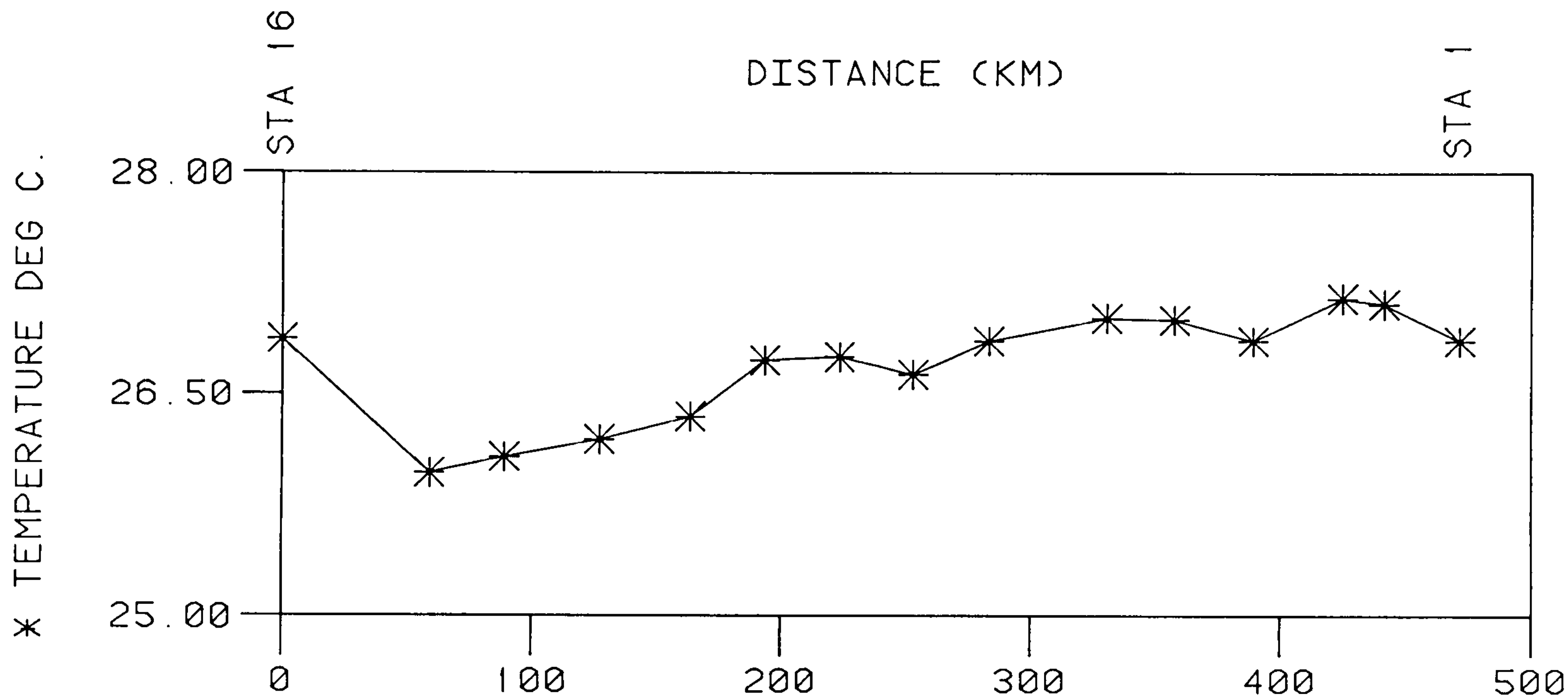

M/V SENATOR CRUISE 87-25
10/16/87 TO 10/17/87
98 W
97 W
96 W
95 W
94 W
93 W
92 W
91 W
90 W
89 W
88 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
16
1
3000 m
1000 m
200 m



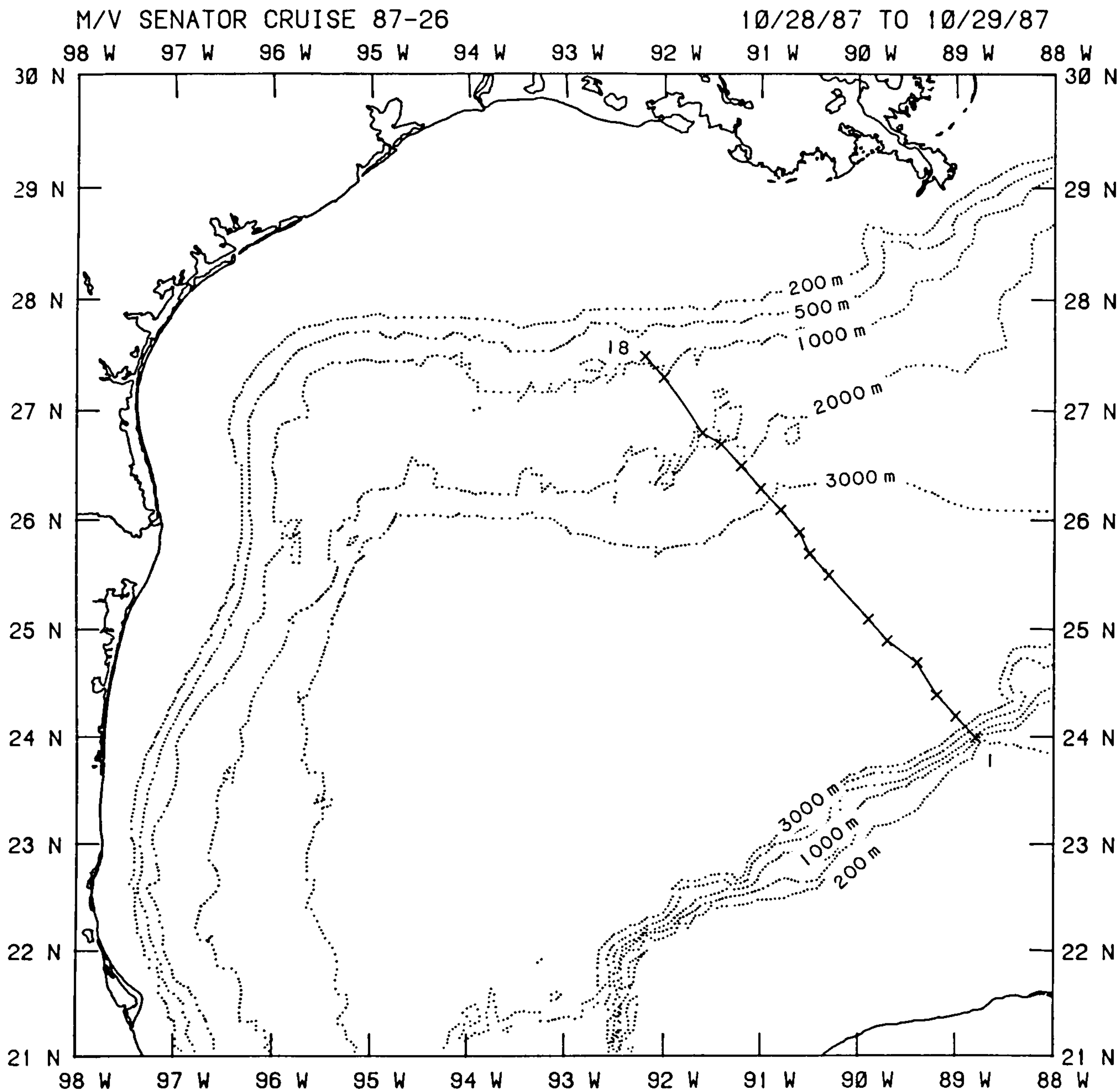
M/V SENATOR CRUISE 87-25
10/16/87 TO 10/17/87
STATIONS 1 TO 16
TEMPERATURE DEG C
MIN = 5.32 MAX = 27.15

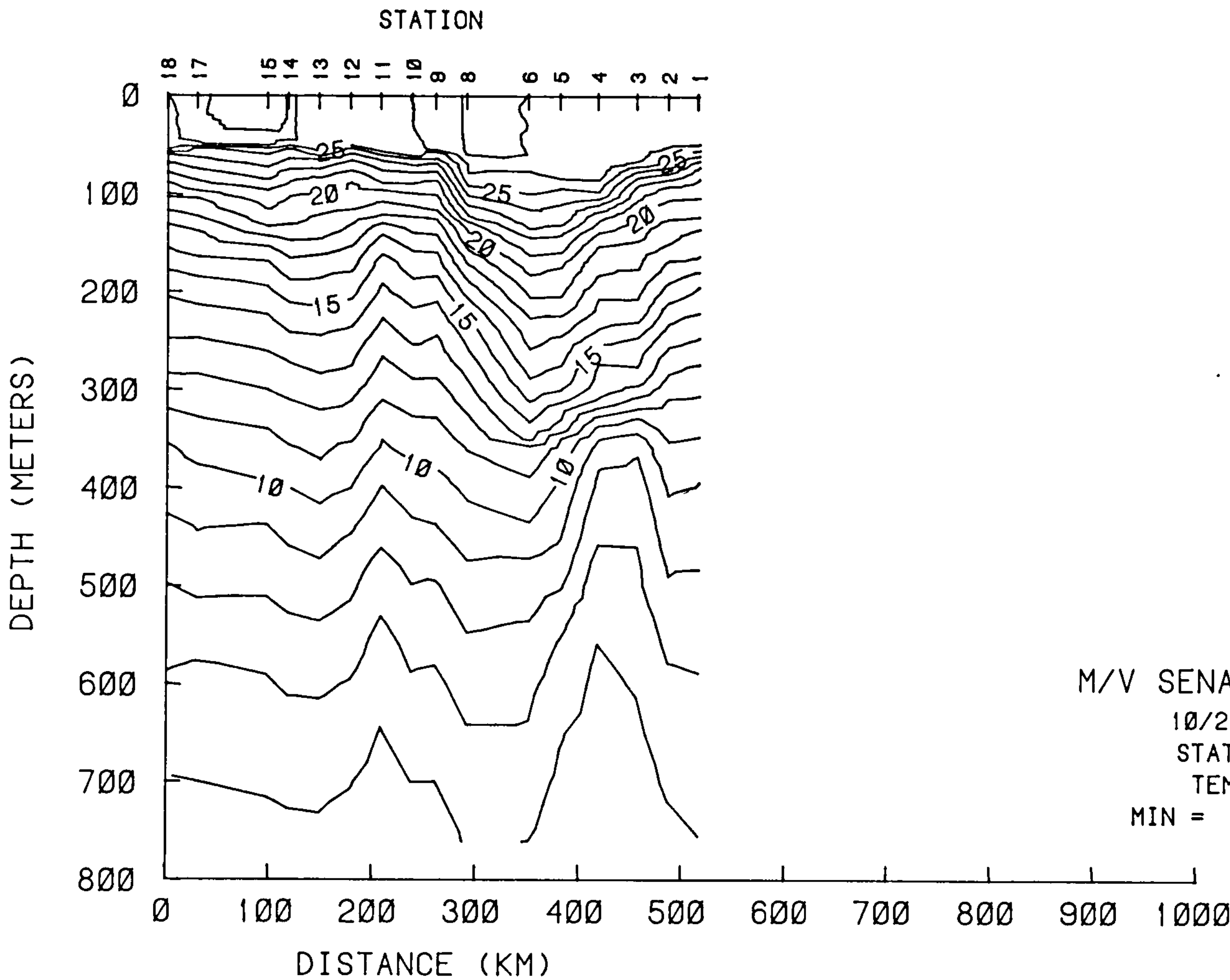


M/V SENATOR CRUISE 87-25
10/16/87 TO 10/17/87
STATIONS 1 TO 16
TEMPERATURE DEG C
MIN = 13.93 MAX = 27.15

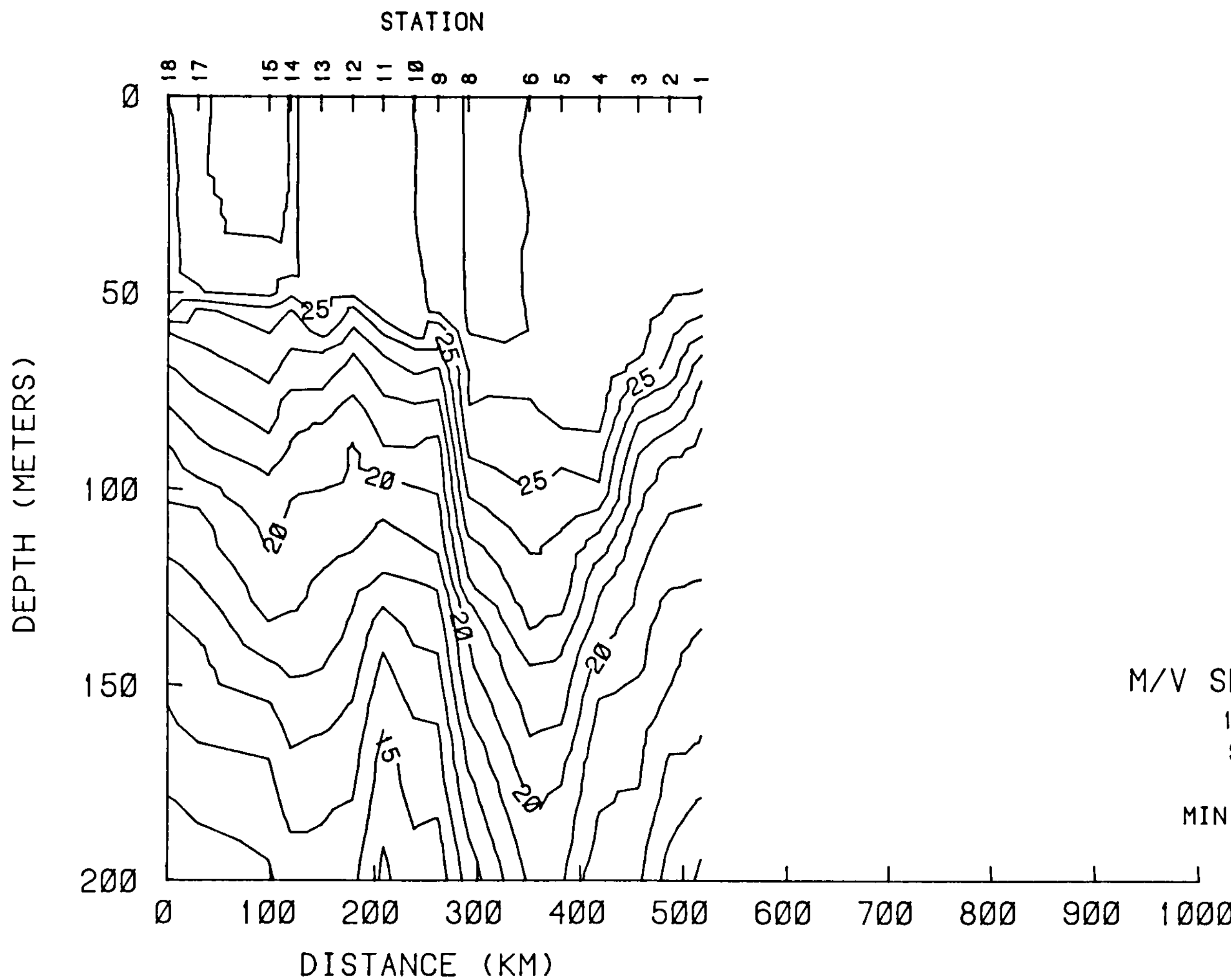


PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-25

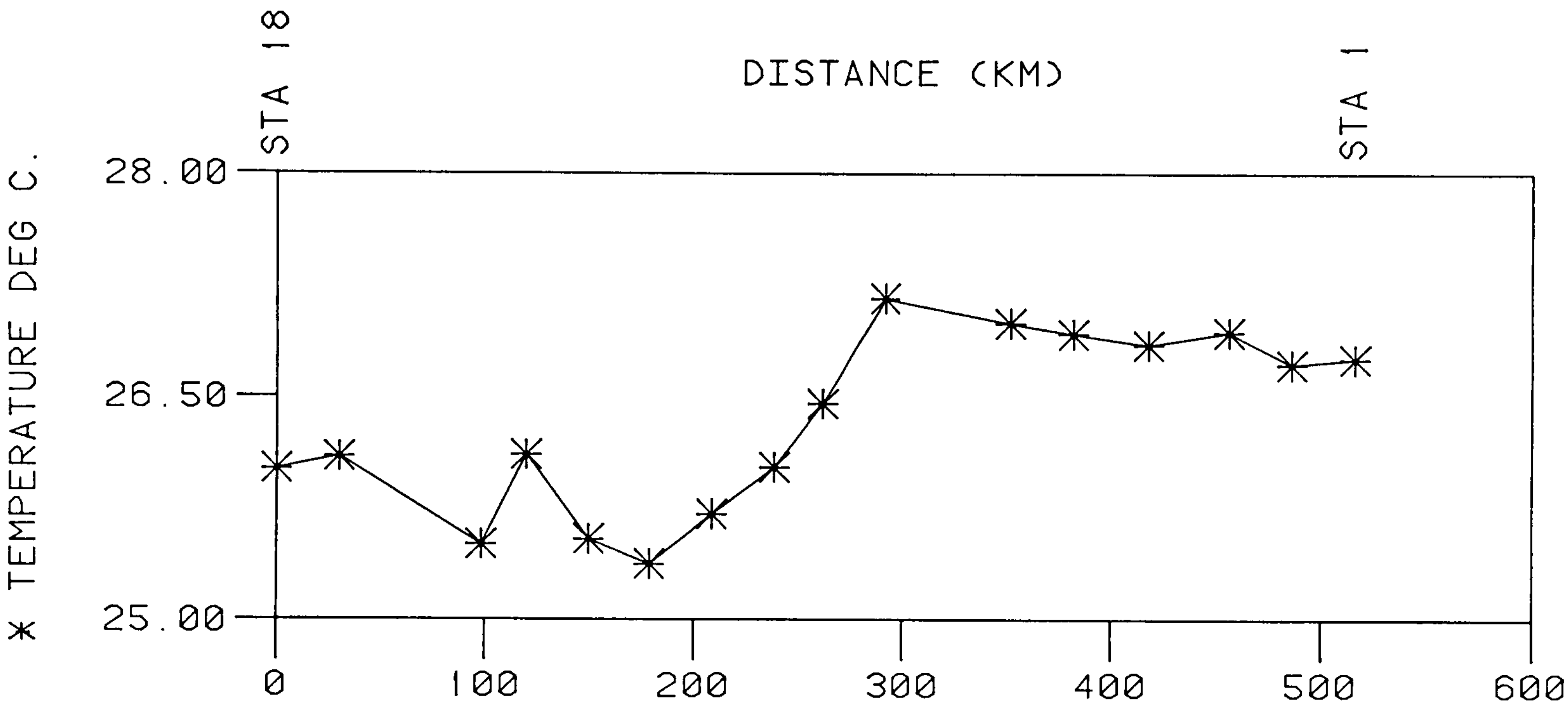

M/V SENATOR CRUISE 87-26
10/28/87 TO 10/29/87
98 W 97 W 96 W 95 W 94 W 93 W 92 W 91 W 90 W 89 W 88 W
30 N 29 N 28 N 27 N 26 N 25 N 24 N 23 N 22 N 21 N
200 m
500 m
1000 m
2000 m
3000 m
3000 m
1000 m
200 m
18
1



M/V SENATOR CRUISE 87-26
10/28/87 TO 10/29/87
STATIONS 1 TO 18
TEMPERATURE DEG C
MIN = 5.15 MAX = 27.16

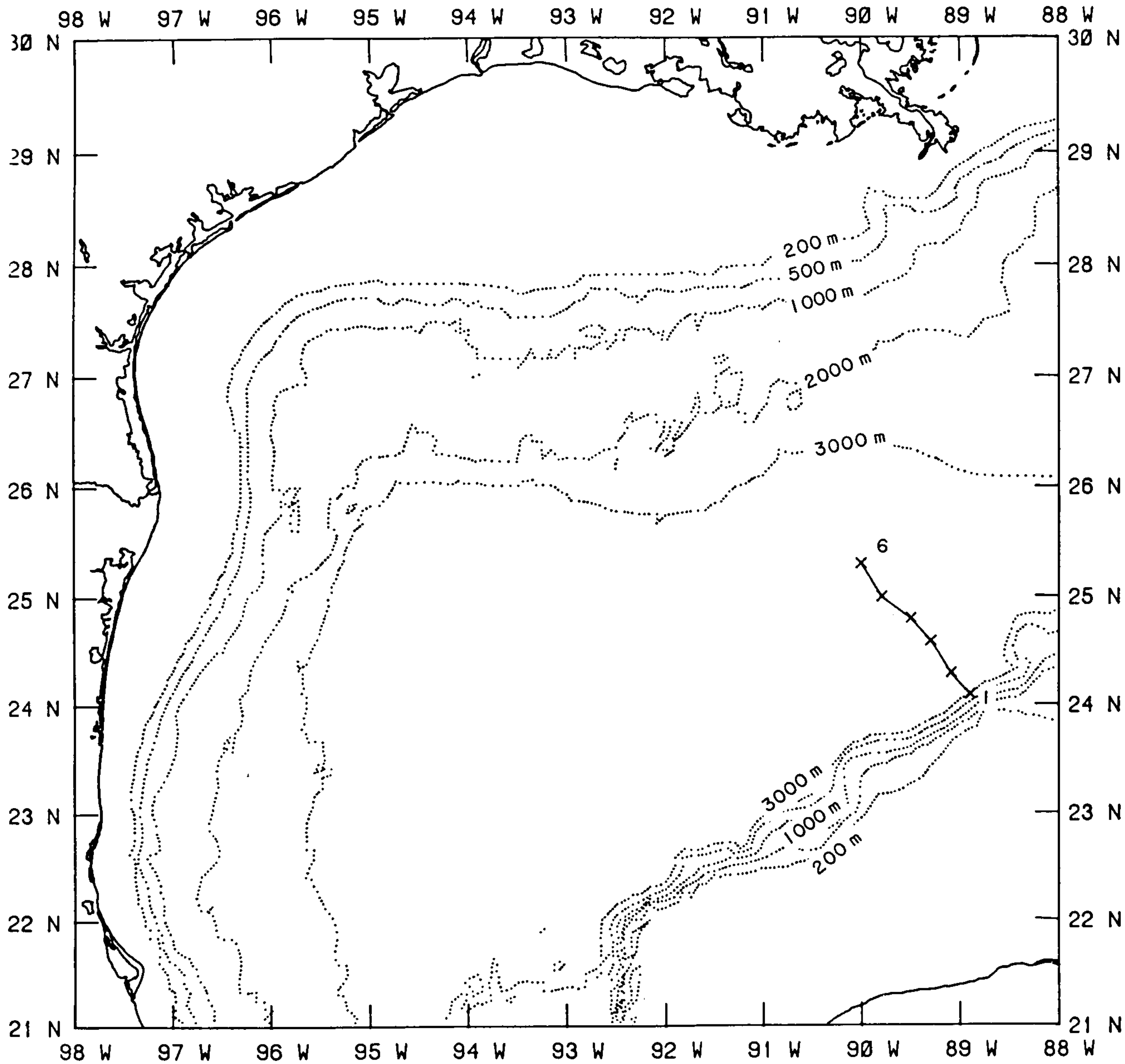


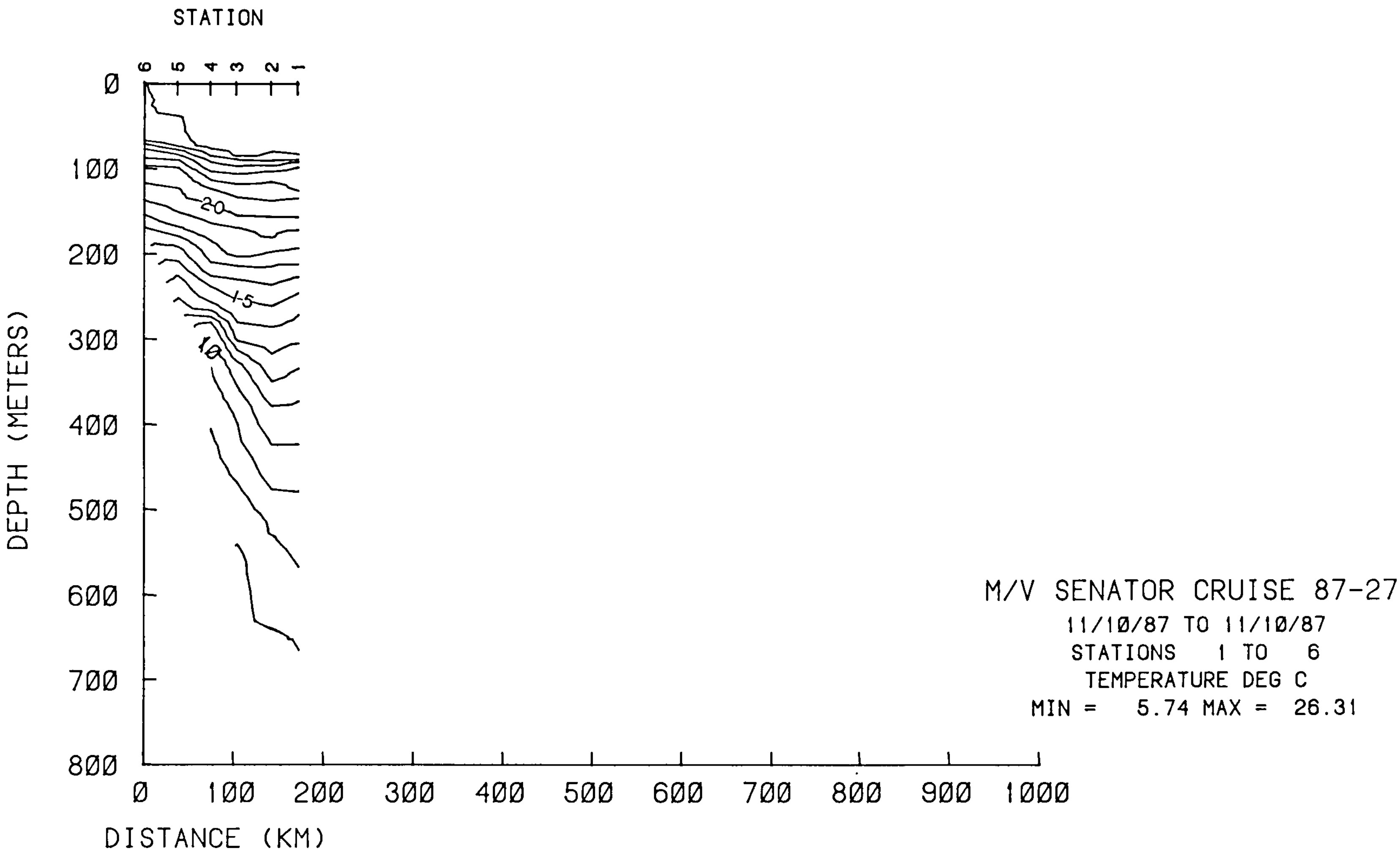
M/V SENATOR CRUISE 87-26
10/28/87 TO 10/29/87
STATIONS 1 TO 18
TEMPERATURE DEG C
MIN = 13.78 MAX = 27.16

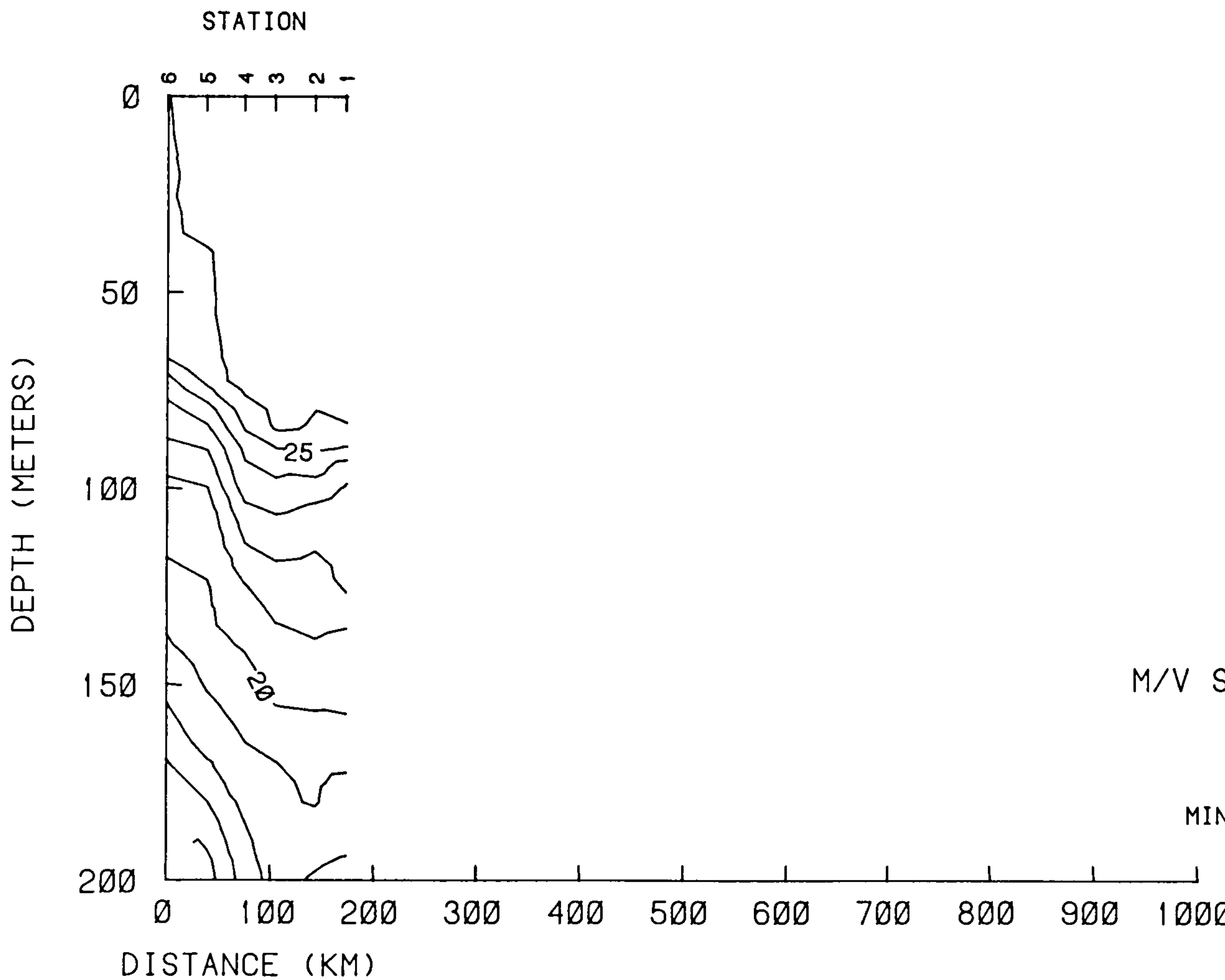


PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-26

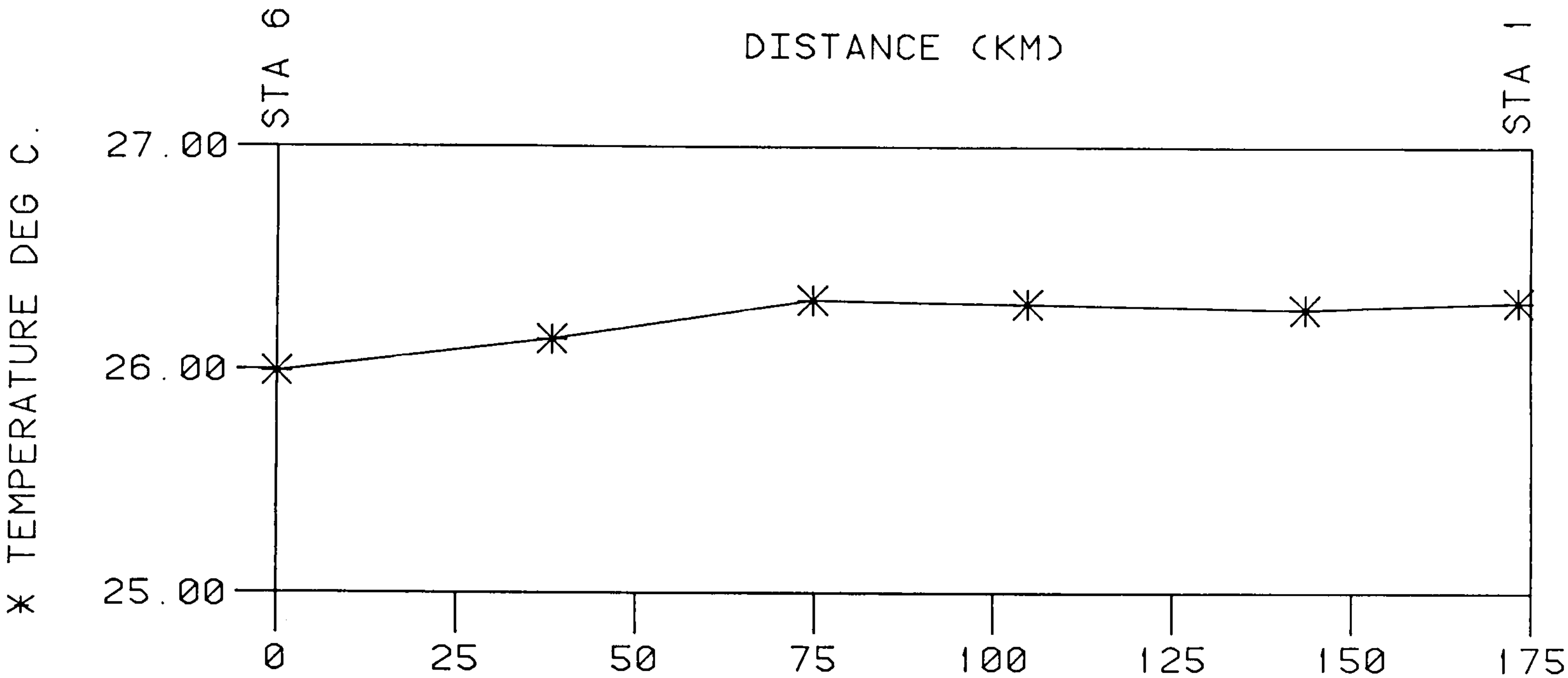
M/V SENATOR CRUISE 87-27 11/10/87 TO 11/10/87




STATION
6 5 4 3 2 1
20
15
10
DEPTH (METERS)
0
100
200
300
400
500
600
700
800
0 100 200 300 400 500 600 700 800 900 1000
DISTANCE (KM)
M/V SENATOR CRUISE 87-27
11/10/87 TO 11/10/87
STATIONS 1 TO 6
TEMPERATURE DEG C
MIN = 5.74 MAX = 26.31



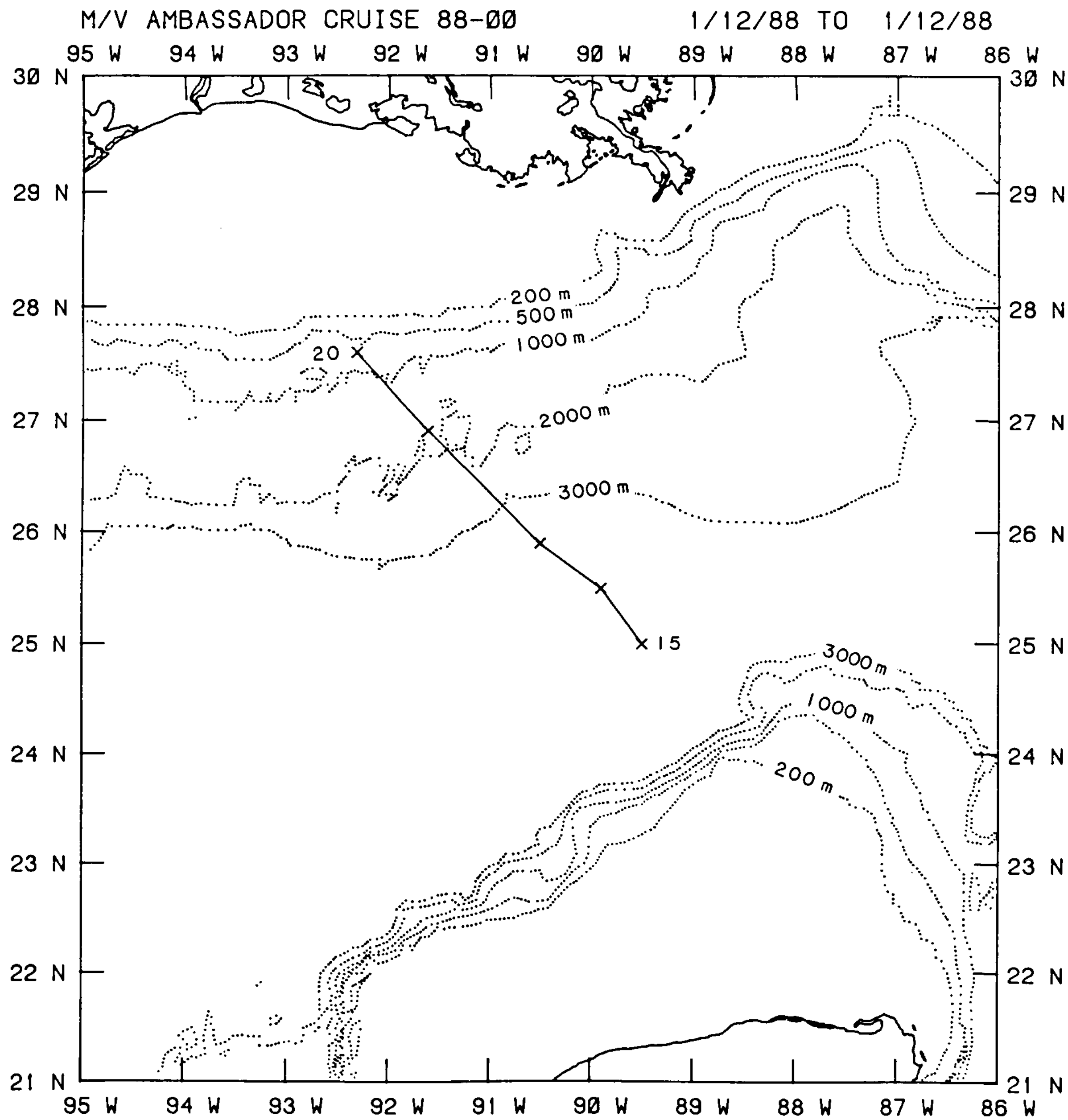
M/V SENATOR CRUISE 87-27
11/1Ø/87 TO 11/1Ø/87
STATIONS 1 TO 6
TEMPERATURE DEG C
MIN = 15.56 MAX = 26.31

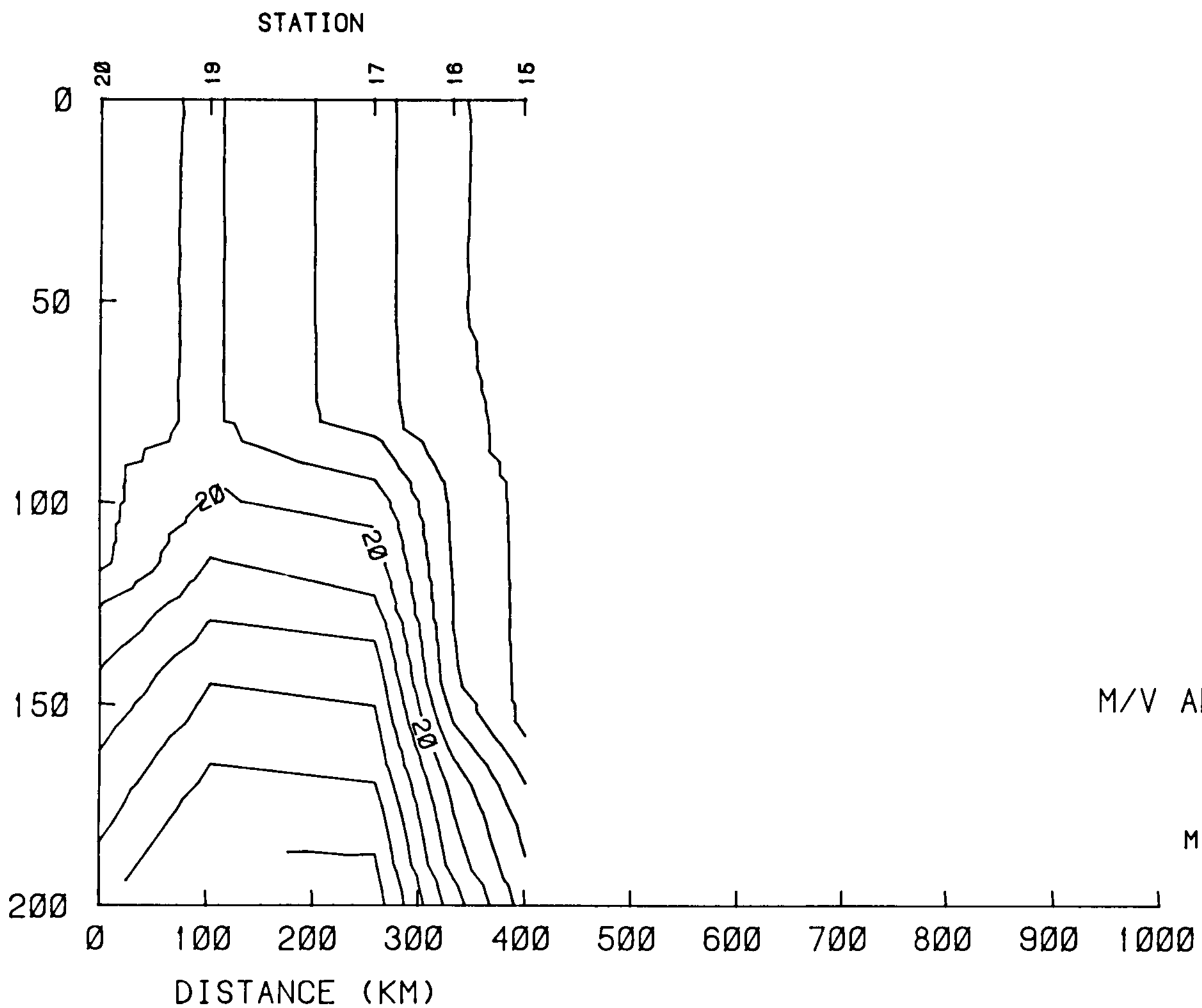


PARAMETERS AT SURFACE M/V SENATOR CRUISE 87-27

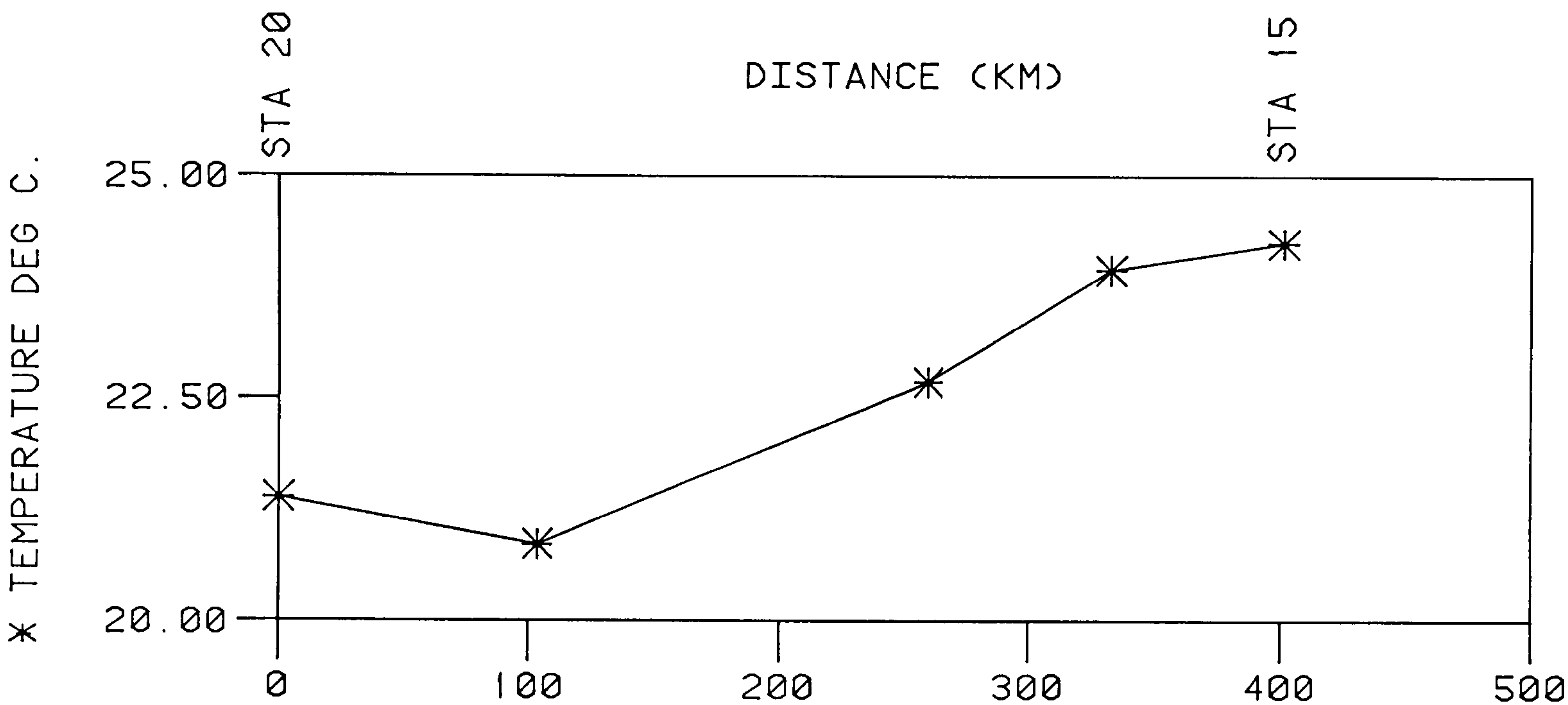
1988 SOOP DATA BY VESSEL

ID	Cruise	Dates		
AM88-00	M/V Ambassador Cruise 88-00	01/12/88	to	01/12/88
AM88-02	M/V Ambassador Cruise 88-02	01/23/88	to	01/24/88
AM88-03	M/V Ambassador Cruise 88-03	02/03/88	to	02/04/88
AM88-04	M/V Ambassador Cruise 88-04	02/16/88	to	02/17/88
AM88-06	M/V Ambassador Cruise 88-06	03/25/88	to	03/26/88

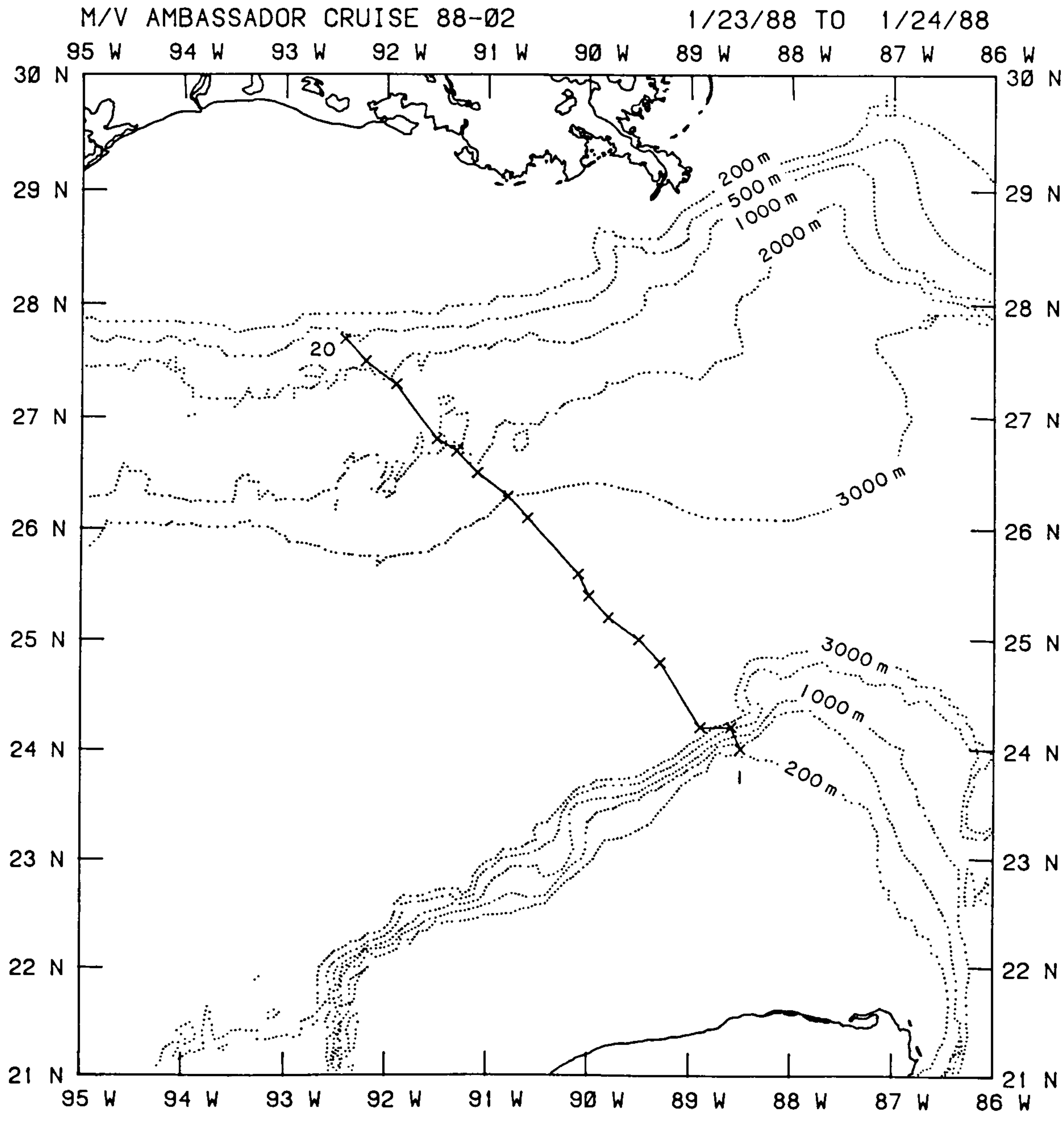

M/V AMBASSADOR CRUISE 88-00
1/12/88 TO 1/12/88
95 W
94 W
93 W
92 W
91 W
90 W
89 W
88 W
87 W
86 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
20
15
3000 m
1000 m
200 m

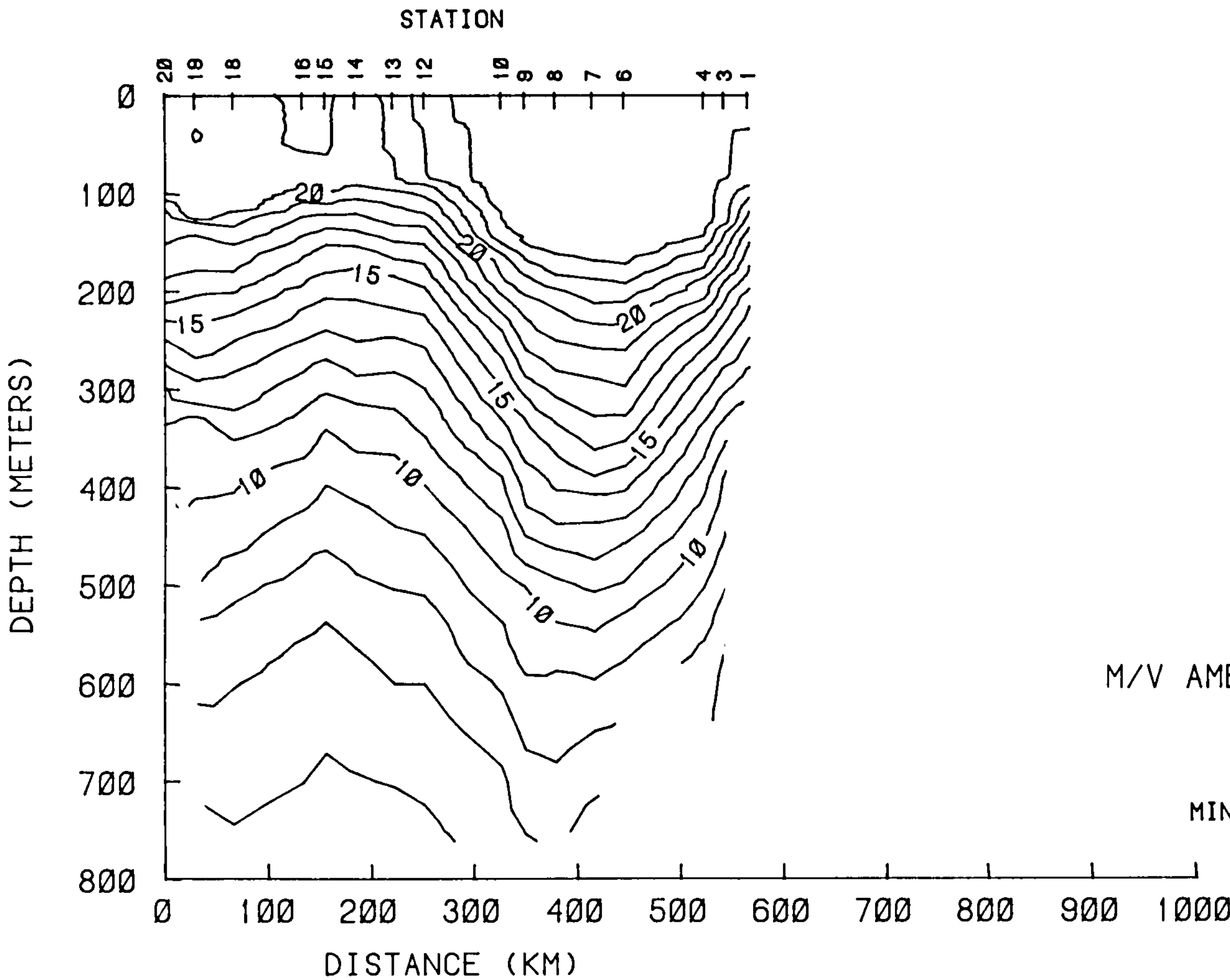


M/V AMBASSADOR CRUISE 88-00
1/12/88 TO 1/12/88
STATIONS 15 TO 20
TEMPERATURE DEG C
MIN = 14.49 MAX = 24.27

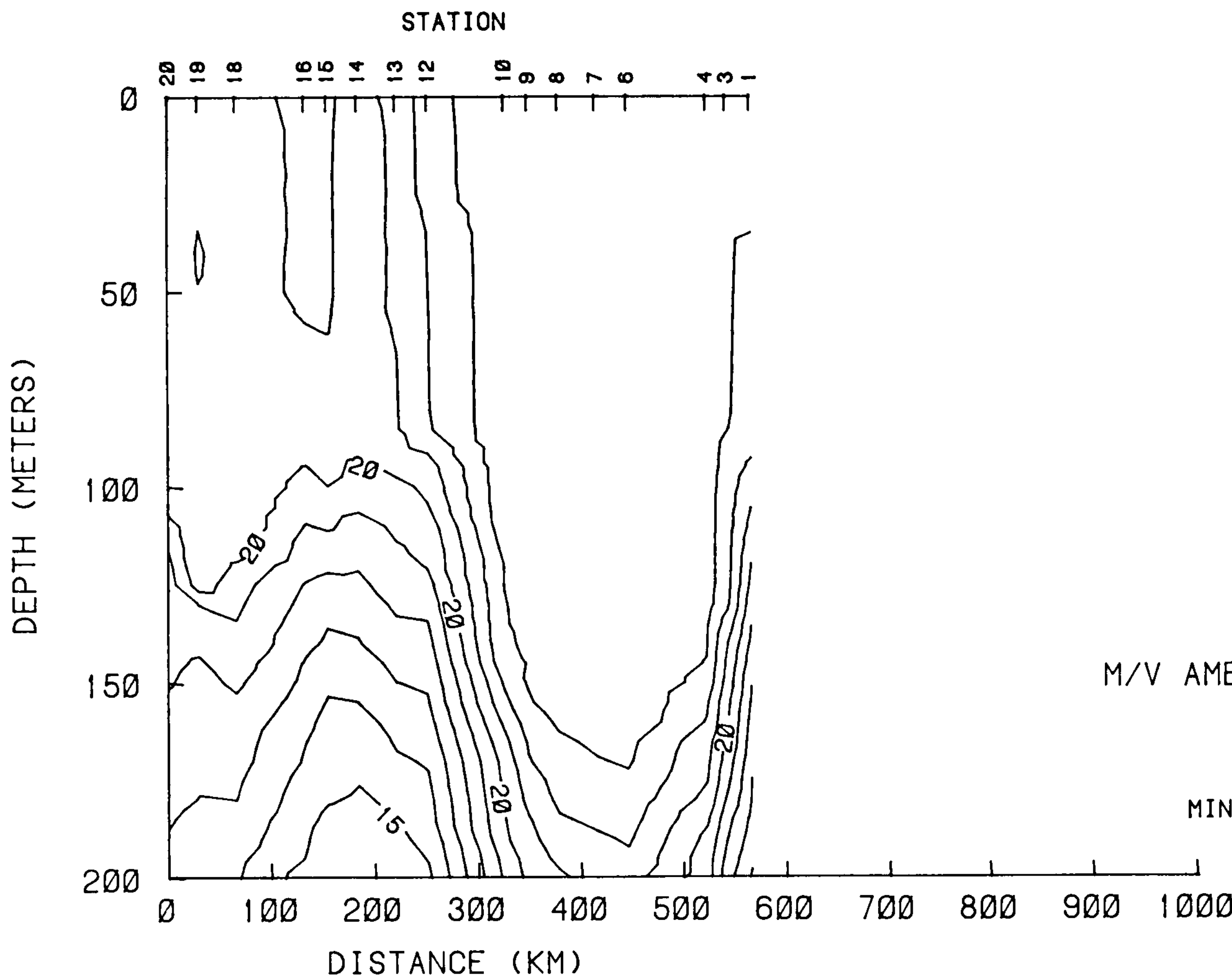


PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 88-00

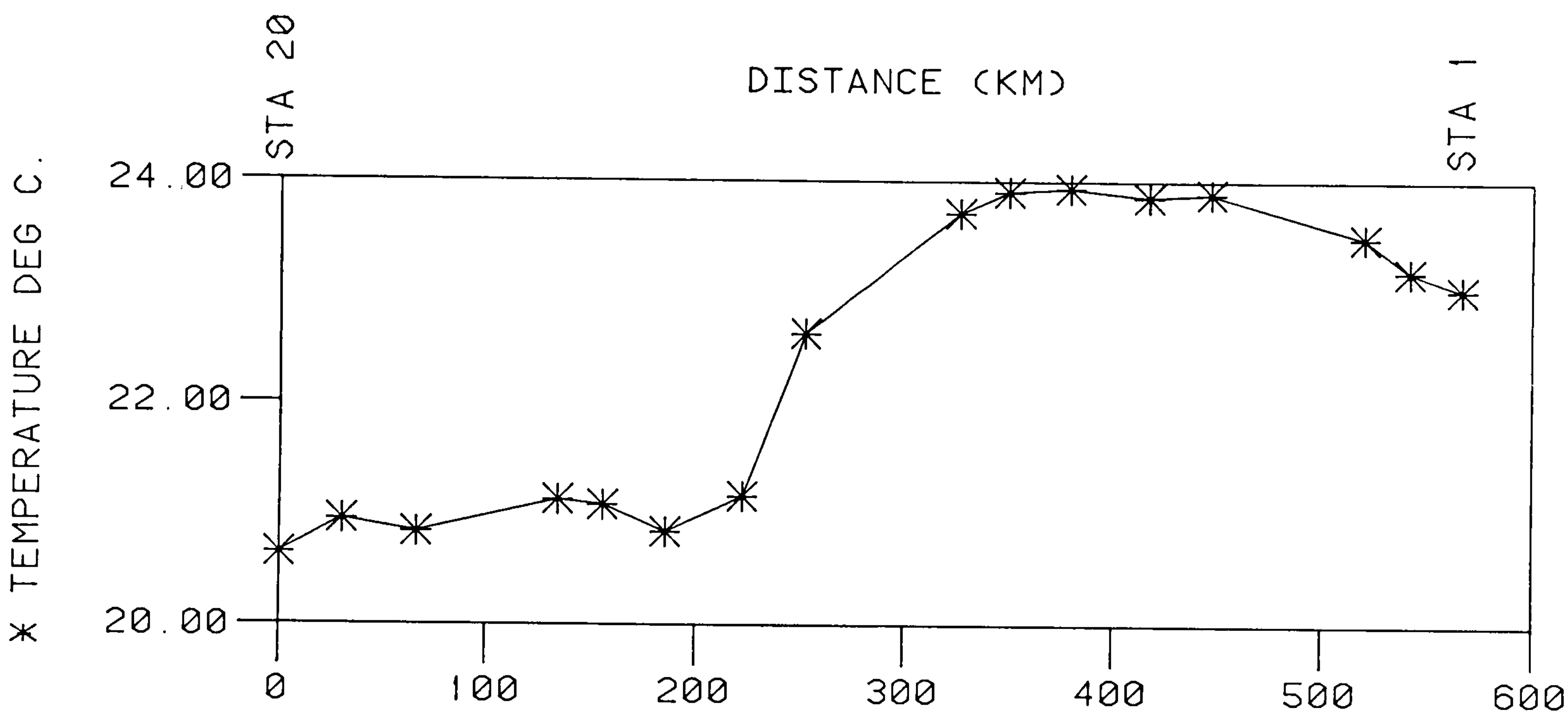

M/V AMBASSADOR CRUISE 88-Ø2
1/23/88 TO 1/24/88
95 W
94 W
93 W
92 W
91 W
9Ø W
89 W
88 W
87 W
86 W
3Ø N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
20
1
3000 m
1000 m
200 m



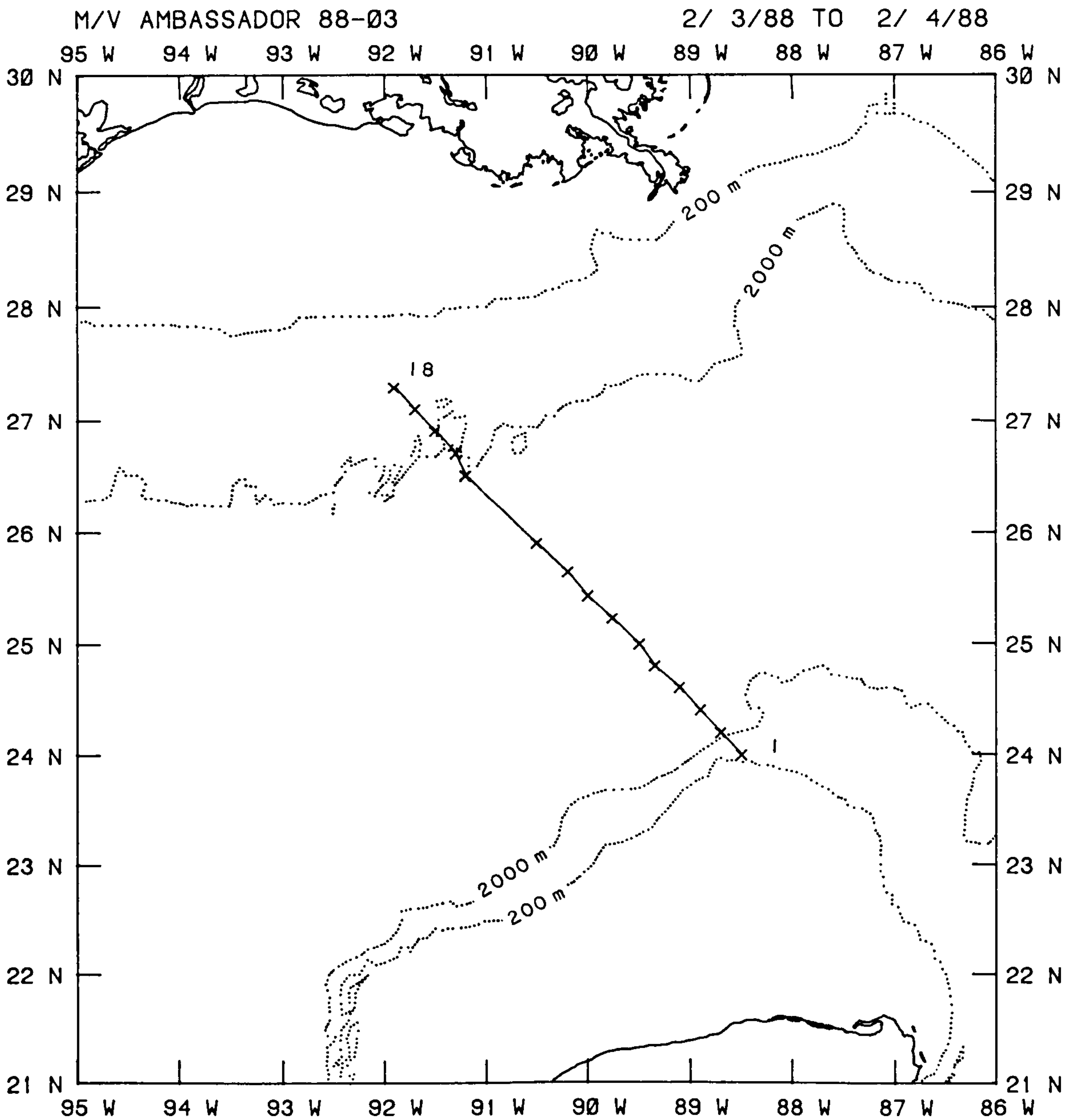
M/V AMBASSADOR CRUISE 88-02
1/23/88 TO 1/24/88
STATIONS 1 TO 20
TEMPERATURE DEG C
MIN = 5.49 MAX = 23.93



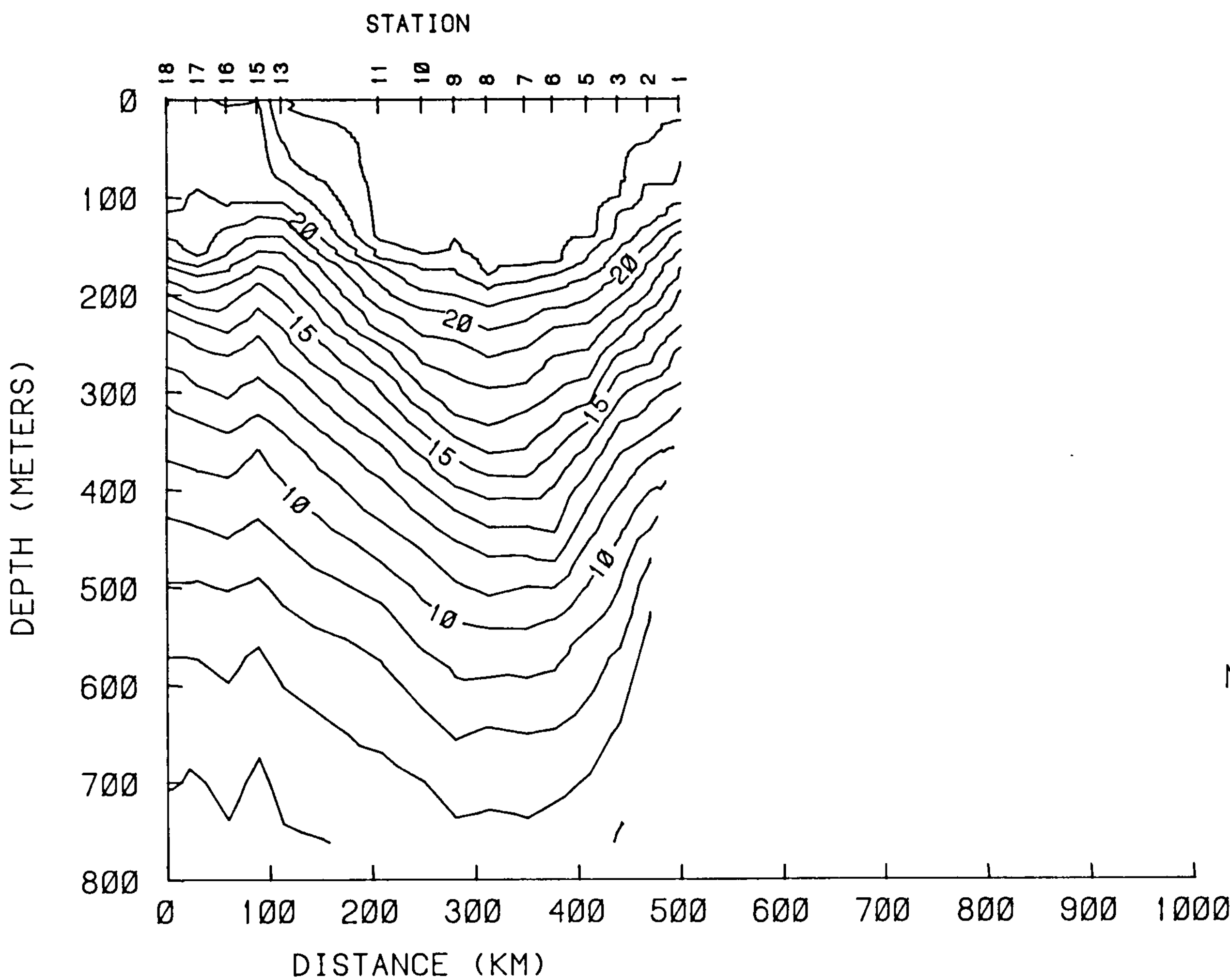
M/V AMBASSADOR CRUISE 88-02
1/23/88 TO 1/24/88
STATIONS 1 TO 20
TEMPERATURE DEG C
MIN = 14.24 MAX = 23.93



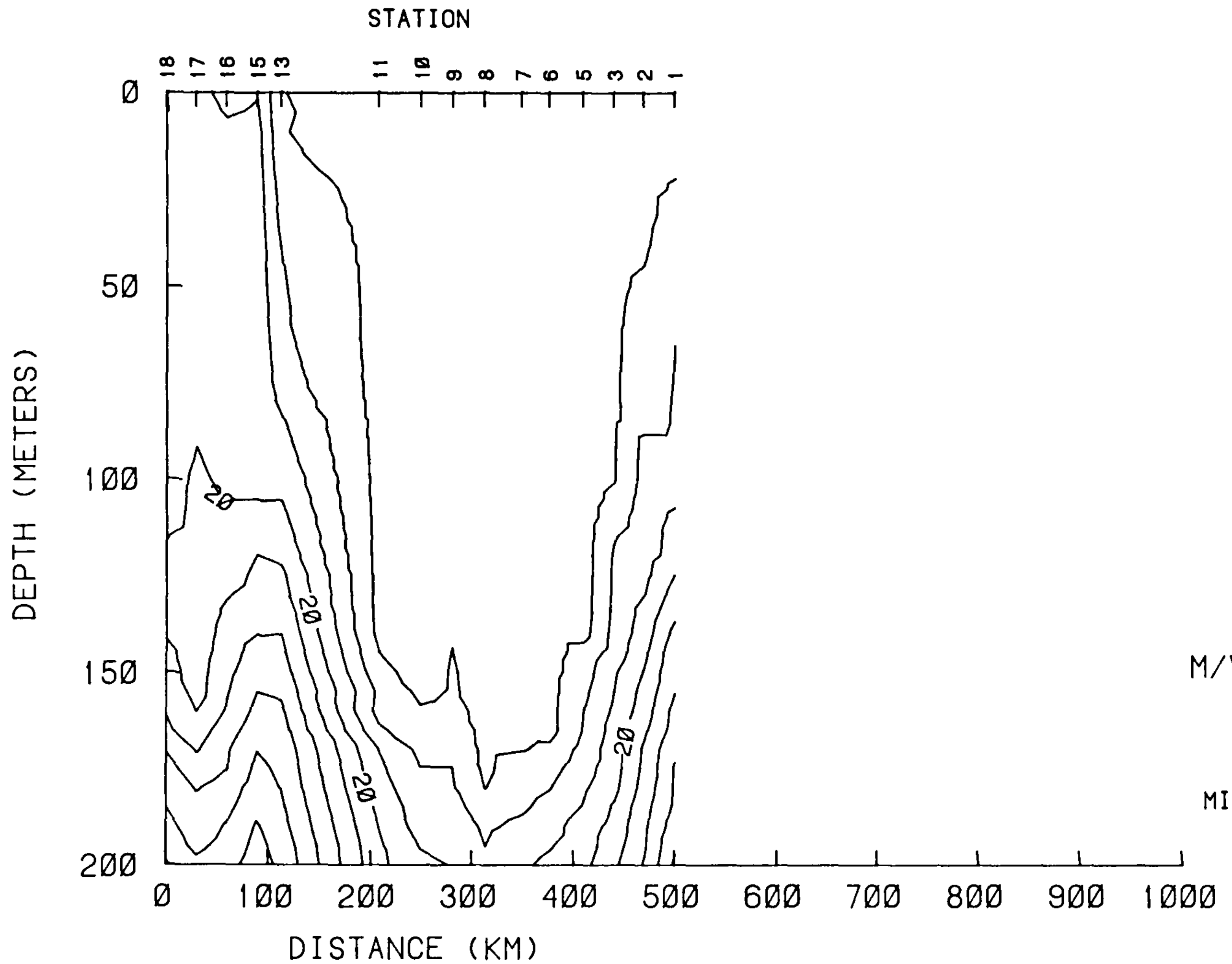
PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 88-02



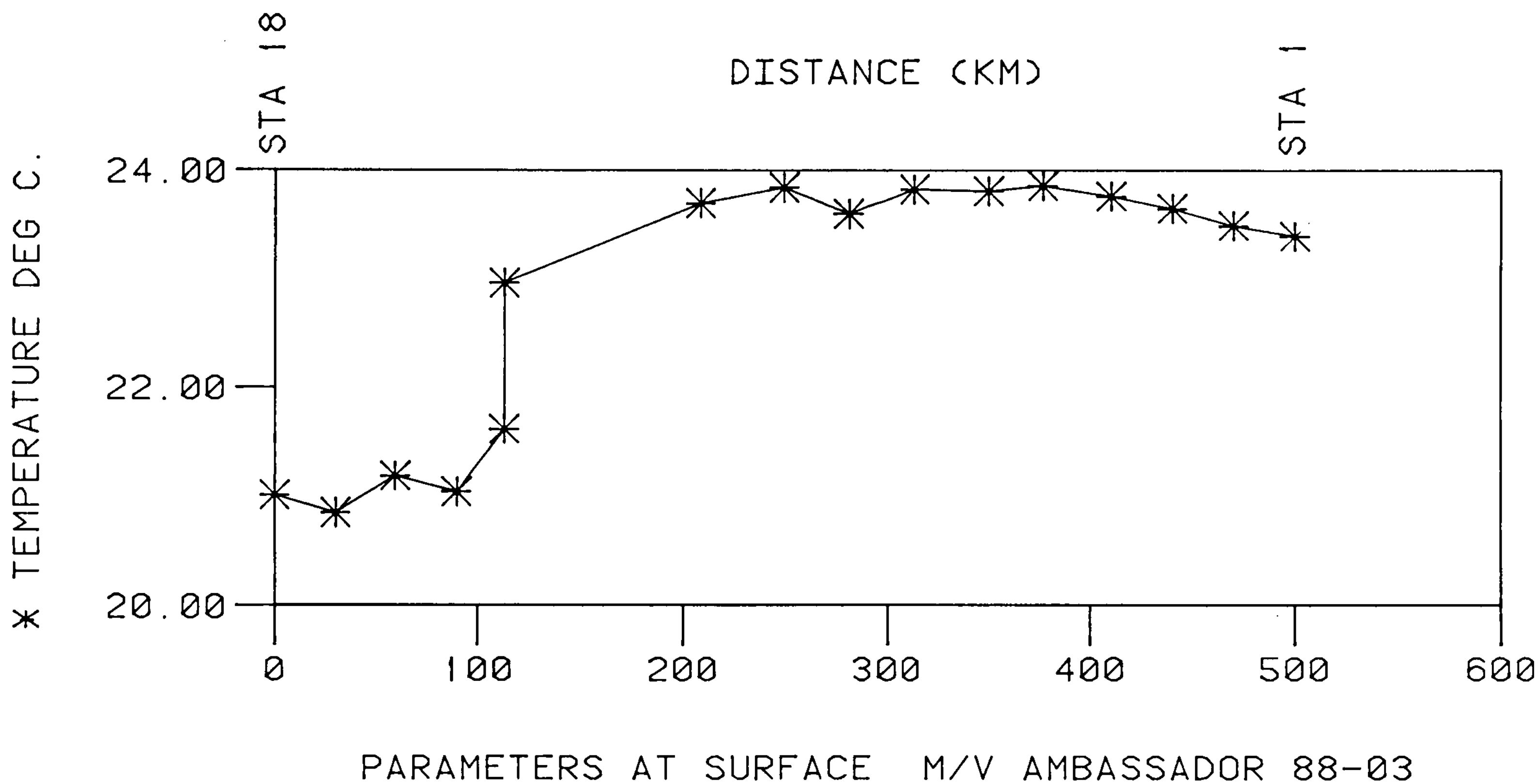
M/V AMBASSADOR 88-03
2/ 3/88 TO 2/ 4/88
95 W
94 W
93 W
92 W
91 W
90 W
89 W
88 W
87 W
86 W
30 N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
2000 m
18
1
2000 m
200 m



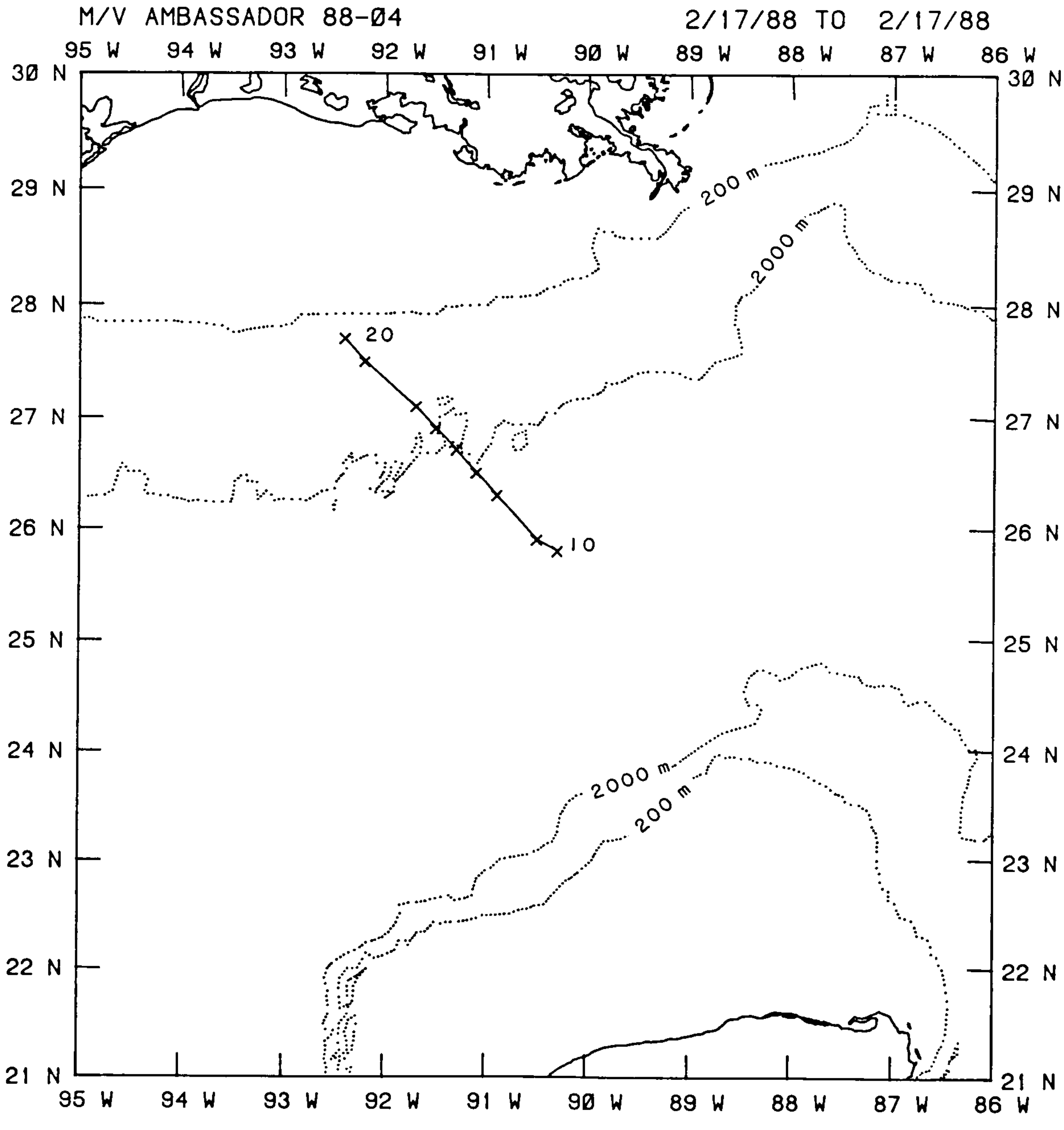
M/V AMBASSADOR 88-03
2/ 3/88 TO 2/ 4/88
STATIONS 1 TO 18
TEMPERATURE DEG C
MIN = 5.51 MAX = 23.86



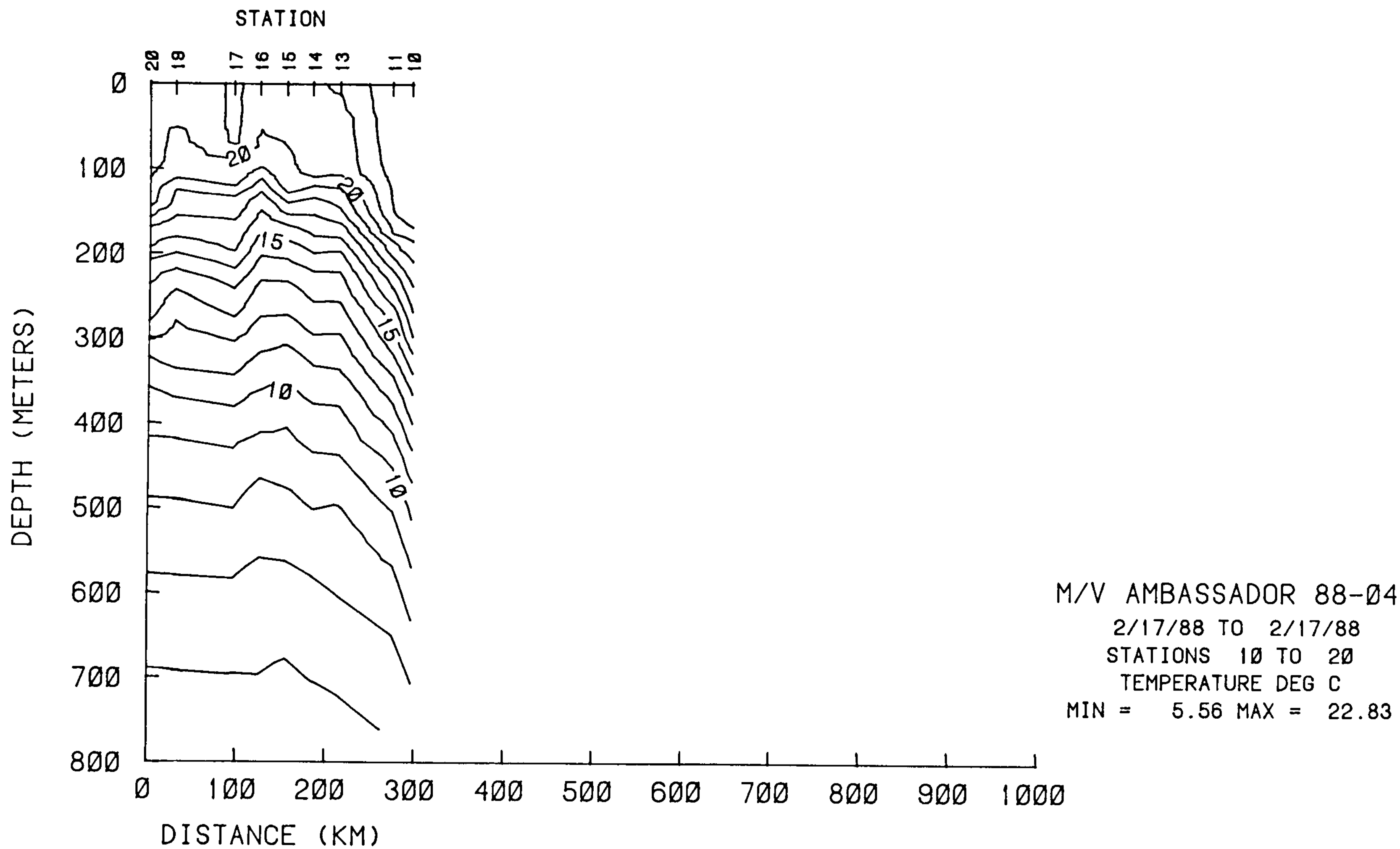
M/V AMBASSADOR 88-03
2/ 3/88 TO 2/ 4/88
STATIONS 1 TO 18
TEMPERATURE DEG C
MIN = 14.48 MAX = 23.86

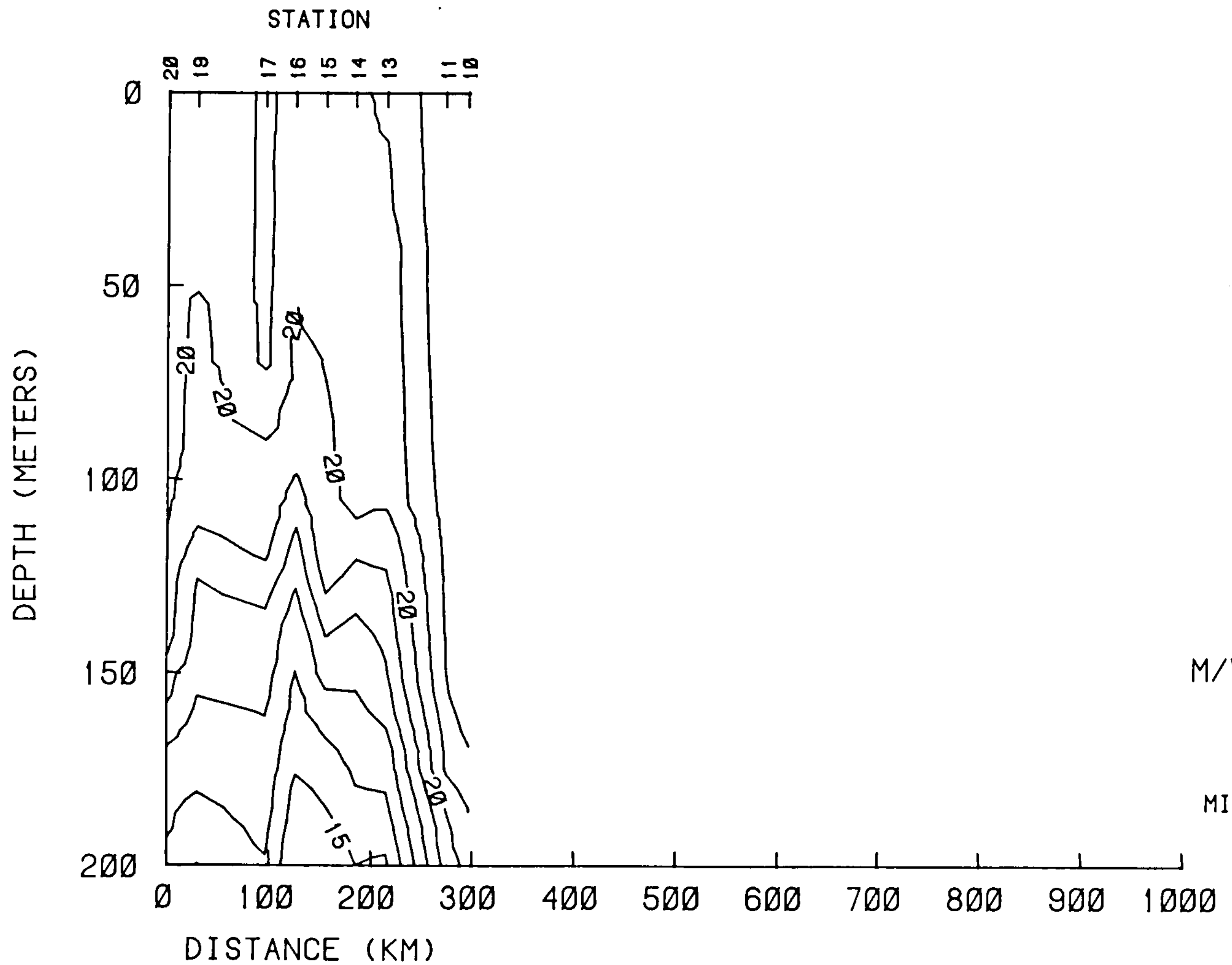


STA 18
DISTANCE (KM)
STA 1
* TEMPERATURE DEG C.
24.00
22.00
20.00
0
100
200
300
400
500
600
PARAMETERS AT SURFACE M/V AMBASSADOR 88-03

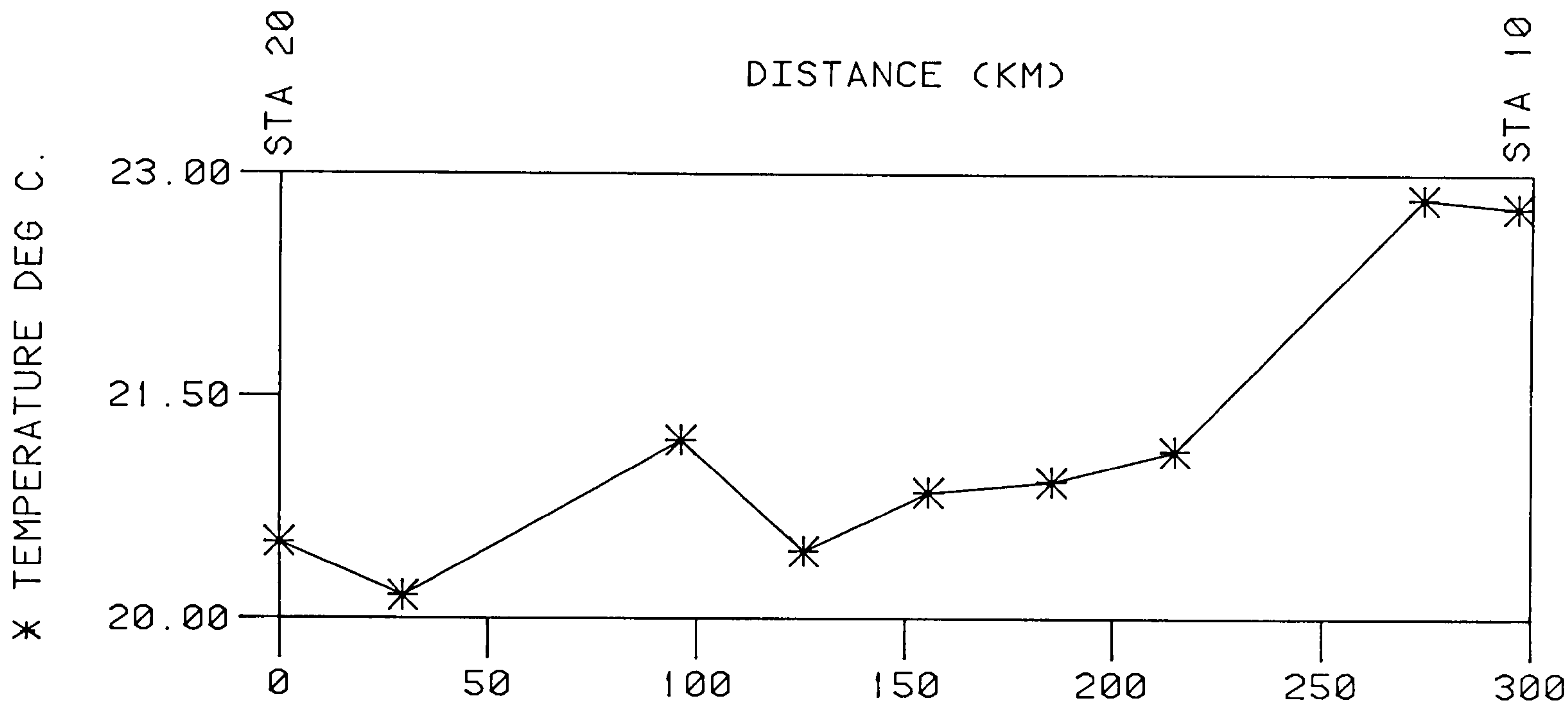


M/V AMBASSADOR 88-Ø4
2/17/88 TO 2/17/88
95 W
94 W
93 W
92 W
91 W
9Ø W
89 W
88 W
87 W
86 W
3Ø N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
2000 m
20
10

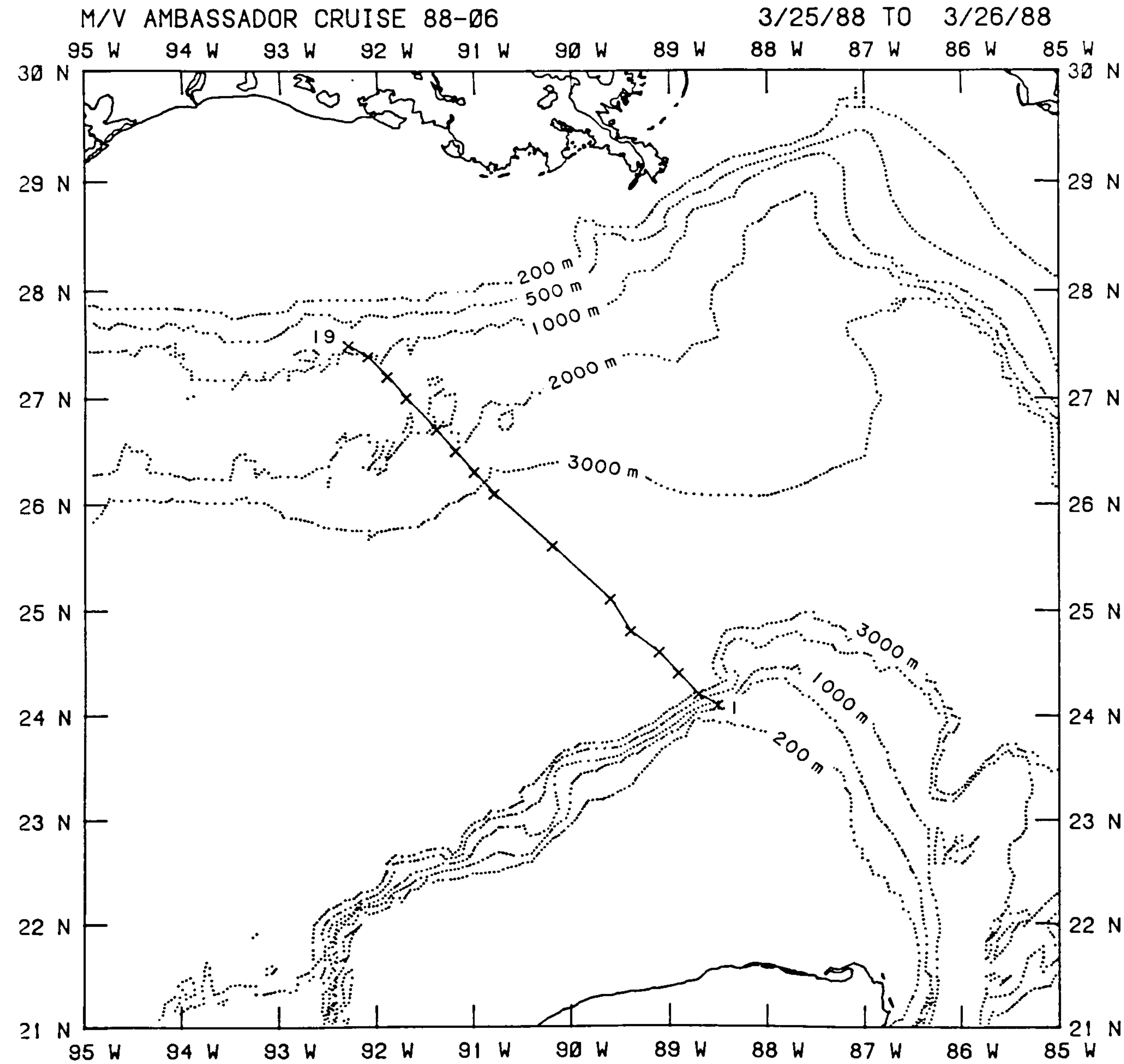

STATION
20 19 17 16 15 14 13 11 10
DEPTH (METERS)
0
100
200
300
400
500
600
700
800
DISTANCE (KM)
0 100 200 300 400 500 600 700 800 900 1000
20
15
10
M/V AMBASSADOR 88-04
2/17/88 TO 2/17/88
STATIONS 10 TO 20
TEMPERATURE DEG C
MIN = 5.56 MAX = 22.83



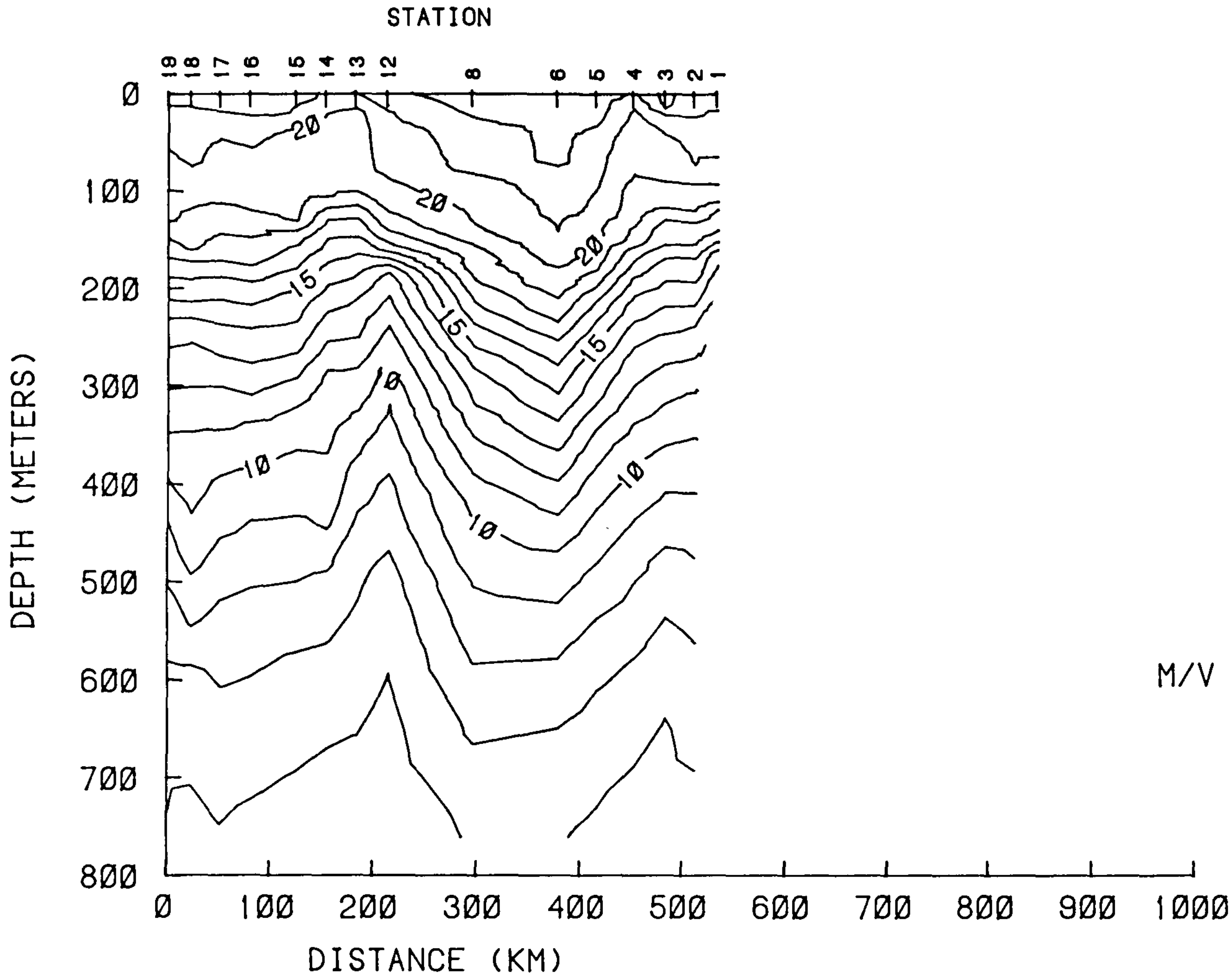
M/V AMBASSADOR 88-04
2/17/88 TO 2/17/88
STATIONS 10 TO 20
TEMPERATURE DEG C
MIN = 14.14 MAX = 22.83



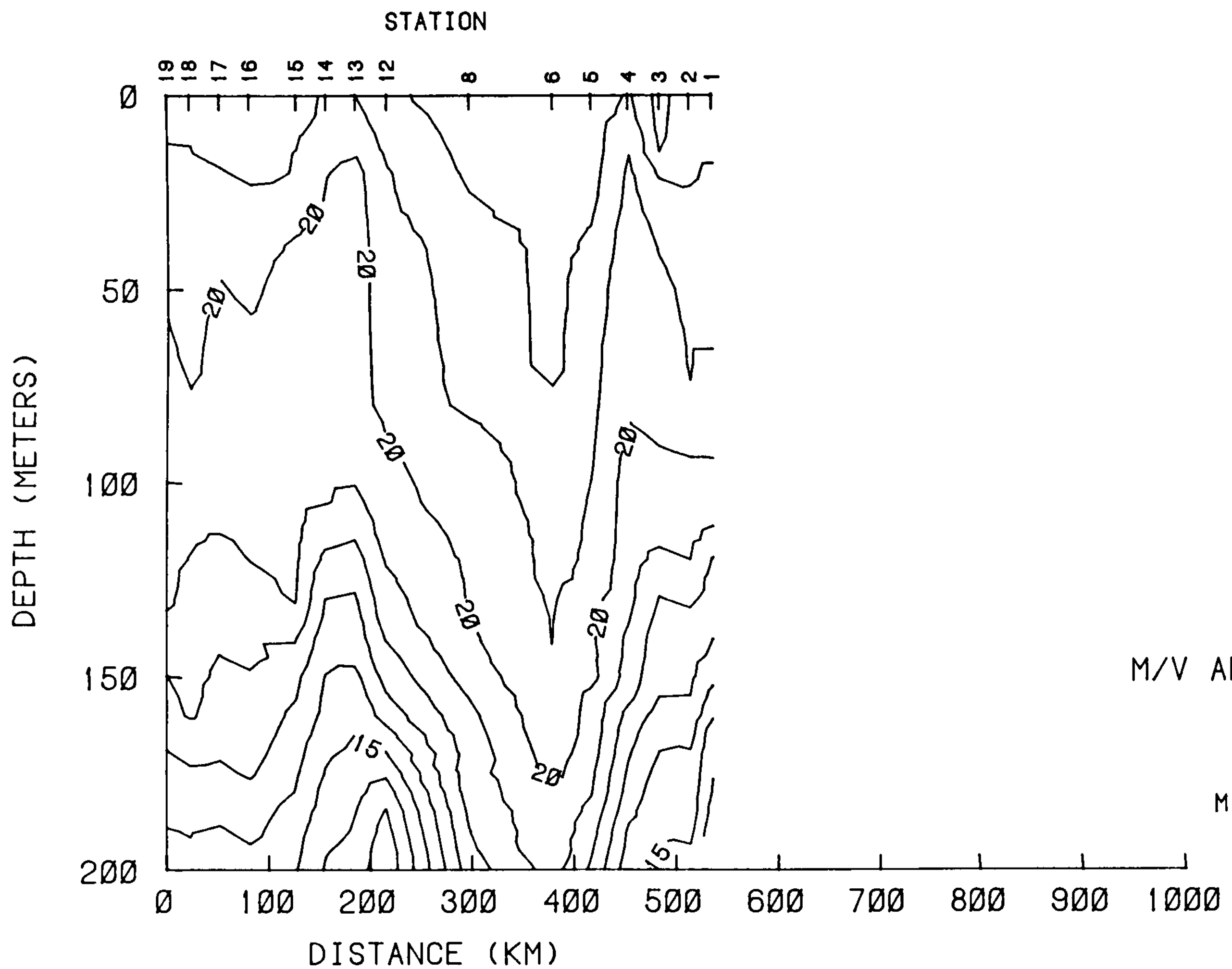
PARAMETERS AT SURFACE M/V AMBASSADOR 88-04



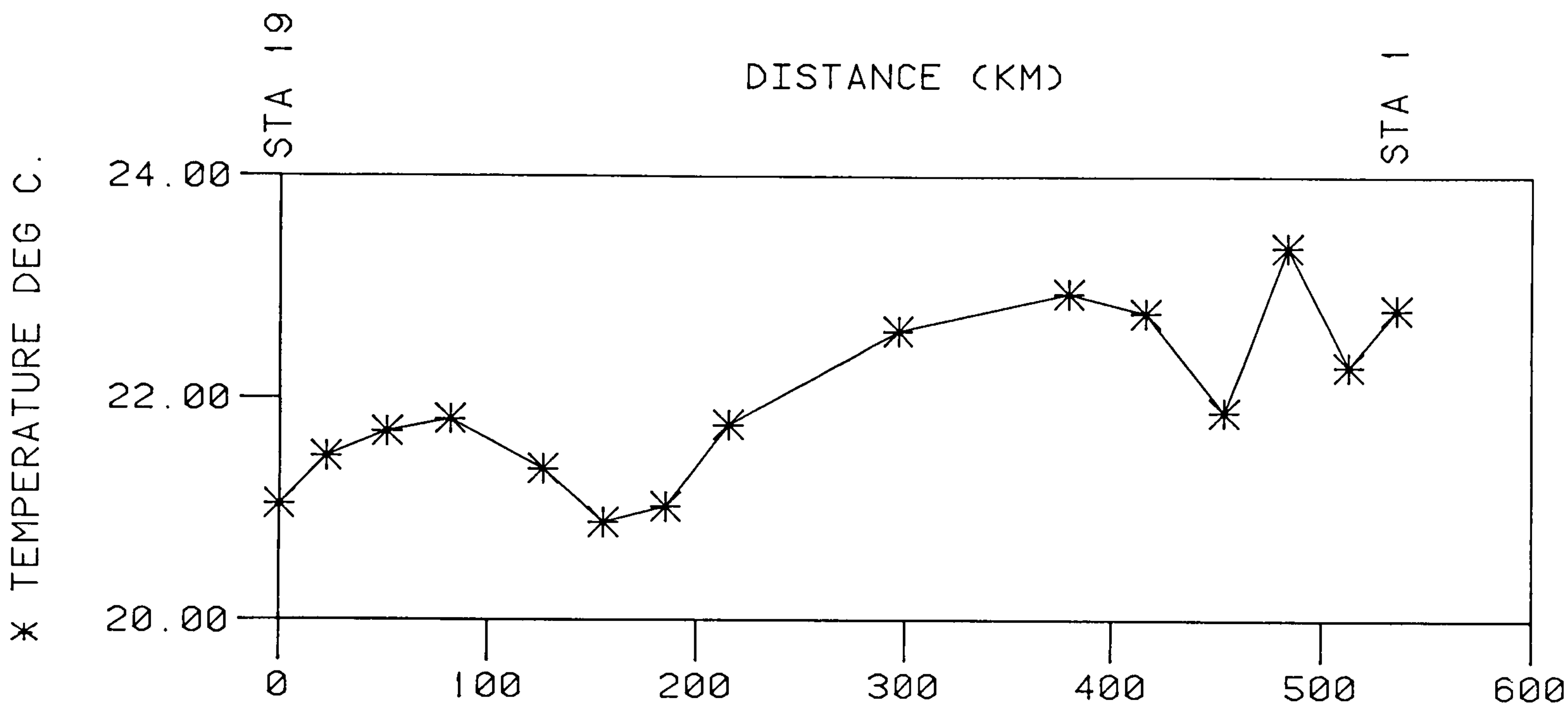
M/V AMBASSADOR CRUISE 88-Ø6
3/25/88 TO 3/26/88
95 W
94 W
93 W
92 W
91 W
9Ø W
89 W
88 W
87 W
86 W
85 W
3Ø N
29 N
28 N
27 N
26 N
25 N
24 N
23 N
22 N
21 N
200 m
500 m
1000 m
2000 m
3000 m
19
1
3000 m
1000 m
200 m



M/V AMBASSADOR CRUISE 88-Ø6
3/25/88 TO 3/26/88
STATIONS 1 TO 19
TEMPERATURE DEG C
MIN = 5.29 MAX = 23.36



M/V AMBASSADOR CRUISE 88-Ø6
3/25/88 TO 3/26/88
STATIONS 1 TO 19
TEMPERATURE DEG C
MIN = 12.26 MAX = 23.36



PARAMETERS AT SURFACE M/V AMBASSADOR CRUISE 88-06

The Department of the Interior Mission

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

The Minerals Management Service Mission

As a bureau of the Department of the Interior, the Minerals Management Service's (MMS) primary responsibilities are to manage the mineral resources located on the Nation's Outer Continental Shelf (OCS), collect revenue from the Federal OCS and onshore Federal and Indian lands, and distribute those revenues.

Moreover, in working to meet its responsibilities, the **Offshore Minerals Management Program** administers the OCS competitive leasing program and oversees the safe and environmentally sound exploration and production of our Nation's offshore natural gas, oil and other mineral resources. The MMS **Minerals Revenue Management** meets its responsibilities by ensuring the efficient, timely and accurate collection and disbursement of revenue from mineral leasing and production due to Indian tribes and allottees, States and the U.S. Treasury.

The MMS strives to fulfill its responsibilities through the general guiding principles of: (1) being responsive to the public's concerns and interests by maintaining a dialogue with all potentially affected parties and (2) carrying out its programs with an emphasis on working to enhance the quality of life for all Americans by lending MMS assistance and expertise to economic development and environmental protection.