LATEX Shelf Data Report

Meteorology
April 1992 through December 1994

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I. Introduction

As part of the Louisiana-Texas Shelf Physical Oceanography Program (LATEX), eight meteorological buoys were deployed over the Texas-Louisiana shelf in the northwest Gulf of Mexico, from April 1992 to December 1994, to provide information on wind stress and sensible heat flux, and to support an investigation of winter northers/cyclogenesis. Hourly values of wind speed and direction, sea and air temperature, and atmospheric pressure were recorded.

Section II of this data report contains a description of the LATEX meteorological field program, the instrumentation and moorings, and data quality assurance procedures. Time series plots of hourly data with basic statistics appear in Appendix A. In addition to LATEX observations, collateral meteorological measurements were collected from a broader array of buoys, platforms, and land stations. The locations of such measurement sites are shown, and wind roses based on those observations have been included in Appendix B. Tabular listings of the wind rose data are given in Appendix C. Collateral measurements together with the LATEX measurements were used to construct gridded, hourly fields of 10-m wind, surface wind stress, surface atmospheric pressure, surface air temperature, and sea surface temperature over the Texas-Louisiana shelf region. The methods used to construct those fields are reported in Section III. Monthly mean fields constructed therefrom are presented in Appendix D.

The hourly time series data shown in this report were submitted to the National Oceanographic Data Center (NODC), a component of the National Oceanic and Atmospheric Administration (NOAA) of the U.S. Department of Commerce. The LATEX A program has been given the NODC project identification code 0212.

II. LATEX A Field Program

LATEX was a five-year study conducted for the Minerals Management Service (MMS) of the U.S. Department of the Interior. The largest part of the LATEX program, Study Unit A, the Texas-Louisiana Shelf Circulation and Transport Processes Study (LATEX A), was funded under MMS OCS contract 14-35-0001-30509 and was based at Texas A&M University (TAMU), College Station, Texas. LATEX A measured ocean waves, currents, and hydrographic, chemical, and biological parameters. These data also were submitted to NODC.

Meteorological buoys were deployed under two tasks within the LATEX A experimental plan (Nowlin et al. 1991). Buoys Met17, Met19, Met20, and Met22 were deployed throughout the field program. Buoys Met50, Met51, Met52, and Met53 were deployed for a study of winter northers/cyclogenesis conducted by Dr. S.A. Hsu of Louisiana State University. Deployment locations were chosen so as to resolve mesoscale cyclogenic events at the eastern and western ends of the study region. The four latter buoys were deployed December through May of each year and were removed as a matter of prudence during hurricane season, June through November. Buoys were serviced at 45-day intervals from April through December 1992 and at 60-day intervals in 1993 and 1994. Table 1 gives the dates of the deployment cruise and 17 subsequent maintenance cruises .

Table 1. LATEX A mooring maintenance cruises for the field period April 1992 through December 1994.

Cruise Code	Start Date	End Date
M01	04/07/92	04/16/92
M02	05/26/92	06/04/92
M03	07/13/92	07/27/92
M04	08/28/92	09/06/92
M05	10/13/92	10/23/92
M06A	11/28/92	12/06/92
M06B	12/08/92	12/18/92
M07	01/09/93	01/21/93
M08	03/16/93	03/24/93
M09	05/18/93	05/28/93
M10A	07/13/93	07/19/93
M10B	07/22/93	07/26/93
M11	09/21/93	10/01/93
M12	12/03/93	12/13/93
M13	02/09/94	02/16/94
M14	03/21/94	04/01/94
M15	05/26/94	06/01/94
M16	07/23/94	08/02/94
M17	09/27/94	10/04/94
M18	11/29/94	12/07/94

Evans-Hamilton Inc. (EHI) maintained the buoys, retrieved the data, and produced on-site documentation used to support the shore-based data reduction activities. Nine identical buoys were acquired for the program, one for use as a spare. Typically, a cruise began with a spare buoy onboard to replace the buoy at the first site. The buoy recovered from the first site was refurbished and its data downloaded during transit to the next location, where it would replace the next buoy, and so on. This efficient procedure minimized gaps in the data. However, if a recovered buoy could not be refurbished before reaching the next site, and if the buoy there could not be refurbished quickly on-site, the second buoy would be recovered and the site would remain vacant for several days until the ship could return to re-deploy a working buoy. This procedure worked well during the 32-month field program, there being only one case in which a site remained vacant between service cruises due to a lack of a functioning buoy.

EHI also generated documentation necessary to process the data. They recorded the times when the buoys were released or attached to the moorings, useful because recovered instruments often continued to collect data for some time during the transit to the next station. They recorded the times the buoys were activated or deactivated, crucial because the buoy electronics did not generate a time-stamp. EHI made collateral on-site weather observations, documented buoy conditions upon recovery, and maintained an inventory of the equipment and its location.

Data collected by the buoy sensors were stored in solid-state memory and recovered during service cruises, downloaded through a serial cable connected to a personal computer running software supplied by the buoy manufacturer. The data and associated documentation were delivered to the LATEX A Data Management Office (DMO) by EHI within a few days of recovery. After quality control procedures (described in section II C) were applied and suitable metadata generated, the data were sent to NODC.

Radio transmitters installed on each buoy broadcasted current meteorological measurements to two NOAA satellites passing overhead in low polar orbit. Ground stations and network connections relayed the data to Service ARGOS Inc. in Landover, Maryland, where they were converted into physical units, encoded into the World Meteorological Organization (WMO) formats, via the Global Telecommunication System (GTS), and thus, made available worldwide within an hour of being collected. Later in the program some of the ARGOS transmitters were turned off for budgetary reasons.

In addition to monitoring the GTS stream, LATEX A, in its role as data originator, was allowed access to the data directly by modem. While this method included information omitted in the GTS stream, such as battery voltage and other non-geophysical data, modem access is slower, more labor intensive, and prone to transmission errors, therefore GTS access was preferred for near real-time monitoring. The full content of the telemetered data was acquired daily by subscription to Service ARGOS' Automated Delivery Service (ADS), which sends a daily Internet electronic mail message containing the previous day's data collection. Throughout the field experiment the meteorological data from LATEX A buoys were acquired three ways: by daily ADS mailings from Service ARGOS, by continuous archiving of the GTS data stream received through the TAMU Department of Meteorology, and from data downloaded directly from the buoys during the mooring maintenance cruises.

Near real-time marine meteorological data has obvious value in preparing marine weather reports and forecasts. However, the telemetered data were also used and disseminated in other ways. Text summaries of the data were posted weekly to the now defunct Omnet electronic bulletin board. Wind rose plots appeared in the *LATEX Fortnightly News*, a newsletter published by the LATEX Data Management Office from April 1992 through December 1994.

The near real-time data proved crucial for generating the time channel of internally-recorded data early in the field program as will be discussed below. Another use for near real-time data would be when a buoy failed and its stored data were erased. In principle, the telemetered data could be used to replace the lost data; however, due to the irregular passage of the NOAA satellites, only about six unique observations per day were available. This represented about 25 percent of expected hourly data. Such data are cumbersome to use in conjunction with hourly time series and are not adequately represented when interpolated to hourly values. Hence, only internally-recorded data were submitted to NODC, and only the internally-recorded data recovered during the 17 mooring service cruises are presented in this report.

Data from the LATEX A buoys appeared in the ADS mail messages under their Service ARGOS identification numbers and in the GTS stream under their assigned WMO numbers. Service ARGOS maintained the association between the buoy location, the Service ARGOS identification number, and the WMO number. The Service ARGOS identification numbers were set in the buoys using electronic switches. Because the

buoys were moved freely during maintenance cruises the switch settings had to be changed to maintain the correct association between the buoy location and the identification numbers. Occasionally the switches were not changed and Service ARGOS was asked to change the linkages in their database so that the information sent over the GTS was correct. Table 2 shows the association between the LATEX A buoy designators, their Service ARGOS identification numbers, and the WMO numbers. This information will be indispensable for anyone examining an archived GTS database or the archive of ADS data.

Table 2. Cross-referenced list of the various identification numbers of the LATEX A meteorological buoys and changes.

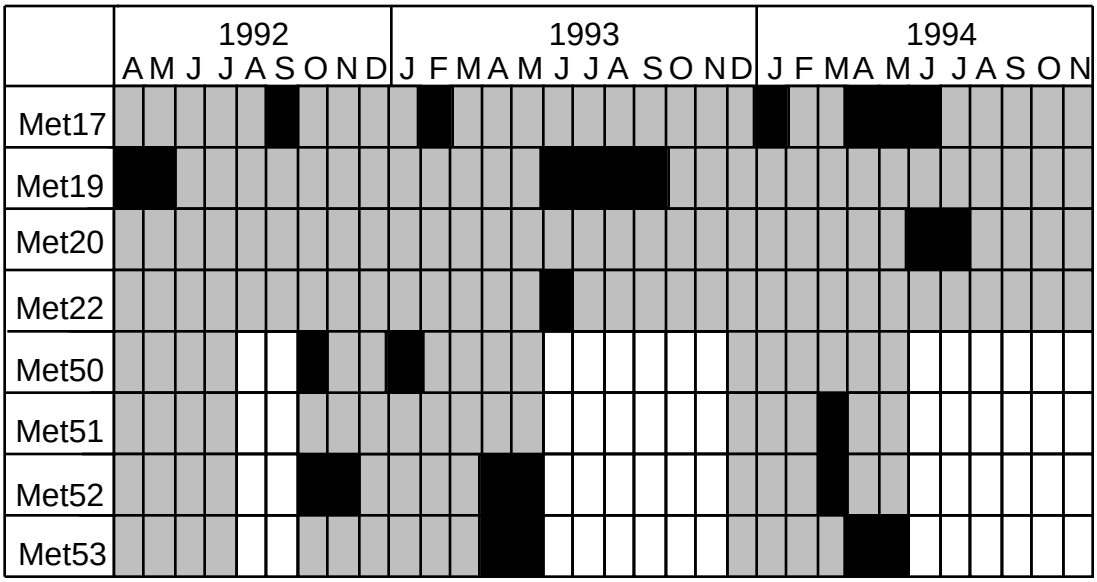
Latex ID	WMO ID	ARGOS ID	Latitude	Longitude
Initial 04-April-1992				
17	42026	00935	29.1960	-91.9648
19	42027	00930	28.4651	-92.0346
20	42028	00937	29.2607	-94.0636
51	42029	00934	28.8373	-94.0795
22	42030	00931	28.3548	-93.9556
50	42031	00936	28.8810	-95.0366
52	42032	00933	28.8039	-93.0176
53	42033	00932	28.8004	-90.9543
spare	42034			
After 03 June 1992				
17	42026	00937	29.1960	-91.9648
20	42028	00932	29.2607	-94.0636
After 16 January 1993				
20	42028	00931	29.26077	-94.0637
22	42030	00932	28.35485	-93.9558
After 15 February 1994				
19	42027	00936	28.4651	-92.0346
22	42030	00935	28.35485	-93.9558

Met17, Met19, Met20, and Met22 were attached to moorings that also held two or three current meters. No current meters were attached to moorings Met50, Met51, Met52, and Met53. Met51, however, was in close proximity to mooring 21, where near-surface and near-bottom current meters were deployed. Thus, for five meteorological buoys, co-located current meter data are often available.

A. Deployment Locations and Periods

Figure 1 shows a base map of the study area. Locations of the LATEX A meteorological buoys are indicated along with those of marine meteorological buoys and coastal meteorological stations operated and maintained by NOAA's National Data Buoy Center (NDBC) and airport weather stations operated by the National Weather Service (NWS). Not all of the LATEX A, NDBC, and CMAN (coastal marine automated network) stations shown were in simultaneous operation. Some stations were decommissioned and new ones placed in service after the start of the LATEX A field program. Table 3 shows the months in which the field plan projected data would be collected from LATEX A meteorological buoys and the months in which little or no planned data were in fact recovered.

Table 3. Months in which the plan called for data to be collected are shaded. Empty cells indicate no planned buoy deployments. Black cells indicate months in which few or no data were recovered.



Reasons for no or partial data recovery included human error, mechanical or electrical failures following collision with a vessel, damage due to tie-off by vessels, vandalism, storms, and mechanical failure due to excessive stress cycling. Where the mast was lost and wind and air temperature measurements were not made, sea temperature and atmospheric pressure may still have been collected. Figure 2 shows the data availability

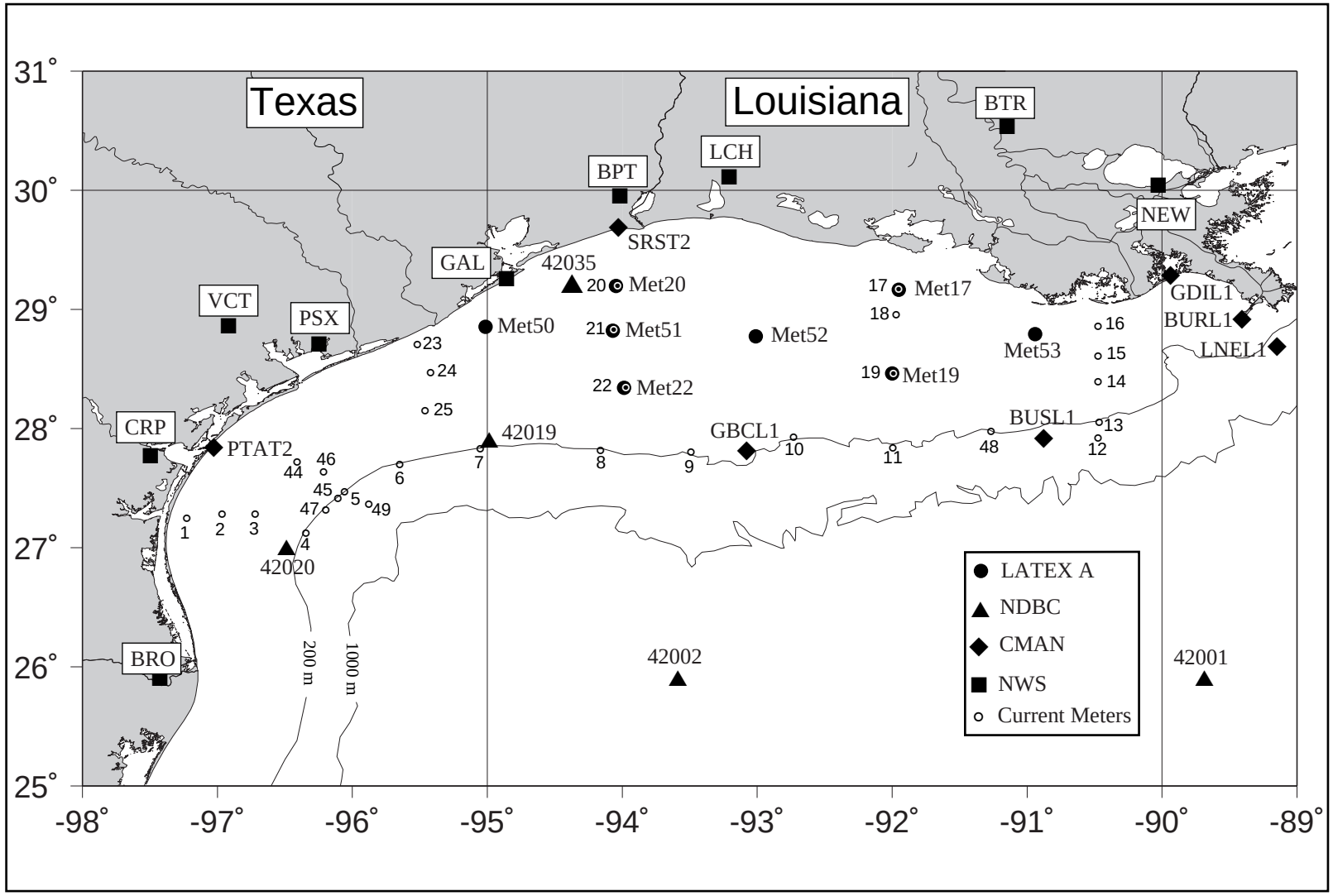


Figure 1. LATEX A study area showing the locations of the LATEX A meteorology buoys. NDBC buoys, the coastal and marine CMAN stations, the NWS airport weather stations and the LATEX A current meters are also shown.

by parameter by mooring and is an informative guide to the LATEX A meteorological data inventory.

B. Equipment Used

1. Design and Instrument Suite

Moorings. Two mooring designs, differing mainly by the presence or absence of an additional subsurface float, were used to keep the eight meteorological buoys and associated current meters in place. All moorings used heavy chains as shock absorbers and stacks of railroad wheels as anchors. On moorings in shallow water, the chain was connected directly to the anchor (Figure 3). In deeper water, the chain was attached to a subsurface float, that was in turn attached to the anchor with rope or cable (Figure 4).

Met17, Met20, and Met 53 were moored in relatively shallow water (7-15 m) using chain and anchor only, as shown in Figure 3. Met17 and Met20 supported a near-surface InterOcean S4 current meter mounted in-line between the surface buoy and the chain (Figure 3), and a separate bottom current meter (not shown) placed on the nearby seabed and tied to the anchor by a separate line. Met19 and Met22 were configured as in Figure 4, with middle and bottom current meters attached to the taut line segment of the mooring. Met50, Met51, and Met52 were configured as shown in Figure 4 but without current meters.

Meteorological packages. The meteorological buoys were the FGGE-type (First Global GARP Experiment) manufactured by Defense Systems, Inc. (DSI). The meteorological instrument package included a Kavlico barometer, a pair of YSI thermolinear temperature sensors, and a R.M. Young wind monitor. The barometer was installed within the hull, essentially at sea level. Air and sea temperatures were measured at 3.0 meters above and 1.0 m below the sea surface. The anemometer and directional vane were installed on the mast at 3.6 m above sea level. A Coast Guard-approved light and a radar reflector were mounted on the mast. A 38"-diameter hull provided buoyancy.

The sensors were sampled every four seconds over one eight-minute period each hour. The eight-minute block average was stored in solid state memory and broadcast by the radio transmitter at 90-second intervals during the next hour for reception by the NOAA satellites. The buoys employed solid-state memory to store the measured data. Unlike

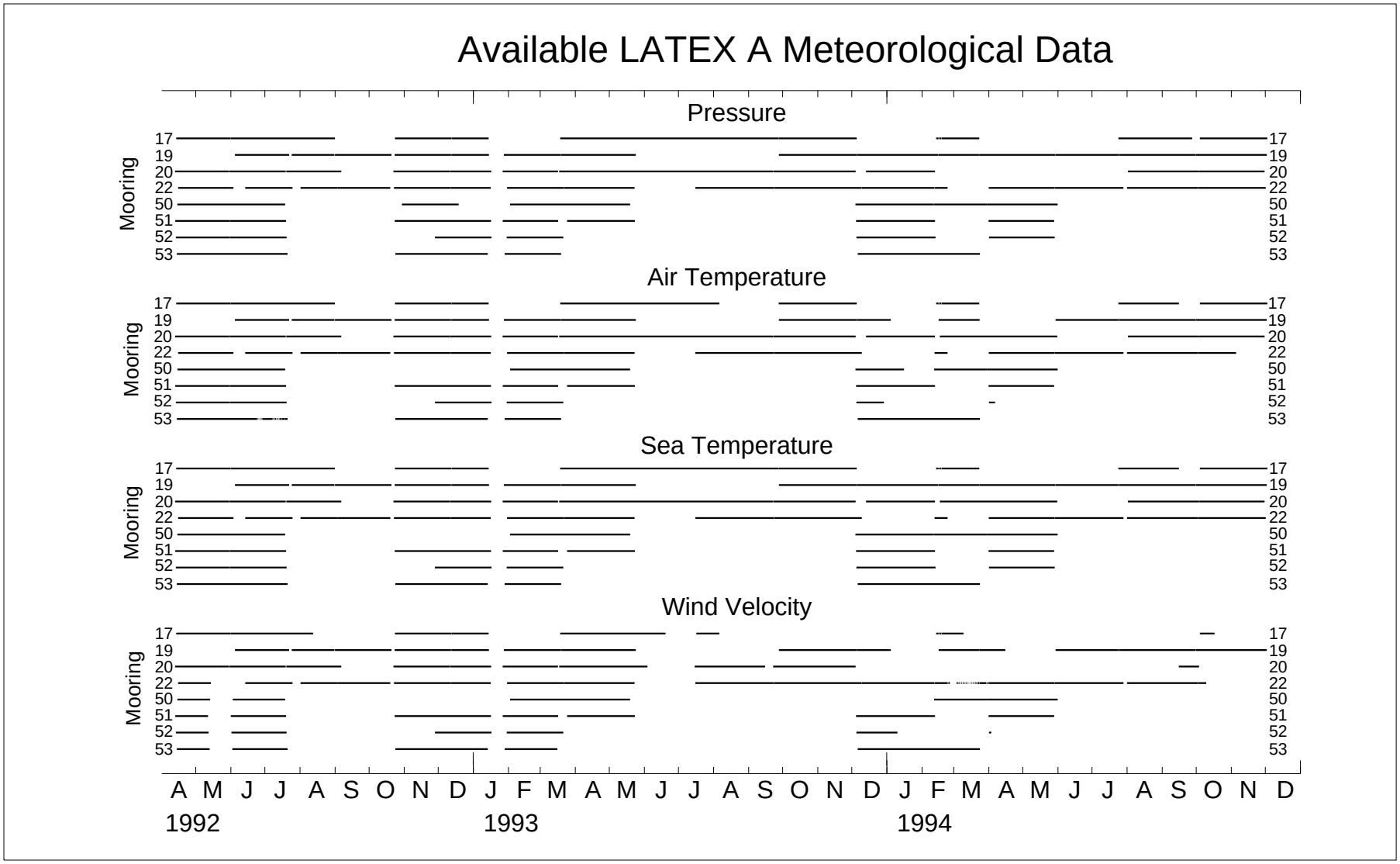


Figure 2. Chart showing times for which pressure, air and sea temperature, and wind data from the LATEX A buoys are available.

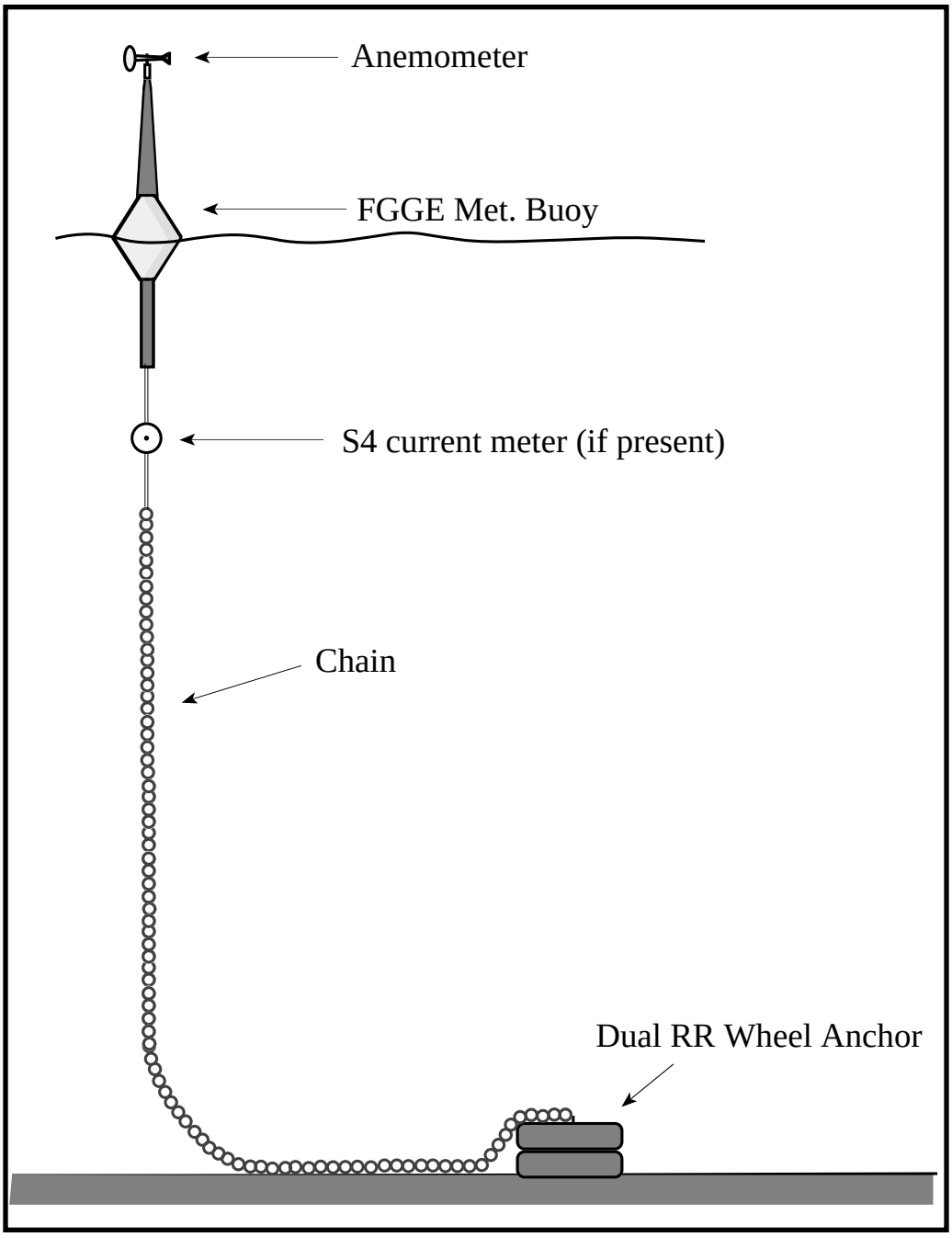


Figure 3. Mooring design for meterological buoy in shallow water (<20 m), with and without S4 current meter.

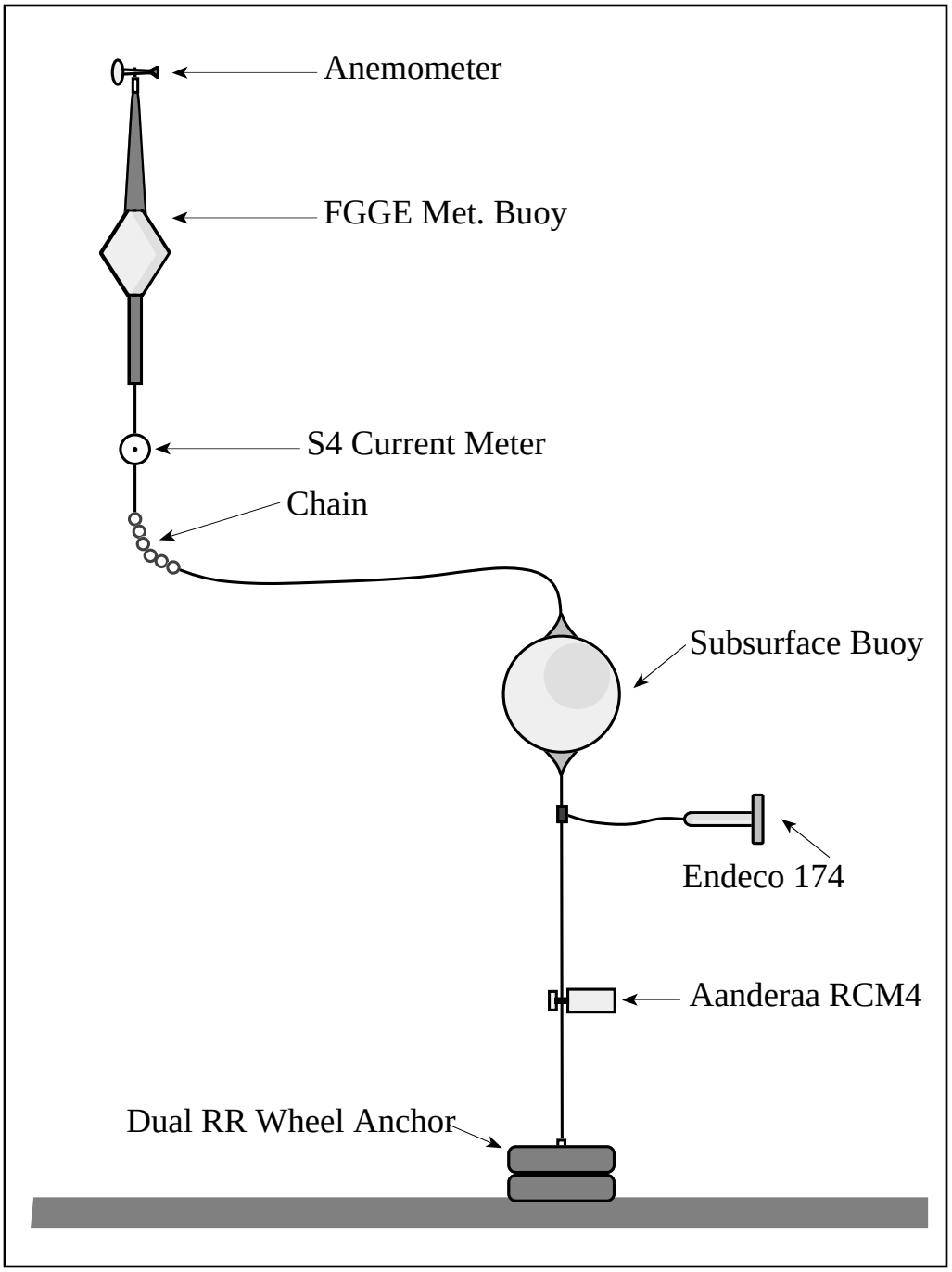


Figure 4. Mooring design of the meteorological buoy in deeper water (>20 m), showing placement of S4, middle, and bottom current meters.

older magnetic tape storage mechanisms, when the power supply was disrupted, all internally-stored data were lost, even data recorded prior to the power failure.

2. System Accuracy

The sensors were accepted as they came from the manufacturer and not subjected to additional pre-deployment calibration. Broken or damaged sensors were replaced, usually in the field. The nominal accuracy and resolution of the sensors is shown in Table 4. Sources of this information are DSI literature and conversations with an instrument specialist from DSI. This information is included in the metadata of each data file.

Table 4. Summary of range, accuracy, and resolution for the meteorological sensors installed on the DSI meteorological buoys.

Sensor	Range	Accuracy	Resolution	Units
Barometer	900 to 1053.45	±0.5	0.5	hPa
Sea Temperature	-3.25 to 35.00	±1.0	0.15	°C
Air Temperature	-3.25 to 35.00	±0.2	0.15	°C
Heading	0 to 360	±10	1.41	deg
Wind Speed	0 to 51	±10% of reading*	0.2	m/s
Wind direction	0 to 360	±20	1.40625	deg

*for readings greater than 1 m/s

C. Data Quality Control

1. Preliminary Processing and Quality Control Procedures

The internally-recorded data were recovered by EHI during each mooring service cruise by downloading the data from the buoy to 3.5" floppy disks using a personal computer and serial cable. The disks were delivered to the DMO a few days after the end of each cruise. The Data Office inventoried, tagged, logged, and duplicated the disks. The original diskettes were stored in a data vault. The Program Management Office kept the duplicates in off-site storage. The raw data were copied into central storage on a VAX cluster for further processing and quality assurance.

Data files recovered by EHI contained hexadecimal numbers in ASCII format. A FORTRAN program written by DMO personnel converted the hexadecimal counts into geophysical units using a format description and calibration constants provided by the buoy manufacturer.

The data acquisition package in the buoy did not have a date and time code generator, so the date and time of each data sample had to be generated after recovery by one of two methods. The first method used the instrument reset time recorded on-site by EHI on log forms. The instrument recorded a sample immediately following reset. The time of each succeeding sample was generated by repeated additions of the sampling interval; one hour in this case. The second method used the time at which downloading operations were initiated, which were within one hour of the last recorded sample, and repeatedly subtract the sampling interval to find the time of each previous sample. If no data samples were dropped and the electronics were sufficiently drift-free, either of these methods should have produced a reasonably accurate time channel.

To test this assumption we compared internally-recorded data, having a time channel based on the reset time plus sampling interval, to the same data delivered by Service ARGOS. By aligning the two records we found the starting times were frequently in disagreement, in some cases by more than two weeks. The more accurate method was to use the download time and work backwards. We attributed small errors to poor record keeping, and five- or six-hour errors to the use of local time rather than universal coordinated time. Larger differences implied that data were lost. We discovered that when the deployment period exceeded the internal storage capacity of the buoy, new data overwrote the oldest data. On cruise M08, additional memory chips were installed in the buoys to increase their storage capacity and data loss due to insufficient capacity no longer occurred. There were cases where the instrument failed days before the recovery cruise but the internally recorded data were intact. In such cases the time channel was generated using the reset time plus sample interval method. After the first few cruises, record keeping became rigorous and time code generation problems all but vanished. Still, comparison with ADS data and adjacent NDBC stations proved a prudent check.

The first step in the quality assurance procedure was a simple visual scan of the data. This permitted the rapid identification of those data that lacked variability or contained out-of-range values. In most cases, lack of variability was due to sensor failure, while out-of-range values were due to sporadic noise in the electronics package or to the loss of

a sensor. Sporadic noise often occurred simultaneously across all data channels. After the visual check, each series was run through an automated quality control program developed at the Data Office to eliminate wild points and fill small data gaps. The control program used a sliding window of eight adjacent points, four on either side of the test point datum, to establish a local mean and a local standard deviation. If the test point datum varied in absolute value from the local mean by greater than A times the standard deviation, the point was replaced by linear interpolation. (A = 5.5 was used for speed and A = 5.0 for pressure and both temperatures.) The original and edited series were overlain on a workstation display and inspected to ensure that the proper edits had been made. In cases where several wild points occurred within the averaging window, the program might fail to eliminate all wild points. These cases were handled manually on a case by case basis.

2. Comparison with NDBC and CMAN Stations

Data from LATEX A buoys were compared with data from NDBC and CMAN stations. This identified periods where wind directions were reasonable in appearance, but not in agreement with surrounding buoys. This occurred following M08, when the additional memory chips were installed in all of the LATEX buoys. During this cruise, all the wind vanes were installed backwards, with the result that all recorded directions were incorrect by 180°. Comparison among the LATEX buoys showed a consistent picture of wind directions; however, comparison with NDBC and CMAN buoys revealed the 180° error.

On several recovery cruises, a buoy's anemometer shaft was found to be loose. In cases where the shaft turned and stuck, the constant offset could be determined using information from adjacent buoys and the data corrected. In cases where the shaft was free to turn, the directional data had to be discarded. Wind roses provide the best graphical presentation for quickly identifying these types of errors.

LATEX A meteorological data are presented in Appendices A and B of this report. Appendix A contains times series of hourly unfiltered atmospheric pressure, wind speed and direction, and sea and air temperature. Basic monthly statistics for each parameter appear at the bottom of each plot. Appendix B presents wind roses (NDBC, CMAN, and NWS data are included) and Appendix C contains tables of wind statistics.

III. Surface Fields

We prepared fields of surface properties (including 10-m winds) on a 0.5° x 0.5° grid for the region 25.5° to 30.5°N and 88.0° to 97.5°W. The data sources, techniques used, and results are described in the following subsections and Appendix C.

A. Data Sources

The LATEX meteorological observations were supplemented with data from six NDBC buoys, nine CMAN buoys, and five NWS or NWS-sponsored weather stations located on land near the coast (Figure 5). Surface properties measured on LATEX buoys (Table 4) also were measured by NDBC and CMAN buoys (Table 5).

Wind and air temperature measurement heights varied with the buoys, as did pressure sensor height at the CMAN stations (Table 6). On LATEX and NDBC buoys, the pressure sensor was located inside the hull at sea level. On CMAN stations, barometric pressure was reduced by the station's electronics package to equivalent sea-level pressure (NDBC, 1992).

To prepare surface fields, wind speed and air temperature from non-airport stations were adjusted to 10-m height above sea level; wind speeds measured at airport stations were converted from knots to m/s; air temperatures were converted from Fahrenheit to Celsius and adjusted to 10 m above the local terrain; and other measurements were used as reported. When measurements were not taken at standard times, data were interpolated linearly to standard times. Gaps of less than six hours were filled by linear interpolation.

B. Adjustment to Standard Height

The vertical profiles of mean wind speed and air temperature are given by

$$k\left(\frac{u}{u_*}\right) = \ln\left(\frac{z}{z_0}\right) - \Psi_m\left(\frac{z}{L}\right)$$

$$k\left(\frac{\Theta_v - T_{vs}}{T_*}\right) = \ln\left(\frac{z}{z_t}\right) - \Psi_t\left(\frac{z}{L}\right)$$

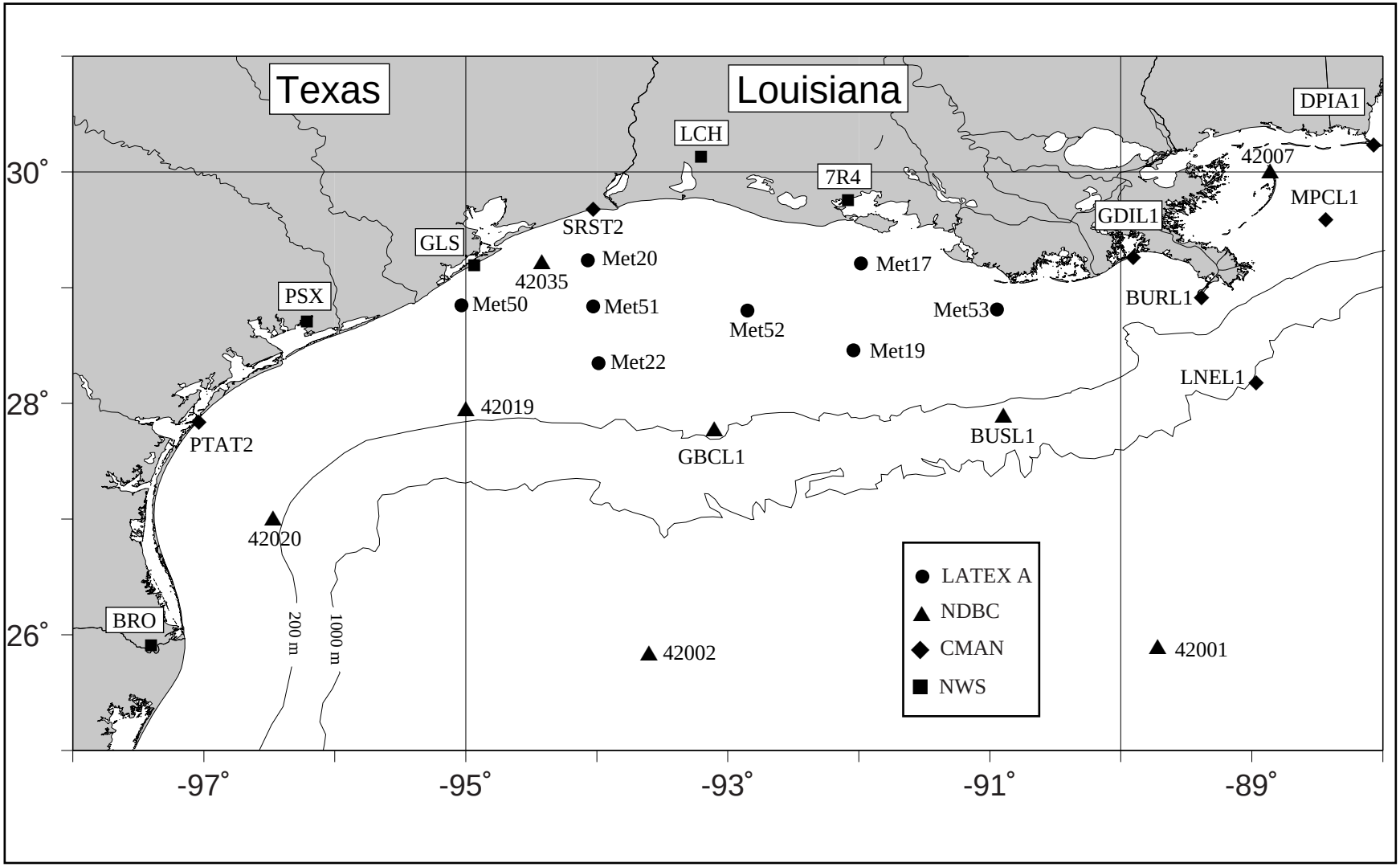


Figure 5. Locations of stations used in preparing meteorological fields.

Table 5. Range, accuracy, and resolution of meteorological sensors on NDBC and CMAN buoys (Meindl and Hamilton 1992).

Sensor	Range	Accuracy	Resolution	Units
Wind Speed	0 to 62	±1 m/s or 10%	0.1	m/s
Wind Direction	0 to 360	±10	1	deg
Air Temperature	-40 to 50	±1	0.1	°C
Barometric Pressure	900 to 1100	±1	0.1	hPa
Sea Surface Temperature	-7 to 41	±1	0.1	°C

Table 6. Positions and instrument heights for meteorological stations used in preparing surface fields.

Buoy	Lat. (°N)	Long. (°W)	Anemometer Ht (m) *	Thermometer Ht (m) *	Type
Met17	29.19	91.96	3.6	3.0	LATEX
Met19	28.46	92.03	3.6	3.0	LATEX
Met20	29.26	94.06	3.6	3.0	LATEX
Met22	28.35	93.96	3.6	3.0	LATEX
Met50	28.88	95.04	3.6	3.0	LATEX
Met51	28.83	94.08	3.6	3.0	LATEX
Met52	28.80	93.02	3.6	3.0	LATEX
Met53	28.80	90.96	3.6	3.0	LATEX
42001	25.90	89.70	10.0	10.0	NDBC
42002	25.90	93.60	10.0	10.0	NDBC
42007	30.10	88.80	10.0	10.0	NDBC
42019	27.90	95.00	5.0	5.0	NDBC
42020	27.00	96.50	5.0	4.0	NDBC
42035	29.20	94.40	5.0	4.0	NDBC
BURL1	28.90	89.43	33.8	13.7	CMAN
BUSL1	27.90	90.90	93.6	21.3	CMAN
DPIA1	30.25	88.08	17.4	9.1	CMAN
GBCL1	27.37	93.80	57.6	57.6	CMAN
GDIL1	29.27	89.96	17.6	17.0	CMAN
LNEL1	28.67	89.17	60.0	34.7	CMAN
MPCL1	29.50	88.60	40.2	40.2	CMAN
PTAT2	27.83	97.05	14.9	9.1	CMAN
SRST2	29.67	94.05	13.4	12.8	CMAN
7R4	29.73	92.11	10.0	1.5	airport
BRO	25.90	97.43	10.0	1.5	airport
GLS	29.26	94.86	10.0	1.5	airport
LCH	30.11	93.21	10.0	1.5	airport
PSX	28.71	96.25	10.0	1.5	airport

* The heights for LATEX, NDBC and CMAN stations are measured from mean sea level; the heights for airport stations are measured from ground level.

which are obtained by integrating the gradients of mean profiles based on Monin-Obukhov similarity theory. k is the Von Karman constant, whose typical value is 0.4; u and θ_v are the wind speed and virtual potential temperature of air, respectively, at observation heights; T_{vs} is the virtual temperature of saturated air at the sea surface temperature (SST); u_* is the friction velocity; T_* is the scaling temperature; z_0 is the roughness length; z_t is the thermal roughness length; and L is the Monin-Obukhov stability scale length (L is positive for stable conditions and negative for unstable); and $Y_m(z/L)$ and $Y_t(z/L)$ are stability functions (Smith 1988).

There are many empirical relations for u_*, T_*, z_0, z_t, and L. We used the Smith (1988) model, employing the relations

$$z_0 = 0.011\left(\frac{u_*^2}{g}\right) + 0.11\left(\frac{\upsilon}{u_*}\right),$$

$$1.0 \times 10^{-3} = \frac{k^2}{\ln\left(\frac{10}{z_0}\right)\ln\left(\frac{10}{z_t}\right)}, \text{ and}$$

$$\frac{z}{L} = \frac{-zkgu_*T_*}{u_*^3\,T_{vs}},$$

where the kinematic viscosity of air is $\upsilon = 14 \times 10^{-6}$ m^2/s, and g is the gravitational acceleration. The closed set of five equations is solved for u_*, T_*, z_0, z_t, and L using an iterative procedure given measurements of wind speed, air temperature, and SST (for details, see Smith 1988). By this process the vertical profiles of wind speed and air temperature are obtained, and hence, the wind speed and air temperature at 10-m height can be calculated.

Theoretically, the adjusted wind speed and air temperature can be obtained from the Smith model for any set of parameters. However, sometimes the iterative procedure used is the computation is not convergent under extremely stable conditions (Smith 1988). When wind speed, air temperature, or SST is not measured, the vertical profiles cannot be obtained. Table 7 gives the approaches used in different situations to adjust to the standard height.

Table 7. Summary of approaches used to adjust observations to standard height.

Situation	Measured wind speed	Measured air temp.	Measured SST	Converge nt?	Wind Speed adjusted to 10-m	Air Temperature adjusted to 10-m
1	yes	yes	yes	yes	Smith method	Smith method
2	yes	yes	yes	no	Smith method using largest convergent temp. difference between air and sea	Smith method using largest convergent temp. difference between air and sea
3	yes	yes	no	n/a	using neutral condition	using adiabatic lapse rate*
4	yes	no	yes/no	n/a	using neutral condition	no
5	no	yes	yes/no	n/a	no	using adiabatic lapse rate*

* Adjusted air temperature at 10-m height using the adiabatic lapse rate is $t_{10}=t_z+G(Z-10)$, where G is the adiabatic lapse rate, which is about 0.89°C per 100 m in the lower marine boundary layer.

C. Objective Analysis Method

The surface meteorological fields are measured at irregularly distributed stations over the study region. For many purposes, however, regularly gridded data sets are required, and there are many methods for gridding the data. The basic approach employed is to estimate the value at a grid point from a weighted average of nearby observed data. In this study a statistical interpolation (SI) method was used. This method is based on

estimation theory known as optimal estimation, used in meteorological data analysis Gandin (1965) and first applied in oceanography by Bretherton et al. (1976). Today it is an important tool in oceanography for both analysis and observational array design (e.g., Bretherton et al. 1976; McWilliams et al. 1986; Carter and Robinson 1987; Mariano and Brown 1992; White and Bernstein 1979; White 1994; Rienecker et al. 1987). The SI method chooses weights based on the spatial correlation of the observed data to minimize the error variance of the gridded values.

We use p to represent a scalar variable, i.e., the wind component, air temperature, surface pressure, or SST, with a known covariance function F(r), assumed isotropic, where r is the separation between two points. At a given time in the analysis of p, the spatial mean is removed. The mean is later added back to the fitted field of p.

Assuming p_i is the measurement of p at a limited number of data points s_i (i = 1, 2,... I) that contain the true point value (q_i) plus some random noise (e_i), which may be caused by sampling error or instrumental uncertainty, then

$$p_i = q_i + e_i \qquad \text{where } i = 1, \ldots I.$$

Suppose e_i is uncorrelated with the error at other measurement points (at location m) and with the true value, then the least-squares optimal estimator of q at grid point s = (x, y) is

$$\langle q_s \rangle = \sum_{i=1}^{I} C_{i\,s} \left(\sum_{m=1}^{I} A^{-1}_{i\,m} p_m \right),$$

where $C_{i\,s} = \langle p_i\, q_s \rangle = F(s_i - s)$ is the covariance between the estimated value at s position and the ith measurement; $A_{i\,m} = \langle p_i\, p_m \rangle = F(s_i - s_m) + E\, d_{i\,m}$ is the matrix of covariance between all pairs of observations; A^{-1} is the inverse matrix of A; and E is the variance of the noise, i.e., $\langle e^2 \rangle$.

The estimated error of q_s is

$$\langle (q_s - \langle q_s \rangle)^2 \rangle = C_{s\,s} - \sum_{i,m=1}^{I} C_{i\,s}\, C_{s\,m}\, A^{-1}_{i\,m}\,.$$

The structures of the covariance of corresponding variables play an important role in the method. The real covariances depend on time and location. It is almost impossible to determine them accurately and in sufficient detail using observed data. To avoid this difficulty, the correlation functions are usually represented in terms of a mathematical form that involves parameters whose values can be estimated from a given data sample. Several analytical formulae have been used in oceanography to model correlation functions, such as second-order auto-regressive models, third-order auto-regressive models, and Gaussian distribution models (Denman and Freeland 1985; Perrie and Toulany 1989). In this study the covariance form

$$F = f_0\left(1 - \frac{r^2}{a^2}\right)\exp\left(\frac{-0.5r^2}{b^2}\right) + E\delta_{r_0}$$

is used (Mooers and Robinson 1984), where r is the separation between observation pairs, a and b are parameters, and $d_{r_0} = \{ \begin{matrix} 1, & r = 0 \\ 0, & r \neq 0 \end{matrix}$.

The foregoing relation assumes that the field is statistically isotropic and homogeneous. The monthly mean spatial covariances between pairs of observed data are calculated separately for wind components, air temperature, surface pressure, and SST. We use an identical covariance function (with the same a, b, and E) to represent the covariances of the two wind components and surface pressure by fitting covariance data of the three variables. The covariances of air temperature and SST are fitted from corresponding covariance data. Some seasonal variation is noted in the covariances. The range of values for a and b for wind components and pressure is 280-410 km; for air temperature the range is 240-390 km; and for SST the range is 180-400 km.

D. Monthly Mean Fields

Monthly mean fields of wind, air temperature, surface pressure, SST, wind stress and wind stress curl, from April 1992 through November 1994, appear in Appendix D.

The grid resolution used is 0.5 by 0.5 degrees. For each variable (10-m wind components, surface air temperature, atmospheric pressure, and SST) hourly fields were estimated at each grid point by the SI objective method. Monthly mean fields were obtained by averaging hourly data over a one-month period at each grid point.

Fluctuations in winds over a monthly periods were represented by principal axis ellipses at every other grid point.

The drag coefficient recommended by Hsu (1994) for the Texas-Louisiana continental shelf break,

$$C_d = 10^{-3} (0.69 + 0.081\ u_{10}),$$

was used to estimate hourly surface wind stress based on 10-m wind speed at each grid point. These gridded wind stress values were in turn used to estimate the hourly wind stress curl. Monthly mean wind stress and wind stress curl fields were calculated from averaging hourly data at each grid point and then contoured using the GMT (Generic Mapping Tools) software package (Wessel and Smith 1991, 1995; Smith and Wessel 1990).

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APPENDIX A

Monthly Time Series and Statistical Summaries of LATEX A Data

This appendix contains, for each mooring and month, time series of hourly, unfiltered atmospheric pressure, wind speed and direction (in stickplot form), and sea and air temperatures. The stickplot vectors point in the direction of wind forcing, i.e., in the direction toward which the wind is blowing. However, the direction associated with the vector mean wind, in the statistics at the bottom of each page, follows meteorological convention and is the angle from which the wind is coming. All directions are relative to true north and all times are UTC.

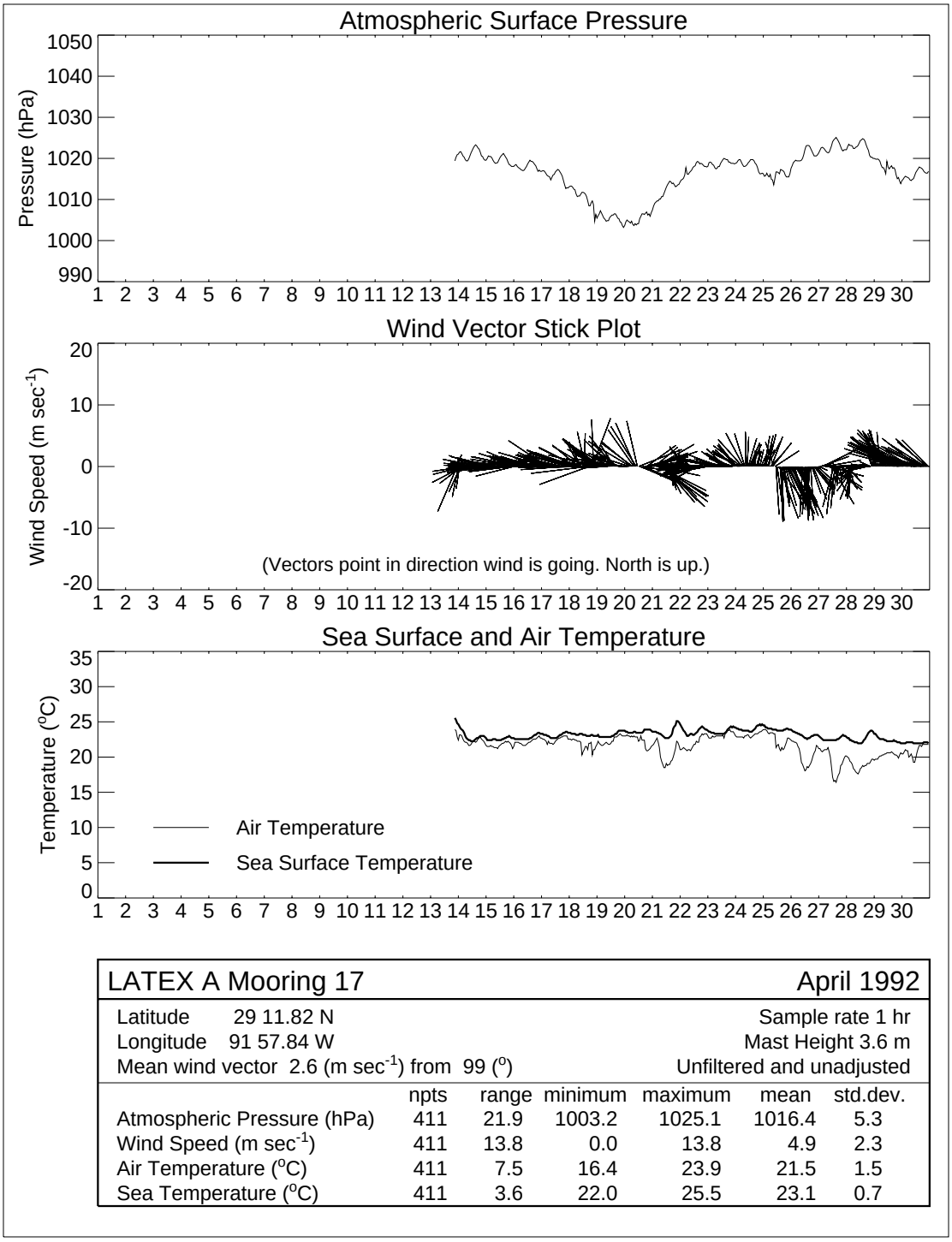
Basic monthly statistics—number of points, range, minimum, maximum, mean, and standard deviation—by parameter and month are tabulated at the bottom of each plot. Plots were not made for months when the meteorological buoy was not deployed or zero data were recovered. Omitted plots are listed in Table A-1. Two notable events evident in these plots are Hurricane Andrew, about 26 August 1992, and the "Storm of the Century", about 13 March 1993.

In this appendix, the figures are numbered by mooring, year and month like so; Figure BB.YY.MM where BB is the buoy mooring number, YY are the last two digits of the year, and MM indicate the month (01 = January,... 12 = December).

Table A.1. Omitted Plots.

Met17	Met19	Met20	Met22
September 1992	April 1992	June 1994	June 1993
February 1993	May 1992	July 1994	
January 1994	June 1993	December 1994	
April 1994	July 1993		
May 1994	August 1993		
June 1994			

Met50	Met51	Met52	Met53
August 1992	August 1992	August 1992	August 1992
September 1992	September 1992	September 1992	September 1992
January 1993	June 1993	October 1992	April 1993
June 1993	July 1993	April 1993	May 1993
July 1993	August 1993	May 1993	June 1993
August 1993	September 1993	June 1993	July 1993
September 1993	October 1993	July 1993	August 1993
October 1993	November 1993	August 1993	September 1993
November 1993	June 1994	September 1993	October 1993
June 1994	July 1994	October 1993	November 1993
July 1994	August 1994	November 1993	April 1994
August 1994	September 1994	March 1994	May 1994
September 1994	October 1994	June 1994	June 1994
October 1994	November 1994	July 1994	July 1994
November 1994	December 1994	August 1994	August 1994
December 1994		September 1994	September 1994
		October 1994	October 1994
		November 1994	November 1994
		December 1994	December 1994

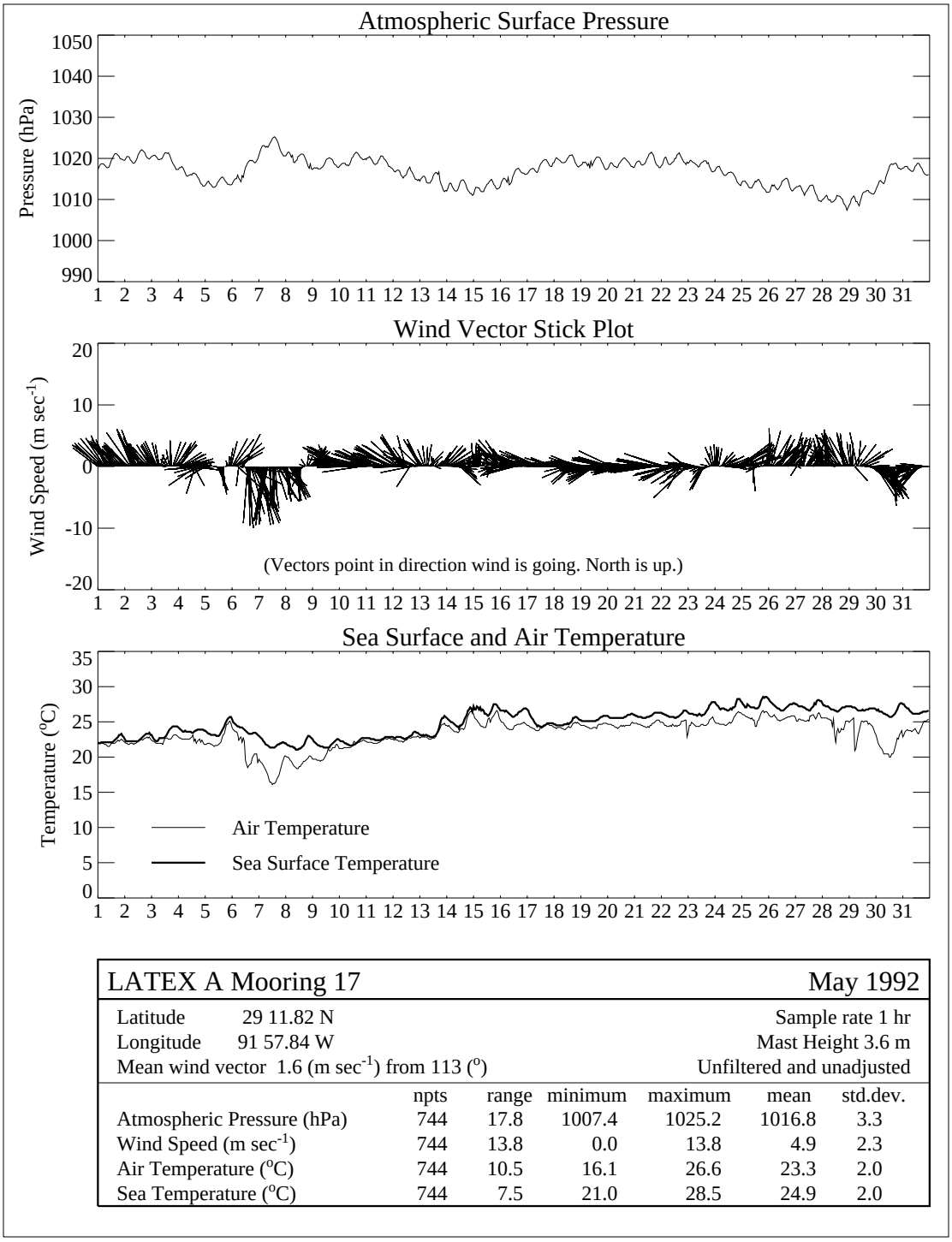


LATEX A Mooring 17 — April 1992

Latitude 29 11.82 N — Sample rate 1 hr
Longitude 91 57.84 W — Mast Height 3.6 m
Mean wind vector 2.6 (m sec^{-1}) from 99 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	411	21.9	1003.2	1025.1	1016.4	5.3
Wind Speed (m sec^{-1})	411	13.8	0.0	13.8	4.9	2.3
Air Temperature (^{o}C)	411	7.5	16.4	23.9	21.5	1.5
Sea Temperature (^{o}C)	411	3.6	22.0	25.5	23.1	0.7

Figure 17.92.04 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for April 1992.

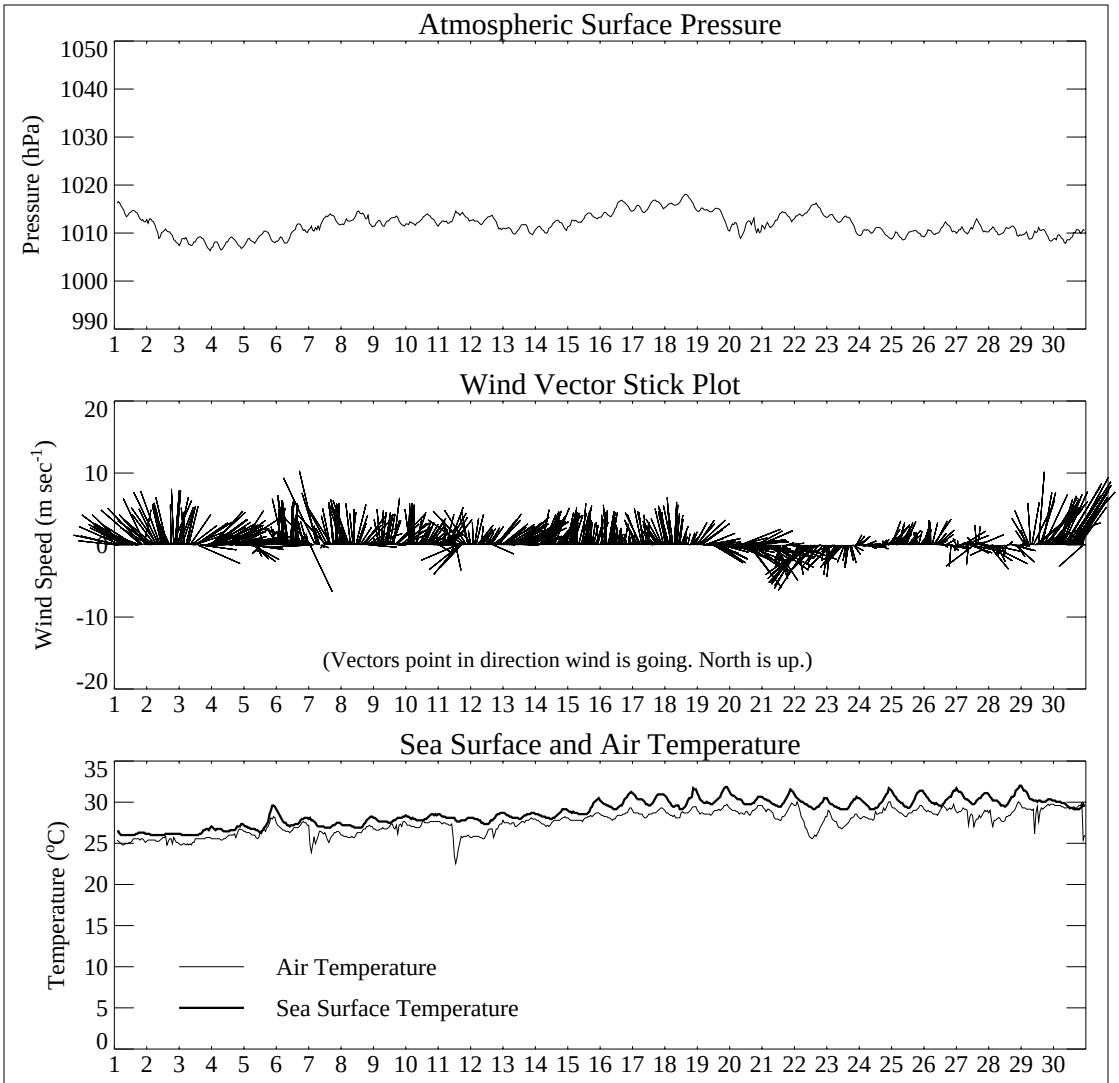


LATEX A Mooring 17 — May 1992

Latitude 29 11.82 N — Sample rate 1 hr
Longitude 91 57.84 W — Mast Height 3.6 m
Mean wind vector 1.6 (m sec^{-1}) from 113 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	17.8	1007.4	1025.2	1016.8	3.3
Wind Speed (m sec^{-1})	744	13.8	0.0	13.8	4.9	2.3
Air Temperature (^{o}C)	744	10.5	16.1	26.6	23.3	2.0
Sea Temperature (^{o}C)	744	7.5	21.0	28.5	24.9	2.0

Figure 17.92.05 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for May 1992.

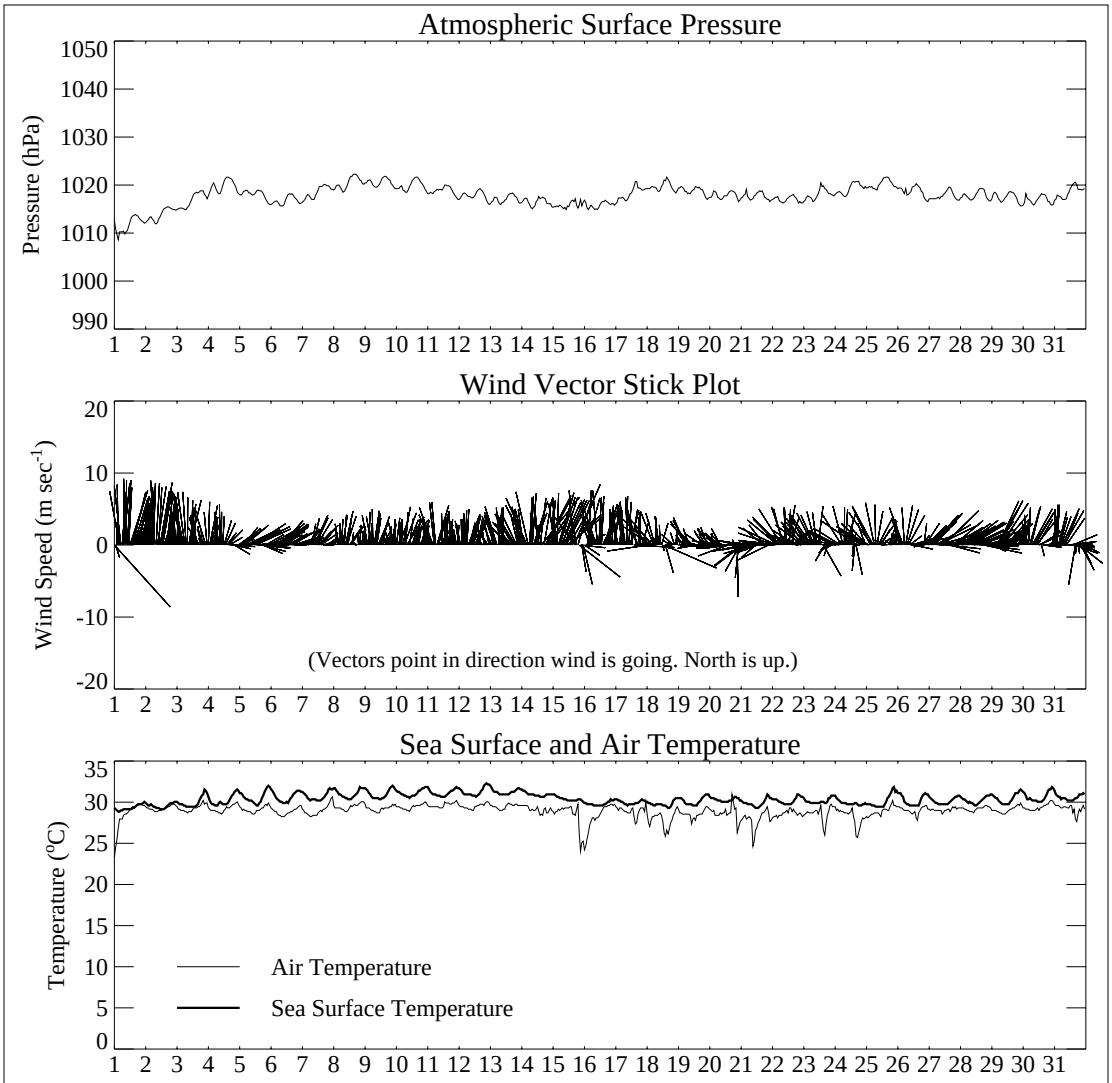


LATEX A Mooring 17 — June 1992

Latitude 29 11.82 N — Sample rate 1 hr
Longitude 91 57.84 W — Mast Height 3.6 m
Mean wind vector 2.3 (m sec^{-1}) from 209 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	718	11.7	1006.3	1018.0	1011.8	2.3
Wind Speed (m sec^{-1})	718	13.8	0.0	13.8	4.9	2.3
Air Temperature (^{o}C)	718	7.5	22.5	30.0	27.6	1.4
Sea Temperature (^{o}C)	718	6.0	26.0	32.0	28.9	1.6

Figure 17.92.06 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for June 1992.

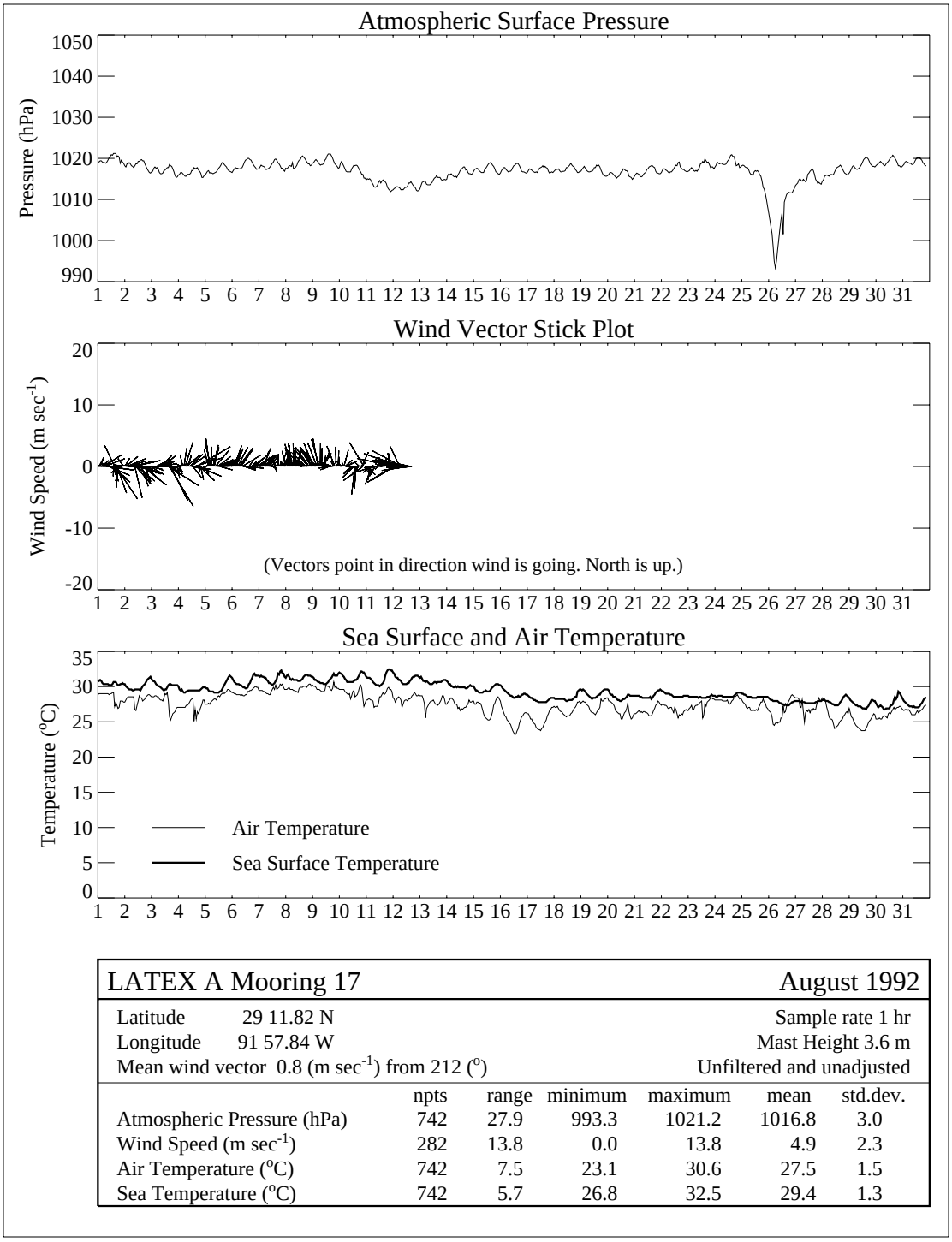


LATEX A Mooring 17 — July 1992

Latitude 29 11.82 N — Sample rate 1 hr
Longitude 91 57.84 W — Mast Height 3.6 m
Mean wind vector 2.9 (m sec^{-1}) from 191 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	743	13.7	1008.6	1022.2	1017.8	2.1
Wind Speed (m sec^{-1})	743	13.8	0.0	13.8	4.9	2.3
Air Temperature (^{o}C)	743	7.7	23.3	31.0	28.9	0.9
Sea Temperature (^{o}C)	743	3.4	28.9	32.3	30.4	0.7

Figure 17.92.07 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for July 1992.

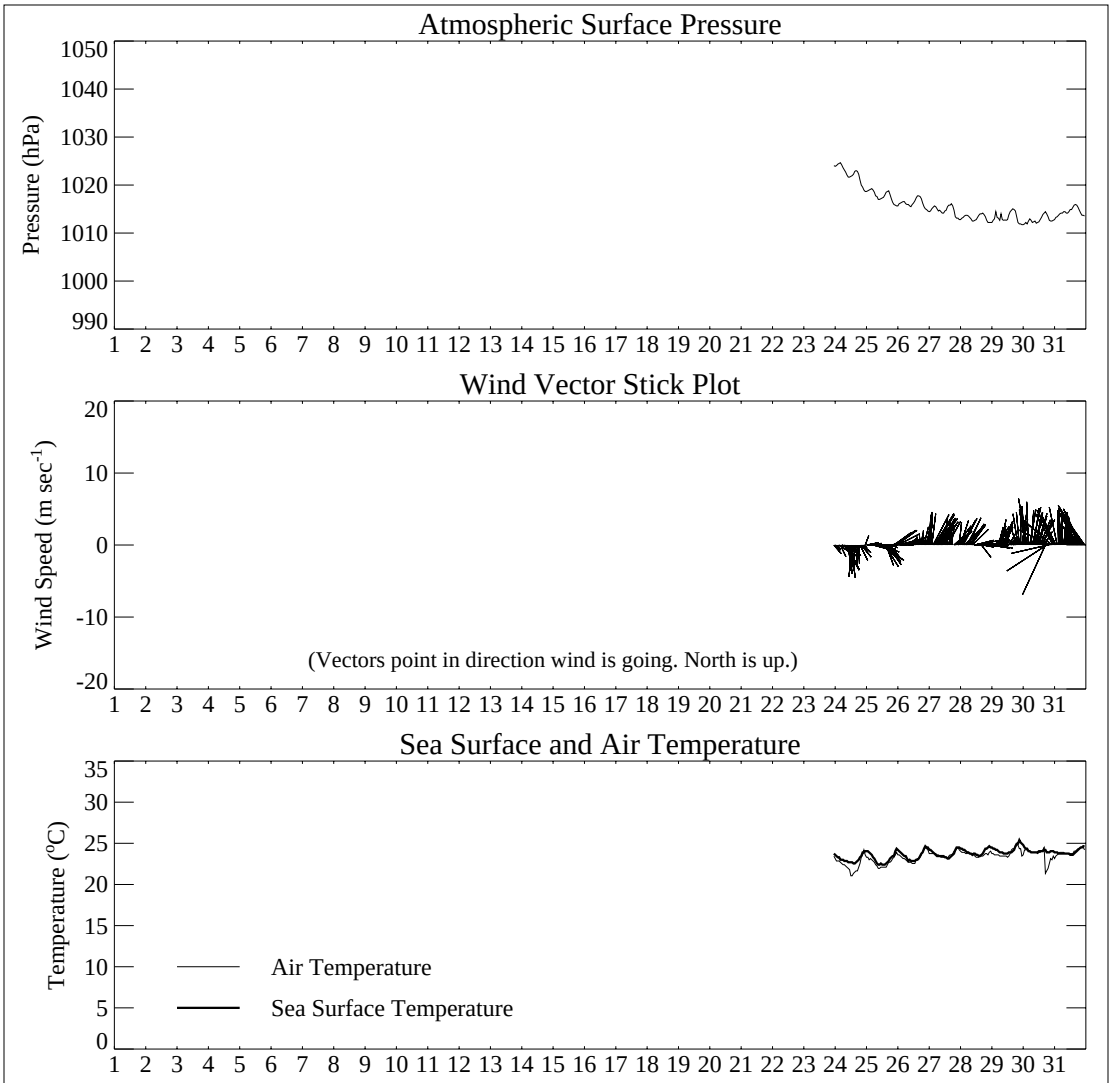


LATEX A Mooring 17 — August 1992

Latitude 29 11.82 N — Sample rate 1 hr
Longitude 91 57.84 W — Mast Height 3.6 m
Mean wind vector 0.8 (m sec^{-1}) from 212 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	742	27.9	993.3	1021.2	1016.8	3.0
Wind Speed (m sec^{-1})	282	13.8	0.0	13.8	4.9	2.3
Air Temperature (^{o}C)	742	7.5	23.1	30.6	27.5	1.5
Sea Temperature (^{o}C)	742	5.7	26.8	32.5	29.4	1.3

Figure 17.92.08 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for August 1992.

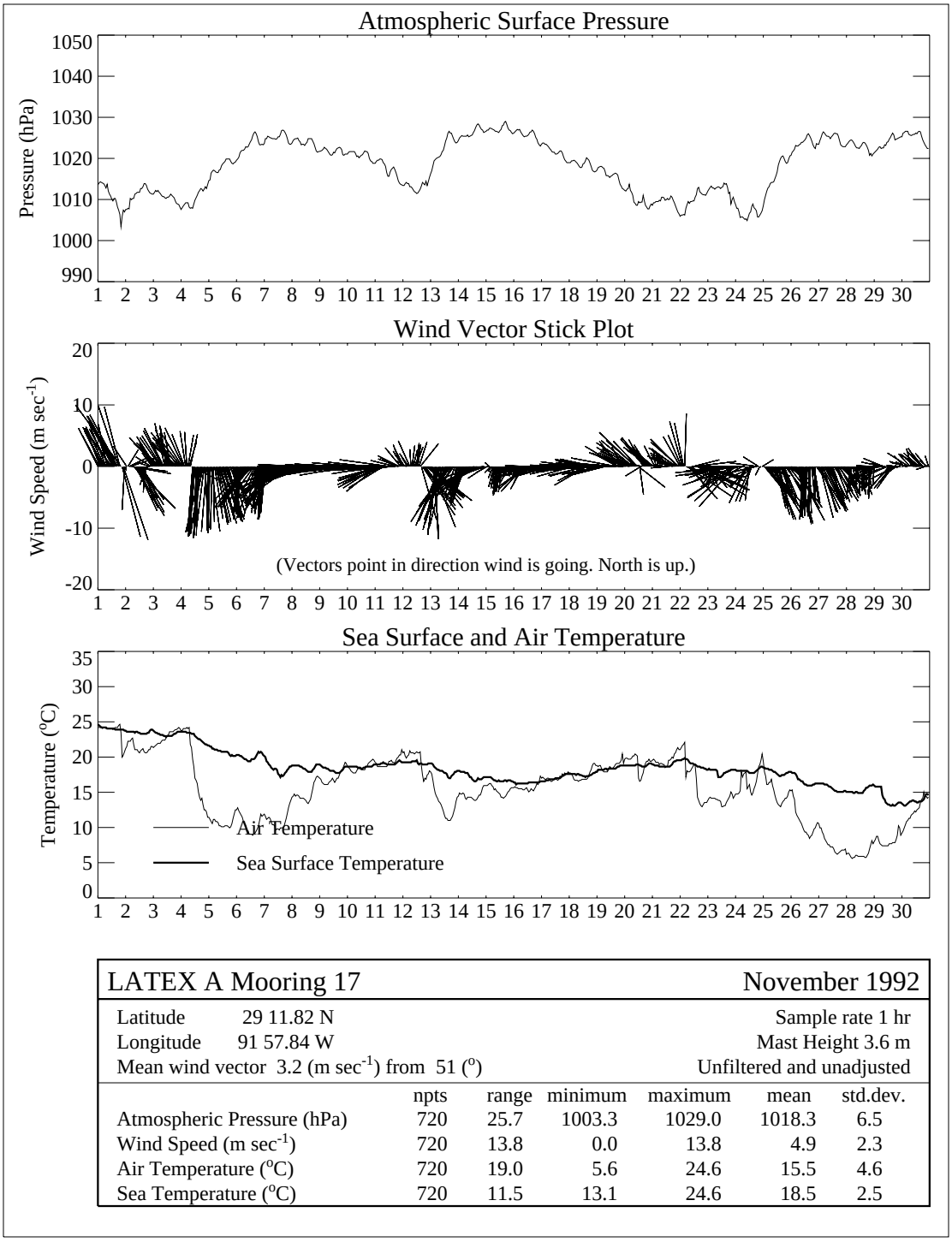


LATEX A Mooring 17 — October 1992

Latitude 29 11.82 N — Sample rate 1 hr
Longitude 91 57.84 W — Mast Height 3.6 m
Mean wind vector 1.8 (m sec^{-1}) from 208 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	193	12.9	1011.7	1024.7	1015.6	3.2
Wind Speed (m sec^{-1})	193	13.8	0.0	13.8	4.9	2.3
Air Temperature (^{o}C)	193	3.8	21.0	24.8	23.4	0.8
Sea Temperature (^{o}C)	193	3.0	22.4	25.4	23.7	0.6

Figure 17.92.10 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for October 1992.

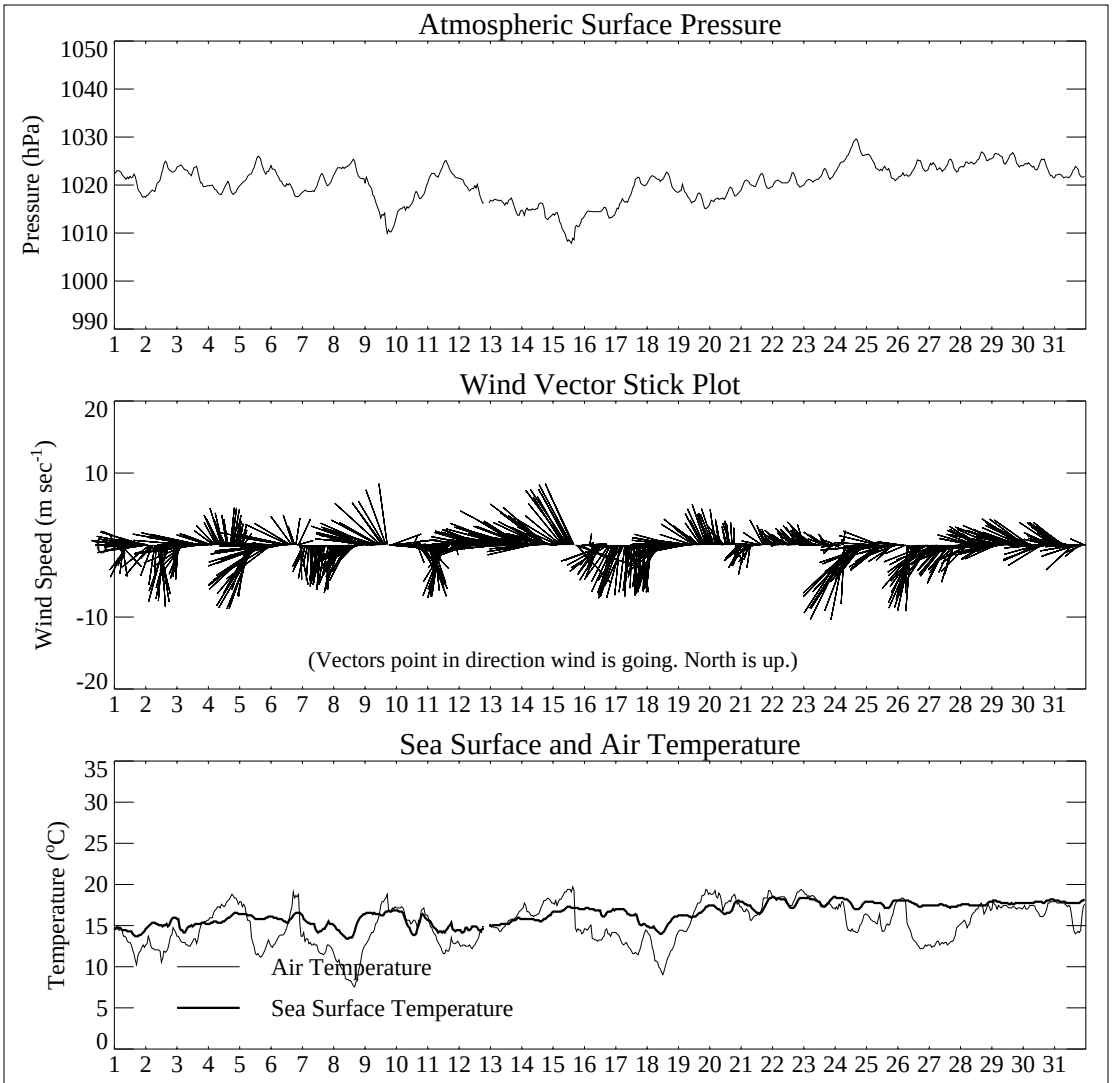


LATEX A Mooring 17 — November 1992

Latitude 29 11.82 N — Sample rate 1 hr
Longitude 91 57.84 W — Mast Height 3.6 m
Mean wind vector 3.2 (m sec^{-1}) from 51 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	25.7	1003.3	1029.0	1018.3	6.5
Wind Speed (m sec^{-1})	720	13.8	0.0	13.8	4.9	2.3
Air Temperature (^{o}C)	720	19.0	5.6	24.6	15.5	4.6
Sea Temperature (^{o}C)	720	11.5	13.1	24.6	18.5	2.5

Figure 17.92.11 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for November 1992.

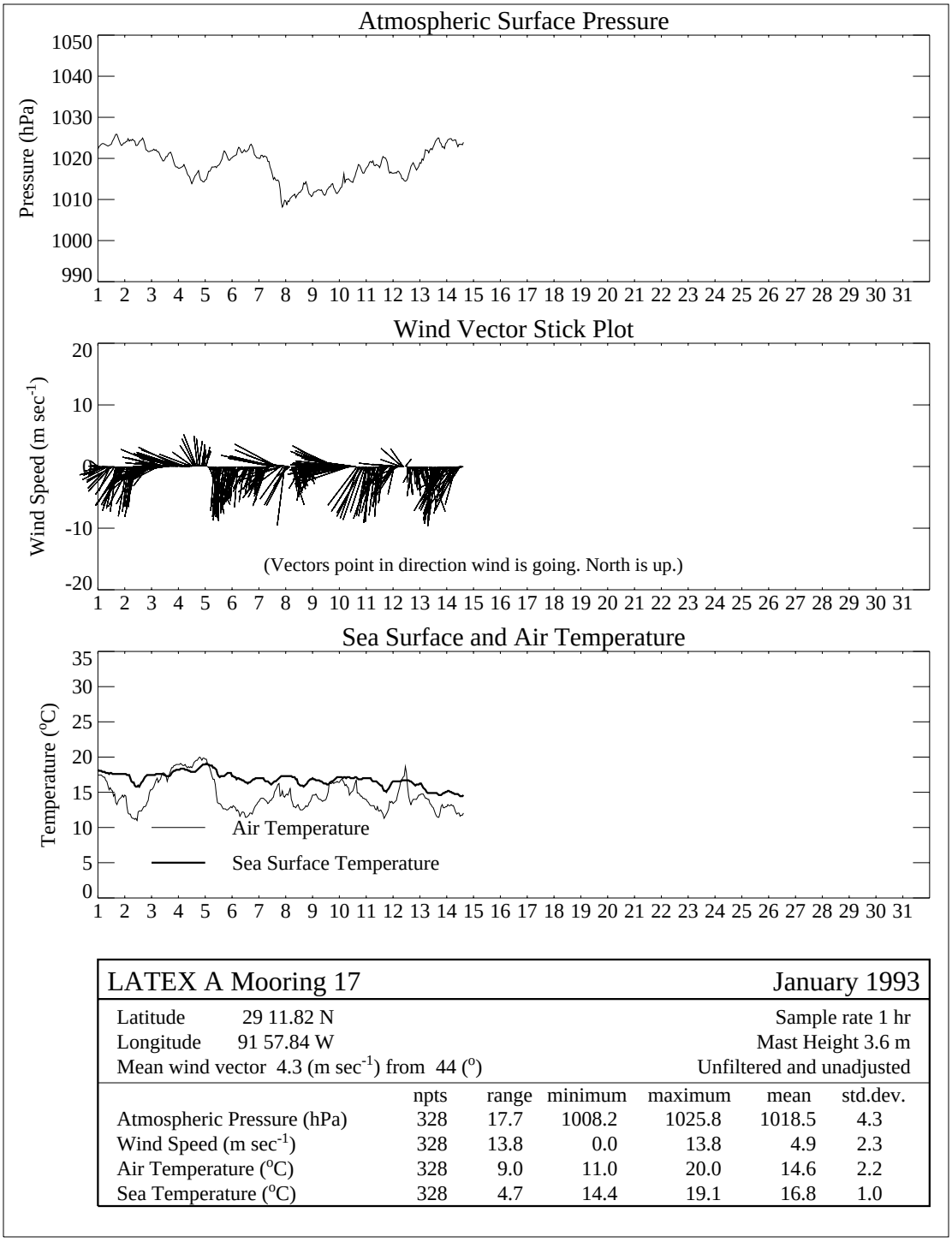


LATEX A Mooring 17 — December 1992

Latitude 29 11.82 N — Sample rate 1 hr
Longitude 91 57.84 W — Mast Height 3.6 m
Mean wind vector 3.3 (m sec^{-1}) from 73 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	741	21.8	1007.8	1029.6	1020.3	3.9
Wind Speed (m sec^{-1})	741	13.8	0.0	13.8	4.9	2.3
Air Temperature (^{o}C)	741	12.2	7.6	19.7	15.1	2.5
Sea Temperature (^{o}C)	741	5.1	13.4	18.5	16.4	1.3

Figure 17.92.12 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for December 1992.

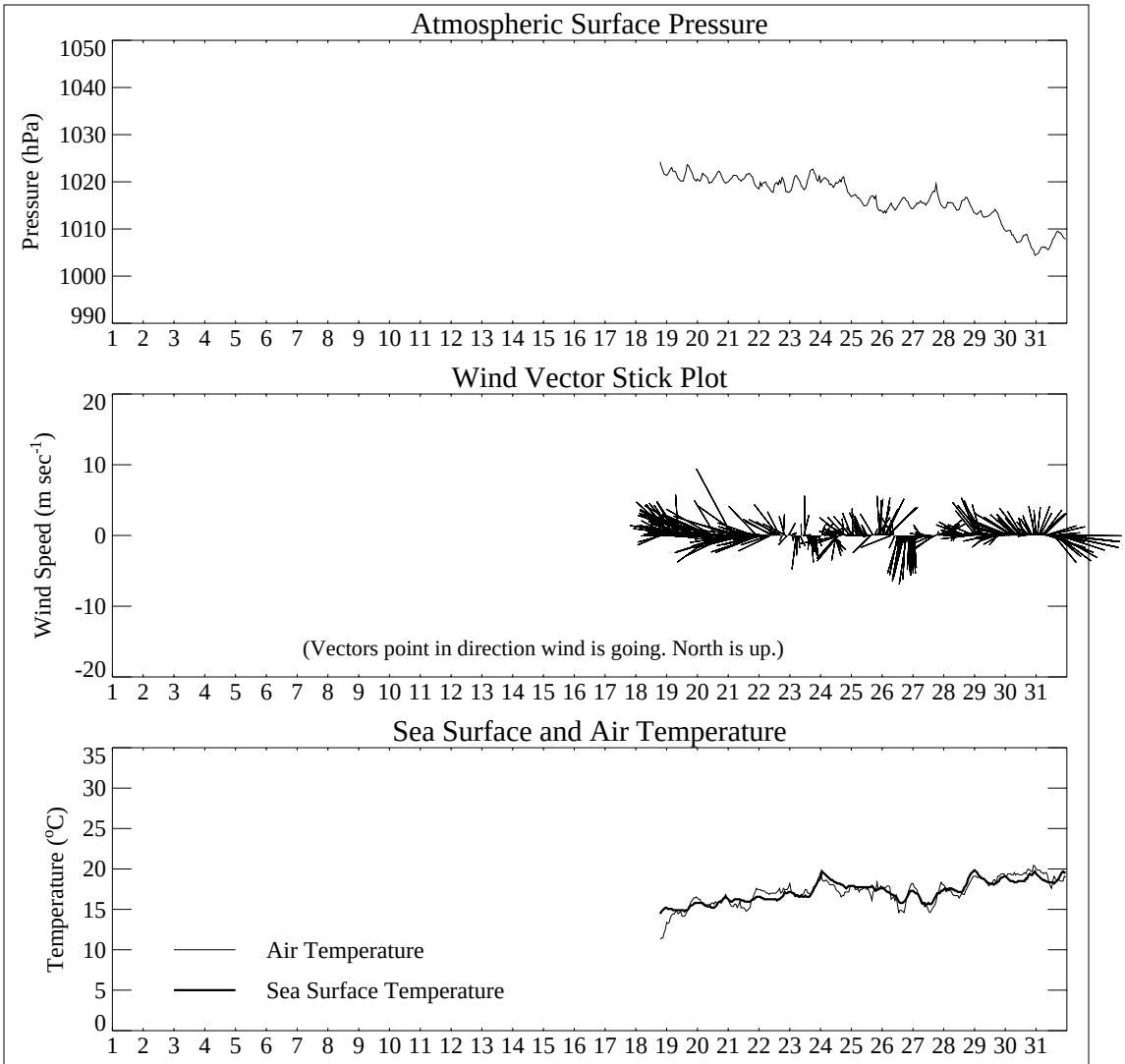


LATEX A Mooring 17 — January 1993

Latitude 29 11.82 N — Sample rate 1 hr
Longitude 91 57.84 W — Mast Height 3.6 m
Mean wind vector 4.3 (m sec^{-1}) from 44 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	328	17.7	1008.2	1025.8	1018.5	4.3
Wind Speed (m sec^{-1})	328	13.8	0.0	13.8	4.9	2.3
Air Temperature (^{o}C)	328	9.0	11.0	20.0	14.6	2.2
Sea Temperature (^{o}C)	328	4.7	14.4	19.1	16.8	1.0

Figure 17.93.01 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for January 1993.

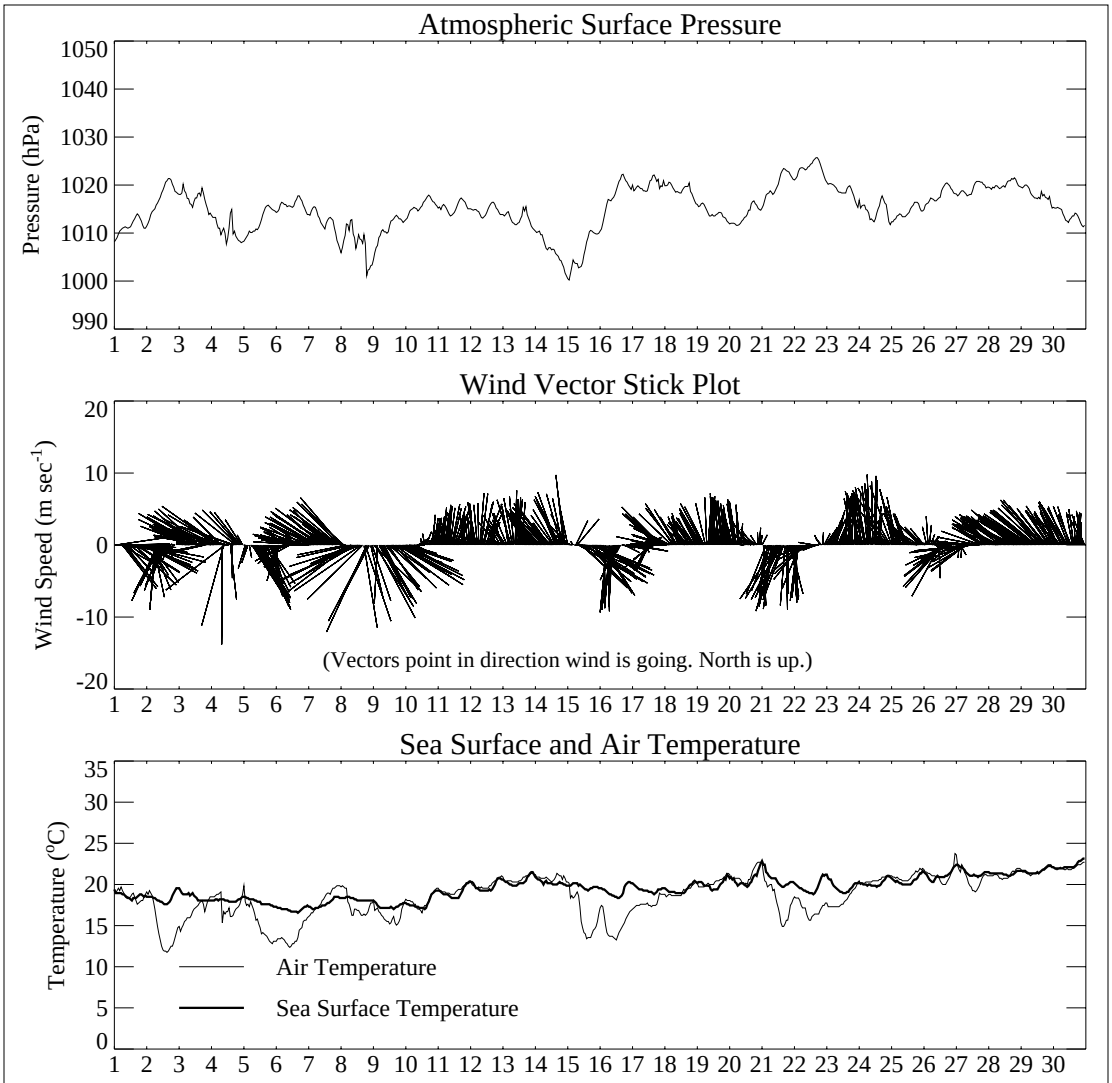


LATEX A Mooring 17 — March 1993

Latitude 29 11.82 N — Sample rate 1 hr
Longitude 91 57.84 W — Mast Height 3.6 m
Mean wind vector 2.1 (m sec^{-1}) from 105 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	317	19.8	1004.4	1024.2	1016.4	4.8
Wind Speed (m sec^{-1})	317	13.8	0.0	13.8	4.9	2.3
Air Temperature (^{o}C)	317	9.2	11.3	20.5	17.1	1.6
Sea Temperature (^{o}C)	317	5.4	14.4	19.9	17.2	1.3

Figure 17.93.03 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for March 1993.

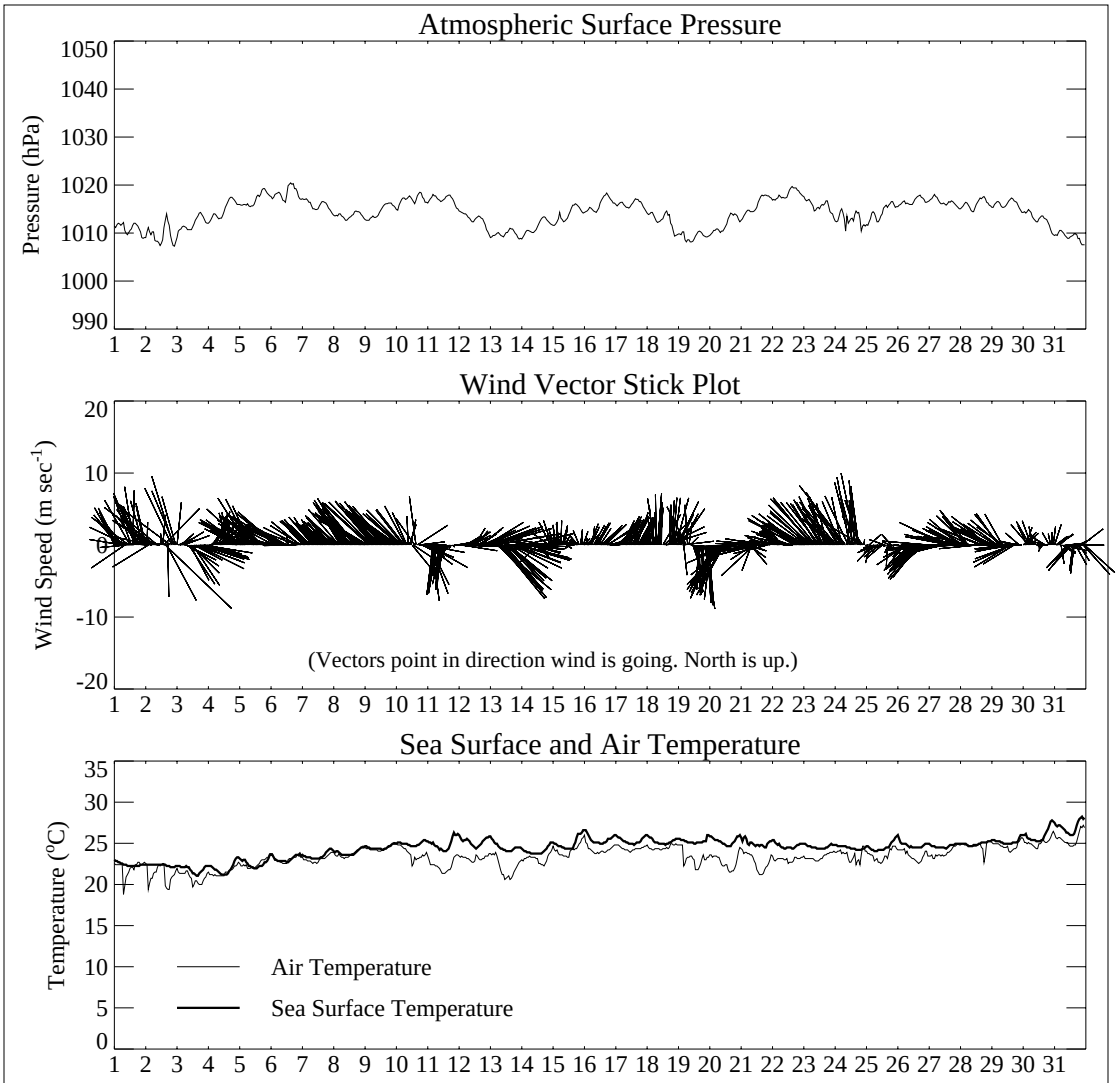


LATEX A Mooring 17 — April 1993

Latitude 29 11.82 N — Sample rate 1 hr
Longitude 91 57.84 W — Mast Height 3.6 m
Mean wind vector 1.6 (m sec^{-1}) from 124 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	25.5	1000.2	1025.7	1015.1	4.6
Wind Speed (m sec^{-1})	720	13.8	0.0	13.8	4.9	2.3
Air Temperature (^{o}C)	720	12.0	11.8	23.8	18.6	2.5
Sea Temperature (^{o}C)	720	6.6	16.5	23.1	19.5	1.4

Figure 17.93.04 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for April 1993.

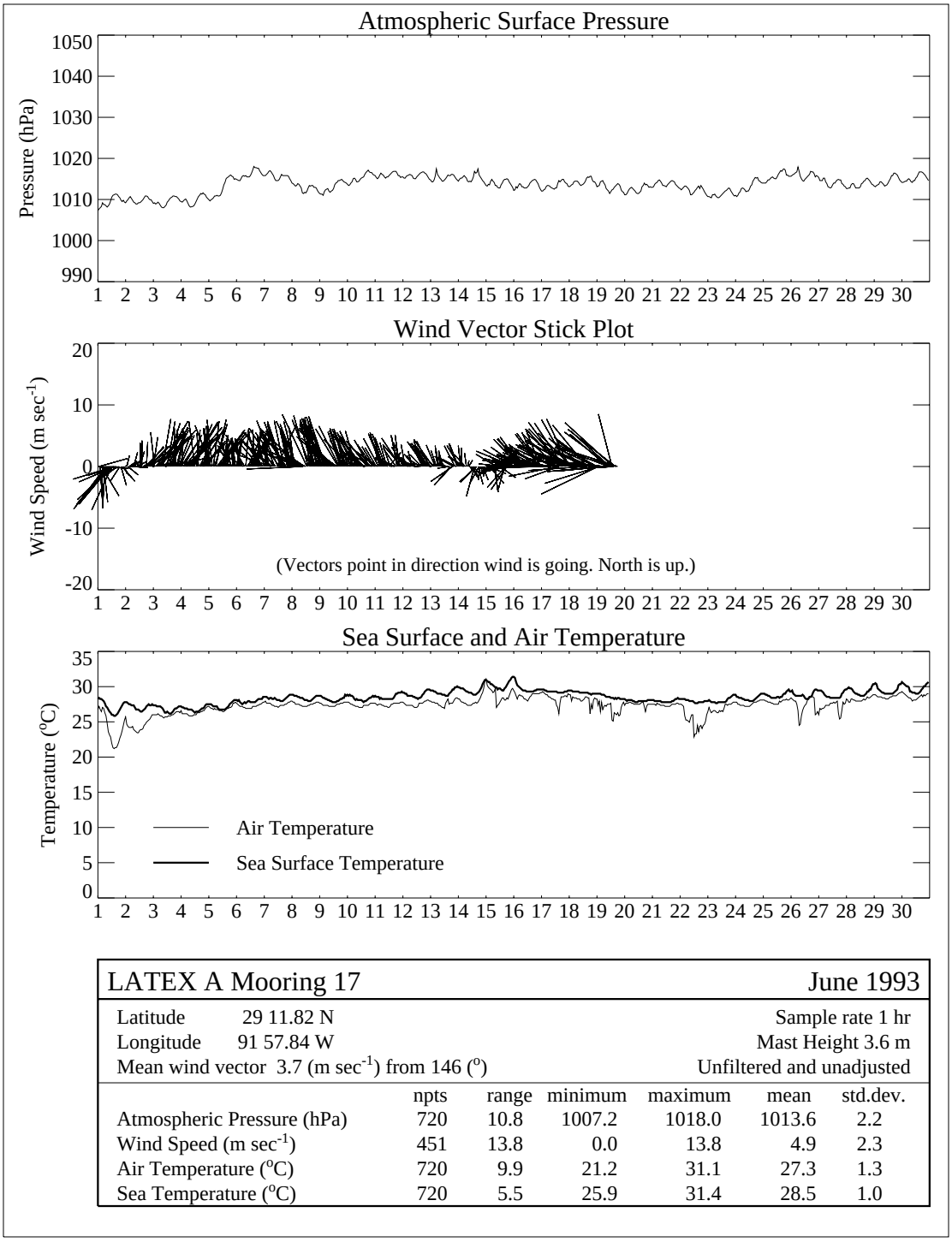


LATEX A Mooring 17 — May 1993

Latitude 29 11.82 N — Sample rate 1 hr
Longitude 91 57.84 W — Mast Height 3.6 m
Mean wind vector 1.9 (m sec^{-1}) from 134 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	743	13.2	1007.2	1020.5	1014.1	2.9
Wind Speed (m sec^{-1})	743	13.8	0.0	13.8	4.9	2.3
Air Temperature (^{o}C)	743	8.4	18.8	27.2	23.4	1.3
Sea Temperature (^{o}C)	743	7.2	21.0	28.3	24.4	1.3

Figure 17.93.05 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for May 1993.

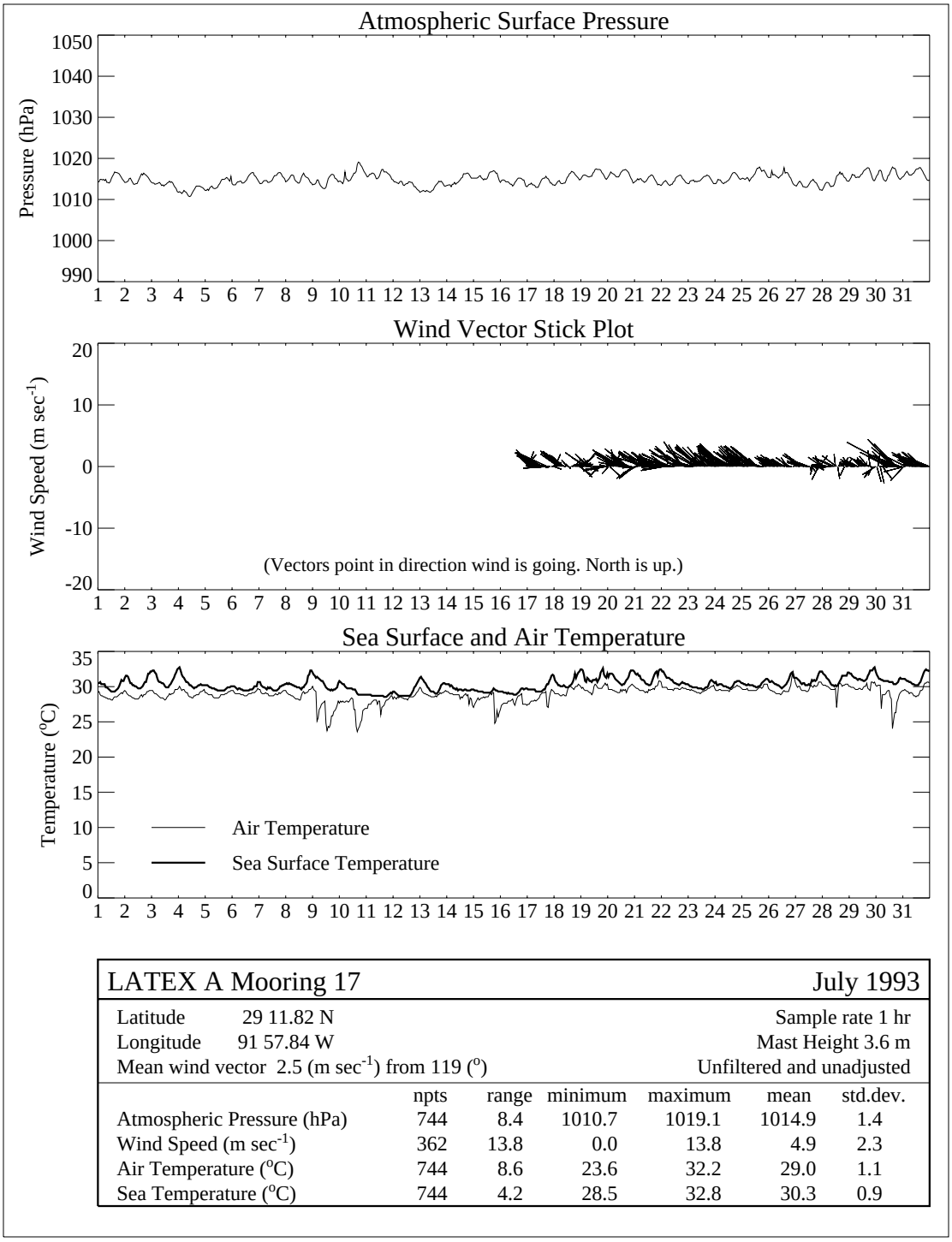


LATEX A Mooring 17 — June 1993

Latitude 29 11.82 N — Sample rate 1 hr
Longitude 91 57.84 W — Mast Height 3.6 m
Mean wind vector 3.7 (m sec^{-1}) from 146 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	10.8	1007.2	1018.0	1013.6	2.2
Wind Speed (m sec^{-1})	451	13.8	0.0	13.8	4.9	2.3
Air Temperature (^{o}C)	720	9.9	21.2	31.1	27.3	1.3
Sea Temperature (^{o}C)	720	5.5	25.9	31.4	28.5	1.0

Figure 17.93.06 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for June 1993.

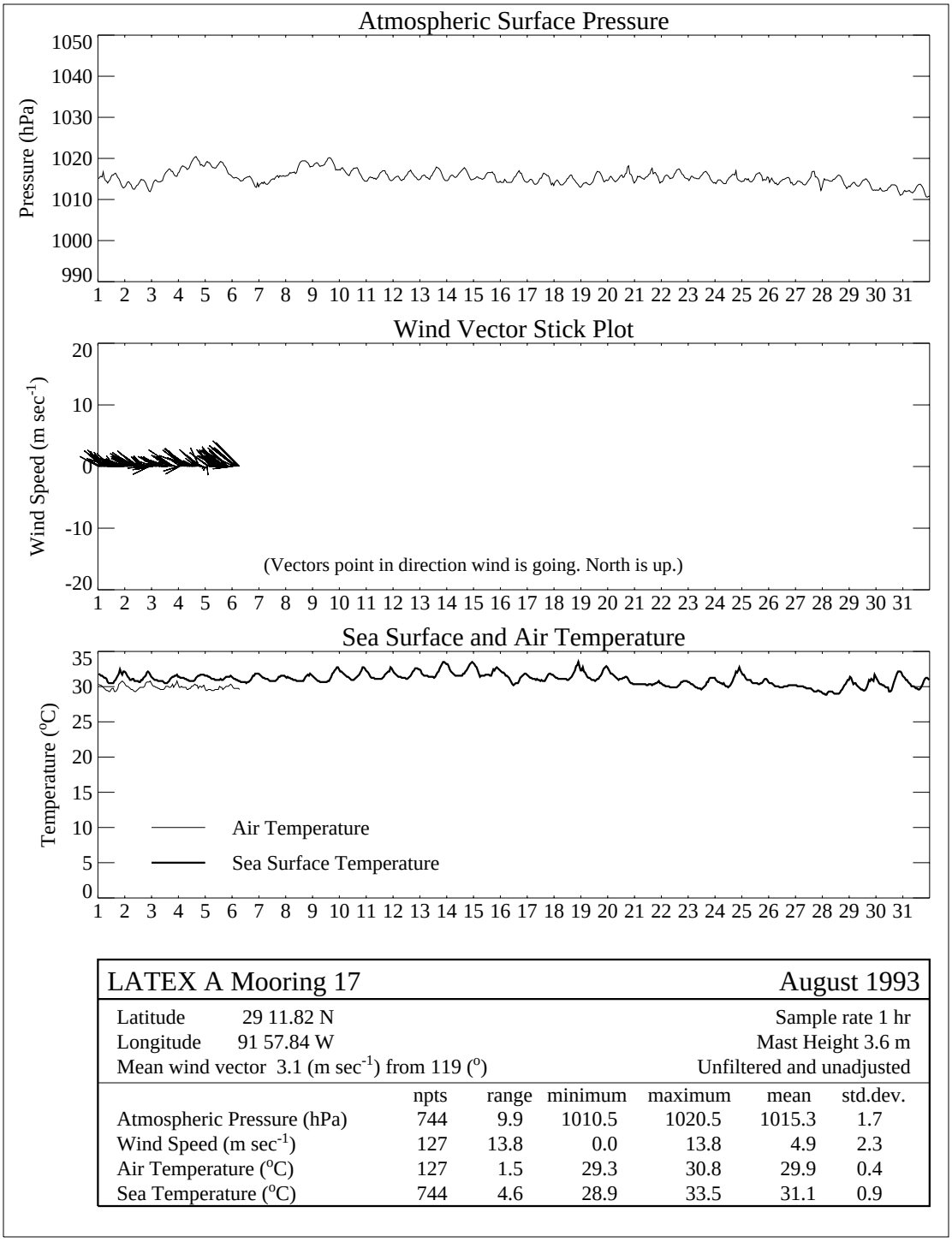


LATEX A Mooring 17 — July 1993

Latitude 29 11.82 N — Sample rate 1 hr
Longitude 91 57.84 W — Mast Height 3.6 m
Mean wind vector 2.5 (m sec^{-1}) from 119 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	8.4	1010.7	1019.1	1014.9	1.4
Wind Speed (m sec^{-1})	362	13.8	0.0	13.8	4.9	2.3
Air Temperature (^{o}C)	744	8.6	23.6	32.2	29.0	1.1
Sea Temperature (^{o}C)	744	4.2	28.5	32.8	30.3	0.9

Figure 17.93.07 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for July 1993.

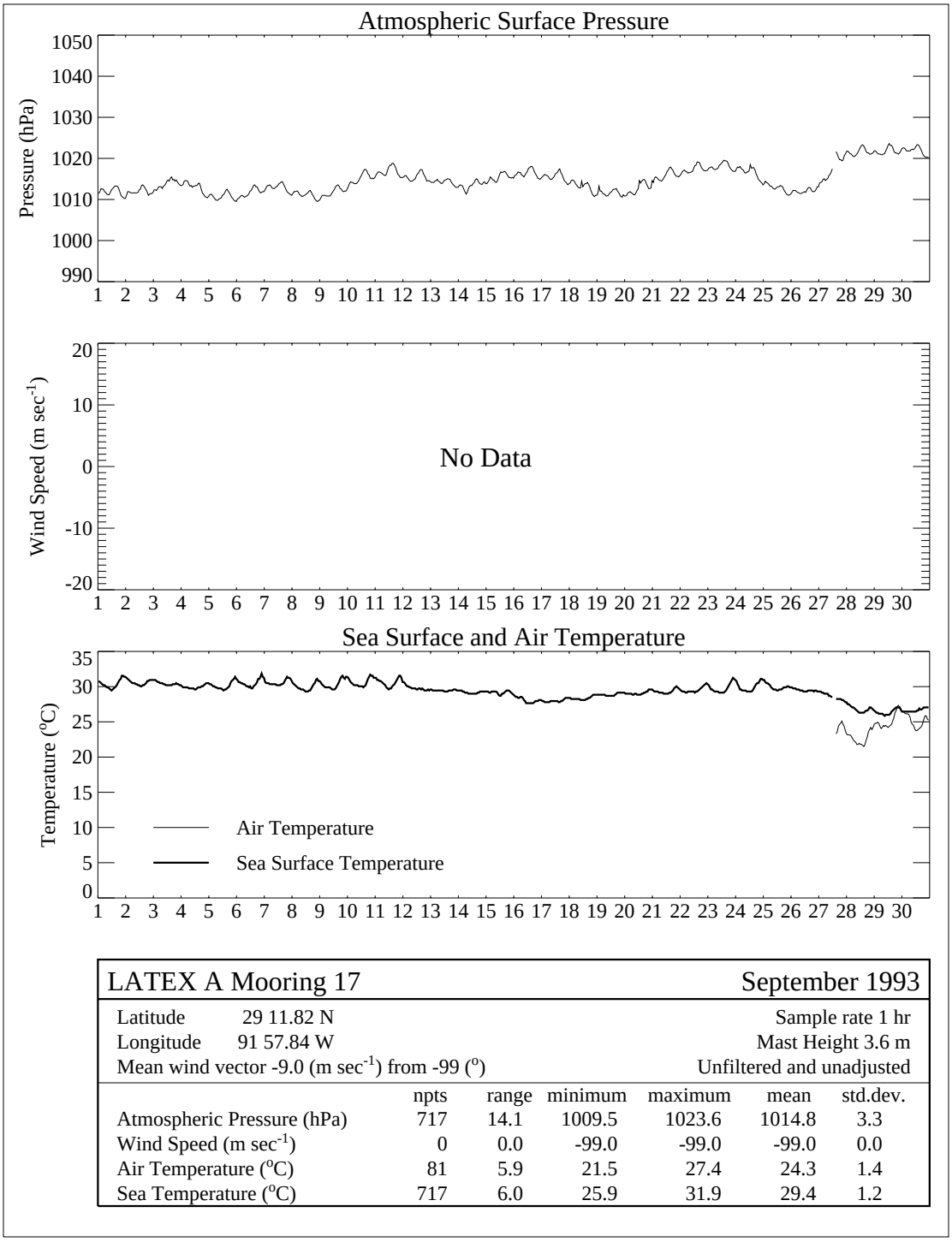


LATEX A Mooring 17 — August 1993

Latitude 29 11.82 N — Sample rate 1 hr
Longitude 91 57.84 W — Mast Height 3.6 m
Mean wind vector 3.1 (m sec^{-1}) from 119 (^{o}) — Unfiltered and unadjusted

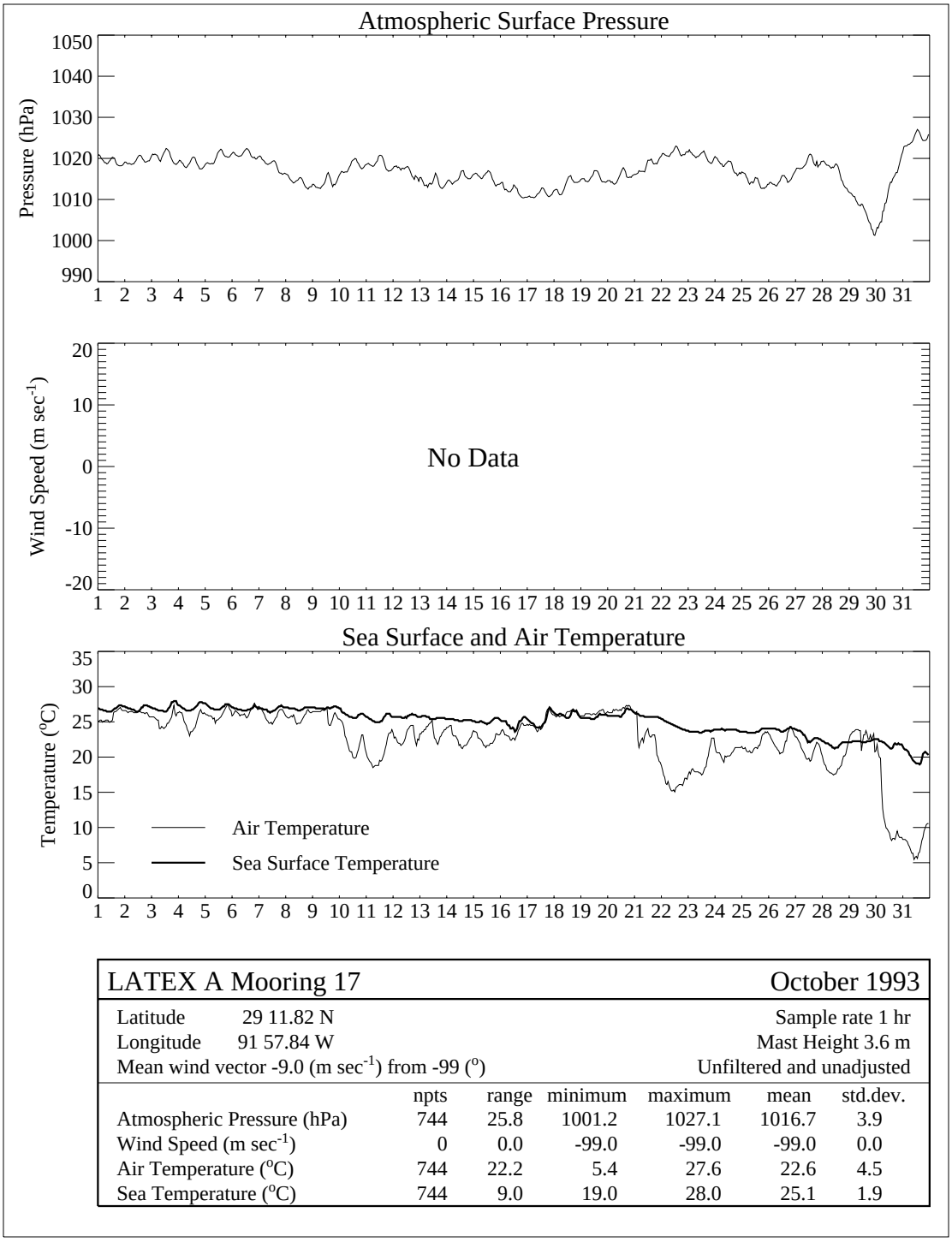
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	9.9	1010.5	1020.5	1015.3	1.7
Wind Speed (m sec^{-1})	127	13.8	0.0	13.8	4.9	2.3
Air Temperature (^{o}C)	127	1.5	29.3	30.8	29.9	0.4
Sea Temperature (^{o}C)	744	4.6	28.9	33.5	31.1	0.9

Figure 17.93.08 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for August 1993.



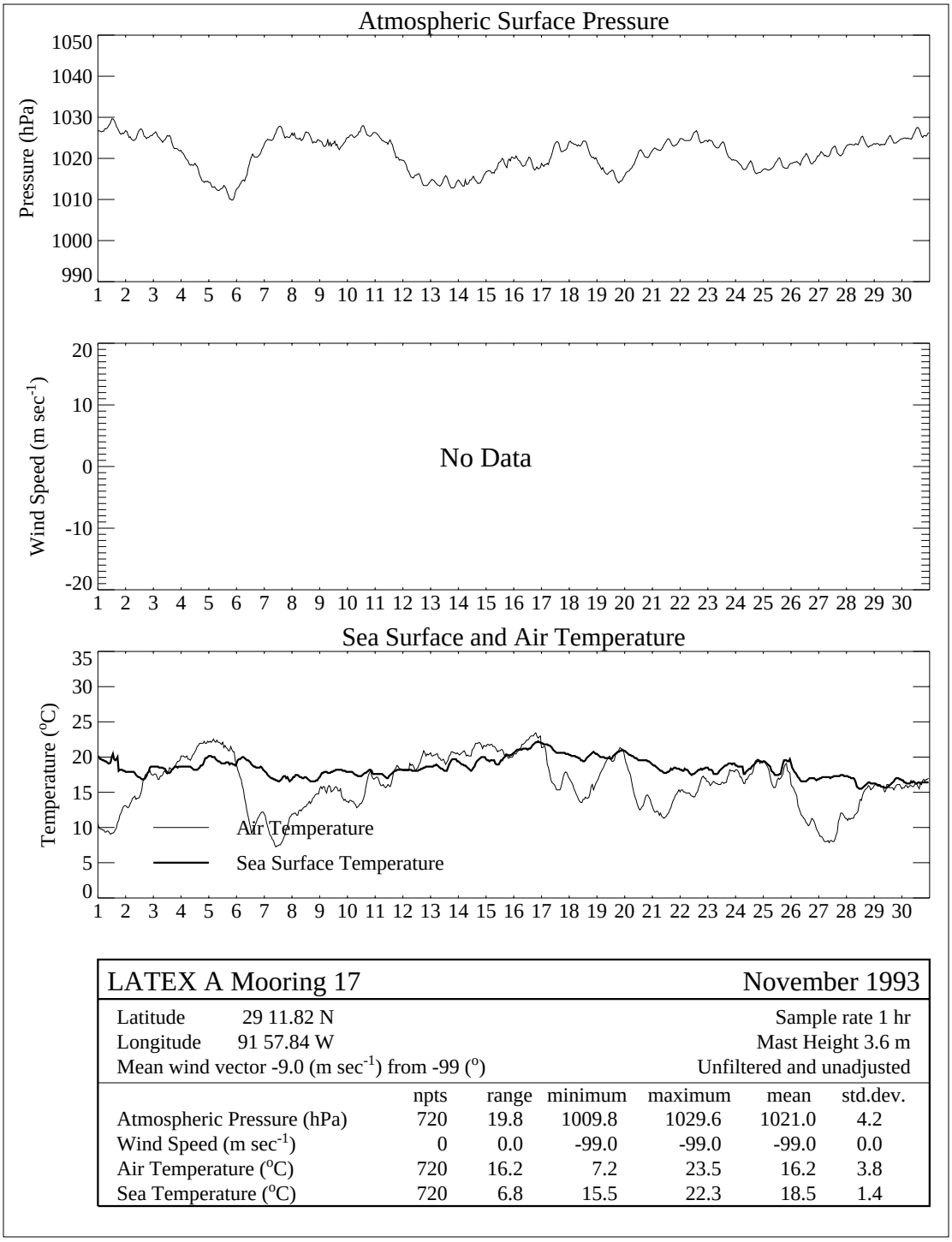
LATEX A Mooring 17						September 1993
Latitude 29 11.82 N						Sample rate 1 hr
Longitude 91 57.84 W						Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o})						Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	717	14.1	1009.5	1023.6	1014.8	3.3
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	81	5.9	21.5	27.4	24.3	1.4
Sea Temperature (^{o}C)	717	6.0	25.9	31.9	29.4	1.2

Figure 17.93.09 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for September 1993.



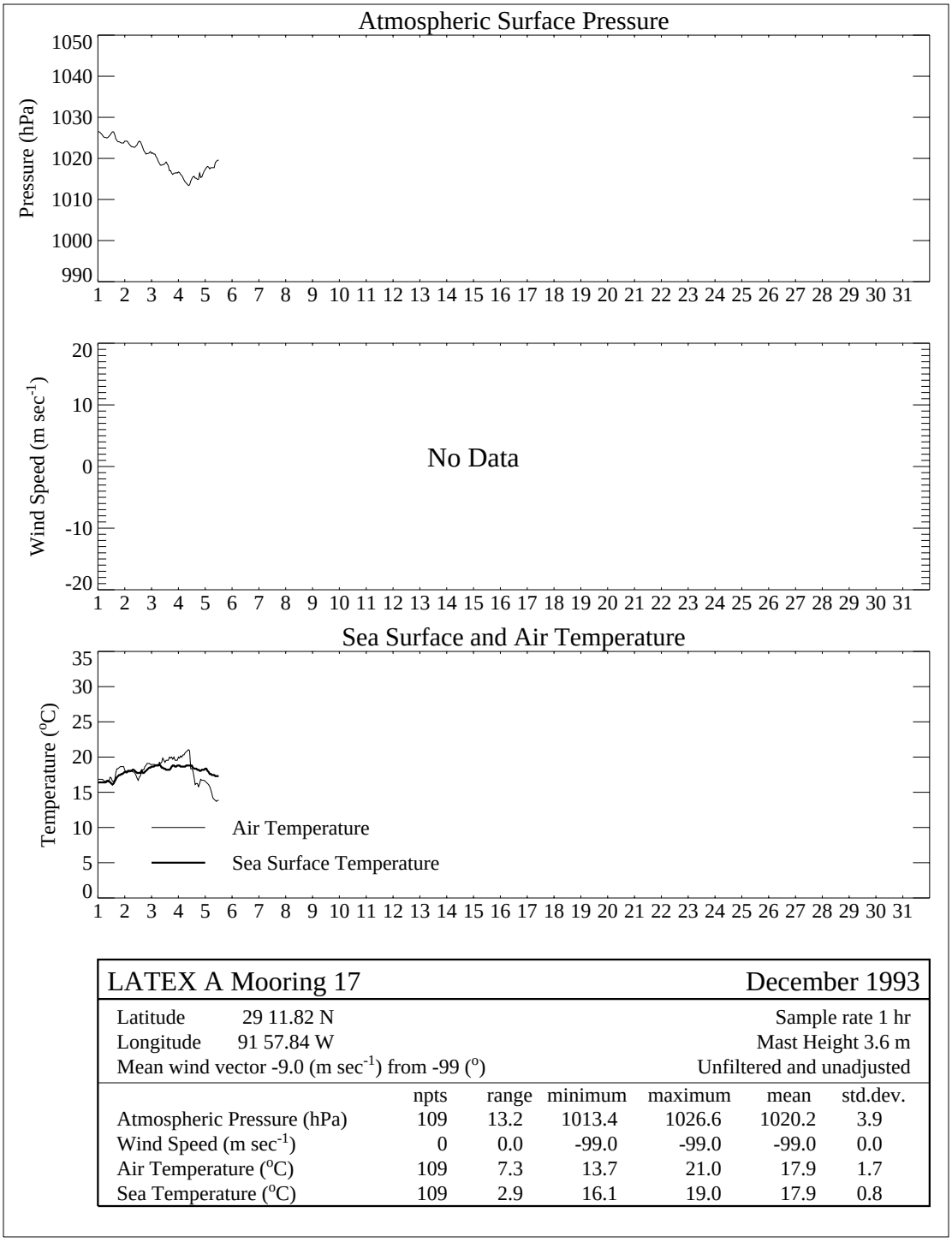
LATEX A Mooring 17						October 1993
Latitude 29 11.82 N						Sample rate 1 hr
Longitude 91 57.84 W						Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o})						Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	25.8	1001.2	1027.1	1016.7	3.9
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	744	22.2	5.4	27.6	22.6	4.5
Sea Temperature (^{o}C)	744	9.0	19.0	28.0	25.1	1.9

Figure 17.93.10 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for October 1993.



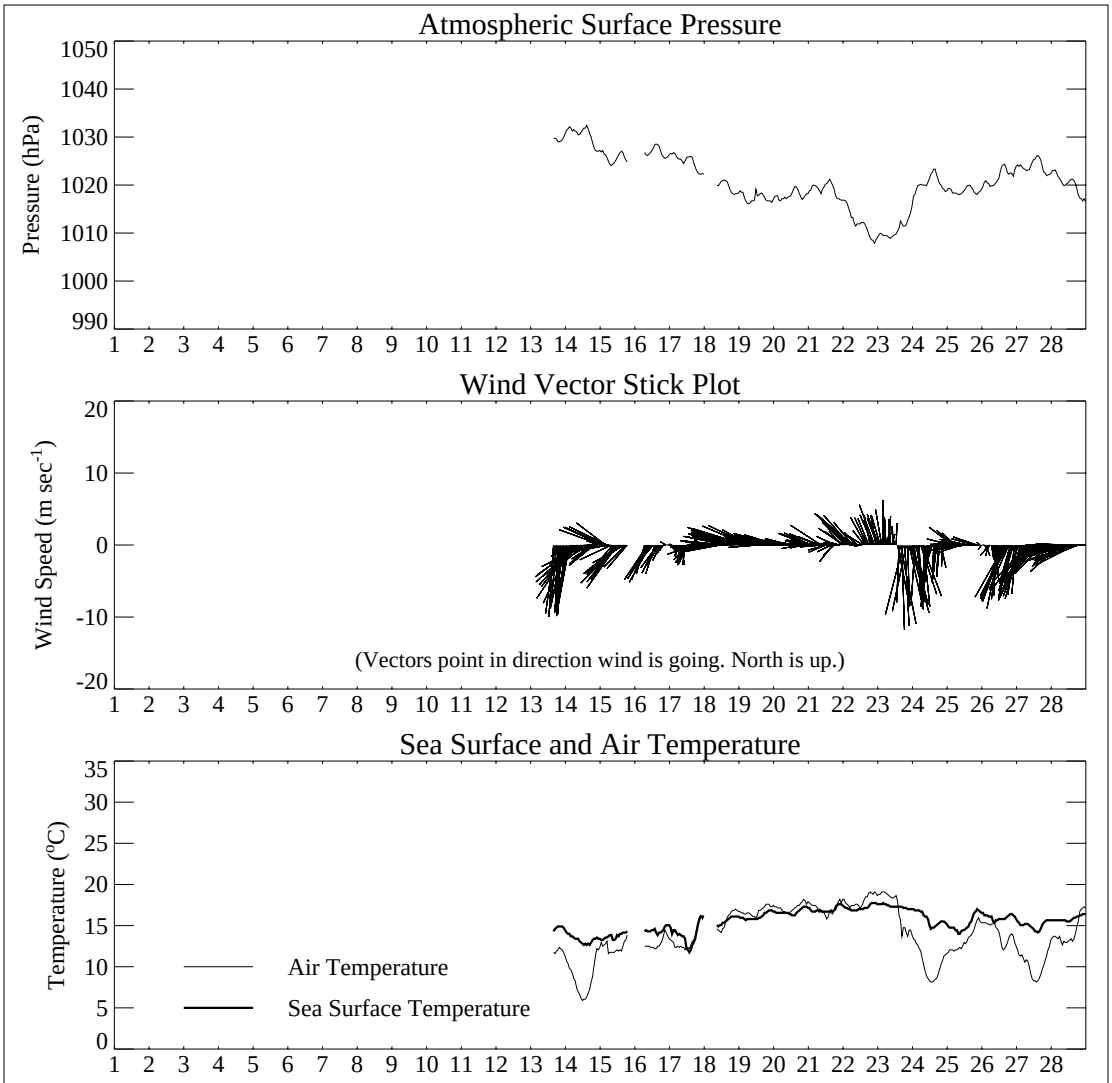
LATEX A Mooring 17						November 1993
Latitude	29 11.82 N					Sample rate 1 hr
Longitude	91 57.84 W					Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o})						Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	19.8	1009.8	1029.6	1021.0	4.2
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	720	16.2	7.2	23.5	16.2	3.8
Sea Temperature (^{o}C)	720	6.8	15.5	22.3	18.5	1.4

Figure 17.93.11 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for November 1993.



LATEX A Mooring 17						December 1993
Latitude 29 11.82 N						Sample rate 1 hr
Longitude 91 57.84 W						Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o})						Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	109	13.2	1013.4	1026.6	1020.2	3.9
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	109	7.3	13.7	21.0	17.9	1.7
Sea Temperature (^{o}C)	109	2.9	16.1	19.0	17.9	0.8

Figure 17.93.12 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for December 1993.

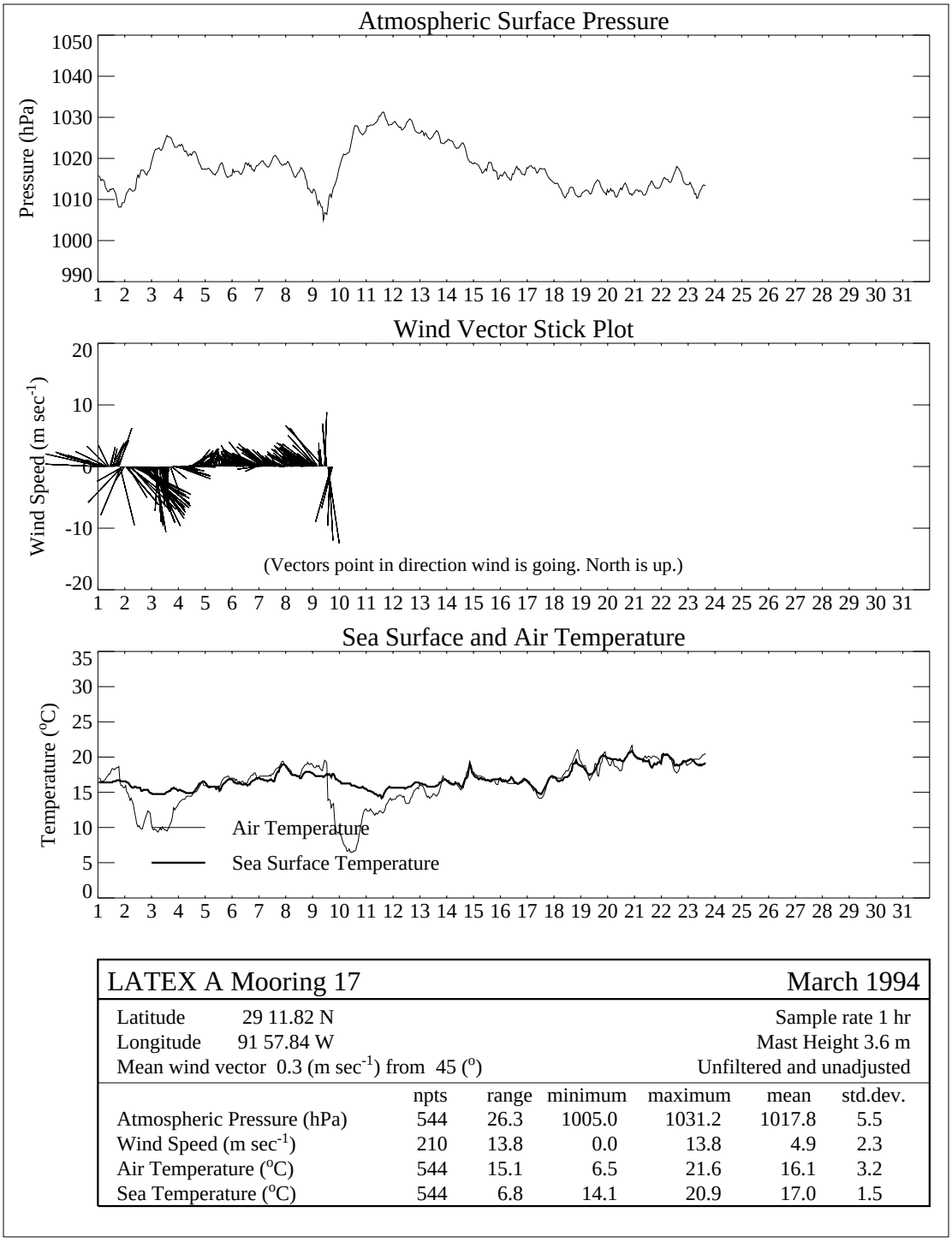


LATEX A Mooring 17 — February 1994

Latitude 29 11.82 N — Sample rate 1 hr
Longitude 91 57.84 W — Mast Height 3.6 m
Mean wind vector 3.3 (m sec^{-1}) from 59 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	350	24.6	1007.8	1032.4	1020.7	5.5
Wind Speed (m sec^{-1})	350	13.8	0.0	13.8	4.9	2.3
Air Temperature (^{o}C)	350	13.2	5.9	19.1	14.0	3.1
Sea Temperature (^{o}C)	350	6.0	11.8	17.8	15.6	1.3

Figure 17.94.02 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for February 1994.

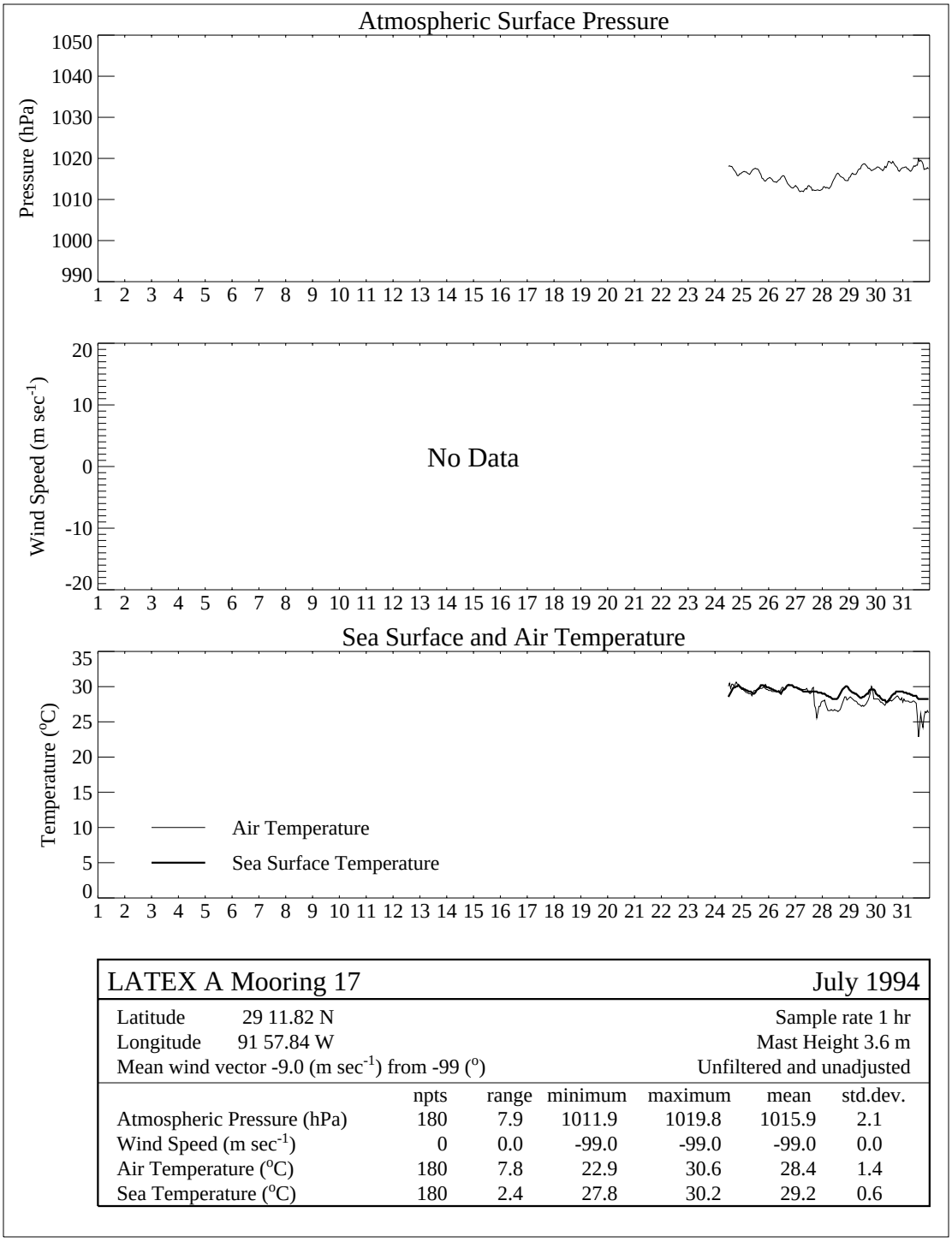


LATEX A Mooring 17 — March 1994

Latitude 29 11.82 N — Sample rate 1 hr
Longitude 91 57.84 W — Mast Height 3.6 m
Mean wind vector 0.3 (m sec^{-1}) from 45 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	544	26.3	1005.0	1031.2	1017.8	5.5
Wind Speed (m sec^{-1})	210	13.8	0.0	13.8	4.9	2.3
Air Temperature (^{o}C)	544	15.1	6.5	21.6	16.1	3.2
Sea Temperature (^{o}C)	544	6.8	14.1	20.9	17.0	1.5

Figure 17.94.03 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for March 1994.

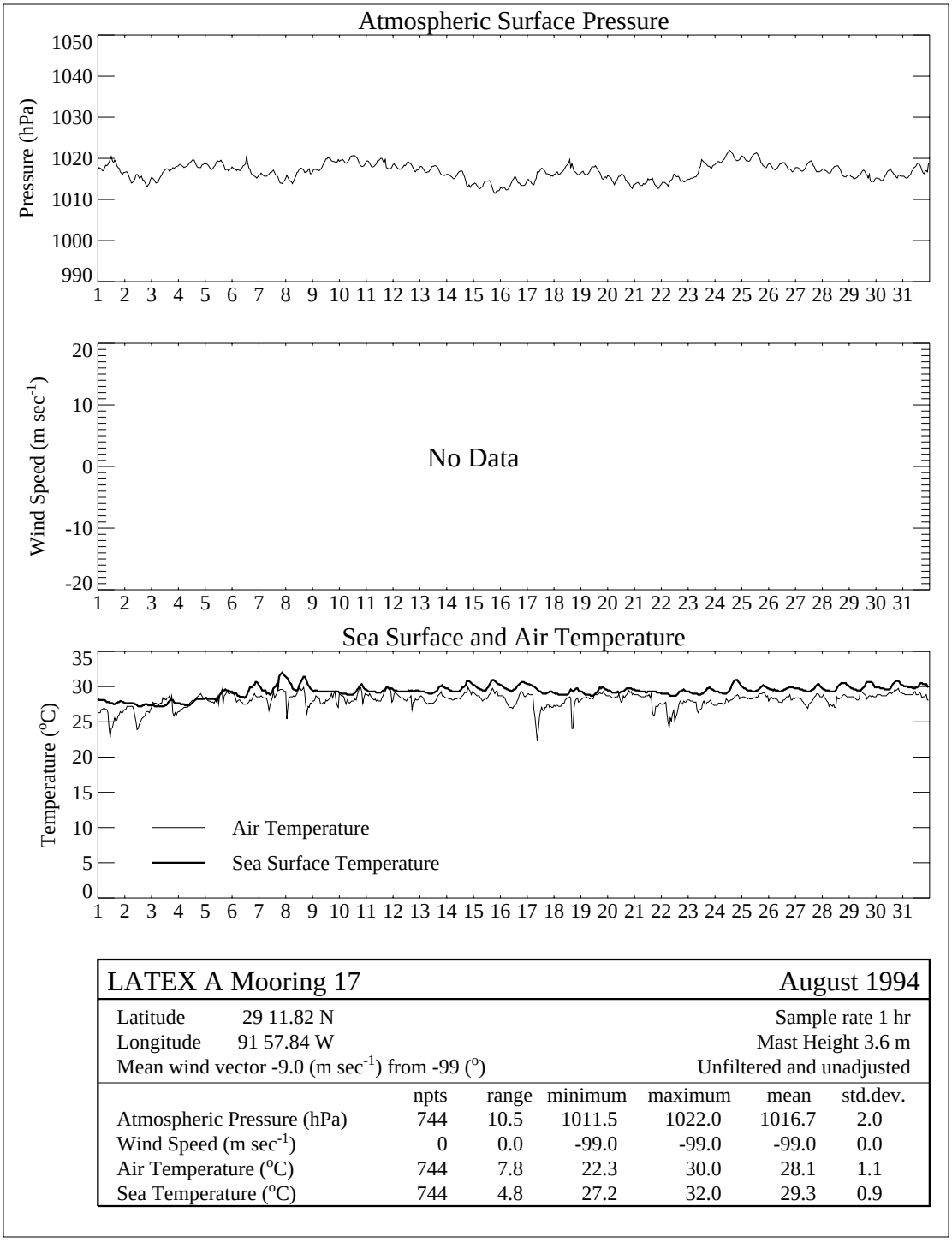


LATEX A Mooring 17 — July 1994

Latitude 29 11.82 N — Sample rate 1 hr
Longitude 91 57.84 W — Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o}) — Unfiltered and unadjusted

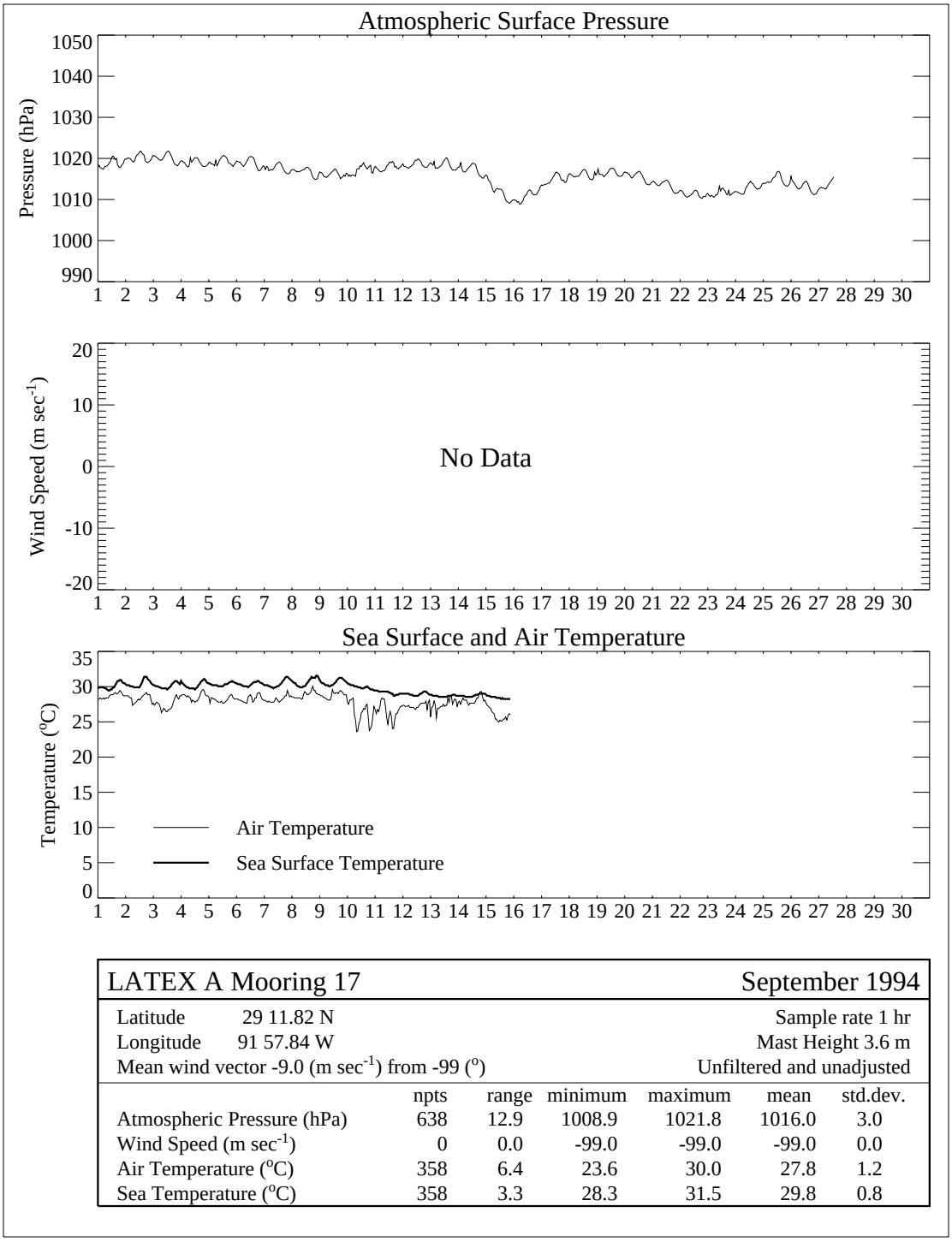
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	180	7.9	1011.9	1019.8	1015.9	2.1
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	180	7.8	22.9	30.6	28.4	1.4
Sea Temperature (^{o}C)	180	2.4	27.8	30.2	29.2	0.6

Figure 17.94.07 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for July 1994.



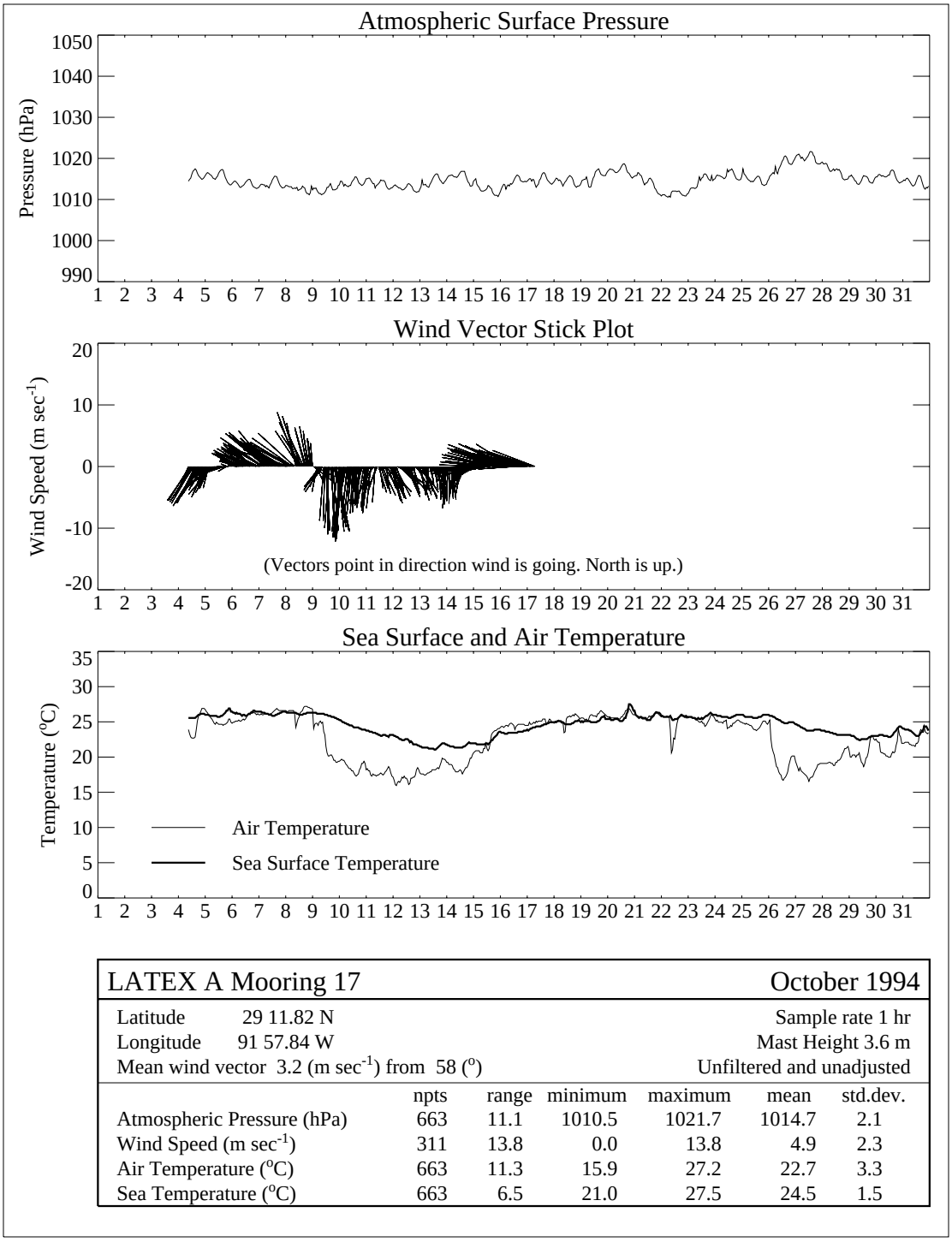
LATEX A Mooring 17						August 1994
Latitude	29 11.82 N					Sample rate 1 hr
Longitude	91 57.84 W					Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o})						Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	10.5	1011.5	1022.0	1016.7	2.0
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	744	7.8	22.3	30.0	28.1	1.1
Sea Temperature (^{o}C)	744	4.8	27.2	32.0	29.3	0.9

Figure 17.94.08 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for August 1994.



LATEX A Mooring 17						September 1994
Latitude 29 11.82 N						Sample rate 1 hr
Longitude 91 57.84 W						Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o})						Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	638	12.9	1008.9	1021.8	1016.0	3.0
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	358	6.4	23.6	30.0	27.8	1.2
Sea Temperature (^{o}C)	358	3.3	28.3	31.5	29.8	0.8

Figure 17.94.09 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for September 1994.

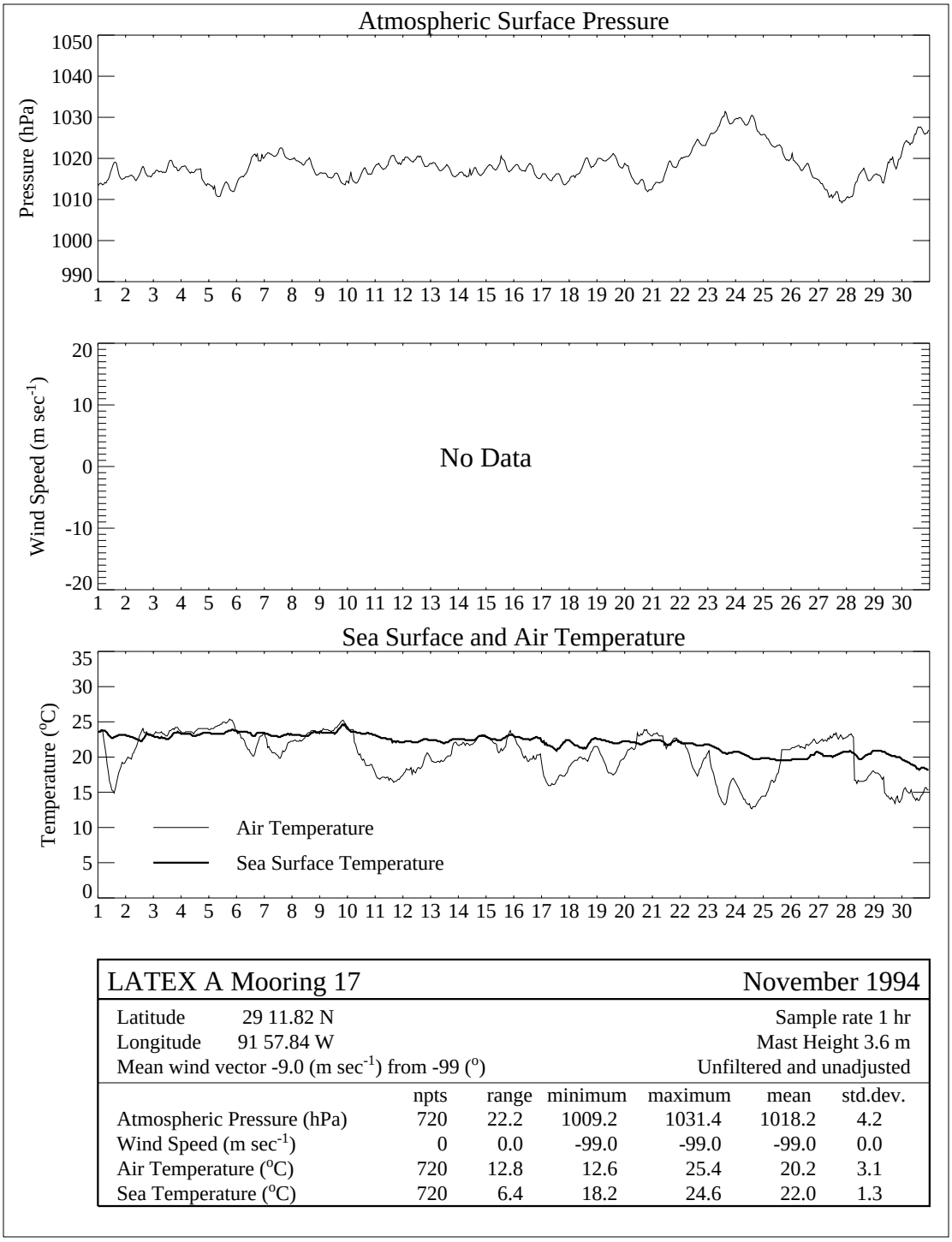


LATEX A Mooring 17 — October 1994

Latitude 29 11.82 N — Sample rate 1 hr
Longitude 91 57.84 W — Mast Height 3.6 m
Mean wind vector 3.2 (m sec^{-1}) from 58 (^{o}) — Unfiltered and unadjusted

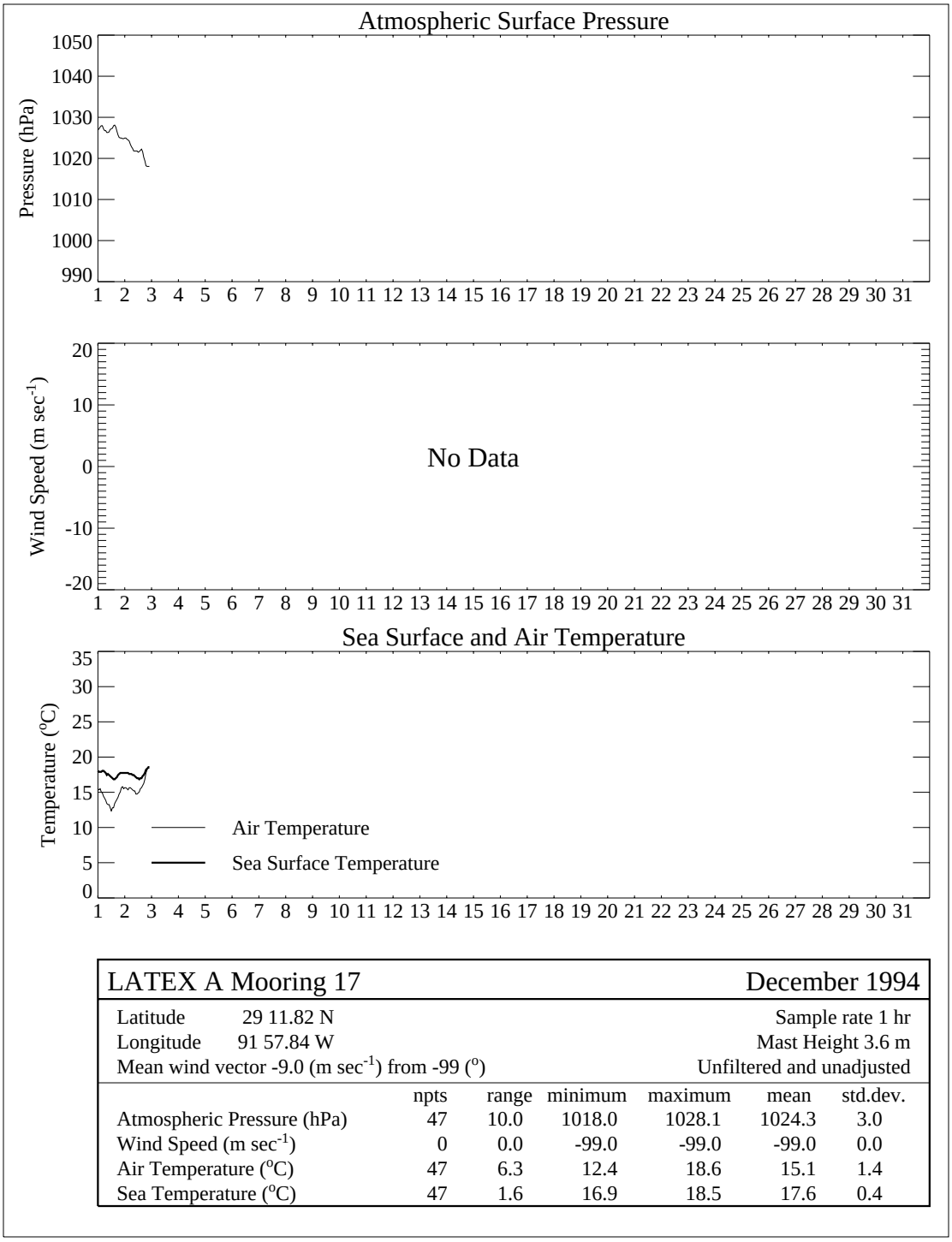
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	663	11.1	1010.5	1021.7	1014.7	2.1
Wind Speed (m sec^{-1})	311	13.8	0.0	13.8	4.9	2.3
Air Temperature (^{o}C)	663	11.3	15.9	27.2	22.7	3.3
Sea Temperature (^{o}C)	663	6.5	21.0	27.5	24.5	1.5

Figure 17.94.10 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for October 1994.



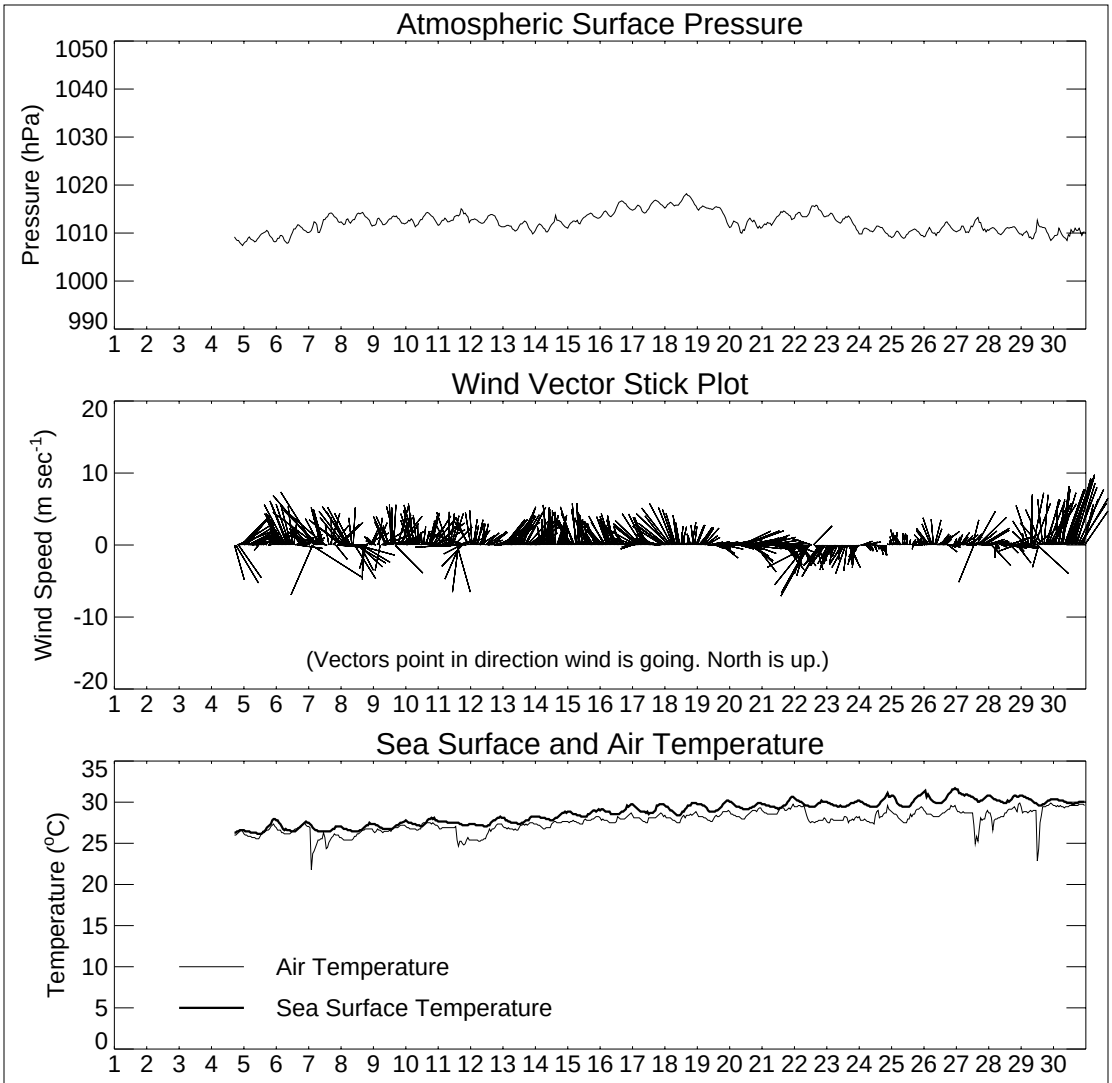
LATEX A Mooring 17						November 1994
Latitude 29 11.82 N						Sample rate 1 hr
Longitude 91 57.84 W						Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o})						Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	22.2	1009.2	1031.4	1018.2	4.2
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	720	12.8	12.6	25.4	20.2	3.1
Sea Temperature (^{o}C)	720	6.4	18.2	24.6	22.0	1.3

Figure 17.94.11 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for November 1994.



LATEX A Mooring 17						December 1994
Latitude 29 11.82 N						Sample rate 1 hr
Longitude 91 57.84 W						Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o})						Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	47	10.0	1018.0	1028.1	1024.3	3.0
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	47	6.3	12.4	18.6	15.1	1.4
Sea Temperature (^{o}C)	47	1.6	16.9	18.5	17.6	0.4

Figure 17.94.12 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for December 1994.

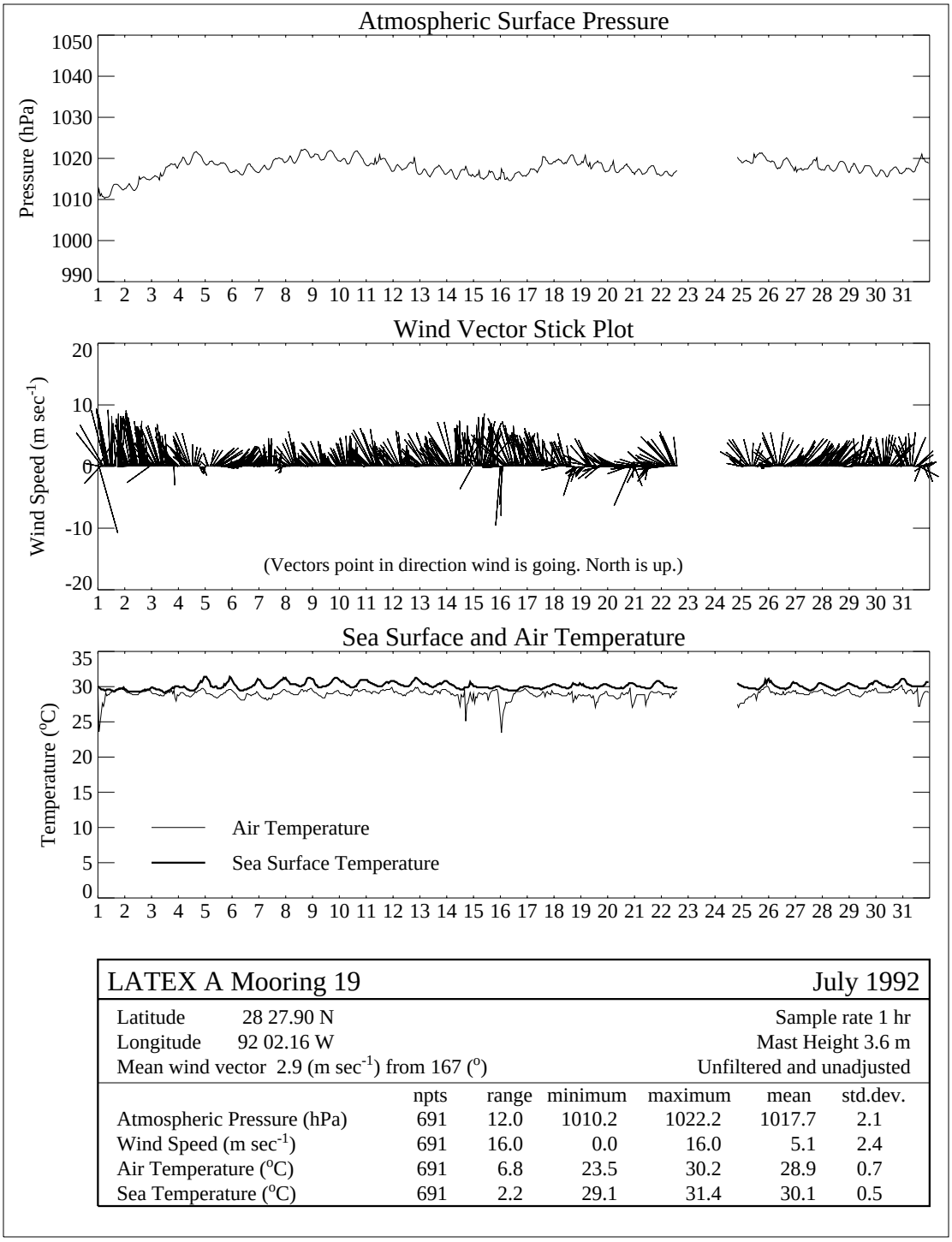


LATEX A Mooring 19 — June 1992

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 1.8 (m sec^{-1}) from 197 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	631	10.8	1007.4	1018.2	1012.2	2.1
Wind Speed (m sec^{-1})	631	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	631	8.1	21.8	29.9	27.6	1.2
Sea Temperature (^{o}C)	631	5.6	26.1	31.7	28.8	1.4

Figure 19.92.06 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for June 1992.

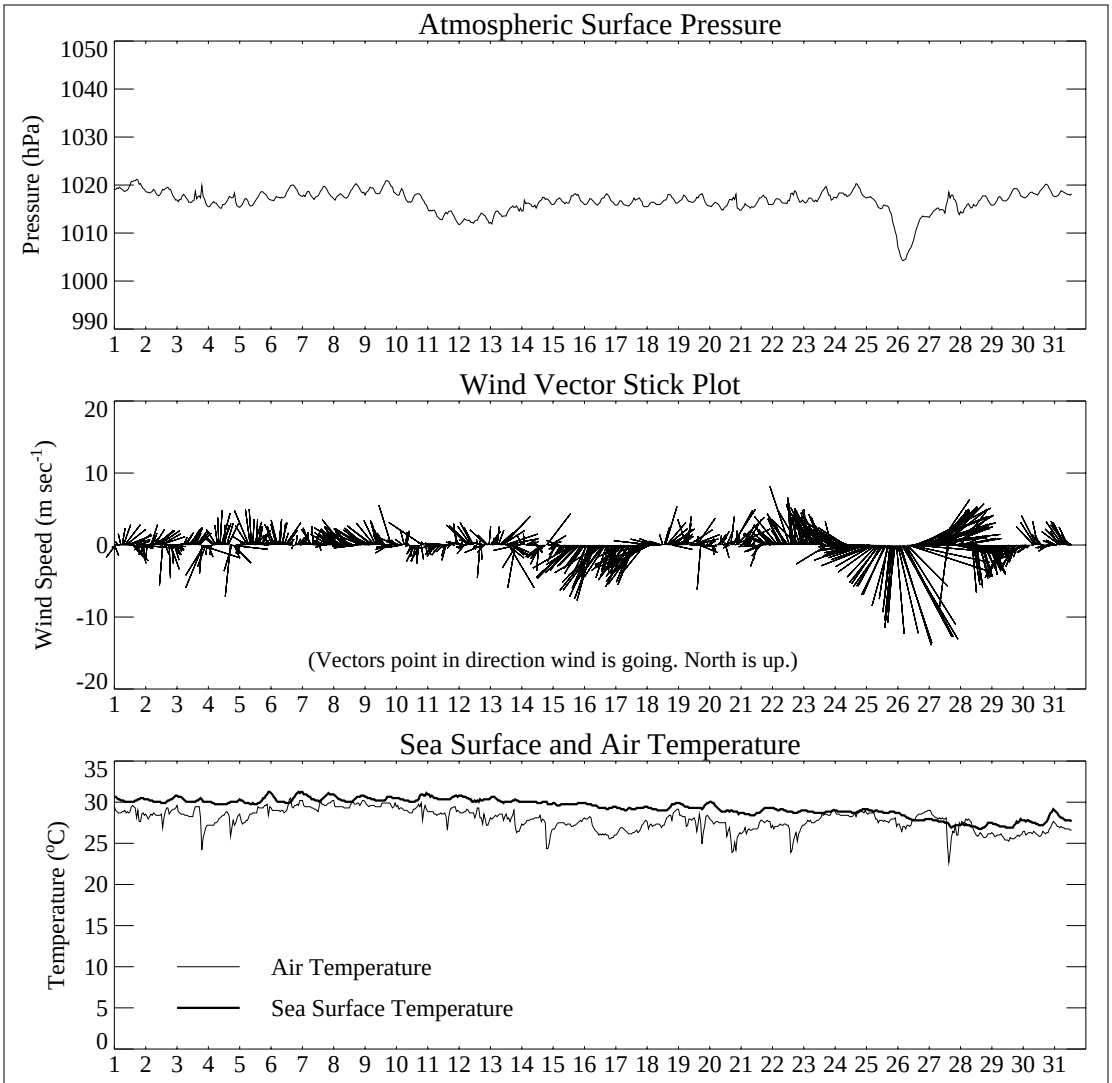


LATEX A Mooring 19 — July 1992

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 2.9 (m sec^{-1}) from 167 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	691	12.0	1010.2	1022.2	1017.7	2.1
Wind Speed (m sec^{-1})	691	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	691	6.8	23.5	30.2	28.9	0.7
Sea Temperature (^{o}C)	691	2.2	29.1	31.4	30.1	0.5

Figure 19.92.07 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for July 1992.

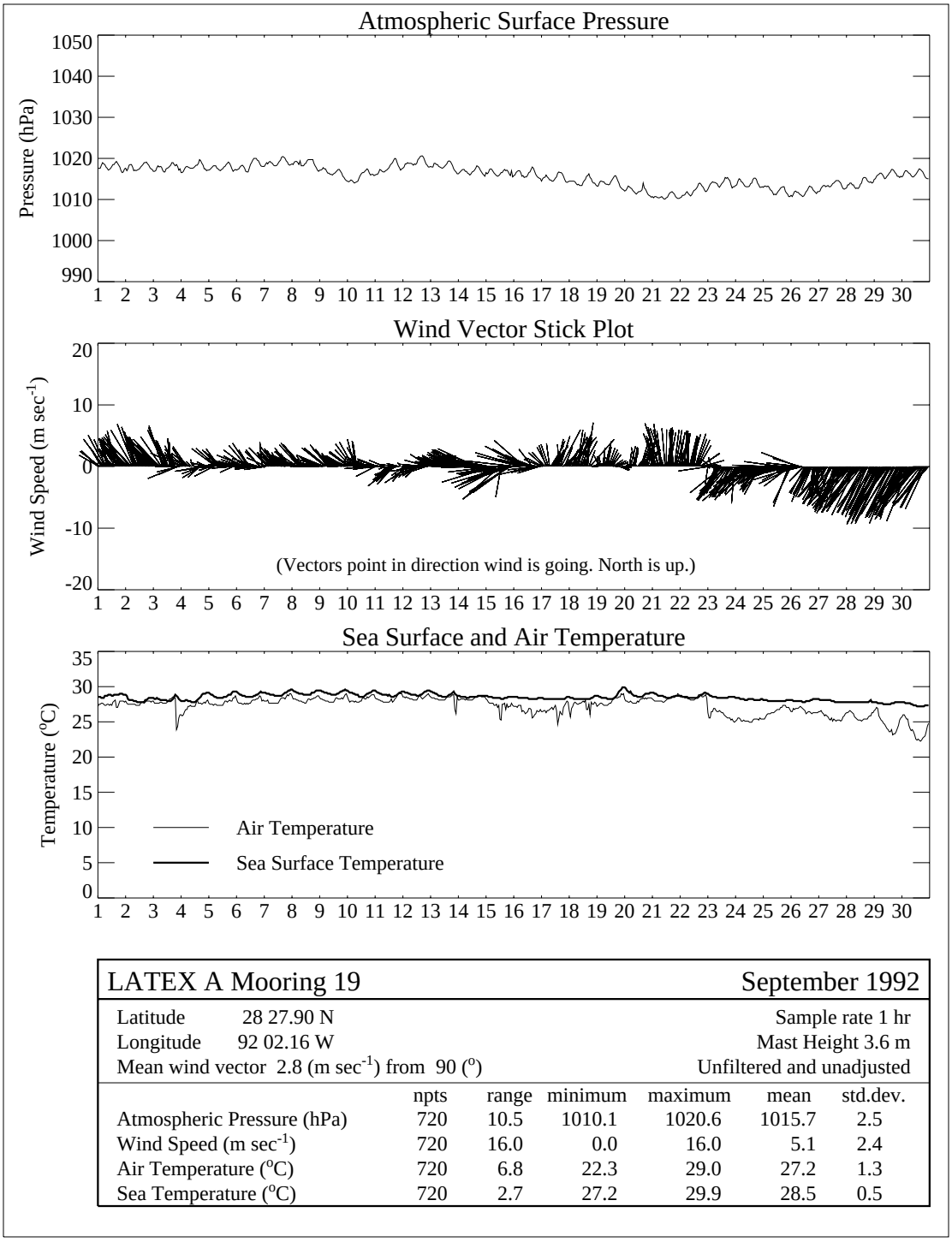


LATEX A Mooring 19 — August 1992

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 0.4 (m sec^{-1}) from 79 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	734	17.0	1004.2	1021.2	1016.6	2.4
Wind Speed (m sec^{-1})	734	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	734	7.8	22.7	30.5	27.9	1.3
Sea Temperature (^{o}C)	734	4.5	26.8	31.3	29.4	1.1

Figure 19.92.08 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for August 1992.

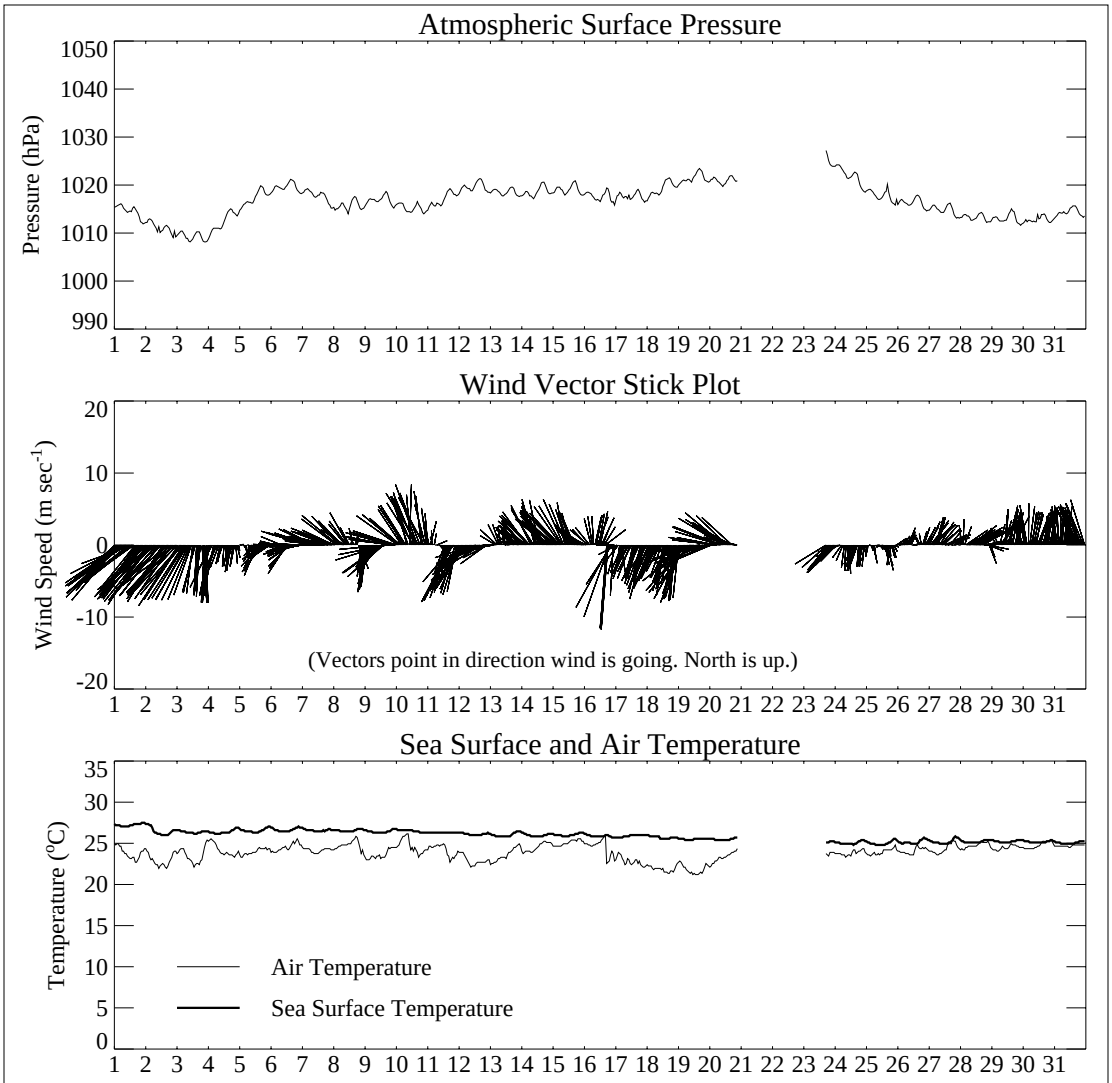


LATEX A Mooring 19 — September 1992

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 2.8 (m sec^{-1}) from 90 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	10.5	1010.1	1020.6	1015.7	2.5
Wind Speed (m sec^{-1})	720	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	720	6.8	22.3	29.0	27.2	1.3
Sea Temperature (^{o}C)	720	2.7	27.2	29.9	28.5	0.5

Figure 19.92.09 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for September 1992.

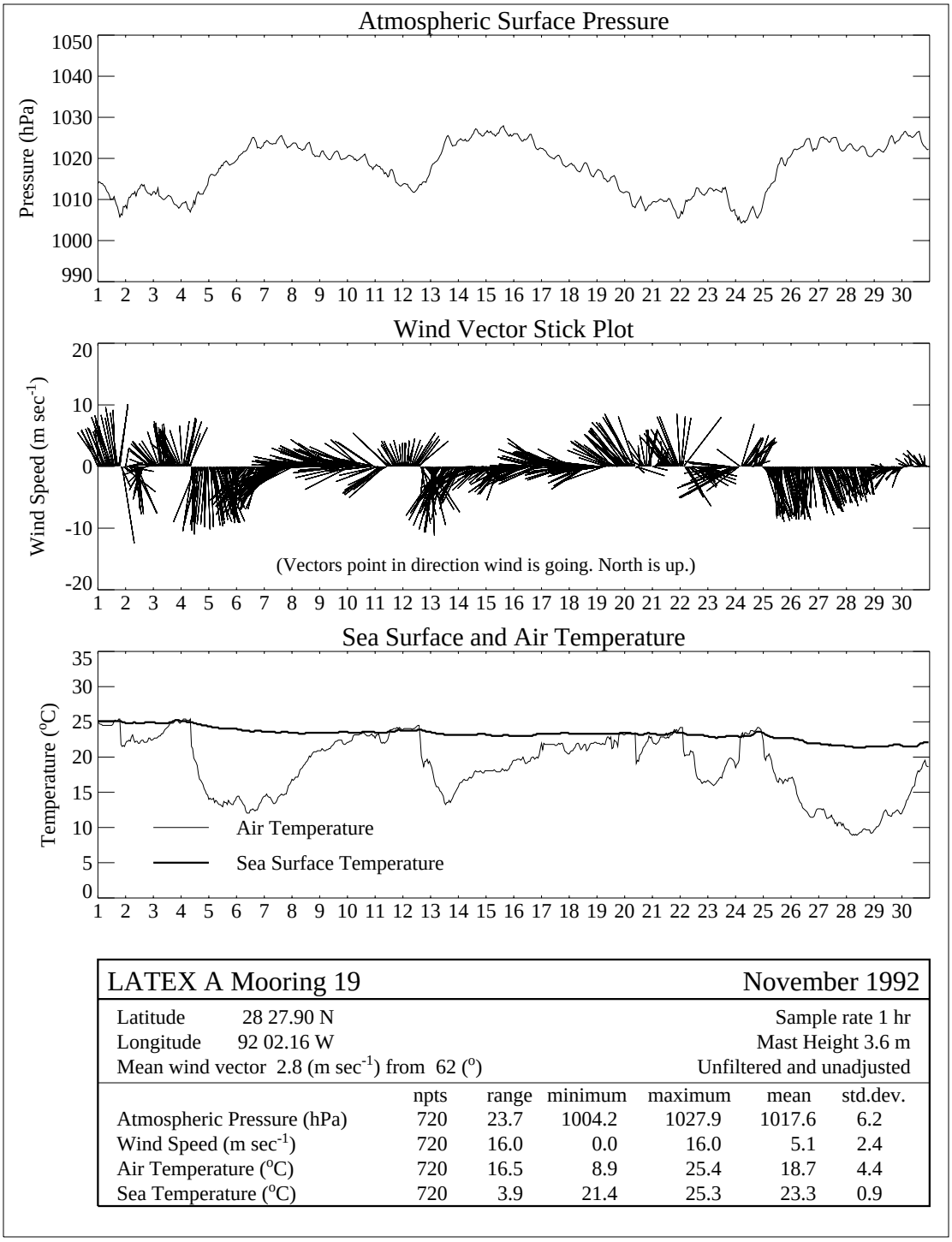


LATEX A Mooring 19 — October 1992

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 2.2 (m sec^{-1}) from 74 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	677	19.0	1008.2	1027.2	1016.6	3.4
Wind Speed (m sec^{-1})	677	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	677	4.9	21.2	26.1	23.9	1.0
Sea Temperature (^{o}C)	677	2.7	24.8	27.5	25.9	0.6

Figure 19.92.10 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for October 1992.

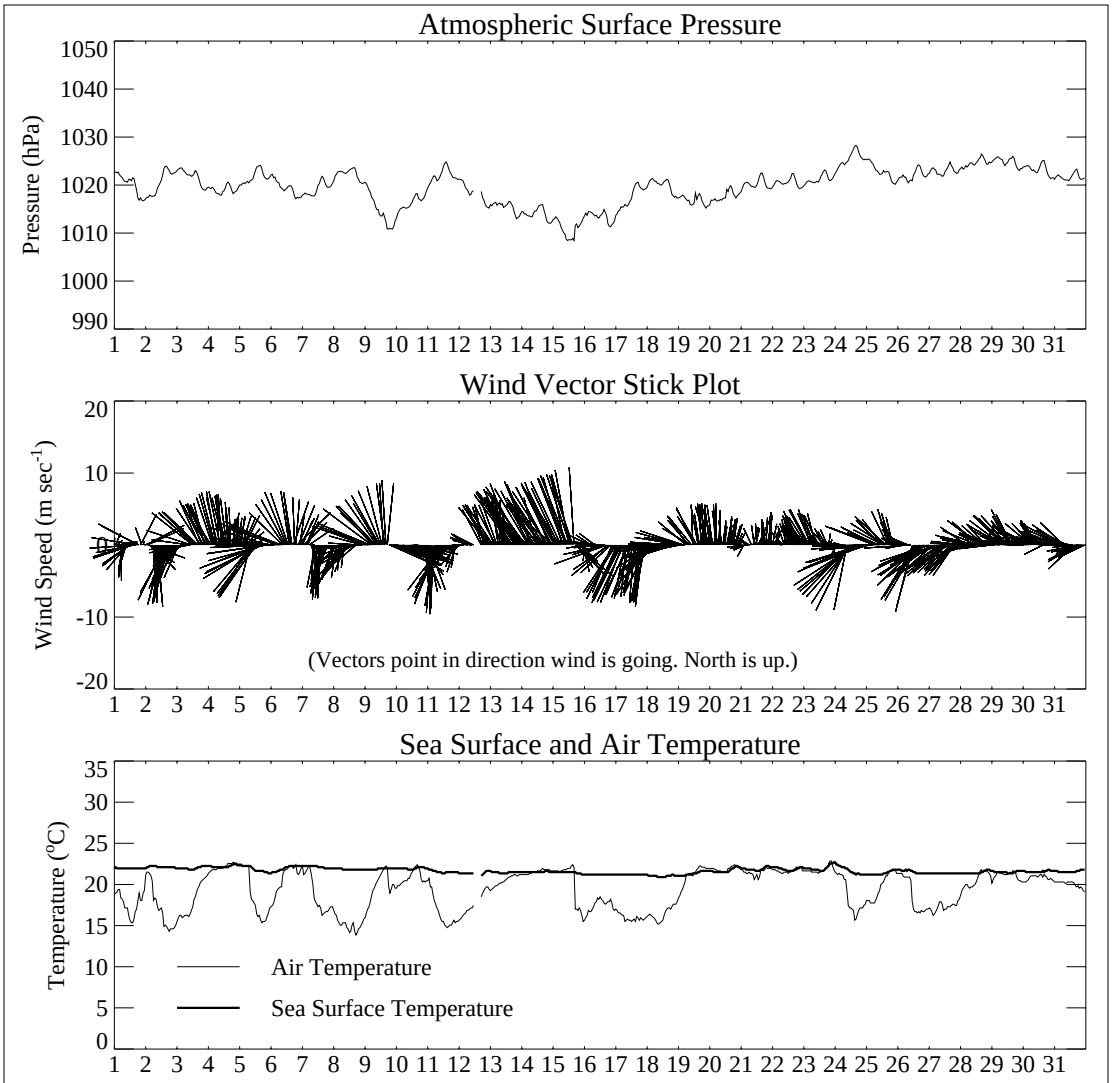


LATEX A Mooring 19 — November 1992

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 2.8 (m sec^{-1}) from 62 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	23.7	1004.2	1027.9	1017.6	6.2
Wind Speed (m sec^{-1})	720	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	720	16.5	8.9	25.4	18.7	4.4
Sea Temperature (^{o}C)	720	3.9	21.4	25.3	23.3	0.9

Figure 19.92.11 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for November 1992.

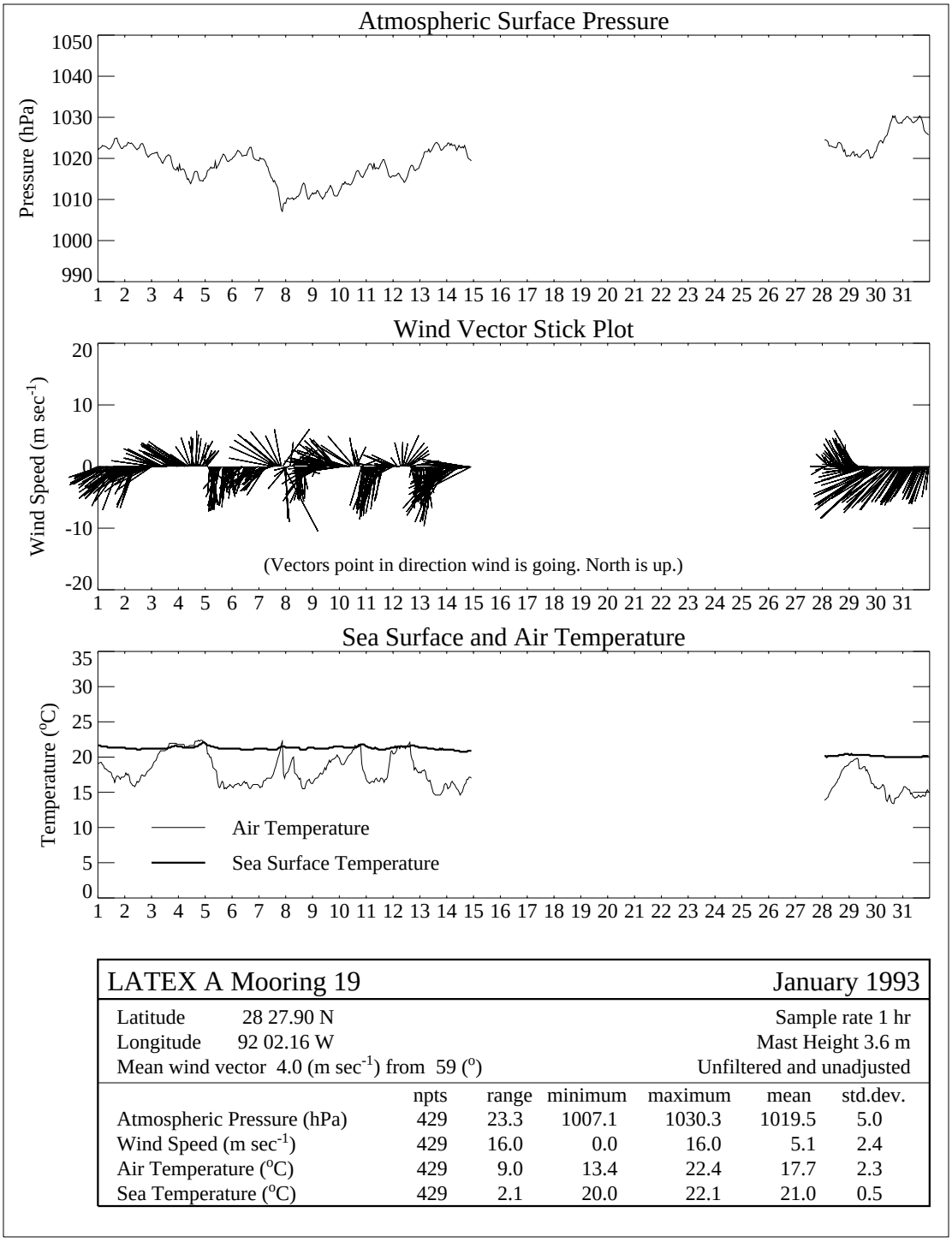


LATEX A Mooring 19 — December 1992

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 2.7 (m sec^{-1}) from 101 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	739	19.8	1008.5	1028.2	1019.7	3.8
Wind Speed (m sec^{-1})	739	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	739	9.0	13.9	22.9	19.4	2.4
Sea Temperature (^{o}C)	739	1.8	20.9	22.7	21.7	0.4

Figure 19.92.12 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for December 1992.

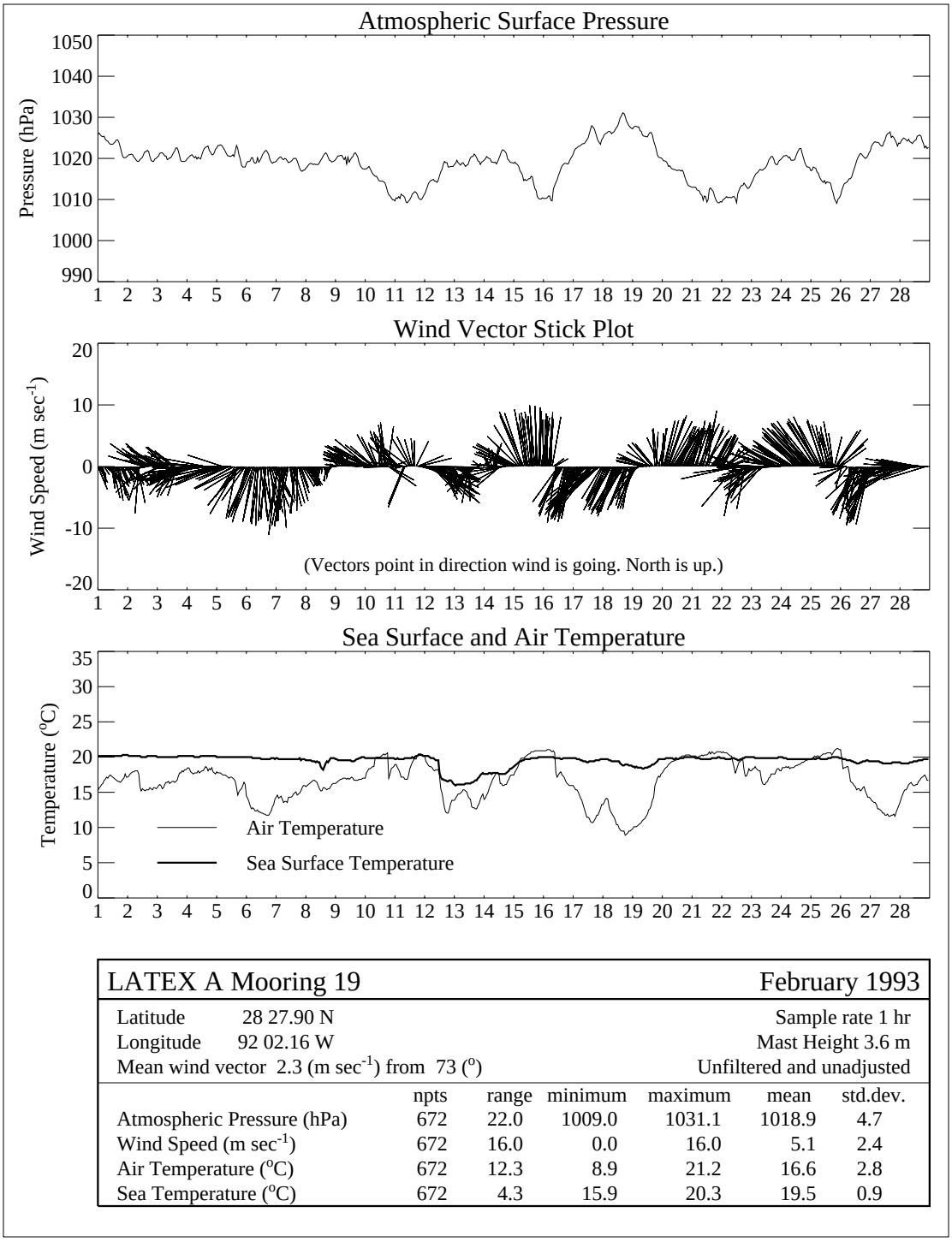


LATEX A Mooring 19 — January 1993

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 4.0 (m sec^{-1}) from 59 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	429	23.3	1007.1	1030.3	1019.5	5.0
Wind Speed (m sec^{-1})	429	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	429	9.0	13.4	22.4	17.7	2.3
Sea Temperature (^{o}C)	429	2.1	20.0	22.1	21.0	0.5

Figure 19.93.01 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for January 1993.

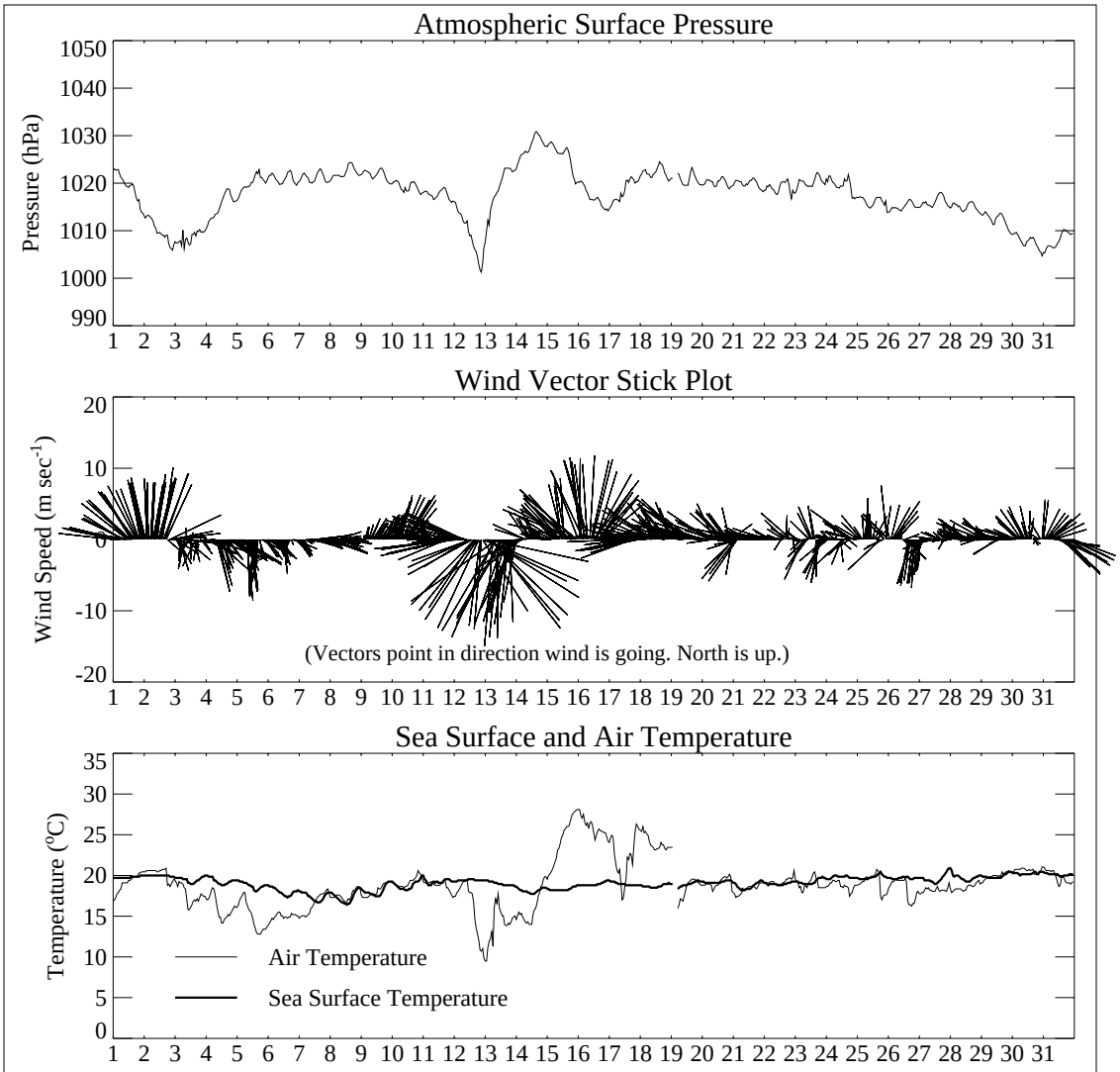


LATEX A Mooring 19 — February 1993

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 2.3 (m sec^{-1}) from 73 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	672	22.0	1009.0	1031.1	1018.9	4.7
Wind Speed (m sec^{-1})	672	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	672	12.3	8.9	21.2	16.6	2.8
Sea Temperature (^{o}C)	672	4.3	15.9	20.3	19.5	0.9

Figure 19.93.02 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for February 1993.

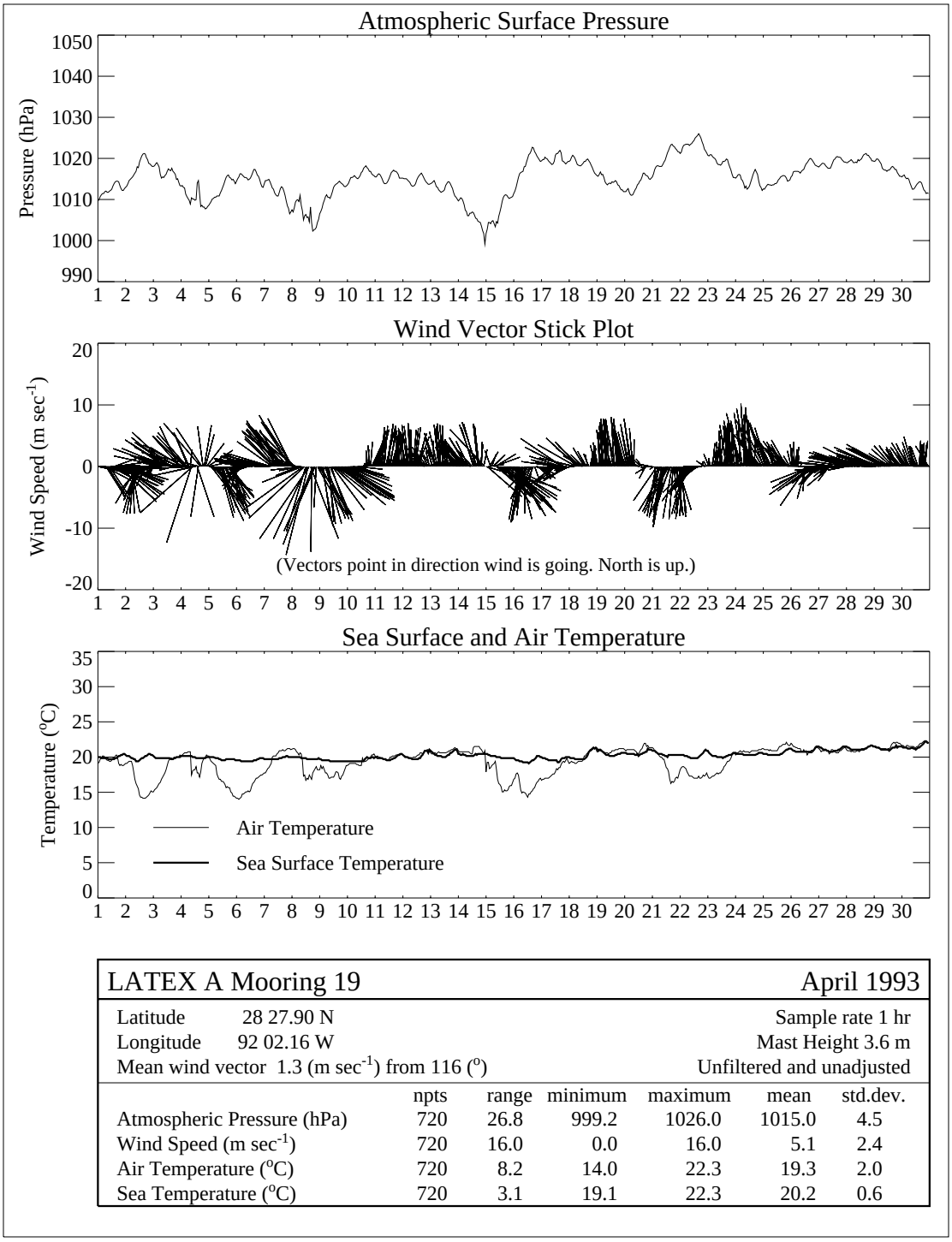


LATEX A Mooring 19 — March 1993

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 1.4 (m sec^{-1}) from 107 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	741	29.6	1001.2	1030.8	1017.6	5.3
Wind Speed (m sec^{-1})	741	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	741	18.6	9.5	28.1	18.8	2.9
Sea Temperature (^{o}C)	741	4.5	16.4	20.9	19.1	0.8

Figure 19.93.03 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for March 1993.

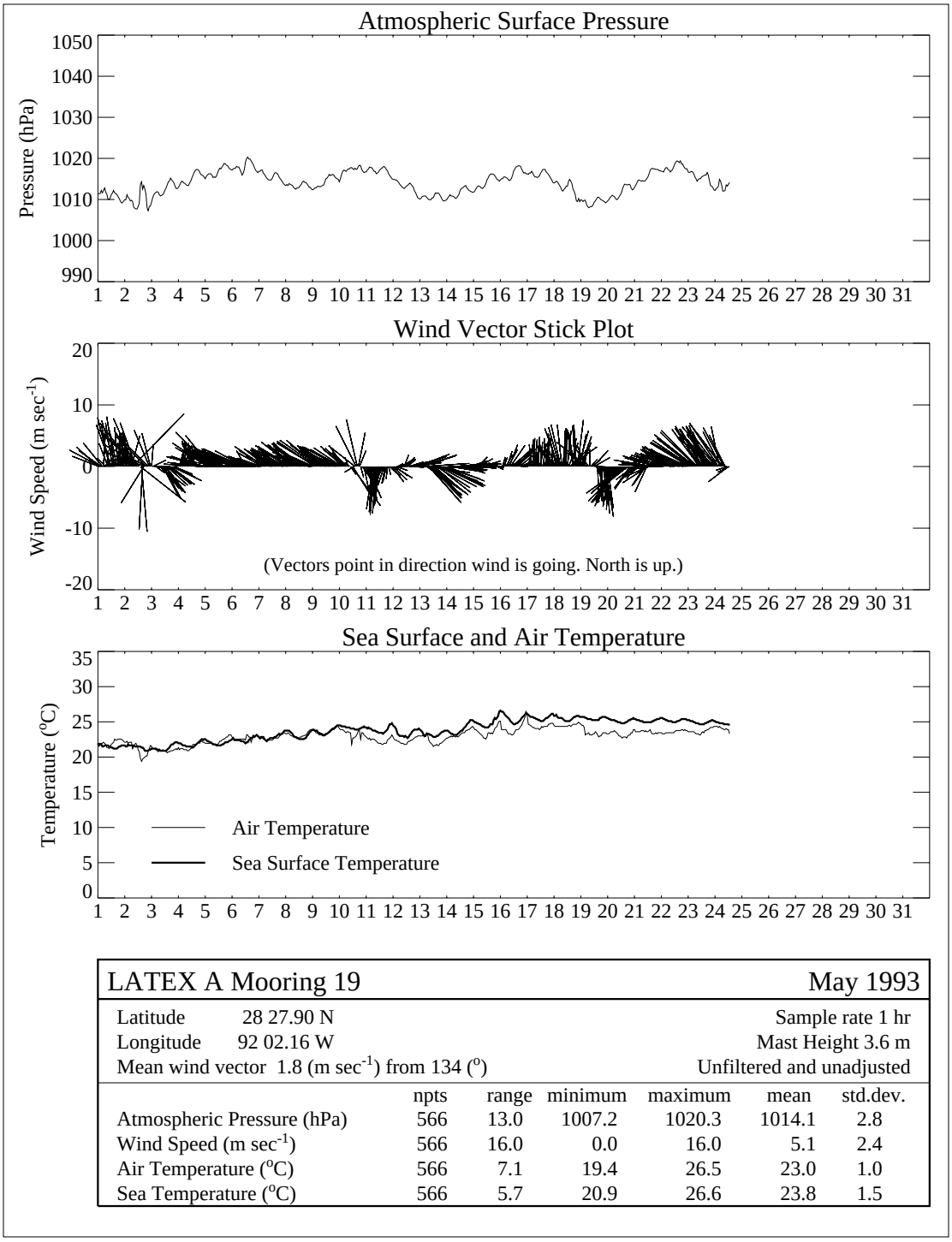


LATEX A Mooring 19 — April 1993

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 1.3 (m sec^{-1}) from 116 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	26.8	999.2	1026.0	1015.0	4.5
Wind Speed (m sec^{-1})	720	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	720	8.2	14.0	22.3	19.3	2.0
Sea Temperature (^{o}C)	720	3.1	19.1	22.3	20.2	0.6

Figure 19.93.04 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for April 1993.

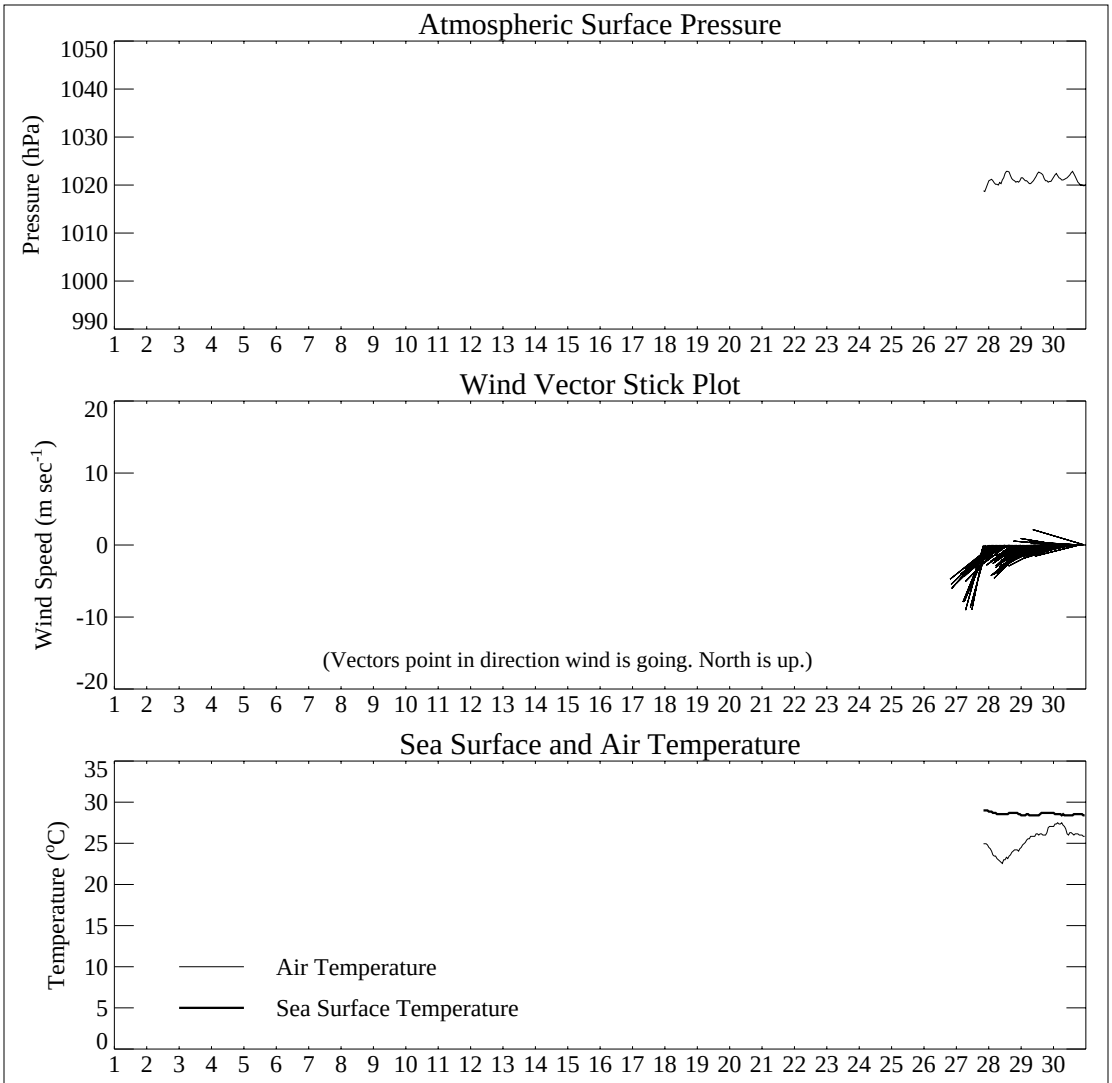


LATEX A Mooring 19 — May 1993

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 1.8 (m sec^{-1}) from 134 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	566	13.0	1007.2	1020.3	1014.1	2.8
Wind Speed (m sec^{-1})	566	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	566	7.1	19.4	26.5	23.0	1.0
Sea Temperature (^{o}C)	566	5.7	20.9	26.6	23.8	1.5

Figure 19.93.05 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for May 1993.

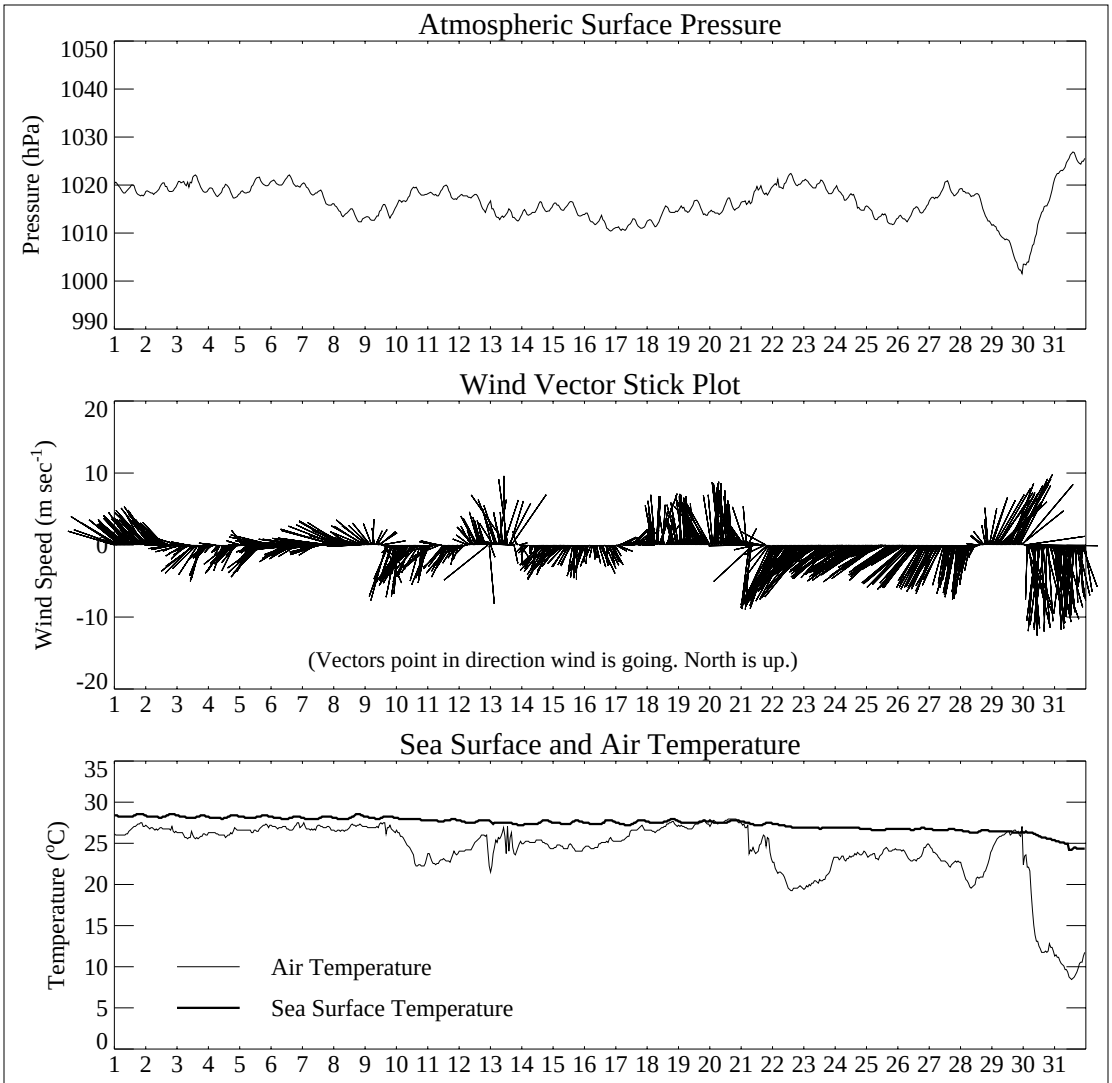


LATEX A Mooring 19 — September 1993

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 6.1 (m sec^{-1}) from 64 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	76	4.2	1018.7	1022.8	1021.1	0.9
Wind Speed (m sec^{-1})	76	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	76	5.0	22.5	27.5	25.3	1.4
Sea Temperature (^{o}C)	76	0.6	28.4	29.0	28.6	0.2

Figure 19.93.09 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for September 1993.

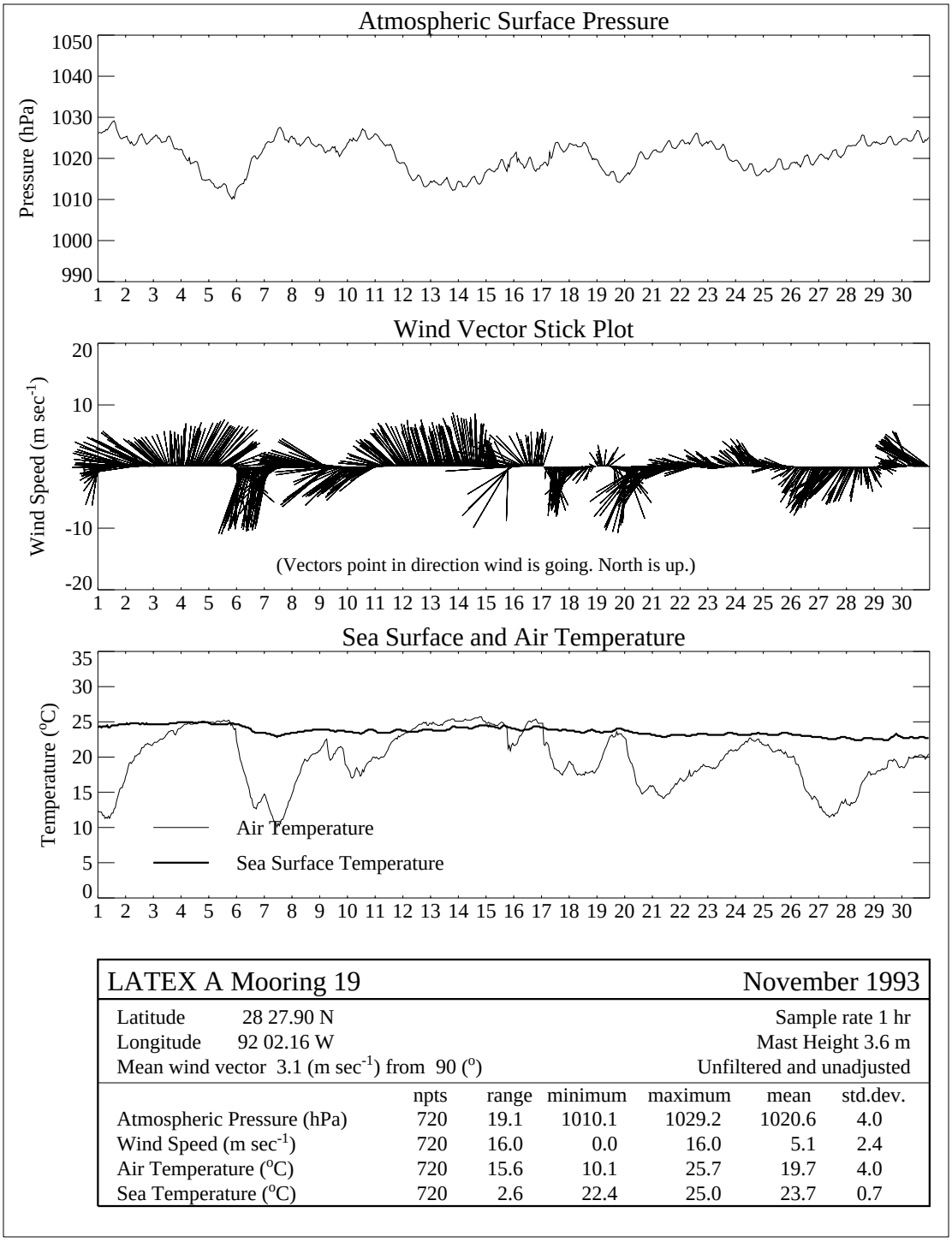


LATEX A Mooring 19 — October 1993

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 2.4 (m sec^{-1}) from 63 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	25.4	1001.5	1026.9	1016.4	3.8
Wind Speed (m sec^{-1})	744	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	744	19.5	8.4	28.0	24.3	3.8
Sea Temperature (^{o}C)	744	4.3	24.2	28.5	27.4	0.8

Figure 19.93.10 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for October 1993.

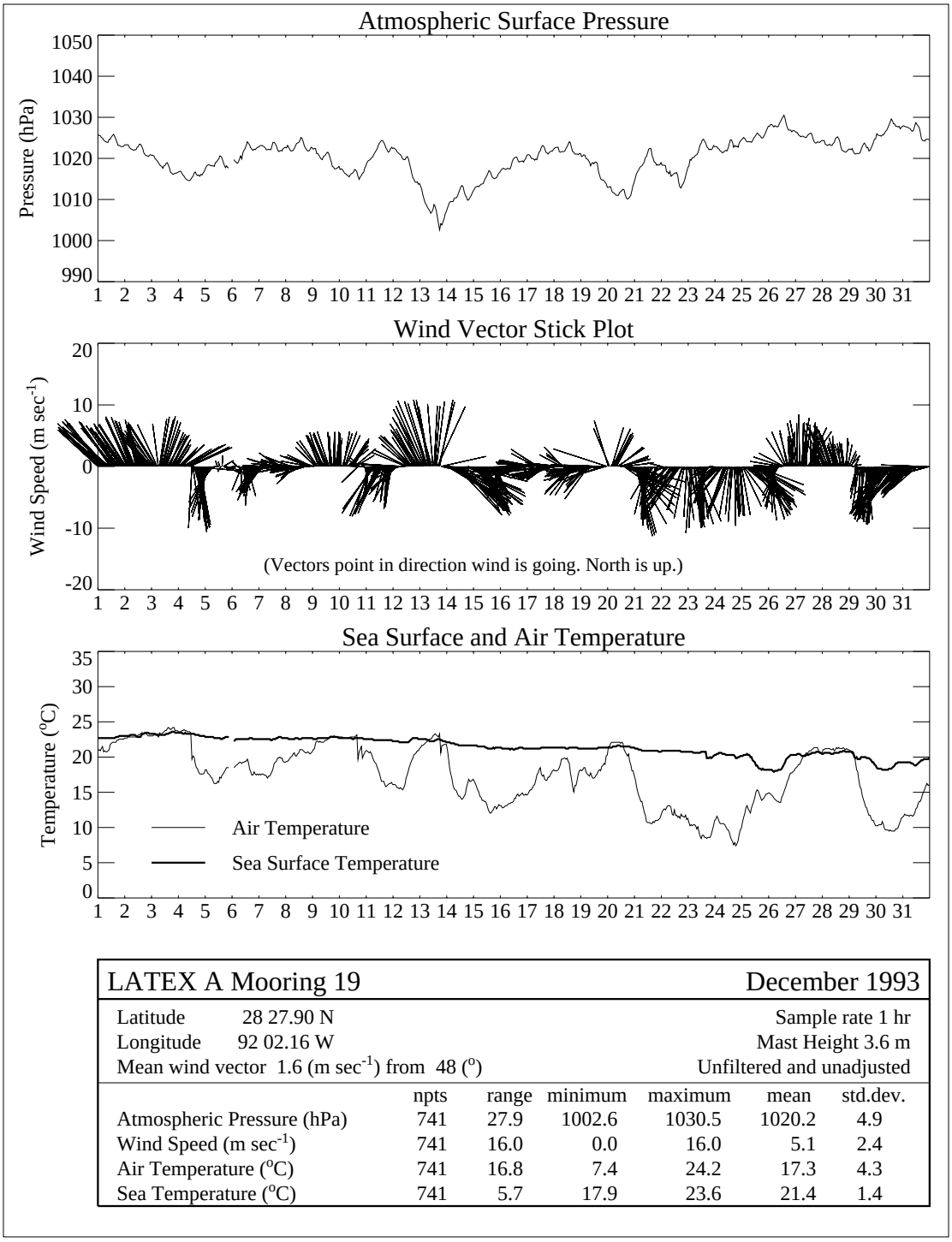


LATEX A Mooring 19 — November 1993

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 3.1 (m sec^{-1}) from 90 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	19.1	1010.1	1029.2	1020.6	4.0
Wind Speed (m sec^{-1})	720	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	720	15.6	10.1	25.7	19.7	4.0
Sea Temperature (^{o}C)	720	2.6	22.4	25.0	23.7	0.7

Figure 19.93.11 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for November 1993.

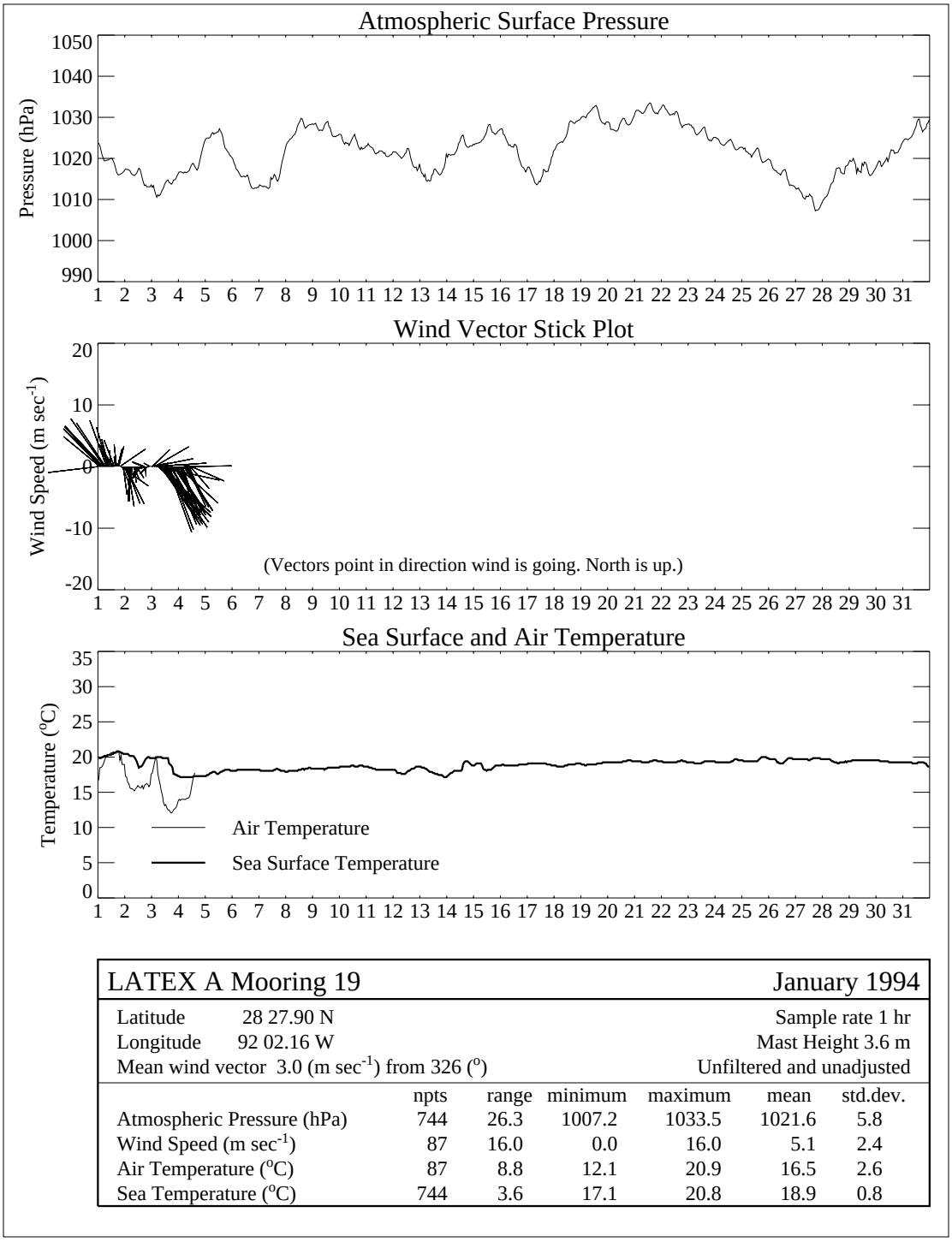


LATEX A Mooring 19 — December 1993

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 1.6 (m sec^{-1}) from 48 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	741	27.9	1002.6	1030.5	1020.2	4.9
Wind Speed (m sec^{-1})	741	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	741	16.8	7.4	24.2	17.3	4.3
Sea Temperature (^{o}C)	741	5.7	17.9	23.6	21.4	1.4

Figure 19.93.12 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for December 1993.

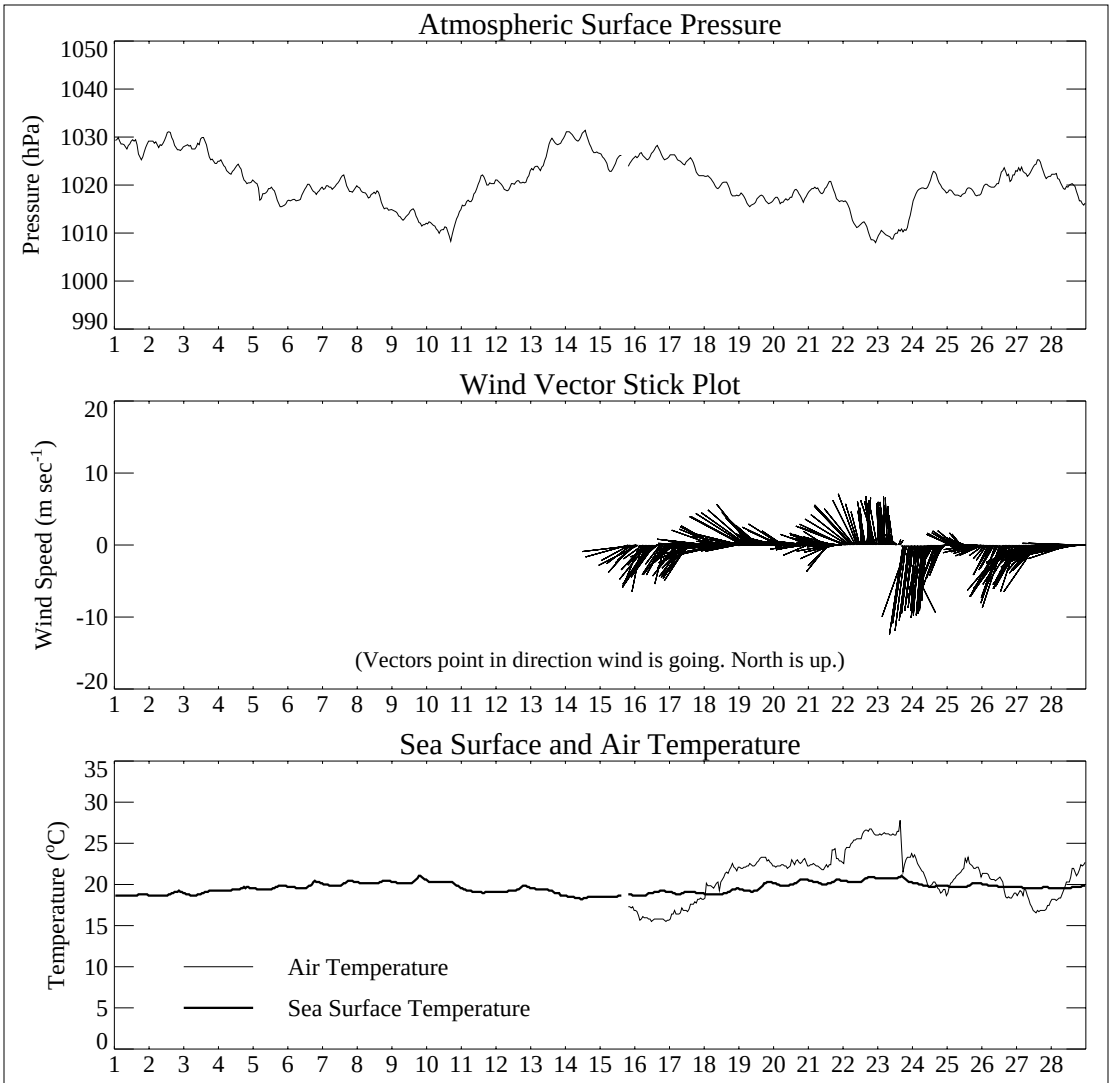


LATEX A Mooring 19 — January 1994

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 3.0 (m sec^{-1}) from 326 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	26.3	1007.2	1033.5	1021.6	5.8
Wind Speed (m sec^{-1})	87	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	87	8.8	12.1	20.9	16.5	2.6
Sea Temperature (^{o}C)	744	3.6	17.1	20.8	18.9	0.8

Figure 19.94.01 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for January 1994.

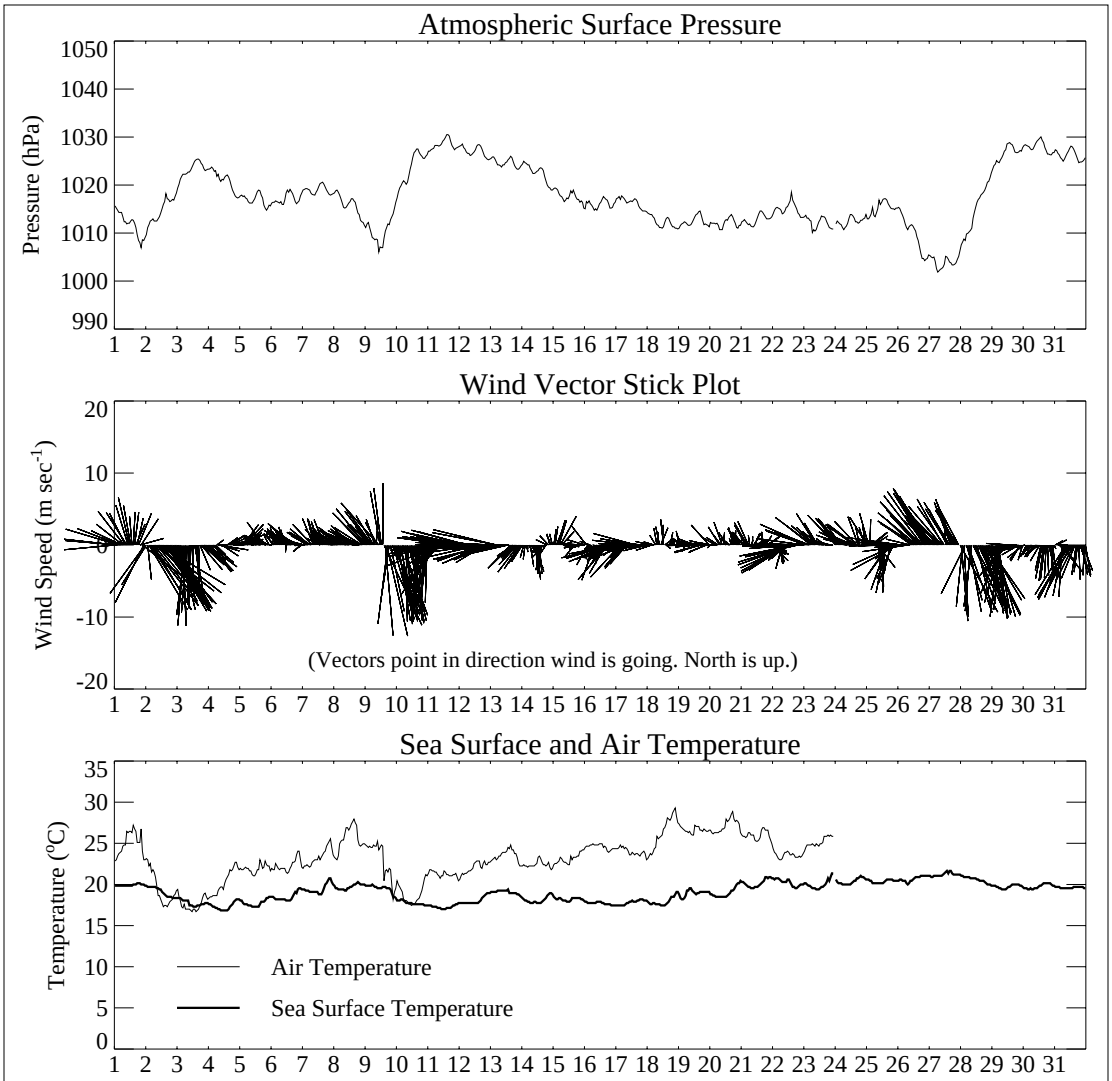


LATEX A Mooring 19 — February 1994

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 3.8 (m sec^{-1}) from 73 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	668	23.4	1008.0	1031.4	1020.4	5.3
Wind Speed (m sec^{-1})	317	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	317	12.3	15.5	27.8	20.9	3.0
Sea Temperature (^{o}C)	668	2.8	18.2	21.0	19.6	0.7

Figure 19.94.02 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for February 1994.

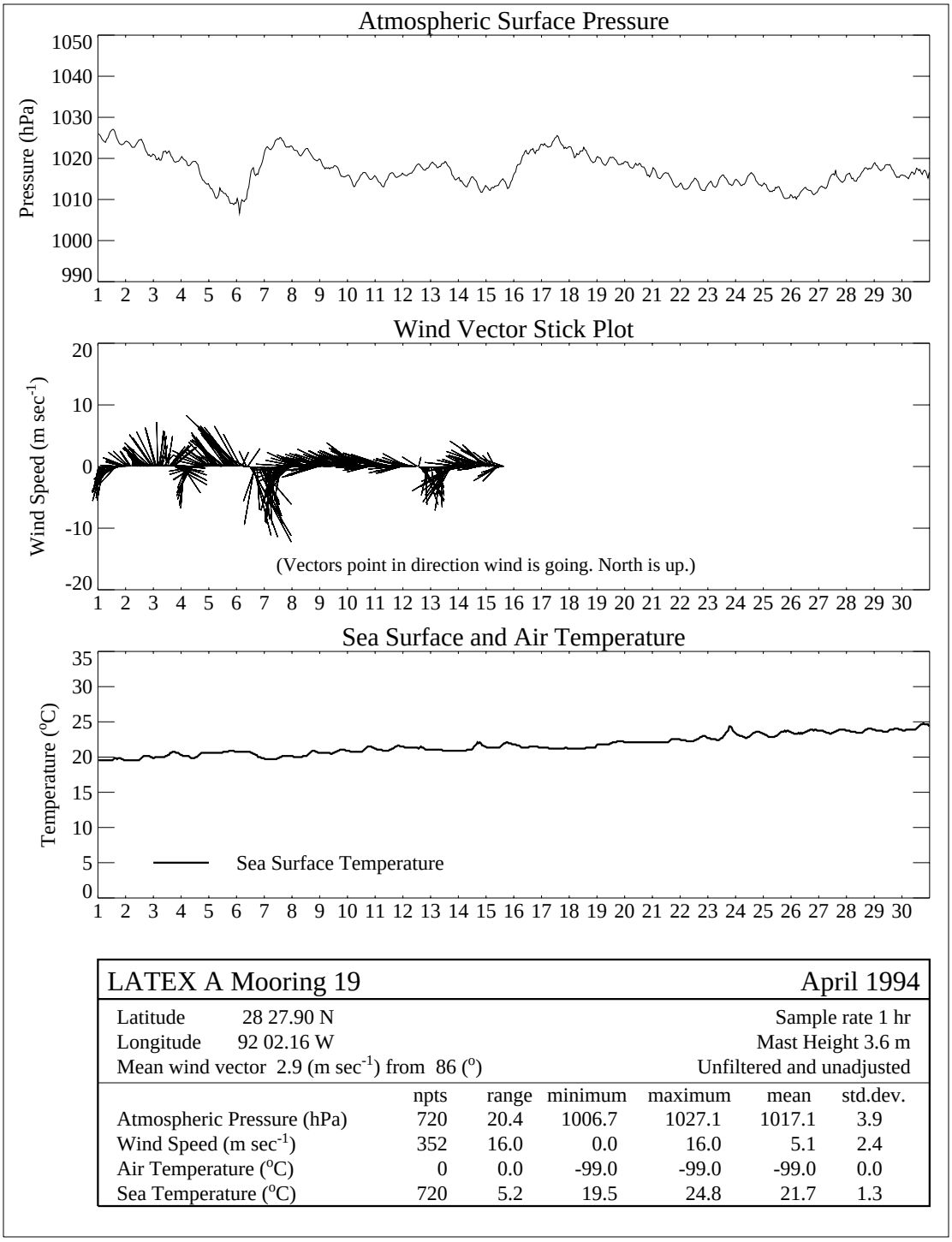


LATEX A Mooring 19 — March 1994

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 1.9 (m sec^{-1}) from 54 (^{o}) — Unfiltered and unadjusted

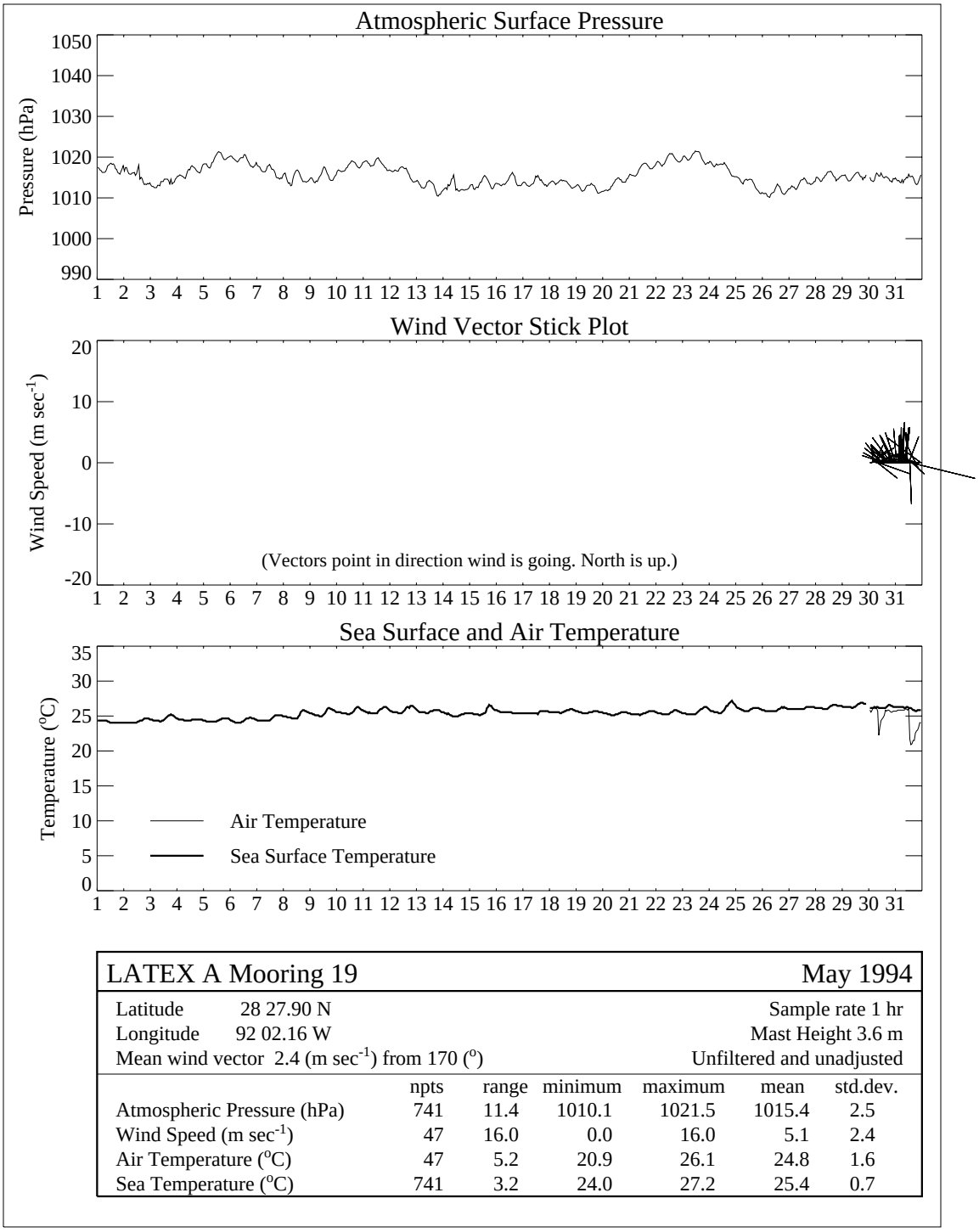
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	743	28.7	1001.8	1030.5	1017.4	6.4
Wind Speed (m sec^{-1})	743	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	551	12.6	16.7	29.3	23.2	2.7
Sea Temperature (^{o}C)	743	4.8	16.9	21.6	19.1	1.2

Figure 19.94.03 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for March 1994.



LATEX A Mooring 19						April 1994
Latitude 28 27.90 N						Sample rate 1 hr
Longitude 92 02.16 W						Mast Height 3.6 m
Mean wind vector 2.9 (m sec^{-1}) from 86 (^{o})						Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	20.4	1006.7	1027.1	1017.1	3.9
Wind Speed (m sec^{-1})	352	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	0	0.0	-99.0	-99.0	-99.0	0.0
Sea Temperature (^{o}C)	720	5.2	19.5	24.8	21.7	1.3

Figure 19.94.04 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for April 1994.

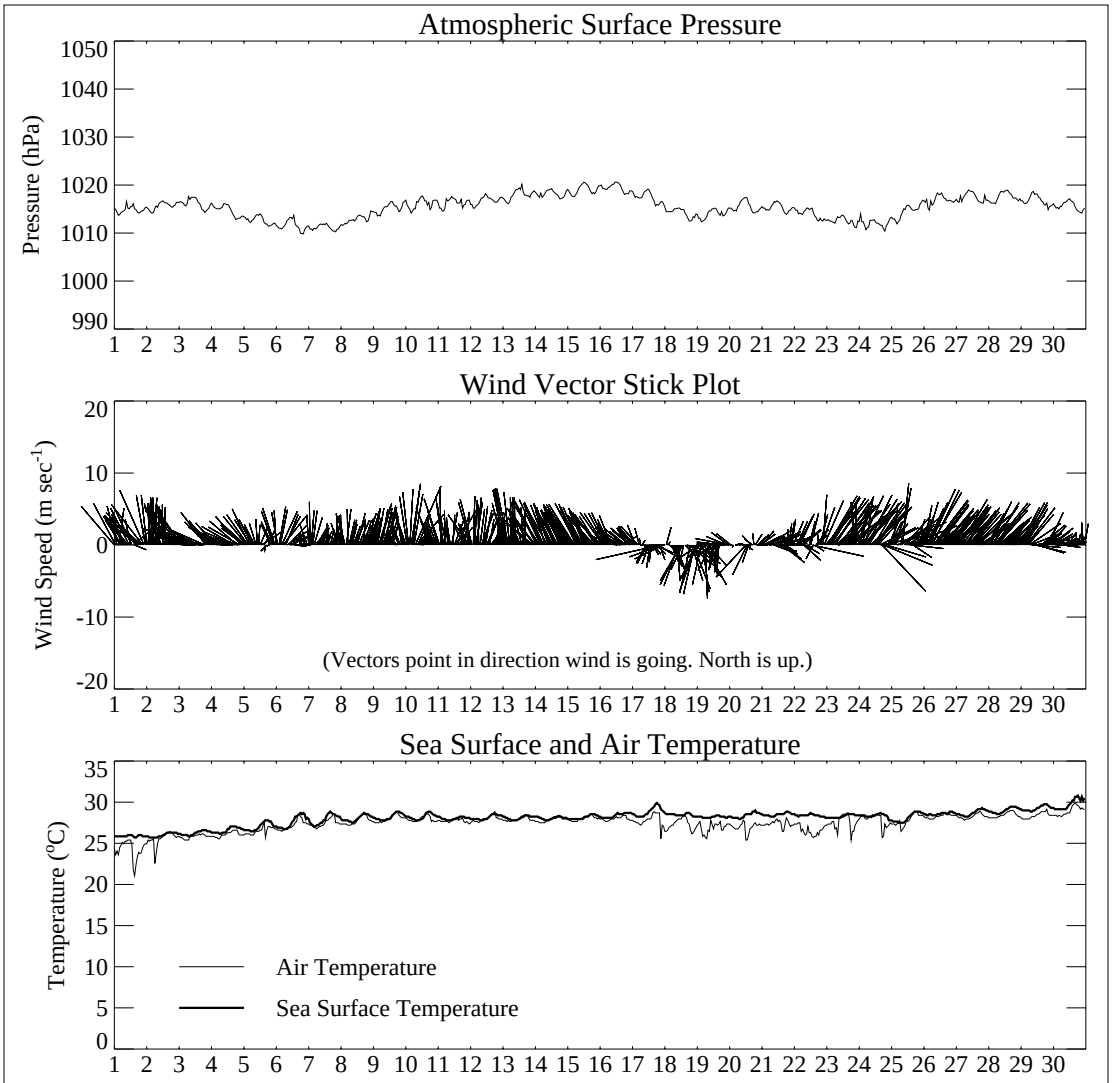


LATEX A Mooring 19 — May 1994

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 2.4 (m sec^{-1}) from 170 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	741	11.4	1010.1	1021.5	1015.4	2.5
Wind Speed (m sec^{-1})	47	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	47	5.2	20.9	26.1	24.8	1.6
Sea Temperature (^{o}C)	741	3.2	24.0	27.2	25.4	0.7

Figure 19.94.05 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for May 1994.

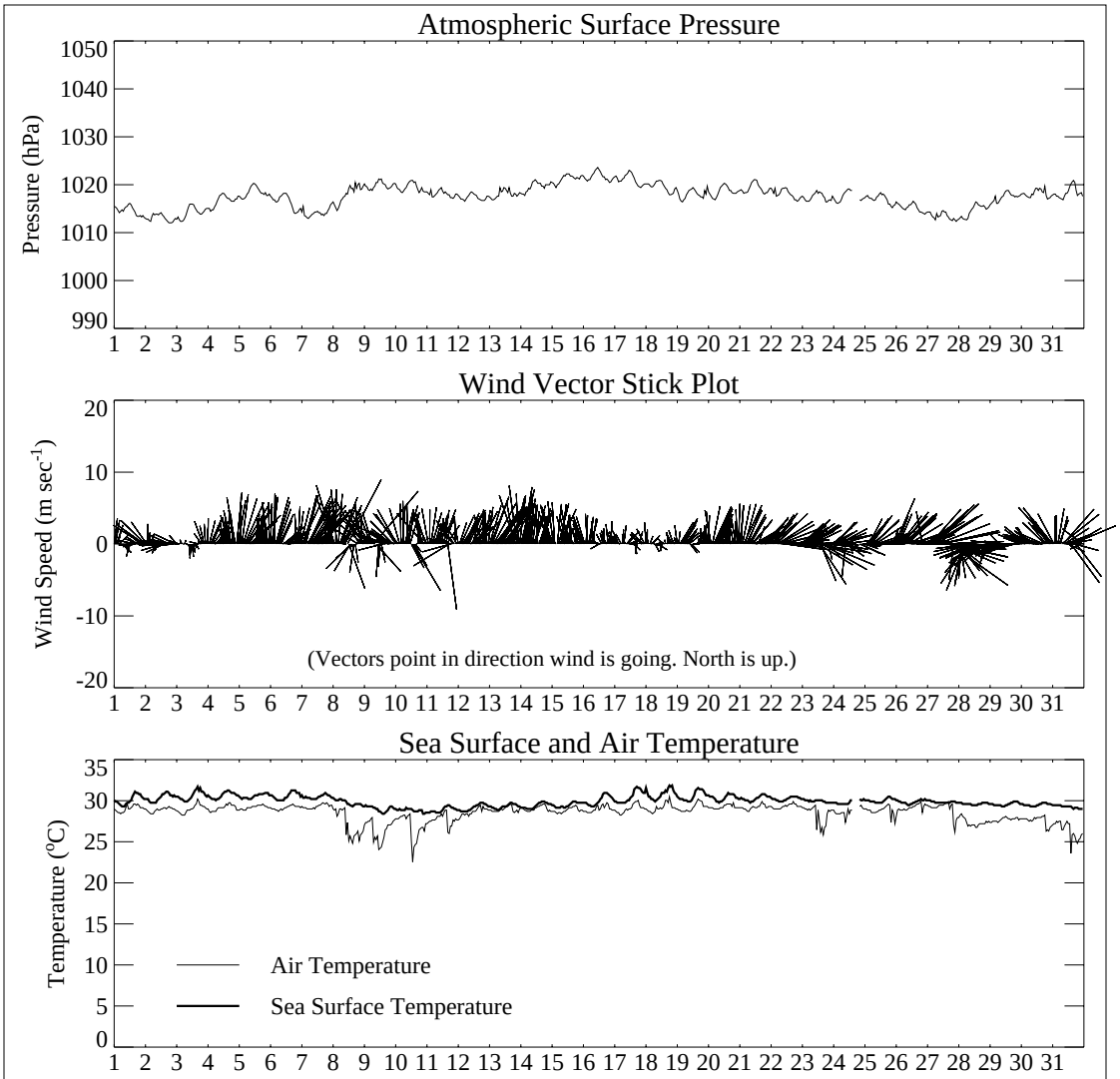


LATEX A Mooring 19 — June 1994

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 2.9 (m sec^{-1}) from 187 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	10.8	1009.8	1020.6	1015.4	2.3
Wind Speed (m sec^{-1})	720	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	720	8.9	21.0	29.9	27.4	1.1
Sea Temperature (^{o}C)	720	5.1	25.7	30.8	28.1	0.9

Figure 19.94.06 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for June 1994.

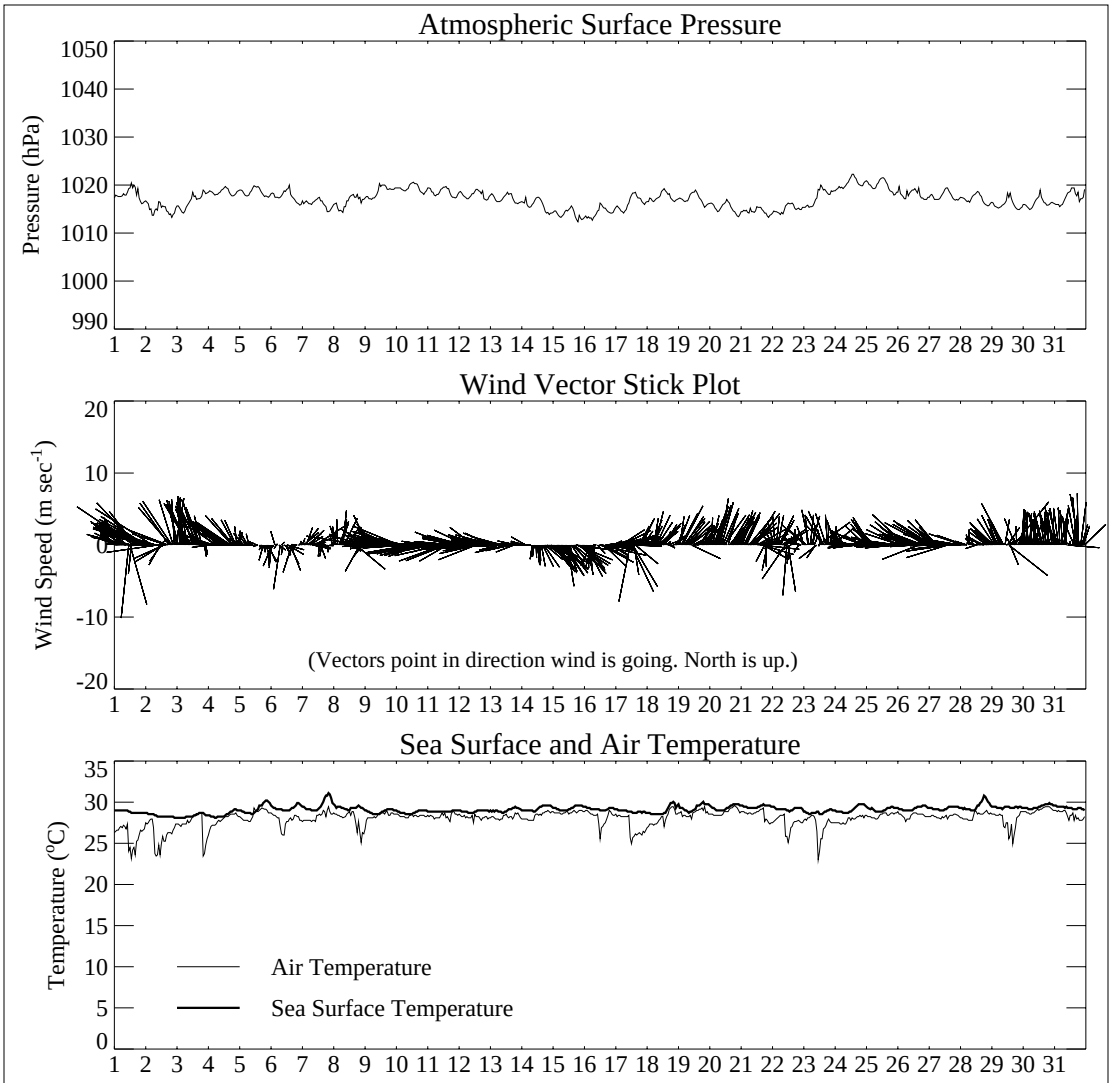


LATEX A Mooring 19 — July 1994

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 2.3 (m sec^{-1}) from 199 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	739	11.5	1012.0	1023.6	1017.6	2.4
Wind Speed (m sec^{-1})	739	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	739	8.0	22.5	30.5	28.5	1.1
Sea Temperature (^{o}C)	739	3.5	28.4	31.9	29.9	0.7

Figure 19.94.07 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for July 1994.

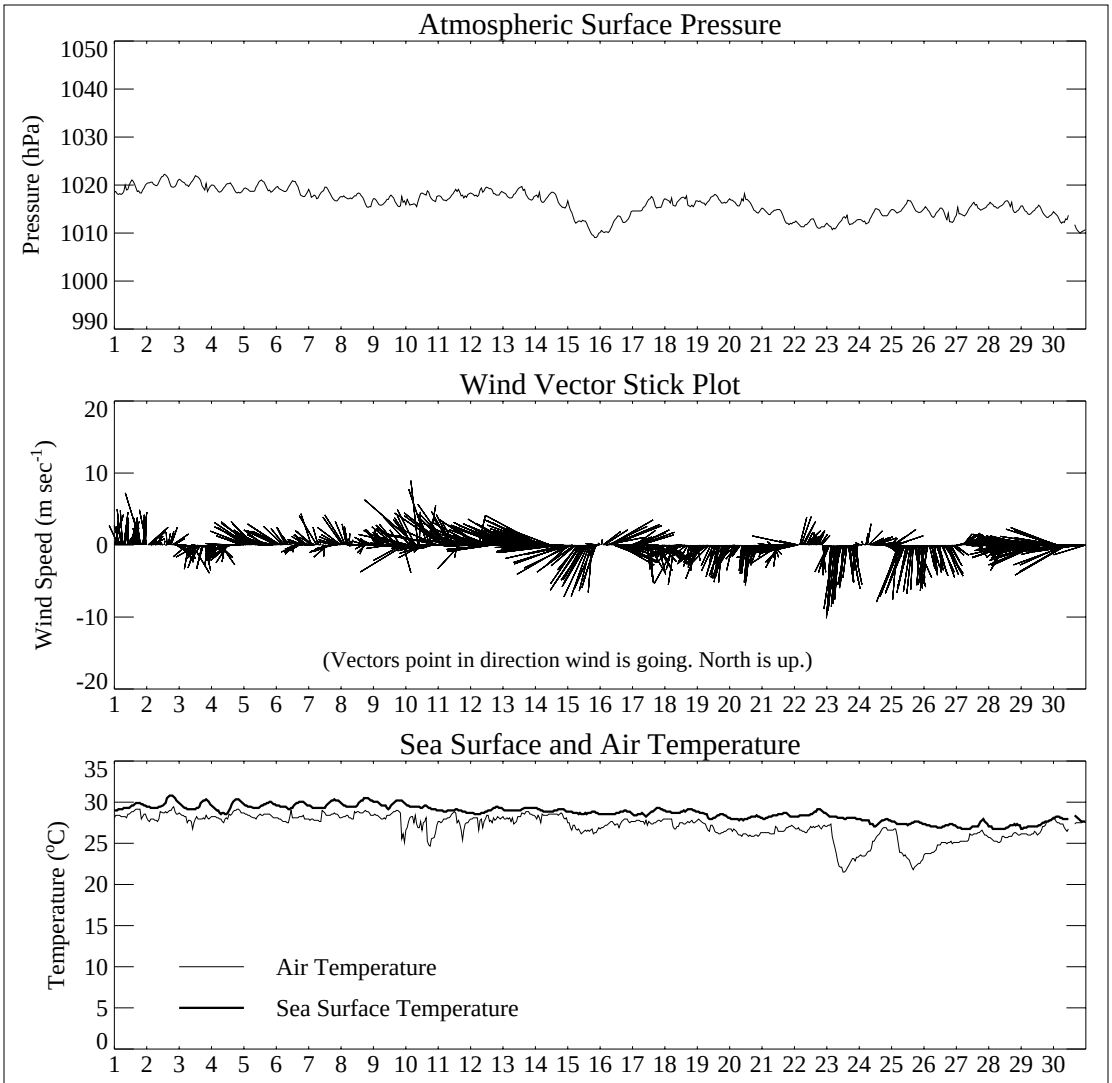


LATEX A Mooring 19 — August 1994

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 1.7 (m sec^{-1}) from 134 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	9.9	1012.3	1022.2	1017.1	1.9
Wind Speed (m sec^{-1})	744	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	744	6.6	23.0	29.6	28.0	1.0
Sea Temperature (^{o}C)	744	3.0	28.1	31.1	29.1	0.4

Figure 19.94.08 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for August 1994.

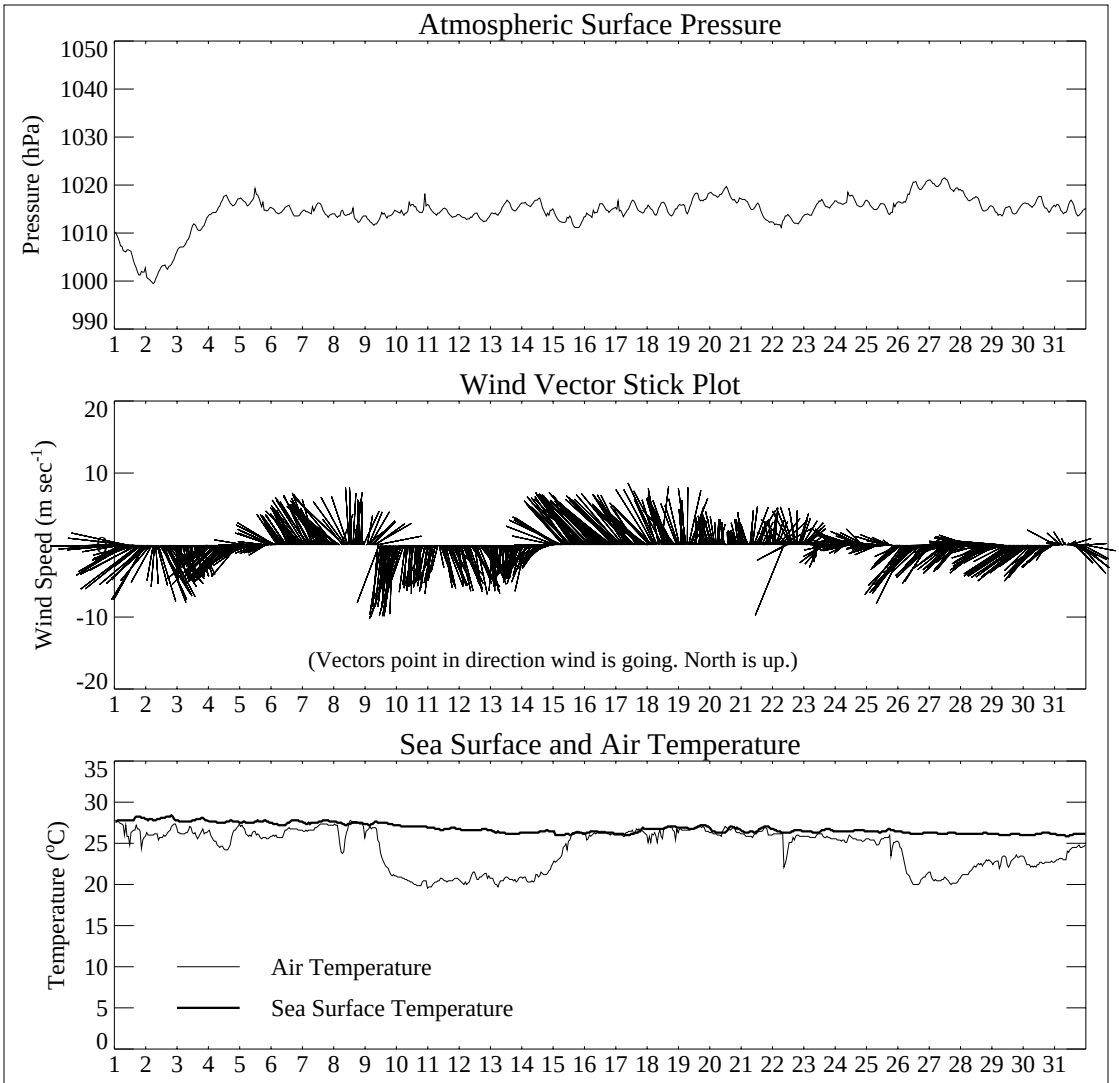


LATEX A Mooring 19 — September 1994

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 2.0 (m sec^{-1}) from 76 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	717	13.2	1009.0	1022.2	1016.2	2.8
Wind Speed (m sec^{-1})	717	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	717	8.0	21.5	29.5	27.1	1.5
Sea Temperature (^{o}C)	717	4.0	26.8	30.8	28.7	0.9

Figure 19.94.09 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for September 1994.

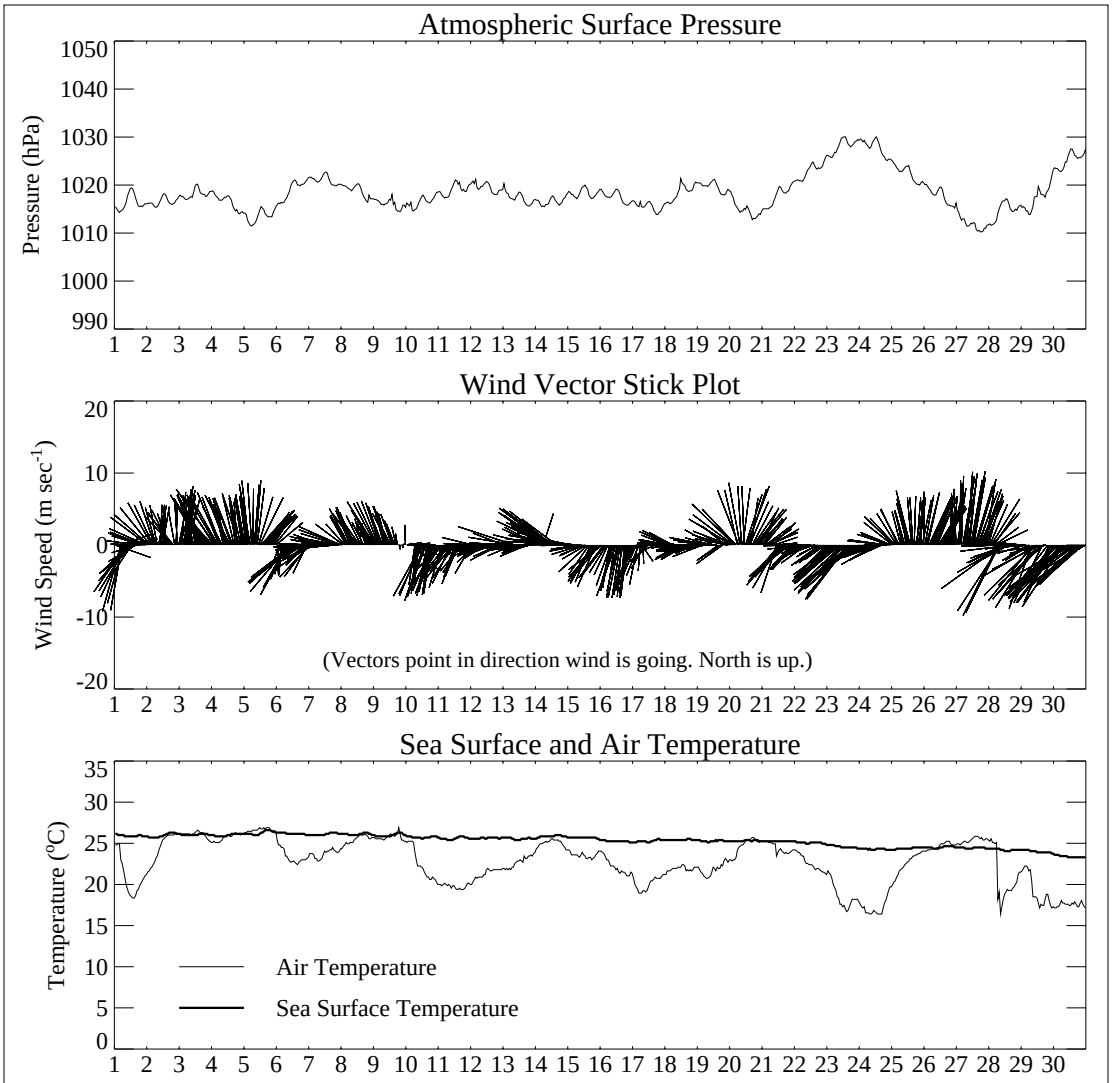


LATEX A Mooring 19 — October 1994

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 2.4 (m sec^{-1}) from 84 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	22.0	999.5	1021.5	1014.4	3.6
Wind Speed (m sec^{-1})	744	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	744	8.2	19.5	27.8	24.4	2.4
Sea Temperature (^{o}C)	744	2.5	25.9	28.4	26.8	0.6

Figure 19.94.10 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for October 1994.

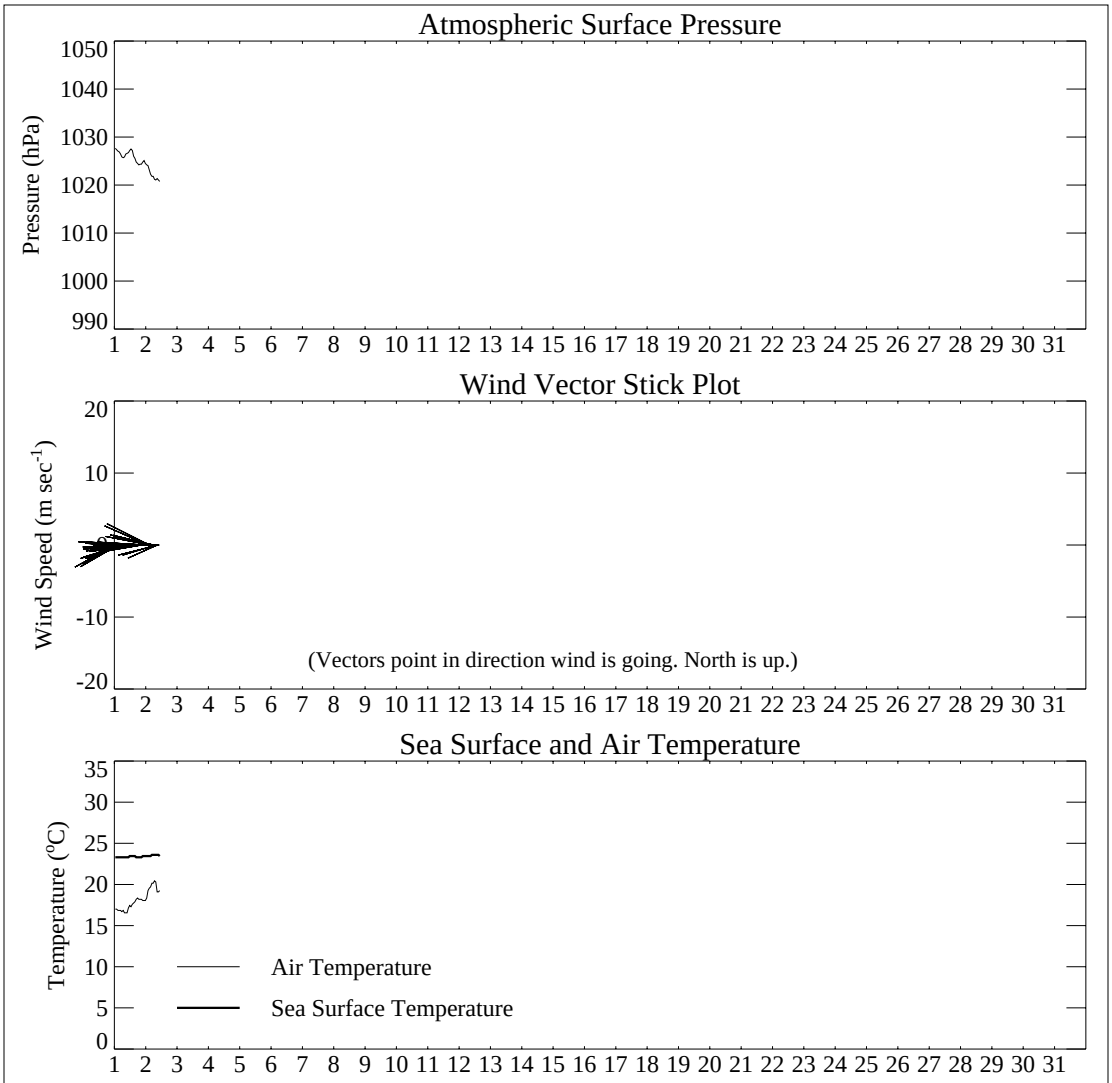


LATEX A Mooring 19 — November 1994

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 2.8 (m sec^{-1}) from 98 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	19.8	1010.2	1030.1	1018.5	3.9
Wind Speed (m sec^{-1})	720	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	720	10.5	16.4	26.9	22.7	2.8
Sea Temperature (^{o}C)	720	3.3	23.3	26.6	25.3	0.8

Figure 19.94.11 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for November 1994.

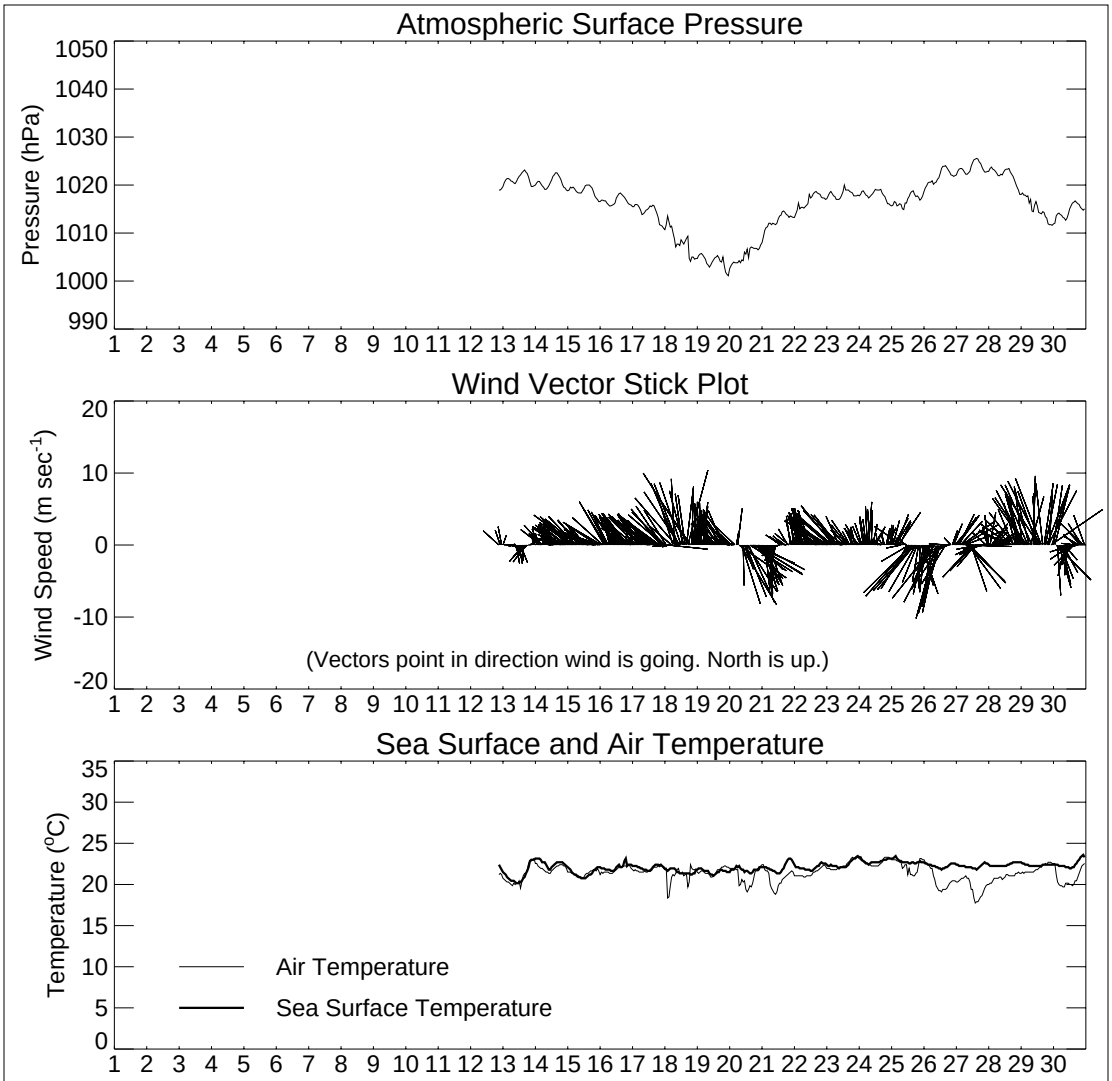


LATEX A Mooring 19 — December 1994

Latitude 28 27.90 N — Sample rate 1 hr
Longitude 92 02.16 W — Mast Height 3.6 m
Mean wind vector 6.2 (m sec^{-1}) from 85 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	35	6.9	1020.7	1027.7	1024.7	2.2
Wind Speed (m sec^{-1})	35	16.0	0.0	16.0	5.1	2.4
Air Temperature (^{o}C)	35	3.9	16.5	20.5	18.1	1.2
Sea Temperature (^{o}C)	35	0.3	23.3	23.6	23.4	0.1

Figure 19.94.12 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for December 1994.

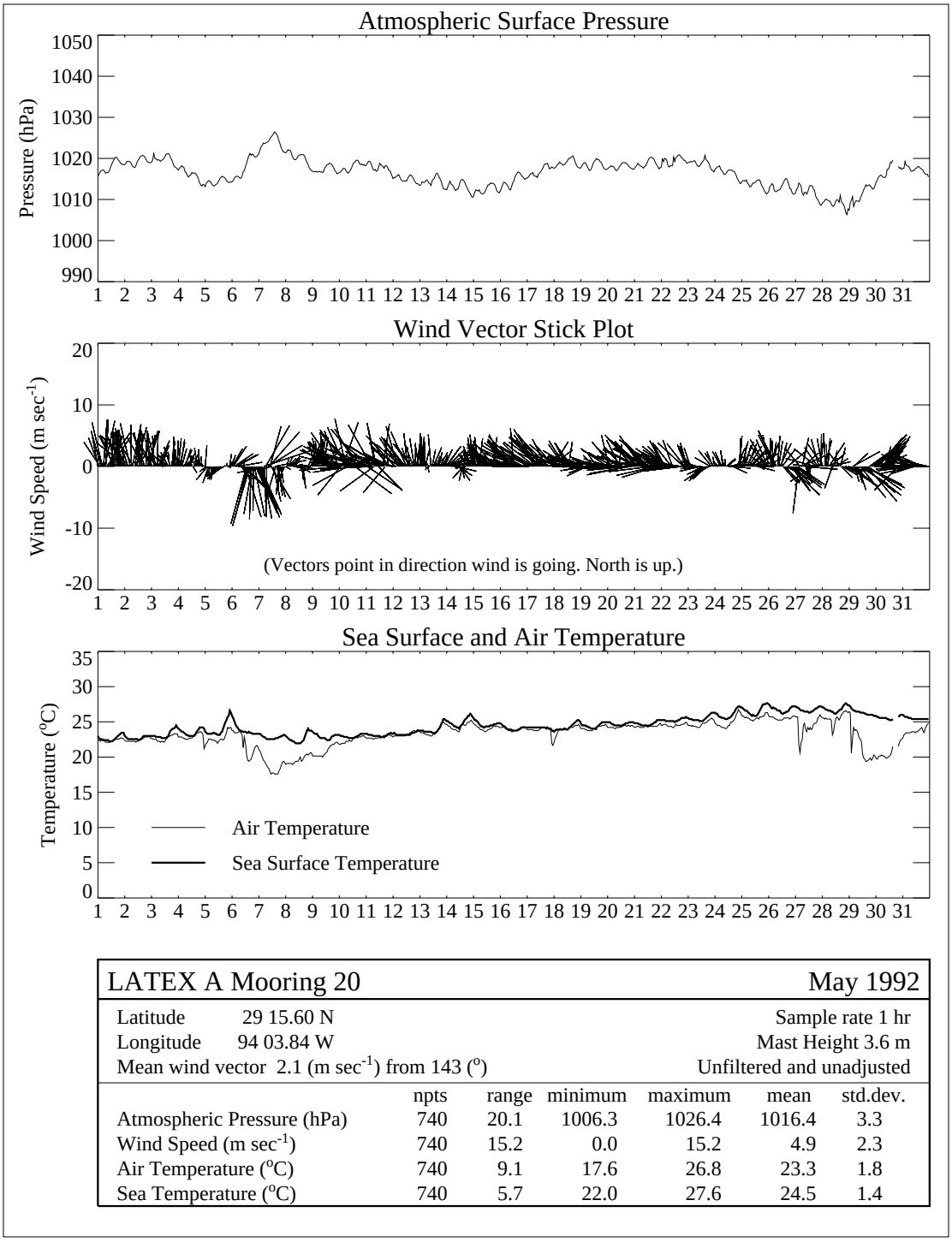


LATEX A Mooring 20 — April 1992

Latitude 29 15.60 N — Sample rate 1 hr
Longitude 94 03.84 W — Mast Height 3.6 m
Mean wind vector 2.1 (m sec^{-1}) from 140 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	435	24.5	1001.1	1025.6	1016.0	5.6
Wind Speed (m sec^{-1})	435	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	435	5.7	17.8	23.5	21.4	1.1
Sea Temperature (^{o}C)	435	3.5	20.1	23.6	22.1	0.6

Figure 20.92.04 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for April 1992.

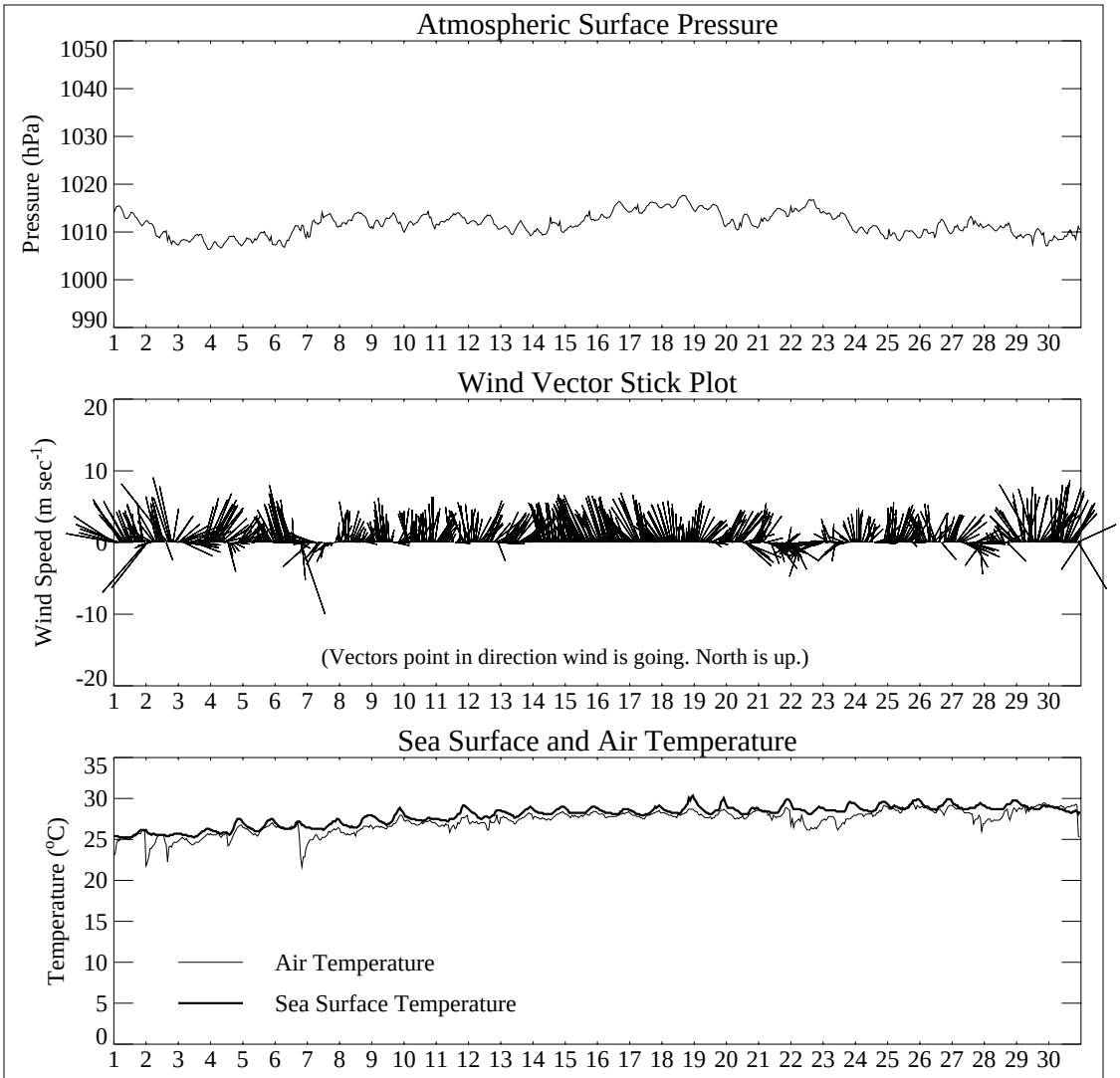


LATEX A Mooring 20 — May 1992

Latitude 29 15.60 N — Sample rate 1 hr
Longitude 94 03.84 W — Mast Height 3.6 m
Mean wind vector 2.1 (m sec^{-1}) from 143 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	740	20.1	1006.3	1026.4	1016.4	3.3
Wind Speed (m sec^{-1})	740	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	740	9.1	17.6	26.8	23.3	1.8
Sea Temperature (^{o}C)	740	5.7	22.0	27.6	24.5	1.4

Figure 20.92.05 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for May 1992.

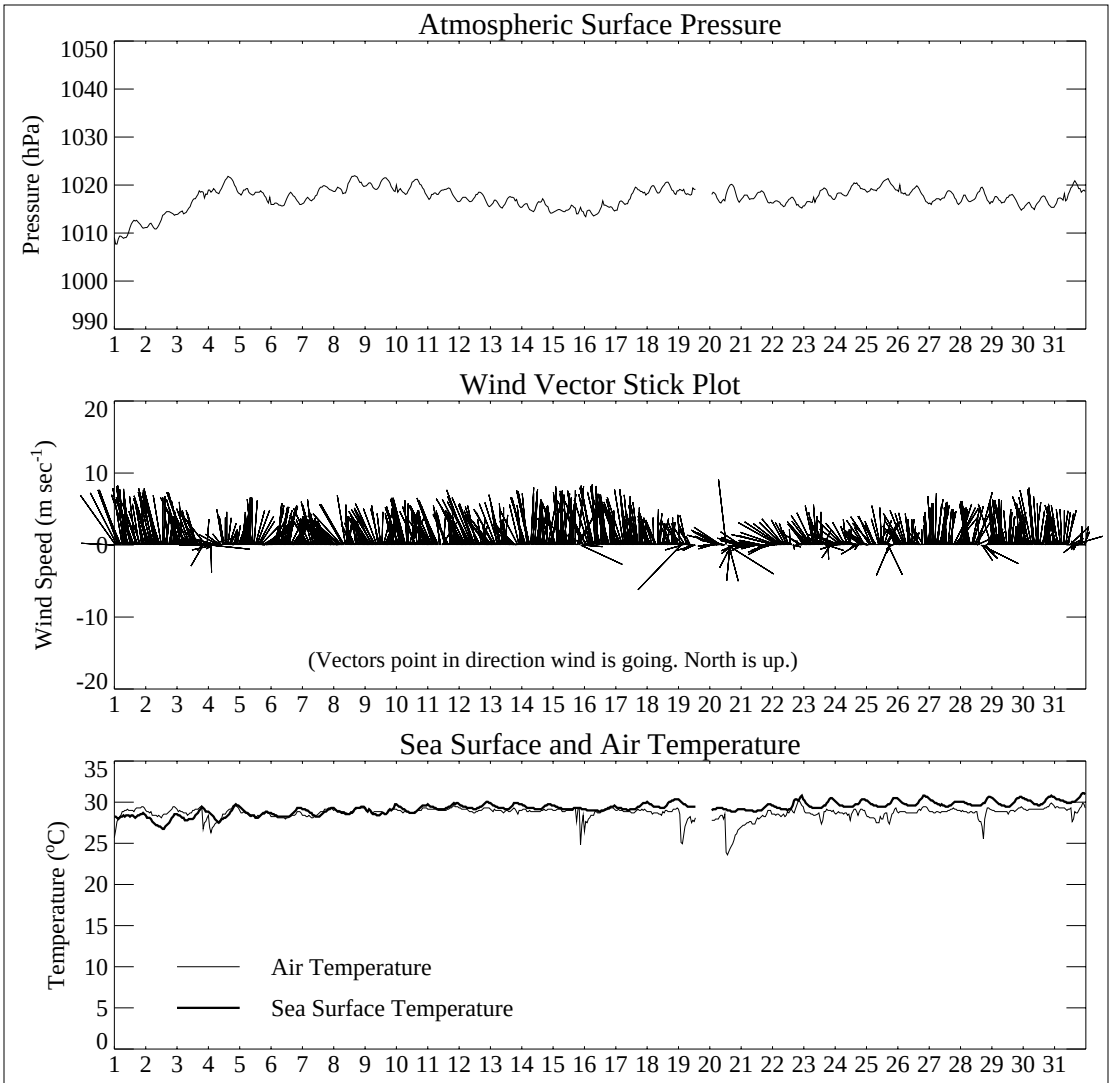


LATEX A Mooring 20 — June 1992

Latitude 29 15.60 N — Sample rate 1 hr
Longitude 94 03.84 W — Mast Height 3.6 m
Mean wind vector 2.7 (m sec^{-1}) from 186 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	11.3	1006.3	1017.6	1011.6	2.4
Wind Speed (m sec^{-1})	720	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	720	7.8	21.6	29.5	27.2	1.4
Sea Temperature (^{o}C)	720	5.1	25.3	30.4	27.9	1.2

Figure 20.92.06 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for June 1992.

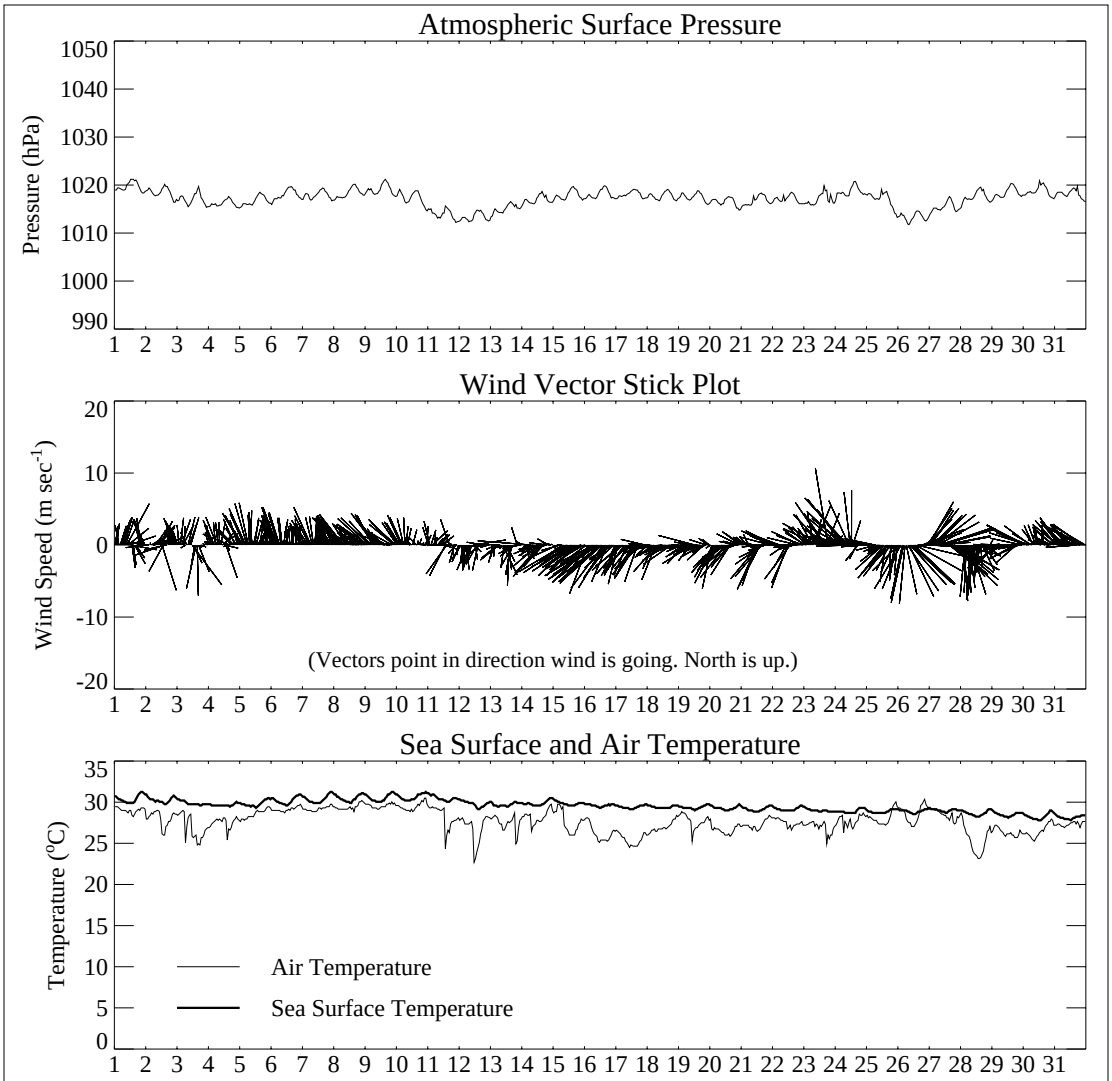


LATEX A Mooring 20 — July 1992

Latitude 29 15.60 N — Sample rate 1 hr
Longitude 94 03.84 W — Mast Height 3.6 m
Mean wind vector 3.9 (m sec^{-1}) from 167 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	733	14.3	1007.7	1022.0	1017.3	2.3
Wind Speed (m sec^{-1})	733	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	733	6.6	23.6	30.2	28.7	0.8
Sea Temperature (^{o}C)	733	4.4	26.8	31.1	29.3	0.7

Figure 20.92.07 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for July 1992.

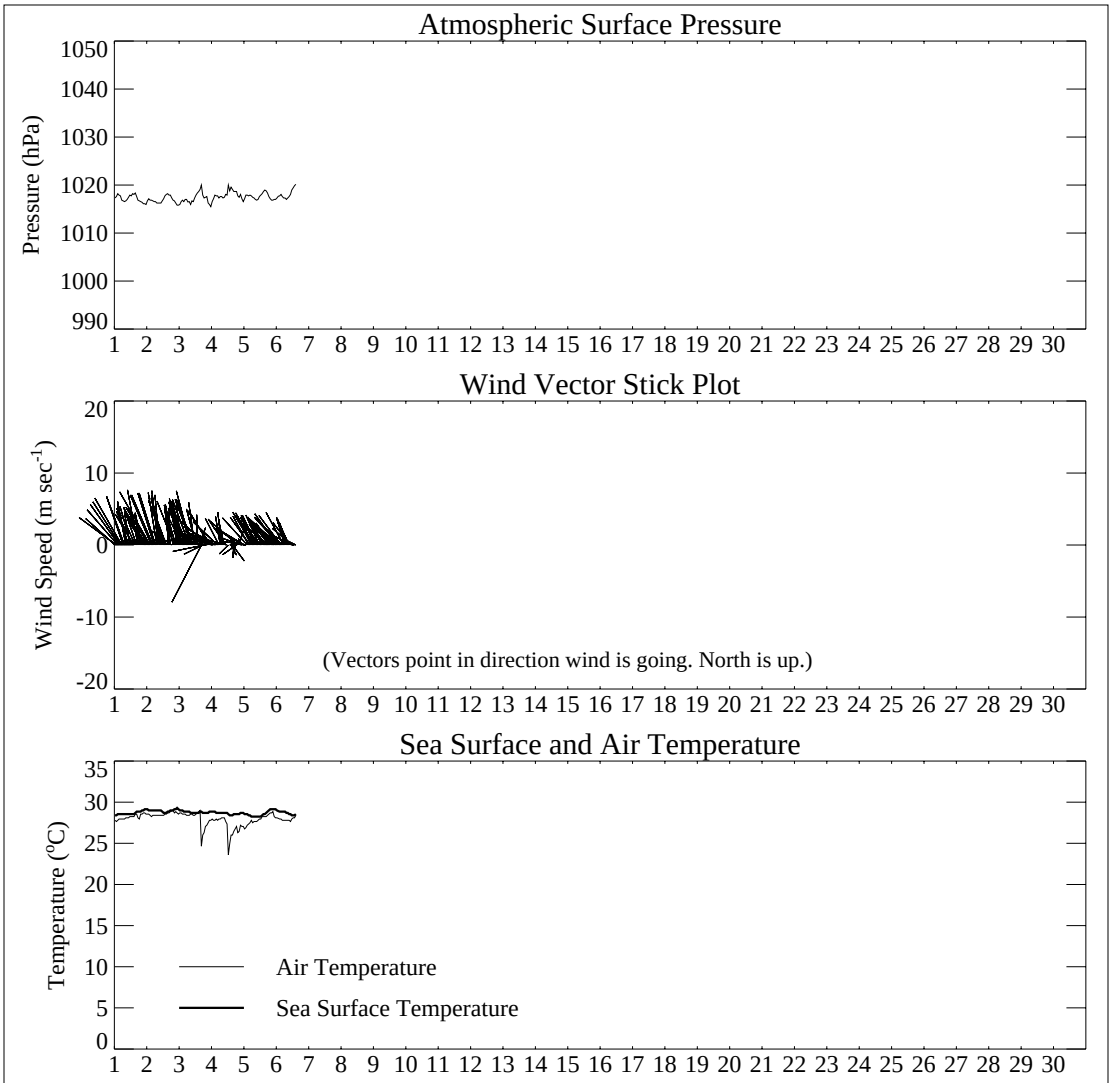


LATEX A Mooring 20 — August 1992

Latitude 29 15.60 N — Sample rate 1 hr
Longitude 94 03.84 W — Mast Height 3.6 m
Mean wind vector 1.4 (m sec^{-1}) from 92 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	9.5	1011.7	1021.2	1017.2	1.8
Wind Speed (m sec^{-1})	744	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	744	7.8	22.7	30.5	27.7	1.4
Sea Temperature (^{o}C)	744	3.5	27.8	31.3	29.5	0.7

Figure 20.92.08 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for August 1992.

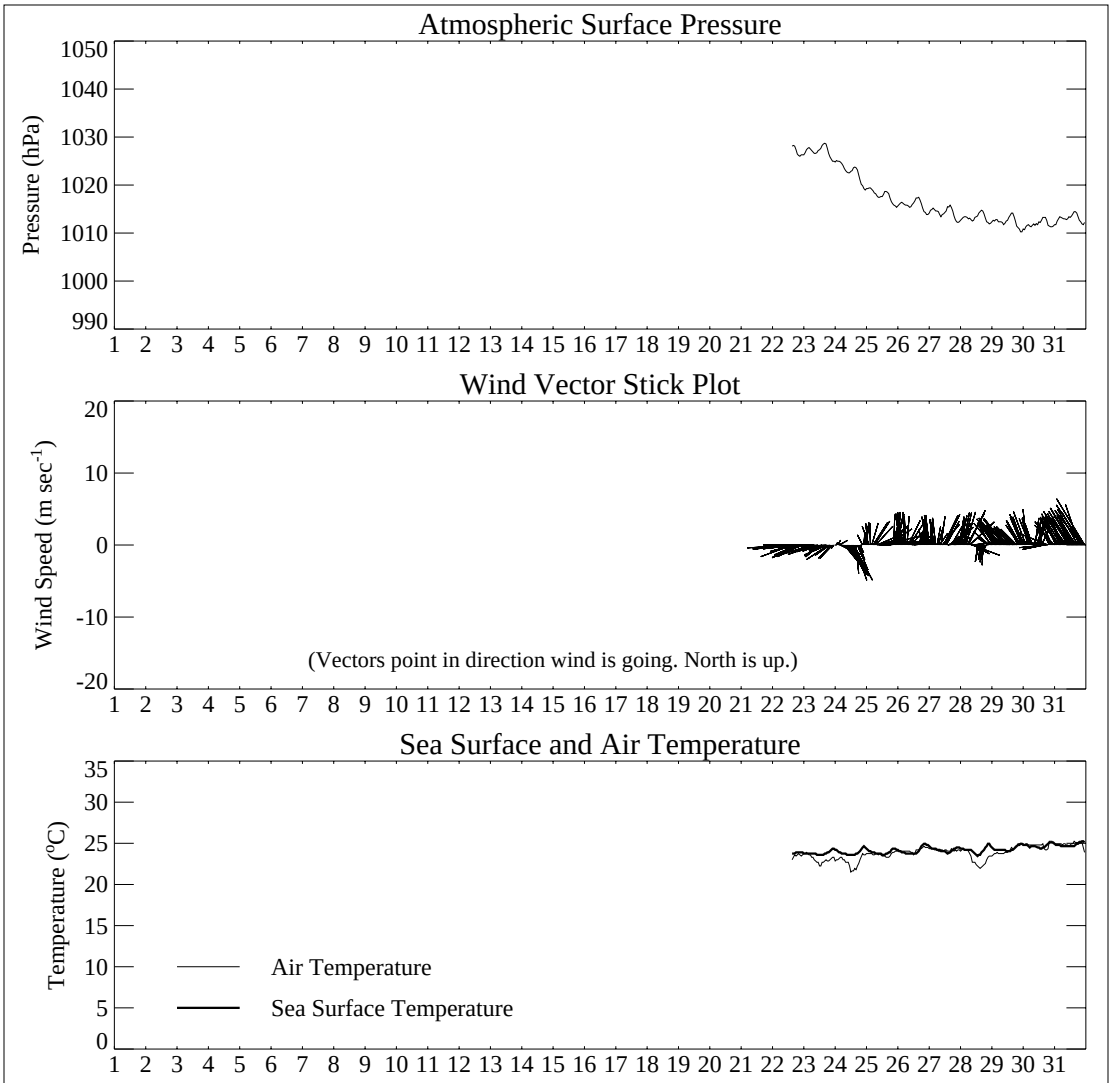


LATEX A Mooring 20 — September 1992

Latitude 29 15.60 N — Sample rate 1 hr
Longitude 94 03.84 W — Mast Height 3.6 m
Mean wind vector 4.5 (m sec^{-1}) from 149 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	135	4.7	1015.5	1020.2	1017.4	0.9
Wind Speed (m sec^{-1})	135	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	135	5.4	23.6	29.0	27.9	0.8
Sea Temperature (^{o}C)	135	1.0	28.3	29.3	28.7	0.2

Figure 20.92.09 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for September 1992.

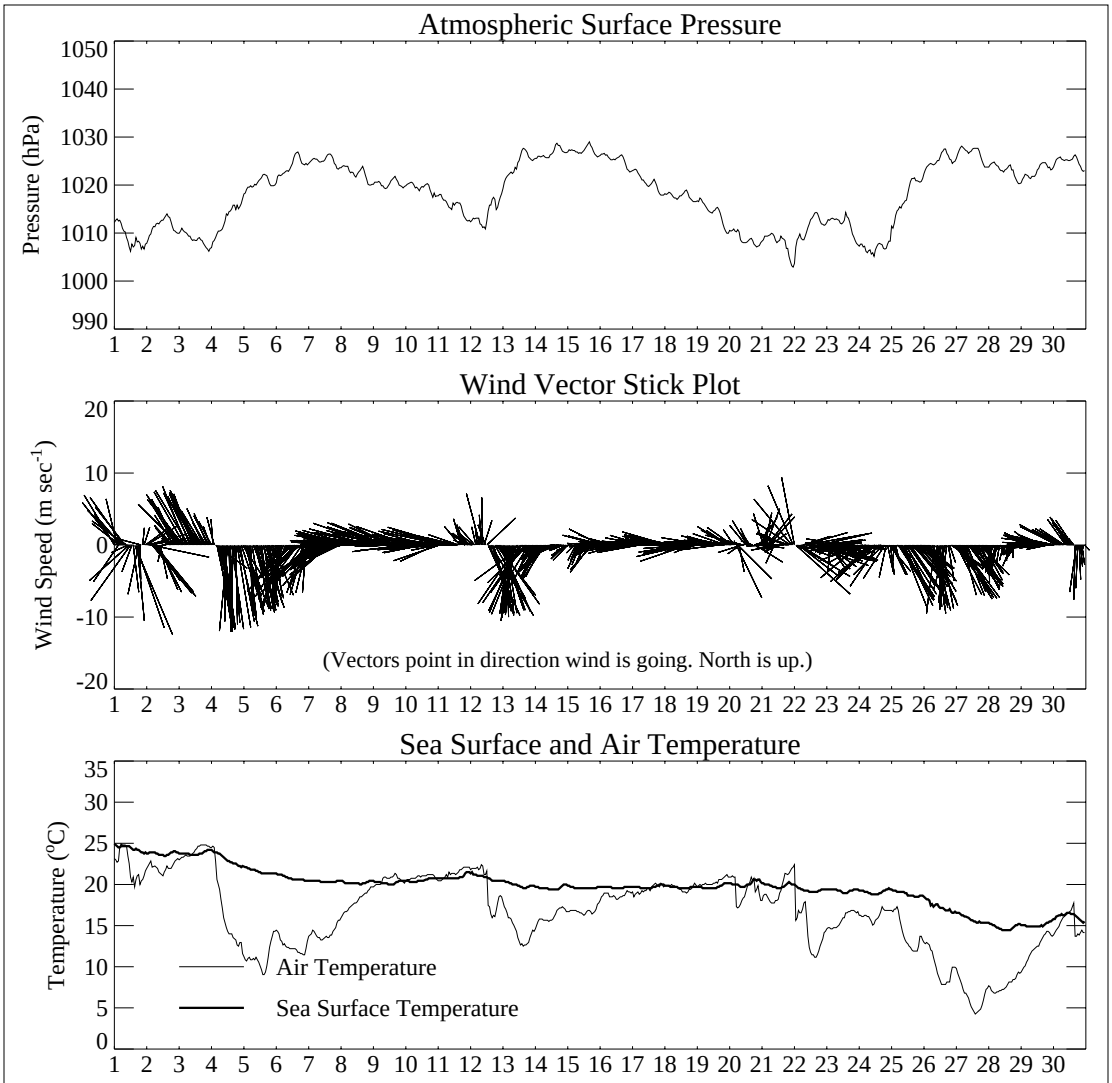


LATEX A Mooring 20 — October 1992

Latitude 29 15.60 N — Sample rate 1 hr
Longitude 94 03.84 W — Mast Height 3.6 m
Mean wind vector 1.8 (m sec^{-1}) from 161 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	225	18.4	1010.2	1028.7	1016.9	5.4
Wind Speed (m sec^{-1})	225	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	225	3.8	21.5	25.3	23.9	0.8
Sea Temperature (^{o}C)	225	1.8	23.5	25.3	24.2	0.4

Figure 20.92.10 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for October 1992.

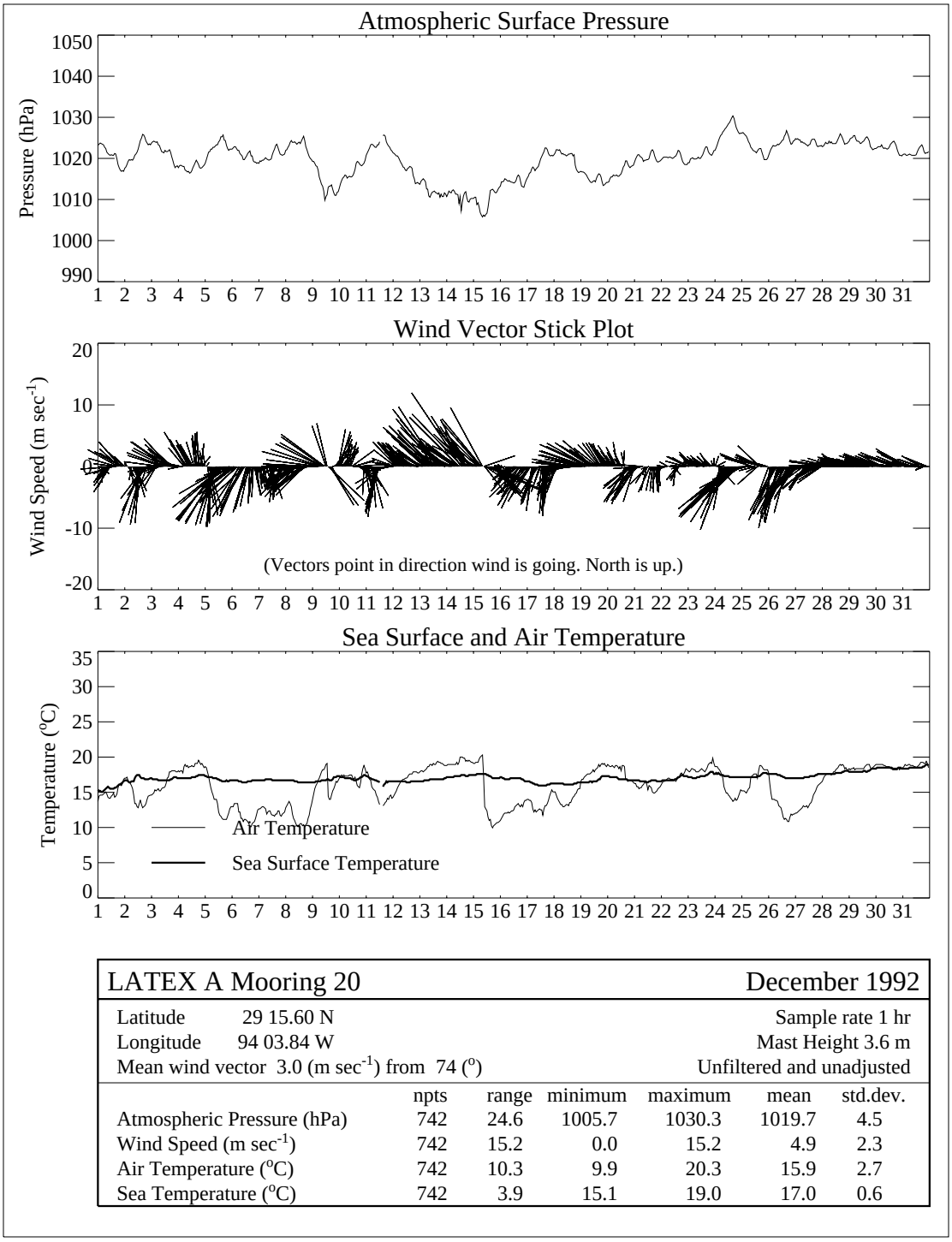


LATEX A Mooring 20 — November 1992

Latitude 29 15.60 N — Sample rate 1 hr
Longitude 94 03.84 W — Mast Height 3.6 m
Mean wind vector 2.7 (m sec^{-1}) from 49 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	26.1	1002.9	1029.0	1018.2	6.7
Wind Speed (m sec^{-1})	720	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	720	20.7	4.2	25.0	16.6	4.5
Sea Temperature (^{o}C)	720	10.5	14.4	25.0	19.8	2.3

Figure 20.92.11 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for November 1992.

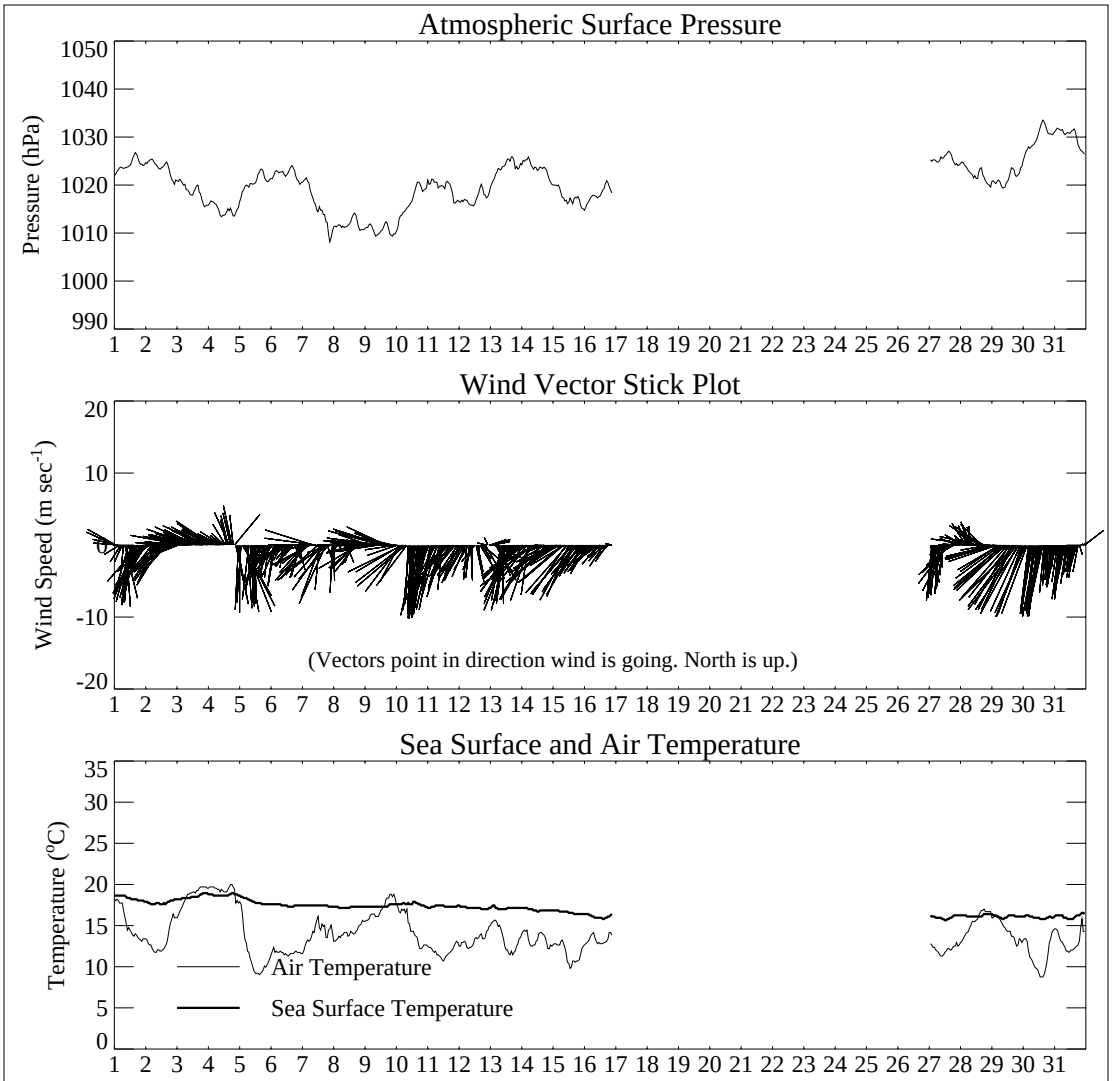


LATEX A Mooring 20 — December 1992

Latitude 29 15.60 N — Sample rate 1 hr
Longitude 94 03.84 W — Mast Height 3.6 m
Mean wind vector 3.0 (m sec^{-1}) from 74 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	742	24.6	1005.7	1030.3	1019.7	4.5
Wind Speed (m sec^{-1})	742	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	742	10.3	9.9	20.3	15.9	2.7
Sea Temperature (^{o}C)	742	3.9	15.1	19.0	17.0	0.6

Figure 20.92.12 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for December 1992.

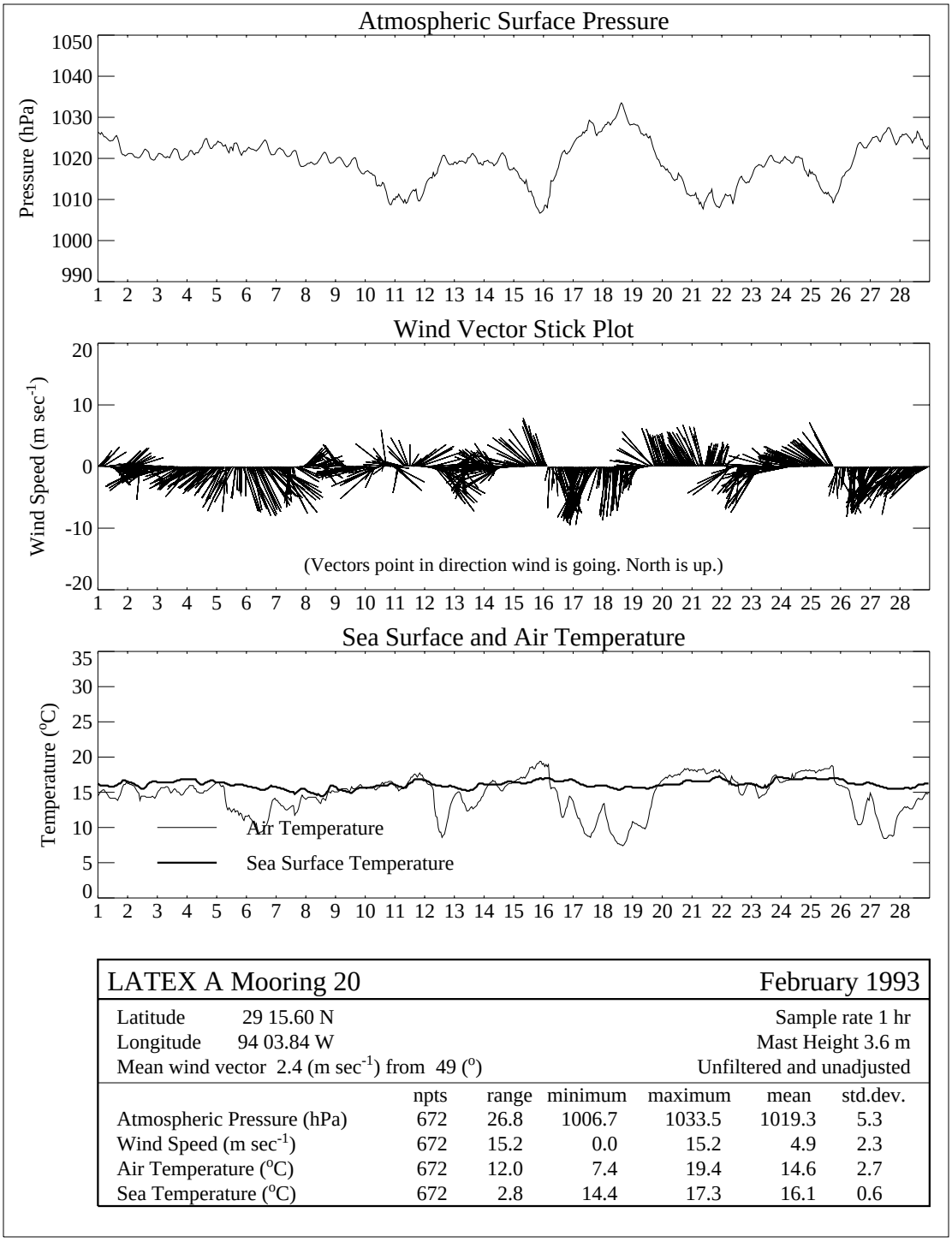


LATEX A Mooring 20 — January 1993

Latitude 29 15.60 N — Sample rate 1 hr
Longitude 94 03.84 W — Mast Height 3.6 m
Mean wind vector 4.4 (m sec^{-1}) from 38 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	501	25.3	1008.2	1033.5	1020.4	5.3
Wind Speed (m sec^{-1})	501	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	501	11.3	8.8	20.0	14.0	2.5
Sea Temperature (^{o}C)	501	3.3	15.6	19.0	17.2	0.8

Figure 20.93.01 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for January 1993.

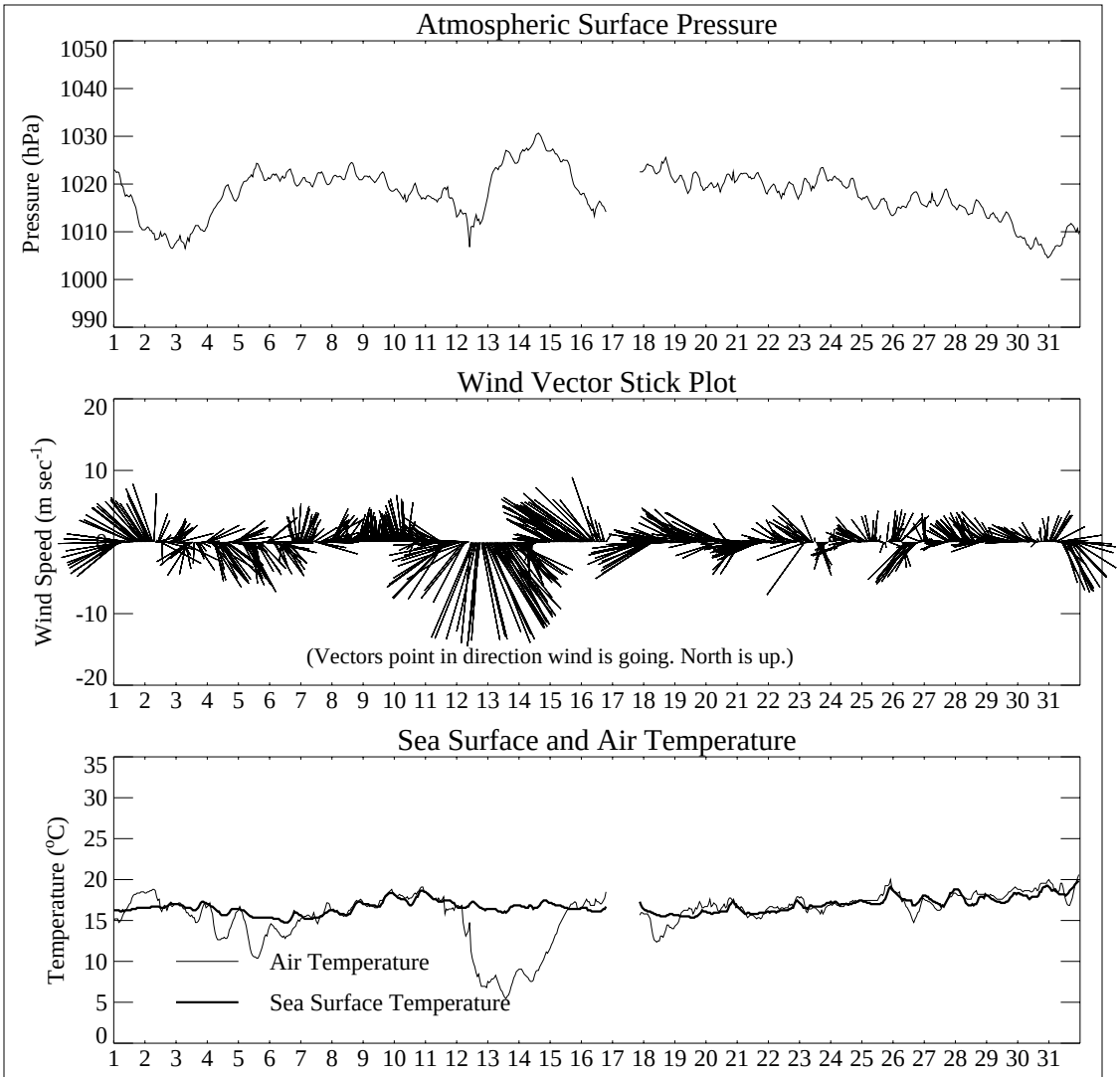


LATEX A Mooring 20 — February 1993

Latitude 29 15.60 N — Sample rate 1 hr
Longitude 94 03.84 W — Mast Height 3.6 m
Mean wind vector 2.4 (m sec^{-1}) from 49 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	672	26.8	1006.7	1033.5	1019.3	5.3
Wind Speed (m sec^{-1})	672	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	672	12.0	7.4	19.4	14.6	2.7
Sea Temperature (^{o}C)	672	2.8	14.4	17.3	16.1	0.6

Figure 20.93.02 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for February 1993.

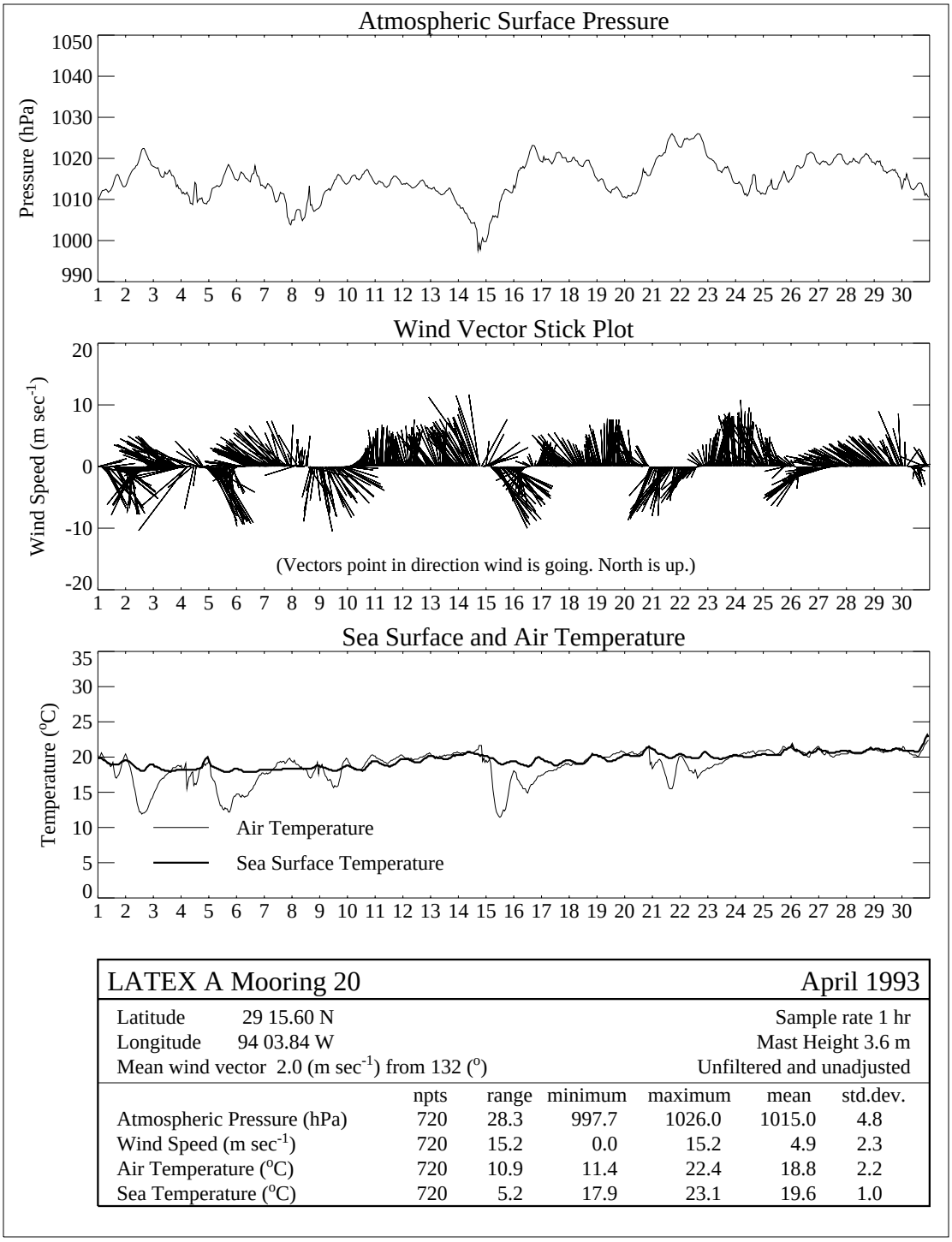


LATEX A Mooring 20 — March 1993

Latitude 29 15.60 N — Sample rate 1 hr
Longitude 94 03.84 W — Mast Height 3.6 m
Mean wind vector 1.5 (m sec^{-1}) from 89 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	719	26.1	1004.5	1030.7	1017.8	5.2
Wind Speed (m sec^{-1})	719	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	719	15.2	5.4	20.6	15.9	2.9
Sea Temperature (^{o}C)	719	5.1	14.8	19.9	16.8	0.9

Figure 20.93.03 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for March 1993.

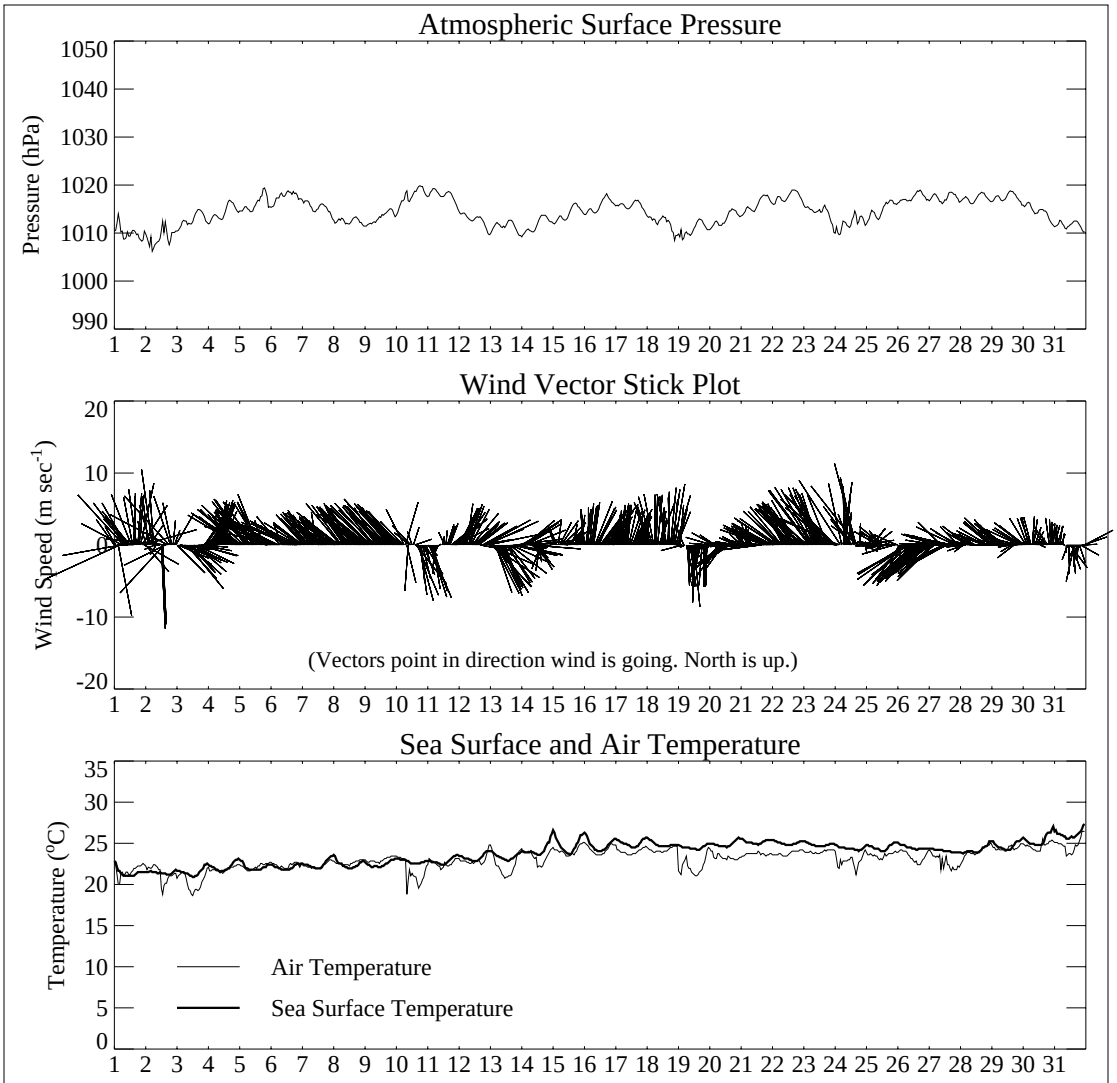


LATEX A Mooring 20 — April 1993

Latitude 29 15.60 N — Sample rate 1 hr
Longitude 94 03.84 W — Mast Height 3.6 m
Mean wind vector 2.0 (m sec^{-1}) from 132 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	28.3	997.7	1026.0	1015.0	4.8
Wind Speed (m sec^{-1})	720	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	720	10.9	11.4	22.4	18.8	2.2
Sea Temperature (^{o}C)	720	5.2	17.9	23.1	19.6	1.0

Figure 20.93.04 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for April 1993.

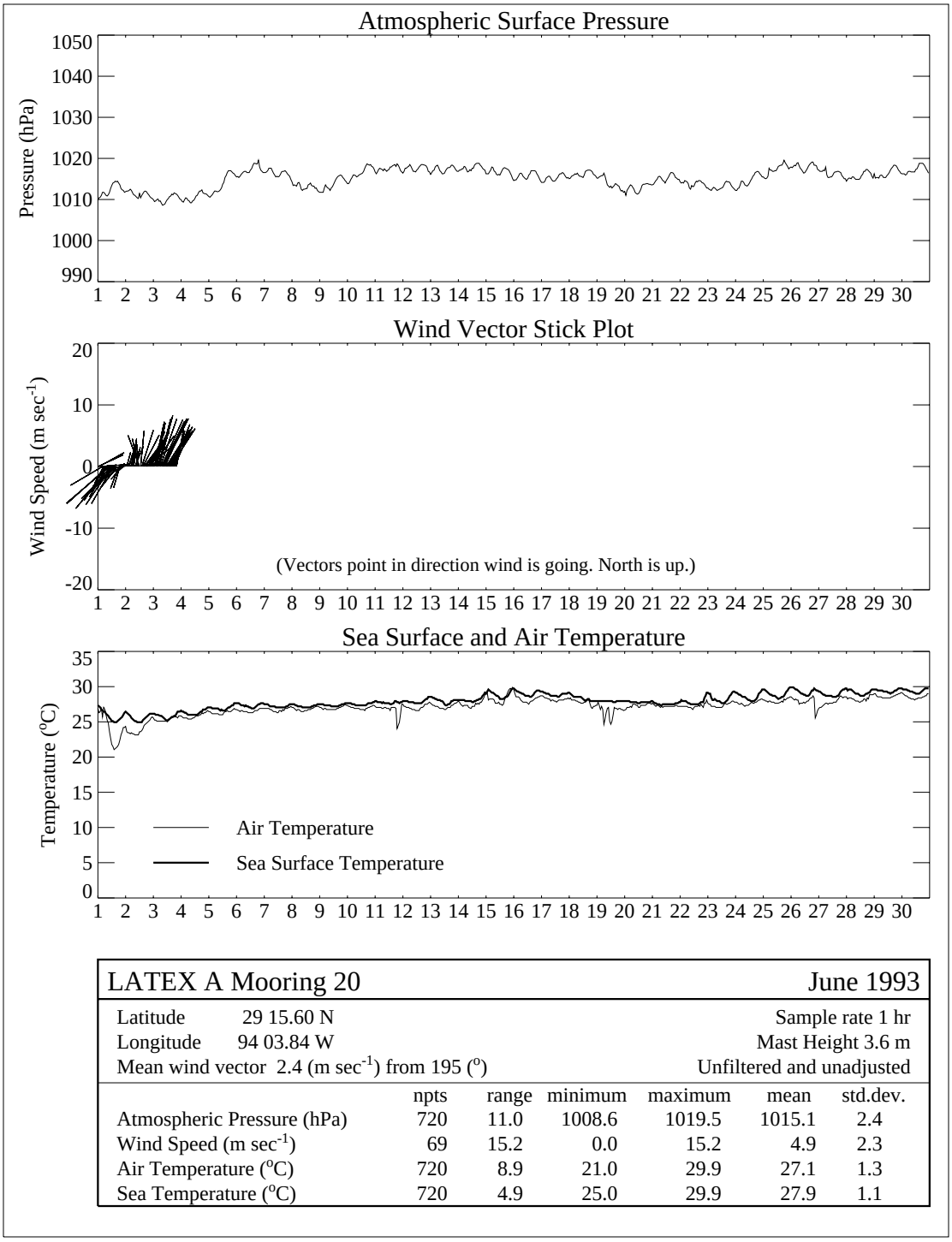


LATEX A Mooring 20 — May 1993

Latitude 29 15.60 N — Sample rate 1 hr
Longitude 94 03.84 W — Mast Height 3.6 m
Mean wind vector 2.4 (m sec^{-1}) from 143 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	743	13.6	1006.2	1019.8	1014.3	2.8
Wind Speed (m sec^{-1})	743	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	743	7.8	18.6	26.5	23.0	1.2
Sea Temperature (^{o}C)	743	6.5	20.9	27.4	23.8	1.4

Figure 20.93.05 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for May 1993.

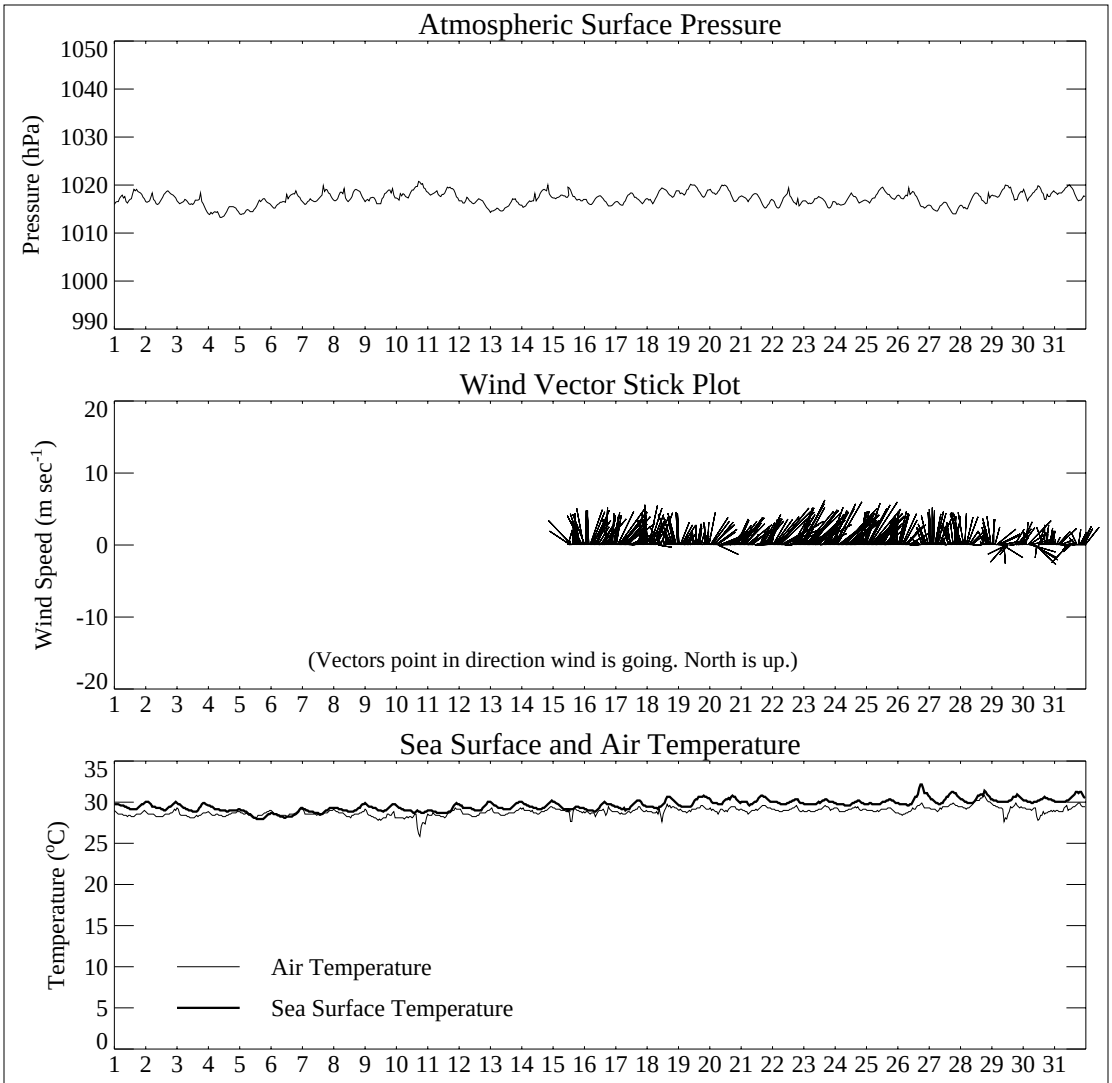


LATEX A Mooring 20 — June 1993

Latitude 29 15.60 N — Sample rate 1 hr
Longitude 94 03.84 W — Mast Height 3.6 m
Mean wind vector 2.4 (m sec^{-1}) from 195 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	11.0	1008.6	1019.5	1015.1	2.4
Wind Speed (m sec^{-1})	69	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	720	8.9	21.0	29.9	27.1	1.3
Sea Temperature (^{o}C)	720	4.9	25.0	29.9	27.9	1.1

Figure 20.93.06 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for June 1993.

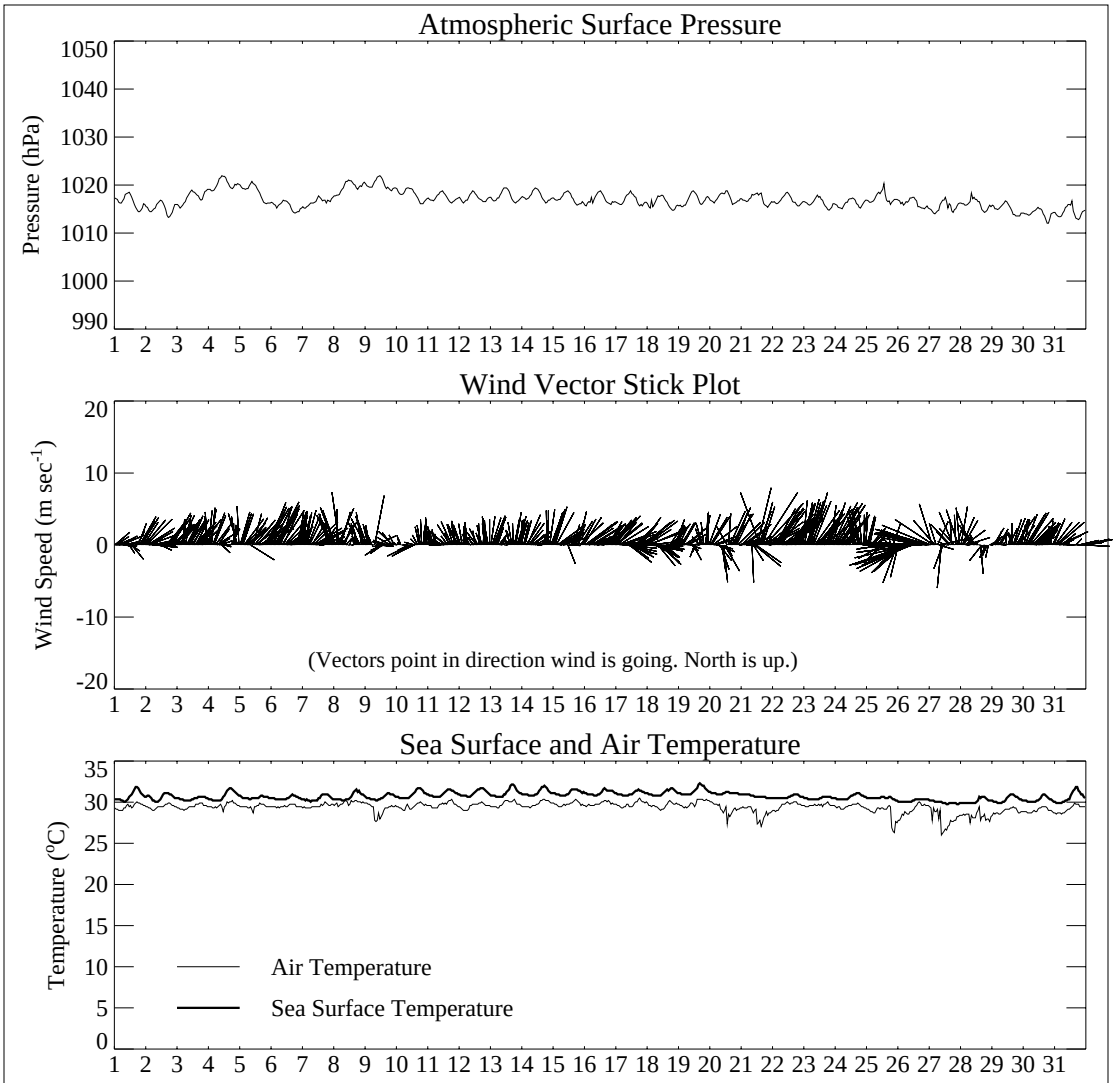


LATEX A Mooring 20 — July 1993

Latitude 29 15.60 N — Sample rate 1 hr
Longitude 94 03.84 W — Mast Height 3.6 m
Mean wind vector 3.0 (m sec^{-1}) from 208 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	746	7.5	1013.2	1020.7	1017.2	1.4
Wind Speed (m sec^{-1})	397	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	746	4.9	25.9	30.8	28.9	0.5
Sea Temperature (^{o}C)	746	4.2	28.0	32.2	29.6	0.7

Figure 20.93.07 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for July 1993.

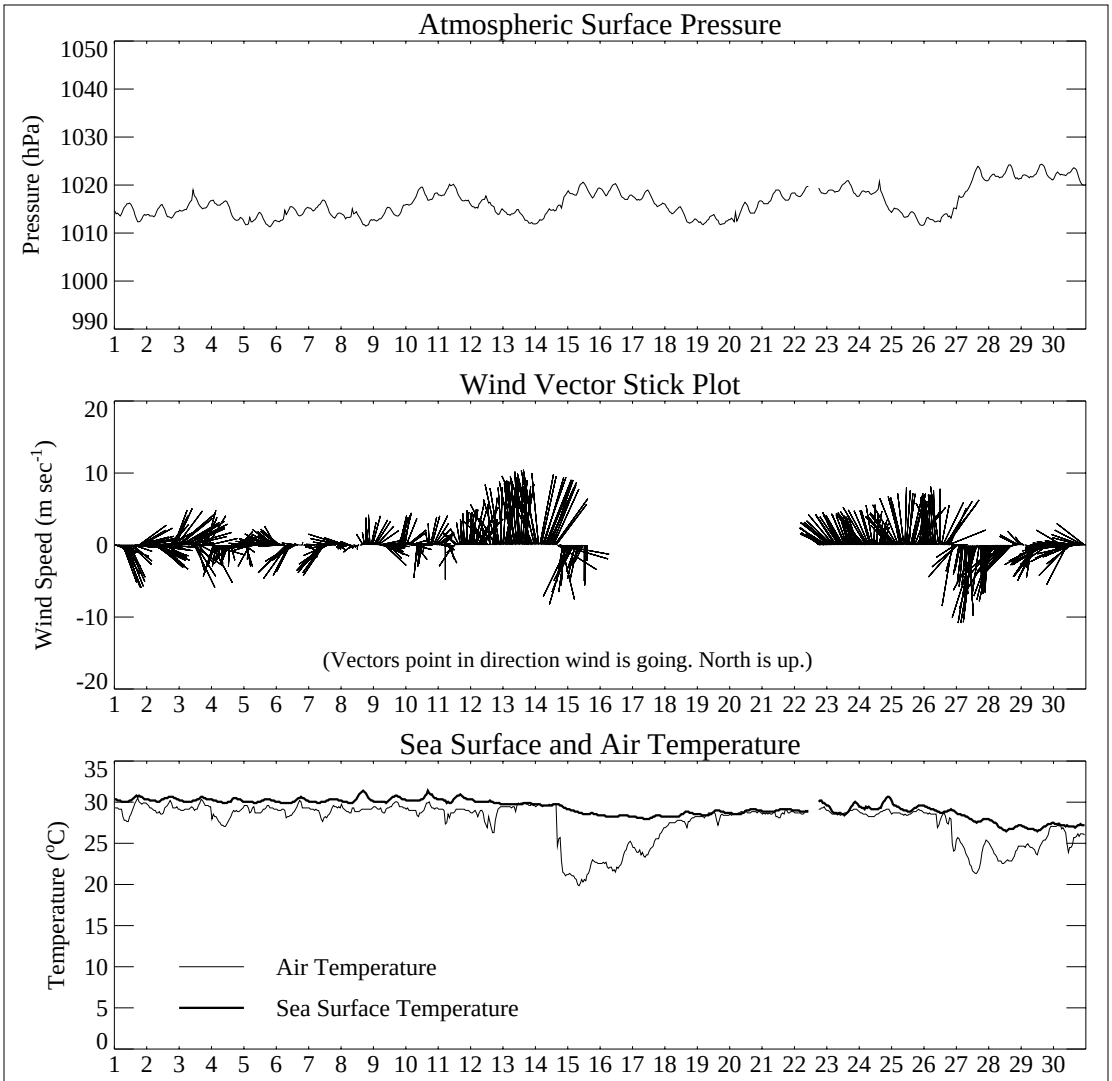


LATEX A Mooring 20 — August 1993

Latitude 29 15.60 N — Sample rate 1 hr
Longitude 94 03.84 W — Mast Height 3.6 m
Mean wind vector 2.4 (m sec^{-1}) from 207 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	9.9	1012.0	1022.0	1016.9	1.7
Wind Speed (m sec^{-1})	744	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	744	4.5	26.0	30.5	29.4	0.6
Sea Temperature (^{o}C)	744	2.5	29.8	32.3	30.7	0.5

Figure 20.93.08 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for August 1993.

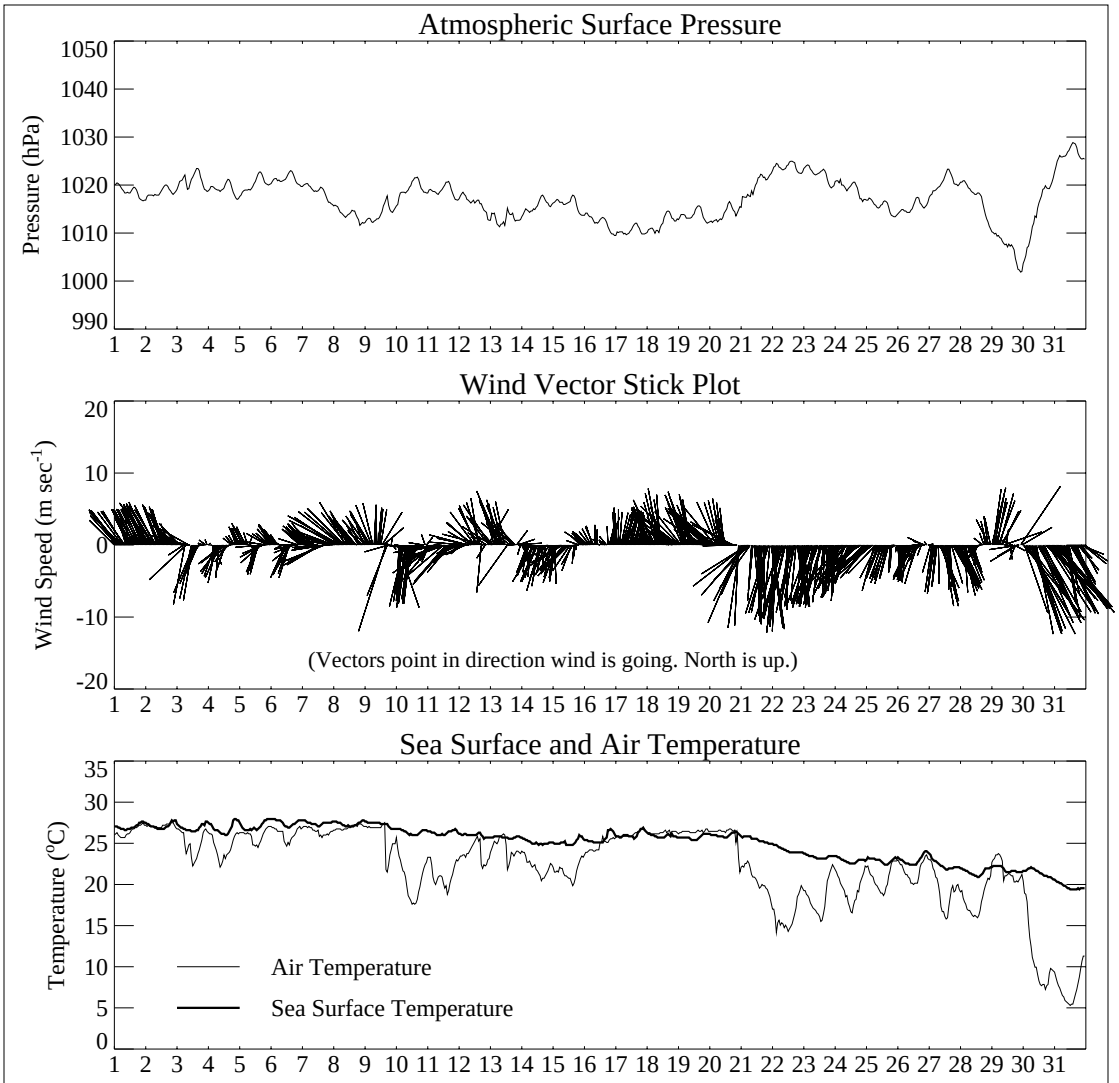


LATEX A Mooring 20 — September 1993

Latitude 29 15.60 N — Sample rate 1 hr
Longitude 94 03.84 W — Mast Height 3.6 m
Mean wind vector 1.0 (m sec^{-1}) from 161 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	713	13.0	1011.3	1024.3	1016.3	3.1
Wind Speed (m sec^{-1})	549	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	713	10.6	19.9	30.5	27.6	2.4
Sea Temperature (^{o}C)	713	4.9	26.5	31.4	29.3	1.1

Figure 20.93.09 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for September 1993.

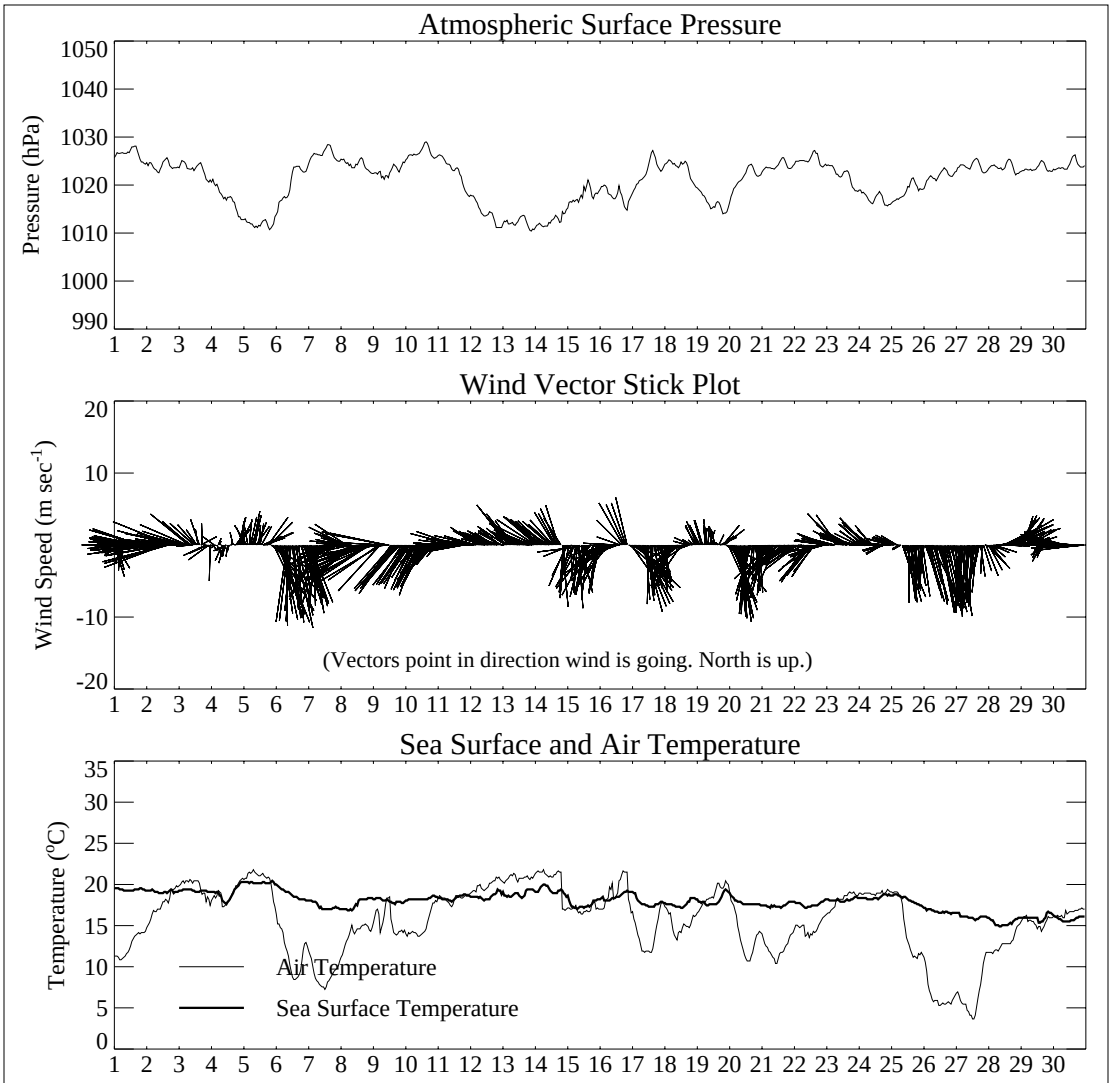


LATEX A Mooring 20 — October 1993

Latitude 29 30.00N — Sample rate 1 hr
Longitude 94 01.32N — Mast Height 3.6 m
Mean wind vector 1.8 (m sec^{-1}) from 48 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	27.0	1001.8	1028.8	1017.0	4.4
Wind Speed (m sec^{-1})	744	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	744	22.2	5.3	27.5	22.4	4.8
Sea Temperature (^{o}C)	744	8.6	19.4	28.0	25.1	2.1

Figure 20.93.10 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for October 1993.

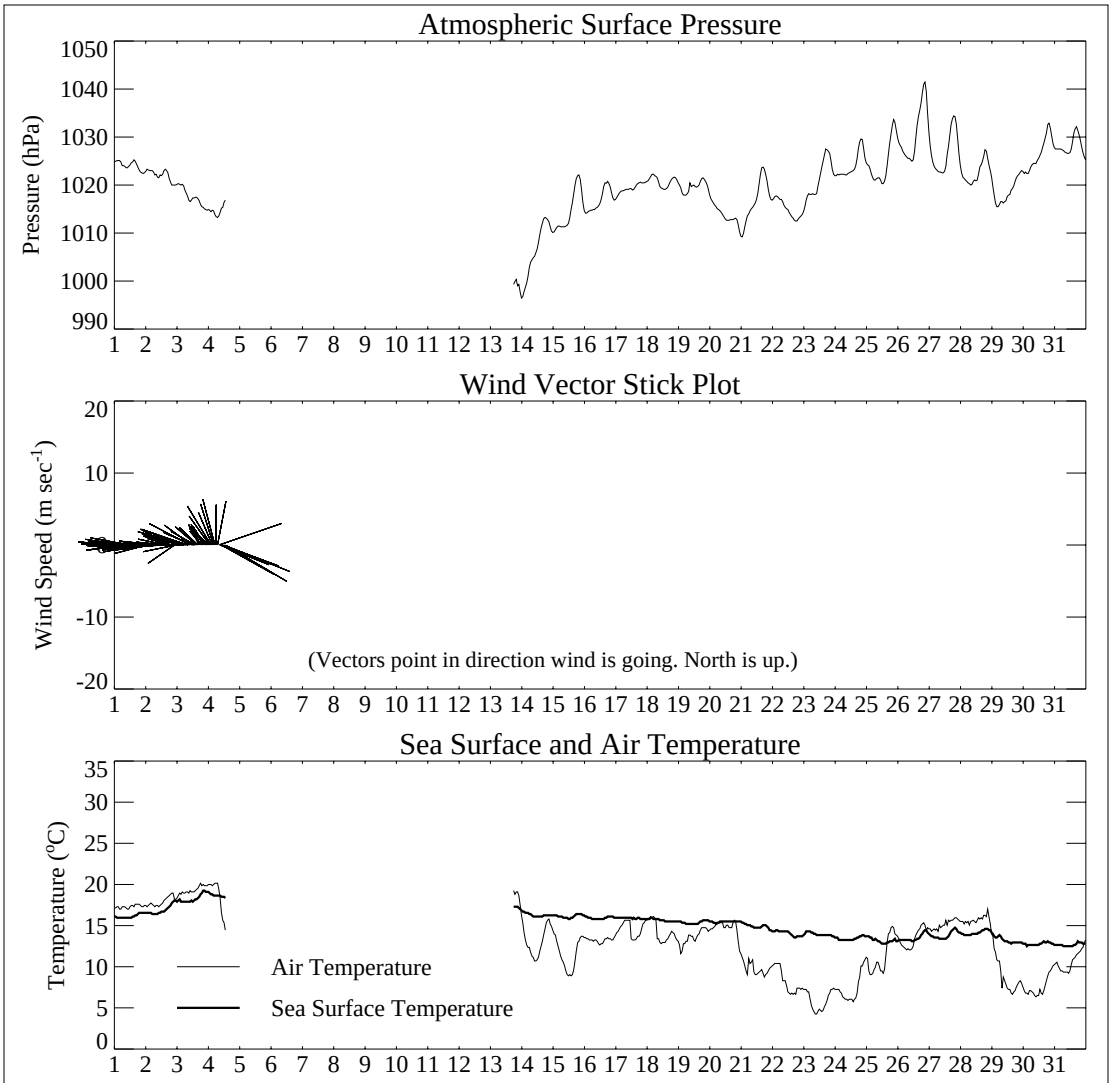


LATEX A Mooring 20 — November 1993

Latitude 29 30.00N — Sample rate 1 hr
Longitude 94 01.32N — Mast Height 3.6 m
Mean wind vector 2.9 (m sec^{-1}) from 47 (^{o}) — Unfiltered and unadjusted

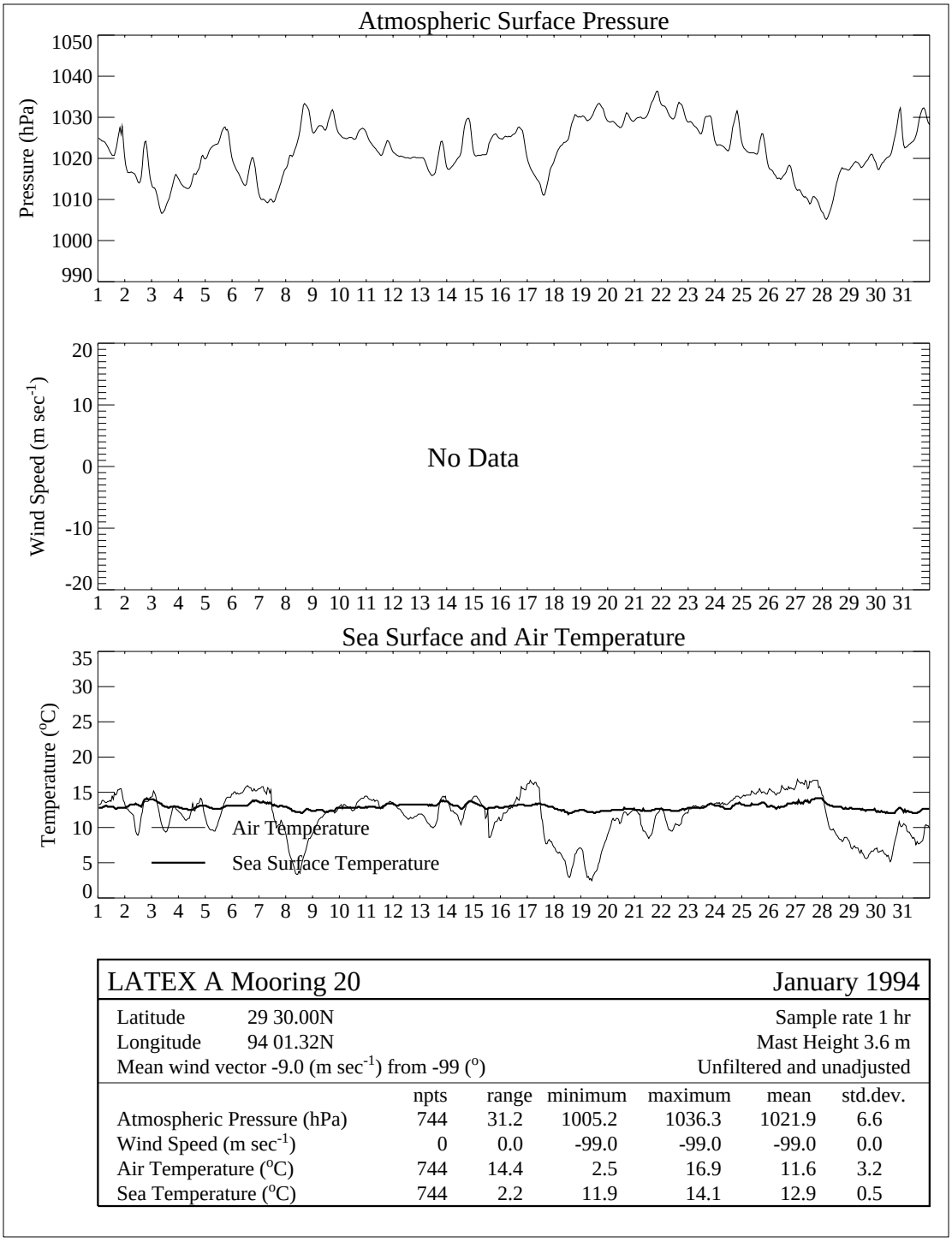
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	18.6	1010.4	1029.0	1021.0	4.5
Wind Speed (m sec^{-1})	720	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	720	18.1	3.7	21.8	15.6	4.1
Sea Temperature (^{o}C)	720	5.6	14.9	20.5	18.0	1.2

Figure 20.93.11 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for November 1993.



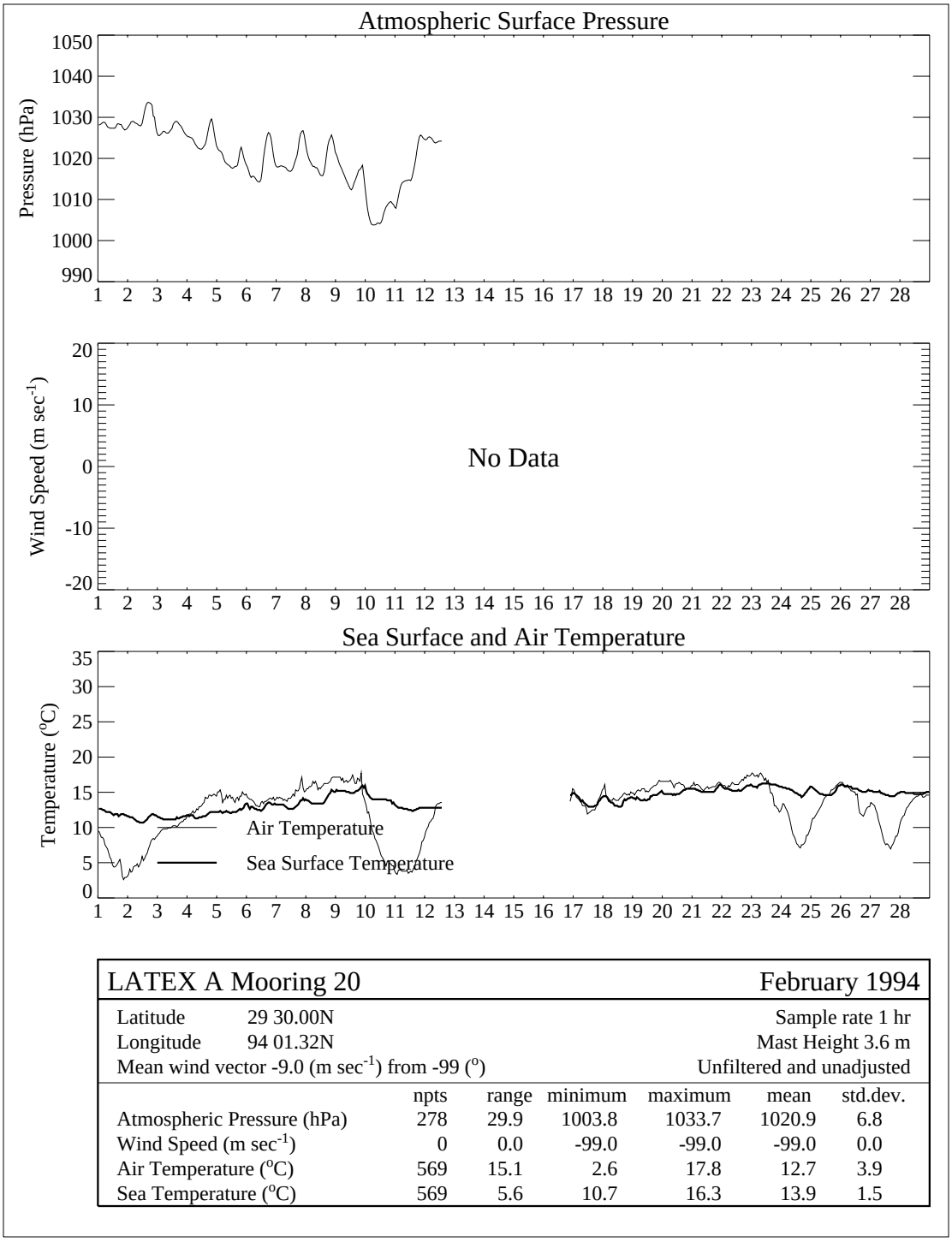
LATEX A Mooring 20						December 1993
Latitude	29 30.00N					Sample rate 1 hr
Longitude	94 01.32N					Mast Height 3.6 m
Mean wind vector 3.6 (m sec^{-1}) from 103 (^{o})						Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	525	45.0	996.5	1041.4	1020.1	6.7
Wind Speed (m sec^{-1})	86	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	525	15.9	4.2	20.1	12.8	3.9
Sea Temperature (^{o}C)	525	6.8	12.5	19.3	15.0	1.6

Figure 20.93.12 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for December 1993.



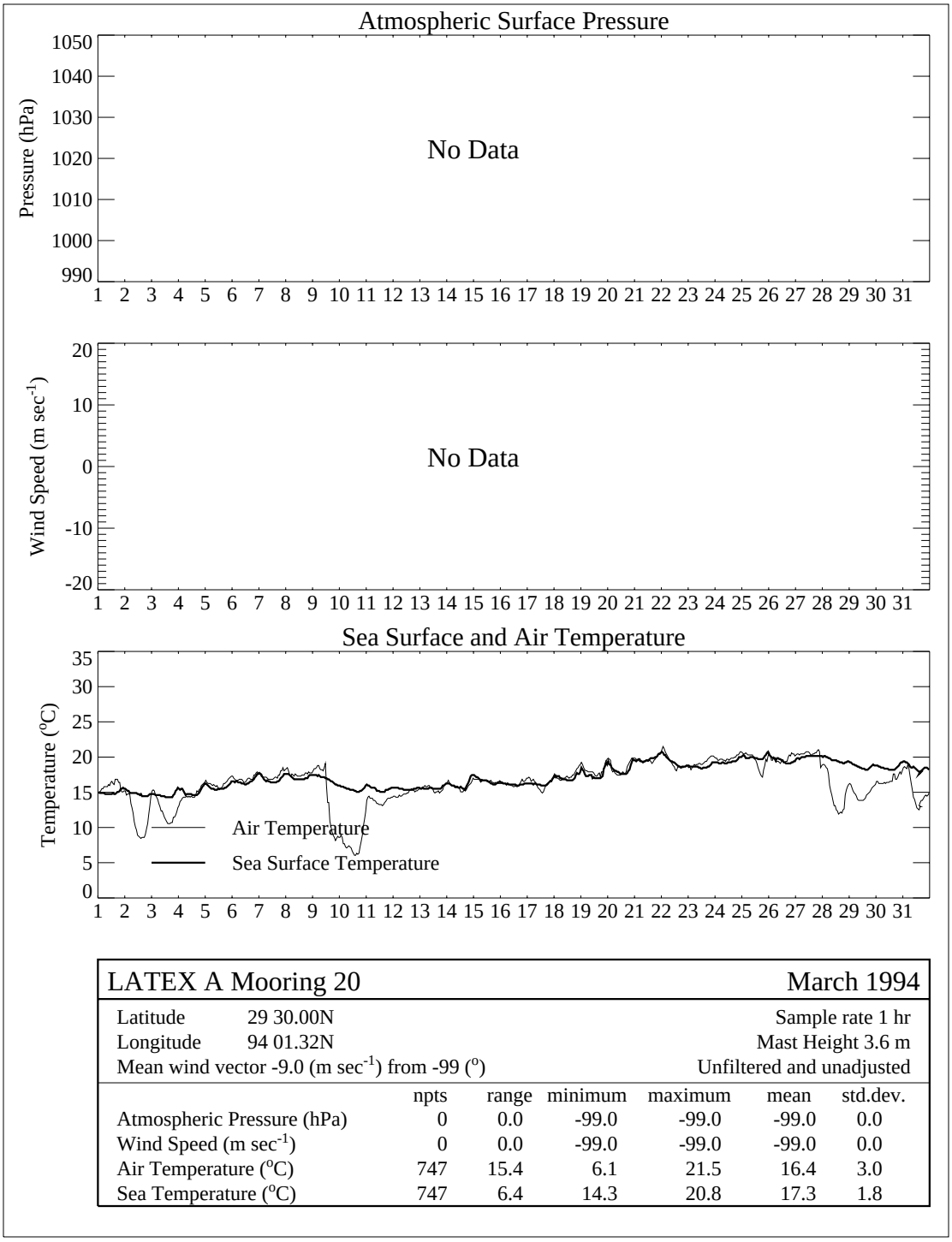
LATEX A Mooring 20						January 1994
Latitude	29 30.00N					Sample rate 1 hr
Longitude	94 01.32N					Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o})						Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	31.2	1005.2	1036.3	1021.9	6.6
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	744	14.4	2.5	16.9	11.6	3.2
Sea Temperature (^{o}C)	744	2.2	11.9	14.1	12.9	0.5

Figure 20.94.01 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for January 1994.



LATEX A Mooring 20						February 1994
Latitude	29 30.00N					Sample rate 1 hr
Longitude	94 01.32N					Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o})						Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	278	29.9	1003.8	1033.7	1020.9	6.8
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	569	15.1	2.6	17.8	12.7	3.9
Sea Temperature (^{o}C)	569	5.6	10.7	16.3	13.9	1.5

Figure 20.94.02 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for February 1994.

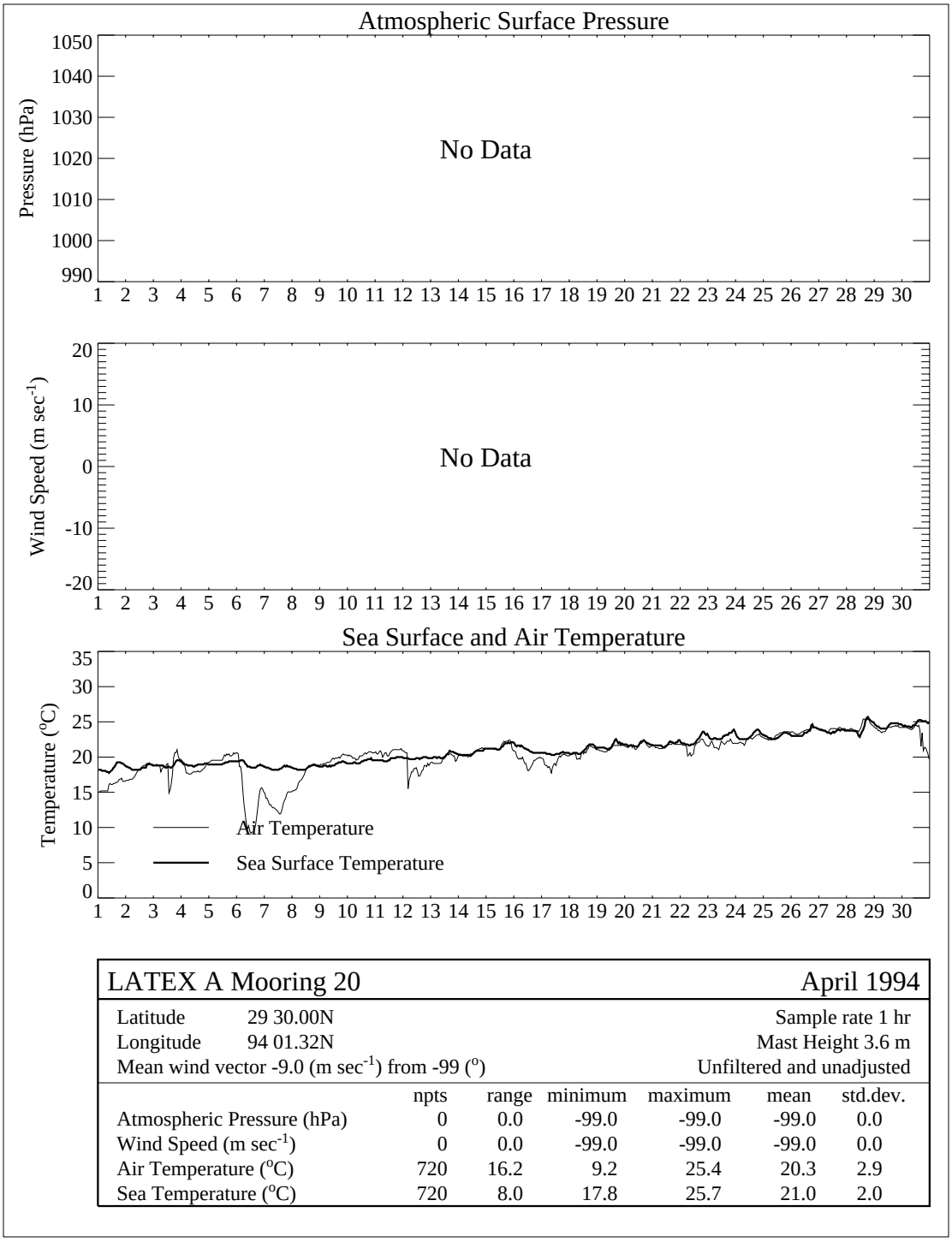


LATEX A Mooring 20 — March 1994

Latitude 29 30.00N — Sample rate 1 hr
Longitude 94 01.32N — Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	0	0.0	-99.0	-99.0	-99.0	0.0
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	747	15.4	6.1	21.5	16.4	3.0
Sea Temperature (^{o}C)	747	6.4	14.3	20.8	17.3	1.8

Figure 20.94.03 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for March 1994.

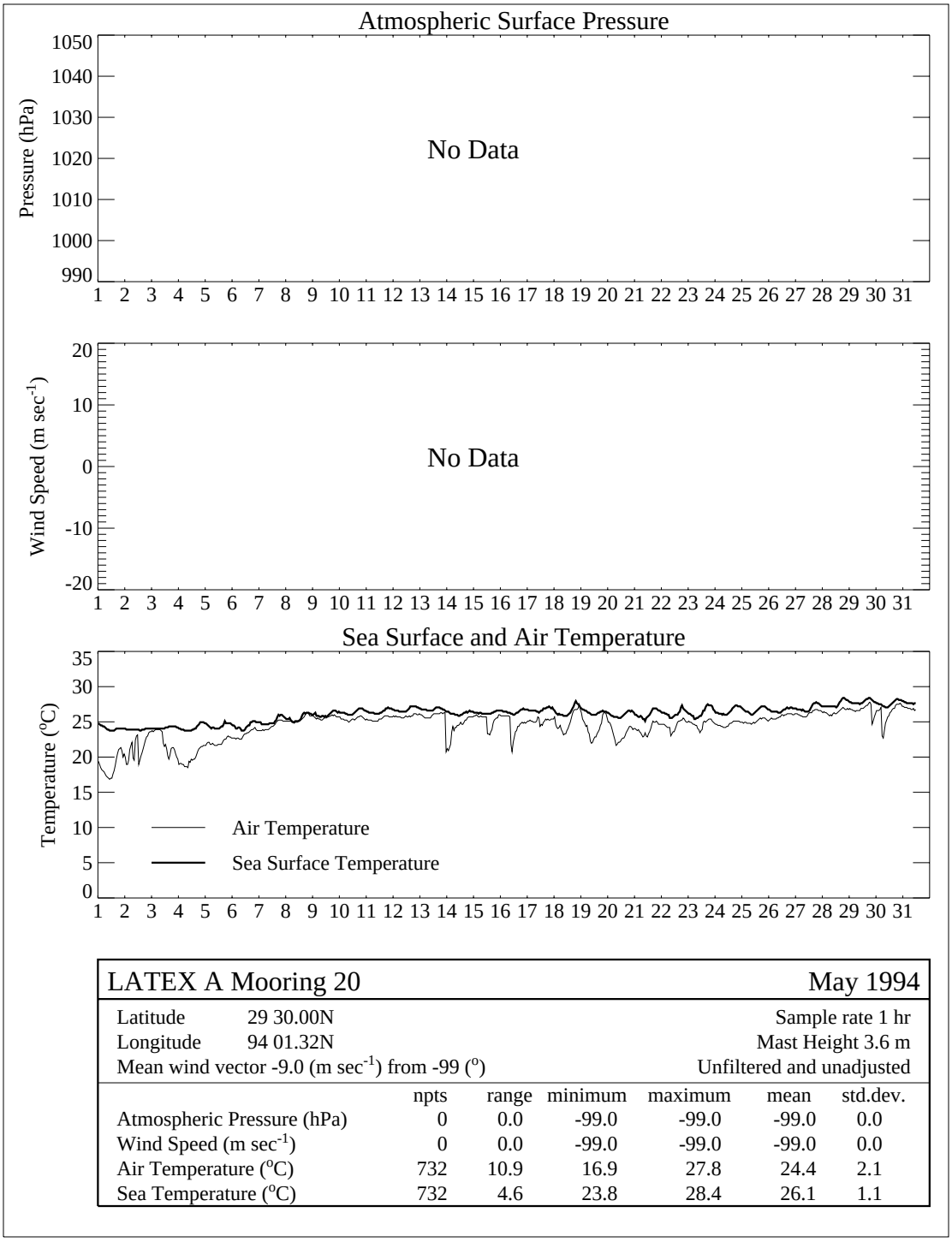


LATEX A Mooring 20 — April 1994

Latitude 29 30.00N — Sample rate 1 hr
Longitude 94 01.32N — Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	0	0.0	-99.0	-99.0	-99.0	0.0
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	720	16.2	9.2	25.4	20.3	2.9
Sea Temperature (^{o}C)	720	8.0	17.8	25.7	21.0	2.0

Figure 20.94.04 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for April 1994.

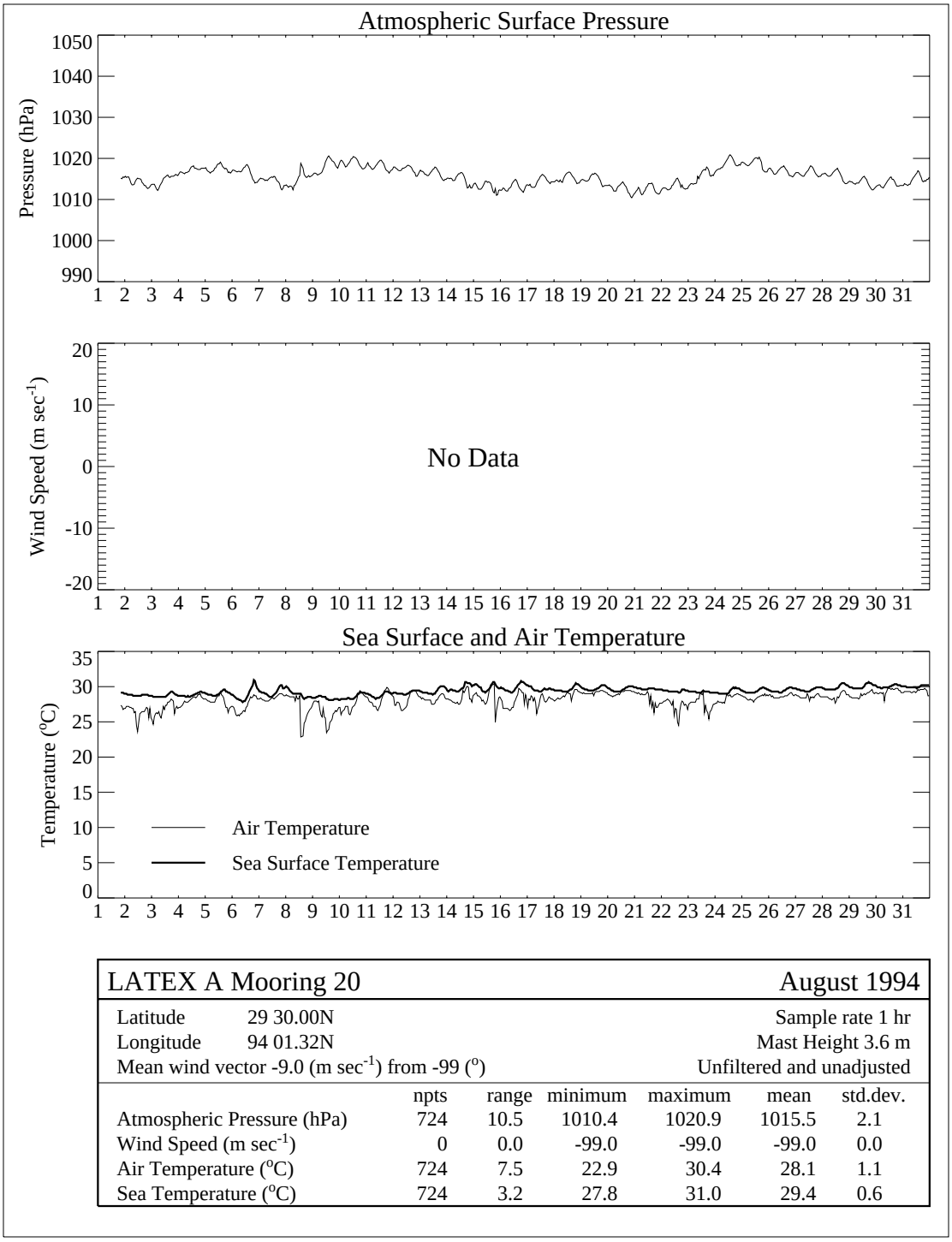


LATEX A Mooring 20 — May 1994

Latitude 29 30.00N — Sample rate 1 hr
Longitude 94 01.32N — Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o}) — Unfiltered and unadjusted

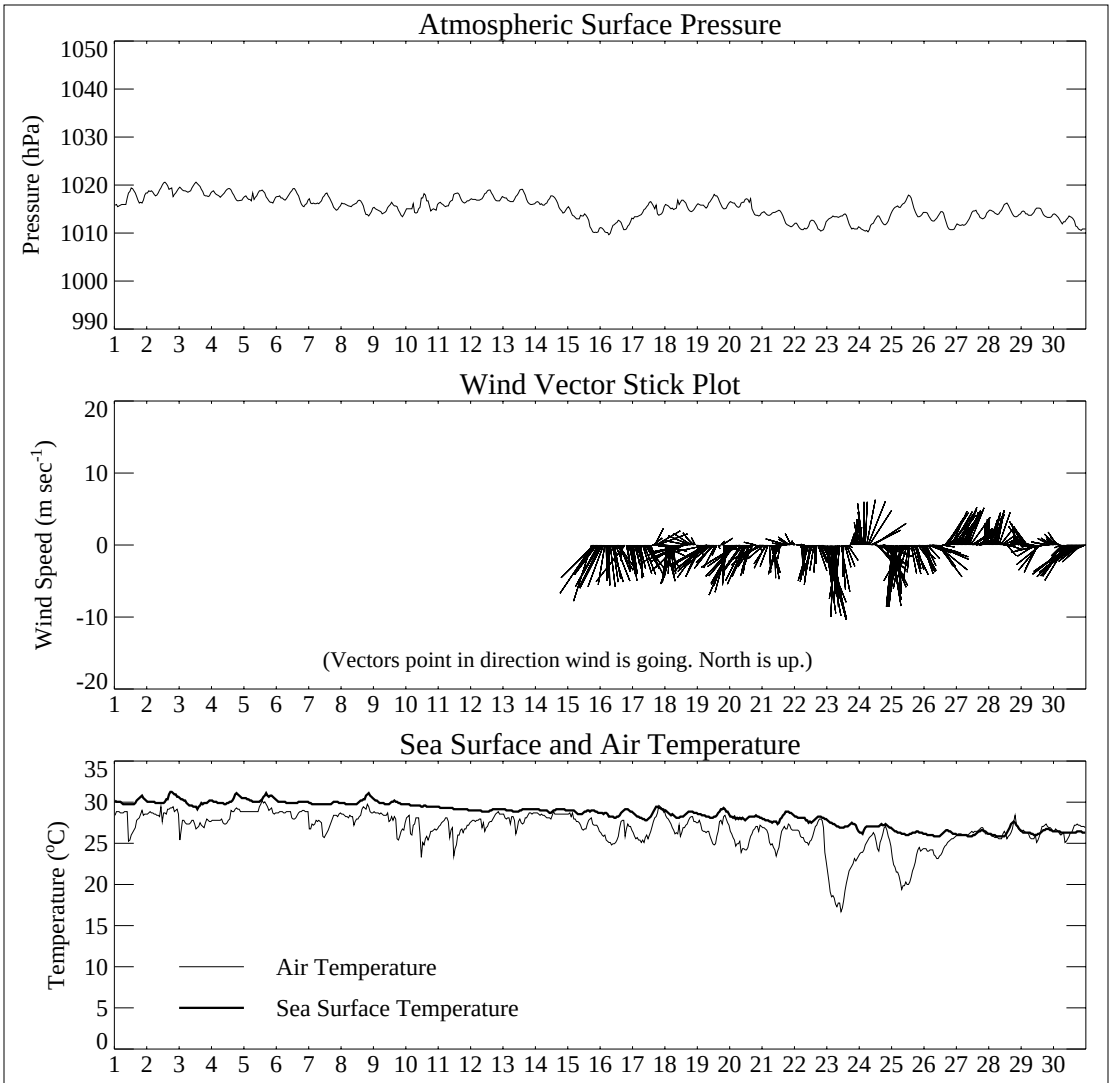
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	0	0.0	-99.0	-99.0	-99.0	0.0
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	732	10.9	16.9	27.8	24.4	2.1
Sea Temperature (^{o}C)	732	4.6	23.8	28.4	26.1	1.1

Figure 20.94.05 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for May 1994.



LATEX A Mooring 20						August 1994
Latitude	29 30.00N					Sample rate 1 hr
Longitude	94 01.32N					Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o})						Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	724	10.5	1010.4	1020.9	1015.5	2.1
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	724	7.5	22.9	30.4	28.1	1.1
Sea Temperature (^{o}C)	724	3.2	27.8	31.0	29.4	0.6

Figure 20.94.08 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for August 1994.

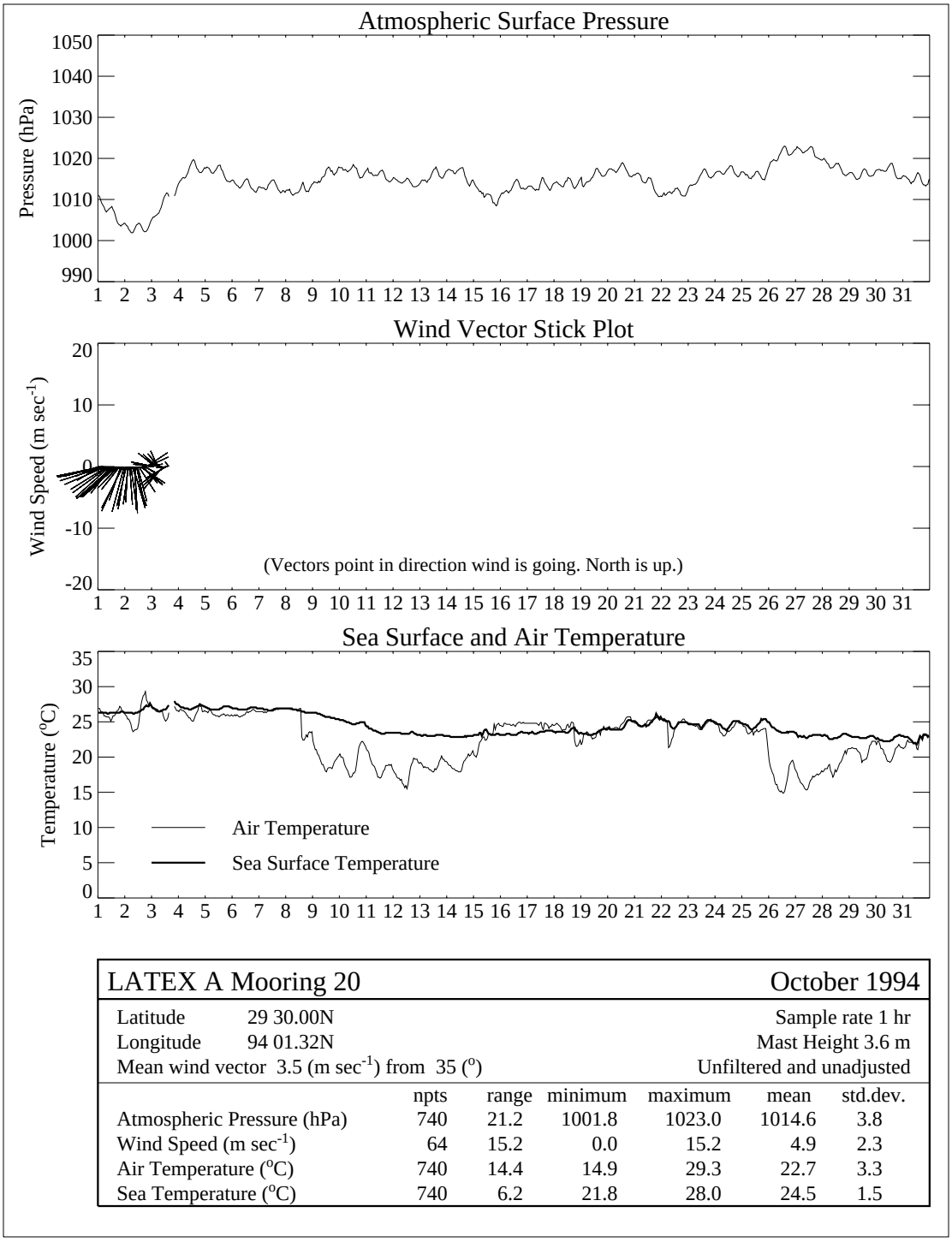


LATEX A Mooring 20 — September 1994

Latitude 29 30.00N — Sample rate 1 hr
Longitude 94 01.32N — Mast Height 3.6 m
Mean wind vector 1.8 (m sec^{-1}) from 6 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	10.9	1009.7	1020.6	1015.2	2.4
Wind Speed (m sec^{-1})	367	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	720	13.5	16.7	30.2	26.7	2.1
Sea Temperature (^{o}C)	720	5.4	25.9	31.3	28.5	1.4

Figure 20.94.09 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for September 1994.

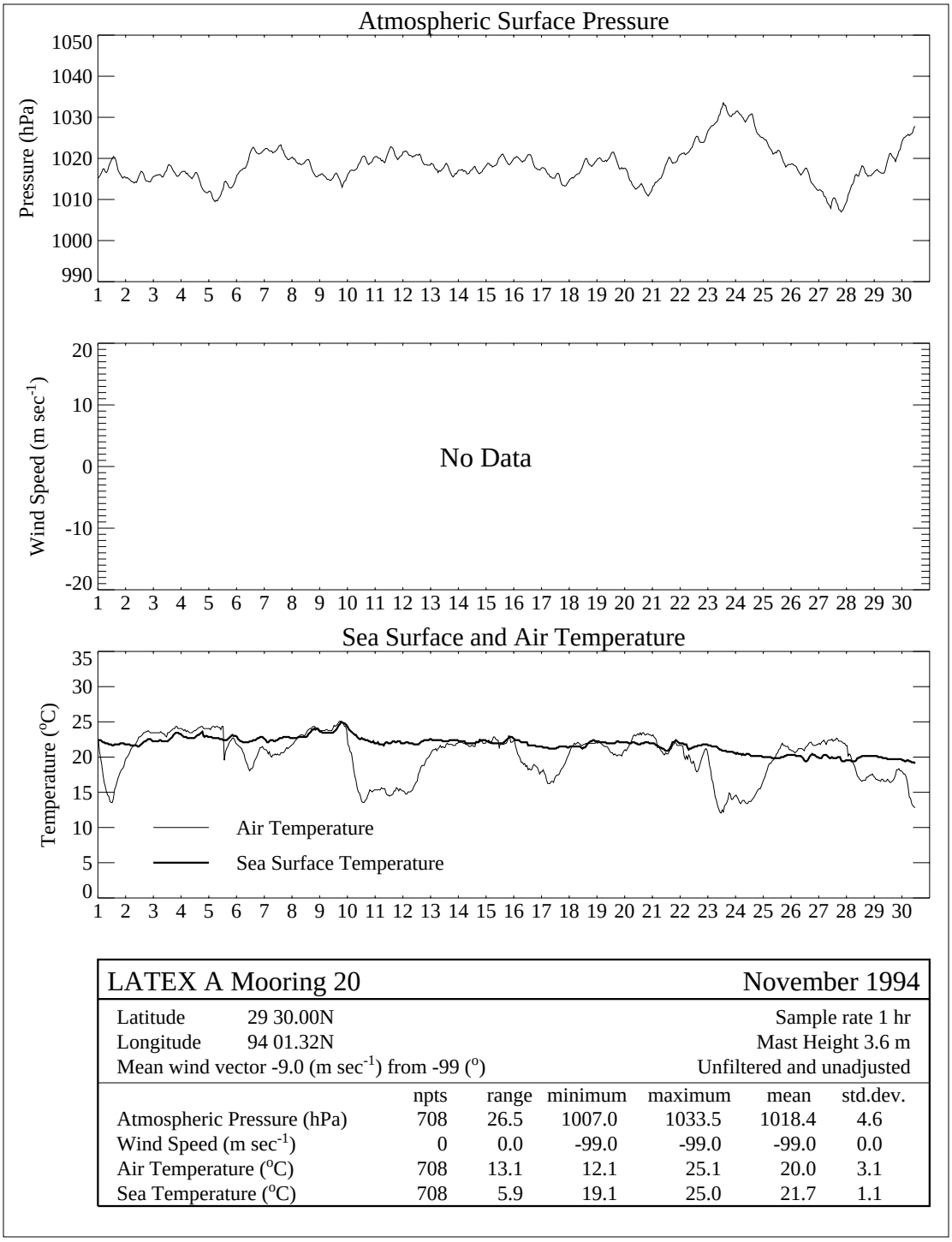


LATEX A Mooring 20 — October 1994

Latitude 29 30.00N — Sample rate 1 hr
Longitude 94 01.32N — Mast Height 3.6 m
Mean wind vector 3.5 (m sec^{-1}) from 35 (^{o}) — Unfiltered and unadjusted

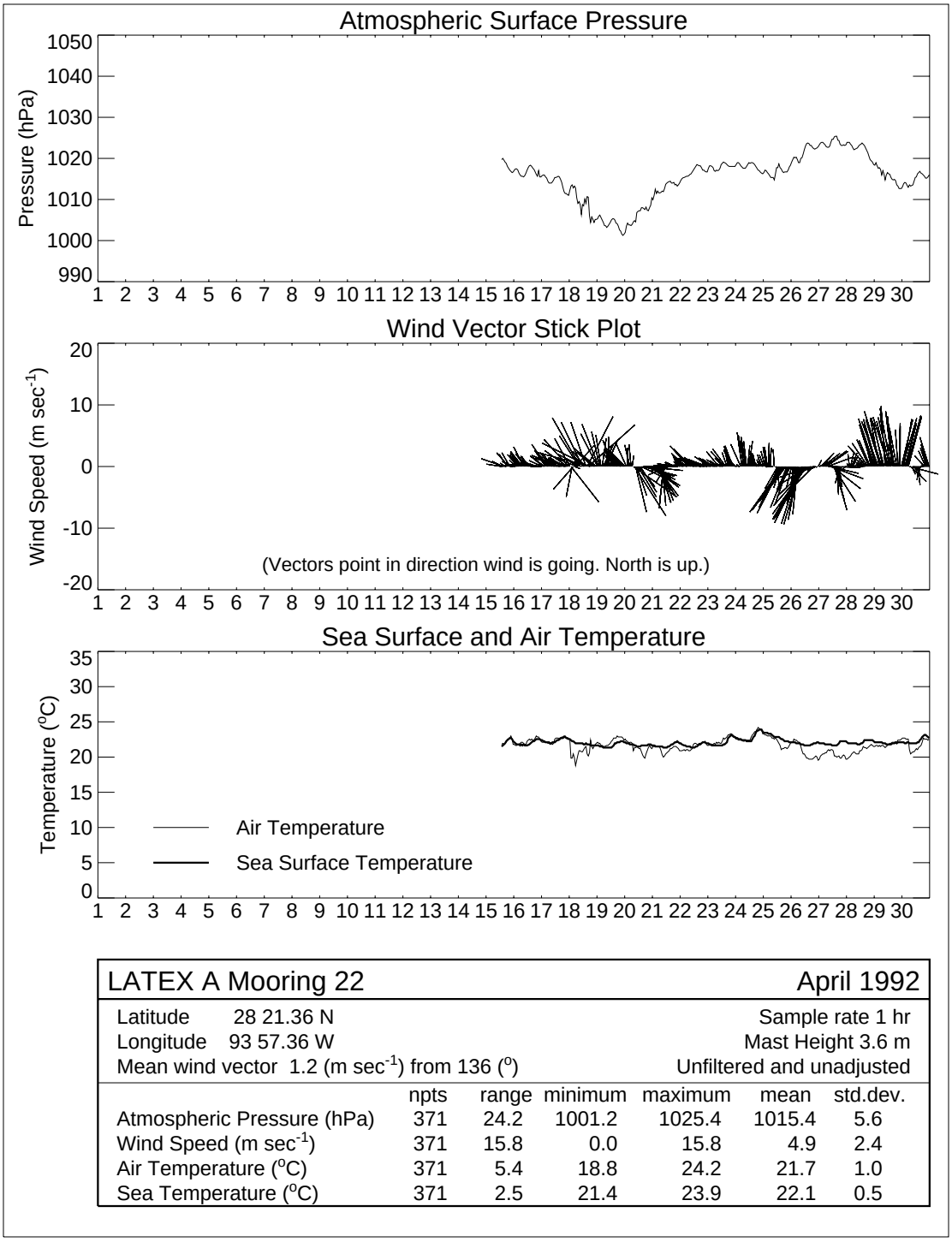
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	740	21.2	1001.8	1023.0	1014.6	3.8
Wind Speed (m sec^{-1})	64	15.2	0.0	15.2	4.9	2.3
Air Temperature (^{o}C)	740	14.4	14.9	29.3	22.7	3.3
Sea Temperature (^{o}C)	740	6.2	21.8	28.0	24.5	1.5

Figure 20.94.10 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for October 1994.



LATEX A Mooring 20						November 1994
Latitude	29 30.00N					Sample rate 1 hr
Longitude	94 01.32N					Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o})						Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	708	26.5	1007.0	1033.5	1018.4	4.6
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	708	13.1	12.1	25.1	20.0	3.1
Sea Temperature (^{o}C)	708	5.9	19.1	25.0	21.7	1.1

Figure 20.94.11 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for November 1994.

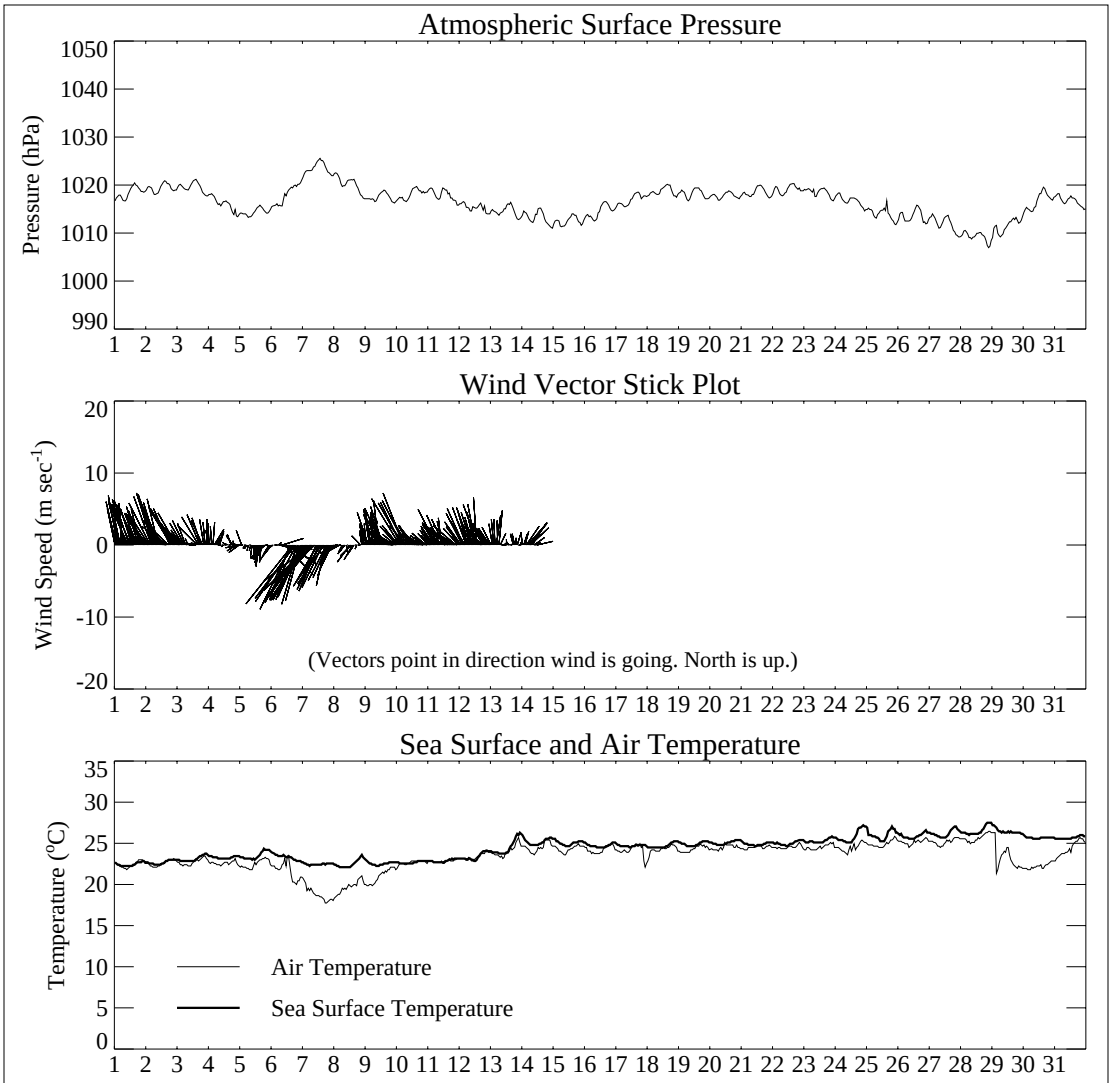


LATEX A Mooring 22 — April 1992

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 1.2 (m sec^{-1}) from 136 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	371	24.2	1001.2	1025.4	1015.4	5.6
Wind Speed (m sec^{-1})	371	15.8	0.0	15.8	4.9	2.4
Air Temperature (^{o}C)	371	5.4	18.8	24.2	21.7	1.0
Sea Temperature (^{o}C)	371	2.5	21.4	23.9	22.1	0.5

Figure 22.92.04 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for April 1992.

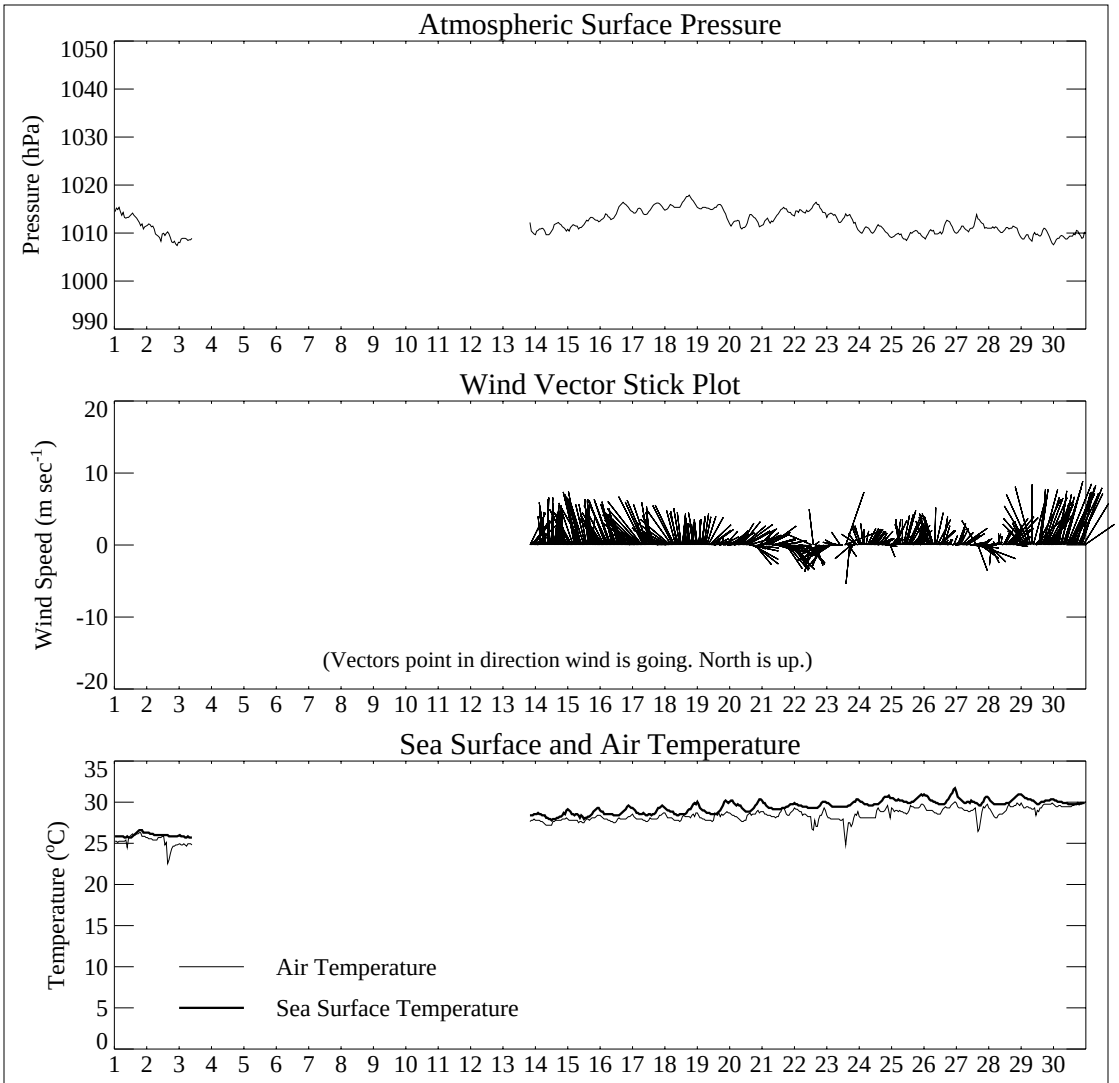


LATEX A Mooring 22 — May 1992

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 1.9 (m sec^{-1}) from 132 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	18.6	1007.0	1025.6	1016.5	3.2
Wind Speed (m sec^{-1})	324	15.8	0.0	15.8	4.9	2.4
Air Temperature (^{o}C)	744	8.7	17.8	26.5	23.4	1.7
Sea Temperature (^{o}C)	744	5.4	22.1	27.5	24.4	1.4

Figure 22.92.05 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for May 1992.

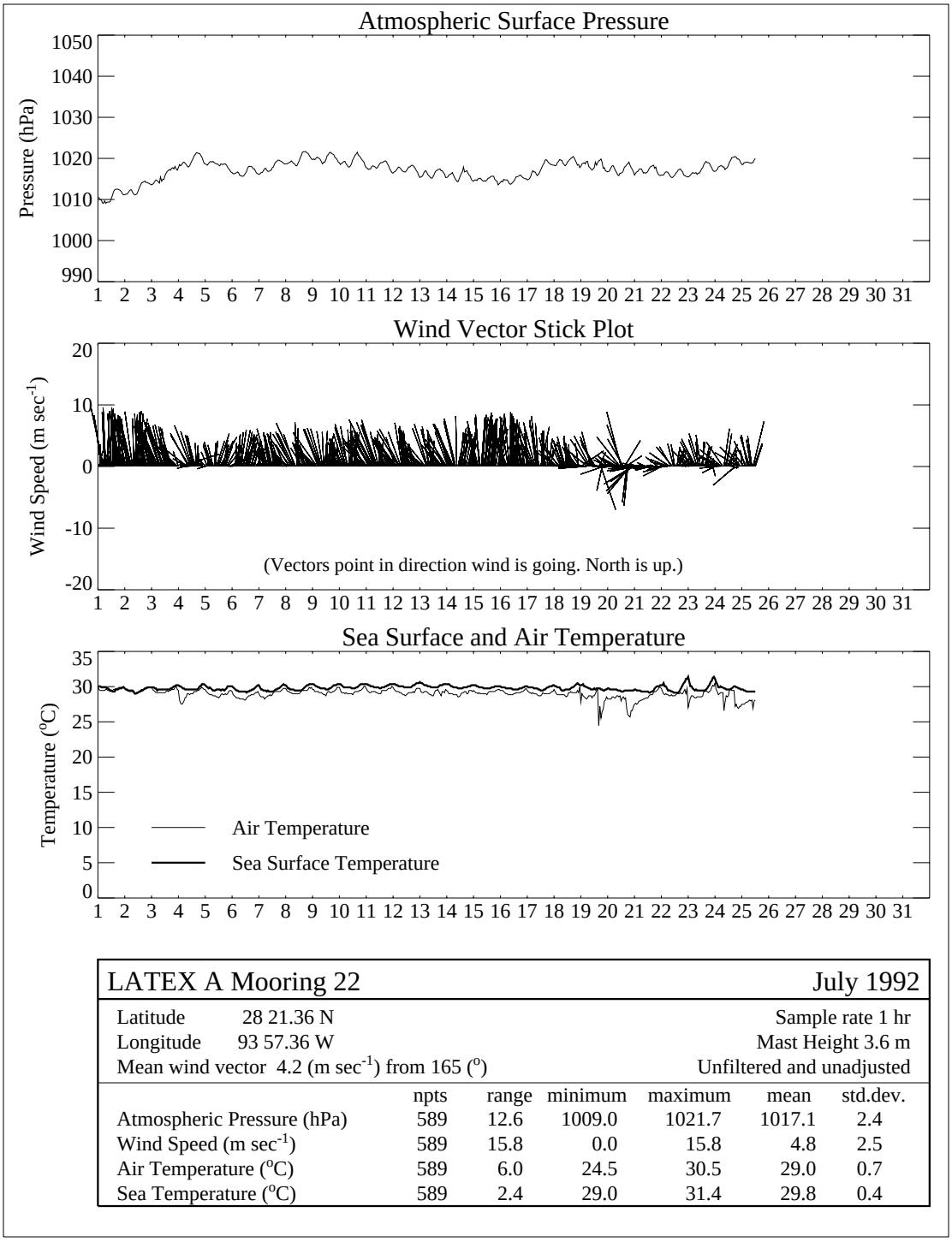


LATEX A Mooring 22 — June 1992

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 2.7 (m sec^{-1}) from 189 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	470	10.5	1007.4	1017.9	1012.1	2.3
Wind Speed (m sec^{-1})	412	15.8	0.0	15.8	4.9	2.4
Air Temperature (^{o}C)	470	7.5	22.5	30.0	28.1	1.3
Sea Temperature (^{o}C)	470	6.0	25.7	31.7	29.1	1.4

Figure 22.92.06 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for June 1992.

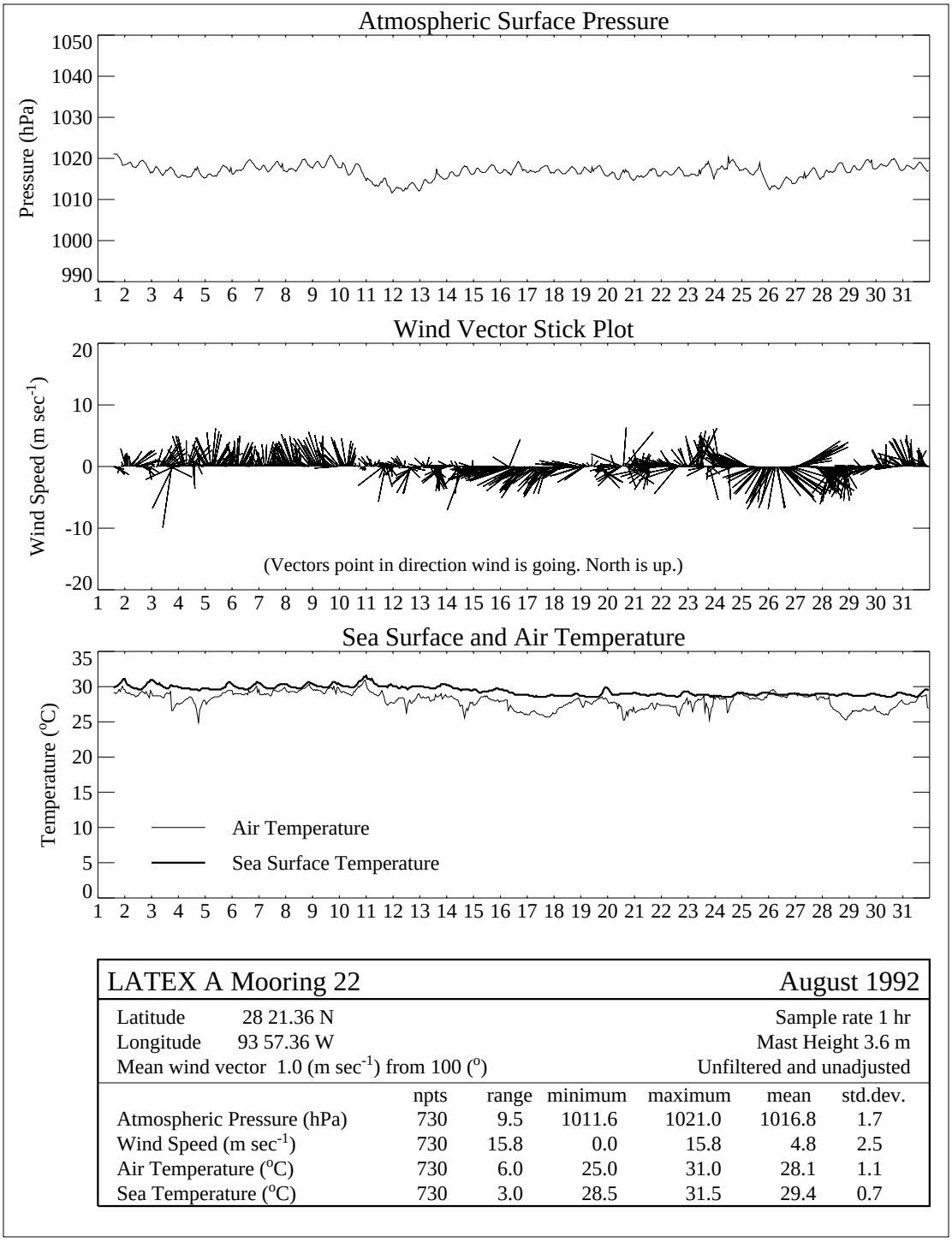


LATEX A Mooring 22 — July 1992

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 4.2 (m sec^{-1}) from 165 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	589	12.6	1009.0	1021.7	1017.1	2.4
Wind Speed (m sec^{-1})	589	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	589	6.0	24.5	30.5	29.0	0.7
Sea Temperature (^{o}C)	589	2.4	29.0	31.4	29.8	0.4

Figure 22.92.07 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for July 1992.

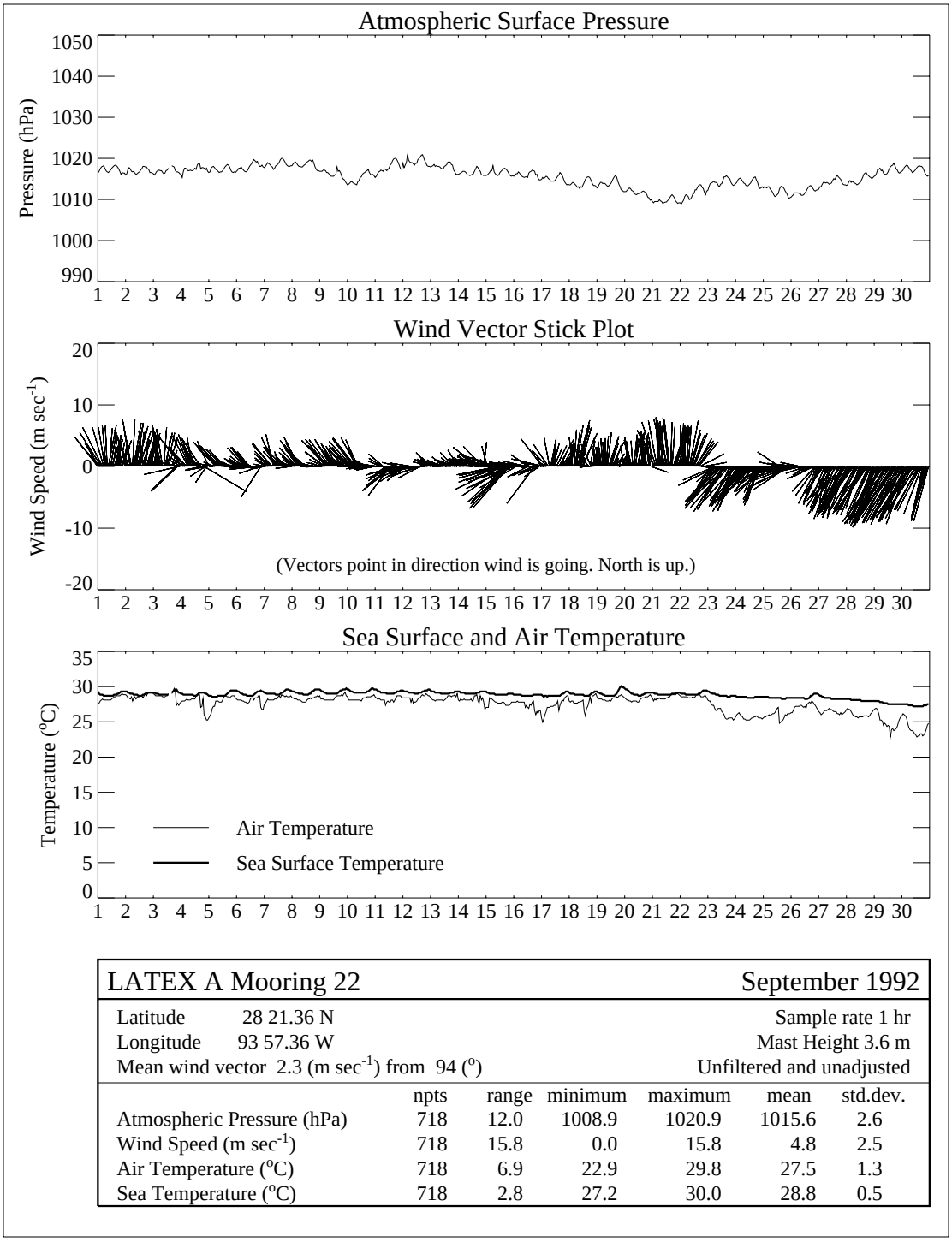


LATEX A Mooring 22 — August 1992

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 1.0 (m sec^{-1}) from 100 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	730	9.5	1011.6	1021.0	1016.8	1.7
Wind Speed (m sec^{-1})	730	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	730	6.0	25.0	31.0	28.1	1.1
Sea Temperature (^{o}C)	730	3.0	28.5	31.5	29.4	0.7

Figure 22.92.08 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for August 1992.

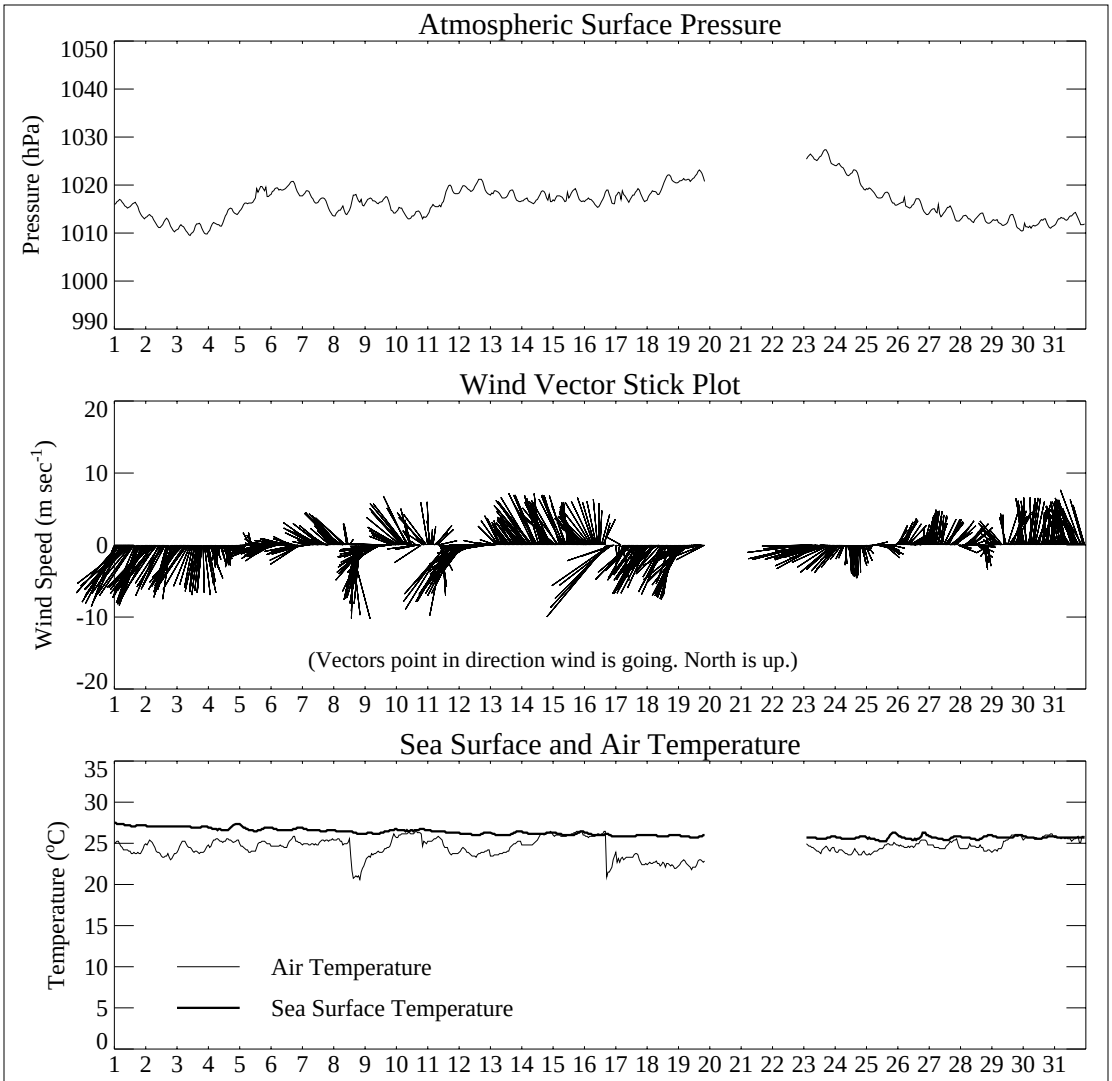


LATEX A Mooring 22 — September 1992

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 2.3 (m sec^{-1}) from 94 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	718	12.0	1008.9	1020.9	1015.6	2.6
Wind Speed (m sec^{-1})	718	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	718	6.9	22.9	29.8	27.5	1.3
Sea Temperature (^{o}C)	718	2.8	27.2	30.0	28.8	0.5

Figure 22.92.09 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for September 1992.

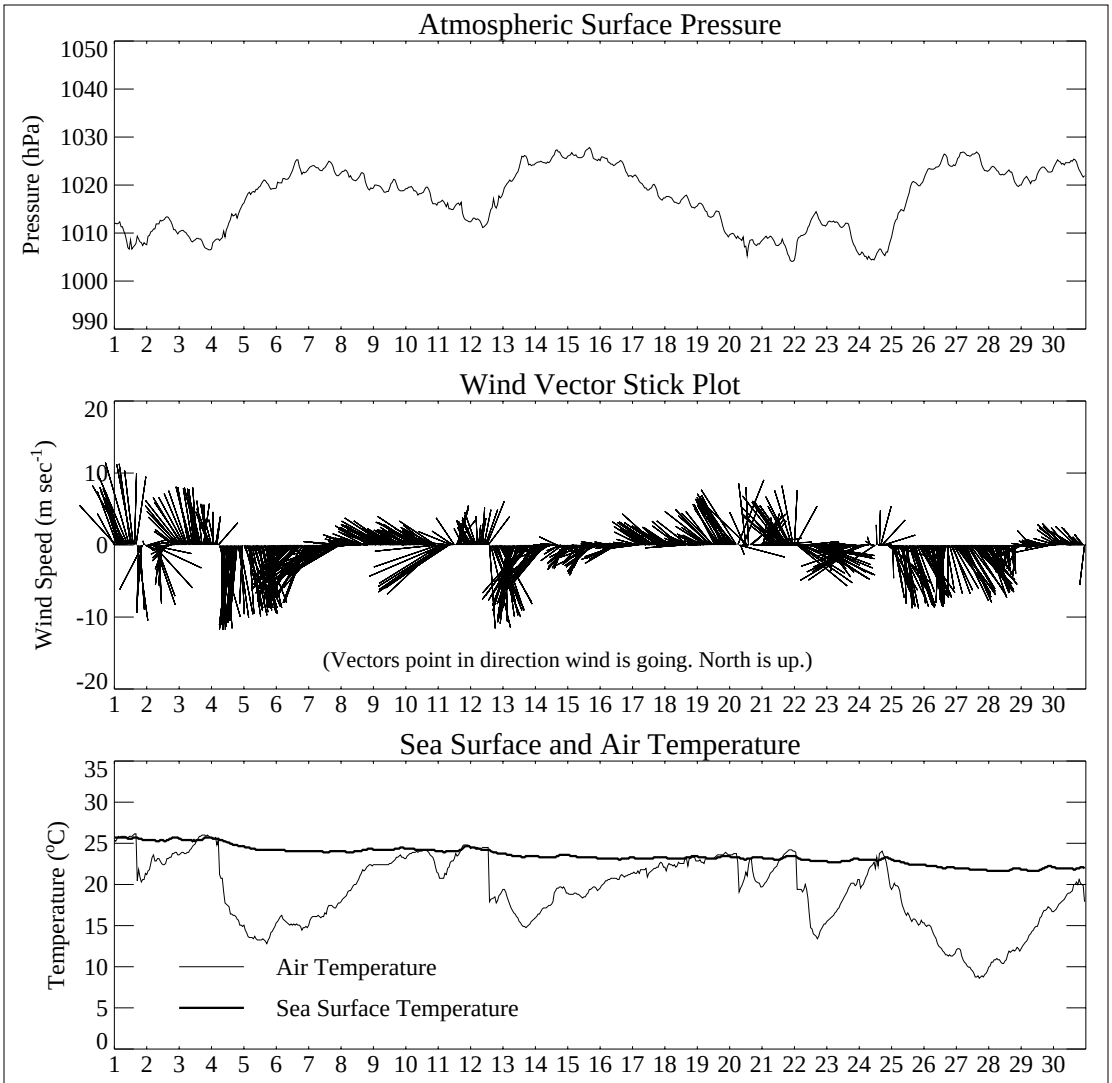


LATEX A Mooring 22 — October 1992

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 2.2 (m sec^{-1}) from 79 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	667	17.8	1009.5	1027.3	1016.4	3.5
Wind Speed (m sec^{-1})	667	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	667	6.0	20.6	26.6	24.5	1.1
Sea Temperature (^{o}C)	667	2.2	25.3	27.5	26.2	0.5

Figure 22.92.10 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for October 1992.

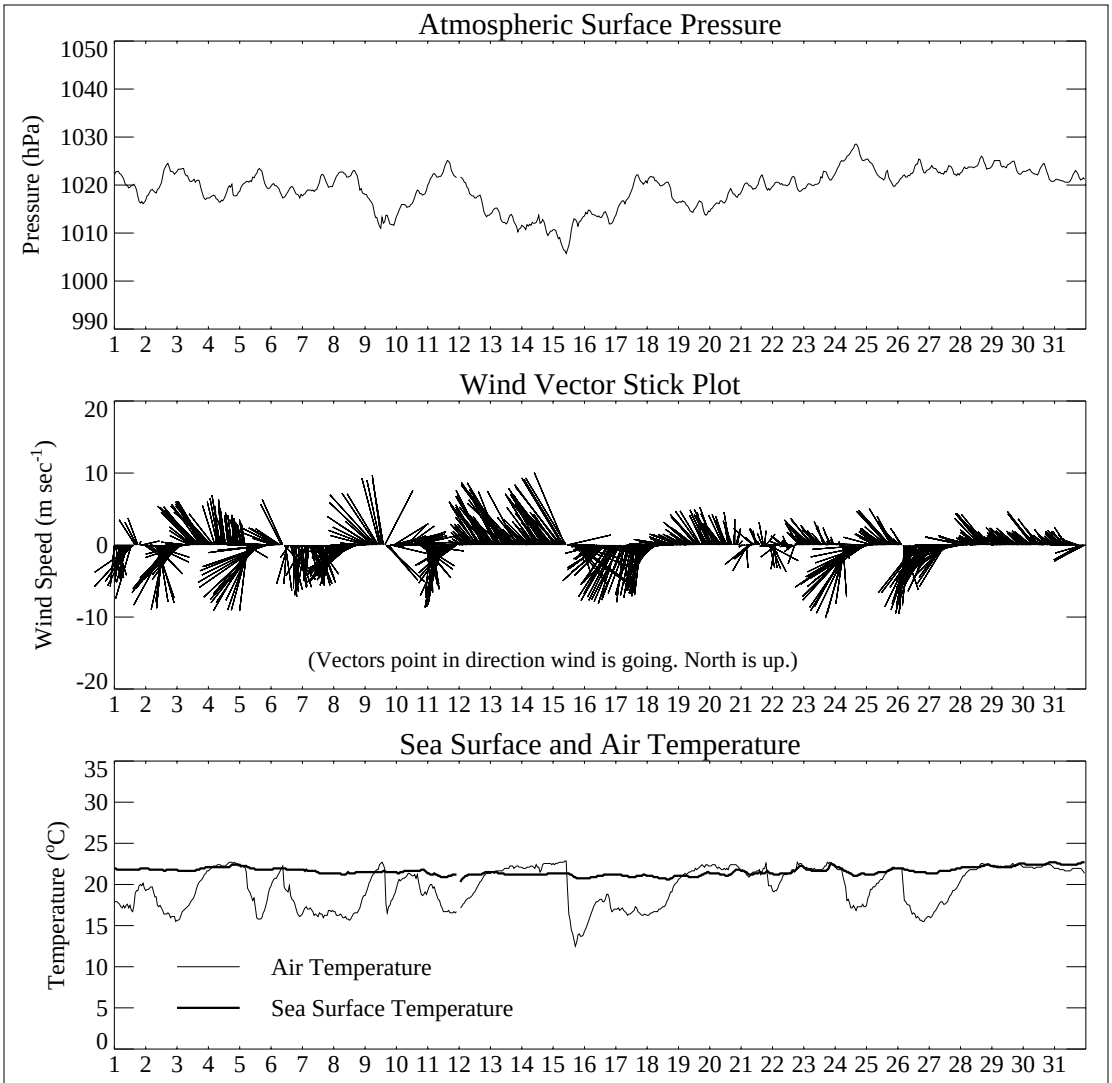


LATEX A Mooring 22 — November 1992

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 2.0 (m sec^{-1}) from 48 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	23.7	1004.1	1027.8	1017.4	6.4
Wind Speed (m sec^{-1})	720	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	720	17.5	8.6	26.1	19.2	4.2
Sea Temperature (^{o}C)	720	4.1	21.6	25.7	23.5	1.1

Figure 22.92.11 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for November 1992.

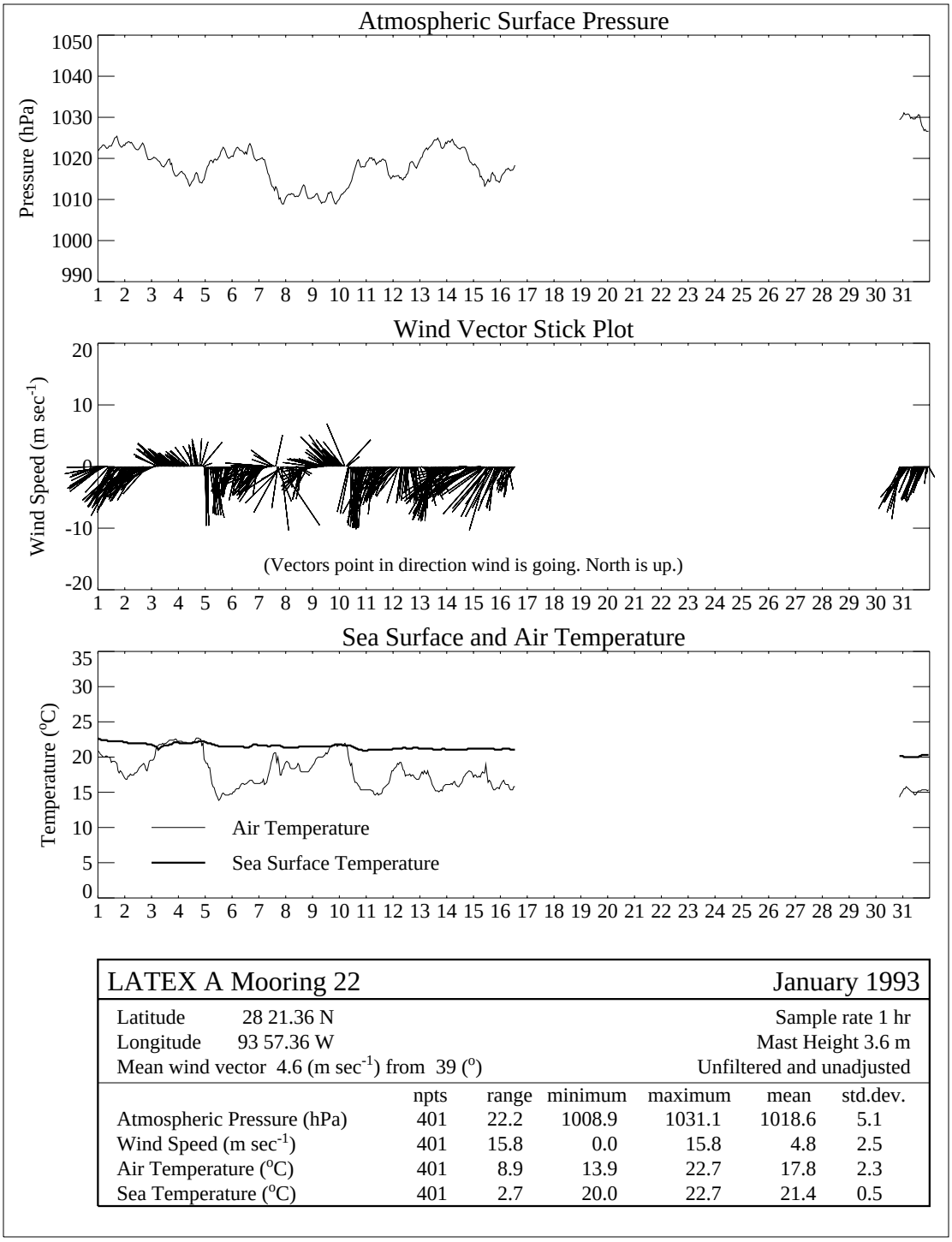


LATEX A Mooring 22 — December 1992

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 2.3 (m sec^{-1}) from 80 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	742	22.8	1005.7	1028.6	1019.2	4.1
Wind Speed (m sec^{-1})	742	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	742	10.4	12.5	22.9	19.7	2.4
Sea Temperature (^{o}C)	742	2.4	20.3	22.7	21.6	0.5

Figure 22.92.12 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for December 1992.

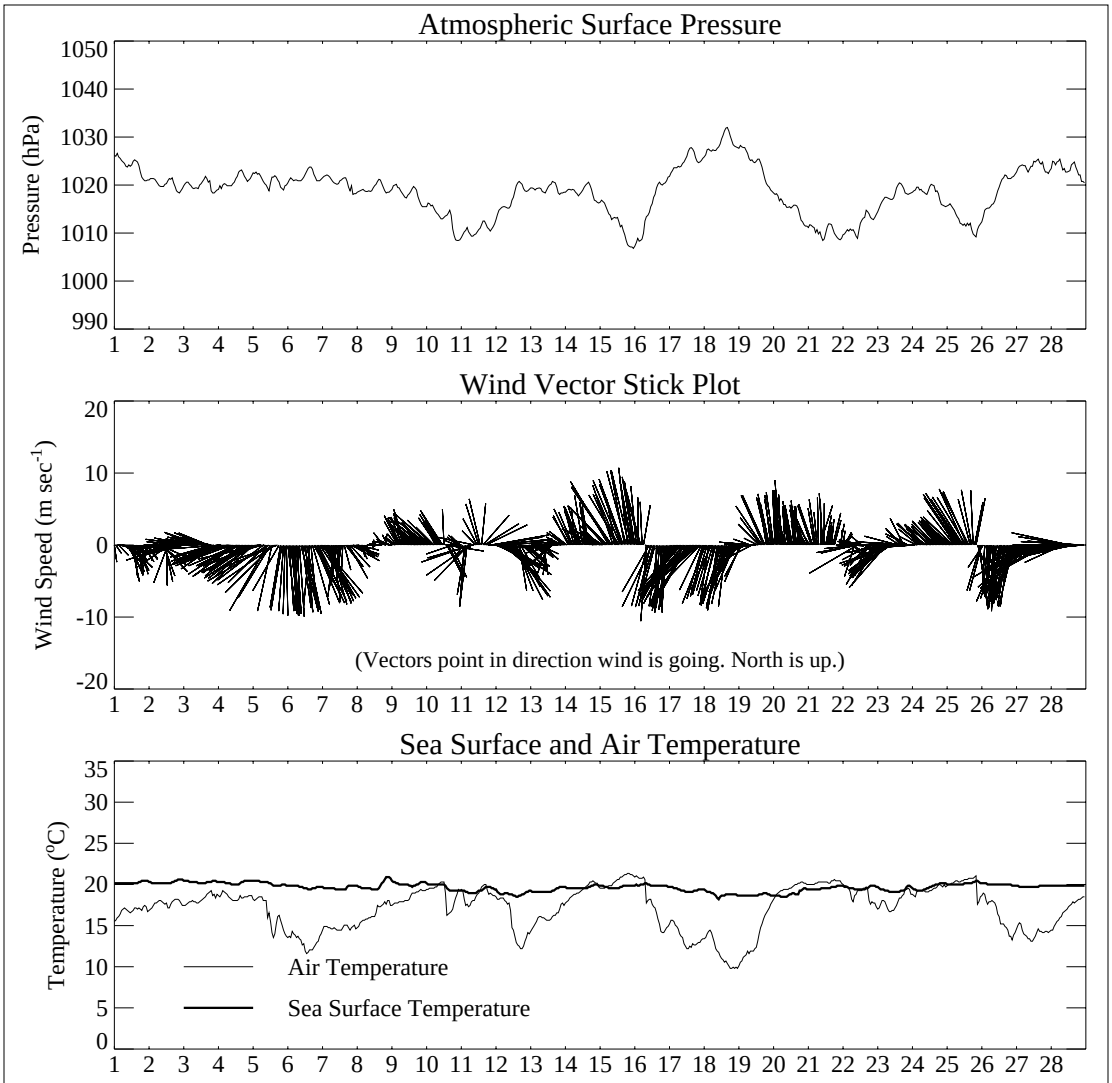


LATEX A Mooring 22 — January 1993

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 4.6 (m sec^{-1}) from 39 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	401	22.2	1008.9	1031.1	1018.6	5.1
Wind Speed (m sec^{-1})	401	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	401	8.9	13.9	22.7	17.8	2.3
Sea Temperature (^{o}C)	401	2.7	20.0	22.7	21.4	0.5

Figure 22.93.01 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for January 1993.

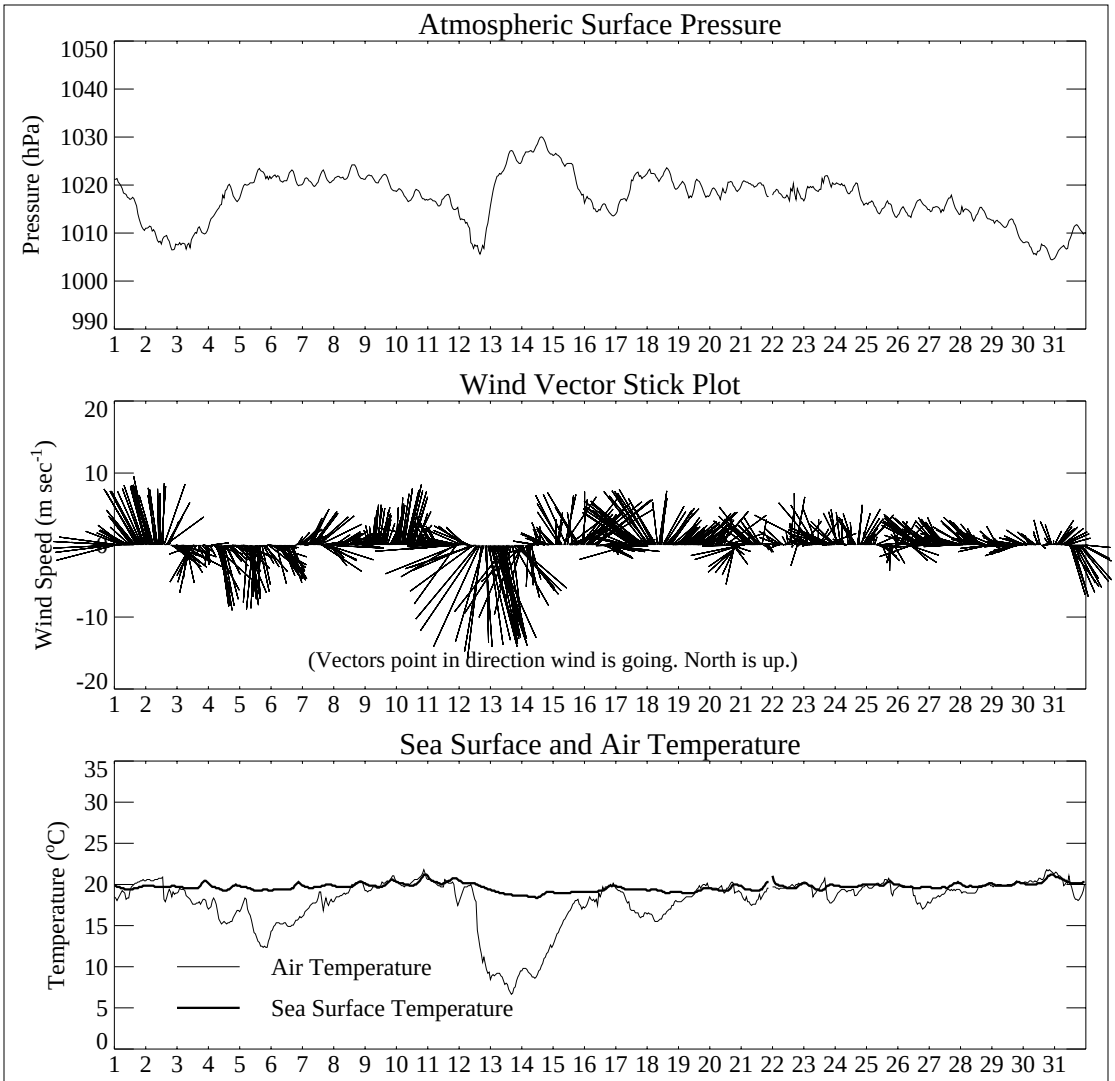


LATEX A Mooring 22 — February 1993

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 2.3 (m sec^{-1}) from 60 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	672	25.2	1006.8	1032.0	1018.6	5.0
Wind Speed (m sec^{-1})	672	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	672	11.6	9.8	21.4	17.1	2.6
Sea Temperature (^{o}C)	672	2.7	18.2	20.9	19.7	0.5

Figure 22.93.02 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for February 1993.

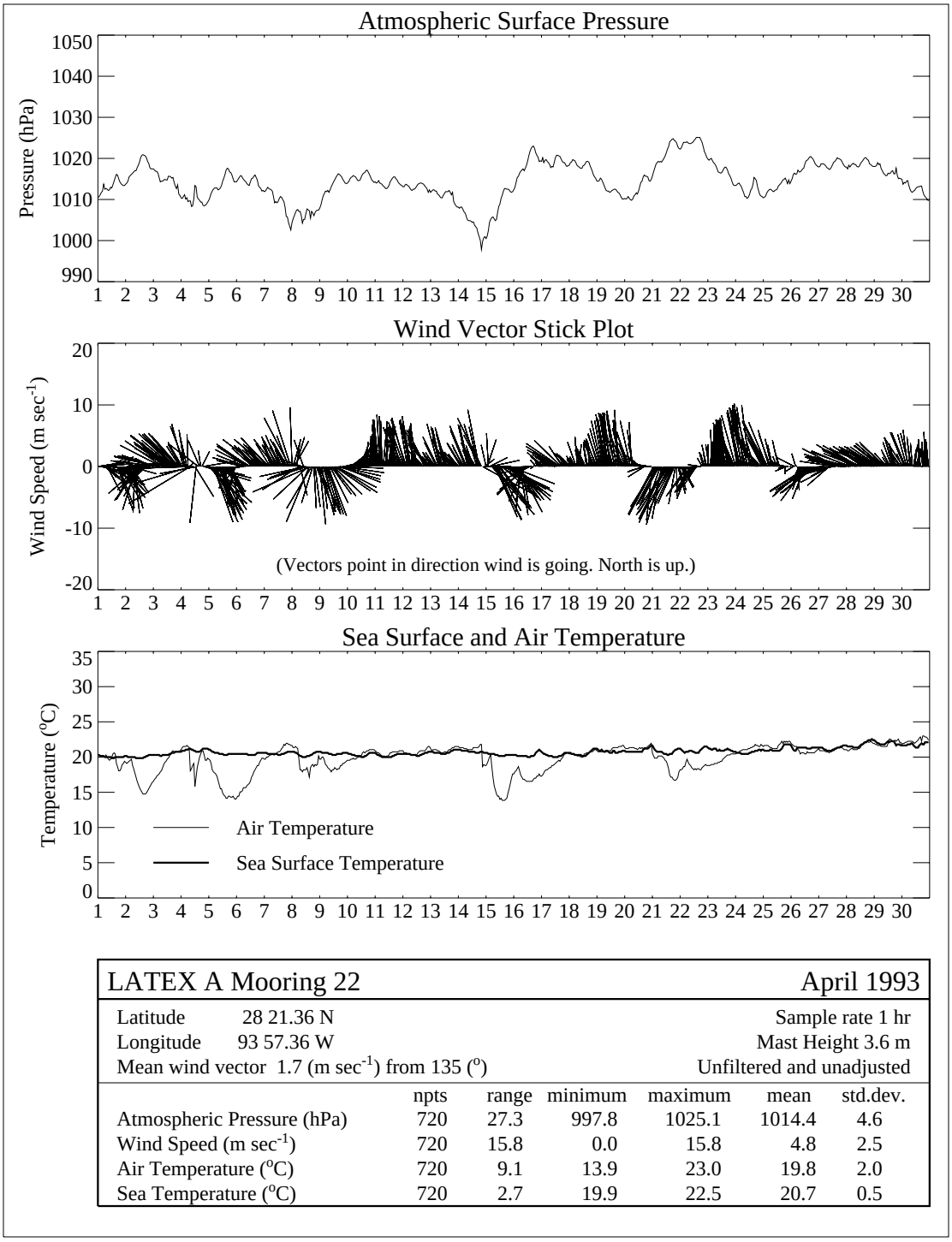


LATEX A Mooring 22 — March 1993

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 0.6 (m sec^{-1}) from 165 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	742	25.7	1004.4	1030.1	1017.2	5.2
Wind Speed (m sec^{-1})	742	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	742	15.1	6.7	21.8	18.0	3.0
Sea Temperature (^{o}C)	742	2.9	18.4	21.2	19.7	0.5

Figure 22.93.03 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for March 1993.

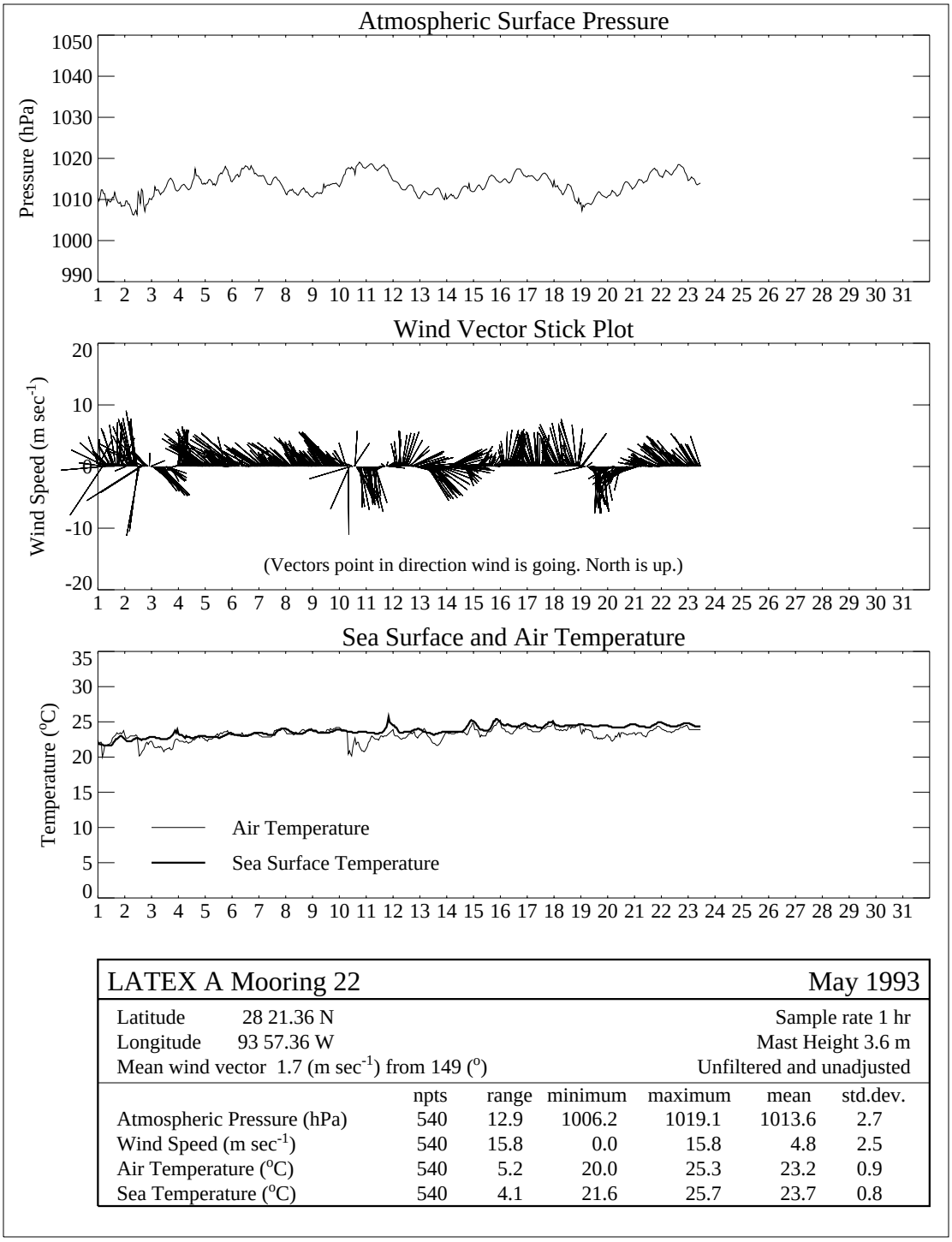


LATEX A Mooring 22 — April 1993

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 1.7 (m sec^{-1}) from 135 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	27.3	997.8	1025.1	1014.4	4.6
Wind Speed (m sec^{-1})	720	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	720	9.1	13.9	23.0	19.8	2.0
Sea Temperature (^{o}C)	720	2.7	19.9	22.5	20.7	0.5

Figure 22.93.04 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for April 1993.

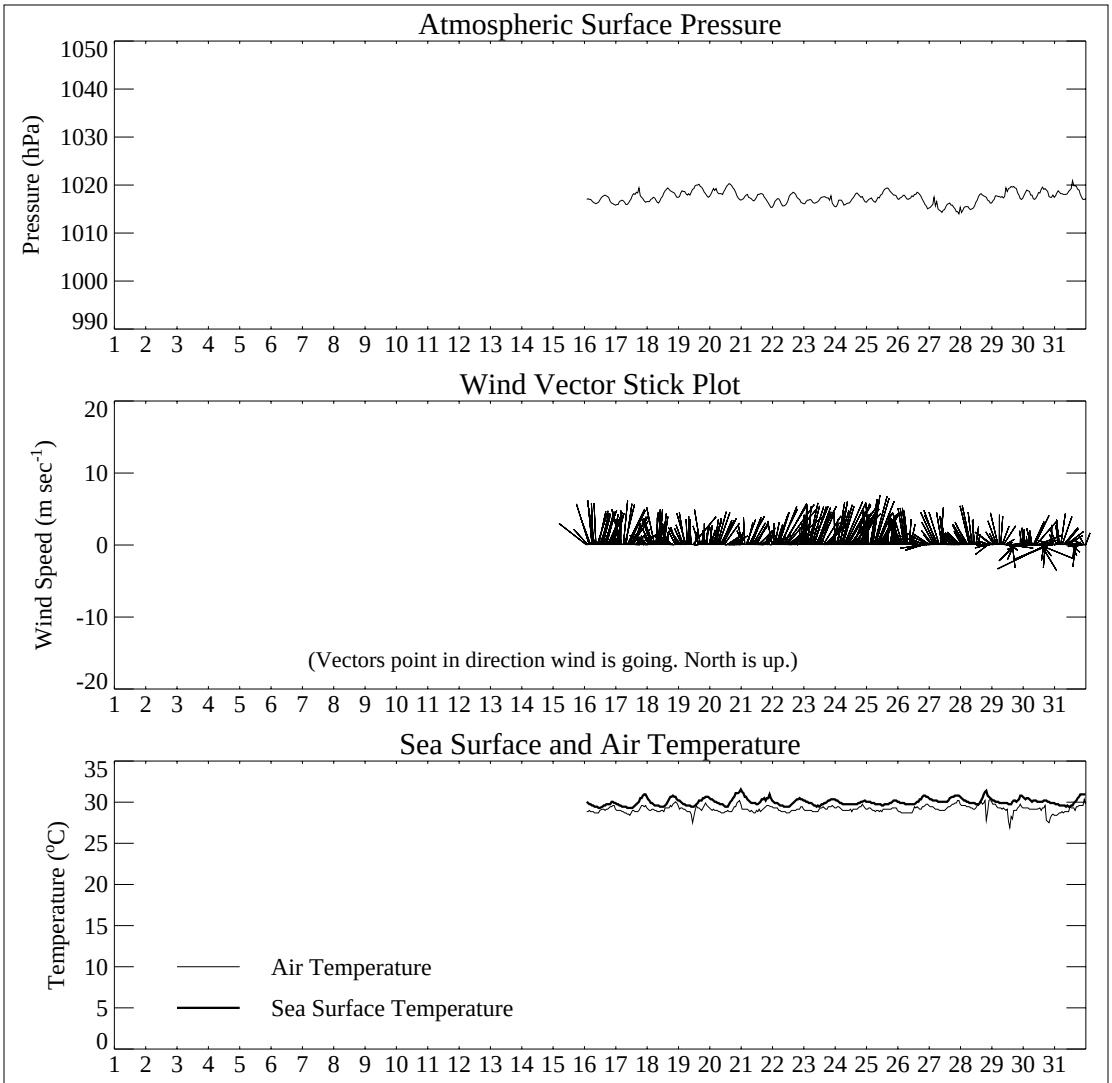


LATEX A Mooring 22 — May 1993

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 1.7 (m sec^{-1}) from 149 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	540	12.9	1006.2	1019.1	1013.6	2.7
Wind Speed (m sec^{-1})	540	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	540	5.2	20.0	25.3	23.2	0.9
Sea Temperature (^{o}C)	540	4.1	21.6	25.7	23.7	0.8

Figure 22.93.05 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for May 1993.

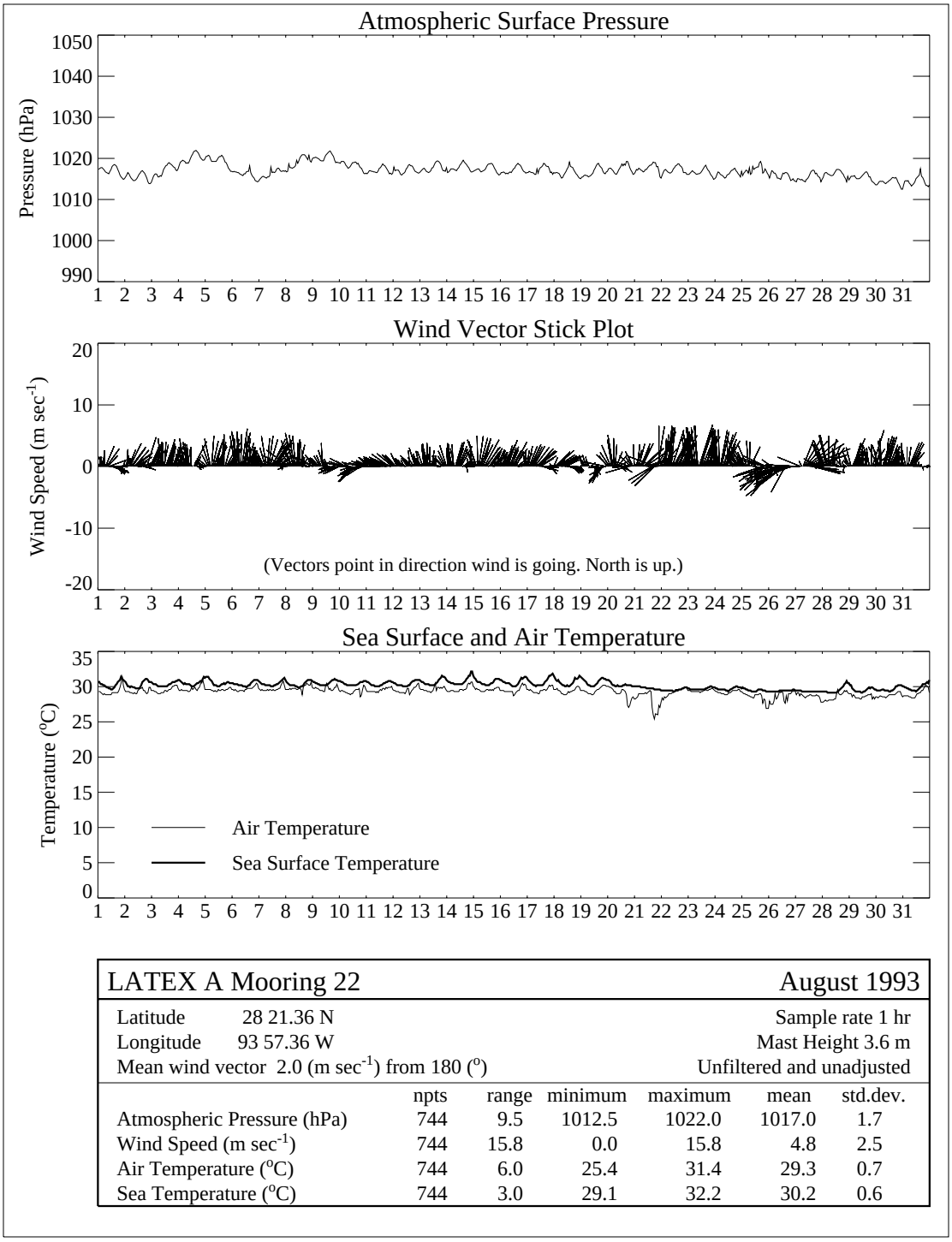


LATEX A Mooring 22 — July 1993

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 2.7 (m sec^{-1}) from 187 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	383	6.9	1014.0	1020.9	1017.4	1.3
Wind Speed (m sec^{-1})	383	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	383	3.5	26.9	30.4	29.1	0.4
Sea Temperature (^{o}C)	383	2.2	29.3	31.5	30.0	0.4

Figure 22.93.07 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for July 1993.

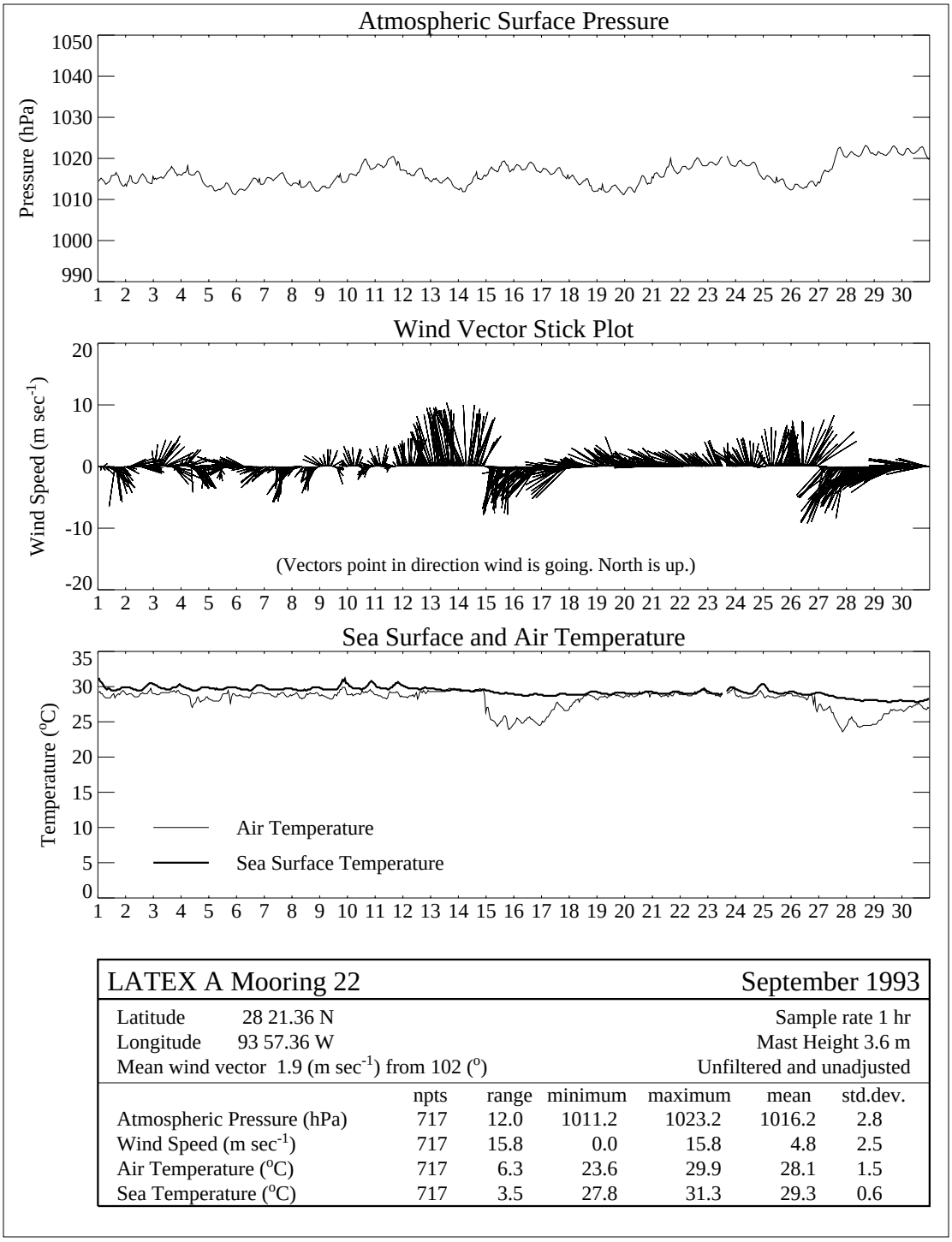


LATEX A Mooring 22 — August 1993

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 2.0 (m sec^{-1}) from 180 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	9.5	1012.5	1022.0	1017.0	1.7
Wind Speed (m sec^{-1})	744	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	744	6.0	25.4	31.4	29.3	0.7
Sea Temperature (^{o}C)	744	3.0	29.1	32.2	30.2	0.6

Figure 22.93.08 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for August 1993.

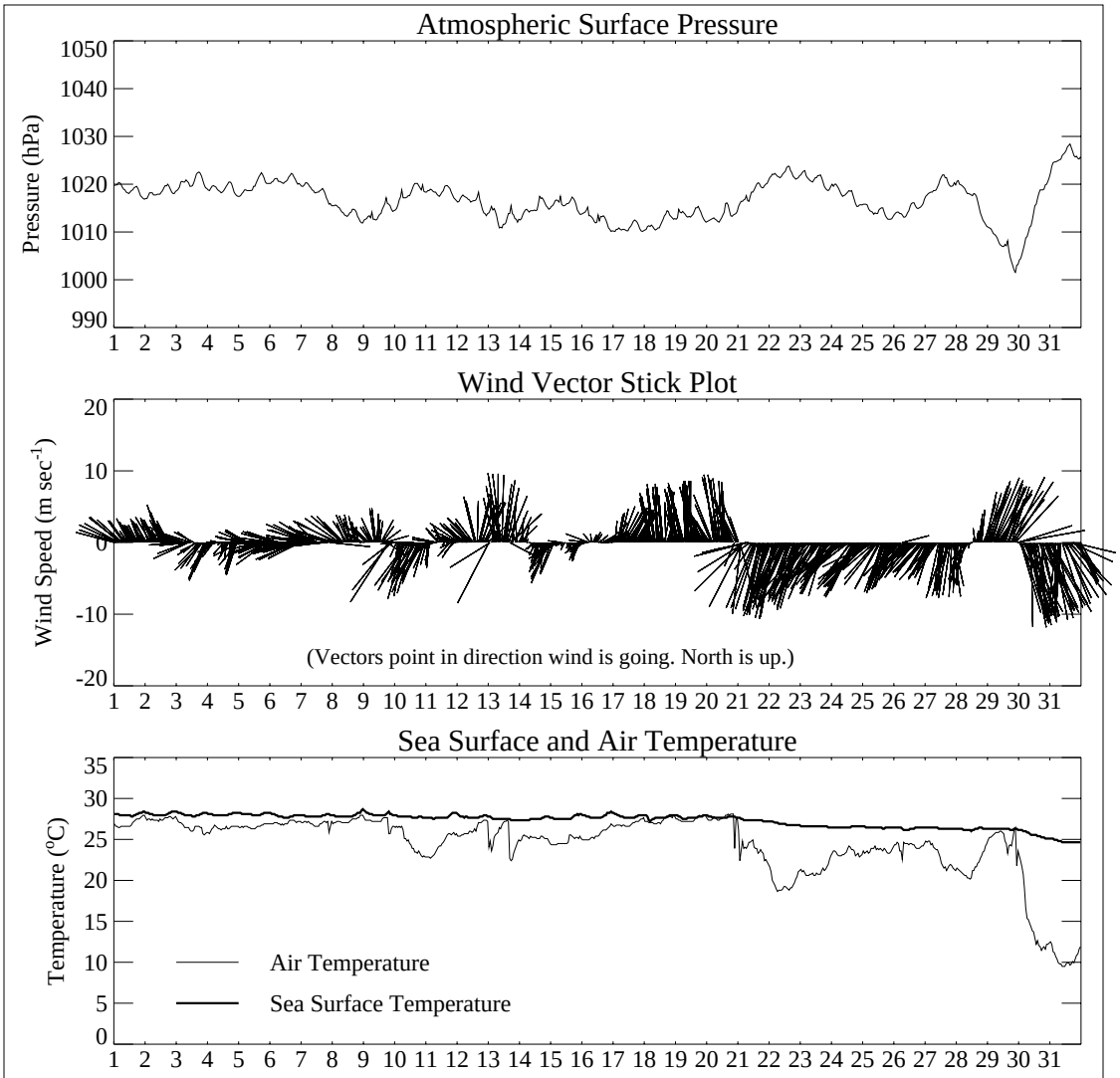


LATEX A Mooring 22 — September 1993

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 1.9 (m sec^{-1}) from 102 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	717	12.0	1011.2	1023.2	1016.2	2.8
Wind Speed (m sec^{-1})	717	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	717	6.3	23.6	29.9	28.1	1.5
Sea Temperature (^{o}C)	717	3.5	27.8	31.3	29.3	0.6

Figure 22.93.09 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for September 1993.

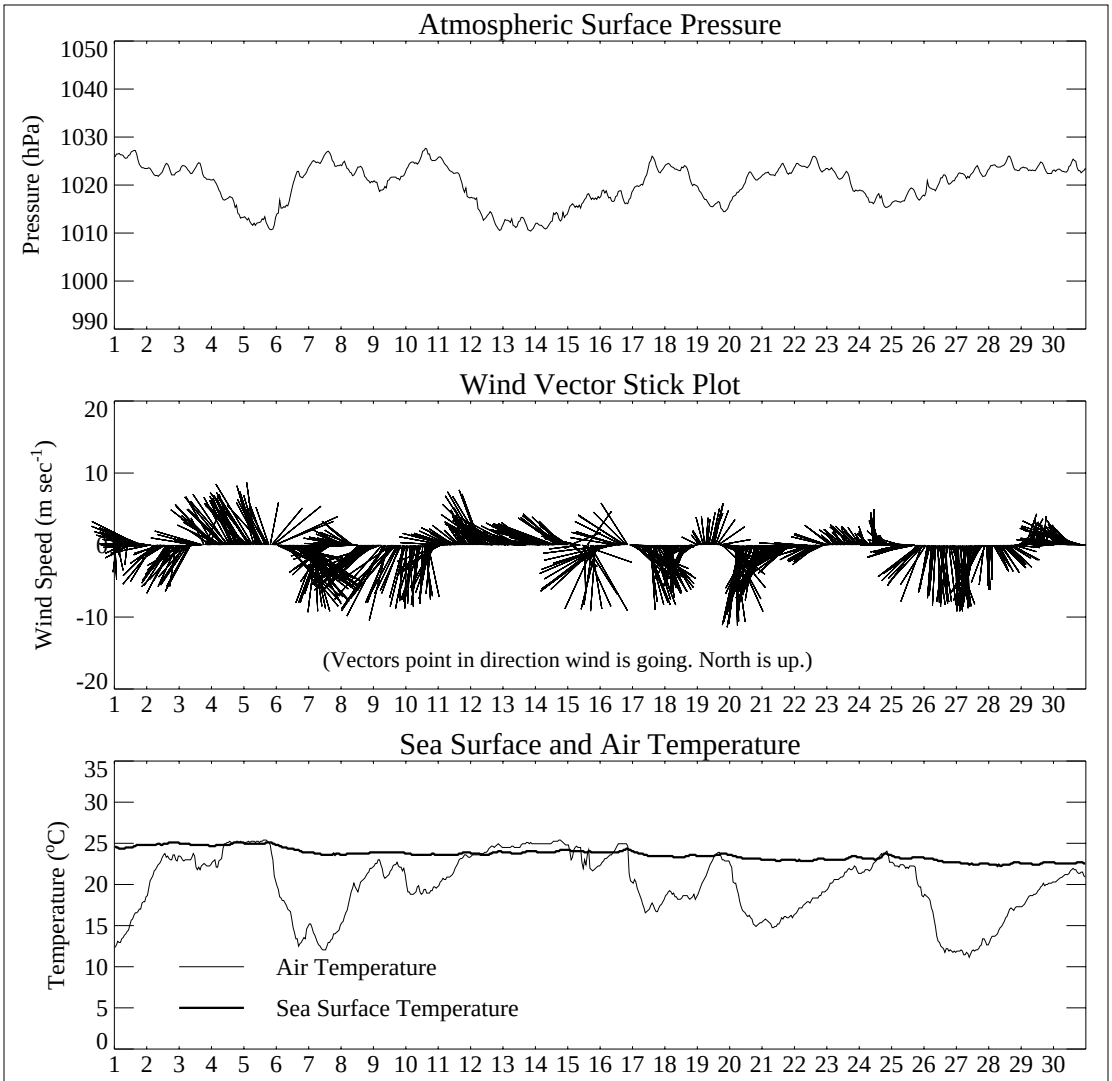


LATEX A Mooring 22 — October 1993

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 1.7 (m sec^{-1}) from 62 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	26.9	1001.5	1028.4	1016.6	4.1
Wind Speed (m sec^{-1})	744	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	744	18.6	9.5	28.1	24.5	3.9
Sea Temperature (^{o}C)	744	4.1	24.6	28.7	27.3	0.9

Figure 22.93.10 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for October 1993.

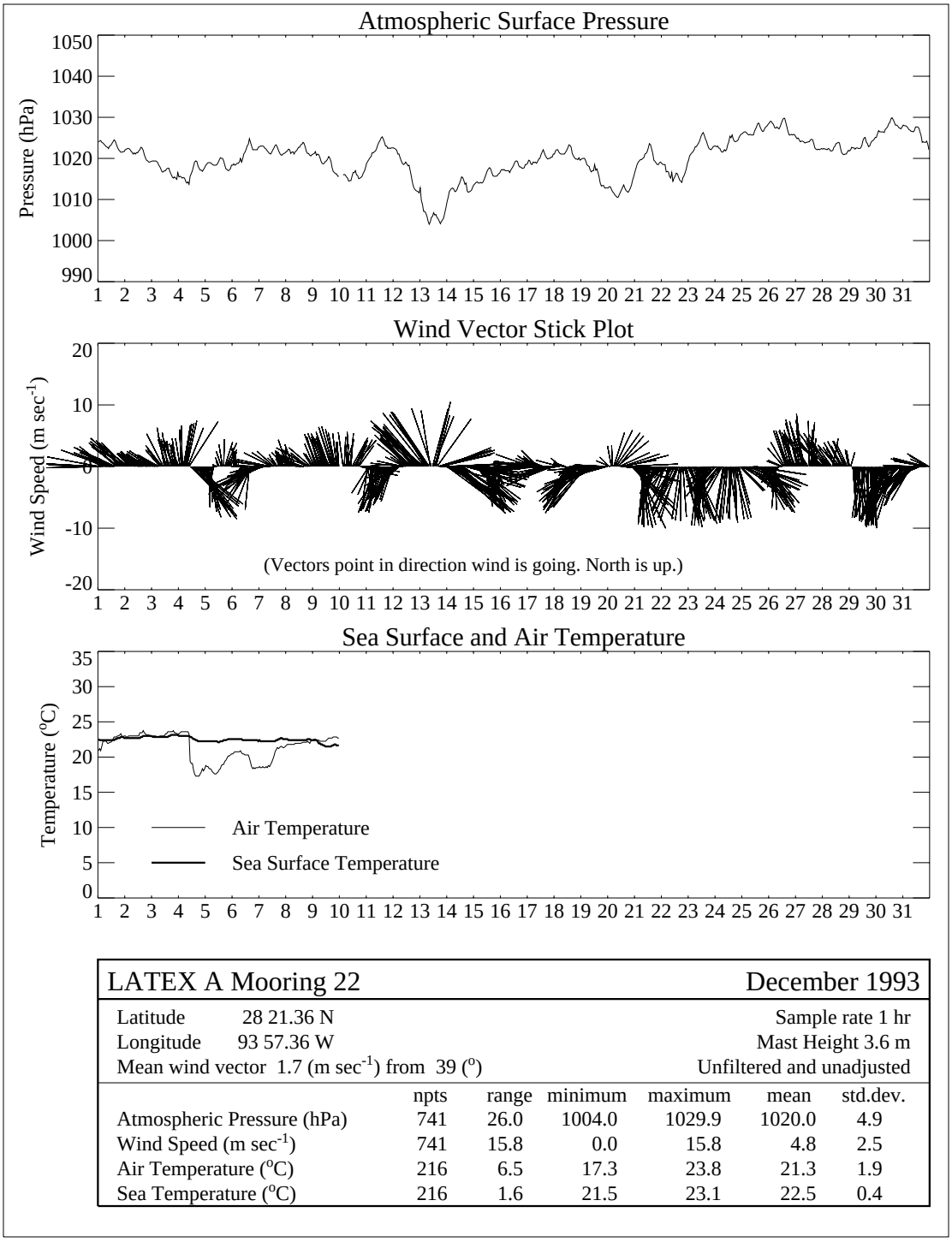


LATEX A Mooring 22 — November 1993

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 2.7 (m sec^{-1}) from 55 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	17.3	1010.4	1027.7	1020.2	4.2
Wind Speed (m sec^{-1})	720	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	720	14.3	11.1	25.4	20.0	3.9
Sea Temperature (^{o}C)	720	2.9	22.3	25.1	23.6	0.7

Figure 22.93.11 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for November 1993.

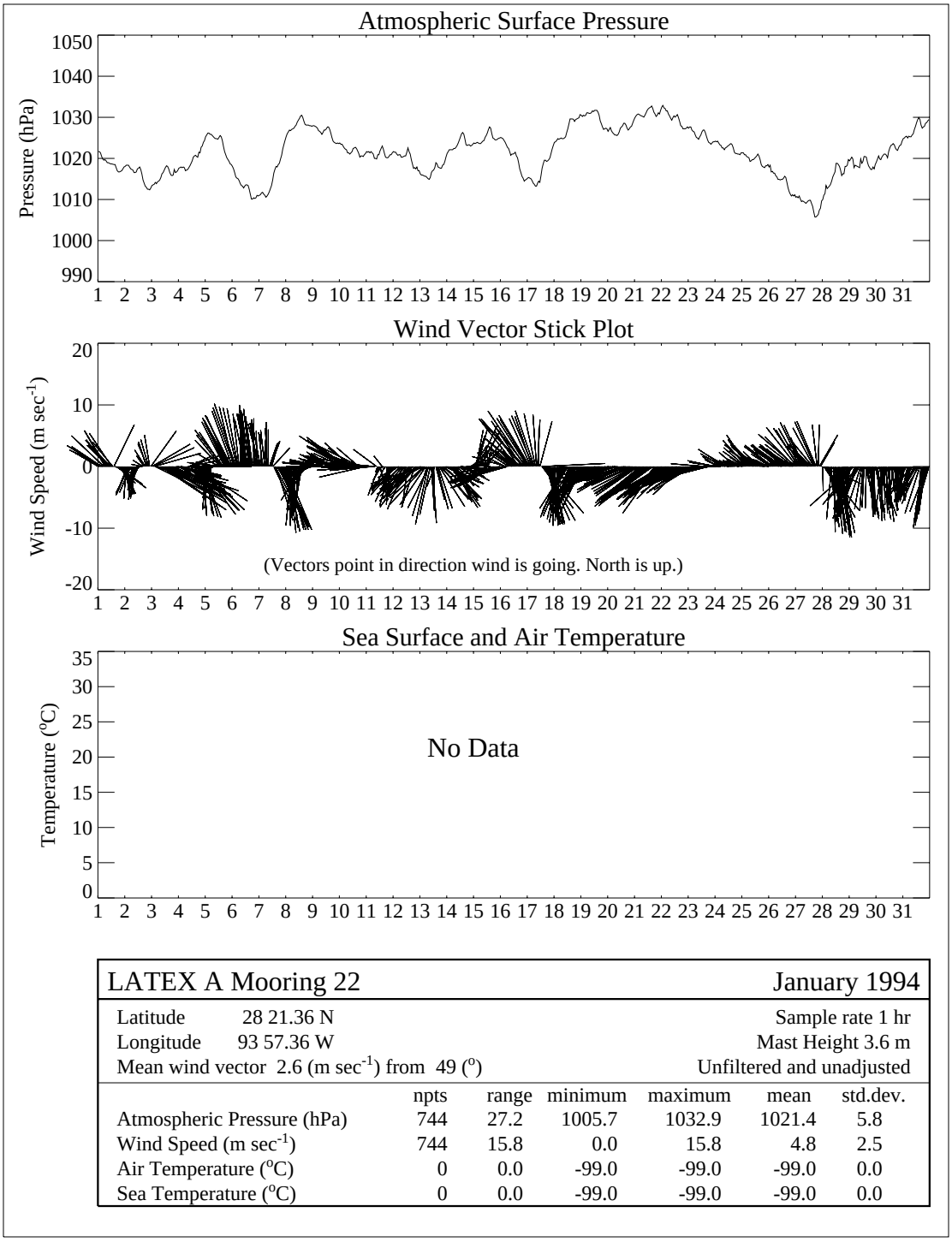


LATEX A Mooring 22 — December 1993

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 1.7 (m sec^{-1}) from 39 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	741	26.0	1004.0	1029.9	1020.0	4.9
Wind Speed (m sec^{-1})	741	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	216	6.5	17.3	23.8	21.3	1.9
Sea Temperature (^{o}C)	216	1.6	21.5	23.1	22.5	0.4

Figure 22.93.12 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for December 1993.

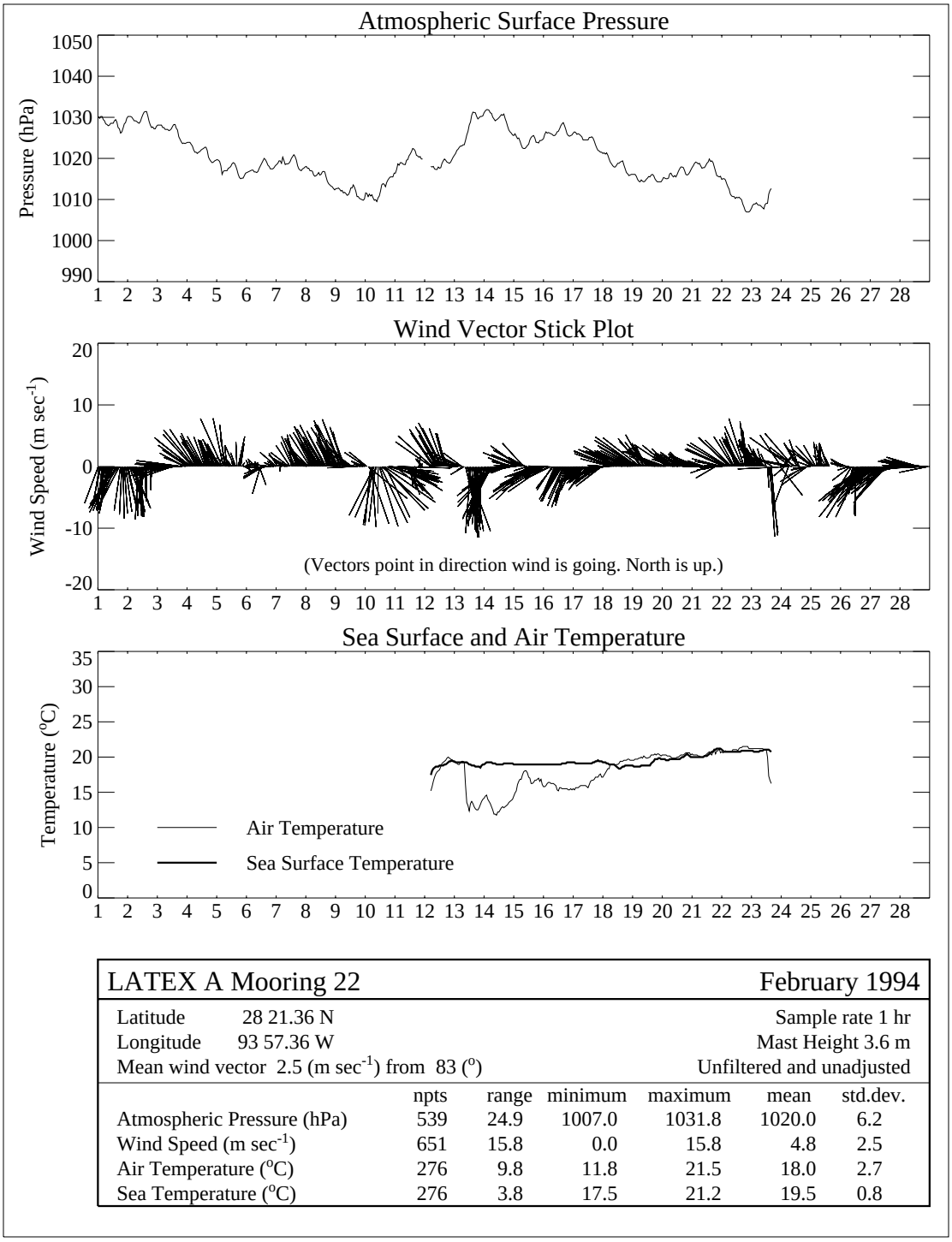


LATEX A Mooring 22 — January 1994

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 2.6 (m sec^{-1}) from 49 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	27.2	1005.7	1032.9	1021.4	5.8
Wind Speed (m sec^{-1})	744	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	0	0.0	-99.0	-99.0	-99.0	0.0
Sea Temperature (^{o}C)	0	0.0	-99.0	-99.0	-99.0	0.0

Figure 22.94.01 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for January 1994.

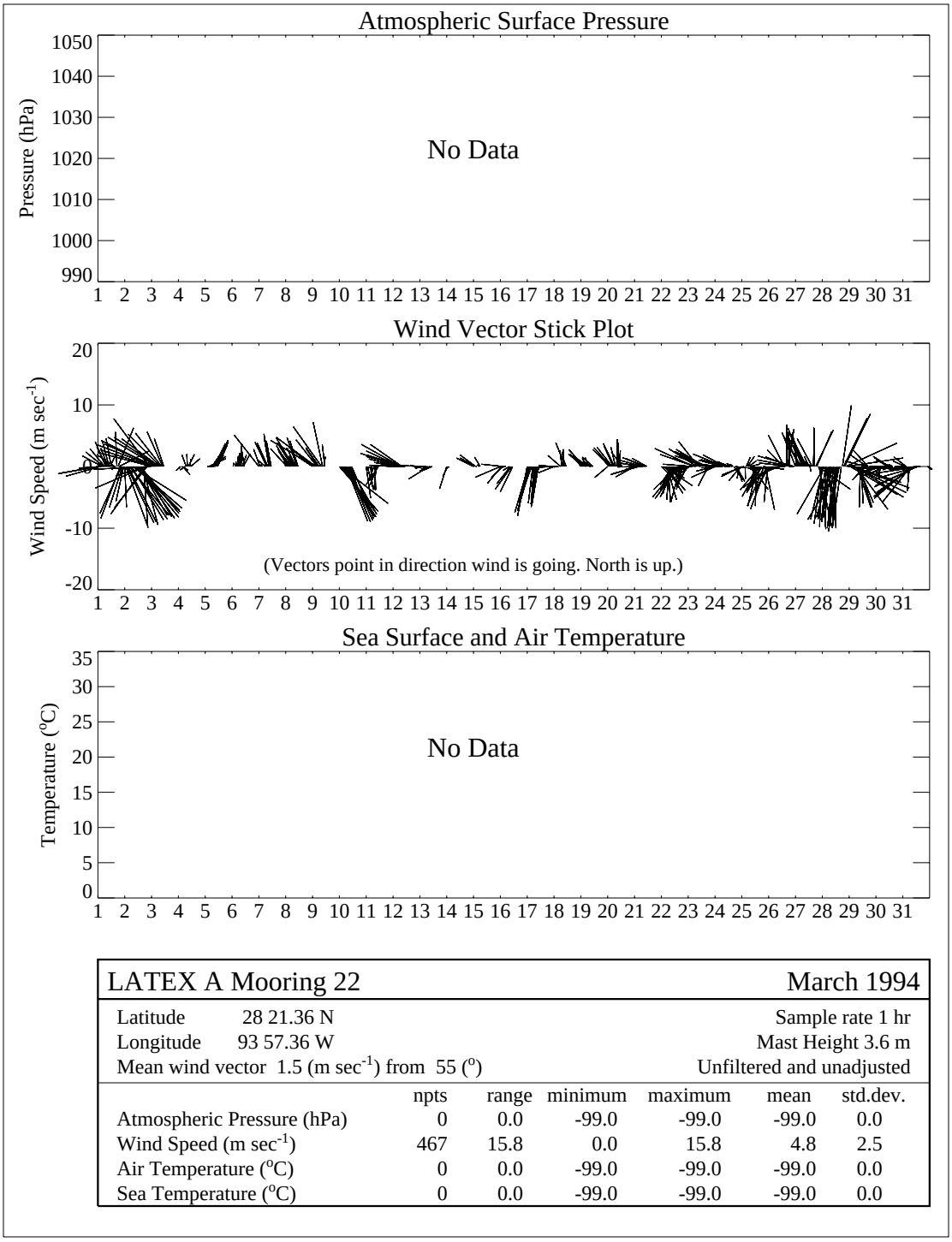


LATEX A Mooring 22 — February 1994

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 2.5 (m sec^{-1}) from 83 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	539	24.9	1007.0	1031.8	1020.0	6.2
Wind Speed (m sec^{-1})	651	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	276	9.8	11.8	21.5	18.0	2.7
Sea Temperature (^{o}C)	276	3.8	17.5	21.2	19.5	0.8

Figure 22.94.02 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for February 1994.

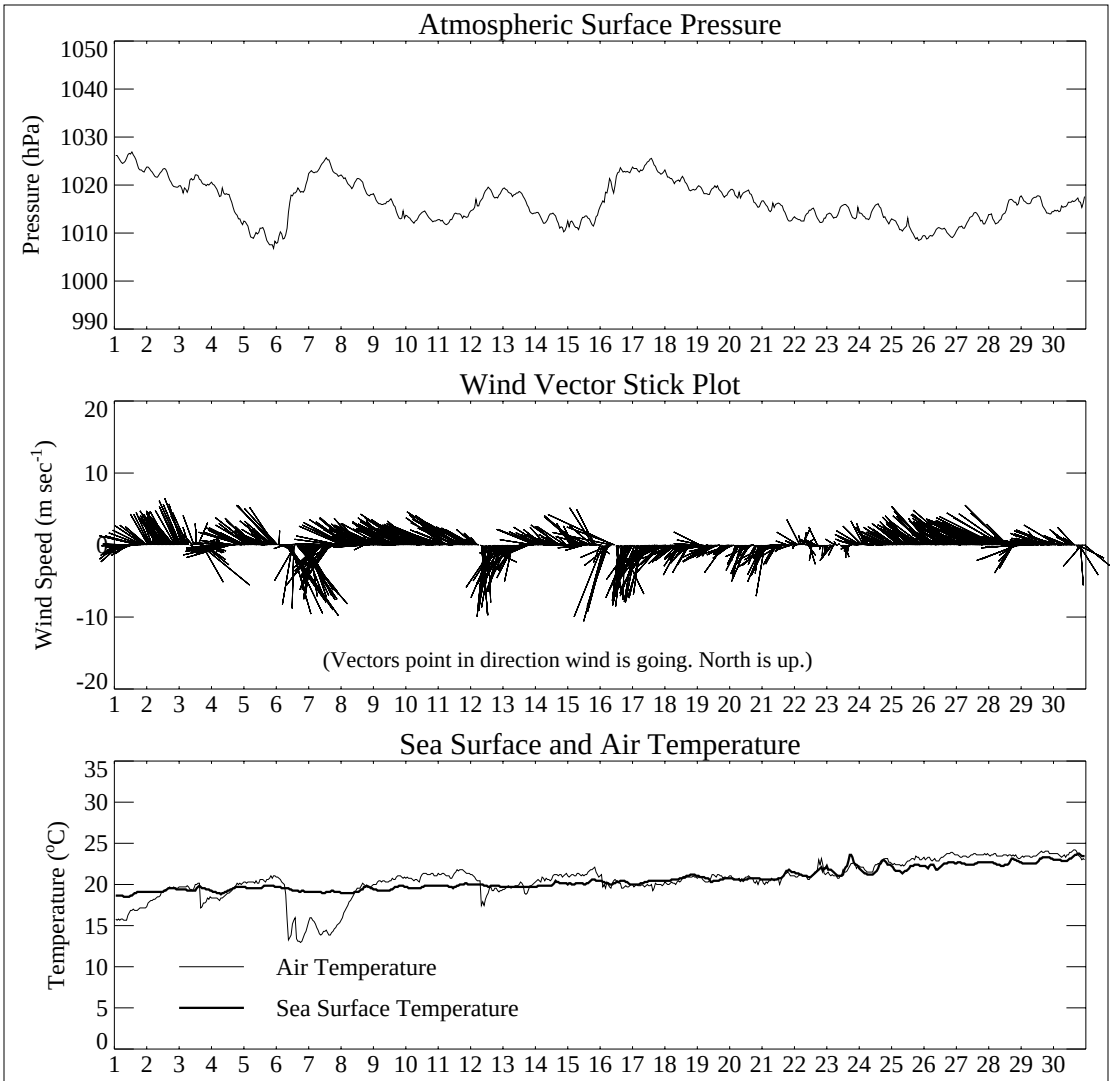


LATEX A Mooring 22 — March 1994

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 1.5 (m sec^{-1}) from 55 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	0	0.0	-99.0	-99.0	-99.0	0.0
Wind Speed (m sec^{-1})	467	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	0	0.0	-99.0	-99.0	-99.0	0.0
Sea Temperature (^{o}C)	0	0.0	-99.0	-99.0	-99.0	0.0

Figure 22.94.03 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for March 1994.

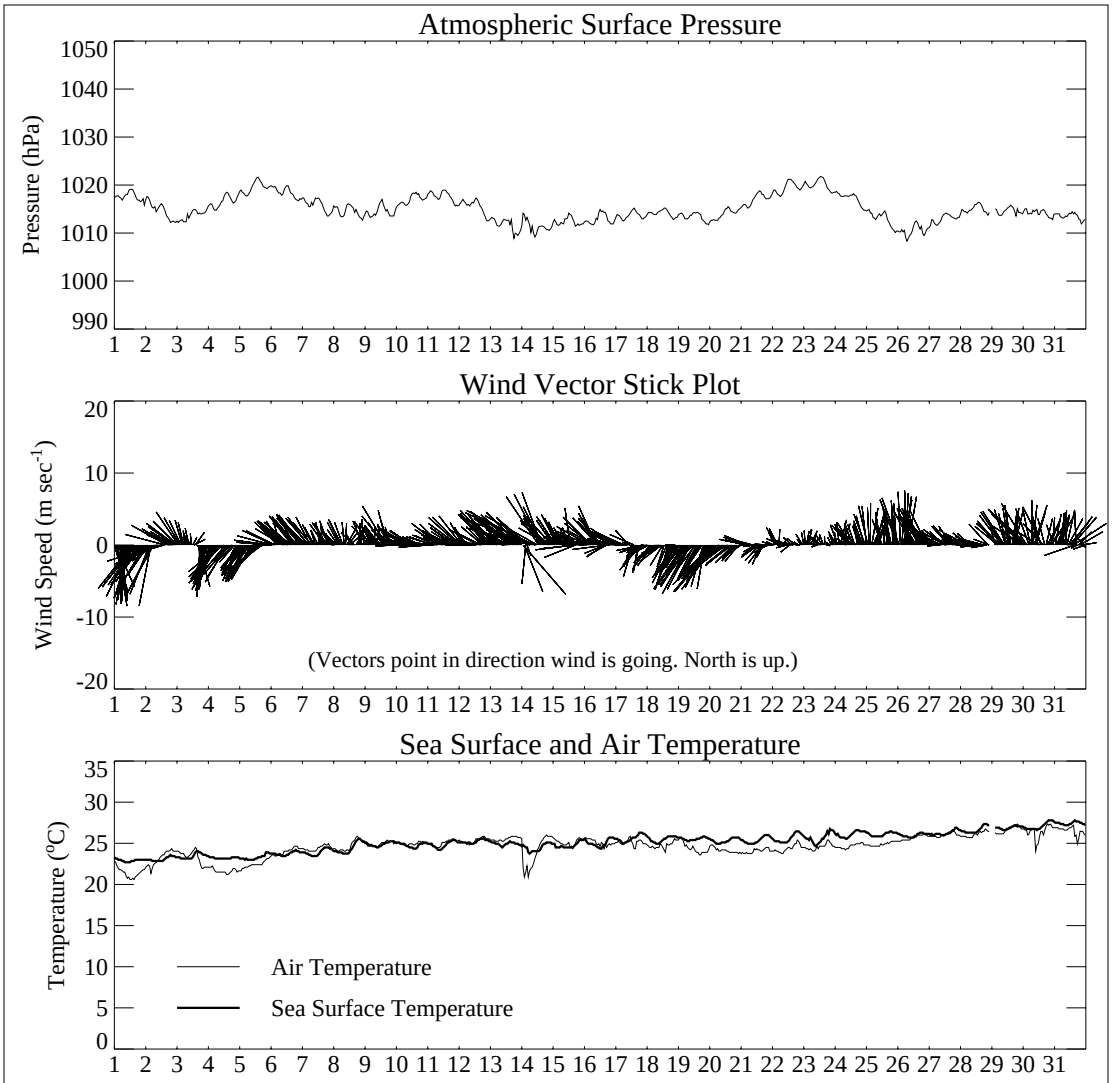


LATEX A Mooring 22 — April 1994

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 3.1 (m sec^{-1}) from 90 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	719	20.1	1006.8	1026.9	1016.4	4.3
Wind Speed (m sec^{-1})	719	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	719	11.3	12.9	24.2	20.5	2.3
Sea Temperature (^{o}C)	719	5.2	18.5	23.8	20.6	1.3

Figure 22.94.04 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for April 1994.

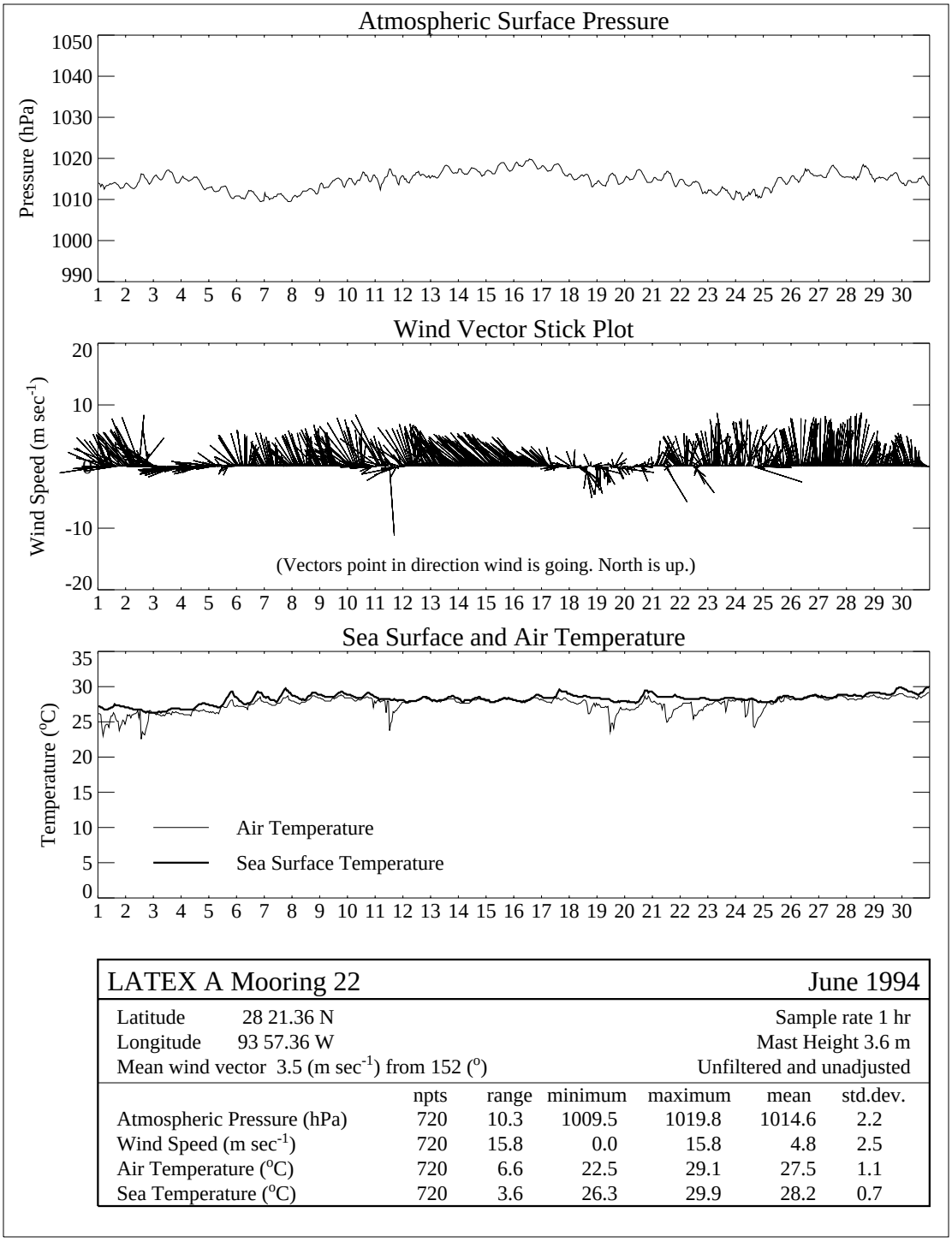


LATEX A Mooring 22 — May 1994

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 2.4 (m sec^{-1}) from 108 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	741	13.5	1008.3	1021.8	1015.0	2.7
Wind Speed (m sec^{-1})	741	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	741	6.8	20.6	27.4	24.6	1.4
Sea Temperature (^{o}C)	741	5.1	22.7	27.8	25.1	1.2

Figure 22.94.05 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for May 1994.

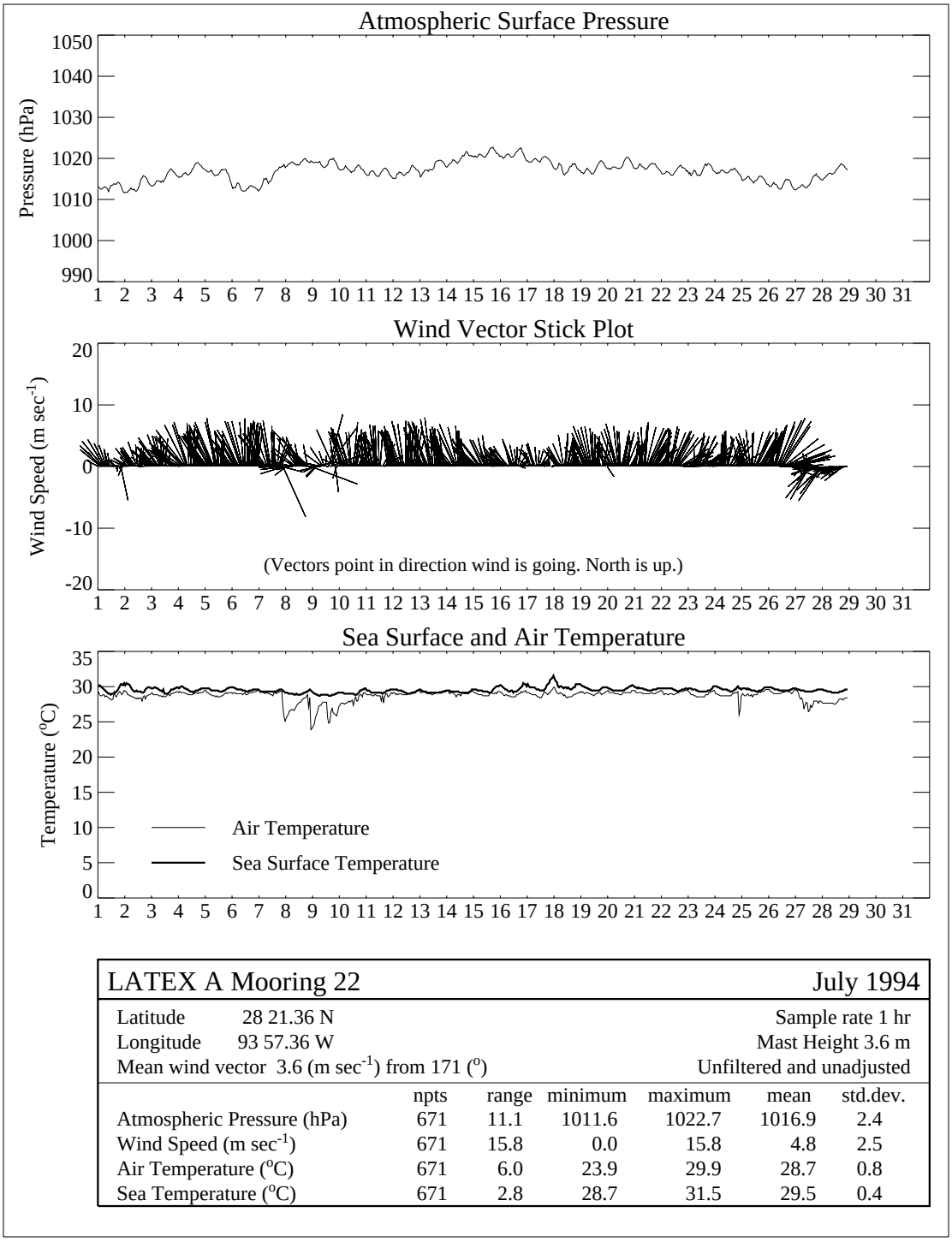


LATEX A Mooring 22 — June 1994

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 3.5 (m sec^{-1}) from 152 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	10.3	1009.5	1019.8	1014.6	2.2
Wind Speed (m sec^{-1})	720	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	720	6.6	22.5	29.1	27.5	1.1
Sea Temperature (^{o}C)	720	3.6	26.3	29.9	28.2	0.7

Figure 22.94.06 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for June 1994.

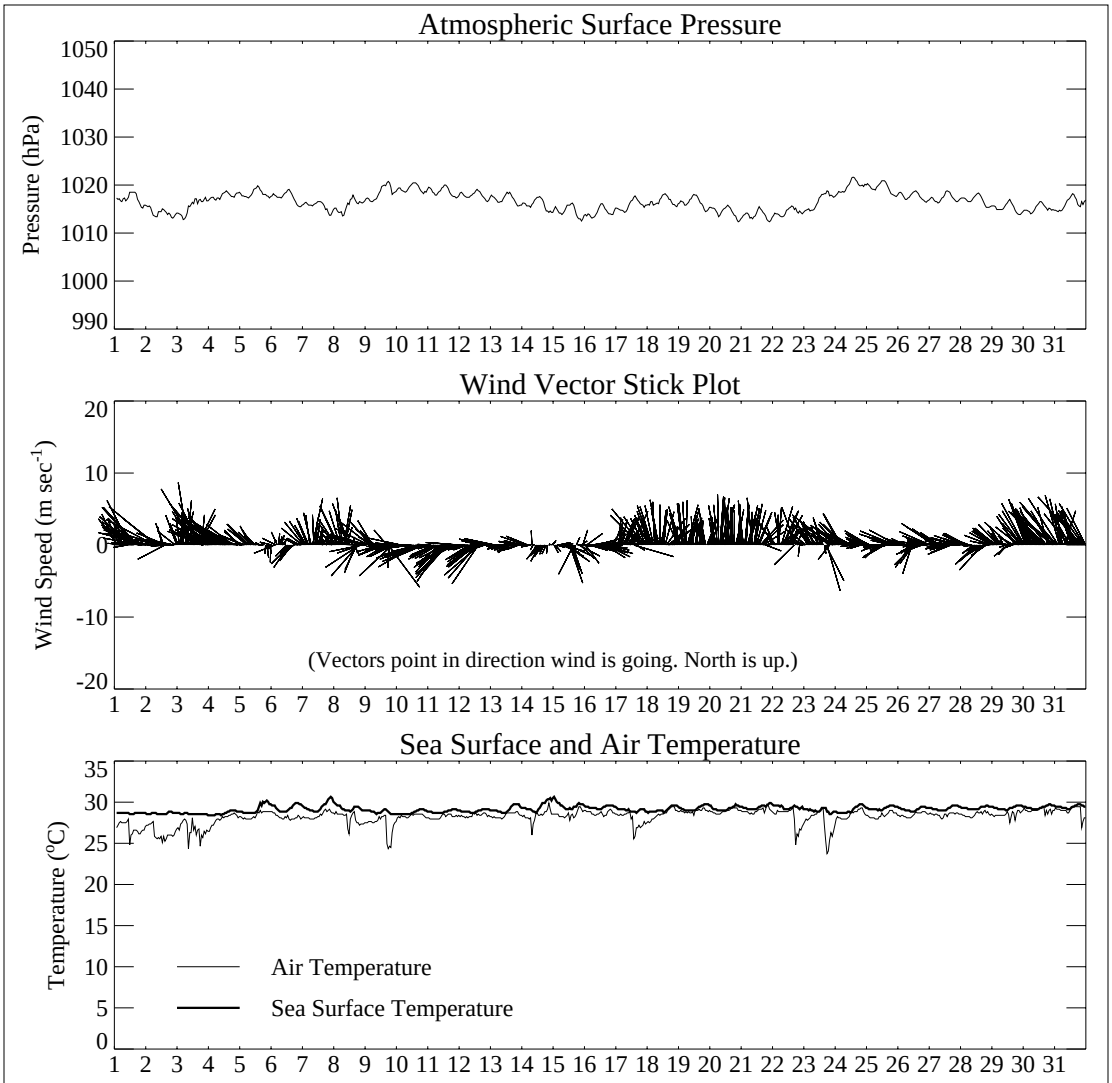


LATEX A Mooring 22 — July 1994

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 3.6 (m sec^{-1}) from 171 (^{o}) — Unfiltered and unadjusted

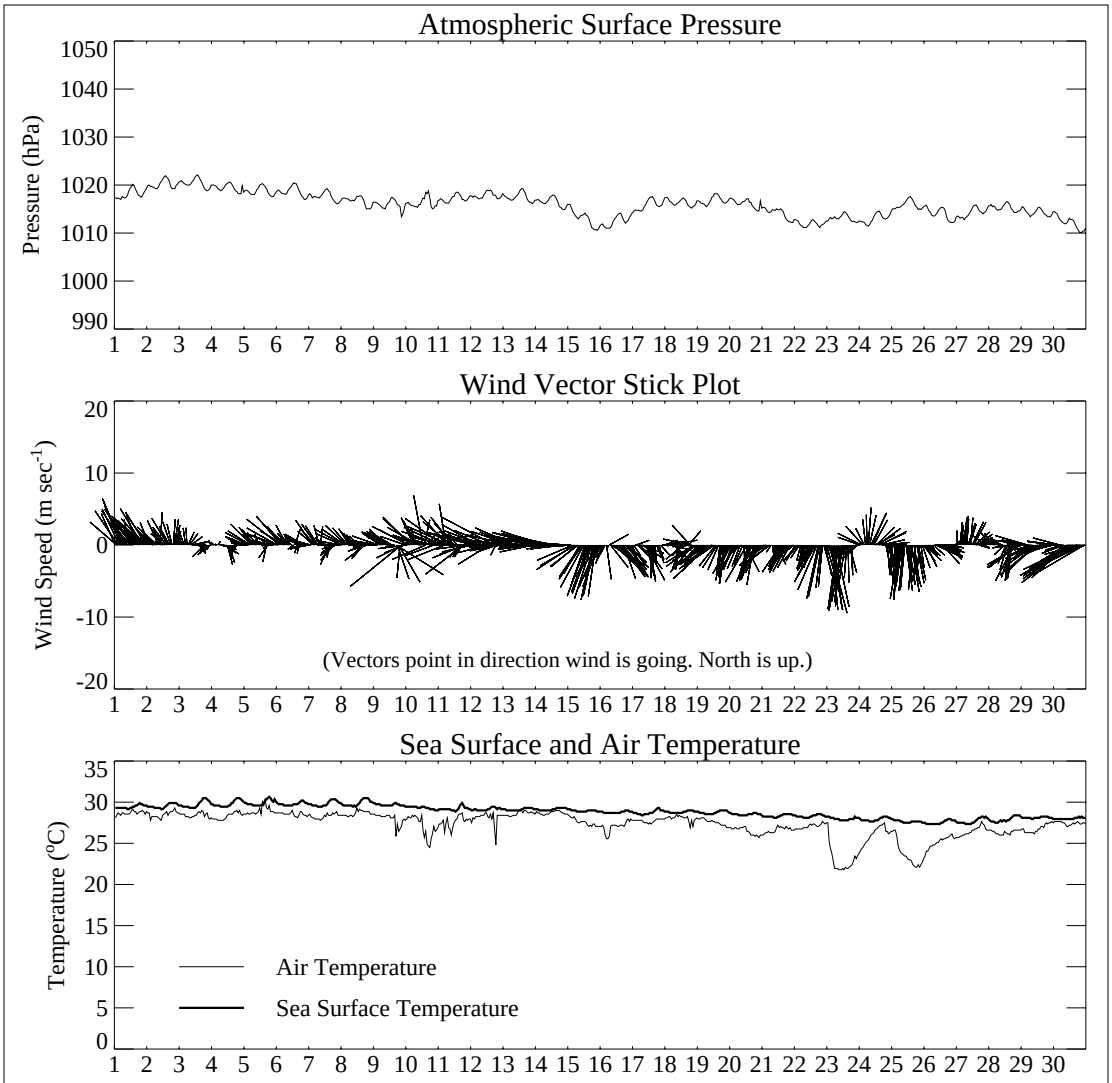
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	671	11.1	1011.6	1022.7	1016.9	2.4
Wind Speed (m sec^{-1})	671	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	671	6.0	23.9	29.9	28.7	0.8
Sea Temperature (^{o}C)	671	2.8	28.7	31.5	29.5	0.4

Figure 22.94.07 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for July 1994.



LATEX A Mooring 22						August 1994
Latitude 28 21.36 N						Sample rate 1 hr
Longitude 93 57.36 W						Mast Height 3.6 m
Mean wind vector 2.3 (m sec^{-1}) from 131 (^{o})						Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	743	9.3	1012.3	1021.7	1016.5	1.9
Wind Speed (m sec^{-1})	743	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	743	6.1	23.8	29.9	28.2	0.9
Sea Temperature (^{o}C)	743	2.2	28.4	30.6	29.2	0.4

Figure 22.94.08 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for August 1994.

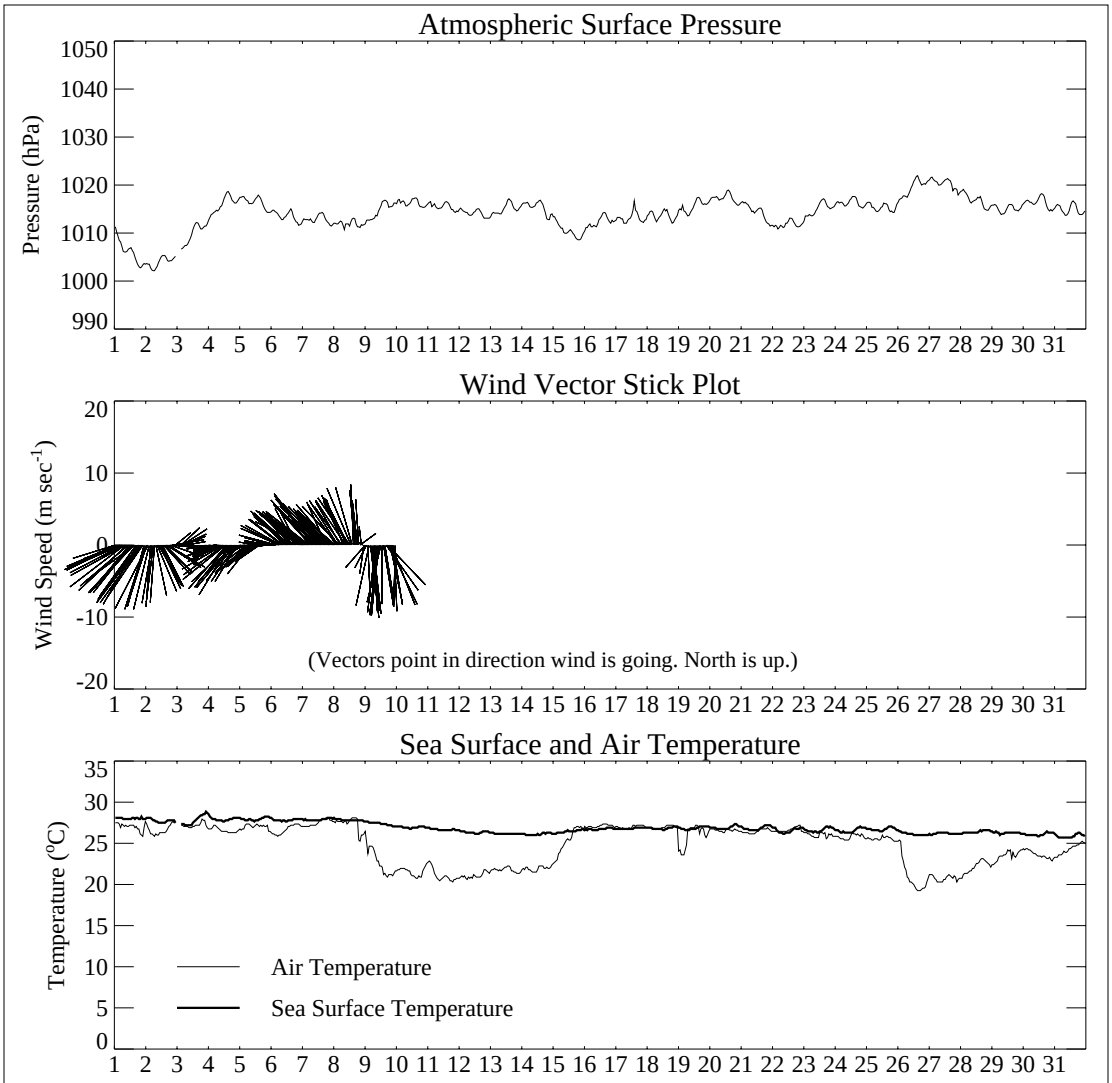


LATEX A Mooring 22 — September 1994

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 1.8 (m sec^{-1}) from 63 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	12.0	1010.1	1022.1	1016.0	2.5
Wind Speed (m sec^{-1})	720	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	720	8.6	21.8	30.4	27.3	1.6
Sea Temperature (^{o}C)	720	3.3	27.4	30.6	28.9	0.8

Figure 22.94.09 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for September 1994.

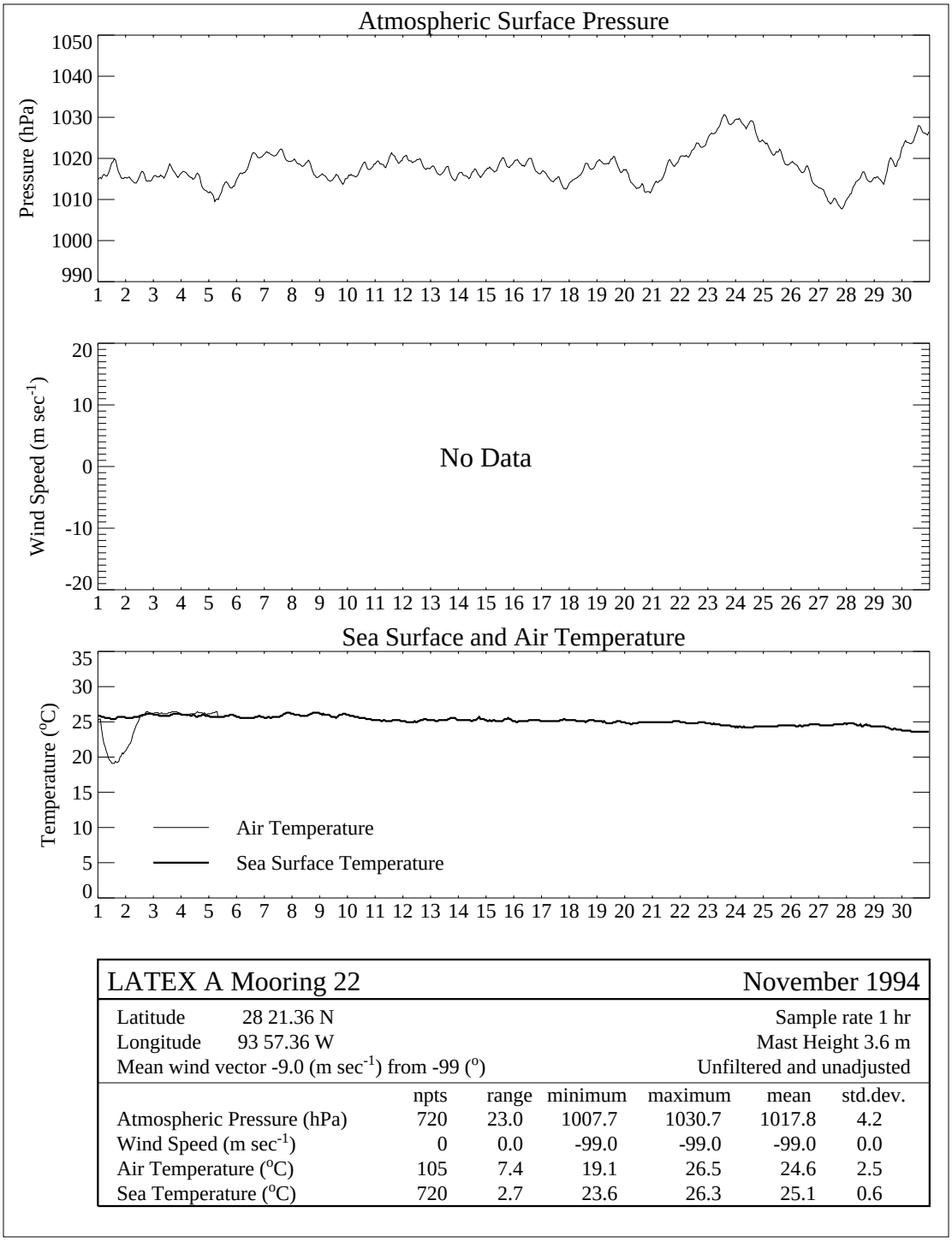


LATEX A Mooring 22 — October 1994

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector 2.8 (m sec^{-1}) from 66 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	740	19.8	1002.2	1022.0	1014.2	3.5
Wind Speed (m sec^{-1})	212	15.8	0.0	15.8	4.8	2.5
Air Temperature (^{o}C)	740	8.9	19.3	28.1	24.8	2.4
Sea Temperature (^{o}C)	740	3.1	25.7	28.9	26.9	0.7

Figure 22.94.10 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for October 1994.

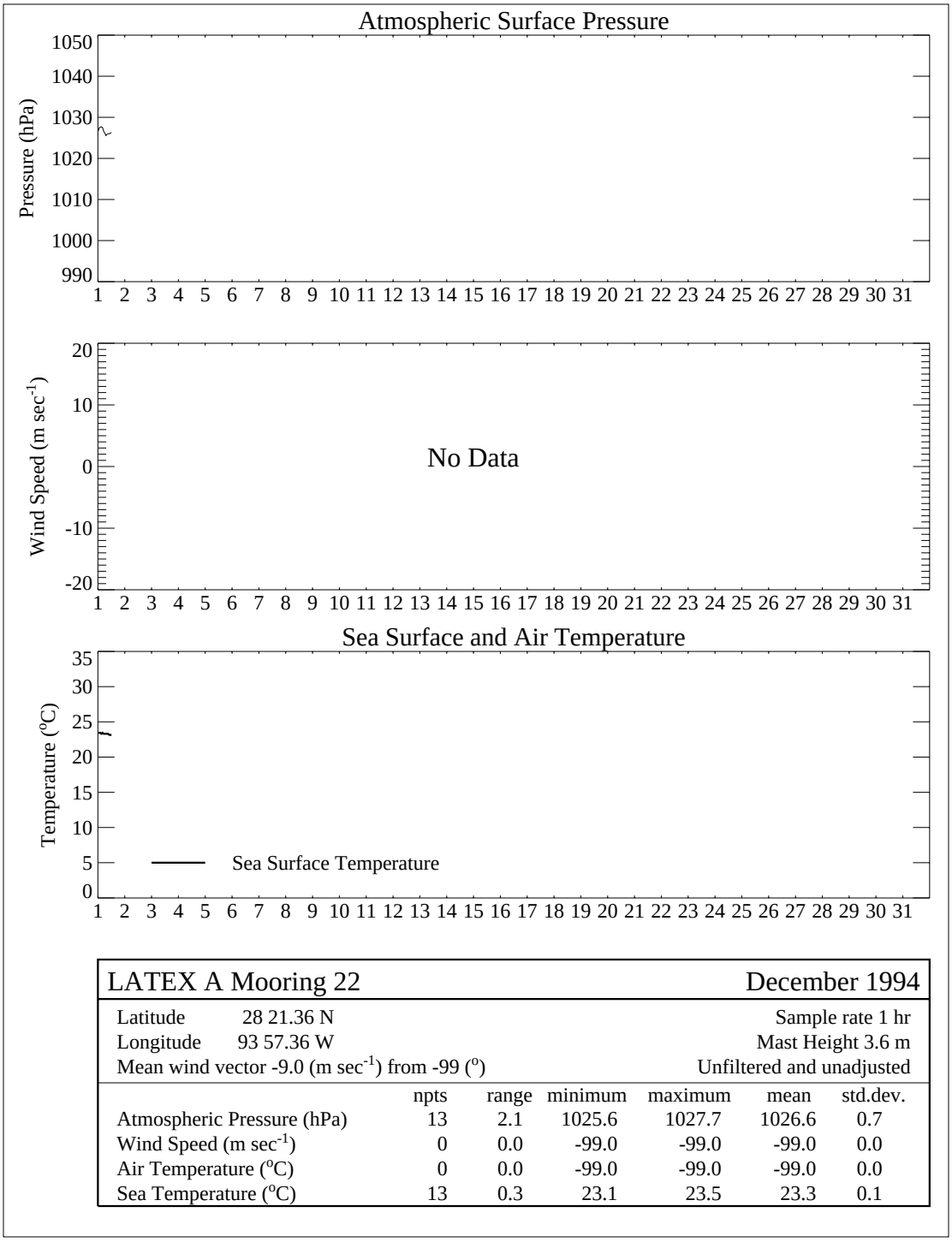


LATEX A Mooring 22 — November 1994

Latitude 28 21.36 N — Sample rate 1 hr
Longitude 93 57.36 W — Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o}) — Unfiltered and unadjusted

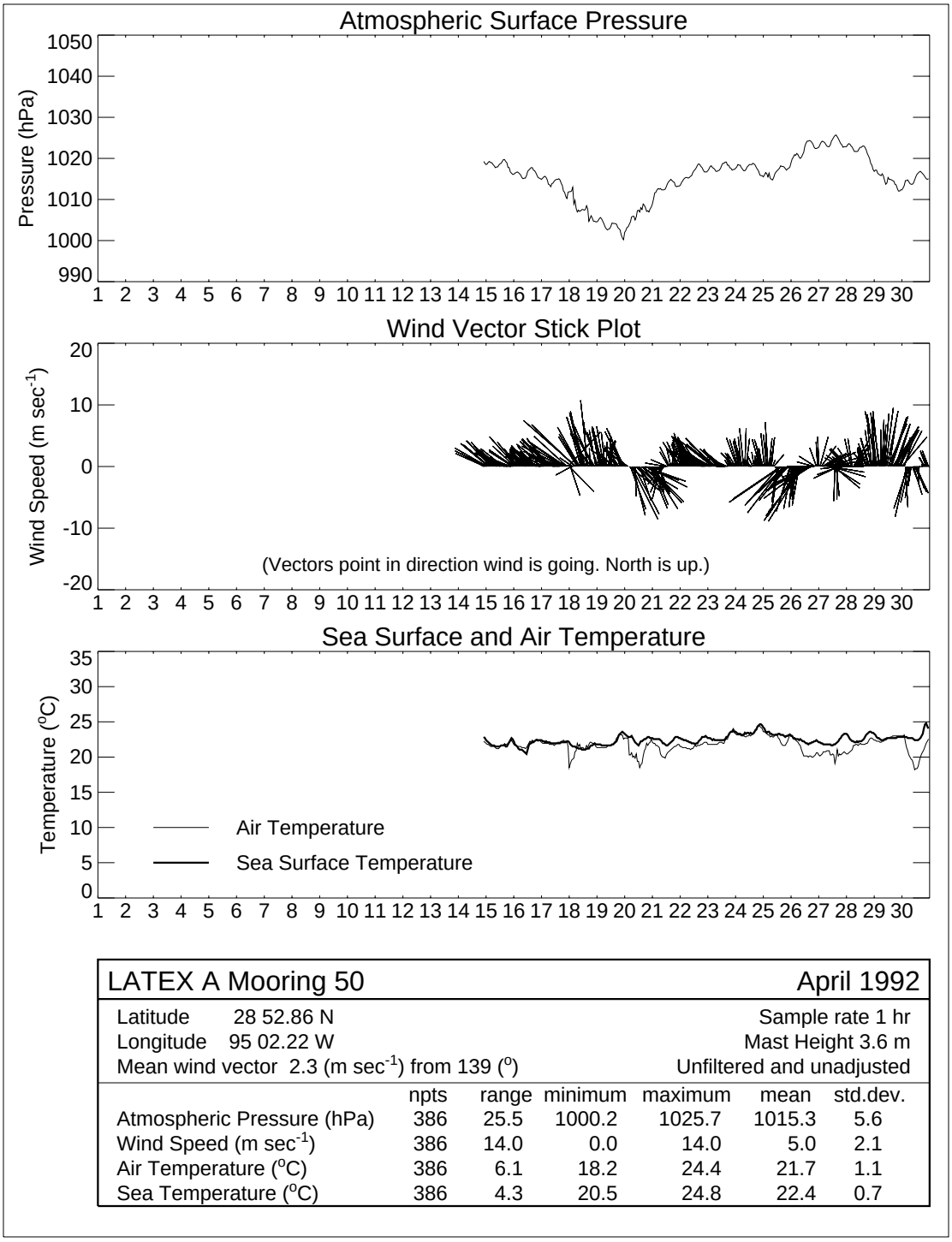
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	23.0	1007.7	1030.7	1017.8	4.2
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	105	7.4	19.1	26.5	24.6	2.5
Sea Temperature (^{o}C)	720	2.7	23.6	26.3	25.1	0.6

Figure 22.94.11 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for November 1994.



LATEX A Mooring 22					December 1994
Latitude 28 21.36 N					Sample rate 1 hr
Longitude 93 57.36 W					Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o})					Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	13	2.1	1025.6	1027.7	1026.6	0.7
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	0	0.0	-99.0	-99.0	-99.0	0.0
Sea Temperature (^{o}C)	13	0.3	23.1	23.5	23.3	0.1

Figure 22.94.12 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for December 1994.

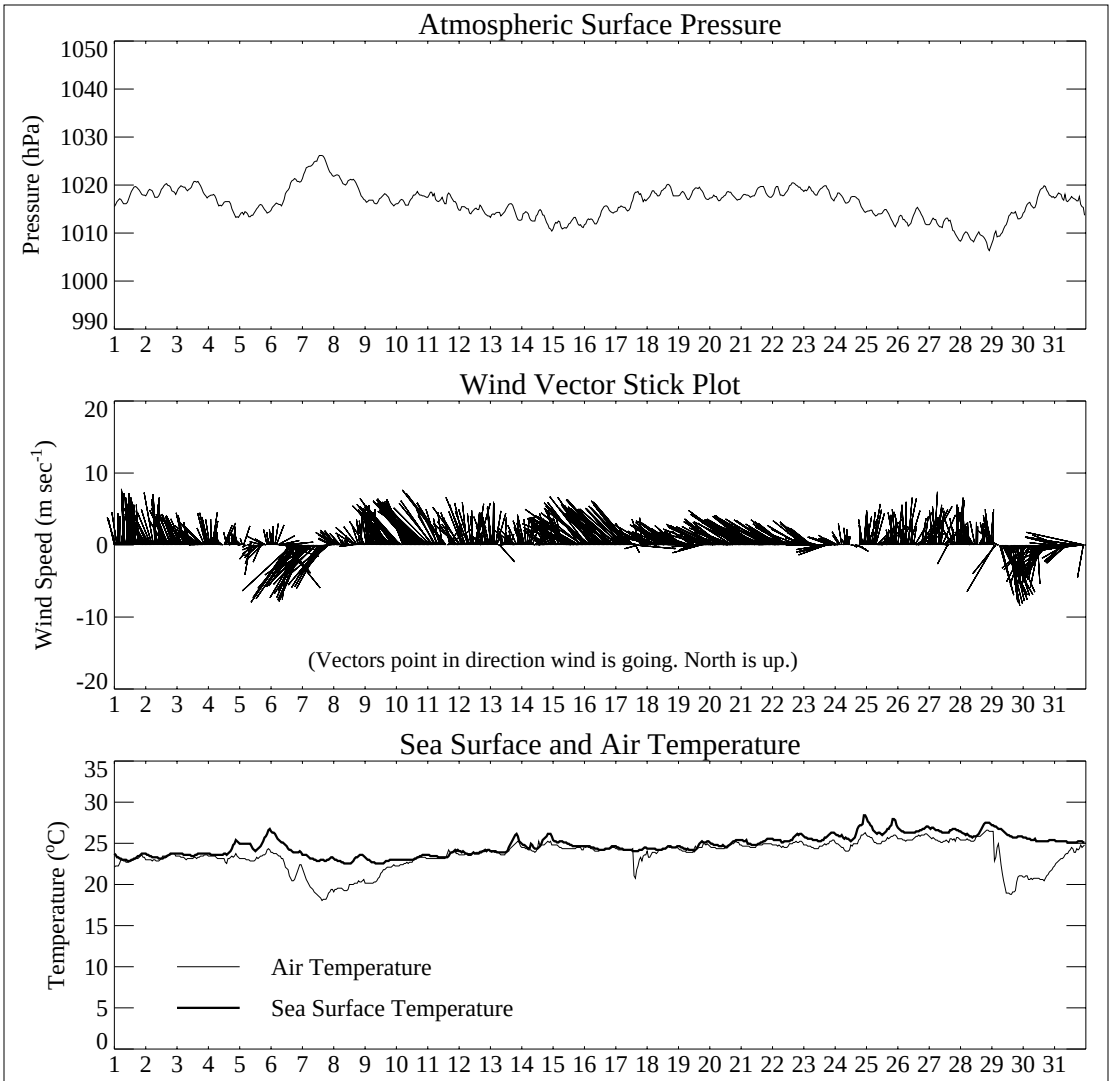


LATEX A Mooring 50 — April 1992

Latitude 28 52.86 N — Sample rate 1 hr
Longitude 95 02.22 W — Mast Height 3.6 m
Mean wind vector 2.3 (m sec^{-1}) from 139 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	386	25.5	1000.2	1025.7	1015.3	5.6
Wind Speed (m sec^{-1})	386	14.0	0.0	14.0	5.0	2.1
Air Temperature (^{o}C)	386	6.1	18.2	24.4	21.7	1.1
Sea Temperature (^{o}C)	386	4.3	20.5	24.8	22.4	0.7

Figure 50.92.04 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for April 1992.

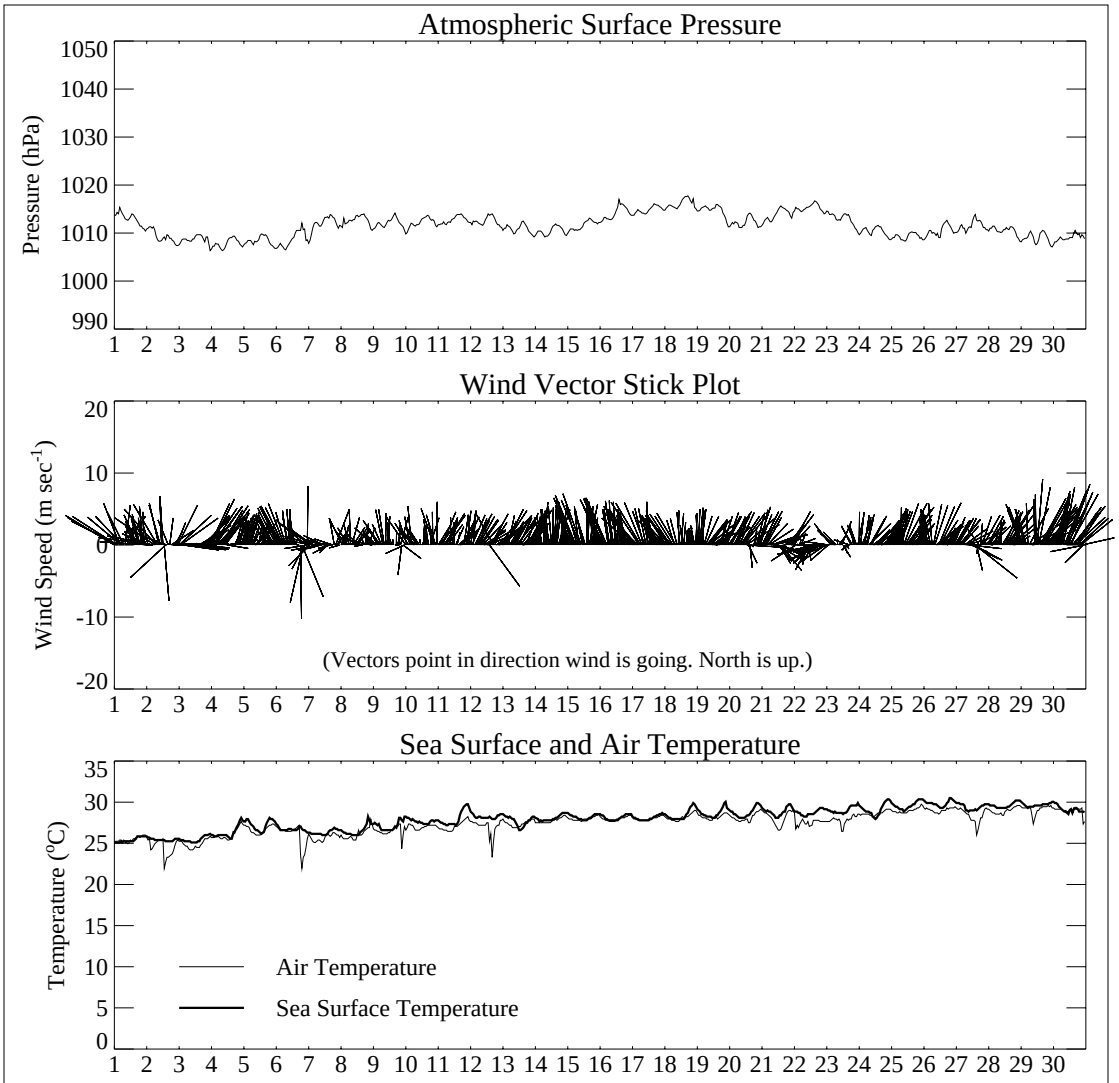


LATEX A Mooring 50 — May 1992

Latitude 28 52.86 N — Sample rate 1 hr
Longitude 95 02.22 W — Mast Height 3.6 m
Mean wind vector 3.0 (m sec^{-1}) from 134 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	19.8	1006.3	1026.2	1016.3	3.3
Wind Speed (m sec^{-1})	744	14.0	0.0	14.0	5.0	2.1
Air Temperature (^{o}C)	744	8.6	18.0	26.6	23.6	1.7
Sea Temperature (^{o}C)	744	5.9	22.5	28.4	24.7	1.2

Figure 50.92.05 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for May 1992.

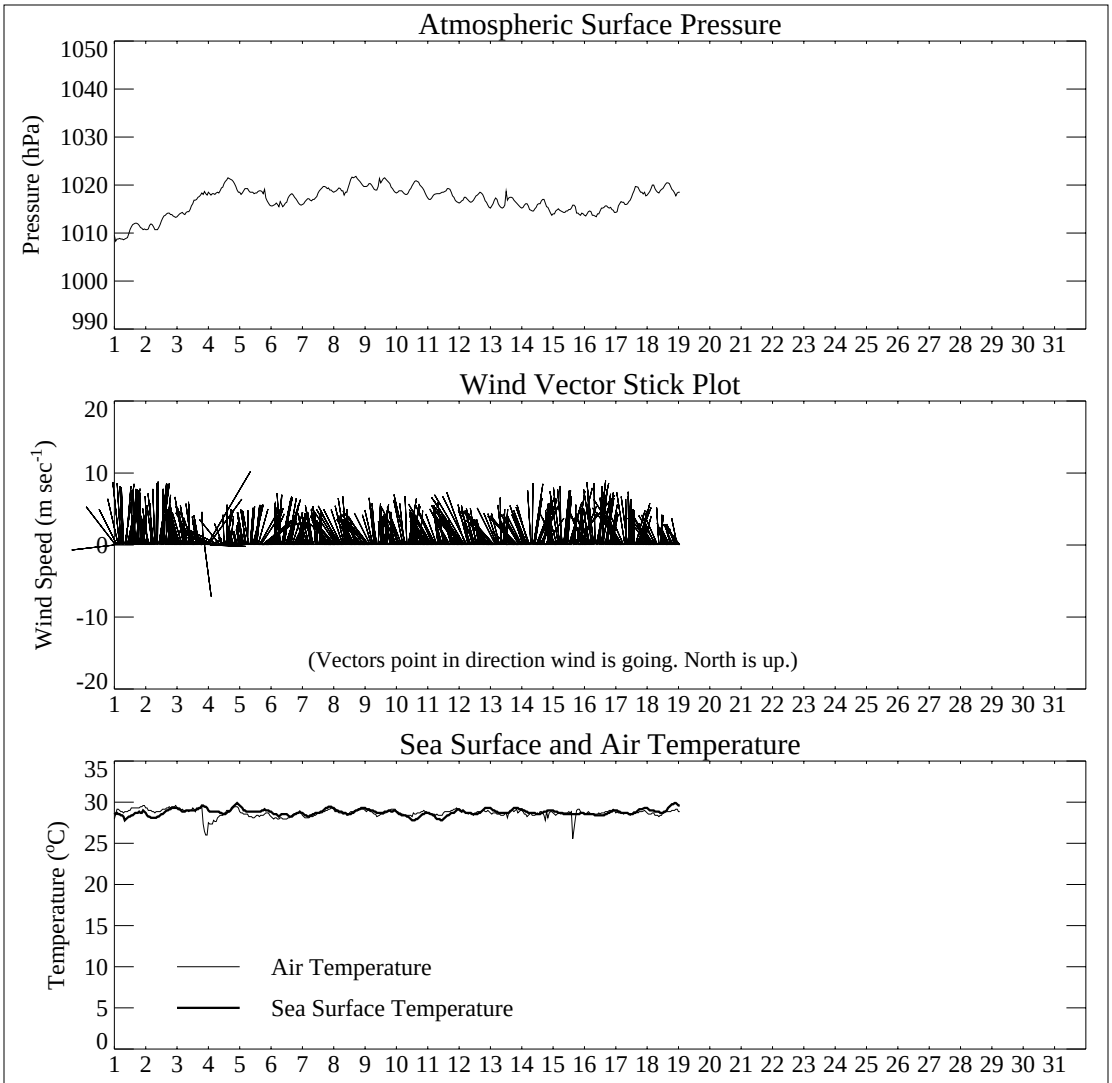


LATEX A Mooring 50 — June 1992

Latitude 28 52.86 N — Sample rate 1 hr
Longitude 95 02.22 W — Mast Height 3.6 m
Mean wind vector 3.0 (m sec^{-1}) from 190 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	719	11.4	1006.3	1017.7	1011.6	2.4
Wind Speed (m sec^{-1})	719	14.0	0.0	14.0	5.0	2.1
Air Temperature (^{o}C)	719	7.8	22.0	29.8	27.4	1.4
Sea Temperature (^{o}C)	719	5.4	25.1	30.5	28.0	1.4

Figure 50.92.06 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for June 1992.

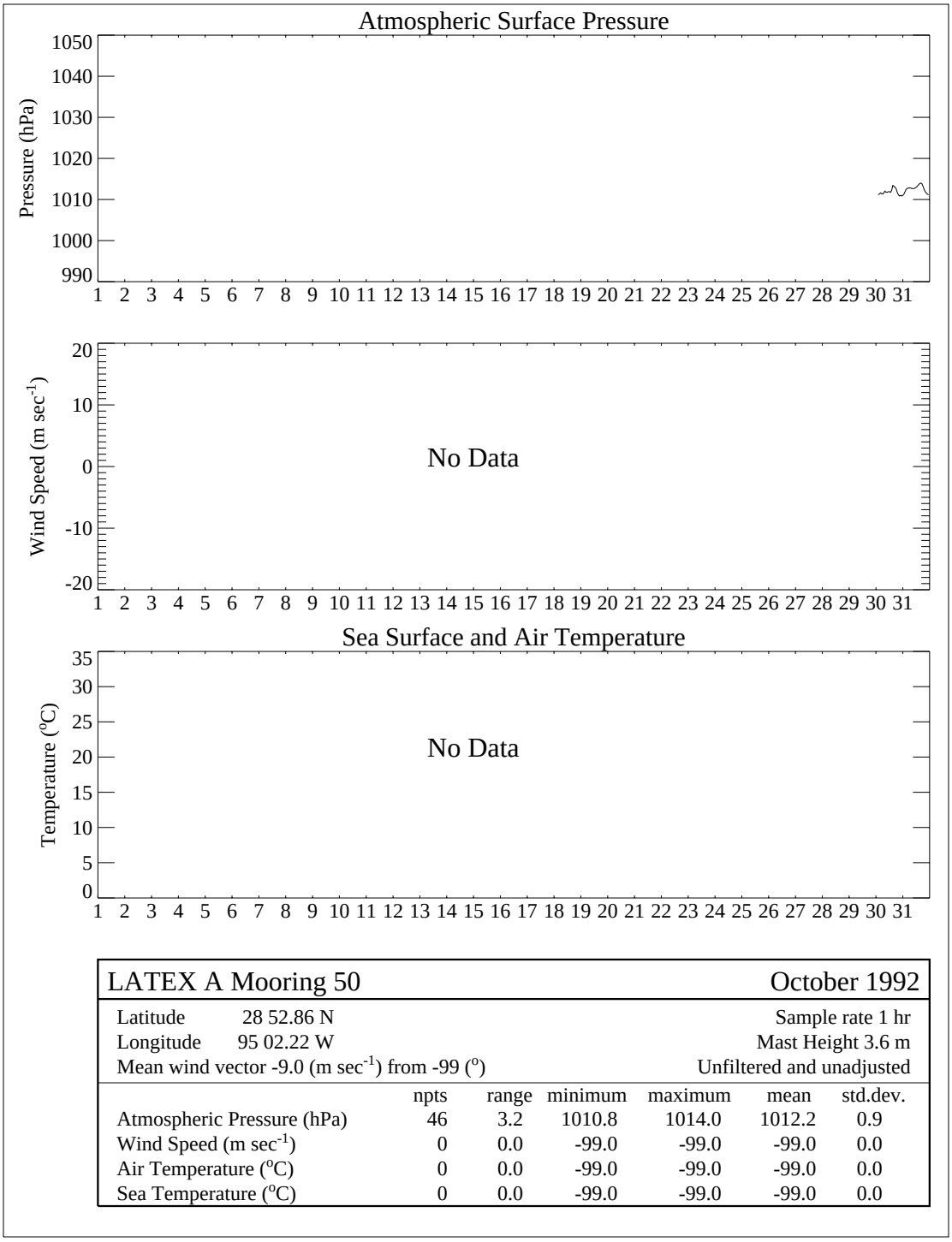


LATEX A Mooring 50 — July 1992

Latitude 28 52.86 N — Sample rate 1 hr
Longitude 95 02.22 W — Mast Height 3.6 m
Mean wind vector 4.9 (m sec^{-1}) from 172 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	434	13.5	1008.3	1021.8	1016.8	2.8
Wind Speed (m sec^{-1})	434	14.0	0.0	14.0	5.0	2.1
Air Temperature (^{o}C)	434	4.1	25.5	29.6	28.7	0.5
Sea Temperature (^{o}C)	434	2.1	27.8	29.9	28.8	0.4

Figure 50.92.07 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for July 1992.

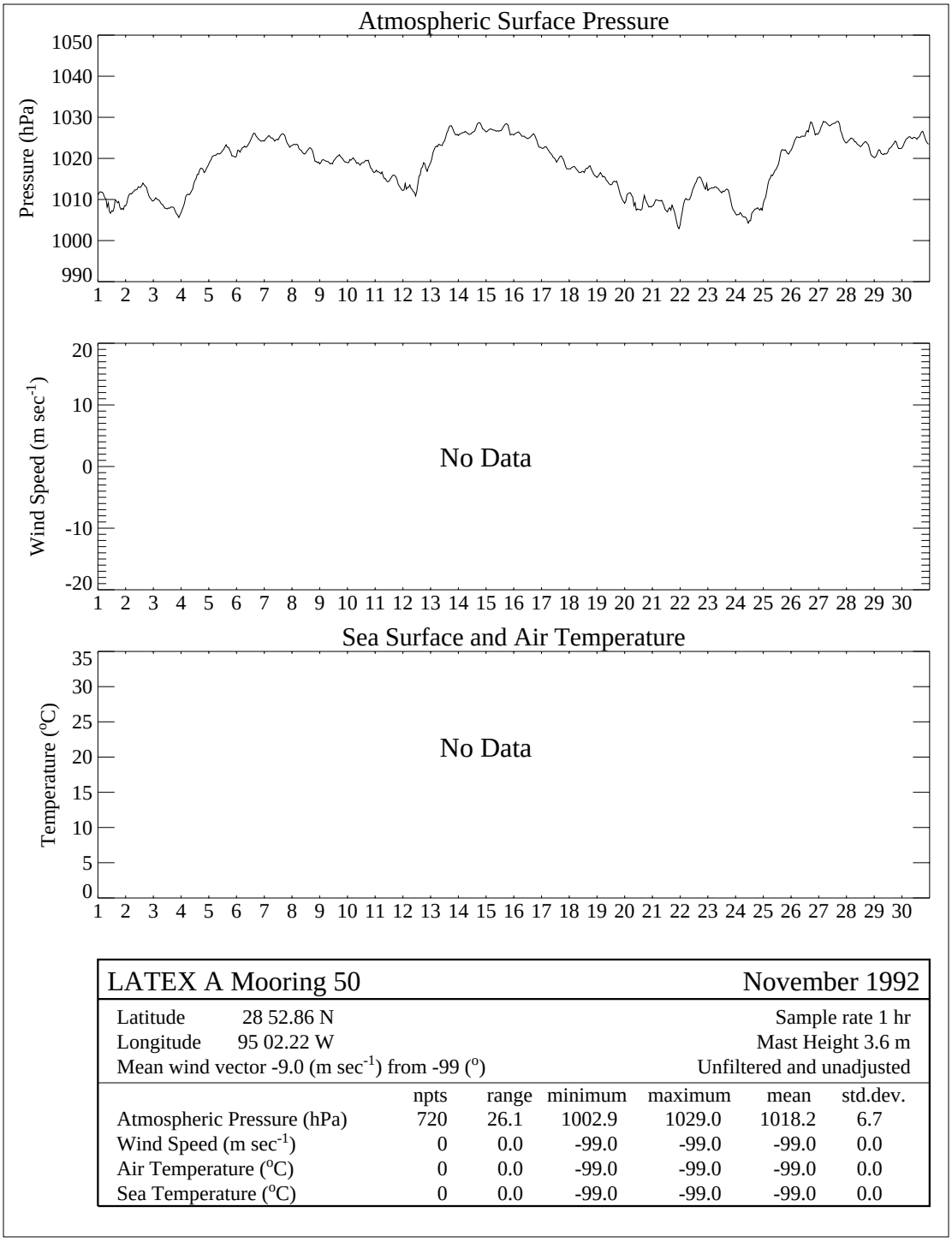


LATEX A Mooring 50 — October 1992

Latitude 28 52.86 N — Sample rate 1 hr
Longitude 95 02.22 W — Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	46	3.2	1010.8	1014.0	1012.2	0.9
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	0	0.0	-99.0	-99.0	-99.0	0.0
Sea Temperature (^{o}C)	0	0.0	-99.0	-99.0	-99.0	0.0

Figure 50.92.10 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for October 1992.

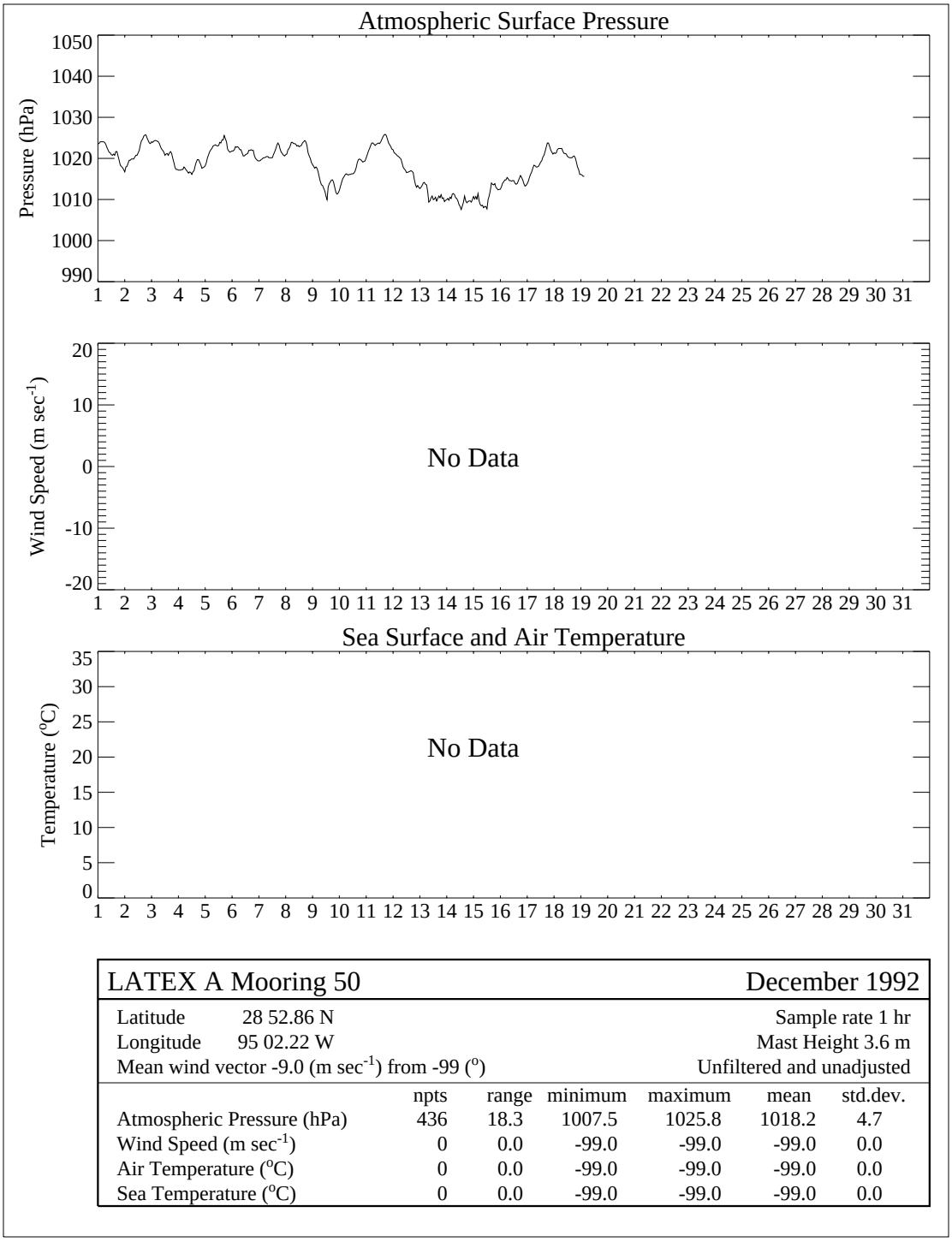


LATEX A Mooring 50 — November 1992

Latitude 28 52.86 N — Sample rate 1 hr
Longitude 95 02.22 W — Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	26.1	1002.9	1029.0	1018.2	6.7
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	0	0.0	-99.0	-99.0	-99.0	0.0
Sea Temperature (^{o}C)	0	0.0	-99.0	-99.0	-99.0	0.0

Figure 50.92.11 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for November 1992.

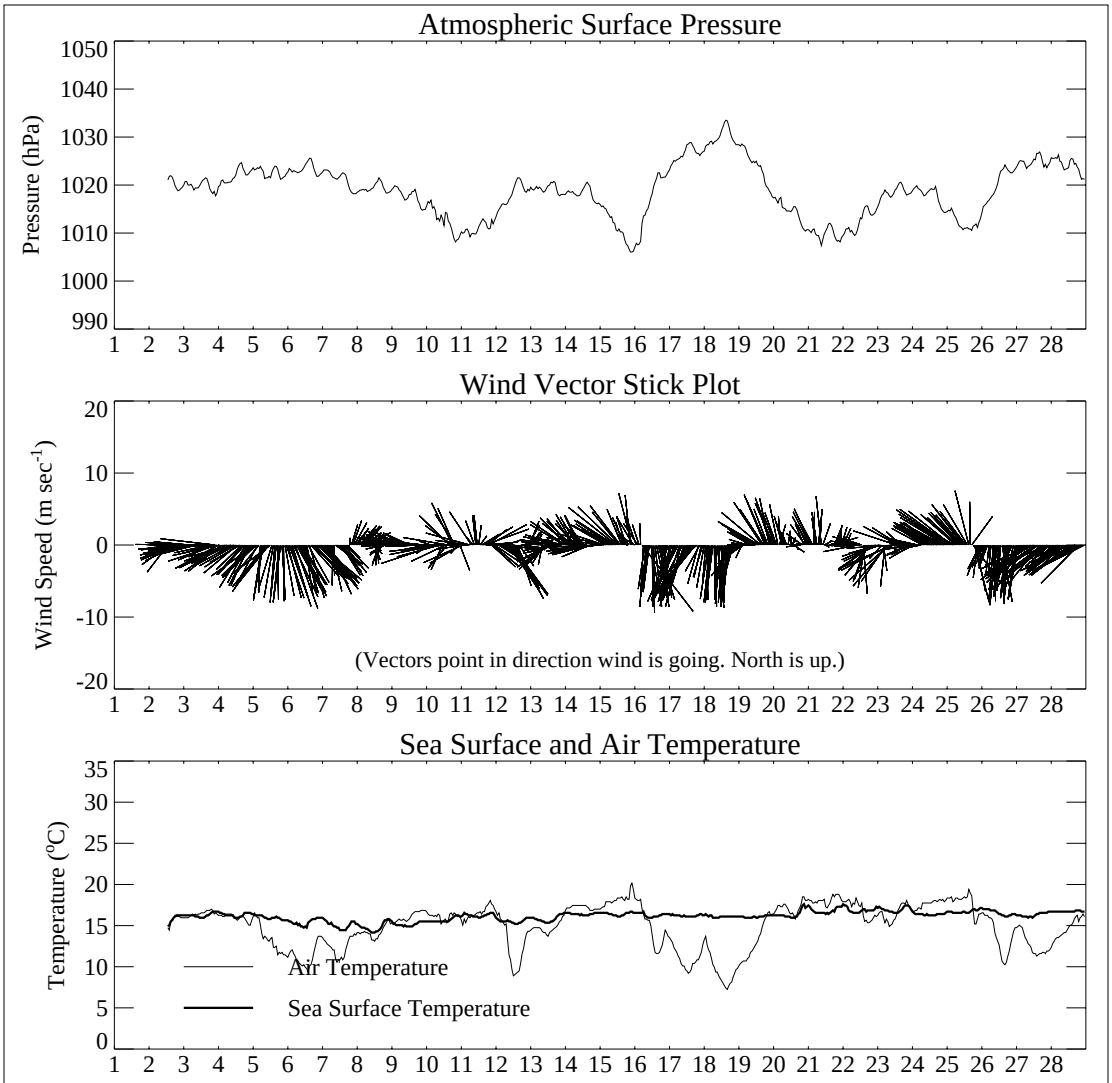


LATEX A Mooring 50 — December 1992

Latitude 28 52.86 N — Sample rate 1 hr
Longitude 95 02.22 W — Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	436	18.3	1007.5	1025.8	1018.2	4.7
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	0	0.0	-99.0	-99.0	-99.0	0.0
Sea Temperature (^{o}C)	0	0.0	-99.0	-99.0	-99.0	0.0

Figure 50.92.12 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for December 1992.

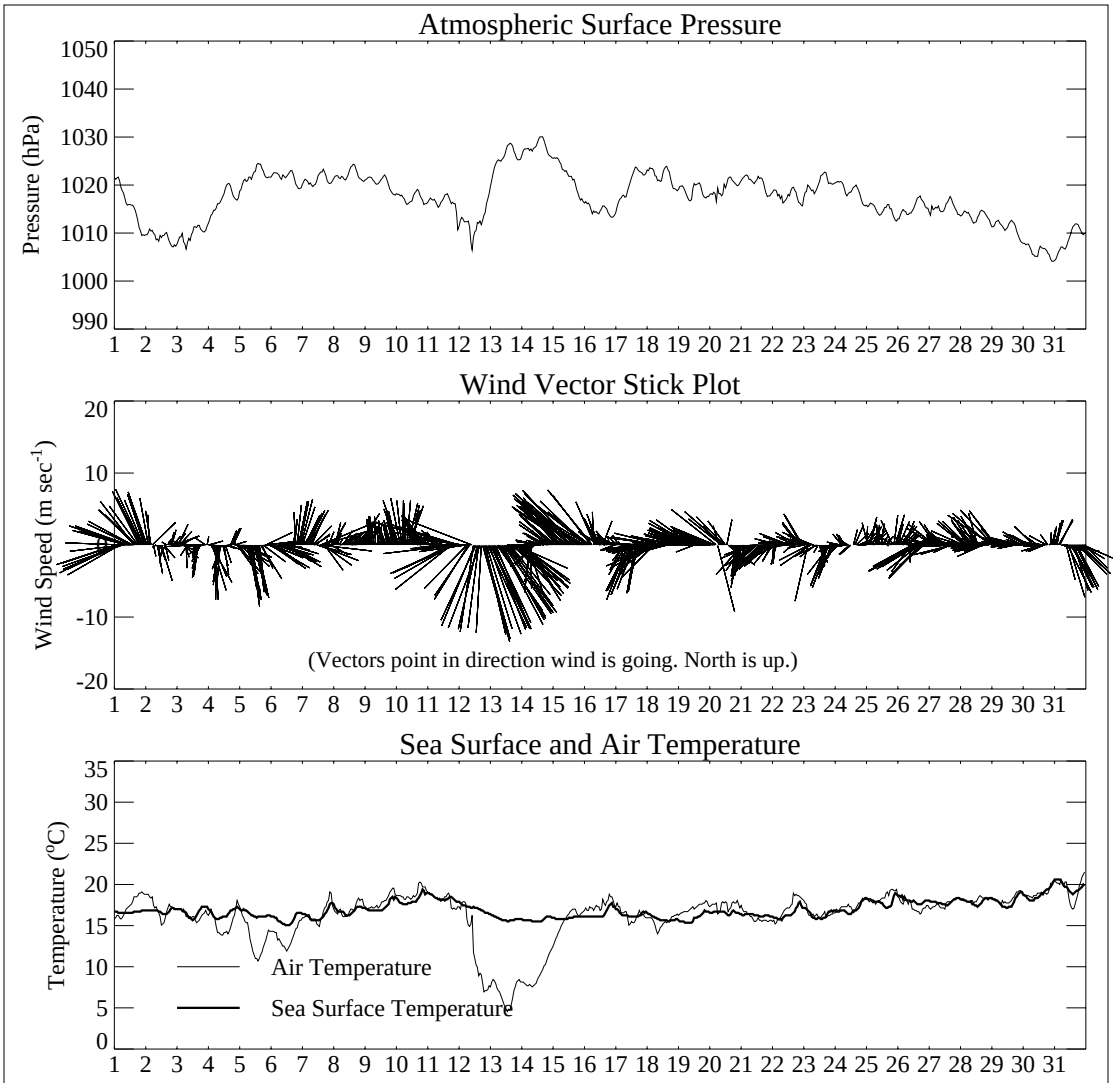


LATEX A Mooring 50 — February 1993

Latitude 28 52.86 N — Sample rate 1 hr
Longitude 95 02.22 W — Mast Height 3.6 m
Mean wind vector 2.6 (m sec^{-1}) from 54 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	635	27.5	1006.0	1033.5	1018.8	5.5
Wind Speed (m sec^{-1})	635	14.0	0.0	14.0	5.0	2.1
Air Temperature (^{o}C)	635	12.9	7.2	20.1	15.0	2.6
Sea Temperature (^{o}C)	635	3.5	14.1	17.6	16.1	0.6

Figure 50.93.02 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for February 1993.

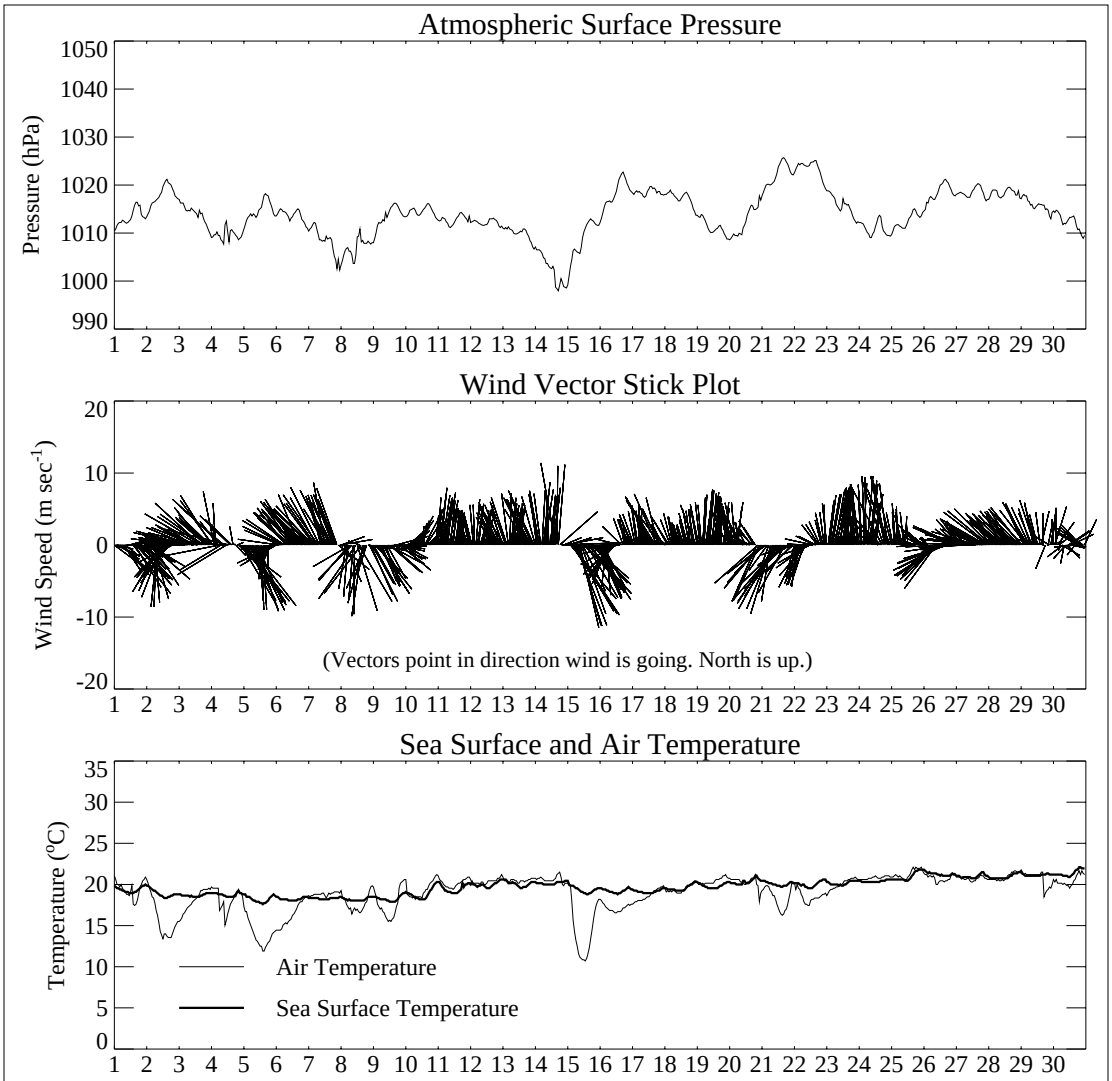


LATEX A Mooring 50 — March 1993

Latitude 28 52.86 N — Sample rate 1 hr
Longitude 95 02.22 W — Mast Height 3.6 m
Mean wind vector 1.4 (m sec^{-1}) from 83 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	743	26.0	1004.1	1030.1	1017.3	5.3
Wind Speed (m sec^{-1})	743	14.0	0.0	14.0	5.0	2.1
Air Temperature (^{o}C)	743	17.0	4.6	21.5	16.3	3.0
Sea Temperature (^{o}C)	743	5.6	15.1	20.6	17.0	1.1

Figure 50.93.03 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for March 1993.

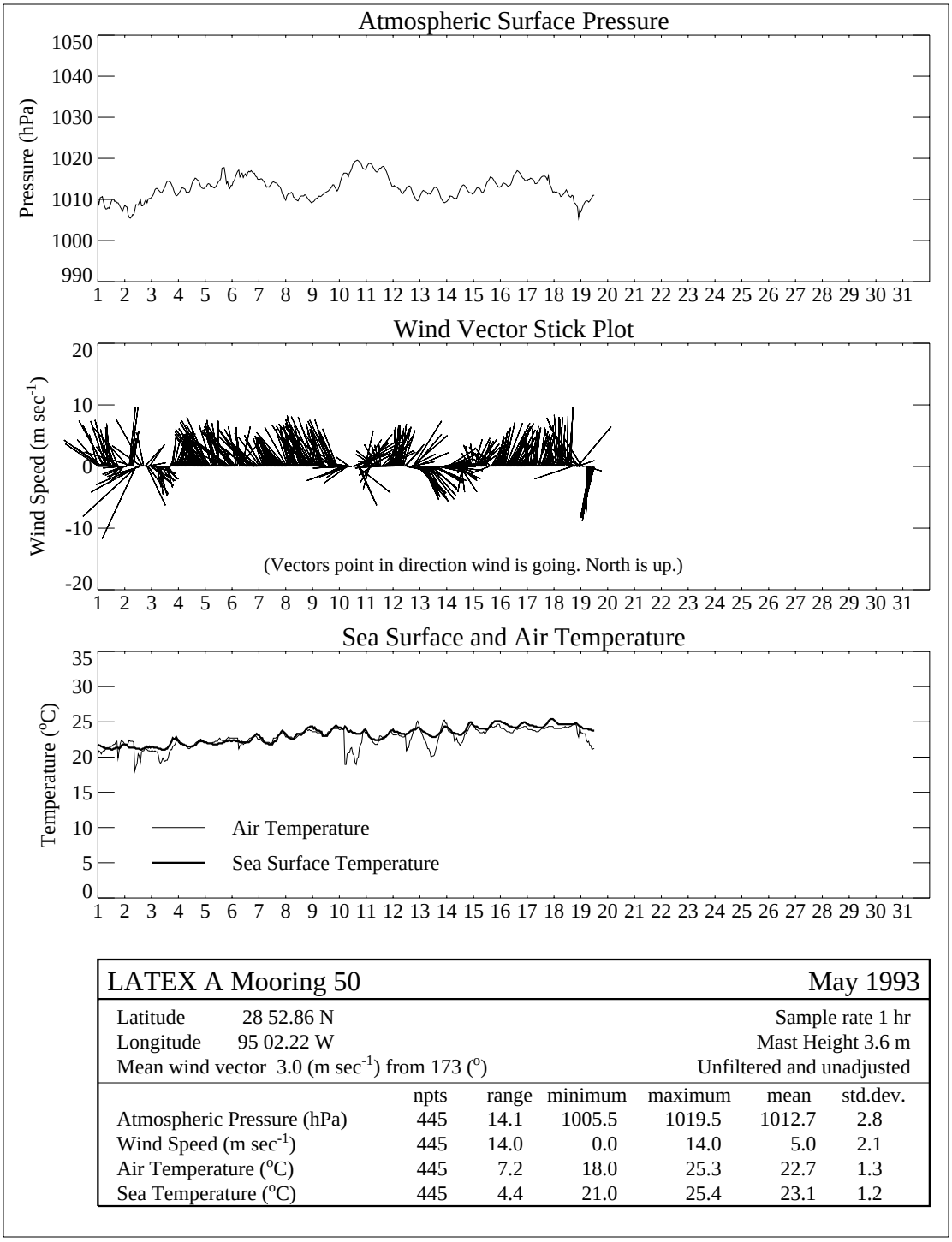


LATEX A Mooring 50 — April 1993

Latitude 28 52.86 N — Sample rate 1 hr
Longitude 95 02.22 W — Mast Height 3.6 m
Mean wind vector 1.8 (m sec^{-1}) from 143 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	27.7	998.0	1025.7	1013.9	4.8
Wind Speed (m sec^{-1})	720	14.0	0.0	14.0	5.0	2.1
Air Temperature (^{o}C)	720	11.4	10.7	22.1	19.0	2.2
Sea Temperature (^{o}C)	720	4.5	17.6	22.1	19.7	1.0

Figure 50.93.04 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for April 1993.

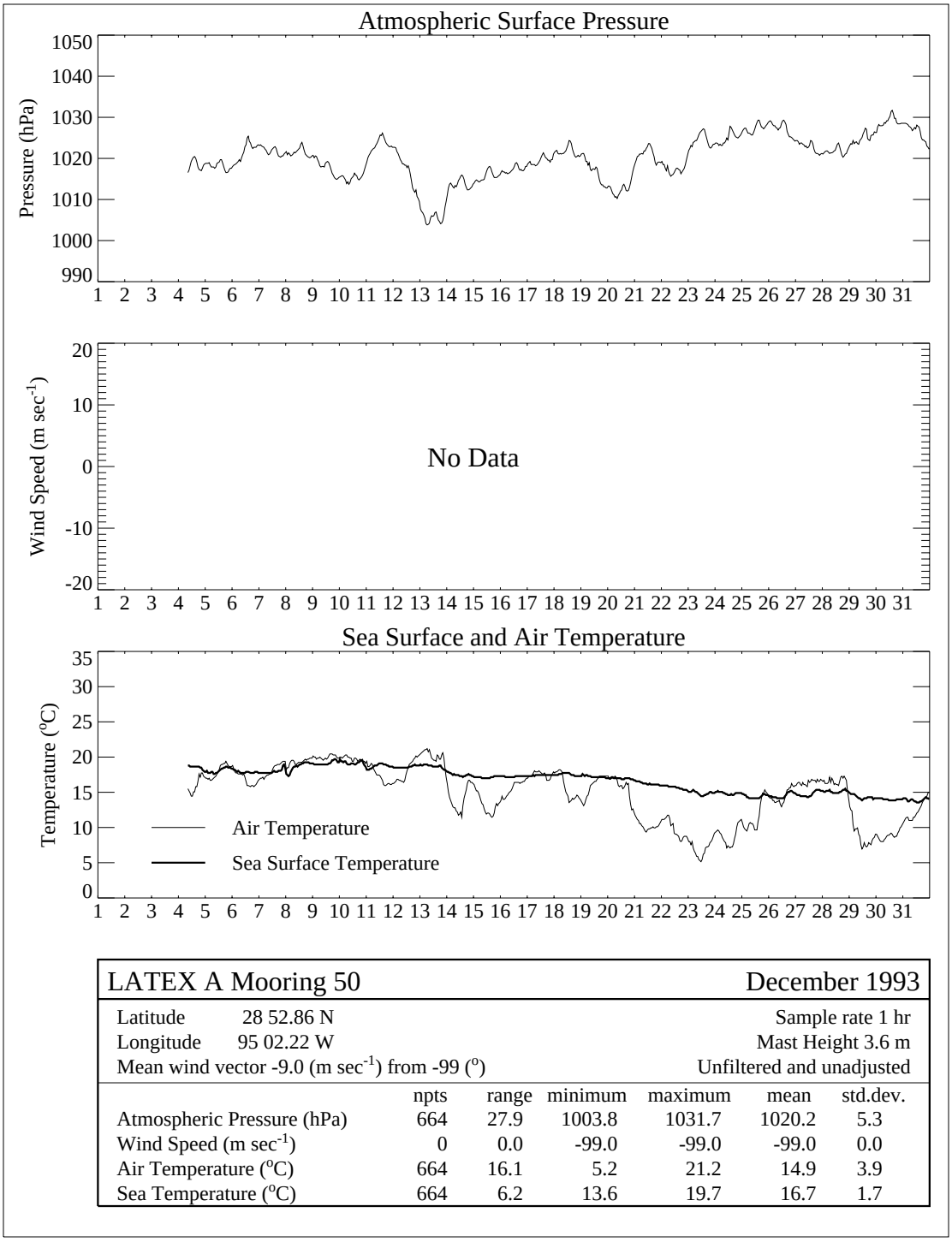


LATEX A Mooring 50 — May 1993

Latitude 28 52.86 N — Sample rate 1 hr
Longitude 95 02.22 W — Mast Height 3.6 m
Mean wind vector 3.0 (m sec^{-1}) from 173 (^{o}) — Unfiltered and unadjusted

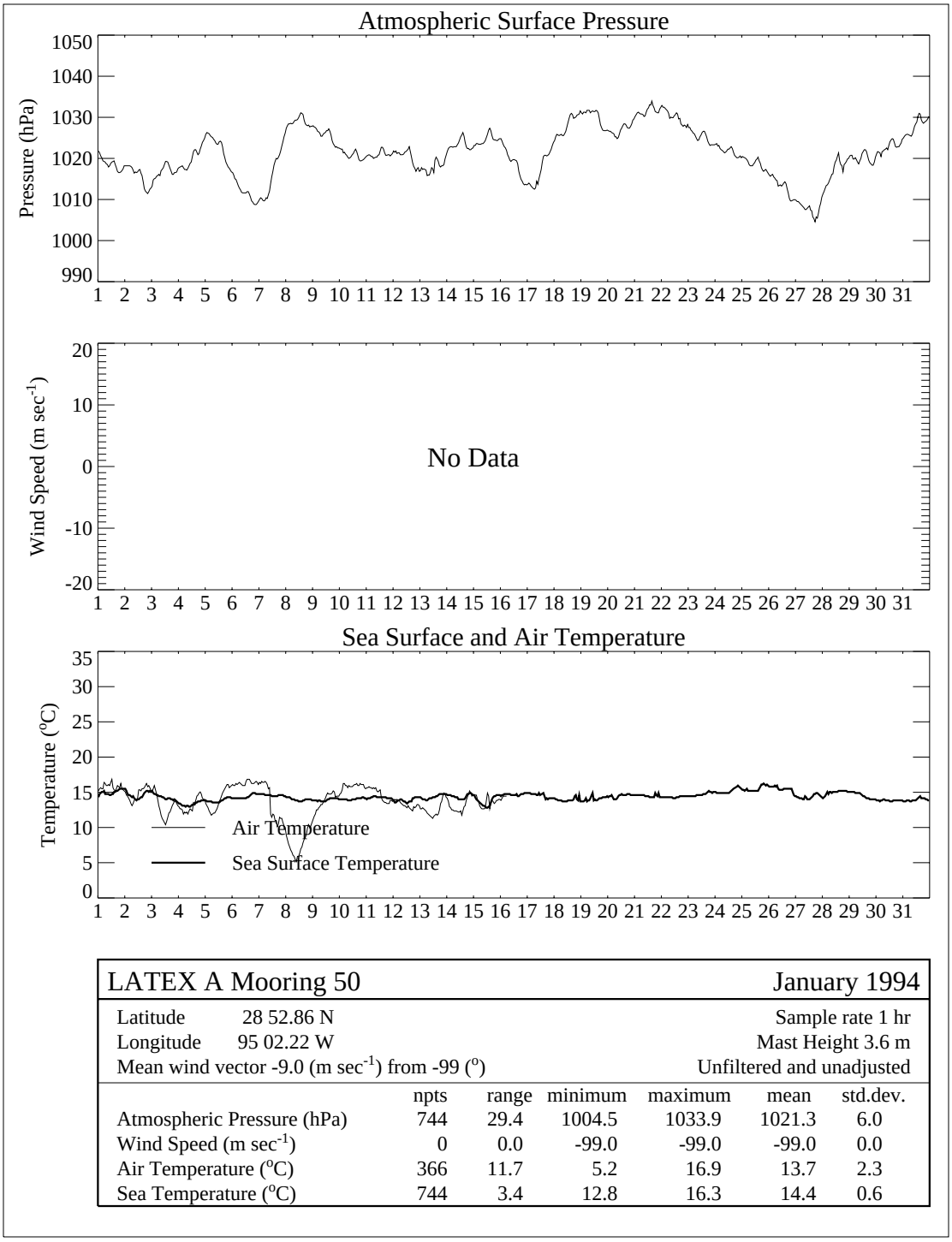
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	445	14.1	1005.5	1019.5	1012.7	2.8
Wind Speed (m sec^{-1})	445	14.0	0.0	14.0	5.0	2.1
Air Temperature (^{o}C)	445	7.2	18.0	25.3	22.7	1.3
Sea Temperature (^{o}C)	445	4.4	21.0	25.4	23.1	1.2

Figure 50.93.05 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for May 1993.



LATEX A Mooring 50						December 1993
Latitude	28 52.86 N					Sample rate 1 hr
Longitude	95 02.22 W					Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o})						Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	664	27.9	1003.8	1031.7	1020.2	5.3
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	664	16.1	5.2	21.2	14.9	3.9
Sea Temperature (^{o}C)	664	6.2	13.6	19.7	16.7	1.7

Figure 50.93.12 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for December 1993.

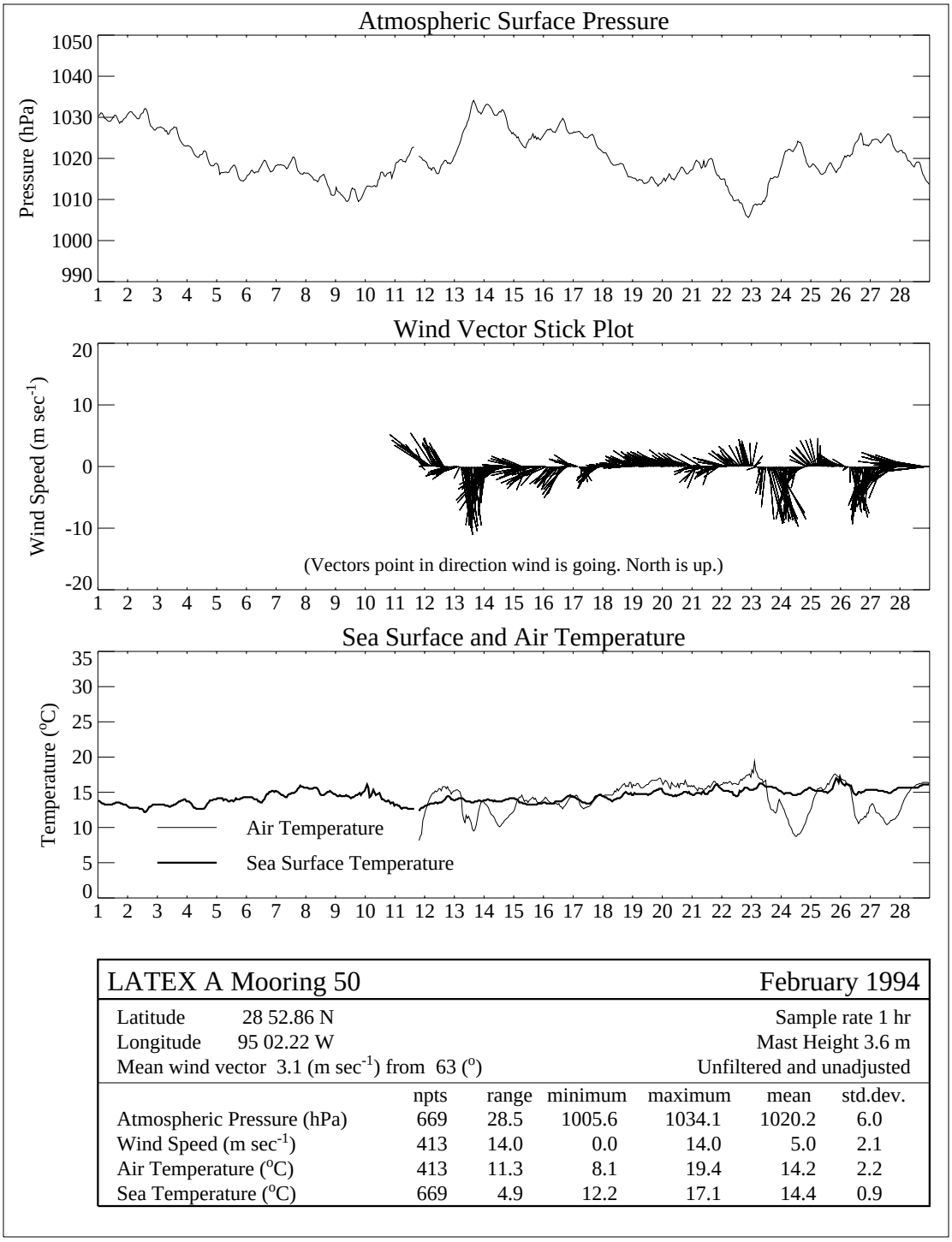


LATEX A Mooring 50 — January 1994

Latitude 28 52.86 N — Sample rate 1 hr
Longitude 95 02.22 W — Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	29.4	1004.5	1033.9	1021.3	6.0
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	366	11.7	5.2	16.9	13.7	2.3
Sea Temperature (^{o}C)	744	3.4	12.8	16.3	14.4	0.6

Figure 50.94.01 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for January 1994.

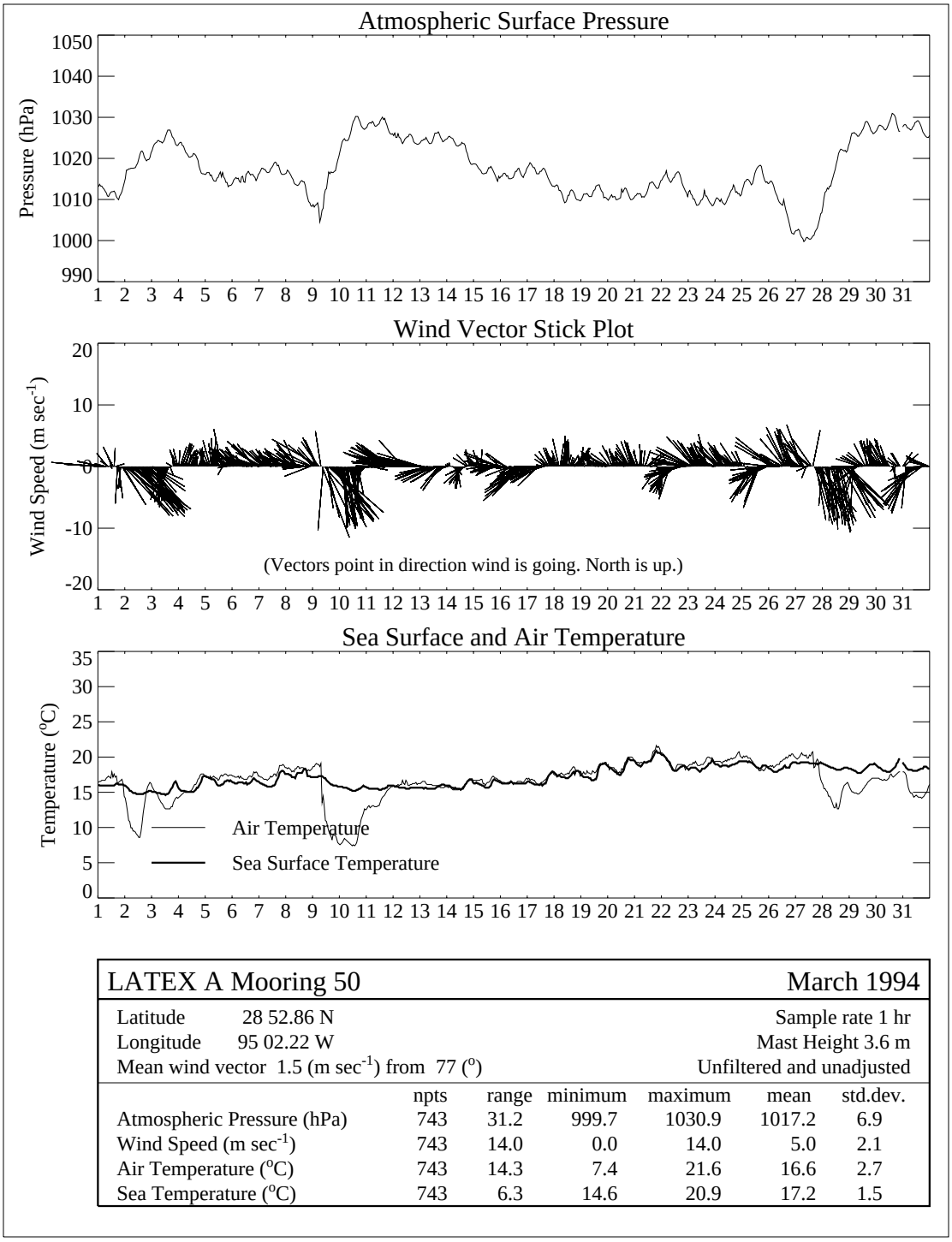


LATEX A Mooring 50 — February 1994

Latitude 28 52.86 N — Sample rate 1 hr
Longitude 95 02.22 W — Mast Height 3.6 m
Mean wind vector 3.1 (m sec^{-1}) from 63 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	669	28.5	1005.6	1034.1	1020.2	6.0
Wind Speed (m sec^{-1})	413	14.0	0.0	14.0	5.0	2.1
Air Temperature (^{o}C)	413	11.3	8.1	19.4	14.2	2.2
Sea Temperature (^{o}C)	669	4.9	12.2	17.1	14.4	0.9

Figure 50.94.02 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for February 1994.

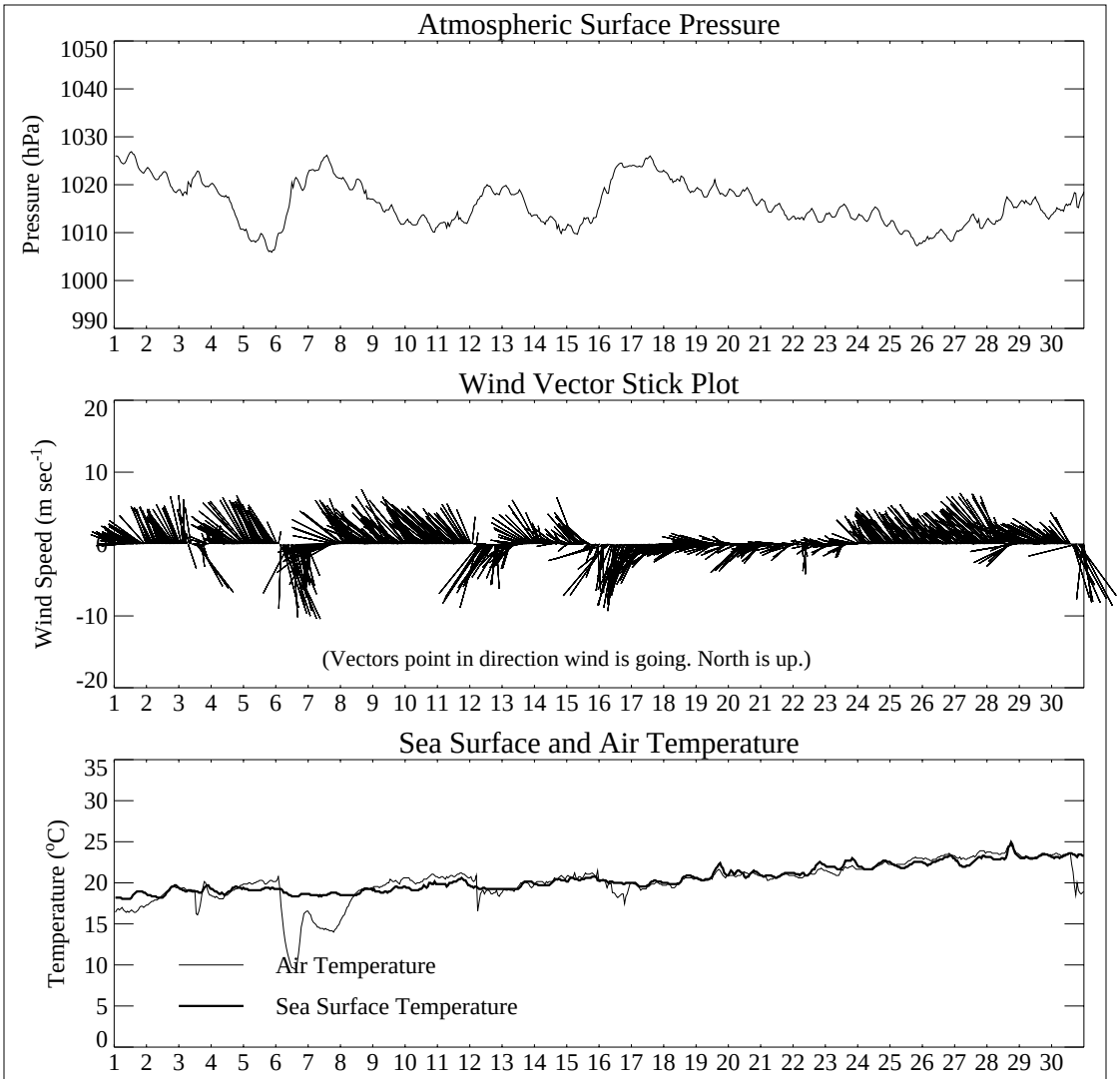


LATEX A Mooring 50 — March 1994

Latitude 28 52.86 N — Sample rate 1 hr
Longitude 95 02.22 W — Mast Height 3.6 m
Mean wind vector 1.5 (m sec^{-1}) from 77 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	743	31.2	999.7	1030.9	1017.2	6.9
Wind Speed (m sec^{-1})	743	14.0	0.0	14.0	5.0	2.1
Air Temperature (^{o}C)	743	14.3	7.4	21.6	16.6	2.7
Sea Temperature (^{o}C)	743	6.3	14.6	20.9	17.2	1.5

Figure 50.94.03 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for March 1994.

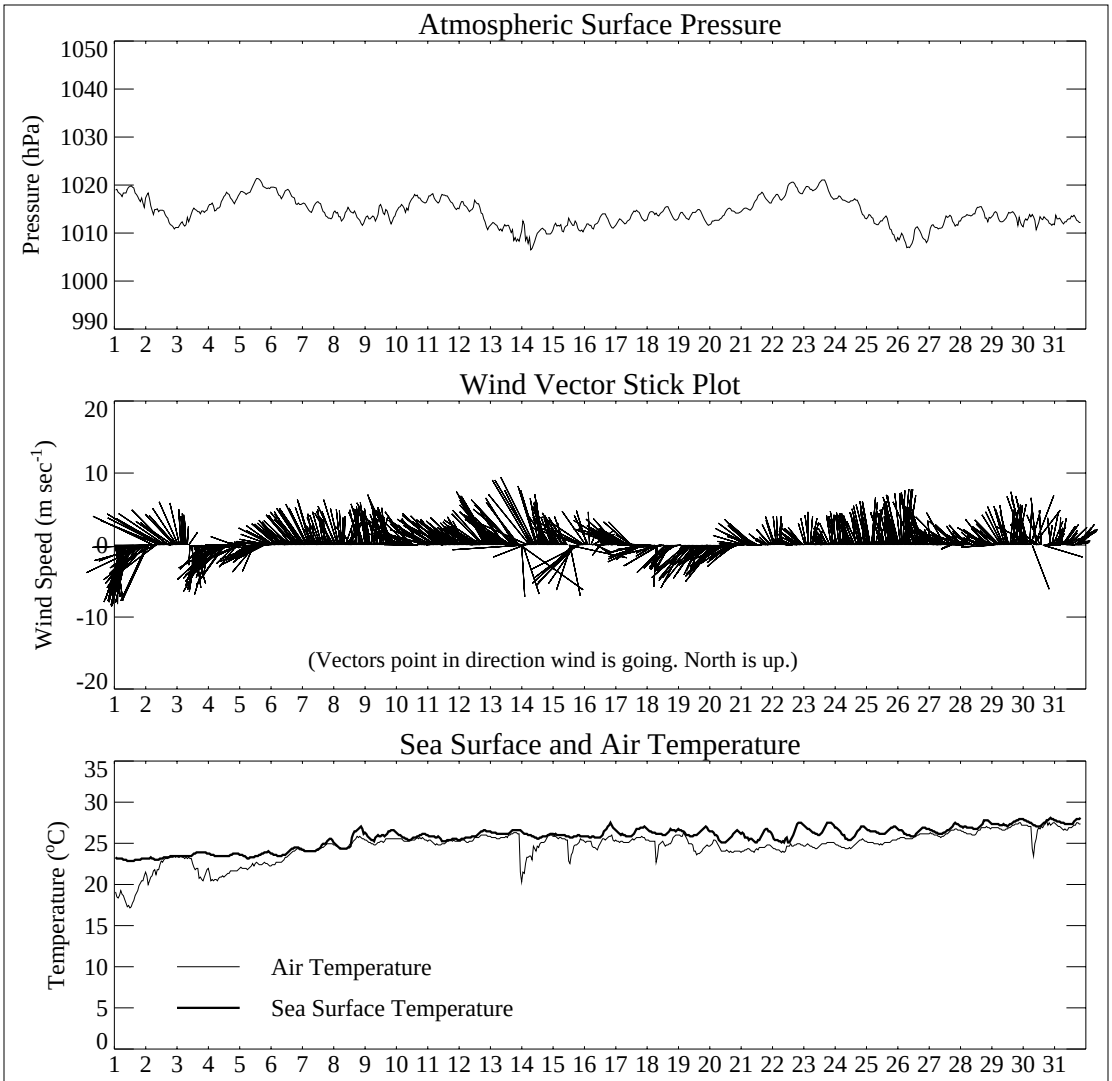


LATEX A Mooring 50 — April 1994

Latitude 28 52.86 N — Sample rate 1 hr
Longitude 95 02.22 W — Mast Height 3.6 m
Mean wind vector 3.3 (m sec^{-1}) from 104 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	21.0	1005.9	1026.9	1016.1	4.7
Wind Speed (m sec^{-1})	720	14.0	0.0	14.0	5.0	2.1
Air Temperature (^{o}C)	720	15.1	9.5	24.6	20.2	2.4
Sea Temperature (^{o}C)	720	6.9	18.0	25.0	20.5	1.6

Figure 50.94.04 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for April 1994.

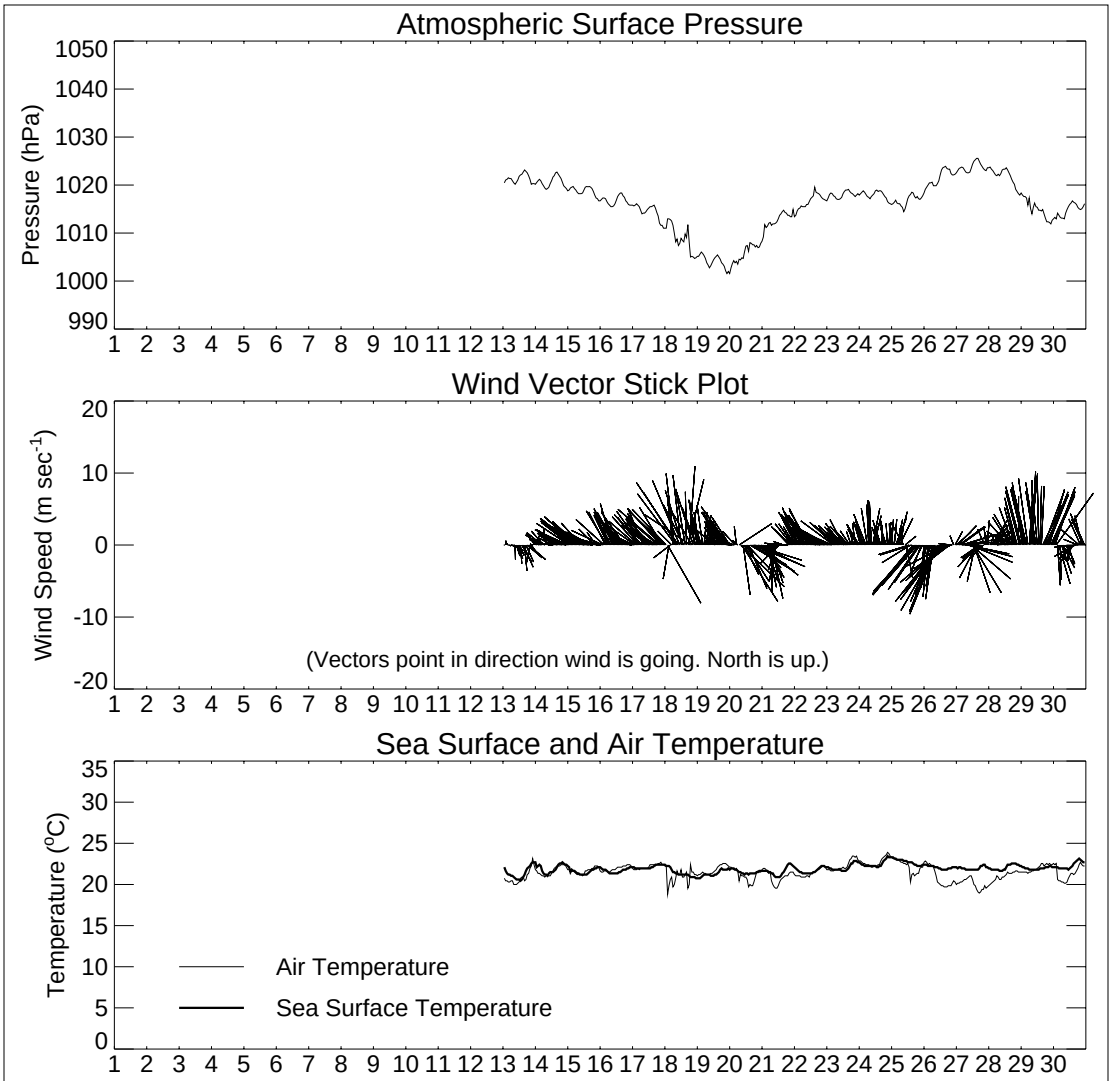


LATEX A Mooring 50 — May 1994

Latitude 28 52.86 N — Sample rate 1 hr
Longitude 95 02.22 W — Mast Height 3.6 m
Mean wind vector 2.9 (m sec^{-1}) from 125 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	740	14.8	1006.5	1021.3	1014.3	2.9
Wind Speed (m sec^{-1})	740	14.0	0.0	14.0	5.0	2.1
Air Temperature (^{o}C)	740	10.6	17.1	27.8	24.6	1.8
Sea Temperature (^{o}C)	740	5.2	22.9	28.1	25.7	1.3

Figure 50.94.05 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for May 1994.

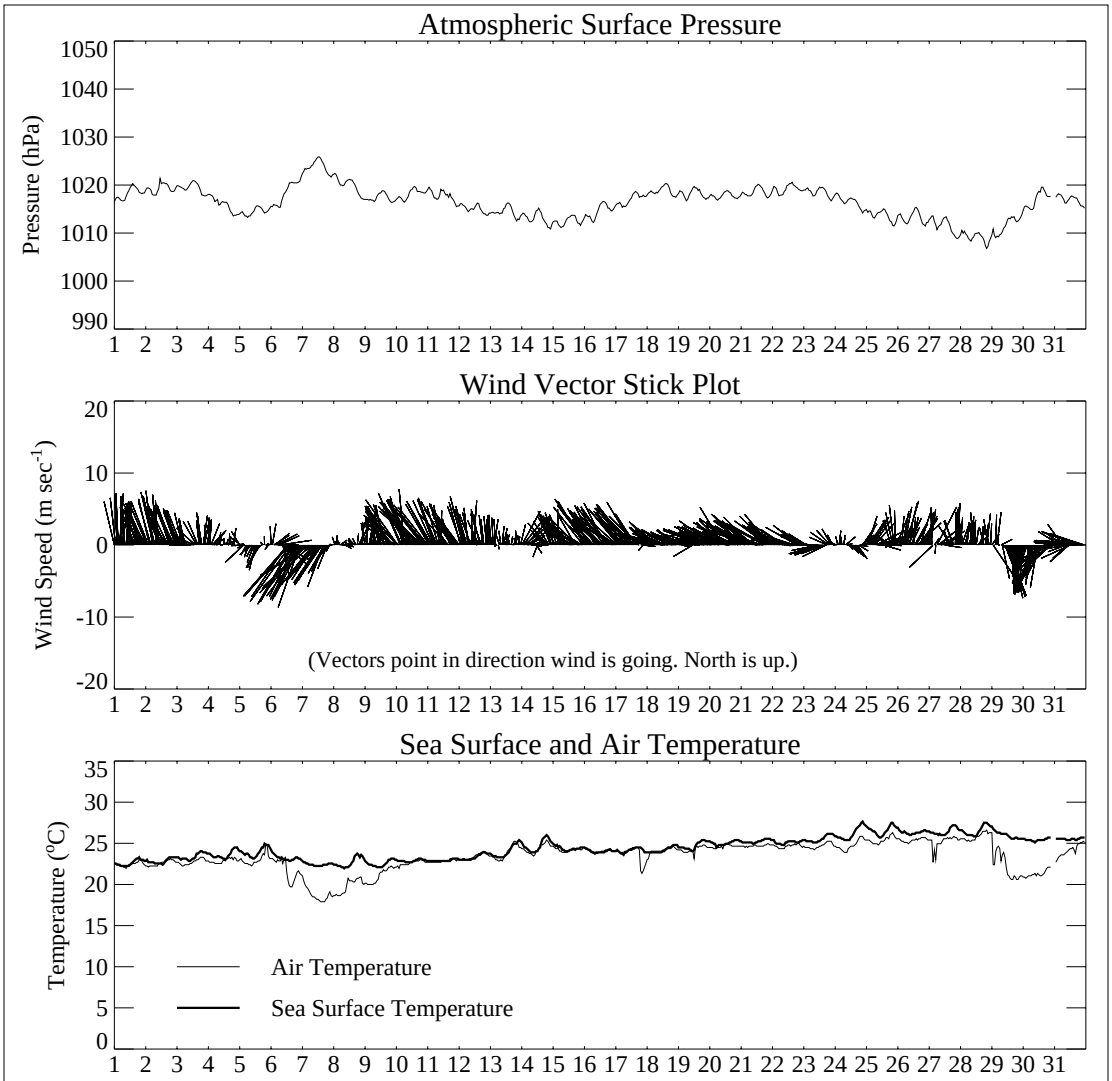


LATEX A Mooring 51 — April 1992

Latitude 28 50.28 N — Sample rate 1 hr
Longitude 94 04.80 W — Mast Height 3.6 m
Mean wind vector 2.0 (m sec^{-1}) from 141 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	431	24.0	1001.5	1025.6	1016.1	5.5
Wind Speed (m sec^{-1})	431	14.8	0.0	14.8	5.4	2.3
Air Temperature (^{o}C)	431	5.1	18.8	23.9	21.5	0.9
Sea Temperature (^{o}C)	431	3.0	20.5	23.5	21.9	0.5

Figure 51.92.04 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for April 1992.

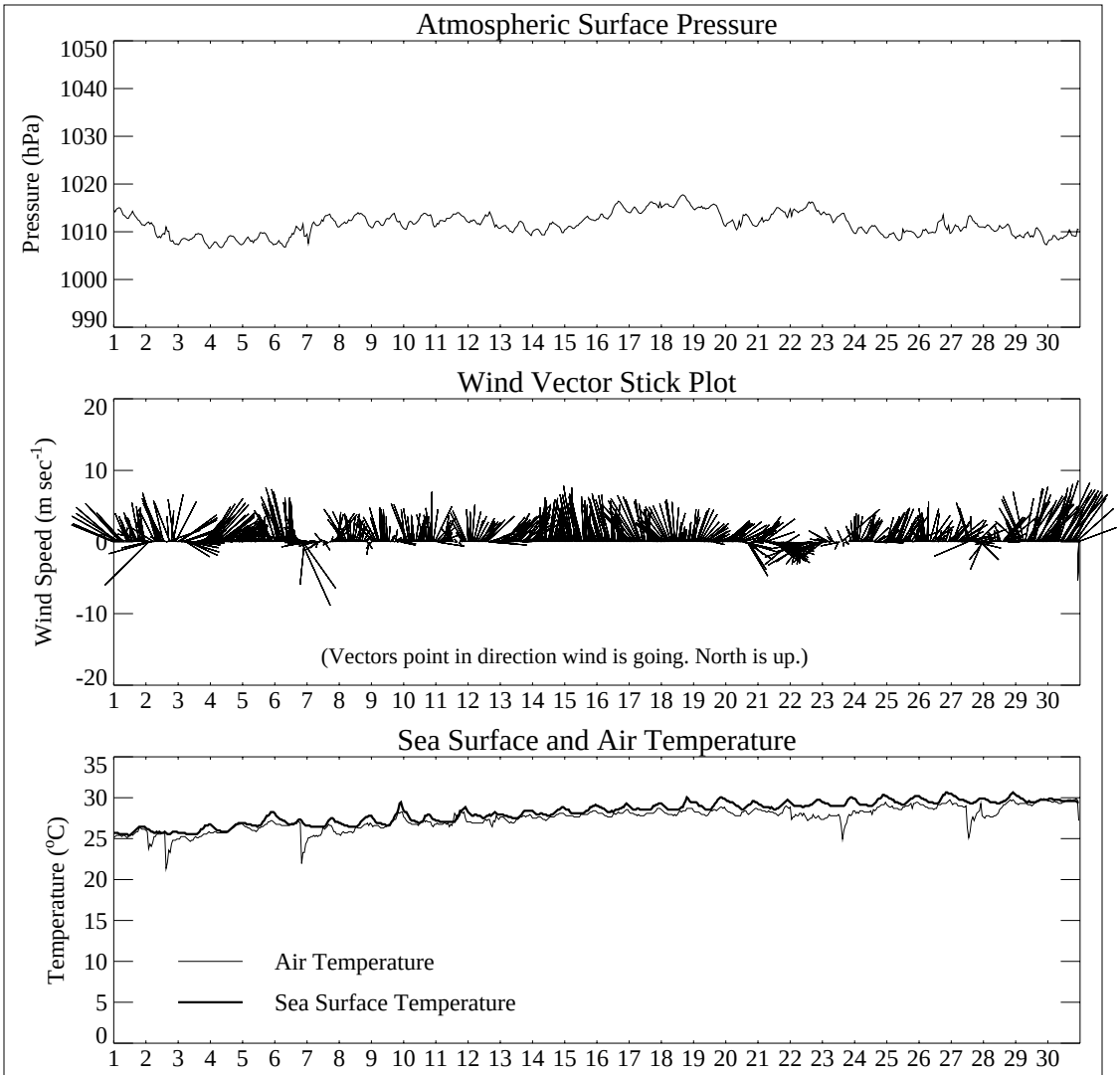


LATEX A Mooring 51 — May 1992

Latitude 28 50.28 N — Sample rate 1 hr
Longitude 94 04.80 W — Mast Height 3.6 m
Mean wind vector 2.6 (m sec^{-1}) from 136 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	741	19.0	1006.8	1025.8	1016.4	3.2
Wind Speed (m sec^{-1})	741	14.8	0.0	14.8	5.4	2.3
Air Temperature (^{o}C)	741	8.7	17.9	26.6	23.4	1.7
Sea Temperature (^{o}C)	741	5.7	22.0	27.6	24.4	1.4

Figure 51.92.05 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for May 1992.

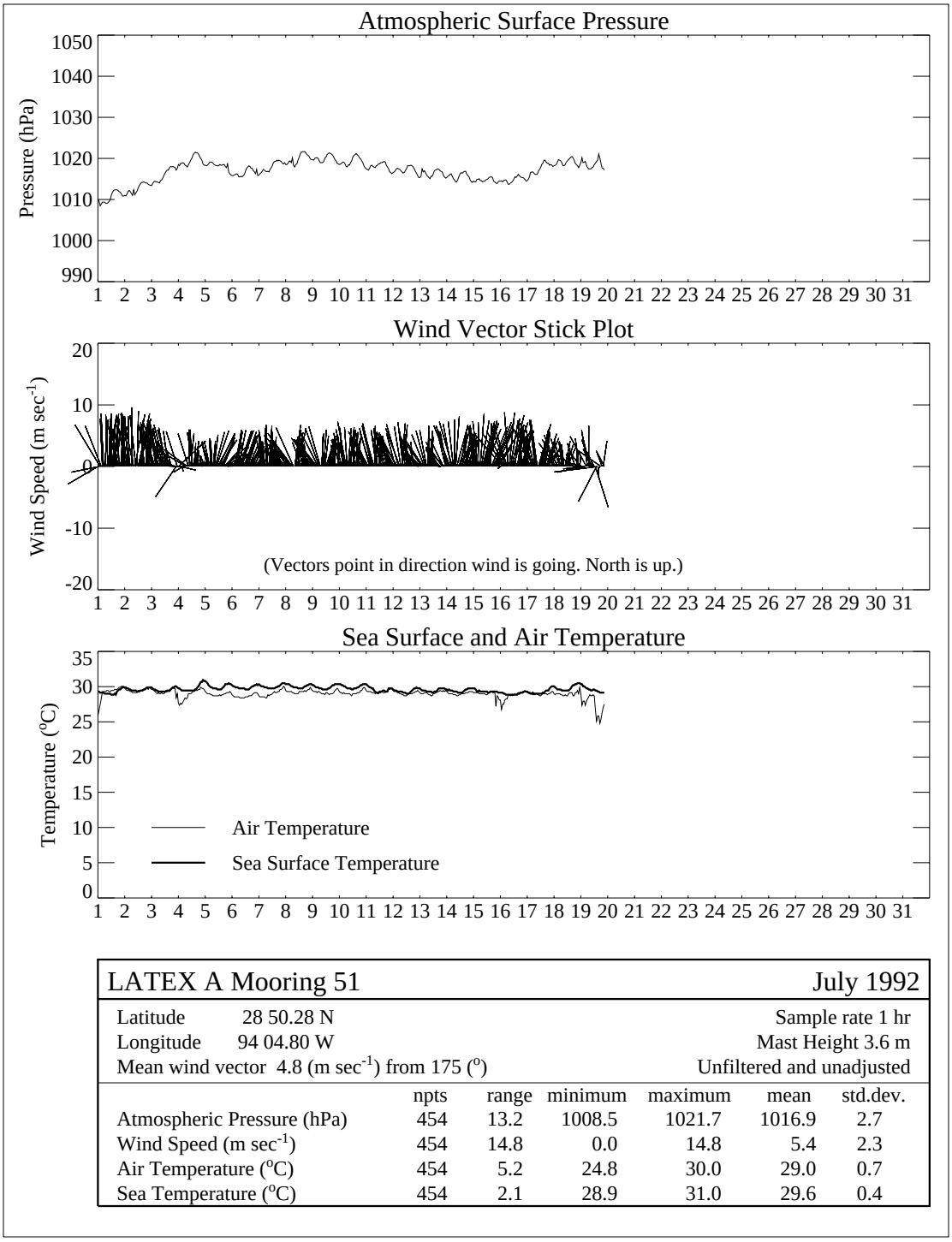


LATEX A Mooring 51 — June 1992

Latitude 28 50.28 N — Sample rate 1 hr
Longitude 94 04.80 W — Mast Height 3.6 m
Mean wind vector 2.8 (m sec^{-1}) from 194 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	11.3	1006.5	1017.7	1011.6	2.4
Wind Speed (m sec^{-1})	720	14.8	0.0	14.8	5.4	2.3
Air Temperature (^{o}C)	720	8.5	21.4	29.9	27.5	1.4
Sea Temperature (^{o}C)	720	5.2	25.4	30.6	28.2	1.4

Figure 51.92.06 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for June 1992.

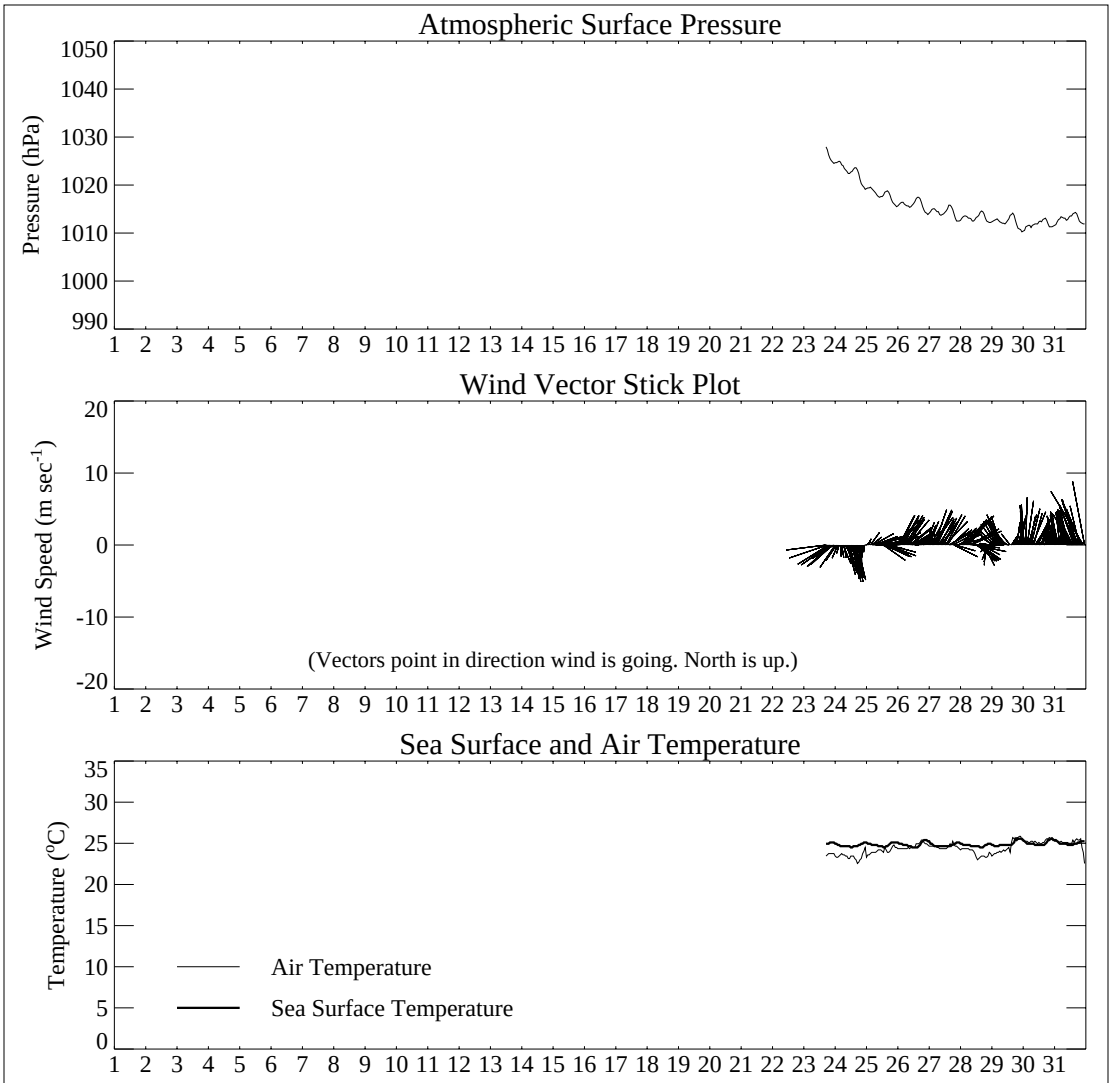


LATEX A Mooring 51 — July 1992

Latitude 28 50.28 N — Sample rate 1 hr
Longitude 94 04.80 W — Mast Height 3.6 m
Mean wind vector 4.8 (m sec^{-1}) from 175 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	454	13.2	1008.5	1021.7	1016.9	2.7
Wind Speed (m sec^{-1})	454	14.8	0.0	14.8	5.4	2.3
Air Temperature (^{o}C)	454	5.2	24.8	30.0	29.0	0.7
Sea Temperature (^{o}C)	454	2.1	28.9	31.0	29.6	0.4

Figure 51.92.07 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for July 1992.

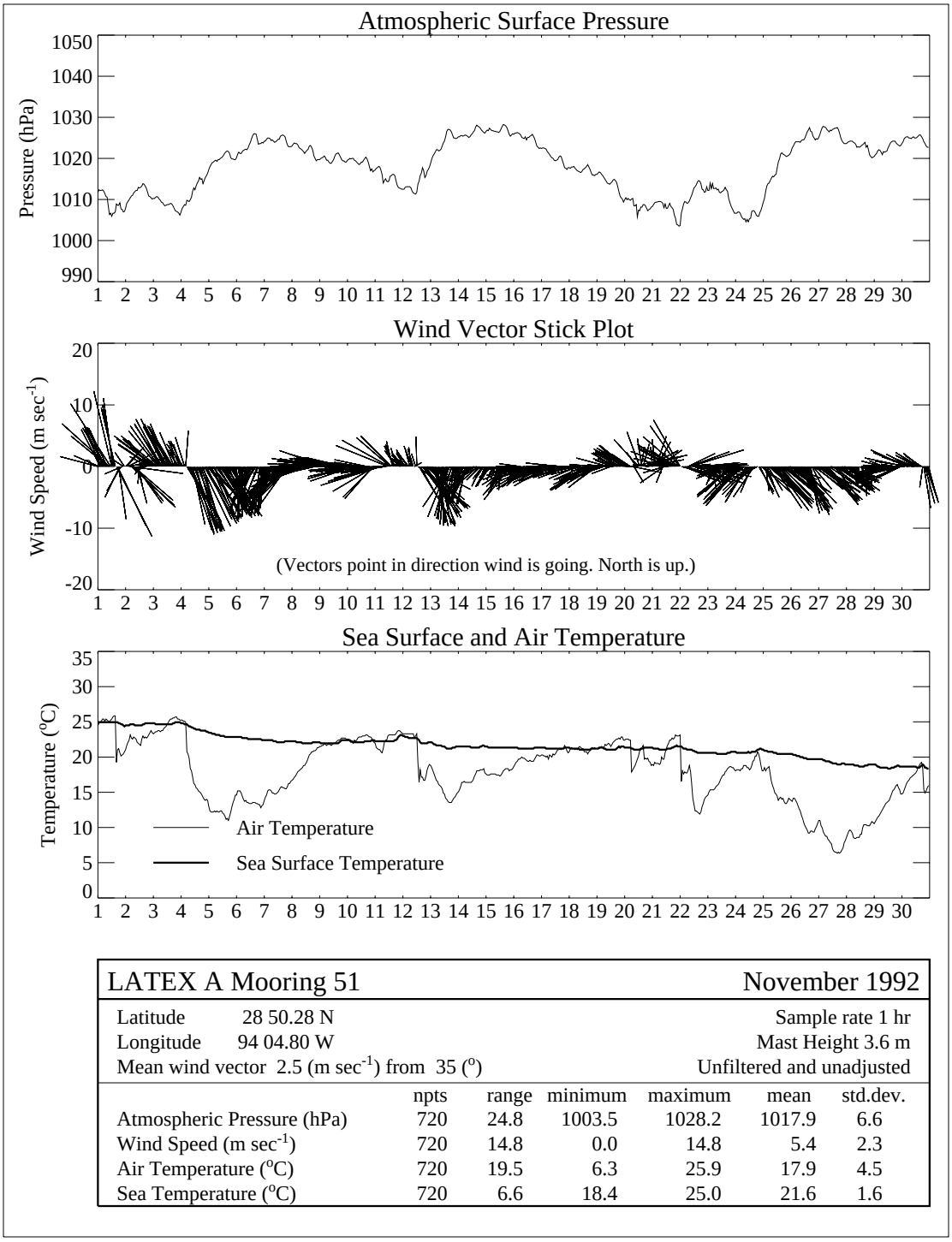


LATEX A Mooring 51 — October 1992

Latitude 28 50.28 N — Sample rate 1 hr
Longitude 94 04.80 W — Mast Height 3.6 m
Mean wind vector 1.9 (m sec^{-1}) from 207 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	199	17.7	1010.2	1027.9	1015.5	4.1
Wind Speed (m sec^{-1})	199	14.8	0.0	14.8	5.4	2.3
Air Temperature (^{o}C)	199	3.3	22.5	25.9	24.4	0.8
Sea Temperature (^{o}C)	199	1.0	24.5	25.5	24.9	0.3

Figure 51.92.10 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for October 1992.

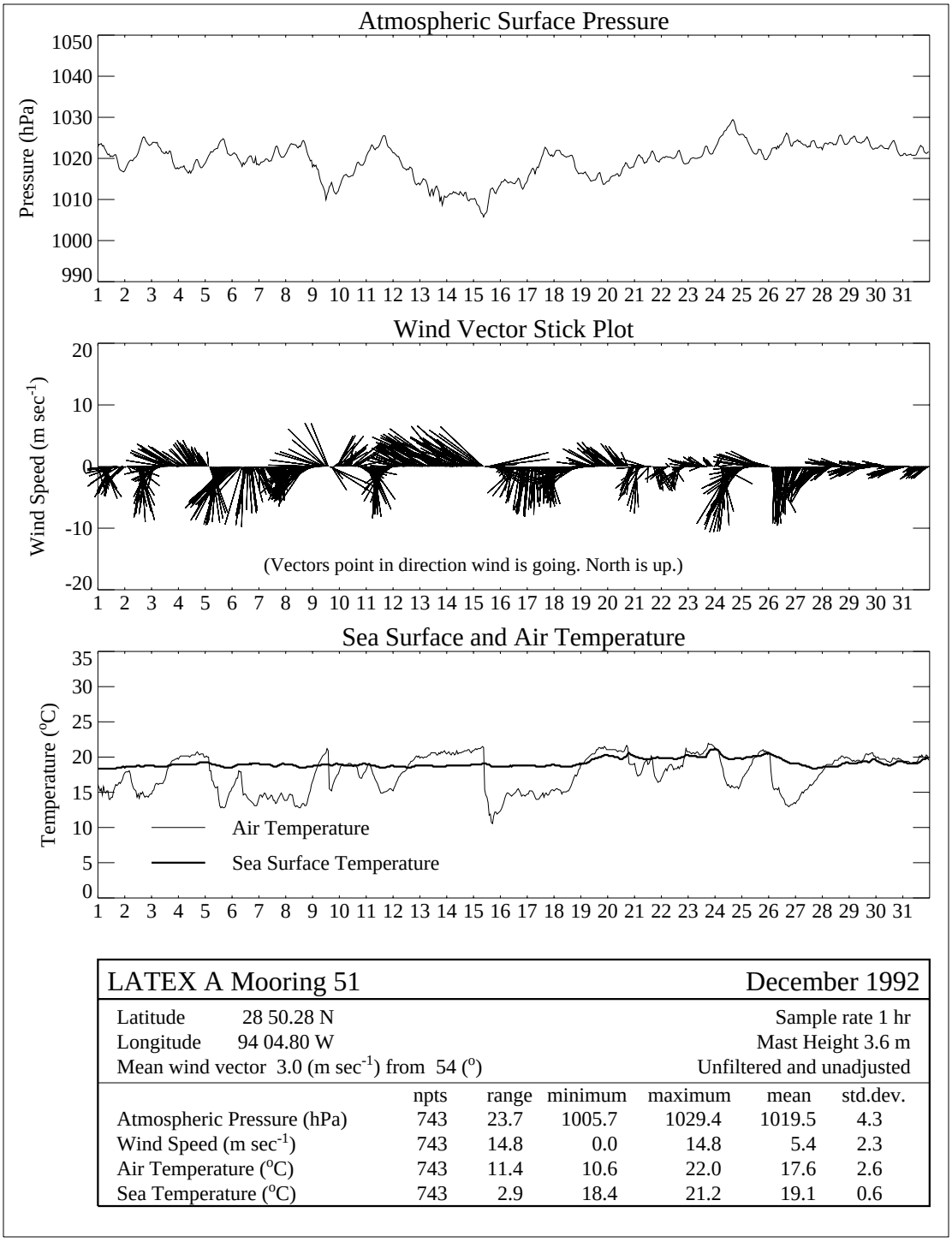


LATEX A Mooring 51 — November 1992

Latitude 28 50.28 N — Sample rate 1 hr
Longitude 94 04.80 W — Mast Height 3.6 m
Mean wind vector 2.5 (m sec^{-1}) from 35 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	24.8	1003.5	1028.2	1017.9	6.6
Wind Speed (m sec^{-1})	720	14.8	0.0	14.8	5.4	2.3
Air Temperature (^{o}C)	720	19.5	6.3	25.9	17.9	4.5
Sea Temperature (^{o}C)	720	6.6	18.4	25.0	21.6	1.6

Figure 51.92.11 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for November 1992.

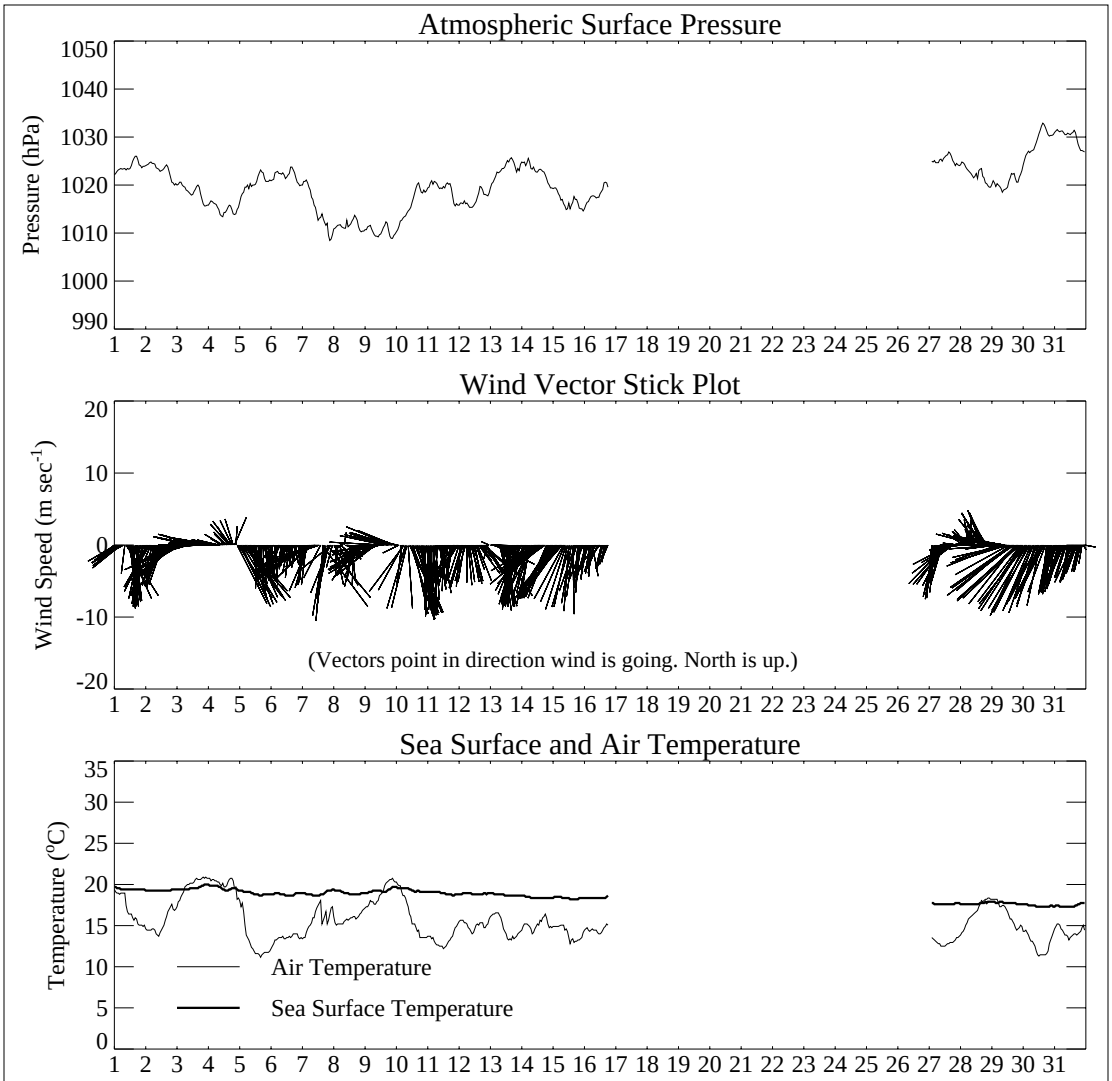


LATEX A Mooring 51 — December 1992

Latitude 28 50.28 N — Sample rate 1 hr
Longitude 94 04.80 W — Mast Height 3.6 m
Mean wind vector 3.0 (m sec^{-1}) from 54 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	743	23.7	1005.7	1029.4	1019.5	4.3
Wind Speed (m sec^{-1})	743	14.8	0.0	14.8	5.4	2.3
Air Temperature (^{o}C)	743	11.4	10.6	22.0	17.6	2.6
Sea Temperature (^{o}C)	743	2.9	18.4	21.2	19.1	0.6

Figure 51.92.12 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for December 1992.

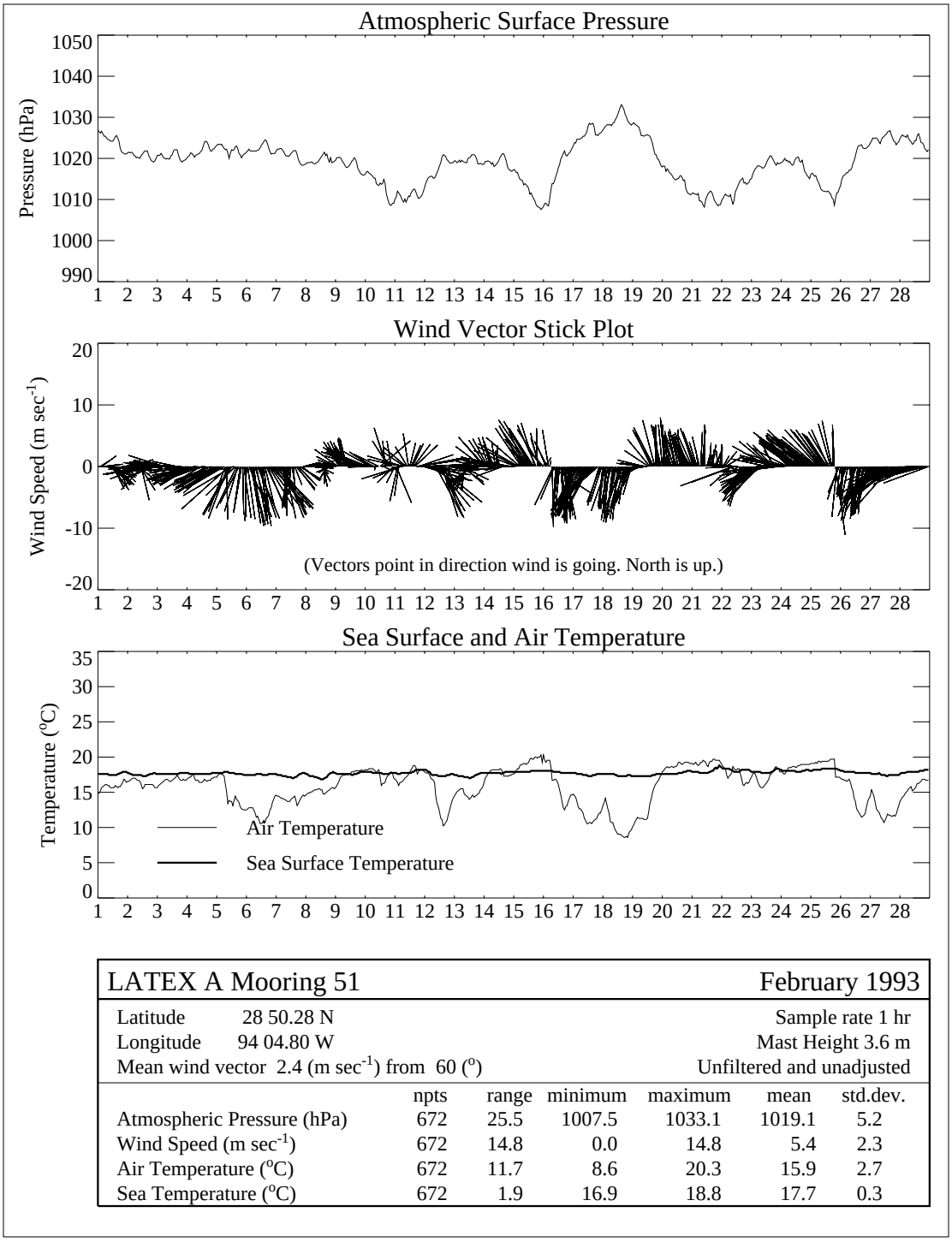


LATEX A Mooring 51 — January 1993

Latitude 28 50.28 N — Sample rate 1 hr
Longitude 94 04.80 W — Mast Height 3.6 m
Mean wind vector 4.7 (m sec^{-1}) from 25 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	497	24.5	1008.5	1032.9	1020.0	5.3
Wind Speed (m sec^{-1})	497	14.8	0.0	14.8	5.4	2.3
Air Temperature (^{o}C)	497	9.8	11.1	20.9	15.5	2.4
Sea Temperature (^{o}C)	497	2.7	17.3	20.0	18.7	0.7

Figure 51.93.01 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for January 1993.

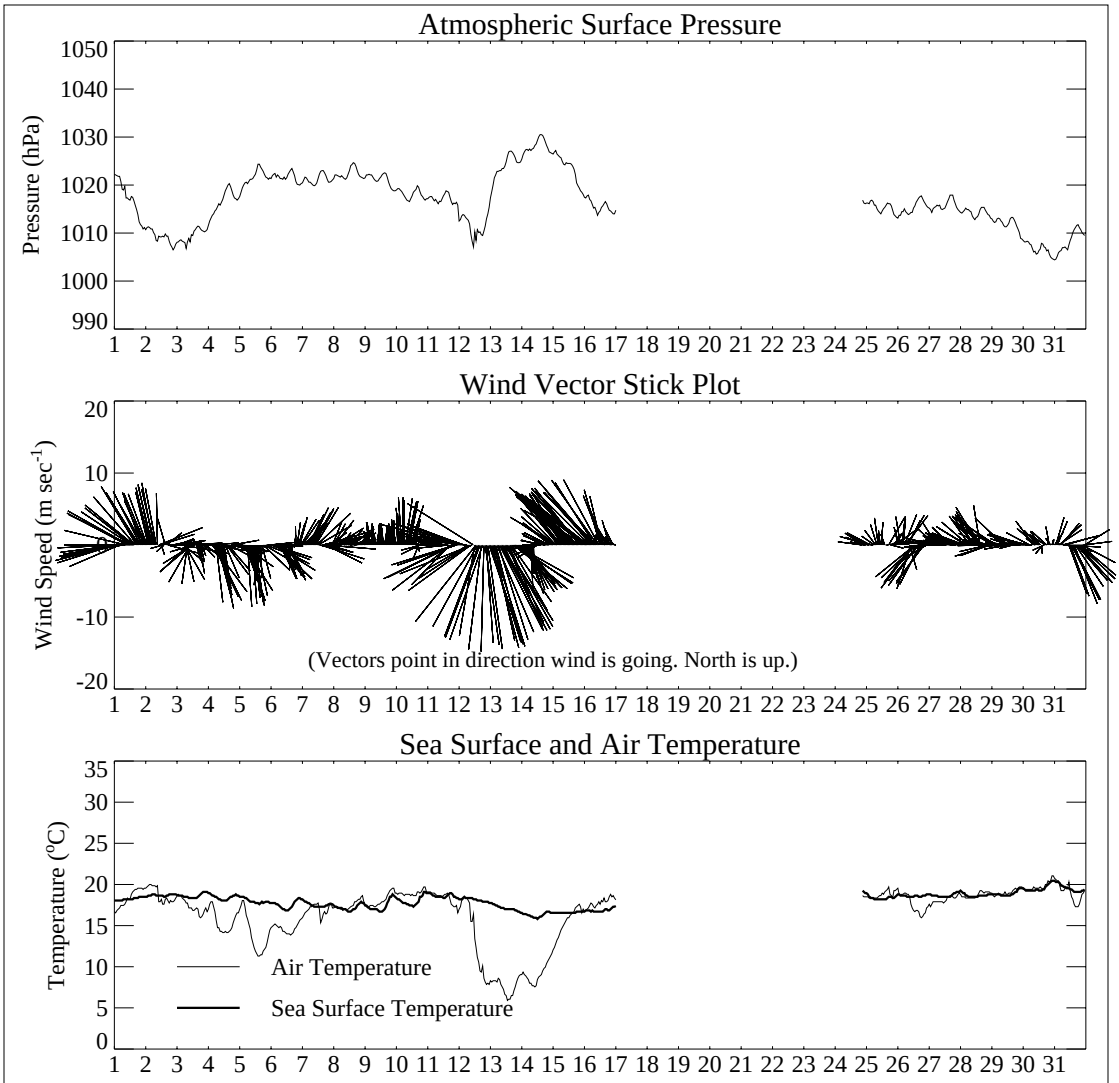


LATEX A Mooring 51 — February 1993

Latitude 28 50.28 N — Sample rate 1 hr
Longitude 94 04.80 W — Mast Height 3.6 m
Mean wind vector 2.4 (m sec^{-1}) from 60 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	672	25.5	1007.5	1033.1	1019.1	5.2
Wind Speed (m sec^{-1})	672	14.8	0.0	14.8	5.4	2.3
Air Temperature (^{o}C)	672	11.7	8.6	20.3	15.9	2.7
Sea Temperature (^{o}C)	672	1.9	16.9	18.8	17.7	0.3

Figure 51.93.02 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for February 1993.

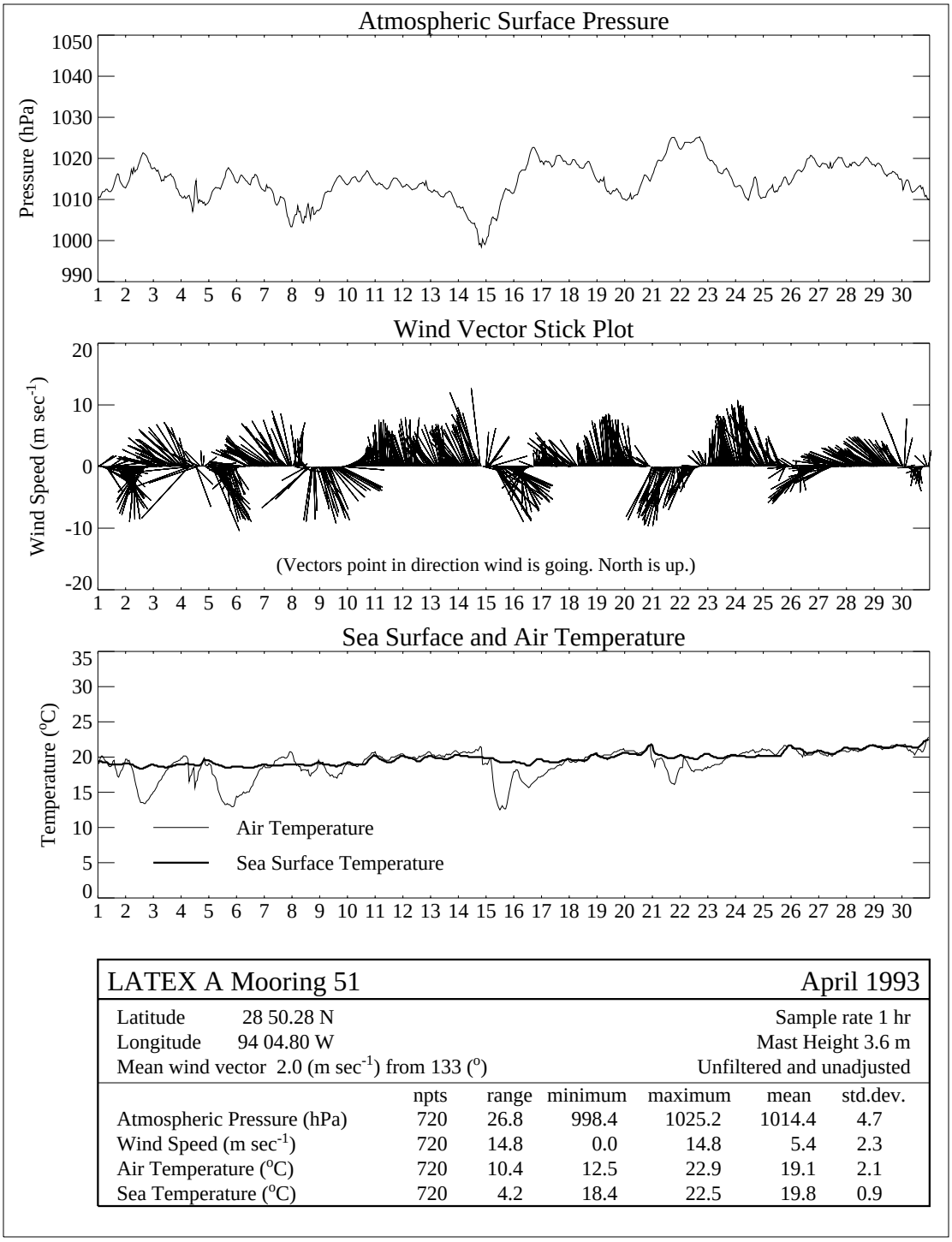


LATEX A Mooring 51 — March 1993

Latitude 28 50.28 N — Sample rate 1 hr
Longitude 94 04.80 W — Mast Height 3.6 m
Mean wind vector 0.8 (m sec^{-1}) from 92 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	556	26.1	1004.4	1030.5	1016.8	5.7
Wind Speed (m sec^{-1})	556	14.8	0.0	14.8	5.4	2.3
Air Temperature (^{o}C)	556	15.1	5.9	21.0	16.7	3.3
Sea Temperature (^{o}C)	556	4.7	15.8	20.5	18.1	0.9

Figure 51.93.03 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for March 1993.

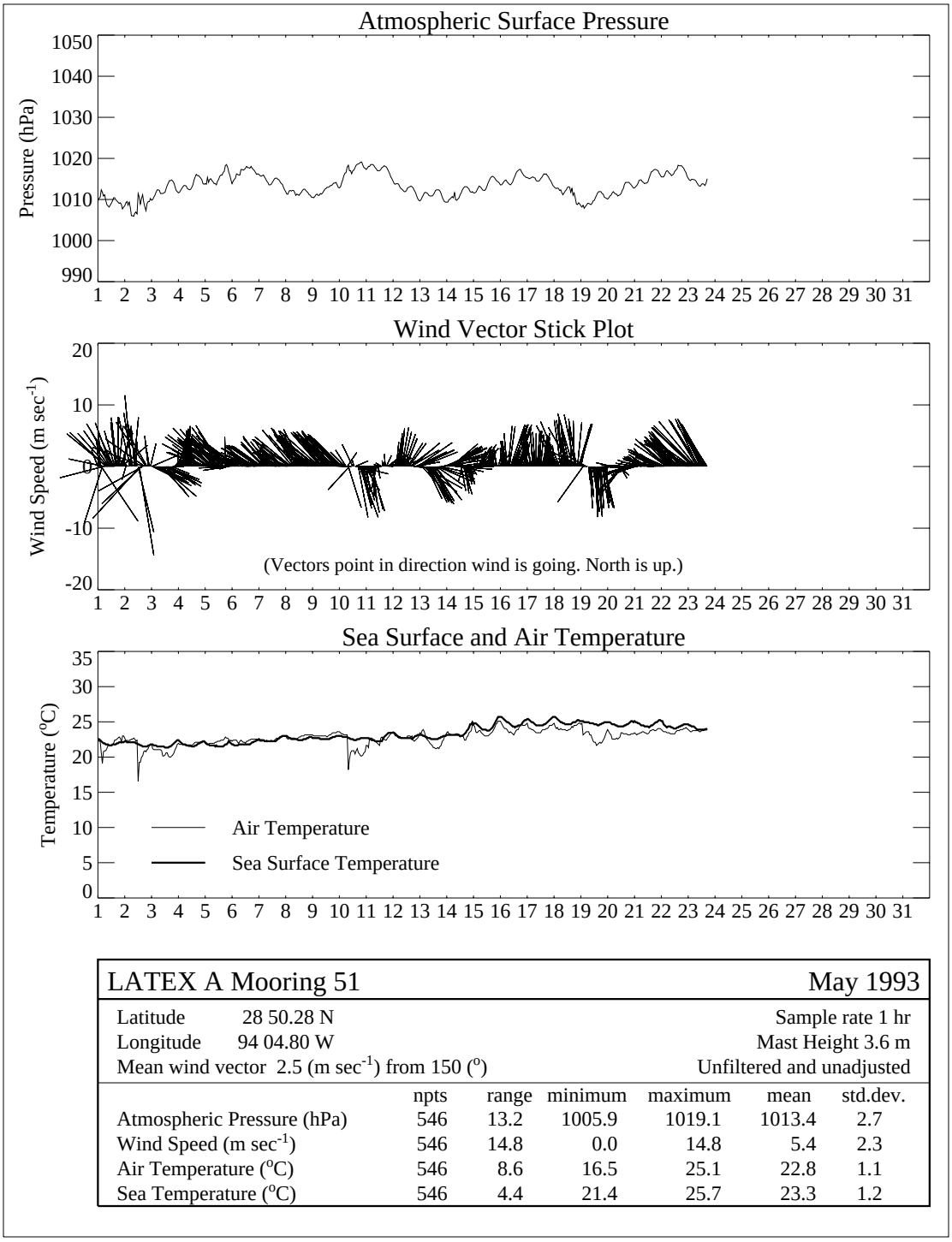


LATEX A Mooring 51 — April 1993

Latitude 28 50.28 N — Sample rate 1 hr
Longitude 94 04.80 W — Mast Height 3.6 m
Mean wind vector 2.0 (m sec^{-1}) from 133 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	26.8	998.4	1025.2	1014.4	4.7
Wind Speed (m sec^{-1})	720	14.8	0.0	14.8	5.4	2.3
Air Temperature (^{o}C)	720	10.4	12.5	22.9	19.1	2.1
Sea Temperature (^{o}C)	720	4.2	18.4	22.5	19.8	0.9

Figure 51.93.04 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for April 1993.

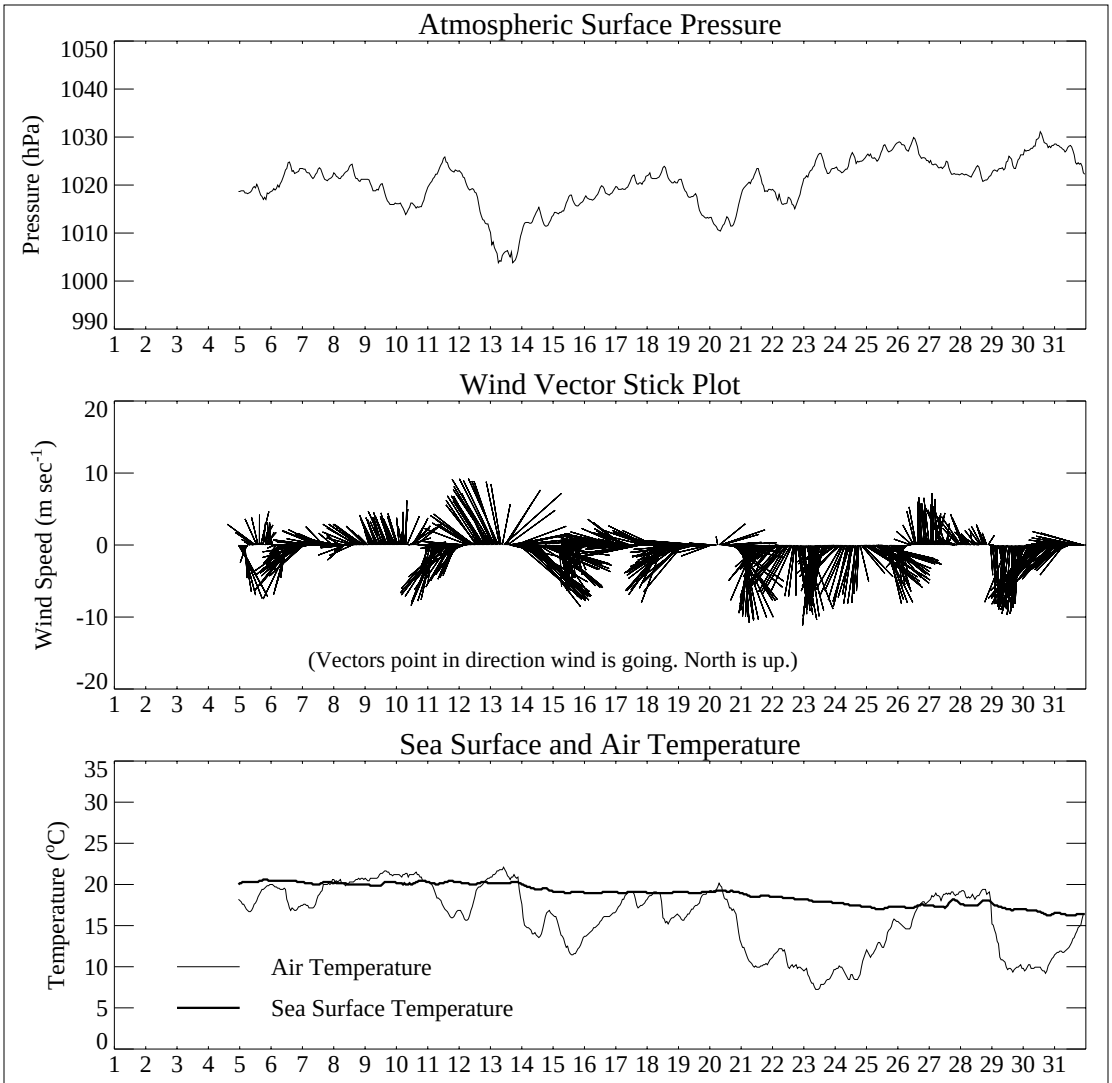


LATEX A Mooring 51 — May 1993

Latitude 28 50.28 N — Sample rate 1 hr
Longitude 94 04.80 W — Mast Height 3.6 m
Mean wind vector 2.5 (m sec^{-1}) from 150 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	546	13.2	1005.9	1019.1	1013.4	2.7
Wind Speed (m sec^{-1})	546	14.8	0.0	14.8	5.4	2.3
Air Temperature (^{o}C)	546	8.6	16.5	25.1	22.8	1.1
Sea Temperature (^{o}C)	546	4.4	21.4	25.7	23.3	1.2

Figure 51.93.05 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for May 1993.

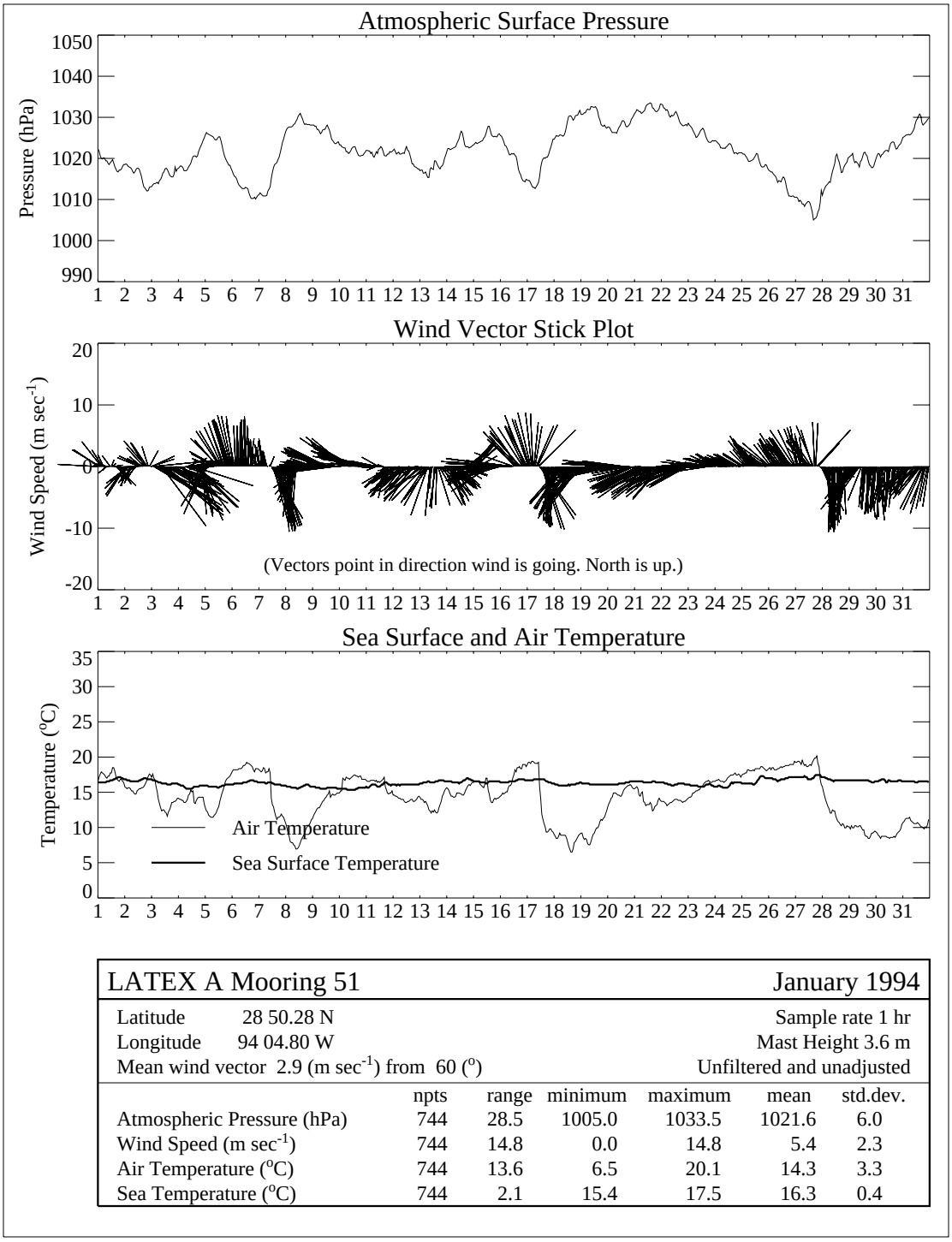


LATEX A Mooring 51 — December 1993

Latitude 28 50.28 N — Sample rate 1 hr
Longitude 94 04.80 W — Mast Height 3.6 m
Mean wind vector 2.4 (m sec^{-1}) from 39 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	649	27.3	1003.8	1031.1	1020.3	5.3
Wind Speed (m sec^{-1})	649	14.8	0.0	14.8	5.4	2.3
Air Temperature (^{o}C)	649	14.9	7.2	22.1	15.9	4.0
Sea Temperature (^{o}C)	649	4.4	16.3	20.6	18.8	1.3

Figure 51.93.12 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for December 1993.

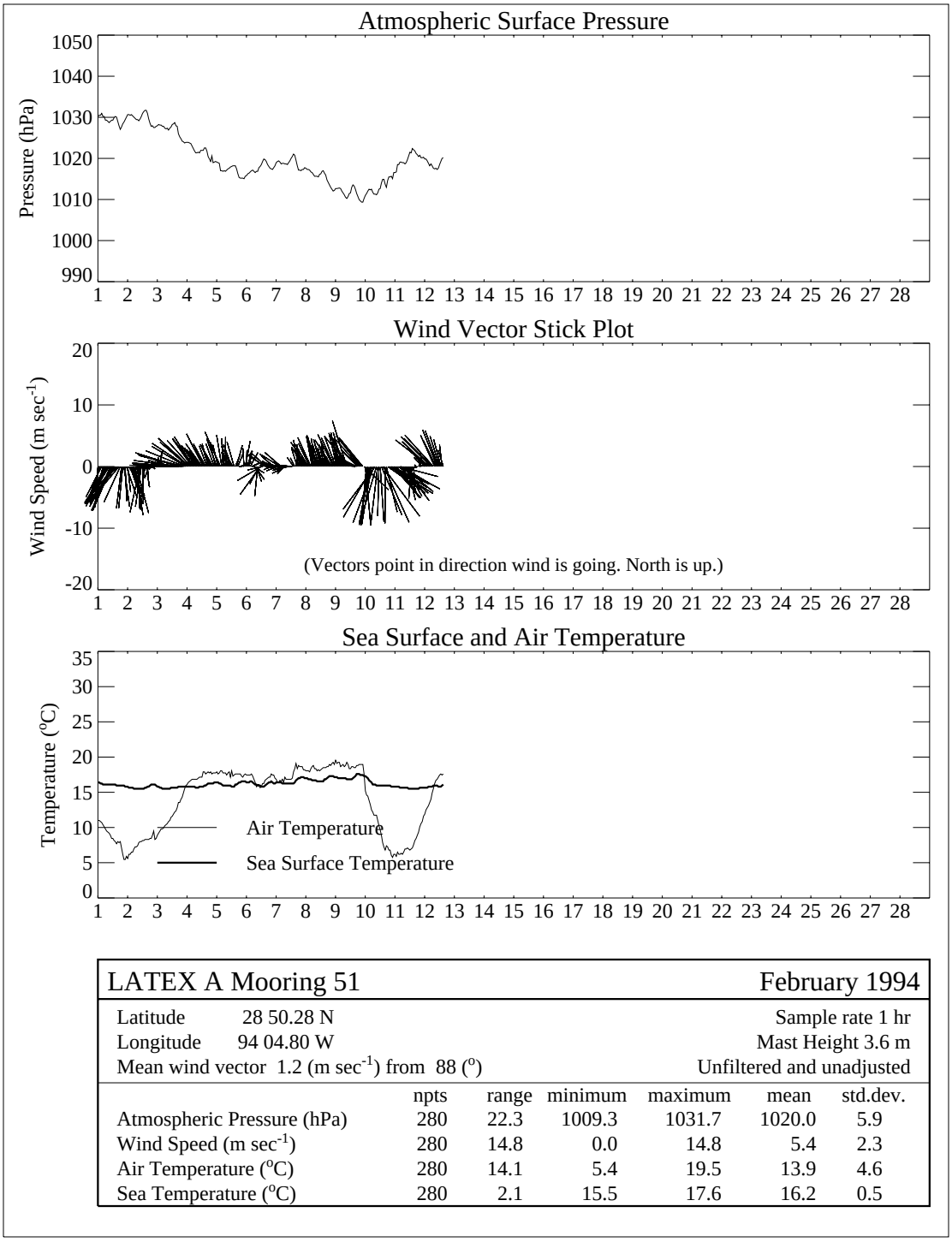


LATEX A Mooring 51 — January 1994

Latitude 28 50.28 N — Sample rate 1 hr
Longitude 94 04.80 W — Mast Height 3.6 m
Mean wind vector 2.9 (m sec^{-1}) from 60 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	28.5	1005.0	1033.5	1021.6	6.0
Wind Speed (m sec^{-1})	744	14.8	0.0	14.8	5.4	2.3
Air Temperature (^{o}C)	744	13.6	6.5	20.1	14.3	3.3
Sea Temperature (^{o}C)	744	2.1	15.4	17.5	16.3	0.4

Figure 51.94.01 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for January 1994.

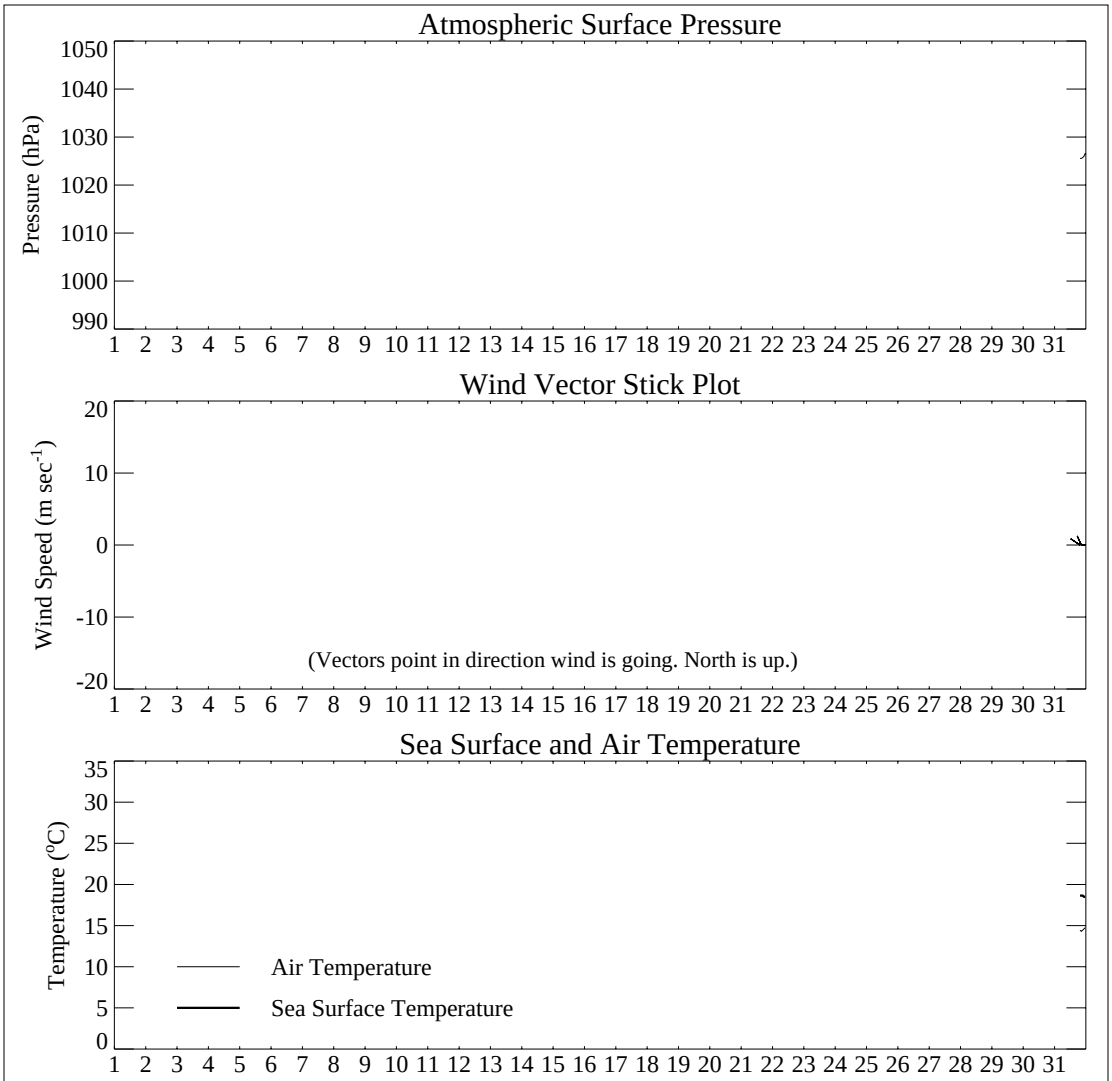


LATEX A Mooring 51 — February 1994

Latitude 28 50.28 N — Sample rate 1 hr
Longitude 94 04.80 W — Mast Height 3.6 m
Mean wind vector 1.2 (m sec^{-1}) from 88 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	280	22.3	1009.3	1031.7	1020.0	5.9
Wind Speed (m sec^{-1})	280	14.8	0.0	14.8	5.4	2.3
Air Temperature (^{o}C)	280	14.1	5.4	19.5	13.9	4.6
Sea Temperature (^{o}C)	280	2.1	15.5	17.6	16.2	0.5

Figure 51.94.02 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for February 1994.

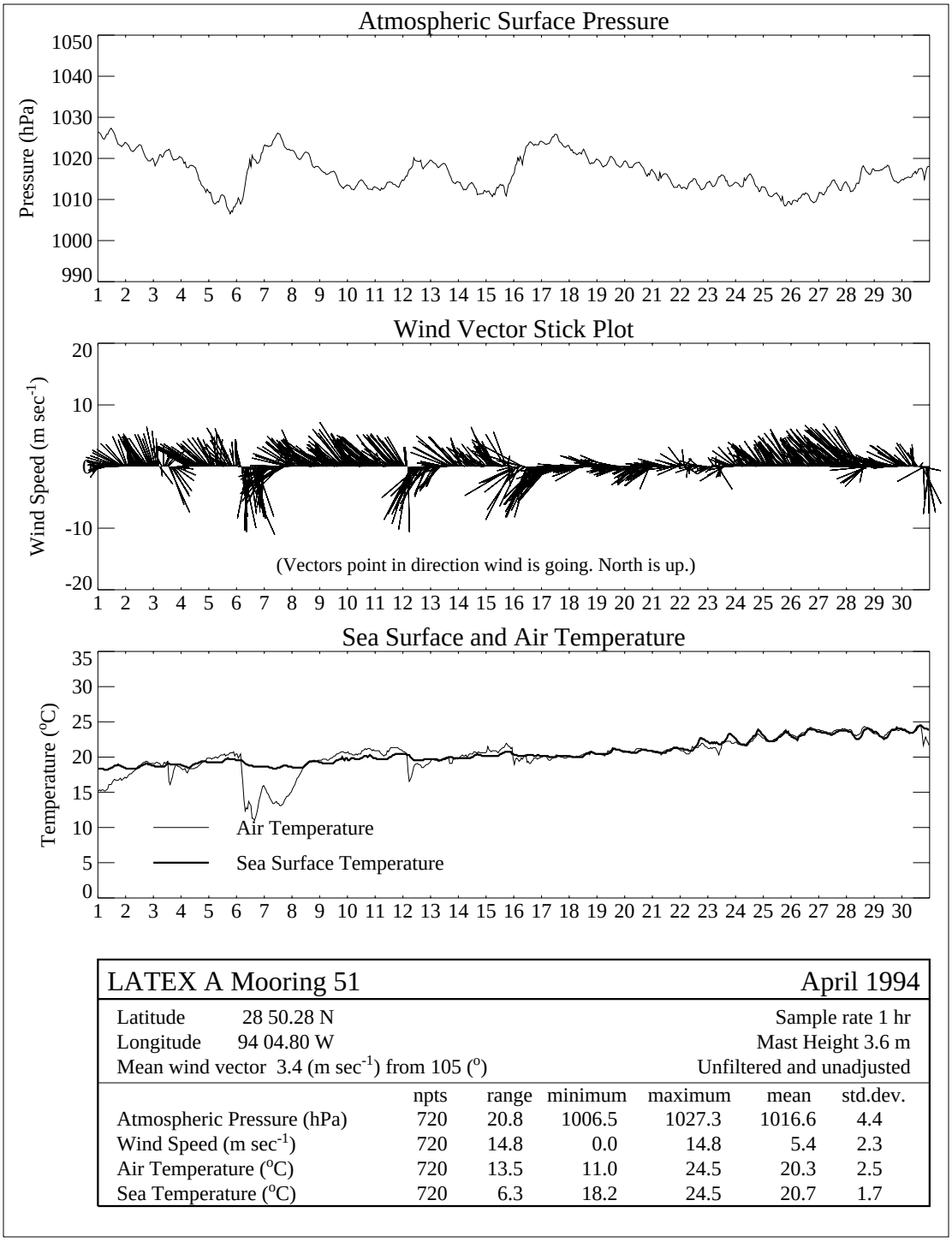


LATEX A Mooring 51 — March 1994

Latitude 28 50.28 N — Sample rate 1 hr
Longitude 94 04.80 W — Mast Height 3.6 m
Mean wind vector 0.8 (m sec^{-1}) from 127 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	5	1.0	1025.6	1026.6	1025.9	0.4
Wind Speed (m sec^{-1})	5	14.8	0.0	14.8	5.4	2.3
Air Temperature (^{o}C)	5	0.4	14.3	14.8	14.5	0.2
Sea Temperature (^{o}C)	5	0.1	18.5	18.6	18.6	0.1

Figure 51.94.03 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for March 1994.

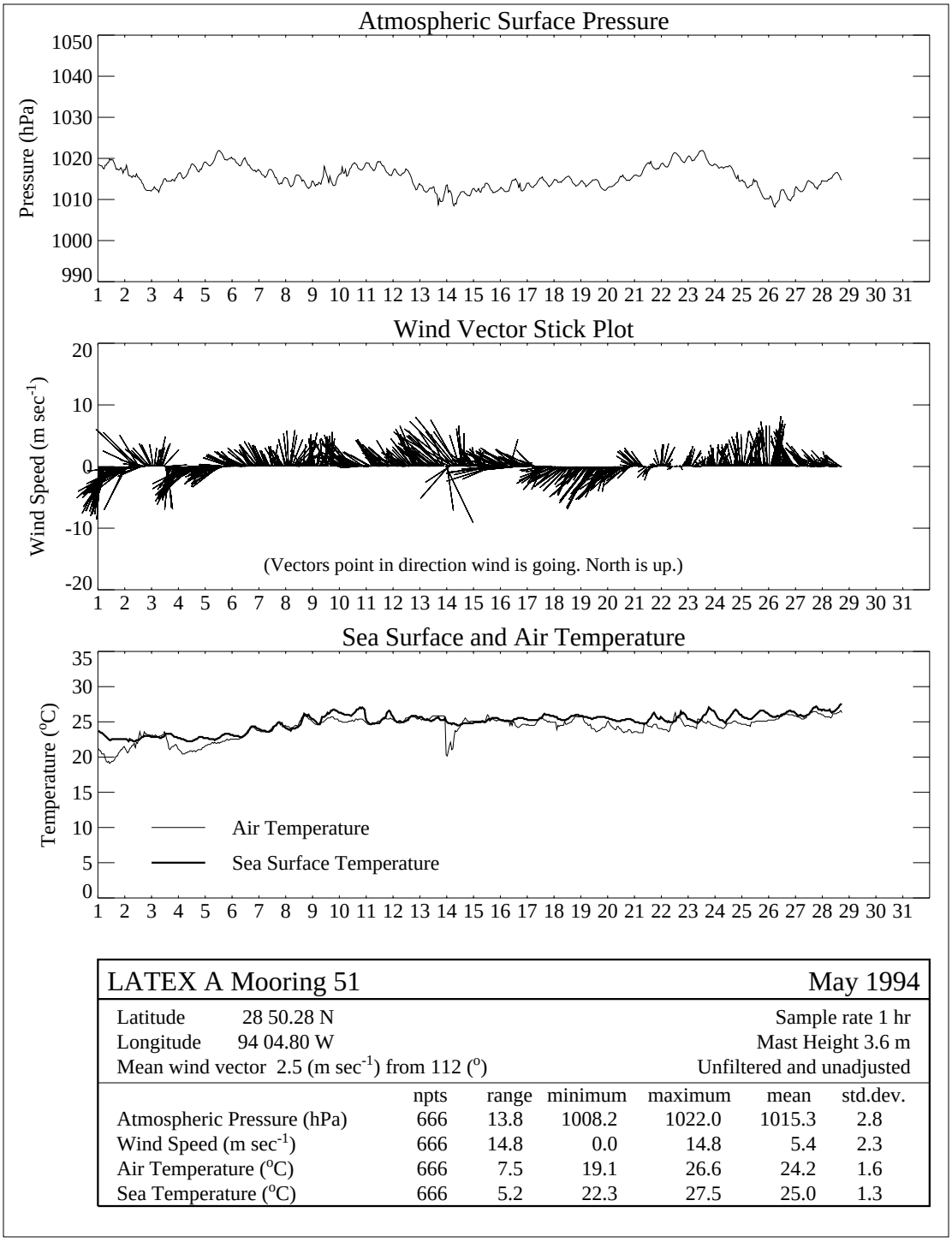


LATEX A Mooring 51 — April 1994

Latitude 28 50.28 N — Sample rate 1 hr
Longitude 94 04.80 W — Mast Height 3.6 m
Mean wind vector 3.4 (m sec^{-1}) from 105 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	20.8	1006.5	1027.3	1016.6	4.4
Wind Speed (m sec^{-1})	720	14.8	0.0	14.8	5.4	2.3
Air Temperature (^{o}C)	720	13.5	11.0	24.5	20.3	2.5
Sea Temperature (^{o}C)	720	6.3	18.2	24.5	20.7	1.7

Figure 51.94.04 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for April 1994.

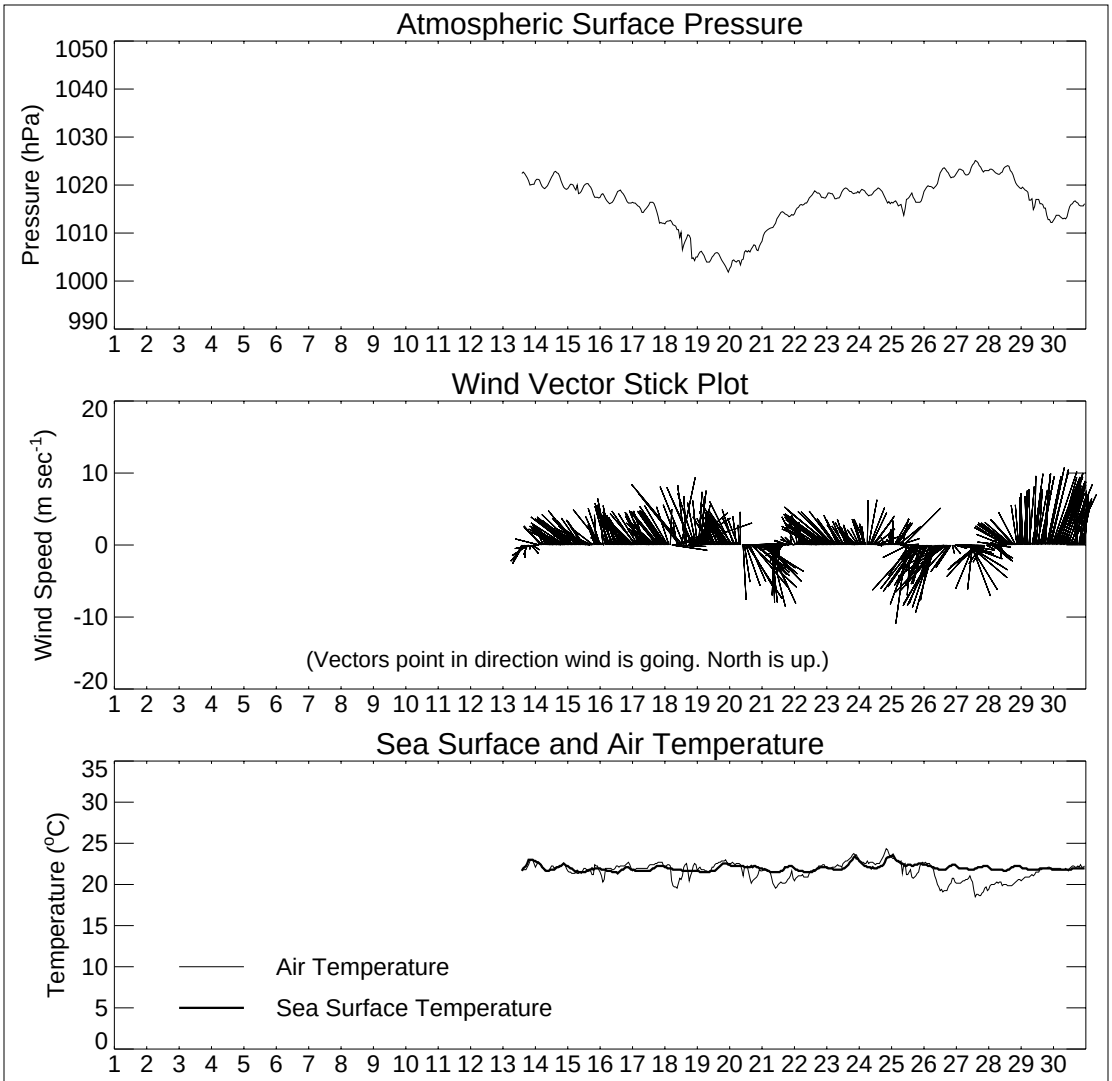


LATEX A Mooring 51 — May 1994

Latitude 28 50.28 N — Sample rate 1 hr
Longitude 94 04.80 W — Mast Height 3.6 m
Mean wind vector 2.5 (m sec^{-1}) from 112 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	666	13.8	1008.2	1022.0	1015.3	2.8
Wind Speed (m sec^{-1})	666	14.8	0.0	14.8	5.4	2.3
Air Temperature (^{o}C)	666	7.5	19.1	26.6	24.2	1.6
Sea Temperature (^{o}C)	666	5.2	22.3	27.5	25.0	1.3

Figure 51.94.05 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for May 1994.

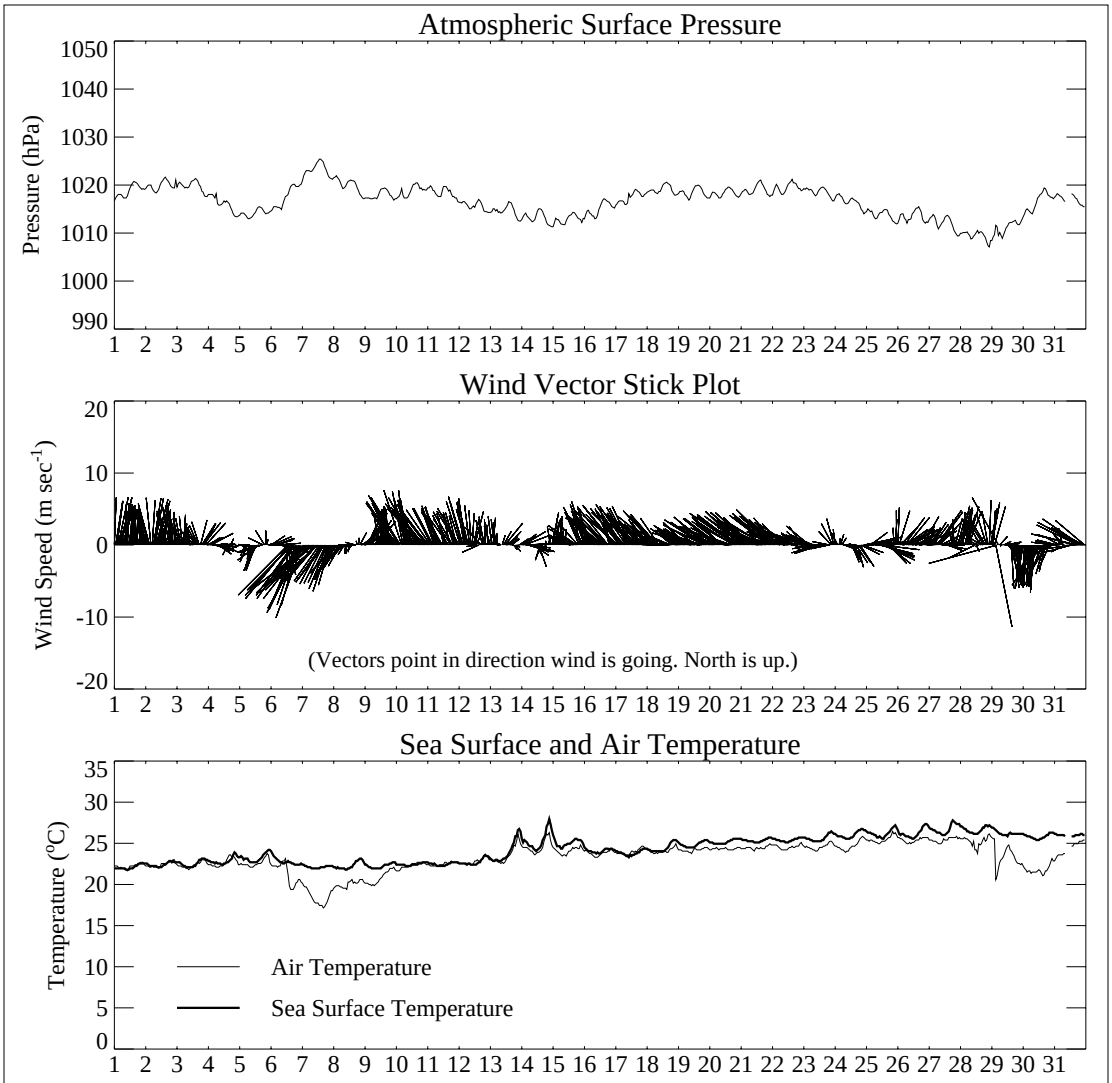


LATEX A Mooring 52 — April 1992

Latitude 28 48.17 N — Sample rate 1 hr
Longitude 93 01.10 W — Mast Height 3.6 m
Mean wind vector 2.2 (m sec^{-1}) from 154 (^{o}) — Unfiltered and unadjusted

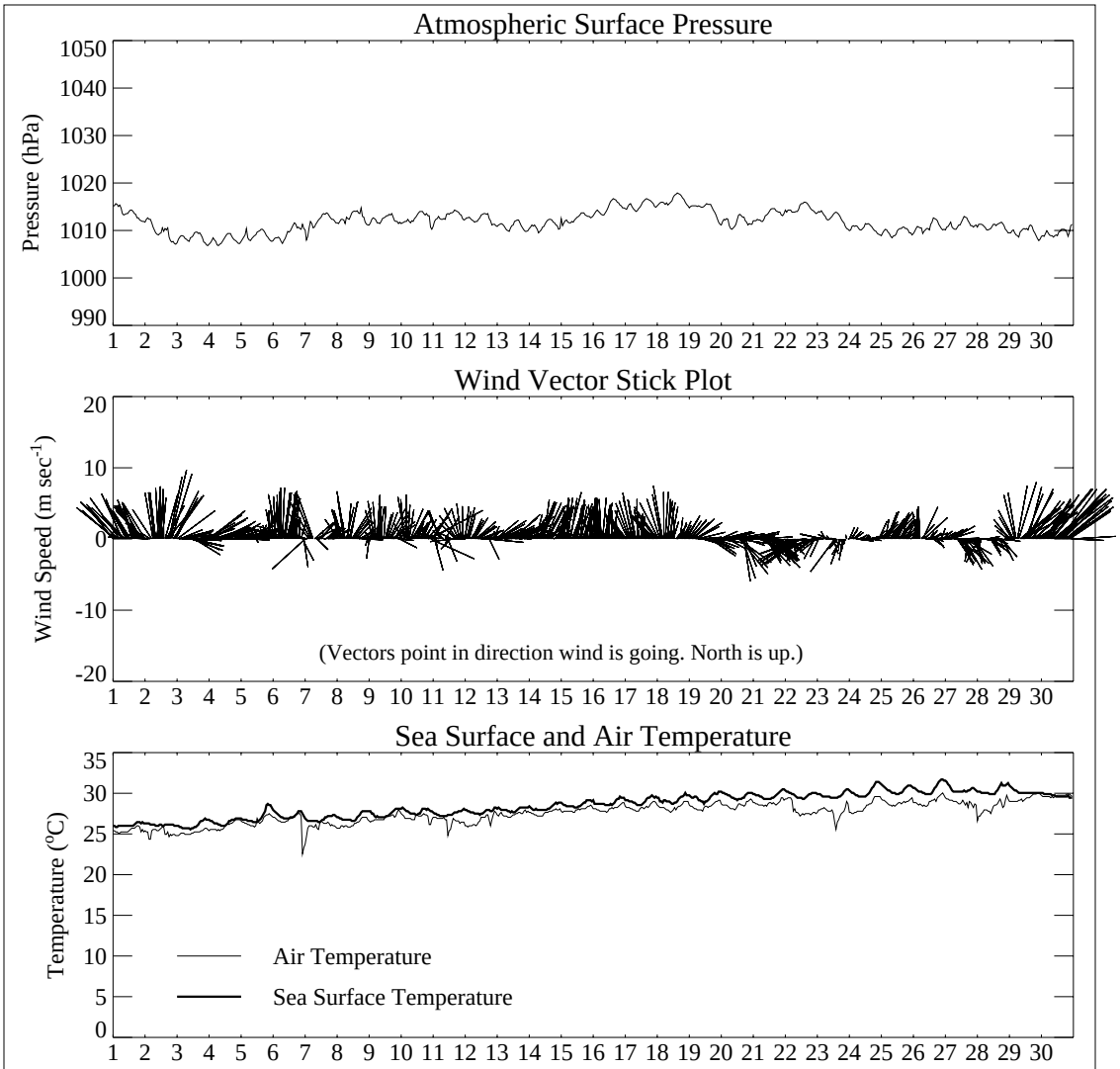
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	418	23.3	1001.8	1025.1	1016.1	5.4
Wind Speed (m sec^{-1})	418	15.0	0.0	15.0	5.4	2.4
Air Temperature (^{o}C)	418	5.9	18.5	24.4	21.6	1.1
Sea Temperature (^{o}C)	418	2.2	21.4	23.6	22.0	0.4

Figure 52.92.04 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for April 1992.



LATEX A Mooring 52						May 1992
Latitude 28 48.17 N						Sample rate 1 hr
Longitude 93 01.10 W						Mast Height 3.6 m
Mean wind vector 2.0 (m sec^{-1}) from 140 (^{o})						Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	740	18.3	1007.1	1025.4	1016.6	3.2
Wind Speed (m sec^{-1})	740	15.0	0.0	15.0	5.4	2.4
Air Temperature (^{o}C)	740	9.3	17.1	26.5	23.3	1.7
Sea Temperature (^{o}C)	740	6.2	21.8	28.0	24.3	1.6

Figure 52.92.05 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for May 1992.

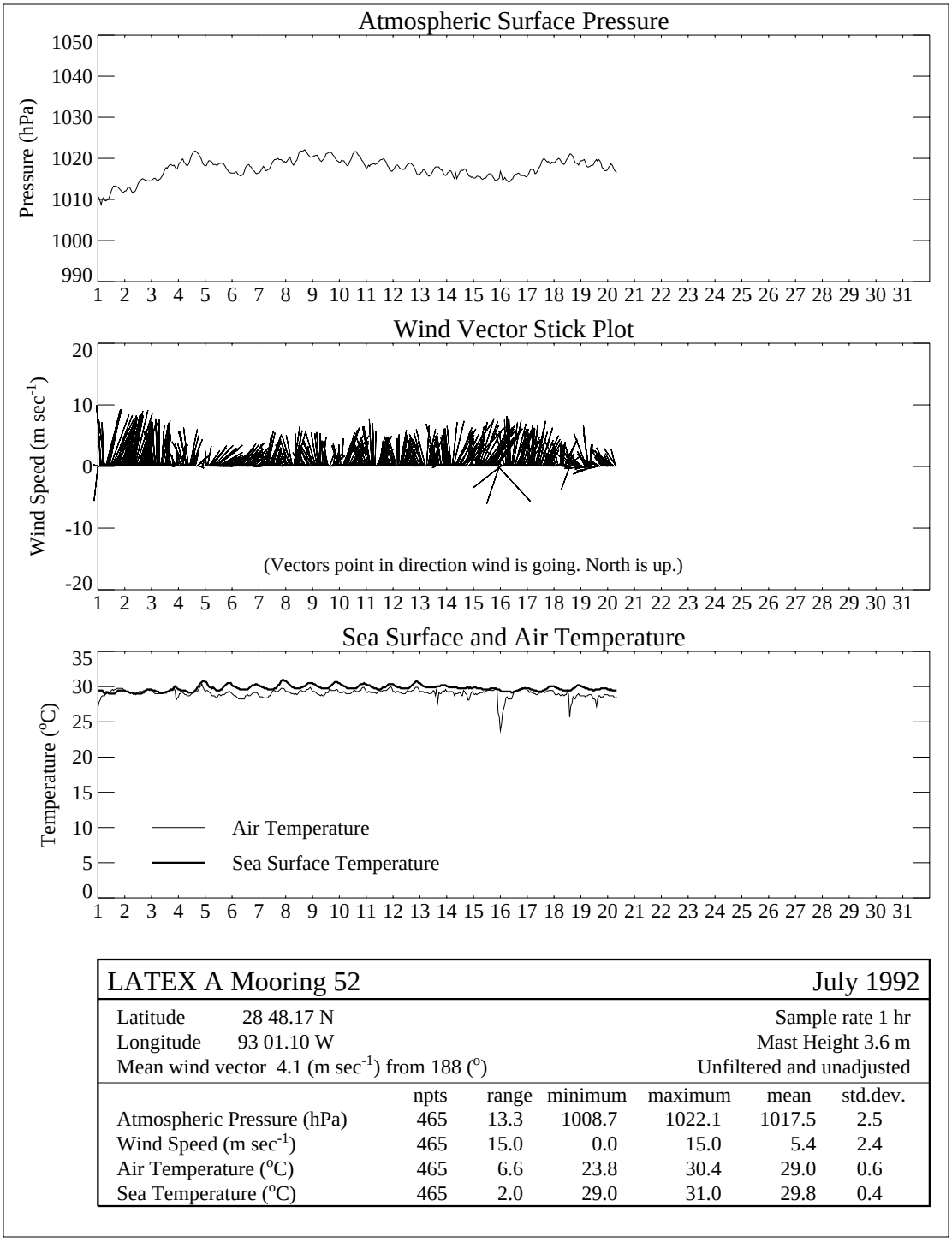


LATEX A Mooring 52 — June 1992

Latitude 28 48.17 N — Sample rate 1 hr
Longitude 93 01.10 W — Mast Height 3.6 m
Mean wind vector 2.4 (m sec^{-1}) from 214 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	11.1	1006.8	1017.9	1011.8	2.3
Wind Speed (m sec^{-1})	720	15.0	0.0	15.0	5.4	2.4
Air Temperature (^{o}C)	720	7.5	22.5	30.0	27.5	1.3
Sea Temperature (^{o}C)	720	6.2	25.5	31.7	28.5	1.5

Figure 52.92.06 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for June 1992.

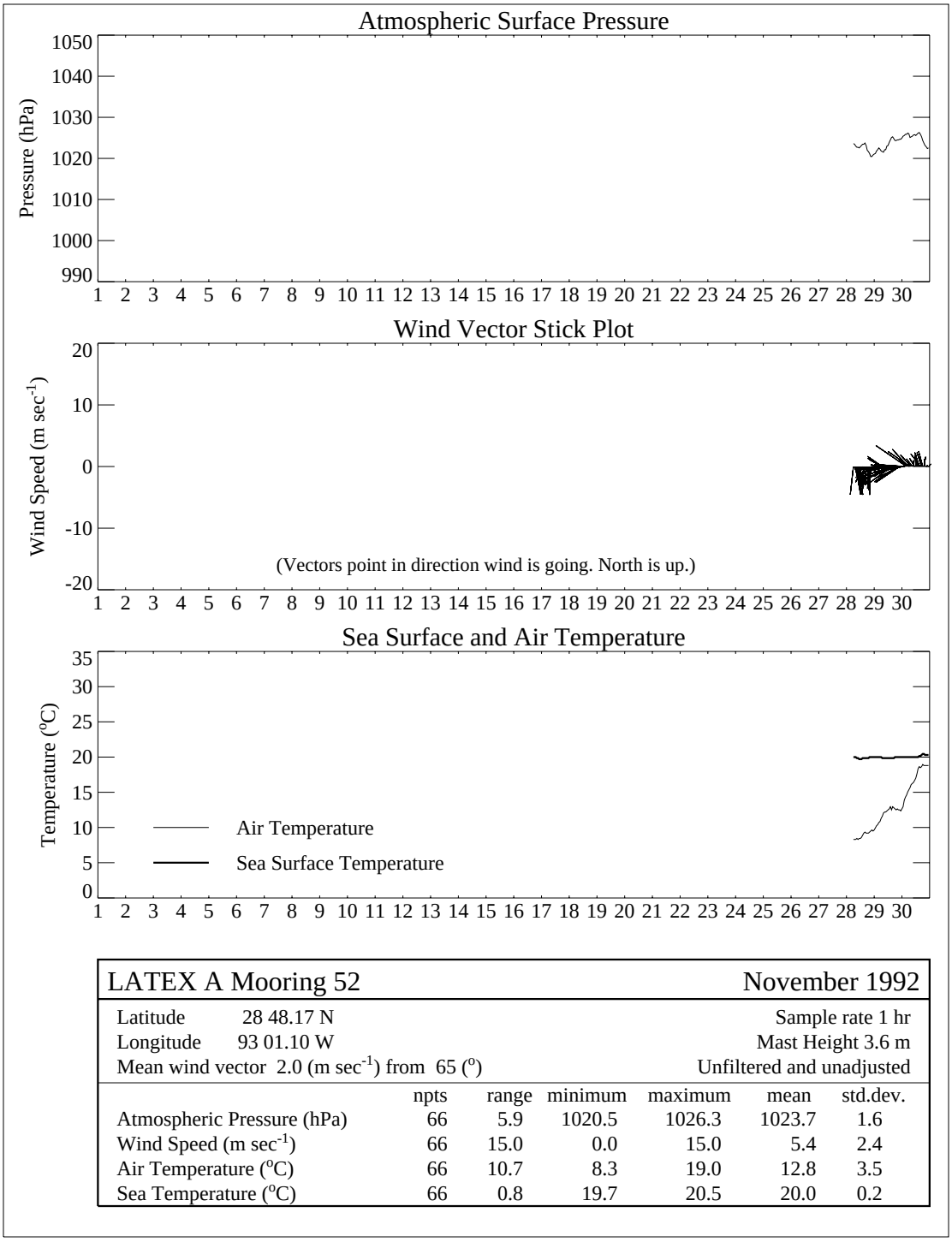


LATEX A Mooring 52 — July 1992

Latitude 28 48.17 N — Sample rate 1 hr
Longitude 93 01.10 W — Mast Height 3.6 m
Mean wind vector 4.1 (m sec^{-1}) from 188 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	465	13.3	1008.7	1022.1	1017.5	2.5
Wind Speed (m sec^{-1})	465	15.0	0.0	15.0	5.4	2.4
Air Temperature (^{o}C)	465	6.6	23.8	30.4	29.0	0.6
Sea Temperature (^{o}C)	465	2.0	29.0	31.0	29.8	0.4

Figure 52.92.07 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for July 1992.

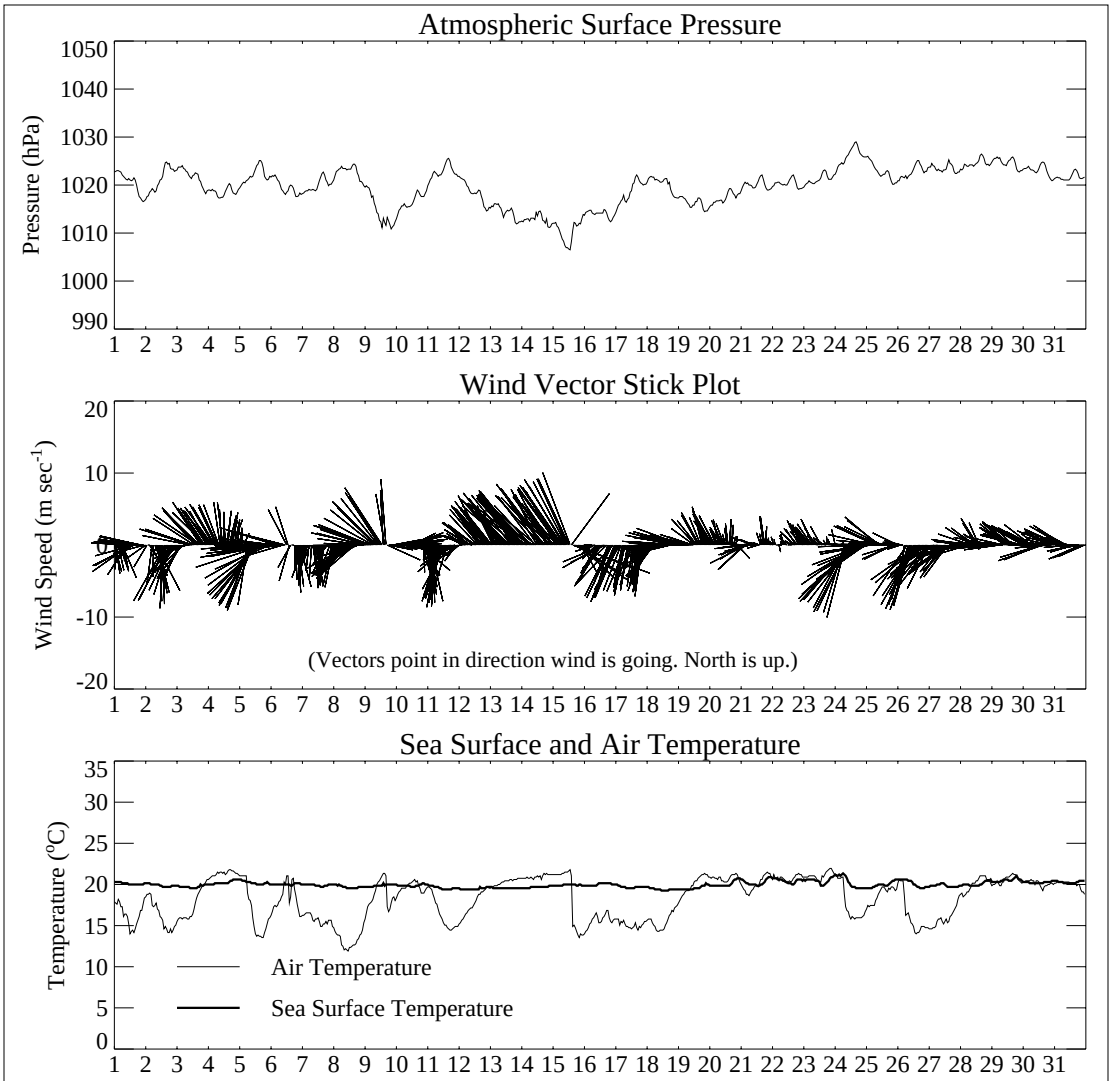


LATEX A Mooring 52 — November 1992

Latitude 28 48.17 N — Sample rate 1 hr
Longitude 93 01.10 W — Mast Height 3.6 m
Mean wind vector 2.0 (m sec^{-1}) from 65 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	66	5.9	1020.5	1026.3	1023.7	1.6
Wind Speed (m sec^{-1})	66	15.0	0.0	15.0	5.4	2.4
Air Temperature (^{o}C)	66	10.7	8.3	19.0	12.8	3.5
Sea Temperature (^{o}C)	66	0.8	19.7	20.5	20.0	0.2

Figure 52.92.11 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for November 1992.

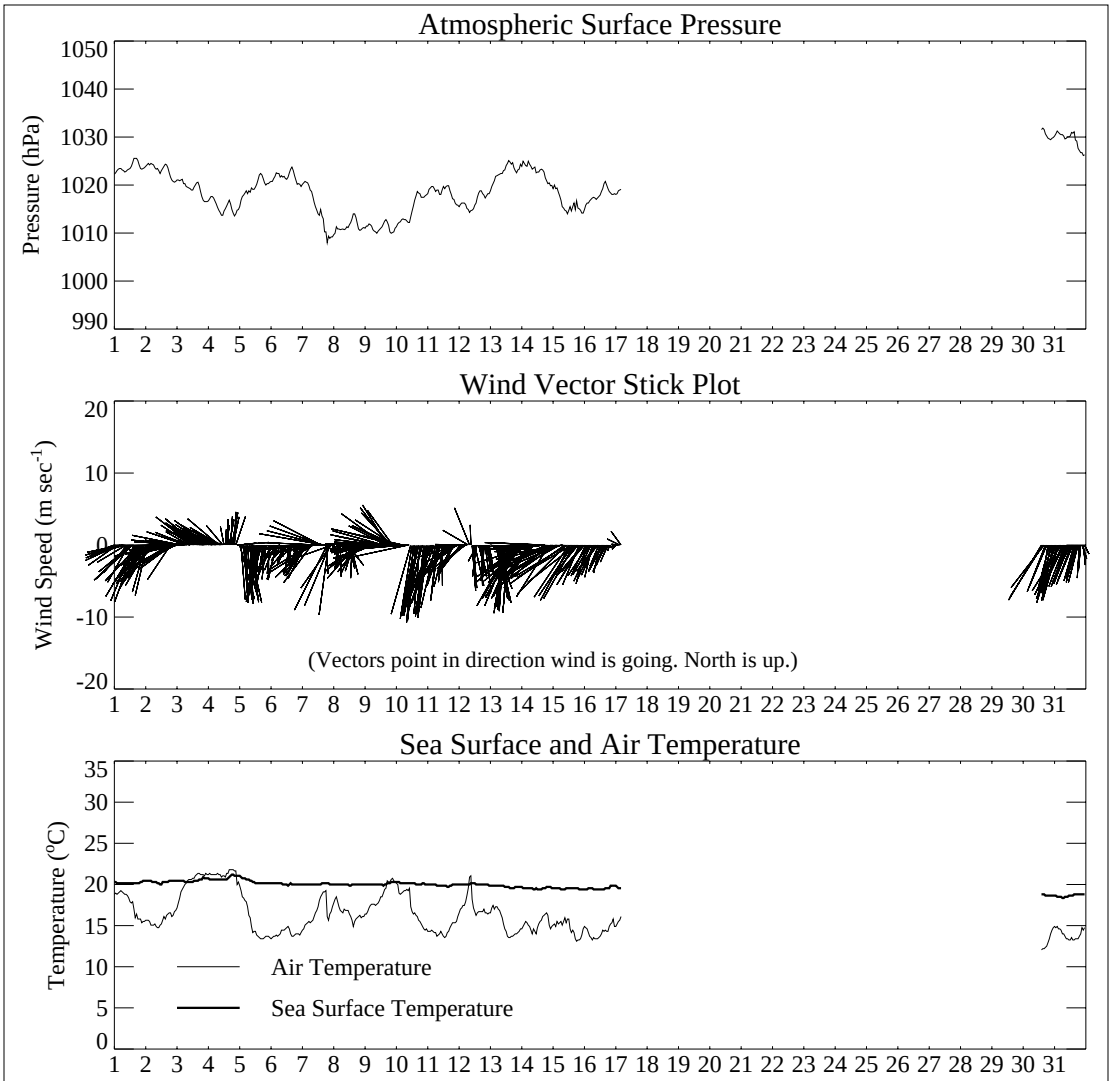


LATEX A Mooring 52 — December 1992

Latitude 28 48.17 N — Sample rate 1 hr
Longitude 93 01.10 W — Mast Height 3.6 m
Mean wind vector 3.0 (m sec^{-1}) from 82 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	22.5	1006.5	1029.0	1019.8	4.0
Wind Speed (m sec^{-1})	744	15.0	0.0	15.0	5.4	2.4
Air Temperature (^{o}C)	744	10.1	11.9	22.0	18.3	2.6
Sea Temperature (^{o}C)	744	2.1	19.3	21.4	20.0	0.4

Figure 52.92.12 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for December 1992.

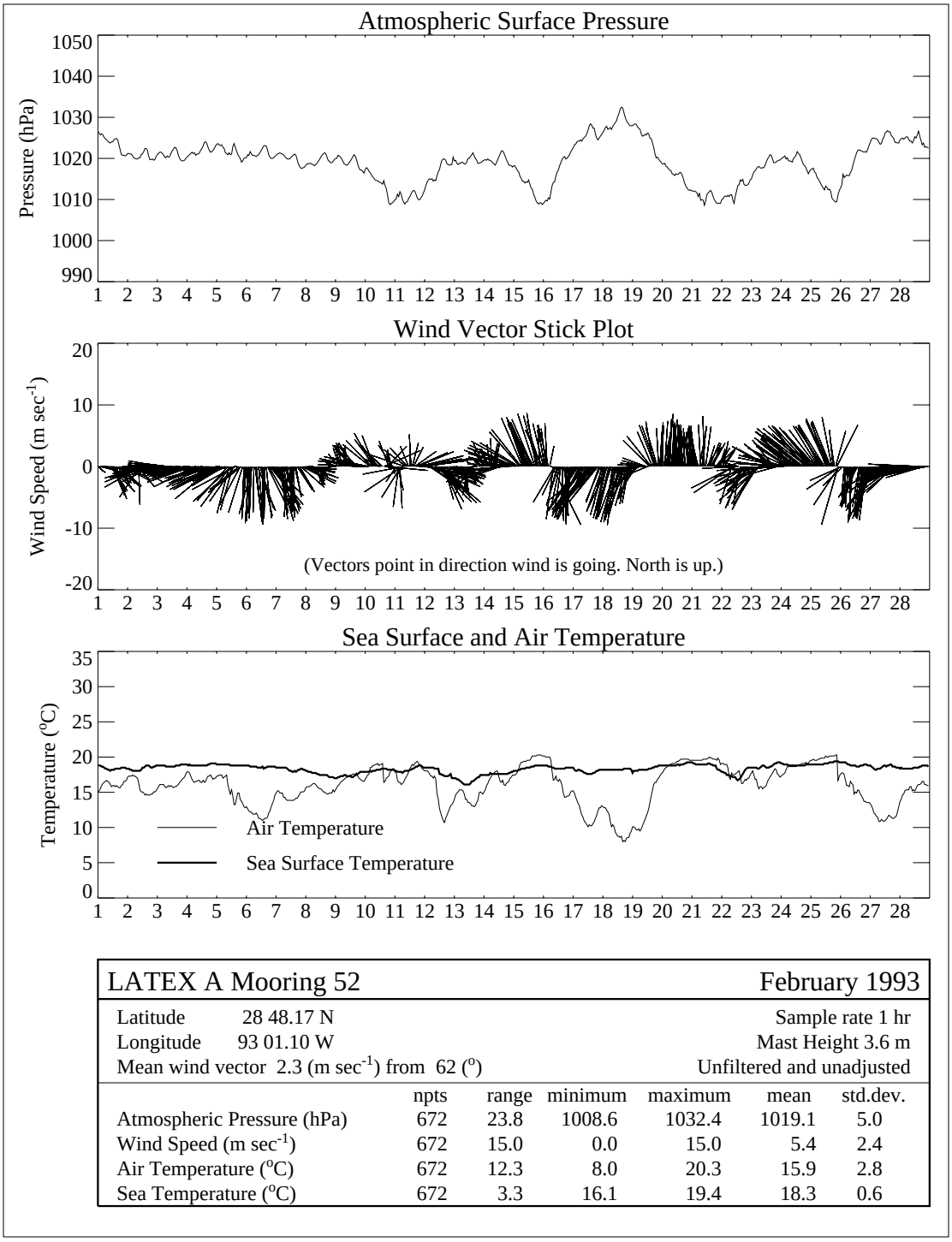


LATEX A Mooring 52 — January 1993

Latitude 28 48.17 N — Sample rate 1 hr
Longitude 93 01.10 W — Mast Height 3.6 m
Mean wind vector 4.6 (m sec^{-1}) from 44 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	423	23.8	1008.0	1031.8	1019.1	5.2
Wind Speed (m sec^{-1})	423	15.0	0.0	15.0	5.4	2.4
Air Temperature (^{o}C)	423	9.7	12.1	21.8	16.3	2.4
Sea Temperature (^{o}C)	423	2.9	18.4	21.2	19.9	0.5

Figure 52.93.01 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for January 1993.

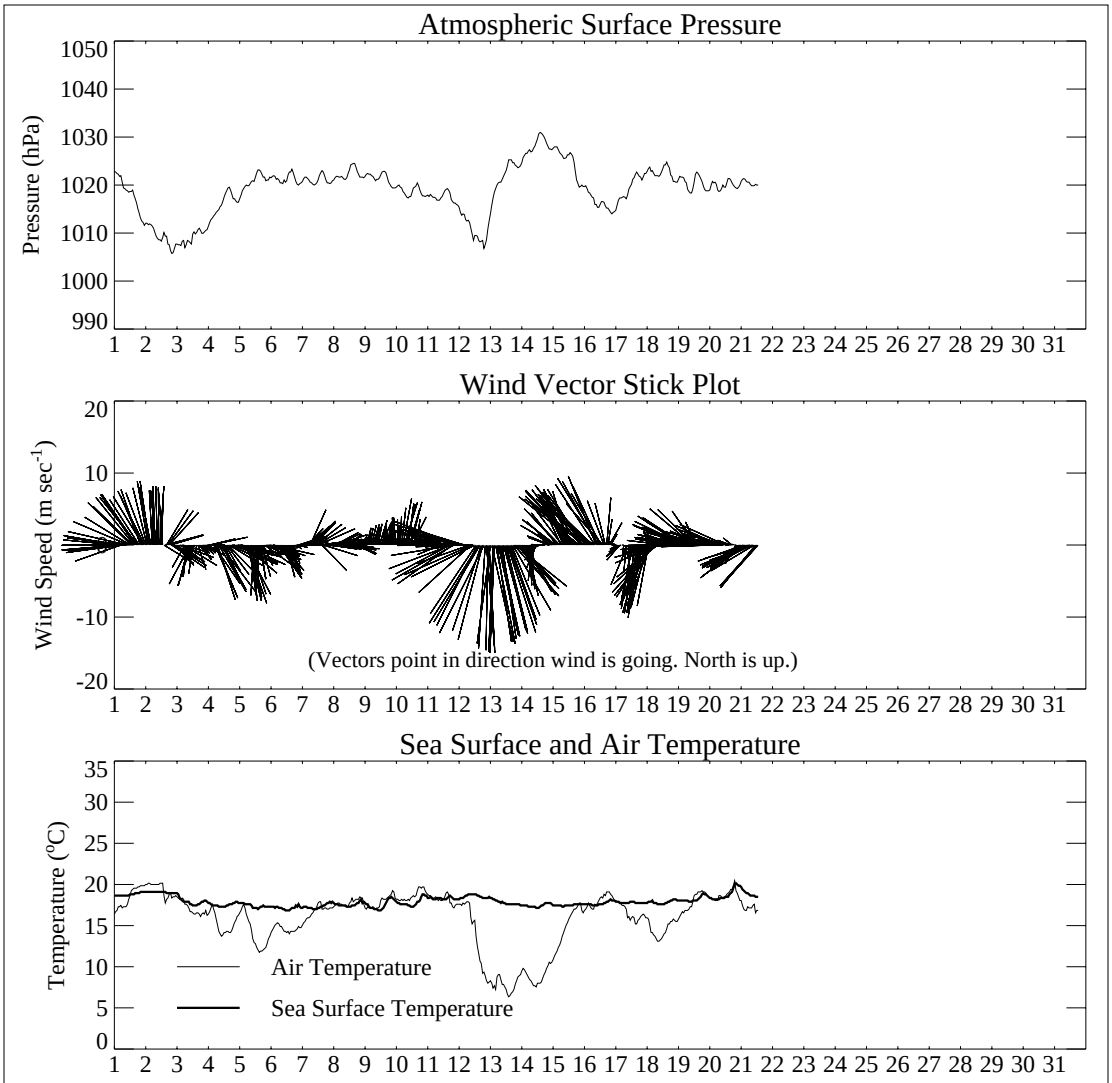


LATEX A Mooring 52 — February 1993

Latitude 28 48.17 N — Sample rate 1 hr
Longitude 93 01.10 W — Mast Height 3.6 m
Mean wind vector 2.3 (m sec^{-1}) from 62 (^{o}) — Unfiltered and unadjusted

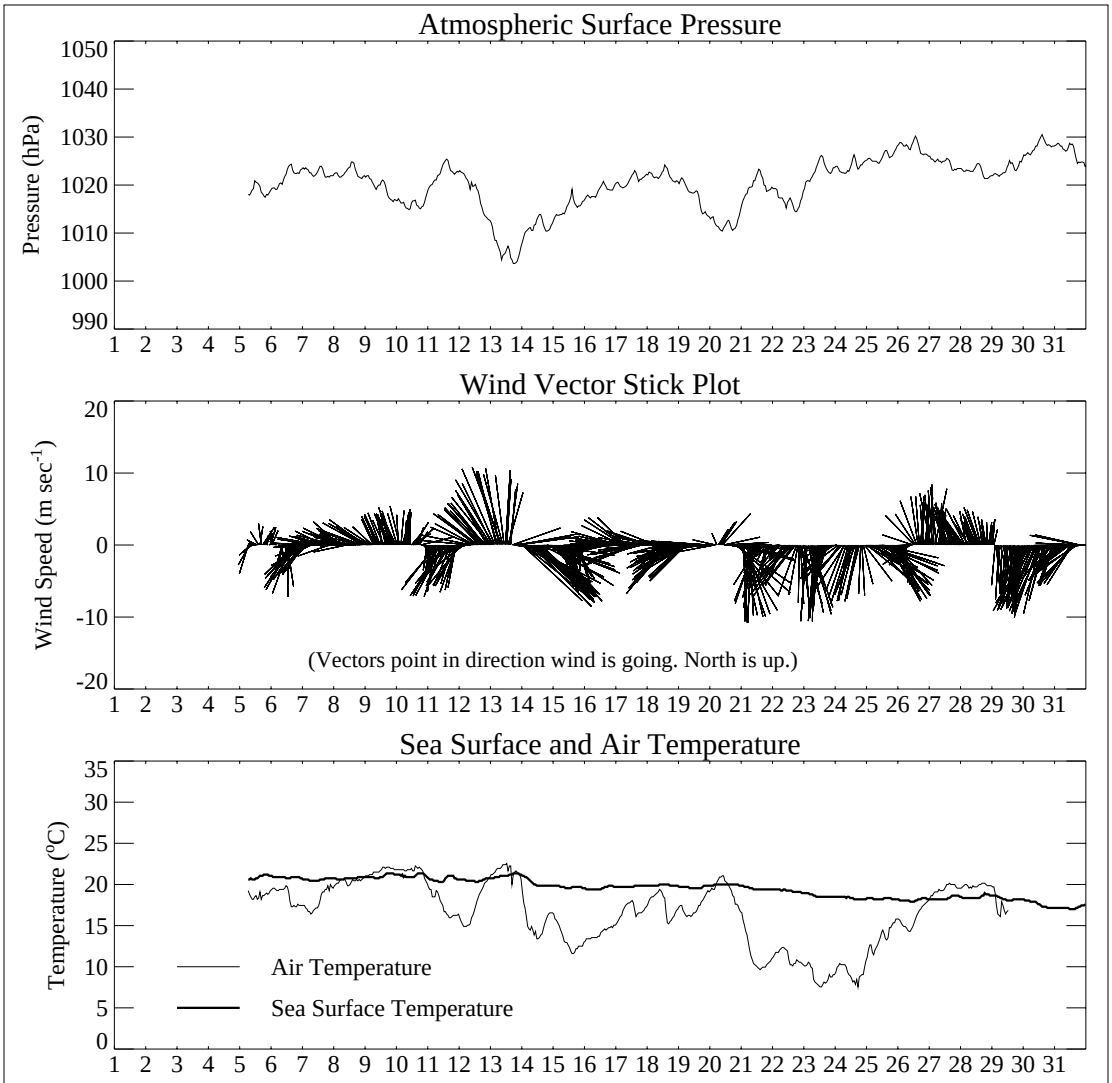
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	672	23.8	1008.6	1032.4	1019.1	5.0
Wind Speed (m sec^{-1})	672	15.0	0.0	15.0	5.4	2.4
Air Temperature (^{o}C)	672	12.3	8.0	20.3	15.9	2.8
Sea Temperature (^{o}C)	672	3.3	16.1	19.4	18.3	0.6

Figure 52.93.02 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for February 1993.



LATEX A Mooring 52						March 1993
Latitude 28 48.17 N						Sample rate 1 hr
Longitude 93 01.10 W						Mast Height 3.6 m
Mean wind vector 1.4 (m sec^{-1}) from 62 (^{o})						Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	494	25.2	1005.7	1030.9	1019.0	5.0
Wind Speed (m sec^{-1})	494	15.0	0.0	15.0	5.4	2.4
Air Temperature (^{o}C)	494	14.1	6.3	20.5	16.0	3.3
Sea Temperature (^{o}C)	494	3.3	16.9	20.1	17.9	0.6

Figure 52.93.03 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for March 1993.

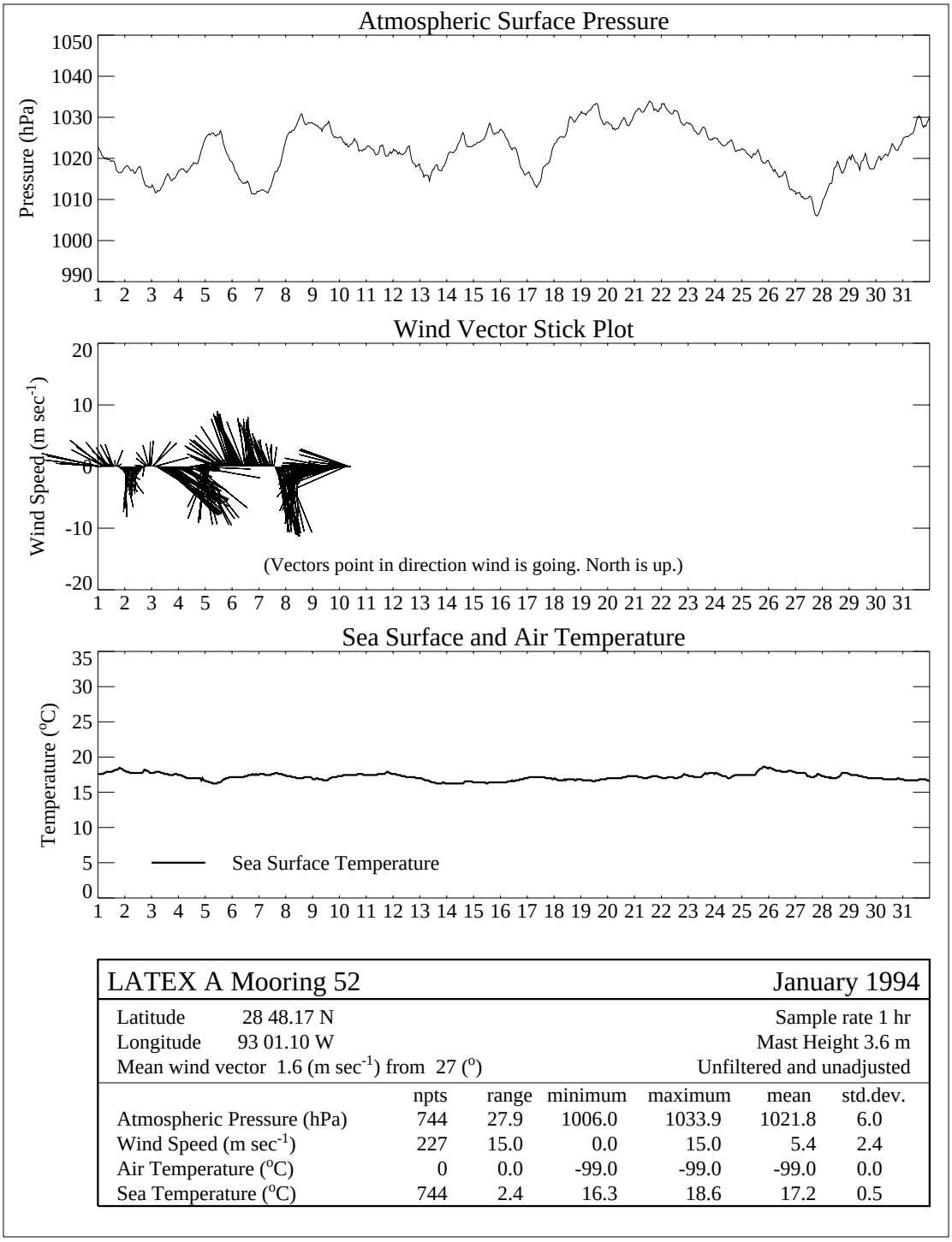


LATEX A Mooring 52 — December 1993

Latitude 28 48.17 N — Sample rate 1 hr
Longitude 93 01.10 W — Mast Height 3.6 m
Mean wind vector 2.3 (m sec^{-1}) from 39 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	642	26.8	1003.7	1030.5	1020.4	5.3
Wind Speed (m sec^{-1})	642	15.0	0.0	15.0	5.4	2.4
Air Temperature (^{o}C)	583	15.0	7.6	22.5	16.6	3.8
Sea Temperature (^{o}C)	642	4.4	17.0	21.4	19.6	1.2

Figure 52.93.12 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for December 1993.

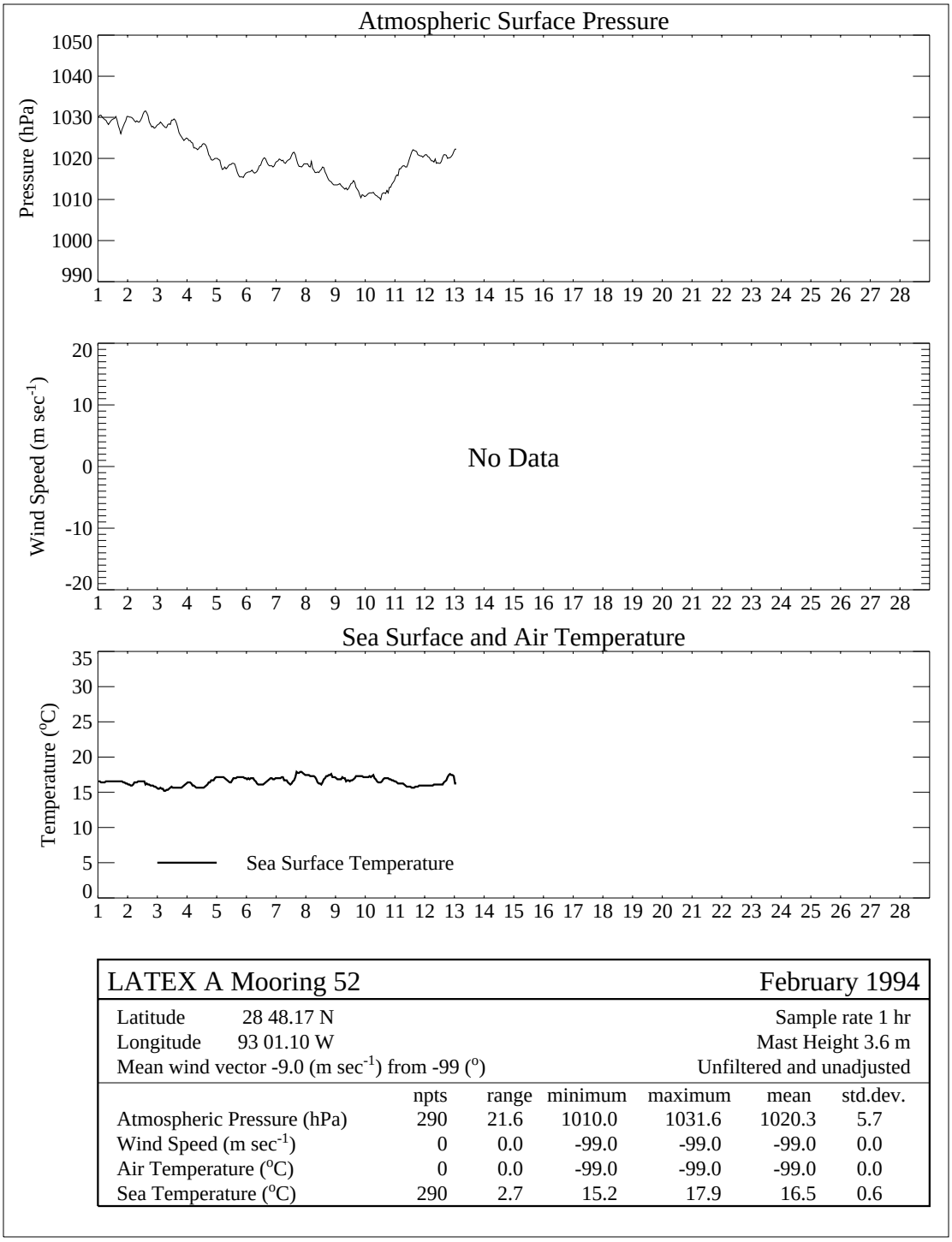


LATEX A Mooring 52 — January 1994

Latitude 28 48.17 N — Sample rate 1 hr
Longitude 93 01.10 W — Mast Height 3.6 m
Mean wind vector 1.6 (m sec^{-1}) from 27 (^{o}) — Unfiltered and unadjusted

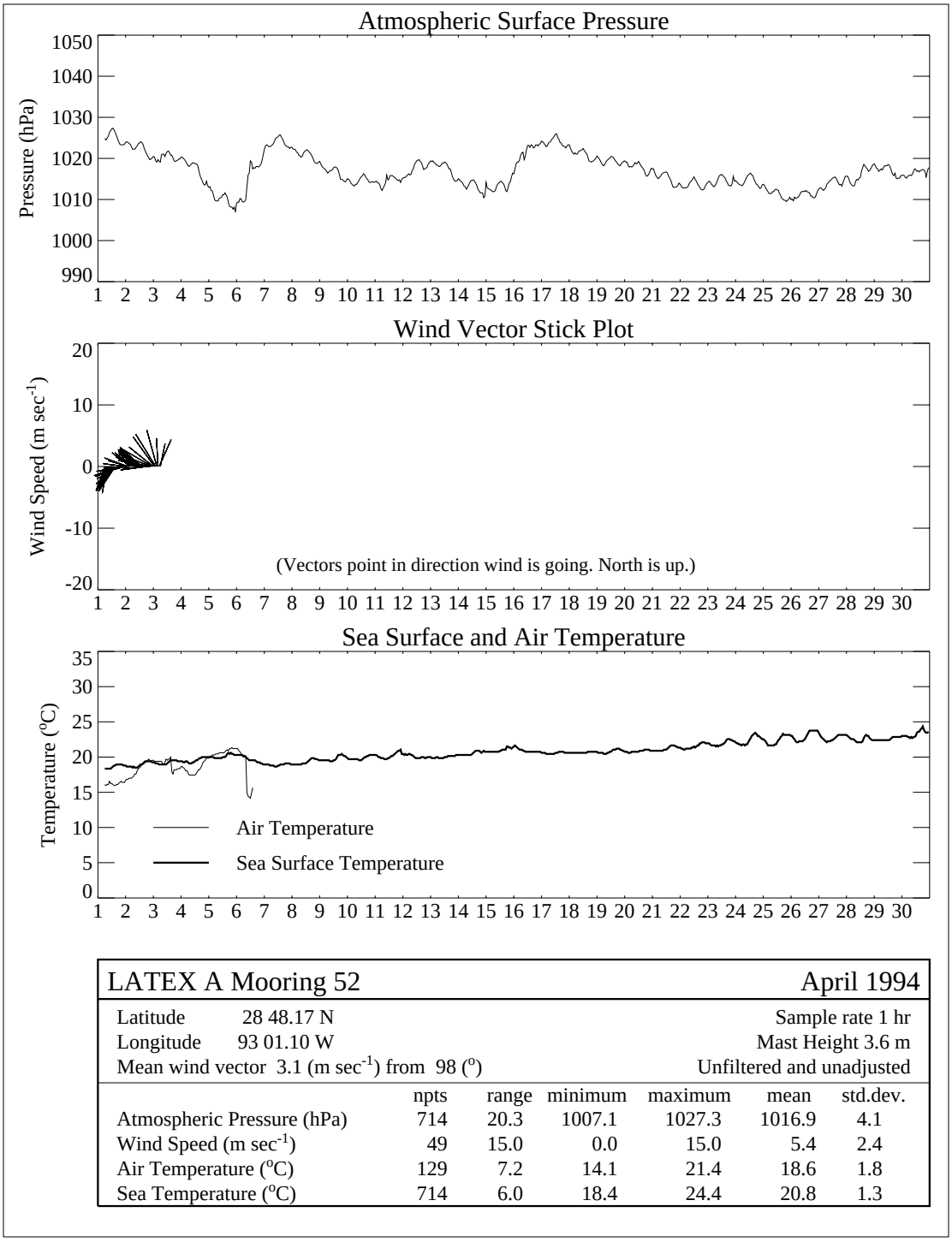
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	27.9	1006.0	1033.9	1021.8	6.0
Wind Speed (m sec^{-1})	227	15.0	0.0	15.0	5.4	2.4
Air Temperature (^{o}C)	0	0.0	-99.0	-99.0	-99.0	0.0
Sea Temperature (^{o}C)	744	2.4	16.3	18.6	17.2	0.5

Figure 52.94.01 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for January 1994.



LATEX A Mooring 52						February 1994
Latitude 28 48.17 N						Sample rate 1 hr
Longitude 93 01.10 W						Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o})						Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	290	21.6	1010.0	1031.6	1020.3	5.7
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	0	0.0	-99.0	-99.0	-99.0	0.0
Sea Temperature (^{o}C)	290	2.7	15.2	17.9	16.5	0.6

Figure 52.94.02 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for February 1994.

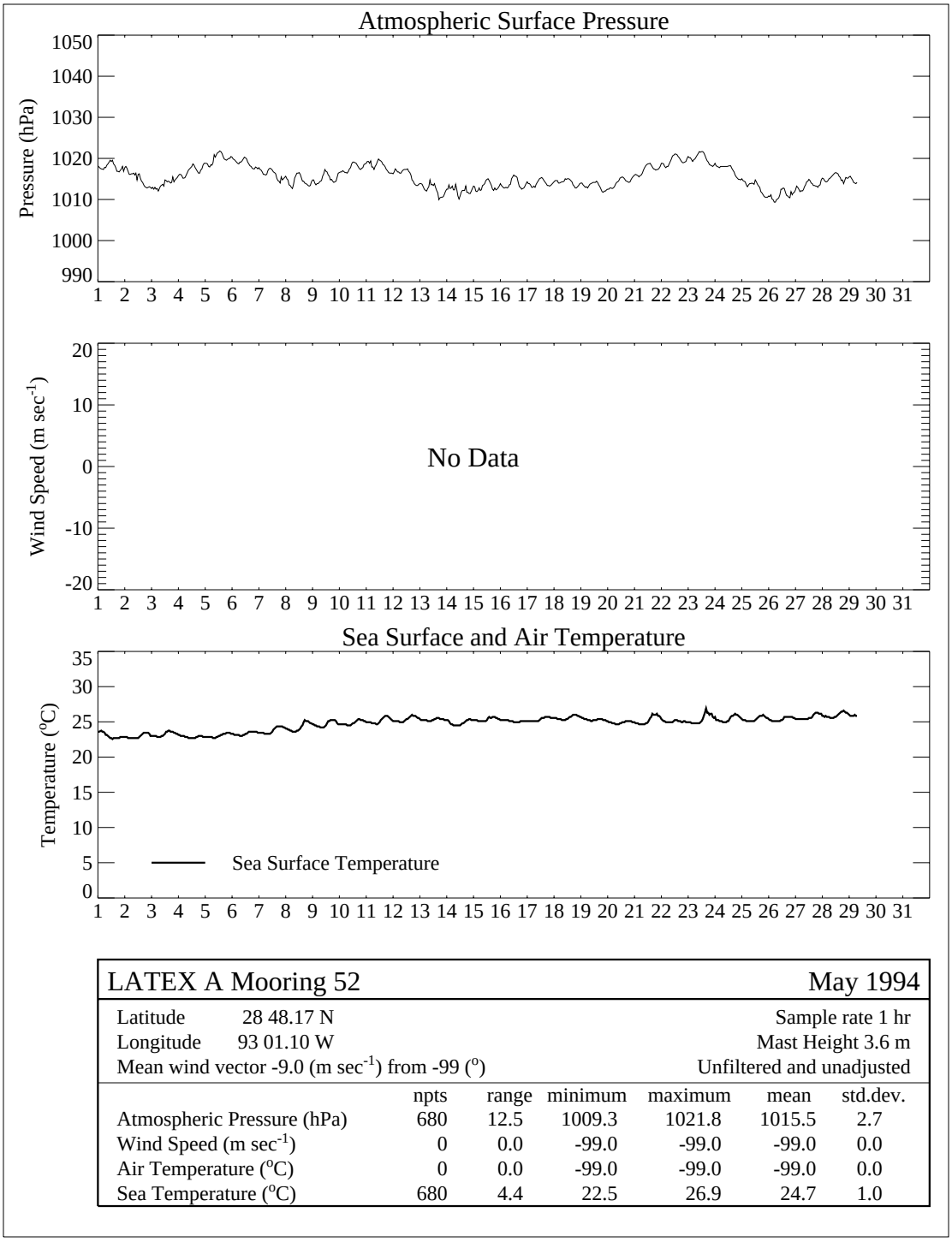


LATEX A Mooring 52 — April 1994

Latitude 28 48.17 N — Sample rate 1 hr
Longitude 93 01.10 W — Mast Height 3.6 m
Mean wind vector 3.1 (m sec^{-1}) from 98 (^{o}) — Unfiltered and unadjusted

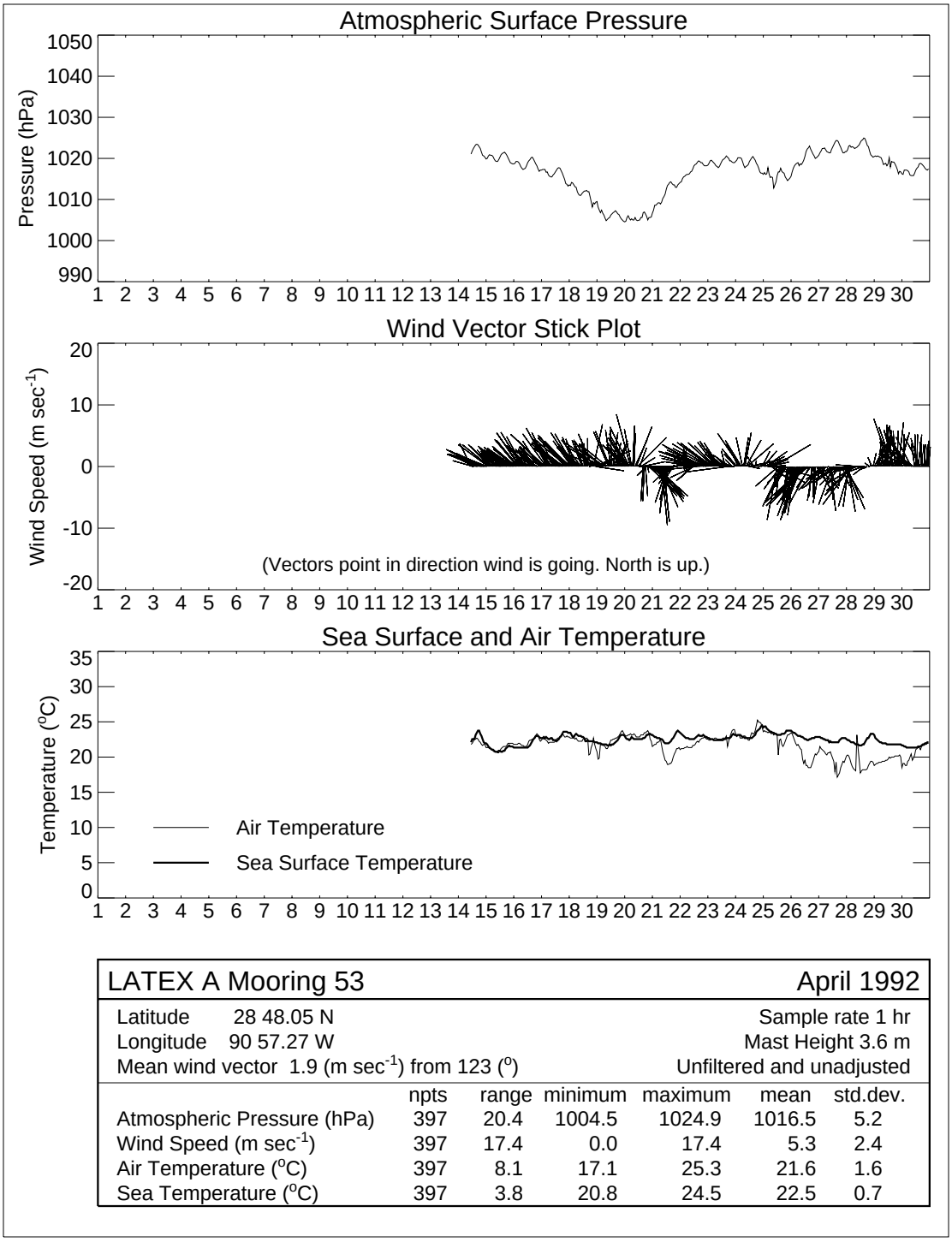
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	714	20.3	1007.1	1027.3	1016.9	4.1
Wind Speed (m sec^{-1})	49	15.0	0.0	15.0	5.4	2.4
Air Temperature (^{o}C)	129	7.2	14.1	21.4	18.6	1.8
Sea Temperature (^{o}C)	714	6.0	18.4	24.4	20.8	1.3

Figure 52.94.04 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for April 1994.



LATEX A Mooring 52						May 1994
Latitude	28 48.17 N					Sample rate 1 hr
Longitude	93 01.10 W					Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o})						Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	680	12.5	1009.3	1021.8	1015.5	2.7
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	0	0.0	-99.0	-99.0	-99.0	0.0
Sea Temperature (^{o}C)	680	4.4	22.5	26.9	24.7	1.0

Figure 52.94.05 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for May 1994.

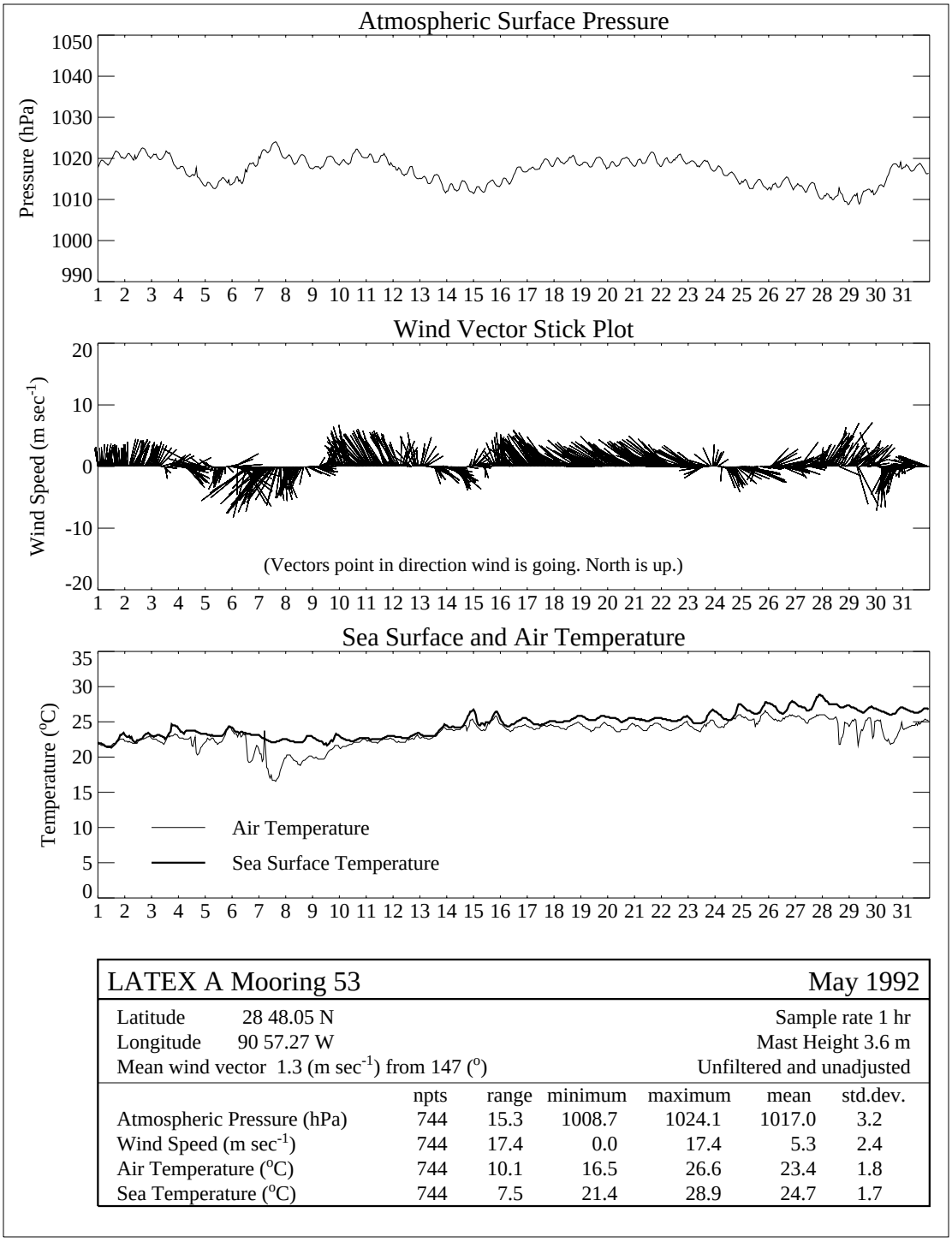


LATEX A Mooring 53 — April 1992

Latitude 28 48.05 N — Sample rate 1 hr
Longitude 90 57.27 W — Mast Height 3.6 m
Mean wind vector 1.9 (m sec^{-1}) from 123 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	397	20.4	1004.5	1024.9	1016.5	5.2
Wind Speed (m sec^{-1})	397	17.4	0.0	17.4	5.3	2.4
Air Temperature (^{o}C)	397	8.1	17.1	25.3	21.6	1.6
Sea Temperature (^{o}C)	397	3.8	20.8	24.5	22.5	0.7

Figure 53.92.04 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for April 1992.

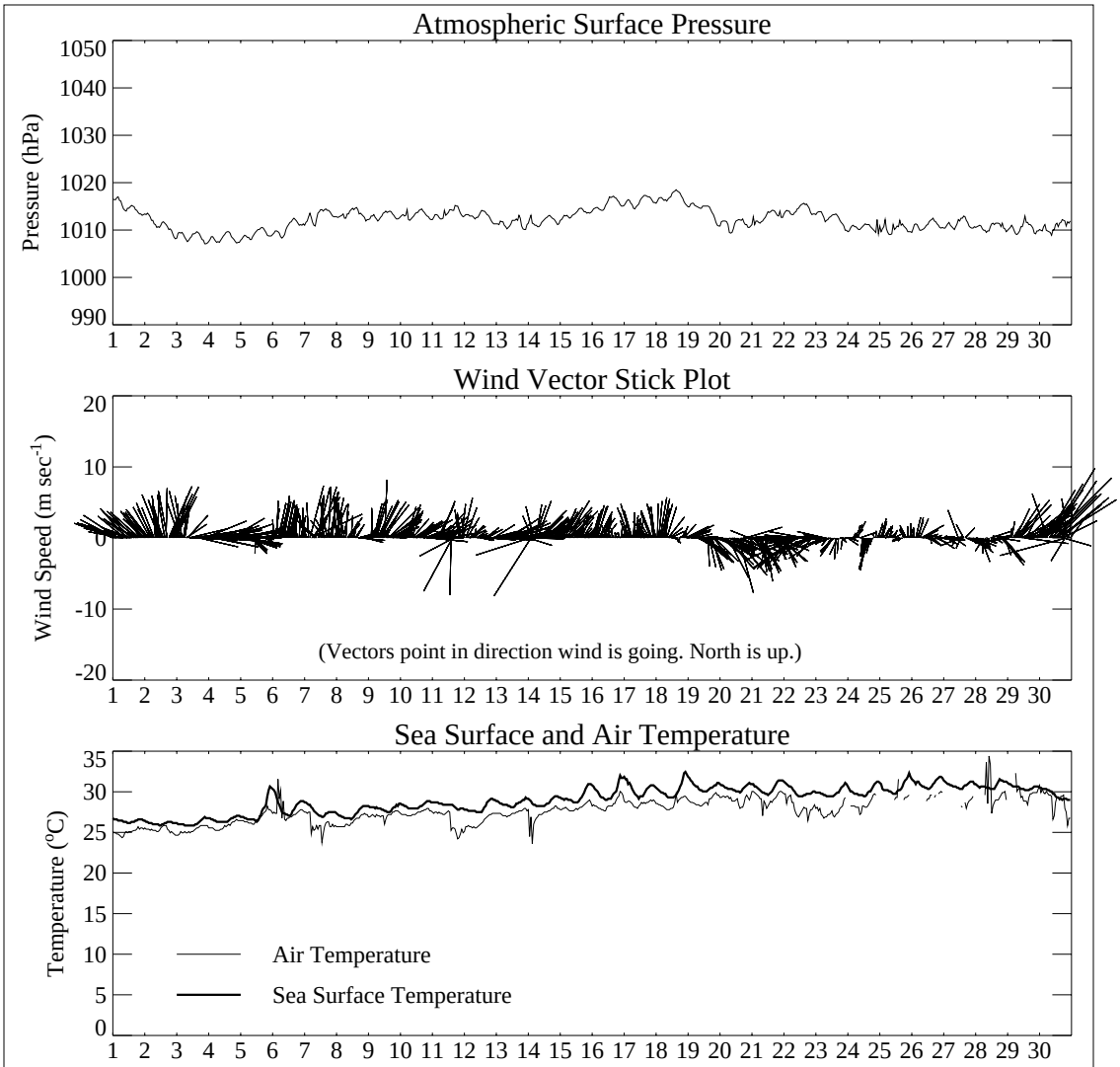


LATEX A Mooring 53 — May 1992

Latitude 28 48.05 N — Sample rate 1 hr
Longitude 90 57.27 W — Mast Height 3.6 m
Mean wind vector 1.3 (m sec^{-1}) from 147 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	15.3	1008.7	1024.1	1017.0	3.2
Wind Speed (m sec^{-1})	744	17.4	0.0	17.4	5.3	2.4
Air Temperature (^{o}C)	744	10.1	16.5	26.6	23.4	1.8
Sea Temperature (^{o}C)	744	7.5	21.4	28.9	24.7	1.7

Figure 53.92.05 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for May 1992.

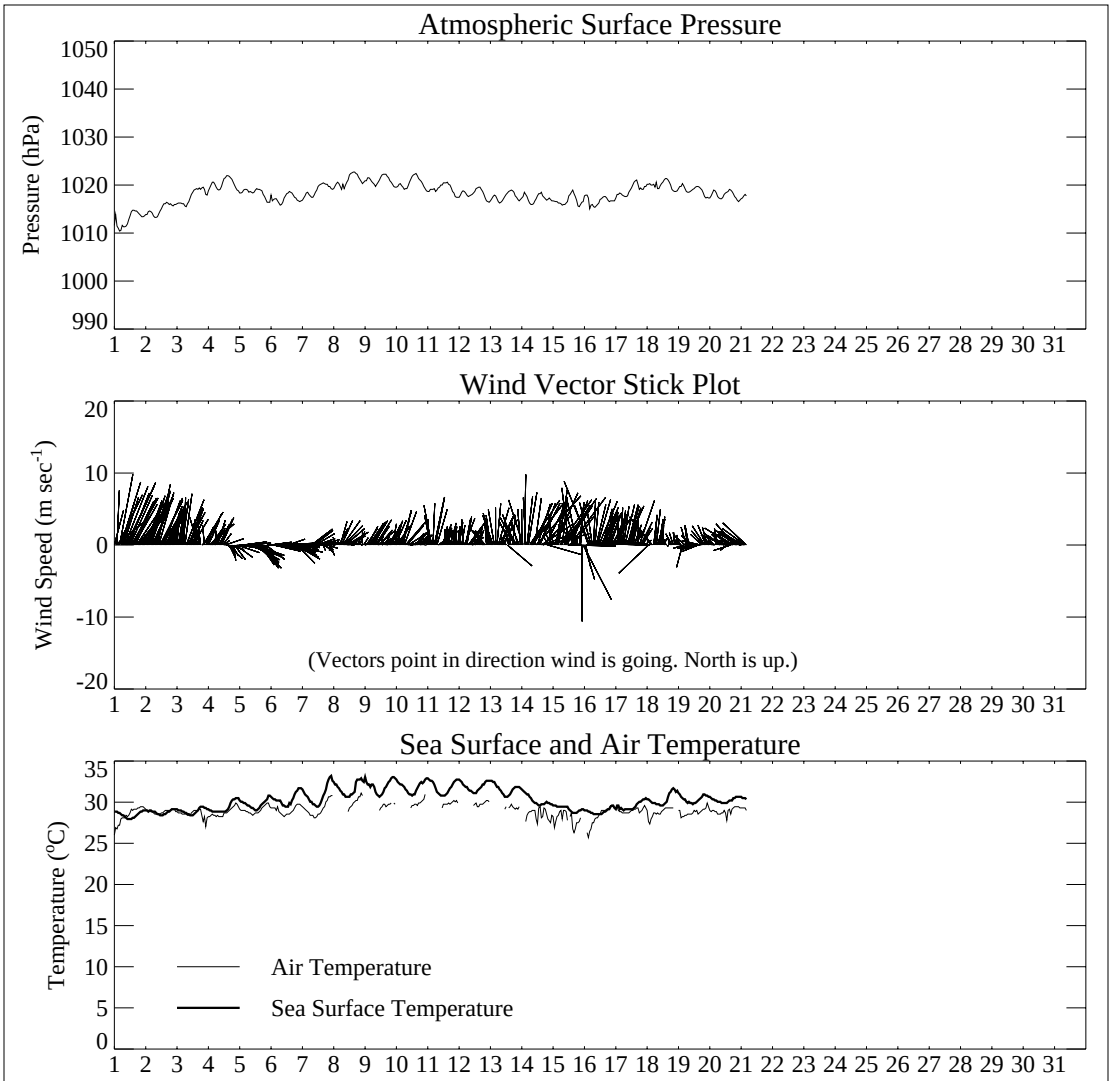


LATEX A Mooring 53 — June 1992

Latitude 28 48.05 N — Sample rate 1 hr
Longitude 90 57.27 W — Mast Height 3.6 m
Mean wind vector 2.0 (m sec^{-1}) from 228 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	719	11.4	1007.1	1018.5	1012.2	2.3
Wind Speed (m sec^{-1})	719	17.4	0.0	17.4	5.3	2.4
Air Temperature (^{o}C)	658	10.8	23.6	34.4	27.6	1.6
Sea Temperature (^{o}C)	719	6.6	25.9	32.5	29.0	1.6

Figure 53.92.06 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for June 1992.

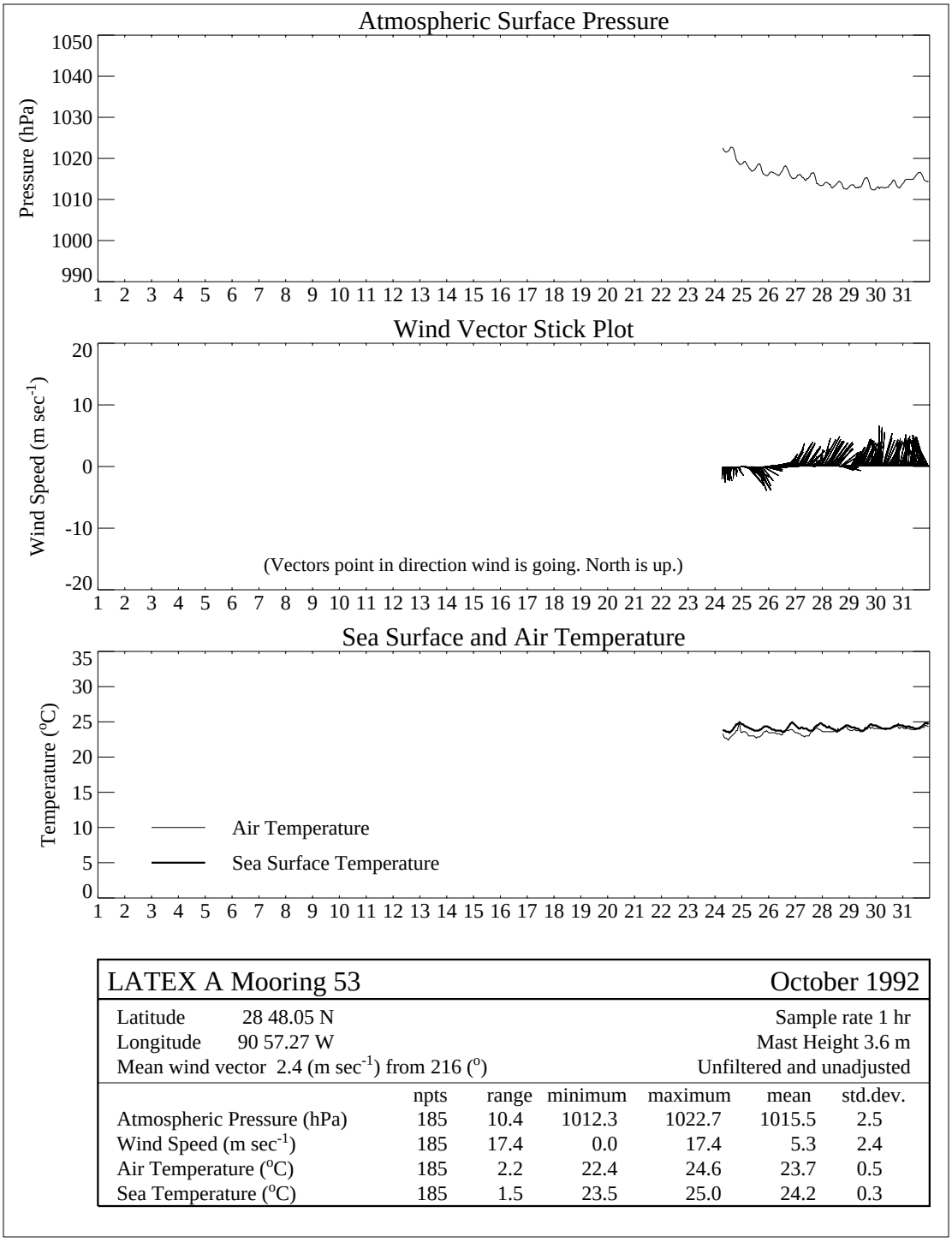


LATEX A Mooring 53 — July 1992

Latitude 28 48.05 N — Sample rate 1 hr
Longitude 90 57.27 W — Mast Height 3.6 m
Mean wind vector 2.8 (m sec^{-1}) from 204 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	485	12.3	1010.4	1022.7	1018.2	2.2
Wind Speed (m sec^{-1})	485	17.4	0.0	17.4	5.3	2.4
Air Temperature (^{o}C)	403	5.4	25.7	31.1	28.9	0.8
Sea Temperature (^{o}C)	485	5.2	28.0	33.2	30.3	1.3

Figure 53.92.07 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for July 1992.

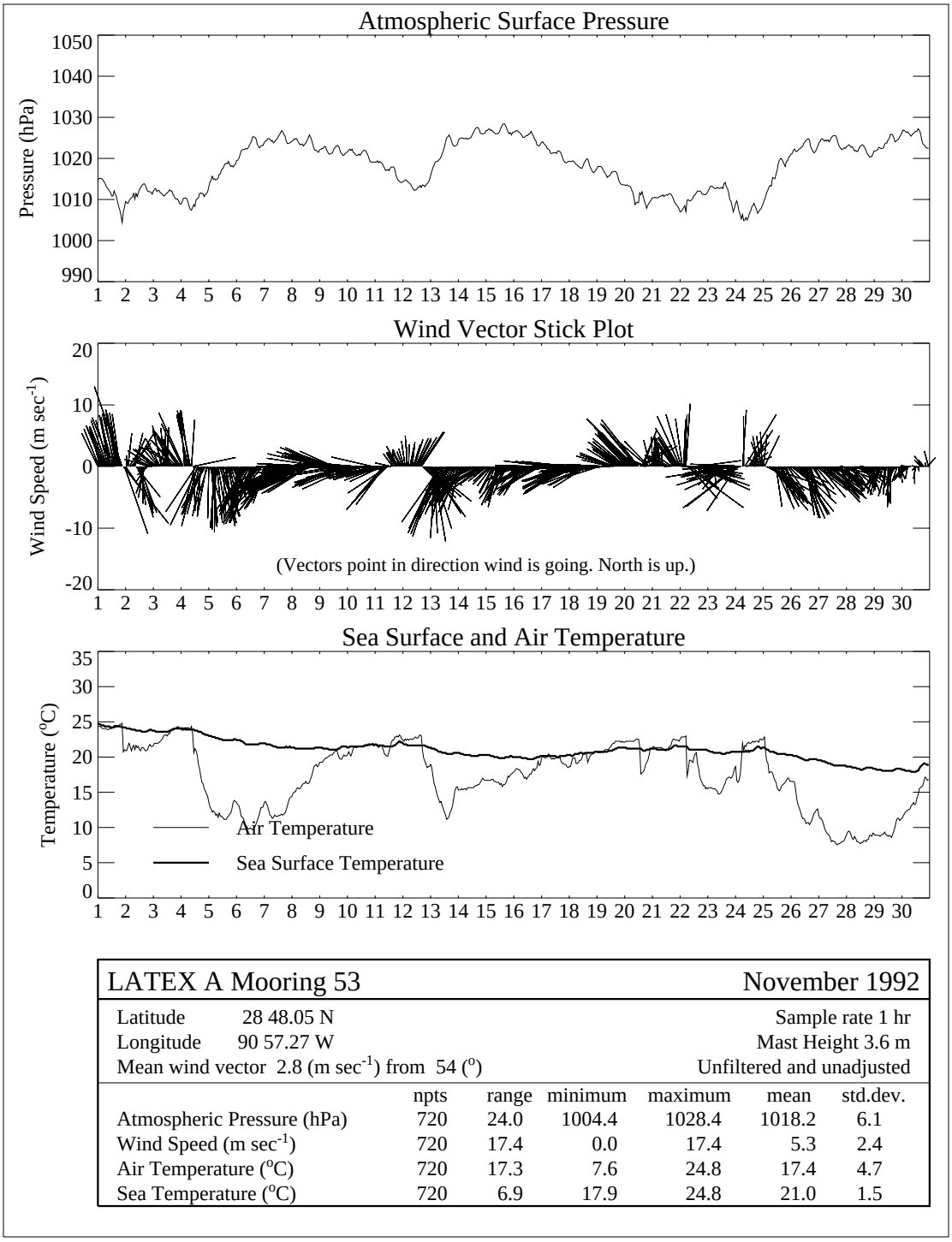


LATEX A Mooring 53 — October 1992

Latitude 28 48.05 N — Sample rate 1 hr
Longitude 90 57.27 W — Mast Height 3.6 m
Mean wind vector 2.4 (m sec^{-1}) from 216 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	185	10.4	1012.3	1022.7	1015.5	2.5
Wind Speed (m sec^{-1})	185	17.4	0.0	17.4	5.3	2.4
Air Temperature (^{o}C)	185	2.2	22.4	24.6	23.7	0.5
Sea Temperature (^{o}C)	185	1.5	23.5	25.0	24.2	0.3

Figure 53.92.10 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for October 1992.

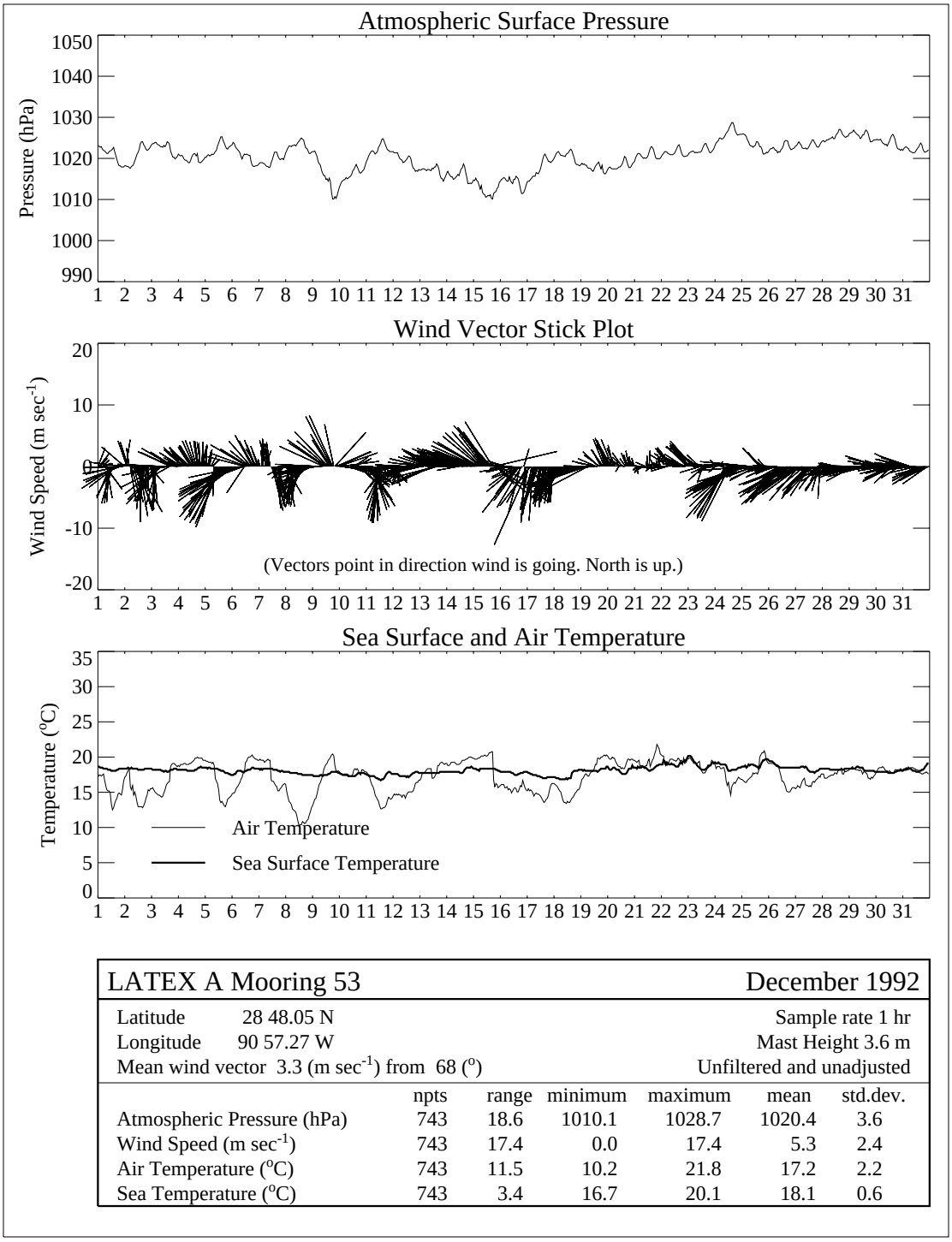


LATEX A Mooring 53 — November 1992

Latitude 28 48.05 N — Sample rate 1 hr
Longitude 90 57.27 W — Mast Height 3.6 m
Mean wind vector 2.8 (m sec^{-1}) from 54 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	720	24.0	1004.4	1028.4	1018.2	6.1
Wind Speed (m sec^{-1})	720	17.4	0.0	17.4	5.3	2.4
Air Temperature (^{o}C)	720	17.3	7.6	24.8	17.4	4.7
Sea Temperature (^{o}C)	720	6.9	17.9	24.8	21.0	1.5

Figure 53.92.11 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for November 1992.

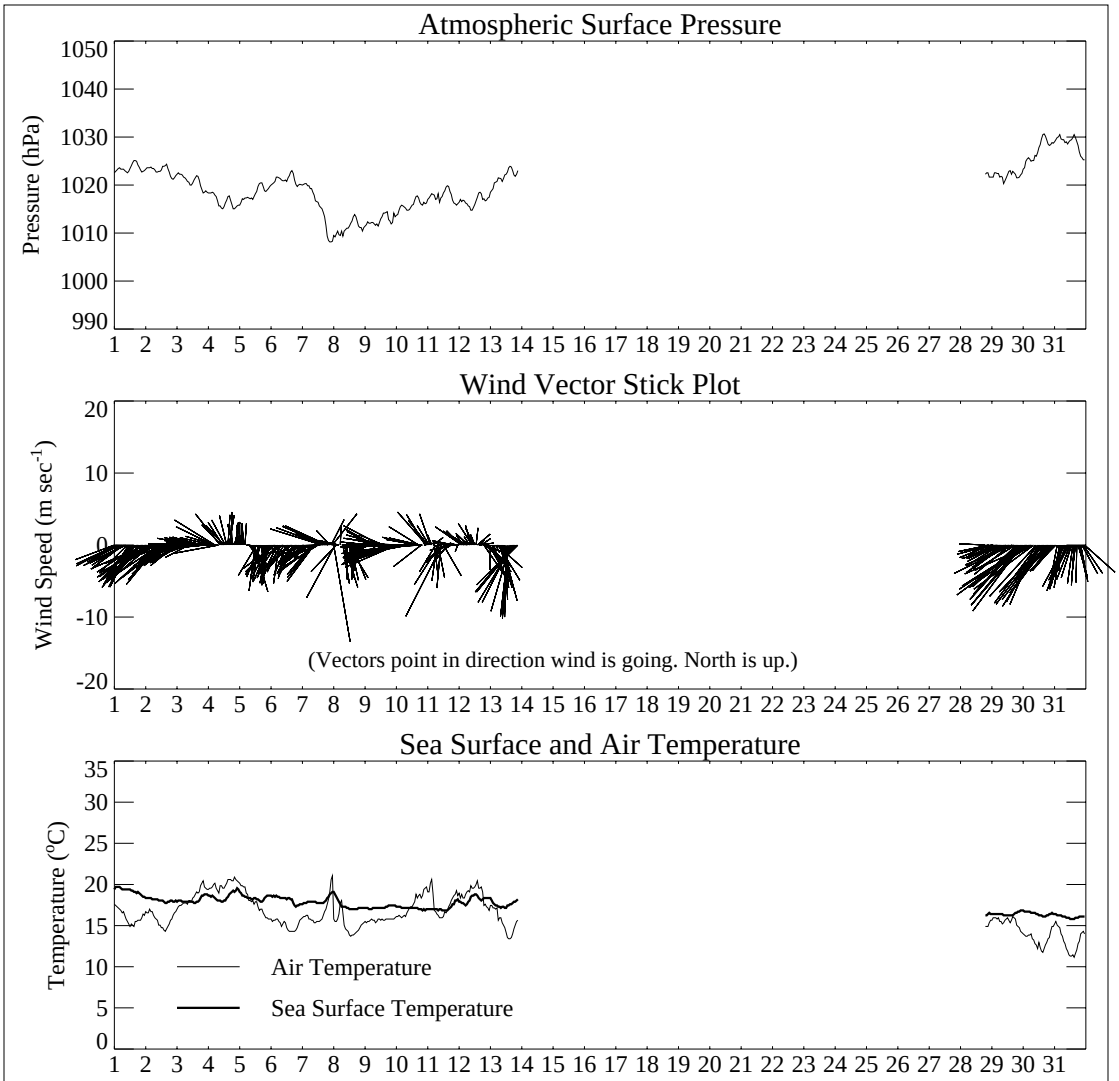


LATEX A Mooring 53 — December 1992

Latitude 28 48.05 N — Sample rate 1 hr
Longitude 90 57.27 W — Mast Height 3.6 m
Mean wind vector 3.3 (m sec^{-1}) from 68 (^{o}) — Unfiltered and unadjusted

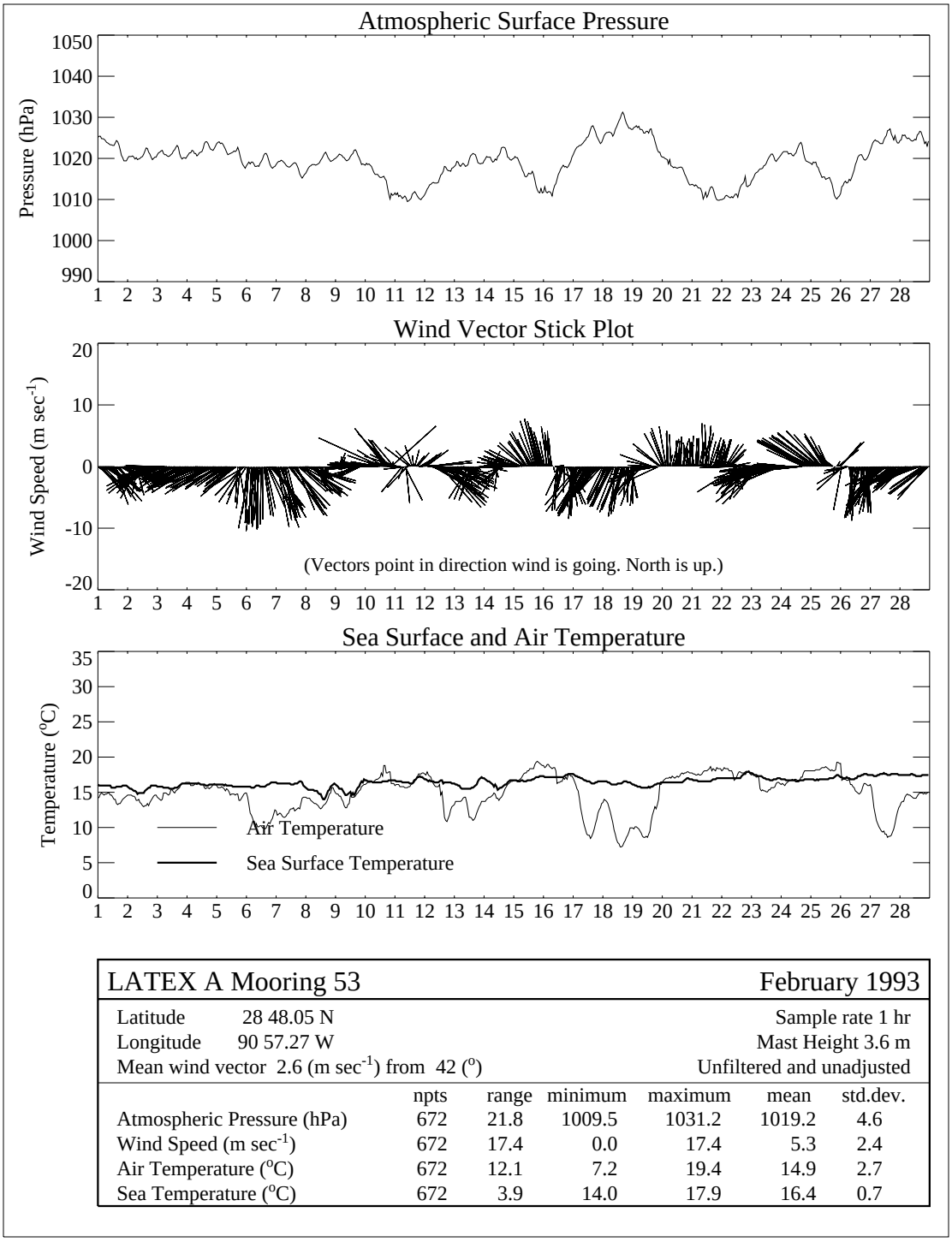
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	743	18.6	1010.1	1028.7	1020.4	3.6
Wind Speed (m sec^{-1})	743	17.4	0.0	17.4	5.3	2.4
Air Temperature (^{o}C)	743	11.5	10.2	21.8	17.2	2.2
Sea Temperature (^{o}C)	743	3.4	16.7	20.1	18.1	0.6

Figure 53.92.12 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for December 1992.



LATEX A Mooring 53						January 1993
Latitude 28 48.05 N						Sample rate 1 hr
Longitude 90 57.27 W						Mast Height 3.6 m
Mean wind vector 3.9 (m sec^{-1}) from 53 (^{o})						Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	387	22.5	1008.2	1030.7	1019.5	5.0
Wind Speed (m sec^{-1})	387	17.4	0.0	17.4	5.3	2.4
Air Temperature (^{o}C)	387	9.9	11.1	21.0	16.4	2.1
Sea Temperature (^{o}C)	387	3.9	15.8	19.7	17.6	0.9

Figure 53.93.01 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for January 1993.

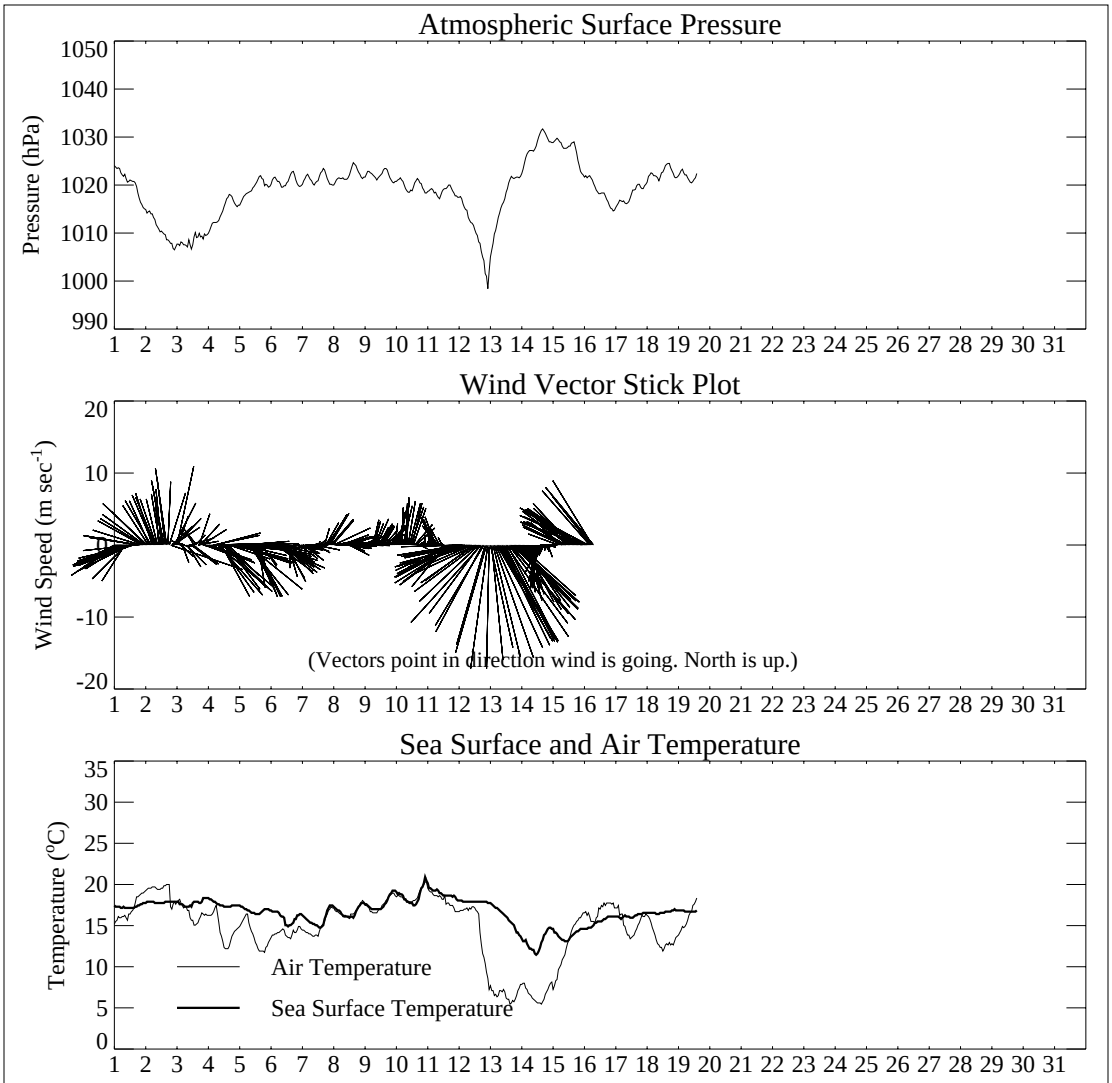


LATEX A Mooring 53 — February 1993

Latitude 28 48.05 N — Sample rate 1 hr
Longitude 90 57.27 W — Mast Height 3.6 m
Mean wind vector 2.6 (m sec^{-1}) from 42 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	672	21.8	1009.5	1031.2	1019.2	4.6
Wind Speed (m sec^{-1})	672	17.4	0.0	17.4	5.3	2.4
Air Temperature (^{o}C)	672	12.1	7.2	19.4	14.9	2.7
Sea Temperature (^{o}C)	672	3.9	14.0	17.9	16.4	0.7

Figure 53.93.02 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for February 1993.

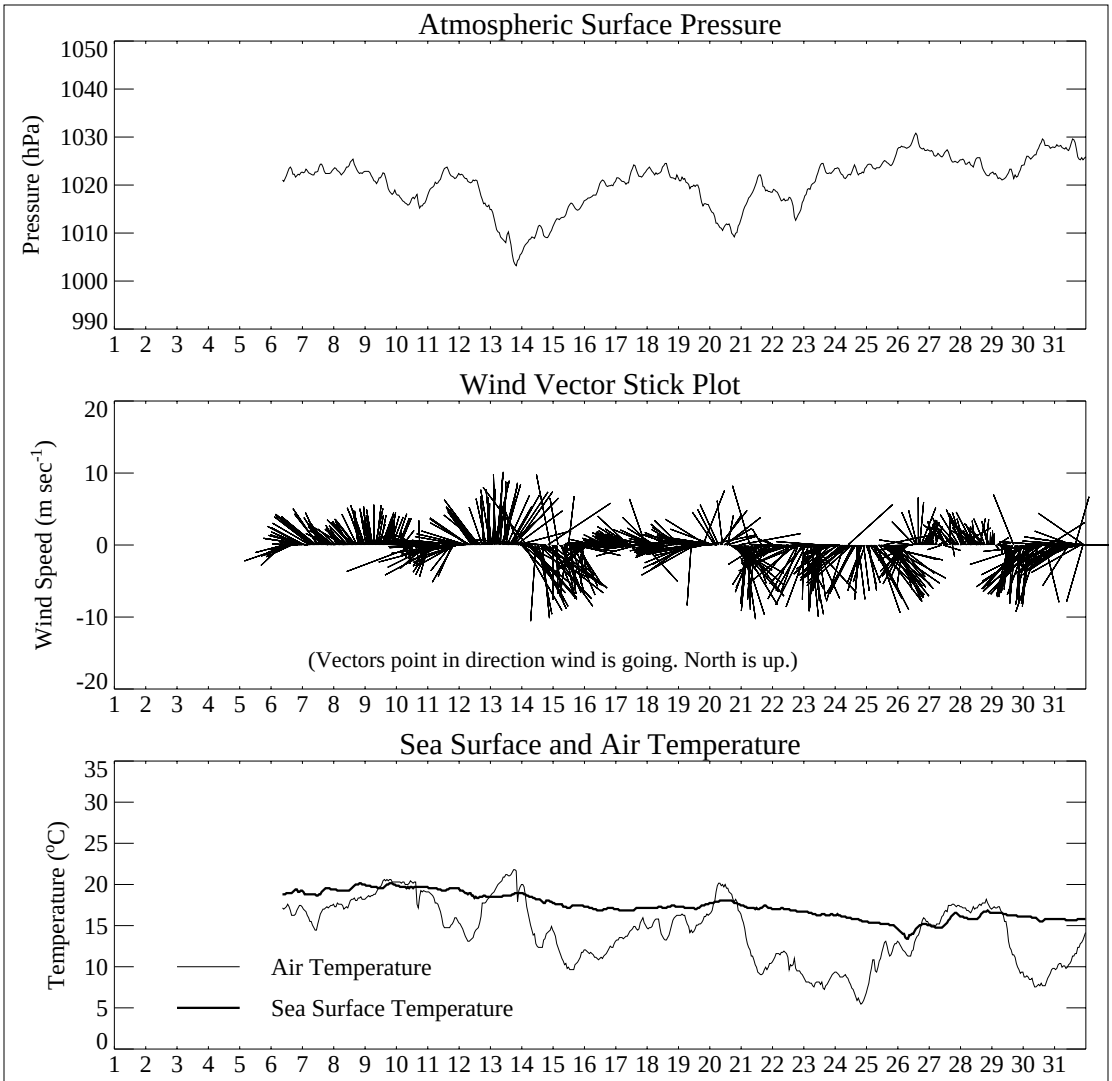


LATEX A Mooring 53 — March 1993

Latitude 28 48.05 N — Sample rate 1 hr
Longitude 90 57.27 W — Mast Height 3.6 m
Mean wind vector 1.1 (m sec^{-1}) from 332 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	447	33.3	998.4	1031.7	1018.9	5.7
Wind Speed (m sec^{-1})	368	17.4	0.0	17.4	5.3	2.4
Air Temperature (^{o}C)	447	14.8	5.4	20.3	14.9	3.6
Sea Temperature (^{o}C)	447	9.4	11.4	20.9	16.7	1.6

Figure 53.93.03 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for March 1993.

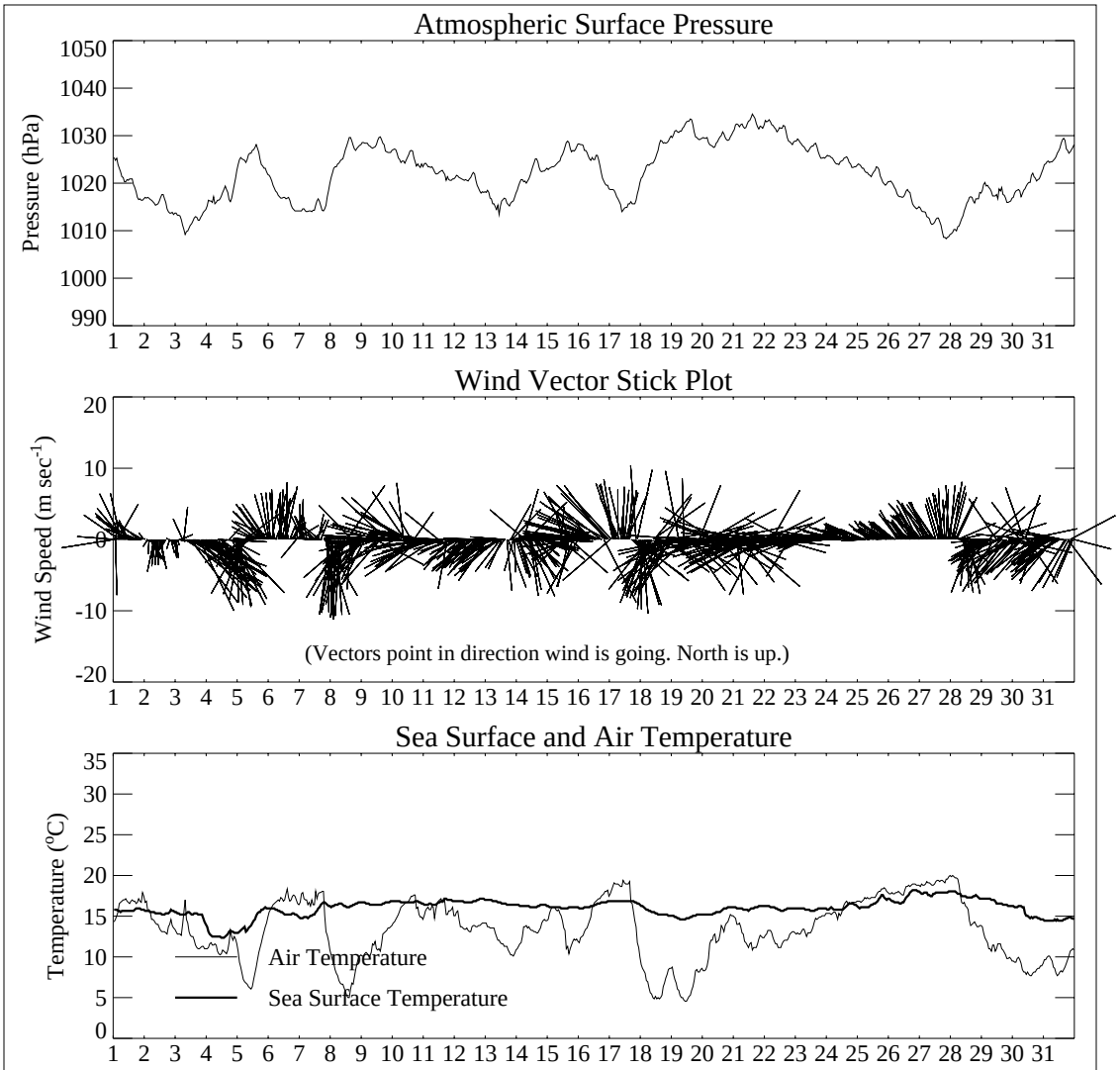


LATEX A Mooring 53 — December 1993

Latitude 28 48.05 N — Sample rate 1 hr
Longitude 90 57.27 W — Mast Height 3.6 m
Mean wind vector 1.8 (m sec^{-1}) from 69 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	616	27.6	1003.2	1030.8	1020.4	5.3
Wind Speed (m sec^{-1})	616	17.4	0.0	17.4	5.3	2.4
Air Temperature (^{o}C)	616	16.3	5.4	21.8	14.3	3.8
Sea Temperature (^{o}C)	616	6.8	13.4	20.1	17.4	1.5

Figure 53.93.12 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for December 1993.

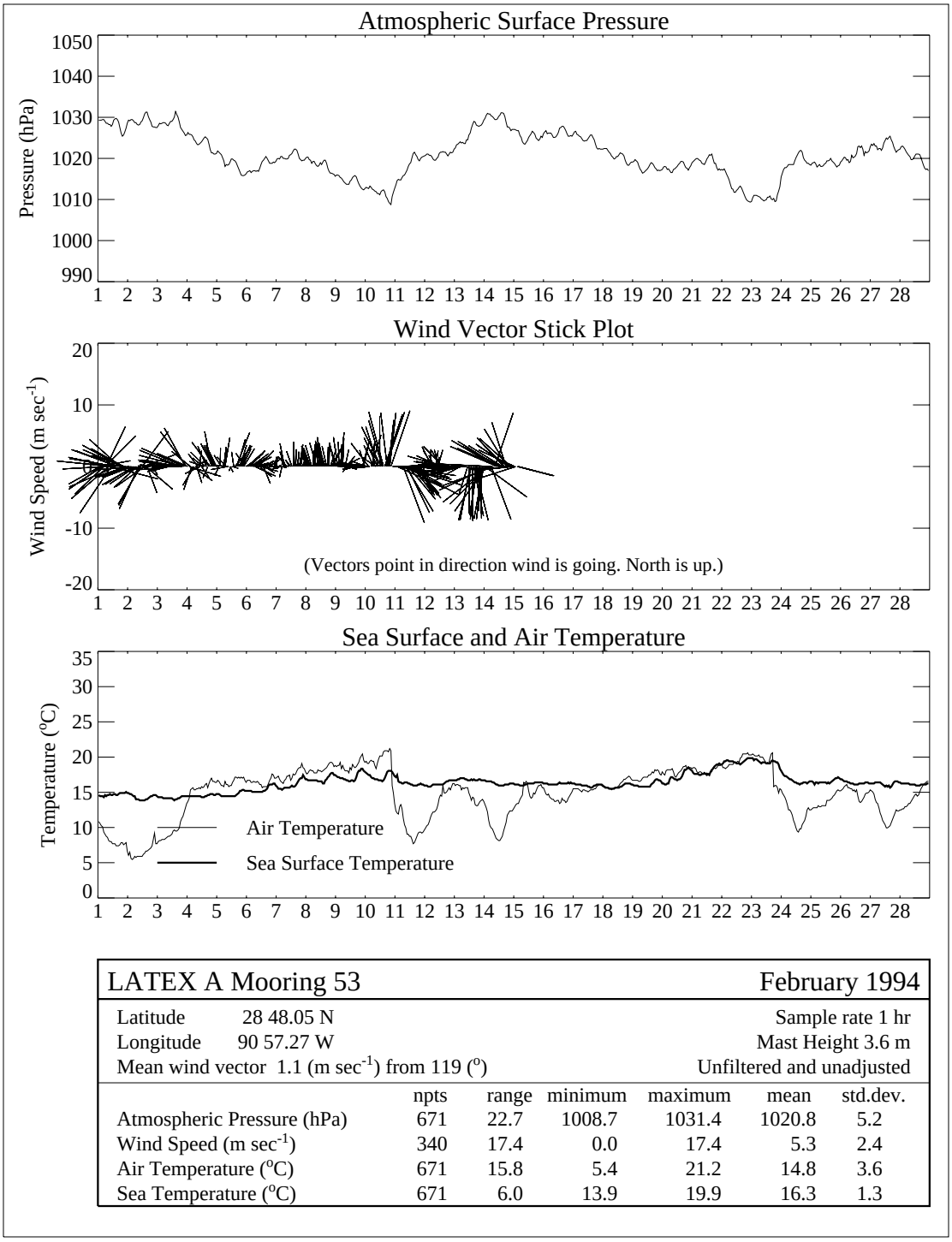


LATEX A Mooring 53 — January 1994

Latitude 28 48.05 N — Sample rate 1 hr
Longitude 90 57.27 W — Mast Height 3.6 m
Mean wind vector 2.2 (m sec^{-1}) from 68 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	744	26.3	1008.3	1034.6	1022.0	5.9
Wind Speed (m sec^{-1})	744	17.4	0.0	17.4	5.3	2.4
Air Temperature (^{o}C)	744	15.4	4.6	20.0	13.4	3.7
Sea Temperature (^{o}C)	744	5.9	12.4	18.2	16.0	1.1

Figure 53.94.01 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for January 1994.

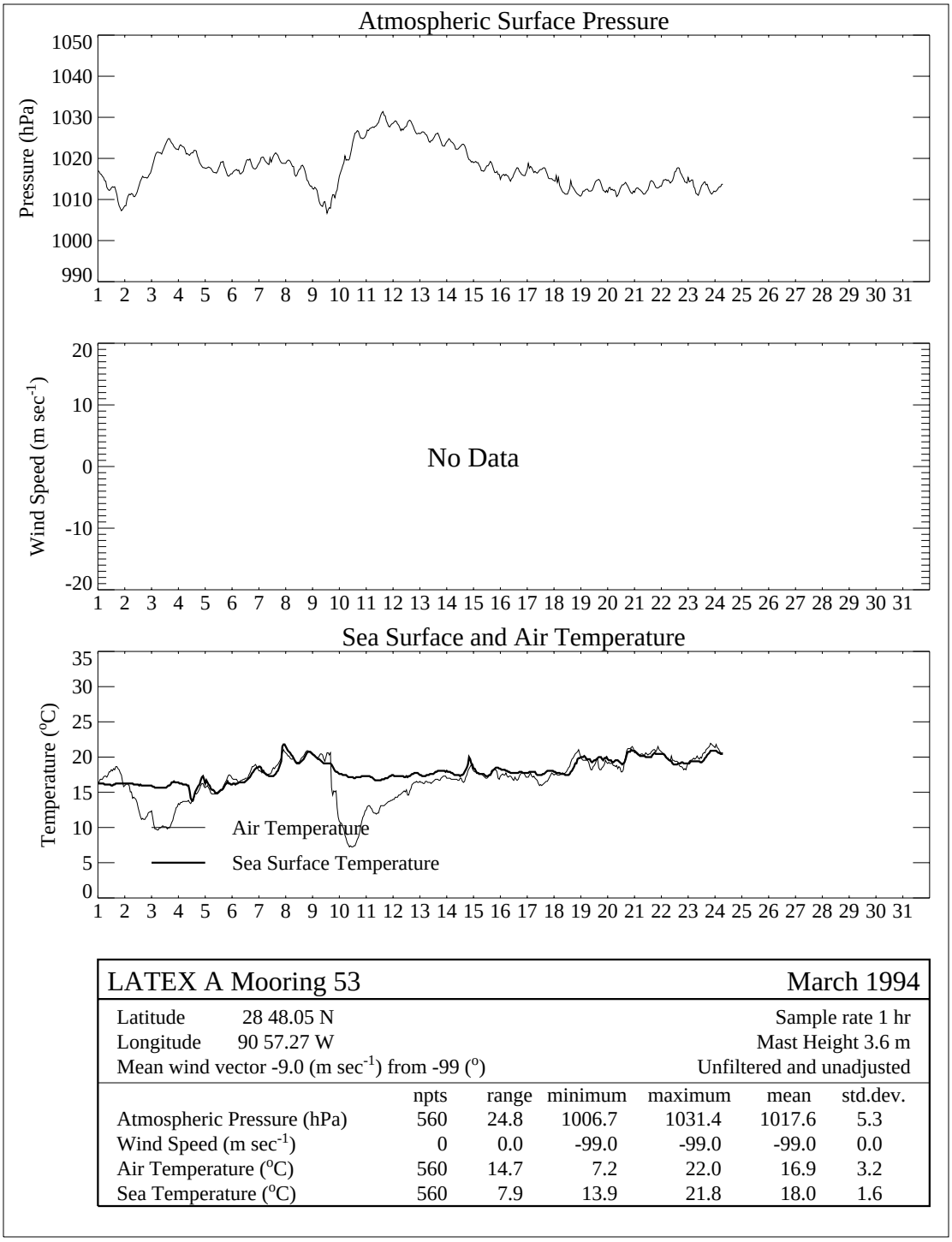


LATEX A Mooring 53 — February 1994

Latitude 28 48.05 N — Sample rate 1 hr
Longitude 90 57.27 W — Mast Height 3.6 m
Mean wind vector 1.1 (m sec^{-1}) from 119 (^{o}) — Unfiltered and unadjusted

	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	671	22.7	1008.7	1031.4	1020.8	5.2
Wind Speed (m sec^{-1})	340	17.4	0.0	17.4	5.3	2.4
Air Temperature (^{o}C)	671	15.8	5.4	21.2	14.8	3.6
Sea Temperature (^{o}C)	671	6.0	13.9	19.9	16.3	1.3

Figure 53.94.02 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for February 1994.



LATEX A Mooring 53						March 1994
Latitude 28 48.05 N						Sample rate 1 hr
Longitude 90 57.27 W						Mast Height 3.6 m
Mean wind vector -9.0 (m sec^{-1}) from -99 (^{o})						Unfiltered and unadjusted
	npts	range	minimum	maximum	mean	std.dev.
Atmospheric Pressure (hPa)	560	24.8	1006.7	1031.4	1017.6	5.3
Wind Speed (m sec^{-1})	0	0.0	-99.0	-99.0	-99.0	0.0
Air Temperature (^{o}C)	560	14.7	7.2	22.0	16.9	3.2
Sea Temperature (^{o}C)	560	7.9	13.9	21.8	18.0	1.6

Figure 53.94.03 Time series of hourly samples of surface pressure, winds, sea surface and air temperatures with statistics for March 1994.

APPENDIX B

Wind Roses for LATEX A Data

Figures presented in this appendix are wind roses on a base map of the study area. Roses for NDBC/CMAN/NWS stations, as well as LATEX buoys, are included for comparison and completeness of the fields. Following meteorological convention, the feathers on the wind roses point in the direction from which the wind is coming. The length of the feather is proportional to the percent frequency of occurrence of wind from that direction. The individual segments represent different speed classes and their lengths are proportional to the frequency of wind speed from the given direction. No marker is drawn if a station had no data points during the month. When few (1-99) data points are available during a month, a location circle is drawn but no feathers are plotted. Tabular listings of the wind statistics for LATEX buoys are found in appendix C for the LATEX A buoys only.

In this appendix, figures are numbered Figure YY.MM, where YY are the last two digits of the year, and MM indicates the month (01 = January,... 12 = December).

Monthly Wind Roses

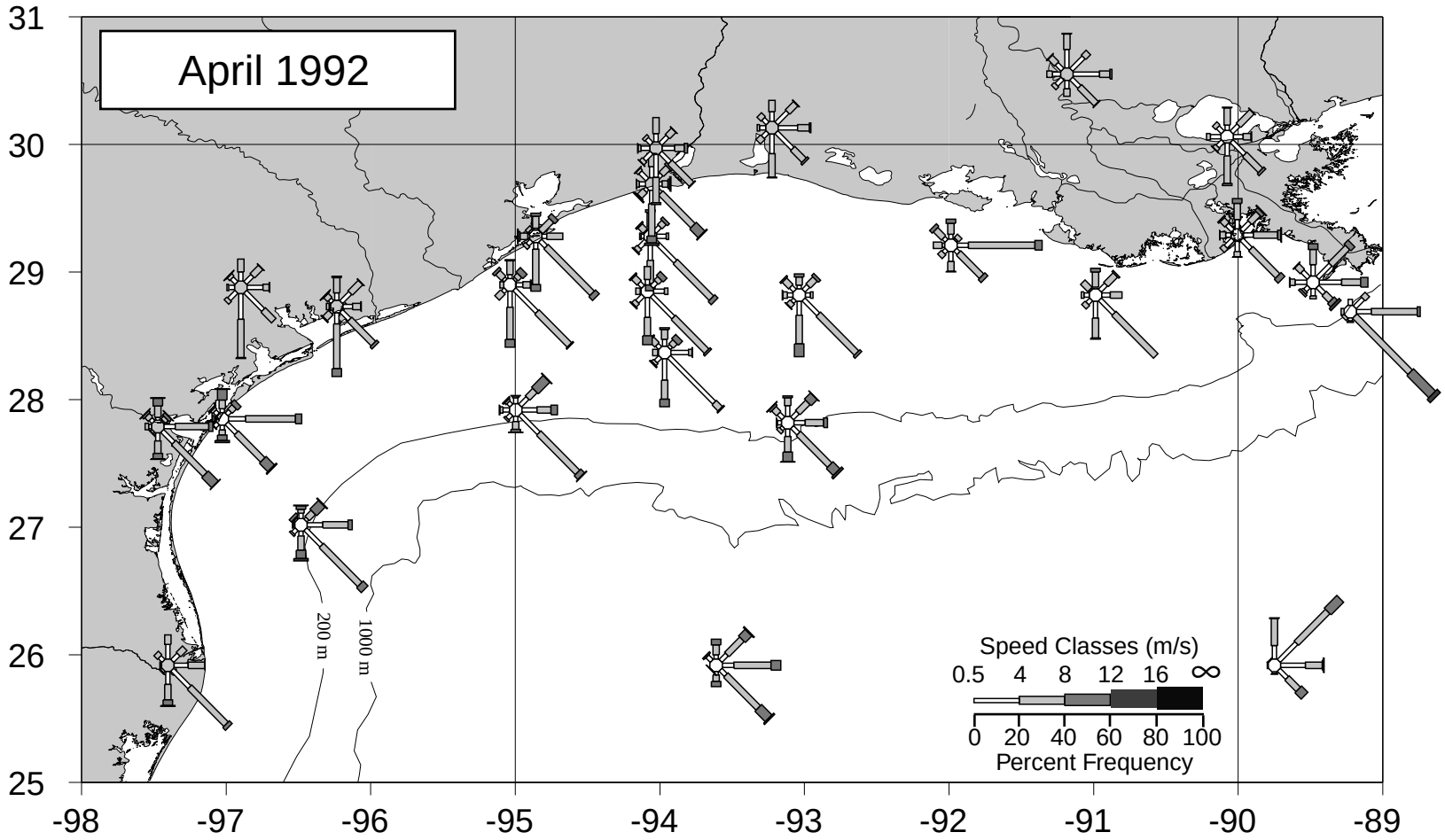


Figure 92.04 Percent frequency of occurrence of wind by speed and direction classes during April 1992 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

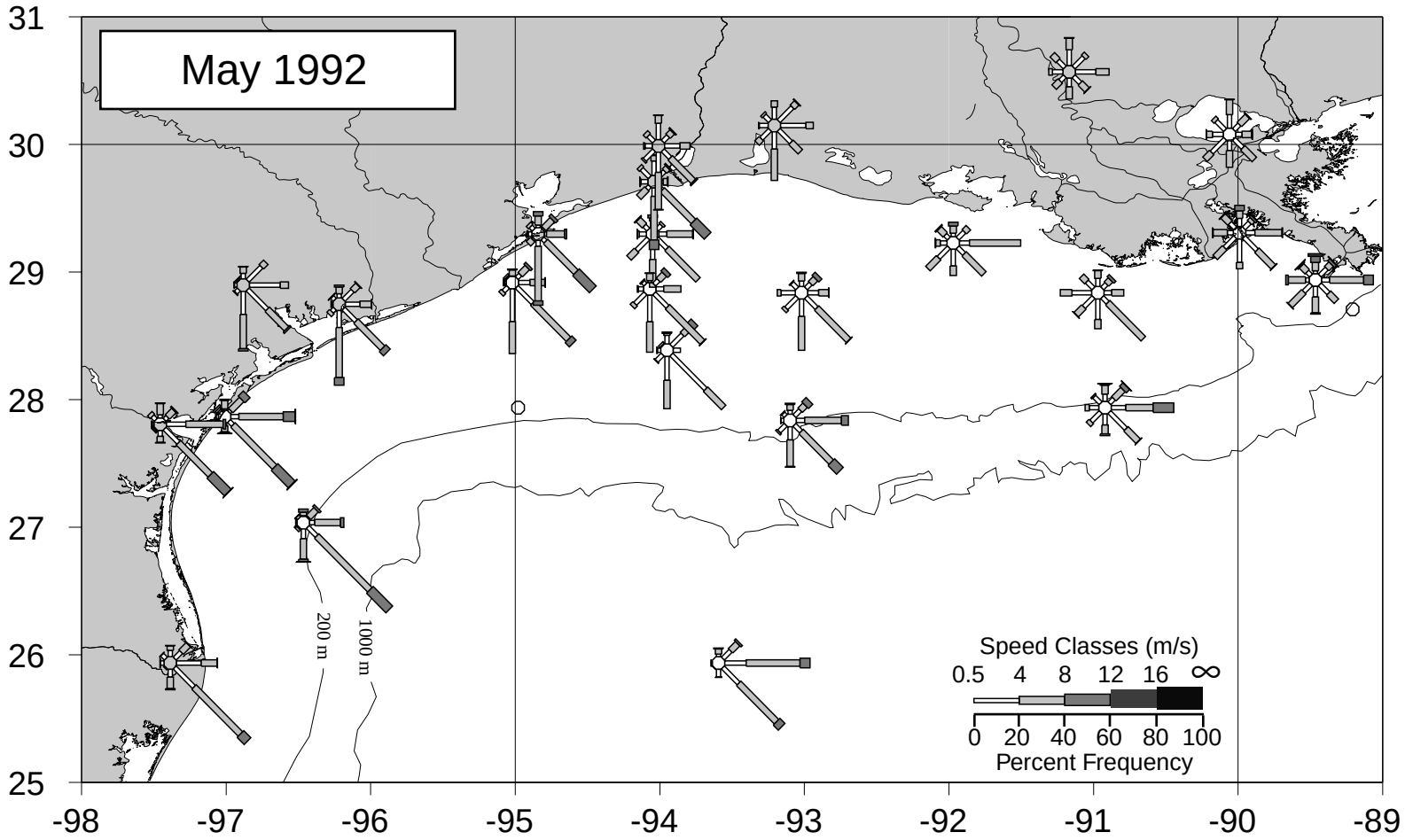


Figure 92.05 Percent frequency of occurrence of wind by speed and direction classes during May 1992 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

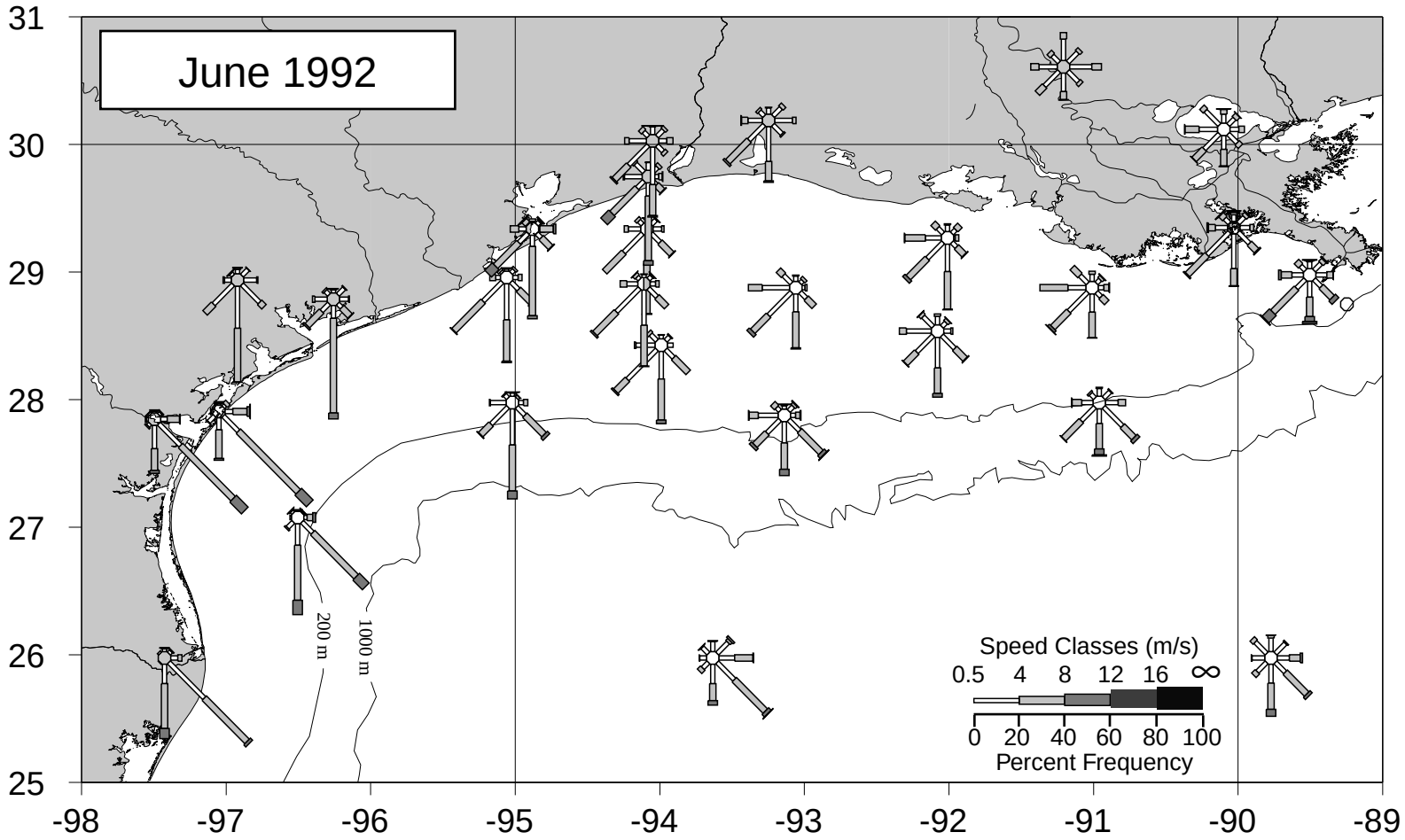


Figure 92.06 Percent frequency of occurrence of wind by speed and direction classes during June 1992 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

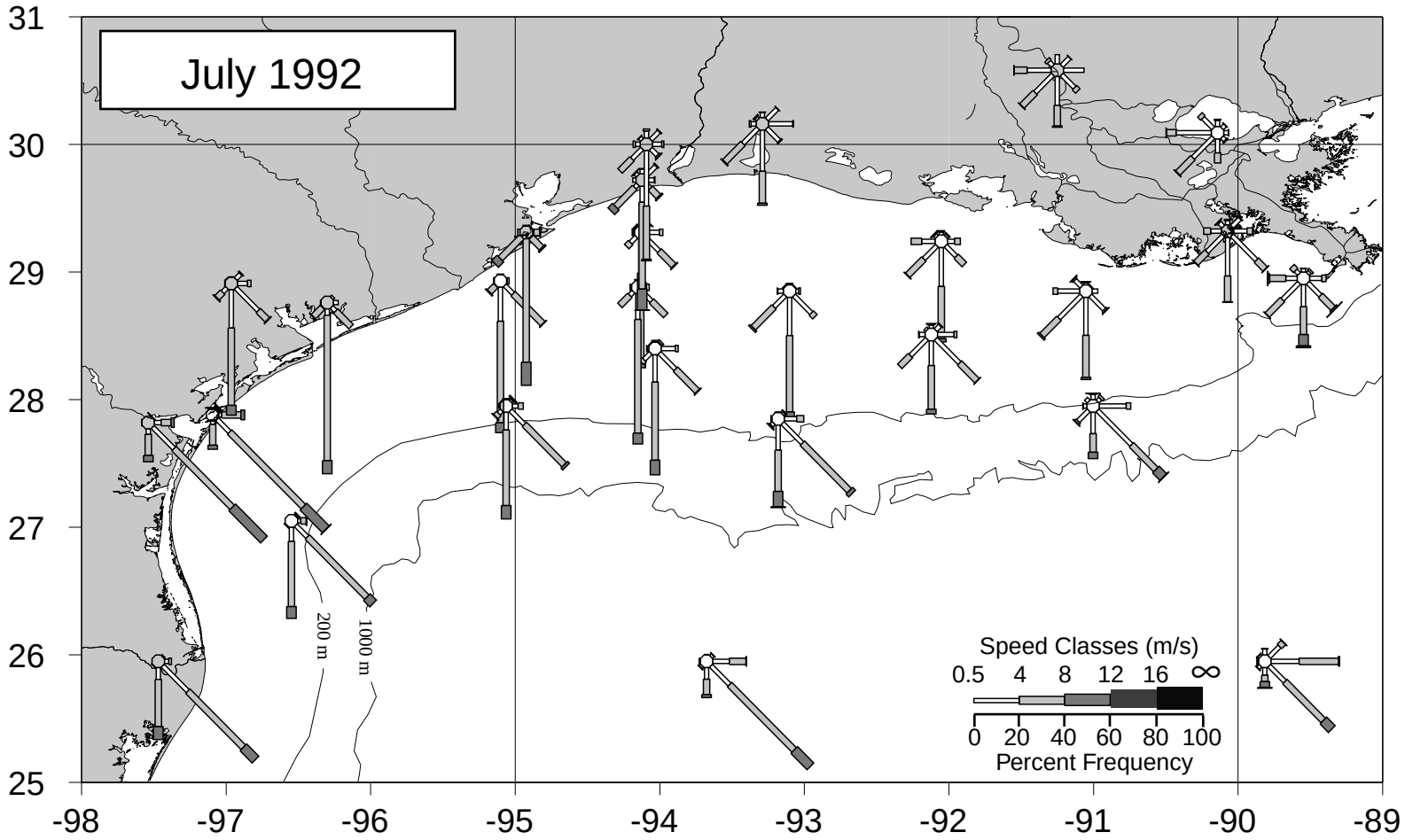


Figure 92.07 Percent frequency of occurrence of wind by speed and direction classes during July 1992 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

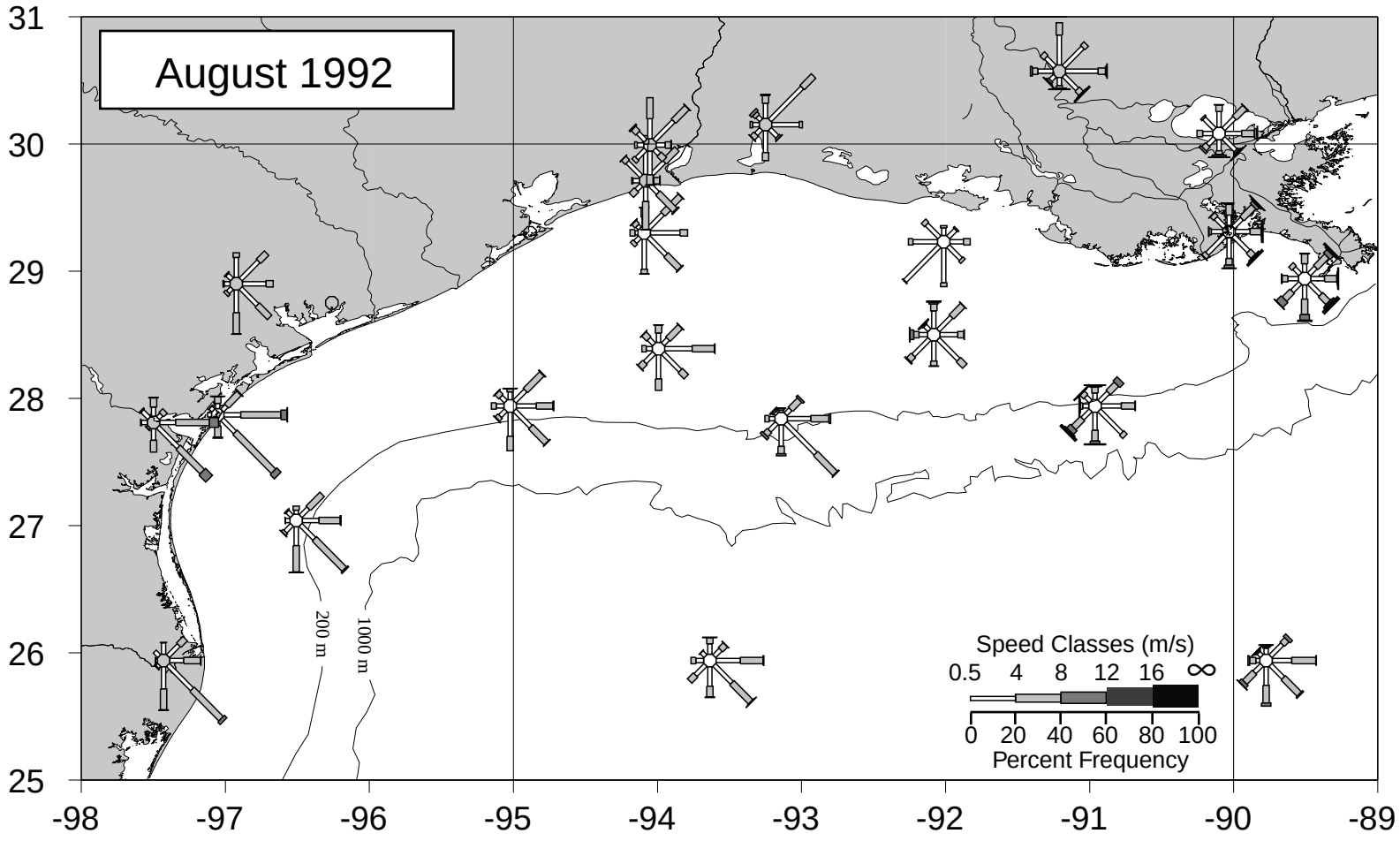


Figure 92.08 Percent frequency of occurrence of wind by speed and direction classes during August 1992 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

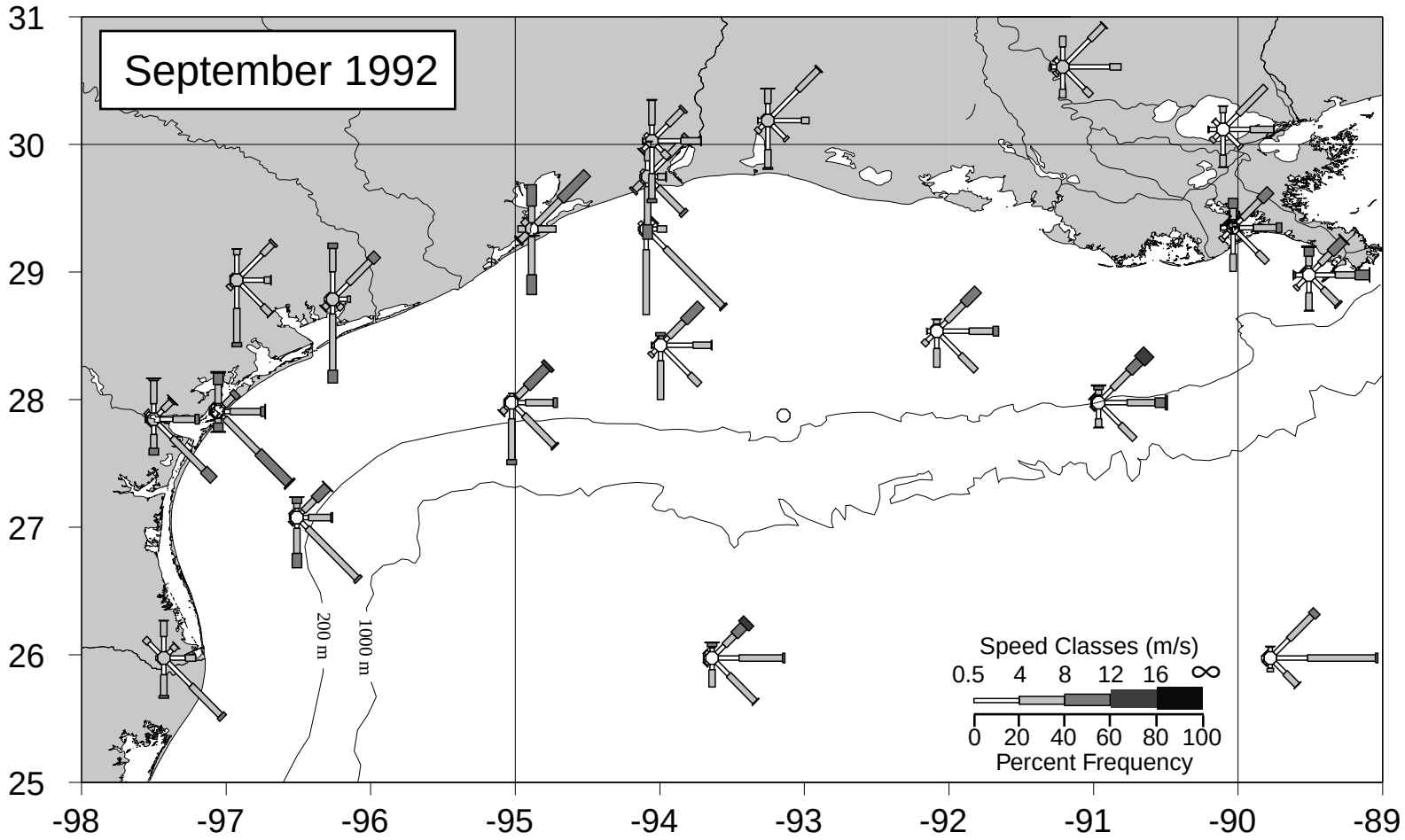


Figure 92.09 Percent frequency of occurrence of wind by speed and direction classes during September 1992 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

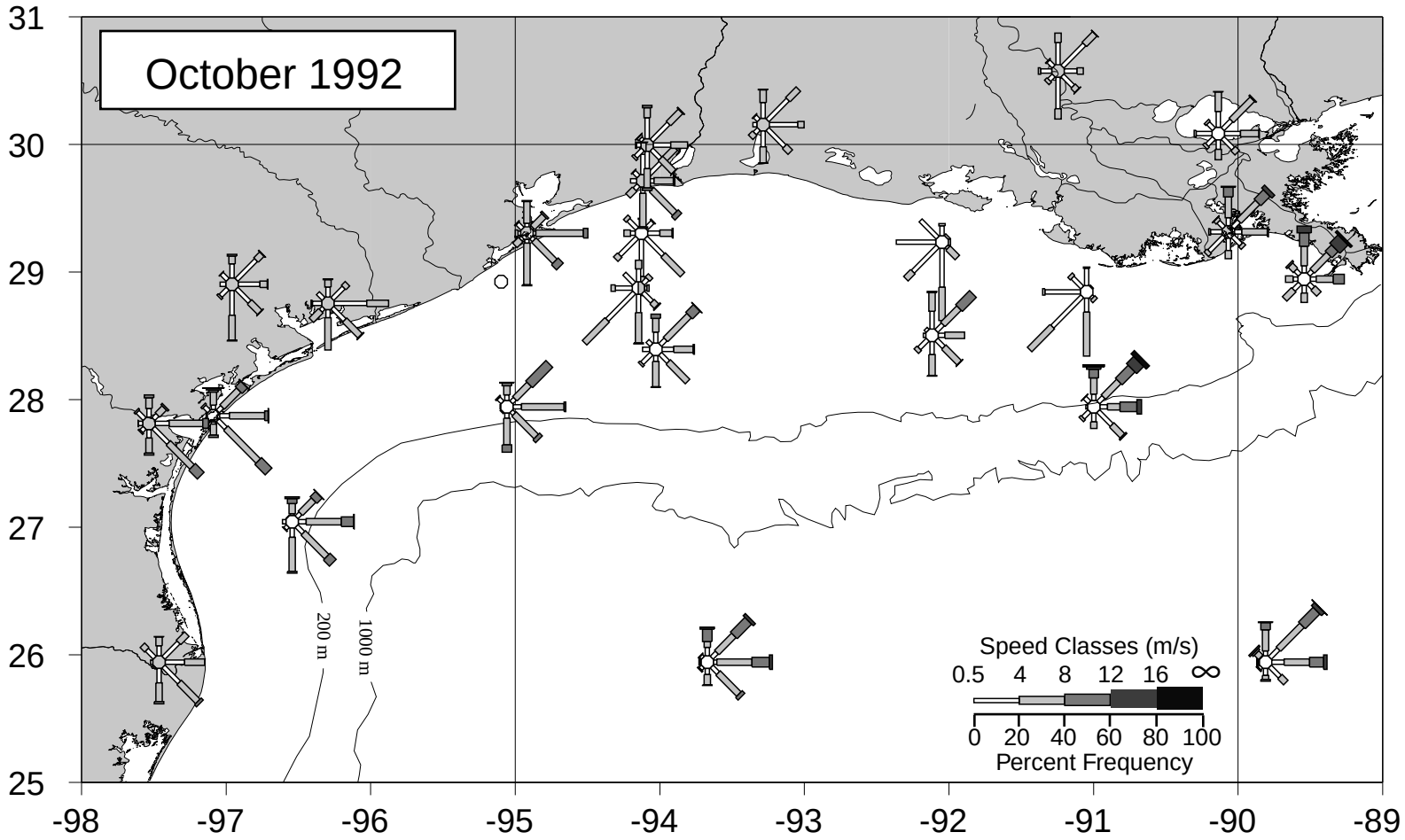


Figure 92.10 Percent frequency of occurrence of wind by speed and direction classes during October 1992 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

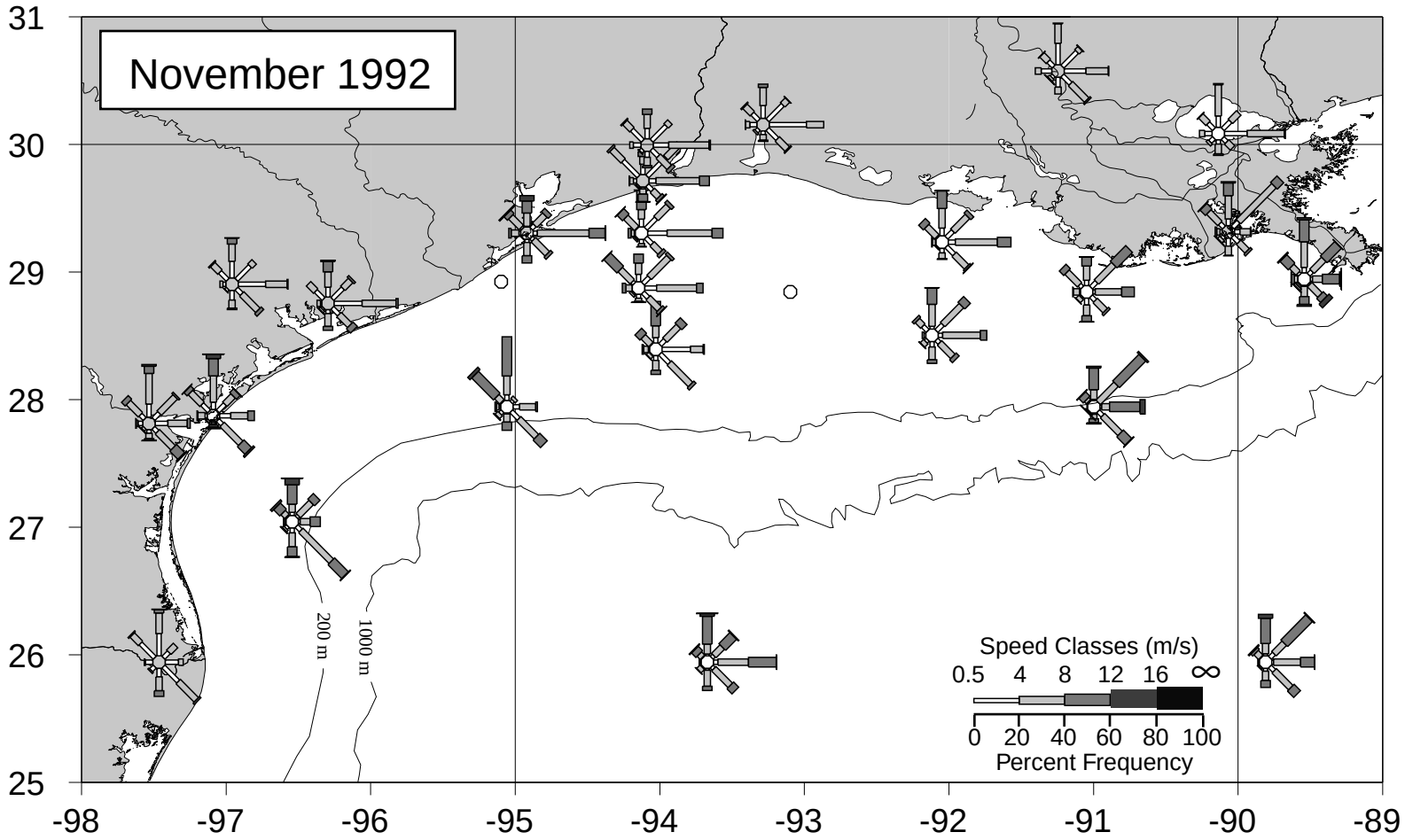


Figure 92.11 Percent frequency of occurrence of wind by speed and direction classes during November 1992 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

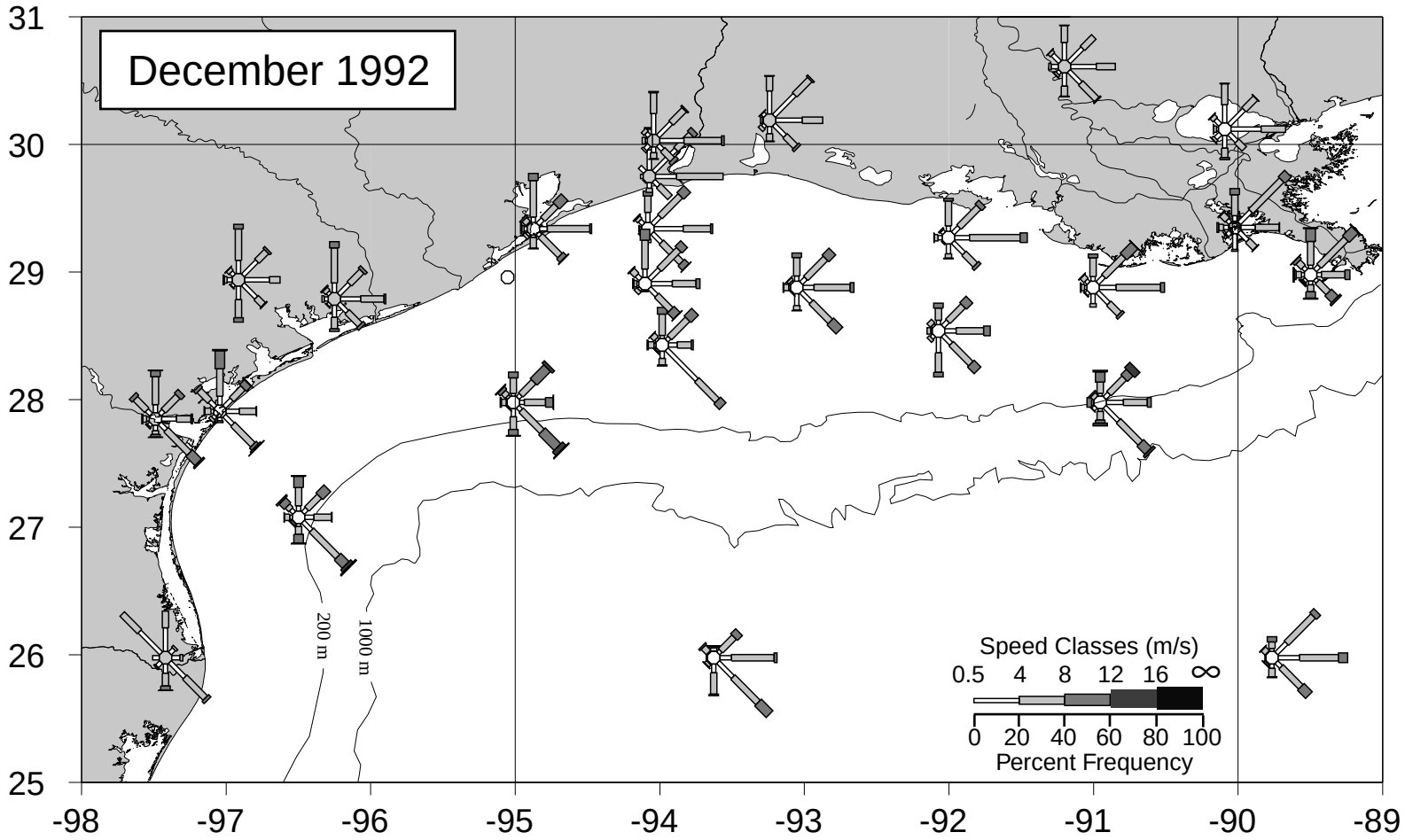


Figure 92.12 Percent frequency of occurrence of wind by speed and direction classes during December 1992 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

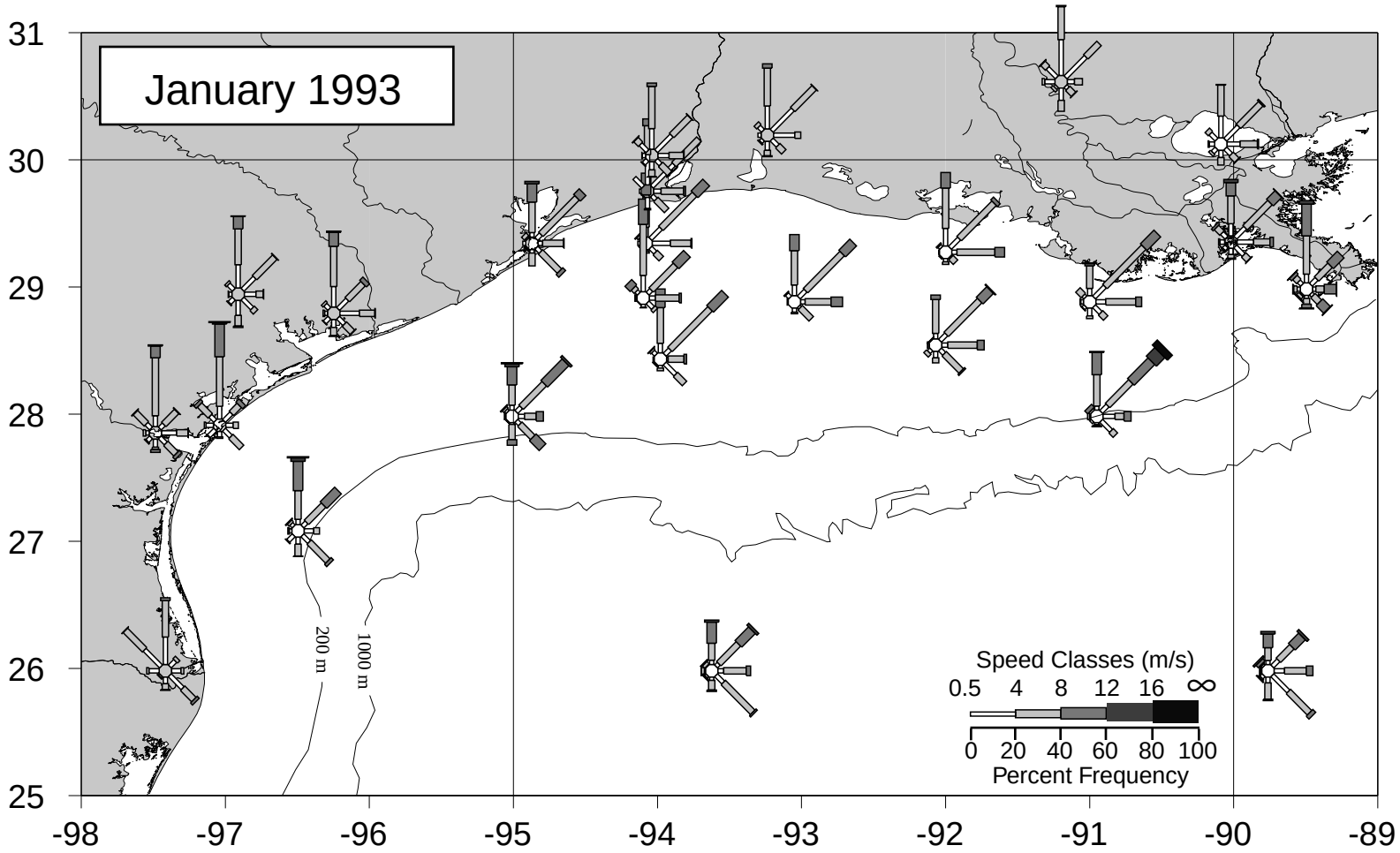


Figure 93.01 Percent frequency of occurrence of wind by speed and direction classes during January 1993 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

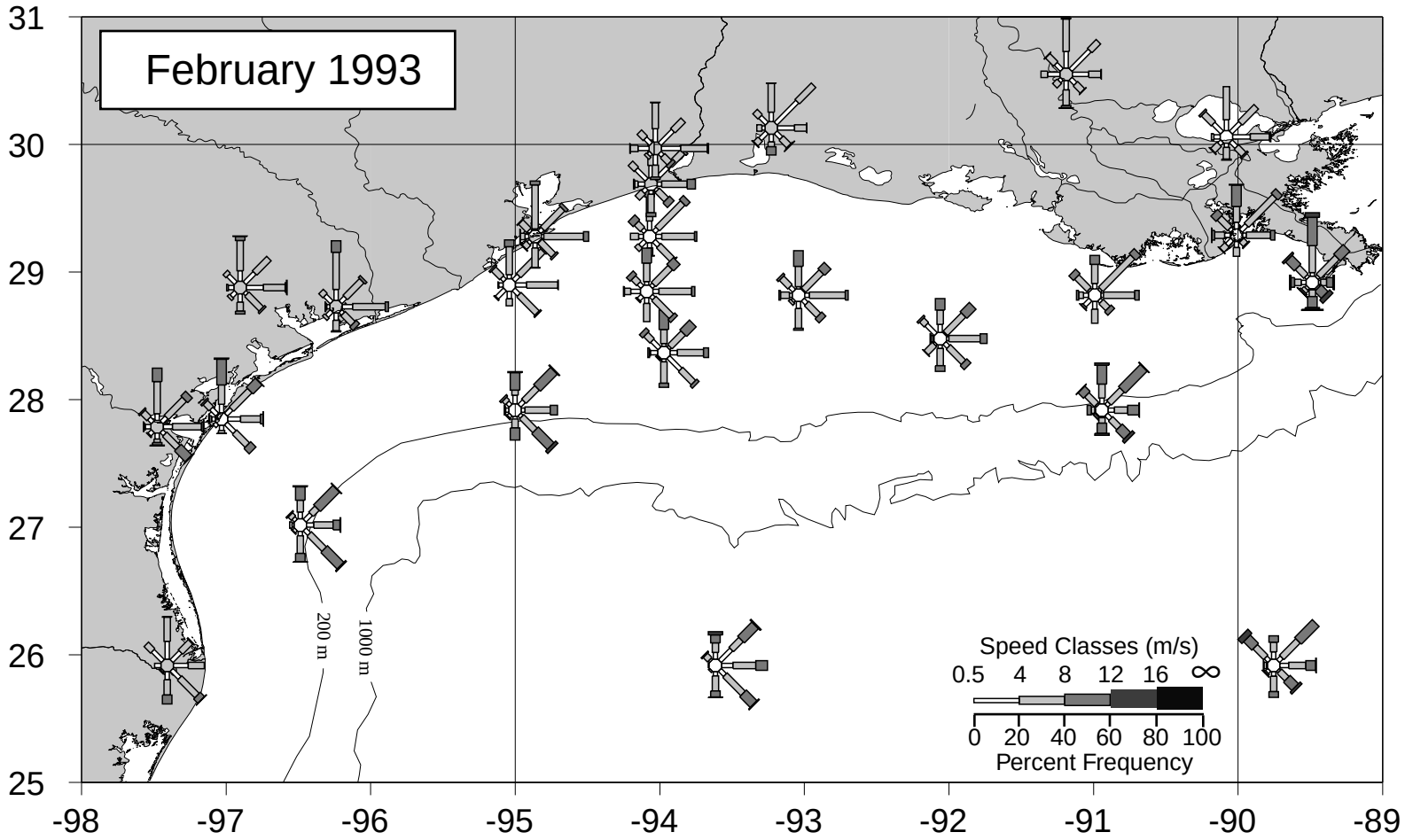


Figure 93.02 Percent frequency of occurrence of wind by speed and direction classes during February 1993 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

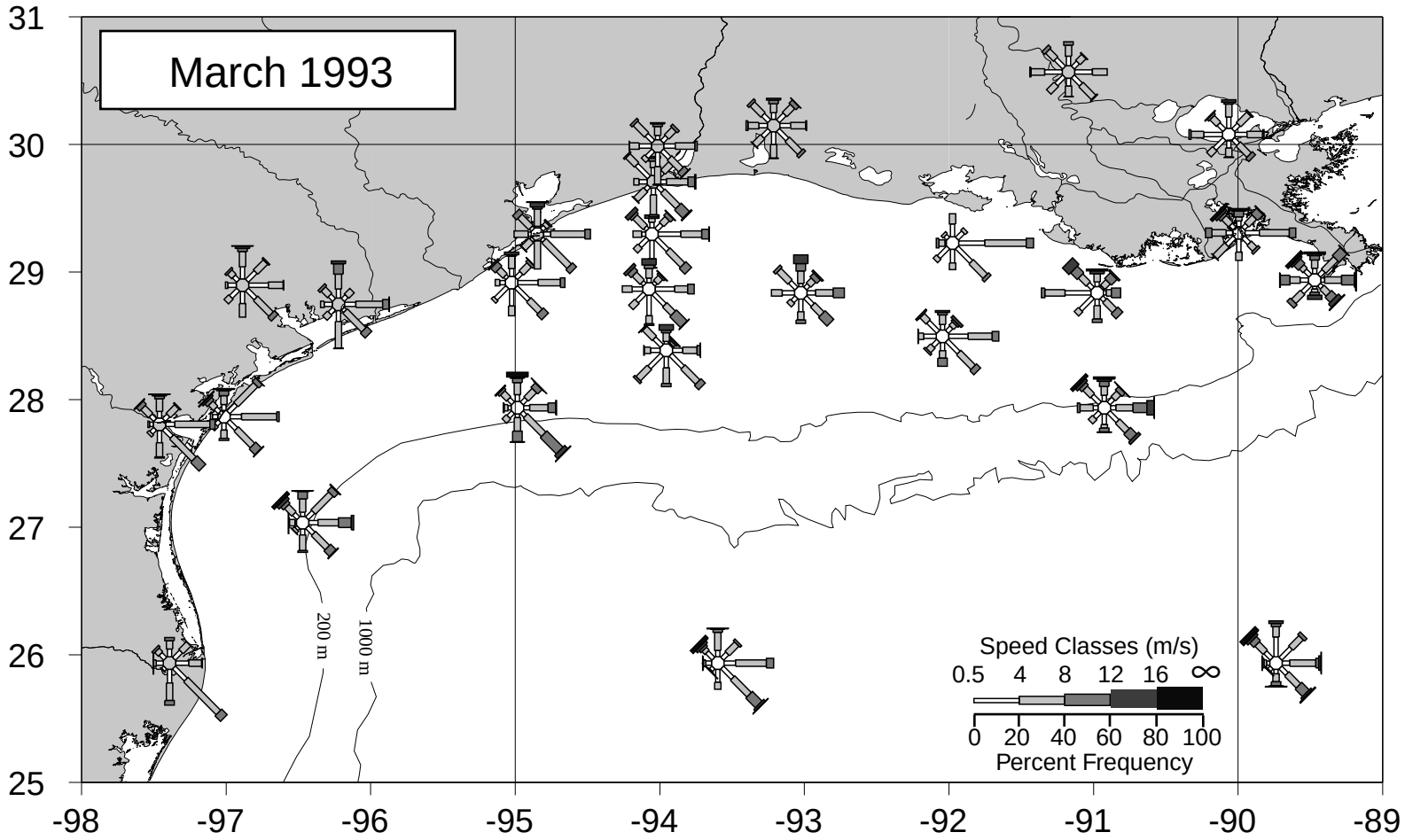


Figure 93.03 Percent frequency of occurrence of wind by speed and direction classes during March 1993 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

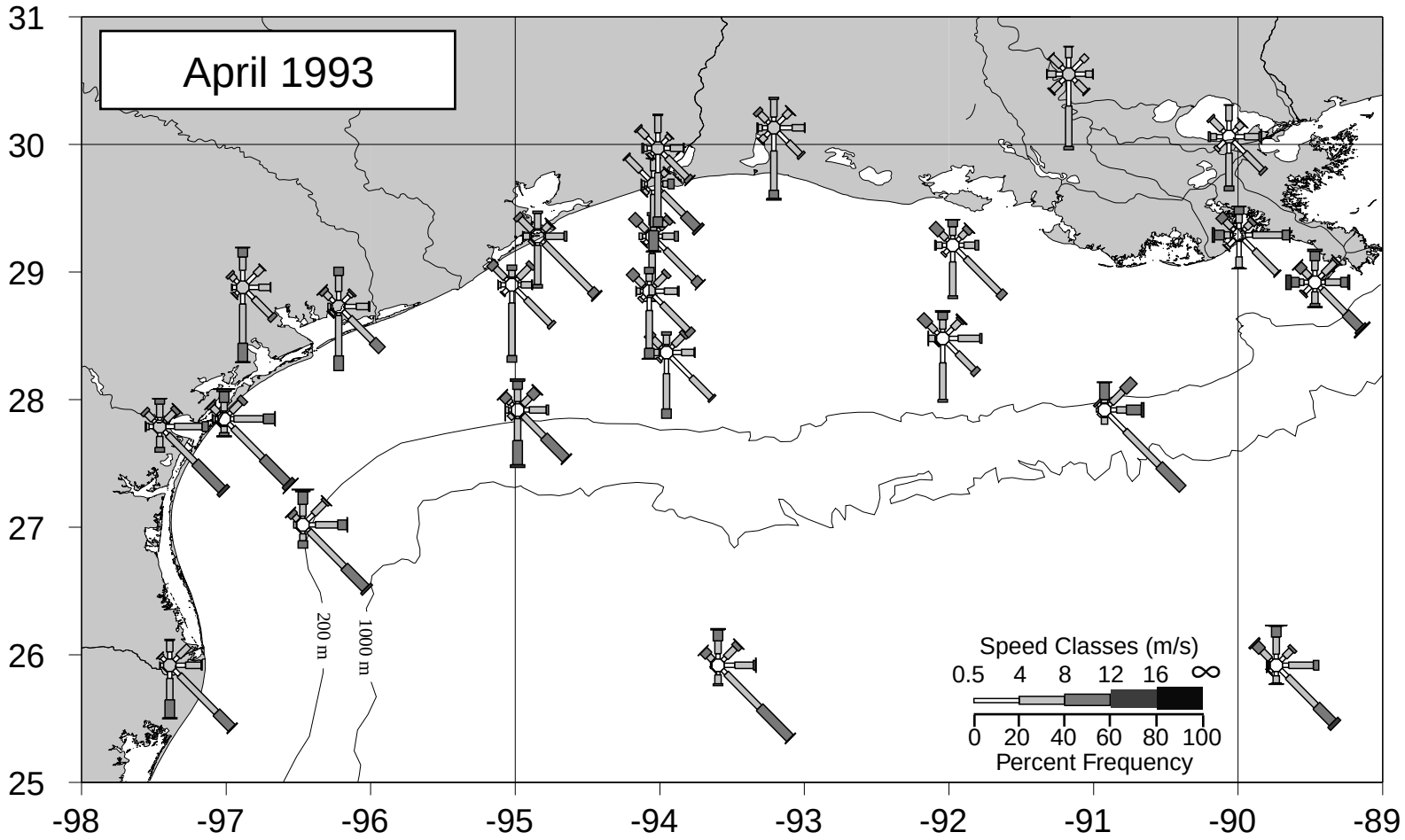


Figure 93.04 Percent frequency of occurrence of wind by speed and direction classes during April 1993 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

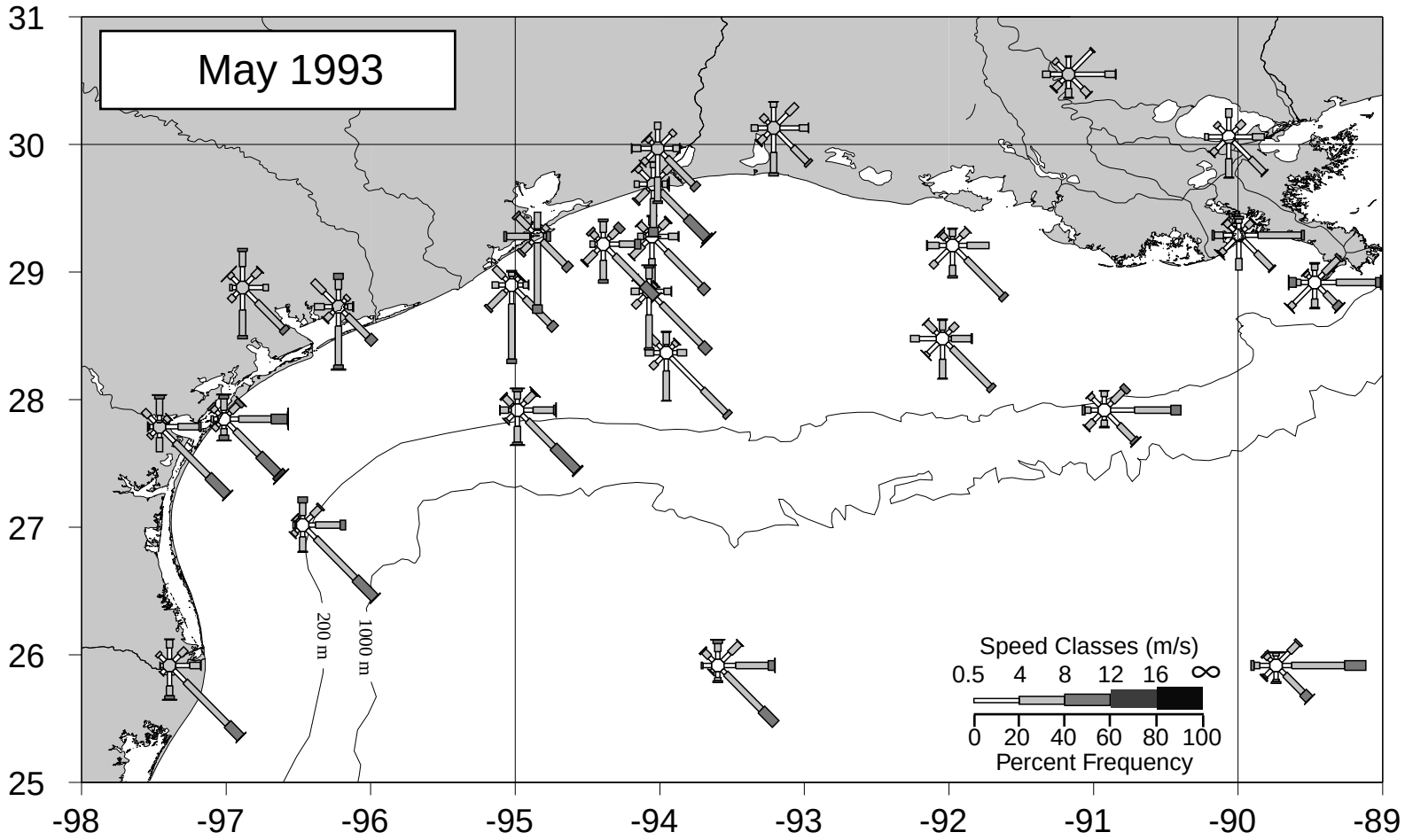


Figure 93.05 Percent frequency of occurrence of wind by speed and direction classes during May 1993 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

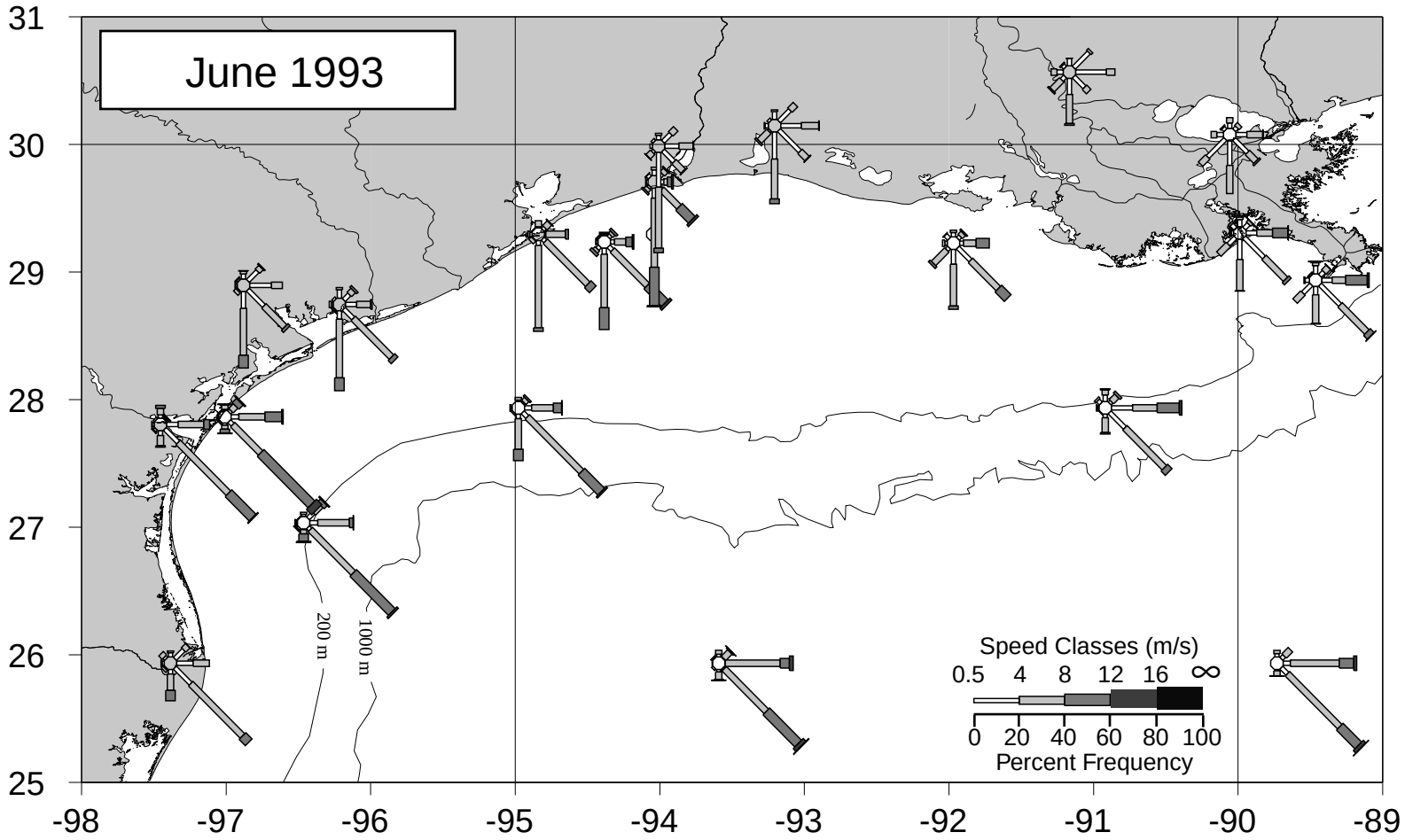


Figure 93.06 Percent frequency of occurrence of wind by speed and direction classes during June 1993 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

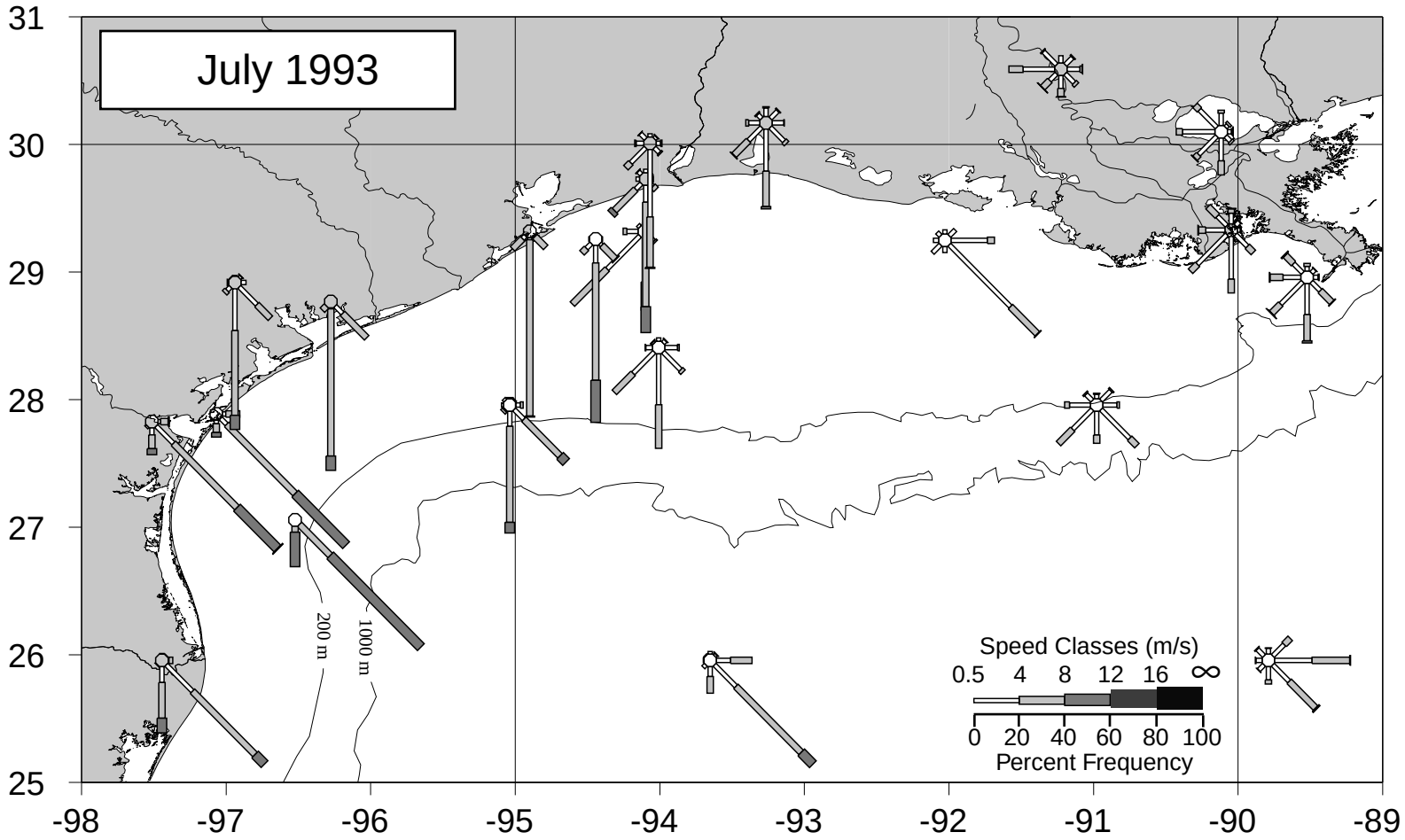


Figure 93.07 Percent frequency of occurrence of wind by speed and direction classes during July 1993 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

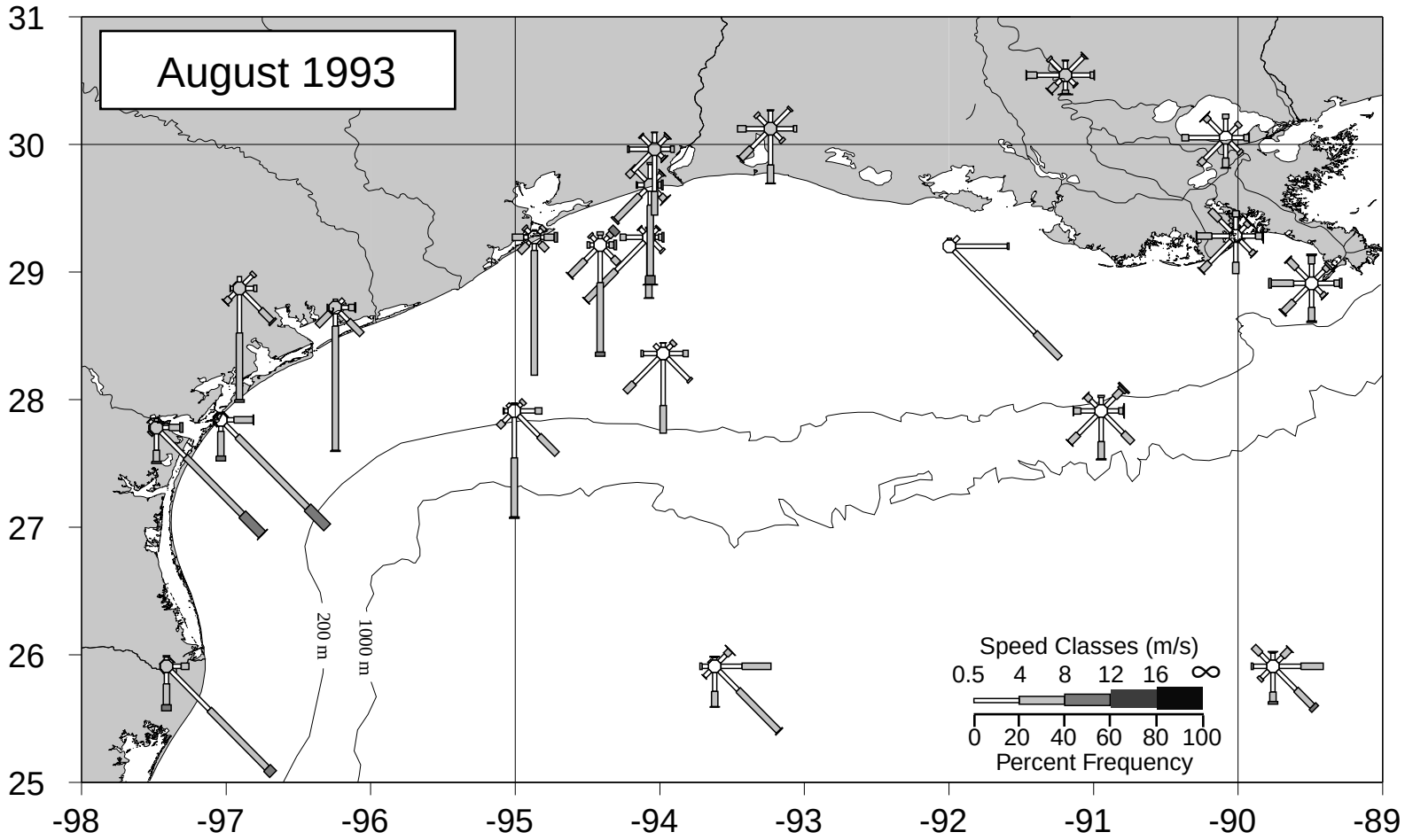


Figure 93.08 Percent frequency of occurrence of wind by speed and direction classes during August 1993 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

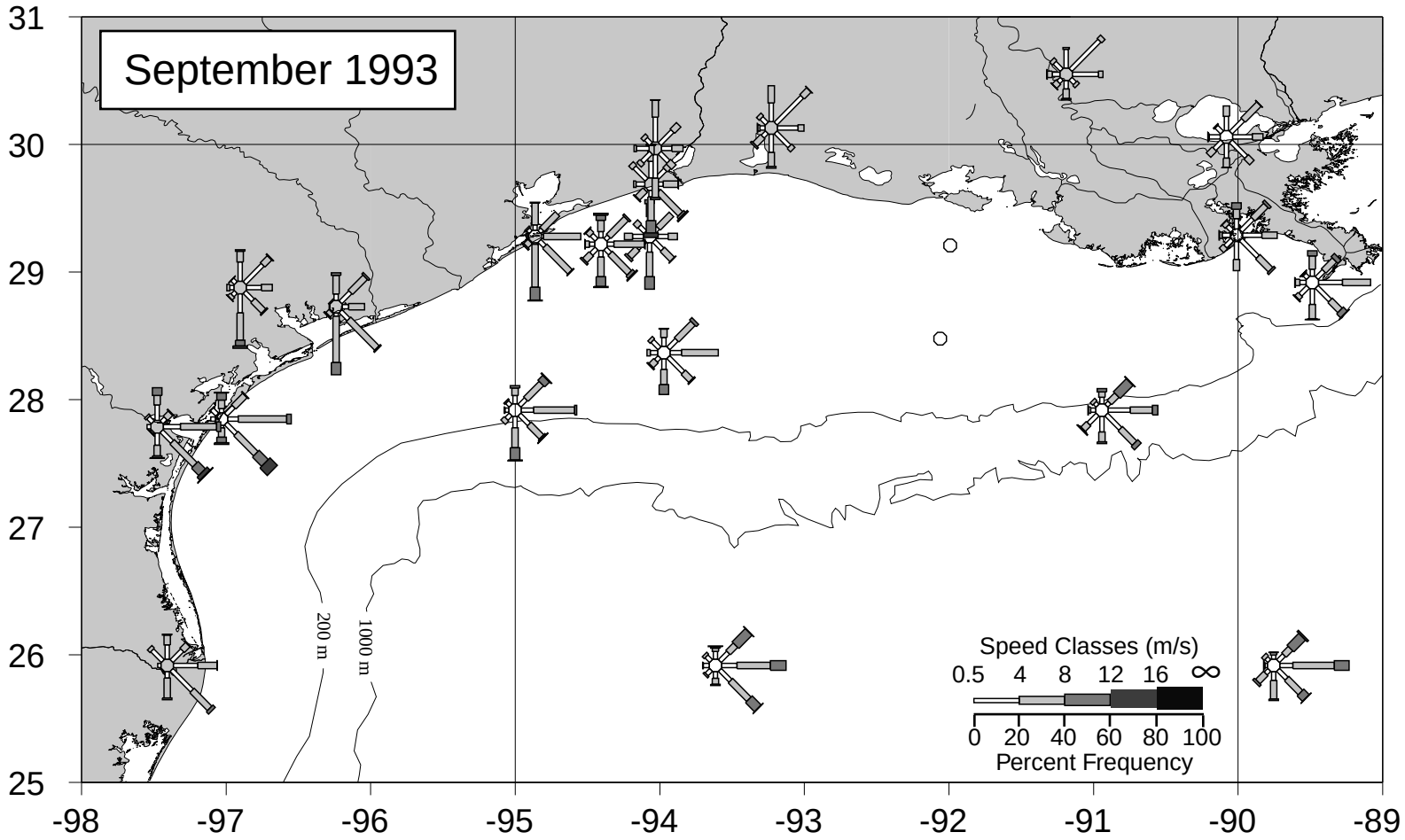


Figure 93.09 Percent frequency of occurrence of wind by speed and direction classes during September 1993 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

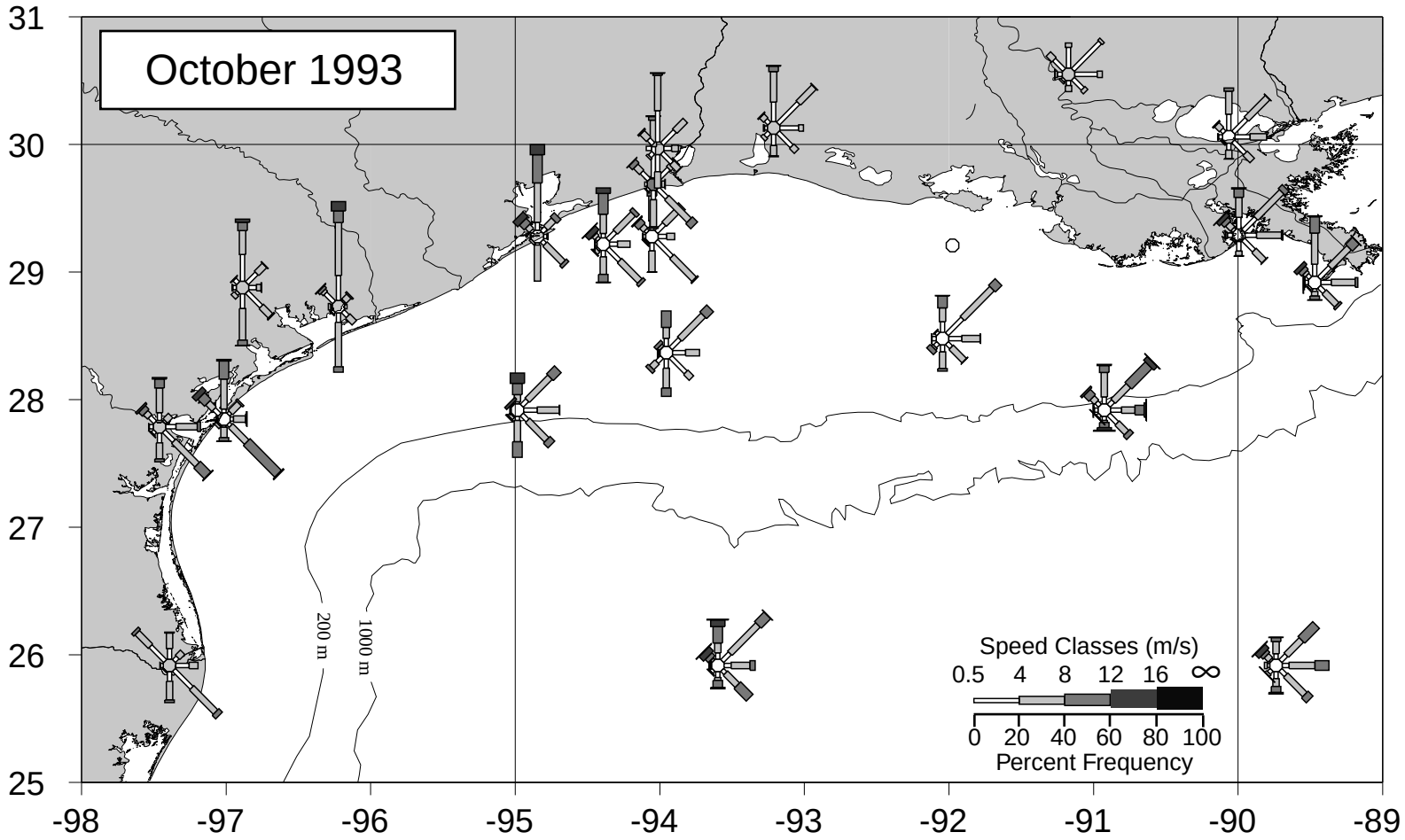


Figure 93.10 Percent frequency of occurrence of wind by speed and direction classes during October 1993 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

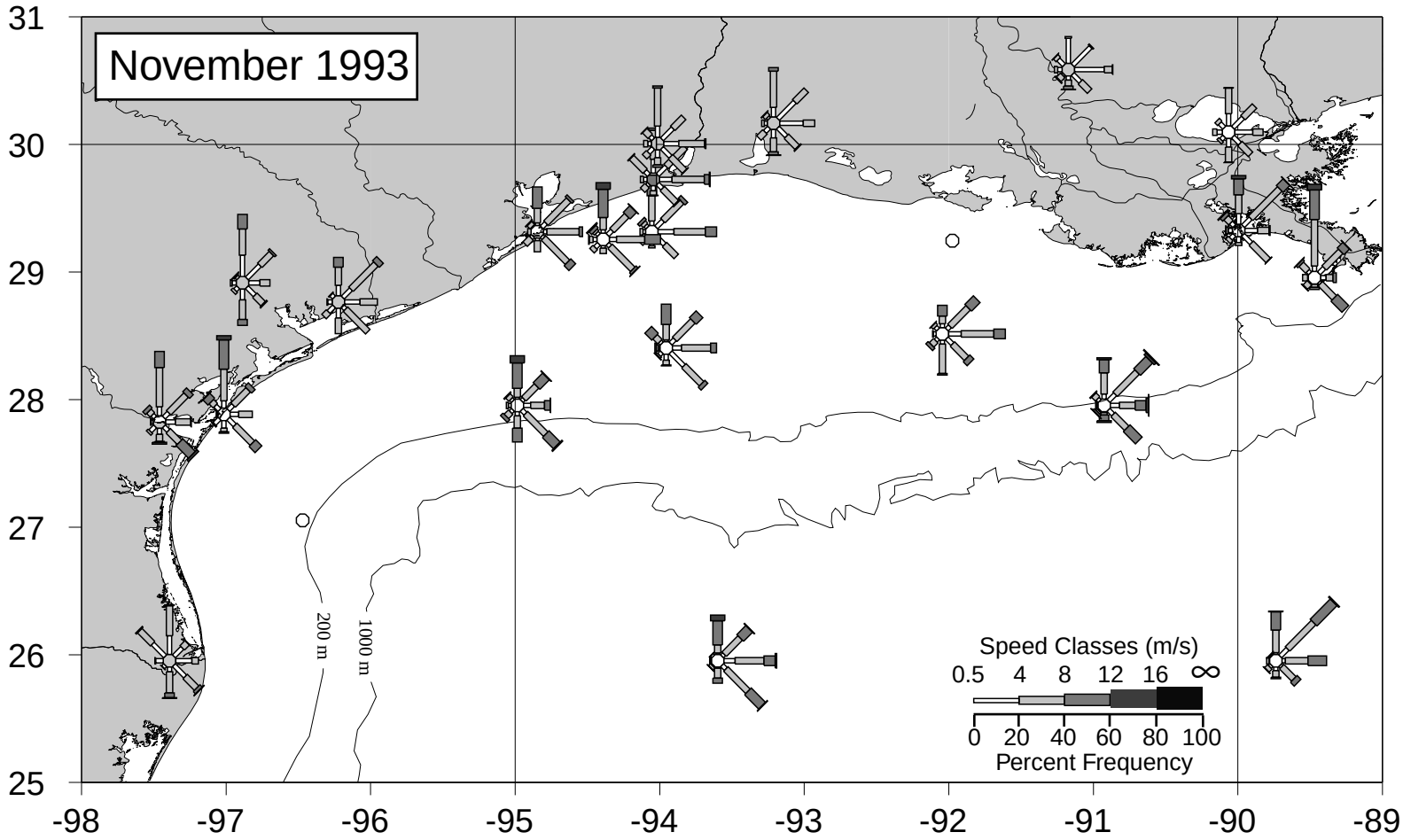


Figure 93.11 Percent frequency of occurrence of wind by speed and direction classes during November 1993 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

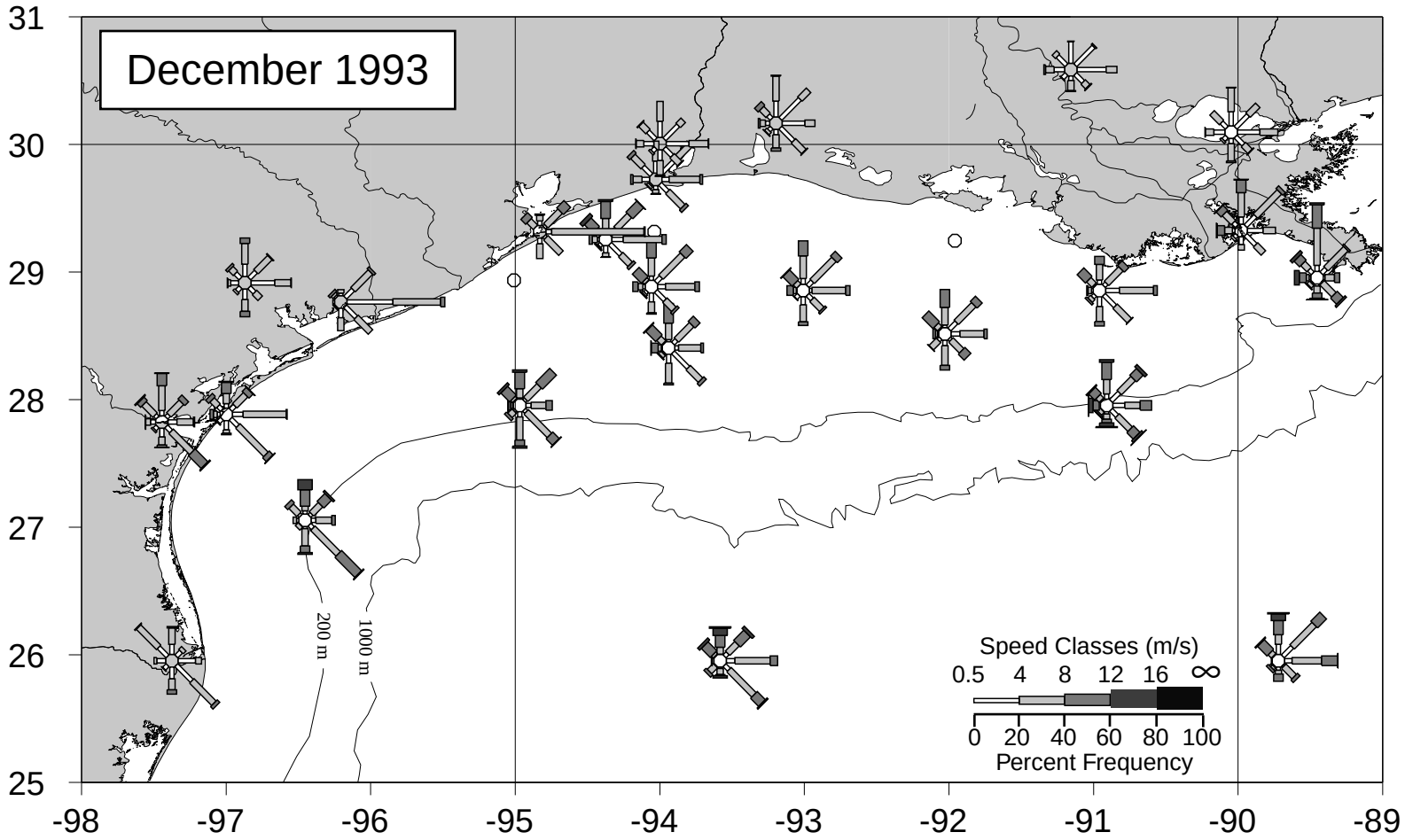


Figure 93.12 Percent frequency of occurrence of wind by speed and direction classes during December 1993 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

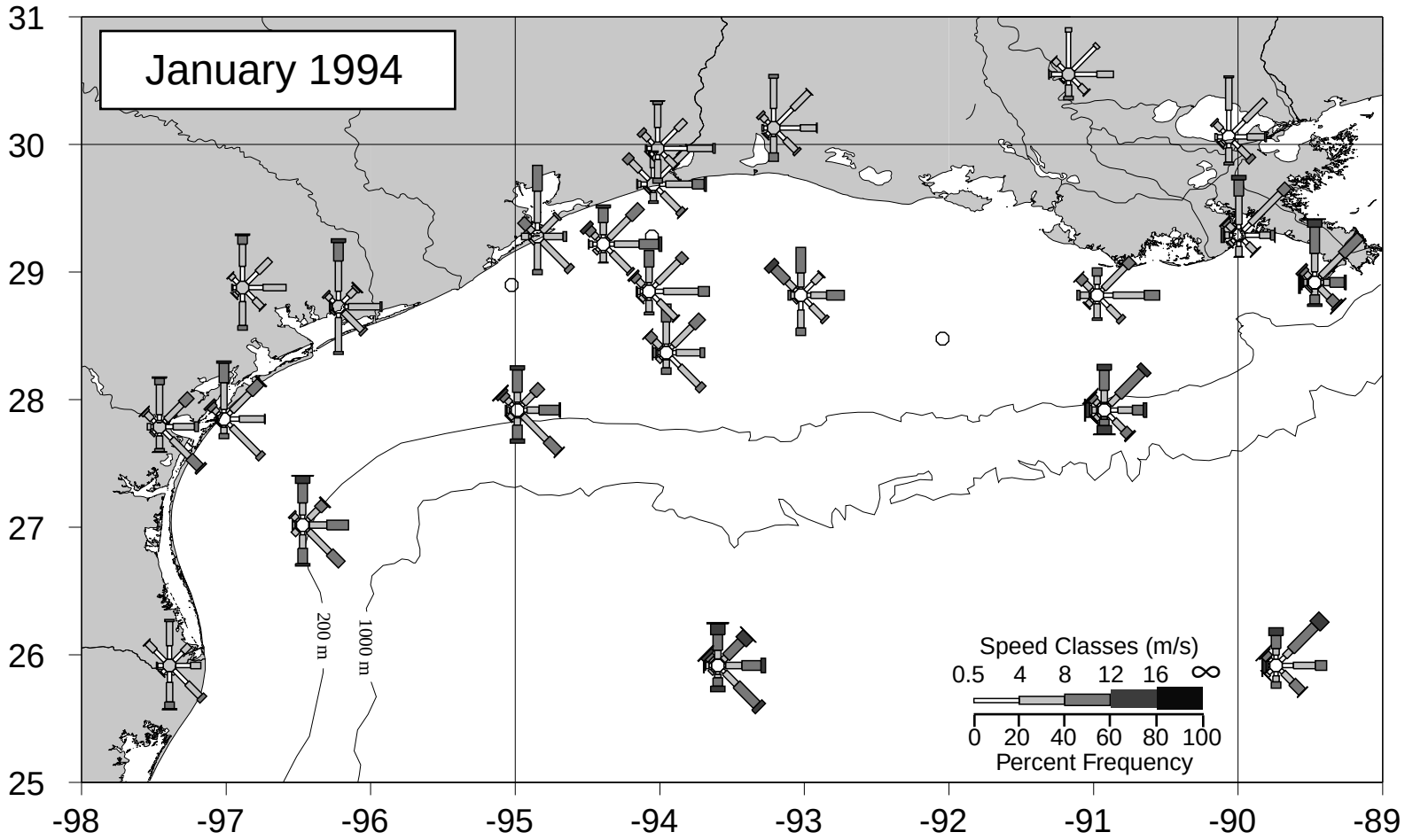


Figure 94.01 Percent frequency of occurrence of wind by speed and direction classes during January 1994 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

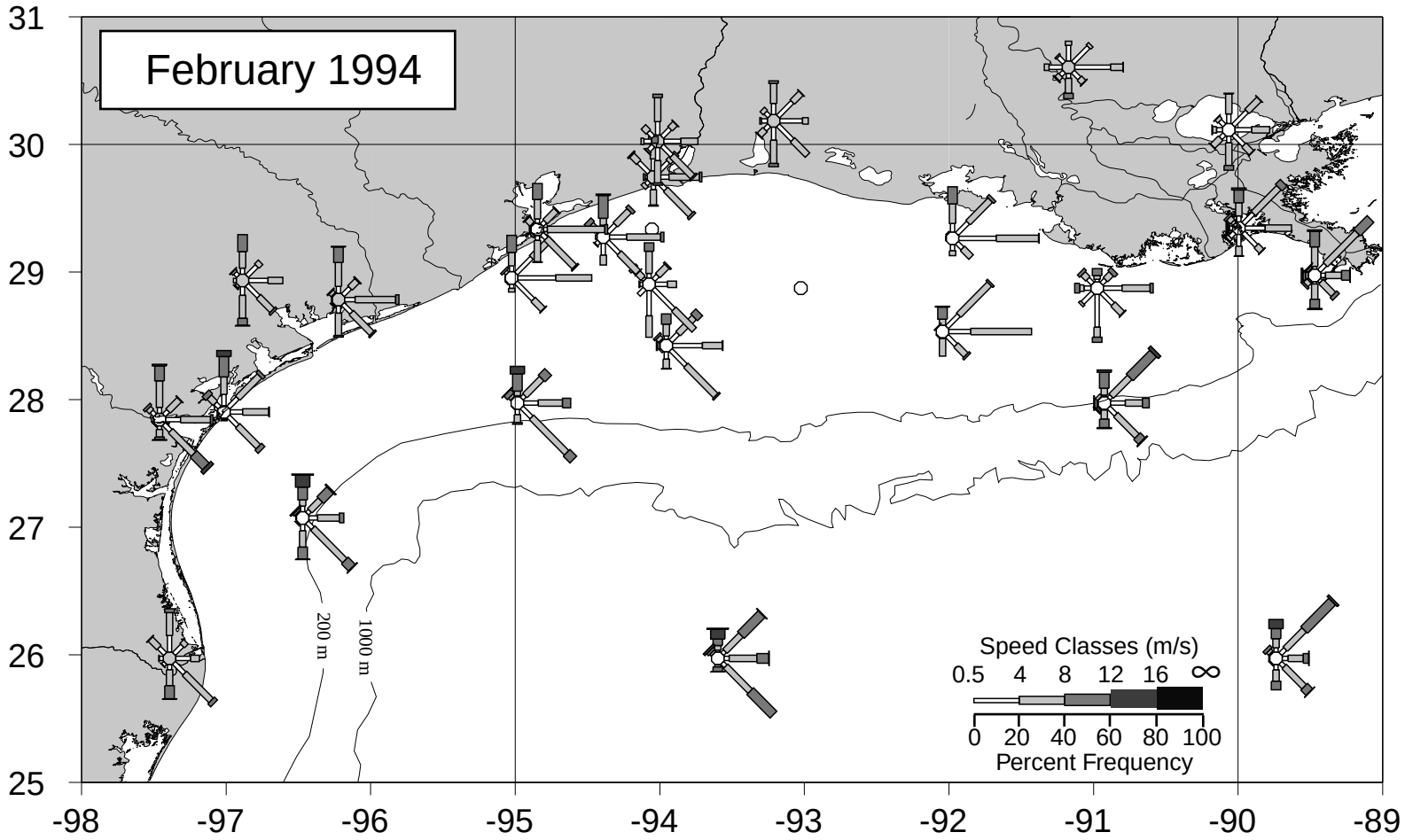


Figure 94.02 Percent frequency of occurrence of wind by speed and direction classes during February 1994 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

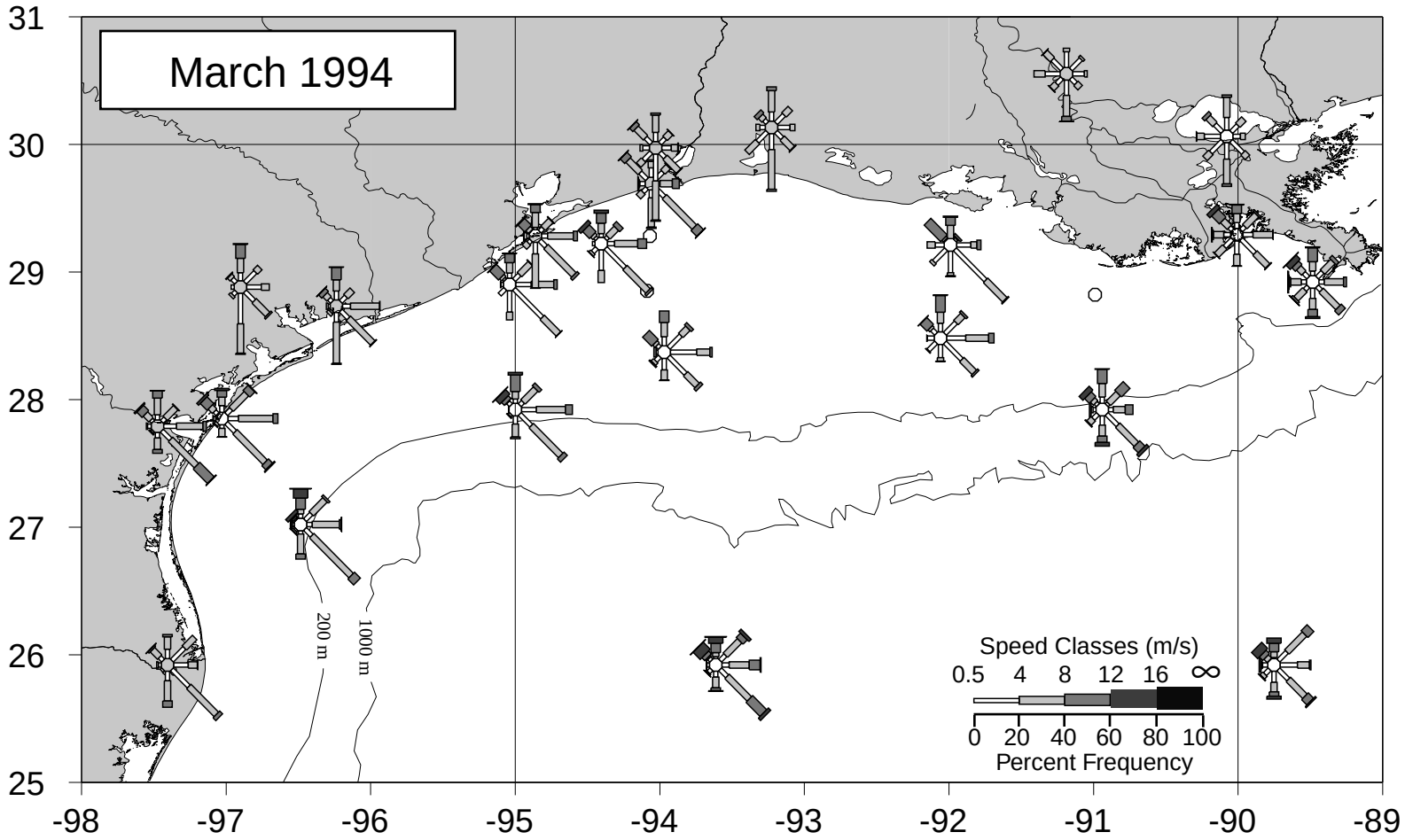


Figure 94.03 Percent frequency of occurrence of wind by speed and direction classes during March 1994 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

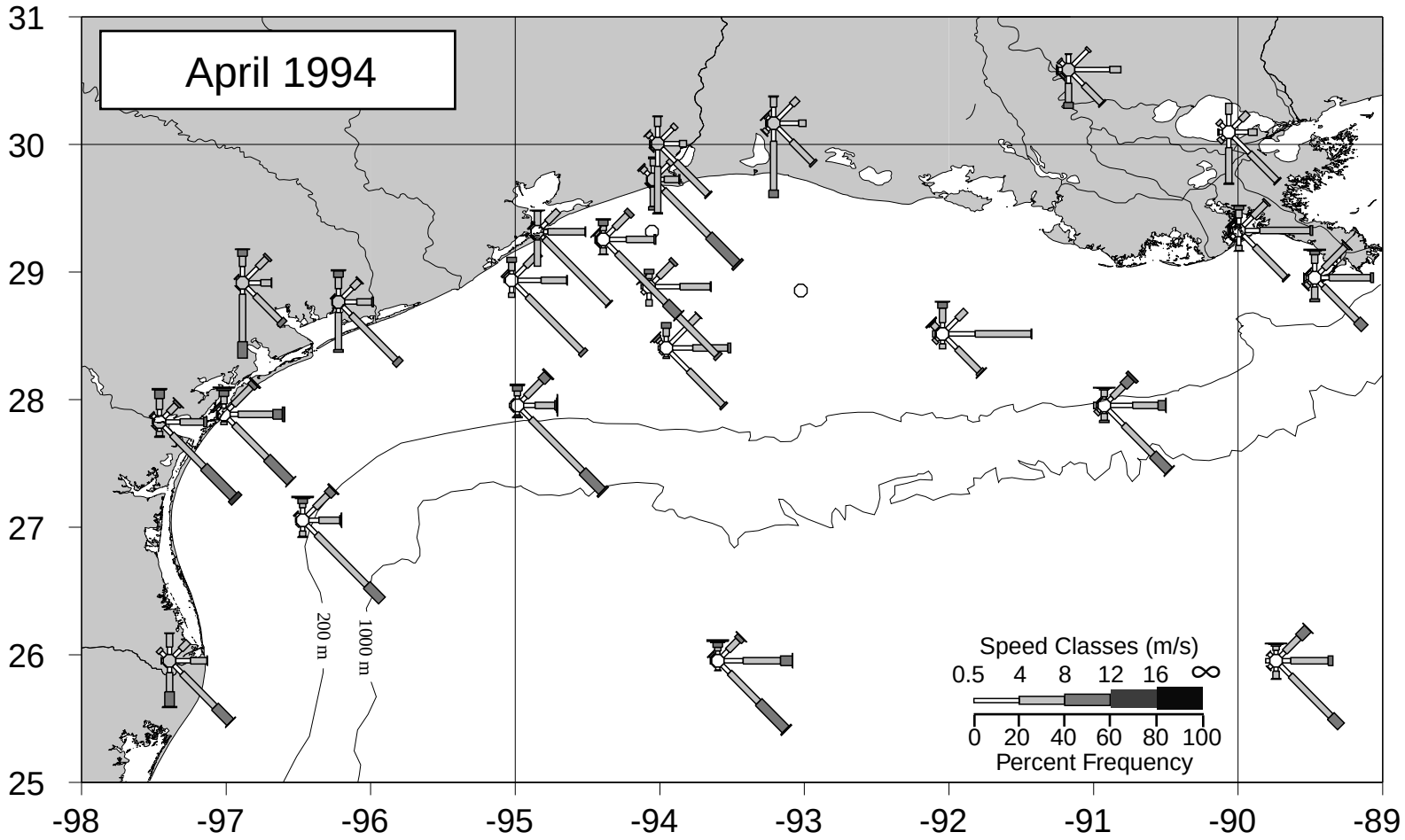


Figure 94.04 Percent frequency of occurrence of wind by speed and direction classes during April 1994 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

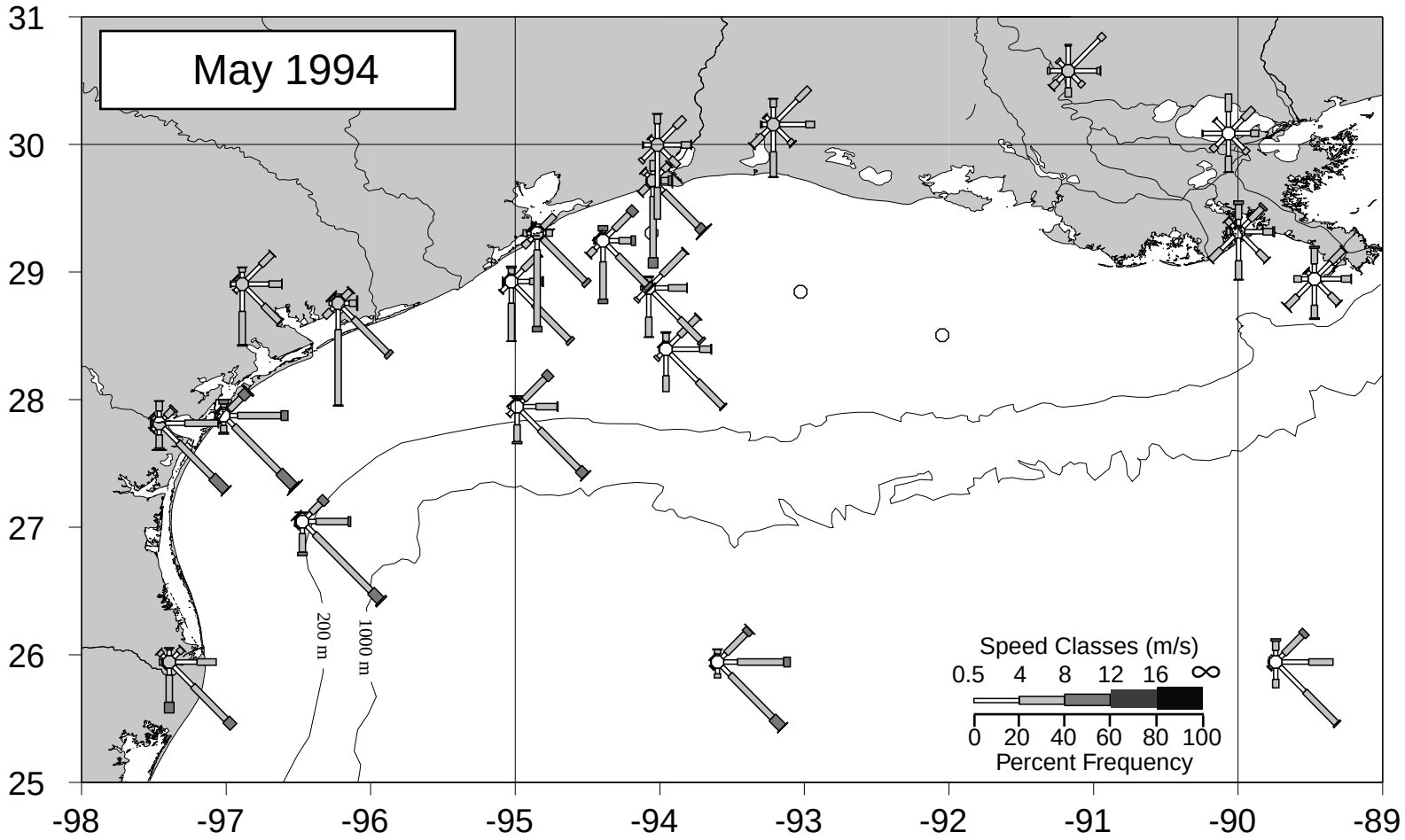


Figure 94.05 Percent frequency of occurrence of wind by speed and direction classes during May 1994 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

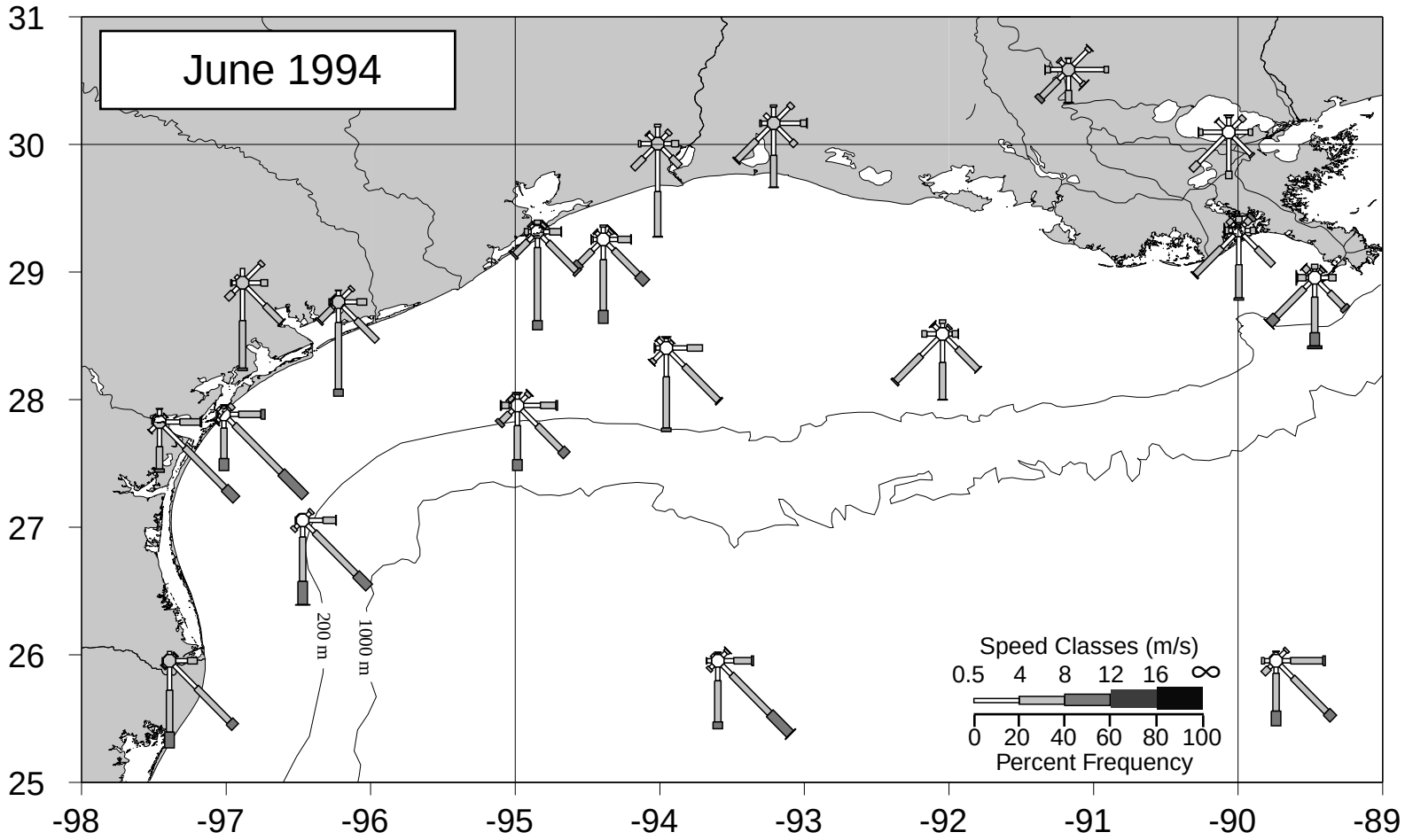


Figure 94.06 Percent frequency of occurrence of wind by speed and direction classes during June 1994 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

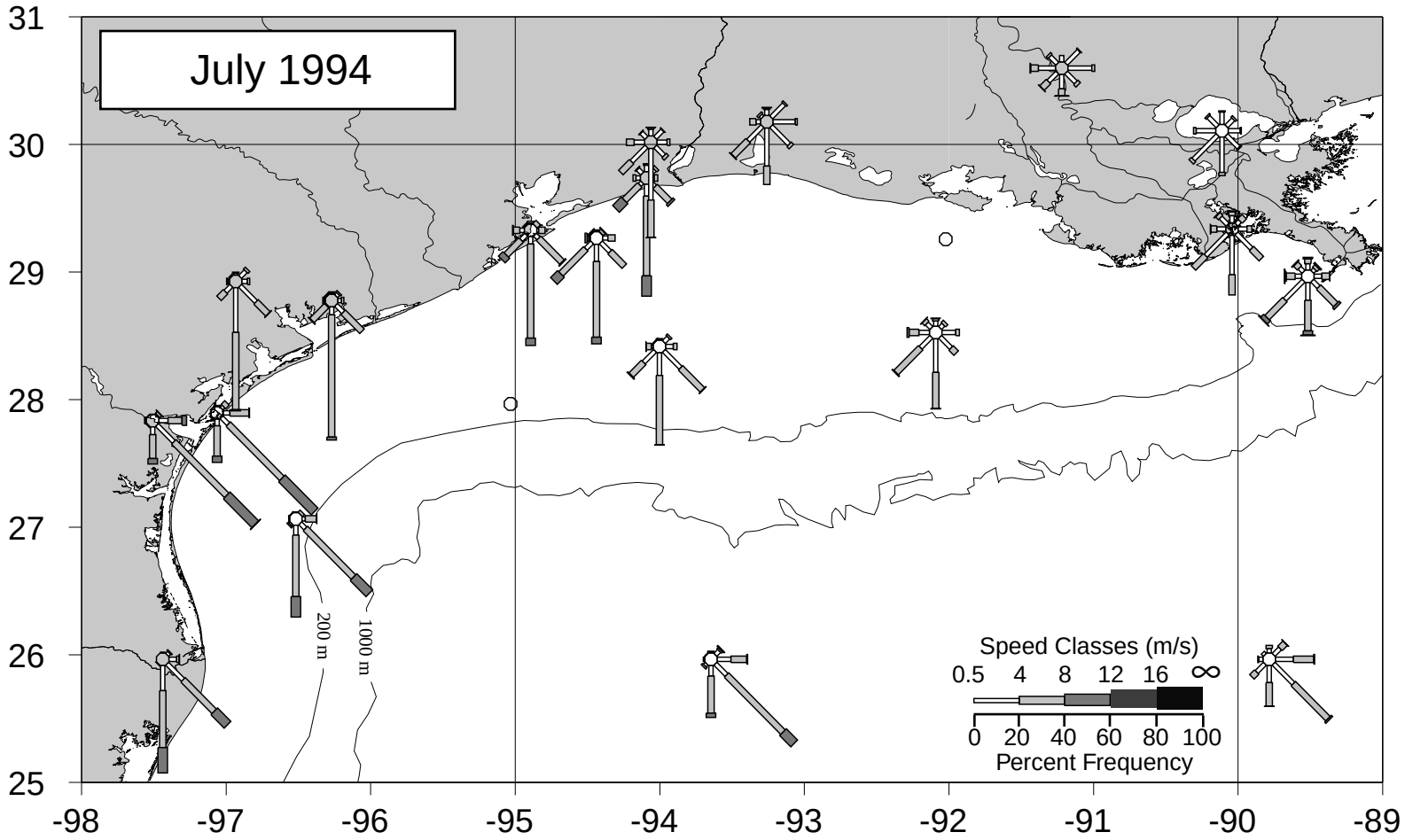


Figure 94.07 Percent frequency of occurrence of wind by speed and direction classes during July 1994 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

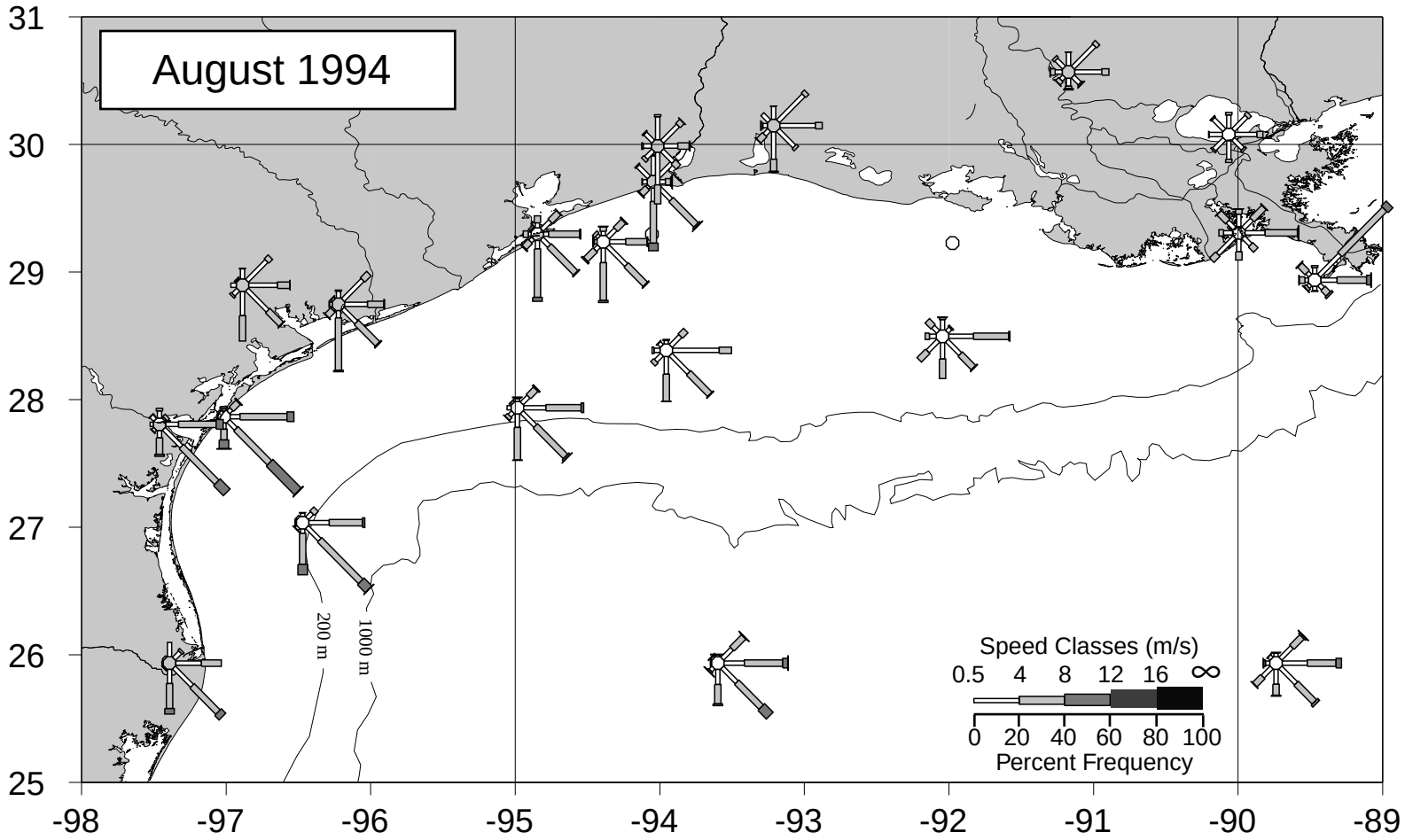


Figure 94.08 Percent frequency of occurrence of wind by speed and direction classes during August 1994 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

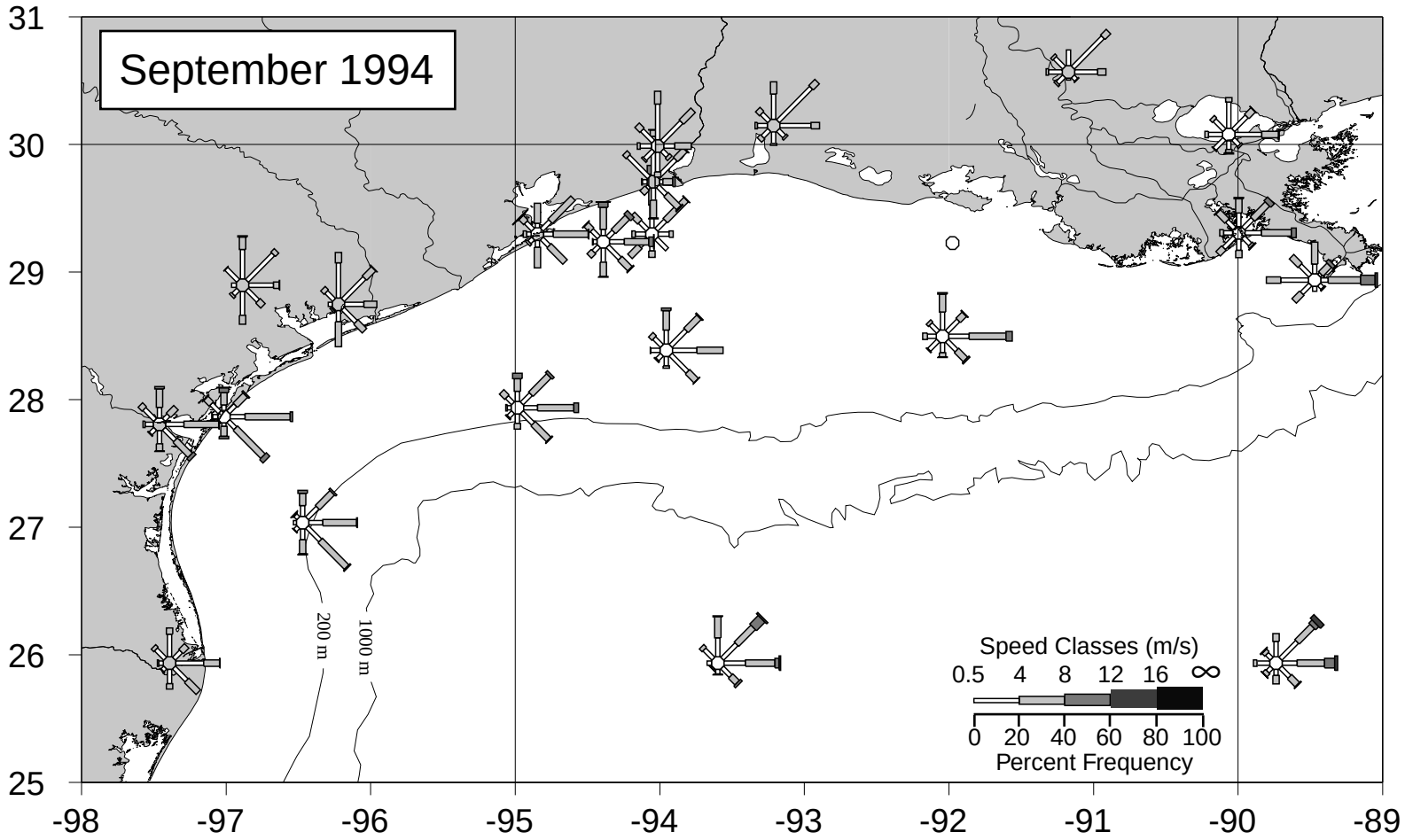


Figure 94.09 Percent frequency of occurrence of wind by speed and direction classes during September 1994 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

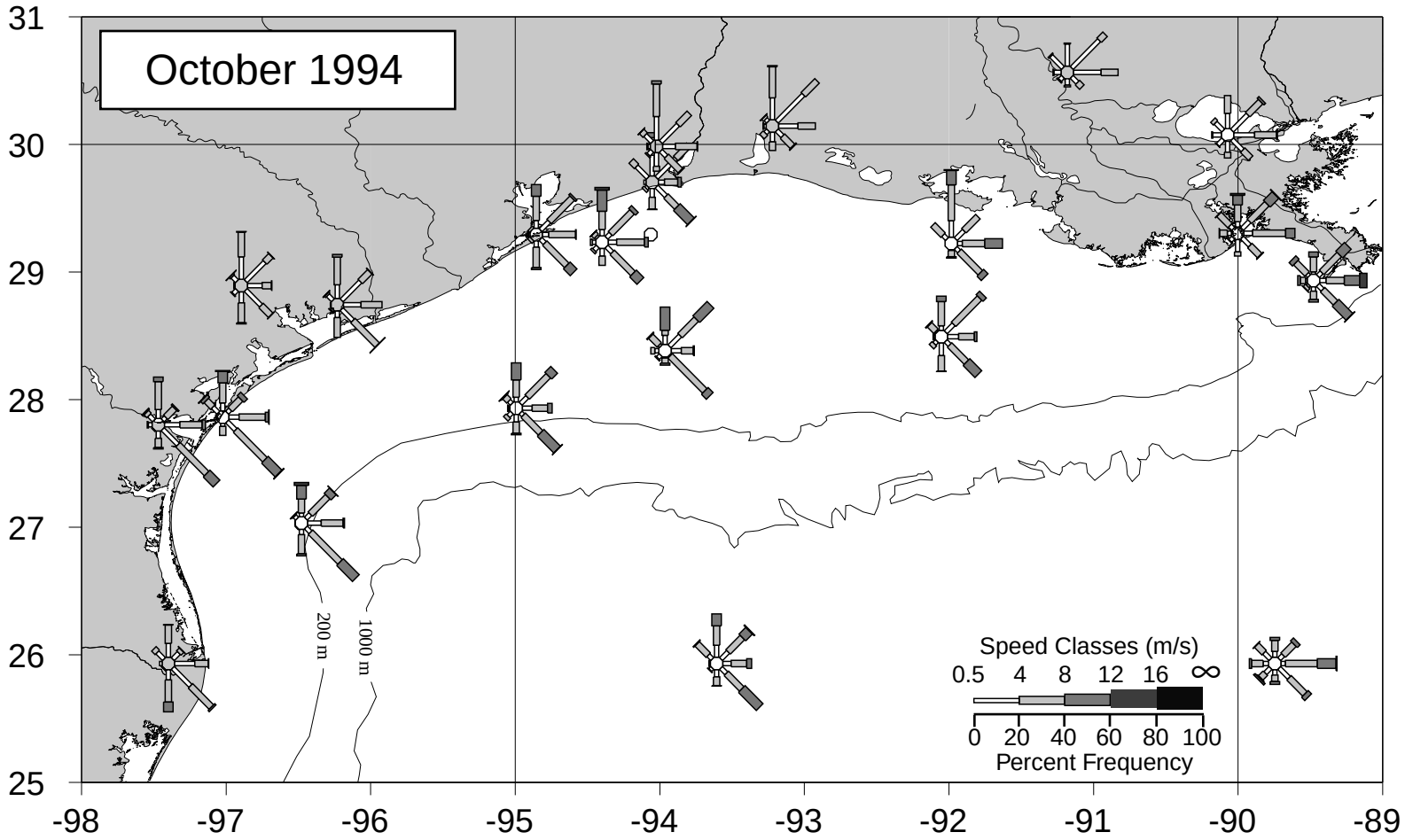


Figure 94.10 Percent frequency of occurrence of wind by speed and direction classes during October 1994 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

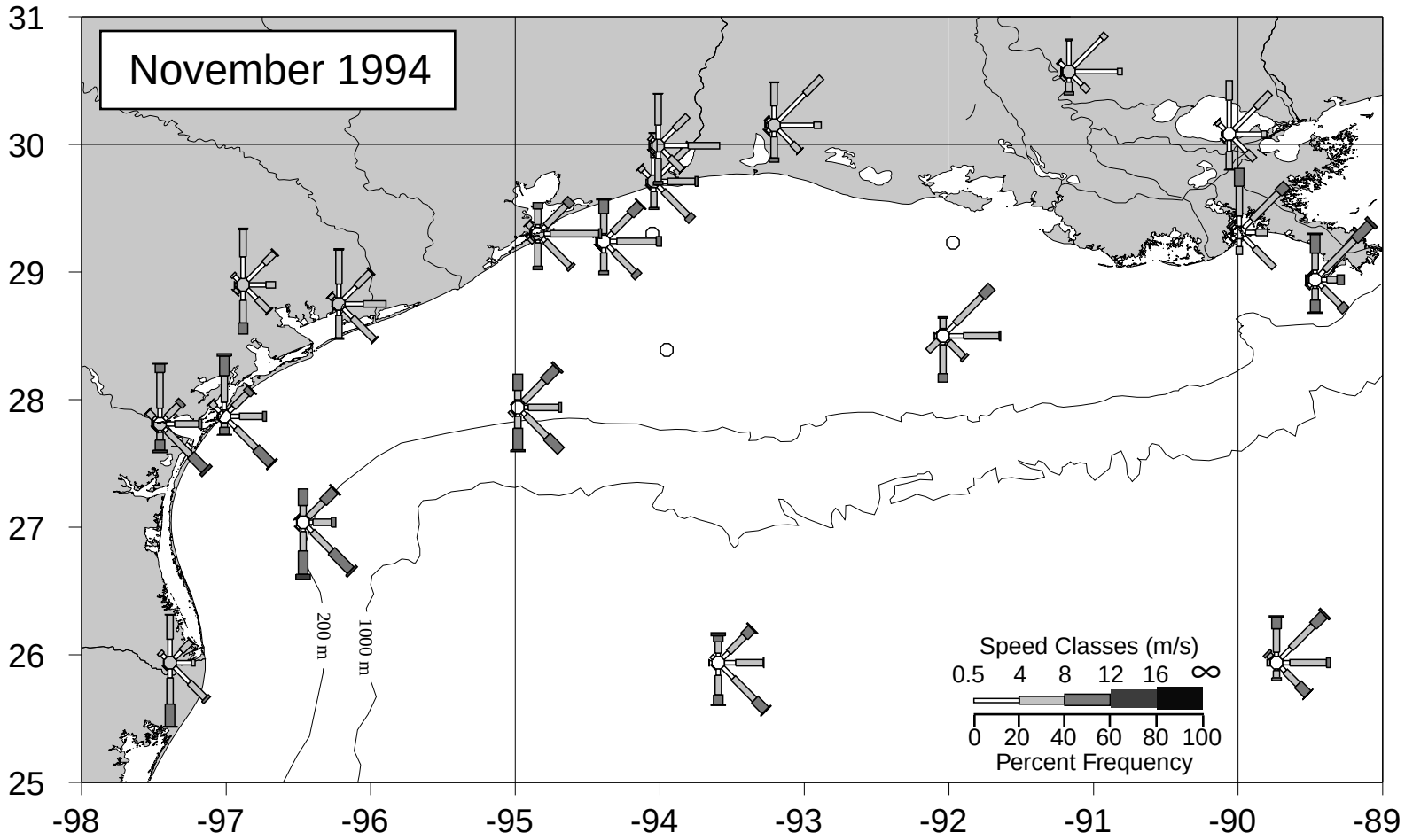


Figure 94.11 Percent frequency of occurrence of wind by speed and direction classes during November 1994 for LATEX A, NDBC/CMAN and NWS meteorological stations.

Monthly Wind Roses

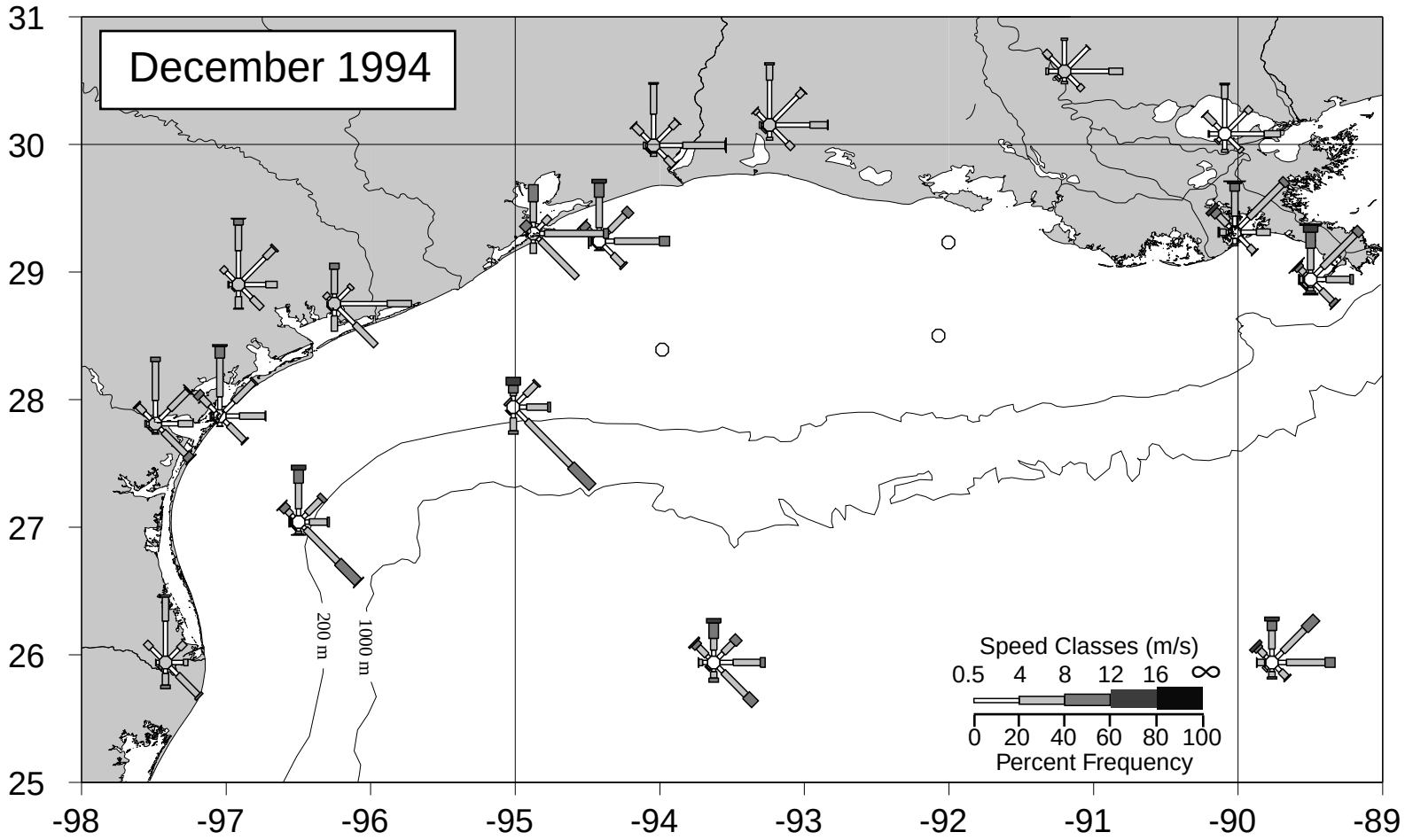


Figure 94.12 Percent frequency of occurrence of wind by speed and direction classes during December 1994 for LATEX A, NDBC/CMAN and NWS meteorological stations.

APPENDIX C

Wind Roses for LATEX A Data

This appendix contains tabular listings of the data shown graphically in appendix B. Only data from the LATEX A meteorological buoys are given here. The tables list the percent frequency of occurrence of wind by speed classes and direction classes. Cumulative frequency by direction and by speed are given as is the average speed by direction and the average speed for all directions. Winds less than 0.5 m/s are considered "calm". Calm winds are included in the totals by direction. Statistics for months in which fewer than 100 data points were collected are not computed, however, an entry exists in the table as a place holder. Data are sorted by mooring number (17,19, 20,22,50,51,52,53) and ordered sequentially by month and year.

Table C-1. Percent frequency of wind by speed and direction.

Mooring 17	April	1992	NPTS = 411		% Calm = 0.0	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.2	5.1	1.9	0.0	0.0	9.2	6.0
NE	0.7	2.2	0.0	0.0	0.0	2.9	4.7
E	5.4	31.4	3.4	0.0	0.0	40.1	6.1
SE	2.2	15.3	1.9	0.0	0.0	19.5	6.1
S	4.6	4.6	0.2	0.0	0.0	9.5	4.1
SW	1.9	2.4	0.0	0.0	0.0	4.4	4.4
W	1.2	4.1	0.0	0.0	0.0	5.4	5.6
NW	1.9	5.4	1.7	0.0	0.0	9.0	6.3
Total	20.2	70.6	9.2	0.0	0.0	100.0	5.8

Mooring 17	May	1992	NPTS = 744		% Calm = 1.1	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.6	3.4	1.7	0.0	0.0	6.7	5.9
NE	4.4	2.7	0.0	0.0	0.0	7.1	3.5
E	4.7	24.2	0.0	0.0	0.0	28.9	5.2
SE	4.3	13.2	0.0	0.0	0.0	17.5	4.8
S	7.8	4.4	0.0	0.0	0.0	12.2	3.7
SW	6.9	7.1	0.0	0.0	0.0	14.0	3.8
W	3.2	2.2	0.1	0.0	0.0	5.5	3.6
NW	2.4	4.0	0.5	0.0	0.0	7.0	4.8
Total	35.3	61.2	2.4	0.0	0.0	98.9	4.6

Mooring 17	June	1992	NPTS = 718		% Calm = 0.7	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	3.1	0.6	0.0	0.0	0.0	3.6	2.5
NE	2.5	2.8	0.0	0.0	0.0	5.3	4.5
E	0.7	1.7	0.0	0.0	0.0	2.4	4.7
SE	3.1	5.2	0.3	0.0	0.0	8.5	4.8
S	12.8	17.5	0.3	0.0	0.0	30.6	4.3
SW	10.6	12.7	1.5	0.0	0.0	24.8	4.6
W	7.5	9.7	0.1	0.0	0.0	17.4	4.0
NW	3.6	3.1	0.0	0.0	0.0	6.7	3.2
Total	43.9	53.2	2.2	0.0	0.0	99.3	4.2

Mooring 17	July	1992	NPTS = 743		% Calm = 1.1	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.3	0.7	0.0	0.0	0.0	2.0	3.2
NE	0.9	0.5	0.0	0.0	0.0	1.5	2.4
E	3.4	2.7	0.0	0.0	0.0	6.1	3.6
SE	7.0	5.4	0.0	0.0	0.0	12.4	3.6
S	18.2	24.4	1.5	0.0	0.0	44.0	4.6
SW	8.7	10.8	0.3	0.0	0.0	19.8	4.2
W	6.3	5.0	0.0	0.0	0.0	11.3	3.6
NW	1.2	0.4	0.3	0.0	0.0	1.9	3.9
Total	47.1	49.8	2.0	0.0	0.0	98.9	4.2

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 17	August		1992	NPTS = 282		% Calm = 4.3	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	3.5	1.1	0.0	0.0	0.0	4.6	2.8
NE	5.0	0.7	0.0	0.0	0.0	5.7	2.2
E	6.4	3.2	0.0	0.0	0.0	9.6	2.9
SE	8.5	1.4	0.0	0.0	0.0	9.9	2.5
S	16.3	1.8	0.0	0.0	0.0	18.1	2.8
SW	23.0	0.4	0.0	0.0	0.0	23.4	2.3
W	11.7	2.1	0.0	0.0	0.0	13.8	2.5
NW	8.5	2.1	0.0	0.0	0.0	10.6	2.9
Total	83.0	12.8	0.0	0.0	0.0	95.7	2.6

Mooring 17	September		1992	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 17	October		1992	NPTS = 193		% Calm = 0.0	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	4.7	1.0	0.0	0.0	0.0	5.7	3.3
NE	0.0	1.0	0.0	0.0	0.0	1.0	7.2
E	0.0	1.0	0.0	0.0	0.0	1.0	5.3
SE	1.0	6.2	0.0	0.0	0.0	7.3	4.8
S	18.1	15.5	0.0	0.0	0.0	33.7	3.6
SW	16.6	4.7	0.0	0.0	0.0	21.2	3.3
W	18.7	0.0	0.0	0.0	0.0	18.7	2.5
NW	11.4	0.0	0.0	0.0	0.0	11.4	2.4
Total	70.5	29.5	0.0	0.0	0.0	100.0	3.3

Mooring 17	November		1992	NPTS = 720		% Calm = 0.7	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	3.6	9.2	8.2	0.1	0.0	21.1	7.1
NE	4.3	9.7	1.9	0.0	0.0	16.0	5.7
E	3.3	19.9	6.4	0.0	0.0	29.6	6.5
SE	5.1	8.3	0.8	0.1	0.0	14.4	5.1
S	2.1	2.6	0.4	0.0	0.0	5.1	4.7
SW	0.6	0.1	0.0	0.0	0.0	0.7	3.2
W	0.1	1.5	0.3	0.0	0.0	1.9	6.4
NW	0.6	6.8	3.1	0.0	0.0	10.4	6.8
Total	19.7	58.2	21.1	0.3	0.0	99.3	6.2

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 17	December		1992	NPTS = 741		% Calm = 0.7	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.6	11.6	1.2	0.0	0.0	15.4	5.7
NE	4.0	13.1	2.4	0.0	0.0	19.6	5.6
E	7.0	23.9	3.4	0.0	0.0	34.3	5.7
SE	7.4	7.6	1.5	0.0	0.0	16.5	4.9
S	4.6	2.0	0.3	0.0	0.0	6.9	3.3
SW	0.7	0.0	0.0	0.0	0.0	0.7	2.6
W	2.0	1.8	0.1	0.0	0.0	3.9	4.0
NW	1.5	0.7	0.0	0.0	0.0	2.2	3.1
Total	29.8	60.6	8.9	0.0	0.0	99.3	5.2

Mooring 17	January		1993	NPTS = 328		% Calm = 0.0	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	8.2	18.9	7.3	0.0	0.0	34.5	6.0
NE	6.1	23.5	1.8	0.0	0.0	31.4	5.5
E	2.4	18.0	4.6	0.0	0.0	25.0	6.5
SE	0.6	3.0	0.0	0.0	0.0	3.7	5.3
S	1.5	1.2	0.0	0.0	0.0	2.7	3.8
SW	0.6	0.0	0.0	0.0	0.0	0.6	2.3
W	0.3	0.0	0.0	0.0	0.0	0.3	1.2
NW	1.2	0.6	0.0	0.0	0.0	1.8	4.5
Total	21.0	65.2	13.7	0.0	0.0	100.0	5.8

Mooring 17	February		1993	NPTS = < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 17	March		1993	NPTS = 317		% Calm = 1.9	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	6.0	4.7	0.0	0.0	0.0	10.7	3.8
NE	4.1	1.6	0.0	0.0	0.0	5.7	2.8
E	12.3	19.6	3.5	0.0	0.0	35.3	5.1
SE	9.5	9.5	1.6	0.0	0.0	20.5	4.6
S	6.3	3.2	0.0	0.0	0.0	9.5	3.1
SW	6.3	2.2	0.0	0.0	0.0	8.5	2.7
W	0.6	2.8	1.3	0.0	0.0	4.7	5.5
NW	1.9	1.3	0.0	0.0	0.0	3.2	3.7
Total	47.0	44.8	6.3	0.0	0.0	98.1	4.3

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 17	April	1993	NPTS = 720		% Calm = 0.6	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.7	4.0	3.2	0.1	0.0	9.0	6.6
NE	2.1	3.6	2.5	0.1	0.0	8.3	6.7
E	2.4	5.1	1.8	0.0	0.0	9.3	5.8
SE	5.6	22.6	3.1	0.0	0.0	31.3	5.7
S	4.9	15.8	1.2	0.0	0.0	21.9	5.4
SW	2.5	1.0	0.0	0.0	0.0	3.5	3.3
W	2.1	2.8	0.7	0.0	0.0	5.6	5.0
NW	1.2	3.6	5.7	0.0	0.0	10.6	7.3
Total	22.4	58.6	18.2	0.3	0.0	99.4	5.8

Mooring 17	May	1993	NPTS = 743		% Calm = 2.7	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.2	3.5	0.4	0.0	0.0	5.1	5.3
NE	3.0	4.3	0.1	0.0	0.0	7.4	4.4
E	3.9	10.4	0.0	0.0	0.0	14.3	4.7
SE	5.9	24.1	2.2	0.0	0.0	32.2	5.8
S	6.3	5.0	0.9	0.0	0.0	12.2	4.6
SW	7.9	3.2	0.0	0.0	0.0	11.2	3.5
W	3.4	5.5	0.4	0.0	0.0	9.3	4.9
NW	1.6	2.8	1.1	0.1	0.0	5.7	5.6
Total	33.2	58.8	5.1	0.1	0.0	97.3	5.0

Mooring 17	June	1993	NPTS = 451		% Calm = 1.1	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.0	1.1	0.0	0.0	0.0	3.1	3.5
NE	1.6	2.0	0.7	0.0	0.0	4.2	5.7
E	1.8	6.0	6.2	0.0	0.0	14.0	6.7
SE	8.4	18.6	6.2	0.0	0.0	33.3	5.8
S	6.9	19.5	1.6	0.0	0.0	27.9	5.4
SW	1.6	8.9	1.1	0.0	0.0	11.5	5.8
W	1.1	1.1	0.0	0.0	0.0	2.2	3.7
NW	2.4	0.2	0.0	0.0	0.0	2.7	2.4
Total	25.7	57.4	15.7	0.0	0.0	98.9	5.6

Mooring 17	July	1993	NPTS = 362		% Calm = 1.9	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.9	0.0	0.0	0.0	0.0	1.9	1.3
NE	3.9	0.0	0.0	0.0	0.0	3.9	2.2
E	17.1	3.3	0.0	0.0	0.0	20.4	2.9
SE	40.9	18.0	0.3	0.0	0.0	59.1	3.4
S	2.8	0.0	0.0	0.0	0.0	2.8	1.6
SW	5.2	0.0	0.0	0.0	0.0	5.2	1.7
W	2.5	0.0	0.0	0.0	0.0	2.5	1.7
NW	2.2	0.0	0.0	0.0	0.0	2.2	1.7
Total	76.5	21.3	0.3	0.0	0.0	98.1	3.0

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 17	August		1993	NPTS = 127		% Calm = 0.0	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.8	0.0	0.0	0.0	0.0	0.8	1.4
NE	3.1	0.0	0.0	0.0	0.0	3.1	1.8
E	24.4	0.8	0.0	0.0	0.0	25.2	3.0
SE	54.3	16.5	0.0	0.0	0.0	70.9	3.4
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	82.7	17.3	0.0	0.0	0.0	100.0	3.2

Mooring 17	September		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 17	October		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 17	November		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 17	December		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 17	January		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 17	February		1994	NPTS = 350		% Calm = 1.7	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	4.0	9.1	8.0	0.0	0.0	21.1	6.6
NE	7.4	14.9	1.4	0.0	0.0	23.7	5.2
E	17.7	20.0	0.3	0.0	0.0	38.0	4.3
SE	3.7	5.7	0.0	0.0	0.0	9.4	4.0
S	2.9	2.3	0.0	0.0	0.0	5.1	4.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.3	0.0	0.0	0.0	0.0	0.3	0.8
NW	0.6	0.0	0.0	0.0	0.0	0.6	0.9
Total	36.6	52.0	9.7	0.0	0.0	98.3	4.9

Mooring 17	March		1994	NPTS = 210		% Calm = 0.0	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.0	6.2	3.8	0.5	0.0	10.5	7.8
NE	1.0	0.5	1.0	0.0	0.0	2.4	5.3
E	6.7	2.9	1.9	0.0	0.0	11.4	4.7
SE	20.5	12.9	0.5	0.0	0.0	33.8	4.0
S	10.0	1.4	0.5	0.0	0.0	11.9	3.0
SW	8.1	1.4	0.0	0.0	0.0	9.5	3.3
W	4.3	3.8	0.0	0.0	0.0	8.1	3.9
NW	0.5	1.0	11.0	0.0	0.0	12.4	9.4
Total	51.0	30.0	18.6	0.5	0.0	100.0	5.0

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 17	April		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 17	May		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 17	June		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 17	July		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 17	August		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 17	September		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 17	October		1994	NPTS = 311		% Calm = 0.0	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	7.7	16.7	6.8	0.3	0.0	31.5	6.2
NE	5.5	9.3	0.0	0.0	0.0	14.8	4.7
E	2.3	10.6	8.4	0.0	0.0	21.2	7.2
SE	2.3	14.1	2.9	0.0	0.0	19.3	6.1
S	0.3	2.9	0.6	0.0	0.0	3.9	6.3
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	2.6	6.8	0.0	0.0	0.0	9.3	4.3
Total	20.6	60.5	18.6	0.3	0.0	100.0	6.0

Mooring 17	November		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 19	April		1992	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 19	May		1992	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 19	June		1992	NPTS = 631		% Calm = 0.6	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	4.0	1.1	0.0	0.0	0.0	5.1	2.8
NE	2.7	1.4	0.2	0.0	0.0	4.3	3.9
E	3.3	1.0	0.0	0.0	0.0	4.3	3.1
SE	8.6	7.0	0.3	0.0	0.0	15.8	3.9
S	14.3	11.9	1.7	0.0	0.0	27.9	4.1
SW	10.9	7.4	0.2	0.0	0.0	18.5	3.6
W	11.7	3.3	0.0	0.0	0.0	15.1	3.3
NW	6.7	1.6	0.2	0.0	0.0	8.4	2.9
Total	62.1	34.7	2.5	0.0	0.0	99.4	3.6

Mooring 19	July		1992	NPTS = 691		% Calm = 1.3	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.4	0.4	0.3	0.0	0.0	2.2	3.7
NE	2.9	0.4	0.0	0.0	0.0	3.3	2.5
E	7.8	1.3	0.0	0.0	0.0	9.1	2.9
SE	15.9	11.7	0.1	0.0	0.0	27.8	3.9
S	11.6	20.4	2.2	0.0	0.0	34.2	4.8
SW	11.0	7.1	0.0	0.0	0.0	18.1	3.7
W	2.7	0.3	0.0	0.0	0.0	3.0	3.0
NW	1.0	0.0	0.0	0.0	0.0	1.0	1.4
Total	54.4	41.7	2.6	0.0	0.0	98.7	4.0

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 19	August	1992	NPTS = 734		% Calm = 2.2		
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	8.2	3.3	0.8	0.5	0.0	12.8	4.1
NE	8.9	7.6	0.1	0.0	0.0	16.6	3.9
E	8.4	2.9	0.3	0.0	0.0	11.6	3.1
SE	13.6	4.2	0.0	0.0	0.0	17.8	3.2
S	9.4	2.3	0.1	0.0	0.0	11.9	2.9
SW	10.8	3.0	0.5	0.0	0.0	14.3	3.1
W	4.1	2.5	1.8	0.3	0.0	8.6	5.2
NW	3.0	0.5	0.1	0.5	0.0	4.2	4.0
Total	66.3	26.3	3.8	1.4	0.0	97.8	3.6

Mooring 19	September	1992	NPTS = 720		% Calm = 1.2		
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.4	2.1	0.1	0.0	0.0	2.6	5.3
NE	3.6	11.4	9.6	0.0	0.0	24.6	6.7
E	12.4	11.3	2.6	0.0	0.0	26.3	4.7
SE	12.6	10.6	0.0	0.0	0.0	23.2	4.0
S	5.1	8.8	0.0	0.0	0.0	13.9	4.5
SW	3.5	2.5	0.0	0.0	0.0	6.0	3.6
W	1.7	0.1	0.0	0.0	0.0	1.8	2.2
NW	0.4	0.0	0.0	0.0	0.0	0.4	1.1
Total	39.7	46.7	12.4	0.0	0.0	98.8	4.9

Mooring 19	October	1992	NPTS = 677		% Calm = 4.1		
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	8.3	8.7	0.6	0.0	0.0	17.6	4.7
NE	4.3	10.8	9.3	0.0	0.0	24.4	6.6
E	3.1	9.3	0.0	0.0	0.0	12.4	5.2
SE	4.9	10.3	0.1	0.0	0.0	15.4	4.7
S	6.1	9.7	0.3	0.0	0.0	16.1	4.2
SW	5.6	1.9	0.0	0.0	0.0	7.5	2.8
W	1.2	0.0	0.0	0.0	0.0	1.2	2.9
NW	1.3	0.0	0.0	0.0	0.0	1.3	0.9
Total	34.7	50.8	10.3	0.0	0.0	95.9	4.9

Mooring 19	November	1992	NPTS = 720		% Calm = 1.0		
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.2	10.3	7.6	0.1	0.0	19.3	7.3
NE	4.2	12.5	3.8	0.0	0.0	20.4	6.3
E	2.1	17.8	3.1	0.0	0.0	22.9	6.6
SE	2.1	8.9	1.9	0.0	0.0	12.9	5.8
S	2.5	6.0	1.7	0.0	0.0	10.1	5.7
SW	1.2	2.2	0.1	0.0	0.0	3.6	4.8
W	0.8	0.8	0.0	0.0	0.0	1.7	4.6
NW	3.2	3.6	1.2	0.0	0.0	8.1	5.3
Total	17.4	62.1	19.4	0.1	0.0	99.0	6.3

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 19	December		1992	NPTS = 739		% Calm = 0.3	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.0	5.7	2.3	0.0	0.0	10.0	6.3
NE	3.4	10.1	4.2	0.0	0.0	17.7	6.2
E	5.4	13.0	3.1	0.0	0.0	21.5	5.4
SE	5.5	13.1	4.5	0.0	0.0	23.1	5.8
S	7.3	9.1	2.2	0.0	0.0	18.5	5.1
SW	1.6	1.5	0.0	0.0	0.0	3.1	3.8
W	0.7	1.8	0.0	0.0	0.0	2.4	5.0
NW	0.9	2.3	0.0	0.0	0.0	3.2	5.1
Total	26.9	56.6	16.2	0.0	0.0	99.7	5.6

Mooring 19	January		1993	NPTS = 429		% Calm = 0.2	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.6	15.9	2.1	0.0	0.0	20.5	6.0
NE	4.2	22.4	7.0	0.5	0.0	34.0	6.7
E	2.8	14.0	3.3	0.0	0.0	20.0	6.4
SE	2.8	11.4	0.7	0.0	0.0	14.9	5.4
S	3.0	2.3	0.0	0.0	0.0	5.4	4.0
SW	1.6	1.9	0.0	0.0	0.0	3.5	4.4
W	0.5	0.5	0.0	0.0	0.0	0.9	3.0
NW	0.2	0.0	0.2	0.0	0.0	0.5	7.5
Total	17.7	68.3	13.3	0.5	0.0	99.8	6.0

Mooring 19	February		1993	NPTS = 672		% Calm = 0.0	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	3.7	6.7	5.4	0.0	0.0	15.8	6.6
NE	0.6	12.1	6.1	0.0	0.0	18.8	7.1
E	1.2	14.7	3.3	0.0	0.0	19.2	6.4
SE	2.5	10.1	2.7	0.0	0.0	15.3	6.0
S	1.6	8.0	2.7	0.0	0.0	12.4	6.5
SW	0.9	5.5	0.1	0.0	0.0	6.5	5.5
W	0.4	0.9	0.4	0.0	0.0	1.8	5.9
NW	6.2	3.1	0.9	0.0	0.0	10.3	4.3
Total	17.3	61.2	21.6	0.0	0.0	100.0	6.2

Mooring 19	March		1993	NPTS = 741		% Calm = 0.9	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.6	4.5	1.2	0.8	0.0	9.0	6.2
NE	3.0	2.2	0.9	1.3	0.0	7.4	6.5
E	9.2	11.3	3.1	0.0	0.0	23.6	5.2
SE	7.8	9.7	2.7	0.0	0.0	20.2	4.9
S	3.8	3.5	3.8	0.0	0.0	11.1	6.1
SW	3.5	3.0	0.9	0.0	0.0	7.4	4.8
W	5.9	2.6	0.0	0.1	0.0	8.6	3.6
NW	6.6	4.0	0.1	0.8	0.0	11.6	4.6
Total	42.4	40.8	12.8	3.1	0.0	99.1	5.2

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 19	April		1993	NPTS = 720		% Calm = 1.0	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.4	4.4	3.5	0.7	0.0	10.0	7.4
NE	3.8	4.6	1.0	0.6	0.0	9.9	5.2
E	4.3	10.3	1.0	0.0	0.0	15.6	5.4
SE	6.7	11.1	2.2	0.0	0.0	20.0	5.2
S	8.5	17.1	1.2	0.0	0.0	26.8	5.3
SW	0.6	0.6	0.0	0.0	0.0	1.1	3.2
W	0.7	3.1	0.0	0.1	0.0	3.9	5.1
NW	1.8	4.2	5.8	0.0	0.0	11.8	7.4
Total	27.6	55.3	14.7	1.4	0.0	99.0	5.7

Mooring 19	May		1993	NPTS = 566		% Calm = 1.1	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.1	4.6	0.5	0.0	0.0	6.2	5.9
NE	2.7	3.9	0.0	0.0	0.0	6.5	4.7
E	1.2	9.4	0.5	0.0	0.0	11.1	5.6
SE	3.2	25.4	1.9	0.0	0.0	30.6	5.8
S	6.7	8.8	0.4	0.0	0.0	15.9	4.7
SW	6.7	1.2	0.0	0.2	0.0	8.1	2.8
W	8.0	4.2	0.0	0.0	0.0	12.2	3.5
NW	1.9	6.2	0.2	0.0	0.0	8.3	5.2
Total	31.4	63.8	3.5	0.2	0.0	98.9	4.9

Mooring 19	June		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 19	July		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 19	August		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 19	September		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 19	October		1993	NPTS = 744		% Calm = 0.1	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	5.0	6.5	5.6	0.1	0.0	17.2	6.6
NE	10.3	19.8	4.3	0.0	0.0	34.4	5.5
E	6.2	8.6	0.1	0.0	0.0	14.9	4.7
SE	2.8	8.7	0.1	0.0	0.0	11.7	4.9
S	3.2	7.8	1.2	0.0	0.0	12.2	5.6
SW	2.2	0.9	2.3	0.0	0.0	5.4	6.4
W	2.0	0.0	0.3	0.0	0.0	2.3	3.5
NW	1.3	0.4	0.0	0.0	0.0	1.7	3.2
Total	33.1	52.7	14.0	0.1	0.0	99.9	5.5

Mooring 19	November		1993	NPTS = 720		% Calm = 0.0	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.8	3.6	5.0	0.0	0.0	10.4	7.7
NE	2.1	12.2	5.7	0.0	0.0	20.0	6.9
E	6.0	15.4	5.4	0.0	0.0	26.8	5.8
SE	3.8	9.4	2.6	0.0	0.0	15.8	6.0
S	1.8	13.8	0.7	0.0	0.0	16.3	5.9
SW	1.5	2.8	1.5	0.0	0.0	5.8	6.1
W	1.2	0.4	0.0	0.0	0.0	1.7	3.0
NW	1.7	1.4	0.1	0.0	0.0	3.2	4.1
Total	19.9	59.0	21.1	0.0	0.0	100.0	6.2

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 19	December		1993	NPTS = 741		% Calm = 0.4	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.2	8.2	8.4	0.0	0.0	17.8	7.4
NE	4.7	11.6	3.4	0.0	0.0	19.7	5.7
E	4.2	11.3	1.5	0.0	0.0	17.0	5.3
SE	1.1	7.2	3.9	0.0	0.0	12.1	7.0
S	2.6	9.2	2.2	0.0	0.0	13.9	6.2
SW	1.3	4.9	0.1	0.0	0.0	6.3	5.0
W	0.5	0.9	1.2	0.0	0.0	2.7	6.8
NW	0.5	2.3	7.2	0.0	0.0	10.0	8.6
Total	16.2	55.6	27.8	0.0	0.0	99.6	6.4

Mooring 19	January		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 19	February		1994	NPTS = 317		% Calm = 0.0	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.0	2.8	5.7	0.3	0.0	8.8	8.7
NE	7.9	20.5	0.9	0.0	0.0	29.3	5.2
E	10.4	28.7	0.0	0.0	0.0	39.1	5.2
SE	6.0	6.6	0.9	0.0	0.0	13.6	5.0
S	0.3	8.2	0.0	0.0	0.0	8.5	5.7
SW	0.3	0.0	0.0	0.0	0.0	0.3	0.8
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.3	0.0	0.0	0.3	10.6
Total	24.9	66.9	7.9	0.3	0.0	100.0	5.5

Mooring 19	March		1994	NPTS = 743		% Calm = 1.2	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	4.0	5.1	7.8	0.3	0.0	17.2	6.9
NE	7.4	4.6	1.1	0.0	0.0	13.1	4.1
E	9.0	10.8	2.6	0.0	0.0	22.3	5.2
SE	11.3	8.3	0.9	0.0	0.0	20.6	4.2
S	6.2	1.6	0.1	0.0	0.0	7.9	3.2
SW	5.1	0.4	0.0	0.0	0.0	5.5	2.1
W	3.4	0.1	0.0	0.0	0.0	3.5	2.2
NW	2.7	1.2	4.6	0.1	0.0	8.6	7.3
Total	49.1	32.2	17.1	0.4	0.0	98.8	4.9

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 19	April		1994	NPTS = 352		% Calm = 0.0	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.3	6.8	2.8	0.3	0.0	12.2	6.3
NE	6.8	5.7	0.0	0.0	0.0	12.5	4.3
E	12.5	26.4	0.3	0.0	0.0	39.2	5.0
SE	6.5	15.1	1.1	0.3	0.0	23.0	5.3
S	1.7	2.3	0.0	0.0	0.0	4.0	4.4
SW	1.1	1.4	0.0	0.0	0.0	2.6	3.9
W	0.6	1.1	0.0	0.0	0.0	1.7	3.5
NW	0.6	3.1	0.6	0.6	0.0	4.8	6.9
Total	32.1	61.9	4.8	1.1	0.0	100.0	5.1

Mooring 19	May		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 19	June		1994	NPTS = 720		% Calm = 1.4	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.9	1.7	0.0	0.0	0.0	3.6	4.2
NE	1.2	0.8	0.0	0.0	0.0	2.1	3.7
E	1.7	2.8	0.1	0.0	0.0	4.6	4.6
SE	6.7	14.0	0.1	0.0	0.0	20.8	4.7
S	10.4	17.2	0.3	0.0	0.0	27.9	4.6
SW	11.3	17.1	0.8	0.0	0.0	29.2	4.9
W	4.4	2.4	0.0	0.0	0.0	6.8	3.4
NW	2.9	0.6	0.1	0.0	0.0	3.6	2.9
Total	40.6	56.5	1.5	0.0	0.0	98.6	4.5

Mooring 19	July		1994	NPTS = 739		% Calm = 1.6	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.4	1.1	0.1	0.0	0.0	3.7	3.1
NE	2.2	1.5	0.0	0.0	0.0	3.7	3.6
E	6.5	1.8	0.0	0.0	0.0	8.3	3.2
SE	7.3	3.4	0.0	0.0	0.0	10.7	3.3
S	15.7	16.8	0.3	0.0	0.0	32.7	4.2
SW	7.2	16.4	0.4	0.0	0.0	24.0	4.7
W	5.0	4.6	0.9	0.0	0.0	10.6	4.5
NW	3.0	1.8	0.1	0.0	0.0	4.9	3.2
Total	49.3	47.2	1.9	0.0	0.0	98.4	4.1

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 19	August		1994	NPTS = 744		% Calm = 2.0	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	4.8	0.9	0.3	0.0	0.0	6.0	3.1
NE	2.3	0.7	0.0	0.0	0.0	3.0	2.3
E	11.7	16.7	0.5	0.0	0.0	28.9	4.5
SE	8.9	8.9	0.4	0.0	0.0	18.1	4.1
S	7.7	9.1	0.0	0.0	0.0	16.8	4.0
SW	7.0	5.6	0.0	0.0	0.0	12.6	3.6
W	3.2	2.0	0.0	0.0	0.0	5.2	3.8
NW	3.4	3.9	0.0	0.0	0.0	7.3	3.8
Total	48.9	47.8	1.2	0.0	0.0	98.0	4.0

Mooring 19	September		1994	NPTS = 717		% Calm = 1.3	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	8.4	8.4	0.7	0.0	0.0	17.4	4.4
NE	7.5	4.0	0.4	0.0	0.0	12.0	4.0
E	9.6	17.4	2.9	0.0	0.0	30.0	5.4
SE	6.4	6.0	0.7	0.0	0.0	13.1	4.0
S	4.7	2.0	0.3	0.0	0.0	7.0	3.3
SW	6.0	0.4	0.0	0.0	0.0	6.4	2.5
W	4.2	2.2	0.0	0.0	0.0	6.4	3.5
NW	5.0	1.4	0.0	0.0	0.0	6.4	3.1
Total	51.9	41.8	5.0	0.0	0.0	98.7	4.2

Mooring 19	October		1994	NPTS = 744		% Calm = 0.3	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.2	11.3	2.6	0.0	0.0	16.0	5.7
NE	5.2	17.3	2.3	0.0	0.0	24.9	5.6
E	5.2	7.4	1.2	0.0	0.0	13.8	4.8
SE	2.6	11.3	7.9	0.0	0.0	21.8	6.9
S	5.9	7.3	0.1	0.0	0.0	13.3	4.7
SW	1.7	1.9	0.0	0.0	0.0	3.6	3.8
W	0.7	0.3	0.0	0.0	0.0	0.9	3.7
NW	0.7	4.3	0.4	0.0	0.0	5.4	5.9
Total	24.2	61.0	14.5	0.0	0.0	99.7	5.6

Mooring 19	November		1994	NPTS = 720		% Calm = 0.6	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.6	4.7	0.7	0.0	0.0	6.0	6.3
NE	5.1	17.9	6.5	0.0	0.0	29.6	6.3
E	6.8	16.8	0.7	0.0	0.0	24.3	5.1
SE	1.0	9.9	1.1	0.0	0.0	11.9	6.2
S	1.2	13.5	3.9	0.0	0.0	18.6	6.6
SW	0.1	6.9	0.0	0.0	0.0	7.1	5.8
W	1.0	0.7	0.0	0.0	0.0	1.7	3.8
NW	0.1	0.1	0.0	0.0	0.0	0.3	2.5
Total	16.0	70.6	12.9	0.0	0.0	99.4	5.9

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 20	April	1992	NPTS = 435		% Calm = 1.1	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.6	6.7	1.1	0.0	0.0	9.4	5.9
NE	3.4	2.8	1.4	0.0	0.0	7.6	5.2
E	4.6	1.1	0.0	0.0	0.0	5.7	3.1
SE	13.8	24.1	2.1	0.0	0.0	40.0	4.7
S	8.3	10.8	3.4	0.0	0.0	22.5	5.1
SW	4.4	2.1	0.5	0.0	0.0	6.9	3.6
W	1.4	0.7	0.0	0.0	0.0	2.1	2.4
NW	0.5	3.4	0.7	0.0	0.0	4.6	6.6
Total	37.9	51.7	9.2	0.0	0.0	98.9	4.8

Mooring 20	May	1992	NPTS = 740		% Calm = 0.5	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	3.2	1.4	1.4	0.0	0.0	5.9	4.6
NE	2.8	1.1	0.0	0.0	0.0	3.9	3.3
E	3.8	12.2	0.3	0.0	0.0	16.2	5.3
SE	6.6	20.7	0.0	0.0	0.0	27.3	5.0
S	8.9	13.0	0.0	0.0	0.0	21.9	4.3
SW	7.8	5.0	0.0	0.0	0.0	12.8	3.9
W	3.4	0.8	0.1	0.0	0.0	4.3	3.0
NW	2.6	4.1	0.4	0.0	0.0	7.0	4.7
Total	39.2	58.1	2.2	0.0	0.0	99.5	4.6

Mooring 20	June	1992	NPTS = 720		% Calm = 1.4	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.5	0.6	0.1	0.0	0.0	2.2	3.3
NE	3.1	0.3	0.3	0.0	0.0	3.6	3.3
E	4.0	1.1	0.0	0.0	0.0	5.1	2.9
SE	5.8	7.8	0.3	0.0	0.0	13.9	4.4
S	13.2	23.3	0.4	0.0	0.0	36.9	4.6
SW	12.5	12.8	0.0	0.0	0.0	25.3	4.0
W	5.8	1.9	0.0	0.0	0.0	7.8	3.2
NW	2.4	1.4	0.0	0.0	0.0	3.8	3.4
Total	48.3	49.2	1.1	0.0	0.0	98.6	4.1

Mooring 20	July	1992	NPTS = 733		% Calm = 0.6	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.4	0.3	0.0	0.0	0.0	0.7	3.3
NE	2.7	0.1	0.1	0.0	0.0	3.0	2.1
E	5.9	1.6	0.0	0.0	0.0	7.5	2.8
SE	9.4	9.7	0.4	0.0	0.0	19.5	4.3
S	16.0	42.4	1.9	0.0	0.0	60.3	5.2
SW	3.8	2.6	0.0	0.0	0.0	6.4	3.7
W	0.7	0.4	0.0	0.0	0.0	1.1	3.4
NW	0.4	0.5	0.0	0.0	0.0	1.0	4.0
Total	39.3	57.7	2.5	0.0	0.0	99.5	4.6

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 20	August		1992	NPTS = 744		% Calm = 1.8	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	4.6	4.2	0.3	0.0	0.0	9.0	4.4
NE	9.5	11.8	0.1	0.0	0.0	21.5	4.4
E	14.0	3.6	0.0	0.0	0.0	17.6	3.0
SE	11.7	9.0	0.3	0.0	0.0	21.0	3.7
S	14.1	2.2	0.1	0.0	0.0	16.4	3.2
SW	3.1	1.7	0.0	0.0	0.0	4.8	3.5
W	1.5	2.3	0.0	0.0	0.0	3.8	4.9
NW	1.7	2.2	0.3	0.0	0.0	4.2	4.4
Total	60.2	37.0	1.1	0.0	0.0	98.3	3.8

Mooring 20	September		1992	NPTS = 135		% Calm = 0.0	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.5	0.0	0.0	0.0	0.0	1.5	1.7
NE	2.2	0.0	0.7	0.0	0.0	3.0	4.1
E	2.2	4.4	0.0	0.0	0.0	6.7	4.6
SE	9.6	38.5	0.7	0.0	0.0	48.9	5.0
S	6.7	30.4	0.0	0.0	0.0	37.0	5.6
SW	0.7	0.0	0.0	0.0	0.0	0.7	2.6
W	0.7	0.0	0.0	0.0	0.0	0.7	1.4
NW	1.5	0.0	0.0	0.0	0.0	1.5	2.2
Total	25.2	73.3	1.5	0.0	0.0	100.0	5.0

Mooring 20	October		1992	NPTS = 225		% Calm = 1.3	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	3.6	0.4	0.0	0.0	0.0	4.0	2.6
NE	4.4	0.4	0.0	0.0	0.0	4.9	2.5
E	5.8	5.8	0.4	0.0	0.0	12.0	4.4
SE	11.6	12.9	0.0	0.0	0.0	24.4	4.3
S	17.3	8.9	0.0	0.0	0.0	26.2	3.7
SW	11.6	2.7	0.0	0.0	0.0	14.2	3.2
W	2.2	3.1	0.0	0.0	0.0	5.3	4.2
NW	5.8	1.8	0.0	0.0	0.0	7.6	3.3
Total	62.2	36.0	0.4	0.0	0.0	98.7	3.7

Mooring 20	November		1992	NPTS = 720		% Calm = 0.1	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	3.6	4.4	9.0	0.1	0.0	17.2	7.4
NE	6.8	8.1	1.7	0.0	0.0	16.5	4.9
E	9.2	21.3	5.1	0.0	0.0	35.6	5.7
SE	4.2	5.4	1.5	0.0	0.0	11.1	5.1
S	1.9	1.2	0.3	0.0	0.0	3.5	4.5
SW	0.7	0.7	0.0	0.0	0.0	1.4	4.1
W	0.4	1.5	1.4	0.0	0.0	3.3	7.1
NW	0.3	7.2	3.6	0.1	0.0	11.3	7.1
Total	27.1	49.9	22.6	0.3	0.0	99.9	5.9

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 20	December		1992	NPTS = 742		% Calm = 0.5	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	4.7	7.7	2.3	0.0	0.0	14.7	5.5
NE	5.1	13.6	4.6	0.0	0.0	23.3	6.0
E	13.7	12.9	0.9	0.0	0.0	27.6	4.2
SE	6.1	13.3	3.0	0.1	0.0	22.5	5.5
S	1.9	1.6	0.0	0.0	0.0	3.5	3.8
SW	1.2	0.7	0.0	0.0	0.0	1.9	3.6
W	0.9	0.4	0.0	0.0	0.0	1.3	3.3
NW	2.4	1.6	0.5	0.0	0.0	4.6	4.4
Total	36.1	51.9	11.3	0.1	0.0	99.5	5.1

Mooring 20	January		1993	NPTS = 501		% Calm = 1.2	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	4.6	15.2	10.2	0.0	0.0	29.9	6.7
NE	7.0	22.6	7.8	0.0	0.0	37.3	6.1
E	8.6	9.8	0.4	0.0	0.0	18.8	4.6
SE	3.2	4.0	0.0	0.0	0.0	7.2	4.1
S	0.8	0.8	0.0	0.0	0.0	1.6	3.4
SW	0.4	0.2	0.0	0.0	0.0	0.6	2.6
W	1.0	0.0	0.0	0.0	0.0	1.0	1.5
NW	1.0	1.0	0.4	0.0	0.0	2.4	4.1
Total	26.5	53.5	18.8	0.0	0.0	98.8	5.7

Mooring 20	February		1993	NPTS = 672		% Calm = 0.1	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	4.3	11.2	3.3	0.0	0.0	18.8	5.7
NE	2.2	17.0	2.7	0.0	0.0	21.9	6.2
E	2.8	15.5	1.0	0.0	0.0	19.3	6.1
SE	3.1	9.8	0.1	0.0	0.0	13.1	5.3
S	2.4	3.6	0.1	0.0	0.0	6.1	5.0
SW	3.3	2.2	0.0	0.0	0.0	5.5	3.8
W	2.2	3.9	0.0	0.0	0.0	6.1	4.7
NW	1.8	4.0	3.3	0.0	0.0	9.1	6.7
Total	22.2	67.1	10.6	0.0	0.0	99.9	5.7

Mooring 20	March		1993	NPTS = 719		% Calm = 0.7	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.6	1.8	0.0	1.5	0.0	6.0	6.3
NE	3.5	3.8	1.9	0.3	0.0	9.5	5.9
E	10.7	9.9	3.3	0.1	0.0	24.1	5.2
SE	7.6	9.9	3.8	0.0	0.0	21.3	5.4
S	8.5	4.2	0.3	0.0	0.0	12.9	3.7
SW	5.0	3.1	0.0	0.0	0.0	8.1	3.7
W	1.9	4.0	0.0	0.0	0.0	6.0	4.5
NW	1.5	6.8	1.3	1.9	0.0	11.5	7.3
Total	41.4	43.4	10.6	3.9	0.0	99.3	5.3

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 20	April	1993	NPTS = 720		% Calm = 0.6	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.4	4.4	1.2	0.0	0.0	8.1	5.5
NE	2.1	4.4	2.4	0.1	0.0	9.0	5.9
E	1.9	5.6	1.9	0.0	0.0	9.4	6.1
SE	5.8	19.3	3.9	0.1	0.0	29.2	5.8
S	5.1	19.4	2.8	0.1	0.0	27.5	5.8
SW	1.9	0.4	0.1	0.0	0.0	2.5	4.0
W	1.7	1.5	0.0	0.0	0.0	3.2	3.7
NW	0.7	4.6	5.3	0.0	0.0	10.6	7.9
Total	21.7	59.7	17.6	0.4	0.0	99.4	5.9

Mooring 20	May	1993	NPTS = 743		% Calm = 0.5	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.4	3.9	0.5	0.0	0.0	6.9	5.2
NE	2.7	4.8	0.7	0.0	0.0	8.2	5.1
E	4.8	4.6	0.4	0.0	0.0	9.8	4.3
SE	6.6	23.0	4.3	0.0	0.0	33.9	5.9
S	7.4	11.4	1.3	0.0	0.0	20.2	5.1
SW	3.0	7.7	0.1	0.0	0.0	10.8	4.6
W	0.9	2.8	0.0	0.0	0.0	3.8	5.3
NW	1.2	4.4	0.3	0.0	0.0	5.9	5.5
Total	29.1	62.7	7.7	0.0	0.0	99.5	5.3

Mooring 20	June	1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 20	July	1993	NPTS = 397		% Calm = 6.0	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.8	0.0	0.0	0.0	0.0	0.8	1.3
NE	1.5	0.0	0.0	0.0	0.0	1.5	2.0
E	0.3	0.0	0.0	0.0	0.0	0.3	0.2
SE	3.5	0.8	0.0	0.0	0.0	4.3	1.9
S	20.7	13.1	0.0	0.0	0.0	33.8	3.4
SW	21.9	23.2	0.0	0.0	0.0	45.1	4.2
W	5.3	1.8	0.0	0.0	0.0	7.1	2.7
NW	1.3	0.0	0.0	0.0	0.0	1.3	3.7
Total	55.2	38.8	0.0	0.0	0.0	94.0	3.5

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 20	August		1993	NPTS = 744		% Calm = 5.7	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.1	0.7	0.0	0.0	0.0	1.7	2.7
NE	2.8	0.7	0.0	0.0	0.0	3.5	2.8
E	1.6	1.6	0.9	0.0	0.0	4.2	4.7
SE	5.5	0.9	0.0	0.0	0.0	6.5	2.4
S	16.0	9.4	0.1	0.0	0.0	25.5	3.6
SW	19.0	19.9	0.1	0.0	0.0	39.0	4.0
W	7.8	2.8	0.0	0.0	0.0	10.6	3.0
NW	3.0	0.4	0.0	0.0	0.0	3.4	2.8
Total	56.7	36.4	1.2	0.0	0.0	94.4	3.6

Mooring 20	September		1993	NPTS = 549		% Calm = 2.9	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	6.4	6.0	1.8	0.0	0.0	14.2	4.7
NE	2.7	8.9	0.0	0.0	0.0	11.7	4.5
E	5.8	4.4	0.0	0.0	0.0	10.2	3.6
SE	5.6	6.6	0.2	0.0	0.0	12.4	4.0
S	4.4	11.5	5.8	0.0	0.0	21.7	6.1
SW	5.1	5.3	1.1	0.0	0.0	11.5	4.9
W	5.1	3.8	0.0	0.0	0.0	8.9	3.8
NW	3.8	2.7	0.0	0.0	0.0	6.6	3.4
Total	39.0	49.2	8.9	0.0	0.0	97.1	4.7

Mooring 20	October		1993	NPTS = 744		% Calm = 0.5	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	4.3	11.7	8.1	0.9	0.0	25.0	6.9
NE	5.2	10.9	0.9	0.0	0.0	17.1	4.9
E	4.0	3.8	0.0	0.0	0.0	7.8	3.7
SE	10.3	14.9	0.5	0.0	0.0	25.8	4.6
S	3.8	9.8	0.1	0.0	0.0	13.7	4.9
SW	0.5	0.7	0.1	0.0	0.0	1.3	3.9
W	1.2	0.3	0.0	0.0	0.0	1.5	2.7
NW	1.3	2.4	3.0	0.5	0.0	7.3	7.8
Total	30.8	54.4	12.8	1.5	0.0	99.5	5.4

Mooring 20	November		1993	NPTS = 720		% Calm = 0.7	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.1	11.8	9.6	0.0	0.0	23.5	7.4
NE	4.4	12.5	1.8	0.0	0.0	18.8	5.5
E	7.5	14.9	5.3	0.0	0.0	27.6	5.7
SE	5.6	7.8	0.0	0.0	0.0	13.3	4.3
S	3.6	1.0	0.0	0.0	0.0	4.6	3.1
SW	2.5	2.1	0.0	0.0	0.0	4.6	4.0
W	1.2	1.4	0.0	0.0	0.0	2.6	4.3
NW	1.2	1.7	1.4	0.0	0.0	4.3	6.2
Total	28.2	53.1	18.1	0.0	0.0	99.3	5.6

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 20	December		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 20	January		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 20	February		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 20	March		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 20	April		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 20	May		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 20	June		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 20	July		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 20	August		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 20	September		1994	NPTS = 367		% Calm = 0.3	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	10.6	14.4	4.1	0.0	0.0	29.2	5.1
NE	6.0	13.9	0.3	0.0	0.0	20.2	4.9
E	5.2	1.9	0.0	0.0	0.0	7.1	3.2
SE	7.1	0.0	0.0	0.0	0.0	7.1	2.0
S	4.9	3.0	0.0	0.0	0.0	7.9	3.8
SW	5.2	6.5	0.0	0.0	0.0	11.7	4.0
W	4.9	1.6	0.0	0.0	0.0	6.5	2.7
NW	5.2	4.9	0.0	0.0	0.0	10.1	3.8
Total	49.0	46.3	4.4	0.0	0.0	99.7	4.2

Mooring 20	October		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 20	November		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 22	April	1992	NPTS = 371		% Calm = 3.2	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	3.2	4.6	0.8	0.0	0.0	8.6	5.2
NE	1.3	2.7	2.7	0.0	0.0	6.7	5.6
E	8.4	1.6	0.3	0.0	0.0	10.2	2.9
SE	30.2	4.0	0.5	0.0	0.0	34.8	2.6
S	10.0	8.9	3.5	0.0	0.0	22.4	5.0
SW	3.0	1.3	0.5	0.0	0.0	4.9	3.7
W	0.3	2.4	0.0	0.0	0.0	2.7	5.2
NW	2.2	3.8	0.5	0.0	0.0	6.5	4.7
Total	58.5	29.4	8.9	0.0	0.0	96.8	3.9

Mooring 22	May	1992	NPTS = 324		% Calm = 8.9	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	4.0	0.9	0.6	0.0	0.0	5.6	2.7
NE	7.4	4.0	4.0	0.0	0.0	15.4	4.7
E	3.4	0.0	0.0	0.0	0.0	3.4	1.2
SE	22.8	12.0	0.0	0.0	0.0	34.9	3.4
S	11.1	13.3	0.0	0.0	0.0	24.4	4.1
SW	4.0	0.3	0.0	0.0	0.0	4.3	1.7
W	1.5	0.3	0.0	0.0	0.0	1.9	2.5
NW	0.3	0.9	0.0	0.0	0.0	1.2	4.6
Total	54.6	31.8	4.6	0.0	0.0	91.0	3.6

Mooring 22	June	1992	NPTS = 412		% Calm = 0.0	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.7	0.2	0.0	0.0	0.0	1.9	3.0
NE	2.7	0.5	0.0	0.0	0.0	3.2	3.1
E	2.7	0.0	0.0	0.0	0.0	2.7	1.5
SE	5.3	9.7	0.0	0.0	0.0	15.0	4.7
S	12.9	19.2	1.7	0.0	0.0	33.7	4.8
SW	19.7	7.8	0.7	0.0	0.0	28.2	3.5
W	9.0	0.7	0.0	0.0	0.0	9.7	2.8
NW	4.1	1.5	0.0	0.0	0.0	5.6	3.2
Total	58.0	39.6	2.4	0.0	0.0	100.0	4.0

Mooring 22	July	1992	NPTS = 589		% Calm = 0.7	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.3	0.5	0.0	0.0	0.0	0.8	5.0
NE	0.5	0.8	0.0	0.0	0.0	1.4	4.3
E	6.6	1.4	0.0	0.0	0.0	8.0	2.6
SE	10.7	14.6	0.3	0.0	0.0	25.6	4.3
S	12.7	36.5	6.8	0.0	0.0	56.0	5.7
SW	4.4	1.7	0.0	0.0	0.0	6.1	3.2
W	0.8	0.2	0.0	0.0	0.0	1.0	2.4
NW	0.3	0.0	0.0	0.0	0.0	0.3	0.6
Total	36.5	55.7	7.1	0.0	0.0	99.3	4.8

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 22	August		1992	NPTS = 730		% Calm = 2.5	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	4.4	3.7	0.1	0.0	0.0	8.2	4.1
NE	3.4	8.2	0.1	0.0	0.0	11.8	4.5
E	13.0	10.7	0.1	0.0	0.0	23.8	4.0
SE	11.6	4.0	0.0	0.0	0.0	15.6	3.0
S	11.2	5.3	0.0	0.0	0.0	16.6	3.0
SW	6.2	3.3	0.1	0.0	0.0	9.6	3.6
W	2.9	2.1	0.0	0.0	0.0	4.9	3.9
NW	3.6	3.3	0.1	0.0	0.0	7.0	3.9
Total	56.3	40.5	0.7	0.0	0.0	97.5	3.7

Mooring 22	September		1992	NPTS = 718		% Calm = 0.7	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.1	1.3	1.5	0.0	0.0	2.9	7.5
NE	2.5	10.2	11.3	0.0	0.0	24.0	7.5
E	12.4	8.6	0.3	0.0	0.0	21.3	4.0
SE	16.3	6.8	0.0	0.0	0.0	23.1	3.3
S	4.3	18.1	0.0	0.0	0.0	22.4	5.3
SW	2.5	1.5	0.0	0.0	0.0	4.0	3.4
W	1.1	0.1	0.0	0.0	0.0	1.3	2.7
NW	0.1	0.0	0.1	0.0	0.0	0.3	5.1
Total	39.4	46.7	13.2	0.0	0.0	99.3	5.0

Mooring 22	October		1992	NPTS = 667		% Calm = 0.6	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	5.1	6.4	1.9	0.0	0.0	13.5	5.3
NE	3.6	15.7	5.1	0.1	0.0	24.6	6.4
E	5.5	9.1	0.6	0.0	0.0	15.3	4.7
SE	5.4	12.9	0.0	0.0	0.0	18.3	5.0
S	2.7	11.8	0.1	0.0	0.0	14.7	5.2
SW	6.1	1.0	0.0	0.0	0.0	7.2	3.4
W	3.3	0.0	0.0	0.0	0.0	3.3	2.3
NW	2.5	0.0	0.0	0.0	0.0	2.5	2.2
Total	34.3	57.1	7.8	0.1	0.0	99.4	5.1

Mooring 22	November		1992	NPTS = 720		% Calm = 0.1	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.5	5.6	11.4	0.0	0.0	19.4	8.0
NE	3.2	9.0	3.5	0.0	0.0	15.7	6.4
E	13.5	6.0	0.6	0.0	0.0	20.0	3.7
SE	6.1	14.2	1.4	0.0	0.0	21.7	5.2
S	2.2	4.6	1.9	0.0	0.0	8.8	6.2
SW	0.3	1.7	0.1	0.0	0.0	2.1	5.2
W	0.6	2.2	0.7	0.0	0.0	3.5	6.0
NW	0.3	5.1	3.3	0.0	0.0	8.8	7.7
Total	28.6	48.3	22.9	0.0	0.0	99.9	6.0

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 22	December	1992	NPTS = 742		% Calm = 1.2		
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.5	10.0	3.1	0.0	0.0	14.6	6.4
NE	1.9	12.1	5.0	0.0	0.0	19.0	6.6
E	4.2	6.6	0.9	0.0	0.0	11.7	4.8
SE	20.2	13.6	3.6	0.0	0.0	37.5	4.5
S	3.4	3.0	0.5	0.0	0.0	6.9	4.3
SW	0.8	0.3	0.1	0.0	0.0	1.2	3.0
W	0.9	2.7	0.5	0.0	0.0	4.2	5.7
NW	1.1	2.6	0.1	0.0	0.0	3.8	5.0
Total	34.0	50.8	14.0	0.0	0.0	98.8	6.0

Mooring 22	January	1993	NPTS = 401		% Calm = 0.0		
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	4.5	16.7	8.7	0.0	0.0	29.9	6.5
NE	3.5	26.9	10.0	0.0	0.0	40.4	6.6
E	0.7	7.5	1.2	0.0	0.0	9.5	6.5
SE	7.2	6.0	0.0	0.0	0.0	13.2	4.2
S	1.2	1.2	0.0	0.0	0.0	2.5	3.9
SW	0.2	0.5	0.0	0.0	0.0	0.7	4.6
W	0.5	0.0	0.0	0.0	0.0	0.5	1.6
NW	2.0	1.0	0.2	0.0	0.0	3.2	4.0
Total	20.0	59.9	20.2	0.0	0.0	100.0	5.2

Mooring 22	February	1993	NPTS = 672		% Calm = 0.1		
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.3	6.5	9.1	0.0	0.0	17.0	7.6
NE	1.0	8.9	6.4	0.0	0.0	16.4	7.2
E	3.4	12.4	2.4	0.0	0.0	18.2	5.8
SE	8.2	8.6	1.5	0.0	0.0	18.3	4.6
S	1.3	10.0	1.9	0.0	0.0	13.2	6.2
SW	0.6	0.4	0.0	0.0	0.0	1.0	3.4
W	3.4	0.4	0.7	0.0	0.0	4.6	3.7
NW	4.9	4.2	2.1	0.0	0.0	11.2	4.9
Total	24.3	51.5	24.1	0.0	0.0	99.9	6.0

Mooring 22	March	1993	NPTS = 742		% Calm = 3.2		
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.2	4.0	1.2	2.6	0.0	9.0	8.1
NE	0.7	1.1	0.8	0.4	0.0	3.0	6.3
E	4.9	6.7	1.5	0.1	0.0	13.2	4.9
SE	8.2	9.8	2.8	0.0	0.0	20.9	4.6
S	5.3	7.3	1.5	0.0	0.0	14.0	5.0
SW	8.4	7.4	1.1	0.0	0.0	16.8	4.5
W	4.4	3.0	0.3	0.0	0.0	7.7	4.0
NW	5.0	6.5	0.5	0.1	0.0	12.1	4.3
Total	38.0	45.8	9.7	3.2	0.0	96.8	5.0

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 22	April		1993	NPTS = 720		% Calm = 1.4	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.8	4.3	1.5	0.0	0.0	6.7	6.5
NE	1.8	6.1	1.7	0.0	0.0	9.6	6.2
E	4.2	6.0	0.4	0.0	0.0	10.6	4.8
SE	13.5	13.5	0.8	0.0	0.0	27.8	4.3
S	6.9	16.5	4.3	0.0	0.0	27.8	5.9
SW	1.5	1.0	0.0	0.0	0.0	2.5	3.5
W	0.6	3.5	0.1	0.0	0.0	4.2	5.5
NW	1.1	5.1	3.3	0.0	0.0	9.6	6.9
Total	30.4	56.0	12.2	0.0	0.0	98.6	5.4

Mooring 22	May		1993	NPTS = 540		% Calm = 1.3	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.9	5.6	0.6	0.0	0.0	7.0	6.2
NE	2.0	2.0	0.4	0.0	0.0	4.4	4.5
E	2.2	4.4	0.0	0.0	0.0	6.7	4.4
SE	21.3	15.6	2.0	0.0	0.0	38.9	4.4
S	5.6	13.9	0.2	0.0	0.0	19.6	4.9
SW	3.7	3.3	0.0	0.0	0.0	7.0	3.7
W	3.0	4.1	0.0	0.0	0.0	7.0	4.3
NW	2.8	5.2	0.0	0.0	0.0	8.0	5.0
Total	41.5	54.1	3.1	0.0	0.0	98.7	4.6

Mooring 22	June		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 22	July		1993	NPTS = 383		% Calm = 1.3	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.6	0.0	0.0	0.0	0.0	1.6	2.5
NE	1.6	0.3	0.0	0.0	0.0	1.8	2.9
E	6.0	0.8	0.0	0.0	0.0	6.8	2.0
SE	11.7	1.6	0.0	0.0	0.0	13.3	2.7
S	23.8	20.4	0.0	0.0	0.0	44.1	3.9
SW	14.1	12.5	0.0	0.0	0.0	26.6	3.9
W	3.1	0.3	0.0	0.0	0.0	3.4	2.6
NW	0.8	0.3	0.0	0.0	0.0	1.0	2.2
Total	62.7	36.0	0.0	0.0	0.0	98.7	3.5

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 22	August	1993	NPTS = 744		% Calm = 2.4		
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.9	0.1	0.0	0.0	0.0	2.0	1.6
NE	2.8	1.9	0.0	0.0	0.0	4.7	3.7
E	6.5	2.4	0.0	0.0	0.0	8.9	3.4
SE	14.2	0.9	0.0	0.0	0.0	15.2	2.3
S	21.4	12.9	0.0	0.0	0.0	34.3	3.7
SW	16.5	5.8	0.0	0.0	0.0	22.3	3.4
W	6.5	1.1	0.0	0.0	0.0	7.5	2.3
NW	2.7	0.0	0.0	0.0	0.0	2.7	1.3
Total	72.4	25.1	0.0	0.0	0.0	97.6	3.2

Mooring 22	September	1993	NPTS = 717		% Calm = 1.1		
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	4.2	3.9	0.3	0.0	0.0	8.4	4.3
NE	5.6	10.9	1.5	0.0	0.0	18.0	5.5
E	5.4	17.3	0.0	0.0	0.0	22.7	5.0
SE	10.0	5.2	0.6	0.0	0.0	15.8	3.7
S	4.9	7.1	4.6	0.0	0.0	16.6	5.8
SW	2.4	3.2	0.6	0.0	0.0	6.1	4.6
W	3.5	1.5	0.0	0.0	0.0	5.0	3.1
NW	4.7	1.5	0.0	0.0	0.0	6.3	2.7
Total	40.7	50.6	7.5	0.0	0.0	98.9	4.7

Mooring 22	October	1993	NPTS = 744		% Calm = 0.4		
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	3.8	5.1	7.7	0.0	0.0	16.5	7.2
NE	6.0	15.7	4.6	0.0	0.0	26.3	5.9
E	6.2	6.6	0.0	0.0	0.0	12.8	4.1
SE	10.1	3.8	0.0	0.0	0.0	13.8	3.6
S	4.3	9.3	3.9	0.0	0.0	17.5	6.0
SW	3.2	3.6	1.6	0.0	0.0	8.5	4.9
W	0.7	0.3	0.3	0.0	0.0	1.2	5.0
NW	0.1	1.2	1.6	0.0	0.0	3.0	8.1
Total	34.4	45.6	19.6	0.0	0.0	99.6	5.5

Mooring 22	November	1993	NPTS = 720		% Calm = 0.1		
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.8	7.2	9.4	0.0	0.0	17.5	7.9
NE	2.8	12.1	4.4	0.0	0.0	19.3	6.5
E	4.3	13.8	2.8	0.0	0.0	20.8	5.7
SE	8.9	11.8	1.9	0.0	0.0	22.6	5.1
S	2.8	2.2	0.4	0.0	0.0	5.4	4.5
SW	1.7	0.8	0.3	0.0	0.0	2.8	3.9
W	0.7	1.0	0.7	0.0	0.0	2.4	6.0
NW	1.2	3.2	4.6	0.0	0.0	9.0	7.6
Total	23.2	52.1	24.6	0.0	0.0	99.9	6.2

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 22	December		1993	NPTS = 741		% Calm = 0.0	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.9	7.7	9.2	0.0	0.0	17.8	7.6
NE	2.3	10.1	3.4	0.0	0.0	15.8	6.3
E	1.8	10.5	1.2	0.0	0.0	13.5	5.8
SE	10.1	8.2	1.6	0.0	0.0	20.0	4.7
S	4.2	9.3	0.8	0.0	0.0	14.3	5.0
SW	0.7	1.6	0.4	0.0	0.0	2.7	5.5
W	0.5	1.5	3.2	0.1	0.0	5.4	7.9
NW	0.4	3.1	6.6	0.4	0.0	10.5	8.7
Total	20.9	52.1	26.5	0.5	0.0	100.0	6.3

Mooring 22	January		1994	NPTS = 744		% Calm = 0.0	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.1	10.3	8.3	0.0	0.0	19.8	7.6
NE	1.6	12.6	6.7	0.0	0.0	21.0	7.1
E	1.7	11.3	2.2	0.0	0.0	15.2	6.4
SE	6.0	12.5	2.8	0.0	0.0	21.4	5.4
S	0.4	3.8	3.0	0.0	0.0	7.1	7.3
SW	0.9	1.7	0.0	0.0	0.0	2.7	5.1
W	1.1	0.8	1.5	0.1	0.0	3.5	7.5
NW	0.8	4.2	4.3	0.1	0.0	9.4	8.0
Total	13.7	57.3	28.8	0.3	0.0	100.0	6.8

Mooring 22	February		1994	NPTS = 651		% Calm = 0.6	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.5	5.5	4.8	0.0	0.0	11.8	7.4
NE	4.9	10.8	3.4	0.0	0.0	19.0	5.7
E	14.1	9.4	0.3	0.0	0.0	23.8	4.0
SE	10.1	20.0	0.8	0.0	0.0	30.9	4.8
S	3.4	4.3	0.3	0.0	0.0	8.0	4.5
SW	0.8	0.0	0.0	0.0	0.0	0.8	1.5
W	0.2	1.1	0.5	0.0	0.0	1.7	7.2
NW	0.6	1.8	0.9	0.0	0.0	3.4	6.5
Total	35.6	52.8	10.9	0.0	0.0	99.4	5.1

Mooring 22	March		1994	NPTS = 467		% Calm = 2.8	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	4.3	6.6	5.4	0.0	0.0	16.3	6.1
NE	8.1	4.7	1.5	0.0	0.0	14.3	4.3
E	12.4	6.2	1.1	0.0	0.0	19.7	3.8
SE	11.3	7.7	1.5	0.0	0.0	20.6	4.2
S	5.4	4.7	0.2	0.0	0.0	10.3	3.7
SW	2.8	1.5	0.6	0.0	0.0	4.9	4.4
W	0.9	0.0	1.1	0.0	0.0	1.9	6.4
NW	1.7	1.5	6.0	0.0	0.0	9.2	7.7
Total	46.9	33.0	17.3	0.0	0.0	97.2	4.8

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 22	April	1994	NPTS = 719		% Calm = 1.4		
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.5	3.8	2.6	0.0	0.0	8.9	5.9
NE	10.4	8.1	0.1	0.0	0.0	18.6	3.9
E	9.6	16.6	1.4	0.0	0.0	27.5	4.9
SE	11.8	23.1	0.8	0.0	0.0	35.7	4.9
S	1.1	0.8	0.0	0.0	0.0	1.9	3.4
SW	0.8	0.0	0.0	0.0	0.0	0.8	1.8
W	0.8	0.0	0.0	0.0	0.0	0.8	2.1
NW	1.4	1.4	1.3	0.1	0.0	4.2	5.4
Total	38.5	53.7	6.3	0.1	0.0	98.6	4.8

Mooring 22	May	1994	NPTS = 741		% Calm = 0.5		
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.7	3.9	0.5	0.0	0.0	5.1	6.2
NE	5.9	12.4	0.4	0.0	0.0	18.8	5.0
E	13.0	5.3	0.4	0.0	0.0	18.6	3.6
SE	18.1	16.9	0.5	0.0	0.0	35.5	4.1
S	9.4	7.4	0.0	0.0	0.0	16.9	3.9
SW	2.4	1.2	0.0	0.0	0.0	3.6	3.2
W	0.4	0.0	0.0	0.0	0.0	0.4	1.4
NW	0.3	0.1	0.1	0.0	0.0	0.5	4.8
Total	50.2	47.2	2.0	0.0	0.0	99.5	4.2

Mooring 22	June	1994	NPTS = 720		% Calm = 1.0		
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.5	0.6	0.1	0.0	0.0	2.2	3.3
NE	1.2	0.1	0.0	0.0	0.0	1.4	1.6
E	6.9	7.2	0.0	0.0	0.0	14.2	4.0
SE	8.9	23.1	0.6	0.0	0.0	32.5	5.3
S	10.6	23.9	1.7	0.0	0.0	36.1	5.1
SW	5.0	1.7	0.1	0.0	0.0	6.8	3.4
W	2.1	0.4	0.1	0.0	0.0	2.6	2.5
NW	2.8	0.4	0.0	0.0	0.0	3.2	2.6
Total	39.0	57.4	2.6	0.0	0.0	99.0	4.6

Mooring 22	July	1994	NPTS = 671		% Calm = 0.9		
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.4	0.3	0.0	0.0	0.0	0.7	2.1
NE	3.0	0.9	0.0	0.0	0.0	3.9	3.3
E	3.6	1.8	0.0	0.0	0.0	5.4	3.5
SE	11.2	14.6	0.1	0.0	0.0	25.9	4.6
S	10.6	32.3	0.1	0.0	0.0	43.1	5.1
SW	7.6	8.3	0.4	0.0	0.0	16.4	4.4
W	0.9	2.4	0.1	0.0	0.0	3.4	5.1
NW	0.1	0.0	0.1	0.0	0.0	0.3	5.5
Total	37.4	60.7	1.0	0.0	0.0	99.1	4.7

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 22	August		1994	NPTS = 743		% Calm = 0.5	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.6	0.5	0.0	0.0	0.0	2.2	2.4
NE	6.5	3.6	0.0	0.0	0.0	10.1	3.7
E	22.1	5.8	0.0	0.0	0.0	27.9	3.2
SE	12.0	14.1	0.4	0.0	0.0	26.5	4.4
S	8.2	12.7	0.1	0.0	0.0	21.0	4.4
SW	4.0	1.9	0.0	0.0	0.0	5.9	3.1
W	2.8	0.9	0.0	0.0	0.0	3.8	3.0
NW	1.9	0.3	0.0	0.0	0.0	2.2	3.3
Total	59.1	39.8	0.5	0.0	0.0	99.5	3.8

Mooring 22	September		1994	NPTS = 720		% Calm = 1.7	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	6.5	9.0	1.2	0.0	0.0	16.8	4.8
NE	10.3	8.6	0.6	0.0	0.0	19.4	4.1
E	11.5	12.4	0.0	0.0	0.0	23.9	4.1
SE	11.3	5.8	0.1	0.0	0.0	17.2	3.6
S	4.3	1.1	0.0	0.0	0.0	5.4	3.2
SW	3.1	0.6	0.0	0.0	0.0	3.6	2.5
W	4.4	0.1	0.0	0.0	0.0	4.6	2.4
NW	5.1	2.2	0.0	0.0	0.0	7.4	3.5
Total	56.5	39.9	1.9	0.0	0.0	98.3	3.9

Mooring 22	October		1994	NPTS = 212		% Calm = 0.5	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	4.2	2.4	10.8	0.0	0.0	17.5	7.0
NE	7.1	10.8	9.4	0.0	0.0	27.4	6.0
E	4.7	5.7	0.5	0.0	0.0	10.8	4.5
SE	0.5	23.1	3.3	0.0	0.0	26.9	7.0
S	0.5	2.4	0.9	0.0	0.0	3.8	6.8
SW	1.9	0.5	0.0	0.0	0.0	2.4	3.4
W	1.9	1.9	0.0	0.0	0.0	3.8	3.5
NW	0.9	5.7	0.5	0.0	0.0	7.1	6.0
Total	21.7	52.4	25.5	0.0	0.0	99.5	6.2

Mooring 22	November		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 50	April	1992	NPTS = 386		% Calm = 0.5	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.8	6.5	0.5	0.0	0.0	8.8	5.2
NE	1.0	2.3	2.8	0.0	0.0	6.2	7.4
E	3.1	3.6	0.3	0.0	0.0	7.0	4.5
SE	15.0	21.8	0.5	0.0	0.0	37.3	4.6
S	7.5	15.0	3.6	0.0	0.0	26.2	5.3
SW	1.8	3.9	0.0	0.0	0.0	5.7	5.1
W	0.0	1.8	0.0	0.0	0.0	1.8	6.1
NW	1.3	3.9	1.3	0.0	0.0	6.5	5.8
Total	31.6	58.8	9.1	0.0	0.0	99.5	5.1

Mooring 50	May	1992	NPTS = 744		% Calm = 0.8	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.1	2.8	0.4	0.0	0.0	3.4	5.9
NE	2.3	4.7	1.2	0.0	0.0	8.2	5.6
E	5.4	7.0	0.3	0.0	0.0	12.6	4.3
SE	10.6	23.9	2.8	0.0	0.0	37.4	5.4
S	15.3	14.9	0.0	0.0	0.0	30.2	4.0
SW	3.0	1.6	0.0	0.0	0.0	4.6	3.3
W	0.7	0.7	0.0	0.0	0.0	1.3	3.4
NW	0.7	0.8	0.0	0.0	0.0	1.5	4.0
Total	38.0	56.5	4.7	0.0	0.0	99.2	4.7

Mooring 50	June	1992	NPTS = 719		% Calm = 1.1	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.0	0.3	0.3	0.0	0.0	1.5	4.1
NE	1.9	1.0	0.0	0.0	0.0	2.9	3.4
E	2.5	1.8	0.0	0.0	0.0	4.3	3.7
SE	5.0	8.6	0.1	0.0	0.0	13.8	4.5
S	16.8	19.3	0.7	0.0	0.0	36.9	4.2
SW	12.8	19.5	0.3	0.0	0.0	32.5	4.4
W	2.2	2.8	0.0	0.0	0.0	5.0	4.0
NW	1.0	1.0	0.0	0.0	0.0	1.9	3.9
Total	43.3	54.2	1.4	0.0	0.0	98.9	4.3

Mooring 50	July	1992	NPTS = 434		% Calm = 0.0	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.0	0.2	0.0	0.0	0.0	0.2	7.2
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.2	0.9	0.0	0.0	0.0	1.2	5.1
SE	5.5	19.8	0.2	0.0	0.0	25.6	4.9
S	15.9	47.5	4.6	0.0	0.0	68.0	5.4
SW	0.2	4.1	0.5	0.0	0.0	4.8	5.7
W	0.0	0.2	0.0	0.0	0.0	0.2	5.2
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	21.9	72.8	5.3	0.0	0.0	100.0	5.2

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 50	August		1992	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 50	September		1992	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 50	October		1992	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 50	November		1992	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 50	December		1992	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 50	January		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 50	February		1993	NPTS = 635		% Calm = 0.8	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.9	13.1	3.1	0.0	0.0	18.1	6.8
NE	3.3	16.2	1.9	0.0	0.0	21.4	6.0
E	5.2	14.8	0.2	0.0	0.0	20.2	5.1
SE	3.5	12.1	0.6	0.0	0.0	16.2	5.2
S	3.5	3.3	0.0	0.0	0.0	6.8	3.9
SW	5.4	0.5	0.0	0.0	0.0	5.8	2.7
W	2.0	0.3	0.0	0.0	0.0	2.4	3.0
NW	2.0	5.5	0.8	0.0	0.0	8.3	5.7
Total	26.8	65.8	6.6	0.0	0.0	99.2	5.4

Mooring 50	March		1993	NPTS = 743		% Calm = 0.8	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	3.6	5.8	0.7	1.2	0.0	11.3	5.8
NE	3.5	5.2	1.3	0.1	0.0	10.2	5.2
E	9.6	10.5	2.2	0.0	0.0	22.2	4.8
SE	8.5	7.5	3.4	0.0	0.0	19.4	5.1
S	7.9	4.6	0.0	0.0	0.0	12.5	3.7
SW	7.7	1.5	0.0	0.0	0.0	9.2	3.0
W	2.7	2.2	0.0	0.0	0.0	4.8	3.8
NW	1.5	4.3	3.0	0.8	0.0	9.6	7.1
Total	45.0	41.6	10.5	2.2	0.0	99.2	4.9

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 50	April		1993	NPTS = 720		% Calm = 0.4	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.7	3.1	2.5	0.0	0.0	6.2	7.3
NE	1.4	7.4	1.9	0.0	0.0	10.7	6.3
E	1.4	5.0	0.4	0.0	0.0	6.8	5.6
SE	6.4	16.4	1.4	0.0	0.0	24.2	5.5
S	5.6	24.6	3.1	0.0	0.0	33.2	5.8
SW	2.8	0.6	0.0	0.0	0.0	3.3	3.5
W	2.2	1.2	0.1	0.0	0.0	3.6	3.8
NW	1.4	6.8	3.3	0.0	0.0	11.5	6.8
Total	21.8	65.0	12.8	0.0	0.0	99.6	5.8

Mooring 50	May		1993	NPTS = 445		% Calm = 0.5	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.1	2.0	0.7	0.0	0.0	3.8	5.4
NE	2.0	0.2	0.2	0.4	0.0	2.9	5.0
E	2.5	2.5	0.2	0.0	0.0	5.2	4.5
SE	5.6	17.1	3.4	0.0	0.0	26.1	5.9
S	5.8	25.8	2.0	0.0	0.0	33.7	5.8
SW	1.6	10.3	1.1	0.0	0.0	13.0	5.6
W	3.1	3.1	0.0	0.0	0.0	6.3	4.2
NW	2.2	6.3	0.0	0.0	0.0	8.5	4.9
Total	24.0	67.4	7.6	0.4	0.0	99.6	5.5

Mooring 50	June		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 50	July		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 50	August		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 50	September		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 50	October		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 50	November		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 50	December		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 50	January		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 50	February		1994	NPTS = 413		% Calm = 0.2	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.7	6.3	8.0	0.0	0.0	16.9	7.3
NE	10.4	12.3	0.5	0.0	0.0	23.2	4.6
E	17.9	16.9	0.0	0.0	0.0	34.9	4.4
SE	11.4	6.5	0.2	0.0	0.0	18.2	3.8
S	1.9	1.7	0.0	0.0	0.0	3.6	4.1
SW	0.5	0.0	0.0	0.0	0.0	0.5	1.2
W	0.2	0.0	0.0	0.0	0.0	0.2	0.6
NW	1.2	0.0	1.0	0.0	0.0	2.2	5.0
Total	46.2	43.8	9.7	0.0	0.0	99.8	4.8

Mooring 50	March		1994	NPTS = 743		% Calm = 0.9	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.4	4.8	4.2	0.1	0.0	11.6	6.7
NE	3.6	7.3	0.3	0.0	0.0	11.2	4.7
E	7.3	10.6	1.6	0.0	0.0	19.5	4.8
SE	18.8	10.9	0.1	0.0	0.0	29.9	3.7
S	10.0	3.6	0.0	0.0	0.0	13.6	3.2
SW	3.6	0.0	0.0	0.0	0.0	3.6	2.6
W	1.2	0.1	0.0	0.0	0.0	1.3	2.2
NW	0.9	1.3	5.9	0.1	0.0	8.3	8.5
Total	47.9	38.8	12.1	0.3	0.0	99.1	4.7

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 50	April		1994	NPTS = 720		% Calm = 0.6	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.5	3.9	2.4	0.0	0.0	7.8	6.3
NE	6.2	8.2	0.8	0.0	0.0	15.3	4.7
E	11.0	12.1	0.3	0.0	0.0	23.3	4.3
SE	7.5	36.4	1.7	0.0	0.0	45.6	5.5
S	2.9	2.1	0.0	0.0	0.0	5.0	3.8
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.7	0.0	0.0	0.0	0.0	0.7	1.4
NW	0.0	1.0	0.8	0.0	0.0	1.8	7.9
Total	29.9	63.6	6.0	0.0	0.0	99.4	5.1

Mooring 50	May		1994	NPTS = 740		% Calm = 0.1	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.5	2.8	0.8	0.0	0.0	4.2	6.5
NE	4.9	10.3	0.7	0.0	0.0	15.8	5.2
E	5.7	5.8	0.7	0.0	0.0	12.2	4.3
SE	12.0	23.5	1.5	0.0	0.0	37.0	4.8
S	7.2	17.7	0.1	0.0	0.0	25.0	4.9
SW	3.6	0.4	0.0	0.0	0.0	4.1	3.1
W	0.7	0.4	0.1	0.0	0.0	1.2	3.8
NW	0.3	0.0	0.1	0.0	0.0	0.4	5.0
Total	34.9	60.9	4.1	0.0	0.0	99.9	4.8

Mooring 50	June		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 50	July		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 50	August		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 50	September		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 50	October		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 50	November		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 51	April	1992	NPTS = 431		% Calm = 1.2	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.6	6.0	0.0	0.0	0.0	8.6	4.8
NE	3.0	2.3	2.6	0.0	0.0	7.9	6.0
E	5.1	1.6	0.0	0.0	0.0	6.7	3.1
SE	14.4	22.3	0.9	0.0	0.0	37.6	4.5
S	9.3	8.6	4.2	0.0	0.0	22.0	5.2
SW	3.9	2.1	0.5	0.0	0.0	6.5	4.0
W	0.5	2.1	0.0	0.0	0.0	2.6	5.2
NW	2.6	3.7	0.7	0.0	0.0	7.0	4.9
Total	41.3	48.7	8.8	0.0	0.0	98.8	4.7

Mooring 51	May	1992	NPTS = 741		% Calm = 2.3	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.9	3.4	0.1	0.0	0.0	4.5	4.9
NE	2.8	3.9	2.0	0.0	0.0	8.8	5.1
E	3.6	8.1	0.0	0.0	0.0	11.7	4.3
SE	8.9	23.3	0.1	0.0	0.0	32.4	4.9
S	12.4	14.2	0.0	0.0	0.0	26.6	4.1
SW	6.9	1.8	0.0	0.0	0.0	8.6	2.9
W	2.4	0.5	0.0	0.0	0.0	3.0	2.6
NW	1.6	0.5	0.0	0.0	0.0	2.2	2.7
Total	39.7	55.7	2.3	0.0	0.0	97.7	4.4

Mooring 51	June	1992	NPTS = 720		% Calm = 1.2	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.4	0.3	0.0	0.0	0.0	1.7	2.6
NE	1.9	0.7	0.1	0.0	0.0	2.8	3.0
E	2.5	1.7	0.0	0.0	0.0	4.2	3.5
SE	5.7	6.4	0.0	0.0	0.0	12.1	4.1
S	16.4	19.0	0.3	0.0	0.0	35.7	4.4
SW	15.6	14.3	0.8	0.0	0.0	30.7	4.3
W	5.1	3.2	0.0	0.0	0.0	8.3	3.8
NW	1.7	1.5	0.1	0.0	0.0	3.3	3.6
Total	50.3	47.1	1.4	0.0	0.0	98.8	4.1

Mooring 51	July	1992	NPTS = 454		% Calm = 0.0	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.4	0.2	0.0	0.0	0.0	0.7	3.2
NE	0.7	0.7	0.0	0.0	0.0	1.3	3.5
E	1.1	1.3	0.0	0.0	0.0	2.4	4.4
SE	6.2	9.5	0.0	0.0	0.0	15.6	4.4
S	12.1	53.1	5.1	0.0	0.0	70.3	5.7
SW	2.4	6.6	0.0	0.0	0.0	9.0	5.0
W	0.4	0.2	0.0	0.0	0.0	0.7	3.3
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	23.3	71.6	5.1	0.0	0.0	100.0	5.3

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 51	August		1992	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 51	September		1992	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 51	October		1992	NPTS = 199		% Calm = 0.5	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	6.0	4.0	0.0	0.0	0.0	10.1	3.3
NE	3.0	2.0	0.0	0.0	0.0	5.0	3.5
E	1.0	1.0	0.0	0.0	0.0	2.0	4.0
SE	6.0	3.0	0.5	0.0	0.0	9.5	4.2
S	8.5	14.1	0.5	0.0	0.0	23.1	4.3
SW	18.1	15.1	0.0	0.0	0.0	33.2	3.7
W	8.0	2.0	0.0	0.0	0.0	10.1	3.4
NW	6.5	0.0	0.0	0.0	0.0	6.5	3.4
Total	57.3	41.2	1.0	0.0	0.0	99.5	3.8

Mooring 51	November		1992	NPTS = 720		% Calm = 0.1	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	3.5	5.3	4.2	0.0	0.0	12.9	6.6
NE	4.2	13.1	1.4	0.0	0.0	18.6	5.8
E	5.6	18.9	3.1	0.0	0.0	27.5	5.8
SE	3.5	7.5	1.4	0.1	0.0	12.5	5.6
S	1.8	1.4	0.4	0.1	0.0	3.8	4.8
SW	0.7	1.0	0.0	0.0	0.0	1.7	4.1
W	0.1	2.9	1.7	0.0	0.0	4.7	7.3
NW	1.2	8.1	8.8	0.1	0.0	18.2	7.8
Total	20.6	58.1	20.8	0.4	0.0	99.9	6.3

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 51	December	1992	NPTS = 743		% Calm = 0.3		
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	3.9	13.5	5.1	0.0	0.0	22.5	6.5
NE	6.6	12.9	3.6	0.0	0.0	23.1	5.5
E	10.0	11.2	1.9	0.0	0.0	23.0	4.8
SE	4.8	9.4	4.0	0.1	0.0	18.4	5.8
S	0.7	0.1	0.0	0.0	0.0	0.8	3.7
SW	1.1	1.7	0.0	0.0	0.0	2.8	4.1
W	0.9	1.3	0.5	0.0	0.0	2.8	5.8
NW	2.6	3.2	0.4	0.0	0.0	6.2	4.6
Total	30.6	53.4	15.6	0.1	0.0	99.7	5.5

Mooring 51	January	1993	NPTS = 497		% Calm = 0.0		
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	7.6	23.9	11.9	0.0	0.0	43.5	6.3
NE	2.4	16.3	7.6	0.0	0.0	26.4	7.0
E	2.8	11.3	1.0	0.0	0.0	15.1	5.5
SE	3.6	1.6	0.0	0.0	0.0	5.2	3.3
S	1.4	0.2	0.0	0.0	0.0	1.6	3.2
SW	0.0	0.2	0.0	0.0	0.0	0.2	4.2
W	0.4	0.6	0.0	0.0	0.0	1.0	3.5
NW	1.6	2.0	3.4	0.0	0.0	7.0	6.6
Total	19.9	56.1	23.9	0.0	0.0	100.0	6.2

Mooring 51	February	1993	NPTS = 672		% Calm = 0.0		
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.6	8.6	7.0	0.0	0.0	17.3	7.2
NE	1.6	11.2	4.3	0.0	0.0	17.1	6.7
E	2.8	15.5	1.5	0.0	0.0	19.8	6.0
SE	1.8	11.8	1.8	0.0	0.0	15.3	6.1
S	2.7	8.5	0.0	0.0	0.0	11.2	5.0
SW	2.4	0.6	0.0	0.0	0.0	3.0	2.8
W	4.6	3.0	0.4	0.0	0.0	8.0	4.1
NW	2.4	3.6	2.4	0.0	0.0	8.3	5.9
Total	19.9	62.6	17.4	0.0	0.0	100.0	6.0

Mooring 51	March	1993	NPTS = 556		% Calm = 0.5		
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.2	4.5	1.6	2.9	0.0	11.2	7.7
NE	1.4	3.2	0.9	0.4	0.0	5.9	6.3
E	9.2	6.1	3.1	0.0	0.0	18.3	4.6
SE	7.6	5.6	7.2	0.2	0.0	20.5	6.3
S	9.5	3.8	0.7	0.0	0.0	14.0	4.1
SW	5.2	4.0	0.0	0.0	0.0	9.2	3.7
W	5.0	4.7	0.0	0.0	0.0	9.7	4.3
NW	1.6	5.2	2.3	1.4	0.0	10.6	7.3
Total	41.7	37.1	15.8	4.9	0.0	99.5	5.5

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 51	April		1993	NPTS = 720		% Calm = 0.4	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.7	3.6	2.9	0.0	0.0	8.2	6.5
NE	1.2	6.2	1.8	0.0	0.0	9.3	6.3
E	4.2	6.2	0.7	0.0	0.0	11.1	5.1
SE	5.4	17.5	2.6	0.0	0.0	25.6	5.7
S	6.1	17.6	4.7	0.3	0.0	28.8	6.1
SW	1.9	1.2	0.0	0.0	0.0	3.2	4.0
W	1.2	1.9	0.1	0.0	0.0	3.3	4.5
NW	0.8	4.7	4.6	0.0	0.0	10.1	7.3
Total	22.6	59.2	17.5	0.3	0.0	99.6	5.9

Mooring 51	May		1993	NPTS = 546		% Calm = 0.6	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.9	5.1	1.1	0.2	0.0	9.3	5.5
NE	0.2	1.3	0.5	0.0	0.0	2.0	6.3
E	4.0	3.5	0.2	0.0	0.0	7.7	4.3
SE	5.3	26.6	5.1	0.0	0.0	37.0	6.4
S	8.1	15.4	0.9	0.0	0.0	24.4	5.0
SW	3.5	3.8	0.0	0.0	0.0	7.3	4.4
W	1.6	3.8	0.0	0.0	0.0	5.5	4.8
NW	0.5	5.5	0.2	0.0	0.0	6.2	5.9
Total	26.2	65.0	8.1	0.2	0.0	99.5	5.5

Mooring 51	June		1993	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 51	July		1993	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 51	August		1993	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 51	September		1993	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 51	October		1993	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 51	November		1993	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 51	December		1993	NPTS = 649		% Calm = 0.0	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.0	8.5	8.0	0.0	0.0	18.5	7.4
NE	3.4	14.5	4.8	0.0	0.0	22.7	6.3
E	3.7	13.9	2.2	0.0	0.0	19.7	5.7
SE	6.0	6.0	1.2	0.0	0.0	13.3	4.7
S	4.2	5.1	0.6	0.0	0.0	9.9	4.4
SW	1.2	0.9	0.5	0.0	0.0	2.6	4.7
W	1.1	2.3	2.5	0.0	0.0	5.9	7.0
NW	0.2	1.4	6.0	0.0	0.0	7.6	9.2
Total	21.7	52.5	25.7	0.0	0.0	100.0	6.2

Mooring 51	January		1994	NPTS = 744		% Calm = 0.3	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.2	7.3	7.7	0.0	0.0	16.1	7.6
NE	2.6	14.4	4.2	0.0	0.0	21.1	6.6
E	3.9	16.4	5.2	0.0	0.0	25.5	6.5
SE	3.4	11.4	0.4	0.0	0.0	15.2	5.2
S	1.2	5.5	1.2	0.0	0.0	7.9	6.2
SW	0.8	1.9	0.3	0.0	0.0	3.0	4.6
W	1.2	1.3	0.5	0.0	0.0	3.1	5.3
NW	0.9	3.5	2.6	0.8	0.0	7.8	7.5
Total	15.2	61.7	22.0	0.8	0.0	99.7	6.5

Mooring 51	February		1994	NPTS = 280		% Calm = 1.1	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.1	10.4	3.9	0.0	0.0	16.4	6.5
NE	2.9	6.1	0.7	0.0	0.0	9.6	5.1
E	5.7	4.3	0.0	0.0	0.0	10.0	4.6
SE	13.6	13.6	0.0	0.0	0.0	27.1	4.3
S	11.8	10.0	0.0	0.0	0.0	21.8	3.9
SW	3.9	0.0	0.0	0.0	0.0	3.9	1.6
W	1.4	0.4	0.0	0.0	0.0	1.8	2.3
NW	1.1	5.7	1.4	0.0	0.0	8.2	6.3
Total	42.5	50.4	6.1	0.0	0.0	98.9	4.7

Mooring 51	March		1994	NPTS = 5		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 51	April		1994	NPTS = 720		% Calm = 0.4	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.8	2.2	2.1	0.0	0.0	5.1	6.6
NE	3.3	9.2	1.5	0.0	0.0	14.0	5.6
E	11.7	14.3	0.4	0.0	0.0	26.4	4.3
SE	9.2	33.1	1.4	0.0	0.0	43.6	5.4
S	3.2	2.9	0.0	0.0	0.0	6.1	4.0
SW	1.5	0.0	0.0	0.0	0.0	1.5	1.9
W	0.8	0.0	0.0	0.0	0.0	0.8	1.9
NW	1.0	0.7	0.1	0.1	0.0	1.9	4.6
Total	31.5	62.4	5.6	0.1	0.0	99.6	5.0

Mooring 51	May		1994	NPTS = 666		% Calm = 1.1	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.2	1.8	0.6	0.0	0.0	2.6	6.5
NE	5.7	15.5	0.5	0.0	0.0	21.6	5.3
E	6.3	8.7	0.2	0.0	0.0	15.2	4.1
SE	17.4	14.3	1.1	0.0	0.0	32.7	4.2
S	10.7	9.3	0.2	0.0	0.0	20.1	4.1
SW	4.4	1.2	0.0	0.0	0.0	5.6	3.1
W	0.9	0.0	0.0	0.0	0.0	0.9	1.9
NW	0.2	0.0	0.2	0.0	0.0	0.3	5.4
Total	45.6	50.8	2.6	0.0	0.0	98.9	4.4

Mooring 51	June		1994	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 51	July		1994	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 51	August		1994	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 51	September		1994	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 51	October		1994	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 51	November		1994	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 52	April	1992	NPTS = 418		% Calm = 1.0	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.7	3.8	1.4	0.0	0.0	6.9	6.0
NE	3.1	4.5	1.4	0.0	0.0	9.1	5.5
E	2.4	1.2	0.0	0.0	0.0	3.6	3.4
SE	9.8	25.6	1.2	0.0	0.0	36.6	4.8
S	6.5	13.4	6.0	0.0	0.0	25.8	6.2
SW	1.7	2.4	0.2	0.0	0.0	4.3	4.7
W	2.6	2.2	0.2	0.0	0.0	5.0	4.0
NW	2.6	4.3	0.7	0.0	0.0	7.7	5.2
Total	30.4	57.4	11.2	0.0	0.0	99.0	5.3

Mooring 52	May	1992	NPTS = 740		% Calm = 1.4	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.6	3.5	0.5	0.0	0.0	6.6	4.7
NE	3.1	3.2	2.0	0.0	0.0	8.4	5.4
E	5.1	4.7	0.1	0.0	0.0	10.0	4.2
SE	7.2	21.4	0.1	0.0	0.0	28.6	5.1
S	8.1	15.8	0.0	0.0	0.0	23.9	4.5
SW	7.3	1.5	0.0	0.0	0.0	8.8	3.1
W	6.8	1.8	0.0	0.0	0.0	8.5	2.7
NW	3.4	0.4	0.0	0.0	0.0	3.8	2.2
Total	43.5	52.3	2.8	0.0	0.0	98.6	4.4

Mooring 52	June	1992	NPTS = 720		% Calm = 1.1	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.5	0.4	0.0	0.0	0.0	2.9	2.9
NE	1.7	1.4	0.0	0.0	0.0	3.1	4.1
E	1.4	1.0	0.0	0.0	0.0	2.4	4.4
SE	4.0	5.3	0.0	0.0	0.0	9.3	4.1
S	8.3	16.8	0.6	0.0	0.0	25.7	4.7
SW	15.3	10.6	1.7	0.0	0.0	27.5	4.3
W	12.9	6.5	0.0	0.0	0.0	19.4	3.5
NW	5.3	3.3	0.0	0.0	0.0	8.6	3.7
Total	51.4	45.3	2.2	0.0	0.0	98.9	4.1

Mooring 52	July	1992	NPTS = 465		% Calm = 0.2	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.2	0.4	0.0	0.0	0.0	0.6	5.3
NE	0.0	0.2	0.0	0.0	0.0	0.2	5.8
E	1.3	0.9	0.0	0.0	0.0	2.2	3.3
SE	11.6	2.4	0.0	0.0	0.0	14.0	3.1
S	17.8	35.7	3.9	0.0	0.0	57.4	5.2
SW	7.5	13.8	0.9	0.0	0.0	22.2	4.9
W	2.6	0.2	0.0	0.0	0.0	2.8	2.7
NW	0.2	0.2	0.0	0.0	0.0	0.4	4.2
Total	41.3	53.8	4.7	0.0	0.0	99.8	4.7

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 52	August		1992	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 52	September		1992	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 52	October		1992	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 52	November		1992	NPTS = 66		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

ooring 52	December		1992	NPTS = 744		% Calm = 2.1	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.4	8.6	2.2	0.0	0.0	13.2	6.0
NE	3.1	13.2	4.6	0.0	0.0	20.8	6.2
E	5.2	17.1	1.7	0.0	0.0	24.1	5.4
SE	6.7	12.8	6.0	0.0	0.0	25.5	5.8
S	5.5	2.2	0.3	0.0	0.0	7.9	3.1
SW	0.4	0.0	0.1	0.0	0.0	0.5	1.8
W	0.8	2.4	0.3	0.0	0.0	3.5	5.3
NW	0.8	1.3	0.1	0.0	0.0	2.3	4.6
Total	25.0	57.5	15.3	0.0	0.0	97.8	5.5

Mooring 52	January		1993	NPTS = 423		% Calm = 1.2	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	5.0	16.1	7.6	0.0	0.0	28.6	6.4
NE	4.5	24.6	7.3	0.0	0.0	36.4	6.1
E	2.1	12.3	5.4	0.0	0.0	19.9	6.6
SE	0.9	7.3	0.0	0.0	0.0	8.3	5.5
S	1.9	0.7	0.0	0.0	0.0	2.6	3.5
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.2	0.2	0.0	0.0	0.0	0.5	2.4
NW	2.1	0.5	0.0	0.0	0.0	2.6	2.7
Total	16.8	61.7	20.3	0.0	0.0	98.8	6.0

Mooring 52	February		1993	NPTS = 672		% Calm = 0.7	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.0	9.5	7.3	0.0	0.0	17.9	7.3
NE	0.4	11.9	4.2	0.0	0.0	16.5	6.8
E	2.2	17.0	1.3	0.0	0.0	20.5	6.0
SE	2.5	7.9	2.7	0.0	0.0	13.1	6.3
S	3.3	9.2	0.9	0.0	0.0	13.4	5.8
SW	1.0	1.2	0.0	0.0	0.0	2.2	4.4
W	1.3	4.2	0.7	0.0	0.0	6.2	5.3
NW	2.7	5.7	1.0	0.0	0.0	9.4	5.1
Total	14.6	66.5	18.2	0.0	0.0	99.3	6.2

Mooring 52	March		1993	NPTS = 494		% Calm = 1.8	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.4	5.9	3.4	4.0	0.0	14.8	8.5
NE	2.2	3.2	2.4	0.8	0.0	8.7	7.0
E	4.0	8.3	5.3	0.0	0.0	17.6	6.4
SE	5.1	6.1	5.7	0.0	0.0	16.8	6.5
S	5.9	3.8	1.6	0.0	0.0	11.3	4.8
SW	2.6	2.2	0.0	0.0	0.0	4.9	3.6
W	5.9	5.1	0.0	0.0	0.0	10.9	4.2
NW	4.3	7.5	1.4	0.0	0.0	13.2	5.3
Total	31.4	42.1	19.8	4.9	0.0	98.2	6.0

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 52	April		1993	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 52	May		1993	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 52	June		1993	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 52	July		1993	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 52	August		1993	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 52	September		1993	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 52	October		1993	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 52	November		1993	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 52	December		1993	NPTS = 642		% Calm = 0.5	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.6	10.6	7.0	0.0	0.0	20.2	7.1
NE	3.1	14.5	3.1	0.0	0.0	20.7	6.2
E	1.2	15.9	2.0	0.0	0.0	19.2	5.9
SE	3.0	6.5	0.9	0.0	0.0	10.4	5.3
S	3.7	7.9	1.7	0.0	0.0	13.4	5.4
SW	2.0	0.2	0.0	0.0	0.0	2.2	2.8
W	0.3	1.4	3.0	0.0	0.0	4.7	7.9
NW	0.0	2.2	6.2	0.3	0.0	8.7	9.2
Total	16.0	59.2	24.0	0.3	0.0	99.5	6.4

Mooring 52	January		1994	NPTS = 227		% Calm = 0.0	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.9	6.6	11.9	0.0	0.0	19.4	8.2
NE	5.3	5.3	0.4	0.0	0.0	11.0	4.8
E	1.8	7.5	8.4	0.0	0.0	17.6	7.6
SE	4.0	8.4	1.3	0.0	0.0	13.7	5.6
S	4.0	8.4	3.5	0.0	0.0	15.9	6.1
SW	0.4	0.9	0.0	0.0	0.0	1.3	3.8
W	0.0	1.8	1.3	0.0	0.0	3.1	8.2
NW	1.3	4.8	8.8	3.1	0.0	18.1	9.2
Total	17.6	43.6	35.7	3.1	0.0	100.0	7.1

Mooring 52	February		1994	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 52	March		1994	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 52	April		1994	NPTS = 49		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 52	May		1994	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 52	June		1994	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 52	July		1994	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 52	August		1994	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 52	September		1994	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

ooring 52	October		1994	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 52	November		1994	NPTS = 0		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 53	April	1992	NPTS = 397		% Calm = 0.8	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	0.8	7.1	1.8	0.0	0.0	9.6	6.2
NE	4.0	6.3	0.8	0.0	0.0	11.1	4.8
E	4.0	5.5	0.0	0.0	0.0	9.6	4.4
SE	9.3	28.0	0.0	0.0	0.0	37.3	4.9
S	7.8	9.3	0.5	0.0	0.0	17.6	4.5
SW	2.5	2.3	0.0	0.0	0.0	4.8	3.8
W	2.5	1.3	0.0	0.0	0.0	3.8	3.7
NW	0.8	4.8	0.0	0.0	0.0	5.5	5.7
Total	31.7	64.5	3.0	0.0	0.0	99.2	4.8

Mooring 53	May	1992	NPTS = 744		% Calm = 0.7	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	3.8	3.6	0.1	0.0	0.0	7.5	4.1
NE	2.8	2.7	1.3	0.0	0.0	6.9	5.2
E	3.6	5.6	0.0	0.0	0.0	9.3	4.3
SE	3.6	23.8	0.0	0.0	0.0	27.4	5.4
S	9.5	4.3	0.0	0.0	0.0	13.8	3.8
SW	6.5	5.1	0.1	0.0	0.0	11.7	3.9
W	9.3	5.5	0.0	0.0	0.0	14.8	3.7
NW	4.4	3.5	0.0	0.0	0.0	7.9	3.8
Total	43.5	54.2	1.6	0.0	0.0	99.3	4.4

Mooring 53	June	1992	NPTS = 719		% Calm = 1.8	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	3.3	1.4	0.0	0.0	0.0	4.7	3.2
NE	2.4	1.4	0.3	0.0	0.0	4.0	3.8
E	2.6	2.4	0.3	0.0	0.0	5.3	4.2
SE	3.1	3.8	0.0	0.0	0.0	6.8	3.7
S	8.5	12.0	0.1	0.0	0.0	20.6	4.1
SW	12.7	10.7	1.3	0.1	0.0	24.8	4.2
W	8.5	13.2	0.0	0.0	0.0	21.7	4.1
NW	5.1	5.1	0.0	0.0	0.0	10.3	3.5
Total	46.2	49.9	1.9	0.1	0.0	98.2	4.0

Mooring 53	July	1992	NPTS = 485		% Calm = 1.6	
	Wind Speed Range (m/s)					Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.0	0.2	0.2	0.0	0.0	1.4	2.9
NE	0.2	0.2	0.0	0.0	0.0	0.4	2.4
E	2.7	0.0	0.0	0.0	0.0	2.7	2.4
SE	9.3	0.8	0.2	0.0	0.0	10.3	2.6
S	17.7	19.6	1.0	0.0	0.0	38.4	4.3
SW	15.1	11.3	0.8	0.0	0.0	27.2	4.2
W	10.3	2.3	0.0	0.0	0.0	12.6	3.2
NW	4.3	0.8	0.2	0.0	0.0	5.4	3.3
Total	60.6	35.3	2.5	0.0	0.0	98.4	3.8

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 53	August		1992	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 53	September		1992	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 53	October		1992	NPTS = 185		% Calm = 0.0	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	8.1	0.5	0.0	0.0	0.0	8.6	2.0
NE	0.5	0.0	0.0	0.0	0.0	0.5	1.6
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	1.1	1.6	0.0	0.0	0.0	2.7	4.6
S	6.5	20.5	0.0	0.0	0.0	27.0	4.5
SW	20.0	15.1	0.0	0.0	0.0	35.1	3.7
W	16.8	1.1	0.0	0.0	0.0	17.8	2.8
NW	6.5	1.6	0.0	0.0	0.0	8.1	3.2
Total	59.5	40.5	0.0	0.0	0.0	100.0	3.6

Mooring 53	November		1992	NPTS = 720		% Calm = 0.3	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.5	6.7	4.2	0.1	0.0	13.5	6.7
NE	3.6	11.5	10.3	0.0	0.0	25.4	6.9
E	1.1	12.5	6.0	0.0	0.0	19.6	7.4
SE	2.8	6.7	1.1	0.0	0.0	10.6	5.5
S	3.2	5.0	2.8	0.1	0.0	11.1	5.7
SW	0.7	2.1	0.1	0.0	0.0	2.9	5.2
W	0.4	2.9	0.3	0.0	0.0	3.6	5.7
NW	1.8	8.3	2.9	0.0	0.0	13.1	6.4
Total	16.1	55.7	27.6	0.3	0.0	99.7	6.5

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 53	December		1992	NPTS = 743		% Calm = 0.4	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.2	8.7	1.7	0.0	0.0	12.7	5.9
NE	4.3	13.2	7.3	0.1	0.0	24.9	6.3
E	7.9	21.0	1.9	0.0	0.0	30.8	5.3
SE	7.5	7.0	1.2	0.0	0.0	15.7	4.6
S	4.6	1.6	0.0	0.0	0.0	6.2	3.2
SW	1.5	0.4	0.0	0.0	0.0	1.9	3.1
W	1.1	1.6	0.3	0.0	0.0	3.0	4.9
NW	1.7	2.4	0.3	0.0	0.0	4.4	5.0
Total	30.8	56.0	12.7	0.1	0.0	99.6	5.3

Mooring 53	January		1993	NPTS = 387		% Calm = 0.0	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	3.4	10.6	1.0	0.3	0.0	15.2	5.4
NE	7.2	26.1	9.0	0.0	0.0	42.4	6.2
E	4.7	14.2	2.8	0.0	0.0	21.7	5.6
SE	4.4	3.4	0.0	0.0	0.0	7.8	4.0
S	3.6	1.3	0.0	0.0	0.0	4.9	3.2
SW	1.3	0.3	0.0	0.0	0.0	1.6	2.7
W	1.3	0.3	0.0	0.0	0.0	1.6	3.3
NW	1.3	3.6	0.0	0.0	0.0	4.9	4.5
Total	27.1	59.7	12.9	0.3	0.0	100.0	5.4

Mooring 53	February		1993	NPTS = 672		% Calm = 0.0	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.5	8.9	4.2	0.0	0.0	15.6	6.6
NE	1.0	21.3	3.3	0.0	0.0	25.6	6.4
E	1.2	14.7	2.1	0.0	0.0	18.0	6.1
SE	1.3	4.5	2.2	0.0	0.0	8.0	6.2
S	3.6	6.5	0.0	0.0	0.0	10.1	4.6
SW	3.9	0.9	0.1	0.0	0.0	4.9	3.0
W	2.4	2.2	1.0	0.0	0.0	5.7	5.1
NW	0.9	8.2	3.0	0.0	0.0	12.1	6.6
Total	16.8	67.3	15.9	0.0	0.0	100.0	6.0

Mooring 53	March		1993	NPTS = 368		% Calm = 0.8	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.2	3.8	0.0	1.4	0.8	8.2	7.4
NE	0.8	3.5	3.8	0.8	0.0	9.0	8.1
E	1.4	2.4	4.3	0.0	0.0	8.2	7.3
SE	2.2	6.5	3.3	0.0	0.0	12.0	6.8
S	3.0	6.2	1.6	0.0	0.0	10.9	5.6
SW	8.2	2.7	0.0	0.0	0.0	10.9	3.3
W	12.2	9.5	1.6	0.0	0.0	23.4	4.6
NW	3.0	5.2	4.3	4.3	0.0	16.8	8.6
Total	32.9	39.9	19.0	6.5	0.0	99.2	6.3

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 53	April		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 53	May		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

ooring 53	June		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 53	July		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 53	August		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 53	September		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 53	October		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 53	November		1993	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 53	December		1993	NPTS = 616		% Calm = 0.2	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.9	7.3	3.7	0.0	0.0	13.0	6.7
NE	1.8	9.6	3.1	0.0	0.0	14.4	6.4
E	6.5	16.1	1.8	0.0	0.0	24.4	5.5
SE	7.5	9.6	0.2	0.0	0.0	17.2	4.5
S	4.5	7.0	2.1	0.0	0.0	13.6	5.2
SW	1.6	1.8	1.0	0.0	0.0	4.4	5.5
W	0.8	1.6	0.6	0.0	0.0	3.1	5.6
NW	0.6	3.6	5.5	0.0	0.0	9.7	8.1
Total	25.3	56.5	18.0	0.0	0.0	99.8	5.8

Mooring 53	January		1994	NPTS = 744		% Calm = 0.4	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	2.2	3.9	3.8	0.0	0.0	9.8	6.8
NE	1.3	14.5	4.7	0.0	0.0	20.6	6.6
E	4.6	14.8	7.3	0.0	0.0	26.6	6.4
SE	4.6	7.4	1.9	0.0	0.0	13.8	5.3
S	1.1	6.6	1.1	0.0	0.0	8.7	6.3
SW	1.1	2.6	0.5	0.0	0.0	4.2	6.0
W	0.8	4.3	1.5	0.0	0.0	6.6	6.2
NW	1.1	4.2	3.9	0.1	0.0	9.3	7.8
Total	16.7	58.2	24.6	0.1	0.0	99.6	6.4

Mooring 53	February		1994	NPTS = 340		% Calm = 1.8	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N	1.2	1.8	3.2	0.0	0.0	6.2	7.0
NE	2.6	3.8	2.1	0.0	0.0	8.5	5.3
E	8.8	13.2	1.5	0.0	0.0	23.5	4.6
SE	7.6	6.2	0.3	0.0	0.0	14.1	4.4
S	15.3	4.7	2.4	0.0	0.0	22.4	4.2
SW	6.8	1.2	0.0	0.0	0.0	7.9	3.3
W	3.2	2.1	2.4	0.0	0.0	7.6	5.0
NW	3.2	3.2	1.5	0.0	0.0	7.9	4.7
Total	48.8	36.2	13.2	0.0	0.0	98.2	4.6

Mooring 53	March		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 53	April		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 53	May		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 53	June		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 53	July		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Table C-1. Percent frequency of wind by speed and direction continued.

Mooring 53	August		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 53	September		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 53	October		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

Mooring 53	November		1994	NPTS < 100		% Calm =	
	Wind Speed Range (m/s)						Ave
Dir	0.5-4	4-8	8-12	12-16	>16	Total	Speed
N							
NE							
E							
SE							
S							
SW							
W							
NW							
Total							

APPENDIX D

Monthly Mean Fields of Meteorological Variables over the Texas-Louisiana Shelf

Figures presented in this appendix are objectively-analyzed monthly mean surface fields of wind, air temperature, surface pressure, sea surface temperature, wind stress, and wind stress curl from April 1992 through November 1994. The figure numbering scheme, Figure X.Y.Z, is designed to allow rapid identification of specific parameters and times. Under this scheme, the meanings of X, Y, and Z are:

X is the variable, where 1 is wind, 2 is wind stress, 3 is wind stress curl, 4 is surface pressure, 5 is air temperature, and 6 is SST;
Y is the year: 92, 93, or 94; and
Z is the month: 1 through 12, where 1 represents January and 12 is December.

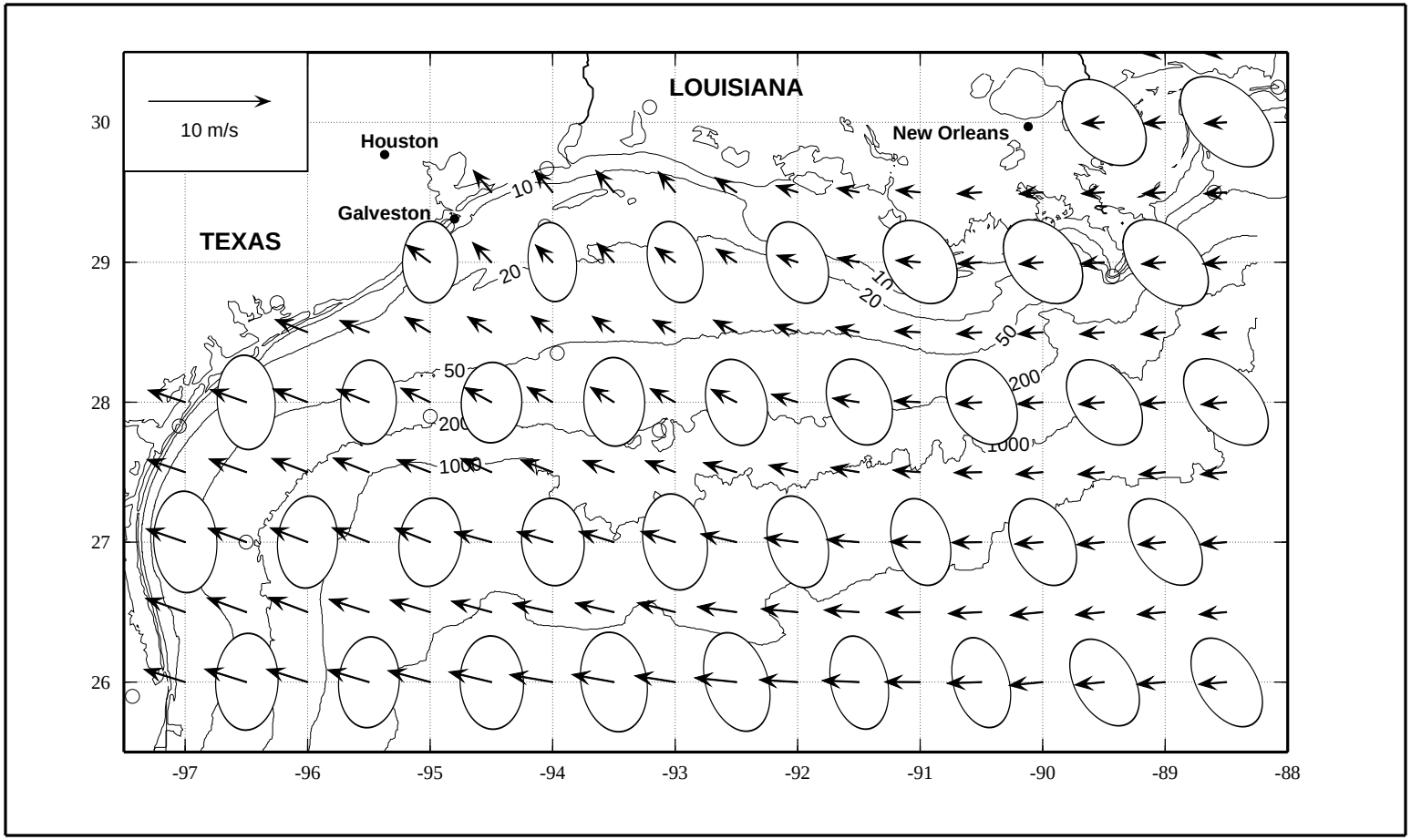


Figure 1.92.04. Monthly mean 10-m wind for April 1992.

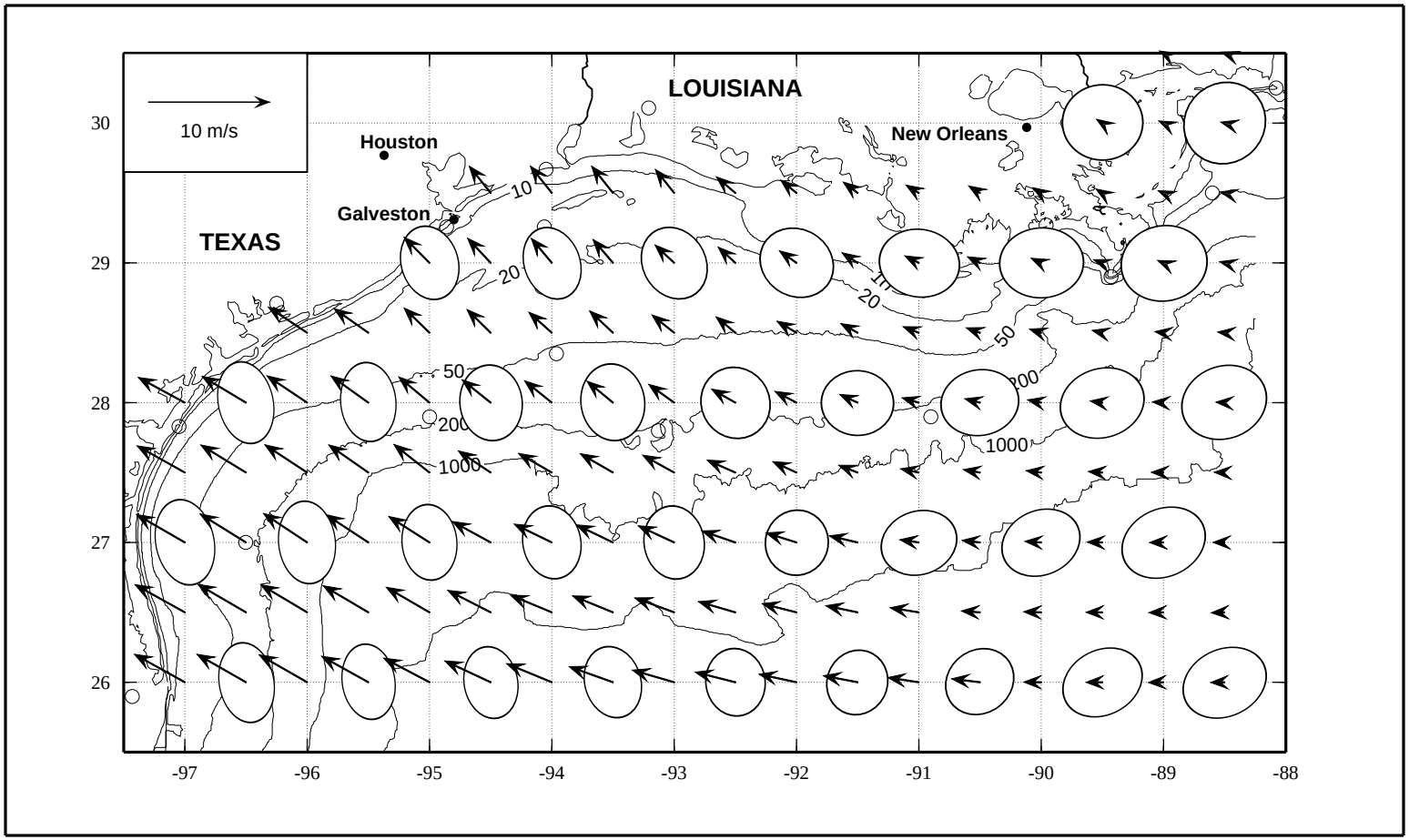


Figure 1.92.05. Monthly mean 10-m wind for May 1992.

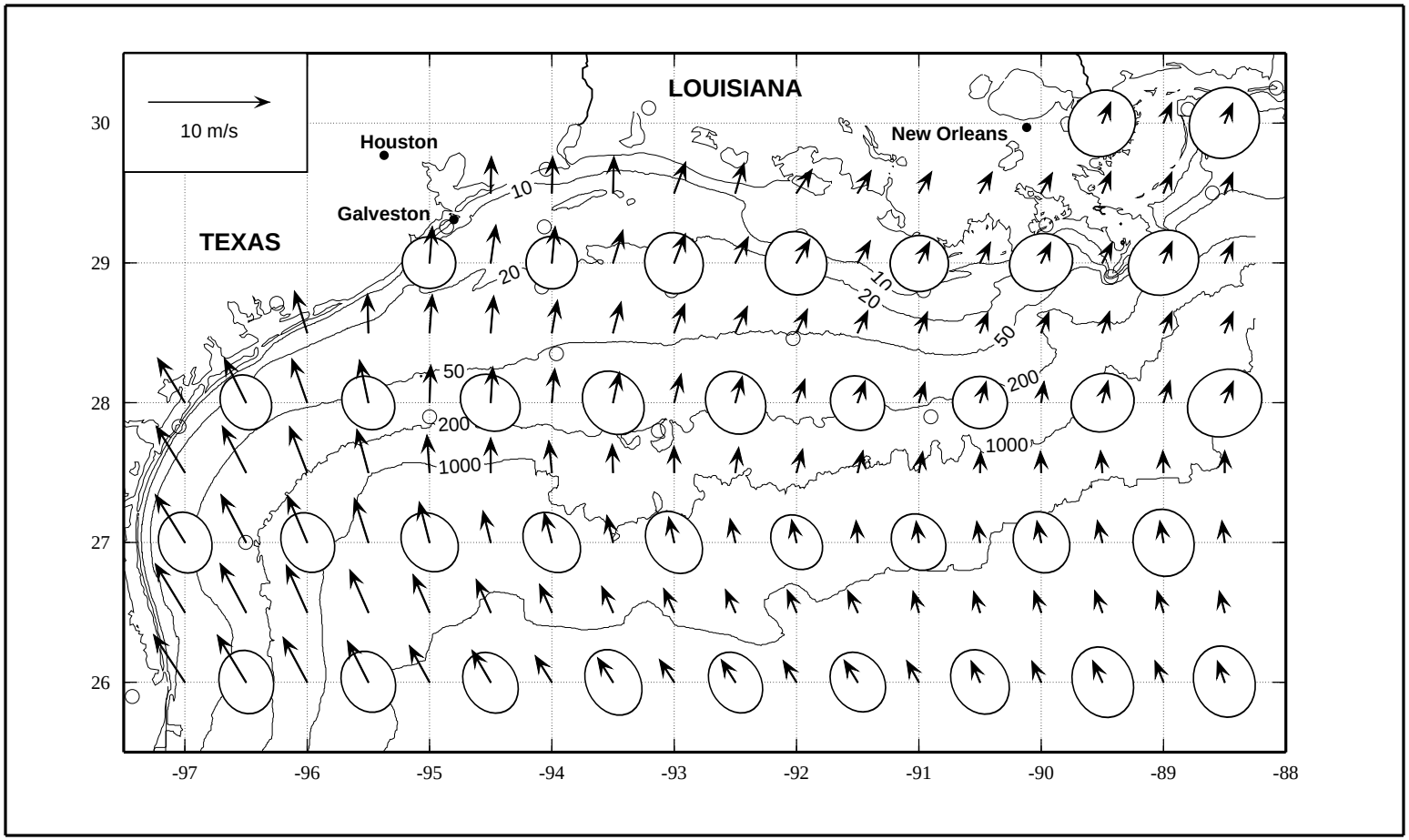


Figure 1.92.06. Monthly mean 10-m wind for June 1992.

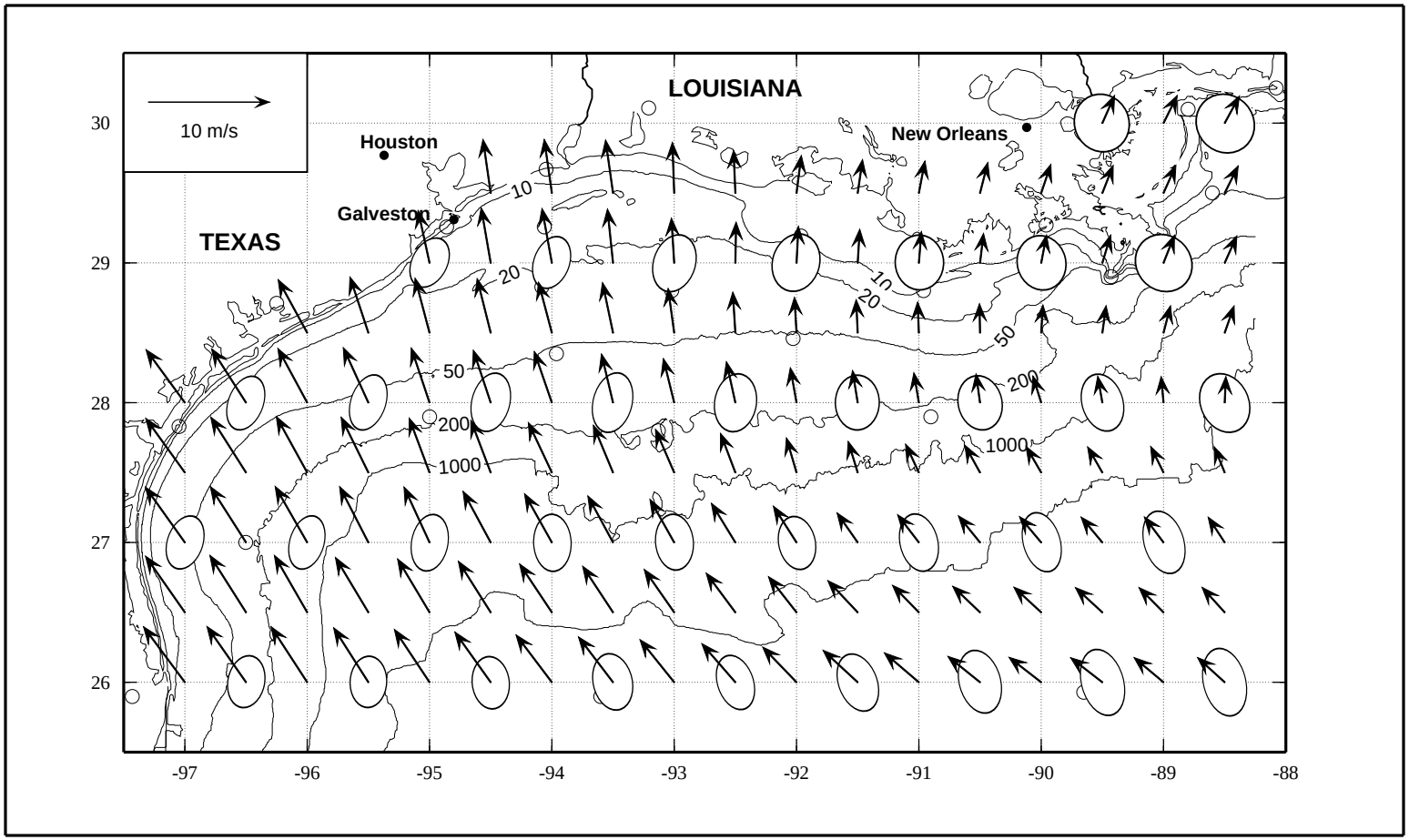


Figure 1.92.07. Monthly mean 10-m wind for July 1992.

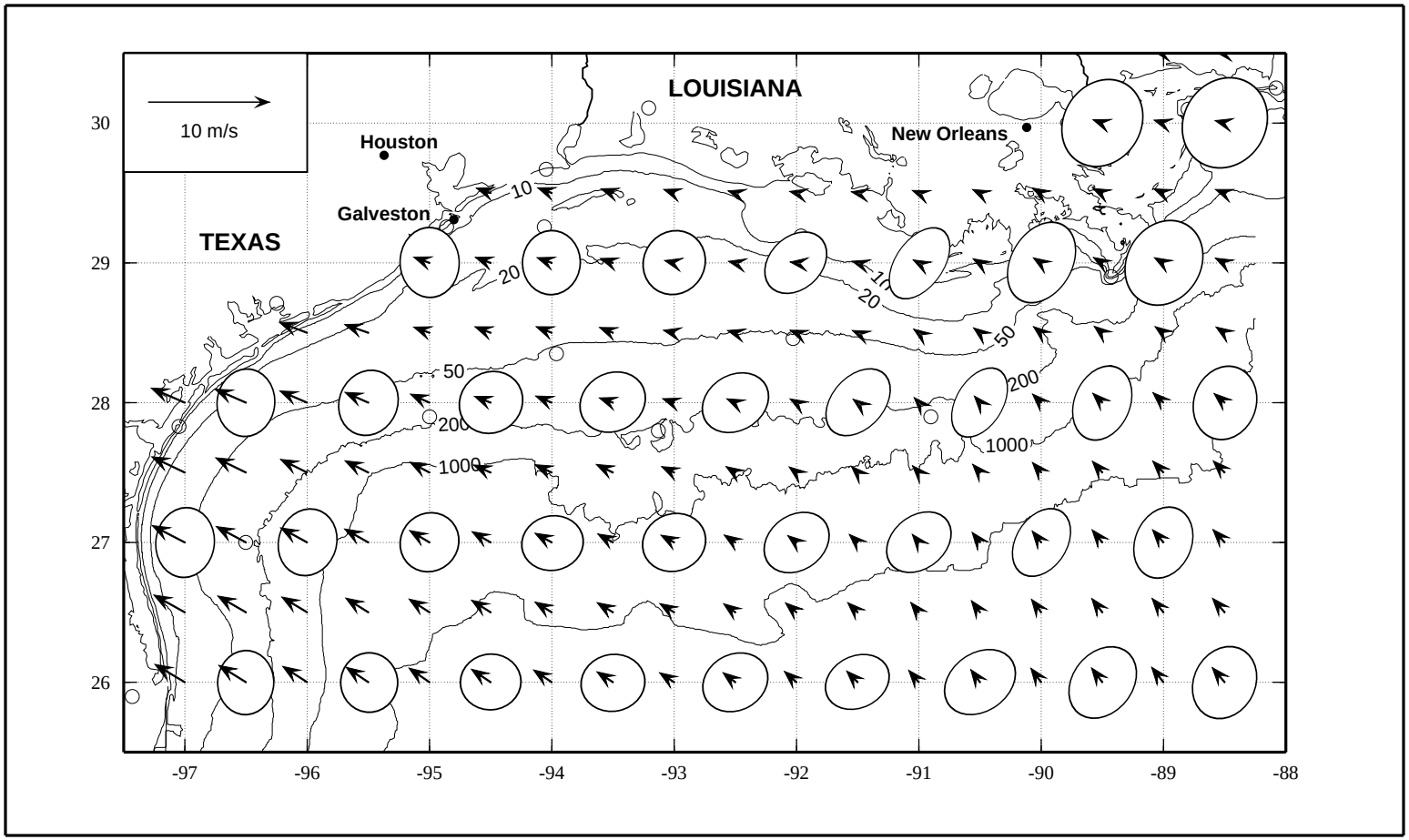


Figure 1.92.08. Monthly mean 10-m wind for August 1992.

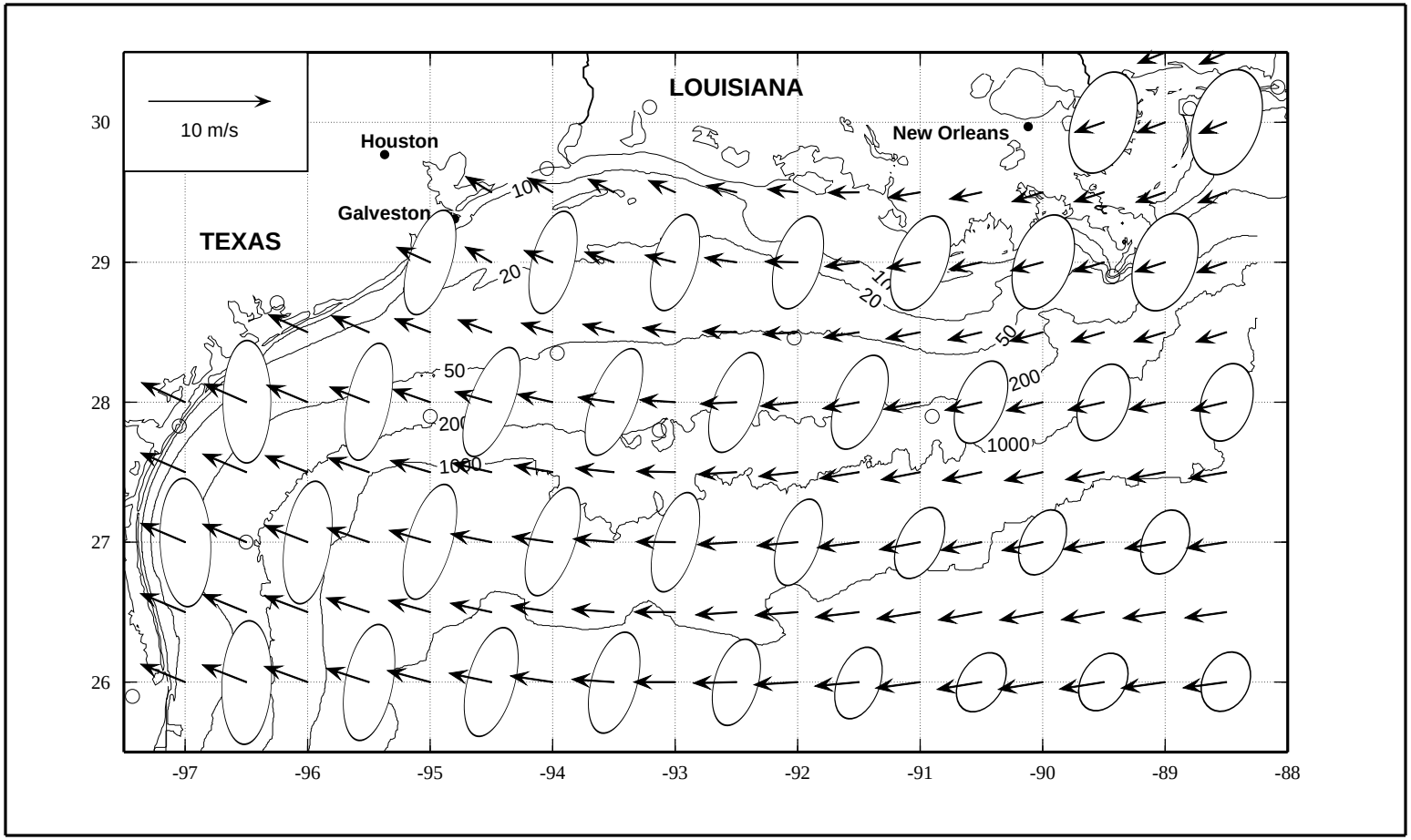


Figure 1.92.09. Monthly mean 10-m wind for September 1992.

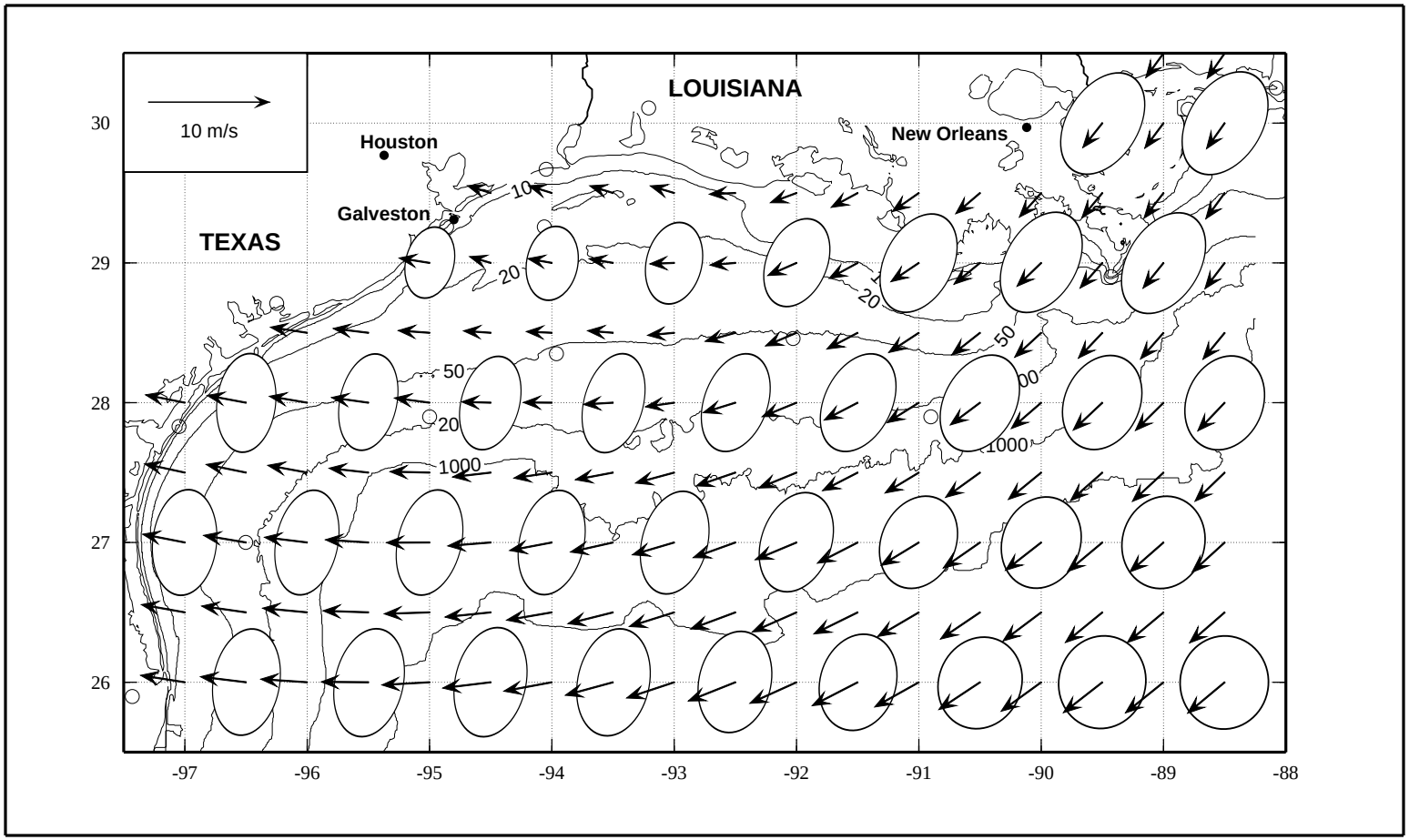


Figure 1.92.10. Monthly mean 10-m wind for October 1992.

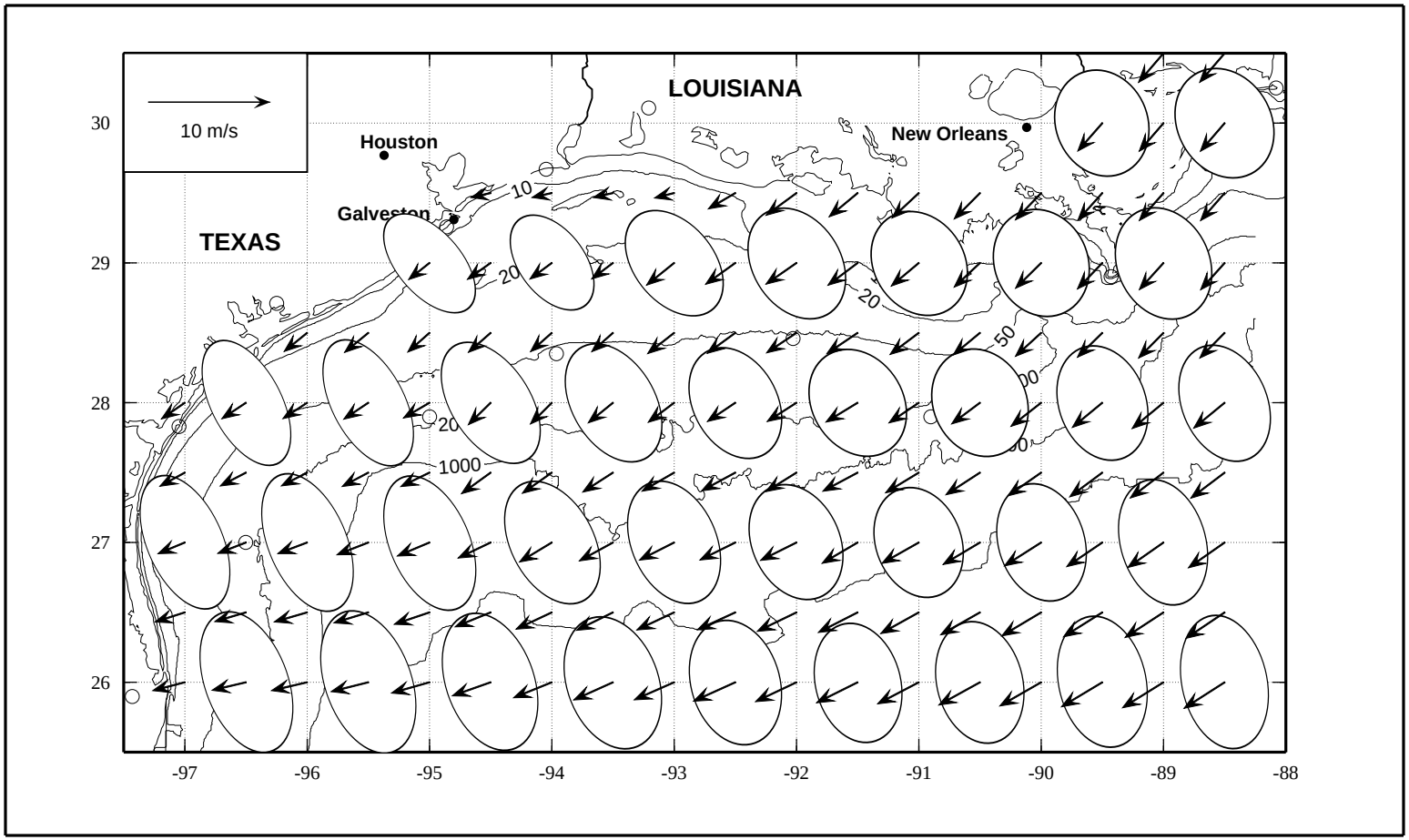


Figure 1.92.11. Monthly mean 10-m wind for November 1992.

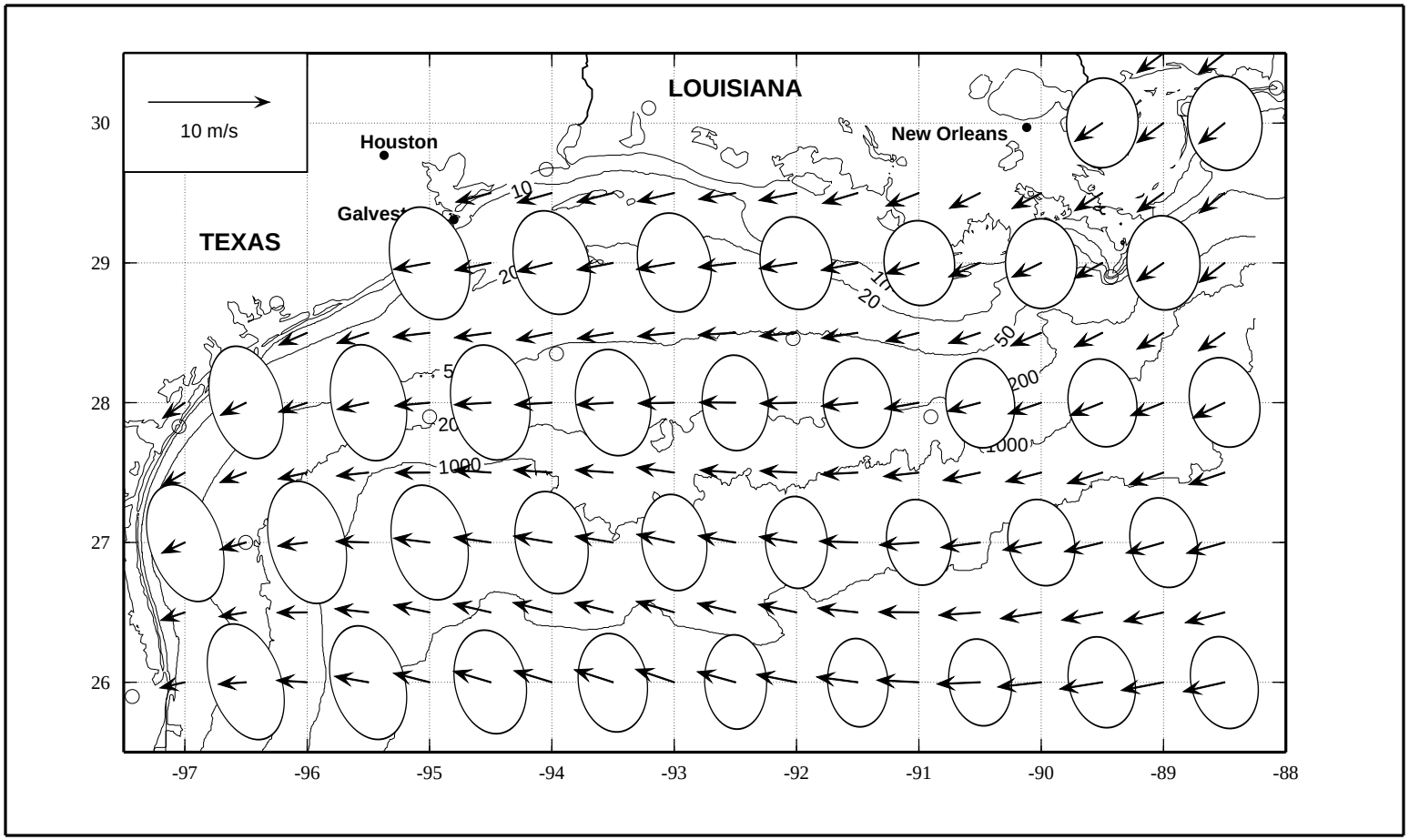


Figure 1.92.12. Monthly mean 10-m wind for December 1992.

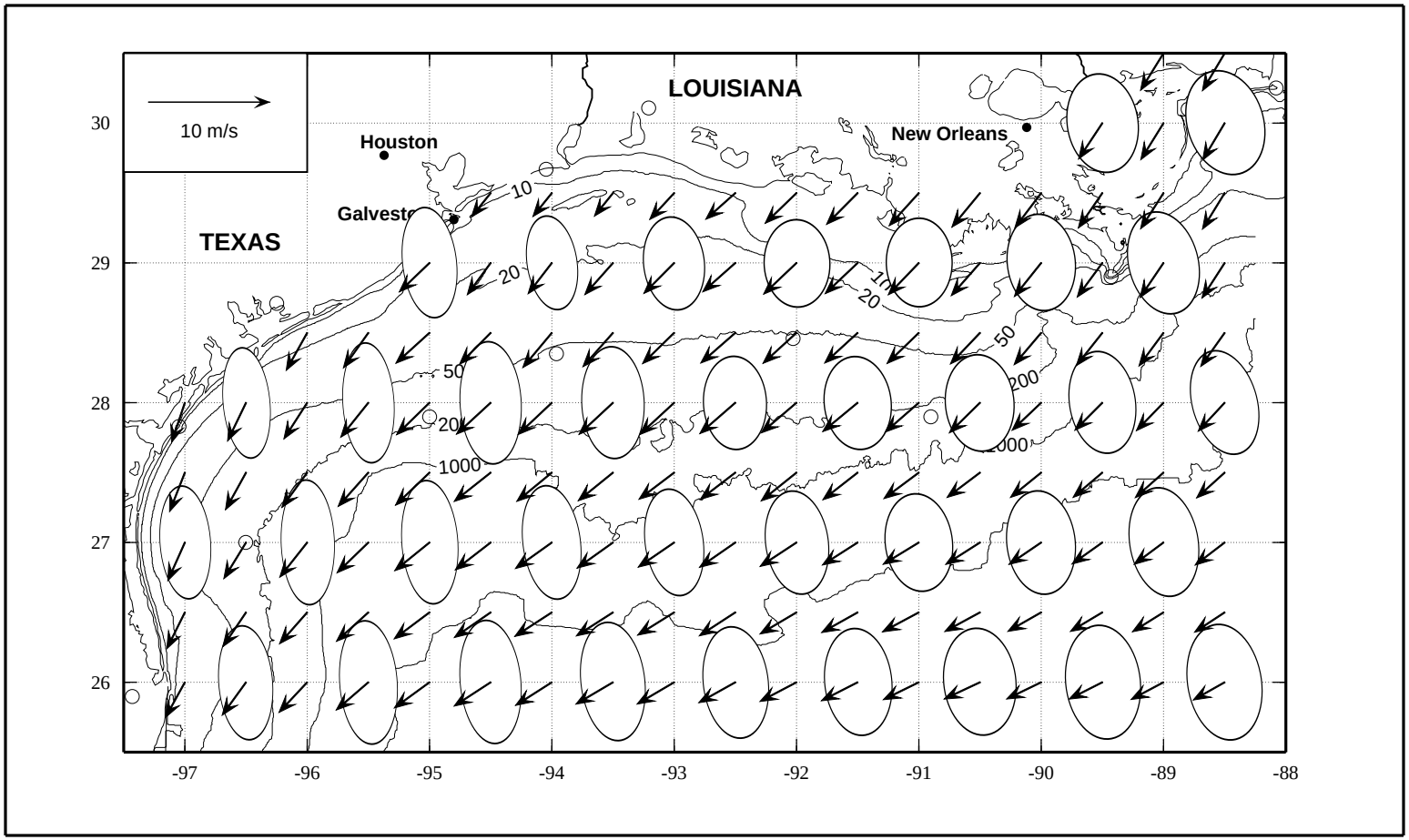


Figure 1.93.01. Monthly mean 10-m wind for January 1993.

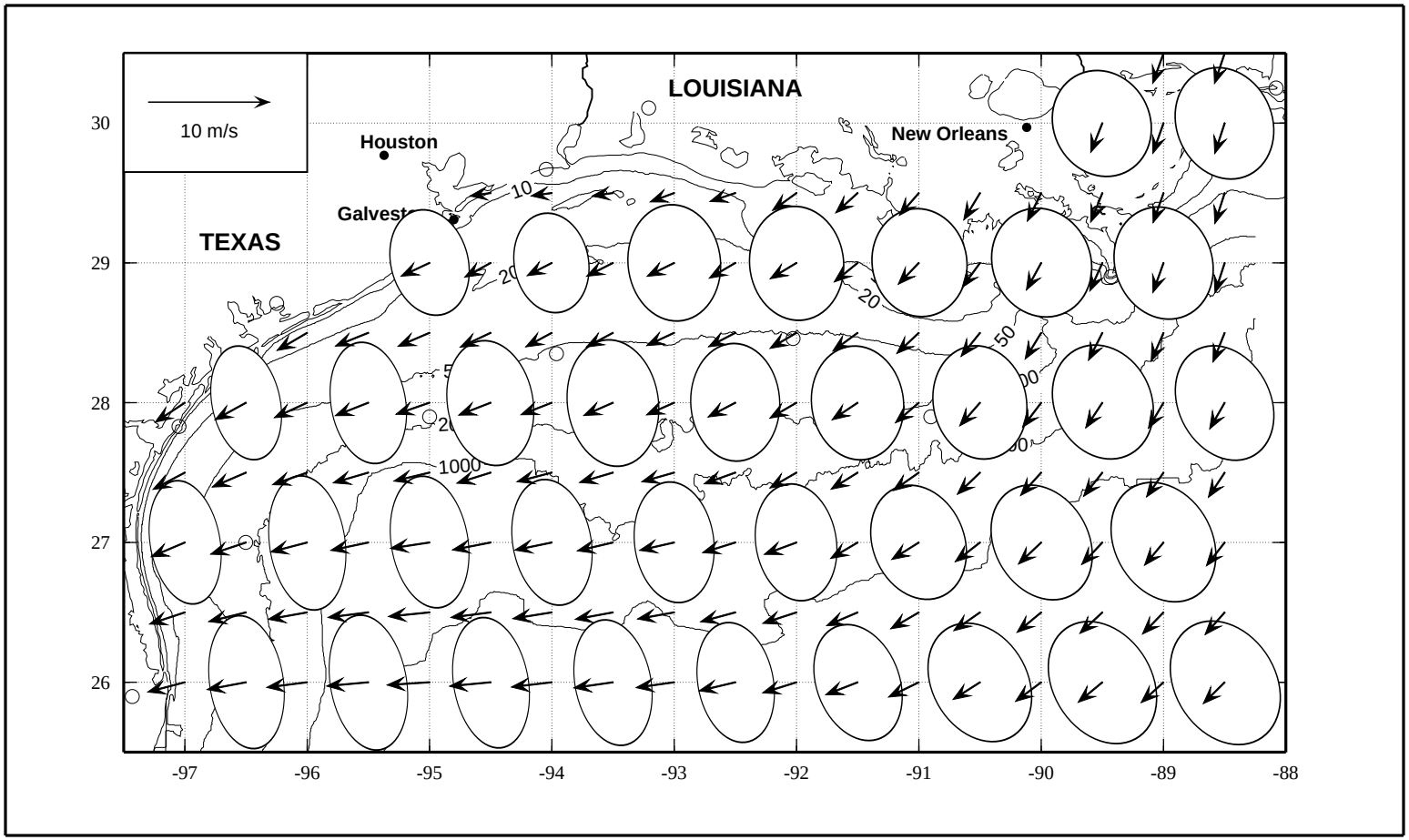


Figure 1.93.02. Monthly mean 10-m wind for February 1993.

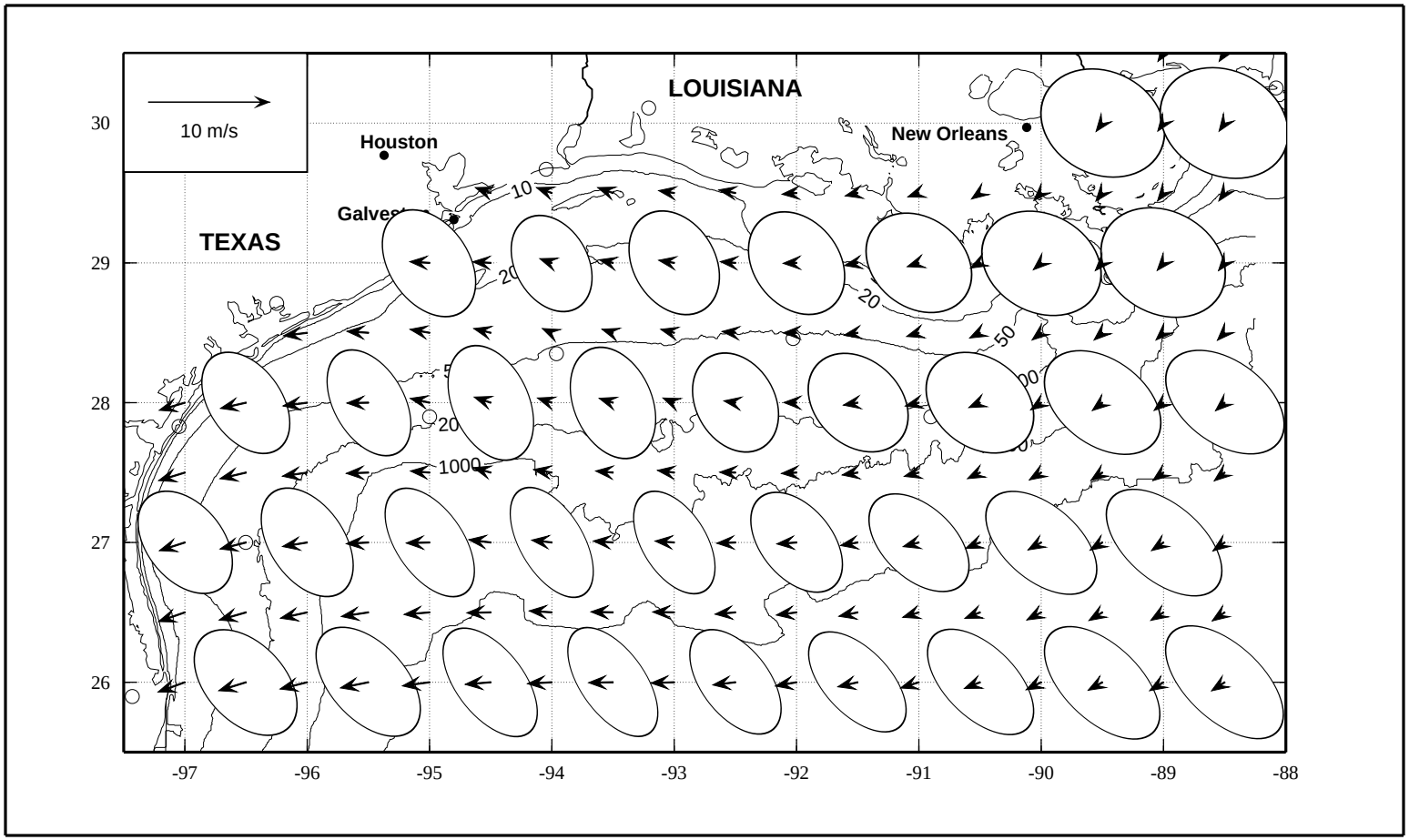


Figure 1.93.03. Monthly mean 10-m wind for March 1993.

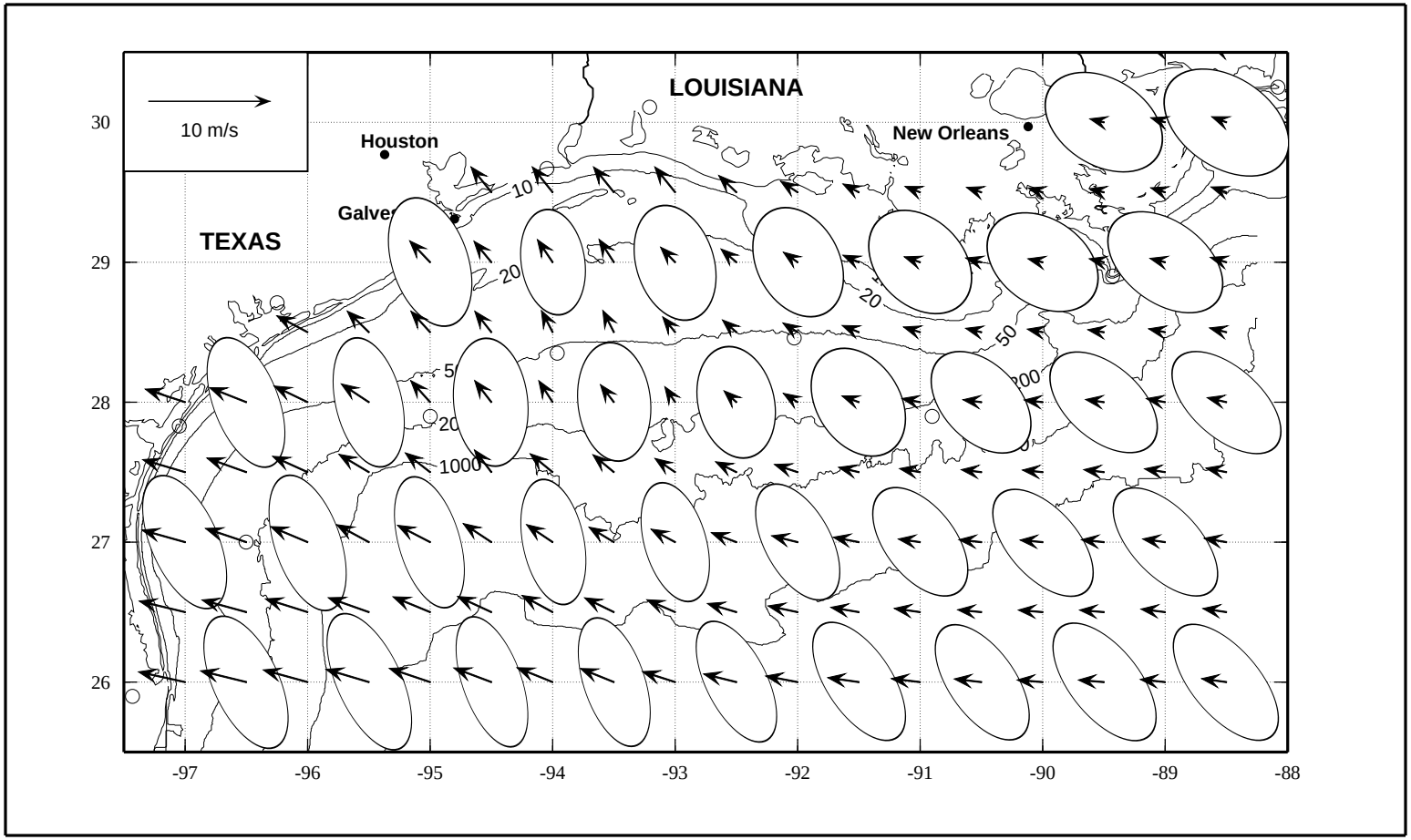


Figure 1.93.04. Monthly mean 10-m wind for April 1993.

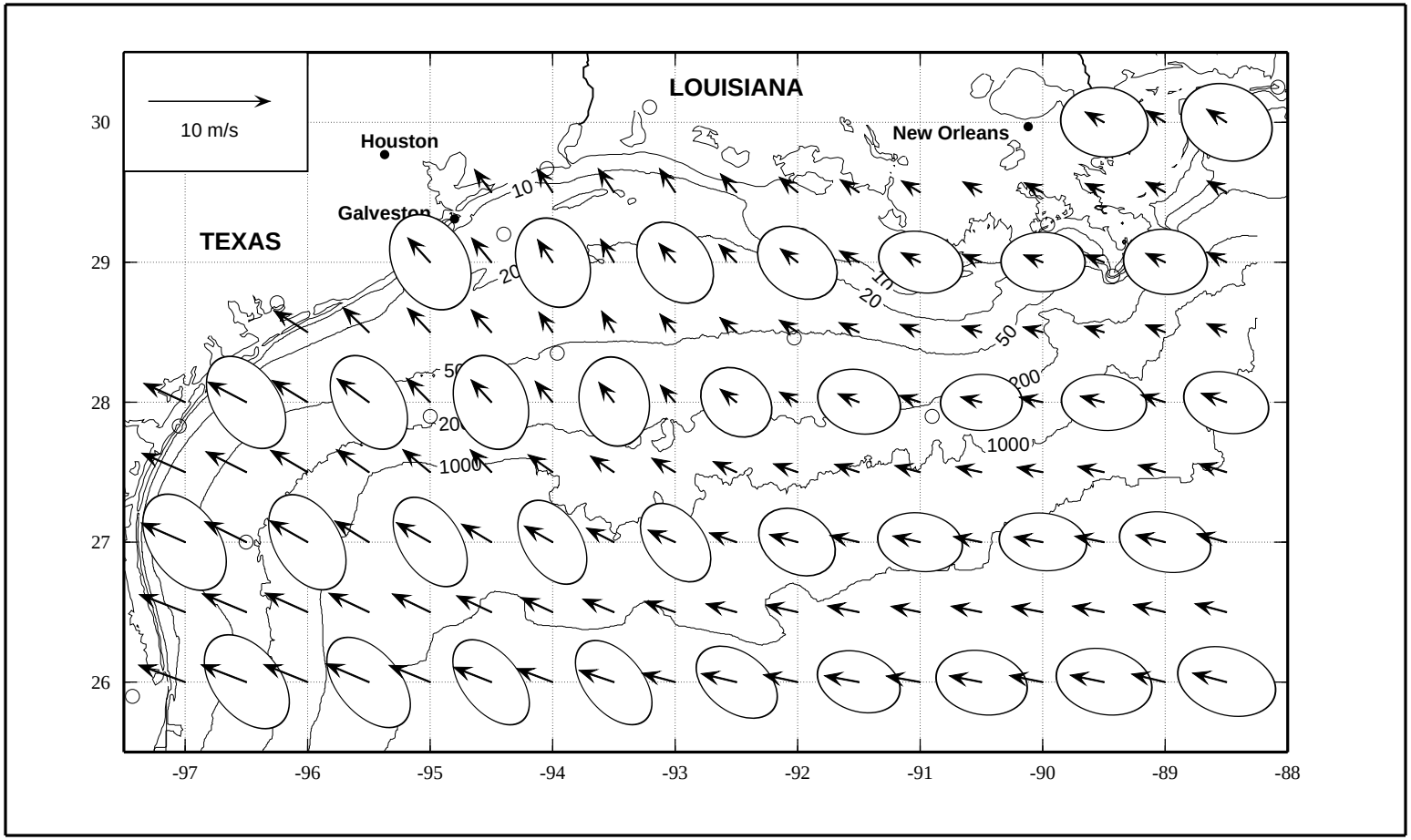


Figure 1.93.05. Monthly mean 10-m wind for May 1993.

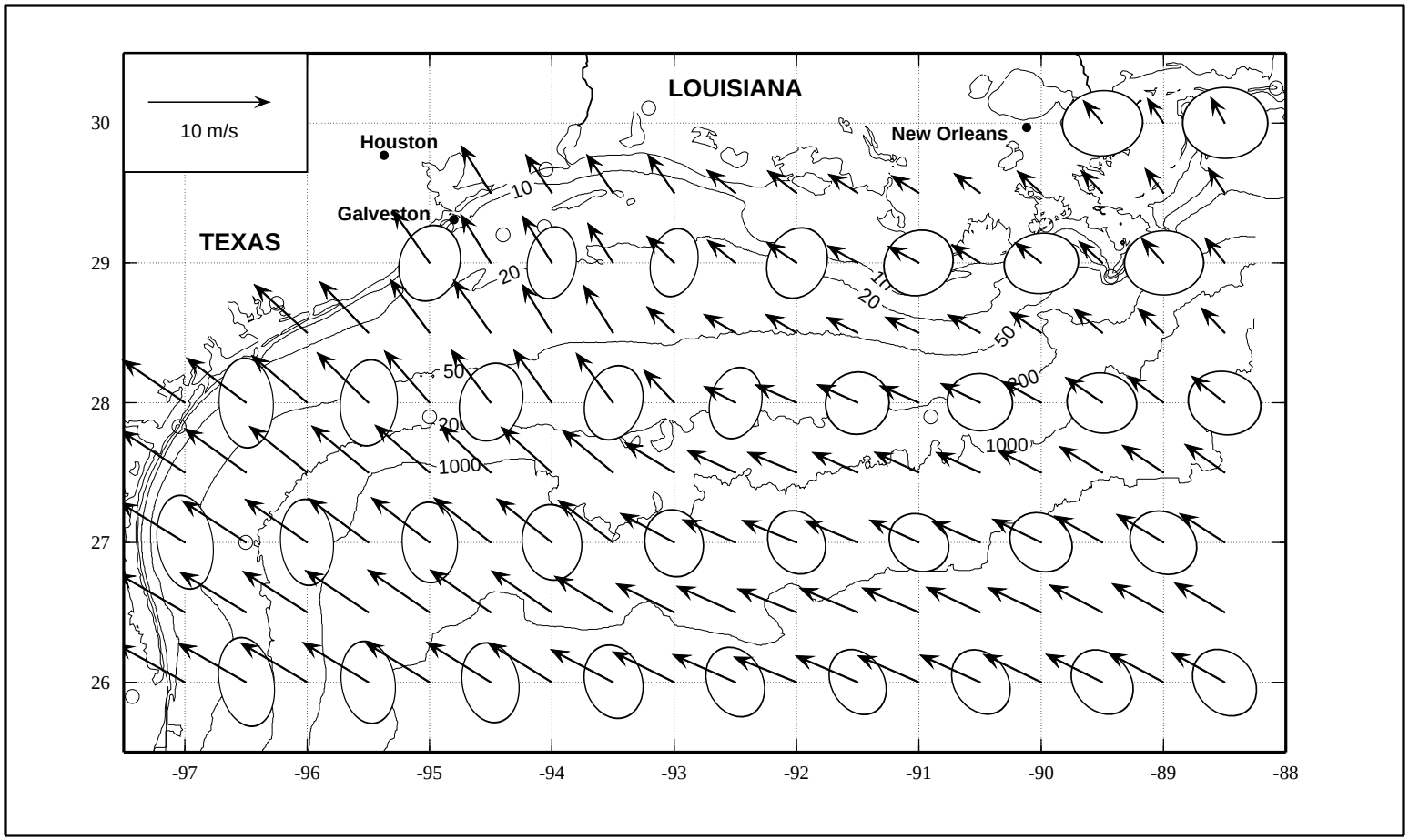


Figure 1.93.06. Monthly mean 10-m wind for June 1993.

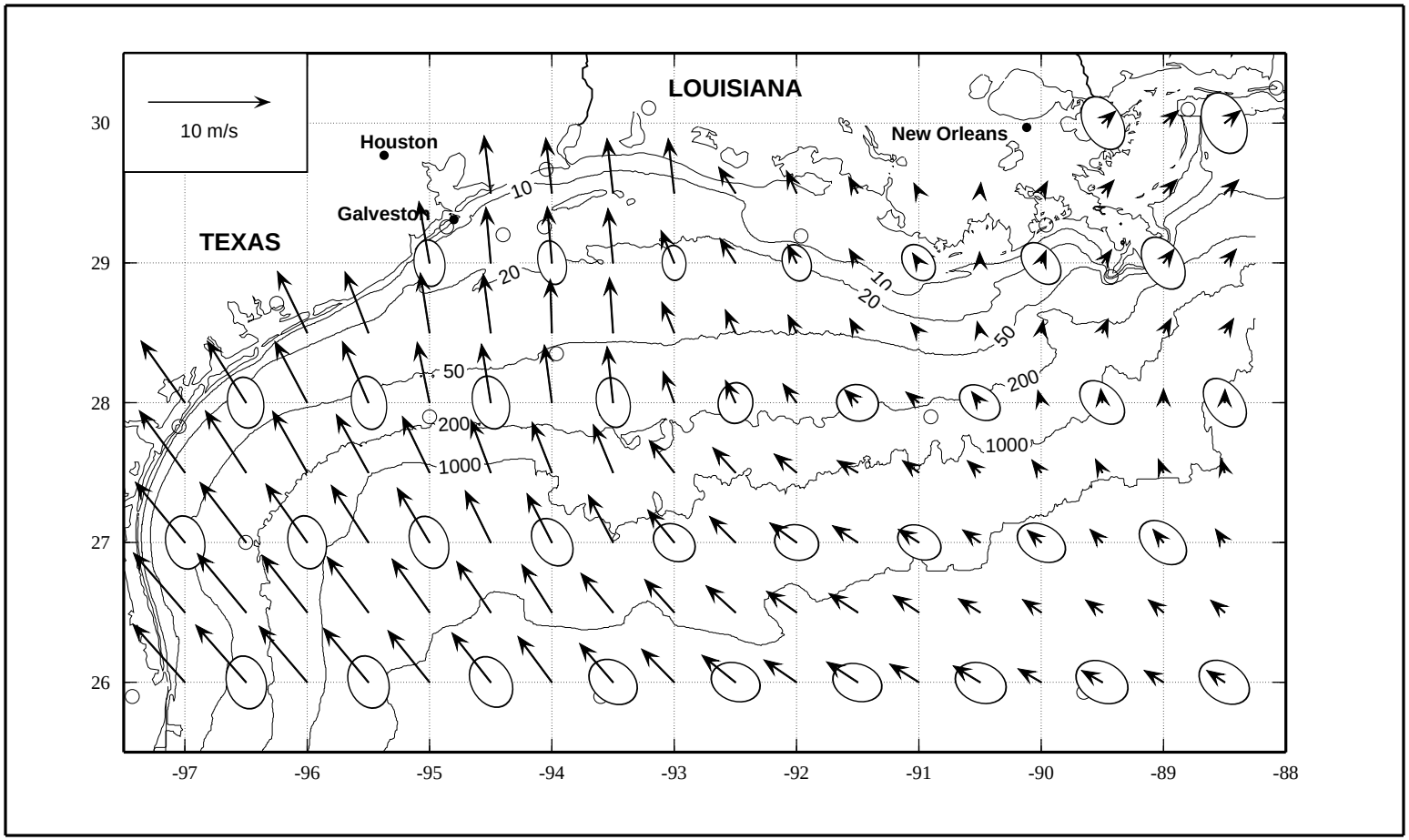


Figure 1.93.07. Monthly mean 10-m wind for July 1993.

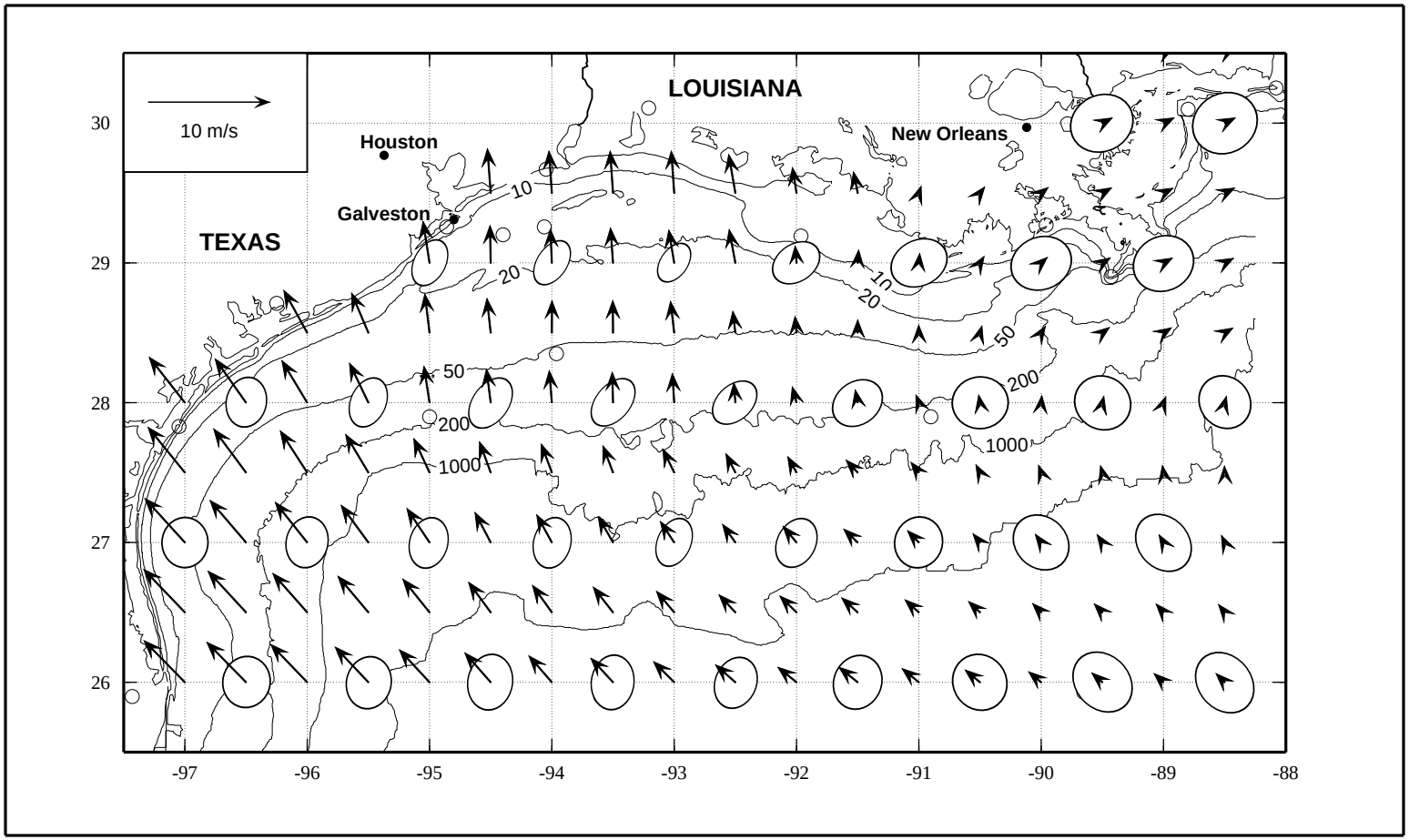


Figure 1.93.08. Monthly mean 10-m wind for August 1993.

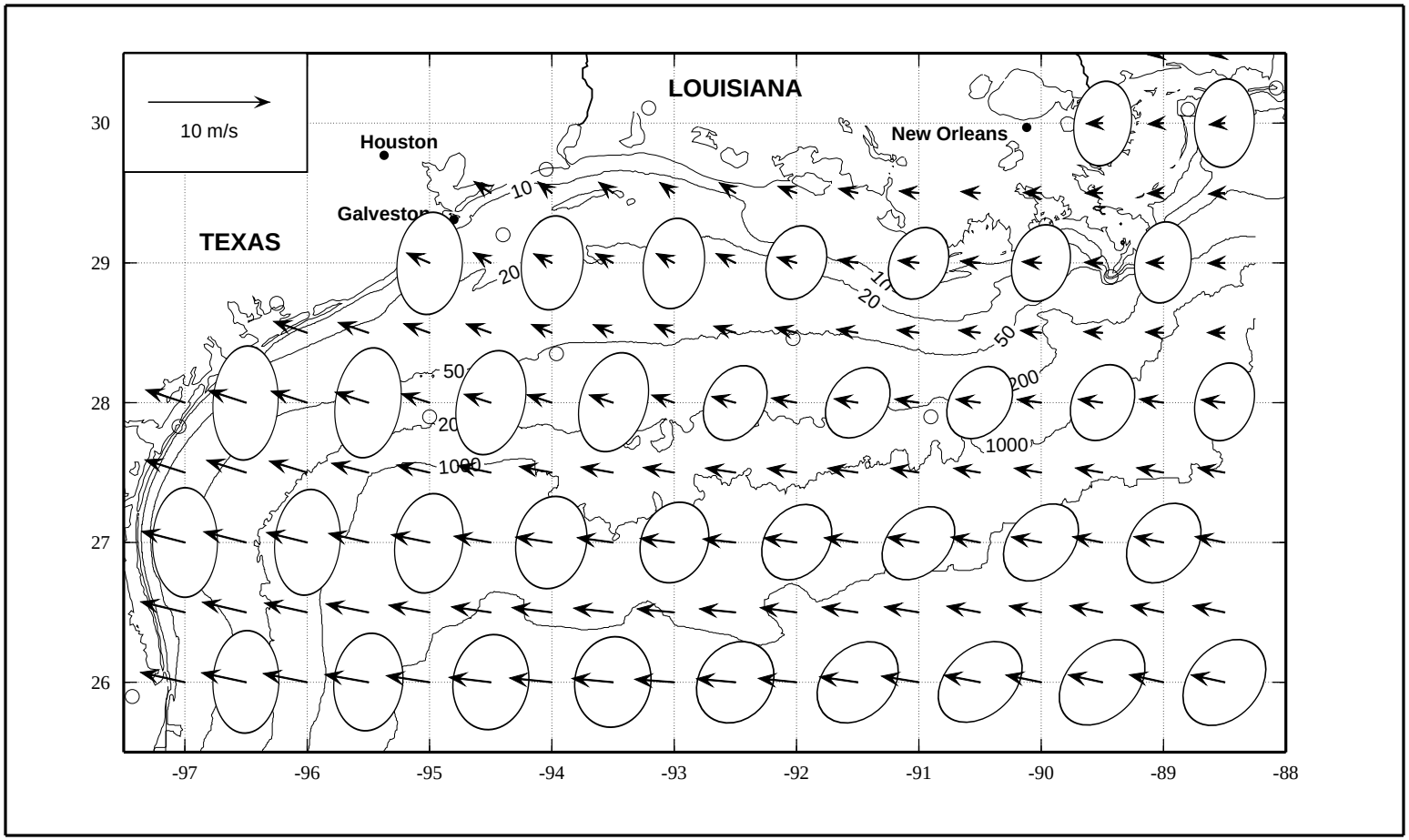


Figure 1.93.09. Monthly mean 10-m wind for September 1993.

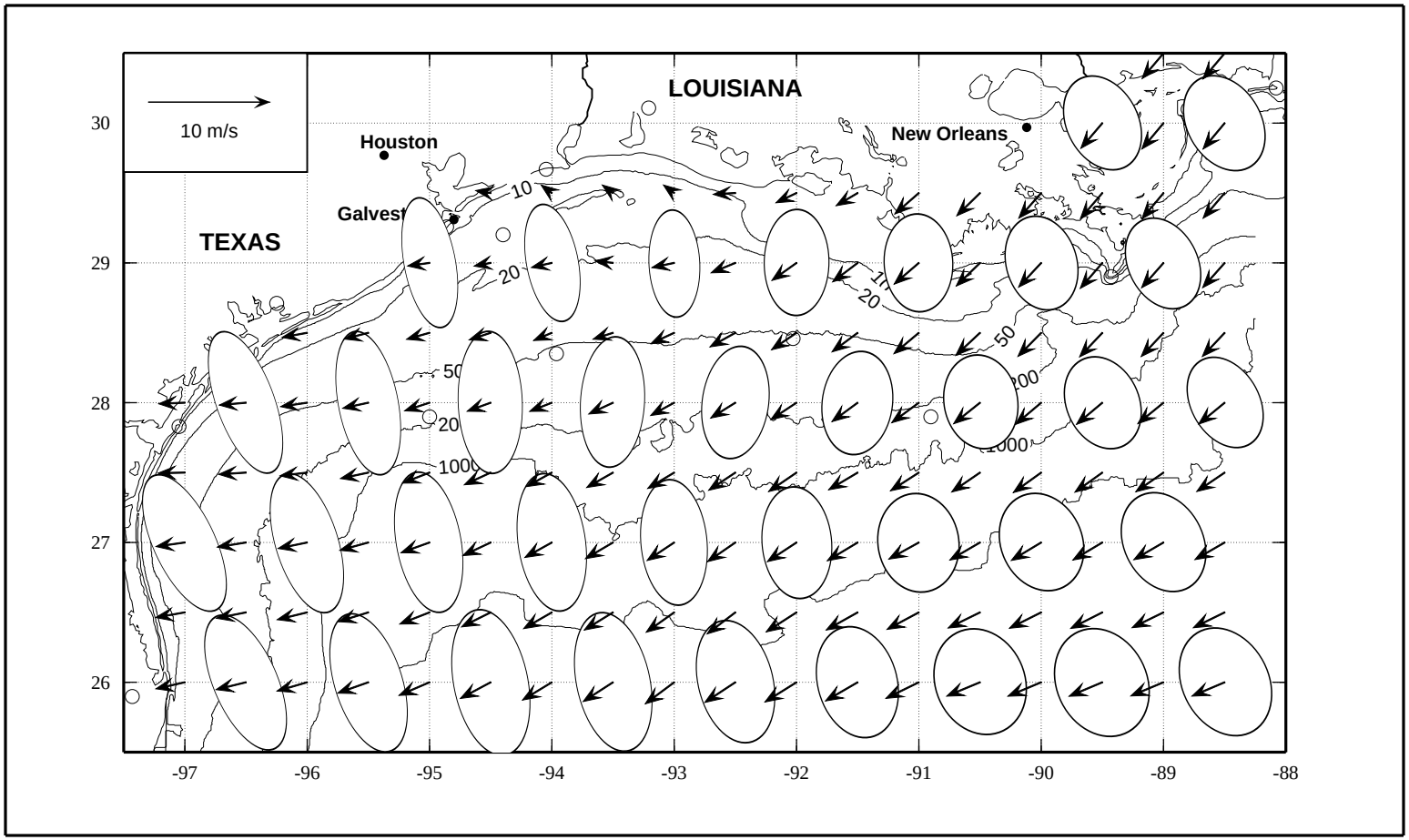


Figure 1.93.10. Monthly mean 10-m wind for October 1993.

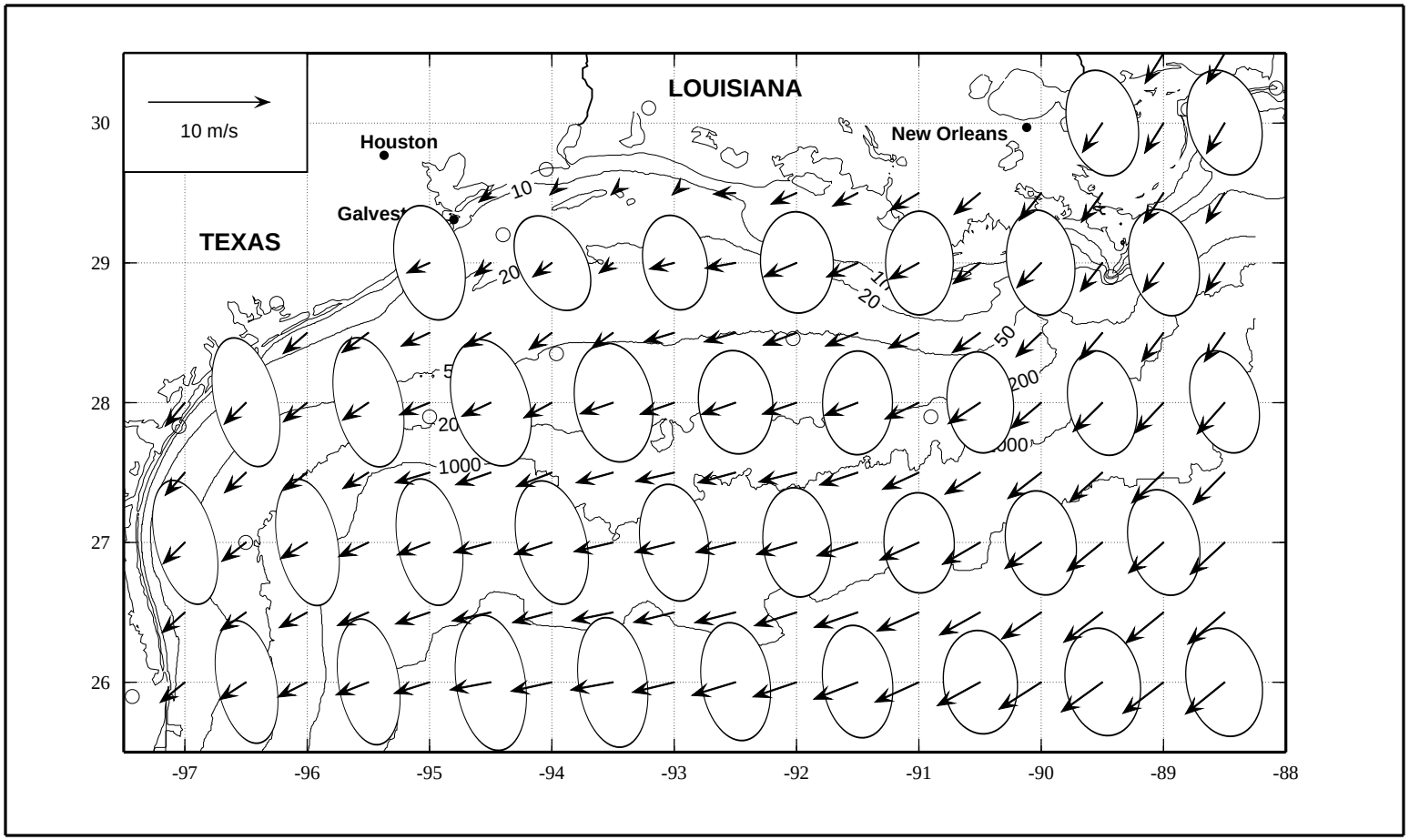


Figure 1.93.11. Monthly mean 10-m wind for November 1993.

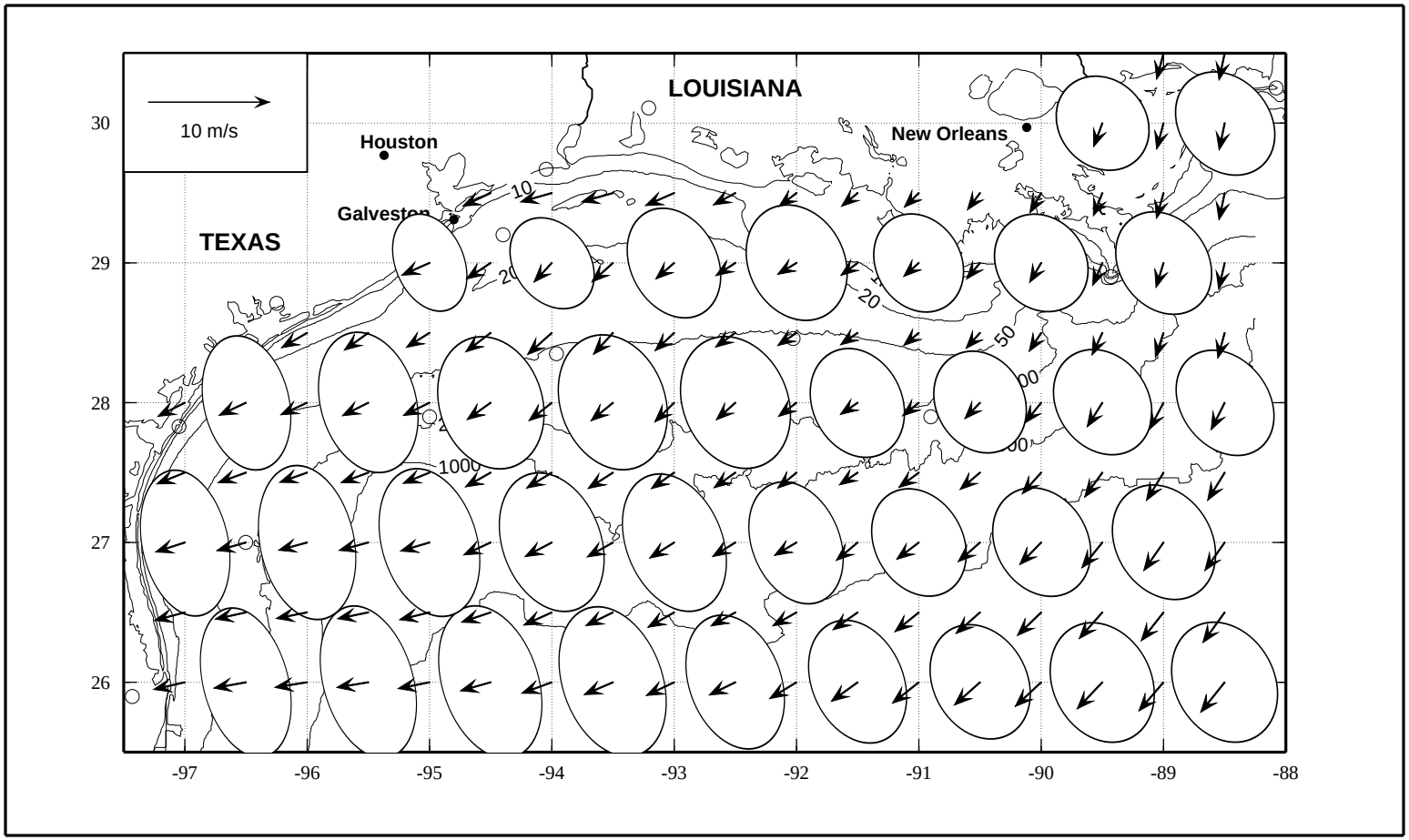


Figure 1.93.12. Monthly mean 10-m wind for December 1993.

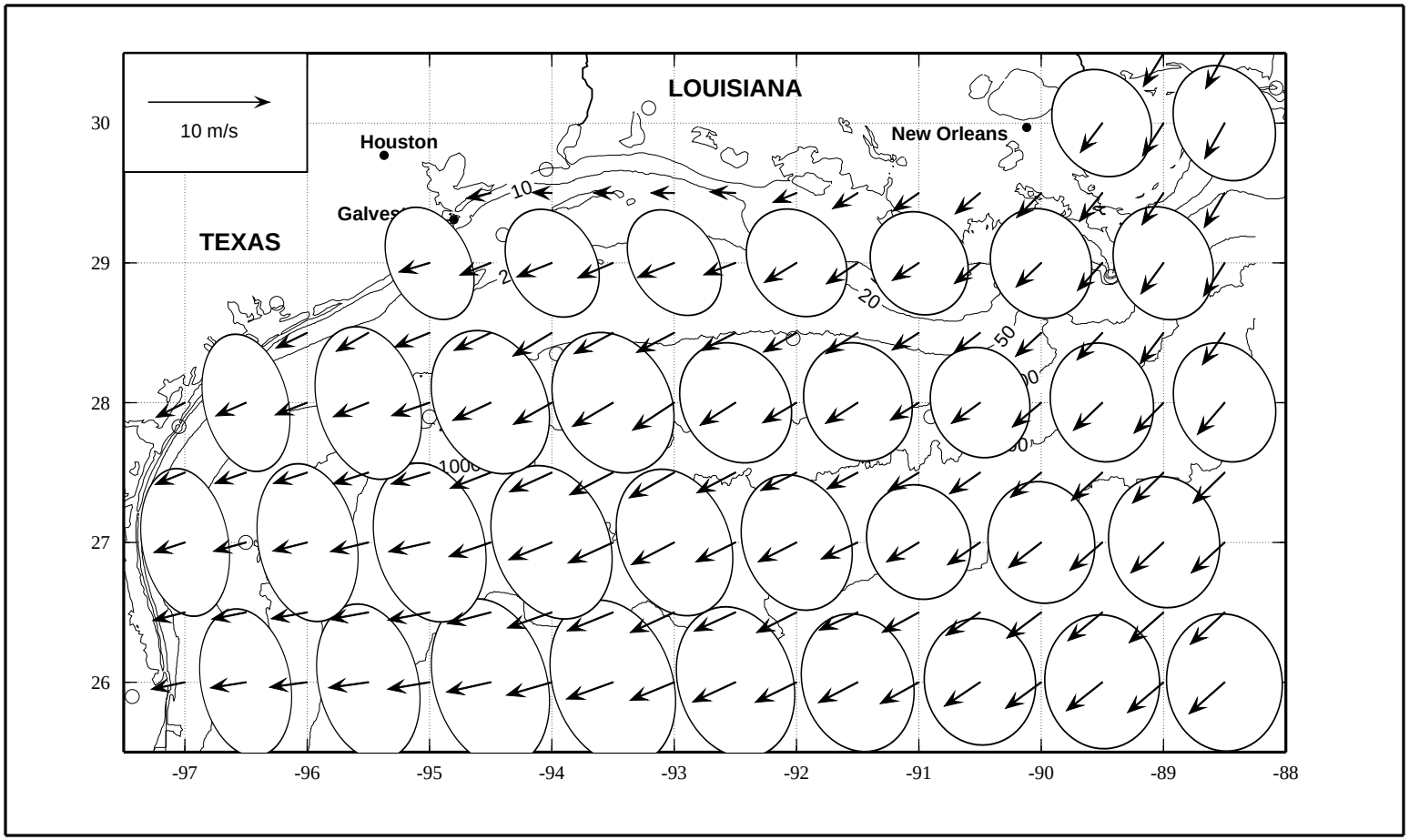


Figure 1.94.01. Monthly mean 10-m wind for January 1994.

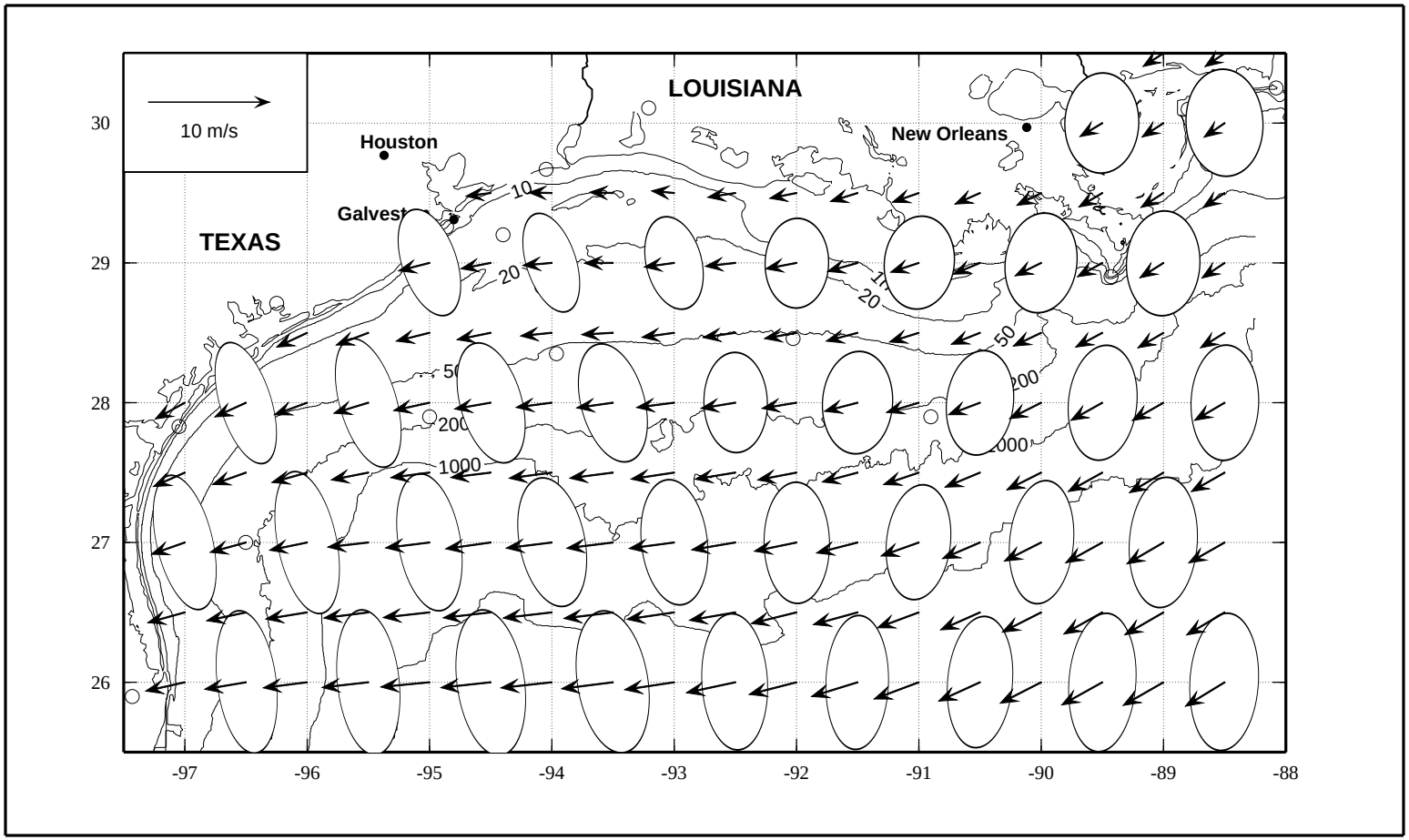


Figure 1.94.02. Monthly mean 10-m wind for February 1994.

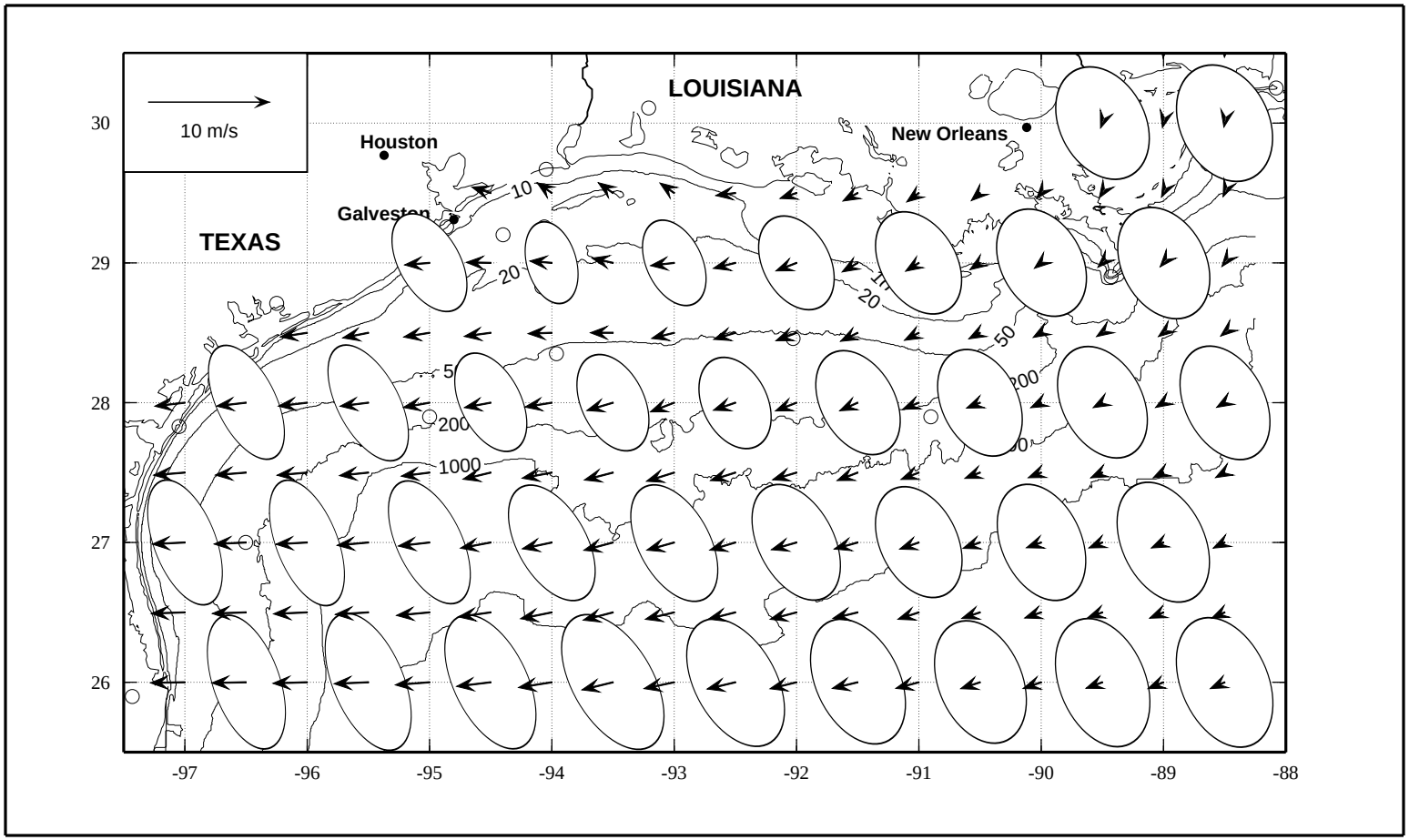


Figure 1.94.03. Monthly mean 10-m wind for March 1994.

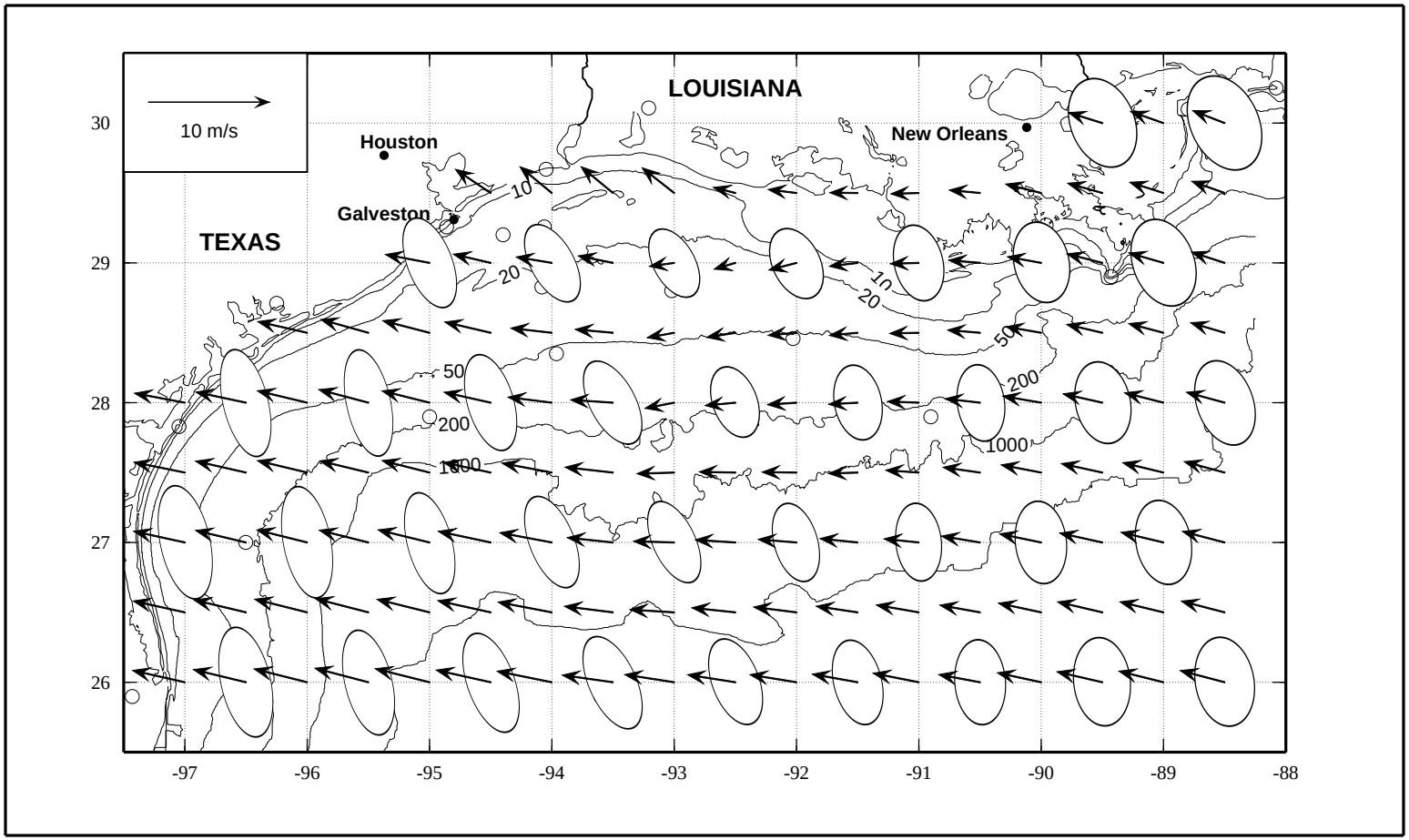


Figure 1.94.04. Monthly mean 10-m wind for April 1994.

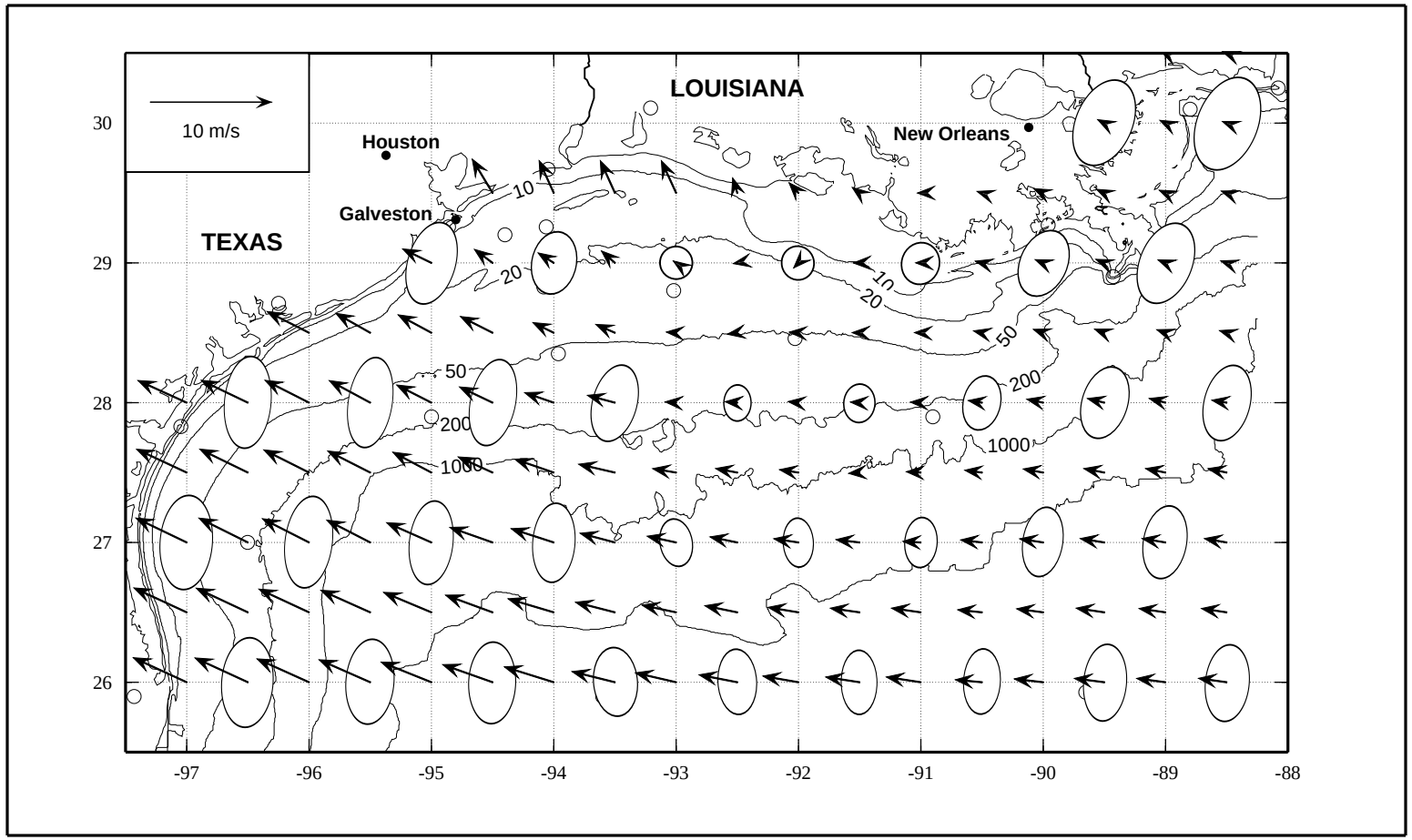


Figure 1.94.05. Monthly mean 10-m wind for May 1994.

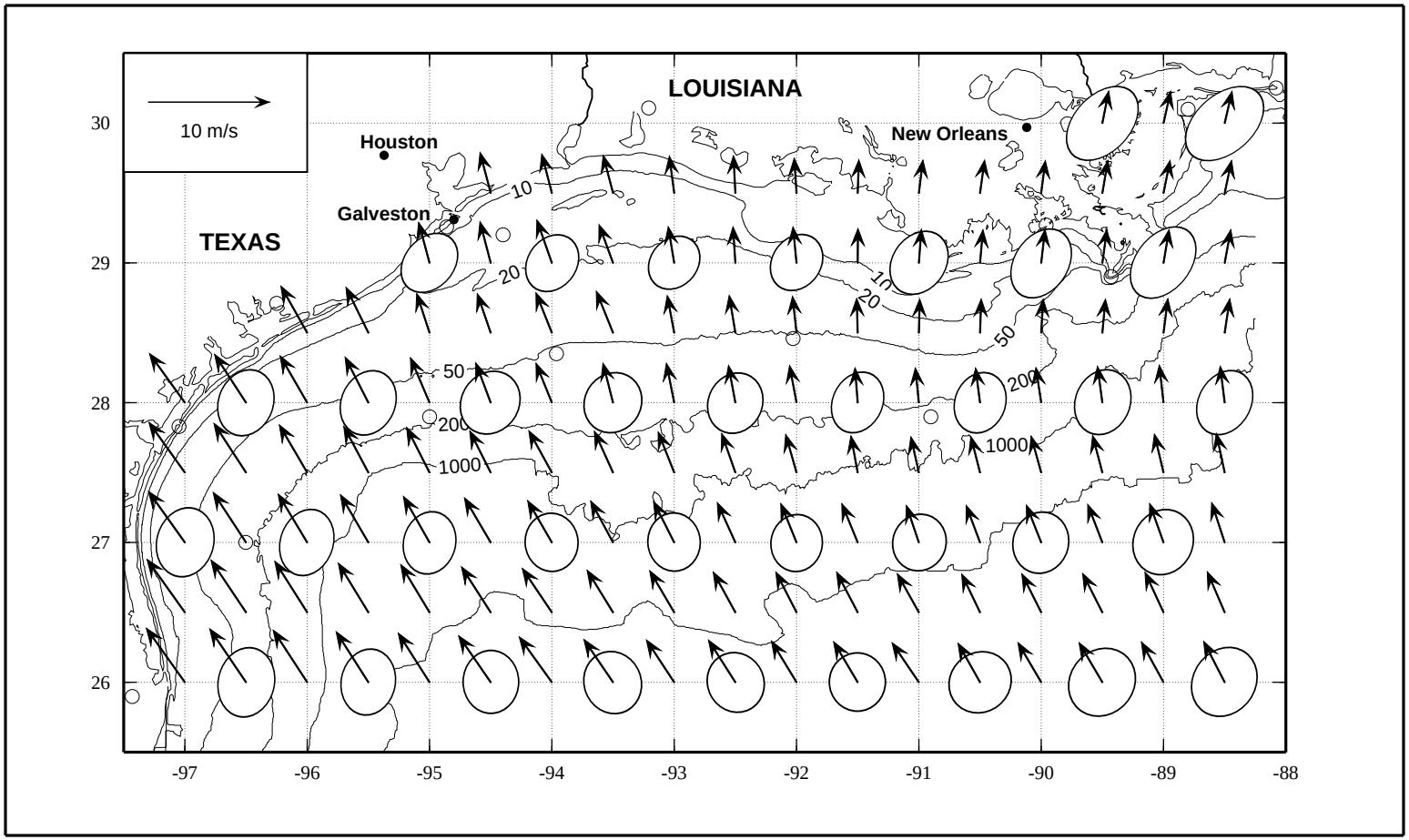


Figure 1.94.06. Monthly mean 10-m wind for June 1994.

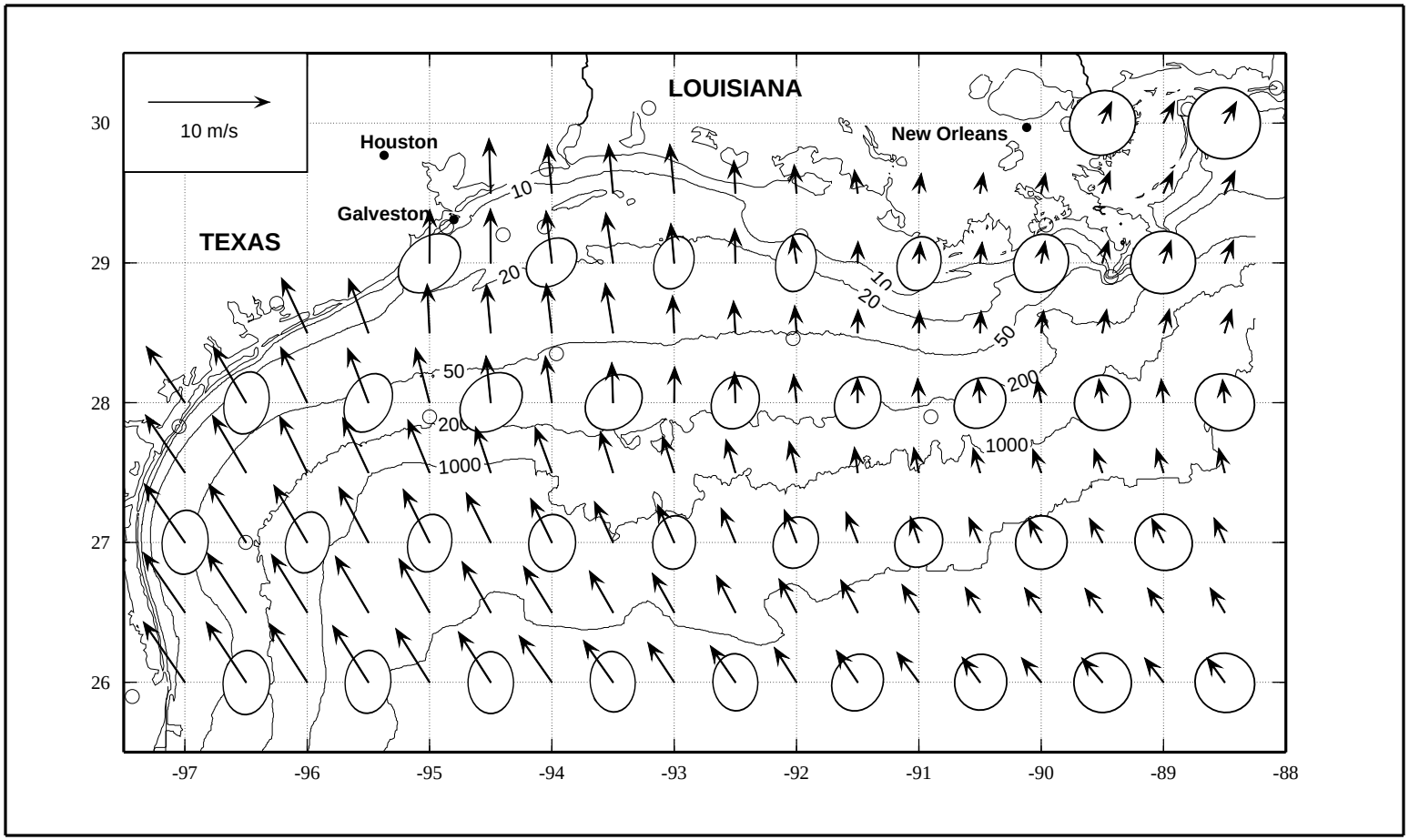


Figure 1.94.07. Monthly mean 10-m wind for July 1994.

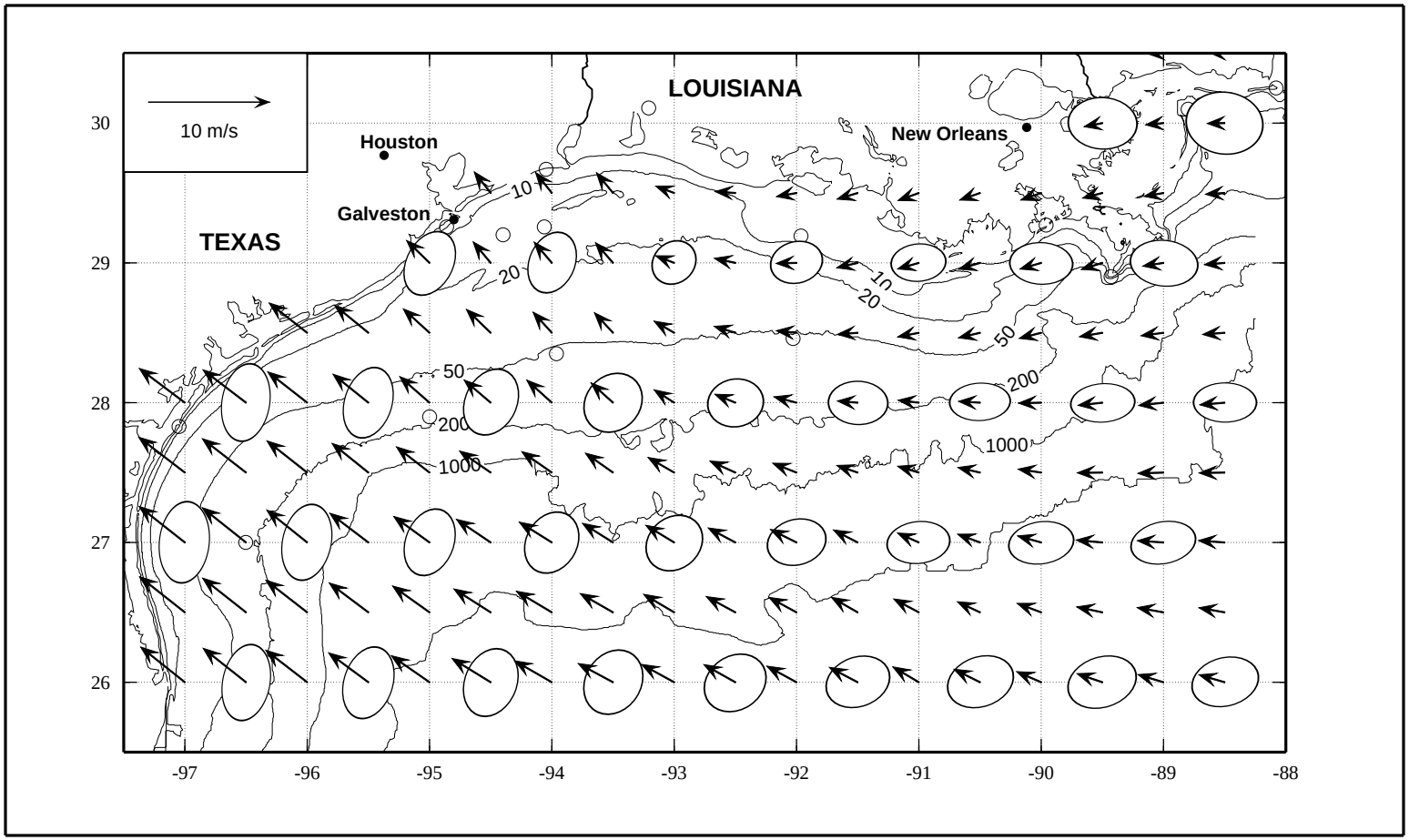


Figure 1.94.08. Monthly mean 10-m wind for August 1994.

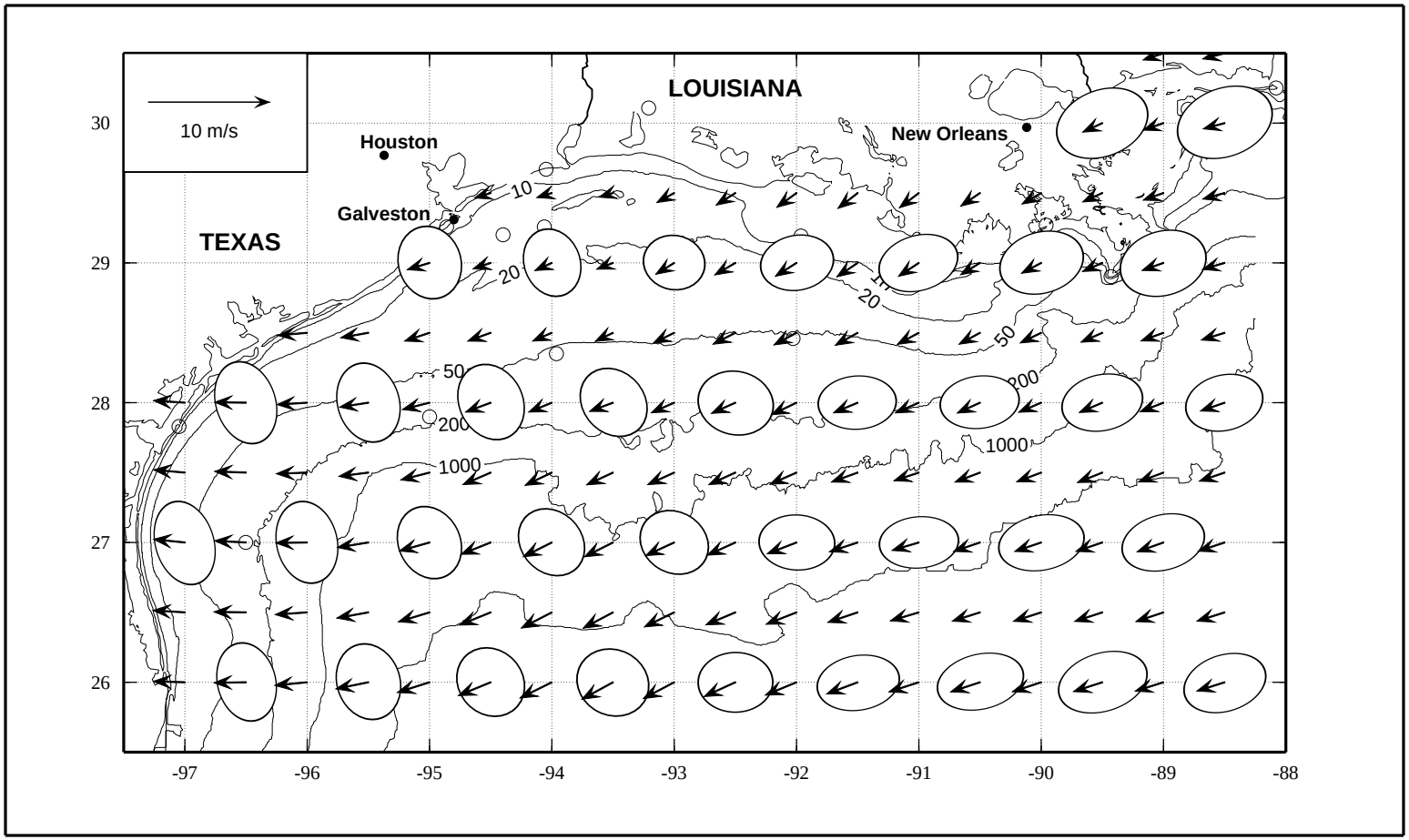


Figure 1.94.09. Monthly mean 10-m wind for September 1994.

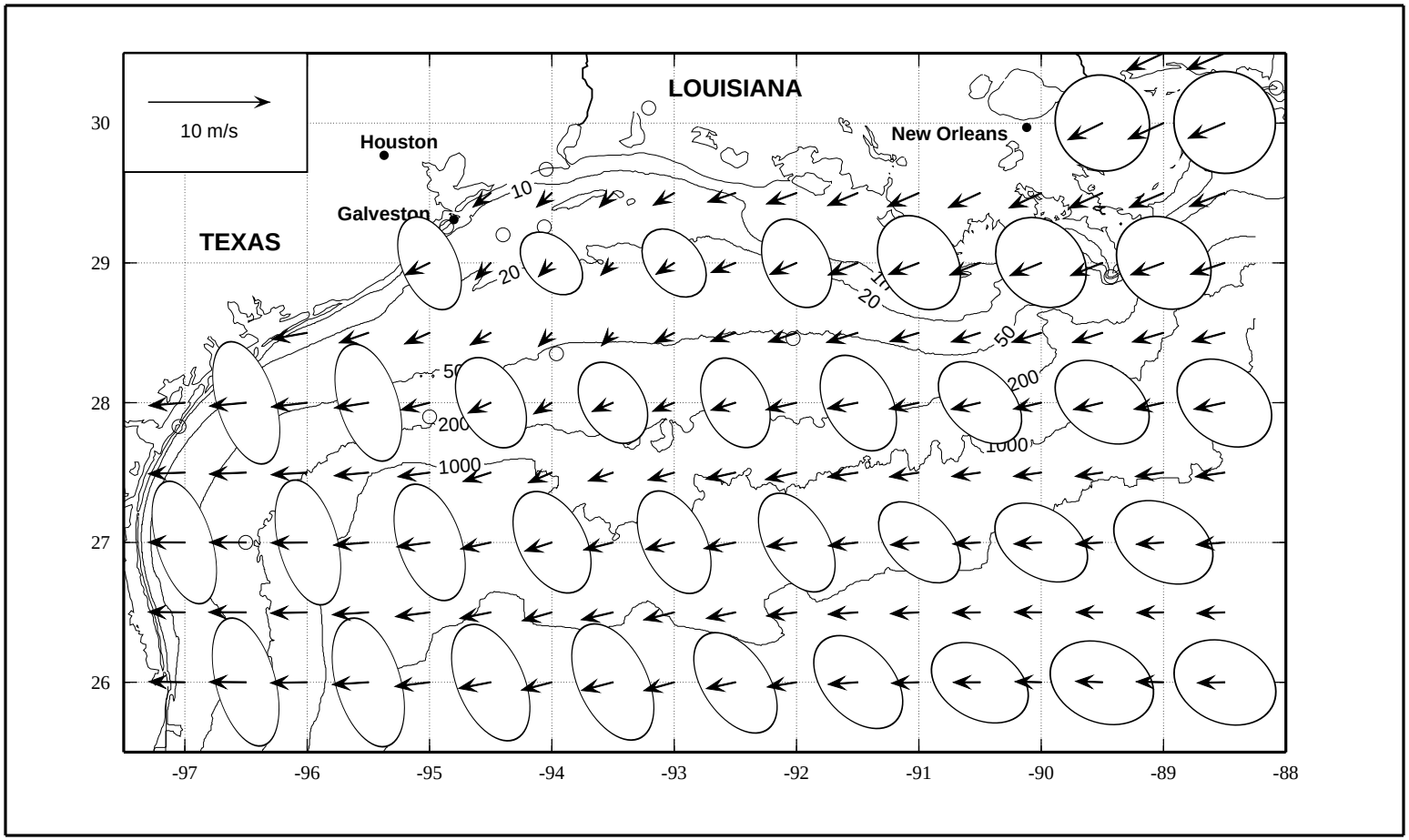


Figure 1.94.10. Monthly mean 10-m wind for October 1994.

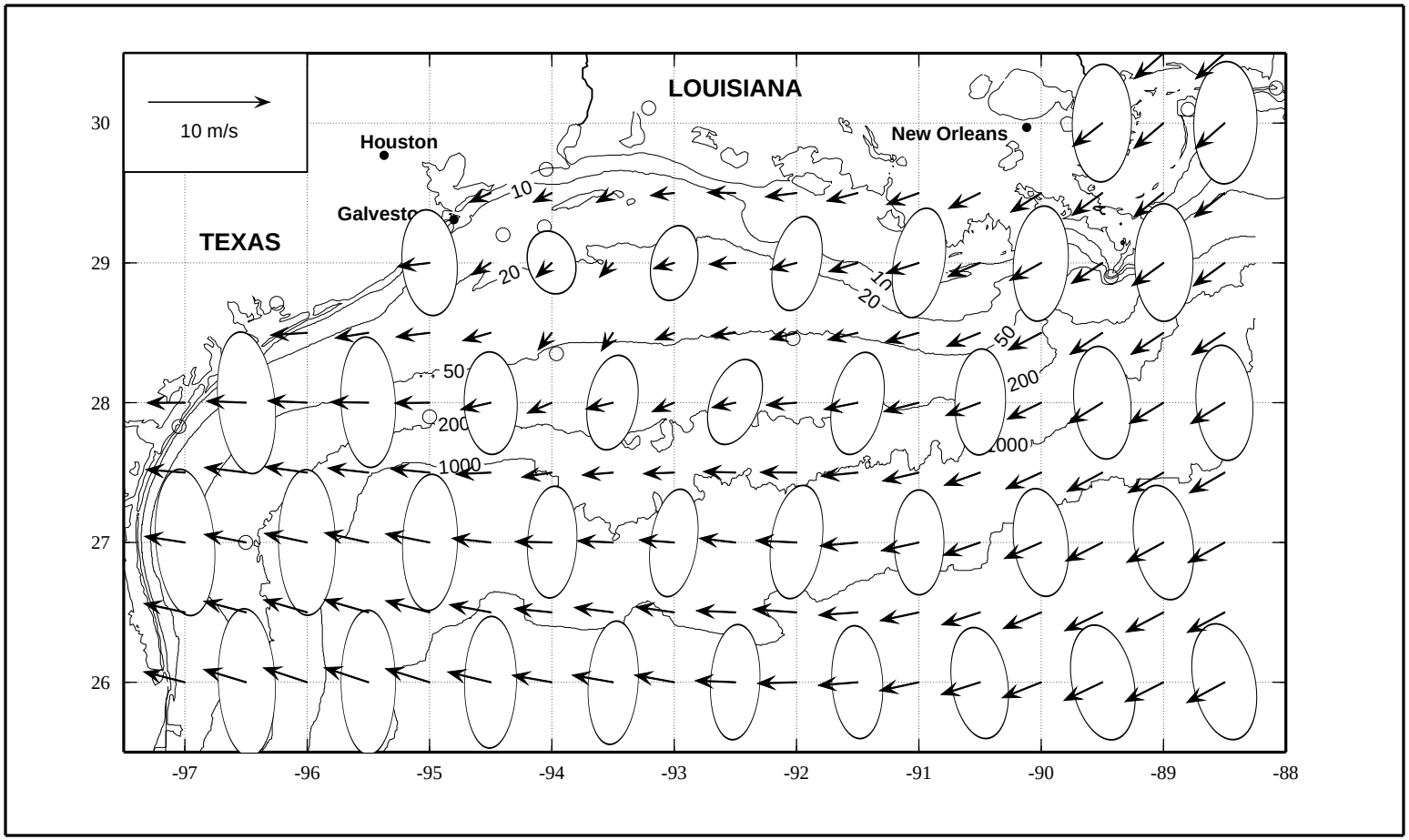


Figure 1.94.11. Monthly mean 10-m wind for November 1994.

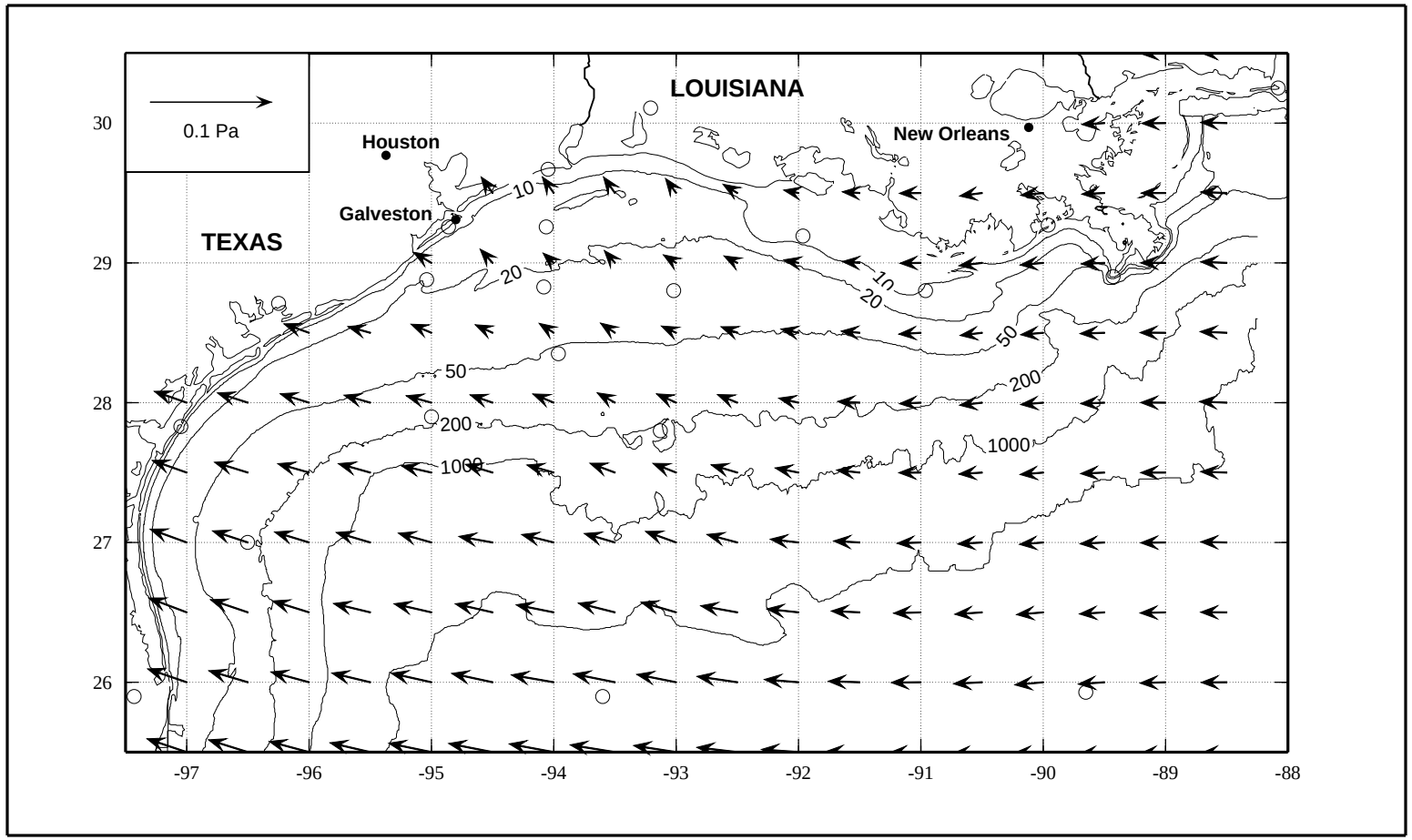


Figure 2.92.04. Monthly mean surface wind stress for April 1992.

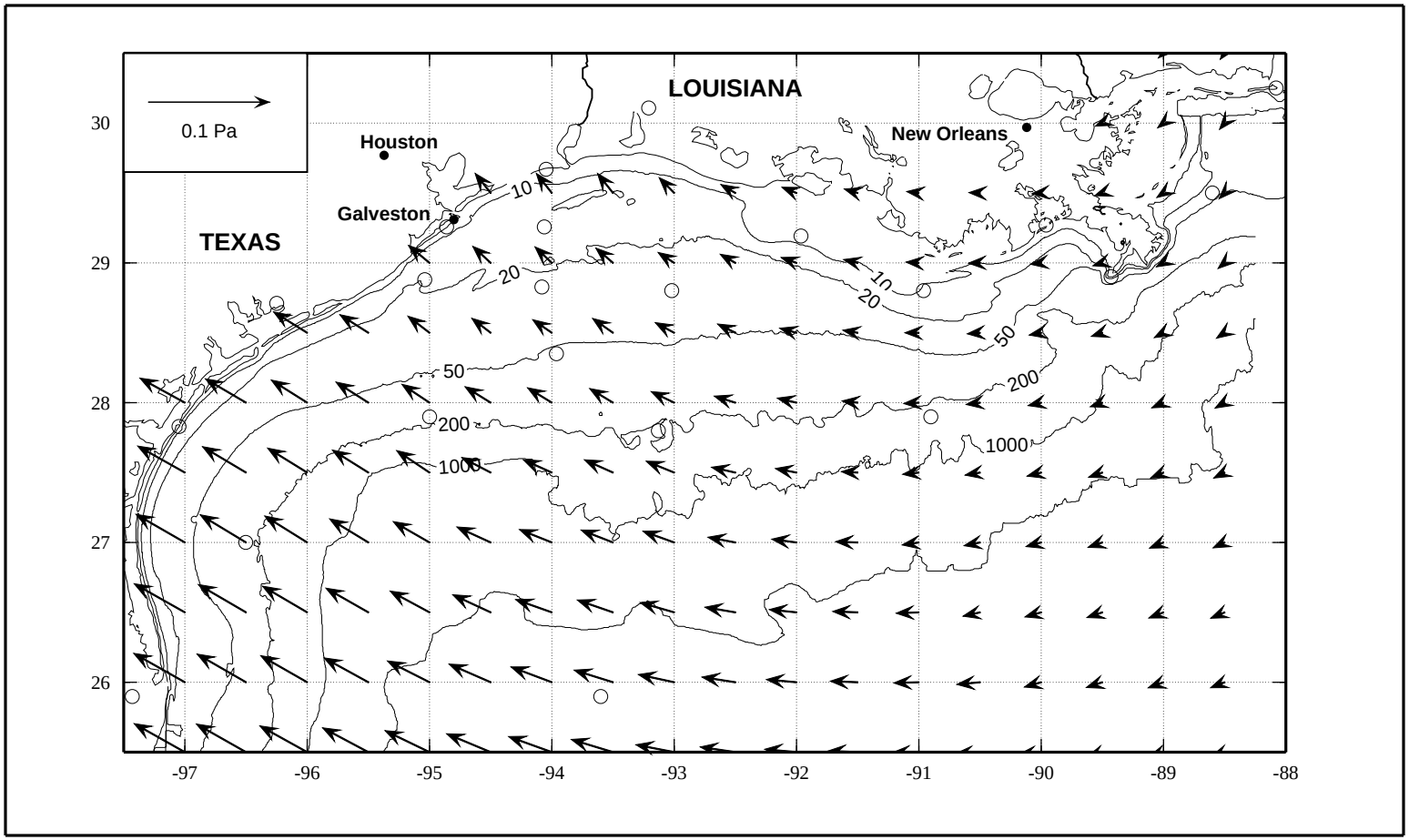
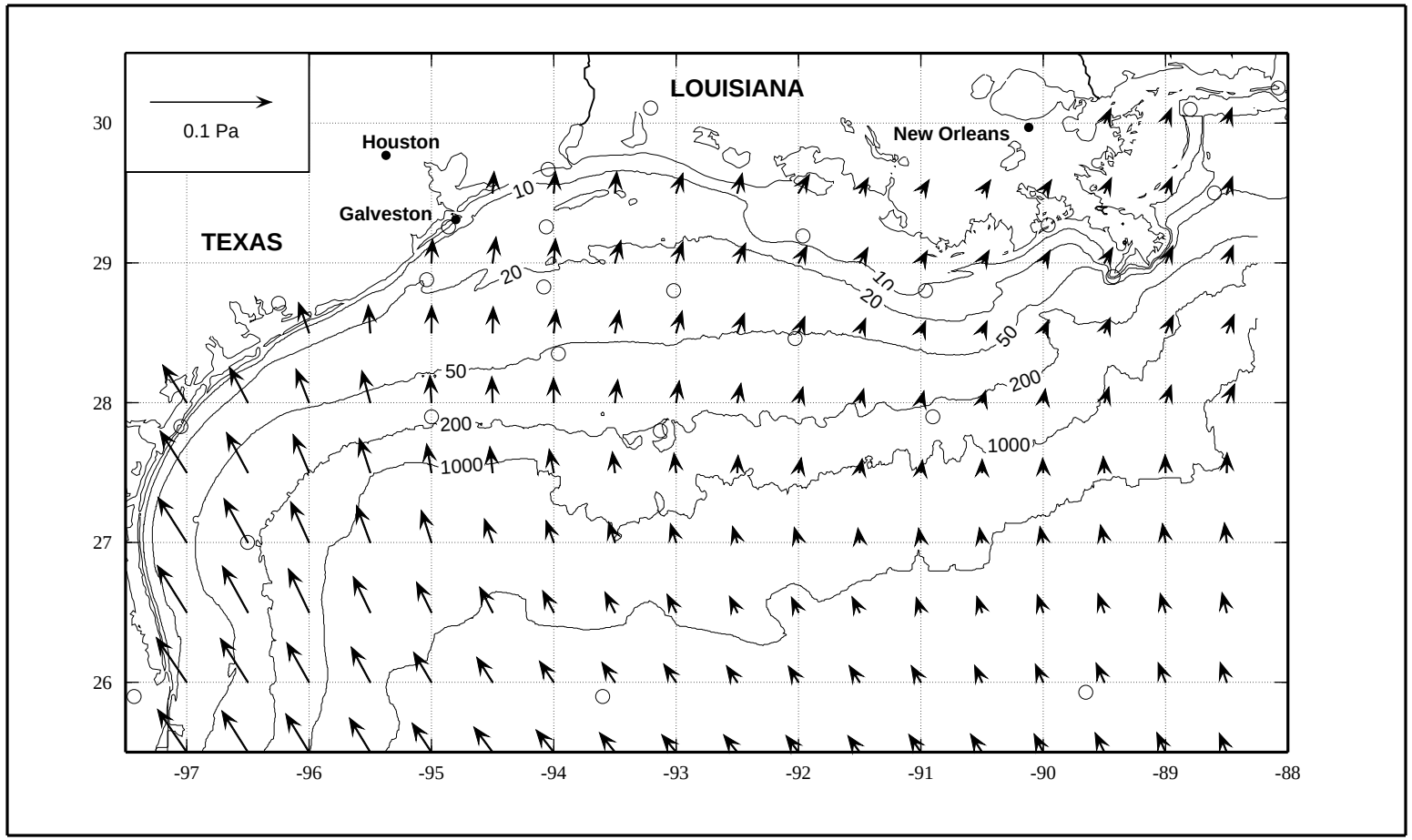


Figure 2.92.05. Monthly mean surface wind stress for May 1992.



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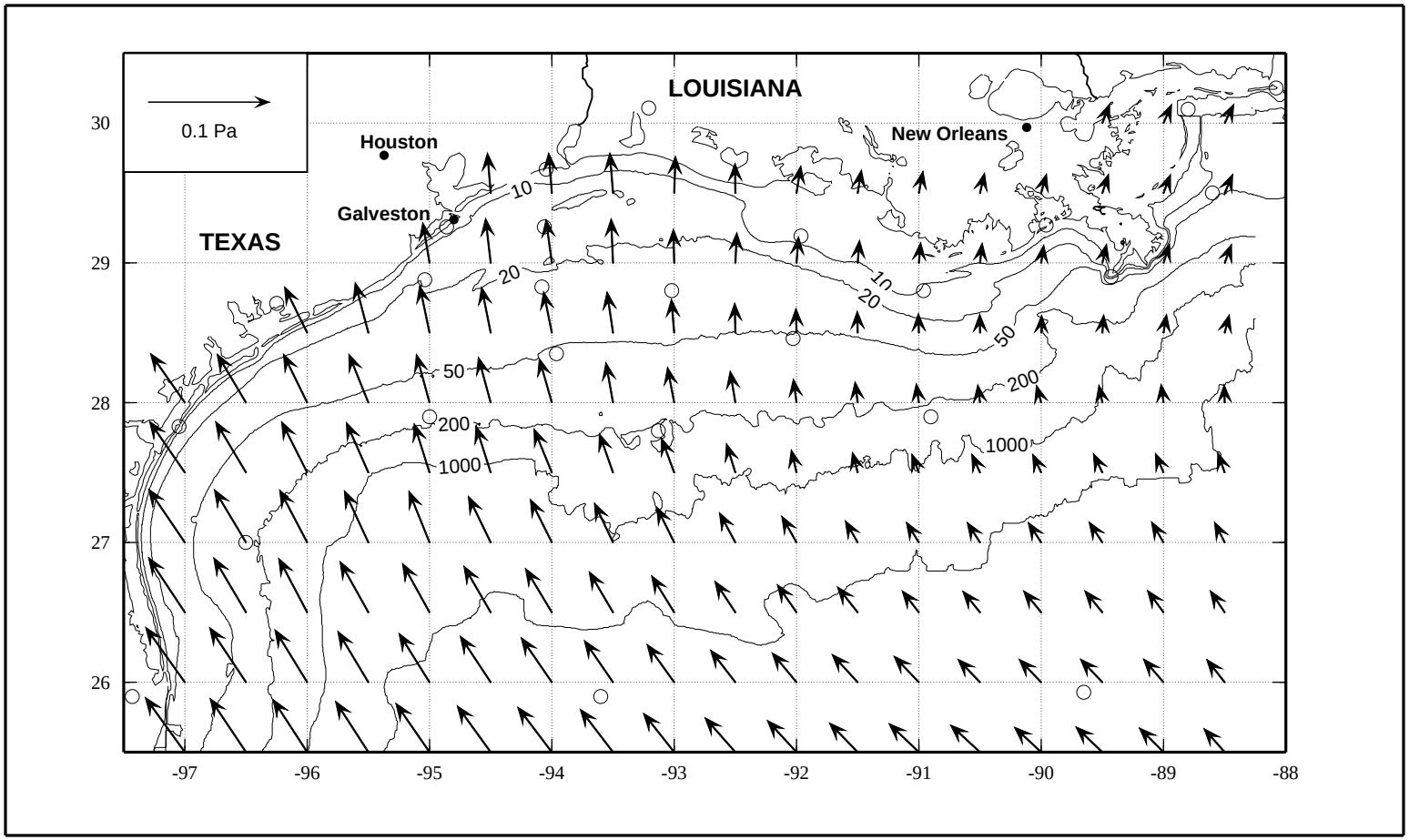


Figure 2.92.07. Monthly mean surface wind stress for July 1992.

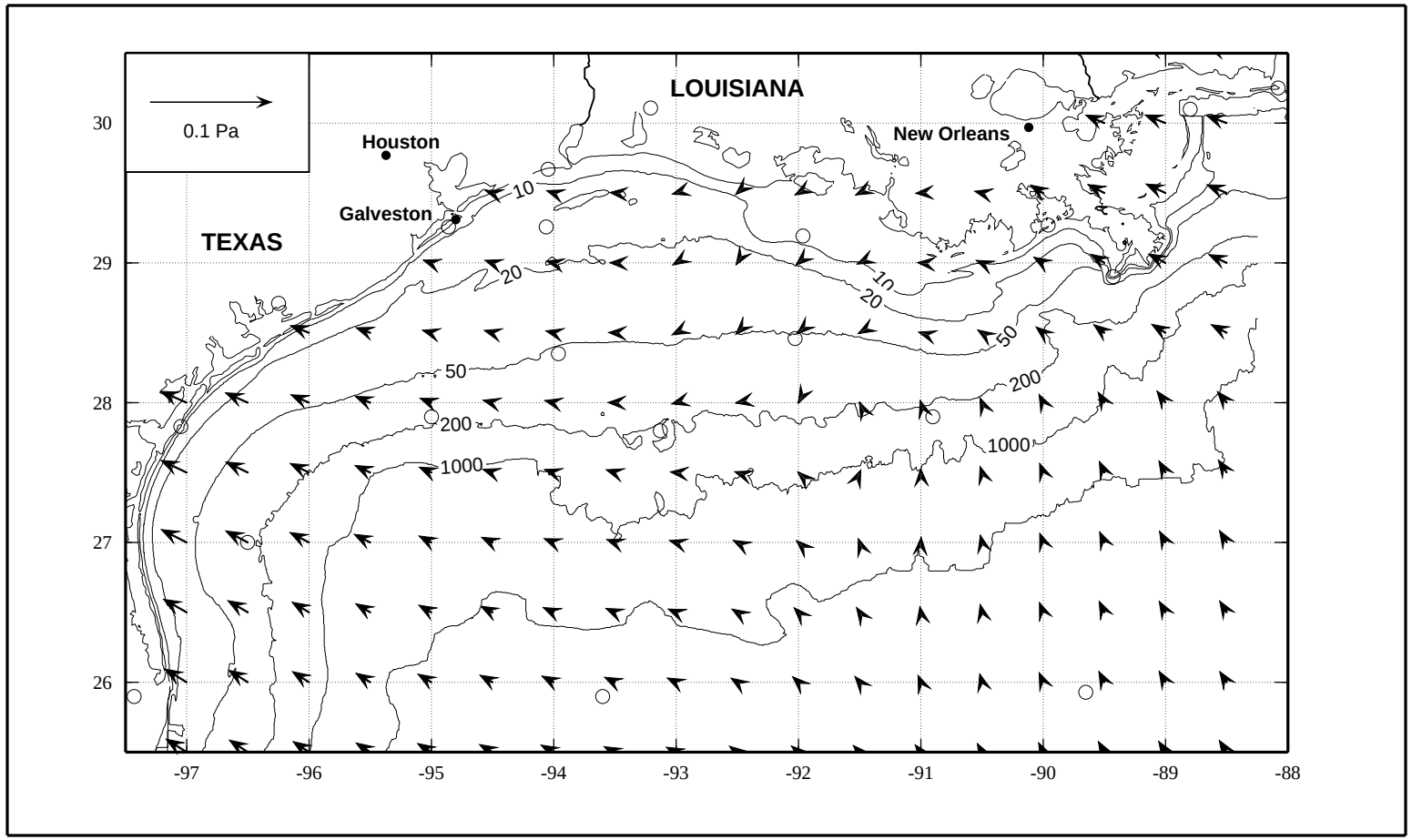


Figure 2.92.08. Monthly mean surface wind stress for August 1992.

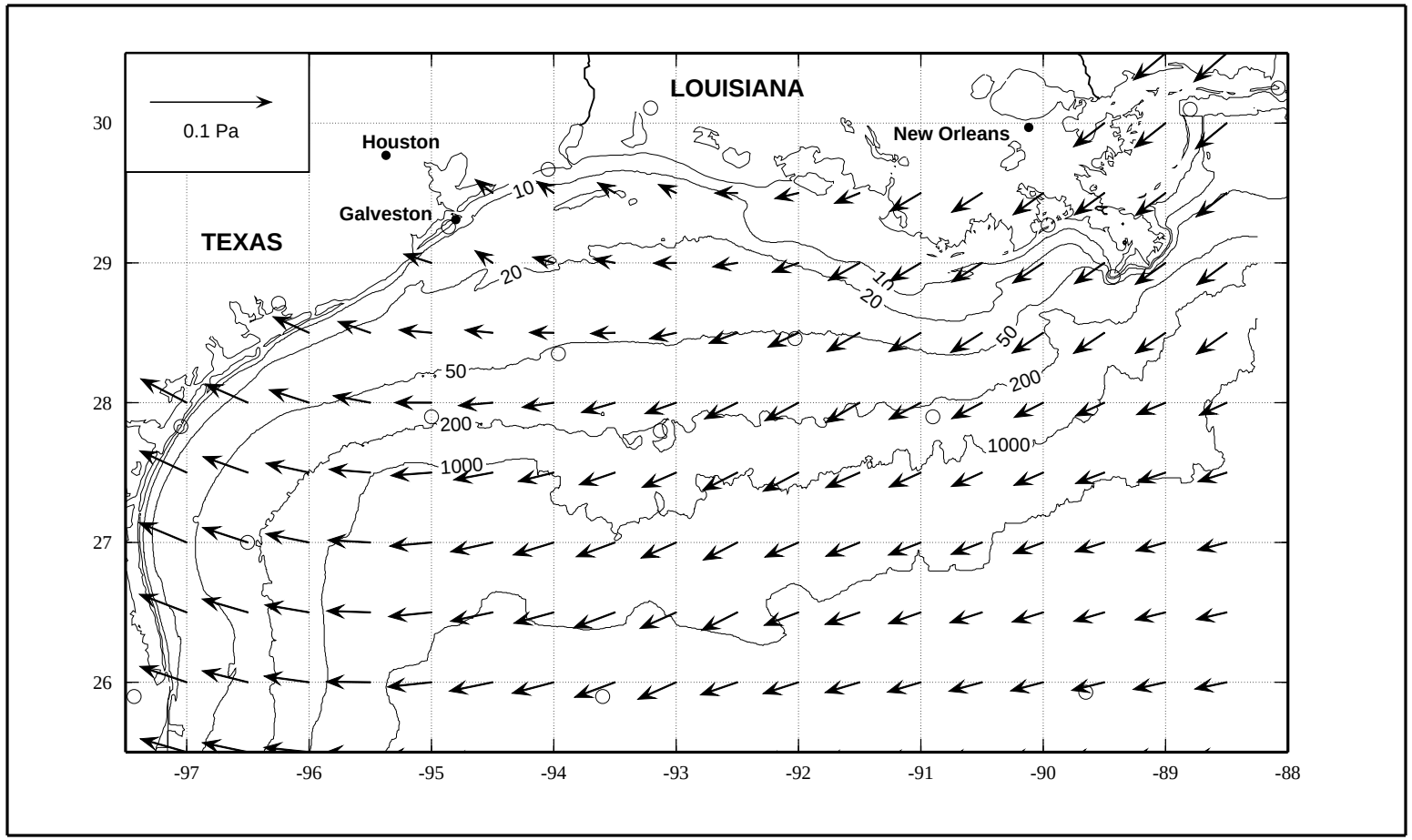
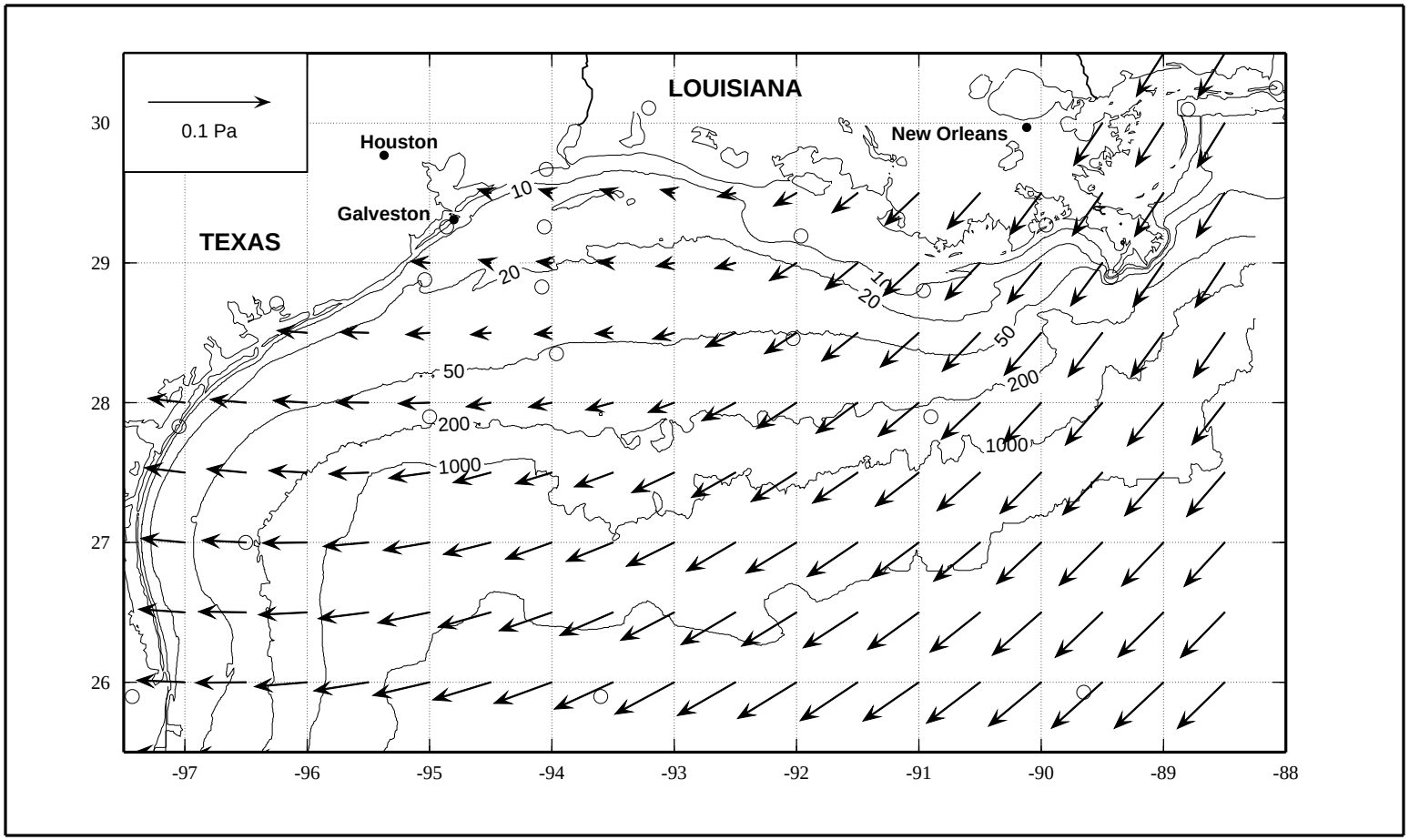


Figure 2.92.09. Monthly mean surface wind stress for September 1992.



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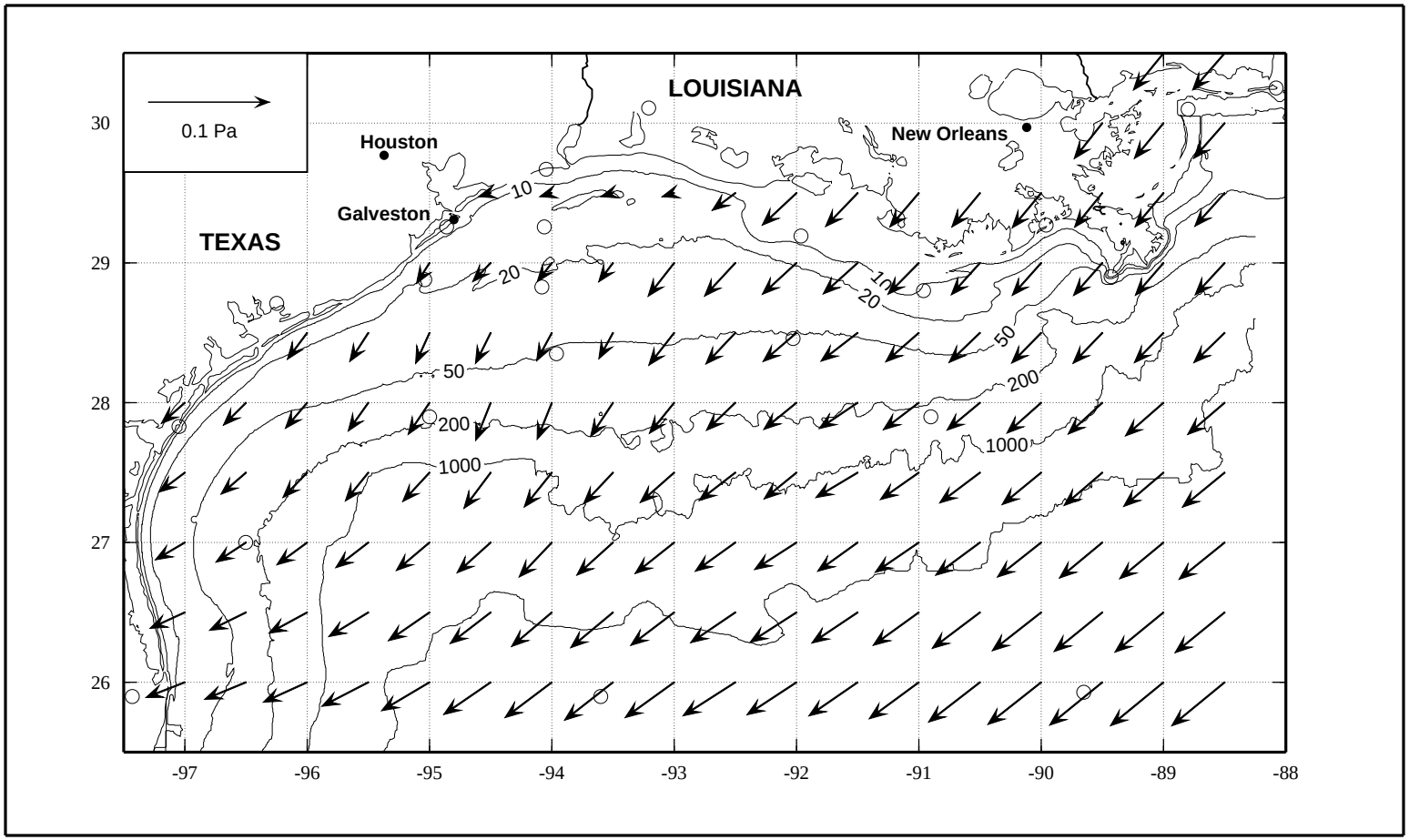


Figure 2.92.11. Monthly mean surface wind stress for November 1992.

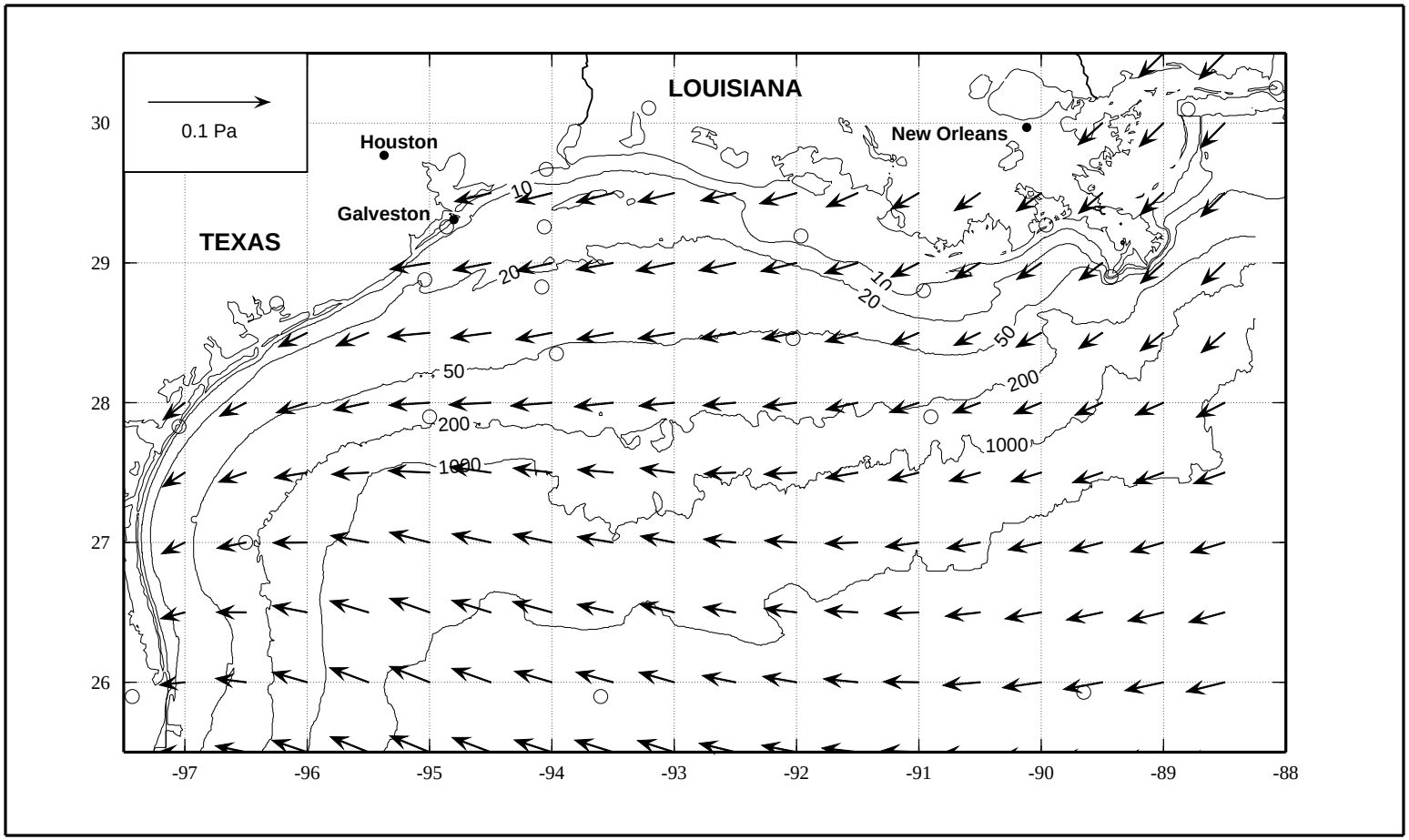


Figure 2.92.12. Monthly mean surface wind stress for December 1992.

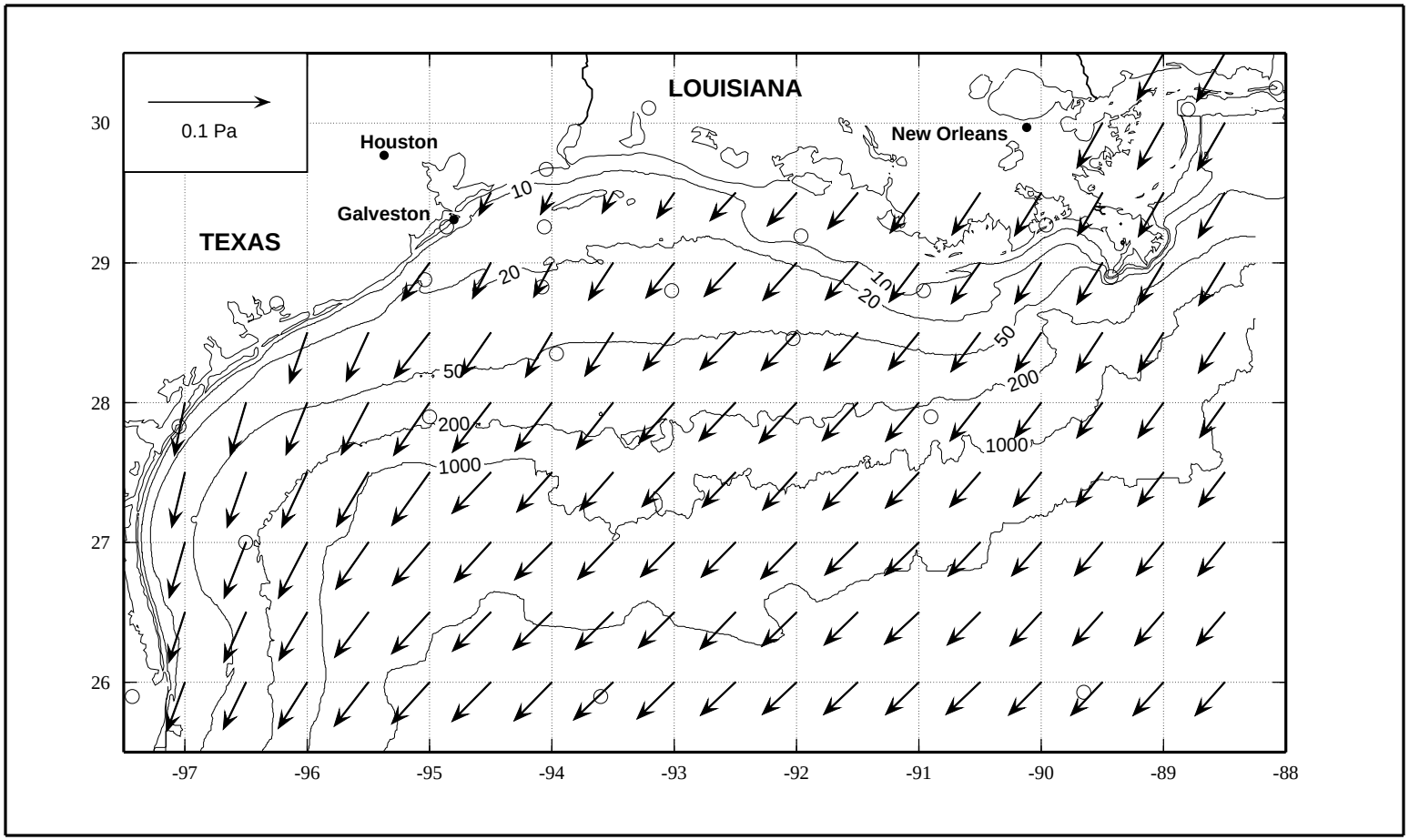


Figure 2.93.01. Monthly mean surface wind stress for January 1993.

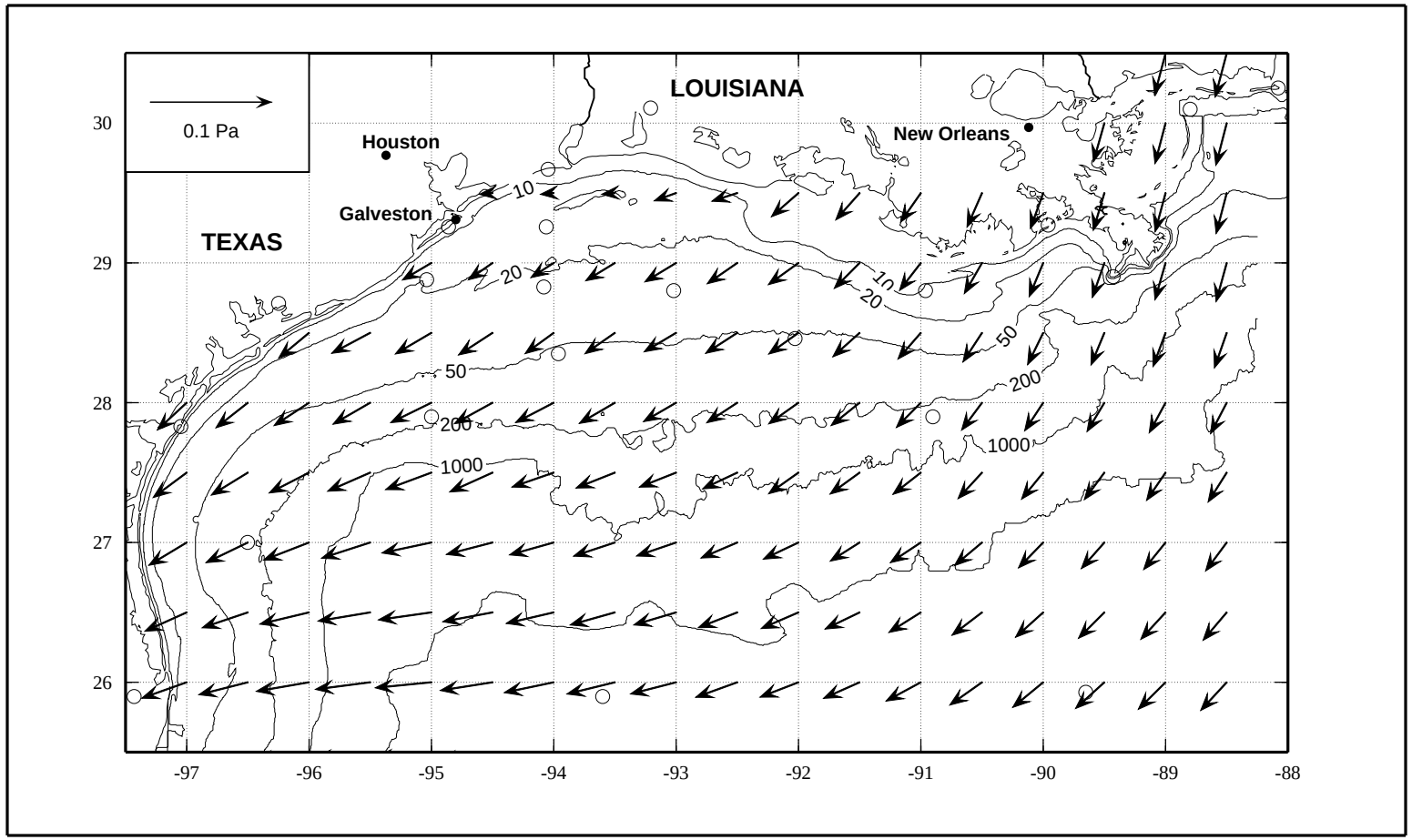


Figure 2.93.02. Monthly mean surface wind stress for February 1993.

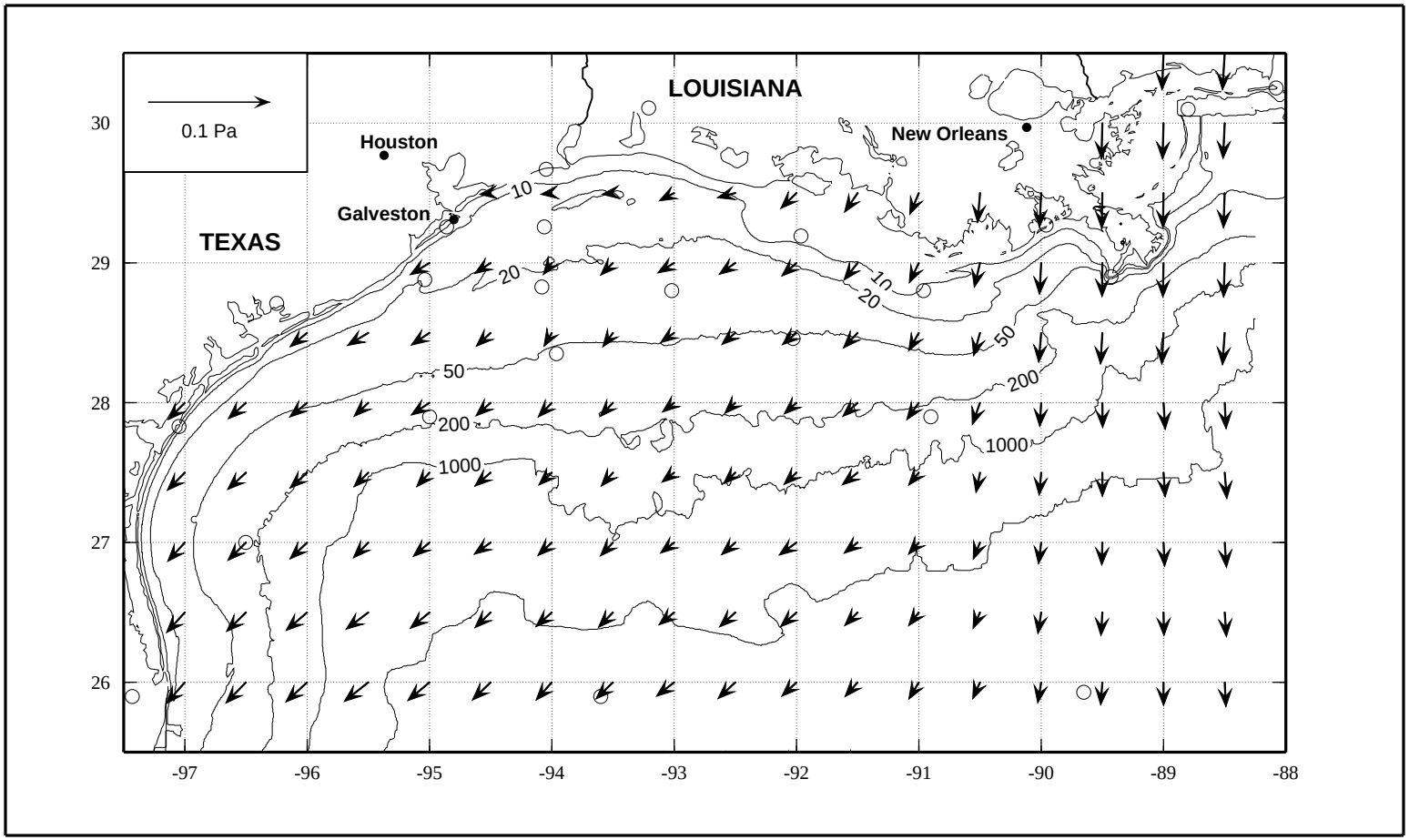


Figure 2.93.03. Monthly mean surface wind stress for March 1993.

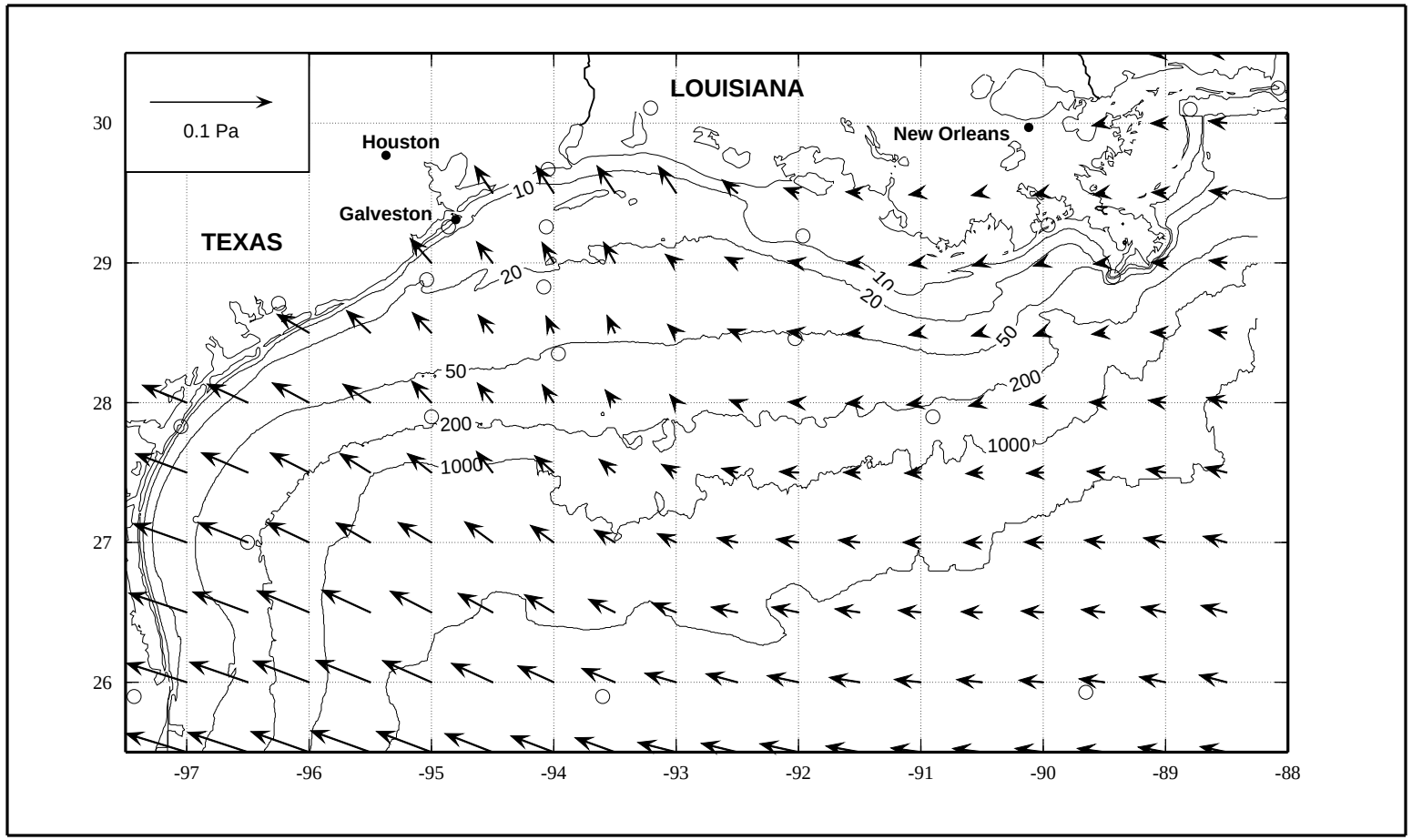


Figure 2.93.04. Monthly mean surface wind stress for April 1993.

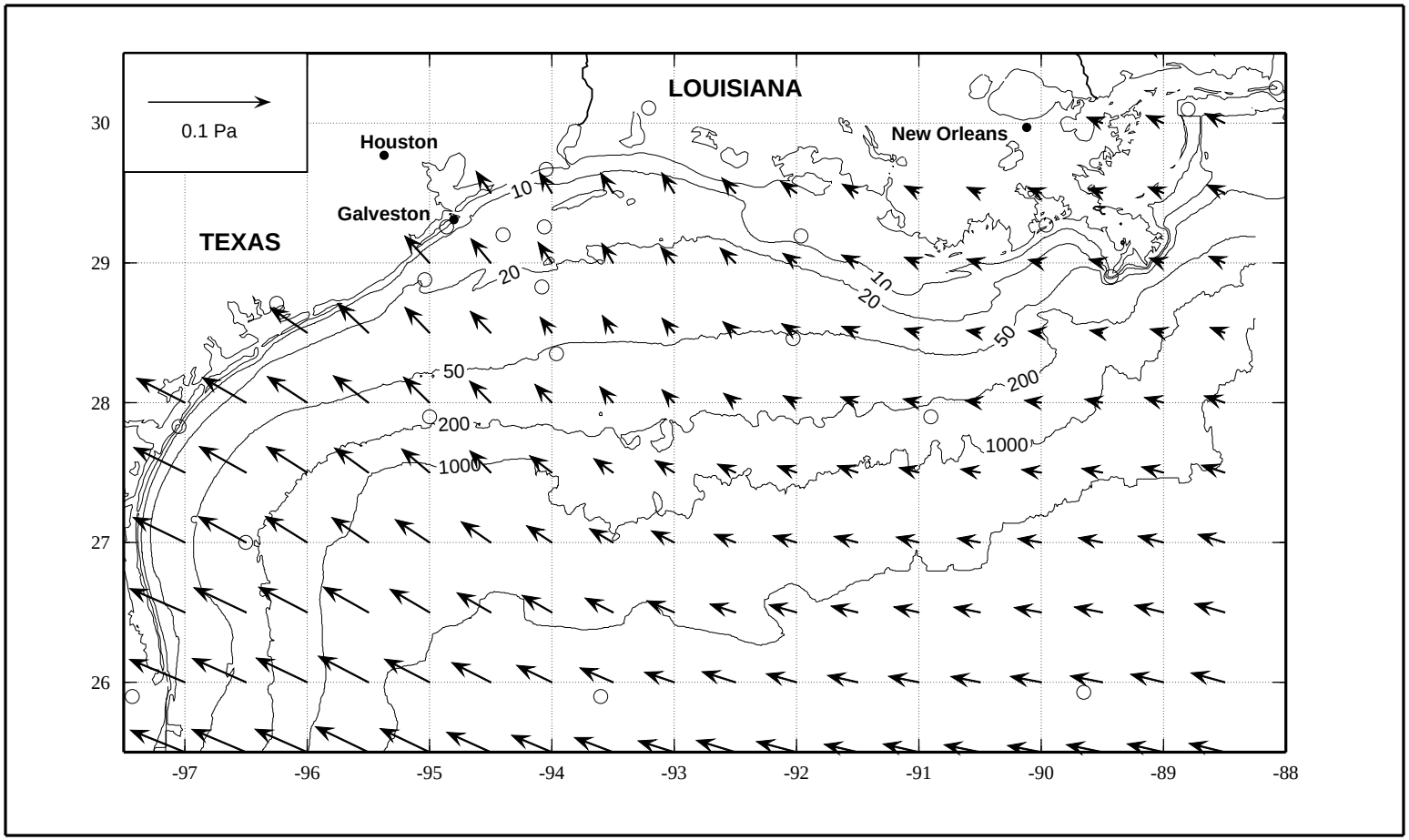


Figure 2.93.05. Monthly mean surface wind stress for May 1993.

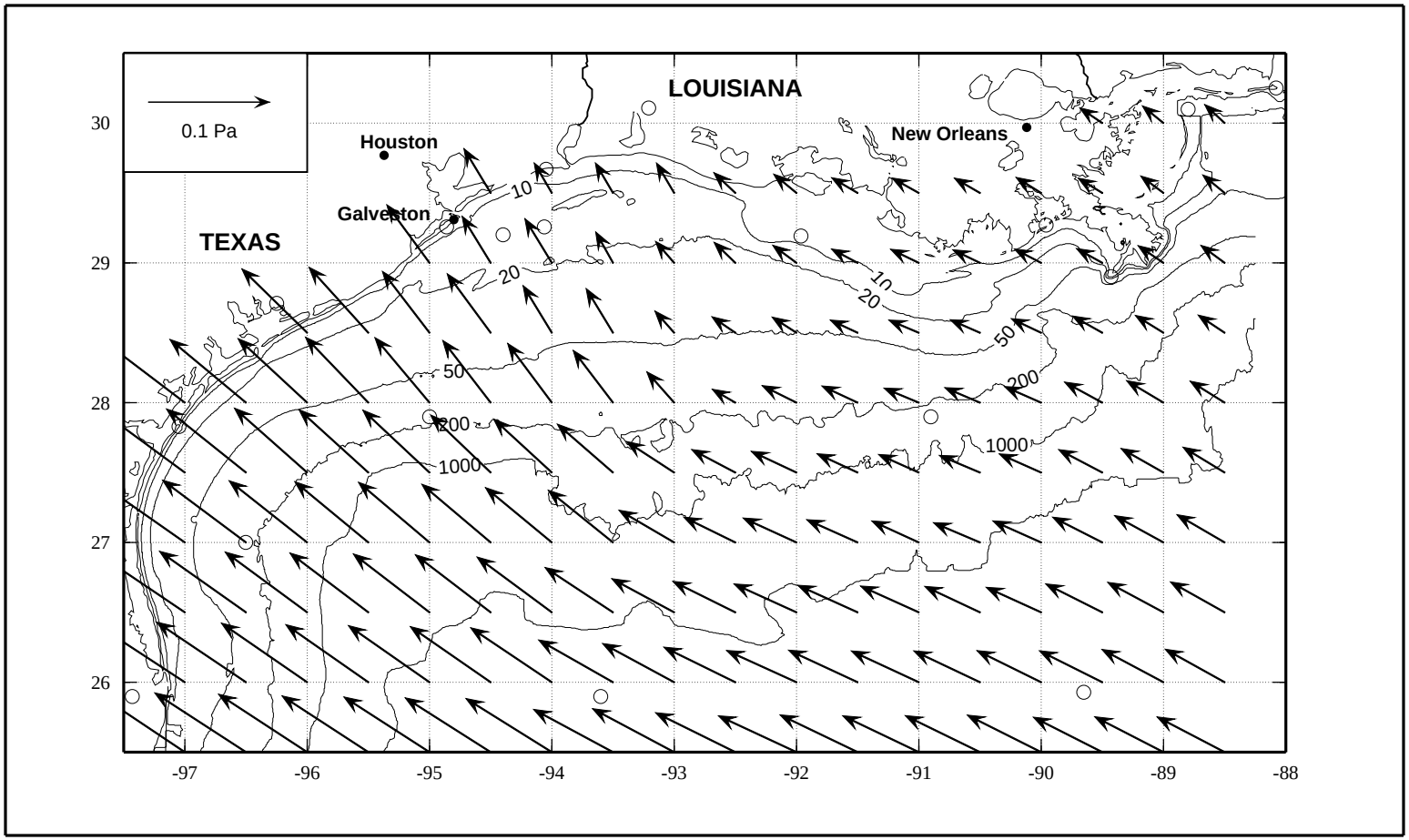


Figure 2.93.06. Monthly mean surface wind stress for June 1993.

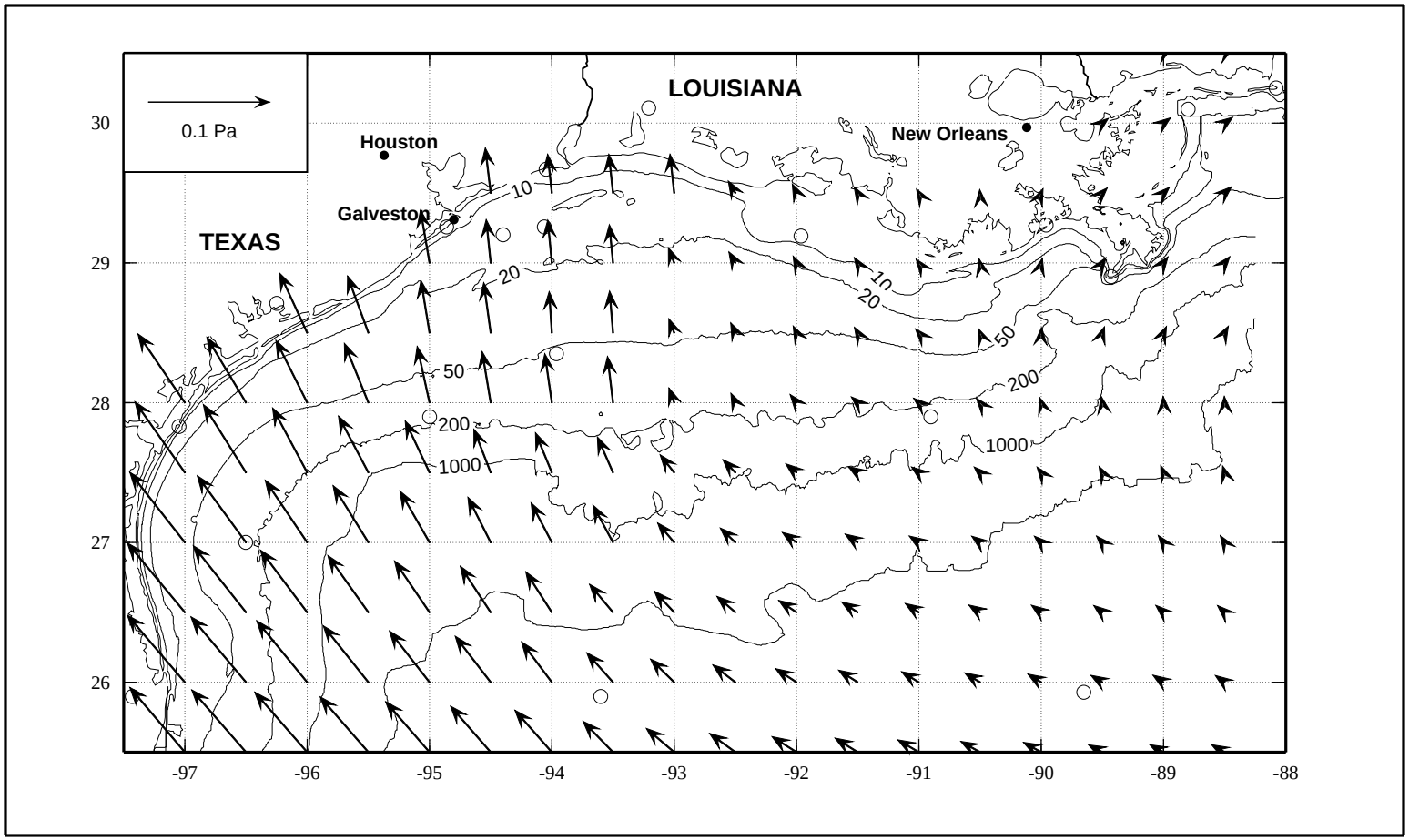


Figure 2.93.07. Monthly mean surface wind stress for July 1993.

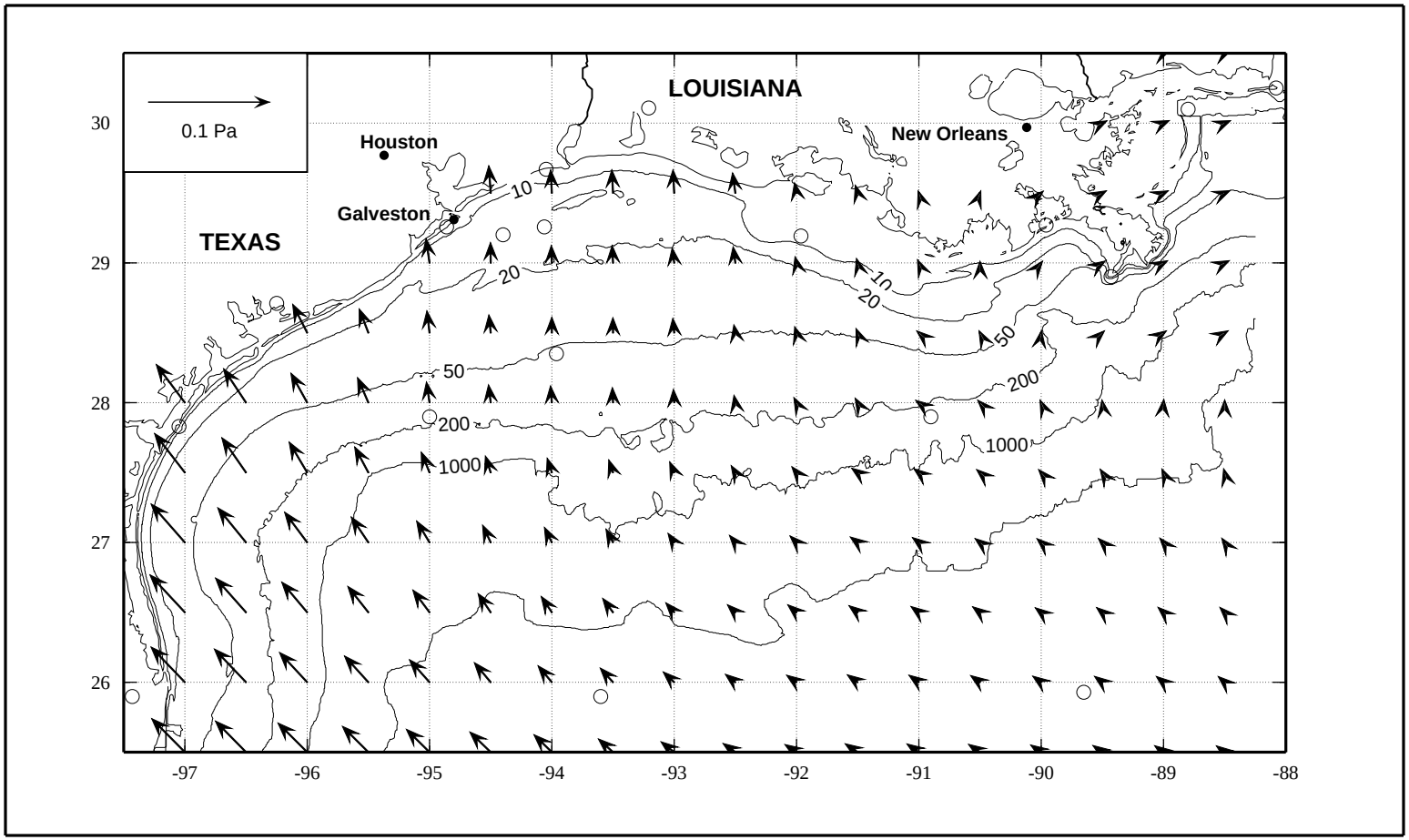


Figure 2.93.08. Monthly mean surface wind stress for August 1993.

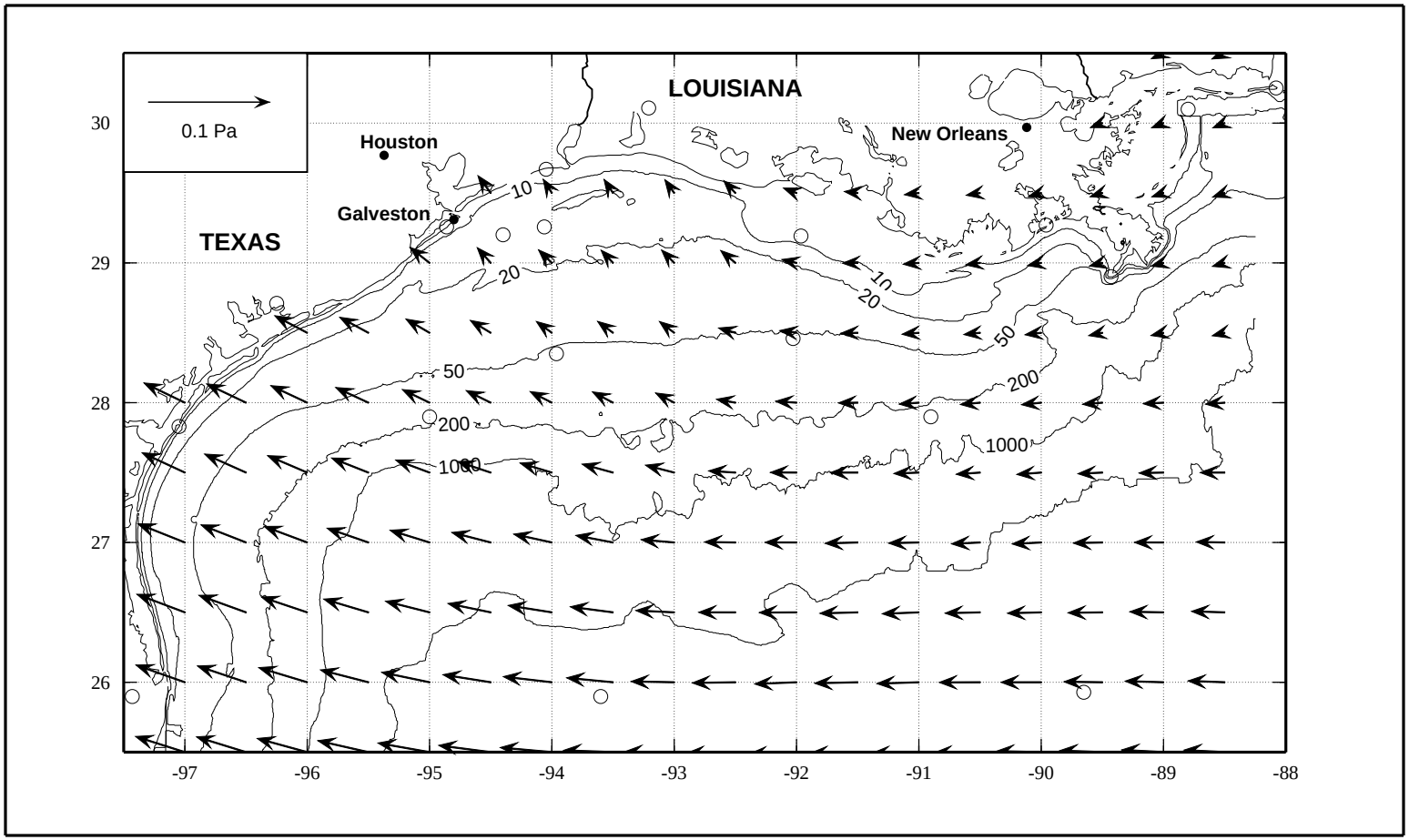


Figure 2.93.09. Monthly mean surface wind stress for September 1993.

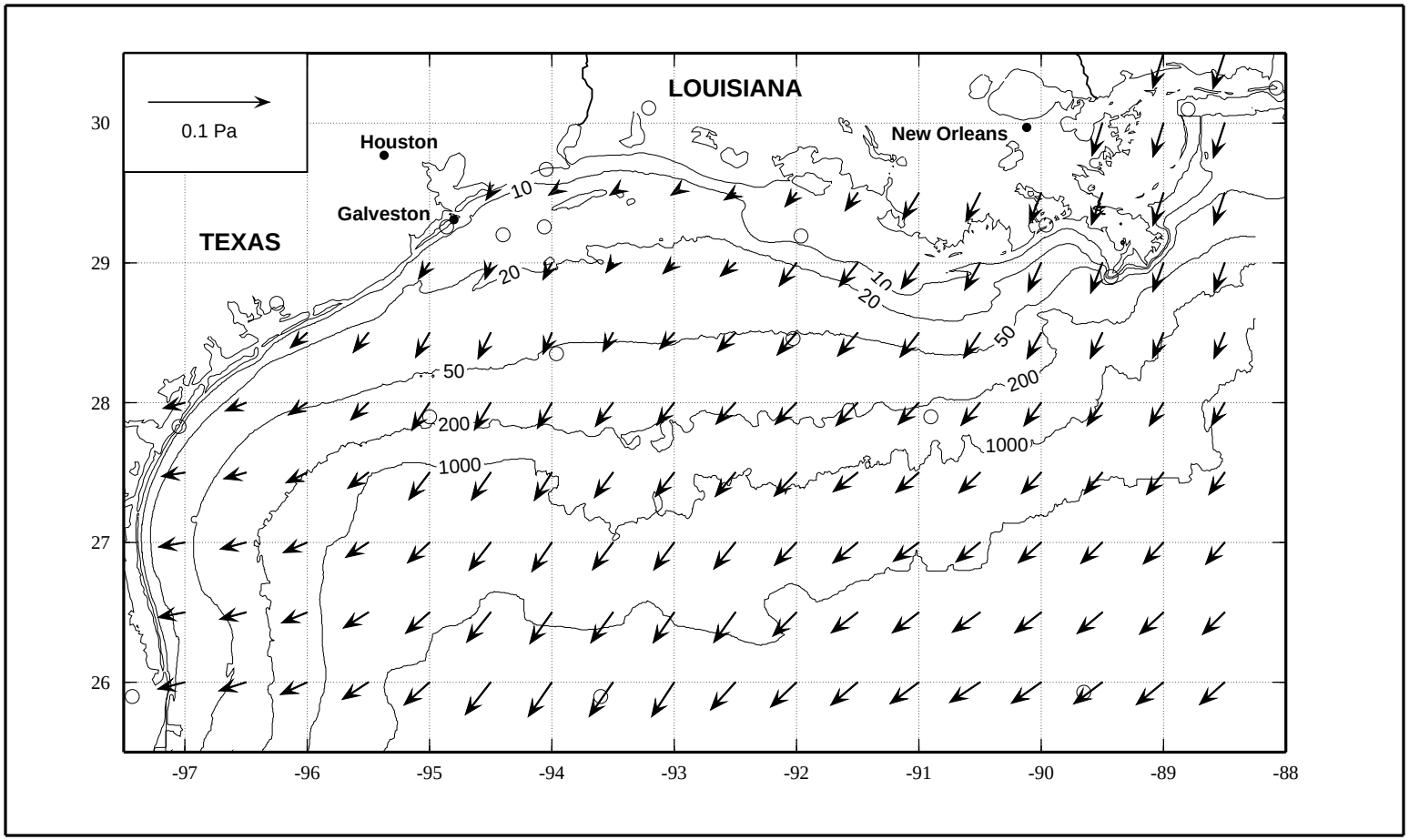


Figure 2.93.10. Monthly mean surface wind stress for October 1993.

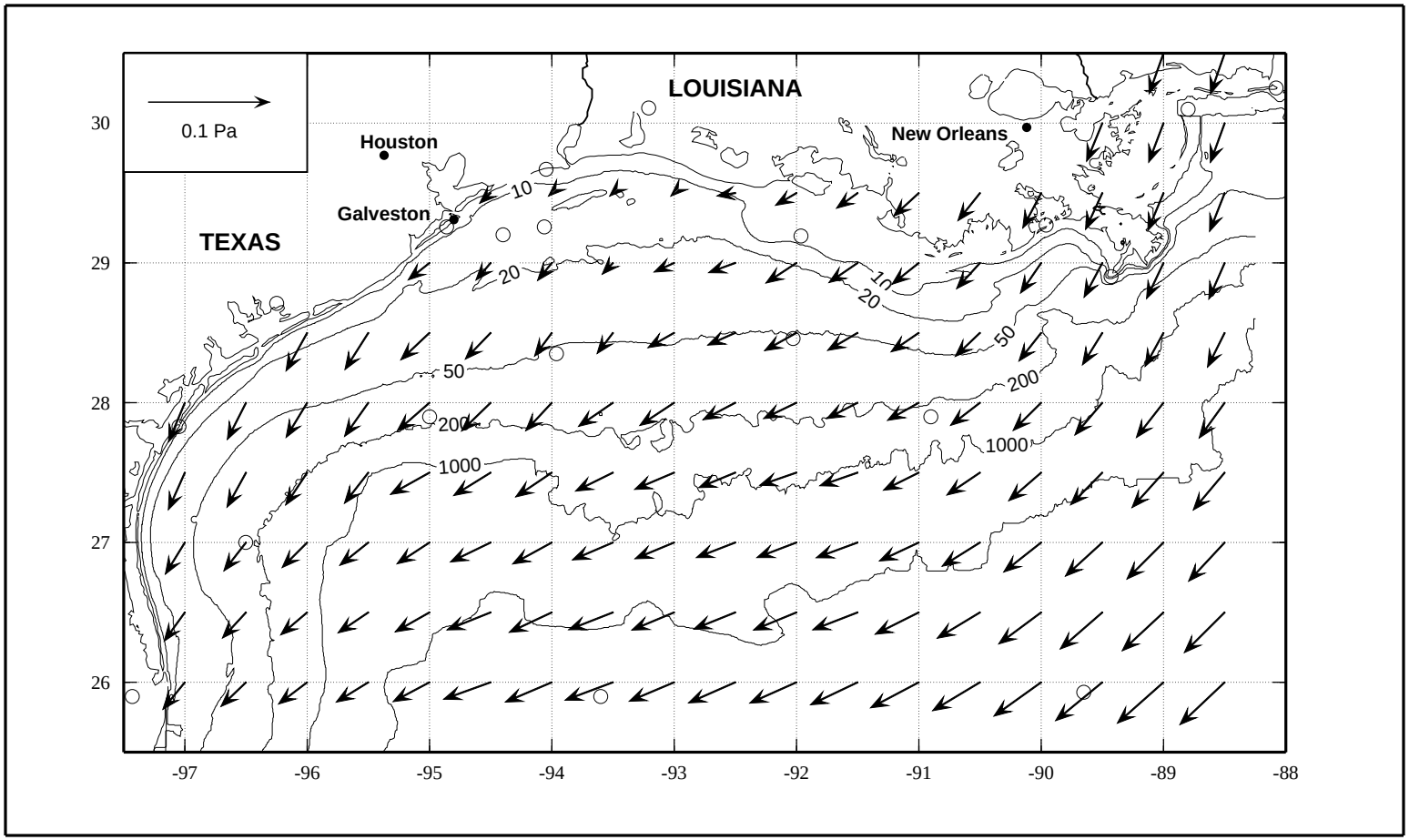
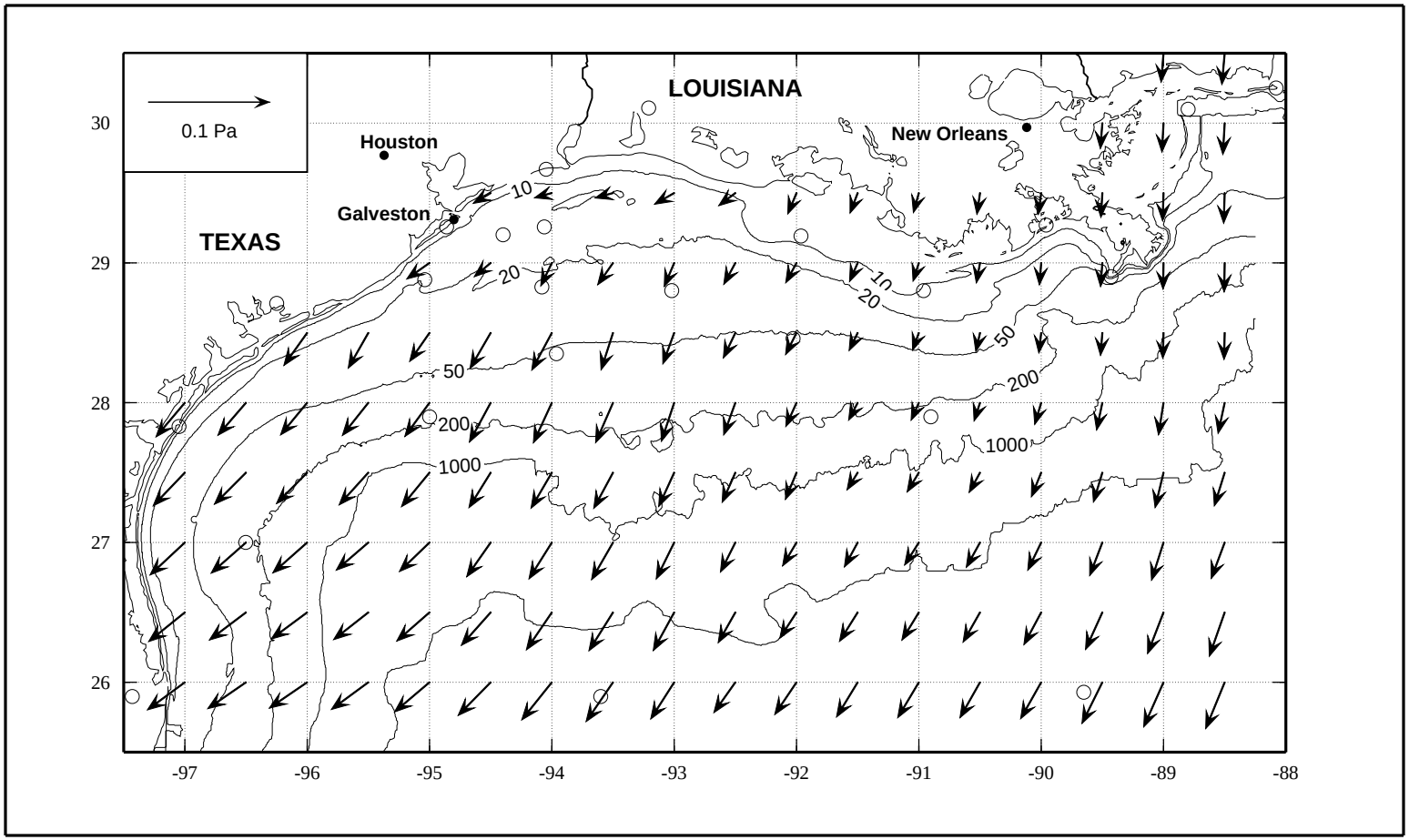


Figure 2.93.11. Monthly mean surface wind stress for November 1993.



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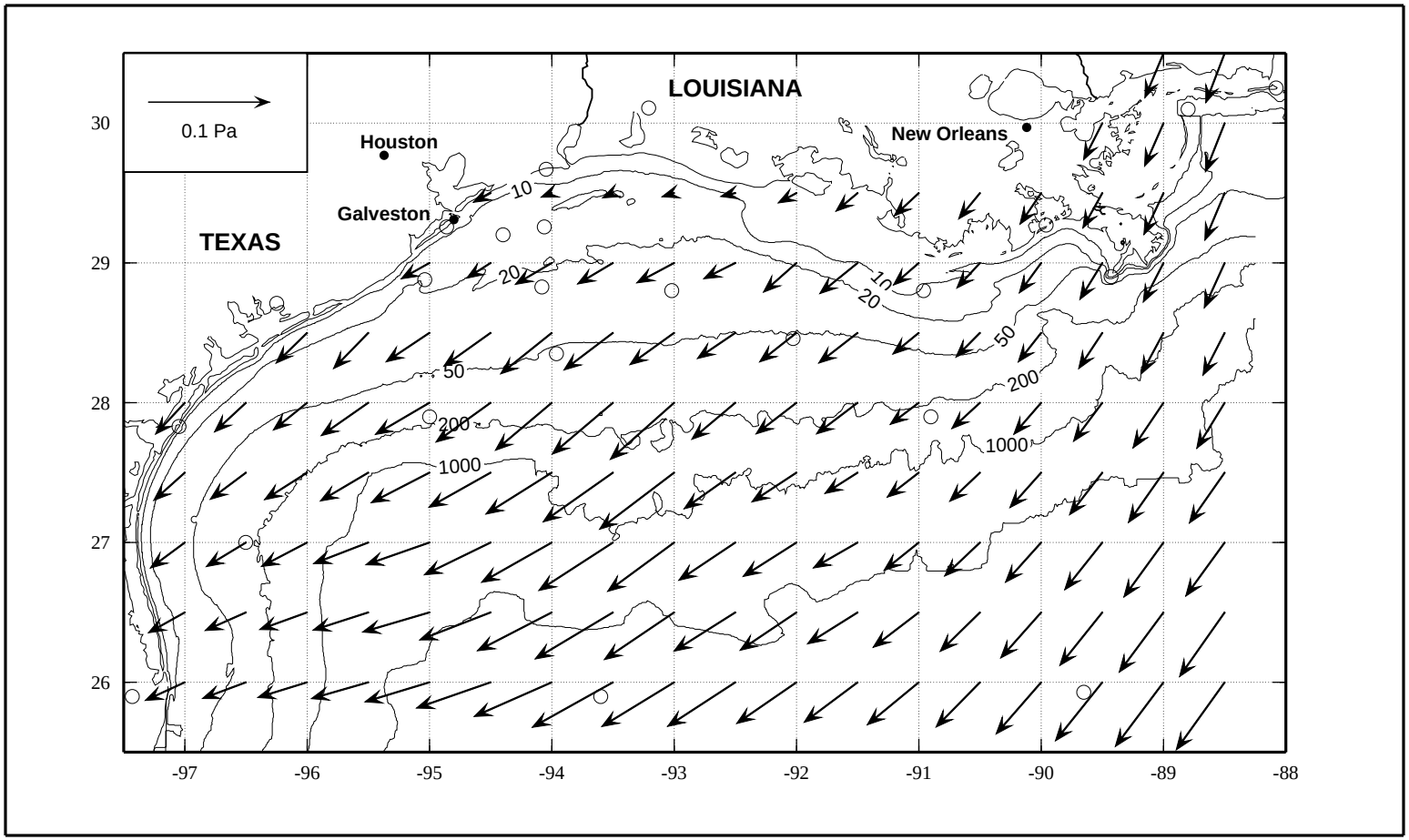

Figure 2.94.01. Monthly mean surface wind stress for January 1994.

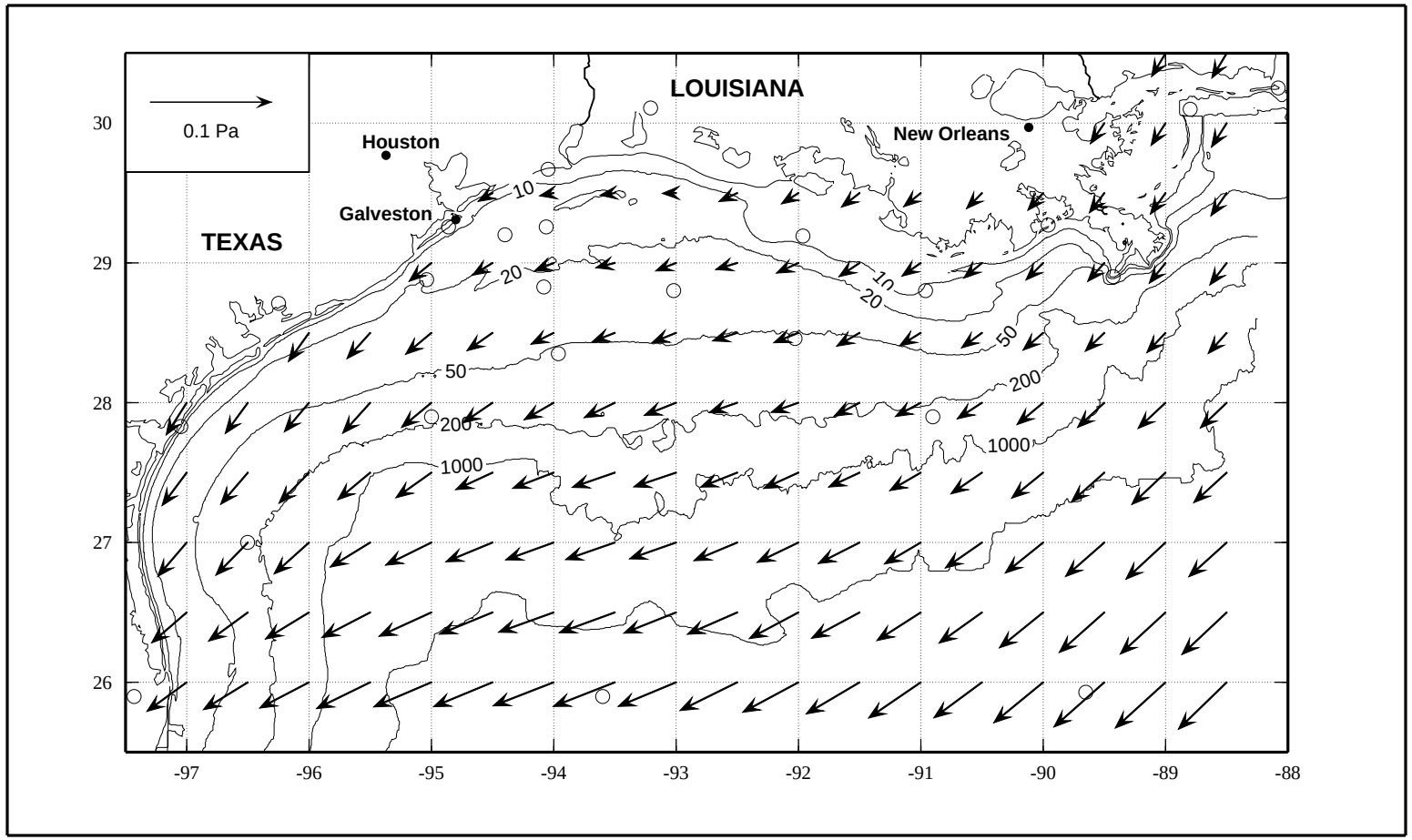

Figure 2.94.02. Monthly mean surface wind stress for February 1994.

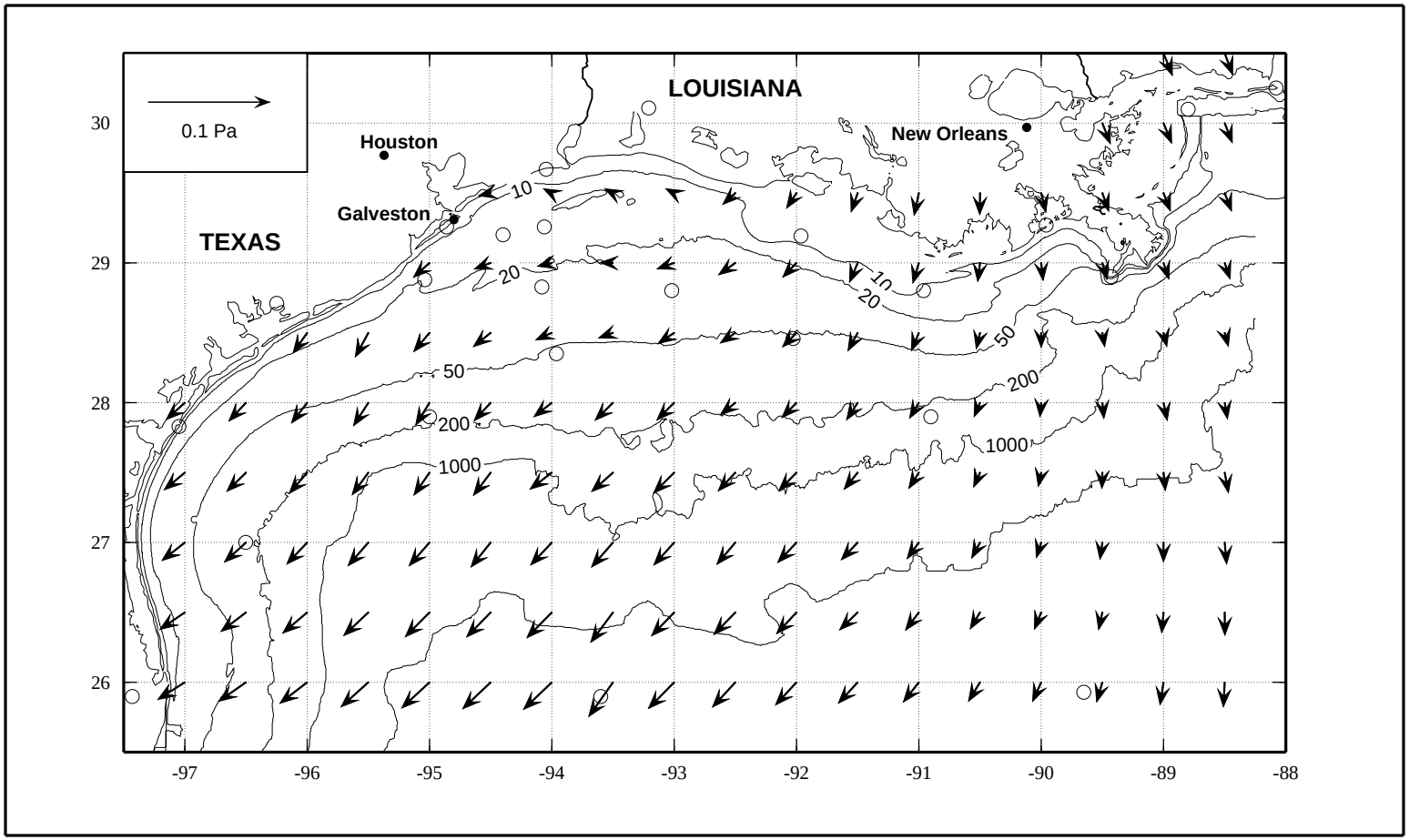

Figure 2.94.03. Monthly mean surface wind stress for March 1994.

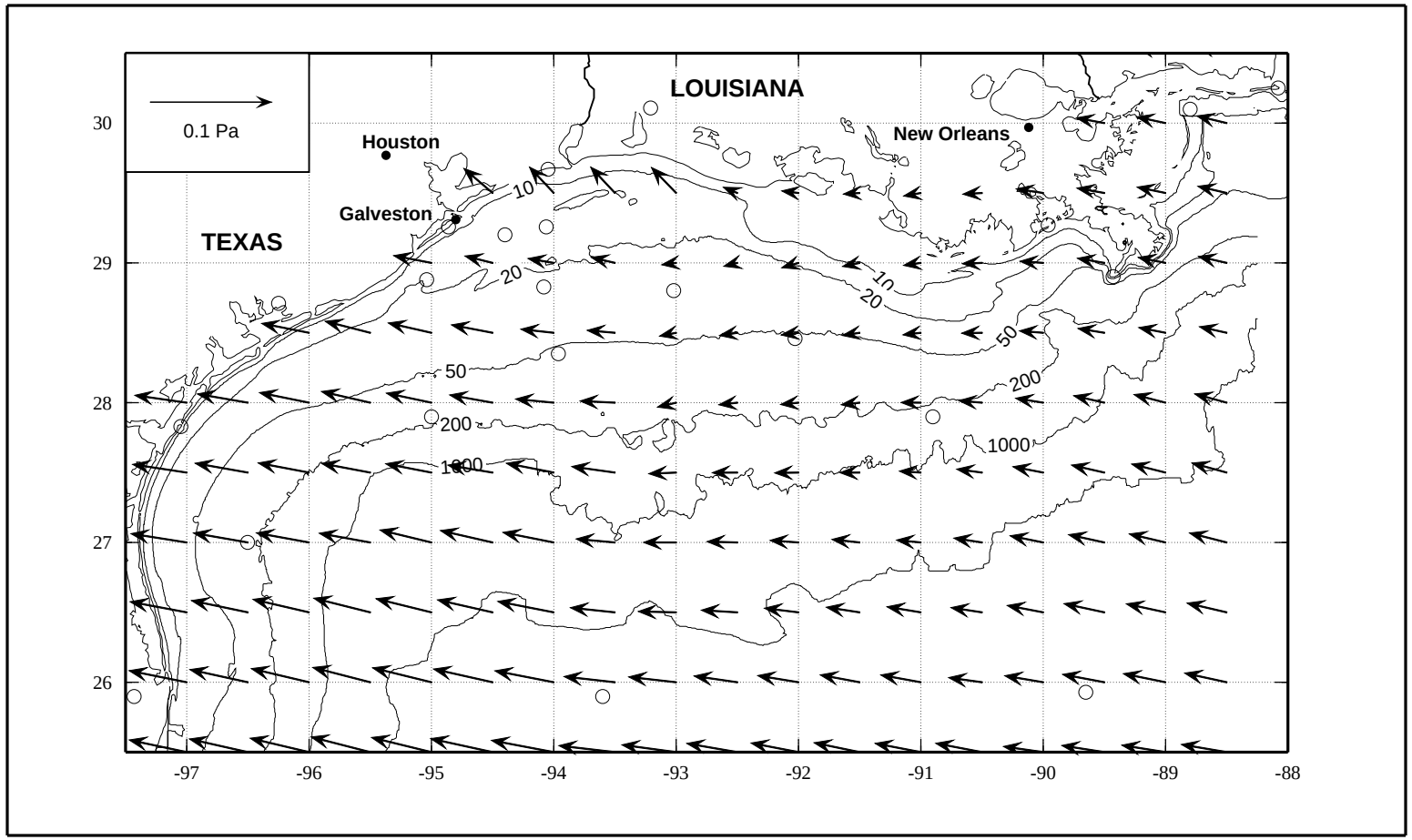

Figure 2.94.04. Monthly mean surface wind stress for April 1994.

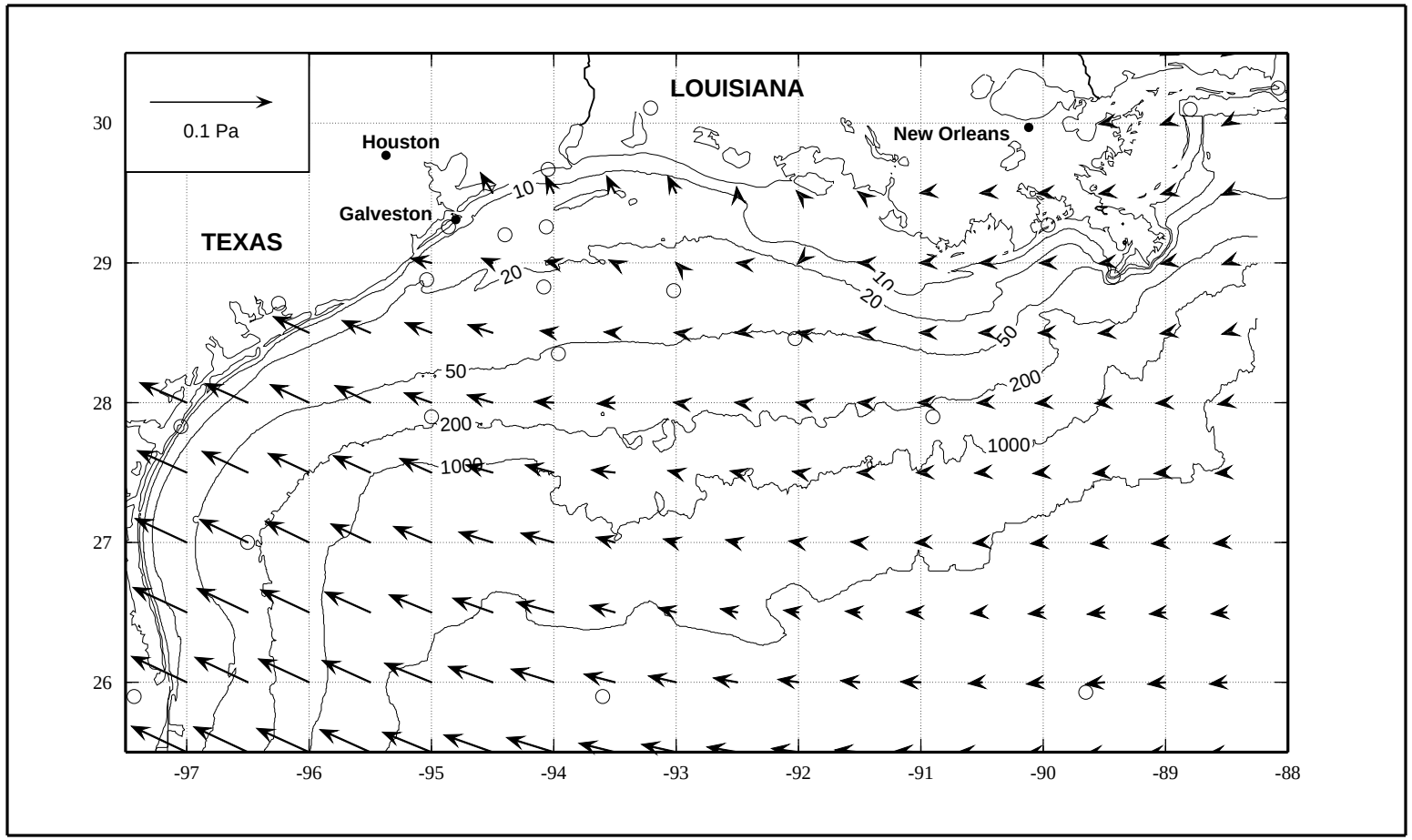

Figure 2.94.05. Monthly mean surface wind stress for May 1994.

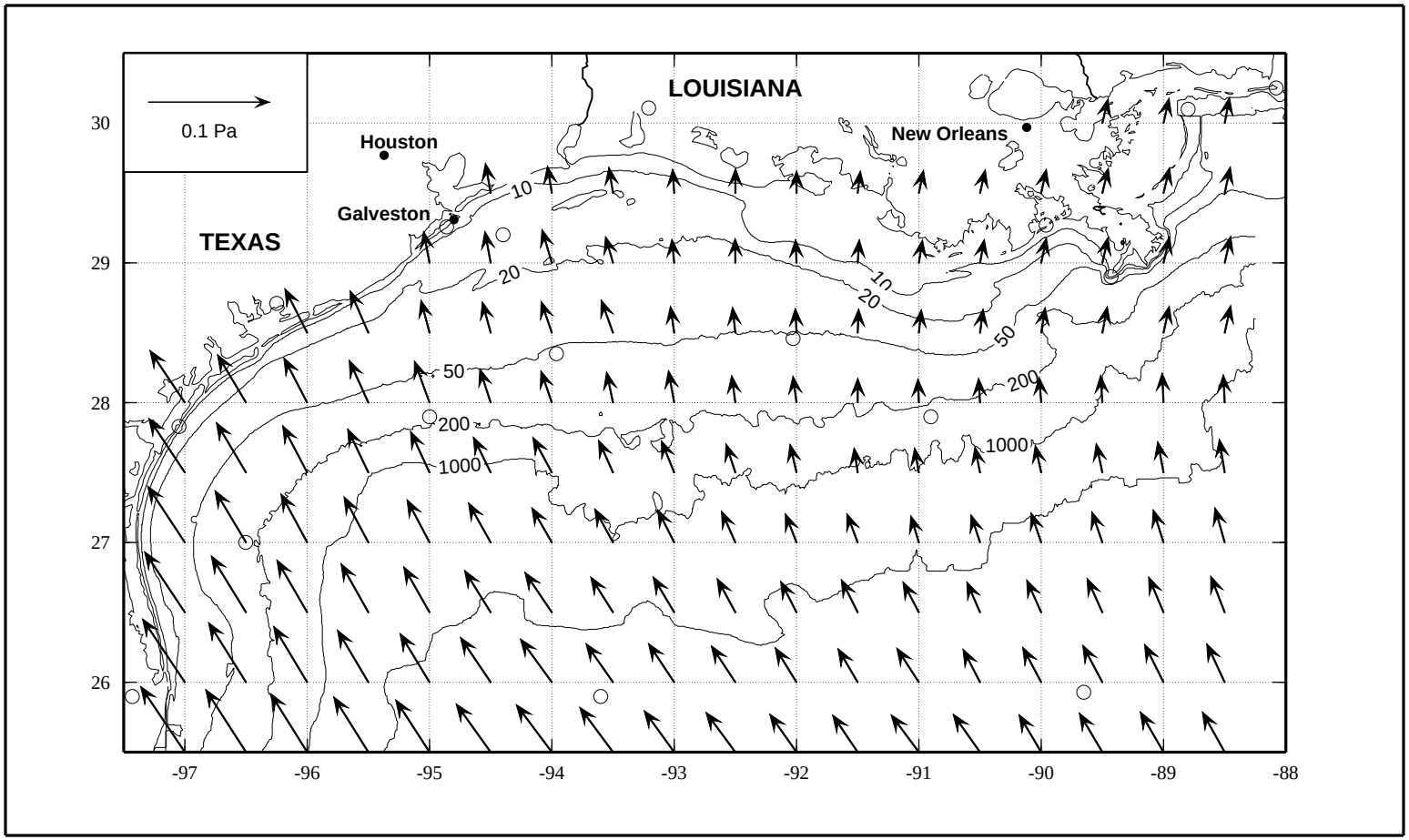

Figure 2.94.06. Monthly mean surface wind stress for June 1994.

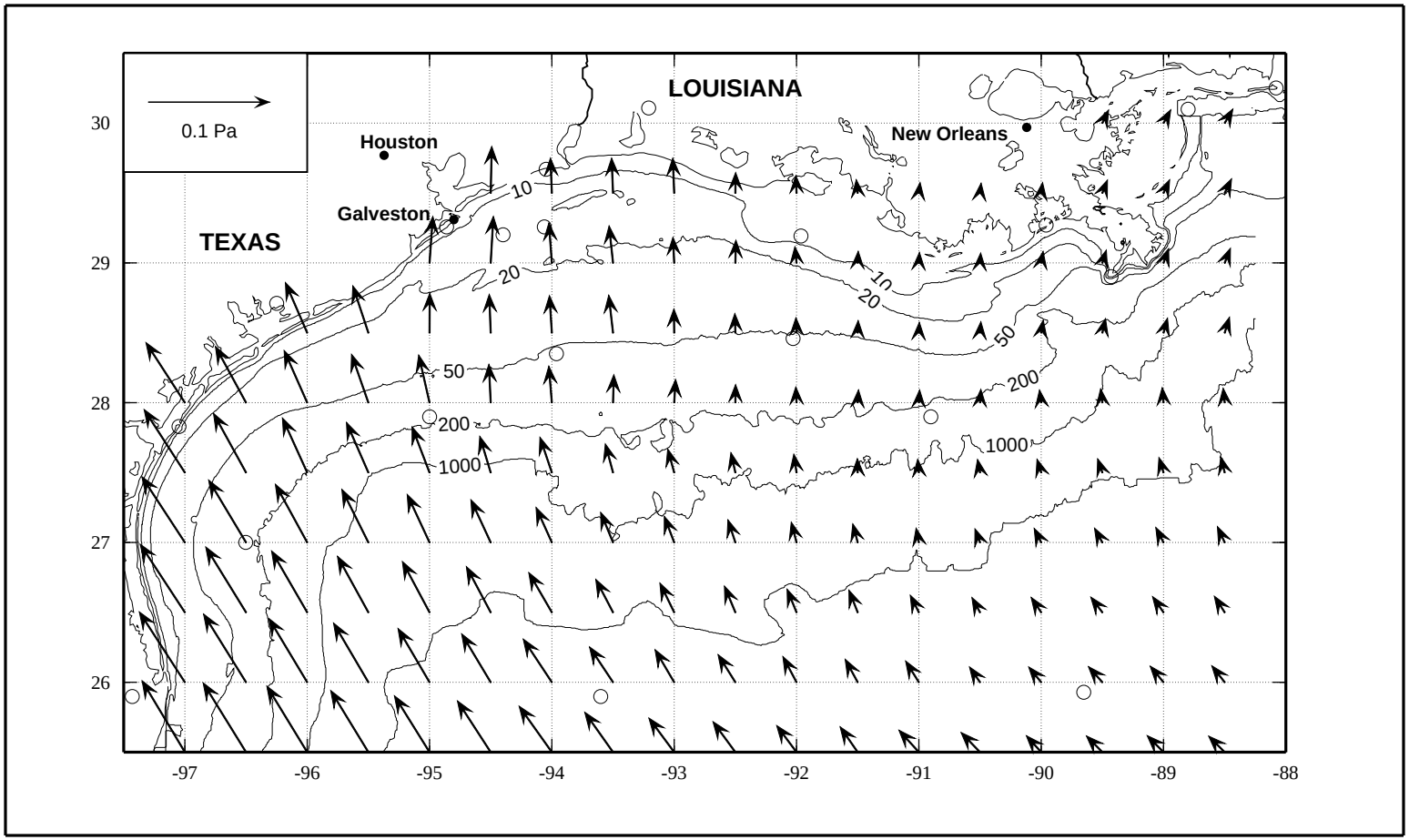

Figure 2.94.07. Monthly mean surface wind stress for July 1994.

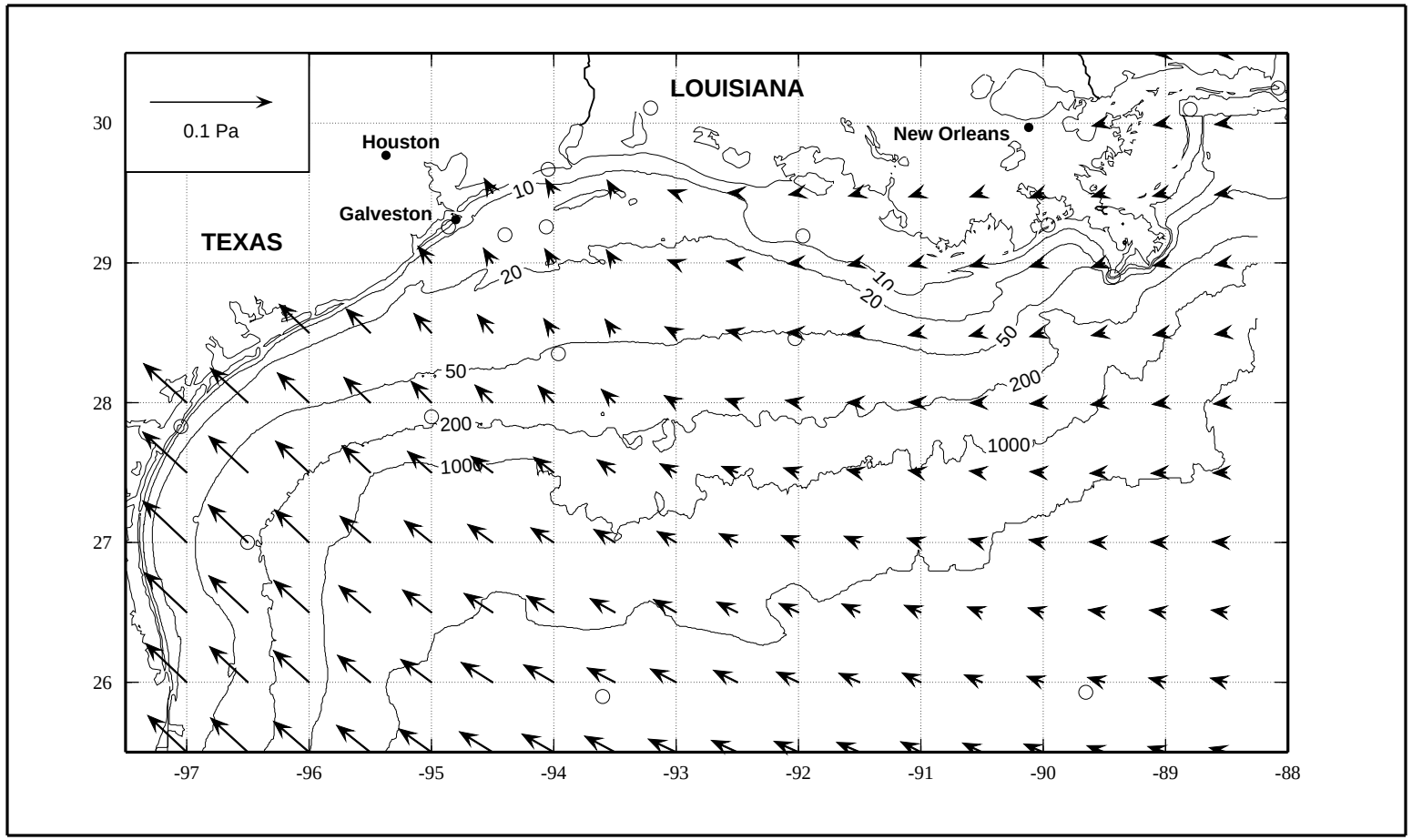

Figure 2.94.08. Monthly mean surface wind stress for August 1994.

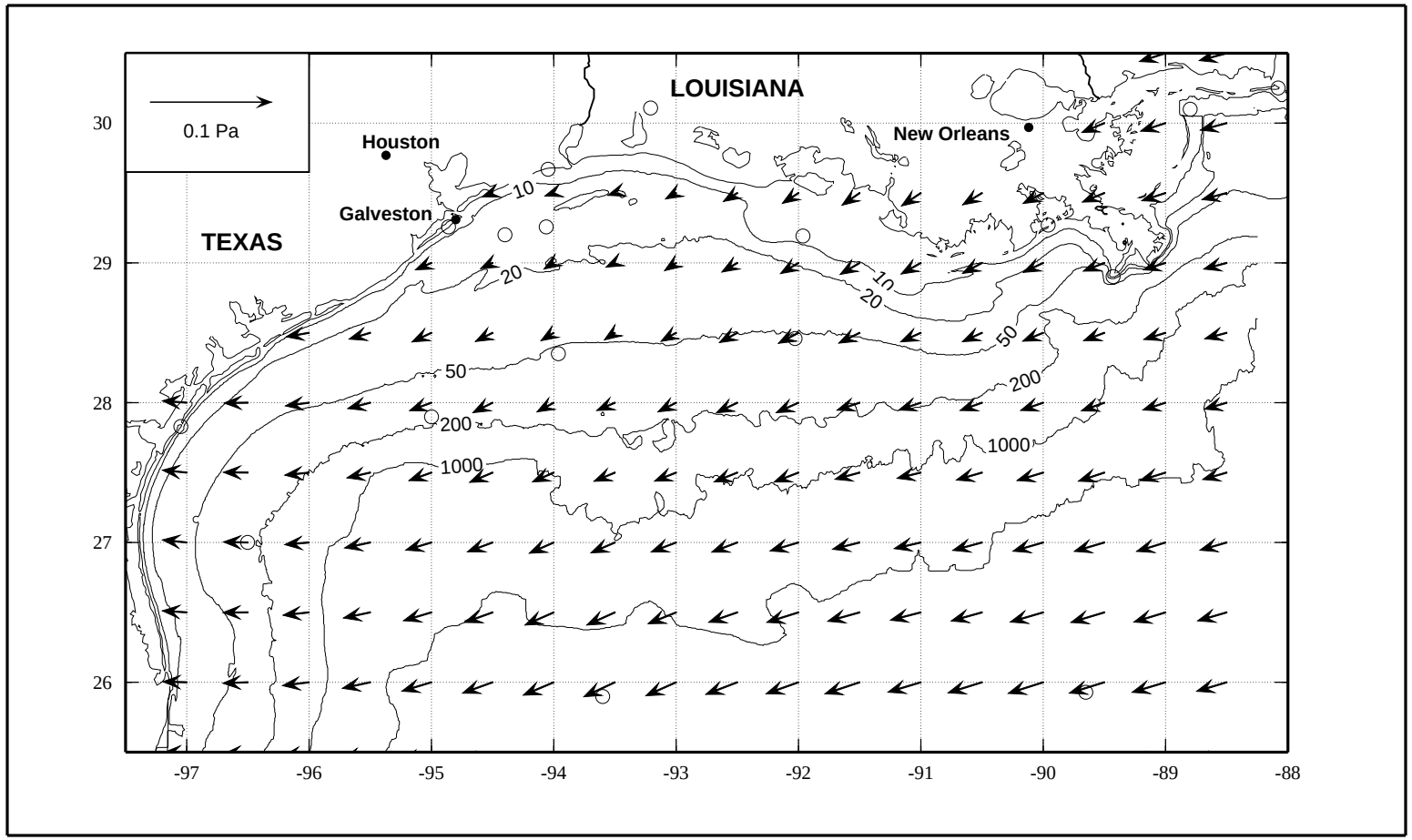

Figure 2.94.09. Monthly mean surface wind stress for September 1994.

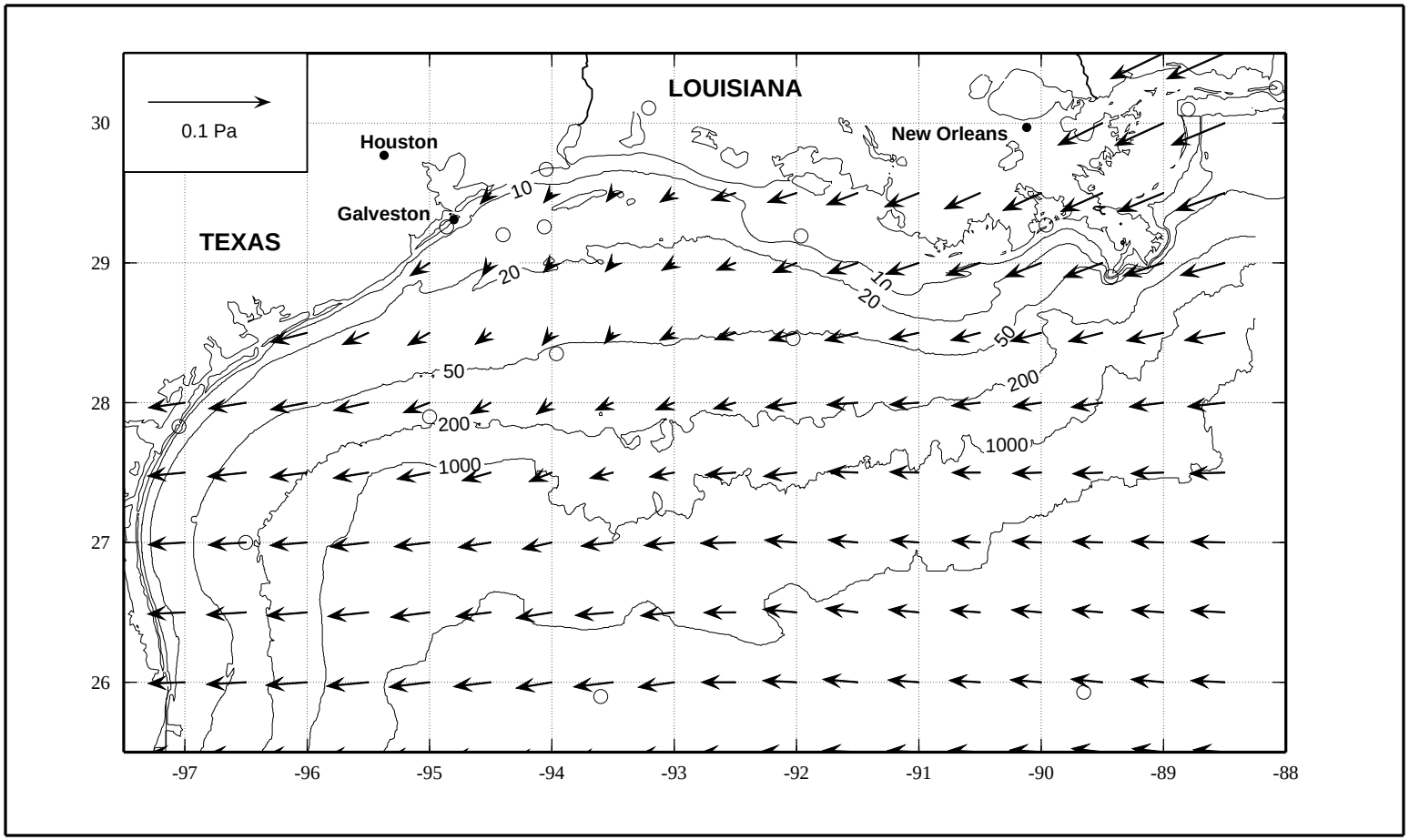

Figure 2.94.10. Monthly mean surface wind stress for October 1994.

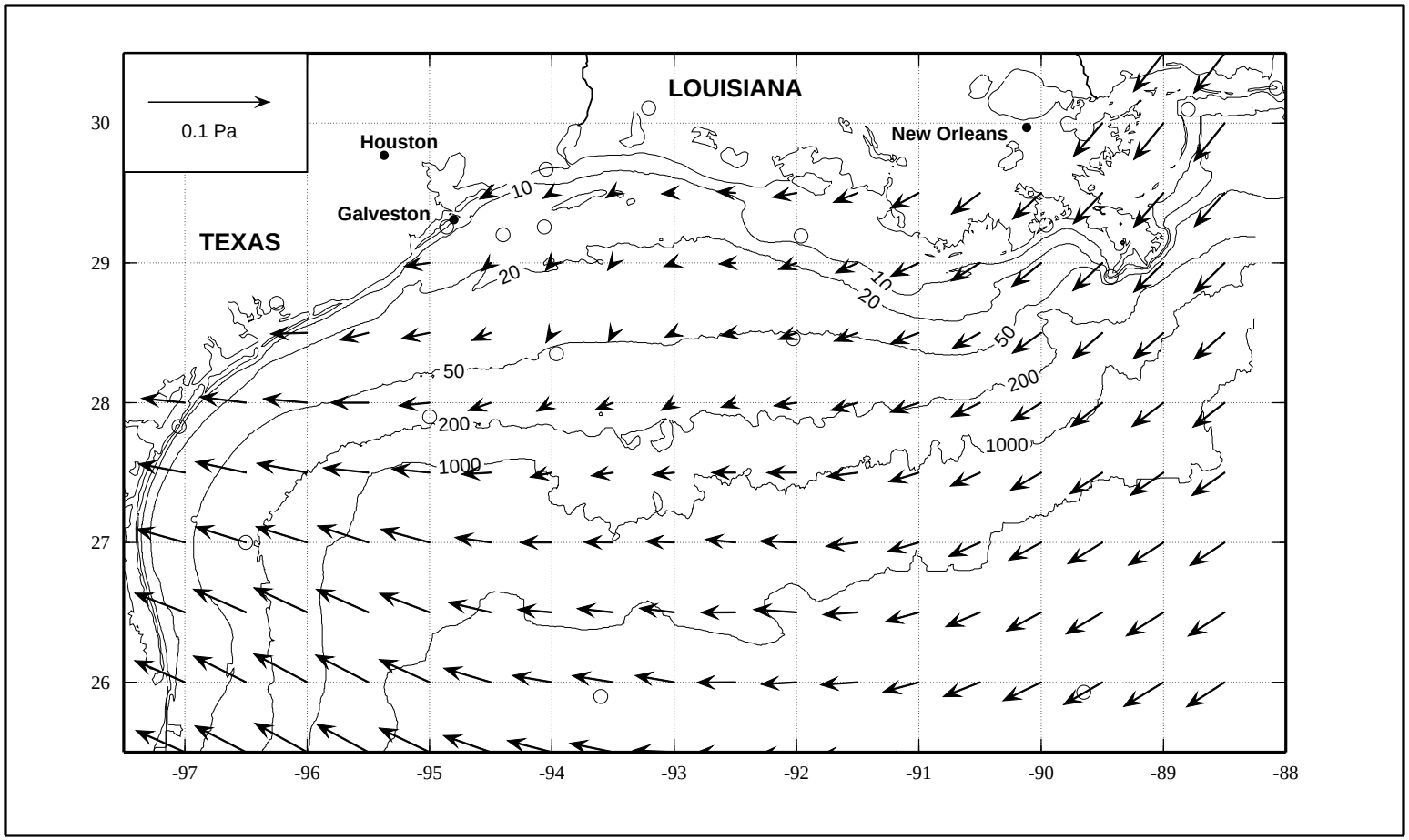

Figure 2.94.11. Monthly mean surface wind stress for November 1994.

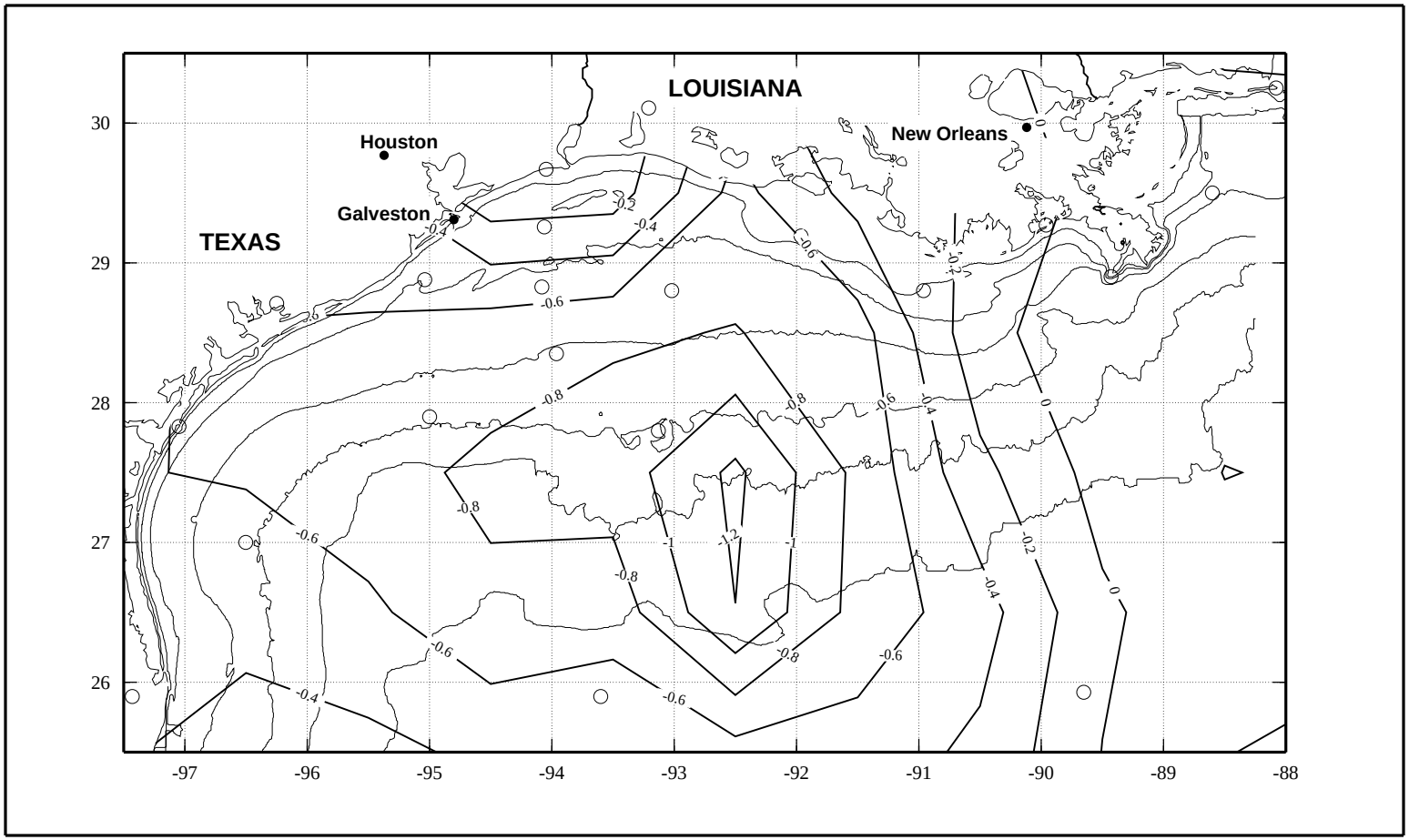

Figure 3.92.04. Monthly mean surface wind stress curl for April 1992, contour units in 10^{-4} Pa km^{-1}.

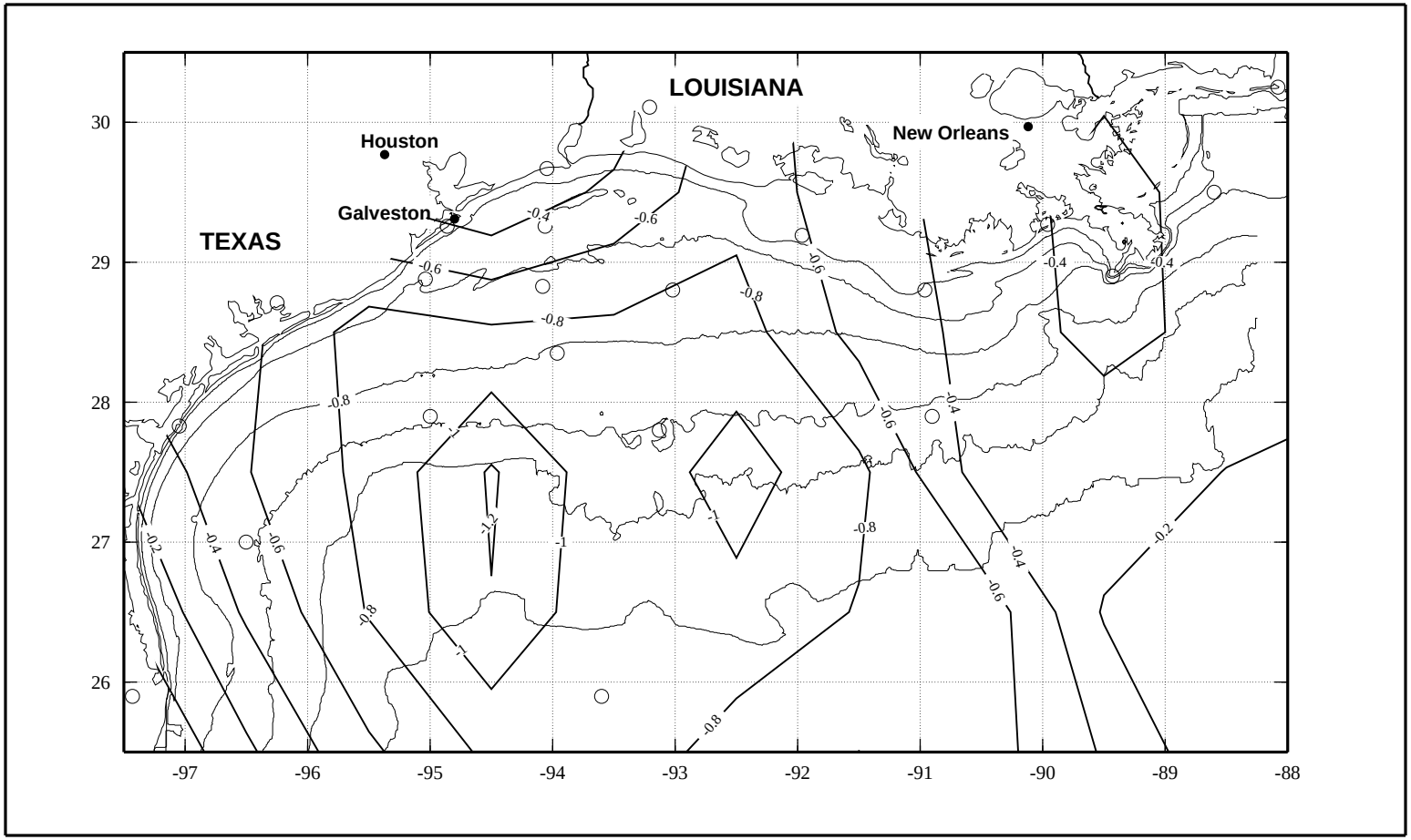

Figure 3.92.05. Monthly mean surface wind stress curl for May 1992, contour units in 10^{-4} Pa km^{-1}.

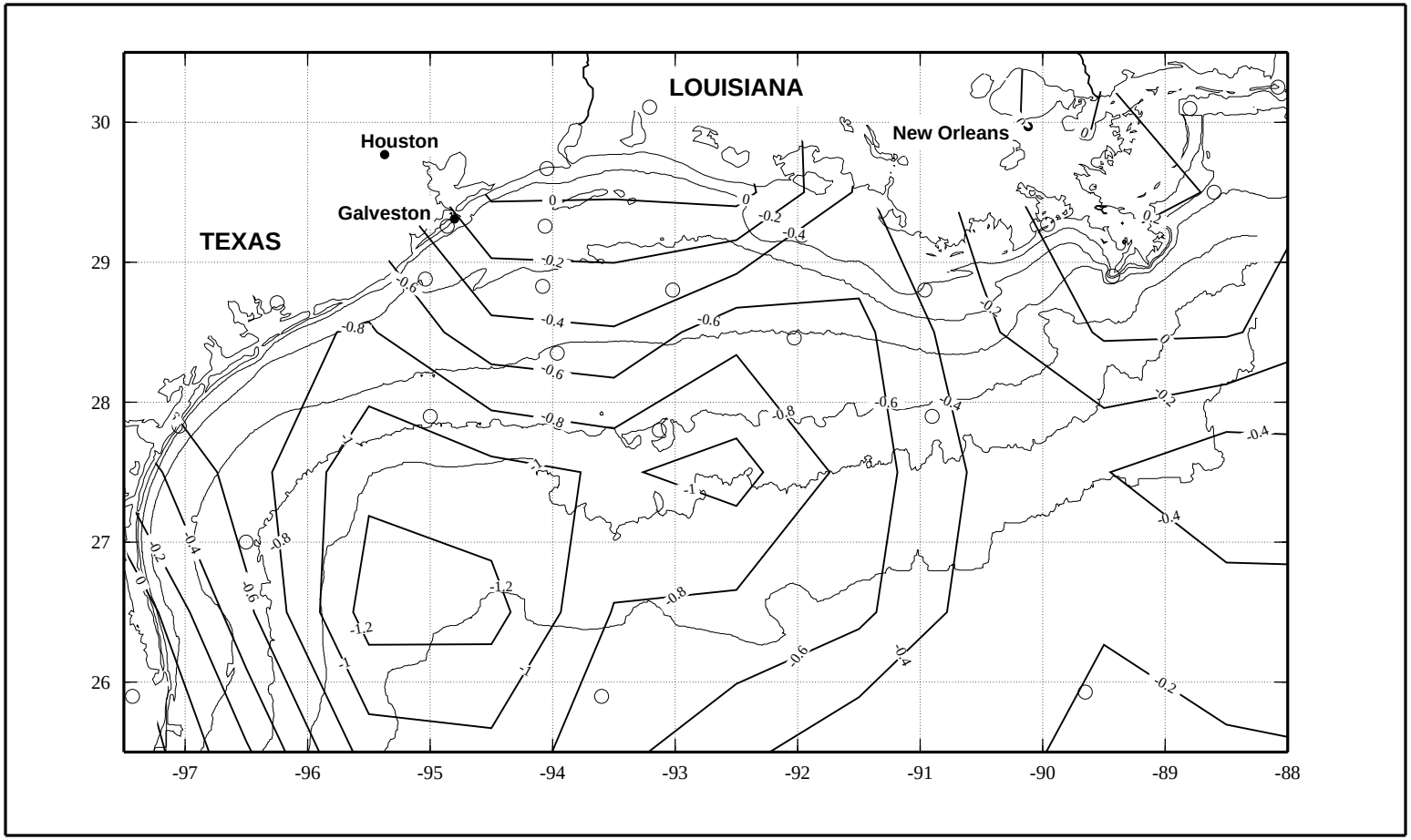

Figure 3.92.06. Monthly mean surface wind stress curl for June 1992, contour units in 10^{-4} Pa km^{-1}.

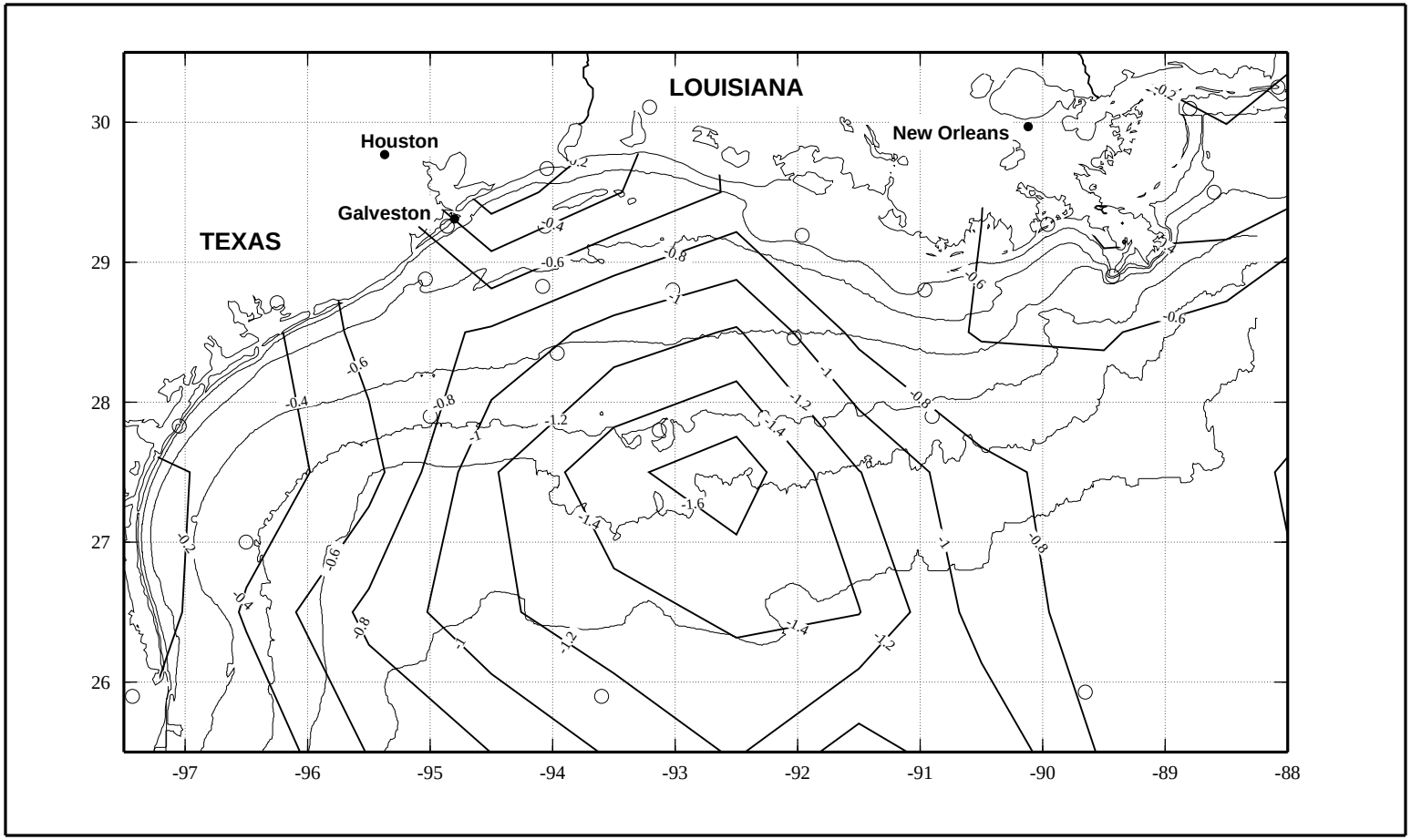

Figure 3.92.07. Monthly mean surface wind stress curl for July 1992, contour units in 10^{-4} Pa km^{-1}.

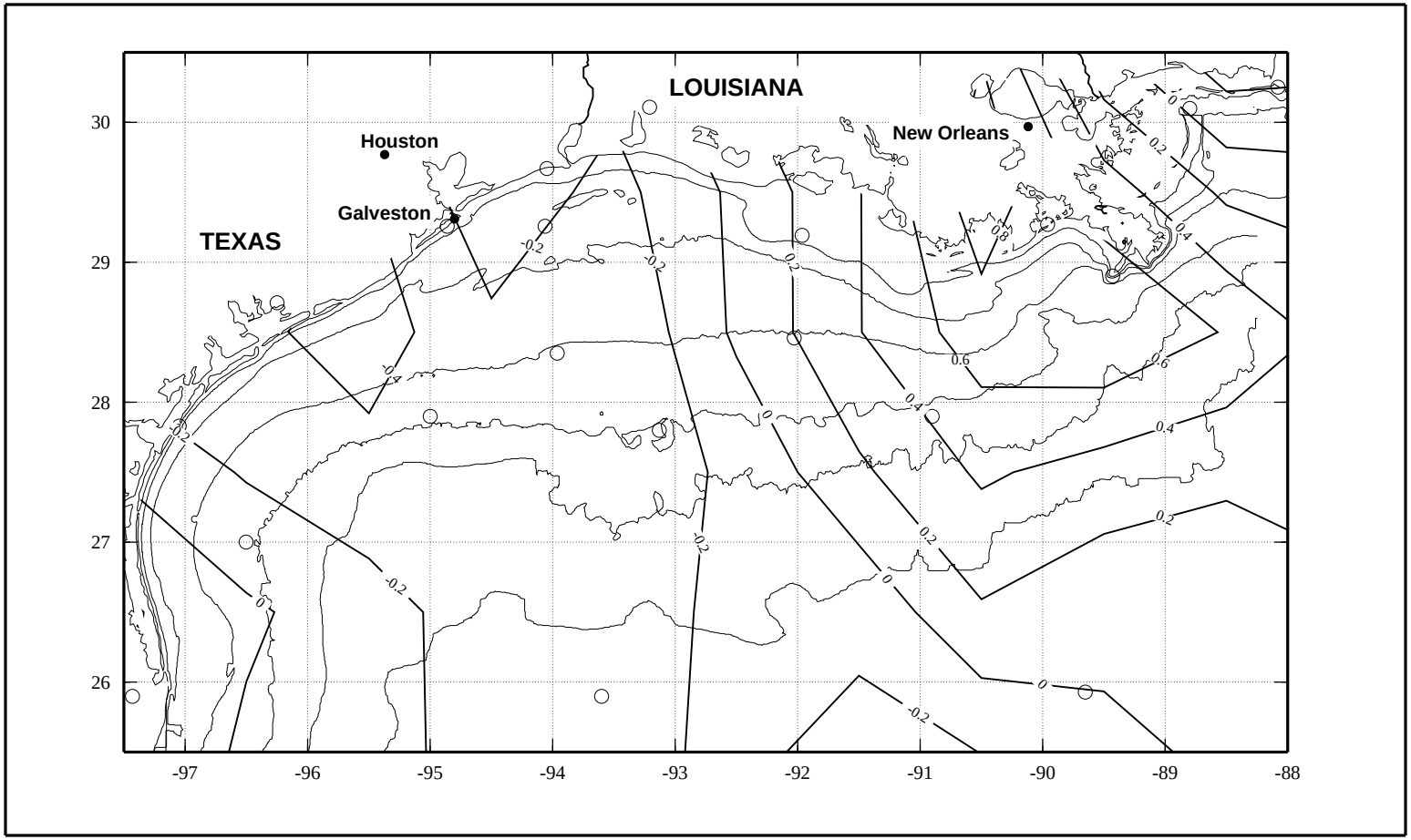

Figure 3.92.08. Monthly mean surface wind stress curl for August 1992, contour units in 10^{-4} Pa km^{-1}.

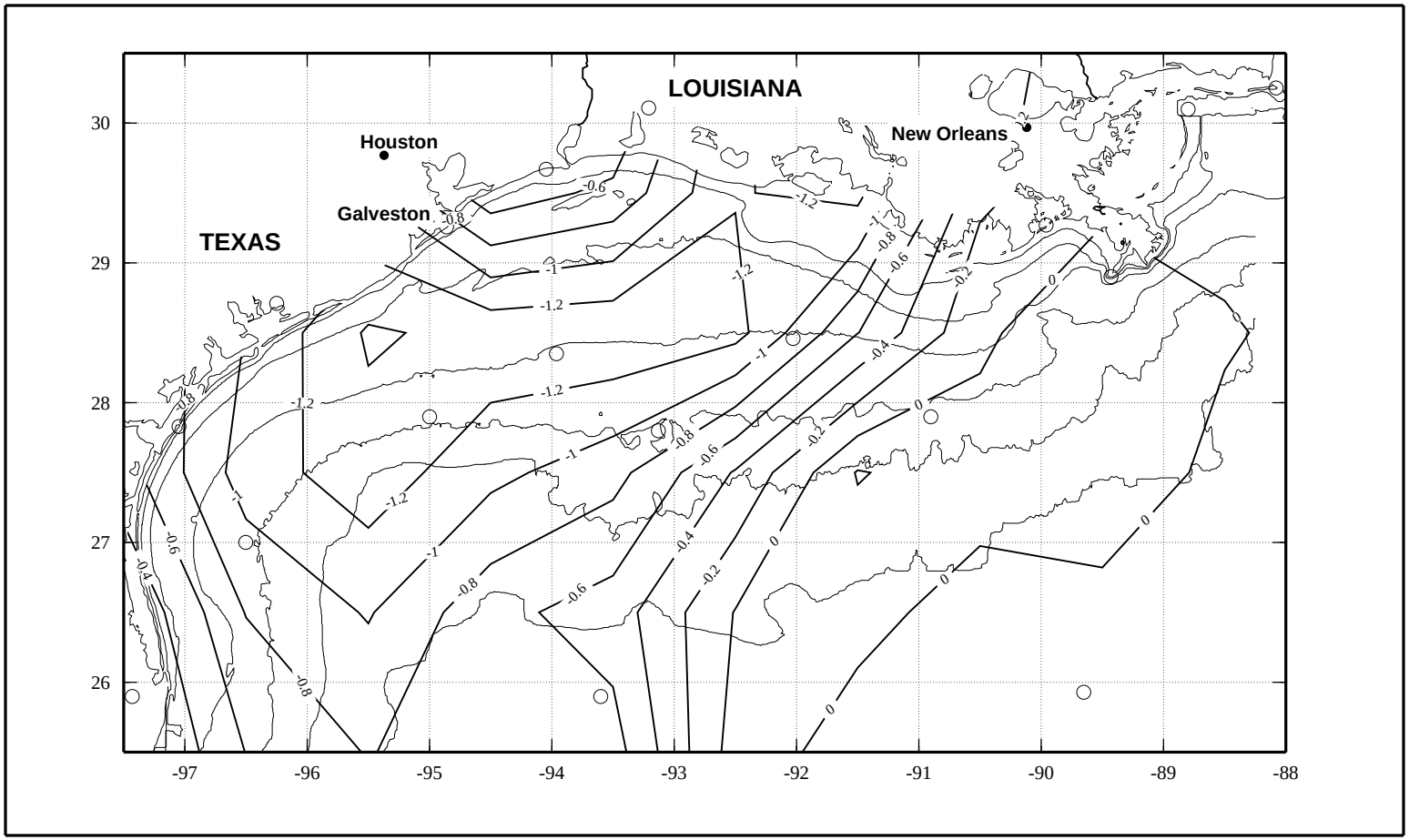

Figure 3.92.09. Monthly mean surface wind stress curl for September 1992, contour units in 10^{-4} Pa km^{-1}.

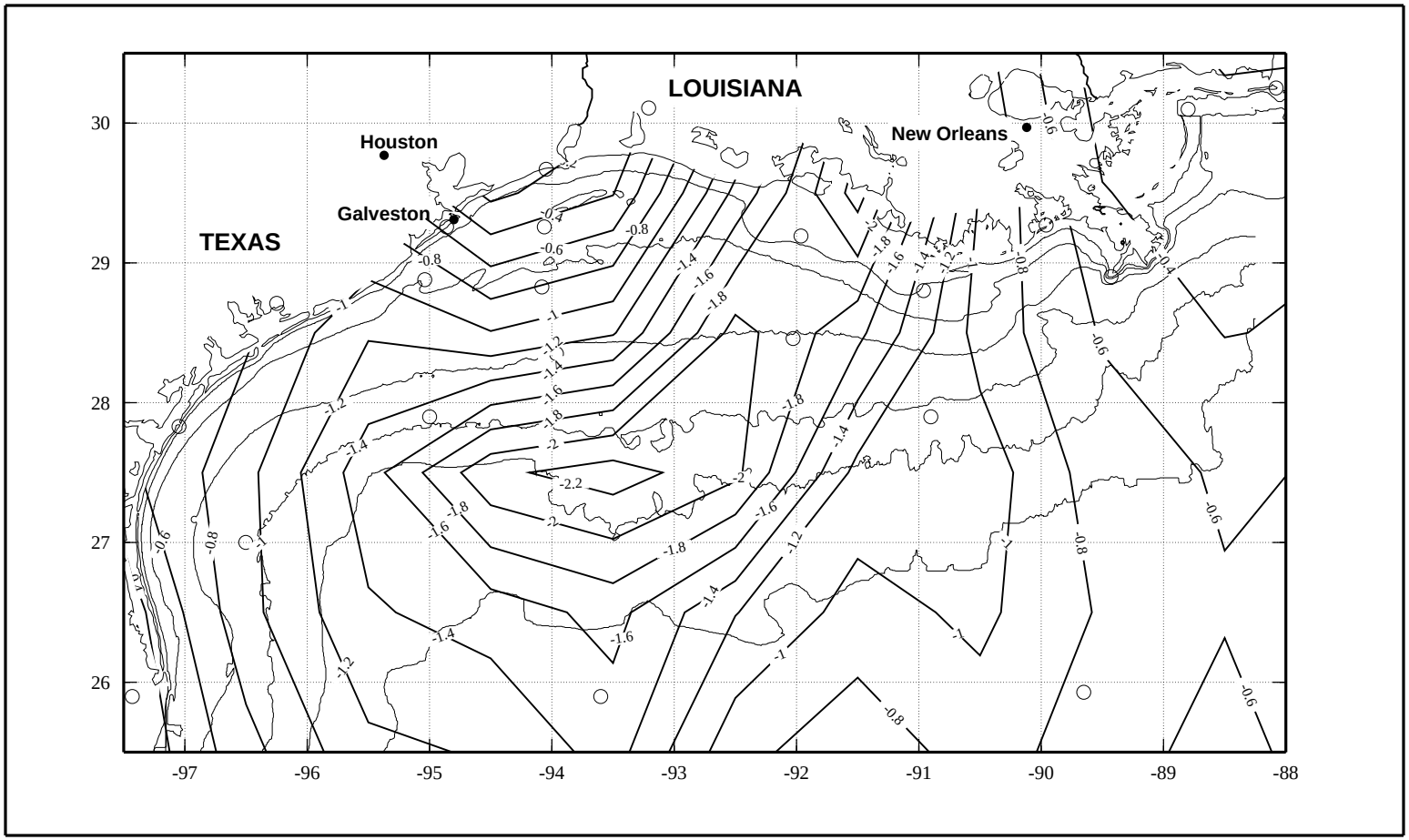

Figure 3.92.10. Monthly mean surface wind stress curl for October 1992, contour units in 10^{-4} Pa km^{-1}.

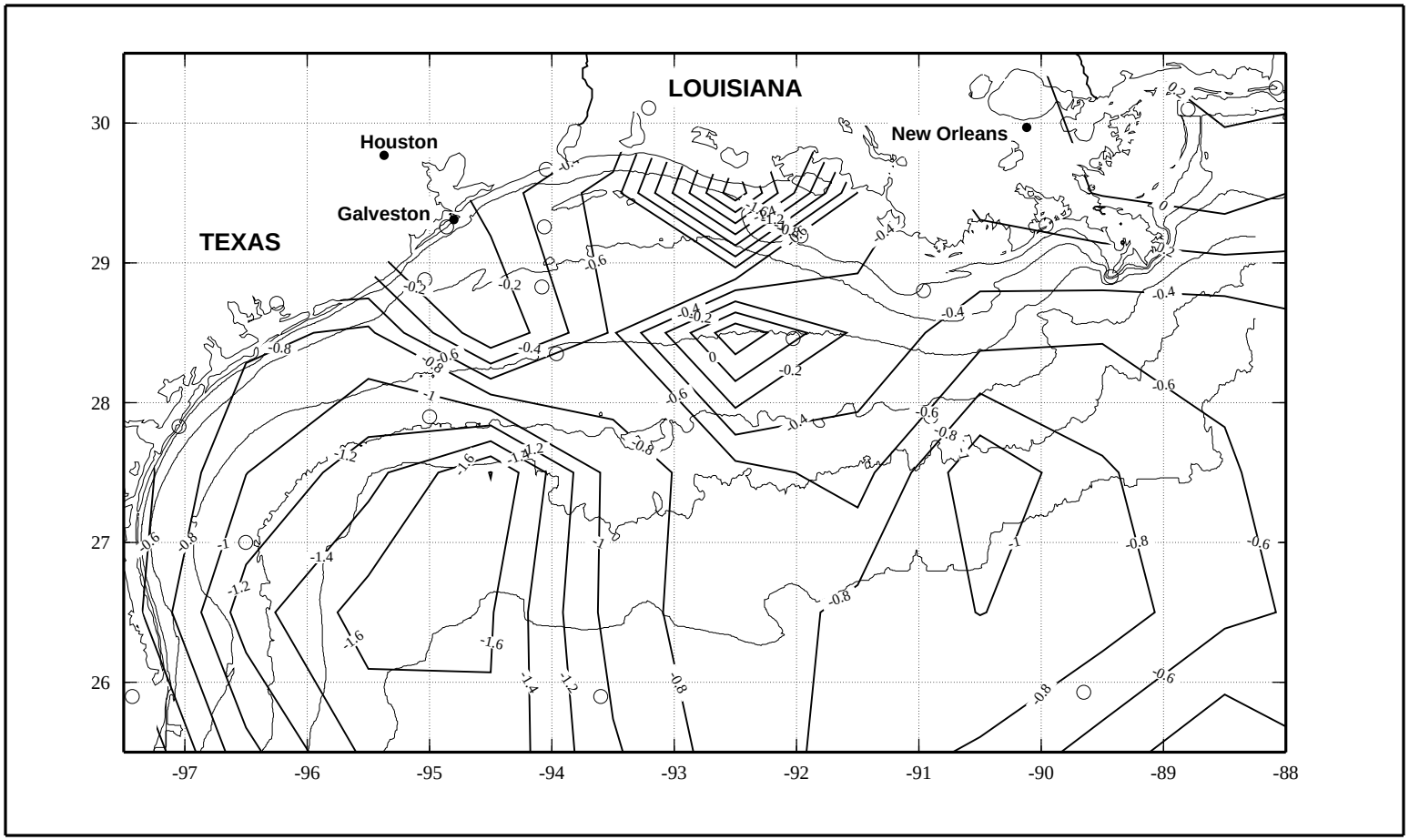

Figure 3.92.11. Monthly mean surface wind stress curl for November 1992, contour units in 10^{-4} Pa km^{-1}.

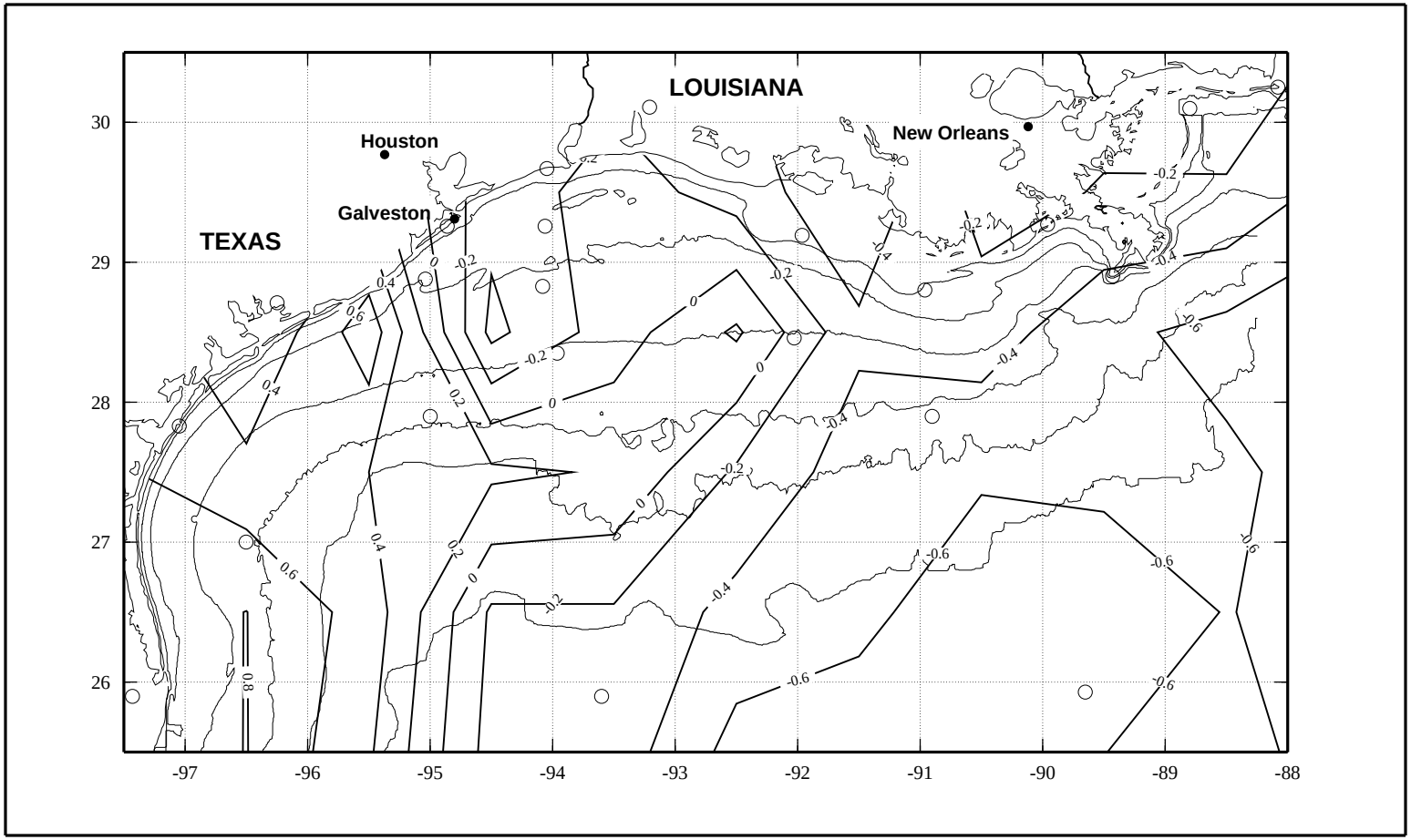

Figure 3.92.12. Monthly mean surface wind stress curl for December 1992, contour units in 10^{-4} Pa km^{-1}.

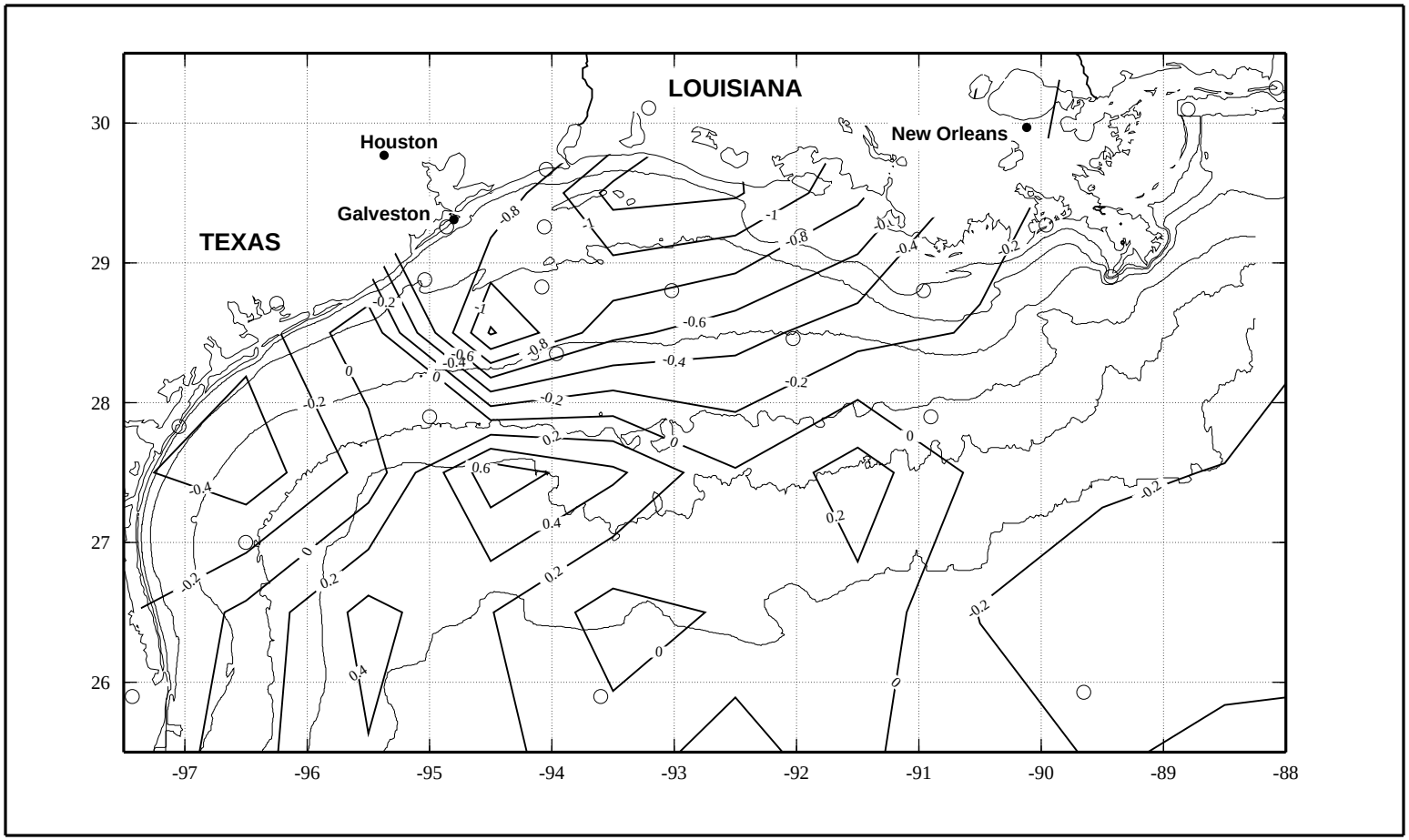

Figure 3.93.01. Monthly mean surface wind stress curl for January 1993, contour units in 10^{-4} Pa km^{-1}.

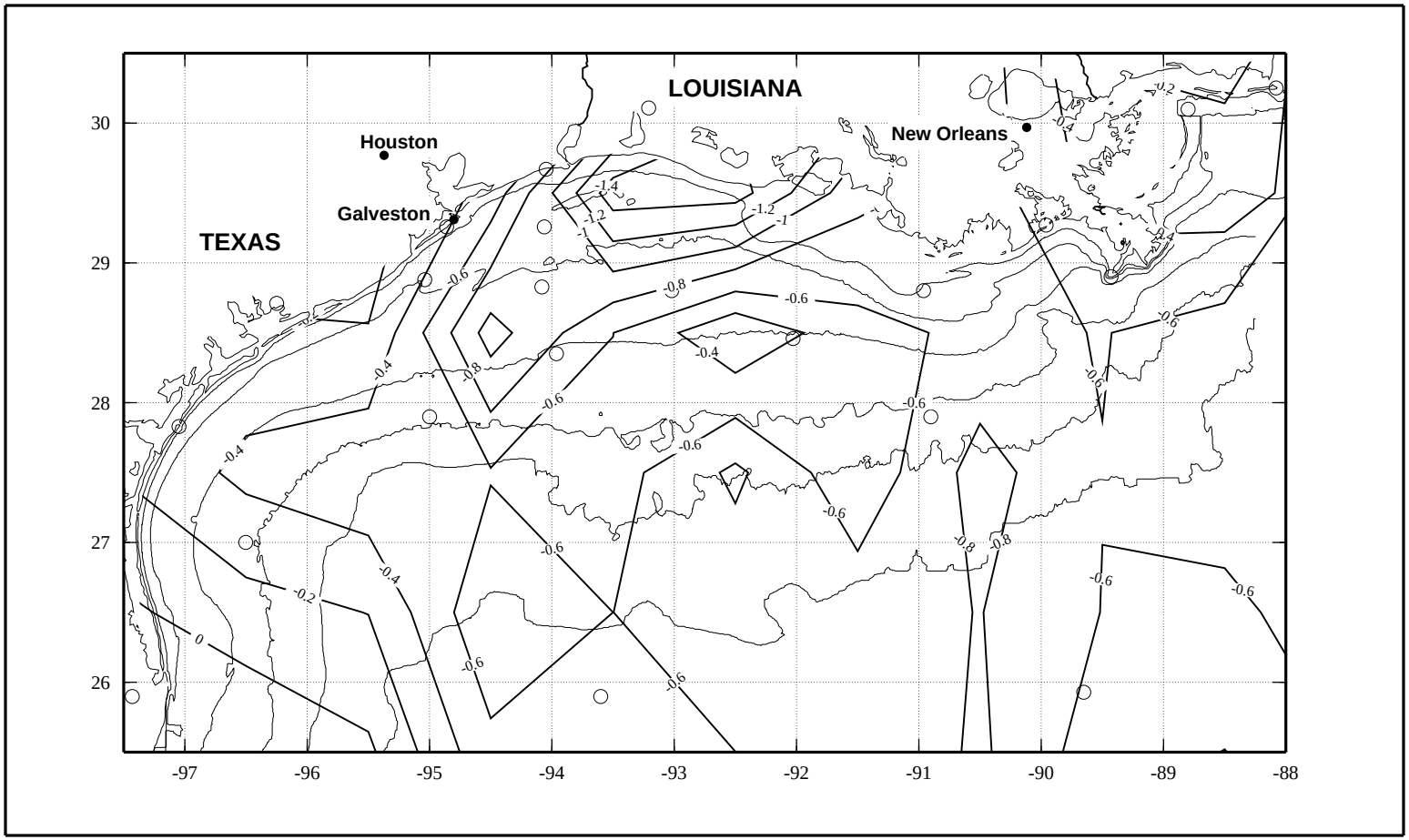

Figure 3.93.02. Monthly mean surface wind stress curl for February 1993, contour units in 10^{-4} Pa km^{-1}.

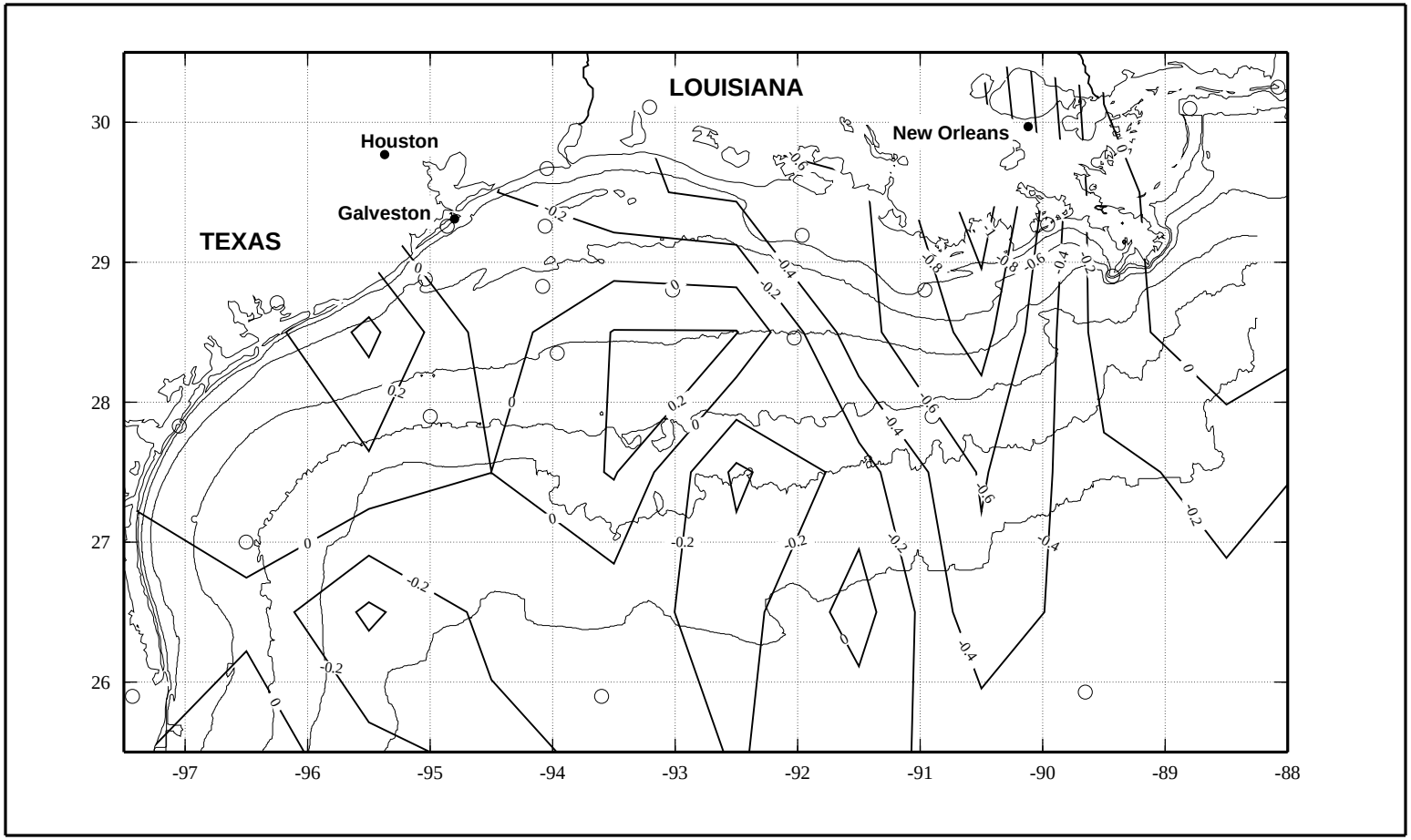

Figure 3.93.03. Monthly mean surface wind stress curl for March 1993, contour units in 10^{-4} Pa km^{-1}.

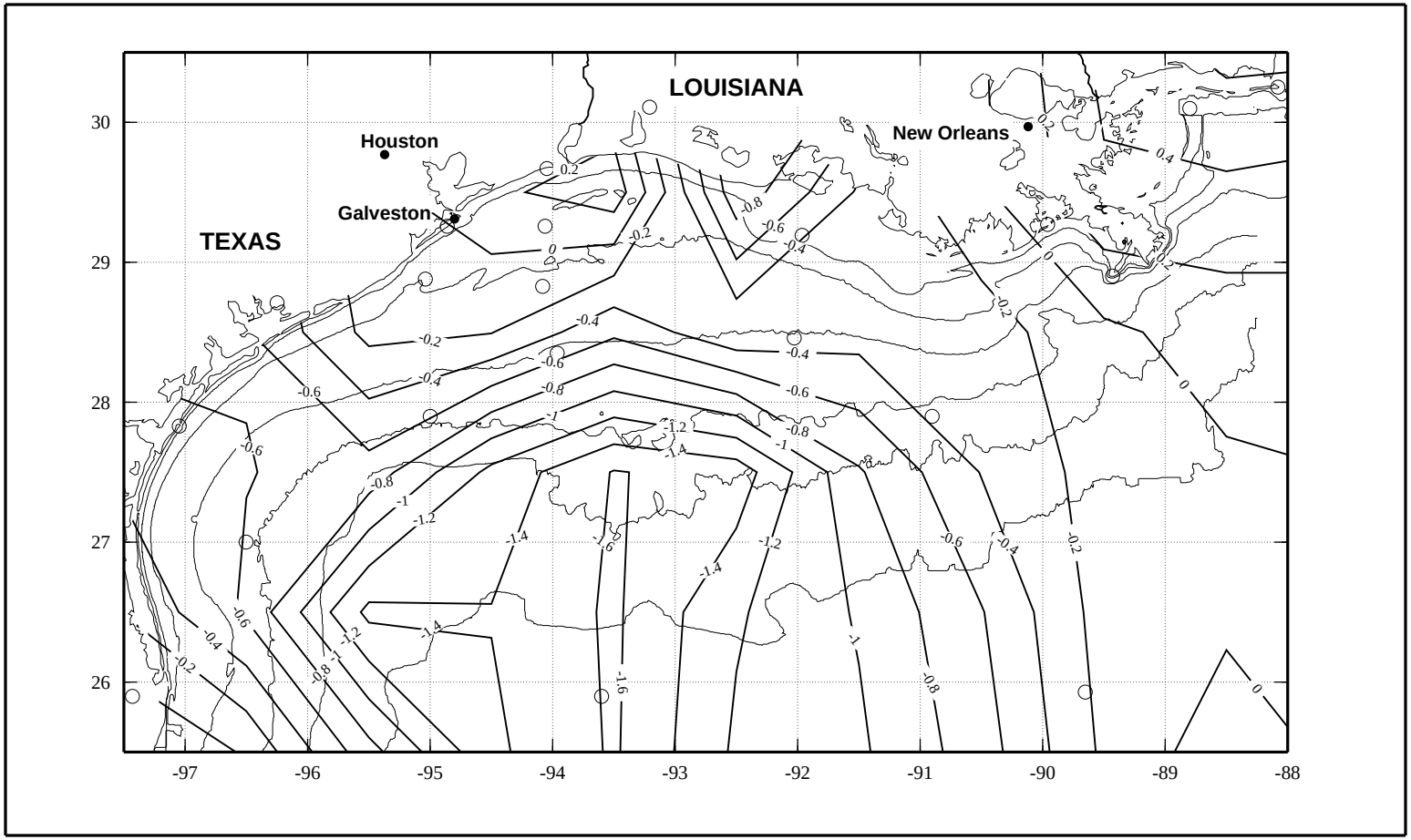

Figure 3.93.04. Monthly mean surface wind stress curl for April 1993, contour units in 10^{-4} Pa km^{-1}.

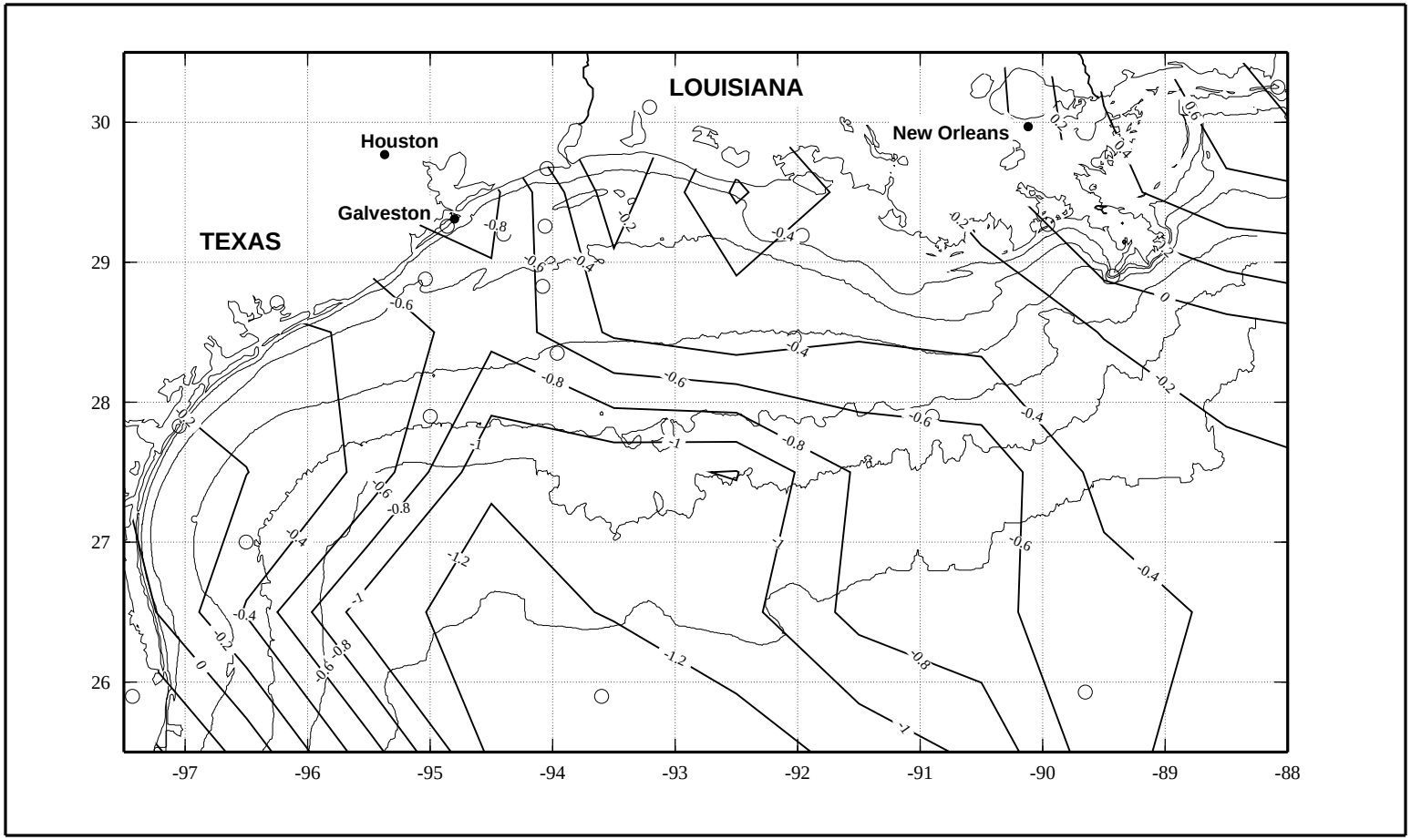

Figure 3.93.05. Monthly mean surface wind stress curl for May 1993, contour units in 10^{-4} Pa km^{-1}.

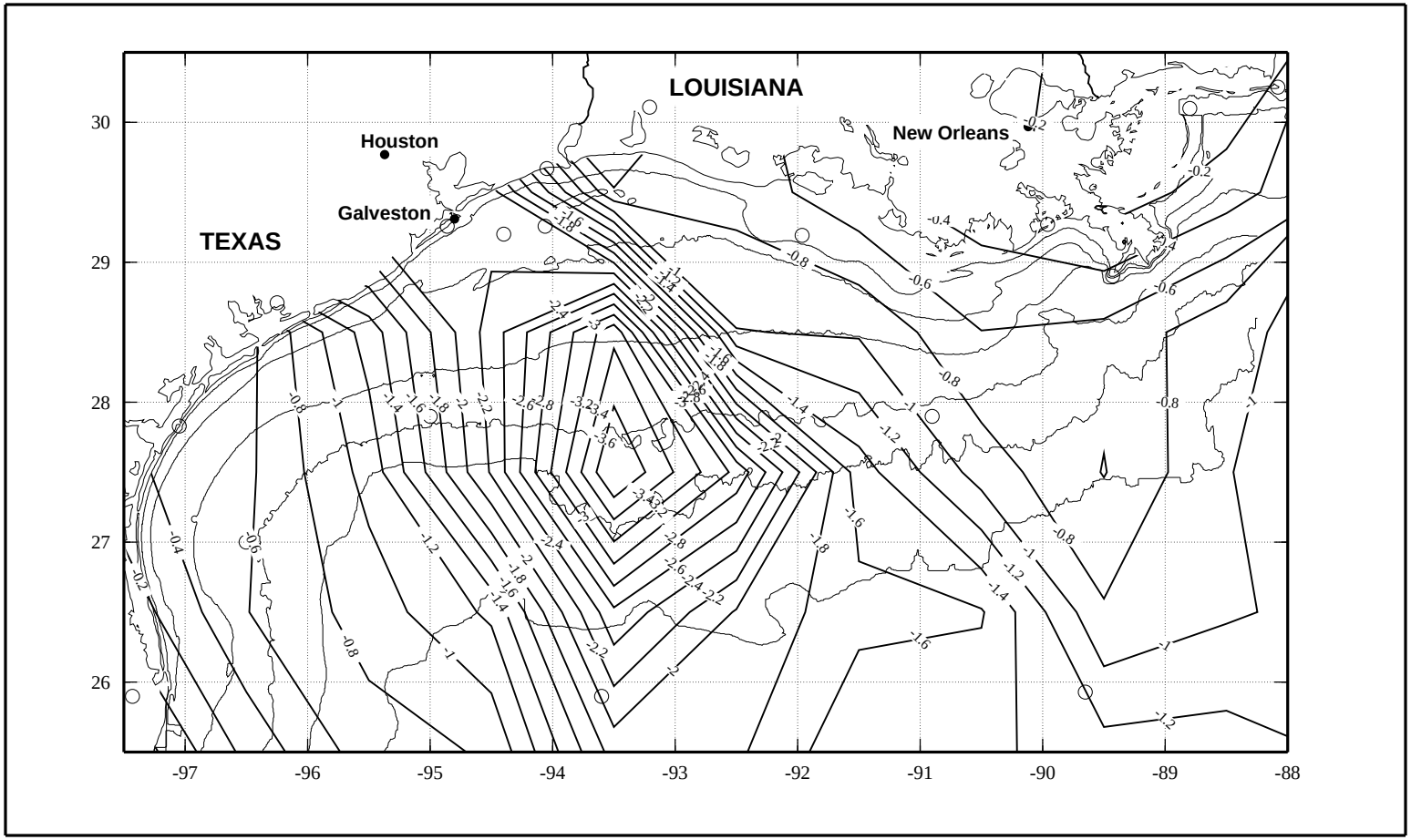

Figure 3.93.06. Monthly mean surface wind stress curl for June 1993, contour units in 10^{-4} Pa km^{-1}.

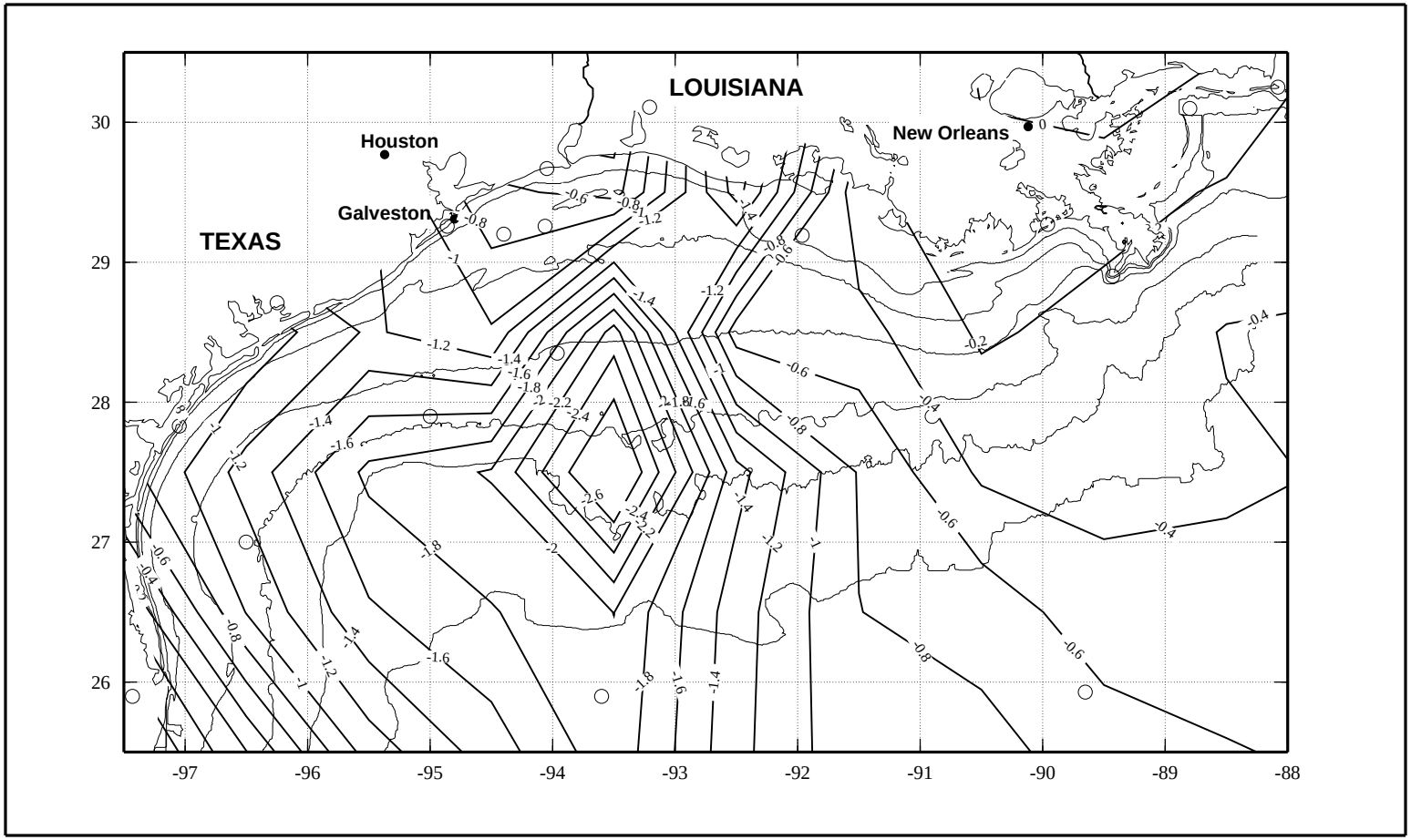

Figure 3.93.07. Monthly mean surface wind stress curl for July 1993, contour units in 10^{-4} Pa km^{-1}.

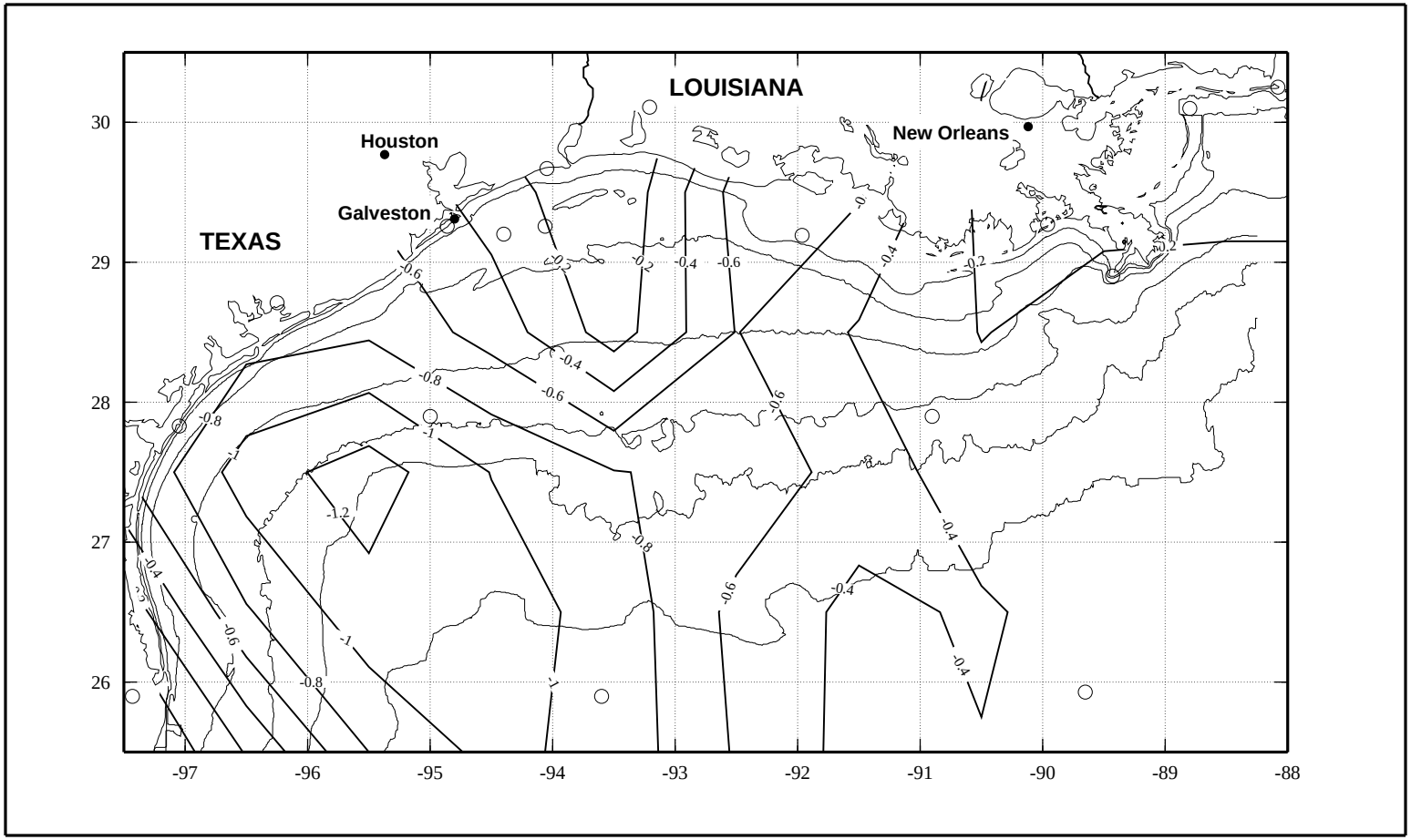

Figure 3.93.08. Monthly mean surface wind stress curl for August 1993, contour units in 10^{-4} Pa km^{-1}.

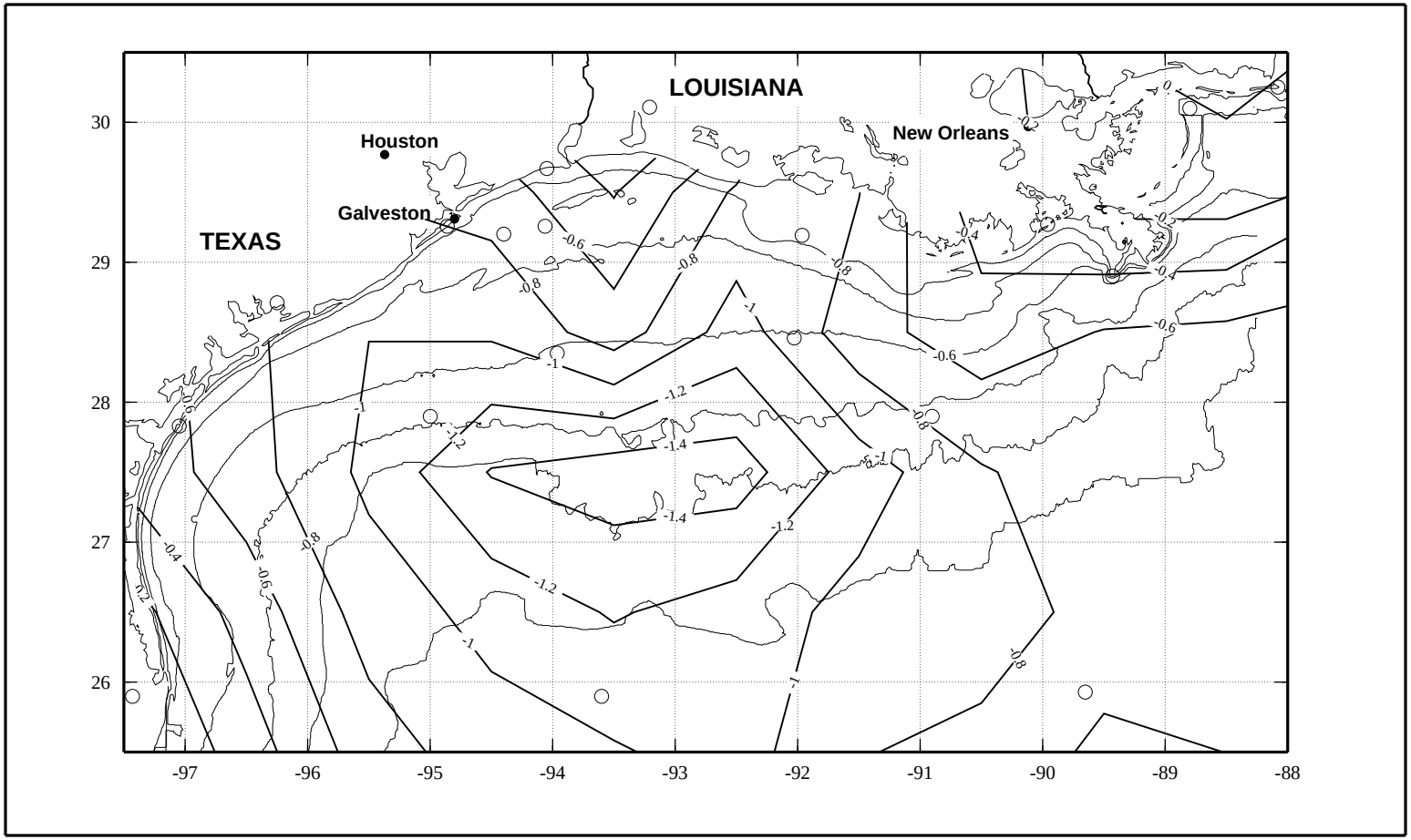

Figure 3.93.09. Monthly mean surface wind stress curl for September 1993, contour units in 10^{-4} Pa km^{-1}.

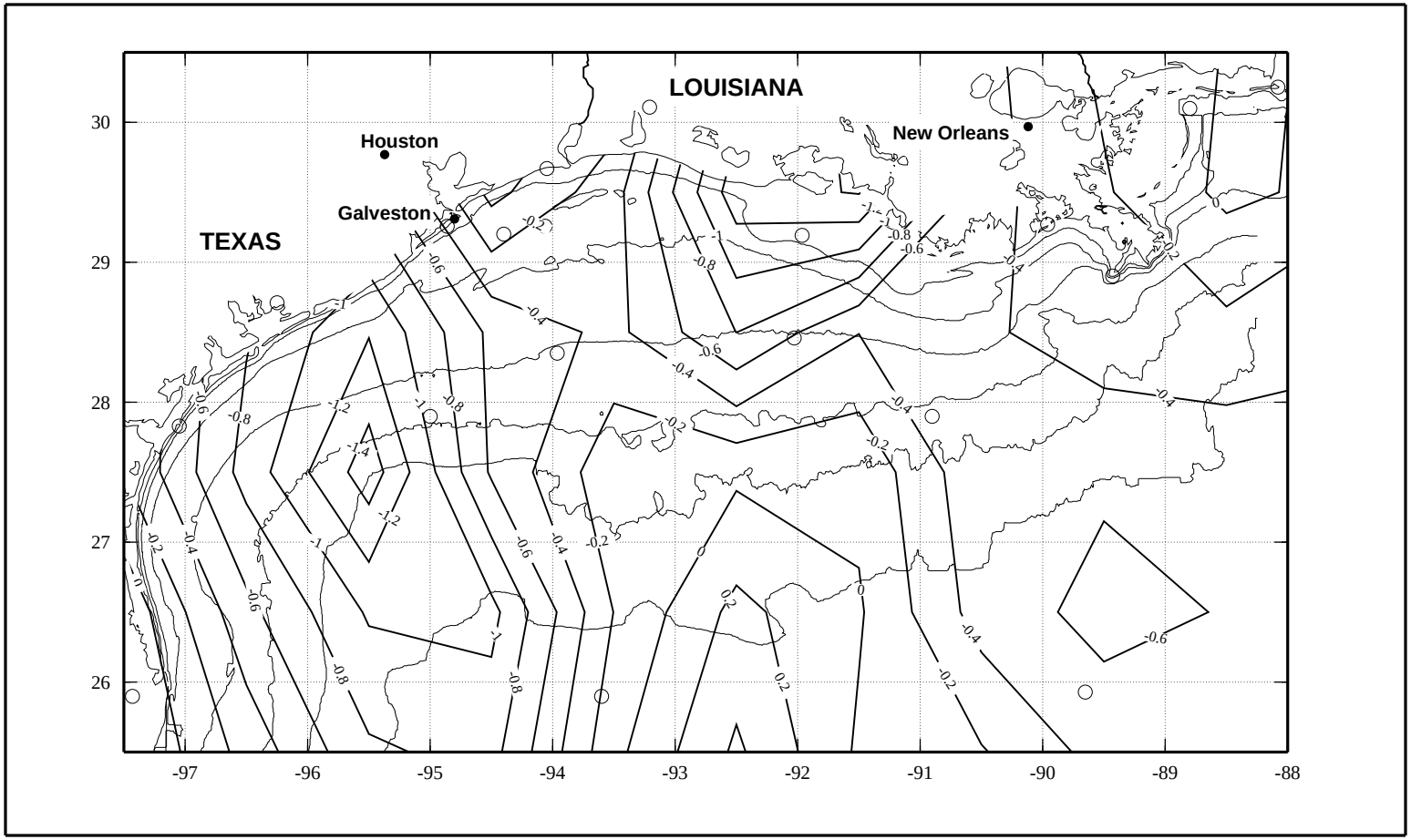

Figure 3.93.10. Monthly mean surface wind stress curl for October 1993, contour units in 10^{-4} Pa km^{-1}.

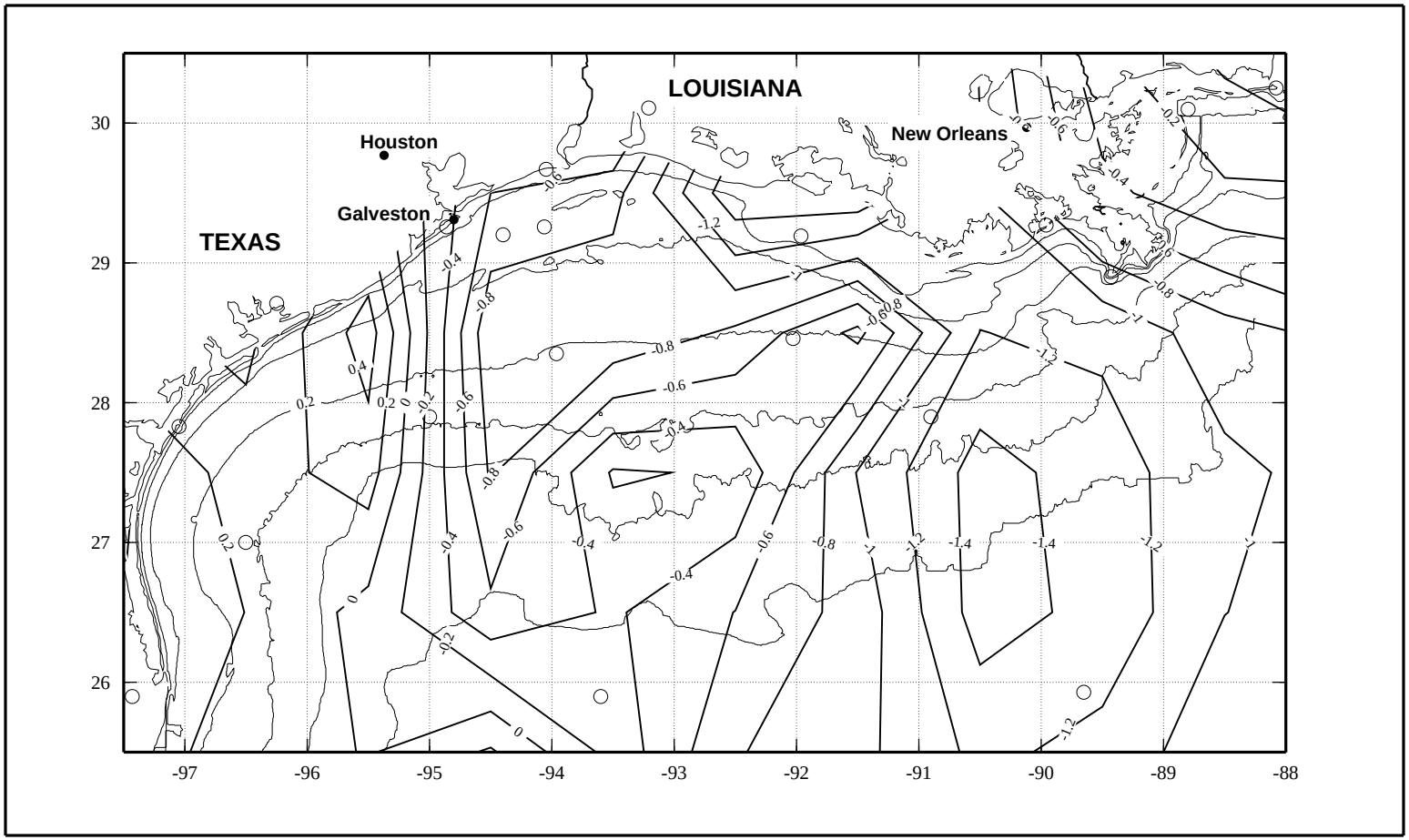

Figure 3.93.11. Monthly mean surface wind stress curl for November 1993, contour units in 10^{-4} Pa km^{-1}.

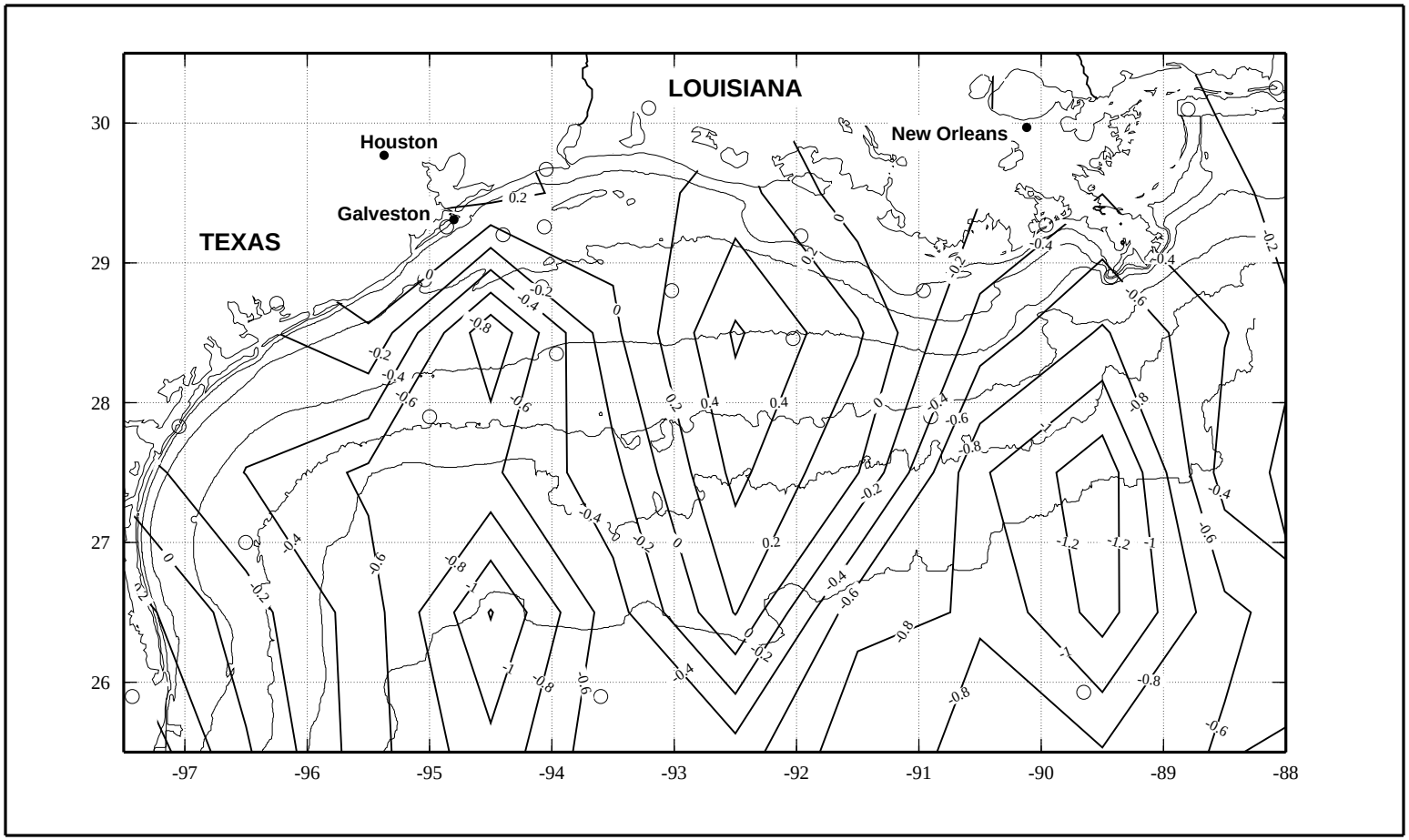

Figure 3.93.12. Monthly mean surface wind stress curl for December 1993, contour units in 10^{-4} Pa km^{-1}.

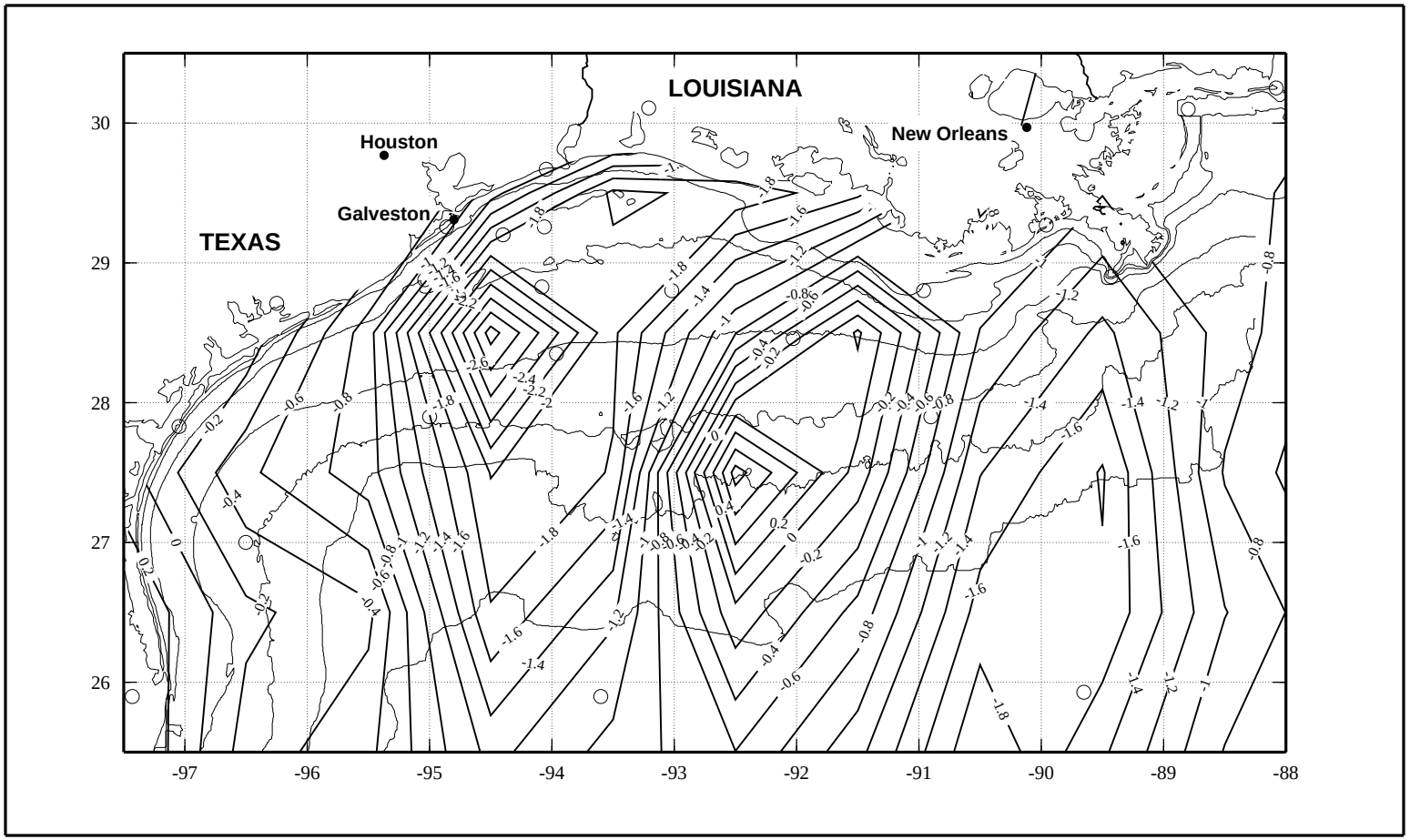

Figure 3.94.01. Monthly mean surface wind stress curl for January 1994, contour units in 10^{-4} Pa km^{-1}.

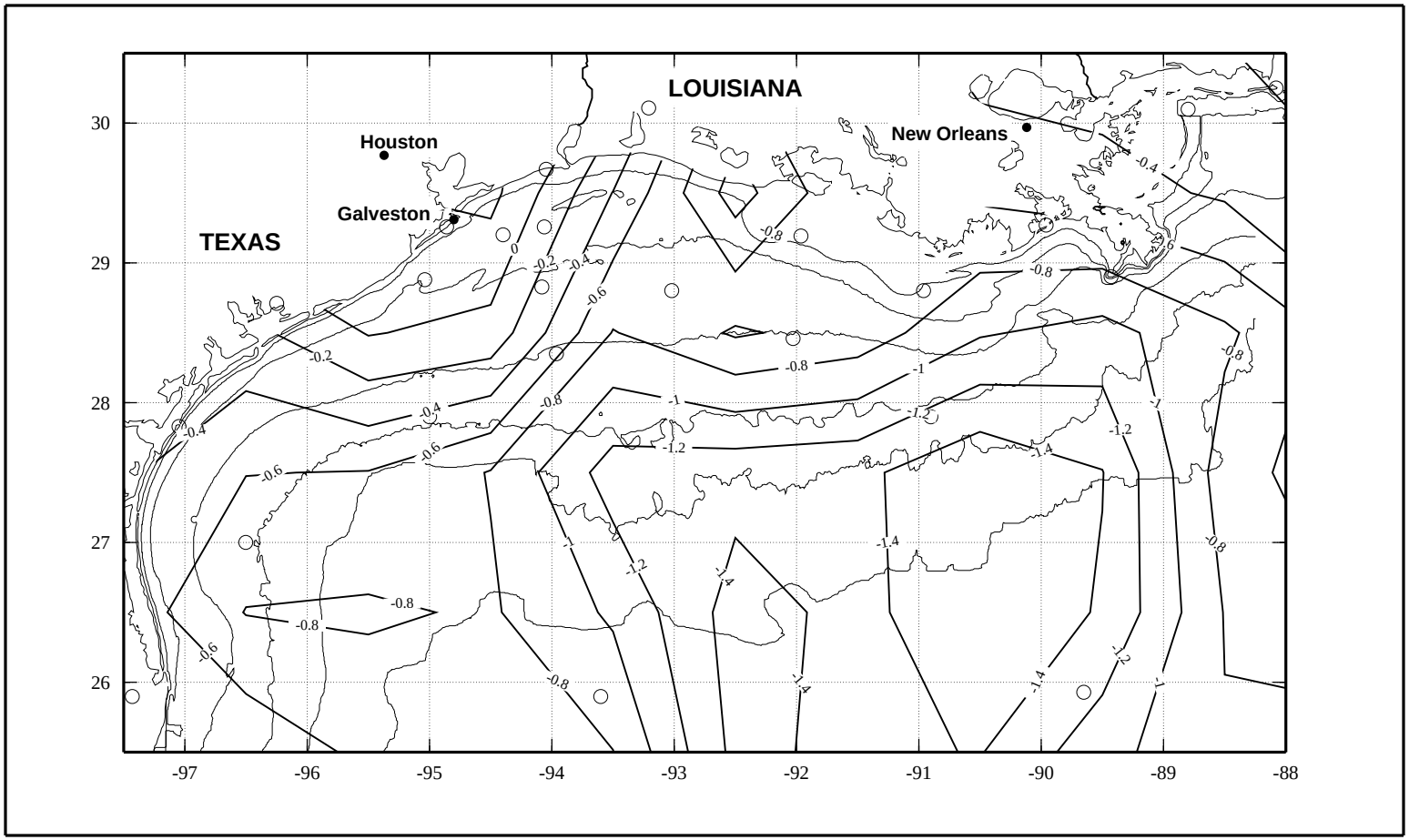

Figure 3.94.02. Monthly mean surface wind stress curl for February 1994, contour units in 10^{-4} Pa km^{-1}.

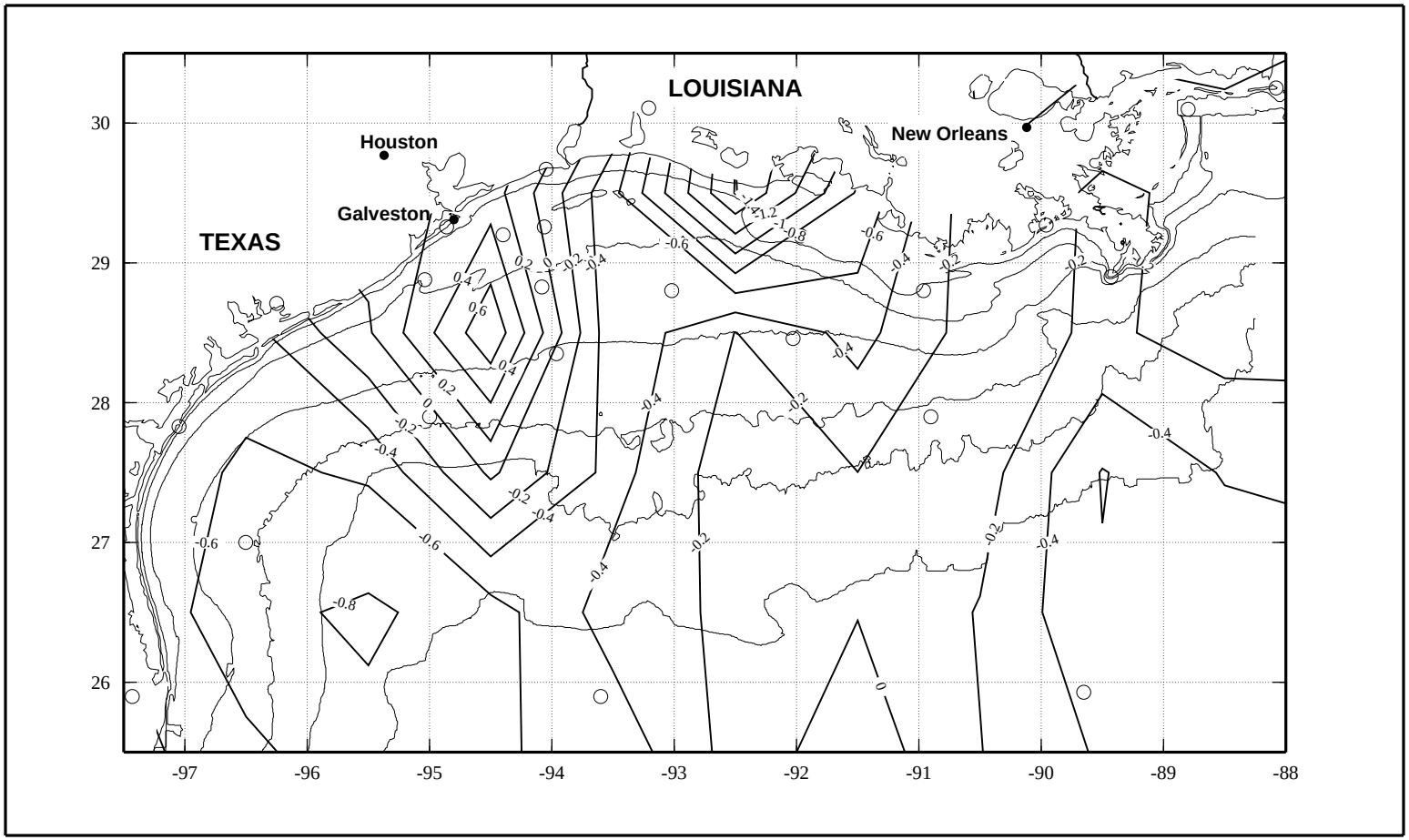

Figure 3.94.03. Monthly mean surface wind stress curl for March 1994, contour units in 10^{-4} Pa km^{-1}.

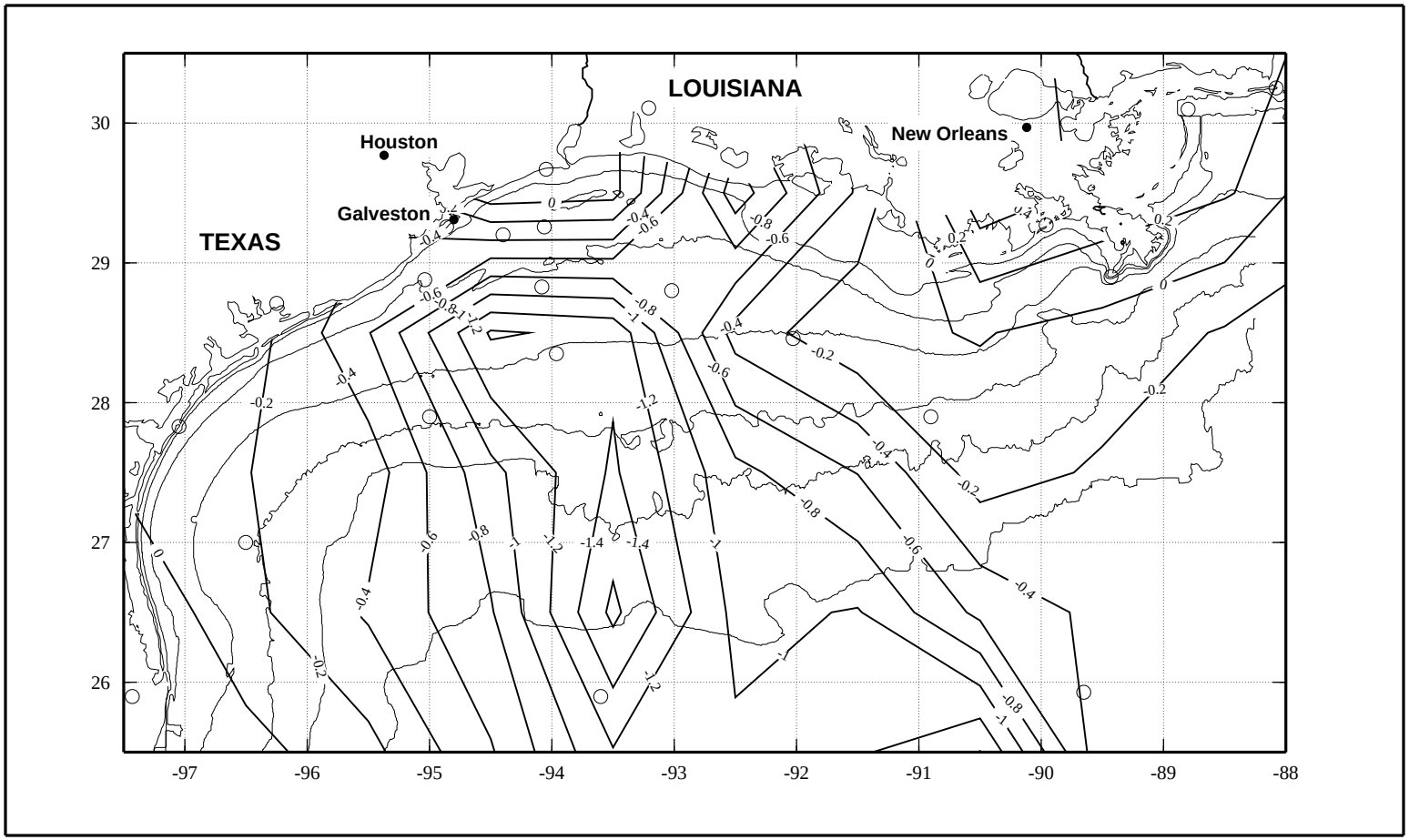

Figure 3.94.04. Monthly mean surface wind stress curl for April 1994, contour units in 10^{-4} Pa km^{-1}.

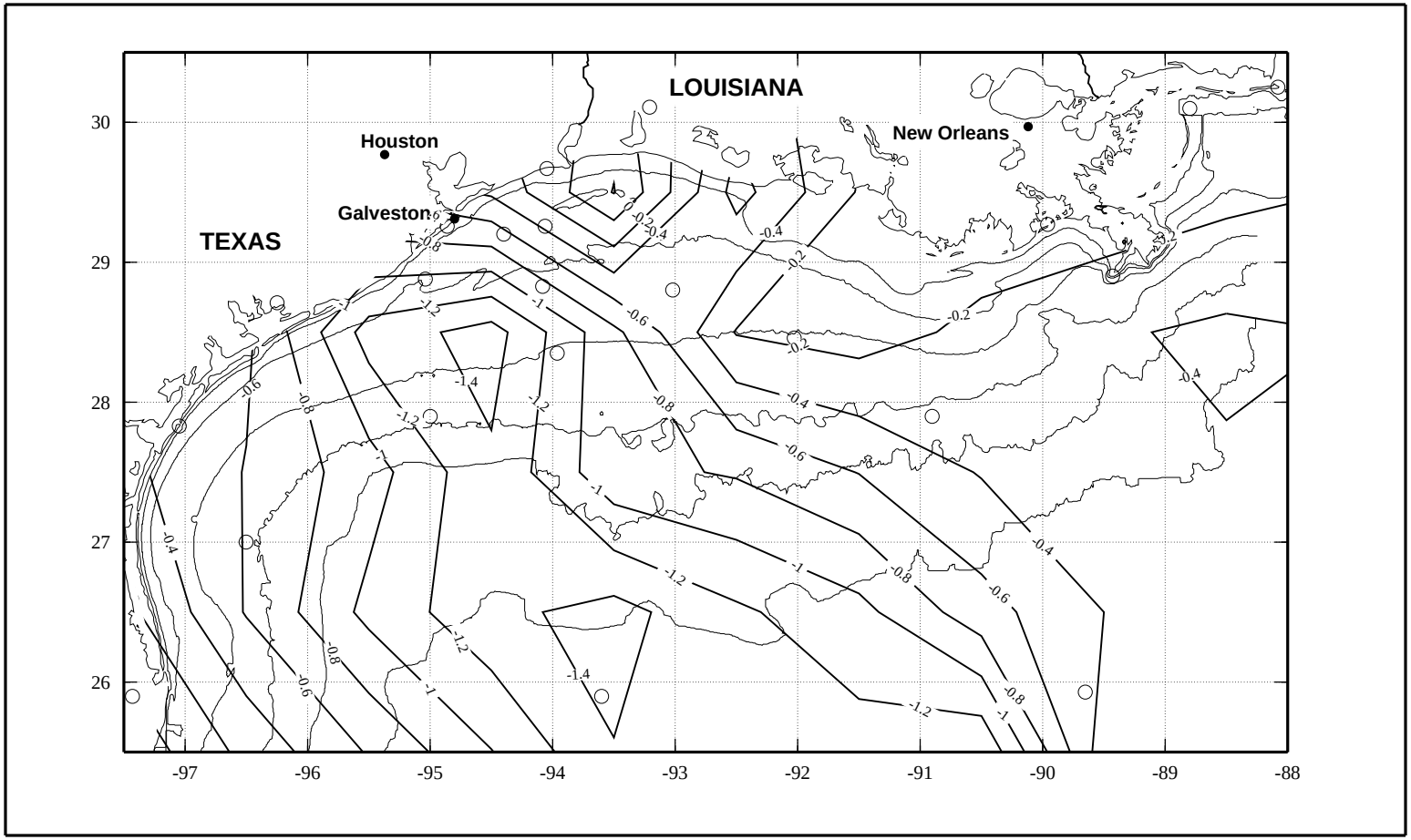

Figure 3.94.05. Monthly mean surface wind stress curl for May 1994, contour units in 10^{-4} Pa km^{-1}.

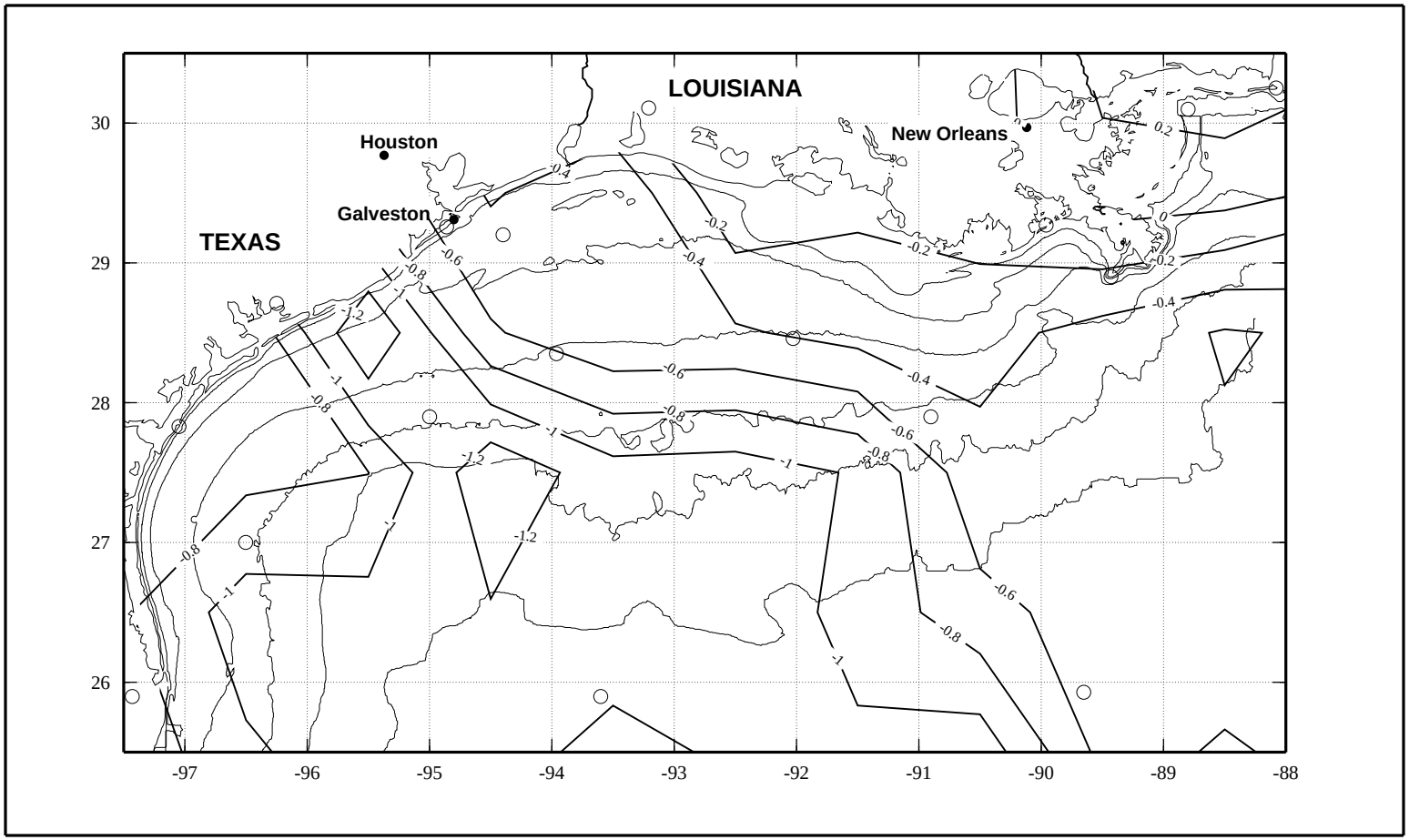

Figure 3.94.06. Monthly mean surface wind stress curl for June 1994, contour units in 10^{-4} Pa km^{-1}.

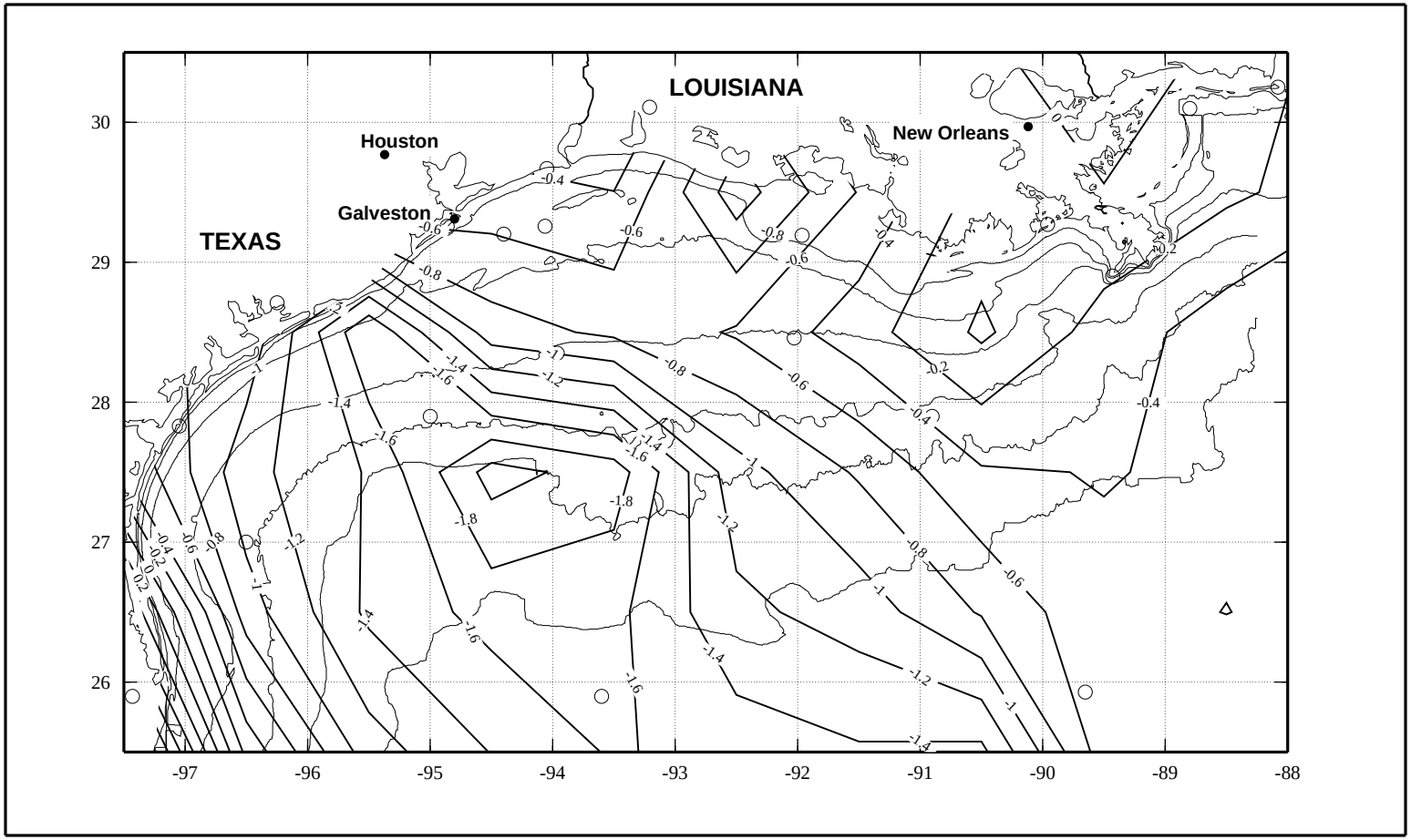

Figure 3.94.07. Monthly mean surface wind stress curl for July 1994, contour units in 10^{-4} Pa km^{-1}.

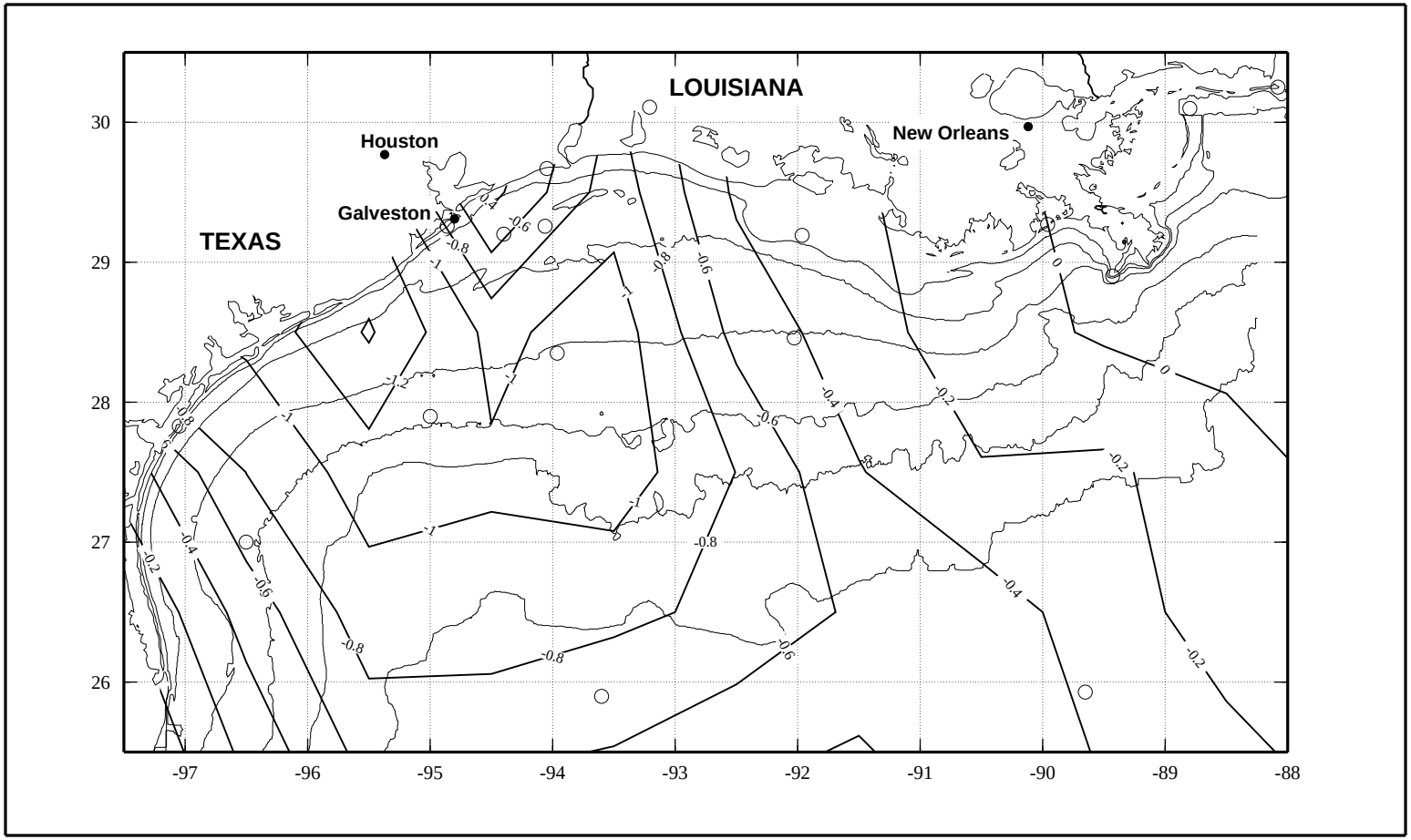

Figure 3.94.08. Monthly mean surface wind stress curl for August 1994, contour units in 10^{-4} Pa km^{-1}.

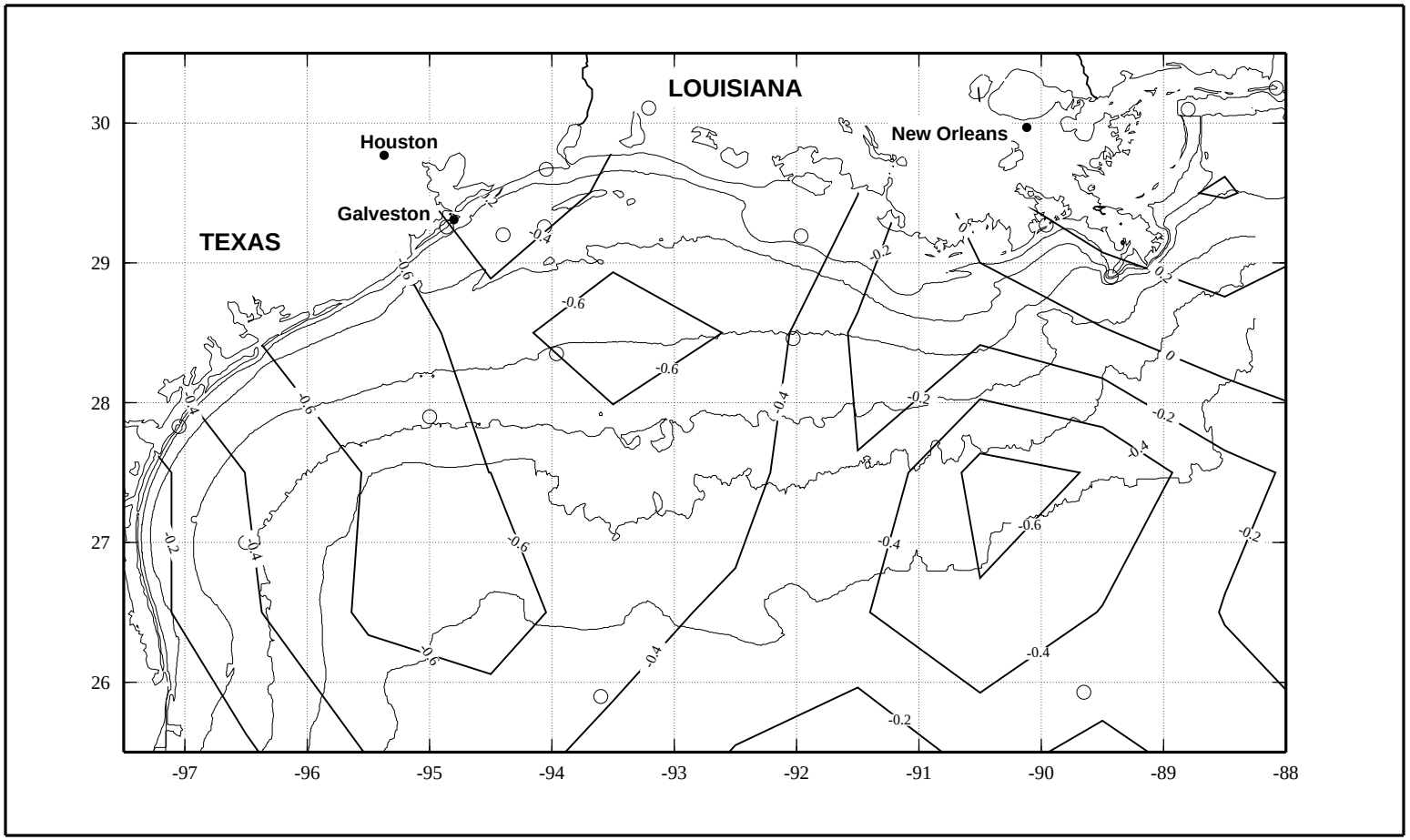

Figure 3.94.09. Monthly mean surface wind stress curl for September 1994, contour units in 10^{-4} Pa km^{-1}.

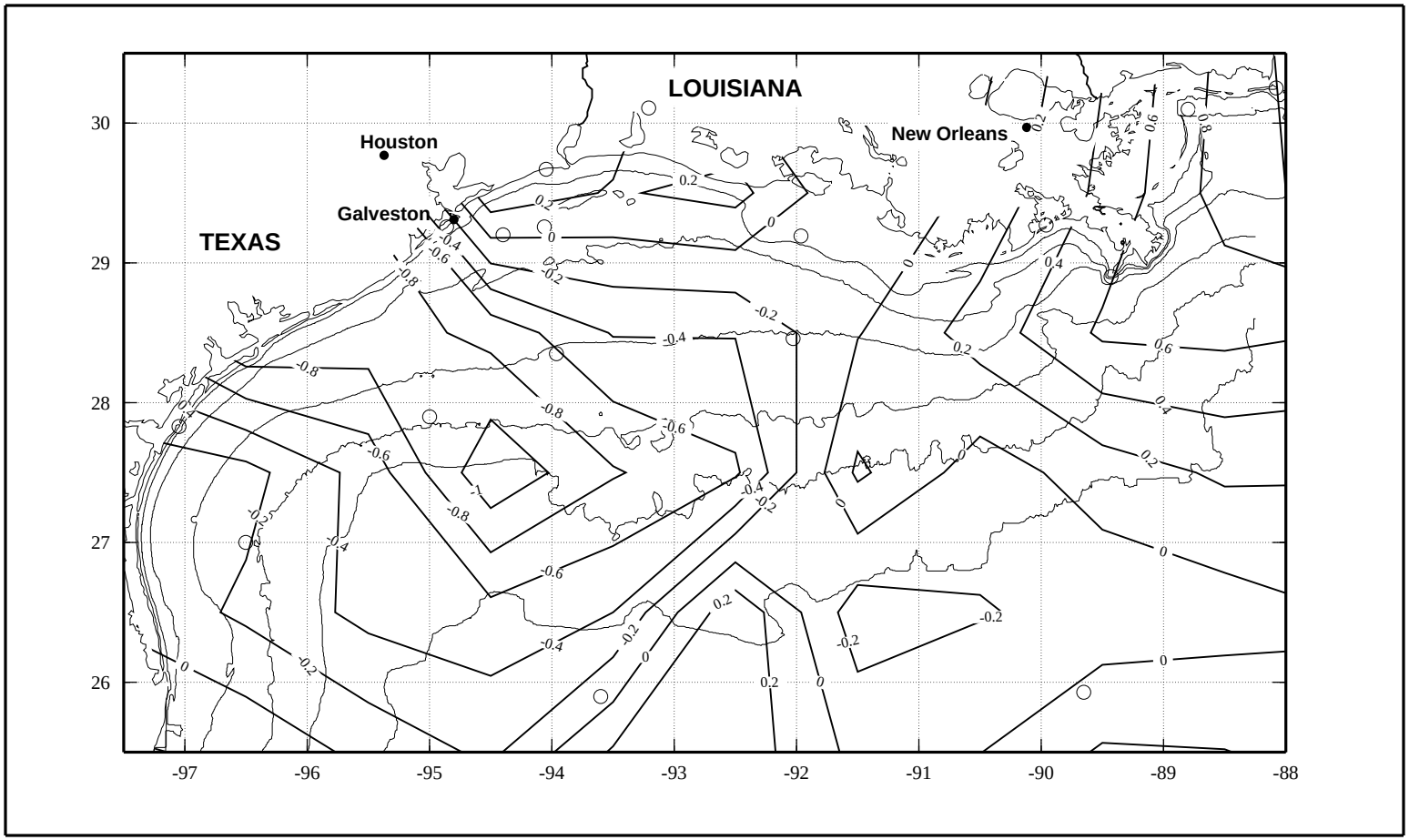

Figure 3.94.10. Monthly mean surface wind stress curl for October 1994, contour units in 10^{-4} Pa km^{-1}.

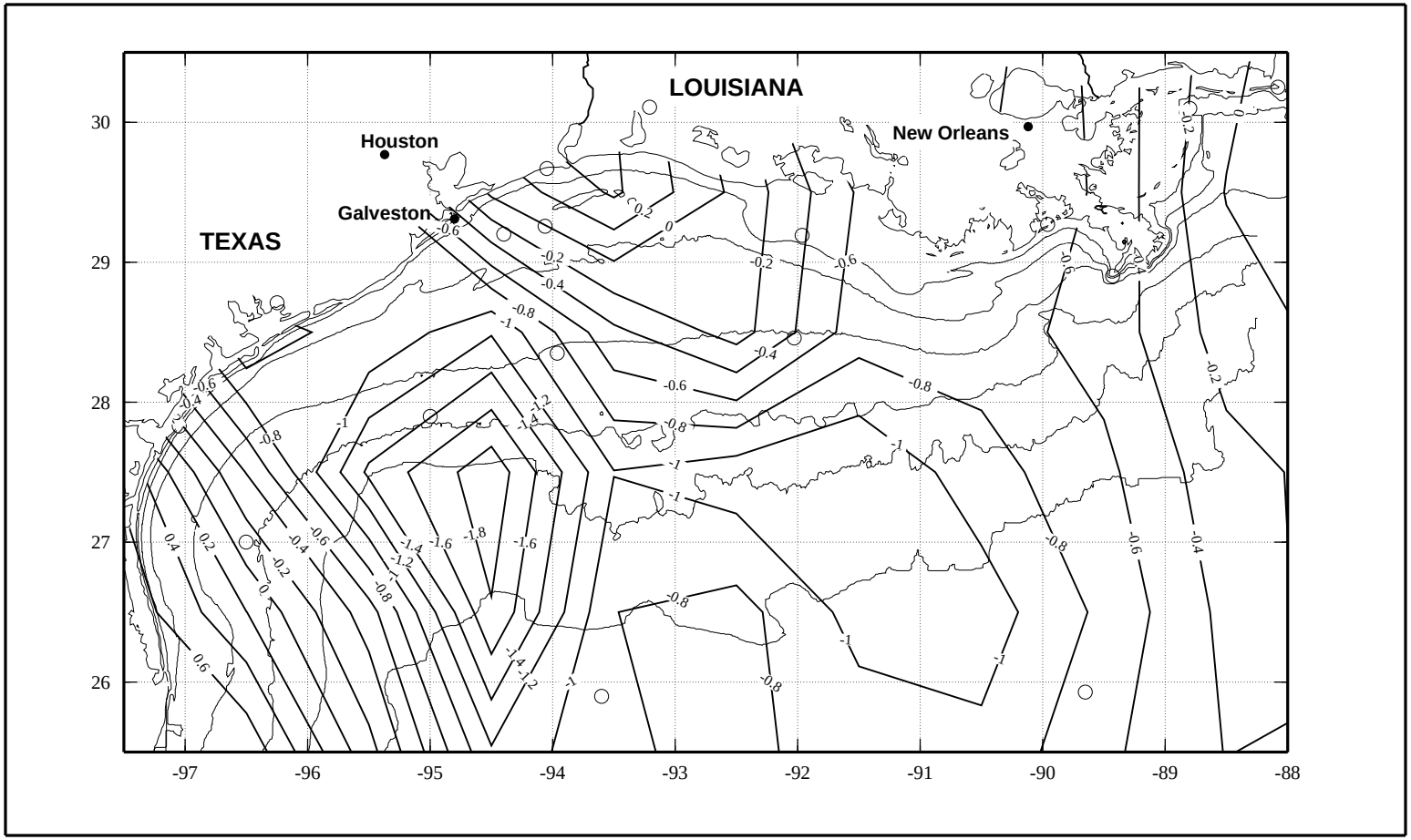

Figure 3.94.11. Monthly mean surface wind stress curl for November 1994, contour units in 10^{-4} Pa km^{-1}.

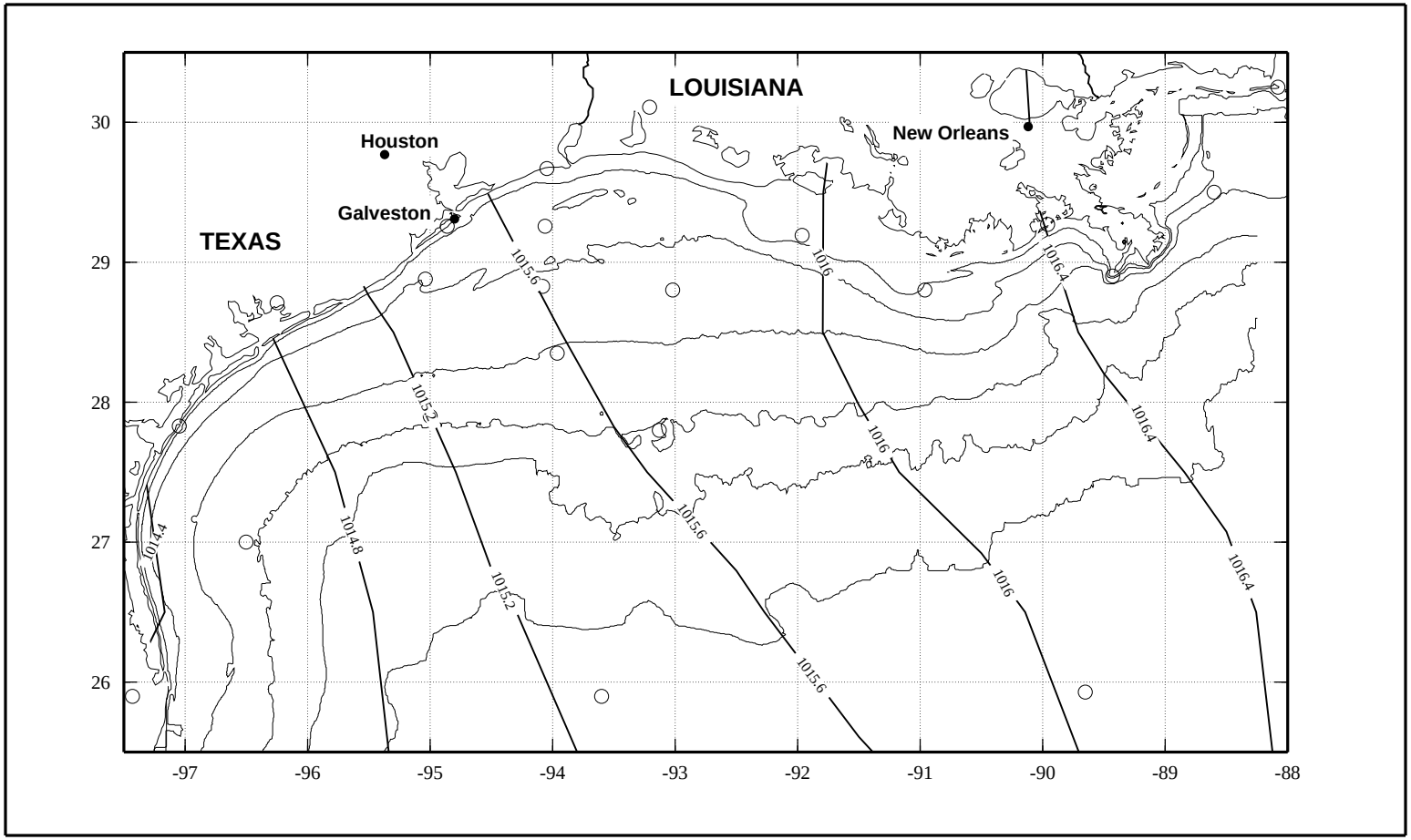

Figure 4.92.04. Monthly mean surface pressure for April 1992, contour units in hPa.

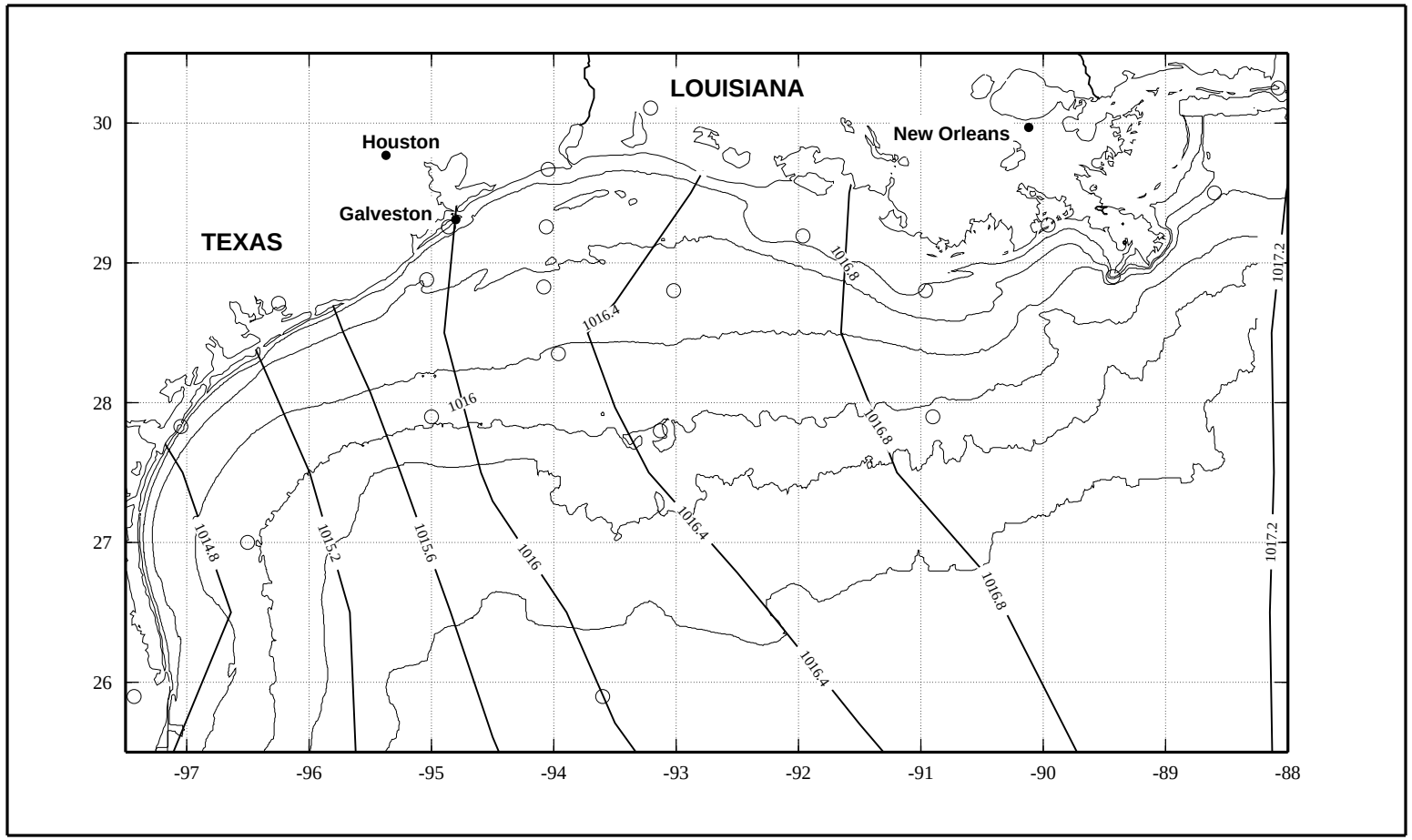

Figure 4.92.05. Monthly mean surface pressure for May 1992, contour units in hPa.

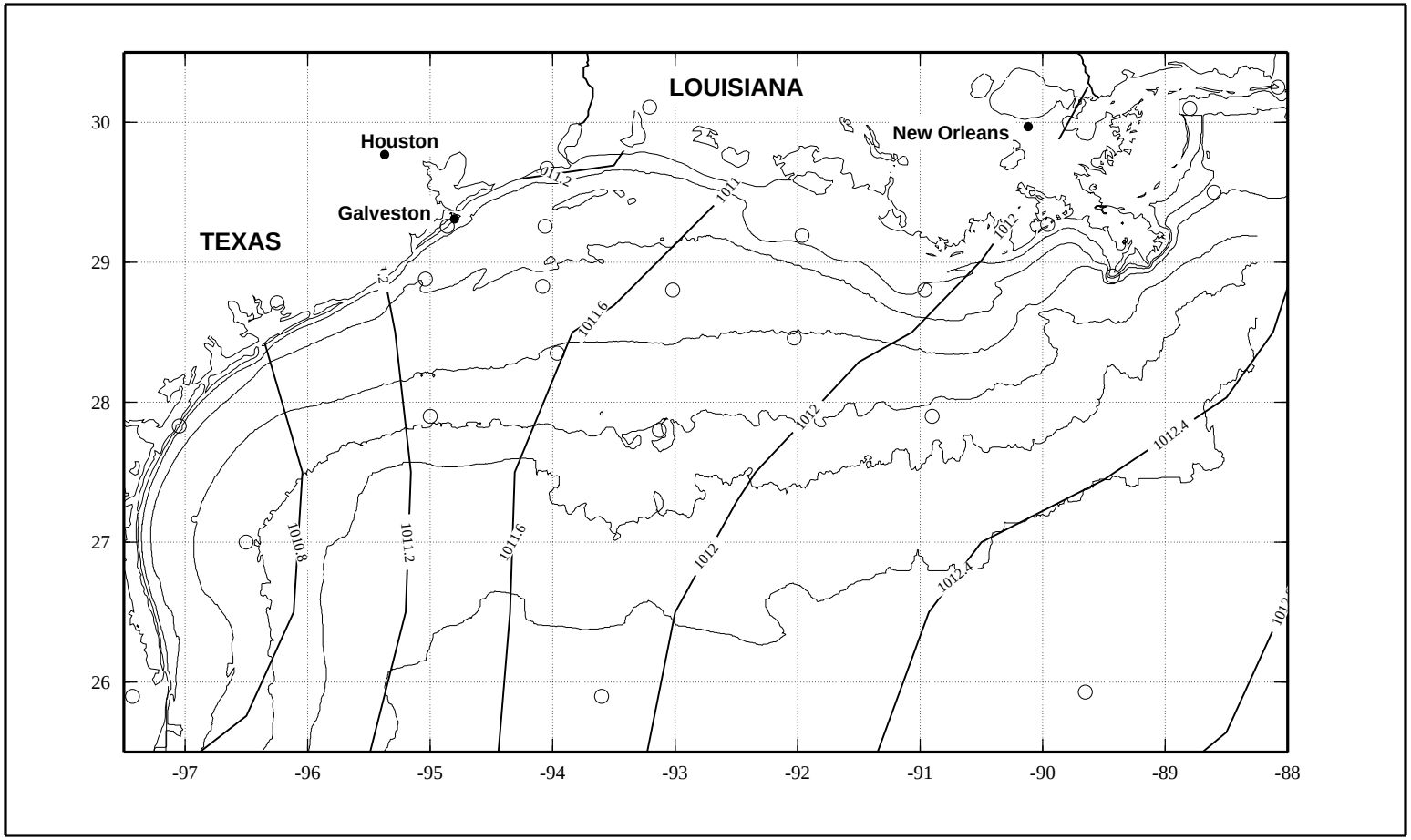

Figure 4.92.06. Monthly mean surface pressure for June 1992, contour units in hPa.

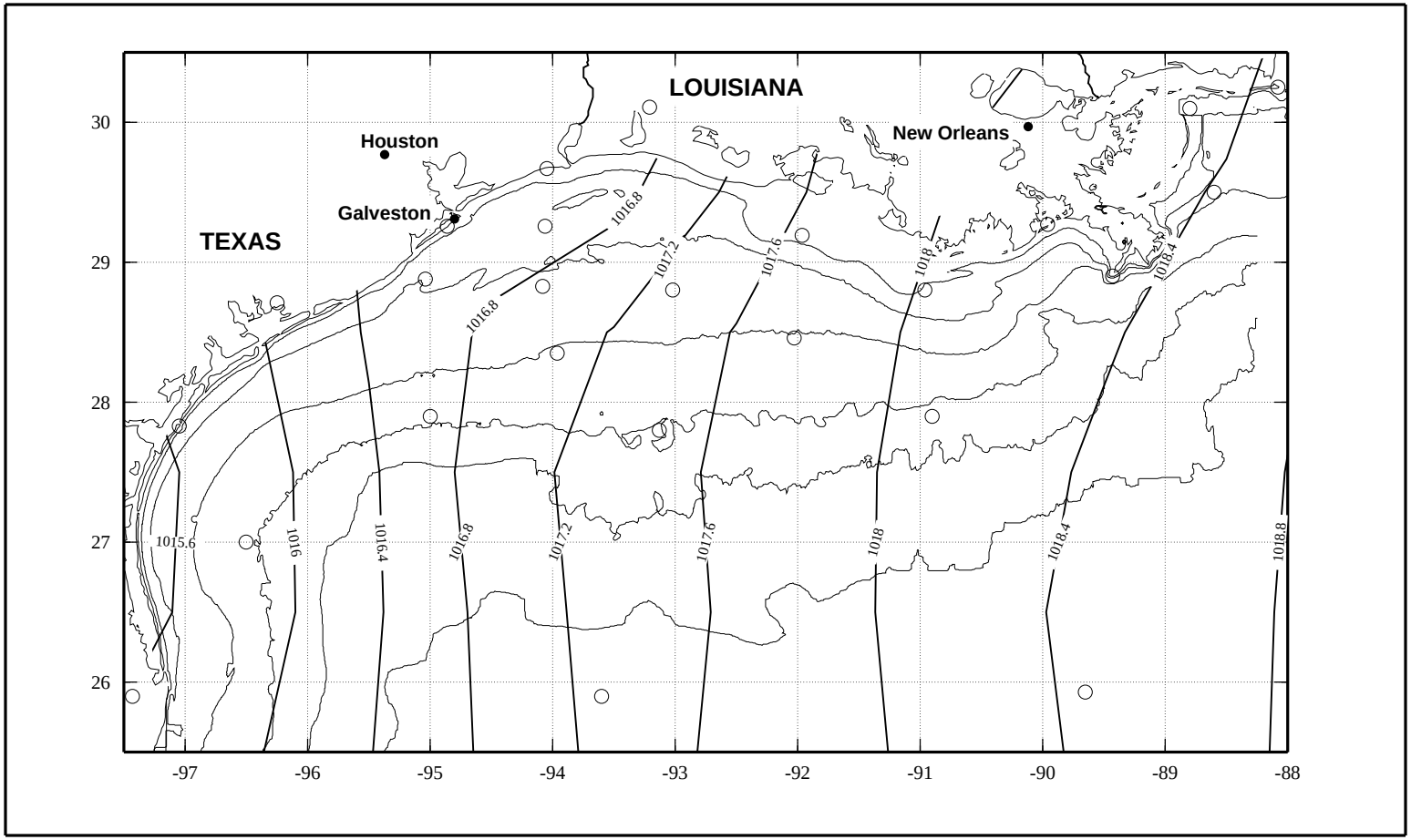

Figure 4.92.07. Monthly mean surface pressure for July 1992, contour units in hPa.

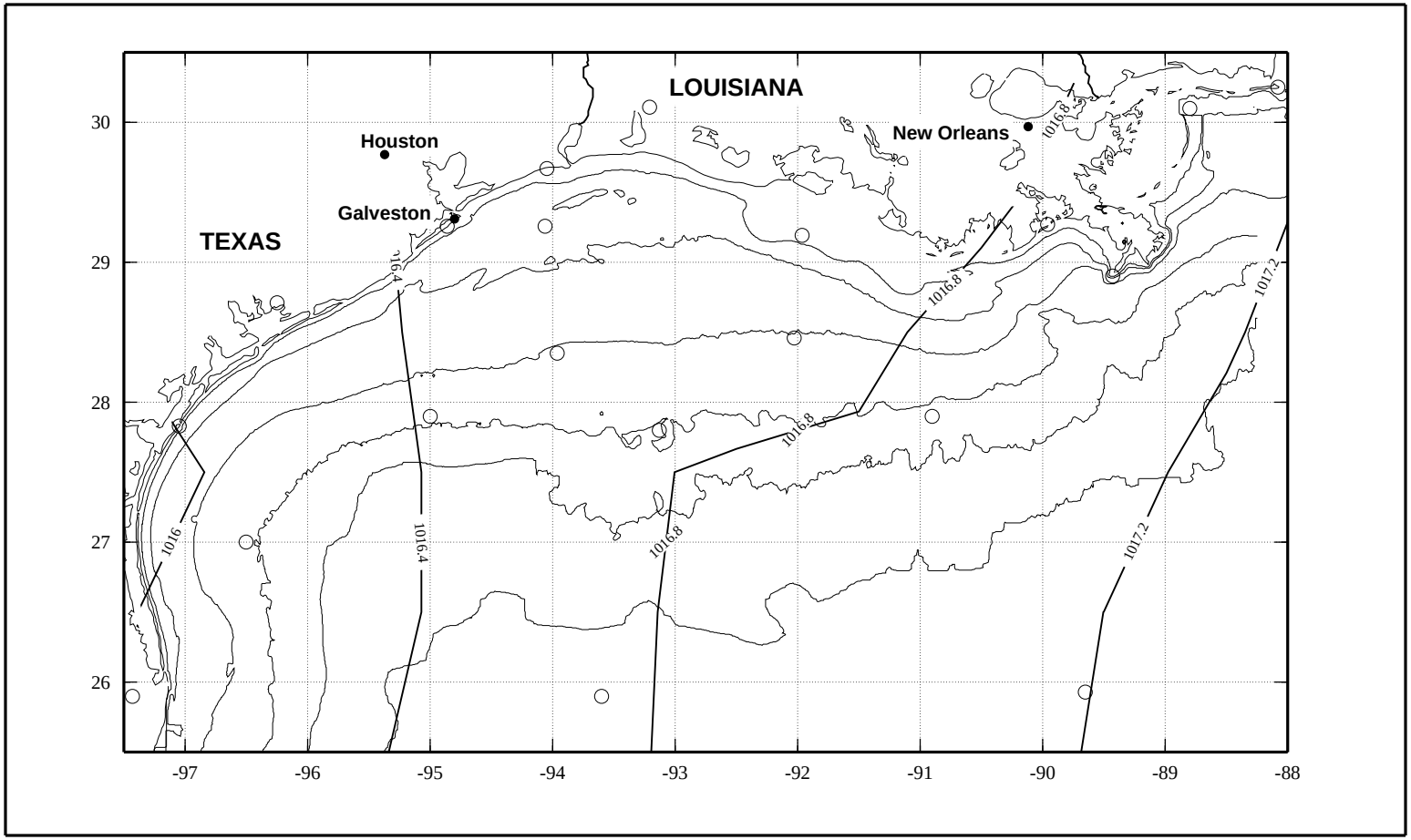

Figure 4.92.08. Monthly mean surface pressure for August 1992, contour units in hPa.

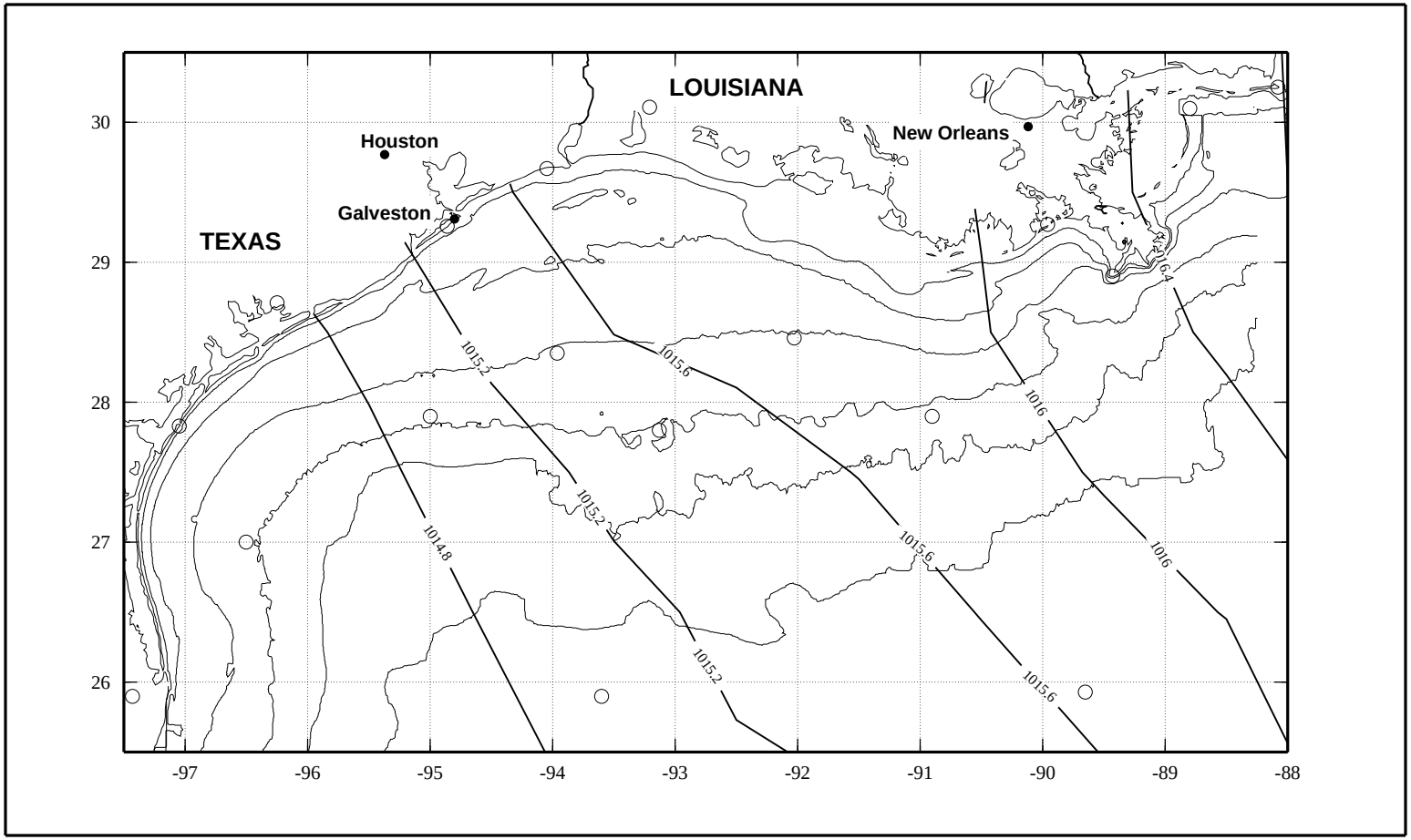

Figure 4.92.09. Monthly mean surface pressure for September 1992, contour units in hPa.

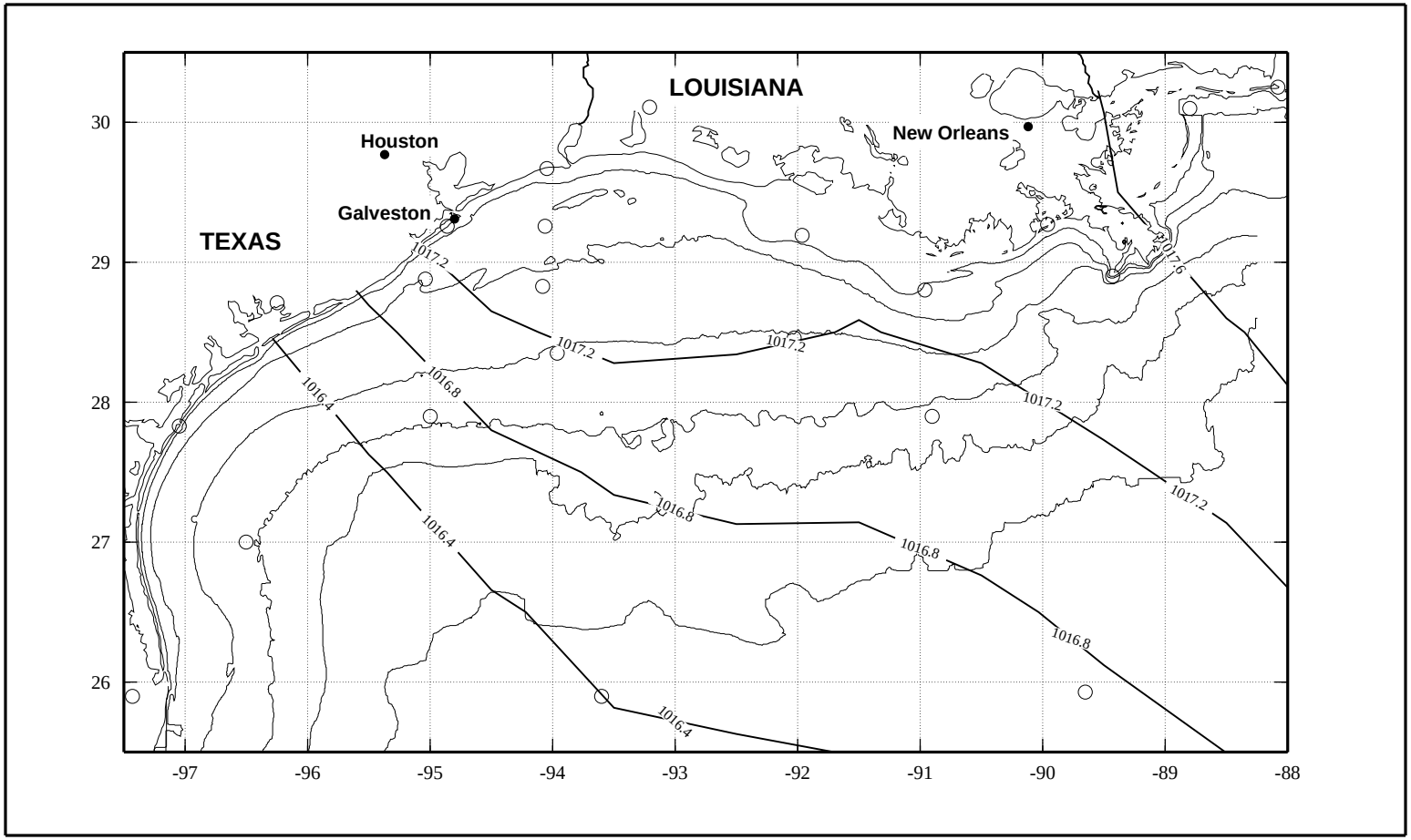

Figure 4.92.10. Monthly mean surface pressure for October 1992, contour units in hPa.

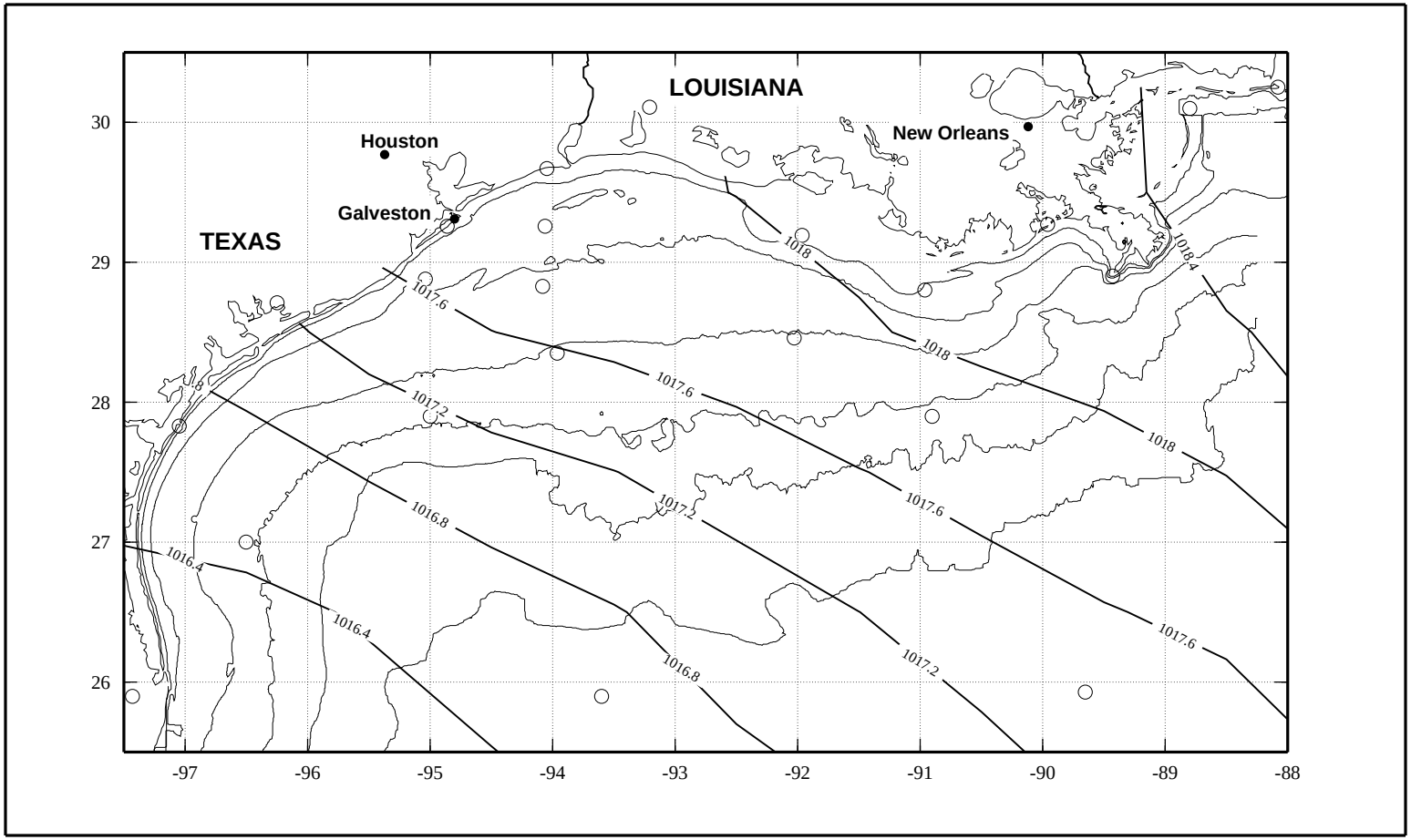

Figure 4.92.11. Monthly mean surface pressure for November 1992, contour units in hPa.

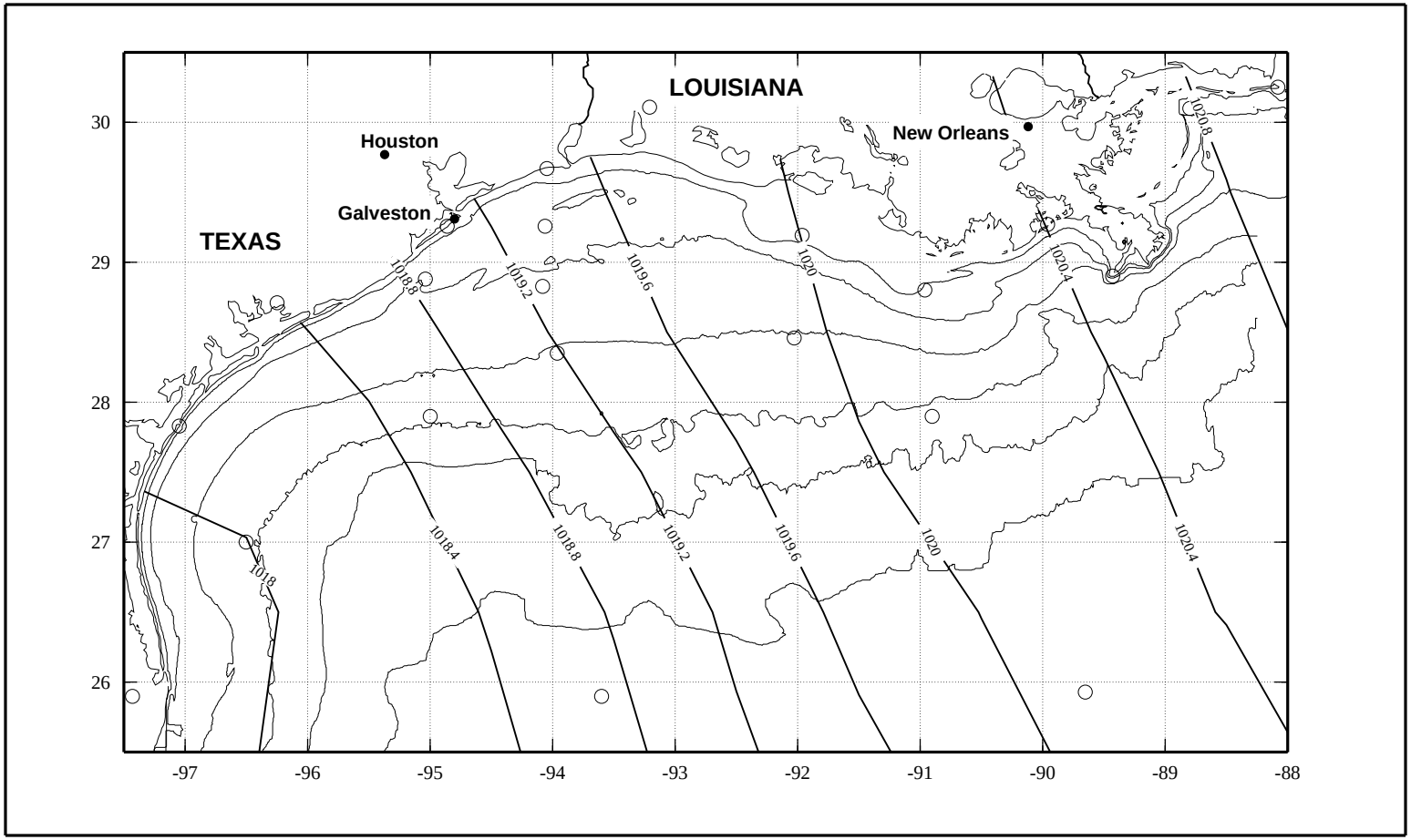

Figure 4.92.12. Monthly mean surface pressure for December 1992, contour units in hPa.

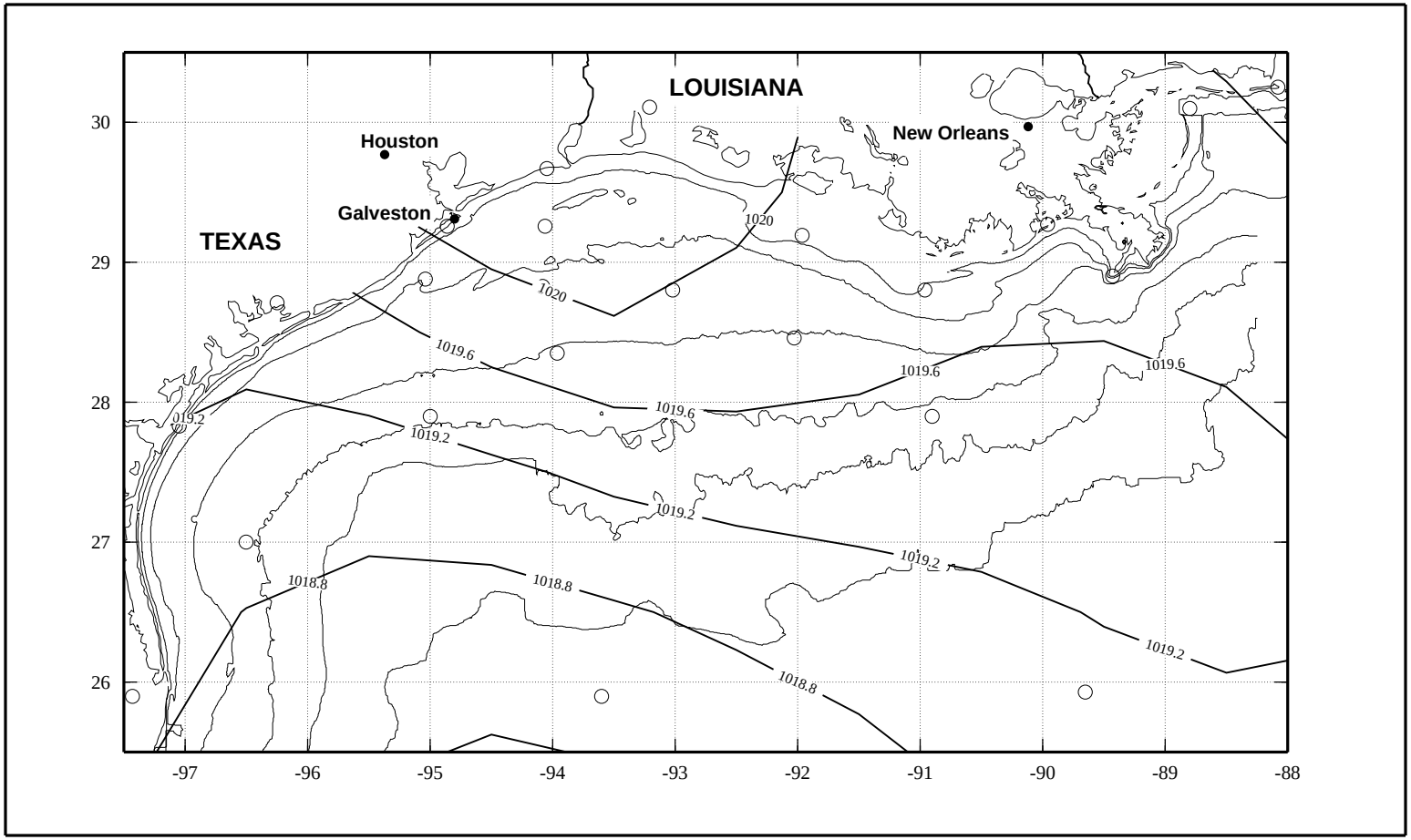

Figure 4.93.01. Monthly mean surface pressure for January 1993, contour units in hPa.

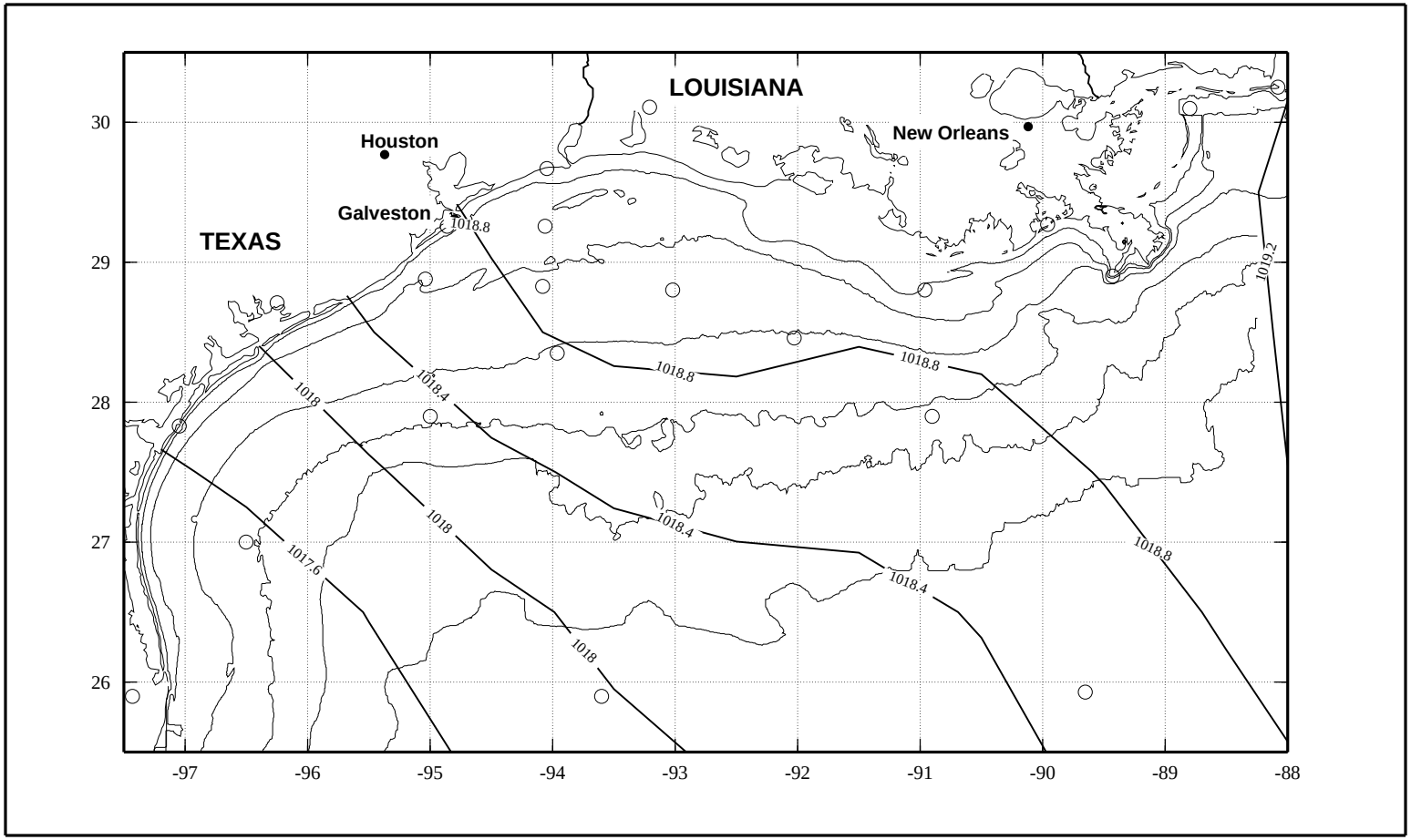

Figure 4.93.02. Monthly mean surface pressure for February 1993, contour units in hPa.

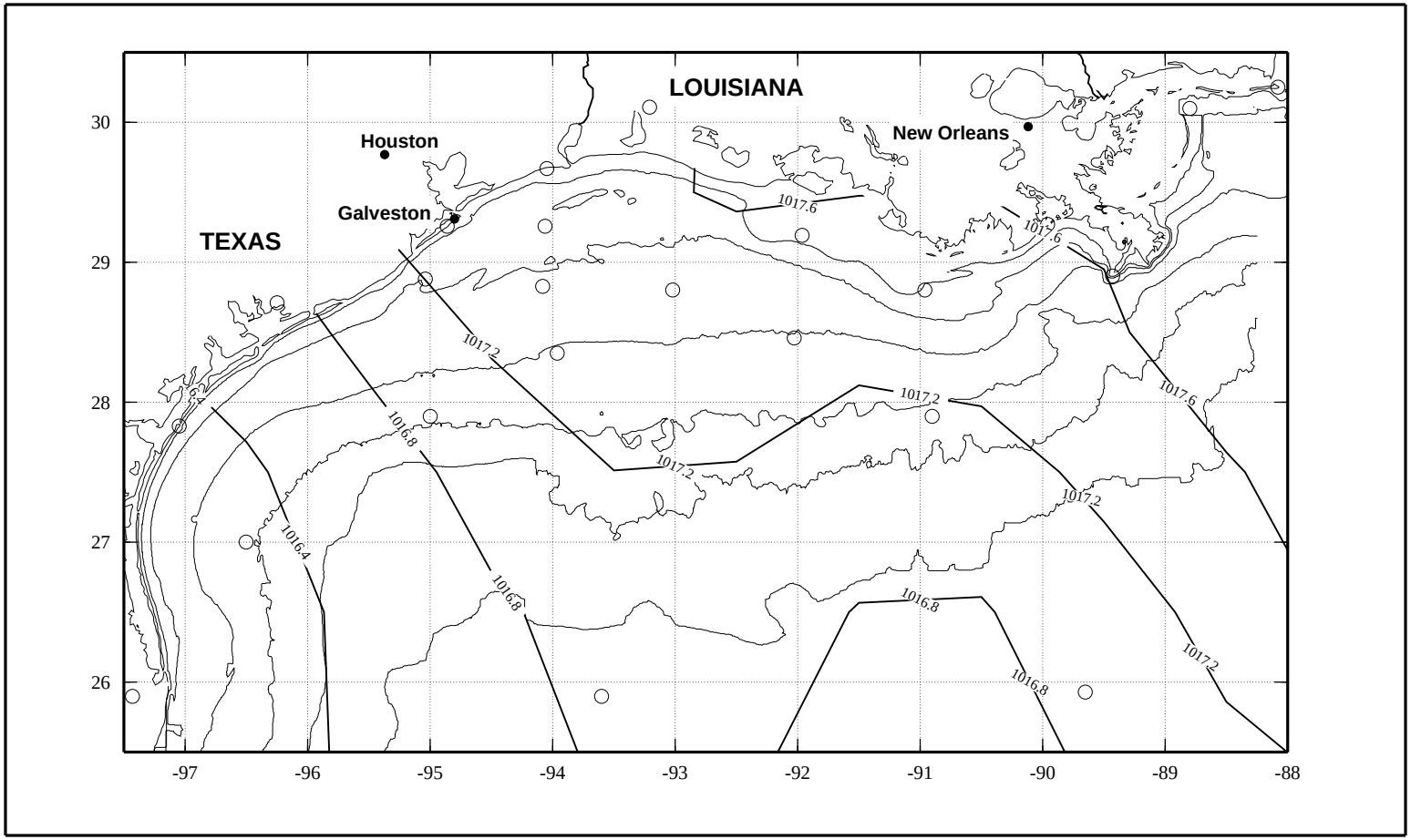

Figure 4.93.03. Monthly mean surface pressure for March 1993, contour units in hPa.

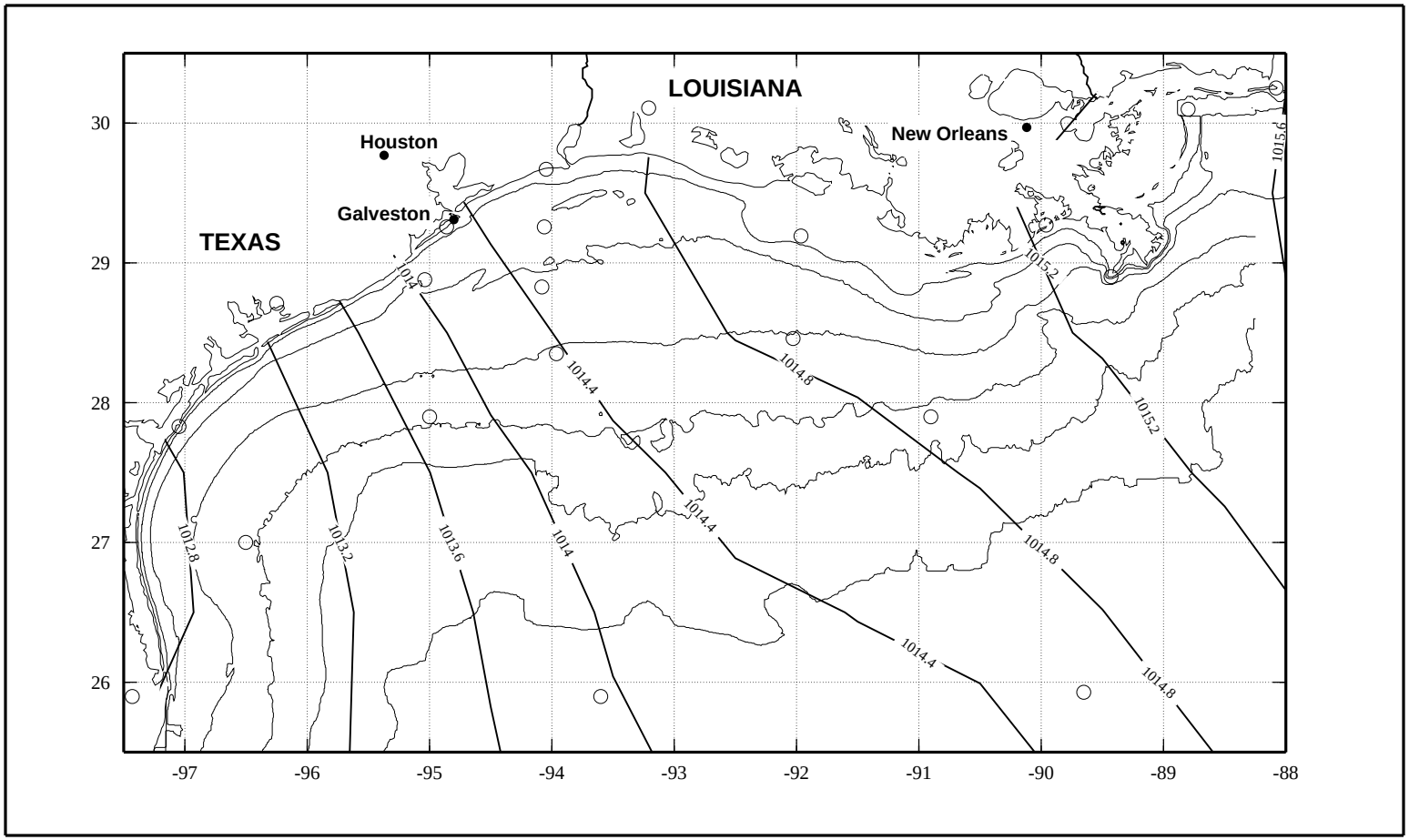

Figure 4.93.04. Monthly mean surface pressure for April 1993, contour units in hPa.

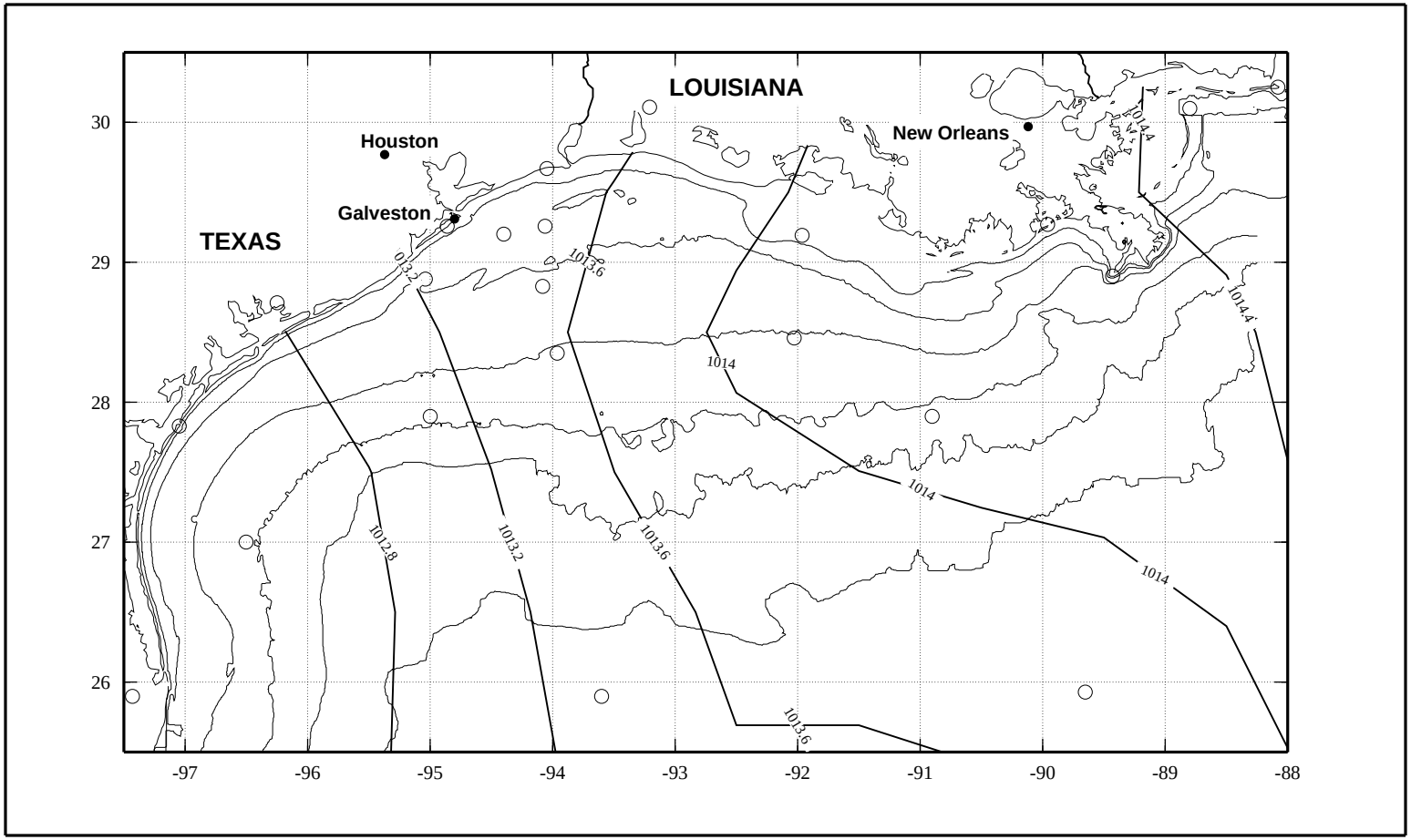

Figure 4.93.05. Monthly mean surface pressure for May 1993, contour units in hPa.

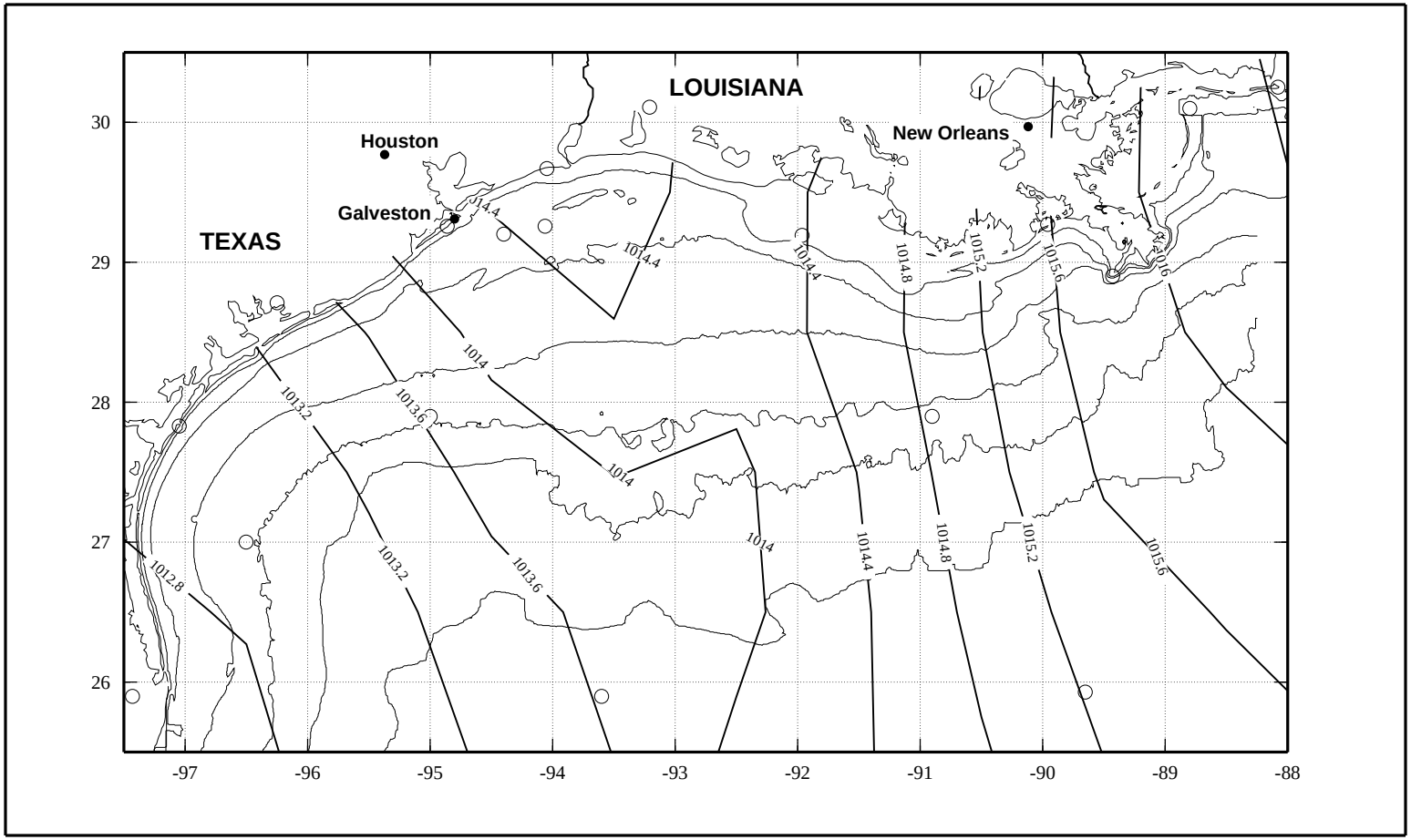

Figure 4.93.06. Monthly mean surface pressure for June 1993, contour units in hPa.

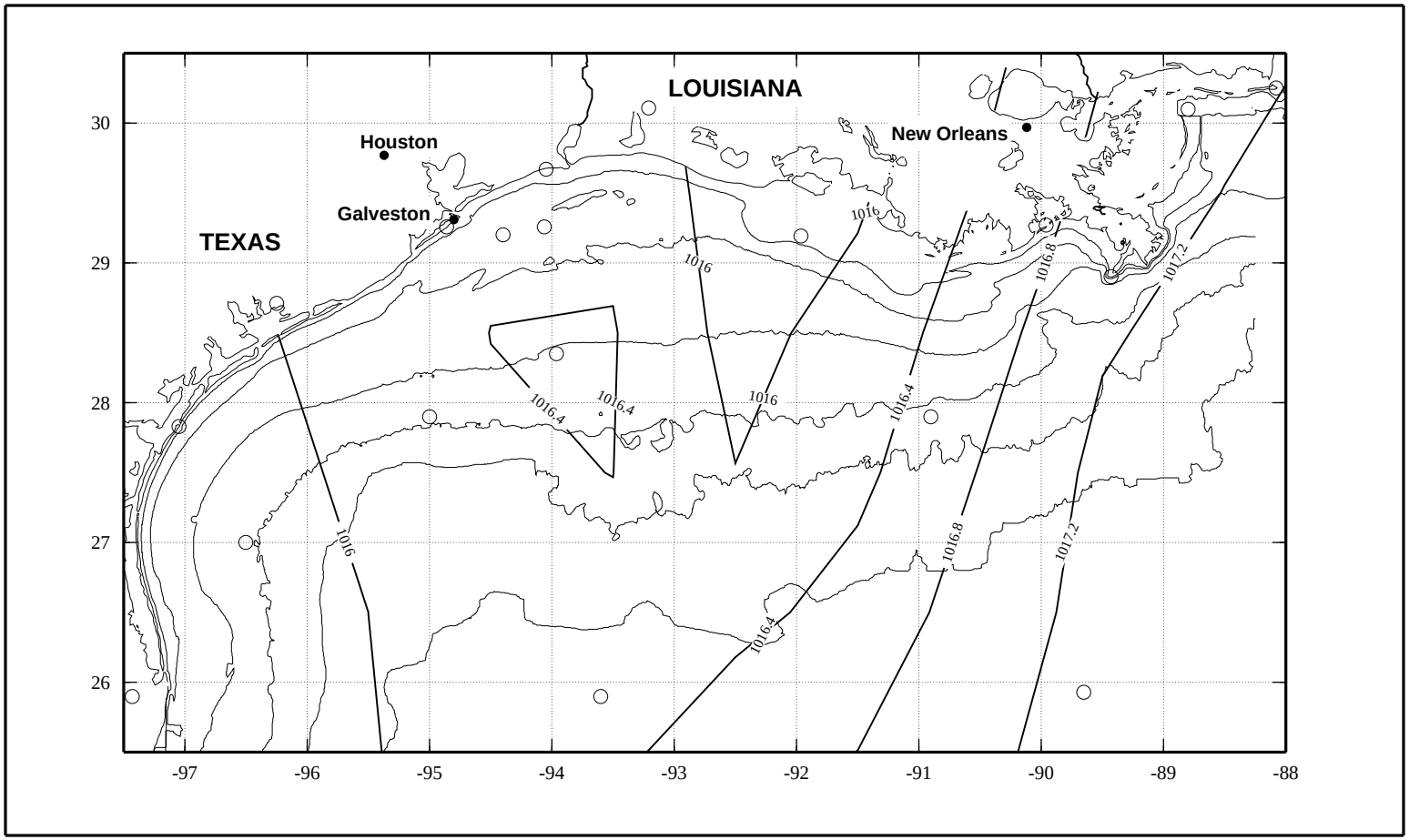

Figure 4.93.07. Monthly mean surface pressure for July 1993, contour units in hPa.

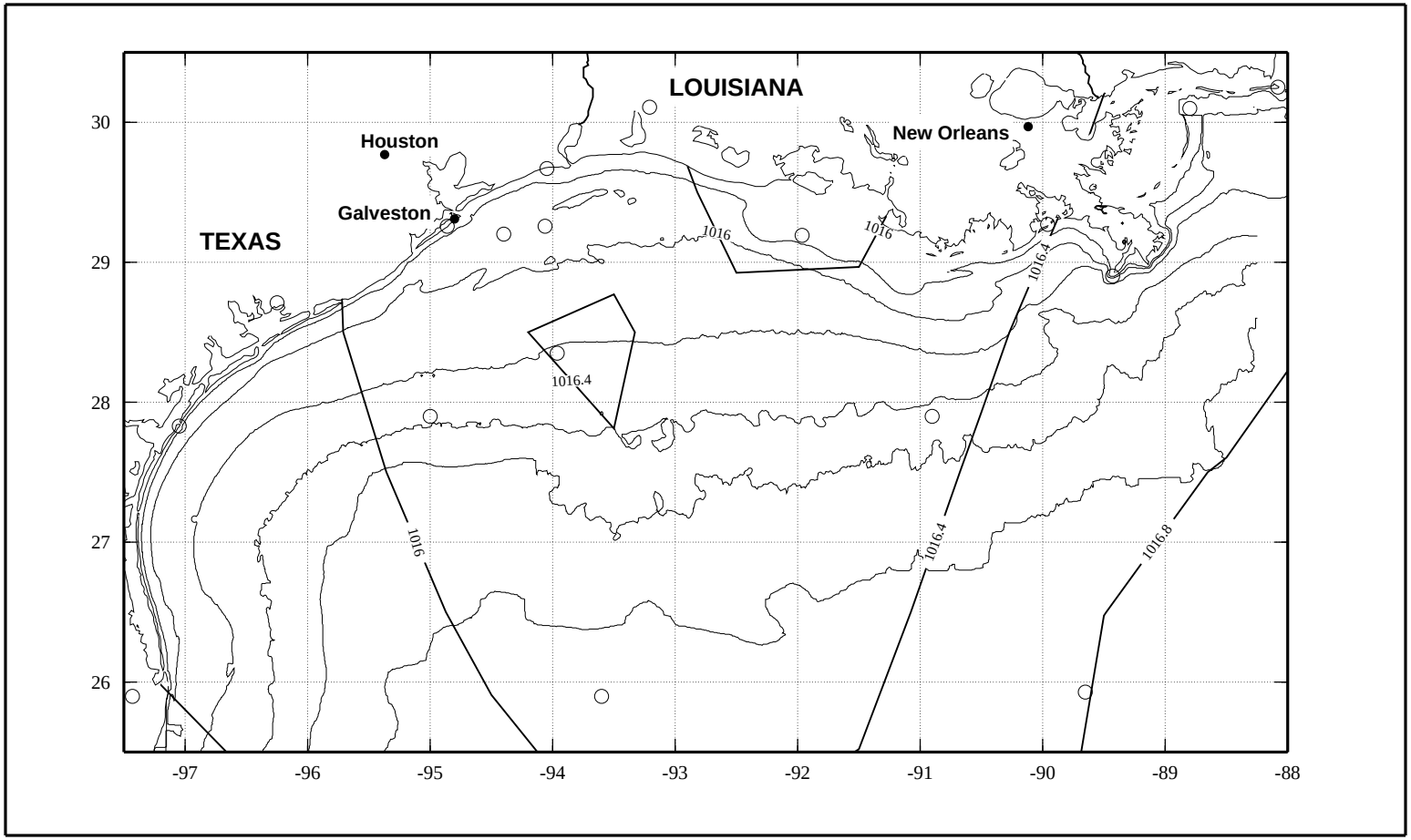

Figure 4.93.08. Monthly mean surface pressure for August 1993, contour units in hPa.

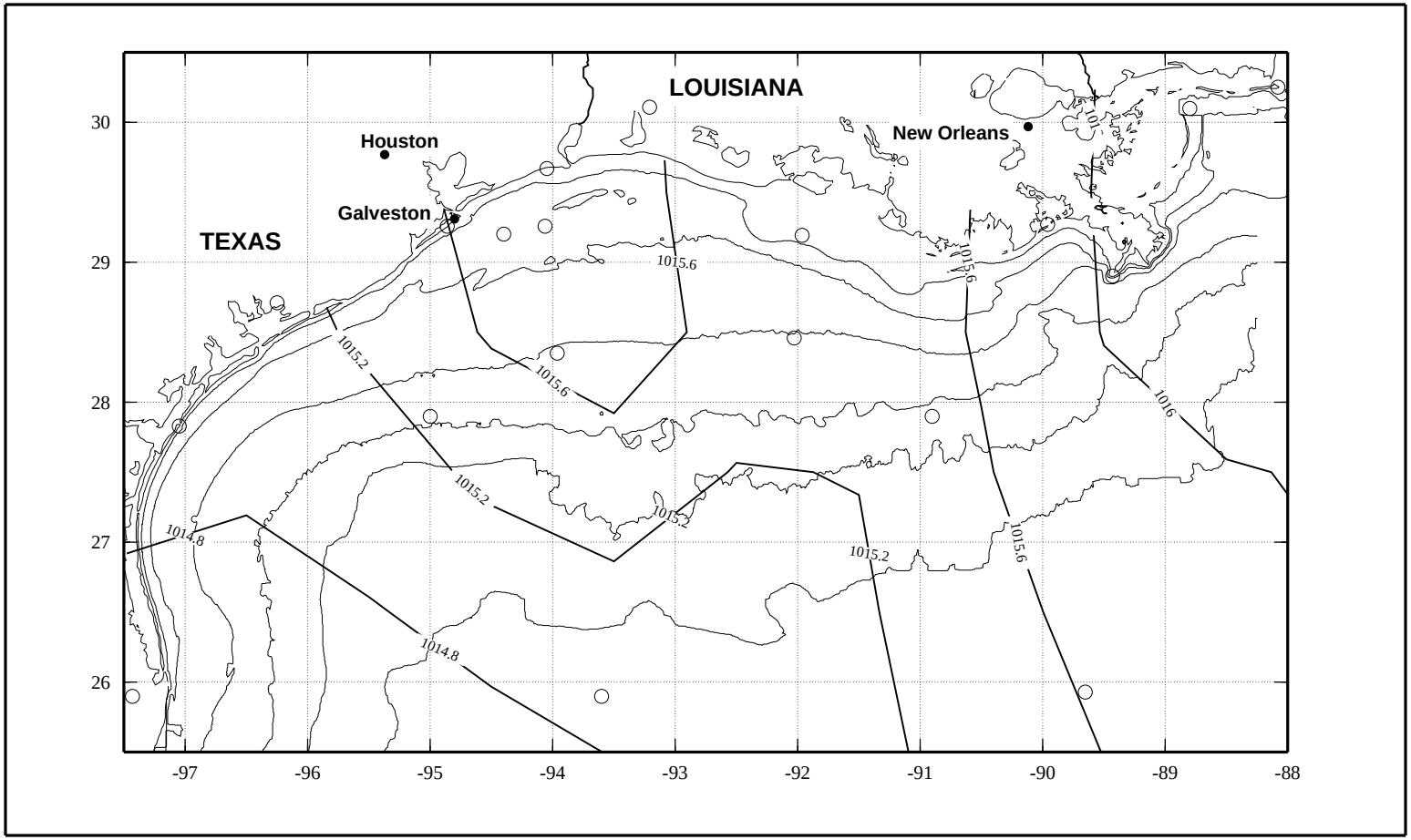

Figure 4.93.09. Monthly mean surface pressure for September 1993, contour units in hPa.

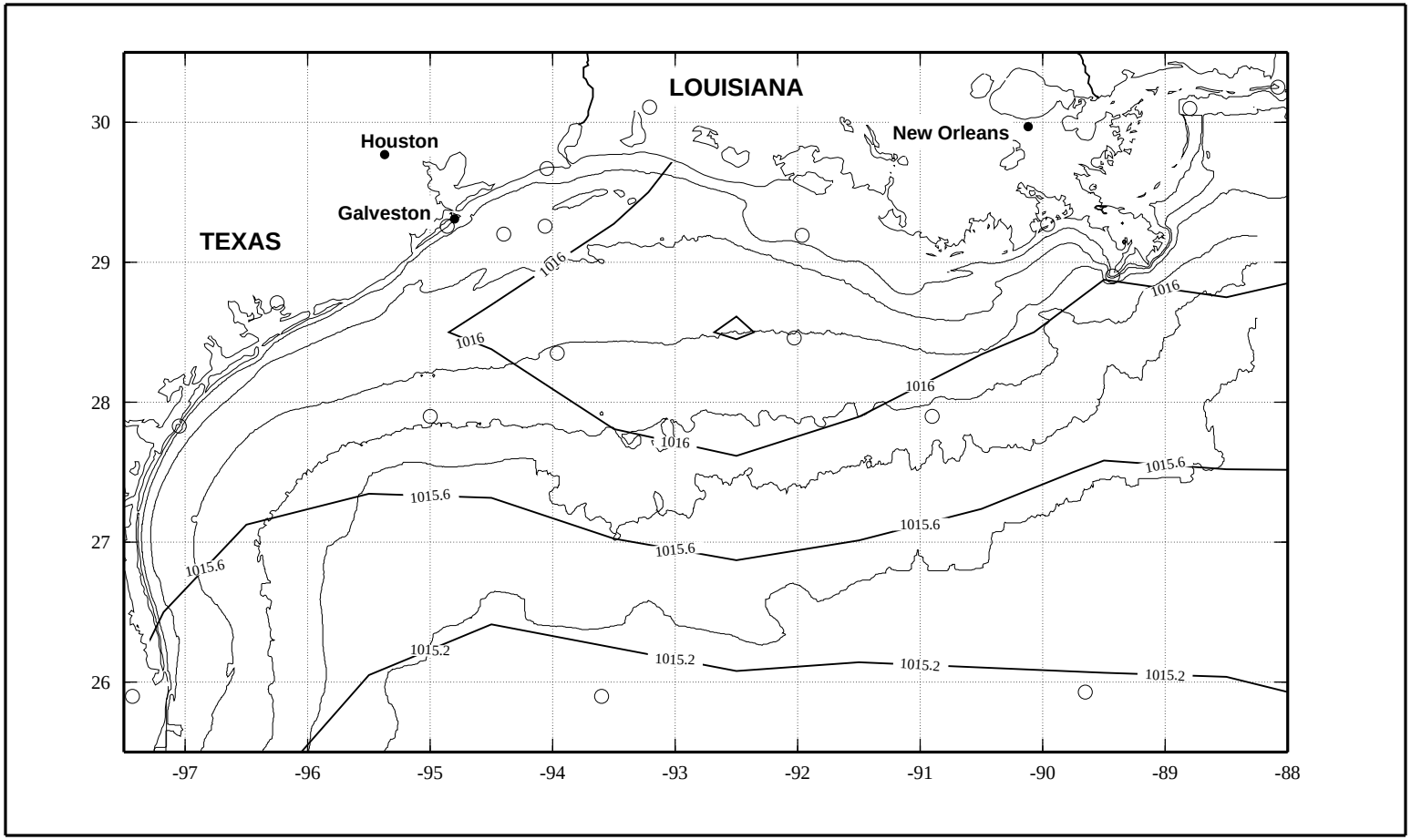

Figure 4.93.10. Monthly mean surface pressure for October 1993, contour units in hPa.

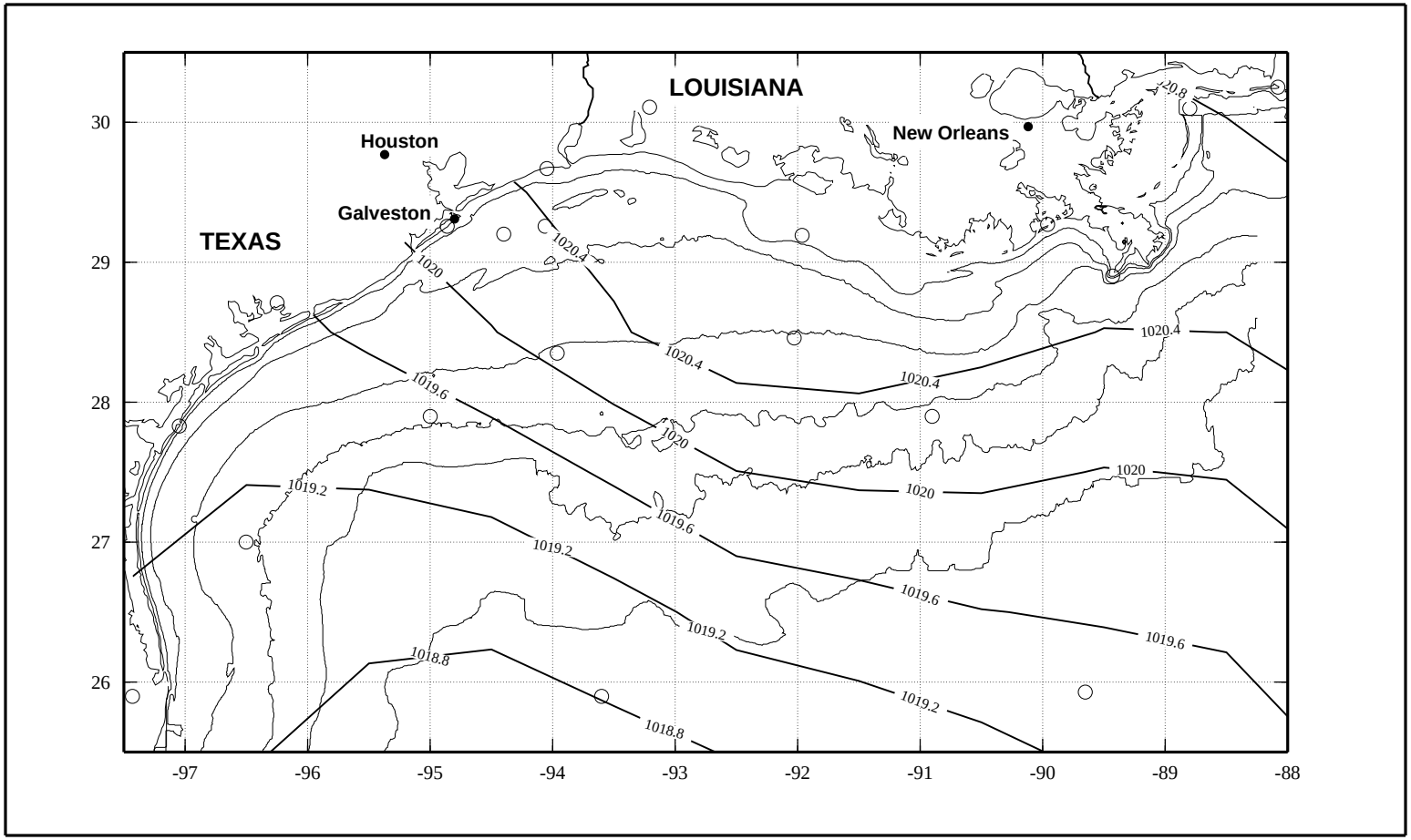

Figure 4.93.11. Monthly mean surface pressure for November 1993, contour units in hPa.

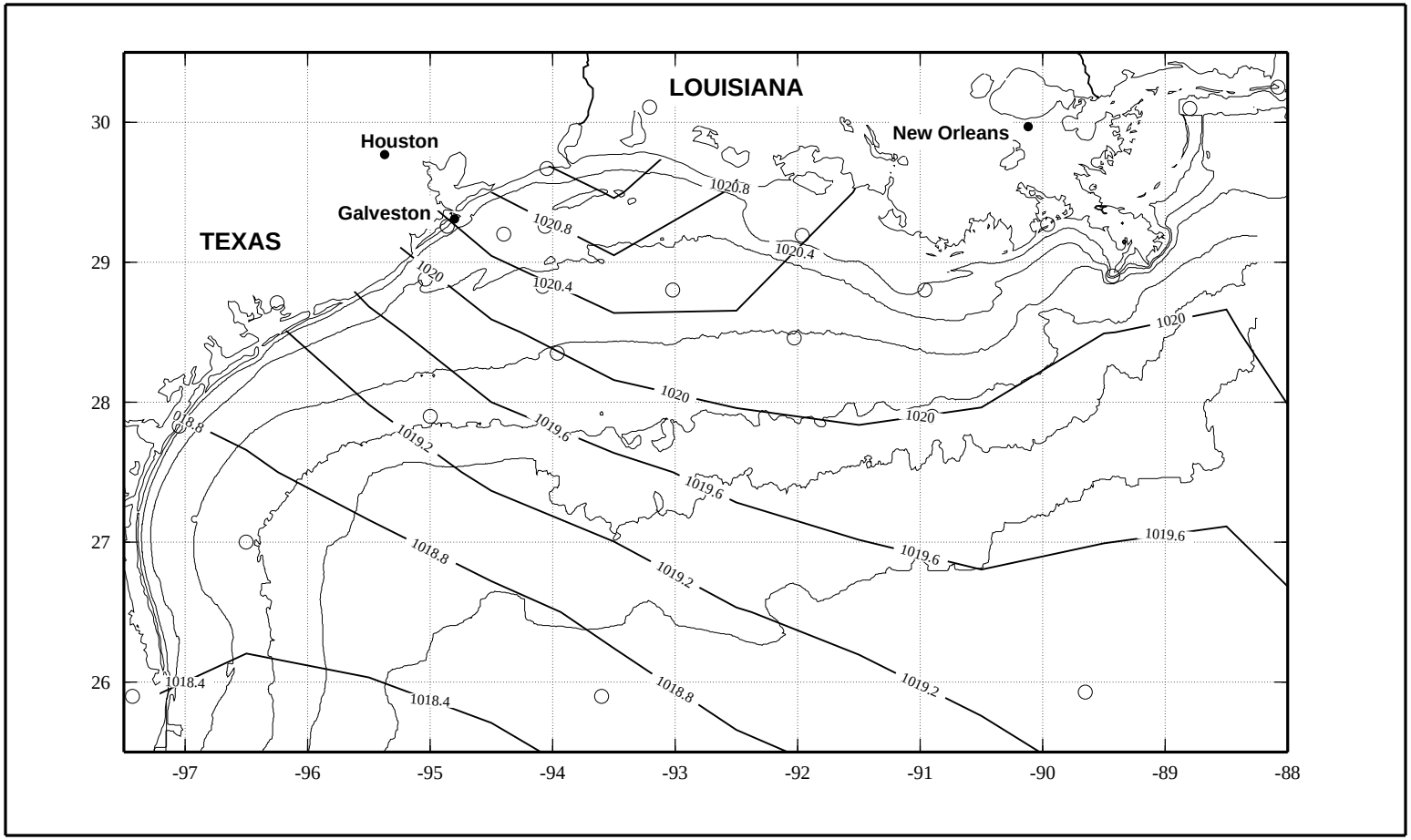

Figure 4.93.12. Monthly mean surface pressure for December 1993, contour units in hPa.

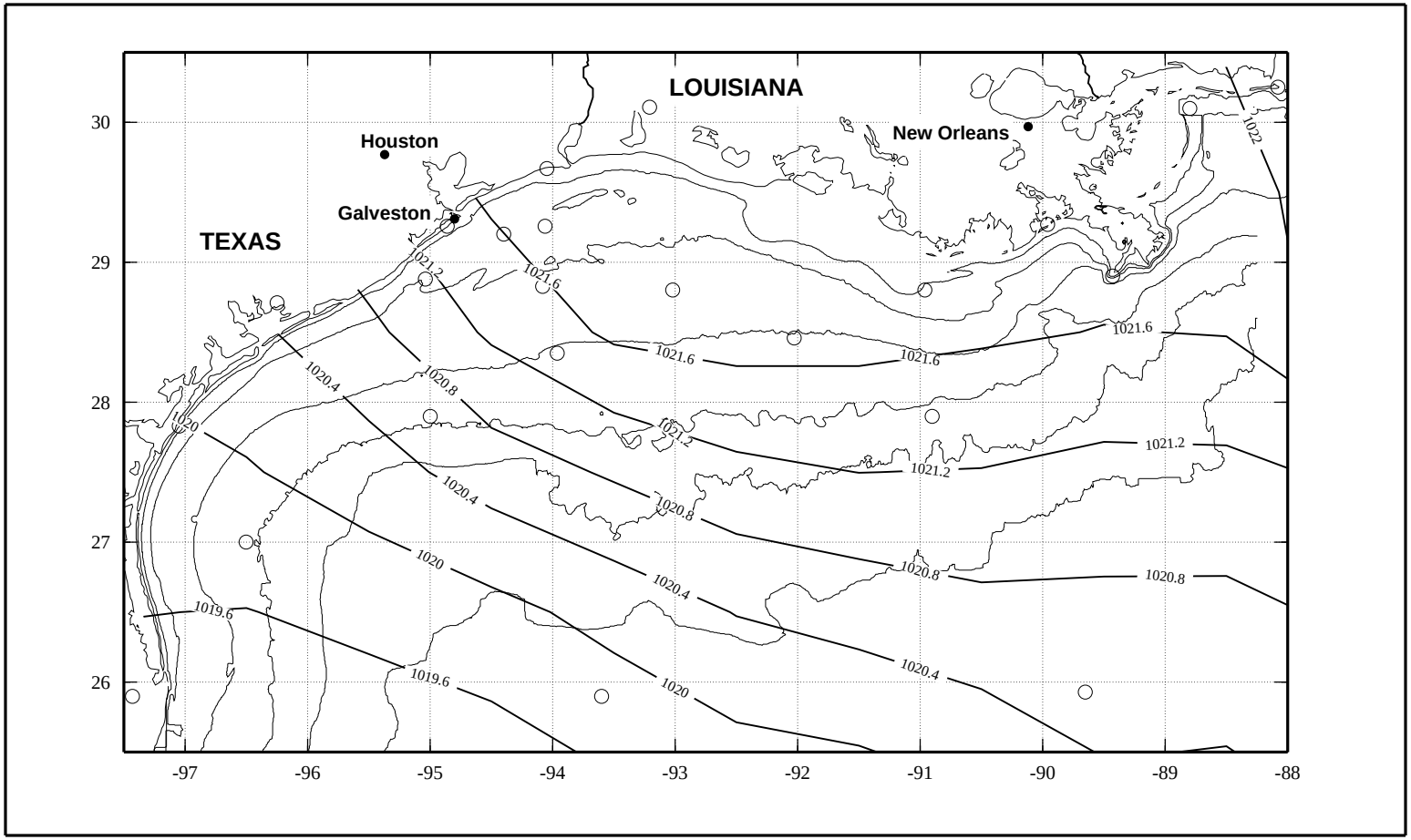

Figure 4.94.01. Monthly mean surface pressure for January 1994, contour units in hPa.

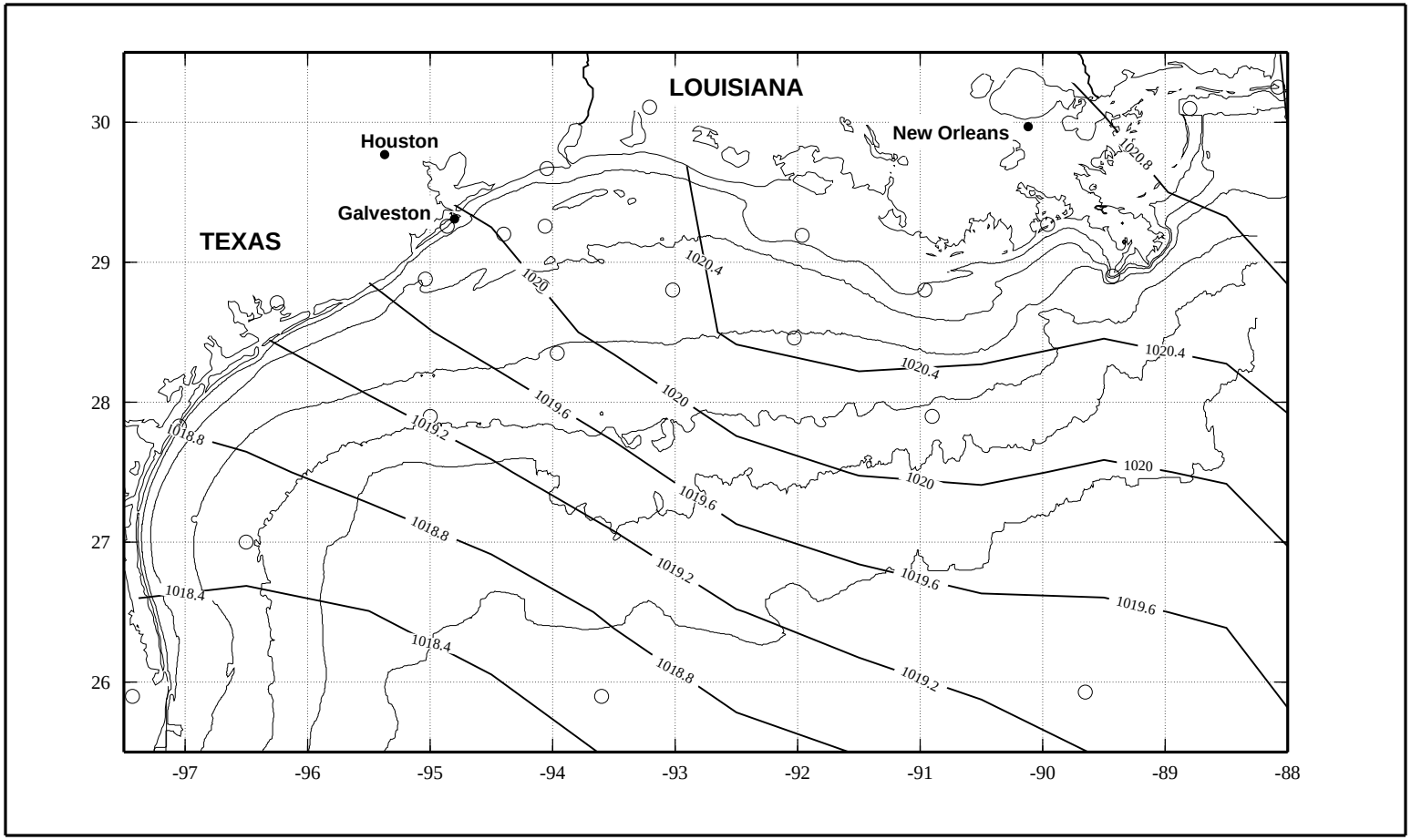

Figure 4.94.02. Monthly mean surface pressure for February 1994, contour units in hPa.

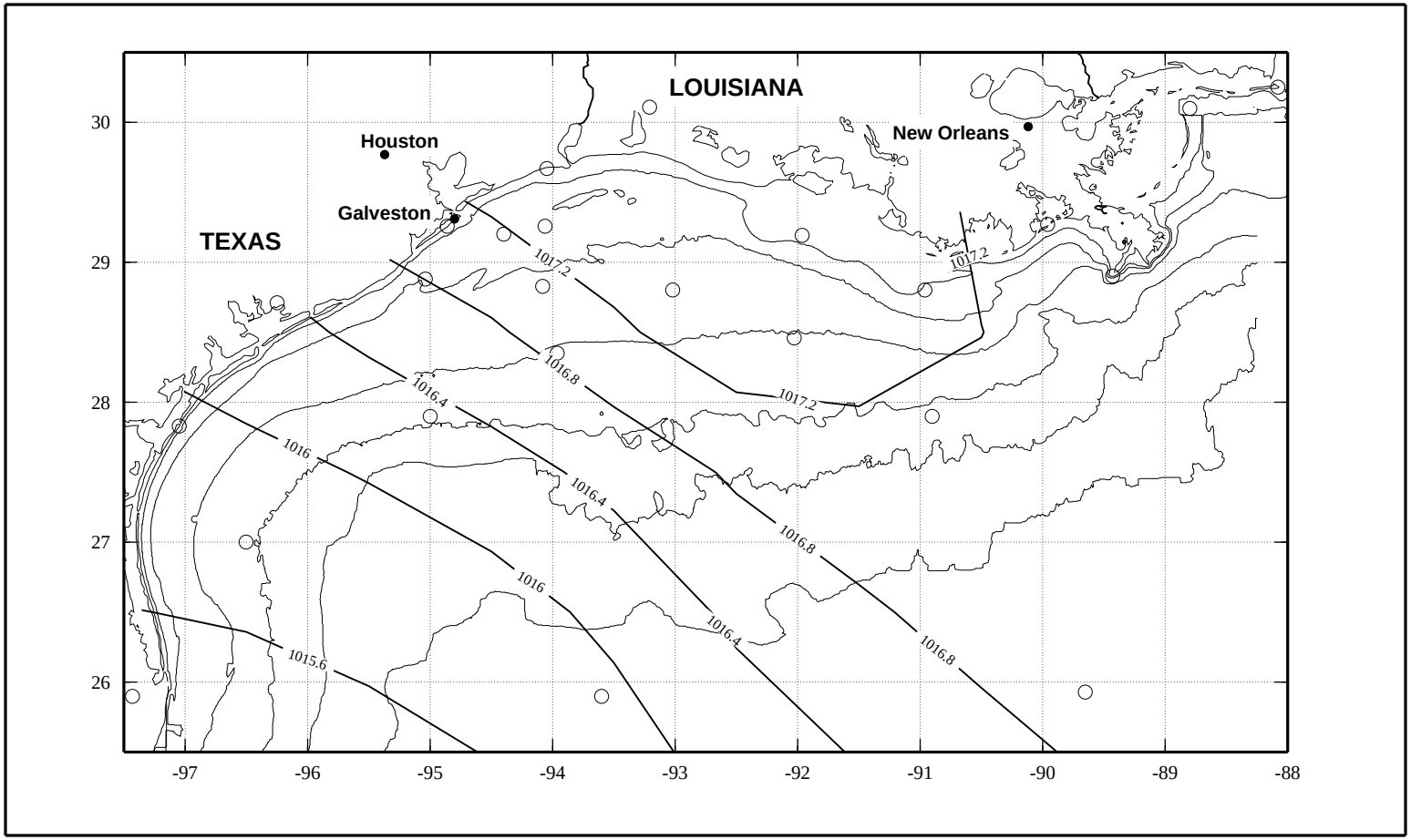

Figure 4.94.03. Monthly mean surface pressure for March 1994, contour units in hPa.

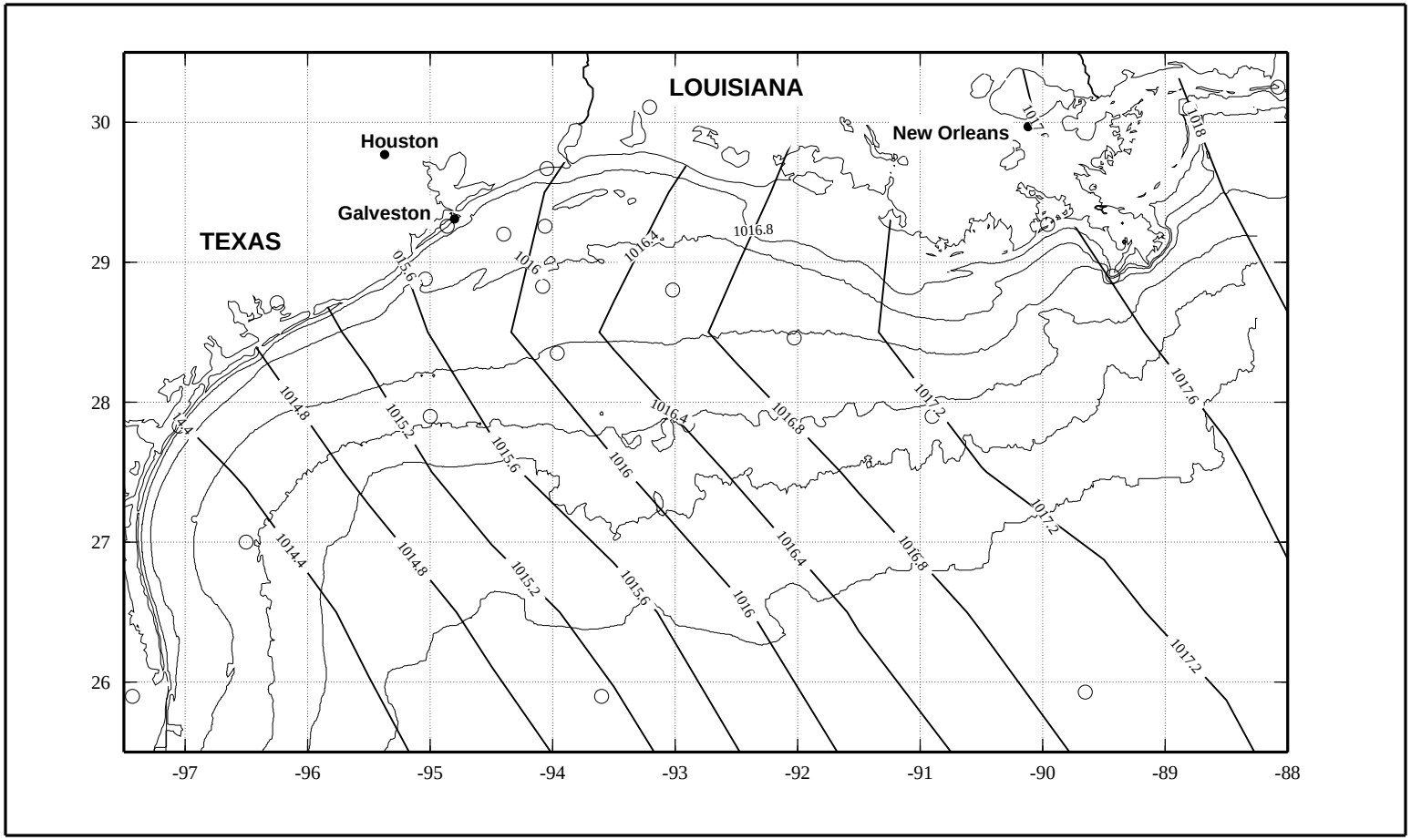

Figure 4.94.04. Monthly mean surface pressure for April 1994, contour units in hPa.

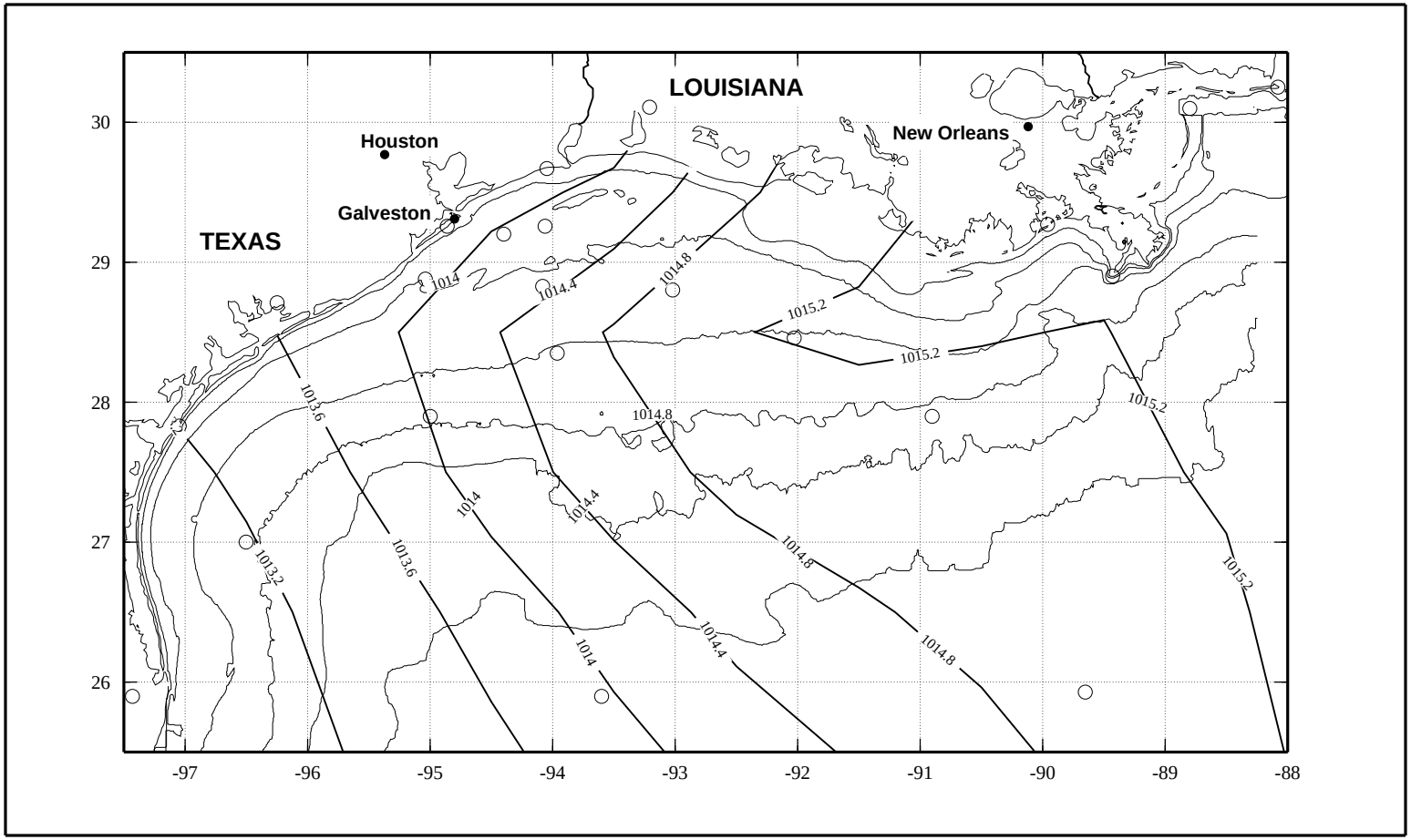

Figure 4.94.05. Monthly mean surface pressure for May 1994, contour units in hPa.

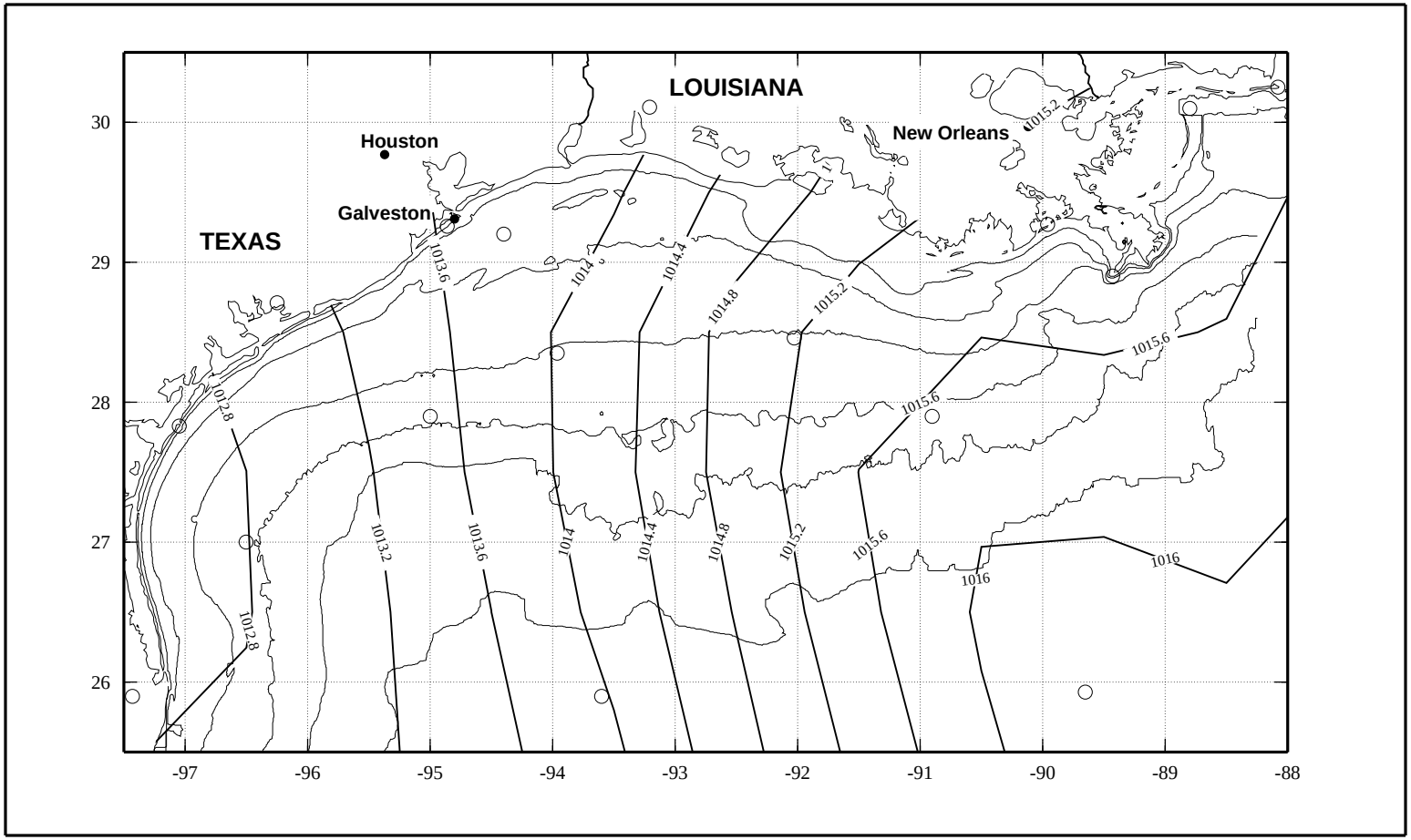

Figure 4.94.06. Monthly mean surface pressure for June 1994, contour units in hPa.

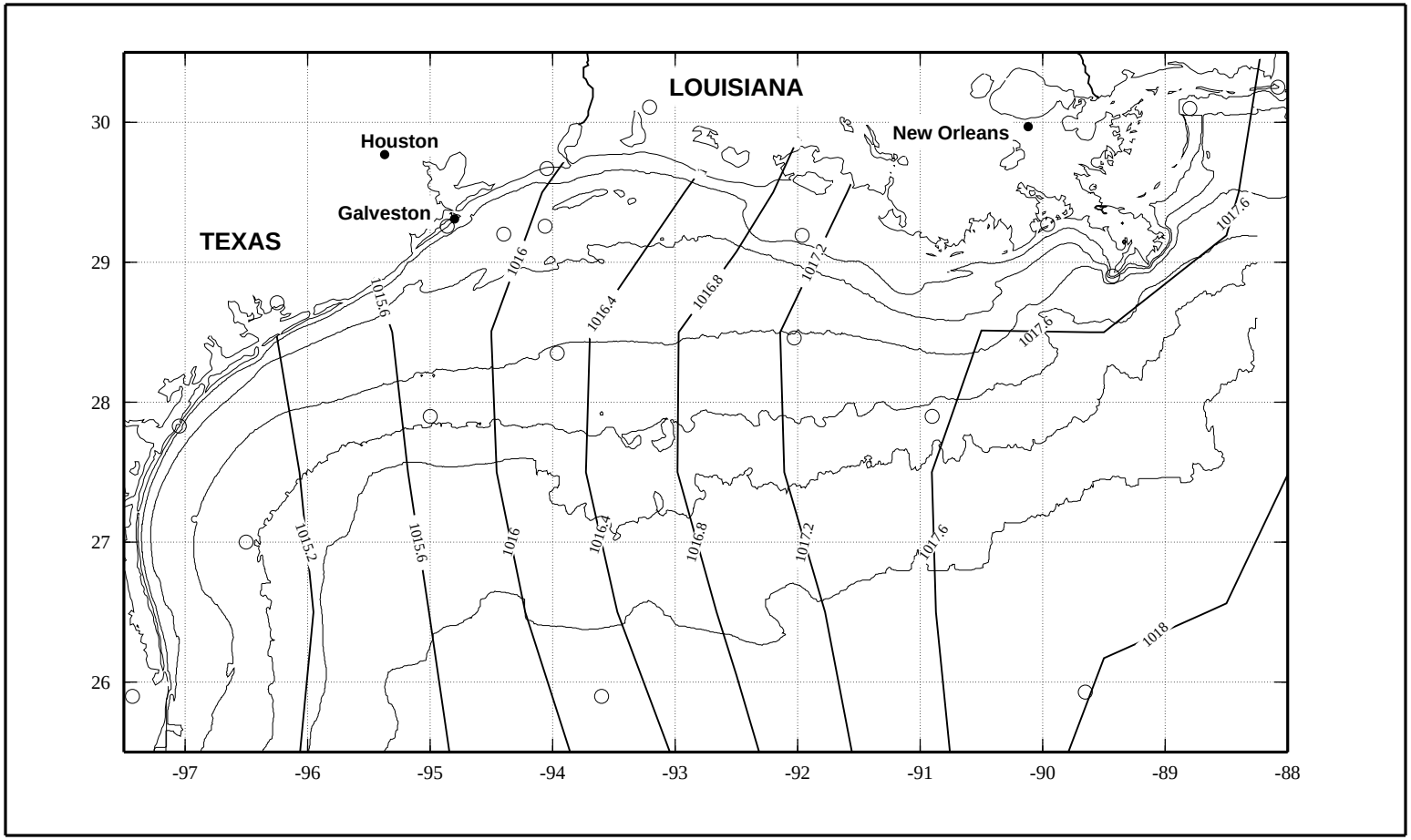

Figure 4.94.07. Monthly mean surface pressure for July 1994, contour units in hPa.

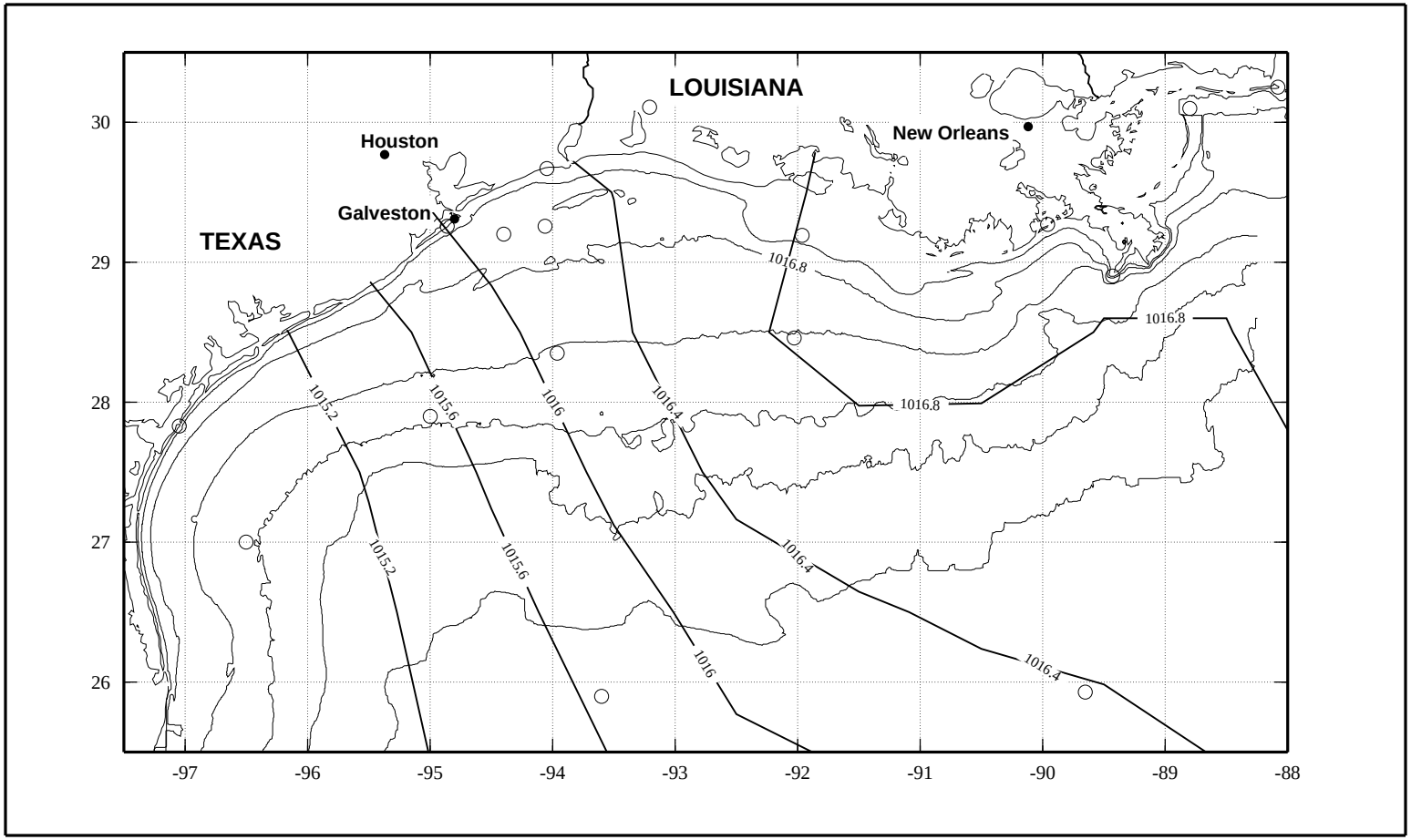

Figure 4.94.08. Monthly mean surface pressure for August 1994, contour units in hPa.

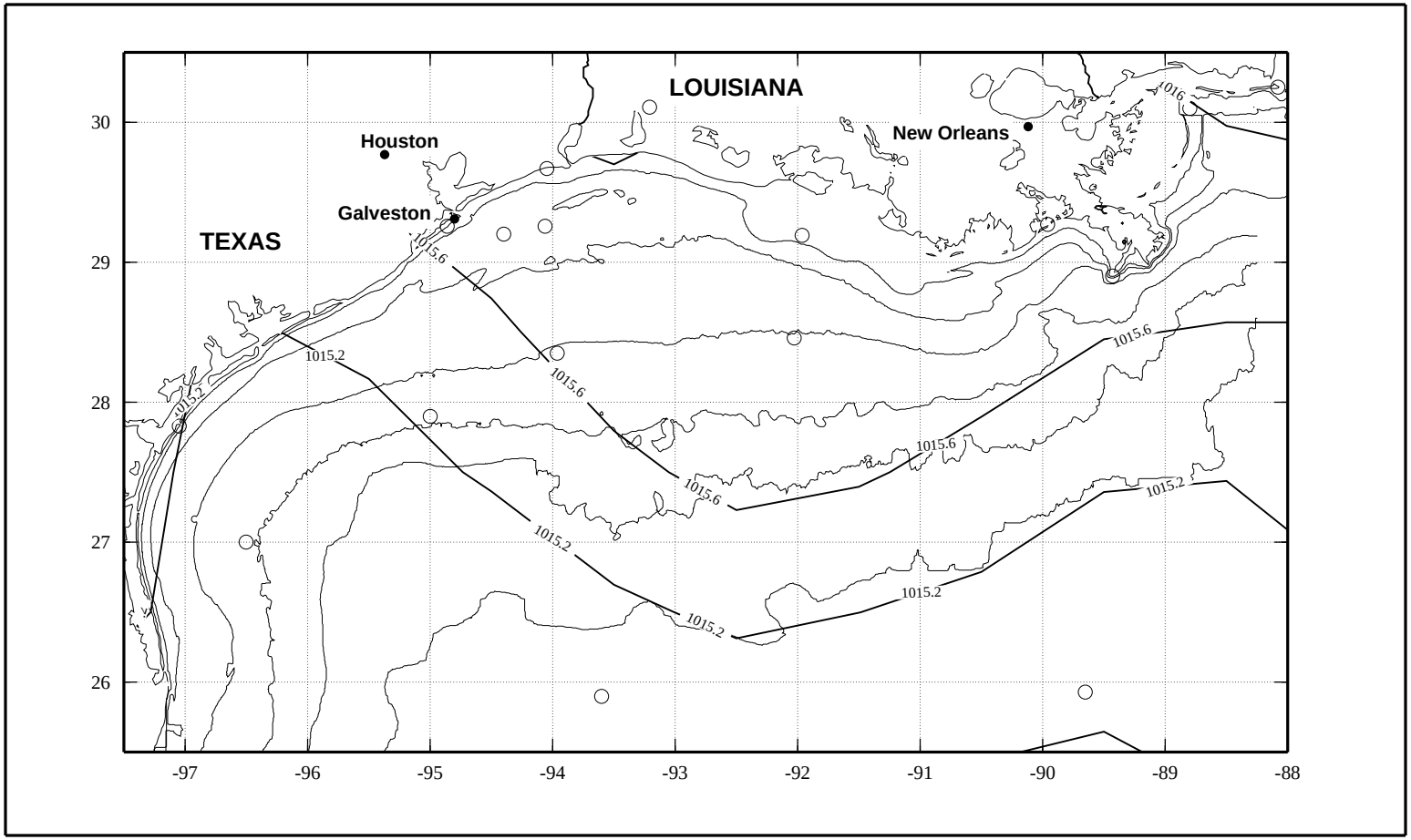

Figure 4.94.09. Monthly mean surface pressure for September 1994, contour units in hPa.

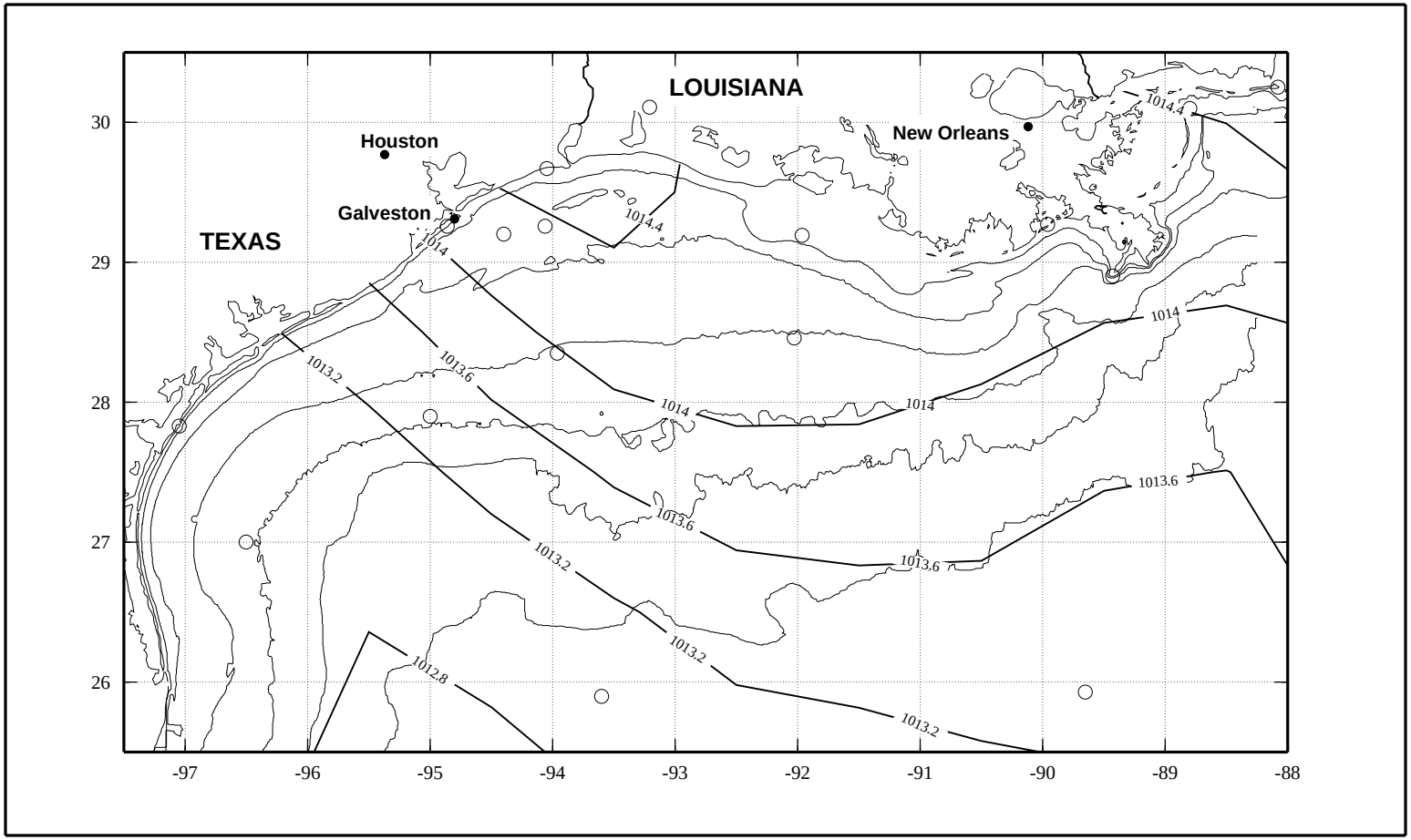

Figure 4.94.10. Monthly mean surface pressure for October 1994, contour units in hPa.

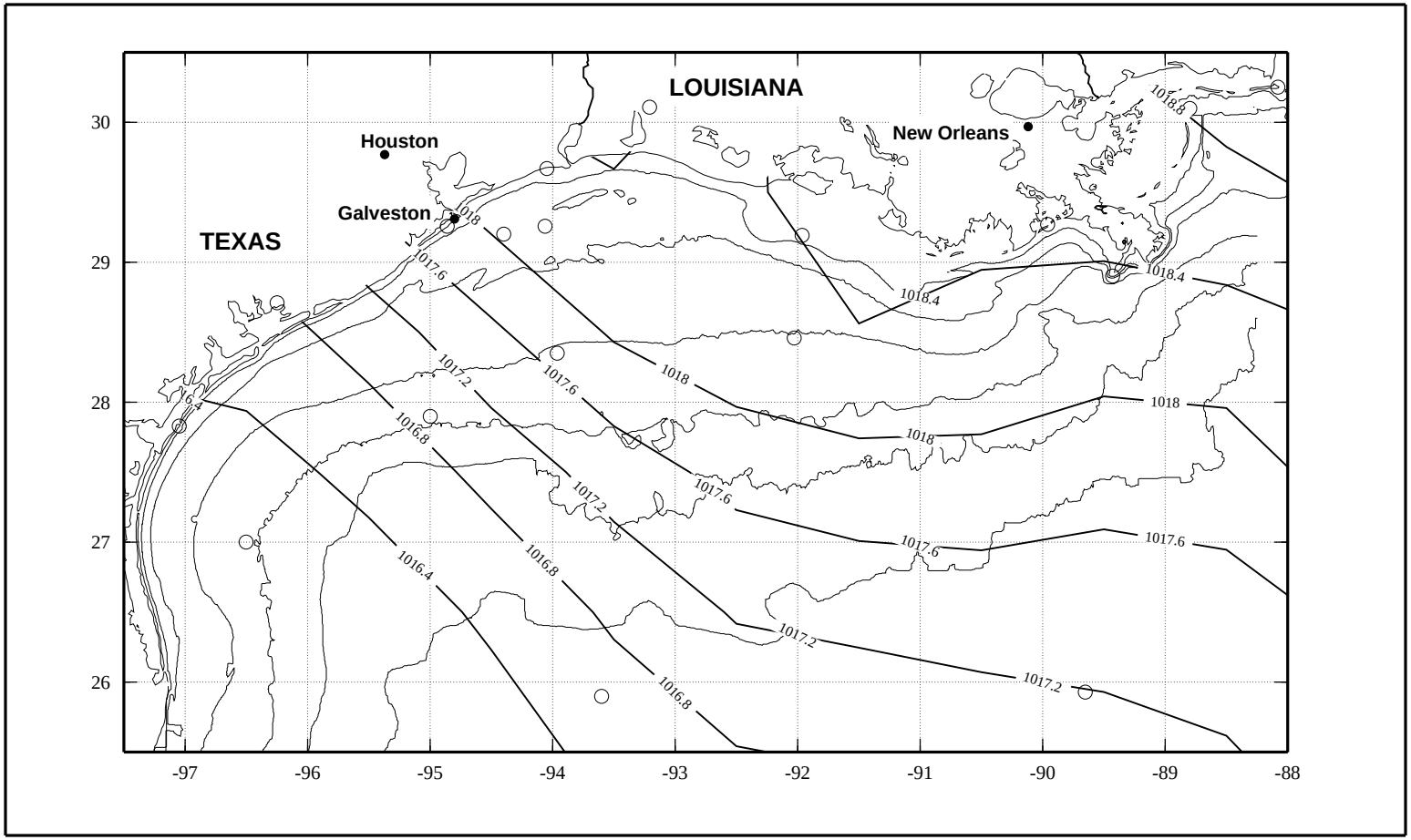

Figure 4.94.11. Monthly mean surface pressure for November 1994, contour units in hPa.

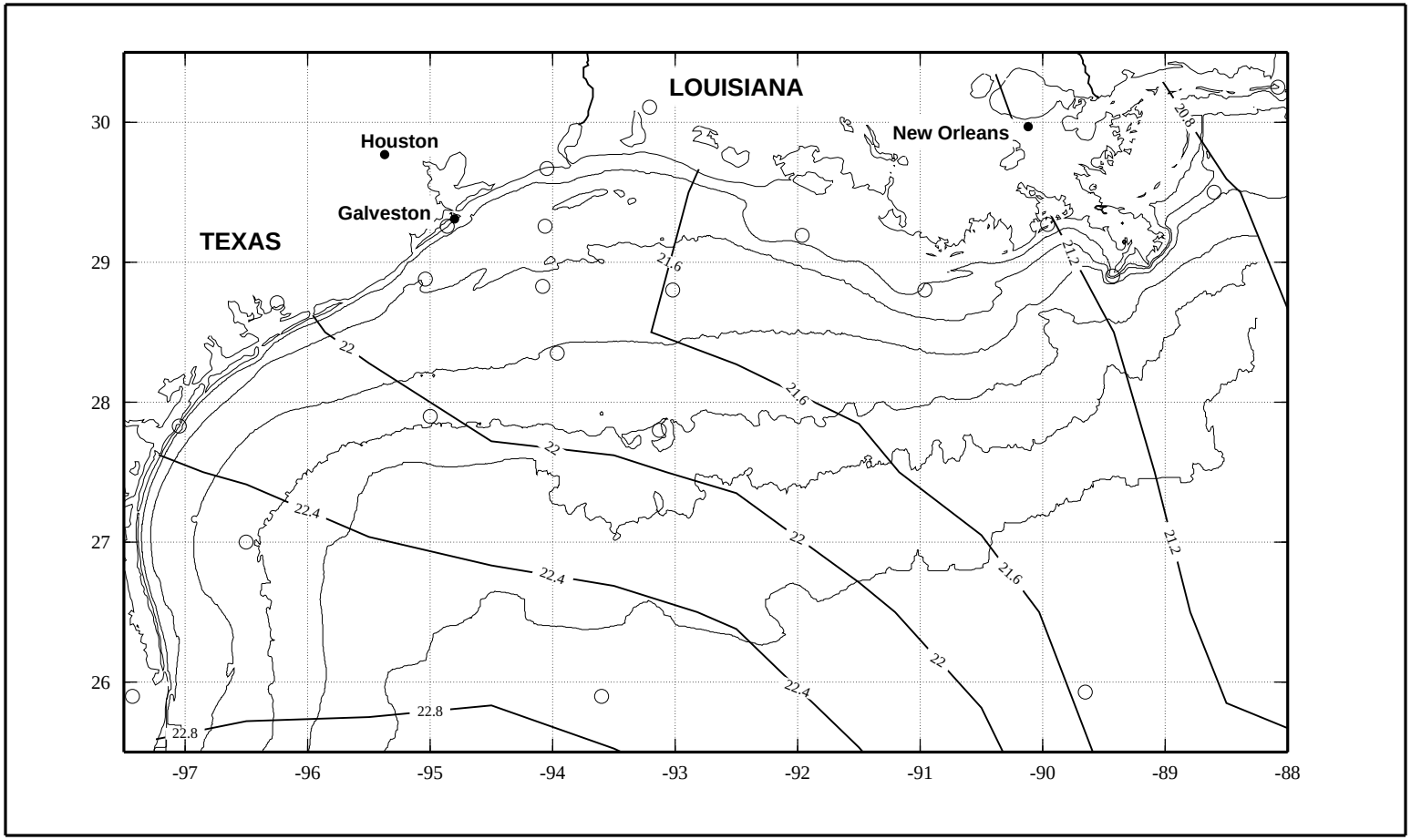

Figure 5.92.04. Monthly mean surface atmosphere temperature for April 1992, contour units in ˚C.

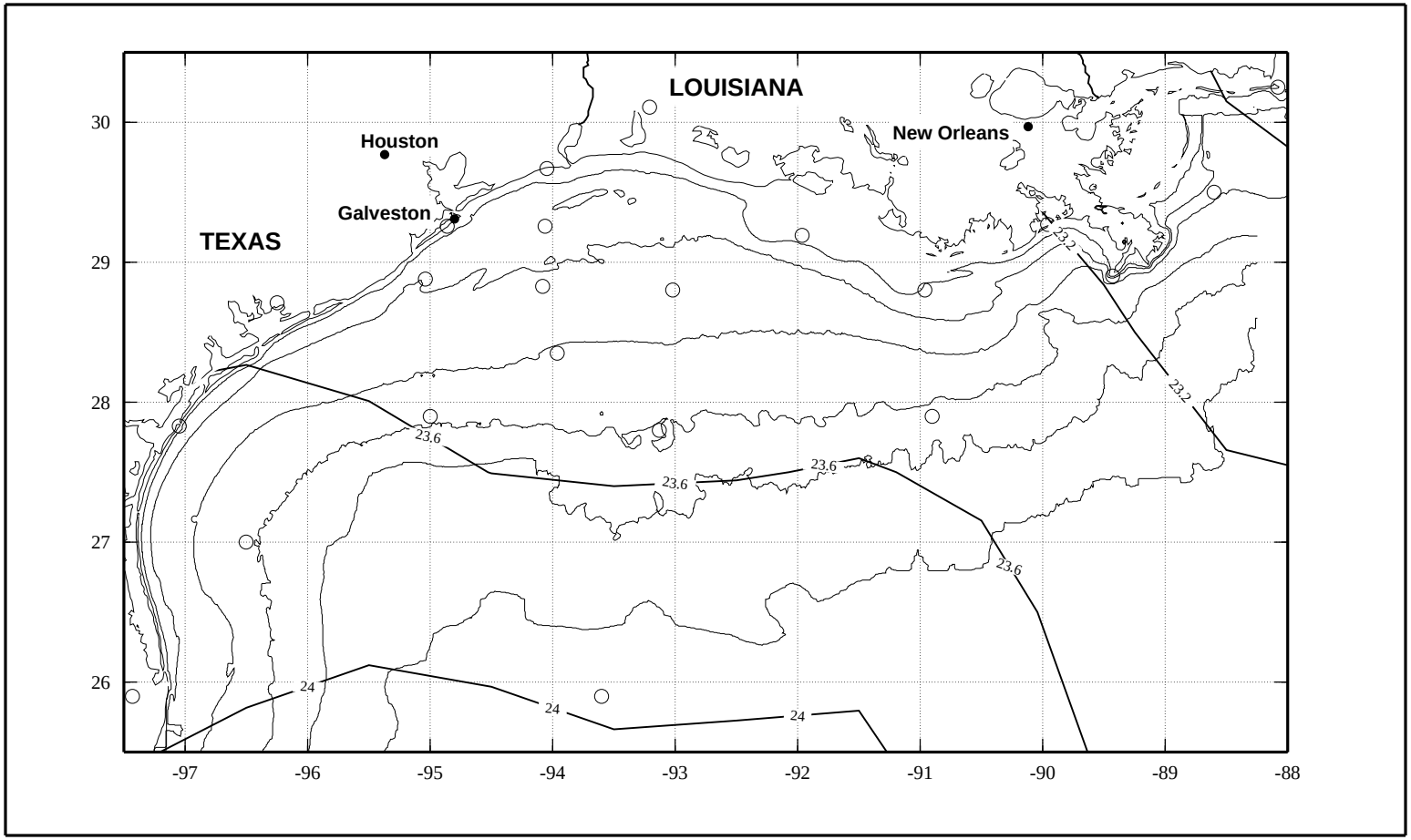

Figure 5.92.05. Monthly mean surface atmosphere temperature for May 1992, contour units in ˚C.

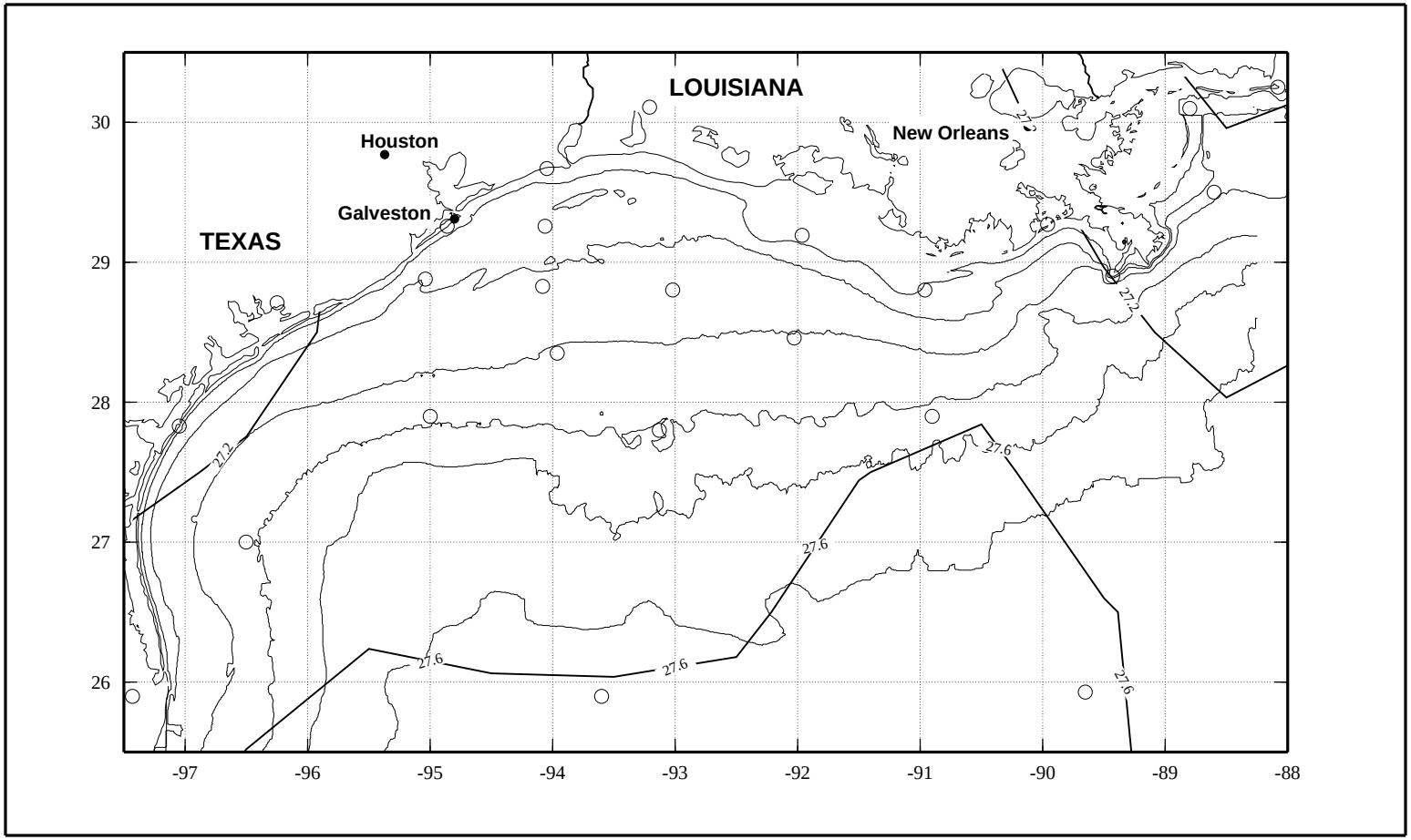

Figure 5.92.06. Monthly mean surface atmosphere temperature for June 1992, contour units in ˚C.

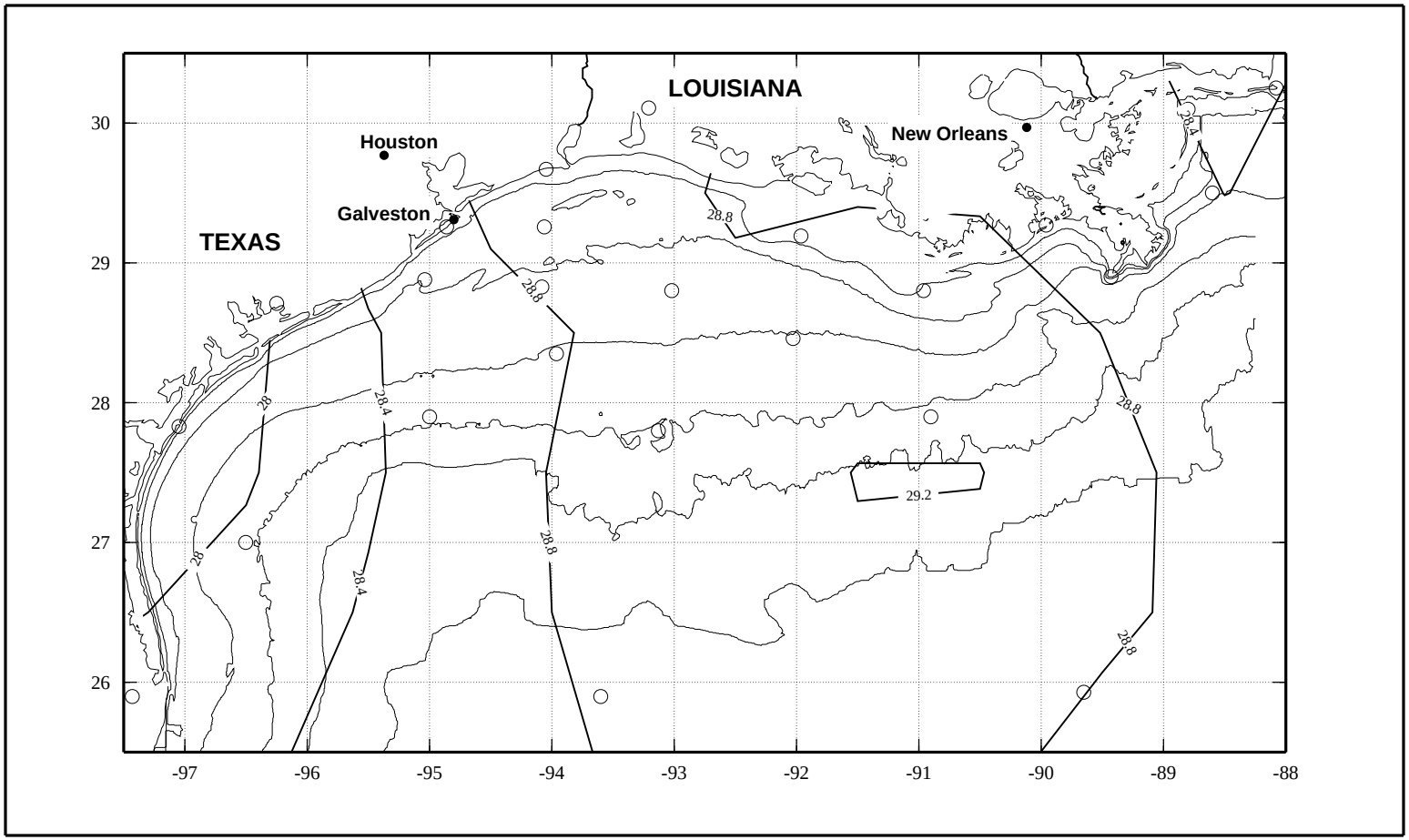

Figure 5.92.07. Monthly mean surface atmosphere temperature for July 1992, contour units in ˚C.

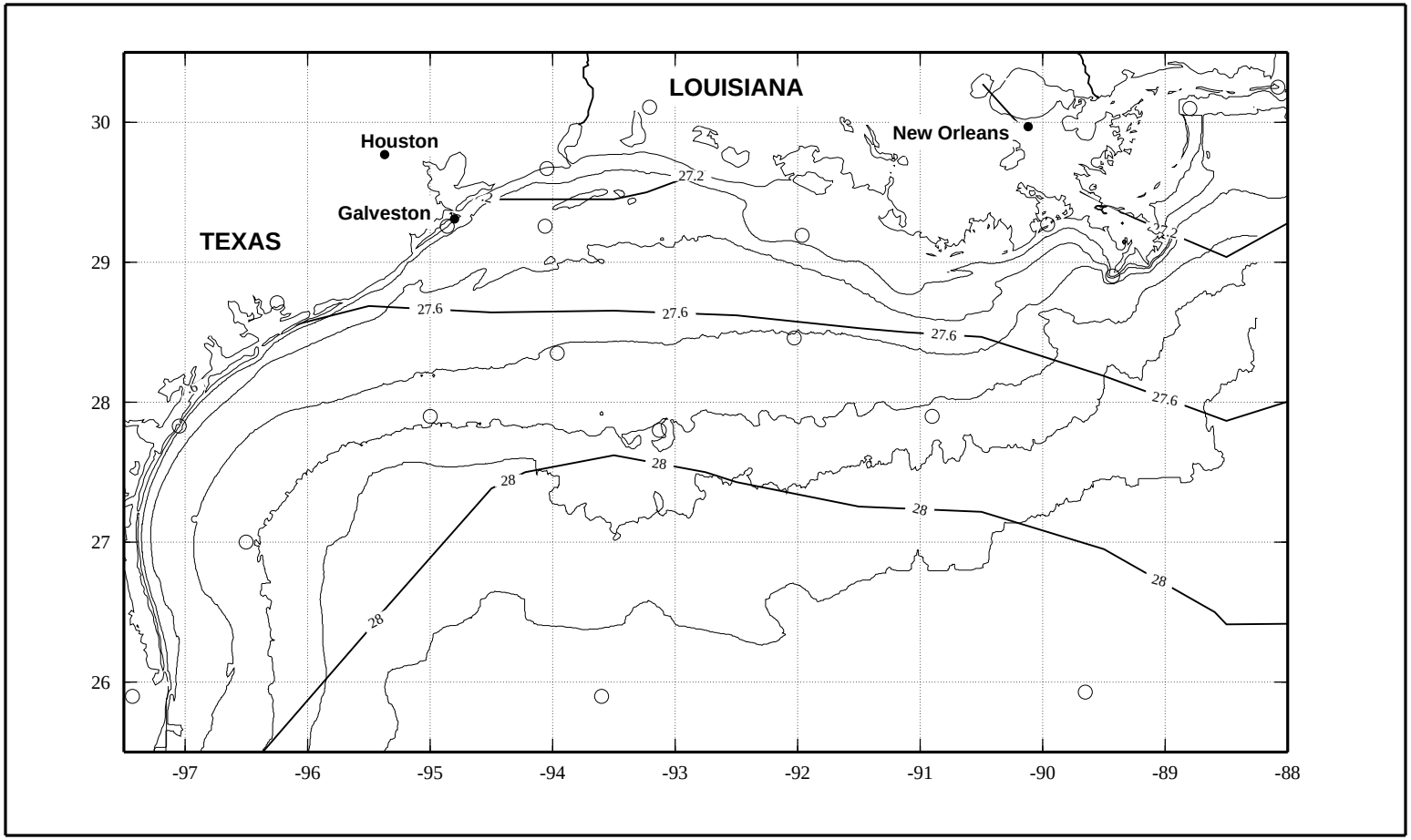

Figure 5.92.08. Monthly mean surface atmosphere temperature for August 1992, contour units in ˚C.

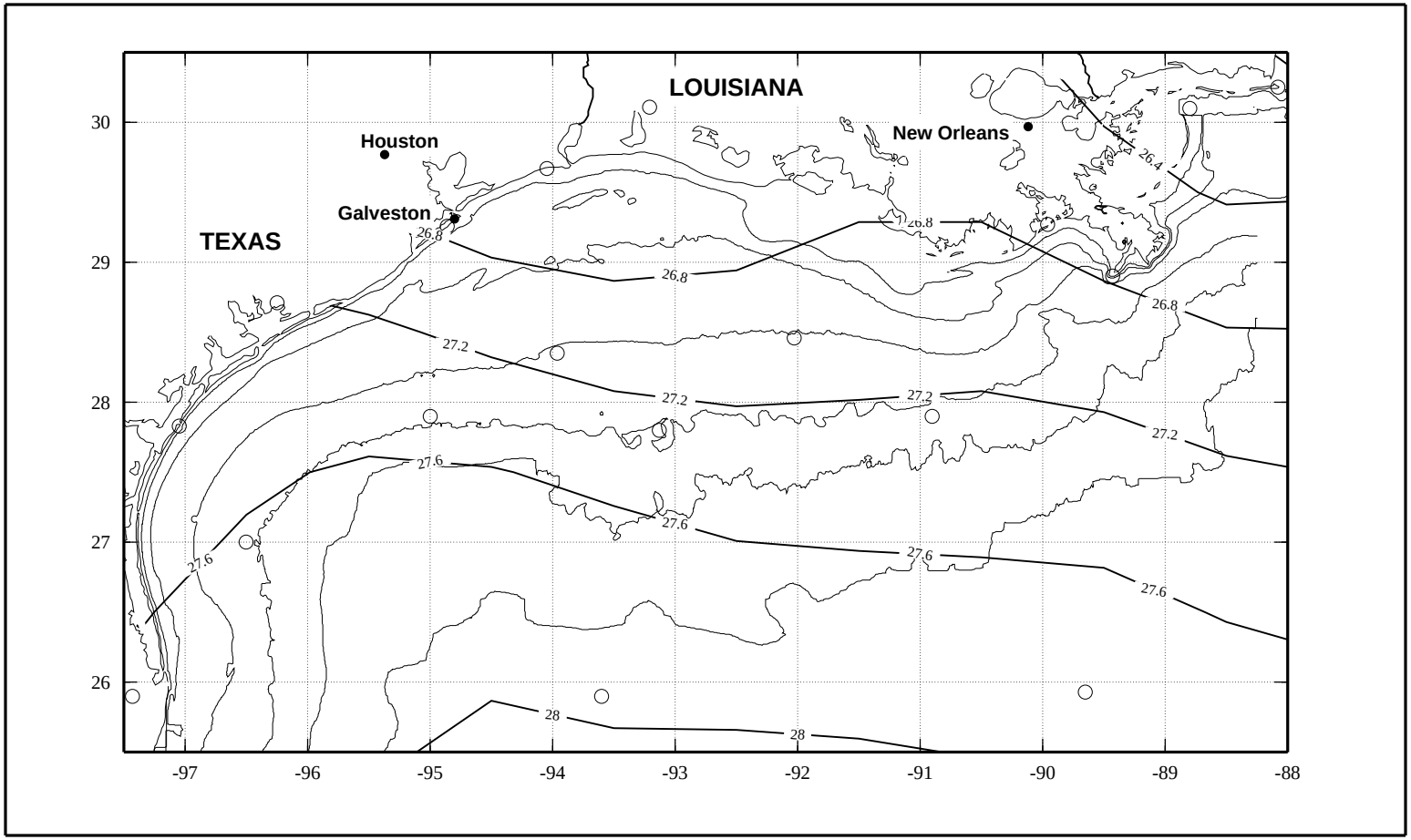

Figure 5.92.09. Monthly mean surface atmosphere temperature for September 1992, contour units in ˚C.

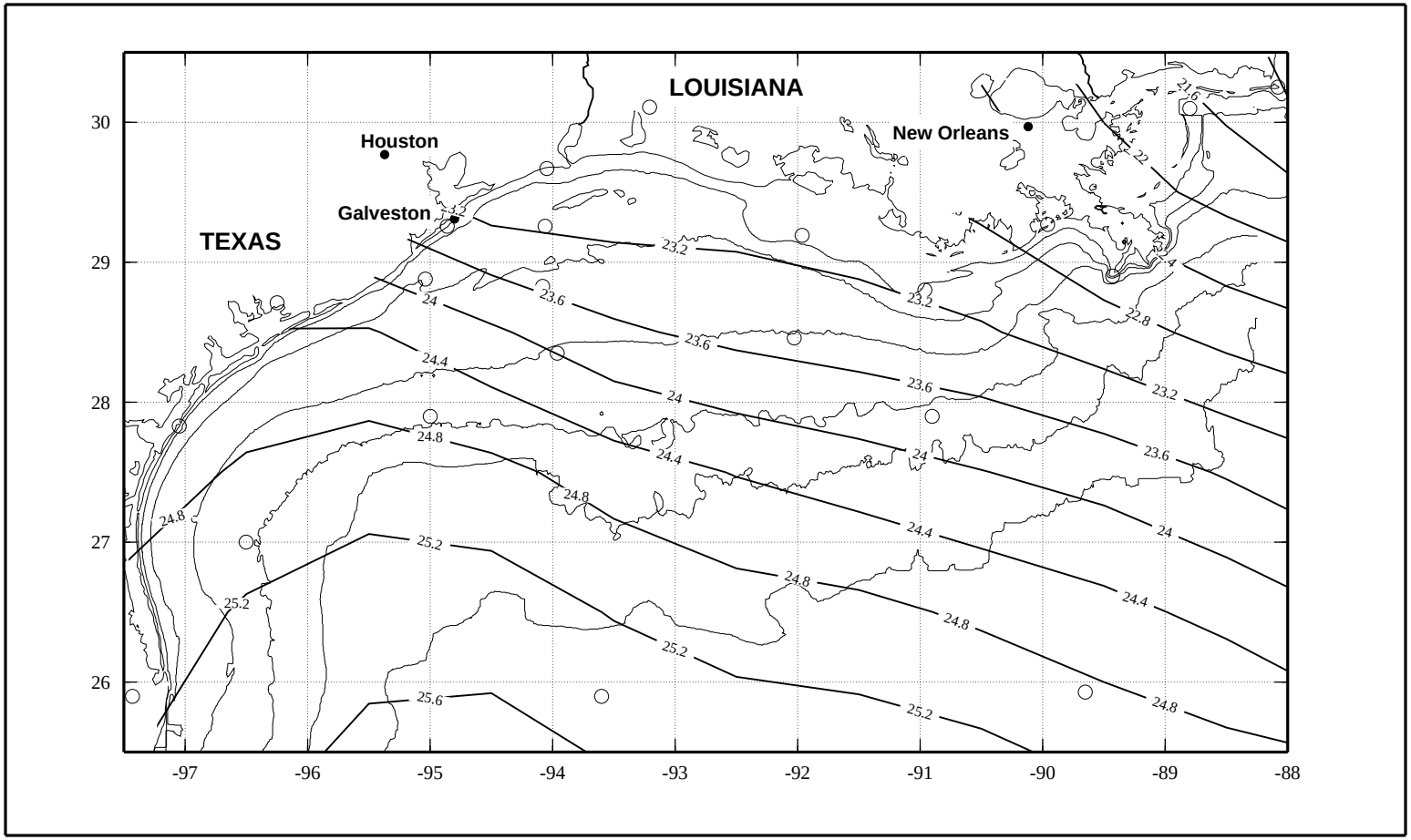

Figure 5.92.10. Monthly mean surface atmosphere temperature for October 1992, contour units in ˚C.

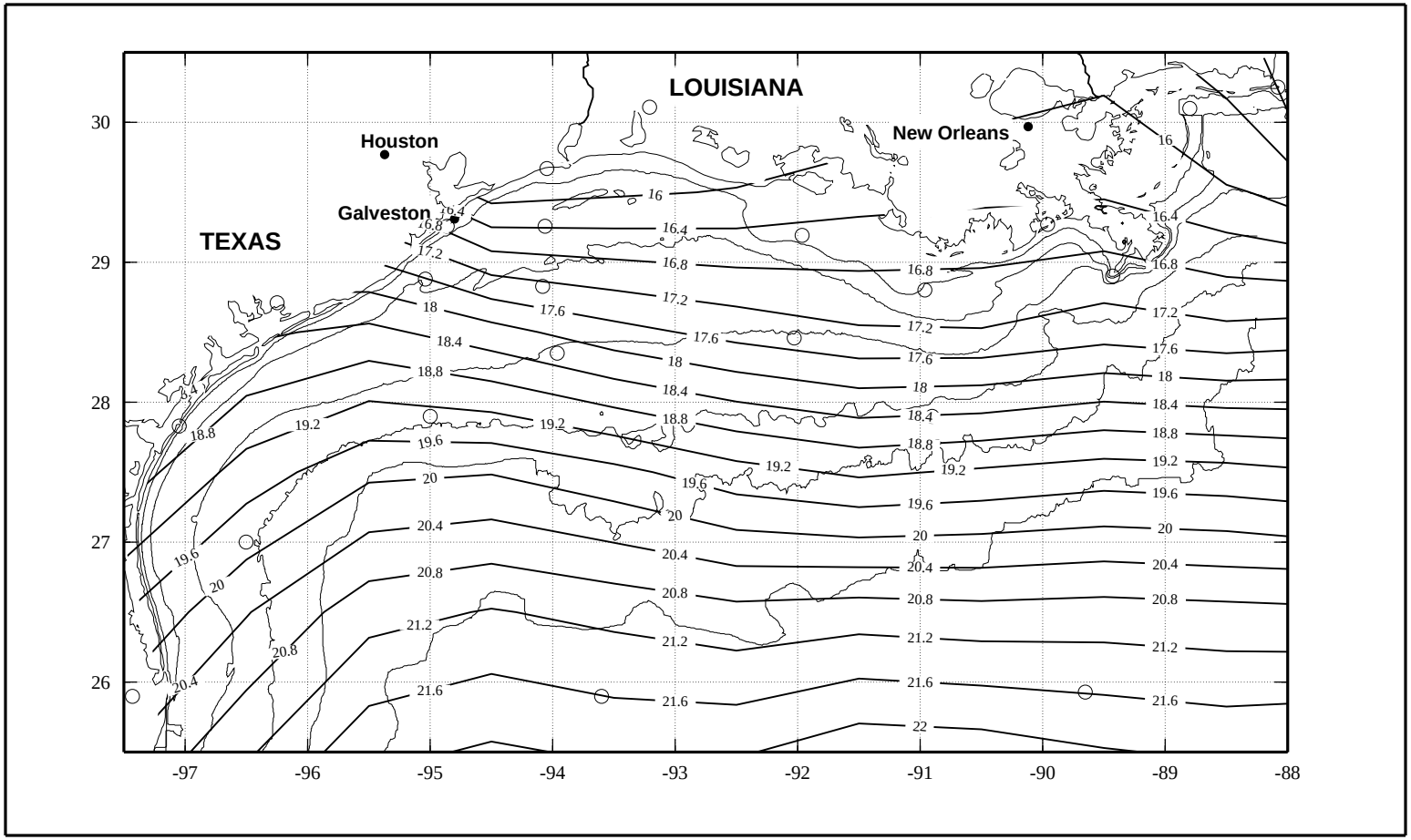

Figure 5.92.11. Monthly mean surface atmosphere temperature for November 1992, contour units in ˚C.

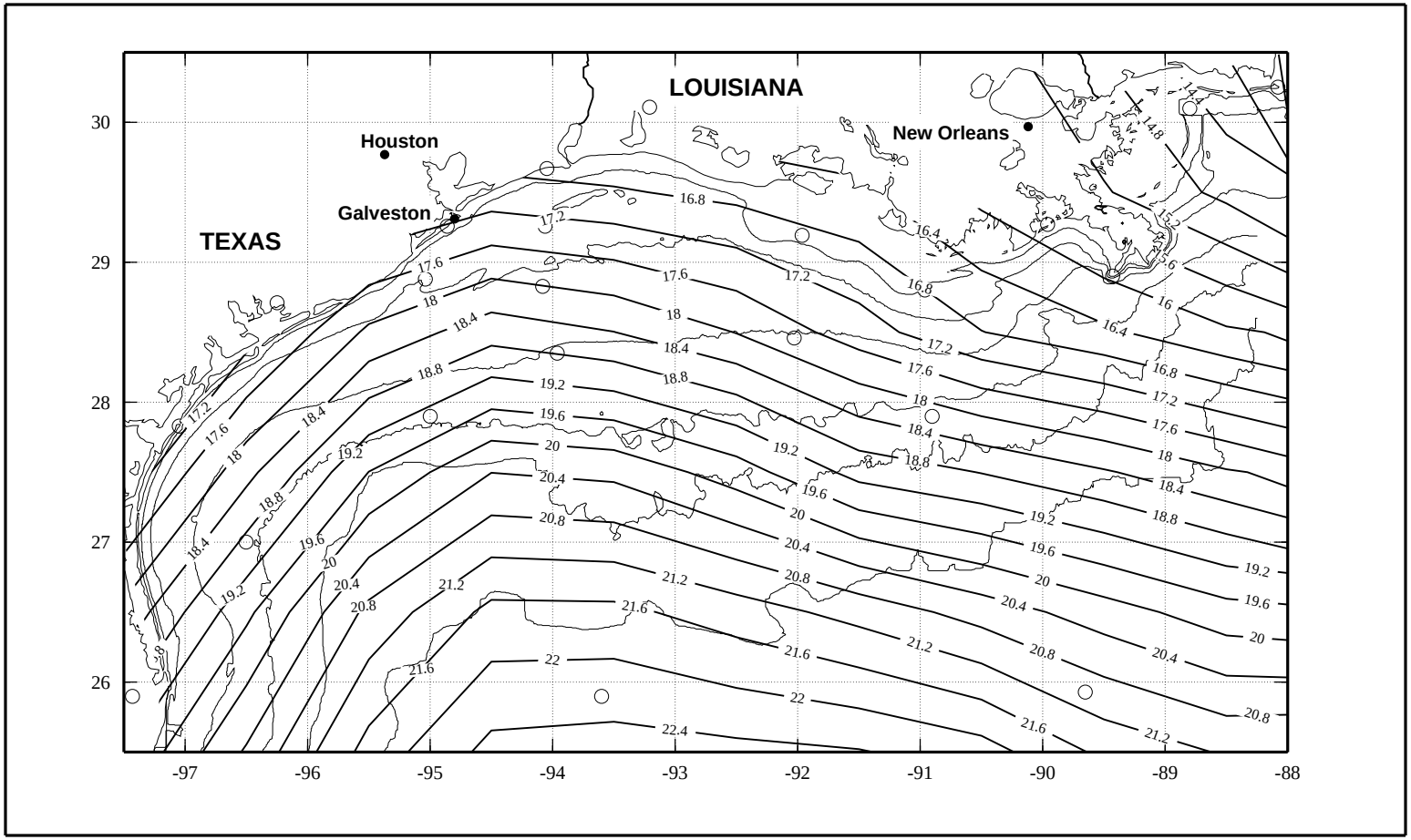

Figure 5.92.12. Monthly mean surface atmosphere temperature for December 1992, contour units in ˚C.

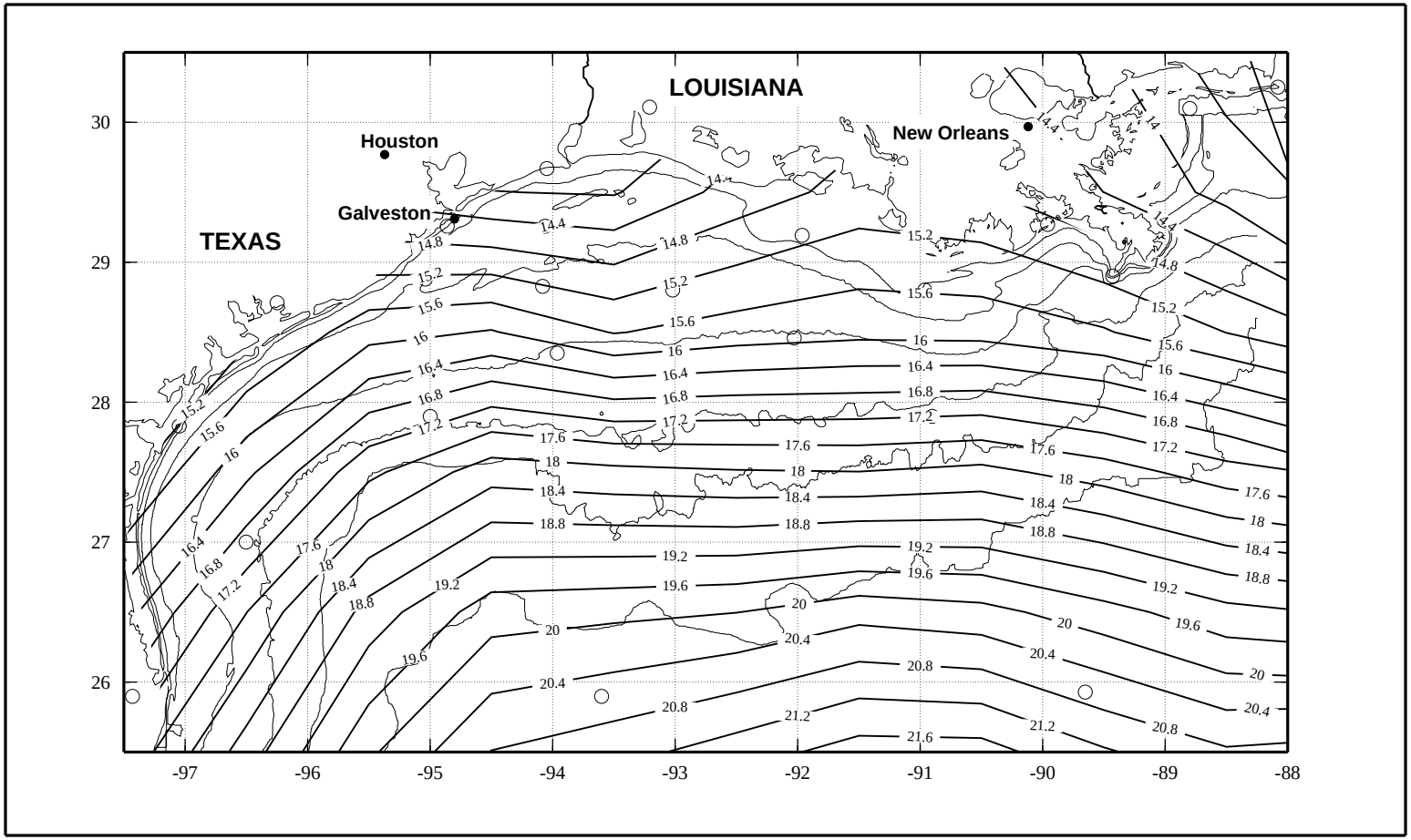

Figure 5.93.01. Monthly mean surface atmosphere temperature for January 1993, contour units in ˚C.

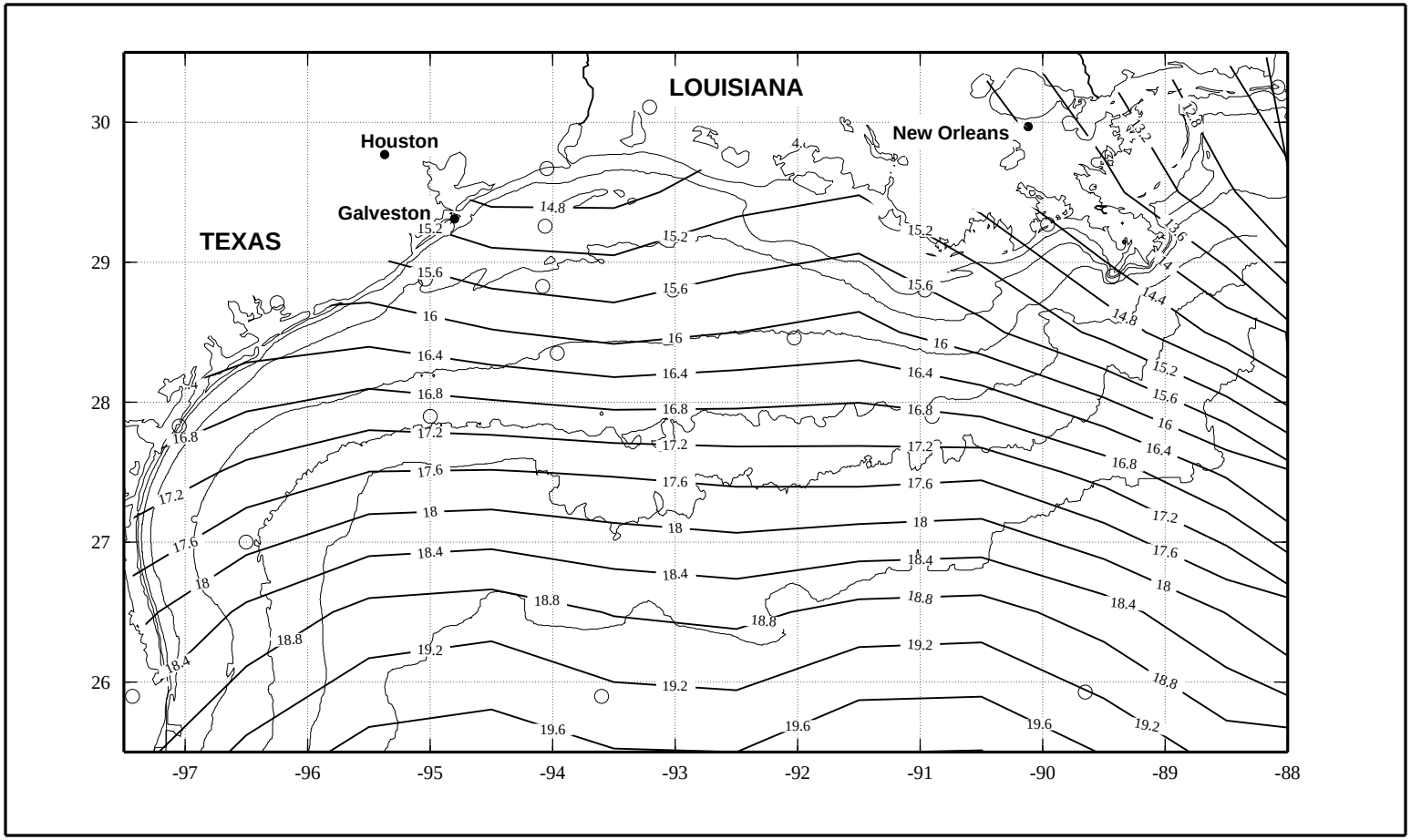

Figure 5.93.02. Monthly mean surface atmosphere temperature for February 1993, contour units in ˚C.

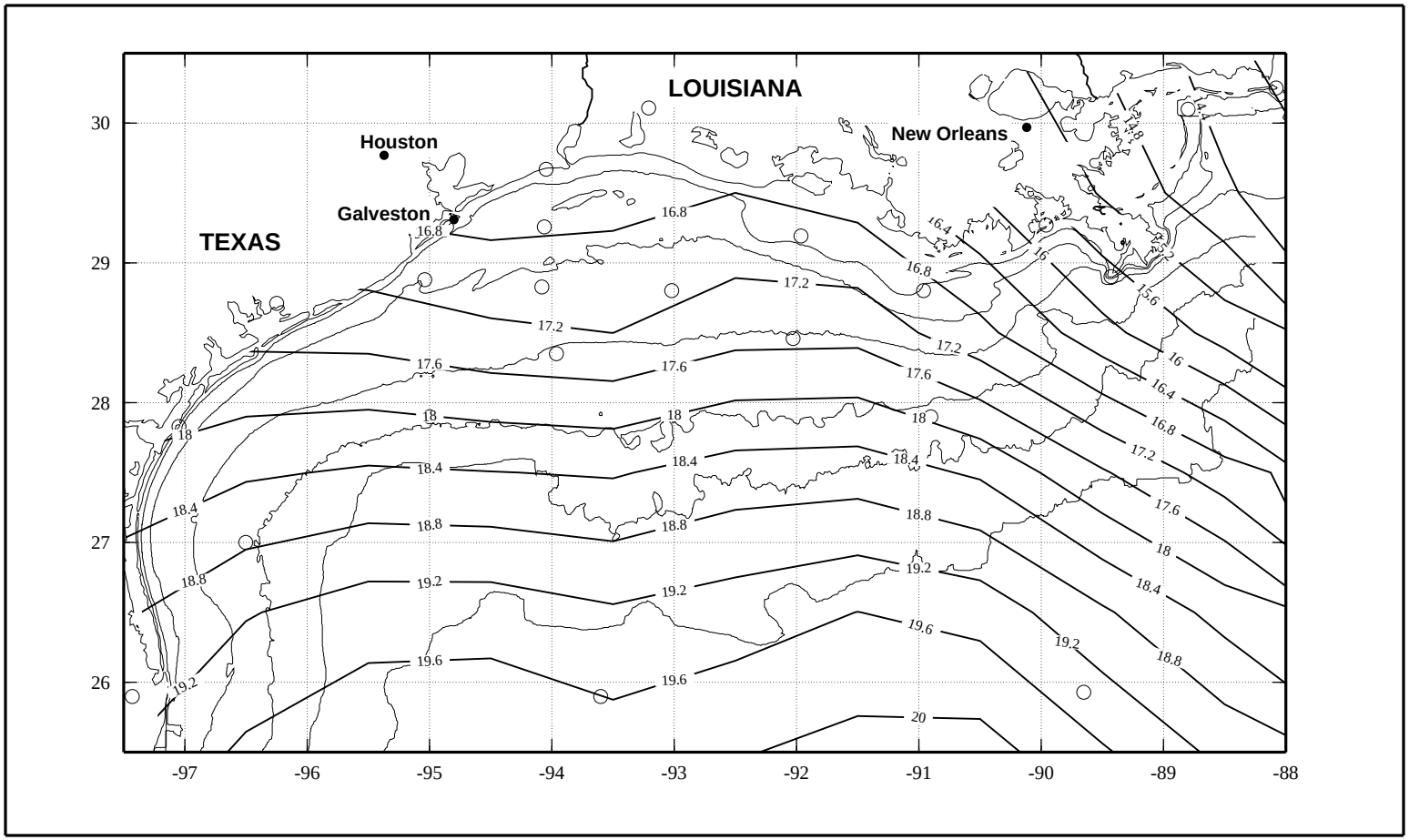

Figure 5.93.03. Monthly mean surface atmosphere temperature for March 1993, contour units in ˚C.

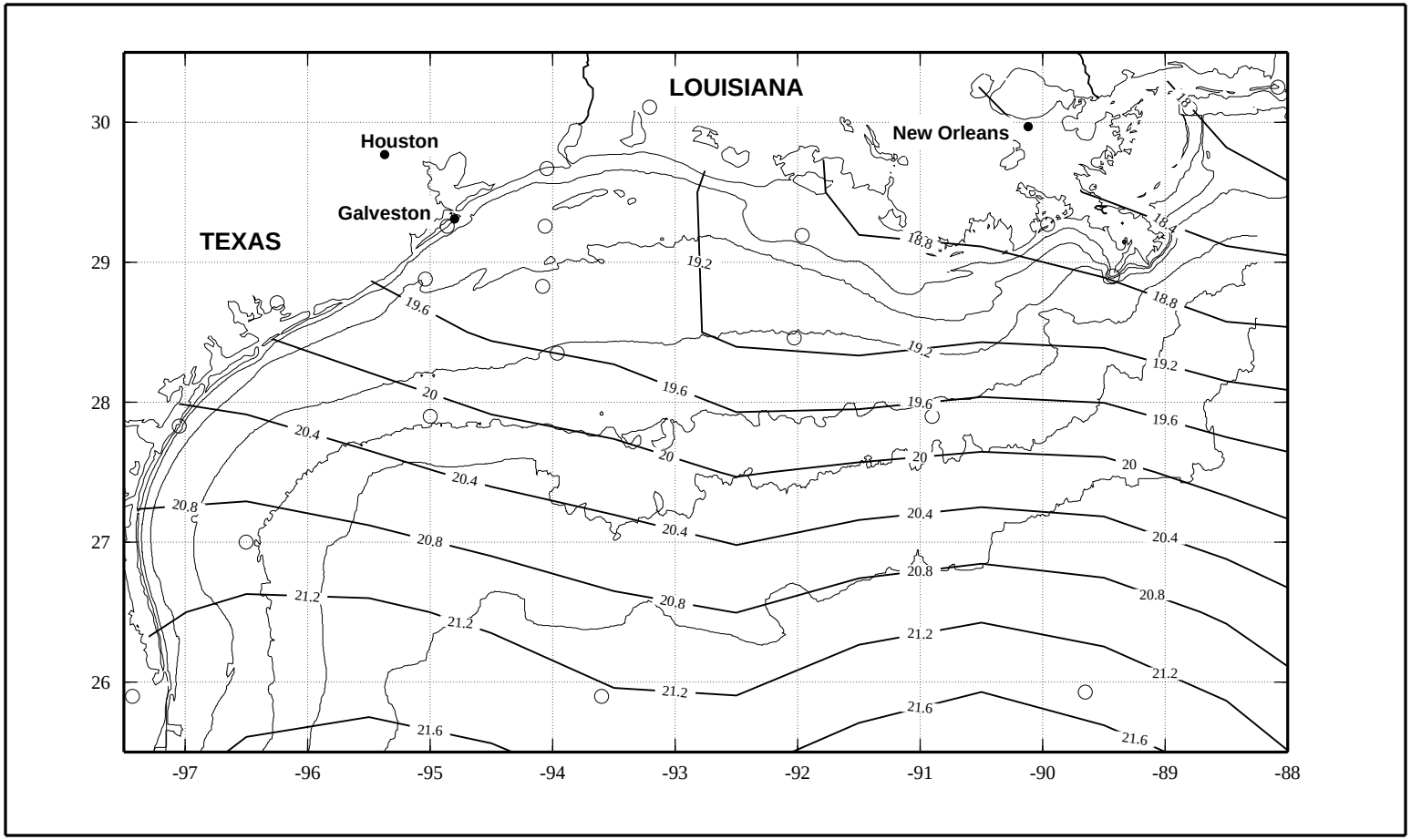

Figure 5.93.04. Monthly mean surface atmosphere temperature for April 1993, contour units in ˚C.

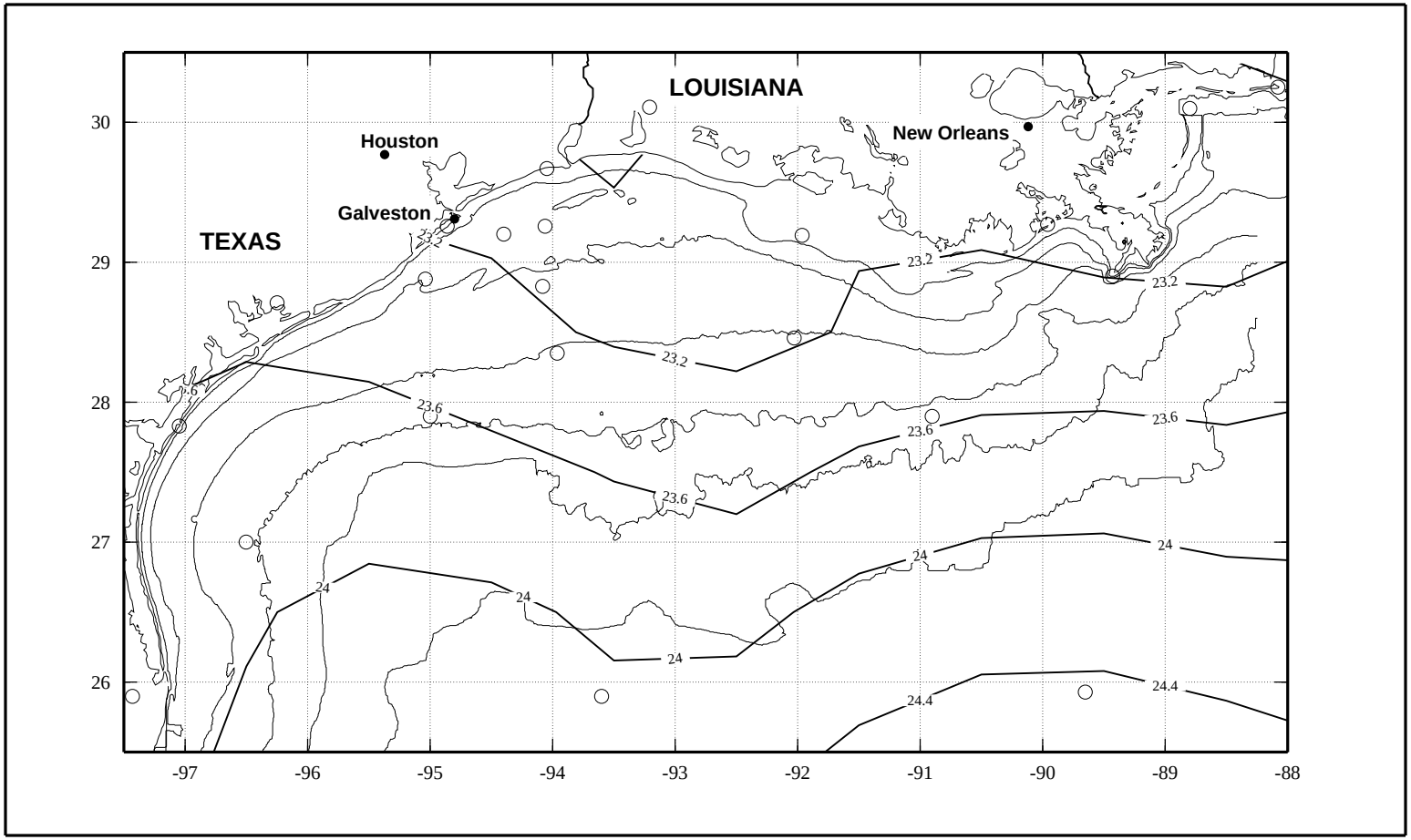

Figure 5.93.05. Monthly mean surface atmosphere temperature for May 1993, contour units in ˚C.

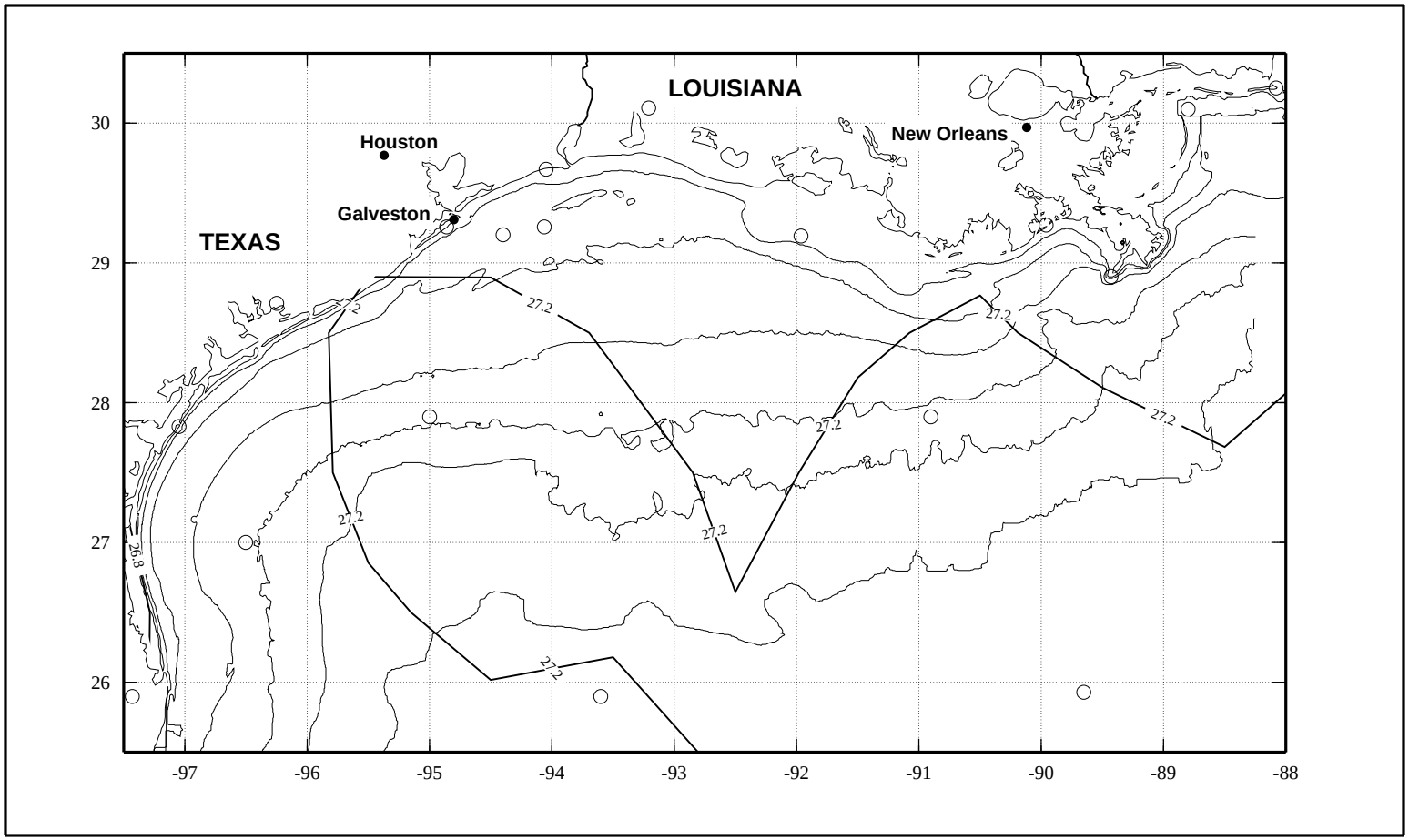

Figure 5.93.06. Monthly mean surface atmosphere temperature for June 1993, contour units in ˚C.

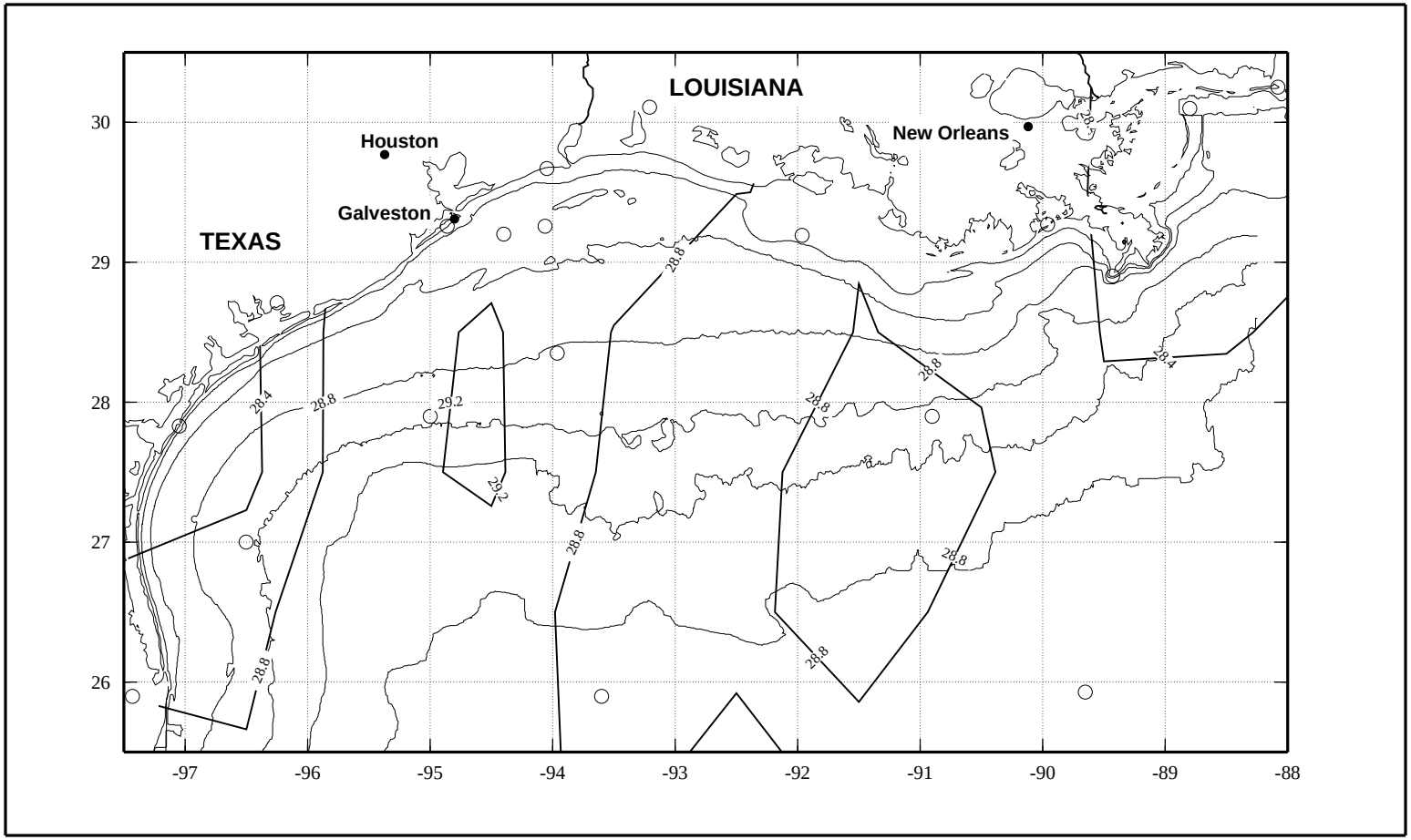

Figure 5.93.07. Monthly mean surface atmosphere temperature for July 1993, contour units in ˚C.

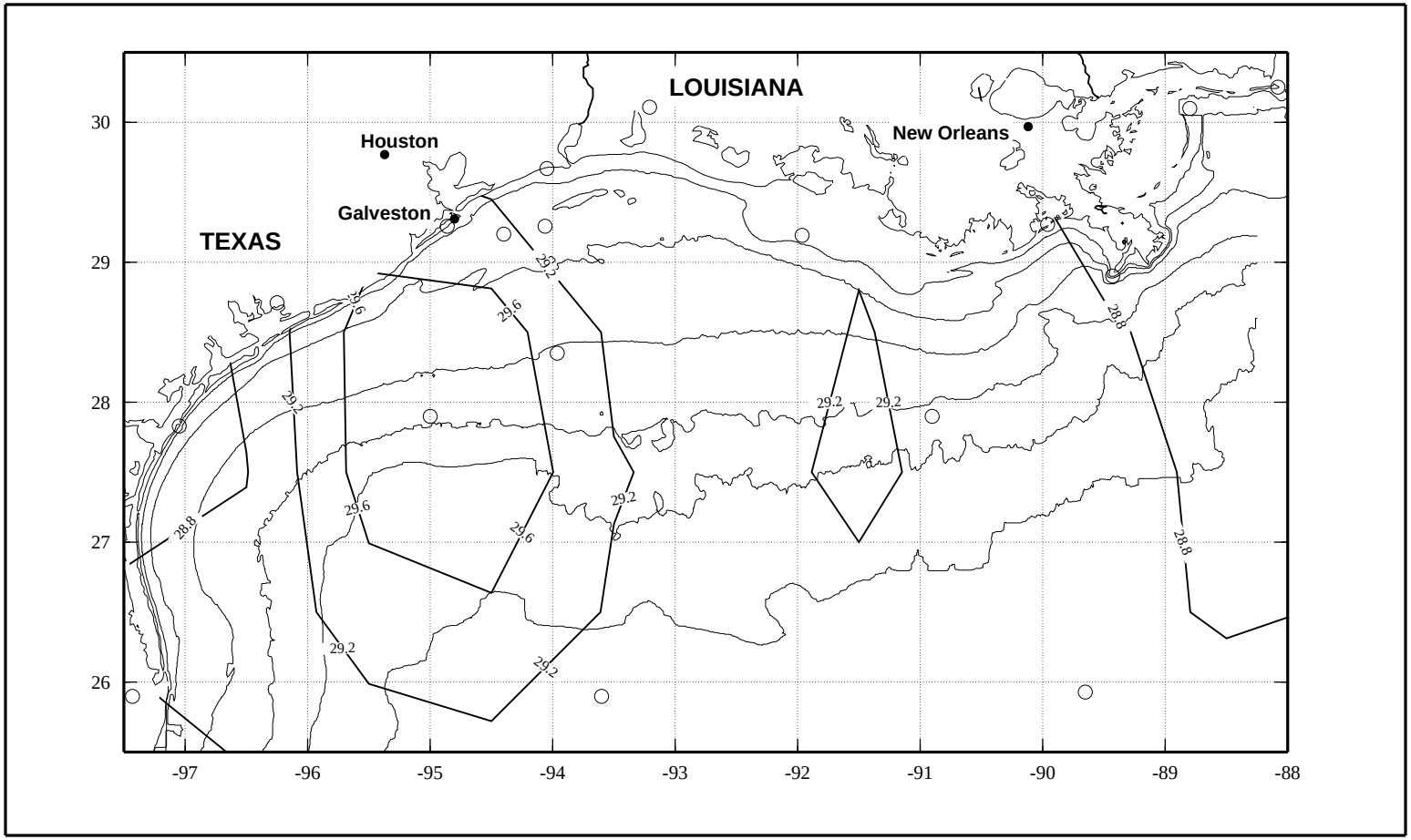

Figure 5.93.08. Monthly mean surface atmosphere temperature for August 1993, contour units in ˚C.

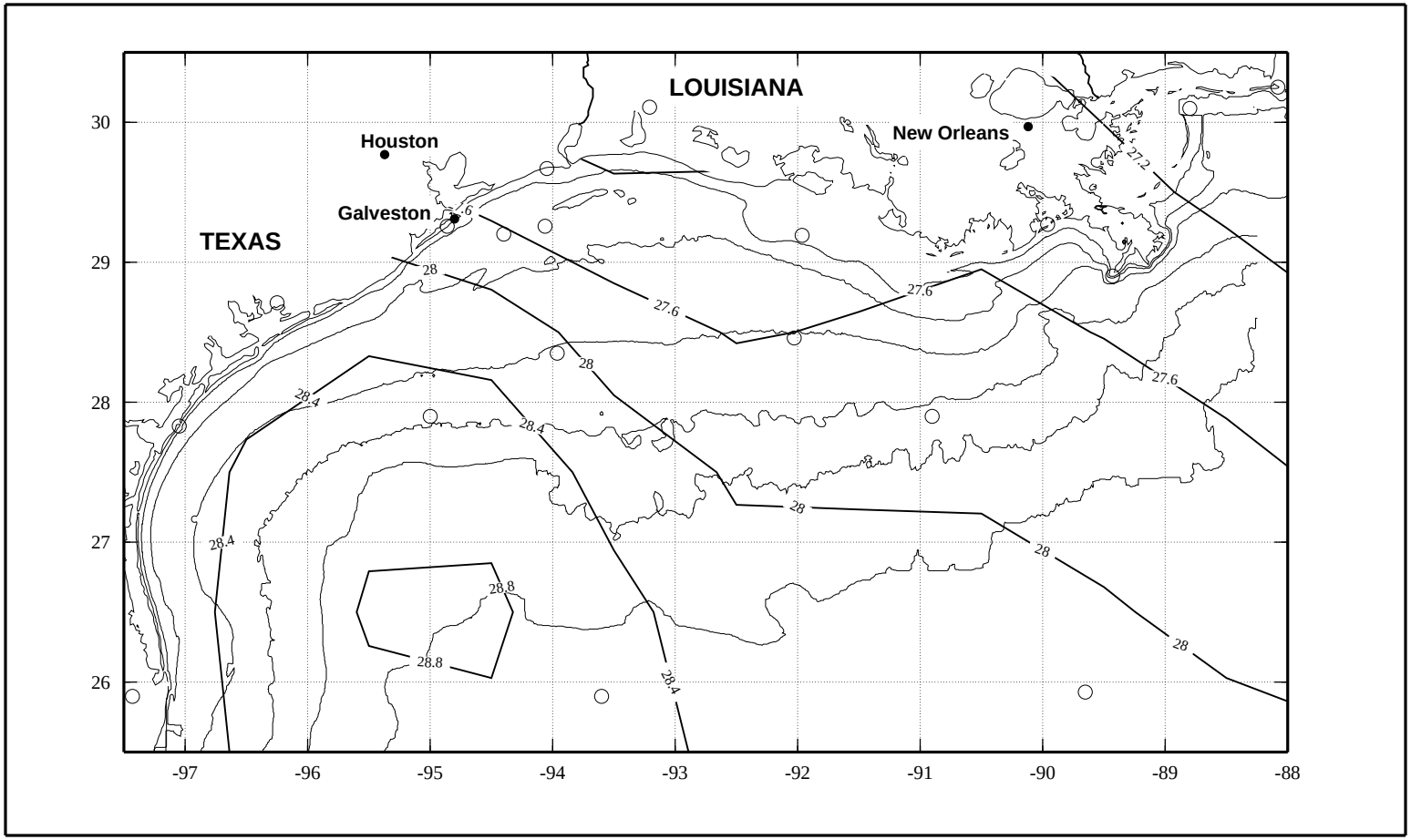

Figure 5.93.09. Monthly mean surface atmosphere temperature for September 1993, contour units in ˚C.

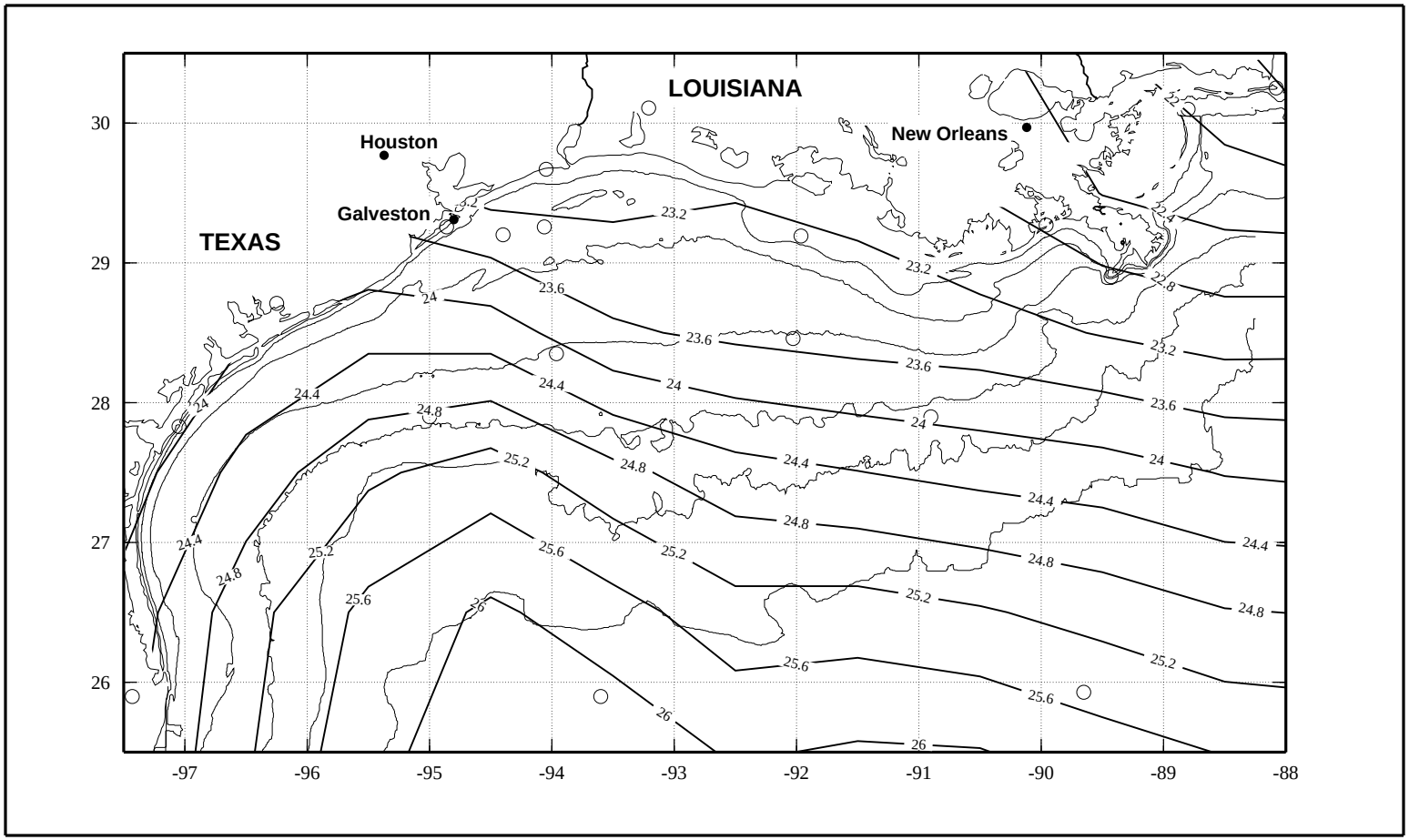

Figure 5.93.10. Monthly mean surface atmosphere temperature for October 1993, contour units in ˚C.

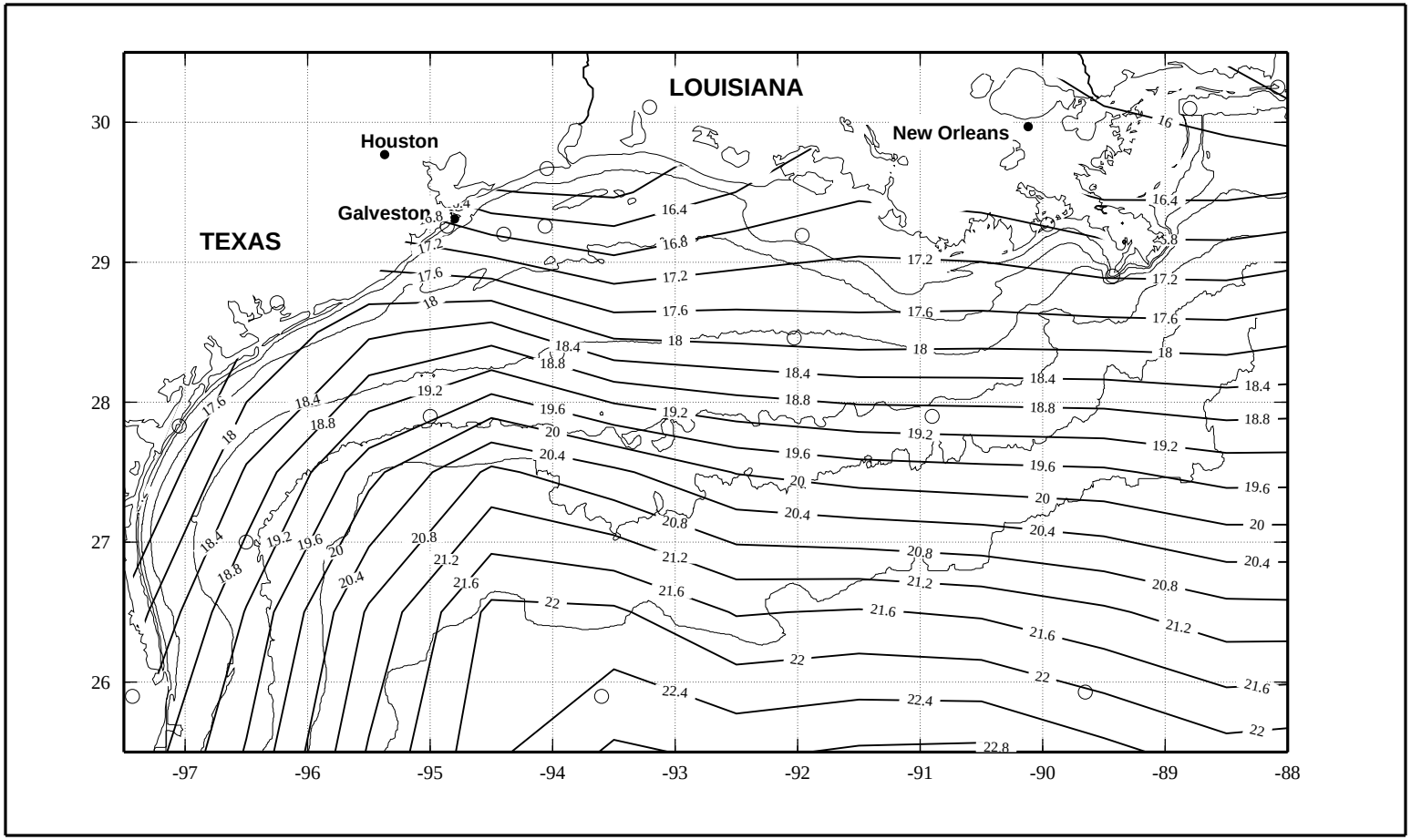

Figure 5.93.11. Monthly mean surface atmosphere temperature for November 1993, contour units in ˚C.

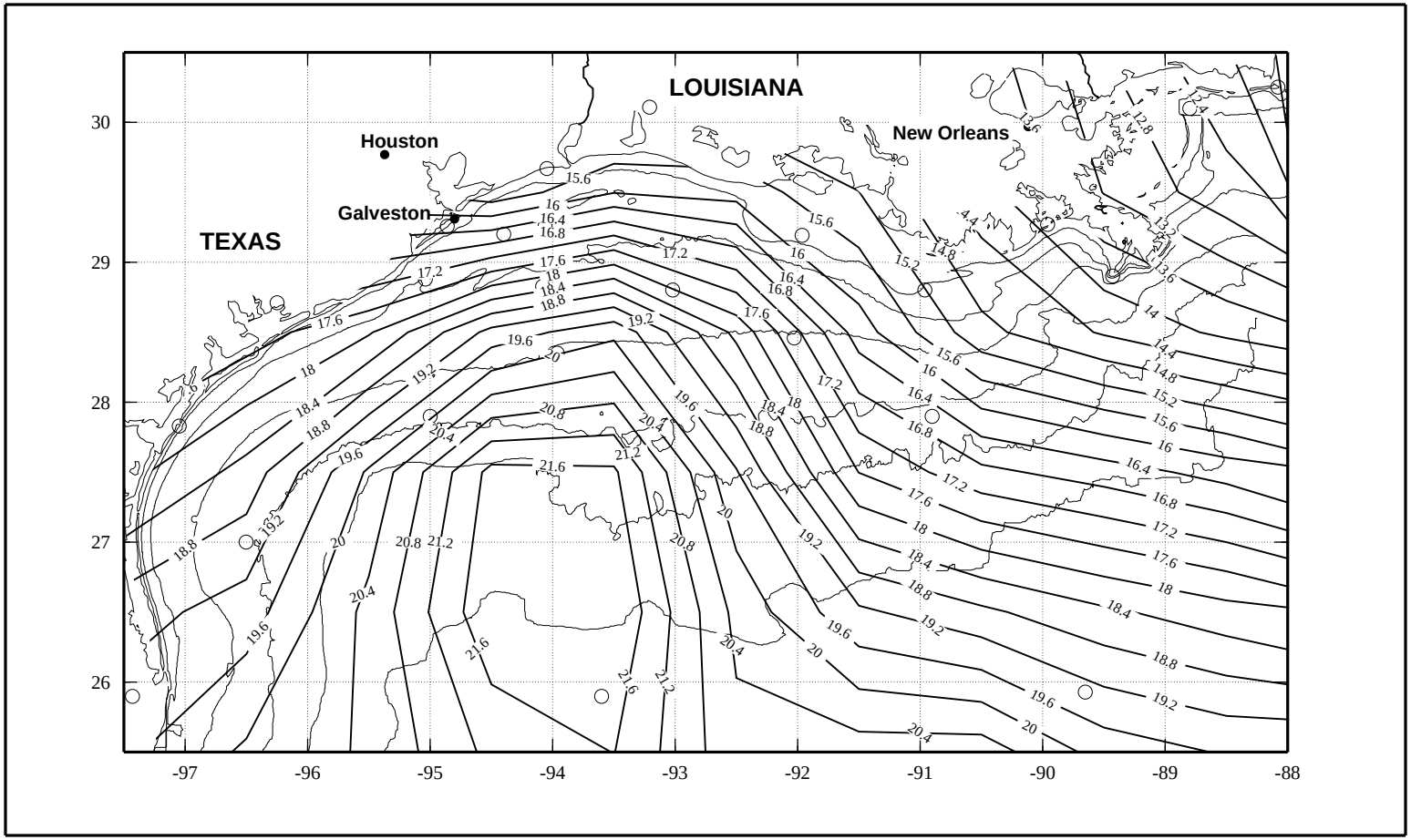

Figure 5.93.12. Monthly mean surface atmosphere temperature for December 1993, contour units in ˚C.

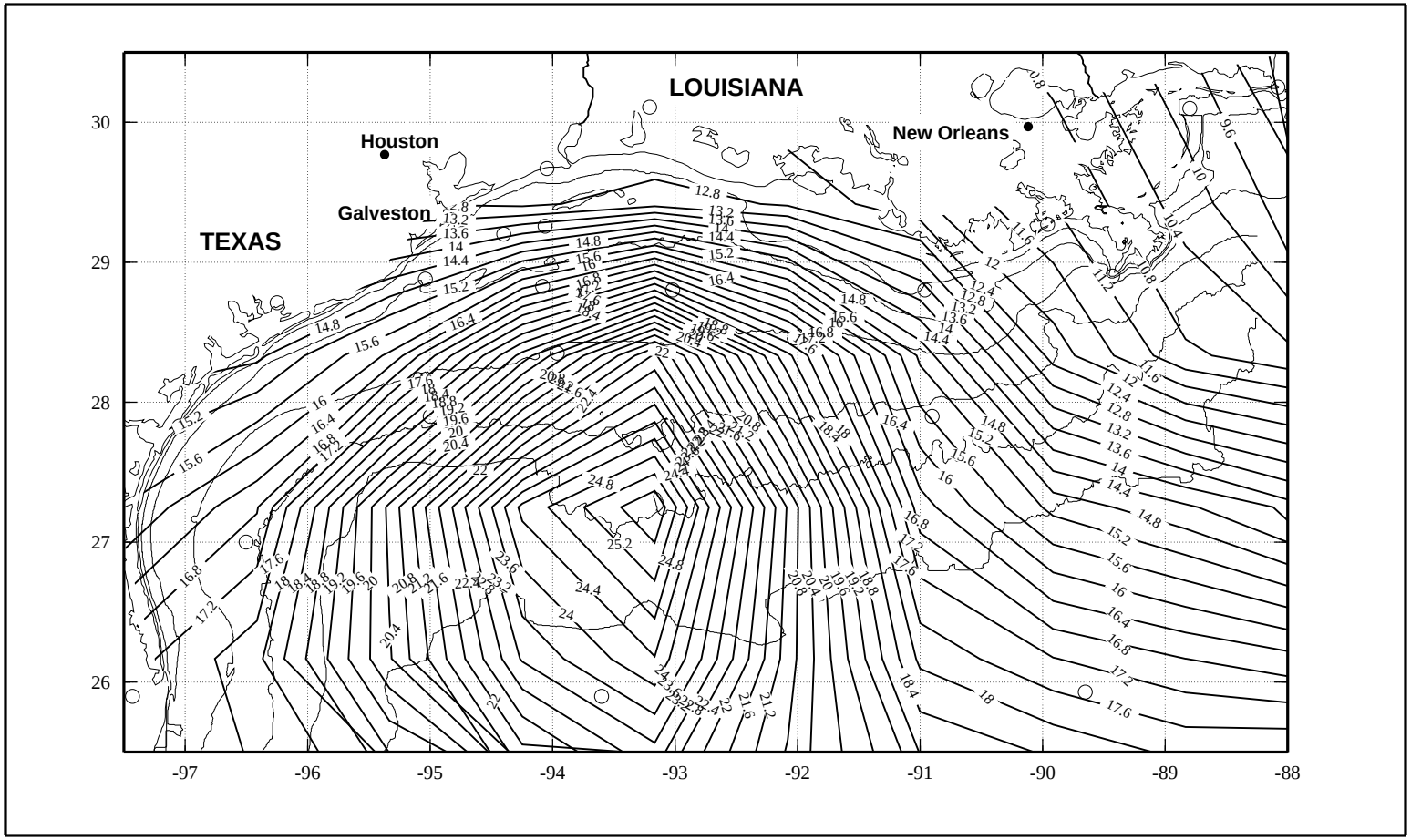

Figure 5.94.01. Monthly mean surface atmosphere temperature for January 1994, contour units in ˚C.

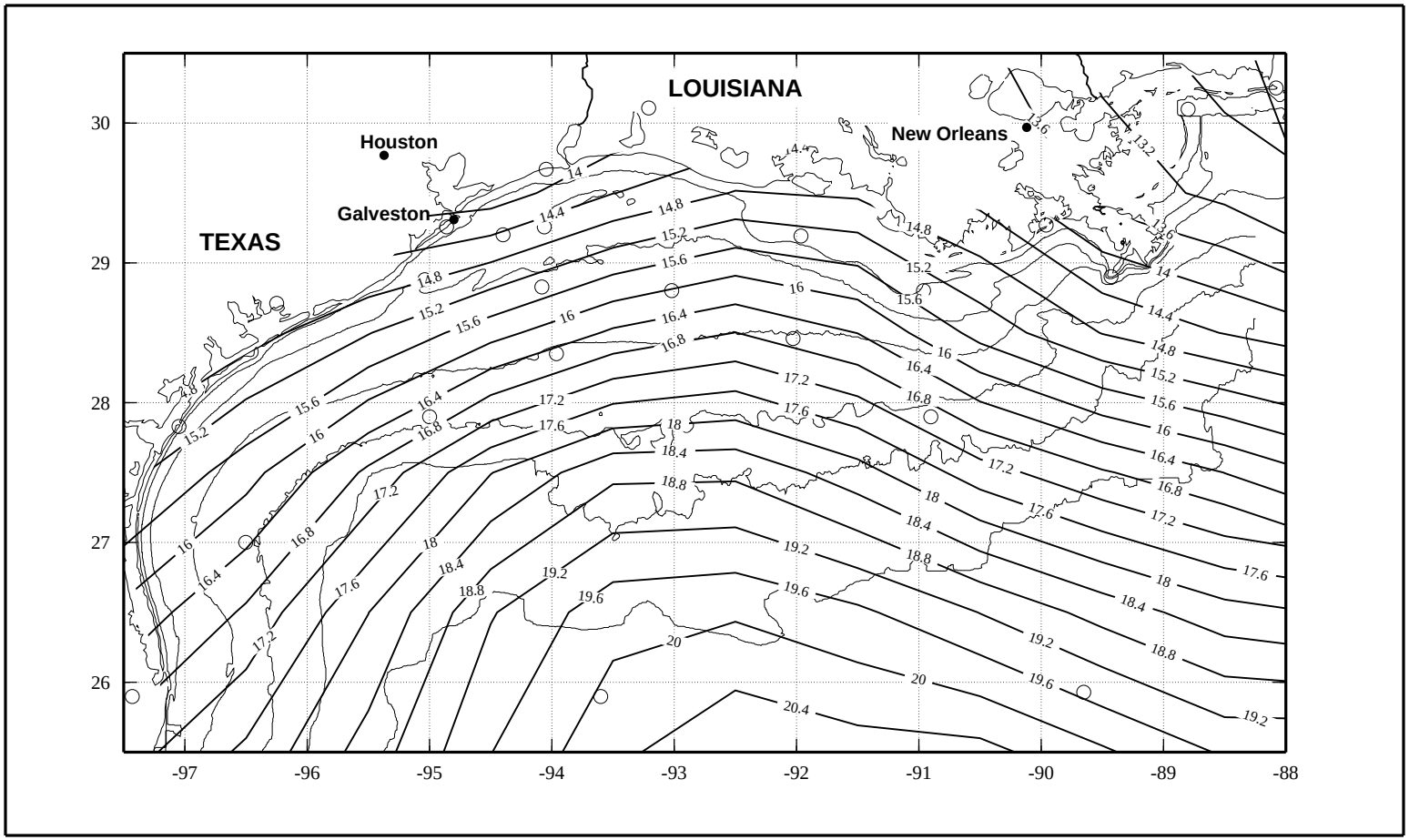

Figure 5.94.02. Monthly mean surface atmosphere temperature for February 1994, contour units in ˚C.

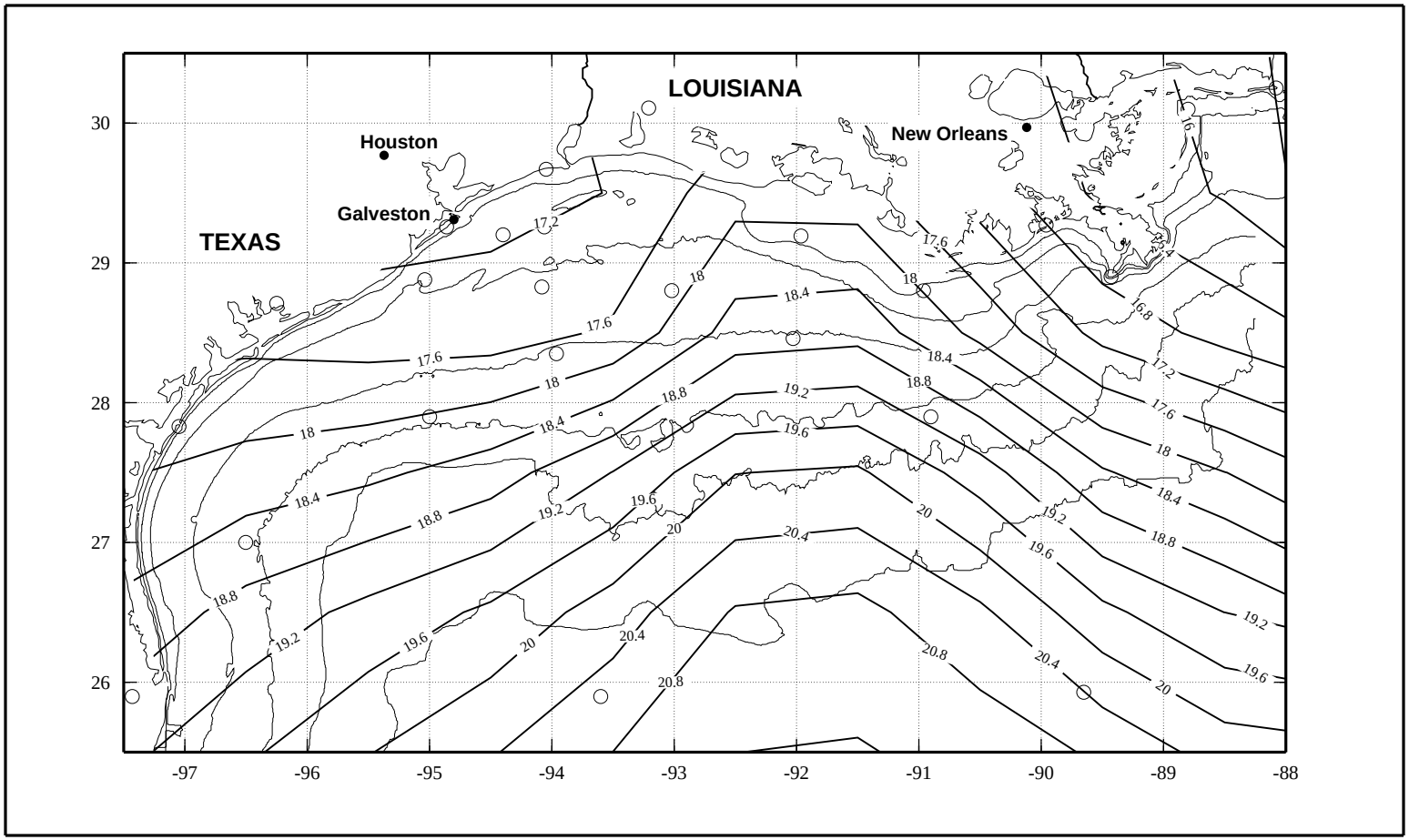

Figure 5.94.03. Monthly mean surface atmosphere temperature for March 1994, contour units in ˚C.

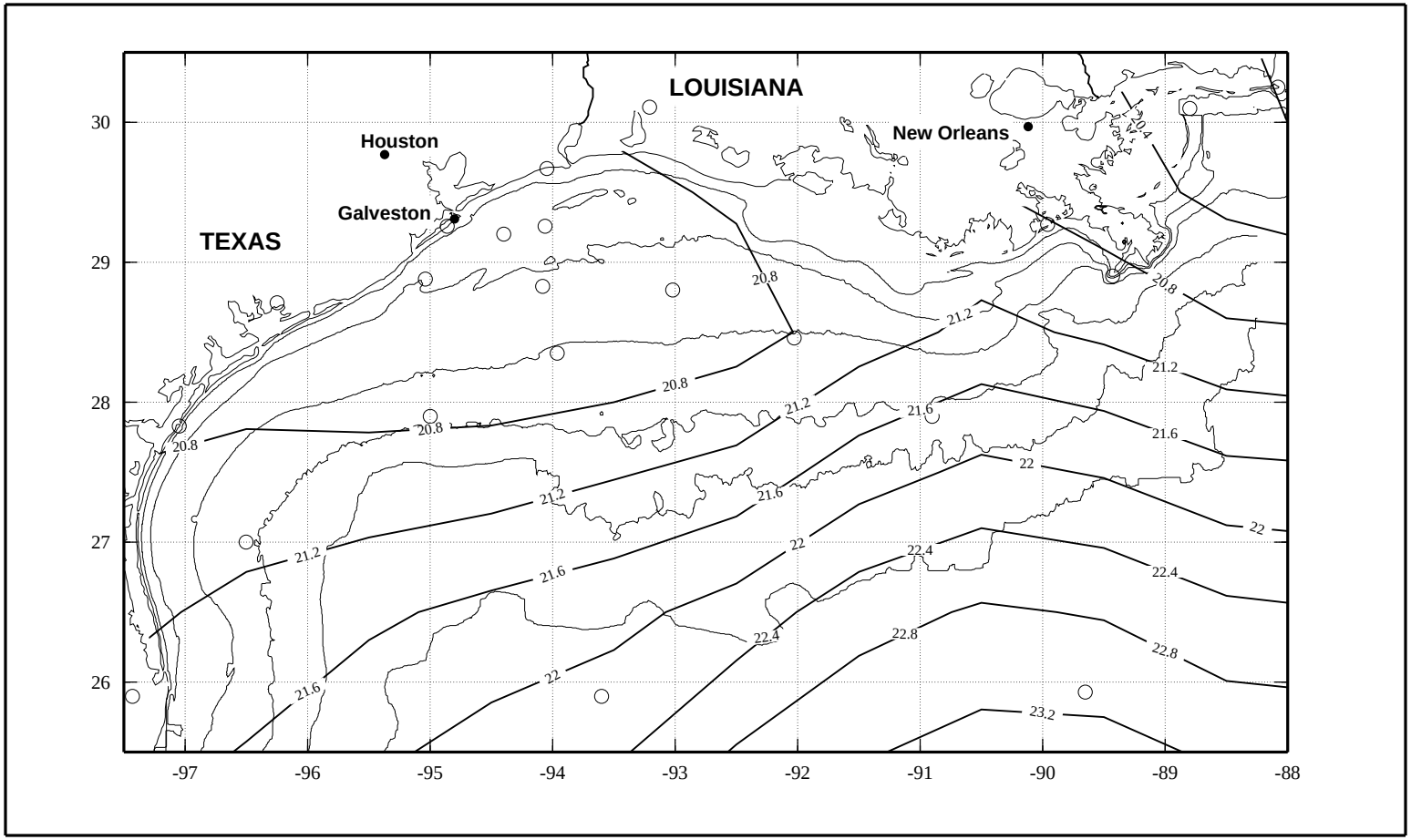

Figure 5.94.04. Monthly mean surface atmosphere temperature for April 1994, contour units in ˚C.

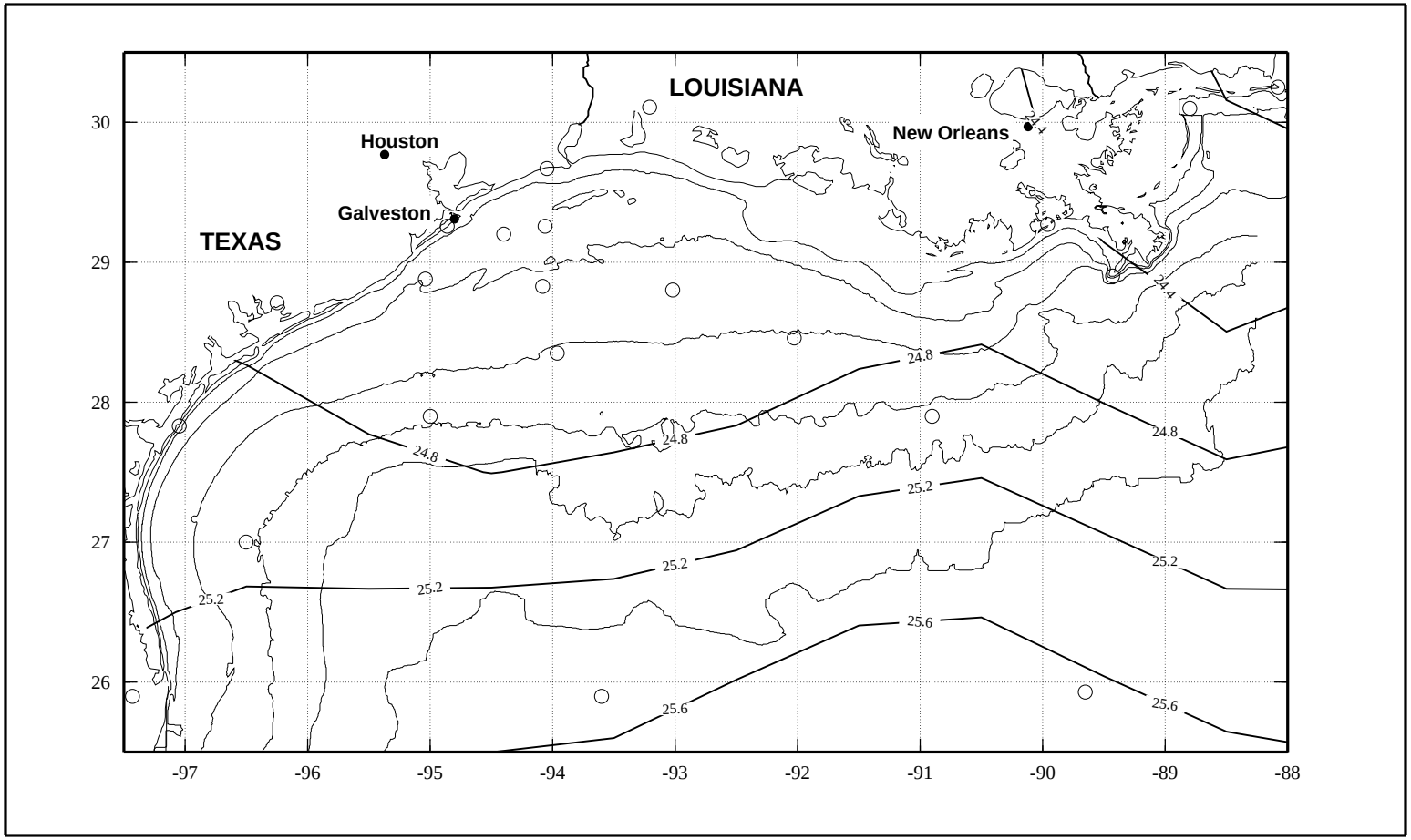

Figure 5.94.05. Monthly mean surface atmosphere temperature for May 1994, contour units in ˚C.

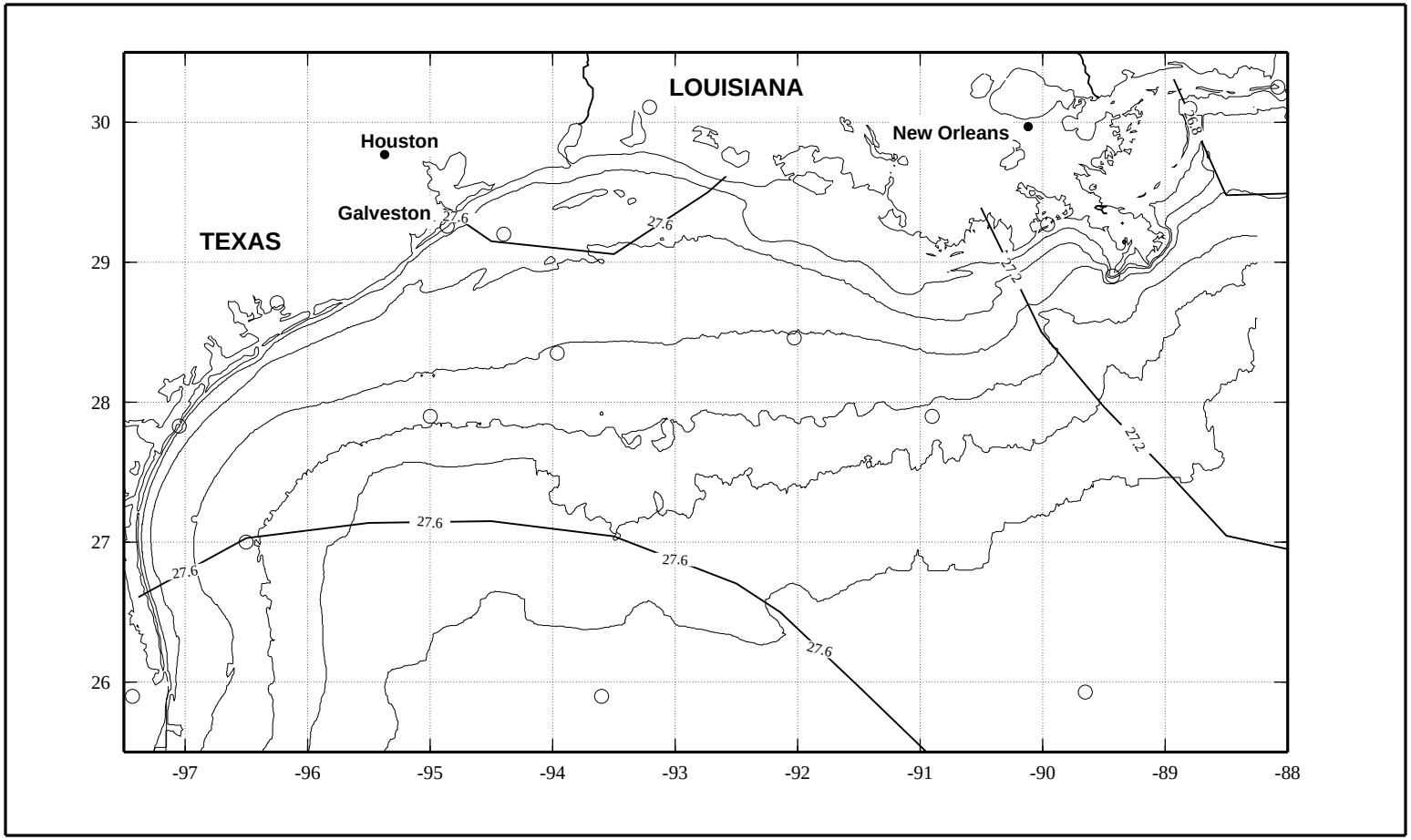

Figure 5.94.06. Monthly mean surface atmosphere temperature for June 1994, contour units in ˚C.

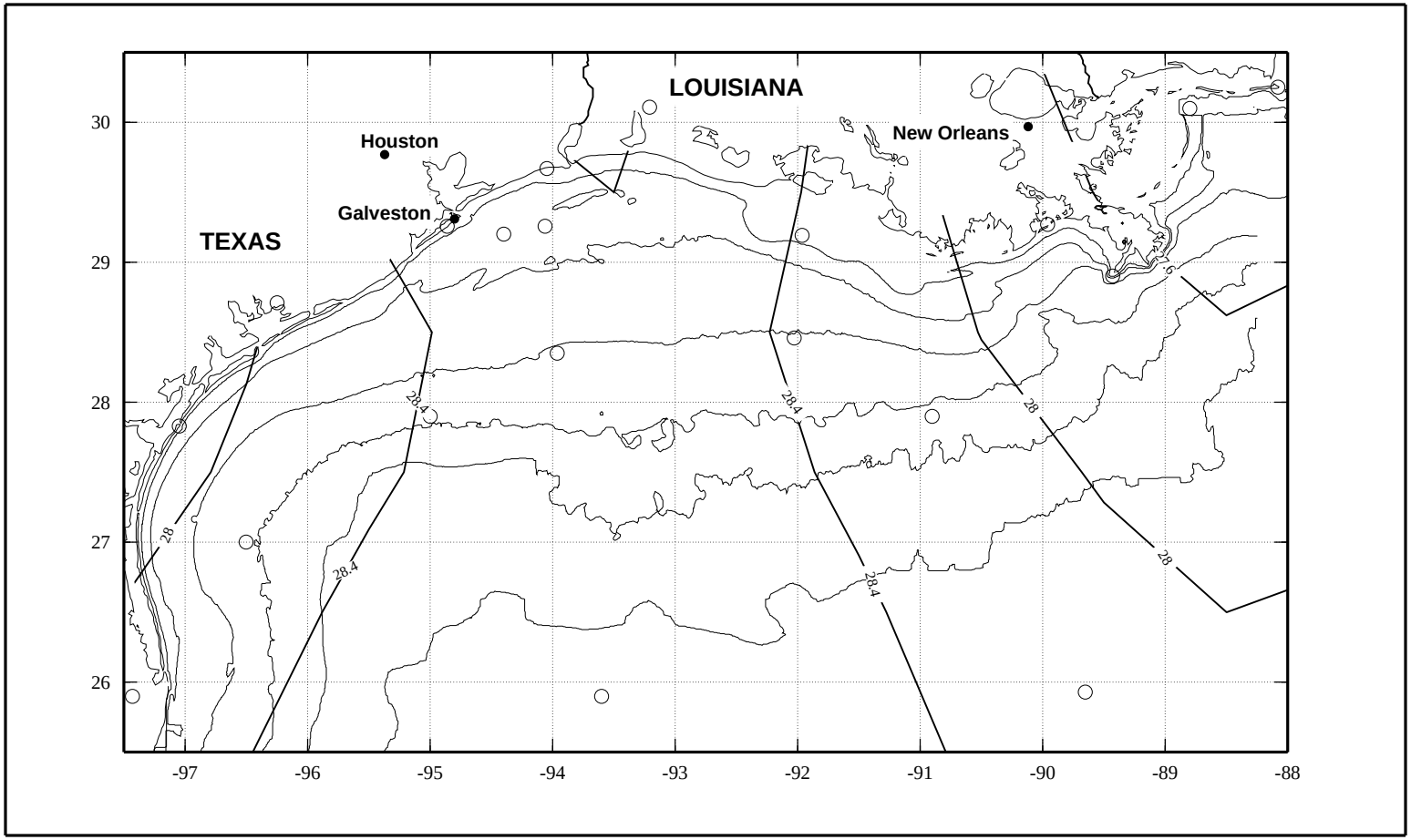

Figure 5.94.07. Monthly mean surface atmosphere temperature for July 1994, contour units in ˚C.

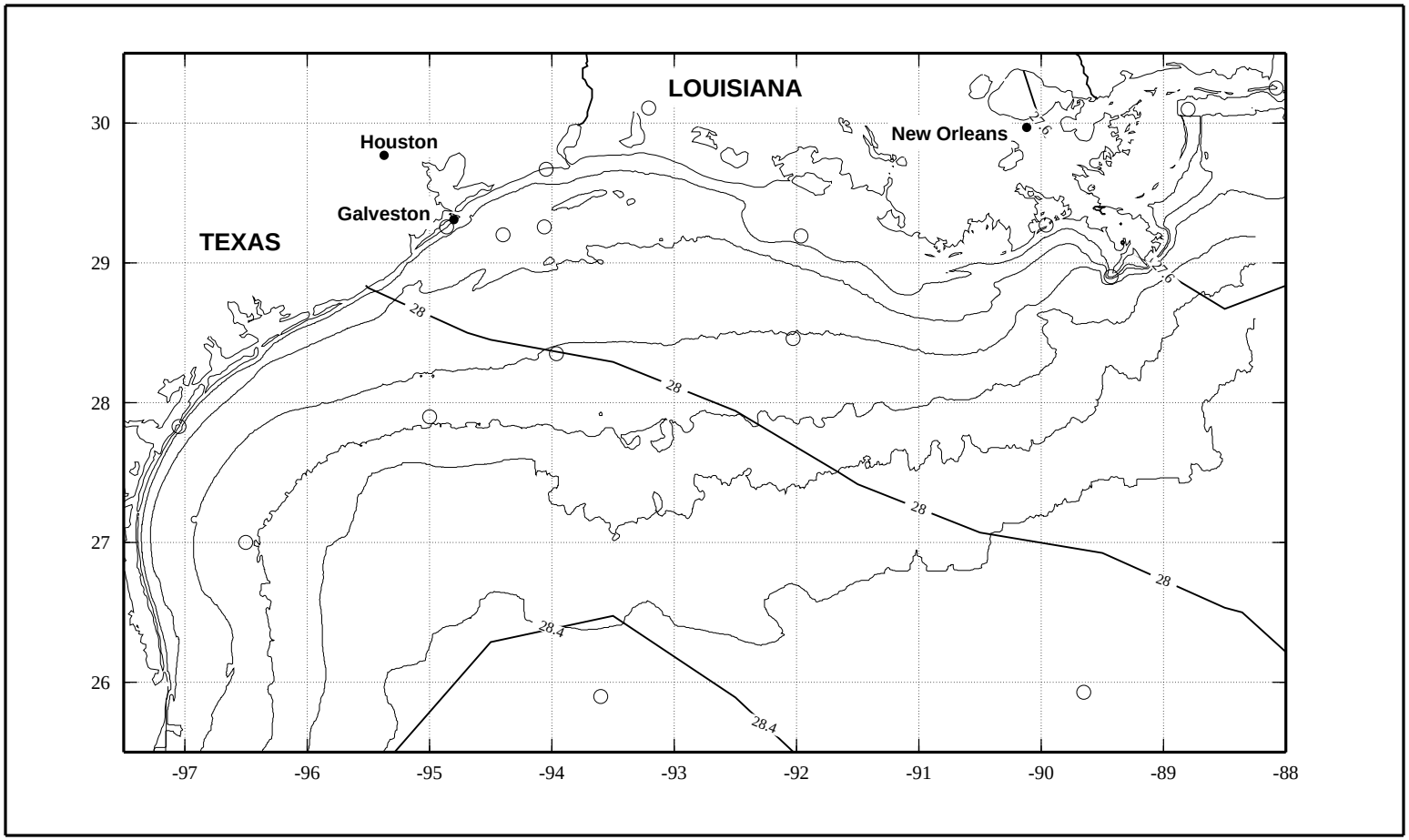

Figure 5.94.08. Monthly mean surface atmosphere temperature for August 1994, contour units in ˚C.

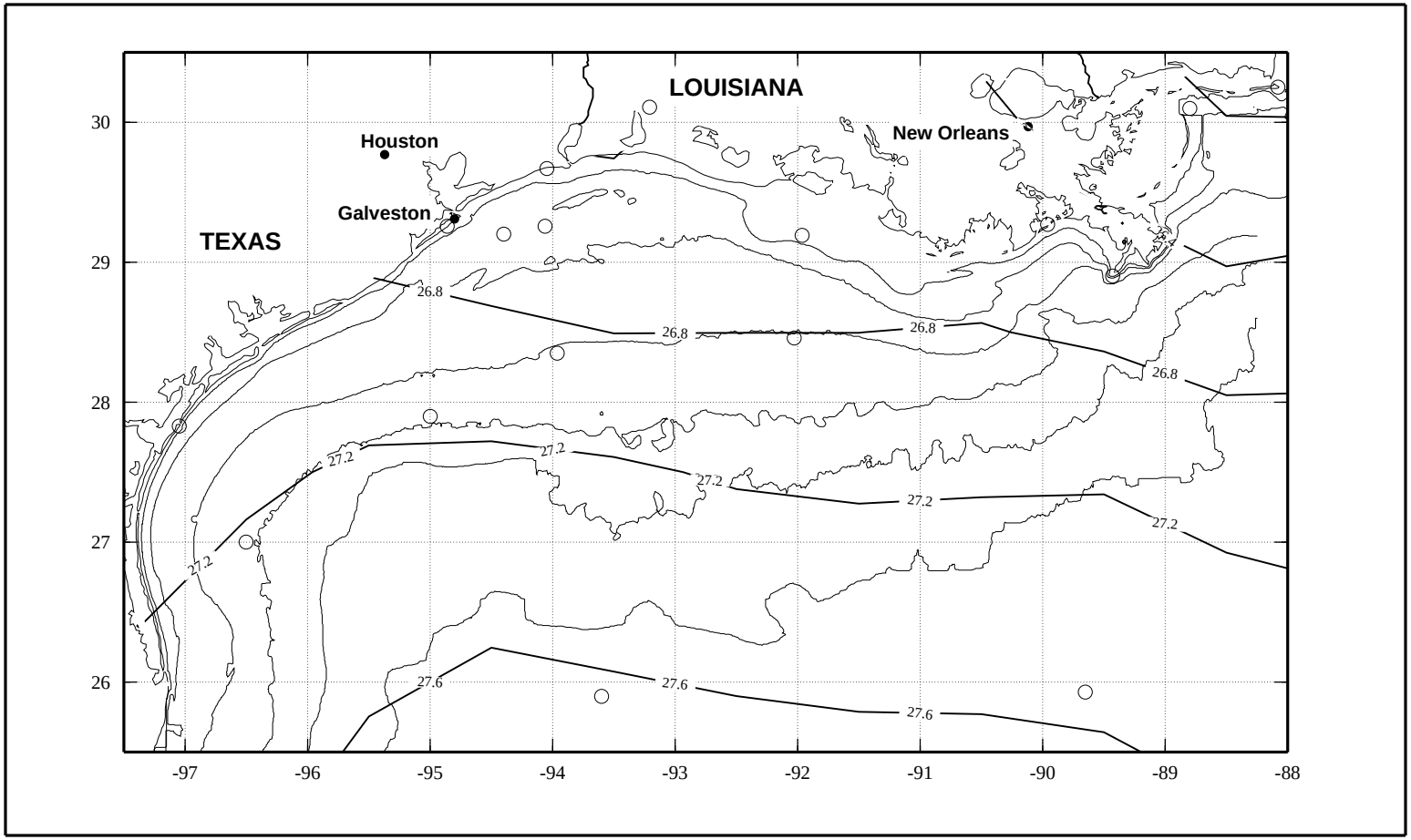

Figure 5.94.09. Monthly mean surface atmosphere temperature for September 1994, contour units in ˚C.

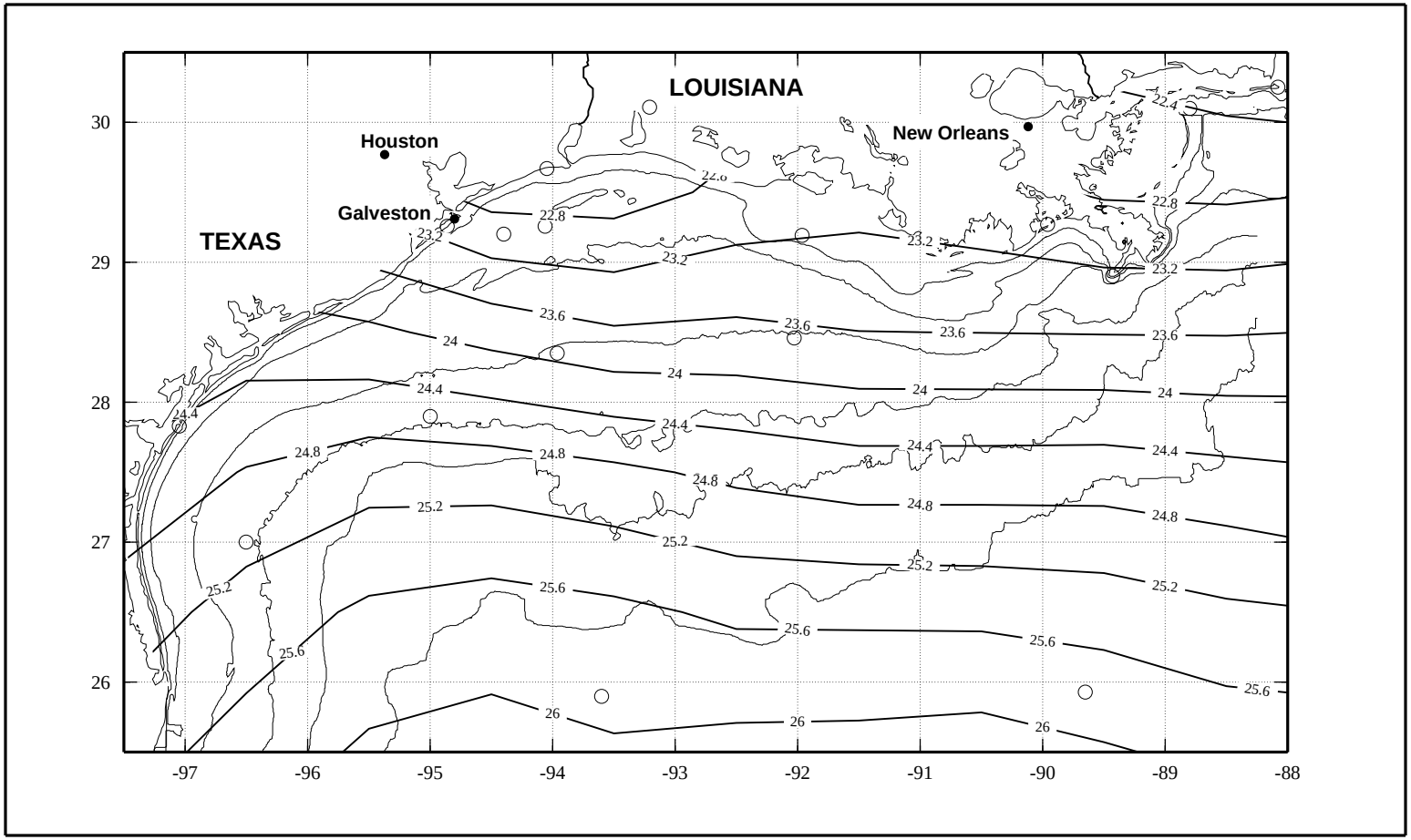

Figure 5.94.10. Monthly mean surface atmosphere temperature for October 1994, contour units in ˚C.

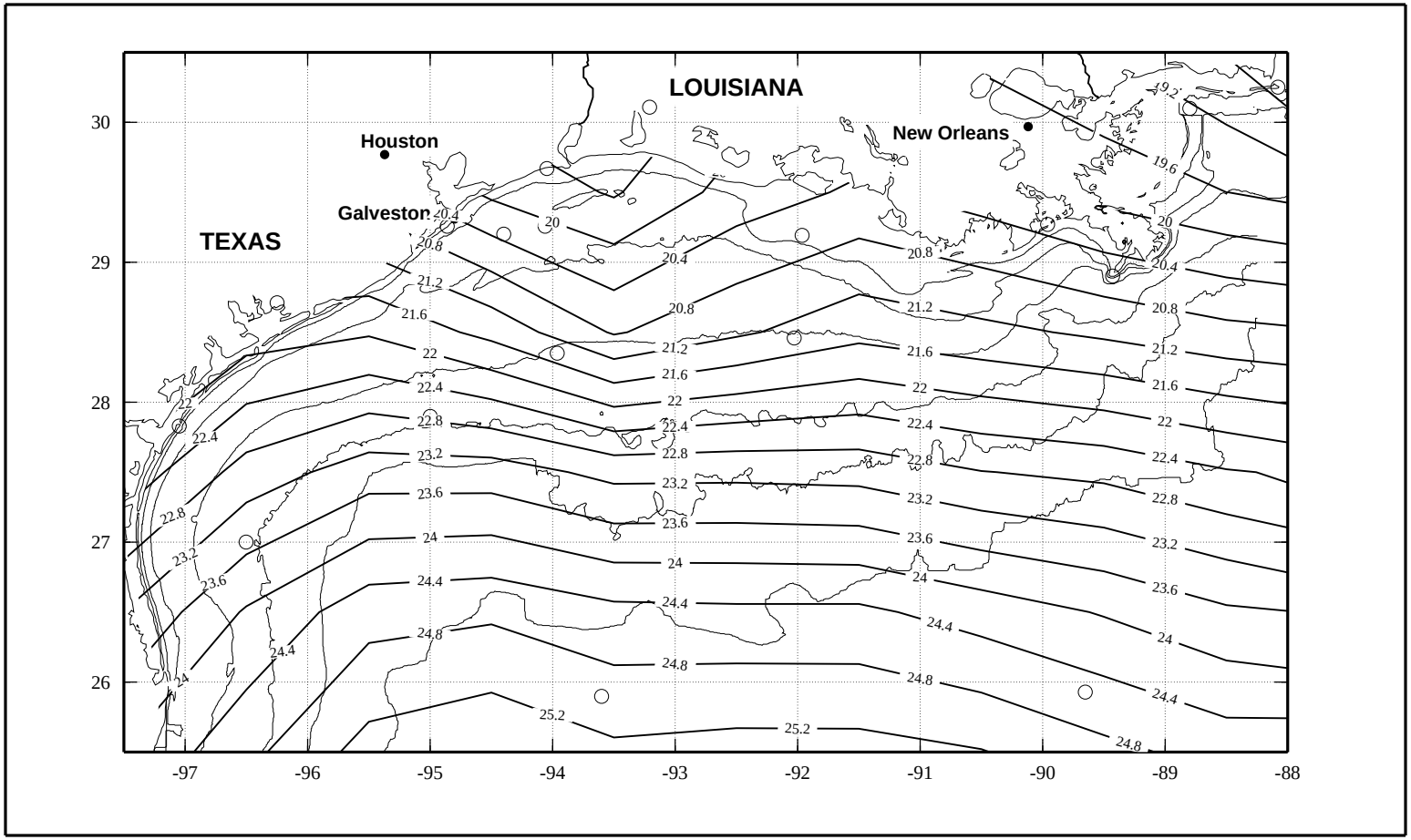

Figure 5.94.11. Monthly mean surface atmosphere temperature for November 1994, contour units in ˚C.

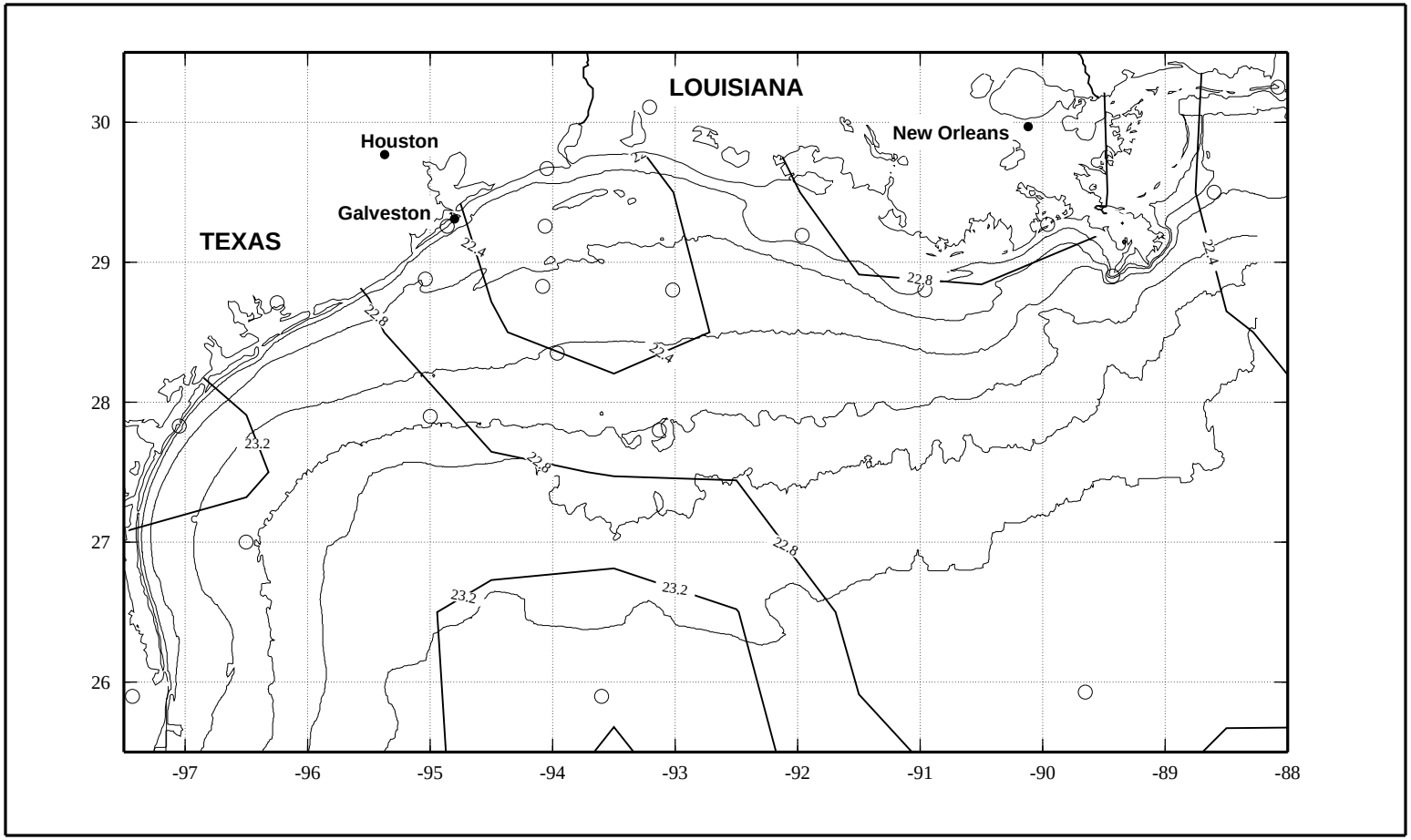

Figure 6.92.04. Monthly mean SST for April 1992, contour units in ˚C.

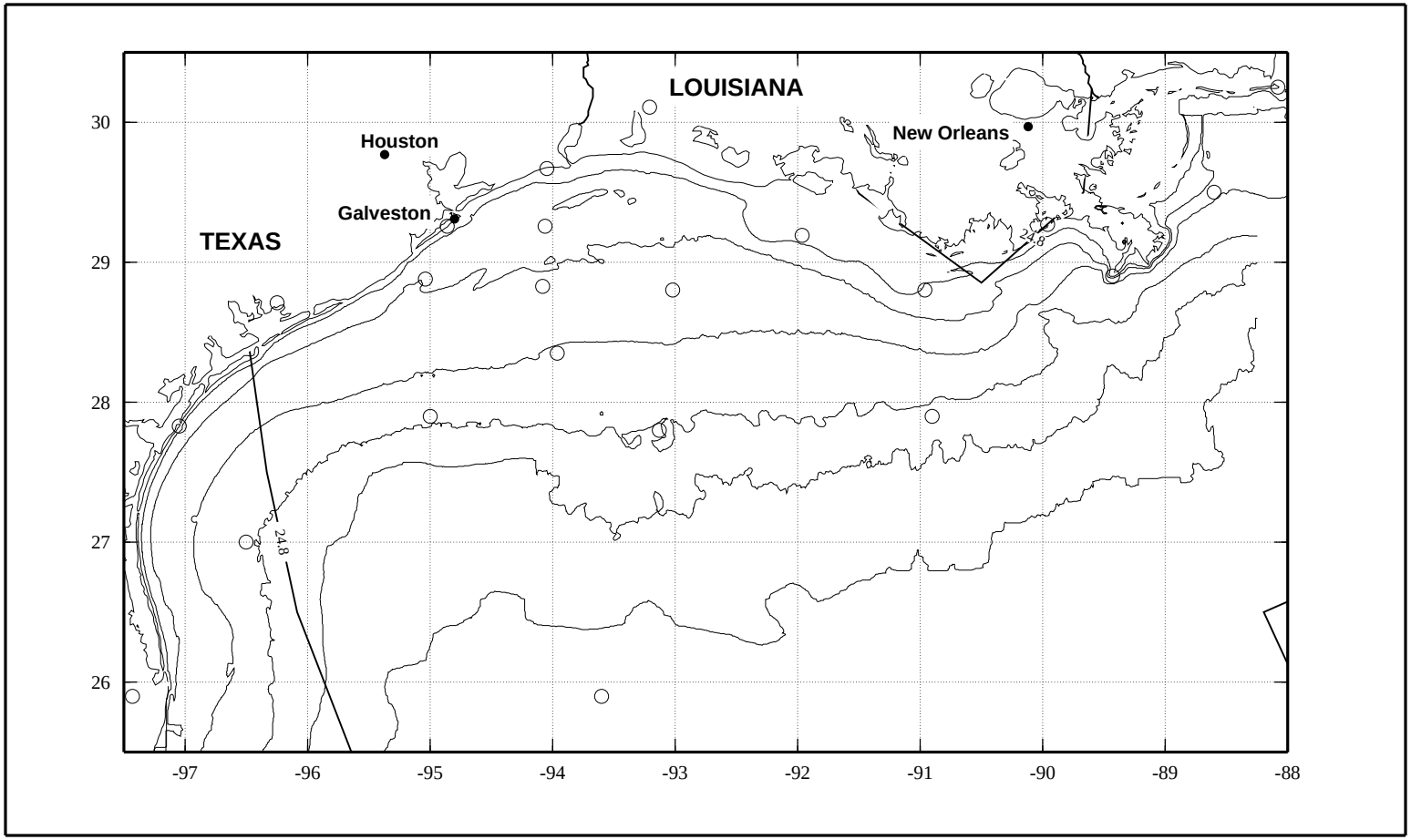

Figure 6.92.05. Monthly mean SST for May 1992, contour units in ˚C.

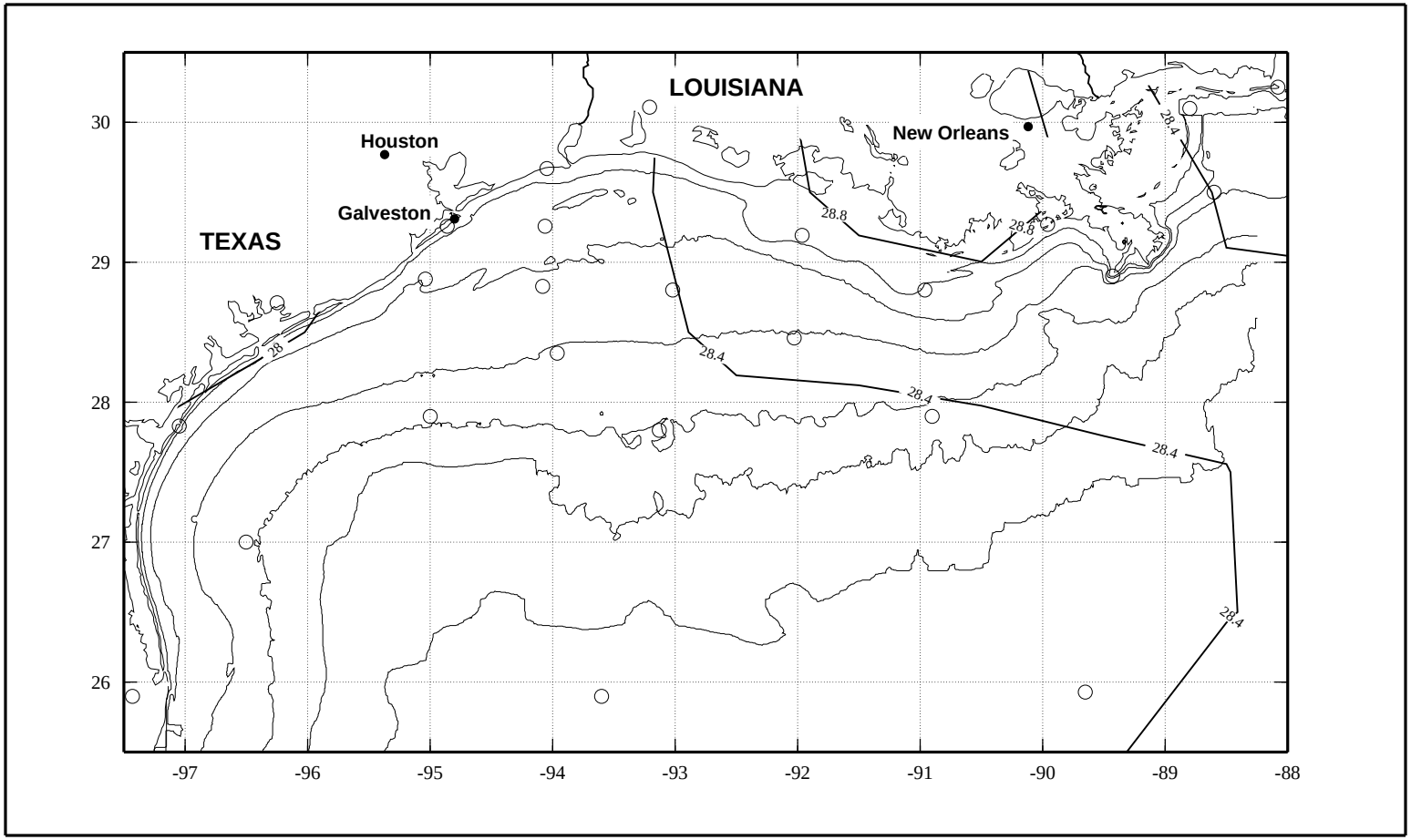

Figure 6.92.06. Monthly mean SST for June 1992, contour units in ˚C.

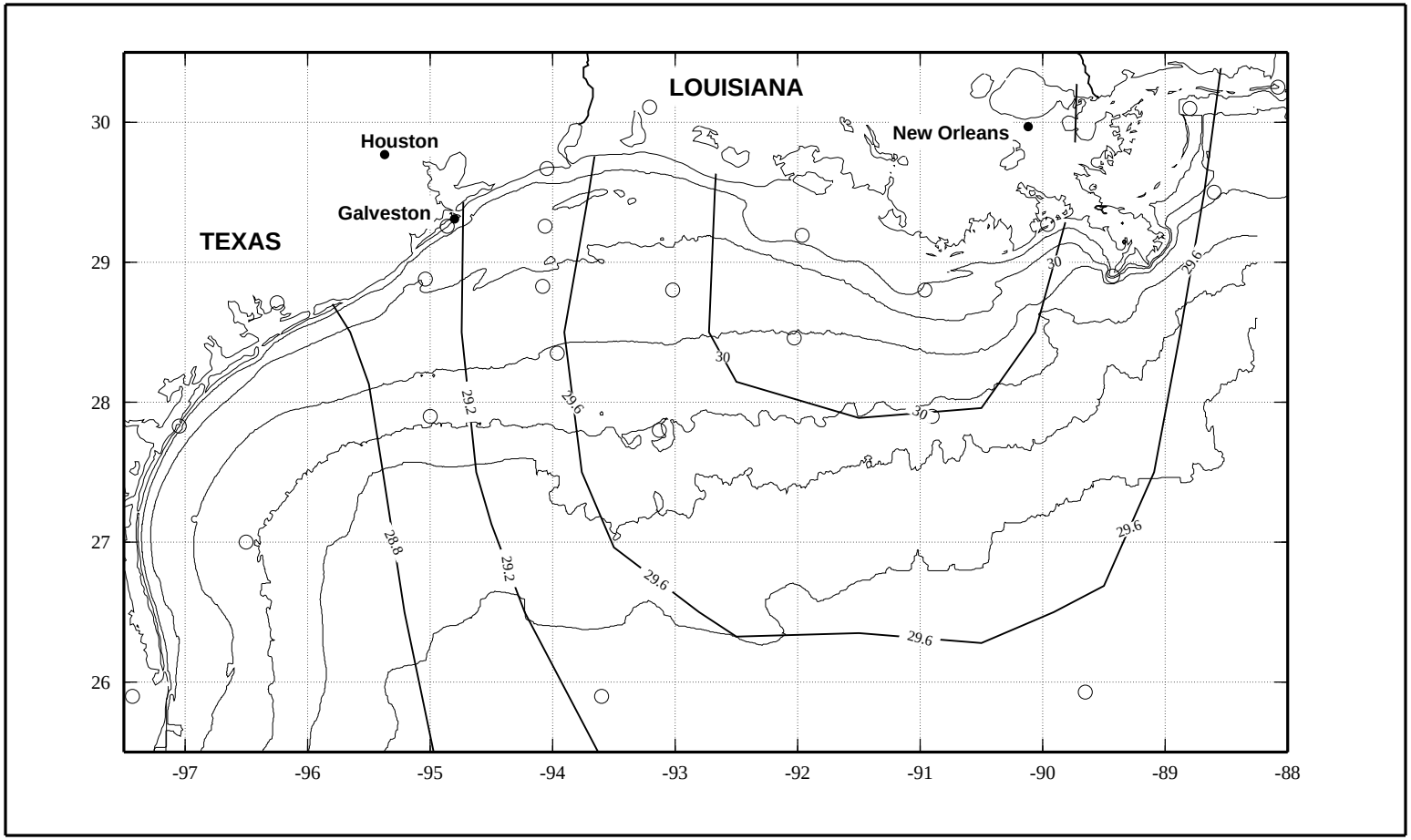

Figure 6.92.07. Monthly mean SST for July 1992, contour units in ˚C.

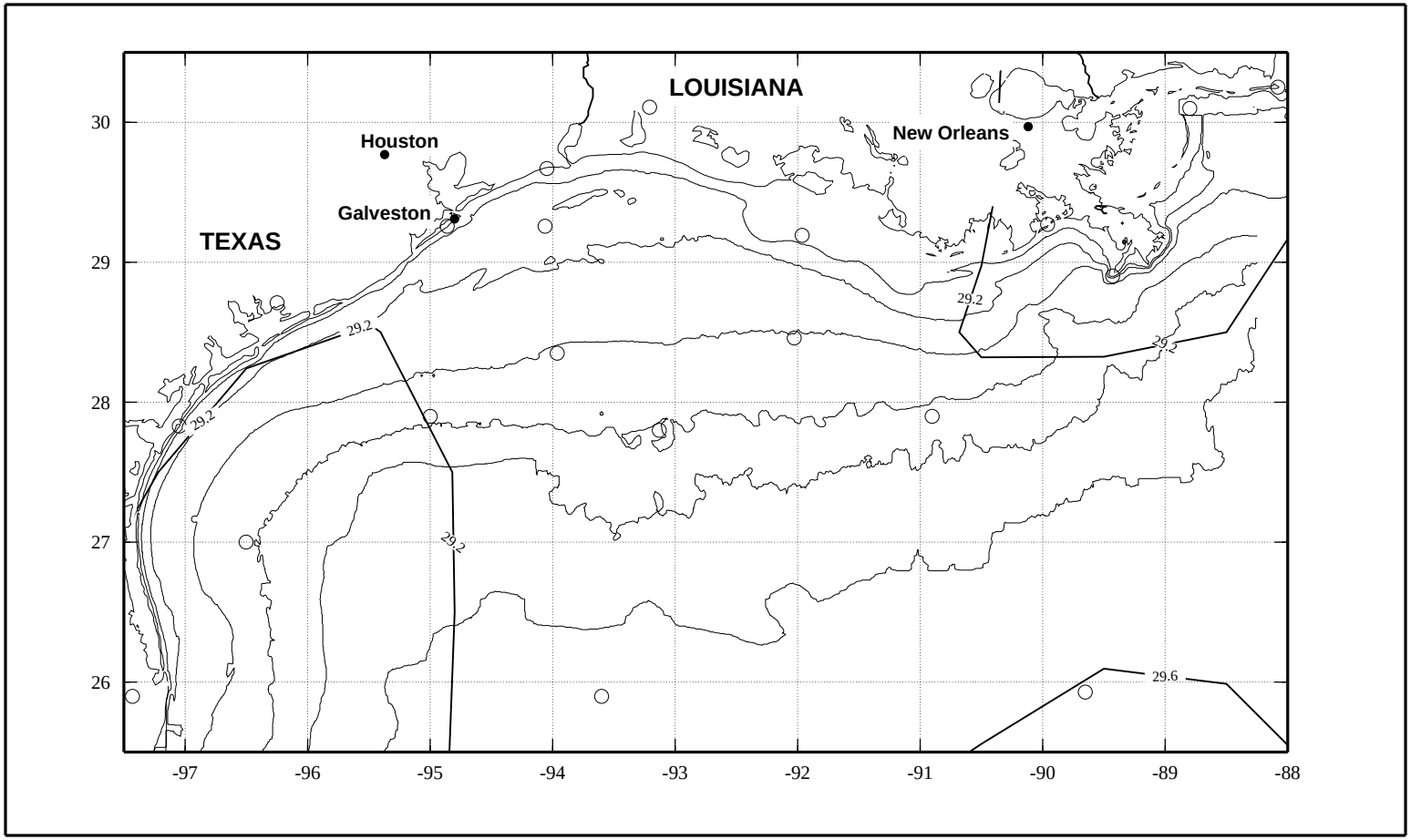

Figure 6.92.08. Monthly mean SST for August 1992, contour units in ˚C.

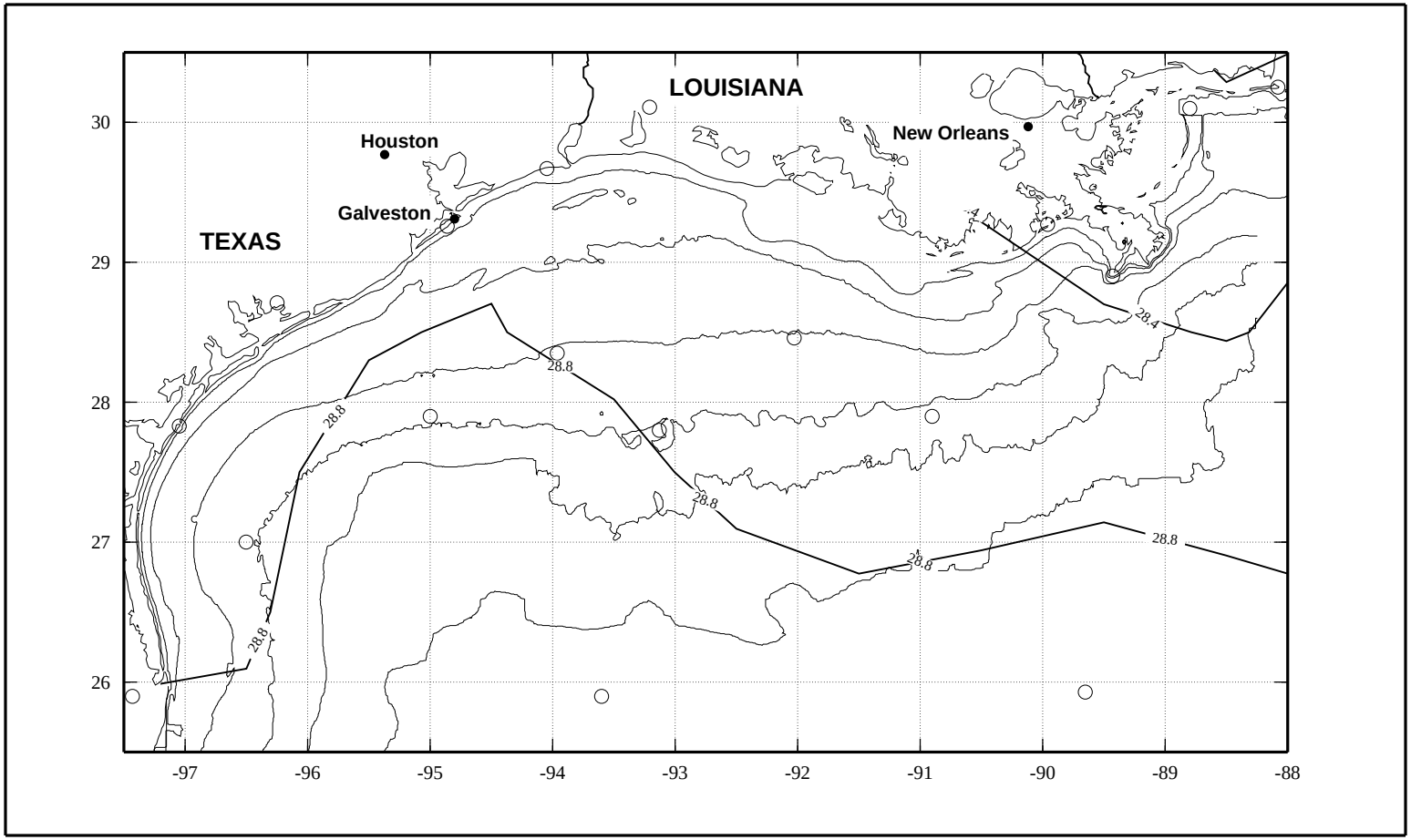

Figure 6.92.09. Monthly mean SST for September 1992, contour units in ˚C.

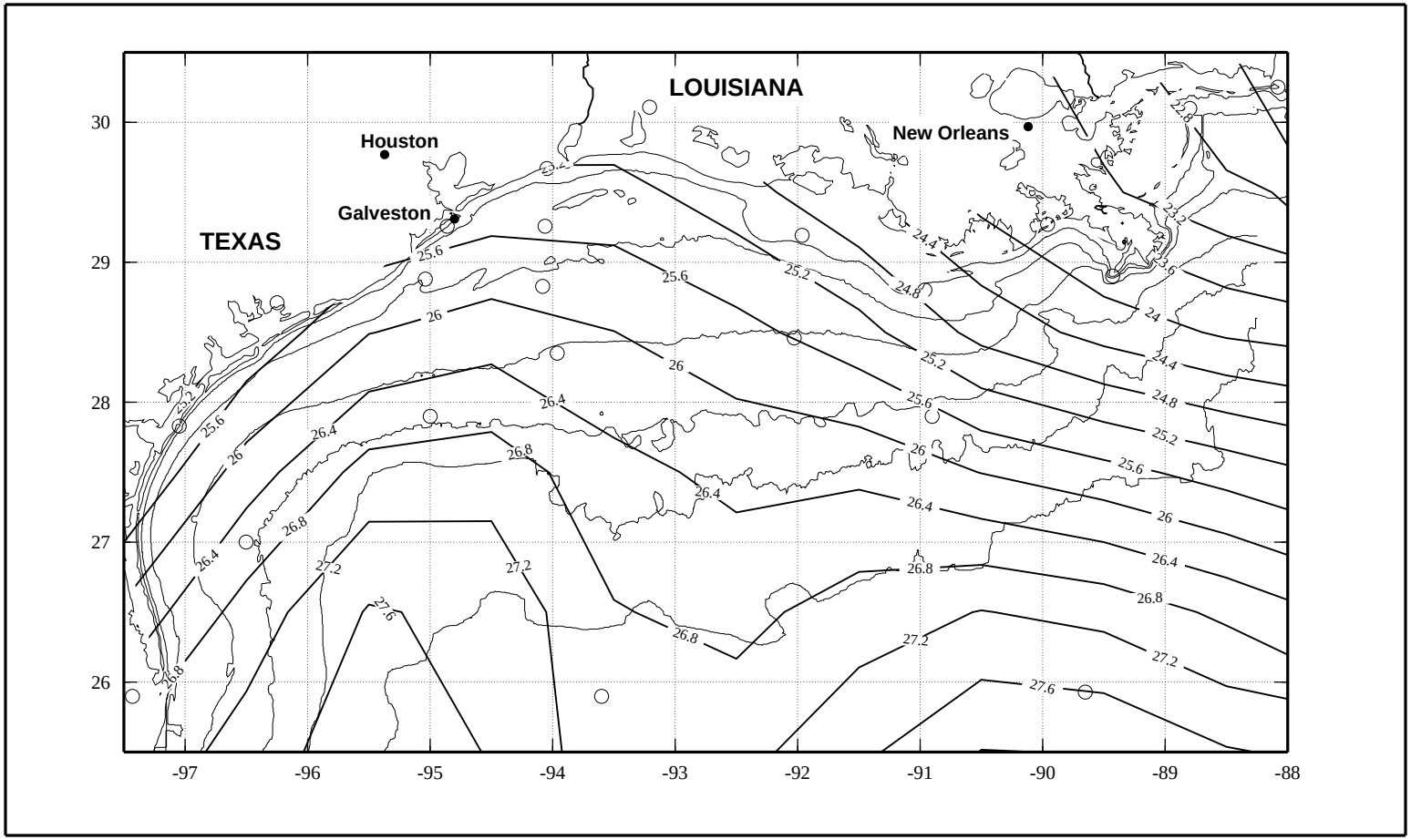

Figure 6.92.10. Monthly mean SST for October 1992, contour units in ˚C.

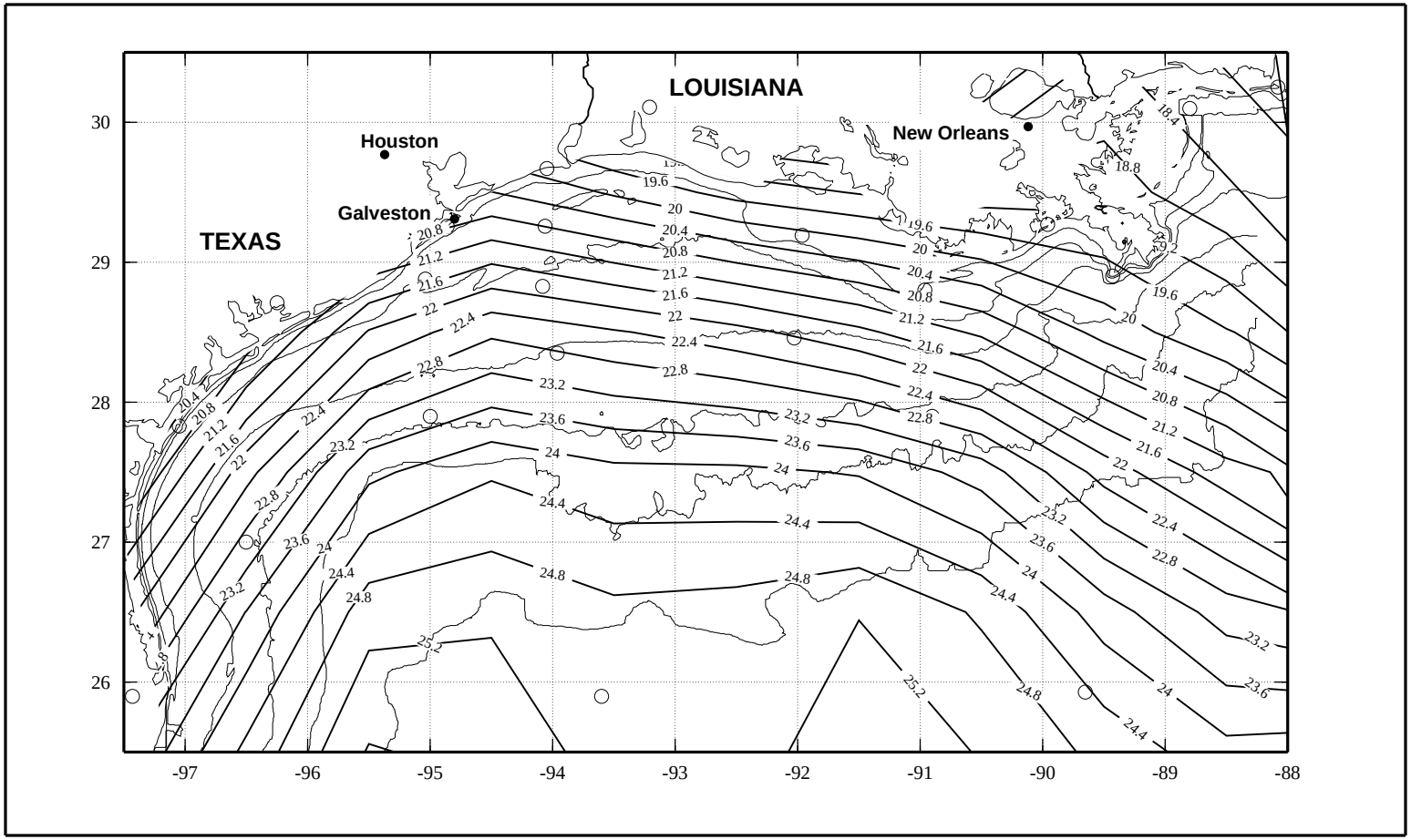

Figure 6.92.11. Monthly mean SST for November 1992, contour units in ˚C.

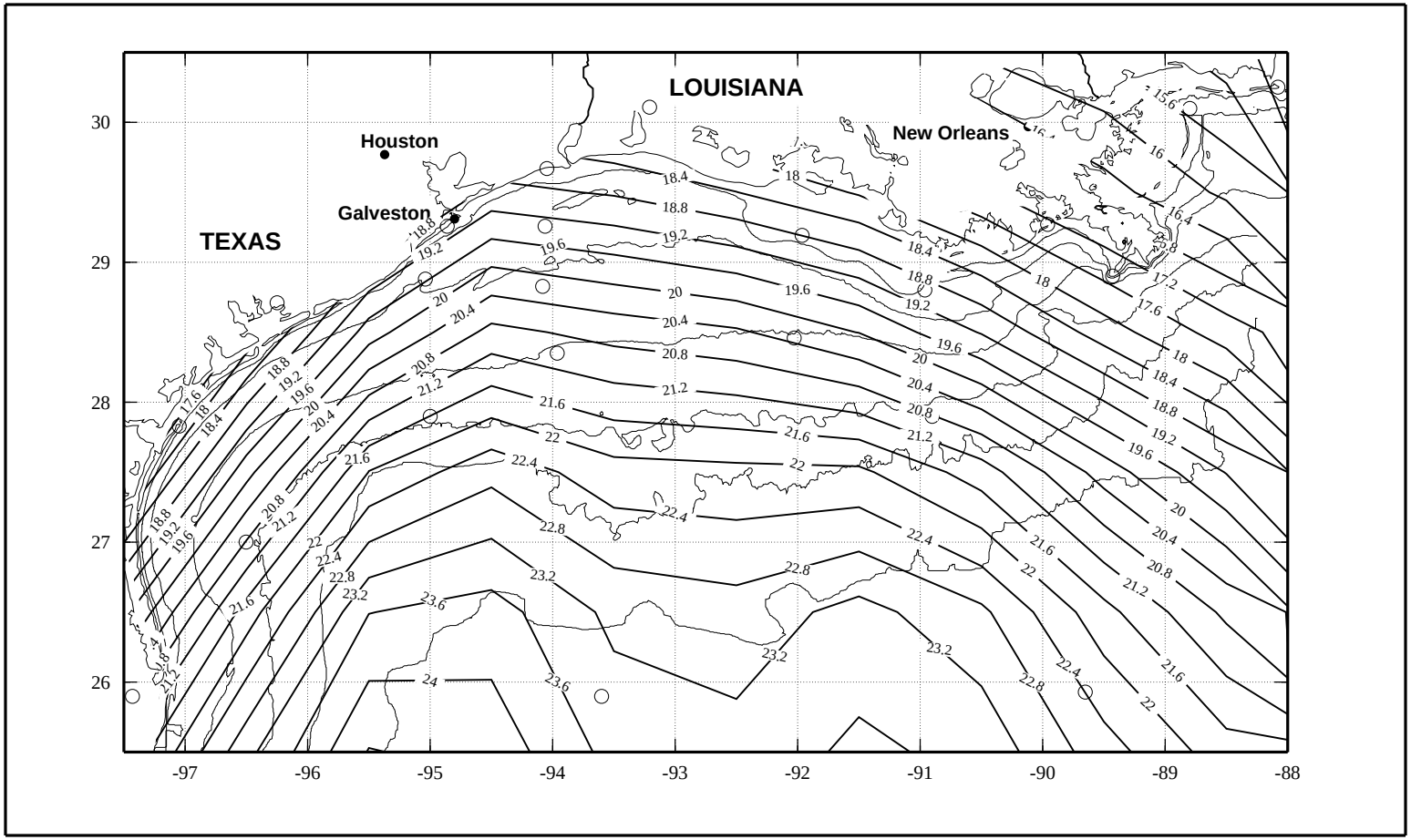

Figure 6.92.12. Monthly mean SST for December 1992, contour units in ˚C.

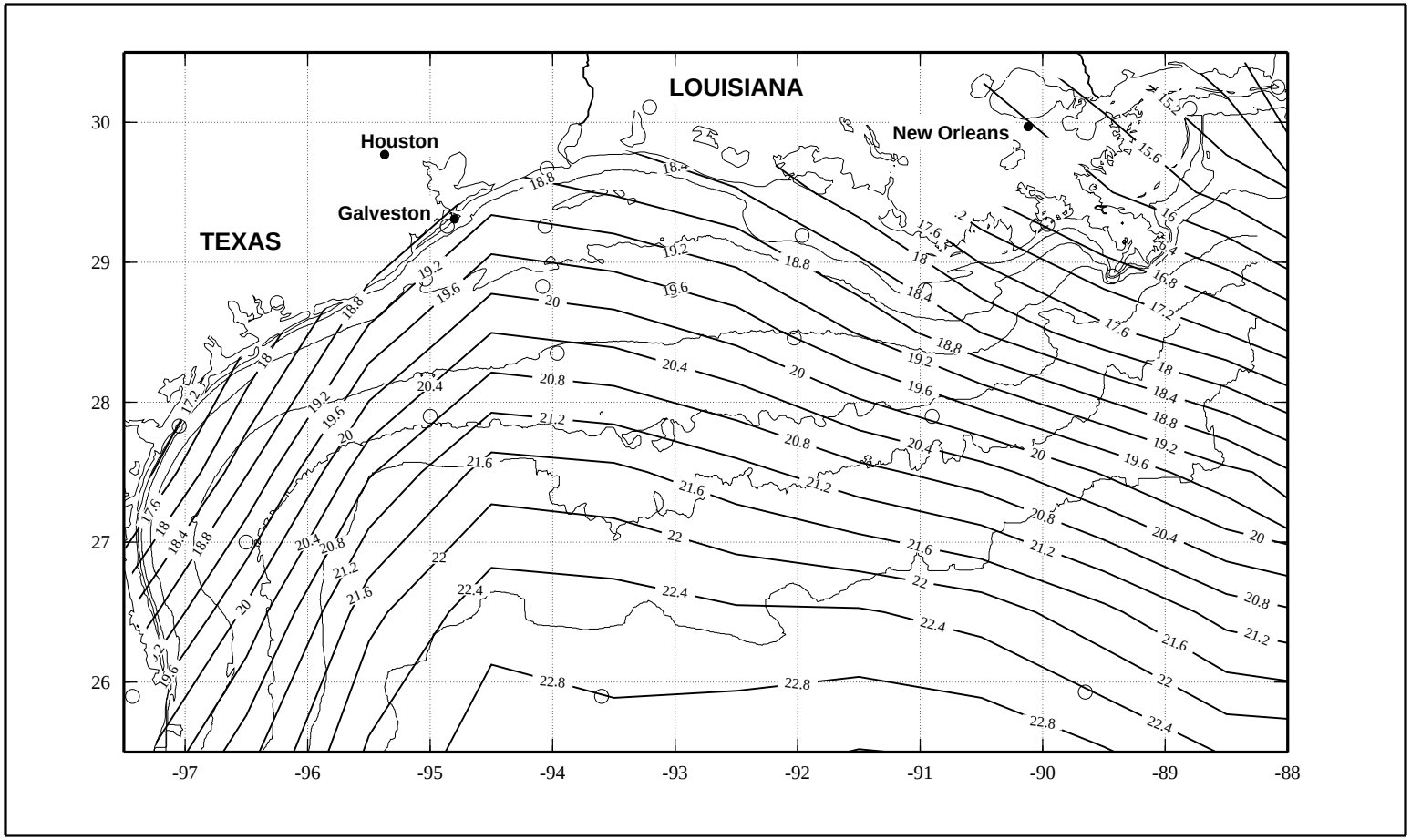

Figure 6.93.01. Monthly mean SST for January 1993, contour units in ˚C.

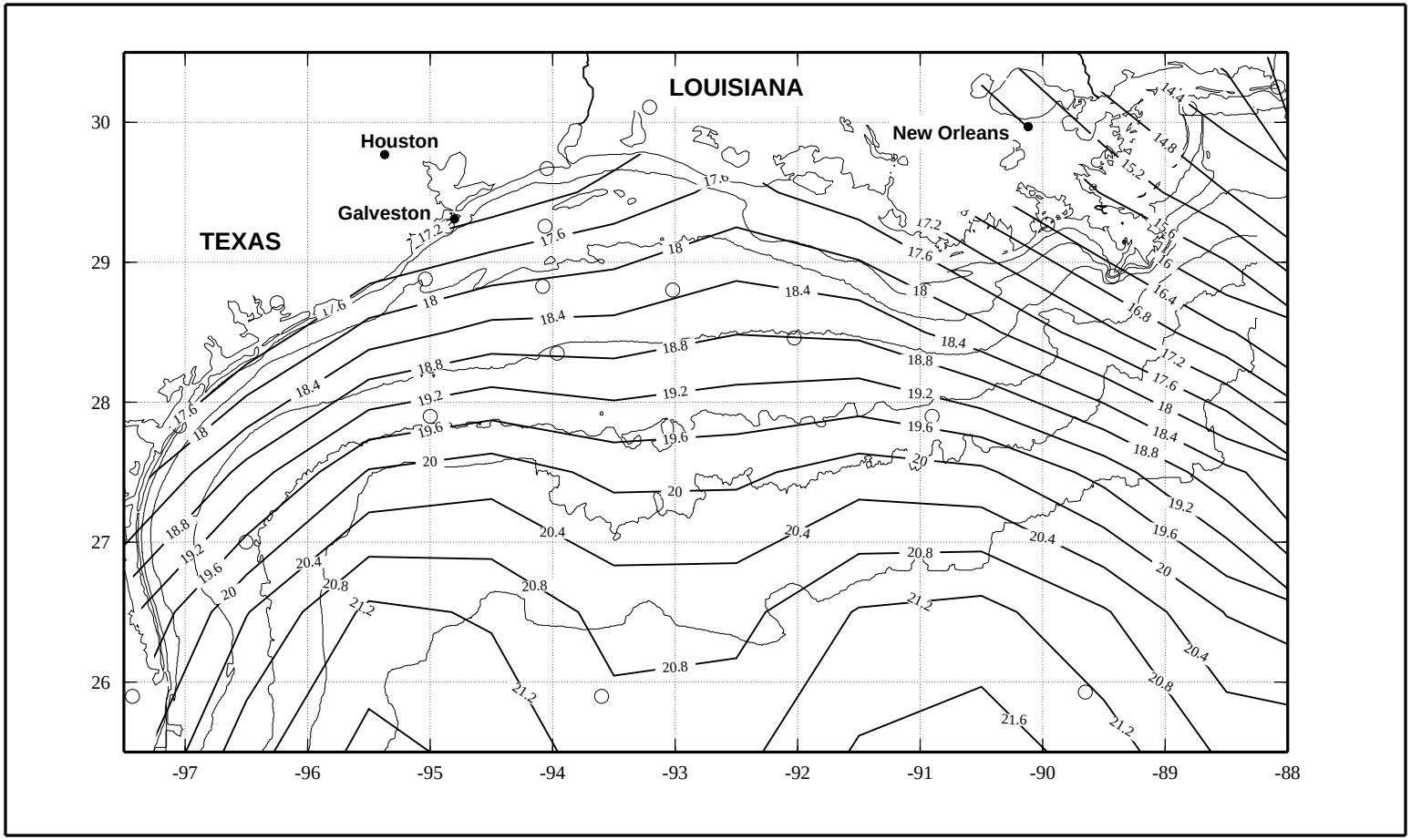

Figure 6.93.02. Monthly mean SST for February 1993, contour units in ˚C.

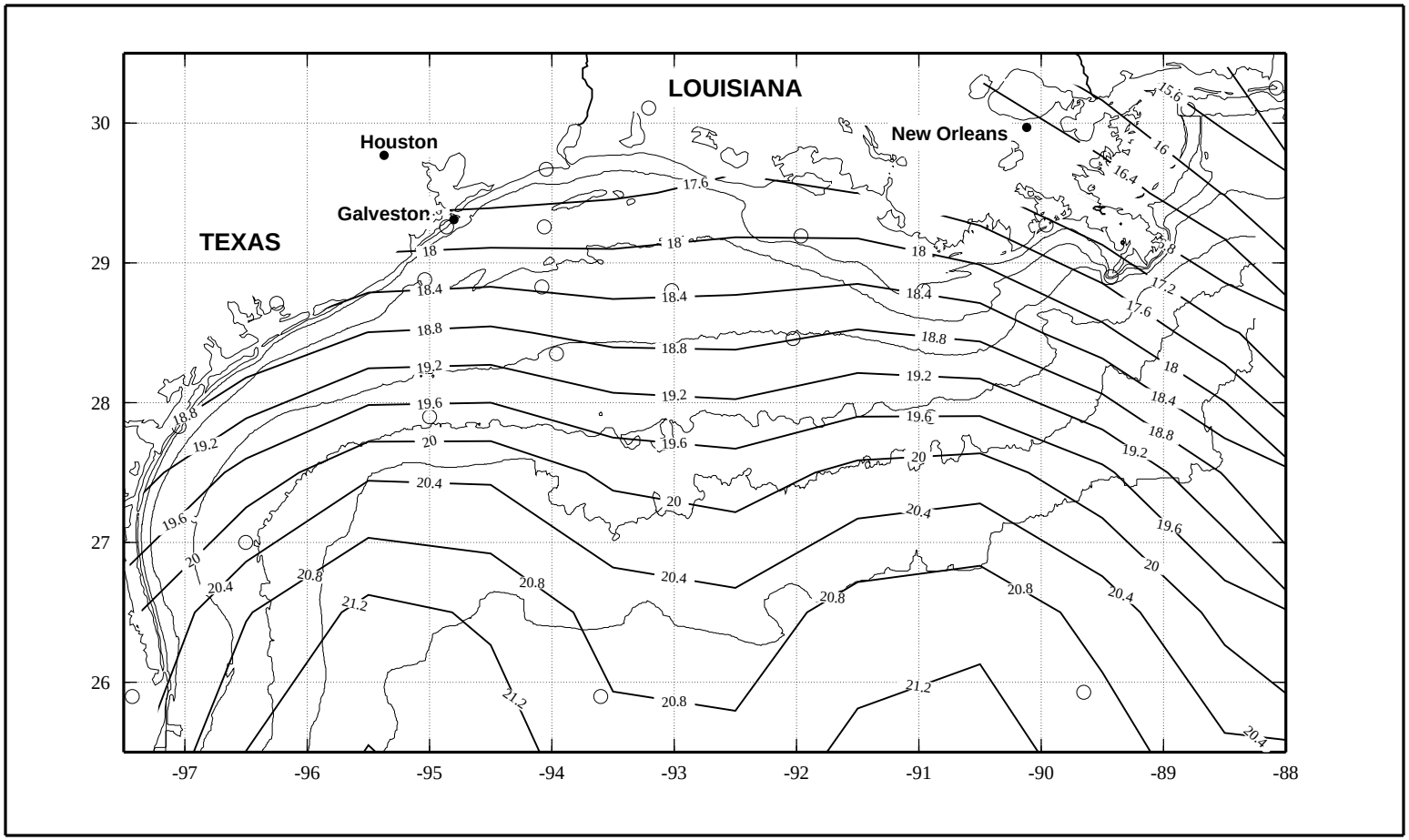

Figure 6.93.03. Monthly mean SST for March 1993, contour units in ˚C.

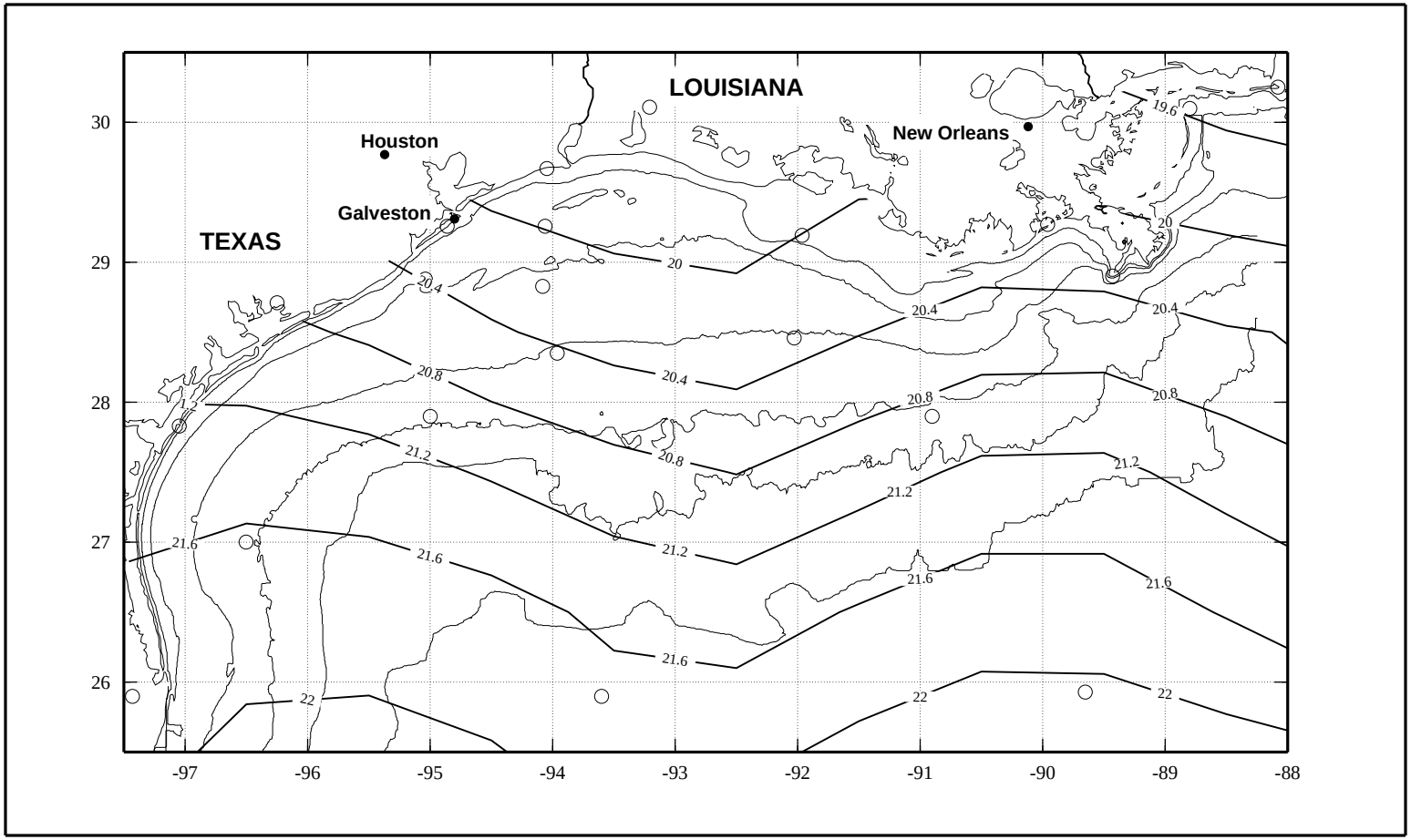

Figure 6.93.04. Monthly mean SST for April 1993, contour units in ˚C.

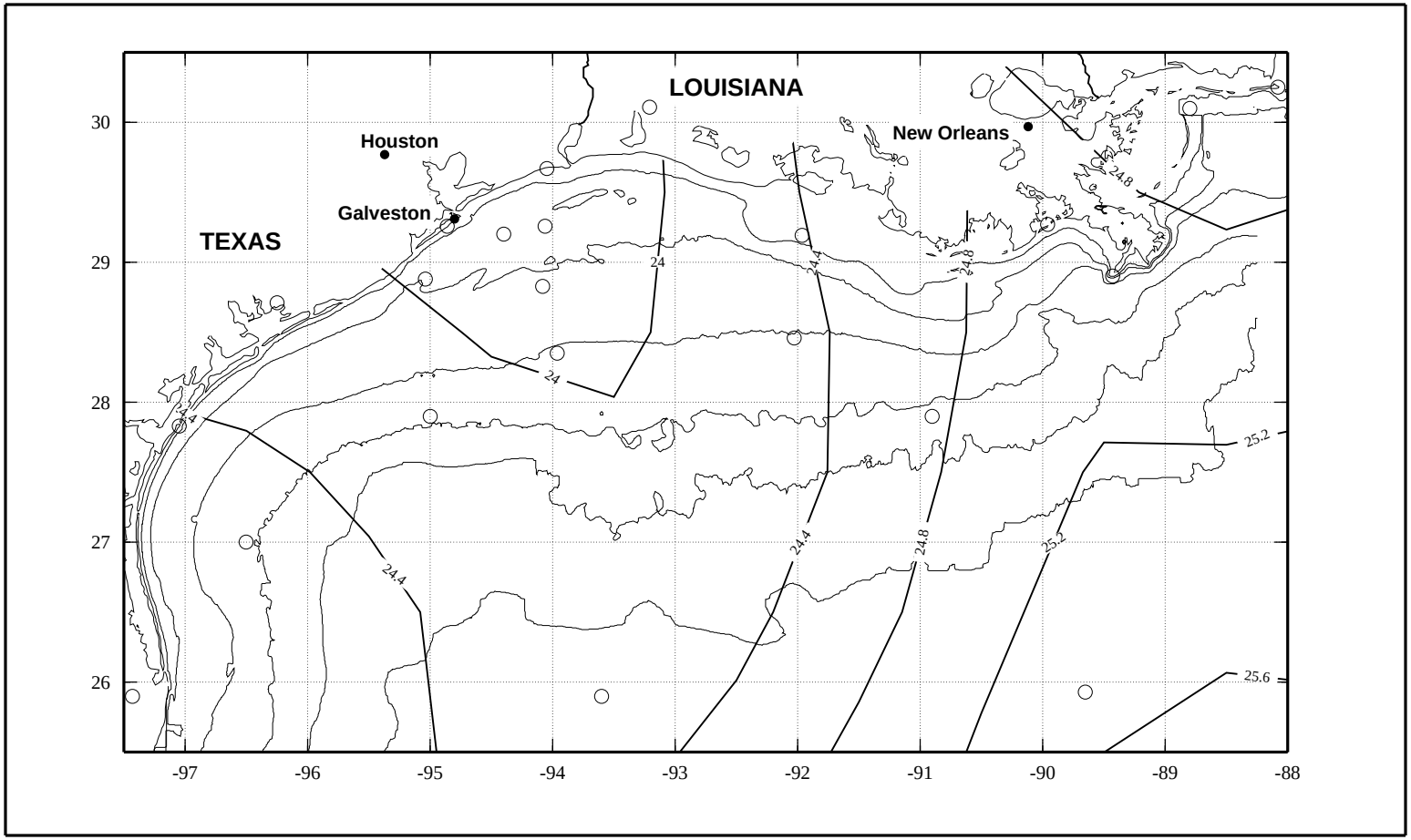

Figure 6.93.05. Monthly mean SST for May 1993, contour units in ˚C.

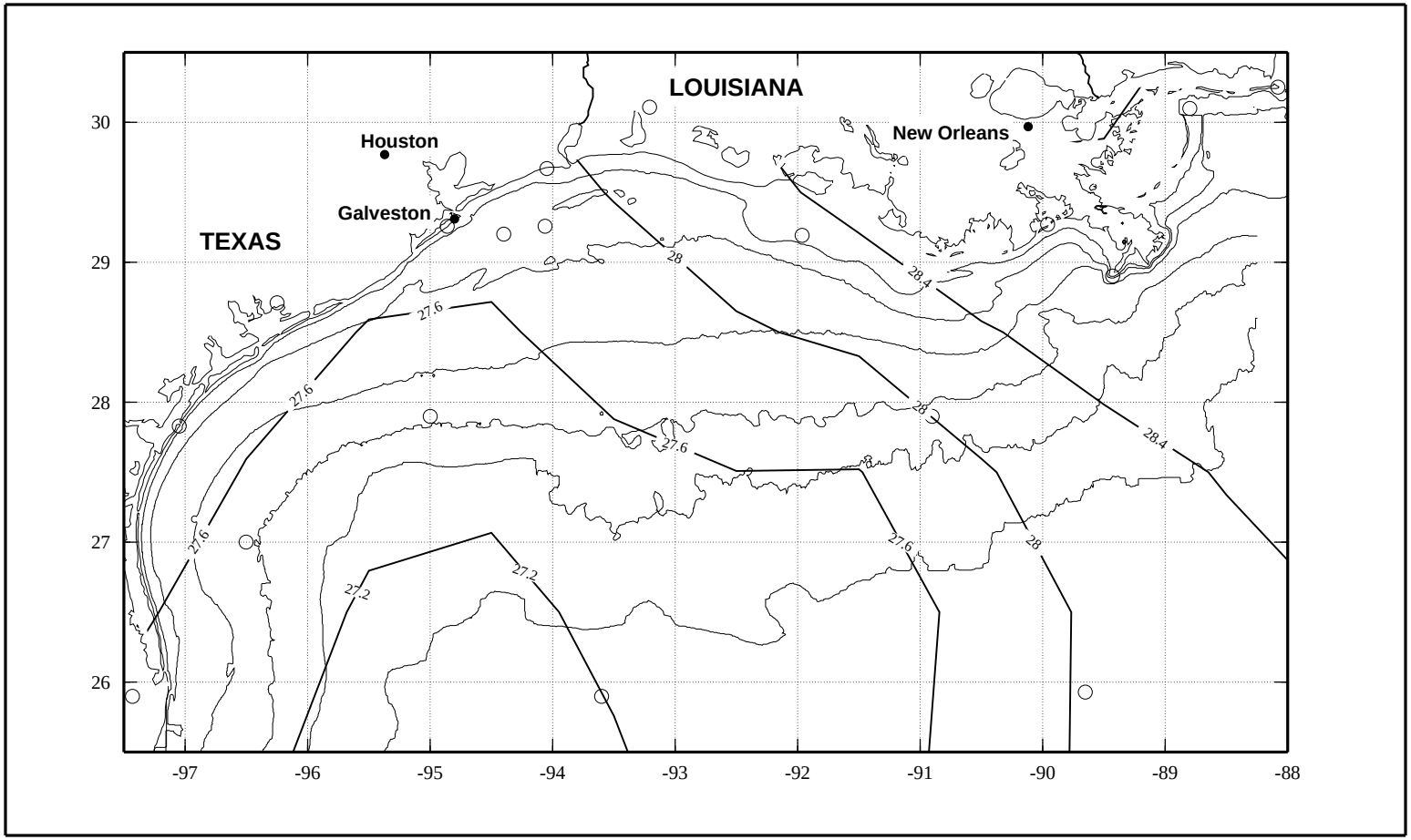

Figure 6.93.06. Monthly mean SST for June 1993, contour units in ˚C.

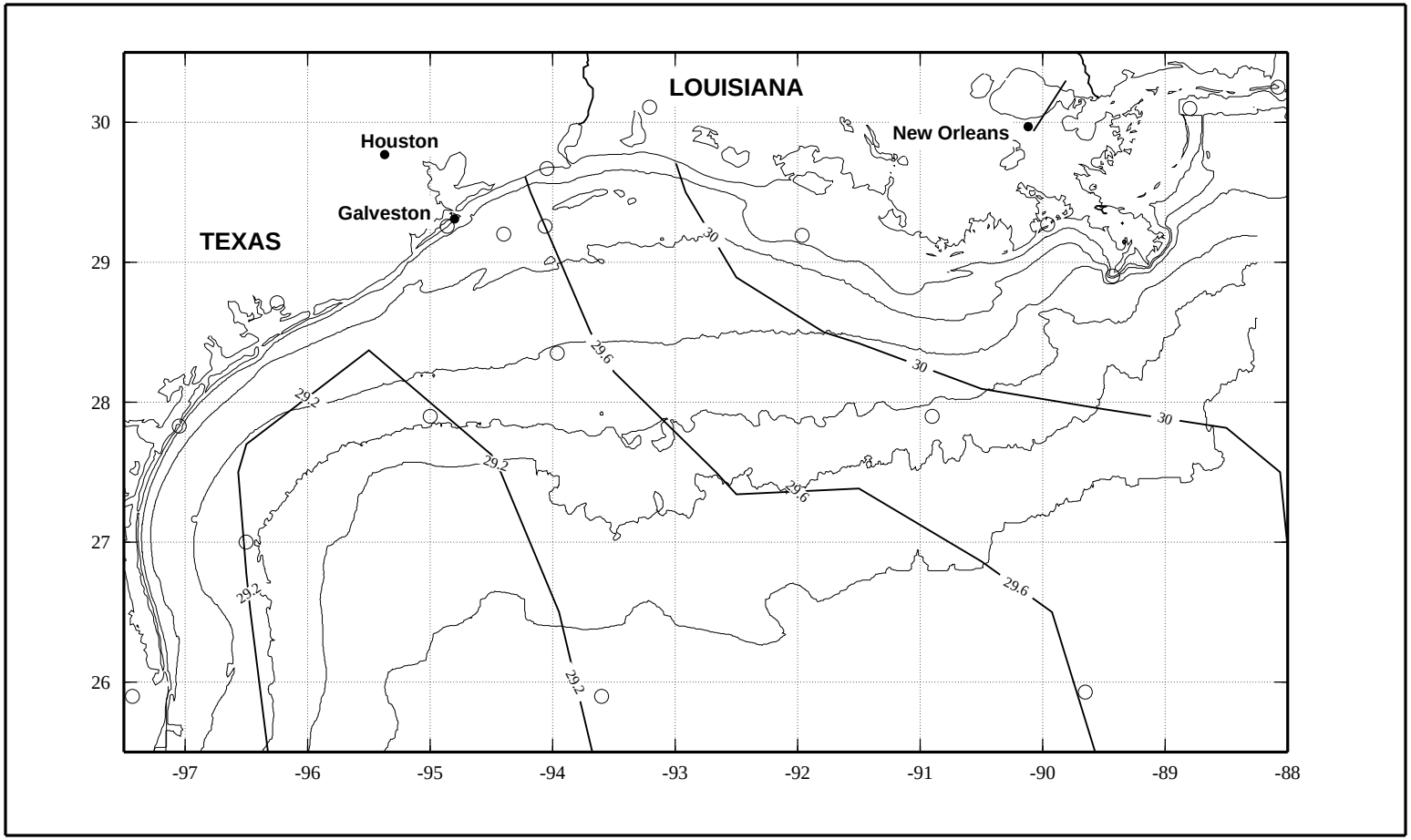

Figure 6.93.07. Monthly mean SST for July 1993, contour units in ˚C.

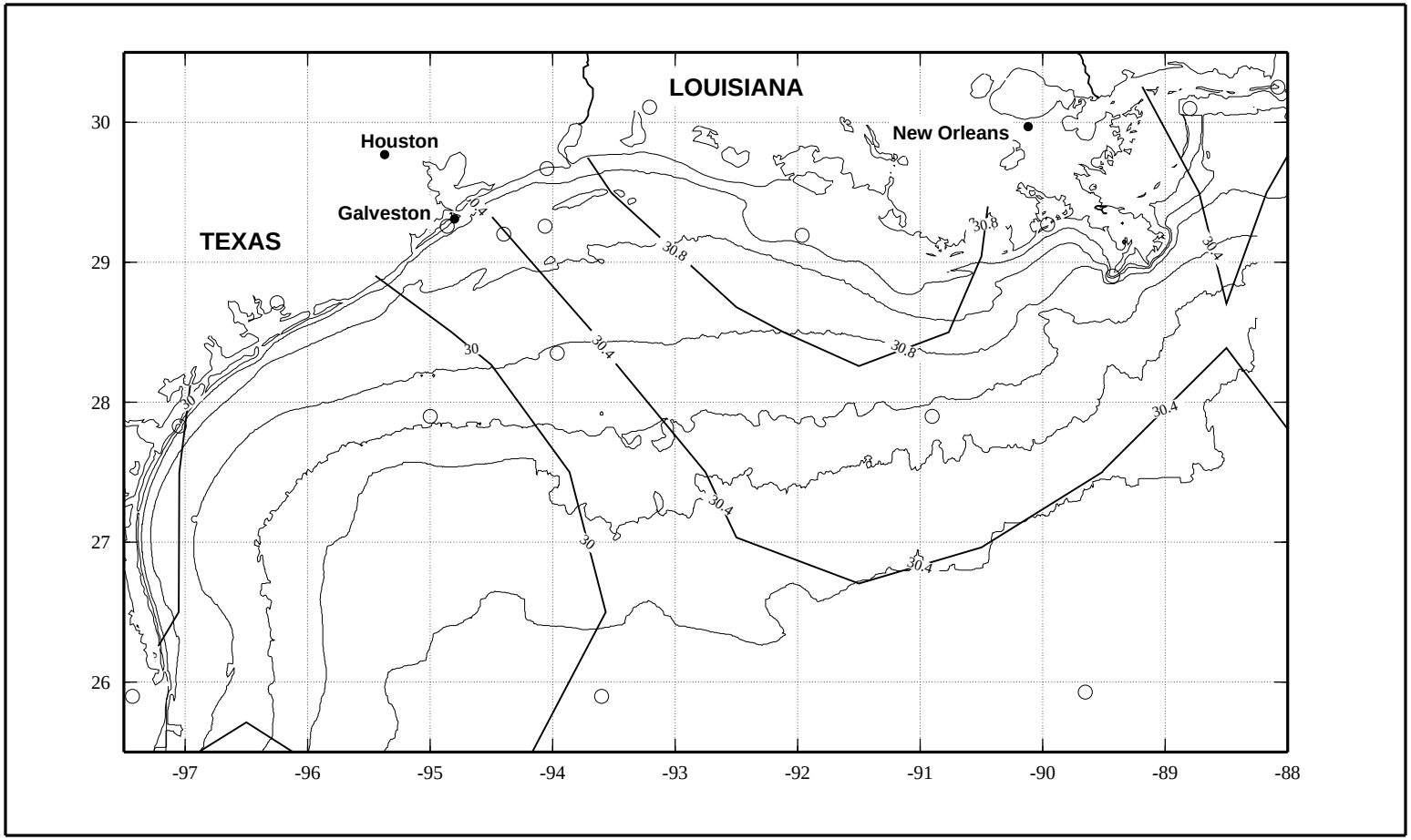

Figure 6.93.08. Monthly mean SST for August 1993, contour units in ˚C.

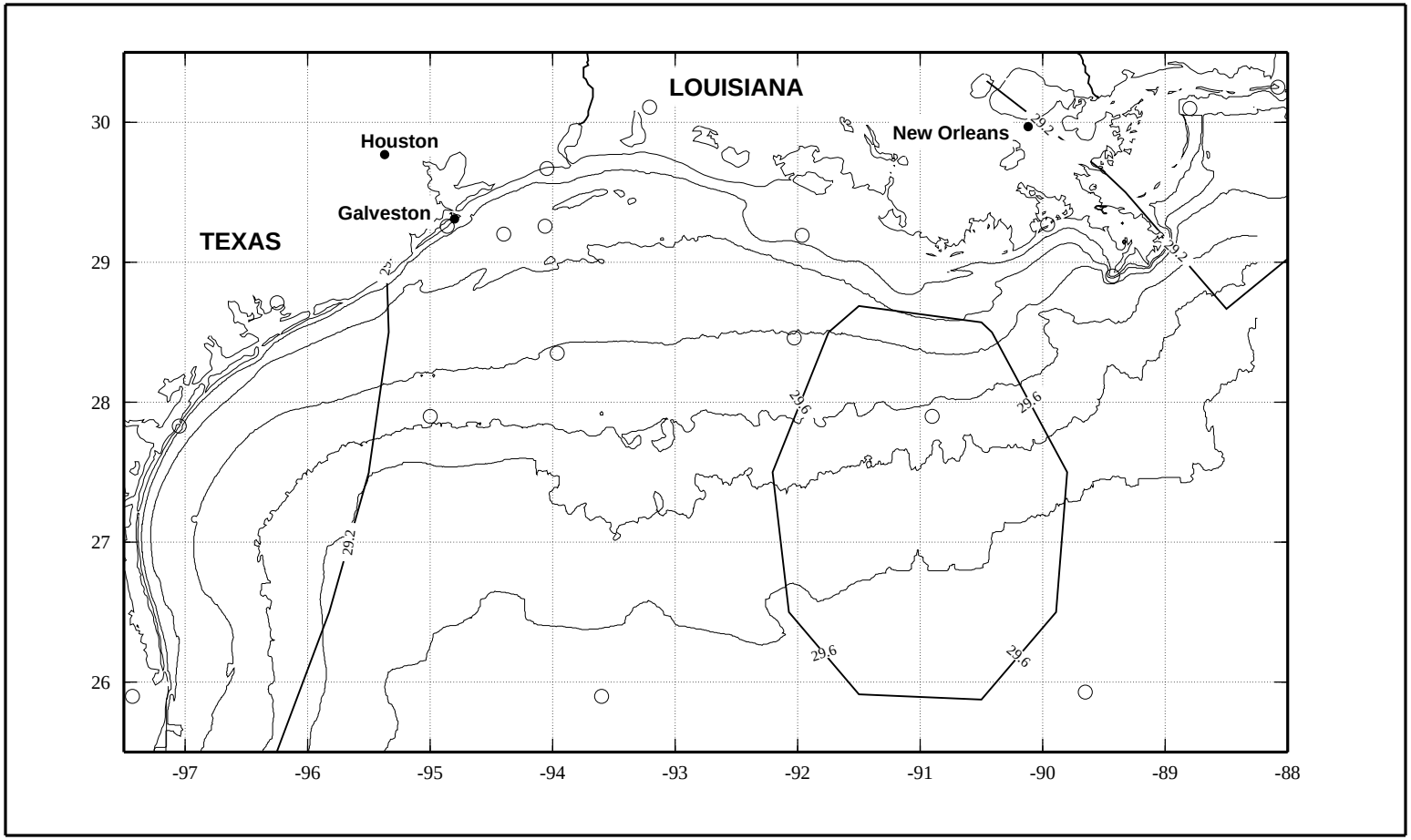

Figure 6.93.09. Monthly mean SST for September 1993, contour units in ˚C.

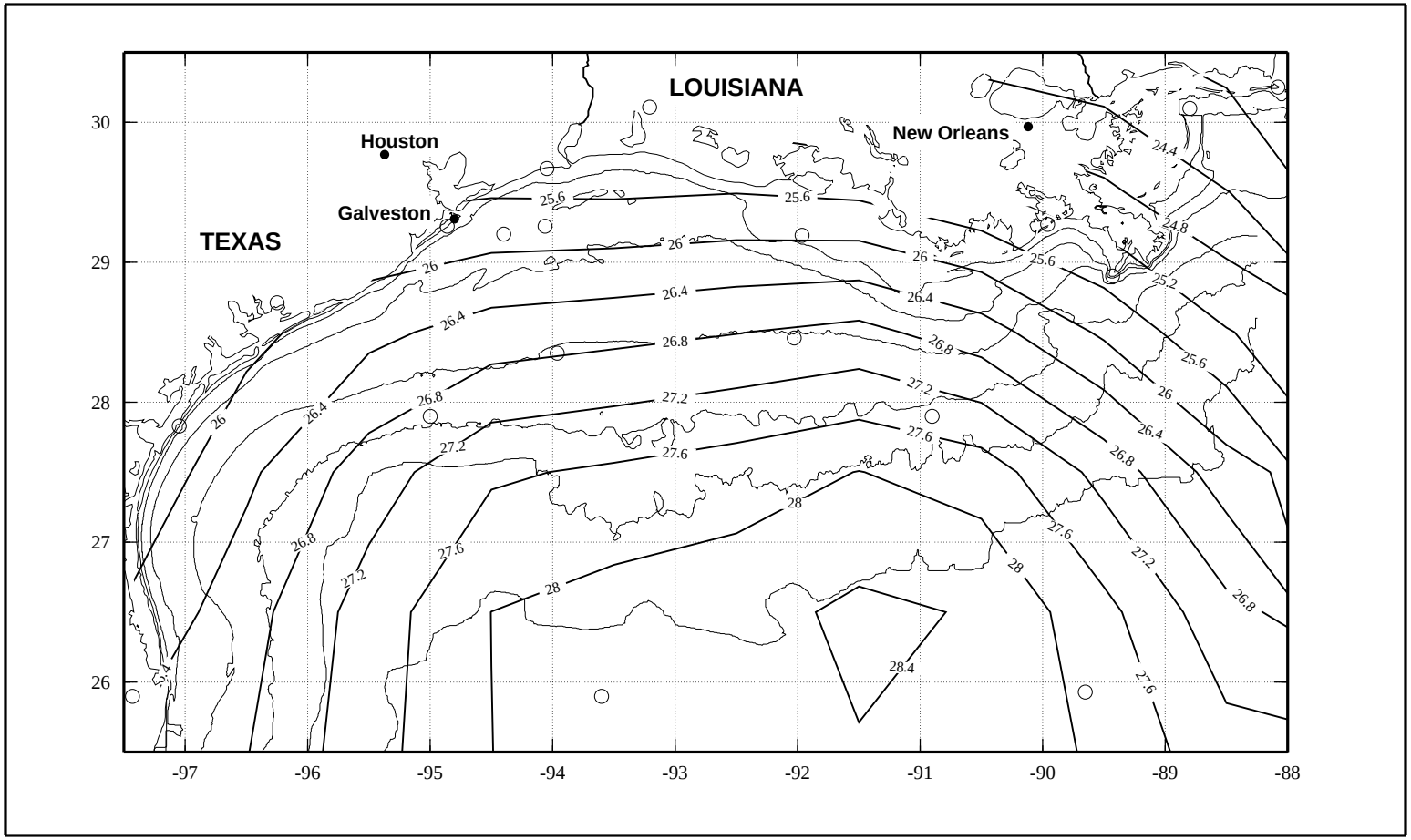

Figure 6.93.10. Monthly mean SST for October 1993, contour units in ˚C.

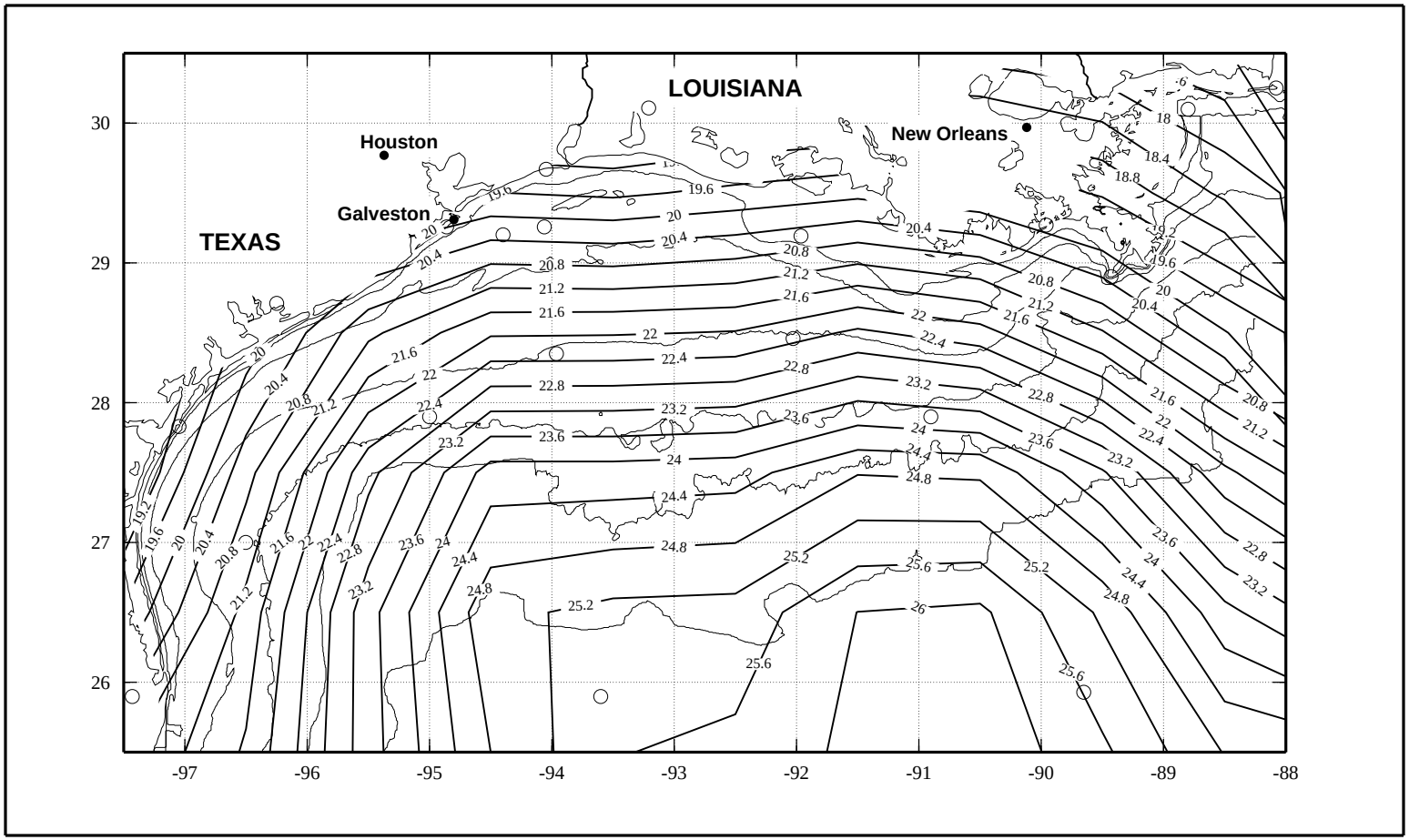

Figure 6.93.11. Monthly mean SST for November 1993, contour units in ˚C.

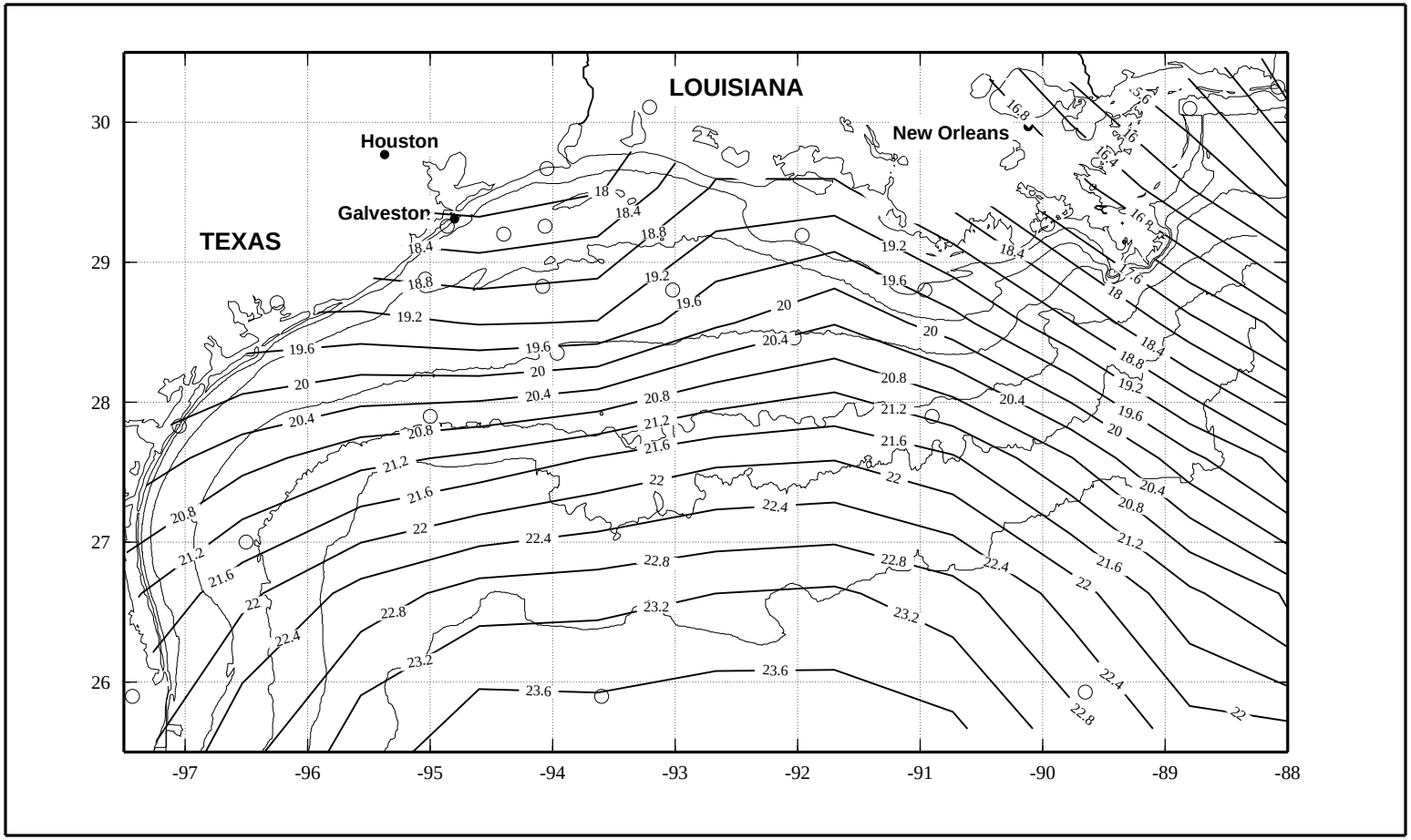

Figure 6.93.12. Monthly mean SST for December 1993, contour units in ˚C.

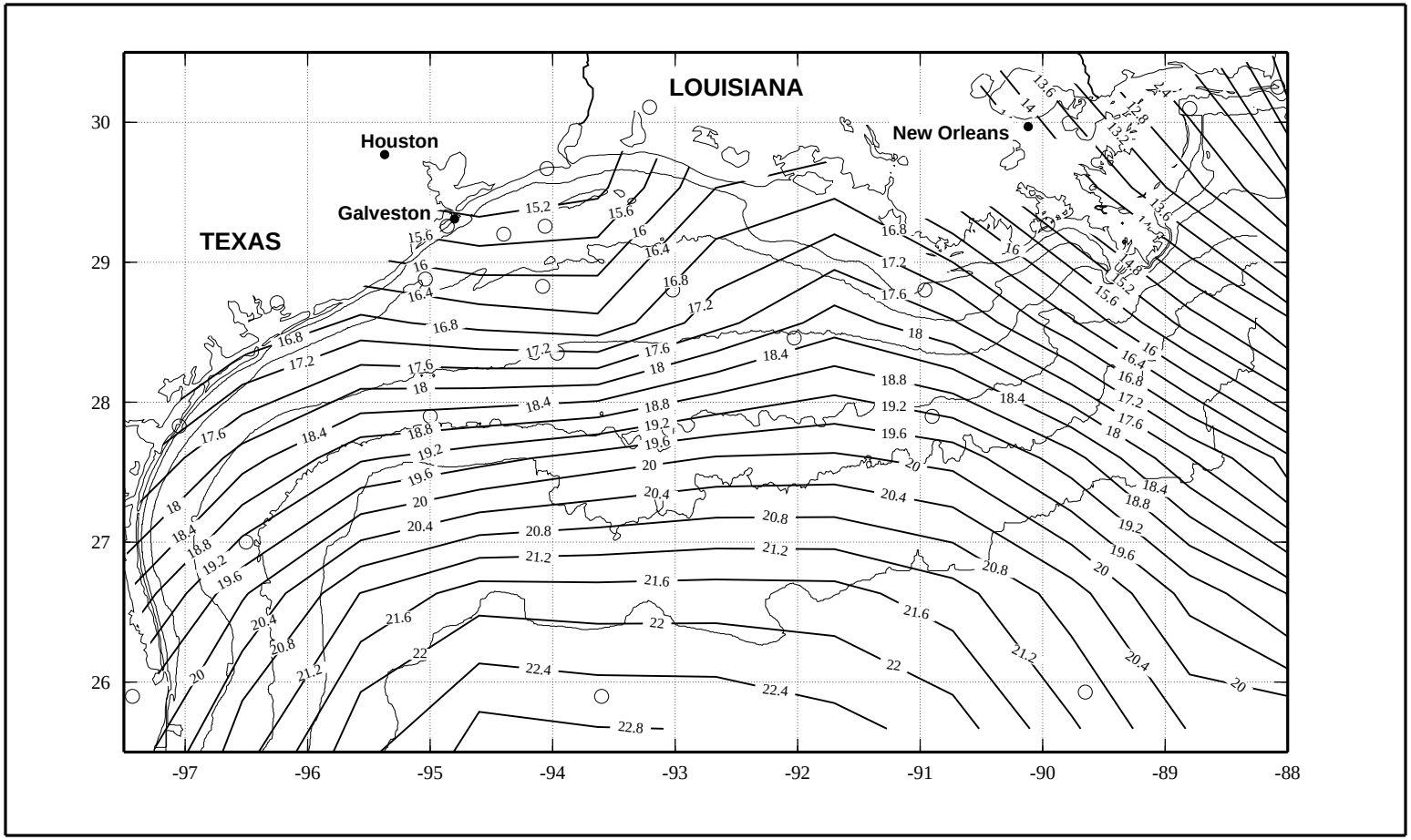

Figure 6.94.01. Monthly mean SST for January 1994, contour units in ˚C.

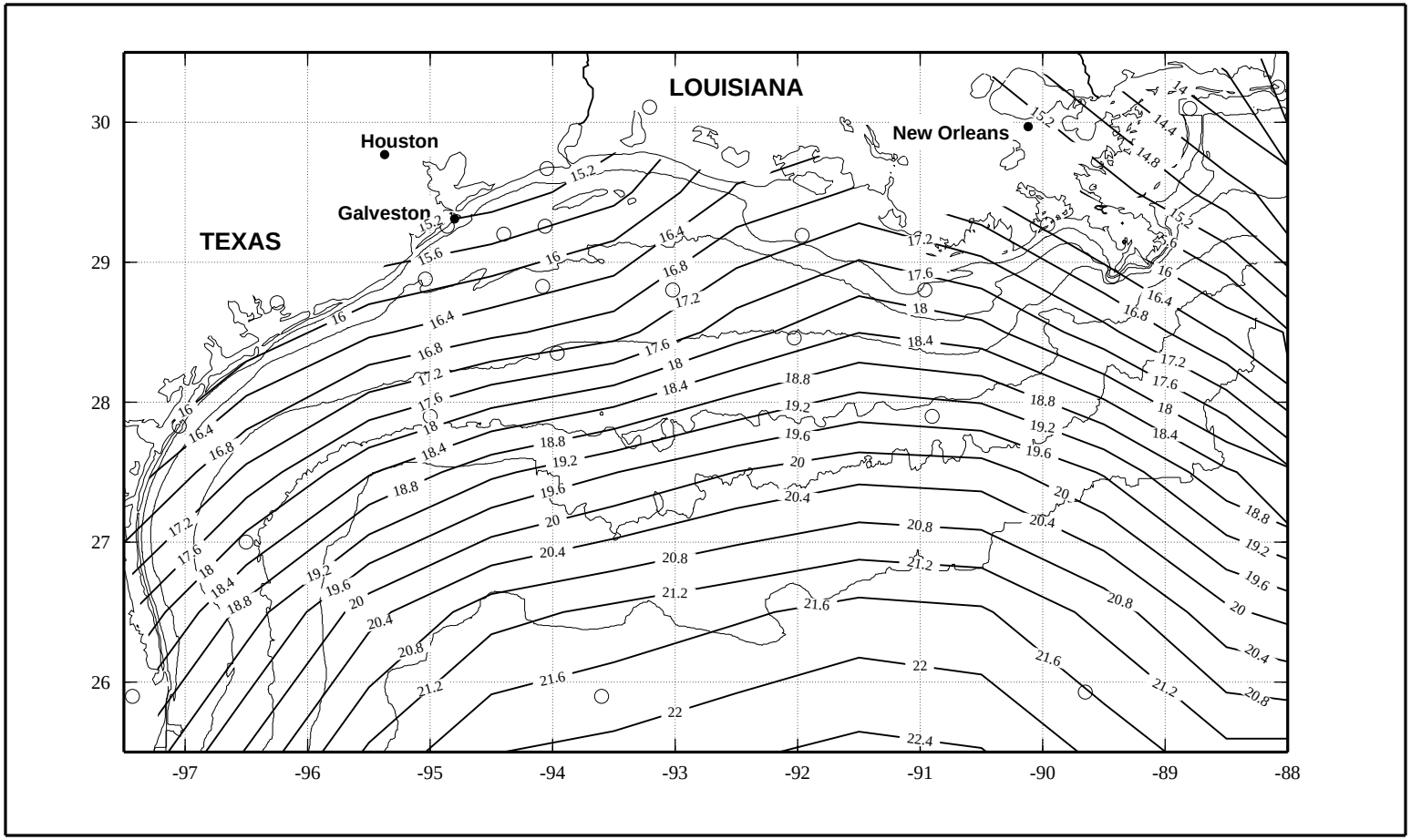

Figure 6.94.02. Monthly mean SST for February 1994, contour units in ˚C.

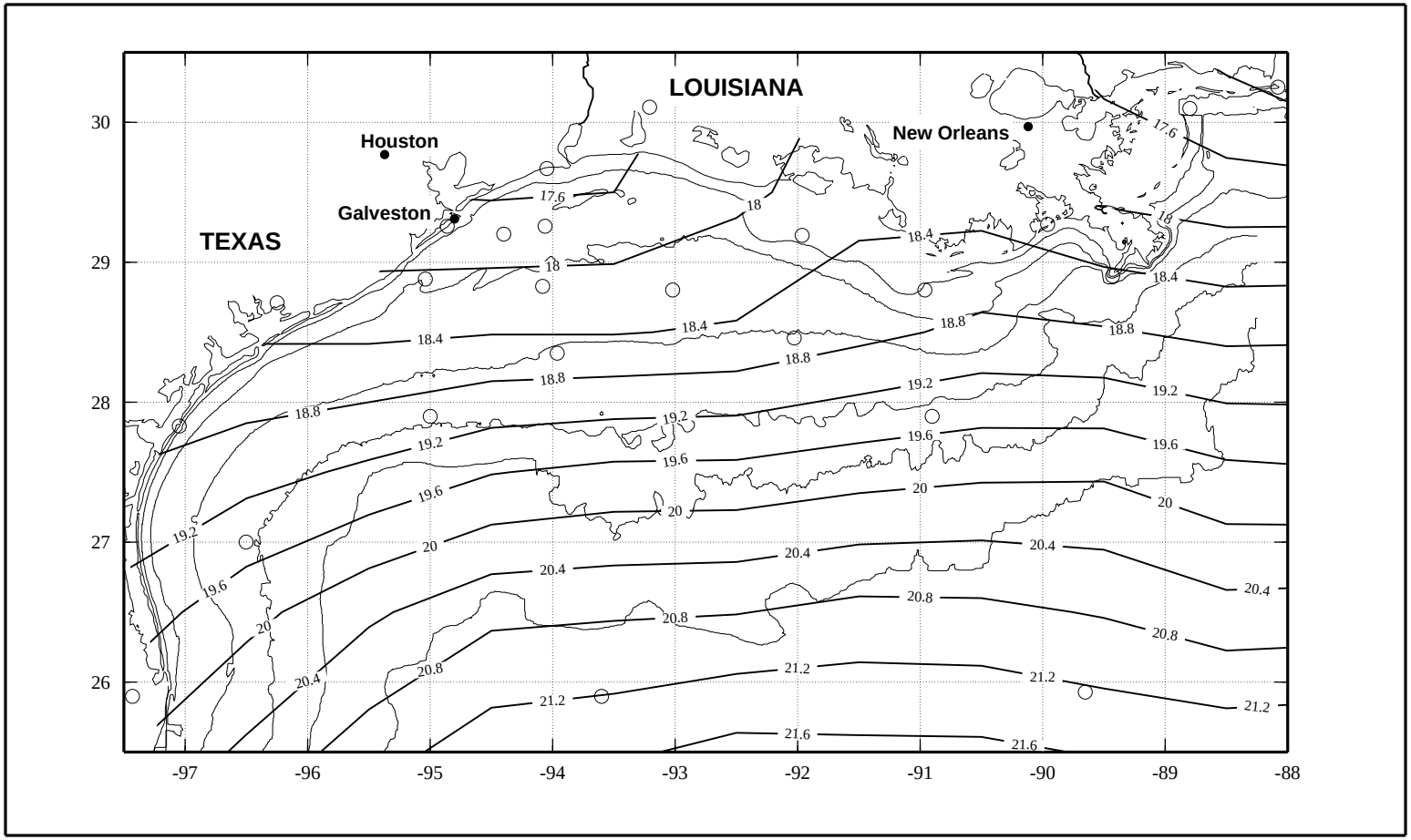

Figure 6.94.03. Monthly mean SST for March 1994, contour units in ˚C.

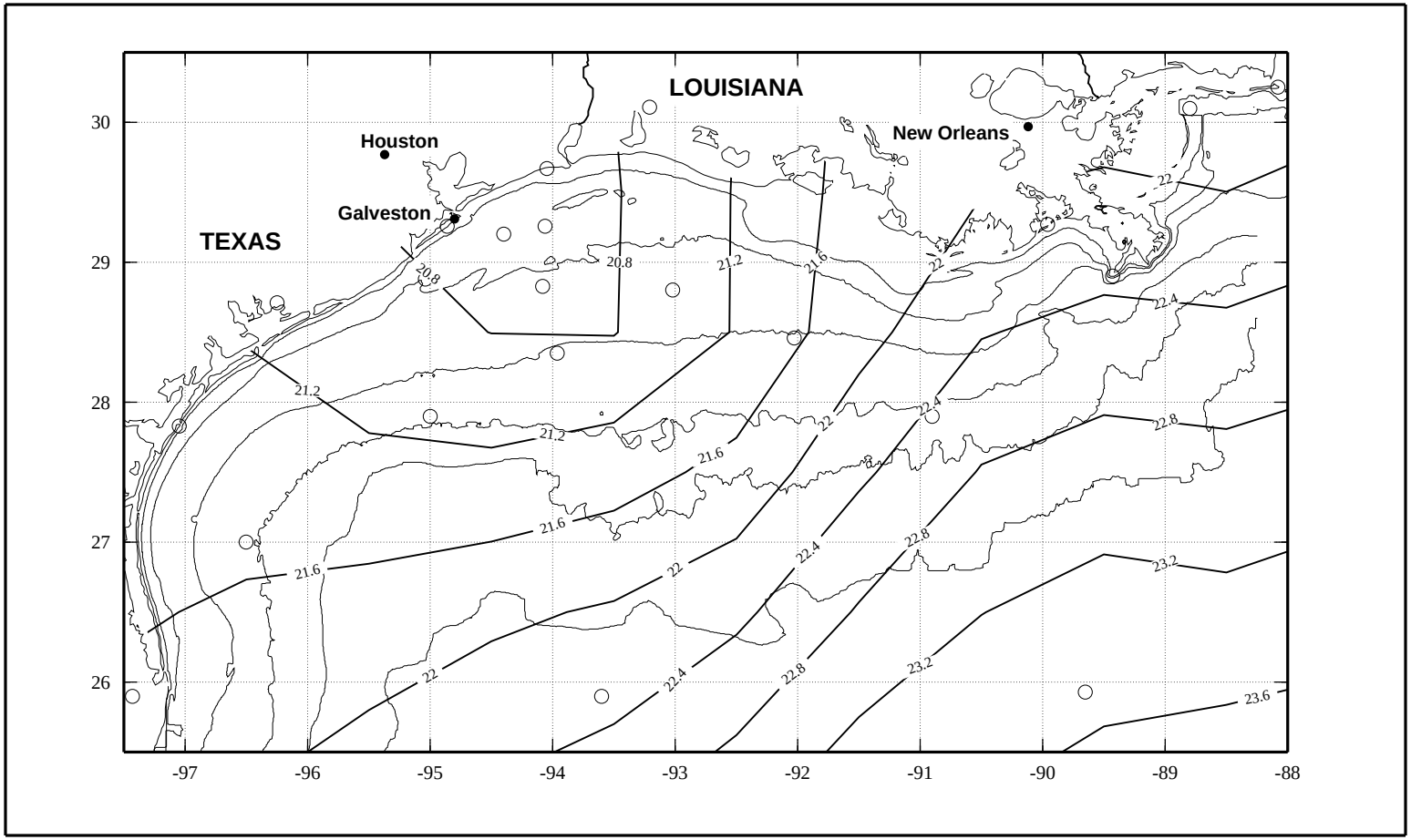

Figure 6.94.04. Monthly mean SST for April 1994, contour units in ˚C.

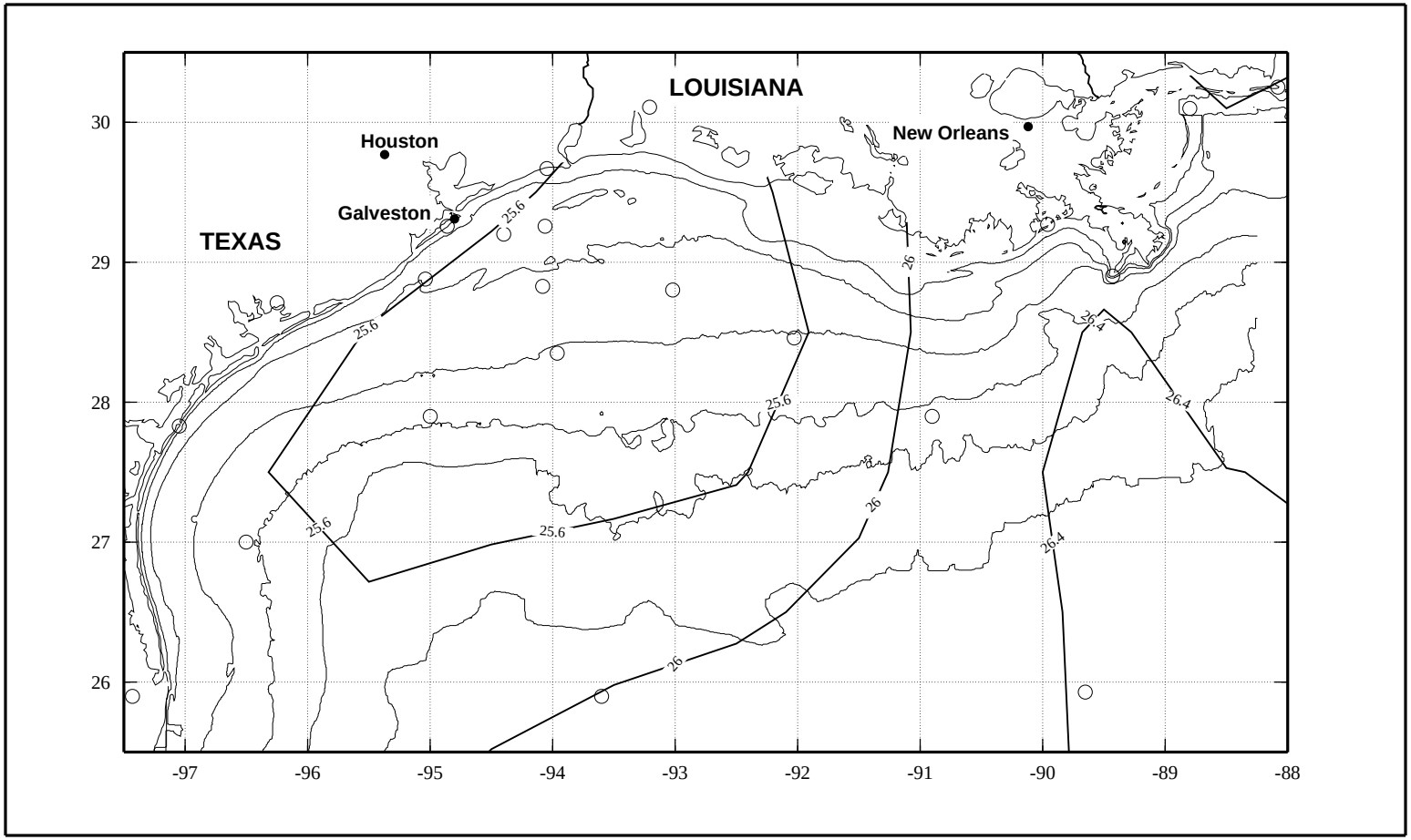

Figure 6.94.05. Monthly mean SST for May 1994, contour units in ˚C.

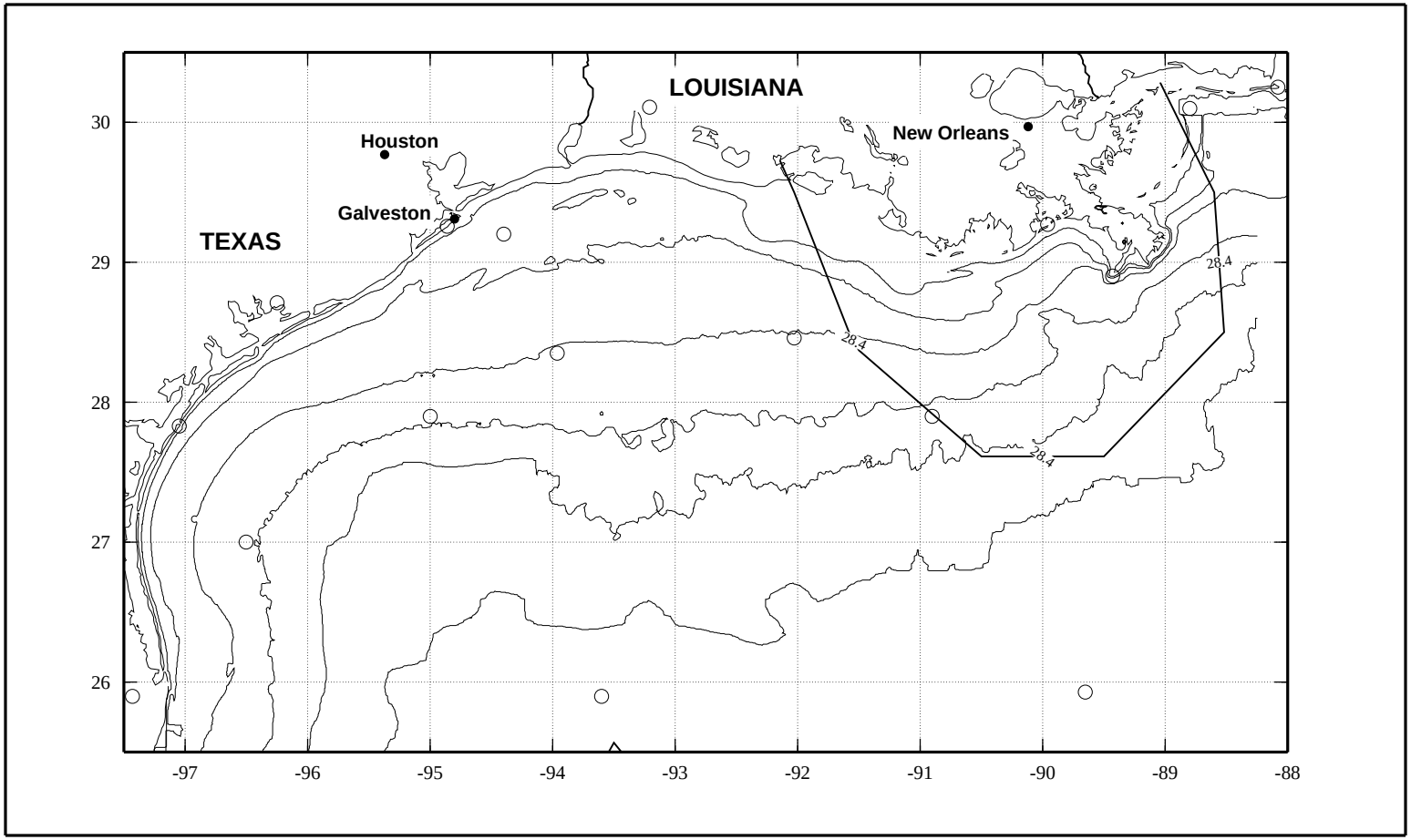

Figure 6.94.06. Monthly mean SST for June 1994, contour units in ˚C.

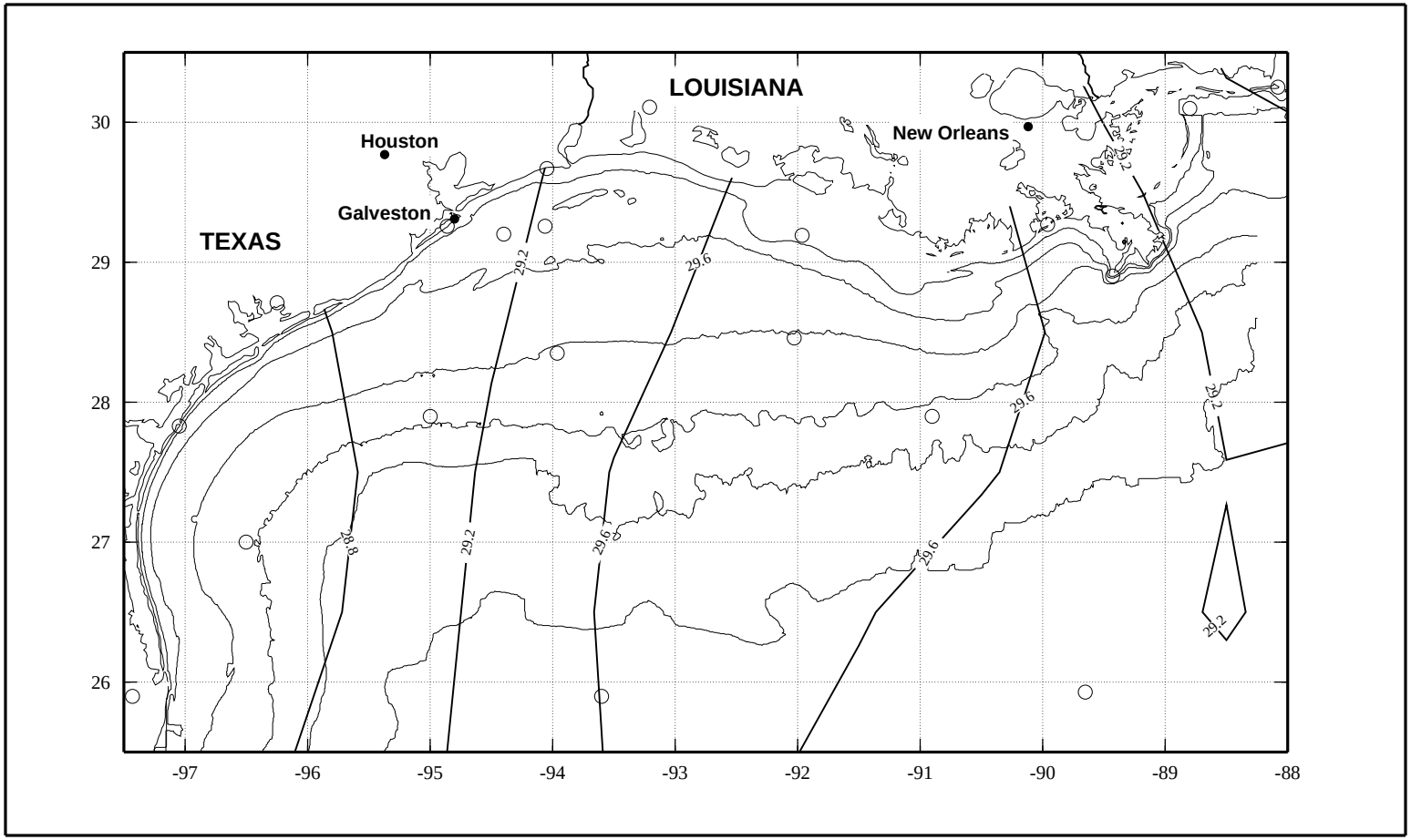

Figure 6.94.07. Monthly mean SST for July 1994, contour units in ˚C.

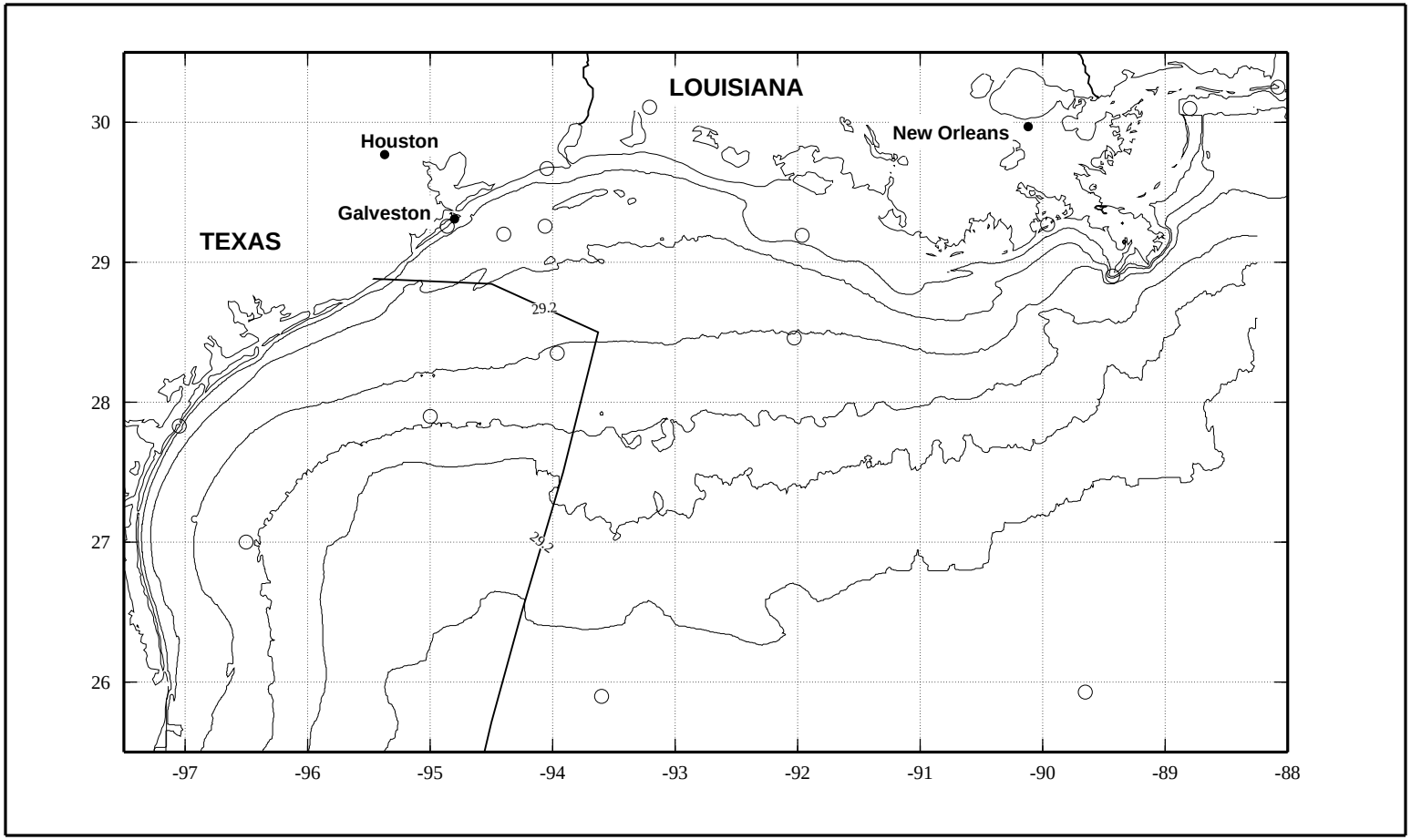

Figure 6.94.08. Monthly mean SST for August 1994, contour units in ˚C.

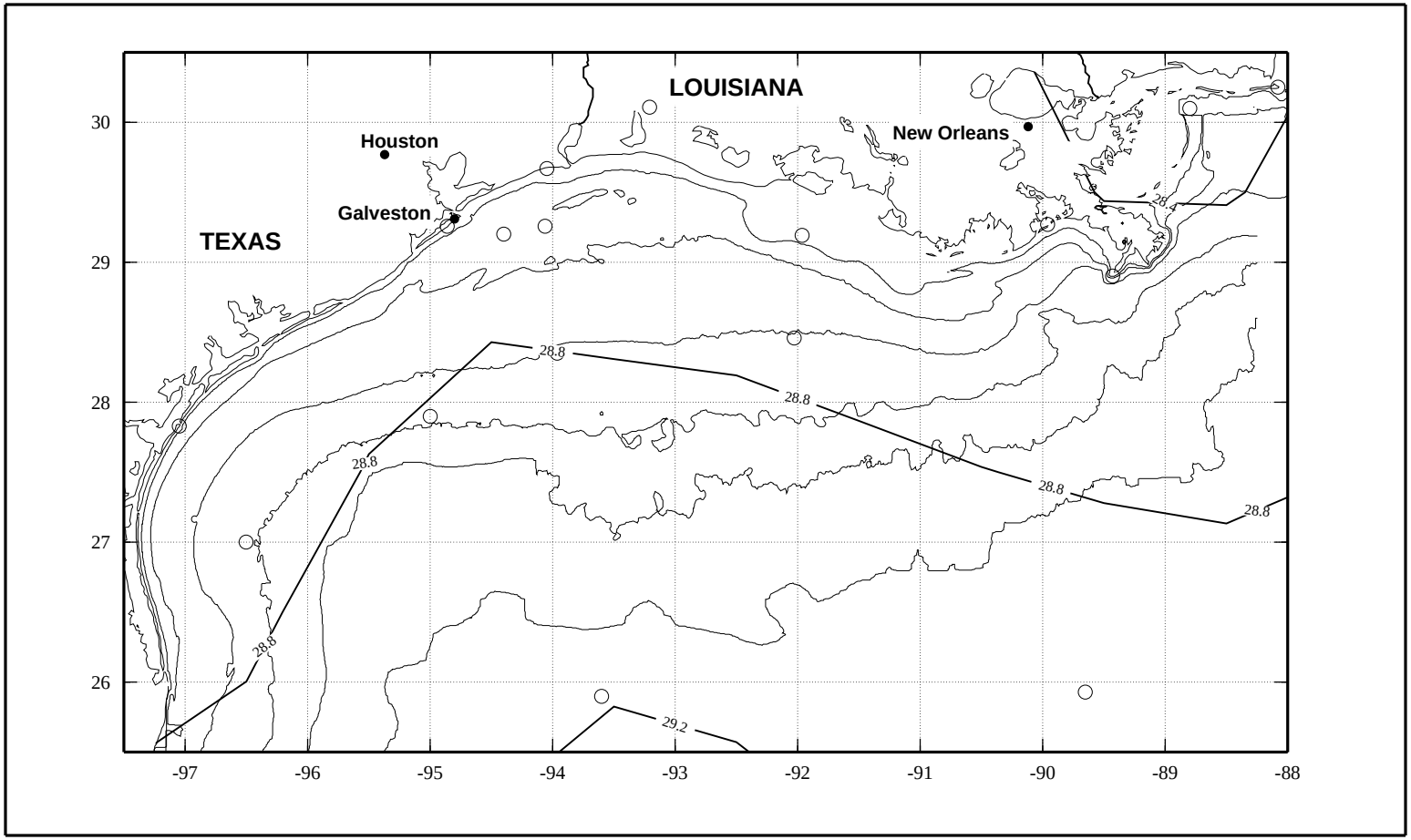

Figure 6.94.09. Monthly mean SST for September 1994, contour units in ˚C.

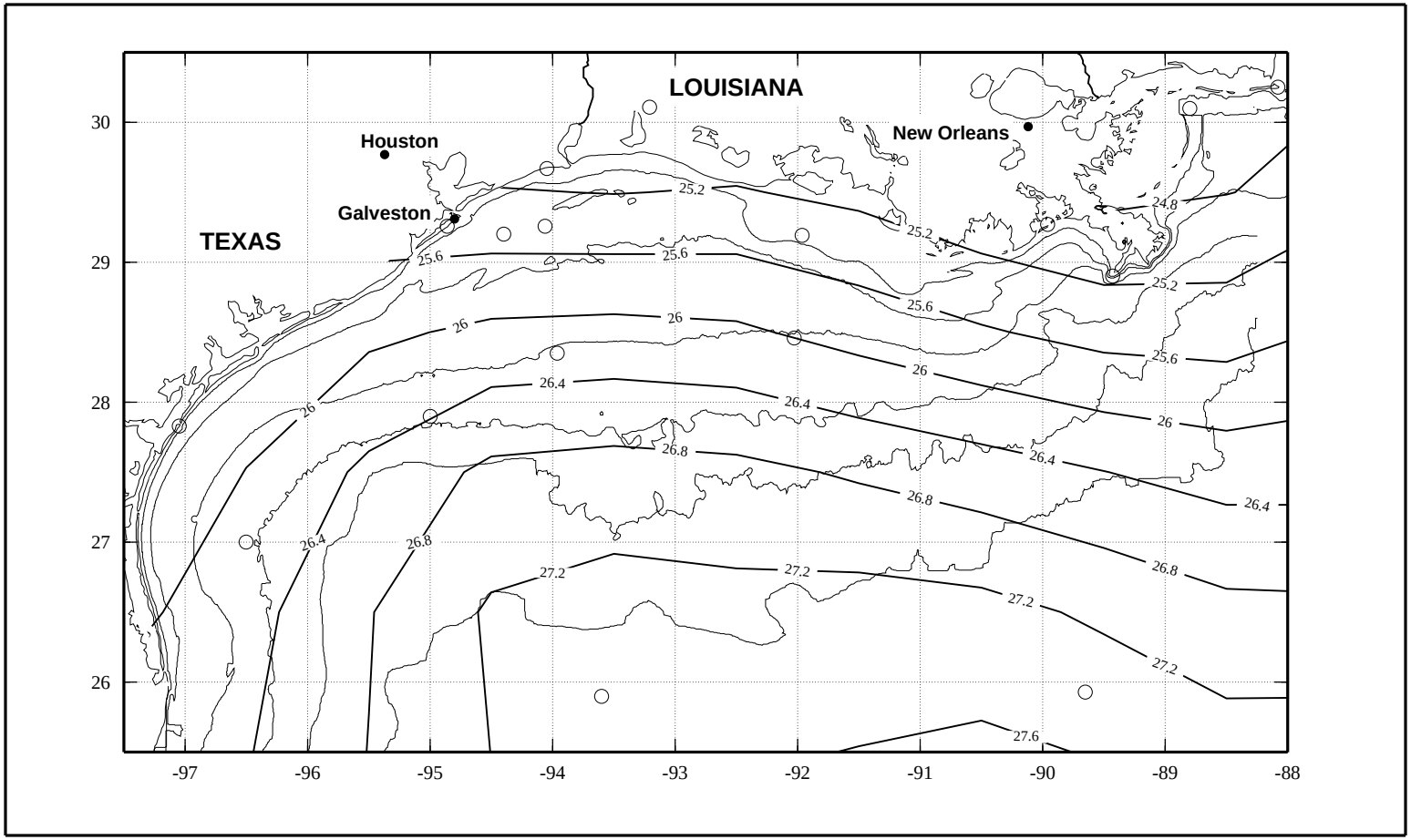

Figure 6.94.10. Monthly mean SST for October 1994, contour units in ˚C.

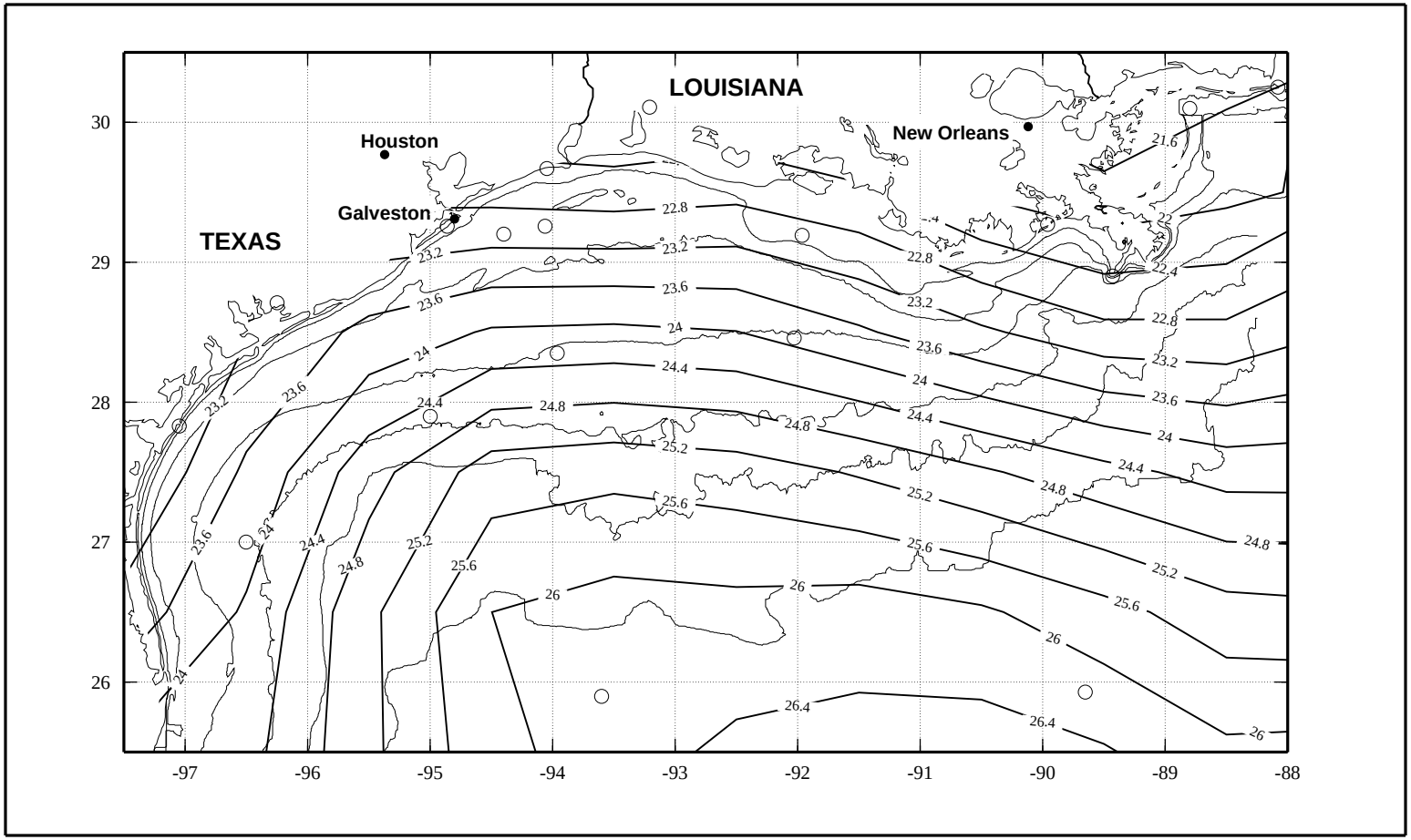

Figure 6.94.11. Monthly mean SST for November 1994, contour units in ˚C.