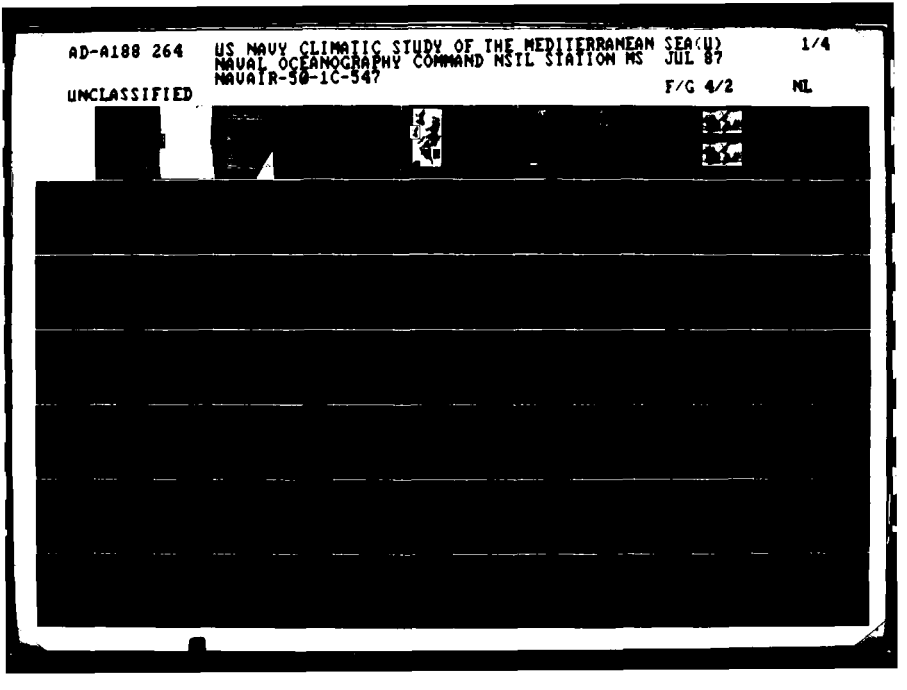
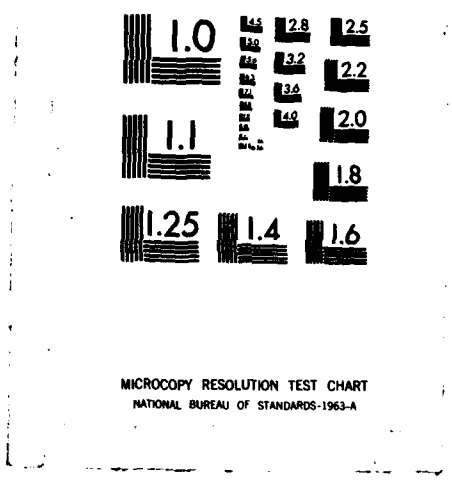
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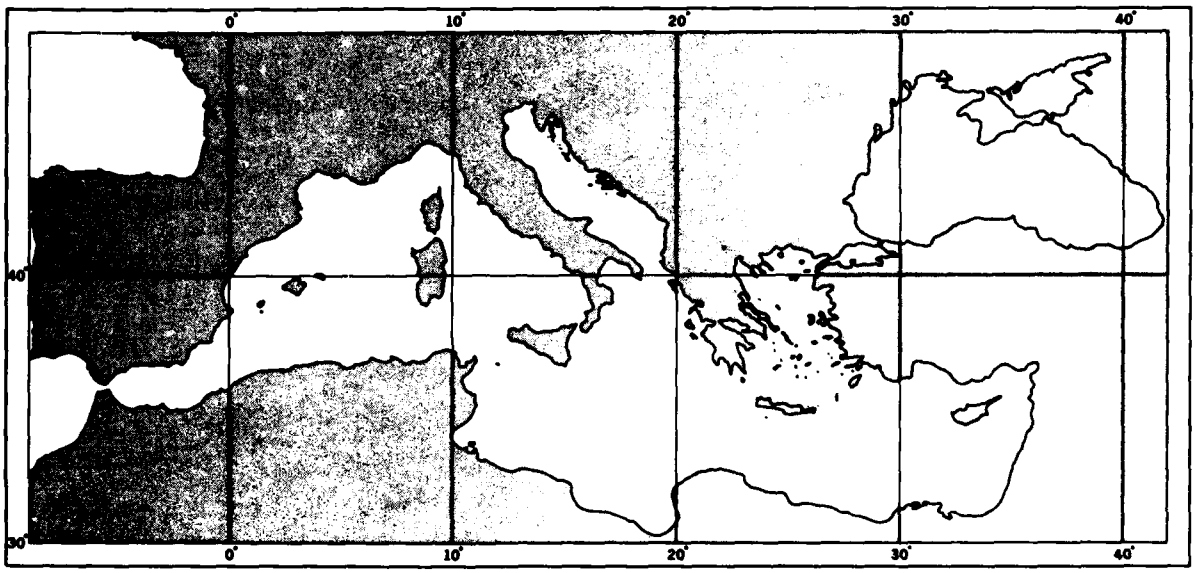


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U.S. NAVY CLIMATIC STUDY OF THE MEDITERRANEAN SEA

JULY 1987



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PREPARED BY
NAVAL OCEANOGRAPHY COMMAND DETACHMENT, ASHEVILLE, N.C.

PREPARED UNDER
COMMANDER NAVAL OCEANOGRAPHY COMMAND
NSTL, MS 39529-5000

S/N 0850-LP-014-8500

The U. S. Navy Climatic Study of the Mediterranean Sea was prepared under the Commander, Naval Oceanography Command and by the Officer in Charge, Naval Oceanography Command Detachment, Asheville, North Carolina. The work was performed at the National Climatic Data Center (NCDC). Specific acknowledgement of the NCDC staff is made to Mr. J.D. Elms, project leader; Messrs. C.N. Williams Jr. and R. G. Baldwin, and Ms. P. L. Franks for data processing and digital graphics; Mr. S. Roselle for assistance in data analysis; Mr. M. J. Changery and Dr. W. J. Koss for technical review; Messrs. M. G. Burgin, J. L. Thomas and S. J. Miller for drafting skills; and Messrs. G. M. Lammers, D. S. Ezell and H. N. Viganasky for station summary compilations.

Geographical and Data Coverage

This Climatic Study covers the Mediterranean Sea from just west of the Strait of Gibraltar to the Levant Coast, and from North Africa to the Black Sea, with the greatest emphasis being placed on the marine areas (see Fig. 1). Data were too sparse in the Sea of Azov for that area to be included. Surface marine data statistics are presented on monthly charts in the form of graphs, tables, and isopleth maps. Land station data appear graphically in the text and in Station Climatic Summary tables in the last section of the publication. The marine data were machine plotted by one-degree quadrangle, computer analyzed, and those analyses adjusted and smoothed by hand. The graphs and tables for the marine areas are also presented by one-degree quadrangles (for visibility, wave heights, wind roses, and currents). These graphs and tables represent the objective compilation of available data; the data were not adjusted for suspected biases (e.g., low observation count, heavy weighting of observations during a short time interval, biases in coding of observations from various source decks, etc.), hence differences may be found when comparing the graphic data with isopleth analyses. The total number of observations for a given one-degree square should always be considered when interpreting the data, as the number of observations might be insufficient to permit representative statistics.

Over three million surface marine observations were used in computing the statistics. These data, taken from NCDC's Tape Data Family 11(TDF-11), were collected by ships of various registry traveling in the study area. Some observations were collected as early as 1854. Data for this study were obtained from the earliest available period through 1984. The bulk of the observations are from the last 35 years, which is significant because more recent observations contain more meteorological elements than pre-1948 reports. The density of observations is greatest along the major shipping routes; in the Mediterranean Sea, observations are most dense along the east-west axis running from the Strait of Gibraltar to the Suez Canal. Observational counts are also relatively good in most one-degree squares because there are many important ports of call throughout the Mediterranean.

Sea surface current information was extracted from the predecessor to this publication; A Climatic Resume of the Mediterranean Sea (1975). These sea surface current data were obtained from available ships' set and drift measurements. The data file containing these measurements is somewhat deficient in quality and quantity and is currently being updated; however, it was not scheduled for completion in time to be used in this edition. Chart utility is somewhat enhanced, despite the paucity of data, by the fact that the current variability in the Mediterranean Sea is not as great as in many other areas. The basic reason for the relatively small variability is that the Mediterranean Sea produces a water deficit because the evaporation over the basin is much greater than the water gain from rainfall and river flow. This deficit is offset by an inflow of water from the Atlantic Ocean which establishes a relatively consistent east moving surface current (See Fig. 2). Because of the high evaporation rate the water becomes very saline and thus relatively dense. It then sinks and sets up a west moving sub-surface current as the excess of this denser water spills over into the Atlantic. At times local wind conditions may be of sufficient strength to temporarily alter the local surface current circulation.

Physical Features

The Mediterranean basin is rich in human culture. This was especially true during the early Greek and Roman periods when the geographical location and climate of the Mediterranean played a most beneficial part in the progression of human activity, making it known as one of the important "cradles of civilization". For insight into the importance of climate from a historical perspective see Casson (1959) and Grant (1969).

The Mediterranean Sea is an important water body for commerce, being centered with Europe to the north, the African continent to the south, Asia Minor and the Middle East to the east, and the Strait of Gibraltar to the west which provides passage to the Atlantic Ocean and the important ports of northwestern Europe and the America's. The Mediterranean Sea is approximately 2100 miles long, as measured from the Strait of

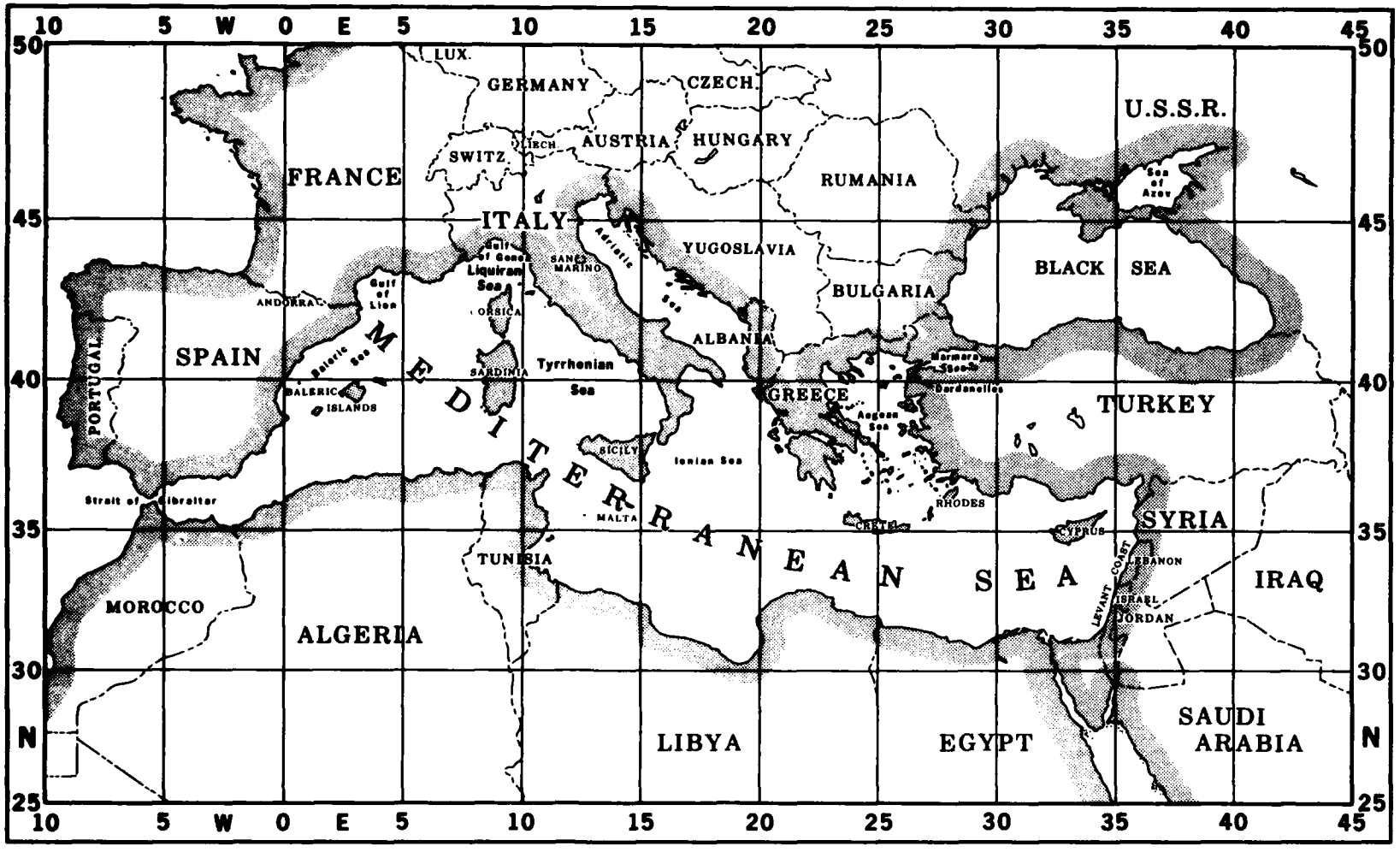


FIG. 1 GEOGRAPHICAL LOCATOR CHART

FIG. 2 PREVAILING ANNUAL SURFACE CURRENTS WITH MEAN SPEEDS

Gibraltar to the Lebanon coast and,at its widest point, it is approximately half its length. Numerous smaller seas make up an integral part of the Mediterranean Sea; the Balearic Sea between Spain and the Balearic Islands, Ligurian Sea north of the island of Corsica, Tyrrhenian Sea extending from Corsica and Sardinia east to the Italian peninsula and south to Sicily, the Adriatic Sea between Italy and Yugoslavia, Ionian Sea between southern Italy and Greece, and the Aegean Sea between Greece and Turkey. The Aegean Sea provides passage into the Dardanelles, the Sea of Marmara Denizi, the Istanbul Bogazi Strait and, finally, the Black Sea. Three important peninsulas jut out into the Mediterranean Sea; the Iberian, Italian, and Balkan peninsulas. Numerous gulfs are also located throughout the Mediterranean, providing adequate harbors for shipping. Two gulfs are especially well known by weather forecasters of the region because of their importance as breeding grounds for cyclogenesis: the Gulf of Lion and the Gulf of Genoa. Many islands are found throughout the Mediterranean Sea, with the greatest concentration being the Greek Islands, which alone number over 1400. The more prominent islands are the Balearic Islands, Corsica, Sardinia, Sicily, Crete, Rhodes and Cyprus (Reference Fig. 1, geographical locator map).

The mountain ranges surrounding the Mediterranean Sea, in particular the Alps, act as a sharp climate barrier protecting the Mediterranean basin from much of the more extreme continental weather conditions (Reference Fig. 3., Topographic Chart). The configuration of the mountains with respect to the Mediterranean basin determines how they act as barriers or affect the channeling of winds down valleys and through gaps. Often winds are strengthened by channeling, or warmed through adiabatic compression when the airflow is downslope.

The greatest single geographical climate control is the Alps, as they act as an extensive barrier to the cold continental air of north central Europe. The highest peaks basically run east to west along the northern rim of the Po Valley with many peaks extending above 12,000 feet. Mount Blanc, located in France near the Swiss-Italian border, is the highest peak at 15,771 feet. This range does extend down through Yugoslavia from a northwest to southeast direction. There they are known as the Dinaric Alps and are much lower than their counterparts that traverse eastern France, Switzerland, Italy and Austria. Because of their lower elevations, generally below 8000 feet, the Adriatic coast experiences colder, more frequent outbreaks of stormy weather during the winter. South of the Po Valley the Apennines extend down the center of the Italian peninsula, with the highest peak reaching just over 9500 feet. To the east, mountainous terrain continues through Greece and Turkey with eighty percent of Greece being covered by mountains and hills. While Turkey is not as mountainous (a large portion of the country is covered by the Anatolian Plateau) it is still crisscrossed by mountain chains in the north and southeastern sections. The Taurus Mountains are inland of the Mediterranean coast bordering the southern rim of the Anatolian Plateau. The headwaters of the Tigris and Euphrates Rivers are found at the eastern edge of the Anatolian Plateau. From here the rivers run southeastward through Syria and Iraq into the Persian Gulf. At the eastern end of the Mediterranean Sea a narrow coastal plain runs along the Levant Coast, with mountain ranges jutting up behind the narrow coastal plain. In Syria the Anti-Lebanon and Ansariyah mountains parallel the coast. In Lebanon, the Lebanese Mountain range has peaks which reach heights of 10,000 feet. They are near the coast with the fertile Bekaa Valley separating them from the Anti-Lebanon Mountains which, as mentioned earlier, extend north into Syria. Continuing into Israel, mountain elevations drop off to where the highest peak found is in the Galilee Mountains at 3930 feet. Crossing North Africa, the topography is best described as a Desert Plateau except for the narrow cultivatable coastal plains east of Tunisia, and the Atlas Mountains which extend across Morocco and northern Algeria. Continuing the loop around the Mediterranean by moving north into Europe from Morocco, we find a large plateau covering most of the Iberian peninsula before reaching the Pyrenees Mountains in the north. The Pyrenees physically separate Spain from France. Completing the circuit of mountain ranges around the Mediterranean, there are the Massif Central Mountains in southeastern France and the rugged Alps of eastern France, which are separated by the Rhone Valley.

Figure 4, shows the bathymetry (water depths in fathoms) of the Mediterranean Sea. The depth of the Mediterranean Sea is relatively shallow with a somewhat level bottom. Water depths reach over 2000 fathoms in a few locations. Those include a few broad areas centered between the Ionian Sea and the Gulf of Sidra, regions southwest of the island of Rhodes, and one area to the southwest of the large Greek island of Peloponnesus where depths reach over 2500 fathoms, the greatest in the Mediterranean Sea. Most water depths average over 500 fathoms, except near the coast where depths range under 100 fathoms. Exceptions are found in the Adriatic Sea where the northern two-thirds are less than 100 fathoms with many areas less than 50 fathoms. Along the eastern coast of Tunisia another relatively broad continental shelf region is found with depths of less than 100 fathoms. The Aegean Sea is also another relatively shallow region where depths generally average between 100 and 200 fathoms, except near the numerous islands where depths are considerably less.

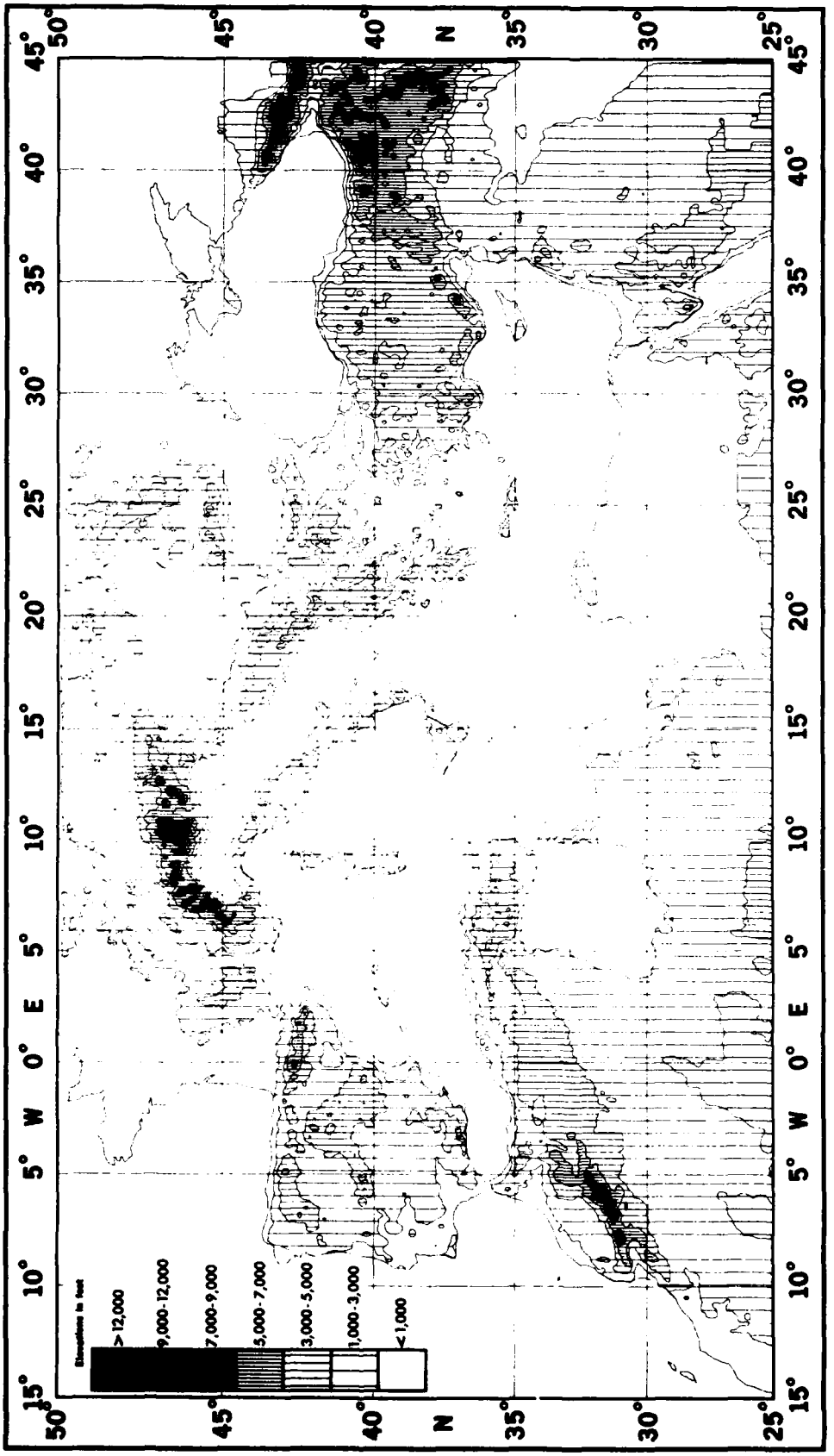


FIG. 3 TOPOGRAPHICAL CHART

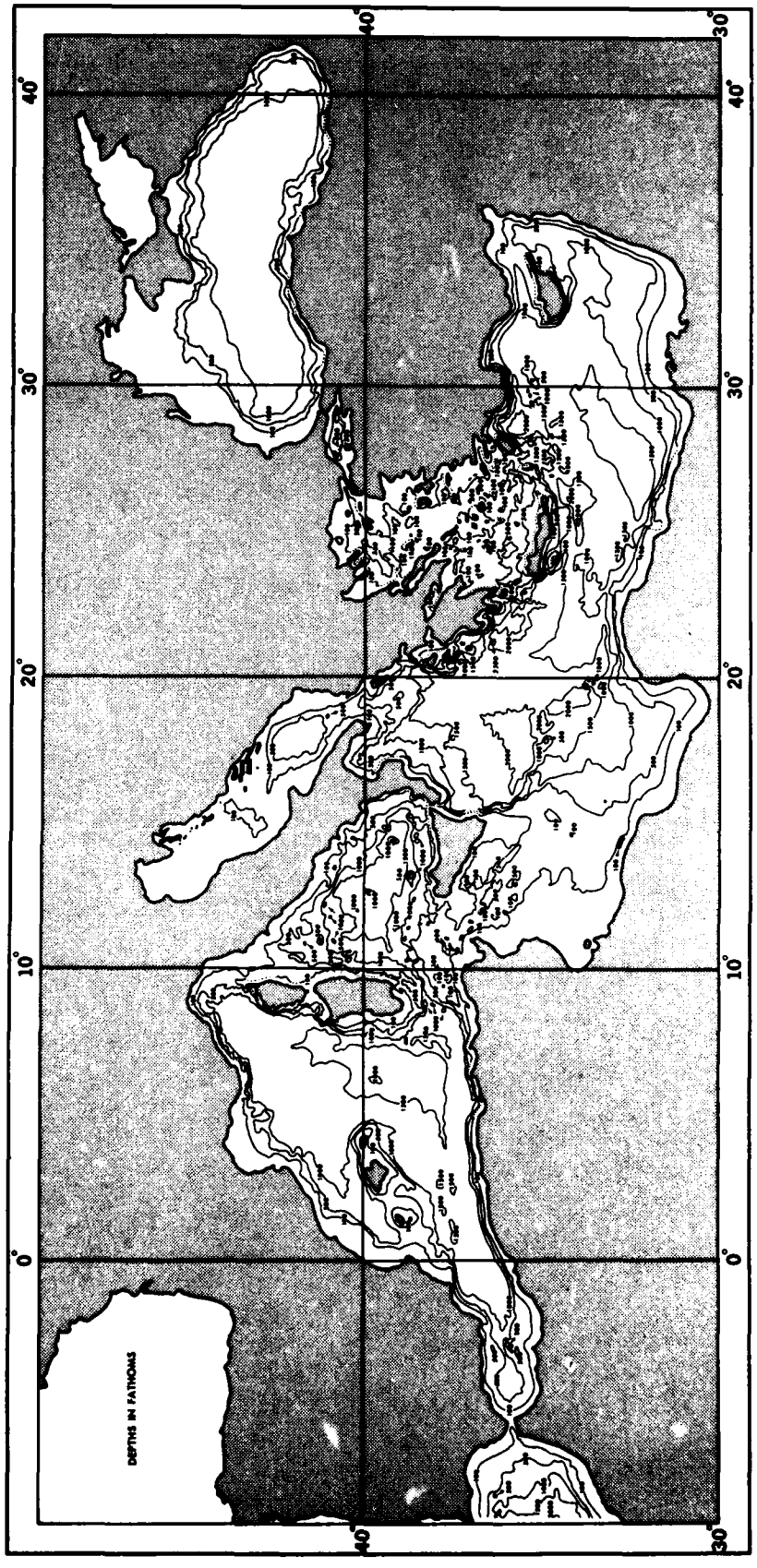


FIG. 4 BATHYMETRY CHART

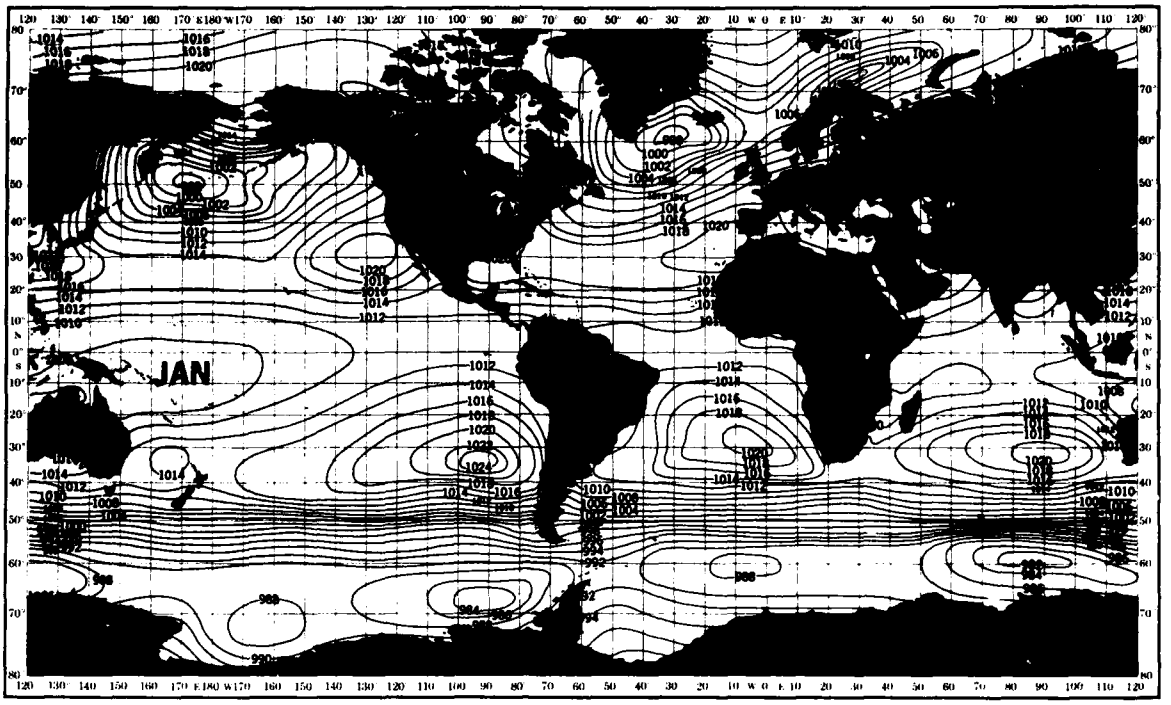
Tides throughout the Mediterranean Sea are semidiurnal except for several areas in the Adriatic which experience mixed tides. In most areas, the water level is influenced more by the wind than the tide. In general the spring tidal rises range from just a few inches to up to 4 feet. To illustrate the influence of the wind, at Venice, Italy the normal tidal rise and fall is near 3 feet. However, strong southeasterly winds can sometimes cause the water level to rise as much as 6 feet above normal, and a strong northerly wind can cause water levels to fall so low as to reveal mud in the lagoons. Each year, from February through April, the mean sea level in the central Mediterranean tends to drop, often falling as much as 1.5 feet.

A major seismic fault line passes through the Mediterranean, affecting parts of northwestern Africa, Spain, Italy, Yugoslavia, Greece and Turkey. Earthquakes are frequent throughout these regions. Although generally minor, they have been intense enough to cause severe damage and loss of life. Some active volcanoes are also located along the fault line. Mount Etna, located on Sicily, is the largest active volcano in Europe and on the average erupts every 4 to 5 years. Other active volcanoes are located within the Mediterranean basin, but a comprehensive list of the active volcanoes is difficult, because various sources such as the Munich Reinsurance Company (1981), the National Geographical Society (1975) and the Smithsonian Institution (1981 & 1984) disagree as to which are considered active.

Climate

A climate regime characterized by warm to hot summers that are dry and sunny, and mild rainy winters, has become known as the Classical Mediterranean Climate. It is so typified by the climate of the coastal regions and islands of the Mediterranean Sea. In North Africa, east of Tunis, the coastal zone that fits this definition narrows in places to less than 20 miles. The Mediterranean climate is basically opposite to a monsoon climate because it has the annual periodicity of rain in the winter season rather than the summer. Similar climate regimes are found to the east of each of the semi-permanent subtropical highs which appear on global mean pressure charts (Reference Fig. 5). Those other regions of similar climate include the California coast, the southwest corners of South Africa and Australia, and a portion of central Chile. These regions are highlighted in Figure 6 adapted from Goodall (1981). During the summer season (reversed between the northern and southern hemispheres) the subtropical highs increase their influence and, due to subsidence and the resulting stable lapse rate, produce characteristically hot dry summers. The area of influence under the subtropical highs is reduced during the winter, allowing more extratropical cyclone activity, *and thereby* leading to a rainy season. Areas with Mediterranean climates are especially suitable for fruit production; across the *Mediterranean basin* there is a high correlation between the distribution of olive trees and those areas that experience such climate characteristics. North Africa east of Tunisia does not, however, have sufficient rainfall (except perhaps for a very narrow coastal strip) to sustain such olive groves and, therefore, is often not considered to have a Classical Mediterranean Climate. For insight into the soil types and plant life of the region, reference Goodall (1981). The subtropical high that influences the general circulation so dramatically over the Mediterranean basin is commonly known as the Azores High. The monthly mean pressure over the Mediterranean Sea varies little during the year, averaging near 1016 millibars during the winter,and in the summer ranging from an average 1008 millibars over the eastern Mediterranean to 1014-1016 millibars over the western sections. The Mediterranean basin is usually wedged between two major mean synoptic pressure features. During the winter they are the Azores high over the Atlantic and the Siberian high over eastern Europe and Asia. During the summer the Azores high strengthens and remains centered over the open Atlantic, while the Siberian high gives way completely to the influence of the strong summer thermal low over Southwestern Asia. This thermal low becomes the engine which drives the intense southwest monsoon over the Arabian Sea.

The maritime influences, and the protection provided by the Alps from the cold continental air masses and the Atlas mountains from the interior heat of the Sahara Desert,help keep the Mediterranean basin's annual temperature range relatively small. Winters are generally mild and summers relatively hot. This can be seen from Figure 7 where monthly means of air temperature and precipitation for selected stations are presented. Monthly mean temperature values increase toward the east and south. In the northwestern section, the mean daily minimum wintertime temperatures average in the mid-30's(^{o}F), while in the southeast corner they average in the high 40's(^{o}F). The corresponding mean daily maximum temperatures range from the low 50's(^{o}F) in the northwestern quadrant to the low 60's(^{o}F) in the south-southeastern sections. During the summer months the average minimum temperatures are near 60°F in the northwestern region and increase to near 70°F in the southeastern sections. At the same time, the average maximum temperatures range from the mid 80's(^{o}F) on the west-northwest side to near 90°F in the south-southeastern sections.



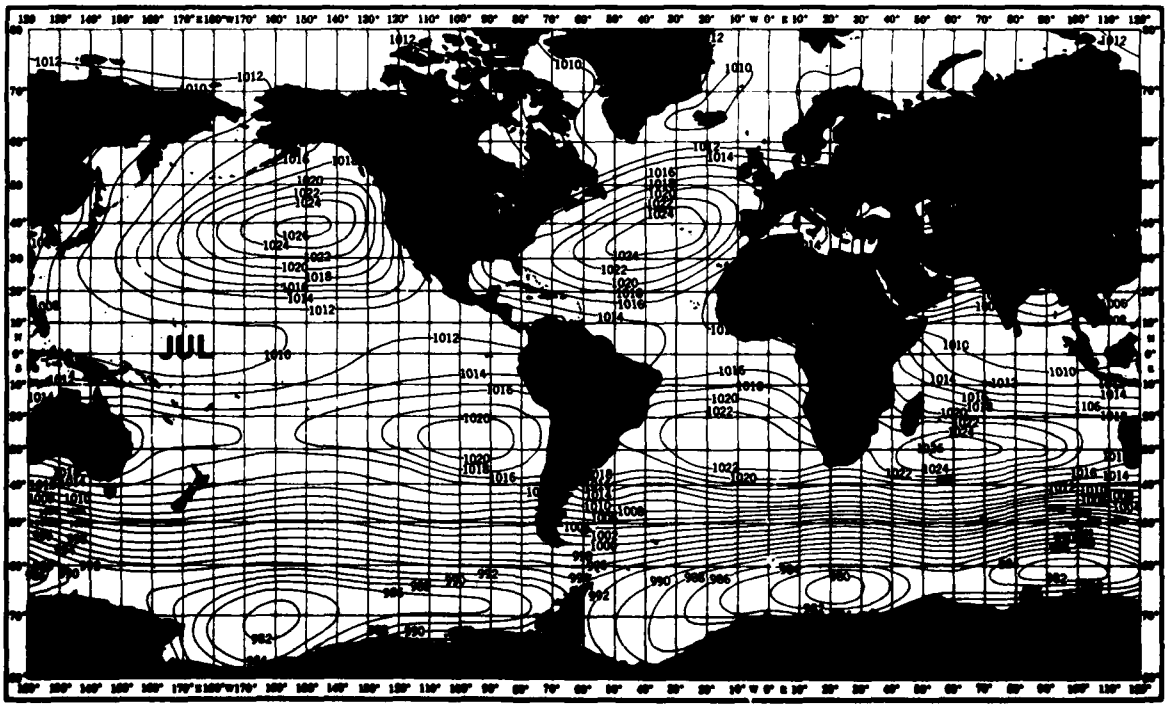


FIG. 5 SEA LEVEL PRESSURE (MBS) - MEANS

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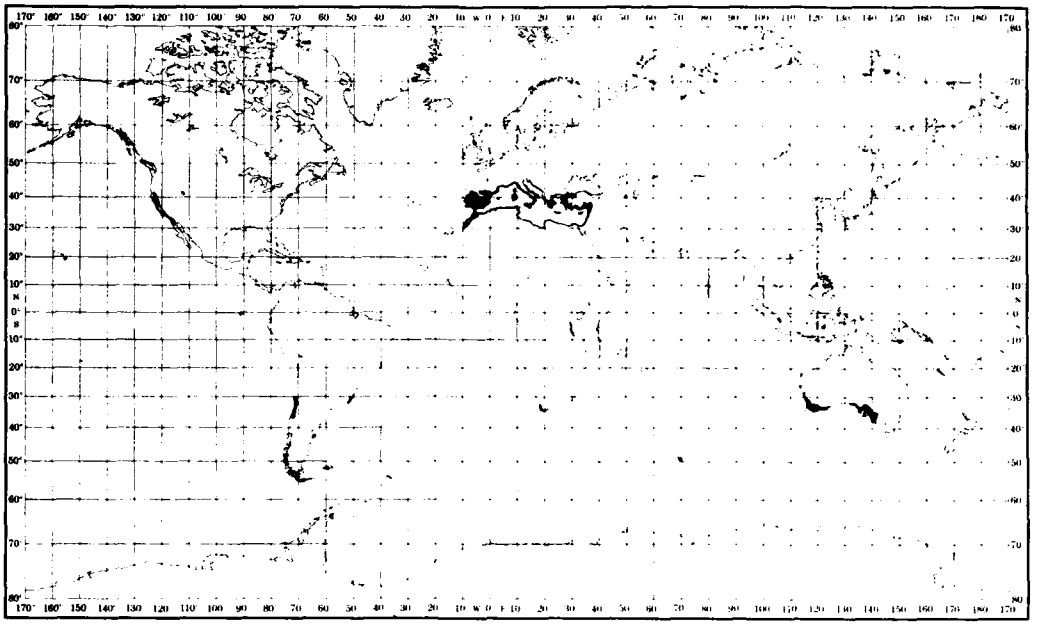


FIG. 6 REGIONS WITH A MEDITERRANEAN CLIMATE

Most of the rainfall across the Mediterranean comes during the winter and is mostly associated with extratropical cyclone activity. In the autumn, however, when the sea surface temperatures are still very warm, instability showers will often occur over land. For rain to occur it is not always necessary to have a surface low. If a sufficiently moist low-level flow is established (usually off the Mediterranean Sea) and an upper-level disturbance is present, rain showers and drizzle will often materialize. These occurrences are harder to forecast because their detection, which is dependent upon the timing of the upper level disturbances, is somewhat more difficult than that of surface lows.

From Figure 7, stations such as Kerkira (Greece), Kyrevia (Cyprus), Algiers (Algeria), and Valletta (Malta) have annual precipitation distributions that fit the Classical Mediterranean Climate definition of dry summers and rainy winters. Eastern Spain and southern France have distributions somewhat different from the typical Mediterranean rainfall patterns in that the dry period is usually very short and not so pronounced (generally in July), and the highest monthly averages occur in the autumn rather than in winter. The rainfall pattern across North Africa, east of Tunis, is dry in the summer and only somewhat wet in the winter, but the mean annual totals are relatively low. For that reason, many meteorological references do not consider the area to have a Classical Mediterranean Climate. In general, it is the one area bordering the Mediterranean Sea which has insufficient rainfall for supporting fruit or shrub tree growth.

The mean annual precipitation totals along the Mediterranean coast range from less than 5 inches in North Africa from Tunisia to the Sinai, to over 80 inches in portions of southwest Turkey and in the eastern Adriatic Sea along the slopes of the Dinaric Alps. Amounts of near 100 inches are found along the southeastern shores of the Black Sea, and to the northeast of the Black Sea along the southern slopes of the Caucasus Mountains. Annual values of less than 12 inches occur along the southeastern coast of Spain. Amounts averaging near 20 inches occur along the coast from there to southern France, except for near 24 inches in the vicinity of the Pyrenees. From eastern France to eastern Turkey values generally range from 28 to 36 inches. Exceptions are those regions along the eastern Adriatic Sea and southwestern Turkey which receive over 80 inches, as highlighted earlier, and along portions of the heel of Italy on the western Adriatic where less than 20 inches a year are received. From coastal Syria to northern Israel values generally range from 24 to 28 inches; however, inland only a short distance the annual amounts drop to less than 5 inches as they are in southern Israel and in the Sinai.

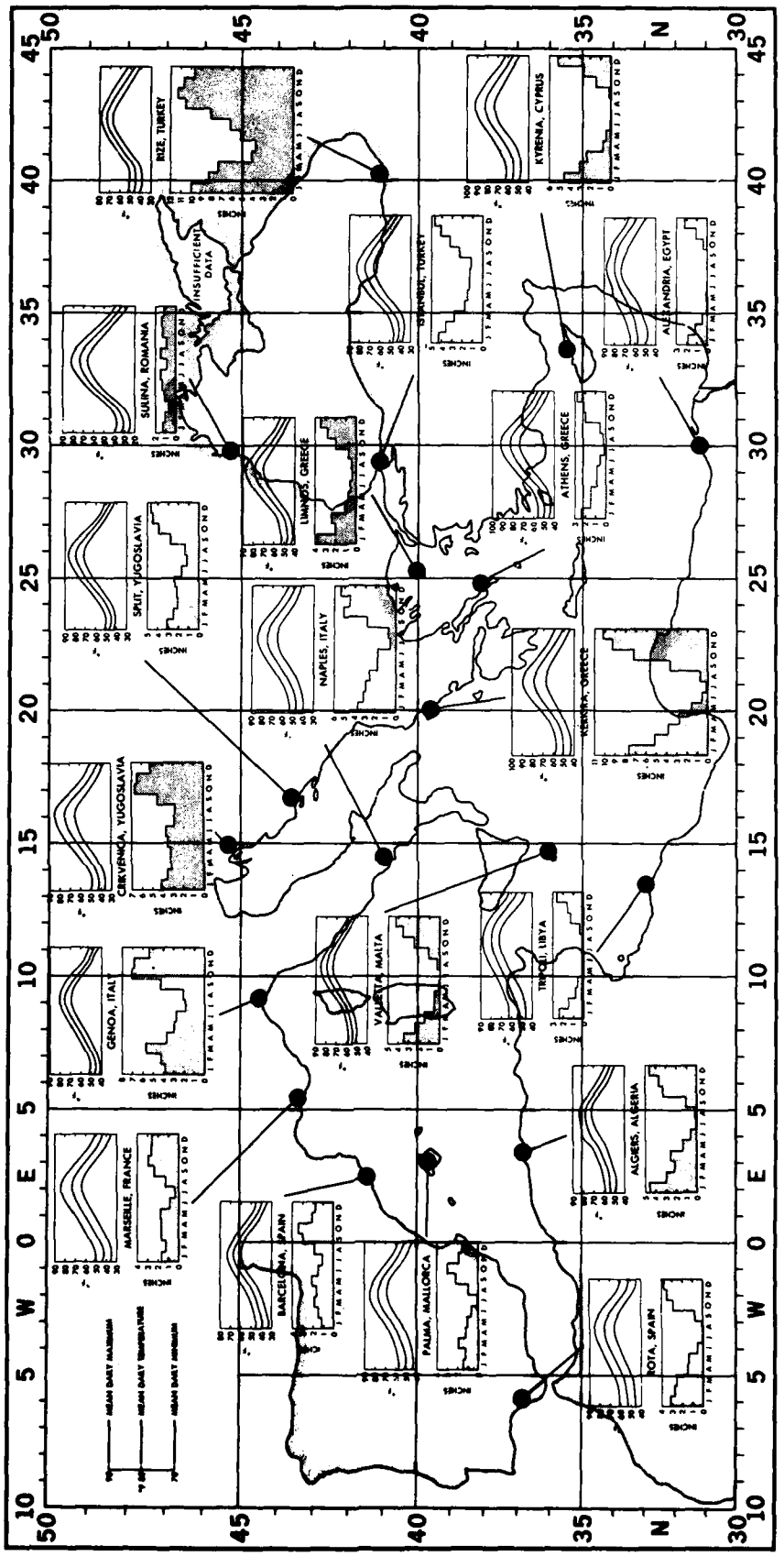


FIG. 7 MONTHLY MEANS OF AIR TEMPERATURE AND PRECIPITATION

Throughout the Mediterranean basin many local winds occur; generally each has been given a local name. Many of these local winds, however, are generated by the same physical effects. The diurnal temperature cycle is responsible for the land and sea breeze regimes as well as the mountain and valley winds. On a typical day, a horizontal temperature gradient is established by the differential heating between the land and sea or the mountains and valleys, thereby generating a local wind. During the diurnal cycle, the horizontal temperature gradient will reverse sign, with a subsequent reversal of wind direction. Along coast lines,incoming solar radiation (insolation) heats the land surface faster than the sea, while at night, the sea cools at a slower rate than the land due to its greater heat capacity. Therefore, during the day, the warmer less dense air is over land, and the cooler more dense air over the water. A circulation pattern is established as the warm air rises over land and the air sinks over water. At the low levels this causes the cooler air to replace the warm air, whereas aloft, the reverse is true, thereby completing the circulation loop. At night the earth radiates energy much more rapidly than the water whereby the sea water becomes warmer than the land and the circulation pattern reverses into a land breeze. Similar dynamic effects are responsible for the mountain and valley winds, but generally the physical processes are much more complicated than those which give a sea breeze.

The monthly wind charts in this volume show a relatively high frequency of strong winds occurring over the Gulf of Lion, especially during the winter and spring. This is the result of a wind called the Mistral: a cold dry katabatic (downslope) wind from the north to northwest that is channeled and strengthened (jet effect) between the mountains (the Pyrenees and western Alps) of the lower Rhone Valley. It often exceeds 50 knots, reaching speeds as high as 75 knots in the lower Rhone Valley, but it rarely exceeds 45 knots at the coast. Further decreases in the wind speed occur over the sea to the south, east, and west. These winds can extend as far south as the Spanish border on the west and the Tyrrhenian Sea on the east.

A Foehn wind can generally be found in almost all mountainous regions. The Foehn is a warm, dry downslope wind on the lee side of a mountain range that can often reach fresh gale force (34 knots) or higher strength. The name originated in the Alps, where it is quite prevalent, occurring mostly with a southerly wind. It is most noted for descending the northern face of a mountain range into a north-south valley that opens onto a plain, or an east-west cross valley, such as at Innsbruck (Austria). On the windward side, the ascending air cools at the moist adiabatic rate with condensation and precipitation occurring. On the lee side, the descending air, having lost its moisture, warms at the dry adiabatic rate, reaching the valley as a warm, dry wind. On rare occasions, a "North Foehn" will effect northern Italy, south of the Alps, mostly in the western portions of the Po Valley. This occurs in combination with a high pressure system north of the Alps and low pressure over northern Italy. East of this region, over the Adriatic Sea and Balkans, the significant local wind is known as the Bora. It is a fall katabatic wind of such cold origin that when it descends the relatively short topographic slope of the Dinaric Alps, the dynamic warming is insufficient and the wind reaches the warm plains or coastal region significantly colder than the environment. The Bora wind is most prominent along the eastern shores of the Adriatic Sea, where wind speeds at Trieste (Italy) have averaged over 70 knots, with gusts exceeding 110 knots. In addition to the strong winds, temperatures have fallen to as low as 14°F and relative humidities to as little as 15 percent.

The Bora winds, when associated only with a high pressure system over central Europe and no opposing low to the south, will generally not extend far out to sea. However, where an opposing low pressure does exist to the south, such as one producing a warm Sirocco (or Scirocco-a Foehn type wind defined below), the warm southerly wind will generally rise aloft over the Bora, producing cloudy skies and some precipitation. Under these circumstances, the Bora winds will most likely extend out over the entire Adriatic Sea. The term Bora also applies to winds of similar origin that are observed at Novorossiysk (U.S.S.R.) on the northern shores of the Black Sea.

As depressions move from west to east across the southern Mediterranean Sea or North Africa, they produce the warm southerly or southeasterly wind in advance of their movement known as the Sirocco. This source of air comes from the Sahara and, as a desert wind, it is dry and often laden with sand and dust. Additional warming occurs through adiabatic compression as the air descends from the desert plateau to the Mediterranean coast. As the Sirocco crosses the Mediterranean Sea, the air picks up moisture and reaches Malta, Sicily, Italy and other parts of the European Mediterranean coast as a warm, moisture-laden wind. Across the Mediterranean basin, the Sirocco is known by many names; in Egypt and over the Red Sea, it is called Khamsin; in the coastal plains of Libya, as Ghibli; in Syria and the deserts of Arabia, as Simoom (poison wind); and along the southeast coast of Spain, as Solano or Leveche. These are only a few of the local names and spellings used to describe wind of desert origin. For more about the local winds of the Mediterranean basin reference Reiter (1975).

Marine Climatological Elements

Precipitation

Of the elements recorded in the marine data base, precipitation is the one most subject to error in both the way it is observed and the way it is interpreted. For example, it is often inferred in the literature that ships often try to avoid foul weather and thereby bias the data towards fair weather with fewer precipitation observations. (Elms (1986) compared the Volunteer Observing Ship (VOS) data to other sources of data such as Ocean Station Vessel (OSV) and buoy data and concluded that there is little evidence that "fair weather bias" is a serious problem for most applications of marine climatic data. The 1982 international code change introduced a present weather indicator (ix) into the Ship Synoptic code FM13-VII and this change will probably be shown to bias the present weather categories more than any foul weather avoidance by ships. This is especially true between January 1982 and March 1985, if the data are not corrected for the missing ix code in the IMMT exchange format.)

Assessing oceanic rainfall data is a major problem because transit ships are unable to take quantitative precipitation measurements. A number of studies have been conducted in efforts to predict precipitation amounts, or rates of fall, based on estimates derived from the use of present weather observations from ships of opportunity (Goroch, et al., 1984) and readings from satellites (Rao, et al., 1976).

Throughout the Mediterranean basin, the percent frequency of precipitation is low. Yet, from the percent frequency of precipitation charts, it is easy to distinguish the classical, wet winter season from that of the dry summer one. During the summer, many areas around the Mediterranean Sea experience precipitation less than one percent of the time; this is especially true in the eastern half. In other sections, observed frequencies rarely exceed two to three percent. While winter brings a significant increase in the frequency of precipitation, especially for the eastern sections, frequencies are still below 10 percent. Slightly higher frequencies are observed in the Black Sea. During the winter, the driest region over the sea is along the eastern Iberian peninsula, where frequencies of reported precipitation average only 3 to 4 percent.

Air Temperature

Air temperature is one of the elements most frequently observed by mariners. On many ships the heating effect of the ship's structure has a tendency to produce higher than actual ambient air temperature readings because of instrument exposure. This is especially true under calm sunny conditions.

From September to April, the mean air temperature pattern is relatively zonal as temperatures increase from north to south. In January and February, average temperatures range from the mid-to-high 40's(^{o}F) along the northern Mediterranean shores to near 60°F along the North African coast. At the height of winter in the Black Sea, mean air temperatures range from the mid 30's(^{o}F) along the northern shores to the mid 40's(^{o}F) along the southern shores.

By summer, the temperature pattern is somewhere between zonal and meridional with the average temperatures ranging from the upper 60's(^{o}F) in the northwestern corner of the Mediterranean Sea to the mid 70's(^{o}F) in the eastern end. Average temperatures during this time range from the upper 60's(^{o}F) to the lower 70's(^{o}F) across the Black Sea.

Sea-Surface Temperature

Sea-surface temperatures are recorded with a fairly high frequency in marine observations. The principle methods for sampling are intake thermometers and buckets. Even though the two methods can produce slightly different results, the data can be used with considerable confidence.

During winter the mean sea-surface temperature pattern never acquires the look of the strong zonal pattern characteristic of the mean air temperature. In fact its winter pattern more closely resembles the summer pattern of the mean air temperature. The summer pattern of mean sea-surface temperatures maintains a similarity to its wintertime pattern as the temperature values basically increase from their lowest values in the northwest corner to the highest in the eastern end. The summer season does introduce some anomalies to the pattern as cold regions are established at the Strait of Gibraltar and in the Aegean Sea.

During winter, temperatures range from the low to mid 50's(°F) in the Gulf of Lion and northern Adriatic Sea to the low 60's(°F) in the southeastern sections. Meanwhile, in the Black Sea, wintertime mean sea temperatures range from the low 40's(°F) in the northwest to the upper 40's(°F) and low 50's(°F) in the southeast. During summer, temperatures range from the low 70's(°F) in the northwestern Mediterranean Sea to the low 80's(°F) along its eastern edge. Those sea temperatures observed in the Black Sea at this time average near the mid 70's(°F).

Surface Winds

Surface wind is one of the most commonly observed elements. Many of the observations from the NCDC data base are visual observations based on the roughness of the sea. In recent years more ships acquired anemometers and reported measured winds. Prior to 1963 many of the wind speeds were recorded in the Beaufort scale; such estimates have proven to be quite reliable and can be used with a high degree of confidence. Five sets of wind speed isopleths are presented: the mean speed, and the percent frequency of winds less than 11 knots, from 11 to 21 knots, from 22 to 33 knots, and greater than or equal to 34 knots. Also presented are wind roses for one-degree squares.

Due to the varied topography surrounding the Mediterranean Sea many local winds are generated and influenced by surface features. The details of local winds have been discussed in some detail earlier, therefore when one examines the mean wind charts one is not surprised to see very non-uniform patterns which were directly affected by the adjacent topography. The mean wind speed isopleths highlight the channeling effects of the Rhone Valley over the Gulf of Lion, the blocking effect of the Balearic Islands, the influences of the Strait of Gibraltar, the Strait of Bonifacio between Corsica and Sardinia, the Strait of Messina between Sicily and Italy, and the effects of topography on the Adriatic and Aegean Seas.

Winter is known for increased extratropical cyclone activity, as the wet season, and as the season of strongest winds. Mean winds are strongest over the Gulf of Lion during January, where mean winds exceed 22 knots near the French coast and decrease to only 14 to 15 knots at the African coast. During January, the lightest winds are observed along the Iberian peninsula and in the northern Adriatic Sea. Over the western Mediterranean, the mean summer wind pattern is similar to that of winter but with much lower speeds. For instance, the mean speeds over the Gulf of Lion are nearly half their winter strengths as they average just over 12 knots near the coast of France. In the eastern Mediterranean, near the island of Rhodes, winds speeds have strengthened during the summer as winds average just over 18 knots during August, some 4 to 5 knots higher than their wintertime values. Across the Black Sea wind speeds average 10 to 15 knots during the winter and 6 to 10 knots during the summer.

Gale force winds (>34 knots) are mostly confined to the winter season and to the Gulf of Lion area. During January, frequencies as high as 20 percent are found in the Gulf of Lion and frequencies of just over 5 percent in a few areas of the central Mediterranean. By May there are no areas reporting gale force winds with frequencies of 5 percent or more. This continues until September when in the Gulf of Lion, observed frequencies again appear at just over 5 percent. For most areas between May and September, gale force winds are observed less than one percent of the time. In the Gulf of Lion the percentages increase each month from September until January when they reach their maximum.

Wind speeds of 10 knots or less are observed less frequently over the Gulf of Lion during the winter than over any other region of the Mediterranean Sea; there frequencies average less than 30 to 40 percent. Similar wintertime frequencies are also observed over the northwestern section of the Black Sea. Most open water regions during the winter experience wind speeds of 10 knots or less 40 to 50 percent of the time, while a number of the near coastal regions report frequencies of near 60 to 70 percent. By mid-to-late summer, light winds (10 knots or less) are observed least over the region between Crete and southwest Turkey where frequencies are less than 30 percent. Correspondingly, frequencies over the Gulf of Lion average under 60 percent, and frequencies over most remaining regions average 70 to 80 percent except for over the northwestern Black Sea where frequencies average just under 60 percent.

From October through April, 30 to 40 percent of the observed winds across the Mediterranean Sea are between 11 and 21 knots. By May frequencies generally average 20 to 30 percent except for a small region southeast of Rhodes where frequencies are 40 percent. Frequencies remain near 20 to 30 percent for the western Mediterranean until autumn; however in the eastern Mediterranean, especially off the southwest coast of Turkey, frequencies generally average 40 to 50 percent until October. August brings the highest frequencies of these wind speeds (11 to 21 knots) to the area off the southwest coast of Turkey where they reach 60 percent.

During the winter, speeds of 22 to 33 knots are observed as much as 30 percent of the time over the Gulf of Lion and generally 10 to 20 percent over most other sections of the Mediterranean Sea. In the summer, west of the Balkan Peninsula winds of those speeds are generally observed 5 percent or less of the time, except over the Gulf of Lion where frequencies exceed 10 percent. East of the Balkan Peninsula, frequencies increase during the summer to as high as 15 to 25 percent between Crete and the southwest coast of Turkey.

Visibility

Visibilities are difficult to measure at sea because of the lack of distance reference points. Climatically, many low visibility observations are probably missed because the observer is too busy with other duties (a form of fair weather bias). However, the coarseness of the visibility (code) intervals tends to minimize the problem, thereby permitting the summarized data to be relatively consistent.

Visibility tables are presented by one-degree quadrangle. From the tables it is clear that visibilities are generally good throughout the Mediterranean basin with visibilities averaging five nautical miles or better at least 90 percent of the time, regardless of month. Percentages generally are slightly less in the Black Sea than they are across the Mediterranean Sea. Visibilities of 10 miles or better occur 60 to 70 percent of the time and low visibilities (less than one mile) usually occur less than one percent of the time.

Clouds

A survey of the cloud data (total and low cloud amounts) from the marine data base shows the number of total cloud reports significantly greater than that of low cloud amounts. This is because many of the early marine observations contain only total cloud amounts. For the two presentations (total cloud amount $\leq$ 2/8 and low cloud amounts $\geq$ 5/8), only those observations reporting both total and low cloud amounts were summarized. This helps eliminate problems introduced as a result of different size data sets (N-count). The use of satellite data helps bolster confidence in the total cloud analyses because they show fairly close agreement with those analyses (U. S. Department of Commerce and United States Air Force, 1971).

The percent frequency of low clouds greater than or equal to five-eighths increases from a minimum during the summer (the dry season) to a maximum during the winter (the wet season). Summer frequencies range from less than ten percent in most areas of the Mediterranean to just over 20 percent in a few areas. By winter, frequencies have increased to 30 to 40 percent across most regions of the Mediterranean Sea. Frequencies over the Black Sea always run somewhat higher than the general Mediterranean basin, averaging 50 to 70 percent during January and as low as 15 to 20 percent during July.

Total cloud amounts naturally follow the same annual cycle between the dry and wet seasons showing less total cloud during the summer than the winter. Total clouds less than or equal to two-eighths are observed 60 to 70 percent of the time across the western Mediterranean and Black Sea, and 80 to 90 percent of the time in the eastern Mediterranean during July and August. Occurrences of total clouds $\leq$2/8 decrease over the months from their peak (relatively clear skies) in the summer season to an ebb (relatively cloudy skies) at the height of winter, where frequencies of 20 to 30 percent are observed over the Black Sea and 30 to 50 percent across the Mediterranean basin.

Ceiling and Visibility

Aircraft-type ceilings are not available from marine observations. The ceilings are estimated from the height of the lowest cloud when low clouds cover more than half the sky. When the sky is totally obscured by rain, fog, dust, or other phenomena, the total obscuration is considered a ceiling with a height of zero. Mid-range ceiling and visibility charts (ceiling less than 1,000 feet and/or visibility less than 5 nautical miles; ceiling less than 8,000 feet and/or visibility less than 10 nautical miles) and low-range ceiling and visibility charts (ceilings less than 300 feet and/or visibility less than 1 nautical mile; ceiling less than 600 feet and/or visibility less than 2 nautical miles) are presented.

During winter, ceilings less than 8,000 feet and/or visibilities less than 10 nautical miles are observed nearly 40 percent of the time across the southern Mediterranean basin and near 70 percent in the northern sections including most of the Black Sea. During the dry summer season, conditions improve somewhat as frequencies range from 20 to 30 percent in the southern sections to 40 to 50 percent in the northern sections.

Ceilings less than 1,000 feet and/or visibilities less than 5 nautical miles (the next lower threshold examined) generally average 5 to 10 percent throughout the year. Frequencies extend above 20 percent in a few sections, especially in the Black Sea during the winter. Throughout the year there is little change at these thresholds over the western Mediterranean Sea; however, over the eastern Mediterranean frequencies follow a more cyclical seasonal pattern with averages running near 10 percent during the winter and less than 5 percent during the summer.

Conditions rarely deteriorate into the lowest two threshold categories examined. During the winter, ceilings less than 600 feet and/or visibilites less than 2 nautical miles occur only two to three percent of the time across most of the Mediterranean. Frequencies reach 5 percent in the northern Adriatic and northeastern Aegean Sea and 8 percent in the Black Sea. By summer, frequencies average two percent or less throughout the study area. For the lowest category (300 feet and/or 1 mile), frequencies generally average below one to two percent regardless of the season. The exception is in the Black Sea where frequencies exceed 6 percent along its northern shores during April.

Wave-Heights

Wave-heights have been recorded in a consistent quantitative code only since the late 1940's. The reluctance of many observers to take wave observations in the earlier years and the difficulty in estimating waves, especially in confused seas, make wave observations one of the least commonly observed elements. The observations are also subject to biases. Generally the heights are too low, the periods too short, and the sea-swell discrimination poor (Quayle, 1980). The data in this study have not been adjusted for the suspected biases but they were processed through a quality control procedure where an internal check was made between wind speed and sea height. The data were also matrix-arrayed and apparent erroneous outliers were deleted from both the sea and swell data. Wave-height presentations include isopleth maps showing percent frequencies of wave-heights $\geq$ 3 feet and $\geq$ 8 feet. In addition, wave-height tables by one-degree quadrangle show frequencies by six wave-height categories. In these presentations, the higher of the sea or swell was selected for summarization. If heights were equal, the wave with the longer period was selected.

Wave-height patterns across the Mediterranean Sea align very closely to local winds, available fetch, water depth and nearness of barriers. These factors make the pattern relatively complex, yet at same time, limit the size and intensity of the wave regime.

Wave-heights of three feet or higher are observed over 80 percent of the time during the winter in the Gulf of Lion and in the east central Mediterranean Sea. During the same period, wave heights of this magnitude are observed only 30 to 50 percent of the time in the northern Adriatic Sea and 50 to 60 percent in the Balearic, Aegean, and Black Seas. Summer brings a drop in the frequency of 3 foot waves or higher by 20 to 30 percent in all areas except in the eastern Mediterranean between Crete and Cyprus, where they remain near 70 percent.

Wave heights of eight feet or greater occur mostly in the open waters, centered along a line that runs from the Gulf of Lion to the south of Sardinia, Sicily, and Crete. During the winter, wave heights of eight feet or greater are observed 20 to 30 percent of the time in this basically open water region, and 10 to 20 percent in most other regions. Exceptions are in the Adriatic Sea and near coastal regions of Europe where frequencies average less than 10 percent. By summer, waves of eight feet or higher are much less likely to occur. Only in the Gulf of Lion and in an area to the east of Crete do frequencies exceed 10 percent.

Ocean Currents

The ocean current charts were compiled from ship drift reports that were forwarded by the various merchant marines to the U.S. Naval Oceanographic Office. From those drift observations the prevailing and secondary current directions, mean current speed, percent of total observations used to compute the primary and secondary directions and the total observation count are presented by one-degree square. This information is presented on monthly charts with the Mediterranean basin being divided into four sections (pages) to ensure readability. The density of the observations is greatest along the major shipping routes and the reliability of the current charts is best in those areas. The data are considered most useful when used collectively such as in summaries where a large number of observations are available.

Summary

Mild wet winters and dry summers with moderate temperatures make the Mediterranean climate a favorite with man. This favorable climate was instrumental in the blossoming of so many of the early great cultures (Greek, Babylonian, Phoenician, Roman, Egyptian, Venetian, etc.) that proved so influential in the civilization of the world. Topography, latitude, and the relationship of land to water all influence the Mediterranean basin climate.

Significant climatic variations occur within the limiting boundaries of the classical definition of the Mediterranean climate. For example, mean annual precipitation totals range from 50 inches and up in some of the near coastal regions of Yugoslavia, western Italy, and southwestern Turkey to 16 inches and less in southeastern Spain, southern Sicily, southeastern Italy and northern Africa. Local winds can be damaging, and their strength and directional persistence often affect the plant life and construction practices of an area because they are forced to adapt to those aspects of climate. There is little destruction from, or fear for, the perils of weather within the Mediterranean basin because that region is unaffected by tropical storms or severe freezes, and is rarely affected by tornadoes or torrential floods. Seismic activity has proven to be the greatest risk to the peoples of the region.

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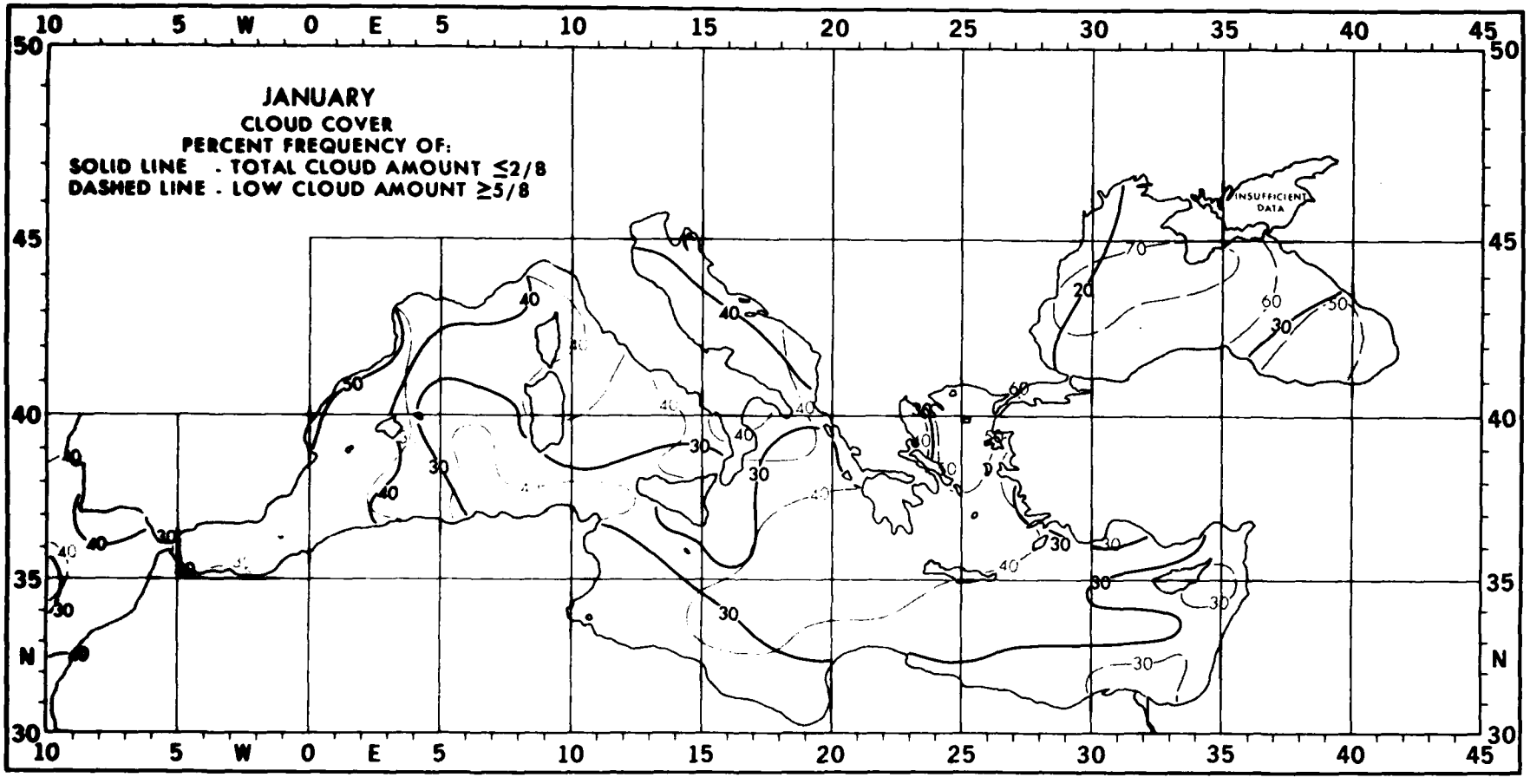
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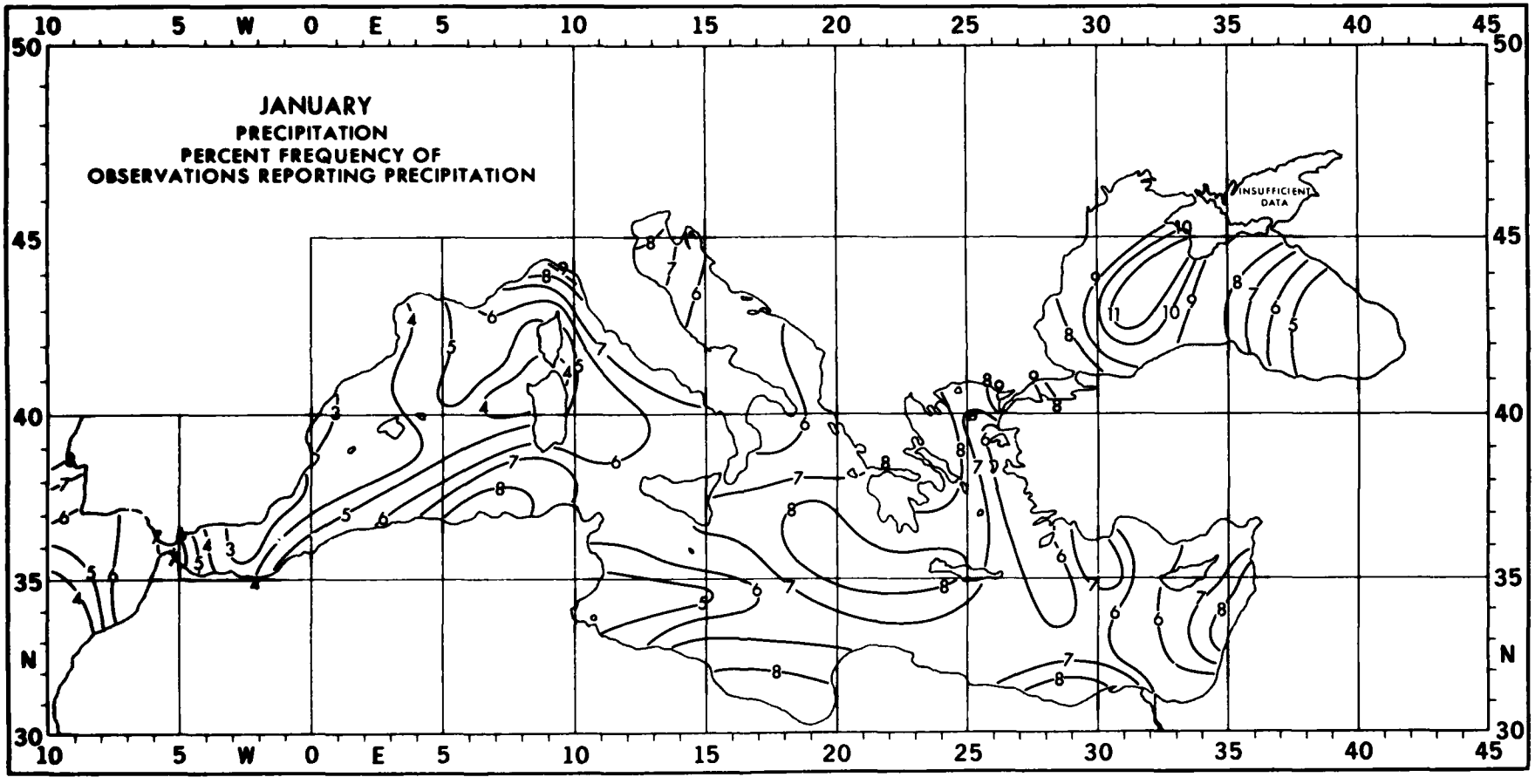
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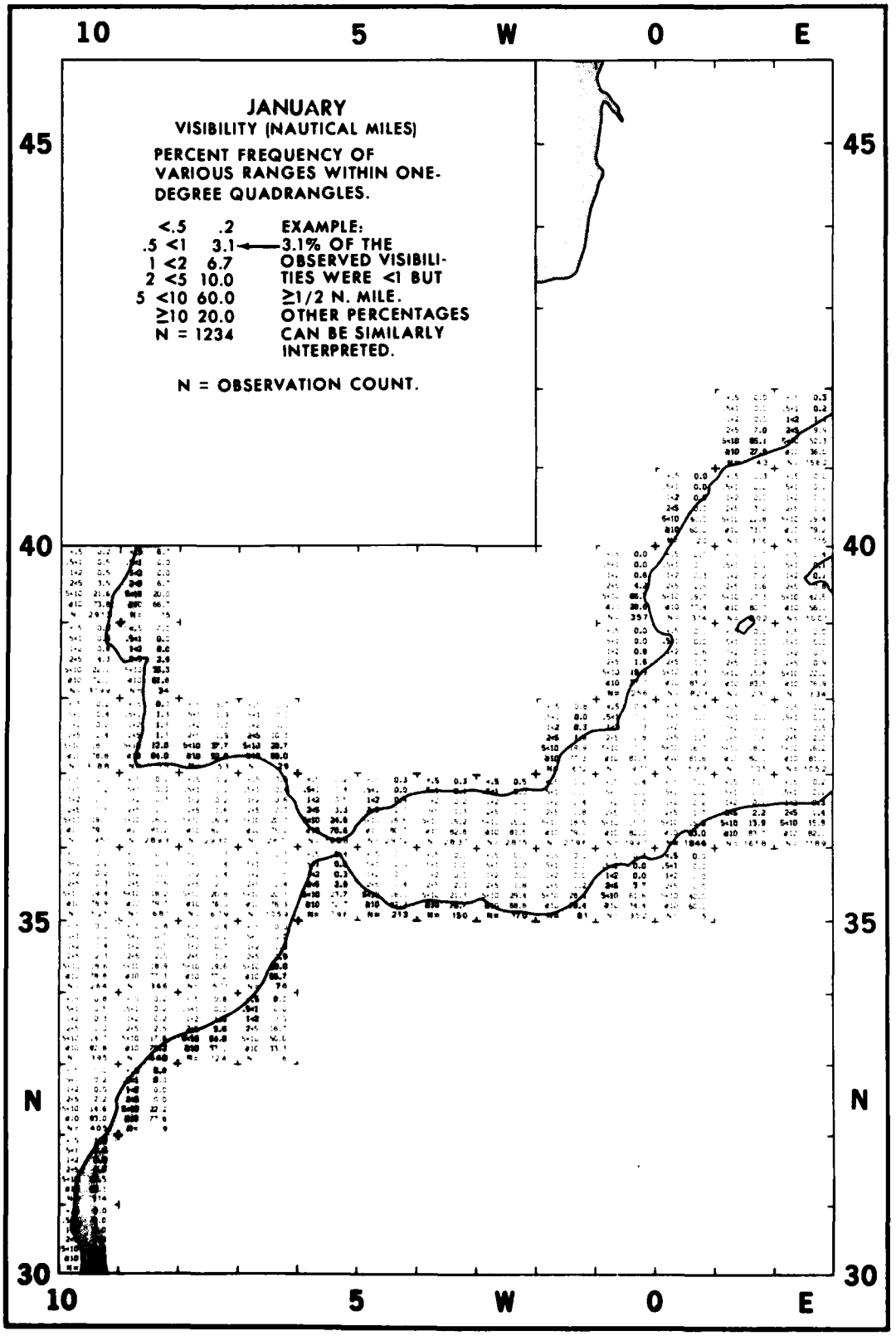
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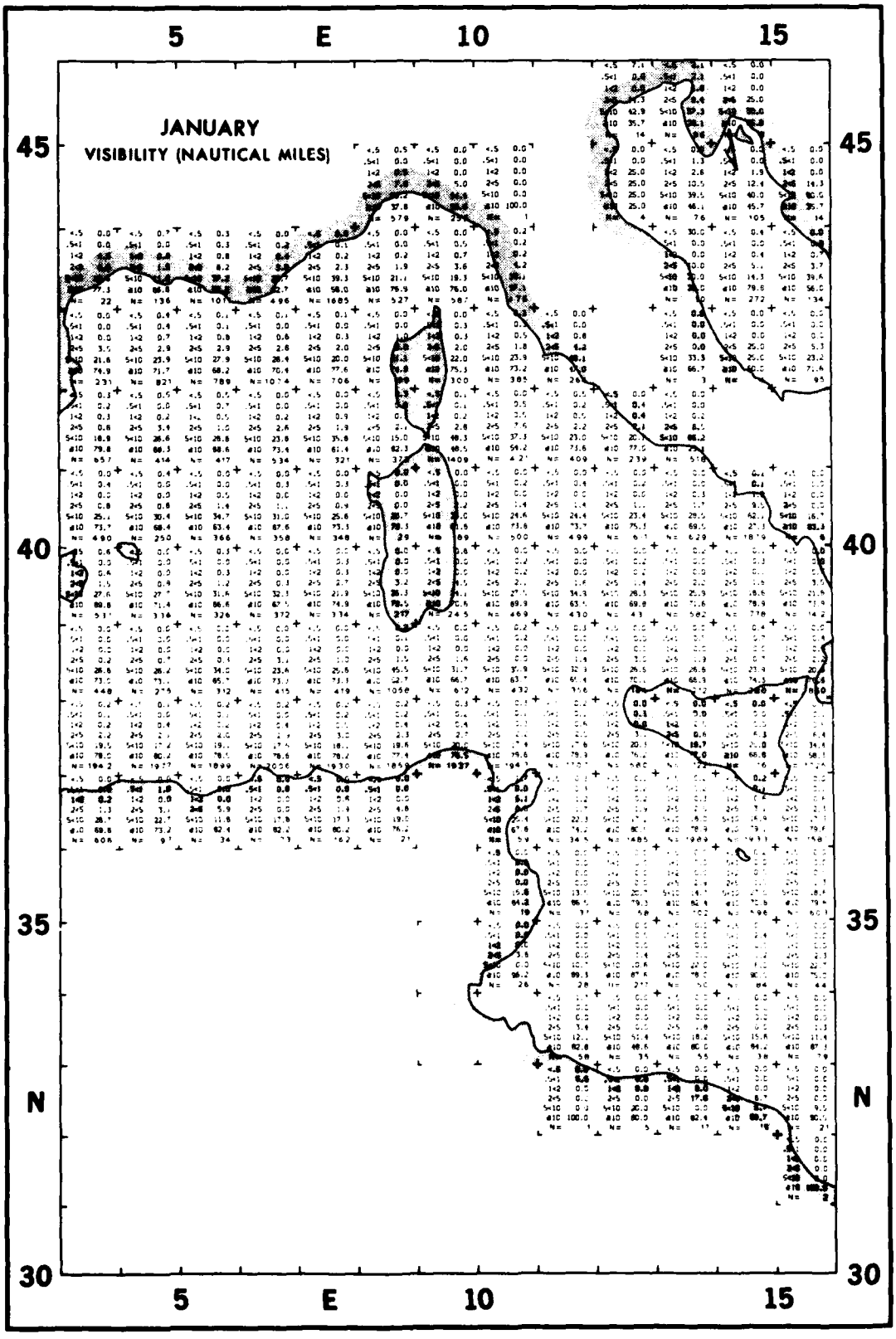
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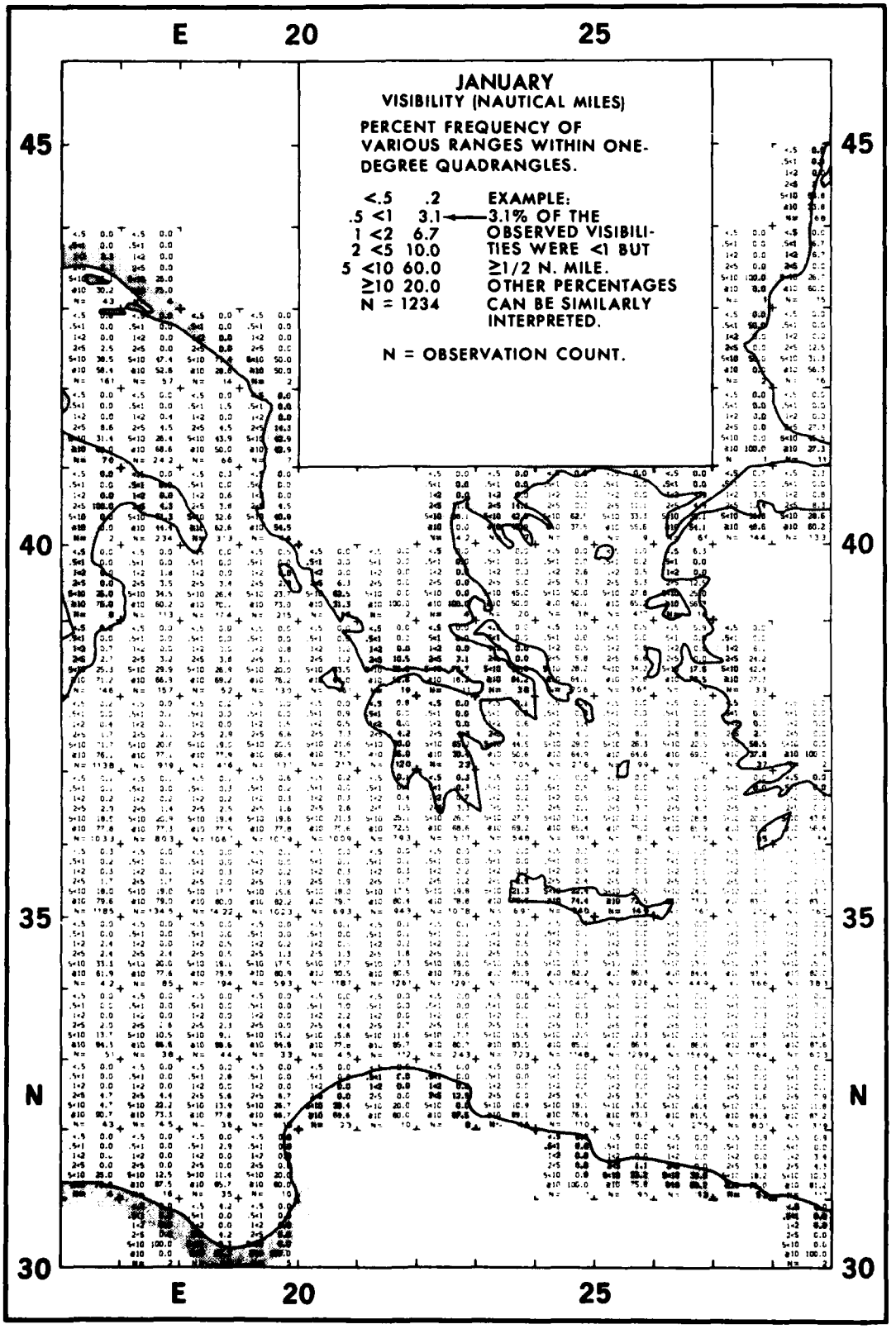
MONTH	CLOUDS	PRECIPITATION	VISIBILITY-TABLES	CEILING-VISIBILITY (mid range)	CEILING-VISIBILITY (low range)	WIND-VISIBILITY-CLOUDINESS	SCALAR MEAN WIND SPEED	WIND SPEED <11 and ≥34 knots	WIND SPEED 11-21 and 22-33 knots	SURFACE WIND ROSES	AIR AND SEA TEMPERATURE	WAVE HEIGHT-ISOPLETHS	WAVE HEIGHT-TABLES	SURFACE CURRENTS	STATION CLIMATIC SUMMARIES	
JANUARY	2	3	4	8	9	10	11	12	13	14	18	19	20	266		
FEBRUARY	24	25	26	30	31	32	33	34	35	36	40	41	42	270		
MARCH	46	47	48	52	53	54	55	56	57	58	62	63	64	274		
APRIL	68	69	70	74	75	76	77	78	79	80	84	85	86	278		
MAY	90	91	92	96	97	98	99	100	101	102	106	107	108	282		
JUNE	112	113	114	118	119	120	121	122	123	124	128	129	130	286	314	
JULY	134	135	136	140	141	142	143	144	145	146	150	151	152	290	THRU	
AUGUST	156	157	158	162	163	164	165	166	167	168	172	173	174	294	342	
SEPTEMBER	178	179	180	184	185	186	187	188	189	190	194	195	196	298		
OCTOBER	200	201	202	206	207	208	209	210	211	212	216	217	218	302		
NOVEMBER	222	223	224	228	229	230	231	232	233	234	238	239	240	306		
DECEMBER	244	245	246	250	251	252	253	254	255	256	260	261	262	310		

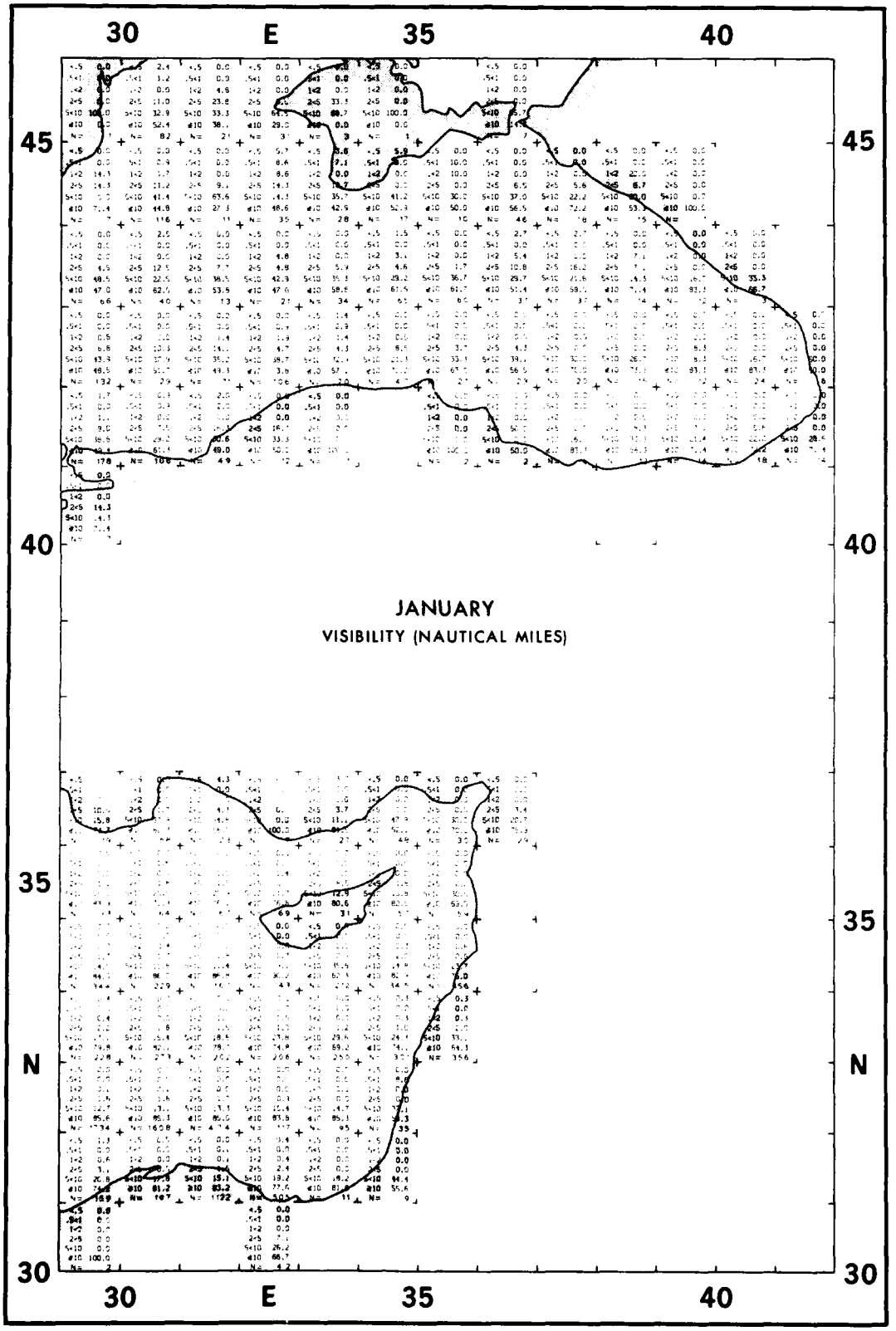

JANUARY
CLOUD COVER
PERCENT FREQUENCY OF:
SOLID LINE - TOTAL CLOUD AMOUNT ≤2/8
DASHED LINE - LOW CLOUD AMOUNT ≥5/8
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

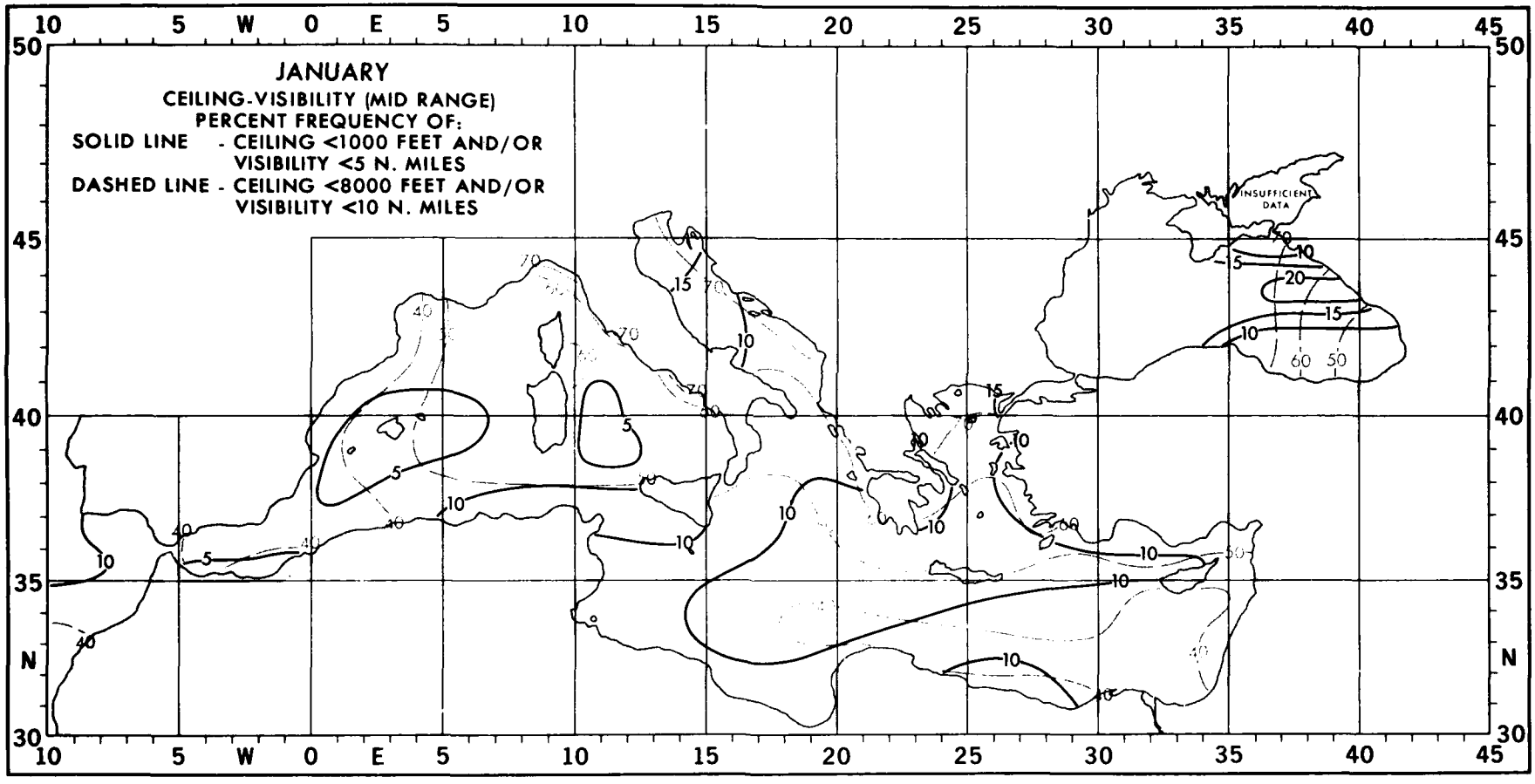

JANUARY
PRECIPITATION
PERCENT FREQUENCY OF
OBSERVATIONS REPORTING PRECIPITATION
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

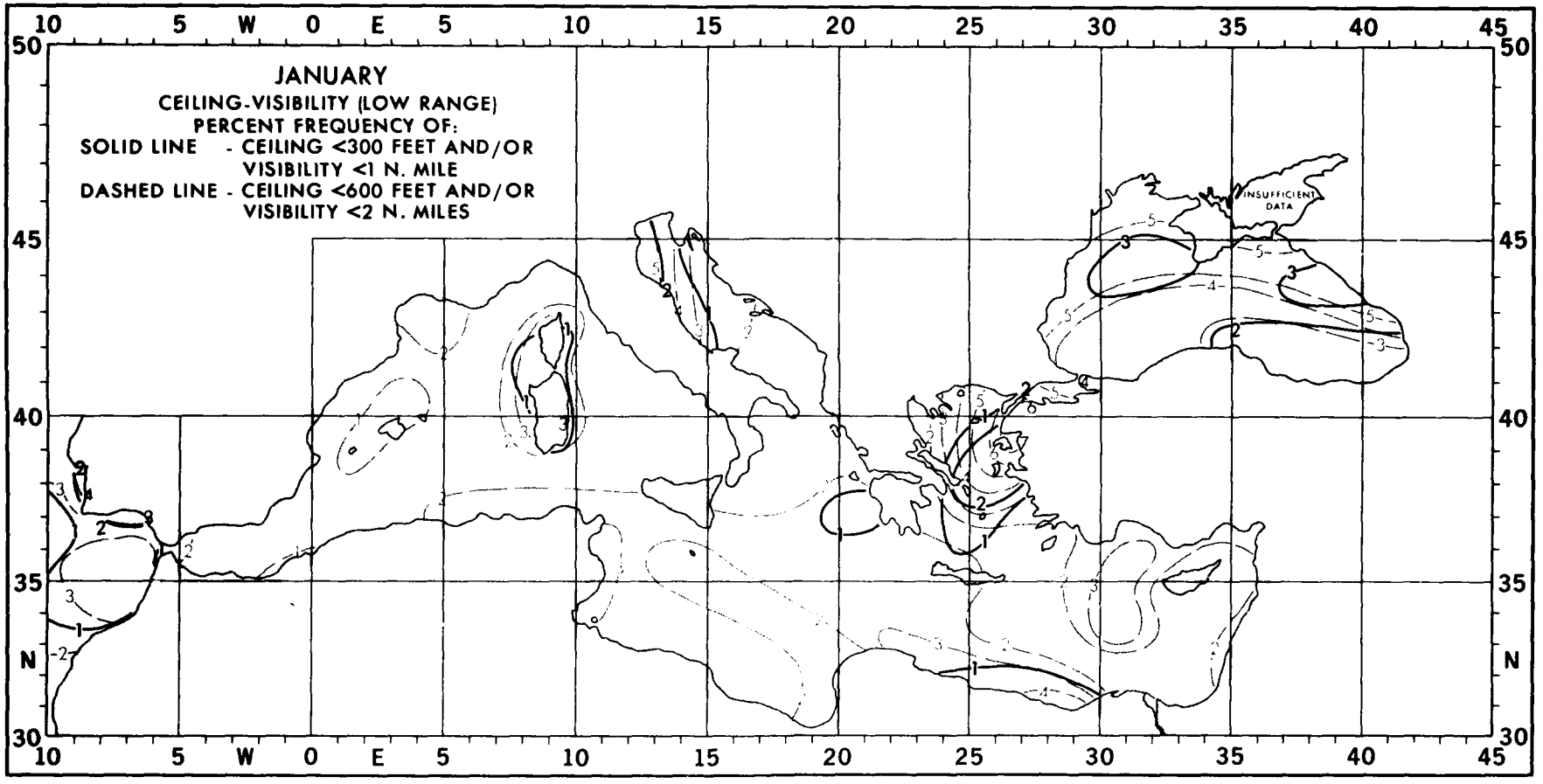

10
5
W
0
E
45
40
35
30
N
JANUARY
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.

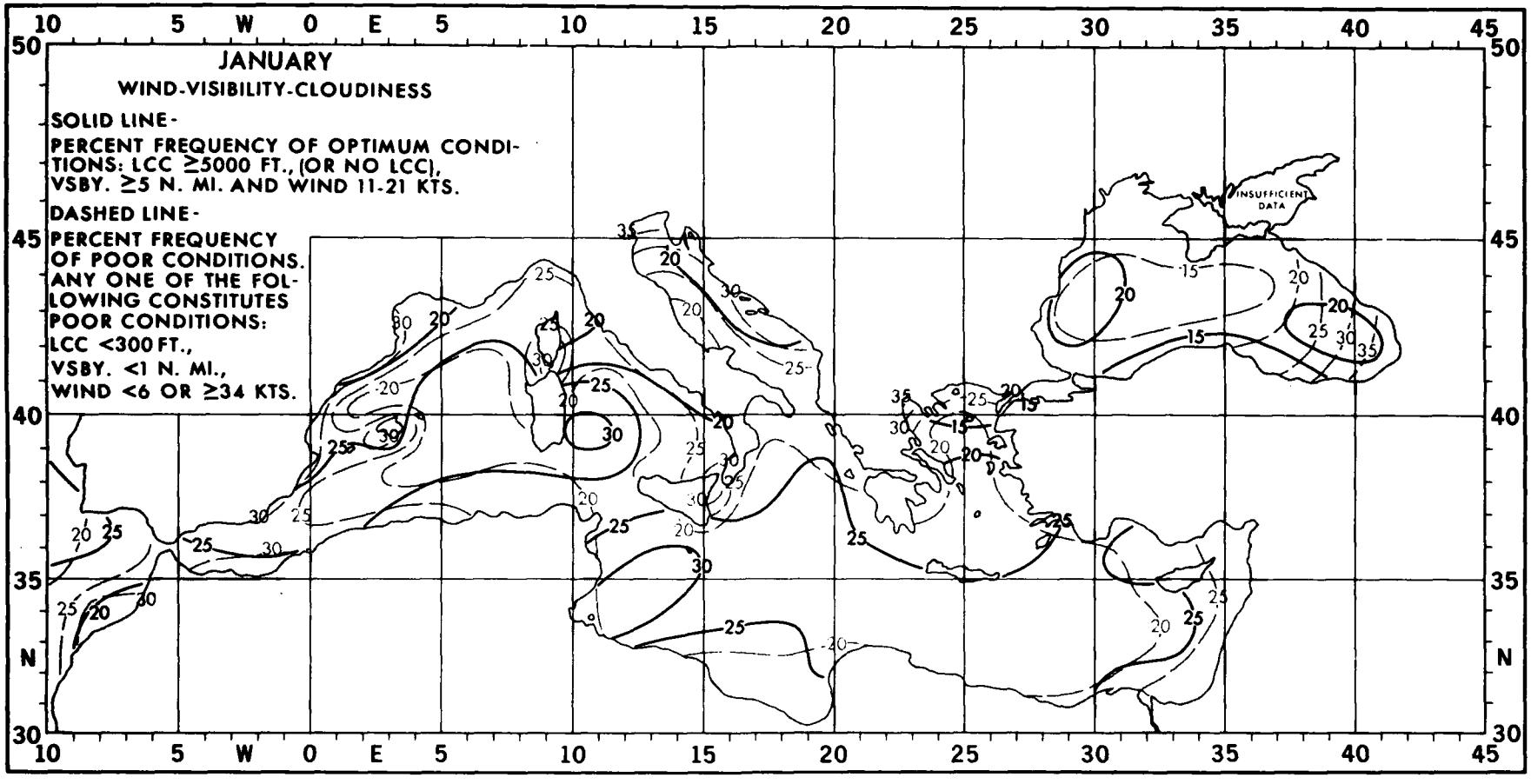

JANUARY
VISIBILITY (NAUTICAL MILES)
5
E
10
15
45
40
35
N
30

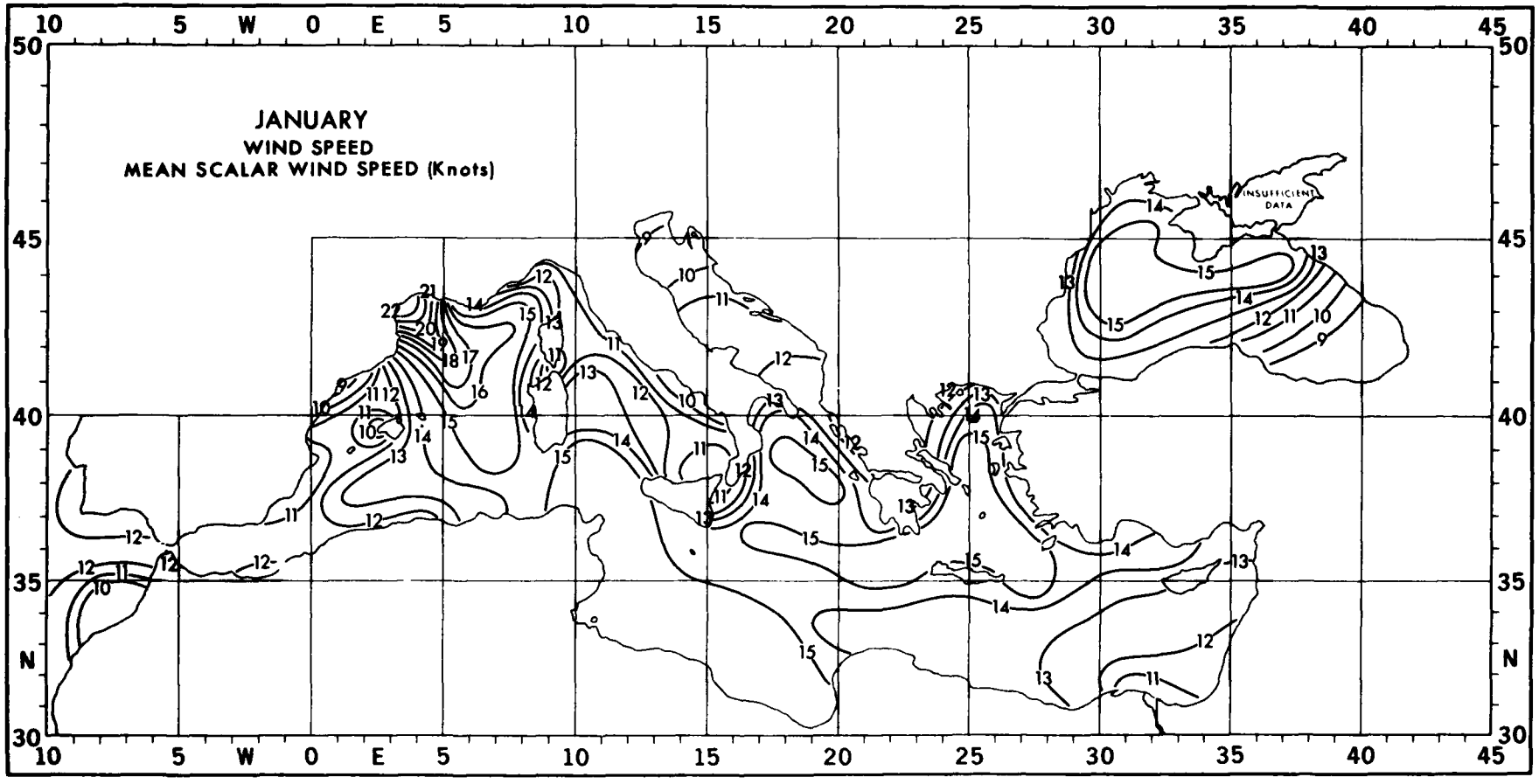

E 20 25
45
40
35
30
N
JANUARY
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.

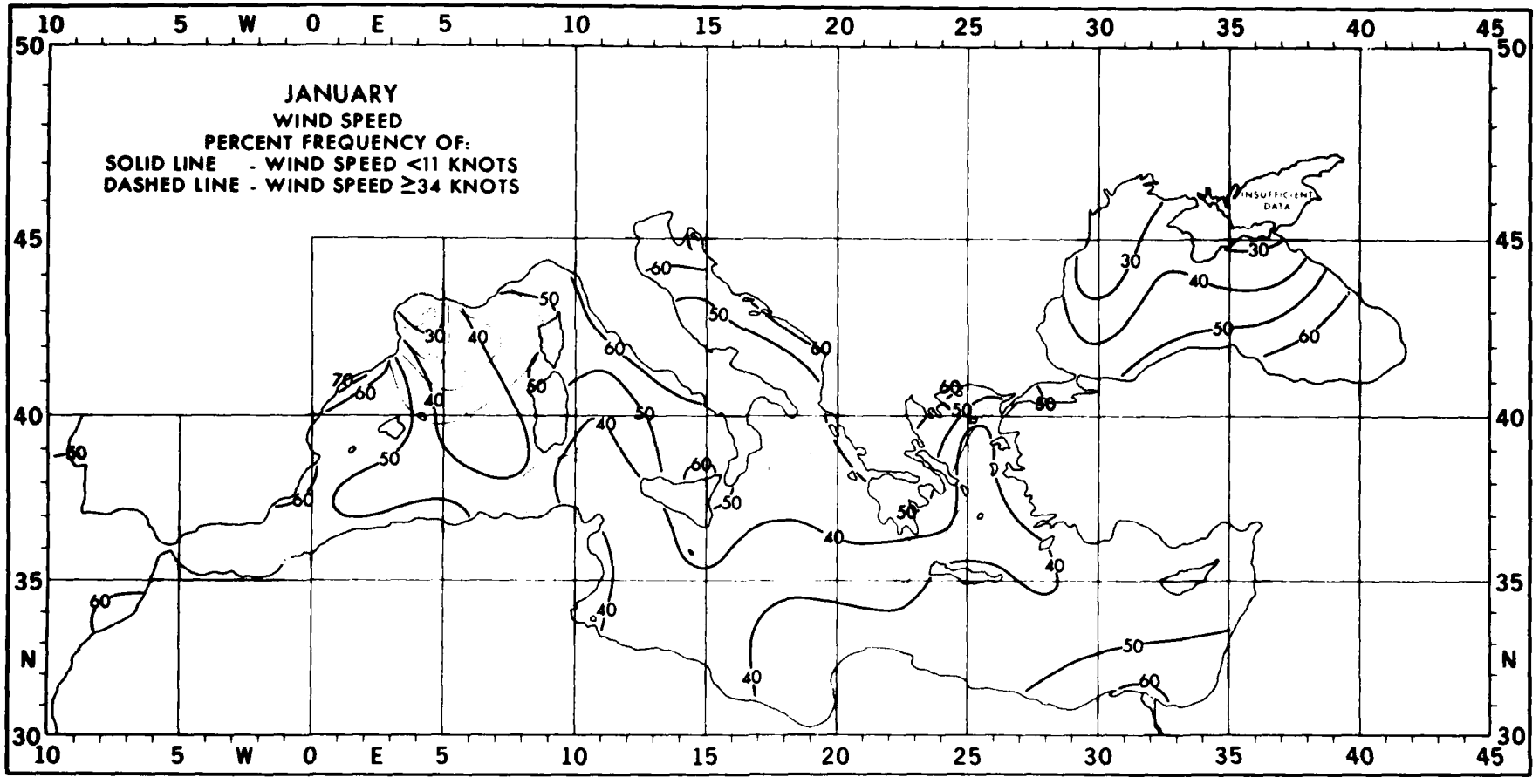

30
E
35
40
45
40
JANUARY
VISIBILITY (NAUTICAL MILES)
35
N
30
30
E
35
40

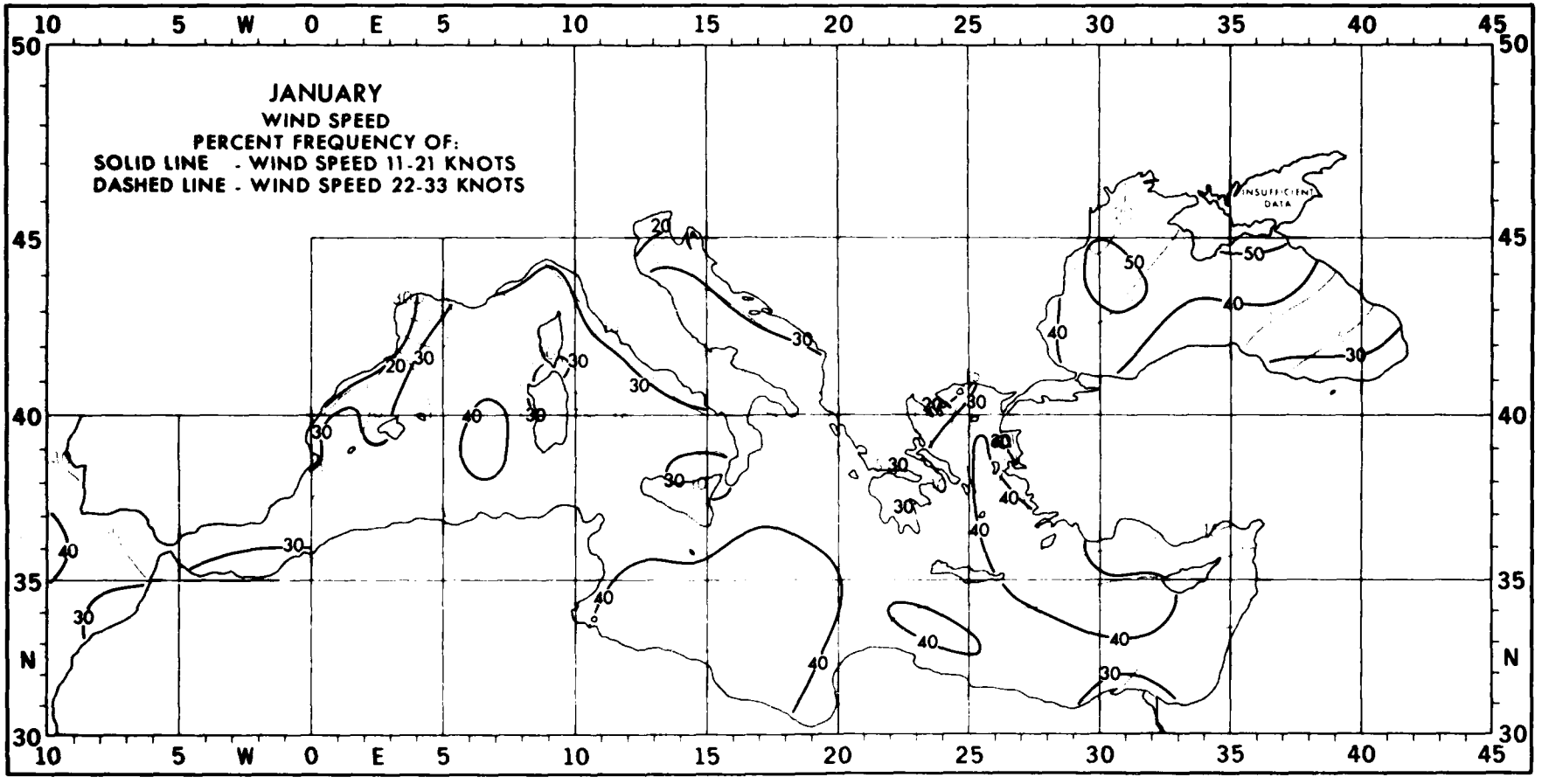

JANUARY
CEILING-VISIBILITY (MID RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <1000 FEET AND/OR VISIBILITY <5 N. MILES
DASHED LINE - CEILING <8000 FEET AND/OR VISIBILITY <10 N. MILES
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
30
N

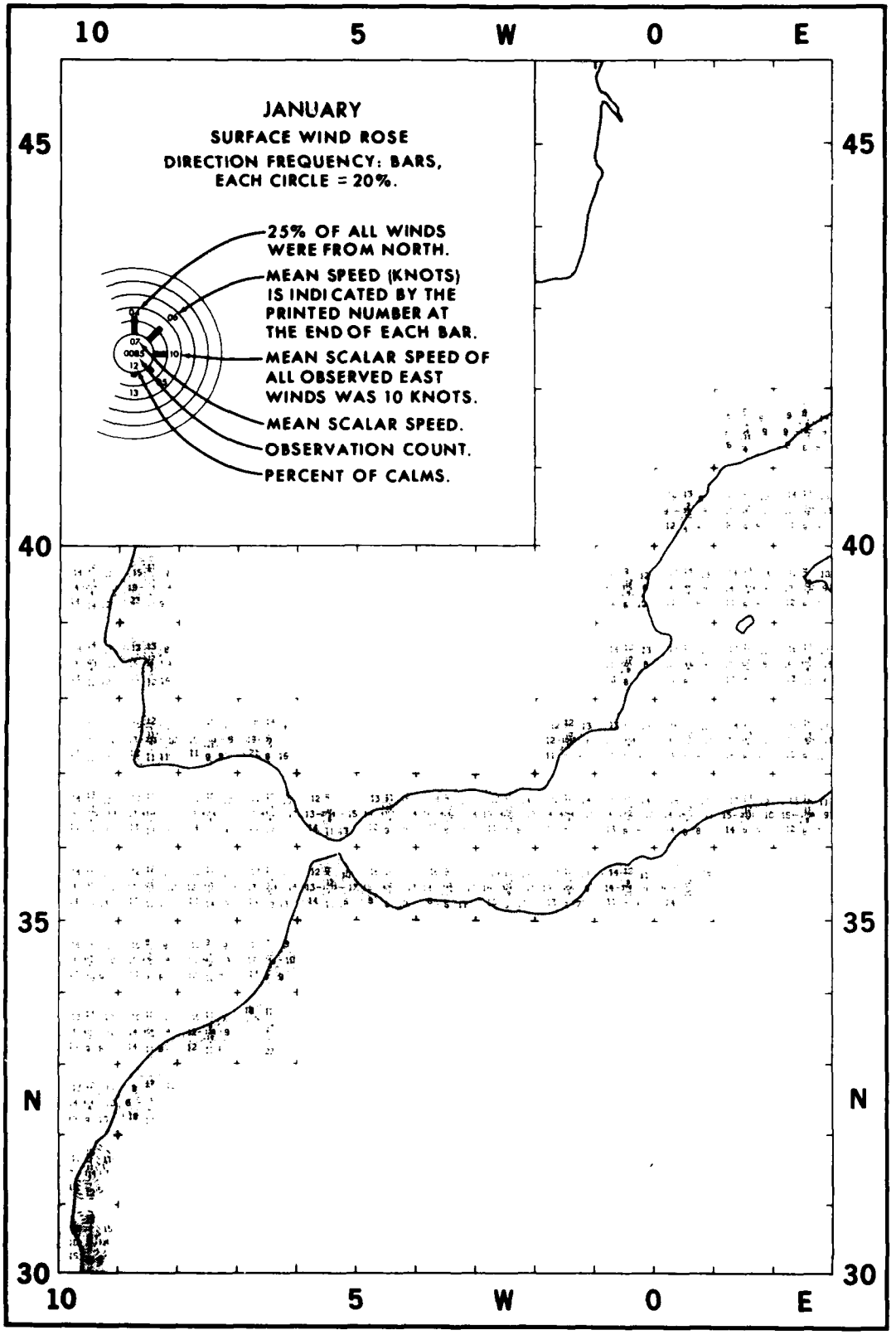

JANUARY
CEILING-VISIBILITY (LOW RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <300 FEET AND/OR VISIBILITY <1 N. MILE
DASHED LINE - CEILING <600 FEET AND/OR VISIBILITY <2 N. MILES
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

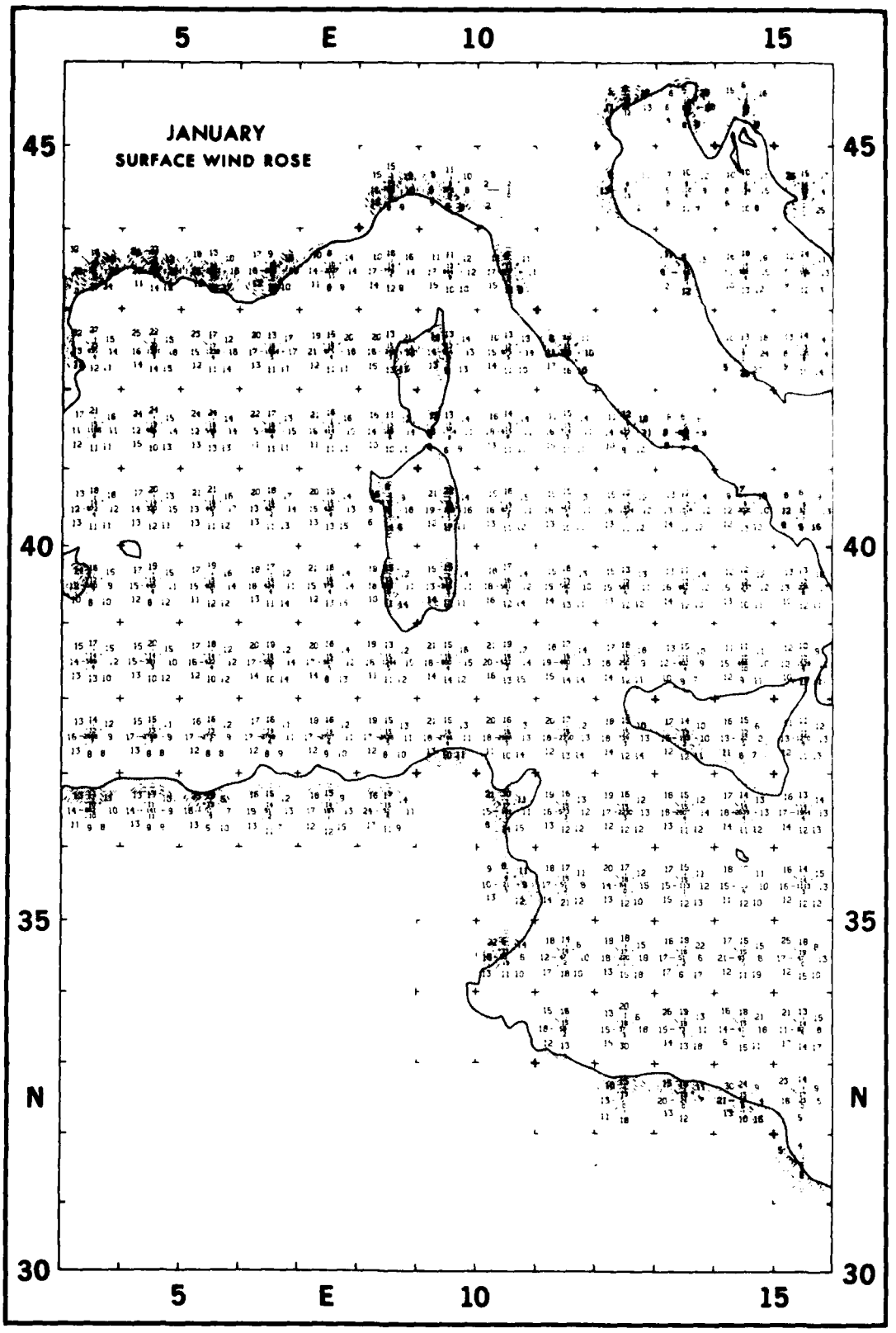

JANUARY
WIND-VISIBILITY-CLOUDINESS
SOLID LINE-
PERCENT FREQUENCY OF OPTIMUM CONDITIONS: LCC ≥5000 FT., (OR NO LCC), VSBY. ≥5 N. MI. AND WIND 11-21 KTS.
DASHED LINE-
PERCENT FREQUENCY OF POOR CONDITIONS. ANY ONE OF THE FOLLOWING CONSTITUTES POOR CONDITIONS:
LCC <300 FT.,
VSBY. <1 N. MI.,
WIND <6 OR ≥34 KTS.
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

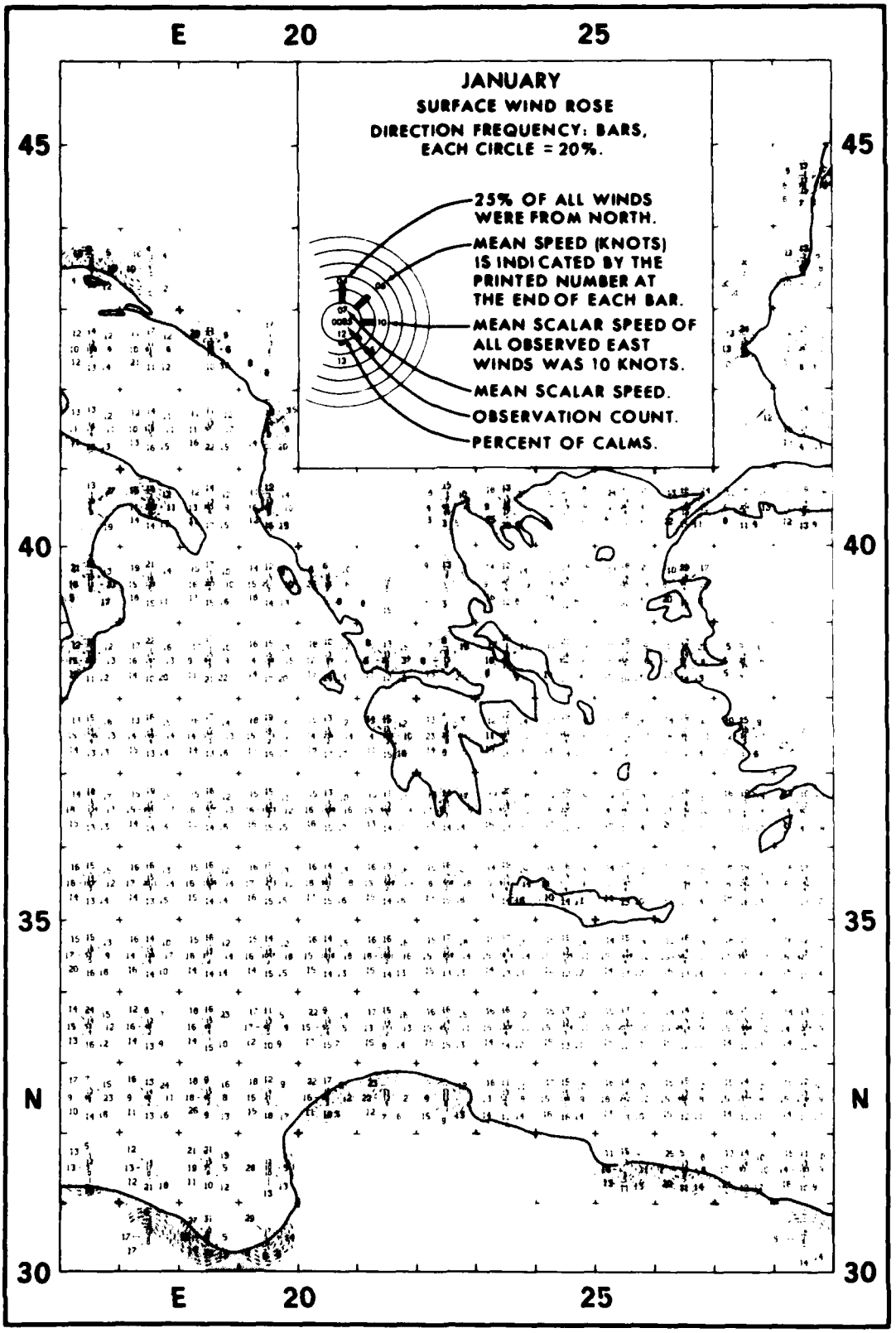

JANUARY
WIND SPEED
MEAN SCALAR WIND SPEED (Knots)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
30
N

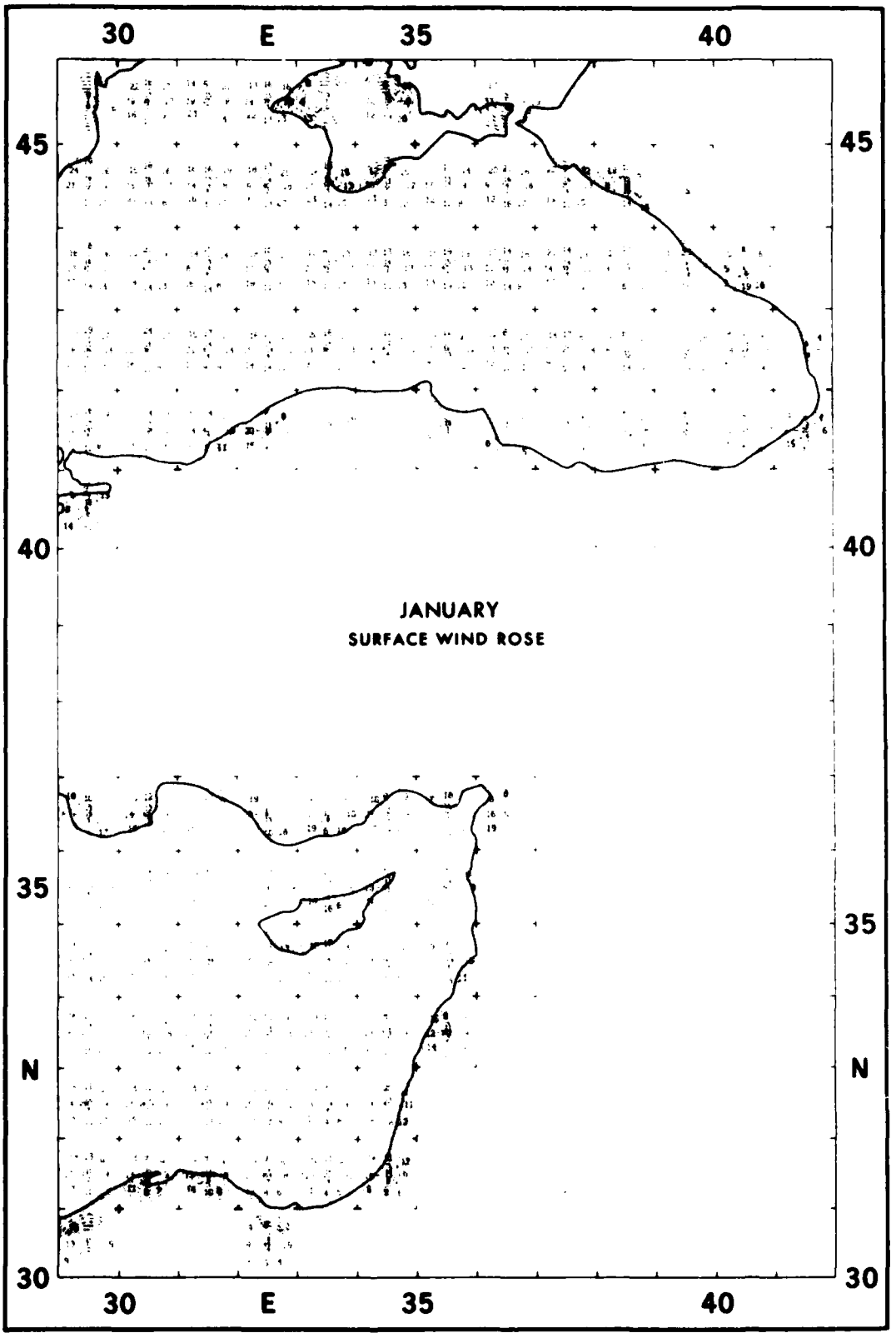

JANUARY
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED <11 KNOTS
DASHED LINE - WIND SPEED ≥34 KNOTS
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

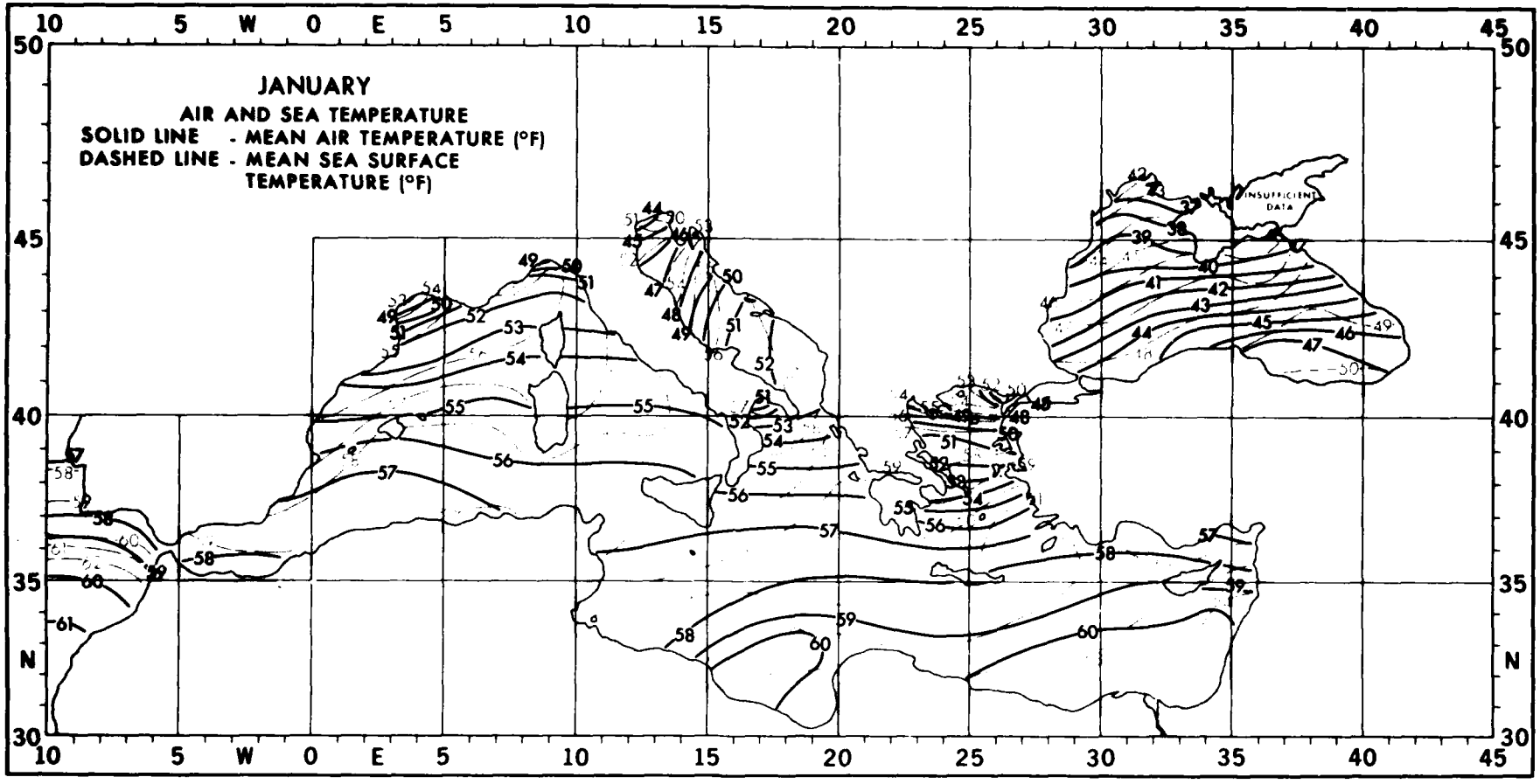

JANUARY
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED 11-21 KNOTS
DASHED LINE - WIND SPEED 22-33 KNOTS
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

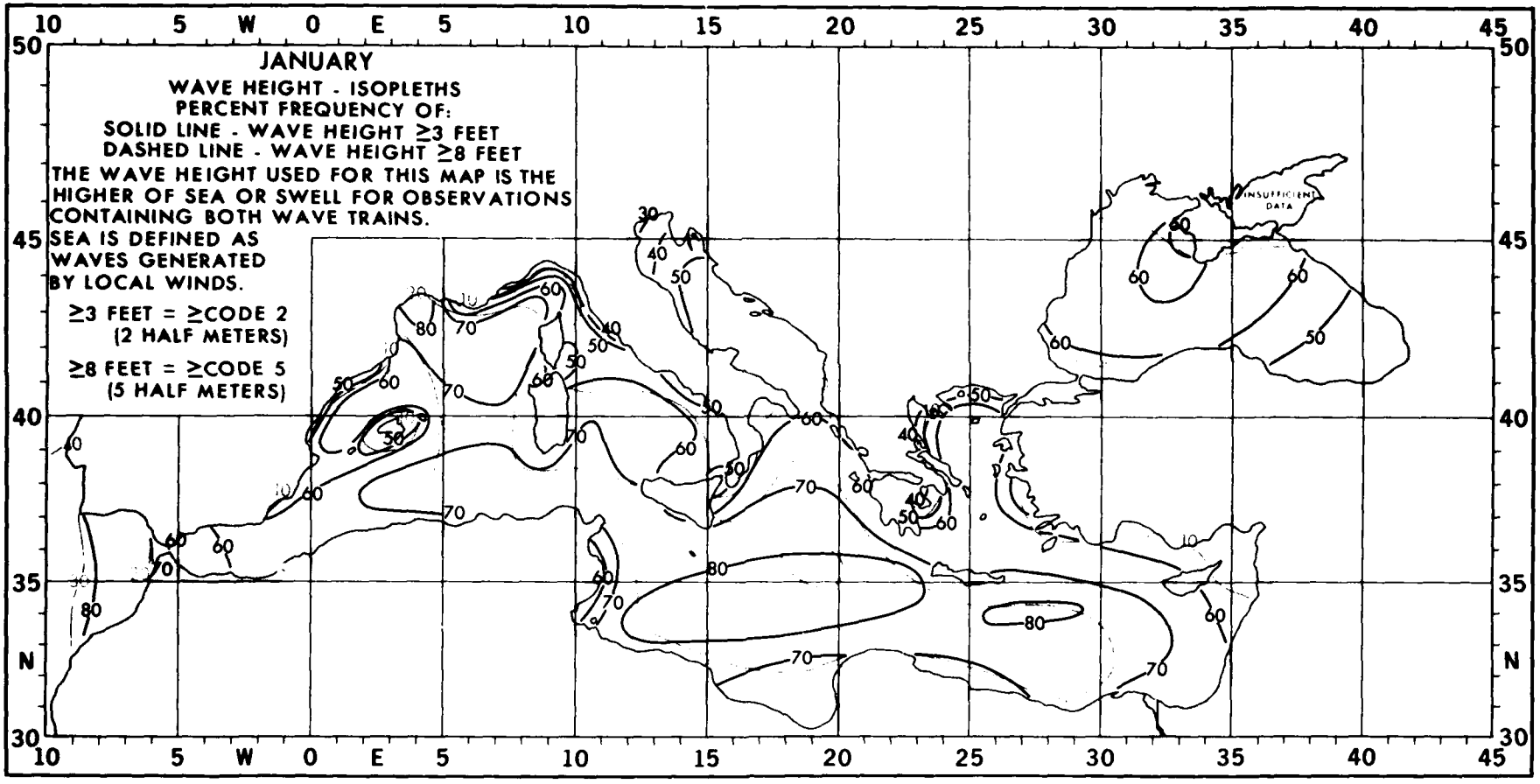

10
5
W
0
E
45
40
35
N
30
JANUARY
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS,
EACH CIRCLE = 20%.
25% OF ALL WINDS WERE FROM NORTH.
MEAN SPEED (KNOTS) IS INDICATED BY THE PRINTED NUMBER AT THE END OF EACH BAR.
MEAN SCALAR SPEED OF ALL OBSERVED EAST WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.

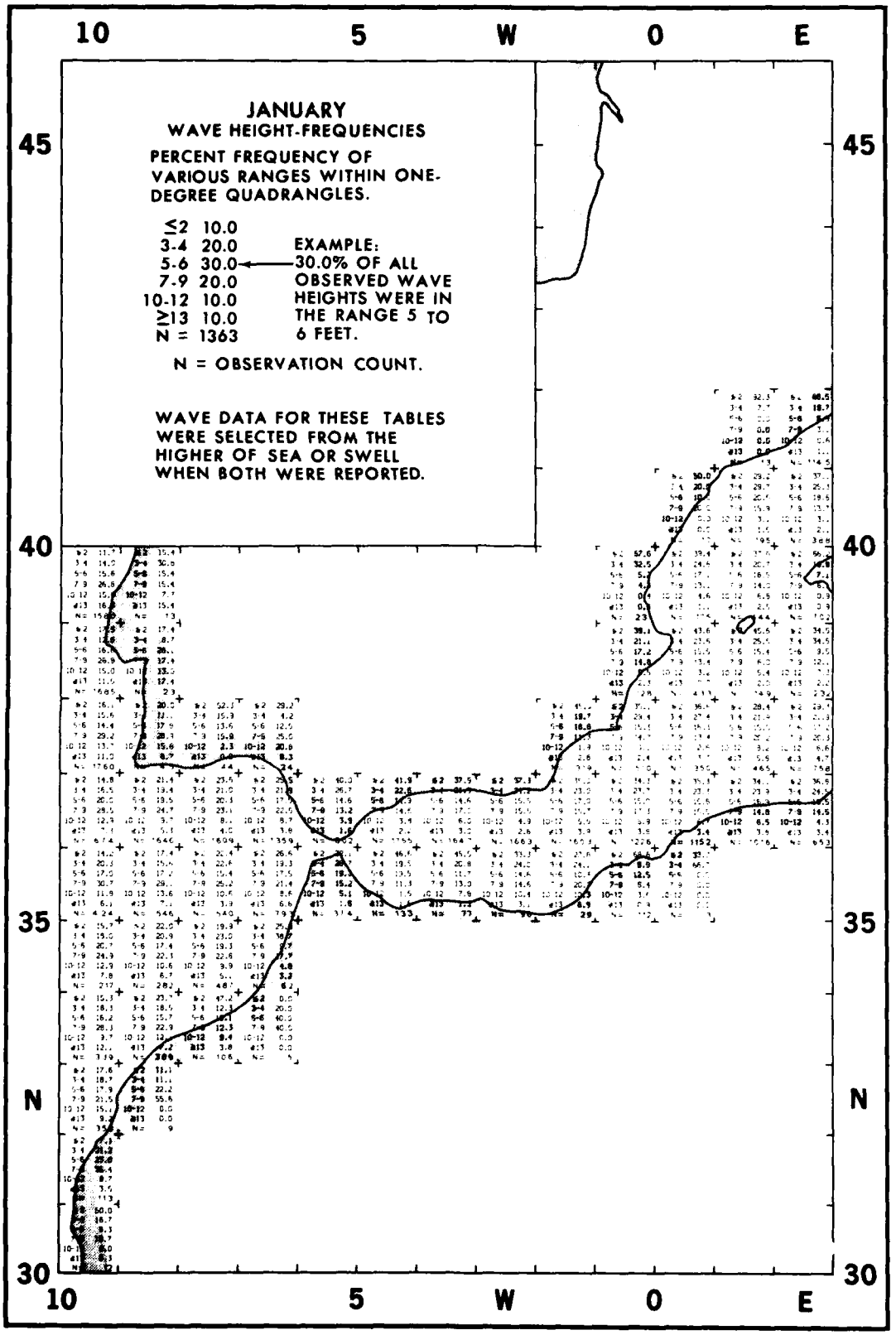

JANUARY
SURFACE WIND ROSE
5
E
10
15
45
40
35
N
30

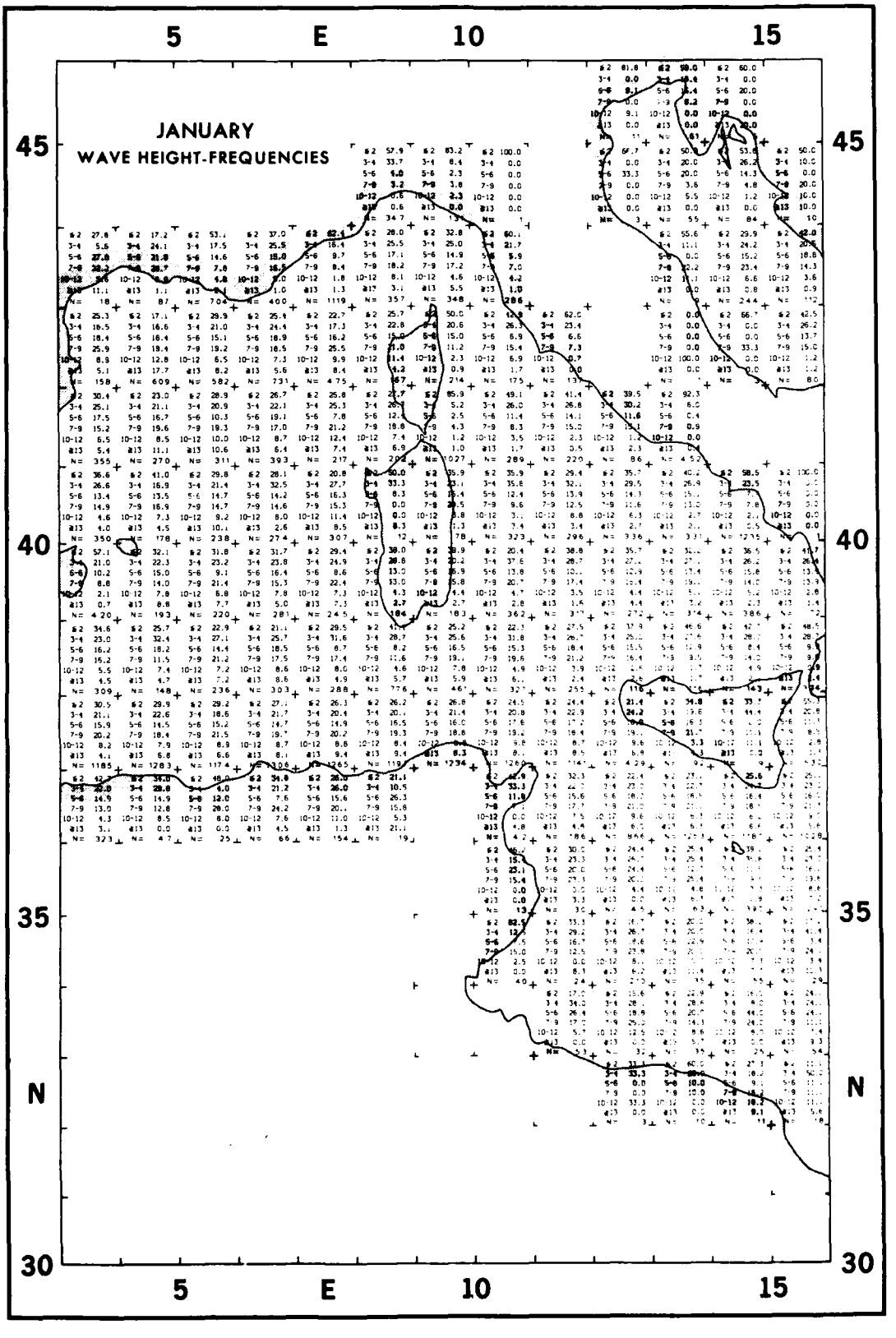

E
20
25
JANUARY
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS,
EACH CIRCLE = 20%.
25% OF ALL WINDS WERE FROM NORTH.
MEAN SPEED (KNOTS) IS INDICATED BY THE PRINTED NUMBER AT THE END OF EACH BAR.
MEAN SCALAR SPEED OF ALL OBSERVED EAST WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.
45
40
35
N
30

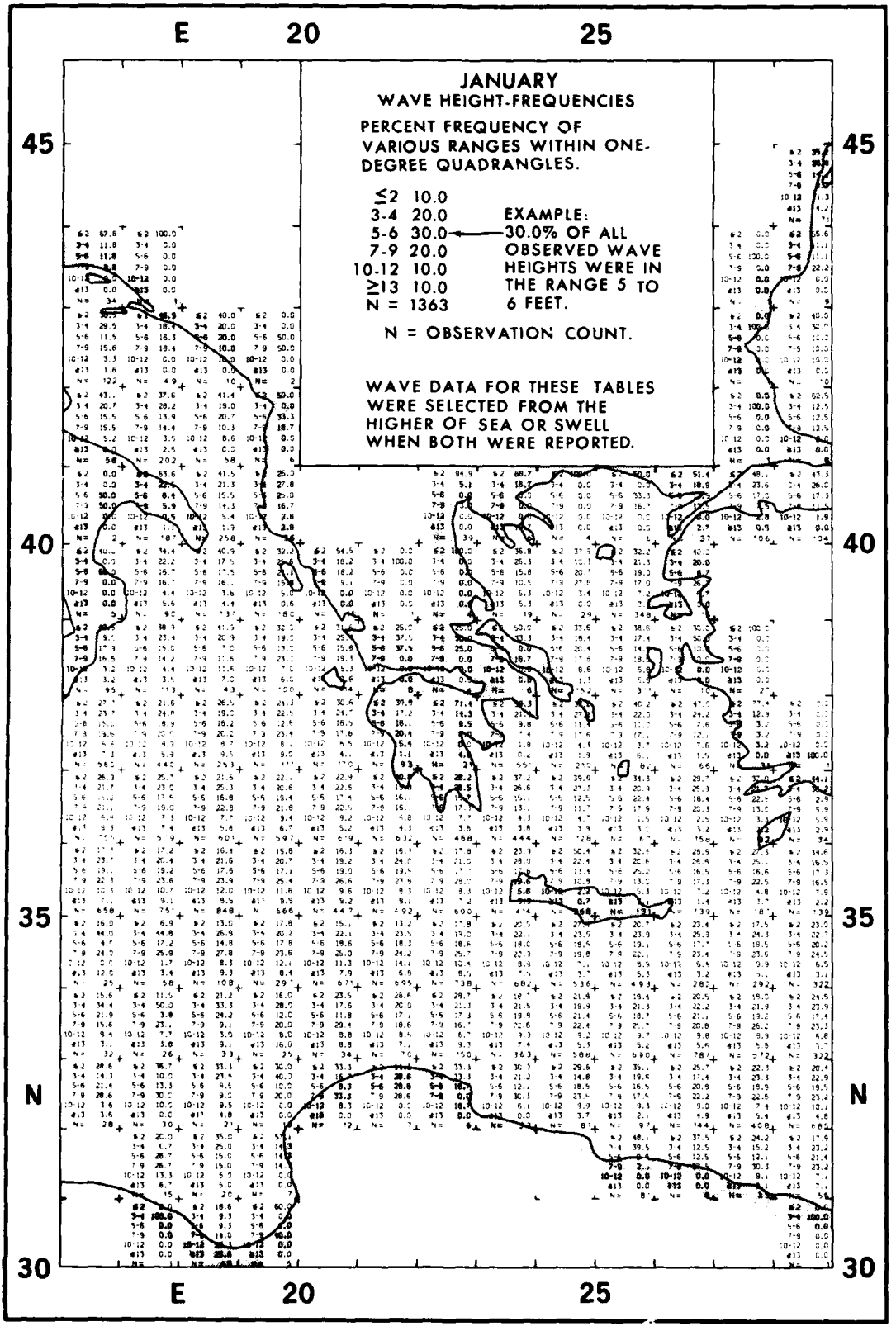

30
E
35
40
45
40
35
N
30
JANUARY
SURFACE WIND ROSE

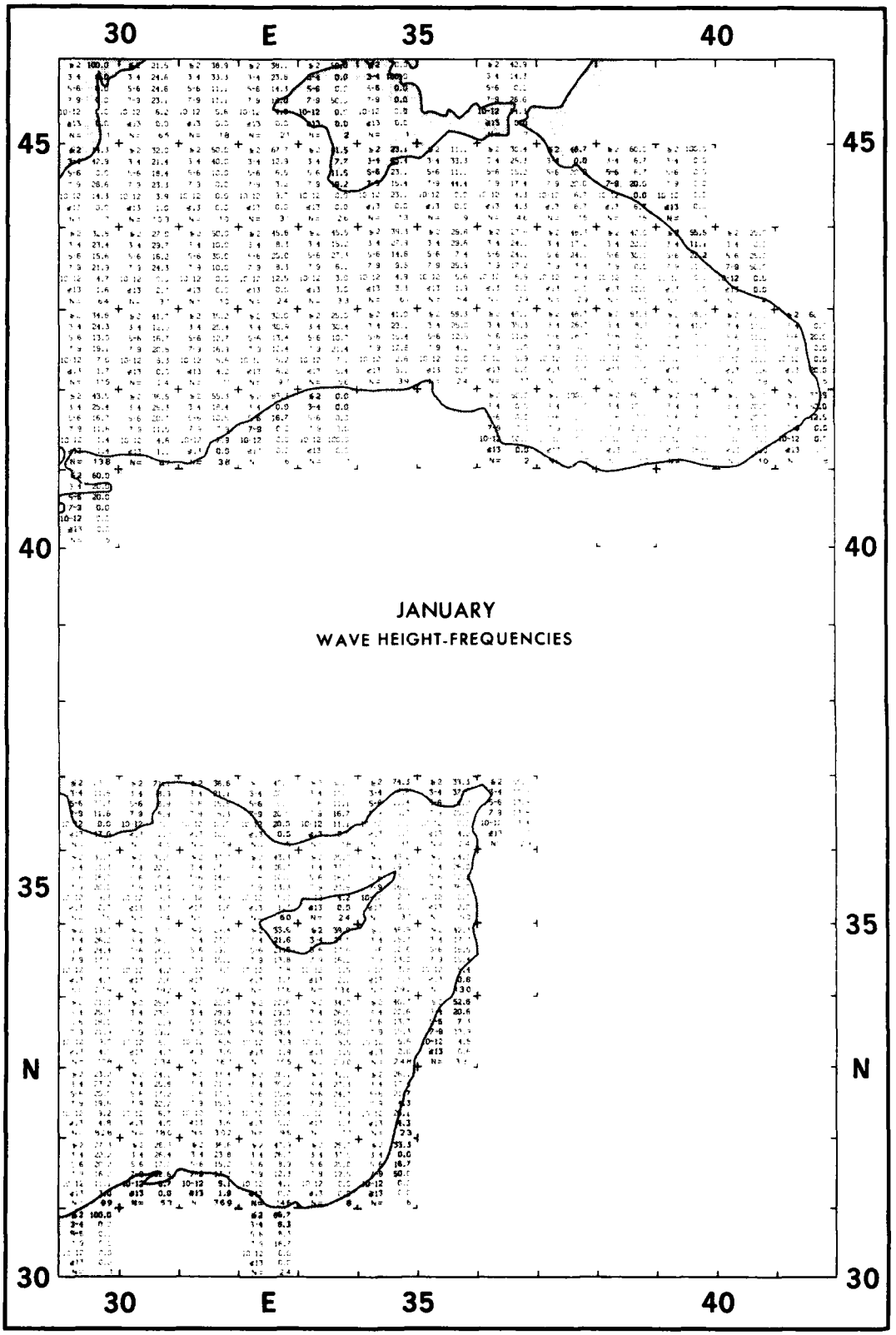

JANUARY
AIR AND SEA TEMPERATURE
SOLID LINE - MEAN AIR TEMPERATURE (°F)
DASHED LINE - MEAN SEA SURFACE TEMPERATURE (°F)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 30 N


JANUARY
WAVE HEIGHT - ISOPLETHS
PERCENT FREQUENCY OF:
SOLID LINE - WAVE HEIGHT ≥3 FEET
DASHED LINE - WAVE HEIGHT ≥8 FEET
THE WAVE HEIGHT USED FOR THIS MAP IS THE HIGHER OF SEA OR SWELL FOR OBSERVATIONS CONTAINING BOTH WAVE TRAINS.
SEA IS DEFINED AS WAVES GENERATED BY LOCAL WINDS.
≥3 FEET = ≥CODE 2 (2 HALF METERS)
≥8 FEET = ≥CODE 5 (5 HALF METERS)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30


10
5
W
0
E
45
40
35
30
N
JANUARY
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.

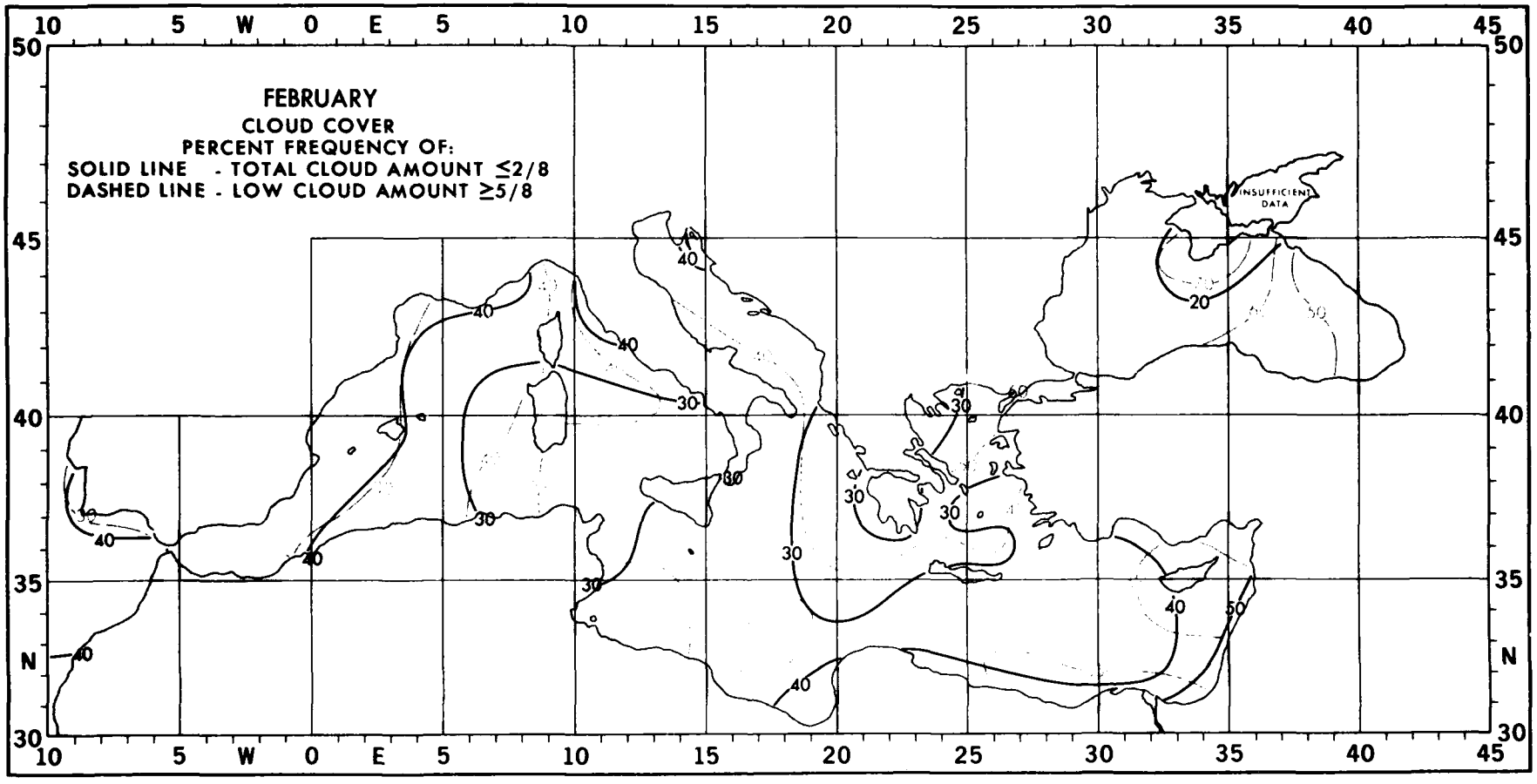

JANUARY
WAVE HEIGHT-FREQUENCIES
5
E
10
15
45
40
35
30
N

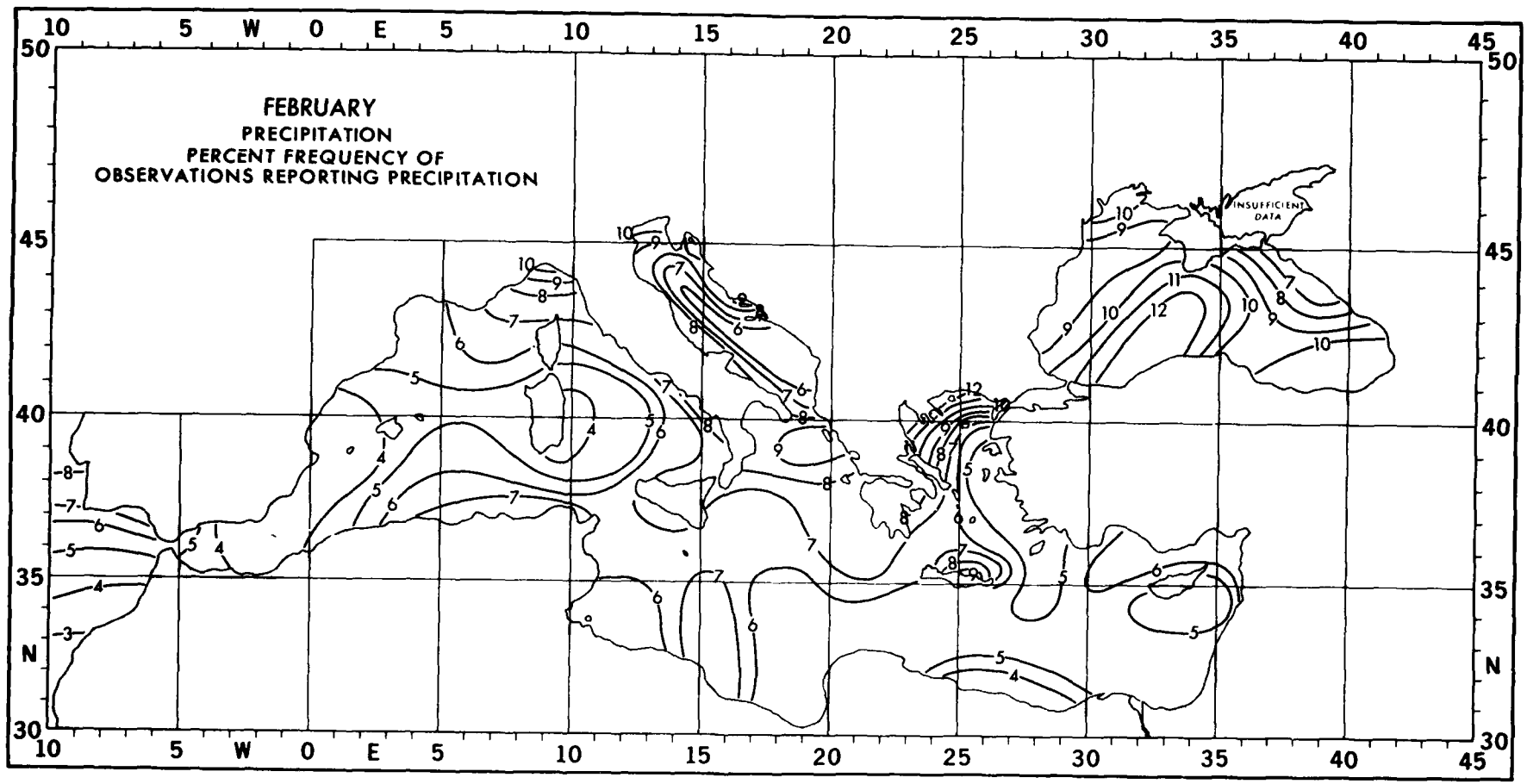

JANUARY
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.
E
20
25
45
40
35
30
N

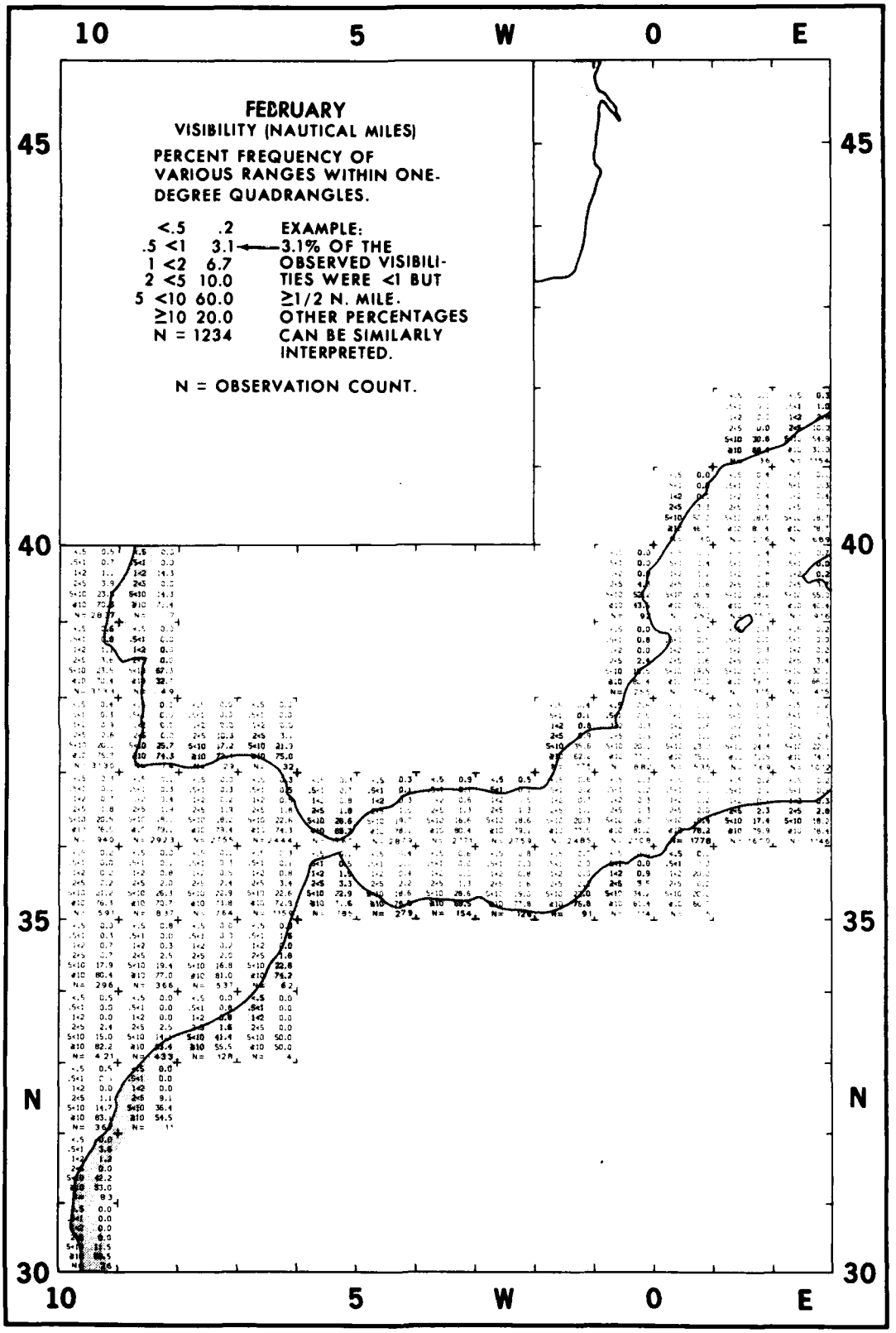


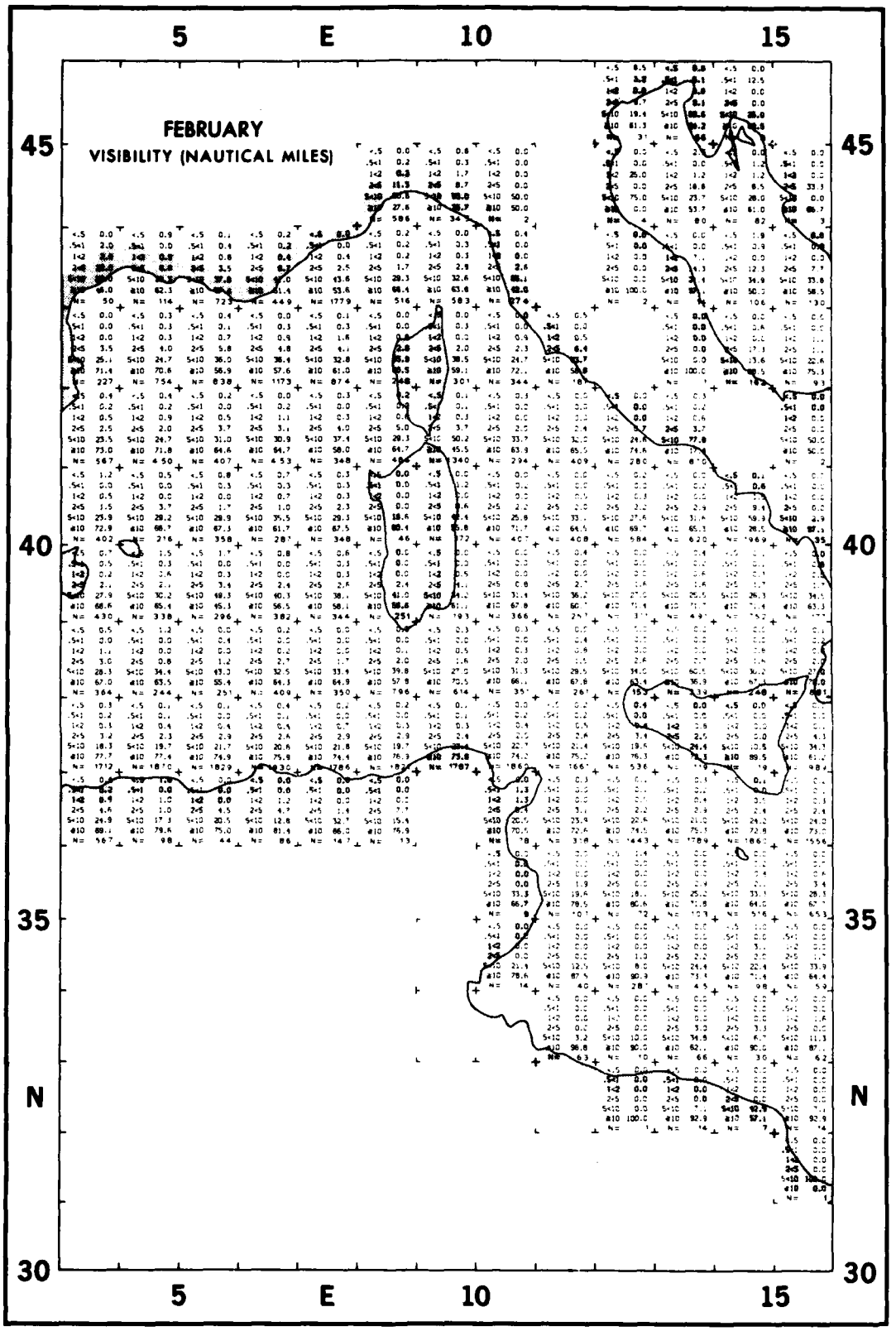
JANUARY

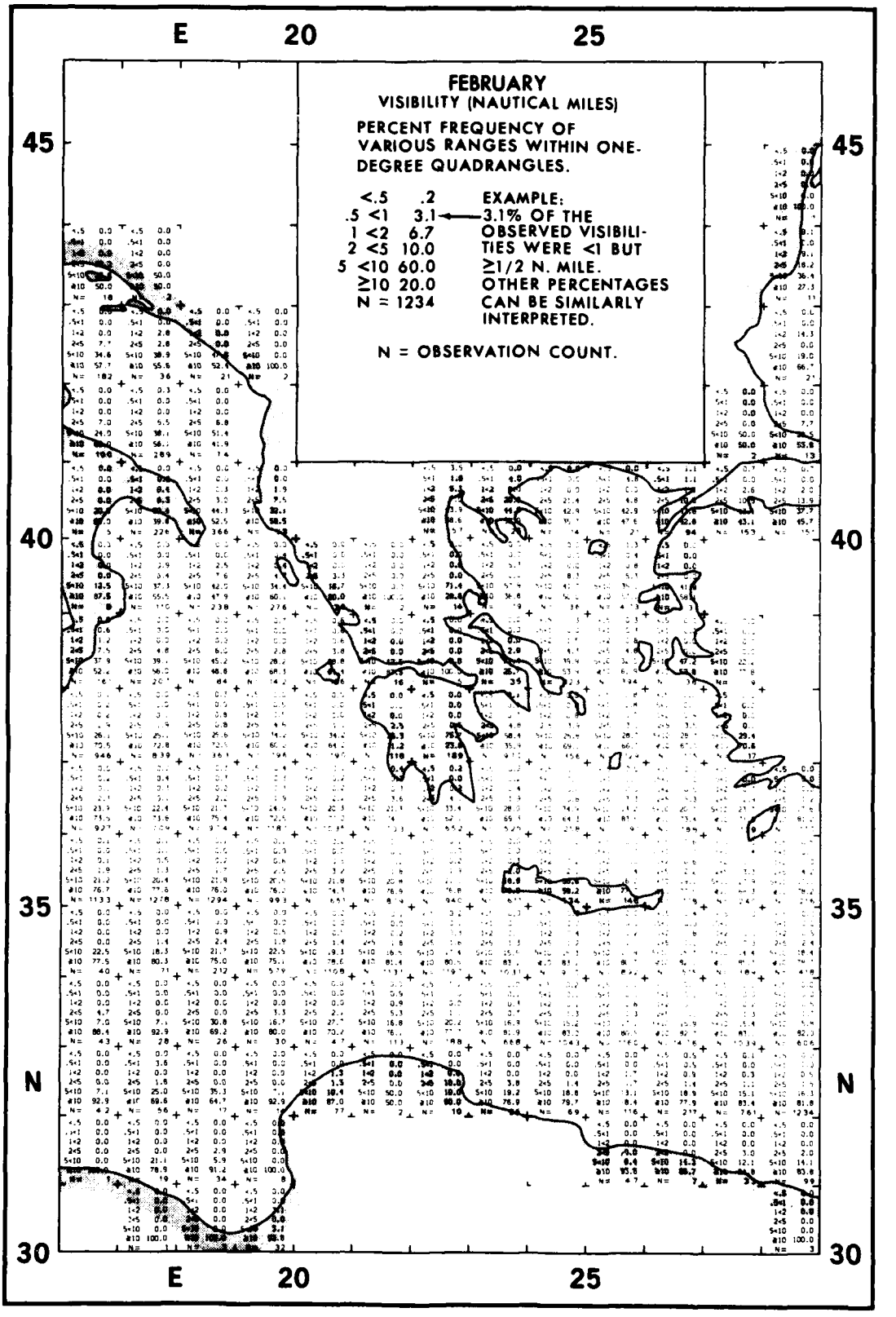
WAVE HEIGHT-FREQUENCIES

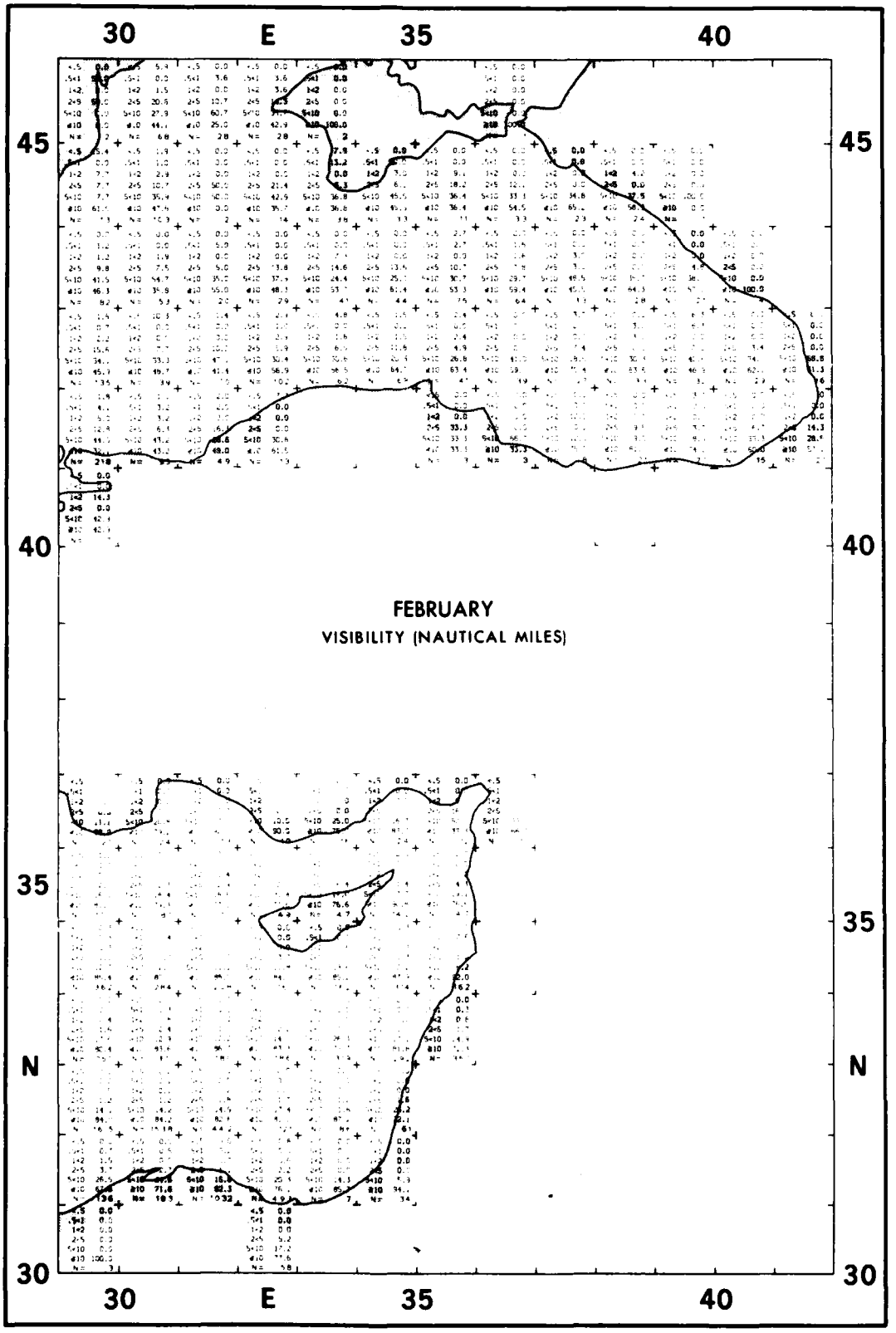

FEBRUARY
CLOUD COVER
PERCENT FREQUENCY OF:
SOLID LINE - TOTAL CLOUD AMOUNT ≤2/8
DASHED LINE - LOW CLOUD AMOUNT ≥5/8
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

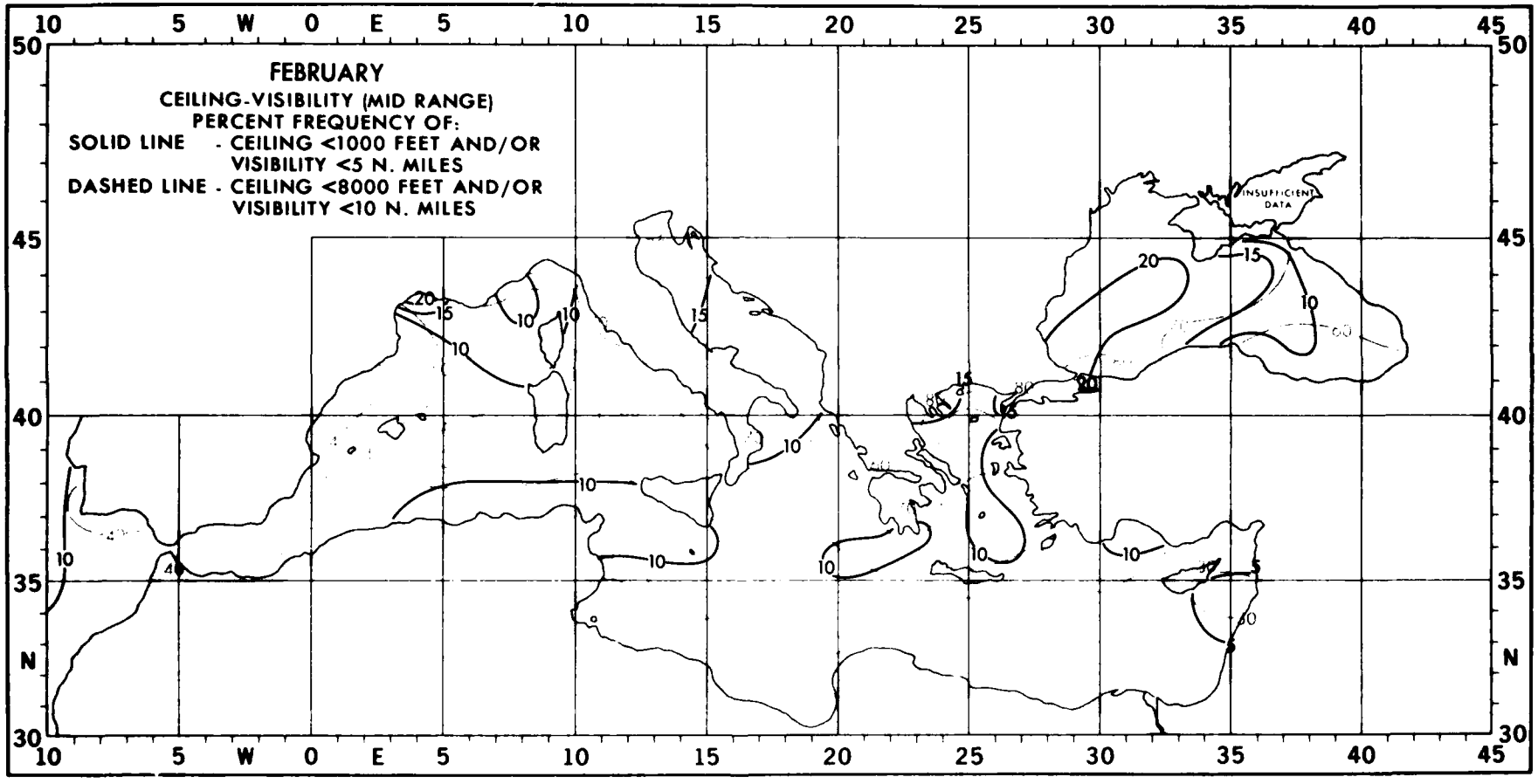

FEBRUARY
PRECIPITATION
PERCENT FREQUENCY OF
OBSERVATIONS REPORTING PRECIPITATION
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

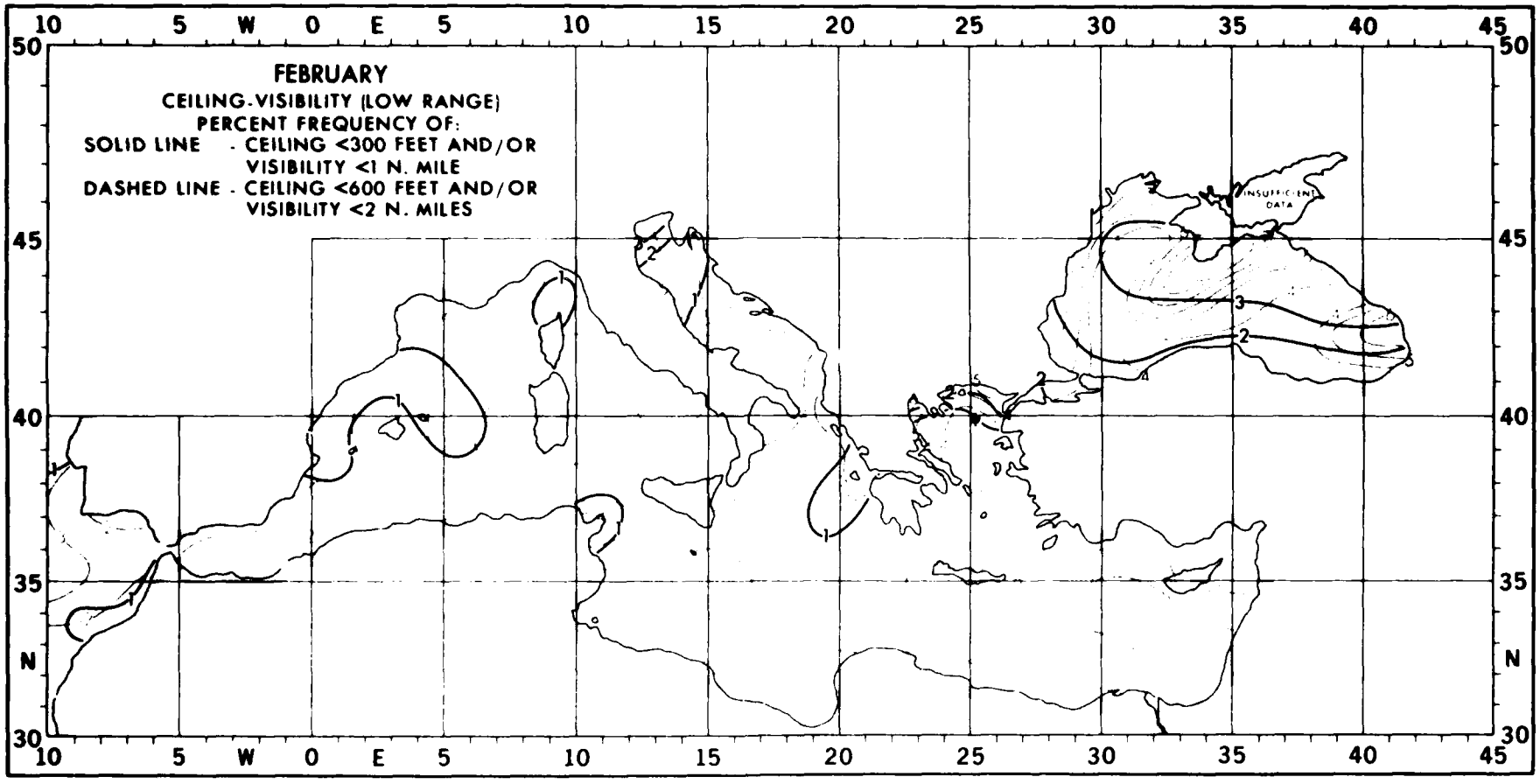

10
5
W
0
E
45
40
35
30
N
FEBRUARY
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.

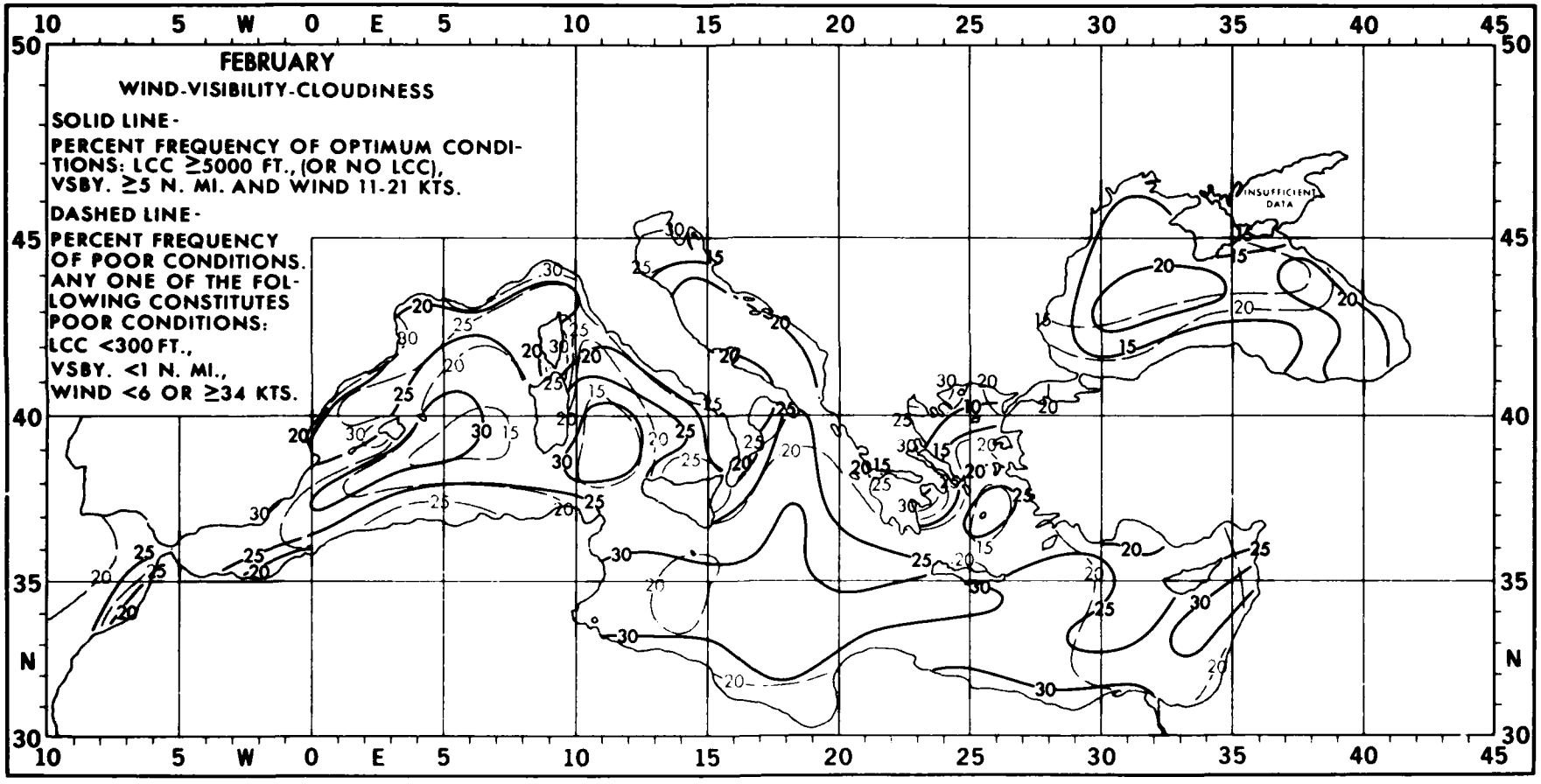

FEBRUARY
VISIBILITY (NAUTICAL MILES)
5
E
10
15
45
40
35
N
30

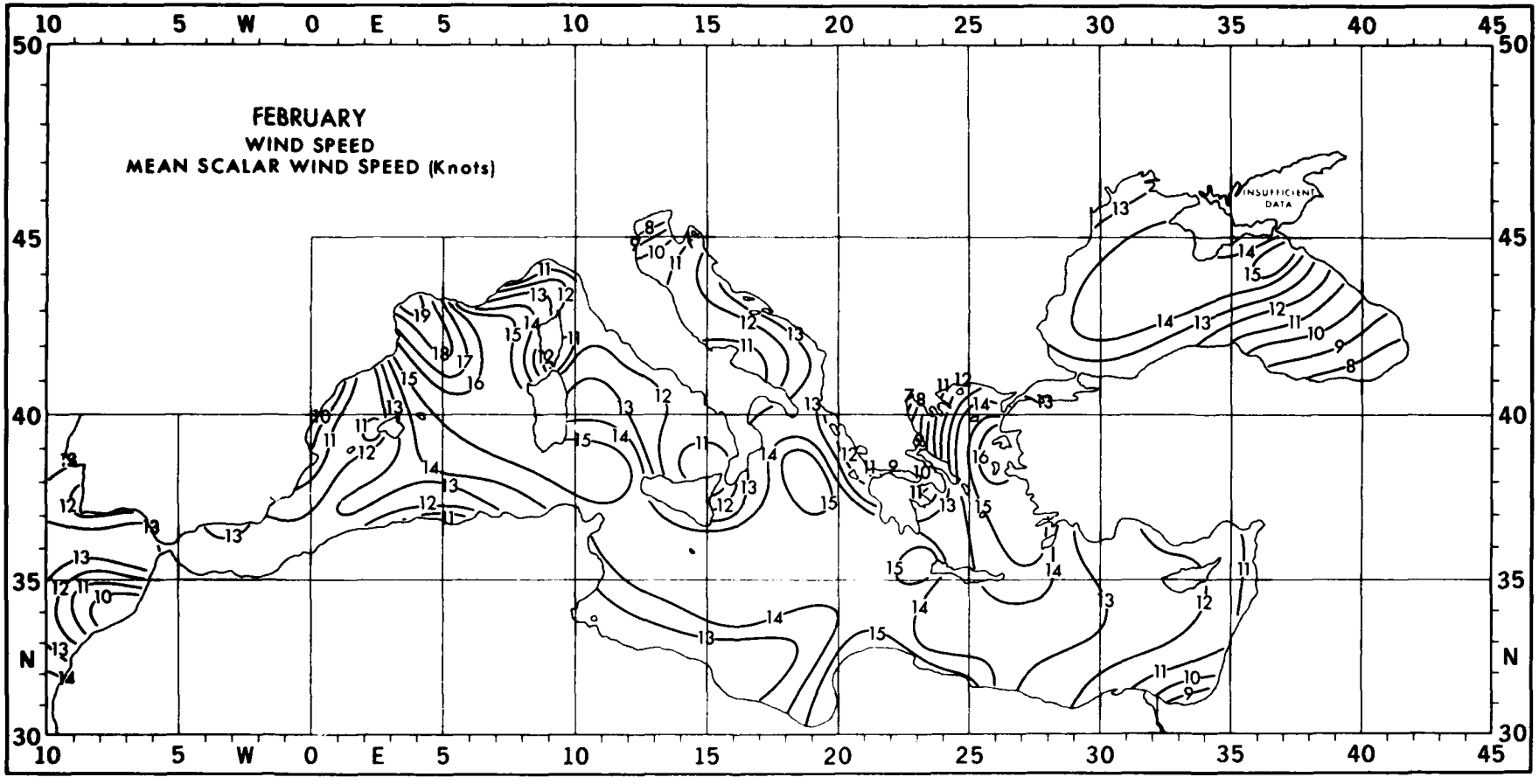

E
20
25
45
40
35
30
N
FEBRUARY
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.

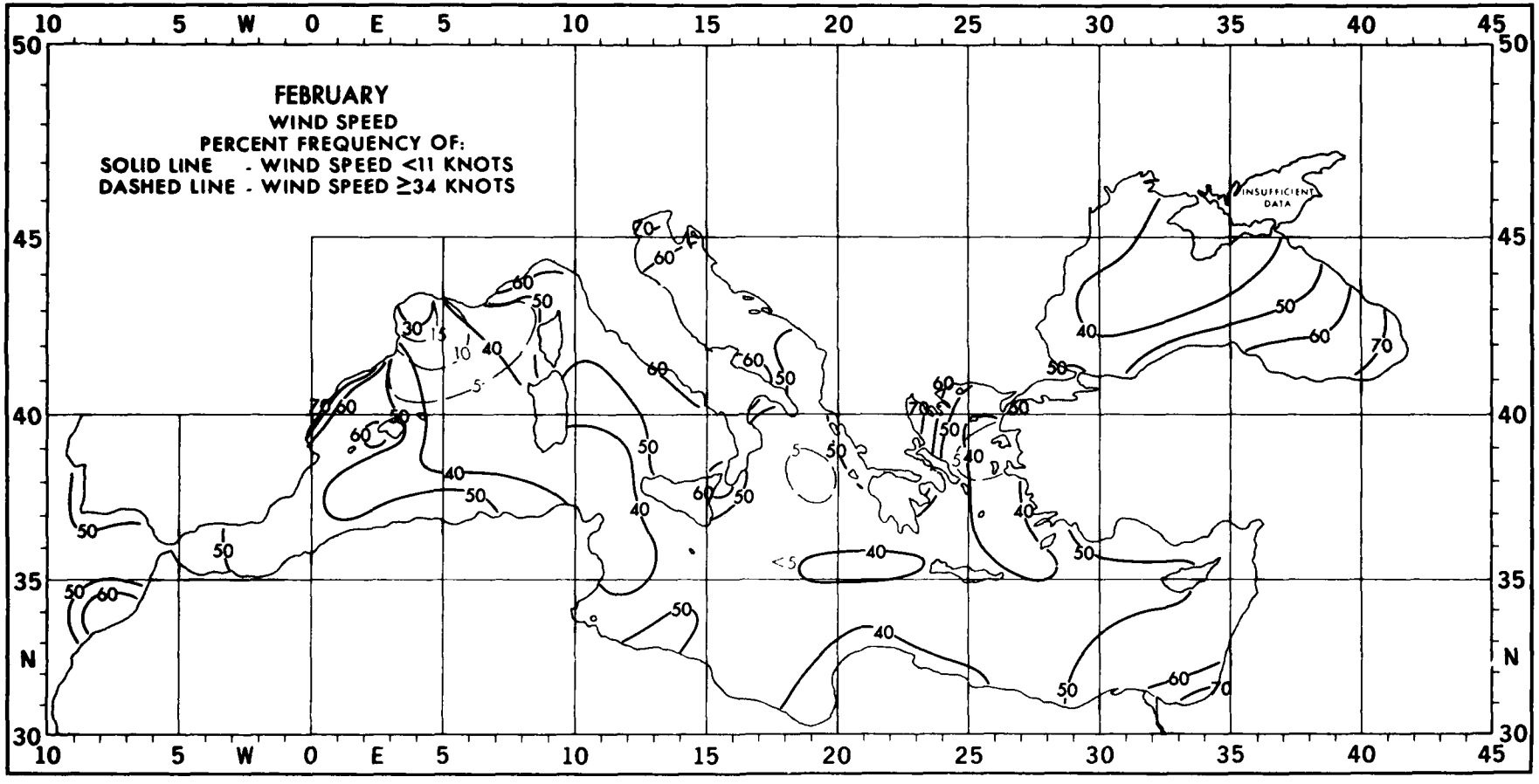

30
E
35
40
45
40
35
N
30
FEBRUARY
VISIBILITY (NAUTICAL MILES)

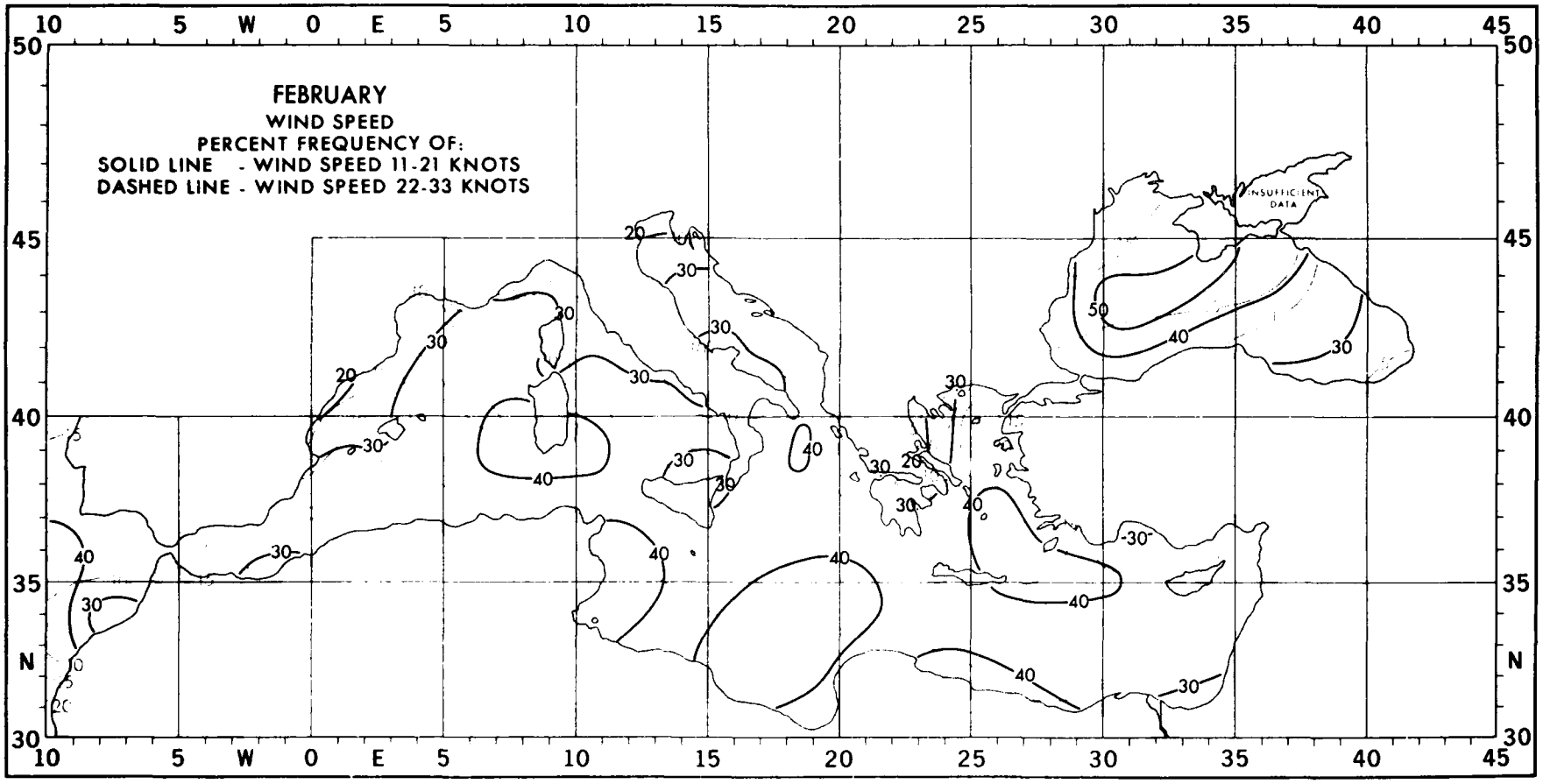

FEBRUARY
CEILING-VISIBILITY (MID RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <1000 FEET AND/OR VISIBILITY <5 N. MILES
DASHED LINE - CEILING <8000 FEET AND/OR VISIBILITY <10 N. MILES
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

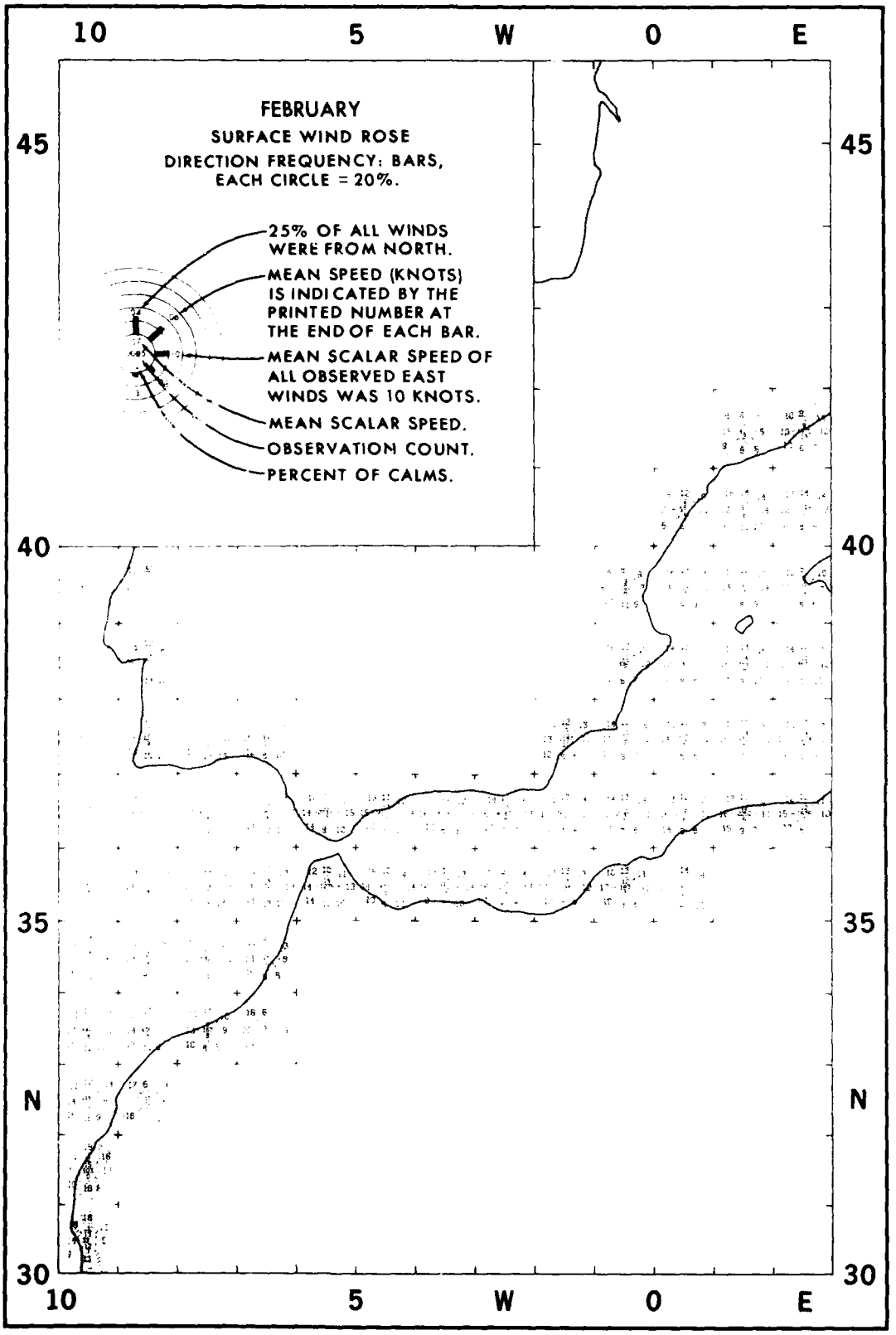

FEBRUARY
CEILING-VISIBILITY (LOW RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <300 FEET AND/OR VISIBILITY <1 N. MILE
DASHED LINE - CEILING <600 FEET AND/OR VISIBILITY <2 N. MILES
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

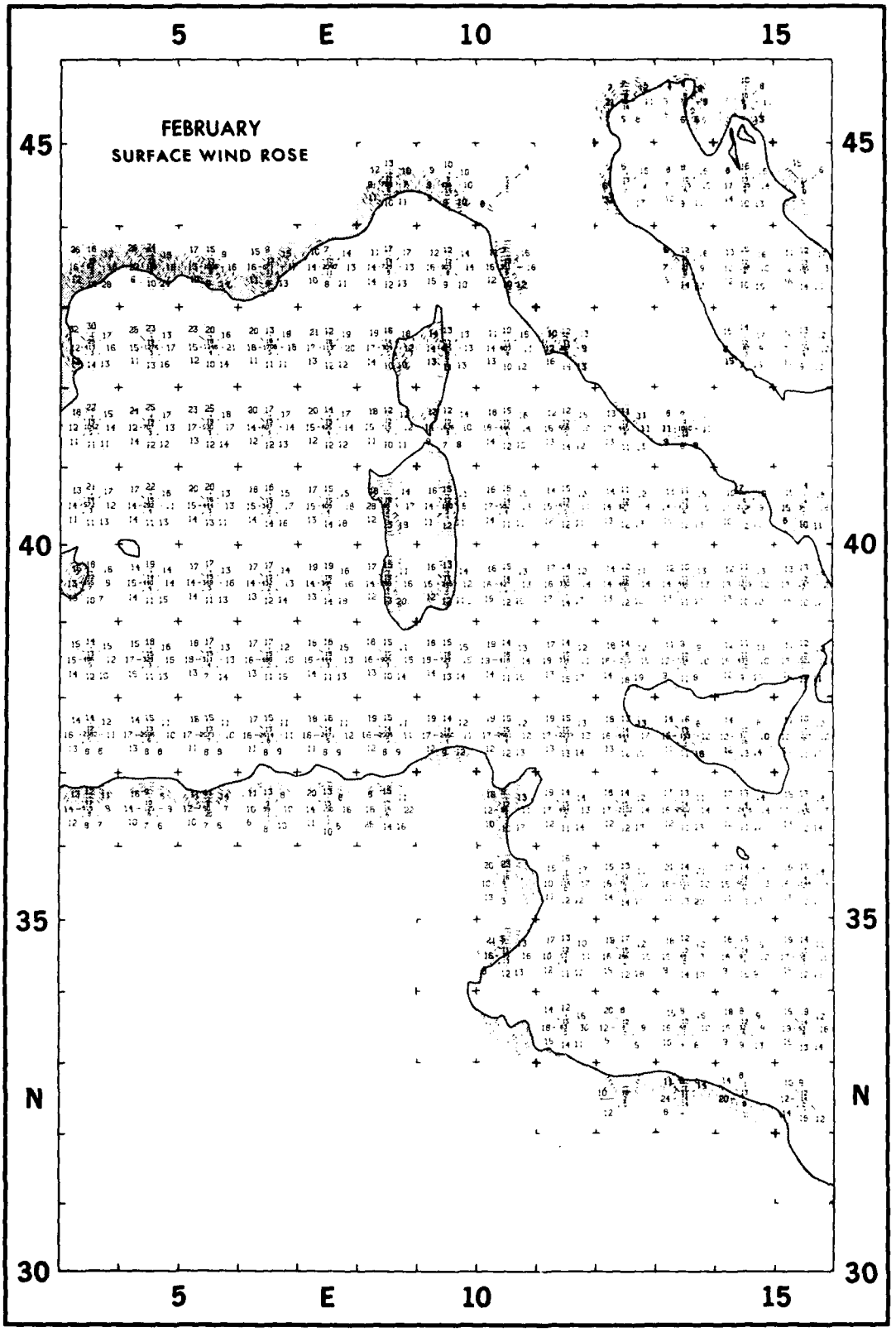

FEBRUARY
WIND-VISIBILITY-CLOUDINESS
SOLID LINE-
PERCENT FREQUENCY OF OPTIMUM CONDITIONS: LCC ≥5000 FT., (OR NO LCC), VSBY. ≥5 N. MI. AND WIND 11-21 KTS.
DASHED LINE-
PERCENT FREQUENCY OF POOR CONDITIONS. ANY ONE OF THE FOLLOWING CONSTITUTES POOR CONDITIONS:
LCC <300 FT.,
VSBY. <1 N. MI.,
WIND <6 OR ≥34 KTS.
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

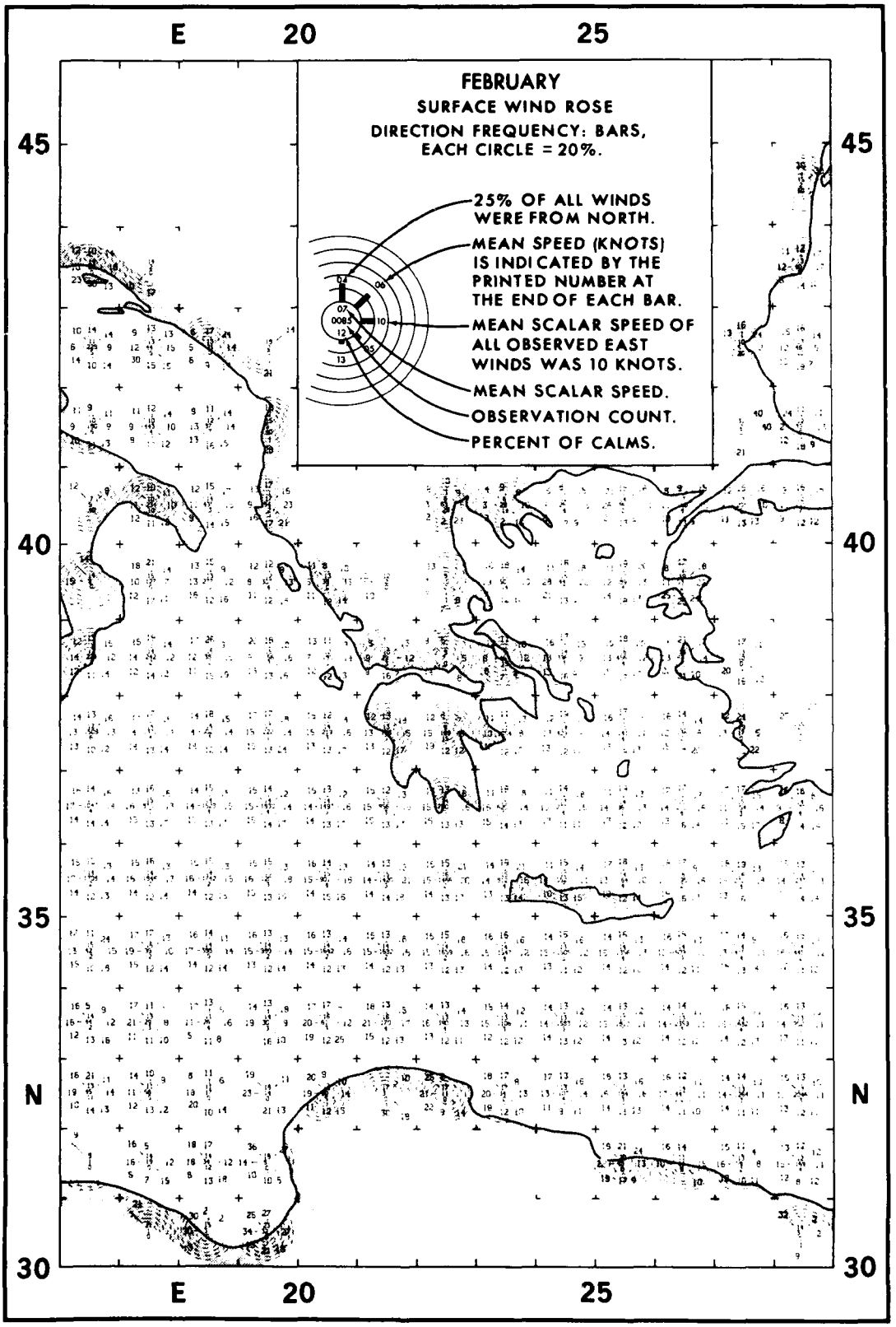

FEBRUARY
WIND SPEED
MEAN SCALAR WIND SPEED (Knots)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

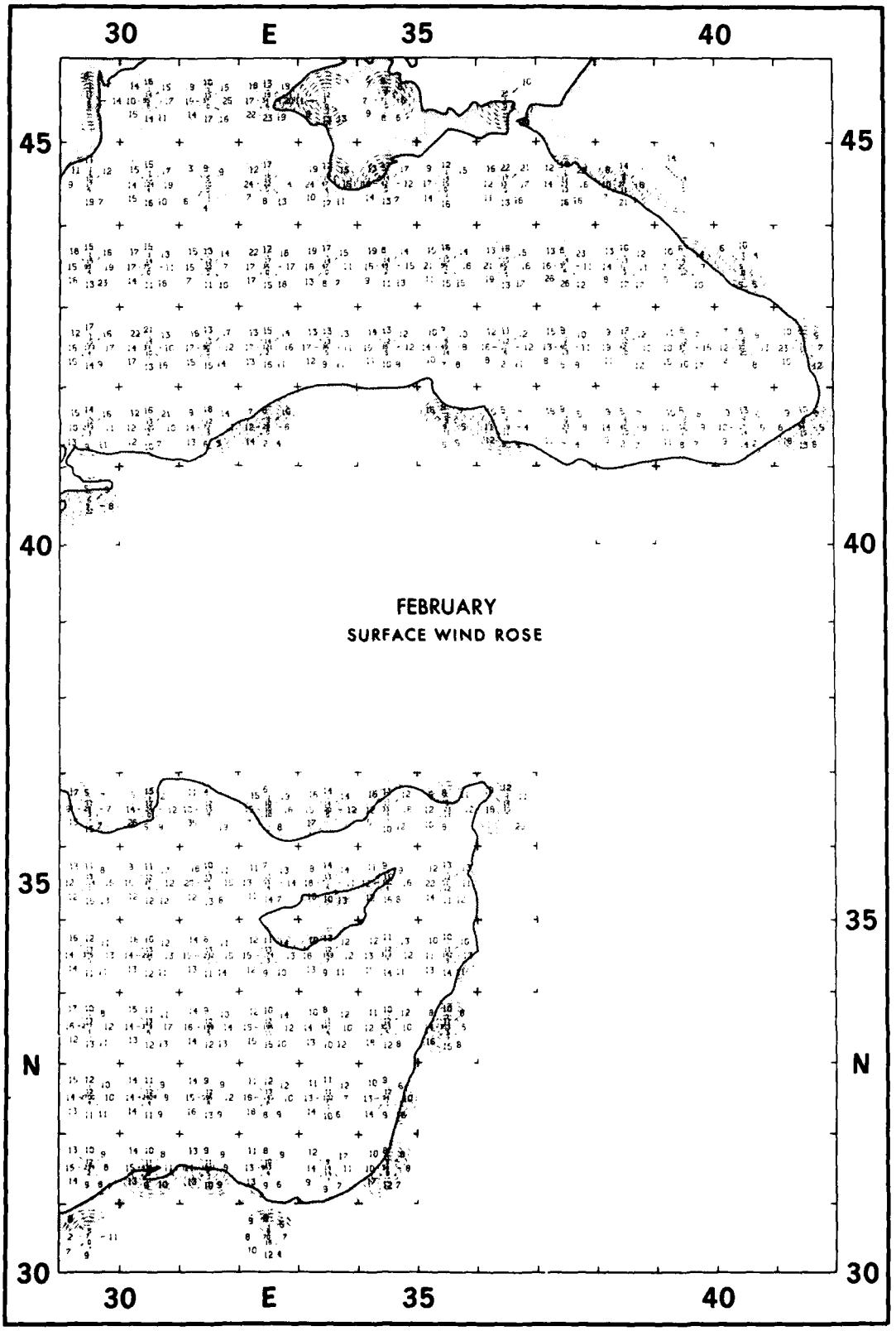

FEBRUARY
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED <11 KNOTS
DASHED LINE - WIND SPEED ≥34 KNOTS
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

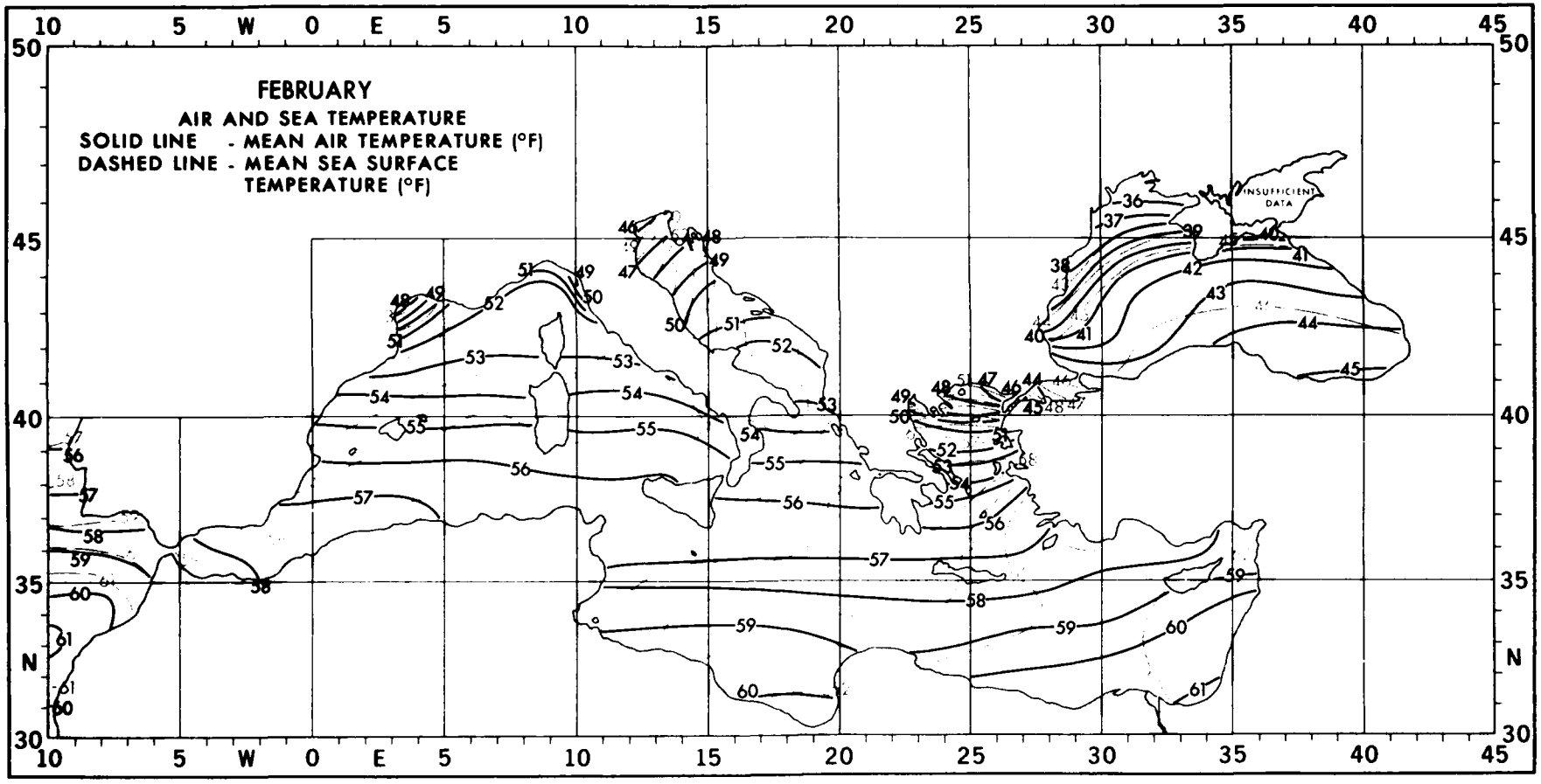

FEBRUARY
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED 11-21 KNOTS
DASHED LINE - WIND SPEED 22-33 KNOTS
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

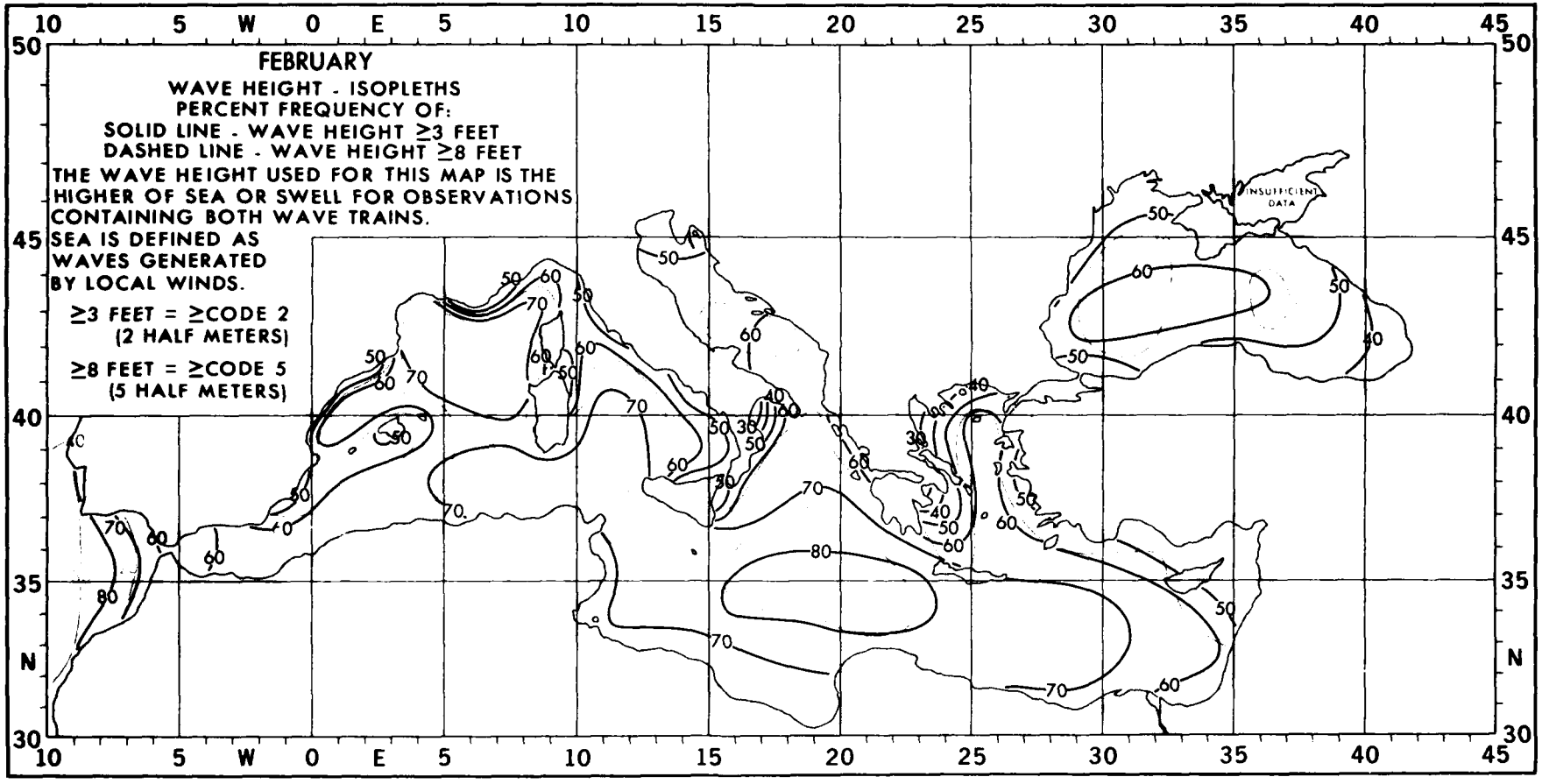

10
5
W
0
E
45
40
35
30
N
FEBRUARY
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS,
EACH CIRCLE = 20%.
25% OF ALL WINDS WERE FROM NORTH.
MEAN SPEED (KNOTS) IS INDICATED BY THE PRINTED NUMBER AT THE END OF EACH BAR.
MEAN SCALAR SPEED OF ALL OBSERVED EAST WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.

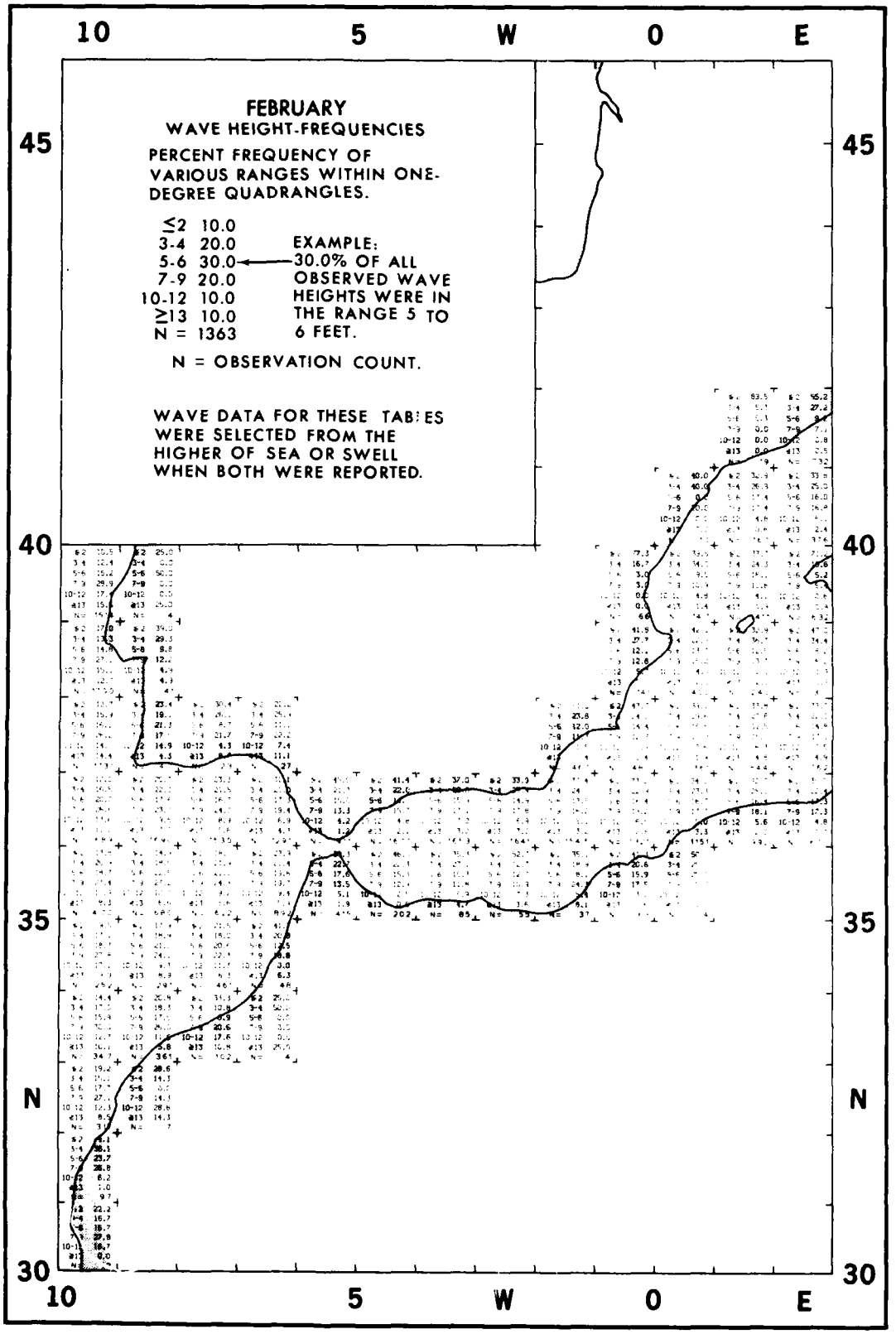

FEBRUARY
SURFACE WIND ROSE
5
E
10
15
45
40
35
N
30

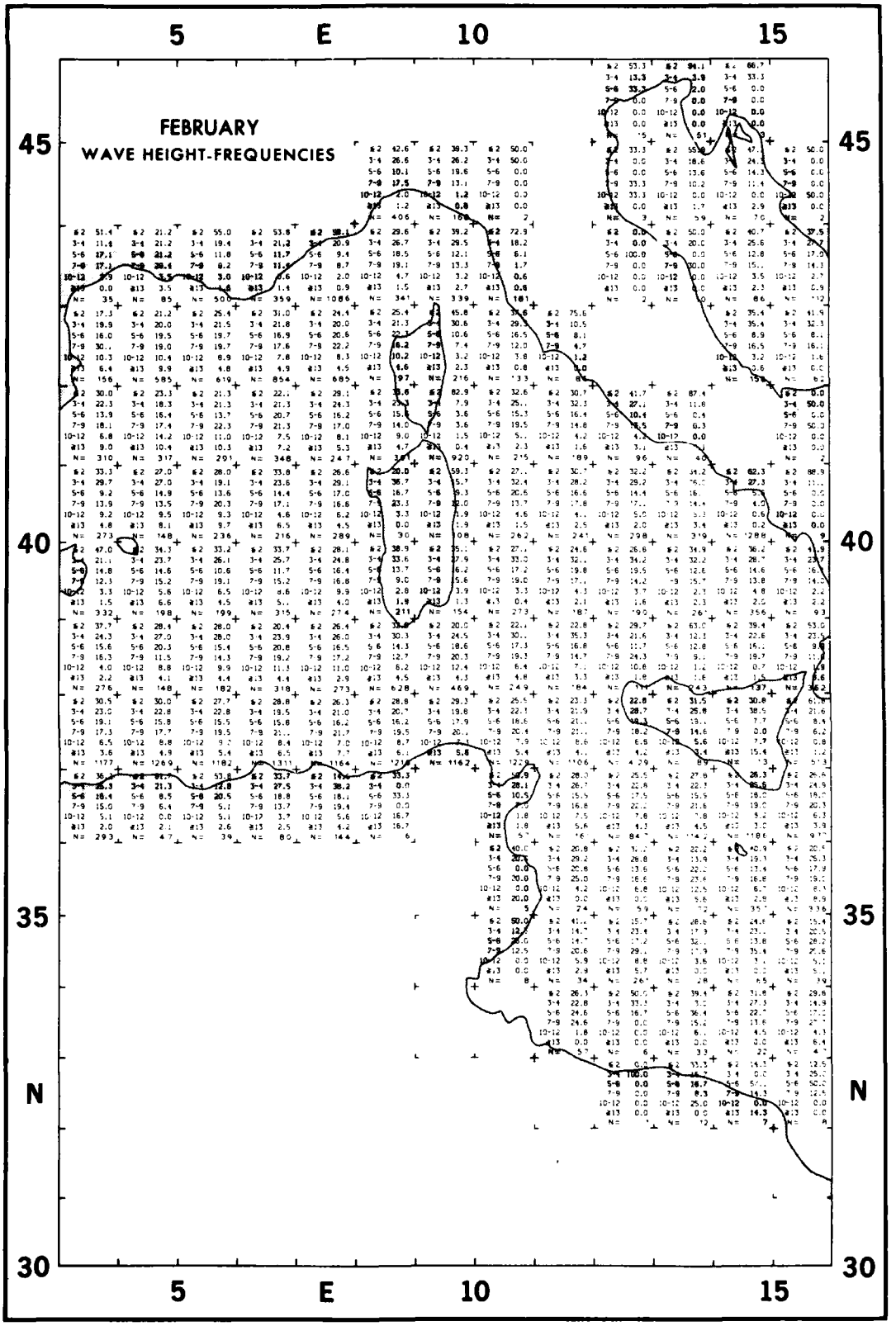

E
20
25
45
40
35
N
30
FEBRUARY
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS,
EACH CIRCLE = 20%.
25% OF ALL WINDS WERE FROM NORTH.
MEAN SPEED (KNOTS) IS INDICATED BY THE PRINTED NUMBER AT THE END OF EACH BAR.
MEAN SCALAR SPEED OF ALL OBSERVED EAST WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.

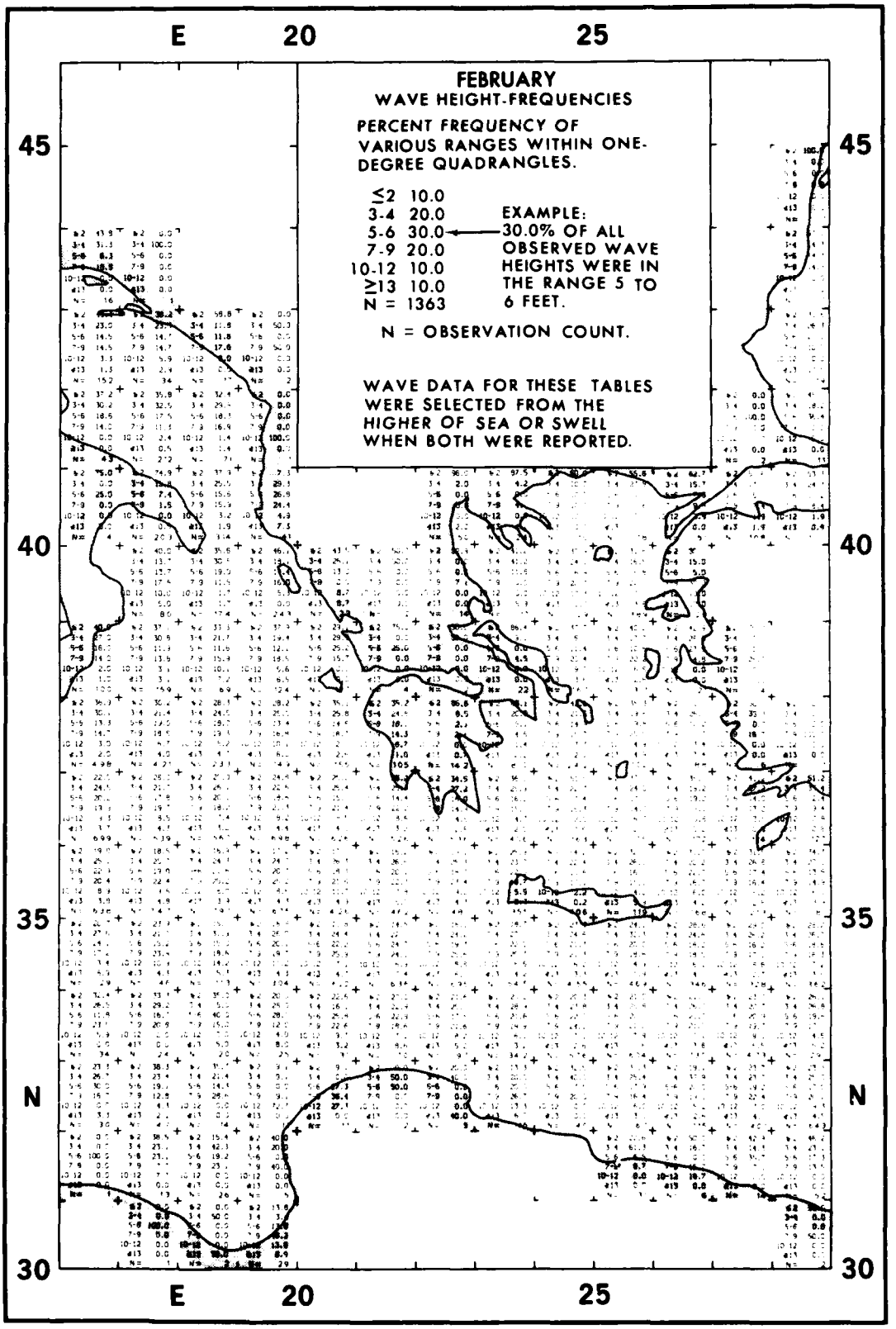

30
E
35
40
45
40
35
N
30
FEBRUARY
SURFACE WIND ROSE

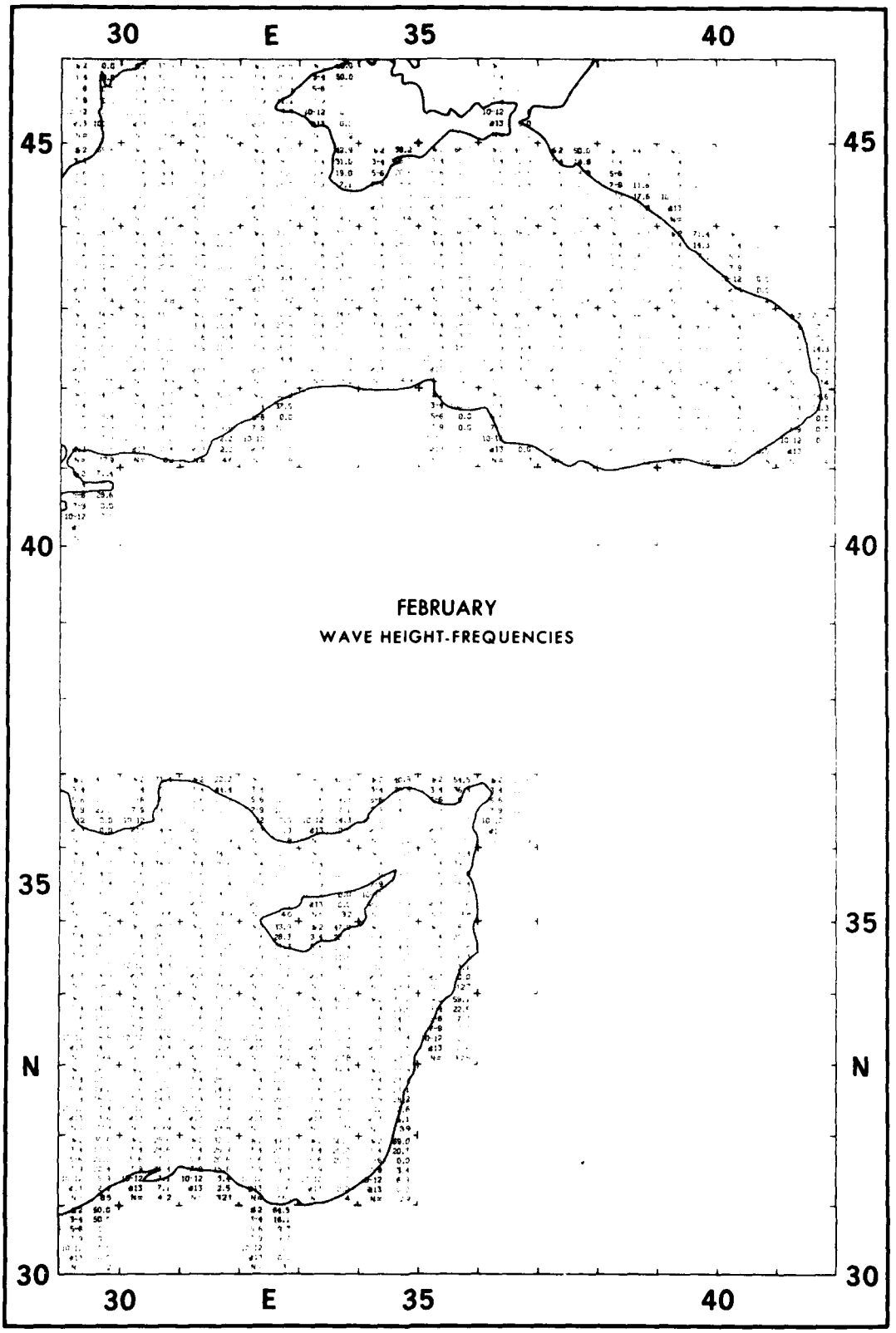

FEBRUARY
AIR AND SEA TEMPERATURE
SOLID LINE - MEAN AIR TEMPERATURE (°F)
DASHED LINE - MEAN SEA SURFACE TEMPERATURE (°F)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 30 N

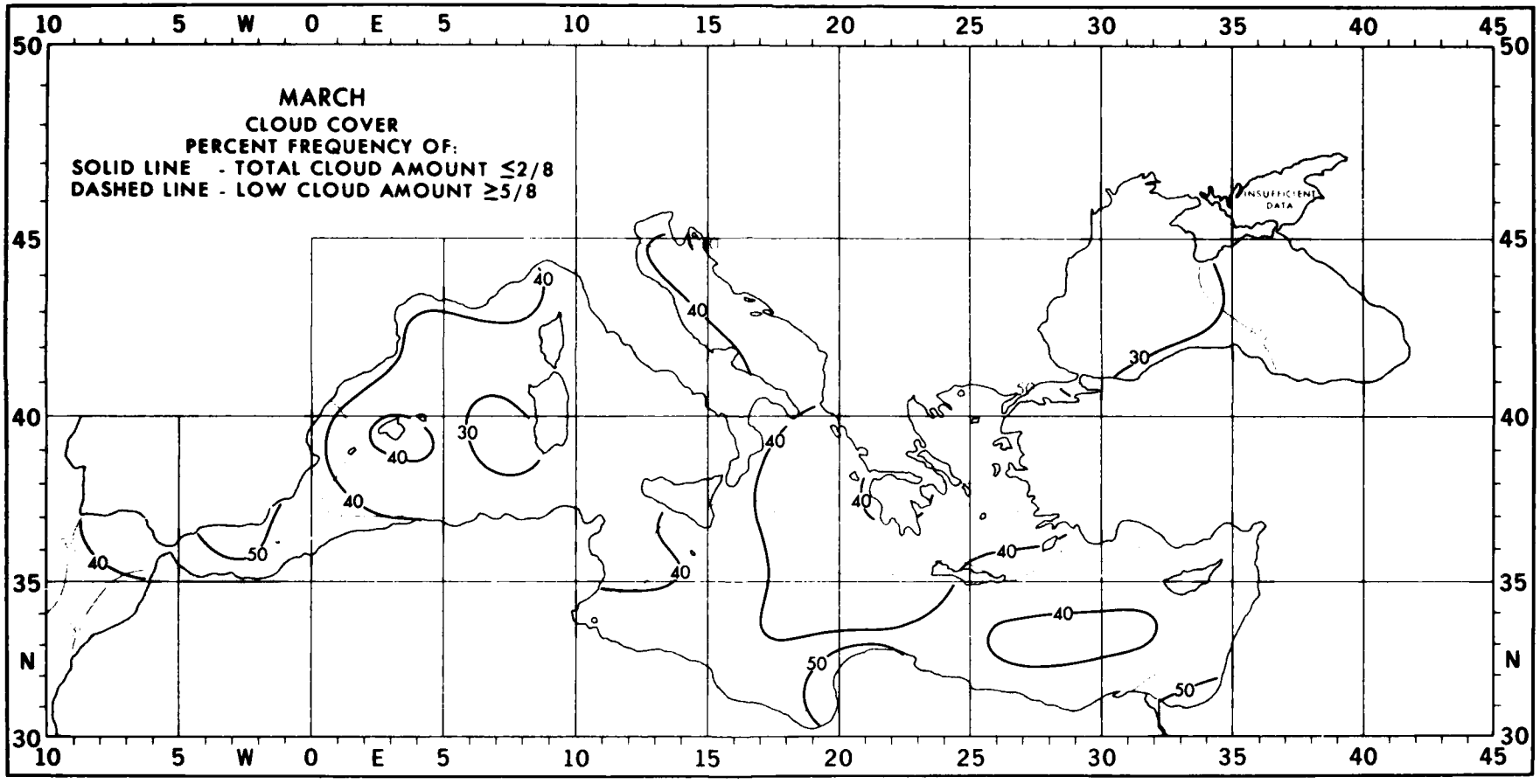

FEBRUARY
WAVE HEIGHT - ISOPLETHS
PERCENT FREQUENCY OF:
SOLID LINE - WAVE HEIGHT ≥3 FEET
DASHED LINE - WAVE HEIGHT ≥8 FEET
THE WAVE HEIGHT USED FOR THIS MAP IS THE HIGHER OF SEA OR SWELL FOR OBSERVATIONS CONTAINING BOTH WAVE TRAINS.
SEA IS DEFINED AS WAVES GENERATED BY LOCAL WINDS.
≥3 FEET = ≥CODE 2 (2 HALF METERS)
≥8 FEET = ≥CODE 5 (5 HALF METERS)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

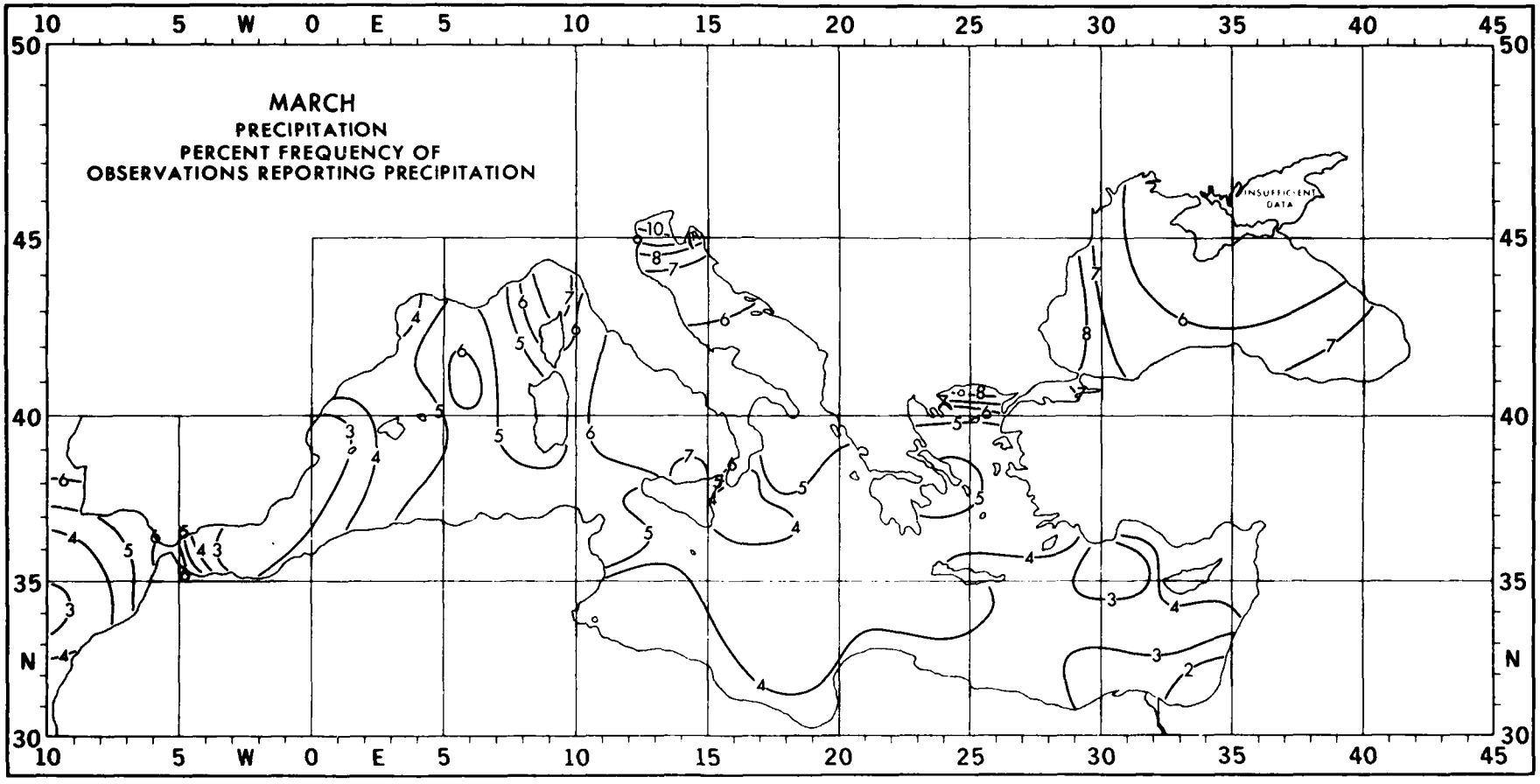

10
5
W
0
E
45
40
35
N
30
FEBRUARY
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.

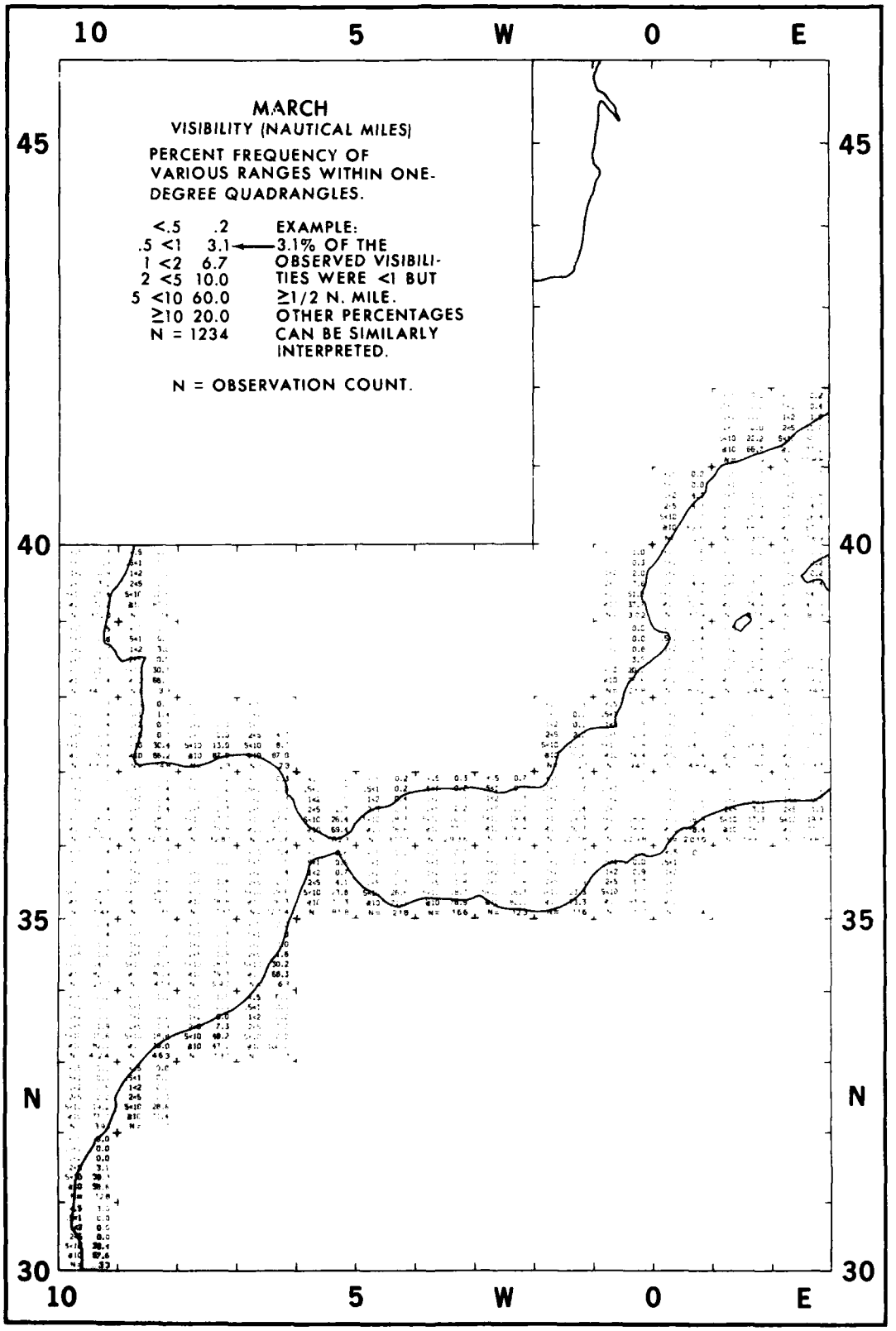

FEBRUARY
WAVE HEIGHT-FREQUENCIES
5
E
10
15
45
40
35
30
N

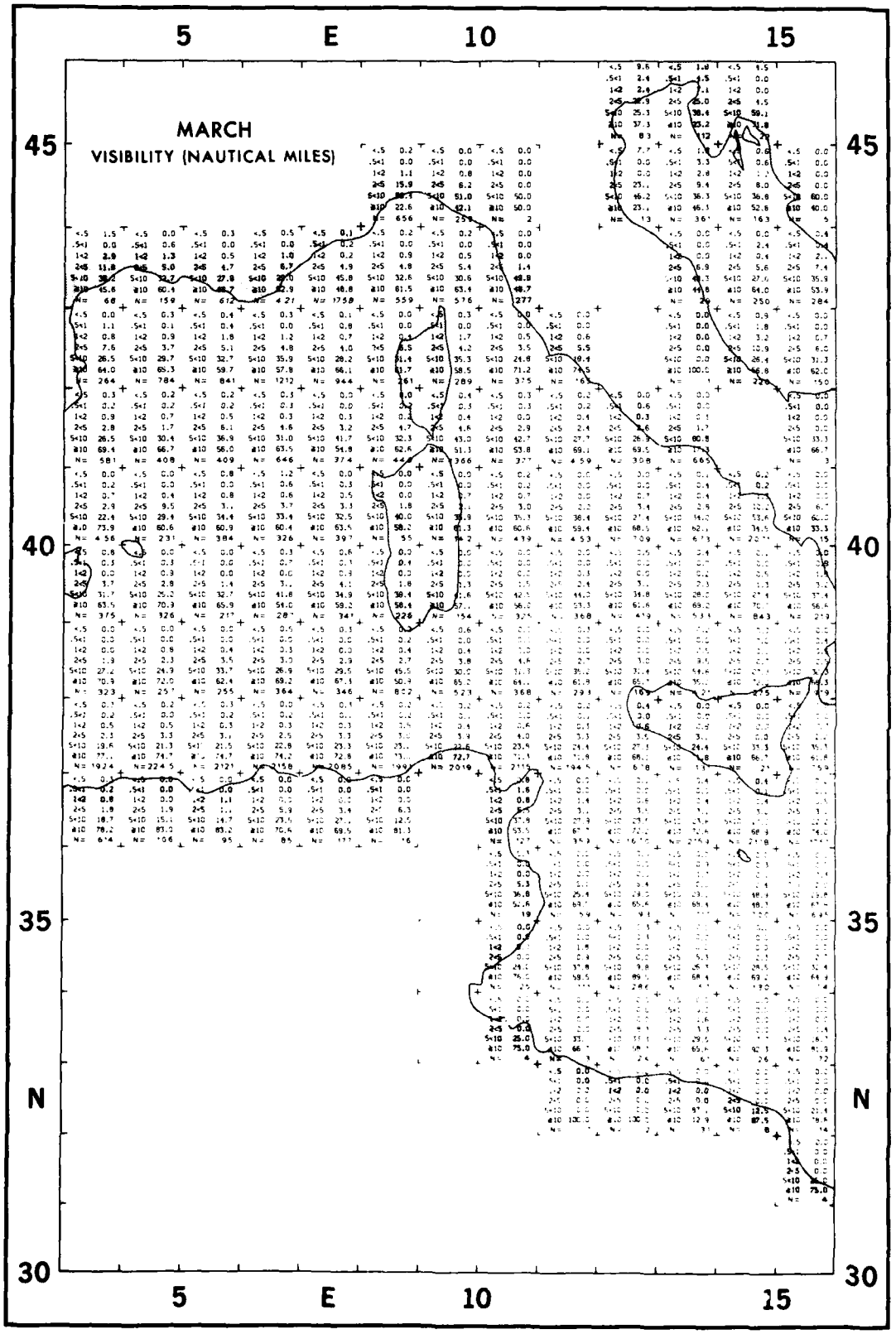

E
20
25
45
40
35
N
30
FEBRUARY
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.

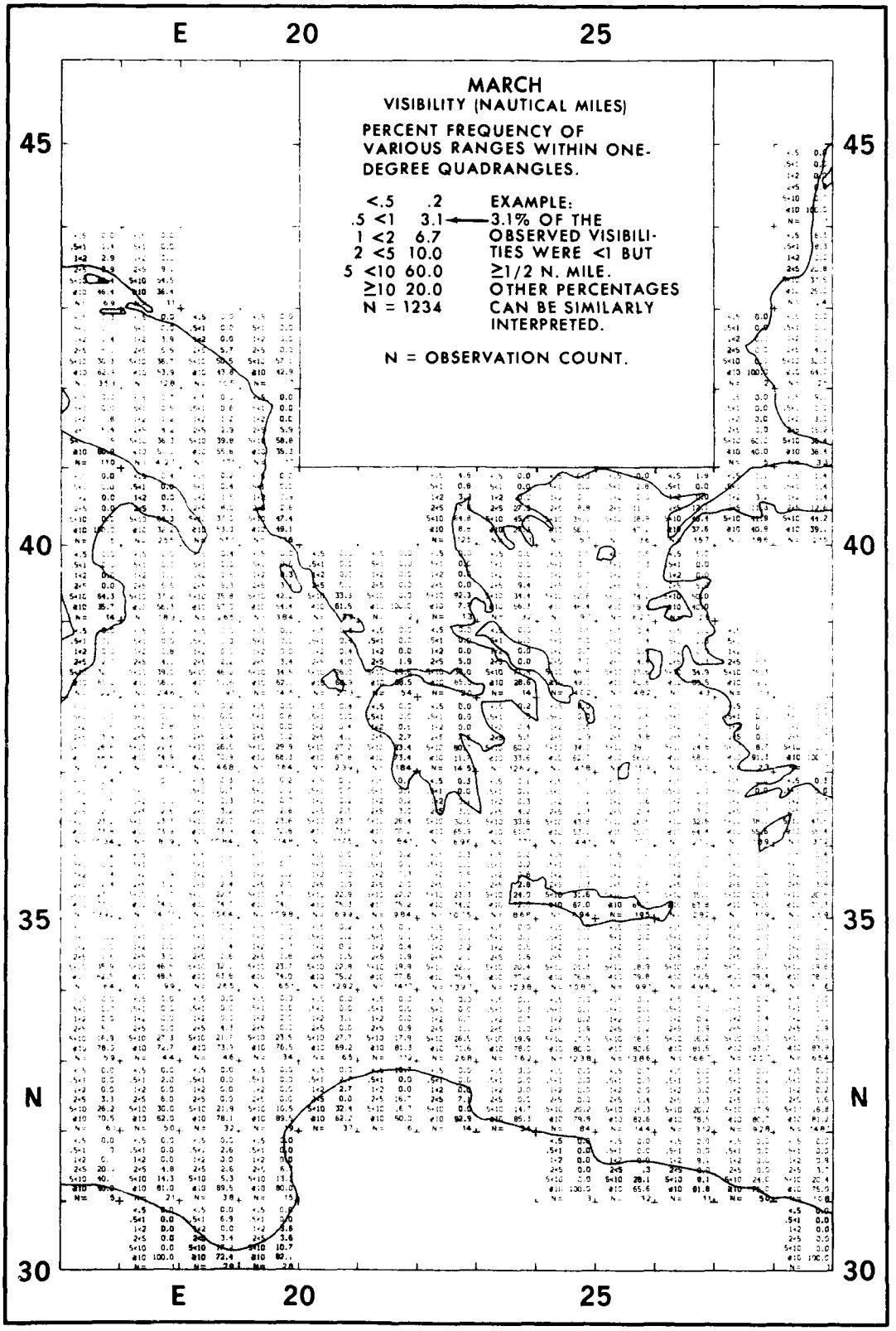

30
E
35
40
45
40
35
N
30
FEBRUARY
WAVE HEIGHT-FREQUENCIES

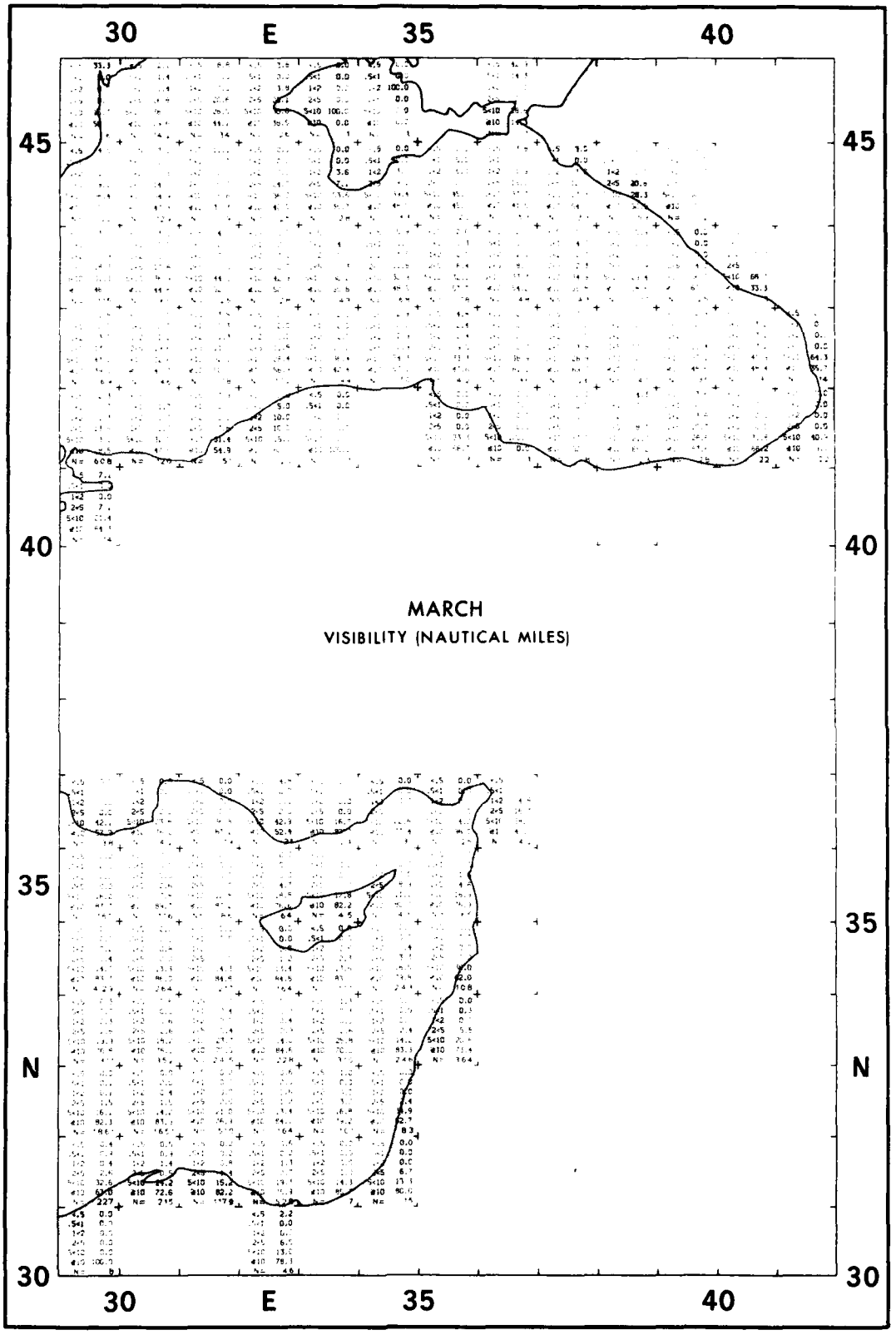

MARCH
CLOUD COVER
PERCENT FREQUENCY OF:
SOLID LINE - TOTAL CLOUD AMOUNT ≤2/8
DASHED LINE - LOW CLOUD AMOUNT ≥5/8
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30
40
30
50

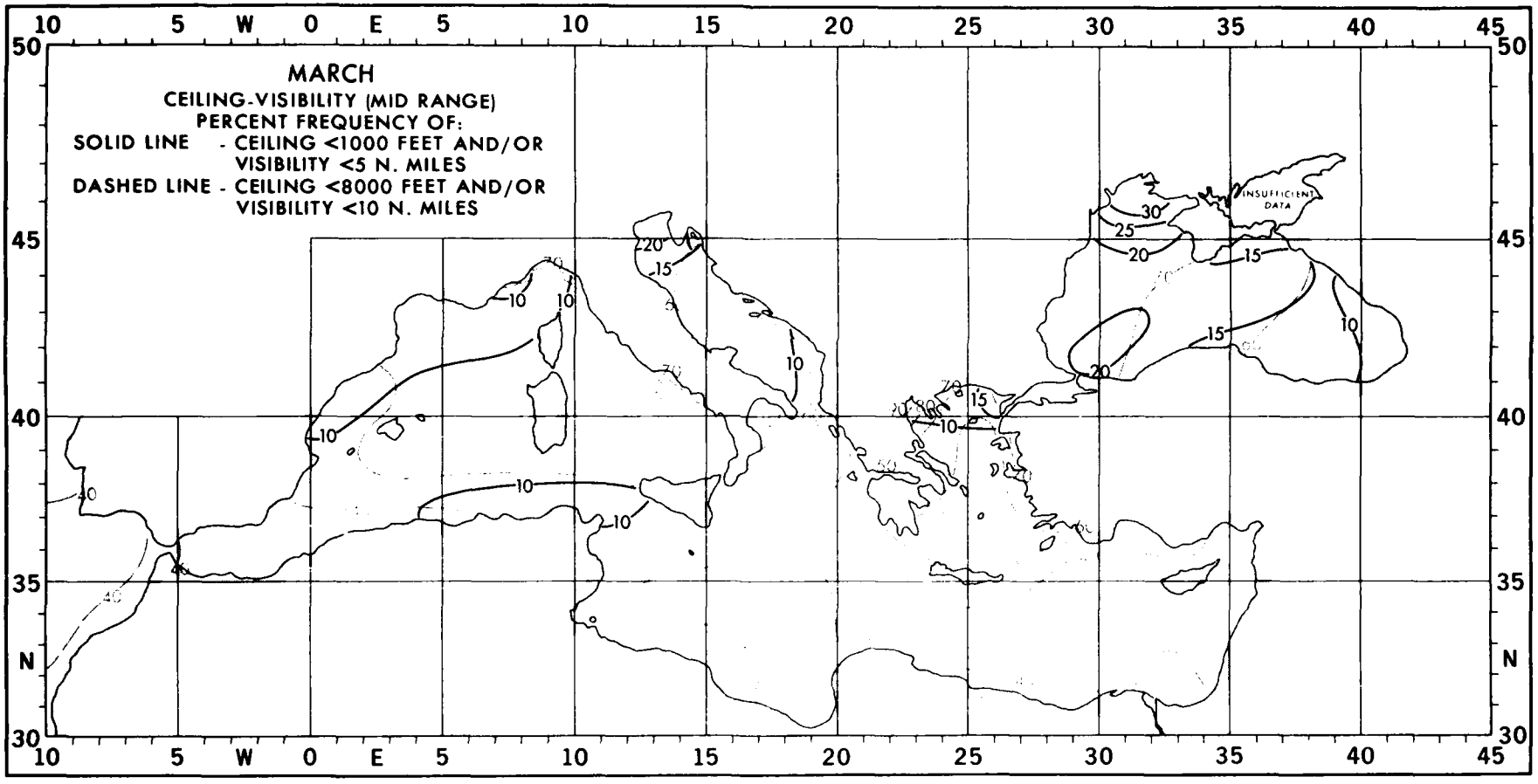

MARCH
PRECIPITATION
PERCENT FREQUENCY OF
OBSERVATIONS REPORTING PRECIPITATION
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

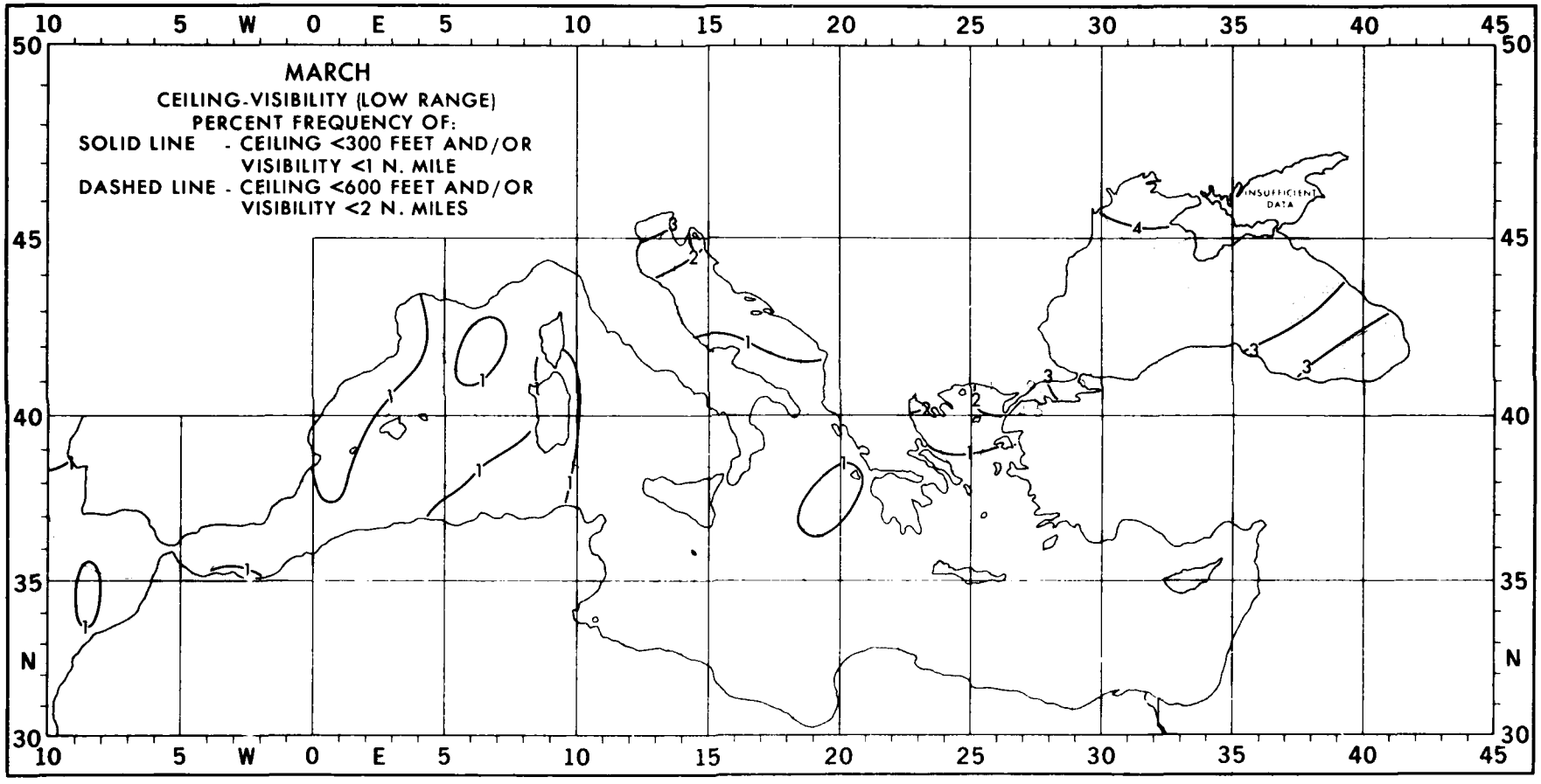

10
5
W
0
E
45
40
35
N
30
MARCH
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.

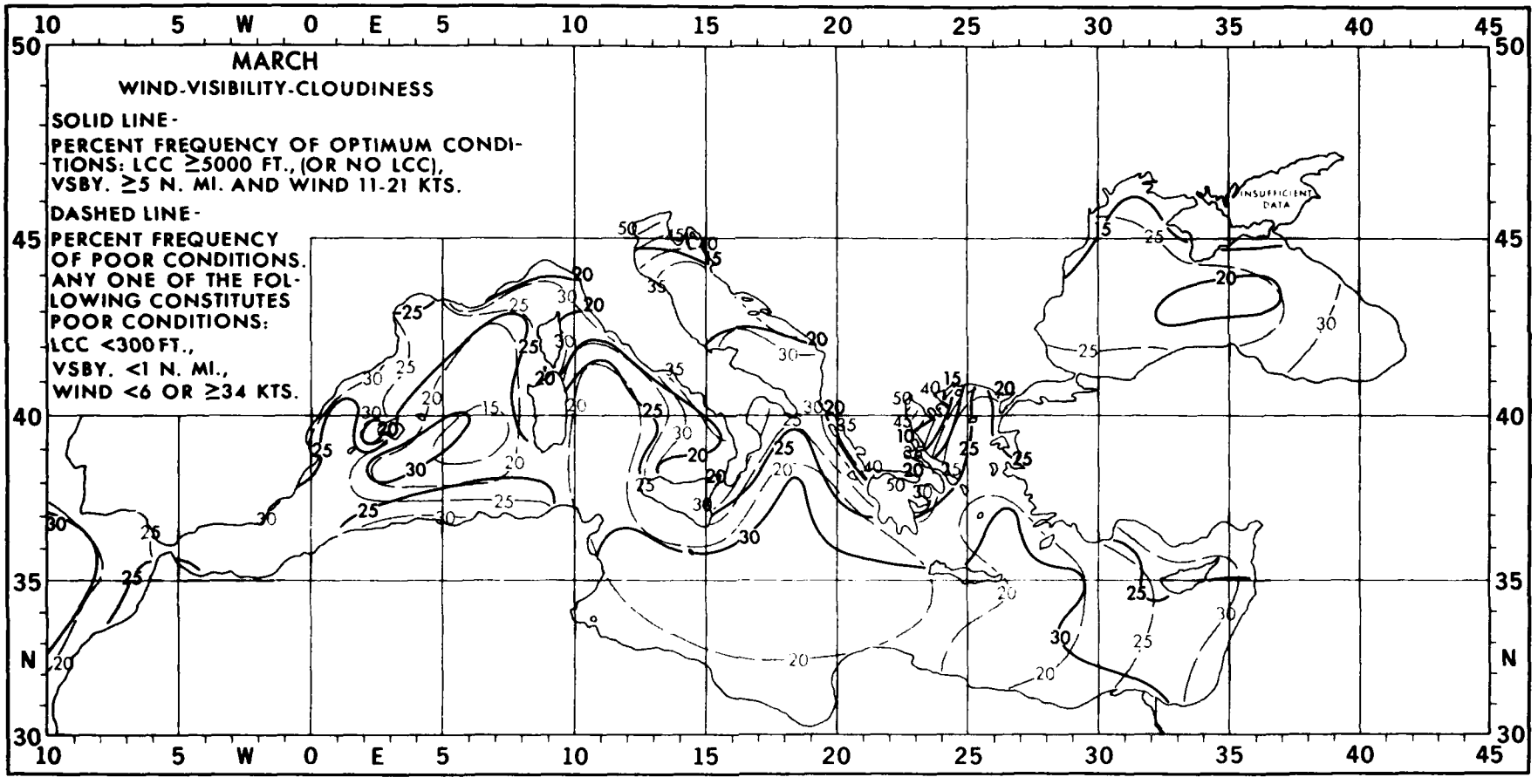

MARCH
VISIBILITY (NAUTICAL MILES)
5
E
10
15
45
40
35
N
30

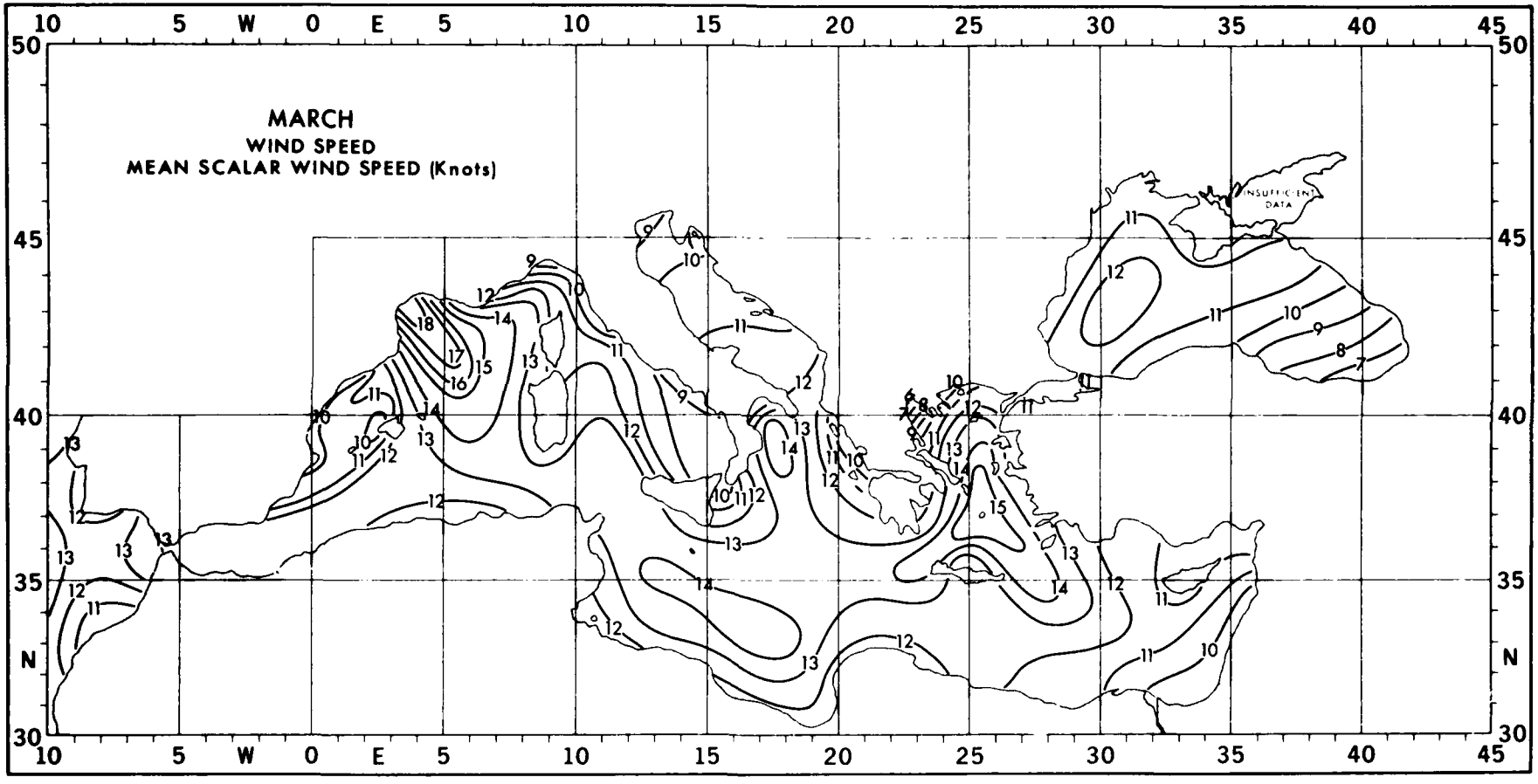

E
20
25
45
40
35
30
N
MARCH
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.

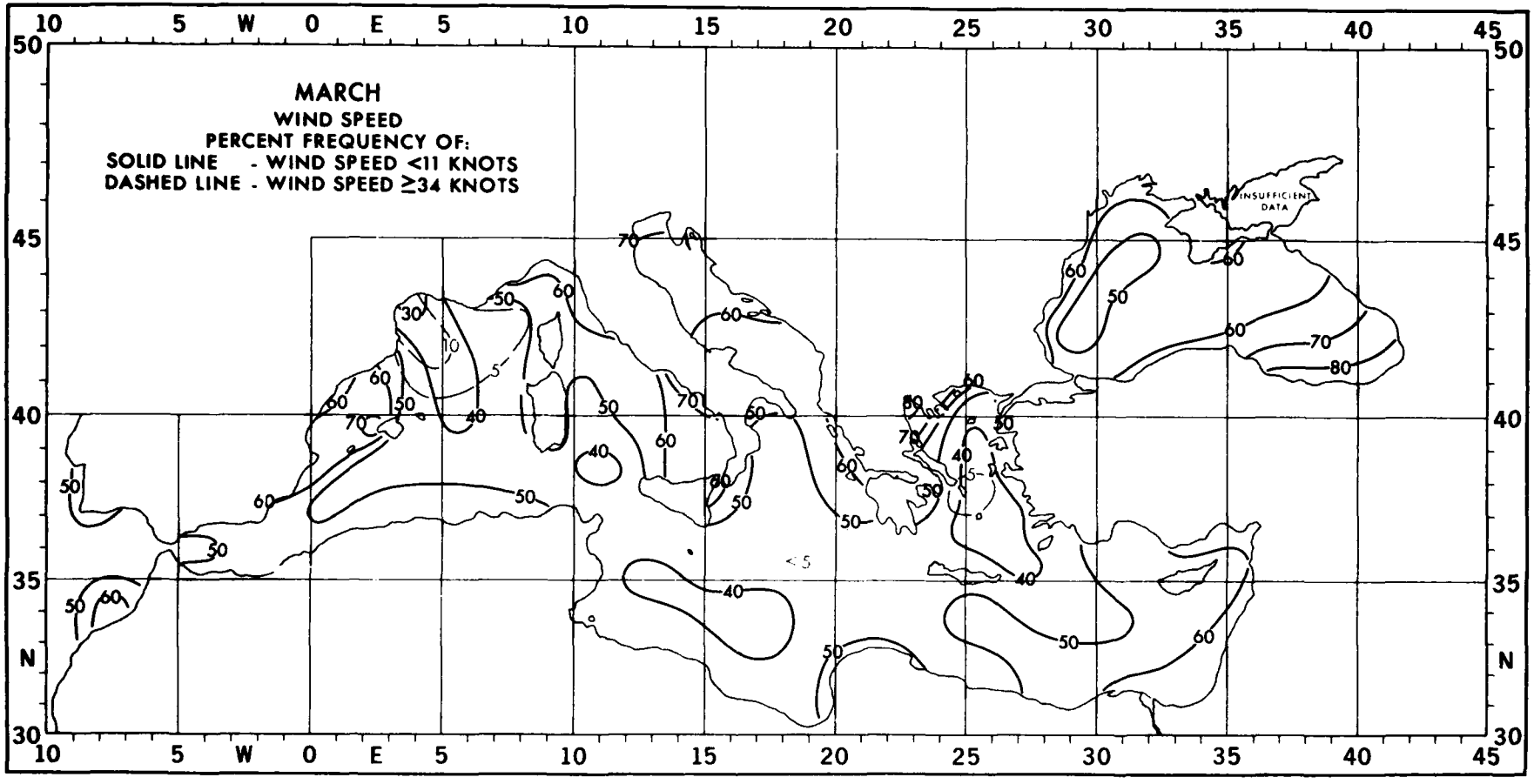

30
E
35
40
45
40
MARCH
VISIBILITY (NAUTICAL MILES)
35
N
30
30
E
35
40

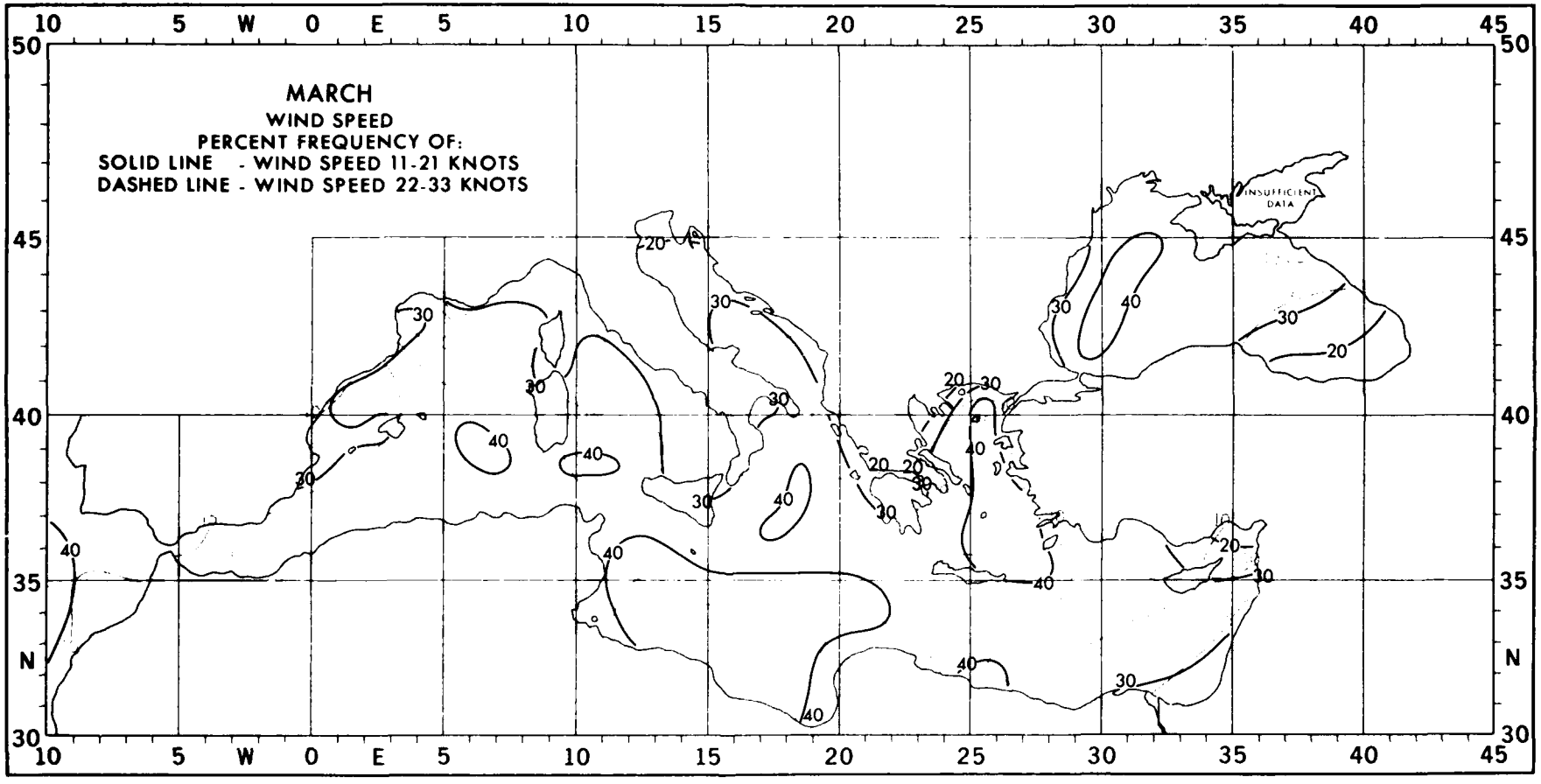

MARCH
CEILING-VISIBILITY (MID RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <1000 FEET AND/OR VISIBILITY <5 N. MILES
DASHED LINE - CEILING <8000 FEET AND/OR VISIBILITY <10 N. MILES
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

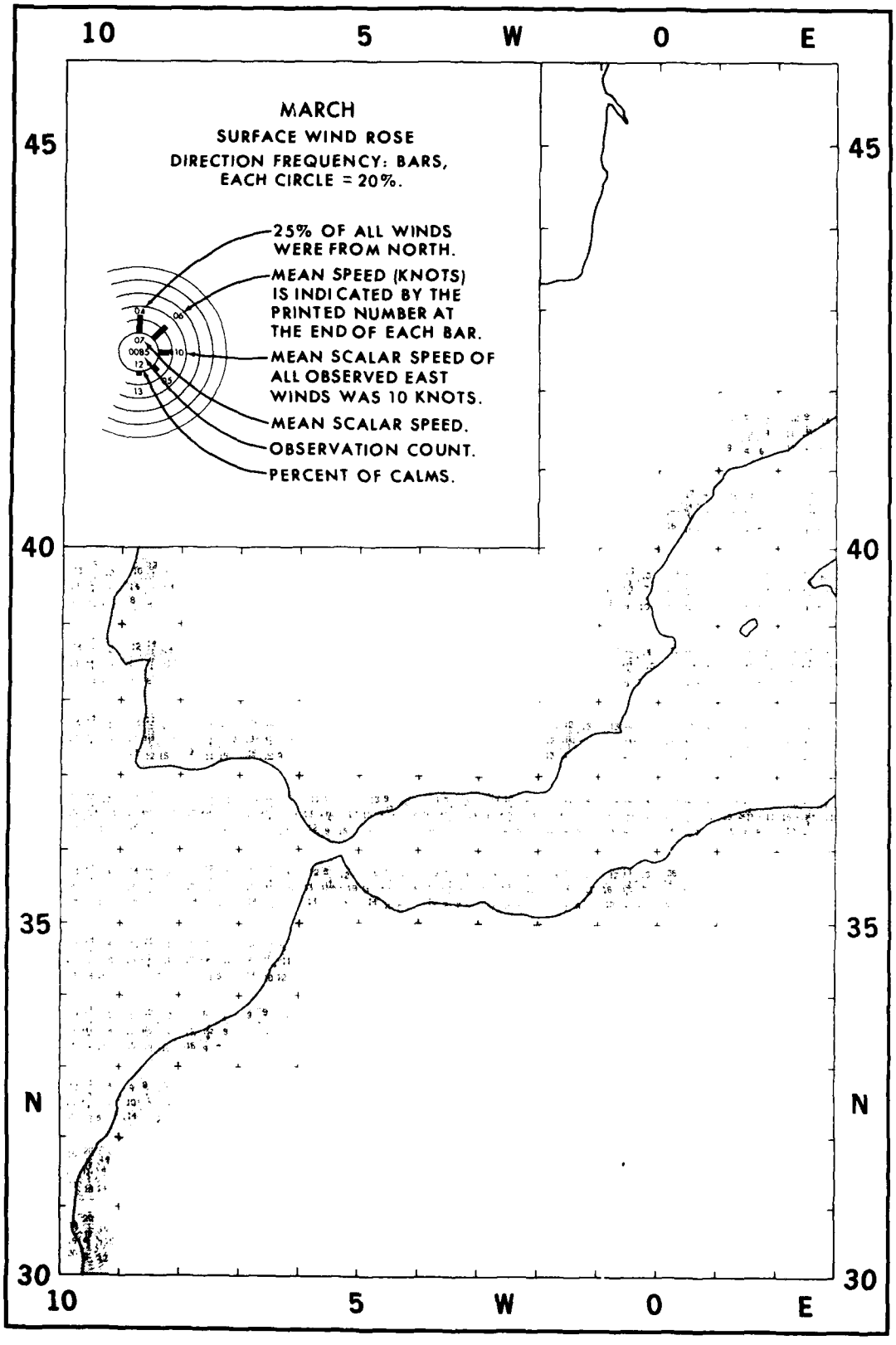

MARCH
CEILING-VISIBILITY (LOW RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <300 FEET AND/OR VISIBILITY <1 N. MILE
DASHED LINE - CEILING <600 FEET AND/OR VISIBILITY <2 N. MILES
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

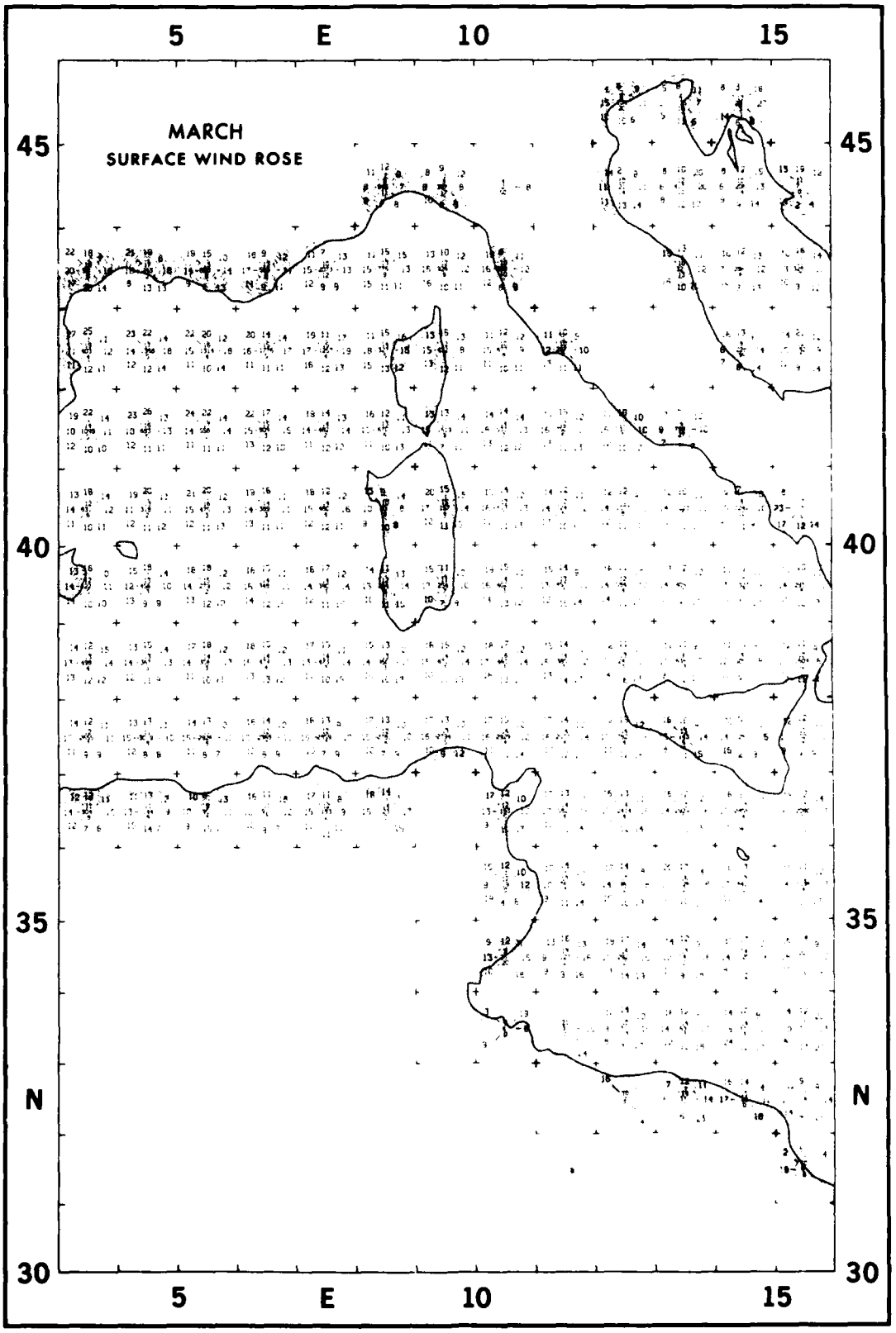

MARCH
WIND-VISIBILITY-CLOUDINESS
SOLID LINE-
PERCENT FREQUENCY OF OPTIMUM CONDITIONS: LCC ≥5000 FT., (OR NO LCC), VSBY. ≥5 N. MI. AND WIND 11-21 KTS.
DASHED LINE-
PERCENT FREQUENCY OF POOR CONDITIONS. ANY ONE OF THE FOLLOWING CONSTITUTES POOR CONDITIONS:
LCC <300 FT.,
VSBY. <1 N. MI.,
WIND <6 OR ≥34 KTS.
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

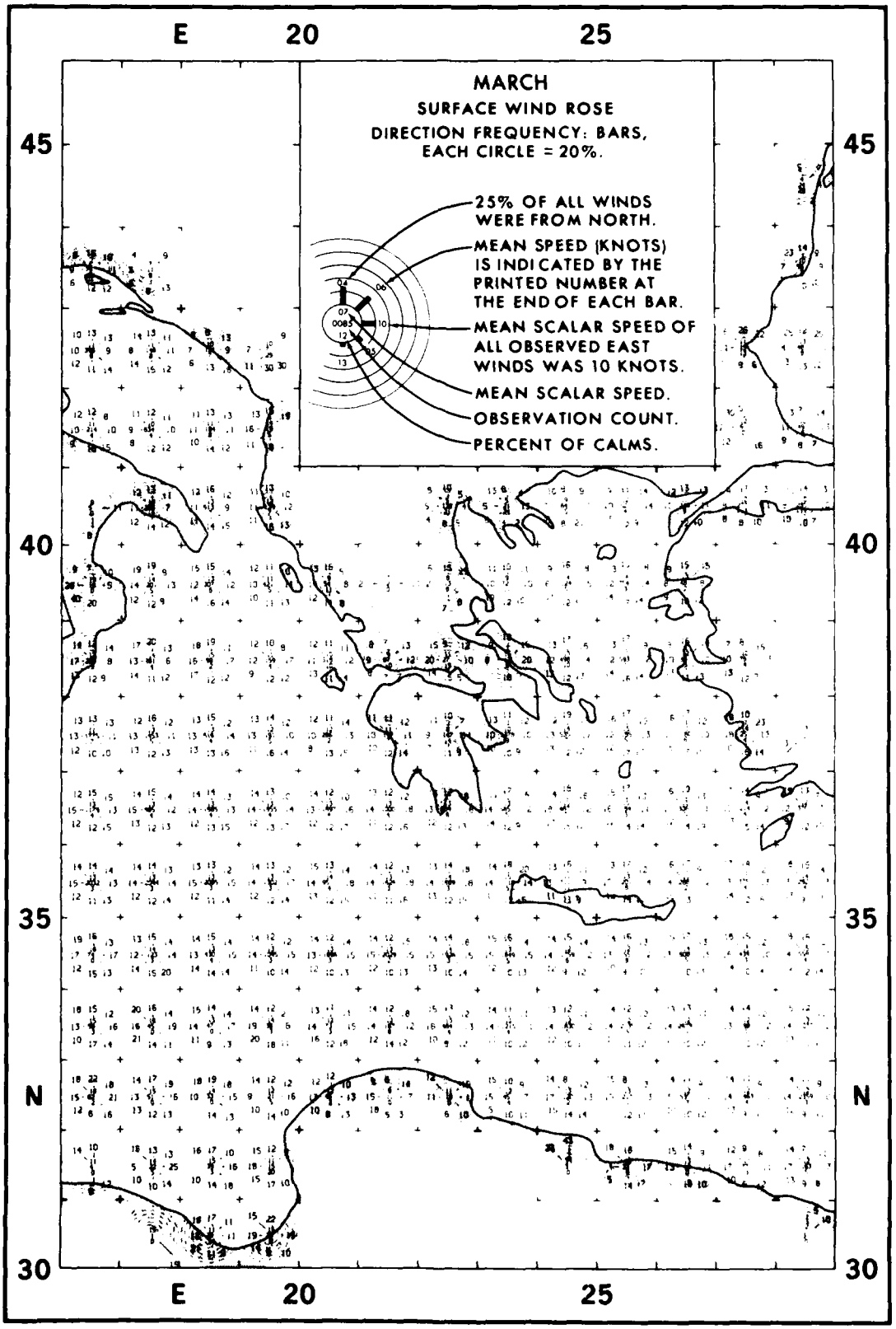

MARCH
WIND SPEED
MEAN SCALAR WIND SPEED (Knots)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
30
N

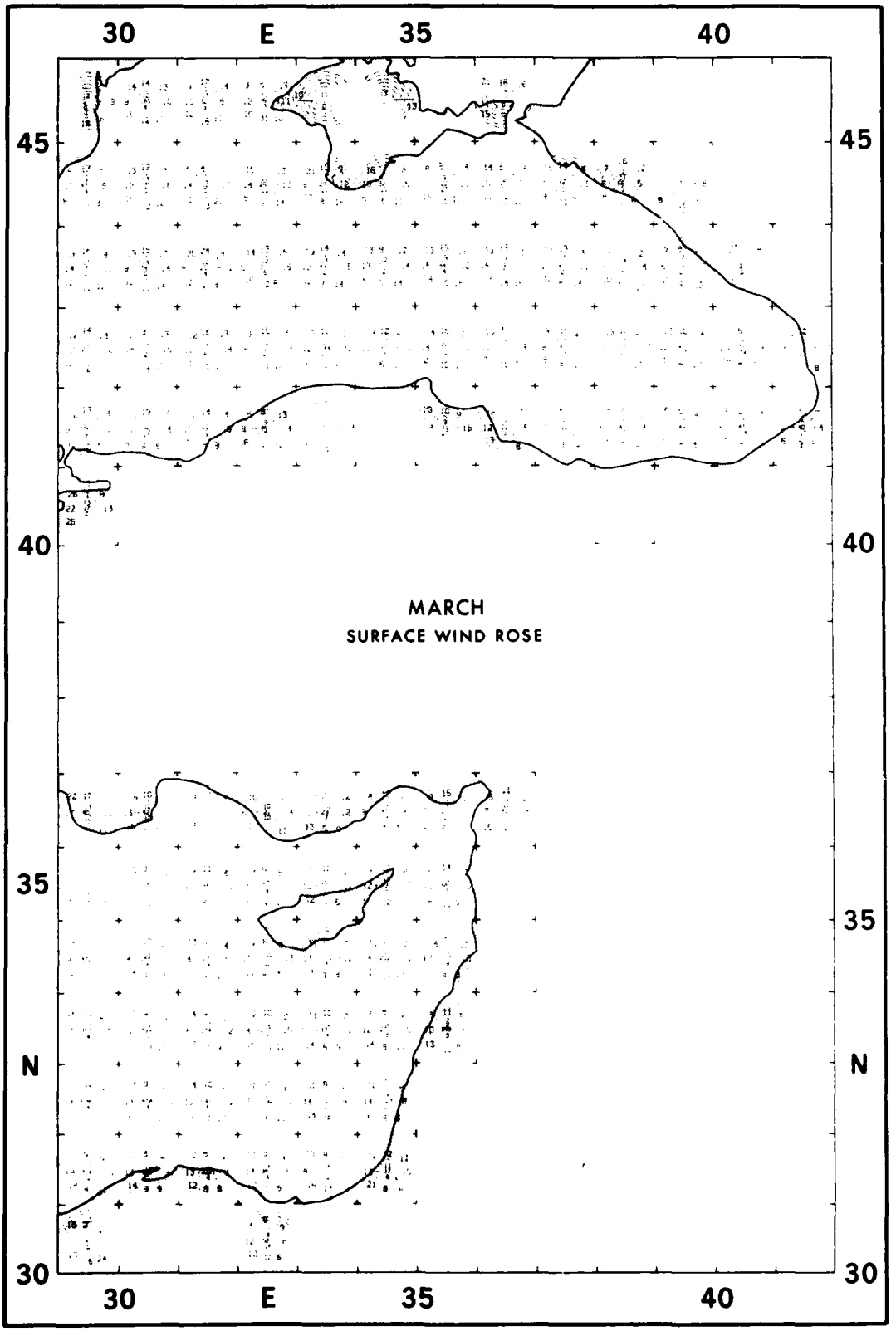

MARCH
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED <11 KNOTS
DASHED LINE - WIND SPEED ≥34 KNOTS
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 30 N

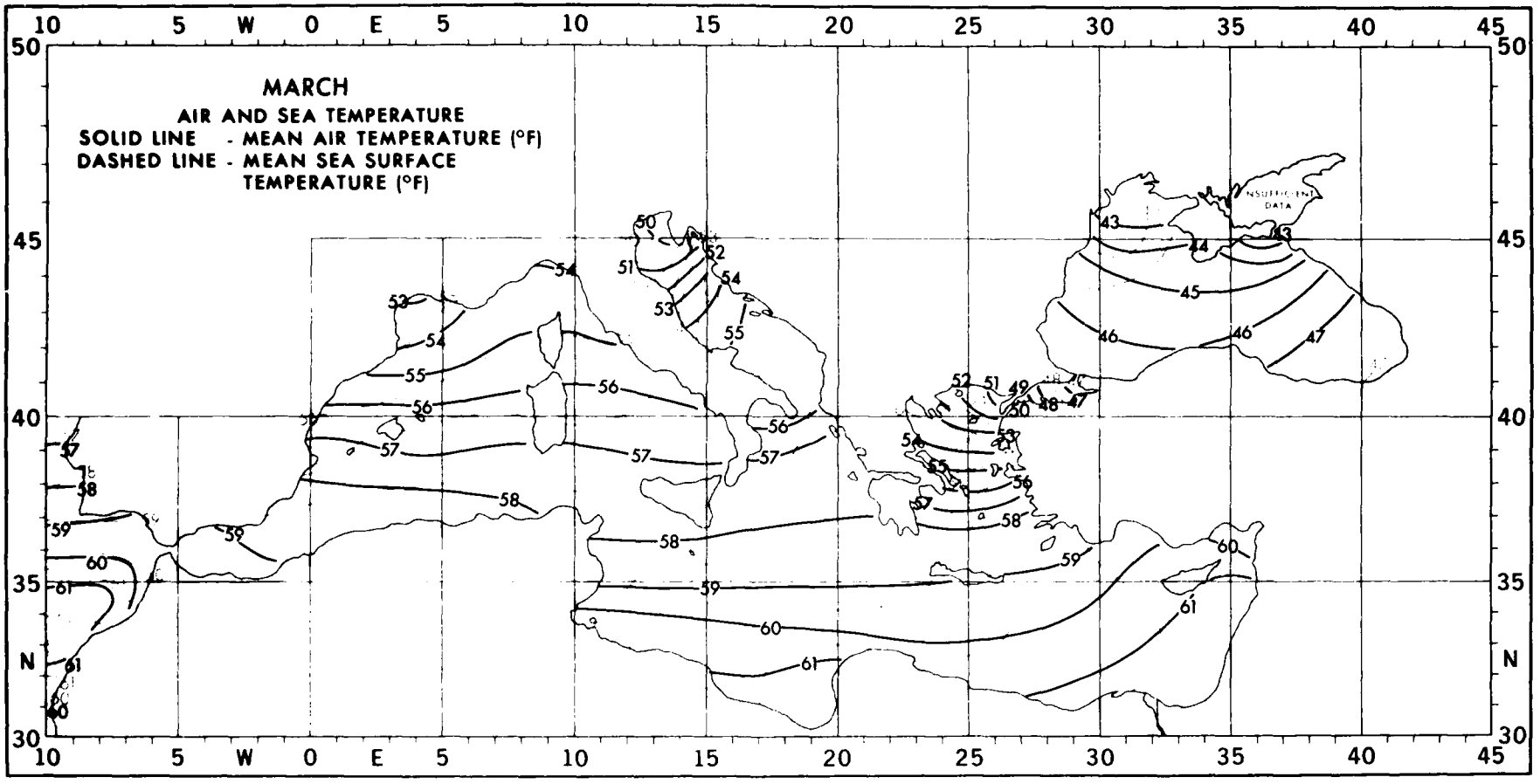

MARCH
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED 11-21 KNOTS
DASHED LINE - WIND SPEED 22-33 KNOTS
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

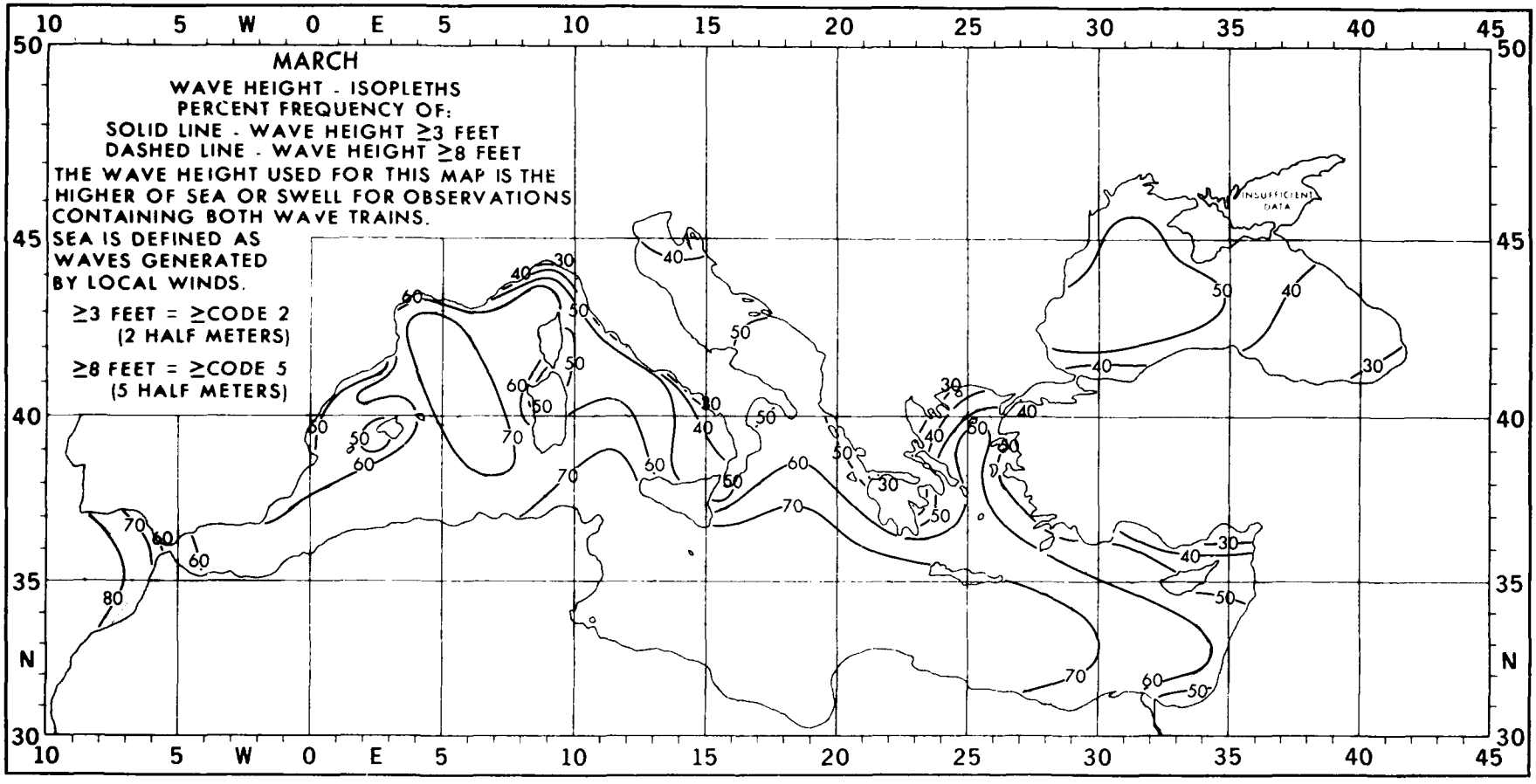

10
5
W
0
E
45
40
35
N
30
MARCH
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS,
EACH CIRCLE = 20%.
25% OF ALL WINDS WERE FROM NORTH.
MEAN SPEED (KNOTS) IS INDICATED BY THE PRINTED NUMBER AT THE END OF EACH BAR.
MEAN SCALAR SPEED OF ALL OBSERVED EAST WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.

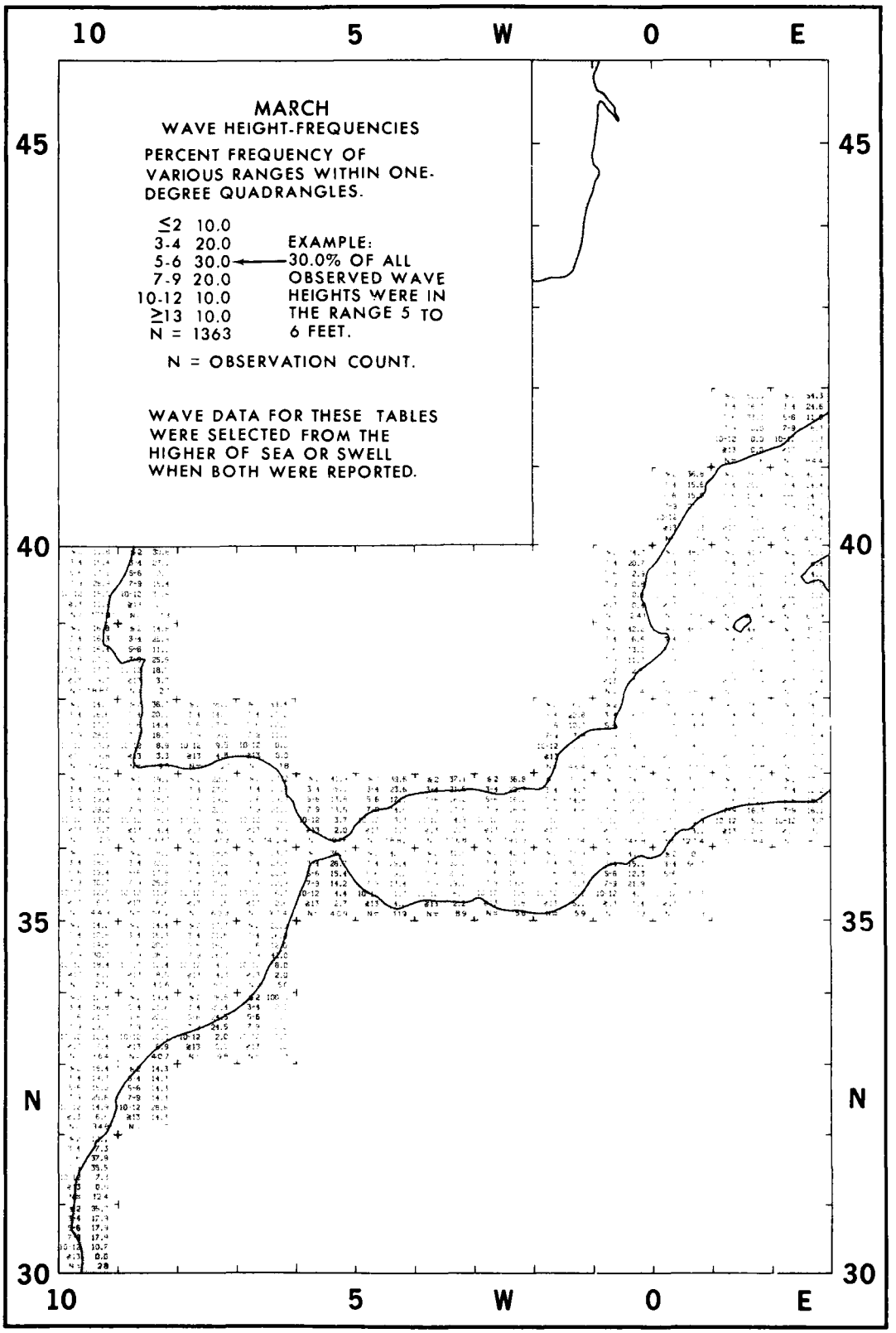

MARCH
SURFACE WIND ROSE
5
E
10
15
45
40
35
N
30

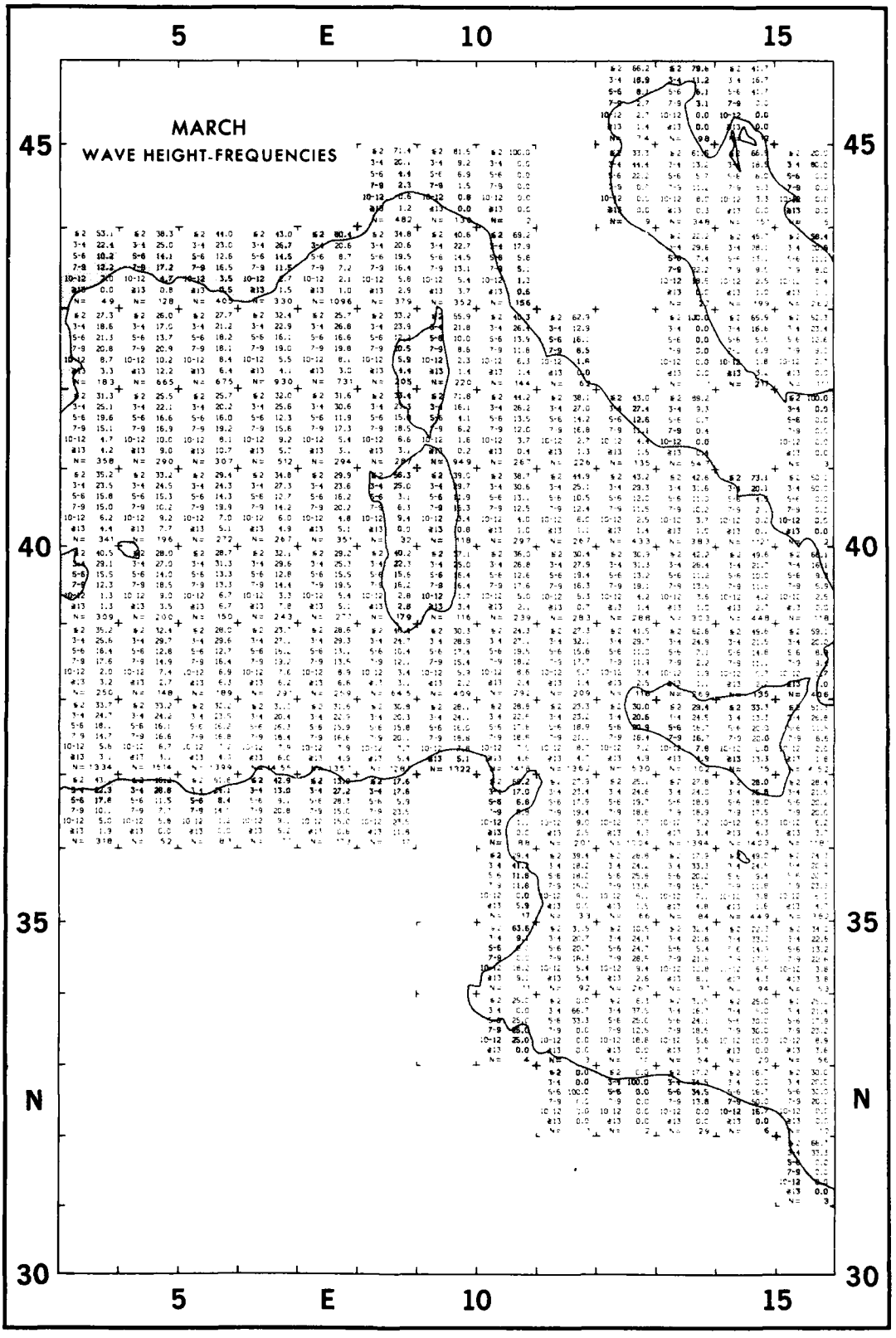

E
20
25
45
40
35
N
30
MARCH
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS,
EACH CIRCLE = 20%.
25% OF ALL WINDS WERE FROM NORTH.
MEAN SPEED (KNOTS) IS INDICATED BY THE PRINTED NUMBER AT THE END OF EACH BAR.
MEAN SCALAR SPEED OF ALL OBSERVED EAST WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.

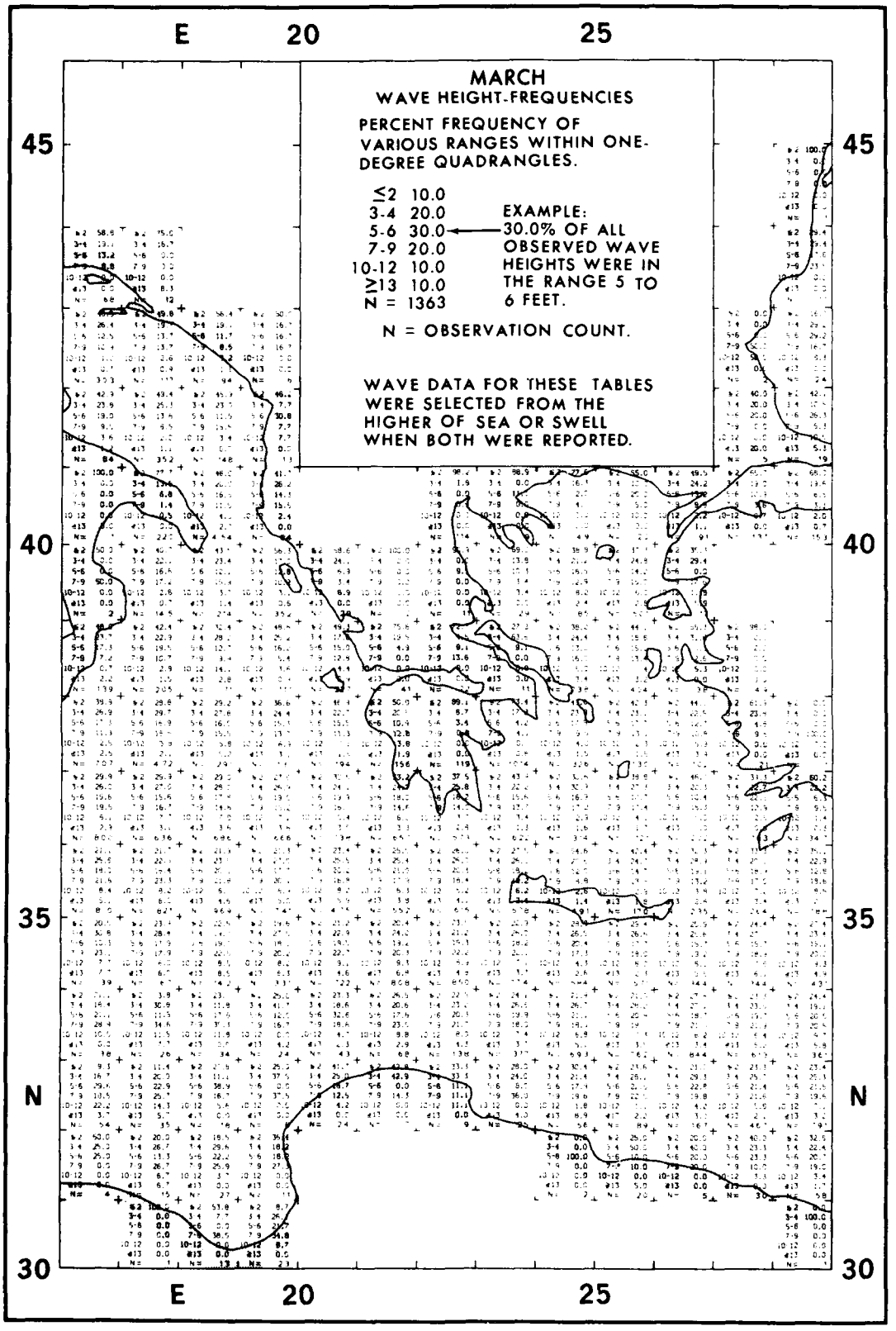

30
E
35
40
45
40
35
N
30
MARCH
SURFACE WIND ROSE

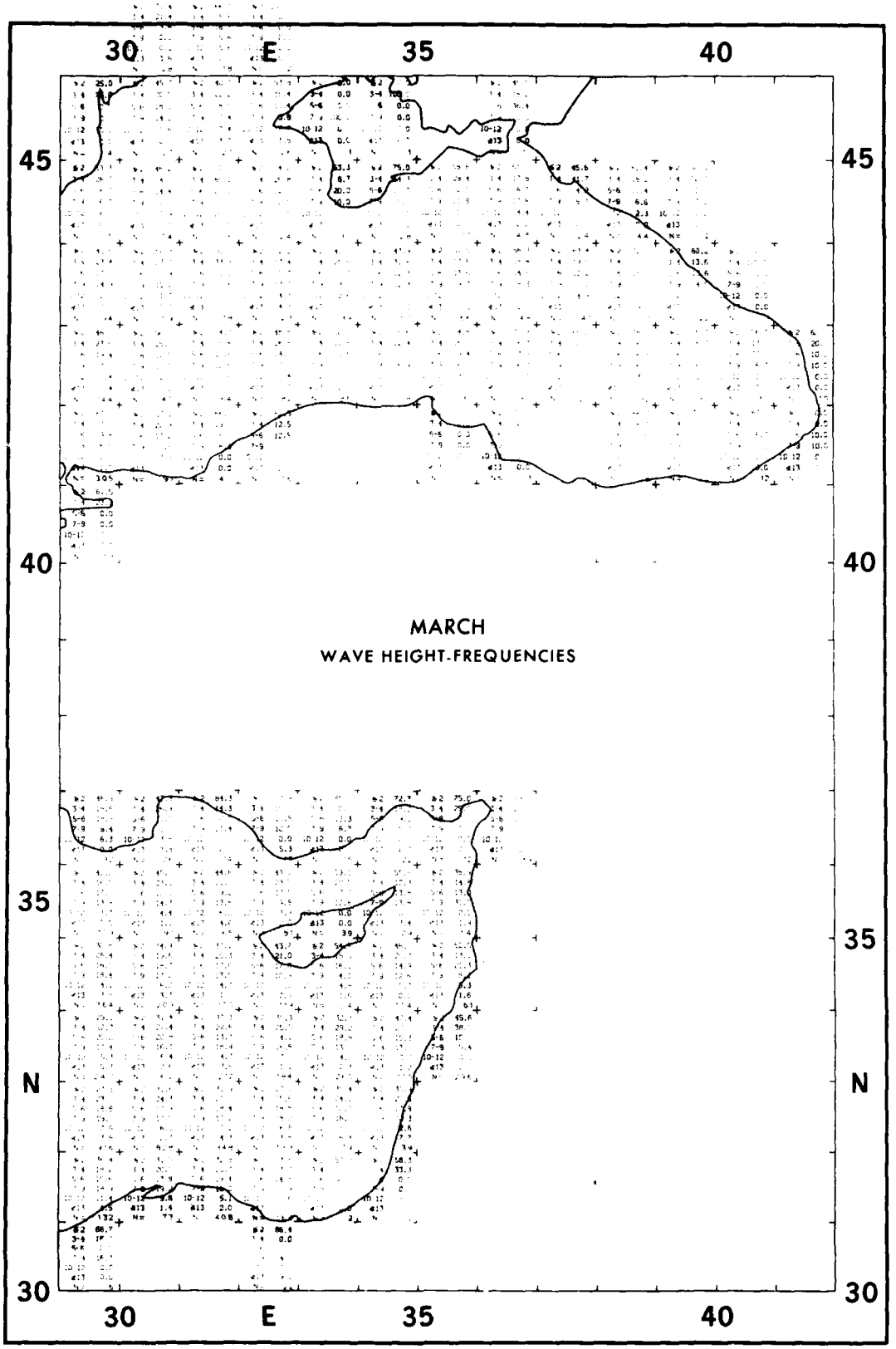

MARCH
AIR AND SEA TEMPERATURE
SOLID LINE - MEAN AIR TEMPERATURE (°F)
DASHED LINE - MEAN SEA SURFACE TEMPERATURE (°F)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

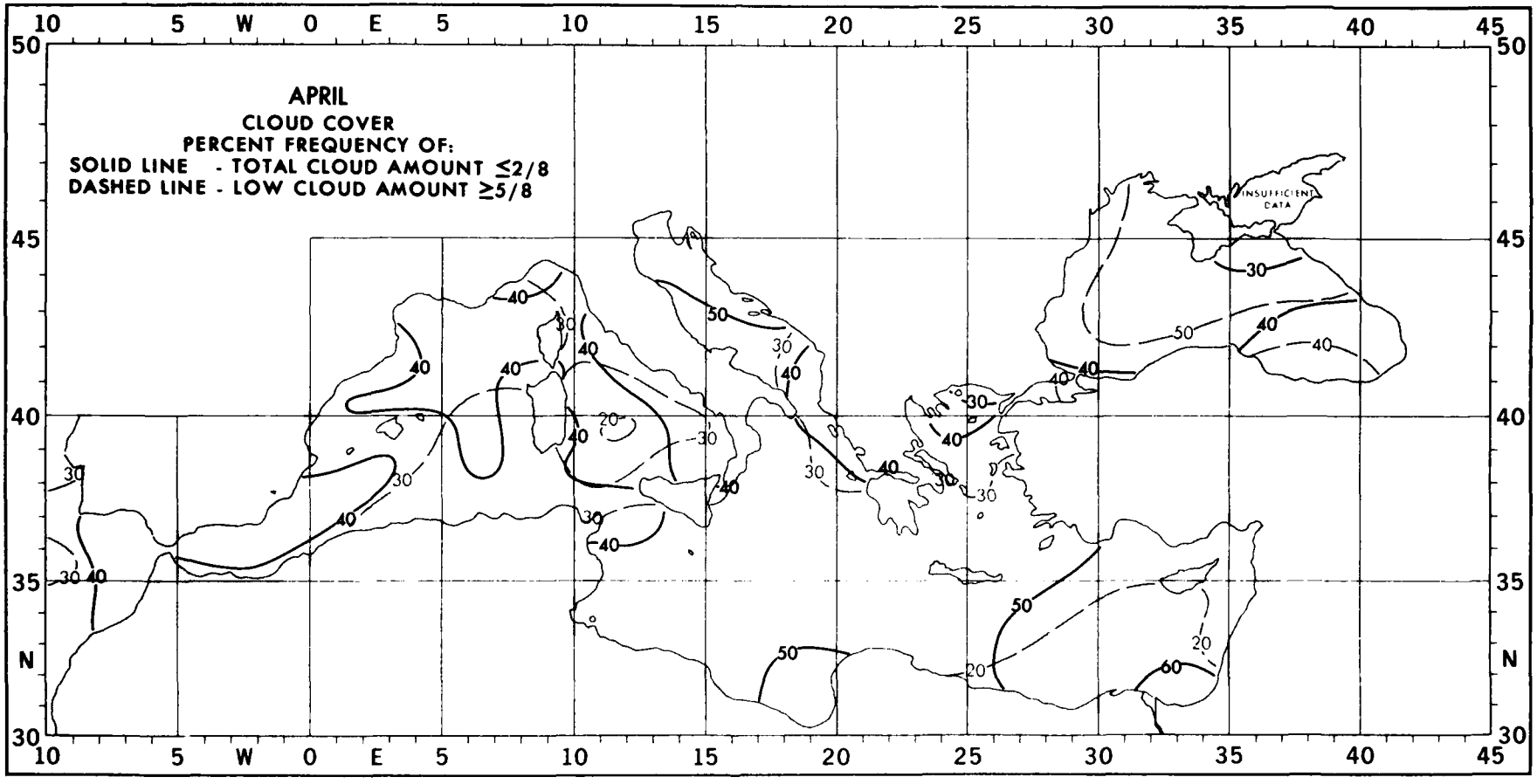

MARCH
WAVE HEIGHT - ISOPLETHS
PERCENT FREQUENCY OF:
SOLID LINE - WAVE HEIGHT ≥3 FEET
DASHED LINE - WAVE HEIGHT ≥8 FEET
THE WAVE HEIGHT USED FOR THIS MAP IS THE HIGHER OF SEA OR SWELL FOR OBSERVATIONS CONTAINING BOTH WAVE TRAINS.
SEA IS DEFINED AS WAVES GENERATED BY LOCAL WINDS.
≥3 FEET = ≥CODE 2 (2 HALF METERS)
≥8 FEET = ≥CODE 5 (5 HALF METERS)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

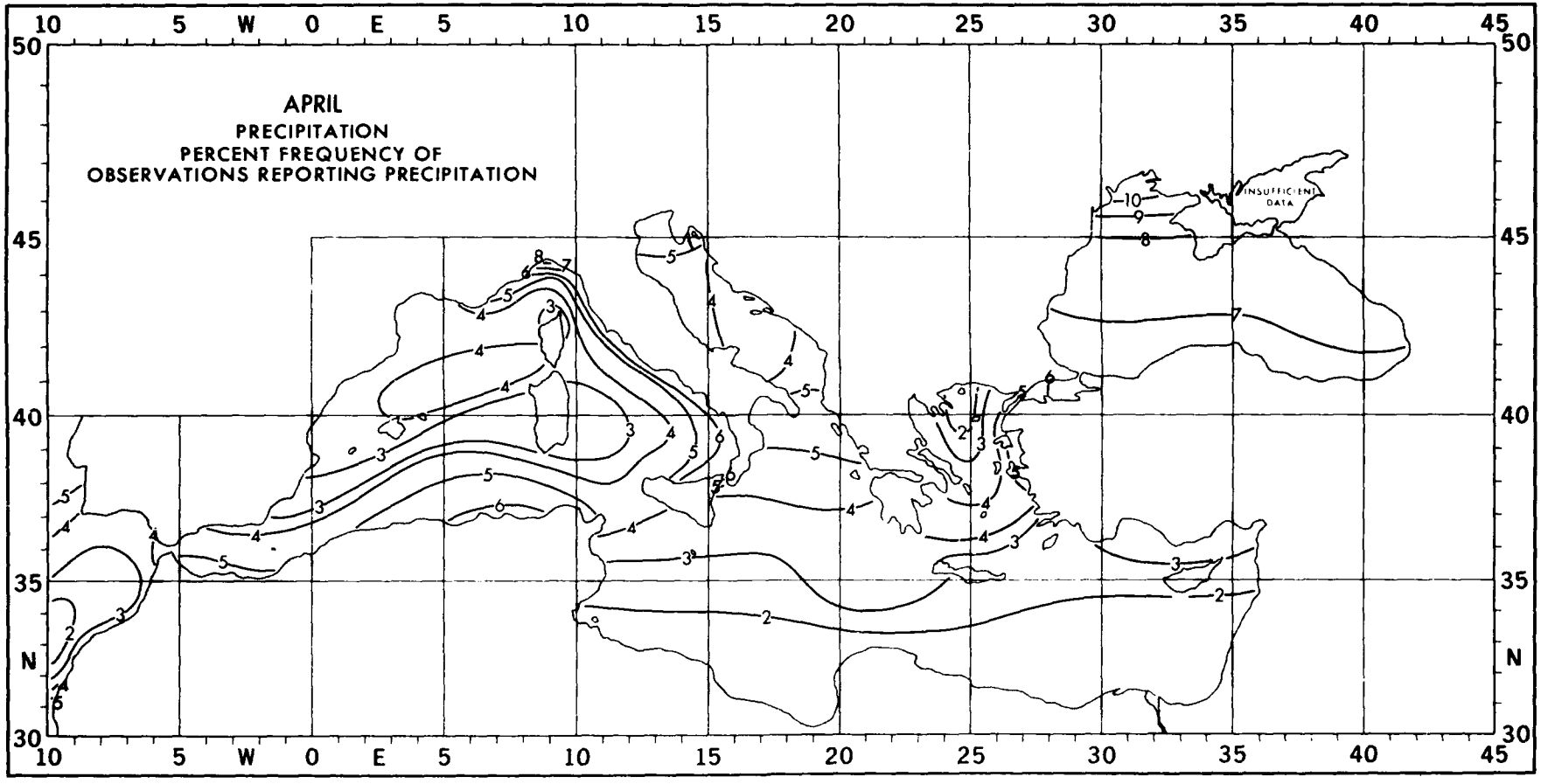

10
5
W
0
E
45
40
35
30
N
MARCH
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.

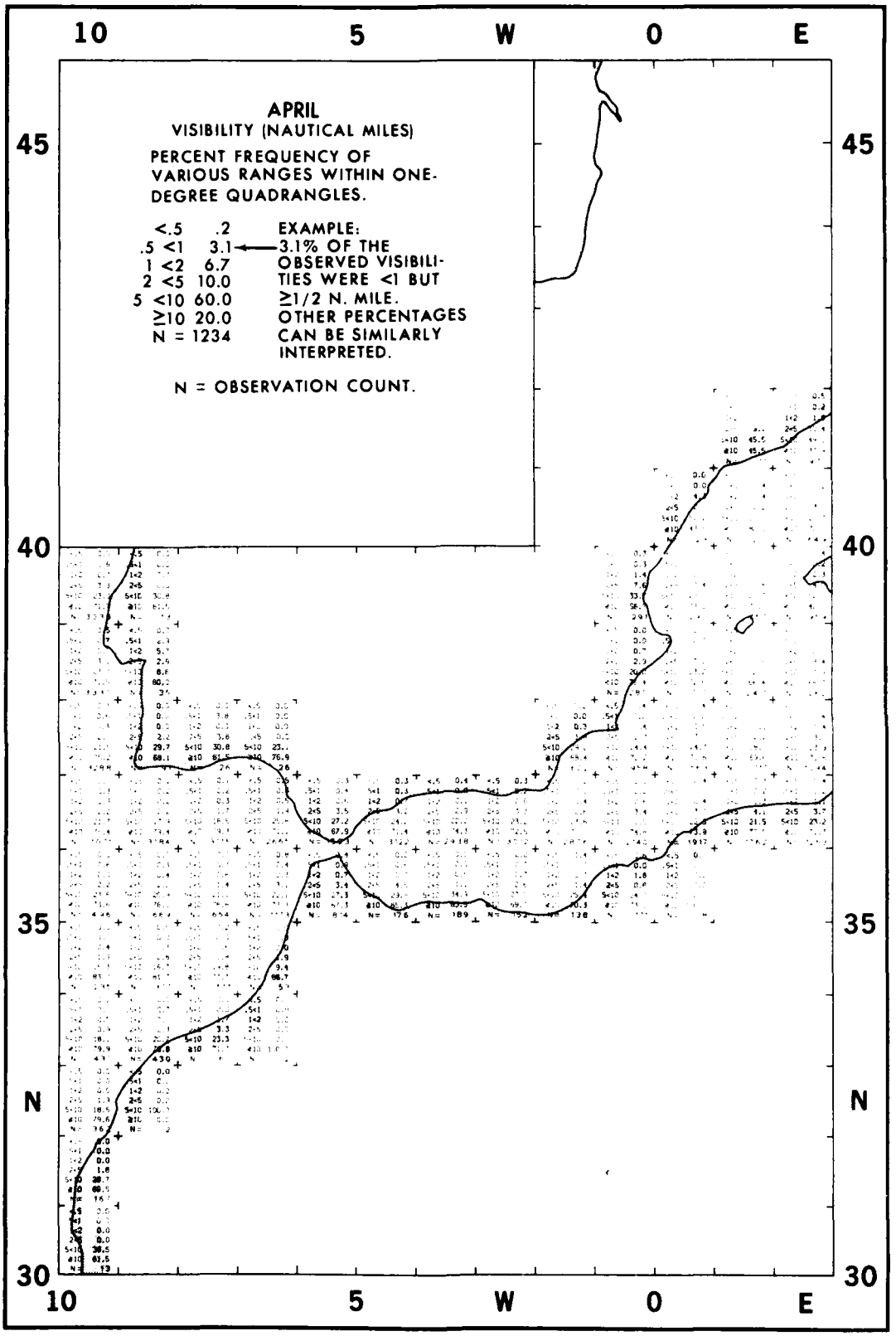

MARCH
WAVE HEIGHT-FREQUENCIES
5
E
10
15
45
40
35
N
30

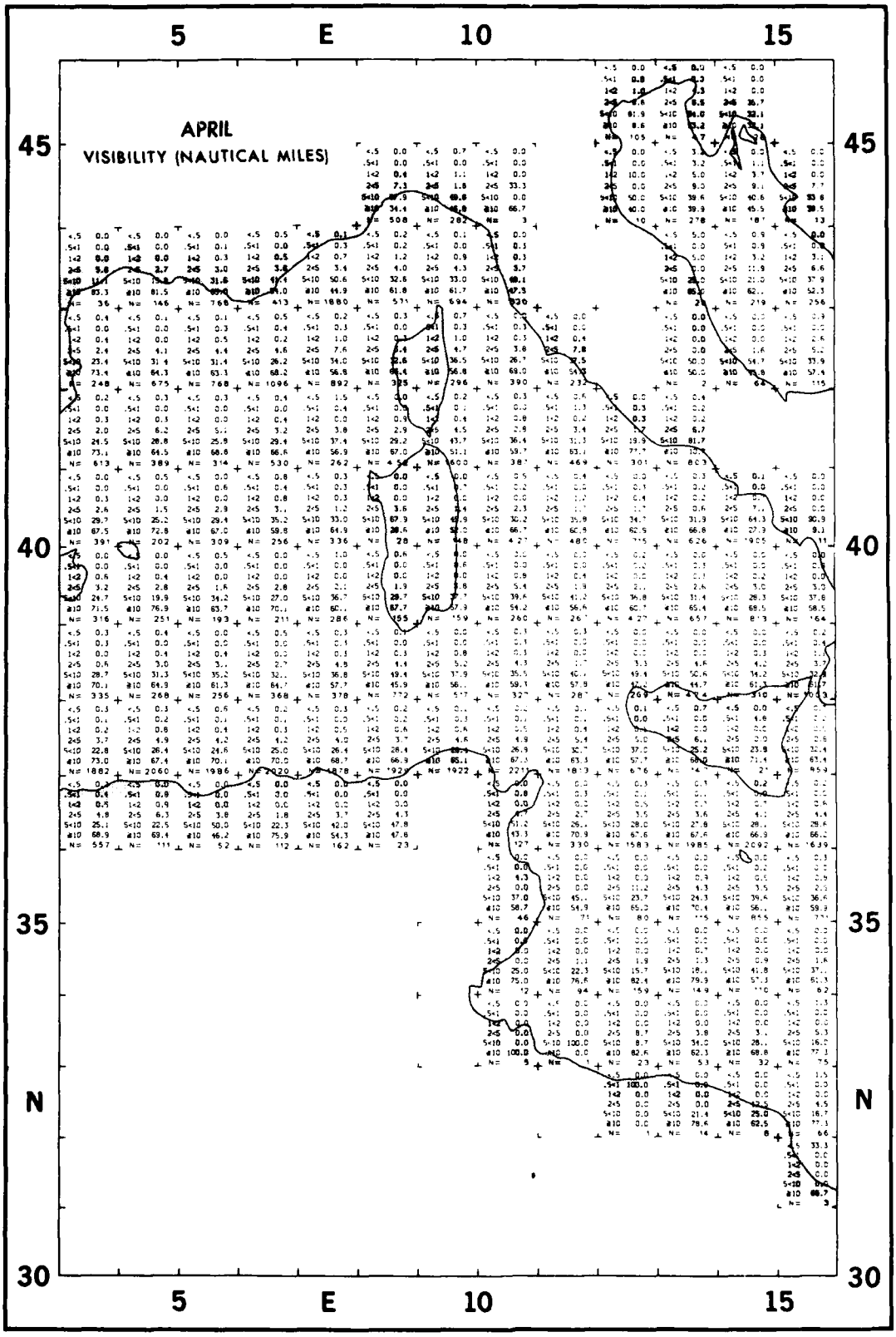

E
20
25
45
40
35
N
30
MARCH
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.

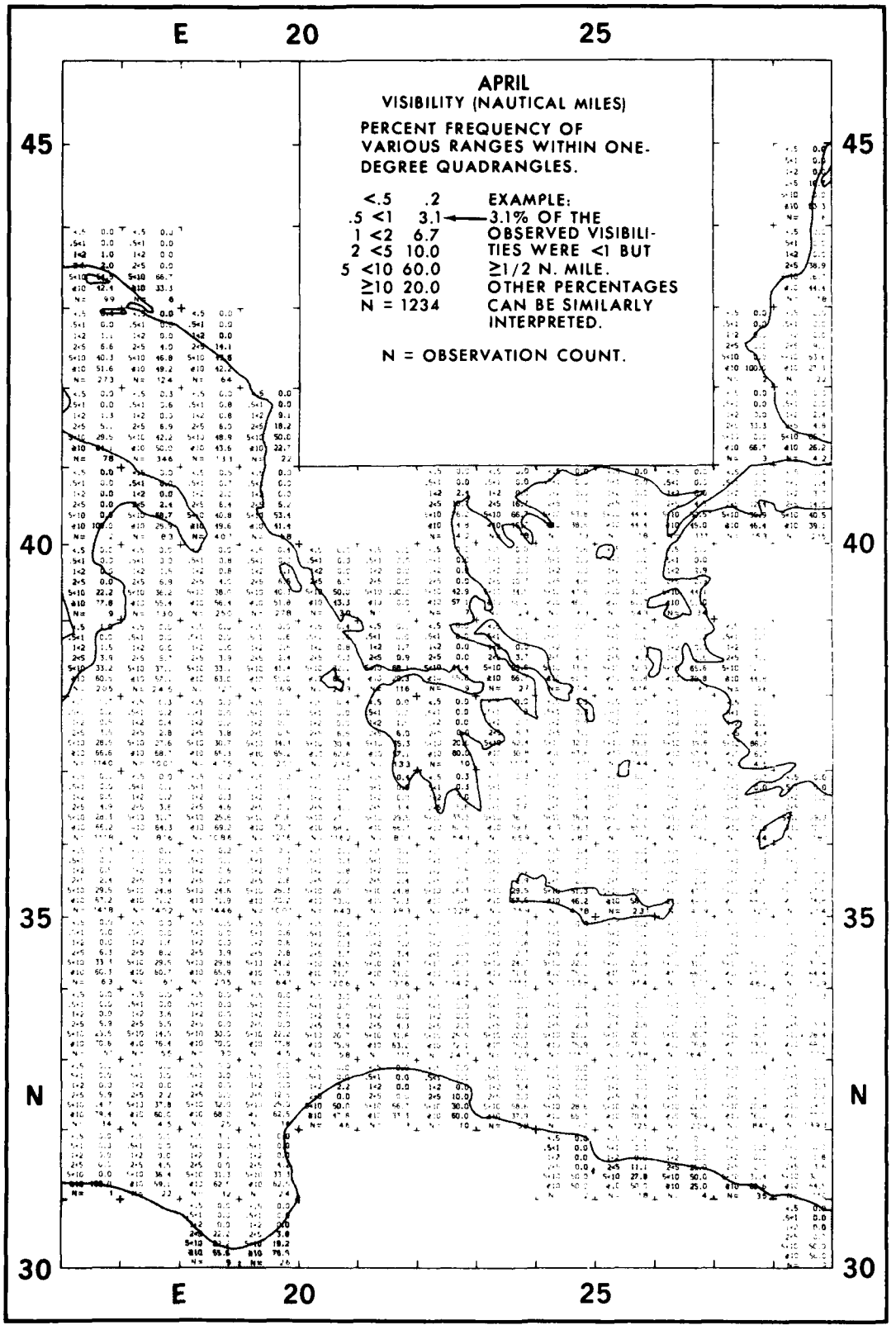

30
E
35
40
45
40
35
N
30
MARCH
WAVE HEIGHT-FREQUENCIES

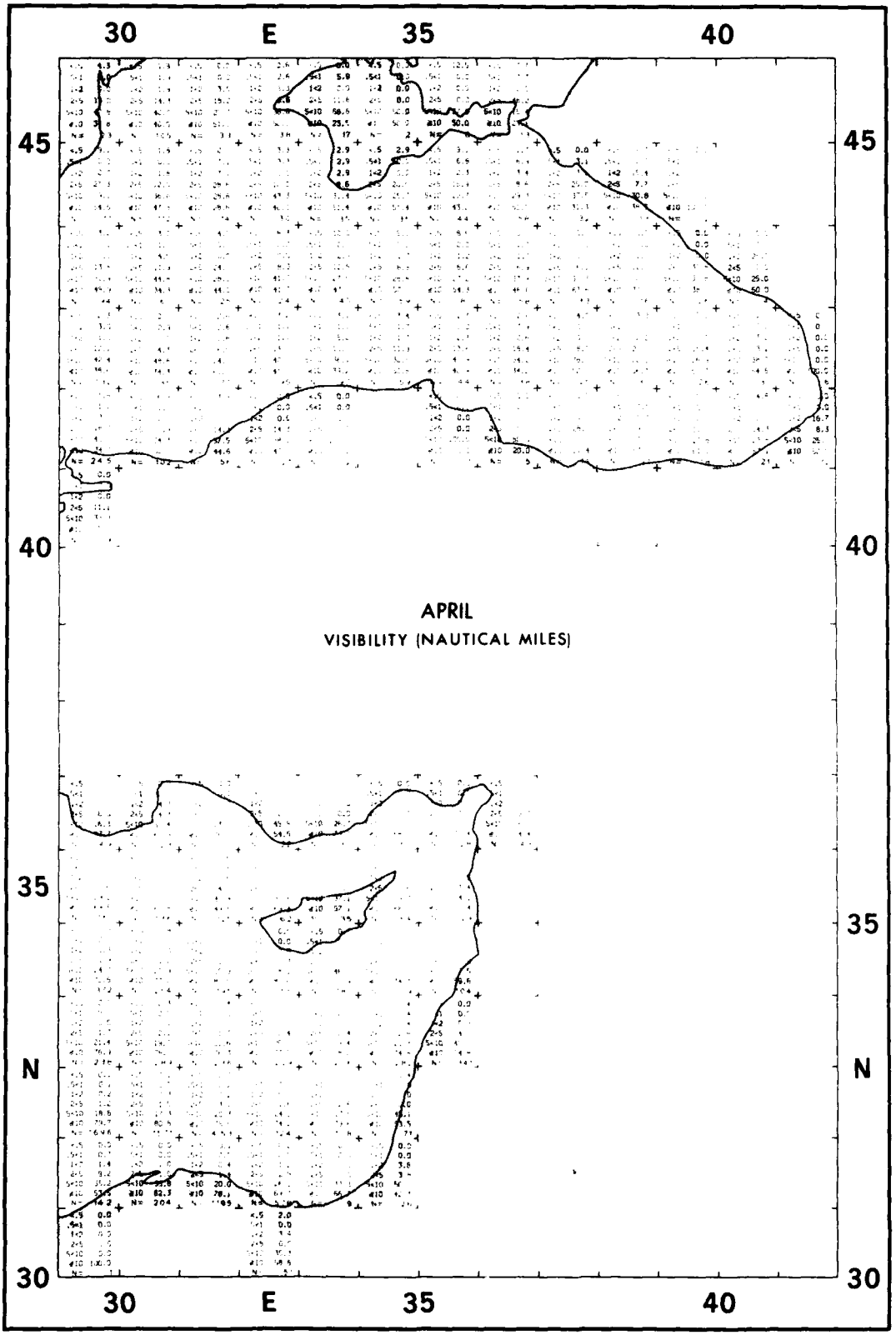

APRIL
CLOUD COVER
PERCENT FREQUENCY OF:
SOLID LINE - TOTAL CLOUD AMOUNT ≤2/8
DASHED LINE - LOW CLOUD AMOUNT ≥5/8
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

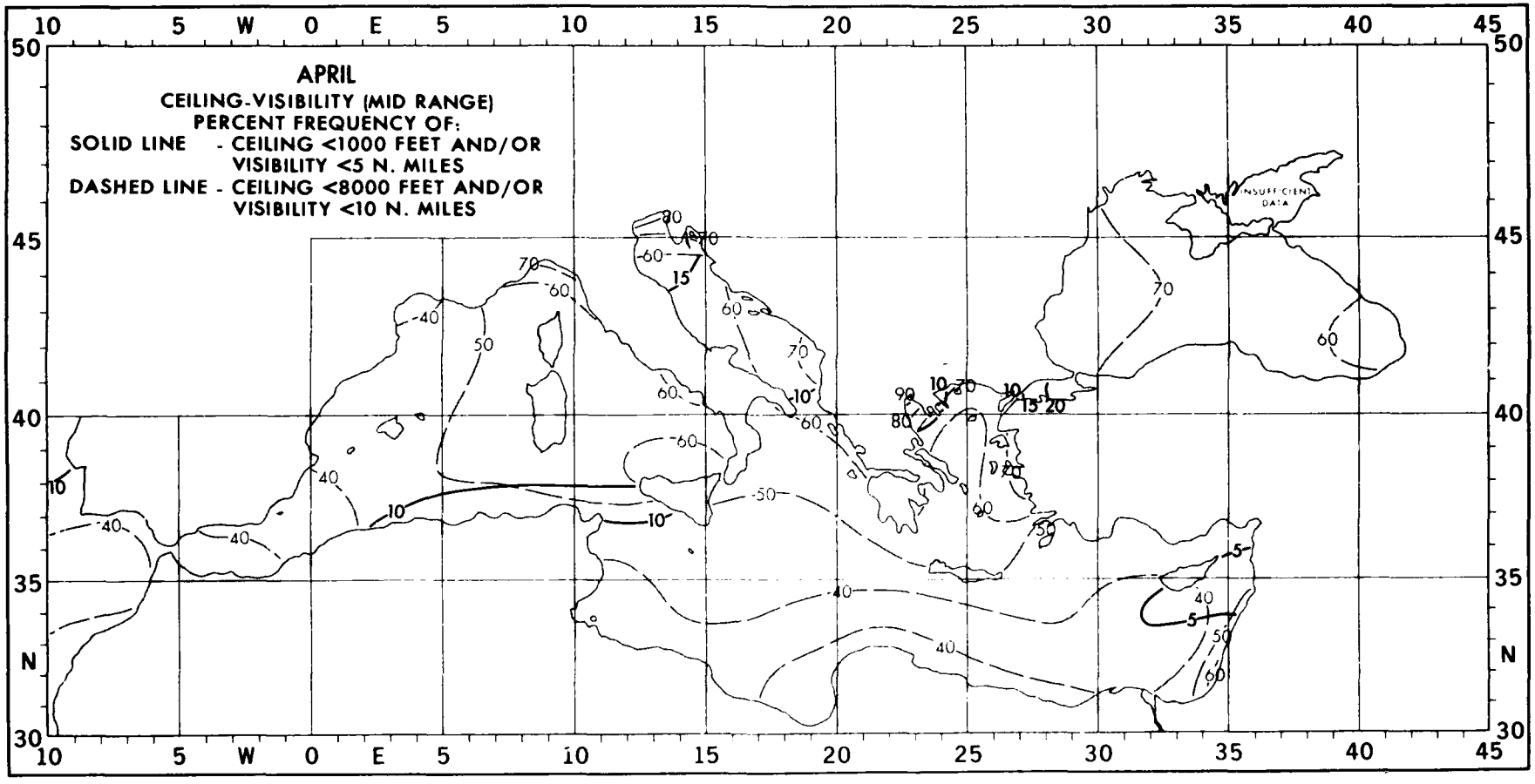

APRIL
PRECIPITATION
PERCENT FREQUENCY OF
OBSERVATIONS REPORTING PRECIPITATION
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

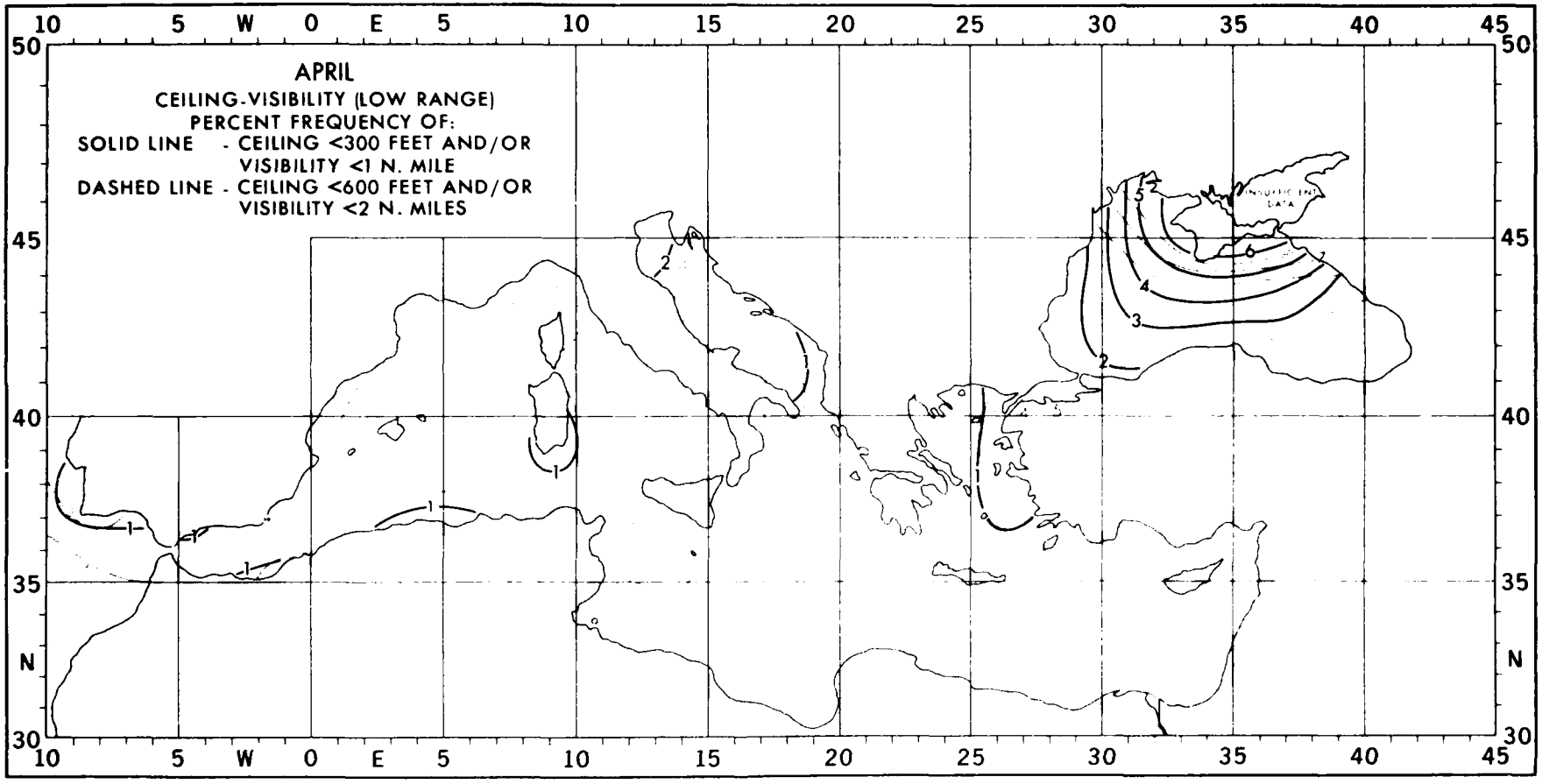

APRIL
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.
10
5
W
0
E
45
40
35
30
N

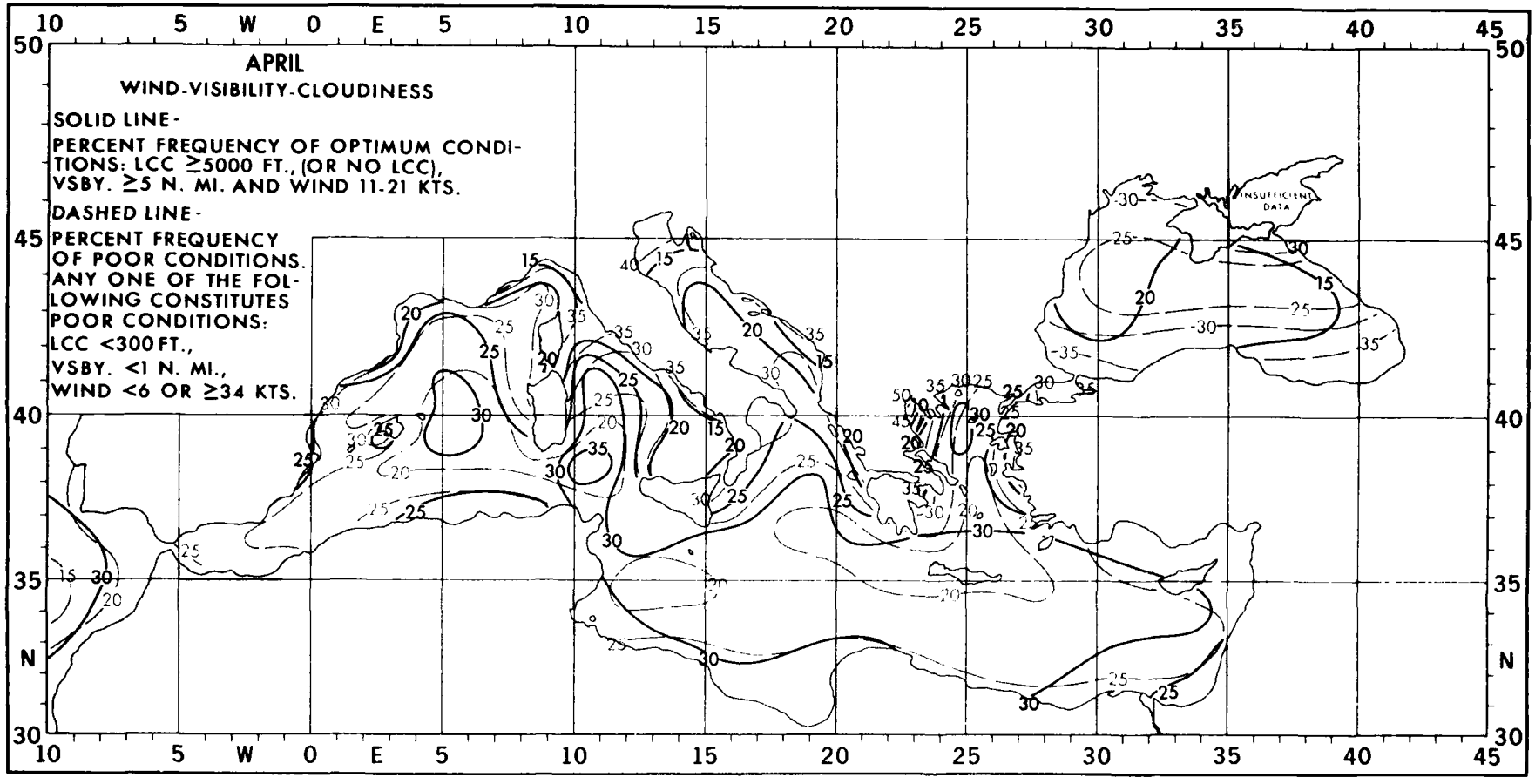

APRIL
VISIBILITY (NAUTICAL MILES)
5
E
10
15
45
40
35
N
30

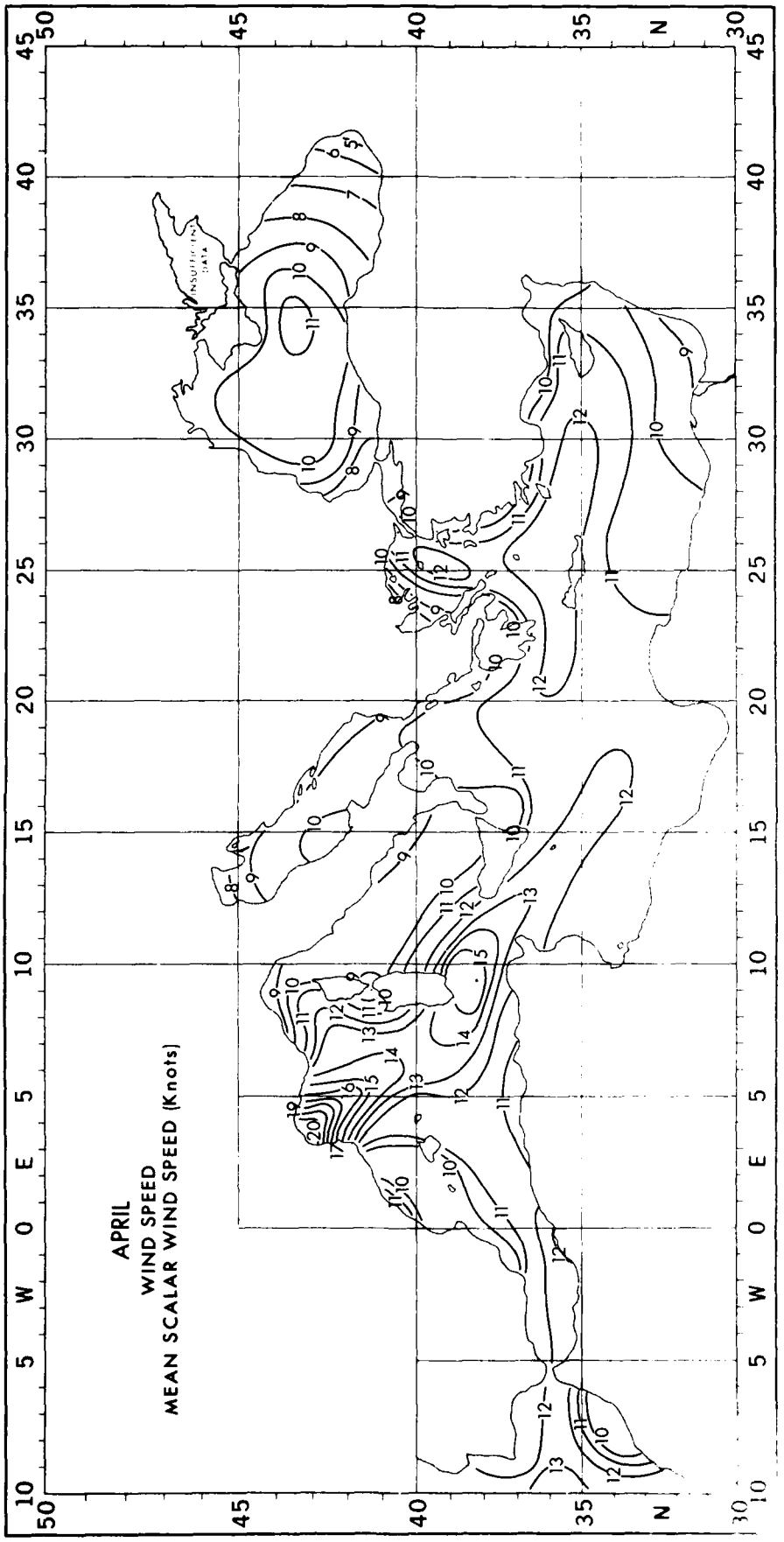

E
20
25
45
40
35
N
30
APRIL
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.


30
E
35
40
45
40
APRIL
VISIBILITY (NAUTICAL MILES)
35
N
30


APRIL
CEILING-VISIBILITY (MID RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <1000 FEET AND/OR VISIBILITY <5 N. MILES
DASHED LINE - CEILING <8000 FEET AND/OR VISIBILITY <10 N. MILES
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

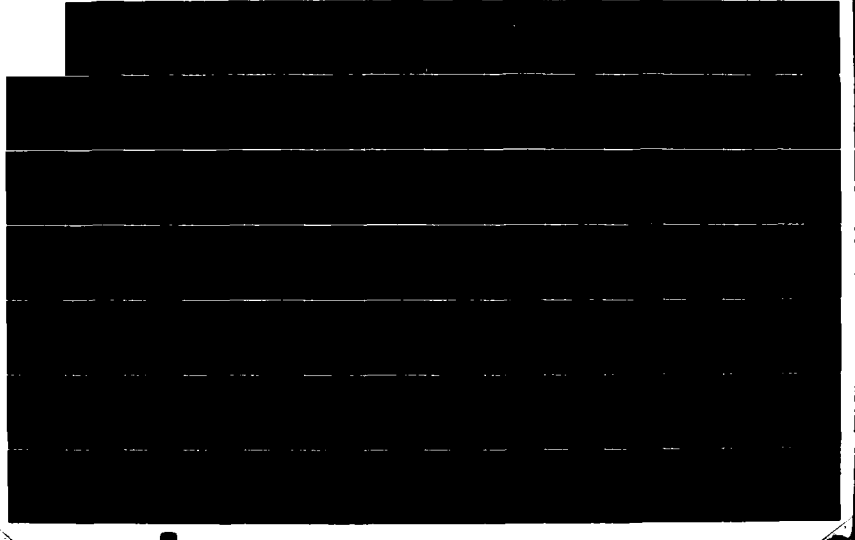

APRIL
CEILING-VISIBILITY (LOW RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <300 FEET AND/OR VISIBILITY <1 N. MILE
DASHED LINE - CEILING <600 FEET AND/OR VISIBILITY <2 N. MILES
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

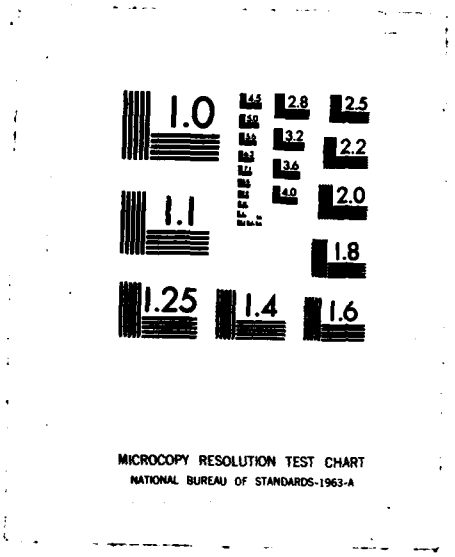

APRIL
WIND-VISIBILITY-CLOUDINESS
SOLID LINE-
PERCENT FREQUENCY OF OPTIMUM CONDITIONS: LCC ≥5000 FT., (OR NO LCC), VSBY. ≥5 N. MI. AND WIND 11-21 KTS.
DASHED LINE-
PERCENT FREQUENCY OF POOR CONDITIONS. ANY ONE OF THE FOLLOWING CONSTITUTES POOR CONDITIONS:
LCC <300 FT.,
VSBY. <1 N. MI.,
WIND <6 OR ≥34 KTS.
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30


APRIL
WIND SPEED
MEAN SCALAR WIND SPEED (Knots)
INSUFFICIENT DATA
50
45
40
35
30
N
10
5
W
0
E
5
10
15
20
25
30
35
40
45

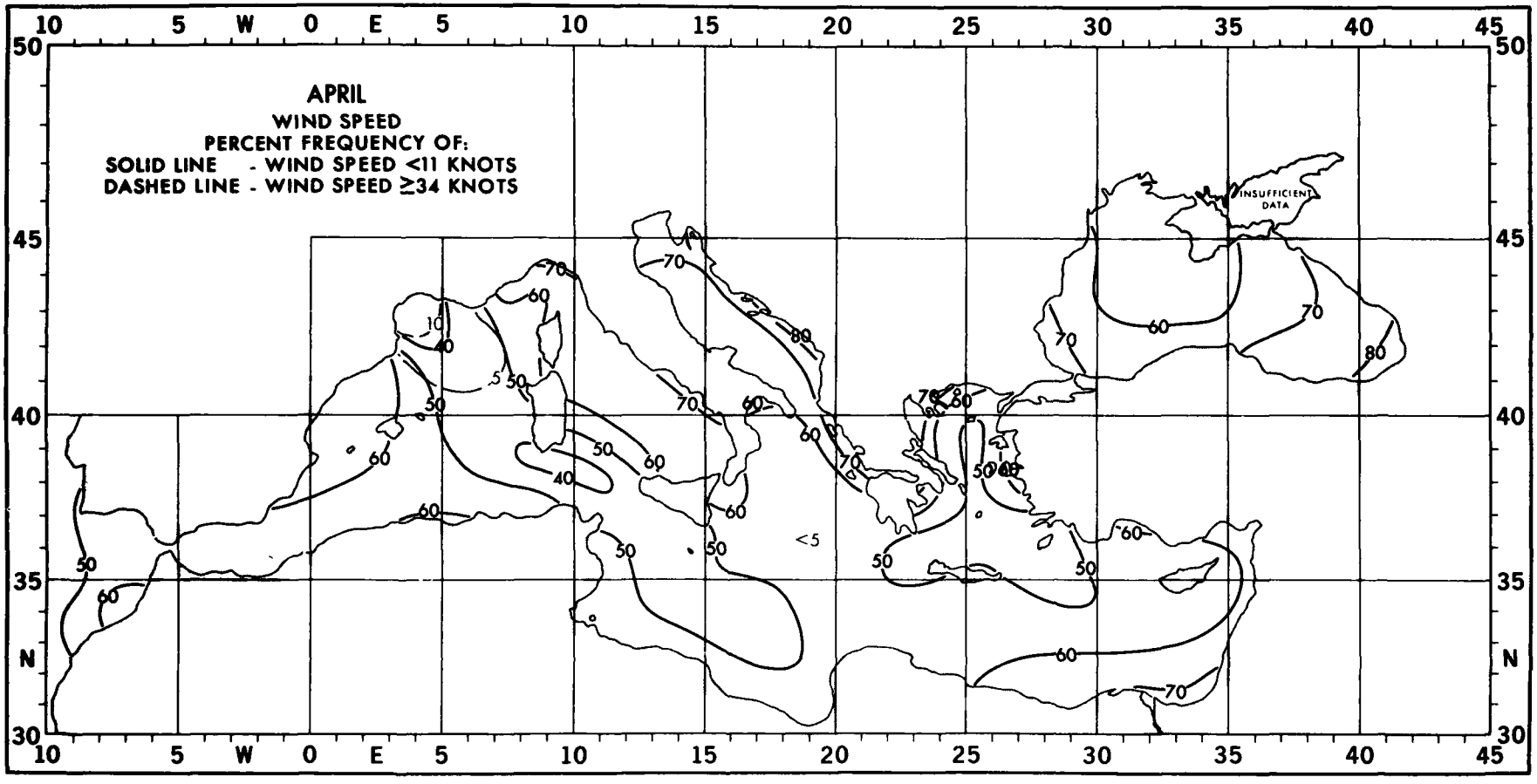
AD-A188 264 US NAVY CLIMATIC STUDY OF THE MEDITERRANEAN SEA(U) 2/4
NAVAL OCEANOGRAPHY COMMAND NSTL STATION MS JUL 87
NAVAIR-50-1C-547

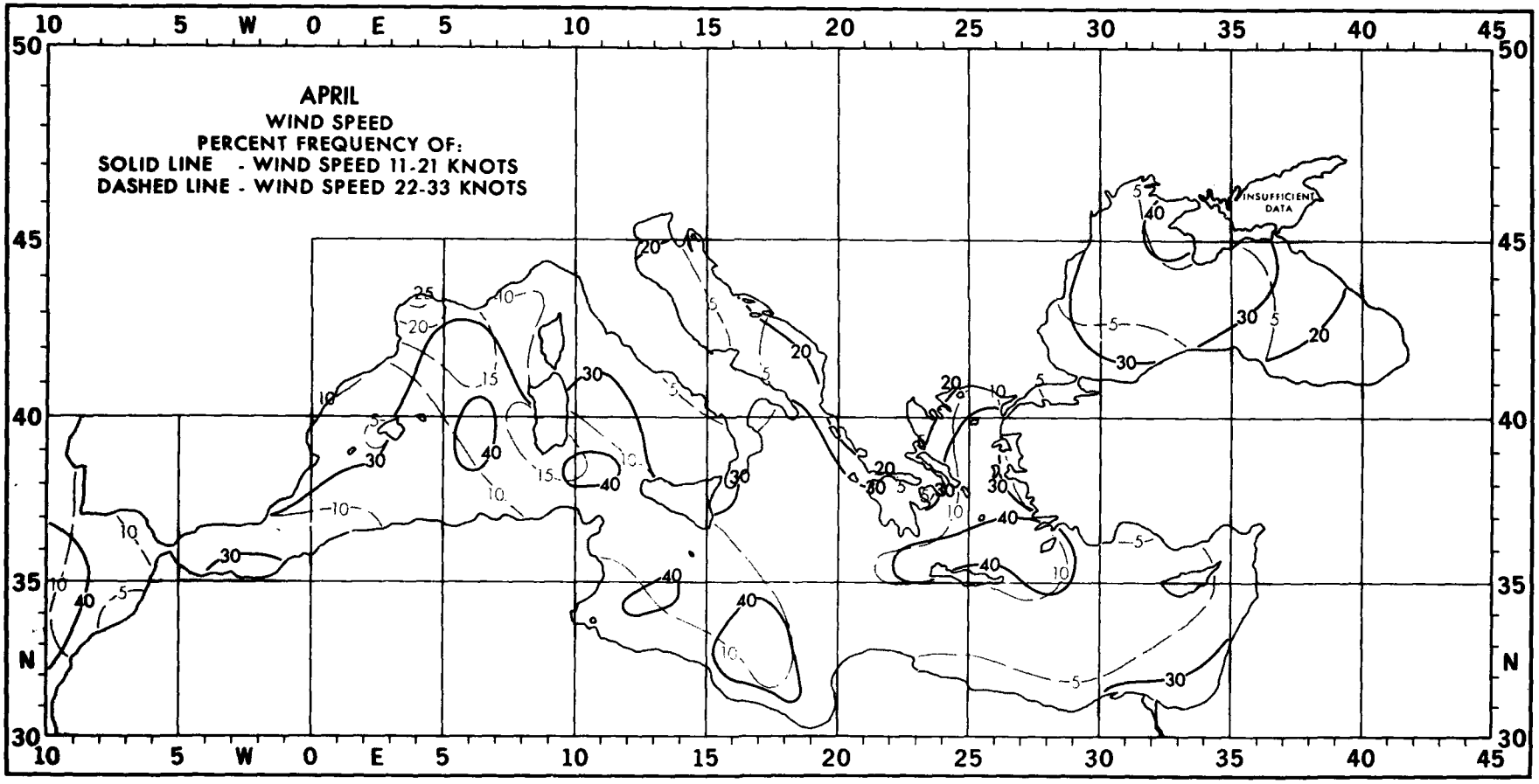
UNCLASSIFIED F/G 4/2 NL

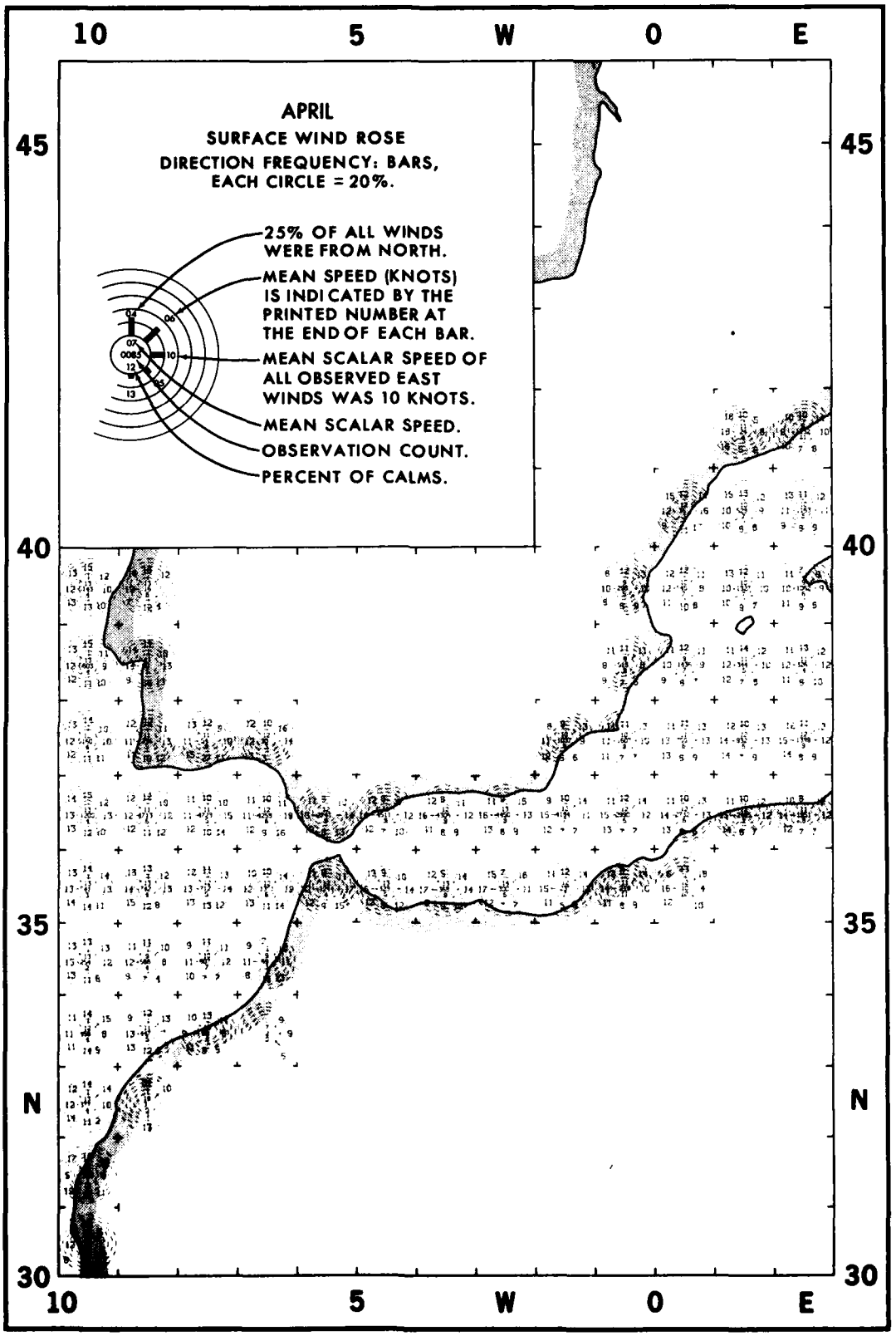


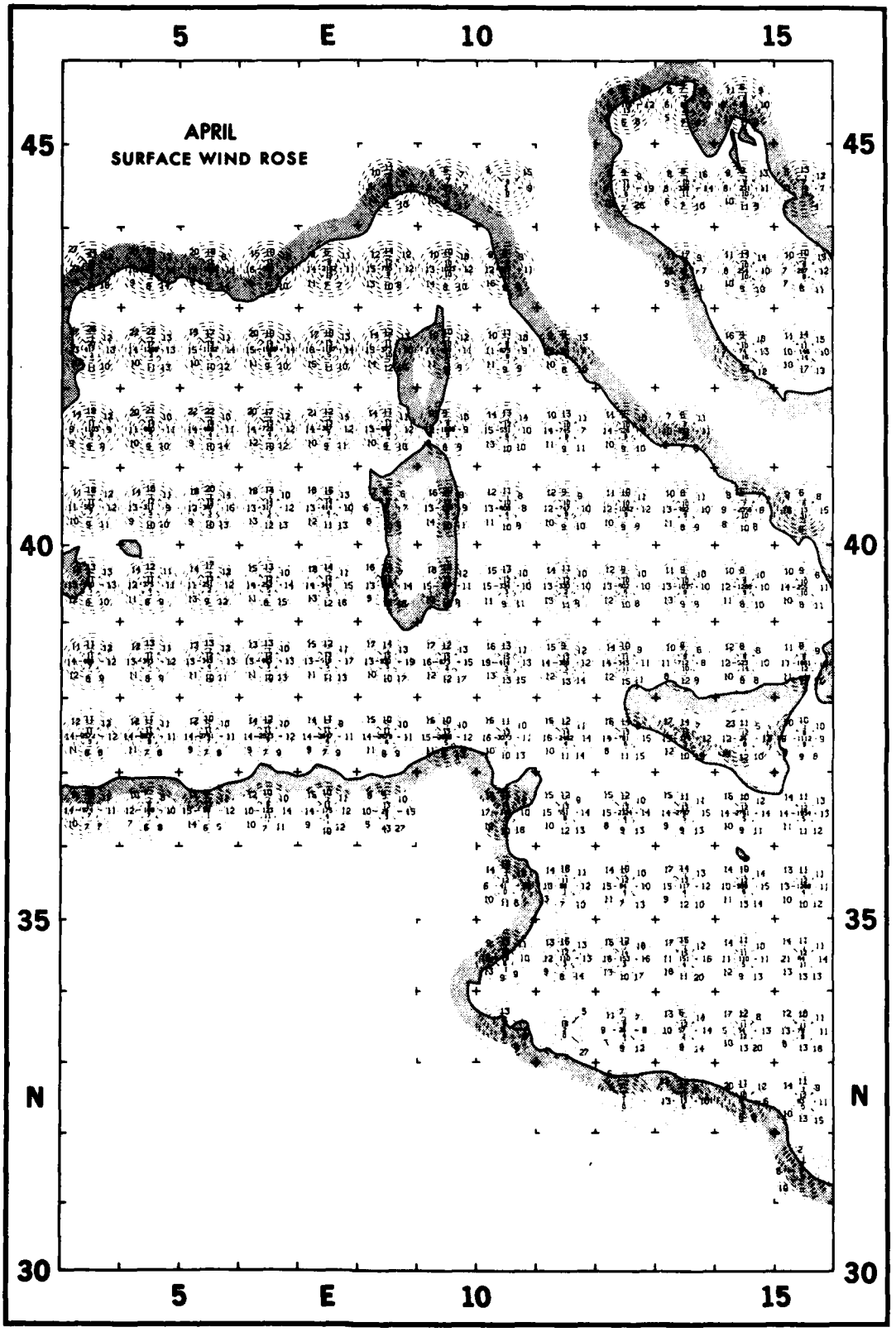


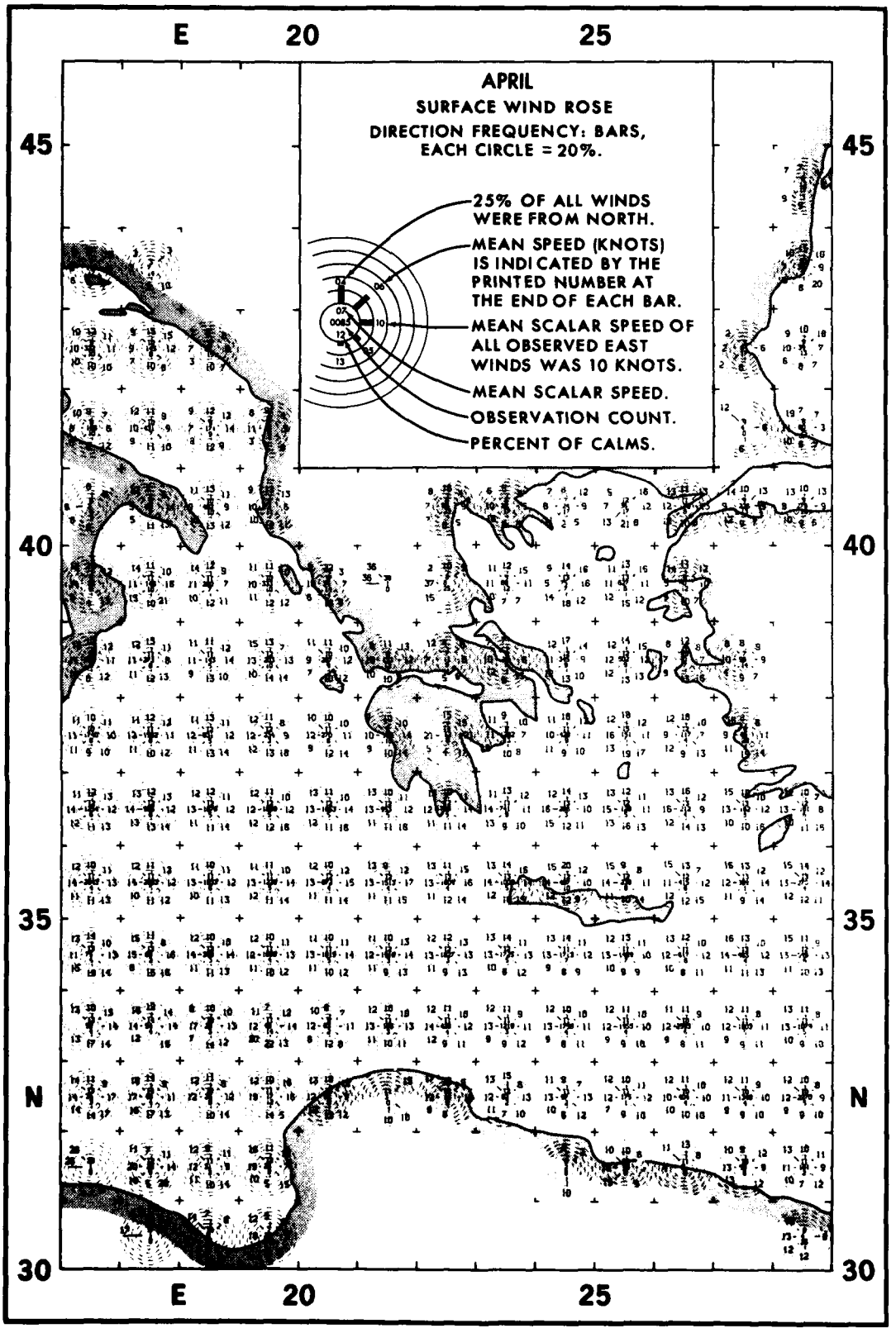
MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

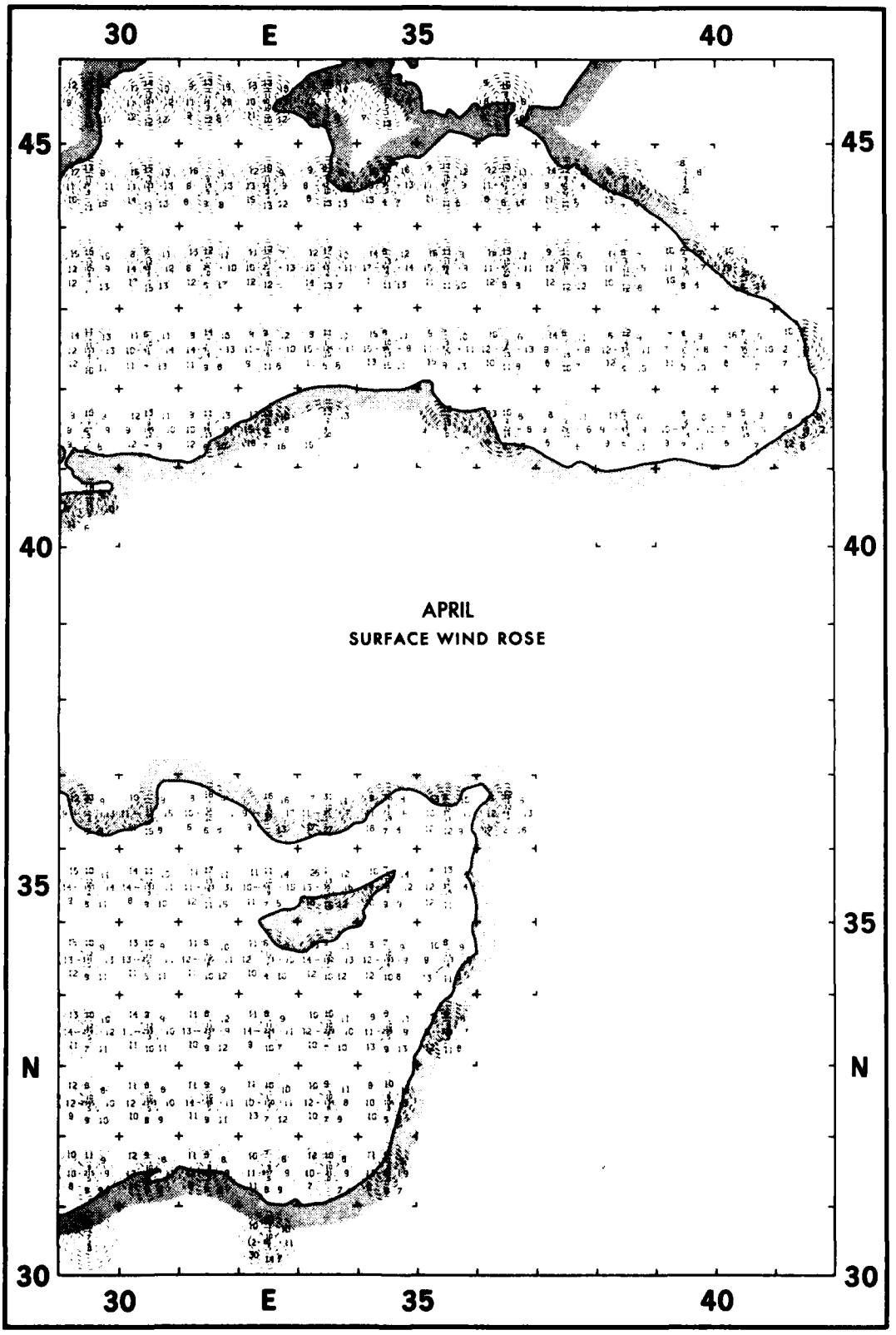

APRIL
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED <11 KNOTS
DASHED LINE - WIND SPEED ≥34 KNOTS
INSUFFICIENT DATA
<5
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

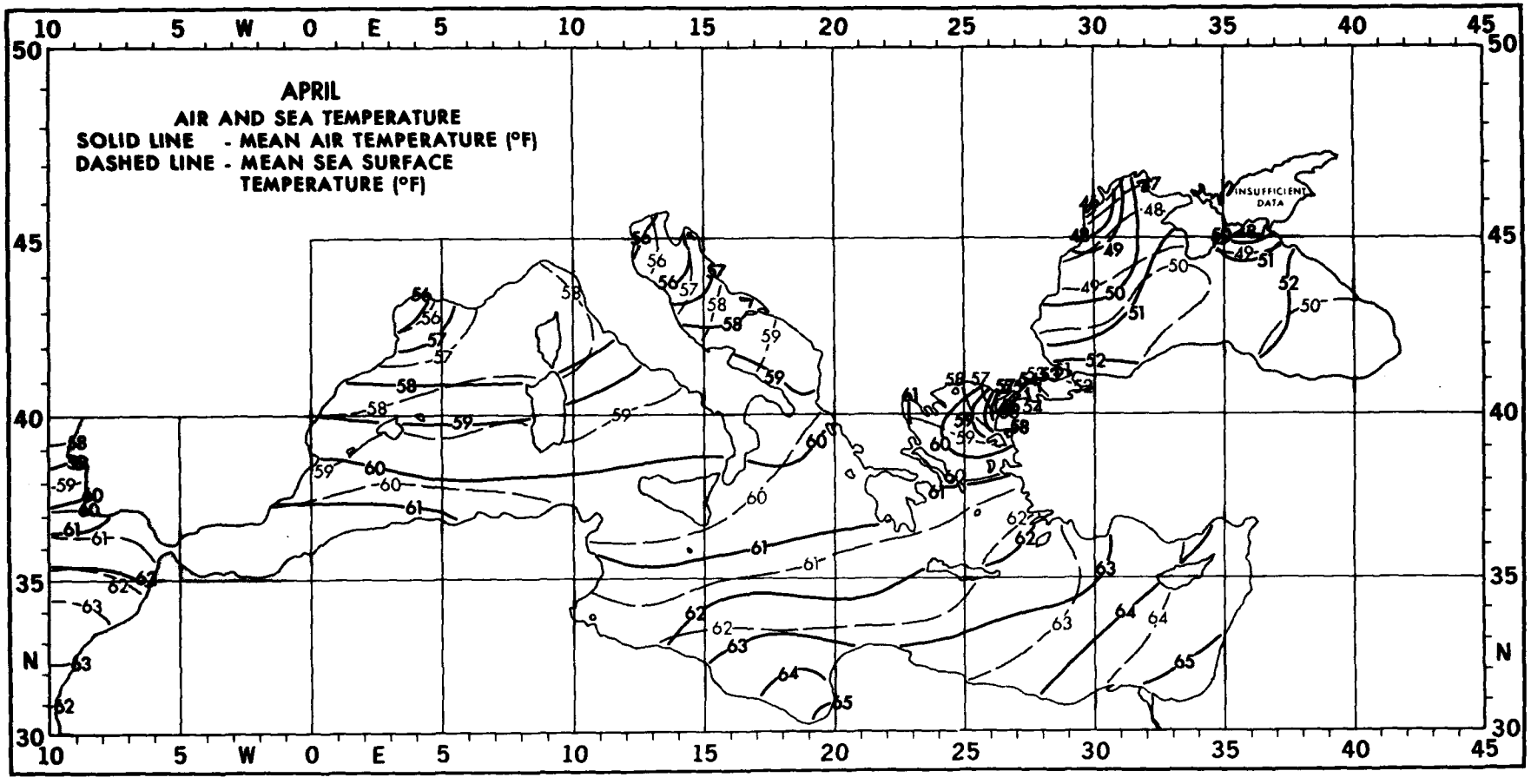

APRIL
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED 11-21 KNOTS
DASHED LINE - WIND SPEED 22-33 KNOTS
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

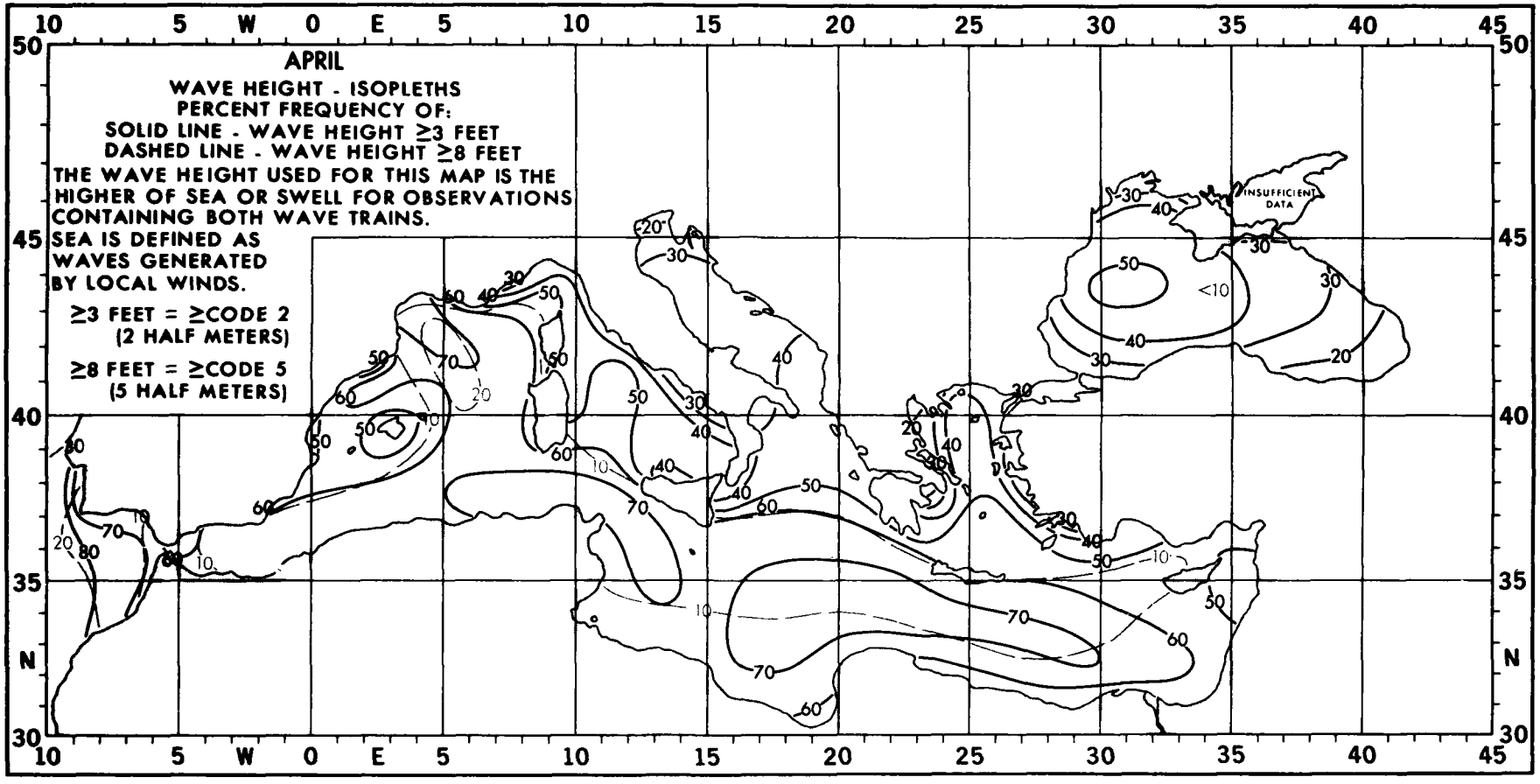

10
5
W
0
E
45
40
35
N
30
APRIL
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS,
EACH CIRCLE = 20%.
25% OF ALL WINDS WERE FROM NORTH.
MEAN SPEED (KNOTS) IS INDICATED BY THE PRINTED NUMBER AT THE END OF EACH BAR.
MEAN SCALAR SPEED OF ALL OBSERVED EAST WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.

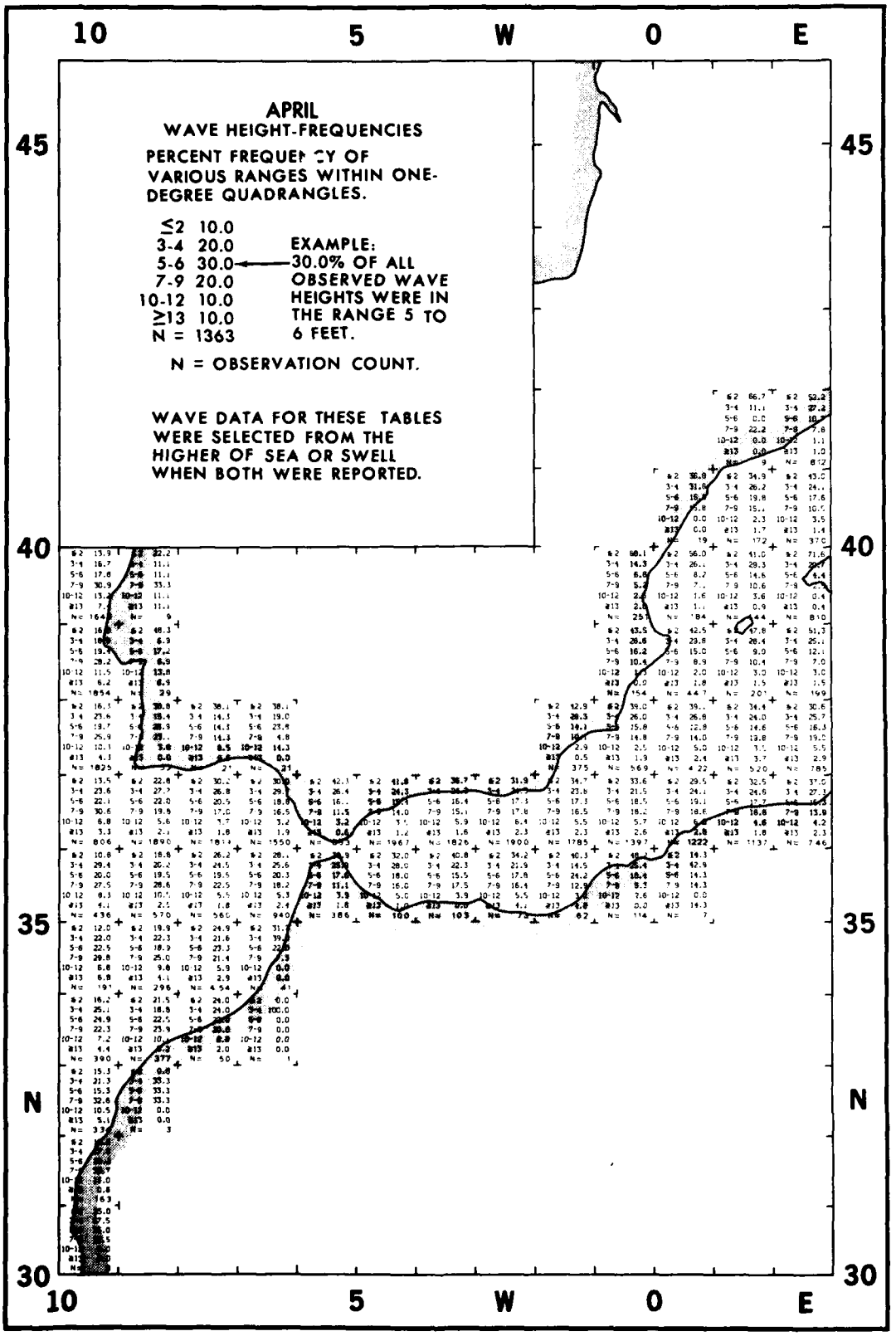

APRIL
SURFACE WIND ROSE
5
E
10
15
45
40
35
N
30

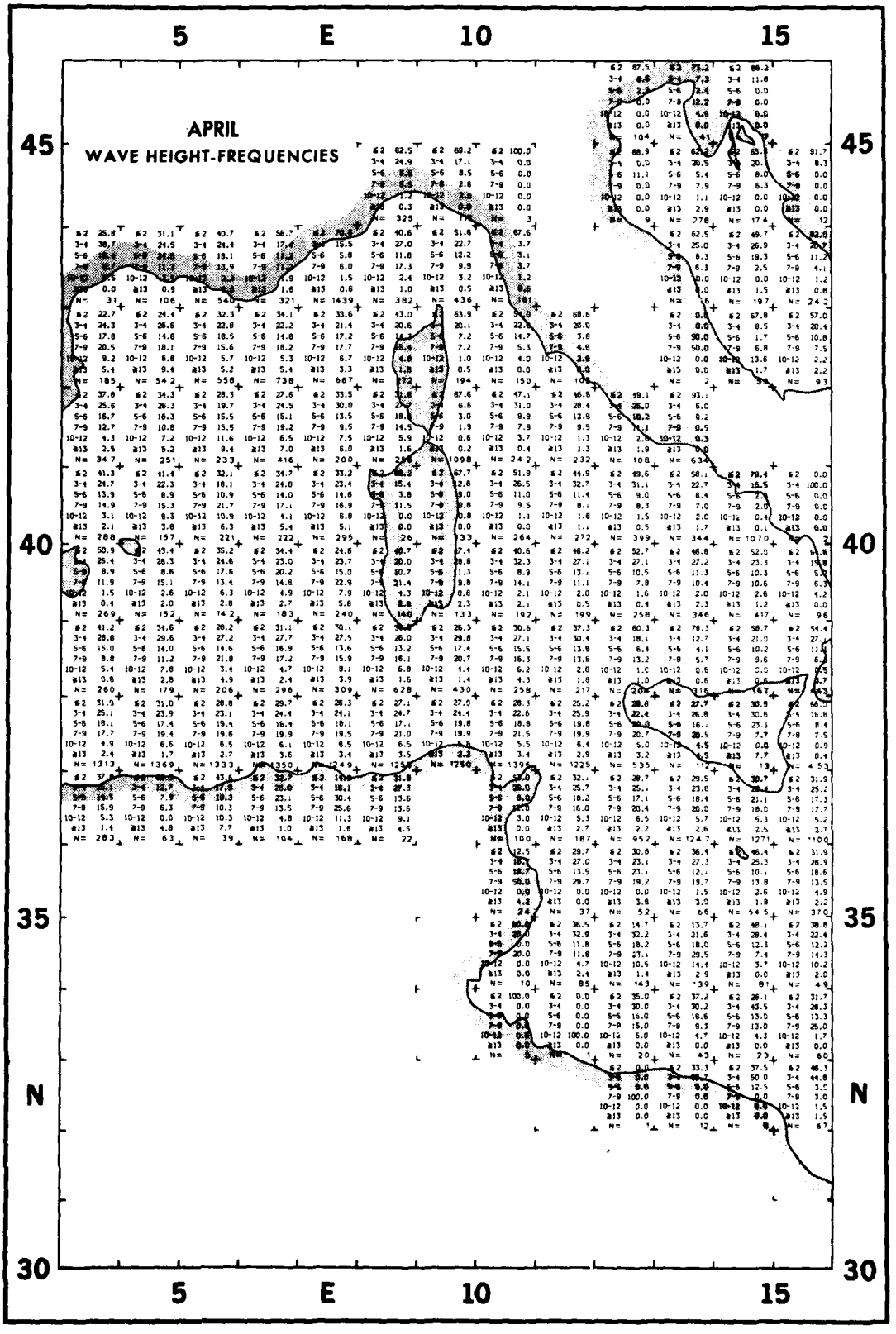

E
20
25
45
40
35
N
30
APRIL
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS,
EACH CIRCLE = 20%.
25% OF ALL WINDS WERE FROM NORTH.
MEAN SPEED (KNOTS) IS INDICATED BY THE PRINTED NUMBER AT THE END OF EACH BAR.
MEAN SCALAR SPEED OF ALL OBSERVED EAST WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.

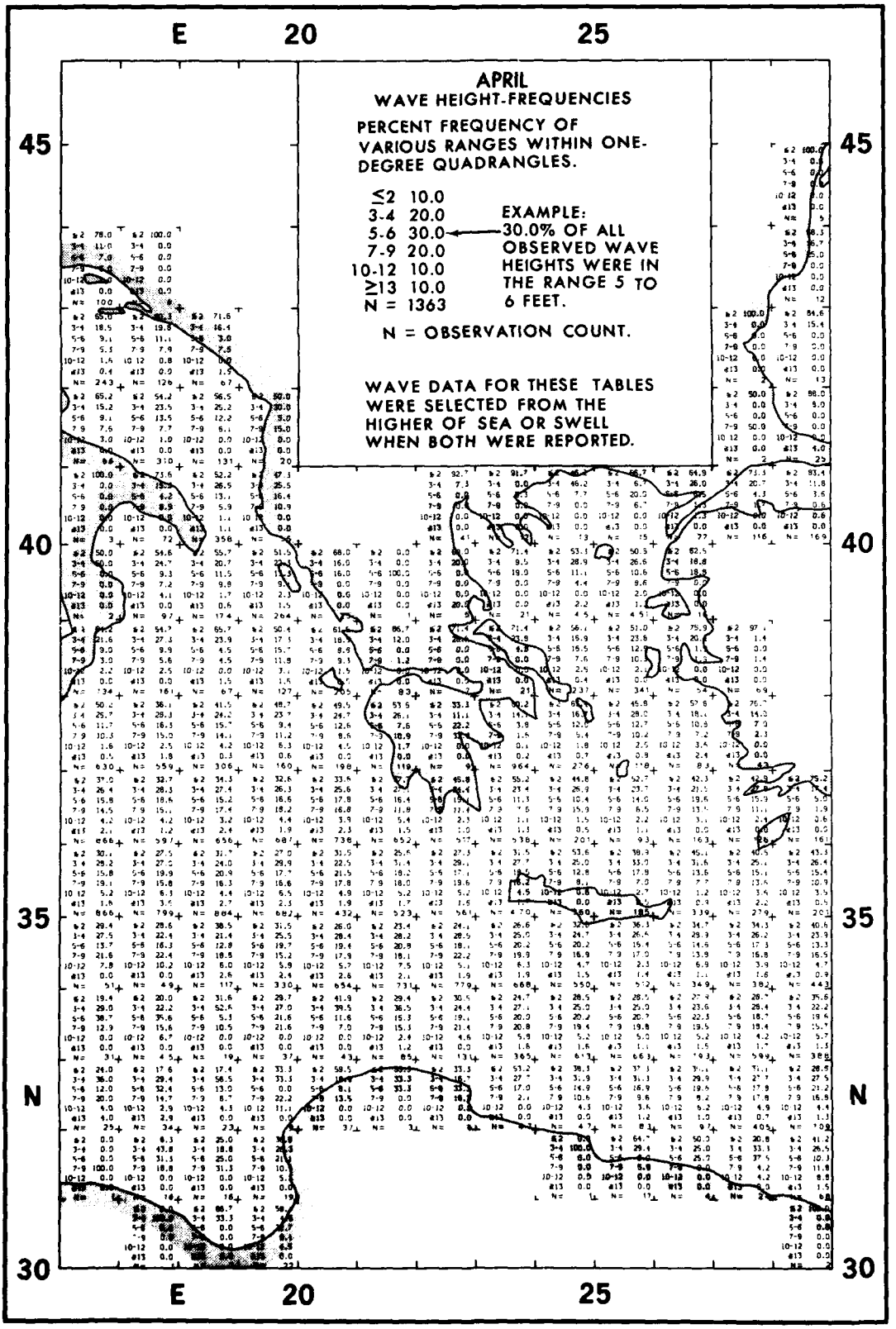

30
E
35
40
45
40
35
N
30
APRIL
SURFACE WIND ROSE

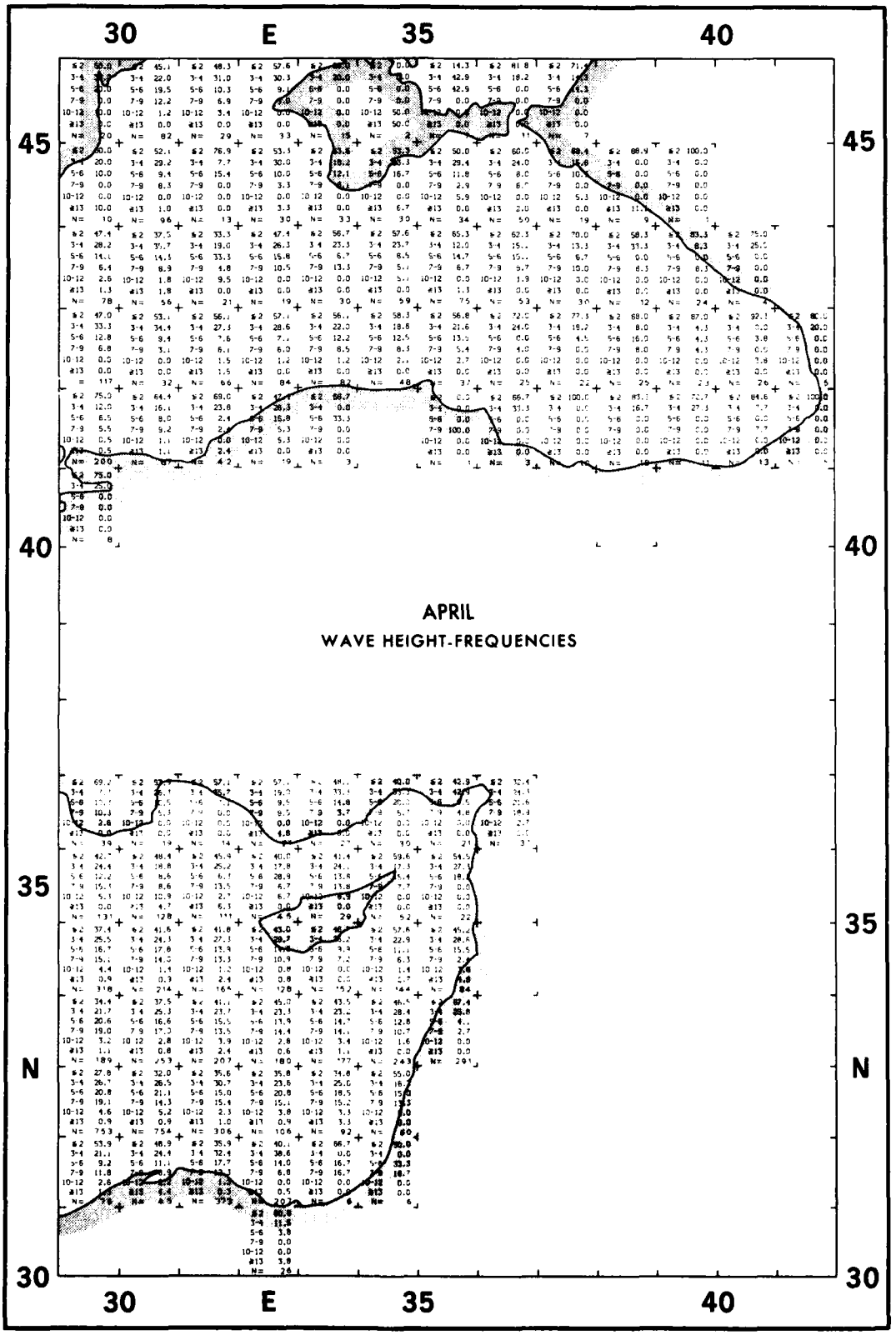

APRIL
AIR AND SEA TEMPERATURE
SOLID LINE - MEAN AIR TEMPERATURE (°F)
DASHED LINE - MEAN SEA SURFACE TEMPERATURE (°F)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

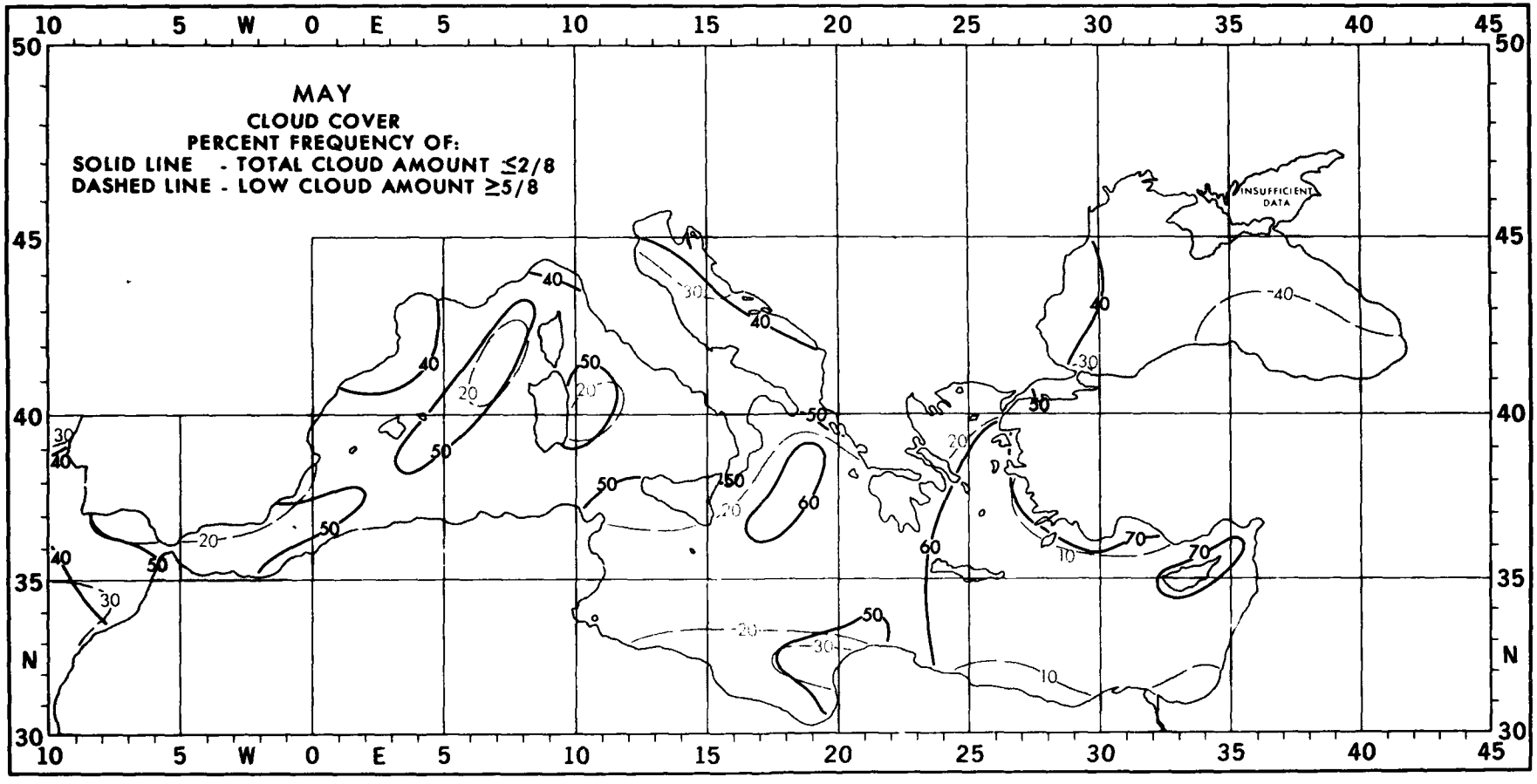

APRIL
WAVE HEIGHT - ISOPLETHS
PERCENT FREQUENCY OF:
SOLID LINE - WAVE HEIGHT ≥3 FEET
DASHED LINE - WAVE HEIGHT ≥8 FEET
THE WAVE HEIGHT USED FOR THIS MAP IS THE HIGHER OF SEA OR SWELL FOR OBSERVATIONS CONTAINING BOTH WAVE TRAINS.
SEA IS DEFINED AS WAVES GENERATED BY LOCAL WINDS.
≥3 FEET = ≥CODE 2 (2 HALF METERS)
≥8 FEET = ≥CODE 5 (5 HALF METERS)
INSUFFICIENT DATA
<10
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

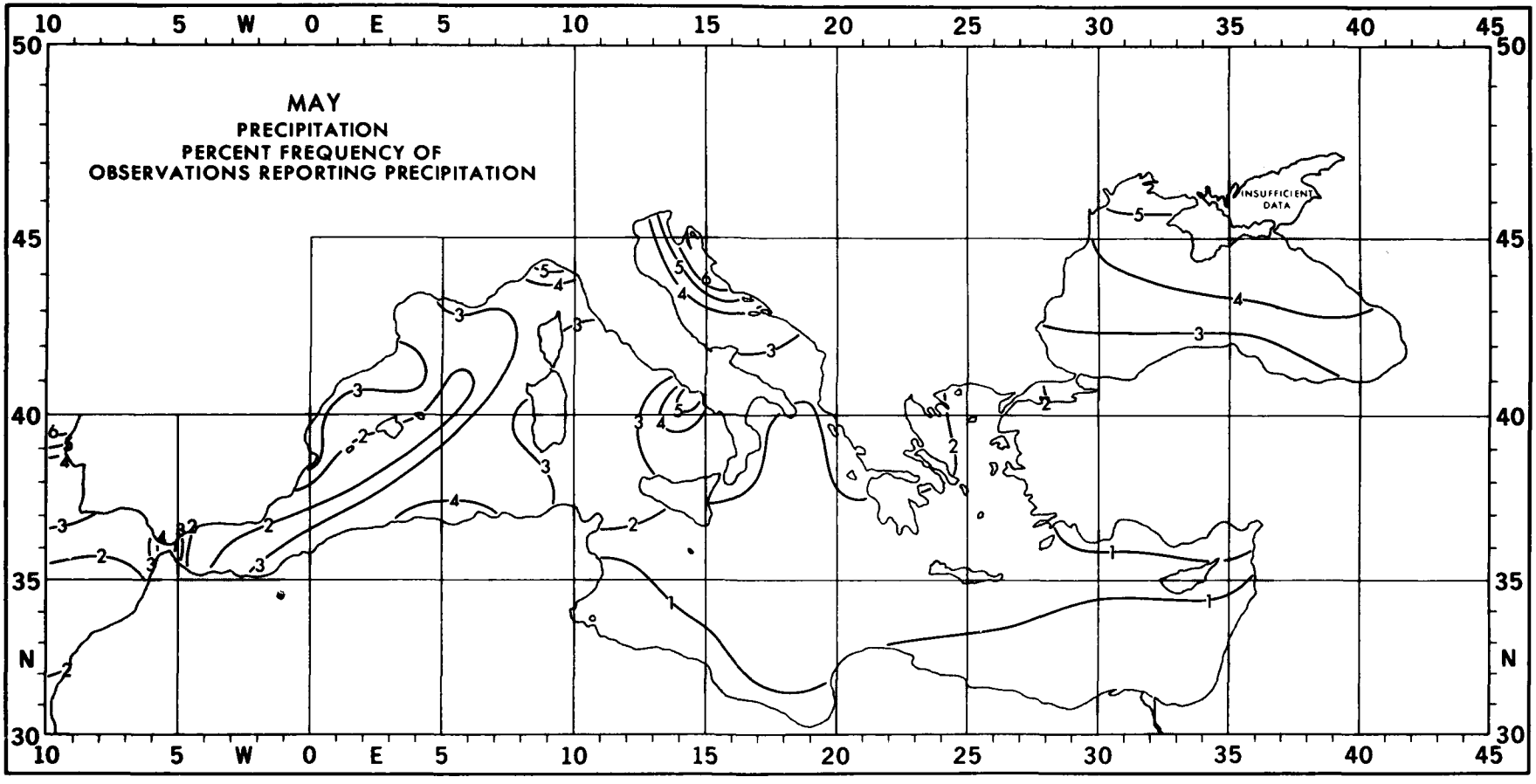

10
5
W
0
E
45
40
35
30
N
APRIL
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.

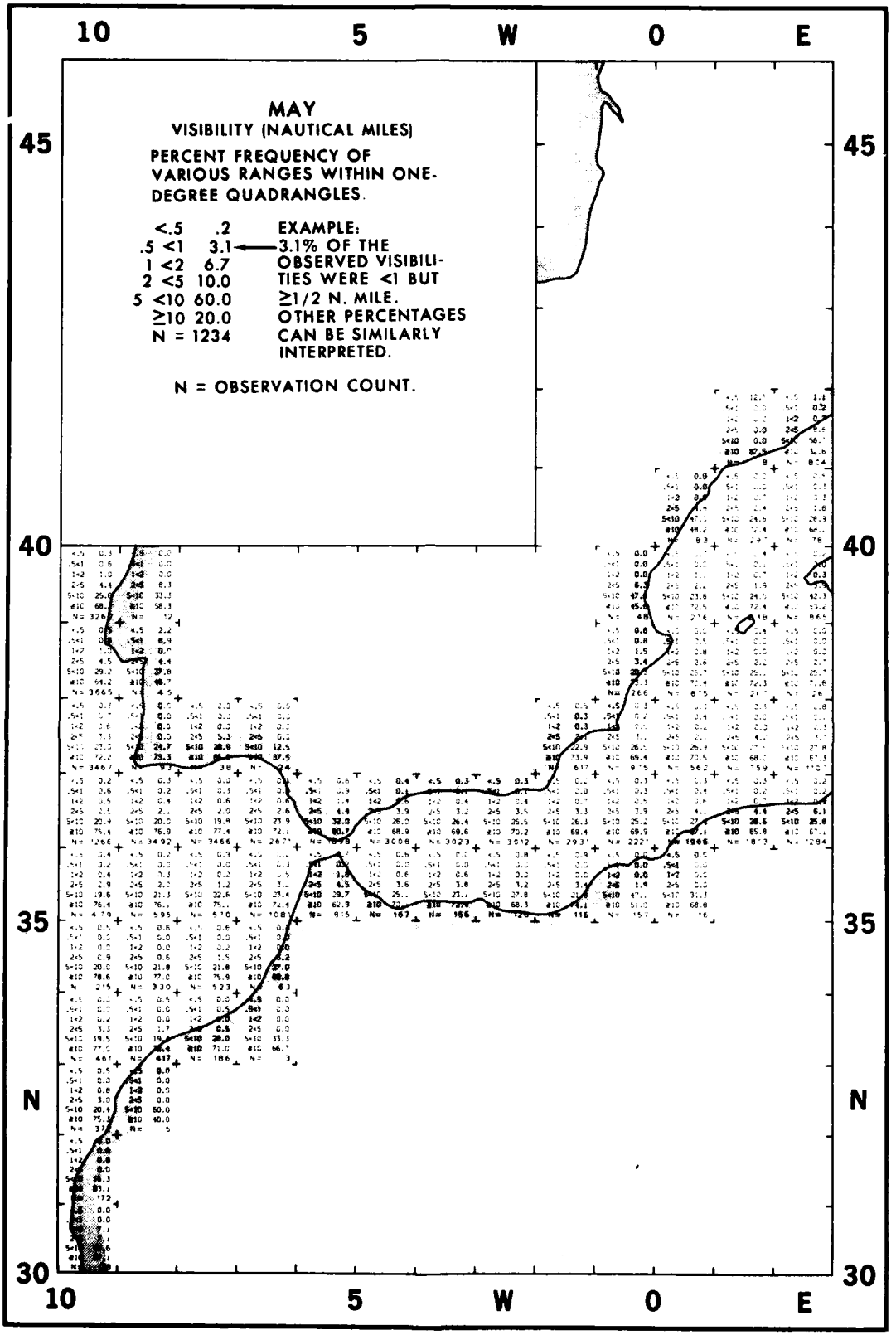

APRIL
WAVE HEIGHT-FREQUENCIES
5
E
10
15
45
40
35
30
N

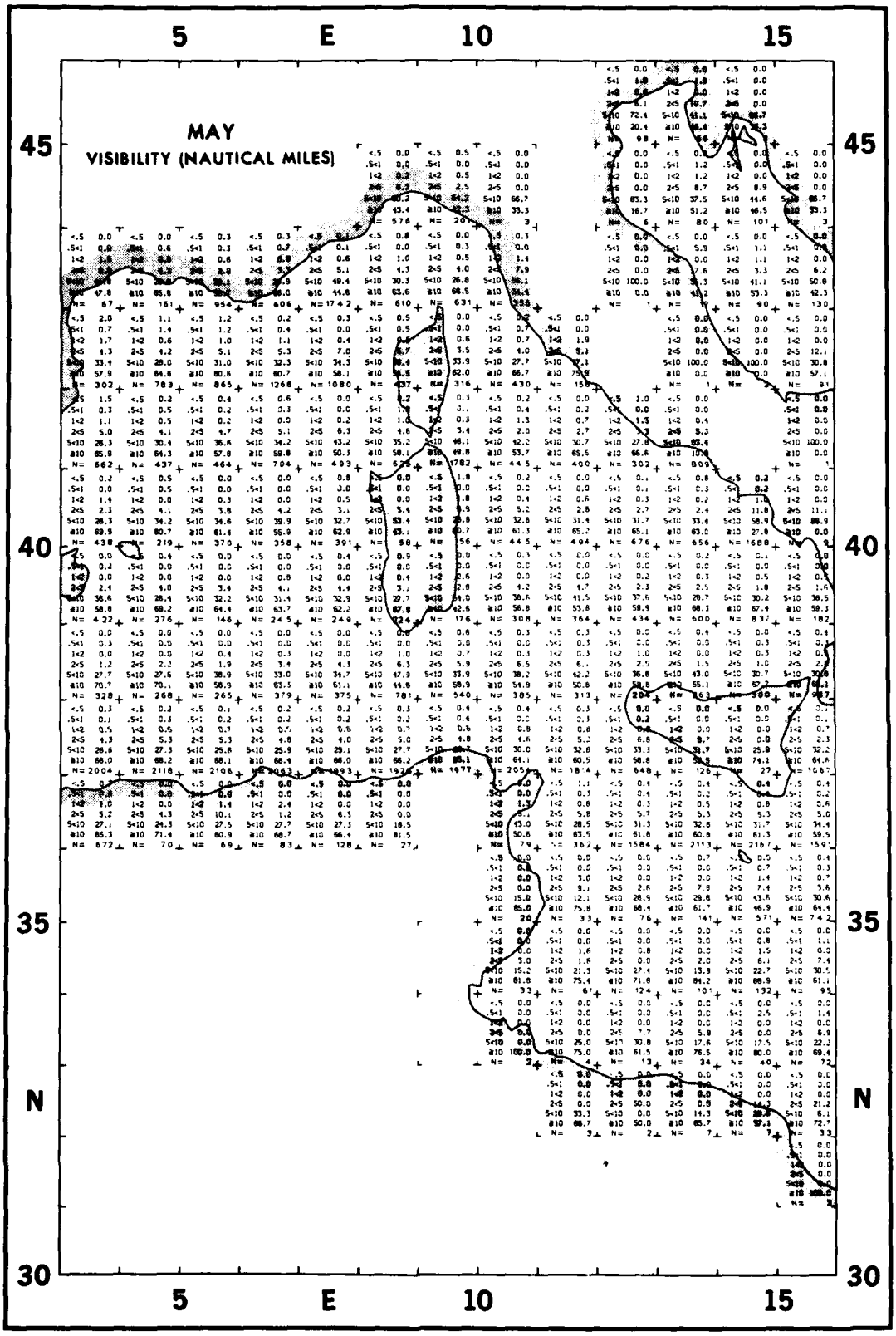

APRIL
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.
E
20
25
45
40
35
30
N

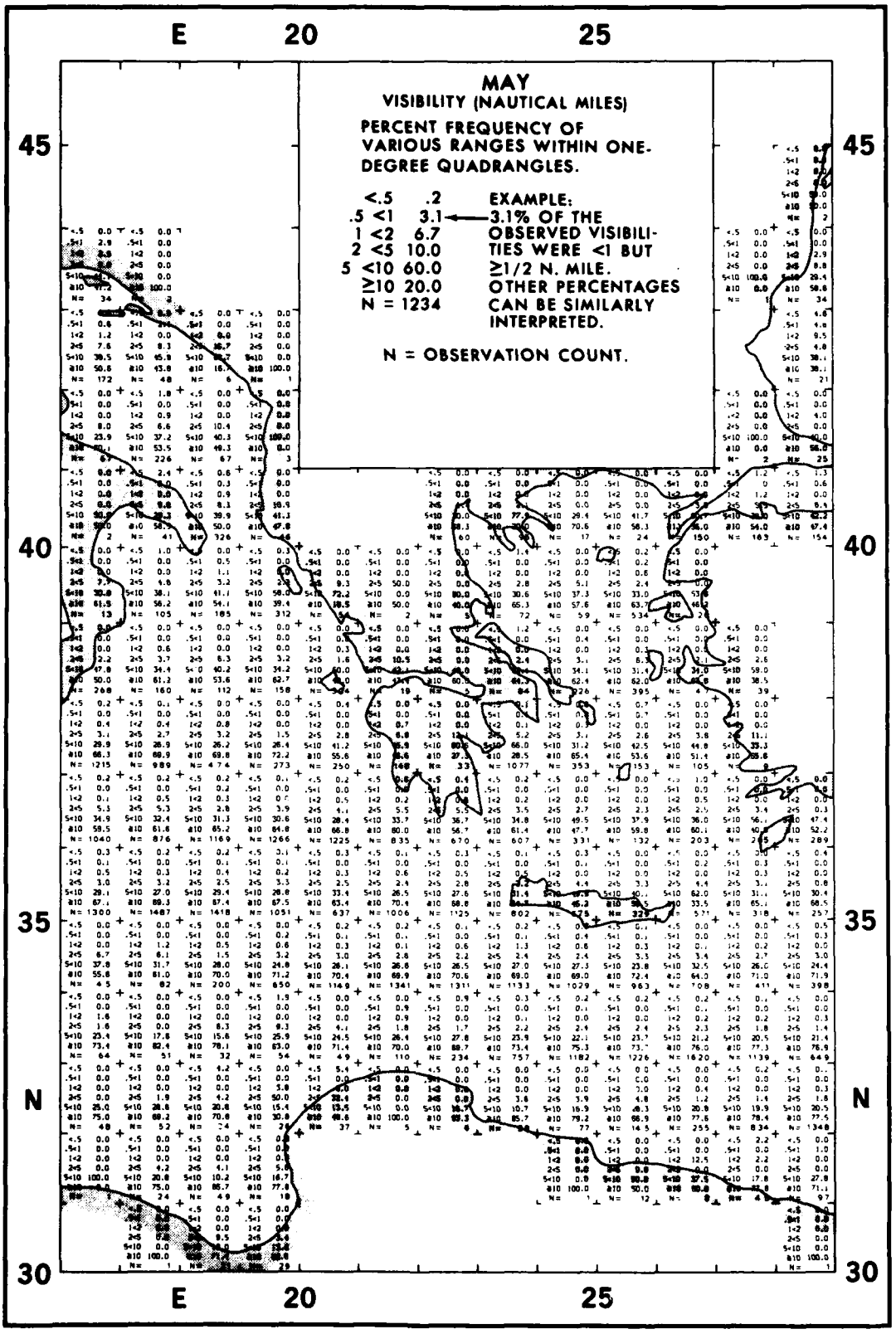

30
E
35
40
45
40
APRIL
WAVE HEIGHT-FREQUENCIES
35
N
30
30
E
35
40

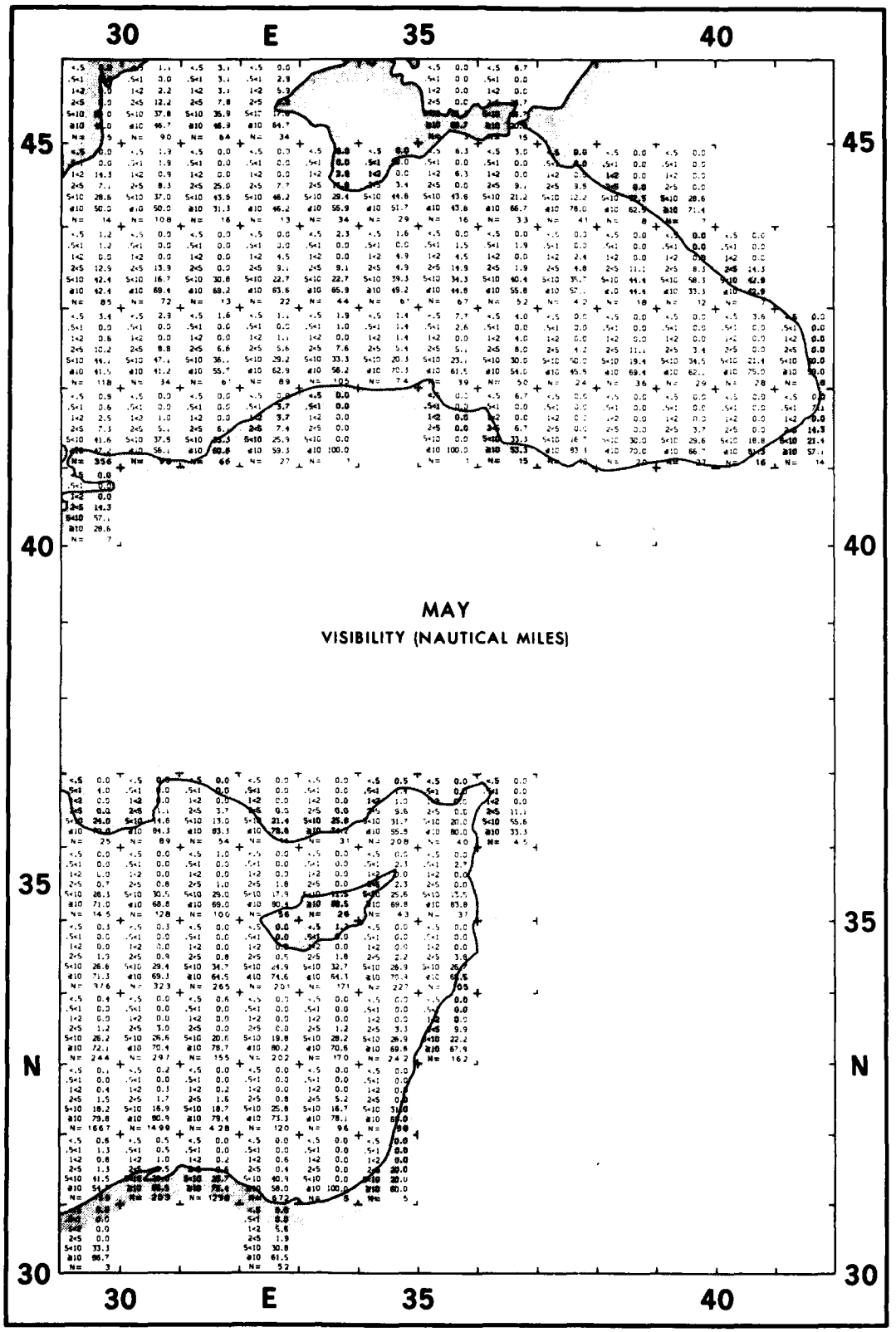

MAY
CLOUD COVER
PERCENT FREQUENCY OF:
SOLID LINE - TOTAL CLOUD AMOUNT ≤2/8
DASHED LINE - LOW CLOUD AMOUNT ≥5/8
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

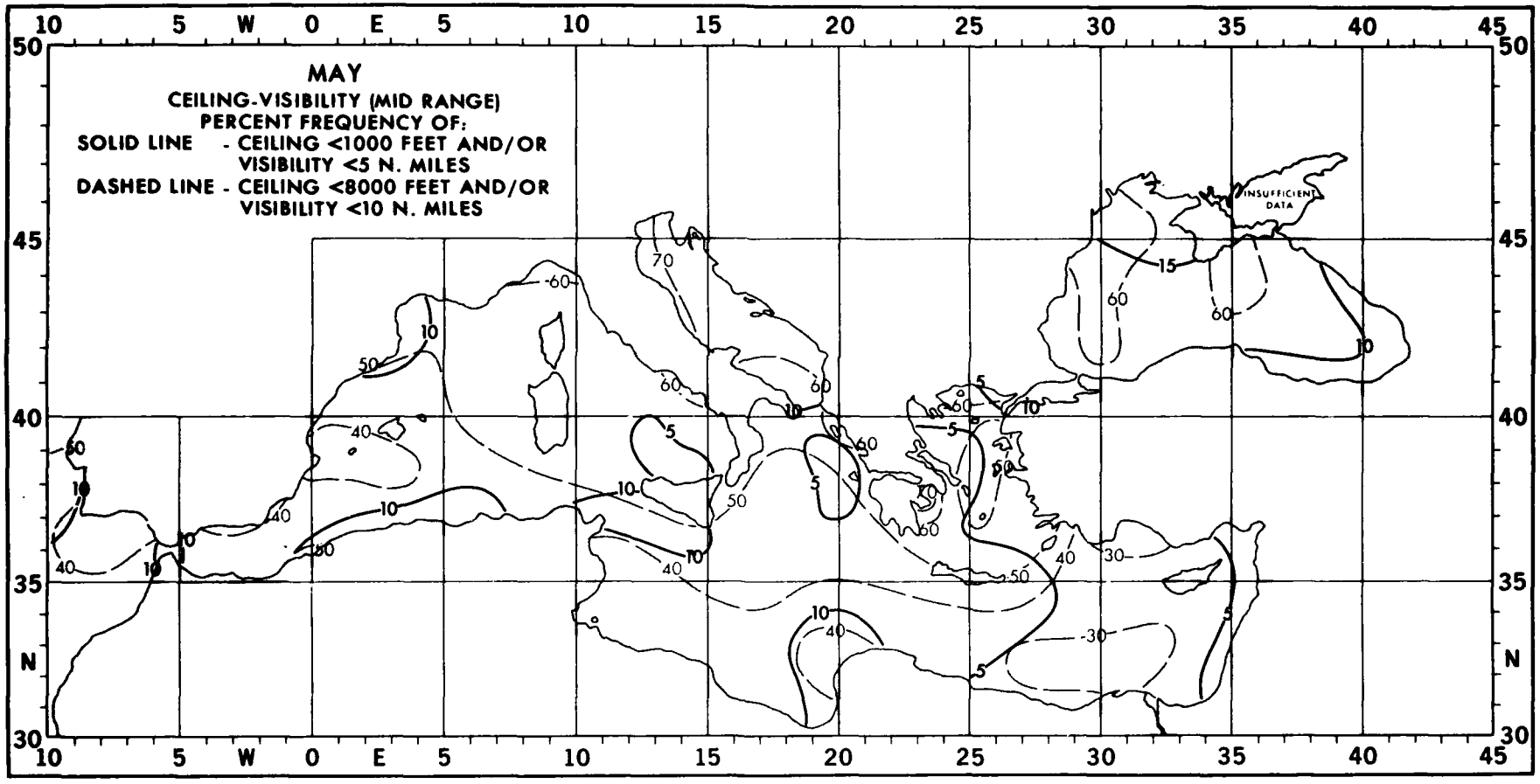

MAY
PRECIPITATION
PERCENT FREQUENCY OF
OBSERVATIONS REPORTING PRECIPITATION
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

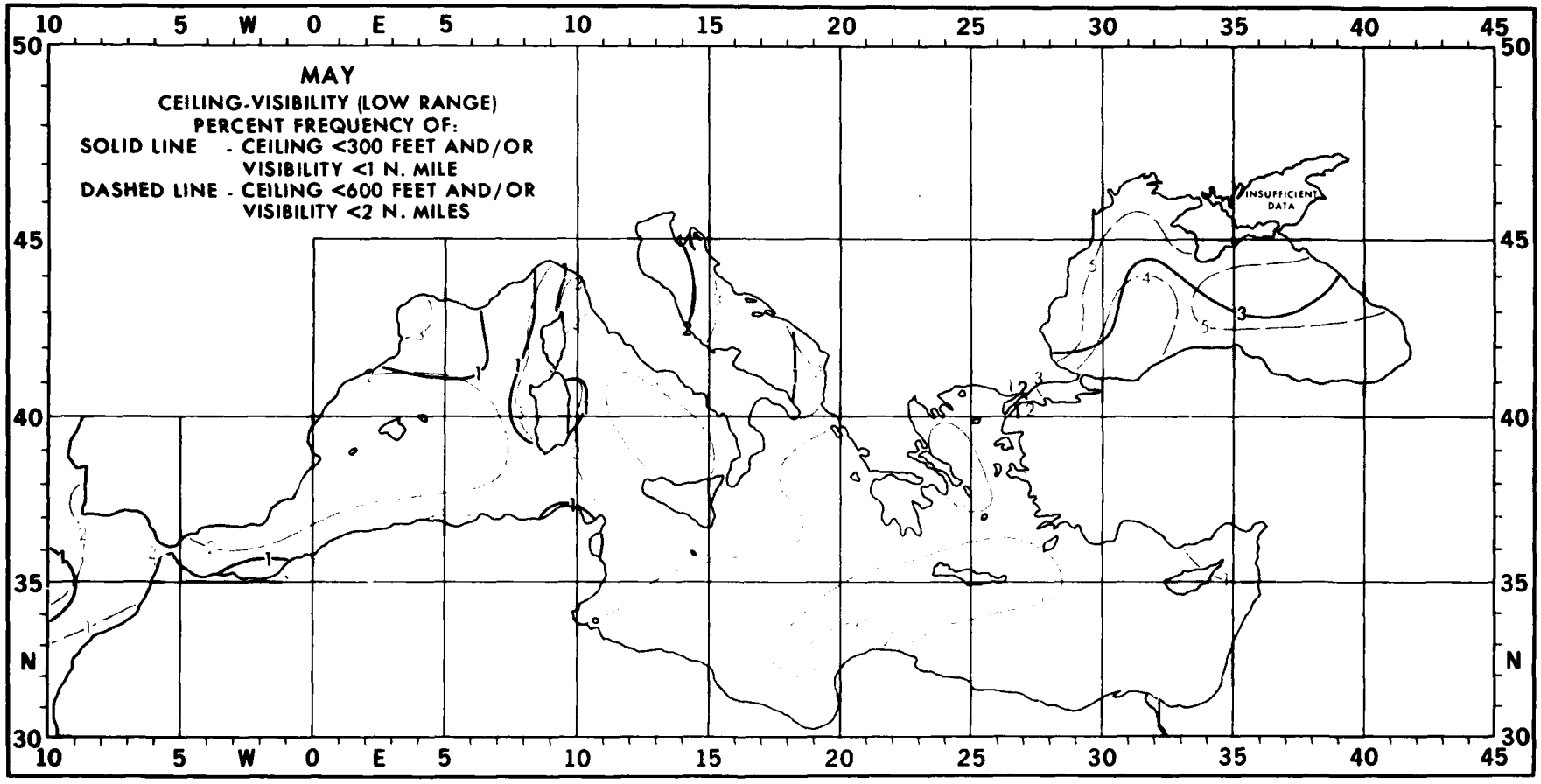

MAY
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.
10
5
W
0
E
45
40
35
30
N

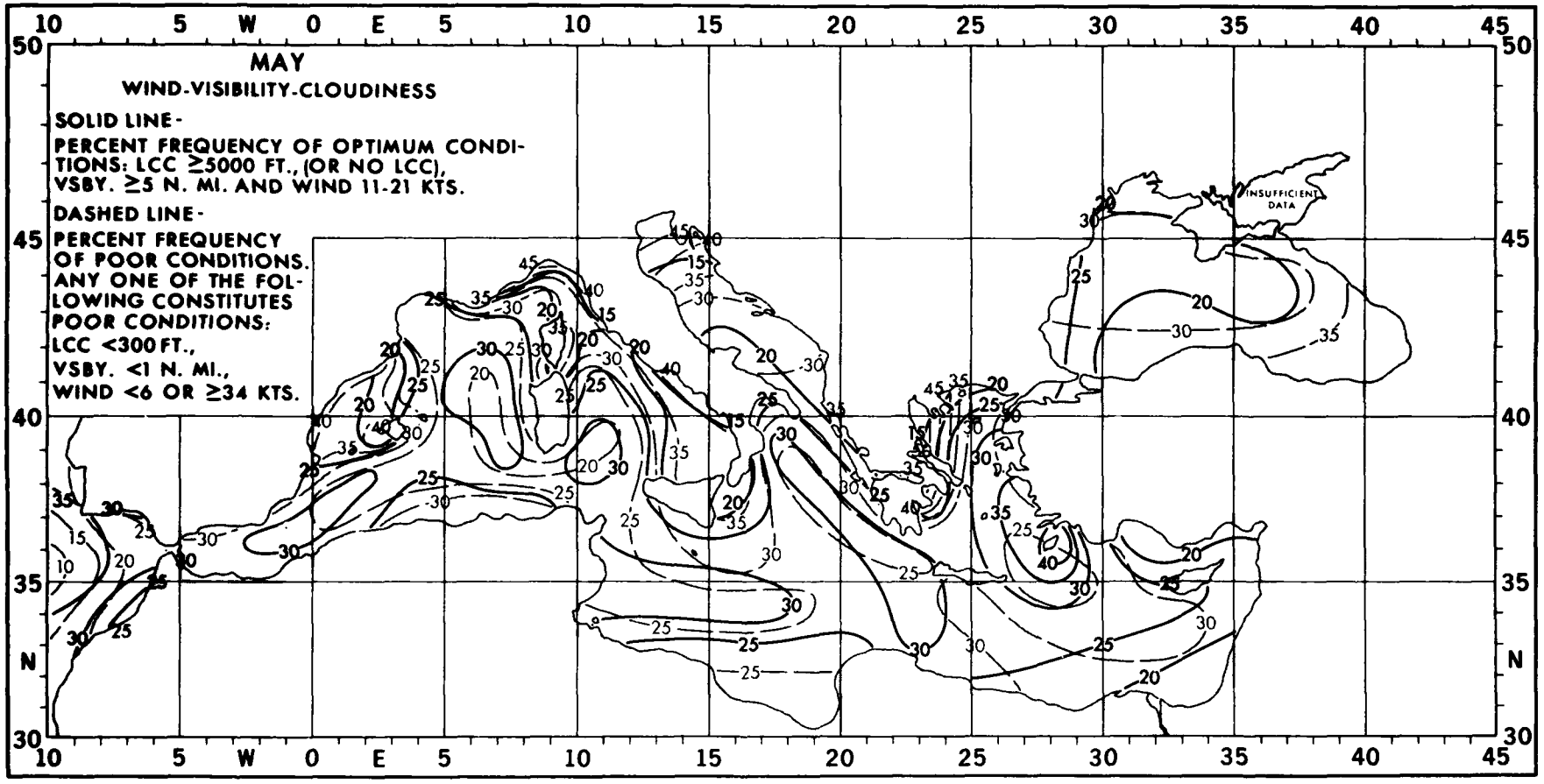

MAY
VISIBILITY (NAUTICAL MILES)
5
E
10
15
45
40
35
30
N

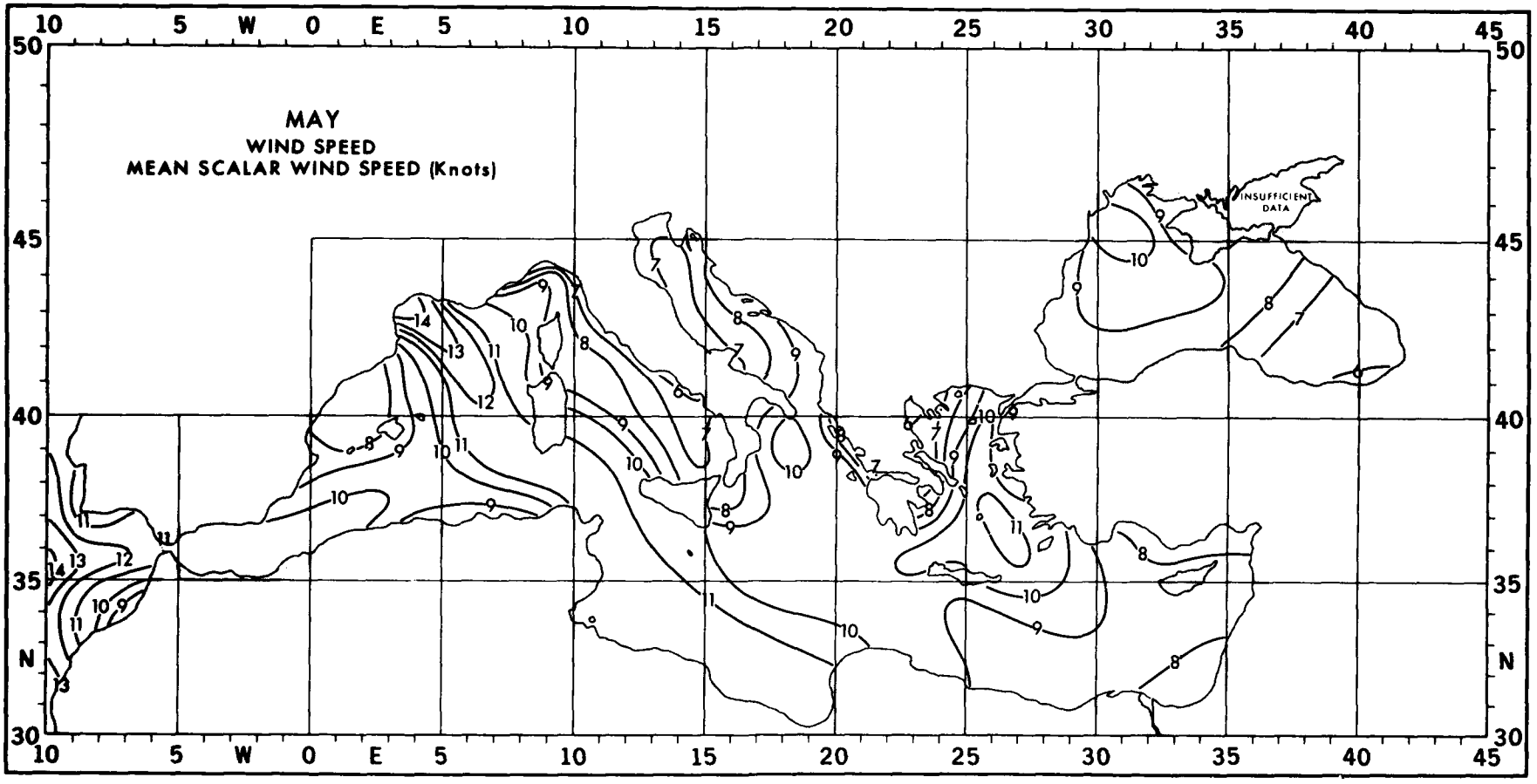

MAY
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.
E
20
25
45
40
35
30
N

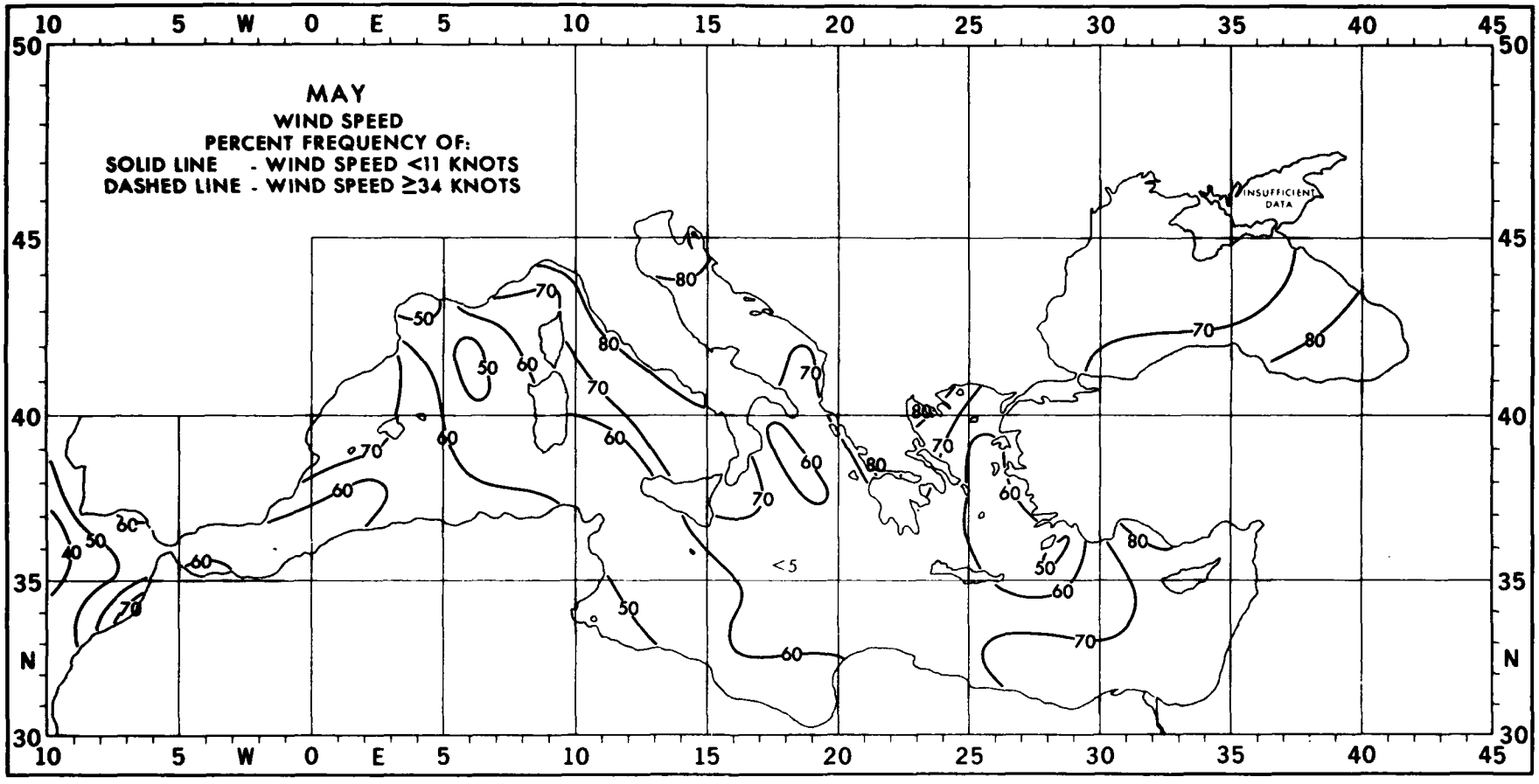

30
E
35
40
45
40
35
N
30
MAY
VISIBILITY (NAUTICAL MILES)

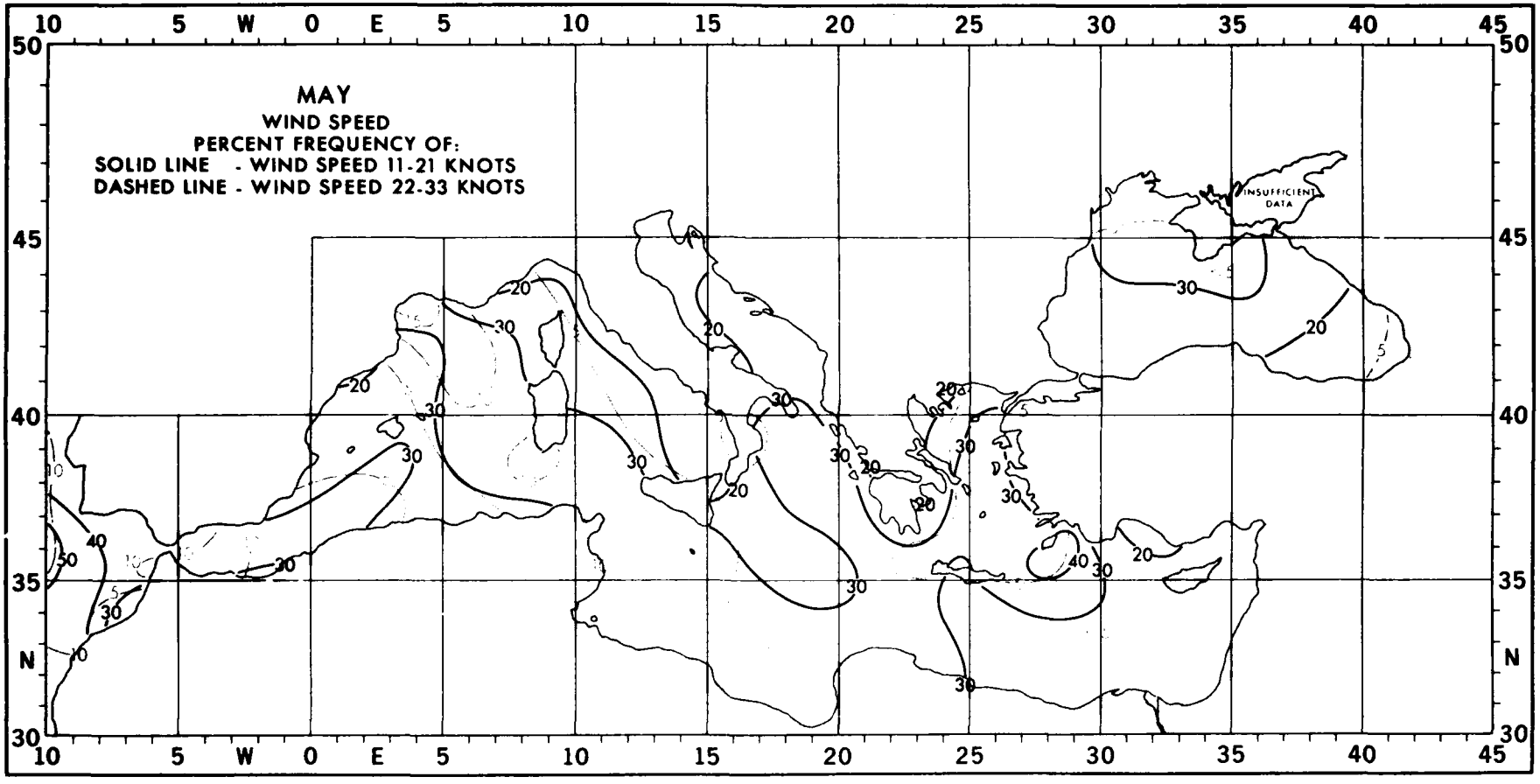

MAY
CEILING-VISIBILITY (MID RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <1000 FEET AND/OR VISIBILITY <5 N. MILES
DASHED LINE - CEILING <8000 FEET AND/OR VISIBILITY <10 N. MILES
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 30 N

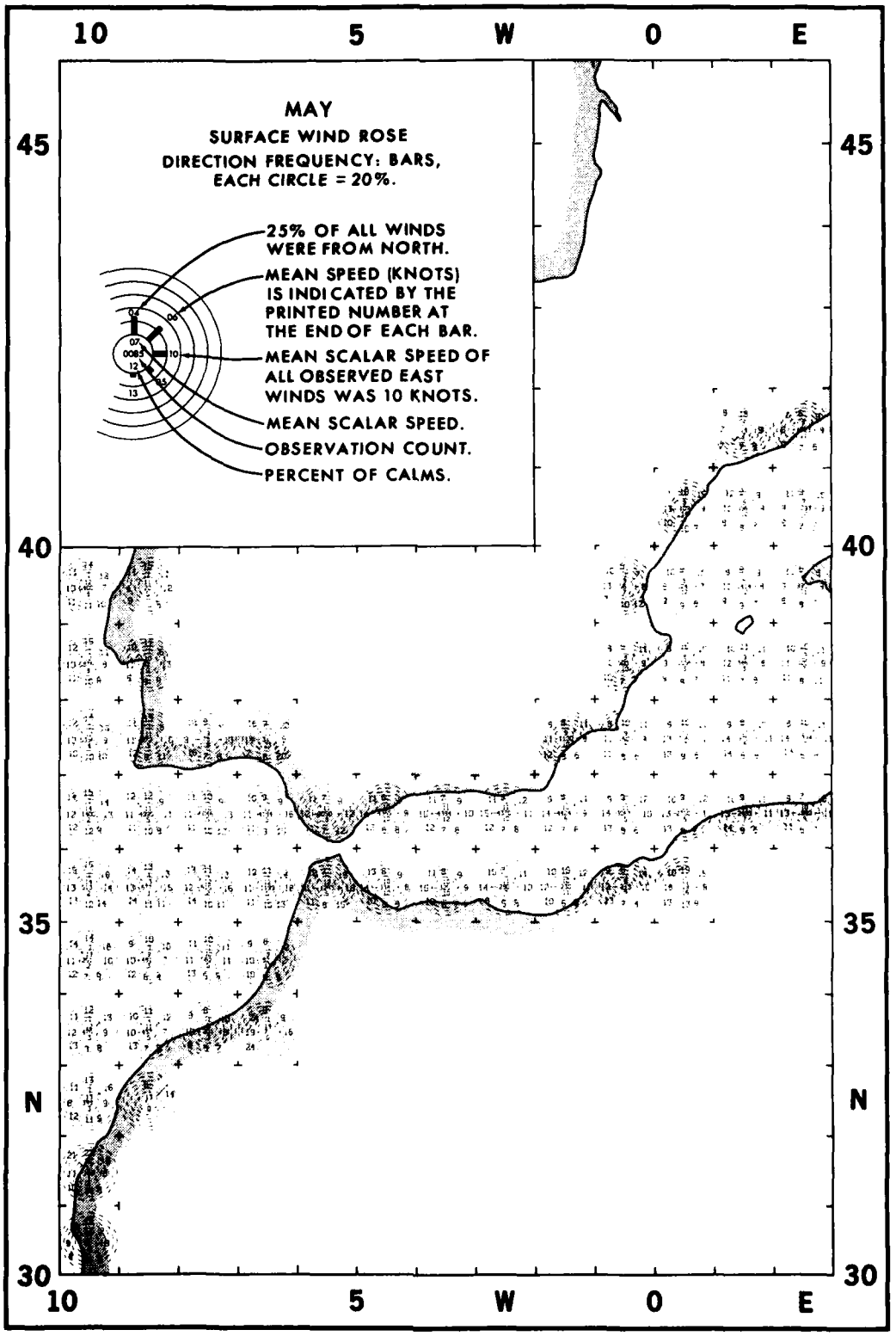

MAY
CEILING-VISIBILITY (LOW RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <300 FEET AND/OR VISIBILITY <1 N. MILE
DASHED LINE - CEILING <600 FEET AND/OR VISIBILITY <2 N. MILES
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

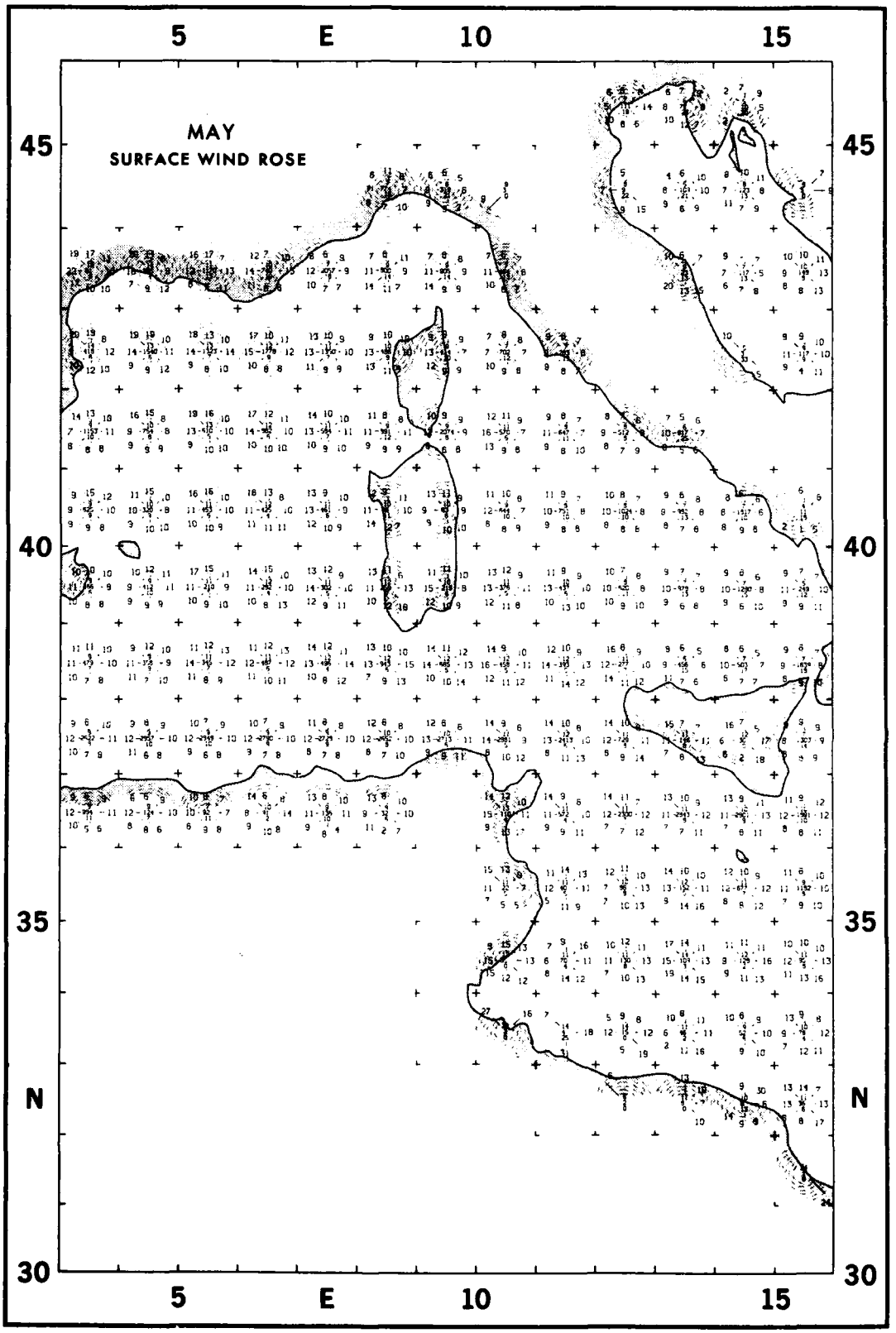

MAY
WIND-VISIBILITY-CLOUDINESS
SOLID LINE-
PERCENT FREQUENCY OF OPTIMUM CONDITIONS: LCC ≥5000 FT., (OR NO LCC), VSBY. ≥5 N. MI. AND WIND 11-21 KTS.
DASHED LINE-
PERCENT FREQUENCY OF POOR CONDITIONS. ANY ONE OF THE FOLLOWING CONSTITUTES POOR CONDITIONS:
LCC <300 FT.,
VSBY. <1 N. MI.,
WIND <6 OR ≥34 KTS.
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 30 N

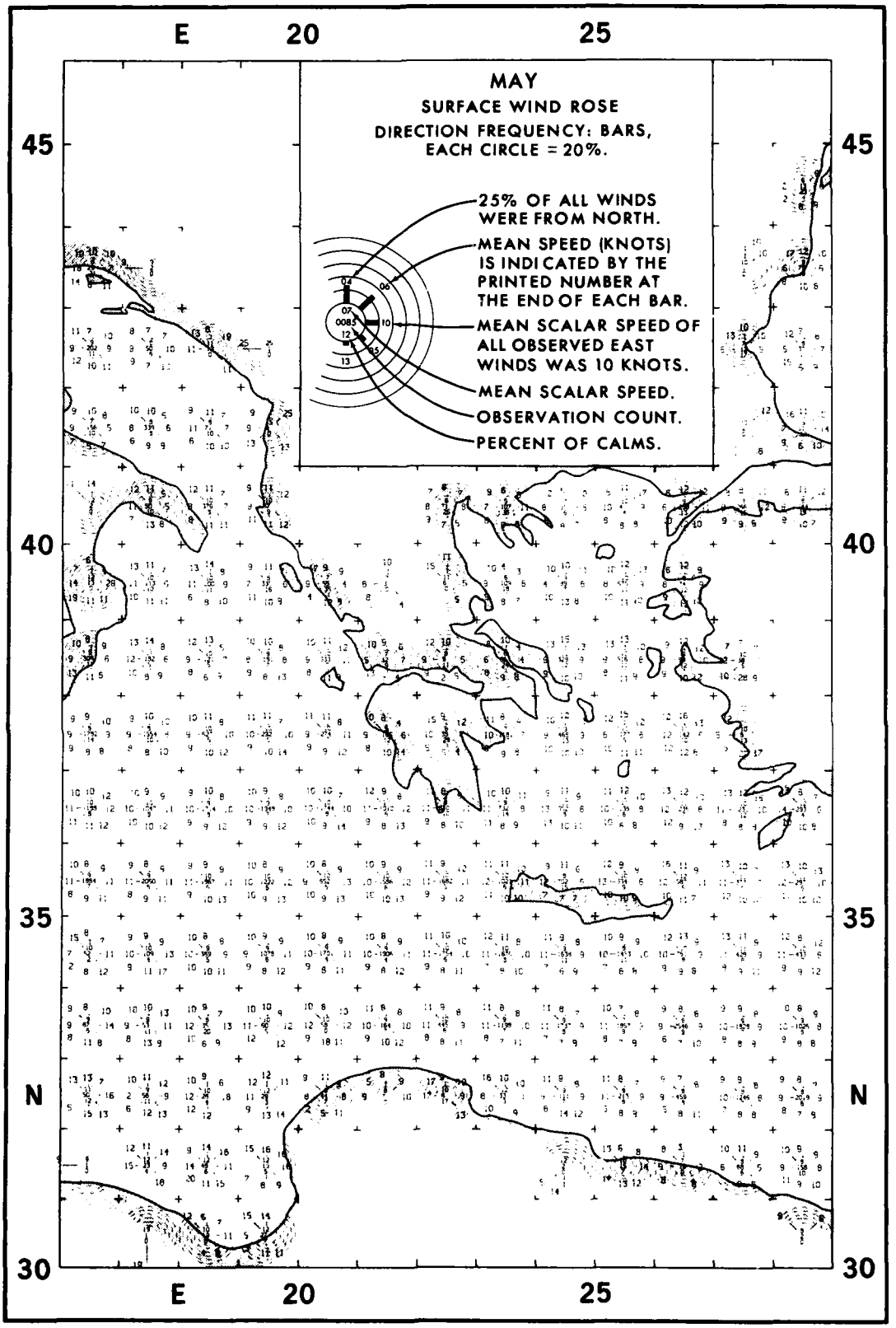

MAY
WIND SPEED
MEAN SCALAR WIND SPEED (Knots)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
30
N

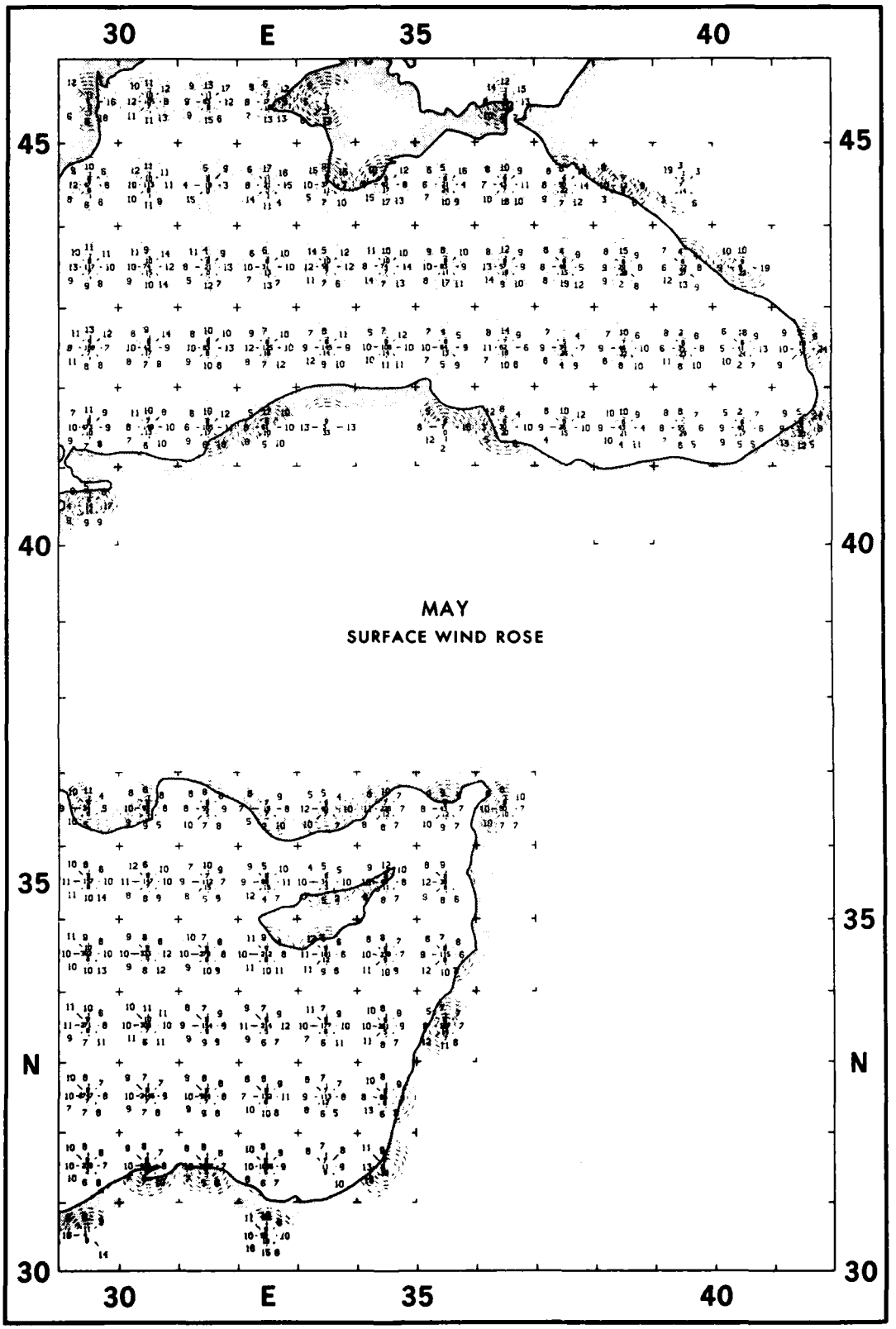

MAY
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED <11 KNOTS
DASHED LINE - WIND SPEED ≥34 KNOTS
INSUFFICIENT DATA
<5
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

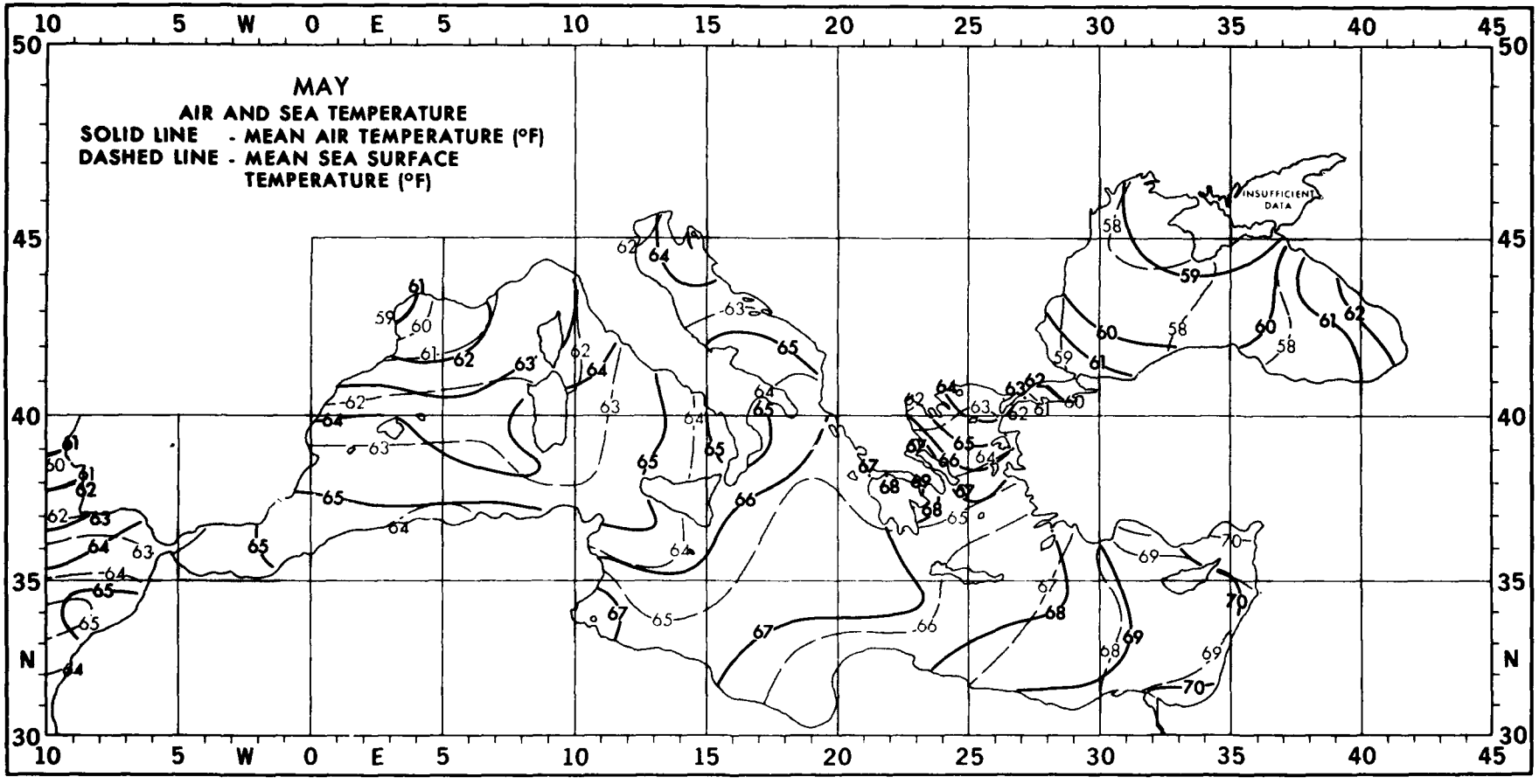

MAY
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED 11-21 KNOTS
DASHED LINE - WIND SPEED 22-33 KNOTS
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

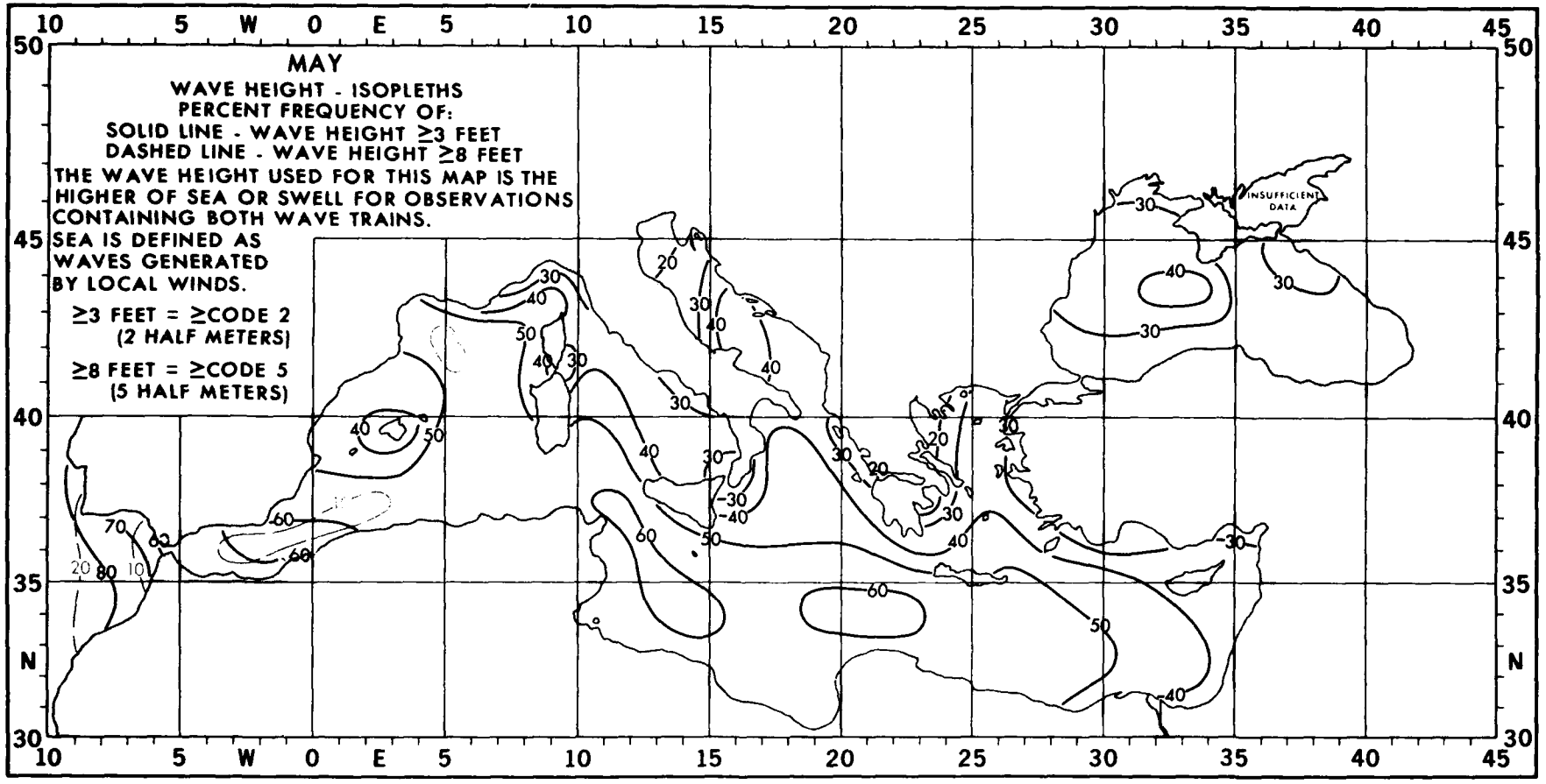

10
5
W
0
E
45
40
35
30
N
MAY
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS,
EACH CIRCLE = 20%.
25% OF ALL WINDS WERE FROM NORTH.
MEAN SPEED (KNOTS) IS INDICATED BY THE PRINTED NUMBER AT THE END OF EACH BAR.
MEAN SCALAR SPEED OF ALL OBSERVED EAST WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.

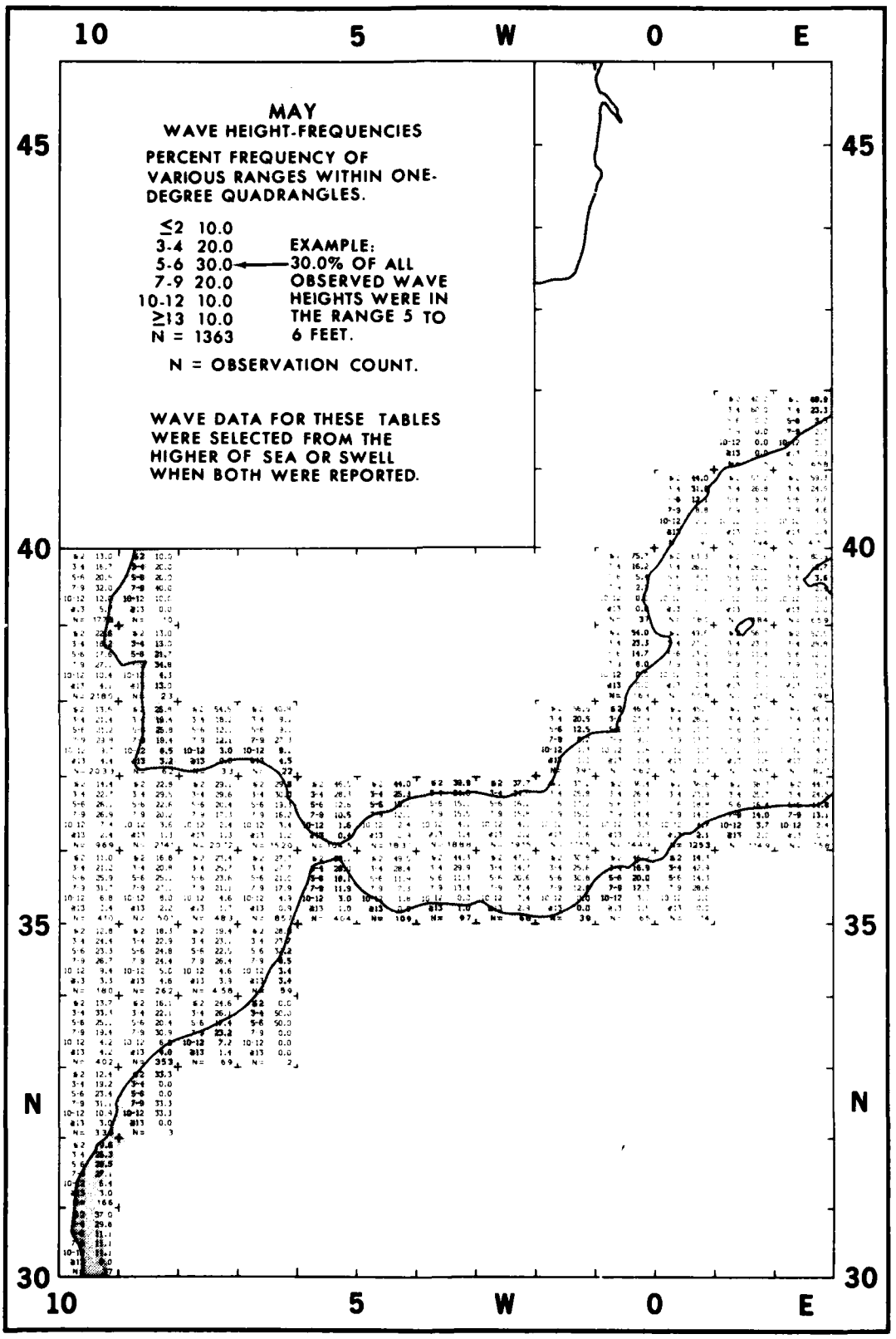

MAY
SURFACE WIND ROSE
5
E
10
15
45
40
35
N
30

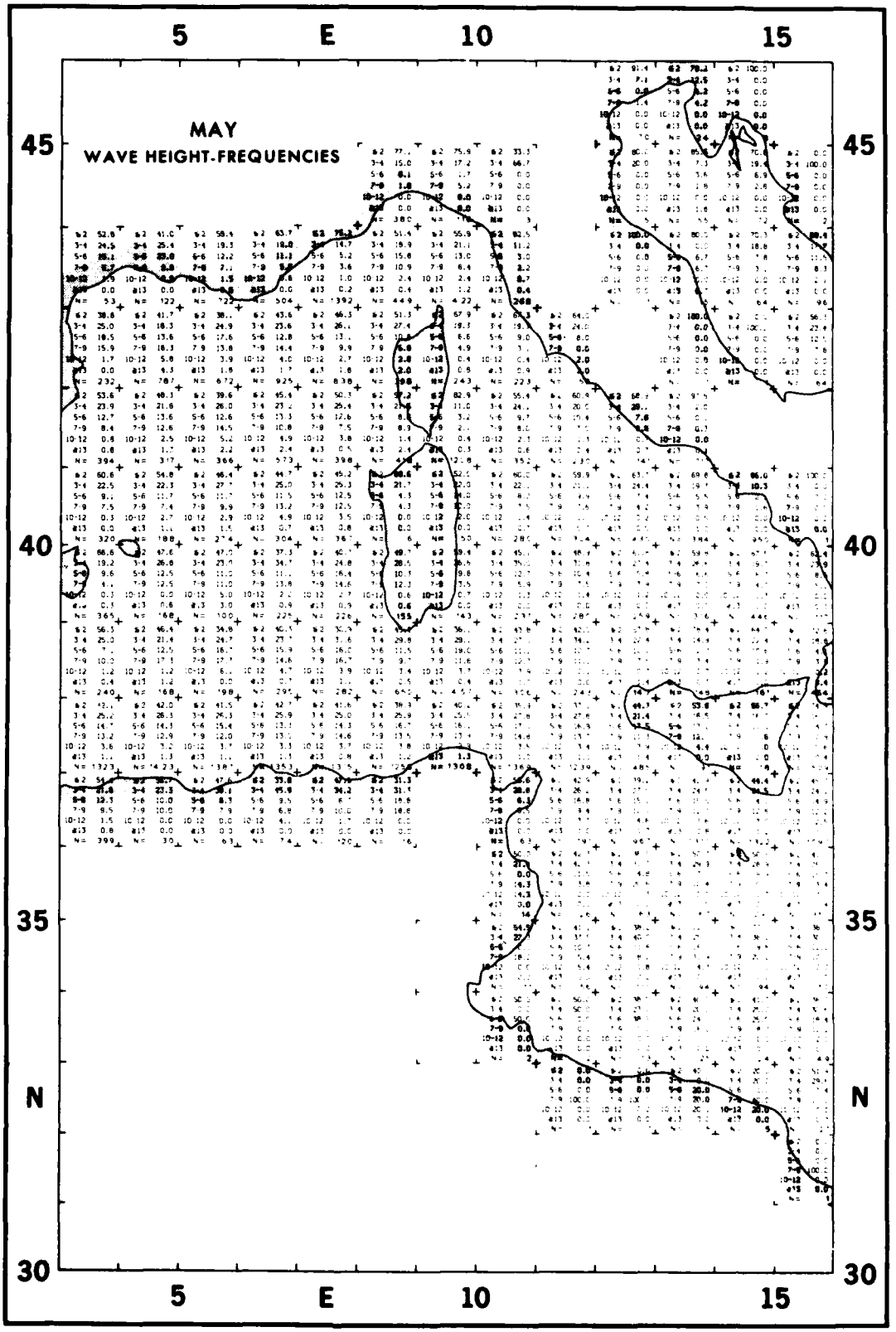

E
20
25
MAY
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS,
EACH CIRCLE = 20%.
25% OF ALL WINDS
WERE FROM NORTH.
MEAN SPEED (KNOTS)
IS INDICATED BY THE
PRINTED NUMBER AT
THE END OF EACH BAR.
MEAN SCALAR SPEED OF
ALL OBSERVED EAST
WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.
45
40
35
N
30

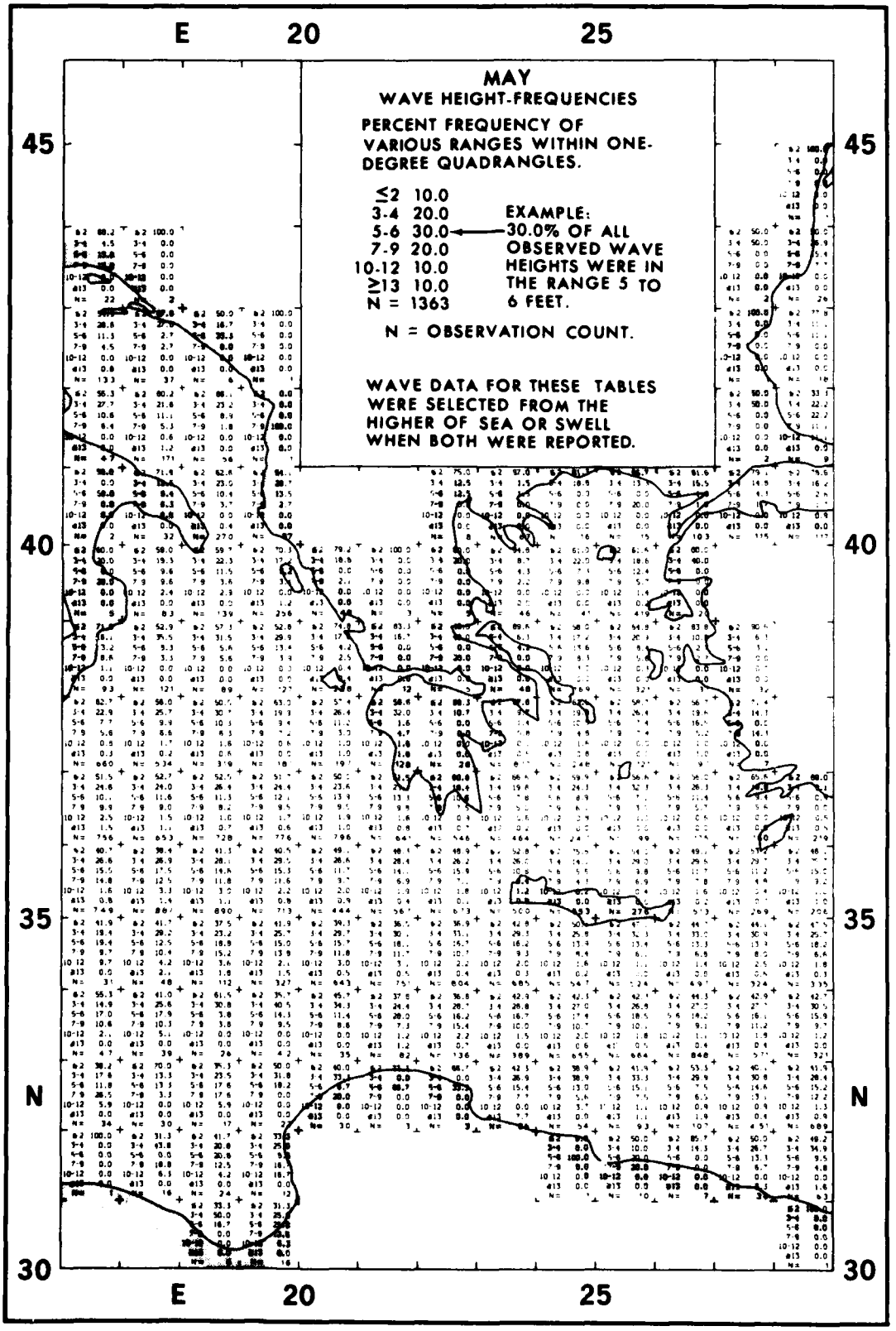

30
E
35
40
45
40
35
N
30
MAY
SURFACE WIND ROSE

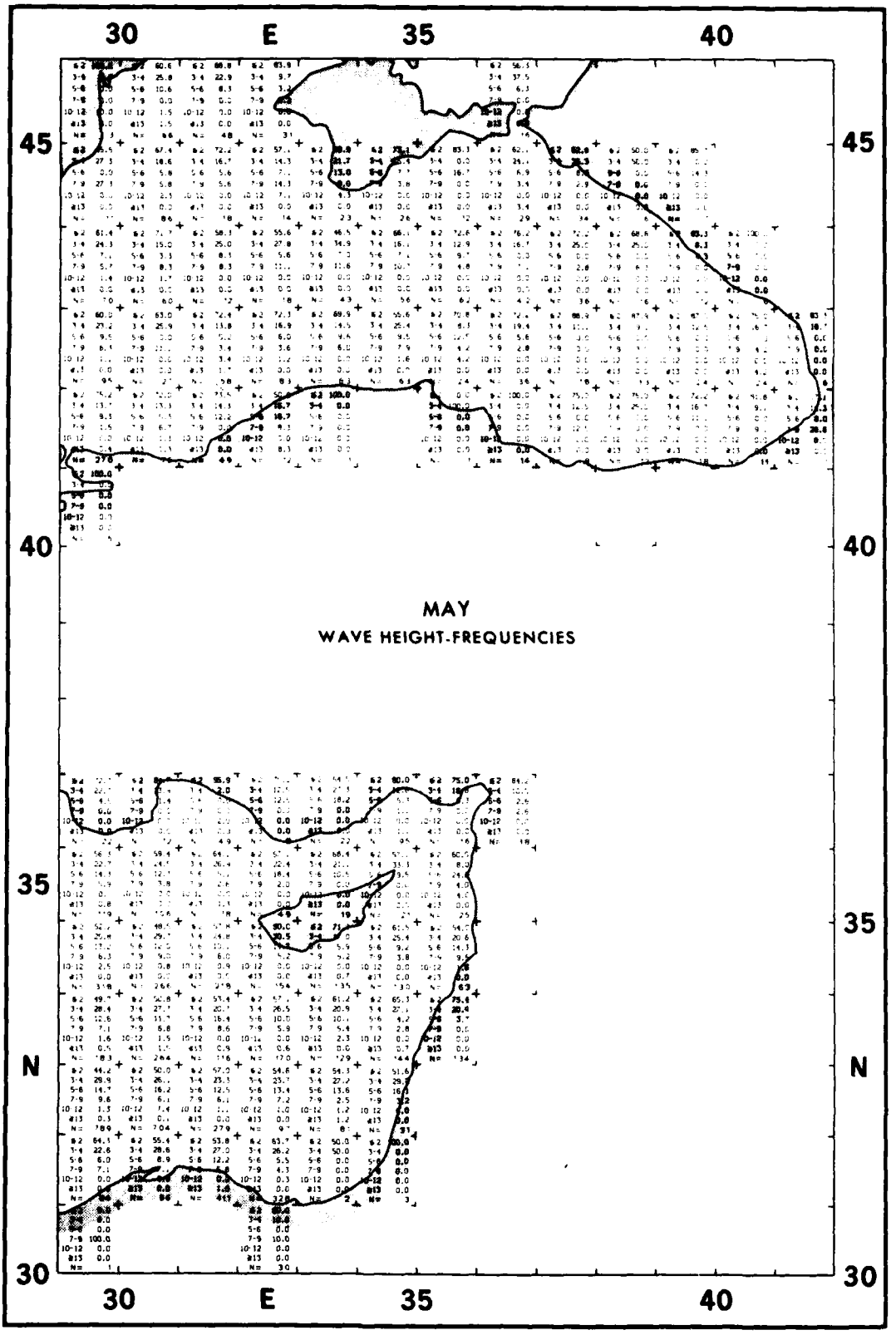

MAY
AIR AND SEA TEMPERATURE
SOLID LINE - MEAN AIR TEMPERATURE (°F)
DASHED LINE - MEAN SEA SURFACE TEMPERATURE (°F)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

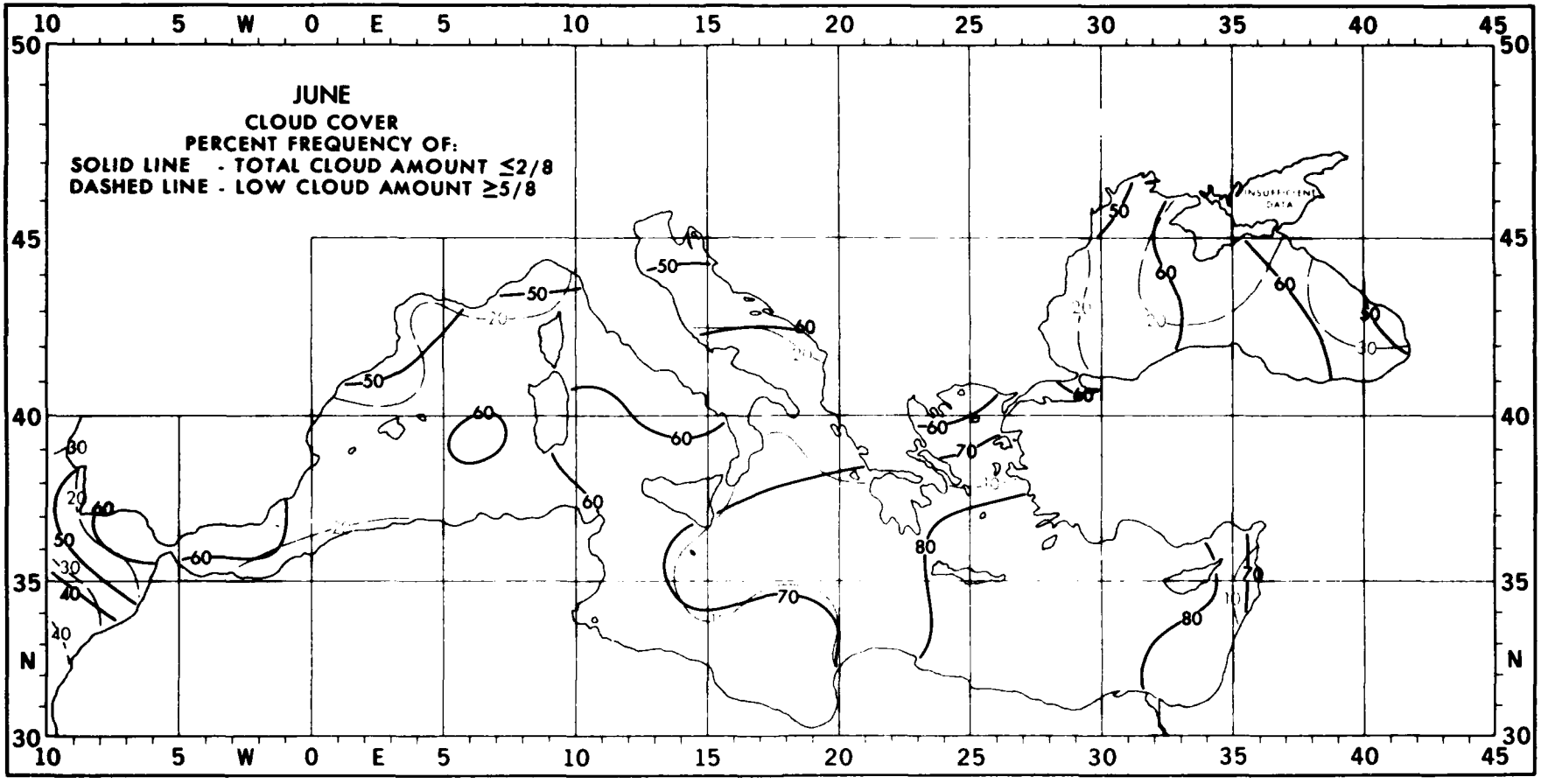

MAY
WAVE HEIGHT - ISOPLETHS
PERCENT FREQUENCY OF:
SOLID LINE - WAVE HEIGHT ≥3 FEET
DASHED LINE - WAVE HEIGHT ≥8 FEET
THE WAVE HEIGHT USED FOR THIS MAP IS THE HIGHER OF SEA OR SWELL FOR OBSERVATIONS CONTAINING BOTH WAVE TRAINS.
SEA IS DEFINED AS WAVES GENERATED BY LOCAL WINDS.
≥3 FEET = ≥CODE 2 (2 HALF METERS)
≥8 FEET = ≥CODE 5 (5 HALF METERS)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

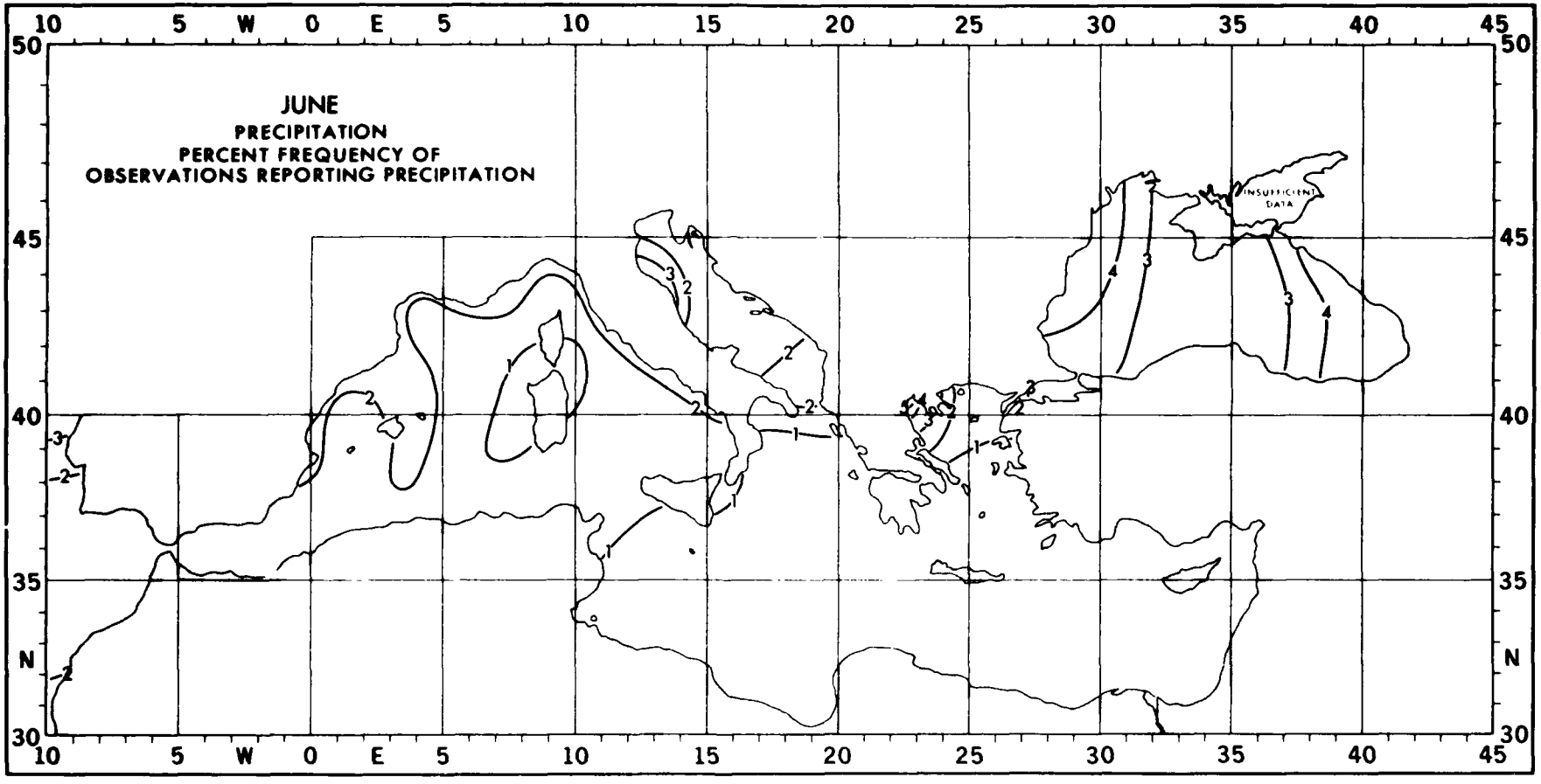

10
5
W
0
E
45
40
35
N
30
MAY
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.

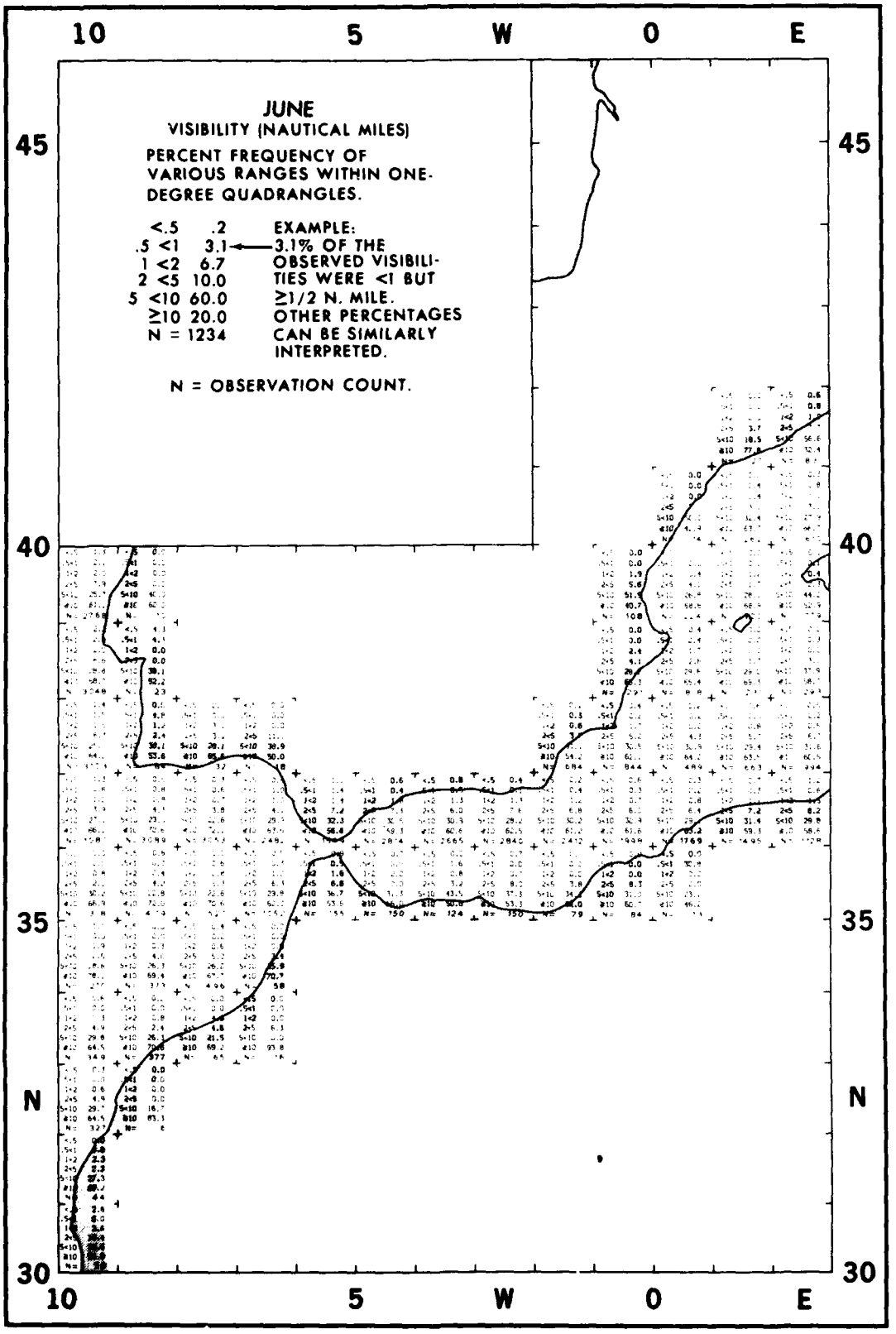

MAY
WAVE HEIGHT-FREQUENCIES
5
E
10
15
45
40
35
30
N

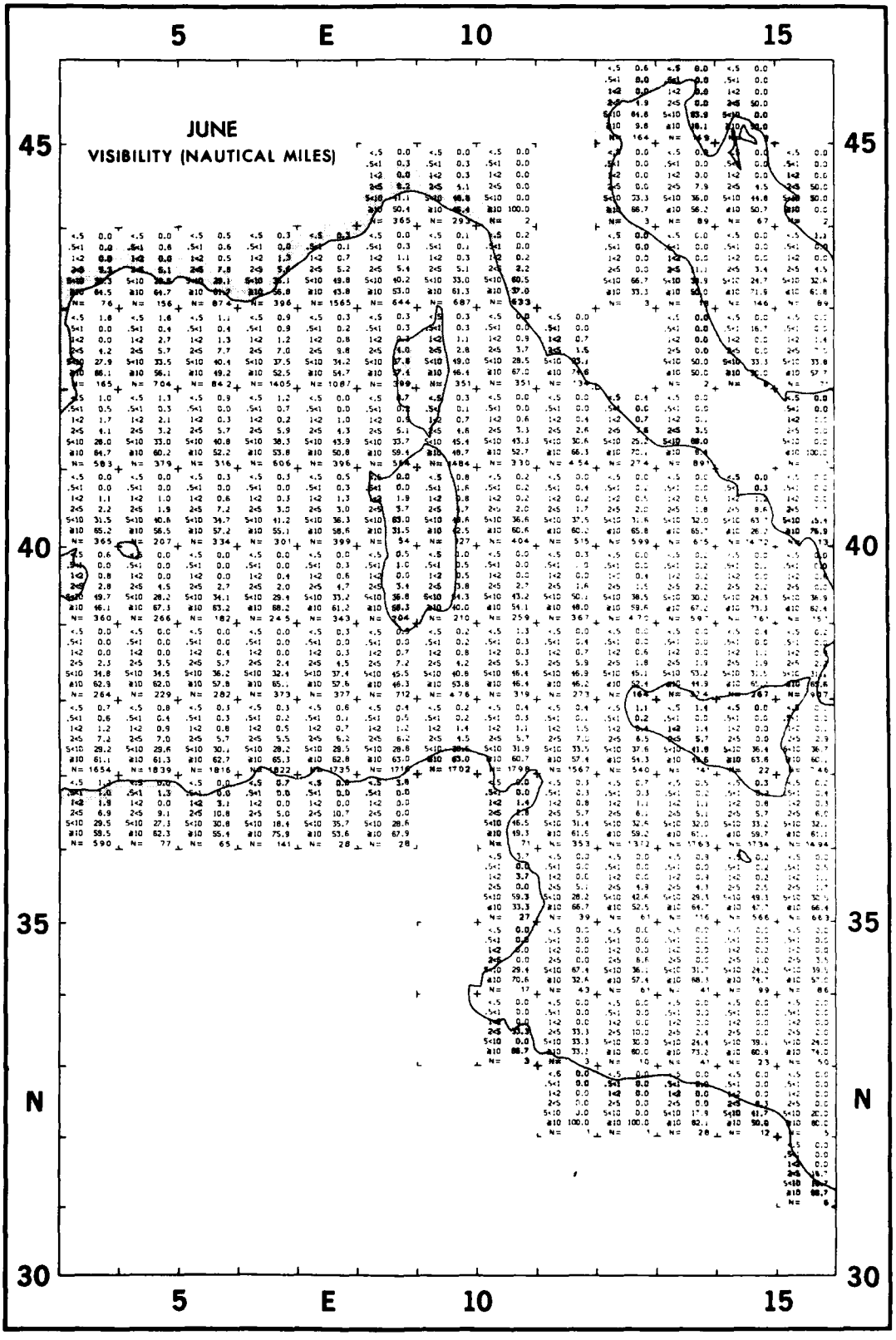

E
20
25
45
40
35
30
N
MAY
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.

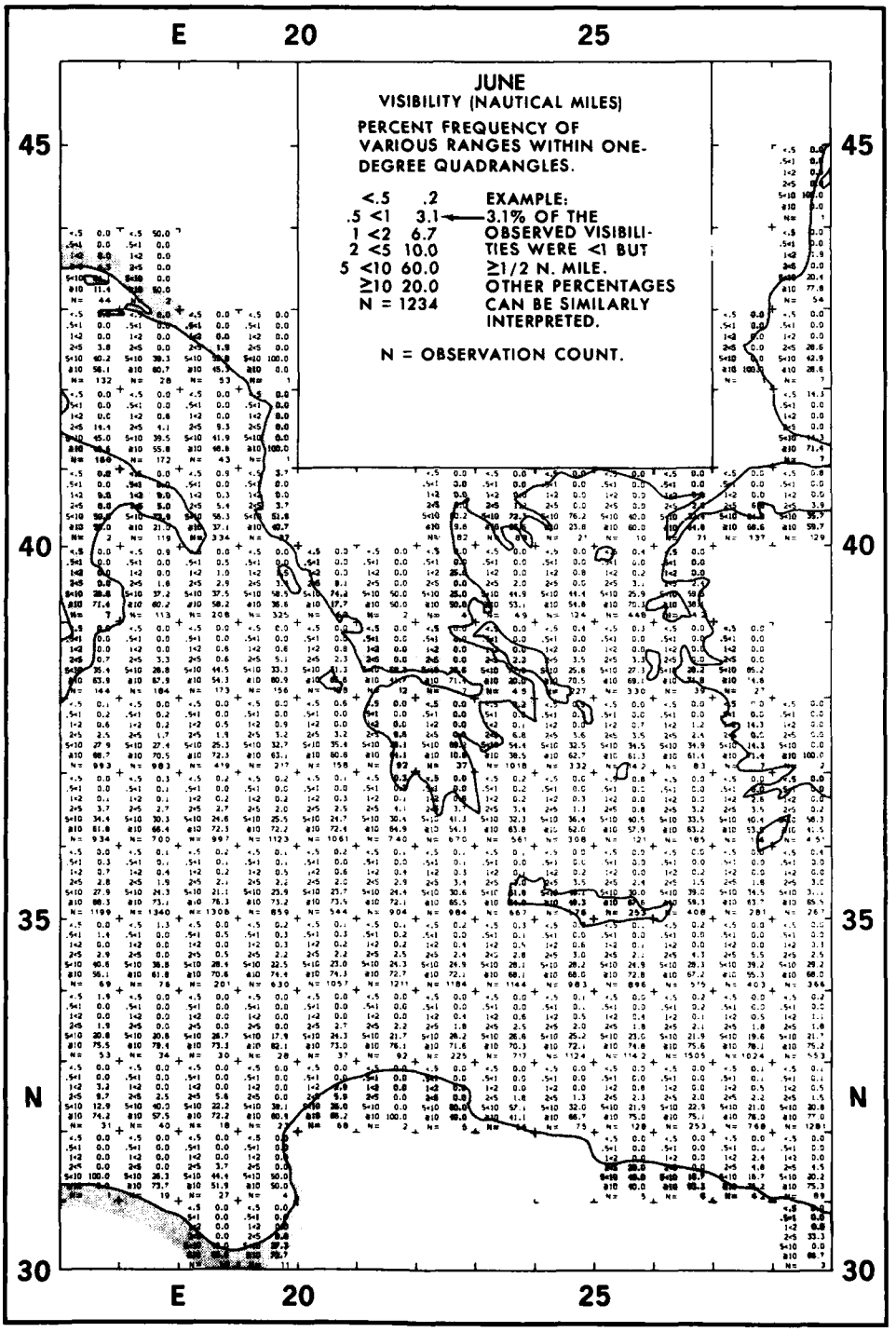

30
E
35
40
45
40
MAY
WAVE HEIGHT-FREQUENCIES
35
N
30

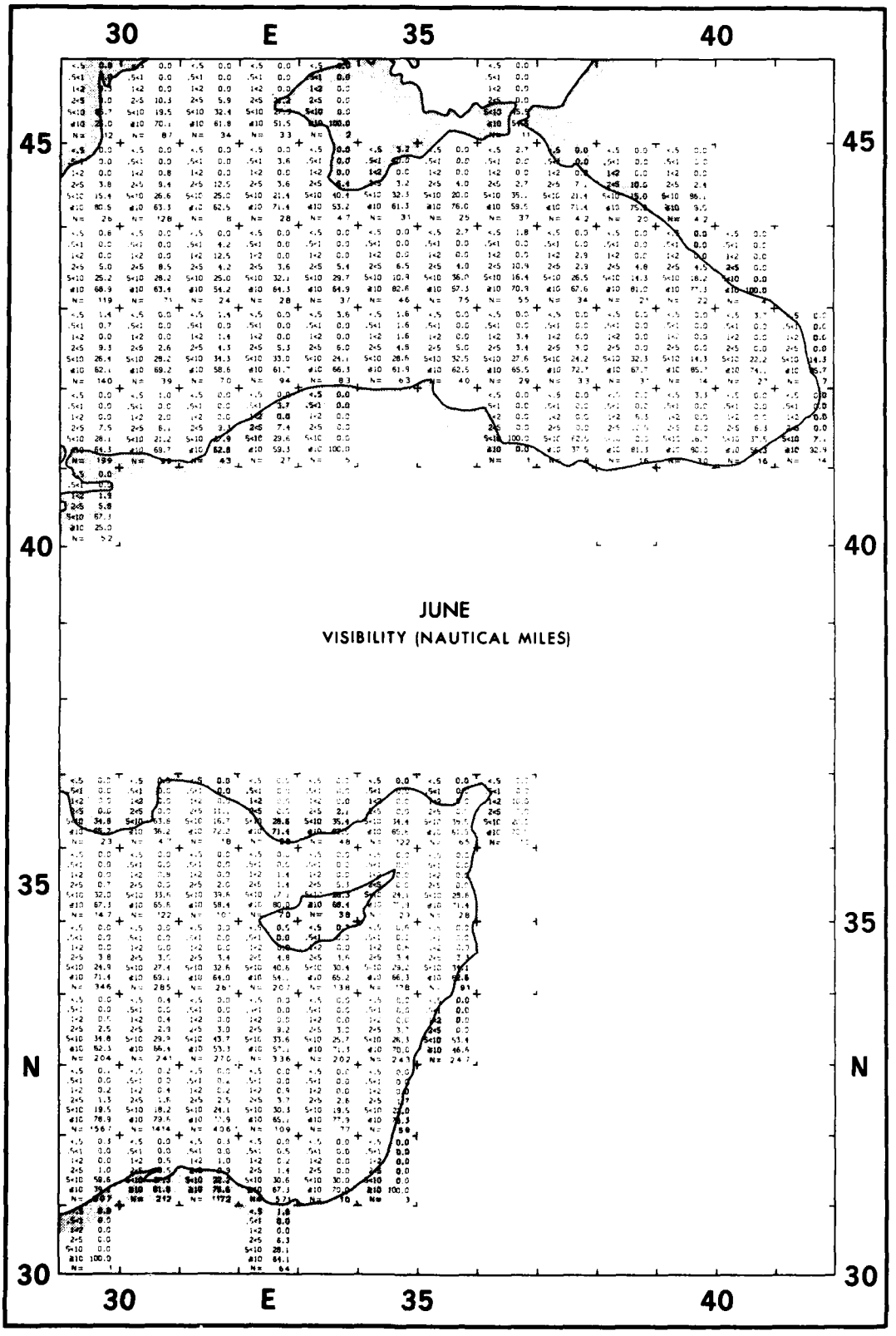

JUNE
CLOUD COVER
PERCENT FREQUENCY OF:
SOLID LINE - TOTAL CLOUD AMOUNT ≤2/8
DASHED LINE - LOW CLOUD AMOUNT ≥5/8
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 30 N

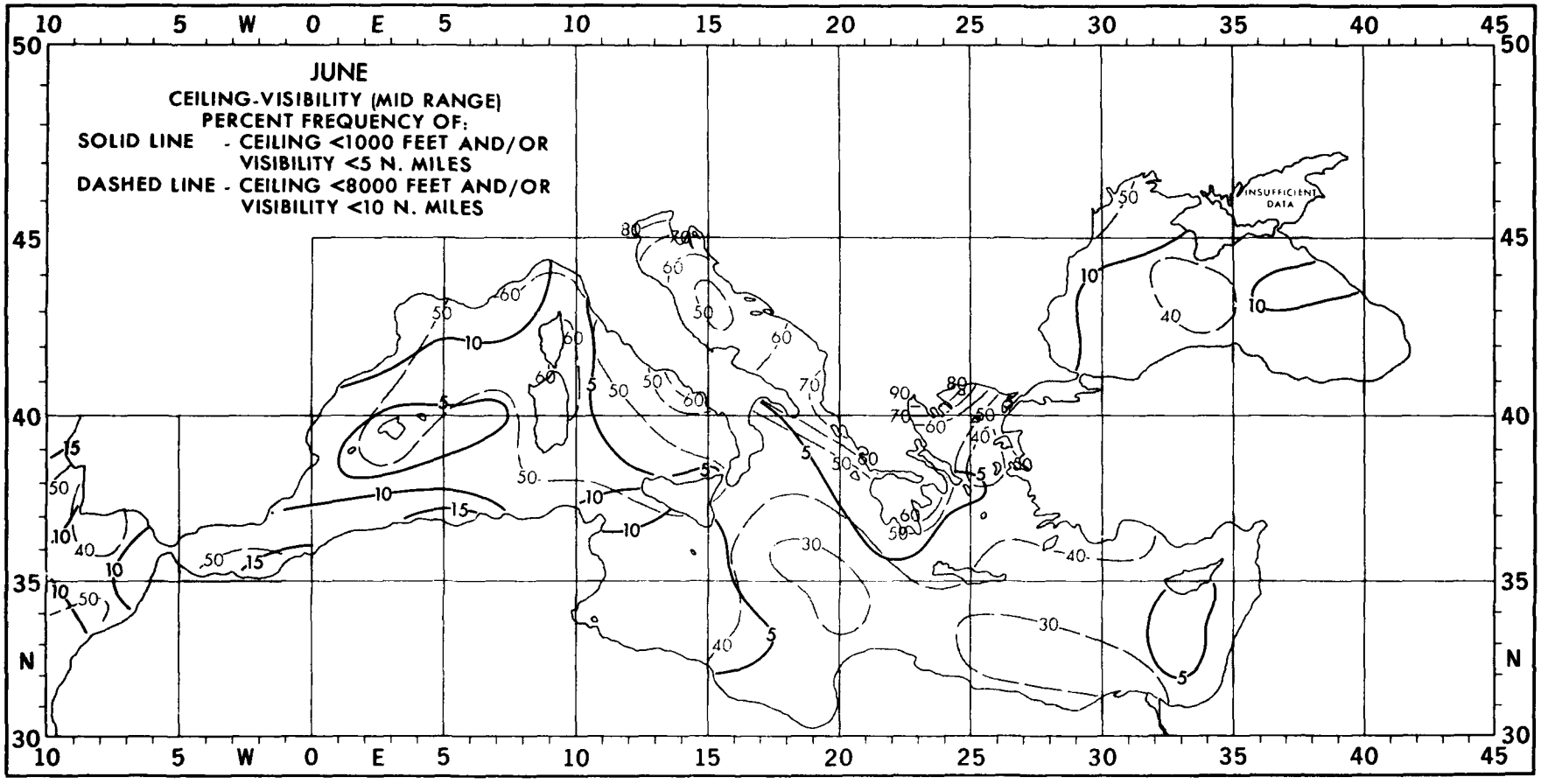

JUNE
PRECIPITATION
PERCENT FREQUENCY OF
OBSERVATIONS REPORTING PRECIPITATION
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

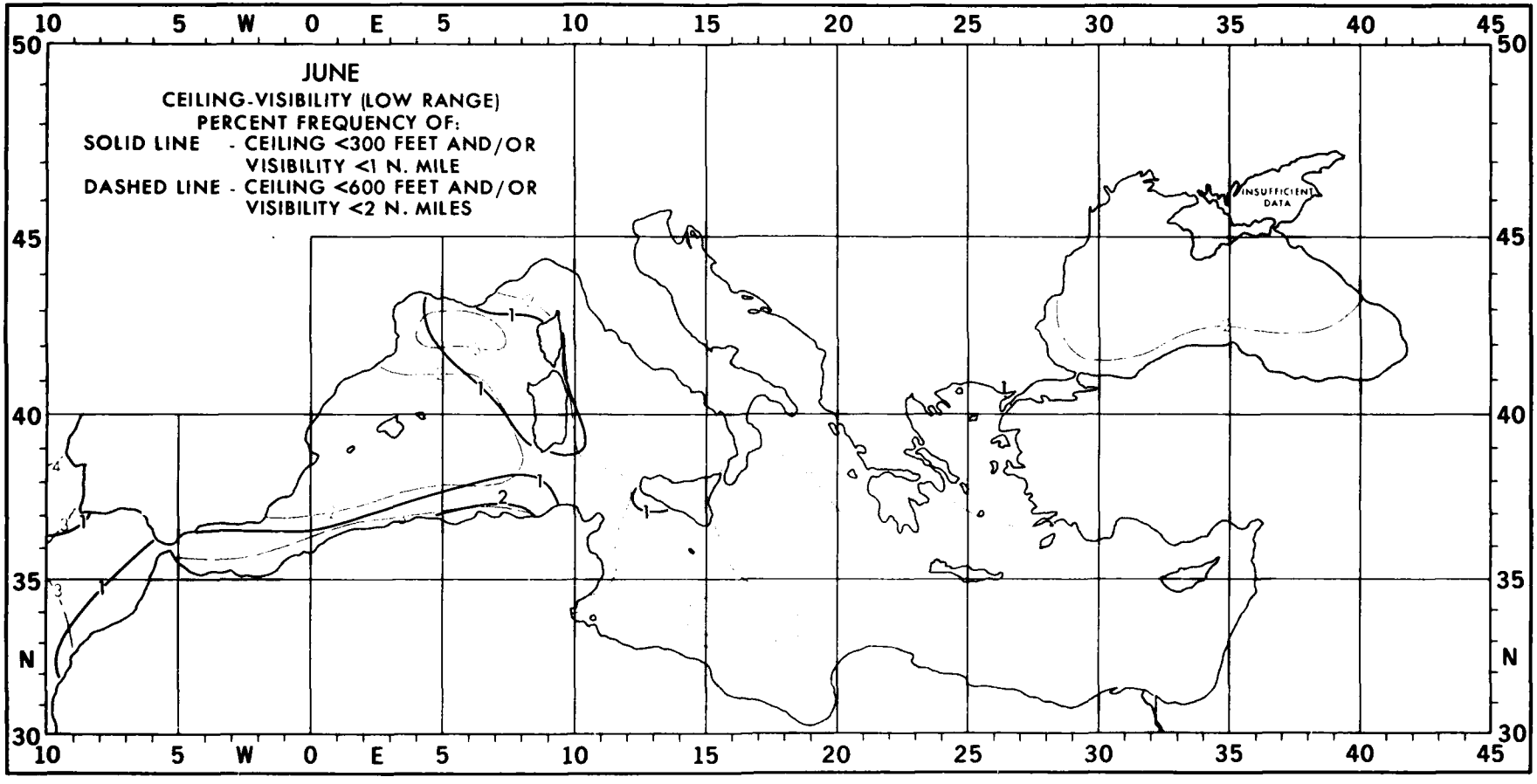

JUNE
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.
10
5
W
0
E
45
40
35
30
N

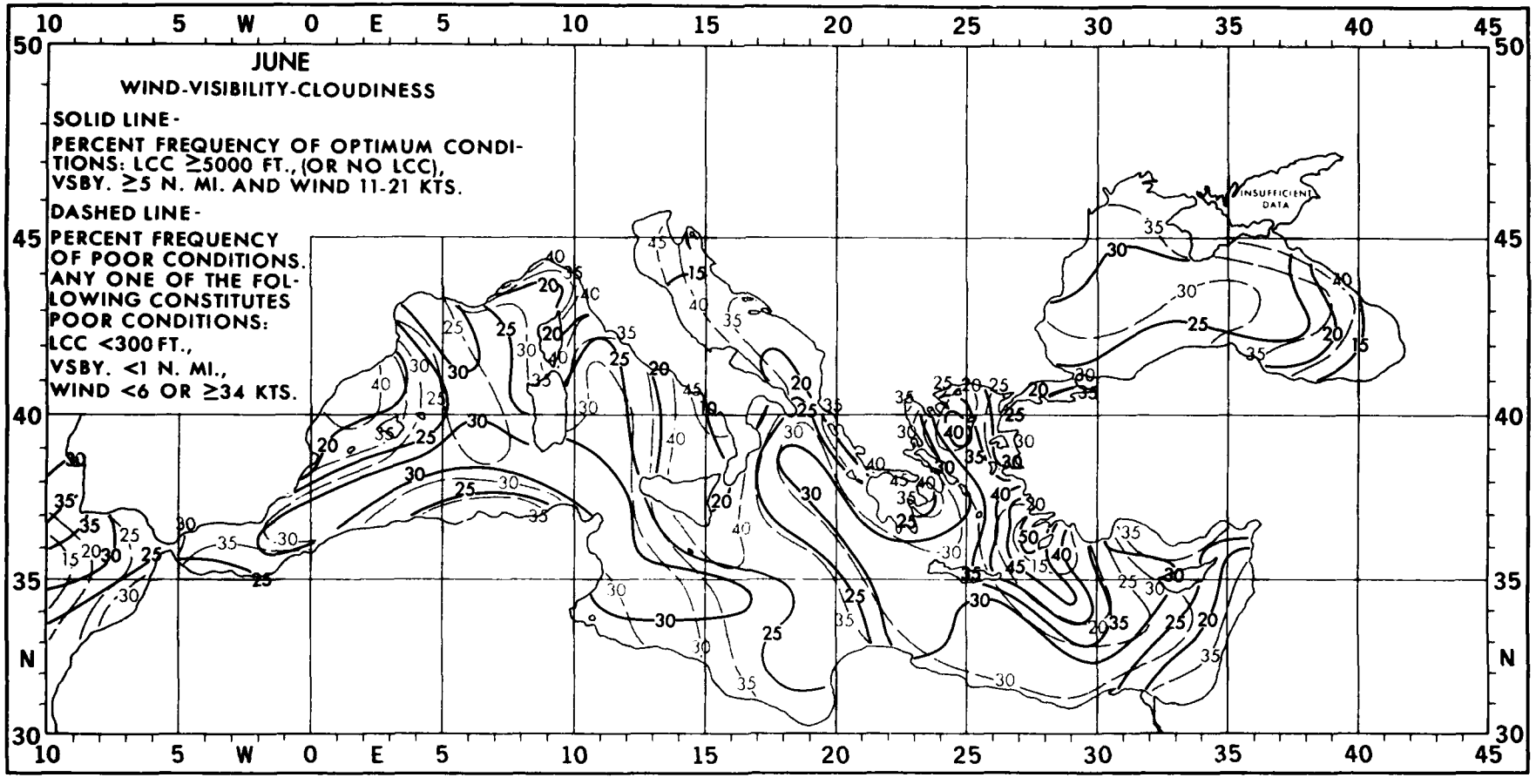

JUNE
VISIBILITY (NAUTICAL MILES)
5
E
10
15
45
40
35
N
30

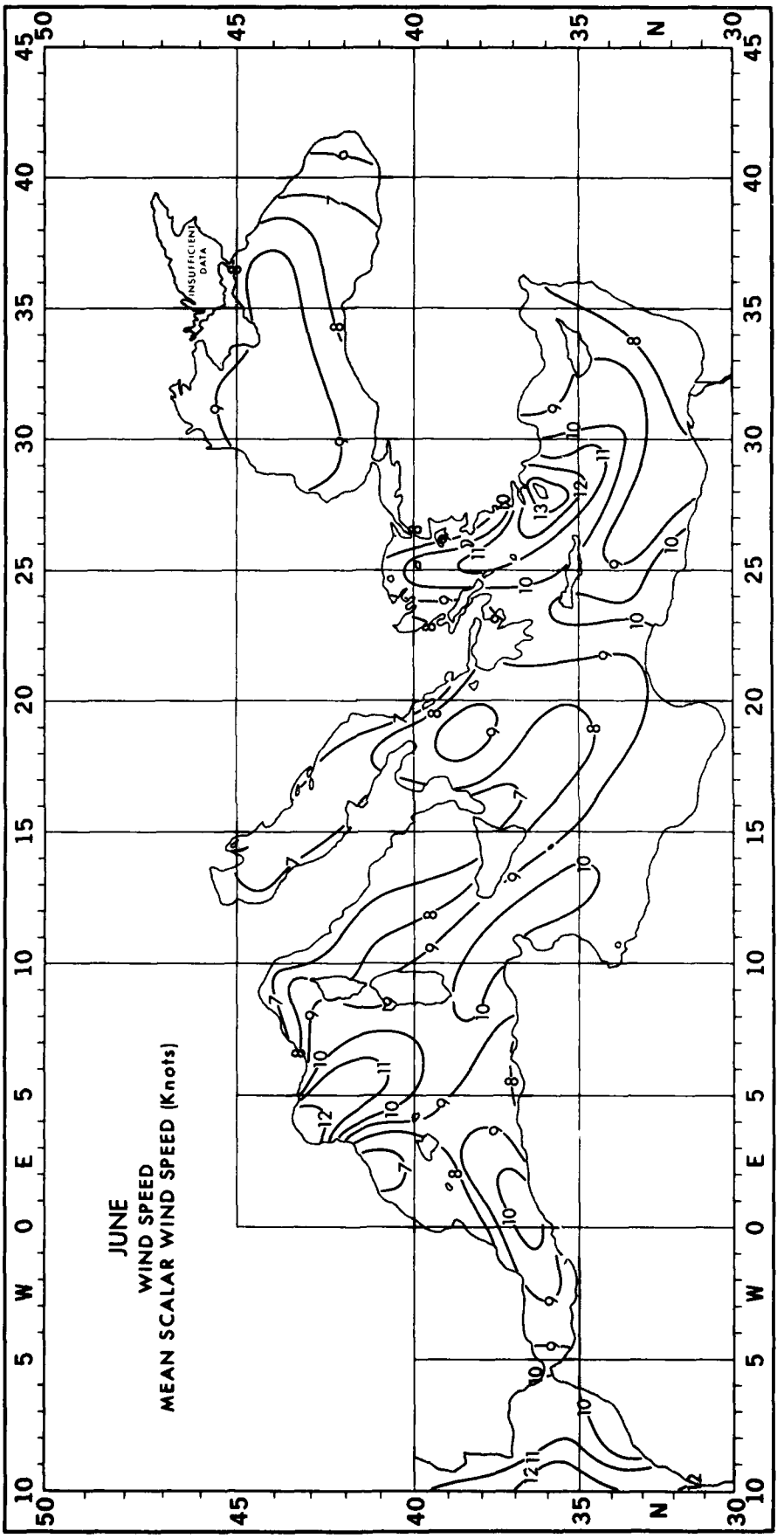

JUNE
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.
E
20
25
45
40
35
30
N

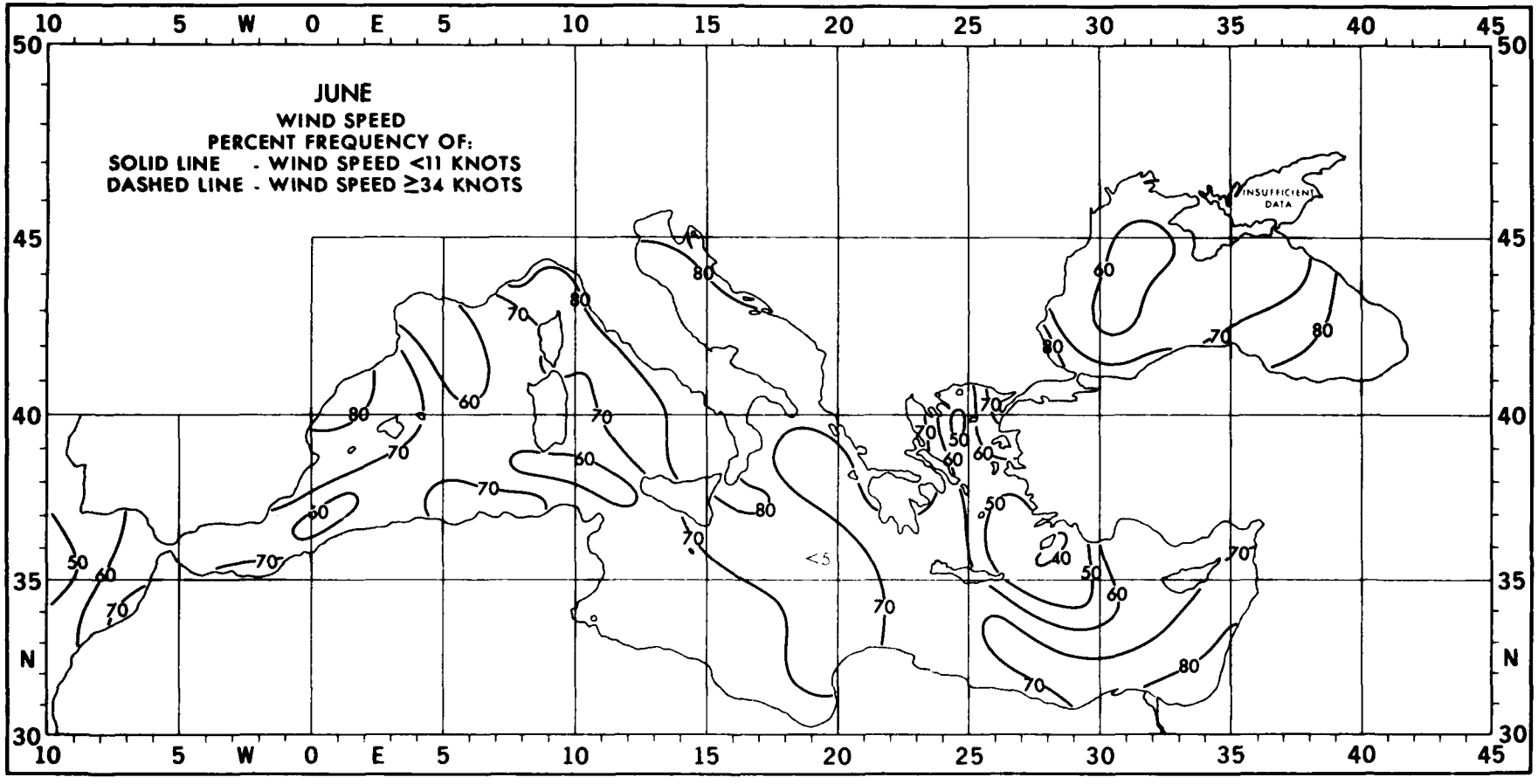

30
E
35
40
45
40
JUNE
VISIBILITY (NAUTICAL MILES)
35
N
30
30
E
35
40

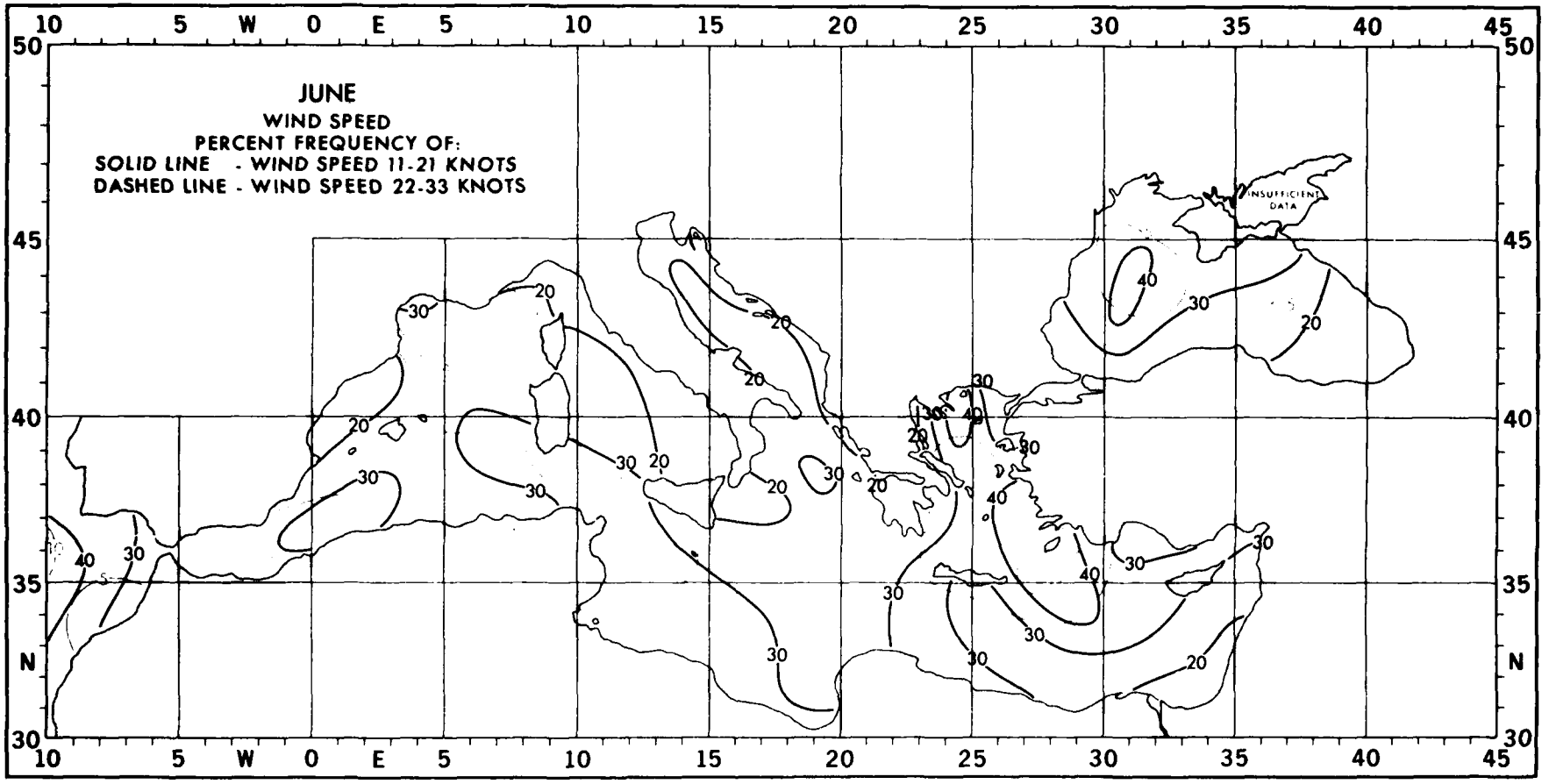

JUNE
CEILING-VISIBILITY (MID RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <1000 FEET AND/OR VISIBILITY <5 N. MILES
DASHED LINE - CEILING <8000 FEET AND/OR VISIBILITY <10 N. MILES
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

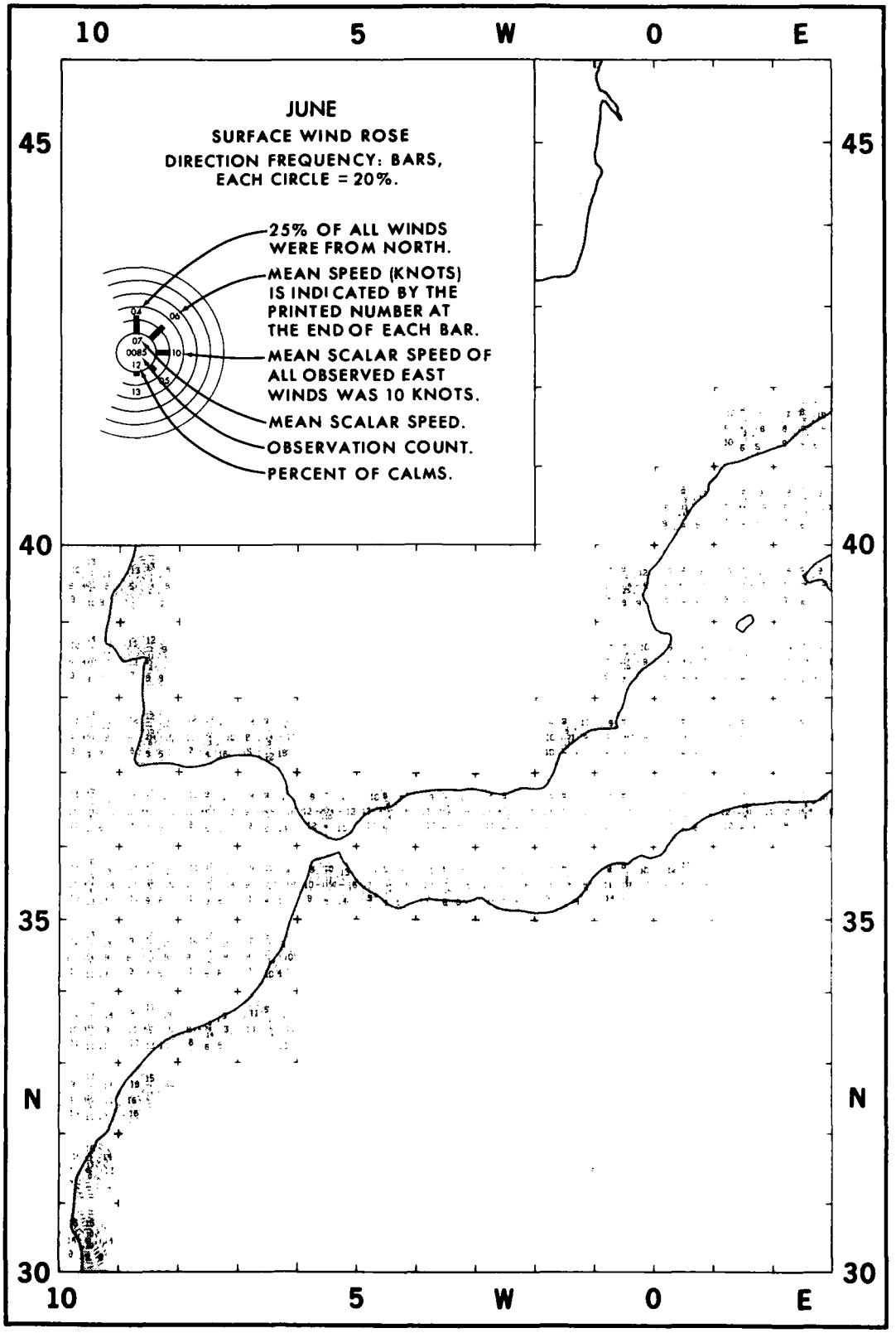

JUNE
CEILING-VISIBILITY (LOW RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <300 FEET AND/OR VISIBILITY <1 N. MILE
DASHED LINE - CEILING <600 FEET AND/OR VISIBILITY <2 N. MILES
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

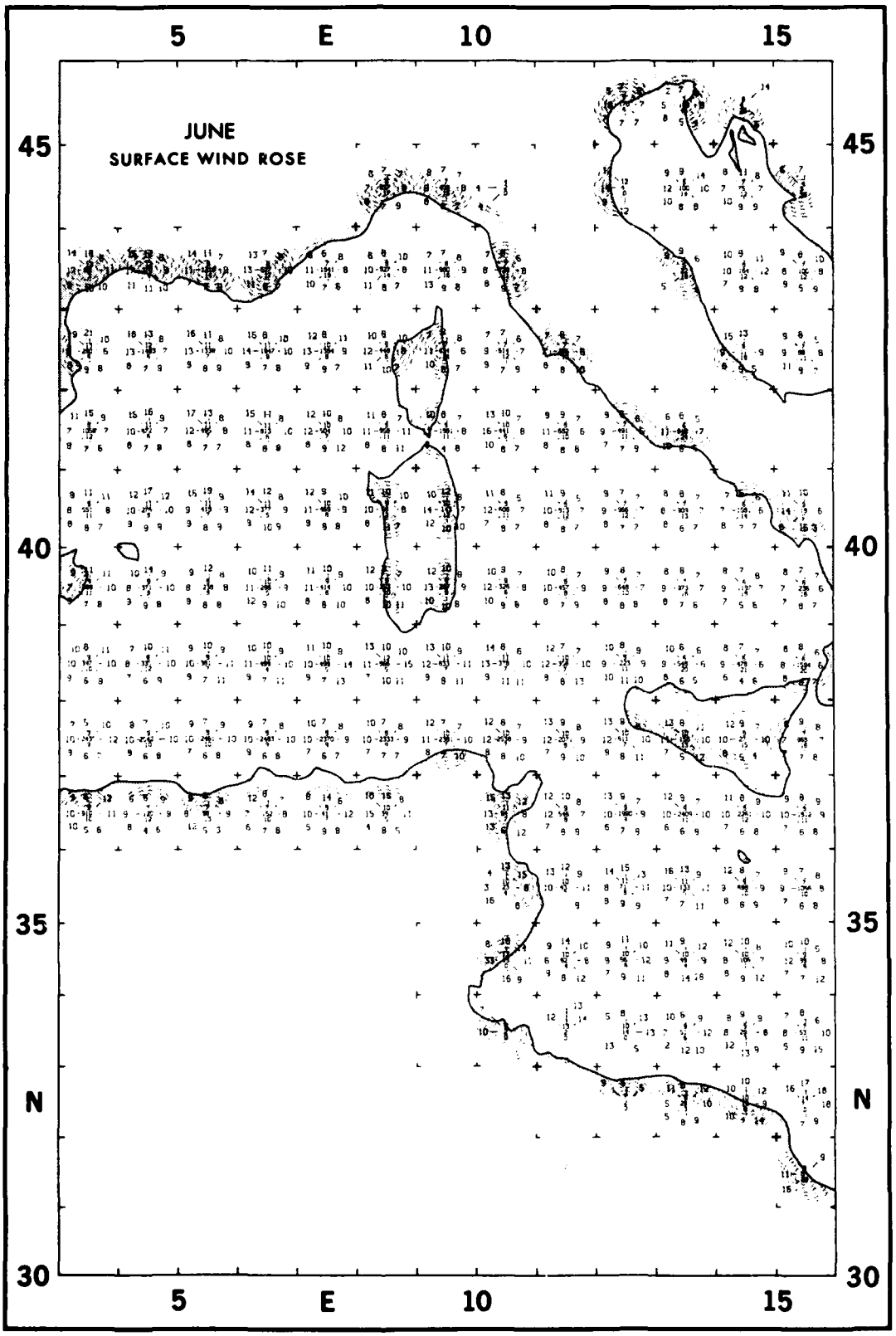

JUNE
WIND-VISIBILITY-CLOUDINESS
SOLID LINE-
PERCENT FREQUENCY OF OPTIMUM CONDITIONS: LCC ≥5000 FT., (OR NO LCC), VSBY. ≥5 N. MI. AND WIND 11-21 KTS.
DASHED LINE-
PERCENT FREQUENCY OF POOR CONDITIONS. ANY ONE OF THE FOLLOWING CONSTITUTES POOR CONDITIONS:
LCC <300 FT.,
VSBY. <1 N. MI.,
WIND <6 OR ≥34 KTS.
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 30 N

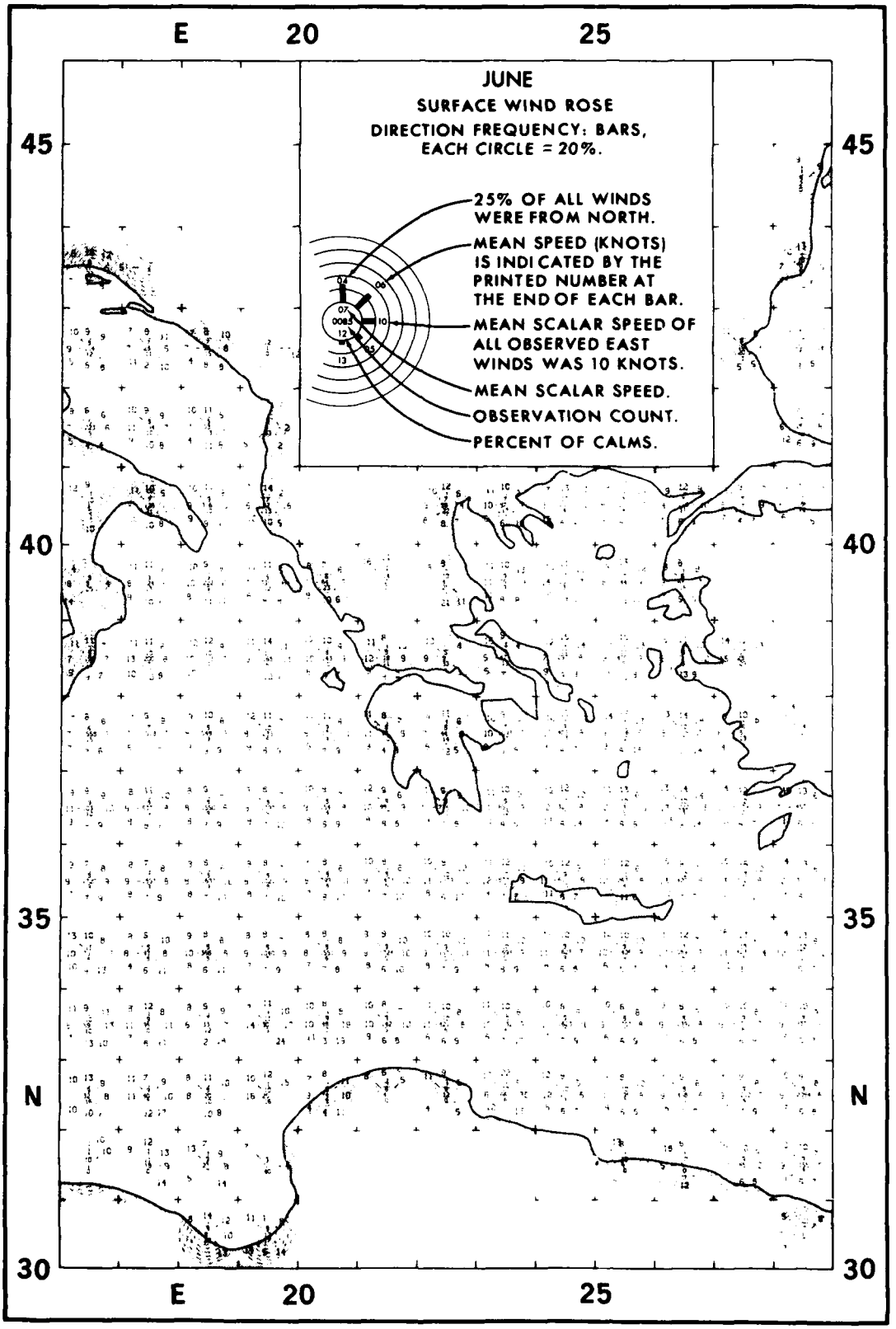

JUNE
WIND SPEED
MEAN SCALAR WIND SPEED (Knots)
INSUFFICIENT DATA
50
45
40
35
30
N
10
5
W
0
E
5
10
15
20
25
30
35
40
45

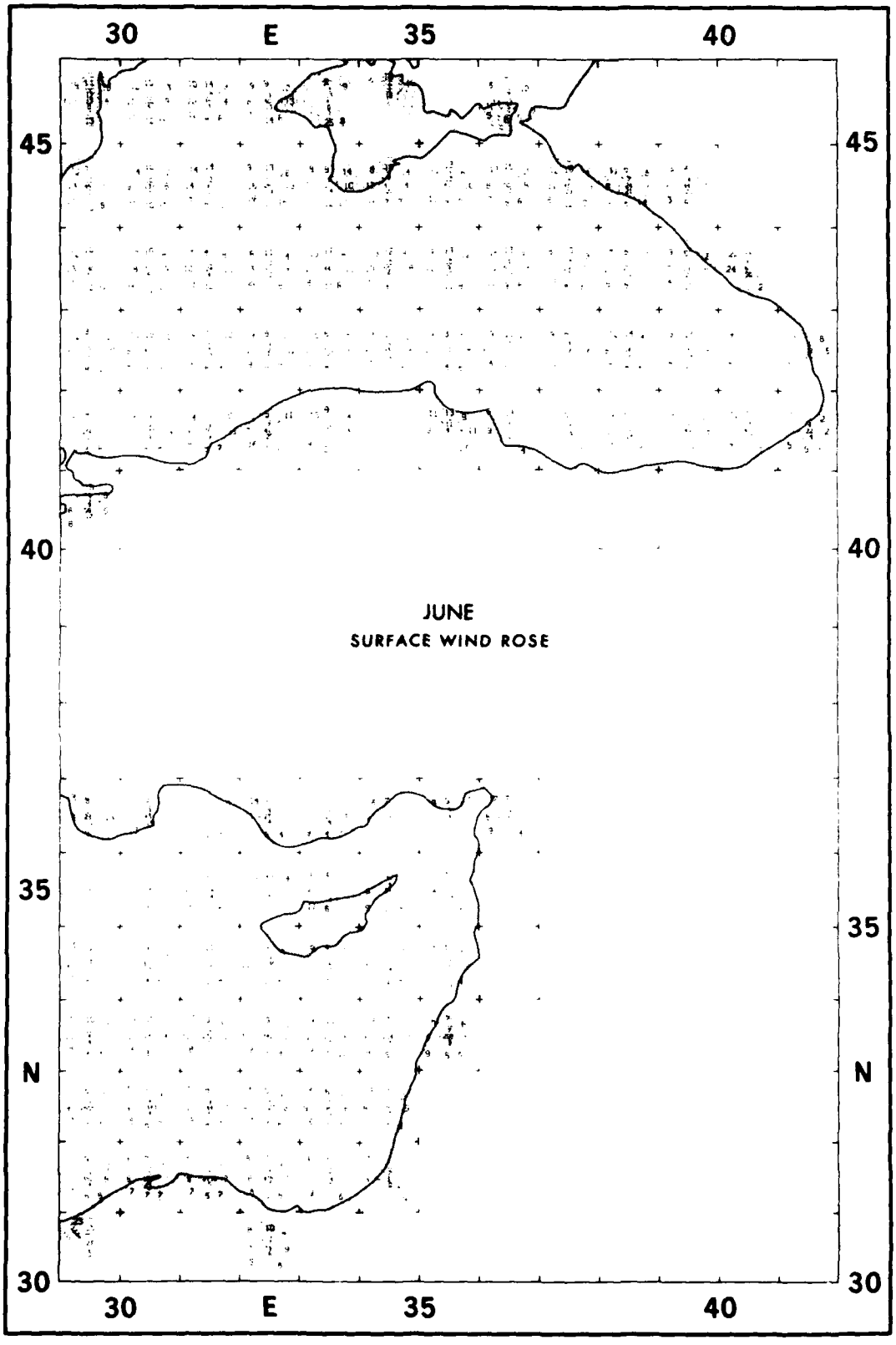

JUNE
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED <11 KNOTS
DASHED LINE - WIND SPEED ≥34 KNOTS
INSUFFICIENT DATA
<5
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

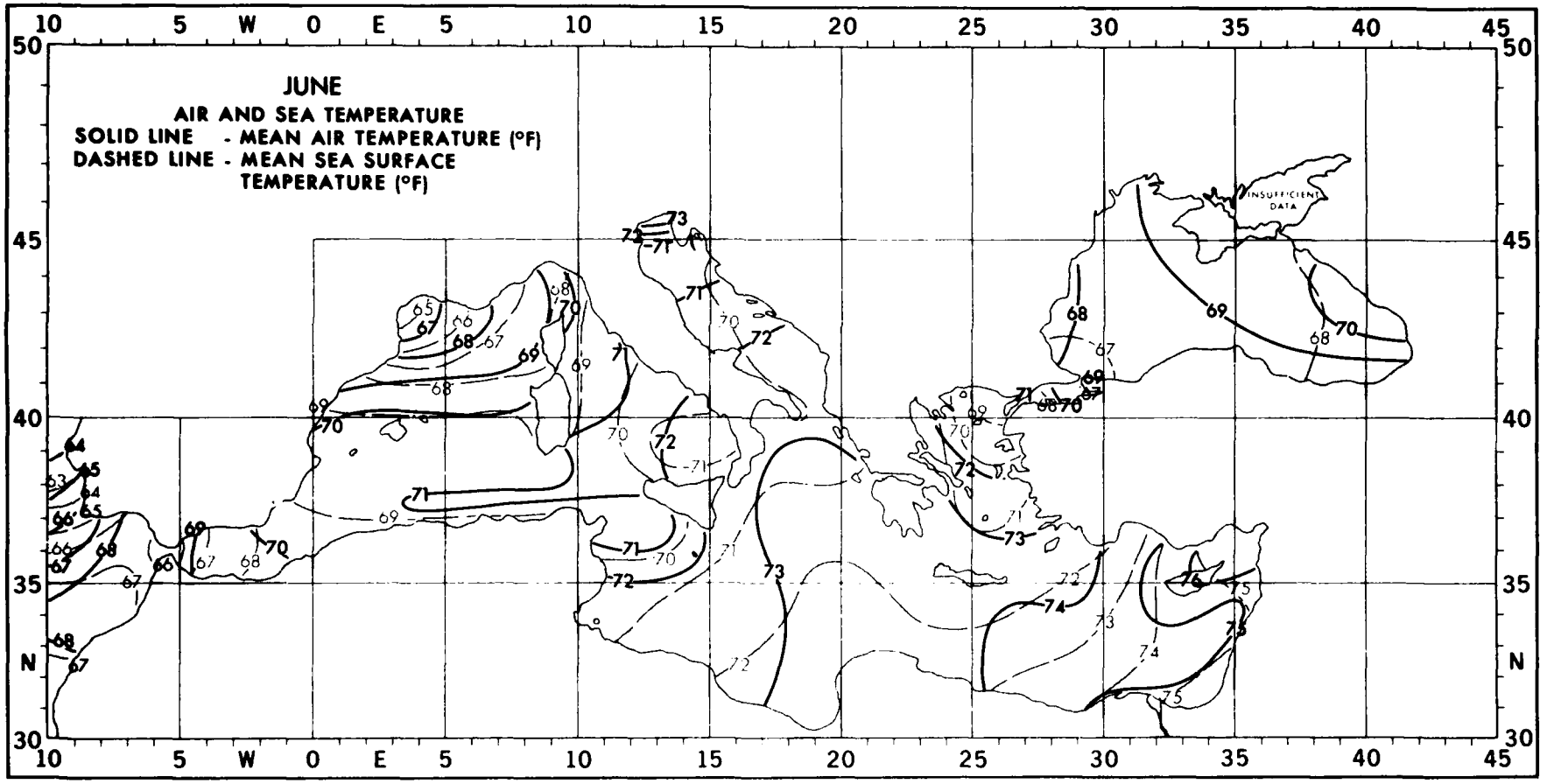

JUNE
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED 11-21 KNOTS
DASHED LINE - WIND SPEED 22-33 KNOTS
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

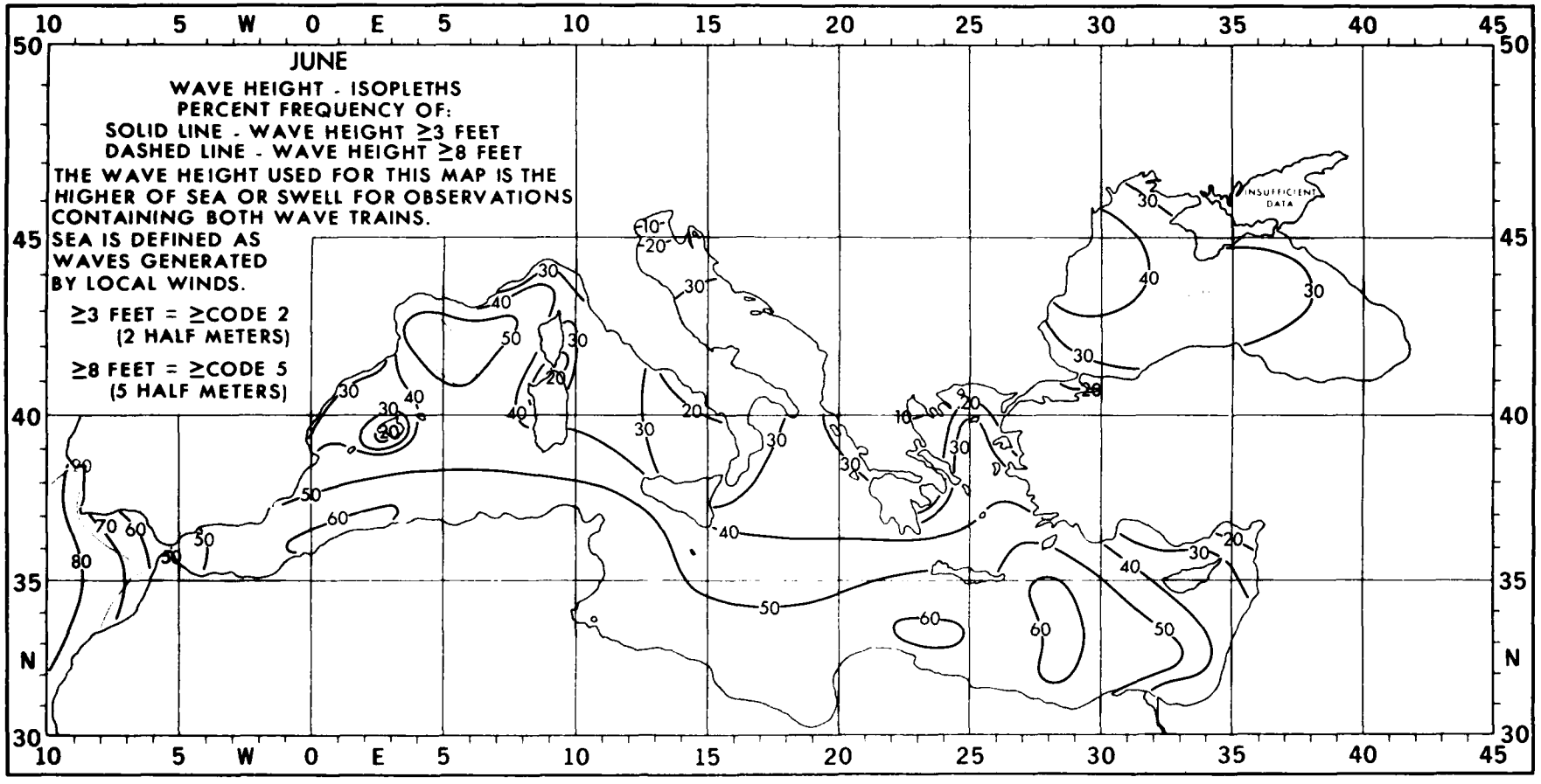

10
5
W
0
E
JUNE
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS,
EACH CIRCLE = 20%.
25% OF ALL WINDS WERE FROM NORTH.
MEAN SPEED (KNOTS) IS INDICATED BY THE PRINTED NUMBER AT THE END OF EACH BAR.
MEAN SCALAR SPEED OF ALL OBSERVED EAST WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.
45
40
35
N
30

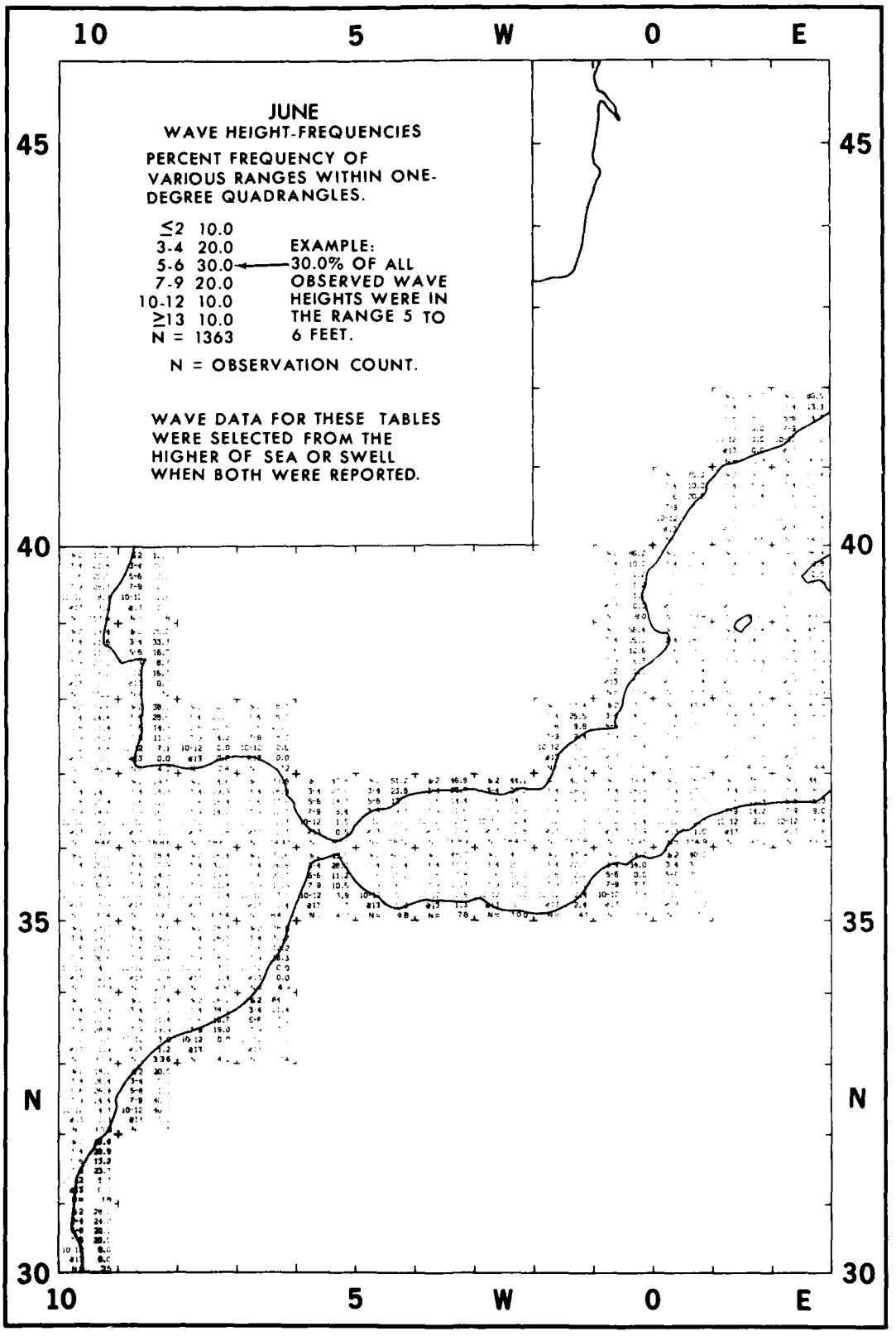

JUNE
SURFACE WIND ROSE
5
E
10
15
45
40
35
N
30

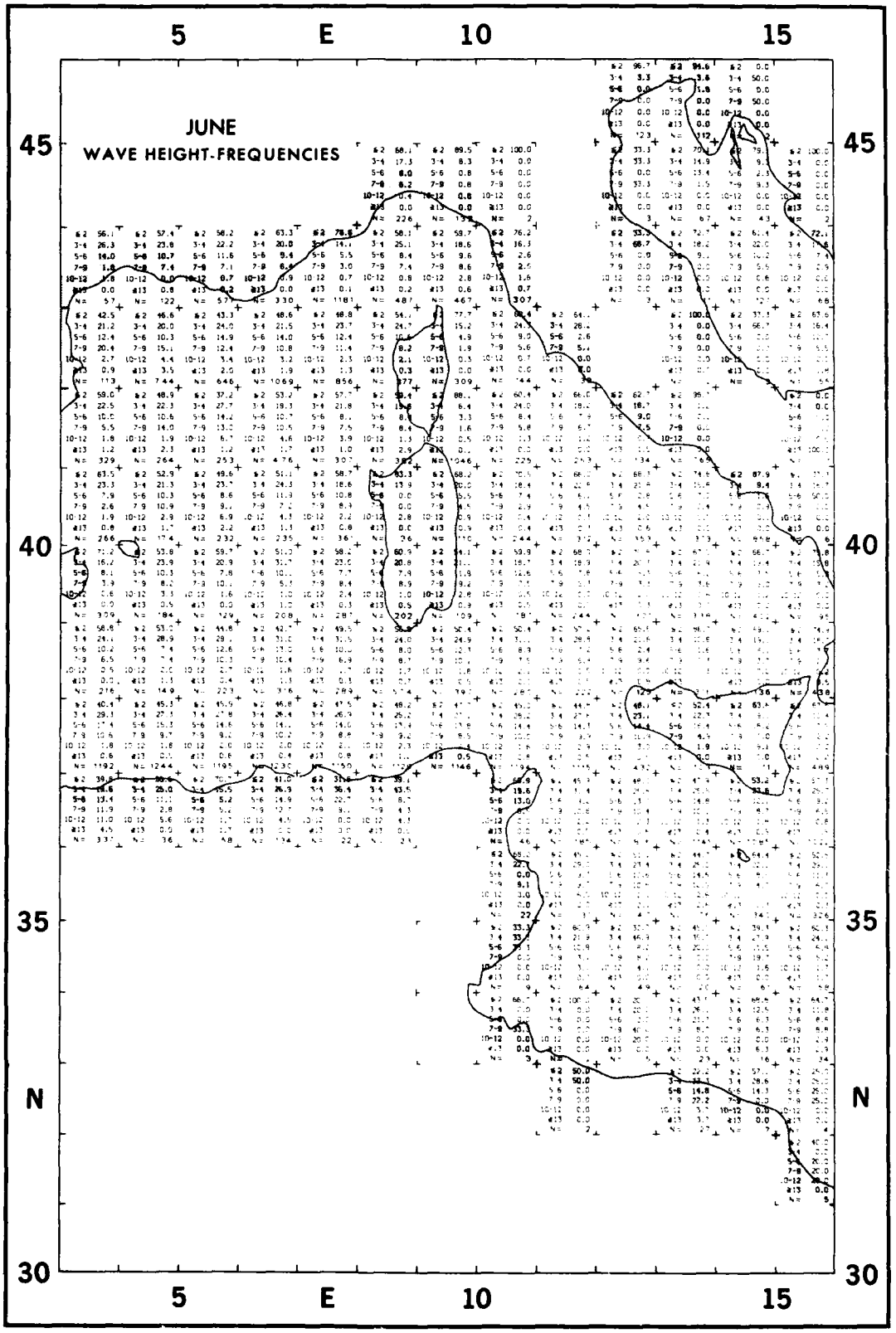

E
20
25
JUNE
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS,
EACH CIRCLE = 20%.
25% OF ALL WINDS WERE FROM NORTH.
MEAN SPEED (KNOTS) IS INDICATED BY THE PRINTED NUMBER AT THE END OF EACH BAR.
MEAN SCALAR SPEED OF ALL OBSERVED EAST WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.
45
40
35
N
30

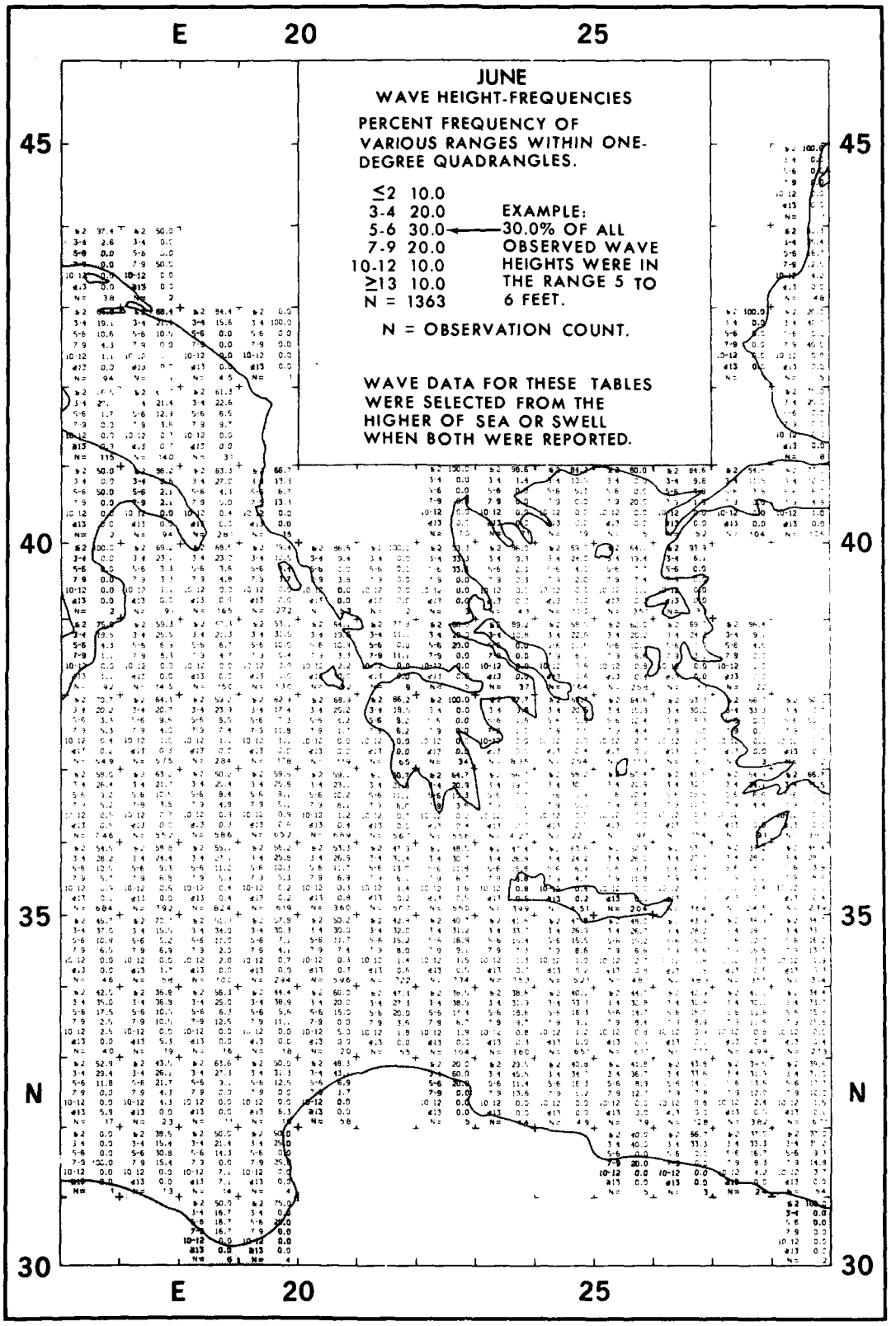

30
E
35
40
45
40
35
N
30
JUNE
SURFACE WIND ROSE

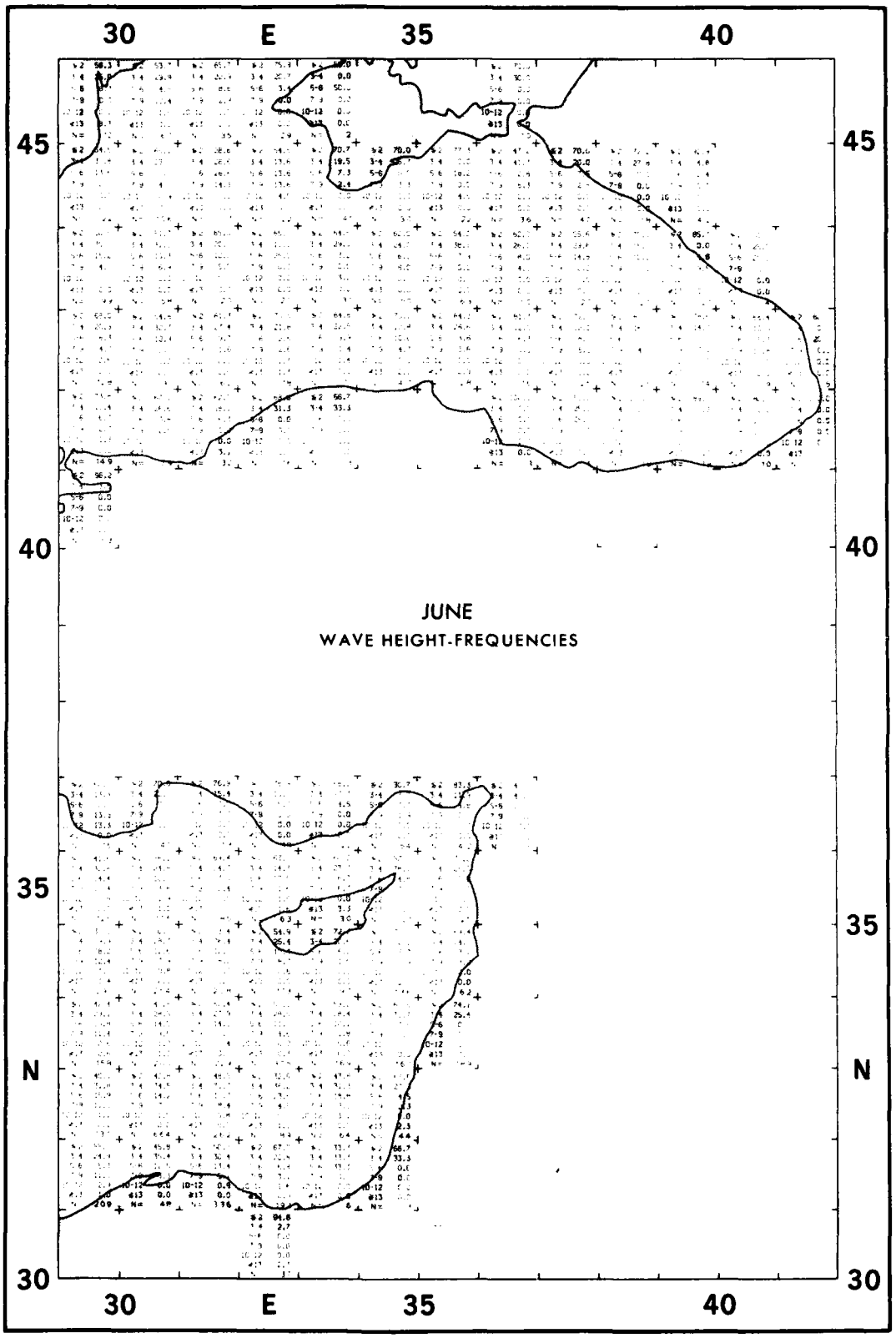

JUNE
AIR AND SEA TEMPERATURE
SOLID LINE - MEAN AIR TEMPERATURE (°F)
DASHED LINE - MEAN SEA SURFACE TEMPERATURE (°F)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

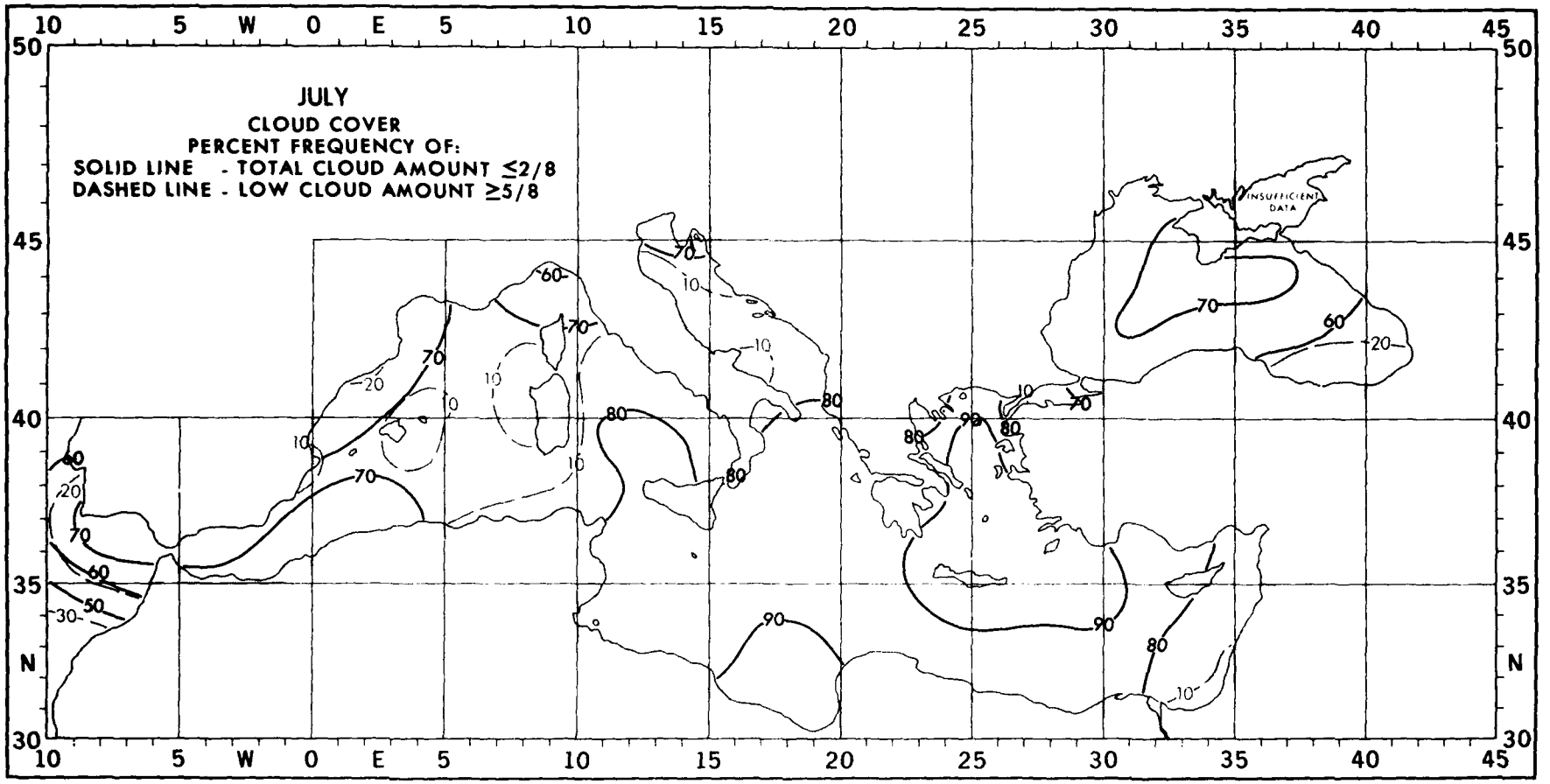

JUNE
WAVE HEIGHT - ISOPLETHS
PERCENT FREQUENCY OF:
SOLID LINE - WAVE HEIGHT ≥3 FEET
DASHED LINE - WAVE HEIGHT ≥8 FEET
THE WAVE HEIGHT USED FOR THIS MAP IS THE HIGHER OF SEA OR SWELL FOR OBSERVATIONS CONTAINING BOTH WAVE TRAINS.
SEA IS DEFINED AS WAVES GENERATED BY LOCAL WINDS.
≥3 FEET = ≥CODE 2 (2 HALF METERS)
≥8 FEET = ≥CODE 5 (5 HALF METERS)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

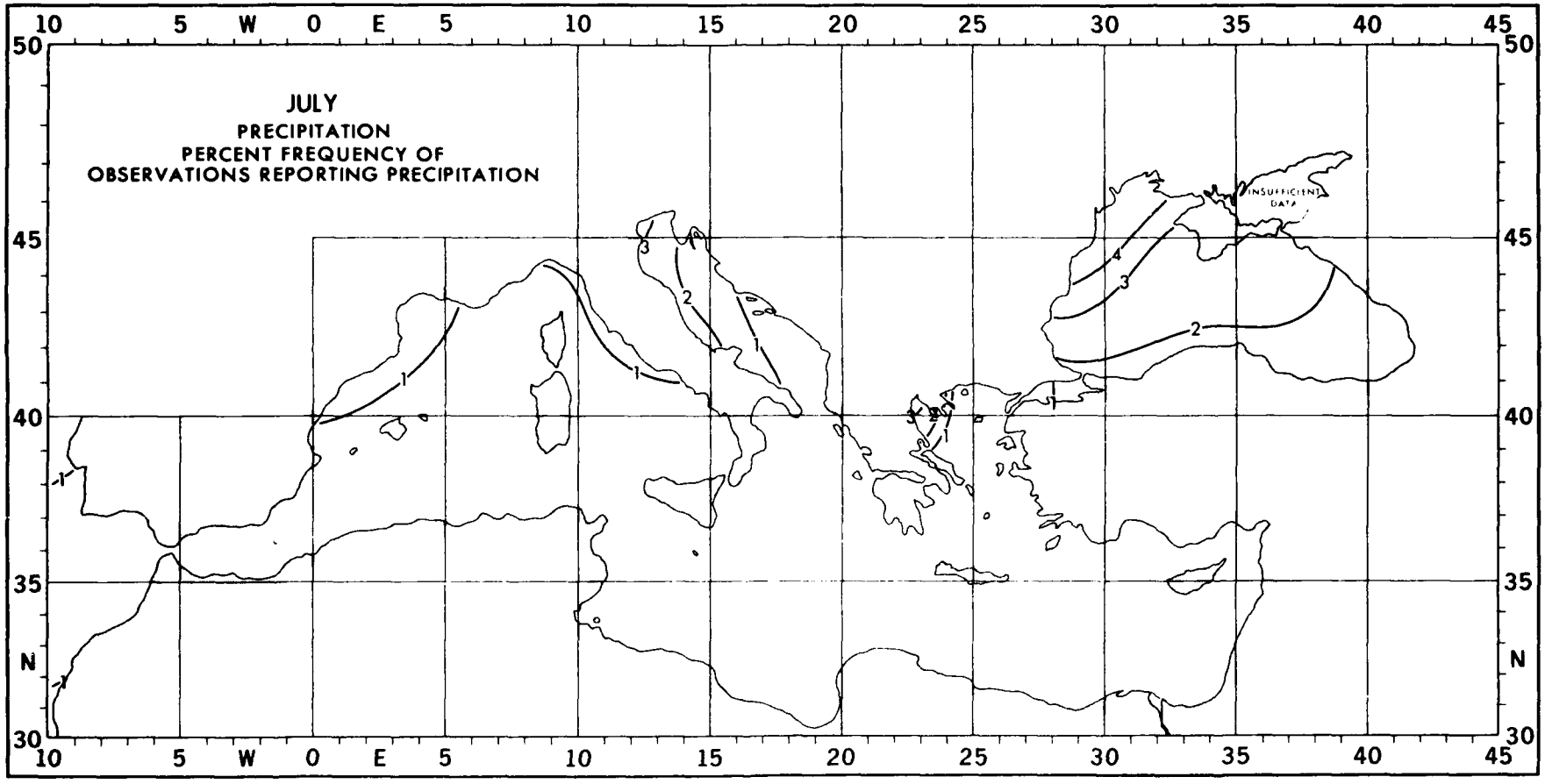

10
5
W
0
E
45
40
35
30
N
JUNE
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.

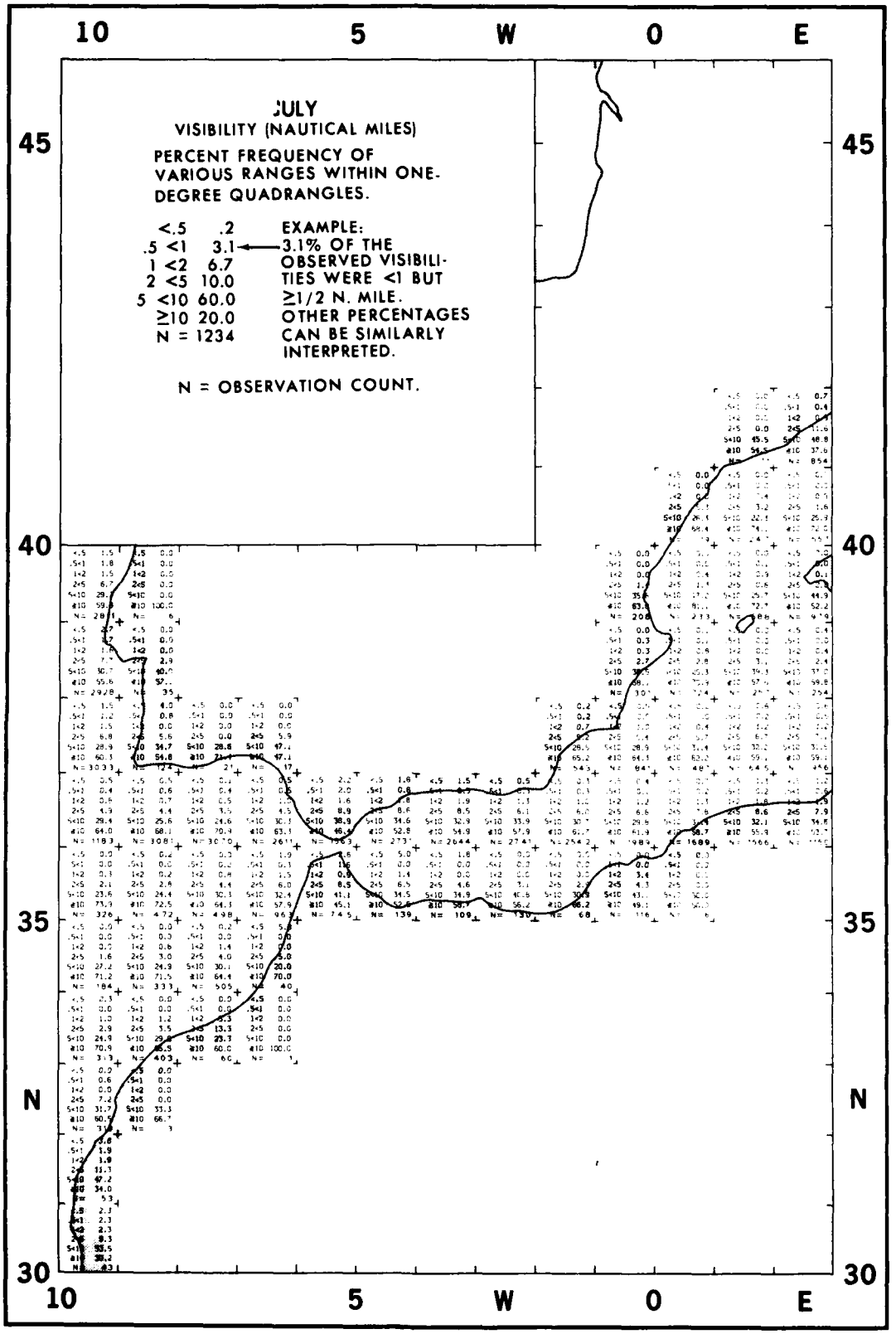

JUNE
WAVE HEIGHT-FREQUENCIES
5
E
10
15
45
40
35
N
30

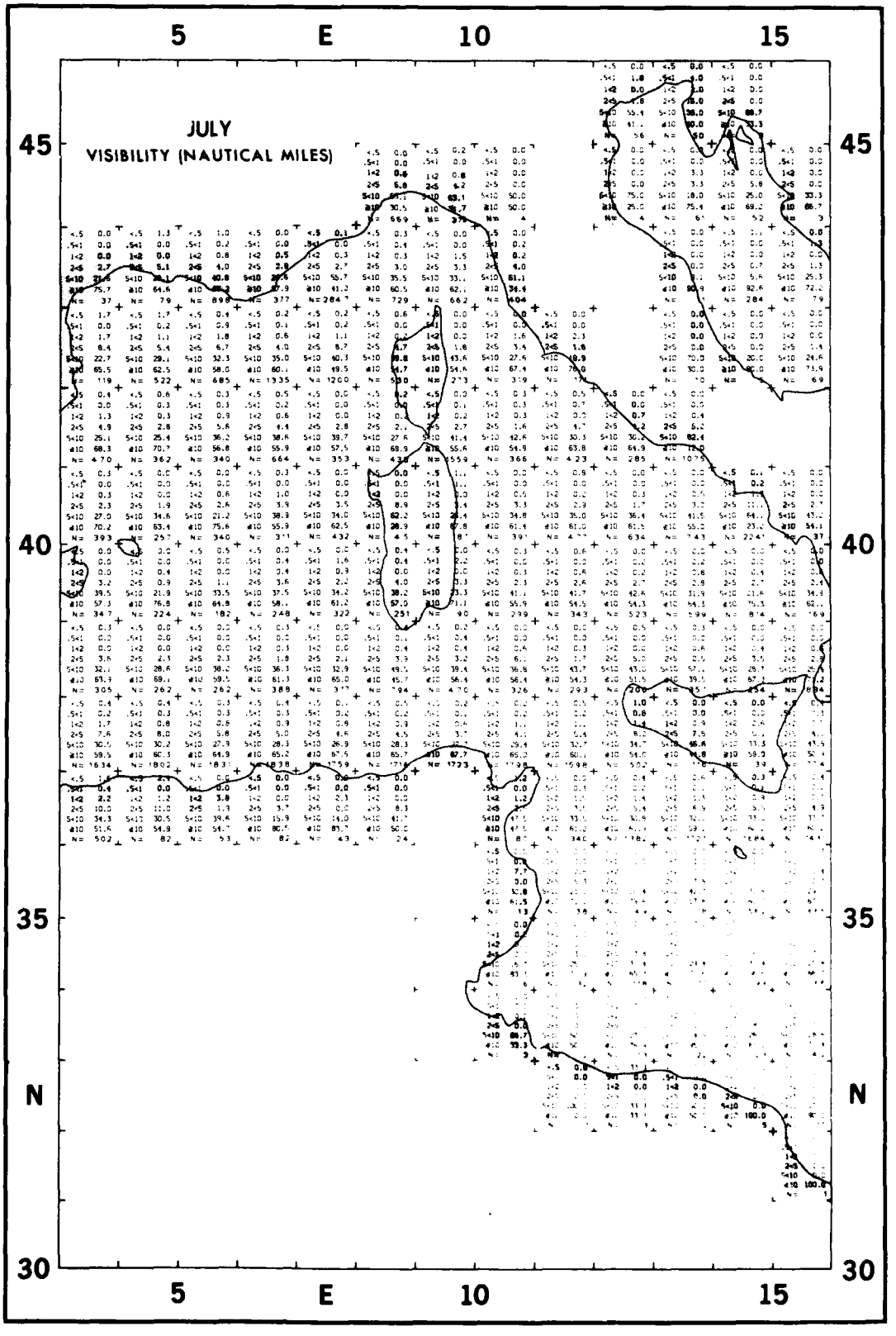

E
20
25
45
40
35
N
30
JUNE
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.

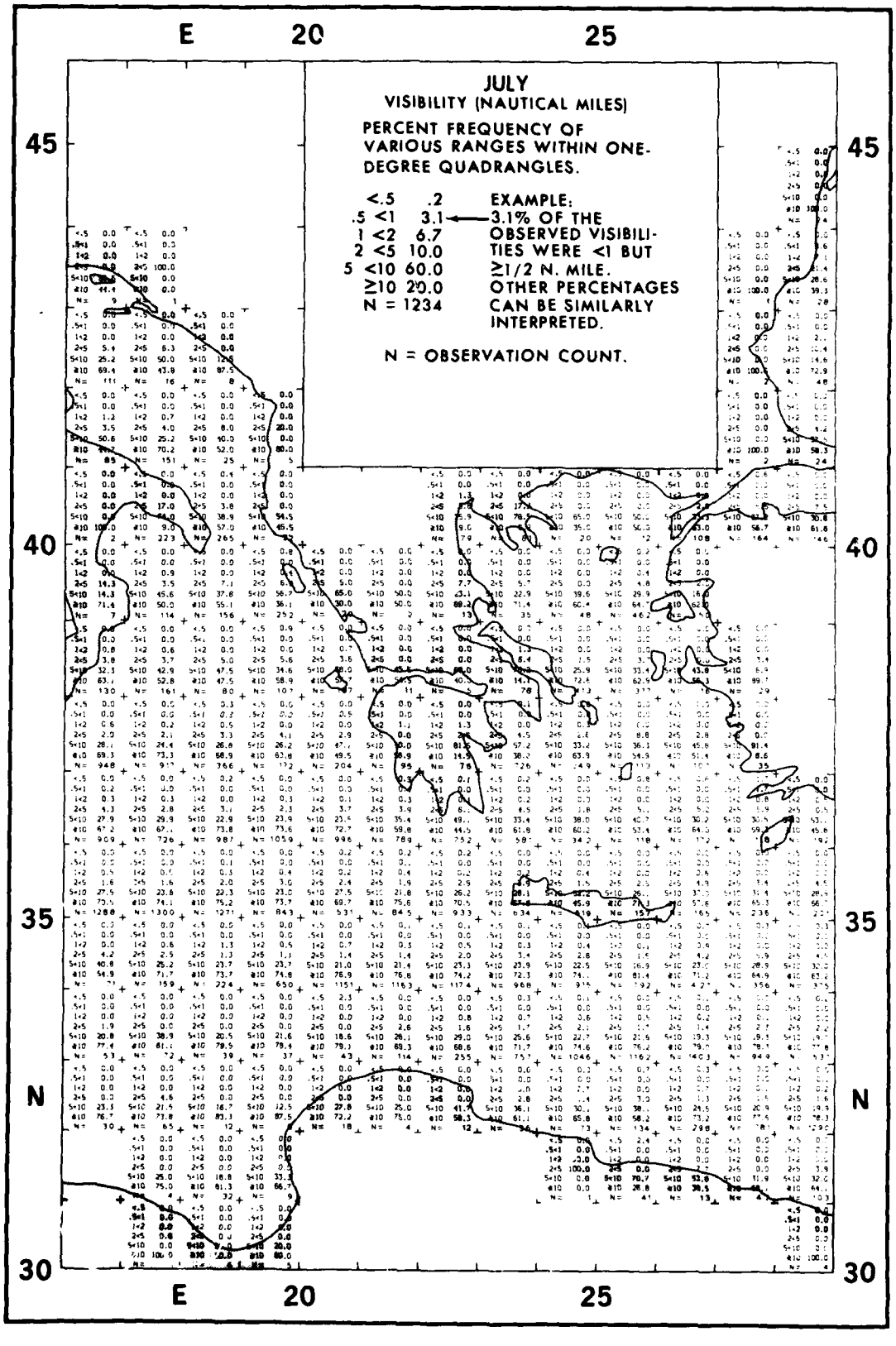

30
E
35
40
45
40
JUNE
WAVE HEIGHT-FREQUENCIES
35
N
30
30
E
35
40

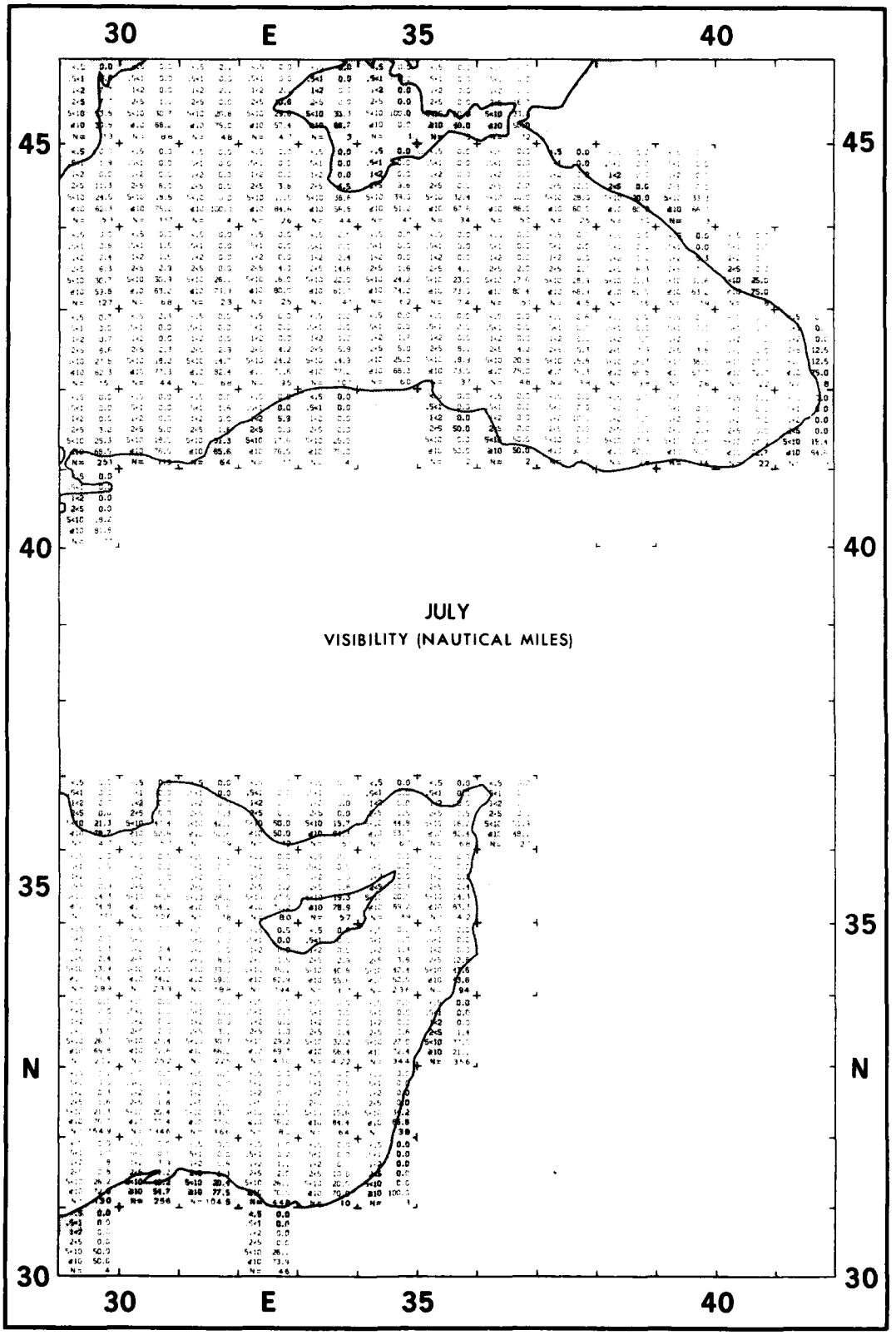

JULY
CLOUD COVER
PERCENT FREQUENCY OF:
SOLID LINE - TOTAL CLOUD AMOUNT ≤2/8
DASHED LINE - LOW CLOUD AMOUNT ≥5/8
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

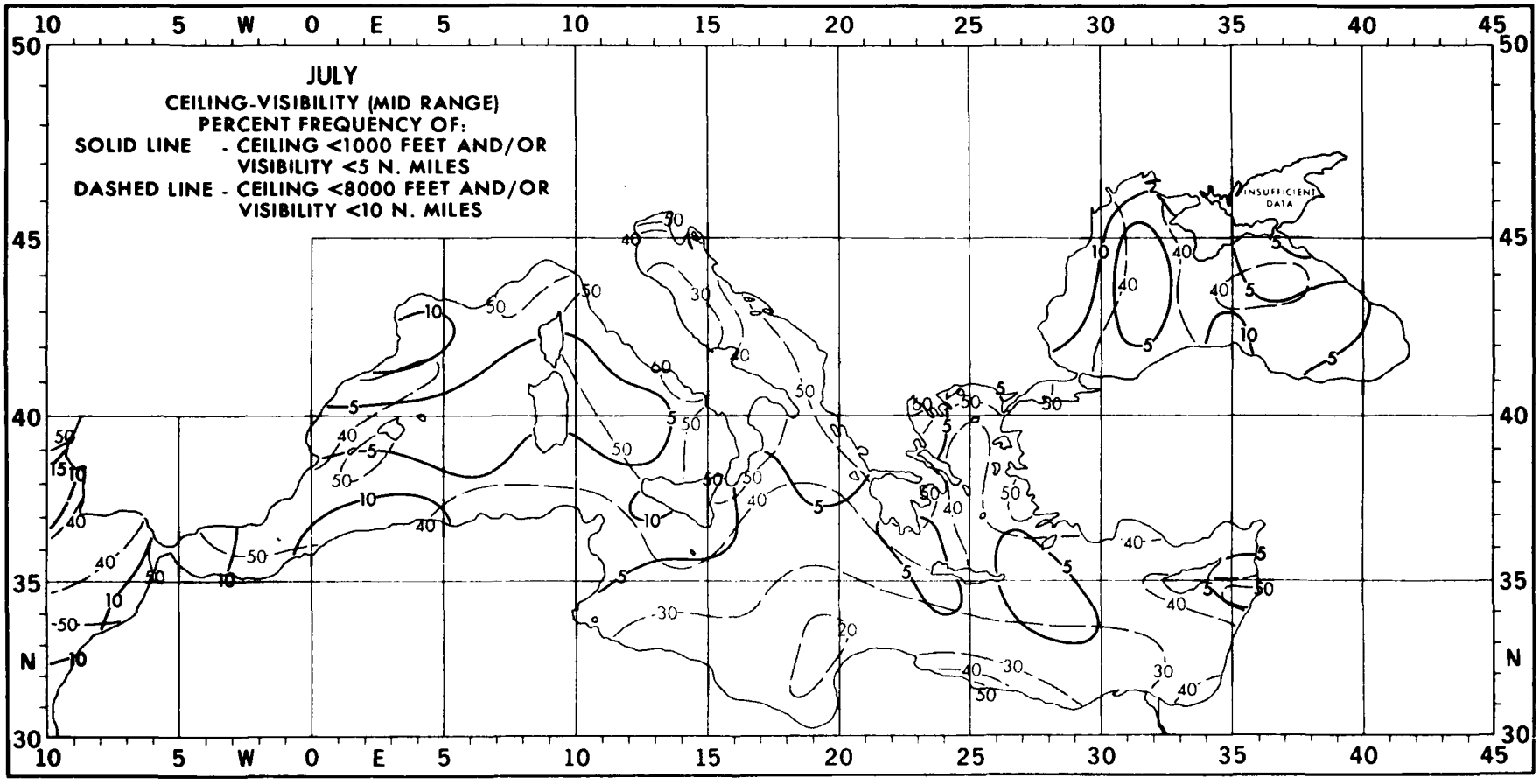

JULY
PRECIPITATION
PERCENT FREQUENCY OF
OBSERVATIONS REPORTING PRECIPITATION
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

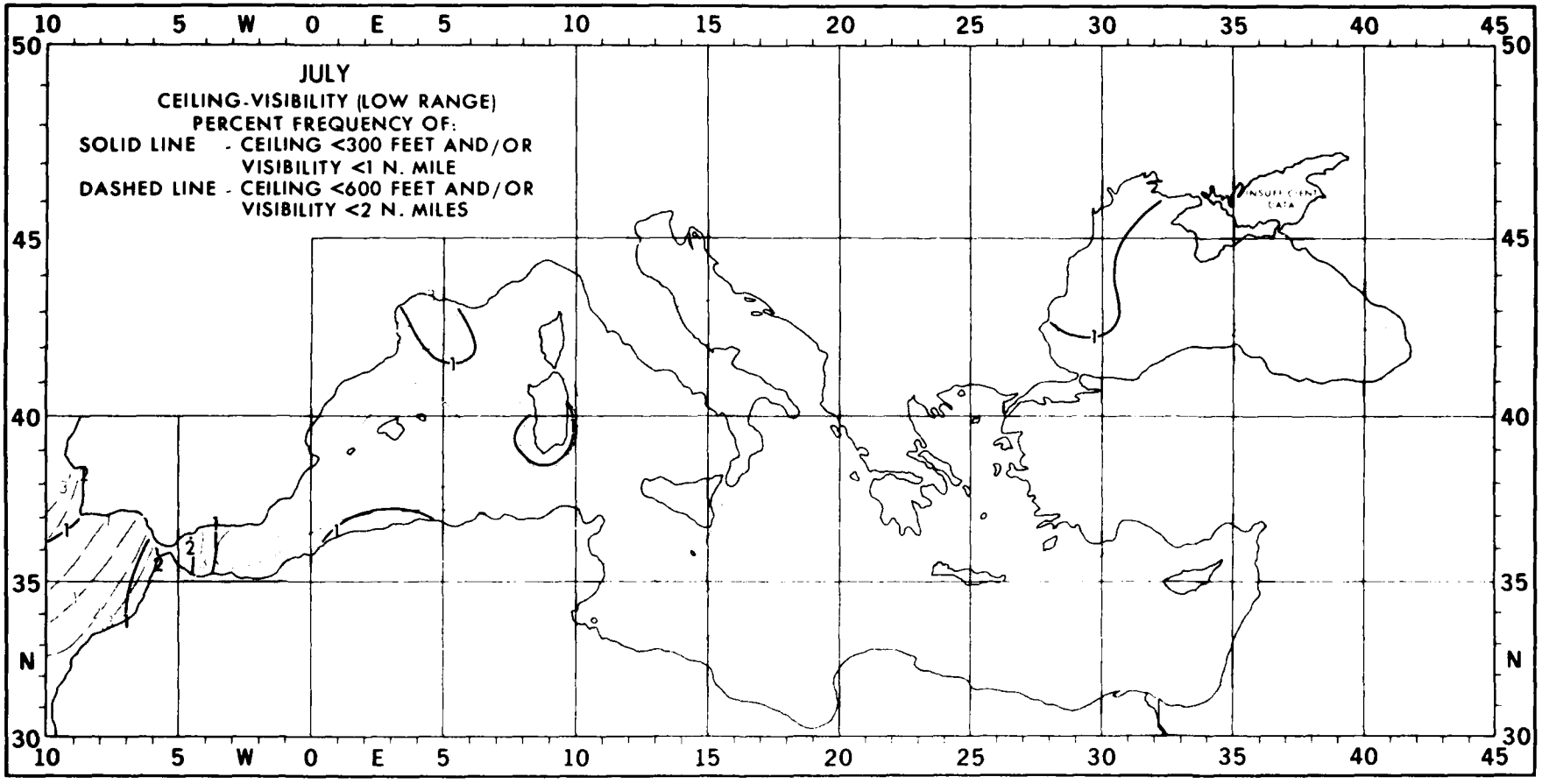

10
5
W
0
E
45
40
35
30
N
JULY
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.

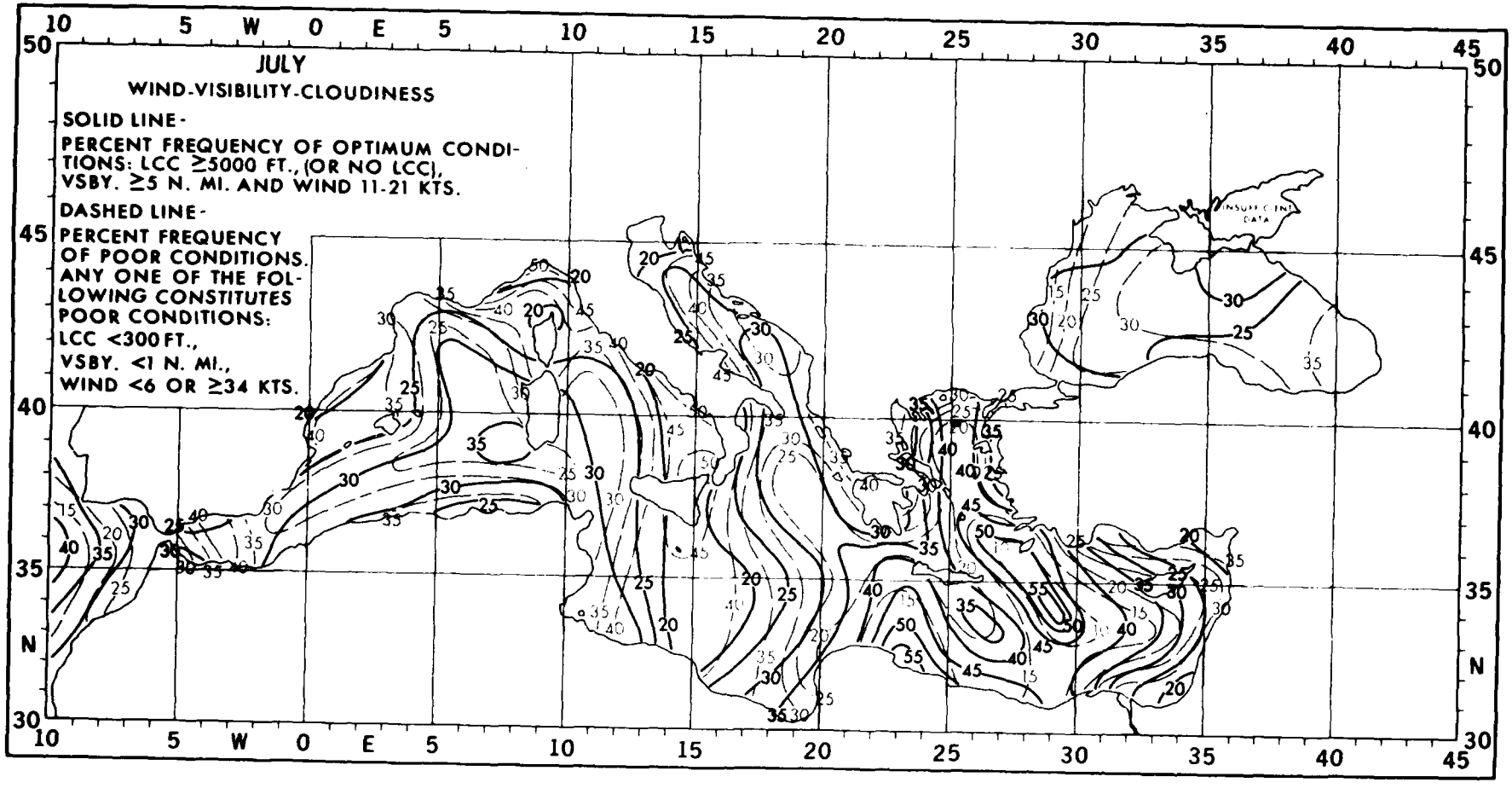

JULY
VISIBILITY (NAUTICAL MILES)
5
E
10
15
45
40
35
30
N

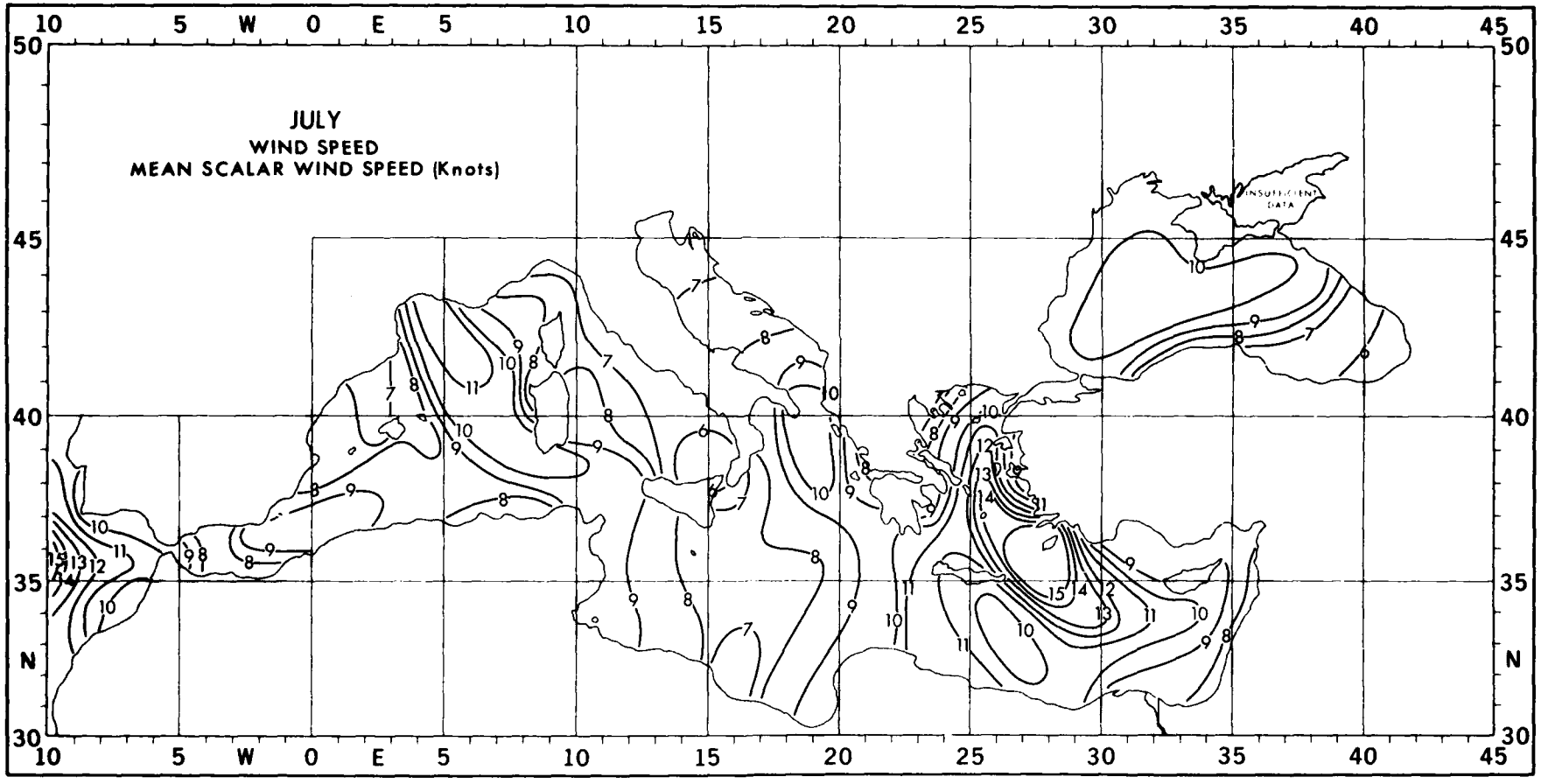

JULY
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.
E
20
25
45
40
35
30
N

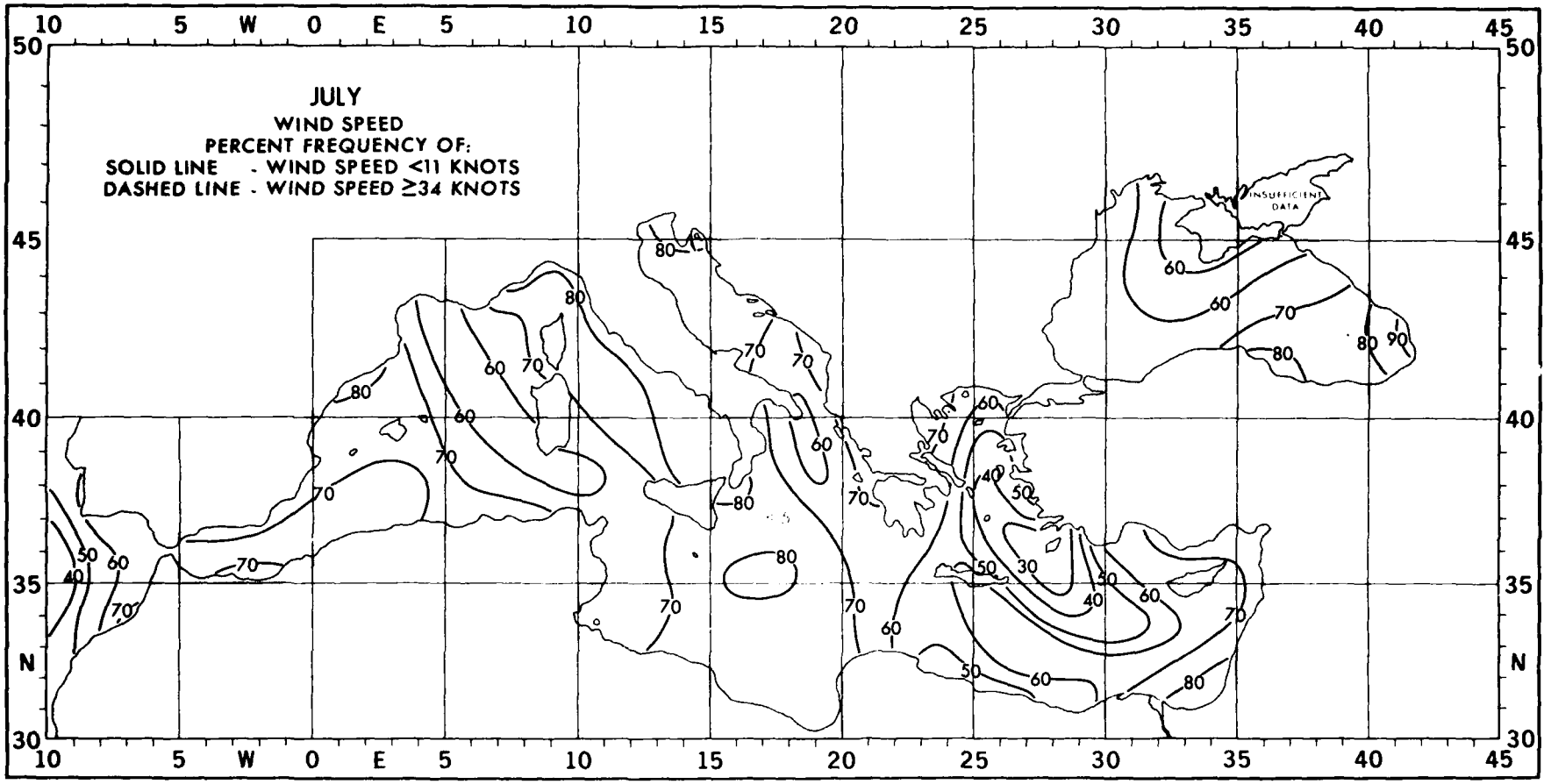

30
E
35
40
45
40
JULY
VISIBILITY (NAUTICAL MILES)
35
N
30
30
E
35
40

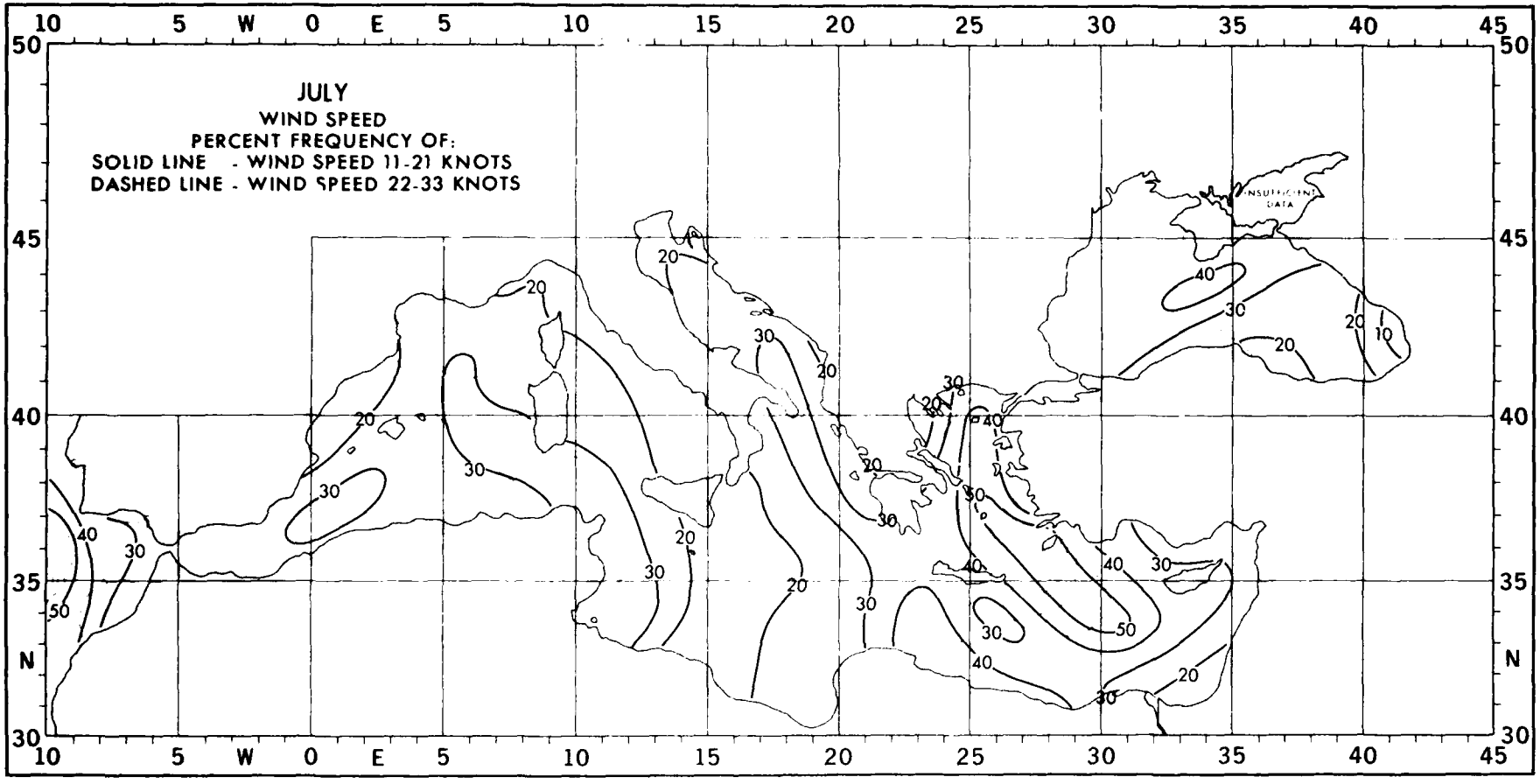

JULY
CEILING-VISIBILITY (MID RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <1000 FEET AND/OR VISIBILITY <5 N. MILES
DASHED LINE - CEILING <8000 FEET AND/OR VISIBILITY <10 N. MILES
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

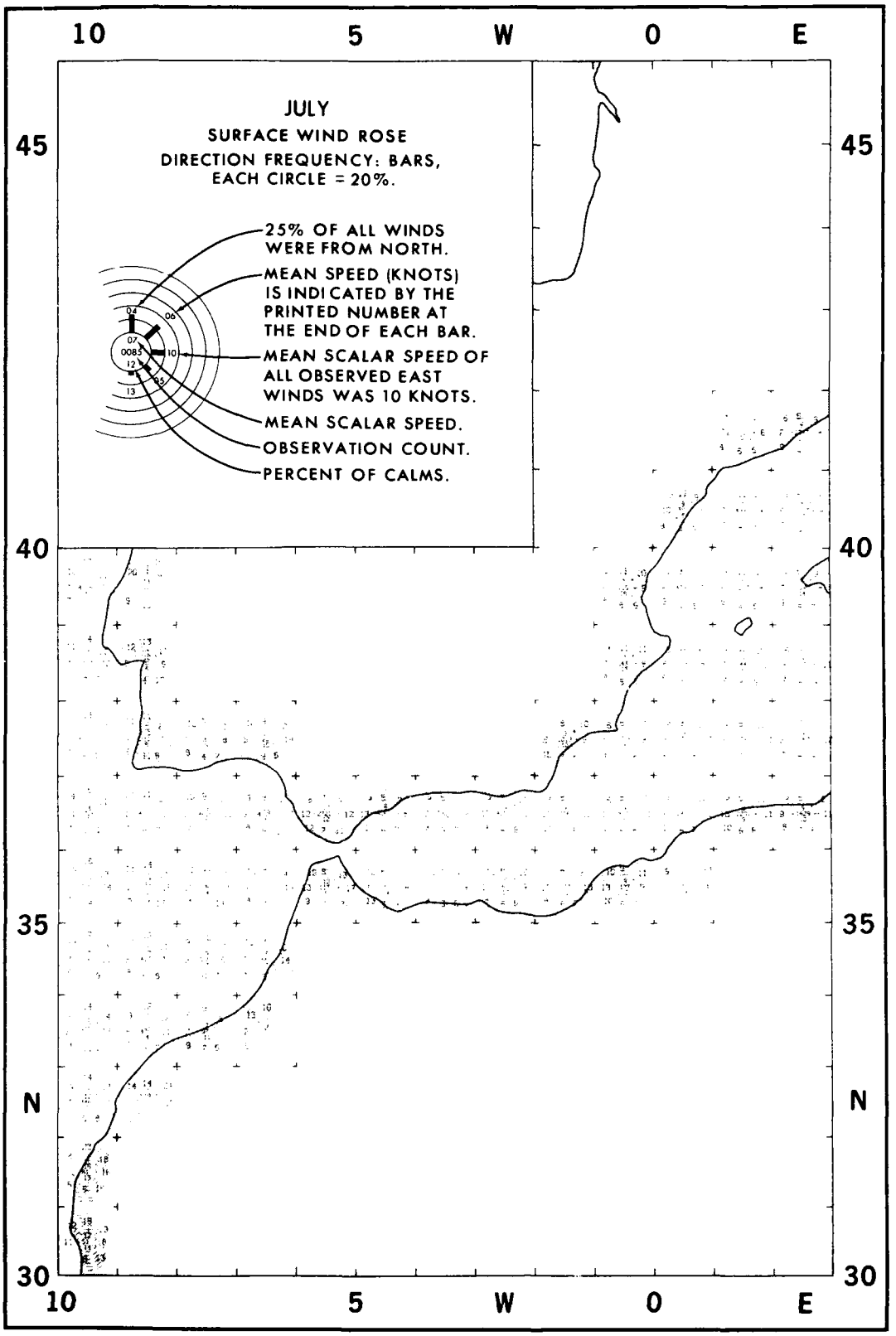

JULY
CEILING-VISIBILITY (LOW RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <300 FEET AND/OR VISIBILITY <1 N. MILE
DASHED LINE - CEILING <600 FEET AND/OR VISIBILITY <2 N. MILES
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

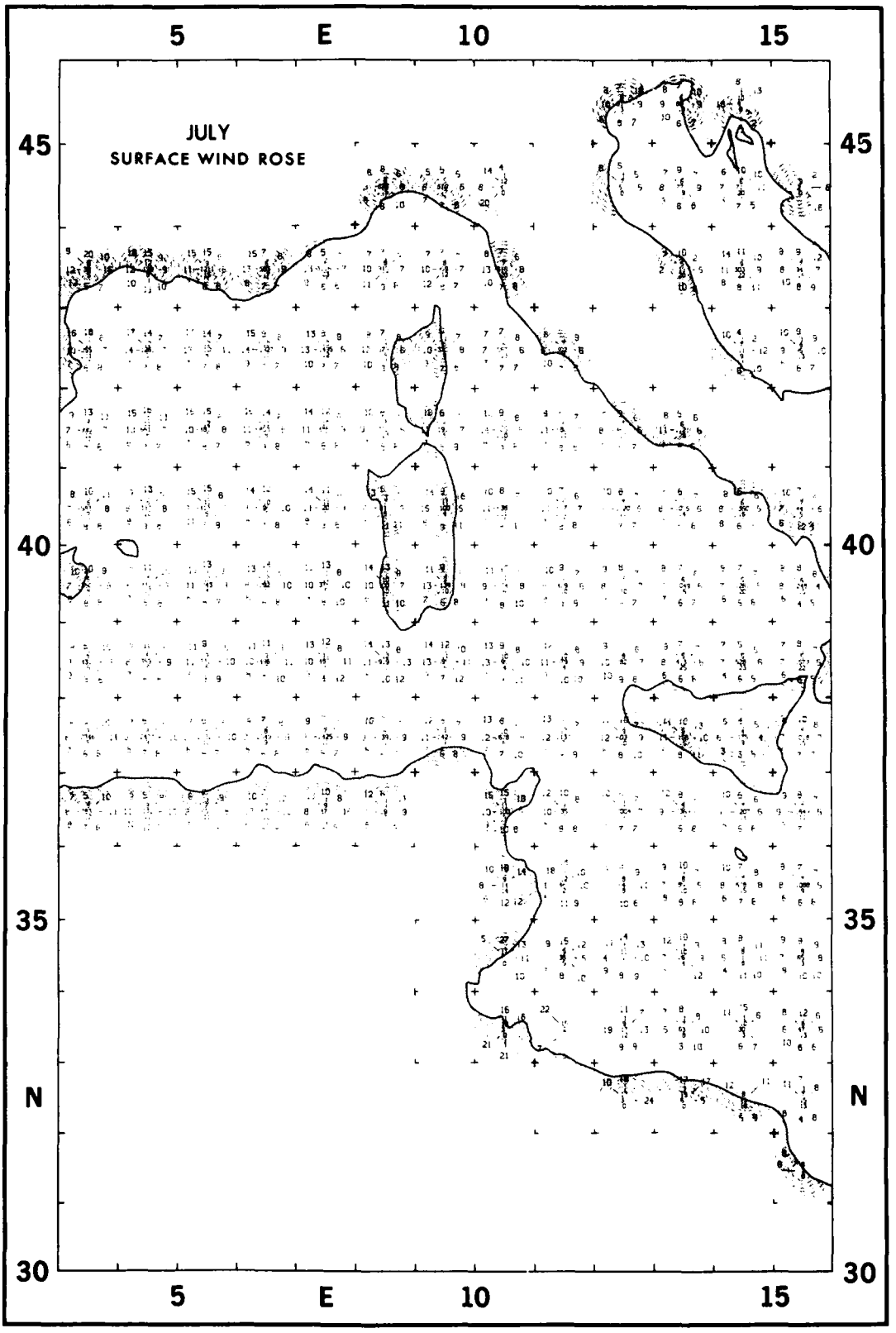

JULY
WIND-VISIBILITY-CLOUDINESS
SOLID LINE-
PERCENT FREQUENCY OF OPTIMUM CONDITIONS: LCC ≥5000 FT., (OR NO LCC), VSBY. ≥5 N. MI. AND WIND 11-21 KTS.
DASHED LINE-
PERCENT FREQUENCY OF POOR CONDITIONS. ANY ONE OF THE FOLLOWING CONSTITUTES POOR CONDITIONS:
LCC <300 FT.,
VSBY. <1 N. MI.,
WIND <6 OR ≥34 KTS.
INSUFF CLIND DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

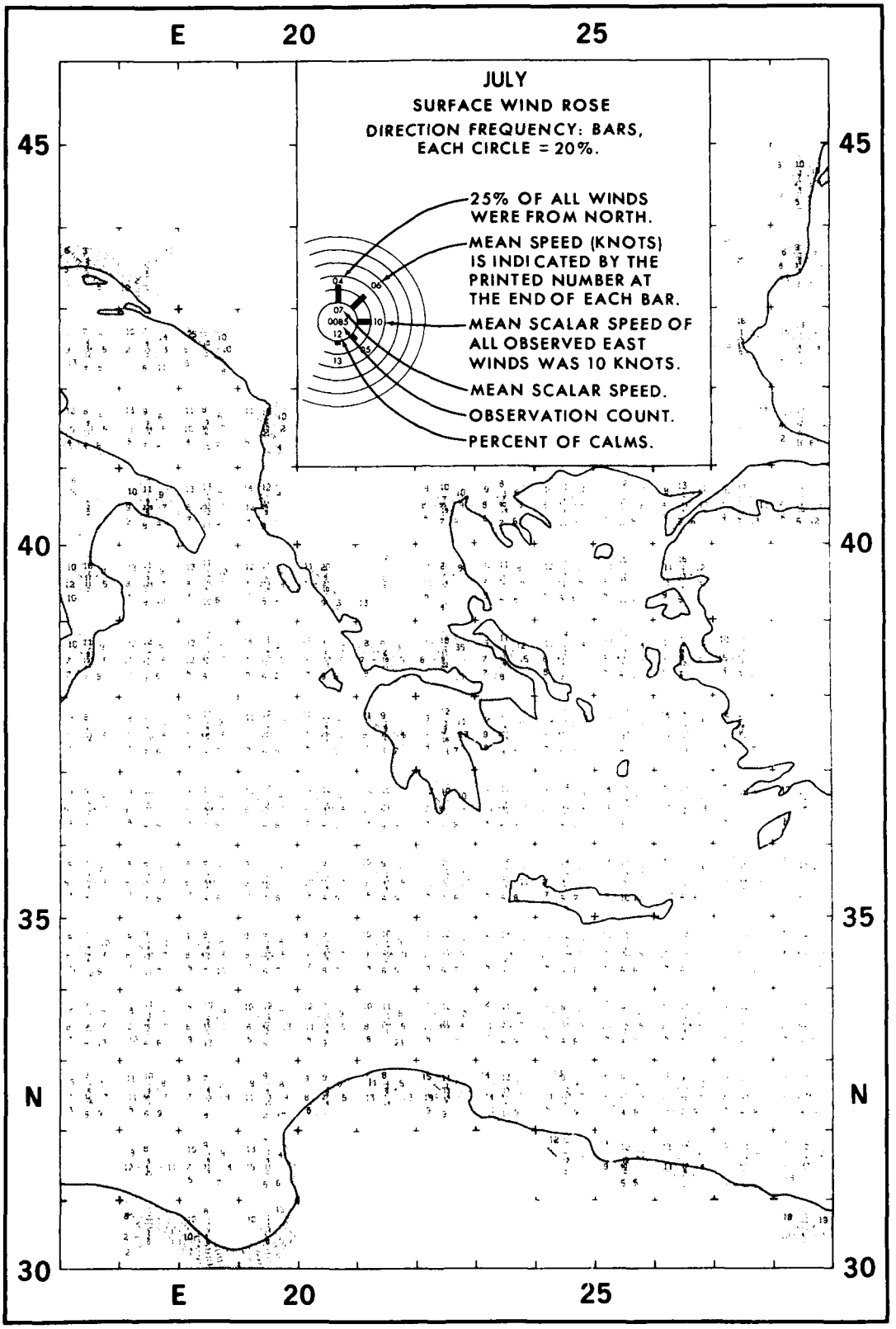

JULY
WIND SPEED
MEAN SCALAR WIND SPEED (Knots)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
30
N

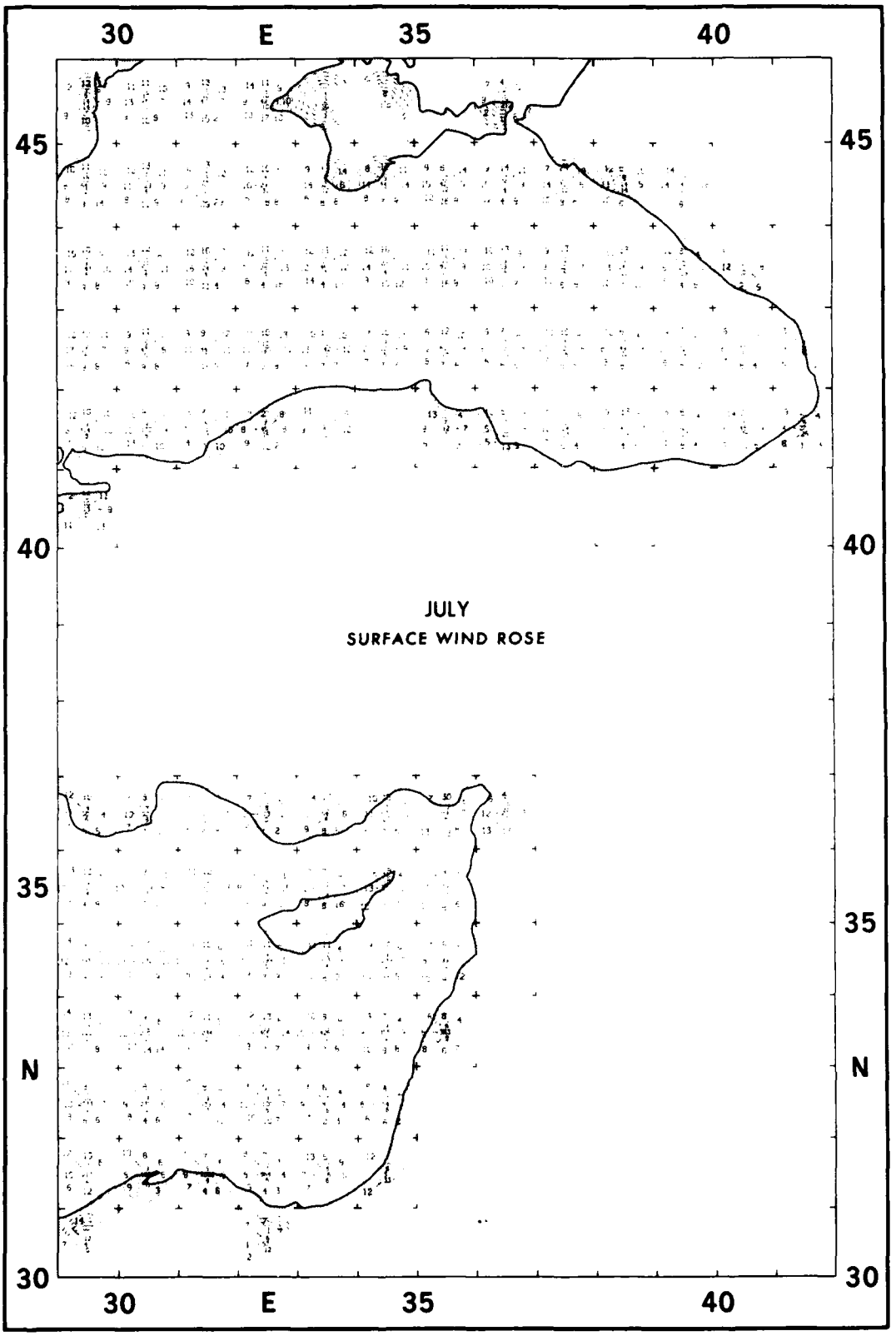

JULY
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED <11 KNOTS
DASHED LINE - WIND SPEED ≥34 KNOTS
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

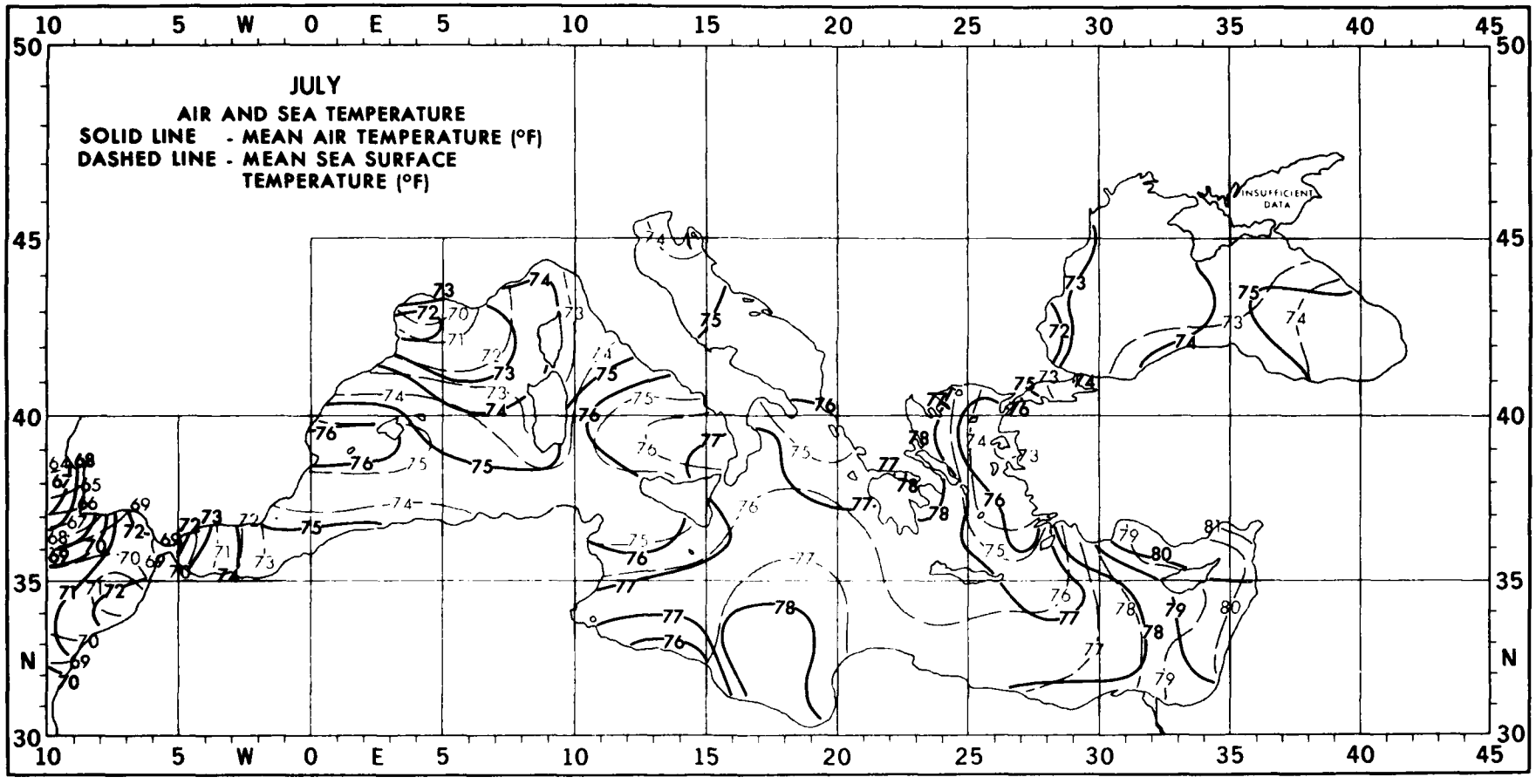

JULY
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED 11-21 KNOTS
DASHED LINE - WIND SPEED 22-33 KNOTS
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

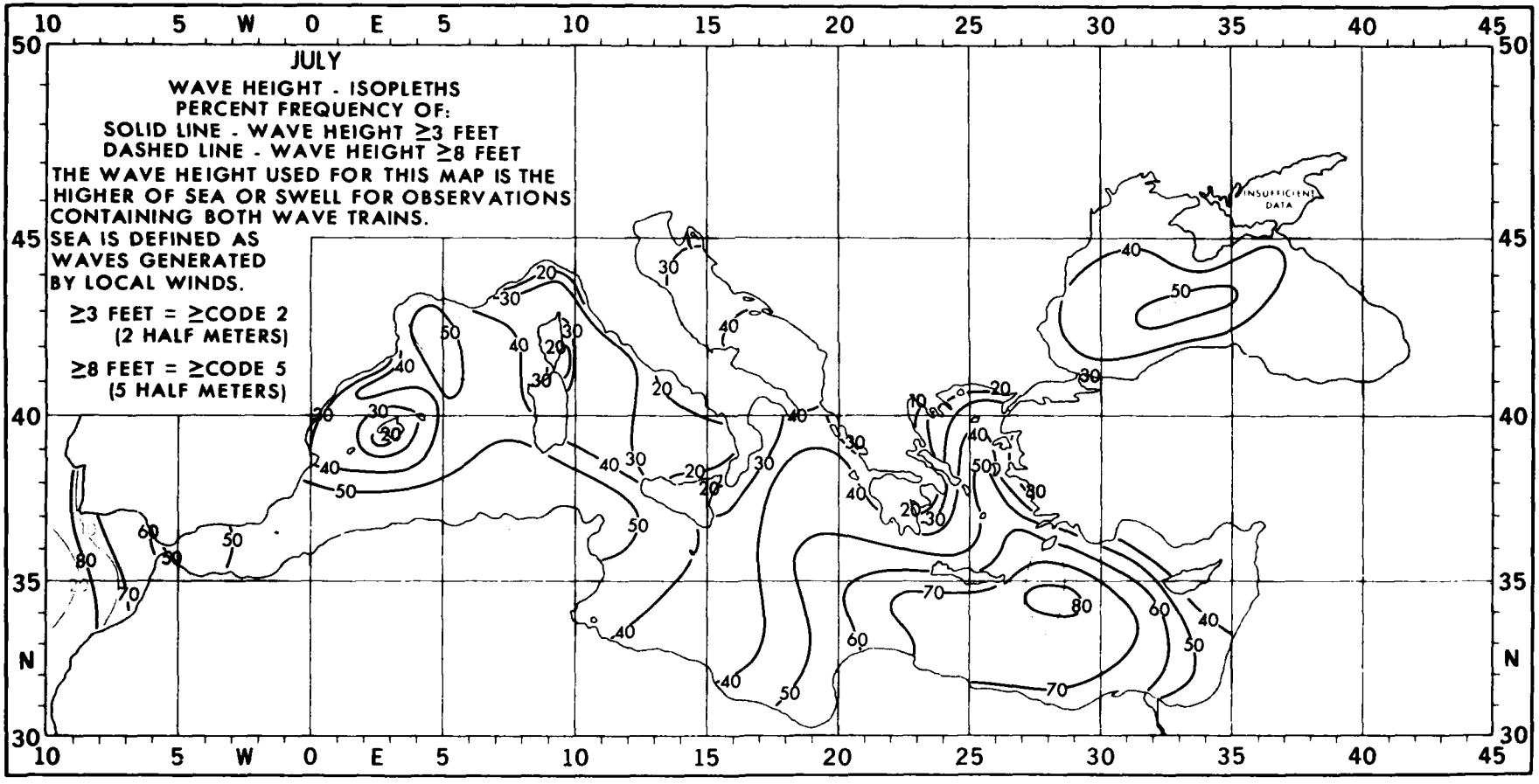

10
5
W
0
E
45
40
35
30
N
JULY
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS,
EACH CIRCLE = 20%.
25% OF ALL WINDS WERE FROM NORTH.
MEAN SPEED (KNOTS) IS INDICATED BY THE PRINTED NUMBER AT THE END OF EACH BAR.
MEAN SCALAR SPEED OF ALL OBSERVED EAST WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.

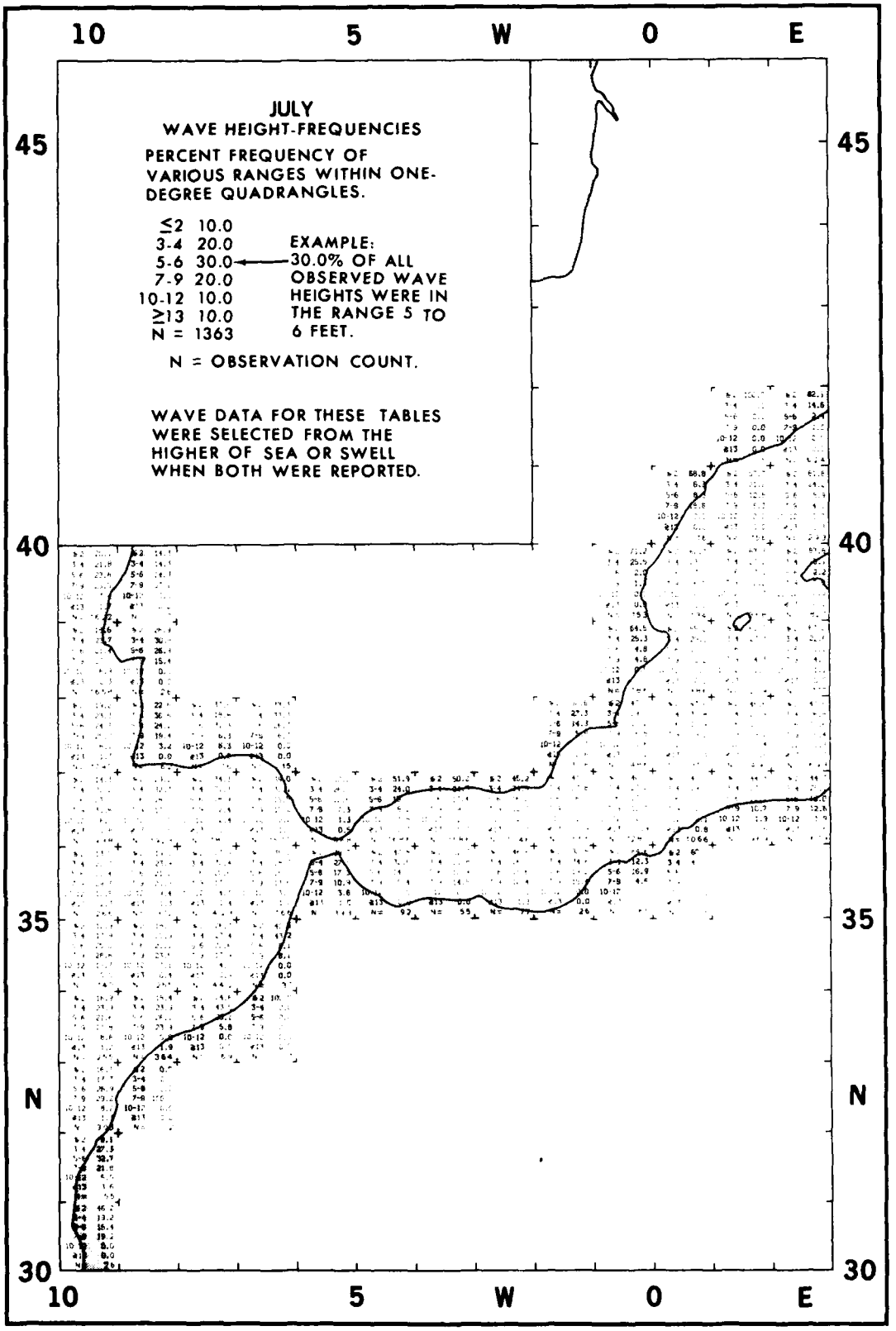

JULY
SURFACE WIND ROSE
5
E
10
15
45
40
35
N
30

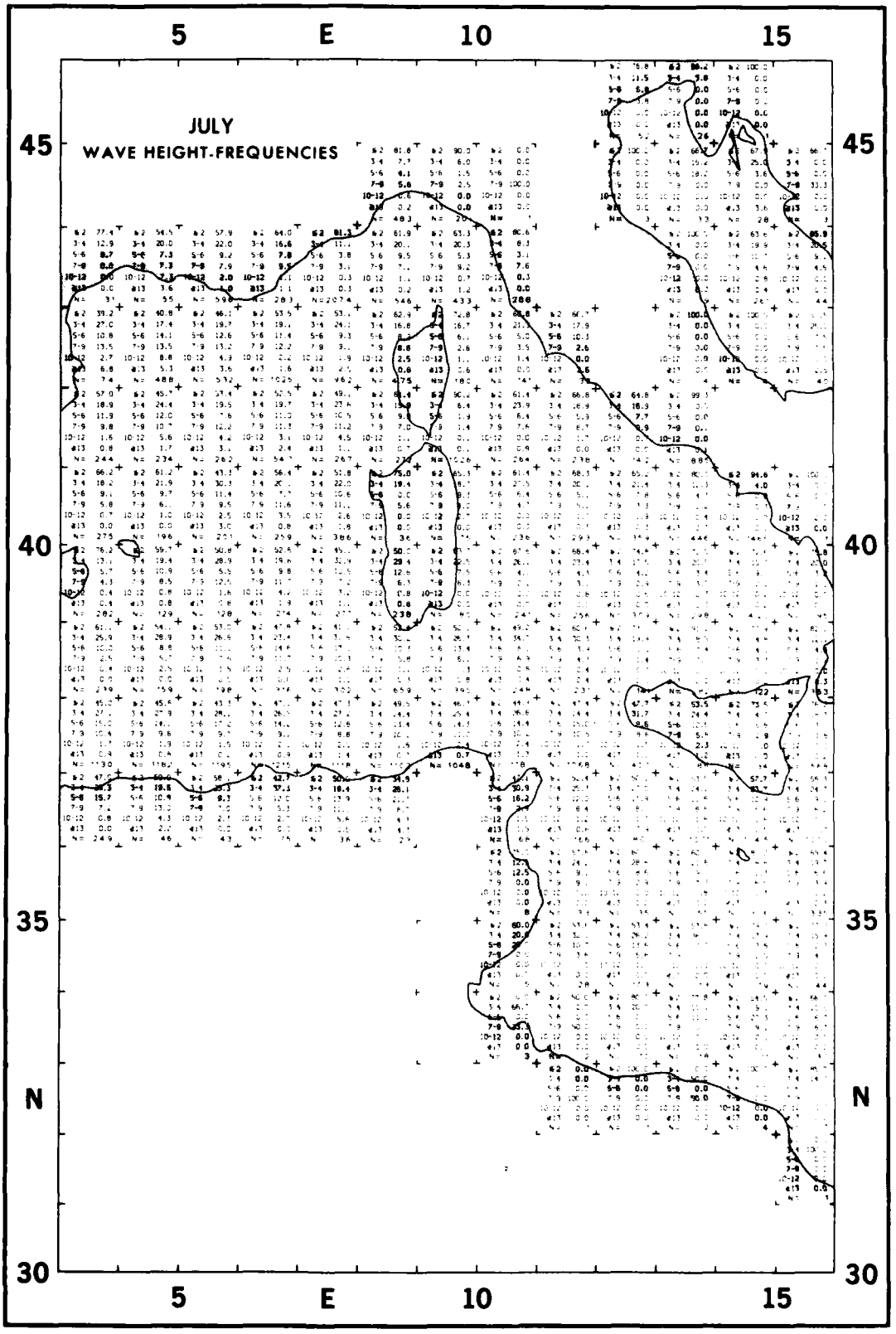

E
20
25
45
40
35
N
30
JULY
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS,
EACH CIRCLE = 20%.
25% OF ALL WINDS WERE FROM NORTH.
MEAN SPEED (KNOTS) IS INDICATED BY THE PRINTED NUMBER AT THE END OF EACH BAR.
MEAN SCALAR SPEED OF ALL OBSERVED EAST WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.

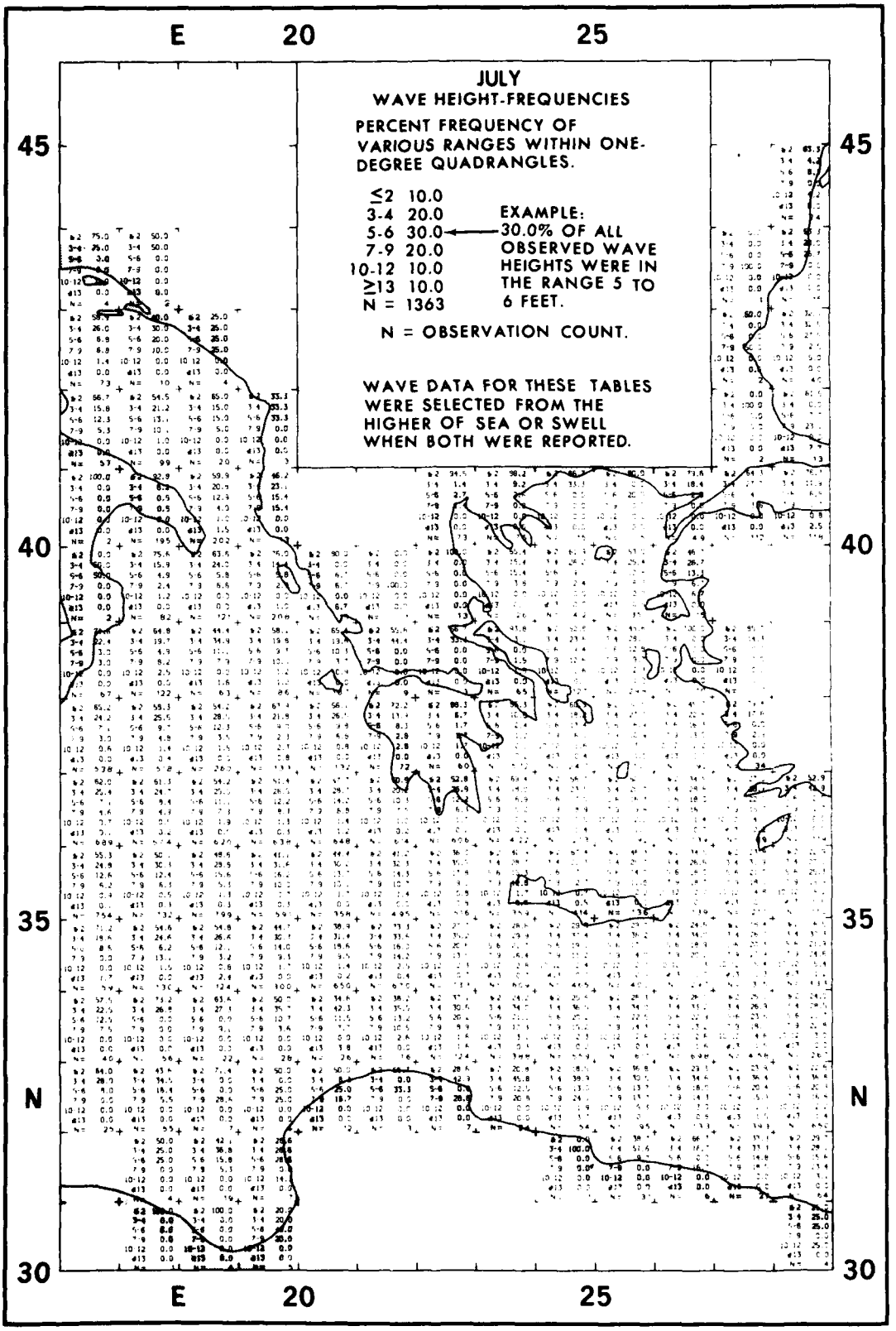

30
E
35
40
45
40
JULY
SURFACE WIND ROSE
35
N
30

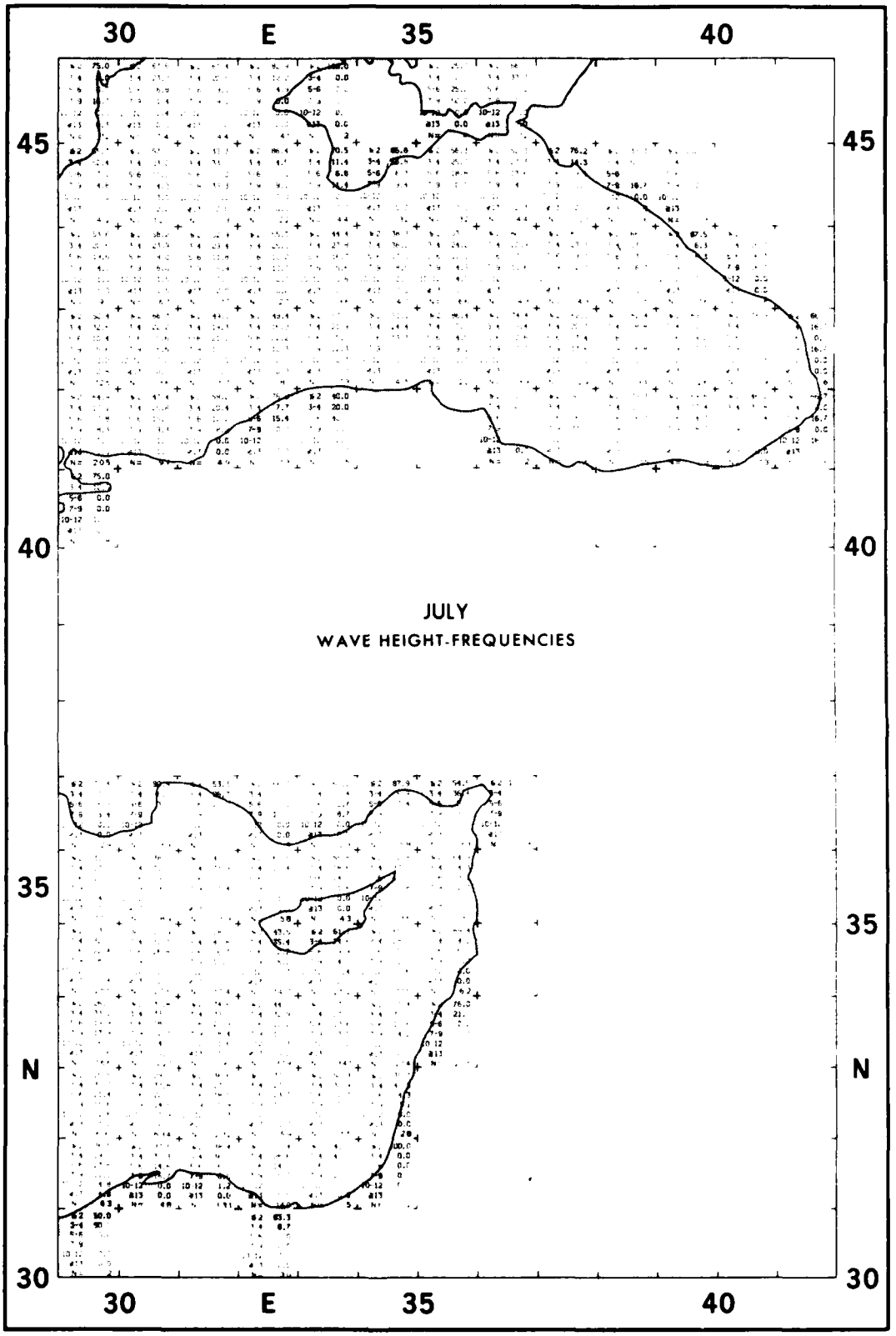

JULY
AIR AND SEA TEMPERATURE
SOLID LINE - MEAN AIR TEMPERATURE (°F)
DASHED LINE - MEAN SEA SURFACE TEMPERATURE (°F)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

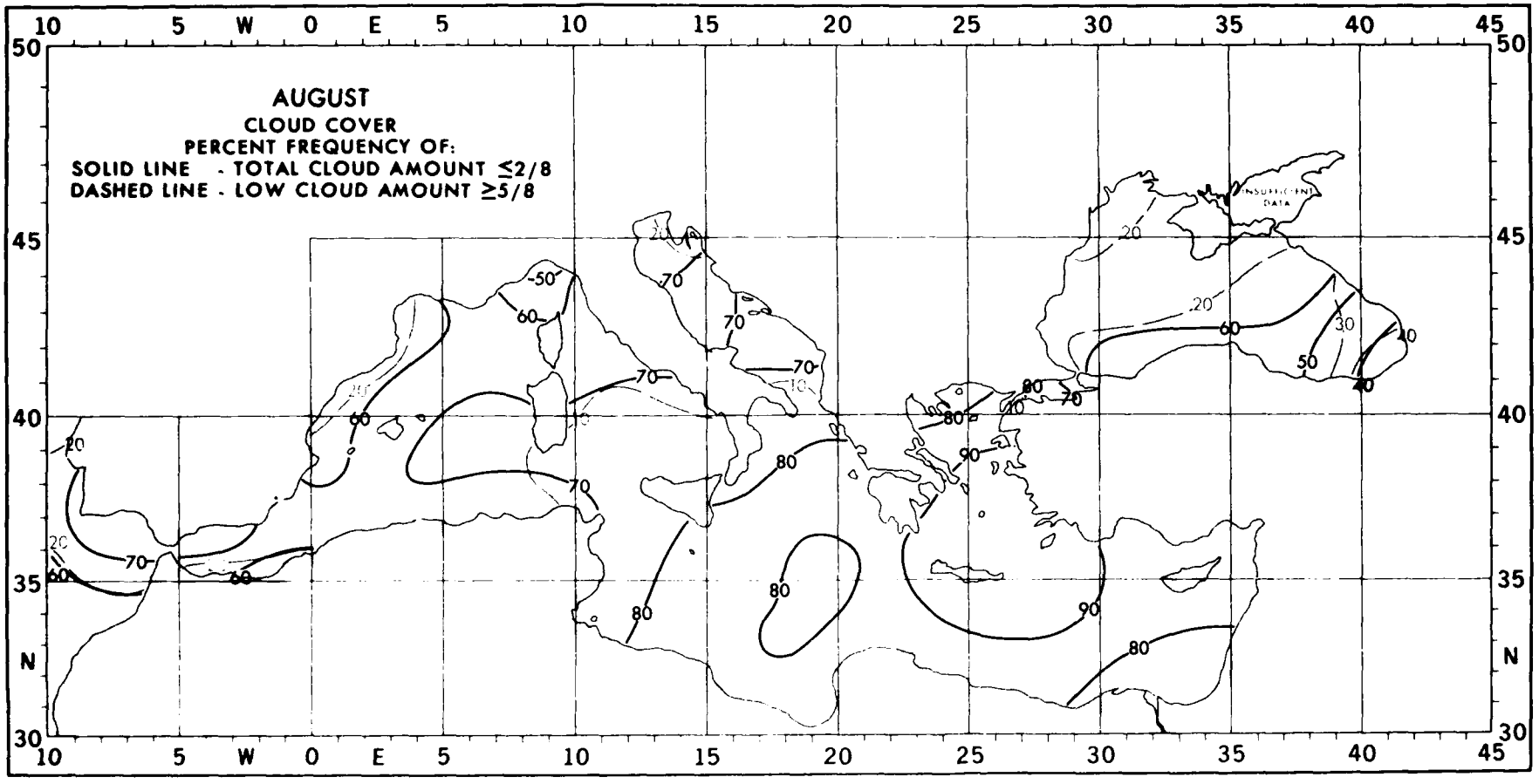

JULY
WAVE HEIGHT - ISOPLETHS
PERCENT FREQUENCY OF:
SOLID LINE - WAVE HEIGHT ≥3 FEET
DASHED LINE - WAVE HEIGHT ≥8 FEET
THE WAVE HEIGHT USED FOR THIS MAP IS THE HIGHER OF SEA OR SWELL FOR OBSERVATIONS CONTAINING BOTH WAVE TRAINS.
SEA IS DEFINED AS WAVES GENERATED BY LOCAL WINDS.
≥3 FEET = ≥CODE 2 (2 HALF METERS)
≥8 FEET = ≥CODE 5 (5 HALF METERS)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

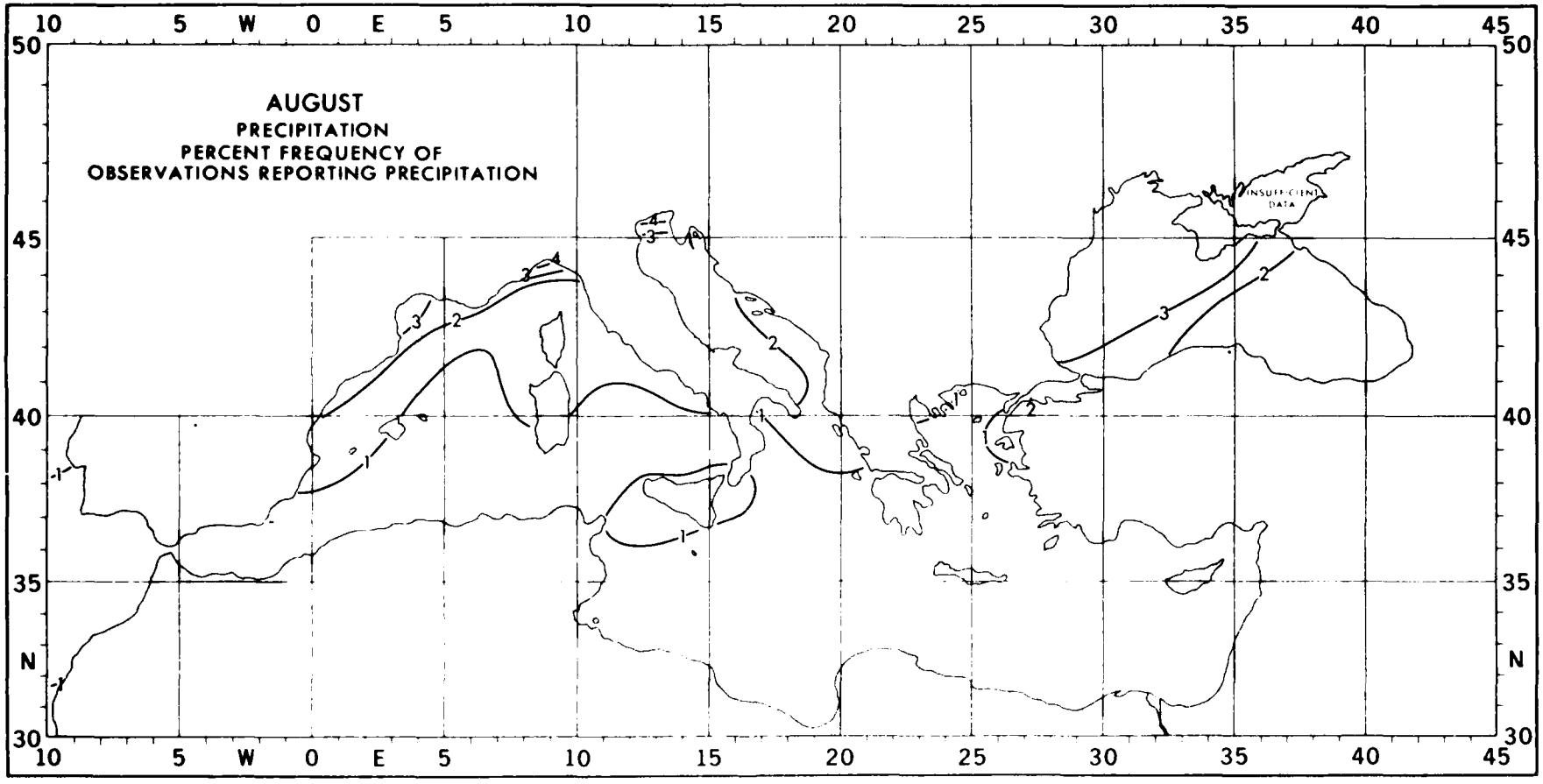

10
5
W
0
E
45
40
35
N
30
JULY
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.

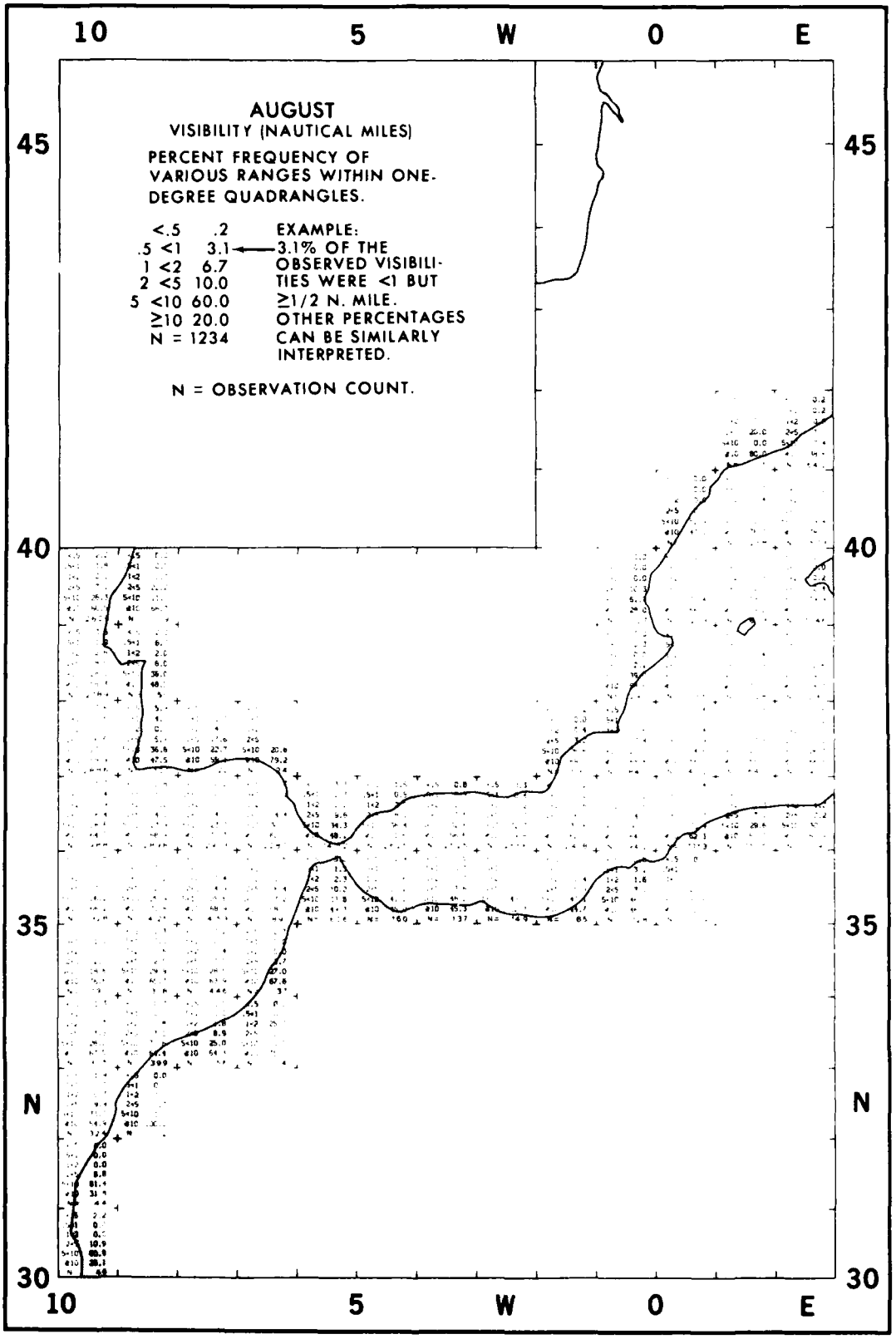

JULY
WAVE HEIGHT-FREQUENCIES
5
E
10
15
45
40
35
30
N

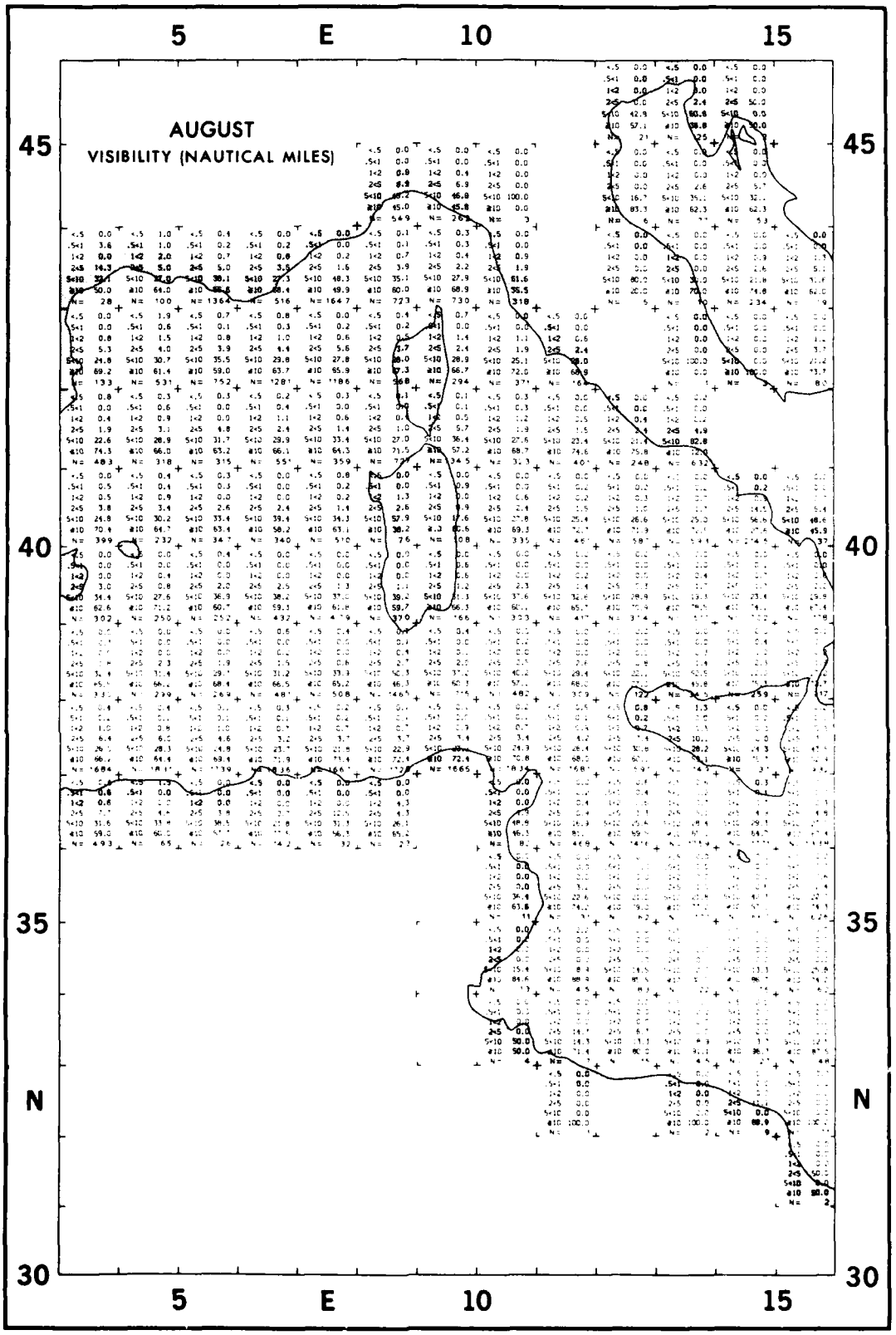

E
20
25
45
40
35
N
30
JULY
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.

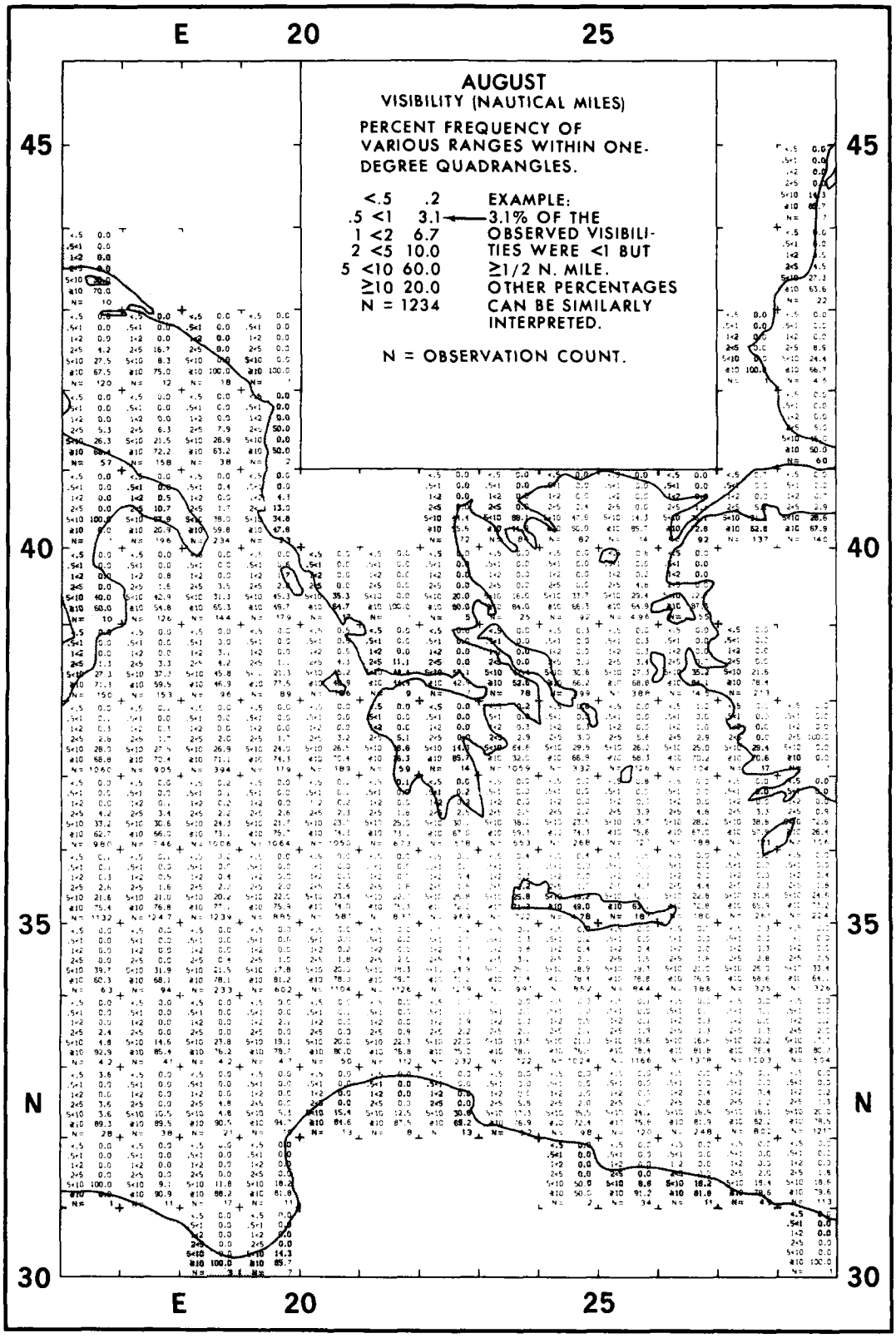

30
E
35
40
45
40
JULY
WAVE HEIGHT-FREQUENCIES
35
N
30

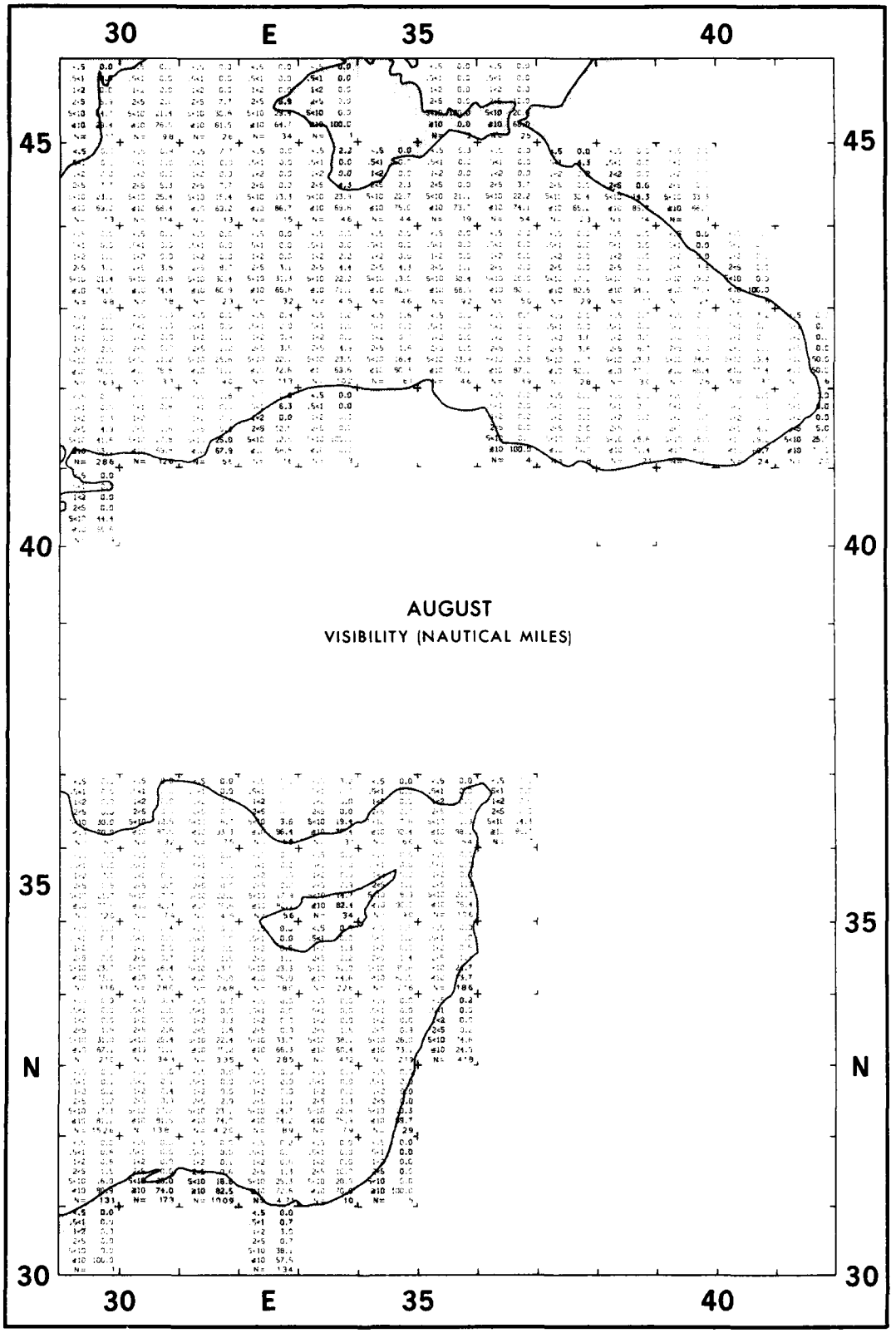

AUGUST
CLOUD COVER
PERCENT FREQUENCY OF:
SOLID LINE - TOTAL CLOUD AMOUNT ≤2/8
DASHED LINE - LOW CLOUD AMOUNT ≥5/8
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
30
N

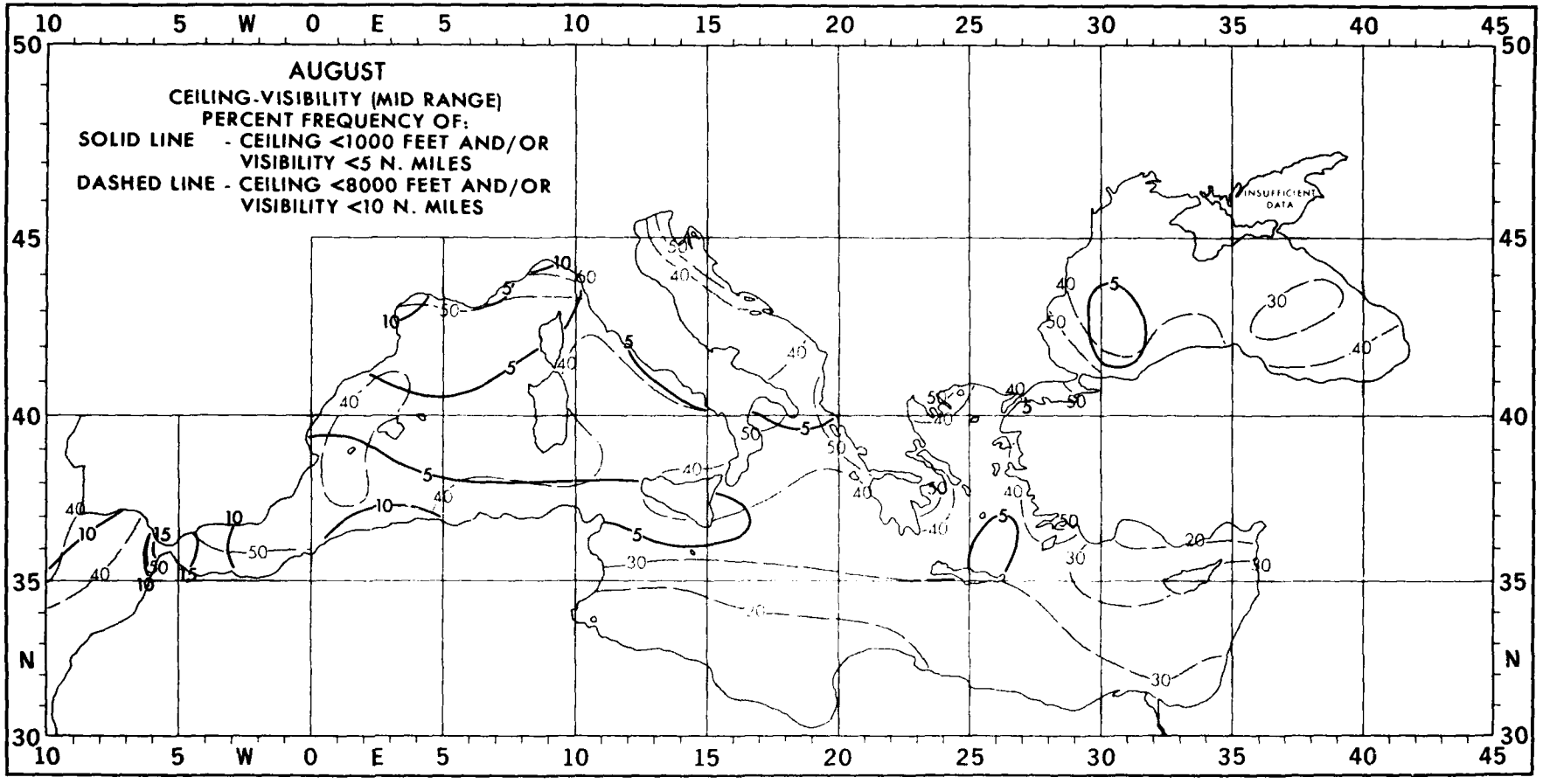

AUGUST
PRECIPITATION
PERCENT FREQUENCY OF
OBSERVATIONS REPORTING PRECIPITATION
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

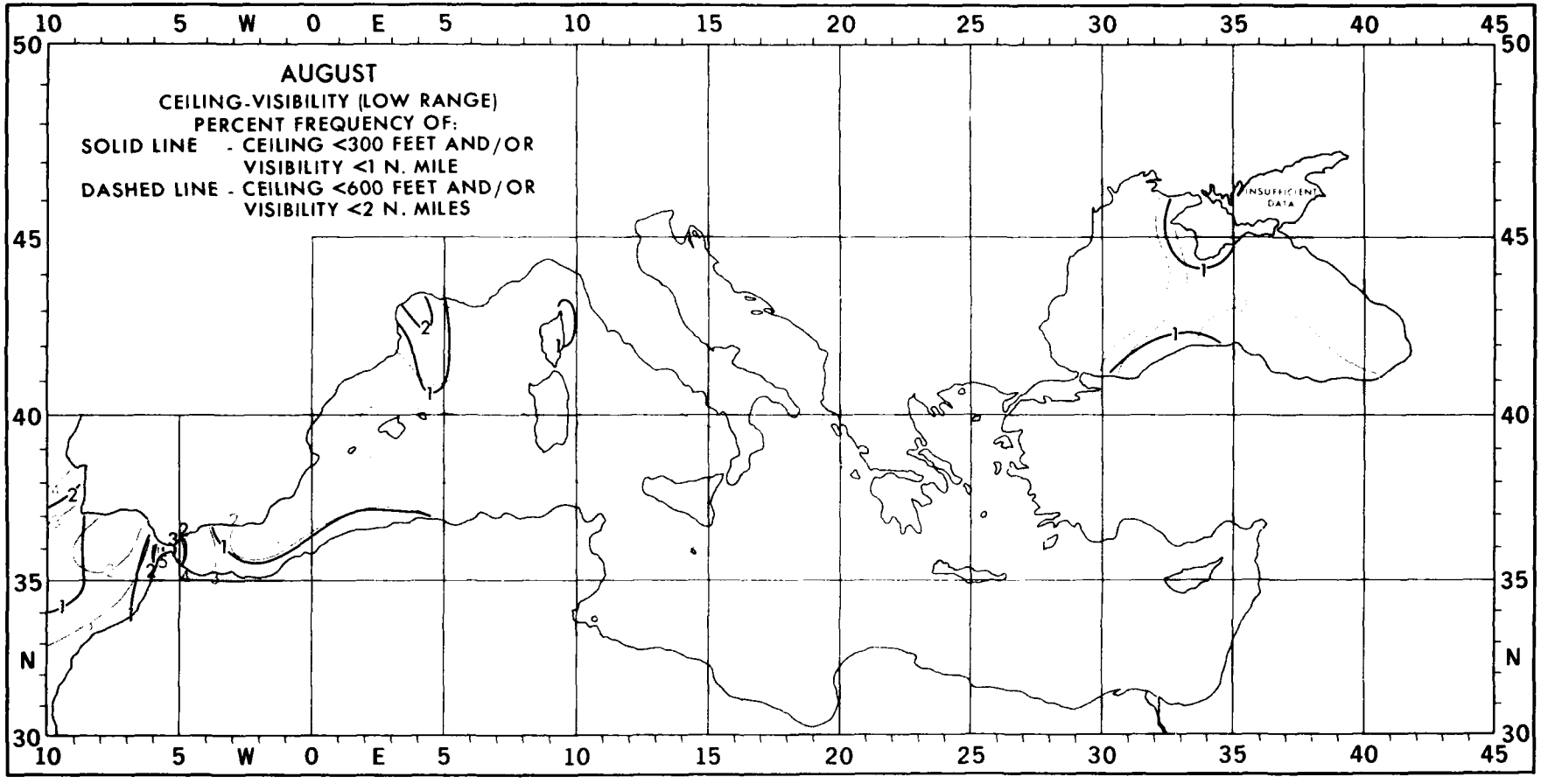

10
5
W
0
E
45
40
35
30
N
AUGUST
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.

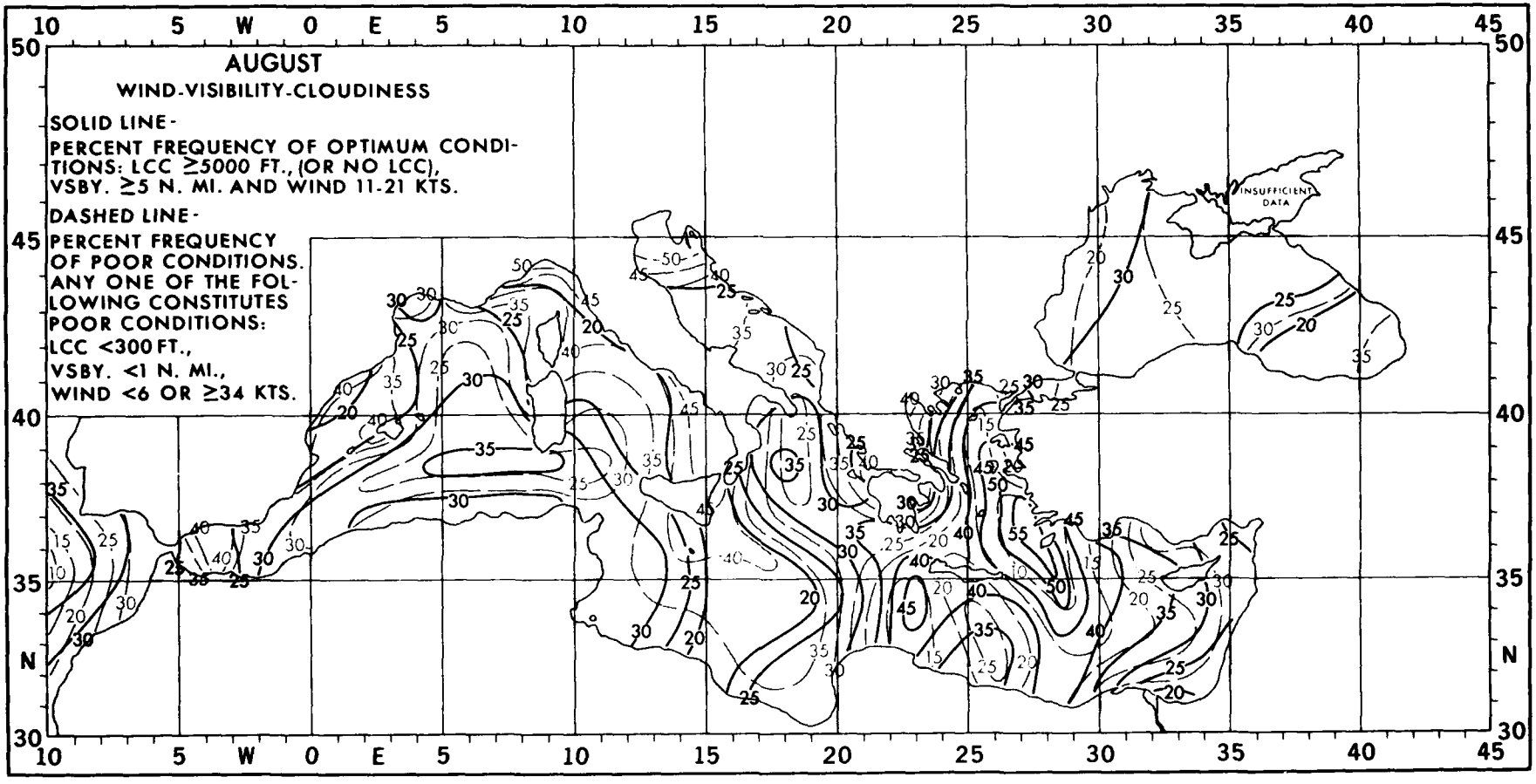

AUGUST
VISIBILITY (NAUTICAL MILES)
5
E
10
15
45
40
35
30
N

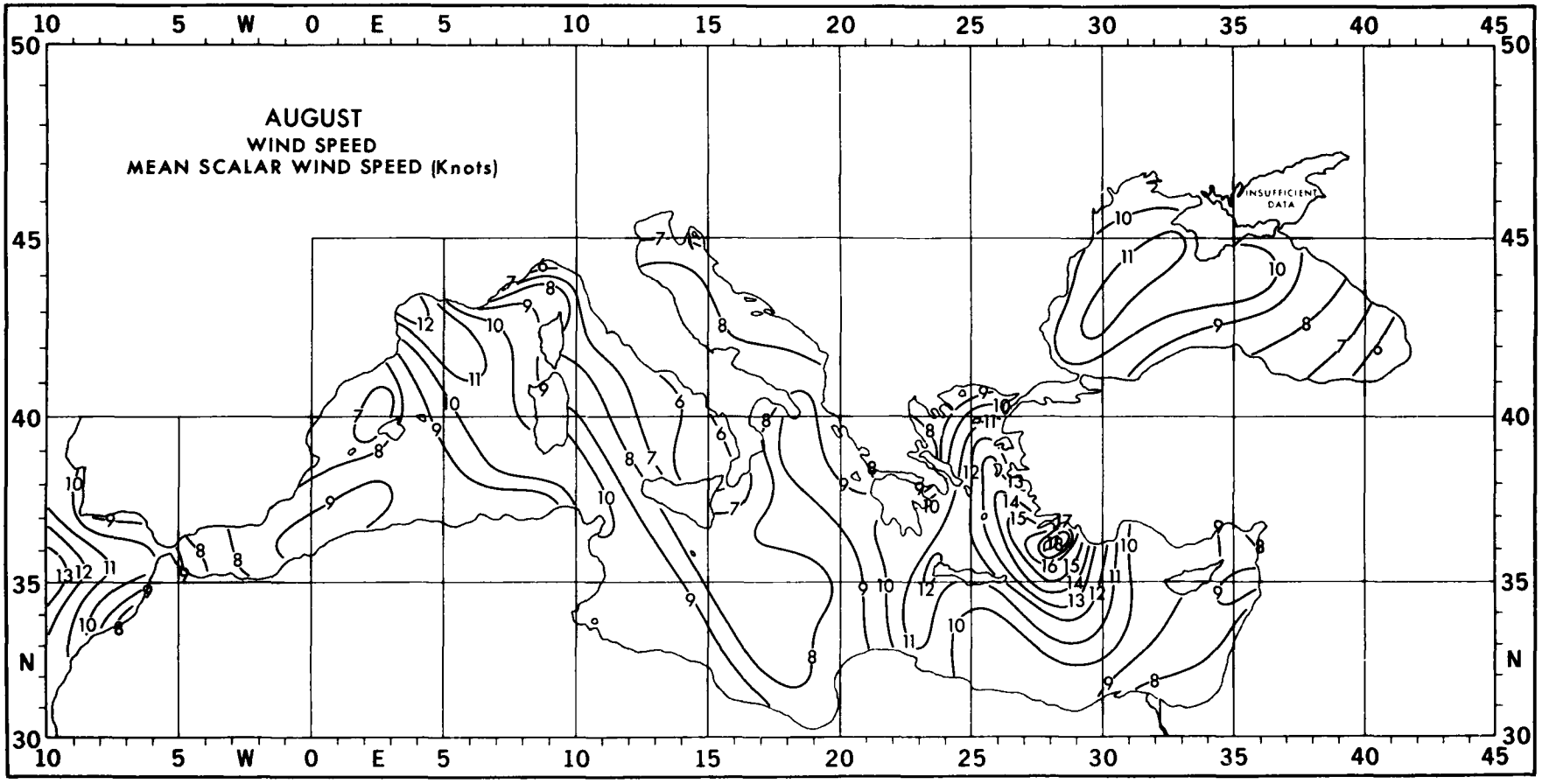

AUGUST
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.
E
20
25
45
40
35
30
N

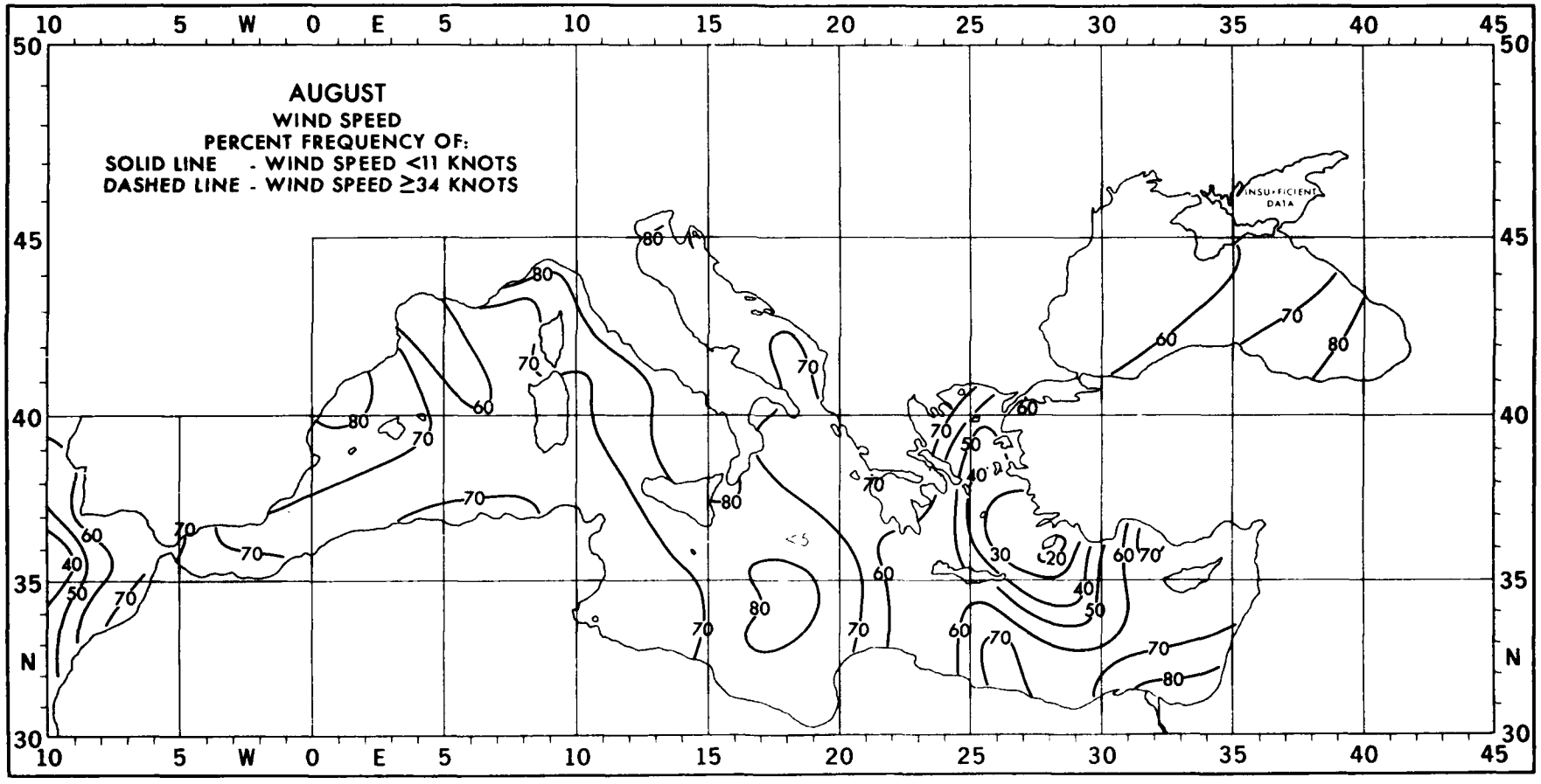

30
E
35
40
45
40
AUGUST
VISIBILITY (NAUTICAL MILES)
35
N
30
30
E
35
40

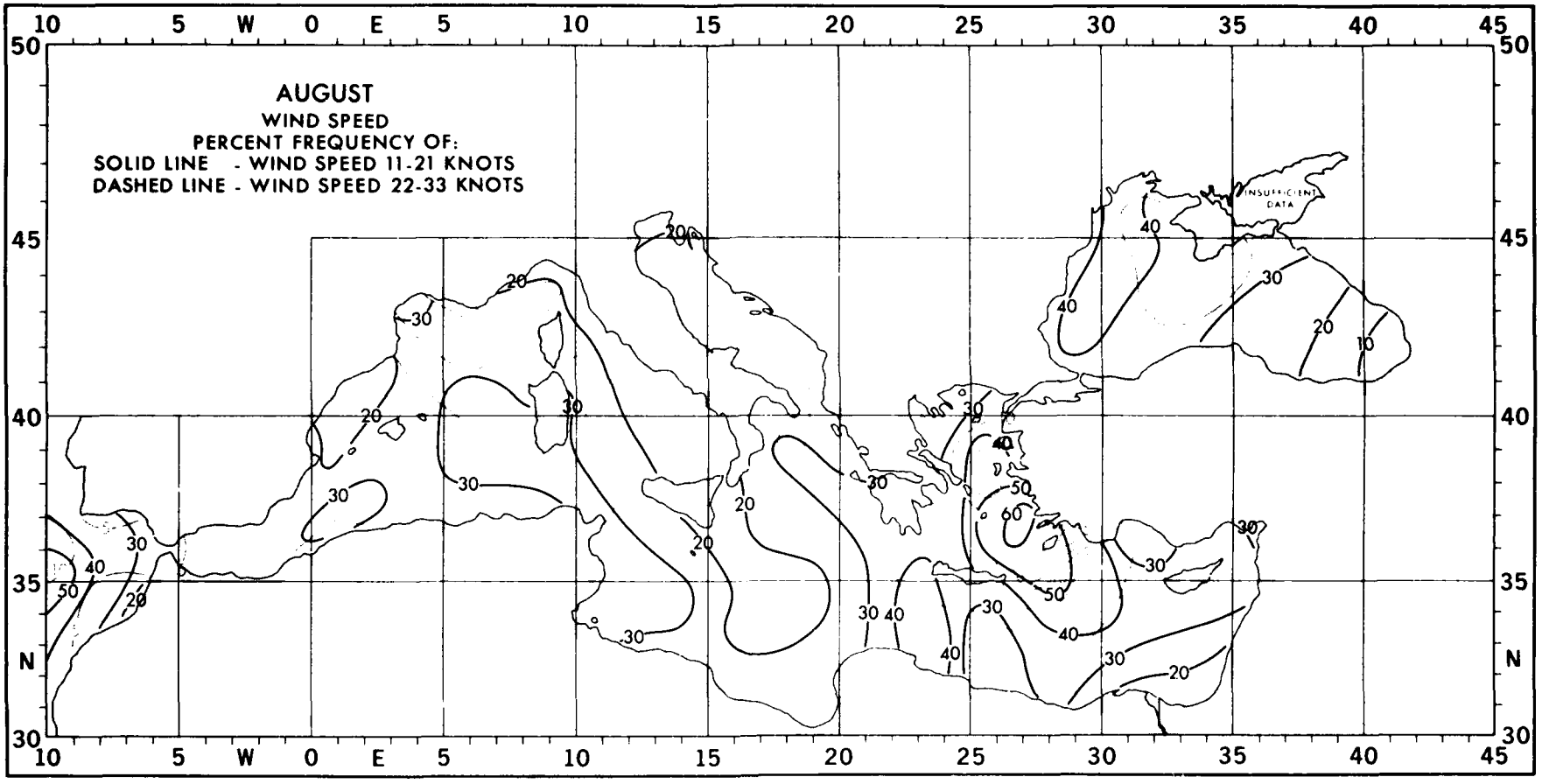

AUGUST
CEILING-VISIBILITY (MID RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <1000 FEET AND/OR VISIBILITY <5 N. MILES
DASHED LINE - CEILING <8000 FEET AND/OR VISIBILITY <10 N. MILES
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

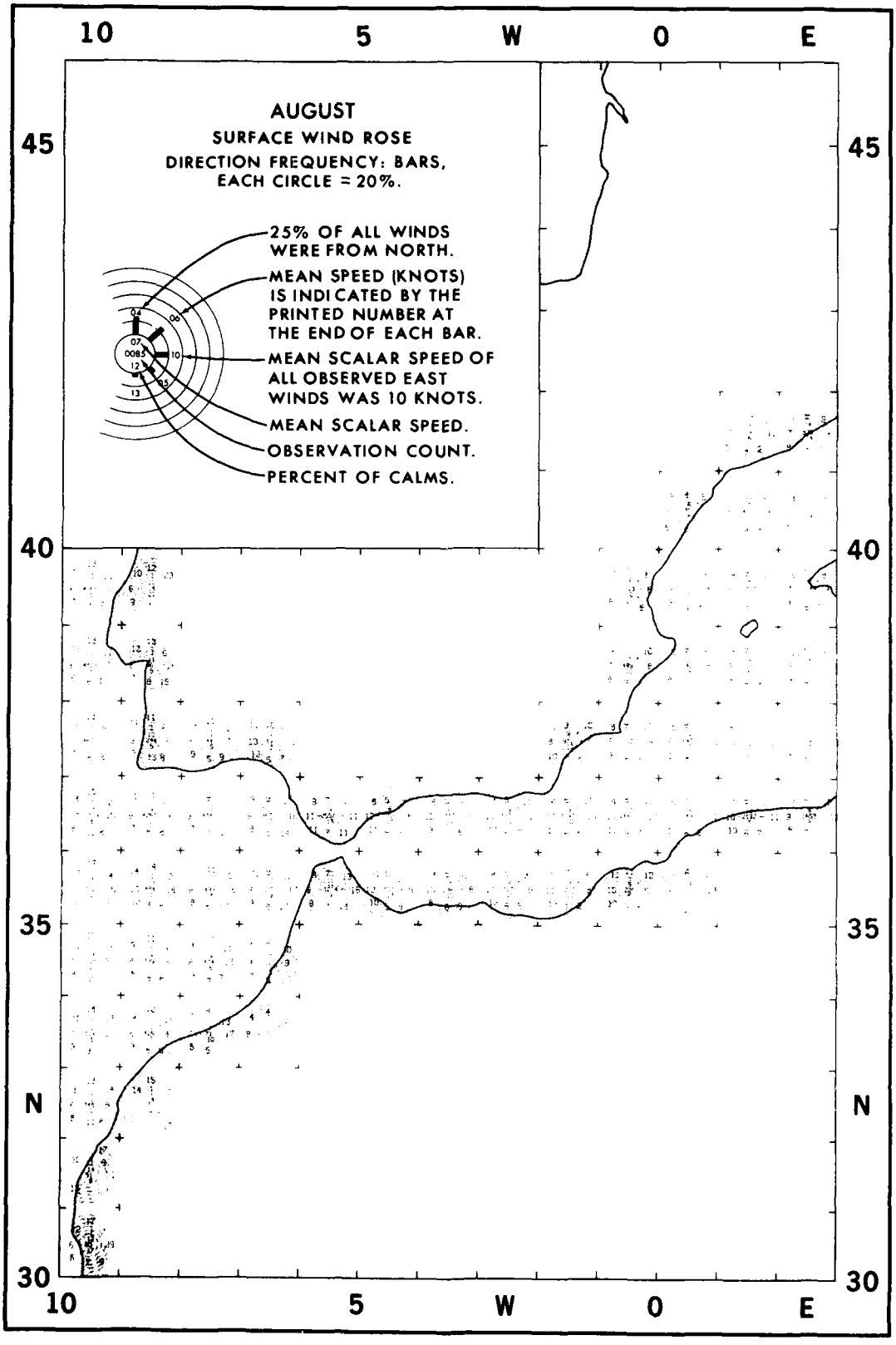

AUGUST
CEILING-VISIBILITY (LOW RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <300 FEET AND/OR VISIBILITY <1 N. MILE
DASHED LINE - CEILING <600 FEET AND/OR VISIBILITY <2 N. MILES
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

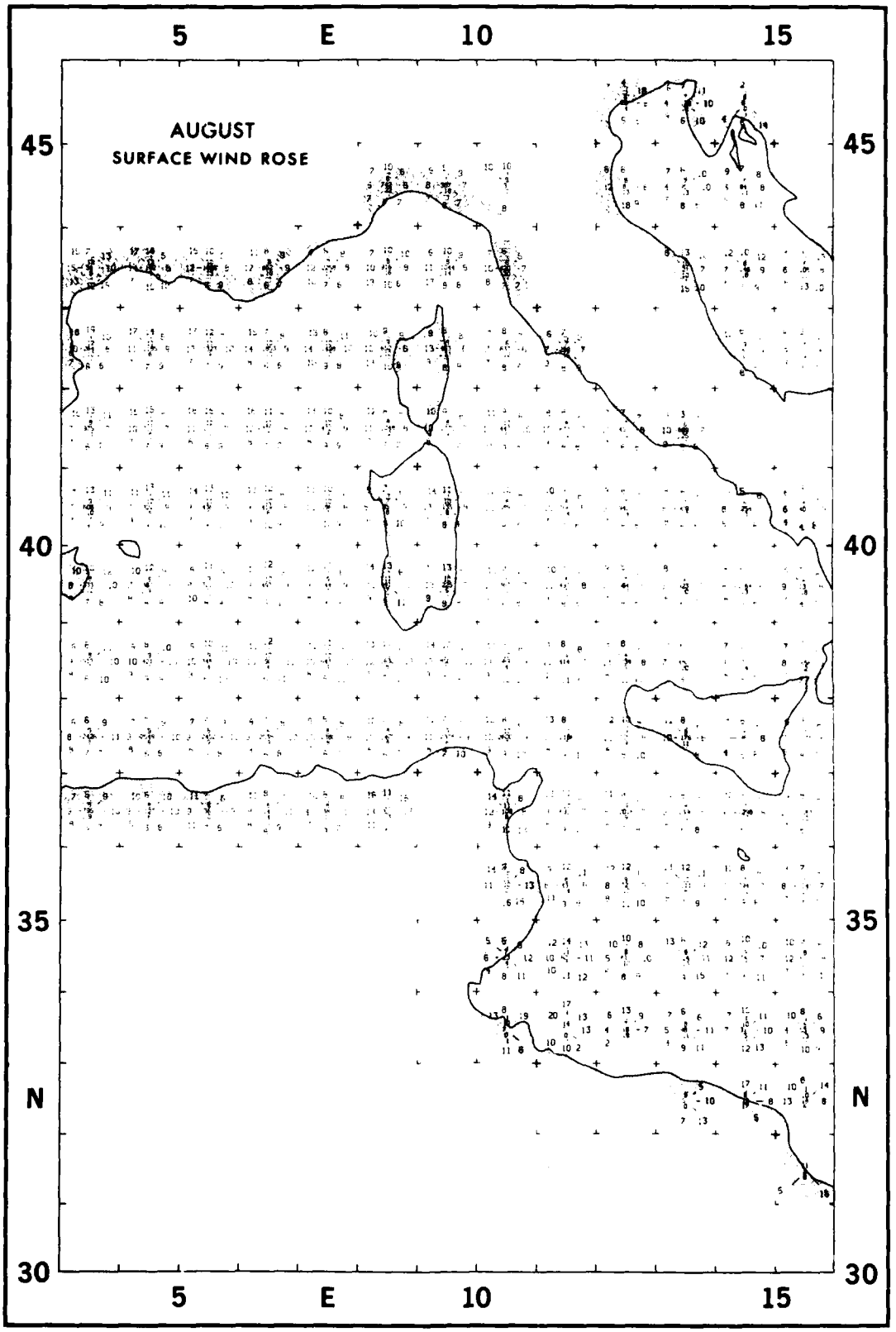

AUGUST
WIND-VISIBILITY-CLOUDINESS
SOLID LINE-
PERCENT FREQUENCY OF OPTIMUM CONDITIONS: LCC ≥5000 FT., (OR NO LCC), VSBY. ≥5 N. MI. AND WIND 11-21 KTS.
DASHED LINE-
PERCENT FREQUENCY OF POOR CONDITIONS. ANY ONE OF THE FOLLOWING CONSTITUTES POOR CONDITIONS:
LCC <300 FT.,
VSBY. <1 N. MI.,
WIND <6 OR ≥34 KTS.
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 30 N

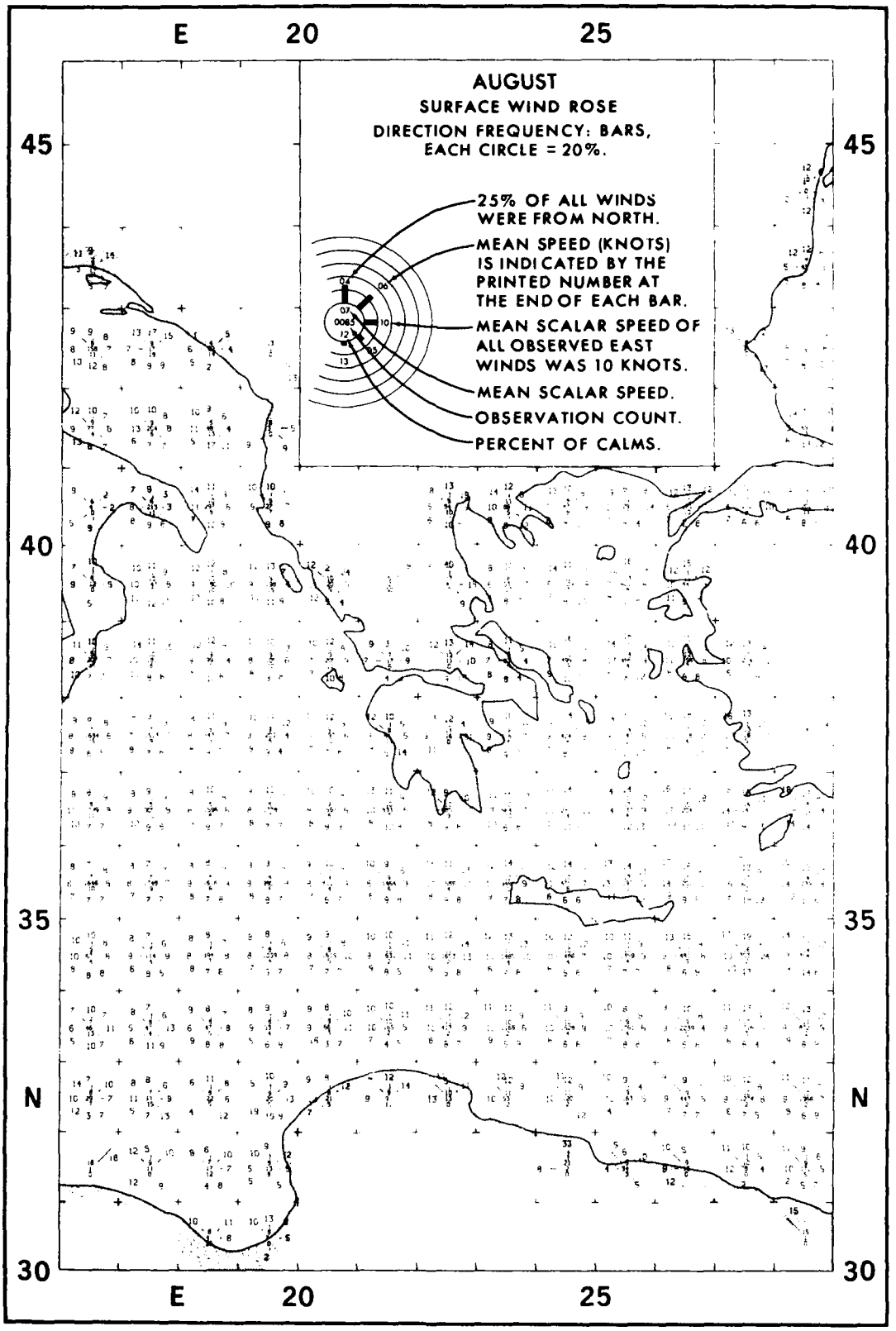

AUGUST
WIND SPEED
MEAN SCALAR WIND SPEED (Knots)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

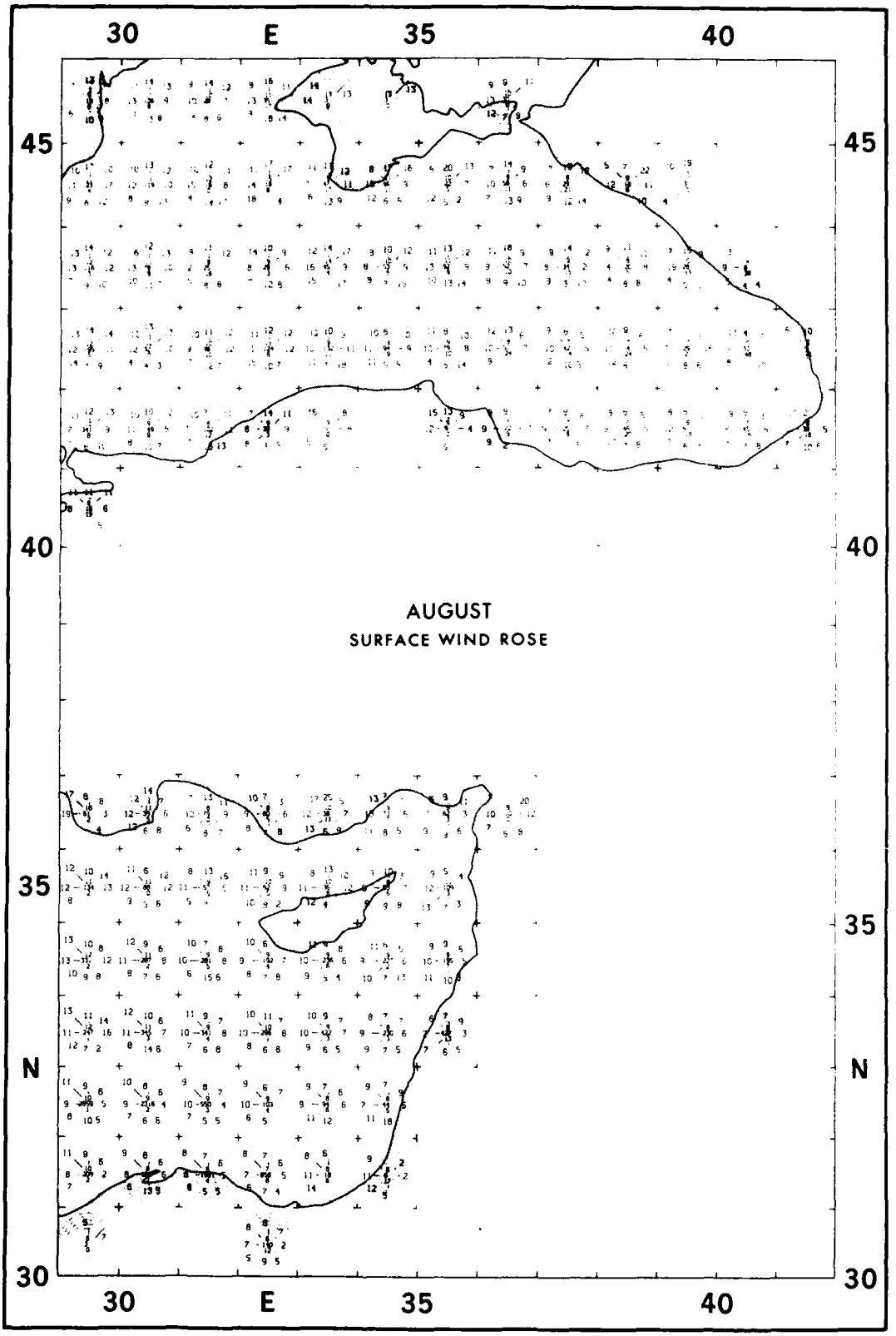

AUGUST
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED <11 KNOTS
DASHED LINE - WIND SPEED ≥34 KNOTS
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

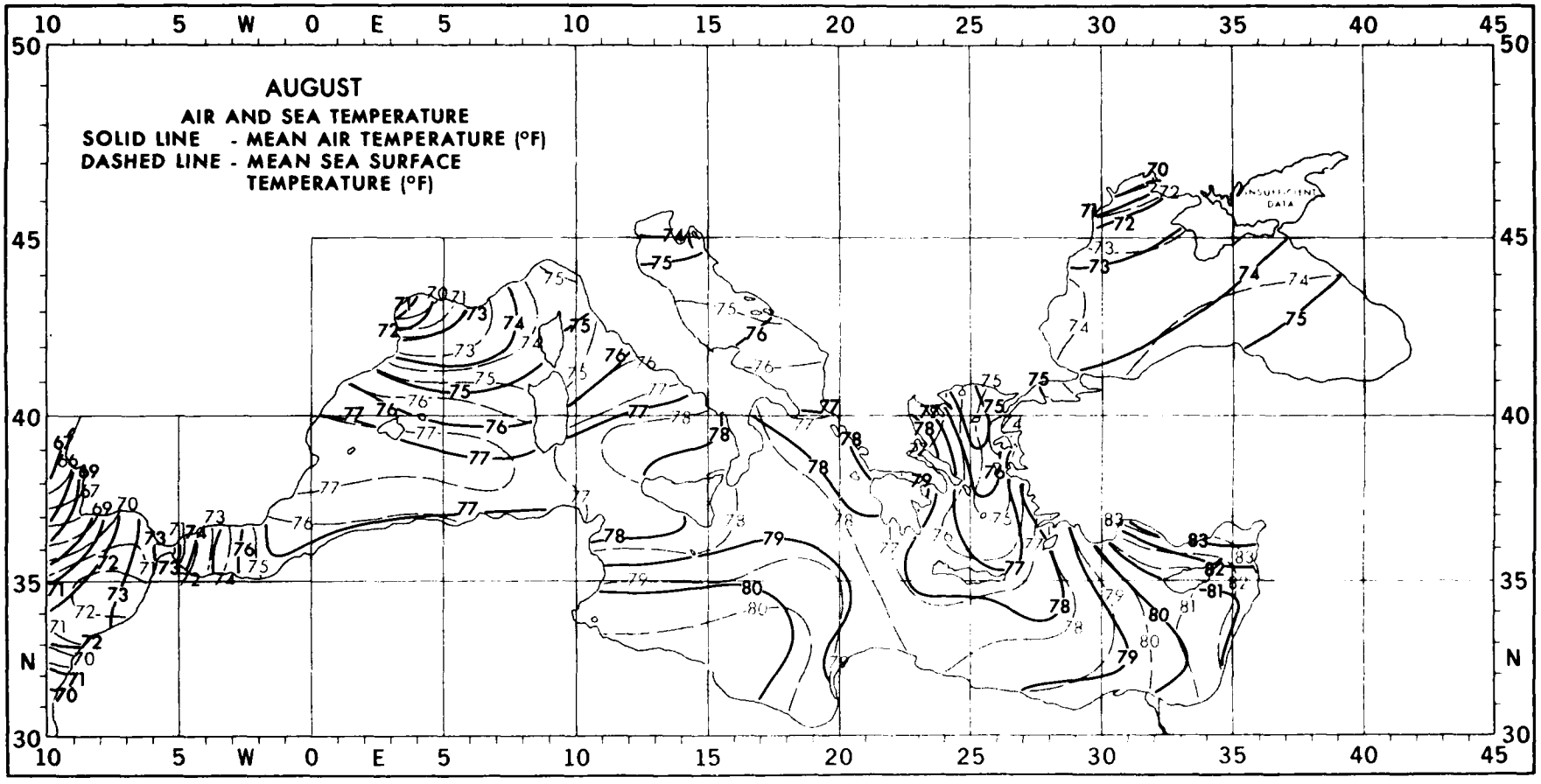

AUGUST
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED 11-21 KNOTS
DASHED LINE - WIND SPEED 22-33 KNOTS
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

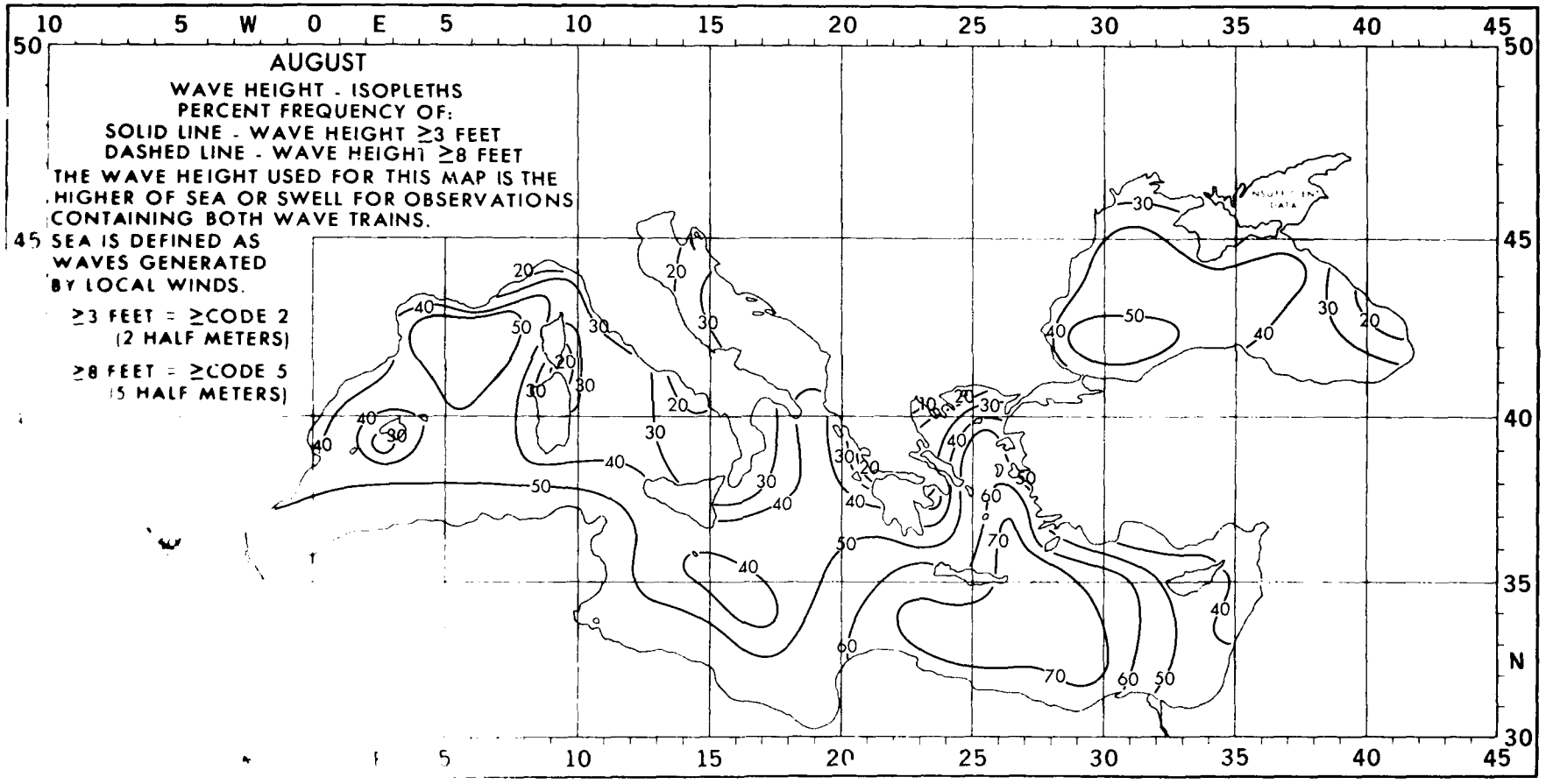

10
5
W
0
E
AUGUST
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS,
EACH CIRCLE = 20%.
25% OF ALL WINDS
WERE FROM NORTH.
MEAN SPEED (KNOTS)
IS INDICATED BY THE
PRINTED NUMBER AT
THE END OF EACH BAR.
MEAN SCALAR SPEED OF
ALL OBSERVED EAST
WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.
45
40
35
N
30


AUGUST
SURFACE WIND ROSE
5
E
10
15
45
40
35
N
30


E
20
25
45
40
35
N
30
AUGUST
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS,
EACH CIRCLE = 20%.
25% OF ALL WINDS WERE FROM NORTH.
MEAN SPEED (KNOTS) IS INDICATED BY THE PRINTED NUMBER AT THE END OF EACH BAR.
MEAN SCALAR SPEED OF ALL OBSERVED EAST WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.

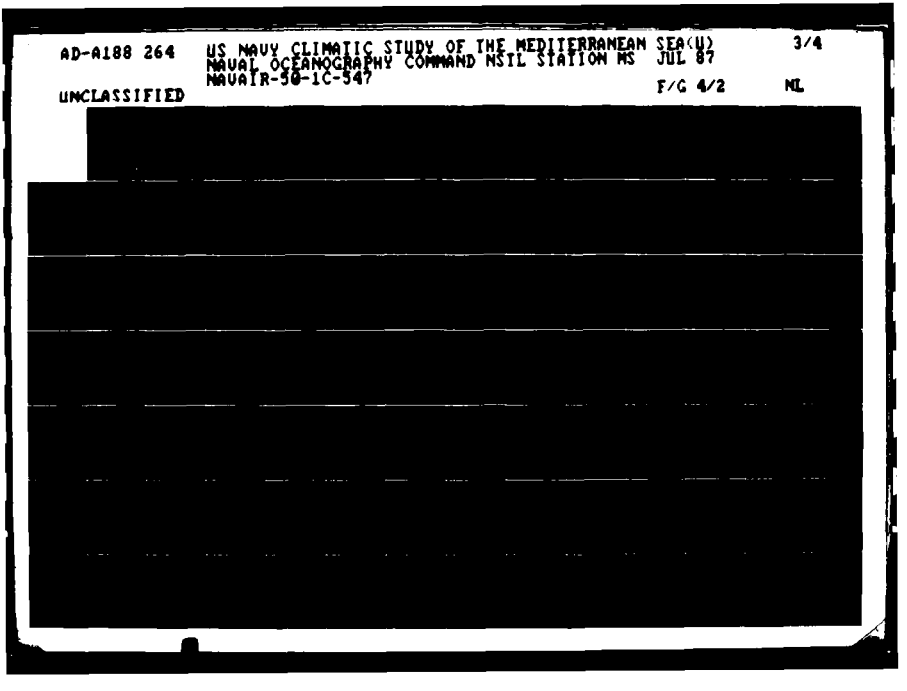

30
E
35
40
45
40
AUGUST
SURFACE WIND ROSE
35
N
30

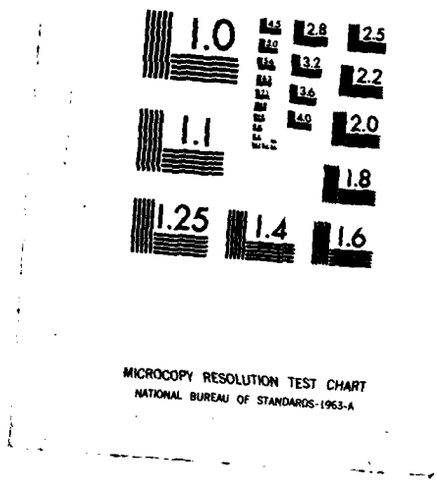

AUGUST
AIR AND SEA TEMPERATURE
SOLID LINE - MEAN AIR TEMPERATURE (°F)
DASHED LINE - MEAN SEA SURFACE TEMPERATURE (°F)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

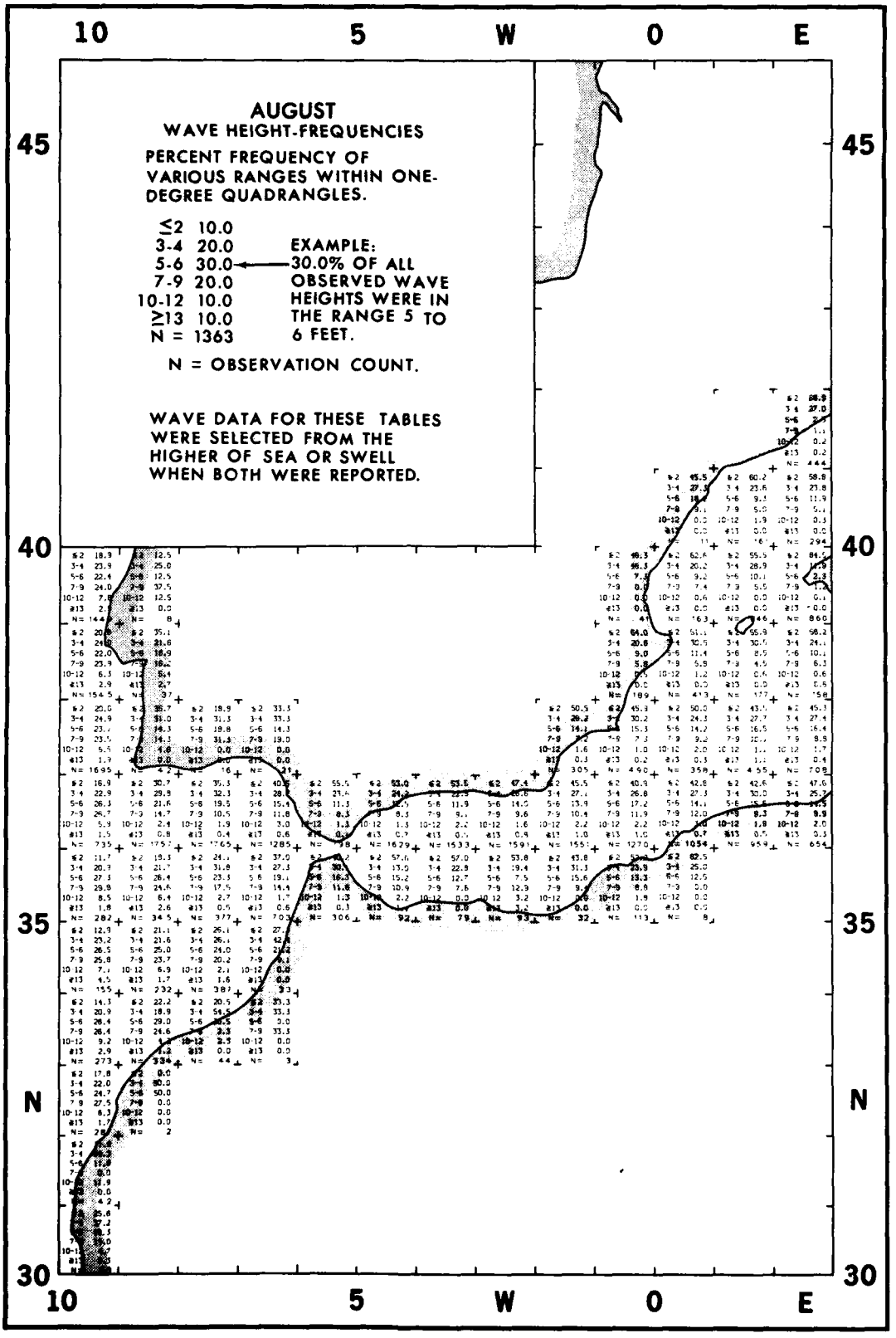

AUGUST
WAVE HEIGHT - ISOPLETHS
PERCENT FREQUENCY OF:
SOLID LINE - WAVE HEIGHT ≥3 FEET
DASHED LINE - WAVE HEIGHT ≥8 FEET
THE WAVE HEIGHT USED FOR THIS MAP IS THE HIGHER OF SEA OR SWELL FOR OBSERVATIONS CONTAINING BOTH WAVE TRAINS.
SEA IS DEFINED AS WAVES GENERATED BY LOCAL WINDS.
≥3 FEET = ≥CODE 2 (2 HALF METERS)
≥8 FEET = ≥CODE 5 (5 HALF METERS)
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
30
N

AD-A188 264 US NAVY CLIMATIC STUDY OF THE MEDITERRANEAN SEA(U) 3/4
NAVAL OCEANOGRAPHY COMMAND NSTL STATION MS JUL 87
NAVAIR-50-1C-547

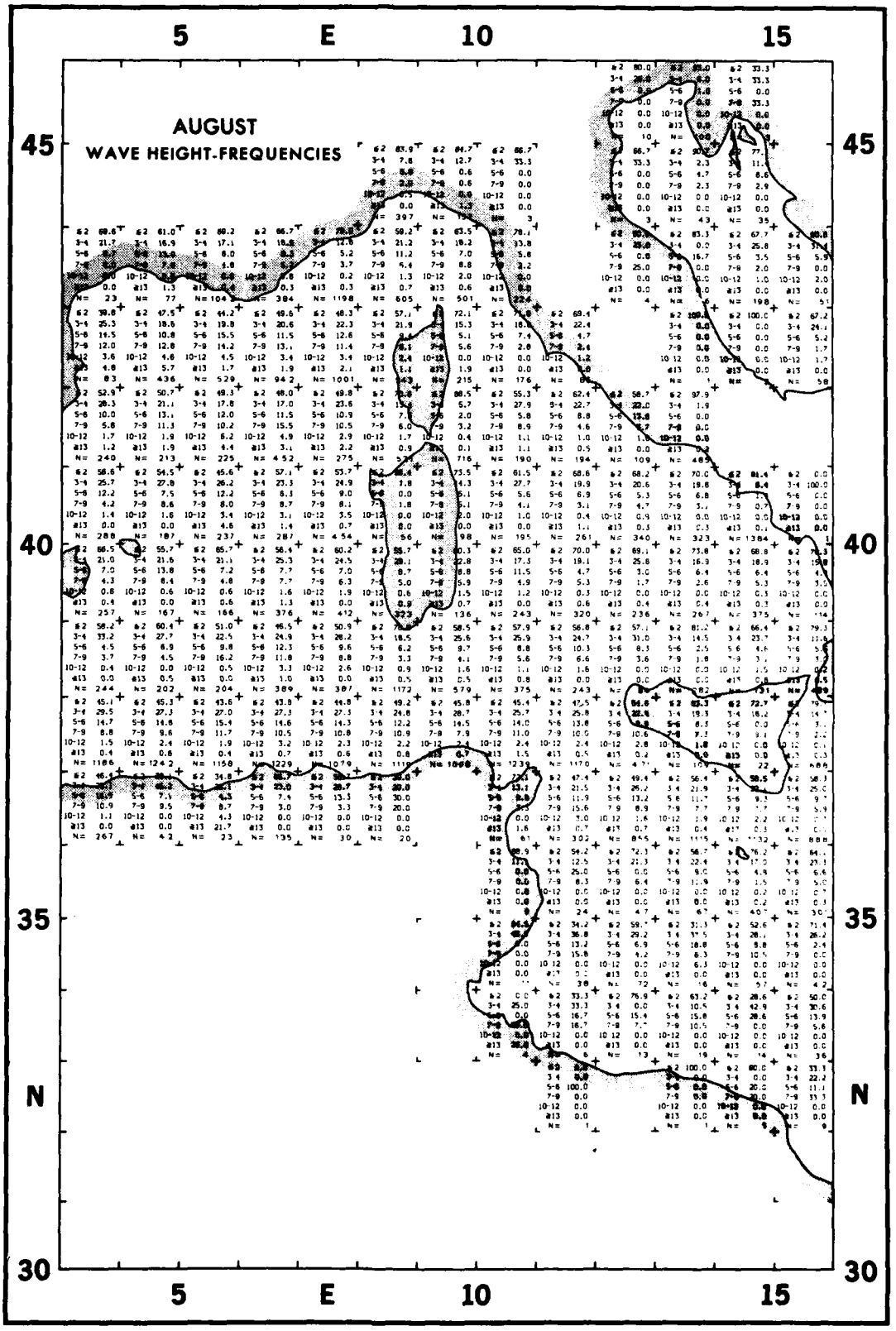
UNCLASSIFIED F/G 4/2 NL

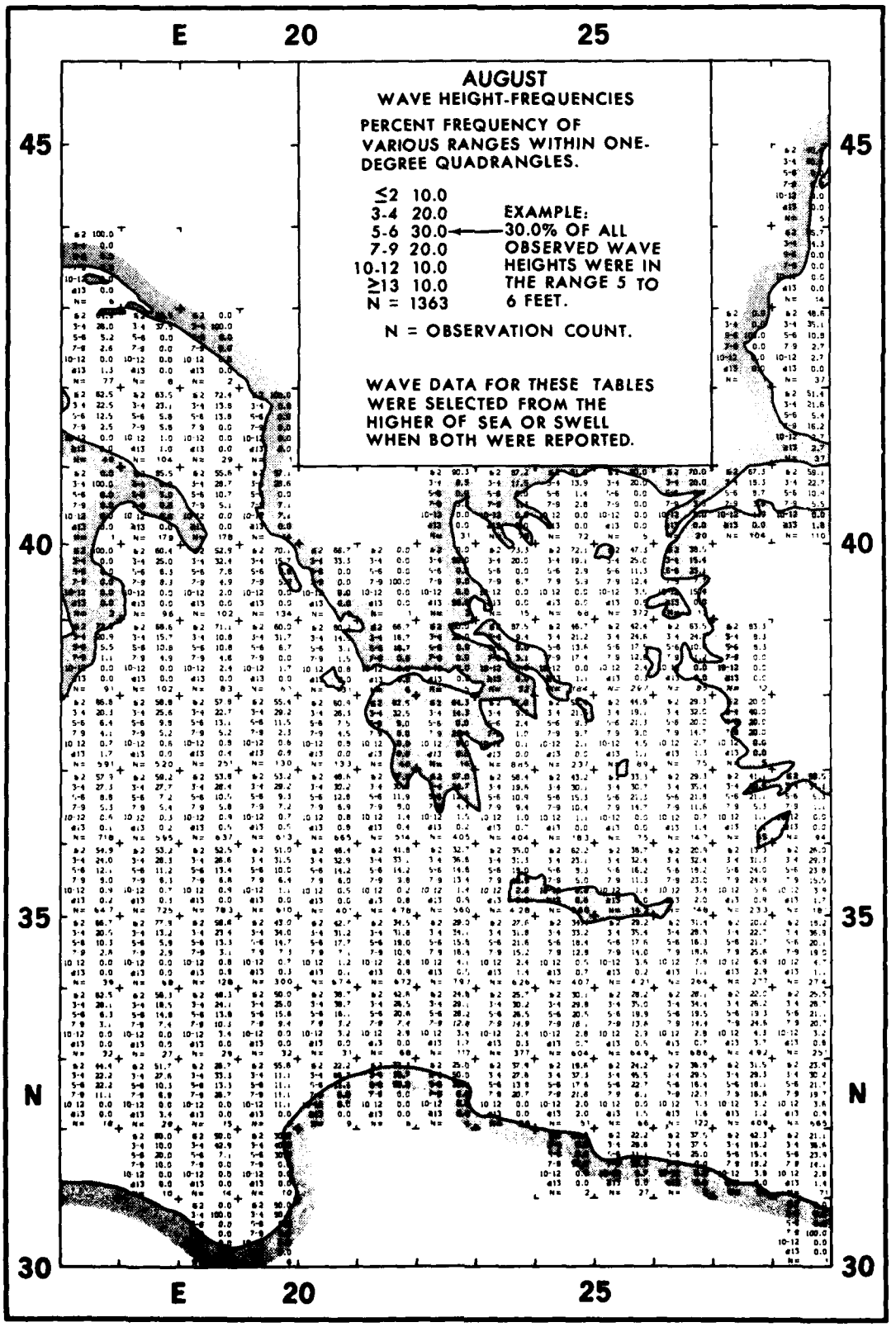


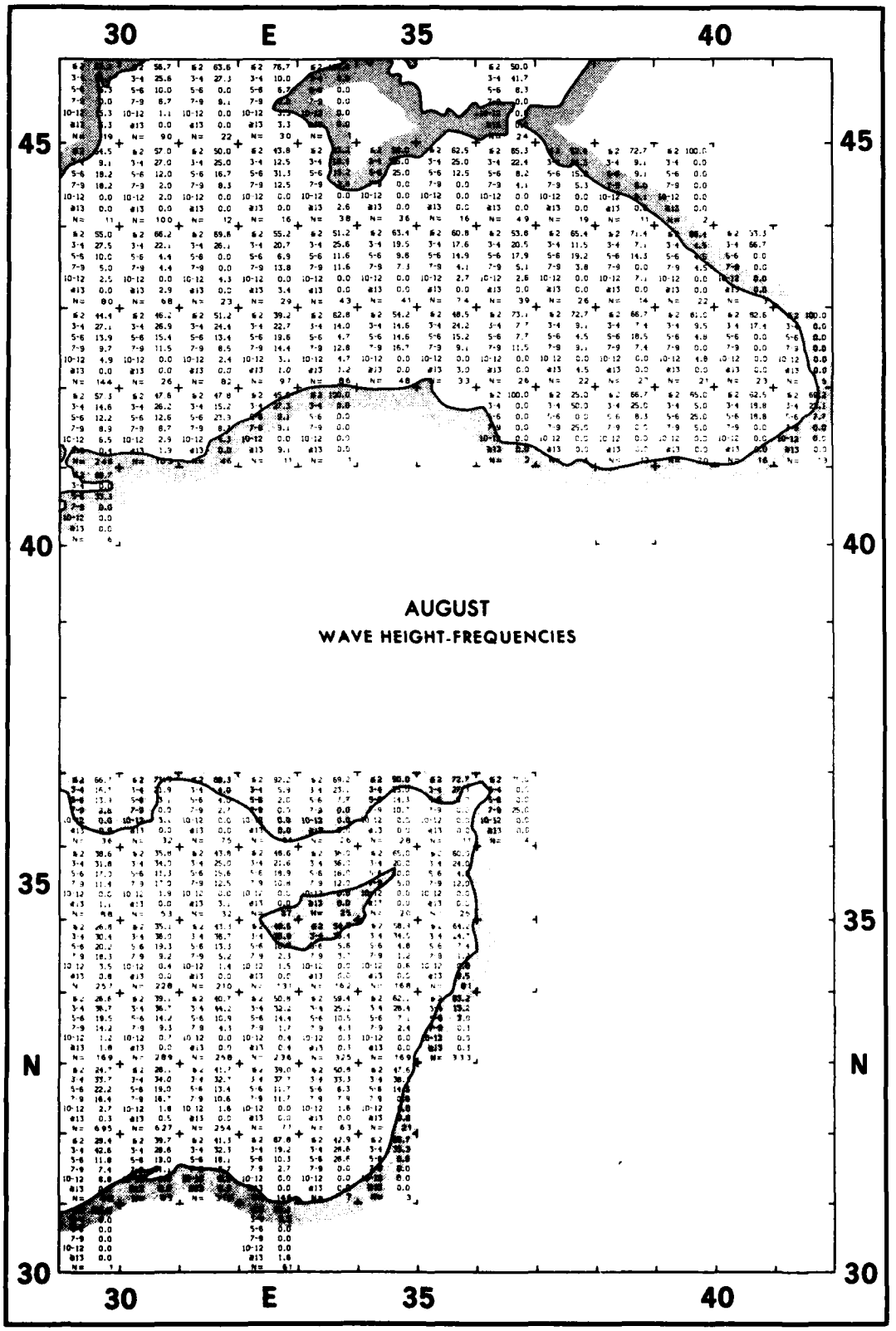

1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
4.5
5.0
MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A


10
5
W
0
E
45
40
35
30
N
AUGUST
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.

3F

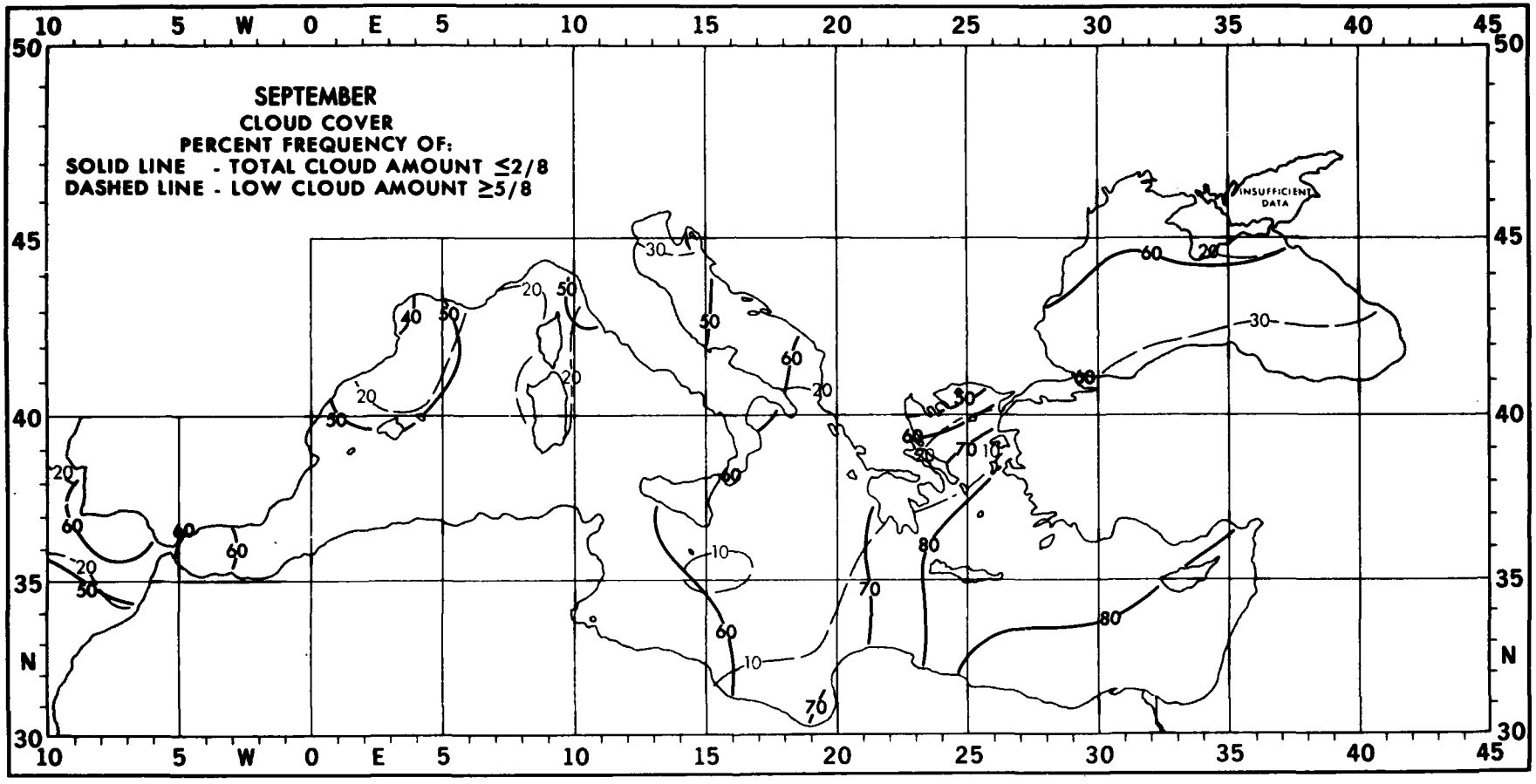

AUGUST
WAVE HEIGHT-FREQUENCIES
5
E
10
15
45
40
35
N
30

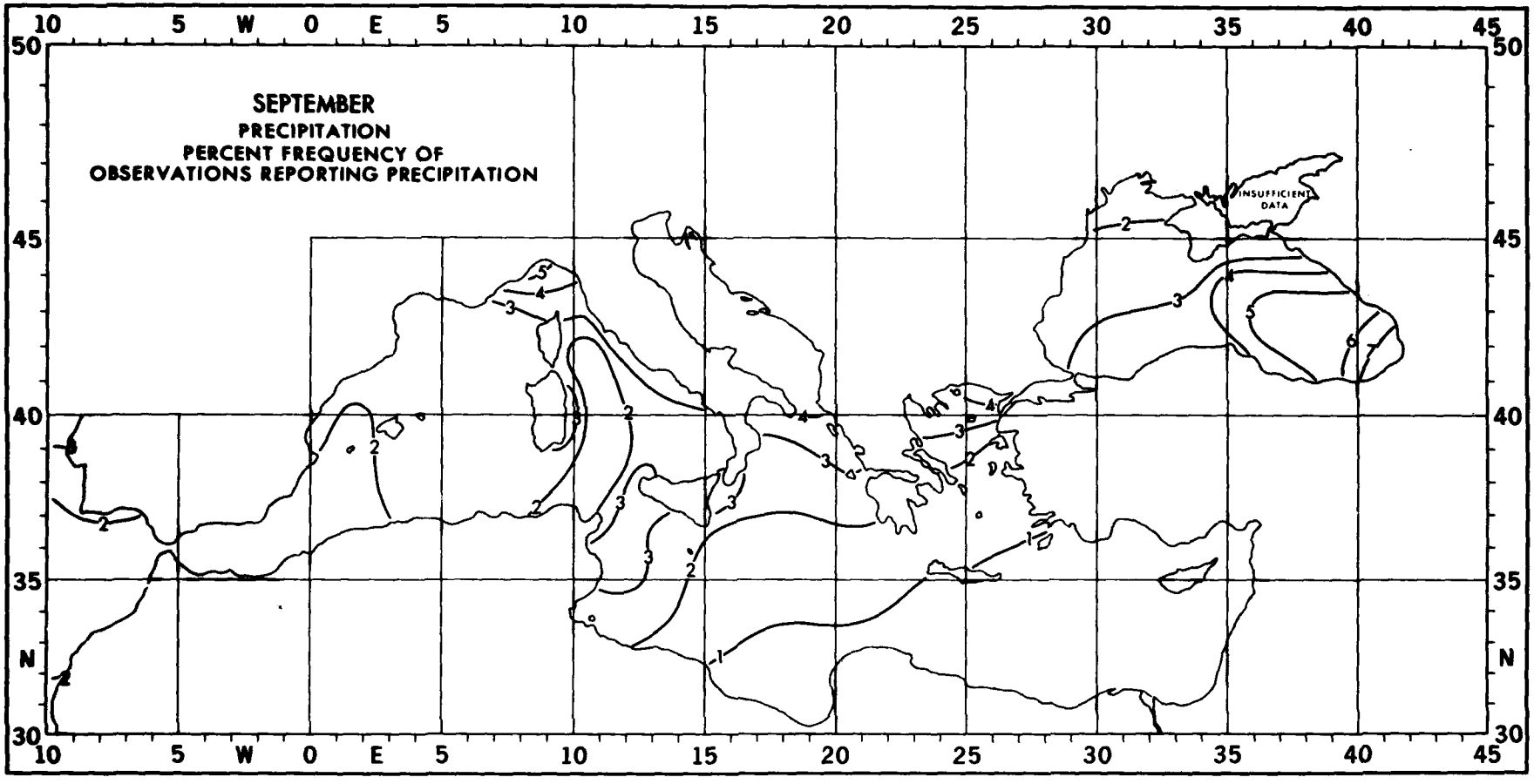

AUGUST
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.
E
20
25
45
40
35
30
N

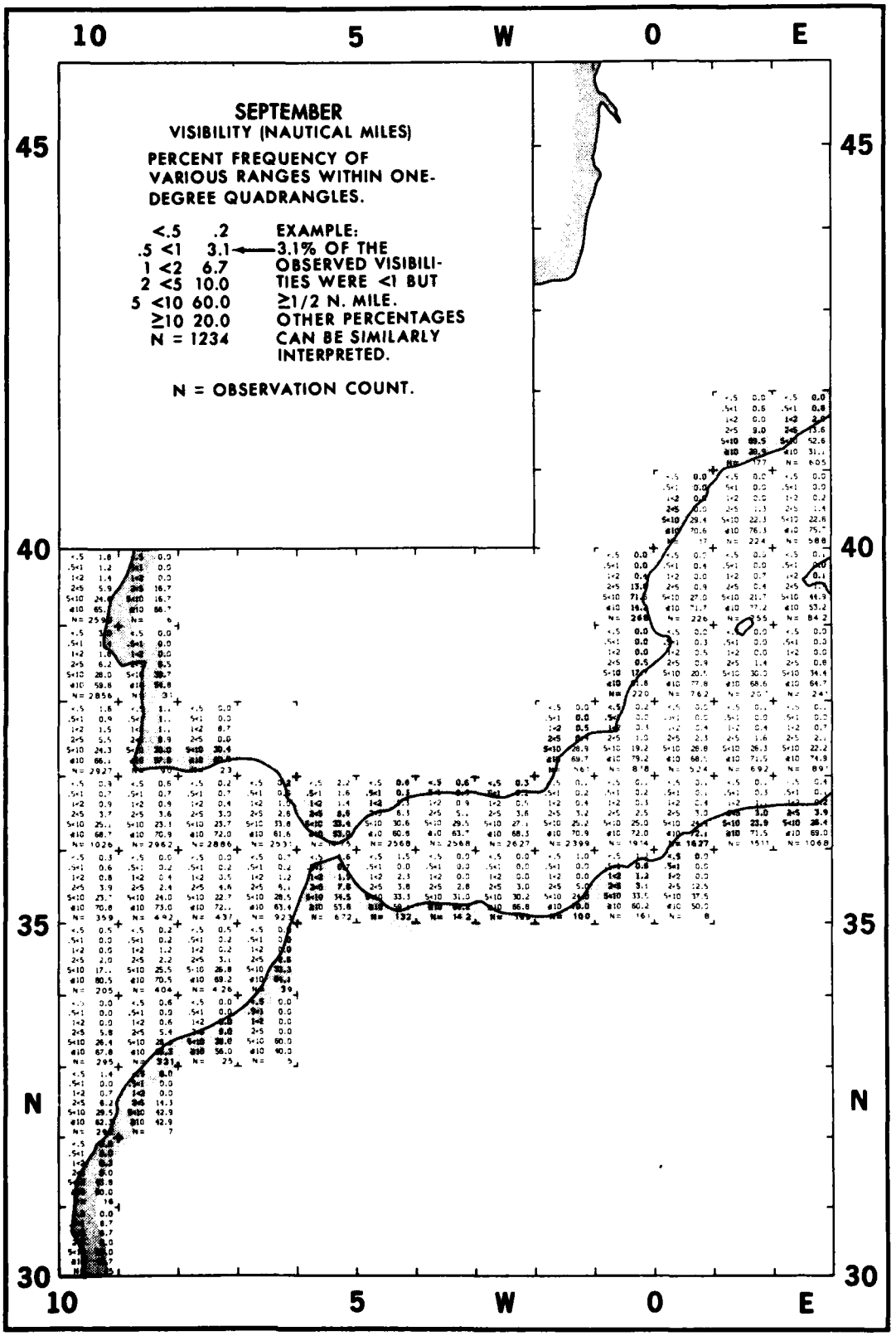


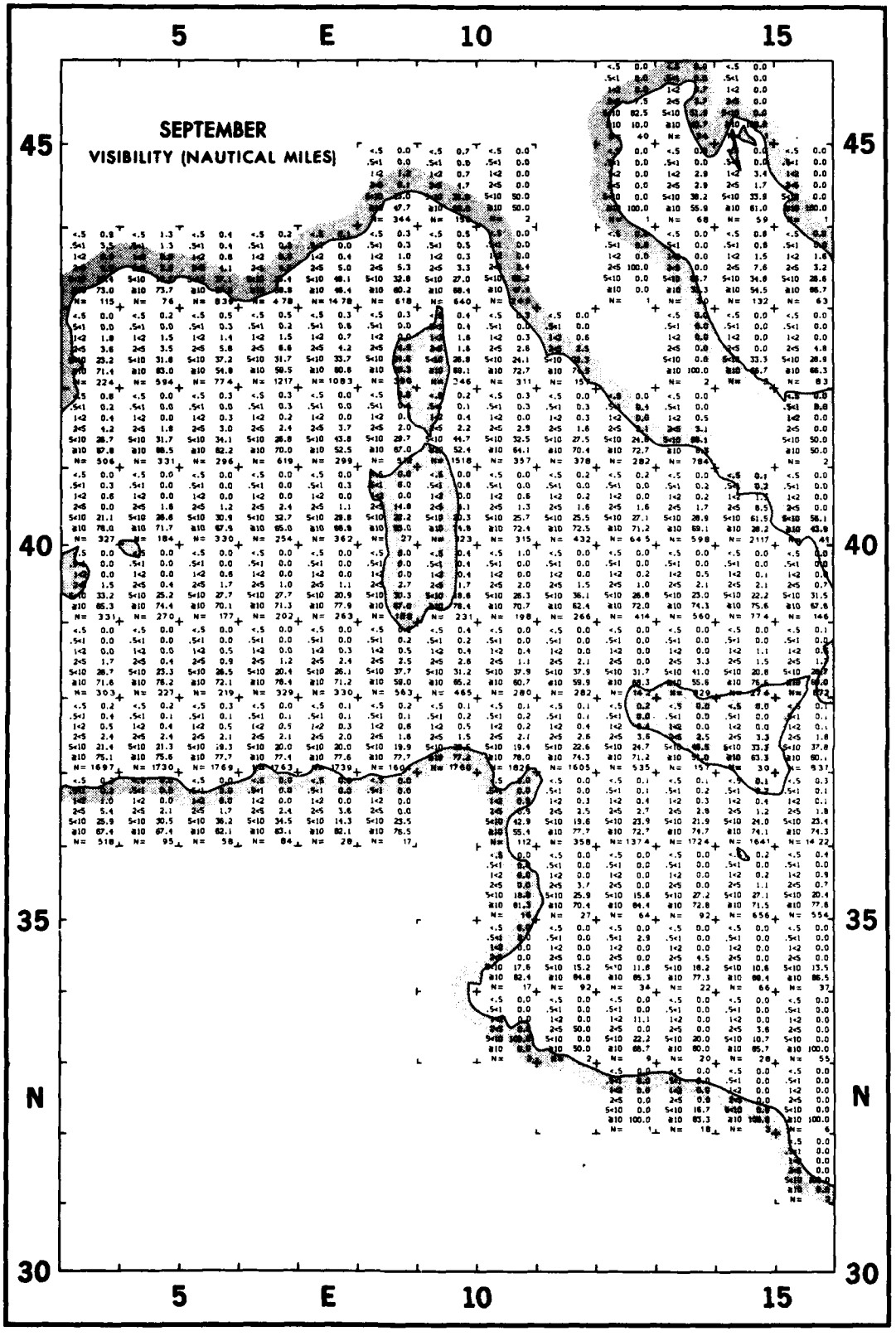
AUGUST

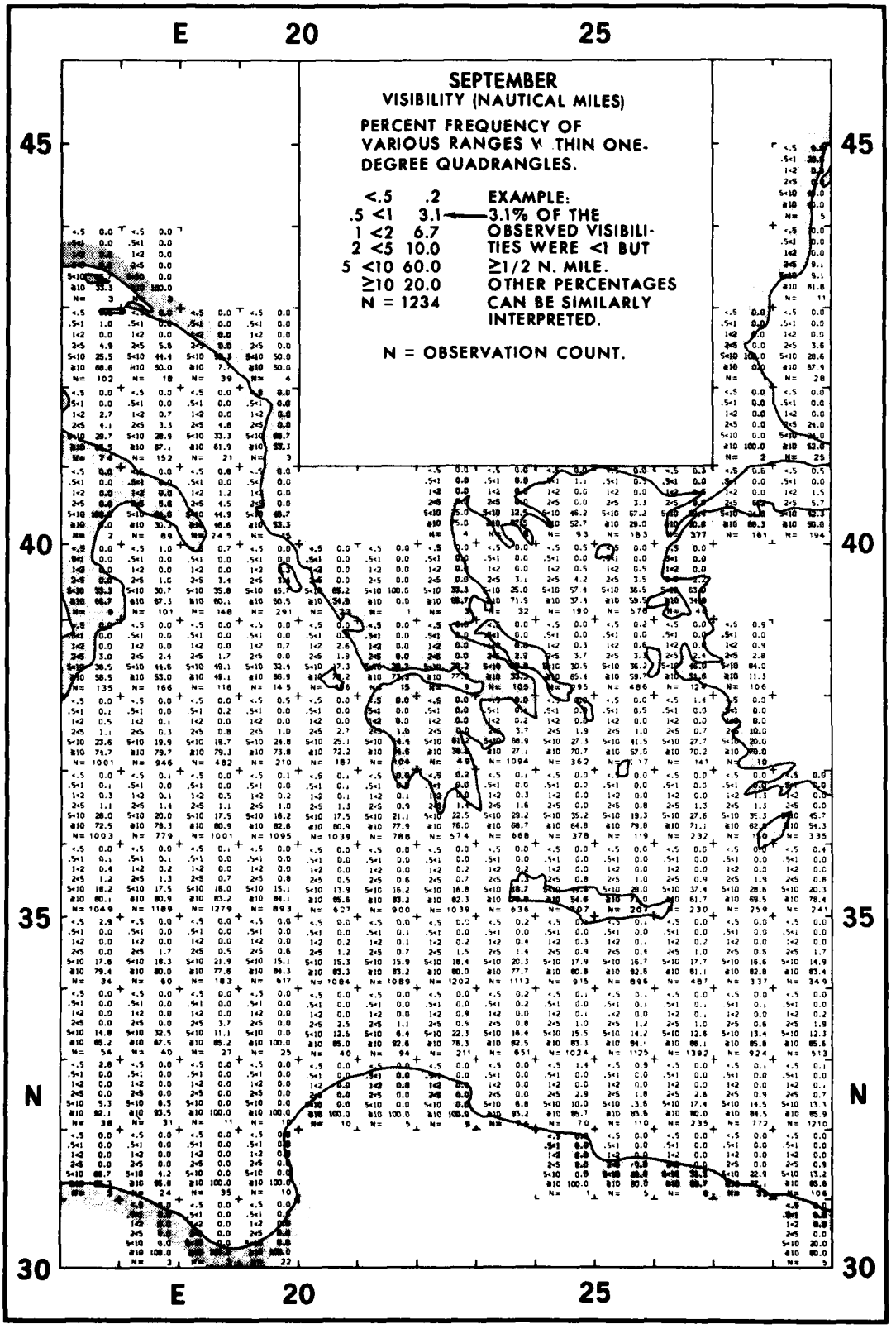
WAVE HEIGHT-FREQUENCIES

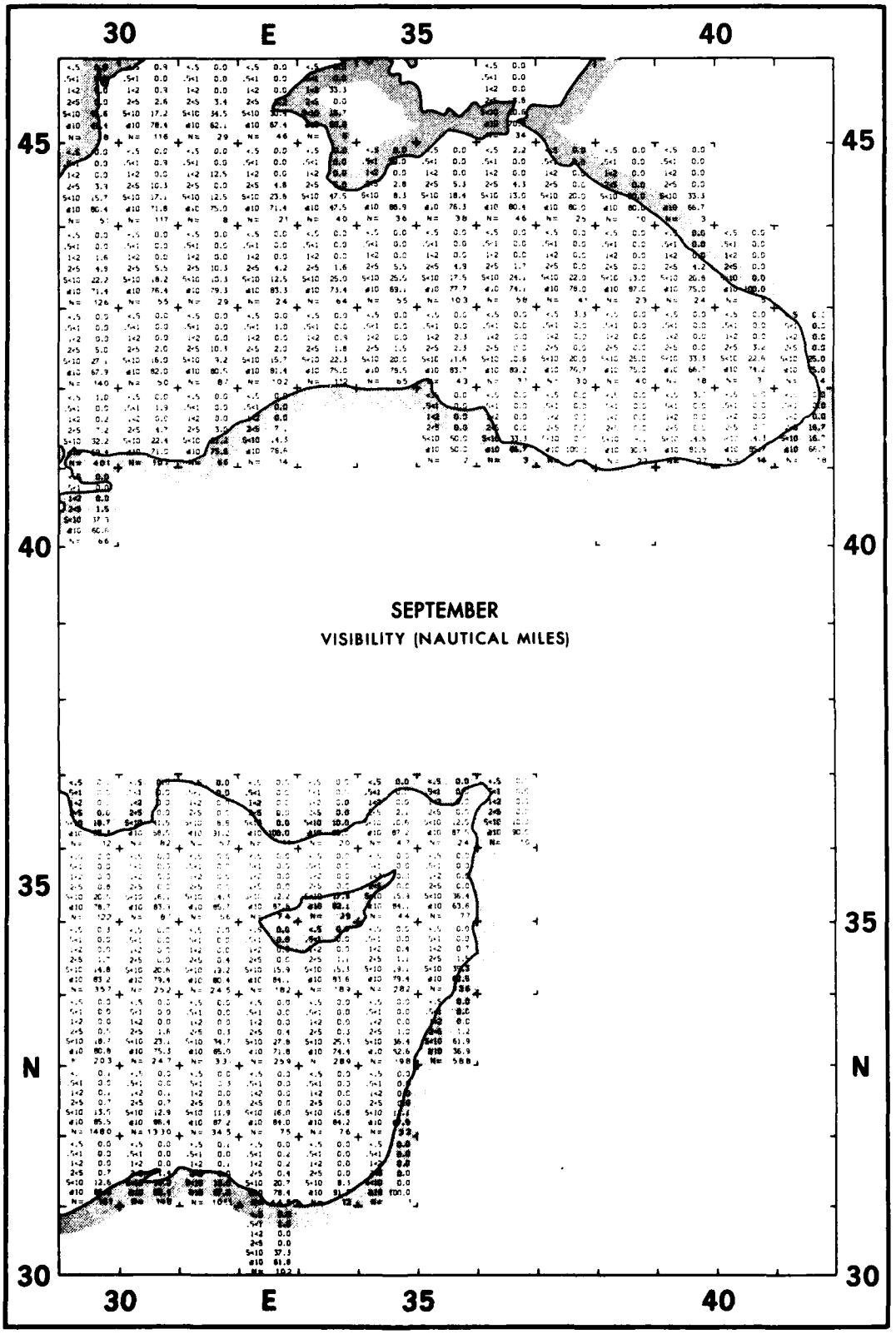

SEPTEMBER
CLOUD COVER
PERCENT FREQUENCY OF:
SOLID LINE - TOTAL CLOUD AMOUNT ≤2/8
DASHED LINE - LOW CLOUD AMOUNT ≥5/8
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30


SEPTEMBER
PRECIPITATION
PERCENT FREQUENCY OF
OBSERVATIONS REPORTING PRECIPITATION
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30


10
5
W
0
E
45
40
35
30
N
SEPTEMBER
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.

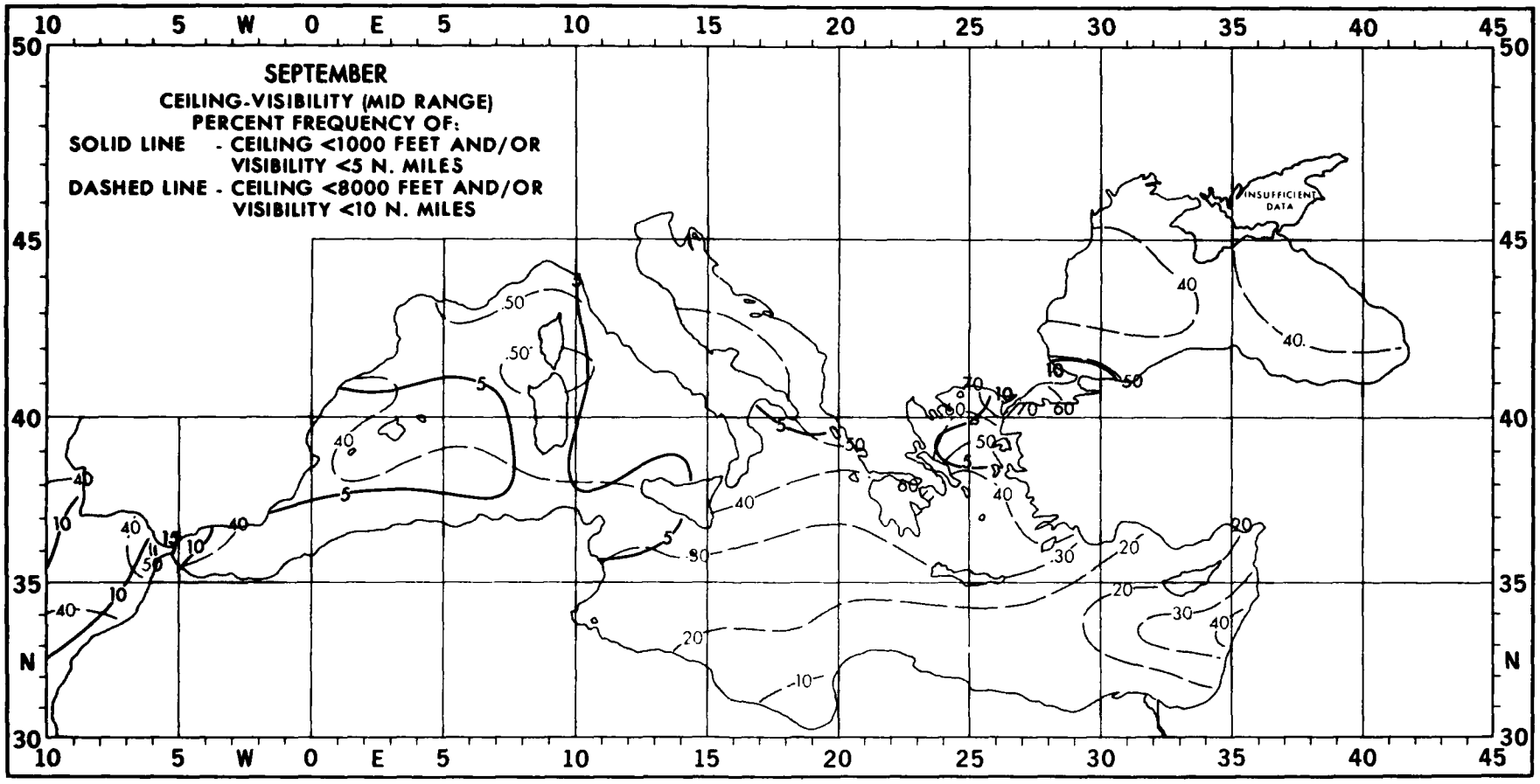

SEPTEMBER
VISIBILITY (NAUTICAL MILES)
5
E
10
15
45
40
35
N
30

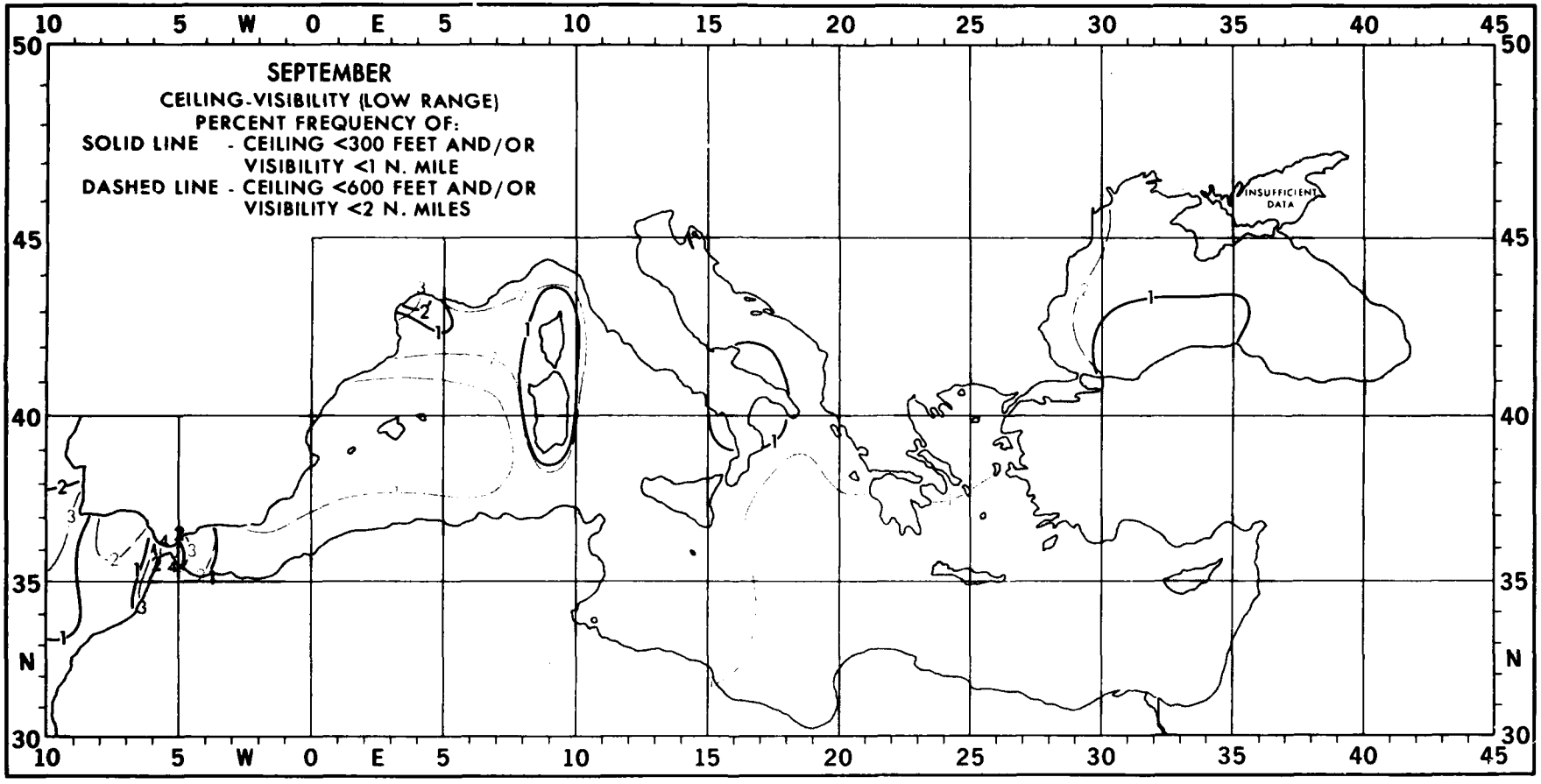

SEPTEMBER
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.
E
20
25
45
40
35
30
N

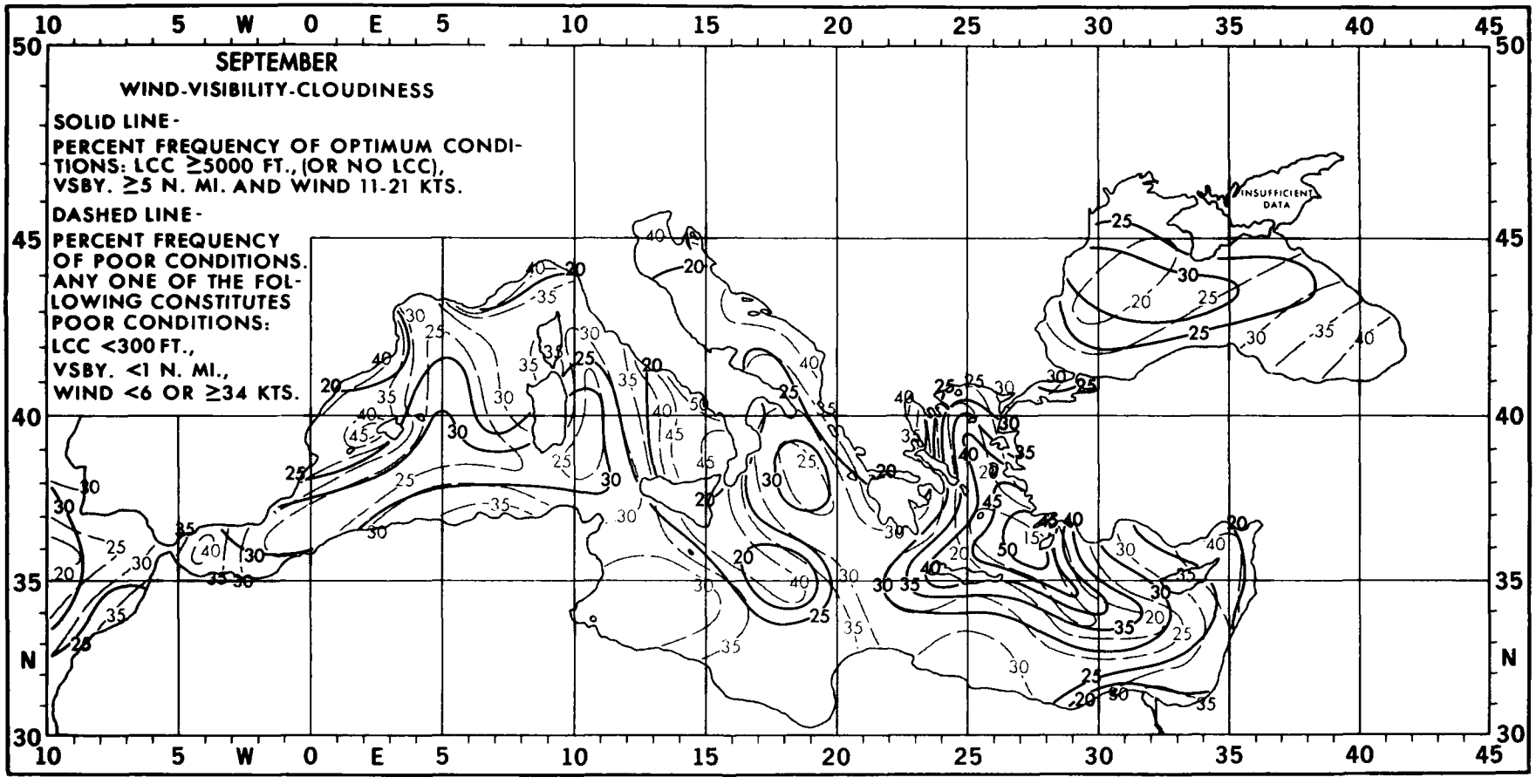


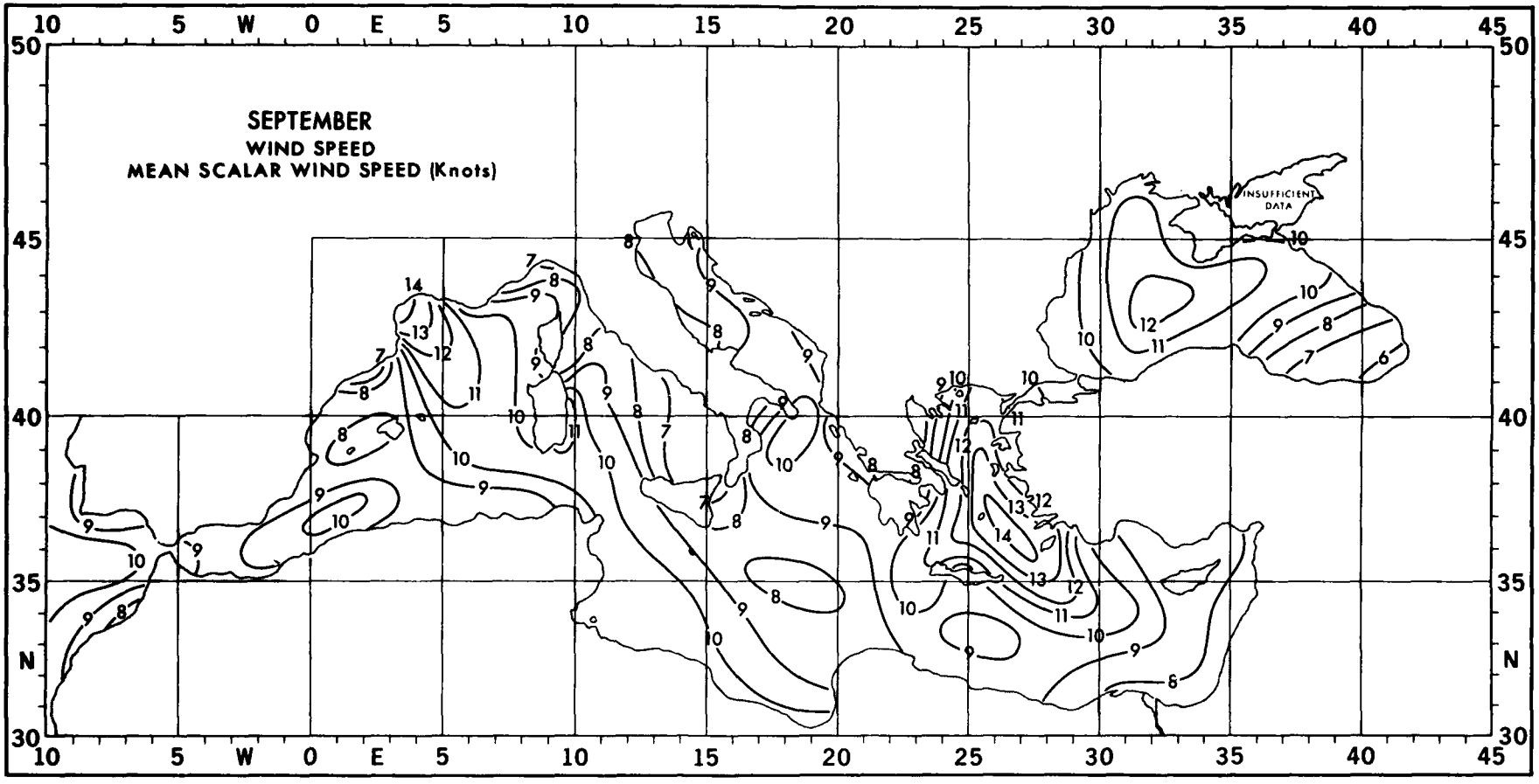
SEPTEMBER

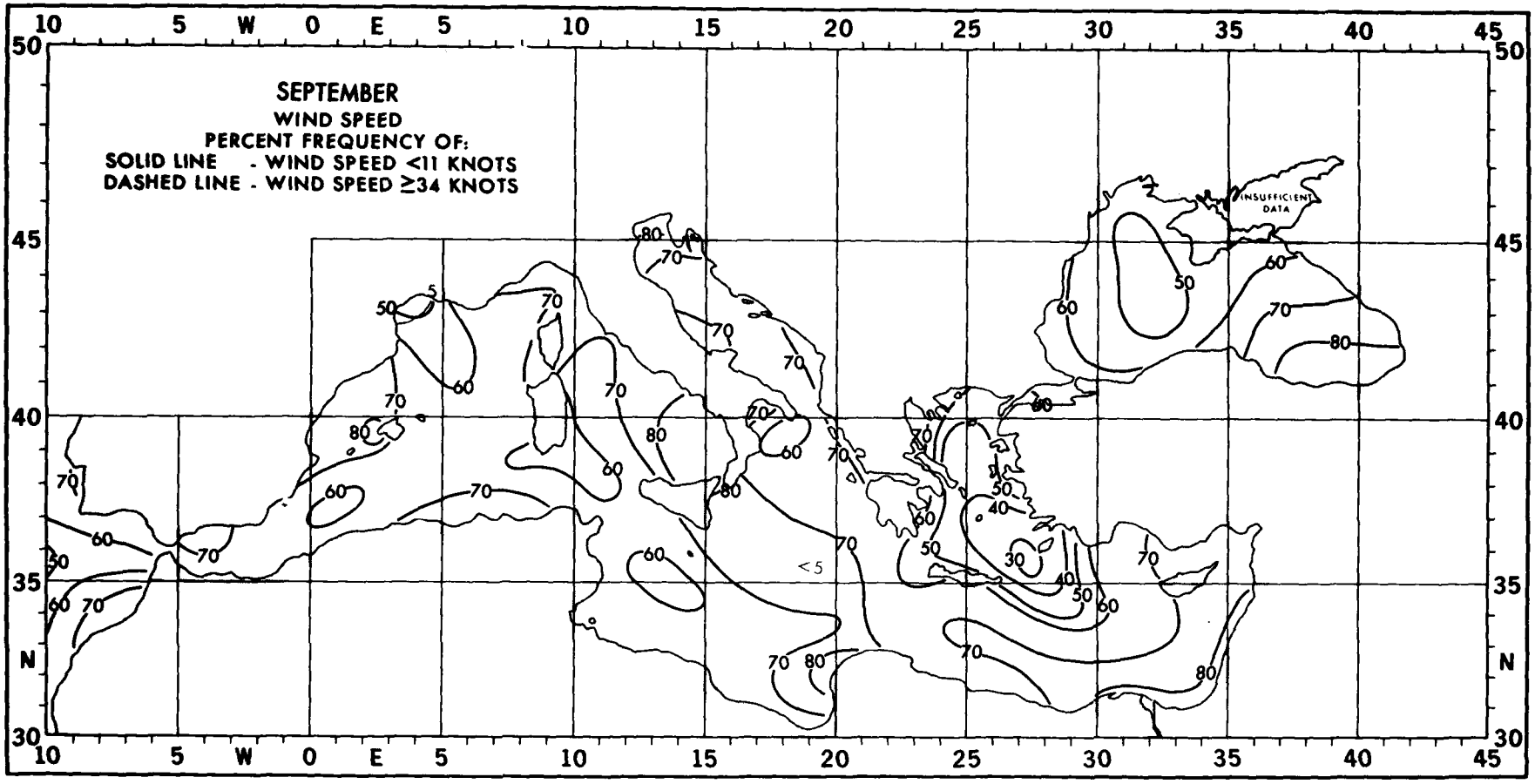
VISIBILITY (NAUTICAL MILES)

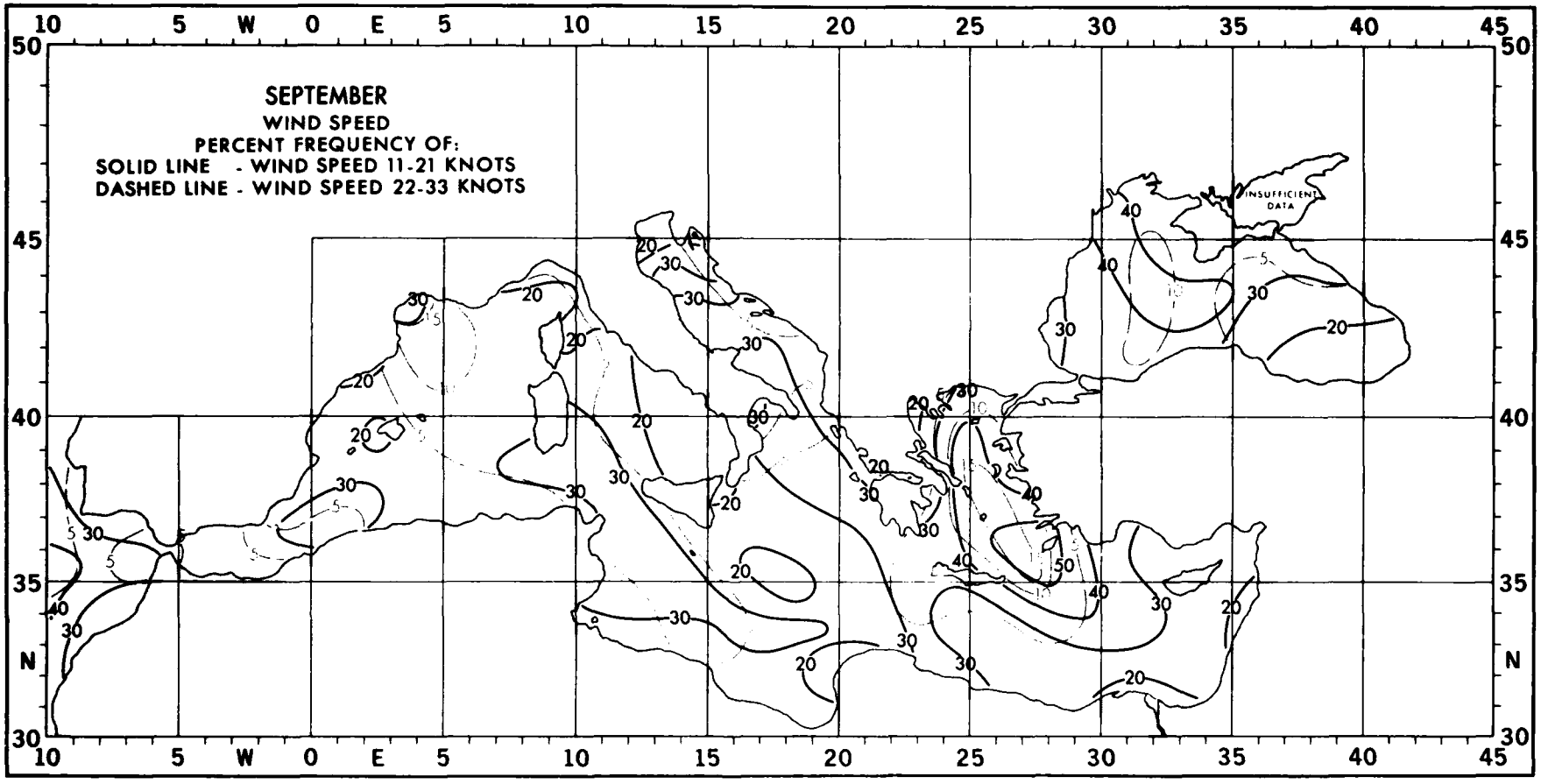

SEPTEMBER
CEILING-VISIBILITY (MID RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <1000 FEET AND/OR VISIBILITY <5 N. MILES
DASHED LINE - CEILING <8000 FEET AND/OR VISIBILITY <10 N. MILES
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

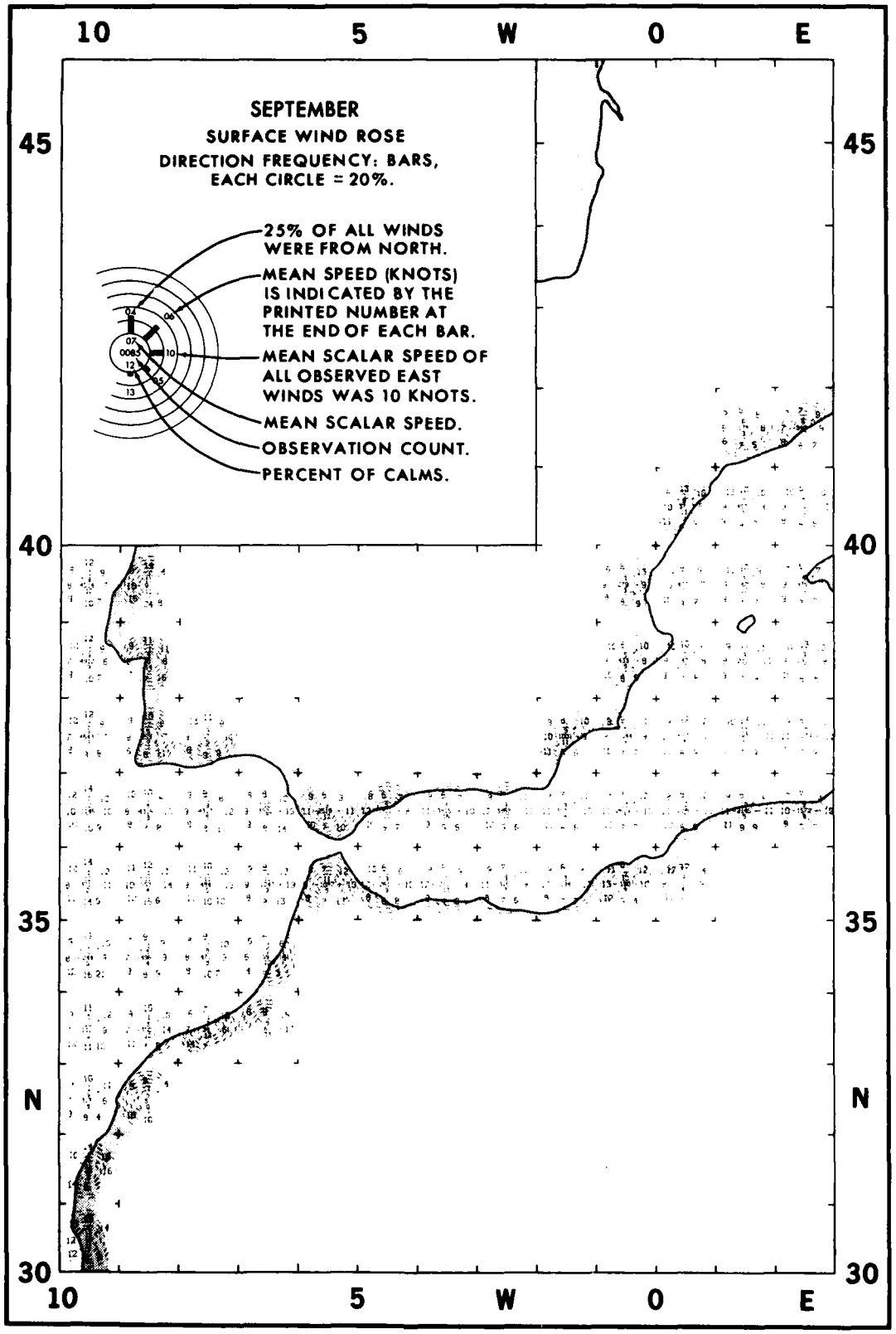

SEPTEMBER
CEILING-VISIBILITY (LOW RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <300 FEET AND/OR VISIBILITY <1 N. MILE
DASHED LINE - CEILING <600 FEET AND/OR VISIBILITY <2 N. MILES
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

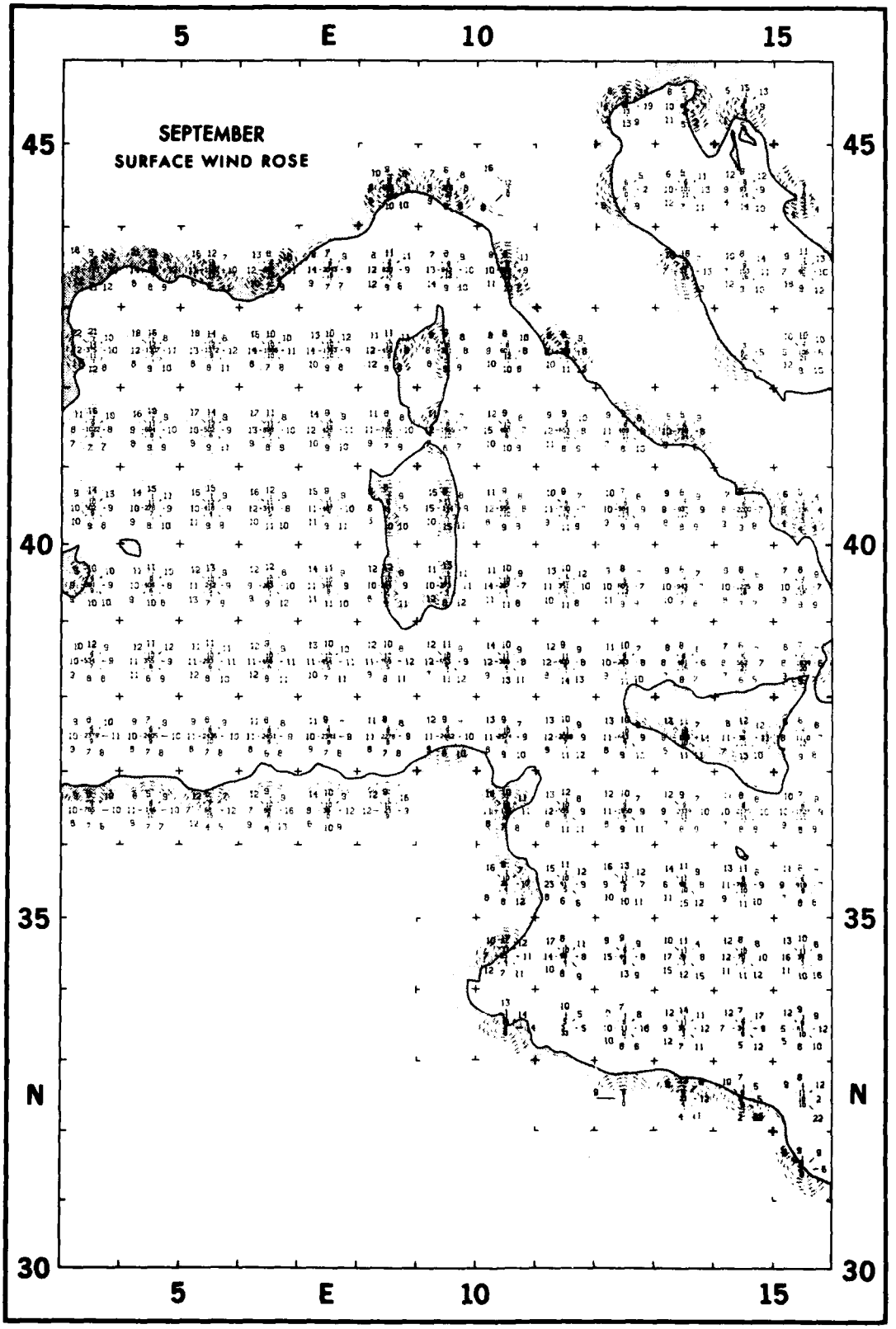

SEPTEMBER
WIND-VISIBILITY-CLOUDINESS
SOLID LINE-
PERCENT FREQUENCY OF OPTIMUM CONDITIONS: LCC ≥5000 FT., (OR NO LCC), VSBY. ≥5 N. MI. AND WIND 11-21 KTS.
DASHED LINE-
PERCENT FREQUENCY OF POOR CONDITIONS. ANY ONE OF THE FOLLOWING CONSTITUTES POOR CONDITIONS:
LCC <300 FT.,
VSBY. <1 N. MI.,
WIND <6 OR ≥34 KTS.
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

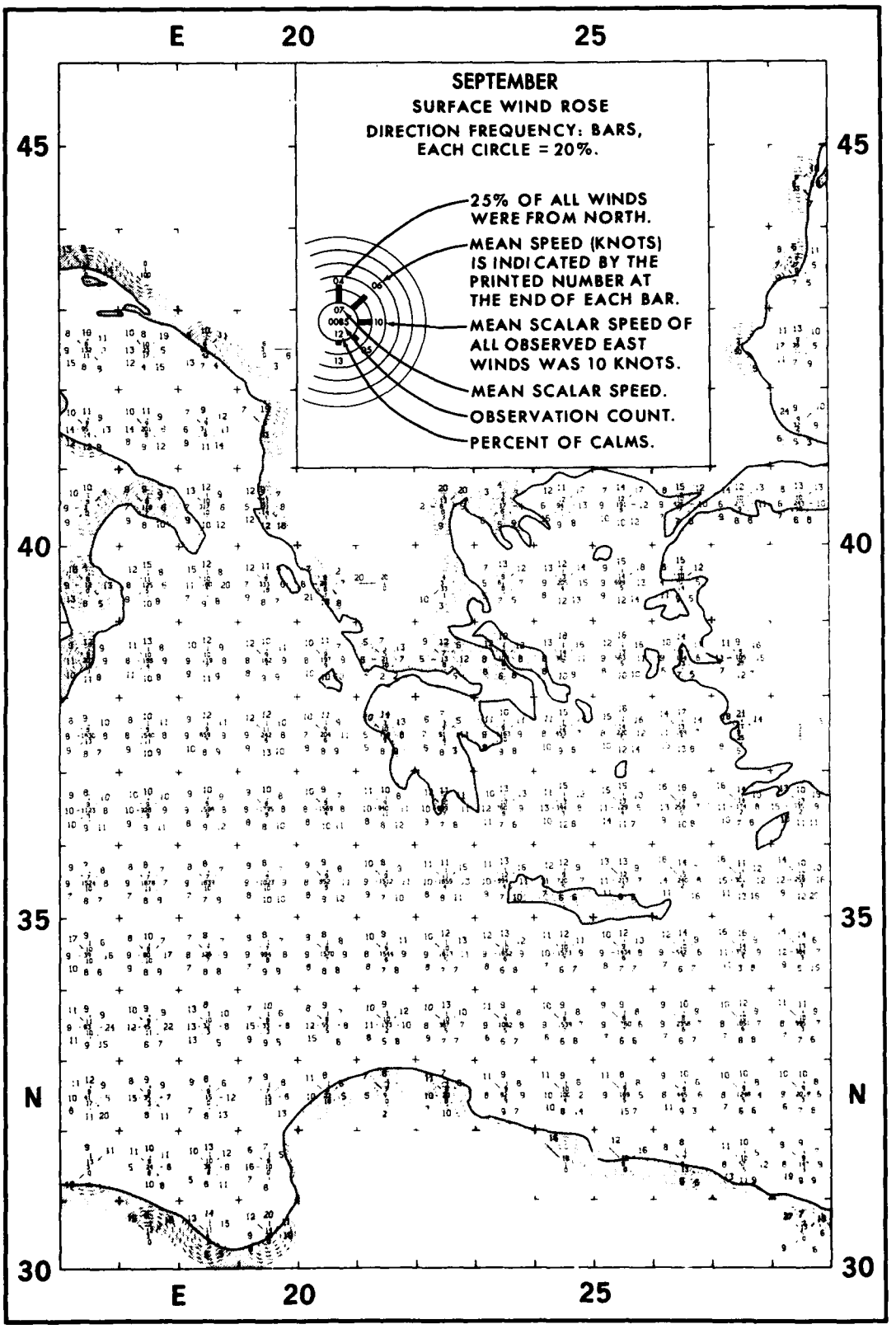

SEPTEMBER
WIND SPEED
MEAN SCALAR WIND SPEED (Knots)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

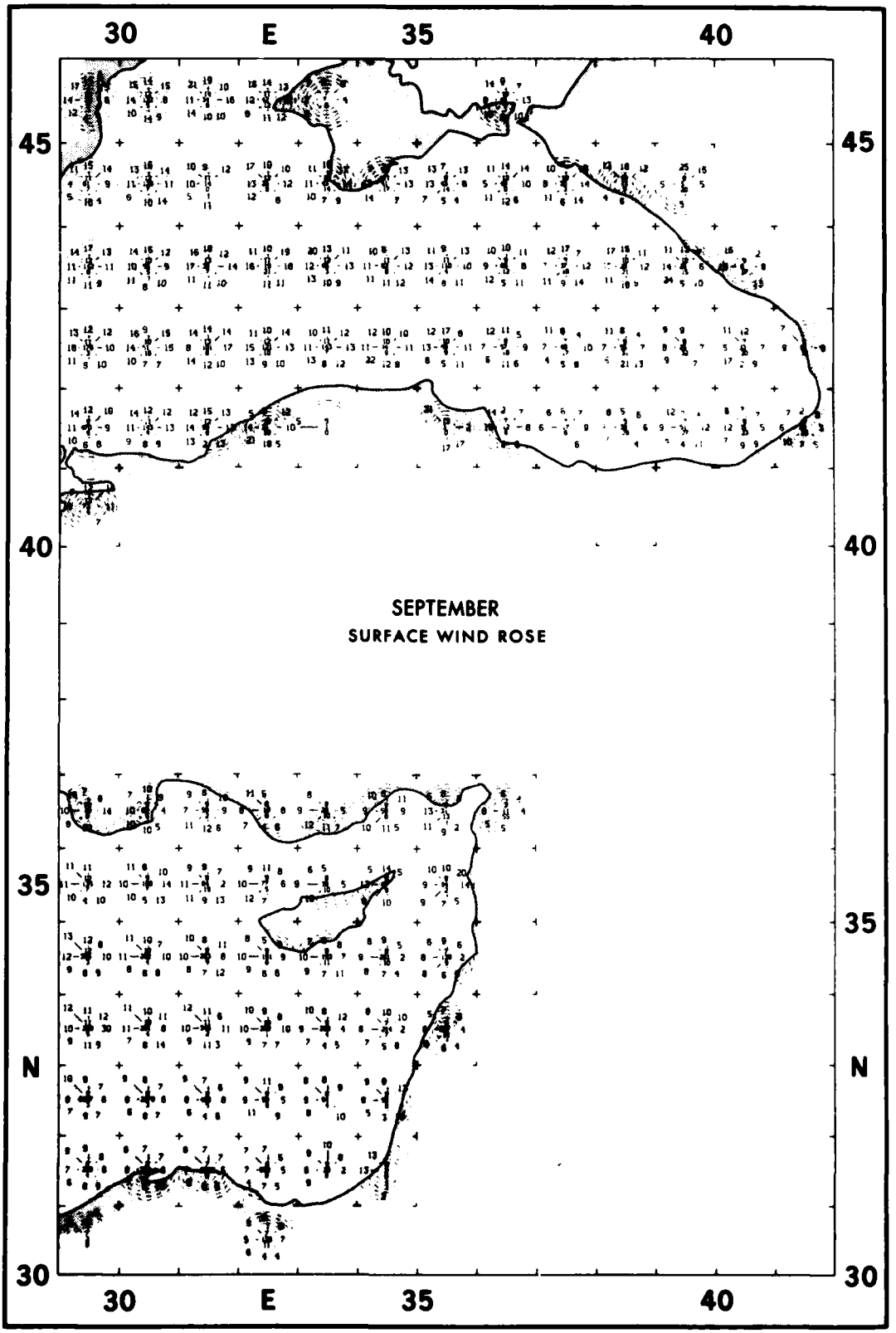

SEPTEMBER
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED <11 KNOTS
DASHED LINE - WIND SPEED ≥34 KNOTS
INSUFFICIENT DATA
<5
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

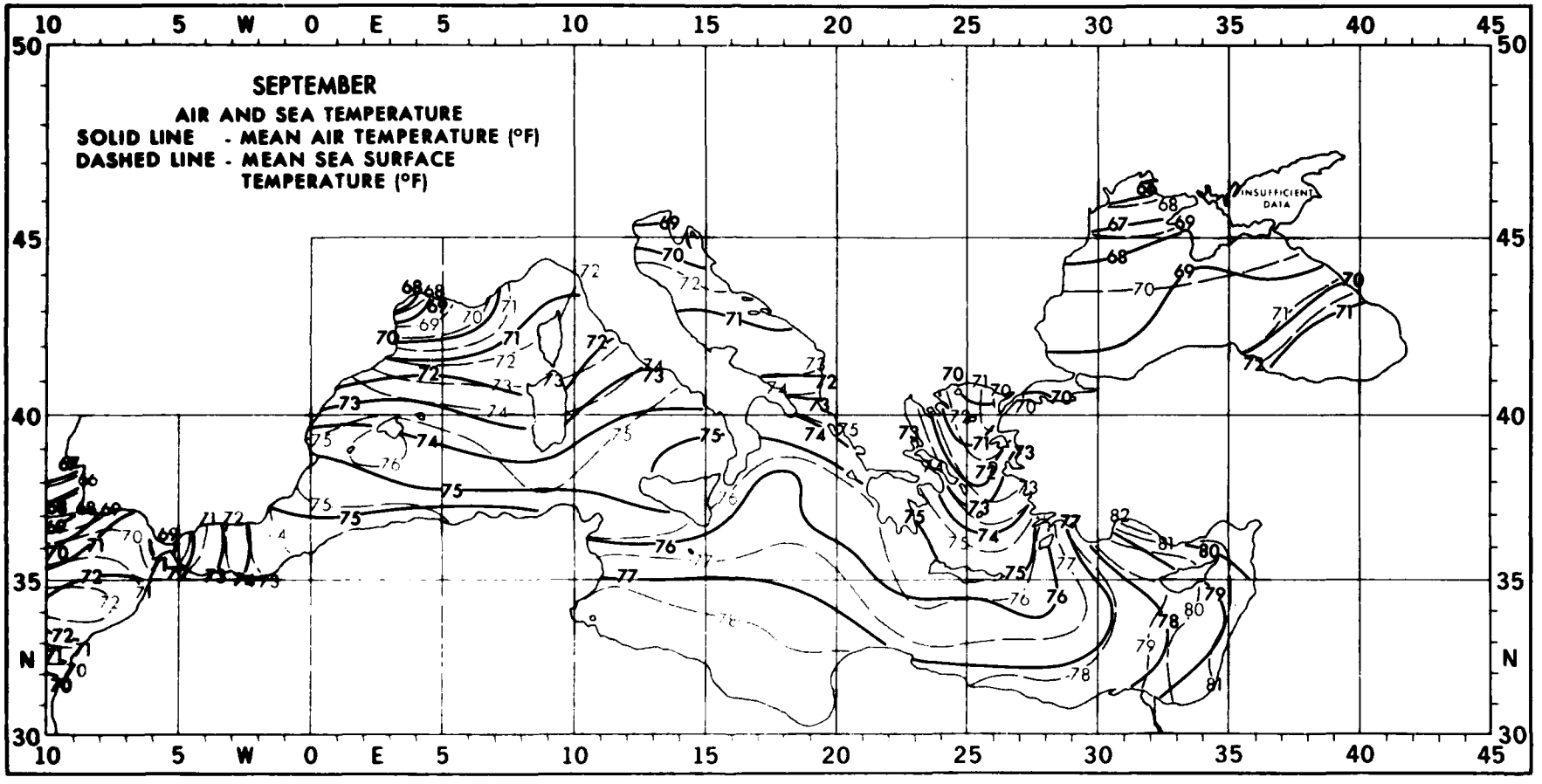

SEPTEMBER
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED 11-21 KNOTS
DASHED LINE - WIND SPEED 22-33 KNOTS
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

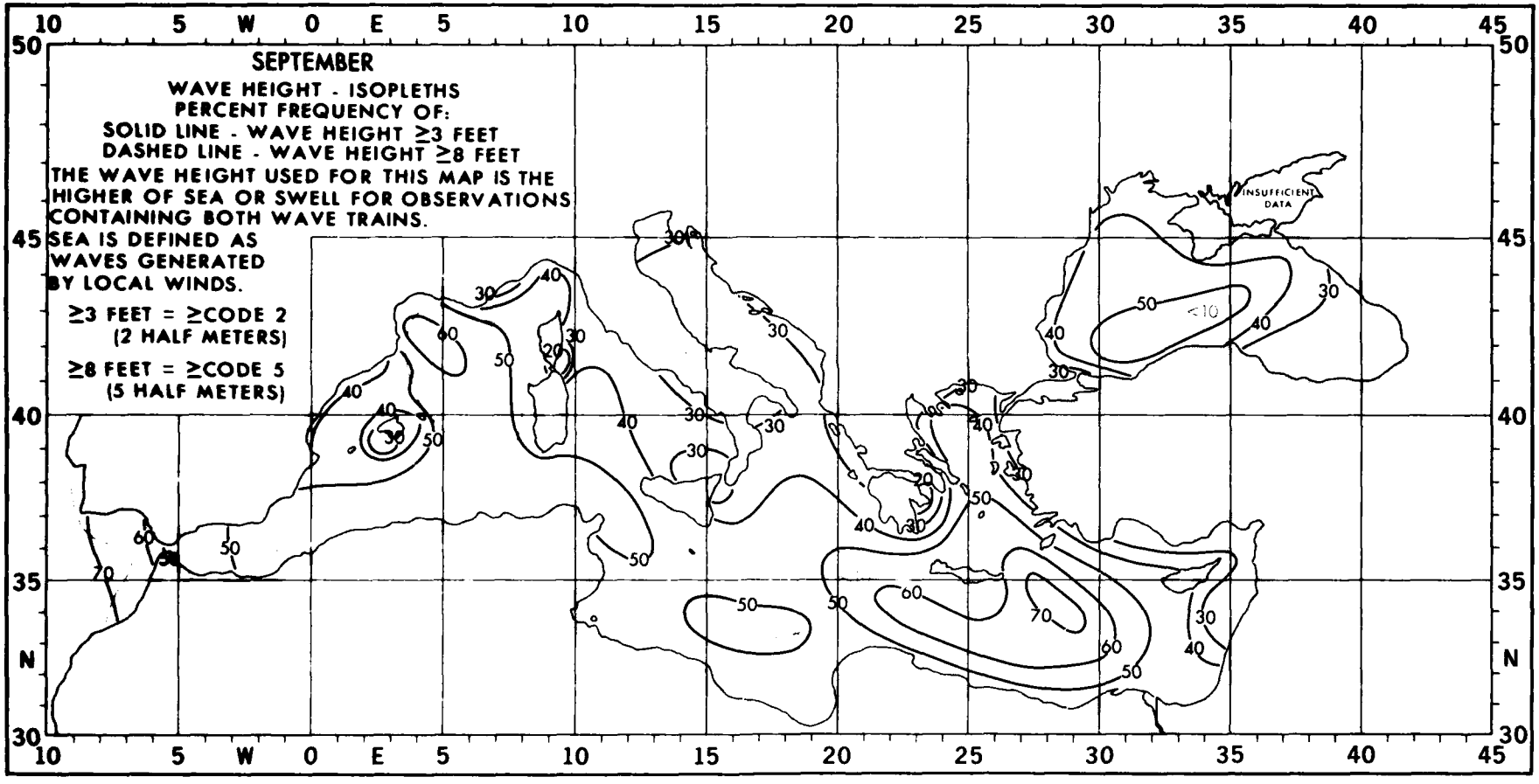

10
5
W
0
E
SEPTEMBER
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS,
EACH CIRCLE = 20%.
25% OF ALL WINDS WERE FROM NORTH.
MEAN SPEED (KNOTS) IS INDICATED BY THE PRINTED NUMBER AT THE END OF EACH BAR.
MEAN SCALAR SPEED OF ALL OBSERVED EAST WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.
45
40
35
N
30

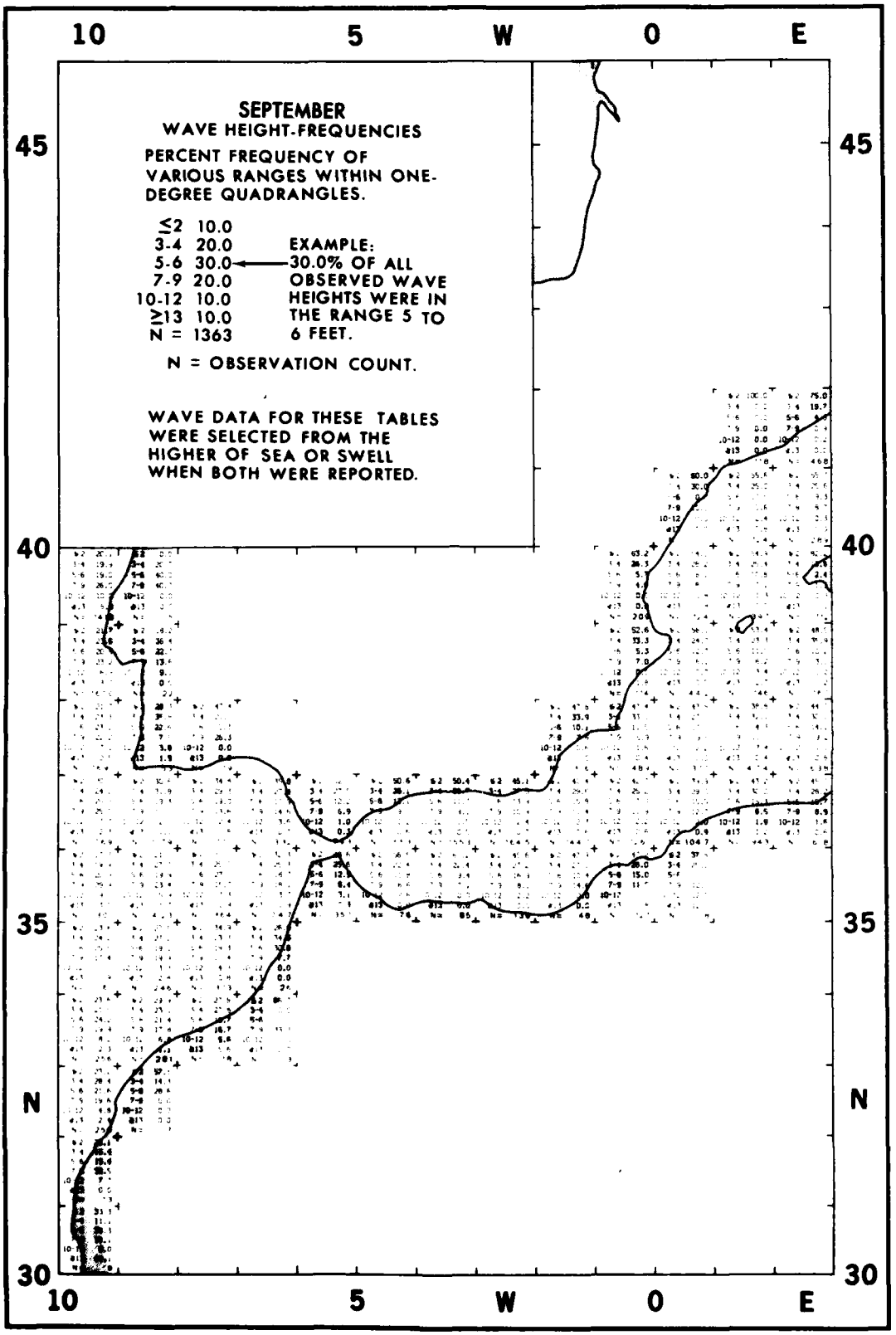

SEPTEMBER
SURFACE WIND ROSE
5
E
10
15
45
40
35
N
30

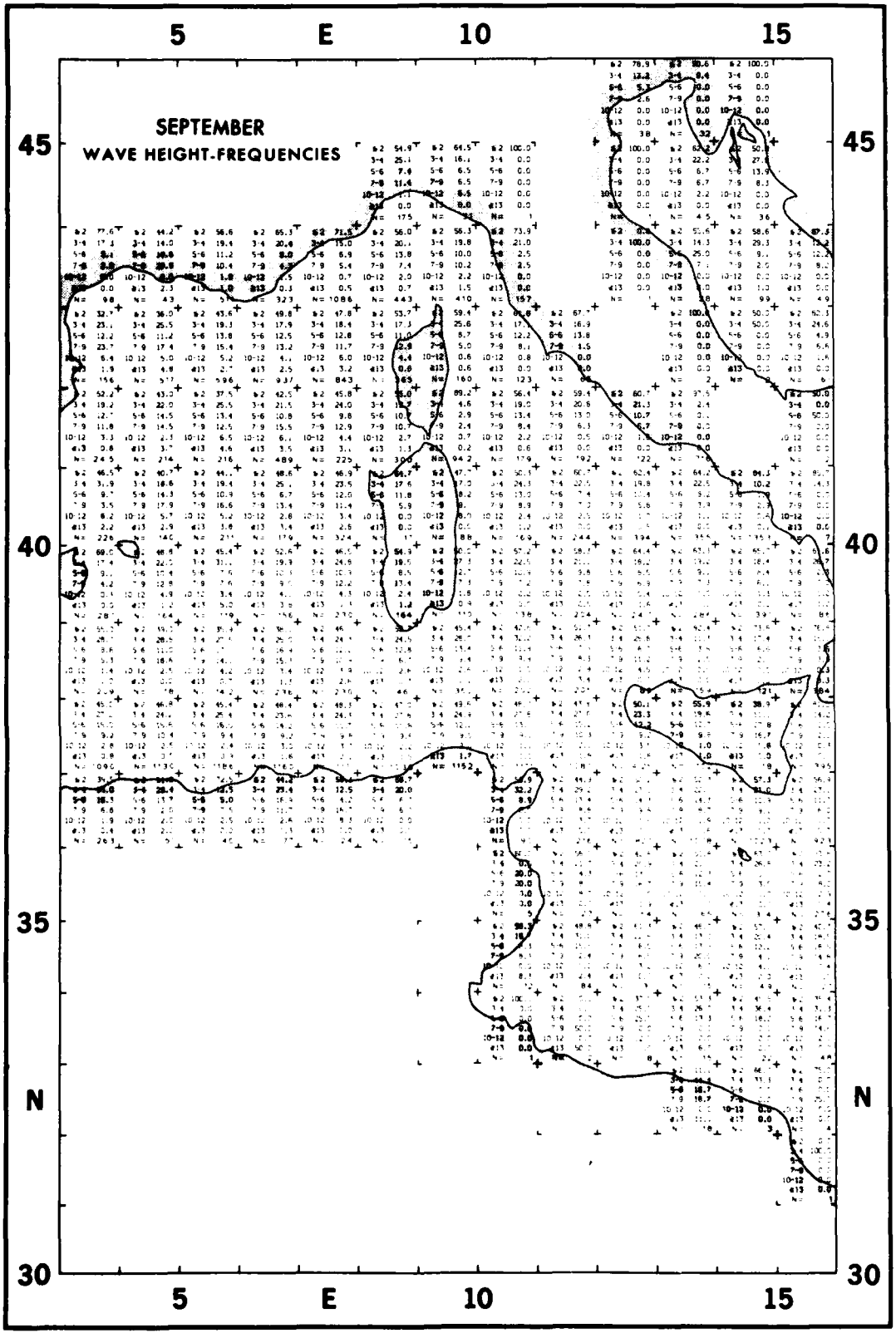

E
20
25
45
40
35
N
30
SEPTEMBER
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS,
EACH CIRCLE = 20%.
25% OF ALL WINDS WERE FROM NORTH.
MEAN SPEED (KNOTS) IS INDICATED BY THE PRINTED NUMBER AT THE END OF EACH BAR.
MEAN SCALAR SPEED OF ALL OBSERVED EAST WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.

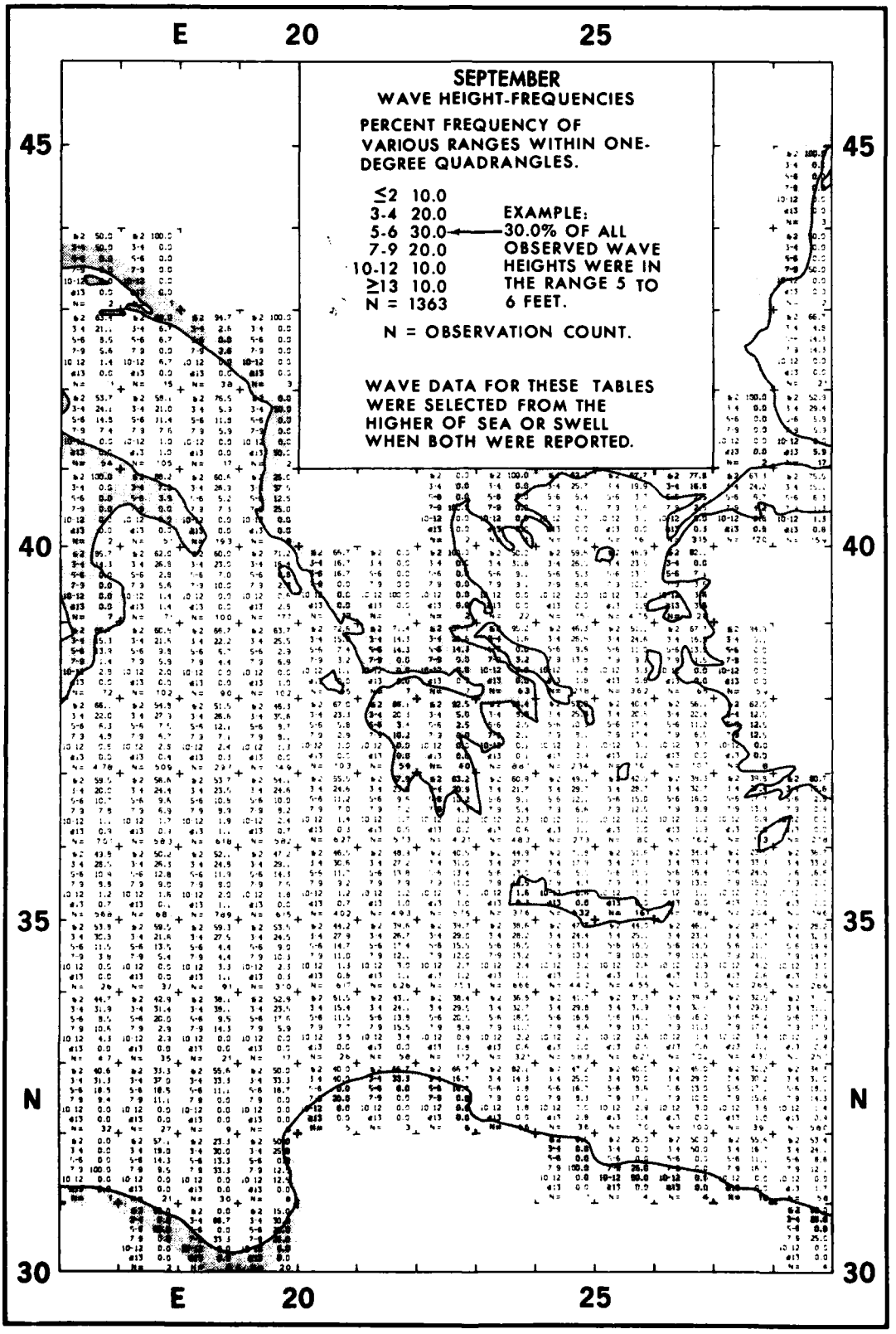

30
E
35
40
45
40
35
N
30
SEPTEMBER
SURFACE WIND ROSE

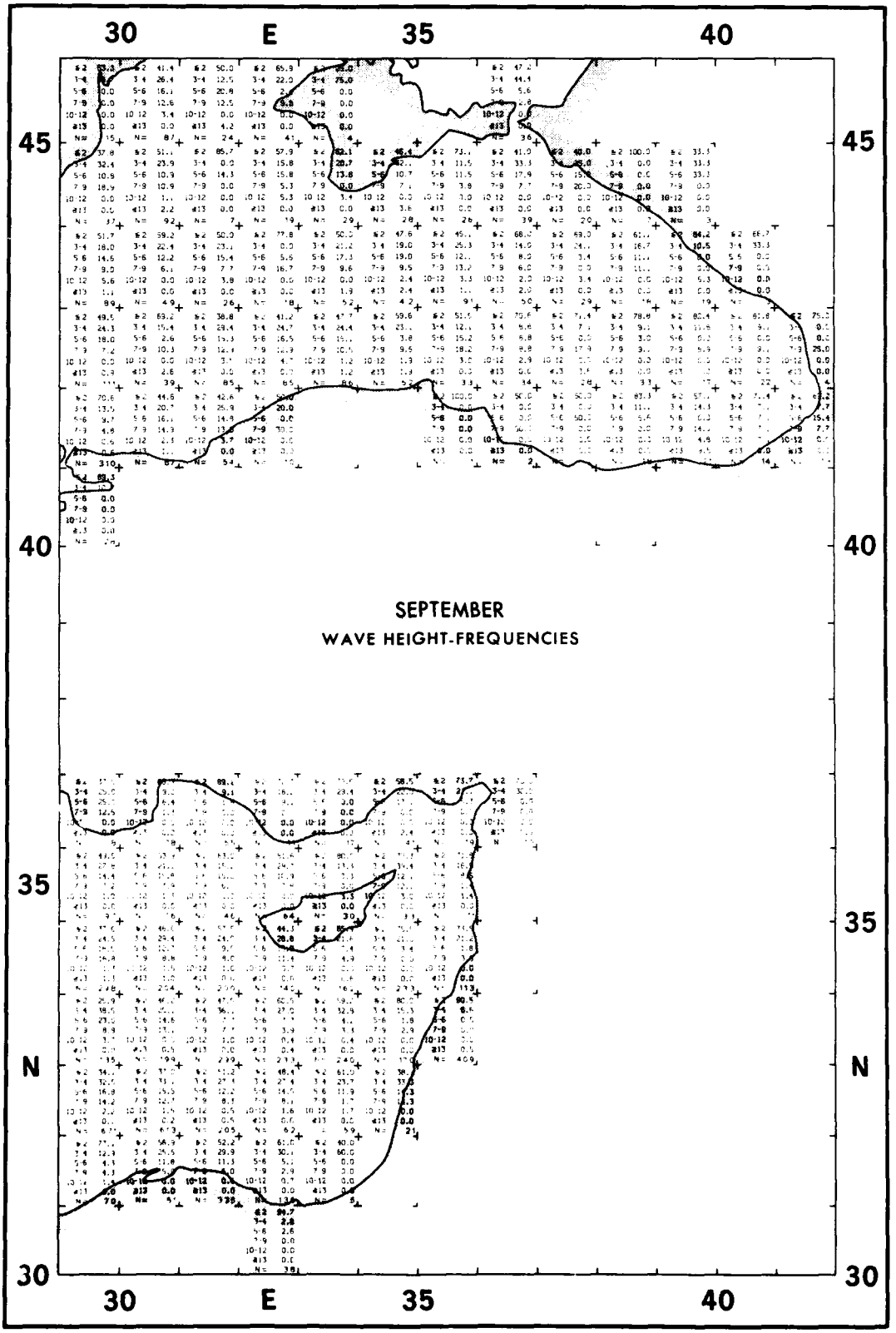

SEPTEMBER
AIR AND SEA TEMPERATURE
SOLID LINE - MEAN AIR TEMPERATURE (°F)
DASHED LINE - MEAN SEA SURFACE TEMPERATURE (°F)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

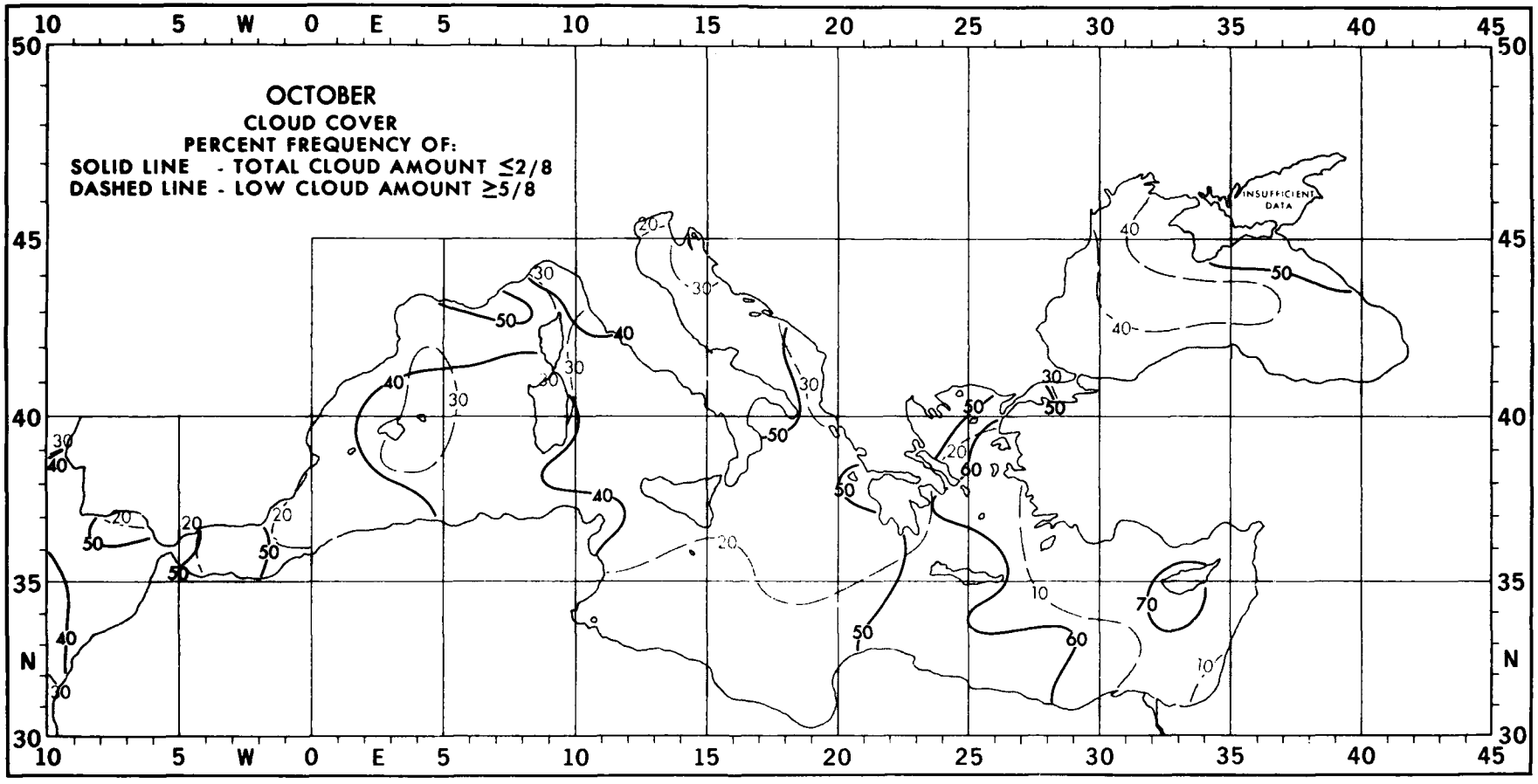

SEPTEMBER
WAVE HEIGHT - ISOPLETHS
PERCENT FREQUENCY OF:
SOLID LINE - WAVE HEIGHT ≥3 FEET
DASHED LINE - WAVE HEIGHT ≥8 FEET
THE WAVE HEIGHT USED FOR THIS MAP IS THE HIGHER OF SEA OR SWELL FOR OBSERVATIONS CONTAINING BOTH WAVE TRAINS.
SEA IS DEFINED AS WAVES GENERATED BY LOCAL WINDS.
≥3 FEET = ≥CODE 2 (2 HALF METERS)
≥8 FEET = ≥CODE 5 (5 HALF METERS)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

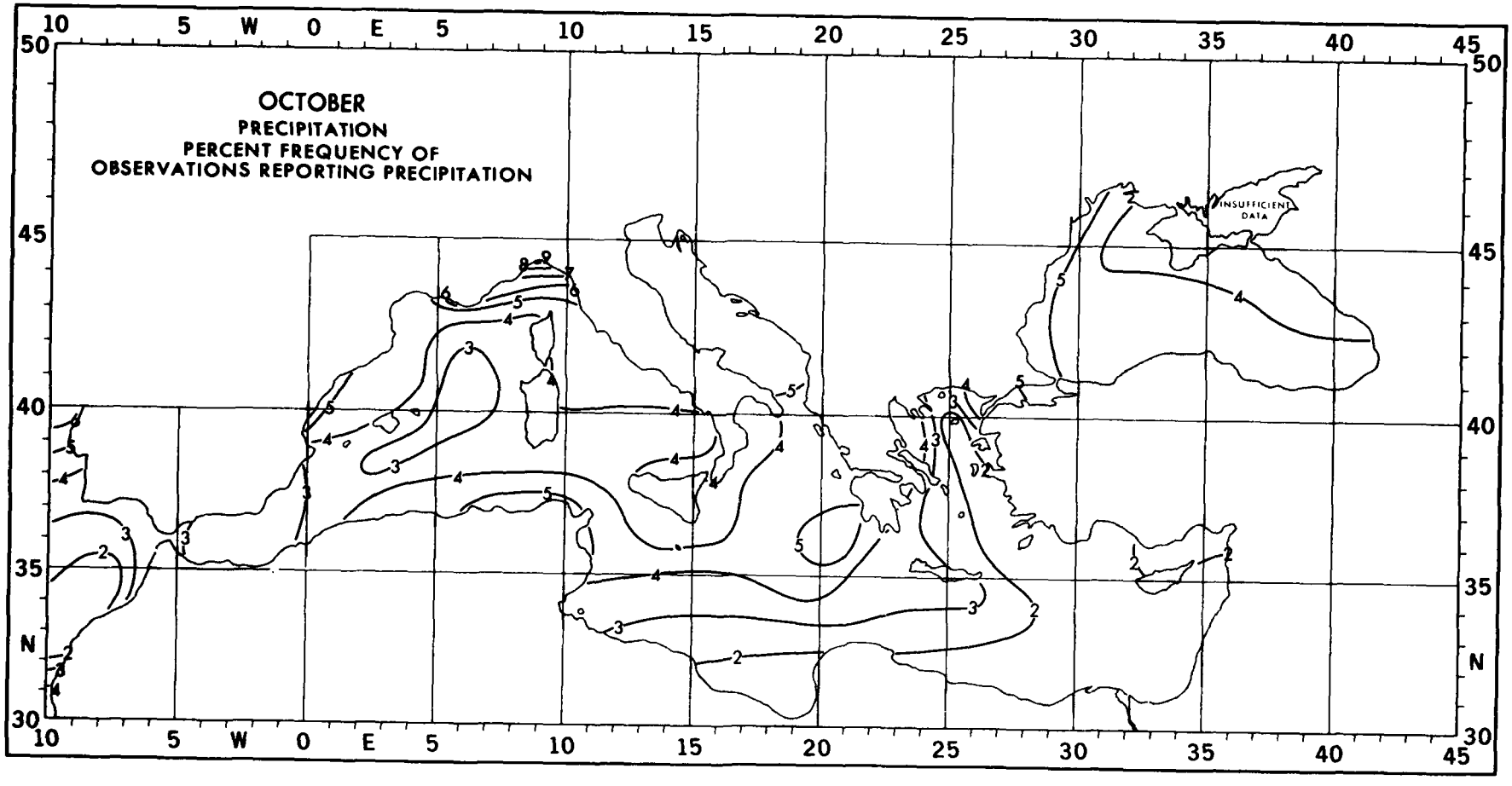

10
5
W
0
E
SEPTEMBER
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.
45
40
35
30
N

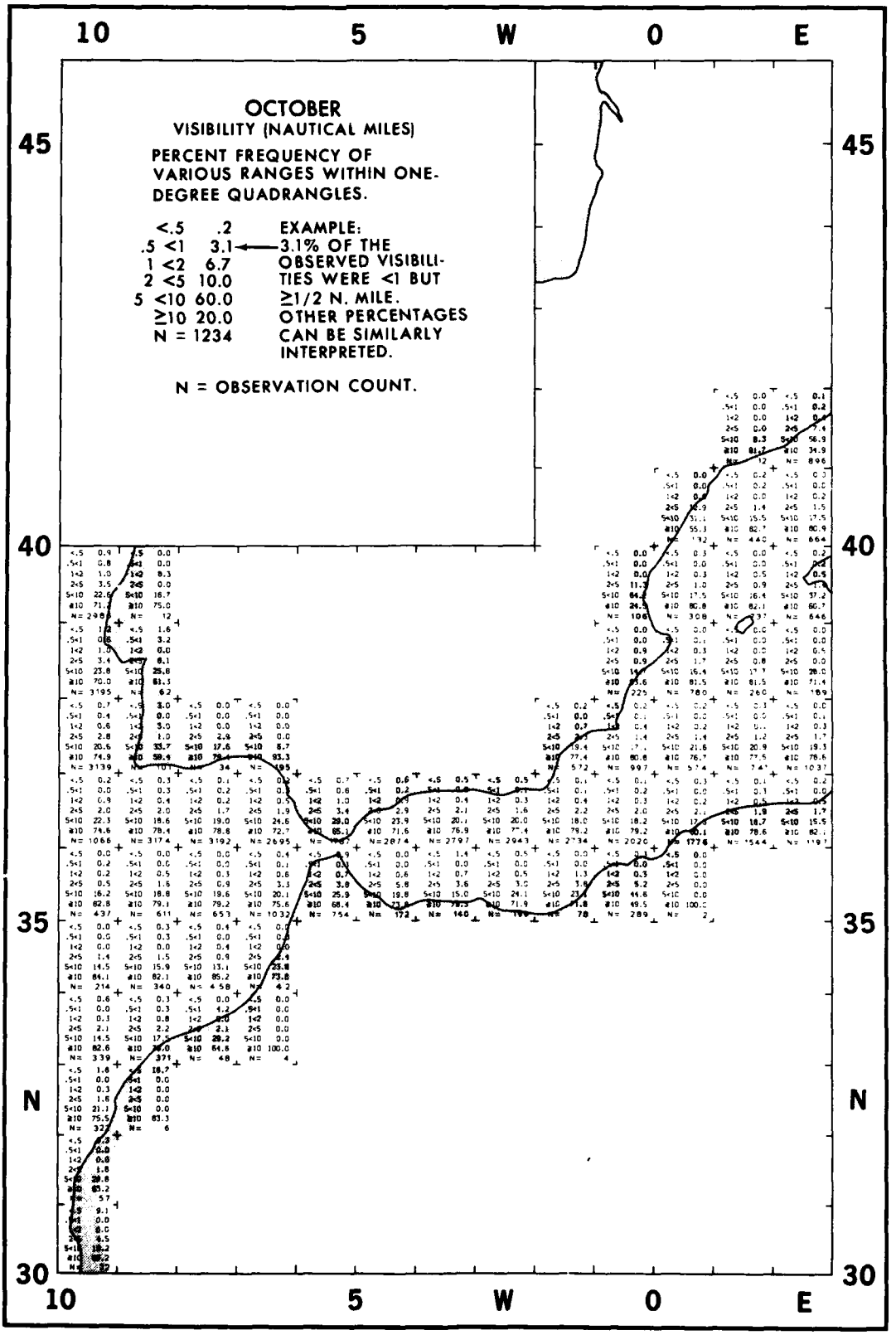

SEPTEMBER
WAVE HEIGHT-FREQUENCIES
5
E
10
15
45
40
35
N
30

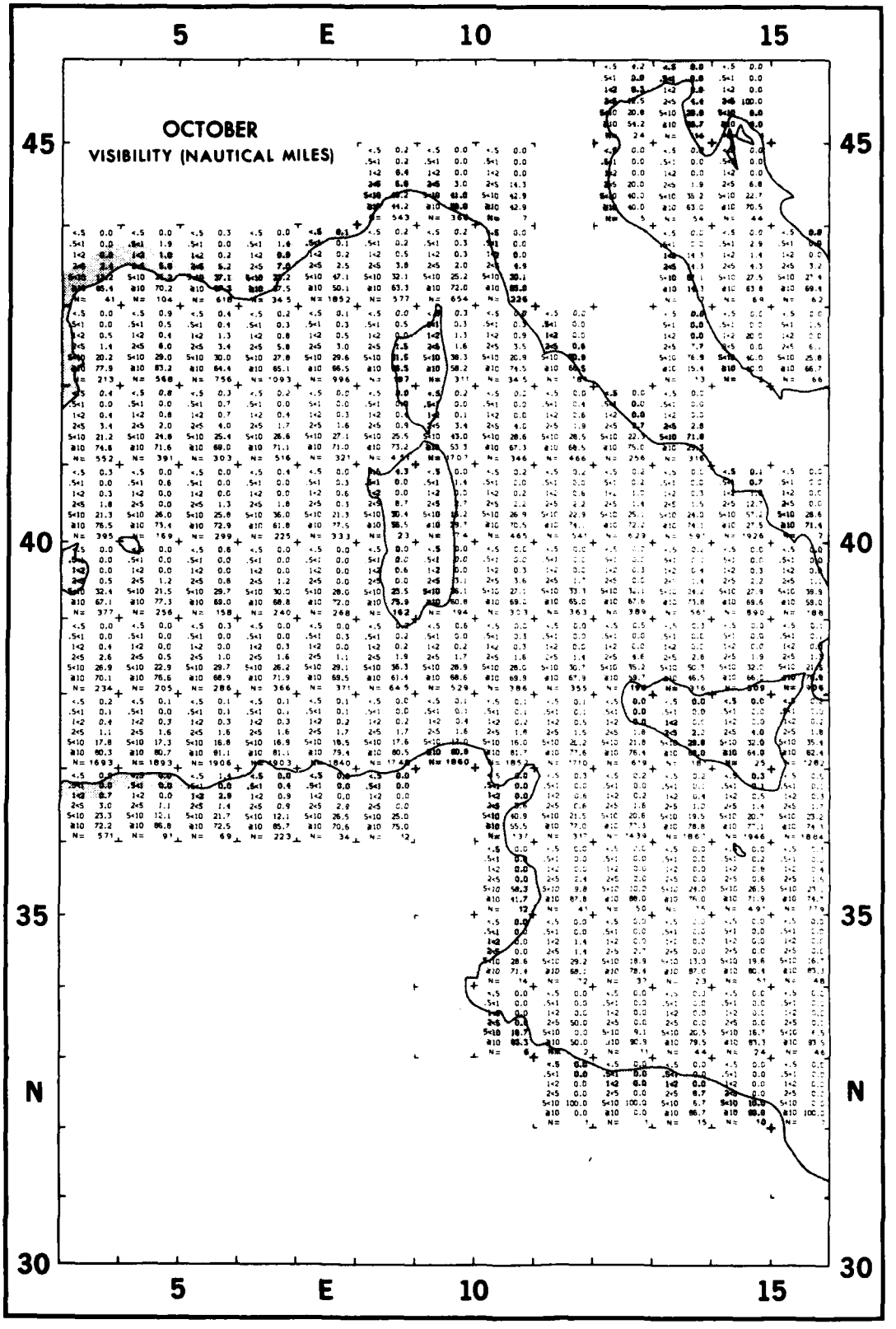

E
20
25
45
40
35
N
30
SEPTEMBER
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.

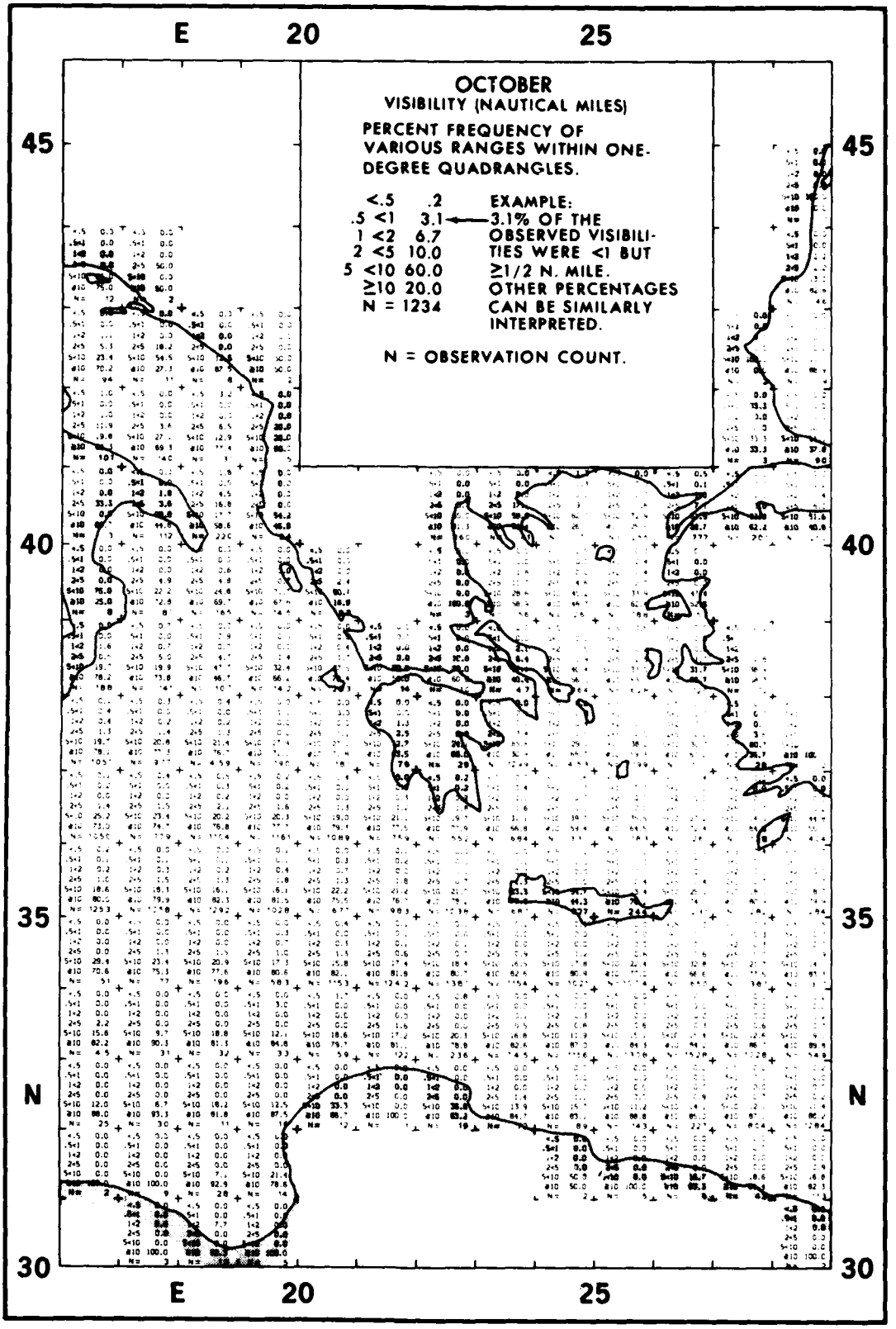

30
E
35
40
45
40
35
N
30
SEPTEMBER
WAVE HEIGHT-FREQUENCIES

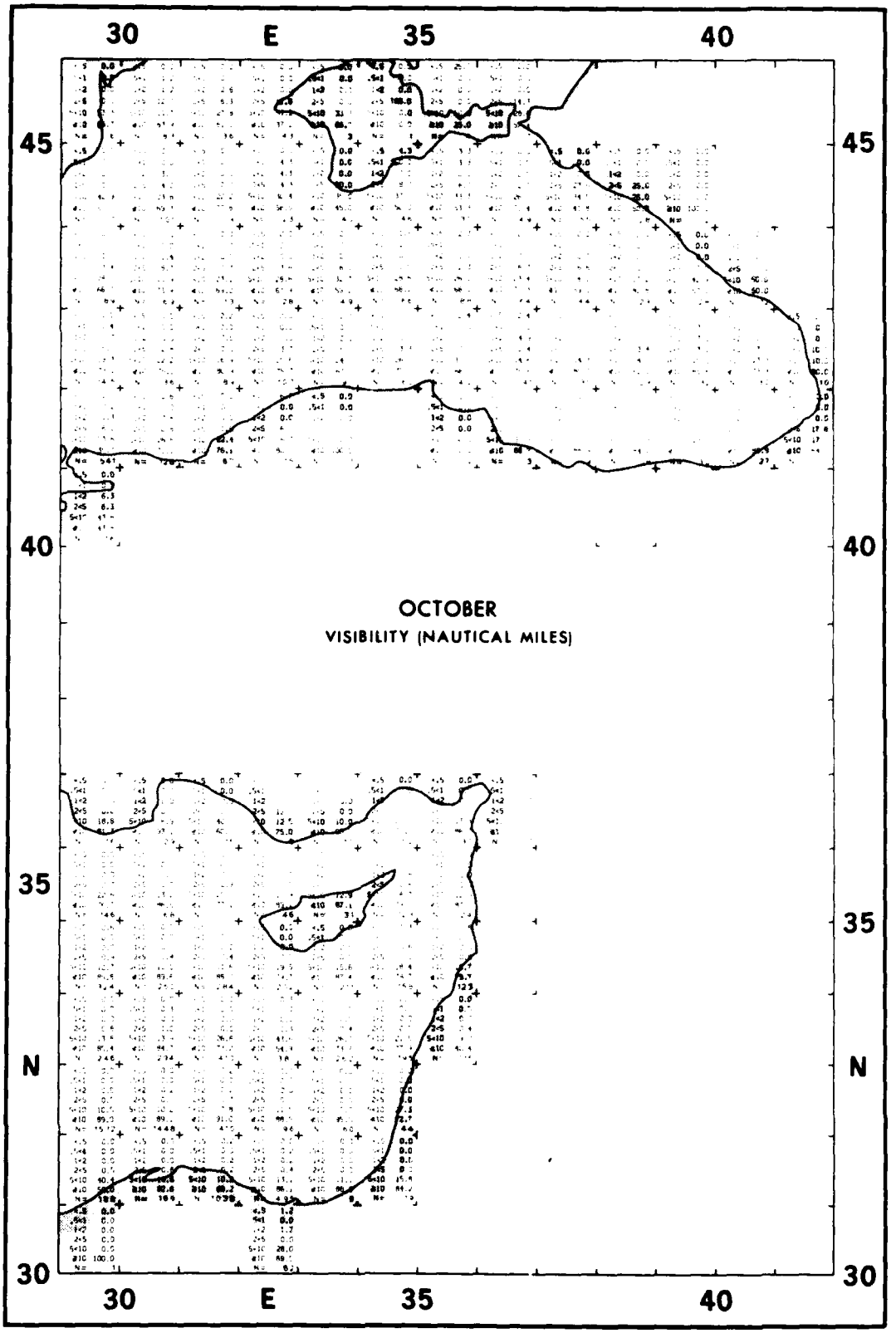

OCTOBER
CLOUD COVER
PERCENT FREQUENCY OF:
SOLID LINE - TOTAL CLOUD AMOUNT ≤2/8
DASHED LINE - LOW CLOUD AMOUNT ≥5/8
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

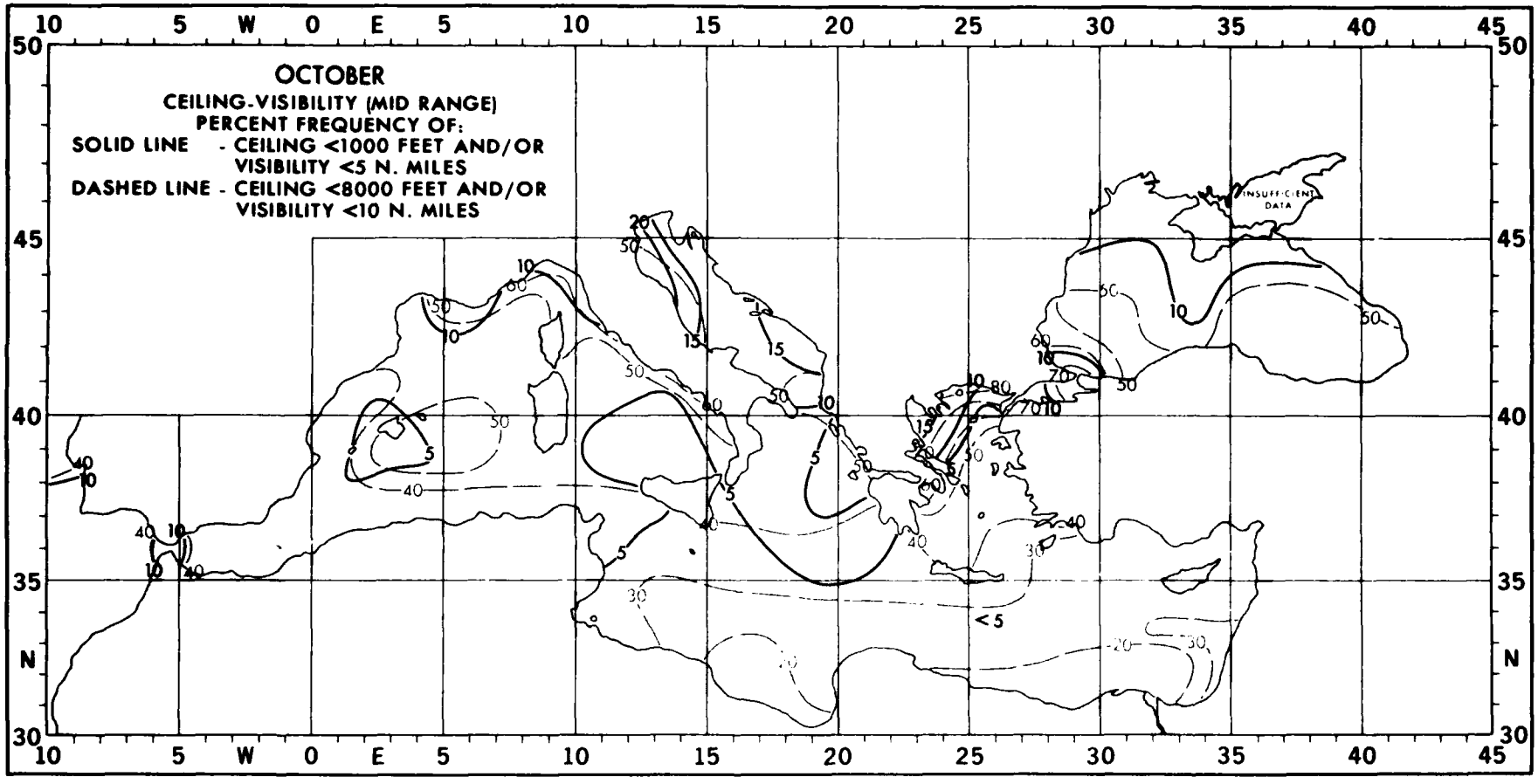

OCTOBER
PRECIPITATION
PERCENT FREQUENCY OF
OBSERVATIONS REPORTING PRECIPITATION
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

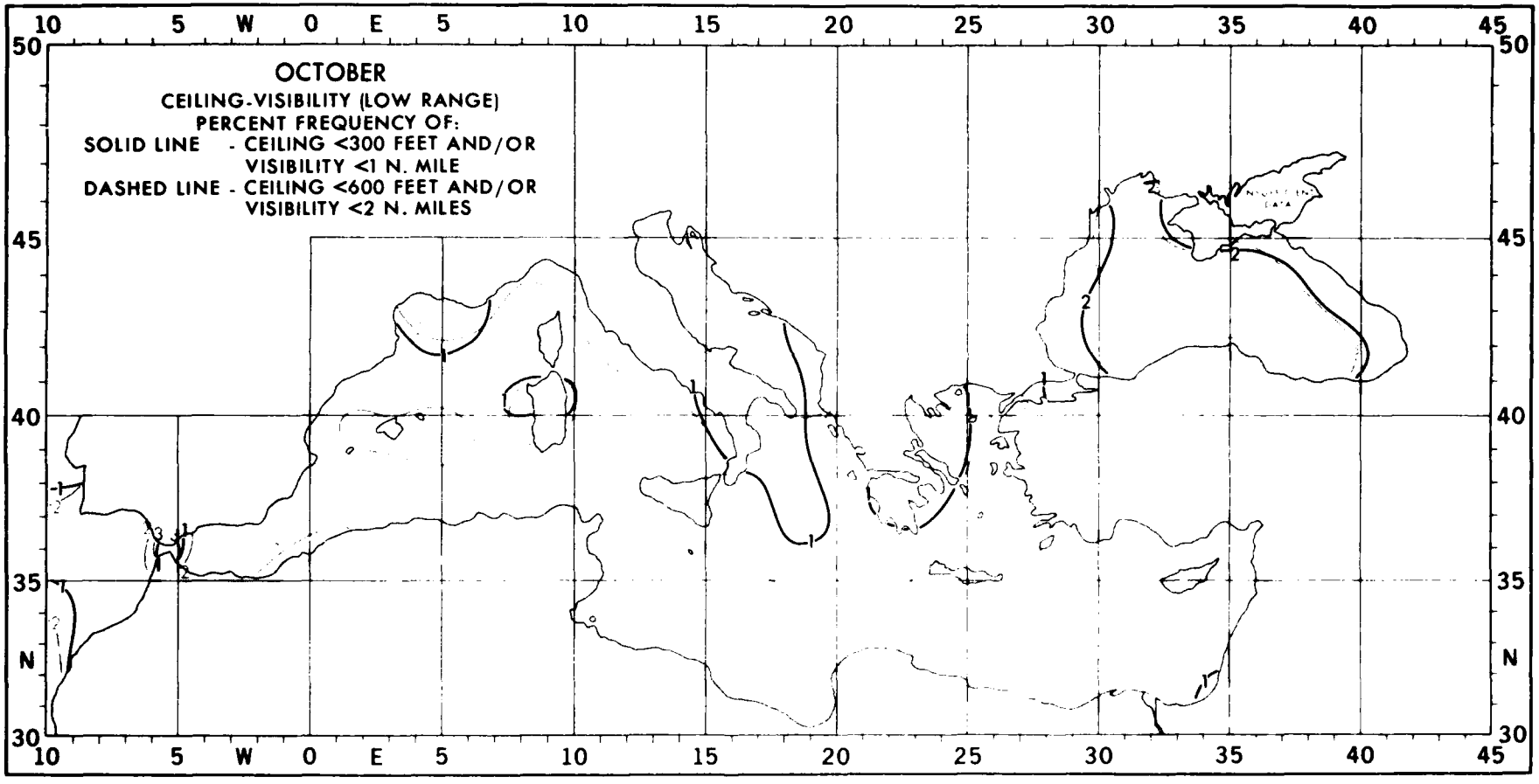

10
5
W
0
E
45
40
35
30
N
OCTOBER
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.

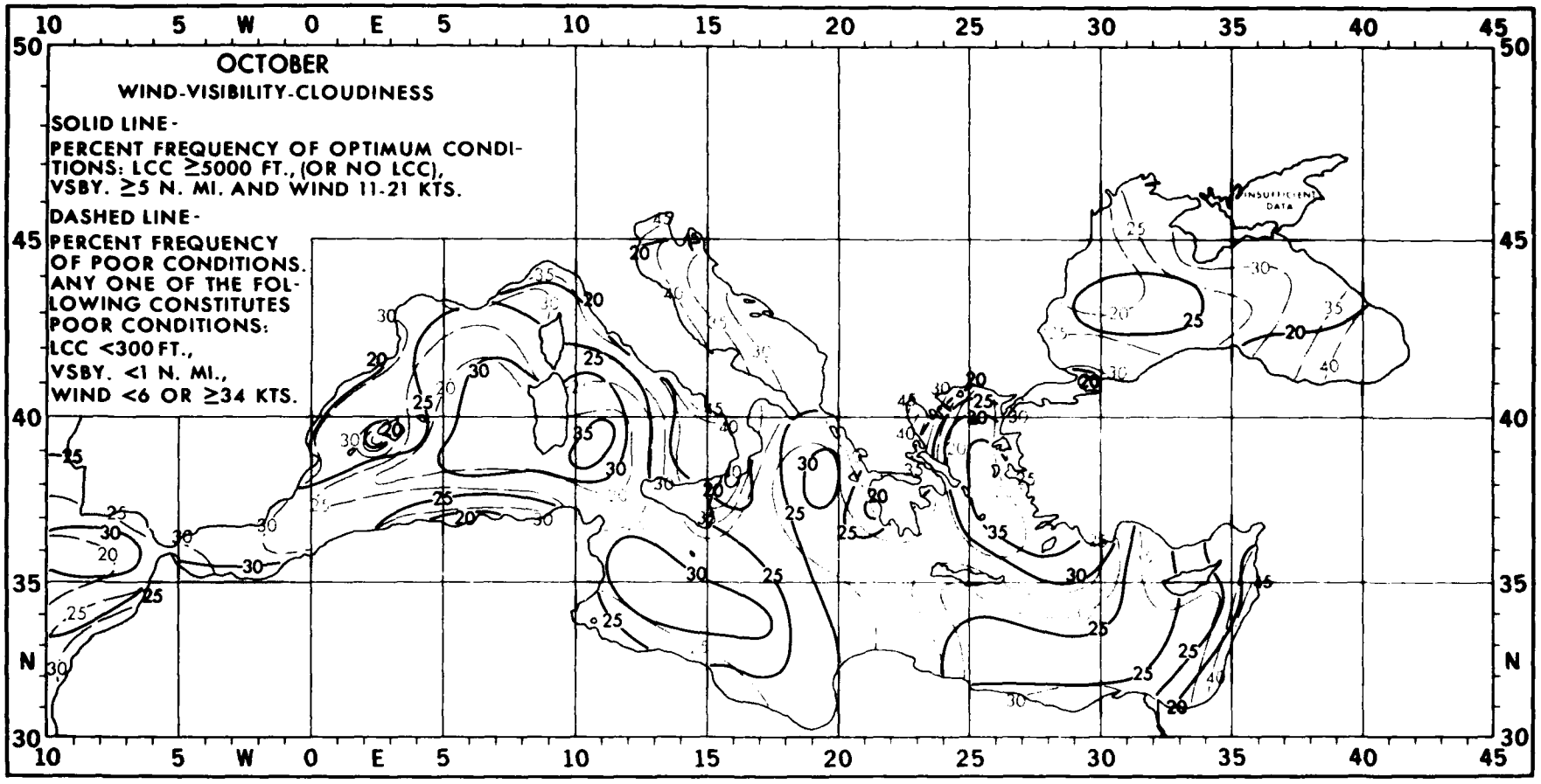

OCTOBER
VISIBILITY (NAUTICAL MILES)
5
E
10
15
45
40
35
30
N

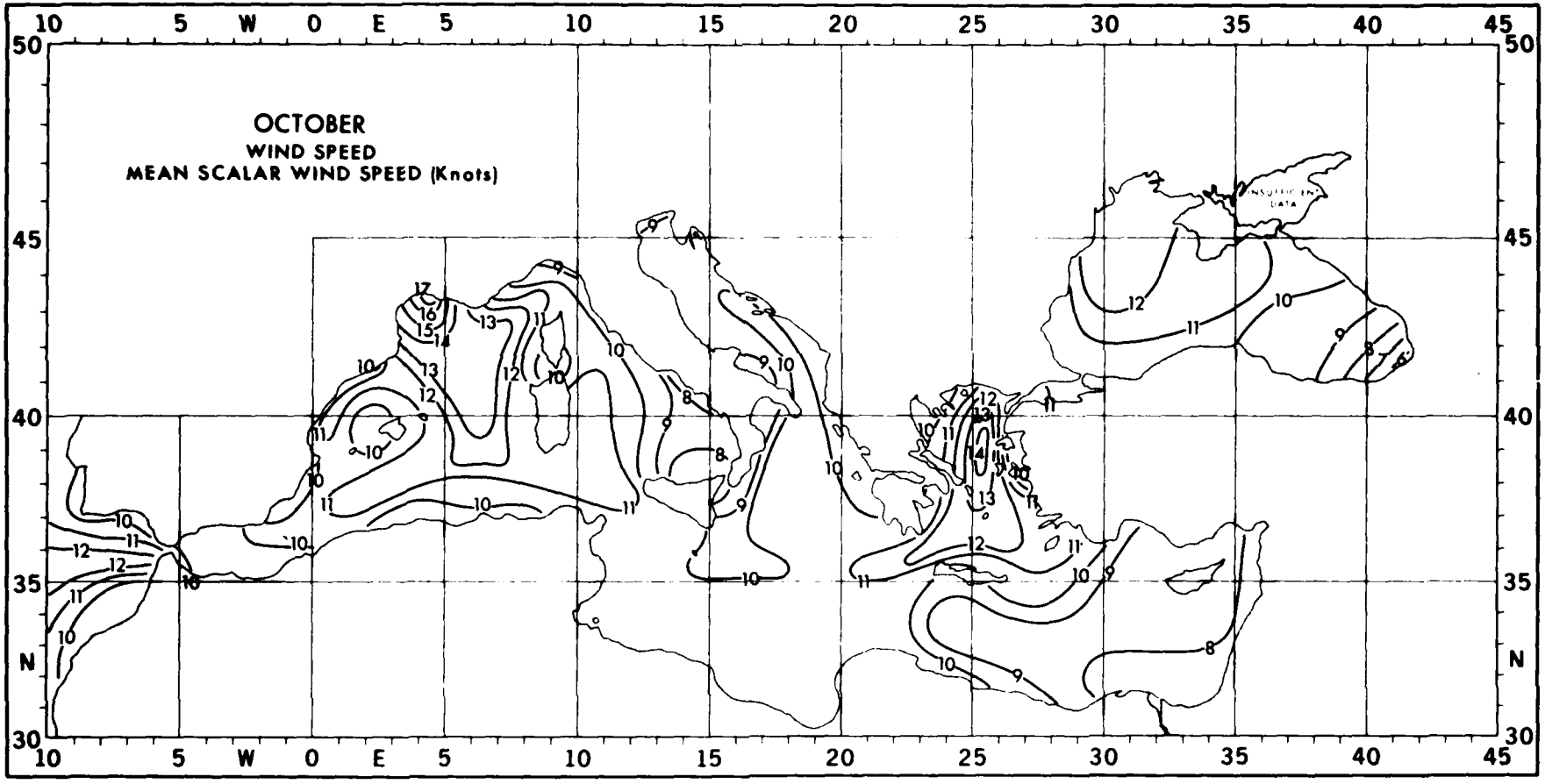

E
20
25
45
40
35
N
30
OCTOBER
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.

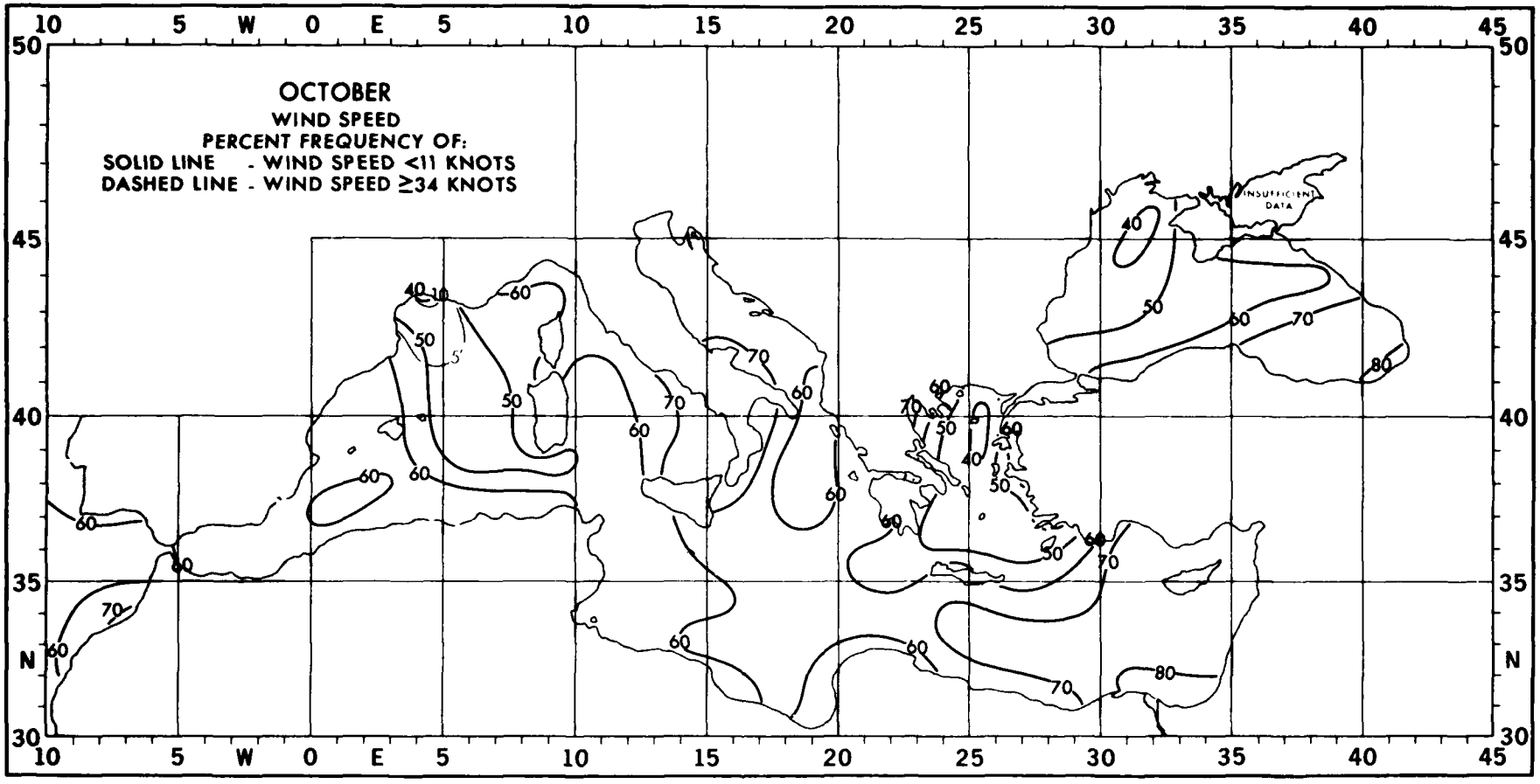

30
E
35
40
45
40
OCTOBER
VISIBILITY (NAUTICAL MILES)
35
N
30

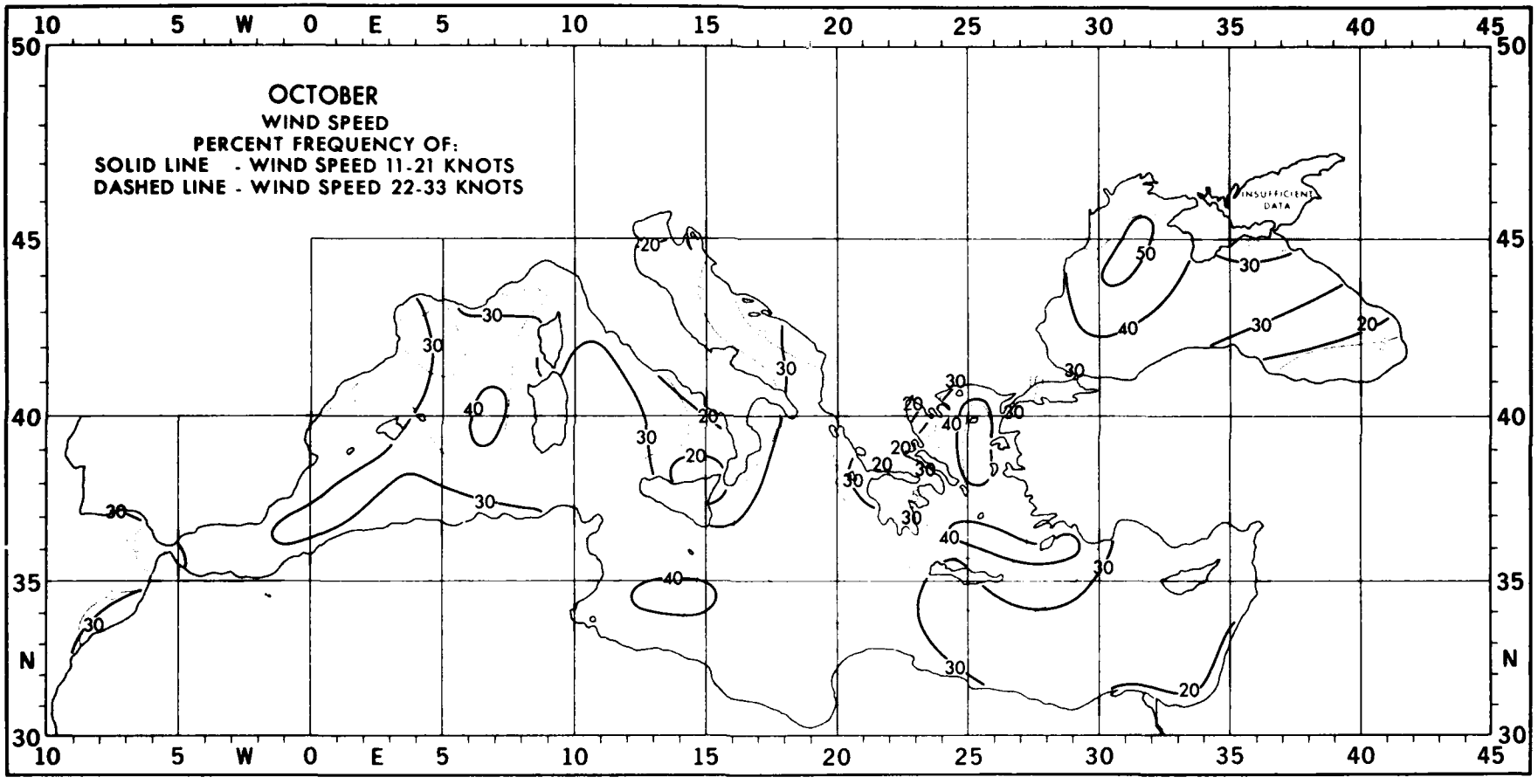

OCTOBER
CEILING-VISIBILITY (MID RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <1000 FEET AND/OR VISIBILITY <5 N. MILES
DASHED LINE - CEILING <8000 FEET AND/OR VISIBILITY <10 N. MILES
INSUFFICIENT DATA
<5
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

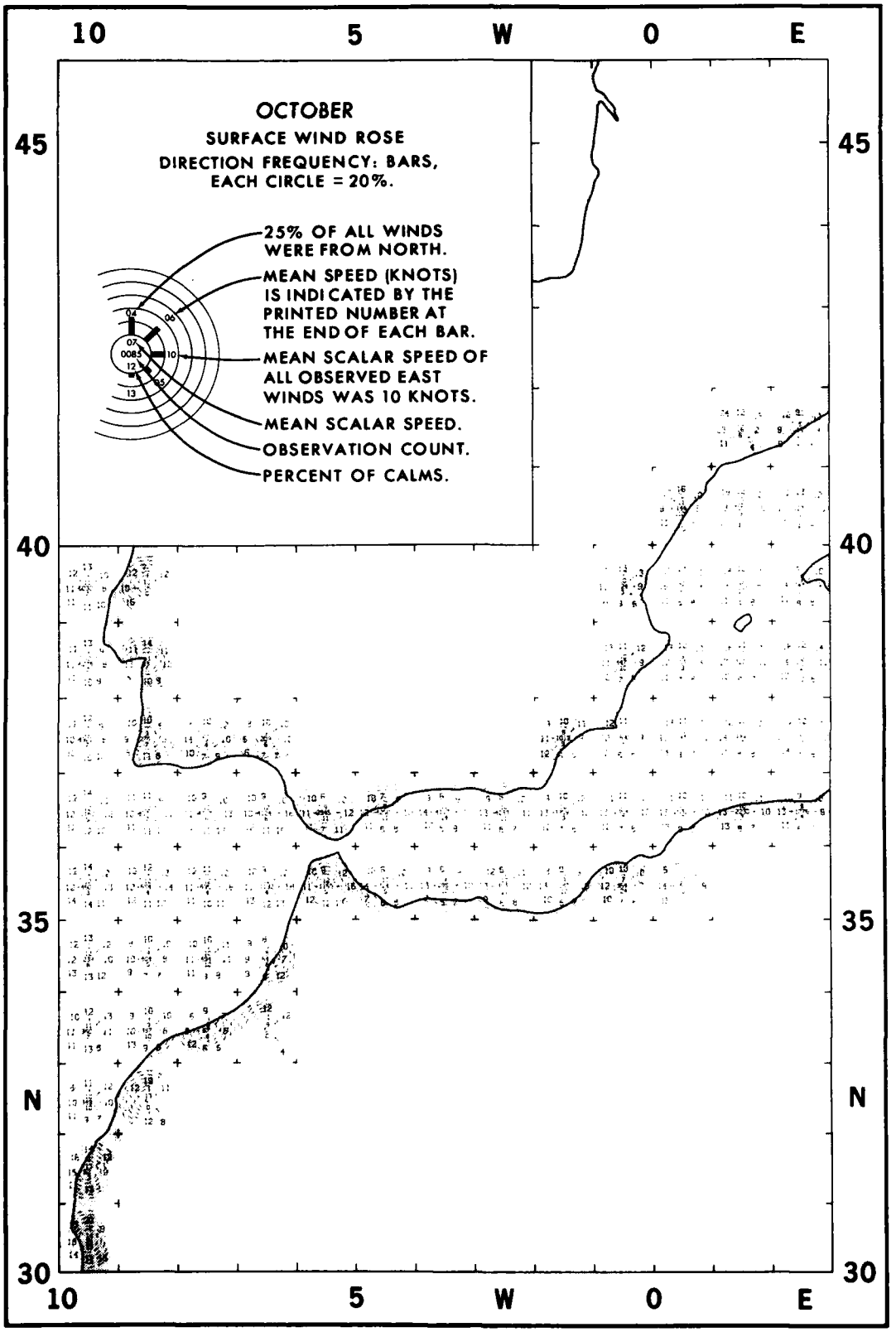

OCTOBER
CEILING-VISIBILITY (LOW RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <300 FEET AND/OR VISIBILITY <1 N. MILE
DASHED LINE - CEILING <600 FEET AND/OR VISIBILITY <2 N. MILES
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

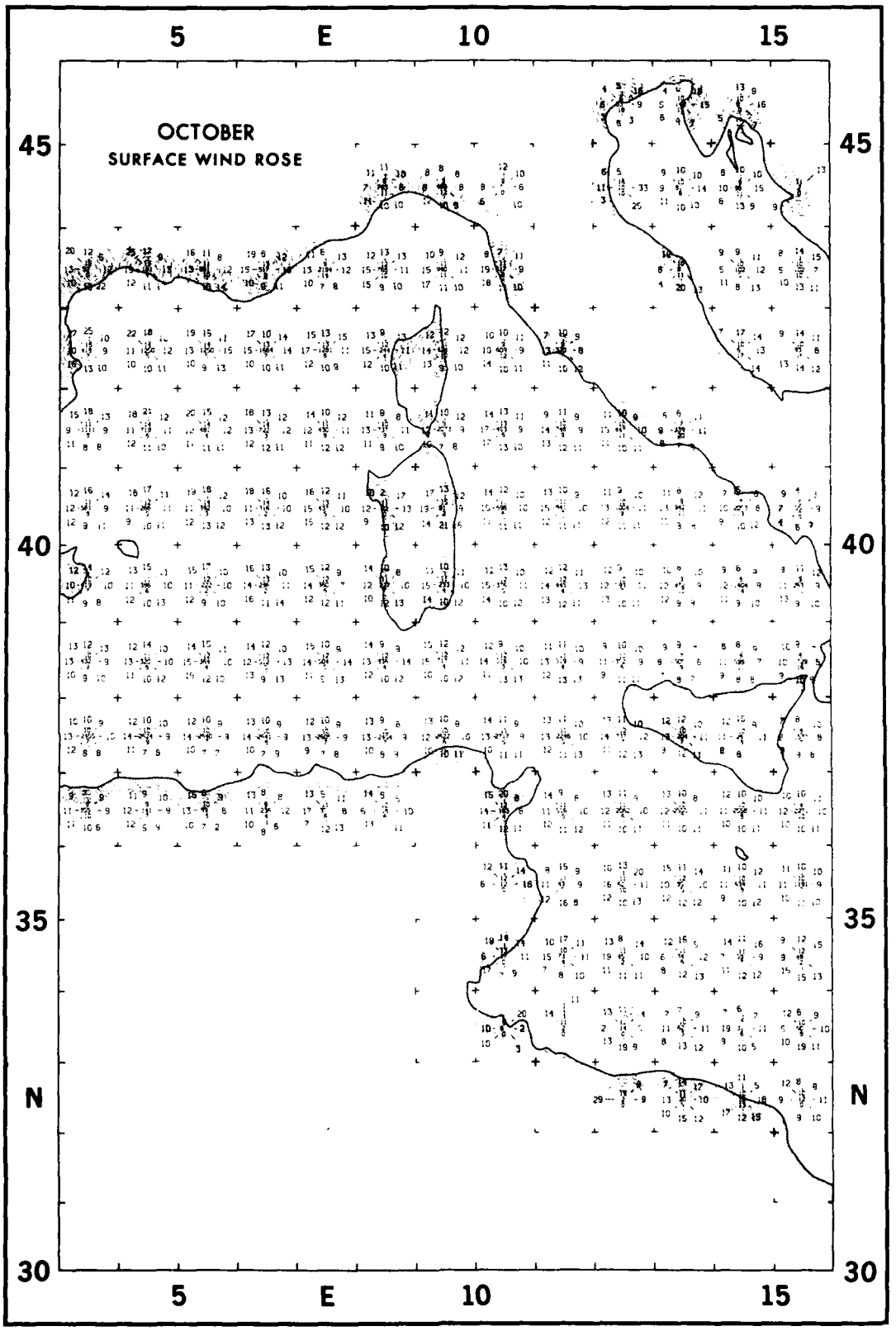

OCTOBER
WIND-VISIBILITY-CLOUDINESS
SOLID LINE-
PERCENT FREQUENCY OF OPTIMUM CONDITIONS: LCC ≥5000 FT., (OR NO LCC), VSBY. ≥5 N. MI. AND WIND 11-21 KTS.
DASHED LINE-
PERCENT FREQUENCY OF POOR CONDITIONS. ANY ONE OF THE FOLLOWING CONSTITUTES POOR CONDITIONS:
LCC <300 FT.,
VSBY. <1 N. MI.,
WIND <6 OR ≥34 KTS.
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

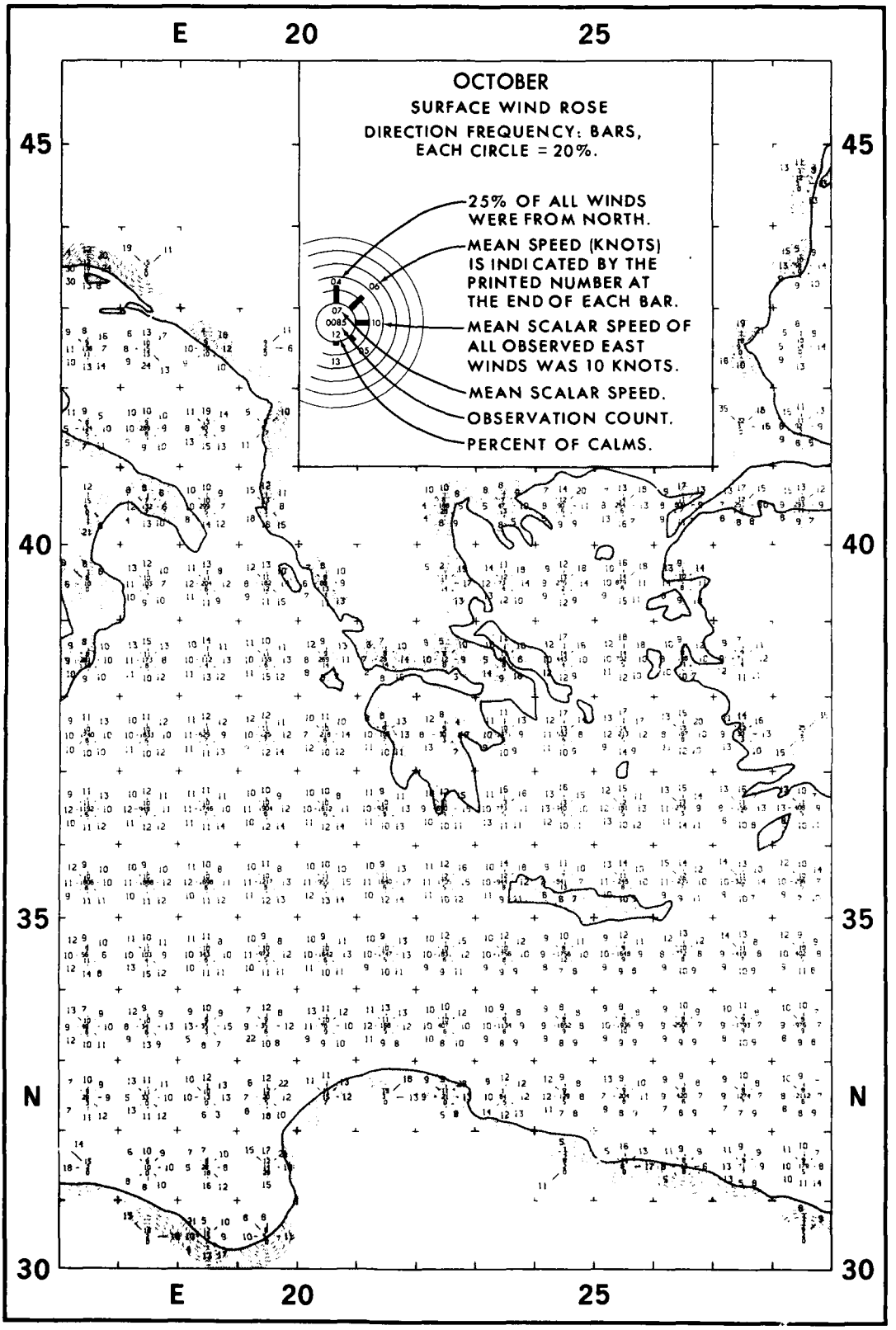

OCTOBER
WIND SPEED
MEAN SCALAR WIND SPEED (Knots)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

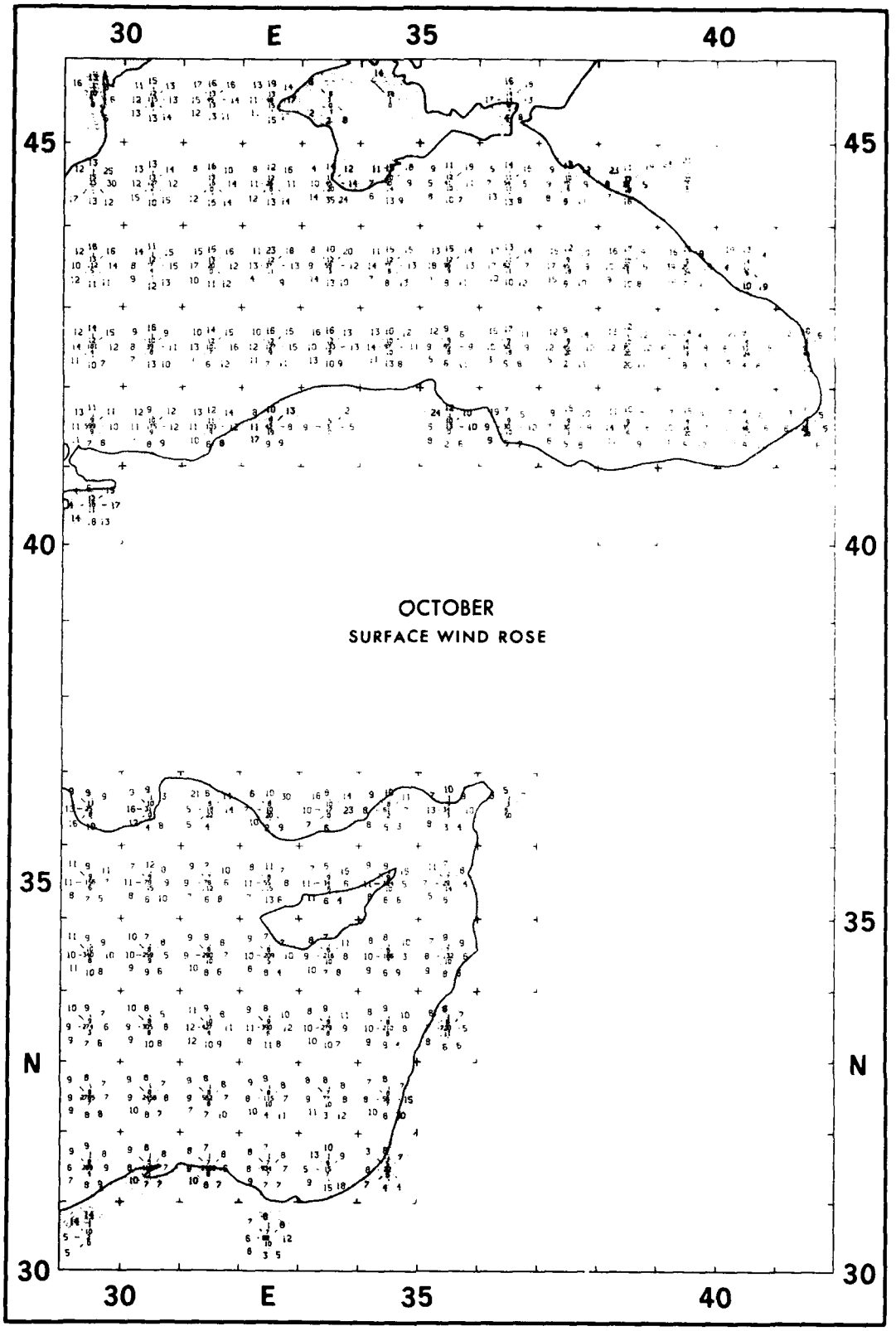

OCTOBER
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED <11 KNOTS
DASHED LINE - WIND SPEED ≥34 KNOTS
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

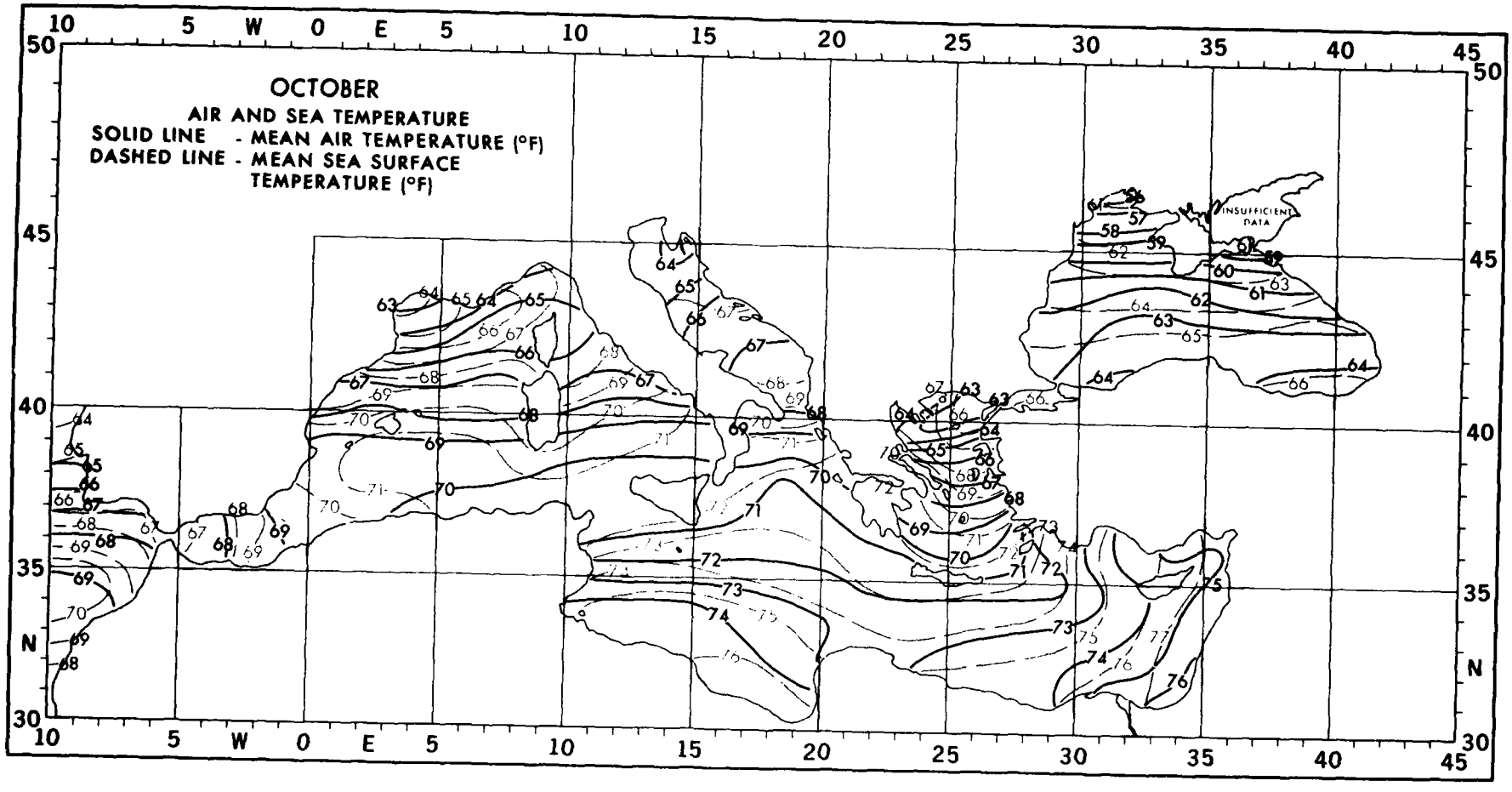

OCTOBER
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED 11-21 KNOTS
DASHED LINE - WIND SPEED 22-33 KNOTS
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

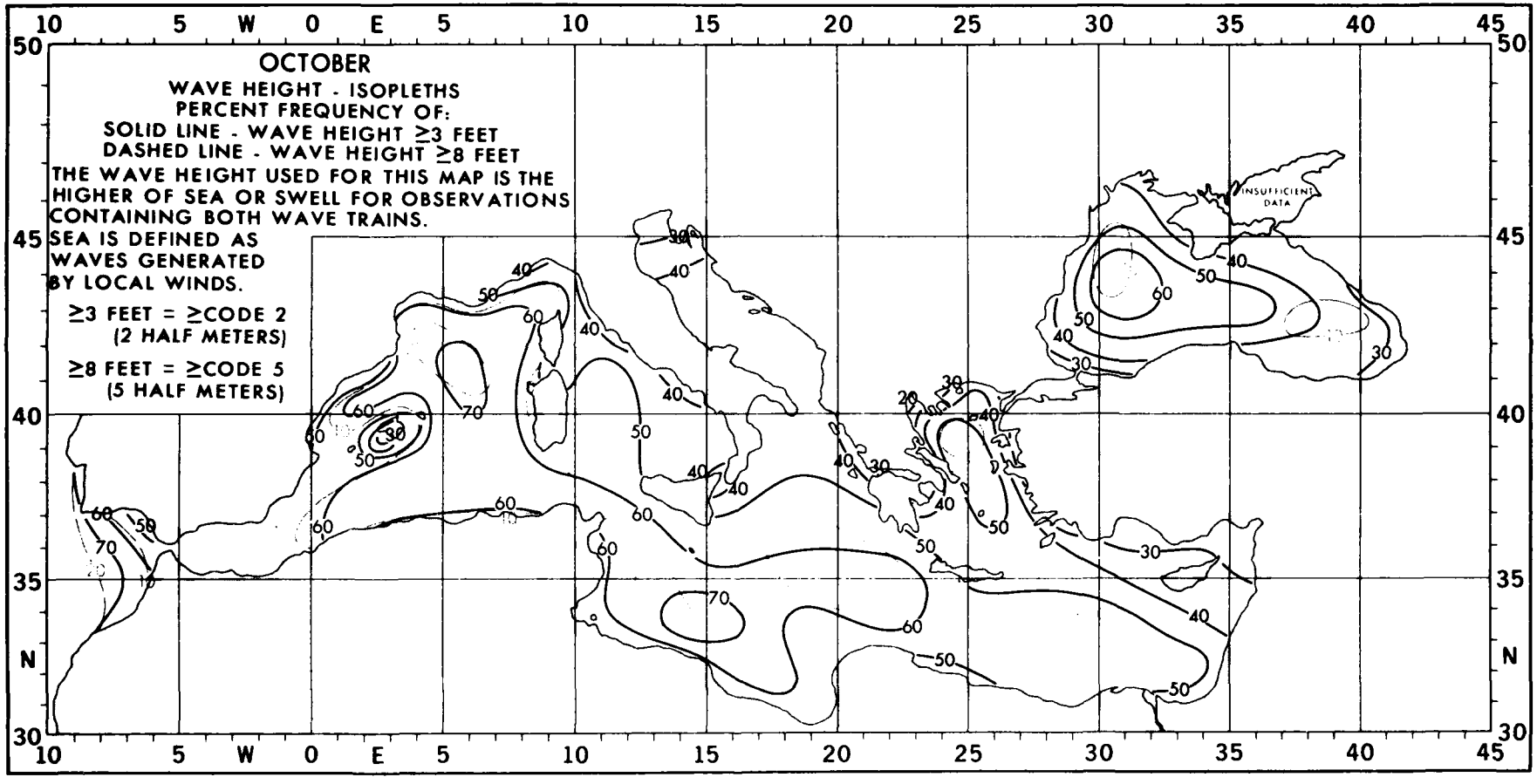

10
5
W
0
E
45
40
35
N
30
OCTOBER
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS,
EACH CIRCLE = 20%.
25% OF ALL WINDS WERE FROM NORTH.
MEAN SPEED (KNOTS) IS INDICATED BY THE PRINTED NUMBER AT THE END OF EACH BAR.
MEAN SCALAR SPEED OF ALL OBSERVED EAST WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.

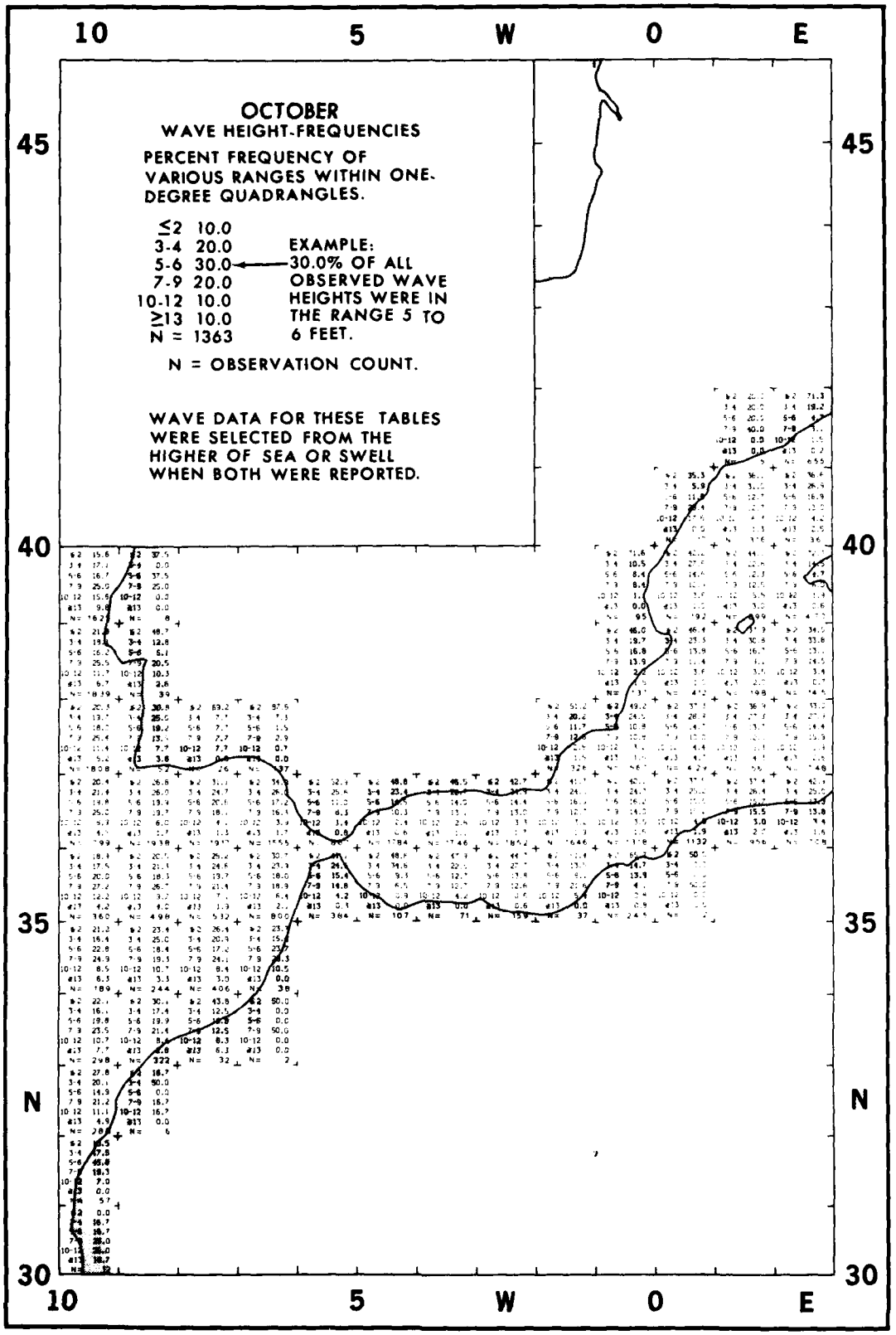

OCTOBER
SURFACE WIND ROSE
5
E
10
15
45
40
35
N
30

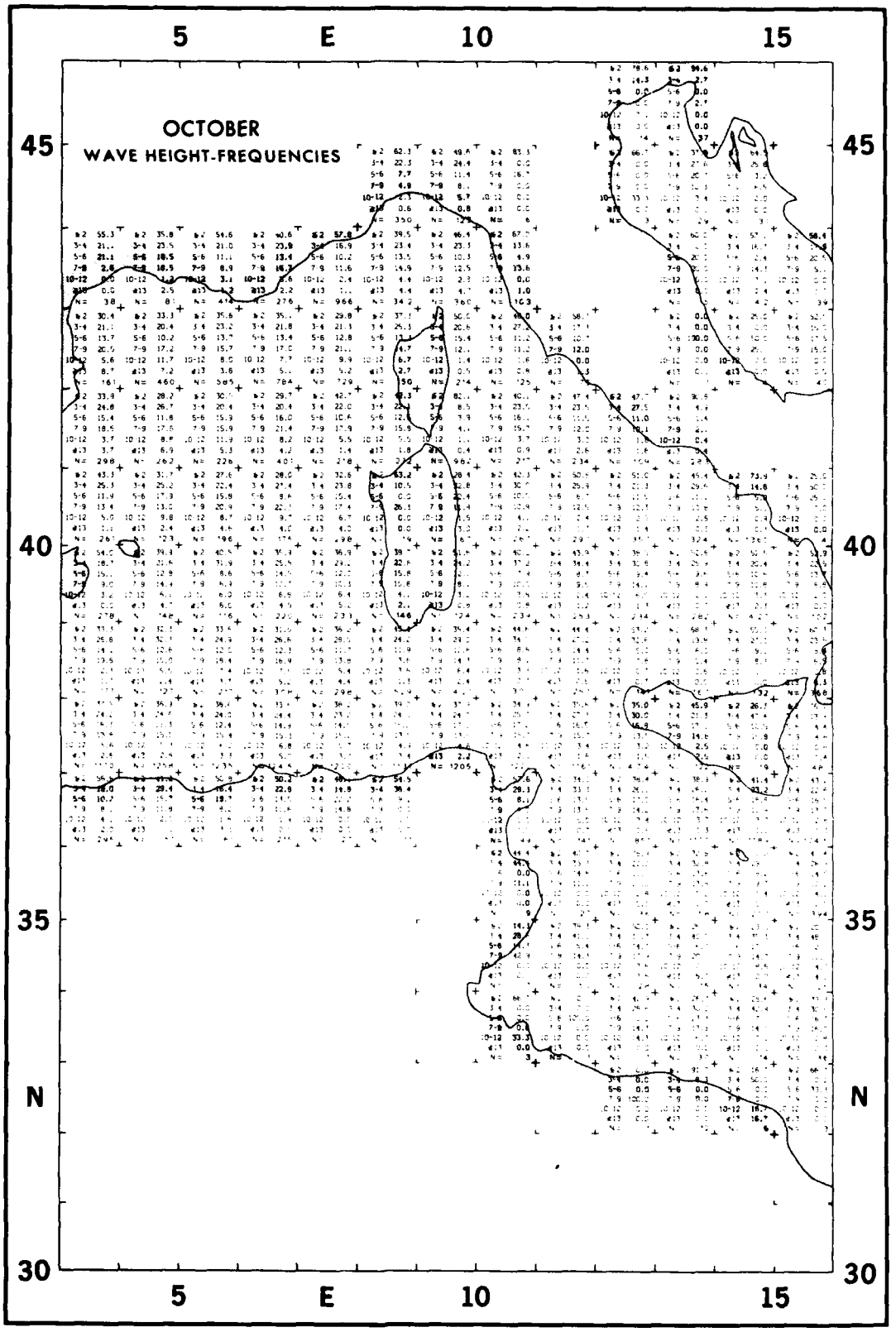

E
20
25
45
40
35
N
30
OCTOBER
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS,
EACH CIRCLE = 20%.
25% OF ALL WINDS WERE FROM NORTH.
MEAN SPEED (KNOTS) IS INDICATED BY THE PRINTED NUMBER AT THE END OF EACH BAR.
MEAN SCALAR SPEED OF ALL OBSERVED EAST WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.

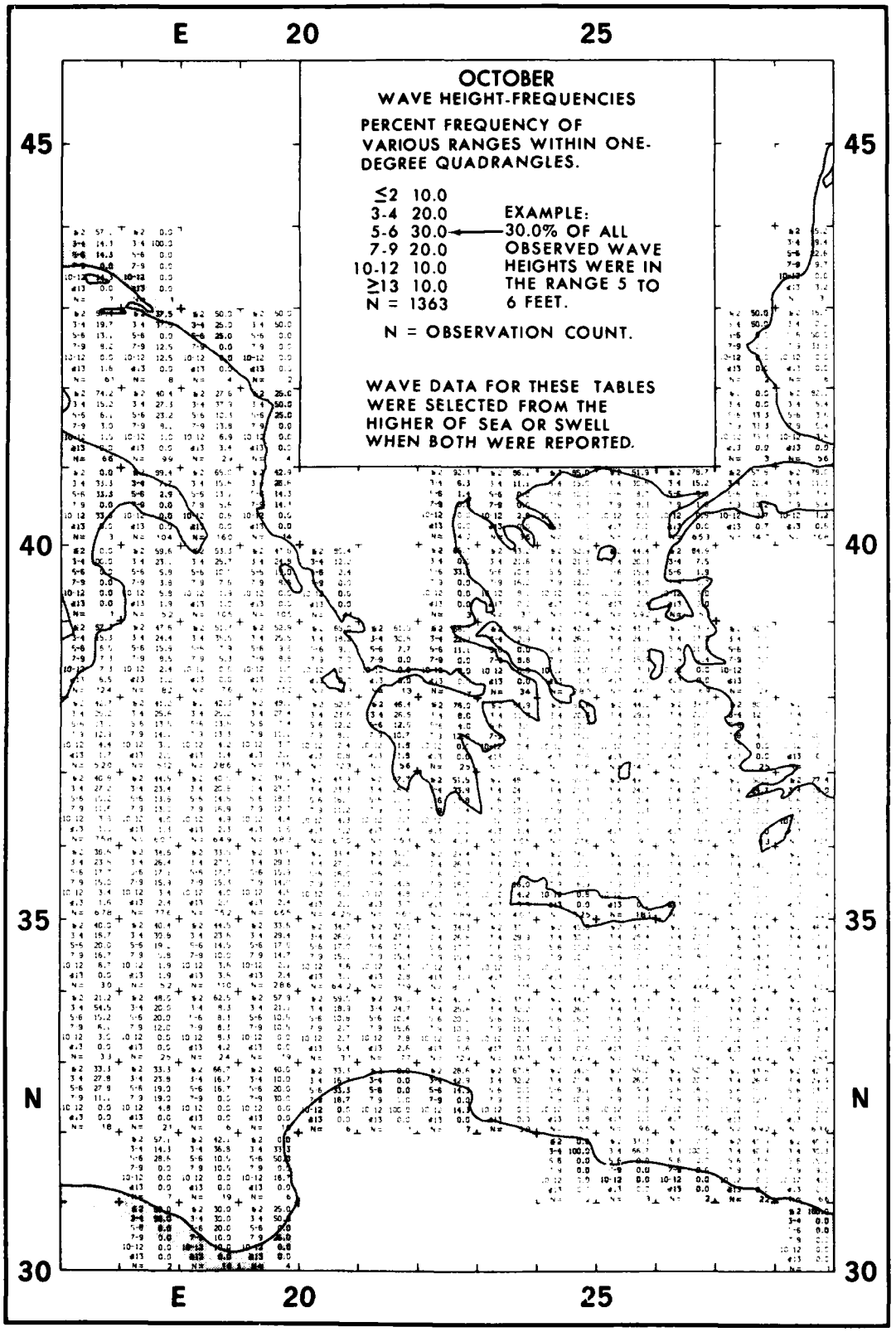

30
E
35
40
45
40
35
N
30
OCTOBER
SURFACE WIND ROSE

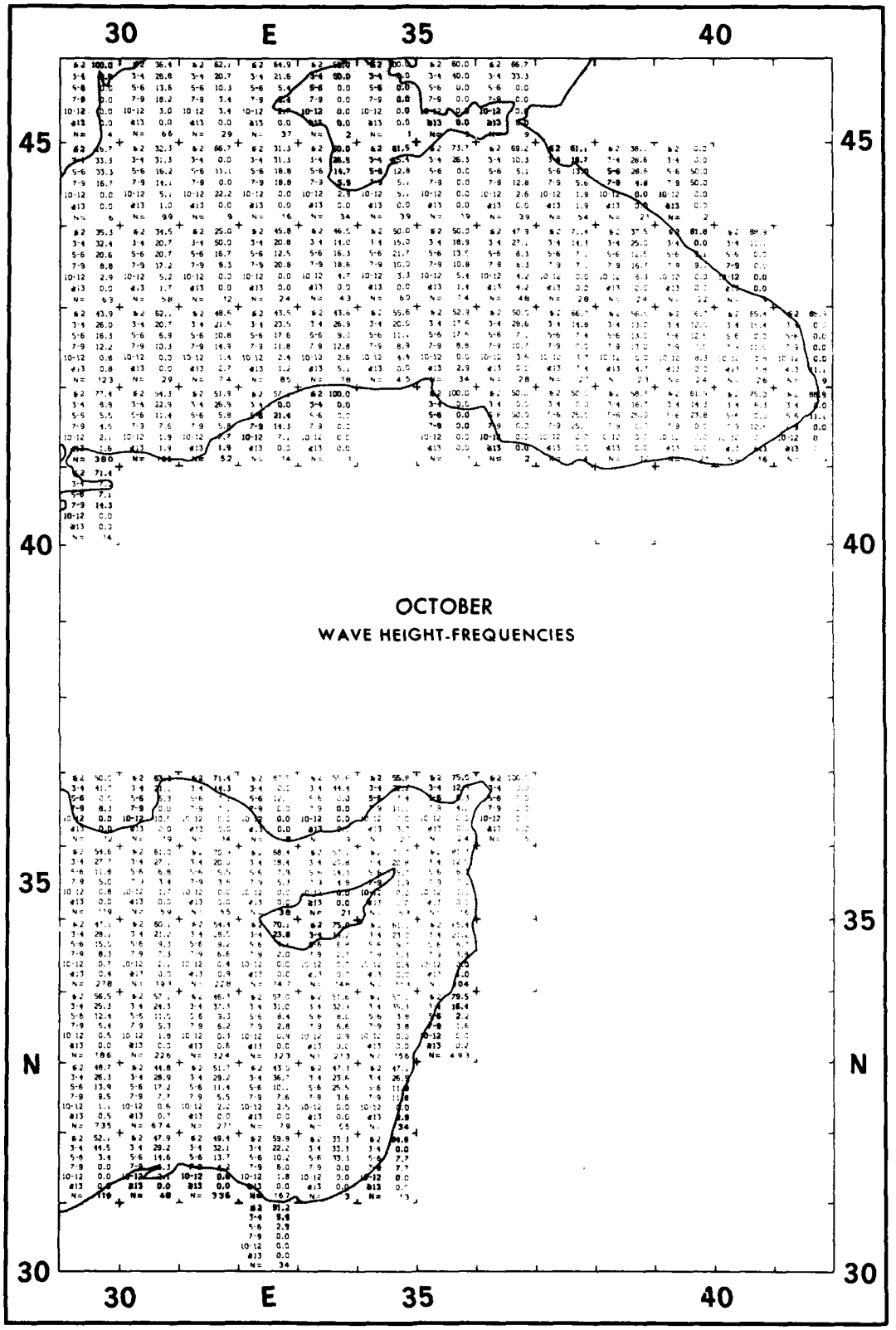

OCTOBER
AIR AND SEA TEMPERATURE
SOLID LINE - MEAN AIR TEMPERATURE (°F)
DASHED LINE - MEAN SEA SURFACE TEMPERATURE (°F)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

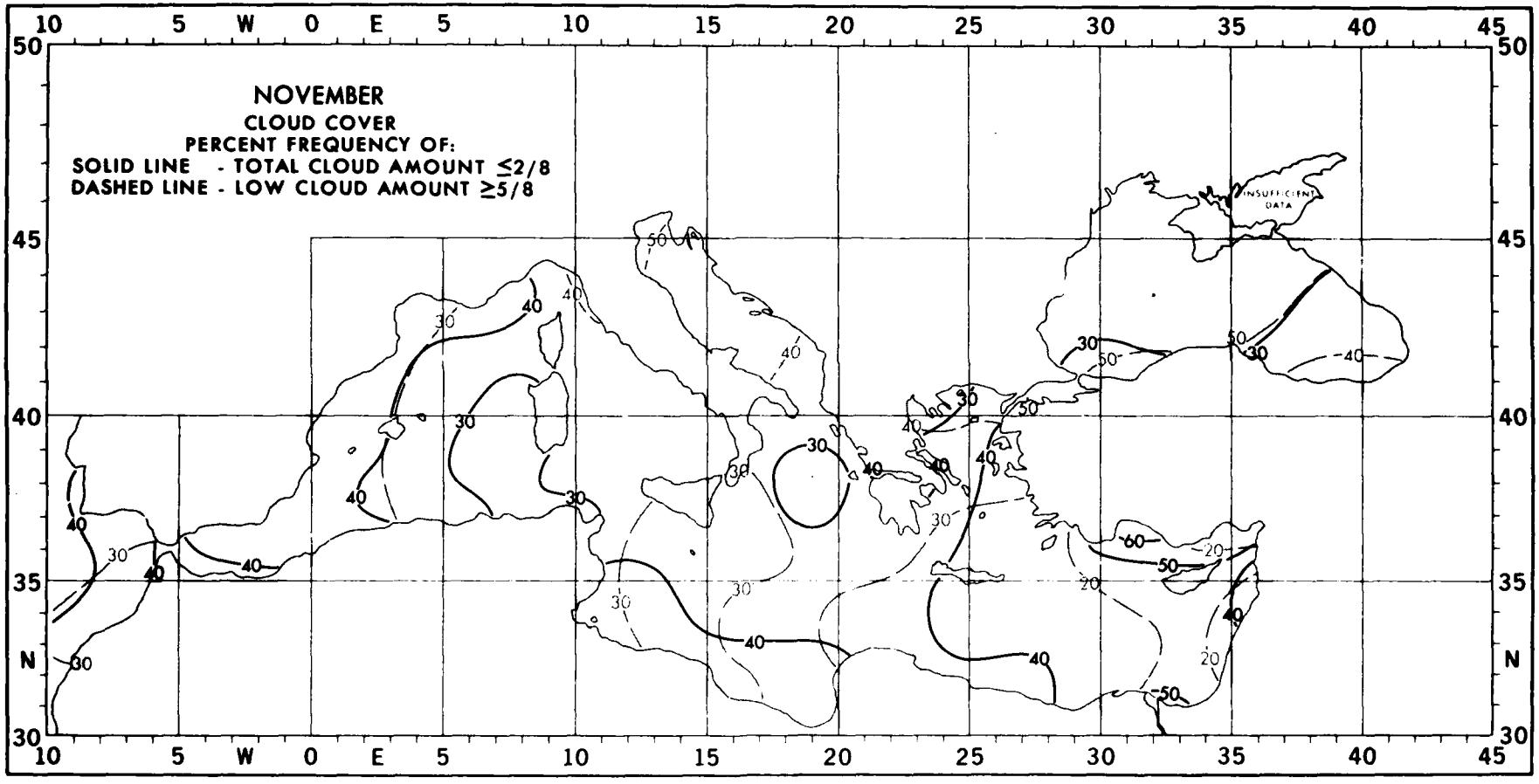

OCTOBER
WAVE HEIGHT - ISOPLETHS
PERCENT FREQUENCY OF:
SOLID LINE - WAVE HEIGHT ≥3 FEET
DASHED LINE - WAVE HEIGHT ≥8 FEET
THE WAVE HEIGHT USED FOR THIS MAP IS THE HIGHER OF SEA OR SWELL FOR OBSERVATIONS CONTAINING BOTH WAVE TRAINS.
SEA IS DEFINED AS WAVES GENERATED BY LOCAL WINDS.
≥3 FEET = ≥CODE 2 (2 HALF METERS)
≥8 FEET = ≥CODE 5 (5 HALF METERS)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

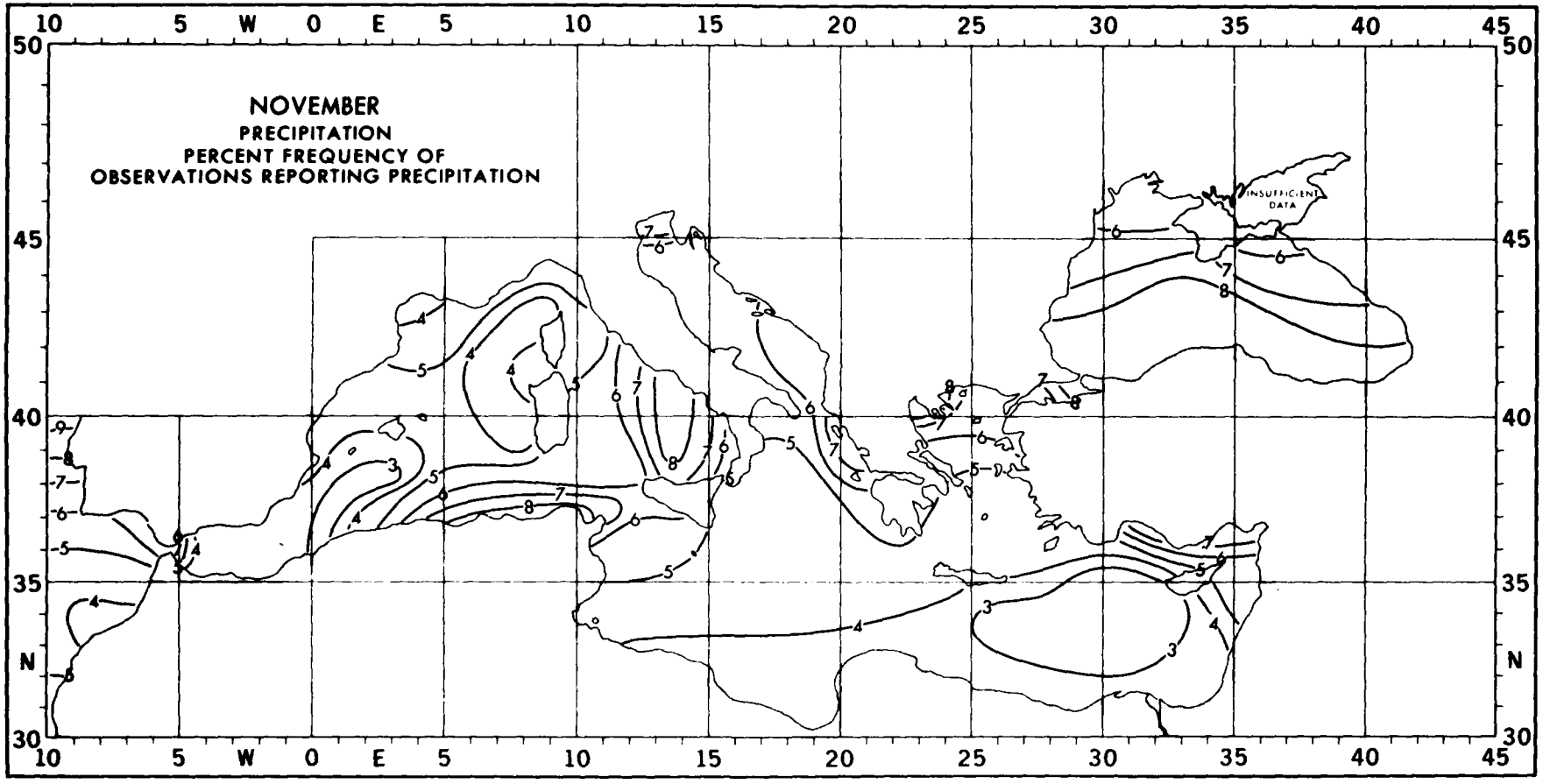

10
5
W
0
E
45
40
35
30
N
OCTOBER
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.

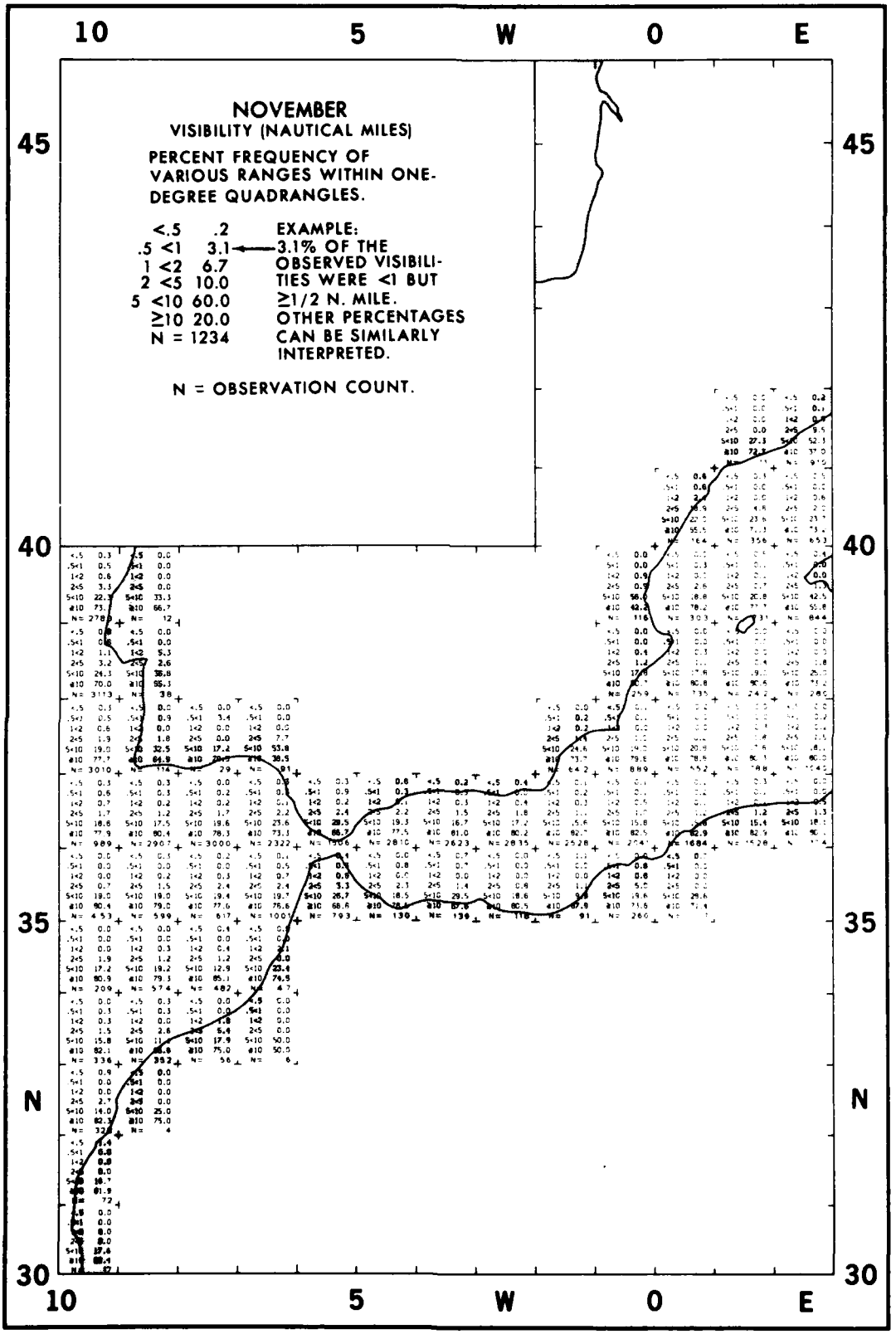

OCTOBER
WAVE HEIGHT-FREQUENCIES
5
E
10
15
45
40
35
N
30

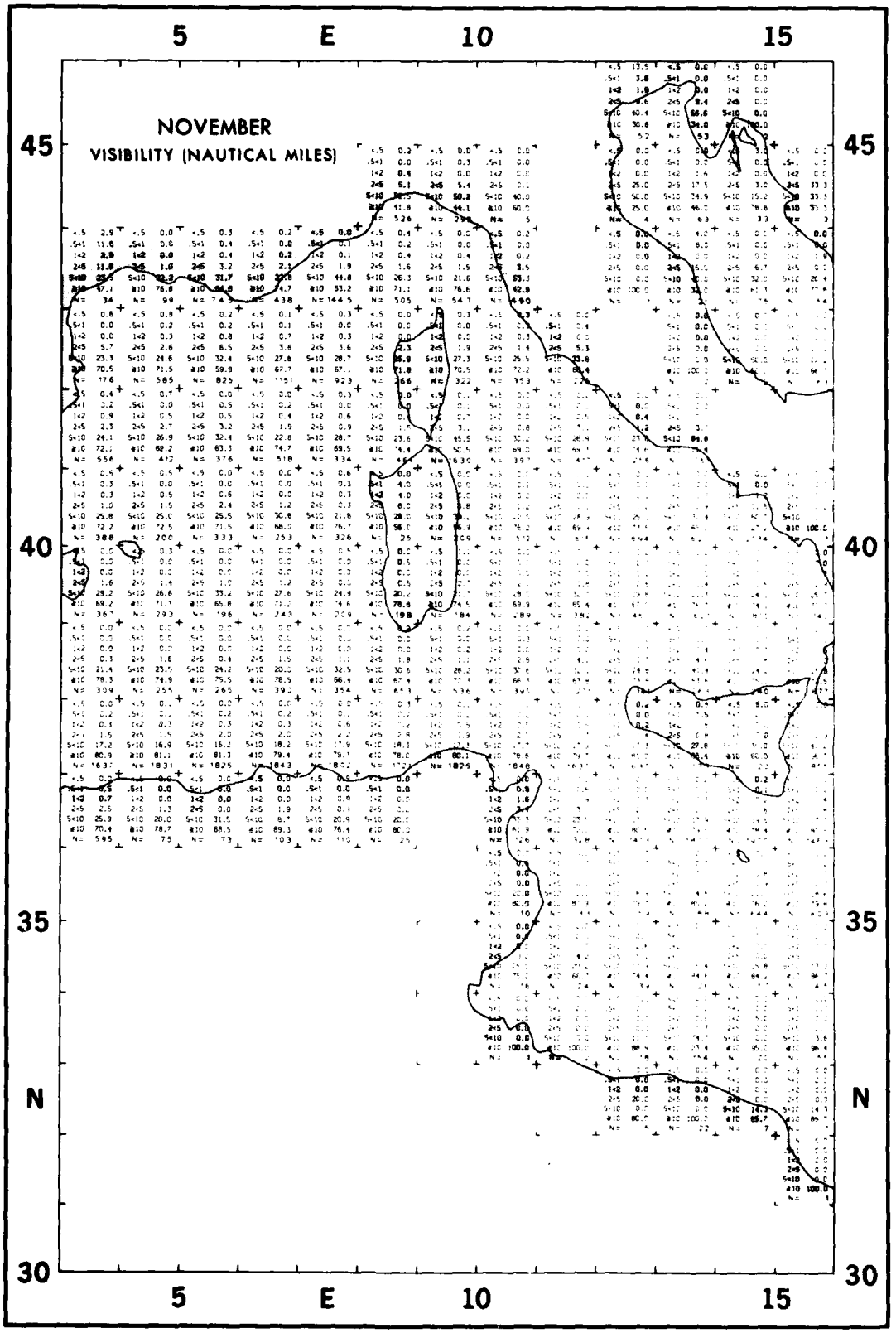

E
20
25
45
40
35
N
30
OCTOBER
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.

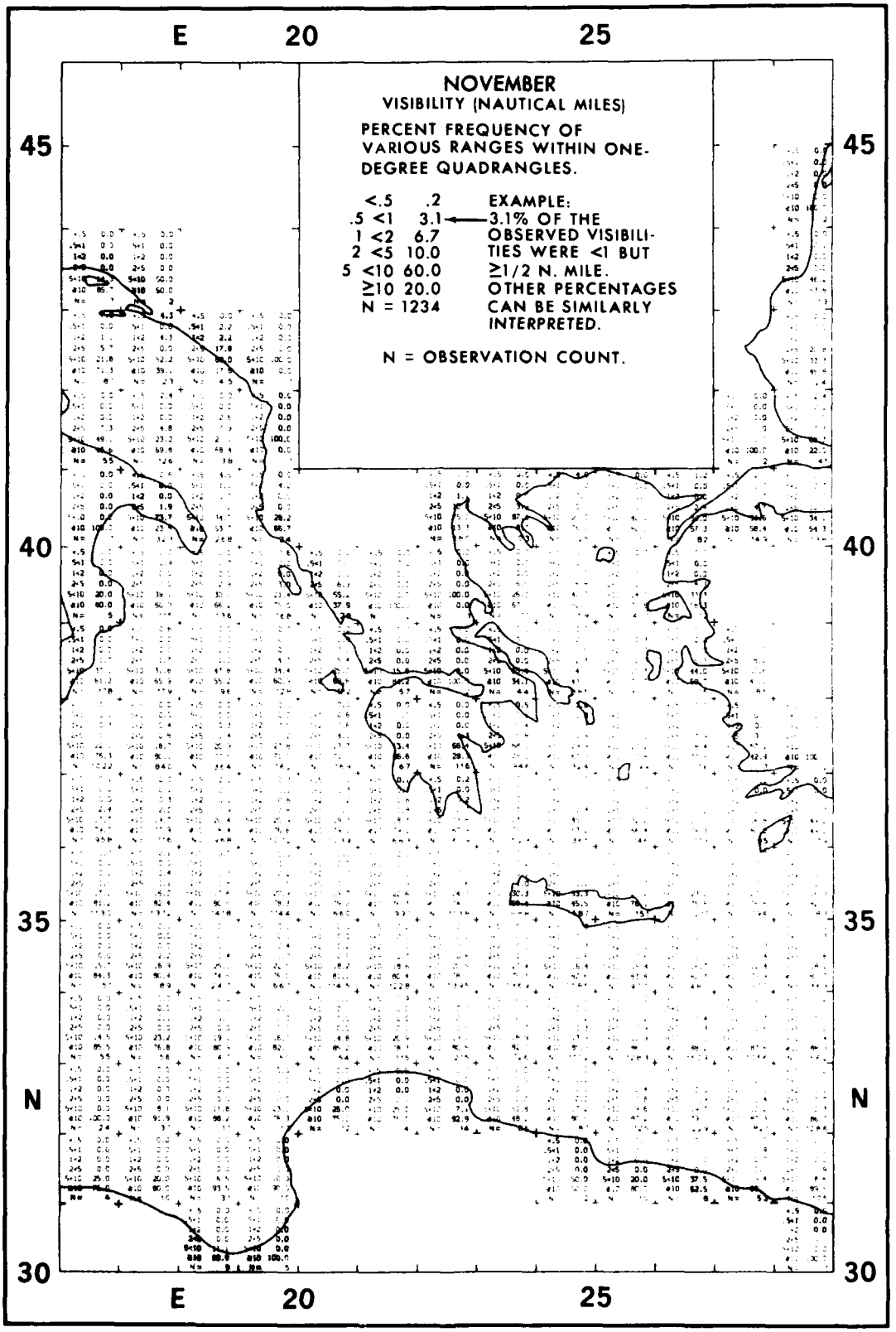

30
E
35
40
45
40
35
N
30
OCTOBER
WAVE HEIGHT-FREQUENCIES

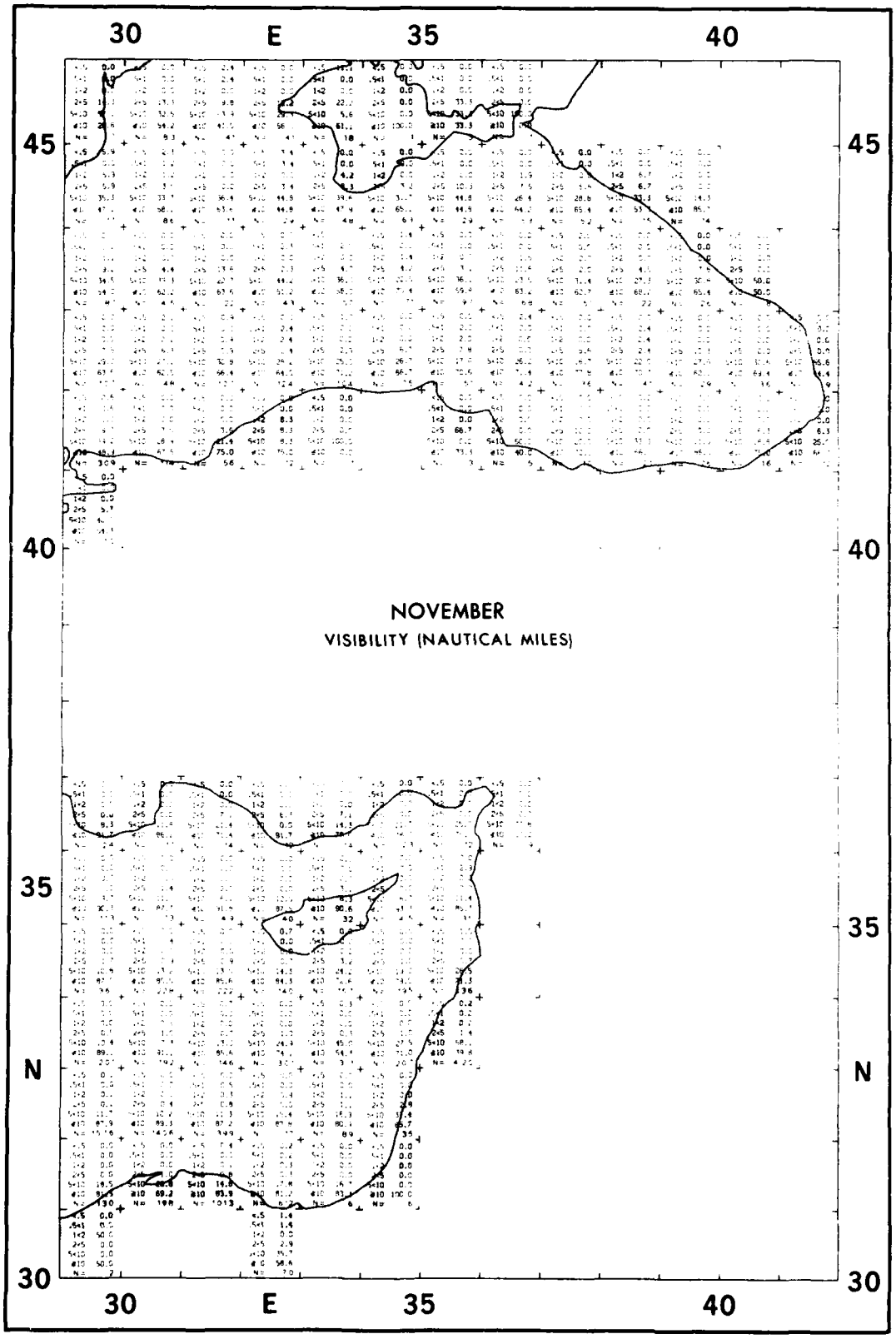

NOVEMBER
CLOUD COVER
PERCENT FREQUENCY OF:
SOLID LINE - TOTAL CLOUD AMOUNT ≤2/8
DASHED LINE - LOW CLOUD AMOUNT ≥5/8
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

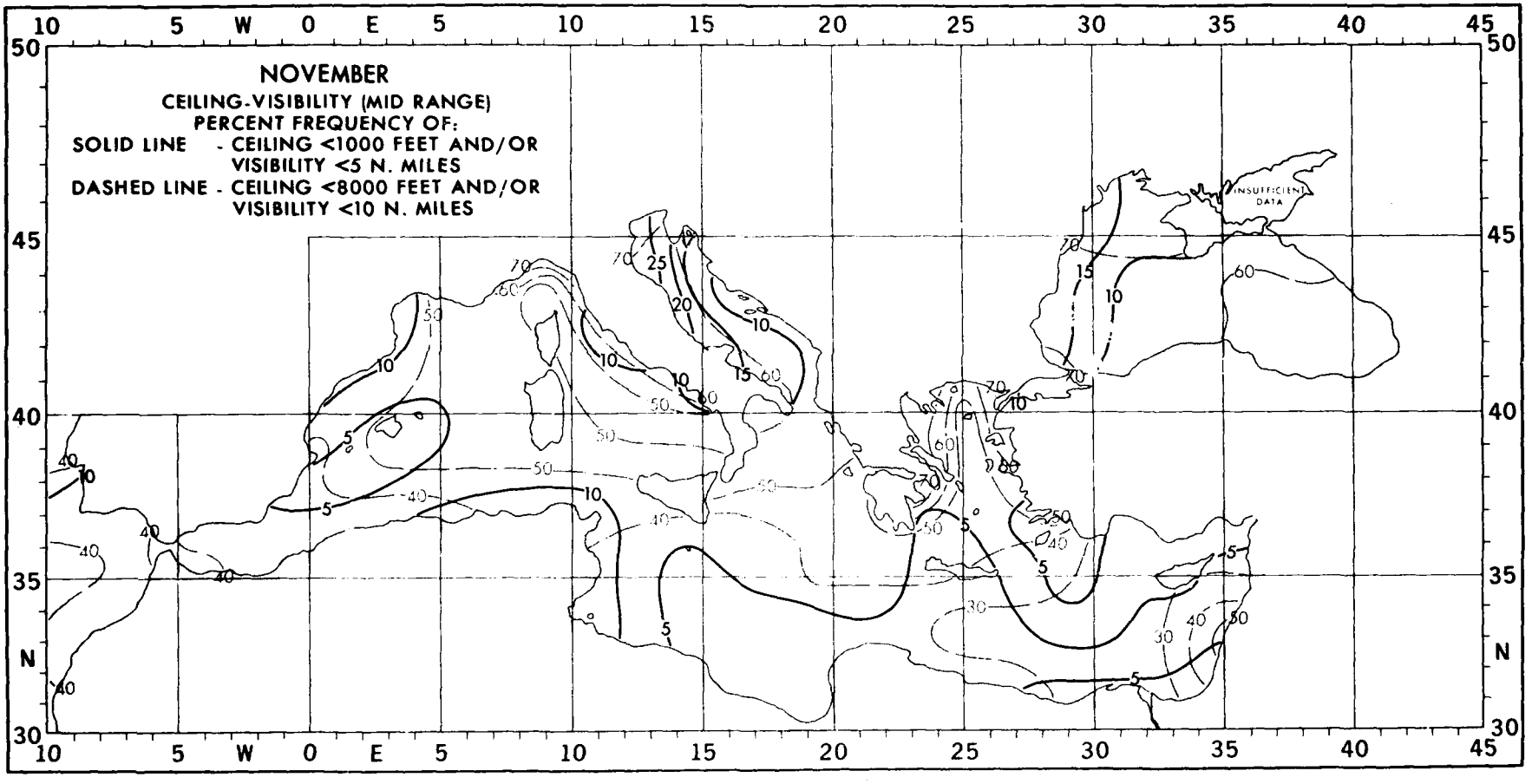

NOVEMBER
PRECIPITATION
PERCENT FREQUENCY OF
OBSERVATIONS REPORTING PRECIPITATION
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

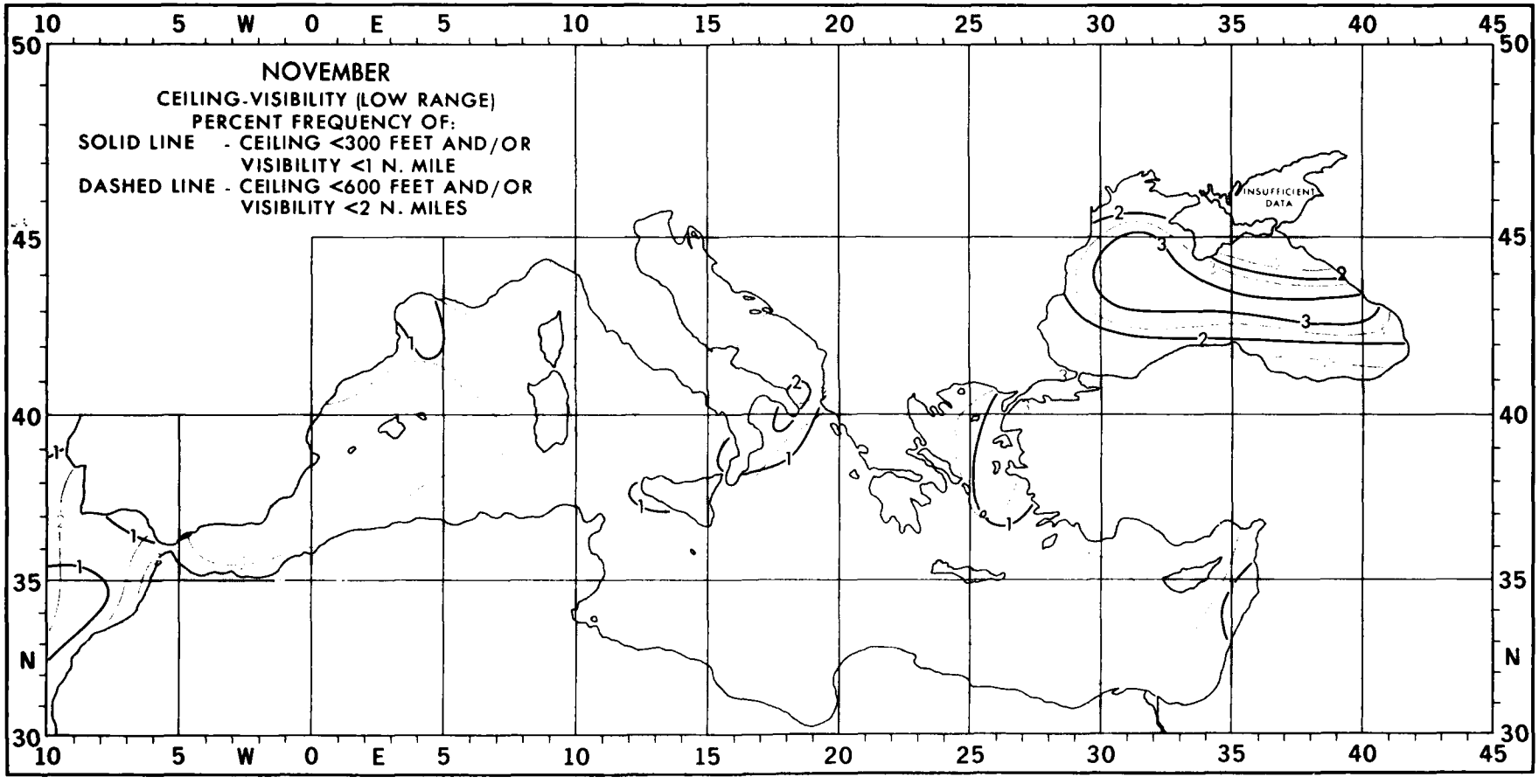

10
5
W
0
E
45
40
35
N
30
NOVEMBER
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.

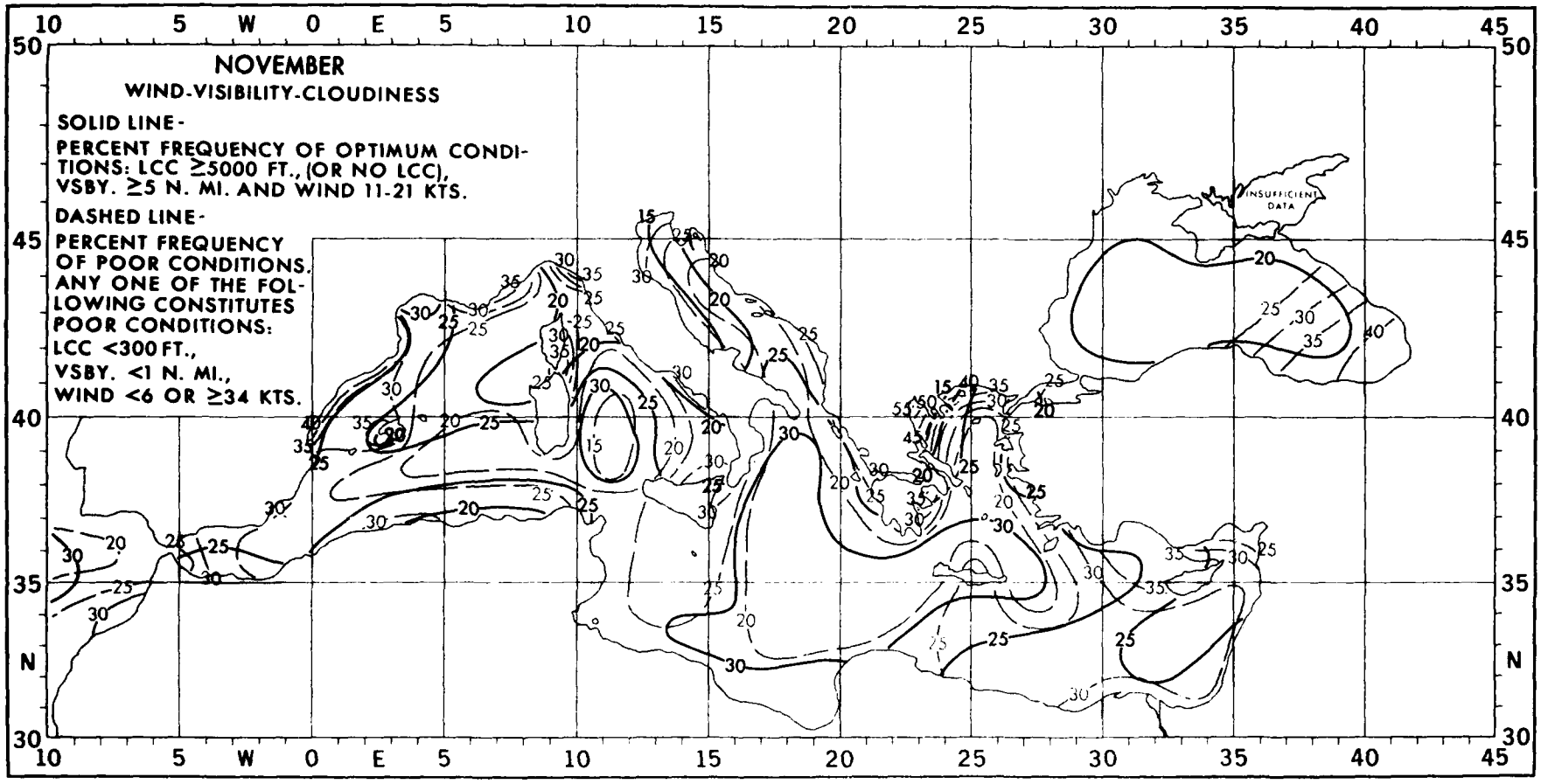

NOVEMBER
VISIBILITY (NAUTICAL MILES)
5
E
10
15
45
40
35
N
30

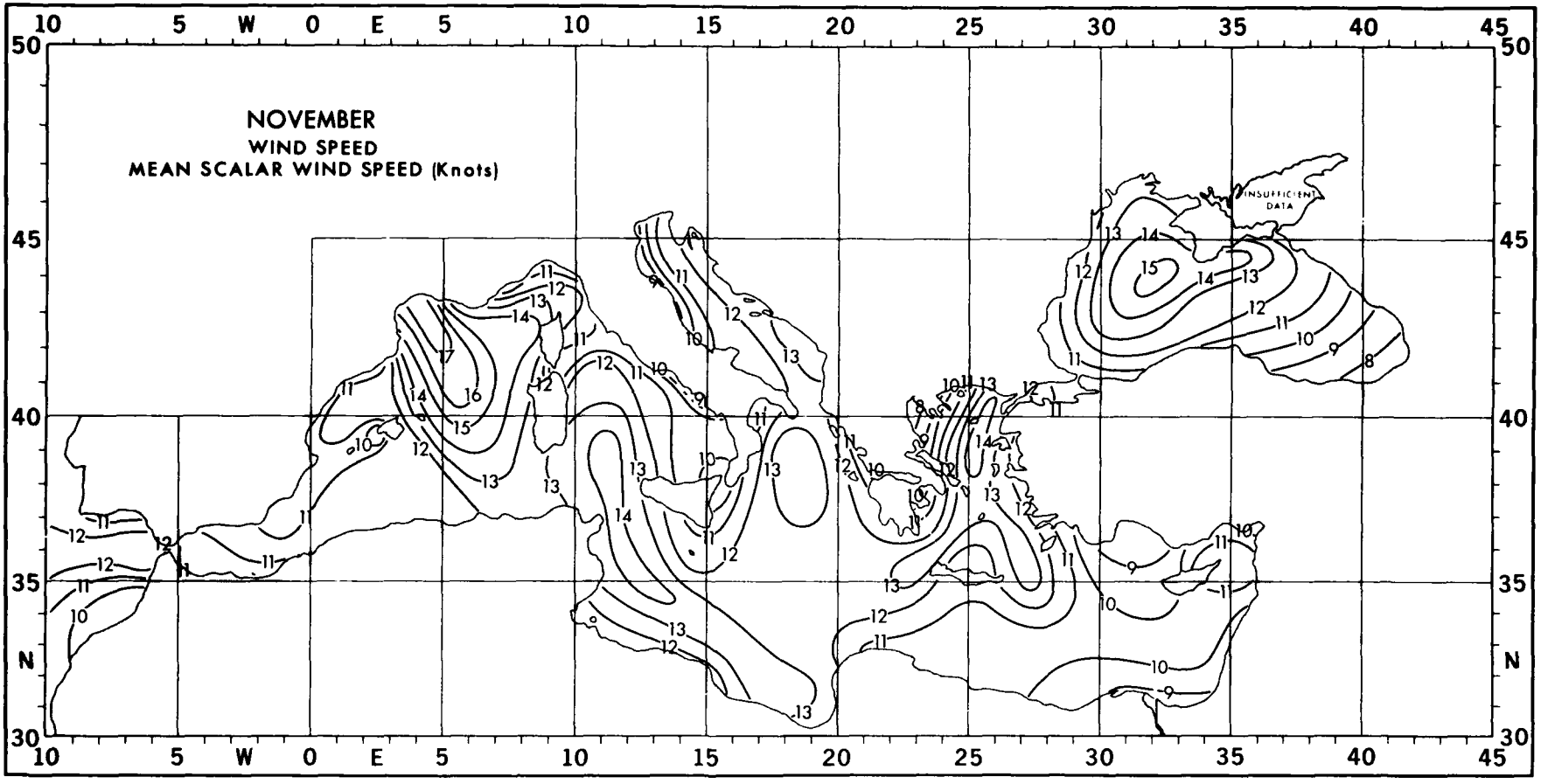

NOVEMBER
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.
E
20
25
45
40
35
30
N

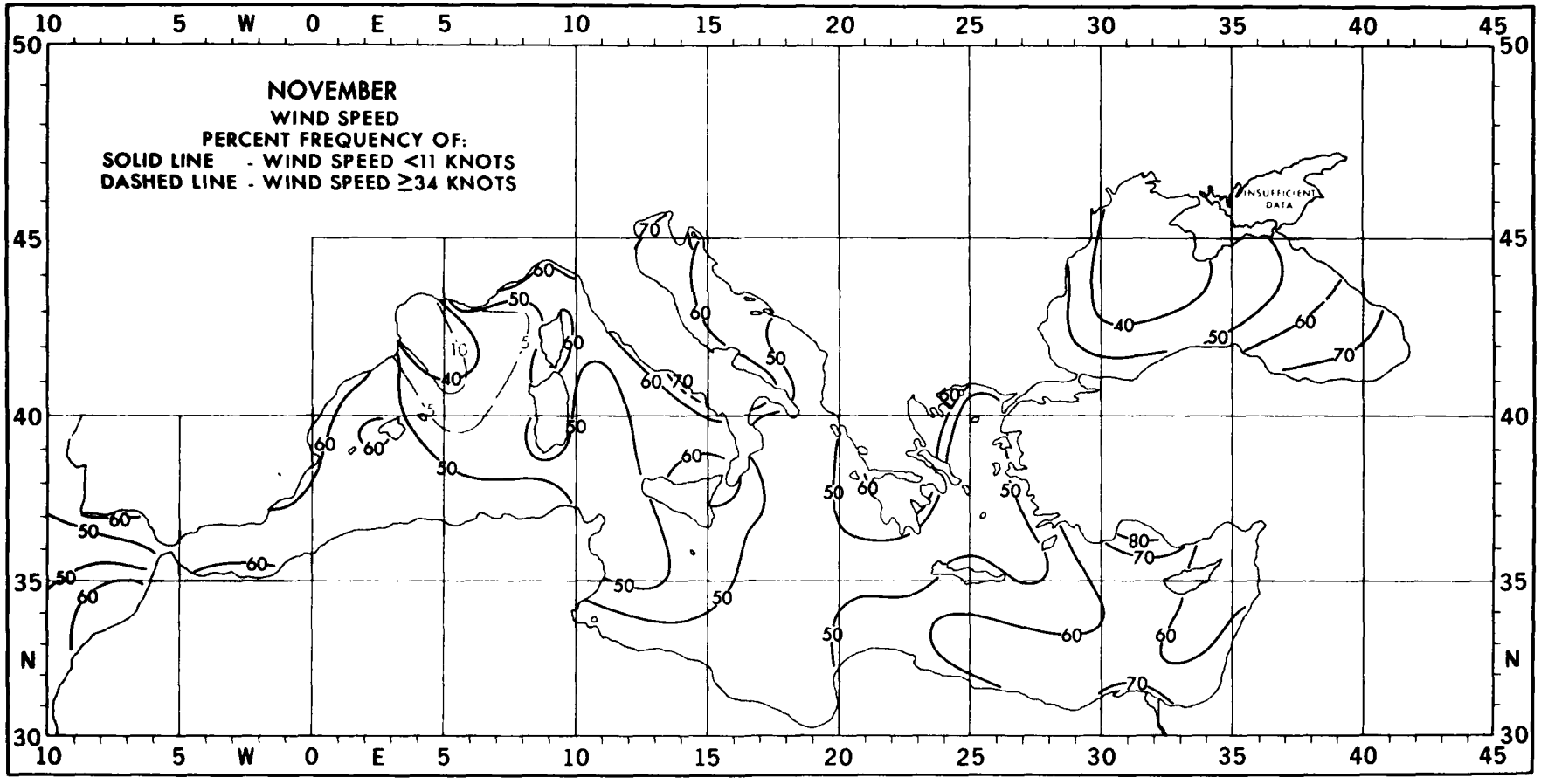

30
E
35
40
45
40
NOVEMBER
VISIBILITY (NAUTICAL MILES)
35
N
30
30
E
35
40

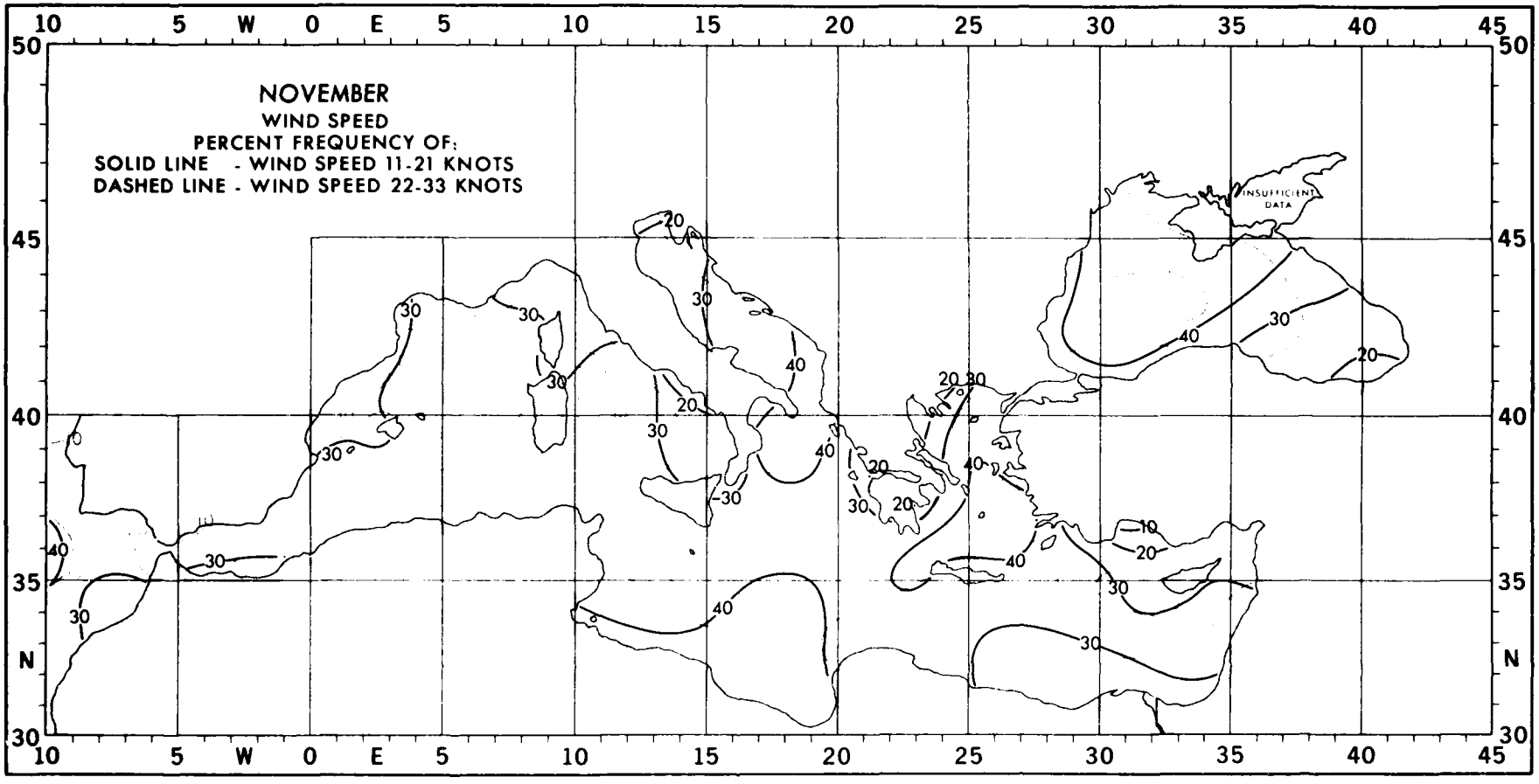

NOVEMBER
CEILING-VISIBILITY (MID RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <1000 FEET AND/OR VISIBILITY <5 N. MILES
DASHED LINE - CEILING <8000 FEET AND/OR VISIBILITY <10 N. MILES
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

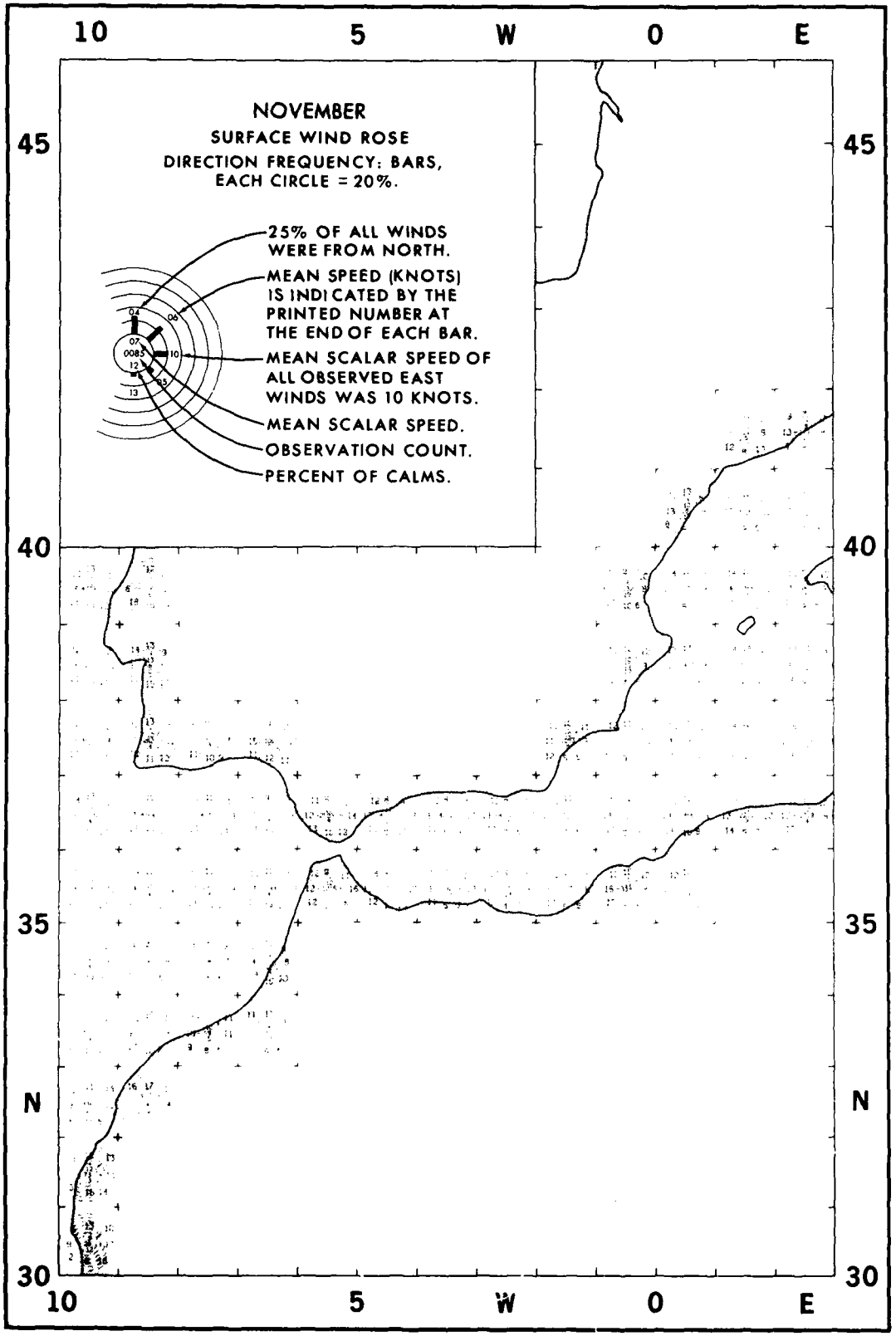

NOVEMBER
CEILING-VISIBILITY (LOW RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <300 FEET AND/OR VISIBILITY <1 N. MILE
DASHED LINE - CEILING <600 FEET AND/OR VISIBILITY <2 N. MILES
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

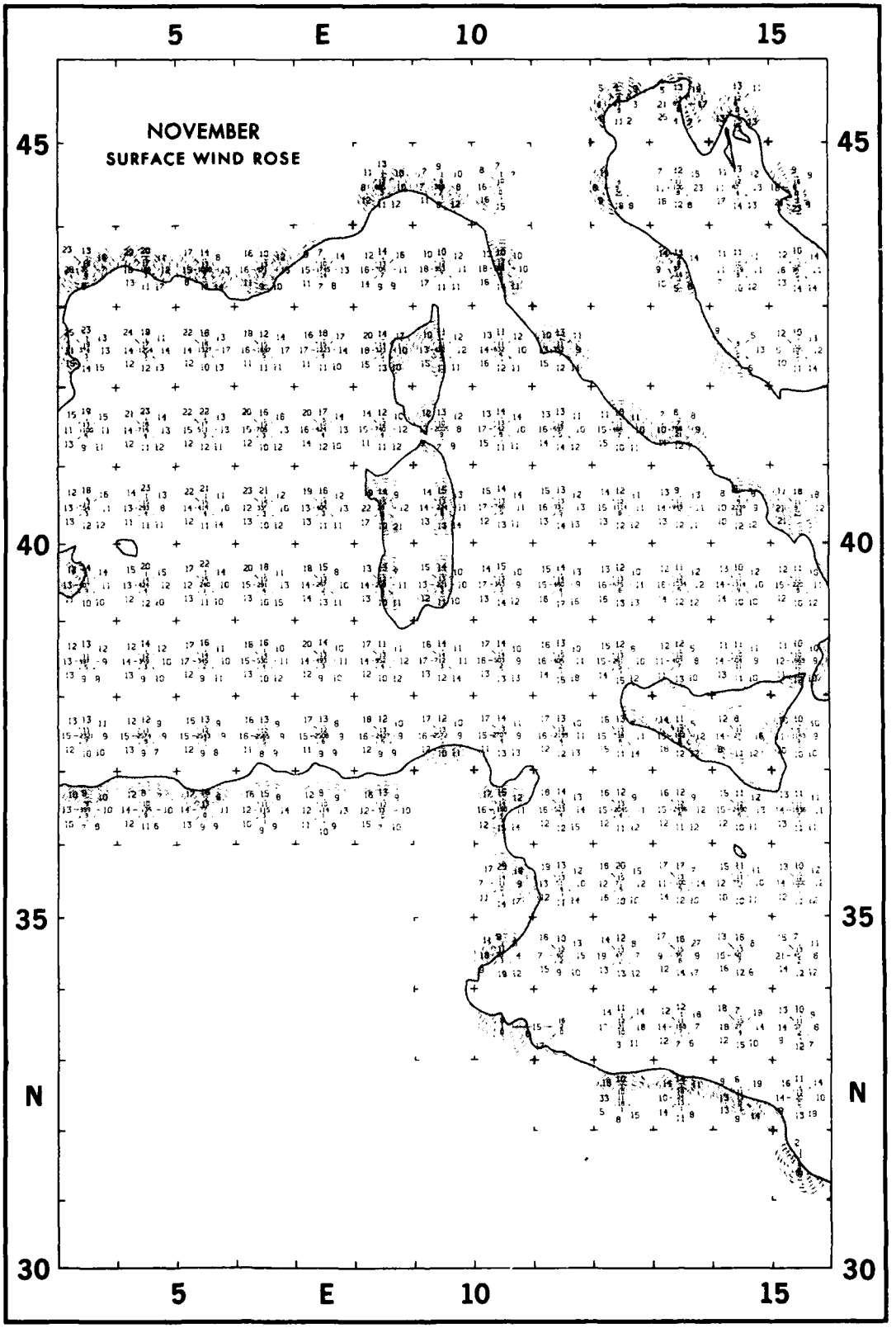

NOVEMBER
WIND-VISIBILITY-CLOUDINESS
SOLID LINE-
PERCENT FREQUENCY OF OPTIMUM CONDITIONS: LCC ≥5000 FT., (OR NO LCC), VSBY. ≥5 N. MI. AND WIND 11-21 KTS.
DASHED LINE-
PERCENT FREQUENCY OF POOR CONDITIONS. ANY ONE OF THE FOLLOWING CONSTITUTES POOR CONDITIONS:
LCC <300 FT.,
VSBY. <1 N. MI.,
WIND <6 OR ≥34 KTS.
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

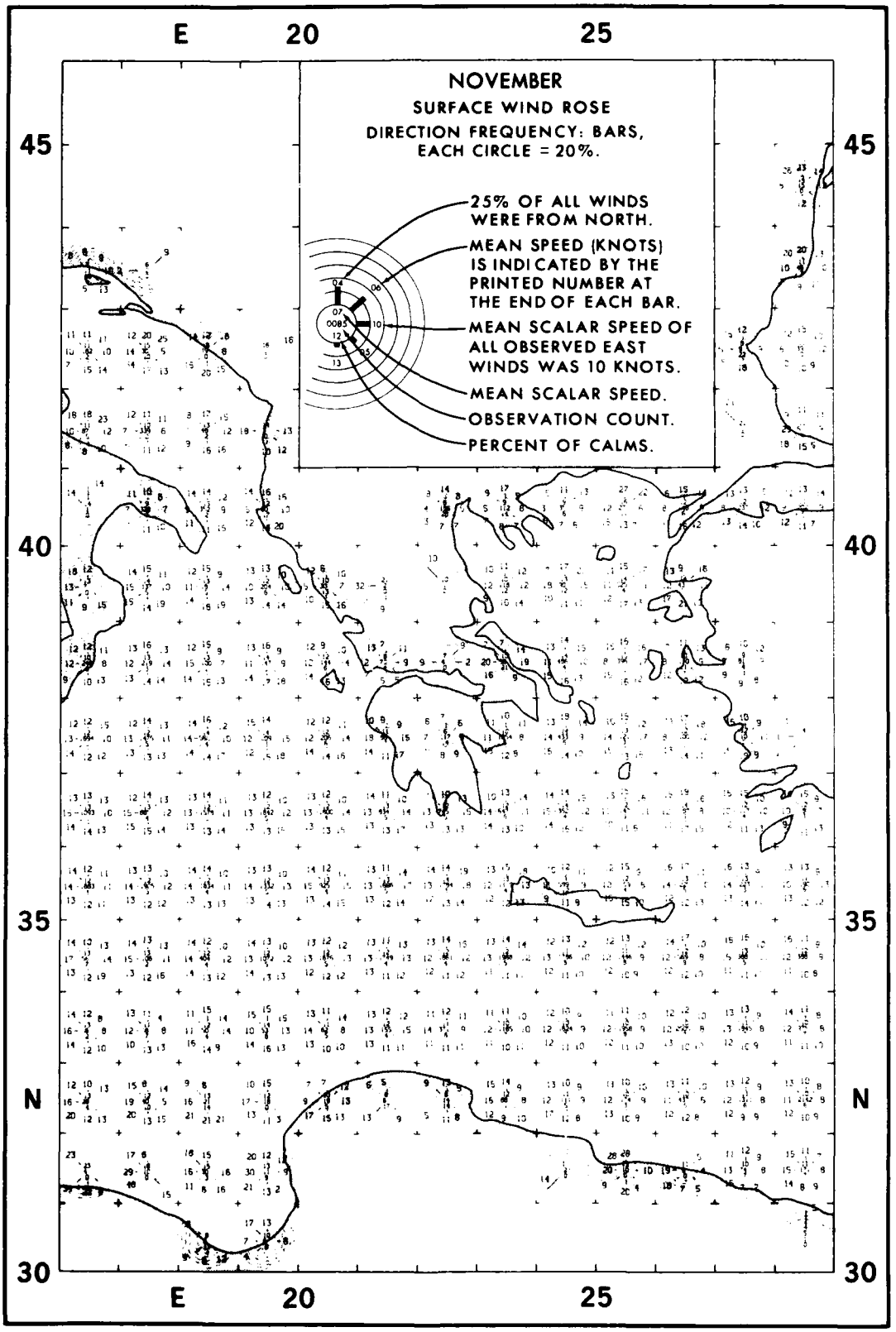

NOVEMBER
WIND SPEED
MEAN SCALAR WIND SPEED (Knots)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

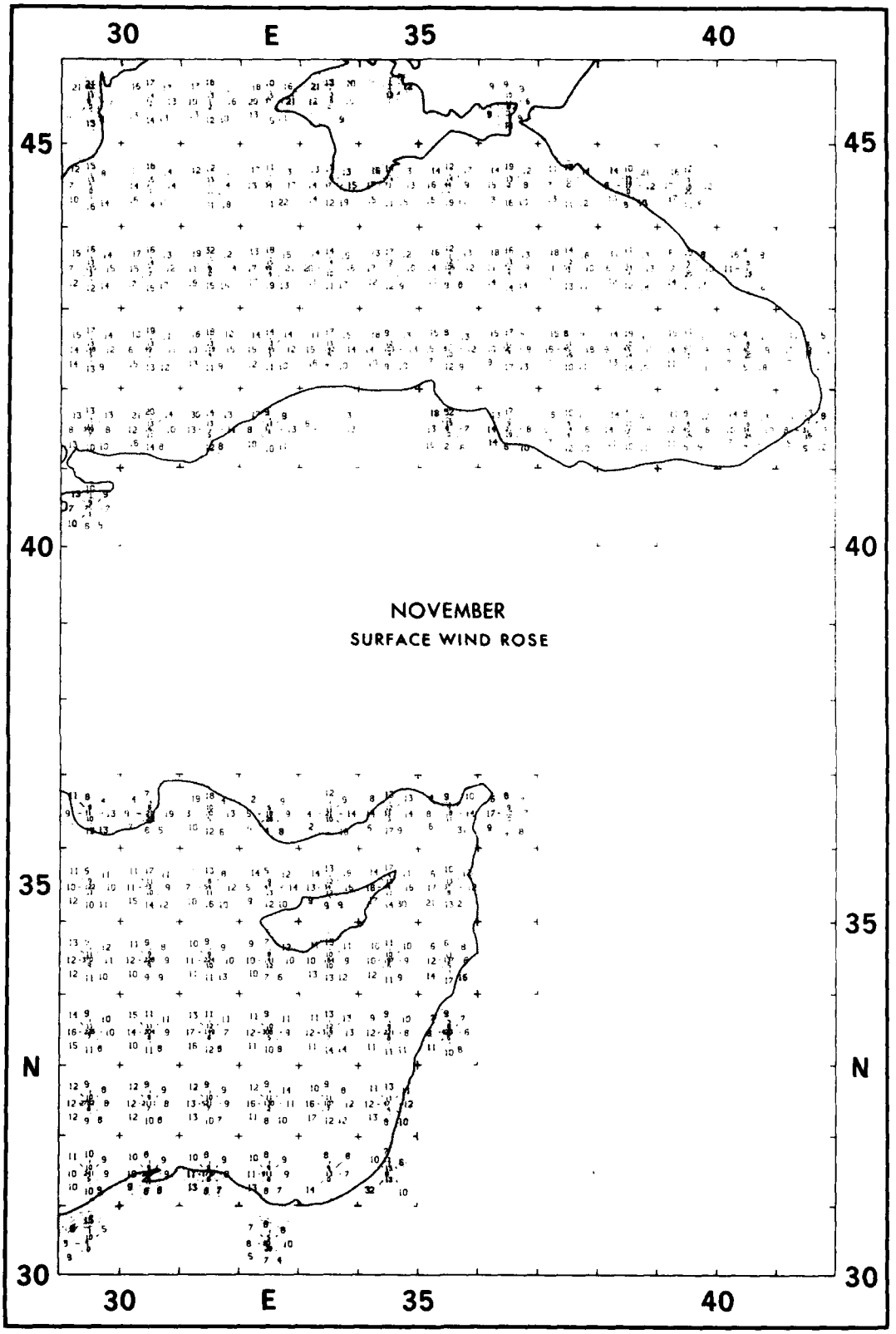

NOVEMBER
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED <11 KNOTS
DASHED LINE - WIND SPEED ≥34 KNOTS
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

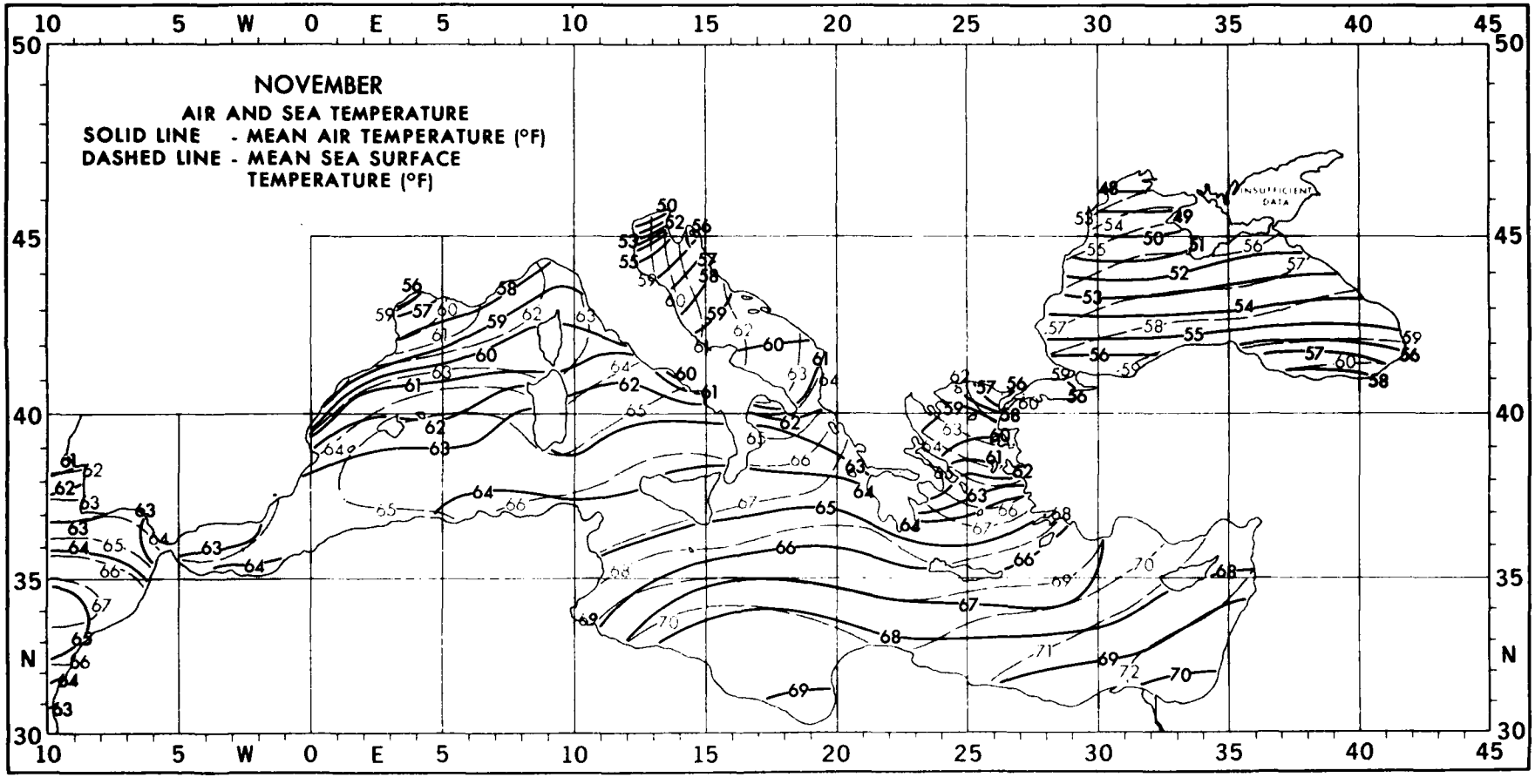

NOVEMBER
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED 11-21 KNOTS
DASHED LINE - WIND SPEED 22-33 KNOTS
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

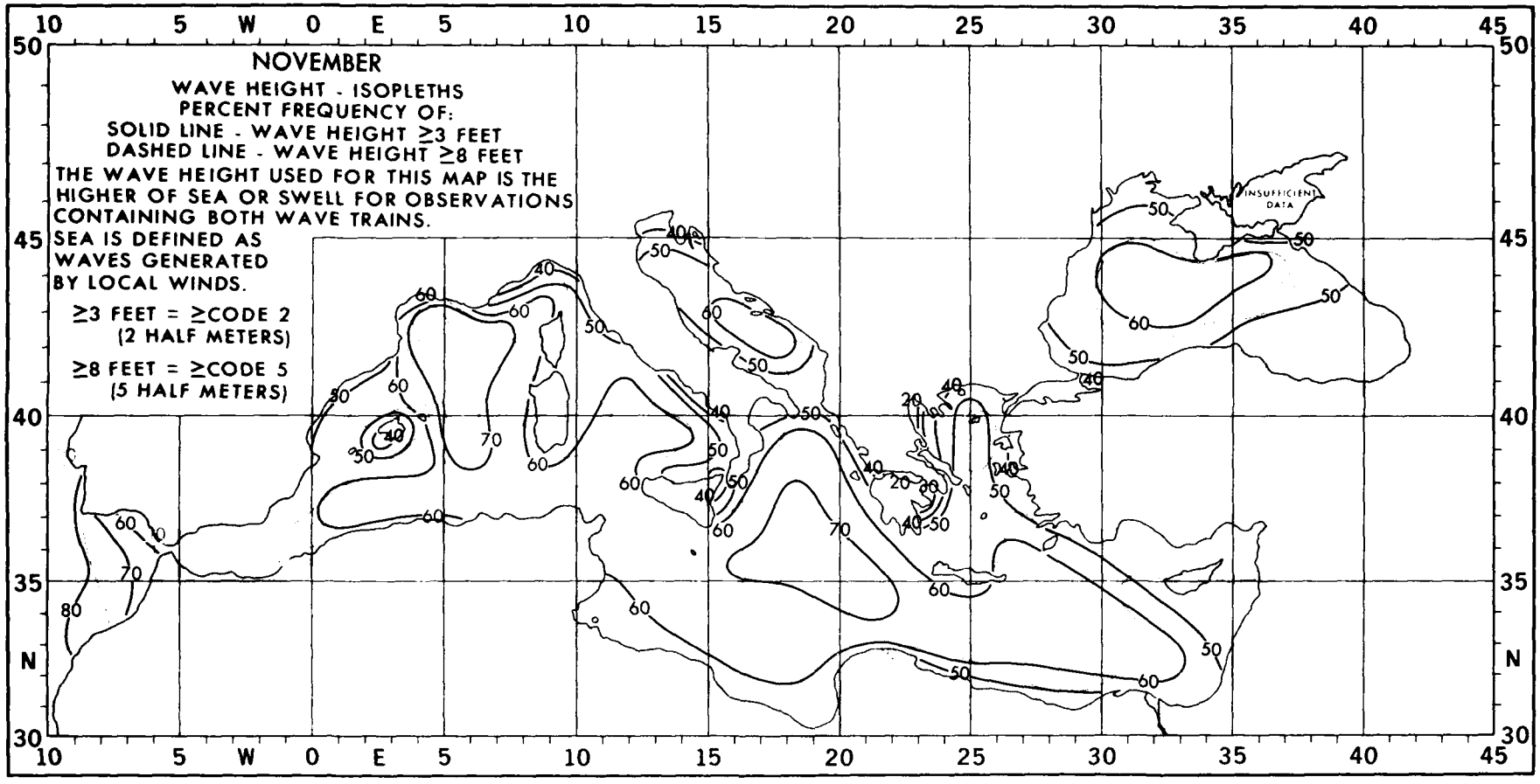

10
5
W
0
E
NOVEMBER
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS,
EACH CIRCLE = 20%.
25% OF ALL WINDS WERE FROM NORTH.
MEAN SPEED (KNOTS) IS INDICATED BY THE PRINTED NUMBER AT THE END OF EACH BAR.
MEAN SCALAR SPEED OF ALL OBSERVED EAST WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.
45
40
35
N
30

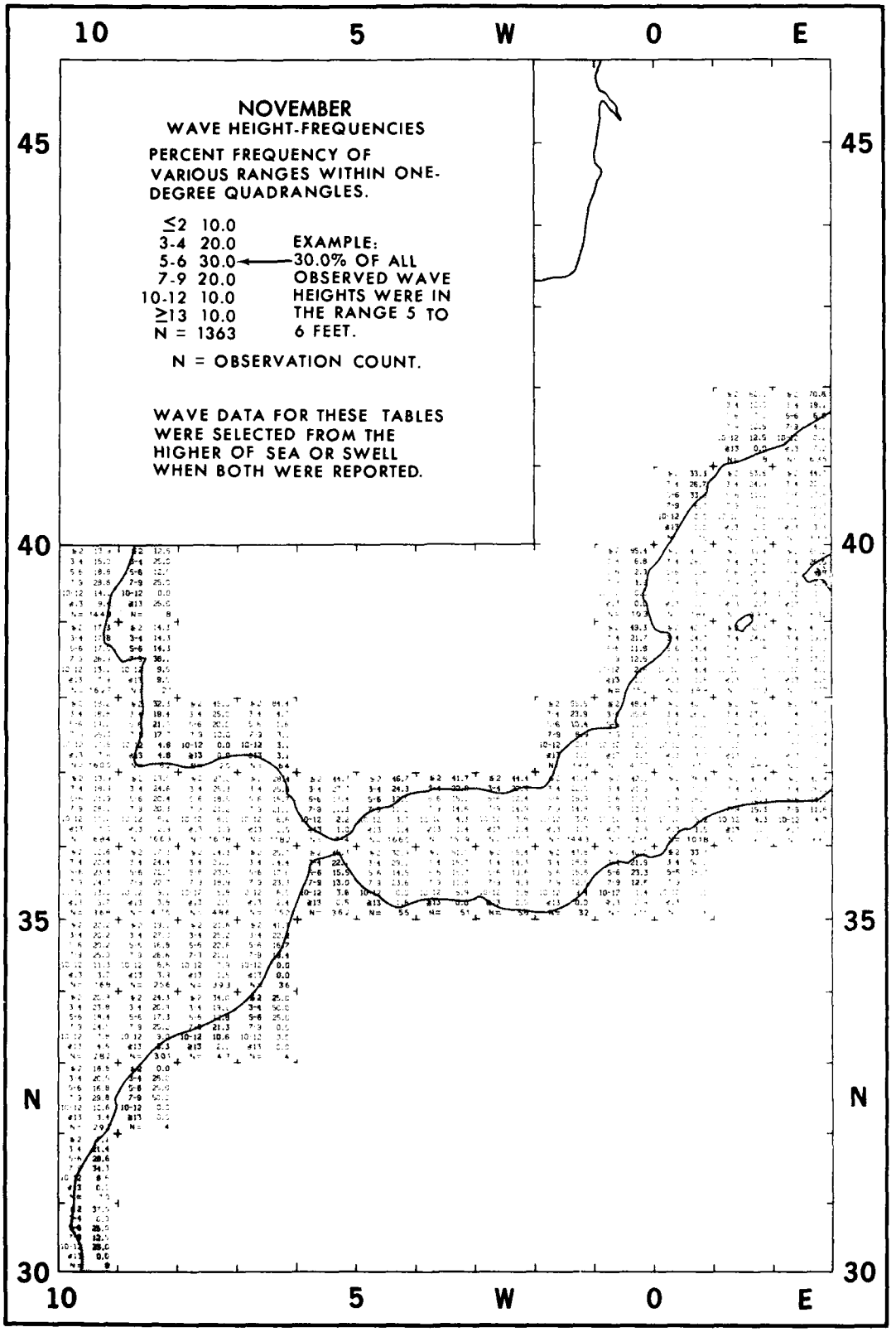

NOVEMBER
SURFACE WIND ROSE
5
E
10
15
45
40
35
N
30

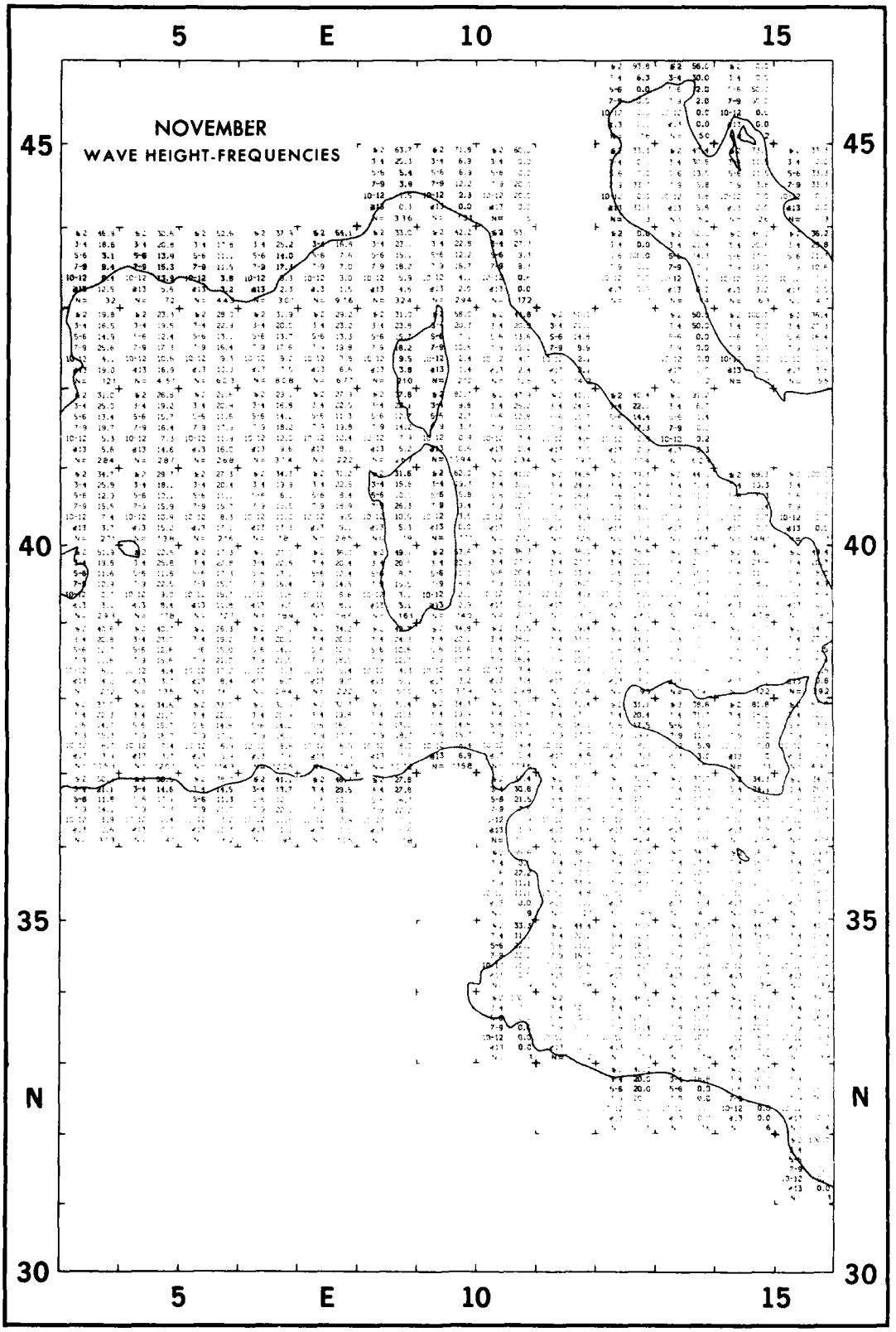

NOVEMBER
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS, EACH CIRCLE = 20%.
25% OF ALL WINDS WERE FROM NORTH.
MEAN SPEED (KNOTS) IS INDICATED BY THE PRINTED NUMBER AT THE END OF EACH BAR.
MEAN SCALAR SPEED OF ALL OBSERVED EAST WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.
E
20
25
45
40
35
N
30

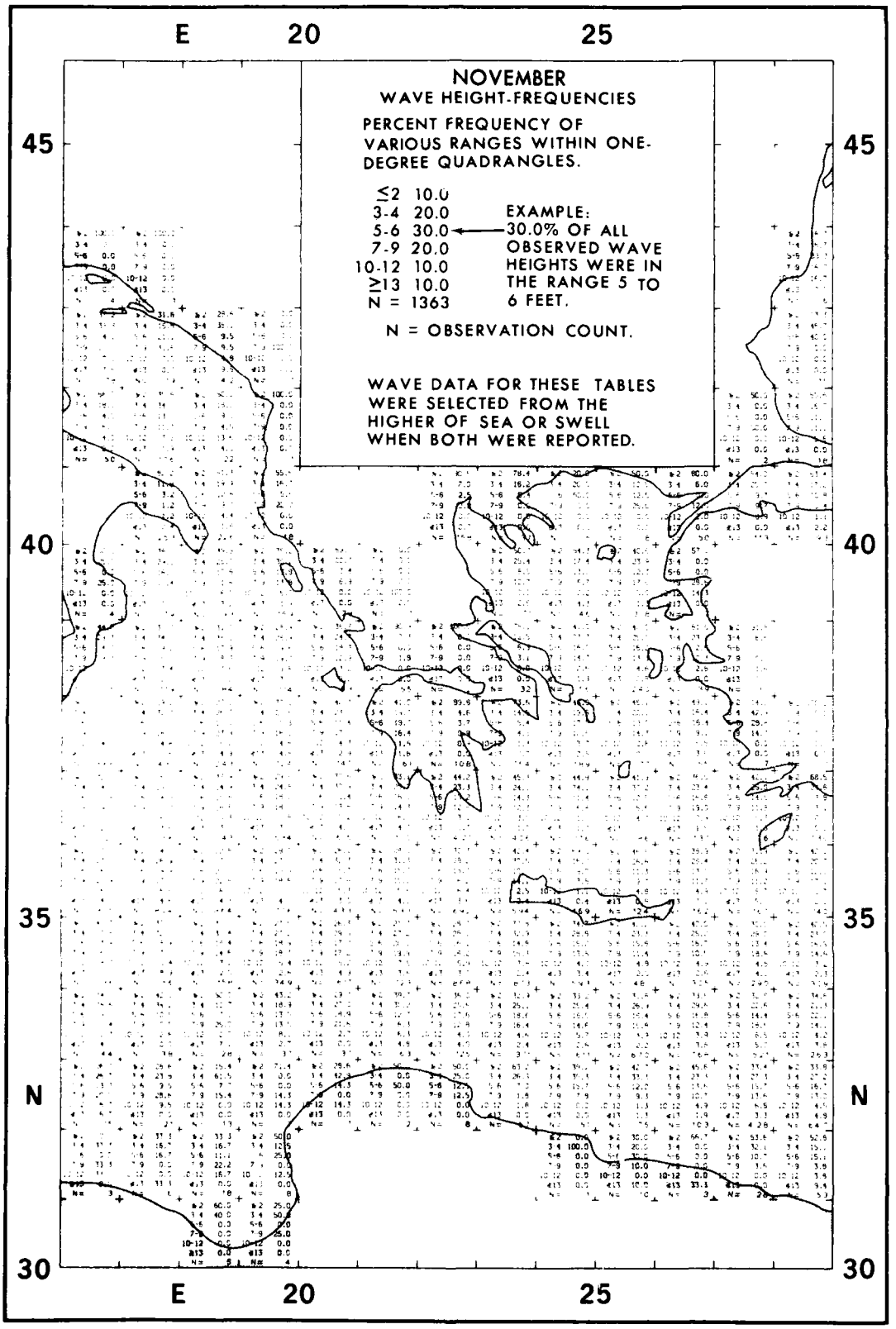

30
E
35
40
45
40
35
N
30
NOVEMBER
SURFACE WIND ROSE

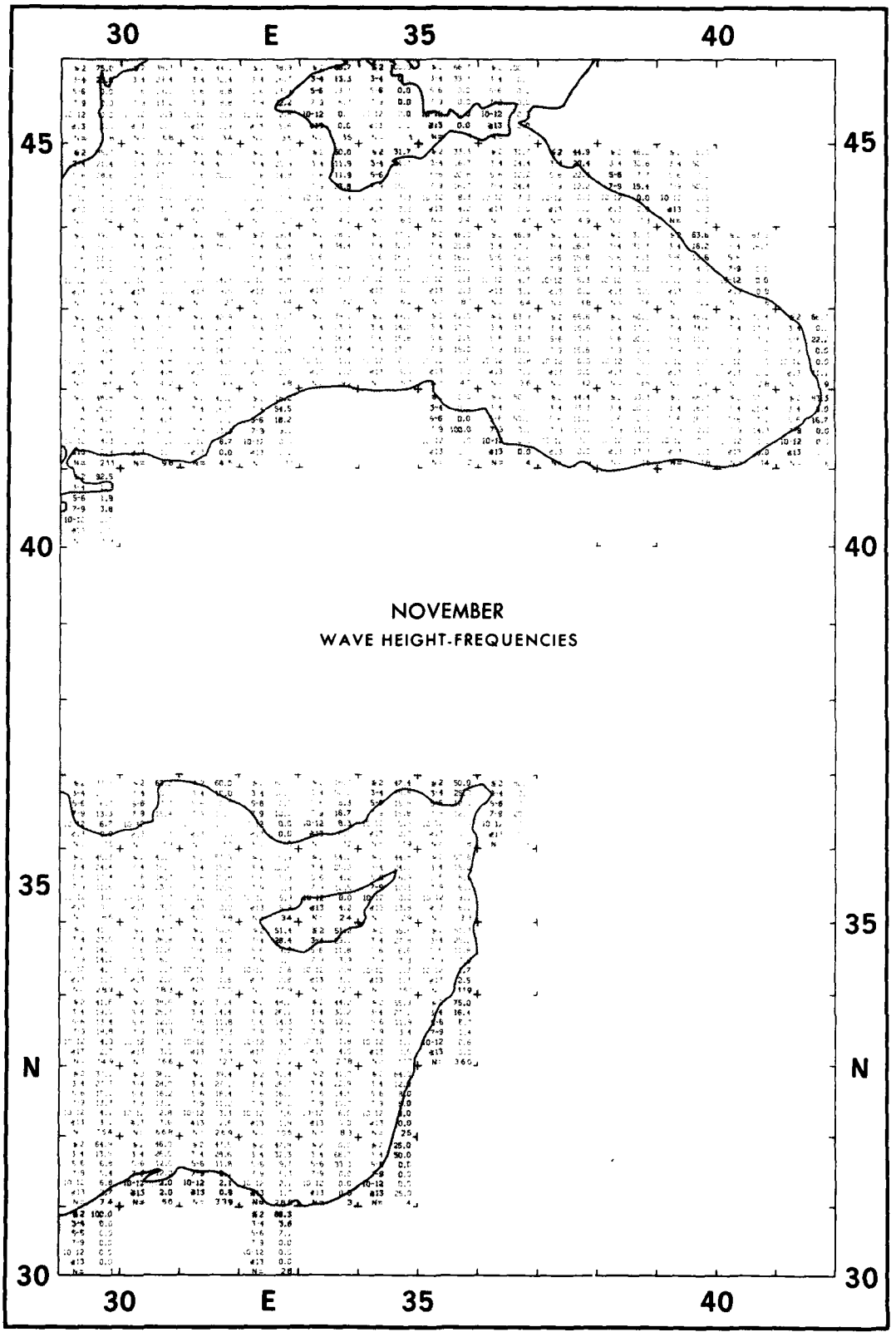

NOVEMBER
AIR AND SEA TEMPERATURE
SOLID LINE - MEAN AIR TEMPERATURE (°F)
DASHED LINE - MEAN SEA SURFACE TEMPERATURE (°F)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

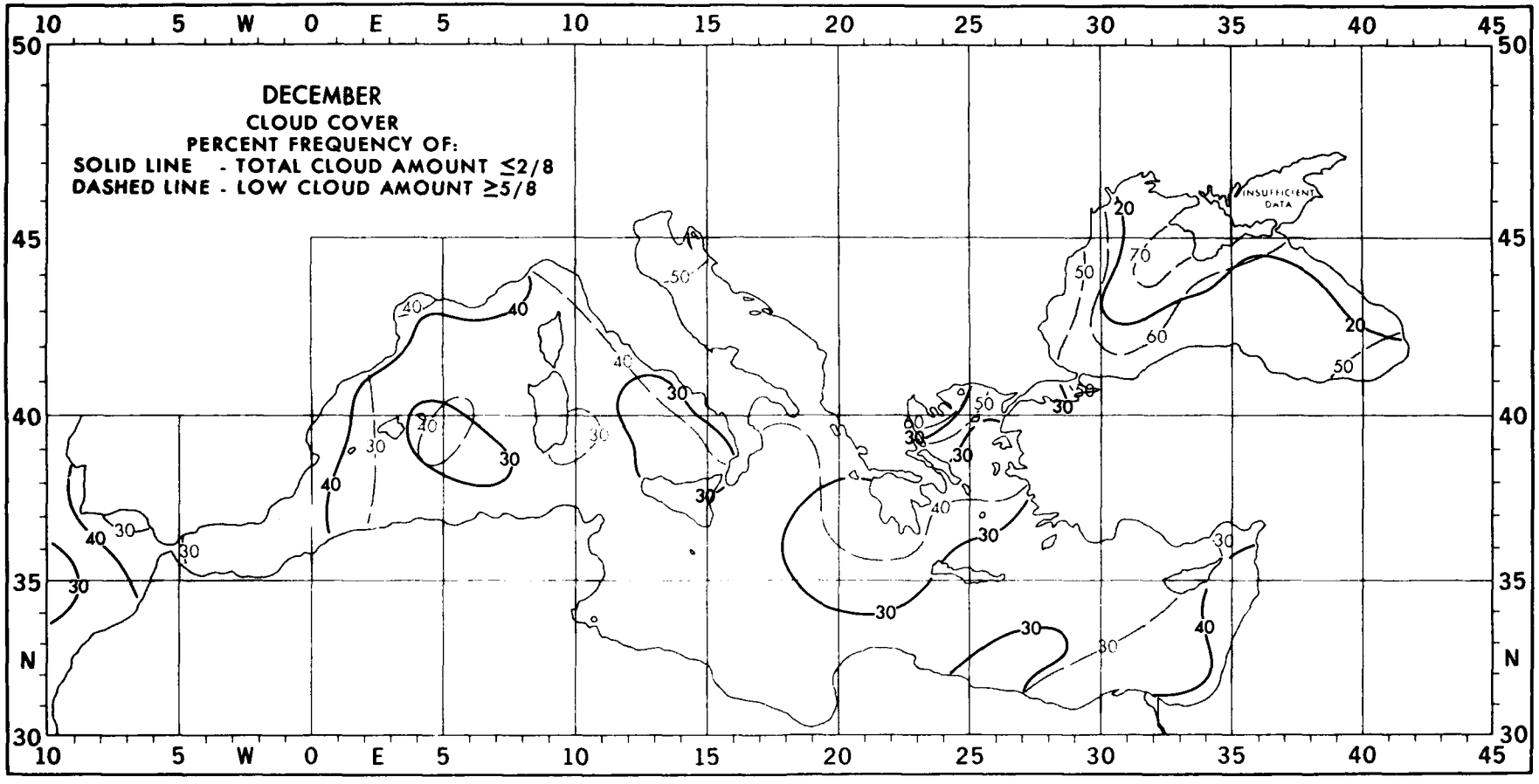

NOVEMBER
WAVE HEIGHT - ISOPLETHS
PERCENT FREQUENCY OF:
SOLID LINE - WAVE HEIGHT ≥3 FEET
DASHED LINE - WAVE HEIGHT ≥8 FEET
THE WAVE HEIGHT USED FOR THIS MAP IS THE HIGHER OF SEA OR SWELL FOR OBSERVATIONS CONTAINING BOTH WAVE TRAINS.
SEA IS DEFINED AS WAVES GENERATED BY LOCAL WINDS.
≥3 FEET = ≥CODE 2 (2 HALF METERS)
≥8 FEET = ≥CODE 5 (5 HALF METERS)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

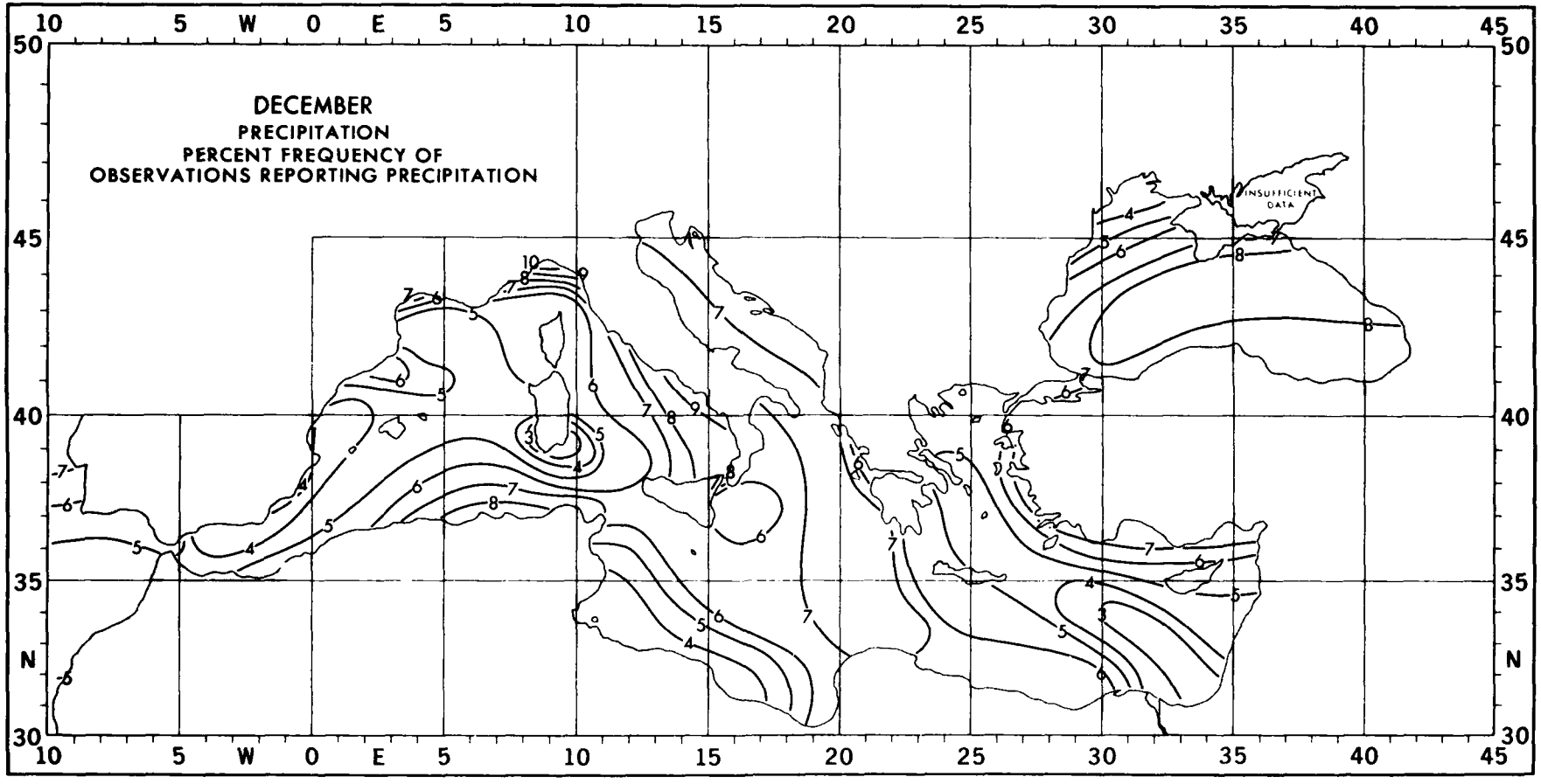

10
5
W
0
E
45
40
35
N
30
NOVEMBER
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.

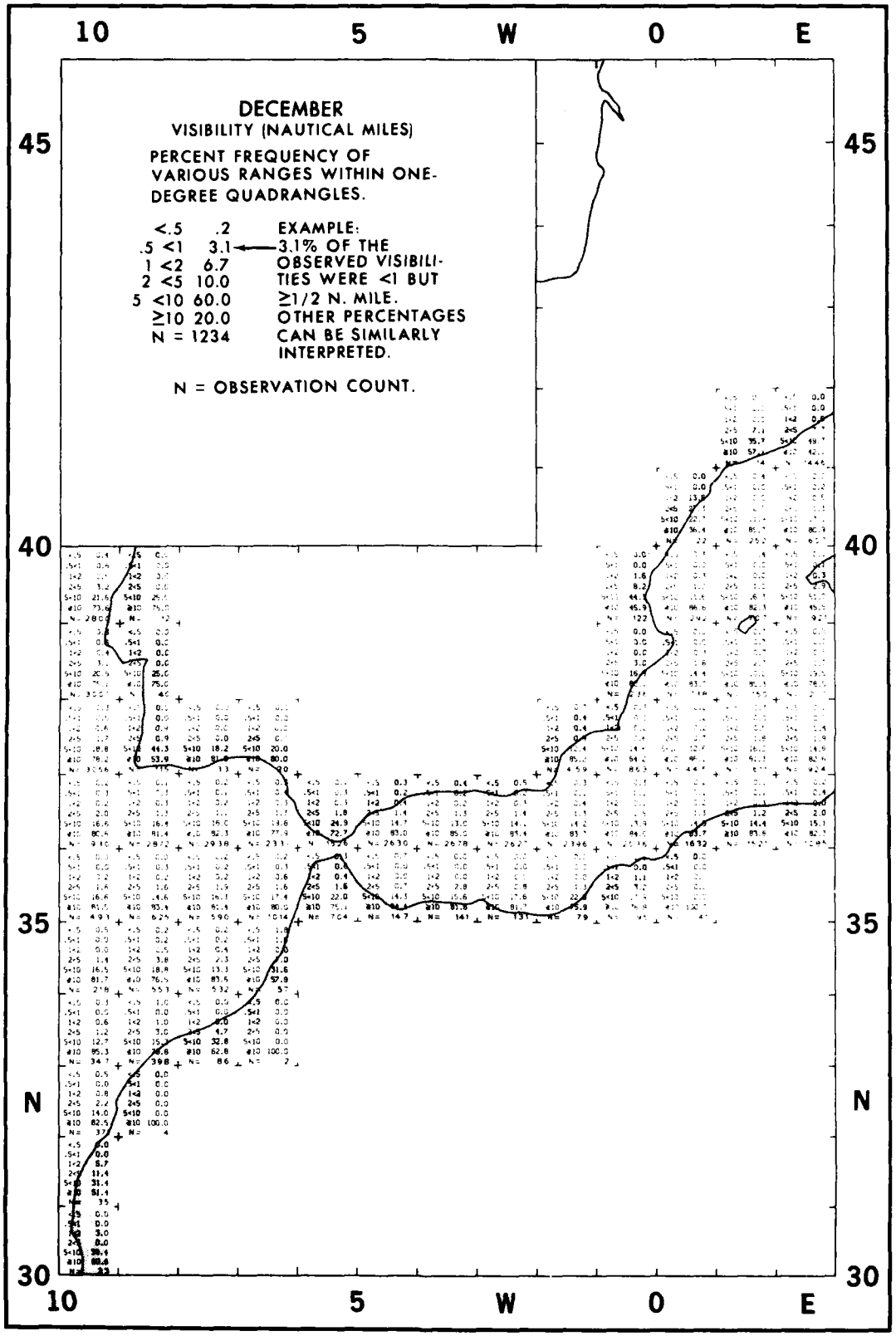

NOVEMBER
WAVE HEIGHT-FREQUENCIES
5
E
10
15
45
40
35
N
30

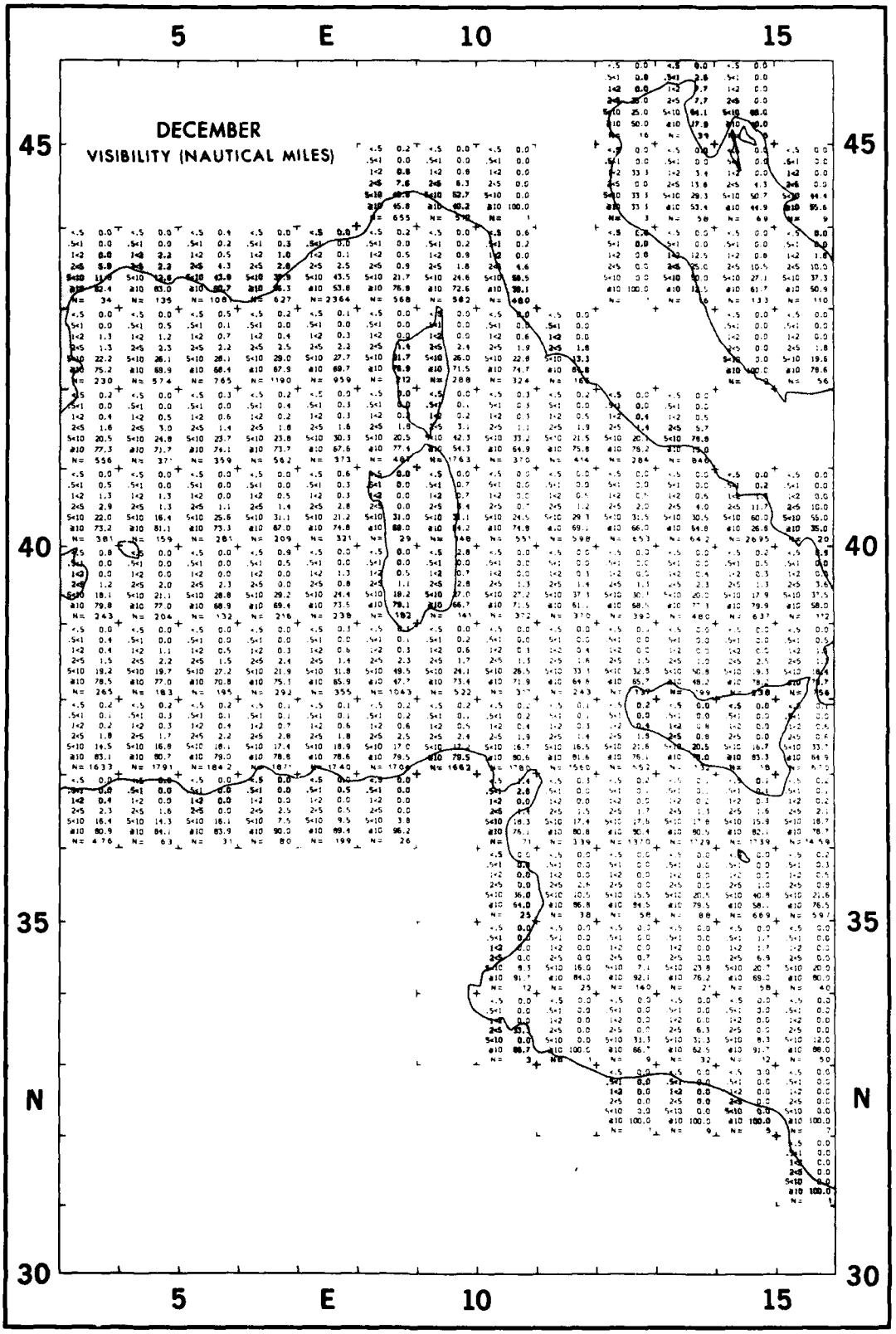

E
20
25
NOVEMBER
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.
45
40
35
N
30

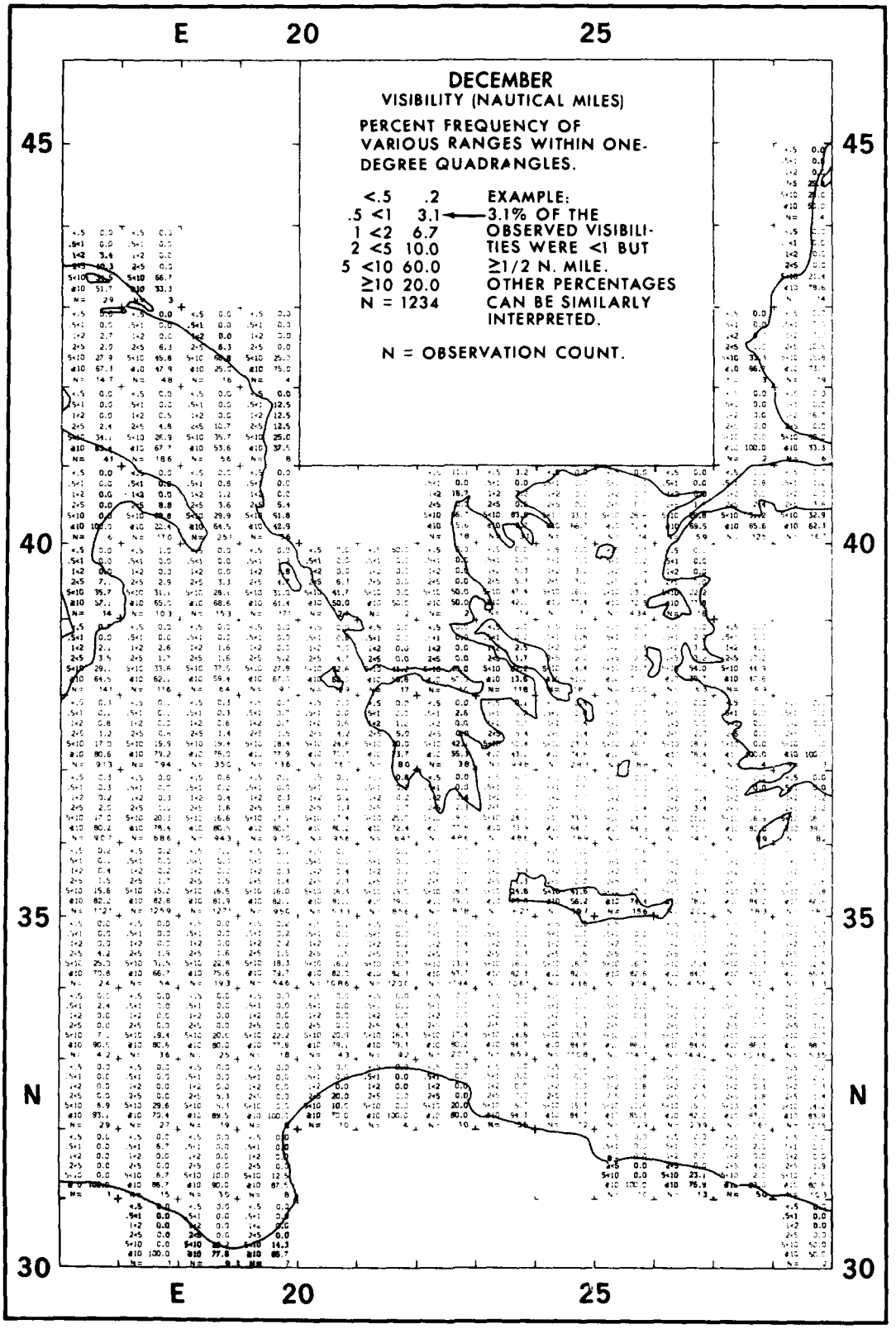

30
E
35
40
45
40
NOVEMBER
WAVE HEIGHT-FREQUENCIES
35
N
30
30
E
35
40

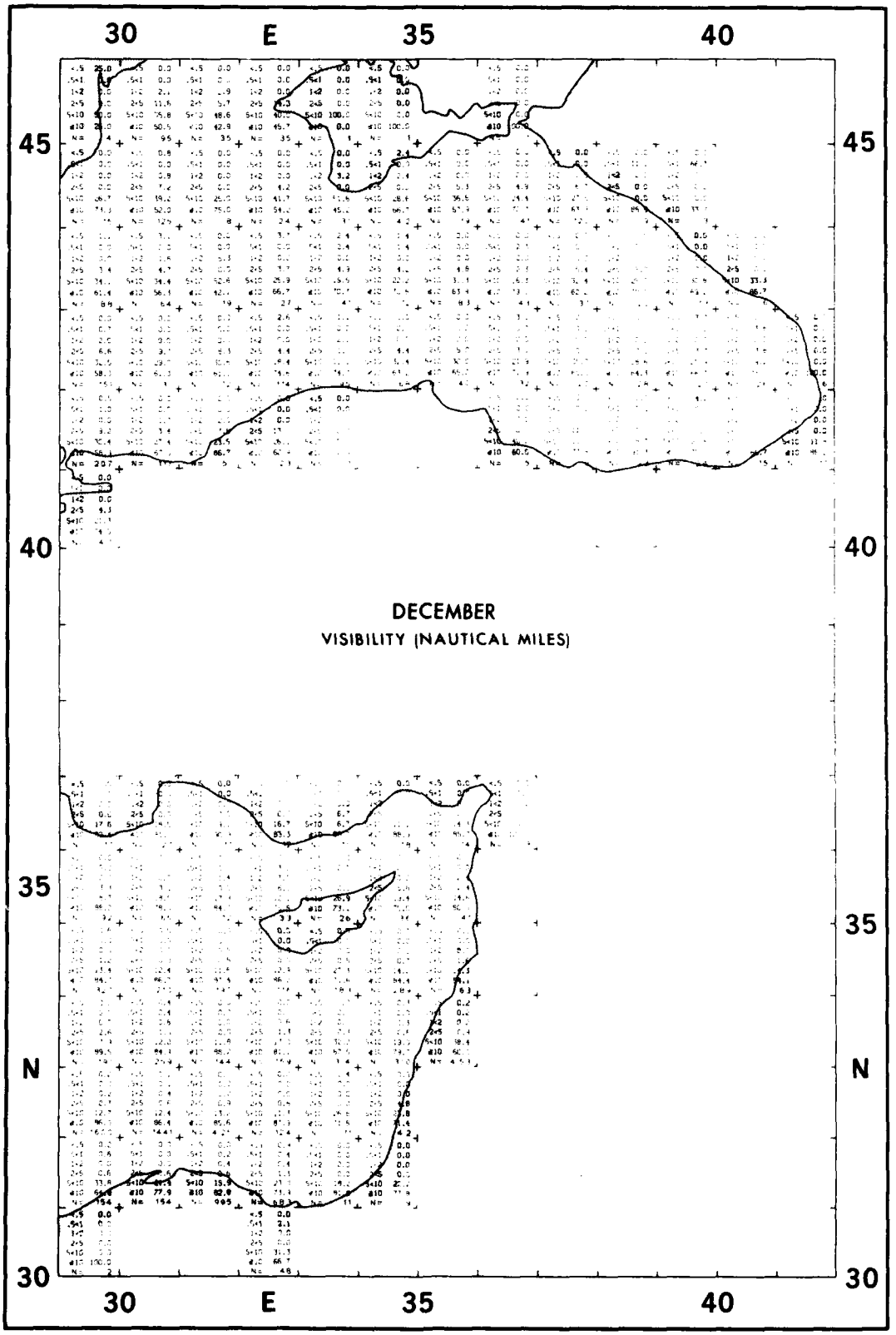

DECEMBER
CLOUD COVER
PERCENT FREQUENCY OF:
SOLID LINE - TOTAL CLOUD AMOUNT ≤2/8
DASHED LINE - LOW CLOUD AMOUNT ≥5/8
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

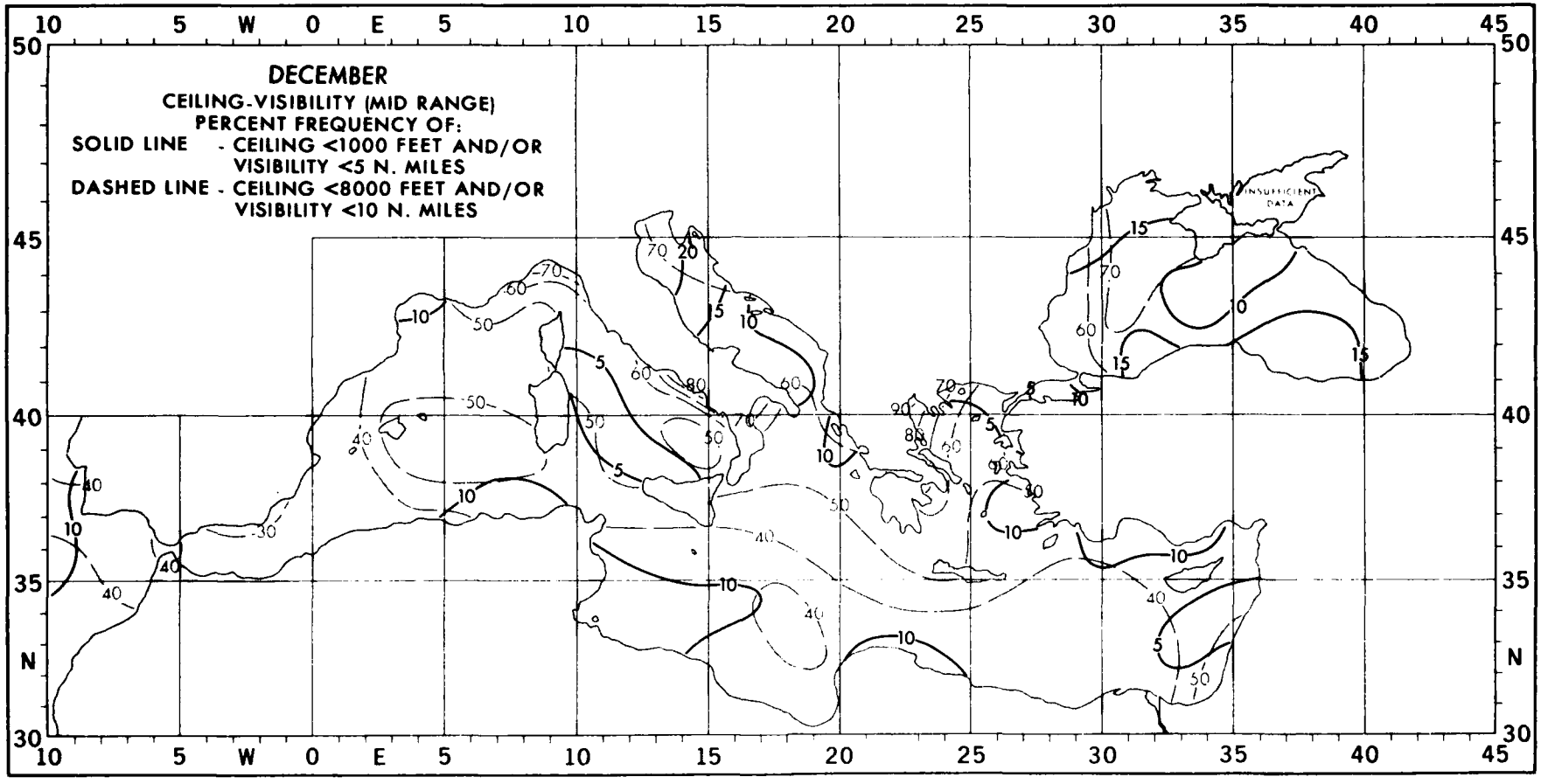

DECEMBER
PRECIPITATION
PERCENT FREQUENCY OF
OBSERVATIONS REPORTING PRECIPITATION
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

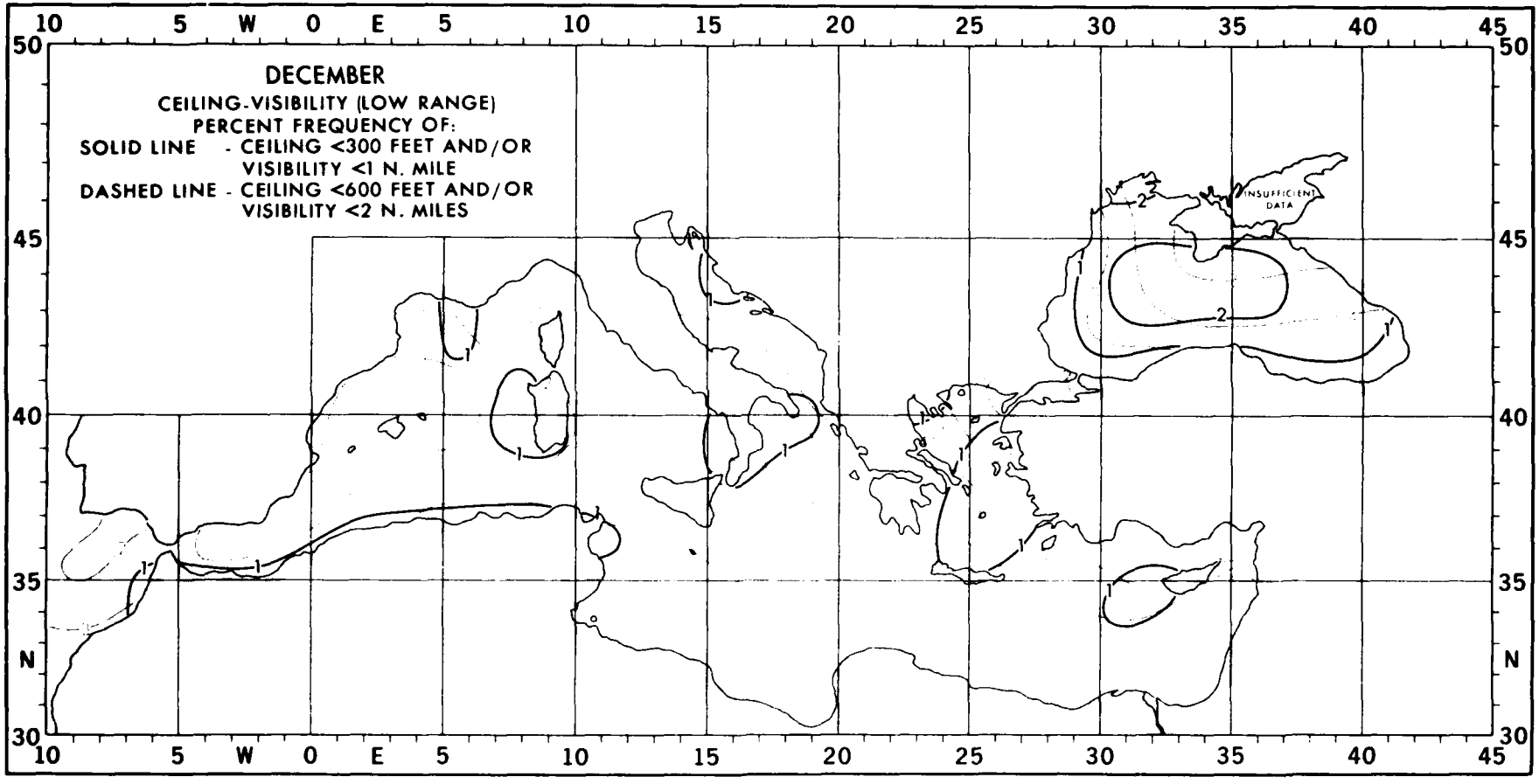

10
5
W
0
E
45
40
35
30
N
DECEMBER
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.

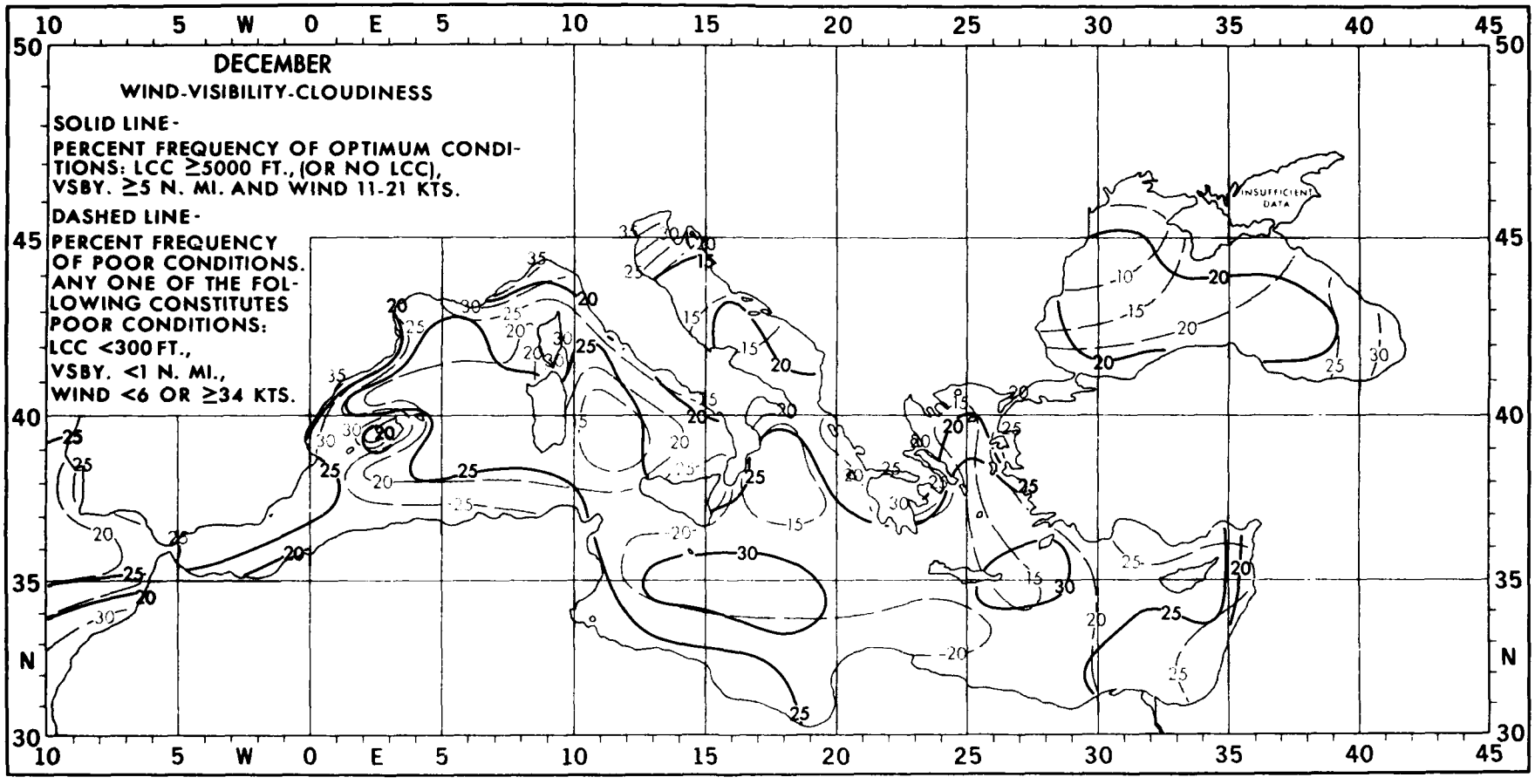

DECEMBER
VISIBILITY (NAUTICAL MILES)
5
E
10
15
45
40
35
30
N

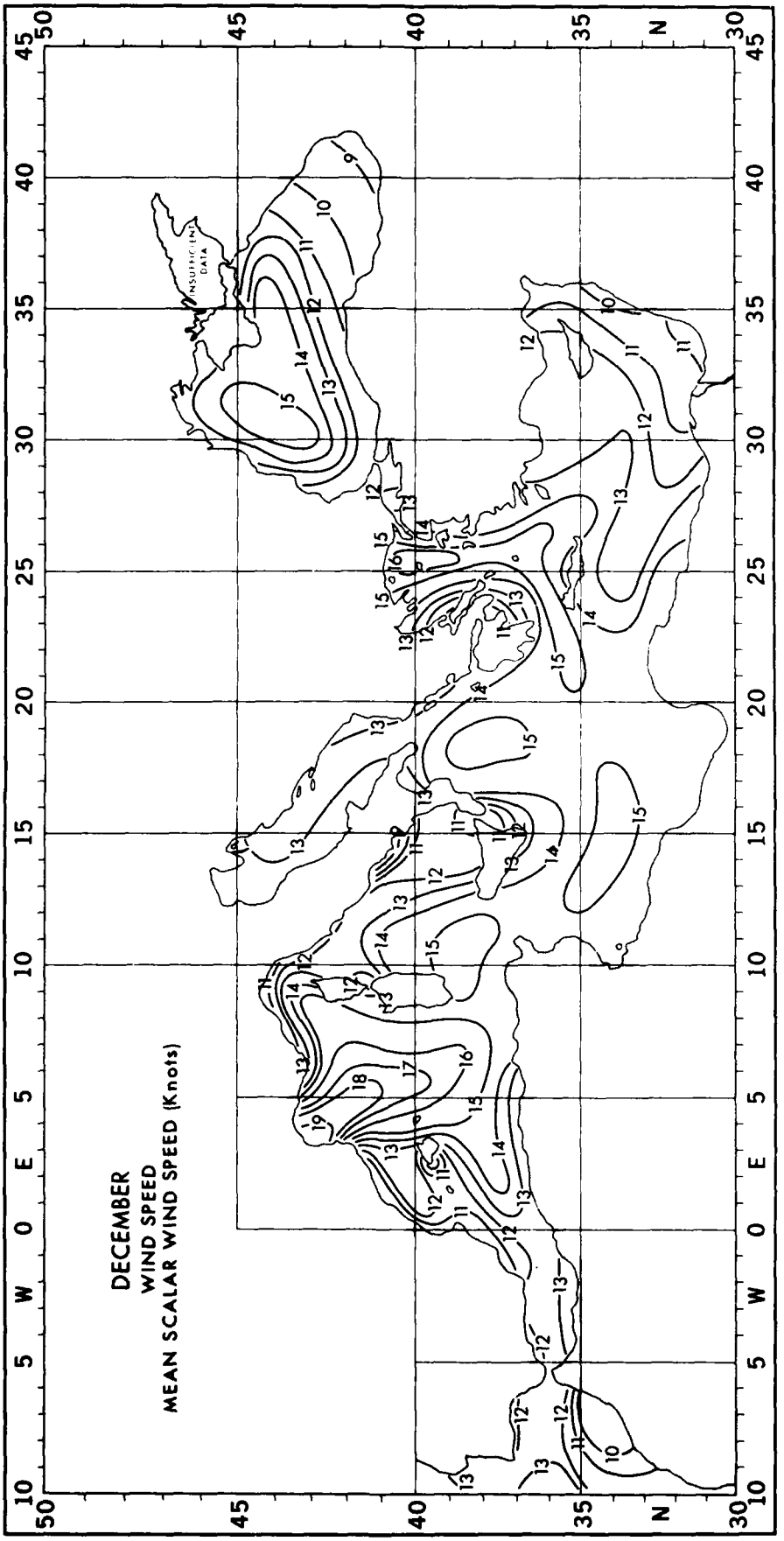

E
20
25
45
40
35
N
30
DECEMBER
VISIBILITY (NAUTICAL MILES)
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
<.5 .2
.5 <1 3.1
1 <2 6.7
2 <5 10.0
5 <10 60.0
≥10 20.0
N = 1234
EXAMPLE:
3.1% OF THE OBSERVED VISIBILITIES WERE <1 BUT ≥1/2 N. MILE.
OTHER PERCENTAGES CAN BE SIMILARLY INTERPRETED.
N = OBSERVATION COUNT.

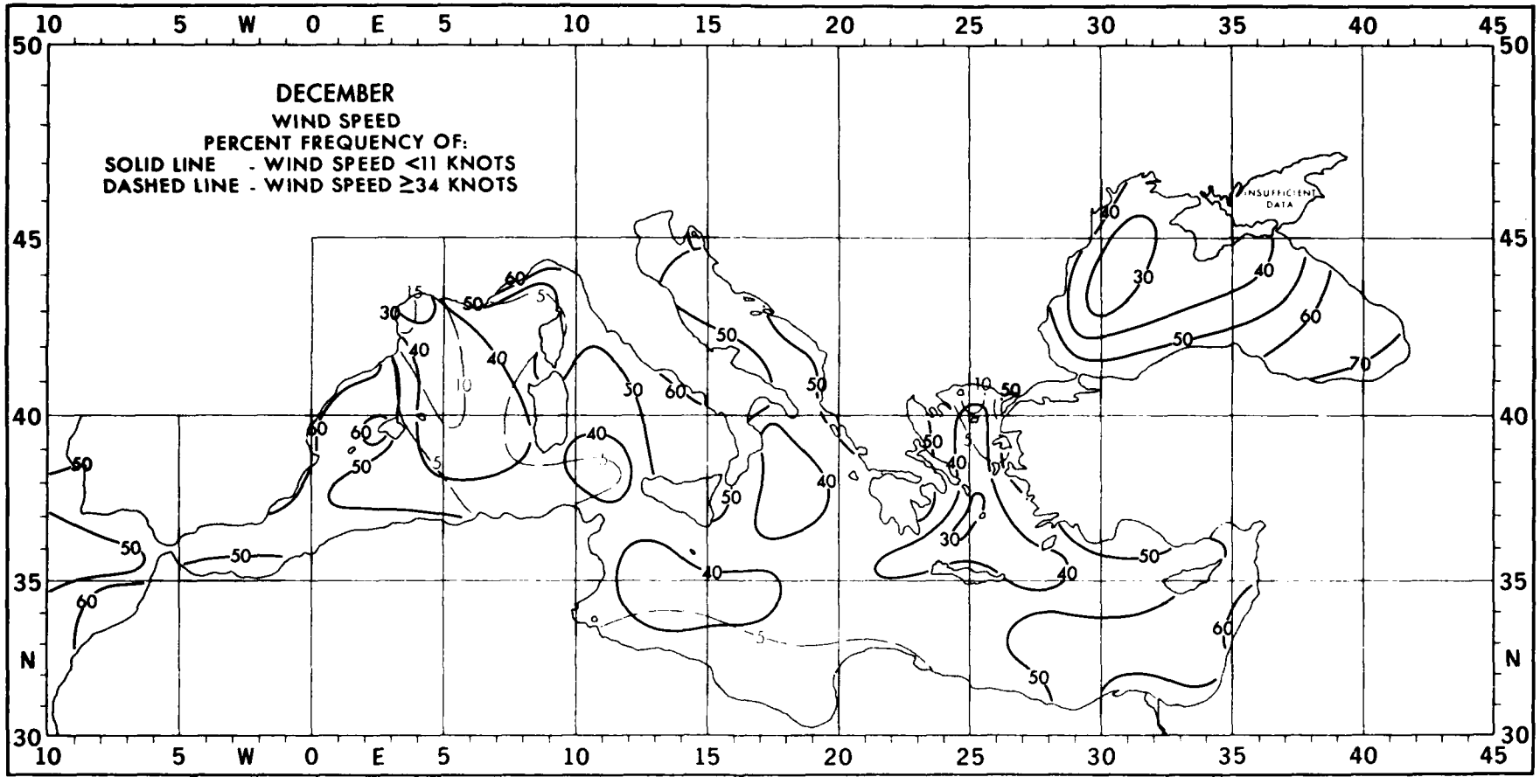

30
E
35
40
45
40
DECEMBER
VISIBILITY (NAUTICAL MILES)
35
N
30
30
E
35
40

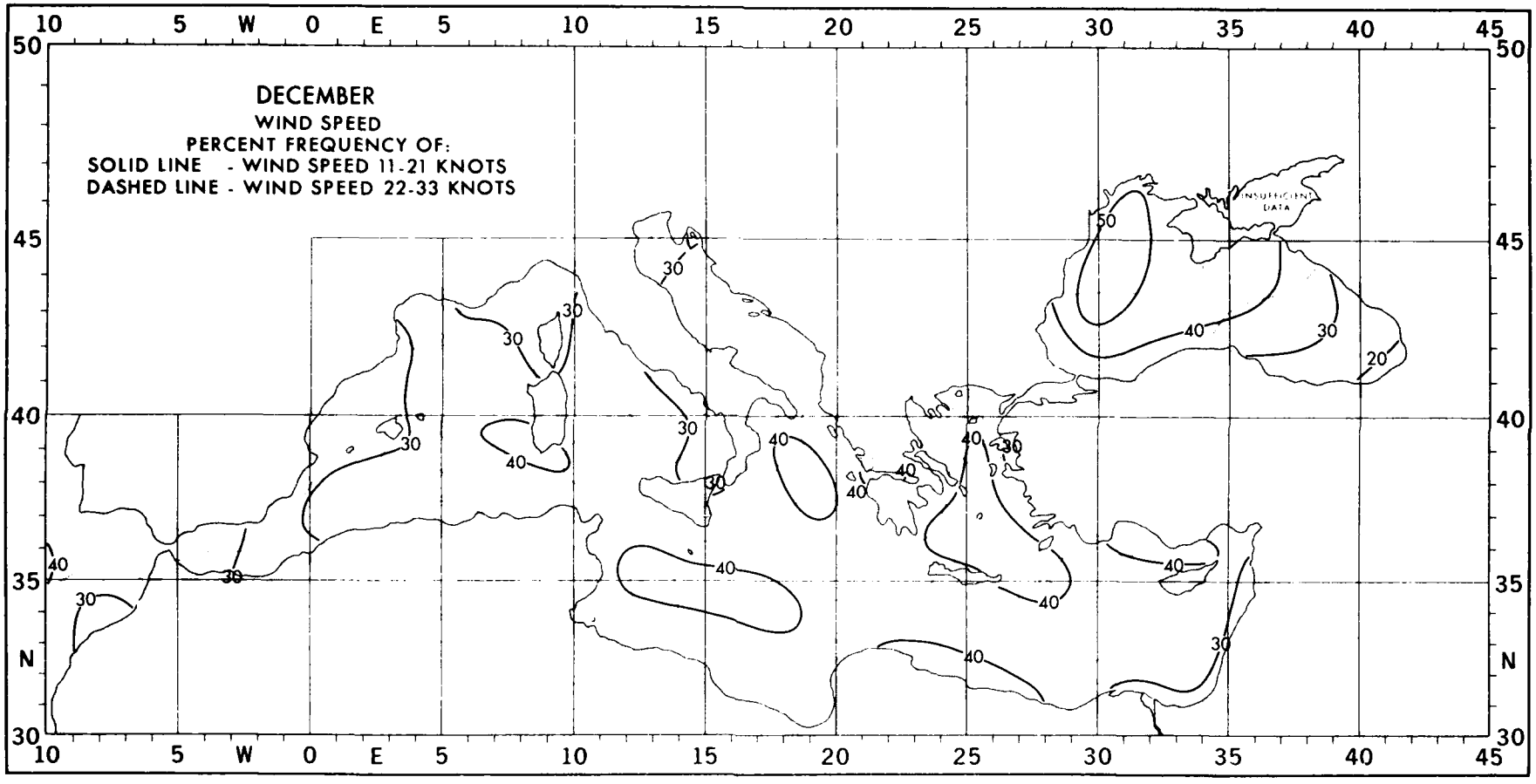

DECEMBER
CEILING-VISIBILITY (MID RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <1000 FEET AND/OR VISIBILITY <5 N. MILES
DASHED LINE - CEILING <8000 FEET AND/OR VISIBILITY <10 N. MILES
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

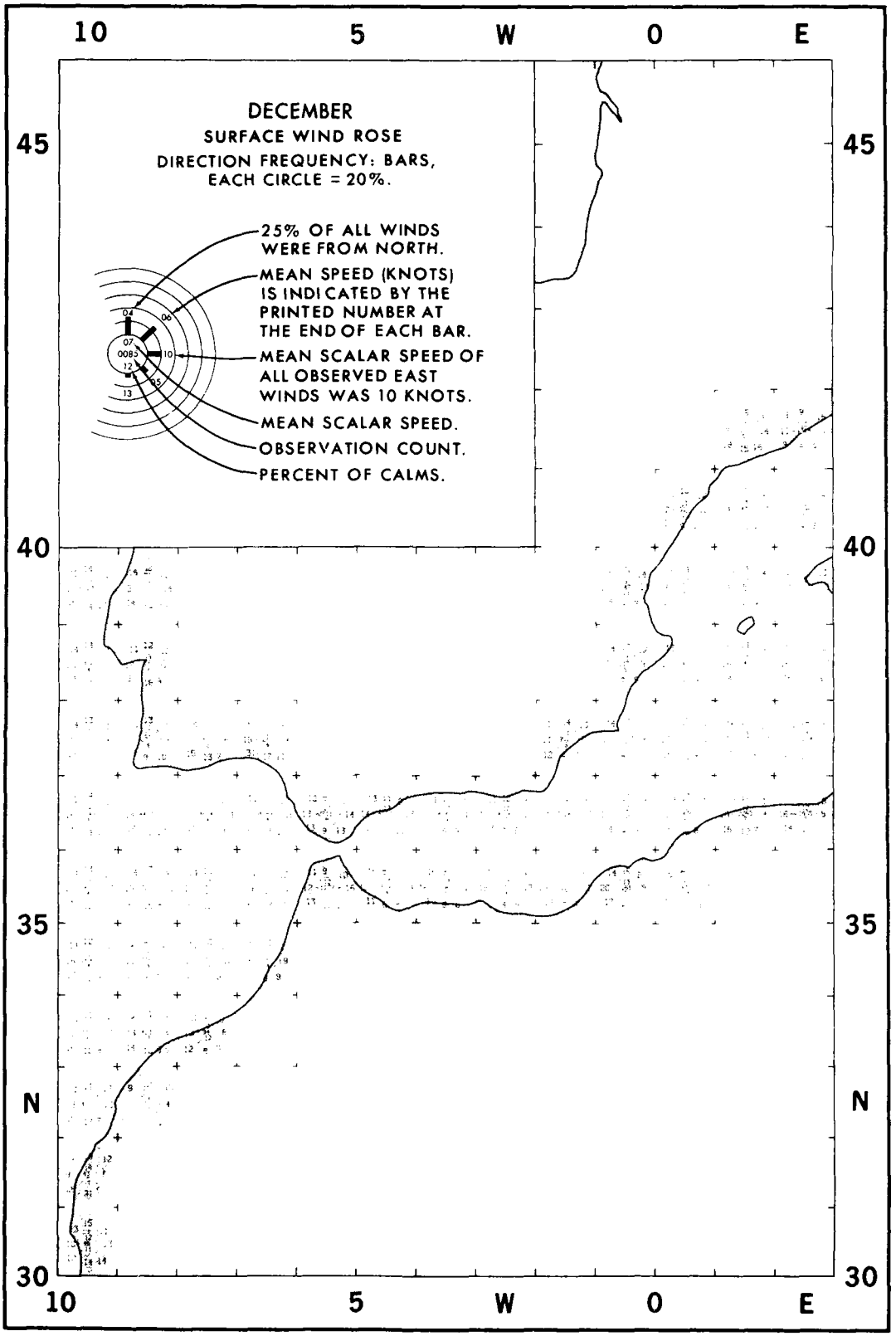

DECEMBER
CEILING-VISIBILITY (LOW RANGE)
PERCENT FREQUENCY OF:
SOLID LINE - CEILING <300 FEET AND/OR VISIBILITY <1 N. MILE
DASHED LINE - CEILING <600 FEET AND/OR VISIBILITY <2 N. MILES
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

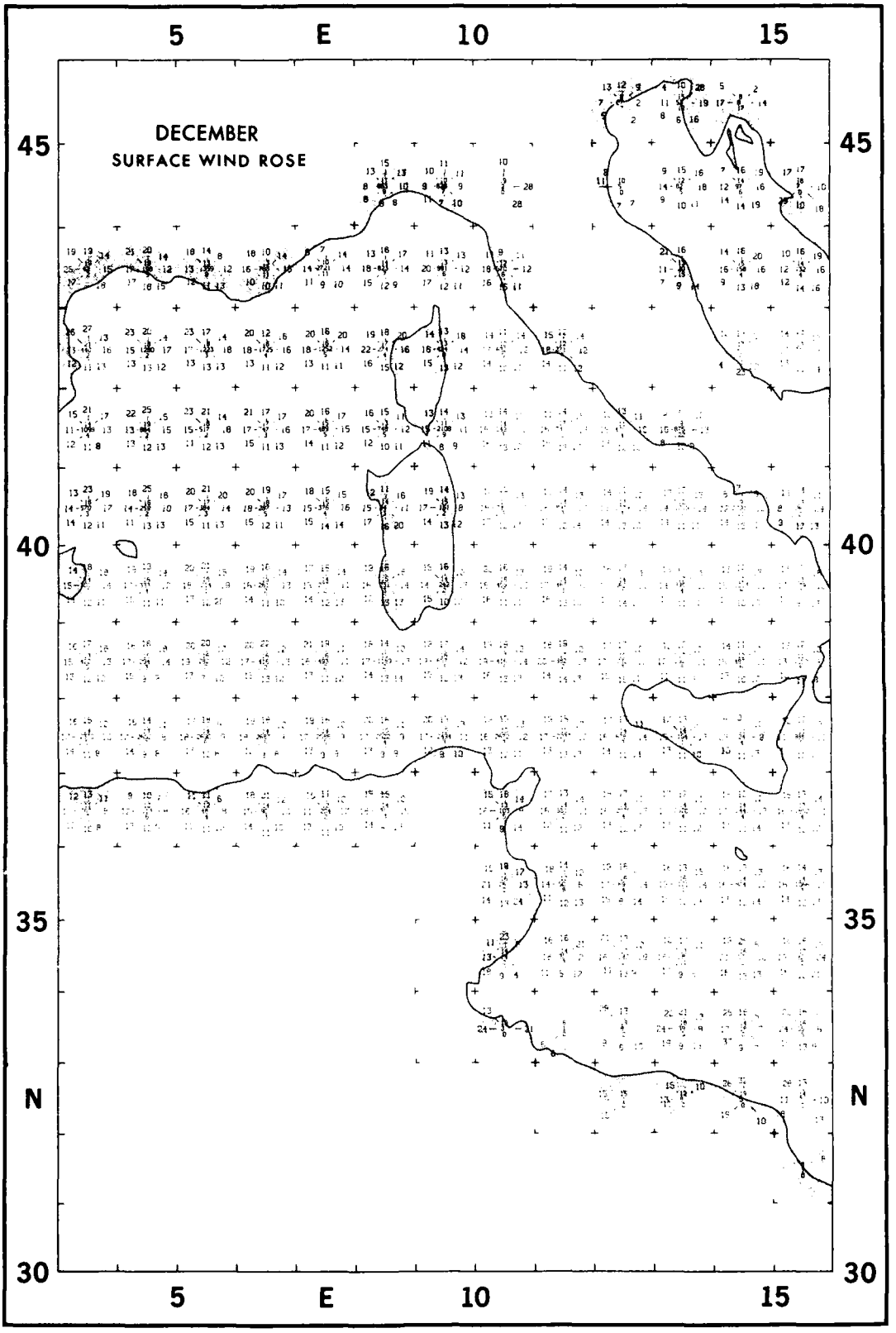

DECEMBER
WIND-VISIBILITY-CLOUDINESS
SOLID LINE-
PERCENT FREQUENCY OF OPTIMUM CONDITIONS: LCC ≥5000 FT., (OR NO LCC), VSBY. ≥5 N. MI. AND WIND 11-21 KTS.
DASHED LINE-
PERCENT FREQUENCY OF POOR CONDITIONS. ANY ONE OF THE FOLLOWING CONSTITUTES POOR CONDITIONS:
LCC <300 FT.,
VSBY. <1 N. MI.,
WIND <6 OR ≥34 KTS.
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

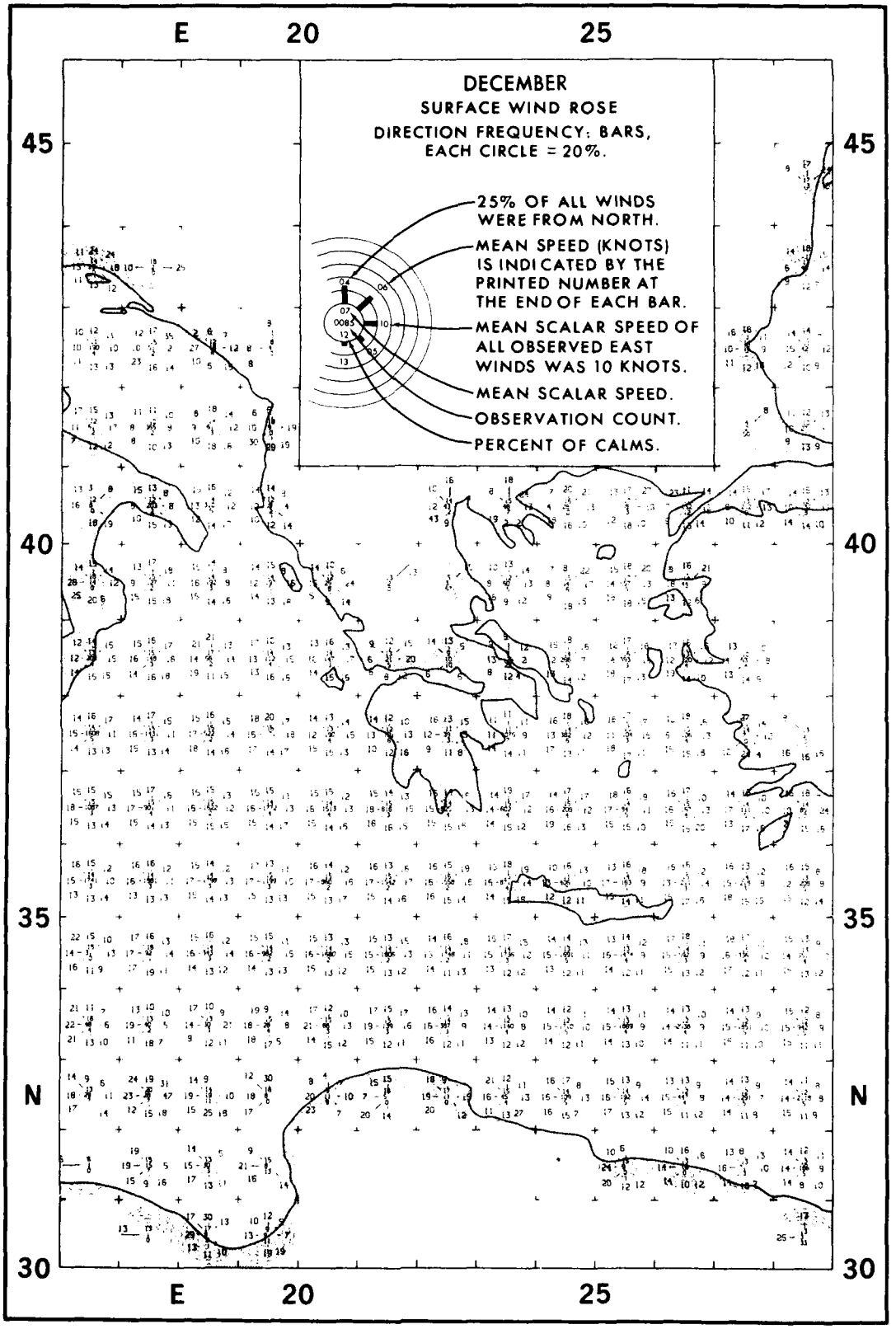

DECEMBER
WIND SPEED
MEAN SCALAR WIND SPEED (Knots)
INSUFFICIENT DATA
50
45
40
35
30
N
10
5
W
0
E
5
10
15
20
25
30
35
40
45

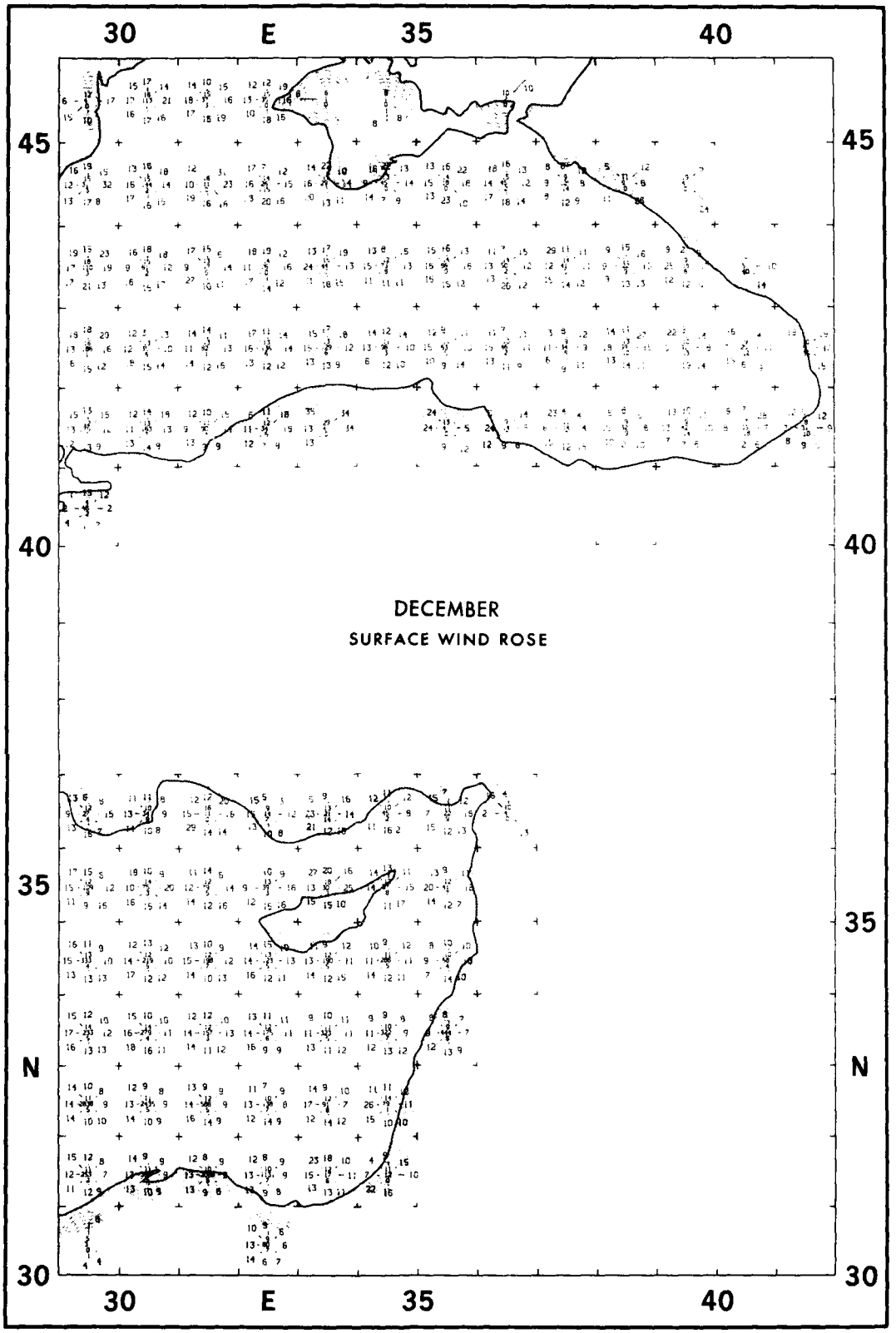

DECEMBER
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED <11 KNOTS
DASHED LINE - WIND SPEED ≥34 KNOTS
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

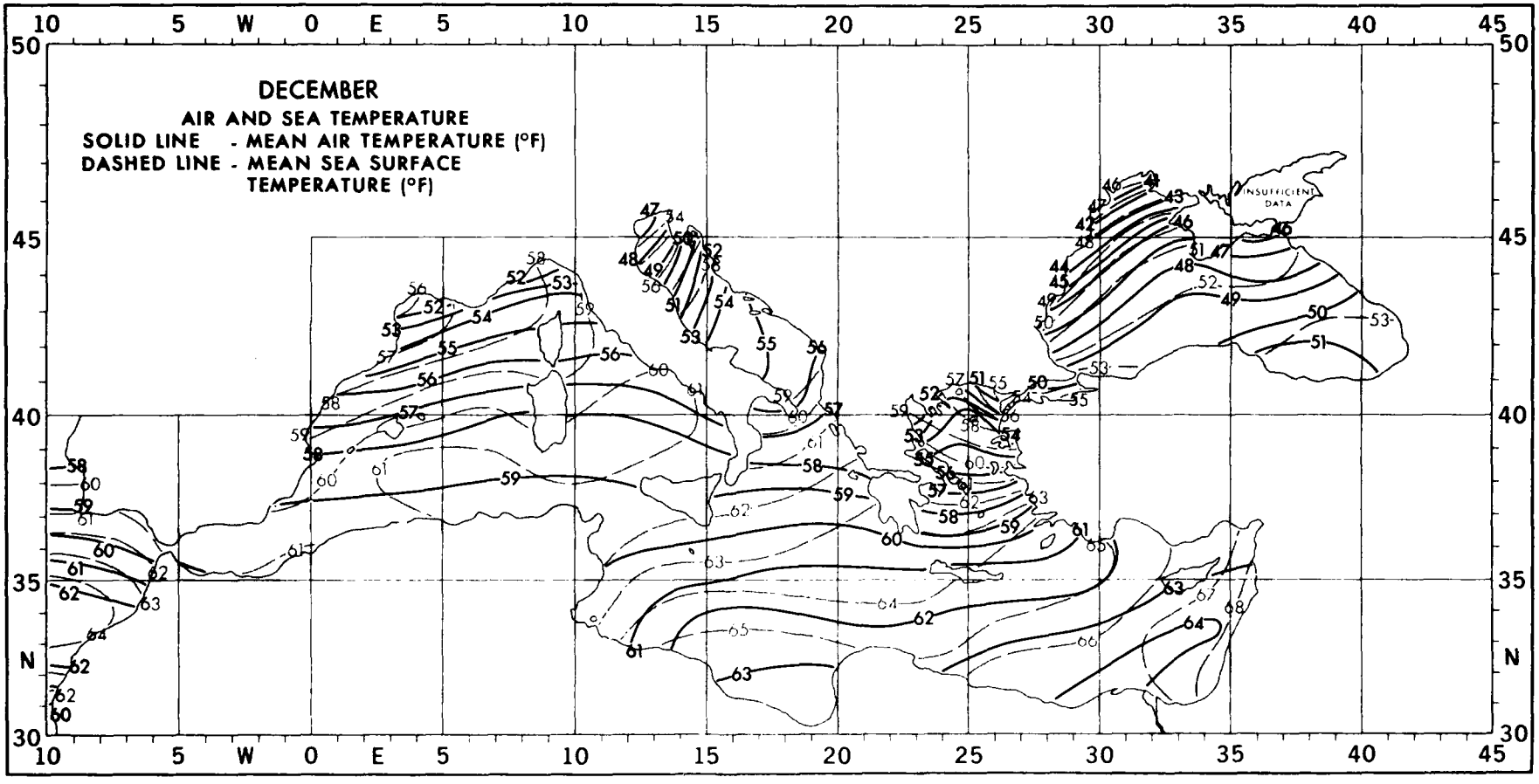

DECEMBER
WIND SPEED
PERCENT FREQUENCY OF:
SOLID LINE - WIND SPEED 11-21 KNOTS
DASHED LINE - WIND SPEED 22-33 KNOTS
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50
45
40
35
N
30

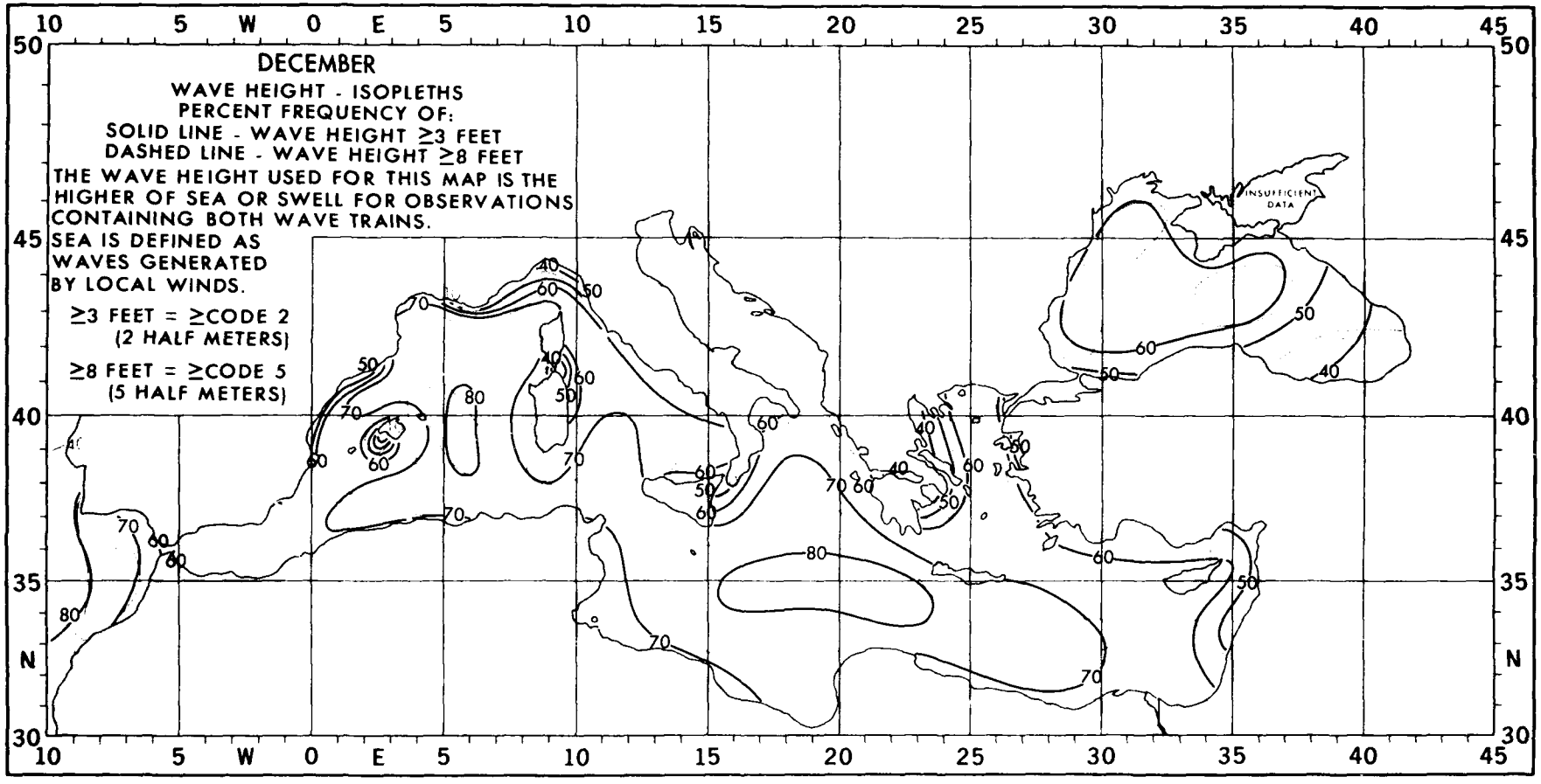

10
5
W
0
E
45
40
35
N
30
DECEMBER
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS,
EACH CIRCLE = 20%.
25% OF ALL WINDS WERE FROM NORTH.
MEAN SPEED (KNOTS) IS INDICATED BY THE PRINTED NUMBER AT THE END OF EACH BAR.
MEAN SCALAR SPEED OF ALL OBSERVED EAST WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.

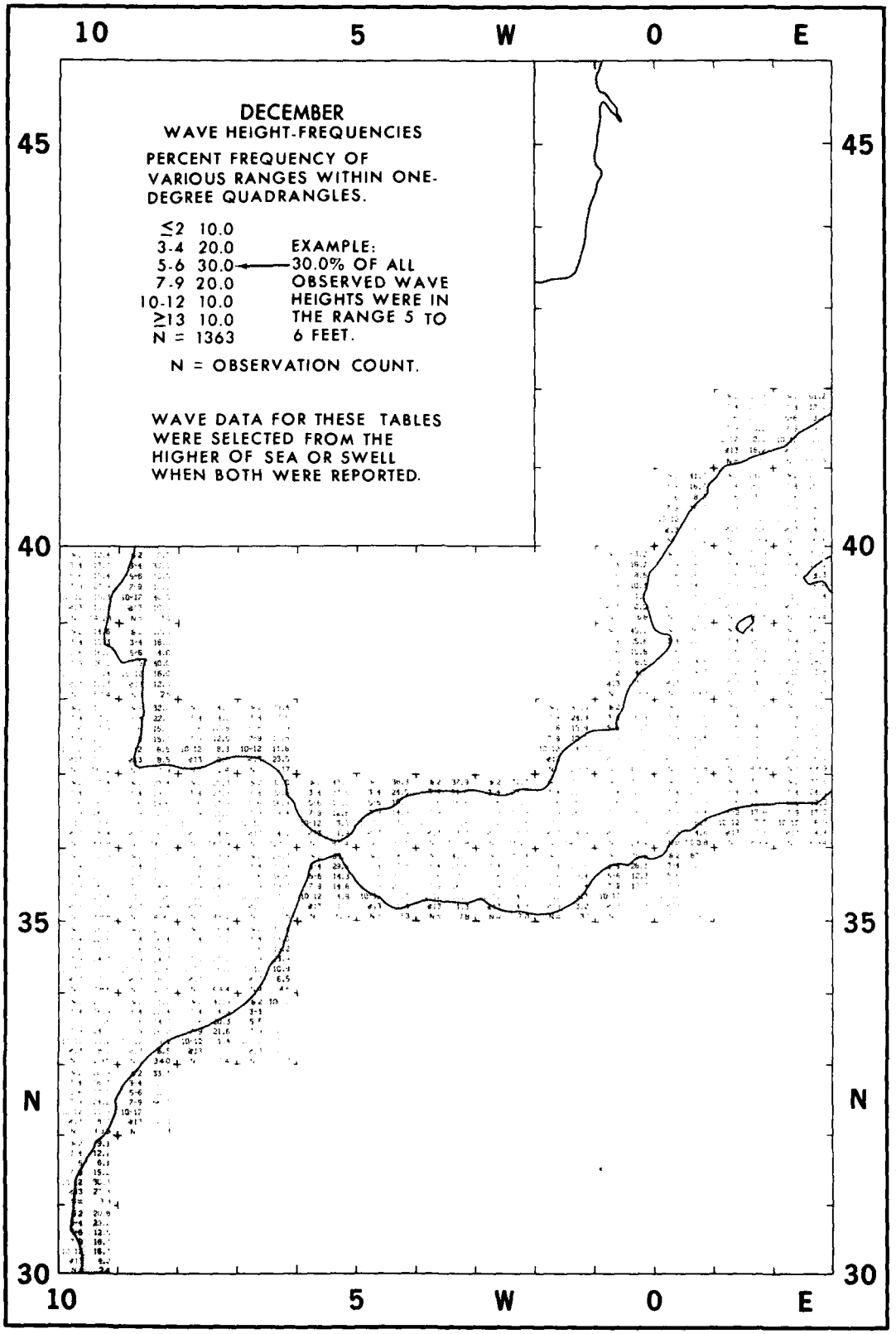

DECEMBER
SURFACE WIND ROSE
5
E
10
15
45
40
35
N
30

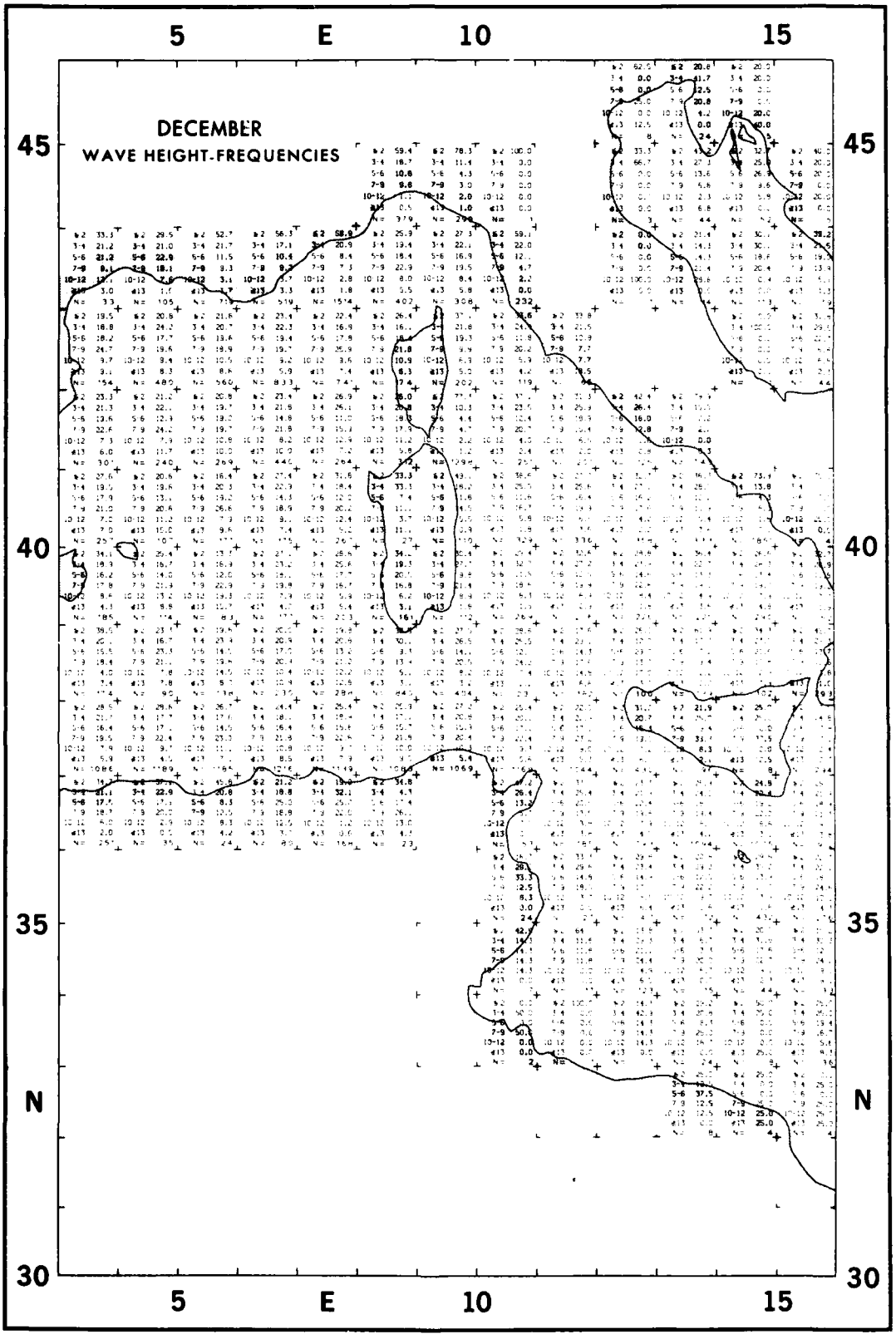

E
20
25
45
40
35
N
30
DECEMBER
SURFACE WIND ROSE
DIRECTION FREQUENCY: BARS, EACH CIRCLE = 20%.
25% OF ALL WINDS WERE FROM NORTH.
MEAN SPEED (KNOTS) IS INDICATED BY THE PRINTED NUMBER AT THE END OF EACH BAR.
MEAN SCALAR SPEED OF ALL OBSERVED EAST WINDS WAS 10 KNOTS.
MEAN SCALAR SPEED.
OBSERVATION COUNT.
PERCENT OF CALMS.

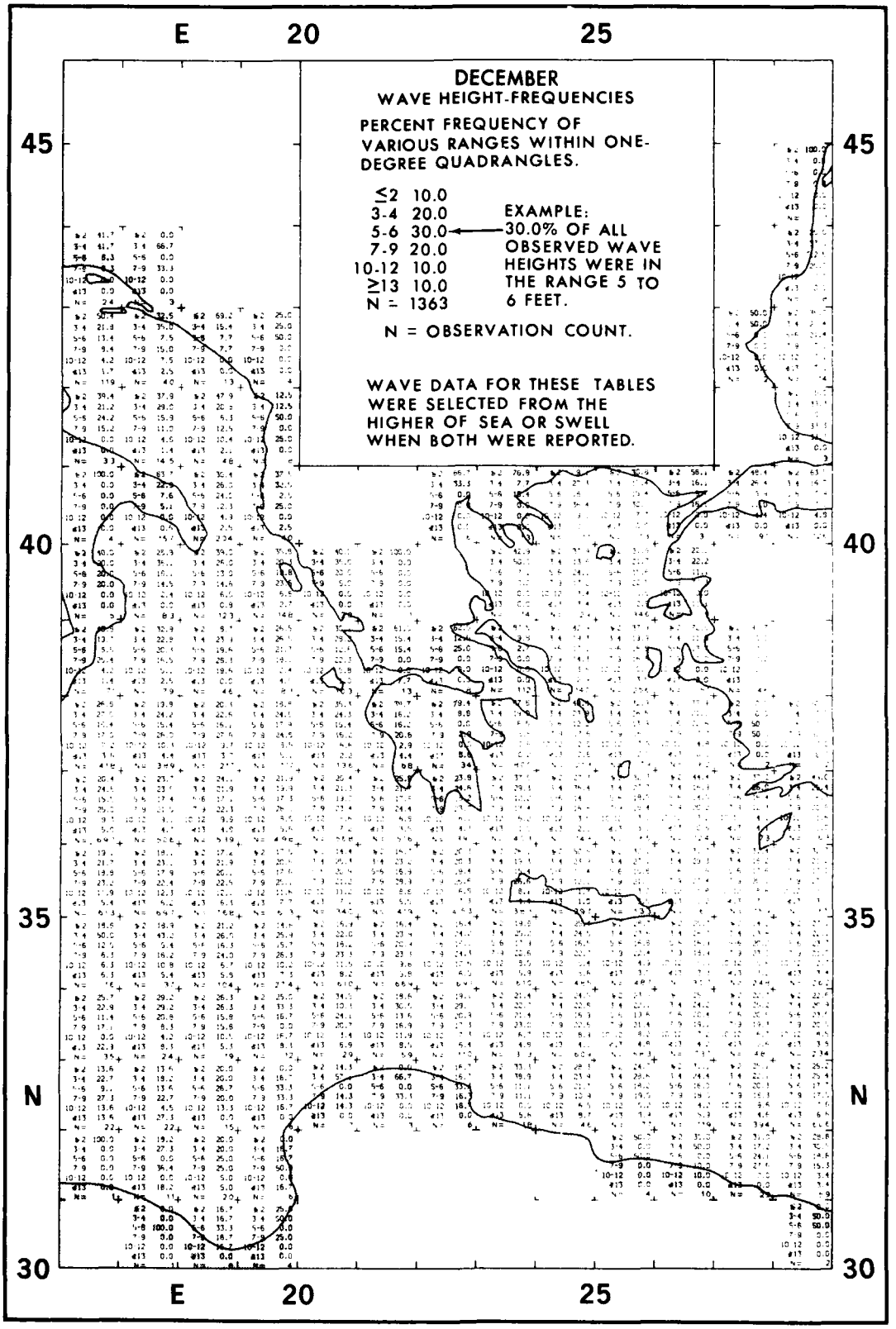

30
E
35
40
45
40
DECEMBER
SURFACE WIND ROSE
35
N
30

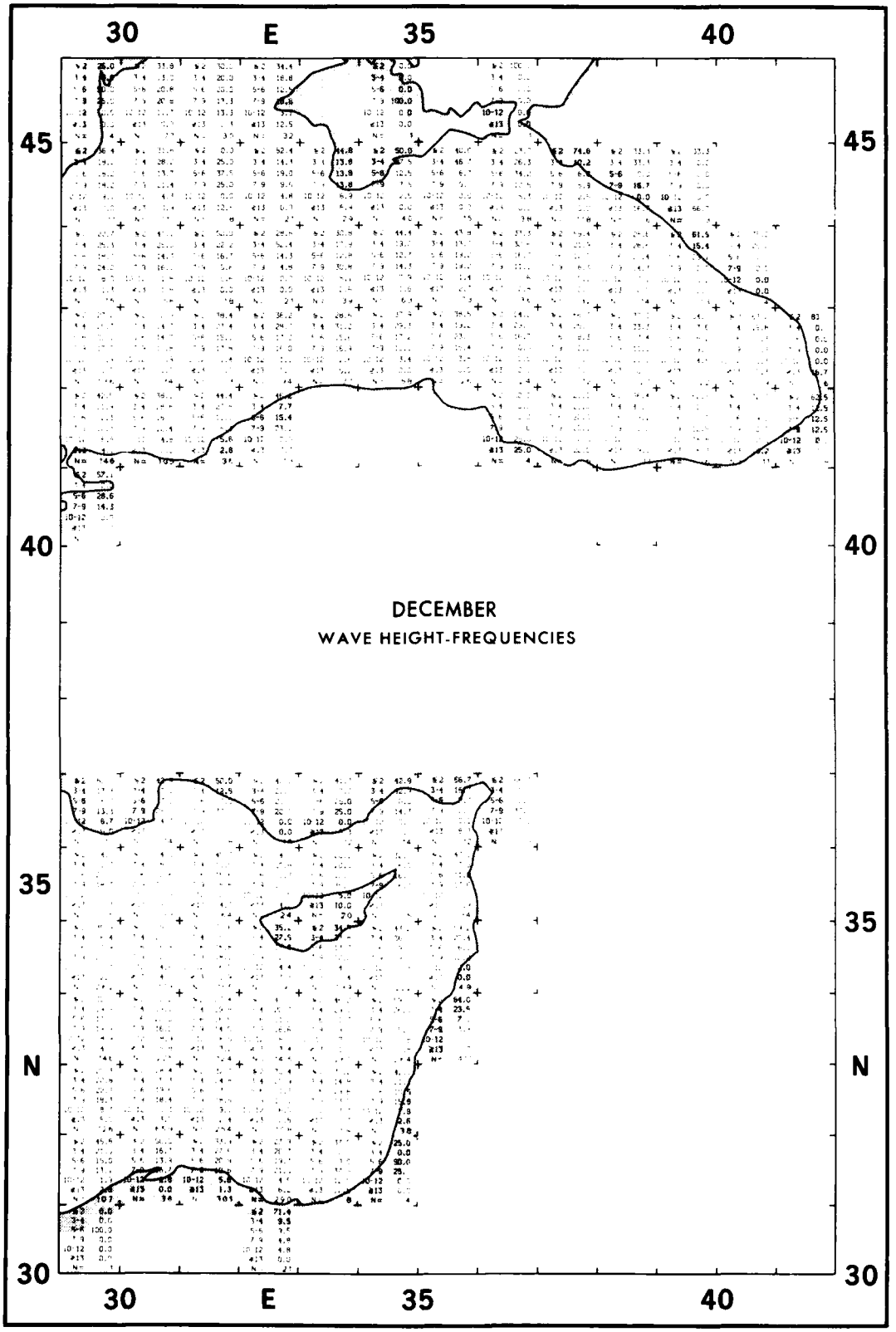

DECEMBER
AIR AND SEA TEMPERATURE
SOLID LINE - MEAN AIR TEMPERATURE (°F)
DASHED LINE - MEAN SEA SURFACE TEMPERATURE (°F)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

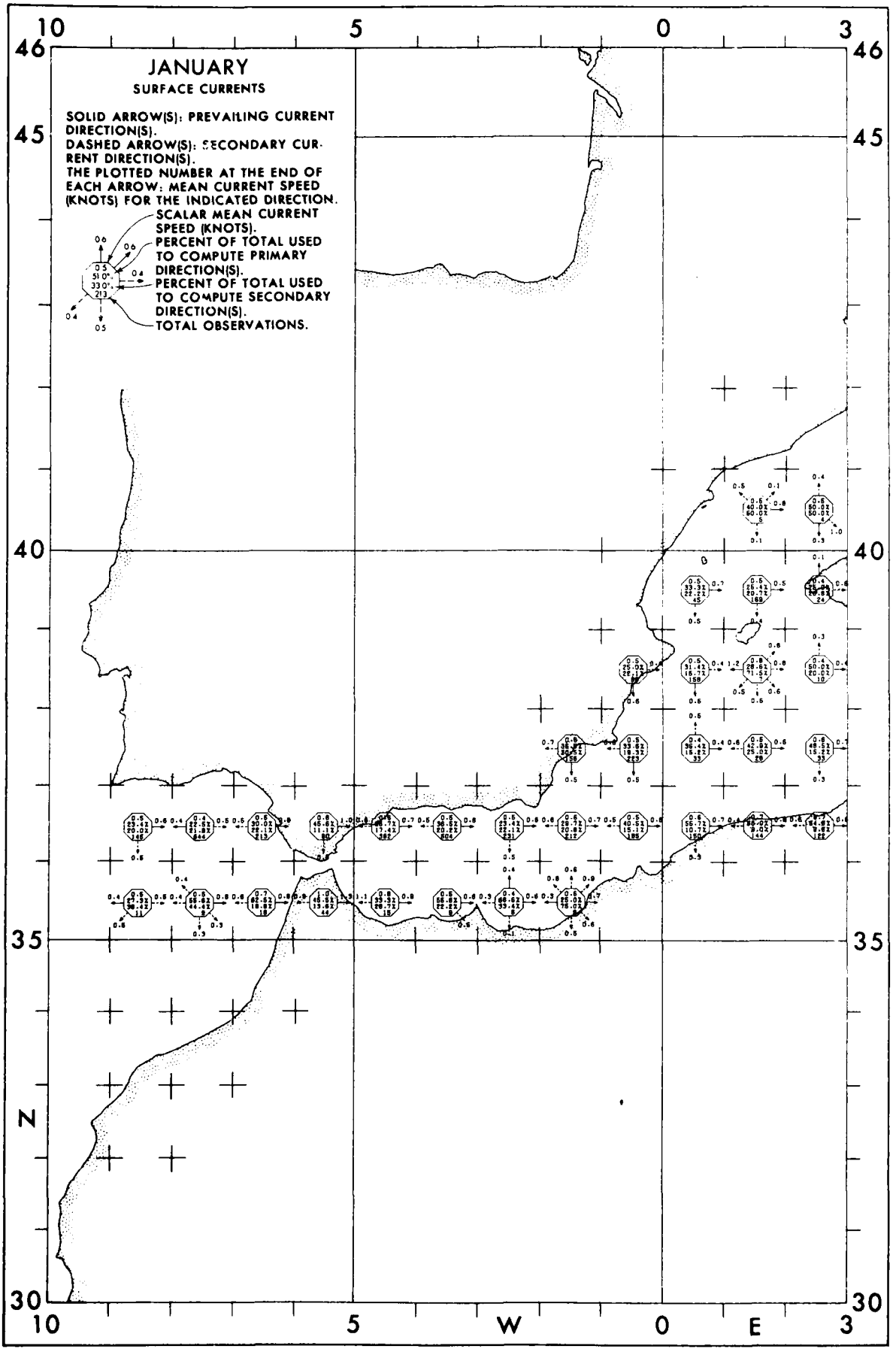

DECEMBER
WAVE HEIGHT - ISOPLETHS
PERCENT FREQUENCY OF:
SOLID LINE - WAVE HEIGHT ≥3 FEET
DASHED LINE - WAVE HEIGHT ≥8 FEET
THE WAVE HEIGHT USED FOR THIS MAP IS THE HIGHER OF SEA OR SWELL FOR OBSERVATIONS CONTAINING BOTH WAVE TRAINS.
SEA IS DEFINED AS WAVES GENERATED BY LOCAL WINDS.
≥3 FEET = ≥CODE 2 (2 HALF METERS)
≥8 FEET = ≥CODE 5 (5 HALF METERS)
INSUFFICIENT DATA
10 5 W 0 E 5 10 15 20 25 30 35 40 45
50 45 40 35 N 30

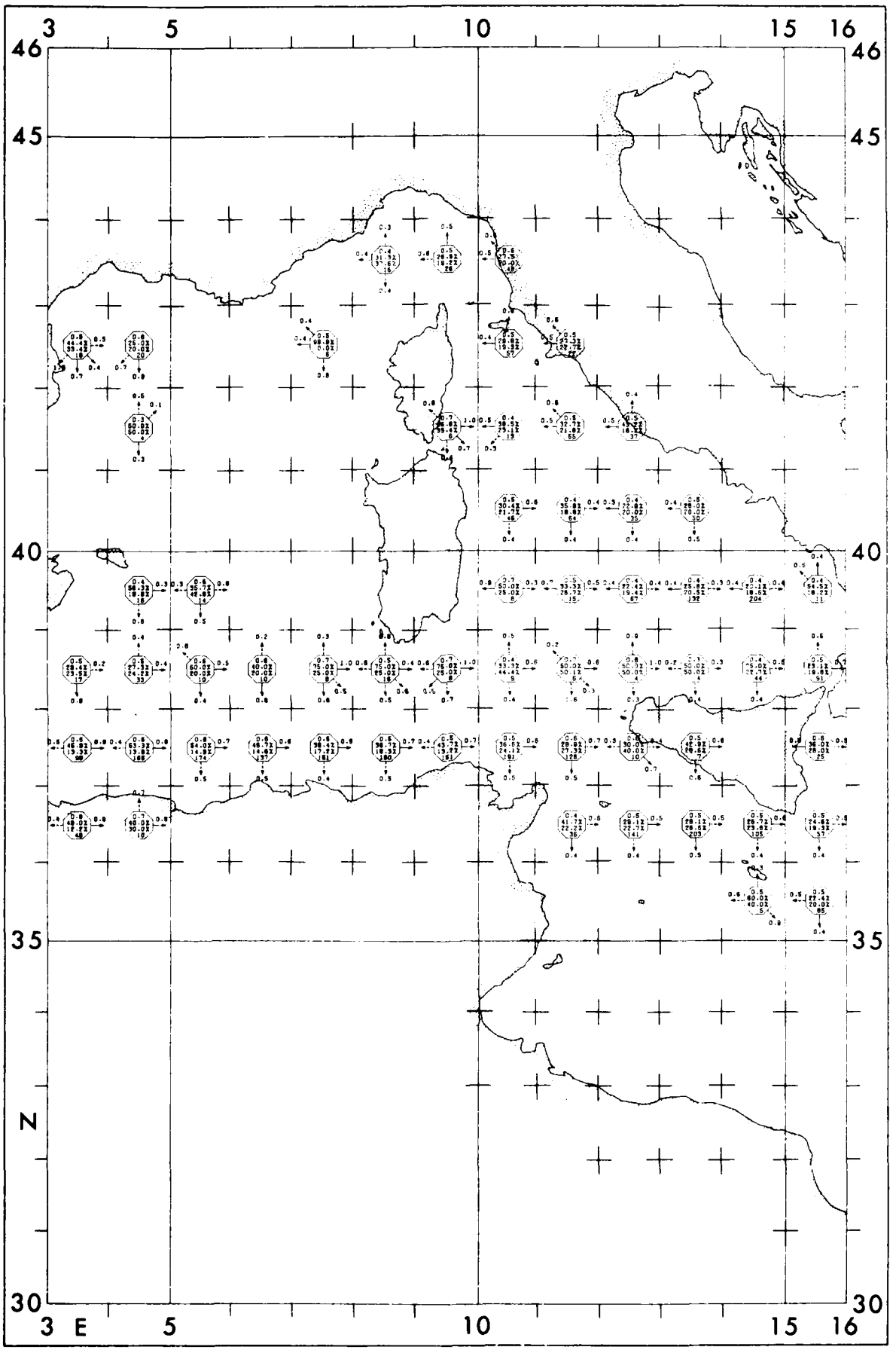

10
5
W
0
E
45
40
35
N
30
DECEMBER
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.

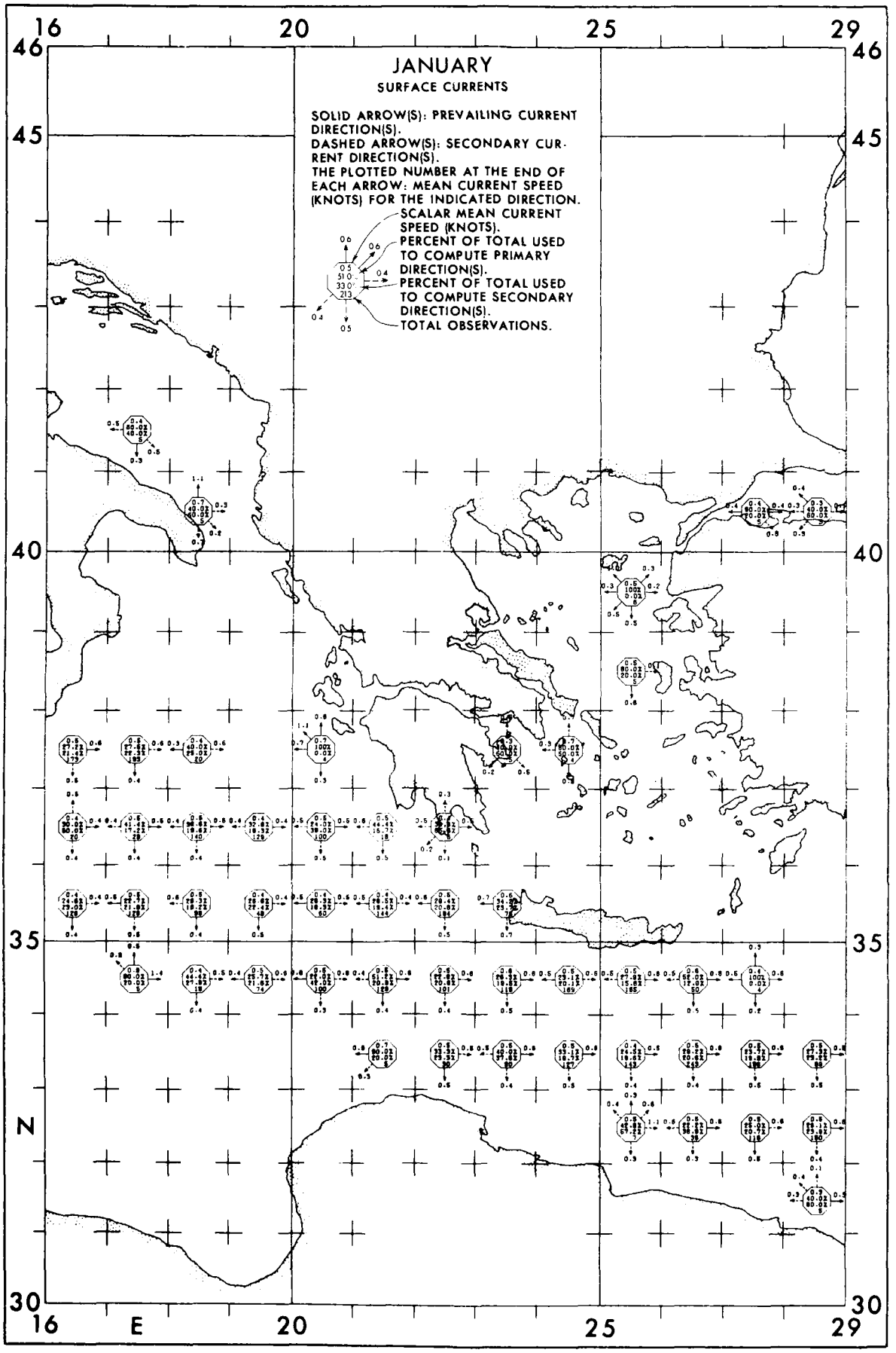

DECEMBER
WAVE HEIGHT-FREQUENCIES
5
E
10
15
45
40
35
N
30

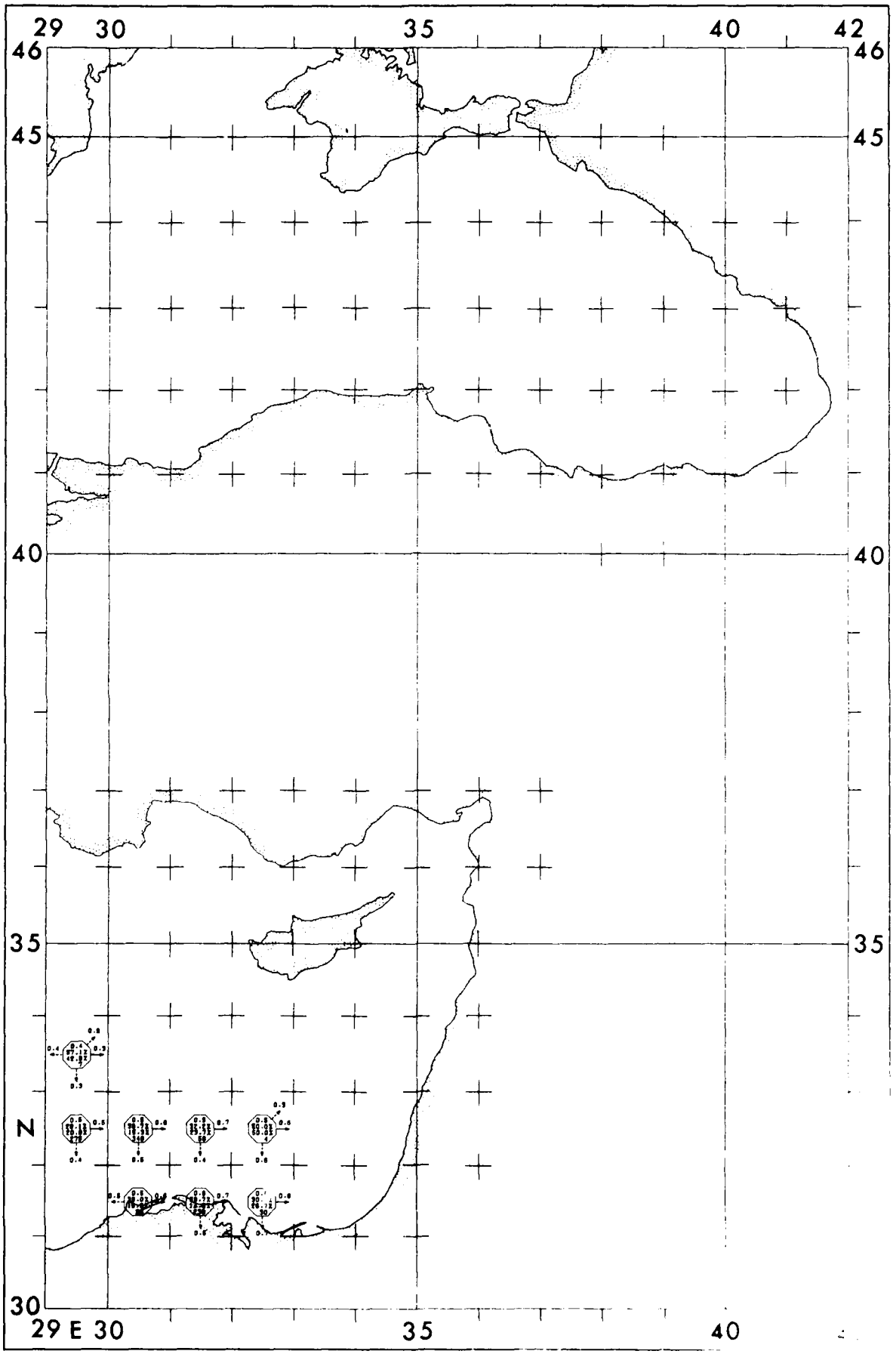

E
20
25
45
40
35
30
N
DECEMBER
WAVE HEIGHT-FREQUENCIES
PERCENT FREQUENCY OF VARIOUS RANGES WITHIN ONE-DEGREE QUADRANGLES.
≤2 10.0
3-4 20.0
5-6 30.0
7-9 20.0
10-12 10.0
≥13 10.0
N = 1363
EXAMPLE:
30.0% OF ALL OBSERVED WAVE HEIGHTS WERE IN THE RANGE 5 TO 6 FEET.
N = OBSERVATION COUNT.
WAVE DATA FOR THESE TABLES WERE SELECTED FROM THE HIGHER OF SEA OR SWELL WHEN BOTH WERE REPORTED.


30
E
35
40
45
40
35
N
30
DECEMBER
WAVE HEIGHT-FREQUENCIES


JANUARY
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
10
5
0
3
46
45
40
35
30
N
W
E

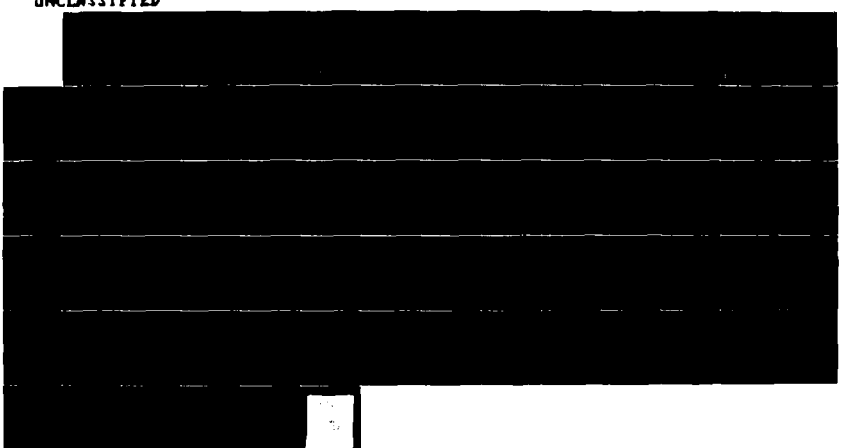

3
5
10
15
16
46
45
40
35
30
N
3 E
5
10
15
16
46
45
40
35
30

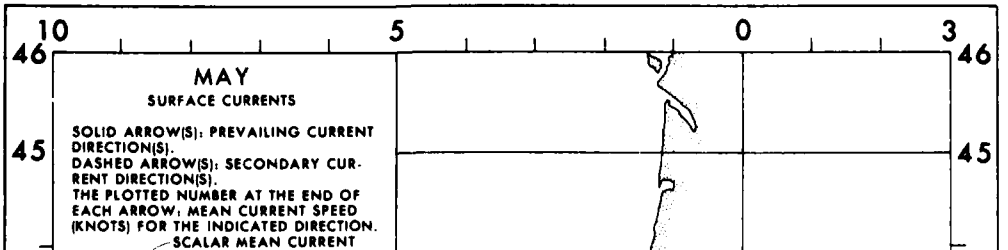

JANUARY
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
16
20
25
29
46
45
40
35
30
N
E

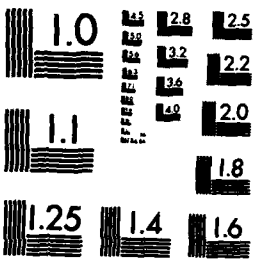

29
30
35
40
42
46
45
40
35
30
N
29 E 30
35
40

AD-A188 264 US NAVY CLIMATIC STUDY OF THE MEDITERRANEAN SEA(U) 4/4
NAVAL OCEANOGRAPHY COMMAND NSTL STATION MS JUL 87
NAVAIR-50-1C-547

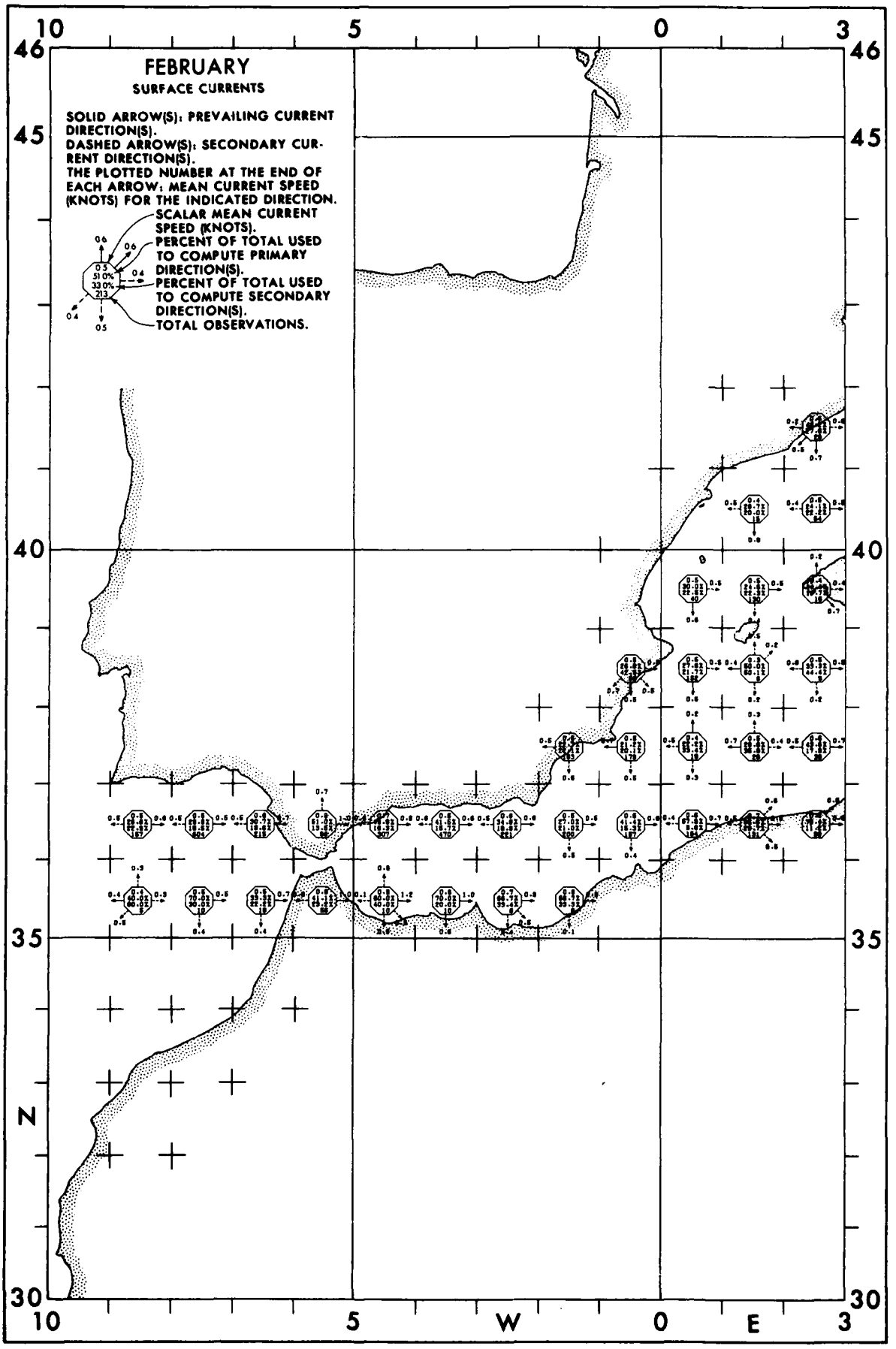
UNCLASSIFIED F/G 4/2 NL



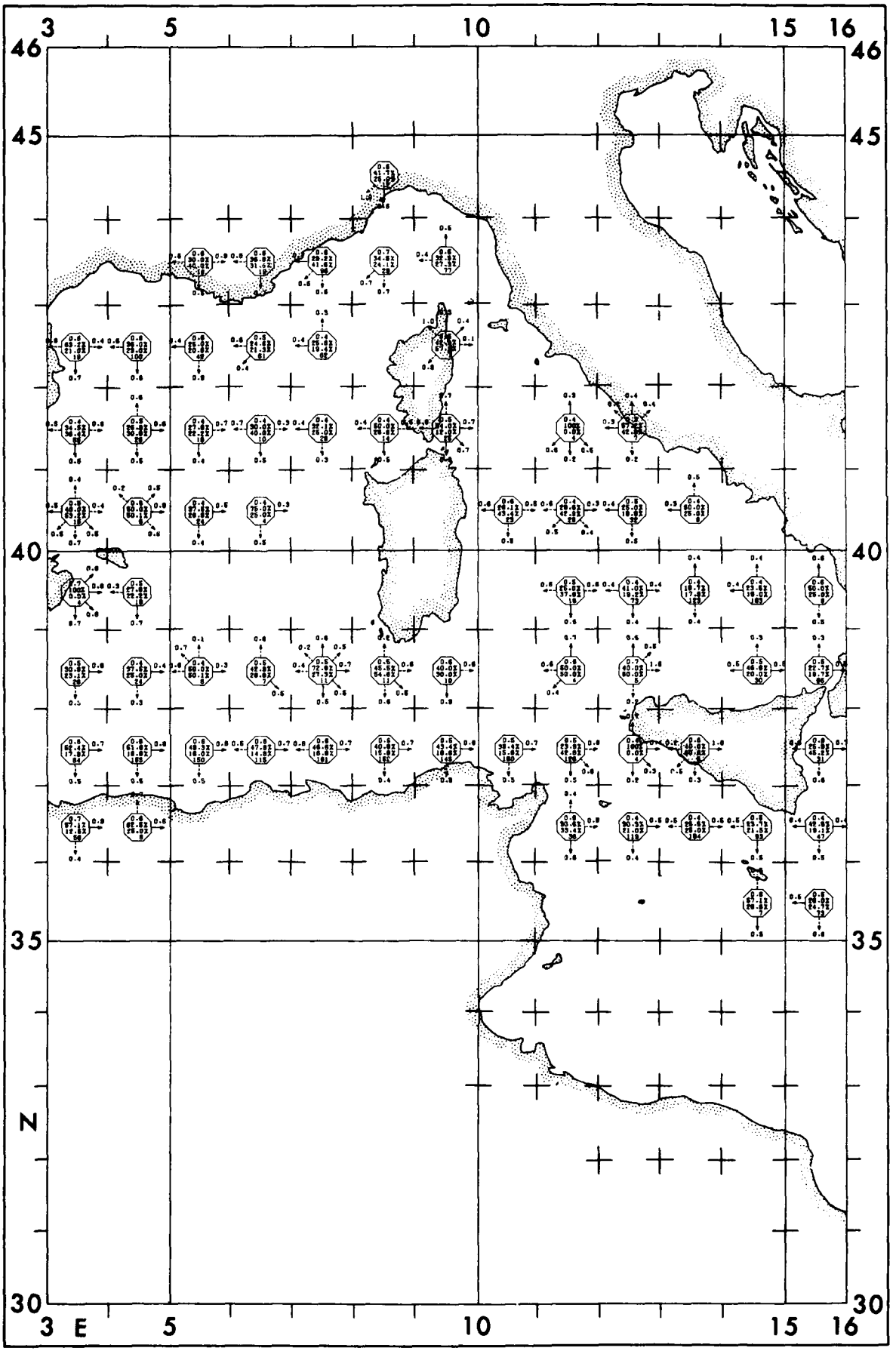

10
5
0
3
46
45
MAY
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT

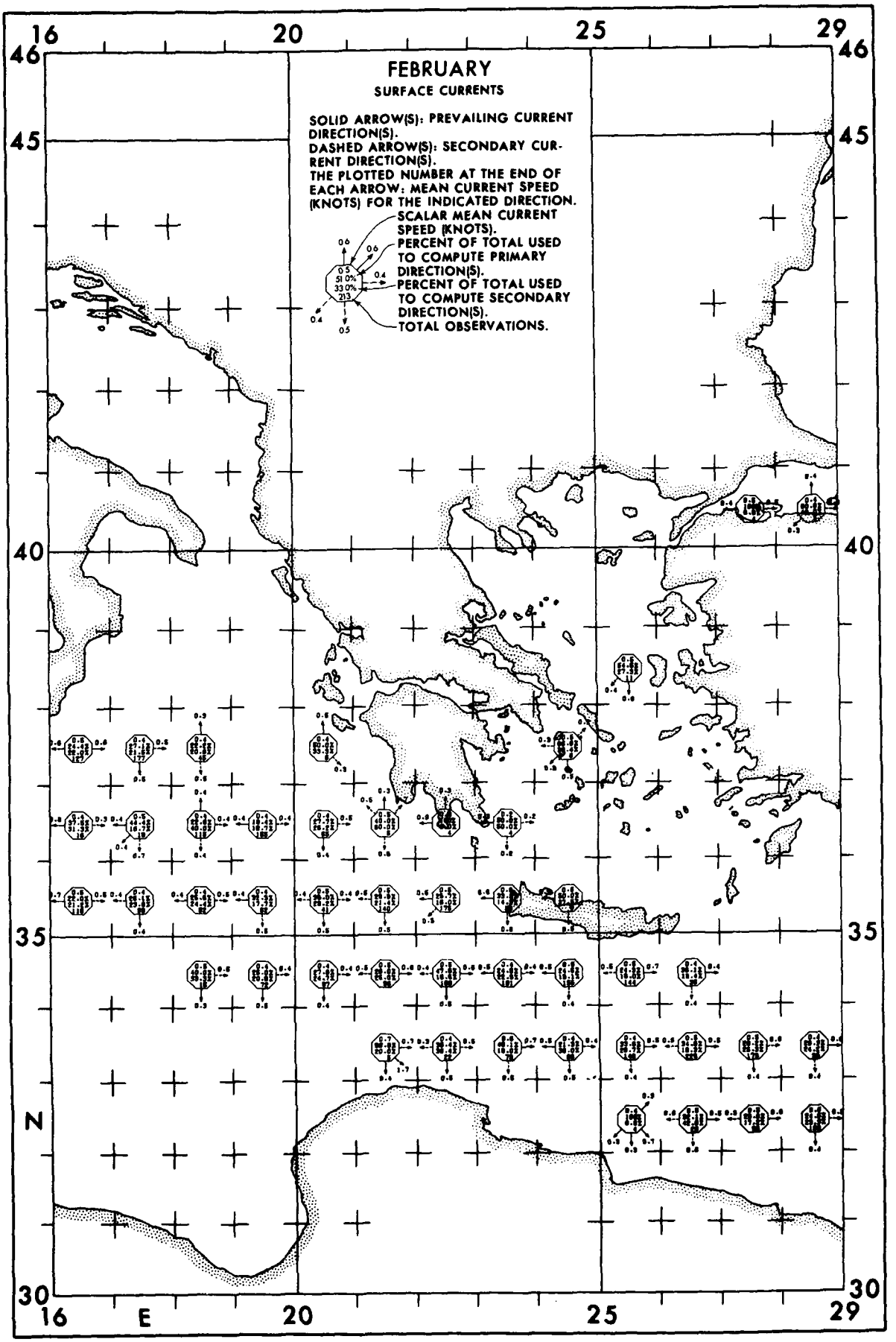


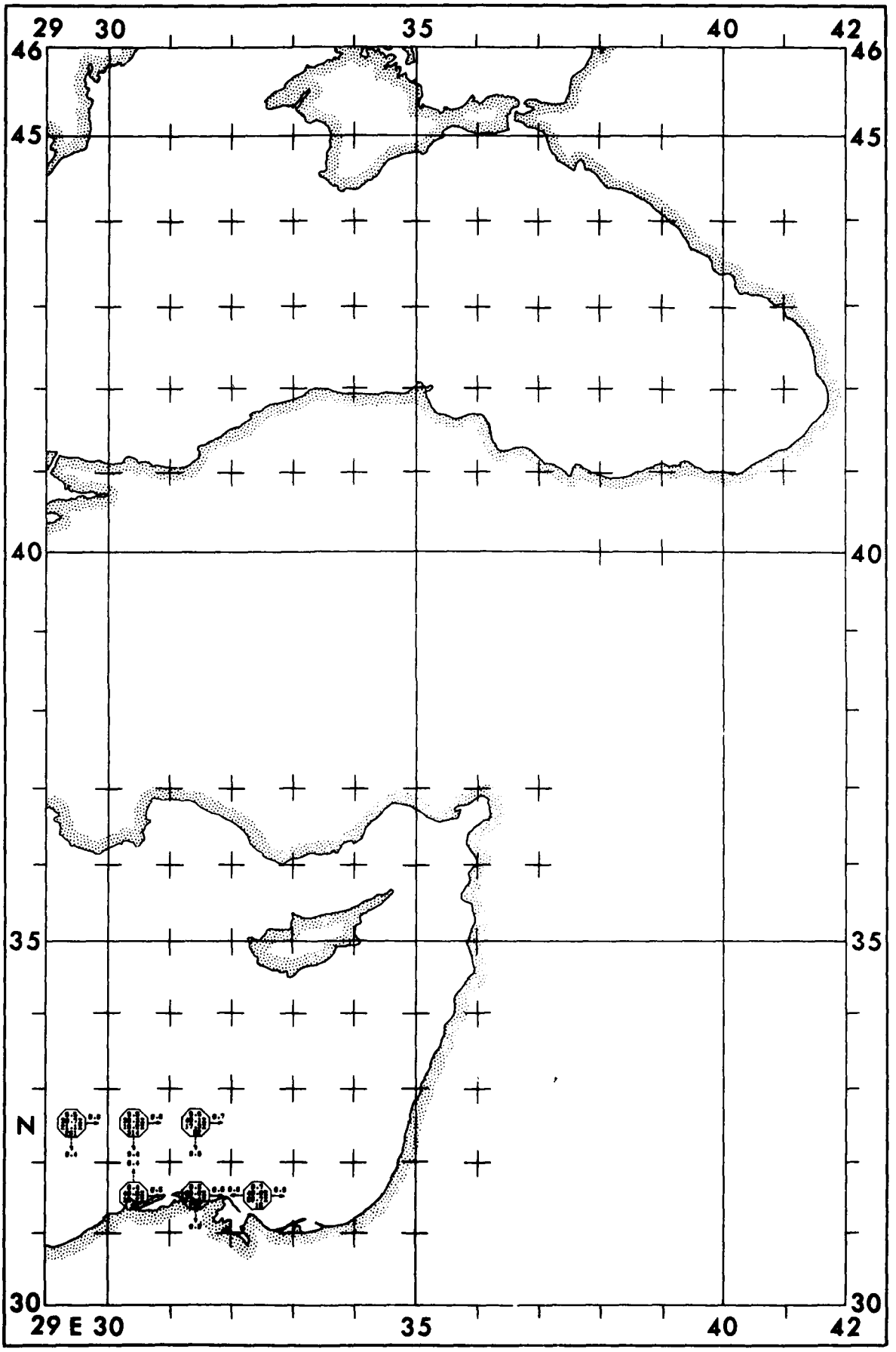
MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

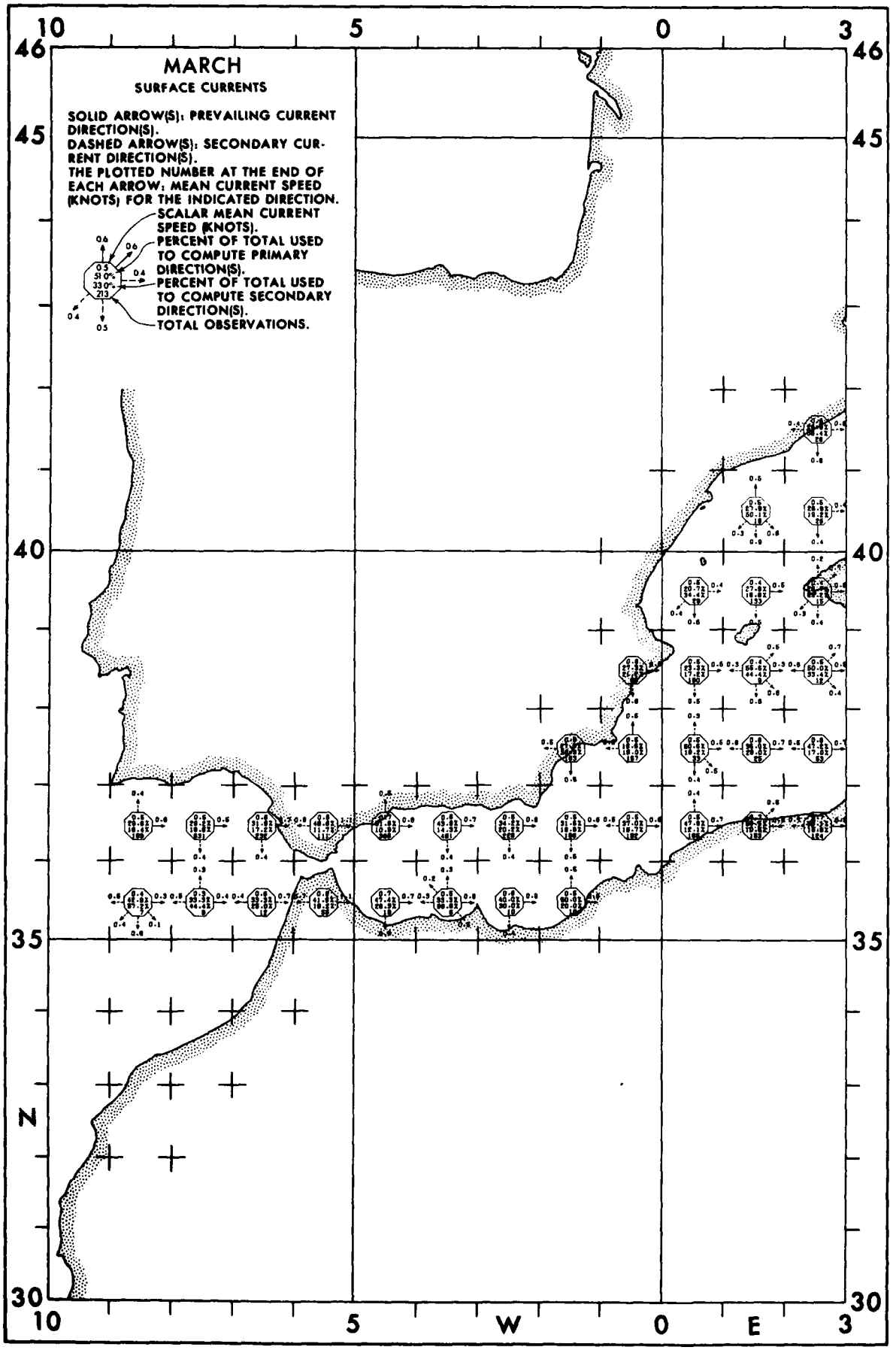

FEBRUARY
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
10
5
0
3
46
45
40
35
30
N
W
E

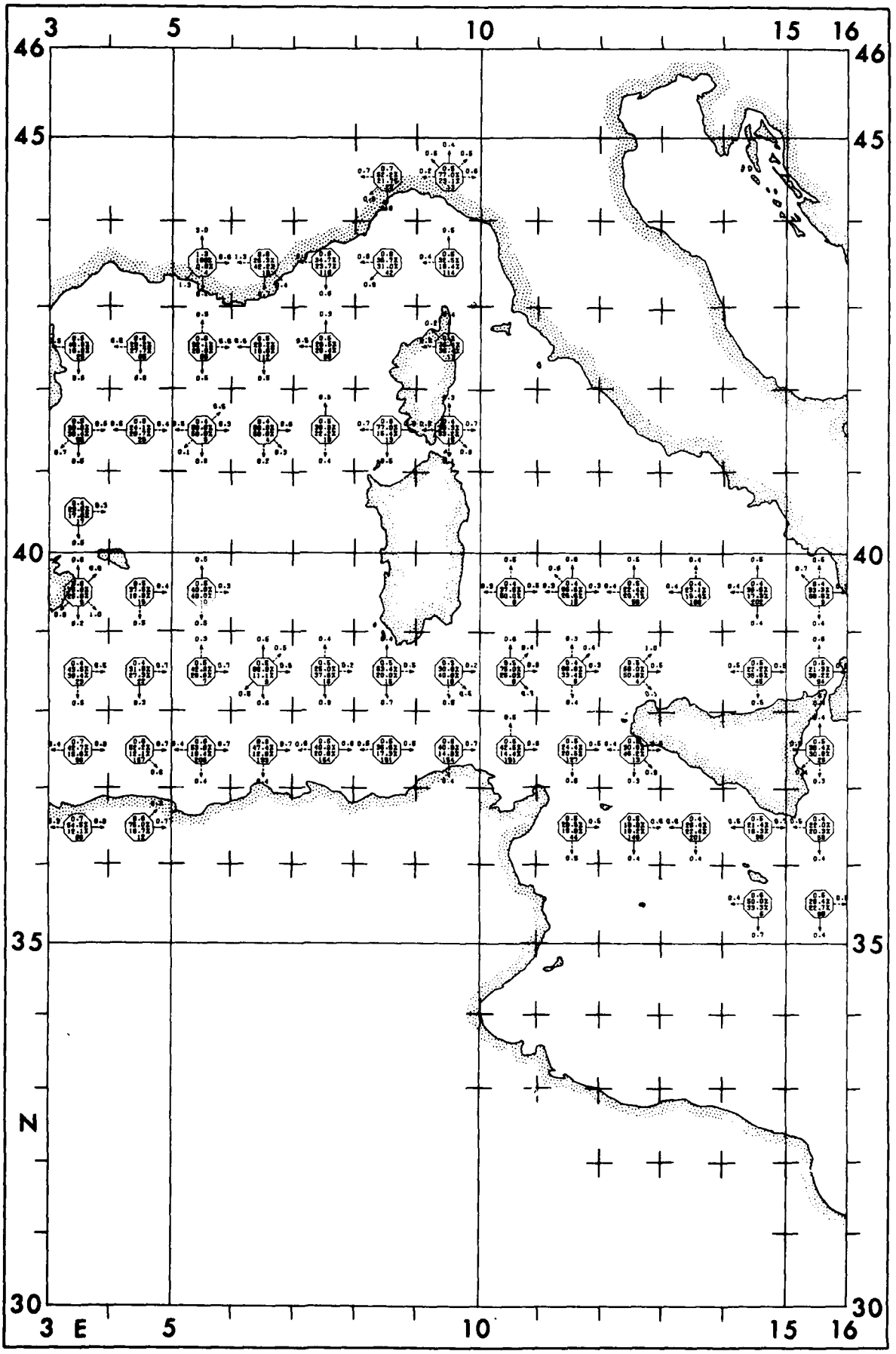
4F

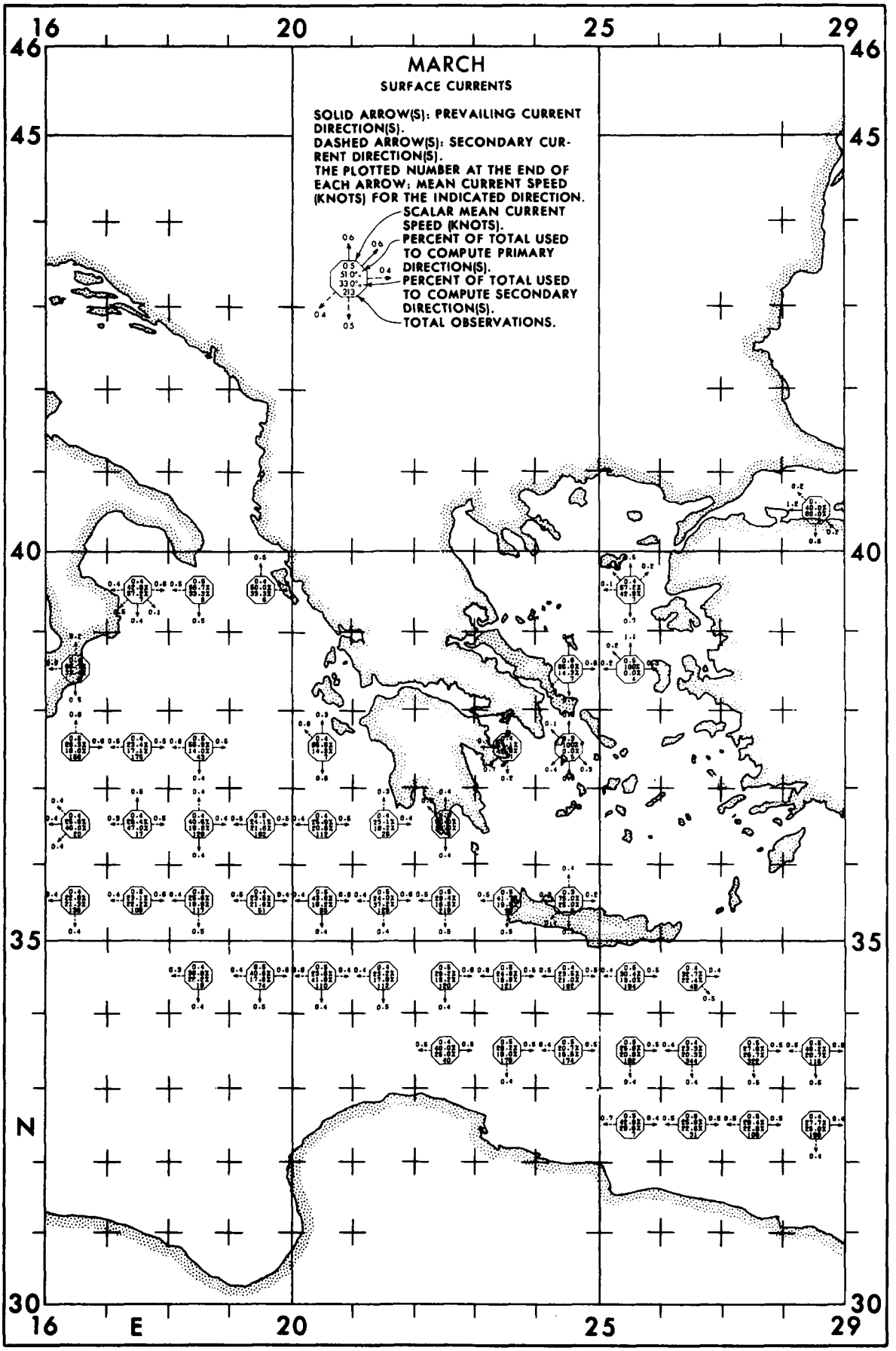

3
5
10
15
16
46
45
40
35
30
N
E

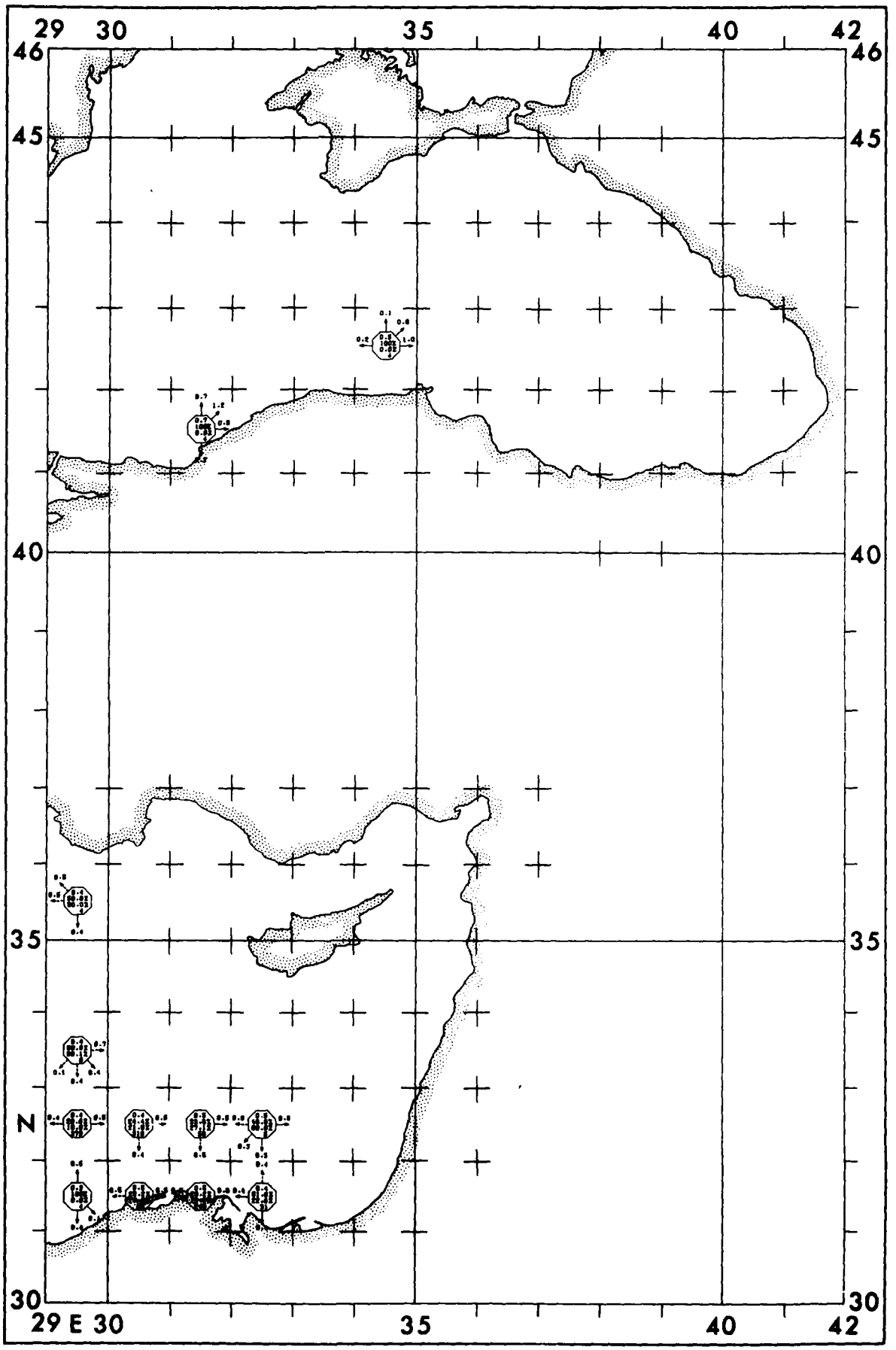

FEBRUARY
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
16
20
25
29
46
45
40
35
30
N
E

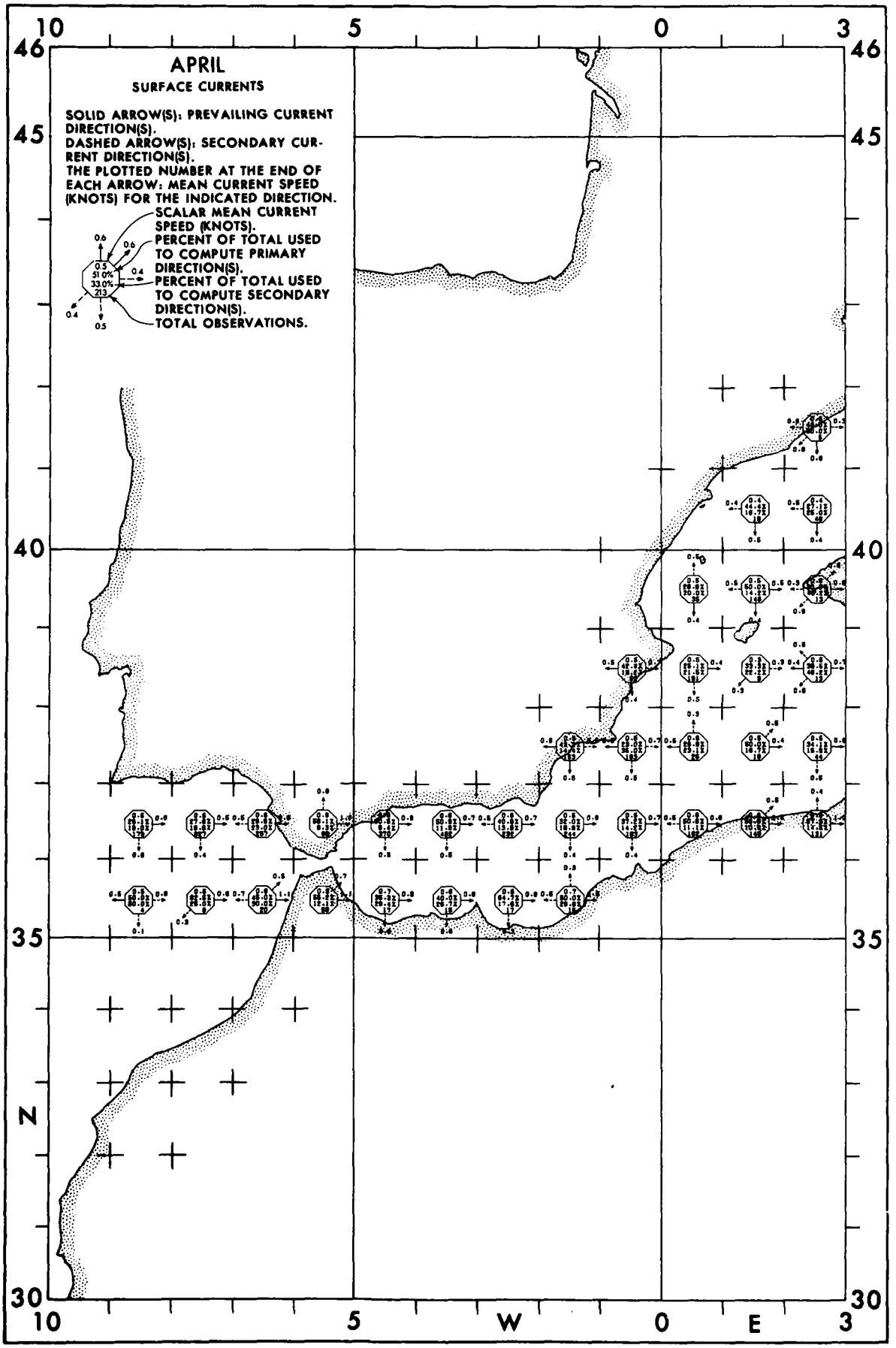

29
30
35
40
42
46
45
40
35
30
N
29 E 30
35
40
42

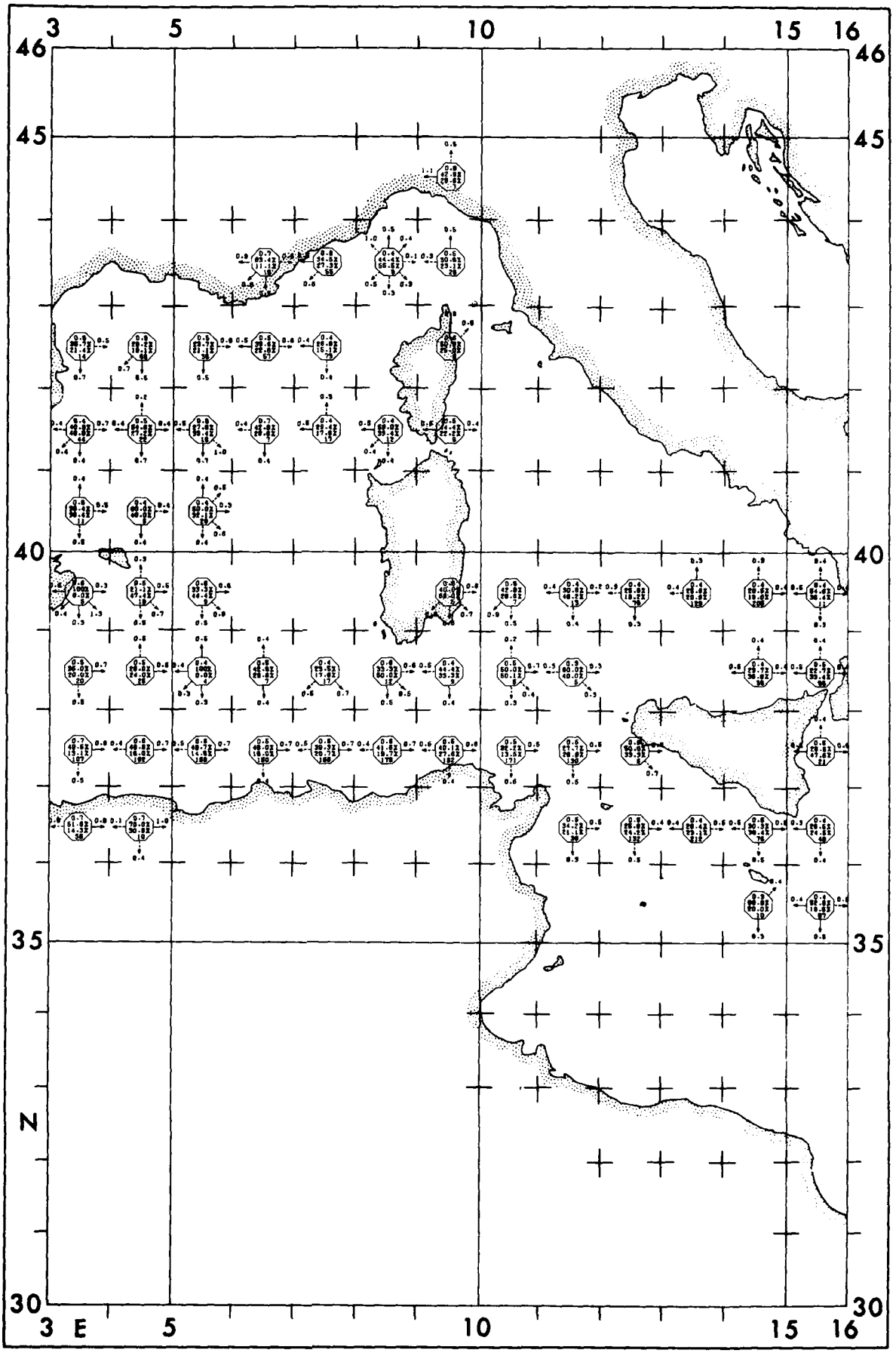

MARCH
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
10
5
0
3
46
45
40
35
30
N
W
E

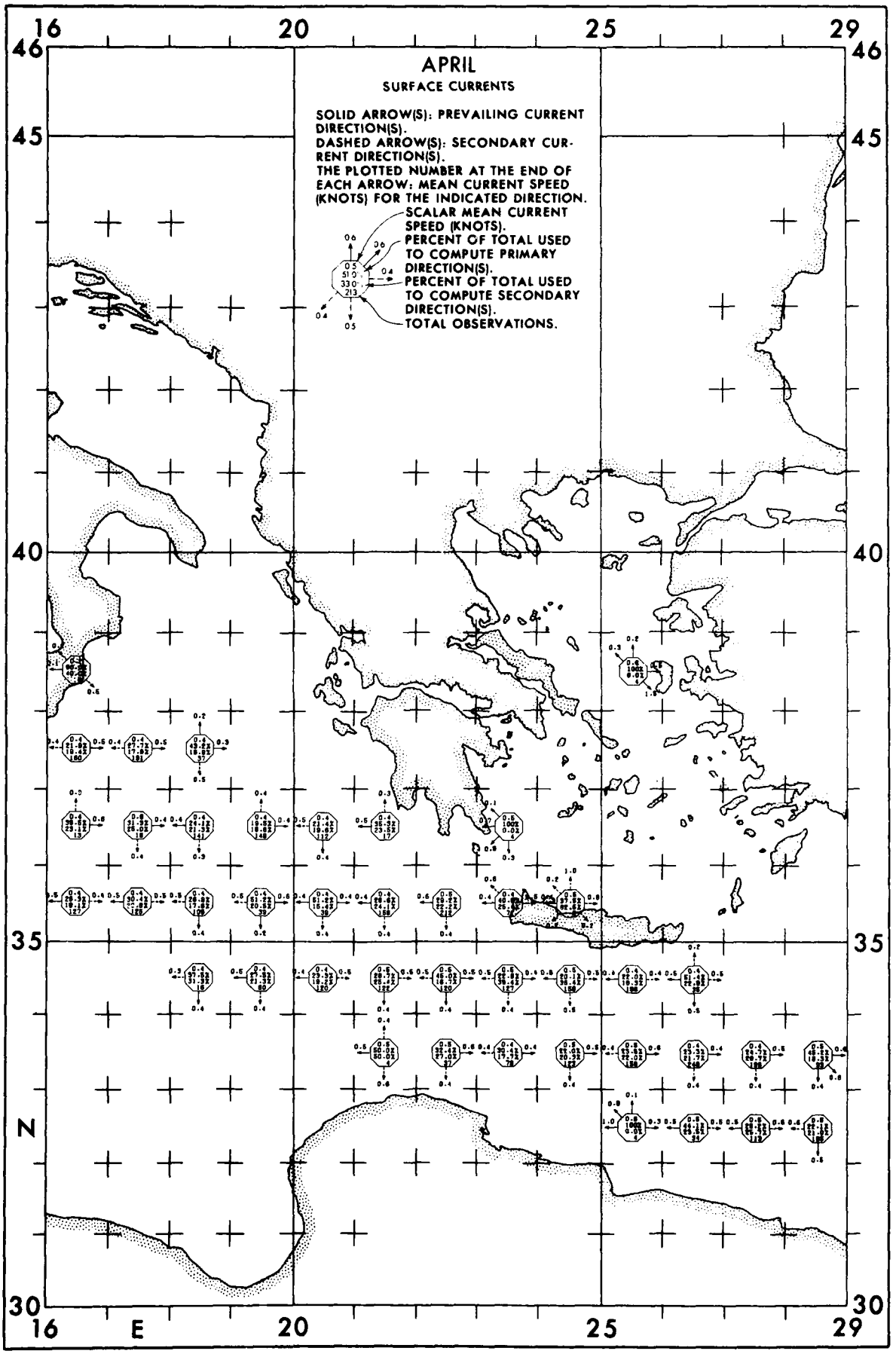

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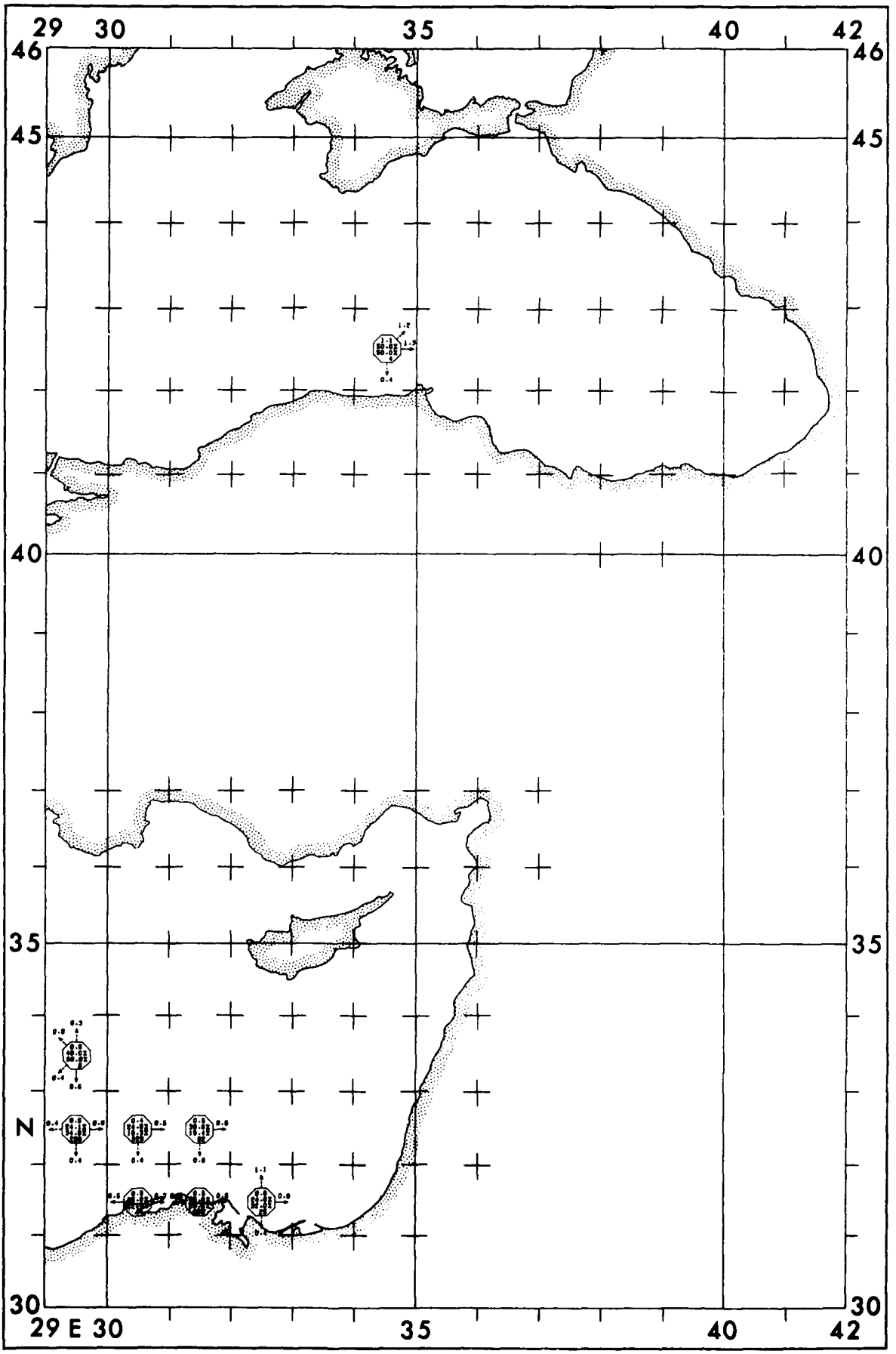

MARCH
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
16
20
25
29
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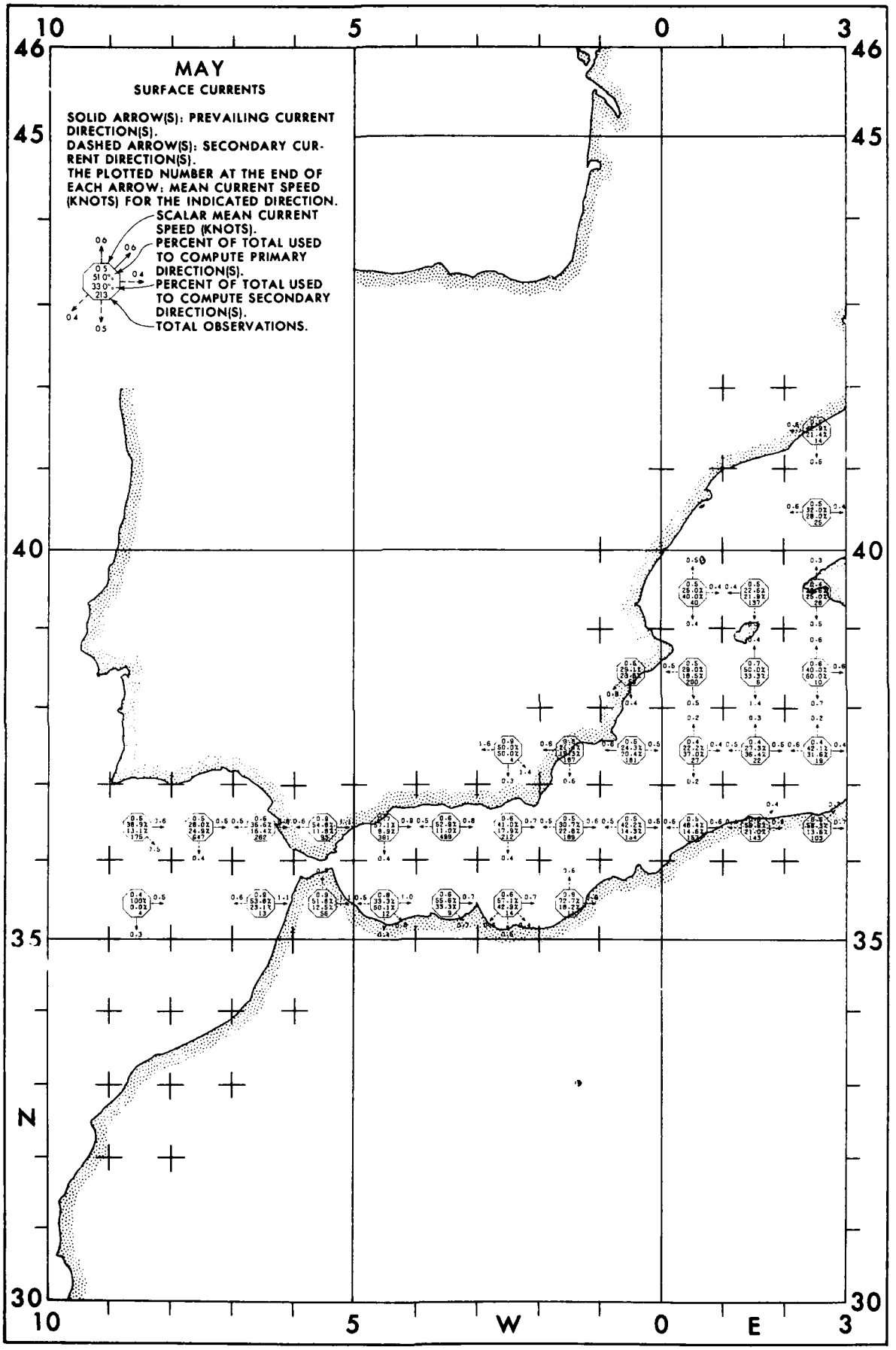

29
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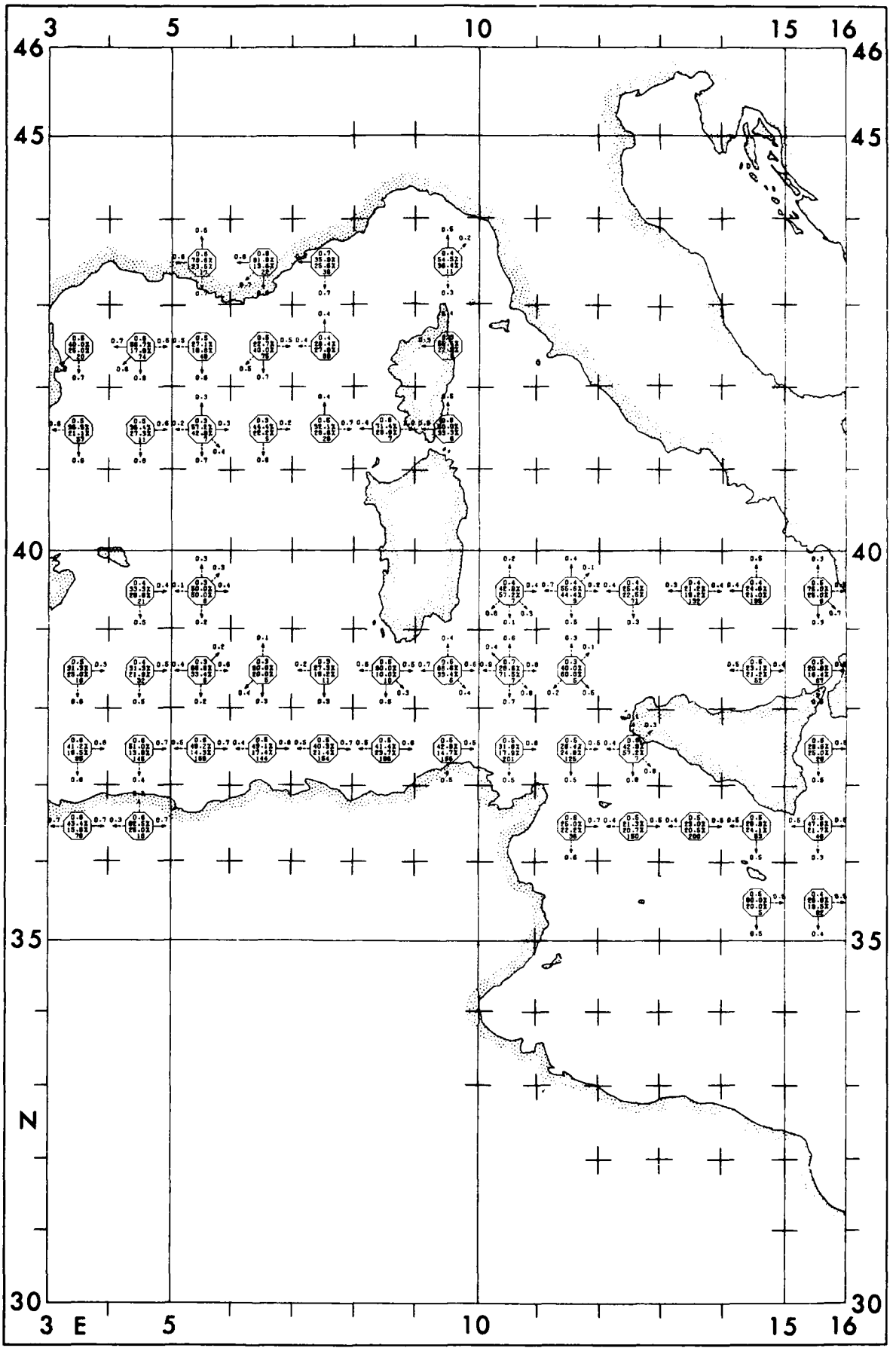

APRIL
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
0.6
0.6
0.5
51.0%
33.0%
213
0.4
0.4
0.5
10
5
0
3
46
45
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35
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N
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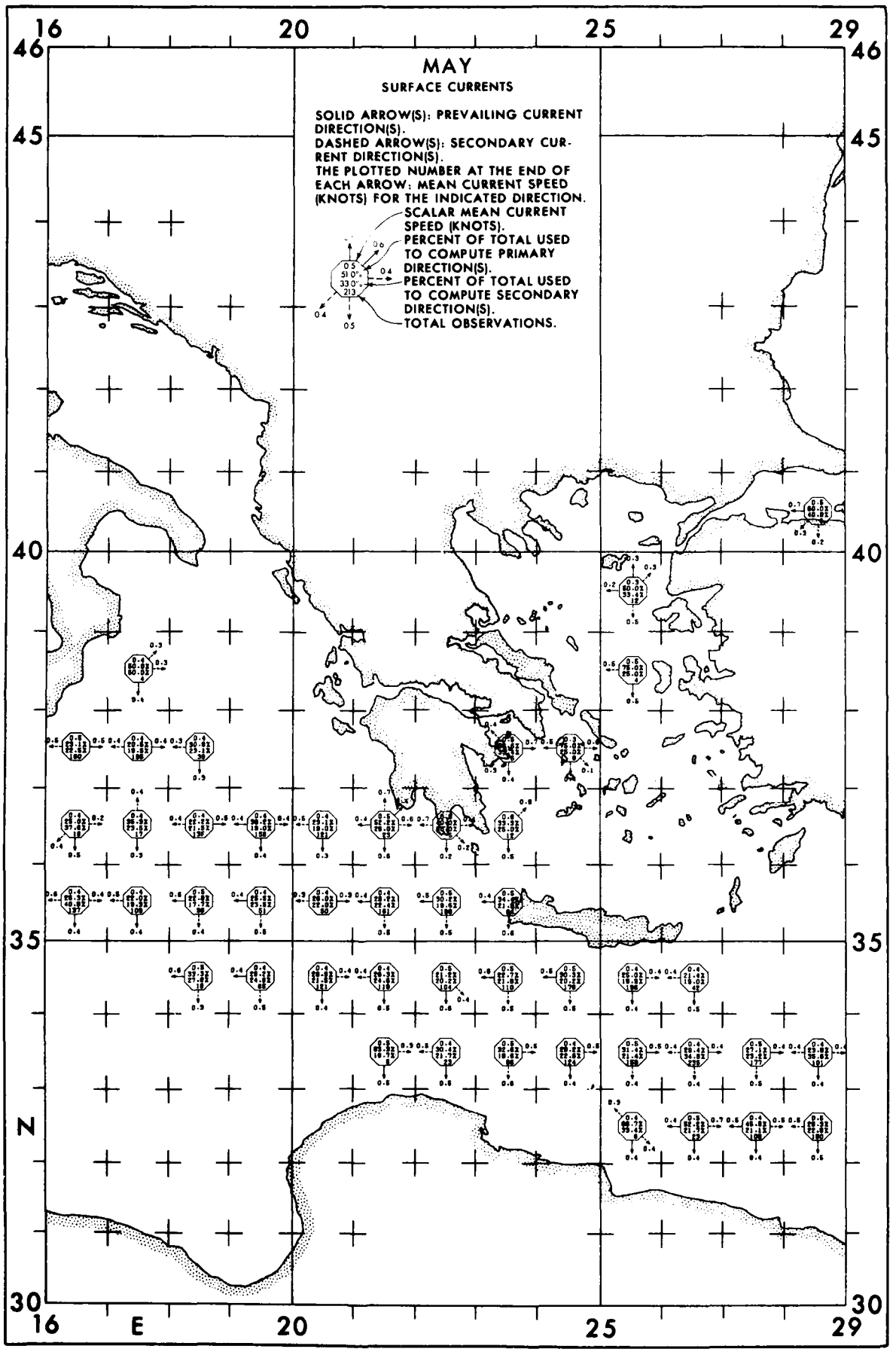

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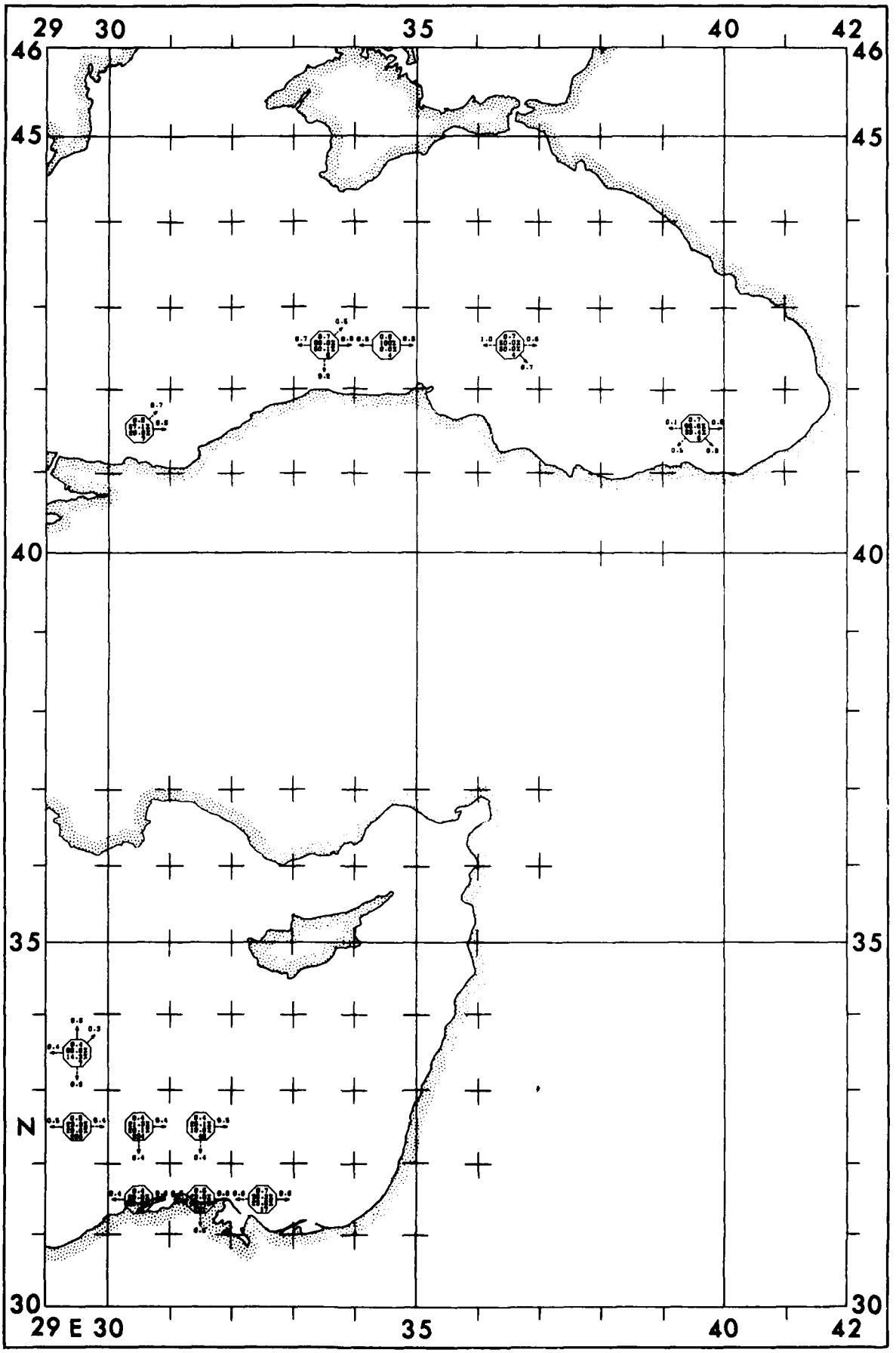

APRIL
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
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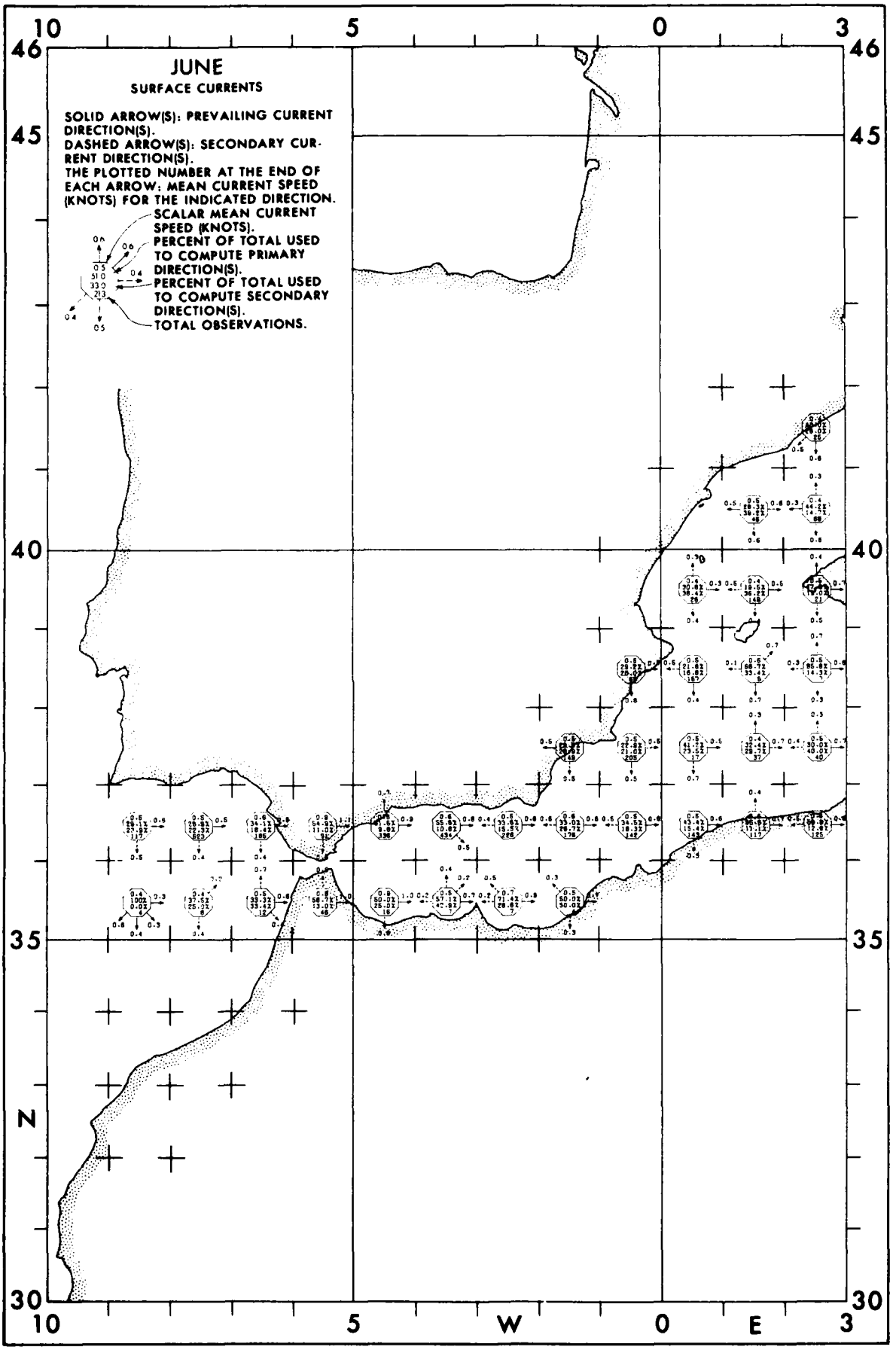

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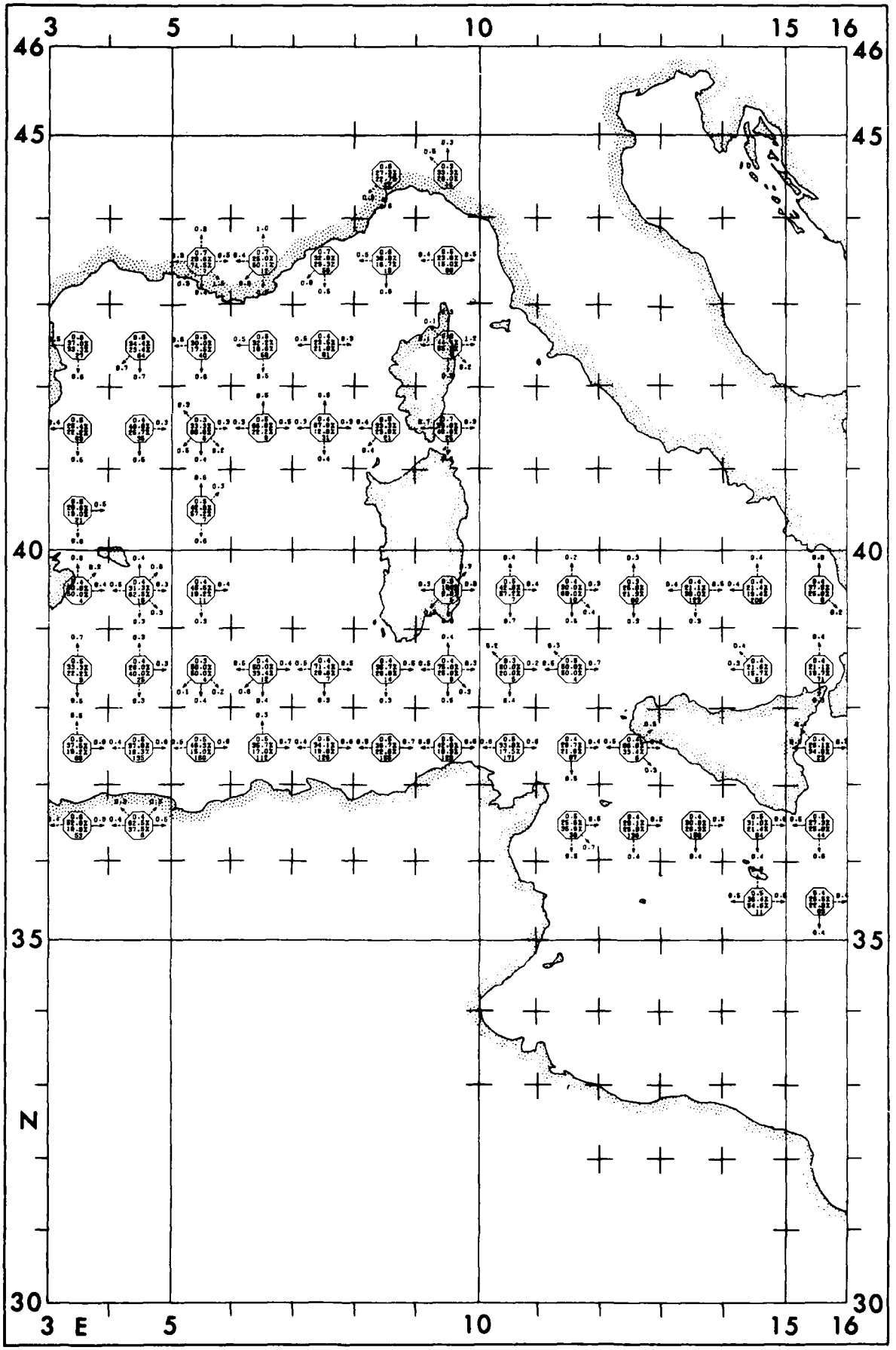

MAY
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
10
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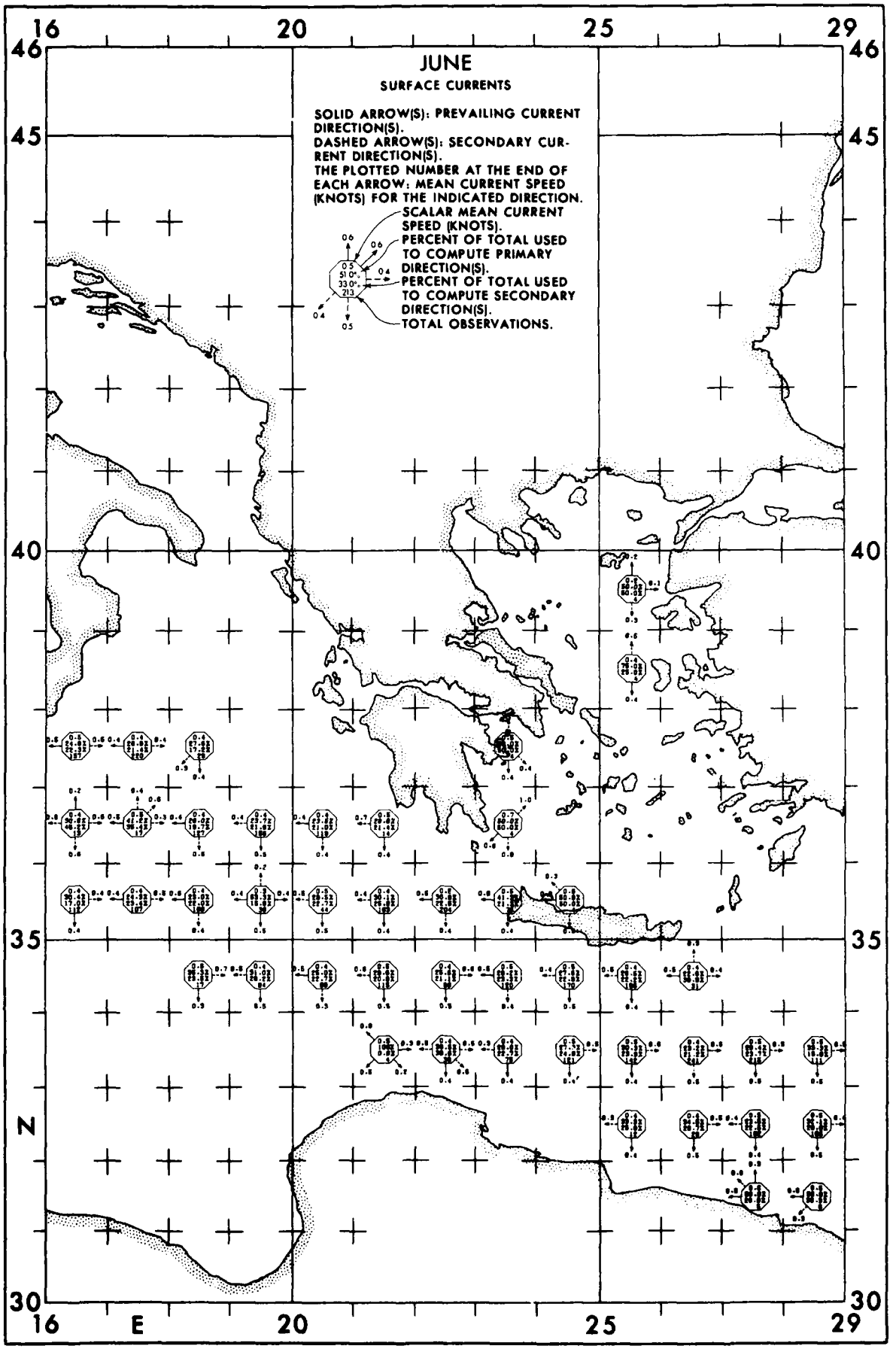

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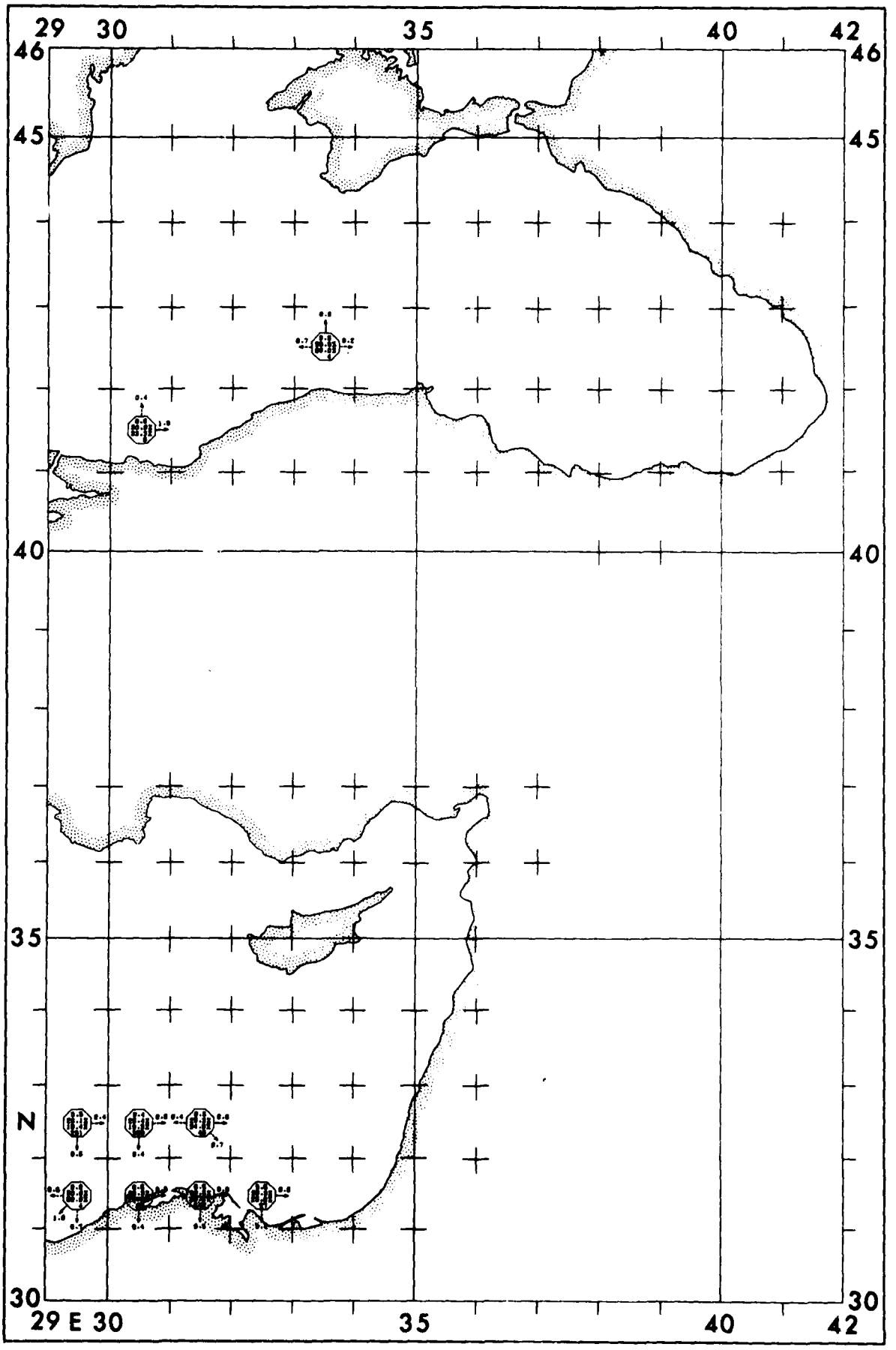

MAY
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
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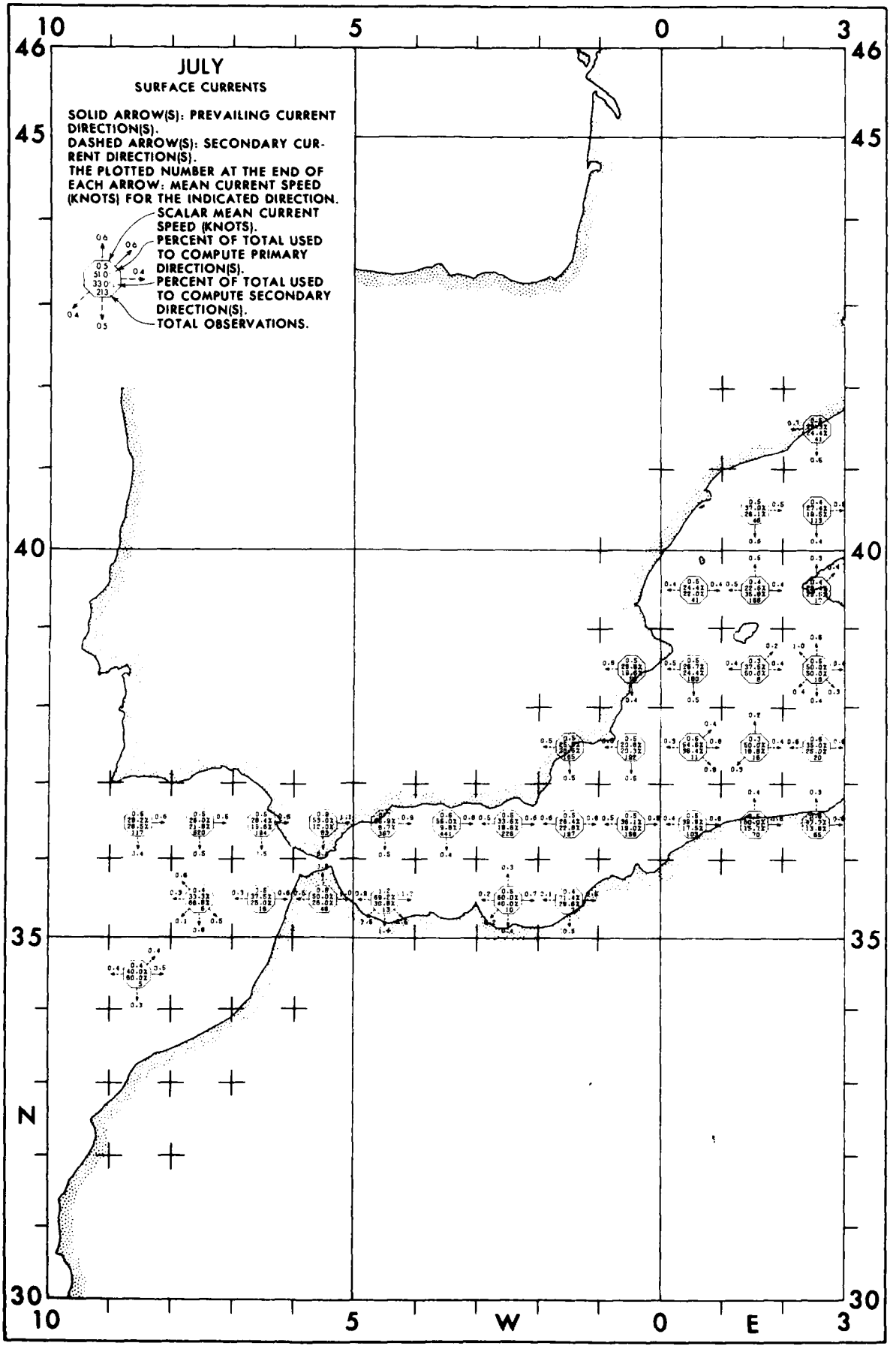

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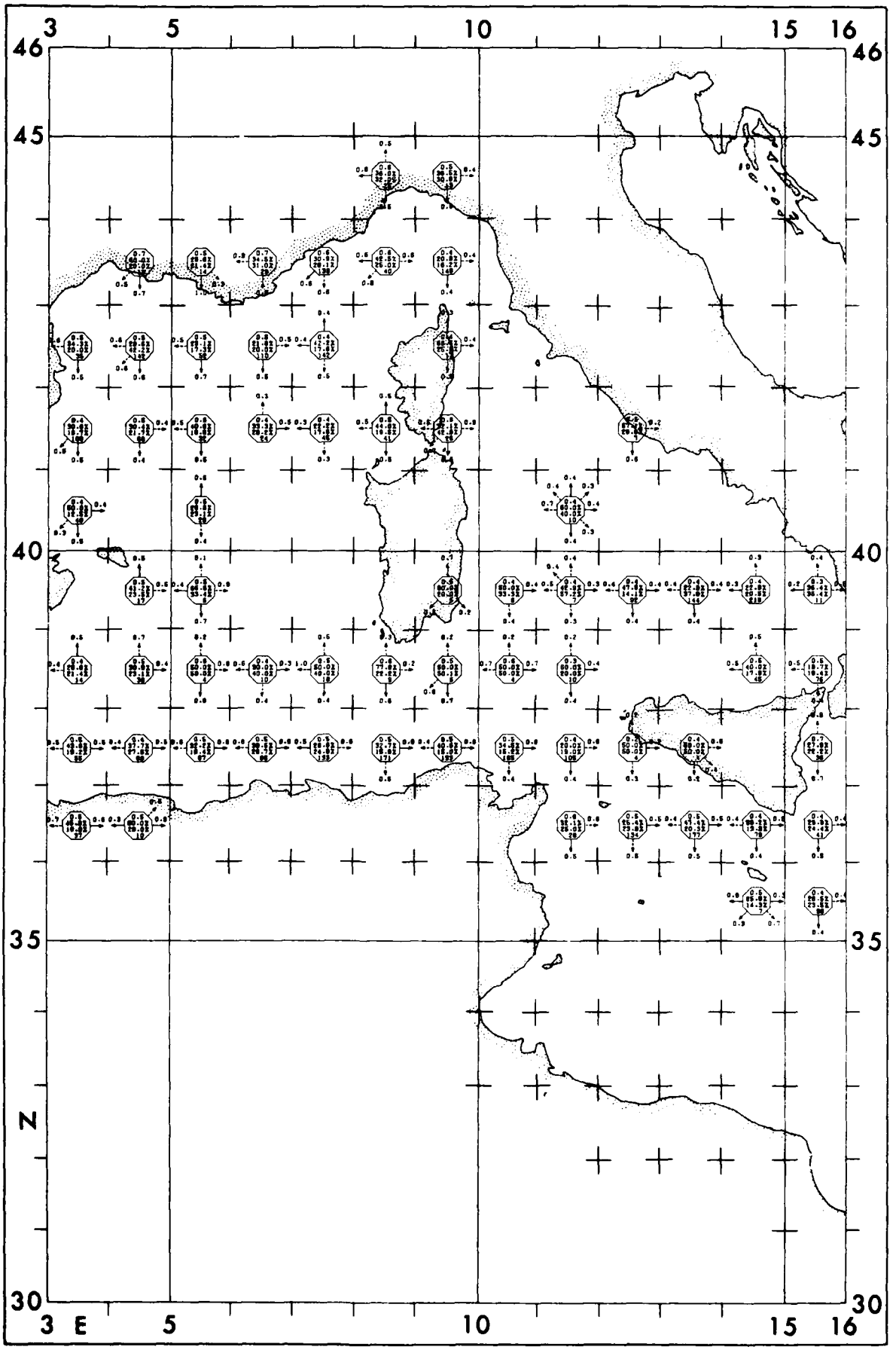

JUNE
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
10
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3
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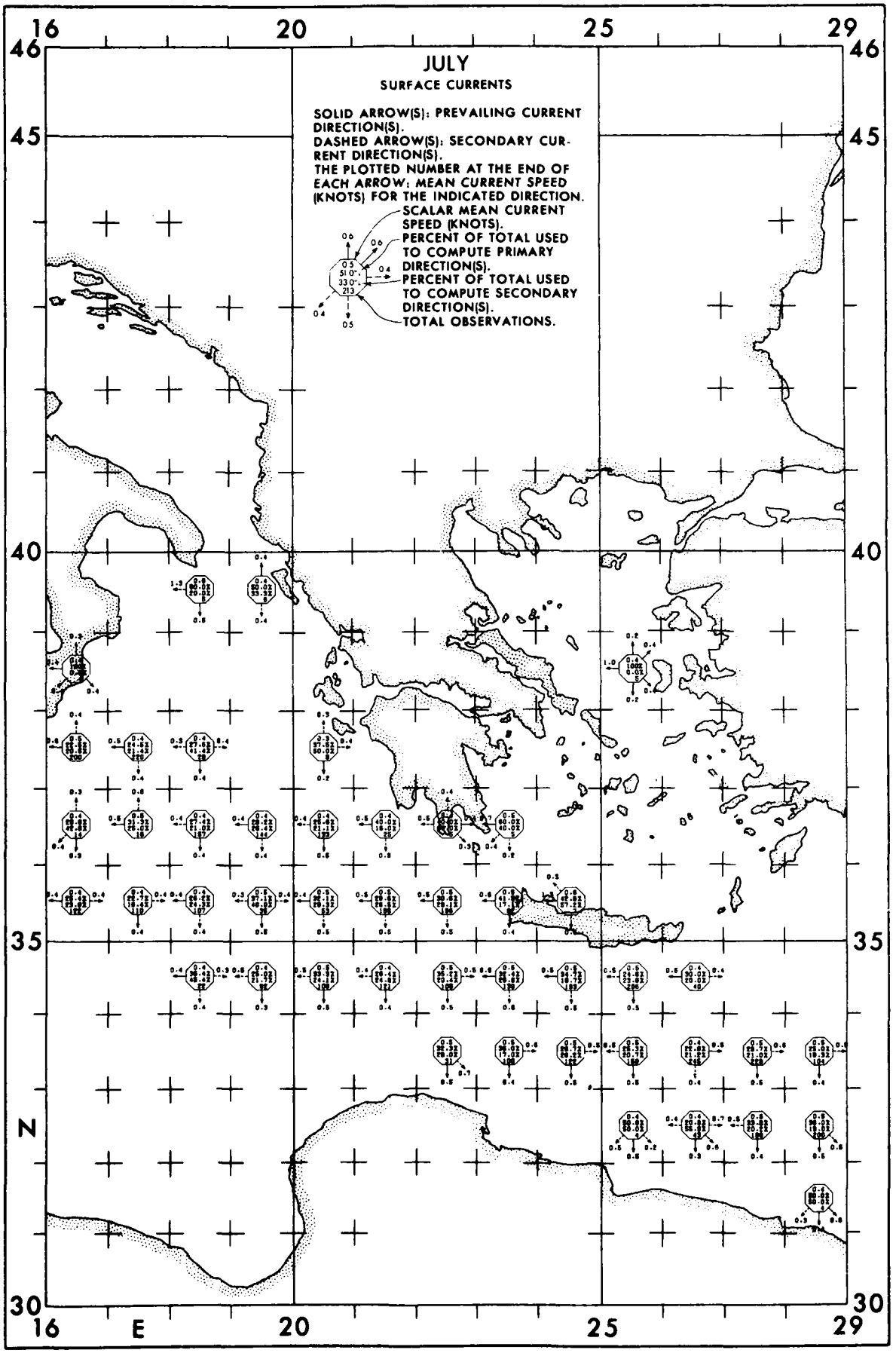

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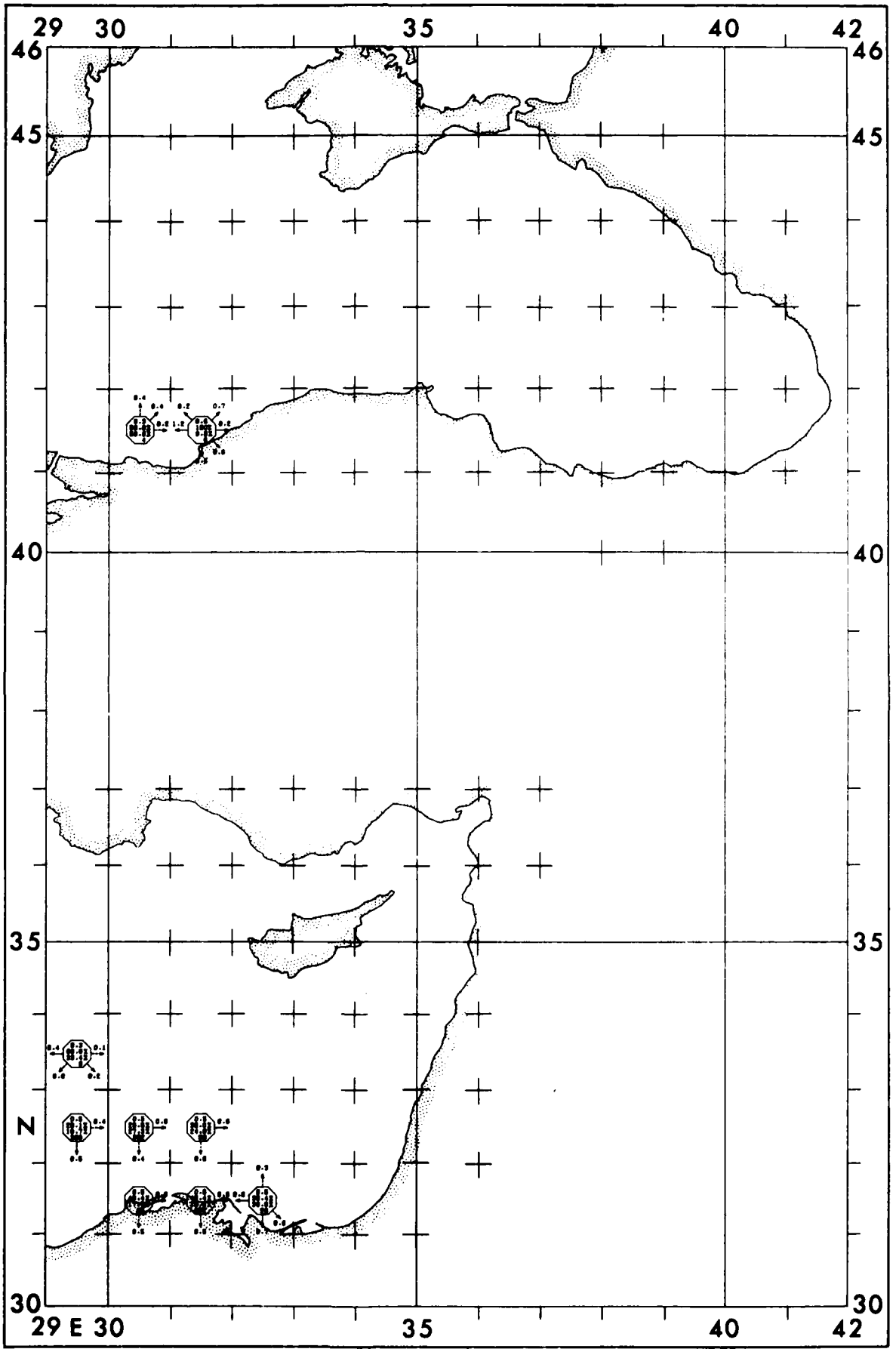

JUNE
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
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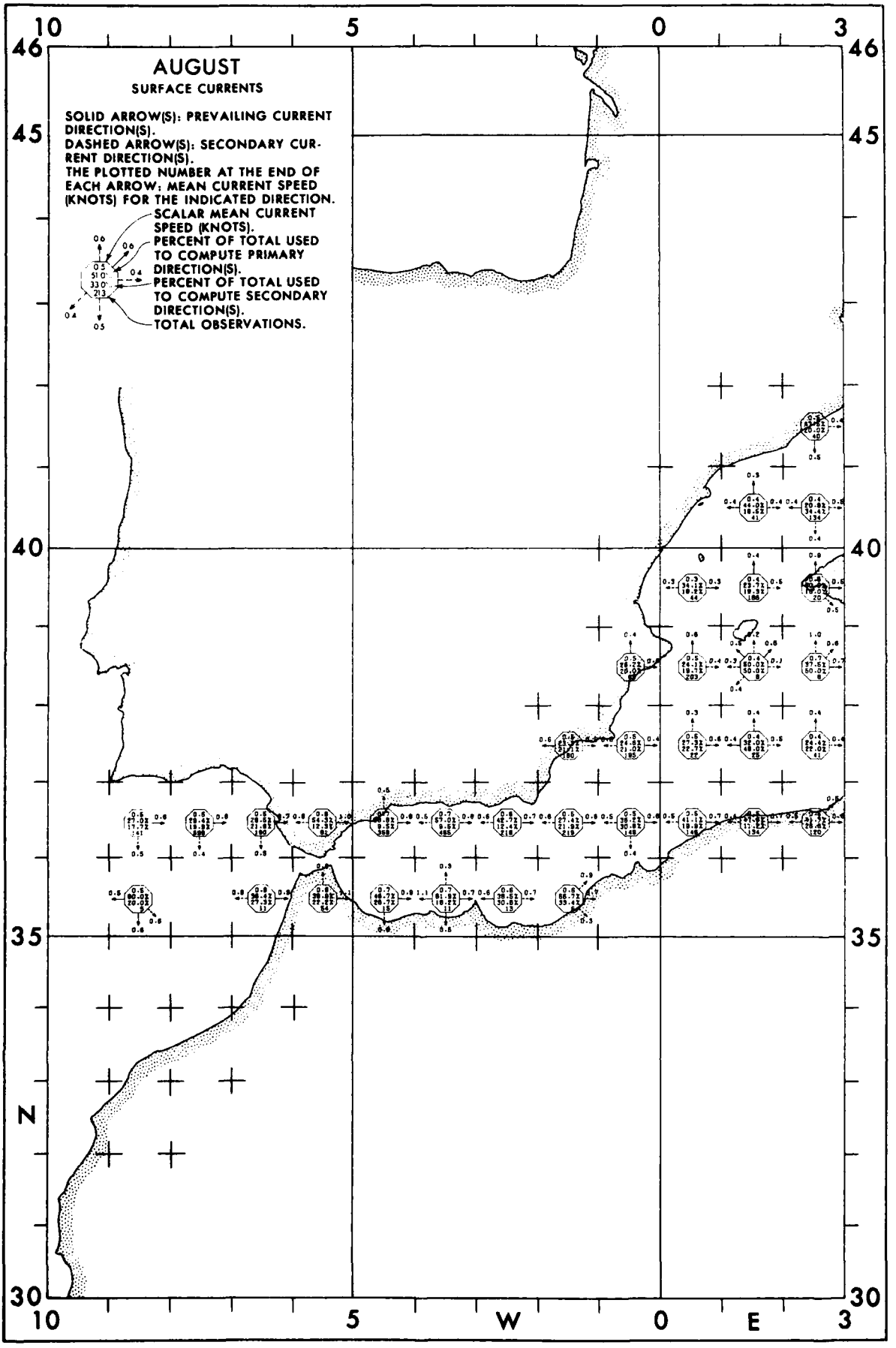

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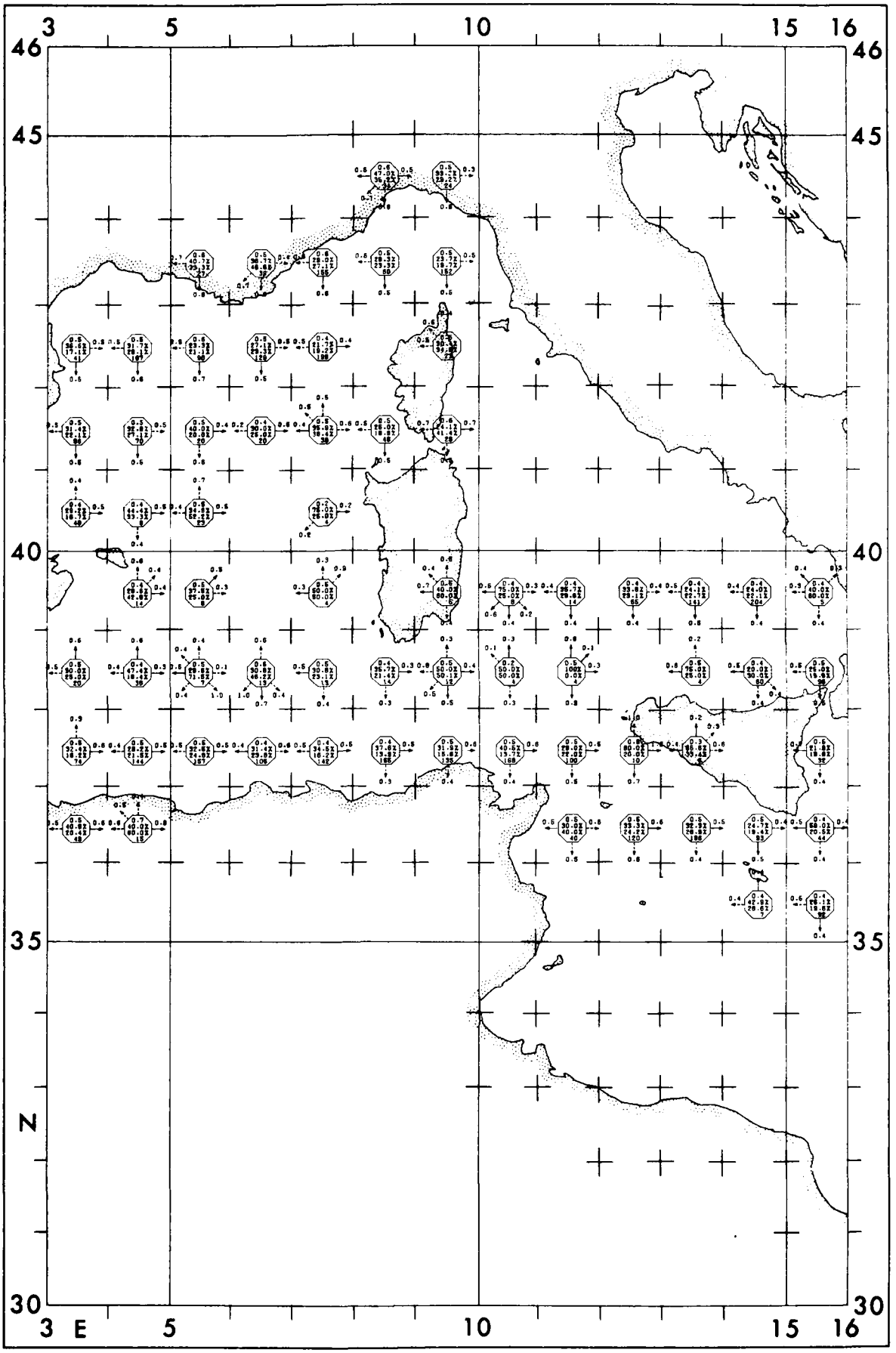

JULY
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
10
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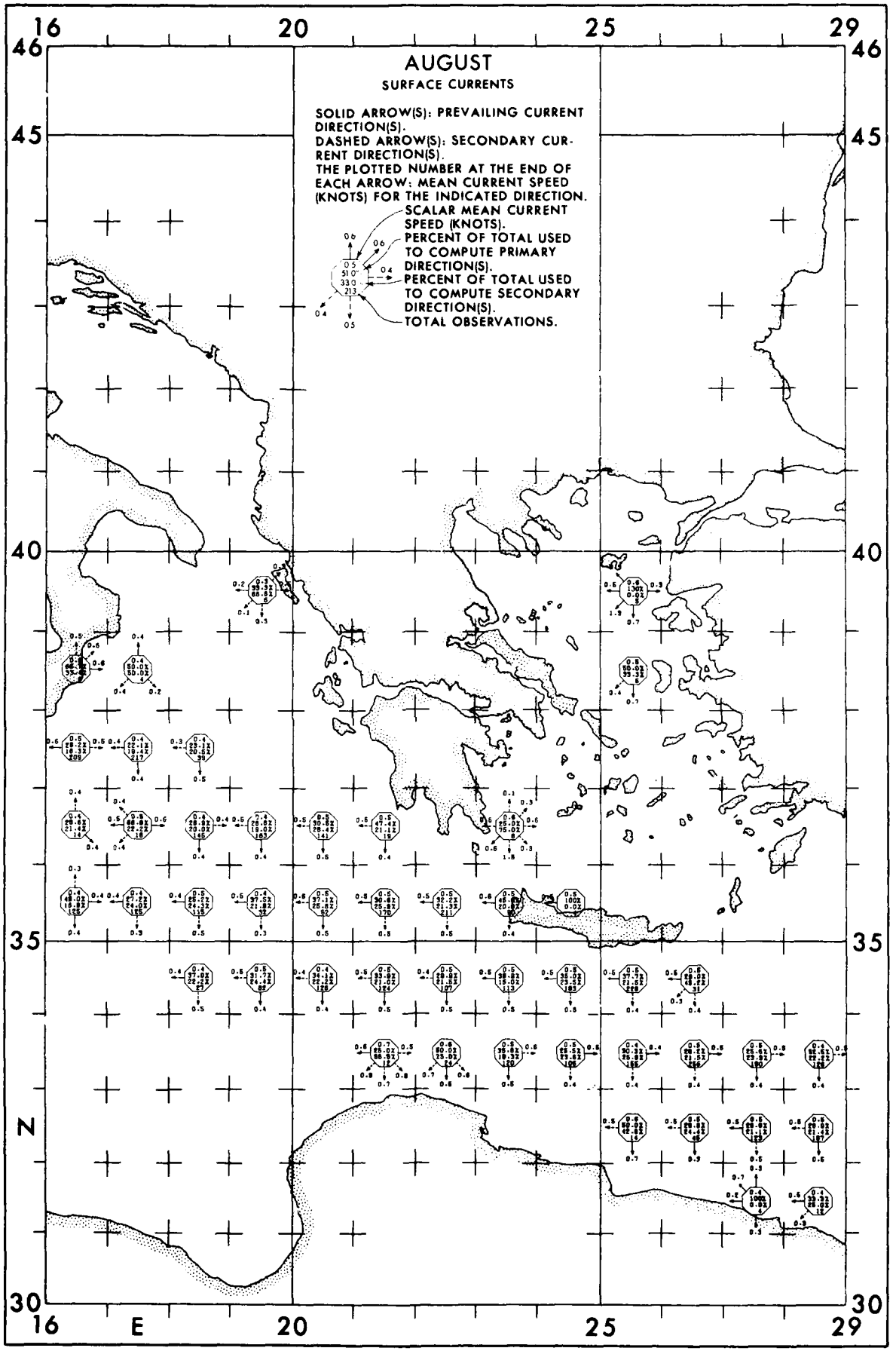

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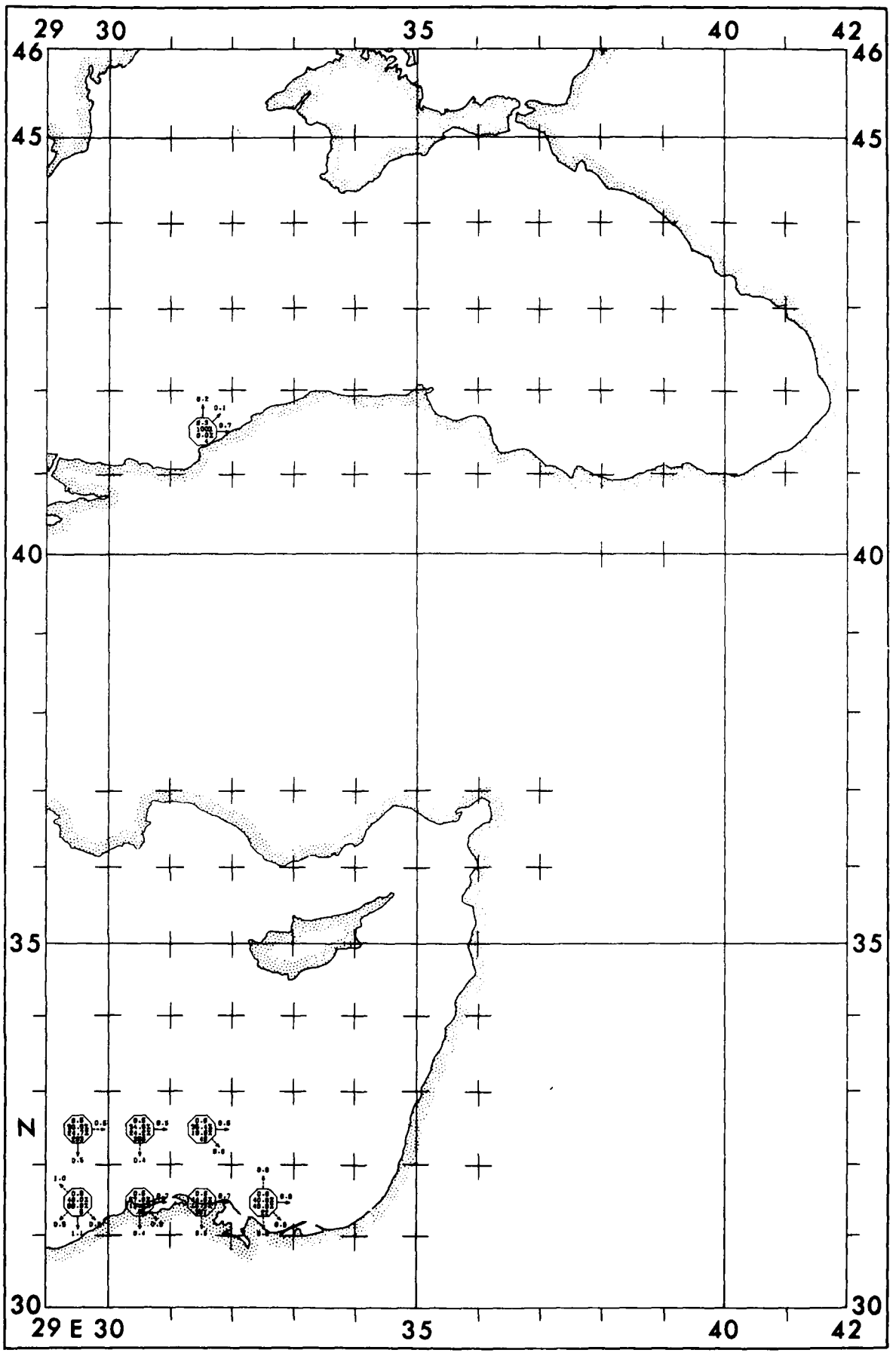

JULY
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
16
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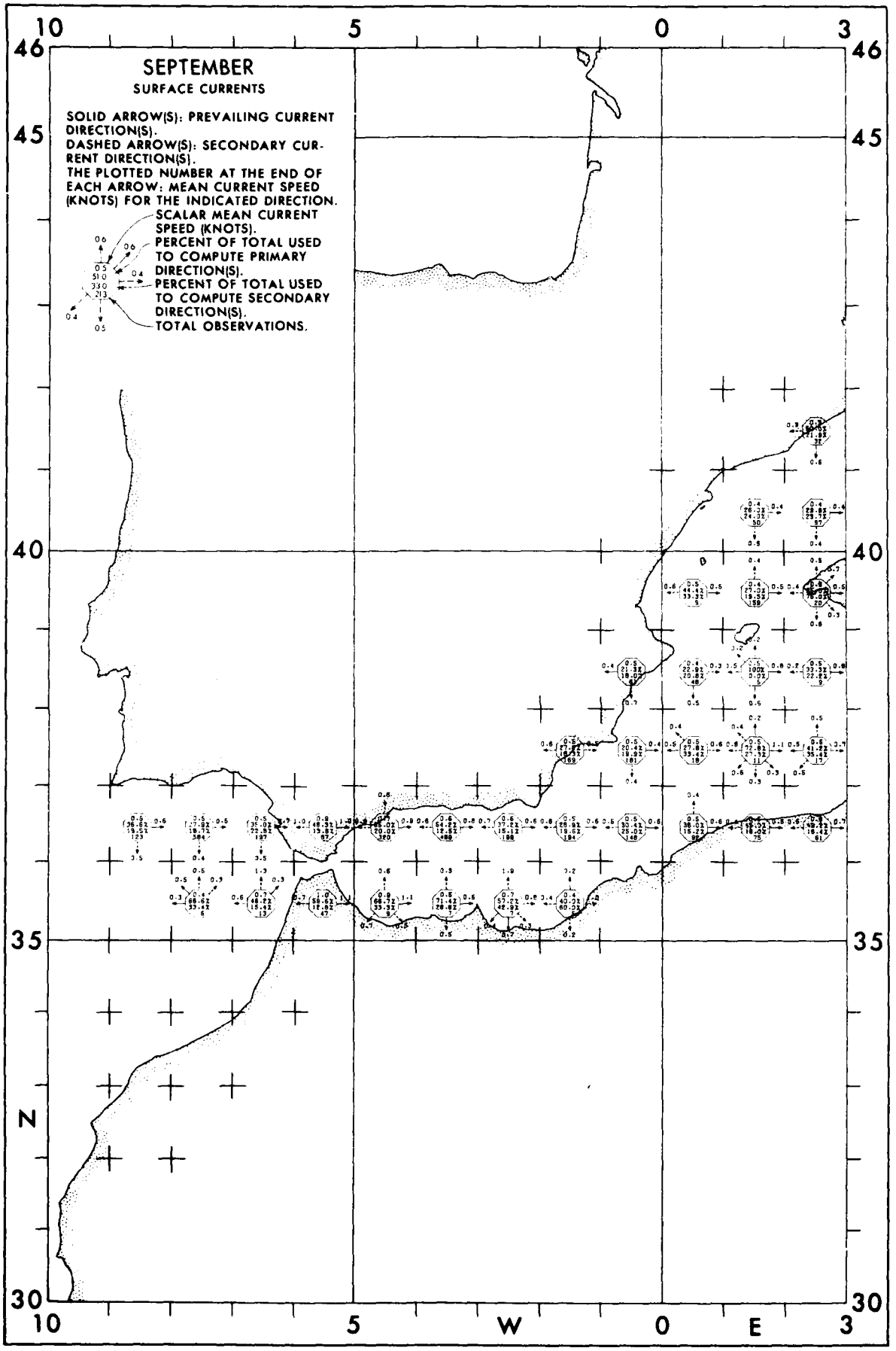

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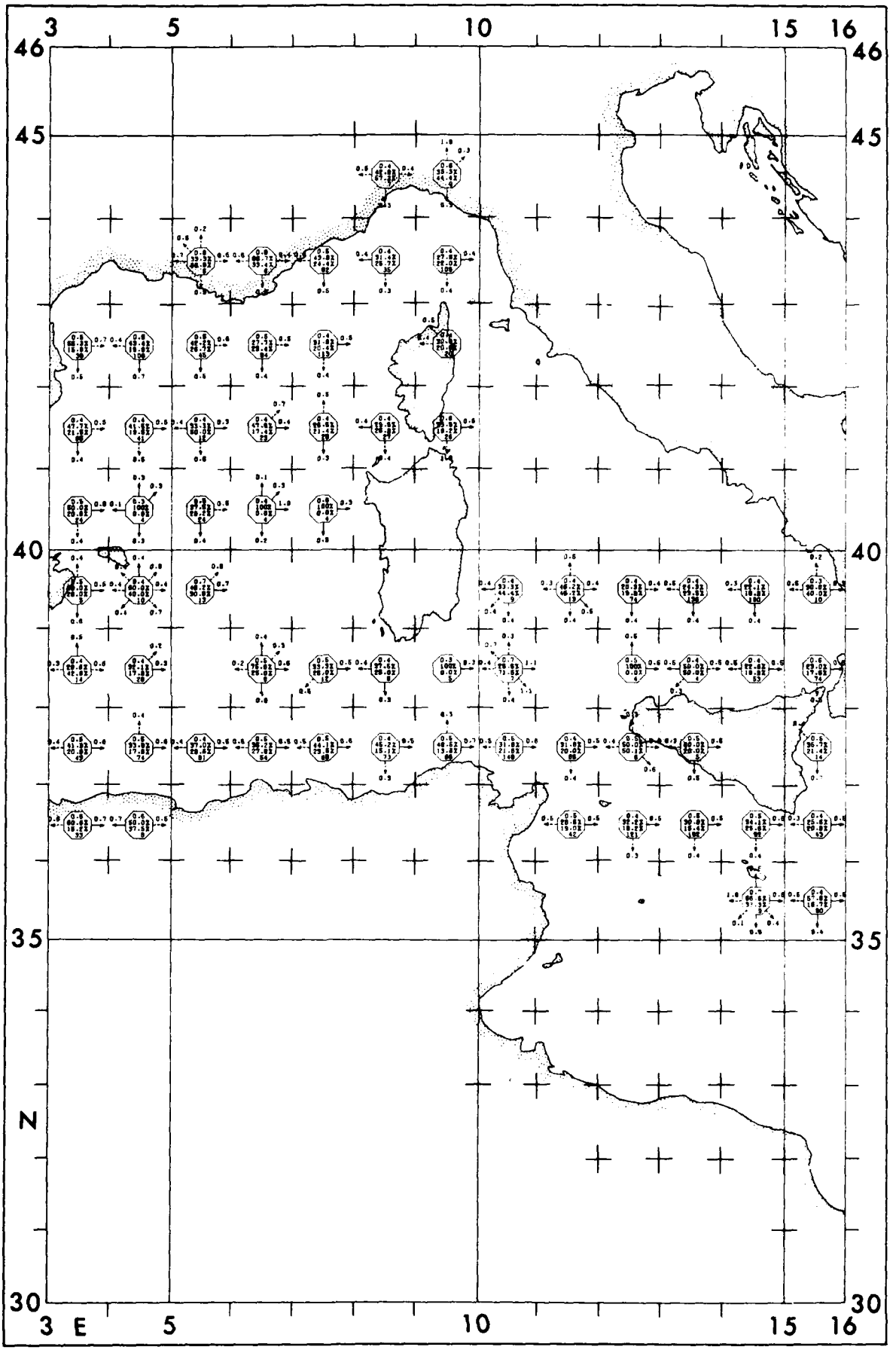

AUGUST
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
10
5
0
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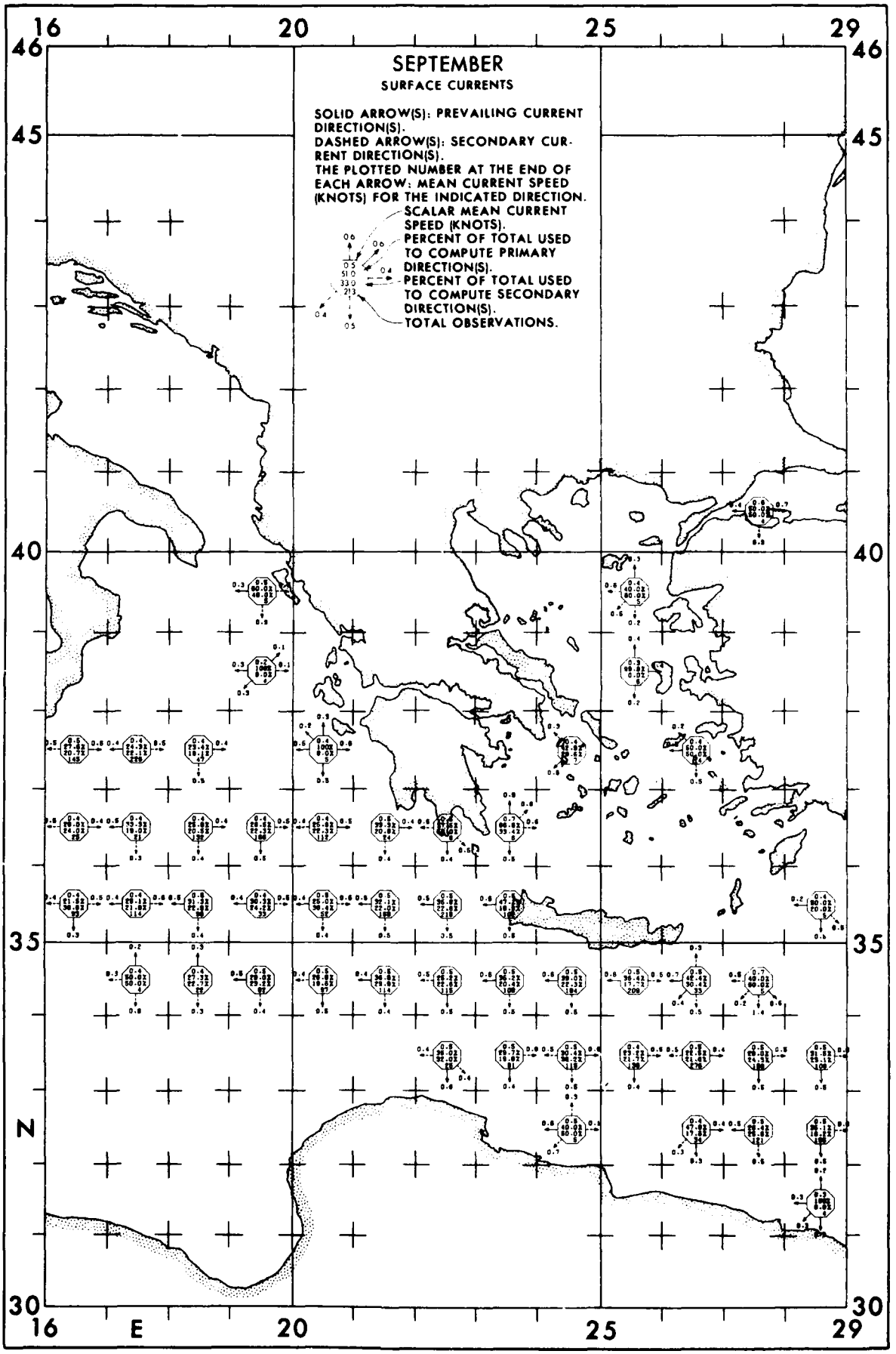

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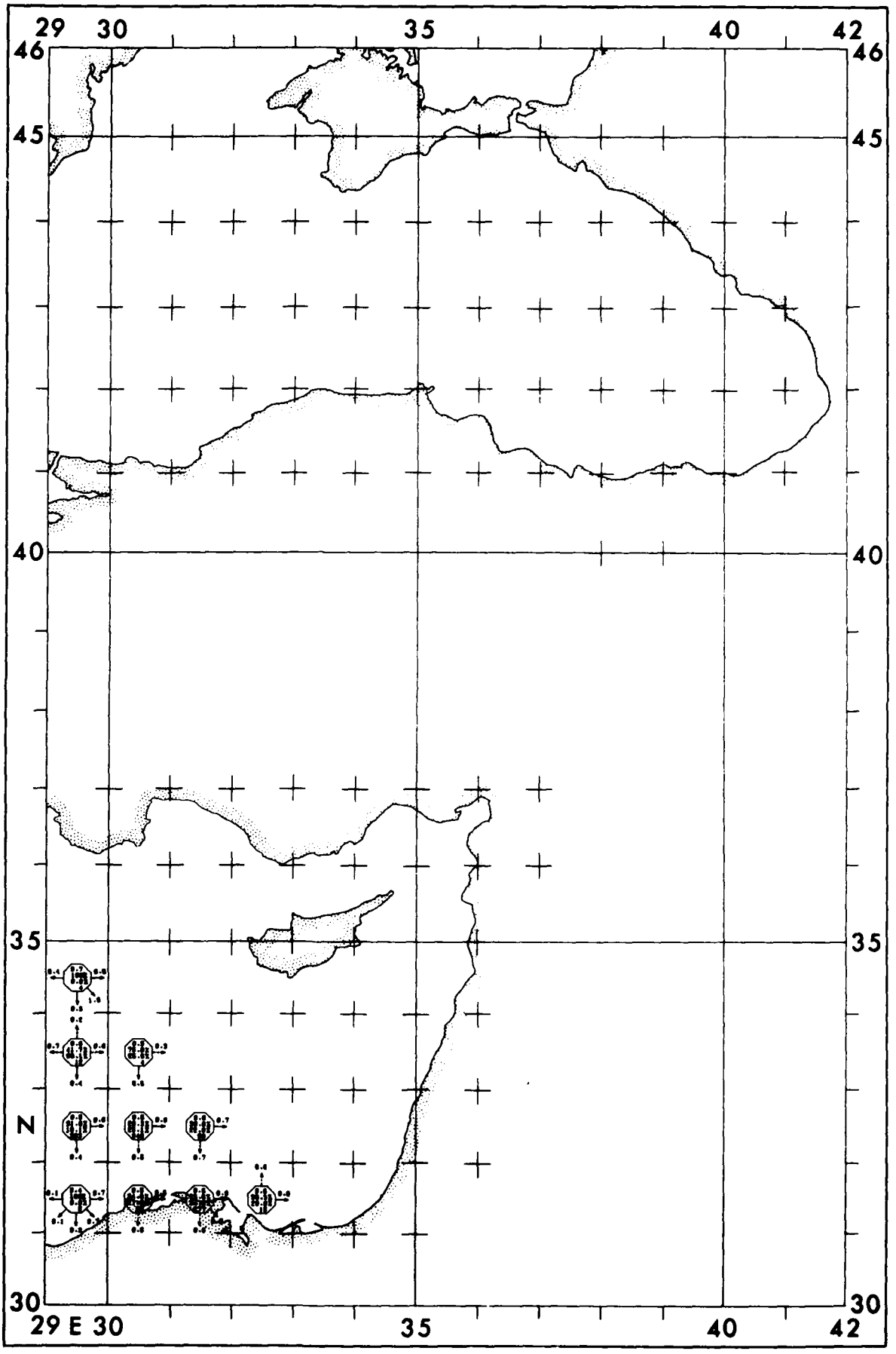

AUGUST
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
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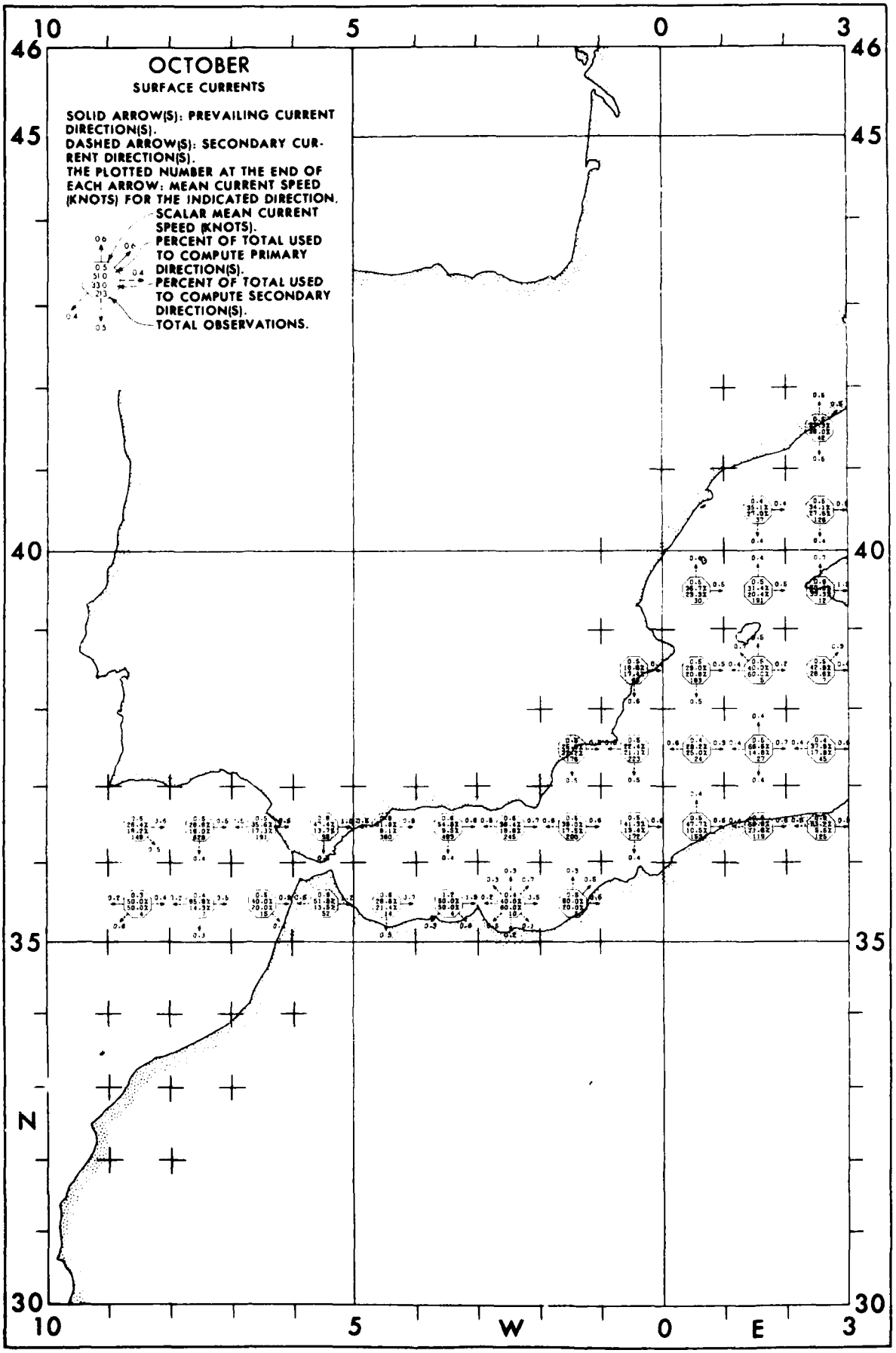

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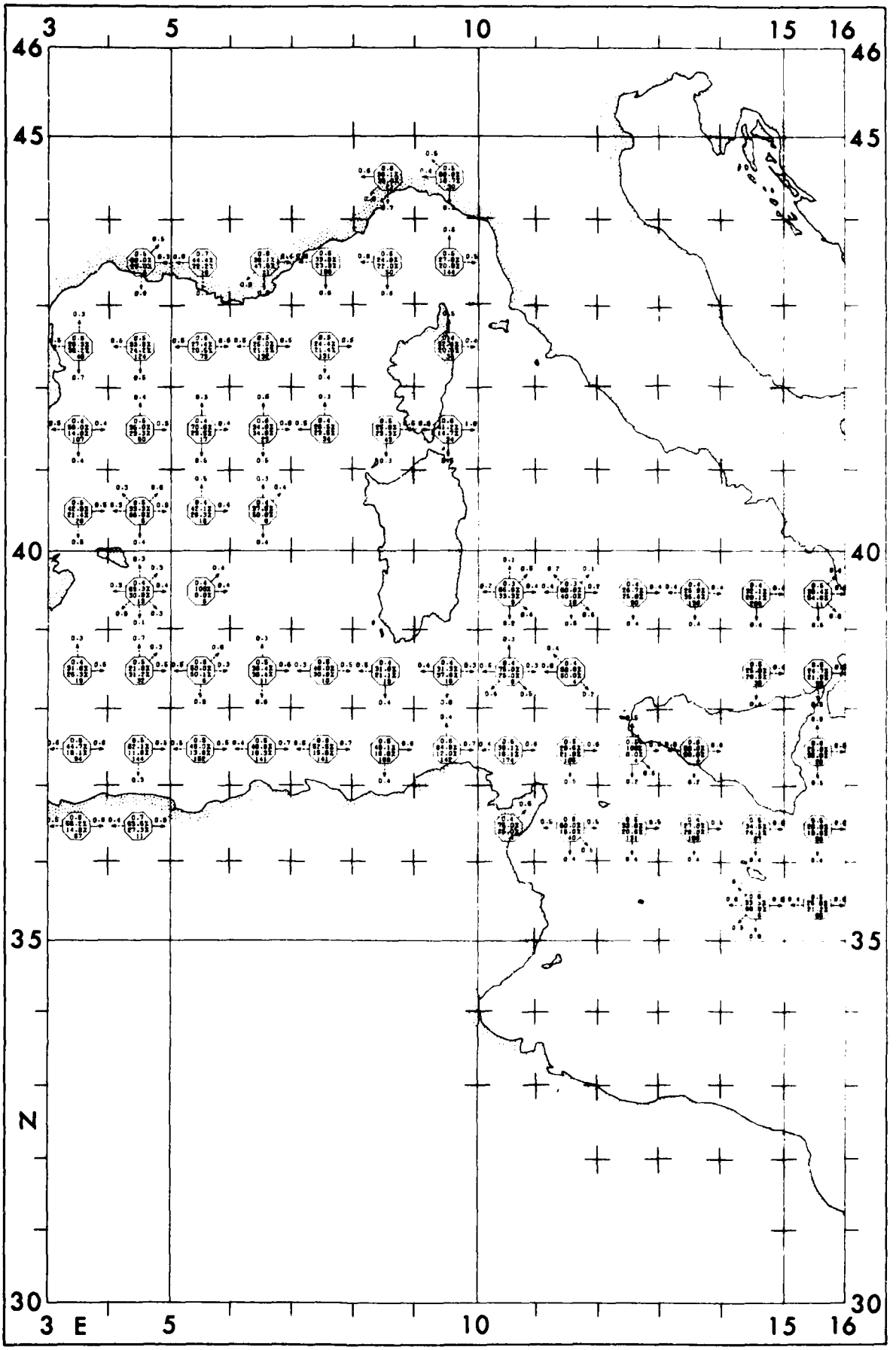

SEPTEMBER
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
10
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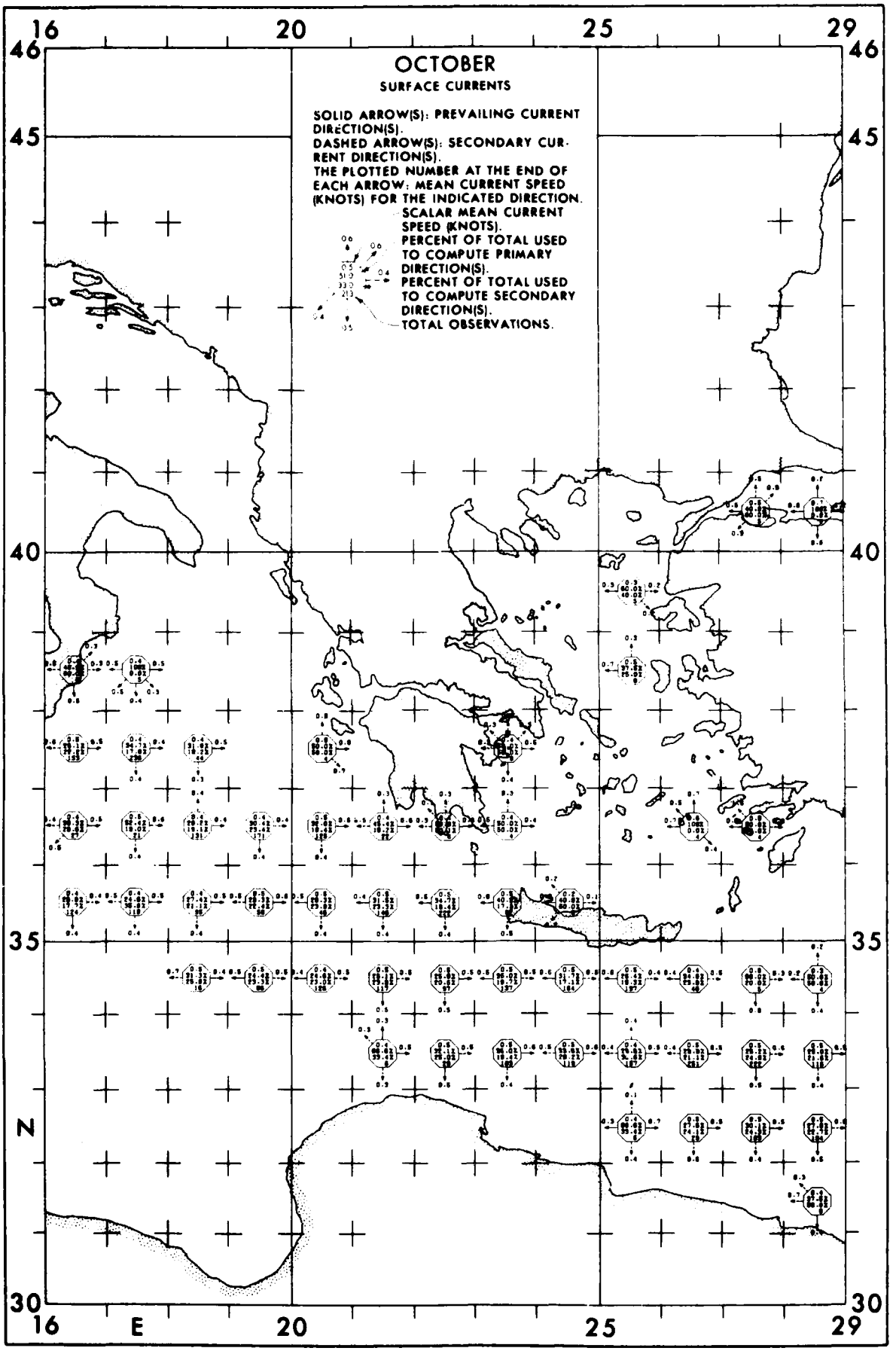

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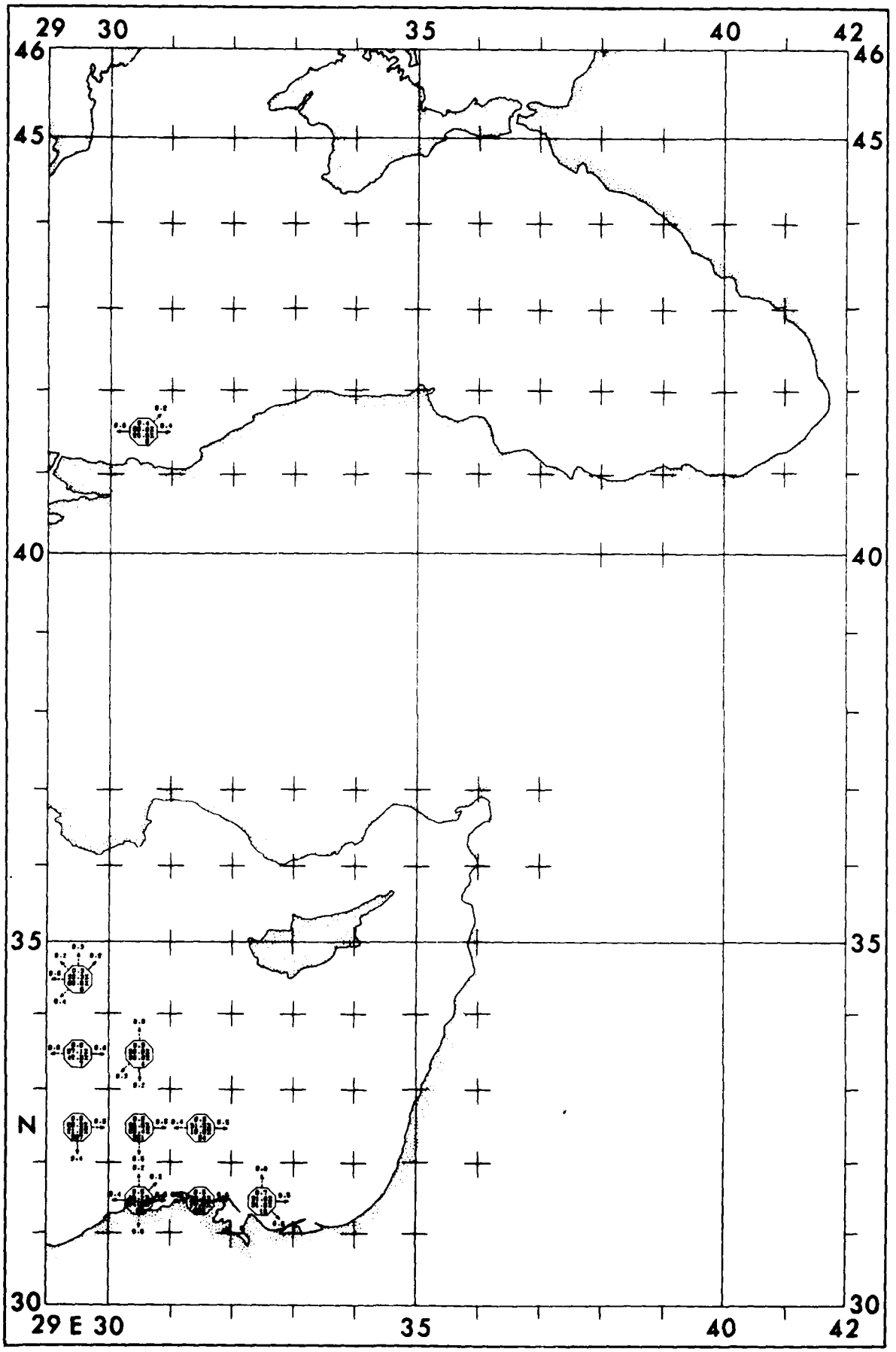

SEPTEMBER
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
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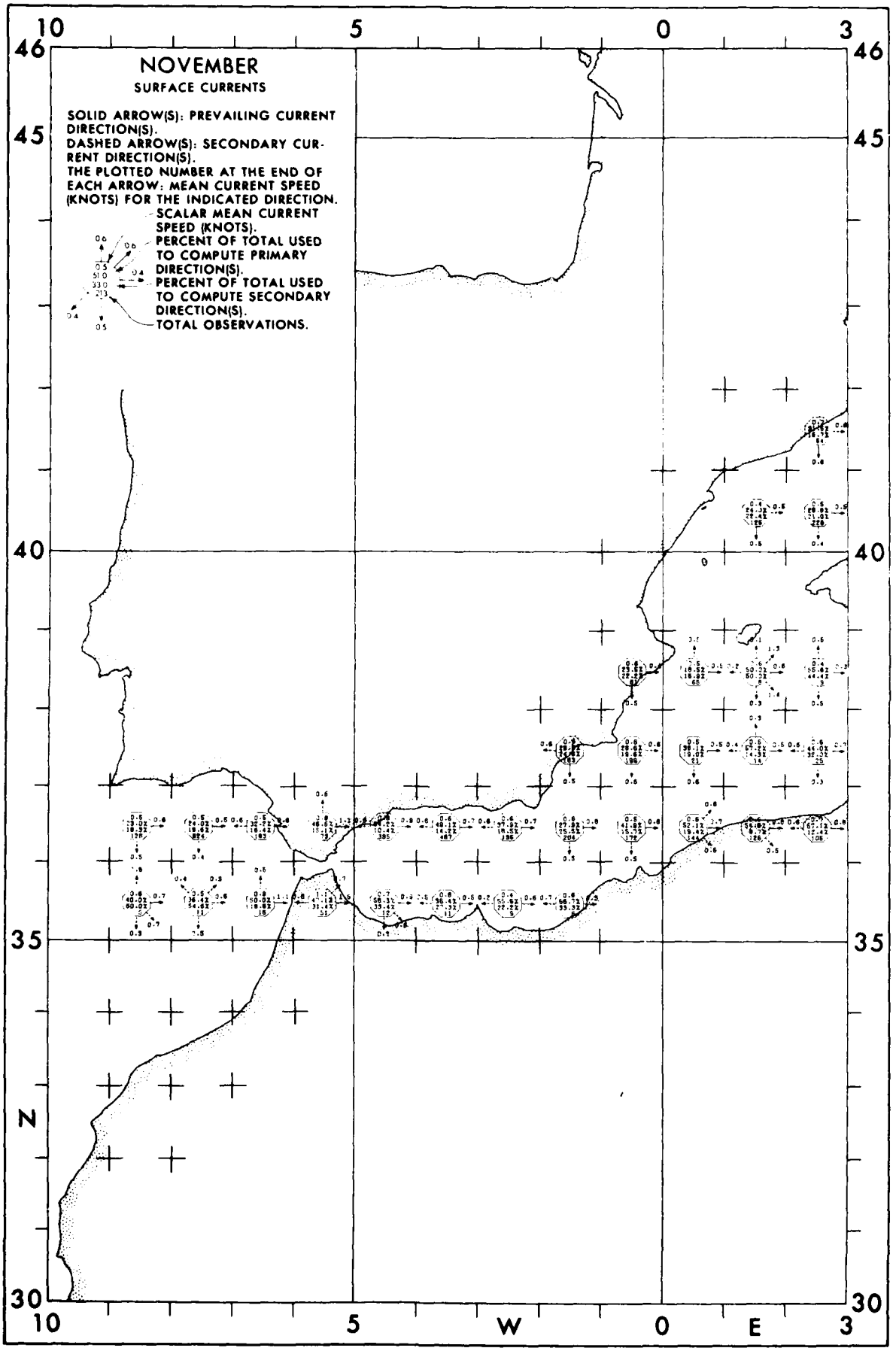

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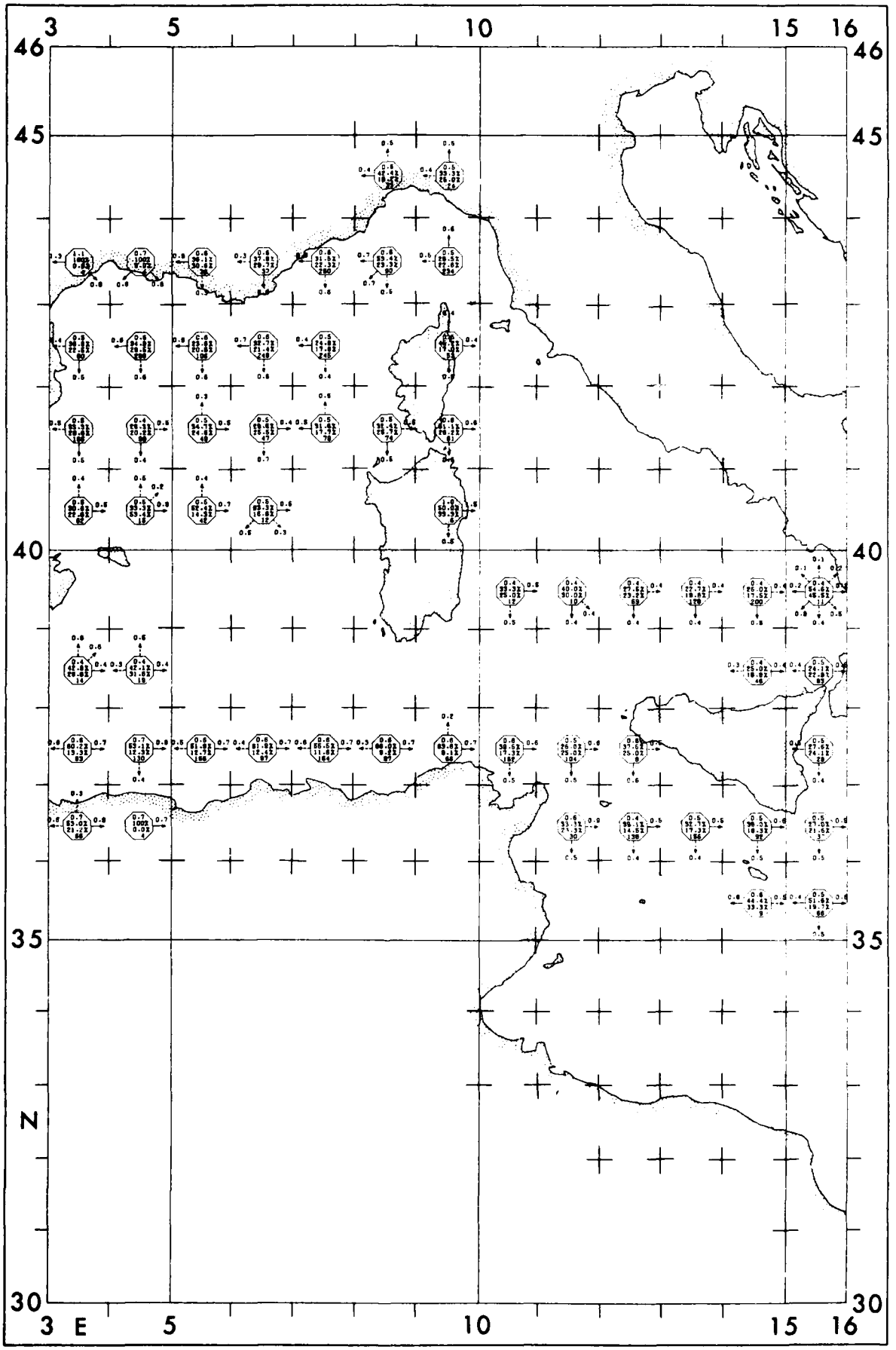

OCTOBER
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
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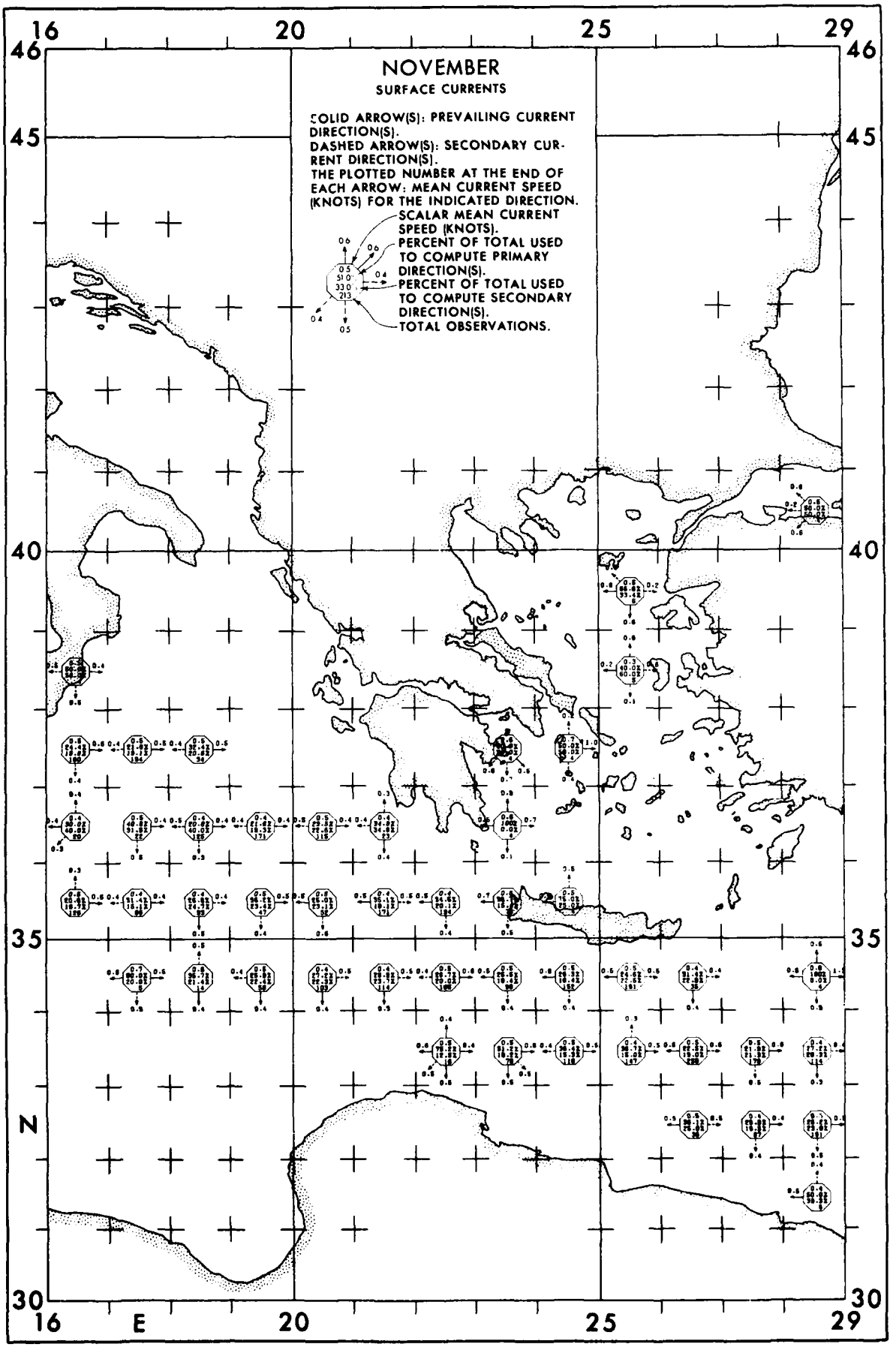

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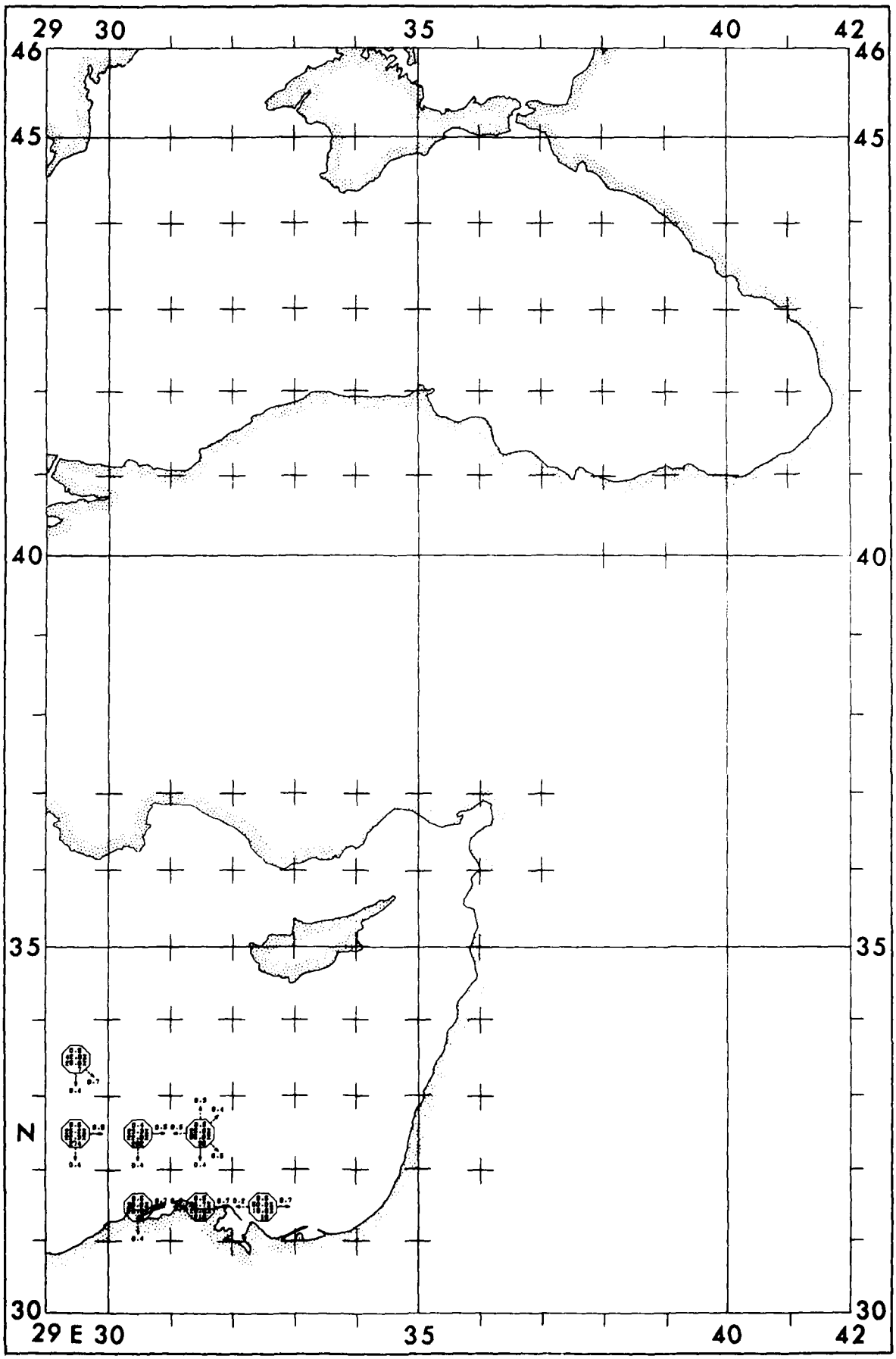

OCTOBER
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
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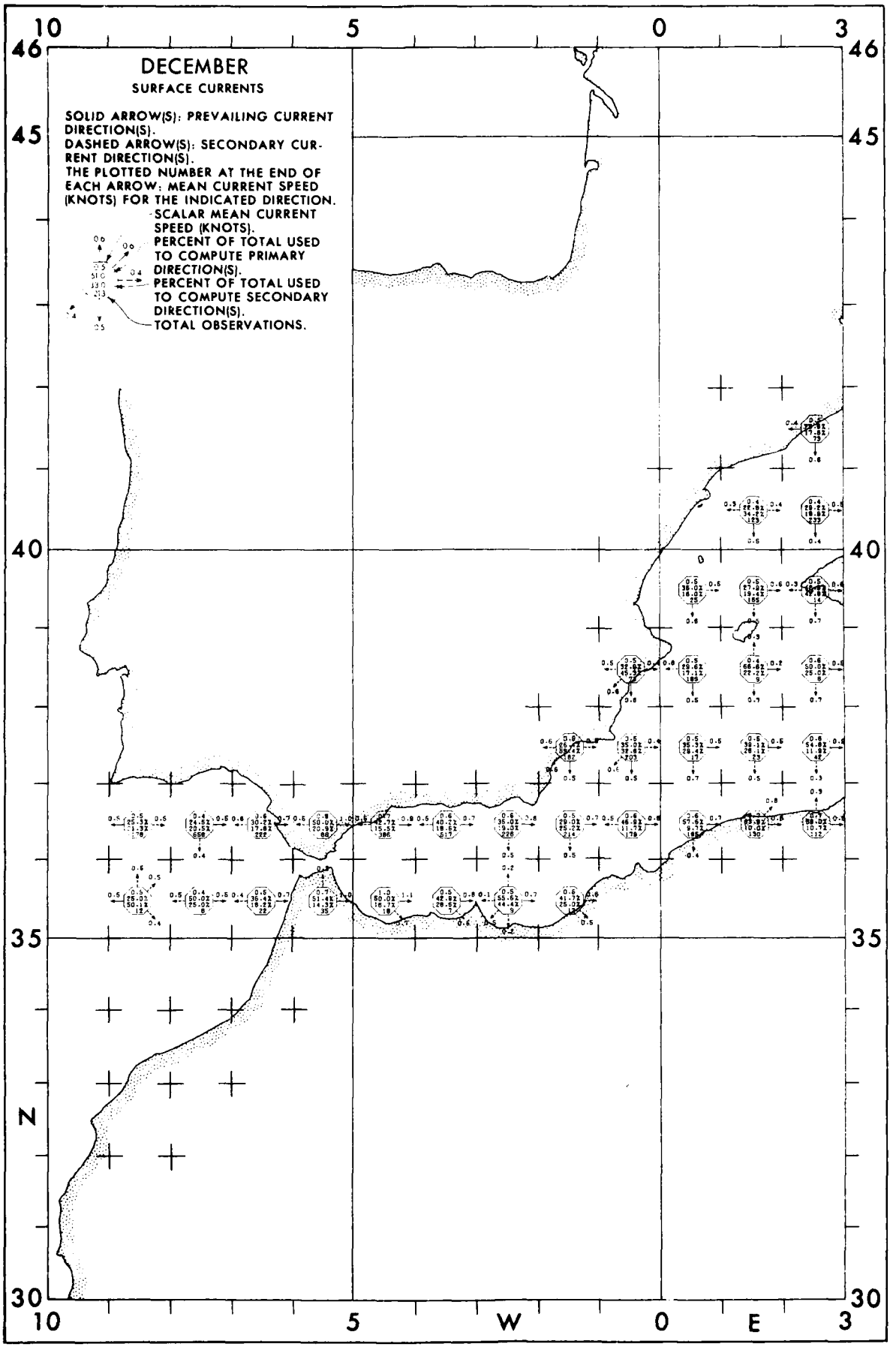

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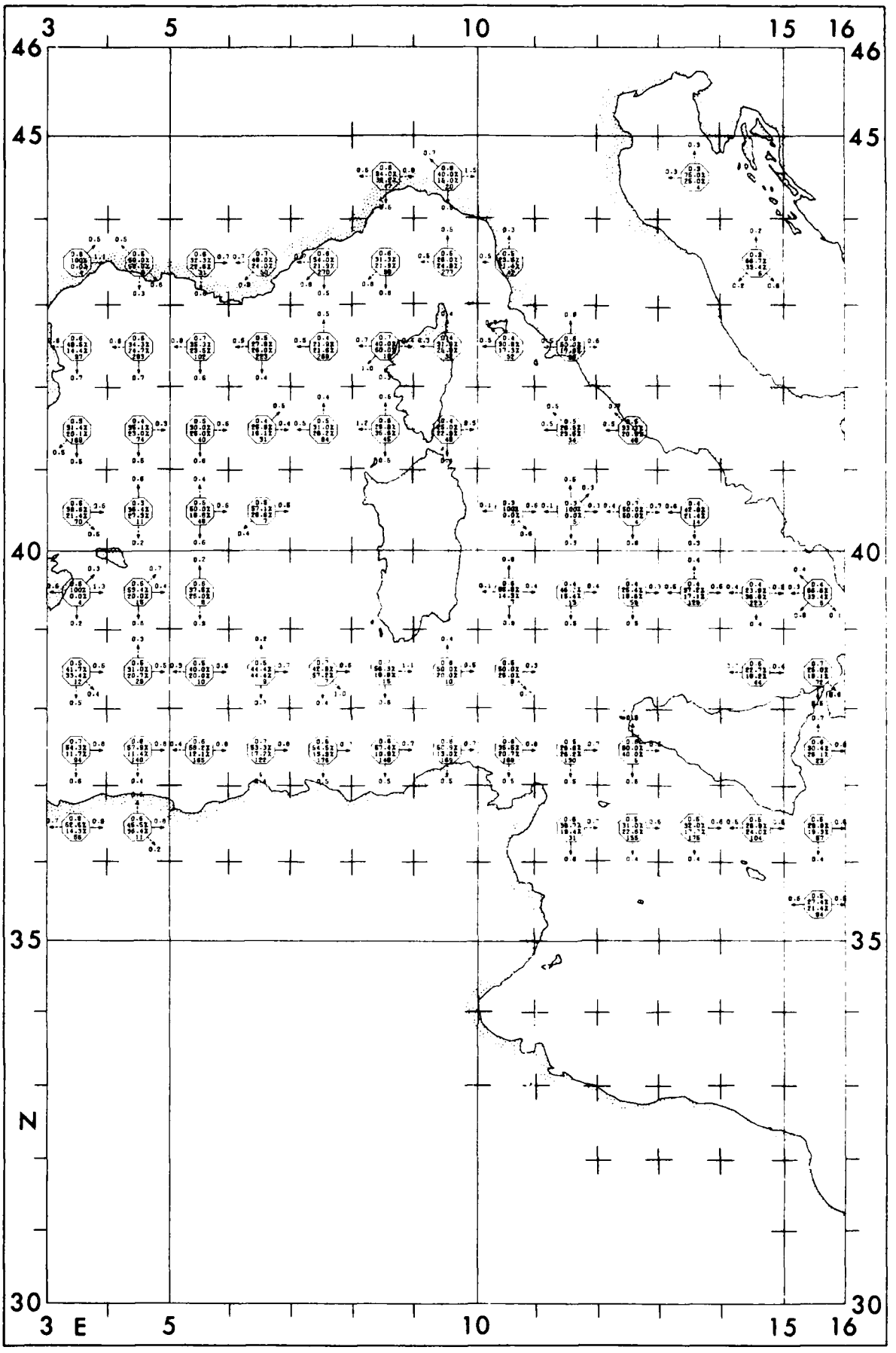

NOVEMBER
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
10
5
0
3
46
45
40
35
30
N
W
E

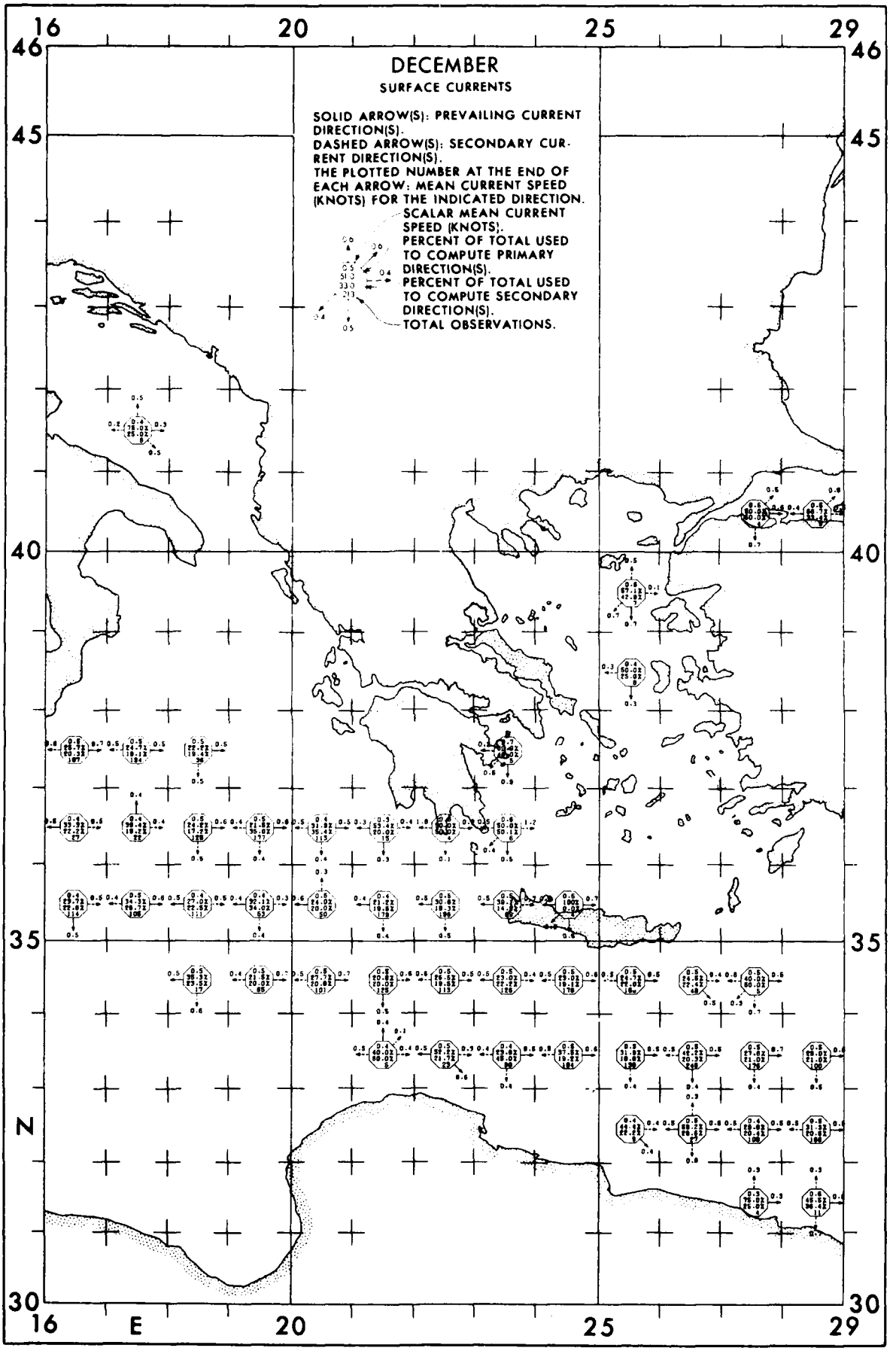

3
5
10
15
16
46
45
40
35
30
N
E

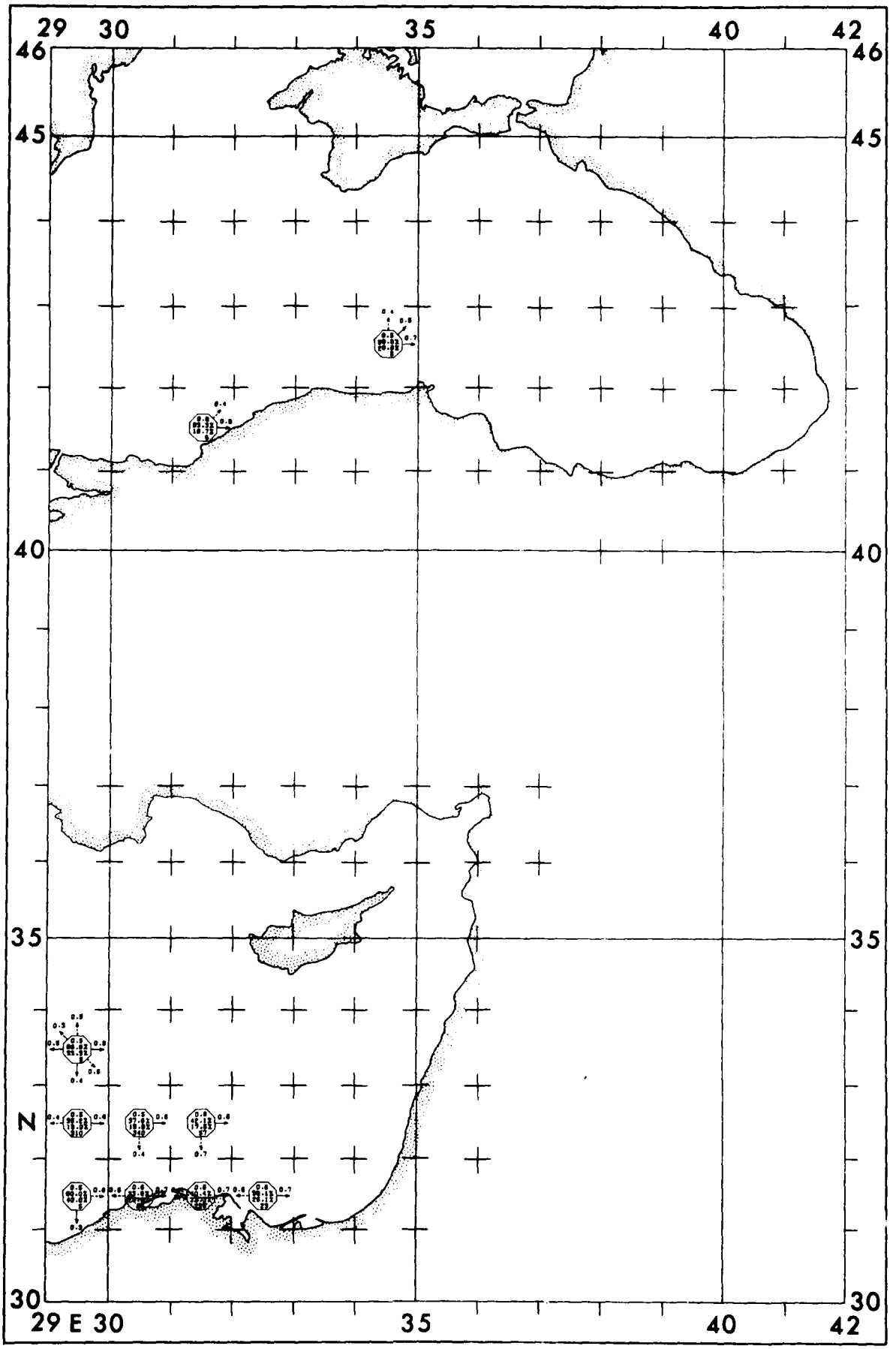

NOVEMBER
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
16
20
25
29
46
45
40
35
30
N
E


29
30
35
40
42
46
45
40
35
30
N
29 E 30
35
40
42


DECEMBER
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
10
5
0
3
46
45
40
35
30
N
W
E


3
5
10
15
16
46
45
40
35
30
N
E


DECEMBER
SURFACE CURRENTS
SOLID ARROW(S): PREVAILING CURRENT DIRECTION(S).
DASHED ARROW(S): SECONDARY CURRENT DIRECTION(S).
THE PLOTTED NUMBER AT THE END OF EACH ARROW: MEAN CURRENT SPEED (KNOTS) FOR THE INDICATED DIRECTION.
SCALAR MEAN CURRENT SPEED (KNOTS).
PERCENT OF TOTAL USED TO COMPUTE PRIMARY DIRECTION(S).
PERCENT OF TOTAL USED TO COMPUTE SECONDARY DIRECTION(S).
TOTAL OBSERVATIONS.
16
20
25
29
46
45
40
35
30
N
E


29
30
35
40
42
46
45
40
35
30
N
29 E 30
35
40
42

STATION CLIMATIC SUMMARIES

The following Station Climatic Summaries are based on data from many different sources, with most stations having variable periods-of-record. Considerable effort went into making these data as compatible as possible for each station. However, for some stations a more recent shorter period-of-record was selected over a longer period because the shorter record is more representative of the current climate. Also, in some instances, the station periods-of-record were mixed because only one period-of-record source could be found for a given element. For example, the mean daily maximum and minimum temperatures for a given station may have been based on a period other than that for the mean temperature because of incomplete data records. This practice sometimes gives inconsistencies in the summarized data set.

Station relocations and varying periods-of-record also introduce inconsistencies. For example, inconsistencies often appear when comparing absolute minimum temperatures from one period-of-record with the total number of days below freezing from another period.

Ideally, these Station Climatic Summaries should be generated from a relatively consistent long-term digital station data base. Unfortunately, that is not possible for most foreign-reporting stations at this time.

Summaries for the following stations appear in alphabetical order:

Ajaccio, Corsica
Algiers, Algeria
Alexandria, Egypt
Athens, Greece
Barcelona, Spain
Beirut, Lebanon
Benina, Libya
Cagliari, Sardinia
Canakkale, Turkey
Genova, Italy
Istanbul, Turkey
Lefkas, Greece
Marseille, France
Naples, Italy
Nice, France
North Front, Gibraltar
Palermo, Sicily
Paphos, Cyprus
Rhodes
Rome, Italy
Sassari, Sardinia
Sigonella, Italy
Souda Bay, Crete
Taranto, Italy
Tel-Aviv, Israel
Tripoli, Libya
Tunis, Tunisia
Venice, Italy

PREPARED BY: NOCD ASHEVILLE STATION NAME: AJACCIO, CORSICA ELEVATION: WMO #:
LOCATION: 41 55N 8 48E

	TEMPERATURE (F.)					PRECIPITATION (INCHES)						RELATIVE HUMIDITY		SUNRISE		MEAN NUMBER OF DAYS WITH		
	MEANS			EXTREME					SNOWFALL					WIND MPH		PRECIPITATION		THUNDER
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	MEAN	MAXIMUM	MINIMUM	MEAN	MAXIMUM								
JAN	55	38	46	68								64						
FEB	56	38	47	74								61						
MAR	60	41	50	74								57						
APR	64	44	54	85								53						
MAY	73	52	62	91								53						
JUN	81	59	70	98								51						
JUL	87	63	75	98								49						
AUG	88	65	77	101								54						
SEP	79	58	68	97								61						
OCT	70	54	62	88								64						
NOV	64	45	54	78								63						
DEC	58	40	49	73								63						
ANN	68	48	58									58						
EXTR	20	14	17	21														

PREPARED BY: NOCD ASHEVILLE STATION NAME: ALGIERS, ALGERIA ELEVATION: [illegible] FEET WMO [illegible]
LOCATION: 36 43N 3 15E

	TEMPERATURE (F)					PRECIPITATION (INCHES)							RELATIVE HUMIDITY		VAPOR PRESSURE INCHES OF MERCURY	DEW POINT (F)	PRESSURE ALTITUDE FEET (99 95%)	SURFACE WIND (MPH)			MEAN NUMBER OF DAYS WITH			
	MEANS			EXTREME						SNOWFALL											PRECIPITATION			TEMPERATURE
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	MEAN	MAXIMUM	MINIMUM	24-HR MAXIMUM	MEAN	MAXIMUM	24-HR MAXIMUM	0600 LST	1200 LST				DIRECTION	SPEED	MAX GUST	MEAN AMOUNT (TENTHS)	0.01 OR MORE	SNOWFALL	
JAN	61	50	56	82	35	4.5	6.4	0.8	2.2	0			68	63	30	44								
FEB	63	50	57	87	35	3.4	7.6	0.0	1.1	0			69	61	30	44								
MAR	66	53	60	96	36	2.3	4.9	0.4	2.9	0			67	60	32	47								
APR	69	56	63	93	43	2.4	7.8	0.7	2.2	0			67	61	36	50								
MAY	75	61	68	108	50	1.1	4.1	0.0	2.4	0			65	60	44	54								
JUN	80	67	74	106	55	0.5	2.8	0.1	1.5	0			70	65	54	60								
JUL	83	71	77	108	62	0.1	0.6	0.0	0.6	0			71	64	63	65								
AUG	86	73	80	110	66	0.3	1.2	0.0	0.5	0			71	63	66	67								
SEP	82	70	77	109	55	0.9	5.1	0.0	1.9	0			68	62	61	58								
OCT	76	64	70	95	46	3.5	13.8	0.0	5.3	0			69	61	48	54								
NOV	69	57	63	93	41	4.3	11.2	0.1	3.2	0			68	67	38	51								
DEC	63	52	58	85	37	5.5	9.8	0.7	2.5	0			70	66	37	49								
ANN	73	60	67	110	35	28.7	42.8	2.7	5.3	0			69	62	45	54								
EYR	29	29	29	29	29	29	20	20	28	25			26	29	26	26								

LESS THAN 0.5 DAYS, 0.5 OR MORE BUT LESS THAN 1.5 DAYS

THE VALUE LISTED UNDER PRESSURE ALTITUDE INDICATES THAT THE [illegible] LABELED 99 95% OTHERWISE IT IS THE MEAN

EYR IS EQUIVALENT YEARS OF RECORD I E THE ACTUAL NUMBER OF YEARS [illegible]

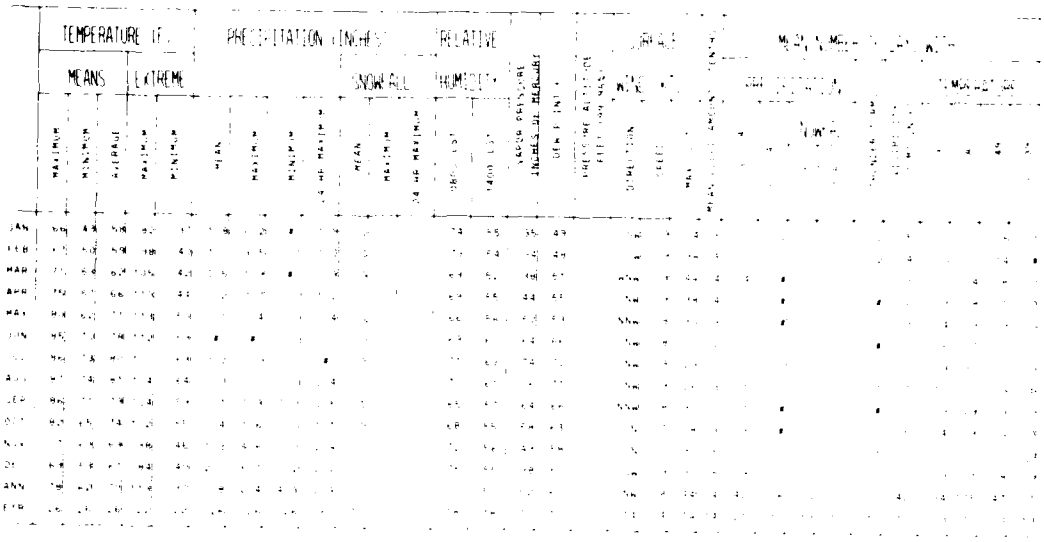
FLYING WEATHER, + PERCENT OF HOURS

HOUR (EST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	YEARS
CEILING LESS THAN 1000 FEET AND OR VISIBILITY LESS THAN 3 MI														
00	31	26	23	15	19	[illegible]								
03	42	24	54	36	19									
06	34	35	31	45	19									
09	34	37	38	35	46									
12	30	34	27	26	19									
15	27	29	29	33	42									
18	33	25	24	30	32									
21	34	34	44	31	55									
ALL HRS	32	28	29	30	29									
CEILING LESS THAN 3000 FEET AND OR VISIBILITY LESS THAN 5 MI														
00	19	17	11	14	17									
03	26	16	29	23	42									
06	24	18	18	23	19									
09	23	22	21	24	26									
12	23	18	17	19	11									
15	21	13	16	20	16									
18	12	15	12	11	12									
21	20	22	23	24	23									
ALL HRS	22	18	16	19	16									
CEILING LESS THAN 1000 FEET AND OR VISIBILITY LESS THAN 2 MI														
00	12	9	5	6	7									
03	14	16	13	12	23									
06	7	9	8	12	11									
09	8	10	5	7	12									
12	4	3	3	4	2									
15	4	3	3	4	8									
18	3	5	2	5	3									
21	9	7	4	7	11									
ALL HRS	7	7	5	7	7									
CEILING LESS THAN 300 FEET AND OR VISIBILITY LESS THAN 1/2 MI														
00	6	6	3	1	2									
03	5	6	7	4	8									
06	5	6	4	3	4									
09	0	3	0	0	0									
12	0	0	1	#	#									
15	0	0	0	*	3									
18	#	1	0	0	#									
21	6	2	3	0	2									
ALL HRS	3	3	2	1	2									

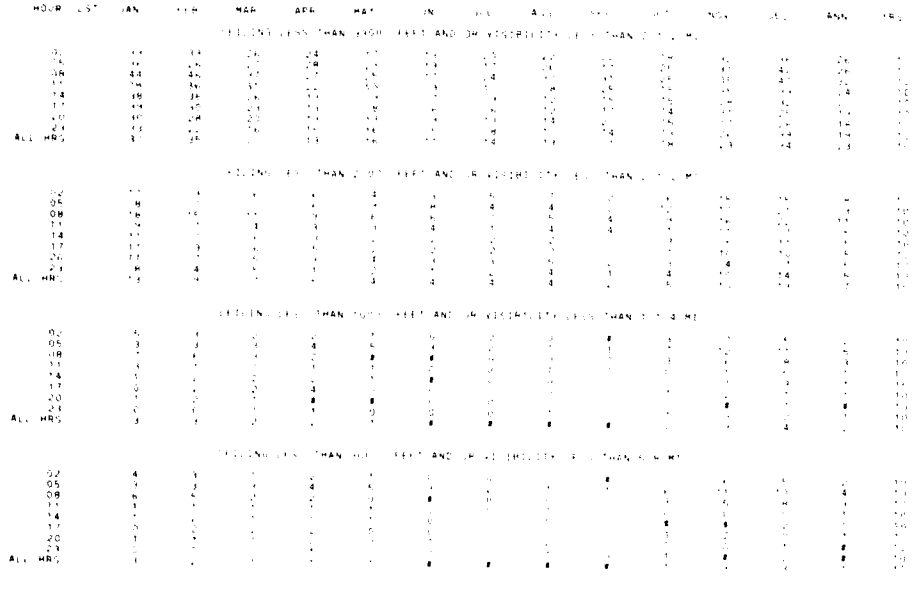
ALGIERS, ALGERIA

PREPARED BY: NOCD ASHEVILLE STATION NAME: ALEXANDRIA, EGYPT

LOCATION: 31 0N 29 5E



FLYING WEATHER, PERCENT OF HOUR



ALEXANDRIA, EGYPT

PREPARED BY: NOCD ASHEVILLE STATION NAME: ATHENS INTL/HELLENIKON, GREECE [illegible]
LOCATION: 37 54N 23 44W

	TEMPERATURE (F) MEANS			TEMPERATURE (F) EXTREME		PRECIPITATION (INCHES)				SNOWFALL			RELATIVE HUMIDITY	Other columns (pressure, wind, mean number of days with precipitation, snow, temperature)
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	MEAN	MAXIMUM	MINIMUM	24 HR MAXIMUM	MEAN	MAXIMUM	24 HR MAXIMUM	[illegible]	[illegible]
JAN	56	45	51	72	27	2.2	4.6	0.7	2.6				[illegible]	[illegible]
FEB	58	46	52	70	30	1.3	5.0	0.0	1.4				[illegible]	[illegible]
MAR	61	48	55	72	32	1.4	3.0	0.4	[illegible]				[illegible]	[illegible]
APR	68	54	61	82	41	0.6	1.4	#	1.0				[illegible]	[illegible]
MAY	75	62	69	93	46	0.9	5.8	0.0	[illegible]				[illegible]	[illegible]
JUN	84	69	77	97	59	0.4	2.7	0.0	.8				[illegible]	[illegible]
JUL	90	74	82	102	6[illegible]	0.1	0.8	0.0	[illegible]				[illegible]	[illegible]
AUG	90	74	82	108	54	0.3	[illegible]	[illegible]	0.5				[illegible]	[illegible]
SEP	83	68	76	95	50	[illegible]	2.8	[illegible]	[illegible]				[illegible]	[illegible]
OCT	75	61	68	88	44	2.4	9.2	0.0	3.0				[illegible]	[illegible]
NOV	68	56	62	[illegible]	39	2.2	4.4	0.5	[illegible]				[illegible]	[illegible]
DEC	60	49	55	73	[illegible]	2.6	[illegible]	[illegible]	[illegible]				[illegible]	[illegible]
ANN	72	59	66	108	27	14.8	22.0	8.5	3.0				[illegible]	[illegible]
EYR	13	13	13	13	13	20	20	20	13				[illegible]	[illegible]

LESS THAN 0.5 DAY [illegible]
THE VALUE LISTED UNDER [illegible]
LABELED 99.95% OTHERWISE IT IS THE MEAN
EYR IS EQUIVALENT YEARS OF RECORD [illegible]

FLYING WEATHER, PERCENT OF HOURS

CEILING LESS THAN 3000 FEET AND/OR VISIBILITY LESS THAN 3 MI

HOUR (LST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	YR
01	1	2	3	0	[illegible]	[illegible]	[illegible]	[illegible]	#	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
04	3	[illegible]	[illegible]	#	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4	[illegible]	[illegible]	8
07	4	4	4	[illegible]	[illegible]	[illegible]	[illegible]	#	[illegible]	[illegible]	4	4	[illegible]	8
10	[illegible]	[illegible]	4	1	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	4	[illegible]	[illegible]	8
13	[illegible]	4	3	[illegible]	[illegible]	#	[illegible]	[illegible]	[illegible]	[illegible]	4	8	[illegible]	8
16	3	4	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8
19	2	4	2	[illegible]	1	[illegible]	[illegible]	[illegible]	#	1	[illegible]	[illegible]	[illegible]	8
22	4	2	2	#	1	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	4	[illegible]	8
ALL HRS	3	4	[illegible]	[illegible]	[illegible]	#	#	#	[illegible]	1	[illegible]	[illegible]	[illegible]	8

CEILING LESS THAN 1500 FEET AND/OR VISIBILITY LESS THAN 3 MI

HOUR (LST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	YR
01	1	0	0	0	0	0	0	0	[illegible]	[illegible]	[illegible]	1	#	[illegible]
04	1	#	[illegible]	0	0	0	0	0	[illegible]	1	1	[illegible]	[illegible]	8
07	1	1	1	[illegible]	2	2	[illegible]	#	#	[illegible]	[illegible]	[illegible]	[illegible]	8
10	3	1	2	1	3	1	1	[illegible]	#	1	[illegible]	[illegible]	[illegible]	8
13	1	1	1	1	1	#	0	0	[illegible]	[illegible]	1	[illegible]	1	8
16	1	1	#	#	1	0	0	0	#	#	[illegible]	[illegible]	#	8
19	1	1	1	0	#	0	0	0	#	0	[illegible]	[illegible]	#	8
22	1	1	#	0	0	0	0	0	0	0	1	#	#	8
ALL HRS	[illegible]	1	[illegible]	#	[illegible]	#	#	#	#	#	1	[illegible]	[illegible]	8

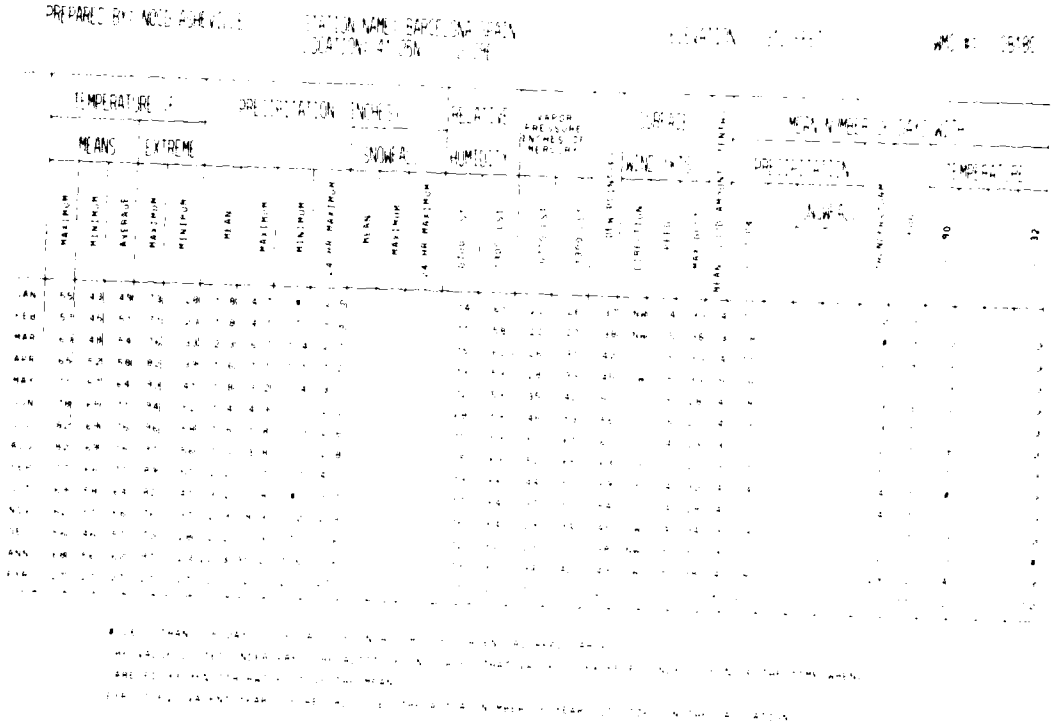
CEILING LESS THAN 1000 FEET AND/OR VISIBILITY LESS THAN 2 MI

HOUR (LST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	YR
01	1	0	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	1	#	#	#	[illegible]
04	1	0	0	0	0	0	0	0	#	#	[illegible]	[illegible]	#	8
07	#	#	0	#	#	0	0	0	0	[illegible]	[illegible]	#	#	8
10	1	#	1	0	1	0	0	0	[illegible]	[illegible]	#	#	#	8
13	1	1	#	0	#	[illegible]	0	0	[illegible]	#	#	#	#	8
16	#	[illegible]	#	#	#	[illegible]	[illegible]	[illegible]	#	[illegible]	[illegible]	#	#	8
19	0	#	0	0	#	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	#	8
22	#	1	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	#	[illegible]	#	8
ALL HRS	1	#	#	#	#	0	[illegible]	[illegible]	#	#	[illegible]	#	#	[illegible]

CEILING LESS THAN 200 FEET AND/OR VISIBILITY LESS THAN [illegible] MI

HOUR (LST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	YR
01	0	0	0	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	1	#	#	[illegible]
04	0	0	0	0	0	0	0	[illegible]	[illegible]	[illegible]	#	[illegible]	#	8
07	0	0	0	0	#	0	[illegible]	[illegible]	[illegible]	[illegible]	#	#	#	8
10	#	#	#	0		0	0	[illegible]		[illegible]		[illegible]	#	8
13	#	#	0	0	#	0	0		[illegible]	[illegible]	[illegible]	[illegible]	#	8
16	0	0	0	0	#	0	0	[illegible]	[illegible]	[illegible]	#	[illegible]	#	8
19	0	0	0	0	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8
22	0	0	0	0	0	0	[illegible]	0	0	[illegible]	[illegible]	[illegible]	[illegible]	8
ALL HRS	#	#	#	0	#	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	#	#	#	8

ATHENS INTL/HELLENIKON, GREECE



BARCELONA, SPAIN

PREPARED BY: NOCD ASHEVILLE STATION NAME: BEIRUT, LEBANON ELEVATION: 79 FEET WMO #: 40100
LOCATION: 33 49N 35 29E

	TEMPERATURE (F)					PRECIPITATION (INCHES)							RELATIVE HUMIDITY		VAPOR PRESSURE INCHES OF MERCURY	DEW POINT (F)	PRESSURE ALTITUDE FEET (99.95%)	SURFACE WIND (KTS)			MEAN CLOUD AMOUNT (TENTHS)		MEAN NUMBER OF DAYS WITH					
	MEANS			EXTREME						SNOWFALL															VISIBILITY 7 MI OR LESS DUE TO FOG		TEMPERATURE ≤ 90	TEMPERATURE ≤ 32
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	MEAN	MAXIMUM	MINIMUM	24 HR MAXIMUM	MEAN	MAXIMUM	24 HR MAXIMUM	0900 LST	1500 LST				DIRECTION	SPEED	MAX GUST	0830 LST	1430 LST	PRECIPITATION .04 OR MORE	THUNDERSTORMS	0800 LST	1800 LST		
JAN	62	51	57	77	31	7.5			4.0	0			72	70	35					44								
FEB	63	51	57	87	30	6.2			3.5	0			72	70	32					44								
MAR	66	54	60	97	36	3.1			3.6	0			71	69	40					44								
APR	72	58	65	99	43	2.2			3.1	0			72	67	48					41								
MAY	78	64	71	101	50	0.5			1.6	0			69	64	59					26								
JUN	83	69	76	104	56	0.1			0.4	0			67	64	69					26								
JUL	87	73	80	98	64	#			0.4	0			66	58	73					44								
AUG	88	74	82	99	62	#			0.3	0			65	57	78					44								
SEP	86	73	80	99	60	0.2			1.1	0			64	57	75					43								
OCT	81	69	75	101	52	2.2			5.5	0			65	62	67					43								
NOV	73	61	67	91	41	5.2			4.1	0			67	67	53					41								
DEC	65	55	60	84	30	7.3			3.9	0			71	69	39					44								
ANN	75	63	69	107	30	35.2			5.5	0			68	64	55					43								
EYR	62	62	62	62	62	71			58	62			30	30	23					19								

LESS THAN 0.5 DAYS, [illegible]

THE VALUE LISTED UNDER PRESSURE ALTITUDE INDICATES THAT [illegible] THE TIME WHEN

LABELED 99.95% OTHERWISE IT IS THE MEAN

EYR IS EQUIVALENT YEARS OF RECORD [illegible] THE ACTUAL NUMBER OF YEARS [illegible]

FLYING WEATHER, PERCENT OF HOUR

HOUR (LST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	YR
CEILING LESS THAN 500 FEET AND OR VISIBILITY LESS THAN 3 MI														
02	28	24	22	14	10	5	1	2	4	11	19	25	13	13
05	25	24	21	13	9	4	1	1	3	10	18	24	12	12
08	27	25	21	13	9	4	1	1	3	10	18	24	12	12
11	28	26	22	14	9	4	1	1	3	10	19	25	13	13
14	31	27	24	15	10	5	1	2	4	12	20	27	14	14
17	31	27	24	15	10	5	1	2	4	12	20	27	14	14
20	29	25	23	14	9	4	1	2	4	11	19	25	13	13
23	26	24	21	13	9	4	1	1	3	10	18	24	12	12
ALL HRS	28	26	23	14	9	4	1	1	3	10	18	24	12	12
CEILING LESS THAN 3300 FEET AND OR VISIBILITY LESS THAN 7 MI														
02	27	24	22	17	12	7	4	4	6	13	21	26	15	15
05	25	23	21	17	12	7	4	4	6	13	21	26	15	15
08	26	23	21	17	12	7	4	4	6	13	21	26	15	15
11	26	23	21	16	11	6	3	4	6	13	21	26	15	15
14	27	24	22	17	12	7	4	4	6	13	21	26	15	15
17	29	24	22	17	12	7	4	4	6	13	21	26	15	15
20	27	24	22	18	12	7	4	4	6	13	21	26	15	15
23	25	23	21	17	12	7	4	4	6	13	21	26	15	15
ALL HRS	27	24	22	17	12	7	4	4	6	13	21	26	15	15
CEILING LESS THAN 1000 FEET AND OR VISIBILITY LESS THAN 3 MI														
02	1	#	#	#	1	#	#	#	#	1	2	3	1	1
05	1	#	#	#	1	#	#	#	#	1	2	3	1	1
08	1	#	#	#	1	#	#	#	#	1	2	3	1	1
11	1	#	#	#	1	#	#	#	#	1	2	3	1	1
14	2	1	#	#	1	#	#	#	#	1	2	3	1	1
17	2	1	#	#	1	#	#	#	#	1	2	3	1	1
20	2	1	#	#	1	#	#	#	#	1	2	3	1	1
23	1	1	#	#	1	#	#	#	#	1	2	3	1	1
ALL HRS	1	#	#	#	1	#	#	#	#	1	2	3	1	1
CEILING LESS THAN 200 FEET AND OR VISIBILITY LESS THAN 1/2 MI														
02	#	#	#	#	#	#	#	#	#	#	#	#	#	#
05	#	#	#	#	#	#	#	#	#	#	#	#	#	#
08	#	#	#	#	#	#	#	#	#	#	#	#	#	#
11	#	#	#	#	#	#	#	#	#	#	#	#	#	#
14	#	#	#	#	#	#	#	#	#	#	#	#	#	#
17	#	#	#	#	#	#	#	#	#	#	#	#	#	#
20	#	#	#	#	#	#	#	#	#	#	#	#	#	#
23	#	#	#	#	#	#	#	#	#	#	#	#	#	#
ALL HRS	#	#	#	#	#	#	#	#	#	#	#	#	#	#

BEIRUT, LEBANON

PREPARED BY: NOCD ASHEVILLE STATION NAME: BENINA, LIBYA ELEVATION: WMO #: 62052
LOCATION: 32 06N 20 16E

	TEMPERATURE (F)					PRECIPITATION (INCHES)			SNOWFALL		RELATIVE HUMIDITY		SURFACE WINDS			MEAN NUMBER OF DAYS WITH					
	MEANS			EXTREME												PRECIPITATION			THUNDERSTORMS	SNOW OR ICE PELLETS	TEMPERATURE
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	MEAN	MAXIMUM	MINIMUM	MEAN	MAXIMUM	MEAN	MAXIMUM	VAPOR PRESSURE (TENTHS OF MILLIBARS)	DIRECTION	SPEED	.01 INCH OR MORE	.10 INCH OR MORE	1.00 INCH OR MORE			90
JAN	62	41	52	78	16	1.24	4.83	0.03	3.9	20	76	96	42	1	14	5	1	0	1	4	0
FEB	64	43	54	81	17	1.28	4.83	0.04	3.6	16	73	95	45	1	14	5	1	0	1	3	0
MAR	68	46	57	103	17	1.28	4.83	0.04	2.3	16	67	94	46	1	14	4	1	0	1	2	0
APR	76	54	65	104	41	0.71	2.17	0.04	0.4	4	60	91	48	1	13	3	1	0	1	1	0
MAY	86	63	74	113	45	0.24	0.98	0.00	0.0	0	53	87	52	1	11	1	0	0	1	0	0
JUN	94	69	82	117	53	0.08	0.47	0.00	0.0	0	50	84	54	1	10	1	0	0	0	0	0
JUL	96	73	84	118	59	0.04	0.47	0.00	0.0	0	54	86	54	1	10	1	0	0	0	0	0
AUG	95	73	84	110	61	0.08	0.47	0.00	0.0	0	55	87	53	1	10	1	0	0	0	0	0
SEP	92	69	81	106	55	0.28	1.18	0.00	0.0	0	57	87	51	1	10	2	0	0	0	0	0
OCT	86	62	74	104	43	0.75	2.17	0.00	0.0	0	62	91	47	1	11	3	1	0	0	0	0
NOV	76	51	64	97	25	1.24	4.83	0.00	0.4	4	70	94	43	1	12	4	1	0	0	1	0
DEC	67	43	55	86	19	1.26	4.83	0.00	1.2	8	74	96	41	1	13	5	1	0	1	2	0
ANN	82	58	70	118	16	8.24	4.83	0.00	12.8	20	63	96	48	1	12	37	6	0	5	14	0
YR	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46

(LESS THAN 0.5 DAYS) FOR CLIMATOLOGICALLY [illegible] AREAS.

THE VALUE LISTED UNDER PRESS OR ATTEMPTED WAS THAT VALUE [illegible] TIME WHEN
ABOVE 90 WAS OTHERWISE IT IS THE MEAN.

FOR [illegible] EQUIVALENT YEARS [illegible] THE ACTUAL NUMBER OF YEARS [illegible]

FLYING WEATHER, PERCENT [illegible]

CEILING LESS THAN 1,000 FEET AND/OR VISIBILITY LESS THAN 3 MILES

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
ALL HRS													
00-03													
03-06													
06-09													
09-12													
12-15													
15-18													
18-21													
21-24													

CEILING LESS THAN 2,000 FEET AND/OR VISIBILITY LESS THAN [illegible]

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
ALL HRS													
00-03													
03-06													
06-09													
09-12													
12-15													
15-18													
18-21													
21-24													

CEILING LESS THAN [illegible] FEET AND/OR VISIBILITY LESS THAN [illegible]

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
ALL HRS													
00-03													
03-06													
06-09													
09-12													
12-15													
15-18													
18-21													
21-24													

CEILING LESS THAN [illegible] FEET AND/OR VISIBILITY LESS THAN [illegible]

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
ALL HRS													
00-03													
03-06													
06-09													
09-12													
12-15													
15-18													
18-21													
21-24													

BENINA, LIBYA

PREPARED BY: NOCD ASHEVILLE

STATION NAME: CAGLIARI, SARDINIA
LOCATION: 39 15N 9 03E

ELEVATION: 39 FEET

WMO #: 16560

	TEMPERATURE (F)					PRECIPITATION (INCHES)							RELATIVE HUMIDITY		VAPOR PRESSURE INCHES OF MERCURY	DEW POINT (F)	PRESSURE ALTITUDE (FEET - 1,013.25)	SURFACE WIND (KTS)			MEAN CLOUD AMOUNT TENTHS	MEAN NUMBER OF DAYS WITH				
	MEANS			EXTREME						SNOWFALL												PRECIPITATION .01 IN OR MORE	THUNDERSTORMS	VISIBILITY 7 MI OR LESS IN FOG		TEMPERATURE 90 OR ABOVE	TEMPERATURE 32 OR BELOW
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	MEAN	MAXIMUM	MINIMUM	24-HR MAXIMUM	MEAN	MAXIMUM	24-HR MAXIMUM	MEAN					DIRECTION	SPEED	MAX GUST				0300 LST	1300 LST		
JAN	57	42	49	68	26	2.6	15.8	0.2	1.3				80		25			W	7	40	5	8	0	1	8	0	3
FEB	58	43	50	69	26	1.9	5.2	0.1	2.1				78		25			W	8	35	5	7	0	1	4	0	2
MAR	62	45	53	81	28	1.6	3.8	0.1	1.1				77		27			SW	8	42	5	7	0	1	3	0	1
APR	65	49	57	82	35	1.1	2.3	0.0	1.1				76		31			W	8	38	5	6	1	1	2	0	0
MAY	72	55	63	85	44	1.0	4.4	0.1	0.9				75		35			W	8	36	4	4	1	1	1	0	0
JUN	80	56	71	100	47	0.5	3.4	0.0	1.9				70		44			W	8	33	3	2	1	2	1	0	0
JUL	86	56	75	100	55	0.1	0.5	0.0	0.2				70		50			NW	8	33	3	1	2	3	1	0	0
AUG	85	67	76	101	54	0.5	3.0	0.0	1.7				72		53			NW	8	37	3	1	3	5	1	0	0
SEP	80	64	72	102	51	1.1	2.9	0.0	1.9				74		49			SE	7	30	3	1	3	4	0	0	0
OCT	74	57	65	88	43	2.9	10.2	0.4	2.0				77		41			SE	6	30	4	3	1	1	0	0	0
NOV	66	50	57	77	33	2.6	5.4	0.4	2.1				77		35			SE	7	33	4	6	1	1	0	0	0
DEC	62	45	52	71	32	2.5	6.2	0.6	3.0				80		27			SE	7	37	4	8	0	1	0	0	0
ANN	71	52	62	102	26	18.0	29.1	10.3	3.0				76		35			W	8	43	4	61	5	15	3	0	0
EYR	10	10	20	10	10	20	20	20	10				10		30			13	13	13	30	16	6	5	6	8	8

LESS THAN 0.5 DAYS, 0.5 OR 0.05 INCH, OR 2.5 PERCENT AS APPLICABLE

THE VALUE LISTED UNDER PRESSURE ALTITUDE INDICATES THAT VALUE IS EXCEEDED ONLY 0.05 % OF THE TIME WHEN LABELED 99.95% OTHERWISE IT IS THE MEAN

EYR IS EQUIVALENT YEARS OF RECORD I.E. THE ACTUAL NUMBER OF YEARS UTILIZED IN THE CALCULATIONS

FLYING WEATHER, PERCENT OF HOURS

HOUR (LST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	YEA
CEILING LESS THAN 5000 FEET AND OR VISIBILITY LESS THAN 3 MI														
01	37	41	40	35	25	24	13	19	21	27	34	36	29	10
04	43	45	44	37	29	27	16	23	25	31	39	41	33	10
07	49	53	53	48	39	34	22	29	31	37	45	47	40	10
10	71	69	68	64	54	45	31	38	40	47	58	61	52	10
13	45	53	46	41	33	25	16	21	23	29	37	39	32	10
16	41	41	42	39	25	18	11	16	18	24	34	36	28	10
19	40	48	48	33	25	18	11	16	18	24	34	36	28	10
22	34	39	39	31	23	16	9	13	15	21	31	33	25	10
ALL HRS	45	49	50	42	30	23	14	19	21	27	36	38	32	10
CEILING LESS THAN 3300 FEET AND OR VISIBILITY LESS THAN 2 1/2 MI														
01	23	27	20	16	9	6	3	4	7	13	17	20	13	10
04	28	30	27	17	12	8	3	5	8	14	19	22	15	10
07	30	33	32	23	17	12	5	7	11	16	24	26	19	10
10	31	33	28	23	11	7	3	4	7	13	21	24	16	10
13	29	36	28	26	11	7	3	4	7	13	21	24	16	10
16	27	29	29	27	14	8	3	5	8	13	21	24	16	10
19	25	30	28	17	7	4	2	3	5	12	19	22	14	10
22	23	23	22	13	5	3	1	2	4	10	16	18	11	10
ALL HRS	27	30	27	20	11	7	3	4	7	13	19	22	15	10
CEILING LESS THAN 1000 FEET AND OR VISIBILITY LESS THAN 1 MI														
01	1	3	2	2	2	2	#	1	1	1	1	1	1	10
04	3	4	4	2	4	2	#	1	1	2	2	2	2	10
07	4	6	11	10	10	4	#	2	3	4	4	4	5	10
10	12	9	9	2	3	2	#	1	1	3	8	4	4	10
13	3	5	3	1	1	1	#	1	1	2	5	3	2	10
16	2	1	2	1	1	1	#	1	1	1	2	1	1	10
19	1	2	3	1	1	1	#	#	#	1	1	1	1	10
22	1	1	1	1	1	1	#	#	#	1	1	1	1	10
ALL HRS	3	4	4	2	3	2	#	1	1	2	3	2	2	10
CEILING LESS THAN 300 FEET AND OR VISIBILITY LESS THAN 1/4 MI														
01	#	2	#	#	1	#	#	#	#	#	#	#	#	10
04	2	2	2	1	2	1	#	#	#	1	1	1	1	10
07	2	6	4	4	5	1	#	#	#	1	1	1	2	10
10	4	2	1	1	1	#	#	#	#	#	1	1	1	10
13	1	1	0	0	#	0	#	#	#	#	#	#	#	10
16	#	1	0	0	#	0	#	#	#	#	#	#	#	10
19	0	1	1	#	1	0	0	#	#	#	#	#	#	10
22	1	#	0	0	1	0	0	0	#	#	#	#	#	10
ALL HRS	1	2	1	1	1	#	0	#	#	#	1	1	1	10

CAGLIARI, SARDINIA

PREPARED BY: NOCD ASHEVILLE STATION NAME: CANAKKALE, TURKEY ELEVATION: 13 FEET WMO #: 17112
LOCATION: 40 08N 26 24E

	TEMPERATURE (F)					PRECIPITATION (INCHES)						RELATIVE HUMIDITY		VAPOR PRESSURE INCHES OF MERCURY	DEW POINT (F)	PRESSURE ALTITUDE FEET (MEAN)	SURFACE WIND (KTS)			MEAN NUMBER OF DAYS WITH					
	MEANS			EXTREME					SNOWFALL												PRECIPITATION				TEMPERATURE	
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	MEAN	MAXIMUM	MINIMUM	24 HR MAXIMUM	MEAN	MAXIMUM	24 HR MAXIMUM	(LST)					DIRECTION	SPEED	MAX GUST	MEAN CLOUD AMOUNT (TENTHS)	.10 OR MORE	SNOWFALL 1 INCH OR MORE	THUNDERSTORMS	90 AND ABOVE	32 AND BELOW
JAN			44			4	8	0										NE								
FEB			45			3	6	0										NE								
MAR			46			2	6	1										NE								
APR			54			1	3	#										NE								
MAY			63			1	3	0										NNE								
JUN			71			1	4	0										NNE								
JUL			77			0	1	0										NE								
AUG			76			0	2	0										NE								
SEP			68			1	4	0										NNE								
OCT			61			2	6	0										NNE								
NOV			54			3	8	0										NNE								
DEC			48			4	9	0										NE								
ANN			58			27	38	20										NE								
EYR			20			20	20	20																		

LESS THAN 0.5 DAYS, 0.5 OR 0.05 INCH, OR .5 PERCENT IF APPLICABLE
THE VALUE LISTED UNDER PRESSURE ALTITUDE INDICATES THAT VALUE IS EXCEEDED ONLY 5% OF THE TIME WHEN LABELED 99.95% OTHERWISE IT IS THE MEAN
EYR IS EQUIVALENT YEARS OF RECORD (I.E. THE ACTUAL NUMBER OF YEARS DIVIDED BY THE APPLICABLE %)

FLYING WEATHER, (PERCENT OF HOUR)

HOUR (LST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	HRS
CEILING LESS THAN 5000 FEET AND/OR VISIBILITY LESS THAN 5 MI														
02	14	11	12	4	5	1	#	#	#	1	4	11	5	1
05	16	11	13	3	3	1	#	#	#	1	4	11	5	1
08	18	24	18	8	4	1	#	#	#	2	6	13	8	2
11	14	15	15	8	4	1	#	#	#	2	5	12	7	2
14	16	16	15	8	4	1	#	#	#	2	5	12	7	2
17	18	17	17	8	4	1	#	#	#	2	5	12	8	2
20	15	14	14	8	4	1	#	#	#	2	5	12	7	2
23	15	12	12	6	4	1	#	#	#	1	4	11	6	1
ALL HRS	17	16	14	6	4	1	#	#	#	1	4	11	6	1
CEILING LESS THAN 1000 FEET AND/OR VISIBILITY LESS THAN 3 MI														
02	13	9	9	2	2	#	#	#	#	#	1	3	2	1
05	12	11	7	4	2	#	#	#	#	#	1	3	2	1
08	14	11	7	2	1	#	#	#	#	#	1	3	2	1
11	12	10	6	2	1	#	#	#	#	#	1	3	2	1
14	12	10	6	2	1	#	#	#	#	#	1	3	2	1
17	13	11	7	2	1	#	#	#	#	#	1	3	2	1
20	12	10	6	2	1	#	#	#	#	#	1	3	2	1
23	12	11	7	2	1	#	#	#	#	#	1	3	2	1
ALL HRS	13	11	7	2	1	#	#	#	#	#	1	3	2	1
CEILING LESS THAN 500 FEET AND/OR VISIBILITY LESS THAN 1 MI														
02	7	5	3	1	1	#	#	#	#	#	#	1	1	#
05	7	5	3	1	1	#	#	#	#	#	#	1	1	#
08	7	5	3	1	1	#	#	#	#	#	#	1	1	#
11	5	5	3	1	1	#	#	#	#	#	#	1	1	#
14	5	5	3	1	1	#	#	#	#	#	#	1	1	#
17	5	4	3	1	1	#	#	#	#	#	#	1	1	#
20	4	4	3	1	1	#	#	#	#	#	#	1	1	#
23	5	5	3	1	1	#	#	#	#	#	#	1	1	#
ALL HRS	5	4	3	1	1	#	#	#	#	#	#	1	1	#
CEILING LESS THAN 200 FEET AND/OR VISIBILITY LESS THAN 1/2 MI														
02	3	2	1	#	#	#	#	#	#	#	#	#	#	#
05	3	2	1	#	#	#	#	#	#	#	#	#	#	#
08	4	3	1	#	#	#	#	#	#	#	#	#	#	#
11	2	2	1	#	#	#	#	#	#	#	#	#	#	#
14	2	2	1	#	#	#	#	#	#	#	#	#	#	#
17	2	2	1	#	#	#	#	#	#	#	#	#	#	#
20	2	2	1	#	#	#	#	#	#	#	#	#	#	#
23	2	2	1	#	#	#	#	#	#	#	#	#	#	#
ALL HRS	2	2	1	#	#	#	#	#	#	#	#	#	#	#

CANAKKALE, TURKEY

PREPARED BY: NOCD ASHEVILLE STATION NAME: GENOVA, ITALY ELEVATION: [illegible] FEET WMO #: 16120

LOCATION: 44 25N 8 51E

	TEMPERATURE (F)					PRECIPITATION (INCHES)						RELATIVE HUMIDITY	VAPOR PRESSURE INCHES OF MERCURY		SURFACE WIND (MPH)			MEAN NUMBER OF DAYS WITH							
	MEANS			EXTREME						SNOWFALL								PRECIPITATION				TEMPERATURE			
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	MEAN	MAXIMUM	MINIMUM	24 HR MAXIMUM	MEAN	MAXIMUM	24 HR MAXIMUM	MEAN	0900 LST	1500 LST	DIRECTION	SPEED	MAX GUST	.01	SNOWFALL	THUNDERSTORMS	VISIBILITY	90	32	32
JAN	51	41	46	66	23	4.1	17.1	0	2.9				66	13	14	33	N	14	13	5			6		3
FEB	52	43	47	68	18	4.3	13.3	0.0	5.0				65	13	14	33	N	14	13	5			8		3
MAR	57	47	52	75	30	4.2	17.8	0.0	2.6				67	15	17	41	N	18	15	6			8		3
APR	63	52	57	80	38	3.9	11.3	0.3	4.6				68	21	20	37	N	16	14	6			6	4	0
MAY	69	58	64	86	45	3.4	9.1	0.2	1.8				71	28	28	54	N	17	15	6			6	7	0
JUN	75	64	70	91	52	2.8	9.8	0.3	2.2				69	36	37	61	N	18	22	5			2	2	0
JUL	80	69	75	98	58	1.7	8.5	0.3	4.8				66	39	41	65	N	17	24	4			4	4	0
AUG	80	69	75	95	53	2.4	13.6	0.0	7.9				65	38	42	63	N	16	28	4			4	4	0
SEP	76	65	70	93	52	4.3	17.3	0.2	4.4				67	35	39	59	N	17	32	4			3	3	0
OCT	69	58	64	85	38	7.9	30.6	0.2	6.8				68	27	29	50	N	16	14	6			3	3	0
NOV	59	50	54	75	30	7.7	28.9	0.1	3.4				69	19	21	42	N	16	15	6			1	1	0
DEC	54	46	49	69	27	5.0	25.4	#	6.5				65	16	17	39	N	15	12	6			1	5	0
ANN	65	55	60	98	18	51.6	96.5	2					67	25	27	44	N	8	25	5	80	21	47	5	0
EYR	16	16	30	30	30	50	120	120					10	8	8	4	33	12	12	2	50	10	5	10	0

LESS THAN 0.5 DAYS, 0.5 OR 0.25 INCH, OR 0.5 PERCENT AS APPLICABLE

THE VALUE LISTED UNDER PRESSURE ALTITUDE INDICATES THAT VALUE IS EXCEEDED ONLY 0.05 % OF THE TIME WHEN LABELED 99.95% OTHERWISE IT IS THE MEAN

EYR IS EQUIVALENT YEARS OF RECORD (I.E. THE ACTUAL NUMBER OF YEARS UTILIZED IN THE CALCULATIONS)

FLYING WEATHER, - PERCENT OF HOURS

HOUR (LST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	YRS
CEILING LESS THAN 3000 FEET AND OR VISIBILITY LESS THAN 5 MI														
01	51	60	56	47	50	54	54	53	57	56	55	53	55	11
04	52	56	57	51	54	58	56	55	62	62	57	47	54	10
07	51	54	56	52	54	54	55	54	60	59	56	53	54	11
10	51	54	54	54	57	57	54	54	59	57	56	54	56	11
13	54	54	54	54	57	57	54	54	59	57	57	56	56	11
16	54	55	54	54	58	60	57	57	61	59	59	57	57	11
19	54	55	56	57	61	63	61	61	64	61	61	60	60	11
22	54	55	56	57	61	63	61	61	64	61	61	60	60	11
ALL HRS	52	55	55	53	56	59	57	56	61	59	58	55	56	11
CEILING LESS THAN 3300 FEET AND/OR VISIBILITY LESS THAN 2 1/2 MI														
01	33	40	44	23	25	26	21	21	27	27	32	28	27	11
04	31	35	26	21	28	26	19	19	27	29	31	29	27	11
07	34	36	30	25	31	30	28	27	37	38	38	34	34	11
10	41	38	33	31	33	29	26	26	36	37	42	33	33	11
13	40	39	32	30	34	25	22	23	28	31	32	30	30	11
16	36	37	31	27	33	25	18	18	25	32	36	28	29	11
19	35	43	34	30	26	24	18	18	22	31	35	37	29	11
22	34	37	27	24	25	26	23	19	32	33	33	26	28	11
ALL HRS	36	38	29	27	29	26	22	20	29	30	33	29	29	11
CEILING LESS THAN 1000 FEET AND/OR VISIBILITY LESS THAN 2 1/2 MI														
01	5	6	5	3	1	2	2	1	4	3	3	2	3	11
04	3	4	5	2	#	1	1	0	3	3	3	1	2	11
07	5	6	6	4	6	4	2	1	4	3	4	2	4	11
10	12	12	13	9	7	6	3	3	7	6	7	4	7	11
13	9	8	7	5	5	4	5	4	4	5	5	5	5	11
16	10	9	5	5	4	4	3	3	4	6	7	6	6	11
19	9	8	8	7	3	3	2	2	3	4	4	5	4	11
22	5	5	5	3	3	3	2	1	3	3	3	1	3	11
ALL HRS	7	7	7	5	3	4	4	2	4	4	4	3	5	10
CEILING LESS THAN 300 FEET AND/OR VISIBILITY LESS THAN [illegible] MI														
01	1	1	1	1	0	#	#	0	1	1	1	#	1	11
04	#	0	1	1	0	0	0	0	1	1	1	0	#	11
07	0	#	0	1	#	0	0	0	#	#	#	0	#	11
10	1	1	1	1	0	#	#	0	1	1	1	0	#	11
13	1	1	2	2	#	0	0	#	1	2	1	#	#	11
16	1	1	1	1	#	0	0	#	1	1	1	#	#	11
19	2	1	1	#	#	0	0	#	1	1	1	#	#	11
22	1	1	0	#	#	0	0	#	0	1	1	#	#	11
ALL HRS	1	1	1	1	#	#	0	#	1	1	1	#	#	10

GENOVA, ITALY

PREPARED BY: NOCD ASHEVILLE STATION NAME: ISTANBUL, TURKEY ELEVATION: ----' WMO #: 1706
LOCATION: 40 58N 29 49E

	TEMPERATURE (F)					PRECIPITATION (INCHES)					RELATIVE HUMIDITY		VAPOR PRESSURE (INCHES OF MERCURY)	DEW POINT (F)	SUNRISE ACTIVITY (FEET OF SKY OBS)	WIND (MPH)		MEAN NUMBER OF DAYS WITH							
	MEANS			EXTREME					SNOWFALL															
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	MEAN	MAXIMUM	MINIMUM	MEAN	MAXIMUM	24 HR MAXIMUM	0700 LST	1300 LST											
JAN	46	37	42	66	18	3.5	6.7	1.3	2.6			82	75		38		NNE	11	34	16				
FEB	48	36	42	71	18	2.9	6.7	0.5	2.4			82	72		37		NNE	10	34	14				
MAR	51	38	45	82	23	2.8	5.7	0.3	1.8			81	67		40		NNE	10	33	14				
APR	60	45	53	86	33	1.5	3.7	0.1	1.5			81	62		46		NNE	8	31	7				
MAY	69	53	61	94	38	1.8	3.4	0.1	1.1			81	61		54		NNE	7	31	4				
JUN	77	60	69	98	47	1.2	2.8	0.1	1.1			76	58		61		NNE	6	30	3				
JUL	82	65	74	100	49	1.1	2.5	0.1	0.5			74	56		63		NNE	6	32	4				
AUG	82	66	74	106	50	1.3	3.6	0.1	1.4			76	59		64		N	6	31	4				
SEP	76	61	69	100	43	1.3	3.5	0.1	1.1			81	64		61		NE	8	33	7				
OCT	68	55	61	91	35	2.4	6.8	0.2	1.2			81	69		54		NNE	8	34	11				
NOV	59	46	54	80	25	3.4	6.7	0.4	2.3			82	77		48		N	7	32	14				
DEC	51	41	46	68	26	3.8	7.1	0.8	2.3			82	78		41		NNE	7	31	14				
ANN	64	50	57	106	18	25.9	34.3	14.8	1.8			81	68		51		NNE	8	33	11				
EYR	30	30	30	30	30	30	30	30	27			30	30											

LESS THAN 0.5 DAYS, 0.5 OR 0.05 INCH, OR < 0.5 PERCENT OF POSSIBLE

THE VALUE LISTED UNDER PRESSURE & TEMPERATURE INDICATES THAT VALUE IS FOR THE ____ HOUR OF THE TIME WHEN LABELED AS YES, OTHERWISE IT IS THE MEAN

EYR IS EQUIVALENT YEARS OF RECORD (I.E. THE ACTUAL NUMBER OF YEARS UTILIZED IN THE COMPILATION

FLYING WEATHER, - PERCENT OF HOURS

HOUR (LST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	YR
CEILING LESS THAN 5000 FEET AND OR VISIBILITY LESS THAN 5 MI														
02	60	56	55	40	31	14	14	14	17	33	43	51	37	
05	61	60	58	48	34	16	14	14	19	36	44	51	41	
08	63	62	61	51	36	17	15	15	20	38	46	54	43	
11	61	61	59	45	32	14	13	13	18	34	43	52	40	
14	58	57	54	42	30	13	12	12	16	32	41	49	38	
17	59	57	54	41	29	13	12	12	16	32	41	49	37	
20	60	58	57	44	31	15	13	13	17	34	42	50	39	
23	61	59	57	44	31	15	13	13	17	34	42	50	39	
ALL HRS	61	59	57	43	31	15	13	13	17	34	42	50	39	
CEILING LESS THAN 1000 FEET AND OR VISIBILITY LESS THAN 3 MI														
02	42	37	34	21	14	7	7	7	9	24	34	41	23	
05	42	41	39	27	17	8	7	7	10	25	34	41	25	
08	50	46	44	31	20	10	9	9	12	29	37	44	28	
11	45	39	41	28	18	8	7	7	11	27	35	42	26	
14	48	41	42	30	19	9	8	8	12	28	36	43	27	
17	44	36	38	26	16	7	6	6	10	25	32	39	24	
20	44	37	36	24	15	7	6	6	9	24	32	39	23	
23	47	44	43	33	21	10	9	9	12	29	37	44	28	
ALL HRS	44	38	37	24	17	8	6	6	9	24	32	39	23	
CEILING LESS THAN 300 FEET AND OR VISIBILITY LESS THAN 1 MI														
02	1	1	1	1	#	#	#	#	#	1	1	1	1	
05	1	1	1	1	#	#	#	#	#	1	1	1	1	
08	2	1	1	1	#	#	#	#	#	1	1	2	1	
11	1	1	1	1	#	#	#	#	#	1	1	1	1	
14	2	1	1	1	#	#	#	#	#	1	1	1	1	
17	2	1	1	1	#	#	#	#	#	1	1	1	1	
20	1	1	1	1	#	#	#	#	#	1	1	1	1	
23	1	1	1	1	#	#	#	#	#	1	1	1	1	
ALL HRS	1	1	1	1	#	#	#	#	#	1	1	1	1	

ISTANBUL, TURKEY

PREPARED BY: NOCD ASHEVILLE STATION NAME: LEFKAS, GREECE ELEVATION: 23 FEET WMO #: 16669
LOCATION: 38 50N 20 43E

	TEMPERATURE (F)					PRECIPITATION (INCHES)							RELATIVE	VAPOR PRESSURE INCHES OF MERCURY	DEW POINT(F)	PRESSURE ALTITUDE FEET (99 95%)	SURFACE WIND (KTS)			MEAN CLOUD AMOUNT (TENTHS)	MEAN NUMBER OF DAYS WITH					
	MEANS			EXTREME						SNOWFALL			HUMIDITY								PRECIPITATION			TEMPERATURE	
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	MEAN	MAXIMUM	MINIMUM	24 HR MAXIMUM	MEAN	MAXIMUM	24 HR MAXIMUM	MEAN				DIRECTION	SPEED	MAX (GUST)		.01	SNOWFALL	THUNDERSTORMS	90	32
JAN	57	43	50	68	23	6.2							82		44		SE	5	39		11		5	3	3
FEB	60	44	52	72	25	4.8							82		46		SE	6	45		10		4	2	1
MAR	61	46	54	77	30	3.6							80		47		SE	5	37		9		4	2	0
APR	66	51	59	75	36	2.5							80		52		NW	6	45		7		2	4	0
MAY	75	59	67	86	48	1.6							80		60		NW	5	36		5		1	8	0
JUN	82	65	74	95	54	0.8							75		64		NW	5	33		2		#	12	0
JUL	87	70	79	97	55	0.2							73		68		NW	5	33		#		#	18	0
AUG	88	70	79	104	59	0.8							74		69		NW	5	38		2		#	15	0
SEP	81	65	73	99	50	1.9							78		65		NW	4	30		5		1	9	0
OCT	73	58	66	86	41	5.7							82		59		NW	4	35		10		2	3	0
NOV	64	51	58	75	34	6.2							84		52		SE	4	31		10		4	0	0
DEC	59	46	53	73	25	8.4							84		48		SE	5	37		11		5	0	0
ANN	71	56	64	104	23	42.6							80		56		NW	5	45		82		31	74	0
EYR	11	11	11	11	11	25							8		10		16	16	16		25		8	11	11

LESS THAN 0.5 DAYS, 0.5 OR 0.05 INCH, OR 0.5 PERCENT AS APPLICABLE

THE VALUE LISTED UNDER PRESSURE ALTITUDE INDICATES THAT VALUE IS EXCEEDED ONLY 0.05 % OF THE TIME WHEN LABELED 99.95% OTHERWISE IT IS THE MEAN

EYR IS EQUIVALENT YEARS OF RECORD (I.E. THE ACTUAL NUMBER OF YEARS UTILIZED IN THE CALCULATIONS

FLYING WEATHER, PERCENT OF HOURS

HOUR (LST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	YR
CEILING LESS THAN 5000 FEET AND/OR VISIBILITY LESS THAN 5 MI														
01														
04														
07	22	19	11	4	4	4	1	1	2	4	10	18	7	16
10	24	19	14	6	4	1	1	1	1	4	11	18	8	5
13	22	17	12	7	3	1	0	0	1	3	11	16	7	5
16	20	16	11	5	3	1	0	0	1	3	11	15	7	2
19	19	17	11	5	3	1	0	0	1	3	11	15	7	16
22	21	18	12	5	4	1	0	0	1	4	11	16	7	2
ALL HRS	21	18	12	5	4	1	0	0	1	4	11	16	7	16
CEILING LESS THAN 3300 FEET AND/OR VISIBILITY LESS THAN 2 1/2 MI														
01														
04														
07	7	6	5	3	2	1	0	1	2	4	10	10	4	16
10	14	17	5	2	1	0	0	0	1	2	5	15	5	3
13	11	10	4	4	2	1	0	0	2	2	6	11	4	5
16	6	4	2	5	2	0	0	0	2	2	4	7	4	2
19	7	5	2	2	2	#	#	1	#	4	7	7	3	16
22	0	10	1	3	1	0	0	0	0	5	6	15	4	2
ALL HRS	8	7	3	3	2	1	#	1	1	4	7	10	4	16
CEILING LESS THAN 1000 FEET AND/OR VISIBILITY LESS THAN 2 1/2 MI														
01														
04														
07	#	0	#	1	#	#	0	1	#	#	1	1	#	16
10	0	0	0	1	0	0	0	0	0	0	0	1	#	3
13	2	2	0	1	0	0	0	0	0	0	0	1	1	5
16	3	0	0	2	0	0	0	0	0	0	0	0	#	2
19	#	1	#	#	0	0	0	1	0	1	#	0	#	16
22	0	2	0	1	0	0	0	0	0	0	0	0	0	2
ALL HRS	1	#	#	1	#	#	0	0	#	#	#	1	#	16
CEILING LESS THAN 300 FEET AND/OR VISIBILITY LESS THAN 1 1/4 MI														
01														
04														
07	0	0	#	1	0	#	0	0	0	0	#	0	#	16
10	0	0	0	0	0	0	0	0	0	0	0	1	#	3
13	1	0	0	0	0	0	0	0	0	0	0	1	#	5
16	3	0	0	0	0	0	0	0	0	0	0	0	#	2
19	#	#	0	#	0	0	0	0	0	#	0	0	#	16
22	0	0	0	0	0	0	0	0	0	0	0	0	0	2
ALL HRS	#	#	#	#	0	#	0	0	0	#	#	#	#	16

LEFKAS, GREECE

PREPARED BY: NOCD ASHEVILLE STATION NAME: MARSEILLE, FRANCE ELEVATION: [illegible] WMO #: 07650

LOCATION: 43.27N [illegible]E

	TEMPERATURE (F)					PRECIPITATION (INCHES)						RELATIVE			WIND			MEAN NUMBER OF DAYS WITH					
	MEANS			EXTREME					NORMAL			HUMIDITY						PRECIPITATION			THUNDER		TEMPERATURE
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	MEAN	MAXIMUM	MINIMUM	MEAN	MAXIMUM	24 HR MAXIMUM	MEAN											
JAN	50	35	43	68	1	1.4	3.7	0.2	3.3			4		21	32								
FEB	53	36	44	71	2	1.3	4.8	0.1	2.8			74		20	36								
MAR	59	41	50	75	14	1.6	3.8	0.0	2.0			69		26	45								
APR	64	46	56	83	28	1.8	4.3	0.3	2.8			66		31	44								
MAY	71	52	62	91	32	1.5	3.7	0.1	2.6			64		39	44								
JUN	79	58	69	99	43	1.6	2.8	#	1.7			67		47	55								
JUL	84	63	74	102	46	0.5	2.4	#	0.4			58		52	58								
AUG	83	63	73	98	47	1.1	3.3	#	2.4			63		52	58								
SEP	77	58	68	94	34	1.5	7.8	0.2	3.5			68		44	56								
OCT	68	51	60	86	28	2.7	6.7	0.3	3.7			73		33	44								
NOV	58	43	51	73	22	2.1	6.5	0.2	3.0			75		30	41								
DEC	52	37	45	68	9	2.4	4.8	0.4	3.6			76		28	37								
ANN	67	49	58	102	1	21.0	37.6	0.1	3.0			69		35	46								
EYR	30	30	30	30	30	29	29	29	29			1		1	1								

LESS THAN 0.5 DAYS, 0.5 OR 0.05 INCH, OR [illegible] PERCENT AS APPLICABLE

THE VALUE LISTED UNDER PRESSURE ALTITUDE INDICATES THAT VALUE IS EXCEEDED [illegible] OF THE TIME WHEN LABELED 99.95% OTHERWISE IT IS THE MEAN

EYR IS EQUIVALENT YEARS OF RECORD (I.E. THE ACTUAL NUMBER OF YEARS [illegible] IN THE CALCULATION

MARSEILLE, FRANCE

PREPARED BY: NOCD ASHEVILLE STATION NAME: NAPLES, ITALY ELEVATION: [illegible] WMO #: 16289
LOCATION: 40 53N 14 17E

	TEMPERATURE (F)					PRECIPITATION (INCHES)						RELATIVE HUMIDITY		VAPOR PRESSURE INCHES OF MERCURY	DEW POINT (F)	SURFACE WIND (KTS)			MEAN NUMBER OF DAYS WITH									
	MEANS			EXTREME					SNOWFALL										PRECIPITATION					TEMPERATURE				
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	MEAN	MAXIMUM	MINIMUM	MEAN	MAXIMUM	24-HR MAXIMUM	0400 LST	1300 LST			DIRECTION	SPEED	MAX GUST	0.004	SNOWFALL	THUNDERSTORMS	VISIBILITY	90	32	30		
JAN	53	41	47	65	26	4.2	7.6	0.4	1.6	8		72	67	22	37	187	NNE	4	42	5	11	9		4	2	0		0
FEB	56	41	48	70	24	3.7	7.8	0.1	1.7	8		71	63	26	41	214	NNE	5	37	5	11	8		4	2	0		0
MAR	59	44	52	76	27	3.4	7.3	0.6	1.3	8		68	60	26	41	269	NNE	5	37	5	11	7		4	2	0		0
APR	67	50	59	81	34	3.4	6.5	0.3	2.1	9		66	61	32	47	328	SSW	5	37	5	10	6		4	2	0		0
MAY	74	56	65	91	42	2.4	4.3	0.4	2.1	9		62	55	42	54	268	SSW	4	28	4	8	6		4	2	0		0
JUN	81	62	72	95	51	1.7	5.7	0.0	2.0	9		62	54	50	59	241	SSW	8	24	3	5	4		4	1	0		0
JUL	86	67	77	101	53	0.5	2.2	0.0	1.3	9		61	54	58	63	241	SSW	8	22	2	2	2		4	1	0		0
AUG	86	67	77	102	58	1.1	2.9	0.0	1.8	9		61	54	58	63	214	SSW	8	18	2	3	2		4	1	0		0
SEP	81	63	72	103	49	3.2	6.3	0.1	3.5	9		66	58	52	60	181	SSW	8	30	3	6	3		4	1	0		0
OCT	71	55	63	87	44	5.4	8.2	1.0	2.1	9		71	64	40	53	214	NNE	8	35	4	10	10		4	#	0		0
NOV	62	49	56	77	33	5.6	10.3	0.4	3.0	9		71	64	32	47	214	S	8	25	5	14	9		4	1	0		0
DEC	57	45	51	68	30	5.3	9.1	0.9	3.6	8		74	70	37	42	214	S	8	31	5	13	10		4	1	0		0
ANN	69	53	61	103	24	39.8	46.8	20.5	3.6	9		67	61	38	51	241	SSW	4	42	4	103	83		31	13	21	0	0
EYR	10	10	10	10	10	35	30+	30+	35	60		10	10	10	10	50	11	11	11	50	27	60		10	10	10	10	10

LESS THAN 0.5 DAYS, 0.5 OR 0.05 INCH, OR 0.5 PERCENT AS APPLICABLE

THE VALUE LISTED UNDER PRESSURE ALTITUDE INDICATES THAT VALUE IS EXCEEDED ONLY 0.05 % OF THE TIME WHEN LABELED 99.95% OTHERWISE IT IS THE MEAN

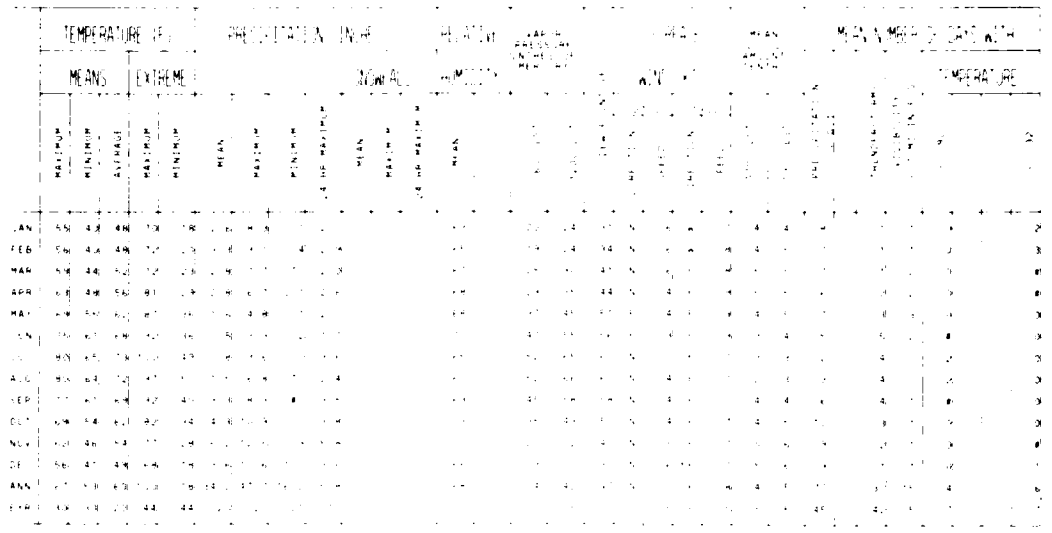
EYR IS EQUIVALENT YEARS OF RECORD (I.E. THE ACTUAL NUMBER OF YEARS UTILIZED IN THE CACULATIONS)

FLYING WEATHER, - PERCENT OF HOURS

HOUR (LST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	HRS
CEILING LESS THAN 3000 FEET AND/OR VISIBILITY LESS THAN 1 MI														
01	22	7	11	15	19	24	8	11	17	16	16	14		5
04	19	7	9	18	29	29	19	17	16	15	15	11		5
07	22	9	16	28	44	34	36	24	30	17	15	14		5
10	40	17	19	23	28	22	19	17	20	20	23	22		5
13	23	19	7	16	11	7	11	7	8	11	11	12		5
16	17	6	4	13	15	10	3	6	1	6	14	14		5
19	17	6	6	12	14	10	3	1	8	11	11	14		5
22	28	7	8	11	12	14	5	1	16	12	16	21		5
ALL HRS	23	9	10	17	22	19	12	14	16	13	15	15	16	5
CEILING LESS THAN 1000 FEET AND/OR VISIBILITY LESS THAN 2 MI														
01	14	3	3	10	12	16	5	7	11	10	10	8		5
04	9	3	3	10	14	22	12	13	9	10	7	6		5
07	16	6	12	21	34	26	25	23	23	11	11	10		5
10	30	12	9	15	16	12	8	11	10	10	15	22		5
13	17	3	1	5	6	5	4	4	4	3	17	16		5
16	13	3	1	6	7	4	1	8	1	2	8	13		5
19	11	2	2	5	9	6	1	3	4	5	7	11		5
22	21	3	2	5	6	6	3	4	10	7	11	13		5
ALL HRS	16	4	4	9	14	12	7	8	9	7	10	12	9	5
CEILING LESS THAN 300 FEET AND/OR VISIBILITY LESS THAN 1 MI														
01	4	3	4	3	2	4	1	3	3	10	7	6		7
04	3	3	5	3	5	9	3	5	4	10	4	4		7
07	5	3	9	7	10	11	5	12	9	10	6	3		7
10	11	6	5	4	3	2	11	3	3	9	6	3		7
13	6	2	1	2	1	1	0	#	#	3	5	5		7
16	4	2	2	2	1	1	#	#	#	2	5	5		7
19	5	1	2	3	1	1	#	1	1	2	3	7		7
22	8	4	2	1	1	#	0	0	2	1	4	7		7
ALL HRS	6	3	4	3	3	4	1	3	3	7	5	5	4	7
CEILING LESS THAN 200 FEET AND/OR VISIBILITY LESS THAN 1/2 MI														
01	4	#	1	#	1	0	0	#	1	1	3	2		5
04	4	1	1	1	2	2	1	1	1	2	2	2		5
07	4	2	1	3	2	2	0	2	1	2	2	2		5
10	2	#	1	#	0	0	0	#	#	1	1	#		5
13	#	0	0	0	0	0	0	#	#	1	#	1		5
16	#	0	0	#	1	0	0	0	#	#	1	1		5
19	1	0	#	1	#	0	0	0	#	1	#	1		5
22	5	1	#	#	#	0	0	0	#	1	3	1		5
ALL HRS	2	1	1	1	1	1	#	#	#	1	1	1	1	5

NAPLES, ITALY

PREPARED BY: NOCC ASHEVILLE STATION NAME: NICE, FRANCE WMO #: 07690
LOCATION: 43 N



NICE, FRANCE

PREPARED BY: NOCD ASHEVILLE STATION NAME: NORTH FRONT, GIBRALTAR ELEVATION: 11 FEET WMO #: 08495
LOCATION: 36 09N 5 21E

	TEMPERATURE (F)					PRECIPITATION (INCHES)						RELATIVE	VAPOR PRESSURE INCHES OF MERCURY	SURFACE WINDS (KTS)				MEAN CLOUD AMOUNT TENTHS	MEAN NUMBER OF DAYS WITH					
	MEANS			EXTREME						SNOWFALL		HUMIDITY							PRECIPITATION .01 OR MORE	THUNDERSTORMS	VISIBILITY 1/4 MI OR LESS	TEMPERATURE		
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	MEAN	MAXIMUM	MINIMUM	24-HR MAXIMUM	MEAN	MAXIMUM	24-HR MAXIMUM	0830 LST	1430 LST	0300 LST	1500 LST	DEW POINT (F)	0830 DIRECTION	0830 SPEED	1430 DIRECTION	1430 SPEED						
JAN	60	50	56	74	37	6.1	20.3	1.3	11.6	3			81	70	33	34	46	W	12	W	12	6	10	2	8	3		
FEB	62	51	56	75	33	4.7	13.8	0.1	3.4	3			79	67	34	34	48	W	11	E	13	6	7	1	8	3		
MAR	65	54	59	81	38	4.1	8.2	0.6	2.1	3			78	66	38	38	50	E	10	E	13	5	7	1	8	4		
APR	68	56	62	82	45	2.2	7.3	0.2	1.8	3			74	64	42	42	52	W	11	E	14	4	4	1	8	3		
MAY	73	60	66	87	47	1.3	4.7	0.0	1.3	3			72	62	46	47	56	W	8	E	15	4	4	1	8	4		
JUN	78	64	70	91	57	0.5	2.5	0.0	0.6	0			73	62	55	57	63	W	7	E	17	3	1	1	8	3		
JUL	83	68	73	101	58	T	0.3	0.0	0.3	0	0		72	66	62	63	68	E	7	E	12	2	1	1	8	1		
AUG	83	69	76	99	57	0.1	0.7	0.0	0.4	0			73	60	63	65	65	SW	8	E	13	2	1	1	8	2		
SEP	79	67	73	92	57	0.6	2.3	0.0	3.8	0			76	65	61	62	68	E	8	E	12	4	1	1	8	3		
OCT	73	62	67	92	50	2.5	7.6	0.0	3.1	0			78	69	54	56	57	W	8	E	11	4	4	1	8	4		
NOV	66	57	61	84	46	6.1	18.9	1.1	4.0	0			81	72	45	47	53	W	10	E	13	5	7	1	8	3		
DEC	62	53	57	75	36	5.5	16.5	1.4	3.3	0			80	70	38	40	47	W	11	W	13	4	10	1	8	3		
ANN	71	59	65	101	33	33.7	60.5	20.2	11.6	3			76	66	48	49	55	W	9	E	13	4	64	12	8	3		
EYR	15	15	20	15	15	20	20	20	14	11			15	15	13	13	11	7	7	7	9	16	14	20	42	11		

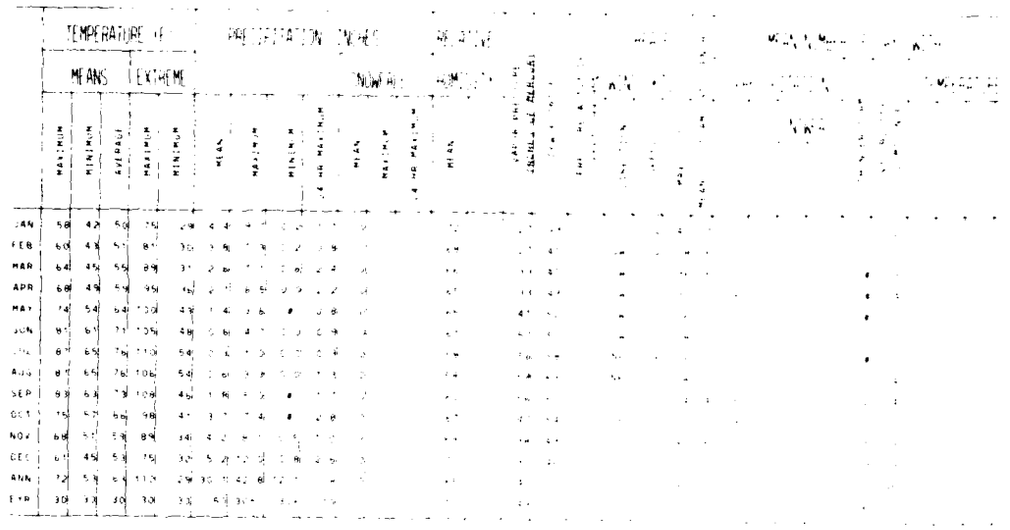
LESS THAN 0.5 DAYS, 0.5 OR 0.05 INCH, OR 0.5 PERCENT AS APPLICABLE

THE VALUE LISTED UNDER PRESSURE ALTITUDE INDICATES THAT VALUE IS EXCEEDED ONLY 0.5% OF THE TIME WHEN LABELED 99.95% OTHERWISE IT IS THE MEAN

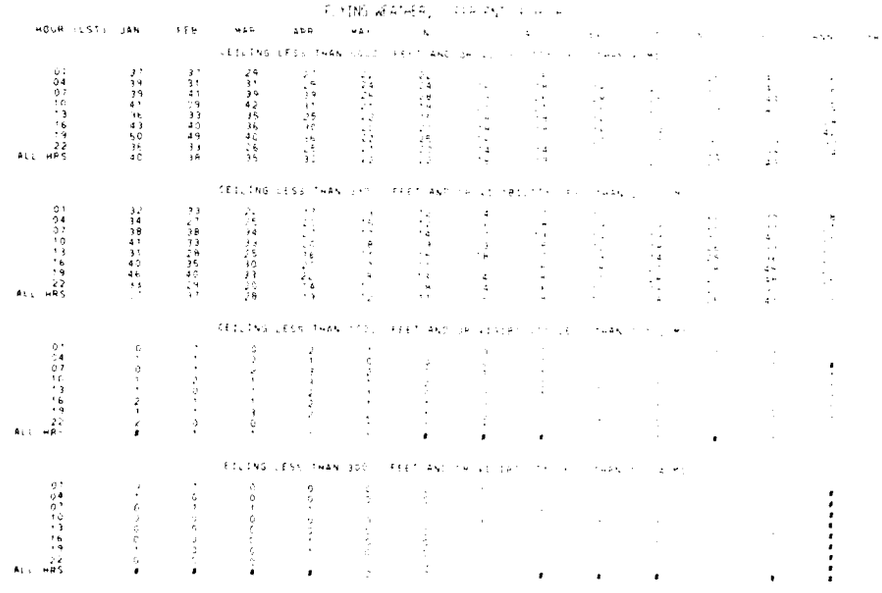
EYR IS EQUIVALENT YEARS OF RECORD. I.E. THE ACTUAL NUMBER OF YEARS UTILIZED IN THE CALCULATIONS

NORTH FRONT, GIBRALTAR

PREPARED BY: NOCC ASHEVILLE



FLYING WEATHER,



PALERMO, SICILY

PREPARED BY: NOCD ASHEVILLE STATION NAME: PAPHOS, CYPRUS ELEVATION: [illegible] WMO #: [illegible]
LOCATION: 34 45N 32 24E

	TEMPERATURE (F)					PRECIPITATION (INCHES)							RELATIVE HUMIDITY		WARM PRESSURE (INCHES OF MERCURY)		SUNRISE		WIND (MPH)			MEAN SKY COVER AMOUNT TENTHS			MEAN NUMBER OF DAYS WITH				
	MEANS			EXTREME					SNOWFALL																TEMPERATURE			
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	MEAN	MAXIMUM	MINIMUM	24-HR MAXIMUM	MEAN	MAXIMUM	24-HR MAXIMUM	0600 LST	1800 LST	0600 LST	1800 LST	PERCENTAGE	PREVAILING DIRECTION	MEAN SPEED	MAXIMUM	MEAN SPEED	CLEAR	SCATTERED	BROKEN	THUNDERSTORMS	HAIL	FOG	90 AND ABOVE	32 AND BELOW
JAN	63	44	53	82	25	4.2			2.4				74	62	24	33	44		12	39	4	5		4					
FEB	64	44	54	83	29	3.5			2.2				73	63	30	34	44		10	41	4	5		3					
MAR	67	46	57	90	29	1.8			1.7				73	63	32	35	42		12	42	5	5	4	4	#				
APR	72	48	60	100	30	0.9			1.4				70	64	41	38	41		8	43	5	4		2					
MAY	78	56	67	102	32	0.6			2.8				72	66	51	46	39		8	38	4	4		1					
JUN	83	61	72	108	39	0.2			1.5				73	67	56	51	66		7	45	4	3		1	#				
JUL	88	66	77	110	44	0.0			#				76	69	76	67	78		7	47	4	3		#	#				
AUG	88	67	77	108	43	#			0.3				72	65	74	62	77		7	43	4	3		#	#				
SEP	86	66	76	103	39	0.2			0.8				67	62	63	52	63		7	39	4	3	#	1	#				
OCT	81	60	71	99	57	0.7			1.7				62	57	48	56	58		7	38	4	3	#	2	1				
NOV	76	53	65	93	30	2.6			2.3				68	69	39	44	53		10	40	4	4	4	5	1				
DEC	67	48	57	86	30	4.8			4.0				72	67	32	36	49		11	38	5	5	6	7	2				
ANN	76	55	65	110	25	19.4			4.0				71	63	49	54	57		9	42	4	3	17	34	4				
EYR	54	54	54	54	54	58			58				44	44	44	44	5		44	44	44	44	44	44	44				

LESS THAN 0.5 DAYS, 0.5 OR 0.05 INCH, OR 0.5 PERCENT AS APPLICABLE

THE VALUE LISTED UNDER PRESSURE ALTITUDE INDICATES THAT VALUE IS EXCEEDED ONLY [illegible]% OF THE TIME WHEN LABELED 99.95% OTHERWISE IT IS THE MEAN

EYR IS EQUIVALENT YEARS OF RECORD (I.E. THE ACTUAL NUMBER OF YEARS UTILIZED IN THE CALCULATIONS)

FLYING WEATHER, - PERCENT OF HOURS

HOUR (LST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	YRS
CEILING LESS THAN 5000 FEET AND OR VISIBILITY LESS THAN 6 MI														
02	21	24	20	14	12	7	8	7	7	9	13	16	14	15
05	29	21	24	18	16	14	11	9	8	11	16	23	17	15
08	34	23	26	17	12	9	8	7	7	9	15	25	16	15
11	28	23	19	11	6	4	3	3	3	5	11	20	11	15
14	28	27	22	13	8	5	4	4	4	6	13	21	13	15
17	30	24	21	12	8	6	5	4	4	6	13	21	13	15
20	21	19	16	12	8	7	6	5	5	6	11	16	11	15
23	24	18	13	13	9	7	6	5	5	6	11	16	11	15
ALL HRS	27	23	21	14	10	8	7	6	6	8	13	19	13	15
CEILING LESS THAN 3000 FEET AND/OR VISIBILITY LESS THAN 3 MI														
02	10	9	8	7	6	5	5	4	4	5	7	9	7	15
05	12	11	14	11	9	8	7	5	4	5	8	13	8	15
08	16	9	13	10	8	6	5	4	4	5	8	13	8	15
11	14	9	12	7	4	3	2	2	2	3	6	11	6	15
14	14	11	10	7	5	3	2	2	2	3	6	11	6	15
17	15	8	12	8	4	3	2	2	2	3	6	12	7	15
20	10	8	8	6	5	5	5	3	4	4	6	12	6	15
23	9	10	9	7	4	4	5	2	3	4	5	10	6	15
ALL HRS	13	9	10	8	6	5	5	3	3	5	7	11	7	15
CEILING LESS THAN 1000 FEET AND OR VISIBILITY LESS THAN 1 MI														
02	#	0	0	2	0	1	0	#	#	1	2	1	1	15
05	1	0	0	1	1	0	0	#	#	1	2	1	1	15
08	0	0	1	1	1	0	0	#	#	1	2	1	1	15
11	#	0	1	1	0	0	0	0	0	1	2	1	#	15
14	1	0	1	1	0	0	0	#	0	1	2	1	#	15
17	1	0	#	1	0	0	#	0	0	1	2	1	#	15
20	0	0	0	1	0	0	0	#	0	1	2	1	#	15
23	0	0	0	1	0	#	#	0	0	1	2	1	#	15
ALL HRS	#	0	#	1	#	#	#	#	#	1	2	1	#	15
CEILING LESS THAN 300 FEET AND/OR VISIBILITY LESS THAN 1/2 MI														
02	0	0	0	1	0	0	0	0	#	#	[illegible]	[illegible]	#	[illegible]
05	#	0	0	1	1	#	#	0	#	#	[illegible]	[illegible]	#	[illegible]
08	0	0	0	1	#	0	0	0	#	#	[illegible]	[illegible]	#	[illegible]
11	0	0	1	0	0	0	0	0	0	#	[illegible]	[illegible]	#	[illegible]
14	#	0	#	0	0	0	0	0	0	#	[illegible]	[illegible]	#	[illegible]
17	0	0	0	#	0	0	0	0	0	#	[illegible]	[illegible]	#	[illegible]
20	#	0	0	#	0	0	0	0	0	#	[illegible]	[illegible]	#	[illegible]
23	0	0	0	1	0	0	0	0	0	#	[illegible]	[illegible]	#	[illegible]
ALL HRS	#	0	#	#	#	#	#	#	#	#	[illegible]	[illegible]	#	[illegible]

PAPHOS, CYPRUS

PREPARED BY: NOCD ASHEVILLE STATION NAME : RHODES ELEVATION FEET WMO # 16749
LOCATION: 36.2N 78.0W

	TEMPERATURE (F) MEANS MAXIMUM	MEANS MINIMUM	MEANS AVERAGE	EXTREME MAXIMUM	EXTREME MINIMUM	PRECIPITATION (INCHES) MEAN	MAXIMUM	MINIMUM	24 HR MAXIMUM	SNOW, ICE MEAN	MAXIMUM	24 HR MAXIMUM	RELATIVE HUMIDITY 0800 LST	1400 LST	VAPOR PRESSURE INCHES OF MERCURY	DEW POINT	PRESSURE ALTITUDE FEET 99 95%	WIND (KTS) DIRECTION	SPEED	MAX GUST	MEAN SPEED (KNOTS)	MEAN NUMBER OF DAYS WITH PRECIPITATION .10 OR MORE	SNOW, ICE 1.0 OR MORE	THUNDERSTORMS	FOG VISIBILITY 1/4 MILE OR LESS	TEMPERATURE 90 AND ABOVE	32 AND BELOW	0 AND BELOW
JAN	50	46	53	72	25	4	8		1	4	11	1	81	69	30			W	8	45	13	12	4	6	3		17	2
FEB	60	46	53	75	26	4	8		1	3	8	1	74	66	31			W	8	45	12	11	3	6	3		12	1
MAR	63	48	56	84	32	4	9		2	1	5	1	72	60	30			W	9	45	13	12	2	8	3		3	0
APR	69	53	61	88	41	3	7		1	0	1	0	72	58	28			W	9	45	11	11	0	8	3		0	0
MAY	77	59	68	93	46	3	7		1	0	0	0	66	52	45			W	9	45	9	10	0	8	3		0	0
JUN	85	66	76	99	56	3	8		1	0	0	0	61	49	54			W	10	40	7	9	0	7	3		0	0
JUL	90	71	81	104	64	4	9		2	0	0	0	58	45	61			W	11	40	7	9	0	7	3		0	0
AUG	93	71	81	103	64	4	9		2	0	0	0	61	47	64			W	10	45	7	8	0	7	3		0	0
SEP	85	67	76	99	50	3	7		1	0	0	0	63	47	58			W	9	45	8	8	0	6	3		0	0
OCT	77	60	69	93	42	3	8		2	0	0	0	71	54	47			W	8	35	9	8	0	5	3		0	0
NOV	70	54	62	85	32	3	9		2	1	4	1	78	62	39			W	8	35	11	9	1	6	3		3	0
DEC	63	48	56	75	28	3	8		2	3	11	2	79	63	32			W	8	45	12	11	3	7	3		11	1
ANN	74	57	66	108	25	38	9		2	12	11	2	70	56	44			W	9	45	10	120	10	80	36		46	4
EYR	23	23	23	23	23	7				7			7	7	7			W	23	23	23	23	23	23	23		23	23

LESS THAN 0.5 DAYS, 0.5 OR 0.05 INCH, OR 0.5 PERCENT AS APPLICABLE
THE VALUE LISTED UNDER PRESSURE ALTITUDE INDICATES THAT VALUE IS EXCEEDED ONLY 0.05 % OF THE TIME WHEN LABELED 99.95% OTHERWISE IT IS THE MEAN
EYR IS EQUIVALENT YEARS OF RECORD (I.E. THE ACTUAL NUMBER OF YEARS UTILIZED IN THE CALCULATIONS.)

FLYING WEATHER, - PERCENT OF HOURS

HOUR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	YR
FLYING LESS THAN 1000 FEET AND OR VISIBILITY LESS THAN 3 MI														
02														
05														
08														
11														
14														
17														
20														
23														
ALL HRS														
FLYING LESS THAN 3000 FEET AND OR VISIBILITY LESS THAN 5 MI														
02														
05														
08														
11														
14														
17														
20														
23														
ALL HRS														
FLYING LESS THAN 5000 FEET AND OR VISIBILITY LESS THAN 5 MI														
02														
05														
08														
11														
14														
17														
20														
23														
ALL HRS														
FLYING LESS THAN 8000 FEET AND OR VISIBILITY LESS THAN 5 MI														
02														
05														
08														
11														
14														
17														
20														
23														
ALL HRS														

RHODES

PREPARED BY: NOCD Asheville STATION NAME: ROME, ITALY ELEVATION: [illegible] WMO #: 16239

LOCATION: 41° 48N [illegible]

	TEMPERATURE (F)					PRECIPITATION (INCHES)						RELATIVE HUMIDITY		VAPOR PRESSURE INCHES OF MERCURY	DEW POINT (F)	PRESSURE ALTITUDE (FT ABV 1000 MB)	SURFACE WIND (KTS)			MEAN CLOUD AMOUNT (TENTHS)	MEAN NUMBER OF DAYS WITH					
	MEANS			EXTREME						SNOW ALL											PRECIPITATION .01 INCH	THUNDERSTORMS	VISIBILITY (MI) LESS THAN 7/16		CEILING (100 FT) LESS THAN 200	
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	MEAN	MAXIMUM	MINIMUM	24 HR MAXIMUM	MEAN	MAXIMUM	0700 LST	1300 LST				DIRECTION	SPEED	MAX GUST				0700 LST	1300 LST	0700 LST	1300 LST
JAN	52	40	46	66	24	2.8	6.8	0.4	1.4	1	8	85	68	21			NE	7	18	8	11	4	2	2	3	2
FEB	55	42	49	68	23	2.7	6.6	0.3	1.4	1	3	76	64	21			NE	7	17	6	9	3	2	2	3	2
MAR	58	45	52	74	28	2.5	6.1	0.3	1.3	X	X	63	54	24			NE	7	15	4	6	3	1	1	2	1
APR	66	50	58	78	35	2.2	6.8	0.3	1.3	X	X	61	54	30			NE	7	15	4	4	3	1	1	1	1
MAY	74	56	65	89	38	1.8	4.8	0.2	1.3	X	X	61	54	38			NE	7	15	4	3	3	1	1	1	1
JUN	82	62	72	96	50	1.3	4.2	0.1	1.4	X	X	54	49	44			NE	7	13	4	2	3	1	1	1	1
JUL	87	67	77	98	54	0.8	2.8	0	1.3	X	X	51	45	47			NE	6	12	4	1	3	1	0	1	1
AUG	86	67	77	104	53	0.9	2.7	0	1.3	X	X	53	47	47			NE	6	12	4	1	3	1	0	1	1
SEP	79	62	71	92	51	1.4	3.7	0	1.8	X	X	61	54	41			NE	6	13	4	2	3	1	1	1	1
OCT	71	55	63	84	39	1.5	3.7	0	1.5	X	X	68	63	38			NE	6	15	5	4	4	1	1	1	1
NOV	61	48	55	74	30	2.4	5.8	0.2	2.8	X	X	81	76	33			NE	7	17	5	6	4	2	2	2	2
DEC	55	44	50	67	27	2.8	6.7	0.3	2.2	X	X	84	72	28			NE	7	19	6	9	4	2	2	3	2
ANN	69	53	61	104	21	30.1	44.3	16.8	3.8	8	1	67	56	35			NE	7	43	6	11	45	22	11	33	20
EYR	16	16	16	16	20	20	20	20	10	6		10	10	33			30	11	11	10	16	10	1	6	10	10

LESS THAN 0.5 DAYS, 0.5 OR MORE BUT LESS THAN 1.0 DAYS (MISSING DATA NOT USED)

THE VALUE LISTED UNDER PRESSURE ALTITUDE INDICATES THAT VALUE [illegible] OF THE TIME WHEN LABELED 99.95% OTHERWISE IT IS THE MEAN

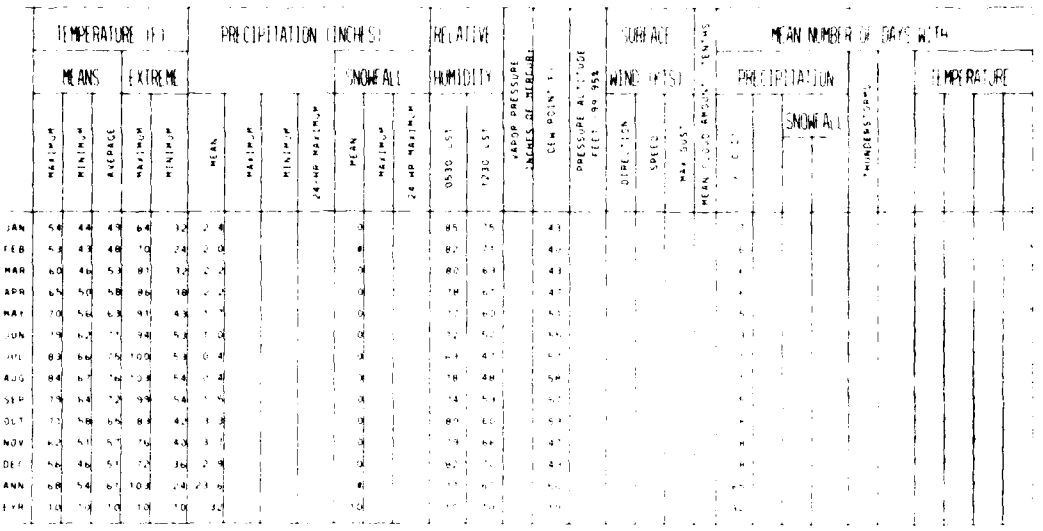
EYR IS EQUIVALENT YEARS OF RECORD (I.E. THE ACTUAL NUMBER OF YEARS USED IN THE CALCULATION)

FLYING WEATHER, - PERCENT OF HOURS

HOUR (LST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	YRS
CEILING LESS THAN 1000 FEET AND/OR VISIBILITY LESS THAN 3 MI														
01	31	45	29	23	21	11	7	9	14	24	44	25	25	13
04	41	48	31	25	15	10	7	6	14	24	46	28	28	13
07	39	56	54	32	18	11	7	7	16	41	47	36	31	13
10	51	59	49	31	17	11	7	8	16	41	47	37	31	13
13	41	49	36	26	16	10	7	8	15	37	47	35	29	13
16	34	37	24	19	13	10	7	8	13	28	46	27	23	13
19	34	44	29	19	14	10	7	8	14	34	47	33	27	13
22	40	51	35	22	16	11	7	8	14	34	47	36	28	13
ALL HRS	41	49	36	24	16	11	7	8	15	34	47	34	28	13
CEILING LESS THAN 3000 FEET AND OR VISIBILITY LESS THAN 2 1/2 MI														
01	20	13	15	15	10	11	7	8	10	9	13	12	12	13
04	23	26	19	18	12	10	8	6	9	13	22	14	14	13
07	31	32	23	24	13	9	6	6	9	13	24	15	15	13
10	25	29	20	16	11	12	8	7	11	14	25	31	17	13
13	22	27	24	28	24	17	8	7	11	17	24	16	17	13
16	19	23	18	17	11	9	8	7	10	19	23	28	17	13
19	11	24	33	16	8	6	3	3	4	18	16	22	14	13
22	21	24	13	13	8	6	4	3	6	9	14	21	12	13
ALL HRS	21	26	20	19	13	10	6	5	9	13	20	21	16	13
CEILING LESS THAN 1000 FEET AND/OR VISIBILITY LESS THAN 2 1/2 MI														
01	2	5	4	2	6	3	1	1	2	1	2	5	3	13
04	3	7	6	6	4	5	3	2	3	4	6	5	4	13
07	4	12	9	13	7	2	3	1	4	5	8	6	5	13
10	12	12	5	2	1	2	1	1	2	3	8	8	5	13
13	4	5	1	1	1	1	0	0	1	2	3	8	2	13
16	2	4	2	2	1	1	0	0	1	1	3	3	2	13
19	1	3	4	2	1	0	0	0	0	1	3	2	1	13
22	1	4	3	2	1	0	0	0	0	1	2	1	1	13
ALL HRS	4	6	4	4	2	2	1	0	1	2	4	4	3	13
CEILING LESS THAN 300 FEET AND/OR VISIBILITY LESS THAN 1 MI														
01	1	3	1	2	2	1	0	0	0	1	1	4	1	13
04	2	4	4	6	2	1	0	0	0	1	1	4	1	13
07	2	7	2	6	2	0	0	0	0	1	3	4	2	13
10	3	5	2	1	0	0	0	0	0	1	1	4	1	13
13	0	1	0	1	0	0	0	0	0	0	1	1	0	13
16	1	2	0	0	0	0	0	0	0	0	1	1	0	13
19	1	1	1	0	0	0	0	0	0	0	1	0	0	13
22	0	1	1	0	0	0	0	0	0	0	1	1	0	13
ALL HRS	1	3	1	2	1	0	0	0	0	1	1	2	1	13

ROME, ITALY

PREPARED BY: NOCD ASHEVILLE STATION NAME: SASSARI, SARDINIA ELEVATION: FEET WMO #: 1420
LOCATION: 40 43N 8 33E



LESS THAN 0.5 DAYS, OR A TRACE OF INCHES, OR INSUFFICIENT DATA TO COMPUTE.

THE VALUE LISTED UNDER PRESSURE ALTITUDE INDICATES THAT VALUE IS EXCEEDED IN % OF THE TIME WHEN LABELED 99.9HS OTHERWISE IT IS THE MEAN.

EYR IS EQUIVALENT YEARS OF RECORD (I.E. THE ACTUAL NUMBER OF YEARS UTILIZED IN THE DATA BASE).

SASSARI, SARDINIA

PREPARED BY: NOCD ASHEVILLE STATION NAME: SIGONELLA (CANTANIA), ITALY ELEVATION: [illegible] WMO #: [illegible]
LOCATION: 37 24N 14 55E

	TEMPERATURE (F)					PRECIPITATION (INCHES)						RELATIVE HUMIDITY		VAPOR PRESSURE (INCHES OF MERCURY)	TEN MINUTE	SURFACE WIND		MEAN NUMBER OF DAYS WITH																	
	MEANS			EXTREME					SNOWFALL																											
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	MEAN	MAXIMUM	MINIMUM	MEAN	MAXIMUM	24-HR MAXIMUM	0400 LST	1300 LST																						
JAN	60	41	50	73	23	2.8	7.1	0.5	3.4	8	8	81	69	30	46																				
FEB	61	40	51	79	23	2.3	6.6	0.4	4.4	0	0	95	65	29	44																				
MAR	64	42	53	84	26	1.9	5.6	0.5	1.6	8	8	91	67	31	46																				
APR	69	45	58	86	32	1.9	6.6	0.4	3.5	3	3	89	56	34	48																				
MAY	78	52	65	99	37	1.0	5.3	0	2.2	0	0	88	51	44	54																				
JUN	86	59	72	106	46	0.5	1.5	0.0	1.5	0	0	82	45	50	59																				
JUL	92	64	78	116	54	0.2	1.4	0.0	1.4	0	0	77	40	54	61																				
AUG	92	65	79	109	51	0.6	3.4	0.0	1.8	0	0	76	41	56	62																				
SEP	86	62	74	104	48	1.0	10.3	0.1	5.4	0	0	82	48	54	61																				
OCT	77	55	66	95	37	5.0	16.9	0.5	1.8	0	0	88	58	45	54																				
NOV	69	47	58	88	30	1.8	6.8	#	2.2	0	0	90	62	35	47																				
DEC	62	43	53	75	28	3.2	13.1	0.1	2.9	0	0	87	70	32	41																				
ANN	75	51	63	116	23	22.4	29.8	10.1	1.8	8	8	86	56	44	53																				
EYR	20	20	20	20	20	20	10+	10+	20	20	20	9	9	9	9																				

LESS THAN 0.5 DAYS, 0.5 OR 0.05 INCH, OR 0.5 PERCENT AS APPLICABLE

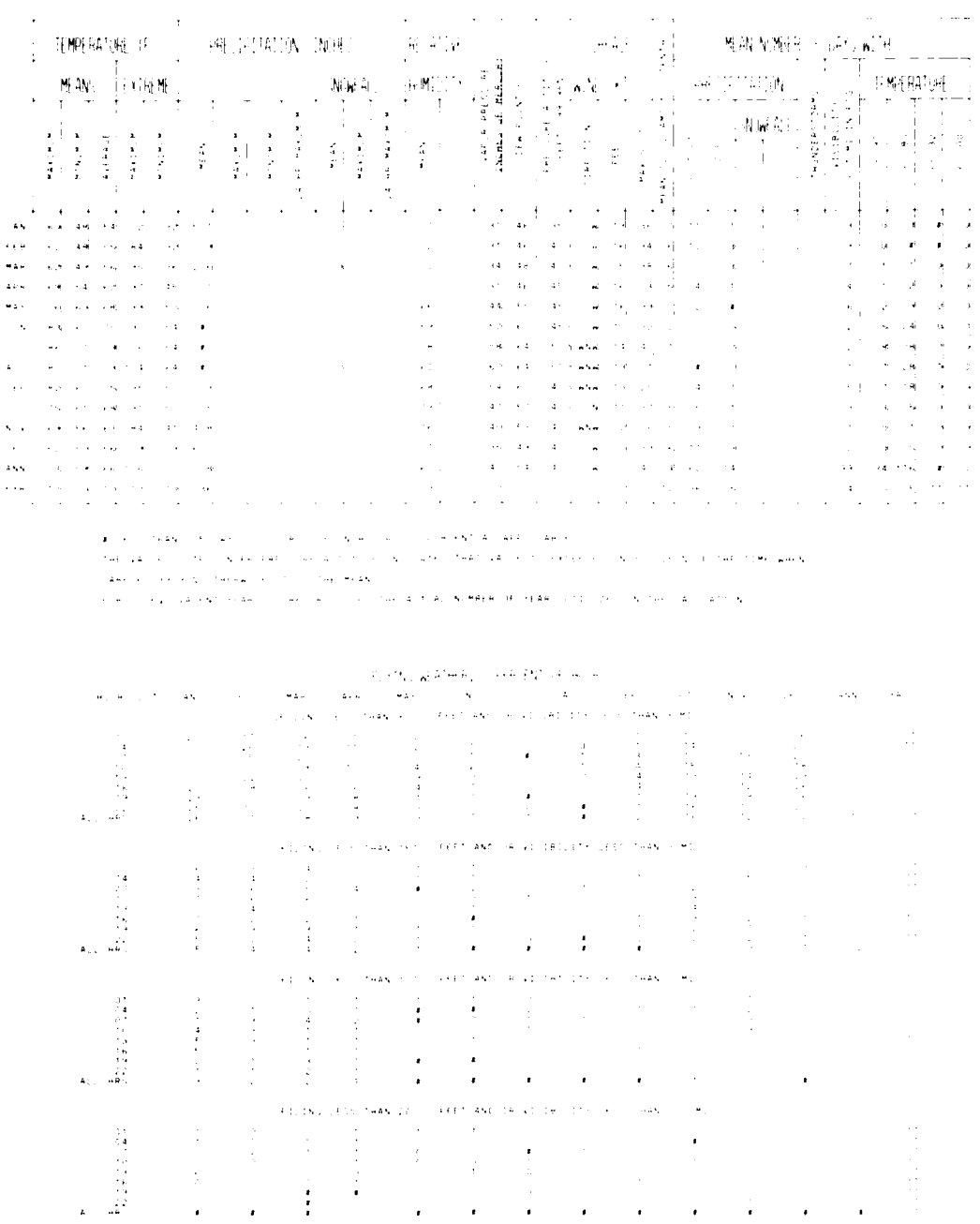
THE VALUE LISTED UNDER PRESSURE ALTITUDE INDICATES THAT VALUE IS EXCEEDED ONLY 0.05 % OF THE TIME WHEN LABELED 99.95% OTHERWISE IT IS THE MEAN

EYR IS EQUIVALENT YEARS OF RECORD (I.E. THE ACTUAL NUMBER OF YEARS UTILIZED IN THE CALCULATIONS

FLYING WEATHER, PERCENT OCCUR

HOUR (LST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	EYR
CEILING LESS THAN [illegible] FEET AND [illegible]														
01	[illegible]													
04														
07														
10														
13														
16														
19														
22														
ALL HRS														
CEILING LESS THAN 3000 FEET AND/OR VISIBILITY LESS THAN 3 MI														
01	13	9	14	12	8	3	1	1	2	7	12	7	8	10
04	13	10	16	13	8	4	1	1	5	7	8	11	8	10
07	14	11	15	15	8	3	0	2	5	14	8	12	9	10
10	9	9	12	8	4	2	0	1	5	8	7	8	5	10
13	9	7	12	6	3	2	0	0	2	7	8	8	6	10
16	8	6	12	6	2	2	0	1	3	5	9	5	5	10
19	9	8	10	9	4	1	0	1	3	6	9	6	5	10
22	8	7	12	9	4	1	0	1	2	8	6	12	6	10
ALL HRS	10	9	13	10	5	2	0	1	3	8	7	11	7	10
CEILING LESS THAN 1500 FEET AND/OR VISIBILITY LESS THAN 3 MI														
01	7	5	8	6	6	2	1	1	1	4	4	5	4	10
04	6	5	10	9	7	3	1	1	1	5	6	6	5	10
07	6	5	8	11	6	2	0	1	2	7	6	10	6	10
10	5	4	5	5	3	1	0	0	1	3	3	4	3	10
13	3	3	4	2	1	0	0	0	0	3	3	4	2	10
16	3	2	3	2	0	1	0	0	0	3	1	3	2	10
19	4	2	4	5	2	1	0	0	0	3	1	1	1	10
22	3	3	6	6	3	1	0	0	1	2	3	4	2	10
ALL HRS	5	4	6	6	3	1	0	0	1	3	3	5	3	10
CEILING LESS THAN 1000 FEET AND/OR VISIBILITY LESS THAN 1 MI														
01	4	1	4	3	2	1	0	0	0	2	2	3	2	10
04	4	3	6	3	5	0	0	0	0	3	3	6	3	10
07	4	4	4	6	2	0	0	1	0	2	3	4	3	10
10	3	2	3	1	0	0	0	0	0	2	2	3	2	10
13	2	1	2	1	0	0	0	0	0	2	2	2	1	10
16	1	1	1	1	0	0	0	0	0	2	1	2	1	10
19	2	1	3	3	1	0	0	0	0	2	1	1	1	10
22	2	3	2	2	1	0	0	0	0	1	2	2	1	10
ALL HRS	3	2	3	2	2	0	0	0	0	2	2	3	2	10
CEILING LESS THAN 200 FEET AND/OR VISIBILITY LESS THAN 1/2 MI														
01	1	0	1	0	1	1	0	0	0	0	0	1	0	10
04	1	1	0	1	1	0	0	0	0	1	1	2	1	10
07	1	1	1	1	0	0	0	0	0	1	1	1	1	10
10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
13	0	0	0	0	0	0	0	0	0	0	0	0	0	10
16	0	0	0	0	0	0	0	0	0	0	0	0	0	10
19	0	0	0	0	0	0	0	0	0	0	0	0	0	10
22	1	0	0	0	0	0	0	0	0	0	0	0	0	10
ALL HRS	1	0	0	0	0	0	0	0	0	0	0	1	0	10

SIGONELLA (CANTANIA), ITALY



SOUDA BAY, CRETE

PREPARED BY: NOCD ASHEVILLE STATION NAME: TARANTO, ITALY ELEVATION: 49 FEET WMO #: 16330
LOCATION: 40 28N 17 17E

	TEMPERATURE (F)					PRECIPITATION (INCHES)				RELATIVE HUMIDITY		VAPOR PRESSURE	DEW POINT	PRESSURE AT STNS (FEET 99,952)	SURFACE WIND (KTS)				MEAN ACCUM AMOUNT	MEAN NUMBER OF DAYS WITH			
	MEANS			EXTREME					SNOWFALL														
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	MEAN	MAXIMUM	MINIMUM	24 HR MAXIMUM	MEAN	MAXIMUM	24 HR MAXIMUM	0700 LST	1300 LST	INCHES OF MERCURY			DIRECTION	SPEED	DIRECTION	SPEED		
JAN	53	44	47	64	25	2.45	5.5	1.4	1.4				84	70	1.4			NW	8			6					
FEB	55	44	49	68	27	1.71	6.3	#	2.3				87	67	2.6			NW	7			5					
MAR	59	47	53	77	28	1.54	4.4	#	2.3				87	58	2.7							5					
APR	64	52	58	87	34	1.85	3.2	0.4	1.3				80	64	3.2							5					
MAY	73	59	66	87	43	1.65	3.5	0.4	1.3				78	52	3.8							4					
JUN	80	66	73	94	53	0.91	2.3	0.0	1.4				70	45	4.8			NW	7			4					
JUL	86	71	79	102	60	0.71	2.3	0.0	0.9				64	43	5.0							1					
AUG	86	72	79	101	60	0.81	1.8	0.0	1.6				71	44	5.3							1					
SEP	79	66	72	91	54	1.38	2.8	#	2.0				78	52	4.5			NW	9	S	10	4					
OCT	71	60	66	83	46	2.52	5.2	0.5	1.7				84	61	4.3			E	9	S	10	4					
NOV	64	53	57	74	38	2.88	4.7	0.6	3.2				86	67	3.4			E	8	S	9	5					
DEC	57	48	51	69	28	2.96	3.9	0.5	1.5				85	68	2.4			E	8	S	10	5					
ANN	69	55	64	102	25	21.25	22.6	14.0	3.2				79	57	3.8			W	7	S	10	5	30	26	7	10	10
EYR	16	16	16	16	16	26	10	10	10				10	10	30			5	5	5	5	30	26	7	10	10	

LESS THAN 0.5 DAYS, 0.5 OR 0.05 INCH, OR 1.5 PERCENT OF POSSIBLE

THE VALUE LISTED UNDER PRESSURE AT STN IS ONLY THAT VALUE OF PRESSURE WHICH IS EXCEEDED ONLY 50 % OF THE TIME WHEN LABELED 99.95% OTHERWISE IT IS THE MEAN

EYR IS EQUIVALENT YEARS OF RECORD I.E. THE ACTUAL NUMBER OF YEARS UTILIZED IN THE CALCULATION

FLYING WEATHER, PERCENT OF HOUR

HOUR LST	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	EYR
CEILING LESS THAN 1000 FEET AND OR VISIBILITY LESS THAN 3 MI														
04	11	11	13	11	11	7	2	2	5	7			10	9
07	7	10	11	9	9	6	3	3	8	9			10	9
10	11	13	11	8	10	6	4	4	8	9	6	4	9	9
ALL HRS														
CEILING LESS THAN 300 FEET AND OR VISIBILITY LESS THAN 1 MI														
01														
04														
07	6	4	2	2	2	1	1	1	1	3	2	3	2	2
10	2	4	1	1	1	1	3	1	2	1	4	2	2	2
13	3	1	1	1	2	1	1	0	1	1	1	1	1	1
16														
19														
22														
ALL HRS														

TARANTO, ITALY

PREPARED BY: NOCD ASHEVILLE   STATION NAME: TEL AVIV, ISRAEL   ELEVATION: [illegible] FEET   WMO #: 40177
LOCATION: 3[illegible] 06N 34 4[illegible]E

	TEMPERATURE (F) MEANS MAXIMUM	MINIMUM	AVERAGE	EXTREME MAXIMUM	MINIMUM	PRECIPITATION (INCHES), RELATIVE HUMIDITY, VAPOR PRESSURE, DEW POINT, PRESSURE ALTITUDE, SURFACE WINDS, MEAN CLOUD AMOUNT, MEAN NUMBER OF DAYS WITH (PRECIPITATION, SNOWFALL, THUNDERSTORMS, TEMPERATURE)
JAN	64	50	56	[illegible]	36	[illegible]
FEB	64	[illegible]	57	88	[illegible]	[illegible]
MAR	66	53	60	95	38	[illegible]
APR	70	[illegible]	64	[illegible]	43	[illegible]
MAY	74	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JUN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JUL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AUG	83	74	[illegible]	[illegible]	68	[illegible]
SEP	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
OCT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NOV	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DEC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ANN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
EYR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

* LESS THAN [illegible]
[illegible]

FLYING WEATHER, PERCENT OF HOURS

HOUR LST JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC ANN YRS

CEILING LESS THAN [illegible] FEET AND/OR VISIBILITY LESS THAN [illegible] MI
[illegible]

CEILING LESS THAN [illegible] FEET AND/OR VISIBILITY LESS THAN [illegible] MI
[illegible]

CEILING LESS THAN [illegible] FEET AND/OR VISIBILITY LESS THAN [illegible] MI
[illegible]

CEILING LESS THAN 300 FEET AND/OR VISIBILITY LESS THAN [illegible] MI

HOUR LST	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	YRS
02	0	2	1	2	[illegible]	2	[illegible]	[illegible]	*	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
05	0	2	2	2	3	1	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
08	*	1	1	1	1	0	*	*	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	1	1	1	1	1	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	1	1	1	1	0	0	*	0	[illegible]	[illegible]	[illegible]	*	[illegible]	[illegible]
17	0	1	1	1	*	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	0	1	1	1	*	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	*	[illegible]
23	*	1	1	2	*	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ALL HRS	*	1	1	1	1	1	*	*	*	[illegible]	*	[illegible]	[illegible]	[illegible]

TEL-AVIV, ISRAEL

PREPARED BY: NOCD ASHEVILLE STATION NAME: TRIPOLI, LIBYA ELEVATION: 46 FEET WMO #: 62011
LOCATION: 32 54N 13 17E

	TEMPERATURE (F)					PRECIPITATION (INCHES)						RELATIVE HUMIDITY		VAPOR PRESSURE INCHES OF MERCURY	DEW POINT (F)	PRESSURE ALTITUDE FEET (99.95%)	SURFACE WIND (KTS)			MEAN CLOUD AMOUNT (TENTHS)	MEAN NUMBER OF DAYS WITH									
	MEANS			EXTREME						SNOWFALL											PRECIPITATION				THUNDERSTORMS	VISIBILITY	TEMPERATURE			
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	MEAN	MAXIMUM	MINIMUM	24-HR MAXIMUM	MEAN	MAXIMUM	24-HR MAXIMUM	0400 LST	1300 LST				DIRECTION	SPEED	MAX GUST		.01 OR MORE	.10 OR MORE	SNOWFALL 1.0 OR MORE	SNOWFALL .1 OR MORE		VISIBILITY 3 MI OR LESS	90 OR ABOVE	80 OR ABOVE	32 OR BELOW	00 OR BELOW
JAN	63	47	55	83	37	2.1	6.1	#	1.9	#	#	#	72	55	28	43	450	5	4	5	5	4	1	1	0	1	0	0	0	0
FEB	65	48	57	84	35	1.1	3.3	1	2.0	#	#	#	71	54	29	44	550	5	4	5	4	3	1	1	0	1	0	0	0	0
MAR	69	51	60	105	36	0.8	3.3	0.0	0.0	0.1	3.3	3.3	72	53	31	46	550	SSW	4	6	4	3	#	#	0	1	0	0	0	0
APR	73	56	65	106	43	0.8	3.4	0.0	0.0	0.8	0.0	0.0	72	56	36	51	550	E	13	20	4	3	#	#	0	3	0	0	0	0
MAY	77	61	69	109	49	0.1	0.4	0.0	0.0	0.0	0.0	0.0	74	59	42	56	400	E	11	18	4	1	#	#	0	1	0	0	0	0
JUN	83	68	76	112	54	0.1	0.7	0.0	0.0	0.1	0.7	0.7	73	59	52	62	300	E	11	18	3	1	#	#	0	1	0	0	0	0
JUL	86	70	78	117	59	#	0.1	0.0	0.0	#	0.1	0.1	79	60	61	67	250	E	11	18	1	#	#	#	0	1	0	0	0	0
AUG	87	71	79	112	62	#	0.1	0.0	0.0	0.1	0.1	0.1	79	59	64	66	250	E	11	18	1	#	#	#	0	1	0	0	0	0
SEP	86	70	78	113	60	0.5	4.4	0.0	1.8	#	#	#	78	59	64	66	200	E	11	18	1	#	#	#	0	1	0	0	0	0
OCT	80	64	72	102	50	1.5	5.3	0.0	1.8	#	#	#	76	55	50	59	300	SSW	8	15	3	2	#	#	0	1	0	0	0	0
NOV	73	56	65	98	42	1.7	7.5	0.0	3.3	#	#	#	72	54	38	51	400	SW	8	15	3	2	#	#	0	1	0	0	0	0
DEC	66	50	58	82	37	2.4	8.3	0.1	3.8	#	#	#	73	56	33	45	450	W	8	15	4	3	#	#	0	1	0	0	0	0
ANN	76	59	68	117	35	11.1	22.3	1.9	3.8	#	#	#	74	57	44	56	450	W	8	15	41	26	1	1	0	34	0	35	41	0	0
EYR	18	18	18	17	17	19	19	19	17	18	18	17	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18

LESS THAN 0.5 DAYS, 0.5 OR 0.05 IN ML OR 0.5 PERCENT AS APPLICABLE.
THE VALUE LISTED UNDER PRESSURE ALTITUDE INDICATES THAT VALUE IS EXCEEDED ONLY 95% OF THE TIME WHEN LABELED 99.95% OTHERWISE IT IS THE MEAN.
EYR IS EQUIVALENT YEARS OF RECORD (I.E. THE ACTUAL NUMBER OF YEARS UTILIZED IN THE CALCULATION).

FLYING WEATHER, PERCENT OF HOUR

HOUR (LST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
CEILING LESS THAN 3000 FEET AND OR VISIBILITY LESS THAN 5 MI													
01	6	6	4	2	1	1	1	1	1	2	3	4	2
04	8	6	4	2	1	1	1	1	1	2	3	5	2
07	7	6	4	2	1	1	1	1	1	2	3	5	2
10	5	4	3	2	1	1	1	1	1	2	3	4	2
13	5	4	3	2	1	1	1	1	1	2	3	4	2
16	5	4	3	2	1	1	1	1	1	2	3	4	2
19	5	4	3	2	1	1	1	1	1	2	3	4	2
22	6	5	4	2	1	1	1	1	1	2	3	4	2
ALL HRS	6	5	4	2	1	1	1	1	1	2	3	4	2
CEILING LESS THAN 1500 FEET AND OR VISIBILITY LESS THAN 3 MI													
01	3	3	2	1	1	1	#	#	#	1	2	2	1
04	3	3	2	1	1	1	#	#	#	1	2	2	1
07	3	3	2	1	1	1	#	#	#	1	2	2	1
10	3	3	2	1	1	1	#	#	#	1	2	2	1
13	3	3	2	1	1	1	#	#	#	1	2	2	1
16	4	4	2	1	1	1	#	#	#	1	2	2	1
19	3	4	2	1	1	1	#	#	#	1	2	2	1
22	3	4	2	1	1	1	#	#	#	1	2	2	1
ALL HRS	3	3	2	1	1	1	#	#	#	1	2	2	1
CEILING LESS THAN 1000 FEET AND OR VISIBILITY LESS THAN 3 MI													
01	#	1	1	1	1	#	#	#	#	1	1	1	1
04	1	1	1	1	1	#	#	#	#	1	1	1	1
07	1	1	1	1	1	#	#	#	#	1	1	1	1
10	1	1	1	1	1	#	#	#	#	1	1	1	1
13	1	1	1	1	1	#	#	#	#	1	1	1	1
16	1	1	1	1	1	#	#	#	#	1	1	1	1
19	1	1	1	1	1	#	#	#	#	1	1	1	1
22	#	1	1	1	1	#	#	#	#	1	1	1	1
ALL HRS	1	1	1	1	1	#	#	#	#	1	1	1	1
CEILING LESS THAN 200 FEET AND OR VISIBILITY LESS THAN 1/2 MI													
01	0	1	#	#	#	#	#	#	#	#	#	#	#
04	#	#	#	#	#	#	#	#	#	#	#	#	#
07	#	#	#	#	#	#	#	#	#	#	#	#	#
10	#	#	#	#	#	#	#	#	#	#	#	#	#
13	#	#	#	#	#	#	#	#	#	#	#	#	#
16	#	#	#	#	#	#	#	#	#	#	#	#	#
19	#	#	#	#	#	#	#	#	#	#	#	#	#
22	#	#	#	#	#	#	#	#	#	#	#	#	#
ALL HRS	#	#	#	#	#	#	#	#	#	#	#	#	#

TRIPOLI, LIBYA

PREPARED BY: NOCD ASHEVILLE STATION NAME: TUNIS, TUNISIA ELEVATION: [illegible] WMO #: 60715
LOCATION: 36 50N 10 14E

	TEMPERATURE (F)					PRECIPITATION (INCHES)						RELATIVE HUMIDITY		VAPOR PRESSURE INCHES OF MERCURY	DEW POINT (F)	PRESSURE ALTITUDE FEET 99 MB	SURFACE WIND (KTS)			MEAN NUMBER OF DAYS WITH									
	MEANS		EXTREME						SNOWFALL											PRECIPITATION					TEMPERATURE				
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	MEAN	MAXIMUM	MINIMUM	MEAN	MAXIMUM	24-HR MAXIMUM	0630 LST	1230 LST				DIRECTION	SPEED	MAX GUST	MEAN FORCE AMOUNT		SNOWFALL		THUNDER					
JAN	59	44	52	74	34	3	11	0	1	6	1	86	68	30	43														
FEB	62	45	54	79	35	1	6	0	1	7	1	92	64	33	45														
MAR	65	48	57	95	35	1	6	0	M	5	1	86	61	35	47														
APR	69	51	60	90	37	1	5	0	#	2	#	86	60	40	51														
MAY	77	57	67	98	45	1	3	0	#	1	#	81	53	43	54														
JUN	84	65	75	105	52	0	2	0	#	1	0	77	50	60	59														
JUL	90	69	80	113	58	0	1	0	0	1	0	73	45	61	63														
AUG	90	70	80	108	59	0	2	0	0	1	0	79	48	71	66														
SEP	85	67	76	103	58	1	5	0	0	4	0	85	54	67	65														
OCT	77	62	69	96	47	3	8	0	0	3	0	87	59	54	58														
NOV	67	53	61	85	41	2	4	#	0	1	0	87	63	40	52														
DEC	62	47	55	76	35	1	4	0	0	1	0	85	67	38	45														
ANN	74	56	65	113	34	14	34	0	2	7	1	84	58	48	54														
YR	18	18	18	18	18	11	26	23	15	50		12	22	7	45														

LESS THAN 0.5 DAYS, 0.5 OR 0.05 INCH, OR 0.5 PERCENT AS APPLICABLE

THE VALUE LISTED UNDER PRESSURE ALTITUDE INDICATES THAT VALUE IS EXCEEDED FOUR PERCENT OF THE TIME WHEN LABELED 99 MB OTHERWISE IT IS THE MEAN

EYR IS EQUIVALENT YEARS OF REPORTS (I.E. THE ACTUAL NUMBER OF YEARS FIGURED IN THE CALCULATIONS)

FLYING WEATHER, PERCENT OF HOURS

HOUR (EST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	YRS
CEILING LESS THAN 1000 FEET AND/OR VISIBILITY LESS THAN 3 MI														
01	22	29	24	29	19	11	4	4	7	13	17	21	16	15
04	26	35	29	31	19	15	11	7	14	19	24	25	22	15
07	41	41	34	37	24	14	11	7	13	24	31	34	25	15
10	43	43	38	37	31	21	14	11	17	31	37	41	31	15
13	31	32	34	30	17	8	3	4	8	20	27	31	20	15
16	25	30	32	27	17	8	3	4	8	17	24	27	18	15
19	22	25	27	24	13	5	1	3	6	13	20	24	15	15
22	19	22	24	21	11	4	1	3	5	11	17	21	13	15
ALL HRS	26	31	29	29	19	10	5	5	9	18	24	28	20	15
CEILING LESS THAN 2000 FEET AND/OR VISIBILITY LESS THAN 5 MI														
01	13	17	15	14	6	4	2	1	3	7	9	12	8	15
04	20	24	20	20	8	4	2	1	4	10	14	17	11	15
07	28	28	27	25	14	6	4	2	5	14	19	23	15	15
10	29	29	29	27	17	9	5	3	6	16	22	26	17	15
13	23	24	25	22	11	5	2	2	4	13	18	22	13	15
16	19	21	22	19	10	4	2	2	4	11	16	19	11	15
19	16	18	19	16	8	3	1	2	3	9	13	16	9	15
22	14	16	17	14	7	2	1	1	2	8	11	14	8	15
ALL HRS	20	22	21	20	10	5	2	2	4	11	15	18	12	15
CEILING LESS THAN 1000 FEET AND/OR VISIBILITY LESS THAN 2 MI														
01	4	4	4	2	1	#	#	#	1	2	3	4	2	15
04	6	8	6	4	2	1	#	#	1	3	4	5	3	15
07	8	9	8	6	3	1	#	#	1	4	5	7	4	15
10	9	10	9	7	4	2	1	#	2	5	7	8	5	15
13	7	8	8	6	3	1	#	#	1	4	5	6	4	15
16	6	7	7	5	2	1	#	#	1	3	4	5	3	15
19	5	6	6	4	2	#	#	#	1	3	4	4	3	15
22	4	5	5	3	1	#	#	#	1	2	3	4	2	15
ALL HRS	6	7	6	5	2	1	#	#	1	3	4	5	3	15
CEILING LESS THAN 300 FEET AND/OR VISIBILITY LESS THAN 1 MI														
01	1	1	#	#	#	#	#	#	#	1	1	1	1	15
04	1	1	1	1	#	#	#	#	#	1	1	1	1	15
07	1	1	1	1	#	#	#	#	#	1	1	1	1	15
10	1	1	1	1	#	#	#	#	#	1	1	1	1	15
13	1	1	1	1	#	#	#	#	#	1	1	1	1	15
16	1	1	1	1	#	#	#	#	#	1	1	1	1	15
19	1	1	1	1	#	#	#	#	#	1	1	1	1	15
22	1	1	1	1	#	#	#	#	#	1	1	1	1	15
ALL HRS	1	1	1	1	#	#	#	#	#	1	1	1	1	15

TUNIS, TUNISIA

PREPARED BY: NOCD ASHEVILLE STATION NAME: VENICE, ITALY ELEVATION: "S FEET" WMO #: 16100
LOCATION: 45 26N 12 23E

	TEMPERATURE (F)					PRECIPITATION (INCHES)							RELATIVE HUMIDITY		VAPOR PRESSURE (INCHES OF MERCURY)*		DEW POINT(F)	SURFACE WIND (KTS)			MEAN NUMBER OF DAYS WITH						
	MEANS			EXTREME						SNOWFALL											PRECIPITATION				TEMPERATURE		
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	MEAN	MAXIMUM	MINIMUM	24-HR MAXIMUM	MEAN	MAXIMUM	24-HR MAXIMUM	0700 LST	1300 LST	0900 LST	1500 LST		DIRECTION	SPEED	MAX GUST	MEAN CLOUD AMOUNT (TENTHS)	.01 OR MORE	SNOWFALL	THUNDERSTORMS	VISIBILITY 1/4 MI OR LESS IN FOG	90 AND ABOVE	32 AND BELOW
JAN	42	33	38	57	18	1.5			1.3				86	76	.14	.16	32	NNE	4	43	8	11	1	0	9	0	14
FEB	46	35	41	64	15	1.9			2.1				80	76	.15	.17	30	NE	5	50	8	6	1	0	4	0	3
MAR	53	41	47	72	24	2.4			2.1				86	86	.19	.21	38	NE	6	44	7	7	1	0	5	0	4
APR	62	49	56	81	35	3.1			1.9				86	67	.25	.26	46	E	6	33	5	7	1	0	3	0	0
MAY	70	56	63	91	41	2.6			1.5				85	69	.33	.35	54	S	6	28	6	8	1	0	5	0	0
JUN	76	63	70	91	47	2.7			1.5				83	65	.40	.41	61	SSE	5	28	5	4	0	0	3	0	0
JUL	81	66	74	94	53	2.1			1.3				82	64	.45	.46	66	SSE	5	30	4	3	0	0	2	0	0
AUG	80	65	73	93	55	2.7			3.9				84	63	.43	.45	64	NE	5	33	4	4	0	0	4	0	0
SEP	75	61	68	87	49	2.3			1.7				87	64	.37	.41	63	NE	5	35	5	5	1	0	1	0	0
OCT	65	53	59	80	38	3.1			2.9				88	68	.28	.30	51	NNE	5	30	6	7	2	0	2	0	0
NOV	53	44	49	69	28	3.7			3.2				88	75	.21	.23	42	NE	5	33	7	9	3	0	4	0	0
DEC	46	37	42	59	24	2.4			1.5				88	79	.15	.17	38	NNE	4	33	8	8	3	0	3	0	5
ANN	62	50	56	94	15	30.4			3.9				85	70	.28	.30	48	NE	5	50	6	87	17	45	39	2	37
EYR	16	16	16	16	16	16			10				10	10	14	14	6	19	19	19	6	16	1	0	8	0	6

LESS THAN 0.5 DAYS, 0.5 OR 0.05 INCH, OR 0.5 PERCENT AS APPLICABLE

THE VALUE LISTED UNDER PRESSURE ALTITUDE INDICATES THAT VALUE IS EXCEEDED ONLY [illegible]% OF THE TIME WHEN LABELED 99.95% OTHERWISE IT IS THE MEAN

EYR IS EQUIVALENT YEARS OF RECORD (I.E. THE ACTUAL NUMBER OF YEARS UTILIZED IN THE CALCULATIONS

FLYING WEATHER, PERCENT OF HOURS

HOUR (LST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	YRS
CEILING LESS THAN 5000 FEET AND/OR VISIBILITY LESS THAN 6 MI														
01	75	70	54	49	35	[illegible]	[illegible]	28	49	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
04	77	71	61	56	48	53	59	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
07	73	74	74	70	58	54	49	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	85	82	72	56	44	45	39	42	[illegible]	[illegible]	[illegible]	84	[illegible]	[illegible]
13	77	76	58	43	31	28	[illegible]	30	43	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	74	67	51	39	25	25	[illegible]	26	41	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	76	71	54	42	26	25	[illegible]	28	44	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	76	68	50	39	27	23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ALL HRS	77	73	60	49	37	35	30	34	46	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CEILING LESS THAN 3300 FEET AND/OR VISIBILITY LESS THAN 2 [illegible] MI														
01	54	52	32	26	15	16	6	10	20	37	49	55	35	11
04	54	53	37	35	23	21	10	13	28	47	49	54	35	11
07	51	55	49	41	27	19	14	17	34	45	49	53	38	12
10	60	53	38	26	16	[illegible]	10	[illegible]	20	35	49	55	32	12
13	52	50	29	20	10	[illegible]	6	9	15	28	41	50	27	11
16	51	42	24	19	11	7	5	9	12	28	44	50	25	12
19	54	48	28	19	12	11	5	7	14	25	42	50	27	13
22	54	46	28	21	14	12	8	11	13	32	44	56	29	11
ALL HRS	54	50	33	26	16	14	8	11	20	34	46	[illegible]	[illegible]	[illegible]
CEILING LESS THAN 1000 FEET AND/OR VISIBILITY LESS THAN 2 [illegible] MI														
01	43	38	18	8	2	2	1	1	[illegible]	24	37	43	19	12
04	40	38	22	16	8	7	3	5	18	30	44	45	24	13
07	42	43	40	30	17	12	9	14	28	36	45	49	29	12
10	52	49	30	17	8	7	4	5	[illegible]	28	38	46	24	12
13	45	41	19	8	4	3	1	2	[illegible]	[illegible]	30	44	[illegible]	[illegible]
16	43	34	16	5	2	2	#	1	[illegible]	[illegible]	[illegible]	41	[illegible]	[illegible]
19	45	35	17	6	2	3	1	[illegible]	[illegible]	[illegible]	[illegible]	42	[illegible]	[illegible]
22	45	32	16	4	2	1	[illegible]	2	[illegible]	28	[illegible]	42	18	[illegible]
ALL HRS	44	39	22	12	6	5	2	4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CEILING LESS THAN 300 FEET AND/OR VISIBILITY LESS THAN [illegible] MI														
01	25	24	10	3	1	#	0	0	4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
04	25	23	13	8	4	2	#	1	9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
07	25	28	20	15	8	11	1	3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	34	30	15	4	1	1	#	1	8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	26	22	6	2	1	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	24	17	5	1	0	0	0	#	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	24	16	6	1	#	#	0	#	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	22	17	6	1	0	0	0	#	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ALL HRS	26	22	10	4	2	1	#	1	6	14	[illegible]	[illegible]	[illegible]	[illegible]

VENICE, ITALY

END

DATE
FILMED

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