

**LOCAL WEATHER.**—For extended remarks on the marine climate along foreign coasts, see the appropriate Sailing Directions and Planning Guides prepared and published by the National Imagery and Mapping Agency ; for the coasts of the United States and its possessions, see the appropriate Coast Pilot prepared and published by the National Ocean Service. The trimester publication "Mariners Weather Log" prepared and published by the National Oceanic and Atmospheric Administration, National Weather Service, carries informative articles on marine climate conditions and tropical cyclone information.

## OCTOBER

**PRESSURE.**—The permanent anticyclone off South America is strongest during October and November; the mean central pressure is just over 1026 millibars. During October, its mean position is near 33°S, 90°W. In contrast, the belt of high pressure over Australia is much more zonal and diffuse than during the winter months. The equatorial trough maintains its weak pressure gradient and position north of the equator. South of New Zealand the global circulation maintains the tight zonal pressure gradient.

**TEMPERATURE.**—Mean air temperatures at 80°W longitude range from 3°C at 60°S to 24°C at the equator. At 160°W, means range from 2°C at 60°S to 29°C at the equator. Of the observations at 60°S, 98% fall between a 3°C and 4°C; along the equator, 98% fall between 18°C and 27°C at 90°W and between 25°C and 33°C at 160°E.

**WINDS.**—The transition between the southeasterly winds to the north and the westerly winds to the south takes place in the vicinity of the 30th parallel. Mean winds of force 4 to 6 are generally found south of 40°S, 10 degrees farther south than during September. Winds average force 3 to 4 north of 40°S.

**GALES.**—Winds of force 8 or greater are infrequently observed north of 40°S. Frequencies reach 10% at 40°S near 110°W and from 2 to 5 degrees farther south for most other areas. Frequencies of 20% are found mainly east of 155°W and within 6 degrees either side of 54°S. Maximum occurrences reach 30% through the Drake Passage.

**TROPICAL CYCLONES.**—Temperatures are still too cool across the South Pacific for any significant tropical cyclone development.

**VISIBILITY.**—Most instances of visibilities less than 2 miles occur south of 40°S. At 20°W, frequencies range from just under 10% at 40°S to over 30% at 60°S. Frequencies at 170°E range from near 10% at 45°S to over 30% at 60°S.

**WAVE HEIGHTS.**—Wave heights of 12 feet or more have decreased in frequency since September. In general, 10% frequencies or greater lie south of 30°S over the western half of the South Pacific, with the exception of the coastal regions of Australia and New Zealand, and south of 20° over the eastern half, with the exception of the coastal regions of Chile. Frequencies increase southerly to over 50% in many areas south of 55°S.

### CHART #1

#### TROPICAL CYCLONES

The mean tracks of tropical storms and hurricanes are shown in red. These tracks represent averages, and movements of individual systems may vary widely.

#### SURFACE PRESSURE

This chart shows the average barometric pressure reduced to sea level. Isobars are solid blue lines for every 2.5 millibars difference in pressure.

### CHART #2

#### AIR TEMPERATURE

The mean air temperature (°C) in red lines is shown for every 2 degrees. All weather narratives refer to air temperature.

#### VISIBILITY

Blue lines show percentages of observations reporting visibilities less than 2 miles.

### CHART #3

#### GALES

The red numerals in the center of each 5-degree square on this inset chart show the average percentage of ship reports in which winds of at least force 8 have been recorded for the month. In cases where the observation count is low the gale frequency may be nonrepresentative and therefore different from the values used in the text. Where "0" is given, gales may have been recorded, but too infrequently to give a percentage value.

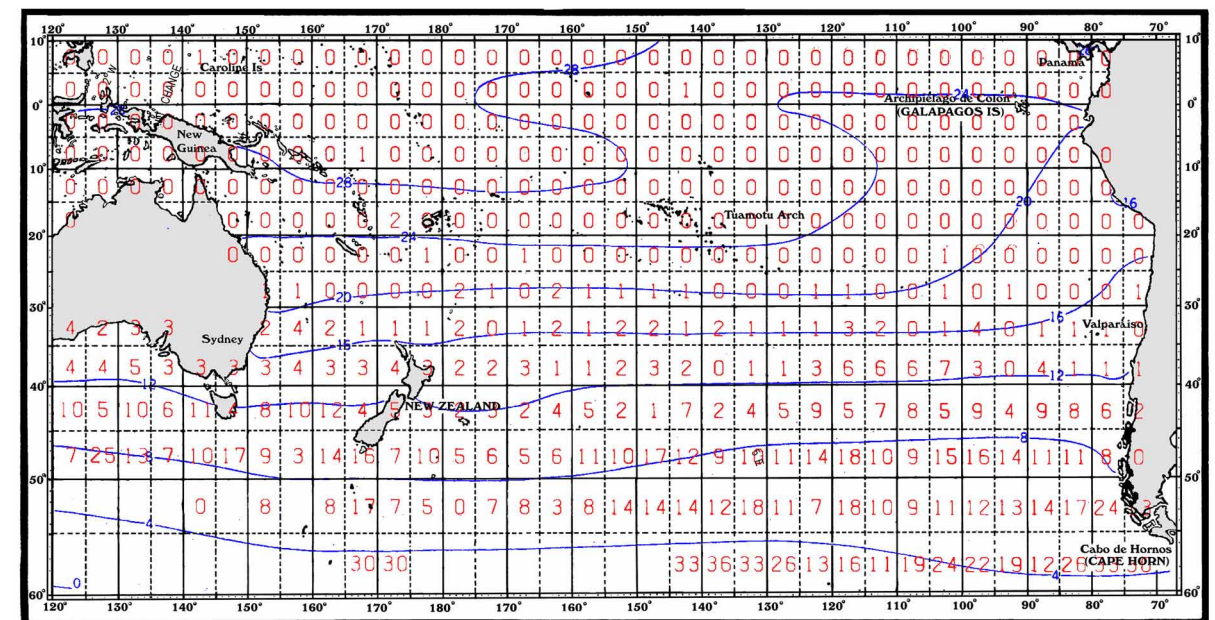
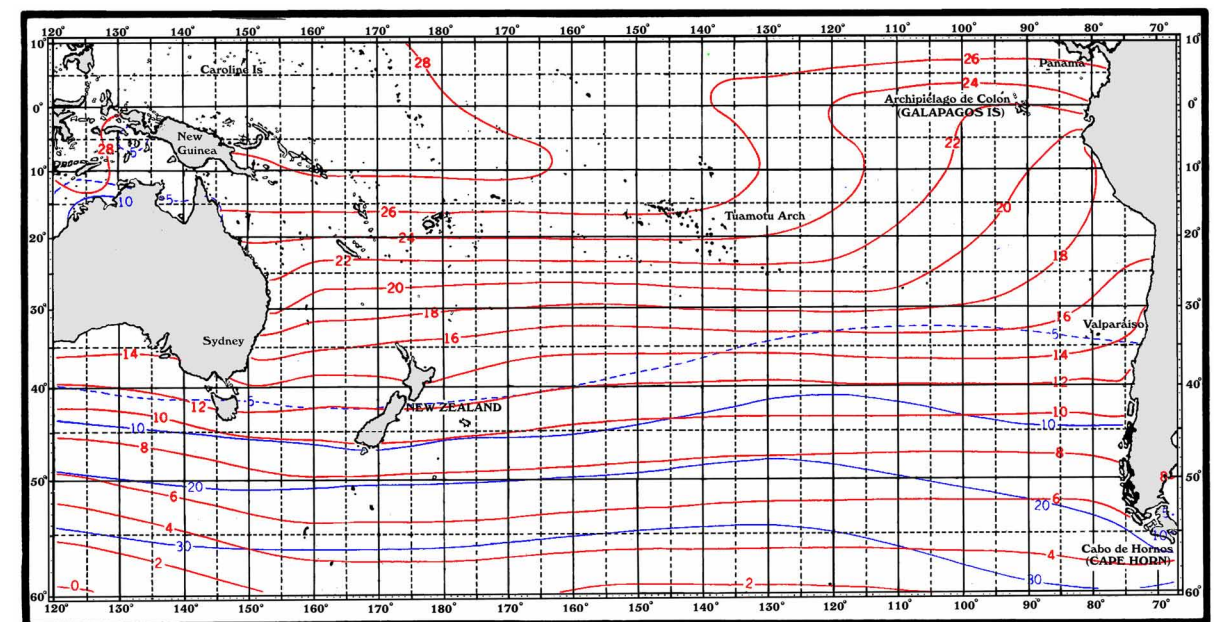
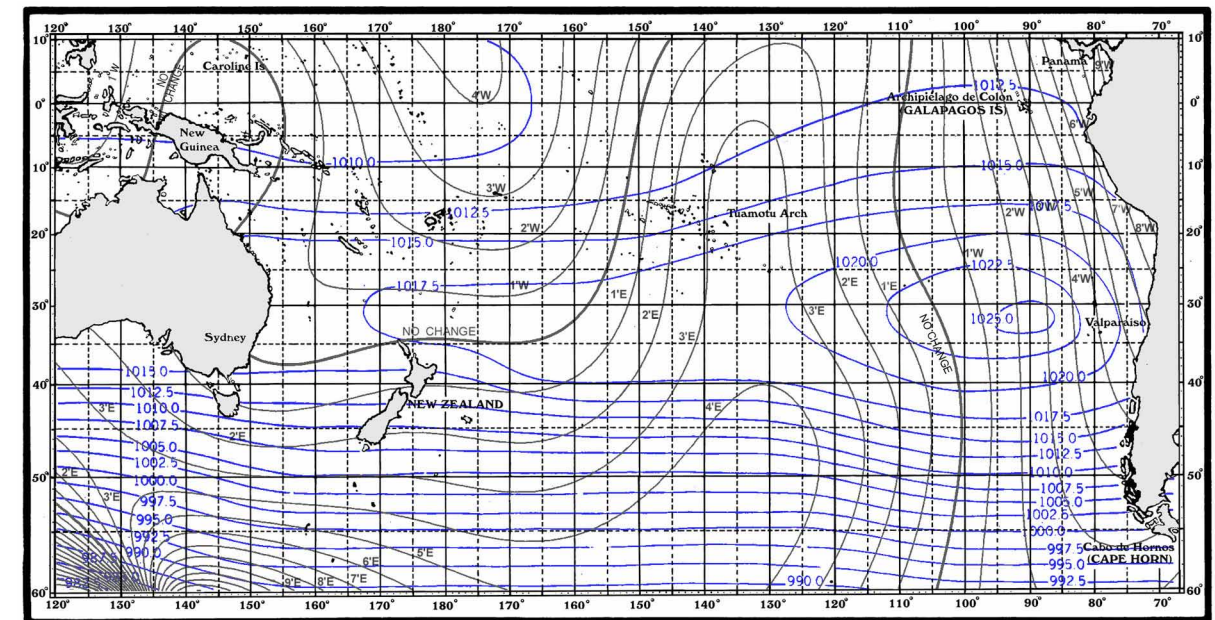
#### SEA SURFACE TEMPERATURE

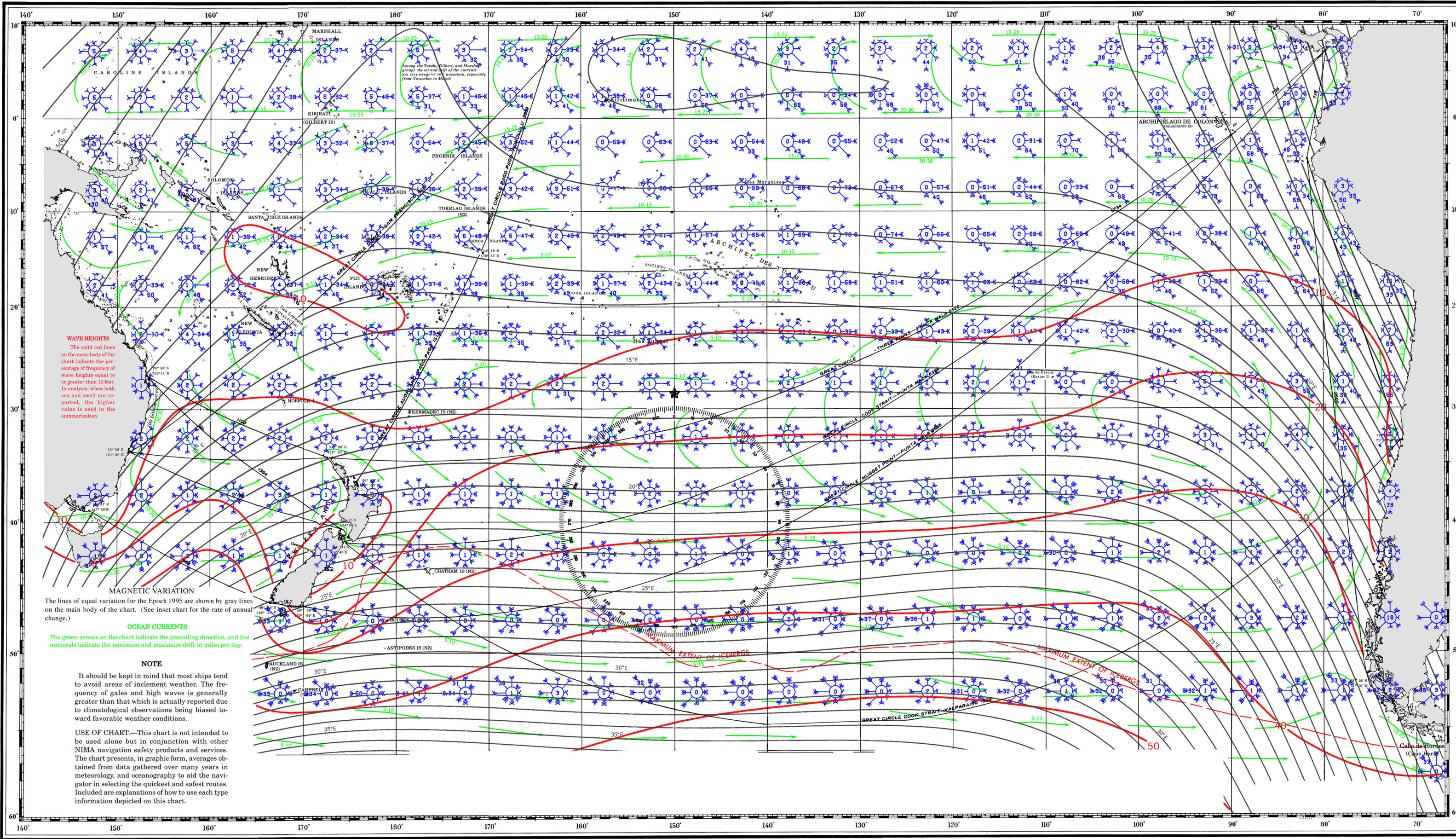
The mean sea surface temperature (°C), in blue lines, is shown for every degree.

### EXPLANATION OF WIND ROSES

**PREVAILING WINDS AND CALMS.**—The wind rose in blue color is located in the center of each 5° square where there was sufficient data. The rose shows the distribution of the winds that have prevailed in the area over a considerable period. The wind percentages are summarized for the eight points and calm. The arrows fly with the wind indicating the direction from which the wind blew. The length of the shaft, measured from the outside of the circle using the scale below, gives the percent of the total number of observations in which the wind has blown from that direction. The number of feathers shows the average force of the wind on the Beaufort scale. The figure in the center of the circle gives the percentage of calms. When the arrow is too long to fit conveniently in the 5° square, anything over 29 percent, the shaft is broken and the percentage is indicated by numerals.

**FOR EXAMPLE.**—The sample wind rose should read thus: In the reported observations the wind has averaged as follows: From N. 3 percent, force 3; N.E. 16 percent, force 4; E. 61 percent, force 4; S.E. 17 percent, force 5; S. 1 percent, force 4; S.W. less than 1 percent, force 3; W. 1 percent force 2; N.W. 1 percent, force 4; calms 0 percent.





**WAVE HEIGHTS**  
 The solid red lines on the main body of the chart indicate the percentage of frequency of wave heights equal to or greater than 12 feet. In analysis, when both sea and swell are reported, the higher value is used in the summarization.

**MAGNETIC VARIATION**  
 The lines of equal variation for the Epoch 1995 are shown by gray lines on the main body of the chart. (See inset chart for the rate of annual change.)

**OCEAN CURRENTS**  
 The green arrows on the chart indicate the prevailing direction, and the numerals indicate the minimum and maximum drift in miles per day.

**NOTE**  
 It should be kept in mind that most ships tend to avoid areas of inclement weather. The frequency of gales and high waves is generally greater than that which is actually reported due to climatological observations being biased toward favorable weather conditions.

**USE OF CHART.**—This chart is not intended to be used alone but in conjunction with other NIMA navigation safety products and services. The chart presents, in graphic form, averages obtained from data gathered over many years in meteorology, and oceanography to aid the navigator in selecting the quickest and safest routes. Included are explanations of how to use each type information depicted on this chart.

**MAXIMUM EXTENT OF ICEBERGS**

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Cape Horn (Cape Horn)