

**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.

## SEPTEMBER

**PRESSURE.**—The subtropical high pressure belt still extends from South America to Australia. The mean center of the permanent high off the South American coast lies near 33°S, 91°W, with a mean pressure just over 1025 millibars. The equatorial trough is still centered north of the equator, just south of 10°N. South of 45°S the strong zonal pressure gradient continues; means range from 1010 to 1013 millibars at 45°S to near 985 millibars at 60°S.

**TEMPERATURE.**—Mean air temperatures range from near 0°C at 60°S to over 28°C in the northwestern portion of the South Pacific. At 60°S, 98% of the observations fall between 4°C and 4°C. Along the equator, 98% fall between 18°C and 27°C and 90°W and between 25°C and 32°C at 170°E.

**WINDS.**—Prevailing winds are southeasterly from central Chile to New Guinea, southerly across the Philippines, and westerly from Australia to southern Chile. In general, wind speeds average force 3 to 4 north of 30°S and force 4 to 6 south of 30°S.

**GALES.**—Winds of force 8 or greater are mainly confined south of 30°S. Over the eastern half of the South Pacific, gales increase from 10% at 35°S to 20% at 38°S to a maximum of 30% through the Drake Passage. Across the western half, frequencies run in the neighborhood of 10% for most areas south of 45°S.

**TROPICAL CYCLONES.**—During the height of winter, tropical storm activity is virtually nonexistent.

**VISIBILITY.**—During September, the frequency pattern for visibilities less than 2 miles is relatively zonal. The 10% isopleth ranges between 42°S and 48°S and the 30% isopleth, between 55°S and 62°S.

**WAVE HEIGHTS.**—The frequency pattern of wave heights equal to or greater than 12 feet is very similar to that of August. Frequencies of at least 10% are found south from Australia and New Caledonia over the western third of the South Pacific to south of 10°S over the eastern third. Wave heights of this magnitude increase in frequency to over 50% in the region south of 52°S to 55°S and west of 100°W.

### 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.

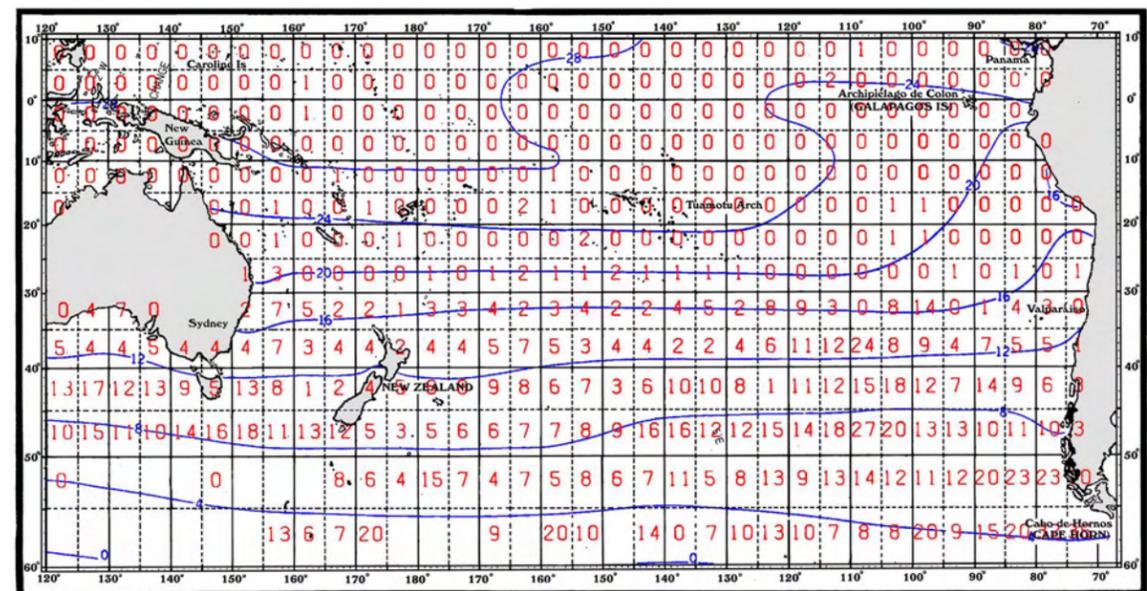
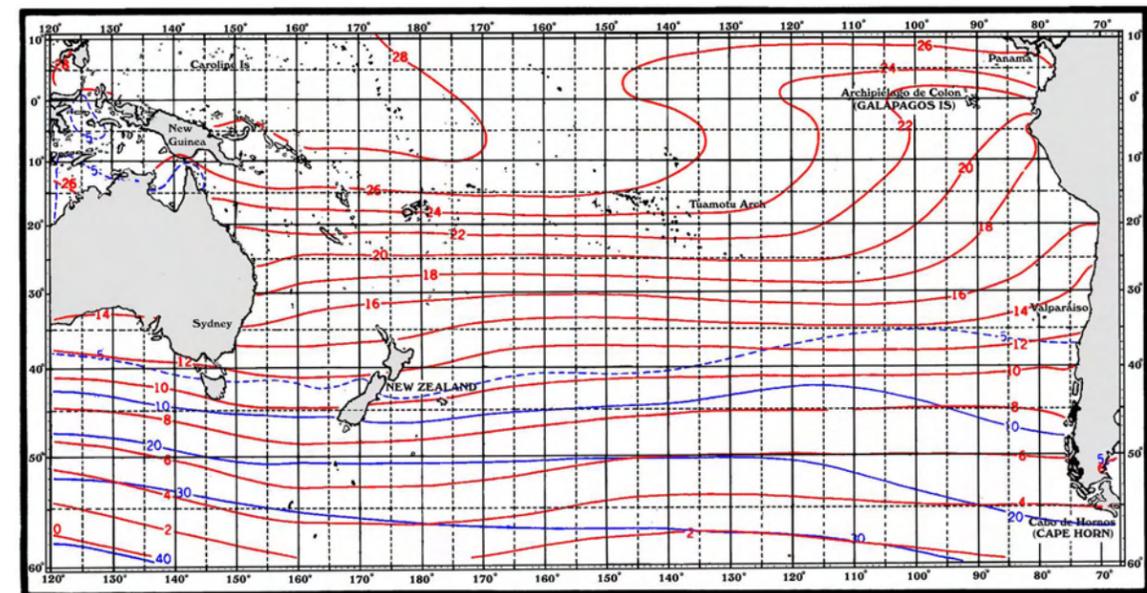
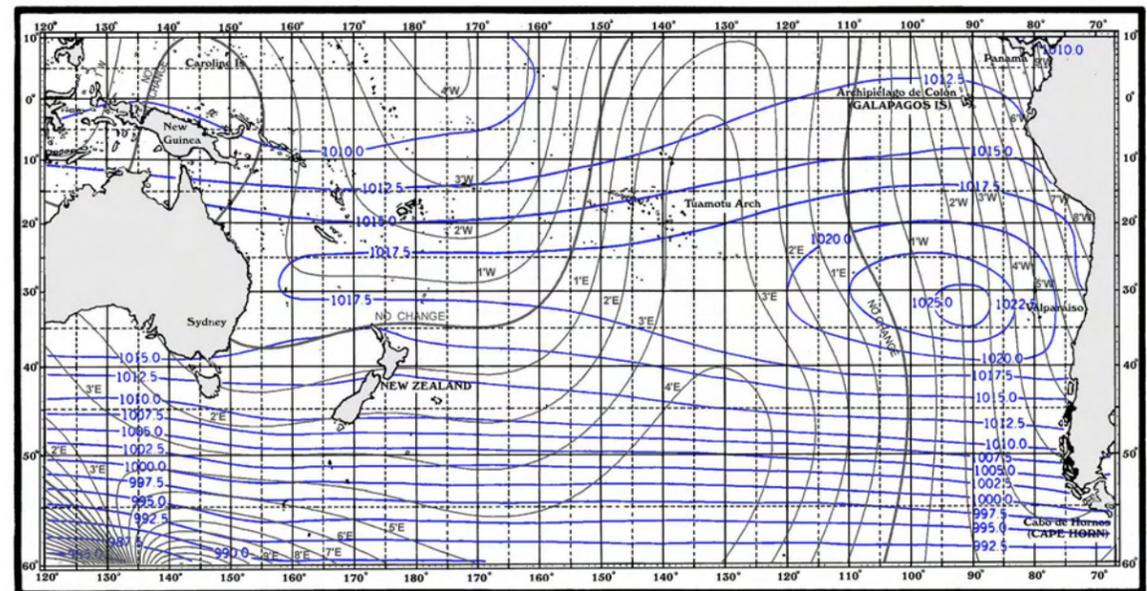
#### SEA SURFACE TEMPERATURE

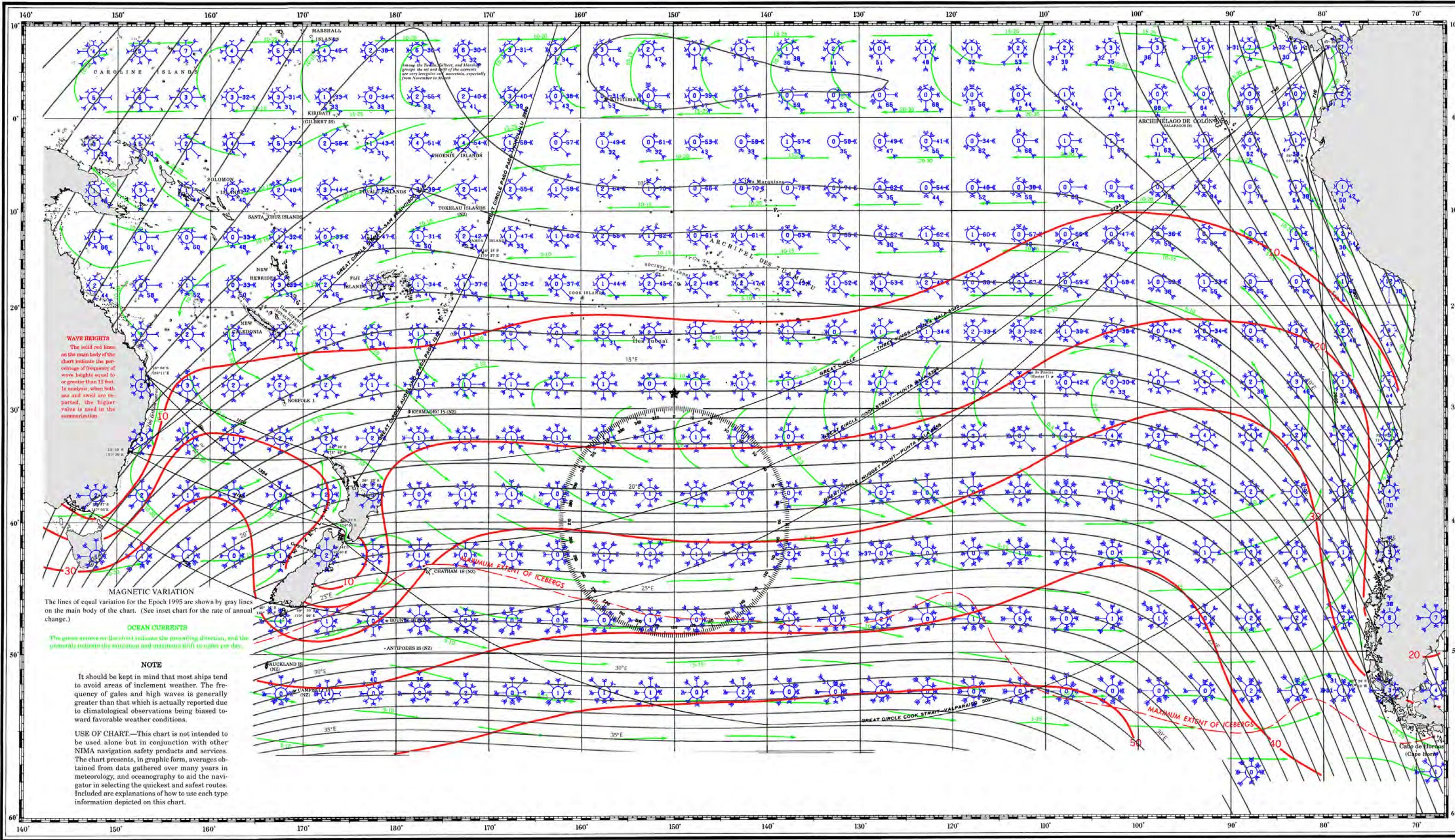
The mean sea surface temperature (°C), in blue lines, is shown for every degree.

### 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 summation.

**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 this chart indicate the prevailing direction, and the general nature and maximum drift in knots 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.

Among the Tuvalu, Gilbert, and Marshall groups the set and drift of the currents are very irregular and uncertain, especially from November to March.

MAXIMUM EXTENT OF ICEBERGS

Cape de Hornos (Cape Horn)