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.

APRIL

PRESSURE.—Although the subtropical high continues to stretch the width of the South Pacific during April, the arrival of cooler temperatures decreases its prominence. This permanent high pressure belt maintains a center near 30°S, 90°W, averaging just over 1020 millibars. A second center over the Great Australian Bight has a mean near 1019 millibars. South of 45°S, the strong zonal pressure gradient continues; its southerly pressure decrease averages 20 to 22 millibars in 15° latitude. The equatorial trough nearly centered over the equator maintains a slightly lower mean pressure over the western South Pacific.

TEMPERATURE.—The temperature gradient is fairly uniform over most of the South Pacific except in the tropics where there is a very broad gradient and along the South American coast where the Peru current influences and irregular gradient. Means range from 2°C at 60°S to 29°C in the tropics. Examination of extremes shows that only about 2% of the observations fall outside the -1°C to 6°C range at 60°S and 2% fall outside the 21°C to 33°C range at the equator.

WINDS.—East to southeast winds generally prevail north of 40°S, except north and northwest of New Guinea where northerly winds prevail. Across this broad region winds average force 3 to 4. South of 40°S, winds are slightly stronger than in previous months, averaging force 4 to 6; westerly winds continue to prevail here.

GALES.—Only a few areas north of 40°S report gale (force 8 or greater) frequencies of 5% percent. Frequencies increase to 10% or more south of New Zealand over the western two-thirds of the South Pacific and south of 40°S over the eastern third. Most regions east of the international date line and south of 50°S report frequencies of 20% or more; frequencies reach 30% through the Drake Passage at 60°S.

TROPICAL CYCLONES.—During April, the average number of tropical storms (≥ 34 knots), which occur only in the northwest quadrant, is half or fewer than that of the previous three months. An average of 1.7 storms are expected to reach 34 knots or more and of these, 0.3 are expected to reach hurricane strength (64 knots or more).

VISIBILITY.—Little change is noted from the March mean pattern of visibilities less than 2 miles. Frequencies reach 10% between 40°S and 50°S and increase southerly to 30% over the western three-quarters of the South Pacific between 50° and 60°S.

WAVE HEIGHTS.—With the exception of some coastal regions of Chile, New Zealand, and Australia, most areas south of 20°S report wave heights of 12 feet or greater 10% or more of the time. Frequencies increase southerly to a maximum of 50% west of 110°W and south of 50°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 tempera

VISIBILITY

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

CHART #3

GALES

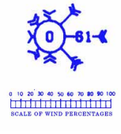
The red numerals in the center of each 5-degree square on this inset chart show the average percentage of ship reports in which winds of at least force 8 have been recorded for the month. In cases where the observation count is low the gale frequency may be nonrepresentative and therefore different from 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

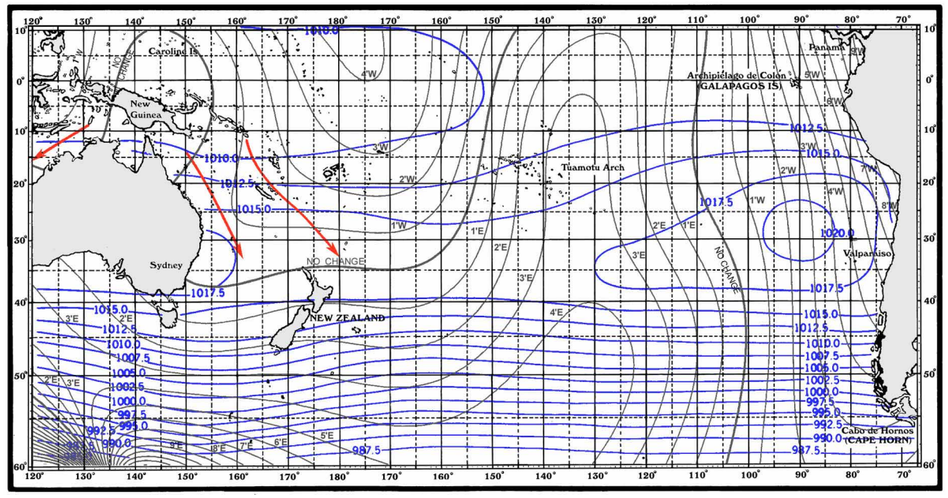
The mean sea surface temperature (C°), in blue lines, is shown for every degrees.

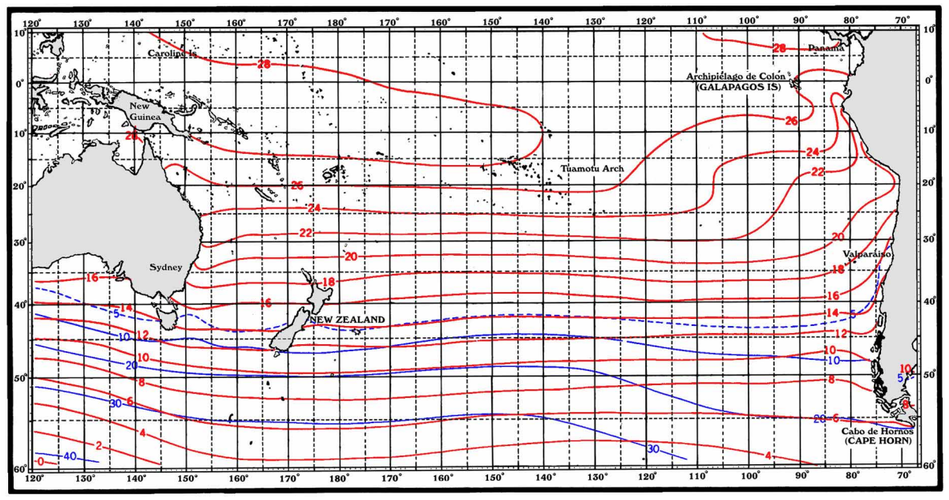
EXPLANATION OF WIND ROSES

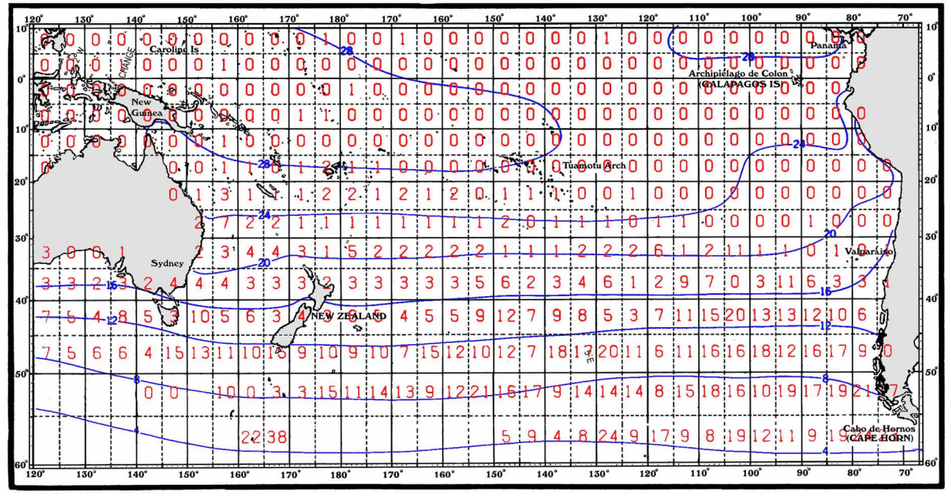
PREVAILING WINDS AND CALMS.—The wind rose in blue color is located in the center of each 5° square where there was sufficient data. The rose shows the distribution of the winds that have prevailed in the area over a considerable period. The wind percentages are summarized for the eight points and calm. 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.

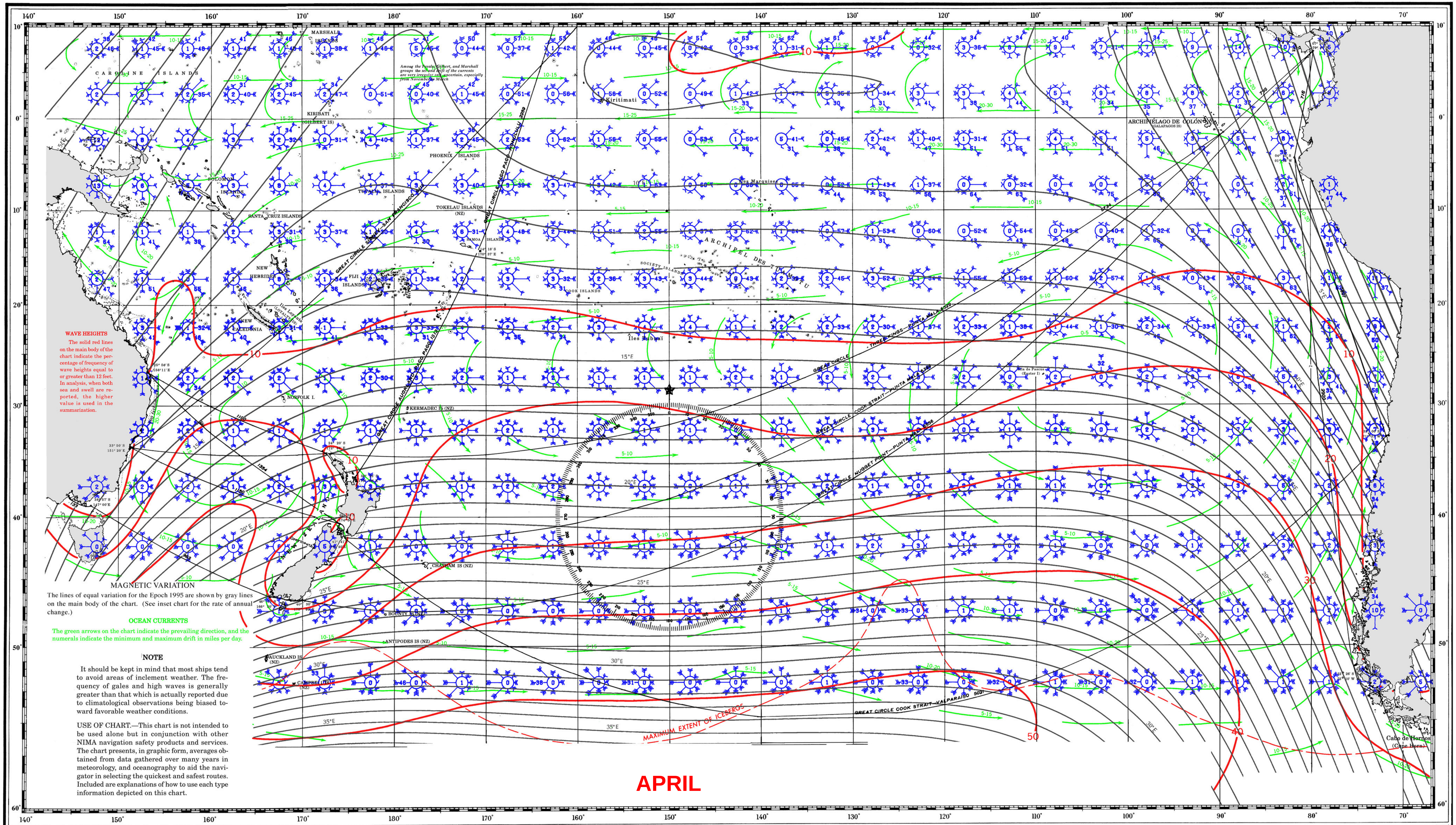


FOR EXAMPLE.—The sample wind rose should read thus: In the reported observations the wind has averaged as follows:
From N. 3 percent, force 3; N.E. 16 percent, force 4; E. 61 percent, force 4; S.E. 17 percent, force 5; S. 1 percent, force 4; S.W. less than 1 percent, force 3; W. 1 percent force 2; N.W. 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.
CAROLINE ISLANDS
MARSHALL ISLANDS
KIRIBATI (GILBERT IS)
PHOENIX ISLANDS
SOLOMON ISLANDS
TUVALU ISLANDS
TOKELAU ISLANDS (NZ)
SANTA CRUZ ISLANDS
NEW HEBRIDES
FIJI ISLANDS
NEW CALEDONIA
NORFOLK I.
KERMADEC IS (NZ)
CHATHAM IS (NZ)
BOUNTY IS (NZ)
ANTIPODES IS (NZ)
AUCKLAND IS (NZ)
CAMPBELL IS (NZ)
Kiritimati
Iles Marquises
ARCHIPEL DES TUAMOTU
SOCIETY ISLANDS
COOK ISLANDS
Iles Tubuai
Isla de Pascua (Easter I)
ARCHIPIÉLAGO DE COLÓN (GALAPAGOS IS)
Cabo de Hornos (Cape Horn)
MAXIMUM EXTENT OF ICEBERGS
GREAT CIRCLE COOK STRAIT—VALPARAISO 5021
APRIL