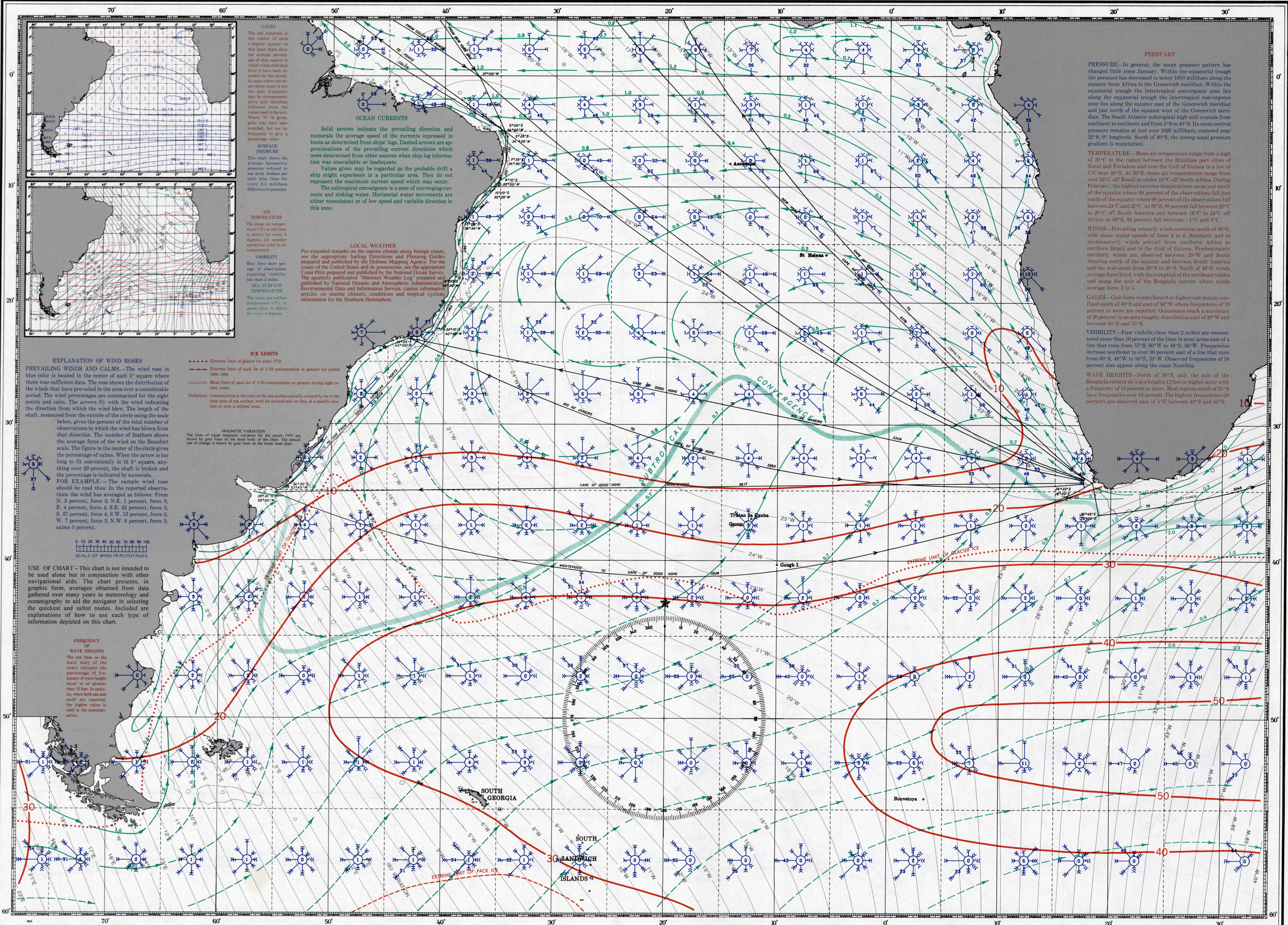


PILOT CHART OF THE SOUTH ATLANTIC OCEAN



GALES
The red numerals in the center of each 5-degree square on this chart show the average percentage of ship reports in which winds of at least force 5 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 text. Where "0" is given, gales may have been recorded, but too infrequently to give a percentage value.

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

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

VISIBILITY
Blue lines show percentage of observations reporting visibility less than 2 miles.

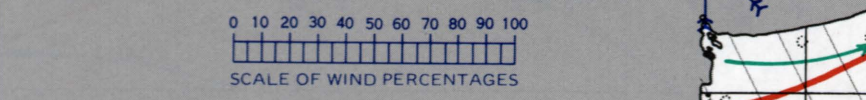
SEA SURFACE TEMPERATURE
The mean sea surface temperature (°C), in green lines, is shown for every 4 degrees.

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 Defense Mapping Agency. For the coasts of the United States and its possessions, see the appropriate Coast Pilot prepared and published by the National Ocean Survey. The quarterly publication "Mariners Weather Log" prepared and published by National Oceanic and Atmospheric Administration, Environmental Data and Information Service, carries informative articles on marine climatic conditions and tropical cyclone information for the Southern Hemisphere.

ICE LIMITS
..... Extreme limit of glacier ice since 1772.
- - - - - Extreme limit of pack ice of 1/10 concentration or greater for period 1966-1980.
~~~~~ Mean limit of pack ice of 1/10 concentration or greater during eight recent years.  
Definition: Concentration is the ratio of the sea surface actually covered by ice to the total area of sea surface, both ice covered and ice free, at a specific location or over a defined area.

**MAGNETIC VARIATION**  
The lines of equal magnetic variation for the epoch 1995 are shown by gray lines on the main body of the chart. The annual rate of change is shown by gray lines on the lower inset chart.

**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 blow. 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 be read thus: In the reported observations the wind has averaged as follows: From N. 3 percent, force 3; N.E. 1 percent, force 3; E. 4 percent, force 4; S.E. 24 percent, force 5; S. 37 percent, force 4; S.W. 13 percent, force 3; W. 7 percent, force 3; N.W. 6 percent, force 3; calms 5 percent.



**USE OF CHART** - This chart is not intended to be used alone but in conjunction with other navigational aids. 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 of information depicted on this chart.

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

**PRESSURE**—In general, the mean pressure pattern has changed little since January. Within the equatorial trough the pressure has decreased to below 1010 millibars along the equator from Africa to the Greenwich meridian. Within the equatorial trough the intertropical convergence zone lies along the equator east of the Greenwich meridian and just north of the equator west of the Greenwich meridian. The South Atlantic subtropical high still extends from continent to continent and from 5°S to 40°S. Its mean central pressure remains at just over 1020 millibars, centered near 32°S, 0° longitude. South of 40°S, the strong zonal pressure gradient is maintained.

**TEMPERATURE**—Mean air temperature range from a high of 28°C in the region between the Brazilian port cities of Natal and Fortaleza and over the Gulf of Guinea to a low of 1°C near 60°S. At 30°S, mean air temperatures range from over 24°C off Brazil to under 18°C off South Africa. During February, the highest extreme temperatures occur just south of the equator where 98 percent of the observations fall between 24°C and 32°C. At 30°S, 98 percent fall between 20°C to 28°C off South America and between 16°C to 24°C off Africa; at 60°S, 98 percent fall between 1°C and 4°C.

**WINDS**—Prevailing westerly winds continue south of 40°S, with mean scalar speeds of force 4 to 6. Southerly and to southeasterly winds prevail from southern Africa to northern Brazil and to the Gulf of Guinea. Predominately northerly winds are observed between 20°W and South America north of the equator and between South America and the mid-ocean from 20°S to 40°S. North of 40°S, winds average force 2 to 4, with the exception of the northeast trades and along the axis of the Benguela current where winds average force 3 to 5.

**GALES**—Gale force winds (force 8 or higher) are mainly confined south of 40°S and east of 50°W where frequencies of 10 percent or more are reported. Occurrences reach a maximum of 20 percent in an area roughly described as east of 30°W and between 45°S and 55°S.

**VISIBILITY**—Poor visibility (less than 2 miles) are encountered more than 10 percent of the time in most areas east of a line that runs from 57°S, 60°W to 40°S, 36°W. Frequencies increase southeast to over 30 percent east of a line that runs from 60°S, 48°W to 50°S, 33°W. Observed frequencies of 10 percent also appear along the coast Namibia.

**WAVE HEIGHTS**—North of 30°S, only the axis of the Benguela current do wave heights 12 feet or higher occur with a frequency of 10 percent or more. Most regions south of 35°S have frequencies over 10 percent. The highest frequencies (50 percent) are observed east of 5°E between 49°S and 55°S.