The Voluntary Observing Ship (VOS) program and the VOS Climate (VOSCLIM) project are an integral part of the world’s commitment to oceans. Most GOSUD and SAMOS personnel are well aware of the World Meteorological Organization’s Joint Commission for Oceanography and Marine Meteorology (JCOMM) and its sub division of the Ship Observation Team (SOT). The three prongs of the SOT trident’s objective are meteorology, oceanography, and the atmosphere. While the Ship Of Opportunity Program (SOOP) covers oceanographic data, and the Automated Shipboard Aerological Program (ASAP) concerns itself with atmospheric conditions, VOS’s main objective is meteorological data from the oceans. This data is sent into the National Weather Service’s Telecommunications gateway (NWSTG) for routing to the Ocean Prediction Center and the Tropical Prediction Center as well as shared to other national meteorological agencies for their real-time modeling efforts. The data is then shared with the National Climatic Data Center (NCDC) and the International Comprehensive Ocean-Atmosphere Data Set (ICOADS) for data archive and climatological use.

Traditional VOS participants are the transiting merchant vessels that follow the standard trade routes. GOSUD and SAMOS vessels are a prime interest to the VOS data collection efforts, as these ships tend to operate in non-traditional routes and have the potential to provide an important high-resolution complement in real-time and climatological processes. The traditional VOS ships are predominately manual observers that only provide observational information once to twice per day while underway. By incorporating the current automated meteorological sensor suites onboard GOSUD and SAMOS ships with the communication capability of VOS, increased real-time coverage in data sparse areas of the ocean can be achieved.

Robert A. Luke, NOAA National Weather Service, Voluntary Observing Ship (VOS) Program Manager, Stennis Space Center, MS USA

Abstract

The Voluntary Observing Ship (VOS) program and the VOS Climate (VOSCLIM) project are an integral part of the world’s commitment to oceans. Most GOSUD and SAMOS personnel are well aware of the World Meteorological Organization’s Joint Commission for Oceanography and Marine Meteorology (JCOMM) and its sub division of the Ship Observation Team (SOT). The three prongs of the SOT trident’s objective are meteorology, oceanography, and the atmosphere. While the Ship Of Opportunity Program (SOOP) covers oceanographic data, and the Automated Shipboard Aerological Program (ASAP) concerns itself with atmospheric conditions, VOS’s main objective is meteorological data from the oceans. This data is sent into the National Weather Service’s Telecommunications gateway (NWSTG) for routing to the Ocean Prediction Center and the Tropical Prediction Center as well as shared to other national meteorological agencies for their real-time modeling efforts. The data is then shared with the National Climatic Data Center (NCDC) and the International Comprehensive Ocean-Atmosphere Data Set (ICOADS) for data archive and climatological use.

Traditional VOS participants are the transiting merchant vessels that follow the standard trade routes. GOSUD and SAMOS vessels are a prime interest to the VOS data collection efforts, as these ships tend to operate in non-traditional routes and have the potential to provide an important high-resolution complement in real-time and climatological processes. The traditional VOS ships are predominately manual observers that only provide observational information once to twice per day while underway. By incorporating the current automated meteorological sensor suites onboard GOSUD and SAMOS ships with the communication capability of VOS, increased real-time coverage in data sparse areas of the ocean can be achieved.