

Trial operation of shipborne automatic weather station

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The Voluntary Observing Ships (VOS) Scheme is an international programme of the World Meteorological Organization (WMO), under which ships plying the oceans and seas of the world are recruited by national meteorological services for taking and reporting meteorological observations.

To acquire more frequent and timely weather observations over the oceans as well as to reduce the workload of ship officers and minimize errors in coding and transmitting VOS reports, national meteorological services have commenced to install Automatic Weather Station (AWS) on board VOSs since the early 2000's. The number of VOS with AWS increased gradually to around 350 in 2011.

Up to end of 2012, the Hong Kong Observatory (HKO) has not operated any VOSs equipped with AWS on board. With the assistance of the United Kingdom Meteorological Office (UKMO, which operates a number of shipborne AWSs), a shipborne AWS has been installed on board OOCL Long Beach, a Hong Kong VOS, in early January this year for trial operation (Figure 1).



Figure 1. AWS installed on board OOCL Long Beach

The AWS measures air temperature, relative humidity and air pressure once every hour. On completion of each measurement, the data will be transmitted to UKMO at present through the Iridium satellites for processing and insertion onto the Global Telecommunication System (GTS) for global consumption.

