

National Report on Argo-2014

by Republic of Korea

► Deployment in 2014 and Future Plan

Korea Meteorological Administration/National Institute of Meteorological Research (KMA/NIMR) and Korea Institute of Ocean Science & Technology (KIOST) are involved in the International Argo Program since 2001. In July 2014, KMA deployed additional 15 floats in the East Sea/Sea of Japan (11 floats) and southwestern region of Kamchatka Peninsula (4 floats) respectively with the help of 'Araon', the ice breaker from Korea Polar Research Institute (KOPRI). The 57 Argo floats are active in the East Sea/Sea of Japan and the North Pacific Ocean.

KMA has a plan to deploy 17 floats in the East Sea/Sea of Japan in mid-July 2015. One of the floats equipped with DO sensor will be deployed in the East Sea/Sea of Japan. It is expected that KMA is able to continue the float deployment.

► Status of Argo data management

During the period of January to December 2014, 2,332 R-files of KMA were sent to GDAC.

National Fisheries Research and Development Institute (NFRDI)/Korea Oceanographic Data Center (KODC) is responsible for Delayed Mode QC (DMQC). NFRDI/KODC has fixed the format errors reported at the ADMT-15, and the corrected D-files will be uploaded before the AST-16 meeting. NIMR built new data transfer system using 'web service' and 'sftp' for security enhancement at the end of December 2014. Also we additionally have started to broadcast the BUFR format data through GTS since November 2014.

► Research and operational uses of Argo data

KMA has investigated the characteristics of dissolved oxygen as an ocean environmental monitoring in the East Sea/Sea of Japan. In a case of summer season,

dissolved oxygen is minimum in the surface layer and maximum at an oceanic depth of 150m, which corresponds to maximum salinity. The findings are maximum salinity and minimum dissolved oxygen occurred by Tsushima current. The concentration of dissolved oxygen in surface layer was much higher than intermediate water in winter. This result is consisted with the previous findings as marine characteristics in the East Sea/Sea of Japan, which is all the more meaningful in that Argo profile is used for this research.

Web pages

KMA/NIMR is operating the Argo Web site. The URL is:
<http://argo.nimr.go.kr/>