Oceanographic data will now be available worldwide on NIO website: Dr M Rajeevan

Craig McLean, chief scientist, National Oceanic and Atmospheric Administrations (NOAA) addresses during the 2nd India-US Collonquium on Earth Observations and Sciences for Society and Economy at National Institute of Oceanography (NIO), Dona Paula on Monday. (L to R) NIO director prof Sunil Kumar Singh, Edgar D Kagan, Dr M Rajeevan, Sidney Walter Thurston III and Satish Shenoi are also present.

BY A STAFF REPORTER
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Panaji: Oceanographic data will now be easily available worldwide in National Institute of Oceanography (NIO) website. There will be no restrictions of sharing data with the East for security reasons too, said Secretary of Ministry of Earth Sciences (MoES) Dr M Rajeevan during the second India-United States Colloquium on Earth Observations and Sciences for Society and Economy held at NationaI Institute of Oceanography (NIO), Dona Paula on Monday.

"Indian National Centre for Ocean Information Services (INCOIS) in Hyderabad is designated for national data collection. We archive all the data and we make it in such a way that it can be used by any scientist all over India. Now we are going to open source of the data so that it can be easily accessible to any scientist all over the world," said Dr Rajeevan.

While explaining the significance and the reach of the work being jointly carried out by the scientific communities from both countries, Dr Rajeevan said, "The citizens of India benefit from the forecast because of the work we do together in the Indian Ocean. The measurements, the deployments, the models and the work that we have to discuss here on fishing and ecosystem management. These are global challenges, that only a global community can master, the only global community can accommodate and develop solutions."

"Indian ocean observations are very important so we have been putting observations jointly. It is a government rule not to share observations with anyone. But by doing that we are stopping good researchers hence we have decided that this data will be shared with the international community and we will have data from 46 databases of the Indian Ocean," he said.

Indian monsoon is influenced by both Pacific ocean and Indian ocean. The trade will also have an indirect impact on sharing the observations. "There are more advantages than disadvantages. Even if we do not share our observations, the foreign countries can put their own observation. In that case, there is no security as such, so we prefer sharing of data," Dr Rajeevan said.

'Ronald H Brown only ship that can collect hydrographic data across oceans in world'

Ronald H Brown (R 104), only global class research vessel of the US National Oceanic and Atmospheric Administration (NOAA) anchored at Mormugao port on Monday. Pics: Atish Naik

BY NIBEDITA SEN
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Panaji: The global class oceanographic and atmospheric research ship Ronald H Brown is the largest in NOAA's fleet that has the unique facility to collect hydrographic data across the oceans, said senior survey technician Josh Gunter.

"There is no other ship that can collect the hydrographic data across the oceans in the world. We have 30 lab scientists and 17 NOAA ships of which Ronald H Brown is the largest (274-feet). The combined atmospheric and oceanographic sampling capability allows the scientists to observe dynamics at sea and to determine how those dynamics affect climate and global weather patterns," said Gunter.

The ship is equipped with the suite of scientific sensors, including a multibeam echo sounder, sub-bottom profiler, acoustic Doppler current profiler, acoustic positioning system and Doppler radar. "There are five primary laboratories which provide nearly 4000 square feet of dedicated mission space with additional space on deck to support up to nine laboratory vans," Gunter said.

"We have Argo float which goes down 2000 metres to collect salinity data and every 10 days they come up. We collect the data and send it back to shore. We also have drifters that float in the ocean and allows us to get data on a constant basis," said Gunter.

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While explaining the usage of highly advanced instruments and sensors, Gunter said, "Sonar is used in many ways. Generally, we use sonar for nautical chart updates which helps further safe navigation. It also allows us to monitor the sea mouth. Currents in various oceans are monitored easily with the help of the equipment."

"This ship supported a multi-agency two-month study to better understand the west coast drought by focusing on how the region's rain and snow are impacted by the intense moisture bearing winter storms. In 2009, the ship was a part of a two-month investigation of the physical mechanisms that keep the ocean so cold in a large Pacific region," Gunter said.

Ronald H Brown's manoeuvring capabilities provided by a dynamic positioning system enhance the ship's ability to hold its position in the water in seas up to 11-feet, with the wind speed of 27-knots and a 2-knot current. This capability is critical when deploying and recovering deep-sea moorings, supporting remotely operated vehicles and deploying the sensors necessary for successful research.