

Buoys 400 km away helped track Cyclone Phailin

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NEW DELHI: Strategically located buoys, some as far as 400 km from India's coastline, telegraphed via satellite vital data on sea pressure, surface temperature and wind speeds that helped Indian scientists read Cyclone Phailin with unerring accuracy.

The sea-borne platforms add significant muscle to India's capacity to decipher destructive weather systems like Phailin days before they strike the Indian coast, saving thousands of lives by giving local authorities crucial lead time to take pre-emptive action.

At present, there are 14 buoys in the Arabian Sea and Bay of Bengal busily supplying meteorologists, analysts, programmers and researchers a wealth of information.



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India is now looking to step up its scientific capacities by acquiring an aircraft equipped with advanced gadgetry that allows a specialist crew to take readings of clouds and atmospheric exchanges as much as 12-14 km above the earth's surface.

The fruits of a modernization programme has seen the Indian Meteorological Department and the department of earth sciences' various facilities deliver more precise information on the monsoon and weather systems in India's vicinity in the Arabian Sea and Bay of Bengal.

"Observations in the upper atmosphere will help in reading cloud formations and this information is important for our ability to read and predict weather," department of earth sciences secretary Shailesh Nayak said.

The success in tracking Phailin and holding their own against claims by foreign agencies that India could be underestimating the strength of the storms has boosted the confidence of Indian scientists in their modelling and observation data.

The modernization programme, however, needs to be kept on track as reading weather and climate becomes increasingly important to agriculture and assisting disaster management agencies. The human and economic implications of good technology cannot be understated.

Although extreme events like the Uttarakhand cloudburst will continue to challenge Indian science establishments, but the 30 minute updates with data run through super computers in Pune and Ghaziabad led to the government being informed of Phailin's potential impact four days before it arrived at Gopalpur in Odisha.

Assessing the power and the likely path of tropical storms is not an easy task, but the large number of automatic weather stations and satellite pictures, including microwave imagery, is allowing Indian agencies to peep into developing weather systems.