To study atmosphere, IIT-K releases weather balloons

PROJECT INCOMPASS While balloons will collect monsoon related information at different heights, the project is aimed at making monsoon predictions more accurate

HT Correspondent

■ htcity.kanpur@hindustantimes.com

KANPUR: A team of five scientists, including two from United Kingdom (UK), released six weather balloons from the airstrip at the Indian Institute of Technology, Kanpur (IIT-K) here on Wednesday.

The release of balloons, which will continue for two months, is part of ambitious project 'Indian Convective Organisation and Monsoon Precipitation Atmosphere Surface and Sea (INCOMPASS)' undertaken by the IIT-K.

The project is a part of threeyear 'national monsoon mission' a joint venture of union ministry for earth sciences (India) and the national environmental research council (UK).

The team of scientists included a senior professor at the IIT-K Dr SN Tripathi (principal investigator), Professor GS Bhatt of IISC Bangalore, Dr Andy G Turner of University of Reading at UK (principal investigator) and his research scholar Kieron Hunt.

The scientists were assisted in their mission by research scholars at IIT-K Chandan Sarangi, Varunesh Chander, Mithun Krishanan, Geet George and Teerthank Chakraborty.

The four weather balloons were released in the atmosphere in the morning and two in the evening with the objective of studying the temperature, humidity and other monsoon related information at different heights with a view to making the monsoon predictive.

Talking to HT, Turner said the study of atmosphere through weather balloon would continue for two months.

Each day six to eight balloons would be released after every three hours which would transmit data to be collected and studied to make monsoon predictions accurate.

The balloon made of latex contains radio transmitter and sensors for measuring the height of clouds, humidity and



The team of scientists, including Dr AG Turner from UK (fourth from left) and research scholar Kieran Hunt (extreme back) at the weather balloon control tower at IIT-K on Wédnesday; (right) research scholar Chandan Sarangi ready to launch the balloon.

temperature. On the ground, a watch tower has been developed which has Micro Wave radio Meter, Antenna and Ceilometers to receive the transmitted data.

Turner said that during the first year the data would be collected and in the second year the data would be studied and scrutinized for ensuring predictive monsoon.

He further said that at Lucknow the atmospheric studies were being conducted by a specially designed FAAM aeroplane which has been measuring the humidity, moisture, wind pressure and temperature in long distances for the past two weeks. It would also conduct similar studies in Bangalore, he added.

Turner said the monsoon mis-

sion has three projects, including INCOMPASS.

The two other projects are 'South West Asia Aerosol Monsoon Interaction' (SWAAMI) and 'Bay of Bengal Boundary Layer Experiment' (BOBBLE).

SWAAMI aimed at studying the temperature in the environment and at surface. It also aimed at studying the clouds' environment. The BOBBLE aimed at studying the link between water and atmosphere in determining the climate.

A specially-designed ship named 'Sindhu Sadhna' has been making the studies in the Bay of Bengal.

The principal investigator of INCOMPASS in India Dr SN Tripathi, a senior professor at



the IIT-K, said that all the three projects were worth Rs 60 crore.

The Ministry of Earth Sciences in India and National Environment Research Centre, UK would bear 50% budget each, he said.



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Dr SN TRIPATHI, principal investigator, INCOMPASS