Indian Institute of Tropical Meteorology (IITM), Pune
Ministry of Earth Sciences
Govt. of India

Press Release: 5 October 2023

Visit of the Hon'ble Cabinet Minister of Earth Sciences, Govt. of India, Shri Kiren Rijiju at High Altitude Cloud Physics Laboratory (HACPL), Mahabaleshwar (Maharashtra)

***5.10.2023, HACPL, Mahabaleshwar* :** The Hon'ble Cabinet Minister of Earth Sciences, Govt. of India, Shri Kiren Rijiju visited the **High Altitude Cloud Physics Laboratory (HACPL), Mahabaleshwar** on **5 October 2023.**

Indian Institute of Tropical Meteorology (IITM), Pune under the aegis of Ministry of Earth Sciences (MoES) has established three *Atmospheric Research Testbeds (ART)* sites across India viz., **Orographic-ART at Mahabaleshwar (High Altitude Cloud Physics Laboratory - HACPL)** and the Urban-ART focused on the Mumbai Metropolitan region and the core monsoon zone ART in the Central India on ~100 acres of land at Silkheda village in the Sehore District of Madhya Pradesh.

These **ARTs have been established to study the orographic clouds, convection and precipitation processes and cloud-aerosol interactions, monsoon convection and land-atmosphere interactions in central India, organizing observational campaigns and model runs. Aerosol-cloud-precipitation interactions are being studied using in-situ and remote sensing measurements for developing parameterization schemes to improve weather & climate models predictability. Orographic convection, precipitation, and cloud microphysical processes are investigated using in-situ measurements, radar and satellite remote sensing.**

Shri Rijiju visited several advanced atmospheric observing facilities of the HACPL namely, cloud combination probe (CCP), Cloud condensation Nuclei Counter (CCN), High resolution aerosol mass spectrometer (HR-AMS), Single particle Soot photometer (SP2),etc. He interacted with scientists and research scholars.

Project Director, HACPL, Dr. G. Pandithurai briefed the Minister about the research initiatives and achievements of HACPL in the field of weather and climate sciences, and highlighte some important studies. Dr. Pandithurai , while highlighting the achievements of HACPL

HMoES reviewed the various R&D activities being executed by HACPL and discussed future directions.

He interacted with Project Directors of IITM during the visit and emphasized on the need of a scientific mechanism to predict the extreme rain events like cloud burst, hail storms to prevent the damages to agriculture yield and human casualties. Project Director presented the glimpses of

actions that are being taken by setting up of urban radar network in order to better predict these extreme events.

District Collector Shri Jitendra Dudi, Superintendant of Police and other officials also visited HACPL during the Minister's visit.

On this occasion, a tree plantation followed by felicitation to the sanitation workers (for observing Swachhta pakhwada) were carried out at the hands of the Honorable Minister.

A press meet was held at the Le Meridian Hotel at the end of the program.

At the Press Meet, Shri Rijiju informed the media persons about the various new initiatives of the ministry including Deep Ocean Mission (developing manned submersibles) and projects with societal implications for farmers and fishermen. "We have our observatories and research stations in polar region. Our station Himadri in the Arctic was earlier operational only during summer. This was limiting our scientific research and observations. India has now made this station operational throughout the year after a discussion with Norway Government" said Shri Rijiju. He informed the press/media that MoES is constantly working for improving forecast and strengthening necessary infrastructure.

Hon. Minister appreciated the efforts of HACPL team of IITM/ MoES for remarkable scientific studies and observational facilities to carry out for understanding the cloud-aerosol interactions at Mahabaleshwar region (over the Western Ghats) which is at an altitude of 1378m (AMSL).

While addressing the media query, he emphasized on the steps taken to strengthen the prediction of extreme events like cloud burst, flash flood by setting up of more concentrated observational network of dual polar radar systems. He reiterated the Ministry's commitment towards establishing these radar networks especially over the cloudburst prone regions like Himachal Pradesh, Uttarakhand, and North East regions on urgent basis.

"Ministry of Earth Sciences is committed to make India proud and "AtmaNirbhar Bharat" by developing our own radar systems with in the country and developing its own climate and weather prediction models which are being appreciated and recognized by the International scientific communities" he added.

MoES will work on strengthening the coordinated efforts with Ministry of Agriculture by providing necessary précise information regarding the weather and rain to the farmers which will enhance crop yield and hence boasting the country's economic growth. He also suggested to host international events, conferences in Mahabaleshwar to mark it as an international destinations which will be beneficial for promoting the tourism and economic development of the region.

The program ended with thanks to Hon. Minister and Media personnel.

High Altitude Cloud Physics Laboratory (HACPL) at Mahabaleshwar (17.92 N, 73.66 E, and 1378 m above mean sea level) situated on the Western Ghats (WG) region of the state of Maharashtra, India to monitor critical atmospheric parameters and cloud parameters regularly.

High Altitude Cloud Physics Laboratory visit and interaction with Scientists and research scholars.

Interaction with Project Directors of IITM, Collector and Superintendent of Police of Satara District.

Group Photograph at HACPL

Tree plantation by Hon. Minister

Committed to scientific research

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