

No.DS_2B-26001/1/2021-Sec.2

Government of India

Department of Space

* * *

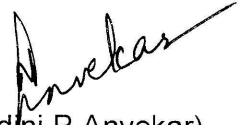
Antariksh Bhavan,
New BEL Road,
Bengaluru-560 094.

November 15, 2021

OFFICE MEMORANDUM

Subject: Monthly Summary of the Department of Space for the month of October, 2021– reg.

The undersigned is directed to circulate herewith a copy of the monthly summary of the Department of Space for the month of October, 2021 for information.


(Nandini P Anvekar)
Director (Budget)

Encl: As above

To:

All Members of Council of Ministers

Copy to : Shri. Bhaskar Dasgupta, Director, Cabinet Secretariat

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE**

**Sub: Monthly Summary of Department of space for the month of
October 2021**

PART- I (Unclassified)

1. Important policy decisions taken and major achievements during the month

A. Satellite Missions:

I. PSLV-C52 / EOS-04 Mission:

PSLV-C52 is scheduled to launch EOS-04, an earth observation satellite in the 4th quarter of 2021. Launch vehicle and satellite integration and testing activities are in progress.

II. PSLV-C53/ EOS-06:

PSLV-C53 is scheduled to launch EOS-06, an earth observation satellite in the 4th quarter of 2021. Launch vehicle and satellite integration and testing activities are in progress

III. Small Satellite Launch Vehicle / EOS-02 :

The first developmental flight of Small Satellite Launch Vehicle, SSLV-D1 is scheduled to launch EOS-02, an earth observation satellite in the 1st quarter of 2022.

B. Earth Observations:

- **Model for Nowcasting of Heavy Rainfall (for IMD/ MoES):** model developed by SAC/ISRO for Nowcasting of heavy rainfall events over Indian region is installed at IMD
- **Earth Observation Application for BIMSTEC region:** ISRO and JAXA jointly mapped 'Aman' (July – December) rice plantation area over Bangladesh using Optical & SAR data combination from IRS Resourcesat-2 and JAXA's ALOS-2, under the new initiative for BIMSTEC region.
- **National Hydrology Project (for MoJS):** Daily snow cover maps over Himalaya, national level daily Actual Evapotranspiration (AET) products and daily simulated water balance components were generated, web-published & shared with Project Management Unit of NHP, Ministry of Jal Shakti. Spatial flood forecast models for Tapi and Godavari basins are being run in real time using rainfall data and WRF data from IMD. Flood forecasting alerts and spatial inundation simulations were disseminated through Bhuvan, NDEM and NHP geoportals.
- **Agriculture Technology Project (for Govt. of Maharashtra):** Statistics of crop area affected due to heavy rain was generated for Nagpur, Buldana, and Nanded districts of Maharashtra and provided to the user. ML based model incorporating remote sensing inputs for estimation of Soybean yield is generated and is under validation.

- **Crop Insurance Decision Support (for AICIL):** Aman Rice maps for current year were prepared for Alipurduar, Bankura and Birbhum districts of West Bengal. Using historical data, the weights for different parameters used in Crop Health Factor (CHF) index were revised for the current season's CHF model for Aman paddy crop.
- **Biodiversity characterization at community level in India using Earth observation data (for DBT):** the progress of the project was presented to the Project Monitoring Committee constituted by DBT in its fourth meeting. Prototype method is developed for community level classification using multi-source remote sensing data, for Purna wildlife sanctuary. **Geoportals:** (i) **Bhuvan Lite**—"My Location" feature is enabled (ii) **MOSDAC**- Dissemination of Solar and Wind forecast to POSOCO (iii) **VEDAS**- "Geospatial Calculator" is implemented as a web processing service that allows user defined operations to be performed on a set of satellite images.
- **Geospatial Training:** Conducted a 2-week customized course on 'Mapping of Estates Boundaries using Remote Sensing & GIS' for 'Directorate General Defence Estates', MoD.
- **Disaster Management Support Programme (for MHA, NDMA, SDMAs):**
 - **NDEM.V.4:** (i) Development of Mobile version of NDEM portal: design of NDEM Lite is completed and modifications & enhancements are in progress (ii) Integration of Storm Surge Products is automated to download and publish the storm surge products into NDEM framework.
 - **Near Real Time Flood Mapping & Monitoring:** Floods due to heavy rains and rising water levels in the states of AP, UP, Bihar, Kerala & Odisha were mapped and monitored using multi-mission satellite data.
 - 8 inundation maps were generated utilizing the various multi-mission satellite datasets and disseminated to MHA, NDMA, SDMAs, etc.
 - **Flood Hazard Atlas:** Preparation of District-wise flood hazard maps of Uttar Pradesh state is in progress. Suggestions from Govt. of West Bengal are incorporated in the Flood Hazard Atlas for West Bengal
 - **Monitoring Agriculture Residue Burning:** Daily report of active agriculture fires for 4 States viz., Punjab, Haryana, Rajasthan and Uttar Pradesh during kharif season are disseminated to MoEFCC & CPCB.
 - **Landslide Susceptibility Map for North Eastern Region:** Landslide susceptibility map of Manipur is finalized. **Landslide Inventory:** Database of landslides triggered due to heavy rains in Kerala and Uttarakhand are being generated. Major landslides are mapped in Kerala and Uttarakhand, and are disseminated to the stakeholders, including GSI.

- **International Charter (IC)/ Sentinel Asia:**
 - 10 IRS satellite datasets were provided for Sentinel Asia and International Charter activations.
 - Sentinel Asia data acquisition is activated for monitoring and mapping of floods in Kerala state
- **Satellite Data Acquisition and Dissemination:** 1,902 satellite passes were acquired and archived. 2,44,834 IRS data products were disseminated, including 3,941 products through data supply chain and 2,40,893 products as free downloads through Bhuvan& MOSDAC.

C. Capacity Building:

1.	4 weeks MEA sponsored eITEC course on G.I.S completed successfully on October 22, 2021 in Hybrid mode.	64 participants (from 24 countries) Nominated by MEA
2.	Course on MOEF&CC sponsored training for IFS officers on advances in RS, GIS & GNSS applications in forestry (04-08 Oct)	28 IFS Officers
3.	Course on "Geospatial inputs for Enabling Master Plan Formulation for AMRUT sub scheme" (11 Oct)	6491 Participants from 831 Institutes
4.	Course on "Basics of Geographical Information System" (Sept 27- Oct 22)	7629 participants from 824 institutes

D. International Cooperation:

- ISRO Official participated in the MTCR Plenary session at Sochi, Russia during Oct 4-8 as part of the 5-member Indian delegation led by Director (D&ISA), MEA and participated in the discussions to amend MTCR Technical Annex.
- Seven member ISRO delegation participated in the 'Space Week' events organised as part of Dubai World Expo 2020 during Oct 17-23.
- Twenty member ISRO/DOS delegation led by Chairman ISRO/ Secretary DOS participated in the 72nd International Astronautical Congress (IAC-2021) at Dubai during Oct 25-29.
- ISRO initiated discussions with National Metrology Institute, Germany for installing NavIC timing receiver in their facilities and the agreement for the same is being negotiated.
- A new HD television channel is being installed in Bhutan using the **South Asia Satellite ground station** for broadcasting educational videos for the children and youth of Bhutan

2. Compliance of CoS Decisions:

No of CoS decisions pending for compliance	Proposed action plan/time lines for compliance of CoS decisions	Remarks
3942/12 5205/5	Under implementation	—
4600/8 5205/1 5205/2 5205/3 5205/6 5291/1	Under consideration	

3. No of Cases of “Sanction for Prosecution” pending for more than three months :- NIL

4. Particulars of cases in which there has been a departure from the Transaction of Business Rules or established policy of the Government: - NIL

5. Status of implementation of e-Governance

Total No. of files	Total No. of e-Files
1146	689

6. Status of Public Grievances:

No. of Public grievances readdressed during the month	No. of Public Grievances pending at the end of the month.
65	127

7. Status of Compliance of ACC’s directions on ACC Vacancy Monitoring System.

The detailed status regarding all the posts pertaining to Department of Space has been updated on AVMS. The status of updation of vacancy as on 31.10.2021 is as follows:

- Total number of posts required to be entered on AVMS: - 26
- Number of posts filled as on date: - 22
- Number of posts totally vacant as on date: - 04
- Number of posts under premature repatriation - 00
- Number of posts under additional charge arrangement: - 01
- Number of posts that would fall vacant during the next 06 months: -05

* * *