

GOVERNMENT OF INDIA
DEPARTMENT OF SPACE

**Sub: Monthly Summary of Department of space for the month of
January 2022**

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 1st quarter of 2022. 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 1st quarter of 2022. 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:

- **Forest Above Ground Biomass (for FSI/ MoEF&CC):** Forest Above-Ground Biomass (AGB) map of India has been prepared and released jointly by the Forest Survey of India (FSI) and SAC/ ISRO. ***Details are published as a chapter in the India State of Forests Report (ISFR) 2021***, released by the Hon'ble Minister of Environment, Forests and Climate Change (MoEF & CC) on January 13, 2022.
- **Sea Ice Advisories (for MoES):** Sea ice advisories identifying optimum route were provided to the voyage leader of 41st ISEA and NCPOR for sailing through the dense pack ice region surrounding Bharati Research Station. Web-based system (https://vedas.sac.gov.in/vstatic/ship_nav/index.html) was used for advisory.
- **National Hydrology Project (for MoJS):** Open Path Eddy Covariance systems are made operational at 10 flux tower locations across the country, and data is received live on Bhuvan server at every half-an-hour from all 10 flux tower sites.
- **Monitoring Watersheds using Geospatial Technologies (IWMP, for MoRD):** 650 High resolution data satellite scenes of 2019-20 have been shared with respective States for monitoring the impact of watershed development interventions.
- **Agriculture Technology Project (for Govt. of Maharashtra):** Circle-wise Rabi Sowing progression of Maharashtra state is mapped for last four years

and mapping of rabi crop progress for 2021-22 is under progress. Kharif crop harvest progress for kharif 2021 is analysed and statistics is generated at division, district, taluka and circle level.

- **Crop Insurance Decision Support (for AICIL):** Aman paddy crop health index generated using Remote sensing based inputs for West Bengal.
- **Bhuvan Panchayat Web Portal (for M/o Panchayati Raj):** Geospatial tool developed for generation of Land and Water Resources Development Plan. Case study for testing the tool is also completed.
- **Biodiversity characterization at community level in India using Earth observation data (for DBT):** Analysis of decadal forest cover change is completed for Biligirirangan hills.
- **Coral Reef Habitat (for DBT):** Coral reef habitat map has been generated for Maharashtra coast using IRS LISS-IV images.
- **Use of Geoinformatics in Rural Road Projects Under PMGSY (for MoRD):** Bhuvan Web portal-based PMGSY module is developed and tested. Updated Geo-spatial road layer and attribute database for 15 states, along with report on habitation buffer and district-wise summary are published on Bhuvan portal.
- **Air Quality information using Space inputs (DoS, R&D):** Annual averages of pollutant gases such as NO₂, SO₂, O₃ and its change hot-spots for four-year (2018-2021) were derived over Indian sub-continent using space-borne data.
- **Arctic Sea Ice Extent (DoS, R&D):** Analysis of long-term time series of Arctic sea ice extent data (2009-2016) using daily sea ice extent data from space-borne scatterometer data was carried out to generate yearly database of layers showing spatial distribution of total days covered with sea ice.
- **Geoportals - Bhuvan:** (i) Geo-spatial Agro-forestry Suitability index generated for the country using various thematic inputs (ii) URL with state-wise and user-wise planning statistics for MGNREGA activities is made live. **Bhoonidhi:** (i) Beta version of Bhoonidhi Vista is released (ii) Multi sensor merged/stereo data search & ordering; Order Cancellation for individual products; New login Page etc. are deployed for testing on Bhoonidhi portal. **MOSDAC:** Global Ocean Current Image Gallery is released. **VEDAS:** Operationalized Antarctica Sea Ice Advisory
- **Disaster Management Support Programme (for MHA, NDMA, SDMAs):**
 - **National Database on Emergency Management (NDEM):** Multilingual label translation capability is added. NDEM Lite design is completed and modifications & enhancements are in process
 - **Near Real Time Flood Mapping & Monitoring:** Automation of flood mapping process is initiated.
 - **Flood Hazard Atlas** preparation for West Bengal state is completed and input from CWC & IMD are being incorporated in the flood hazard atlas of UP.

- **Forest Fire:** Daily near real time (satellite pass-wise) operational active forest fire detection (for entire India) are disseminated to FSI and concerned States.
- **Satellite Data Acquisition and Dissemination:** 2,272 satellite passes were acquired and archived. 2,18,151 data products were disseminated, including 2,119 products through data supply chain and 216032 products through Bhuvan & MOSDAC

C. Capacity Building:

1.	Course on “ Geospatial technologies for disaster risk reduction” (03-07 Jan, 2022)	82 nominated members from BIMSTEC member countries
2.	Course on “Overview of Geoprocessing using Python” (17-18 Jan, 2022)	14950 participants from 1257 Institutes

D. International Cooperation:

- “Memorandum of Understanding between Indian Space Research Organisation (ISRO) and Mohammed Bin Rashid Space Centre (MBRSC) regarding co-operation in the exploration and use of outer space for peaceful purposes” was signed on January 05, 2022.
- “Implementing Arrangement (IA) between ISRO and Australian Space Agency relating to cooperation on establishing and operating transportable telemetry terminals in the Cocos (keeling) Islands, Australia for the Gaganyaan human space flight mission” was signed on December 10, 2021/ January 07, 2022.
- ISRO officials participated in the panel discussion on Space Radiation, organised as part of IUSSTF-sponsored INDO-US workshop on January 27,2022.
- ISRO provided inputs to ‘Compendium on Space Debris Mitigation Standards’ to UNOOSA in preparation to the upcoming 61st session of the Legal Sub-Committee.

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	Under implementation	—
4600/8 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
941	613

6. Status of Public Grievances:

No. of Public grievances readdressed during the month	No. of Public Grievances pending at the end of the month.
32	118

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 31.01.2022 is as follows:

- Total number of posts required to be entered on AVMS: - 26
- Number of posts filled as on date: - 20
- Number of posts totally vacant as on date: - 06
- Number of posts under premature repatriation - 00
- Number of posts under additional charge arrangement: - 03
- Number of posts that would fall vacant during the next 06 months: -04

* * *