

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE**

Sub: Monthly Summary of Department of space for the month of May 2022

PART- I (Unclassified)

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

A. Satellite Missions:

I. CMS-02 (GSAT-24) Mission

NSIL is undertaking its "1st Demand Driven communication satellite mission" named CMS-02, which shall be launched by M/s. Arianespace during 2nd quarter of 2022. The entire satellite capacity on-board CMS-02 will be leased to its committed customer M/s. Tata Sky for meeting their DTH application needs.

II. PSLV-C53/DS-EO

PSLV C53 is the second dedicated commercial launch mission of NSIL. It is carrying DS-EO satellite, along with two co-passenger satellites from Singapore and six other payloads aboard the PS4 orbital platform.

III. PSLV-C54/ EOS-06:

PSLV-C54 is scheduled to launch EOS-06, an earth observation satellite in the 3rd quarter of 2022. Integration and testing activities of launch vehicle and satellite are in progress.

IV. 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 3rd quarter of 2022.

V. RLV-LEX Mission

First runway landing experiment [RLV-LEX] of Reusable Launch Vehicle – Technology Demonstrator is scheduled in the 3rd quarter of 2022 from Aeronautical Test Range, Chitradurga, Karnataka.

B. Earth Observations:

- **Agriculture Technology Project (for Govt. of Maharashtra):** A web-enabled sowing & harvest monitoring tool is tested for duration since 2017 for analyzing the consistency and sensitivity of the model. Soybean yield at circle level was estimated using Machine Learning (ML) and Crop Simulation Model (CSM) for all the soybean growing areas of Maharashtra
- **Crop Insurance Support (for AICIL):** Crop Health factor of mustard for 13 districts of West Bengal was finalized and submitted to the AICIL.

- **National Hydrology Project (NHP, for M/o Jal Shakti):** Progress was reviewed by Senior Joint Commissioner, NHP. A training programme on “Eddy Covariance Flux Tower Data Processing” was organized for the 35 participants from 10 partner institutes.
- **Biodiversity characterization at community level in India using Earth observation data (for DBT):** Spatial analysis of decadal changes to the regional forest landscape is in progress.
- **GeoMGNREGA (for MoRD):** Bhuvan-Yuktdhara planning portal is being integrated with MoRD’s MIS. Procedure for integrating the planning tool in Yuktdhara has been finalised.
- **Bhuvan Geoportal:** (i) Waterbody information system Version 2 is made live (ii) Full India Mosaic of IRS AWiFS 2022 (April) data is generated and published (iii) Updated GeoMGNREGA mobile application has been shared with State MGNREGA teams for testing.
- **Disaster Management Support Programme (for MHA, NDMA, SDMAs):**
 - **National Database on Emergency Management (NDEM):** NDEM Lite Version design is completed
 - **Near Real Time Flood Mapping & Monitoring:** Floods were monitored & mapped in the Assam State; 4 flood inundation maps were generated and shared with the MHA and ASDMA. Preparedness for the upcoming flood season has been presented during the review meeting organised by MHA
 - **Forest Fire:** Multiple-daily detections of active forest fire have been done and disseminated to FSI and concerned States
 - **Sentinel Asia:** Emergency request pertaining to Philippines Floods & landslides was processed and IRS data was provided for the same.
- **Satellite Data Acquisition and Dissemination:** 2,342 satellite passes were acquired and archived. About 24,100 satellite data products were downloaded through Bhuvan portal and 3,899 products were disseminated through data supply chain

C. Capacity Building:

1.	“Space Technology and Applications” for school teachers (from 23-27 May, 2022)	2003 teachers from 34 States & UTs attended
2.	“AI for Earth Observation & Geodata handling and processing” (from 02-13 May, 2022)	2674 participants from 478 institutions

3.	Workshop on "Status, challenges & opportunities for geospatial technology applications in irrigation water management" (May 17, 2022)	2143 participants from 449 institutions
4.	Workshop on "Planetary Exploration of the Moon: Findings from Indian Remote Sensing Missions" (May 20, 2020)	2687 participants from 390 institutions

D. International Cooperation:

- As part of the India- Bhutan joint satellite realisation project, Chairman ISRO/Secretary DOS inaugurated the training programme for Bhutanese engineers on satellite data processing and applications on May 06.
- Secretary, DOS/ Chairman, ISRO and President of Italian Space Agency (ASI) signed and exchanged letters on forming joint steering committee and joint working groups to further enhance the space cooperation in Earth Observation and Space Exploration.
- Secretary, DOS/ Chairman, ISRO along with the heads of Agencies from AEB/Brazil, Roscosmos/Russia, CNSA/China and SANSAS/South Africa virtually participated in the first meeting BRICS Remote Sensing Satellite Constellation (RSSC) Joint Committee on May 25.
- Indian delegation participated in the first session of the Open Ended Working Group established by UN General Assembly on reducing space threats through norms, rules and principles of responsible behaviour during May 09-13 at Geneva.

2. No of Cases of 'Sanction of Prosecution' pending for more than three months:
NIL

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

4. Status of ongoing Swachhta Abhiyan (progress under Special Campaign):

The Department has formulated the Swachhta Abhiyan Plan for the year 2022 and under this Swachhta Pakhwada was celebrated from 01.02.2022 to 15.02.2022 across DOS/ISRO Centres/Units Autonomous Bodies. The evaluation for the best maintained Centre/Unit/Autonomous Body is under process.

5. Status of Rationalisation of Autonomous Bodies:

EMC has recommended that SCL and NARL be governmentalized out of which SCL has been transferred to MeitY during the year 2021-22. The recommendations of the committee in respect of NARL is under review.

Action is being initiated to bring all the AB's under the Department namely, IIST, PRL, NARL & NESAC under Treasury Single Account before the end of financial year 2022-23.

6. Information on specific steps taken for utilisation of the Space Technology based tools and applications in Governance and Development:

- **M/o Rural Development:** Under the Integrated Watershed Management Programme (IWMP/WDC-PMKSY) for monitoring Watersheds using Geospatial Technologies, 20 High resolution data satellite scenes have been shared with respective States for monitoring the impact of watershed development interventions and 515 summary reports were generated.
- **MoEF&CC and CPCB:** Monitoring Agriculture Residue Burning- Daily report of active agriculture fires for 4 Indian states viz., Punjab, Haryana, Rajasthan and Uttar Pradesh is being generated and disseminated to MoEF&CC and CPCB.

7. Vacancy position of senior level appointments in the Ministry/Department including Autonomous Bodies/PSUs:

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 31.05.2022 is as follows:

- Total number of posts required to be entered on AVMS: - 24
- Number of posts filled as on date: - 19
- Number of posts totally vacant as on date: - 05
- Number of posts under premature repatriation - 00
- Number of posts under additional charge arrangement: - 04
- Number of posts that would fall vacant during the next 06 months: -01

8. List of cases in which ACC directions have not been complied with :- NIL.

* * *