

**GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE**

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

**PART- I (Unclassified)**

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

**A. Satellite & Launch Vehicle Missions:**

**I. LVM3-M2/OneWeb India-1 Commercial Mission**

The first dedicated commercial mission of LVM3 [LVM3-M2/OneWeb India-1] took place on Sunday, 23<sup>rd</sup> October, 2022, deploying 36 satellites of OneWeb, marking the successful completion of one of the biggest commercial orders by ISRO & NSIL. With this successful launch, the LVM3 has become a catalyst for the Indian Space Programme, opening new vistas for heavy payloads to the LEO.

**II. PSLV-C54/EOS-06 Mission:**

PSLV-C54 is scheduled to launch EOS-06, an earth observation satellite in the 4<sup>th</sup> quarter of 2022. Launch Campaign for PSLV C54 has commenced and various activities pertaining to spacecraft integration and tests are in advanced stages of progress for the scheduled launch.

**III. RLV-LEX Mission**

First runway landing experiment [RLV-LEX] of Reusable Launch Vehicle – Technology Demonstrator is scheduled in the 4<sup>th</sup> quarter of 2022 from Aeronautical Test Range, Chitradurga, Karnataka.

**B. Earth Observations:**

- **Agriculture Technology Project (for Govt. of Maharashtra):** Kharif crop sowing progress is being mapped and first estimate of 2022-23 kharif sown area is validated with ground based information. For technology-based yield estimation for soybean, cotton and paddy, crop layers of past 3 years have been analysed.
- **Crop Insurance Support (for AICIL):** Prevented/ failed transplanting area of Aman paddy in West Bengal is analyzed using temporal SAR data.
- **National Hydrology Project (NHP, for M/o Jal Shakti):** (i) Daily actual evapotranspiration (AET) and fortnightly & monthly average & maximum composite AET maps are generated and disseminated (ii) flood forecast models for Godavari and Tapi basins were run in real time during Sep-Oct, 2022. Computed flood hydrographs/ flood forecast (current day + 2 days) at 13 CWC stations for Godavari basin and 12 stations for Tapi basin were disseminated through Bhuvan, NHP and NDEM portals in near real time
- **GeoMGNREGA (for MoRD):** Completed action plans from respective state resources have been uploaded on to the Bhuvan portal. Evaluation of integration of rule sets onto Yuktdhara for semi automated planning assistance portal has been carried out.



- **Bhuvan Geoportal:** (i) Developed and implemented algorithm for analyzing Emerging Hot Spots based on decadal Land Use/ Land Cover datasets (ii) Draft Night Time Light Atlas for Indian states has been generated.
- **Disaster Management Support Programme (for MHA, NDMA, SDMAs):**
  - **National Database on Emergency Management (NDEM):** (i) 3D visualization and rendering is completed for entire country and integrated into NDEM framework (ii) Incident reporting module is designed to allow NDRF users to report new incidents & option is provided to add / edit historical incidents
  - **Near Real Time Flood Mapping & Monitoring:**
    - ❖ Floods in Bihar, Uttar Pradesh, and Odisha were monitored using satellite data. About 29 flood maps and 25 value added products were prepared using satellite datasets and provided to the concerned.
  - **Burnt Area mapping due to Forest fire:** has been carried out for 2022 forest fire season
  - **Support to Sentinel Asia:** Provided four IRS datasets to emergency requests from Sentinel Asia pertaining to Earthquake (Taiwan), floods (Philippines & Vietnam) and landslides (Nepal)
  - **Detection of lightning phenomena and associated processes:** Preliminary map of lightning vulnerability based on 2 years of data has been generated
- **Satellite Data Acquisition and Dissemination:** 2,391 satellite passes were acquired and archived. About 19,750 satellite data products were downloaded through Bhuvan

#### **C. Capacity Building:**

1.	"Geo-data sharing and Cyber Security" (17 - 22 Oct, 2022)	5546 participants from 716 institutions
2.	"Applications of geospatial technology in paleo- channel studies: Potential & Future Trends" (11 Oct, 2022)	1118 participants from 295 institutions
3.	"Overview of Geographical Information System" (03-27 Oct, 2022)	3835 participants from 497 institutions

#### **D. International Cooperation:**

- Chairman, ISRO/ Secretary, DOS inaugurated the 3<sup>rd</sup> batch of UNNATI training programme on October 17, 2022 at URSC. The batch has 30 officials from 20 countries.
- Chairman, ISRO/Secretary, DOS participated in the 3<sup>rd</sup> edition of Space Economy Leaders Meeting of G20 countries in virtual mode organized at Jakarta, Indonesia on October 27, 2022.



- A Two-member ISRO delegation attended the 40<sup>th</sup> Inter-agency Space Debris Coordination Committee (IADC) held at Jeju Island, South Korea during October 10-14, 2022.
- A five-member ISRO delegation led by Director, SAC participated in ICG-16 annual meeting organized by UNOOSA in Abu Dhabi, UAE during Oct 9-14, 2022.

**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):**

Based on the Swachhta Action Plan for the year 2022, Centres/Units/ABs/CPSEs of DOS/ISRO are carrying out various activities meticulously. Apart from this, Swachhta Pakhwada Award 2022 for the best maintained Centre/Unit/AB/CPSE are also being finalized. Also, as a part of Special Campaign 2.0, 23 campaign sites across various Centres/Units/ABs/CPSEs of DOS/ ISRO have been identified and cleanliness campaign has been implemented.

**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 review of NARL is underway.

Treasury Single Account(TSA) has been implemented in PRL, NESAC , NARL and IIST, ABs under DOS

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

**Support to Ministries/ Departments**

- **M/o Rural Development:** Under the Integrated Watershed Management Programme (IWMP/ WDC-PMKSY) for monitoring Watersheds using Geospatial Technologies, 800 satellite images were provided to the states. 5,000 locations of watershed development interventions have been geotagged (cumulative 16.66 lakh geotags) and 290 summary reports were generated.
- **Ministry of Environment Forest and Climate Change and Central Pollution Control Board:** Daily reporting of active agriculture fires initiated for kharif 2022



season. Reports are disseminated for 4 Indian states viz., Punjab, Haryana, Rajasthan and Uttar Pradesh.

- **MoH&UA:** Final version of urban geospatial database for 6 AMRUT cities have been delivered (cumulative completion: 218 / 238).

**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 31.10.2022 is as follows:

- Total number of posts required to be entered on AVMS: - 24
- Number of posts filled as on date: - 21
- Number of posts totally vacant as on date: - 03
- 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: -00

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

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