

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE**

Sub: Monthly Summary of Department of Space for the month of December, 2018

PART- I (Unclassified)

1. Important Policy decisions taken and major achievements during the month,

A. Satellite Missions:

I. GSAT-11 MISSION:

GSAT-11, advanced communication satellite was successfully launched on December 05, 2018 from Kourou launch base, French Guinea by Ariane-5 VA-246. The satellite is positioned in its designated geostationary orbit and is performing satisfactorily.

II. GSLV-F11 / GSAT-7A MISSION:

GSLV-F11 successfully launched GSAT-7A, communication satellite on December 19, 2018 from Satish Dhawan Space Centre SHAR, Sriharikota. The satellite is placed in its designated orbit and is performing satisfactorily.

III. PSLV-C44 / MICROSAT-R MISSION:

Vehicle Integration activities are in-progress. Microsat - R is an experimental satellite. Propulsion integration activities are in progress. The launch is planned in last week of January 2019.

IV. GSLV Mk III M1 / CHANDRAYAAN-2 MISSION:

GSLV Mk III M1 will carry Chandrayaan-2, India's second mission to the Moon comprising of indigenous Lander (Vikram), Rover (Pragyaan) and Orbiter modules. Assembly, Integration and testing of these modules is in progress. L110 stage is positioned at SDSC SHAR and C25 stage transported to SDSC SHAR. Launch is planned in 1st quarter of 2019.

V. GSAT-31:

GSAT-31, a communication satellite is planned to be launched by a procured launcher from French Guinea. The spacecraft is scheduled for launch in 1st quarter of 2019.

B. Earth Observation

S.N	Project/Program	Achieved in this month	Cumulative achievement
1.	Geo-MGNREGA (Geotags of activities / assets)	No. of Geotags	
		5 Lakhs in Phase-I (accepted) 0.96 Lakh in Phase-II	3.33 Crore in Phase-I 3.96 Lakhs in Phase-II
2.	IWMP-86,000 micro-watersheds – Geotags of Watershed Development Interventions	No. of Geotags& Impact Report	
		0.10 Lakh 300 Impact assessment reports under evaluation	9.78 Lakh 600 Impact assessment reports
3.	Housing for All (Urban) (Monitoring of construction of beneficiary houses)	No. of houses geotagged	
		3.12 Lakh	38.97 Lakh
4.	AMRUT Programme (Urban geospatial data for Master Plan preparation)	Very High Resolution Data: 34 Cities Ortho-Image: 9 Cities Geospatial Database: 41 in progress	170 Cities 91 Cities 19 Cities

I. Evaluation of Hyperspectral data from HYSIS mission

- Quality evaluation of VNIR & SWIR products from HYSIS are being carried out since 5th December 2018. Geometric accuracy, targeting accuracy and Dynamic range are evaluated for the scenes over Indian region. Radiometric response over Desert sand and snow was evaluated.

II. Land Use/ Land Cover (23m resolution, 3rd Cycle)

- Satellite data interpretation completed at national level. Post-quality check corrections are done for 95% of area.

III. Land Use/ Land Cover (56m resolution, 15th Cycle)

- Processing of kharif season 2018 data is completed (514 quadrants processed) till November 2018.

IV. National Hydrology Project

- Quality checking of the glacial lakes' database carried out for Indus, Brahmaputra and Ganges basins (23,500 glacial lakes mapped)

V. Crop Area Assessment

- Satellite remote sensing study carried out for Kharif season Maize and Bajra crops in Chindwara, M.P. and Barmer, Rajasthan.
- The preliminary estimate indicates 1,83,819 ha of Maize and 8,01,531 ha of Bajra area.

VI. Installation of Ceilometer

- A ceilometer was installed at NARL, Gadanki, Tirupati, for detecting aerosol and multiple cloud layers in the atmosphere.

VII. Geoportals:

Bhuvan

- Geospatial inputs for 31st meeting of PRAGATI were prepared and provided to PMO. Nine projects were updated with geospatial inputs onto Bhuvan-Pragati portal.
- High Resolution satellite data of year 2017 is made available in Bhuvan-2D application for visualization

MOSDAC& VEDAS:

- Near Real-time update provided for Center, track and intensity and inundation forecast for PHETHAI Cyclone.
- Operationalized new SCATSAT-1 browse Products visualization in MOSDAC Gallery.

VIII. Disaster Management Support program:

Integrated Control Room for Emergency Response (ICR-ER)

- Meetings were held with DM&IS Divisions of MHA for requirement finalization.
- Efforts are being made to provide civil and infrastructure related RFPs

Data Processing Platform for UN International Charter

- Efforts are made to develop prototype charter processing platform through VEDAS portal
- Automatic data ingestion, visualisation and processing are being enabled

Cyclone

- Activated Sentinel Asia and International charter for monitoring Phethai cyclone.
- Two inundation maps were sent to AP State Disaster Management Authority.

Landslides

- Mapping of landslides in 23 districts of Kerala, Karnataka and Tamil Nadu that occurred due to August 2018 rainfall completed. Approximately 1840 additional landslides (total 6970) were mapped.

C. Capacity Building

Category	No. Of Participants
Short course on RS, GIS & GNSS Application in Biodiversity characterization	15
RS, GIS & GNSS Application in Biodiversity characterization	42
Geospatial Technologies and Applications	27

D. International Cooperation:

- Implementing Arrangement between ISRO and CNES on Space Geodesy Activities and Applications was signed on December 02, 2018.
- Implementing Arrangement between ISRO and NASA for cooperation on the Chandrayaan-2 Mission was signed by ISRO on December 26, 2018, and sent to NASA for signature.
- ISRO-JAXA Implementing Arrangement concerning collaborative activities on the radio occultation experiment in JAXA's Venus orbiter mission Akatsuki (Planet-C) was further extended for five years (upto Dec 31, 2023).
- Agreement between ISRO and EUMETSAT on the cooperation in exchange, redistribution and utilisation of data and products from meteorological and ocean satellites in support of weather analysis and forecasting and other related areas was further extended for five years (upto January 19, 2024).
- A total of 32 candidates from 18 countries (Algeria, Argentina, Azerbaijan, Bhutan, Brazil, Chile, Egypt, Ethiopia, Indonesia, Kazakhstan, Malaysia, Mexico, Mongolia, Morocco, Myanmar, Oman, Panama & Portugal) are shortlisted for the first batch of UNNATI training programme to be conducted during January 16 to March 15, 2019.
- ISRO participated in the workshop on South Asia Satellite (SAS) ground segment, applications and utilization held on December 11, 2018 at New Delhi with the technical specialists from Afghanistan, Bangladesh, Bhutan, Maldives, Nepal, Sri Lanka highlighting the current status and future needs on the SAS utilization.

2. Compliance of CoS Decisions:

No of CoS decisions pending for compliance	Proposed action plan/time lines for compliance of CoS decisions	Remarks
180/4 3942/12 3923/14 4075/1 4120/3	Under implementation Status is being uploaded on a time bound manner in the online portal of e-Samiksha.	—

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
1069	601

6. Status of Public Grievances:

No. of Public grievances readdressed during the month	No. of Public Grievances pending at the end of the month.
78	267

7. Information on the specific steps taken by the Ministry/Department for utilization of the Space Technology based tools and applications in Governance and Development.

- 127 (out of 157) Space Technology projects are progressing as per schedule.

8. 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 31.12.2018 is as follows:

- Total number of posts required to be entered on AVMS: - 19
- Number of posts filled as on date: - 18
- Number of posts totally vacant as on date: - 0
- Number of posts under additional charge arrangement: - 0
- Number of posts that would fall vacant during the next 06 months: - 0
