

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE**

LOK SABHA

UNSTARRED QUESTION NO. 2909

TO BE ANSWERED ON WEDNESDAY, AUGUST 05, 2026

**ISRO'S ROLE IN FLOOD MAPPING AND DISASTER RESPONSE IN
ASSAM**

2909. SHRI GAURAV GOGOI:

Will the PRIME MINISTER be pleased to state:

- (a) the details of the frequency and resolution of Indian Space Research Organisation (ISRO) satellite flood mapping data provided to Assam State Disaster Management Authority during the years 2025 and 2026 monsoon seasons;**
- (b) the average time lag between satellite data capture and its delivery to State Disaster Management Authorities in Assam**
- (c) whether real-time or near-real-time satellite flood monitoring is currently available for the Brahmaputra basin and if so, the details thereof; and**
- (d) the steps being taken by the Government to improve the timeliness and district-level granularity of ISRO flood data for Assam?**

ANSWER

**MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC
GRIEVANCES & PENSIONS AND IN THE PRIME MINISTER'S OFFICE**

(DR. JITENDRA SINGH):

- (a) During the 2025 monsoon season, 45 flood inundation maps & value-added products and during 2026 monsoon season (up to 28 July 2026), 33 flood inundation maps & value-added products were provided to Assam State Disaster Management Authority (ASDMA), covering major floods in the State. ISRO's EOS-04 (RISAT-1A) Microwave satellite data (18m spatial resolution) and Resourcesat 2/2A LISS-IV & AWiFS data (5.8 m & 56m resolution) were used for generating these products. High resolution satellite data of Cartosat-2E PAN & Multispectral (0.65 & 1.6m spatial resolution) and Cartosat-3 PAN & Multispectral (0.28 & 1.1m spatial resolution) are used in damage assessment and in preparing value added products.**
- (b) The satellite-based flood inundation maps are disseminated to the concerned disaster management authorities within 5 to 6 hours turn-around-time after acquiring the satellite data.**
- (c) ISRO provides Near Real-Time (NRT) satellite-based flood monitoring for the Brahmaputra Basin. The flood inundation maps & value-added products generated during 2026 for Assam, using Synthetic Aperture Radar (SAR) and optical satellite data were disseminated through the National Database for Emergency Management (NDEM), Bhuvan platform, and directly to the Assam State Disaster Management Authority (ASDMA).**
- (d) ISRO has undertaken several initiatives to improve the timeliness and district-level granularity of flood information for Assam, including use of globally available satellite data, development of semi-automated sensor specific data**

processing algorithms & flood mapping work-flows, and generating flood reports at district level. The spatial flood inundation data is published in NDEM portal for visualisation at district / sub-district level. High resolution satellite data is used to assess flood damage at district level, subject to the availability of cloud free satellite data.
