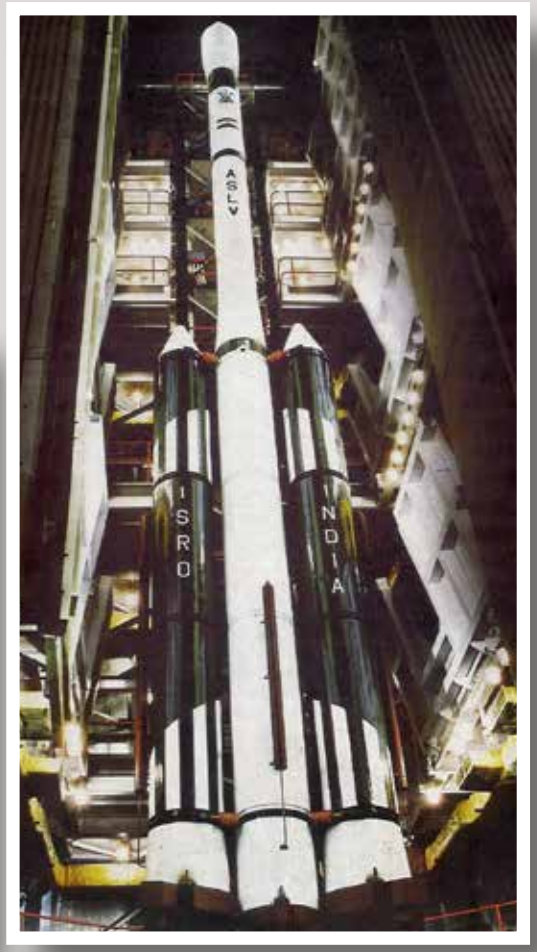
ASLV-D2 / SROSS-2 Mission

13 July, 1988

THE MISSION

ASLV-D2 carrying on-board the SROSS-2 lifted-off from the Satish Dhawan Space Centre (SDSC) SHAR, Sriharikota on July 13, 1988. SROSS-2, the second satellite in the Stretched Rohini Satellite Series carried the MEOSS payload, which was an ISRO-DFVLR collaborative experiment aimed at generating stereo images of the Earth and encompassed diverse applications in meteorology, geology, forestry etc.



ASLV-D2

THE LAUNCH VEHICLE

The Augmented Satellite Launch Vehicle (ASLV) Programme was designed to augment the payload capacity, thrice that of SLV-3 for Low Earth Orbits (LEO). While building upon the experience gained from the SLV-3 missions, ASLV proved to be a low-cost intermediate vehicle to demonstrate and validate critical technologies that would be needed for the future launch vehicles like strap-on technology, inertial navigation, bulbous heat shield, vertical integration and closed-loop guidance.

ASLV was the second developmental flight configured as an all-solid propellant vehicle, with a payload capability of 150 kg class satellites into 400 km circular orbits. The strap-on stage consisted of two identical solid propellant motors of 1 m diameter.

SPECIFICATIONS

Height	24 m
Lift-Off Mass	40 t
No of Stages	5
Payloads	SROSS-2

SROSS-2

THE SATELLITE

SROSS-2 was a 150 kg experimental three axis body stabilized satellite designed with a power handling capability of 90 W. It carried Gamma Ray Burst (GRB) payload and Monocular Electro-Optic Stereo Scanner (MEOSS) payload built by DFVLR, West German Space Agency. The GRB experiment was designed to monitor the celestial Gamma Ray Bursts in the energy range of 20 Kev to 3000 Kev. However the satellite could not be placed into its intended orbit.

SPECIFICATIONS

Weight	150 kg
Power	90 W
Stabilization	3-axis body stabilized (biased momentum) with a Momentum Wheel and Magnetic Torquer
Type of Satellite	Earth Observation
Payloads	• Gamma Ray Burst (GRB) • Monocular Electro-Optic Stereo Scanner (MEOSS)
Mission Life	Not Realised