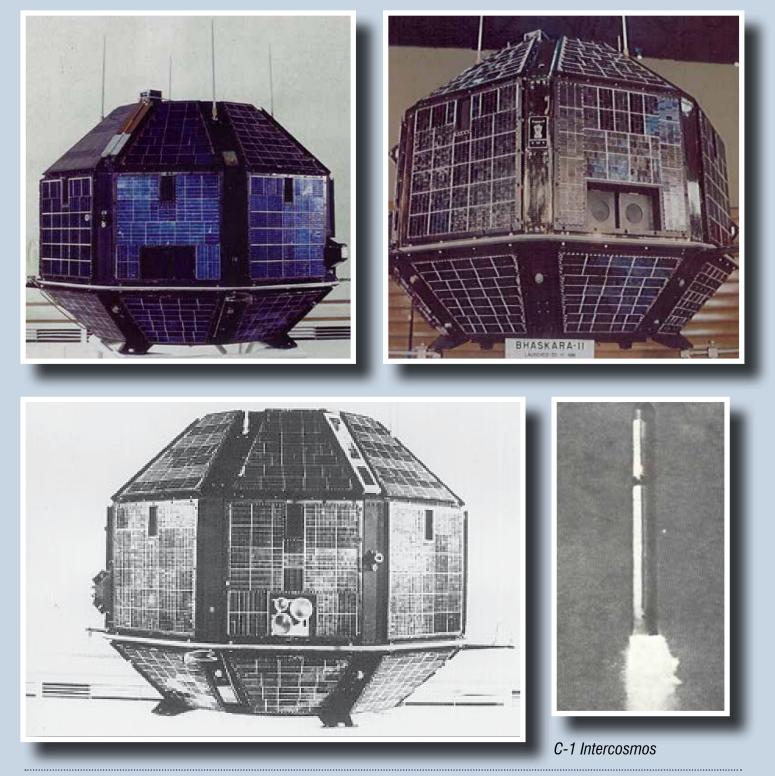


## **BHASKARA-II** Mission

## 20 November, 1981

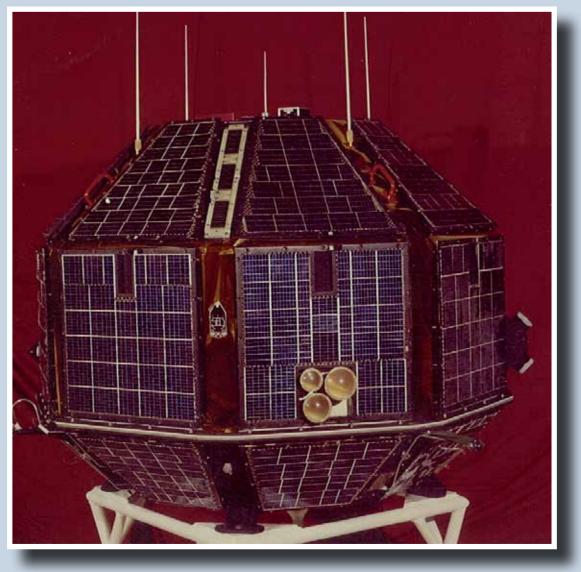
## THE MISSION

Bhaskara-II on-board the C-1 Intercosmos lifted-off from Kapustin Yar on November 20, 1981. The main objectives of Bhaskara-II, similar to Bhaskara-I, were to conduct Earth Observation Experiments for applications related to Hydrology, Forestry and Geology.





The Bhaskara-II satellite had two band television camera system operating in the 0.54 to 0.66 microns visible band and 0.75 to 0.85 micron near infrared band to carry out the primary objectives of the mission. It also had a Satellite Microwave Radiometer (SAMIR) operating at 19.35, 22.235 & 31.4 GHz frequency band to regulate ocean surface studies. Bhaskara-II had secondary objectives which were to test engineering and data processing systems, to collect limited meteorological data from remote platforms and to conduct scientific investigations in X-ray astronomy.



Bhaskara-II payload was suitably modified to take care of the problems observed in Bhaskara-1 and the satellite was declared operational after receipt of 300 television images of the Indian sub-continent. The camera electronics was ruggedized against corona in space. Two-band images were processed at Space Application Centre, Ahmedabad facilities and many applications of Remote Sensing were demonstrated. This includes studies on snow coverage in the Himalayas and studies on Sunderben area, etc.

Successful operation was done during Bhaskara-II mission life. Despite the problem faced by one of the two on-board cameras of Bhaskara-II, it sent more than two thousand images which were used for many studies.

## SPECIFICATIONS

Weight	444 kg
Power	47 W
Stabilization	Spin-stabilized and spin axis oriented perpendicular to orbit plane
Type of Satellite	Earth Observation
Payloads	<ul> <li>TV Cameras</li> <li>Three band Microwave Radiometer (SAMIR)</li> </ul>
Mission Life	1 Year (nominal)