



1962



1975



1988



1993



2005



2007



2008 ...

Indian Space Odyssey

1962 - 2008



1963



First sounding rocket launched from TERLS November 21, 1963

1962

Vikram Sarabhai, the visionary behind the Indian Space Programme

Indian National Committee for Space Research (INCOSPAR) formed by the Department of Atomic Energy and work on establishing Thumba Equatorial Rocket Launching Station (TERLS) started

Prime Minister Jawaharlal Nehru visiting Physical Research Laboratory, Ahmedabad

1965



Space Science & Technology Centre (SSTC) established in Thumba

1967



Experimental Satellite Communication Earth Station set up at Ahmedabad

1968



Prime Minister Indira Gandhi, dedicating TERLS to U.N. February 2, 1968

1969



Formation of Indian Space Research Organisation (ISRO) August 15, 1969

New SSTC campus at Veli, Thiruvananthapuram

1971



SHAR Centre, Sriharikota operationalised October 1971, renamed as Satish Dhawan Space Centre in October 2003

1972

Department of Space (DOS) established, ISRO brought under DOS June 1, 1972



Prof. Satish Dhawan takes over as Secretary, DOS & Chairman, ISRO October 1972



Space Applications Centre (SAC) established at Ahmedabad



ISRO Satellite Centre (ISCAT) established at Bangalore

ISRO becomes
Government
Organisation
(April 1, 1975)

1975



Satellite Instructional Television Experiment (SITE) (1975-1976) using ATS-6 Satellite of USA



First Indian Satellite, **ARYABHATA**, launched on April 19, 1975

1977



Satellite Telecommunication Experiments Project (STEP) (1977-1979) carried out using Franco-German Symphonie Satellite

1979



Launch of **BHASKARA-I**, an experimental satellite for earth observations (June 7, 1979)

First experimental launch of **SLV-3** (August 10, 1979)

1980



Liquid Propulsion Systems Centre (LPSC) started in Bangalore

Second experimental launch of **SLV-3, Rohini RS-1** satellite placed in orbit (July 18, 1980)



Indian Space

1981



First developmental launch of **SLV-3, RS-D1** placed in orbit (May 31, 1981)



Launch of **APPLE**, an experimental geo-stationary communication satellite (June 19, 1981)

Launch of **BHASKARA-II** (November 20, 1981)



1982



Master Control Facility (MCF) established at Hassan

Launch of **INSAT-1A** (April 10, 1982)



Space technology, in the last four decades, has firmly established its capability for socio-economic development in the country. With its unique capability to provide a synoptic view of

Research Organisation ... searching

Imagery from RS-D2

1983

Second developmental launch of ASLV, RS-D2 placed in orbit (April 17, 1983)



INSAT system commercialized with the launch of INSAT-1B (August 30, 1983)

1984

Prof. U.R. Rao takes over as Secretary, DOS & Chairman, ISRO (September 30, 1984)



INSAT system for Telecom, Television & Meteorology



Indo-Soviet joint manned spaceflight



1987



Stretched Rohini Satellite Series-1 (SROSS-1) Satellite

First developmental launch of ASLV with SROSS-1 satellite on board (March 24, 1987)

1988



Imagery from IRS-1A

Establishment of IRS system with the launch of Indian Remote Sensing Satellite, IRS-1A (March 17, 1988)



Second developmental launch of ASLV with SROSS-2 on board (July 13, 1988)



Launch of INSAT-1C (July 22, 1988)

1990



Launch of INSAT-1D (June 12, 1990)

1991



Launch of second operational Remote Sensing Satellite, IRS-1B (August 29, 1991)

1992

First successful launch of ASLV, SROSS-C placed in orbit (May 20, 1992)



SROSS-C Satellite



Launch of INSAT-2A, the first satellite of the indigenously built second generation INSAT series (July 10, 1992)

the earth, it has unleashed a vast potential for applications in telecommunications, television broadcasting including education, meteorology and natural resources monitoring and

the realms of space...

1993



Launch of **INSAT-2B**
(July 23, 1993)



Launch of **INSAT-2C**,
the third satellite in
INSAT-2 series
(December 7, 1995)

1995



Launch of Indian
Remote Sensing
Satellite, **IRS-1C**
(December 28, 1995)



First operational launch of
PSLV, **IRS-1D** placed
in orbit (September 29, 1997)

1997



Launch of **INSAT-2D**,
the fourth satellite
in INSAT-2 series
(June 4, 1997)



1999



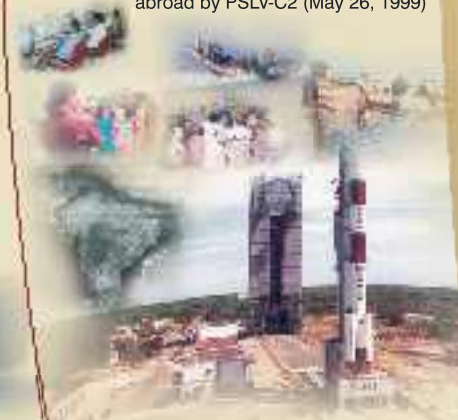
Launch of **INSAT-2E**
(April 3, 1999)



KITSAT-3
- Korean

DLR- TUBSAT
- Germany

Launch of **INS-P4** (OCEANSAT)
along with two Satellites from
abroad by PSLV-C2 (May 26, 1999)



First developmental launch of
PSLV with **IRS-1E** on board
(September 20, 1993)



Dr. K. Kasturirangan takes over as
Secretary, DOS & Chairman, ISRO
(March 31, 1994)

1994



Fourth developmental
launch of **ASLV**,
SROSS-C2 placed in
orbit (May 4, 1994)

Successful launch of
PSLV **IRS-P2** placed
in orbit (October 15, 1994)

1996



Third developmental
launch of PSLV, **INS-P3**
placed in orbit
(March 21, 1996)



management. India was among the first few countries to realise the potential of space technology for national development.

2000

Launch of **INSAT-3B**, the first satellite in the third generation INSAT-3 series (March 22, 2000)



2001

Launch of PSLV-C3, India's **TES** along with Belgian **PROBA** and German **BIRD**, placed in orbit (October 22, 2001)



Successful flight test of Geo-synchronous Satellite Launch Vehicle (GSLV), Experimental satellite **GSAT-1** placed in orbit (April 18, 2001)

2002

Launch of **INSAT-3C** (January 24, 2002)



Launch of **KALPANA-1** on board PSLV-C4 (September 12, 2002)



2003

Launch of **INSAT-3A** (April 10, 2003)



Mr G Madhavan Nair takes over as Secretary, **DOSS** and Chairman, **ISRO** (September 1, 2003)

Launch of **GSAT-2** by **GSLV-D2** (May 8, 2003)



Launch of **INSAT-3E** (September 28, 2003)



Launch of **RESOURCESAT-1** by **PSLV-C6** (October 17, 2003)



2004

Launch of **EDUSAT** by **GSLV-F01** (September 20, 2004)



2005

CARTOSAT-1



HAMSAT



Commissioning of Second Launch Pad and launch of **CARTOSAT-1** & **HAMSAT** by **PSLV-C6** (May 5, 2005)



Launch of **INSAT-4A** by **Ariane**, Europe (Dec 22, 2005)



2006

Second operational launch of **GSLV** with the **INSAT-4C** on board



INSAT-4C



2007

LAPAN-TUBSAT
- INDONESIA

PEHUENSAT-1
- ARGENTINA

Launch of **CARTOSAT-2** along with **SRE-1** and Two Satellites from abroad by PSLV-C7 (January 10, 2007)

Successful recovery of **SRE-1** (January 22, 2007)

Launch of **INSAT-4B** by Ariane-5, Europe (March 12, 2007)

Launch of **AGILE**, Italian astronomical satellite by PSLV-C8 (April 23, 2007)

Indigenous Cryogenic Stage tested successfully (August 4, 2007)

Launch of **INSAT-4CR** by GSLV-F04, (September 2, 2007)

2008

Launch of **TECSAR**, by PSLV-C10 (January 21, 2008)

IMS-1

CARTOSAT-2A

CAN-X2
- Canada

CUTE-1.7
- Japan

DELFI-C3
- The Netherlands

AAUSAT-II
- Denmark

COMPASS-I
- Germany

SEEDS
- Japan

RUBIN-8
- Germany

Launch of **Cartosat-2A** and **IMS-1** along with Eight Nano Satellites from abroad by PSLV-C9 (April 28, 2008)

NLS-5
- Canada



IO (Satellite Orbital) : 255 km x 22,860 km
 EBO-1 (Satellite Orbital) : 100 km x 7,920 km
 EBO-2 : Apogee at 7,715 km
 EBO-3 : Apogee at 7,600 km
 EBO-4 : Apogee at 2,67,000 km
 EBO-5 (Lunar Transfer Trajectory) : Apogee at 380,000 km
 IO (Initial Lunar Orbit) : 104 km x 7,920 km
 IO (Lower Orbit) : 100 km x 7,920 km
 LO-3 : 182 km x 255 km
 LO-4 : 182 km x 150 km
 COO (Operational Lunar Orbit) : 100 km x 100 km

Launch of **CHANDRAYAAN-1** by PSLV-C11 (October 22, 2008)

RESOURCESAT-2

GSAT-4

OCEANSAT-2

Megha-Tropiques

RISAT

INDIAN REGIONAL NAVIGATION SATELLITE SYSTEM (IRNSS)

ASTROSAT

MANNED MISSION

GSLV-MkIII

RLV

