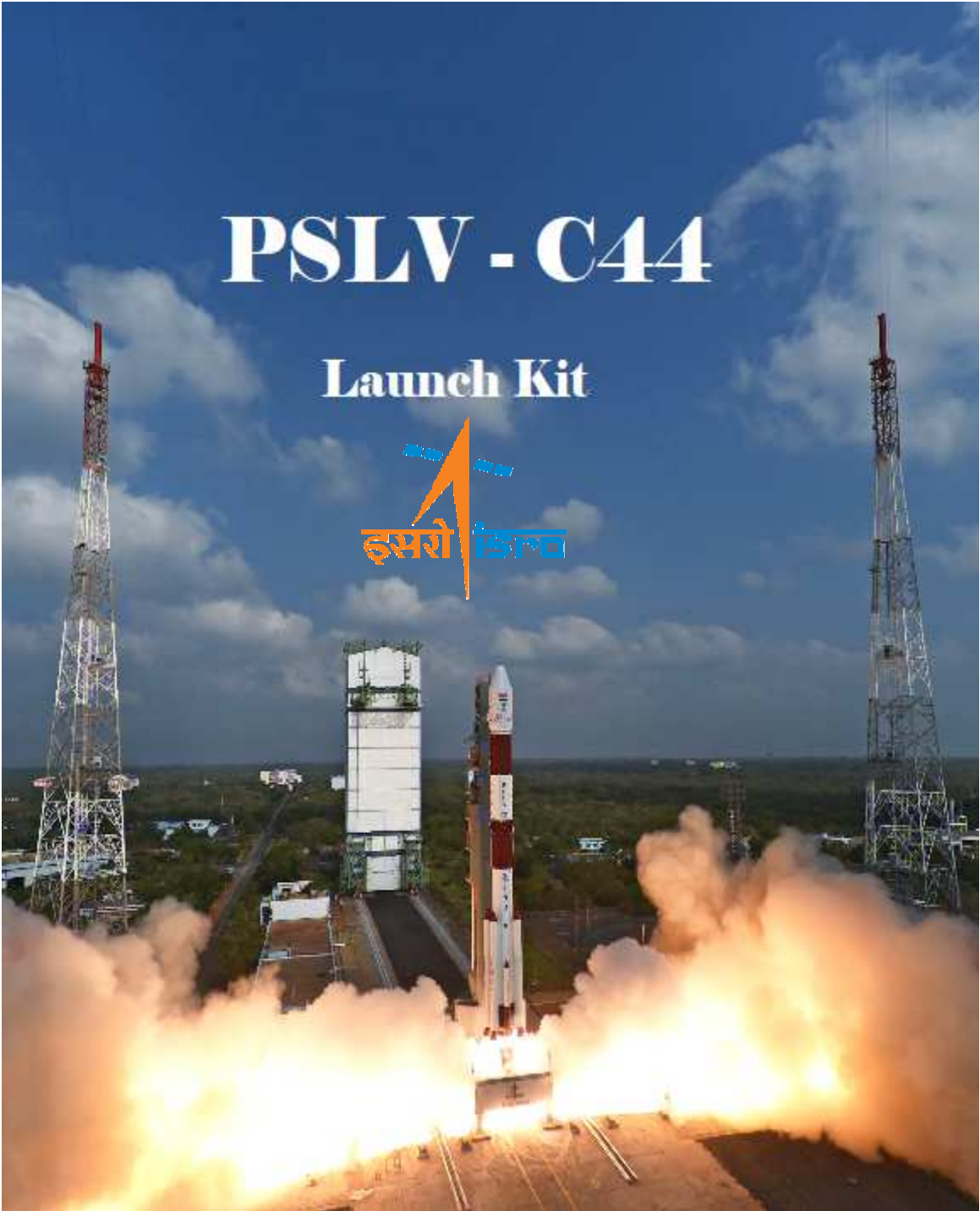


# PSLV - C44

Launch Kit



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## MISSION DESCRIPTION

Polar Satellite Launch Vehicle – C44 (PSLV – C44) is the 46<sup>th</sup> flight of PSLV. The PSLV with 2 strap-on configuration has been identified for this mission and the configuration is designated as PSLV-DL.

PSLV-C44 is the first mission of PSLV-DL and is a new variant of PSLV. It will be launched from First Launch Pad (FLP) at Satish Dhawan Space Centre SHAR, Sriharikota.

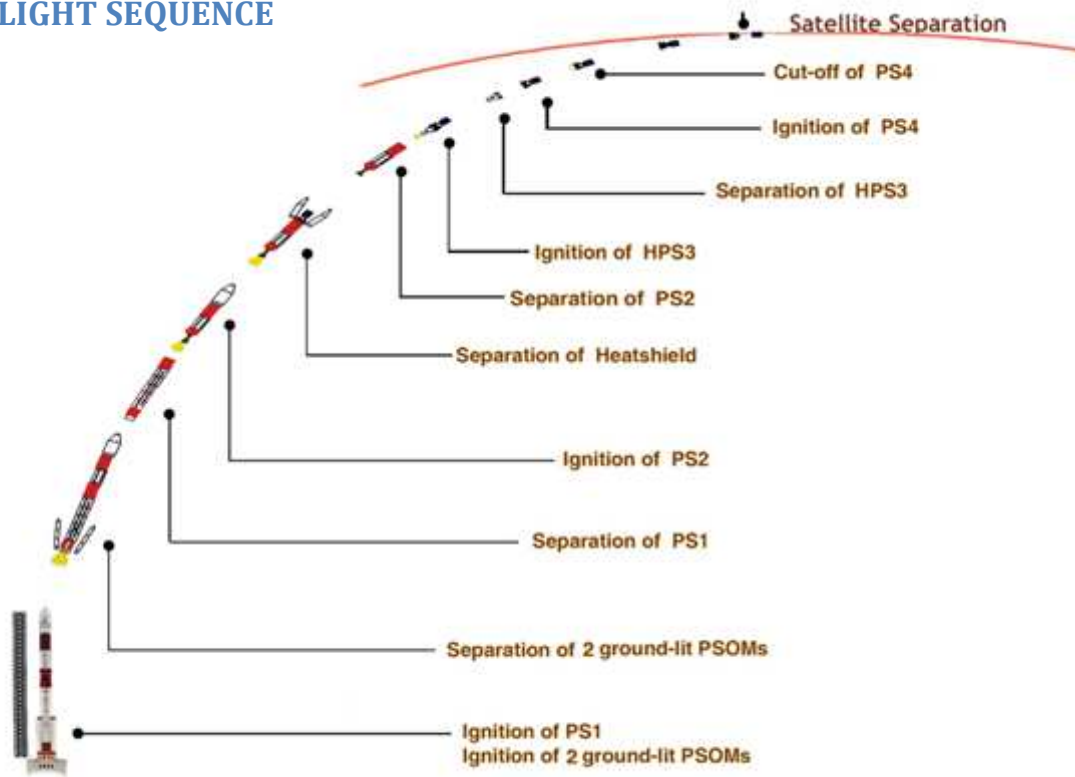
### PS4 as orbital platform

In PSLV-C44, the fourth stage (PS4) of the vehicle will be moved to higher circular orbit so as to establish an orbital platform for carrying out experiments. Kalamsat, a student payload will be the first to use PS4 as orbital platform.

PSLV-C44 will also carry Microsat-R, an imaging satellite

PSLV-C44 Mission Specifications		
Parameter	PS4 Orbital experiment	Microsat-R
Altitude	450 km	274.12 km
Inclination	$98.767 \pm 0.2^\circ$	$96.567 \pm 0.2^\circ$
Launch Pad	First Launch Pad (FLP)	
Launch Azimuth	140°	

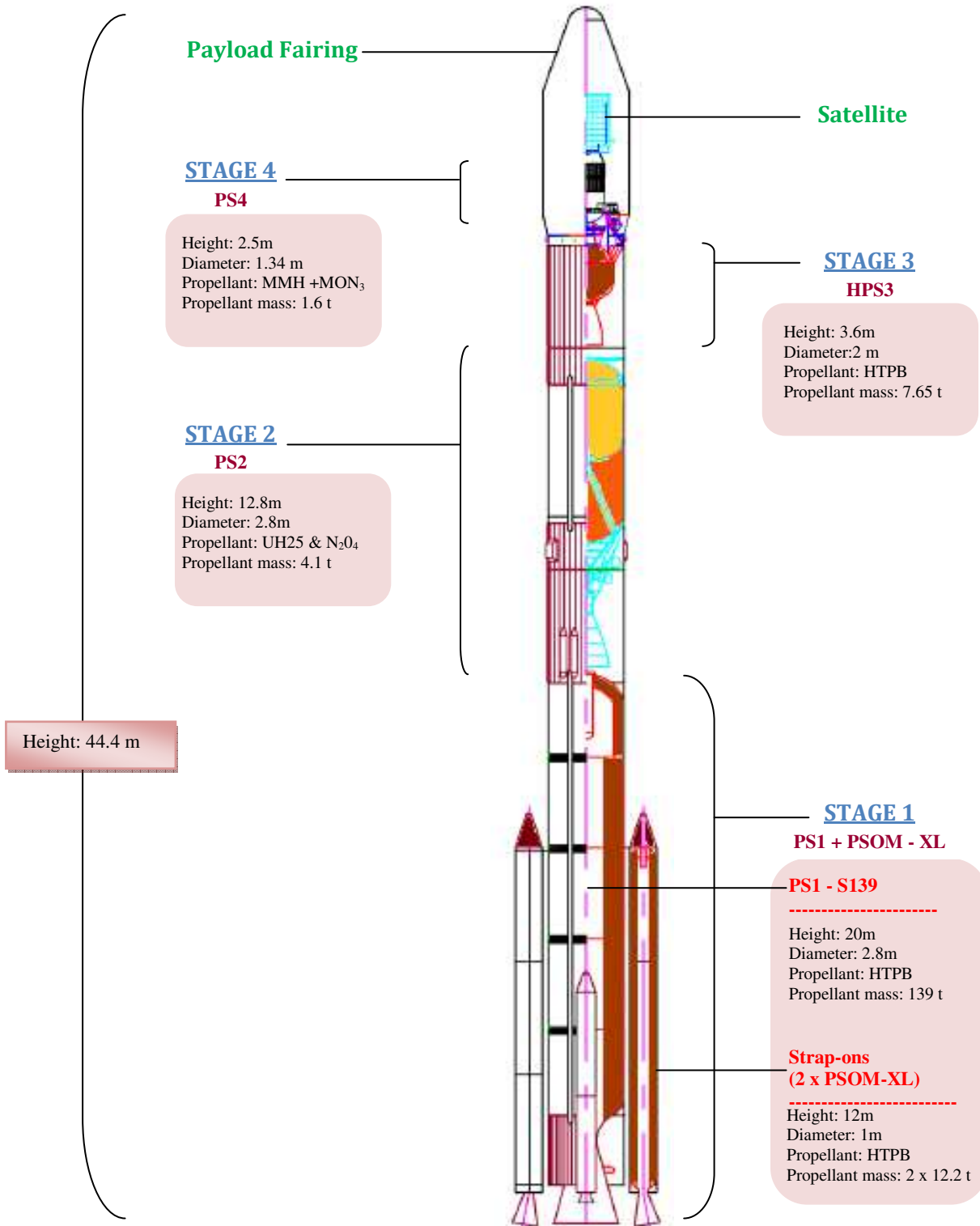
PSLV-C44 FLIGHT SEQUENCE



PSLV-C44 FLIGHT EVENTS

Event	Time (s)	Local Altitude (km)	Inertial Velocity (m/s)
RCT Ignition	-3.00	0.025	451.9
PS1 Ignition	0.00	0.025	451.9
PSLV Strap-Ons Motor Ignition	0.42	0.025	451.9
PSLV Strap-Ons Motor Separation	69.90	23.941	1078.4
PS1 Separation	109.58	59.077	1871.3
PS2 Ignition	109.78	59.281	1870.4
Heat Shield Separation	168.58	115.751	2377.4
CLG Initiation	173.58	120.192	2430.9
PS2 Separation	262.12	187.751	4055.6
PS3 Ignition	263.32	188.551	4053.8
PS3 Separation	487.72	273.906	6529.1
PS4 Ignition	498.12	275.310	6527.2
PS4 Engine Cut-off	766.56	276.576	7735.2
MICROSAT-R Separation	813.56	277.295	7740.0

PSLV-C44



## GLIMPSES



Hoisting of nozzle end segment of PSLV-C44 core stage



Placement of nozzle end segment of PSLV-C44 core stage



Joining of two segments of PSLV-C44 core stage in progress



View of two joined segments of PSLV-C44



Hoisting of one of the Strap-ons of PSLV-C44 during vehicle integration



Integration of strap-ons of PSLV-C44 with the core stage



Hoisting of an interstage during PSLV-C44 integration



A view of PSLV-C44 second stage at MST during vehicle integration