

ICESat/CHIPSat Media Kit

This site requires a JavaScript-enabled browser and uses Flash for both animation and navigation. To get the full benefit of the [Boeing Web Site](#), you will need to download and install the latest version of the [Flash player](#), then return to view the [ICESat/CHIPSat site](#).

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- [Delta Launch Videos](#)
- [ICESat/CHIPSat Mission Information](#)
- [Photos](#)
- [Extra Links](#)



MISSION INFORMATION



Backgrounders

[Boeing Delta II](#)

[Space Launch Complex 2](#)

Mission Details

[Boeing Delta II to Launch Dual Missions for NASA](#)

[Multiple Missions Awarded by NASA](#)

[ICESat/CHIPSat Fact Sheet](#)

[ICESat/CHIPSat Mission Patch](#)

[ICESat/CHIPSat Mission Sequence of Events](#)

[ICESat/CHIPSat Mission Boost Profile](#)

[ICESat/CHIPSat Mission Flight Profile](#)

Delta Launch Vehicle

[Delta II 7320-10 Launch Vehicle](#)



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▶ E-BUSINESS
▶ BOEING WORLDWIDE
INVESTOR RELATIONS

EMPLOYMENT
EMPLOYEE/RETIREE
DOING BUSINESS
GEN INFO/IMAGES

CORP. GOVERNANCE
NEWS
SECURE LOGON

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VIDEO



Delta II Rocks!

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Delta II Rolls!!

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Delta IV First Flight!

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EMPLOYEE/RETIREE

DOING BUSINESS

GEN INFO/IMAGES

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NEWS

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ICESat/CHIPSat mission photos



ICESat Gets Prepped for Launch

Vandenberg Air Force Base, Calif. – Cleanroom technicians make final preparations to NASA's ICESat (ICE, Cloud and land Elevation Satellite) for launch aboard a Boeing Delta II rocket. ICESat will study the Earth's ice sheet mass balance and climate.



ICESat/CHIPSat Encapsulated in Fairing

Vandenberg Air Force Base, Calif. – NASA's ICESat and CHIPSat undergo encapsulation with the 10-foot-diameter payload fairing that will be integrated on top of the Boeing Delta II 7320-10 launch vehicle. Both satellites will be delivered to circular polar orbits and will be deployed by the Reduced Height Dual Payload Attach Fitting that enables two satellites to be launched on a single rocket.



CHIPSat Headed for the Stars

Vandenberg Air Force Base, Calif. – NASA's CHIPSat (Cosmic Hot Interstellar Plasma Spectrometer Satellite) undergoes final preparation before its launch aboard a Boeing Delta II 7320-10 rocket. CHIPSat will examine the interstellar medium, the gas that fills the space between stars, and the ultraviolet glow believed to be emitted by the hot gas.

Delta II mission photo



QuickBird: A Delta II 7320-10 thundered into the skies over Space Launch Complex 2W at Vandenberg Air Force Base, Calif., Oct. 18, 2001, carrying the DigitalGlobe QuickBird imaging satellite.



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▶ E-BUSINESS
▶ BOEING WORLDWIDE
INVESTOR RELATIONS

EMPLOYMENT
EMPLOYEE/RETIREE
DOING BUSINESS
GEN INFO/IMAGES

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NEWS
SECURE LOGON

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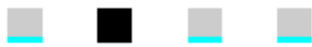


PHOTO GALLERY



CHIPSat Headed for the Stars

[previous](#) | [next](#)



Vandenberg Air Force Base, Calif. — NASA's CHIPSat (Cosmic Hot Interstellar Plasma Spectrometer Satellite) undergoes final preparation before its launch aboard a Boeing Delta II 7320-10 rocket. CHIPSat will examine the interstellar medium, the gas that fills the space between stars, and the ultraviolet glow believed to be emitted by the hot gas.

[Delta Home](#) | [Delta II](#) | [Top of Page](#) | [Media Kits](#) | [Launch Record](#)



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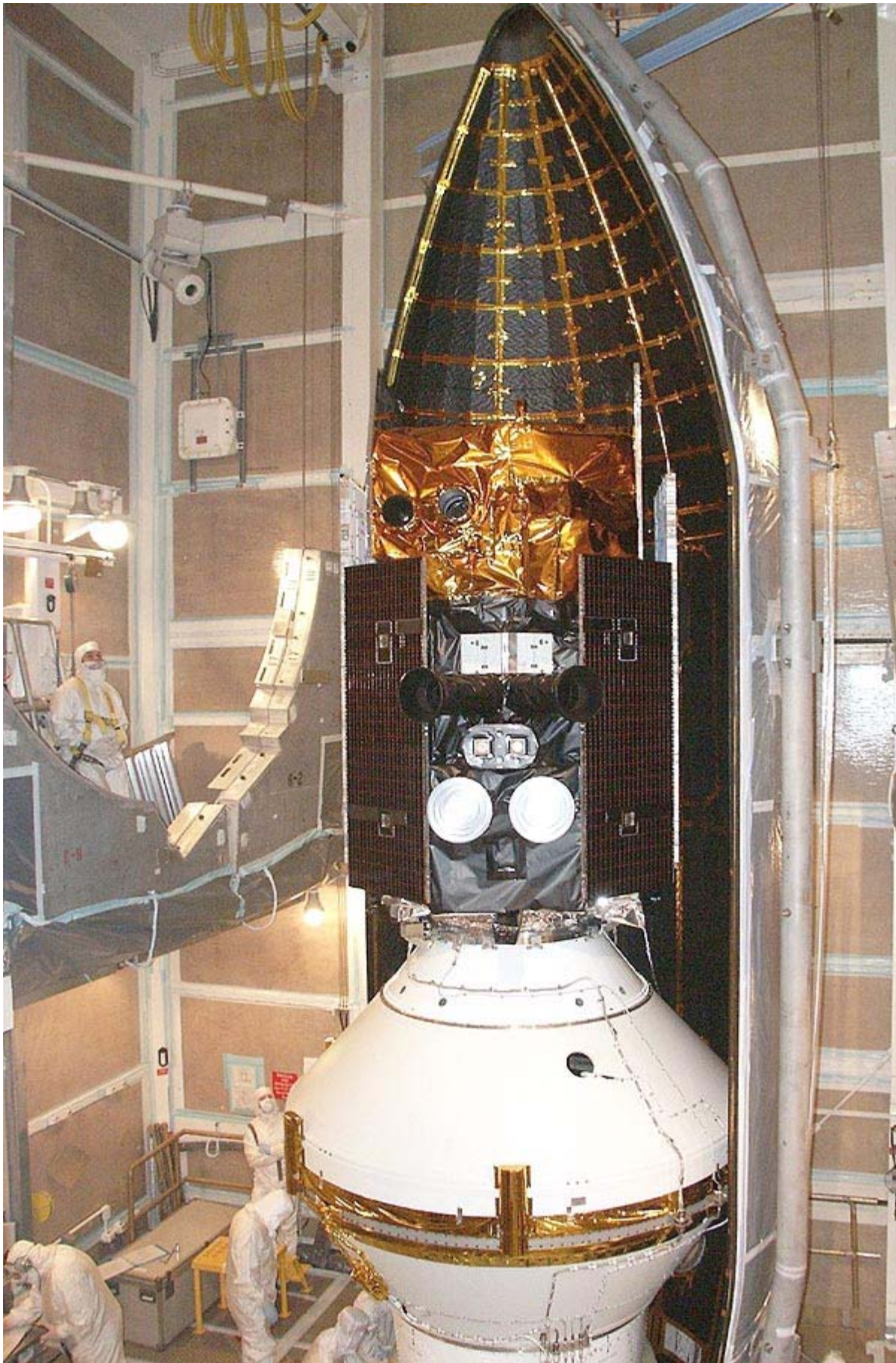
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- ▶ BOEING WORLDWIDE
- INVESTOR RELATIONS

- EMPLOYMENT
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- GEN INFO/IMAGES

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- NEWS
- SECURE LOGON

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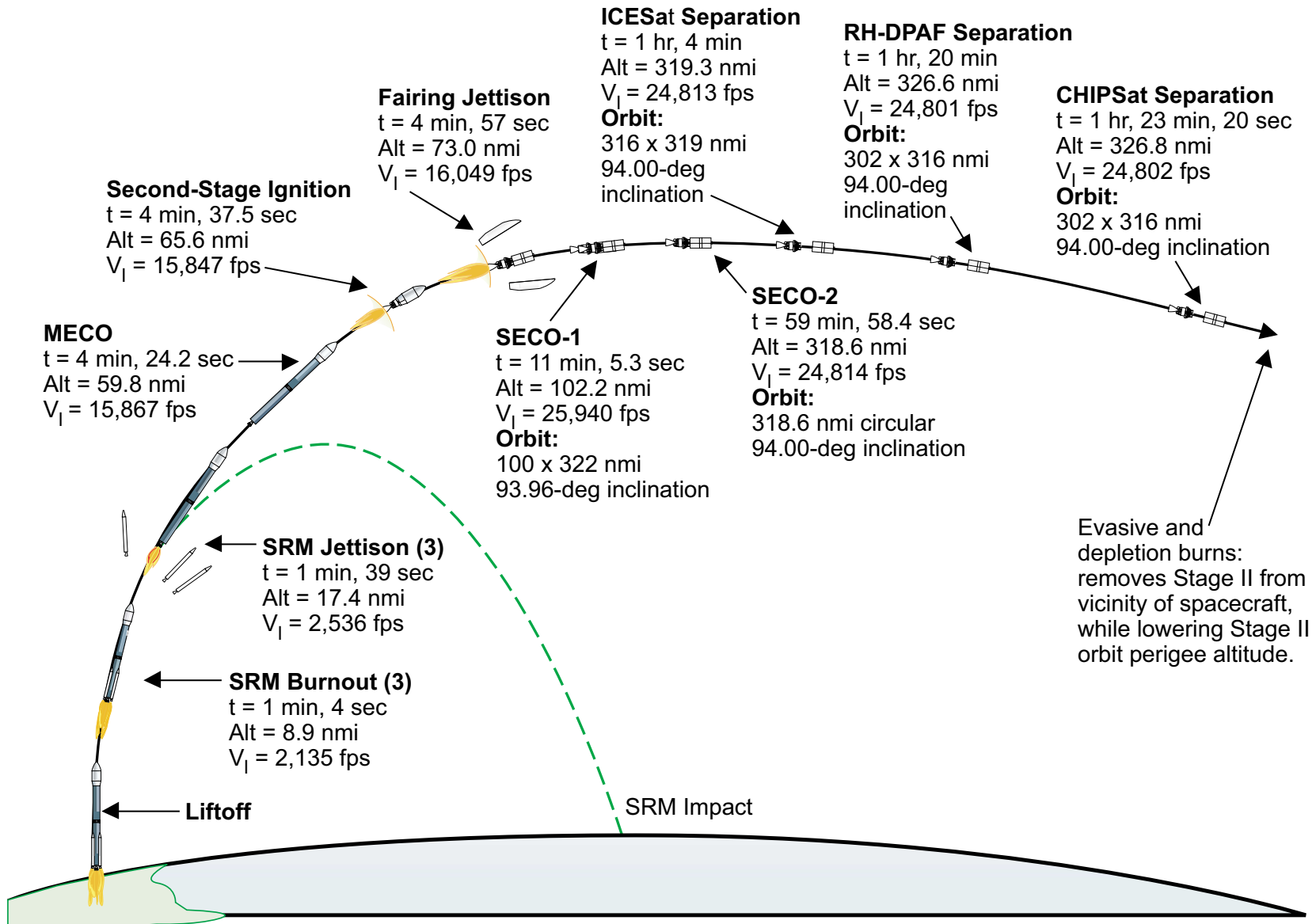


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[Delta Home](#) | [Delta II](#) | [Top of Page](#) | [Media Kits](#) | [Launch Record](#)

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ICESat/CHIPSat Mission – Boost Profile

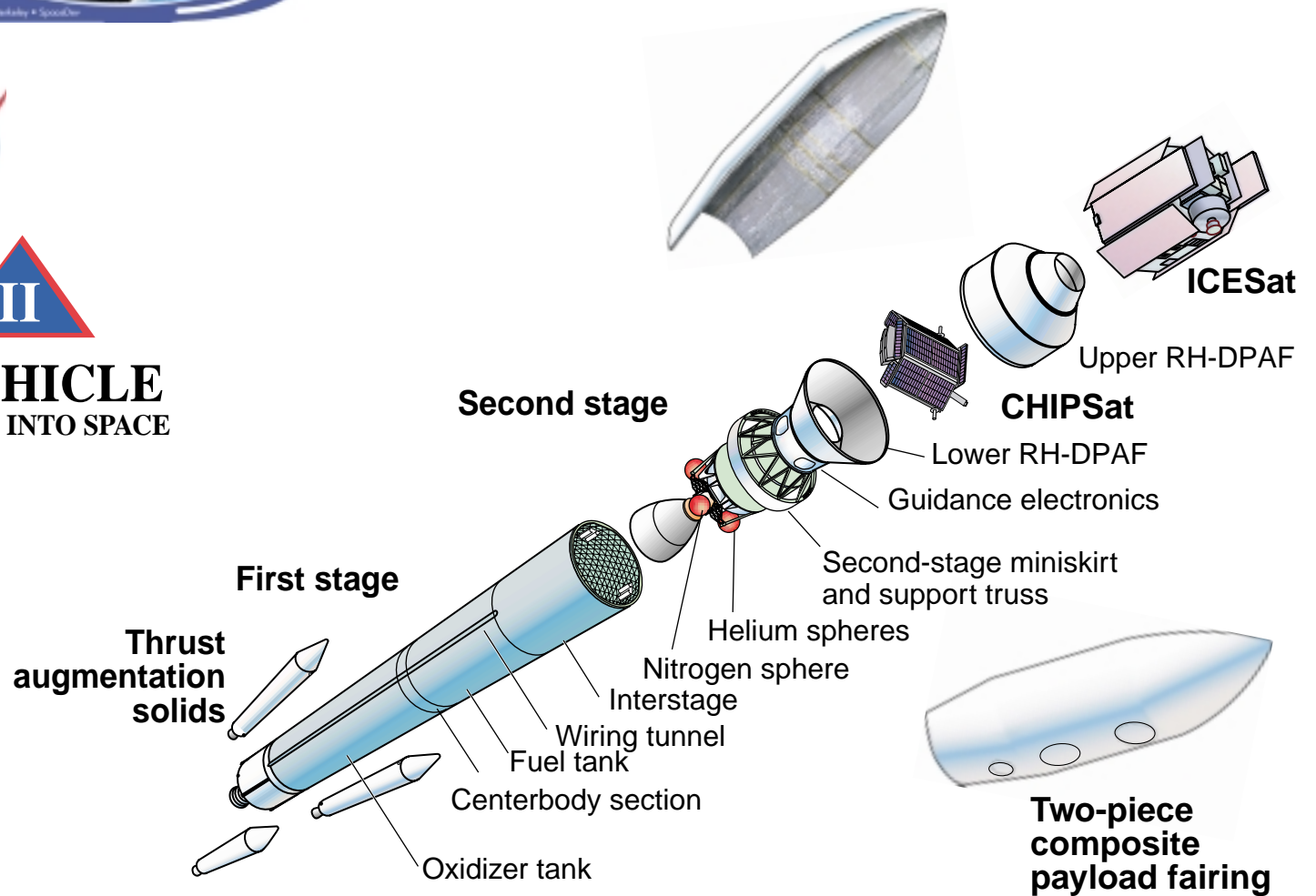


Delta II 7320-10 Launch Vehicle



DELTA II

LAUNCH VEHICLE
PUTTING THE WORLD INTO SPACE



ICESat/CHIPSat Mission – Sequence of Events

Event	Time (hr:min:sec)
Liftoff	0:00:00.0
Maximum dynamic pressure	0:00:36.1
Three solid motors burnout	0:01:04.0
Jettison three solid motors	0:01:39.0
Main engine cutoff (MECO)	0:04:24.2
Stage I-II separation	0:04:32.2
Stage II ignition	0:04:37.5
Jettison fairing	0:04:57.0
First cutoff – Stage II (SECO-1)	0:11:05.3
Begin maneuver to thermal conditioning attitude	0:12:20.0
End maneuver to thermal conditioning attitude	0:25:50.0
Begin thermal roll program	0:26:40.0
End thermal roll program	0:50:50.0
Begin maneuver to restart attitude	0:51:00.0

ICESat/CHIPSat Mission – Sequence of Events

(Continued)

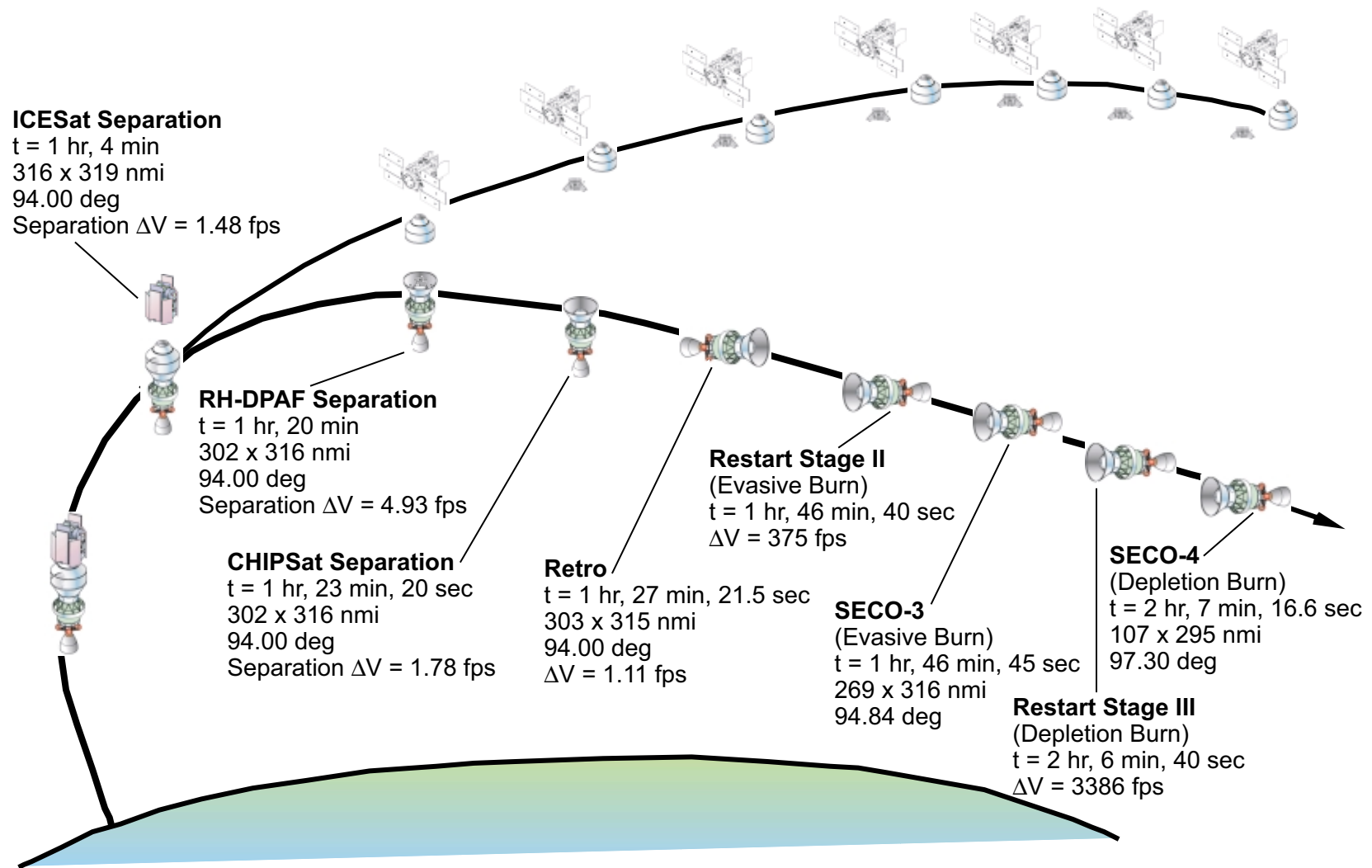
Event	Time (hr:min:sec)
End maneuver to restart attitude	0:57:50.0
Stage II restart ignition	0:59:50.0
Second cutoff – Stage II (SECO-2)	0:59:58.4
Begin maneuver to ICESat attitude	1:00:20.0
End maneuver to ICESat attitude	1:02:50.0
Begin spin-up maneuver	1:03:50.0
Separate ICESat spacecraft	1:04:00.0
End spin-up maneuver	1:04:18.0
Begin maneuver to RH-DPAF attitude	1:04:30.0
End maneuver to RH-DPAF attitude	1:19:10.0
Separate RH-DPAF (upper portion)	1:20:00.0
Begin maneuver to CHIPSat attitude	1:20:20.0
End maneuver to CHIPSat attitude	1:22:30.0
Separate CHIPSat spacecraft	1:23:20.0

ICESat/CHIPSat Mission – Sequence of Events

(Continued)

Event	Time (hr:min:sec)
Begin maneuver to retro attitude	1:24:00.0
End maneuver to retro attitude	1:26:00.0
Begin Stage II retro	1:26:40.0
End Stage II retro	1:27:21.5
Begin maneuver to evasive attitude	1:28:50.0
End maneuver to evasive attitude	1:44:10.0
Stage II restart ignition	1:46:40.0
Third cutoff – Stage II (SECO-3)	1:46:45.0
Begin maneuver to depletion attitude	1:56:40.0
End maneuver to depletion attitude	2:03:20.0
Stage II restart ignition	2:06:40.0
Fourth cutoff – Stage II (SECO-4)	2:07:16.6

ICESat/CHIPSat Mission – Spacecraft Separation Flight Profile



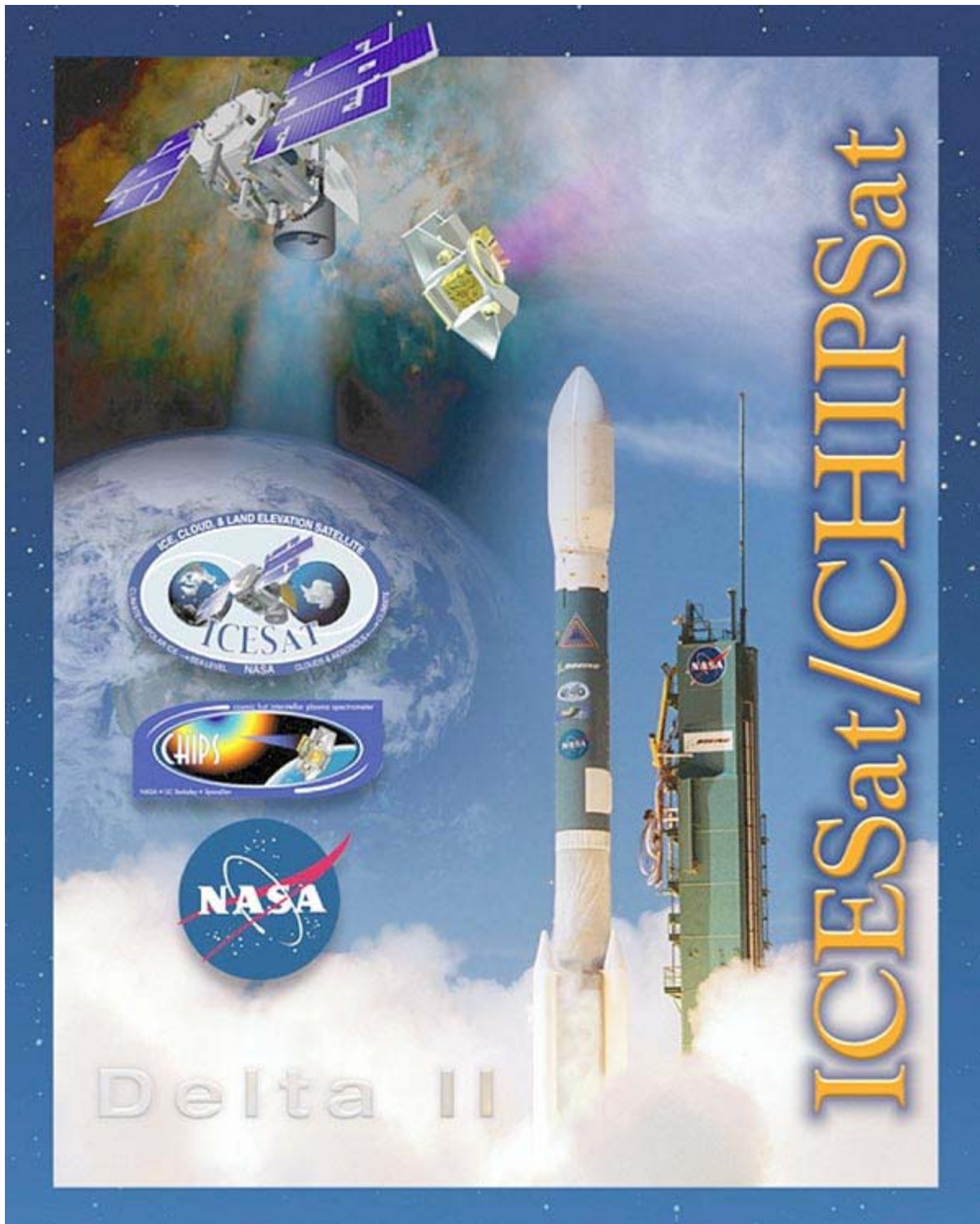
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Boeing Delta II ICESat/CHIPSat Mission

- Mission:** ICESat (Ice, Cloud and land Elevation Satellite)
CHIPSat (Cosmic Hot Interstellar Plasma Spectrometer Satellite)
Dual Primary Payloads
- Date:** January 11, 2003
- Time:** 4:45 p.m. – 5:30 p.m. PST Launch Window
- Launch Site:** Space Launch Complex 2W, Vandenberg Air Force Base, Calif.
- Customer:** NASA
- Launch Vehicle:** Boeing Delta II 7320-10
Reduced Height Dual Payload Attach Fitting
- Orbit:** 590 km (318.6 nmi) circular orbit attitude
94.00 degree inclination
- Overview:** ICESat is part of NASA's Earth-observing system. It will study the Earth's ice sheet mass balance and climate, ranging from climate change to variations in sea level. ICESat consists of the Geoscience Laser Altimeter System, which is a multipurpose laser instrument that will map ice sheet elevations, the height profiles of clouds and aerosols, land elevations, vegetation cover, and estimate sea ice thickness.
- CHIPSat will examine the interstellar medium, the gas that fills the space between stars. It will also provide data on the origin, physical processes and properties of the interstellar gas such as the ultraviolet glow that is expected to be emitted by the hot gas.

###

Contact:
Boeing Communications: (714) 896-1301
Boeing Launch Hotline: (714) 896-4770
Boeing Delta Web site: www.boeing.com/delta



[Delta Home](#) | [Delta II](#) | [Top of Page](#) | [Media Kits](#) | [Launch Record](#)



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 INVESTOR RELATIONS

EMPLOYMENT
 EMPLOYEE/RETIREE
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[EMPLOYMENT](#)

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