



ICE AIS BABY

PRESS KIT | NO EARLIER THAN NOV 23, 2024

Rocket Lab USA, Inc.
rocketlabusa.com



LAUNCH INFORMATION

Rocket Lab will launch an Electron rocket to deploy five satellites for French Internet of Things (IoT) company Kinéis. It's the third of five dedicated Electron launches booked by Kinéis.



LAUNCH SITE

Launch Complex 1 – Pad B
Mahia, New Zealand.



LAUNCH WINDOW

The launch window opens on November 23rd NZDT and extends for 14 days. This launch requires an instantaneous T-O and it remains the same for every day of the launch window.

Time Zone	Window Open
NZST	4:55 pm (Nov 23)
UTC	03:55 am (Nov 23)
EST	10:55 pm (Nov 22)
PST	7:55 pm (Nov 22)
CET	4:55 am (Nov 23)



ORBIT

643km



SATELLITES

5

5x IoT Satellites



INCLINATION

97

Degrees

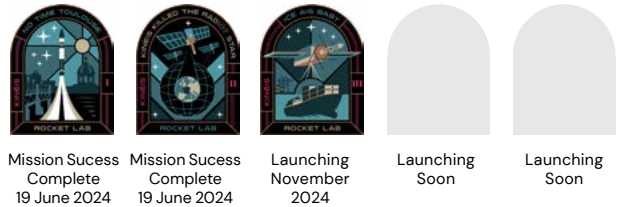


CUSTOMER

Kinéis

MISSION OVERVIEW

About 'Ice AIS Baby'



Ice AIS Baby Star will lift off from Launch Complex 1 in New Zealand, deploying five satellites for French IoT company Kinéis.



The mission is the third of five dedicated launches for Kinéis. The first mission, 'No Time Toulouse,' launched on June 19, 2024. Across these five launches, Rocket Lab will deploy Kinéis' complete constellation of 25 satellites.

Kinéis, a satellite IoT operator, is backed by private and public investors including the French government's space agency CNES (Centre National d'Études Spatiales) and CLS (Collecte Localisation Satellites) an international space-based solutions provider, to improve global IoT connectivity.

The Ice AIS Baby launch has been tailored specifically to meet Kinéis' mission requirements, giving them greater control over launch schedule, orbit, and deployment parameters than would be possible on a larger rideshare mission.

LAUNCH SITE OVERVIEW

Rocket Lab Launch Complex-1
Mahia, New Zealand



'Ice AIS Baby' Payload Integration
Launch Complex 1, Mahia, New Zealand

An FAA-licensed spaceport, Launch Complex 1 can provide up to 120 launch opportunities every year. From the site it is possible to reach orbital inclinations from sun-synchronous through to 30 degrees, enabling a wide spectrum of inclinations to service the majority of the satellite industry's missions to low Earth orbit.

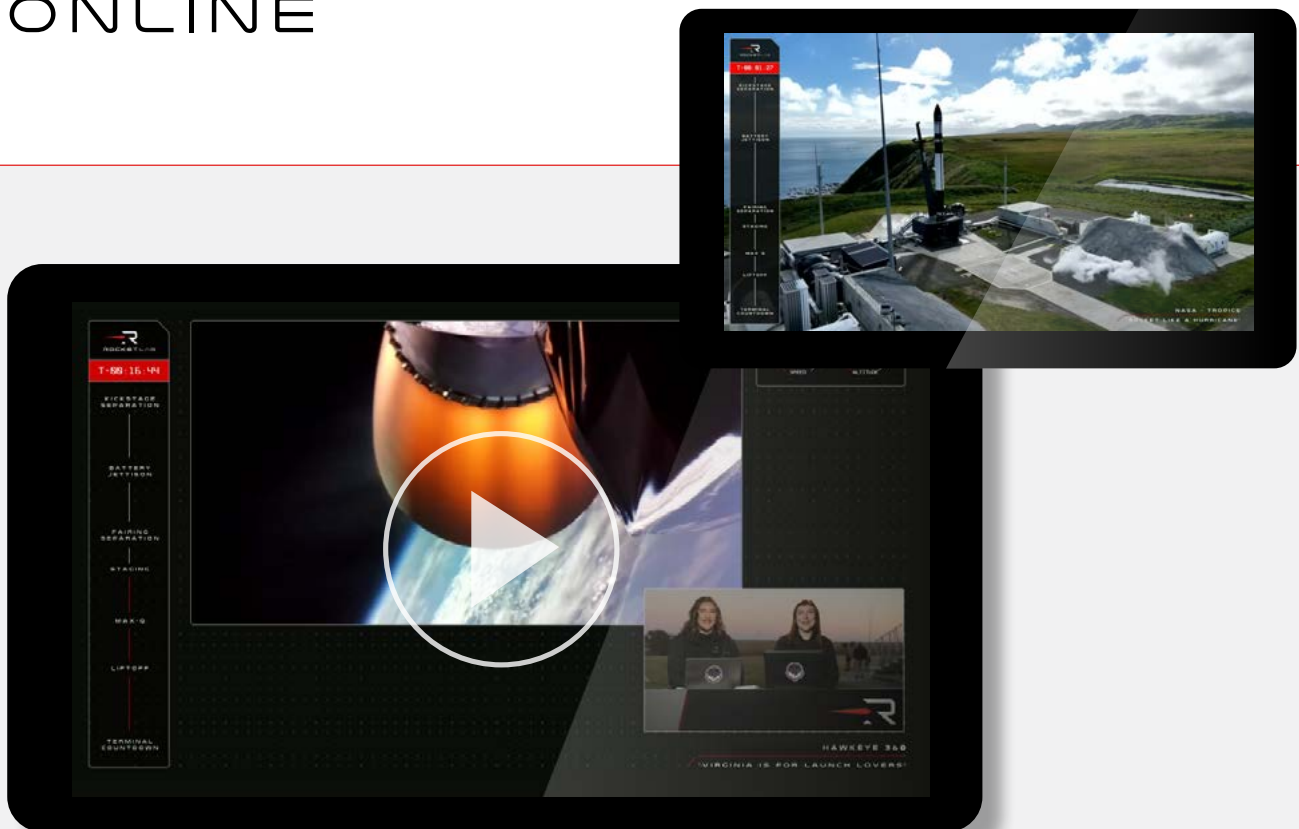
Located within Launch Complex 1 are Rocket Lab's private range control facilities, two 100K satellite cleanrooms, a launch vehicle assembly facility which can process multiple Electrons at once, and administrative offices.

Operating a private orbital launch site alongside its own range and mission control centres allows Rocket Lab to reduce the overhead costs per mission, resulting in a cost-effective launch service for satellite operators.

In addition to Launch Complex 1, Rocket Lab operates an additional launch site, Launch Complex 2, at the Mid-Atlantic Regional Spaceport within NASA's Wallops Flight Facility on Virginia's Eastern Shore. Launch Complex 2 can support up to 12 missions per year.

By operating two launch complexes in two hemispheres, Rocket Lab provides customers with flexible, responsive launch opportunities.

VIEWING A LAUNCH ONLINE



LIVE STREAM

The live stream is viewable at:

[rocketlabusa.com/
live-stream](https://rocketlabusa.com/live-stream)

LAUNCH FOOTAGE & IMAGES

Images and footage of "Ice AIS Baby" launch will be available shortly after a successful mission at:

www.flickr.com/photos/rocketlab

UPDATES

For information on launch day visit:

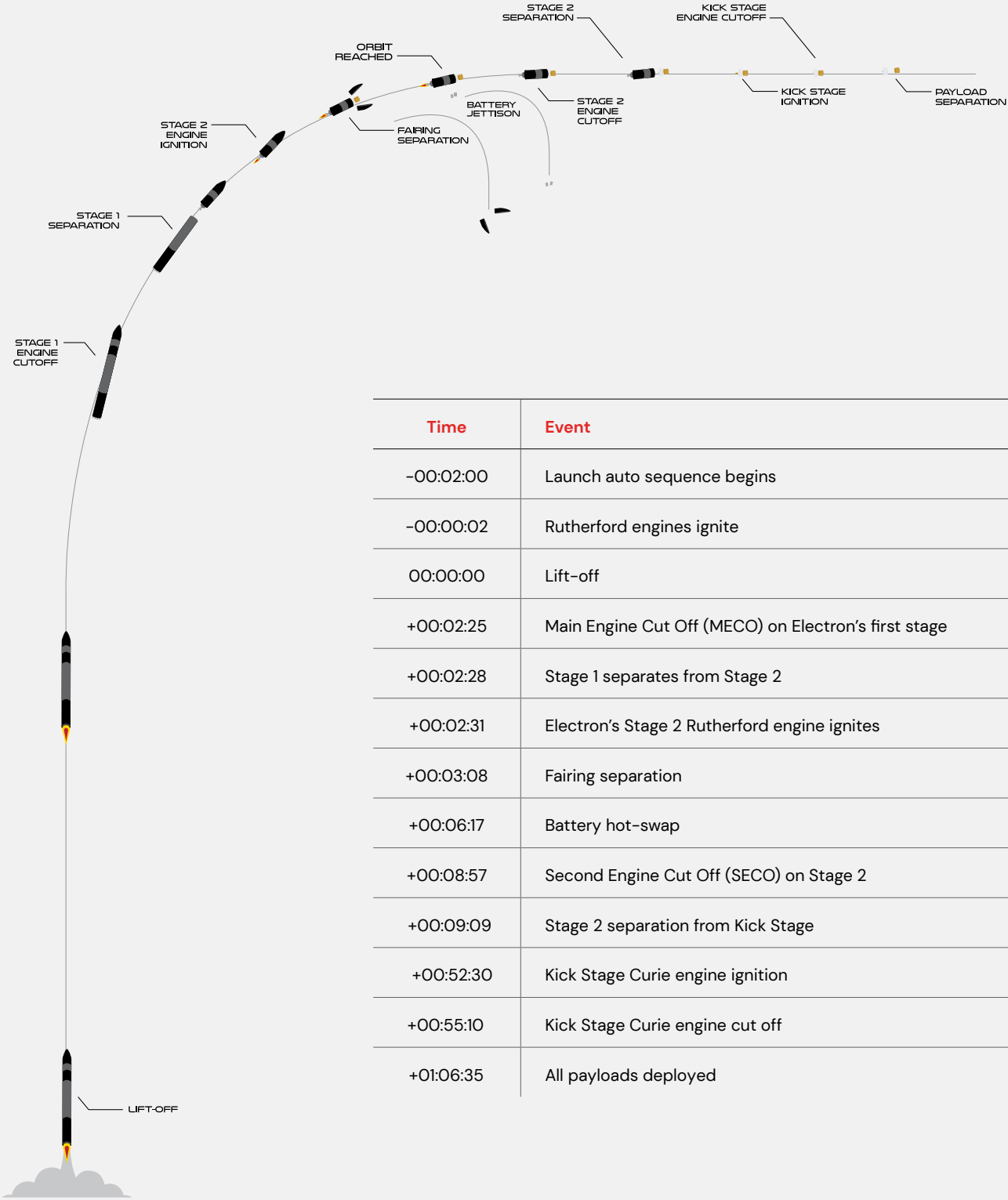
rocketlabusa.com/next-mission

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TIMELINE OF LAUNCH EVENTS



Time	Event
-00:02:00	Launch auto sequence begins
-00:00:02	Rutherford engines ignite
00:00:00	Lift-off
+00:02:25	Main Engine Cut Off (MECO) on Electron's first stage
+00:02:28	Stage 1 separates from Stage 2
+00:02:31	Electron's Stage 2 Rutherford engine ignites
+00:03:08	Fairing separation
+00:06:17	Battery hot-swap
+00:08:57	Second Engine Cut Off (SECO) on Stage 2
+00:09:09	Stage 2 separation from Kick Stage
+00:52:30	Kick Stage Curie engine ignition
+00:55:10	Kick Stage Curie engine cut off
+01:06:35	All payloads deployed

ELECTRON LAUNCH VEHICLE

OVERALL

LENGTH

18m

DIAMETER (MAX)

1.2m

STAGES

2 + Kick Stage

VEHICLE MASS (LIFT-OFF)

13,000kg

MATERIAL/STRUCTURE

Carbon Fiber Composite/Monocoque

PROPELLANT

LOX/Kerosene

PAYLOAD

NOMINAL PAYLOAD

320kg / 440lbm To 500km

FAIRING DIAMETER

1.2m

FAIRING HEIGHT

2.5m

FAIRING SEP SYSTEM

Pneumatic Unlocking, Springs

STAGE 2

PROPULSION

1x Rutherford Vacuum Engine

THRUST

5800 LBF Vacuum

ISP

343 Sec

INTERSTAGE

SEPARATION SYSTEM

Pneumatic Pusher

STAGE 1

PROPULSION

9x Rutherford Sea Level Engines

THRUST

5600 LBF Sea Level (Per Engine)

ISP

311 Sec



MISSION PATCH ANATOMY

'Ice AIS Baby'

Mission name reference to Automatic Identification System, or AIS, which transmits a ship's position so that other ships are aware of its position.

This mission is part of a rapid deployment dynamic, aimed at ensuring optimal ocean coverage and maximizing detection of ships equipped with AIS transponders.





Five stars symbolize the five payloads on board this mission.

Kinéis Satellites equipped with electric propulsion systems powered by solar panels, keeping them in orbit and avoiding collisions.


Three out of the five missions for Kinéis.


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