



# THE MOON GOD AWAKENS

PRESS KIT | Launch Window Opens December 13 2023

Rocket Lab USA, Inc.  
rocketlabusa.com



# LAUNCH INFORMATION



## LAUNCH SITE

Launch Complex 1 – Pad B  
Mahia, New Zealand.



## DAILY LAUNCH WINDOW OPENS

Rocket Lab is targeting no earlier than December 13, 2023 UTC with a two hour daily window.

Time Zone	Window Open
NZDT	17:00 – 19:00, Nov. 28, 2023
UTC	04:00 – 06:00, Nov. 28, 2023
EST	00:00 – 02:00, Nov. 27, 2023
PDT	21:00 – 23:00, Nov. 27, 2023

Back up opportunities are available throughout December.



## ORBIT

# 575km

Circular Orbit



## SATELLITES

# 1



## INCLINATION

# 42

Degrees



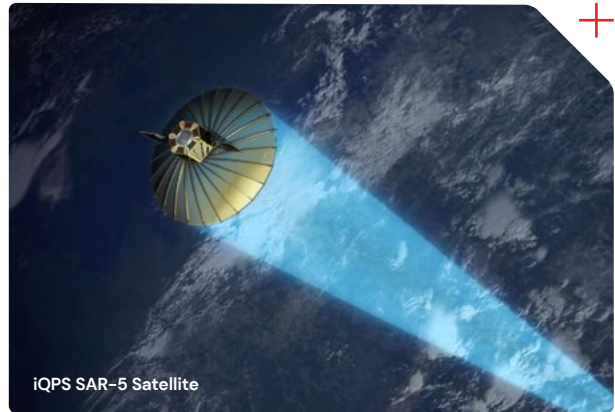
## CUSTOMER

# iQPS

# MISSION OVERVIEW

About 'The Moon God Awakens'

Rocket Lab will launch the TSUKUYOMI-I synthetic-aperture radar (SAR) satellite for Japan-based Earth imaging company the Institute for Q-shu Pioneers of Space, Inc. (iQPS).



'The Moon God Awakens' is scheduled to launch from Pad B at Launch Complex 1 in Mahia, New Zealand, and will carry a single satellite for iQPS.

Named after the Japanese God of the Moon, the QPS-SAR-5 satellite "TSUKUYOMI-I" is a synthetic-aperture radar satellite that will collect high-resolution images of Earth. The satellite will join another iQPS satellite in orbit that will ultimately be a 36-satellite constellation capable of monitoring Earth at specific fixed points every 10 minutes.

The mission will be Rocket Lab's 10th launch of 2023, exceeding our previous annual launch record of nine. 'The Moon God Awakens' will be Rocket Lab's 42nd Electron launch overall.



# LAUNCH SITE OVERVIEW

**Rocket Lab Launch Complex-1**  
Mahia, New Zealand



‘The Moon God Awakens’ will lift off from Launch Complex 1, Pad B on New Zealand’s Mahia Peninsula.

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.

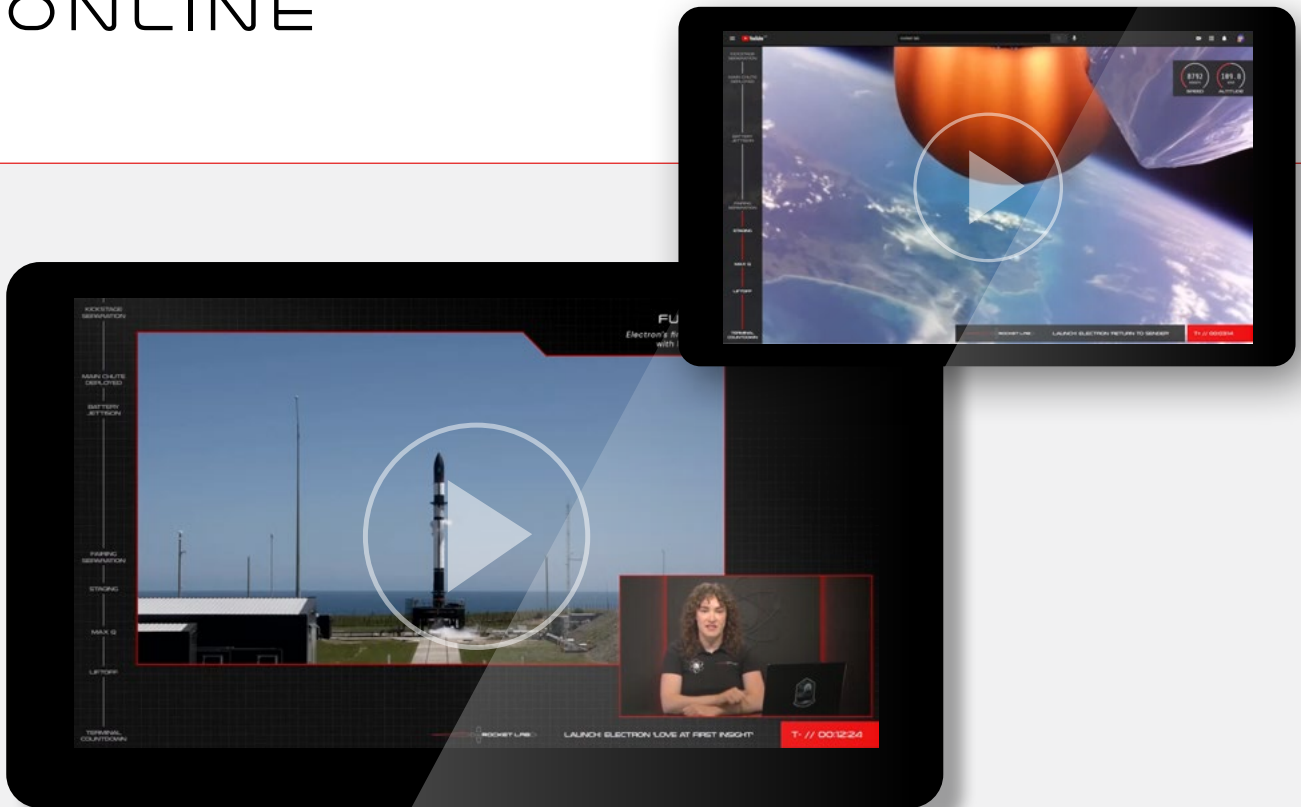
Operating a private orbital launch site alongside its own range and mission control centres allows Rocket Lab to reduce the overhead costs per mission, resulting in a cost-effective launch service for satellite operators.

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)

## UPDATES

For information on launch day visit:

[rocketlabusa.com/next-mission](https://rocketlabusa.com/next-mission)

## LAUNCH FOOTAGE & IMAGES

Images and footage of "The Moon God Awakens" launch will be available shortly after a successful mission at:

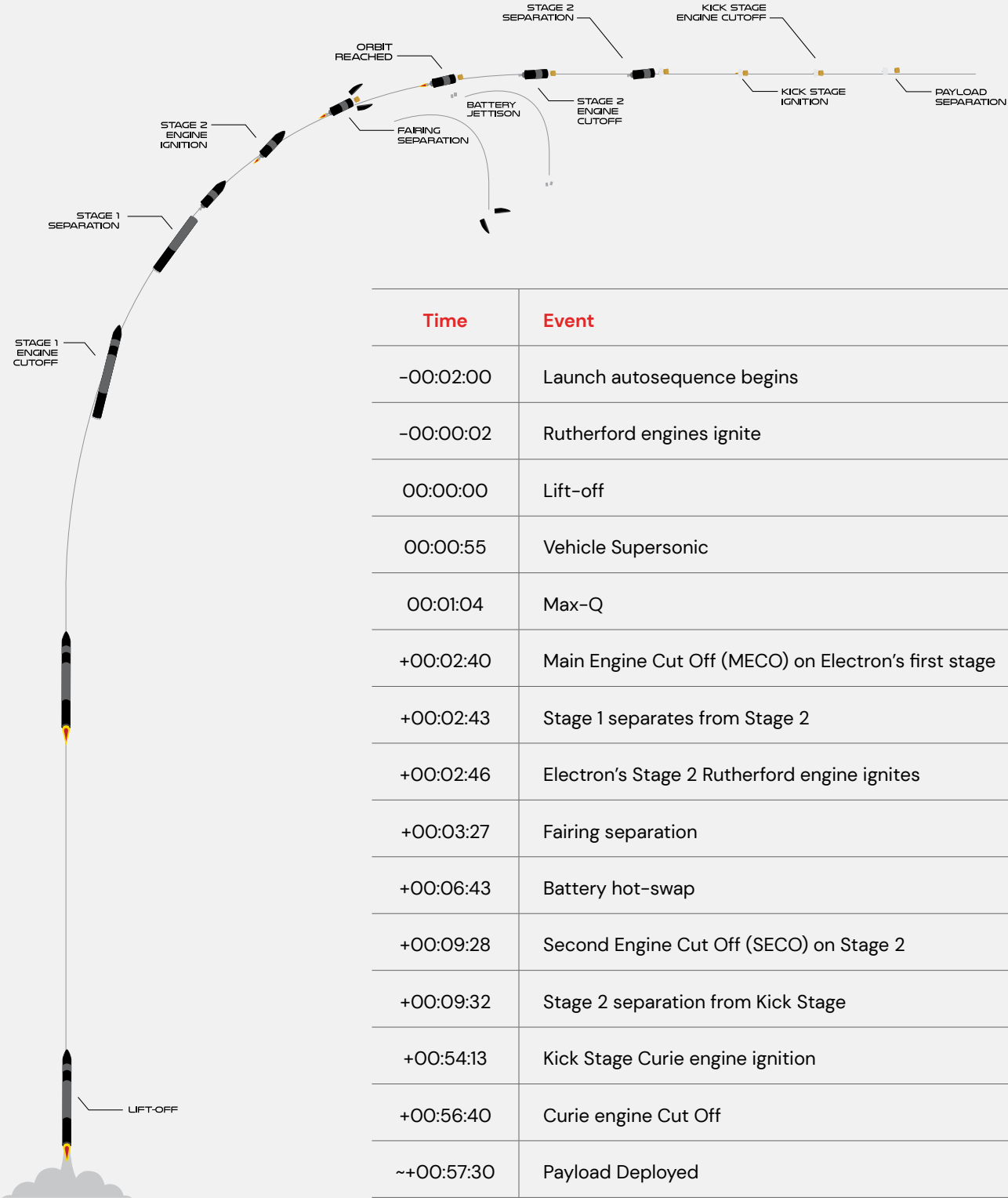
[www.flickr.com/photos/rocketlab](https://www.flickr.com/photos/rocketlab)

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# TIMELINE OF LAUNCH EVENTS



# 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

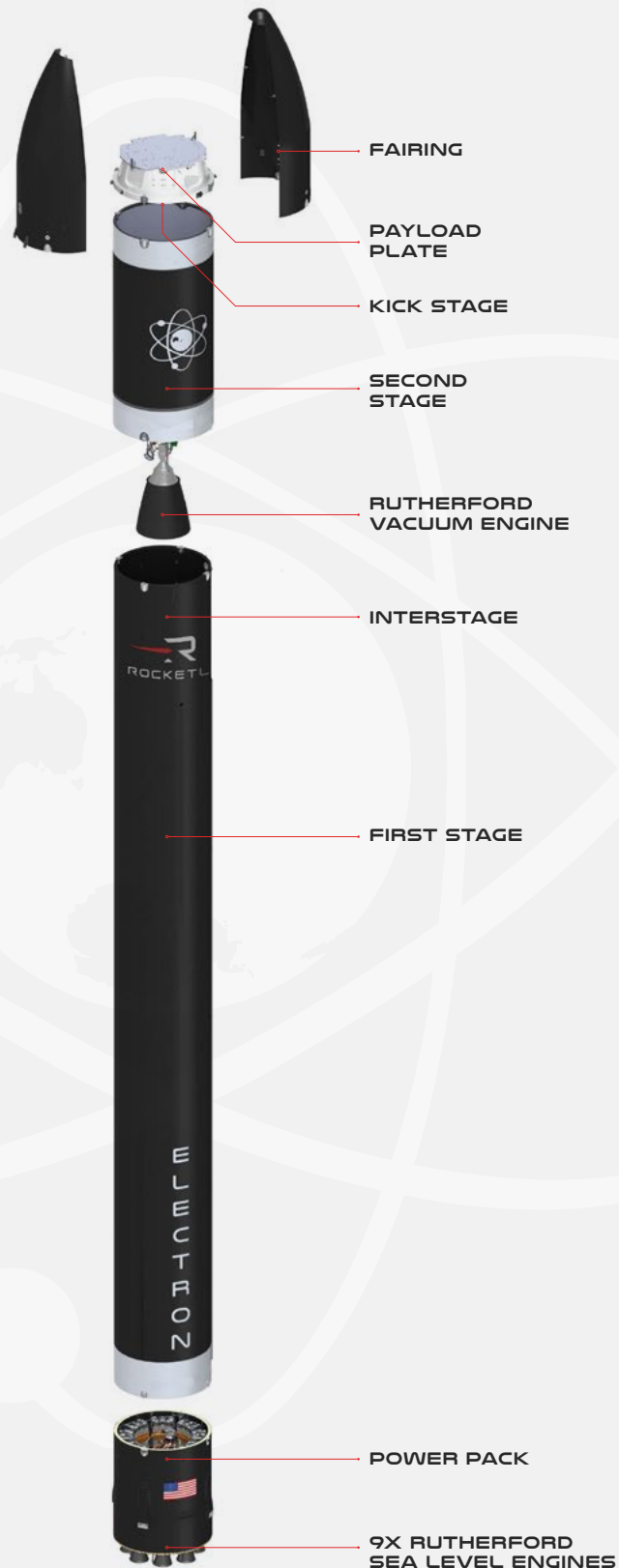
9x Rutherford Sea Level Engines

### THRUST


5600 LBF Sea Level (Per Engine)


### ISP

311 Sec





## CONTACT US


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