



# A DATA WITH DESTINY

PRESS KIT | NET 7 DECEMBER 2021

# LAUNCH INFORMATION



## LAUNCH WINDOW

A 14-day launch window opens  
NET 7 December 2021.



## DAILY LAUNCH OPPORTUNITY

The launch timing for this mission will shift slightly each day of the launch window and is 2 hrs 05 minutes each day.

NZ	
07 Dec	13:40–15:45
08 Dec	13:10–15:15
09 Dec	12:45–14:50
10 Dec	12:20–14:25
11 Dec	11:50–13:55
12 Dec	11:25–13:30
13 Dec	10:50–12:55
14 Dec	10:30–12:35
15 Dec	10:05–12:10
16 Dec	09:35–11:40
17 Dec	09:10–11:15
18 Dec	08:40–10:45
19 Dec	08:15–10:20
20 Dec	07:50–09:55

UTC	
07 Dec	00:40–02:45
08 Dec	00:10–02:15
08 Dec	23:45–01:50
09 Dec	23:20–01:25
10 Dec	22:50–00:55
11 Dec	22:25–00:30
12 Dec	21:50–23:55
13 Dec	21:30–23:35
14 Dec	21:05–23:10
15 Dec	20:35–22:40
16 Dec	20:10–22:15
17 Dec	19:40–21:45
18 Dec	19:15–21:20
19 Dec	18:50–20:55

ET	
06 Dec	19:40–21:45
07 Dec	19:10–21:05
08 Dec	18:45–20:50
09 Dec	18:20–20:25
10 Dec	17:50–19:55
11 Dec	17:25–19:30
12 Dec	16:50–18:55
13 Dec	16:30–18:35
14 Dec	16:05–18:10
15 Dec	15:35–17:40
16 Dec	15:10–17:15
17 Dec	14:40–16:45
18 Dec	14:15–16:20
19 Dec	13:50–15:55

PT	
06 Dec	16:40–18:45
07 Dec	16:10–18:15
08 Dec	15:45–17:50
09 Dec	15:20–17:25
10 Dec	14:50–16:55
11 Dec	14:25–16:30
12 Dec	13:50–15:55
13 Dec	13:30–15:30
14 Dec	13:05–15:05
15 Dec	12:35–14:40
16 Dec	12:10–14:15
17 Dec	11:40–13:45
18 Dec	11:15–13:20
19 Dec	10:50–12:55



ORBIT

430km



SATELLITES

2



INCLINATION

42

Degrees



CUSTOMER

BlackSky

Dedicated mission



# MISSION OVERVIEW

## ABOUT 'A DATA WITH DESTINY'

Launching from Rocket Lab Launch Complex 1 on New Zealand's Mahia Peninsula, the 'A Data With Destiny' mission will be Rocket Lab's 23rd Electron launch overall and sixth mission of 2021.



LAUNCH COMPLEX 1  
MAHIA, NEW ZEALAND

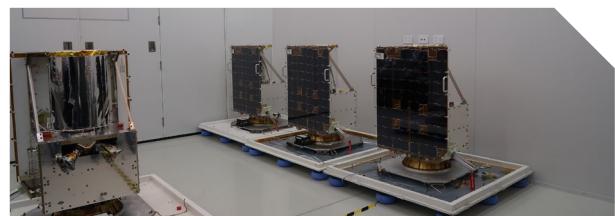
'A Data With Destiny' is the next in a succession of dedicated Electron launches for BlackSky, following the recent successful launch of Love At First Insight on November 18, 2021.

The 'A Data With Destiny' mission is the latest in a multi-launch agreement signed earlier this year for BlackSky between Rocket Lab and Spaceflight Inc, which is providing integration and mission management services for BlackSky. This mission will deploy the 10th and 11th satellites of BlackSky's low Earth orbit constellation, with another two BlackSky Gen-2 satellites next on the manifest for launch.

The 'A Data With Destiny' launch will bring the total number of satellites launched by Rocket Lab to 109. Rocket Lab will not attempt to recover Electron for this mission.

### PAYLOADS ONBOARD ELECTRON: **BLACKSKY GEN-2**

**BLACKSKY**

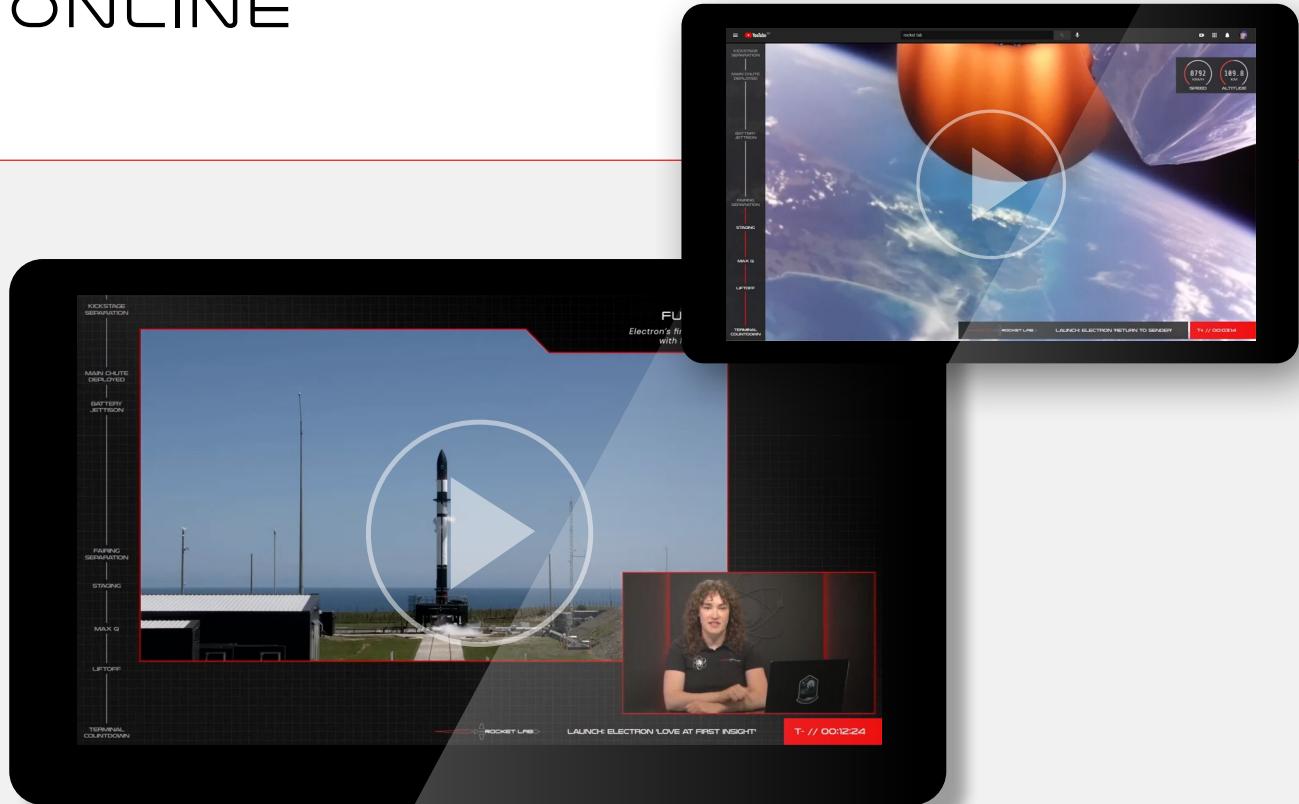


Electron will deploy two of BlackSky's high-resolution, multi-spectral Gen-2 satellites to low Earth orbit, expanding BlackSky's network in space and offering real-time geospatial intelligence and monitoring services.

BlackSky combines high-resolution images captured by its constellation of microsatellites with its proprietary Spectra AI software platform to deliver analytics and insights to government customers and industries including transportation, infrastructure, land use, and supply chain management.

The two BlackSky Gen-2 satellites on this mission, along with those previously launched by Rocket Lab for BlackSky, represent the largest number of satellites BlackSky has dedicated to a single launch provider to date.

# VIEWING A LAUNCH ONLINE



## LIVE STREAM LINKS

The livestream is viewable at:

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

Webcast will be live approx. T-20 minutes

## UPDATES

For information on launch day visit:

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

## LAUNCH FOOTAGE & IMAGES

Images and footage of the 'A Data With Destiny' launch will be available shortly after a successful mission at:

[www.rocketlabusa.com/about-us/  
updates/link-to-rocket-lab-imager-and-video](http://www.rocketlabusa.com/about-us/updates/link-to-rocket-lab-imager-and-video)

## FOLLOW ROCKET LAB:

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 [facebook.com/RocketLabUSA](https://facebook.com/RocketLabUSA)

# VIEWING A LAUNCH IN PERSON

## Location

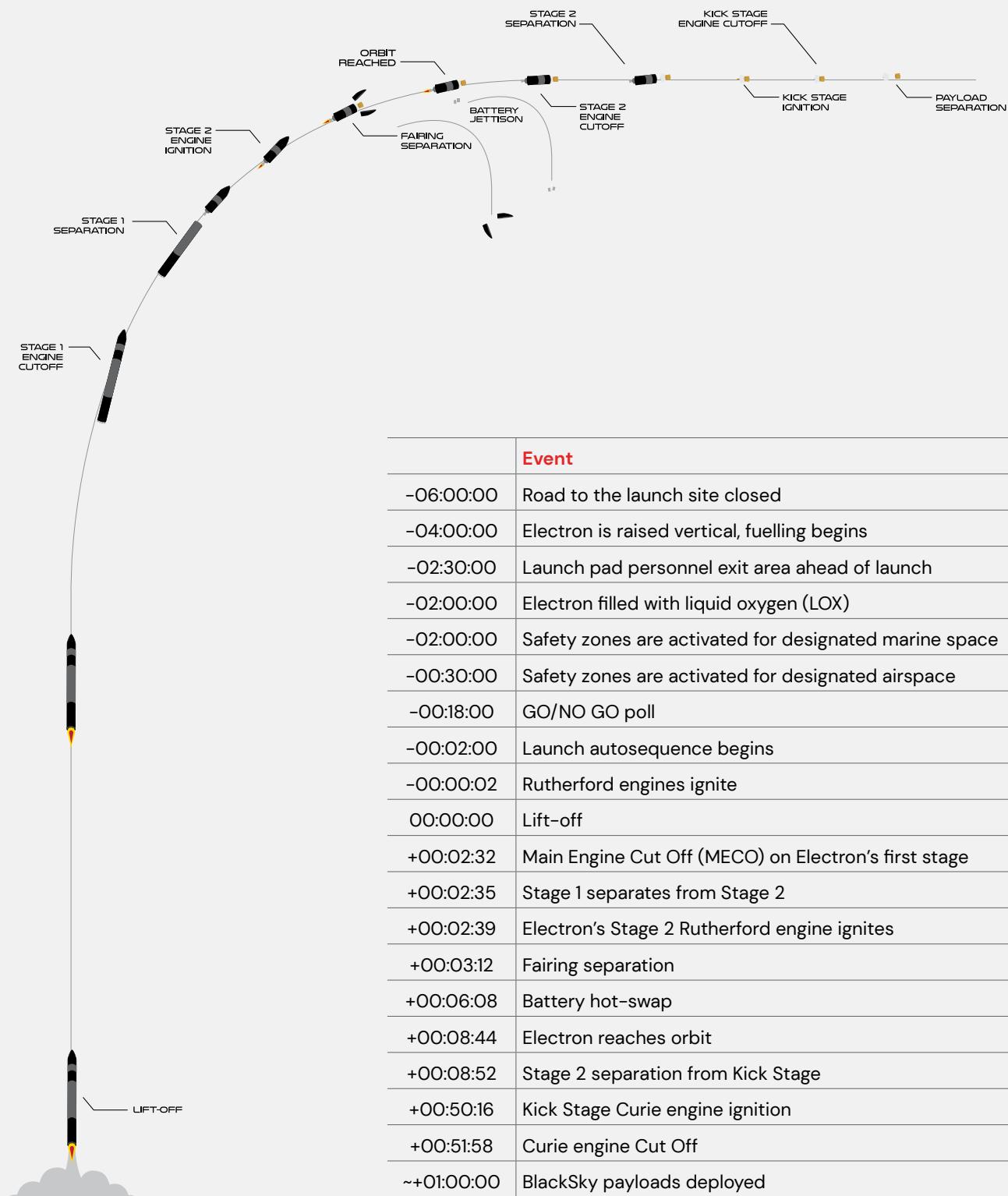
Wairoa District Council has allocated a rocket launch viewing area for the public near Nuhaka, accessible via Blucks Pit Road. Scrubs and postponements are likely during launch windows, so visitors to the Blucks Pit viewing site should anticipate multiple postponements, sometimes across several days.

## More information visit

[www.visitwairoa.co.nz/welcome-to-wairoa/space-coast-new-zealand](http://www.visitwairoa.co.nz/welcome-to-wairoa/space-coast-new-zealand)



# 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

## PAYOUT

### NOMINAL PAYLOAD

200kg / 440lbm To 500km SSO

### FAIRING DIAMETER

1.2m

### FAIRING HEIGHT

2.5m

### FAIRING SEP SYSTEM

Pneumatic Unlocking, Springs

## STAGE 2

### PROPELLANT

1x Rutherford Vacuum Engine

### THRUST

5800 LBF Vacuum

### ISP

343 Sec

## INTERSTAGE

### SEPARATION SYSTEM

Pneumatic Pusher

## STAGE 1

### PROPELLANT

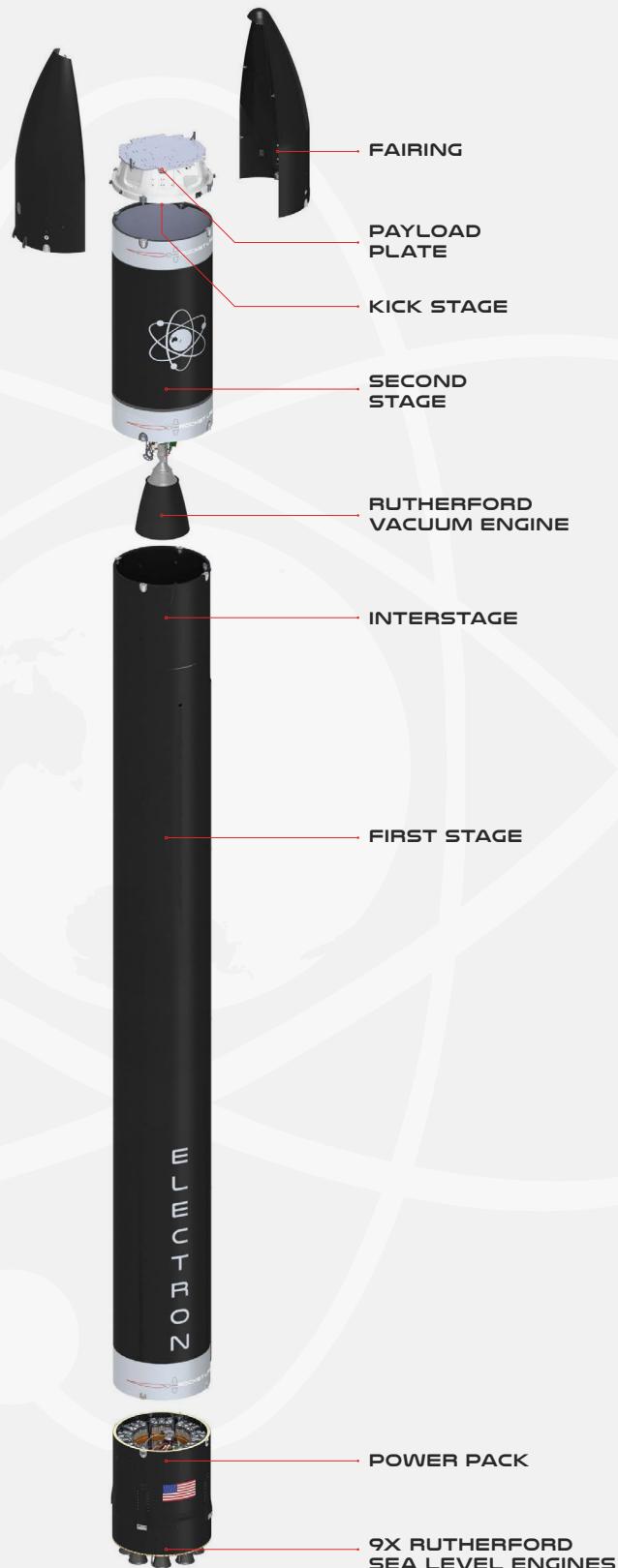
9x Rutherford Sea Level Engines

### THRUST

5600 LBF Sea Level (Per Engine)

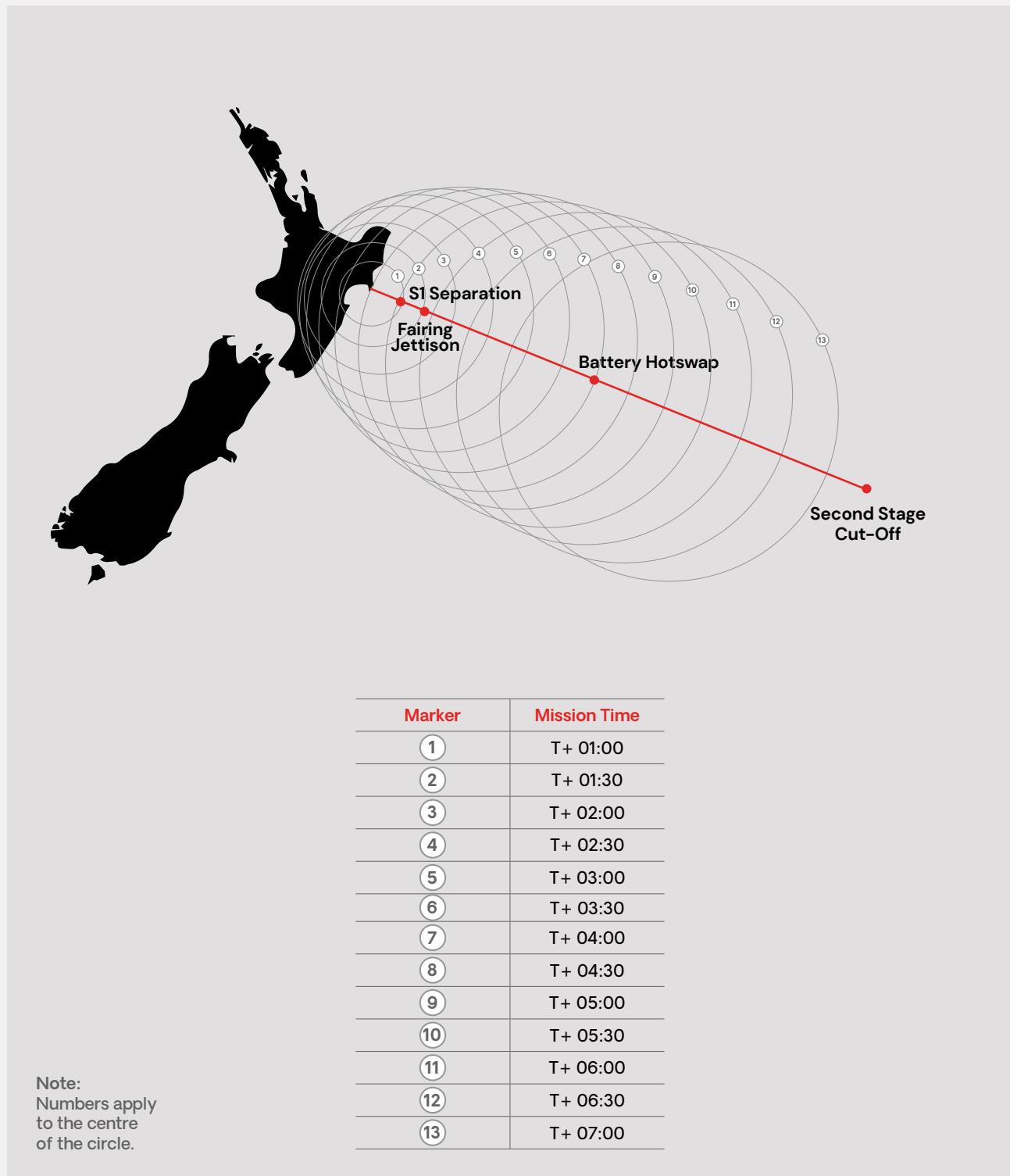
### ISP

311 Sec



# LAUNCH VISIBILITY MAP

WHEN AND WHERE TO SPOT THE LAUNCH



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## CONNECT WITH US

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