FINDING HOT WILDFIRES NEAR YOU

PRESS KIT | NET MARCH 27 2025

Rocket Lab USA, Inc.
rocketlabusa.com

ROCKETLAB

LAUNCH INFORMATION

MISSION

Rocket Lab will launch a dedicated mission for OroraTech, a Germany based global wildfire detection and monitoring company.

LAUNCH SITE

Launch Complex 1 – Pad B
Mahia, New Zealand.

LAUNCH WINDOW

The launch window opens for 30 minutes from March 27, 2025, and is open for two weeks. Back up opportunities are available throughout March and April should the launch date change for any reason.

Time Zone	Window Open
NZDT	04:30 - 5:00 AM
UTC (Mar 26)	15:30 - 16:00
EDT (Mar 26)	11:30 - 12:00 PM
CDT (Mar 26)	10:30 - 11:00 AM
MDT (Mar 26)	9:30 - 10:00 AM
PDT (Mar 26)	8:30 - 9:00 AM

ORBIT

550 km
Circular Earth orbit

SATELLITES

8
OroraTech Constellation Phase 1

INCLINATION

97
Degrees

CUSTOMER

OroraTech

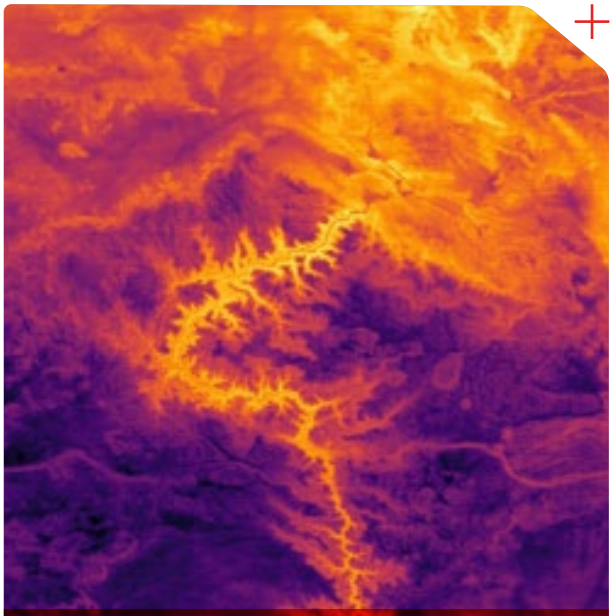
MISSION OVERVIEW

About 'Finding Hot Wildfires Near You'

Rocket Lab is set to launch a global wildfire detection and monitoring mission for German company OroraTech. The mission, named 'Finding Hot Wildfires Near You', will lift off from Launch Complex 1 in New Zealand on an accelerated timeline to meet the mission's wildfire detection requirements: from contract to launch in just four months.

Artist's impression of a OroraTech Constellation Phase 1 satellite.

Electron will deploy eight OroraTech Constellation Phase 1 satellites to a 550 km orbit, where they will join the company's constellation of thermal infrared imaging satellites designed to identify wildfires and hotspots worldwide.



Thermal infrared imagery from FOREST-2 satellite: Image of the Colorado River, June 21, 2024

The mission aims to enhance OroraTech's constellation capacity and enable continuous 24/7 monitoring: a crucial capability for improving the security of people, forests, and infrastructure, especially in the face of increasing wildfire threats.

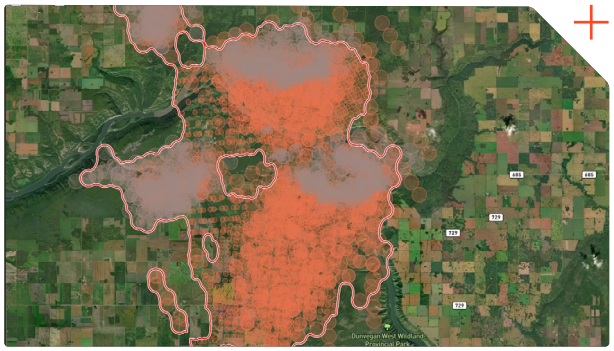
OroraTech Constellation Phase 1 satellite infrared sensors

ORORATECH OVERVIEW

About OroraTech

OroraTech empowers everyday heroes by protecting our world and creating a safer future. Through our Wildfire Solution platform, we detect, track, and predict wildfires across the globe. Using our network of over 25+ public and proprietary satellites, we give firefighters and emergency personnel near-real-time data on fire behavior and situational awareness for those battling the flames.

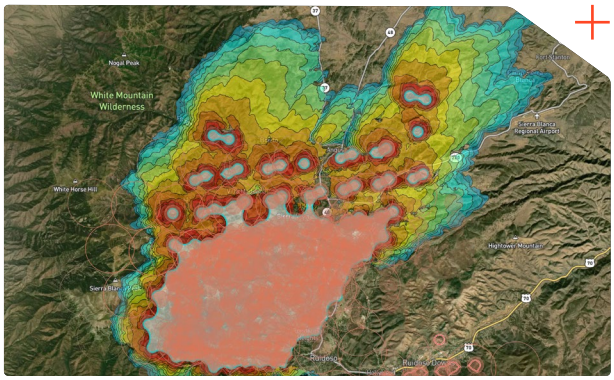
OroraTech operates the world's largest network of wildfire detection satellites. With the launch of OroraTech Constellation Phase One with Rocket Lab, we are adding detections and observations during the early afternoon. This period, known as the "Afternoon Gap," is when fires start most often and rage the hottest, yet offer no satellite overpasses. We aim to fix that. Adding these critical observations allows firefighters to maintain situational awareness during a fire at all times of the day, regardless of weather or cloud cover.



Alberta fires: Fire progression within the first 24 hours, detected via Wildfire Solution on May 16, 2023.

Wildfire Solution is the most comprehensive wildfire suite on the market today, giving tools for every stage of a fire. Before a fire has even begun, it can provide an analysis of Fire Danger based on the current ground conditions. When a fire breaks, OroraTech detects and tracks that fire using our network of satellites, but also can predict it's speed and direction using their Fire Spread simulation.

This simulation can also be customized for specific weather conditions and fire scenarios, allowing users to plan in advance. Finally, once the flames have been put out, Burnt Area analysis can help determine the damage to begin rebuilding and reforesting efforts. This means fast burn severity assessment via satellites that save countless man hours.



Ruidoso, NM, USA: Six-hour fire spread simulation during the South Fork fire.

OroraTech Constellation Phase One is just the beginning. In the next five years, we will launch 100+ satellites into orbit to achieve a maximum gap time of 30 minutes. These advancements will allow constant updates to active fires on the ground and support firefighters around the world as they battle flames that destroy life, land, and property.

Los Angeles, CA, USA: The burnt area of the Palisades Fire.

MISSION PATCH ANATOMY

'Finding Hot Wildfires Near You'

This patch, titled 'Finding Hot Wildfires Near You,' was created to show the increasing global need to protect both people and infrastructure from the growing threat of wildfires. These fires not only endanger wildlife but also disrupt the essential processes that enable our daily lives to function smoothly and efficiently.

OroraTech Constellation Phase 1
The name of the OroraTech satellite.

In Greek legend, Orion was a hunter and protector, mirroring OroraTech's role in detecting and tracking wildfires to safeguard property and lives.

Infrared thermal technology to help detect wildfires and hot spots as small as 10x10 meters to a refined 200m spatial super resolution.

The Earth represents OroraTech's vast global coverage and protection.

Mission merchandise can be found on the Rocket Lab Store after launch day.

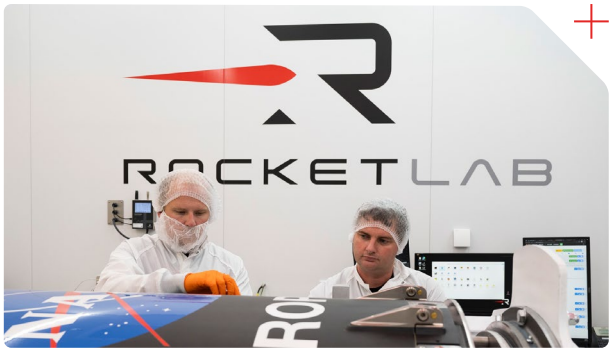
rocketlabusa.com/shop

LAUNCH SITE OVERVIEW

Rocket Lab Launch Complex-1
Mahia, New Zealand

> ‘Finding Hot Wildfires Near You’ will lift off from Launch Complex 1 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.



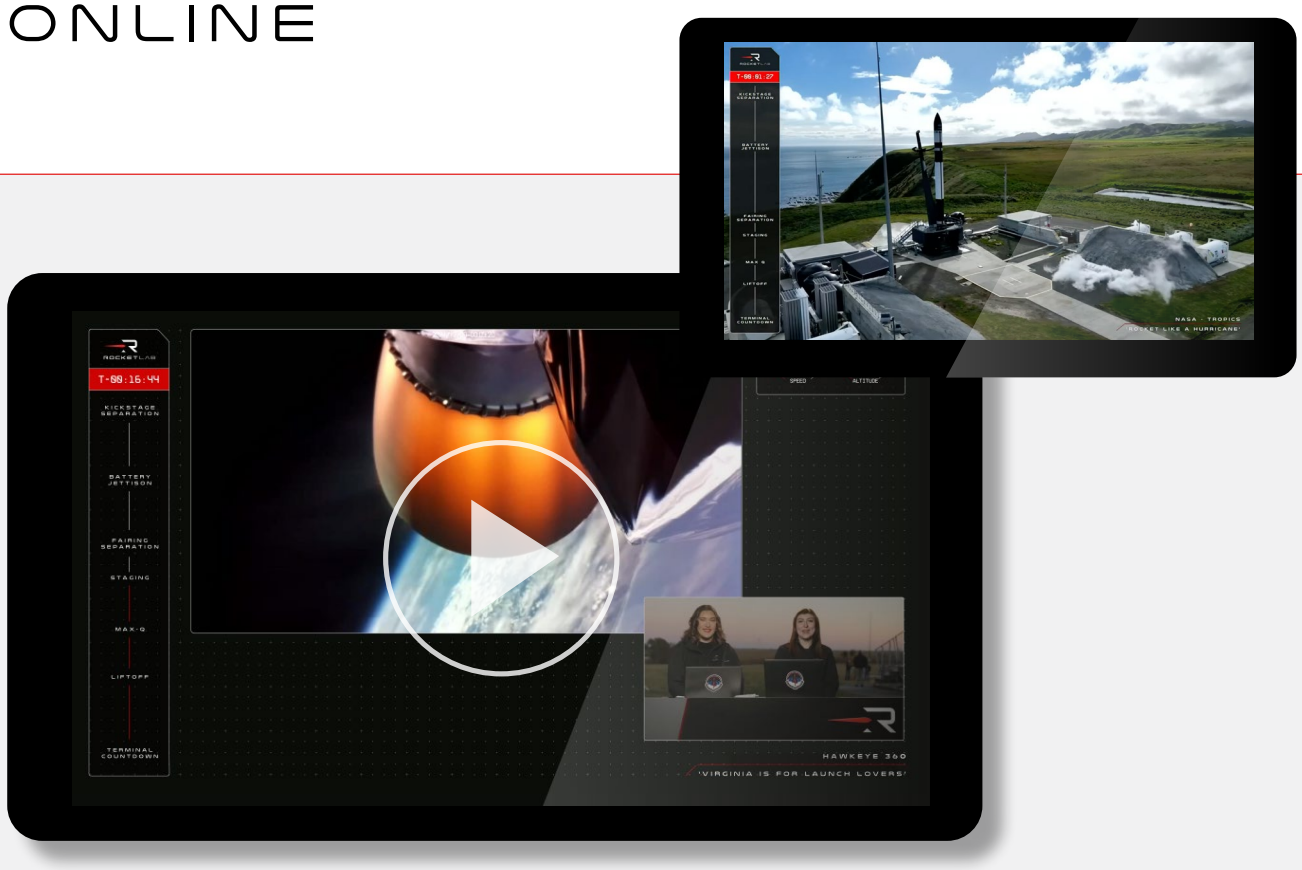
Located within Launch Complex 1 are Rocket Lab’s private range control facilities, three 100K satellite cleanrooms, a launch vehicle assembly facility which can process multiple Electrons at once, and administrative offices.

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

LAUNCH FOOTAGE & IMAGES

Images and footage of 'Finding Hot Wildfires Near You' 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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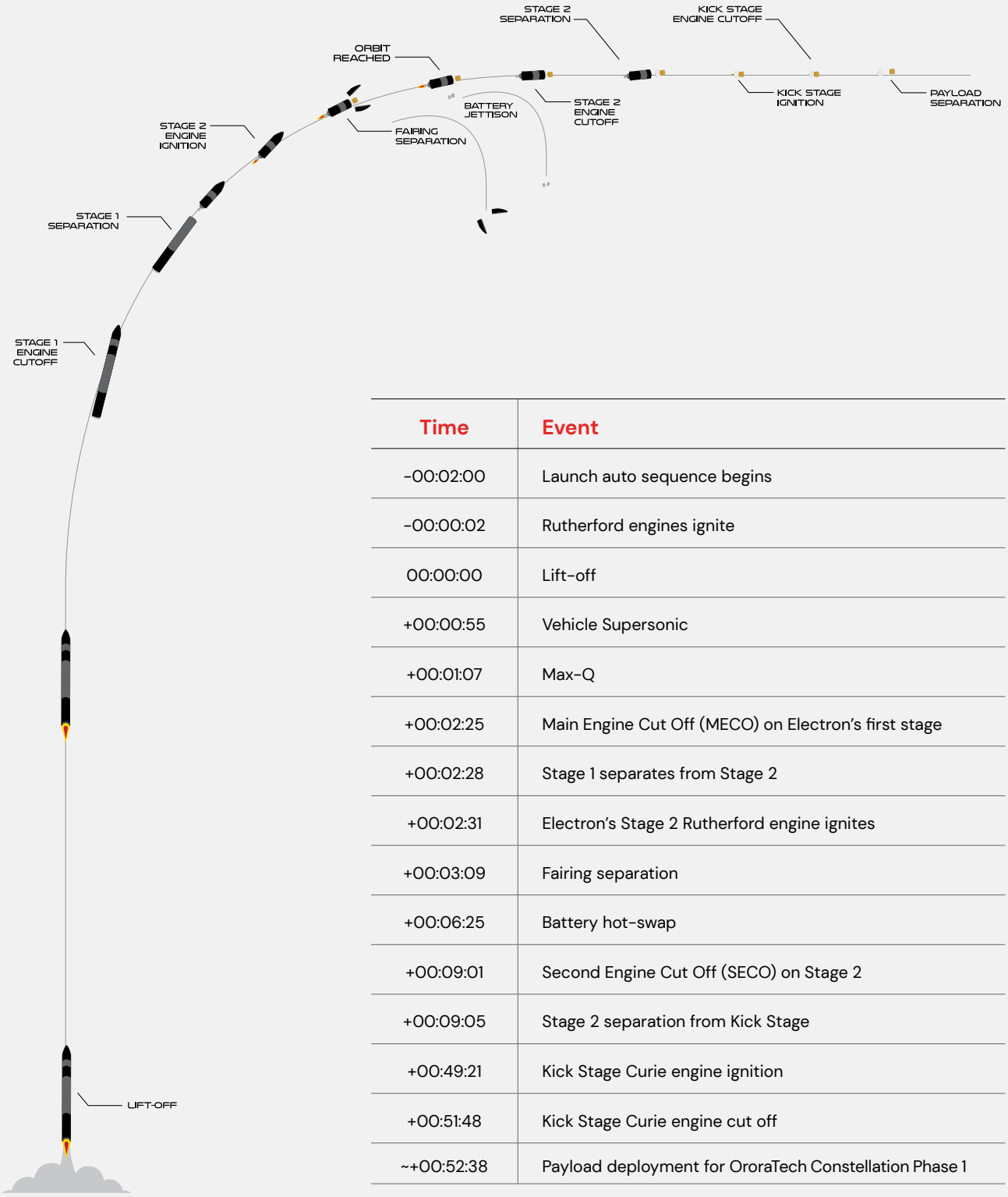
TIMELINE OF LAUNCH EVENTS



Time	Event
-00:02:00	Launch auto sequence begins
-00:00:02	Rutherford engines ignite
00:00:00	Lift-off
+00:00:55	Vehicle Supersonic
+00:01:07	Max-Q
+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
+00:03:09	Fairing separation
+00:06:25	Battery hot-swap
+00:09:01	Second Engine Cut Off (SECO) on Stage 2
+00:09:05	Stage 2 separation from Kick Stage
+00:49:21	Kick Stage Curie engine ignition
+00:51:48	Kick Stage Curie engine cut off
~+00:52:38	Payload deployment for OroraTech Constellation Phase 1

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

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