



Launch Mission Execution Forecast

Mission: Falcon 9 Astranis MicroGEO

Issued: 19 Dec 2024 / 0900L (1400Z)

Valid: 20 Dec 2024 / 2239 – 21/0228L (21/0339 – 0728Z)



Forecast Discussion: A broad area of high-pressure over the central United States will bring northwest flow and drier air to the cape Friday and Saturday. Although the Probability of Violation is slightly higher on the backup day due to a slight chance of a flight-through Cumulus Cloud Rule violation, expect favorable weather for either launch window.

Launch Day	Probability of Violating Weather Constraints ¹					
	<5%	Primary Concerns: None				
	Weather Conditions				Additional Risk Criteria ²	
	Weather/Visibility: None / 7 mi.	Clouds Type Coverage Base (ft) Tops (ft)			Upper-Level Wind Shear:	Low
Temp/Humidity: 52°F / 70%	Cumulus	Few	2,000	3,000	Booster Recovery Weather:	Low
Liftoff Winds (200'): 310° 15 - 22 mph					Solar Activity:	Low
24-Hour Delay	Probability of Violating Weather Constraints					
	5%	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: None / 7 mi.	Clouds Type Coverage Base (ft) Tops (ft)			Upper-Level Wind Shear:	Low-Mod
Temp/Humidity: 53°F / 70%	Cumulus	Few	2,000	5,000	Booster Recovery Weather:	Low
Liftoff Winds (200'): 340° 12 - 18 mph					Solar Activity:	Low
Notes	1. The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring any random time during the launch window. 2. Additional Risk Criteria, which are not included in the PoV, are mission-specific constraints that may not include all phenomena within each risk factor.					
	See https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf for more information					
Next Forecast Will Be Issued		AS REQUIRED				