



Launch Mission Execution Forecast



Mission: Falcon 9 Nilesat-301

Issued: 5 June 2022 / 1000L (1400Z)

Valid: 8 June 2022 / 1703 – 1932L (2103 – 2332Z)

Forecast Discussion: The current NHC forecast has Tropical Storm Alex, currently well east of the Florida peninsula, continuing to move to the east-northeast away from the state and out into the open Atlantic with little additional impacts. Locally, the weather will return to a typical summertime pattern heading into the remainder of the week, with the east coast sea breeze developing early in the afternoon across the Spaceport and moving inland each day. Chances are expected to be highest on Monday as an upper level system passes overhead, with lower chances through the remainder of the week. Each day the potential for showers and storms will generally be highest in the early afternoon across the Spaceport, shift to the interior of the peninsula by the late afternoon and early evening with the sea breeze. The primary concerns for both the primary and secondary launch windows Wednesday and Thursday afternoons will be cumulus clouds from any lingering activity.

Launch Day		Probability of Violating Weather Constraints ¹					
Launch Day	20%	Primary Concerns: Cumulus Cloud Rule					
	Weather Conditions				Additional Risk Criteria ²		
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low		
	Temp/Humidity: 83°F / 72%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low	
Liftoff Winds (200'): 100° 10 - 15 mph	Cumulus	Scattered	3,500	8,000	Solar Activity: Low		
24-Hour Delay		Probability of Violating Weather Constraints					
24-Hour Delay	20%	Primary Concerns: Cumulus Cloud Rule					
	Weather Conditions				Additional Risk Criteria		
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low		
	Temp/Humidity: 82°F / 74%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low	
Liftoff Winds (200'): 140° 7 - 12 mph	Cumulus	Scattered	3,500	10,000	Solar Activity: Low		
Notes	1. The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring anytime 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		6 June 2022					