



# Launch Mission Execution Forecast

**Mission:** Falcon 9 IMAP

**Issued:** 23 Sept 2025 / 1000L (1400Z)

**Valid:** 24 Sept 2025 / 0720 – 0740L (1120 – 1140Z)



**Forecast Discussion:** A considerably moister environment is in place across the Spaceport this morning, leading to more shower activity over local Florida waters than in the past few days. Ongoing activity off the coast of Southwest Florida has led to anvils streaming across the peninsula over the past few hours. This afternoon will be more active than the past few, though the east coast sea breeze will focus the best coverage inland. While land based showers and storms will wane after sunset, Atlantic showers will linger over the local waters into the Wednesday morning window and there remains a low chance for this activity to drift close enough to coast to be a concern. Some mid and upper level clouds, likely once again anvils from Gulf storms, will be around, but model consensus continues to have this too high to be a concern for Thick Cloud Layers or Anvil Cloud Rules.

The drying trend continues into Thursday with both a weak ridge aloft and the western Atlantic high nosing into the area. Low level flow remains light, though a little more likely to be onshore. Low topped Atlantic showers may be around but are likely to pose a very minimal launch weather concern.

Launch Day	Probability of Violating Weather Constraints <sup>1</sup>					
	10%	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions					Additional Risk Criteria <sup>2</sup>
	Weather/Visibility: None / 7 mi.	Clouds				Upper-Level Wind Shear: Low
		Type	Coverage	Base (ft)	Tops (ft)	
24-Hour Delay	Temp/Humidity: 78°F / 90%	Cumulus	Scattered	3,000	8,000	Booster Recovery Weather: Low
	Liftoff Winds (200'): VRB 5 mph	Cirrus	Scattered	25,000	30,000	Solar Activity: Low
	Probability of Violating Weather Constraints					
	10%	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions					Additional Risk Criteria
Notes	Weather/Visibility: None / 7 mi.	Clouds				Upper-Level Wind Shear: Low
		Type	Coverage	Base (ft)	Tops (ft)	
	Temp/Humidity: 78°F / 90%	Cumulus	Scattered	3,500	8,000	Booster Recovery Weather: Low
	Liftoff Winds (200'): VRB 5 mph	Cirrus	Scattered	30,000	35,000	Solar Activity: Low
	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 Launch FAQ <a href="https://45thweathersquadron.nebula.spaceforce.mil/pages/launchForecastSupport.html">https://45thweathersquadron.nebula.spaceforce.mil/pages/launchForecastSupport.html</a> for more information					
Next Forecast Will Be Issued		As Needed				