



Launch Mission Execution Forecast

Mission: Falcon 9 NASA Crew-13

Issued: 30-Sep-26 / 1130L (1530Z)

01-Oct-26 / 1100 – 1120L (1500 – 1520Z)

Valid: 02-Oct-26 / 1038 – 1058L (1438 – 1458Z)

03-Oct-26 / 1015 – 1035L (1415 – 1435Z)



Forecast Discussion: High centered across the Mid-Atlantic this morning has set up southeasterly flow across Florida. This setup has already tapped into the deeper moisture pooled to the south, bringing the return of showers and the occasional storm lifting north across the local Atlantic. Over the next 24 hours, a weak low-level disturbance sliding along the south side of the high into the Gulf will bring breezy onshore flow that will continue into the primary launch window late Thursday morning. Models still suggest the continued threat for onshore moving Atlantic showers along the coast, with the exact timing and locations of this activity the main forecast challenge. The primary concerns will be the Cumulus Cloud Rule and Dragon Flight Through Precipitation constraints associated with showers, with an intermingling of mid-level thick clouds and anvils also possible given the highly moist environment.

The deeper moisture is expected to shift north and west of the area with the feature into the weekend, lowering the overall coverage of Atlantic showers brushing the Spaceport. However, the threat for onshore moving Atlantic showers, along with the challenge of their exact timing and location will continue for the backup windows.

Launch Day	Probability of Violating Weather Constraints ¹							
	45%	Primary Concerns: Cumulus Cloud Rule , Flight Through Precip , Thick Cloud Layers Rule						
	Weather Conditions					Additional Risk Criteria ²		
	Weather:	Sct Showers	Type	Coverage	Base (ft)	Tops (ft)	Pad Escape Winds:	Low
	Visibility:	7+ mi	Cumulus	Scattered	3,500	16,000	Ascent Corridor Weather:	Low
24-Hour Delay	Temp/Humidity:	83°F / 80%	Cirrostratus	Overcast	25,000	35,000	Solar Activity:	Low
	Liftoff Winds (200'):		110° 12 - 17 mph					
	Probability of Violating Weather Constraints							
	40%	Primary Concerns: Cumulus Cloud Rule , Flight Through Precip , Thick Cloud Layers Rule						
	Weather Conditions					Additional Risk Criteria		
48-Hour Delay	Weather:	Sct Showers	Type	Coverage	Base (ft)	Tops (ft)	Pad Escape Winds:	Low
	Visibility:	7+ mi	Cumulus	Scattered	3,500	15,000	Ascent Corridor Weather:	Low
	Temp/Humidity:	83°F / 80%	Cirrostratus	Broken	25,000	35,000	Solar Activity:	Low
	Liftoff Winds (200'):		120° 12 - 17 mph					
	Probability of Violating Weather Constraints							
Note	30%	Primary Concerns: Cumulus Cloud Rule , Flight Through Precip , Anvil Cloud Rules						
	Weather Conditions					Additional Risk Criteria		
	Weather:	Isol Showers	Type	Coverage	Base (ft)	Tops (ft)	Pad Escape Winds:	Low
	Visibility:	7+ mi	Cumulus	Scattered	3,000	12,000	Ascent Corridor Weather:	Low
	Temp/Humidity:	83°F / 85%	Altostratus	Broken	18,000	22,000	Solar Activity:	Low
Liftoff Winds (200'):		130° 10 - 15 mph						
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 https://45thweathersquadron.nebula.spaceforce.mil/pages/launchForecastSupport.html for more information								
Next Forecast Will Be Issued			As Needed					