



# Launch Mission Execution Forecast

**Mission:** Falcon 9 PSN-MFS

**Issued:** 17 June 2023 / 0900L (1300Z)

**Valid:** 18 June 2023 / 1804 – 2102L (2204 – 19/0102Z)



**Forecast Discussion:** A boundary is slowly pushing through Central Florida increasing the afternoon and evening thunderstorm coverage and strength. This boundary will be mostly south of the Spaceport by Sunday’s launch window, creating less thunderstorms coverage. The primary weather concerns for launch attempts Sunday and Monday evening will be the Cumulus and Anvil Cloud Rules, and the Surface Electric Fields Rule associated with the day’s convection. Depending on localized convective interactions, the storminess should diminish through the launch window.

## Probability of Violating Weather Constraints<sup>1</sup>

**Launch Day**

**40→25%**

**Primary Concerns:** Cumulus and Anvil Cloud Rules, Surface Electric Fields Rule

### Weather Conditions

### Additional Risk Criteria<sup>2</sup>

Weather/Visibility:	Isold Showers / 7 mi.	Clouds				Upper-Level Wind Shear:	Low-Mod
		Type	Coverage	Base (ft)	Tops (ft)		
Temp/Humidity:	82°F / 72%	Cumulus	Scattered	3,000	18,000	Booster Recovery Weather:	Low-Mod
Liftoff Winds (200’):	240° 12 - 17 mph	Cirrostratus	Broken	25,000	28,000	Solar Activity:	Low

## Probability of Violating Weather Constraints

**24-Hour Delay**

**40→25%**

**Primary Concerns:** Cumulus and Anvil Cloud Rules, Surface Electric Fields Rule

### Weather Conditions

### Additional Risk Criteria

Weather/Visibility:	Isold Showers / 7 mi.	Clouds				Upper-Level Wind Shear:	Low
		Type	Coverage	Base (ft)	Tops (ft)		
Temp/Humidity:	82°F / 72%	Cumulus	Scattered	3,000	18,000	Booster Recovery Weather:	Low
Liftoff Winds (200’):	180° 10 - 15 mph	Cirrostratus	Broken	25,000	28,000	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