



Launch Mission Execution Forecast

Mission: Falcon Heavy USSF-44

Issued: 29 Oct 2022 / 0900L (1300Z)

Valid: 1 Nov 2022 / 0940 – 1011L (1340 – 1411Z)



Forecast Discussion: The remnants of the boundary that stalled a few days ago over Central Florida will continue to dissipate this weekend, driving a small chance for onshore moving Atlantic showers across the Spaceport. The next storm system will move out of the Deep South into the Ohio River Valley on Monday, but it will be too far north for significant impacts and its weak frontal boundary will move through on Tuesday with little fanfare.

Despite the boundary nearby around the time of the primary launch attempt Tuesday morning, the threat for showers will be low. The main concern will be any more robust cumulus clouds that may develop over the local waters and move onshore. Similar conditions are expected for the backup window Wednesday morning, with only a low threat for onshore moving cumulus. Increasing pressure gradient will bump up onshore flow into Thursday, bringing a small increase in cumulus clouds and Atlantic showers for the second backup window Thursday morning.

Launch Day	Probability of Violating Weather Constraints ¹				
	10%	Primary Concerns: Cumulus Cloud Rule			
	Weather Conditions			Additional Risk Criteria ²	
	Weather/Visibility: None / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)
Temp/Humidity: 78°F / 72%	Cumulus	Scattered	3,000	6,000	Solar Activity: Low
Liftoff Winds (200'): 070° 5 - 10 mph					

24-Hour Delay	Probability of Violating Weather Constraints				
	10%	Primary Concerns: Cumulus Cloud Rule			
	Weather Conditions			Additional Risk Criteria	
	Weather/Visibility: None / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)
Temp/Humidity: 78°F / 65%	Cumulus	Scattered	3,000	6,000	Solar Activity: Low
Liftoff Winds (200'): 070° 5 - 10 mph	Cirrus	Scattered	30,000	33,000	

48-Hour Delay	Probability of Violating Weather Constraints				
	20%	Primary Concerns: Cumulus Cloud Rule			
	Weather Conditions			Additional Risk Criteria	
	Weather/Visibility: None / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)
Temp/Humidity: 74°F / 70%	Cumulus	Scattered	3,000	8,000	Solar Activity: Low
Liftoff Winds (200'): 030° 7 - 12 mph					

Notes

- The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring anytime during the launch window.
- 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 30 Oct 22