



Launch Mission Execution Forecast

Mission: Falcon 9 KPLO

Issued: 3 Aug 2022 / 0830L (1230Z)

Valid: 4 Aug 2022 / 1903 – 1913L (2303 – 2313Z)



Forecast Discussion: The western Atlantic ridge is diffuse over the Spaceport this morning, with light and variable winds. The influence of the dying low-level boundary across the southeastern US will bring one more day of a slow moving east coast sea breeze with scattered storms this afternoon, though the best chances will remain inland of the Spaceport late evening. A re-strengthening of the ridge will put the area in deep easterly flow through the end of the week. The sea breeze will push quickly inland each afternoon, along with it the highest chances for storms beyond the early afternoon. Occasional onshore moving Atlantic showers and cumulus in the afternoon can't be ruled out in this pattern, but threat remains low for the early evening launch windows on Thursday and Friday evenings.

Along with the gradual increase in moisture, the approach of another easterly wave into Saturday will bring better rain chances overall, including for a second backup launch attempt Saturday evening.

Launch Day	Probability of Violating Weather Constraints ¹					
	20%	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions				Additional Risk Criteria ²	
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low	
	Type	Coverage	Base (ft)	Tops (ft)		
Temp/Humidity: 82°F / 79%	Cumulus	Scattered	3,500	8,000	Booster Recovery Weather: Low	
Liftoff Winds (200'): 110° 10 - 15 mph	Cirrus	Scattered	25,000	30,000	Solar Activity: Low	
24-Hour Delay	Probability of Violating Weather Constraints					
	20%	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low	
	Type	Coverage	Base (ft)	Tops (ft)		
Temp/Humidity: 82°F / 74%	Cumulus	Scattered	3,500	12,000	Booster Recovery Weather: Low	
Liftoff Winds (200'): 110° 10 - 15 mph					Solar Activity: Low	
48-Hour Delay	Probability of Violating Weather Constraints					
	30%	Primary Concerns: Cumulus Cloud 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 / 78%	Cumulus	Scattered	3,500	15,000	Booster Recovery Weather: Low	
Liftoff Winds (200'): 130° 12 - 17 mph	Cirrocumulus	Broken	30,000	35,000	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 4 Aug 2022