



Launch Mission Execution Forecast



Mission: Space Launch System - Artemis I

Issued: 29 Aug 2022 / 1030L (1430Z)

Valid: 2 Sep 2022 / 1248 – 1448L (1633 – 1833Z)

Forecast Discussion: The position of the Bermuda high will continue to be the main driver of our weather pattern through the next few days. The Spaceport will see light southerly flow developing an offshore component Tuesday and Wednesday, and an onshore component Thursday and Friday. Deep layered moisture begins to drop off as we enter the month of September. This should lower overall shower coverage late this week, though moisture will still be high enough to trigger early afternoon showers and storms during the launch window Friday. The time of the launch window will do us no favors, as the noon to 3pm timeframe will have the highest chance of storms generating along the Space Coast assuming the flow remains onshore. As a result, our primary concerns will be the Cumulus Cloud Rule, Surface Electric Fields Rule, and the Flight Through Precipitation constraint, with additional LLCC concerns on the table.

Probability of Violating Weather Constraints¹

60%

Primary Concerns: Cumulus Cloud Rule, Surface Electric Fields Rule, Flight Through Precipitation

Weather Conditions

Additional Risk Criteria²

Weather/Visibility:	Sct Showers / 7 mi.	Clouds			
		Type	Coverage	Base (ft)	Tops (ft)
Temp/Humidity:	86°F / 90%	Cumulus	Scattered	2,500	20,000
Liftoff Winds (132'):	120° 8-12 mph				

Upper-Level Winds: Low
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

30 Aug 2022