



Launch Mission Execution Forecast



Mission: Space Launch System - Artemis I

Issued: 30 Aug 2022 / 0900L (1300Z)

Valid: 2 Sep 2022 / 1248 – 1448L (1648 – 1848Z)

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 with a developing, but weak, offshore component today and Wednesday. A reversion back to stronger onshore flow begins Friday and persists through the weekend. Some of the deep layered atmospheric moisture across the area is forecast to get stripped away beginning today and continuing through late week, leading to lower overall shower coverage; however, moisture will still be high enough to trigger showers and possibly storms during the launch window Friday. As a result, the primary weather concerns will be the Cumulus Cloud Rule, Surface Electric Fields Rule, and the Flight Through Precipitation constraint.

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)
Cumulus	Scattered	2,500	20,000

Upper-Level Winds: Low

Solar Activity: Low

Temp/Humidity: 86°F / 80%

Liftoff Winds (132'): 120° 8-12 mph

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

31 Aug 2022