



Launch Mission Execution Forecast

Mission: Atlas V SBIRS GEO-6

Issued: 2 Aug 2022 / 0800L (1200Z)

Valid: 4 Aug 2022 / 0629 – 0709L (1029 – 1109Z)



Forecast Discussion: *There has been no change to the forecast reasoning.* The return to a more typical summertime pattern of afternoon showers and thunderstorms continues today as atmospheric moisture builds across the area. Though the greatest coverage of storms is again expected over the interior, there is an opportunity for precipitation and lightning advisories later today as the sea breeze pushes slowly inland. A slightly earlier start to the sea breeze on Wednesday suggests a threat of late morning or early afternoon showers and storms, with activity focusing west of Complex 41 through the day. Thereafter, the Atlantic ridge will strengthen a bit and push north of the area, bringing a return to deep easterly flow by Thursday morning's launch window. Isolated showers are expected to develop over the nearshore Atlantic waters toward sunrise, and there is a small concern for a Cumulus Cloud Rule violation during the initial launch attempt. In the event of a 24-hour delay, the probability of violation is even higher due to increased moisture and an even better chance of early-morning shower and storm activity over the Atlantic.

| Launch Day | Probability of Violating Weather Constraints ¹ | | | | | |
|-----------------------------|---|--------------------------------------|-----------|-----------|---------------------------------------|--|
| | 30% | Primary Concerns: Cumulus Cloud Rule | | | | |
| | Weather Conditions | | | | Additional Risk Criteria ² | |
| | Weather/Visibility: | Isolated Showers / 7 mi. | Clouds | | | |
| | | Type | Coverage | Base (ft) | Tops (ft) | |
| Temp/Humidity: | 81°F / 84% | Cumulus | Scattered | 2,500 | 6,000 | |
| Ground Winds (230'): | 110° 7 - 12 knots | | | | | |

| 24-Hour Delay | Probability of Violating Weather Constraints | | | | | |
|-----------------------------|--|---|-----------|-----------|--------------------------|--|
| | 50% | Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rules | | | | |
| | Weather Conditions | | | | Additional Risk Criteria | |
| | Weather/Visibility: | Isolated Showers / 7 mi. | Clouds | | | |
| | | Type | Coverage | Base (ft) | Tops (ft) | |
| Temp/Humidity: | 82°F / 85% | Cumulus | Scattered | 2,500 | 6,000 | |
| Ground Winds (230'): | 150° 8 – 13 knots | | | | | |

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 3 Aug 2022