



# Launch Mission Execution Forecast



**Mission:** Atlas V SBIRS GEO-6

**Issued:** 1 Aug 2022 / 0830L (1230Z)

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

**Forecast Discussion:** Despite the fact that atmospheric moisture will begin to increase today, any showers and storms that develop are likely to be across the interior, i.e. west of Interstate 95. During MLP Roll Operations tomorrow, precipitation chances will return to the Spaceport as isolated to scattered storms are forecast to develop in the afternoon along the inland-moving sea breeze. Thereafter, the Atlantic ridge will re-strengthen and push north of the area later in the week, bringing a return to deep easterly flow by Thursday morning's launch window. While a swath of drier air is still forecast to cross the area, moisture is expected to begin increasing right around the time of the initial launch attempt. As a result, the probability of a weather-related violation has been increased to 30% as isolated early-morning showers will bring a small chance of a Cumulus Cloud Rule violation. In the event of a 24-hour delay, the probability of violation is 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 <sup>1</sup>					
	<b>30%</b>	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions				Additional Risk Criteria <sup>2</sup>	
	<b>Weather/Visibility:</b>	Isolated Showers / 7 mi.	Clouds			<b>Solar Activity:</b> Low
		Type	Coverage	Base (ft)	Tops (ft)	
<b>Temp/Humidity:</b>	81°F / 84%	Cumulus	Scattered	2,500	6,000	
<b>Ground Winds (230'):</b>	140° 7 - 12 knots					

24-Hour Delay	Probability of Violating Weather Constraints					
	<b>40%</b>	Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rules				
	Weather Conditions				Additional Risk Criteria	
	<b>Weather/Visibility:</b>	Isolated Showers / 7 mi.	Clouds			<b>Solar Activity:</b> Low
		Type	Coverage	Base (ft)	Tops (ft)	
<b>Temp/Humidity:</b>	82°F / 85%	Cumulus	Scattered	2,500	6,000	
<b>Ground Winds (230'):</b>	150° 10 – 15 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** 2 Aug 2022