



Launch Mission Execution Forecast

Mission: Atlas V GOES-T

Issued: 28 Feb 2022 / 0800L (1300Z)

Valid: 1 Mar 2022 / 1638 – 1838L (2138 – 2338Z)



Forecast Discussion: For Roll Day today, a cool front is stalled just south of central Florida that brought just some showers over the Atlantic waters. Behind it over north Florida, a mid-level shortwave trough moves across the state today at the same time a surface low will develop along the frontal boundary just off the coast. This will bring scattered showers moving in from the northwest by late afternoon Monday, with an isolated thunderstorm possible in the evening tonight, though most will remain over water. As the surface low intensifies off the coast, winds will increase to near 15-20kt from the north by this evening. For Launch Day through backup day, models have come into agreement on the surface low continuing to move east away from the Spaceport, indicating an improvement in the forecast from previous days. However, we will still have deep onshore flow from the north-northeast bringing the possibility for convergent bands and a few showers moving onshore with it. These conditions linger into the backup day Wednesday as well, with the primary concern being the Cumulus Cloud Rule should any of these showers move over the pad, with a secondary concern of elevated electric fields on Tuesday.

		Probability of Violating Weather Constraints ¹				
Launch Day	30%	Primary Concerns: Cumulus Cloud Rule, Surface Electric Fields Rule				
	Weather Conditions				Additional Risk Criteria ²	
	Weather/Visibility:	Few Showers / 7 mi.	Clouds			Solar Activity: Low
		Type	Coverage	Base (ft)	Tops (ft)	
Temp/Humidity:	70°F / 85%	Cumulus	Few	2,000	12,000	
Ground Winds (230'):	010° 15 - 20 knots	Stratocumulus	Scattered	2,000	5,000	
		Probability of Violating Weather Constraints				
24-Hour Delay	30%	Primary Concerns: Cumulus Cloud Rule				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility:	Few Showers / 7 mi.	Clouds			Solar Activity: Low
		Type	Coverage	Base (ft)	Tops (ft)	
Temp/Humidity:	73°F / 80%	Cumulus	Few	2,500	10,000	
Ground Winds (230'):	030° 10 - 15 knots					
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		As required				