



Launch Mission Execution Forecast



Mission: ASTRA VCLS DEMO 2

Issued: 7 Feb 2022 / 0800L (1300Z)

Valid: 7 Feb 2022 / 1300 – 1600L (1800 – 2100Z)

Forecast Discussion: Low ceilings this morning will lift to about 3,000ft by launch window and likely become more broken. There is just a very slight possibility for a Cumulus Cloud embedded in this lower more stable broken deck to violate for the Cumulus Cloud Rule, more towards the end of the window. For backup day Tuesday, another front moves through slowly. This front is expected to bring significant cloud cover through the mid-levels and rain likely, especially towards the end of the window. Winds will also elevate to near 20 kt from the north, making for a cold, wet, and afternoon into evening. Therefore, there is a high POV for the backup day Tuesday with the primary concerns being the Thick Cloud Layer Rule, Cumulus Cloud Rule, and Liftoff winds

		Probability of Violating Weather Constraints					
Launch Day	10%	Primary Concerns: Cumulus Cloud Rule					
	Weather Conditions				Additional Risk Criteria		
	Weather/Visibility: None / 7 mi.	Clouds				Upper-Level Wind Shear:	Low
	Temp/Humidity: 67°F / 82%	Type	Coverage	Base (ft)	Tops (ft)	Solar Activity:	N/A
Liftoff Winds (30'): 290° 6 - 10 kts	Stratocumulus	Broken	3,000	6,000			
		Probability of Violating Weather Constraints					
24-Hour Delay	80%	Primary Concerns: Thick Cloud Layer Rule, Cumulus Cloud Rule, Liftoff Winds					
	Weather Conditions				Additional Risk Criteria		
	Weather/Visibility: Showers / 7 mi.	Clouds				Upper-Level Wind Shear:	Low
	Temp/Humidity: 58°F / 90%	Type	Coverage	Base (ft)	Tops (ft)	Solar Activity:	N/A
Liftoff Winds (30'): 350° 15 - 20 kts	Cumulus	Scattered	3,000	13,000			
	Altostratus	Overcast	13,000	22,000			
<p><i>Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity.</i></p>							
Next Forecast Will Be Issued		As required					