



Launch Mission Execution Forecast



Mission: ASTRA VCLS DEMO 2

Issued: 5 Feb 2022 / 1600L (2100Z)

Valid: 6 Feb 2022 / 1300 – 1600L (1800 – 2100Z)

Forecast Discussion: A shallow cold front is stalled just south of the Cape, leaving us with an overcast stratocumulus deck and some spotty light rain. For the backup forecast Sunday, a surface low develops off the coast of the Spaceport along the frontal boundary and exits to the northeast with a trailing front just south of the Cape. Models are now in agreement that the Spaceport will be in a drier slot. Still, more unstable air could cause a few convective showers to pop up within 10nm during the count and launch window. Therefore, the POV is reduced to 40% with the primary concerns being the Cumulus Cloud Rule and Surface Electric Fields Rule.

Probability of Violating Weather Constraints

40%

Primary Concerns: Cumulus Cloud Rule, Surface Electric Fields Rule

Weather Conditions

Additional Risk Criteria

Weather/Visibility:		Clouds				Upper-Level Wind Shear:	
Temp/Humidity:		Type	Coverage	Base (ft)	Tops (ft)	Solar Activity:	
Few Showers / 7 mi.		Cumulus	Scattered	3,000	14,000	Low	
70°F / 87%						N/A	
Liftoff Winds (30'): 350° 7 - 12 kts							

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.

Next Forecast Will Be Issued As required