



Launch Mission Execution Forecast

Mission: ASTRA VCLS DEMO 2

Issued: 9 Feb 2022 / 0800L (1300Z)

Valid: 10 Feb 2022 / 1300 – 1600L (1800 – 2100Z)



Forecast Discussion: Showers will taper off by mid-morning followed by clearing skies in the afternoon as a surface high moves into north Florida tonight through Friday. This will bring dry weather, lighter winds and mostly sunny skies for launch day Thursday with the only concern being a rare cumulus cloud moving right over the pad. For backup day Friday, moisture increases as we get into deep onshore flow from the east with a weak trough over south Florida. This could bring isolated showers northward nearing the Spaceport, especially later in the day towards the end of the window. Therefore, the POV is 30% Friday for the Cumulus Cloud Rule.

| Probability of Violating Weather Constraints | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|--------------------------------|--------------------------|--------------------------|--|----------------------------|-----------------------|---------------|--|--------------------------------|-----|--|--|------|----------|-----------|-----------|-----------------------|------------|---------|-----------|-------|--------|-----------------------------|-----------------|--------|--------|--------|--------|------------------------|--|--|--|--|-----|
| Launch Day | <table border="1"> <tr> <td style="text-align: center;"><10%</td> <td>Primary Concerns: Cumulus Cloud Rule</td> </tr> </table> | <10% | Primary Concerns: Cumulus Cloud Rule | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 24-Hour Delay | <table border="1"> <tr> <td style="text-align: center;">30%</td> <td>Primary Concerns: Cumulus Cloud Rule</td> </tr> </table> | 30% | Primary Concerns: Cumulus Cloud Rule | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Temp/Humidity: | 68°F / 70% | Cumulus | Scattered | 2,500 | 10,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Liftoff Winds (30'): | 080° 8 - 13 kts | Cirrus | Broken | 25,000 | 27,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| <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 | 10 Feb 2022 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |