

## **Launch Mission Execution Forecast**

**Mission**: Falcon 9 StarlinkV1.0-L14 **Issued**: 23 Oct 2020 / 0800L (1200Z)

**Valid**: 24 Oct 2020 / 1121 – 1142L (1521 – 1542Z)



**Forecast Discussion**: The strong easterly flow that has been in place across Central Florida this week will diminish today, although the area will continue to see breezy conditions at times. The onshore flow will continue to bring periodic Atlantic showers into the Spaceport the next two days, with overall coverage lower than earlier this week. The weather concern for the primary launch window Saturday morning will be Cumulus Clouds associated with this Atlantic shower activity.

A broad tropical disturbance near Cuba that is currently being monitored for development by NHC is expected to lift north across Cuba on Saturday, then the Straits of Florida and central Bahamas on Sunday. There remains uncertainty on the development of this system and how close it will approach the Florida peninsula. Current trends suggest this system will remain south of the state, but bring a higher chance of Atlantic showers and storms for the backup launch window Sunday morning. The primary concern for a Sunday morning attempt will be Cumulus Clouds and Surface Electric Field Rule with shower activity.

|   | Probability of Violating Weather Constraints                          |      |                        |  |                    |                         |           |                             |          |
|---|---|------|------------------------|--|--------------------|-------------------------|-----------|-----------------------------|----------|
| ich Day   | 40%   | Prim | ary Concerns: Cum      |  |                    |                         |           |                             |          |
|   | Weather Conditions  |      |                        |  |                    |                         |           | Additional Risk Criteria    |          |
| aunch   | Weather/Visibility:   |      | None / 7 mi.           | Туре                                     | Clouds<br>Coverage | Base (ft)               | Tops (ft) | Upper-Level Wind Shear: Low |          |
| _   | Temp/Humid  | ity: | 82°F / 68%             | Cumulus                                  | Scattered          | 3,000                   | 7,000     | Booster Recovery Weather:   | Moderate |
|   | Liftoff Winds (200'): 0   |      | 080° 12 - 17 mph       | Altocumulus                              | Scattered          | 15,000                  | 19,000    | Solar Activity:             | Low      |
|   | Probability of Violating Weather Constraints                          |      |                        |  |                    |                         |           |                             |          |
| Delay   | 50% Primary Concerns: Cumulus Cloud Rule, Surface Electric Field Rule |      |                        |  |                    |                         |           |                             |          |
|   | Weather Conditions  |      |                        |  |                    |                         |           | Additional Risk Criteria    |          |
| 24-Hour   | Weather/Visibility:   |      | Isold. Showers / 7 mi. | Clouds Type Coverage Base (ft) Tops (ft) |                    | Upper-Level Wind Shear: | Low       |                             |          |
| 24  | Temp/Humidity:  |      | 83°F / 70%             | Cumulus                                  | Scattered          | 3,000                   | 9,000     | Booster Recovery Weather:   | Moderate |
|   | Liftoff Winds (200'):   |      | 060° 12 - 17 mph       | Altocumulus                              | Scattered          | 12,000                  | 16,000    | Solar Activity:             | Low      |
| Note: The Brokehility of Violation (BOV) is the change that a Lightning Lough Commit Criteria (LLCC) or contain year constraints (surface winds precipitation and |   |      |                        |  |                    |                         |           |                             |          |

**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 Needed