



Launch Mission Execution Forecast

Mission: Falcon 9 CRS-21

Issued: 05 Dec 2020 / 0800L (1300Z)

Valid: 06 Dec 2020 / 1112 – 1123L (1612 – 1623Z)



Forecast Discussion: Cool and dry air will filter into Central Florida today behind the weak cold front, which will slide southward and settle across the Florida Keys tonight. A low pressure system is expected to develop across the central Gulf of Mexico overnight and gradually drift eastward Sunday. While conditions are expected to remain dry across Central Florida Sunday morning, the disturbance will generate a mid-level cloud shield across much of the state during the launch window. The primary weather concern during Sunday's launch window will be the Thick Cloud Layer Rule.

The weather rapidly deteriorates Sunday night into Monday as an upper level trough dives down from the Upper Midwest into the Deep South, lifting the surface low in the Gulf of Mexico northeastward through Florida. Expect showers and perhaps a few thunderstorms to push through Central Florida Sunday night, with activity lasting into Monday. Monday afternoon/evening, a cold front packing arctic air will push through the Florida Peninsula, clearing showers out of the Spaceport. Strong cold air advection will drop temperatures into the upper 40s early Tuesday morning, aided by breezy northwesterly winds. The primary weather concern during the backup launch window will be Liftoff Winds.

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Launch Day	40% Primary Concerns: Thick Cloud Layer Rule																												
	Weather Conditions																												
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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