

Launch Mission Execution Forecast

Mission: Falcon 9 StarlinkV1-L4

Issued: 16 Feb 2020/1000L (1500Z)

Valid: 17 Feb 2020/0959-1010L (1459-1510Z)

<u>Synoptic Discussion:</u> High pressure continues to dominate over the Space Coast. Winds decreased significantly overnight and will remain light through early next week. For the launch window Monday morning, skies will be mostly clear with a few cumulus clouds off the coast. With low-level winds from the east, there is a very slight chance for cumulus clouds to move onshore during the window. Therefore, the primary concern for launch is the Cumulus Cloud Rule. In the event of a 24 hour delay, conditions remain mostly favorable. Increased mid-level moisture remains in the area from an inverted trough, therefore the primary concern for backup day is the Thick Cloud Layer Rule.

<u>Clouds</u> <u>Coverage</u> <u>Bases (feet)</u> <u>Tops (feet)</u>

Cumulus Few 3,000 6,000

Weather: None

Surface Visibility: 7 Miles Solar Activity: Low

Liftoff Winds (MPH): 150° @ 5-10mph (200') **Pressure:** 30.08 inHg

Temperature: 71°F RH: 84%

	Probability of Violating Weather Constraints*		Other Risk Criteria	
Launch Day	<10%	Cumulus Cloud Rule	Upper-Level Shear	Moderate
			Recovery	Low
			Proton Flux	Low
24-Hour Delay	20%	Thick Cloud Layer Rule	Upper-Level Shear	Low
			Recovery	Moderate
			Proton Flux	Low

*The violation probabilities above do not include upper level wind/shear or recovery/travel risk.

Sunrise: 17/0658L | Sunset: 17/1813L | 18/0658L

 Moonrise:
 17/0219L 18/0318L
 Moonset:
 17/1304L 18/1354L
 Illumination:
 33% 23%

Next forecast will be issued: As Required