



# Launch Mission Execution Forecast

**Mission:** Falcon 9 JCSAT-18

**Issued:** 15 Dec 2019/1300L (1800Z)

**Valid:** 16 Dec 2019/1910-2038L (17 Dec 0010-0138Z)

Synoptic Discussion:

High pressure across the region will slide east into the Atlantic on Monday, allowing increasing southeasterly flow along the Space Coast. Conditions look to remain dry for the launch window with only a few cumulus clouds. The primary weather concern for launch on Monday is cumulus clouds. Maximum upper-level winds will be from the west at 55 knots near 35,000 feet.

Another frontal boundary will move into the region Tuesday night. Increasing cloudiness associated with the boundary will reach the area by the launch window, with the potential for showers and a few storms ahead of the boundary before the launch window on Tuesday. However, it looks as though most of the precipitation associated with the boundary will reach the Space Coast after the backup launch window. The main weather concerns will be cumulus clouds and disturbed weather. Maximum upper-level winds will be from the north at 75 knots near 45,000 feet.

<u>Clouds</u>	<u>Coverage</u>	<u>Bases (feet)</u>	<u>Tops (feet)</u>
Cumulus	Scattered	2,000	4,000

<b>Weather:</b> None	<b>Solar Activity:</b> Low
<b>Surface Visibility:</b> 7 Miles	<b>Pressure:</b> 30.07 inHg
<b>Liftoff Winds (MPH):</b> 150° @ 15-20 (200')	<b>RH:</b> 85%
<b>Temperature:</b> 73°F	

**Launch day probability of violating launch weather constraints:** **10%**  
**Primary concern(s):** Cumulus Cloud Rule

**Delay day probability of violating launch weather constraints:** **50%**  
**Primary concern(s):** Cumulus Cloud Rule, Disturbed Weather Rule

\*\*The probability of violation does not include mission & launch vehicle specific upper-level wind criteria.\*\*

<b>Sunrise:</b> 16/0707L 17/0707L	<b>Sunset:</b> 16/1727L 17/1728L	
<b>Moonrise:</b> 16/2209L 17/2314L	<b>Moonset:</b> 17/1143L 18/1212L	<b>Illumination:</b> 80% 70%

**Next forecast will be issued:** As Required