



# Launch Mission Execution Forecast

**Mission:** Falcon 9 Dragon In-Flight Abort

**Issued:** 18 Jan 2020/0400L (0900Z)

**Valid:** 19 Jan 2020/0800-1400L (1300-1900Z)

**Synoptic Discussion:** Gusty onshore winds will gradually subside through the day today as a frontal system makes its way into the Panhandle. On Sunday, winds will switch southwesterly and weather will deteriorate ahead of a frontal system moving into Central Florida. The main weather concern will be the extensive clouds associated with this system as it approaches the Spaceport by the end of the launch window. Maximum upper-level winds will be westerly at 80 knots at 45,000 feet.

On Monday, winds will become northerly as the front slowly moves south of the Spaceport through the morning. The main concern is the extensive clouds associated with the system until it is south of the Spaceport. Maximum upper-level winds will be westerly at 110 knots near 35,000 feet.

<u>Clouds</u>	<u>Coverage</u>	<u>Bases (feet)</u>	<u>Tops (feet)</u>
Cumulus	Scattered	3,000	7,000
Alto cumulus	Broken	10,000	14,000
Cirrostratus	Overcast	20,000	26,000

<b>Weather:</b> Isolated Rain Showers	<b>Solar Activity:</b> Low
<b>Surface Visibility:</b> 7 Miles	<b>Pressure:</b> 30.17 inHg
<b>Liftoff Winds (MPH):</b> 230° @ 12-17 (200')	<b>RH:</b> 70%
<b>Temperature:</b> 62°F → 72°F	

**Launch day probability of violating launch weather constraints:** 40% → 60%  
**Primary concern(s):** Thick Cloud Layer Rule, Flight through Precipitation

**24-hr delay probability of violating launch weather constraints:** 50% → 40%  
**Primary concern(s):** Thick Cloud Layer Rule, Flight through Precipitation

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

<b>Sunrise:</b> 19/0715L 20/0715L	<b>Sunset:</b> 19/1751L 20/1752L
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<b>Moonrise:</b> 19/0222L 20/0324L	<b>Moonset:</b> 19/1335L 20/1419L	<b>Illumination:</b> 34% 24%
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**Next forecast will be issued:** As Required