



# Launch Mission Execution Forecast

**Mission:** Falcon 9 Dragon CRS-20

**Issued:** 5 Mar 2020/1100L (1600Z)

**Valid:** 6 Mar 2020/2346-2354L (0446-0454Z)

Synoptic Discussion: A low-pressure has formed along a frontal boundary and is currently nearing the Florida Panhandle. This is creating southwesterly winds and warm temperatures in Central Florida. As the day progresses, the Space Coast will see increasing cloudiness and isolated showers late. The cold front with its associated showers and isolated thunderstorms will push through the Spaceport early Friday as the low pushes up the Eastern Seaboard. Skies will clear through the day Friday, and winds will become gusty out of the north as the high-pressure area moves east. The primary weather concern for launch is Liftoff Winds with the tight pressure gradient behind the front.

On Saturday, the winds will weaken slightly and become northeasterly as the high-pressure area continues to move closer. The primary weather concern for Saturday evening remains Liftoff Winds.

| <u>Clouds</u> | <u>Coverage</u> | <u>Bases (feet)</u> | <u>Tops (feet)</u> |
|---------------|-----------------|---------------------|--------------------|
| Cirrus        | Few             | 28,000              | 30,000             |

**Visibility/Weather:** 7 Miles  
**Liftoff Winds (MPH):** 350° @ 25-30mph (200')  
**Temperature:** 56°F  
**Pressure:** 30.18 inHg  
**RH:** 64%

|                      | <b>Probability of Violating Weather Constraints*</b> |               | <b>Other Risk Criteria</b> |          |
|----------------------|--|---------------|----------------------------|----------|
| <b>Launch Day</b>    | <b>40%</b>   | Liftoff Winds | Upper-Level Shear          | Low      |
|                      |  |               | Recovery Conds             | Moderate |
|                      |  |               | Solar Activity             | Low      |
| <b>24-Hour Delay</b> | <b>10%</b>   | Liftoff Winds | Upper-Level Shear          | Low      |
|                      |  |               | Recovery Conds             | Low      |
|                      |  |               | Solar Activity             | Low      |

\*The violation probabilities above do not include shear, recovery, or solar criteria.

|                                     |  |                                 |  |
|-------------------------------------|--|---------------------------------|--|
| <b>Sunrise:</b> 6/0641L<br>7/0640L  | <b>Sunset:</b> 6/1825L<br>7/1826L        |                                 |  |
| <b>Moonrise:</b> 6/1512L<br>7/1619L | <b>Moonset:</b> 7/0516L<br>8/0703L (EDT) | <b>Illumination:</b> 90%<br>95% |  |

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