

## **Launch Mission Execution Forecast**

Mission: Falcon 9 NROL-108

**Issued**: 18 Dec 2020 / 0800L (1300Z)

**Valid**: 19 Dec 2020 / 0900 – 1200L (1400 – 1700Z)



**Forecast Discussion**: Today will be a chilly one across Central Florida with mostly clear skies and gusty northerly winds. On Saturday, winds will become easterly and weaken as the high-pressure center moves north towards the Mid-Atlantic. These onshore winds will bring clouds that develop over the warmer waters towards the Space Coast. The primary weather concern for an attempt Saturday is cumulus clouds associated with these coastal showers.

On Sunday, a low-pressure system will move into the northern Gulf of Mexico, bringing clouds to Central Florida as it moves towards the peninsula. These clouds will increase in coverage and thickness through the day Sunday. The primary weather concern for a Sunday attempt is the Thick Cloud Layer Rule.

				Proba	ability of V	iolating W	eather	Constra	ints	
Day	10% Primary Concerns: Cumulus Cloud Rule									
ch	Weather Conditions								Additional Risk Criteria	
aunch	Weather/Visi	bility:	None / 7 m	ni.	Туре	Clouds Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
Ĭ	Temp/Humid	ity:	64°F / 72%	, 6	Cumulus	Scattered	3,000	8,000	Booster Recovery Weather:	Low
	Liftoff Winds	(200'):	090° 15-20	) mph					Solar Activity:	Low
	Probability of Violating Weather Constraints									
$\geq$	30% Primary Concerns: Thick Cloud Layer Rule									
<u>ela</u>	30%	Prima	ary Conce	erns: Thick	Cloud Laye	r Rule				
ur Delay	30%	Prima	•		Cloud Laye				Additional Risk Cr	iteria
	30% Weather/Visi		•	Weather	-		Base (ft)	Tops (ft)	Additional Risk Cr	i <b>teria</b> Low
24-Hour Dela		bility:		Weather	Condition	IS Clouds		Tops (ft) 10,000		
	Weather/Visi	bility:	Isold Show	Weather vers / 7 mi.	Condition	Clouds Coverage	Base (ft)	,	Upper-Level Wind Shear:	Low
24-Hour	Weather/Visi Temp/Humid Liftoff Winds	bility: ity: (200'):	Isold Show 68°F / 70% 220° 10-15 on (POV) is th	Weather wers / 7 mi. 6 5 mph ne chance that	Type Cumulus Altostratus	Clouds Coverage Scattered Scattered noch Commit Critical	Base (ft) 3,500 10,000 eria (LLCC)	10,000 14,000 or certain us	Upper-Level Wind Shear: Booster Recovery Weather:	Low Low Low pitation, and