



# Launch Mission Execution Forecast



**Mission:** Falcon 9 Starlink 4-14

**Issued:** 19 Apr 2022/ 0900L (1300Z)

**Valid:** 21 Apr 2022/ 1104 – 1404L (1504 – 1804Z)

**Forecast Discussion:** Pleasant weather is on tap today as cool air filters into the state behind the cold front, which passed the Spaceport early this morning. High pressure will set up across the eastern CONUS through Wednesday, and then shift off of New England Thursday and Friday. While the weather will be pleasant and sunny, the tight pressure gradient on the southwestern flank of the ridge will create breezy to windy conditions across the Spaceport through the end of the week. The only concern for the primary and backup launch window will be Liftoff Winds.

Launch Day		Probability of Violating Weather Constraints <sup>1</sup>					
Launch Day	<b>30%</b>	Primary Concerns: Liftoff Winds					
	Weather Conditions				Additional Risk Criteria <sup>2</sup>		
	<b>Weather/Visibility:</b> None / 7 mi.	<b>Clouds</b>		<b>Upper-Level Wind Shear:</b> Low			
	<b>Temp/Humidity:</b> 76°F / 60%	Type	Coverage	Base (ft)	Tops (ft)	<b>Booster Recovery Weather:</b> Low	
<b>Liftoff Winds (200'):</b> 080° 17 - 22 mph	Cumulus	Scattered	3,500	4,500	<b>Solar Activity:</b> Low		
24-Hour Delay		Probability of Violating Weather Constraints					
24-Hour Delay	<b>50%</b>	Primary Concerns: Liftoff Winds					
	Weather Conditions				Additional Risk Criteria		
	<b>Weather/Visibility:</b> Iso Showers / 7 mi.	<b>Clouds</b>		<b>Upper-Level Wind Shear:</b> Low			
	<b>Temp/Humidity:</b> 76°F / 70%	Type	Coverage	Base (ft)	Tops (ft)	<b>Booster Recovery Weather:</b> Low	
<b>Liftoff Winds (200'):</b> 060° 20 - 25 mph	Cumulus	Scattered	3,500	4,500	<b>Solar Activity:</b> Low		
Notes	<ol style="list-style-type: none"> <li>The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring anytime during the launch window.</li> <li>Additional Risk Criteria, which are not included in the PoV, are mission-specific constraints that may not include all phenomena within each risk factor.</li> </ol>						
	See <a href="https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf">https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf</a> for more information						
<b>Note:</b> The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity.							
<b>Next Forecast Will Be Issued</b>		20 Apr 2022					