



# Launch Mission Execution Forecast



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

**Issued:** 20 Apr 2022/ 0900L (1300Z)

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

**Forecast Discussion:** Another beautiful, sunny day is expected across Florida as high pressure sets up across the Deep South and eastern CONUS. The high pressure ridge will 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 maintain 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>					
	<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	
	Type	Coverage	Base (ft)	Tops (ft)		
<b>Temp/Humidity:</b> 75°F / 60%	Cumulus	Scattered	3,500	4,500	<b>Booster Recovery Weather:</b> Low	
<b>Liftoff Winds (200'):</b> 080° 17 - 22 mph					<b>Solar Activity:</b> Low	

24-Hour Delay	Probability of Violating Weather Constraints					
	<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	
	Type	Coverage	Base (ft)	Tops (ft)		
<b>Temp/Humidity:</b> 75°F / 70%	Cumulus	Scattered	3,500	4,500	<b>Booster Recovery Weather:</b> Low	
<b>Liftoff Winds (200'):</b> 060° 20 - 25 mph					<b>Solar Activity:</b> Low	

**Notes**

- The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring anytime during the launch window.
- Additional Risk Criteria, which are not included in the PoV, are mission-specific constraints that may not include all phenomena within each risk factor.

See <https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf> for more information

**Note:** 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.

**Next Forecast Will Be Issued** | As Required