



# Launch Mission Execution Forecast



**Mission:** Falcon 9 KPLO

**Issued:** 1 Aug 2022 / 0830L (1230Z)

**Valid:** 4 Aug 2022 / 1903 – 1913L (2303 – 2313Z)

**Forecast Discussion:** A stagnant weather pattern will remain in place across Florida for another day as the western Atlantic ridge axis continues to meander across Central Florida and the Spaceport. Shower and storm chances will remain well below normal with temperatures above normal. Heading into midweek, a boundary riding over the top of the ridge across the southeastern US will weaken and suppress the ridge axis southwards. This will allow an increase in moisture along with better storm chances as the inland progress of the east coast sea breeze is halted closer to the coast. The ridge re-strengthens on Thursday as the boundary weakens, transitioning to very deep easterly flow. The east coast sea breeze will push quickly inland, along with any significant threat for storms beyond the early afternoon. A passing Atlantic shower or more developed cumulus can't be ruled out in this pattern, but models suggest the threat is small for the early evening launch window on Thursday. A similar pattern will be in place for a backup launch attempt Friday evening.

<b>Launch Day</b>	<b>Probability of Violating Weather Constraints<sup>1</sup></b>					
	<b>20%</b>	<b>Primary Concerns:</b> Cumulus Cloud Rule				
	<b>Weather Conditions</b>				<b>Additional Risk Criteria<sup>2</sup></b>	
	<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> 82°F / 79%	Cumulus	Scattered	3,000	15,000	<b>Booster Recovery Weather:</b> Low	
<b>Liftoff Winds (200'):</b> 100° 10 - 15 mph	Cirrus	Scattered	25,000	30,000	<b>Solar Activity:</b> Low	
<b>24-Hour Delay</b>	<b>Probability of Violating Weather Constraints</b>					
	<b>20%</b>	<b>Primary Concerns:</b> Cumulus Cloud Rule				
	<b>Weather Conditions</b>				<b>Additional Risk Criteria</b>	
	<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> 82°F / 74%	Cumulus	Scattered	3,500	15,000	<b>Booster Recovery Weather:</b> Low	
<b>Liftoff Winds (200'):</b> 100° 10 - 15 mph					<b>Solar Activity:</b> Low	
<b>Notes</b>	1. The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring anytime during the launch window.					
	2. 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 <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>Next Forecast Will Be Issued</b>		2 Aug 2022				