



# Launch Mission Execution Forecast



**Mission:** Falcon 9 SES-22

**Issued:** 28 Jun 2022 / 0800L (1200Z)

**Valid:** 29 Jun 2022 / 1703 – 1913L (2103 – 2313Z)

**Forecast Discussion:** Surface high pressure situated across the central Atlantic with ridge axis extending into the Carolinas will maintain deep easterly flow locally the remainder of the week. While this pattern favors afternoon thunderstorms largely contained to interior portions of the state, a few showers cannot be ruled out along the coast especially during the morning into early afternoon hours today and tomorrow. An increase in atmospheric moisture is expected to arrive Thursday into Friday ahead of a wave moving in from the Atlantic, resulting in greater cloud cover and higher chances for precipitation across the region.

Therefore the primary weather concern for both launch day and in the event of a 24-hour delay is extensive and sufficiently tall cumulus clouds.

		Probability of Violating Weather Constraints <sup>1</sup>			
<b>Launch Day</b>	<b>20%</b>	Primary Concerns: Cumulus Cloud Rule			
	Weather Conditions			Additional Risk Criteria <sup>2</sup>	
	<b>Weather/Visibility:</b> Isol Showers / 7 mi.	<b>Clouds</b>			<b>Upper-Level Wind Shear:</b> Low
	<b>Temp/Humidity:</b> 84°F / 68%	Type	Coverage	Base (ft)	Tops (ft)
<b>Liftoff Winds (200'):</b> 110° 15 - 20 mph	Cumulus	Scattered	3,000	12,000	<b>Booster Recovery Weather:</b> Low
					<b>Solar Activity:</b> Low
		Probability of Violating Weather Constraints			
<b>24-Hour Delay</b>	<b>40%</b>	Primary Concerns: Cumulus Cloud Rule			
	Weather Conditions			Additional Risk Criteria	
	<b>Weather/Visibility:</b> Sct Showers / 7 mi.	<b>Clouds</b>			<b>Upper-Level Wind Shear:</b> Low
	<b>Temp/Humidity:</b> 84°F / 73%	Type	Coverage	Base (ft)	Tops (ft)
<b>Liftoff Winds (200'):</b> 120° 15 - 20 mph	Cumulus	Broken	3,000	16,000	<b>Booster Recovery Weather:</b> Low
	Cirrostratus	Broken	25,000	30,000	<b>Solar Activity:</b> Low
<b>Notes</b>	<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>Next Forecast Will Be Issued</b>		As Required			