

Launch Mission Execution Forecast

Mission: Falcon 9 Amazonas-6 Issued: 4 Feb 2023 / 0930L (1430Z) Valid:

5 Feb 2023 / 1732 – 2132L (05/2232 – 06/0232Z)



Forecast Discussion: The forecast has trended unfavorably based on this morning's high resolution model guidance. The strong cold front that pushed through yesterday will remain to our south today, and a strong pressure gradient will bring windy onshore flow. Tomorrow, the front will begin to migrate back northwards, and some energy aloft will cause a low to spin up along the remnant boundary. While there is still some uncertainty as to the exact strength and location of the developing low, showers and storms will push back into the area by tomorrow morning into the afternoon. The low's center will likely be just off the coast by the start of the launch window, pushing eastwards as the evening progresses. Because of this, there is a higher probability of violation at the beginning of the window, with the primary concerns being the Cumulus Cloud Rule, Thick Cloud Layers Rule, and the Disturbed Weather Rule.

Conditions improve significantly by Monday afternoon, as the low moves off to the east and a reinforcing high pressure moves in. The only concern for the backup day is the slight risk of a Cumulus Cloud Rule violation.

	Probability of Violating Weather Constraints ¹							
Day	70 -> 45%	Primary Concerns: Cumulus Cloud Rule, Thick Cloud Layers Rule, Disturbed Weather Rule						
ch	Weather Conditions						Additional Risk Criteria ²	
aunch	Weather/Visibility:	Sct Showers / 7 mi.	Туре	Cloud Coverage	S Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
Ľ	Temp/Humidity:	68°F / 85%	Cumulus	Broken	3,000	16,000	Booster Recovery Weather:	High
	Liftoff Winds (200'):	020° 12 - 17 mph	Cirrostratus	Broken	24,000	28,000	Solar Activity:	Low
	Probability of Violating Weather Constraints							
Delay	10%	Primary Concerns	ncerns: Cumulus Cloud Rule					
		Weather	r Condition	S			Additional Risk Cr	iteria
	Weather/Visibility:	Weather	r Condition	IS Cloud Coverage	S Base (ft)	Tops (ft)	Additional Risk Cr	iteria Low
24-Hour D	Weather/Visibility: Temp/Humidity:			Cloud	-	Tops (ft) 6,000		
	-	None / 7 mi. 65°F / 75%	Туре	Cloud Coverage	Base (ft)	,	Upper-Level Wind Shear:	Low
	Temp/Humidity: Liftoff Winds (200'): 1. The Probability of V 2. Additional Risk Crit	None / 7 mi. 65°F / 75% 040° 15 - 20 mph /iolation (PoV) is the changeria, which are not include	Type Cumulus ce of a local safet d in the PoV, are	Cloud Coverage Few y or customer of mission-specifi	Base (ft) 3,000 constraint vic	6,000 Internation occurrings that may no	Upper-Level Wind Shear: Booster Recovery Weather:	Low Low-Mod Low