Launch Mission Execution Forecast

Mission: Falcon 9 Inmarsat 6F2
Issued: 16 Feb 2023 / 0830L (1330Z)
Valid: 17 Feb 2023 / 2259 – 18/0028L (18/0359 – 0528Z)

Forecast Discussion: A cold front is expected to pass through the Spaceport late Friday evening into Saturday morning, although there is still some model disagreement around the timing of the front. With very little upper-level support and relatively low moisture, isolated rain showers are expected along with a slight chance for some storms. Most clouds will be low level, which bodes well for launch weather constraints. The primary concerns for launch weather are the Thick Cloud Layers Rule and Cumulus Cloud Rule.
Launch weather on the post-frontal backup day looks more favorable, as high pressure builds in behind the front. Mostly dry conditions will return to the area with slightly elevated easterly winds. The primary concern for launch on the backup day is the Cumulus Cloud Rule, as low-topped onshore-moving Atlantic showers cannot be ruled out.

Launch Day

Probability of Violating Weather Constraints[1]

25%

Primary Concerns: Thick Cloud Layers Rule, Cumulus Cloud Rule

Weather Conditions

Weather/Visibility: Isol'd showers / 5 mi.
Temp/Humidity: 72°F / 85%
Liftoff Winds (200'): 280° 15 - 20 mph

Clouds

Type	Coverage	Base (ft)	Tops (ft)
Cumulus	Scattered	2,000	5,000
Altostratus	Broken	6,000	10,000
Cirrostratus	Overcast	35,000	38,000

Additional Risk Criteria[2]

Upper-Level Wind Shear: Low-Mod
Booster Recovery Weather: Low
Solar Activity: Low

24-Hour Delay

Probability of Violating Weather Constraints

15%

Primary Concerns: Cumulus Cloud Rule

Weather Conditions

Weather/Visibility: None / 7 mi.
Temp/Humidity: 67°F / 75%
Liftoff Winds (200'): 060° 17 - 22 mph

Clouds

Type	Coverage	Base (ft)	Tops (ft)
Cumulus	Scattered	2,500	6,000

Additional Risk Criteria

Upper-Level Wind Shear: Low-Mod
Booster Recovery Weather: Low
Solar Activity: Low

Notes

1. *The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring any random time 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 https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf for more information

Next Forecast Will Be Issued | AS REQUIRED