



STS-116 Launch Weather Forecast

Vehicle: Space Shuttle Discovery
Issued: 6 December 2006 (0700EST)
Valid: 8 December 2130 – 2141EST

Synoptic Discussion: A cold front will move through Central Florida Thursday causing isolated showers and significant cloud cover through the launch window. The probability of KSC weather prohibiting launch increased to 60% due to the significant low-level moisture expected with the front. High pressure behind the front will migrate over the Eastern US, increasing the pressure gradient over Central Florida causing launch wind and Shuttle Landing Facility (SLF) crosswind concerns. **Our primary concern for launch day is a low cloud ceiling.**

<u>Clouds</u>	<u>Coverage</u>	<u>Bases (feet)</u>	<u>Tops (feet)</u>
Stratus	1/8 Few	1,500	2,500
Stratus	5/8 Broken	3,000	4,500
Altostratus	5/8 Broken	6,000	8,000
Cirrus	5/8 Broken	20,000	22,000

Weather: None
Visibility: 7 miles
Wind: 340° @ 15 - 22 KT
 (60 foot pad winds)
Temperature: 58°F **RH:** 77% **Dewpoint:** 51°F

Probability of KSC weather prohibiting launch: 60%
Probability of KSC weather prohibiting tanking: 0%
Primary concern(s): Low cloud ceiling.

Probability of KSC weather prohibiting launch for 24-hour delay: 70%
Probability of KSC weather prohibiting tanking: 0%
Primary concern(s): Low cloud ceiling, isolated showers, CX39B launch wind and SLF crosswind.

Probability of KSC weather prohibiting launch for 48-hour delay: 60%
Probability of KSC weather prohibiting tanking: 0%
Primary concern(s): Low cloud ceiling, isolated showers, CX39B launch wind and SLF crosswind.

Sunrise:	7/0703 EST 8/0704 EST 9/0704 EST	Sunset:	7/1731 EST 8/1731 EST 9/1731 EST	
Moonrise:	7/2009 EST 8/2111 EST 9/2210 EST	Moonset:	8/1029 EST 9/1107 EST 10/1140 EST	Illumination: 7-8 December: 88% 8-9 December: 81% 9-10 December: 72%

Next forecast will be issued: As needed.