

SCIFER 2 (Sounding of the Cleft Ion Fountain Energization Region Two)
Thursday January 6, 2008 Update

This is fifth update for SCIFER 2 collaborators and friends participating in the SCIFER 2 campaign. If you do not wish to be included in these emails, please ask to be removed from future mailings.

Breaking news:

The fifth count was held on Thursday January 4, 2008 with the window opening at 0600 UT. The ground winds at Andoya Rocket Range permitted raising the rocket to the vertical position. The science team drove directly to KHO Auroral observatory without using the band wagon and having only a moderate adventure. The winds aloft were too strong to count down below 15 minutes. The window was closed at 1045 UT after the winds failed to subside. The next count down begins at 0300 UT (0400 Norway time). Science station time is 0330 UT (0430 Norway time) at UNIS IPY room. A decision will be made whether to stay in town or to proceed to the KHO Auroral Observatory. The forecast tomorrow is for warmer and clearer weather.

Space Weather Conditions

The space weather conditions began very active. Earlier in the night a 60,000 Raleigh aurora was reported. The solar wind velocity continued to be strong gusting 700 km/s but the density declined to $1/\text{cm}^3$. The STEREO B satellite indicates that the solar wind speed and density will continue for tomorrow's window. A substorm produced aurora over Longyearbyen about 1 hour before the window opened. However during the window the solar wind density and magnetic field decreased leading to less space weather as the window continued. Unfortunately the winds were too strong for launching regardless of the space weather. We remain optimistic for tomorrow when there will be clearing skies over all of Svalbard.

Current Weather Conditions:

Longyearbyen: Temperature -4.2 C (20.0 F) Wind chill -14C (7 F), wind speed 6.1 m/s (14 mph), overcast

Andenes: Temperature 3 C (36 F), wind speed 7.6 m/s (17 mph), sunny

Rocket/Payload status: The payload is mounted on the launcher and is operating nominally. The payload was in the vertical position and nominal for the window today.

Local color: Attached is a photo a Svalbard Reindeer taken just outside our lodgings by Meghan. The reindeer are a special subspecies losing nearly half their weight over the winter.. In the summer they weigh 90 kg and during the winter they weigh 60 kg. They are remarkably docile with

only the polar bear to fear. Also both the male and female grow antlers but presumably not this time of the year.

Scientist locations on January 6, 2008:

Paul Kintner	Longyearbyen
Erik Lundberg	Longyearbyen (at long last)
Mark Lessard	Longyearbyen (at long last)
Kristina Lynch	Andenes
Meghan Mella	Longyearbyen

Phone numbers for science launch operations

Backup Science Center at UNIS, Longyearbyen 79 02 64 48

KHO Auroral Observatory 79 02 64 70 or 71

EISCAT 79 02 12 36

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