

SCIFER 2 (Sounding of the Cleft Ion Fountain Energization Region Two) Thursday January 5, 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 fourth count was held on Thursday January 4, 2008 with the window opening at 0600 UT. The ground winds at Andoya Rocket Range too strong to risk raising the rocket to the vertical position for the first time. The avalanche dangers in the region have passed. The science team drove directly to KHO Auroral observatory without using the band wagon and having only a mild adventure. The space weather conditions were excellent in spite of the poor weather at the launch range. The window was closed at 1045 UT after the winds failed to subside and the excellent space weather became less active. 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 improved markedly today. The solar wind velocity has doubled to 600 km/s and the density is $2/\text{cm}^3$. The STEREO B satellite indicates that the solar wind speed and density will have sustained high values for tomorrow's window. During this window there were excellent science conditions for launch, sustained ion upflows, bright and widespread 6300 auroral arcs, magnetic field fluctuations, dense and hot ionosphere, and sustained convection. Unfortunately the winds were too strong for launching.

Current Weather Conditions:

Longyearbyen: Temperature -2.2 C (28.0 F) Wind chill -13.2 C (8.24 F), wind speed 7.3 m/s (16.3 mph), good visibility with occasional stars
Andenes: Temperature 2 C (34 F), wind speed 13.4 m/s (30 mph), sunny

Rocket/Payload status: The payload is mounted on the launcher and is operating nominally. Only horizontal checks were completed today.

Local color: We have had very heavy snow over the past several days although now the weather has cleared and is quite comfortable. Attached is a picture showing the snow conditions around the KHO observatory. It features the observatory director (Fred „the polar bear“ Sigernes) trying to clear the entry way steps from snow Σ so that we could crawl up the snow bank to the band wagon.

Scientist locations on January 5, 2008:

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|----------------|-----------------------------|
| 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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