

SCIFER 2 (Sounding of the Cleft Ion Fountain Energization Region Two)
Wednesday January 9, 2008 Update

This is seventh 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 eighth count was held on Tuesday January 9, 2008 with the window opening at 0600 UT. The ground winds at Andoya Rocket Range have improved substantially and are no longer obstruct the possibility of launching.

The science team continues to drive directly to KHO Auroral Observatory for which we have included a picture. There were several intense substorms on the night side before the window opened. A pair of quiet, stable auroral arcs maintained themselves over Svalbard for the first half of the window and become less well-defined and diffuse during the second half. About one hour before the nominal end of the window, weak and transient aurora appeared to the north of Svalbard and danced around us. We continued the window 30 minutes past the nominal end but hitting this aurora would be like Cheney trying to shoot quail. The window was closed at 1230 LT due to a high priority flight from Russia crossing the polar cap to Anchorage. 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 colder and clearer weather.

Local color: The final kilometer to the KHO observatory is on open tundra and has been plowed once since we have been here. Our picture of the day shows Erik lying in this road hoping to be noticed by a personal injury lawyer.

Space Weather Conditions

The space weather conditions were moderate today. The solar wind velocity subsided somewhat to 500 km/s and the density ($1/\text{cm}^3$) and magnetic field (4 nT) were small. The STEREO B satellite indicates that the solar wind speed will continue to decrease tomorrow and the density will continue unchanged for tomorrow's window. The solar wind magnetic field was variable with nearly all conditions occurring. There was no auroral activity until late in the window and it stayed well north of Svalbard. Little if any activity was seen in the EISCACT Svalbard Radar. The skies have cleared over Svalbard and should remain clear for the next 24 hours.

Current Weather Conditions:

Longyearbyen: Temperature -13.5 C (7.3F), wind chill -19.7 C (-3.5 F), clear skies

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.

Scientist locations on January 8, 2008:

Paul Kintner	Longyearbyen
Erik Lundberg	Longyearbyen
Mark Lessard	Longyearbyen
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

CUTLASS Ops 44-116-252-3520