

SIDERALE

Cronistoria di un "pallone gonfiato"



Sergio D'Angelo
sergio@iasf-milano.inaf.it

Team

- IASF - Mi/Sanitas EG
 - Detector
 - AFE
 - DFE
 - Management
- IASF - Bo/LEN srl
 - Telemetry
 - GSE
- IASF - Pa
 - Power box

Team (Milan)

- Monica Alderighi
- Mauro E. Quadrini
- Michela Uslenghi
- Mauro Fiorini
- Oscar Lambri
- Sergio D'Angelo

- Fabio Casini
- Marcello Mancini
- Cristian Albanese
- Riccardo Chiello
- Ruben Capozzi

- Enrico Mattaini
- Emilio Santambrogio
- Francesco Perotti

Payload

- SoRa
- Duster
- SIDERALE
- Telemetry (SIT+IRIASI)

From CZT to SIDERALE



- High voltage
- Temp. probe
- Armadillo
- Software
- Box

From CZT to SIDERALE



PC104
ARM 920
64 MB SDRAM
8 MB FLASH
100base-TX
IDE
USB
CF
2 RS232
12 GPIO

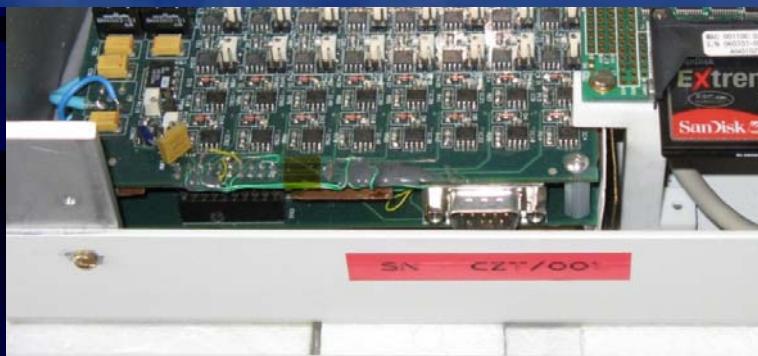
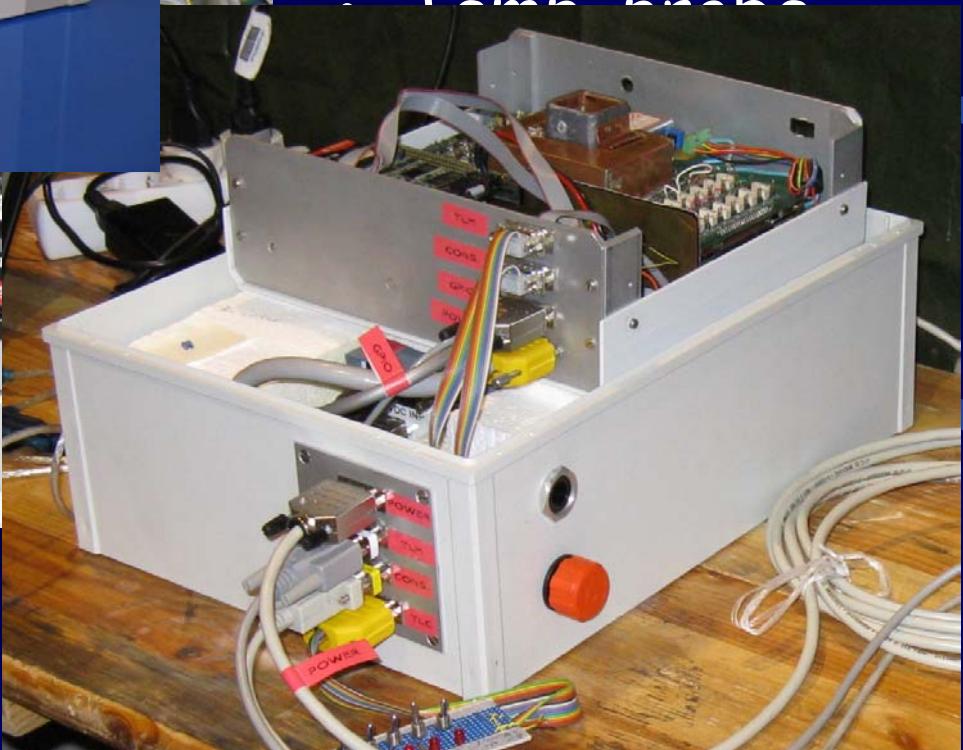


- High voltage
- Temp. probe
- Armadillo
- Software
- Box

SIDERALE



- High voltage
Temp probe



Software

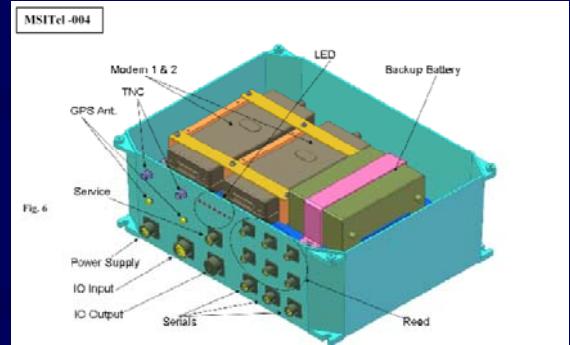
- C++
- Ground mode/Flight mode
- Acq. window/off-time
- Telemetry
- Scientific/housekeeping/test
- Temperature and voltage alarm

Software



SIT (MSITel004)

- Management of 2 Iridium units
 - Back-up mode (2.4 Kbps)
 - Split mode (4.8 Kbps)
- Management of 2 GPS units
- Complete Data (sci & hk) storage into non-volatile on-board memory (CF)
- Operation controlled by dedicated macro-language
- Execution of Telecommands sent by the ground console
- Primary ground console (send TCs) and several remote consoles connected via internet



SIT hk & quick-look

MSITel Telemetry

#79243 MSITel IO Status at:2009/07/03 12:03:17 UTC

Internal

- V Power: 17.13 V
- +8 V: 7.97 V
- +5 V: 4.96 V
- Board T: 325.2 K
- +3.3 V: 3.44 V
- Modem #1: 4.87 V
- Modem #2: 4.78 V

External Digital Input

- Start Acq
- Spare
- Volt Warning
- T° Warning
- in 5
- in 6
- in 7
- in 8

External Analog Input

- EXT V1: 4.04 V
- EXT V2: 0.00 V
- EXT V3: 0.00 V
- EXT V4: 0.00 V

Digital Out

- Link Up
- System OFF
- Send CTLPKT
- Armadillo Off
- Next Mode
- SORA Land

Scientific Data Block n. 79281 Source IP 5.43.39.232:1006

Data Valid and stored

Offset	Descrizione	Dato	Offset	Descrizione	Dato	Offset	Descrizione	Dato
0	descr_1	0x42	128	descr_129	66	256	descr_257	66
1	descr_2	0x0	129	descr_130	0	257	descr_258	0
2	descr_3	0x0	130	descr_131	0	258	descr_259	0
3	descr_4	0x0	131	descr_132	0	259	descr_260	0
4	descr_5	0x0	132	descr_133	0	260	descr_261	0
5	descr_6	0x0	133	descr_134	0	261	descr_262	0
6	descr_7	0	134	descr_135	0	262	descr_263	0
7	descr_8	129	135	descr_136	129	263	descr_264	129
8	descr_9	66	136	descr_137	66	264	descr_265	66
9	descr_10	0	137	descr_138	0	265	descr_266	0
10	descr_11	0	138	descr_139	0	266	descr_267	0
11	descr_12	0	139	descr_140	0	267	descr_268	0
12	descr_13	0	140	descr_141	0	268	descr_269	0
13	descr_14	0	141	descr_142	0	269	descr_270	0
14	descr_15	0	142	descr_143	0	270	descr_271	0
15	descr_16	129	143	descr_144	129	271	descr_272	129
16	descr_17	66	144	descr_145	66	272	descr_273	66
17	descr_18	0	145	descr_146	0	273	descr_274	0
18	descr_19	0	146	descr_147	0	274	descr_275	0
19	descr_20	0	147	descr_148	0	275	descr_276	0
20	descr_21	0	148	descr_149	0	276	descr_277	0
21	descr_22	0	149	descr_150	0	277	descr_278	0
22	descr_23	0	150	descr_151	0	278	descr_279	0
23	descr_24	129	151	descr_152	129	279	descr_280	129
24	descr_25	66	152	descr_153	66	280	descr_281	66
25	descr_26	0	153	descr_154	0	281	descr_282	0
26	descr_27	0	154	descr_155	0	282	descr_283	0
27	descr_28	0	155	descr_156	0	283	descr_284	0
28	descr_29	0	156	descr_157	0	284	descr_285	0

enrico ronchi wow 12.20
Sergio adesso il sistema e' in stand-by per 1 ora e 45 12.21
enrico ronchi ok 12.22
Sergio sta per partire il sistema ... forza iridium, forza!!!!!! 13.59

RealPlayer Collegamento a DivX Player TABELLA

Adobe Reader 9 putty Hex Editor Neo lab_lug_03... TELEMETRIA data

start MSITel House Keepin... MSITel Telemetry MSITel Scientific Da... Scientific Data Block ... Svalbard 2009 IT 14.07

Nobile/Amundsen Stratospheric Balloon Center



Nobile/Amundsen Stratospheric Balloon Center



Nobile/Amundsen Stratospheric Balloon Center



Payload



LYR Airport



©2009 Google - Immagini ©2009 DigitalGlobe, GeoEye - Termini e condizioni d'uso

SEARCH

Enter a place name, e.g. [Stavanger](#), [Røst](#) or [Beijing](#). [Advanced search](#).

- [My list](#)
- [Norway](#)
 - [East Norway](#)
 - [South Norway](#)
 - [West Norway](#)
 - [Trøndelag](#)
 - [North Norway](#)
 - [Sea and oil](#)
 - [Polar regions](#)
 - [Midnight sun](#)
 - [Observations](#)
 - [Weather maps](#)
- [World](#)
 - [Nordic countries](#)
 - [Europe](#)
 - [Asia](#)
 - [Africa](#)
 - [North/C. America](#)
 - [South America](#)
 - [Oceania](#)
 - [Antarctica](#)
- [Radar](#)
 - [Southeast Norway](#)
 - [Southwest Norway](#)
 - [Trøndelag](#)
 - [Nordland/Troms](#)
 - [South Norway](#)
 - [Scandinavia](#)
- [Satellite](#)
 - [Europe](#)

[yr.no](#) > [Norway](#) > [Svalbard](#) > Svalbard lufthavn

Hourly forecast for Svalbard lufthavn (Svalbard)

Updated at 12:00. Next update is expected at 17:00.

[Overview](#) [Hour by hour](#) [Weekend](#) [Long term forecast](#) [Advanced map](#) [Statistics](#) [Free weather data](#)> [Detailed hourly forecast](#)

The meteorologist's forecast (in Norwegian)

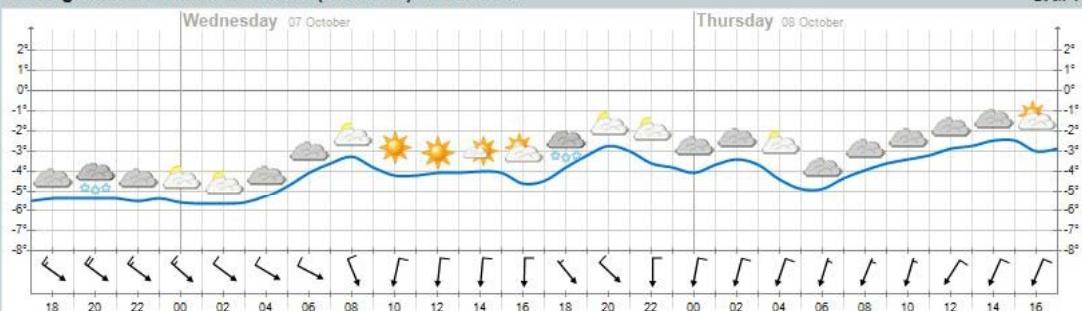
Spitsbergen Tuesday and Wednesday: Nordvestlig bris, stiv kuling 15 utsatte steder, i ettermiddag kortvarig sterk kuling 20 på kysten i nord. Sne i nord og langs vestkysten, ellers oppholds vær. Onsdag gradvis minking til nordlig frisk bris 10, men nordøstlig liten kuling 12 m/s på kysten i nord og i vest. Snøbygger, vesentlig i nordlige del, ellers for det meste delvis skyet oppholds vær.

Spitsbergen Thursday: Nordaustlig bris, periodevis liten kuling 12 m/s på vestkysten. Enkelte snøbygger i nord, ellers oppholds vær.

Spitsbergen Friday: Nordlig bris. Oppholds vær. Kjølig.

Spitsbergen Saturday to Tuesday: Nordlig bris. Stort sett oppholds vær. Litt fallende temperatur.

Meteogram for Svalbard lufthavn (Svalbard) Next 48 hours



Take off



Take off



Take off



Take off



Take off



Flight



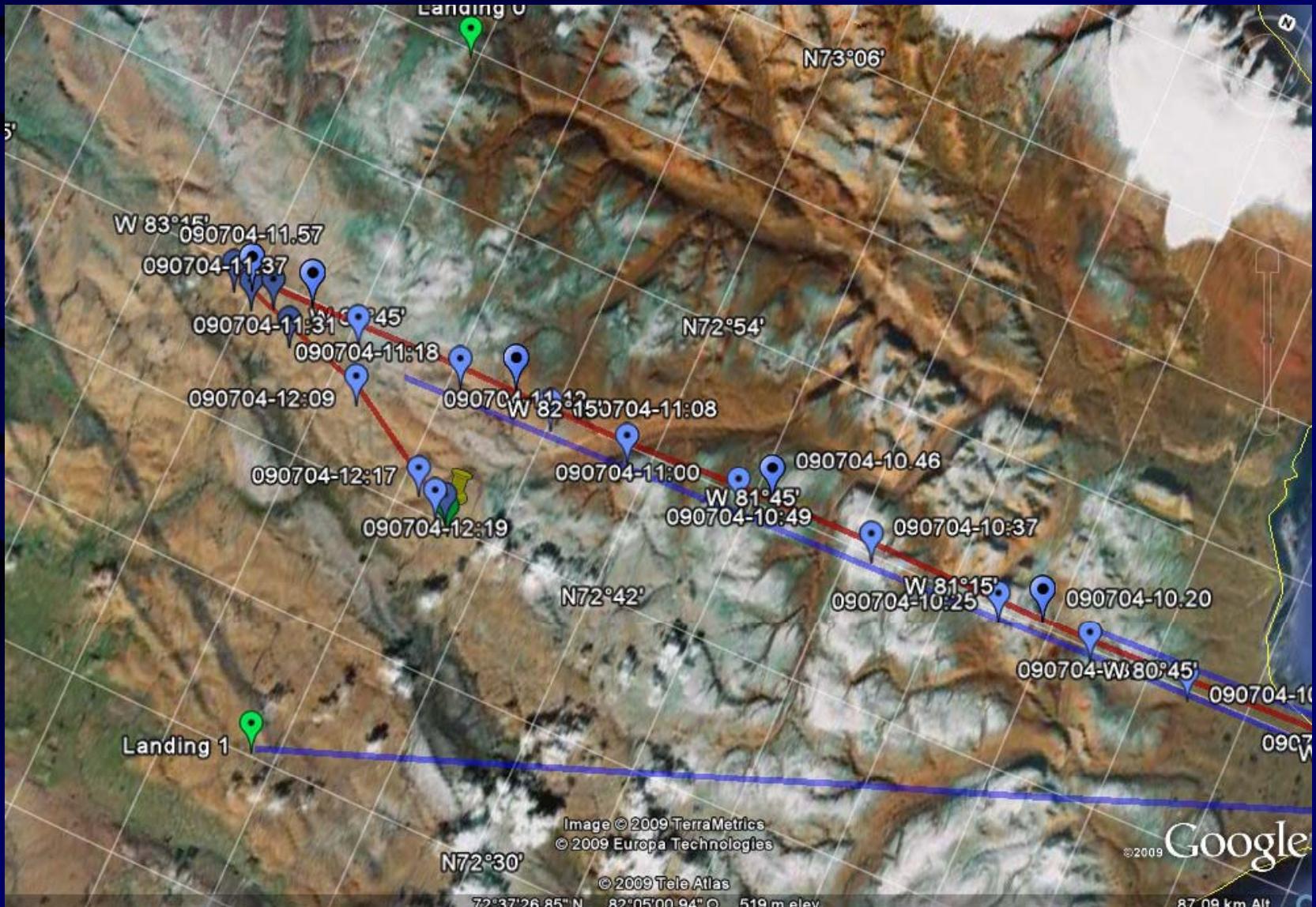
Flight



Flight



Flight



Bingo!!



Bingo!!



Longyearbyen

(midnight view)



Longyearbyen

(midnight view)



Longyearbyen



Longyearbyen

(reindeer)



Longyearbyen (Kroa Restaurant)



Longyearbyen

