



Italian activities at Ny Alesund: status report

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Projects under way

- **Climate Change Tower Integrated Project (CCT-IP)**
- **Cloud Effects on UV Irradiance Measurements (CEUVIM)**
- **Sensor network for oceanography in shallow water - Kongsfjord experiment (SNOW)**
- **Ionospheric Scintillations Arctic Campaign Coordinated Observations (ISACCO)**
- **Joint High-Latitude Aurora Observations with ITACA² Twin All-Sky Camera**
- **Diversity and changes on temporal and spatial scales of the cyanobacterial community in the high arctic environment of Spitsbergen, Svalbard Islands**
- **Ice and rock deformations along intraplate strike-slip faults at Svalbard Islands and their role in microclimate changes**

The overall effort

Length of the field campaign	214 days	
Days <i>Dirigibile Italia</i> was full/overbooked	65 days	(30%)
TOTAL Man days	770	
Man days for CCT-IP/PRIN 2007 projects	476	(62%)
Man days for other projects/activities (<i>terrestrial ecosystems, oceanography, geology</i>)	270	(35%)
Media	24 days	
Personnel involved in field activities	40	
ARCFAC supported projects	4	
<i>(8 researchers involved, 139 man days funded by this transnational EU action)</i>		

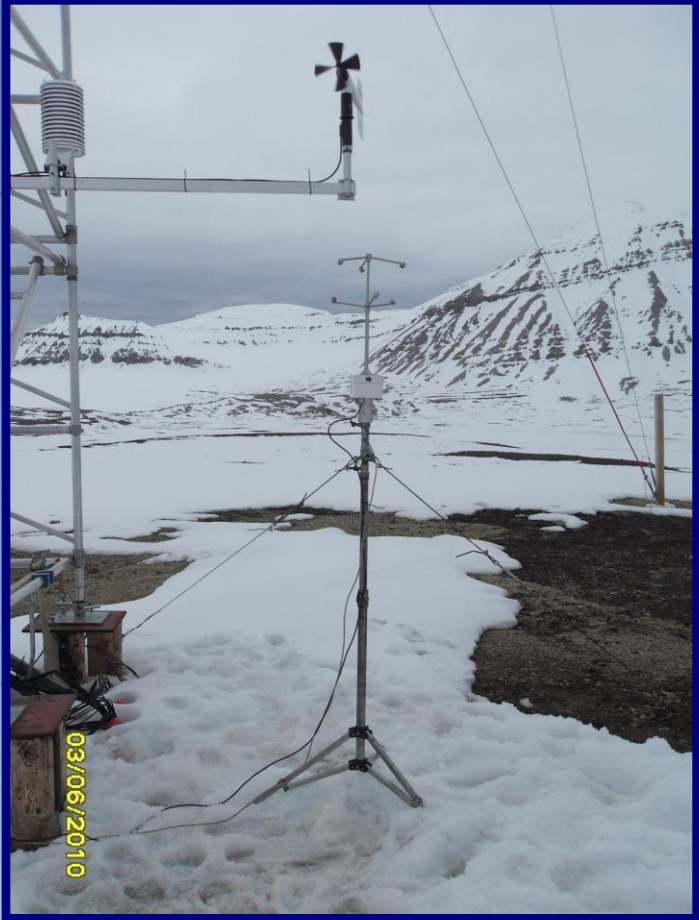
Disciplines interested by field activities

- Atmospheric physics **(2 projects)**
- Oceanography
- Biology (terrestrial ecosystems)
- Geology
- Sun-Earth interactions **(2 projects)**



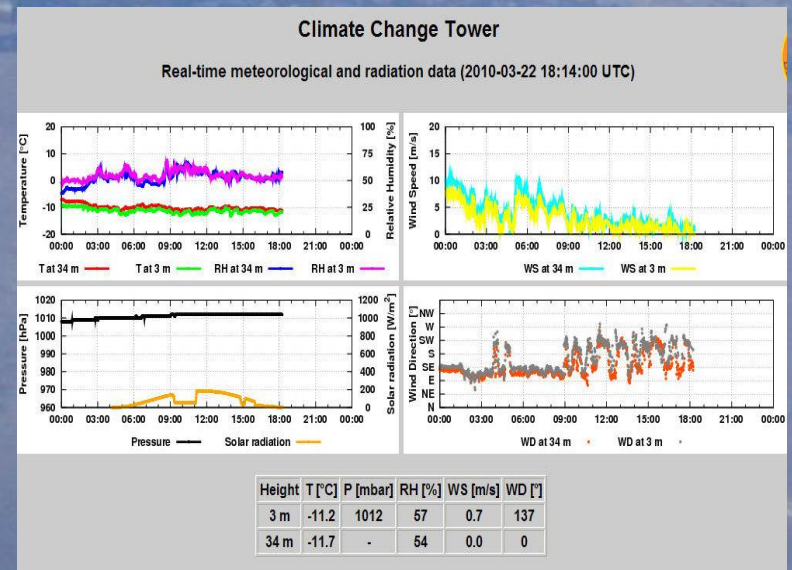
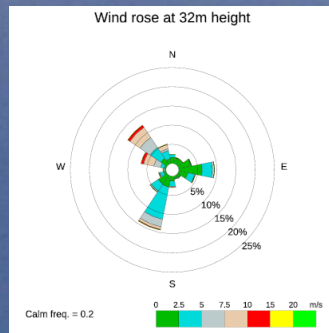
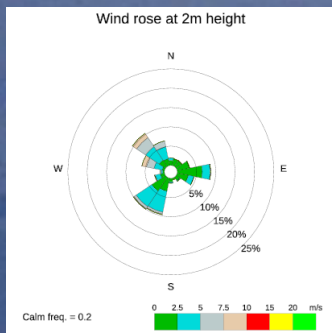
CCTower Instrumentation

- Net radiometer at 33 m for radiation budget and albedo measurements
- Long wave and shortwave radiometer at 25 m for upwelling radiation fluxes from the surface
- Temperature, humidity and wind sensors at 3, 5, 10 and 34 m to profile the atmospheric parameters in the surface layer.
- Sonic anemometer and fast hygrometer at 6.5 m for measurements of turbulent fluxes at the surface
- Microlidar for aerosol measurements in PBL

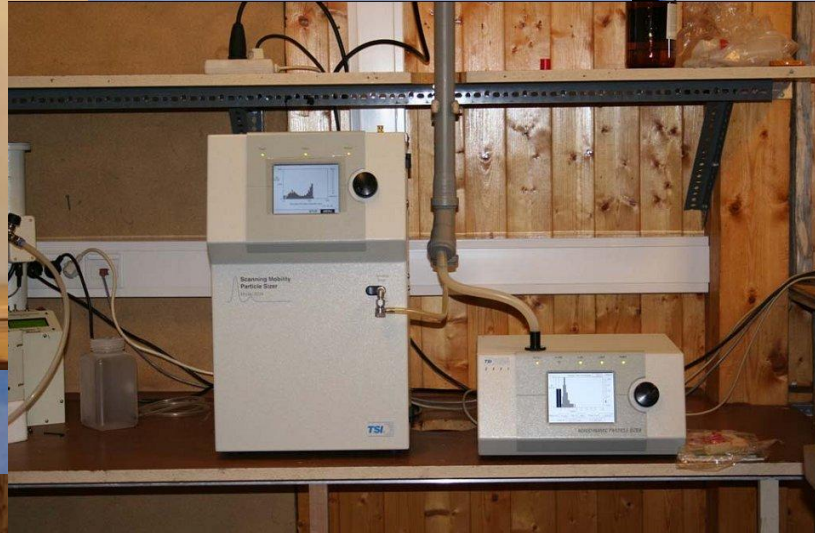
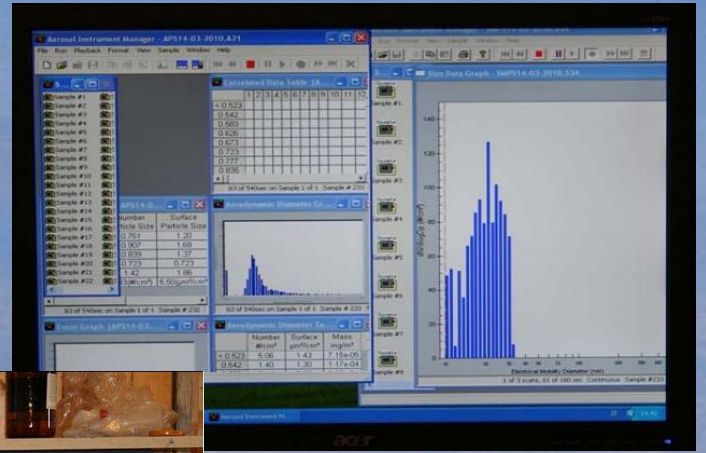
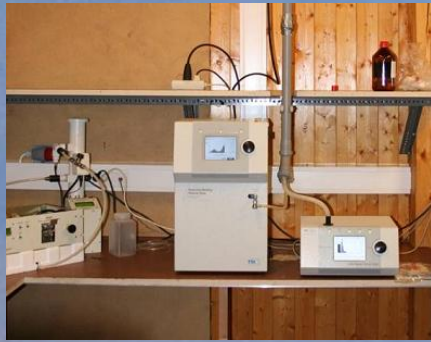


Plan for September 2010

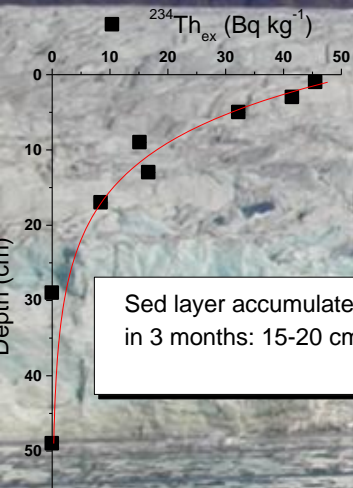
- Sensors Intercomparison test
- Control of instrumentation
- Software updating
- Verification test of the CCT structure
- Communication Updating
- Information/data to Visitor center



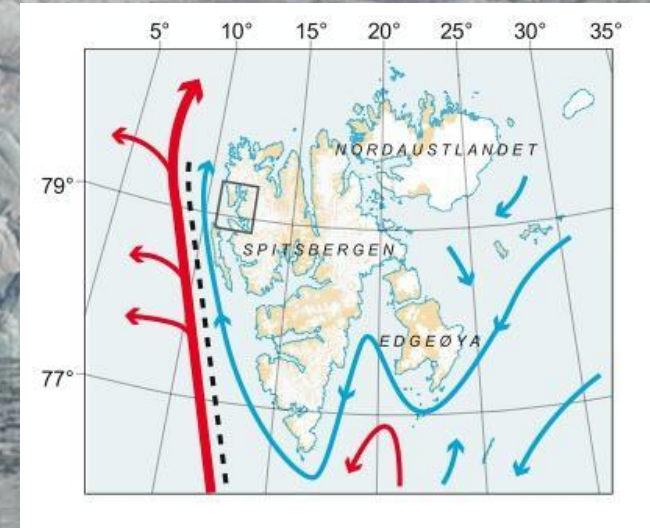
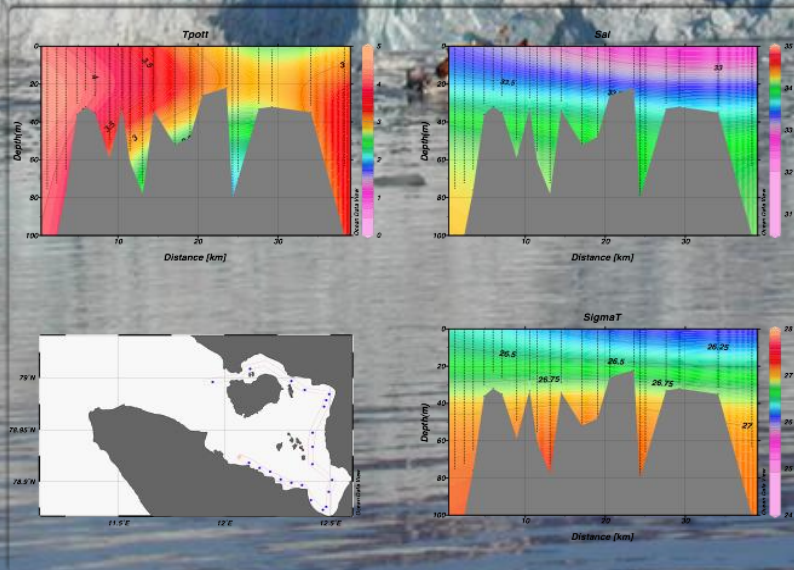


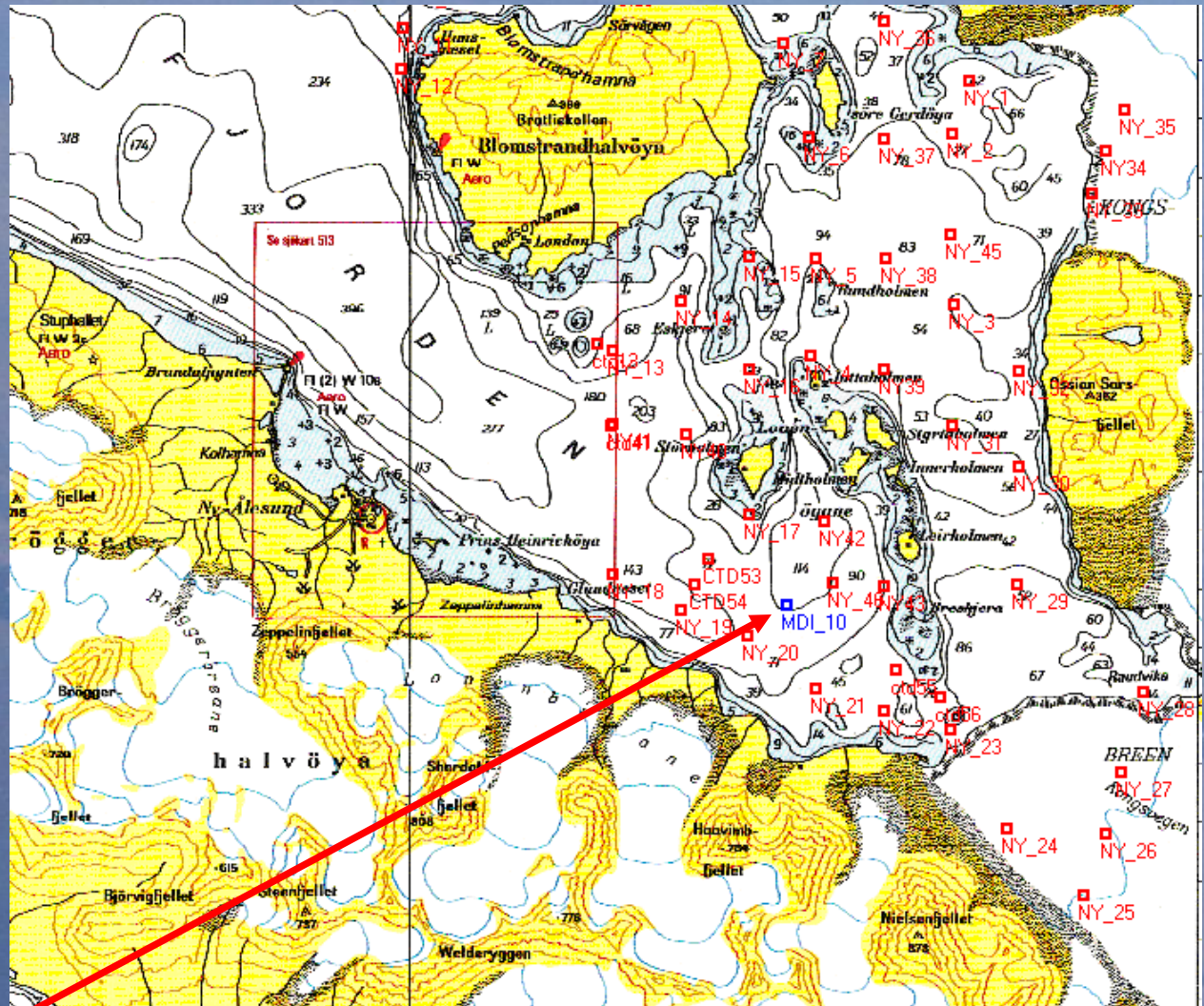


Oceanographic investigations in the inner Kongsfiord:



Sed layer accumulated in 3 months: 15-20 cm

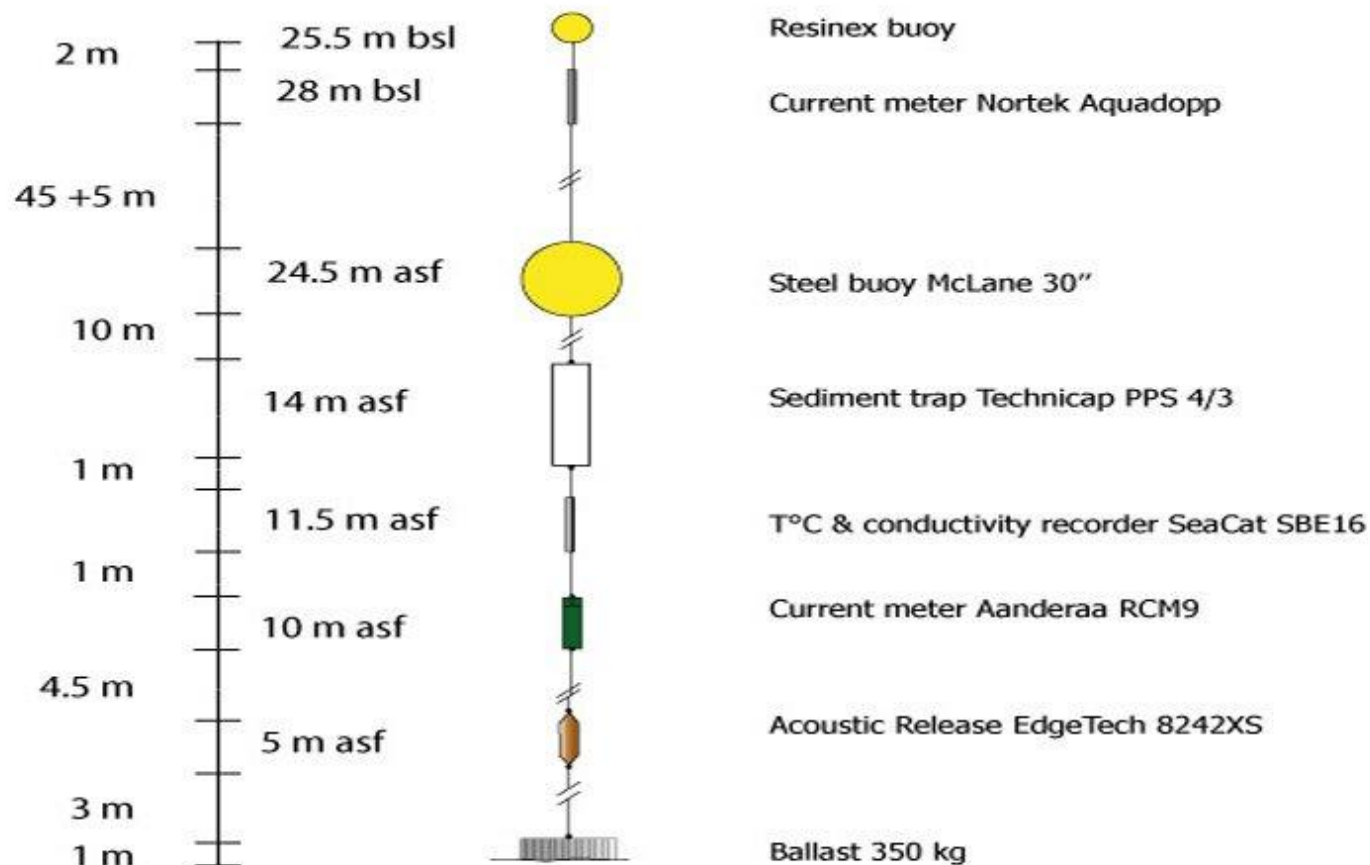




MDI_2010

Mooring Dirigibile Italia_2010 (MDI_10)

78°54.838' N - 12°14.722' E, water depth 103 m



N.B. : not in scale!
 bsl: below sea level
 asf: above sea floor