

SvalGlac

Report of activities of Spanish (& Russian) national team

TEAM MEMBERS:

Rodríguez-Cielos, Ricardo
Corcuera, María Isabel
Cuadrado, María Luisa
Lapazaran, Javier
Machío, Francisco
Martín-Español, Alba
Navarro, Francisco
Otero, Jaime
Vasilenko, Evgeny (Russia)

SvalGlac Steering Committee Metting, Oslo, 30 October 2011

Main activities of the team

Fieldwork:

- Barentsburg-based GPR campaign, spring 2010, together with Russian team (Machío, Macheret, Lavrentiev).
- Hornsund-based GPR campaign, spring 2011 (Navarro, Vasilenko), together with Polish (Grabiec, Puczko, Ignatiuk) and Finish (Schäfer) teams. Nearly all data processed.

Modelling:

- Modelling of Hansbreen dynamics (Spain/Poland-field data).
- Modelling of Amundsenisen thermo-mechanics (Spain/Italy).

Inventory of Svalbard radio-echo sounded glaciers:

- Aimed at ice volume estimates.

ALL OF THE ABOVE WILL BE DETAILED IN THE GPR AND MODELLING GROUP REPORTS

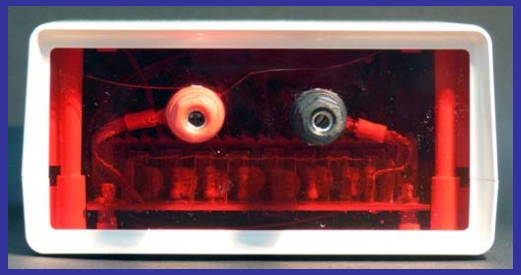
Design, development and testing of new GPR system VIRL7

Team involved: Vasilenko, Machío, Navarro, Frolovskiy, Lapazaran.





Control unit and recording system









E. Vasilenko, F. Machío, J. Lapazaran, F. Navarro & K. Frolovskiy: A compact and lightweight multipurpose ground-penetrating radar for glaciological applications. J. Glaciol., 57 (206), 2011.

Budget status

Summary: Granted 98 k€, spent 40 k€, remaining 58 k€.

Initial budget: 98 k€

- 1-year post-doc contract: 35 k€.
- Equipment: GPR equipment-12 k€; snow scooter-9 k€.
- Consumables-fieldwork (3 campaigns): 12 k€.
- Travel & per diem (3 campaigns, symposia, meetings): 21 k€.
- Other: Contrib. to helicopter costs-6 k€; pub. page charges-3 k€.

Spent: 40 k€ (fieldwork, heli. costs, consum., symp., meetings)

Remaining: 58 k€

- 1-year post-doc contract: 35 k€.
- GPR equipment:12 k€.
- Fieldwork (1 campaign), heli. costs, symp. & meetings: 11 k€.

Main deviation:

- Discarded the purchase of snow scooter (instead: metal sledge, VIRL7 remote control & other complem. equipment, heli. costs).

Published & planned papers to the end of the project

Subject	*Authors*	*Journal*	*Status*
New GPR system VIRL7	Vasilenko, Machío, Lapazaran, Navarro, Frolowskiy	J. Glaciol.	✓
Ariebreen struc. & vol. ch.	Lapazaran, Petlicki, Navarro, Machío, Puczko, Glowacki, Nawrot	Polar Res.	~✓
Hansbreen 2D modelling of dynamics & calving	Otero, Navarro, Lapazaran, Grabiec, Puczko, Molina, Vieli	J. Glaciol.	+++
Power reflection indexes IRP/BRP in glaciology	Lapazaran, Otero, Martín-García	Polish Polar Res.	+
Amundsenisen – Hydro-thermal struct. from GPR	Glazovsky, Glowacki, Macheret, Lapazaran, Vasilenko, Navarro, Grabiec, Moore	J. Glaciol.	++
Amundsenisen – Hydro-thermal struct. from GPR	Navarro, Jania, Otero, Hagen, Puczko, Martín-Español, Glazovsky	J. Glaciol.	-
Hansbreen 3D modelling	Spanish and Polish teams	Cryosph.	-
Amunds. modelling & lake	Spanish and Italian teams	???	-
Vol. estimates from GPR (likely several, by region)	Spanish, Polish & Russian teams	???	-

✓= Published	~✓ = Under review	+++ = well advanced	++ = advanced	+ = initiated	- = not initiated