


# SvalGlac

## Report of activities of Spanish (& Russian) national team

TEAM MEMBERS:

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

SvalGlac Steering Committee Meeting, Uppsala, 27 October 2012

# Main activities of the team

**Fieldwork:**

• Planned Hornsund-based GPR campaign, spring 2012, could not be done because of inaccessibility of Hornsund station due to fiord ice conditions.

• Switched to Barentsburg-based GPR campaign performed by Russian team (Vasilenko, Macheret, Lavrentiev).

**Data processing:**

• All GPR data from above campaign already processed.

**Modelling:**

• Advances in modelling of Hansbreen dynamics.

• Consulting on Amundsenisen modelling (Italian partners).

**Inventory (& vol. comp.) Svalbard echo sounded glaciers:**

• Substantial advance in the work. Paper on western Nordenskiöld Land glaciers submitted (31 July) to Ann. Glaciol.

# Budget status

**Summary: Granted 98 k€, spent 60 k€, remaining 38 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: 60 k€** (fieldwork, helicopter costs, sledge, consum., symp.)

**Remaining: 38 k€**

- 1-year $\rightarrow$ 9-month post-doc contract: 32 k€.
- Fieldwork (spring 2012 campaign & consumables): 6 k€.

**IMPORTANT POINT:**

- Requested to Spanish Ministry of Economy and Competitiveness the extension of the project & budget expenditure to 31 Dec 2013.

# 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. | ~✓ |
| GPR & vol. comput. Nordenskiöld Land glac. | Martín-Español, Vasilenko, Navarro, Otero, Lapazaran, Lavrentiev, Macheret, Machío | Annals Glaciology | ~✓ |
| Hansbreen 2D modelling of dynamics & calving | Otero, Navarro, Lapazaran, Grabiec, Puczko, Molina, Vieli | J. Glaciol. | +++ |
| GPR & vol. comput. Wedel Jarlsberg Land glaciers | Navarro, Martín-Español, Lapazaran, Grabiec, Otero, Vasilenko, Puczko | AAAR? | ++ |
| Errors in glacier vol. estim. from GPR thickness data | Lapazaran, Martín-Español, Otero, Navarro | J. Glaciol. | ++ |
| Amunds. modelling & lake | E. Bucchignani, D. Mansutti, F. J. Navarro, J. Otero and P. Glowacki | Int. Sci. Comput. J. | + |
| Vol.-Area relat. & estimate of total ice vol. Svalbard | Martín-Español, Navarro, Otero, Lapazaran, Błaszczyk (?) | Cryosph. | - |

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

# Related planned papers NOT expected to be ready before the end of the project

| *Subject* | *Authors* | *Journal* | *Status* |
|---|---|---|---|
| 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. | - |
| Evol. of MB of some Svalbard gl. under different climate scenarios | Martín-Español, Navarro, … ? | ??? | - |

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