GEO EUROPEAN PROJECTS' WORKSHOP-7

Barcelona
15-16 April 2013

GEO GROUP ON EARTH OBSERVATIONS

Gfg2: an FP7 project for GEOSS
- The experience of a Spanish SME -

Dr. Anna Puig-Centelles
M.Sc. Elizabeth Gil-Roldán

GeoViQua GRUMETS UAB CREAF MIRAMON

Who we are

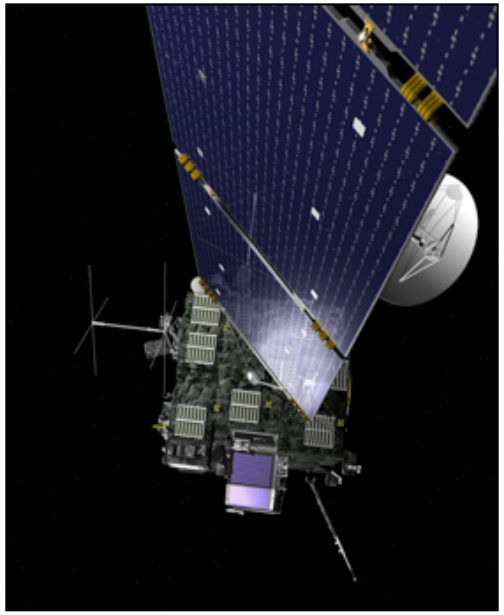
- A Spanish SME transforming Science into technologies through 12 years of groundbreaking technology development
- From research to products and services
- Scientific and business excellence to solve our clients' challenges

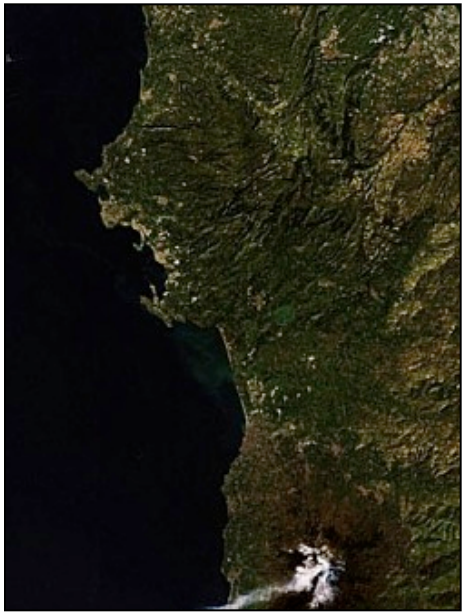
Starlab®
Living Science

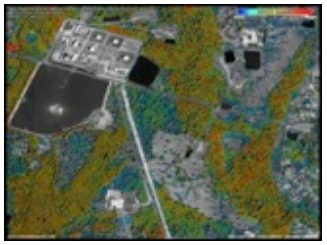
- Multidisciplinary backgrounds: physics, neuroscience, mathematics, engineering, economics, law, journalism…
- International staff (9 nationalities) where most have a Ph.D.

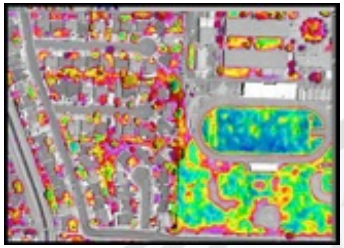
Space business chain

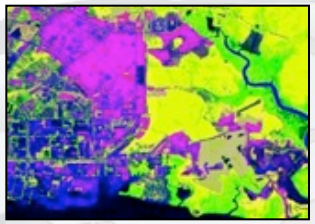
Space technology → **Space applications** → **Products and services**











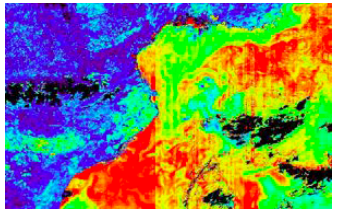
Continuous R&D effort

Space technology

- Advanced active sensors and algorithms for Earth Observation:
  - feasibility studies and simulators of novel instrument concepts for ocean and land monitoring
  - signal processing techniques to enhance the estimation of geophysical parameters

- Global Navigation Satellite Systems (GNSS) for Remote Sensing:
  - GNSS-based instruments for crucial geophysical parameter monitoring: sea surface, soil moisture, vegetation, sea ice, dry snow, ionosphere, etc.

Space applications in the market



- Renewable energy: wind and wave mapping service for site selection or plant management

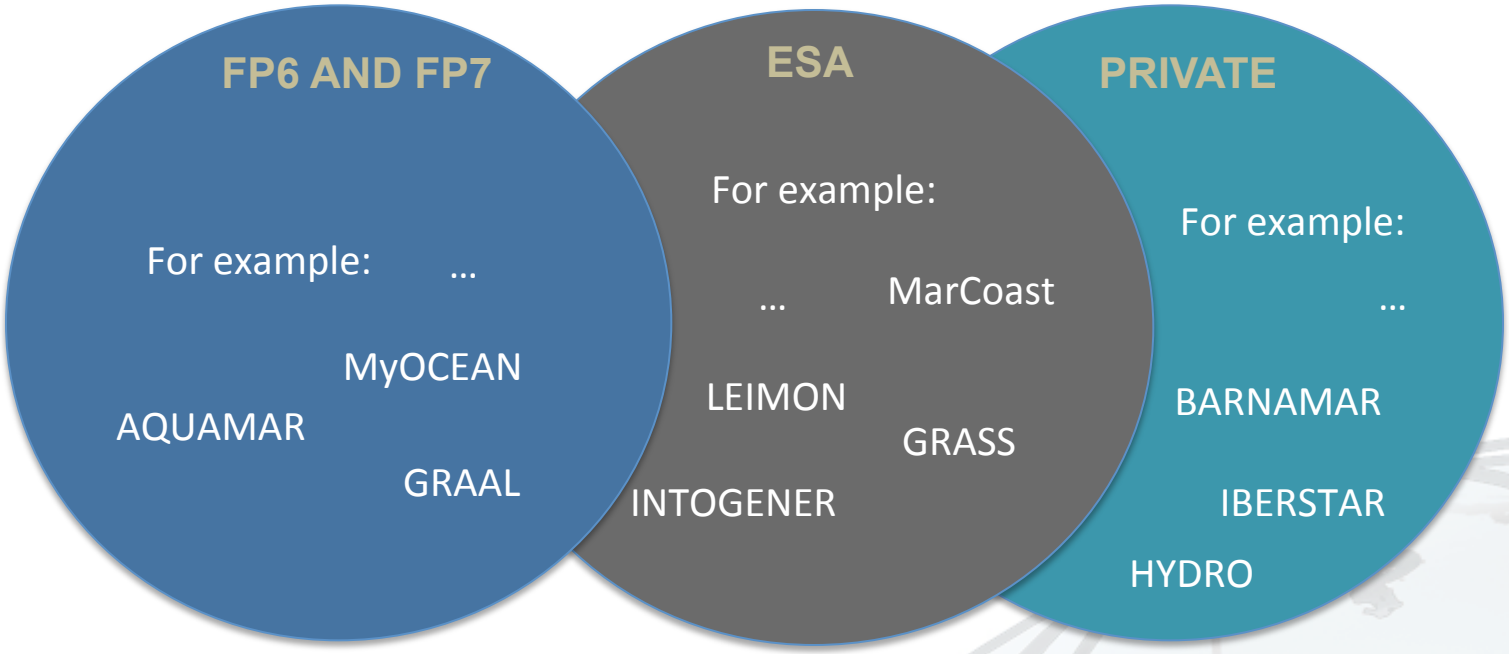
- Environmental monitoring: oil spill detection and water quality service

- Water resource management: snow cover and soil moisture service for efficient water management

Oceanpal®

- Remote dry system for water state monitoring using GNSS signals

Previous experience



- **Starlab's contribution to GEOSS**
  - Gfg^2
  - WeSenseIt: FP7 funded citizen observatory providing data to GEOSS

What is Gfg²?

- **Gfg²** → GNSS for Global Environmental Earth Observation (GEEO) and GEOSS (Global Earth Observation System of Systems)
- 3-year Coordination Action (CA) funded by the 7th FP of the EC under the Environment theme (2010). From January 2011 to December 2013.

- **Mission** → to better asses the value of GNSS for Global Environmental Earth Observation (GEEO) and GEOSS

GEOSS Societal Benefit Areas (SBAs)

Gfg² Partners

STARLAB → Starlab Barcelona S.L., Starlab Consulting Division - Space Engineering

ULEIC → University of Leicester, G-STEP group

UNOTT → The University of Nottingham, GNSS Research and Applications Centre of Excellence (GRACE)

CHALMERS → Chalmers University of Technology

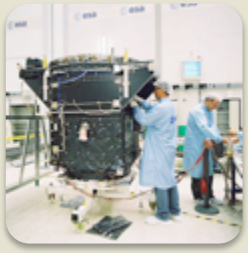
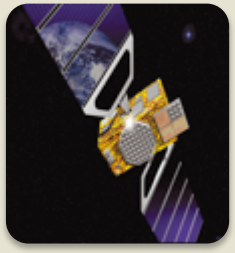
ALTERRA → Wageningen University and Research Centre

MET.NO → Norwegian Meteorological Institute

GFZ → German Research Centre for Geosciences

Gfg² Goals




To **consolidate a community of experts** interested in the scientific exploitation of GNSS for Environment and GEOSS

To **explore novel applications** derived from GNSS for Environment and GEOSS while **enhancing research-industry collaboration** to implement these applications

To **identify** the **research and technological challenges** and **define the strategic vision**, **roadmap** and policy for GNSS for Environment and GEOSS available or under development

To **assess the value of a European GNSS independent constellation** (EGNOS-GALILEO) in the support to Environment and GEOSS

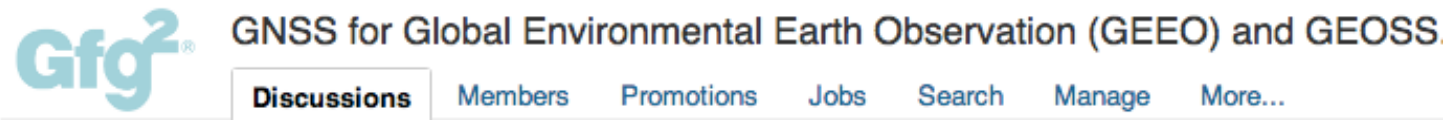
To **promote the public understanding of GNSS** for Environment and GEOSS research and use within the GEO

Achievements expected from Gfg^2

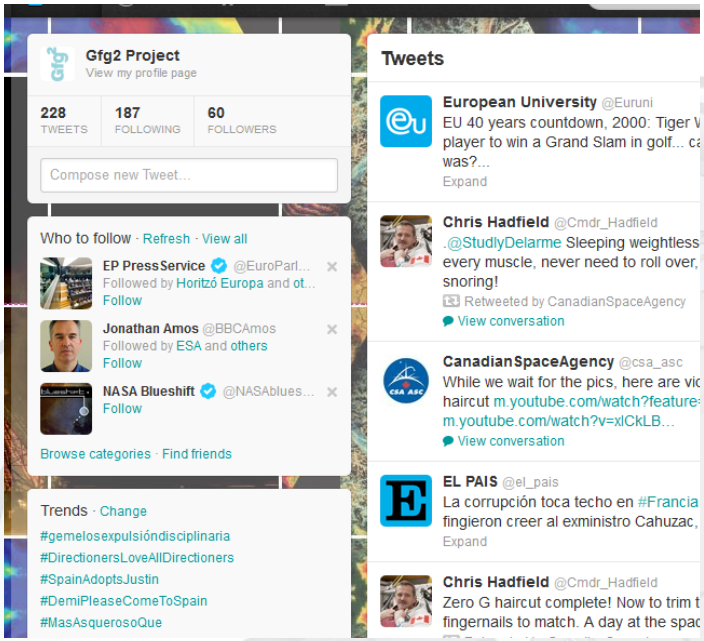
- Publications, documentation and training material relevant to GNSS, GEO and GEOSS
- Dissemination among the GEO community in European and non-European events
- 2 Summer Schools
- 2 Roadmap Workshops
- Barriers and enablers to address GEEO and GEOSS needs with GNSS
- Is Galileo a solution? Thoughts for the next generation of Galileo
- Future applications of GNSS for GEEO and GEOSS
- Benefits of GALILEO for GEEO and GEOSS
- Best Practices Book
- Final recommendations for GEOSS
- Etc.

Some of the project's main successes

305 LinkedIn community members



228 Twitter followers



Gfg2.eu website

2,301 people visited this site

Visits	Unique Visitors
3,924	2,301

*Google analytics

Some of the project's main successes

Upcoming event → TEDx Barcelona
x = independently organised TED event

November 16th 2013, Barcelona

http://www.gfg2.eu/tedxbarcelona

Breaking Myths on the Framework Programme

- ~~An SME cannot be project leader~~
  - Gfg2, HC2, Hive, Peach, etc.
- ~~It is very difficult to get a project approved~~
  - Large competency → look for excellence!
- ~~The same countries are always involved~~
  - Poland, Slovakia, Malta, Greece, Lithuania, etc.
- ~~FP projects do not have tangible results~~
  - Starlab created a successful spin-off that commercializes products developed within FP projects

Lessons Learned at Starlab

- Networking and talking to Project Officers (PO) is very important
- Your participation must be aligned with the objectives of your SME
- No investment, no gain!
  - Play an active&driving role. Partners will remember you.
- Think of side effects: in addition to products and services, know-how and retained talent
- Don't be scared of the complexity
  - An SME can do it!

Thank you!

Starlab®
Living Science

Gfg2®