

# Project: VOLcanic disaster disaster risk management for the CANary Islands (VOLCAN) EC ECHO 101193100



## Participants:

CSIC: Coordinator and Full Partner

CANARIAN GOVERNMENT (Civil Protection). Associated Partner and main enduser

CNIG-IGN: Associated Partner and enduser

total eligible costs: 666,798.28 euros

EU co-financing: 633,457.00 euros

duration: 24 months

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# Objective and justification

Taking advantage of previous EC ECHO funded projects (VeTOOLS and EVE) coordinated by the CSIC and aimed at developing a systematic methodology and e-tools to conduct long and short term volcanic hazard assessment and a volcano early warning system (the VOLCANBOX platform), the CSIC will contribute to develop a new volcanic disaster risk management plan for the Canary Islands, from a multi-risk perspective, including a prevention and preparedness based on precise long-term volcanic hazards assessment and volcano monitoring, and developing new risk reduction policies, public awareness raising and training programs for disaster risk management.

# Working Team

Natural Risk Assessment and Management Service (NRAMS), IDAEA-CSIC,  
Barcelona (<http://nrams.csic.es/>)



Joan Marti Molist  
Coordinator  
Dr. in Geology  
Expert in geological  
hazards



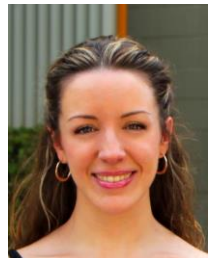
Julia Sanchez Martínez  
Physical Engineer  
Expert in simulation  
models



Iris Schneider Pérez  
Geologist and  
Environmentalist  
Expert in scientific  
communication



Arnau Lagresa Gardella  
Geograoher and  
Historian  
Expert in GIS  
applications



Marta López Saavedra  
Group Manager  
Dra. in Earth Sciences  
Expert in multihazard  
assessment and  
management



Marc Martínez Sepúlveda  
System Manager  
Programming Engineer  
Expert in data science and  
programming

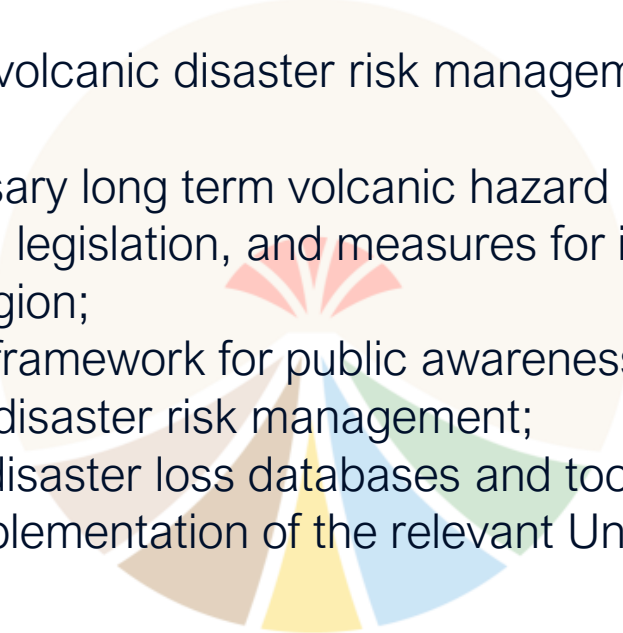


Jordi Mestres Esteve  
Data Science  
Engineer  
Expert in data science

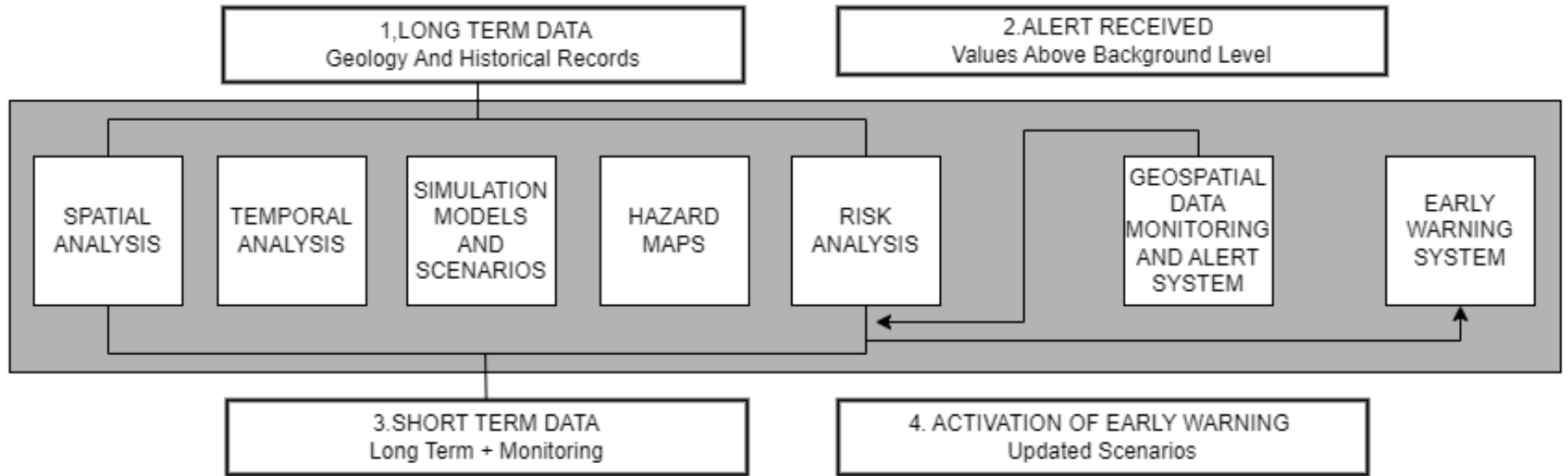


XAVIER Arnau Sarabia  
Programming Engineer  
Expert in programming

# Major goals

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- 1) revise and update the volcanic disaster risk management plan and strategy for the Canary Islands;
  - 2) to carry out the necessary long term volcanic hazard assessment necessary for developing policies, legislation, and measures for improving disaster risk management in this region;
  - 3) to develop a strategic framework for public awareness raising and training programs for volcanic disaster risk management;
  - 4) to develop a volcanic disaster loss databases and tools;
  - 5) to contribute to the implementation of the relevant Union disaster resilience goals.

# VOLCANBOX: the concept



# Working plan

- **WP1:** Project coordination, management, and dissemination
- **WP2:** Revision of the volcanic hazard and risk in the area
- **WP3:** Hazard assessment
- **WP4:** Prevention and mitigation strategies
- **WP5:** Preparedness
- **WP6:** Communication and information management
- **WP7:** Revision and updating of the Canarian management plan

1. Tenerife
2. La Palma
3. El Hierro
4. Lanzarote

| ACTIVITY                      | MONTHS |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------------------------|--------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                               | M 1    | M 2 | M 3 | M 4 | M 5 | M 6 | M 7 | M 8 | M 9 | M 10 | M 11 | M 12 | M 13 | M 14 | M 15 | M 16 | M 17 | M 18 | M 19 | M 20 | M 21 | M 22 | M 23 | M 24 |
| Task 1.1 - Coordination       |        |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Task 1.2 - Reporting          |        |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Task 1.3 - Publicity          |        |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Task 1.4 - Meetings           | 1      |     |     |     |     |     |     | 2   |     |      |      |      |      |      |      | 3    |      |      |      |      |      |      |      | 4    |
| Task 2.1 - Eruptive activity  |        |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Task 2.2 - Database           |        |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Task 3.1 - Long-term hazard   |        |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Task 3.2 - Eruption scenarios |        |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Task 3.3 - Visualisation      |        |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Task 4.1 - Land use planning  |        |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Task 4.2 - Vulnerability      |        |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Task 5.1 - Monitoring         |        |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Task 5.2 - Early warning      |        |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Task 5.3 - Education          |        |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Task 6.1 - Communication      |        |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Task 6.2 - Mangement          |        |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Task 7.1 - Management plan    |        |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

# Expected outputs

- Improved volcanic disaster risk management plans and strategies; (WPs, 6 and 7)
- Improved volcanic risk assessment analyses, methodologies or tools; (WPs 3 and 4)
- Compilation of good practices and knowledge in the field of volcanic disaster risk management; (WPs 5 and 6)
- Development and implementation of strategies and measures aimed at increasing risk awareness and preparedness of the population. (WPs 1, 3, 5, 6)
- Digital awareness raising products, such as media campaigns, including social media, open-source platforms, other visuals; (WPs 1, 3, 5, 6)
- Development of training and educational modules, methodologies, workshops, for the general public or specific groups, including vulnerable groups and persons with disabilities; (WP 1)