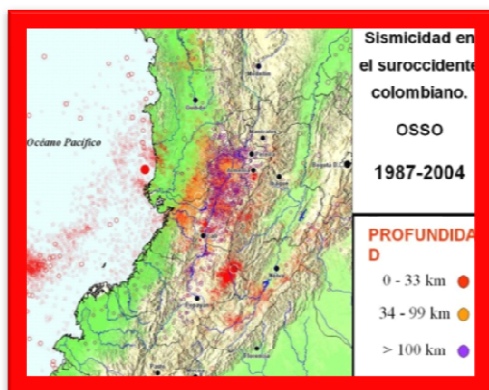




Scientific, technical, and social research applied to risk reduction in Latin America and the Caribbean.



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Corporación OSSO
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Introduction

- OSSO is a multidisciplinary Colombian research group, which was originated in the early 1980s, and formally established in 1987 .



Osso's research has been focused on three topics:

Earth sciences, Engineering and technology and Environment and Society



Earth sciences



Environment and Society



Engineering and technology



In addition to that the Osso group is one of La Red founders.



<http://www.desenredando.org/>





LINES OF ACTION

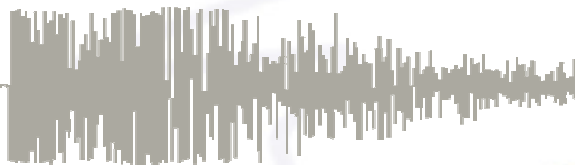
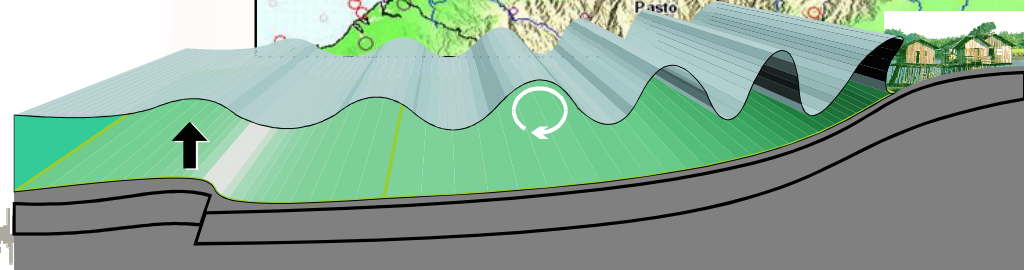
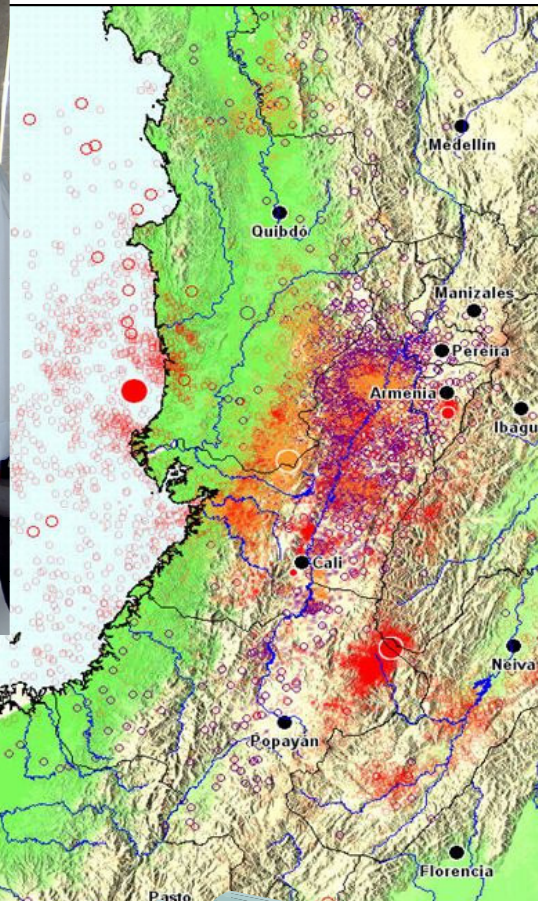
- The construction of scientific and technical knowledge developed by the OSSO group in recent years at local, national and regional (the continent) scale, has been associated primarily with :



- Development of observing systems, acquisition and processing of environmental signals,
- Seeking technological independence through the development of hardware and software.
- Professional training for processing and analyzing environmental signals.



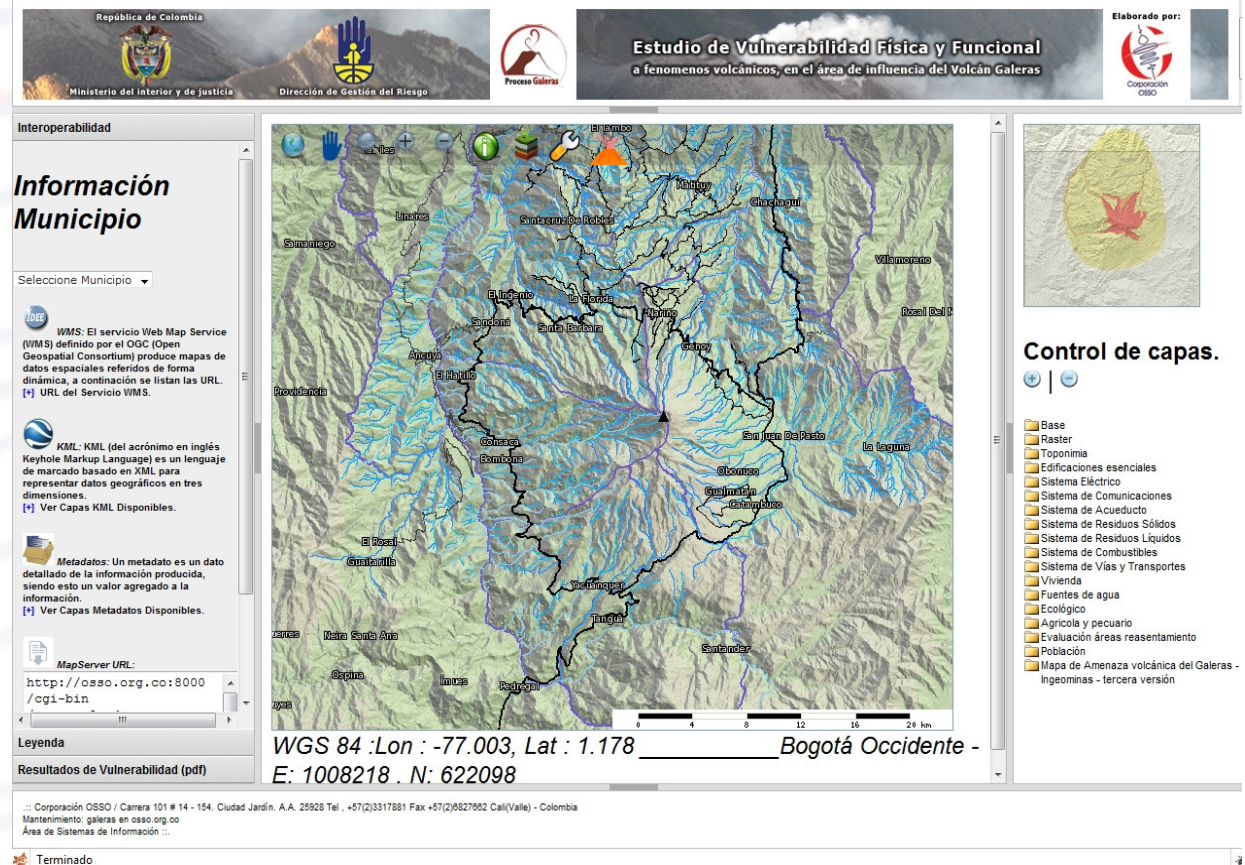
- OSSO group designed, implemented and operated for a continuous and uninterrupted period of time, the Southwestern Regional Seismological Network, as part of National System for Disaster Prevention and Response since 1987 until 2007.
- As well as developed the National Tsunami Detection and Alert - SNDAT of Colombia until today.





Online GIS development for ***Vulnerability assessment*** : <http://sigvulgaleras.osso.org.co>

- Usually the OSSO group relies on free software or public domain tools and makes use of available data on the internet from institutions related with generation of information technology, application of GIS, remote sensing and spatial modeling and social mapping exercises and planning-action-participation with communities and institutions.





- The OSSO group had a long experience in social integration and transfer of technical scientific knowledge to communities and institutions.

Colombian Indigenous communities



Colombian rural communities





Projects in vulnerable areas from afrodescendant communities .





- Training of human resources for science and technology, from a practical learning strategy, encouraging interdisciplinary and holistic knowledge for understanding natural phenomena, social relationships and the environment.





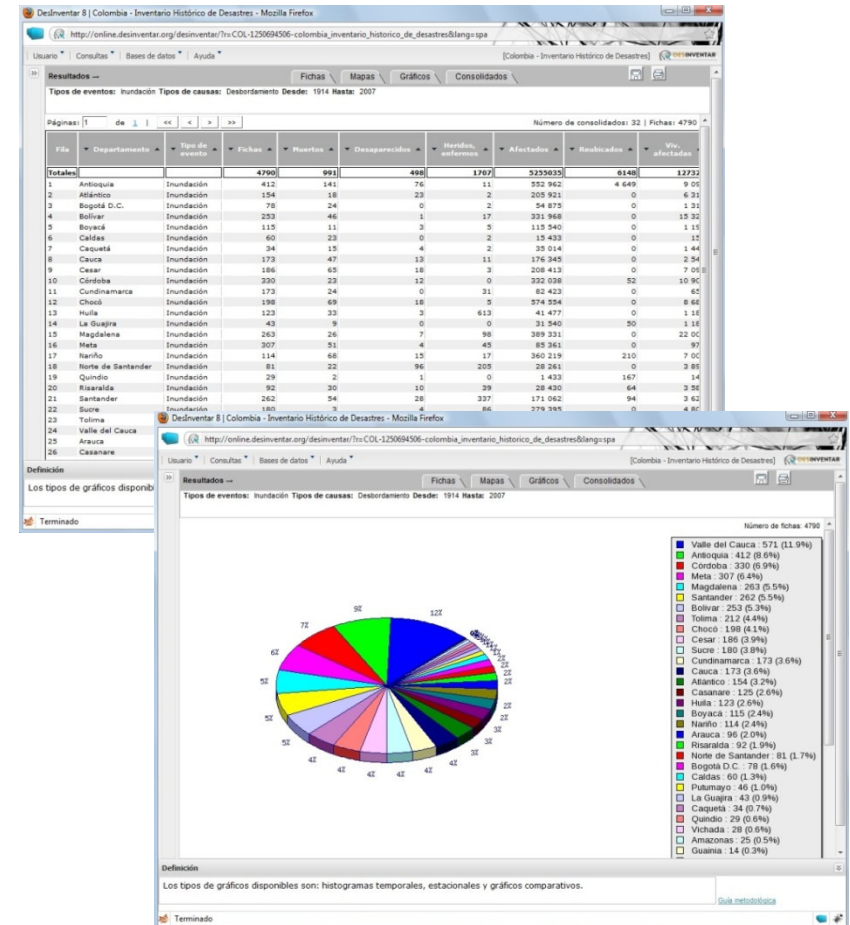
Contributions

- Since 1994 the development and coordination of a disaster inventory system - **DesInventar** .
(Available free at: <http://online.desinventar.org/>).





DesInventar methodology applied to inventory of disasters effects.





- DesInventar has been applied to the Andean countries (Bolivia, Colombia, Ecuador, Peru and Venezuela), Central America and the Caribbean (Costa Rica, El Salvador, Guatemala, Panama, Cuba and Haiti); Southern Cone (Chile, Argentina and Paraguay), and North America (Mexico).



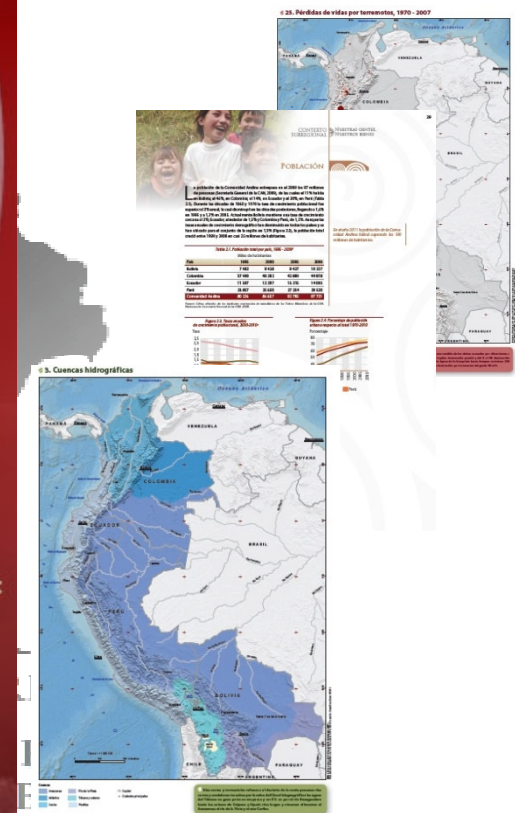
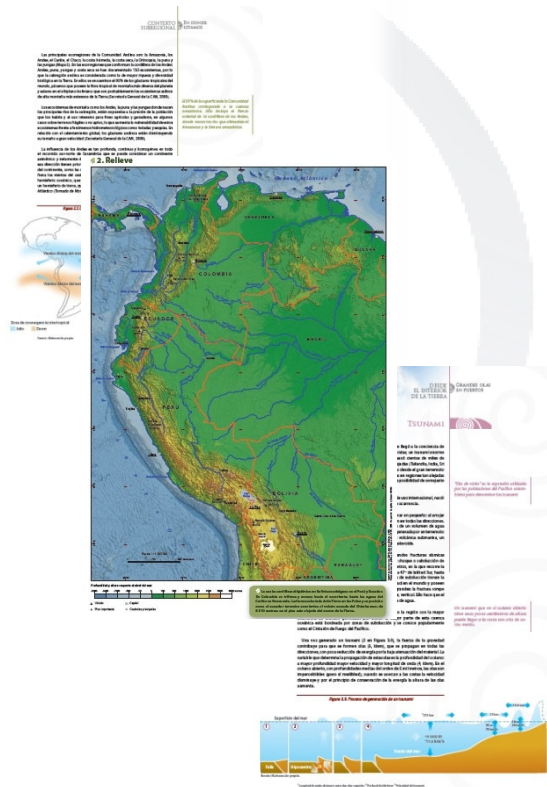
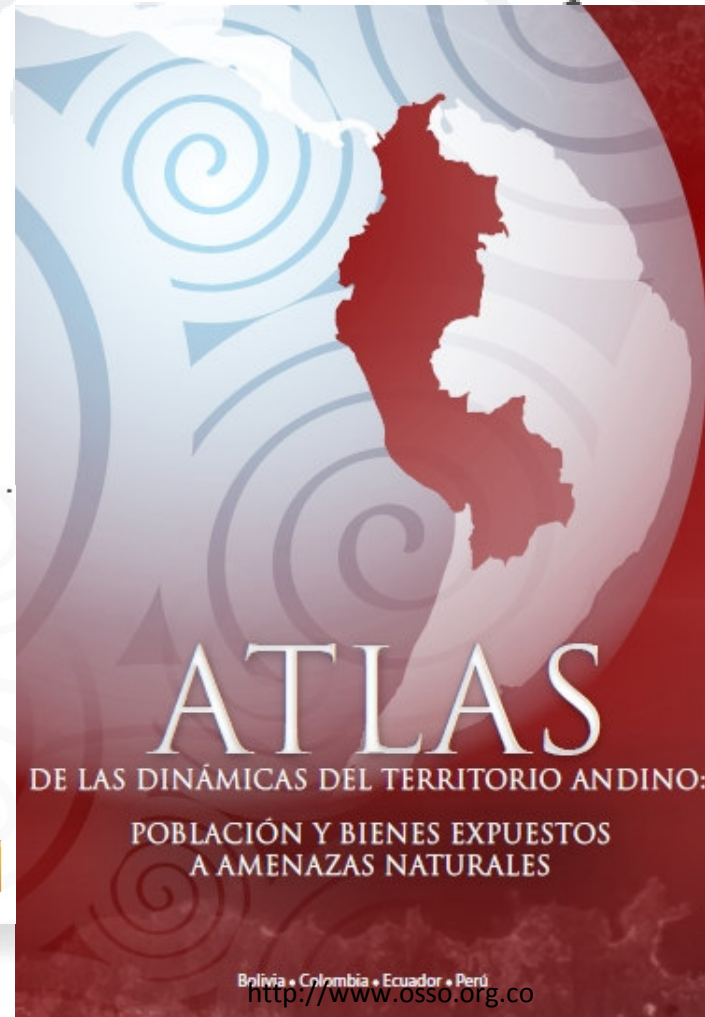
DesInventar training (Haiti, 2010).





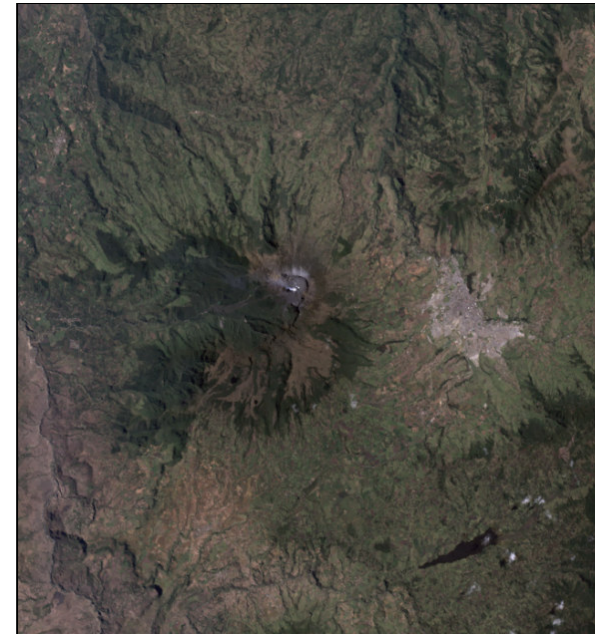
Atlas of the dynamic of the Andean Territory (2009)

Download at :<http://www.comunidadandina.org/predecan/atlasweb/index.html>





Vulnerability assessment



Another recent projects was the vulnerability assessment of the physical and functional volcanic phenomena in the area surrounding the Galeras volcano for the National System for Prevention and Treatment Disaster (2008-2009), study conducted for 11 municipalities around the volcanic complex (see <http://osso.org.co:8000/>).



Conclusions

- Transition from a vision based on the disaster and the development of a new vision based on the risk, the latter with a more modern, scientific and holistic character to move towards comprehensive risk reduction policies in the territories and communities that inhabit it.
- From a cultural context of science and technology, OSSO promotes the observation of environmental and social variables on a comprehensive, interdisciplinary and holistic risk for countries of the region, which can make better use of development and the challenges facing the world today.
- It is likewise appropriate to approach the question of how to obtain and how to build scientific technological knowledge, to provide a positively impact to society, institutions and community.
- It is essential, especially in the context of Latin America and Caribbean countries, to support projects properly, observing and monitoring environmental and social variables, which, as far as possible, open-ended, and also continuous monitoring processes that allow human resources training scientific and technological capabilities to generate useful knowledge for actions to reduce risks and enable social, economic, and environmental development.





Thank you very much .

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<http://www.osso.org.co>



Boys playing soccer at flooded area in Tumaco, Colombia (2005)

