WORKSHOP
NEMO - NumErical MOdelling using high performance computing infrastructures

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Solid Earth Dynamics Department,
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1) PRESENTATION TITLE:

SCIENTIFIC VISUALIZATION WITH OPEN SOURCE SOFTWARE

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2) ABSTRACT:

Today, we are provided with an abundance of visual images from a variety of sources. In doing research, data visualization represents an important part, and sophisticated models require special tools that should enhance the comprehension of modeling results, especially when dealing with large and complex sets of data obtained from numeric simulations performed on supercomputers.
Geodynamic numeric simulations calculate several 3D scalar variables like temperature, viscosity and composition, and 3D vector variables, as velocity for example, at millions of spatial/temporal grid points. In order to make sense of this massive amount of data, it is useful to have a set of tools able to handle these data in order to allow users to navigate through volumes, explore the model features and helping information understanding.
In this paper we present a series of applications produced with open source software, as GMT (Generic Mapping Tools) and ParaView.

4) POSITION OF CORRESPONDING AUTHOR:

Student	~~**yes**~~	no
Post-Doctoral	~~yes~~	**no**
Researcher	yes	~~**no**~~