



## **Toward the integration of a dislocation model in the DInSAR time series analysis**

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The DInSAR technique is widely used to detect the coseismic displacement field, even for moderate earthquakes. However, the disturbances affecting single interferograms, i.e. atmospheric phase delay and loss of coherence, may mask possible pre- or post-seismic signals. By discriminating the signal due to such disturbances, DInSAR time series analysis allows to obtain very accurate measurements of ground deformation. The integration of a geophysical dislocation model, retrieved by data inversion, in a DInSAR time series processing containing a coseismic displacement signal (represented by a “sudden step” in time) may allow a better detection of possible other deformation signals and improve the general temporal coherence. We will present the results of such integration using ERS ascending and descending data, spanning from 1992 to 2001 and encompassing the Mw 5.9, september 1999 Athens earthquake.