Japan Geoscience Union Meeting 2011
(May 22-27 2011 at Makuhari, Chiba, Japan)

STT054-P04 Room:Convention Hall Time:May 24 14:00-16:30

Coseismic Displacement Measurement of The 2010 El Mayor, Mexico Earthquake Using Satellite Optical Images

Masashi Matsuoka[1*], Shinsuke Kodama[1]

[1]AIST

This paper performed to measure the ground deformation of the fault rupture due to the 2010 El Mayor, Mexico earthquake by the sub-pixel correlation technique to pre- and post-event satellite orthorectified images. The Terra/ASTER and ALOS/PRISM images processed by the GEO Grid system were used for this examination. The maximum displacement interpreted from the image analysis was few meters of right-lateral strike slip. The results will be validated in comparison with field survey and other sensors' data.

Keywords: subpixel correlation, crustal displacement, satellite optical sensor, Terra/ASTER, ALOS/PRISM, the 2010 Baja california earthquake