## **Japan Geoscience Union Meeting 2011**

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SSS030-P15 Room:Convention Hall Time:May 24 10:30-13:00

Fault model of an earthquake at Laos(May 2007, Mw6.3); Possibility of a conjugate rupture

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On May 16, 2007, an earthquake with moment magnitude (Mw) 6.3 took place near the northern border of Laos.

Using L-band ALOS/PALSAR data, we apply interferometric synthetic aperture radar technique in order to detect the associated co-seismic crustal deformation.

We compared the InSAR image with Global CMT solution and USGS to search the location of the source.

At the 2010 JPGU meeting, we presented a preliminary fault model that consisted of a rectangular source with a uniform slip. But The observed data shows complex deformation signals that can't be explained by a simple uniform slip fault.

Also, the special distribution of the deformaition signal suggests that the earthquake was accompanied with a conjugate rupture.

Here, we present a non-planar fault source that is based on a triangular dislocation element.

Keywords: coseismic deformation, SAR, InSAR