

Outline and Source Process of earthquake occurred at Haiti on 12th January, 2010

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A large earthquake (Mw7.1) occurred at Haiti in Central America on January 12th, 2010 (GMT). We will report about CMT analysis, source rupture process analysis with using teleseismic body wave, and SAR interference analysis of this earthquake.

CMT analysis showed a strike-slip type with its pressure axis in a NNE-SSW direction. The slip distribution on the nodal plane in the direction of E-W was analyzed by using teleseismic body wave. The Mw of this earthquake was estimated 7.1 from both source rupture process analysis and CMT analysis. Fault length, width and amount of the largest slip were estimated about 30km, 15km and 5meter, respectively.

Moreover, we analyzed crustal deformation from SAR interferometry analysis with ALOS/PALSAR data. The obtained crustal deformation seems to be corresponds to source rupture process analysis result.

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