Volcanic Deformations revealed by D-InSAR --Kozu-shima, Eastern Izu Peninsula, Unzen, Iwate-san and etc.--

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Using Interferometric SAR images with a two-path method, we have analyzed to detect some deformations associated with their activity for several volcanic areas such as Kozu-shima, eastern Izu peninsula, Unzen, Iwate-san and etc. Although the detectability and accuracy of the detected deformations are not quite systematic, the detected deformations for Kozu-shima and eastern Izu peninsula associated with seismic swarm activities are confirmed by dense GPS network observations by the GPS University Group. Most of swarm events for eastern Izu peninsula are considered to be intrusion processes of magma into the shallow crust. Results of Unzen between Dec. 1993 and Dec. 1993, however, show a slight deformation which is close to the detection limit of the D-InSAR analysis.