The study of coseismic dam monitoring with the Satellite data

\*DAISUKE SANGO<sup>1</sup>, YOSHIKAZU FUKUSHIMA<sup>1</sup>, KAZUO YOSHIKAWA<sup>1</sup>, SHO SHIMIZU<sup>1</sup>, YASUNARI MORITA<sup>1</sup>, HIROYUKI SATO<sup>2</sup>

1.PASCO, 2.Natinal Institute for Land and Infrastructure Management

Many of roads and river dike has been damaged caused by Kumamoto Earthquake (main shock) on April 16.PASCO acquired the data of stricken area from satellites and other sensing technologies as to validate and grasp the damages by the earthquake. In this series of the validation, PASCO attempted to monitor three fill dams. Some sedimentation at upper end of dam, which is located in area of 6 seismic intensity, caused by the earthquake were caught through interferometry analysis by satellite SAR. On the other hand, in dam body, which is located in area of 4 seismic intensity, any changes were not found at this moment. Pre/post earthquake optical satellite data also allows to grasp immediate change detection in dams and the surrounded area. Consequently, utilizing satellite imageries would be an effective method to monitor dams which are dotted around huge area in urgent cases.

Keywords: Satellite, Dam, Monitoring, DInSAR