

EARTH OBSERVATION SYMPOSIUM (B1)
Earth Observation Applications and Economic Benefits (5)

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INTER. COOPERATION PROPOSAL: RAPID RESPONSE SMALL SATELLITES FOR DISASTER
SURVEILLANCE

Abstract

Only in this several years, many heavy disaster events such as earthquake, tsunami, snowstorm/frost, emerged with few effective prediction, fast tracking and continuous surveillance by spaceborne instruments. In order to deal with these disasters using small rapid response/low cost satellites, an international cooperation program is proposed in this paper. Based on analysis of the observational requirements of main disasters and the response capability (resolution and revisit) of small satellites, the solution plan is given including of the special orbits of small, satellite/constellation, current and standard satellite platforms with plug and play modules, appropriate and optional observation payloads with on-orbit programmable spectrums, affordable vehicles with fast and mobile launching, international teamwork division, etc.