YOUNG PROFESSIONALS VIRTUAL FORUMS (YPVF)
Global Earth Observation System of Systems (GEOSS) (3)

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INTEGRATED SMALL SATELLITE SYSTEM FOR DISASTER MONITORING- A NOVEL CONCEPT TO MONITOR NATURAL DISASTERS FROM SPACE

Abstract

The rapid globalization around the world has given birth to several problems. Global Warming and its consequences are the major drawbacks of this globalization. The Tsunami tragedies in Japan last year and in South East Asia in the end of 2004 are seen as some of the major natural tragedies that the humans had to face in the recent years. The natural disasters are sure to occur as a possible consequence of the Global Warming. The thing which can be done in this regard is to monitor them for quick remedies. During the time of Tsunami tragedy in South East Asia in the end of 2004, a lot of people lost their lives and resources were damaged due to lack of proper monitoring services in the affected areas which comes in the list of developing regions on the world map. Thousands of live could have been saved during the Tsunami tragedy in South East Asia in 2004 if there would have been dedicated Space Applications over this region to monitor the disaster. Since this area comes in the category of developing countries so the lack of advanced technology and resources is relevant. In certain cases it becomes quite difficult for the humans to analyze the tragedies at the right time either due to remote locations or due to any nature born threat. This delay turns out to be serious and by the time humans could reach there the damage turns out to be severe. In this direction Space Applications can play a vital role in monitoring the natural disasters from Space. This would not only be cost saving but would also help in providing immediate solution even when the humans could not be available physically at the right time. Those regions which are highly prone to natural tragedies like Tsunami, Earthquake and Landslide can be easily monitored with the installations of Satellite Systems over those areas specifically designed for this purpose. This can be done more effectively with the help of a cost saving Integrated Small Satellite System. The Small Satellite System consisting of 4-5 satellites in one system can be designed and integrated for deployment over those areas which are highly prone to natural tragedies for round the clock monitoring. The deployment of such System can be done to all those concerned areas; a task which is cost effective and simple in operation.