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29th IAA SYMPOSIUM ON SPACE AND SOCIETY (E5) Is Space R&D Truly Fostering A Better World For Our Future? (2)

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USING SPACE FOR DISASTER MANAGEMENT IN EMERGING SPACE STATES: A CRITICAL ASSESSMENT

Abstract

One common unifying justification for space is disaster management. Usually, emerging space countries justifying their need for space program on this application. On the other hand, space faring countries or industries sell or give for free their data for this application as well. In the past decade, various emerging space nations have started and have already invested amount of funding and human resources to build up their own space capacity, space infrastructures and satellites to serve national disaster management.

From these reasons, by observing the current status and the progress that the emerging space nations are performing, we are able to assess and raise some interesting questions i.e. Have these space programs been able to effectively and efficiently achieve the goal of disaster management using their own national investments in space technology? And would it be sustainable in the long run?

In this paper, general background and current status for using space data for disaster resilience in different emerging countries (in different regions; Asian, Africa and South America) will be presented. Then, criteria will be proposed for assessing whether emerging countries are effectively and efficiently achieved the goal of disaster management using their own or foreigners' EOS assets and programs. Case studies when space-based disaster management framework worked or failed in emerging space countries will be discussed in the final section.