

SPACE DEBRIS SYMPOSIUM (A6)  
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DEVISING OF STRATEGIES TO MONITOR THE SPACE DEBRIS USING A NETWORK OF  
GROUND-BASED MEDIUM-SIZED OBSERVATORIES

**Abstract**

The main objective of this study is to devise strategies to develop an active network of monitoring of the space debris using ground-based medium-sized observatory facilities along with other methods such as radar or radio monitoring systems. Nowadays, there are many inactive or semi-active small and medium-sized observatories around the world that devising a wise plan, development of equipments and connection to a regional integrated monitoring system can assist in use of their potential in this field. The first step in this direction is to identify these observatories and then create an integrated network monitoring platform to educate the observers and collect the monitoring data. For this purpose, it is necessary to consider several factors such as parameters in selection of eligible observatories, methods in observation of space debris, adjust current equipments to comply with the defined mission and creation of a central data base. This paper focuses on these issues by providing comments on the situation in developing countries. Iran in this regard, is a unique country among developing countries in the monitoring of space debris where its great position in international space studies in addition to its vast geographical area in the Middle East; all have turned this country to an appealing opportunity for investment by more advanced countries in this field. Iran will perform a pilot scheme by proper planning, investment and creating a network of medium-sized observatories around the country. This context will provide a better insight into advantages, performance and difficulties in completion of this project.