

IAF EARTH OBSERVATION SYMPOSIUM (B1)  
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Author: Dr. Ming Li  
China Academy of Space Technology (CAST), China, liming\_cast@sina.cn

Dr. Tang Liang  
Beijing Institute of Control Engineering, China Academy of Space Technology (CAST), China,  
tl614@sina.com

Prof. Yong Chun Xie  
Beijing Institute of Control Engineering, China Academy of Space Technology (CAST), China,  
xieyongchun@vip.sina.com

THREE-SUPER PLATFORM FOR HIGH-EFFICIENCY, HIGH-VALUE EARTH OBSERVATION  
MISSION

**Abstract**

To meet the development needs of high-efficiency, high-value earth observation satellites, ultra-agile and dynamic imaging technologies have been studied, a platform with three super performance—super agile ability, super high attitude measurement accuracy, super high attitude stability for remote sensing satellites has been suggested.

The overall design of dynamic imaging mode combined with altitude maneuvering and stable control has been analyzed. The relevant core control components and completed closed-loop verification of the system has been developed. To build a dynamic imaging integration verification system, a simulation in the orbital imaging process, the integrated test verification of the attitude maneuvering and camera imaging were performed.

It's estimated that the attitude maneuver of 25 degree around any axis can be achieved in less 10 second including stability time. With the three-super ability, the rich modes of imaging scenario can be achieved according to user requirement, the efficiency and value of the mission will be highly improved..