

## ***Interactive comment on “Instrument observation strategy of new generation three-axis stabilized geostationary meteorological satellite of China” by Jian Shang et al.***

### **Anonymous Referee #1**

Received and published: 26 April 2019

General Comments: This manuscript presents simulation results and in-orbit results for three-axis stabilized geostationary satellite attitude control. The geostationary satellite uses multiple stars as a reference to stabilize the platform for acquiring latitude, longitude, and altitude of image. The simulation results of star observational studies are applied to the in-orbit application. The simulation methodology should be described more clearly step-by-step. A detailed description of the simulation procedure will help the reader to appreciate the results presented in tables 3, 4,5 and 6.

The figure captions should be more descriptive. The axis labels in the figures are missing.

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This study has a practical significance, but the authors did not provide a mathematical framework and numerical example of the simulation. . Specific and General Comments:

In the document the phrase ‘so on’ should either be deleted or replace it the with necessary description.

Page 1, line #19: Define ‘moon tasks.’

Page 1, line#26: Briefly describe the increase in observation efficiency and flexibility compared to FY-2

Page 1, line#27: What are the challenges in image navigation and registration in the case of three-axis stabilized satellite?

Page 1, line#29: Describe edge detection and how it is used in a spin-stabilized satellite.

Page 2, line #1: list other important parameters.

Page 2, line #2: What is the range of variation in space thermal source variation?

Page 2, line #3-4: Rewrite the sentence.

Page 2, line #5: State the expected thermal gradient across the three-axis stabilized the platform.

Page 2, line #5: What is meant by launch violation?

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https://doi.org/10.5194/gi-2018-35, 2019.

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