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Author: Dr. PEI HAN

Technology and Engineering Center for Space Utilization, Chinese Academy of Sciences, China

Mr. Wei Zhang

Technology and Engineering Center for Space Utilization, Chinese Academy of Sciences, China

STUDY ON OUTPUT EVALUATION METHOD OF SPACE SCIENCE PROJECT

Abstract

Space science is a cross-field of multidisciplinary study, technology and research. It is the forefront of natural science and also has important application prospect, its benefit in promoting earth and a country's economy is more and more significant. As the investment of space science project increase, pay back to earth is in more expectation. One characteristic of space projects is that they require relatively higher outcome and take more risk in getting achievements. Thus, it is of great importance to evaluate the outcome of space science project, which is also an efficient instruction for project selection in the following steps. Current output evaluation of space science project is mainly by holding conference of Evaluation Committee and most of evaluation methods are qualitative which has defect of lacking accuracy. Evaluation indicators usually contain scientific excellence and innovationscientific outreachlong term scientific impactpublicationsynergycritical capability and health of the science program. However, since different space project type may lead to various outputs, to improve the reliability, validity and sensitivity of evaluation on space projects, the evaluation indicators should be varied and put into more accurate category. In this paper, we developed a semi-quantitative evaluation system for space science project. We classified space science projects into different types and sorted key evaluation indicator for each type, varied weight were put for individual indicator and effective quantitative method was employed. To test the validity of this evaluation method, previous Chinese space science project output was used as a test.