

SPACE EXPLORATION SYMPOSIUM (A3)
Space Exploration Overview (1)

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CHINESE KUAFU PROJECT SPACE ENVIRONMENT DETECTION ON L1 POINT

Abstract

“KuaFu Project” of China is a large international cooperation project. It comprises three satellites. KuaFu A will be located at the first Lagrangian point. KuaFu B1 and B2 will be placed in a polar elliptical orbit around Earth. The objective of the KuaFu project is to accomplish the full-range observation of the complete cause-and-effect chain from the solar atmosphere to geospace. The space particle radiation environment payload on the KuaFu A including three instruments: Solar Wind Instrument Package (SWIP) detect low-energy particles developed by England or China, Solar Energetic Particle Telescope (SEPT) detect middle-energy particles developed by Germany, Solar High-Energetic Particle Detector (SHEPD) detect high-energy particles developed by China. With those payloads people can research of acceleration mechanism of energetic particles (are) accelerated in flares and shock waves driven out of the corona by coronal mass ejections, and their transfer and diffuse in interplanetary space. and research on characteristics and mechanism of SEP transfer, diffuse and acceleration through interplanetary and geospace.