

Investigations with the magnetometers on KuaFu

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KuaFu is a joint Chinese, Canadian, and European mission to study the Sun-Earth connection. Scheduled for launch in 2012, it consists of a pair of polar-orbiting spacecraft to make in situ and remotely-sensed observations of the auroral regions of the magnetosphere together with a spacecraft, KuaFu-A, in a halo at L1. KuaFu-A will also carry both in situ and remote sensing instrumentation, in this case to study solar events and their interplanetary manifestations. The magnetometers are being provided by a single consortium and will contribute the essential linkage between the interplanetary and magnetospheric phenomena. KuaFu-A at L1 will fill the traditional solar wind “monitor” role. Additionally, in concert with other L1 spacecraft unique joint studies of solar wind turbulence and discontinuities can be undertaken. This paper will discuss these science goals of the mission.