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CSSDC PROMOTED SERVICE ALSO STRENGTHENED CONNECTION TO SOLAR-TERRESTRIAL COMMUNITY THROUGH DEEP PROJECTS COOPERATION

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Through the extensive and deep projects cooperation with Solar-Terrestrial community, Chinese Space Science Data Centre (CSSDC) contacted and served the research community not only in supplying qualified scientific data and data analysis tools or computation models service, but also in providing data process and manage software and data standards service. In recent decades, China approved and executed a number of space exploration projects including Double Star Program (DSP) and Meridian Space Weather Monitor Project. All the raw data material from instruments firstly should be correctly converted and well formatted, organized to scientific data, then open to public and keep permanent usable. In those programs, CSSDC mainly in charge of raw data conversion, scientific data validation, distribution, archiving and data standards construction on accounting of its (CSSDC) role in space science data reduction, management, sharing and keeping data permanent safety. With the help of the experiences in programs, CSSDC established an operation model in data process and mange procedures, which consists of data production, collection, quality assurance, storage standardization, classification, labeling, archiving and distribution. We present the main procedures in this model, then describe the metadata specifications and data organization frame we constructed and adopted. By the way, we got lots of meaningful advice from the researchers in the above standards construction. The model together with standards and organization frame ensured our data being high quality, normalized and easy understanding. Furthermore, to expand our serve aspects, CSSDC designed a data distribution portal–Solar-Terrestrial and Astronomy Research Network (STAR-Network), which fulfilled functions of data acquisition, storage, analysis, model computation and simulation tools operation by using of cloud storage and computation resources. There's no doubt this portal assisted scientists a lot in their research, though much more data, tools and models need to integrate into this portal. In the future satellite plan "Solar wind Magnetosphere Ionosphere Link Explorer" (SMILE), CSSDC would be in charge of the whole data process and manage procedures. In this way, CSSDC could contact and serve scientists community well and would prompt more research achievements.

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