Utility Software for Web–Based PPP Applications for Automated Data Processing

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SUMMARY

Recently Web-based PPP (Precise Point Positioning) applications are widely used by many researchers. Principle of the applications depends on uploading the observation data to the servers and receiving the results after the processes. However, when batch process is necessary, systems limit the users in terms of file size. In addition, if the observation data corresponding to the IGS stations are necessary, such data should be downloaded from many different websites which takes a lot of time. To overcome this problem, software which provides batch process that requires user to input only IGS station name and desired time period was developed by the authors. Software downloads the observation files from the SOPAC (Scripps Orbit and Permanent Array Center) servers and prepares them for the CSRS-PPP application format. To avoid overloading the CSRS-PPP servers, an algorithm in the software calculates the file sizes then uploads the packages, about 20 files in each. After receiving the solution files produced by CSRS-PPP, software extracts the point coordinates and also creates a parameter to illustrate health status of observation files according to the number of epochs. Final step of the software is writing the results to a text file. In this study, this utility software developed by authors was introduced extensively.

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