

SHAO Summer Internship Logging: 3

Author: Tin-yau Yu

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This was the third day of the internship, in brief, the *prepfold* error has fixed and two pulsar profiles have produced, it is a great step forward in stage one. Meanwhile, the first version of the project plan has been written and uploaded to github.

In details, we looked back at the source code of *polycos.py*. It is located */usr/local/astrosoft/presto/src/polycos.c*. In line 161, we discovered that the terminal has printed "Generating polycos ...", so there is something wrong after that. In short, we discovered that a file called "temp.cfg" which is a configure file was missing inside the folder */usr/local/astrosoft/tempo*. After putting that file back to the folder, I got two pulsar profiles: J1921+2153-1095506112 and J1534-5334-1121173352. See attachment for the profiles.

Next, I will continue to re-produce pulsar profiles that have mentioned in Mengyao's paper. My goal is to complete this reproduction within this week, so we can start working on blind search in the second week.

Besides, Prof. An has suggested to share my logging and project plan with others for collaboration. I have agreed to this suggestion, and we have agreed we should finalize the documents before sharing with others. I hope all these documents would become a strong foundation for future pulsars research, and for my future research topics as well.

