Dear Friends and Colleague

This version of HIST-PPM software adds the simulation programs. See the manual for the contents of these executions. All FORTAN programs and R programs in this version, and input/output examples of each program, are stored in sub-directories for each corresponding section of the manual. We hope that this will make it easier to check the execution results for each purpose.

The software written in FORTRAN, and examples of input-and outputs of respective programs are also included. This is to verify that the user is executing the program correctly. Not only for that, but especially importantly, we hope that it will help researchers to create equivalent programs in languages other than FORTRAN as needed. We also expect to create better ones in those languages. Therefore, please understand the algorithm. Please read the appendix and literature of the manual. Best regards,

Y. Ogata; on behalf of all the collaborates, K. Katsura, M. Tanemura, J. Zhuang, and D. Harte

## On the Occasion of publication of the revised version of the HIST-PPM (second Edition)

February 22, 2020

Dear Friends and Colleague,

This version of HIST-PPM adds the Prediction program by HIST-ETAS model to the original HIST-PPM ( $\beta$ -version), as well as some modifications of the R-modules for image visualization because of R language updating.

We would be very pleased if you were able to make use of the programs for your research. We will probably not have sufficient resources to provide help to individuals. However, we would be interested to hear what problems you encounter, particularly with the code (syntax errors, omissions, etc.) and with documentation that is incorrect or not clear. We will use this feedback to fix program bugs and improve documentation, although we will not be able to respond you individually because of limited time.

It is a very large and complicated process to revise what was essentially written as research program code into a well-documented and logical structure that is accessible by a wide audience. This is our ultimate aim. Hopefully we are well along that route. However, we do expect that users will find problems, and hence our interest in your feedback.

As already mentioned, this is research software and, while we have made considerable effort to ensure that the computation algorithms are implemented correctly, we cannot guarantee the results will be correct under all possible circumstances. The onus is on the user scientist who is assumed to be sufficiently sophisticated to perform various diagnostic tests on the results to ensure that they are both statistically and physically plausible.

Best regards,

Y. Ogata, on behalf of all the collaborates; K. Katsura, M. Tanemura, J. Zhuang, and D. Harte.

## HIST-PPM (β-version) Source codes for space-time seismicity analysis

September 1, 2015

Dear Friends and Colleague

We are writing to you and a small group of other colleagues about some software for space and space-time stochastic modelling of seismicity. We want to eventually make it publicly available, but want to initially restrict usage to a smaller group of people.

The software written in FORTRAN has been developed over a long period of time by Yosi Ogata and various collaborators. The software was developed to answer research questions about the nature of seismicity. Hence it has been developed in a rather prospective manner, rather than a retrospective manner when the process of interest was well defined and well understood. Consequently, some of the software may not be structured in a way that one may write it now with one's current technology and understanding of the problem.

However, the collected programs represent a considerable amount of effort and hence resource to the statistical seismology community. And therefore, we have attempted to provide documentation for the programs to potential users.

We would be very pleased if you were able to make use of the programs for your research. We will probably not have sufficient resources to provide help to individuals. However, we would be interested to hear what problems you encounter, particularly with the code (syntax errors, omissions, etc.) and with documentation that is incorrect or not clear. We will use this feedback to fix program bugs and improve documentation.

It is a very large and complicated process to revise what was essentially written as research program code into a well-documented and logical structure that is accessible by a wide audience. This is our ultimate aim. Hopefully we are well along that route. However, we do expect that users will find problems, and hence our interest in your feedback.

As already mentioned, this is research software and, while we have made considerable effort to ensure that the computation algorithms are implemented correctly, we cannot guarantee the results will be correct under all possible circumstances. The onus is on the user scientist who is assumed to be sufficiently sophisticated to perform various diagnostic tests on the results to ensure that they are both statistically and physically plausible.

Once the software has been used successfully by this smallish group of closer colleagues, we then intend to make it more generally available on the web.

If you are interested in or would like to obtain the software with the associated documentations (program manual and illustrative demonstrations), write a brief mail to <a href="mailto:ogata@ism.ac.jp">ogata@ism.ac.jp</a> with the

email-title "HIST-PPM" and your name, email address and affiliation. Then, we will respond you to let you know the URL address of the software. We will keep the email address for letting users know of revised versions and information on the software.

We do not mind that you share this mail with your close colleagues who may be interested in the beta testing.

Best regards,

D. Harte, K. Katsura, Y. Ogata, M. Tanemura, and J. Zhuang