

# New developments on Seismic Handler

Marcus Walther and Klaus Stammer

Federal Institute for Geosciences and Natural Resources Bundesanstalt für Geowissenschaften und Rohstoffe  
Seismological Central Observatory Seismologisches Zentralobservatorium

## Introduction

The Seismic Handler package is a widely used software for seismological processing and observatory purposes. The waveform analysis tool is based upon a graphical interface (SHM) and a command line version (SH). Unique features are sophisticated array processing methods, extensibility by attaching external programs and plug-ins and easy data exchange.

The development of Seismic Handler started about 20 years ago and the software was constantly enhanced to meet the needs of the seismological community. In the last years exceeding expansion of seismological infrastructure lead to new challenges for data processing. For this reason the German Research Foundation (DFG) granted support for further development of Seismic Handler.

## Roadmap to SHX

Our updated roadmap for development includes consolidation of the parts SHM and SH into a new release "SHX".

This new branch of Seismic Handler will offer a contemporary graphical interface, python bindings for easy data processing and a flexible and easy-to-use configuration interface.

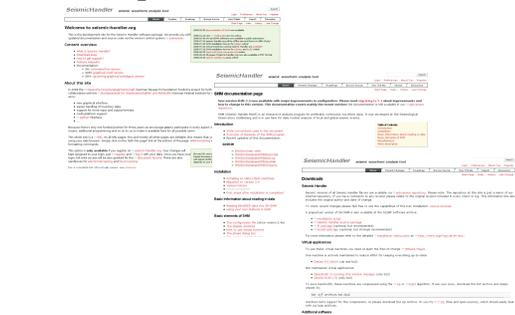
By implementation of an extensible plug-in interface, Seismic Handler will be enabled to process every thinkable input and output format.

To achieve these goals, major technical improvements are to be accomplished.

- new graphical user interface
- online data and metadata access
- python bindings
- multi-platform support
- additional input and output formats
- plug-in interface
- network-compatible
- SQL interface

## Documentation

An updated documentation is already published at our new project website [www.seismic-handler.org](http://www.seismic-handler.org).



This site is an open wiki allowing everyone to contribute to documentation of Seismic Handler and offering the possibility to publish own enhancements rapidly.

## Information

Additional to information published on the website, new mailing lists help to incorporate Seismic Handler users.

Three mailing lists are available:

- Announce: regular information on new releases
- Users: support on using SH/SHM/SHX
- Devel: discussion and support regarding SH's development

To subscribe, simply visit [list.seismic-handler.org](http://list.seismic-handler.org), take a list of your choice, fill in and submit the registration form.

All contributions are archived for later demands.

## Development

Since 2006 Seismic Handler is explicitly released under the GNU public licence (GPL).

On our website, full development source code is available. There are three ways of accessing the sources:

- subversion access via [www.seismic-handler.org/svn/](http://www.seismic-handler.org/svn/)
- syntax highlighted code on website
- pre-packed tarballs

Additionally you can download virtual machines for running Seismic Handler on e.g. Windows OS.

[www.seismic-handler.org](http://www.seismic-handler.org)

## Ticket system for suggestions and bug reports

Associated with the launch of the project website, we introduced a new way for submitting bug reports and suggestions for improvement of Seismic Handler.

At [www.seismic-handler.org](http://www.seismic-handler.org) you will find a trouble ticket system fitting these concerns.

If you have any wishes for enhancement or detailed bug reports, please register at our website. Afterwards you are able to create a new "ticket":



Further development is strongly dependent on user's demand, so please contribute. On the next panels we show, how to create such tickets.

Steps to create a ticket:

- supply a meaningful summary title,
- write as much detailed description necessary for explaining your concern,
- choose type of ticket (defect, task, ...)
- select proper branch of Seismic Handler (SH, SHM, SHX or website)
- if applicable, pick a milestone



- choose a suitable priority (if we are of another opinion, we'll change it),
- please preview your ticket and
- finally submit it.

The ticket system will track your request and record all changes until the issue has been solved.

