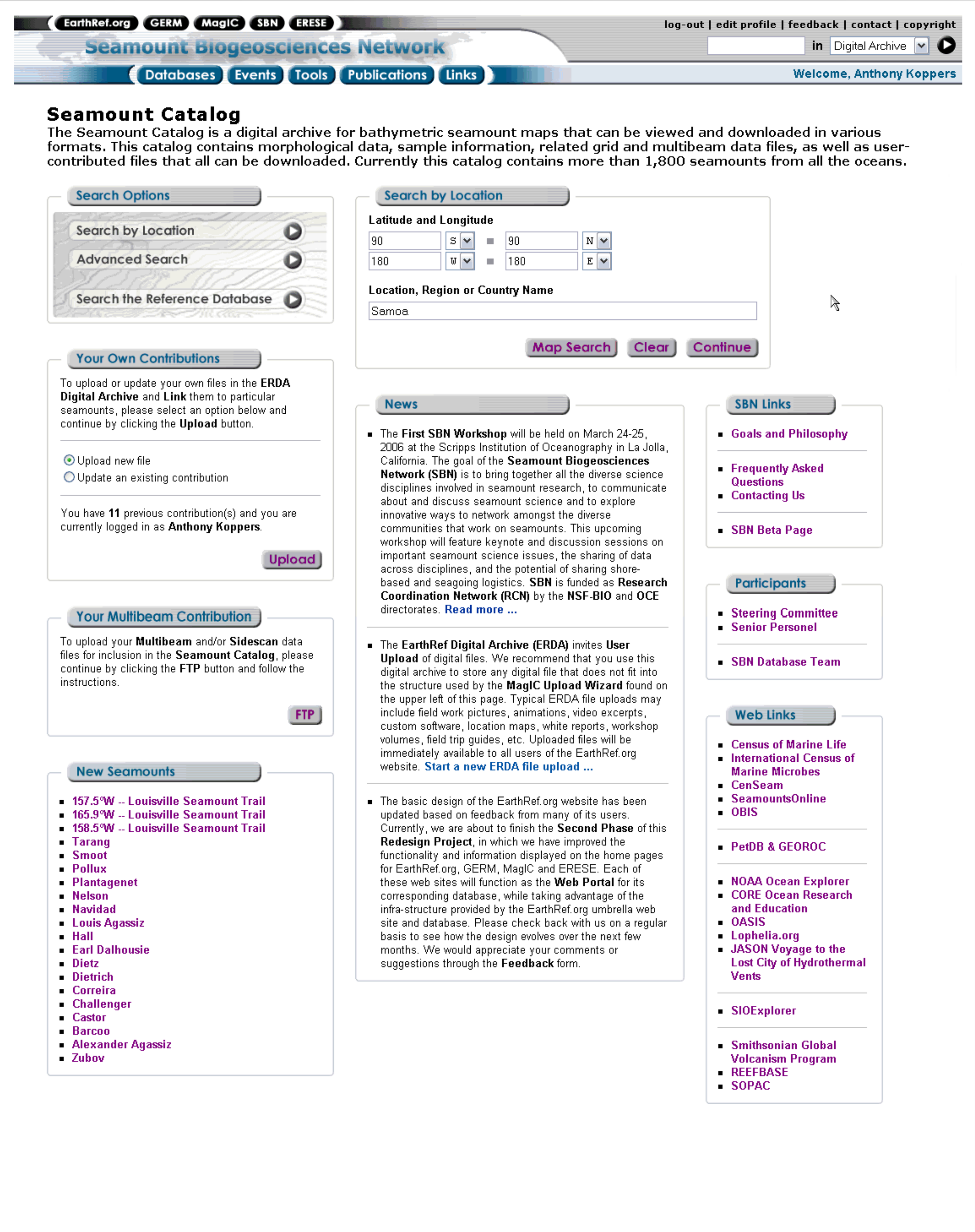
The Seamount Catalog in EarthRef.org

Anthony Koppers [1] Rupert Minnett [1]
Hubert Staudigel [1] Jake Perez [1]
John Helly [2] Patty Keizer [1]

[1] Scripps Institution of Oceanography, IGPP, San Diego, USA [2] San Diego SuperComputer Center, San Diego, USA

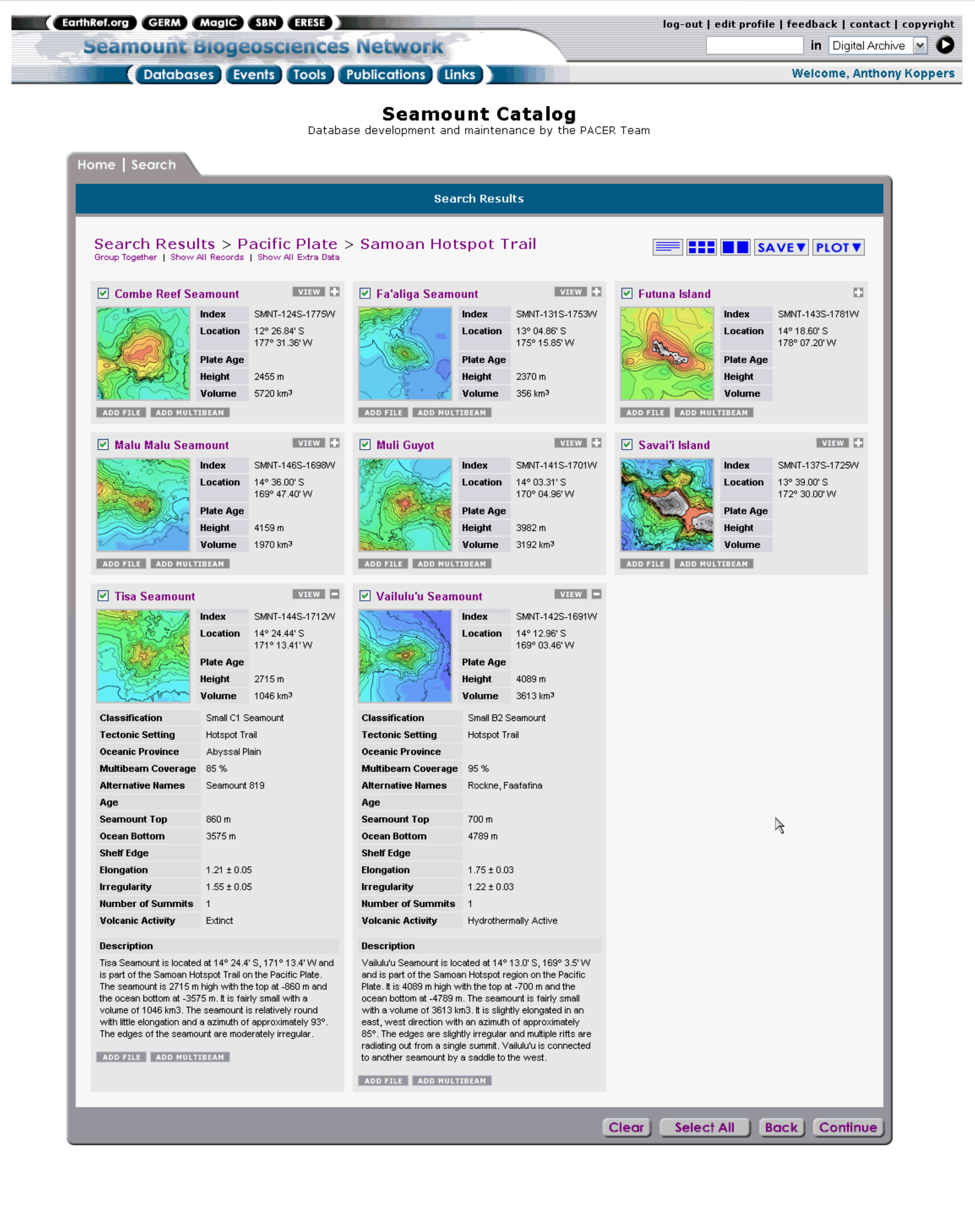
1 Seamount Catalog Home Page

The Seamount Catalog allows you to search by Location or an Advanced Location Search in order to find seamounts of your interest. The Search Options also allow you to search through the EarthRef.org Reference Database where you can find papers on seamount research. Currently the Seamount Catalog contains more than 1,800 seamounts, more than 4,100 maps and XYZ grid files, and more than 15,000 multibeam and topography data files.



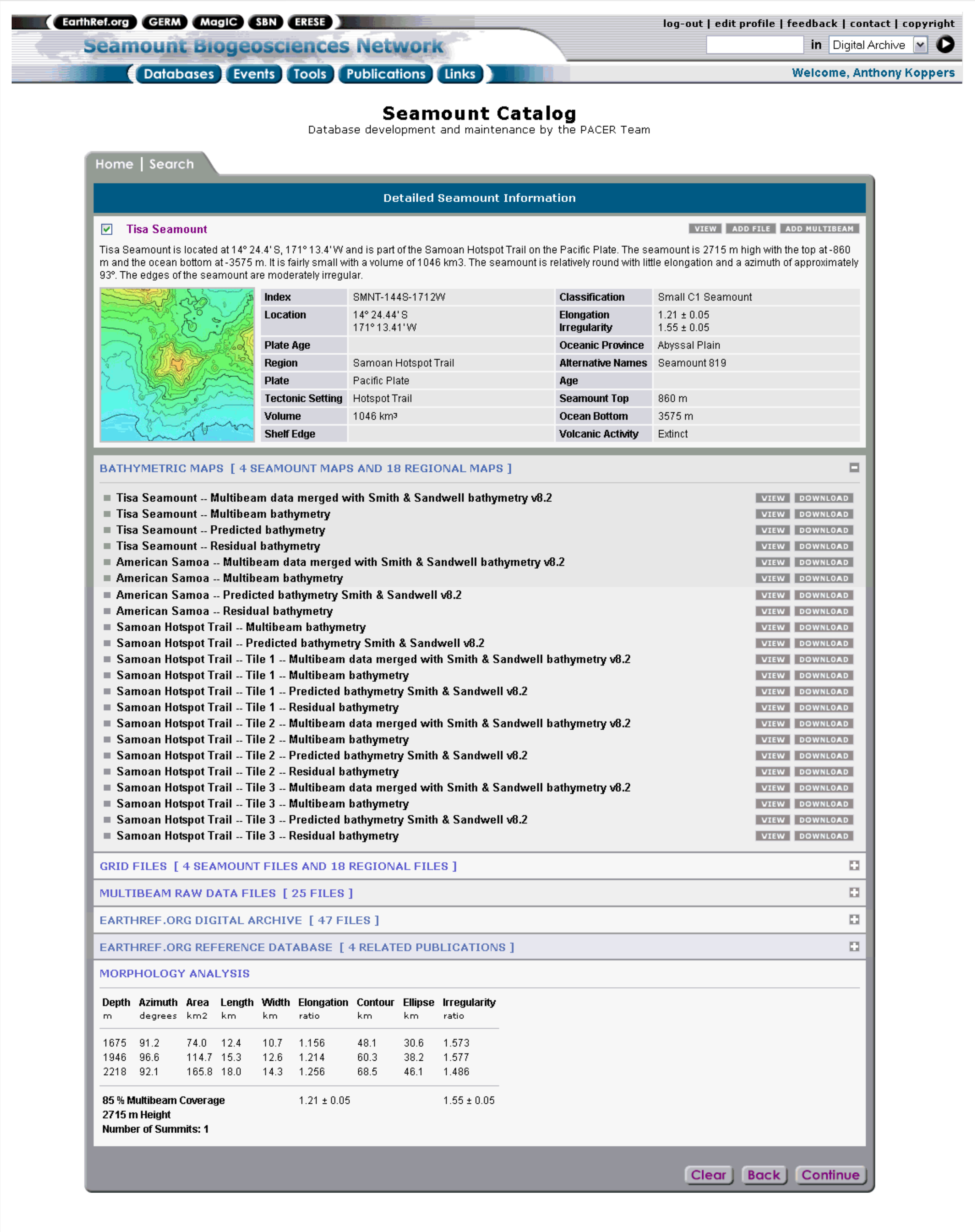
2 Thumbnail Search Results

View your results with small or large thumbnails or in text-only mode. The results can be further refined by breaking this view apart, only showing selected seamounts or by showing all extra data. These latter data can also be shown for each seamount individually by clicking on the [+] buttons. Click on the thumbnails, or check multiple seamounts and hit the Continue button, to get maps, grids, multibeam data and a detailed morphology analysis for each seamount.



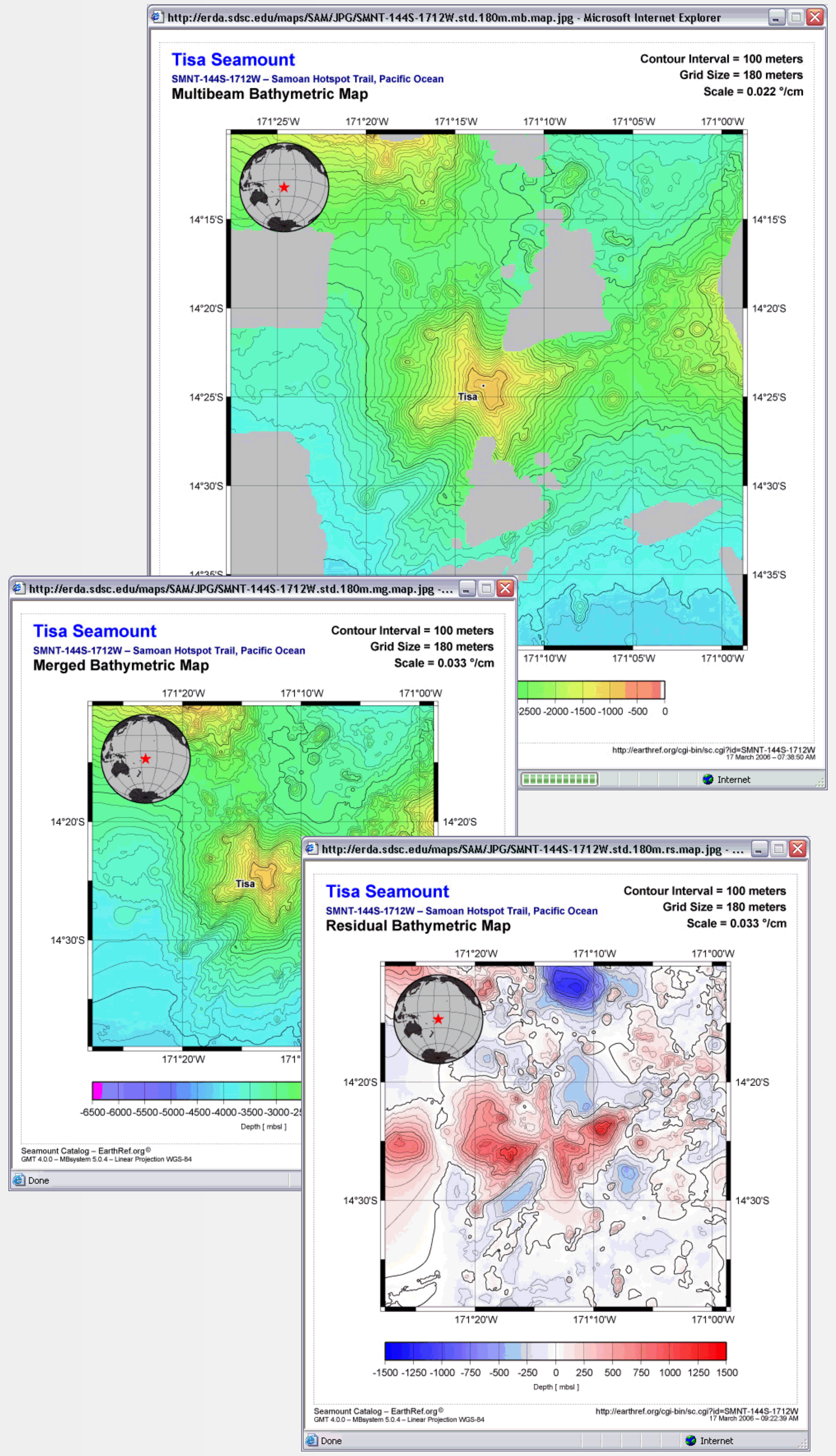
3 Detailed Results + Download Options

In the Detailed Seamount Information view we show all that we have in our archives for each seamount. Here you can easily view and/or download maps, grids, multibeam data files, and the files uploaded into the ERDA archive by other reseachers that are related to these particular seamounts. If publications have been linked to a seamount, they will show up in a separate block as well. Hide or show these blocks of information and data at your convenience.



4 Map Products for Download

In total four basic maps are available for downloading: (i) a global bathymetric map (not shown) based on the Smith & Sandwell (1997) satellite altimetry database, (ii) a map based on multibeam, (iii) a residual map between these two previous maps, and (iv) a merged map. Each map is available in JPG, PDF and PS format and the grid files are available as NetCDF grid files.



A Upload Your Data Files

We like to invite you to upload any of your data files, whether they are cruise reports, maps, data tables, video excerpts, animations, raw data files, and so on. By clicking on the "Add File" buttons or by using the "Your Own Contributions" panel (as shown above) you can manage your own uploads and associate them to any (set of) seamount(s). For each contribution there is a minimum set of five requisite fields (title, description, keywords, data type and expert level) that need to be filled in, but you always have the option to add extra fields (location, tectonic setting, copyrights, etc) to make your data contribution more rich in metadata and thus more readily searchable by search engines like Google and Yahoo.

B Upload Your Multibeam Data

The Seamount Catalog already contains more than 15,000 multibeam and sidescan files, but we are still far from getting a global archive of multibeam data for seamounts. Currently, most of the data residing in our archives are from the NGDC or SIO, but there is only a limited availability of data from outside the US. In the coming weeks we will bring online an easy tool that will allow you to upload your multibeam data via a FTP server. This way we will be able to pick up your data sets and add them to the Seamount Catalog and use them to update the bathymetric maps we provide online. Click on the "Add Multibeam" buttons or use the "Your Multibeam Contribution" panel to enter this new FTP tool.

C Linking to Other Databases

At this moment the Seamount Catalog links data that are already residing in the other EarthRef.org databases. Above we show the linkage of two such databases, where for Tisa seamount we found 47 data files that have been uploaded in the ERDA digital archive and 4 related publications in the EarthRef.org Reference Database. You can list these data by expanding the box when you click on the [+] buttons. From this expanded view, you can either click to get more information on these contributions, you can quickly view the files or you can download the data files directly. In the future we will expand this functionality by adding data from external databases like SeamountsOnline.