The EarthRef.org Web Portal

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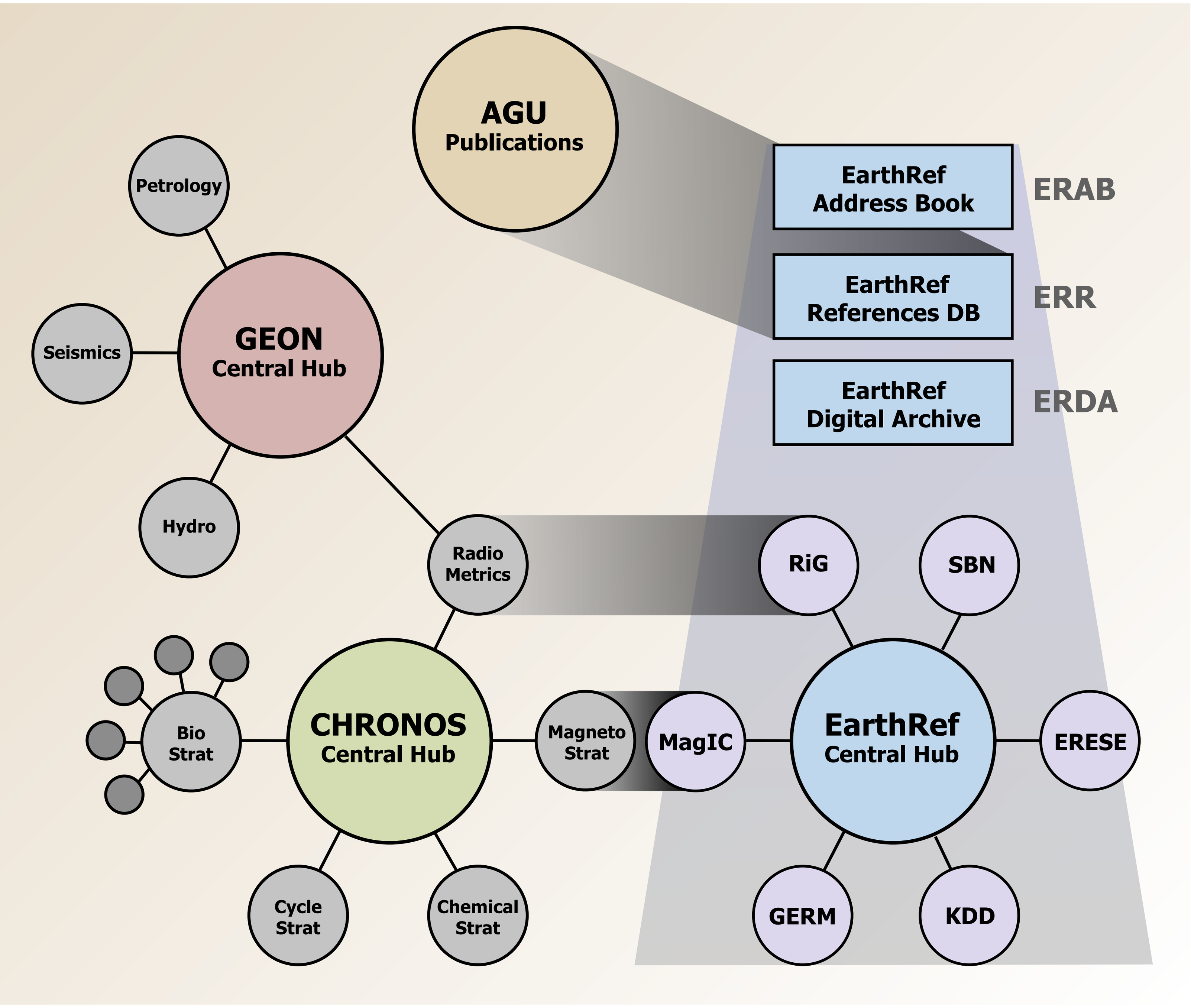
1 Earth Reference Data and Models

The EarthRef.org website originally has been developed as the host website for GERM (the Geochemical Earth Reference Model initiative, see Point 3) but it is now a very substantial website for a wide range of Earth science data that spans from geochemistry to paleomagnetism (see Point 2) to geochronology and more.

A variety of EarthRef.org tools and databases will be immediately available to the SBN network: The ERAB is a much used directory for Earth scientists address information (~2,000 registered users) that is frequently visited by users using web search engines such as Google. It features password protected updating privileges for the individuals listed and it can easily be expanded into a "Yellow Pages" for seamount researchers. The ERRD includes a very substantial number (~95,000) of publications, archived with complete reference information, abstracts and, in many cases, Microsoft Excel files of tables and appendices. The ERRD has a well defined data population protocol for data upload that can be directly applied to a seamount reference library linking publications to the seamounts studied. Finally, ERDA is a fully functional database that archives any digital object with a critical number of metadata to make it efficiently searchable by seamount researchers. Your contributions can be linked to the seamounts you studied and the papers in which you published these data, whichever is applicable.

The EarthRef.org web portal and databases all reside within the San Diego Supercomputer Center (SDSC) reassuring the longevity of the seamount data storage in the most professional manner. On top of that, many important facilities required to run an international network are already in place, which will allow us to hit the ground running while designing and setting up the Web Portal for the Seamount Biogeosciences Network (SBN).

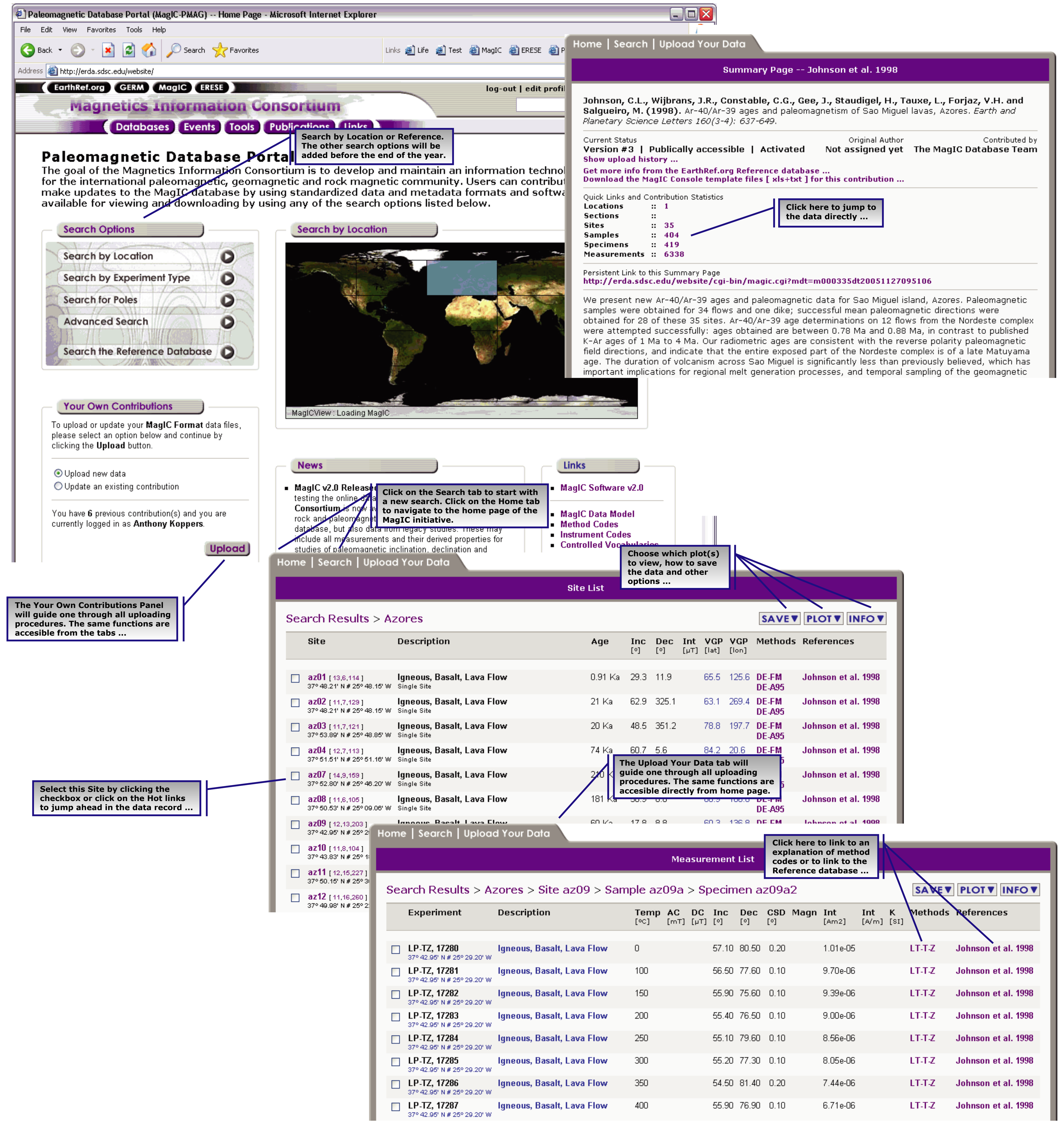
EarthRef.org and other Online Resources in the Earth Sciences



RAD = Radio-Isotopic Geochronology Database
MagIC = Magnetics Information Consortium
GERM = Geochemical Earth Reference Model
KDD = Partition Coefficient Database
SBN = Seamount Biogeosciences Network plus Seamount Catalog
ERESE = Enduring Resources for Earth Science Education

2 Magnetics Information Consortium

The MagIC database initiative aims to promote information technology infrastructures for the international paleomagnetic, geomagnetic and rock magnetic community. This is the most data intensive database residing under EarthRef.org where data from the measurement level all the way up to the highely derived paleomagnetic parameters are stored and displayed in an online web portal.



3 Geochemical Earth Reference Model

The GERM Reservoir Database contains summary data on the geochemistry of all reservoirs in the Earth. All GERM search results are customizable, allowing the user to sort and convert units. This relational database only includes peer-reviewed data and is intimately related to the EarthRef.org Reference Database as shown below.