

# SQUID 1.03

## What is *SQUID*?

*SQUID*, an add-in program that runs under Microsoft *Excel*, processes raw SHRIMP U-Th-Pb data (in the standard Canberra **.OP** format) for zircons and a few other minerals into completely reduced and corrected isotope ratios and ages. The output consists of an *Excel* workbook separated into Standard and Sample worksheets, with additional worksheets for each group of samples (user specified). The worksheets and their associated graphics are “live”, so that the user can specify acceptable subsets of both the Standard and Sample spots, with consequent recalculation and re-graphing appearing on demand within a few seconds or less. The worksheet data are grouped conveniently for additional calculations and graphics (e.g. Concordia plots) via *Isoplot/Ex*, permitting extremely simple and rapid total evaluation and processing of even a very long SHRIMP session. *SQUID* will also prepare publication-ready data-tables from the *SQUID* worksheets provided the user can spare another few seconds. The entire process of data reduction, preliminary selection of Standard spots, and separation into specified sample groups will typically take less than a minute for data from a session of more than 100 spots.

## What does *SQUID* Require?

*SQUID* runs only under Microsoft *Excel*. For Windows, version *Excel 97* or later is required; for Macintosh, *Excel 98* or later. You will need a Pentium-class processor for Windows (133 Mhz or faster recommended). For Macintosh, G3 or G4 systems are strongly advised, though PowerMacs with a 180 Mhz or faster CPU and at least 64 Mb of memory can be used *at the cost of immensely slower operation*. Both systems require at least 64 Mb of memory (preferably 128 Mb on a Mac) to reliably run *SQUID* and *Isoplot* together. *With a Mac, you must allocate a lot of memory (say 12 Mb with virtual memory, perhaps 16 Mb otherwise) to Excel*. For both platforms, you will need *Isoplot/Ex* version 2.4 or later (see the *Isoplot/Ex* links in this website for information on obtaining *Isoplot/Ex*).

## Obtaining *SQUID*

The program is available on request, at no charge; just Email a request to [kludwig@bgc.org](mailto:kludwig@bgc.org) . Kindly download the *SQUID* Manual from this website before you do so.

## Installing *SQUID*

1. Don't open *SQUID* (or *Isoplot*) by double-clicking on the *Squid.xla* icon.
2. Install *Isoplot/Ex 2.4* or later.
3. Open *Excel* and select *Add-Ins* from the *Tools* menu. Click on *Select* or *Browse* to locate the *Squid.xla* file you have downloaded (on a Mac, specify *List all types of files* or the program won't appear in the list). Select *Squid.xla*.

*SQUID*, along with *Isoplot/Ex*, will now be loaded every time you start *Excel*, and can be invoked either from the *SQUID* button in the *SQUID* toolbar, or from the *SQUID* drop-down menu.

## Installation Problems

If you encounter error messages such as “Compile error in ...” or “Can't find project or library” when you first install and invoke *Isoplot* or *SQUID*, the cause is usually one of the below:

### Insufficient memory

This is particularly common on the Mac, and can be solved by assigning more memory to *Excel* – at least 8 Mb, perhaps as much as 16 Mb (experiment). Make sure Virtual Memory is enabled. Though memory problems are rare on Windows machines, try closing *Excel*, close one or more other programs that are running, and try again. Having 128 or more Mb of RAM is a good idea, though most 64 Mb platforms will work satisfactorily.

### Incomplete installation of *Excel*

Try a complete re-install of *Excel* from the CD, making sure to specify that all of the Visual Basic modules are installed.

### Slow closing of *Excel* on Macintosh platforms

A common problem and easily solved. Read the relevant section in the *Isoplot* manual.

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