1 Program 2swap

1.1 Purpose

Different computers use different formats for storage of two byte (short) integers. Some computers store the most significant (high) byte first, followed by the least significant (low) byte. Other computers store the low byte first, followed by the high byte. Program 2swap is provided to facilitate exchange of data between computers using different formats for short integers. The program simply swaps byte pairs on the files specified by the user. This program should be run on the *.BRIK data files only; it should *never* be run on *.HEAD files (which store data in ASCII format).

1.2 Usage

The command line format for program 2swap is as follows:

2swap [-q] file ...
The -q option means to work quietly (i.e., suppress output to the screen).

1.3 Examples

Example 1. A user has transferred the AFNI dataset fred.anat+orig (.HEAD and .BRIK) from a computer with an Intel CPU to a RISC workstation. Since these computers use different formats for storage of short integers, it will be necessary to swap bytes in the .BRIK file prior to viewing the dataset with program afni. The appropriate command line is:

2swap fred.anat+orig.BRIK

The computer responds with:

- opened fred.anat+orig.BRIK.........

File fred.anat+orig.BRIK now contains the byte-swapped data, suitable for viewing with afni.

Example 2. A group of 20 AFNI datasets is to be transferred from a RISC workstation to an Intel CPU computer. The data files have the names fred.func01+orig (.HEAD and .BRIK), ..., fred.func20+orig(.HEAD and .BRIK). Instead of entering the 2swap command 20 times (once for each .BRIK file), the wildcard character "*" can be used (assuming that the transferred files are the only files beginning with "fred.func" in the current directory):

2swap fred.func*.BRIK

The computer responds with:

- opened fred.func01+orig.BRIK.........
- opened fred.func02+orig.BRIK.........

etc.

- opened fred.func20+orig.BRIK.........

As a result, all .BRIK files which were transferred to the current directory have their bytes swapped.