Installation of Ezys 1.0.22 from zip file.

The following instructions work well on my Windows 7 PC with CUDA 5.0 installed

The zip file should extracted to a subdirectory of the CUDA SDK samples tree, I use:

`D:\ProgramData\NVIDIA Corporation\CUDA Samples\v5.0\8_Richard\Ezys_1.0.22`

Two solution files built for MS Visual Studio 2008 are in:

`..\Ezys_1.0.22\VisualStudio\Ezys_console`   and
`..\Ezys_1.0.22\VisualStudio\Ezys_GUI`

The former creates a command line version which does NOT require QT to be installed, the latter creates a GUI version which exposes most but not all of the functionality of the command line version.

The executable files, `Ezys_c.exe` and `Ezys_GUI.exe` are created in:

`...\Ezys_1.0.22\bin\win32\Release`

The GUI version has been built with QT version 4.7.3 and the necessary `QtCore4.dll` and `QtGUI4.dll` files are present in the release directory. Both the Ezys exe files are supplied in the release directory so that it may be possible run the programs without any rebuilding.

Both versions can be driven by common format script files:

`C:\...path\>Ezys_c.exe -script myscript.txt > muchtext.txt`

or

`C:\...path\>Ezys_GUI.exe -script myscript.txt`

Notice we pipe the output of the command line version of Ezys to a text file. This is highly recommend as the program is quite verbose, and the text file can be useful if things go wrong. The GUI version sends text to a scrolling QT buffer instead. We recommend using script files for all but the simplest tasks and examples are provided.

Processing of Klein et al. 2009 datasets:

There are for data sets MHG10, CUMC12, IBSR18 and LPBA40, they can all be downloaded from: http://mindboggle.info/papers/evaluation_NeuroImage2009.php

We down loaded and unzipped to files to the following tree, the directories in black were created by the unzipping process and the directories in red were created manually to hold Nifty format images and results of processing by Ezys and ANTS.

```
..someroot\cudareg\MGH10\Atlases
                       \BrainMasks
                       \Heads
                       \Labels
                       \Nifty      (populate with makenii.exe)
                       \Nifty\ezys (run ezys with script file)
                       \Nifty\ANTS (run ANTS with bat file)
..someroot\cudareg\CUMC12\Atlases
                        \BrainMasks
                        \Heads
                        \Labels
                        \Nifty      (populate with makenii.exe)
                        \Nifty\ezys (run ezys with script file)
                        \Nifty\ANTS (run ANTS with bat file)
..someroot\cudareg\IBSR18\Atlases
                        \BrainMasks
                        \Heads
                        \Labels
                        \Nifty       (populate with makenii.exe)
                        \Nifty\ezys (run ezys with script file)
                        \Nifty\ANTS (run ANTS with bat file)
..someroot\cudareg\LPBA40\LPBA40_rigidly_registered_pairs
                        \Nifty_Images  (populate with anal2nii.exe)
                        \Nifty_Labels  (populate with anal2nii.exe)
                        \Results       (run ezys with script file)
                        \ANTS          (run ANTS with bat file)
```

After each set of registrations is done the program `overlap.exe` can be run to create summary files suitable for excel etc.

The zip file `dummy.zip` will create the above tree containing the necessary script files and `Utilities.zip` contains a MS VS2008 solution for the necessary utility programs.