

Reading in TXRM images & stacks (Xradia)

Requested by Shanghai Synchrotron Radiation Facility

Challenge: Data stored in proprietary Microsoft secure storage format. IDL does not have a reader

Solution: use IDL-Java bridge and reader software supplied by Florian Meirer and Dieter Ingerle (Apr 2013)

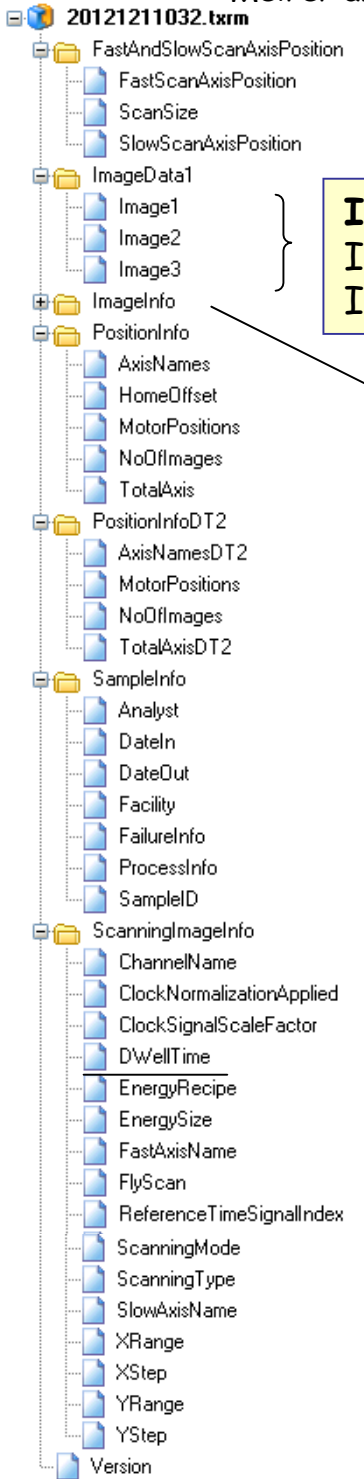
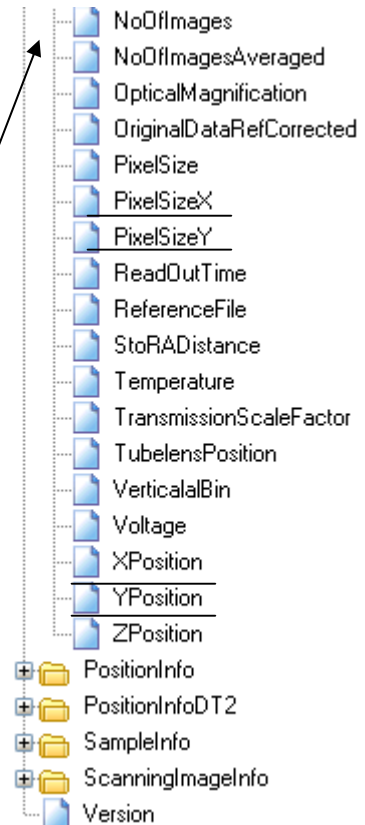
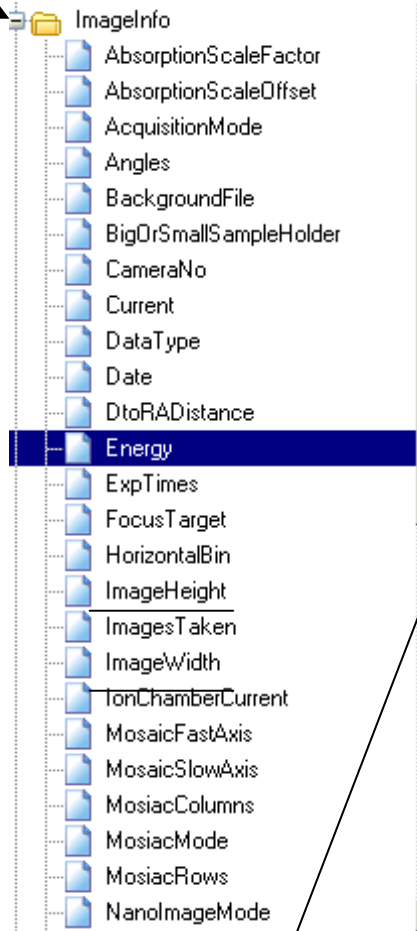
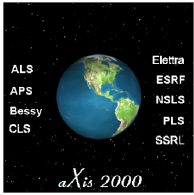


Image1 is the transmission image
Image2 is the upstream mesh (Io - doe not work)
Image 3 is a clock signal proportional to the per-pixel time

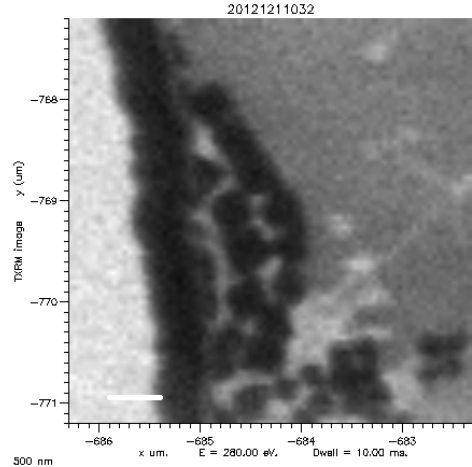
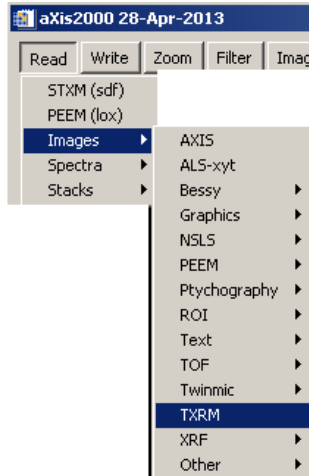




Reading TXRM images and stacks

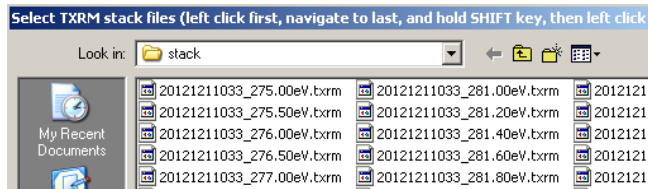
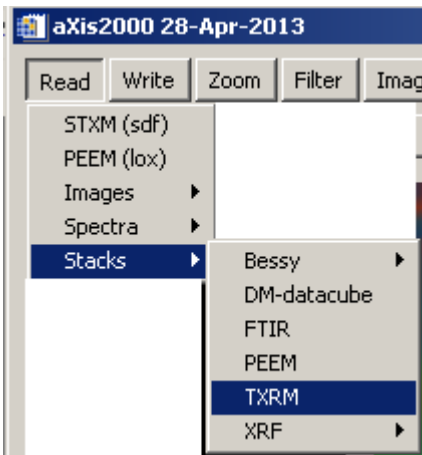
Single image

Normalized to per-pixel time



Stack

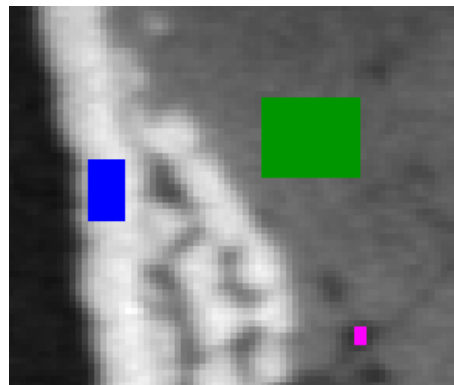
Then select all of the stack images (see prompt on title bar)



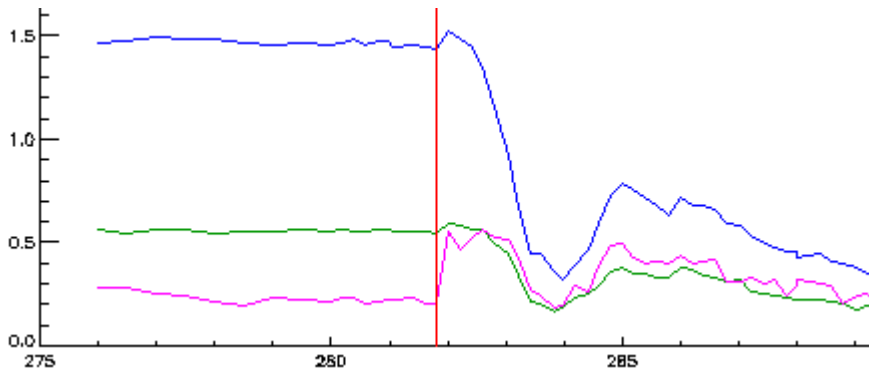
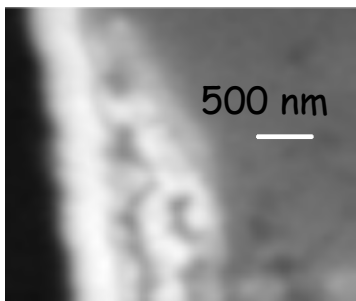
Save an axis binary stack (*.ncb)

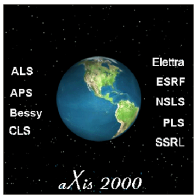
Images are stored in the initial *.ncb file in reverse order so when you are asked to sort the energies say 'Yes'

20121211033 supplied
Zimba, alignments applied multiple times.
Spectra distorted by carbon contamination



Avg all images





Installing IDL Java Bridge

From Floriam Meyer (20-June-2014)

The IDL-Java bridge initializes when the first Java object in IDL is created. If the bridge is not configured correctly, an error message is issued and the IDL stops. The following errors occur because the IDL-Java bridge cannot find the Java Virtual Machine on your system. On UNIX, check the `IDLJAVAB_LIB_LOCATION` environment variable, and on Windows, check the `IDLJAVAB_LIB_LOCATION` environment variable. If this environment variable does not exist on your system, create it and set it equal to the location of the Java Virtual Machine on your system. See [Configuring the Bridge](#) for details:

-) Bad JVM Home value: 'path', where path is the location of Java Virtual Machine on your system.
JVM shared lib not found in path 'JVM LibLocation', where JVM shared lib is the location of the Java Virtual Machine shared library and JVM LibLocation is the value of the `IDLJAVAB_LIB_LOCATION` environment variable.

No valid JVM shared library exists at location pointed to by `$IDLJAVAB_LIB_LOCATION`

-) `idljavab.jar` not found in path 'path', where path is the location of the `external/objbridge/java` directory in the IDL distribution.

-) **Bridge cannot determine which JVM to run**

-) Java virtual machine failed to start

-) Failure loading JVM: path/JVM shared lib name, where path is the location of the Java Virtual Machine and JVM shared lib name is the name of the main Java shared library, which is usually `libjvm.so` on UNIX and `jvm.dll` on Windows.

If IDL catches an error and continues, subsequent attempts to call the bridge will generate the following message:

-) IDL-Java bridge is not running

If this message occurs, fix the error and restart IDL."

Here is the link to "Configuring the Bridge":

http://northstar-www.dartmouth.edu/doc/idl/html_6.2/Initializing_the_IDL-Java_Bridge.html#wp1019140

For XP: right click 'My computer' icon; then Properties, then Advanced tab , then Environment Variables'

If
"IDLJAVAB_LIB_LOCATION" is not there, add it.

You must have Java VM (or RTE) installed.

