**Rosetta Review.**

**Calib,**

Files are readable and self explanatory.

**Cat**,

*Inst.cat* - There does not seem to be a Cat files explaining the expected significance of the primary science goals of the instrument. Why are these measurements important?

Furthermore, no mention is made of the magnetic force mode of operation and what that may mean for the science objectives.

Measurement Principle – “The surface features can be resolved with almost atomic

 Resolution”. Is this really the case given the nature of the materials under study? This statement would be true if these samples were close to atomically flat. The reality of the situation is that the instrument will give the highest 3-D resolution images ever taken of particles.

*Dataset.cat* – contains a description of the operating parameters of the instrument.

“After performing an overview scan MIDAS selects a region of interest (ROI) by means of the auto-zoom feature. This is follwed by a high resolution scan of the choosen area.” I am unsure if this is a totally automated process or requires ground input. Also it would be great to get an idea of scan resolution in this sentence and how this would be complted. Spell check this document.

Size issues between target size and area covered (100 um scan size on a large target area). How are they addressing this?

Software.cat – I am unsure of the utility of this file. I opened this expecting a software review and some mention of software to open the data files. Seems to be a place holder file.

Target.cat – very detailed. Perhaps an overview summary would make this clearer?

**Data**

CAH files ending with .tab and .lbl as well files in FSC. Opening these in NASA view is clumsy and does not display the table in a format easily readable format (although I may be doing something wrong here). Text editor opens the .tab files but without column and row headers.

**IMG files**

MIDAS user manual does not contain details of what software packages are available to view data.

Without proprietary software it is difficult to extract anything other than 2-D data. 3-D data extraction needs a package such as SPIP which costs.

Only 1 of 3 image scans in the IMG folder appears complete using the NASA view software. All labels list data as Cat 2 data OK.

Label to IMG files states ; IMG - BCR-STM format used by the Image Metrology SPIP application. Parameter definitions are in /DOCUMENT/..." – It would be helpful to know which files in Document/…. this header is pointing the reviewer to.

**Documents,**

There is a great deal of information on the use of IDL. I have no access to this program and cannot evaluate the content of these files.

ImagePDS files does not contain specific information on formats other than IDL. IT would be very useful to either produce another document that is not so IDL specific.

A license for the software costs $300. Unable to verify the datasets or whether the IDL specific codes function.

There is extensive literature on the instrument and mission.

The MID\_EICD.pdf file shows the software expected to be used to verify data. This information (in my opinion) should be called out separately.

MID\_user.pdf has TBD under Failure detection and recovery.

Fly by data. \_ Updating?

**Label**

There is no img\_structure.fmt is this an omission?