PDS/SBN Comet Data Review

## 12 December 2005
Lori Feaga

Stardust/NAVCAM Wild 2 Shape Model

- A. Raugh was supplied typos/grammatical errors
- All files were present, could be opened and read
- Information for 2 shape models is included
  - Basic tri-axial ellipsoid shape
    - Given in wild2_shape.tab but not completely in dataset.cat or model_desc.txt
      - 1.65 x 2.00 x 2.75 km
      - RA = 110°, dec = -13° reference
  - Detailed plate model shape
    - Given in dataset.cat
      - 1.350 x 2.002 x 2.607 km
      - RA = 112°, dec = -17° reference
    - wild2_plan_vis.tab and wild2_plan_full.tab are missing orientation information
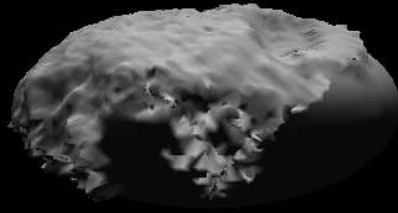
Stardust/NAVCAM Wild 2 Shape Model

- Documentation text files are missing the ^M at the end of each line
  - aareadme.txt
  - catinfo.txt
  - docinfo.txt
  - model_prep.txt
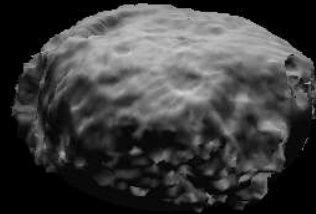 - model_desc.txt
  - plate_model_desc.txt

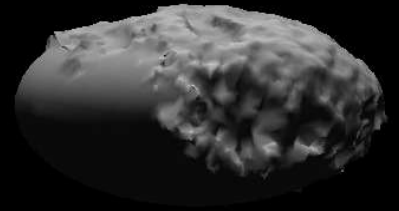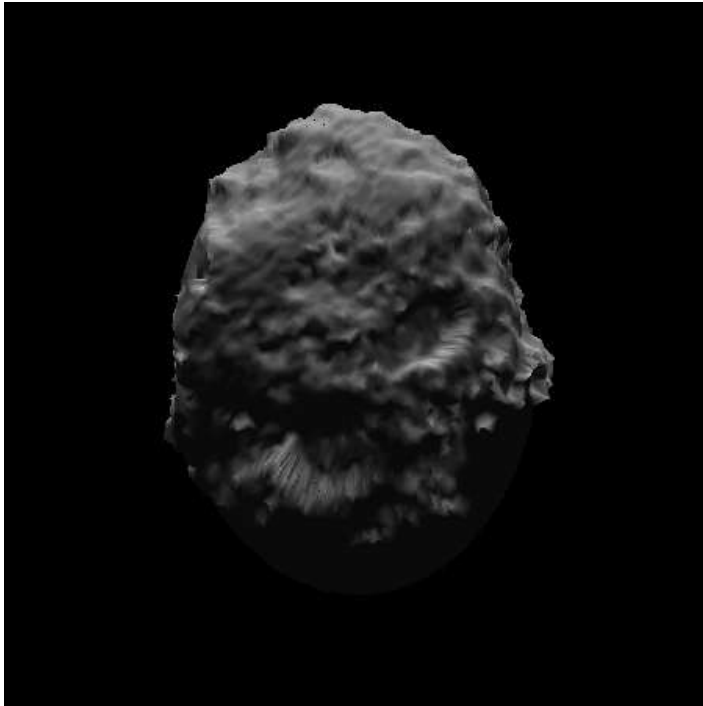# Wild 2 Shape Model Data Analysis
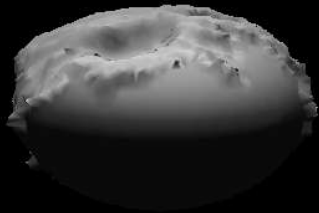
0° longitude

90° longitude

180° longitude
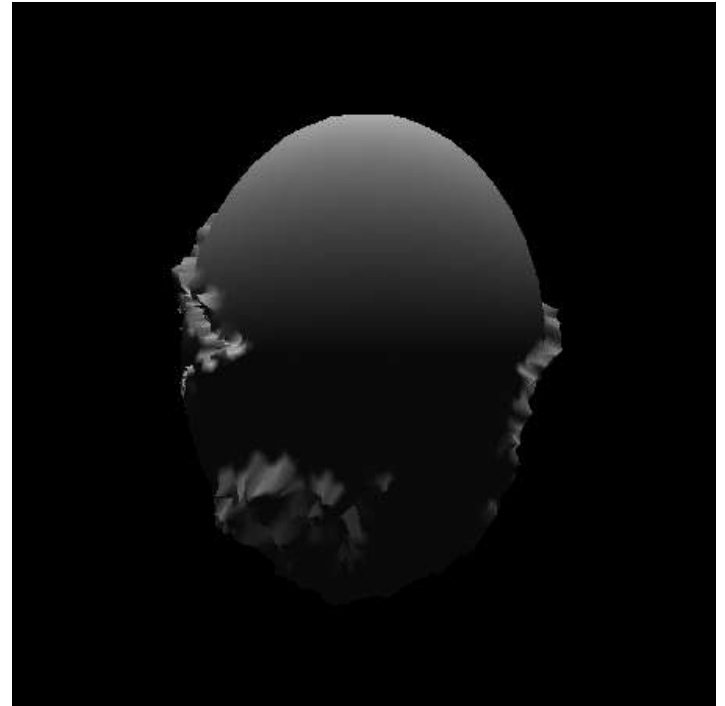
270° longitude

Wild 2 Shape Model Data Analysis
Polar Views

North Polar View

South Polar View

Wild 2 Shape Model Data Analysis Cont'd

ELEVATION (shadow modeled)
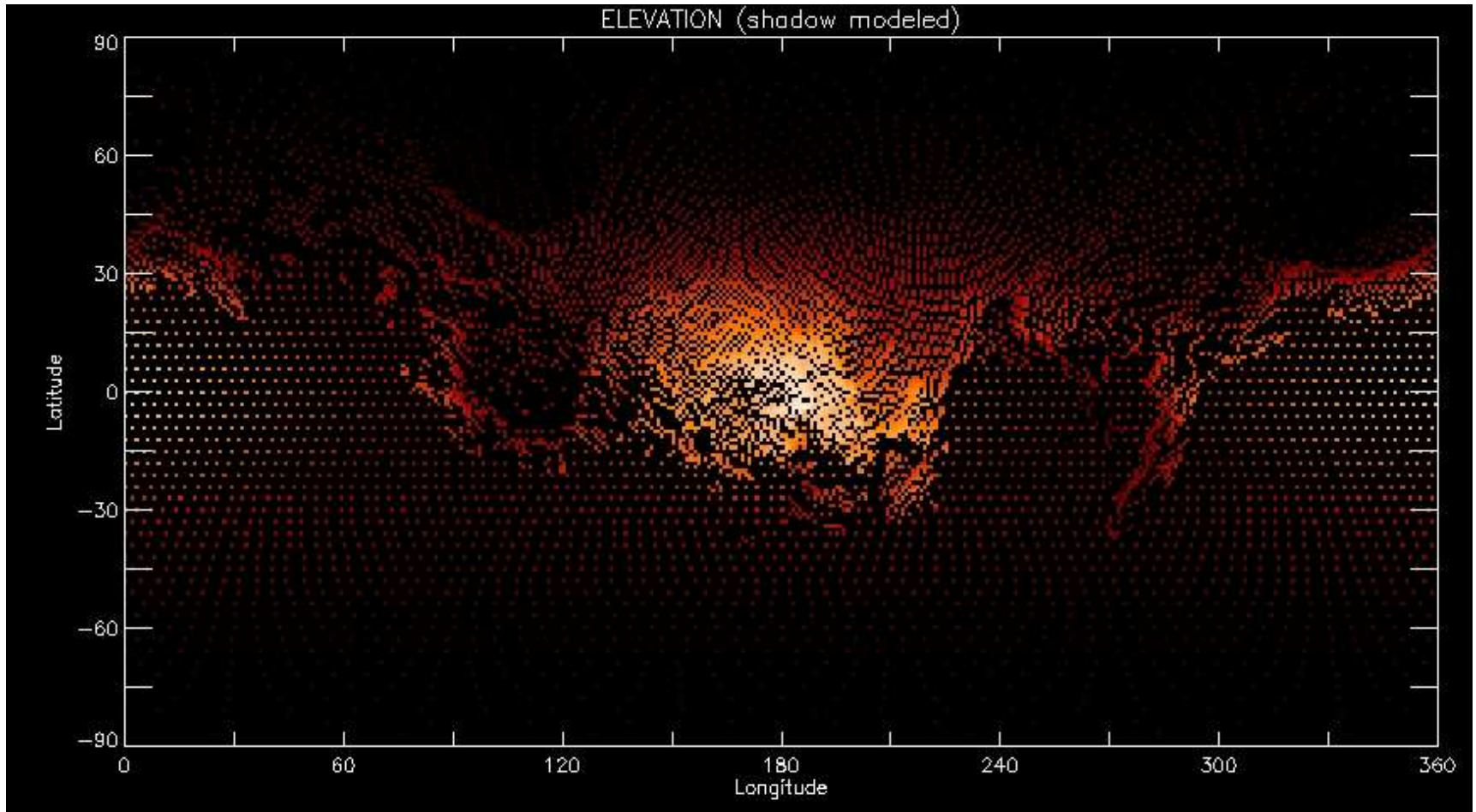
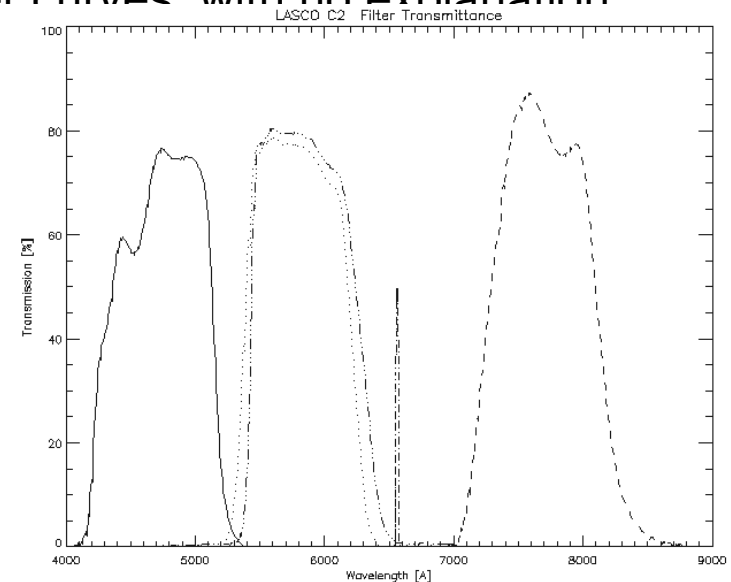# SOHO2000: Images of Sungrazer Comets

- A. Raugh was supplied typos/grammatical errors

- Some files expected from documentation were missing

- Of the files present, all could be opened and read

SOHO2000 Dataset Problems

- SOHO/calib/filter/*.lbl
  - In DESCRIPTION keyword of column 2: transmittance
    - Range from -100 to 100??
    - Should this be 0 to 100?
  - c2_ha.lbl and .tab, c3_ha.lbl and .tab, and c3_i75.lbl and .tab files
    - units for wavelength are inconsistent
    - .lbl file has as nm
    - .tab file has as Å
- SOHO/catalog/dataset.cat
  - In "Processing"
    - "vignetting corrections have remained constant throughout the mission" yet there are versions 1 and 2 for some of the filters and some filters have multiple files (different filenames)
  - In "Data"
    - "These images are listed in the reduction.log file found in the documents directory."— no such file available
- SOHO/document/capture_dates.txt
  - There is an asterisk after the listing for handbook.txt, why?
  - For the list of files in document/calib_docs/exp_fac, only 24 of 192 files were actually available

SOHO2000 Dataset Problems Cont'd

- SOHO/document/calib_docs/expfac.txt
  - In the description of the exposure factor plots, several colors are mentioned to distinguish the method of calculating the exposure factor, I only saw red and green points
- SOHO/document/calib_docs/filter/
  - Missing *.tab files as described in filter.txt
  - Files reside in /calib/filter/, needs a pointer to that directory
- SOHO/document/calib_docs/filter/c2_all.png
  - Plot of filter transmission has 2 orange filter curves, with no explanation

SOHO2000 Dataset Problems Cont'd

- SOHO/document/calib_docs/filter/c3_all.png
  - Doesn't include the transmission curve of the polarization I-75 filter
- SOHO/document/calib_docs/quantum_eff/qe.txt
  - ASCII tables are in /calib/quantum_eff/ directory not here
  - c3_qe.ps plot is also available, but not listed
- SOHO/document/calib_docs/vignetting/vign.txt
  - Vignetting images are found in the /calib/vignetting directory, a pointer to this directory should be added
  - Missing file: c3_cl_vig_951201_v03.fit
- SOHO/document/comet_pos/pos_expl.txt
  - "values are replaced by dashes of the same width as the corresponding field"—not replaced with dashes but by -999.99 of same width
- SOHO/index/index.lbl
  - Units need to be added to column 5, 6, 7, and 11

SOHO2000 Dataset Problems Cont'd

- SOHO/document/calib_docs/filter/c3_all.png
  - Doesn't include the transmission curve of the polarization I-75 filter
- SOHO/document/calib_docs/quantum_eff/qe.txt
  - ASCII tables are in /calib/quantum_eff/ directory not here
  - c3_qe.ps plot is also available, but not listed
- SOHO/document/calib_docs/vignetting/vign.txt
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- SOHO/document/comet_pos/pos_expl.txt
  - "values are replaced by dashes of the same width as the corresponding field"—not replaced with dashes but by -999.99 of same width
- SOHO/index/index.lbl
  - Units need to be added to column 5, 6, 7, and 11

SOHO2000 Dataset Problems Cont'd

- Liens from previous review still need work:
  - /calib/filter/
    - Should there be a unit mentioned for transmittance, i.e. percent?
    - Pointer still needed to the PNG files in the label files
  - /calib/quantum_eff/
    - Should there be a unit for quantum efficiency?
    - Pointer still needed to the PNG and PS files in the label files
  - /document/handbook/
    - Spelling error remains, "accessable"

SOHO Example Data
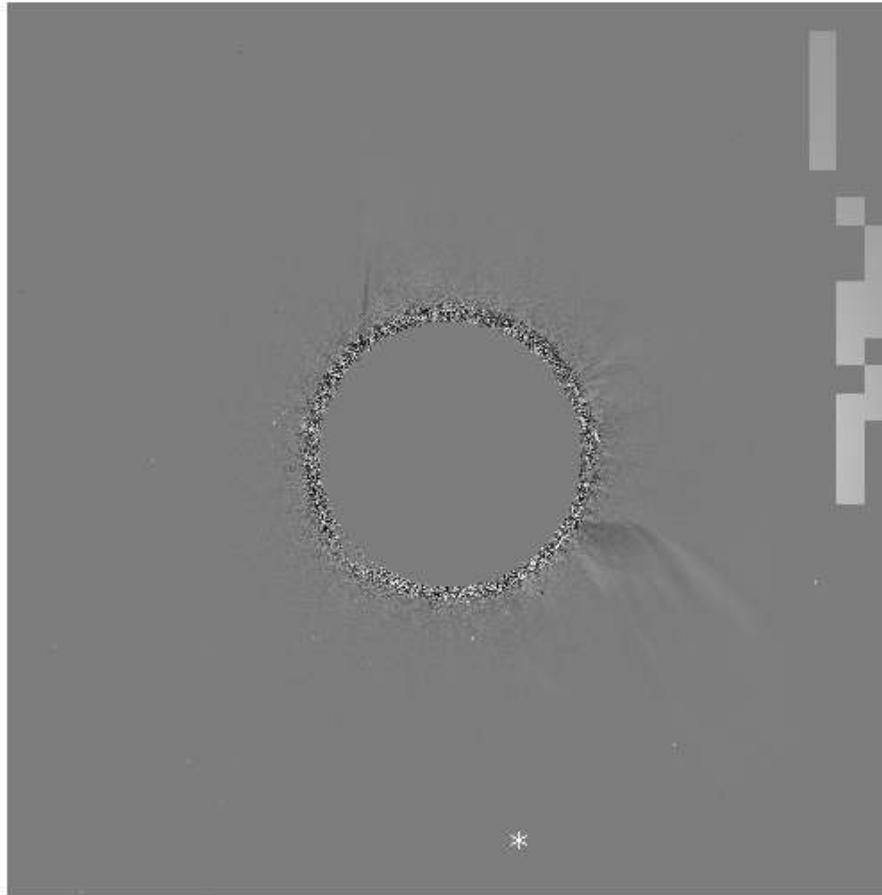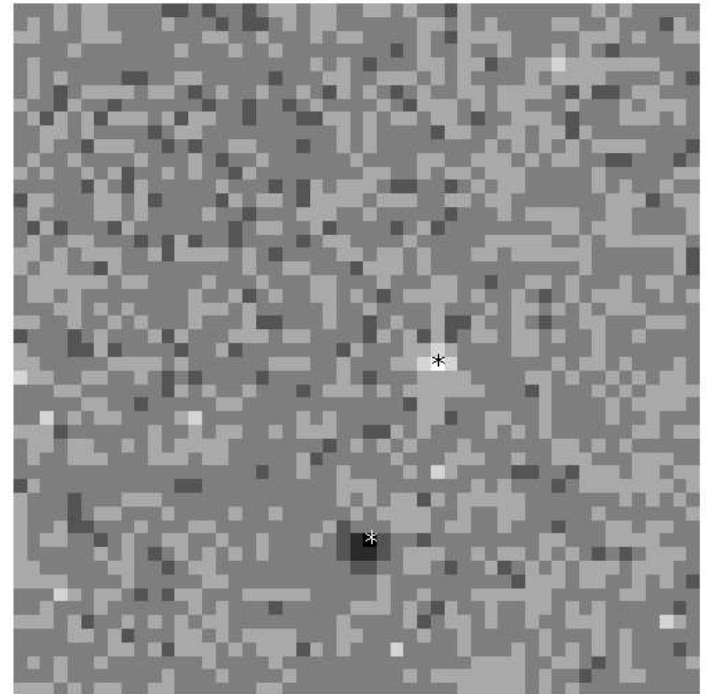
Cometary Nuclei and Cometary Polarimetry Datasets

- A. Raugh was supplied typos/grammatical errors

- All files were present, could be opened and read

- Are the /catalog/targets/comet.cat and reference.cat needed for these two datasets? They add nothing.