

ISIS-MGS WORKSHOP AGENDA

U.S. Geological Survey

Flagstaff, AZ

June 28th – 29th, 2001 – Thursday-Friday

9:00 am – 5:00 pm

Presented by: Eric Eliason, Tammy Becker & Kris Becker

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Flagstaff, Arizona

PART 1 – MOC PROCESSING

PART 2 – MOLA PROCESSING

PART 3 – IDL w/ ISIS

◇ OVERVIEW OF ISIS

- ISIS On-line Documentation
- Characteristics of an ISIS cube (core/suffix)
- ISIS ascii labels/keywords
- Bit-types (core_base/core_multiplier)
- Special pixel values
- Standard processing levels in ISIS

◇ MOC/MOLA OVERVIEW SUPPORT

- What is currently supported and functional
- Near-future support efforts

PART 1 – MOC PROCESSING

◇ PUBLIC RELEASE (PDS) PROCESSING

- Use of PDS website
- Use of image index file - '[mocsearch](#)' & '[mocindex](#)'
- Download of images - '[mocftp](#)'

◇ LEVEL 0 - Ingestion of raw MOC data to ISIS

- Introduction to '[moclev0](#)'
- Error handling (log files, print.prt)

(HANDS - ON)

◇ Interactive Image Display ([qview](#))

- Functions: viewing images, contrast stretch, tvdoctor,

- zoom, browse, stats, options,

◇ **MOC STATISTIC TOOLS**

- NAIF/SPICE information
- 'lev1stats' & 'lev1pt'/ 'inc' parameter
- 'mocavgstats' ('mocbtbl' & 'mocrange')

◇ **LEVEL 1 - Radiometric correction/noise cleanup of MOC data**

- Introduction to 'moclev1'
- Program details

(HANDS - ON)

◇ **GEOMETRY INFORMATION**

- Introduction to 'lev1geoplane'
- backplane/core plane options
- geometry information options – 'levinit'
- viewing cube suffix backplanes

◇ **LEVEL 2 - MAP PROJECTION for MOC**

- Introduction to 'moclev2'
- Parameter/Projection options
- Mosaicking requirements

(HANDS - ON)

◇ **'STREAM-LINE' PROCESSING OF MOC – 'moclevall'**

◇ **CONVERTING BIT-TYPES AND LEAVING ISIS**

- Introduction to 'dform'

PART 2 - MOLA PROCESSING

◇ Reconciliation of MOC and MOLA instrument pointing

◇ Discussion of SPICE kernels available in NAIF

◇ 'mocmola' – extract MOLA *PEDR* data corresponding to a MOC frame

◇ 'molasearch' – find all *PEDR*'s that correspond to a time range

◇ 'molaftp' – download MOLA data from ftp web site

PART 3 – IDL w/ ISIS

- ◇ ISIS in the IDL Environment
 - ISIS/IDL Basics
 - ✓ ISIS/IDL Interface
 - ✓ Data types
 - ✓ Cube Visualization with 'cv'
 - Reading and writing of ISIS cube files in IDL
 - ✓ 'readisis'/'writeisis'