

		+--*.LBL	PDS label, one for each FITS file
		+--/RAD/	Irreversibly calibrated spectra in radiance units
		+--/YYYY/	Multiple year directories, as needed
		+--/DDD/	Multiple day-of-year directories
		--*.FIT	FITS file, 2-D spectral image with four extensions
		+--*.LBL	PDS label, one for each FITS file
		--/DOCUMENT/	Directory containing documents most useful understanding this dataset
		--/EXTRAS/	Directory containing an image gallery (There is no EXTRAS/ folder, but it should exist with samples of final spectra. Cook book?)
		+--/INDEX/	Directory containing PDS index files

Consistency	Directory structure is complete.
Notes	<ul style="list-style-type: none"> • These data were originally peer reviewed in September 2010 but were rejected due to an error in the absolute calibration that inflated all spectra by a factor of 2. The data were reprocessed in 2013 with the correct absolute calibration • At every half hour of each observing period, the spacecraft slewed across Mars while the IR spectrometer recorded data; these frames were performed three times within several minutes, alternating direction from south-to-north and north-to-south. Each scan consisted of eight 128x256 binned subframes. Each half-hour set alternated between slower frames with longer frame exposure times and faster frames with shorter frame durations

2) Catalog files (catalog/catinfo.txt)

File	Status	Comments
CATINFO.TXT	√	Descriptive.
EPOXI.CAT	√	Descriptive.
DIF.CAT, HRIL.CAT	√	Descriptive.
DATASET.CAT	√	Descriptive.
REF.CAT	√	Descriptive.

Notes: *dataset.cat* would benefit from a description of the goals of each dataset. Currently, some details can be found in *epoch_earth_xyz.pdf* in folder "Documents."

3) Documentation (document/docinfo.txt)

Consistency	Directory structure is complete. Information is descriptive.
--------------------	--

Notes	None.
--------------	-------

4) Addition browsing (browse/)

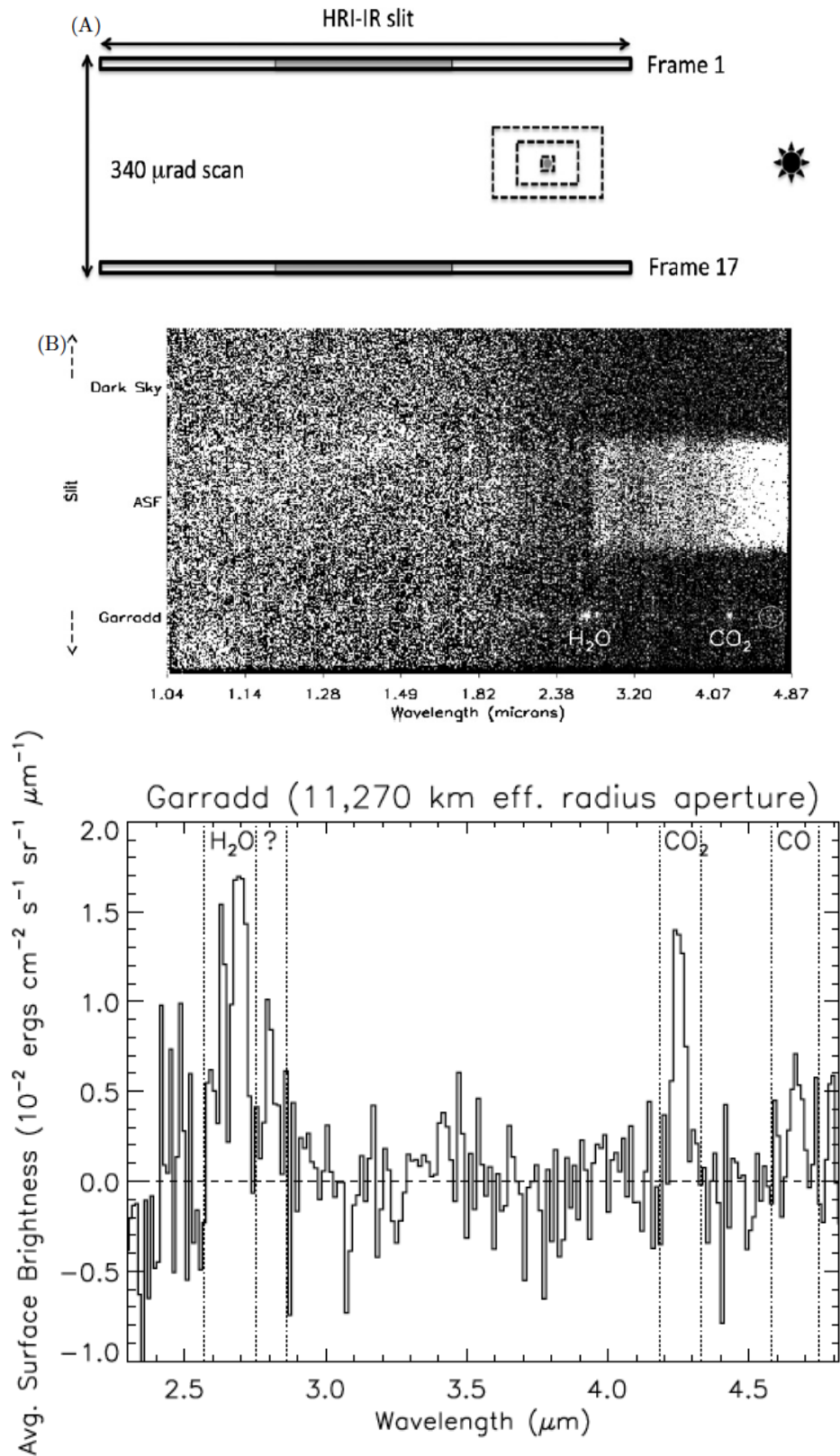
Consistency	Nonexistent.
Notes	-

5) Data (data/)

Folder	Status	Comments
RADREV	√	Calibrated but uncleaned data in units of radiance (calibration steps can be reversed to get back to the raw DN) – Level 3 data . Units of radiance as <i>Watts/(meter² steradian micron)</i>
RAD	√	Calibrated and irreversibly cleaned data in units of radiance – Level 4 data . Units of radiance as <i>Watts/(meter² steradian micron)</i>

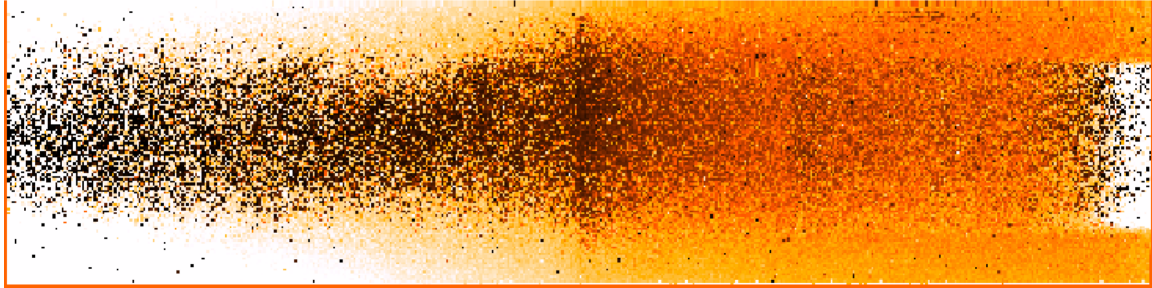
Consistency	Directory structure is complete.
Notes	<ul style="list-style-type: none"> • Frame size 512x256 pixels² • Extension 0: Radiance • Extension 1: Quality map (data flags) • Extension 2: Wavelength (micron) • Extension 3: Resolution per pixel • Extension 4: Signal-to-noise ratio

Example of cometary data (Feaga et al. 2014):

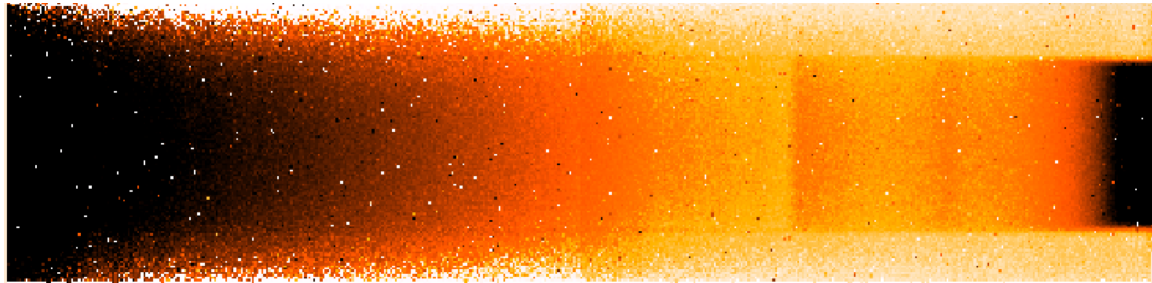


Examples

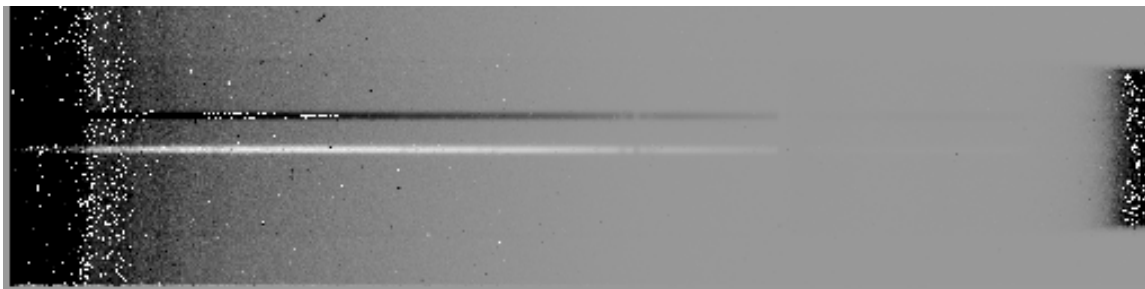
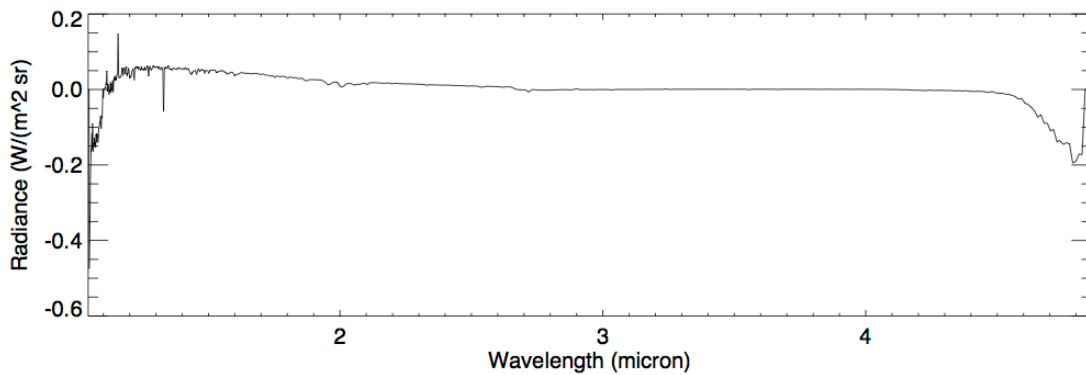
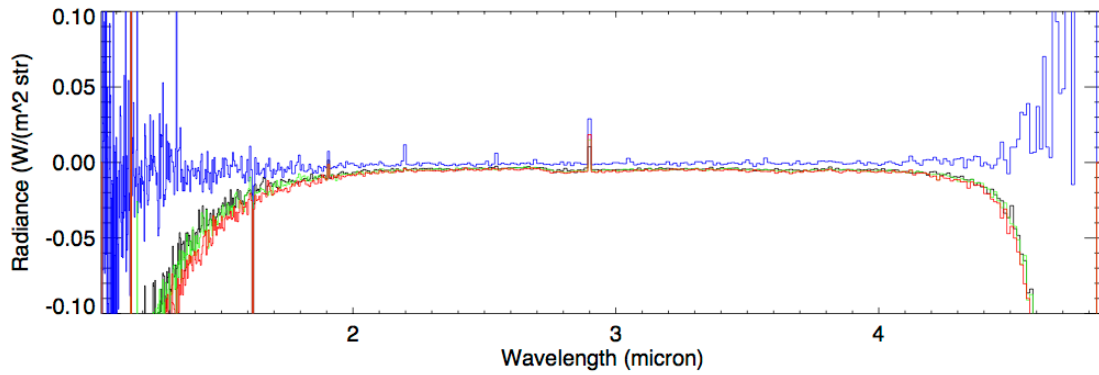
RAD-1:



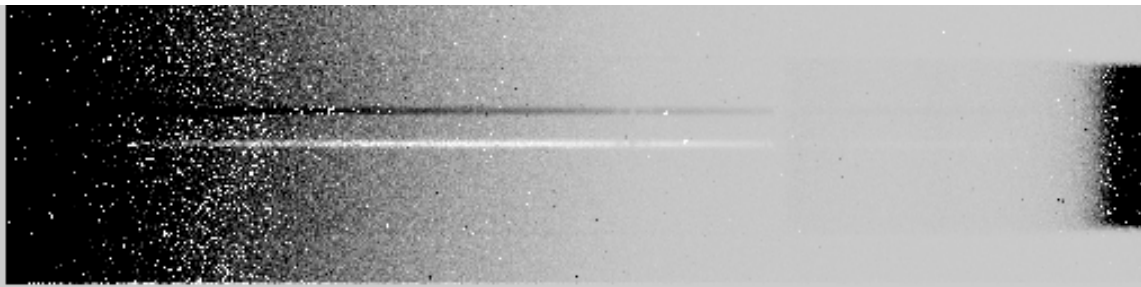
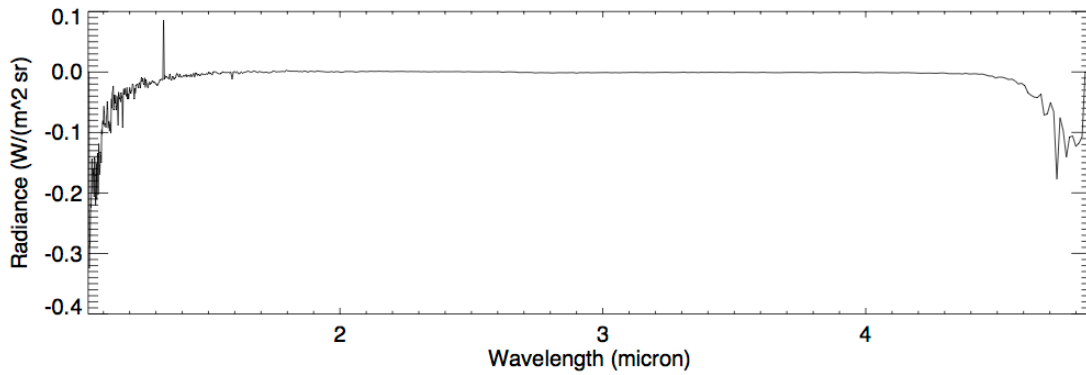
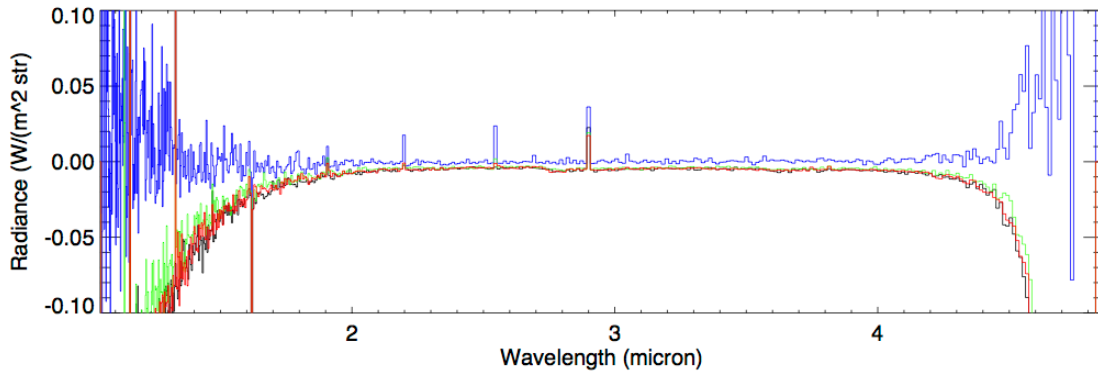
RAD-2:



Spectral samples from current database (selections due to different frame sizes):



Folder: dif-m-hrii-3_4-epoxi-mars-v1.0/data/rad/2009/324 (first 16 frames).
Upper: black, blue, red and green represent frames 1, 2, 3 and 4. Middle: spectrum of 8 stacked frames (3-pix integration). Bottom: stacked A – B, i.e. frames (1–8) - frames (8–16). Note: y-axis unit is $W/(m^2 sr micron)$



Folder: dif-m-hrii-3_4-epoxi-mars-v1.0/data/rad/2009/324 (first 16 frames).
 Upper: black, blue, red and green represent frames 1, 2, 3 and 4. Middle: spectrum of 8 stacked frames (3-pix integration). Bottom: stacked A - B, i.e. frames (1-8) - frames (8-16). Note: y-axis unit is $W/(m^2 sr micron)$

Final comments	<ul style="list-style-type: none"> • Beam position changes along the slit (more than 2 positions) • It was not clear what the goal of these observations and their strategy were. • Bad pixels • No major issues
-----------------------	--

6) Remaining directories (geometry, software, extras)

Consistency	Nonexistent.
Notes	<ul style="list-style-type: none">• <i>aareadme.txt</i> should contain clear information pointing to the important ASCII/PDF files and their contents, such as <i>dataset.txt</i>

Typos:

In Data Set Overview and in Spectral Frames (dataset.cat):
“across the Mars“ > “across Mars”