

Lunar and Planetary Science Conference, March 16th, 2014

COMMUNITY USER WORKSHOP
ON PLANETARY LIBS (CHEMCAM)
DATA

Using the PDS Analyst's Notebook with ChemCam

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PSD Geosciences Node

16 Mar 2014

ChemCam Community Workshop





PDS data archives

- The Planetary Data System (PDS) is a NASA organization that archives science data from NASA's planetary missions.
- One or more data sets are defined for each mission instrument based on the data products produced.
- An **archive volume** is created for each data set.

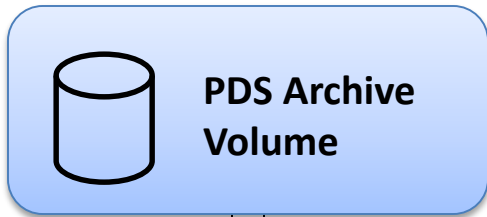


What is an archive volume?

- Archive volumes contain not only the scientific data, but information necessary to understand the data, including documentation that details
 - science objectives
 - instrument configuration and calibration
 - data acquisition, processing, and format
 - errata and other special considerations








Archive volume components

- Archived Data
 - Standard EDR and RDR data products
- Documentation
 - Software Interface Specification
 - Spacecraft and instrument reports
- Calibration Data
 - Calibration reports and data



PDS Community

Archive volume file structure

-  calib
-  catalog
-  data
-  document
-  index
-  aareadme.txt
-  errata.txt

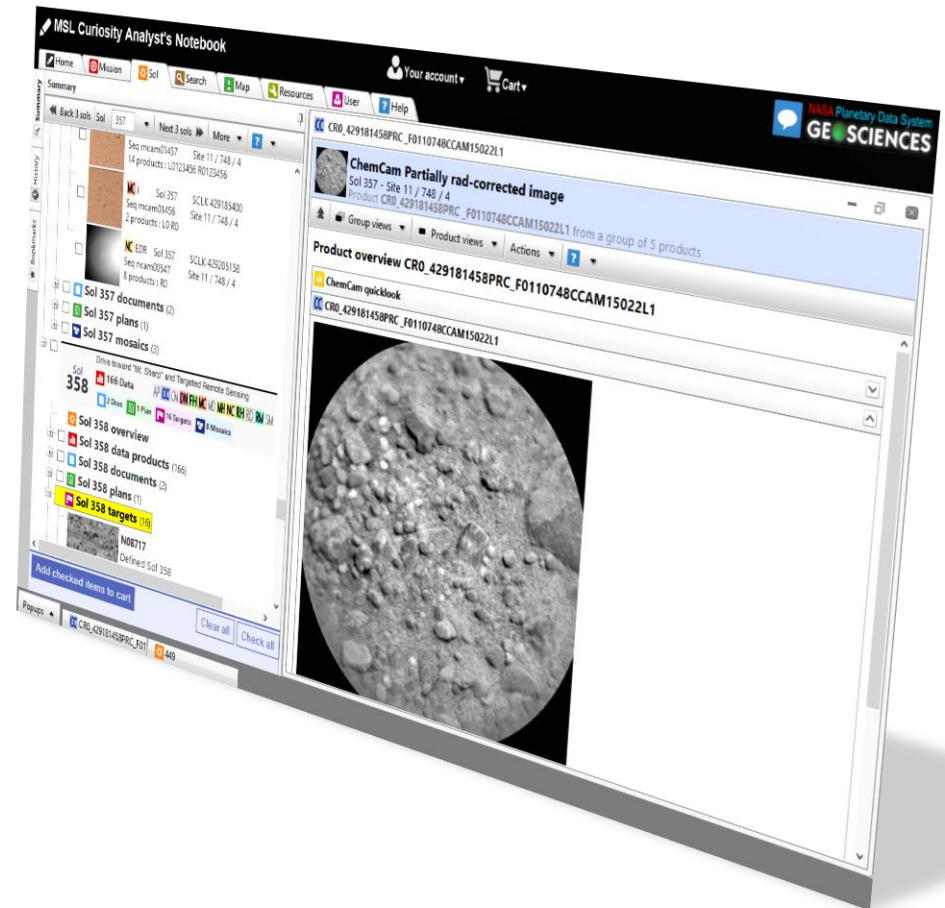
**geodata.rsl.wustl.edu - /mer/mer1-m-pancam-3-radcal-rdr-v1/
/mer1pc_1xxx/data/sol0004/**

[\[To Parent Directory\]](#)

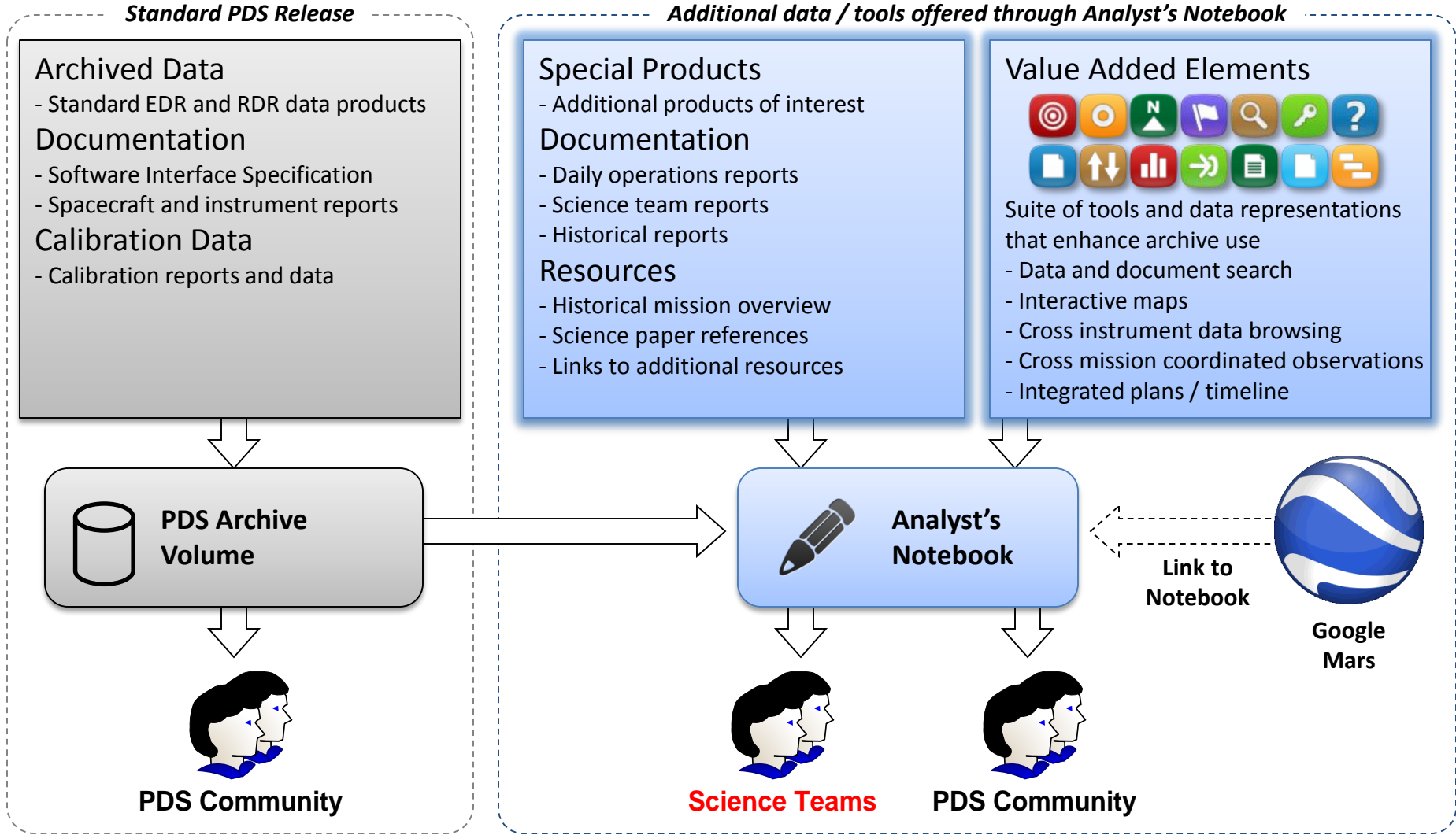
Wednesday, September 29, 2004 3:18 PM	2142208	lp128532760rad0200p285114cl.img
Wednesday, September 29, 2004 3:18 PM	50048	lp128532760rat0200p285114cl.img
Wednesday, September 29, 2004 3:18 PM	2142208	lp128532801rad0200p285115cl.img
Wednesday, September 29, 2004 3:18 PM	50048	lp128532801rat0200p285115cl.img
Wednesday, September 29, 2004 3:19 PM	2142208	lp128532843rad0200p285116cl.img
Wednesday, September 29, 2004 3:19 PM	50048	lp128532843rat0200p285116cl.img
Wednesday, September 29, 2004 3:19 PM	216320	lp128532898rad0200p285114cl.img
Wednesday, September 29, 2004 3:19 PM	50176	lp128532898rat0200p285114cl.img
Wednesday, September 29, 2004 3:19 PM	216320	lp128532950rad0200p285115cl.img
Wednesday, September 29, 2004 3:19 PM	50176	lp128532950rat0200p285115cl.img
Wednesday, September 29, 2004 3:19 PM	216320	lp128533003rad0200p285116cl.img
Wednesday, September 29, 2004 3:19 PM	50176	lp128533003rat0200p285116cl.img
Wednesday, September 29, 2004 3:19 PM	50148	lp128534453rad0203p260018cl.img
Wednesday, September 29, 2004 3:19 PM	41814	lp128534453rad0203p2600r8cl.img
Wednesday, September 29, 2004 3:19 PM	50432	lp128534453rat0203p260018cl.img
Wednesday, September 29, 2004 3:19 PM	50432	lp128534453rat0203p2600r8cl.img
Wednesday, September 29, 2004 3:20 PM	2142208	lp128534493rad0203p285018cl.img
Wednesday, September 29, 2004 3:20 PM	2142208	lp128534493rad0203p2850r8cl.img
Wednesday, September 29, 2004 3:20 PM	50432	lp128534493rat0203p285018cl.img
Wednesday, September 29, 2004 3:20 PM	50432	lp128534493rat0203p2850r8cl.img
Wednesday, September 29, 2004 3:21 PM	2142208	lp128534537rad0203p285018cl.img
Wednesday, September 29, 2004 3:21 PM	2142208	lp128534537rad0203p2850r8cl.img
Wednesday, September 29, 2004 3:21 PM	50176	lp128534537rat0203p285018cl.img
Wednesday, September 29, 2004 3:21 PM	50176	lp128534537rat0203p2850r8cl.img
Wednesday, September 29, 2004 3:21 PM	74752	lp128534568rad0203p261013cl.img
Wednesday, September 29, 2004 3:21 PM	50048	lp128534568rat0203p261013cl.img
Wednesday, September 29, 2004 3:21 PM	75520	lp128534606rad0203p261016cl.img
Wednesday, September 29, 2004 3:21 PM	74752	lp128534606rad0203p2610r6cl.img

Analyst's Notebook objective

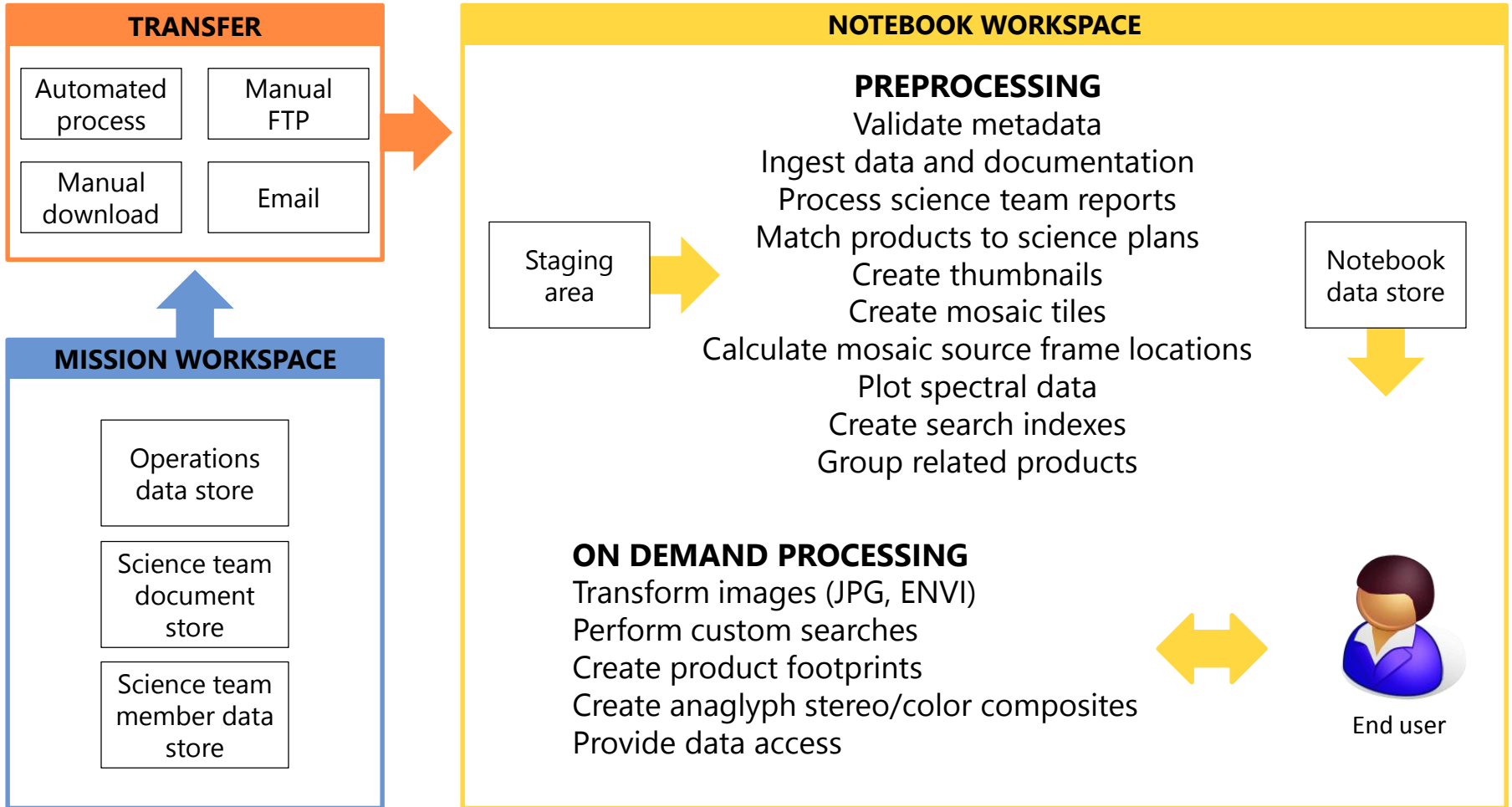
Provide access to the mission data archives by integrating sequence information, engineering and science data, and documentation into standard web-accessible pages.



Notebook components



Populating the Notebook



Navigating the Notebook

MSL Curiosity Analyst's Notebook
 Your account ▾
 Cart ▾
 NASA Planetary Data System
GE SCIENCES

Home
 Mission
 Sol
 Search
 Map
 Resources
 User
 Help

Access data from Mars Science Laboratory.

The Analyst's Notebook combines sequence information, engineering and science data, and documentation for virtual mission replay.

Contains released data from first 449 sols.

New user? Start here
with Quick Start recommendations

Be a registered user!

Create new account | Why do this? | Help

Email address

Remember my email address

Password

Forgotten your password?

Sign in

Release schedule

The Analyst's Notebook is a work in progress. Features are added regularly, often at the suggestion of our users. Data and documents are added to the Notebook concurrently with PDS data releases.

The Navcam mosaics are now online. Thanks to the PDS Imaging Node for providing early access! The most recent MAHLI, MARDI, Mastcam, Navcam, Hazcam, and REMS data were just released and are being processed into the Notebook.

All remaining data released through sol 449 are included in the Notebook.

New features

We added a lot of features to the Notebook with this release:

- Multiple windows: view multiple data products, documents, etc. concurrently.
- User history: quickly access previous items by clicking on the History tab under Sol and Search.
- Traverse map: all new and updated, with access to data right from the map.
- Quick looks: download a JPEG

Announcements

i 2014-02-07

System maintenance is scheduled for Friday, March 28 from 00:00 to 02:00 UTC. The Notebook may be unavailable during this time.



Mission summaries

MSL Curiosity Analyst's Notebook

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[Mission](#)
[Sol](#)
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MSL Landed Operations Historical Overview

The mission is summarized with brief entries for each day's activity. Click on a sol to go to the Sol Summary for that sol.

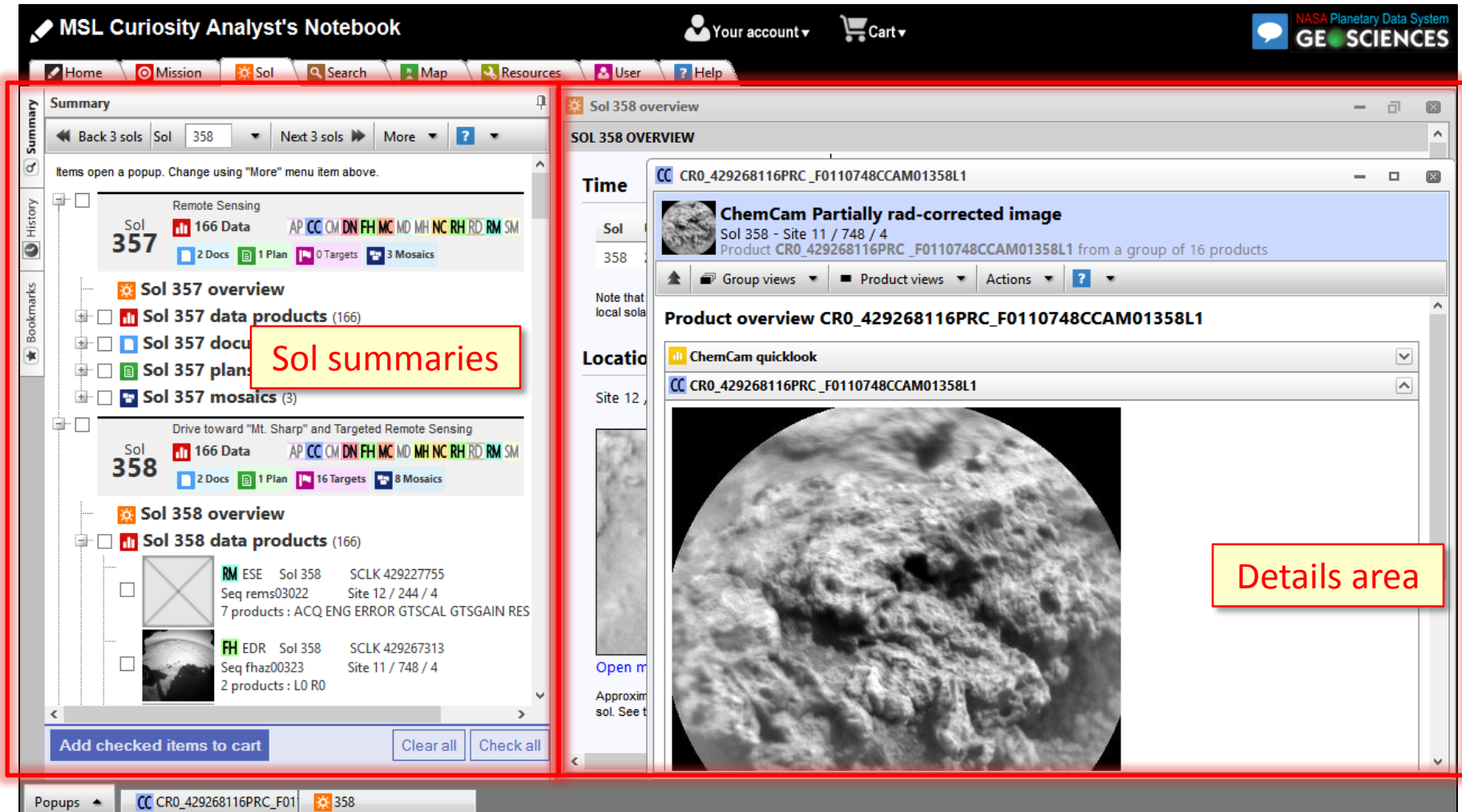
[Download as PDF](#)

[Download as Excel spreadsheet](#)

[Reload table](#)

Sol	Activity	Start site	L sub S	UTC at local noon
<input type="text"/>	<input type="text"/>	<input type="text"/>		
449	Anomalies Preclude Science Activities	22	047.59	2013-11-10 10:31
448	Anomalies Preclude Science Activities	22	047.13	2013-11-09 09:52
447	Anomalies Preclude Science Activities	22	046.68	2013-11-08 09:12
446	Flight Software Transition; Safing Event	22	046.22	2013-11-07 08:33
445	Flight Software Transition	22	045.76	2013-11-06 07:54
444	Flight Software Transition	22	045.31	2013-11-05 07:15
443	Targeted Remote Sensing	22	044.85	2013-11-04 06:35
442	In-Situ Observations of "Pine Plains" and "Rensselaer" Targets and Remote Sensing	22	044.39	2013-11-03 05:56
441	Targeted Remote Sensing; SAM Baseline Test	22	043.93	2013-11-02 05:17
440	Bump to "Cooperstown" Targets and Targeted Remote Sensing	21	043.47	2013-11-01 04:38
439	Drive toward "Cooperstown" Targets and Targeted Remote Sensing	21	043.01	2013-10-31 03:58
438	Drive toward "Cooperstown" Targets and Targeted Remote Sensing	21	042.55	2013-10-30 03:19
437	Drive toward "Cooperstown" and Remote Sensing	21	042.09	2013-10-29 02:40
436	Drive toward "Cooperstown" and Remote Sensing	21	041.63	2013-10-28 02:01

Sol summaries



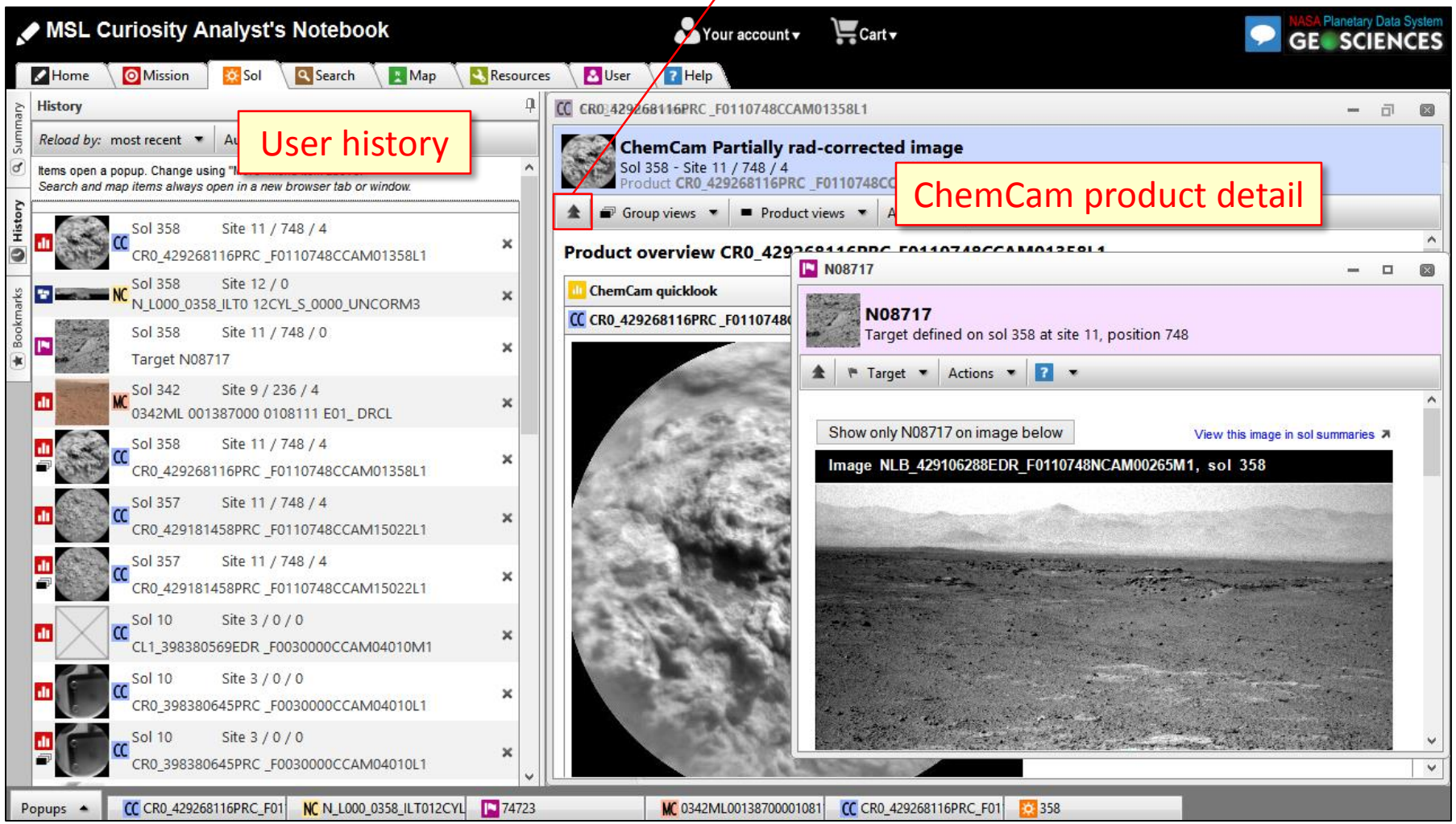
The screenshot displays the MSL Curiosity Analyst's Notebook interface. The top navigation bar includes 'Home', 'Mission', 'Sol', 'Search', 'Map', 'Resources', 'User', and 'Help'. The main content area is divided into two panes. The left pane, titled 'Summary', shows a list of sol summaries for Sol 357 and Sol 358. A red box highlights the text 'Sol summaries' over the Sol 357 summary. The right pane, titled 'Sol 358 overview', shows a detailed view of a ChemCam image. A red box highlights the text 'Details area' over the image. The interface also includes a 'Popups' bar at the bottom with the product ID 'CR0_429268116PRC_F01' and the sol number '358'.

User history

Click to hide detail title

User history

ChemCam product detail



The screenshot displays the MSL Curiosity Analyst's Notebook interface. On the left, a 'History' panel lists various data products with columns for Sol number, Site, and Product ID. A red box highlights the 'User history' text in the panel's header. On the right, a 'Product detail' view is open for product ID 'CR0_429268116PRC_F0110748CCAM01358L1'. This view includes a 'ChemCam quicklook' section with a large image of the Mars surface and a 'Product overview' section. A red box highlights the 'ChemCam product detail' text in the product title area. The top navigation bar includes 'Home', 'Mission', 'Sol', 'Search', 'Map', 'Resources', 'User', and 'Help'. The bottom status bar shows active popups for various product IDs and site numbers.

ChemCam quicklook











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[Mission](#)
[Sol](#)
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[Resources](#)
[User](#)
[Help](#)

History
🔔

Reload by: most recent ▾ Auto refresh on More ▾

Items open a popup. Change using "More" menu item above.
Search and map items always open in a new browser tab or window.

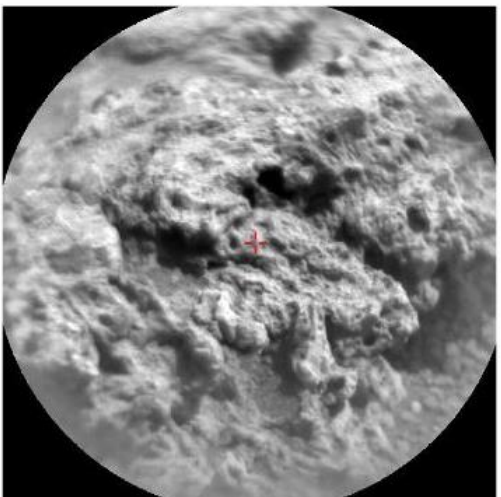
Thumbnail	CC	Sol	Site	Item ID	Close
	CC	Sol 358	Site 11 / 748 / 4	CR0_429268116PRC_F0110748CCAM01358L1	✕
	NC	Sol 358	Site 12 / 0	N_L000_0358_ILTO_12CYL_S_0000_UNCORM3	✕
		Sol 358	Site 11 / 748 / 0	Target N08717	✕
	MC	Sol 342	Site 9 / 236 / 4	0342ML 001387000 0108111 E01_DRCL	✕
	CC	Sol 358	Site 11 / 748 / 4	CR0_429268116PRC_F0110748CCAM01358L1	✕
	CC	Sol 357	Site 11 / 748 / 4	CR0_429181458PRC_F0110748CCAM15022L1	✕
	CC	Sol 10	Site 3 / 0 / 0	CL1_398380569EDR_F0030000CCAM04010M1	✕
	CC	Sol 10	Site 3 / 0 / 0	CR0_398380645PRC_F0030000CCAM04010L1	✕
	CC	Sol 10	Site 3 / 0 / 0	CR0_398380645PRC_F0030000CCAM04010L1	✕
				ccam_ref.cat	✕

CC CR0_429268116PRC_F0110748CCAM01358L1
- □ ×

Group views ▾ Product views ▾ Actions ▾ ? ▾

Product overview CR0_429268116PRC_F0110748CCAM01358L1


ChemCam quicklook



ChemCam RMI Quicklook
Generated: Thu Oct 31 00:49:35 2013
QChemCam_00358_RMI_429268116
From: CR0_429268116PRC_F0110748CCAM01358L1.MXD

Target: Bird_River	Distance, m: 9.561
Sol: 358	Tel. temp. °C: -32.4
LTST: 10:16:39	Exposure, ms: 26

- Linearity correction
- Dark subtraction
- Smearing correction
- Ghost removal
- Flat field correction (2.507750)
- Bad pixels process



Popups ▾
CC CR0_429268116PRC_F01
449

ChemCam quicklook

Product views

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Home Mission Sol Search Map Resources User Help

History

Reload by: most recent | Auto refresh on | More

Items open a popup. Change using "More" menu item above.
Search and map items always open in a new browser tab or window.

	CC	Sol 358	Site 11 / 748 / 4	CR0_429268116PRC_F0110748CCAM01358L1	✕
	NC	Sol 358	Site 12 / 0	N_L000_0358_ILT012CYL_S_0000_UNCORM3	✕
		Sol 358	Site 11 / 748 / 0	Target N08717	✕
	MC	Sol 342	Site 9 / 236 / 4	0342ML 001387000 0108111 E01_DRCL	✕
	CC	Sol 358	Site 11 / 748 / 4	CR0_429268116PRC_F0110748CCAM01358L1	✕
	CC	Sol 357	Site 11 / 748 / 4	CR0_429181458PRC_F0110748CCAM15022L1	✕
	CC	Sol 357	Site 11 / 748 / 4	CR0_429181458PRC_F0110748CCAM15022L1	✕
	CC	Sol 10	Site 3 / 0 / 0	CL1_398380569EDR_F0030000CCAM04010M1	✕
	CC	Sol 10	Site 3 / 0 / 0	CR0_398380645PRC_F0030000CCAM04010L1	✕
	CC	Sol 10	Site 3 / 0 / 0	CR0_398380645PRC_F0030000CCAM04010L1	✕

CR0_429268116PRC_F0110748CCAM01358L1

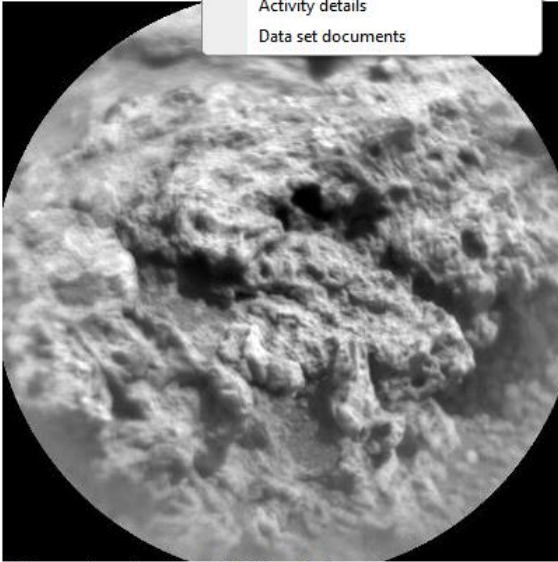
Group views | Product views | Actions | ?

Product overview C | **AM01358L1**

ChemCam quicklook

CR0_429268116PRC_F

- Overview
- Full-resolution image
- PDS label
- Derived products and download
- Activity details
- Data set documents



This browse image is not the actual data product.

Popups | CC CR0_429268116PRC_F01 | NC N_L000_0358_ILT012CYL | 74723 | MC 0342ML0013870001081 | CC CR0_429268116PRC_F01 | 358

Actions

MSL Curiosity Analyst's Notebook

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Home | Mission | Sol | Search | Map | Resources | User | Help

History

Reload by: most recent | Auto refresh on | More

Items open a popup. Change using "More" menu item above.
Search and map items always open in a new browser tab or window.

Thumbnail	Product ID	Sol	Site	Actions
	CC CR0_429268116PRC_F0110748CCAM01358L1	Sol 358	Site 11 / 748 / 4	✕
	NC N_L000_0358_ILT012CYL_S_0000_UNCORM3	Sol 358	Site 12 / 0	✕
	Target N08717	Sol 358	Site 11 / 748 / 0	✕
	MC 0342ML 001387000 0108111 E01_DRCL	Sol 342	Site 9 / 236 / 4	✕
	CC CR0_429268116PRC_F0110748CCAM01358L1	Sol 358	Site 11 / 748 / 4	✕
	CC CR0_429181458PRC_F0110748CCAM15022L1	Sol 357	Site 11 / 748 / 4	✕
	CC CR0_429181458PRC_F0110748CCAM15022L1	Sol 357	Site 11 / 748 / 4	✕
	CC CL1_398380569EDR_F0030000CCAM04010M1	Sol 10	Site 3 / 0 / 0	✕
	CC CR0_398380645PRC_F0030000CCAM04010L1	Sol 10	Site 3 / 0 / 0	✕
	CC CR0_398380645PRC_F0030000CCAM04010L1	Sol 10	Site 3 / 0 / 0	✕

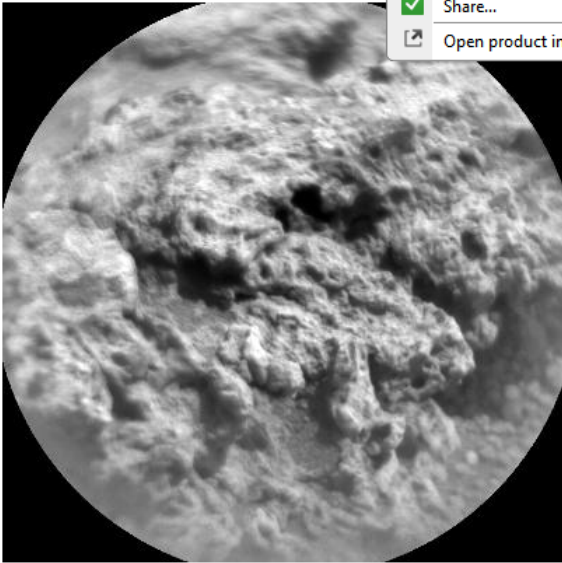
CR0_429268116PRC_F0110748CCAM01358L1

Group views | Product views | Actions | ?

Product overview CR0_429268116PRC

ChemCam quicklook

CC CR0_429268116PRC_F0110748CCAM01358L1



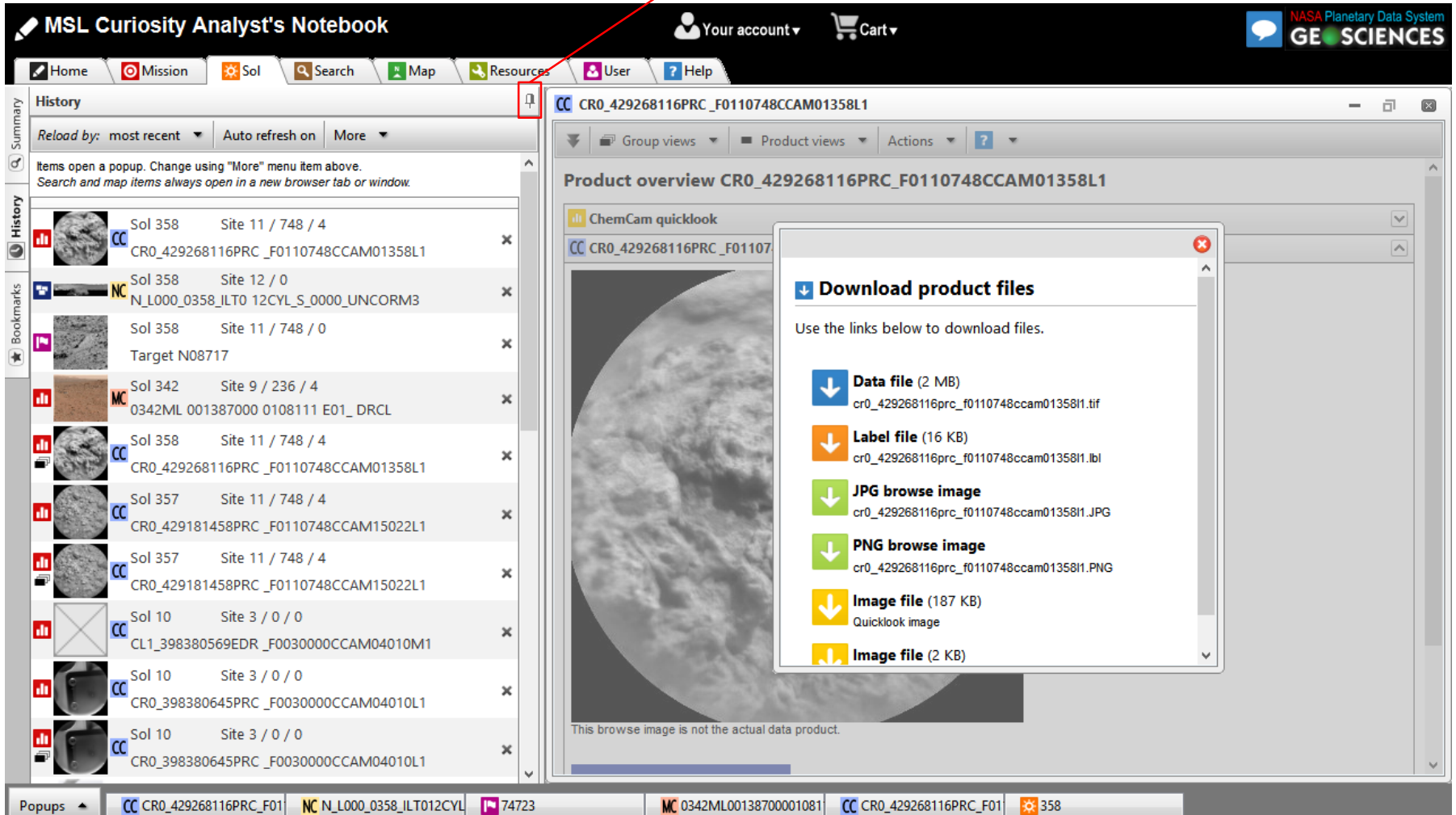
This browse image is not the actual data product.

- Bookmark...
- Cart...
- Download... ←
- Search...
- Share...
- Open product in new window

Popups | CC CR0_429268116PRC_F01 | NC N_L000_0358_ILT012CYL | 74723 | MC 0342ML0013870001081 | CC CR0_429268116PRC_F01 | 358

Download files

Click to hide summaries



MSL Curiosity Analyst's Notebook

Home Mission Sol Search Map Resources User Help

Your account Cart

NASA Planetary Data System
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History

Reload by: most recent Auto refresh on More

Items open a popup. Change using "More" menu item above.
Search and map items always open in a new browser tab or window.

Thumbnail	Product ID	Site	Summary	Actions
	CC CR0_429268116PRC_F0110748CCAM01358L1	Site 11 / 748 / 4		✕
	NC N_L000_0358_ILT012CYL_S_0000_UNCORM3	Site 12 / 0		✕
	Target N08717	Site 11 / 748 / 0		✕
	MC 0342ML 001387000 0108111 E01_DRCL	Site 9 / 236 / 4		✕
	CC CR0_429268116PRC_F0110748CCAM01358L1	Site 11 / 748 / 4		✕
	CC CR0_429181458PRC_F0110748CCAM15022L1	Site 11 / 748 / 4		✕
	CC CR0_429181458PRC_F0110748CCAM15022L1	Site 11 / 748 / 4		✕
	CC CL1_398380569EDR_F0030000CCAM04010M1	Site 3 / 0 / 0		✕
	CC CR0_398380645PRC_F0030000CCAM04010L1	Site 3 / 0 / 0		✕
	CC CR0_398380645PRC_F0030000CCAM04010L1	Site 3 / 0 / 0		✕

Product overview CR0_429268116PRC_F0110748CCAM01358L1

ChemCam quicklook

CR0_429268116PRC_F0110748CCAM01358L1

Download product files

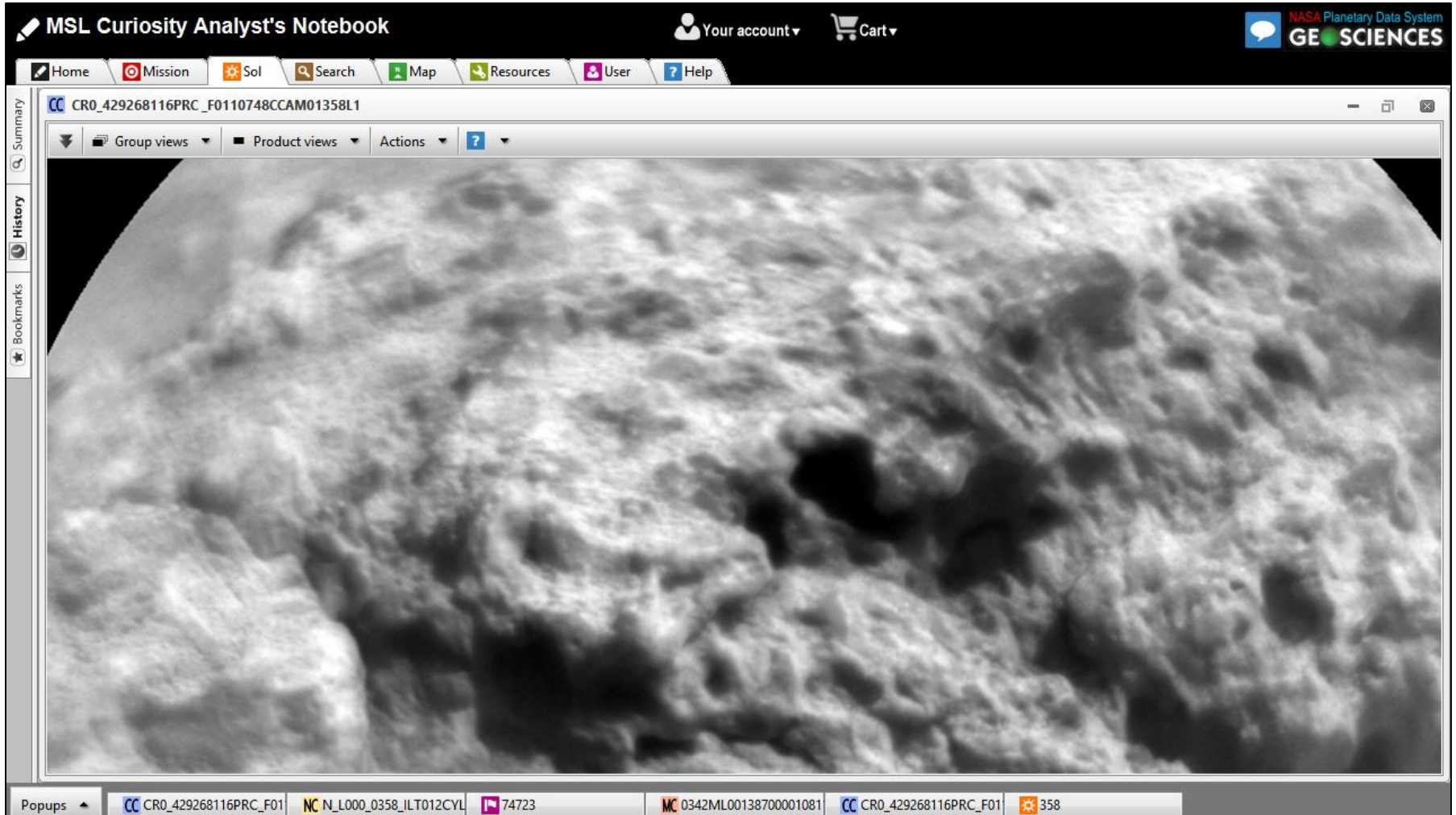
Use the links below to download files.

- Data file** (2 MB)
cr0_429268116prc_f0110748ccam01358l1.tif
- Label file** (16 KB)
cr0_429268116prc_f0110748ccam01358l1.lbl
- JPG browse image**
cr0_429268116prc_f0110748ccam01358l1.JPG
- PNG browse image**
cr0_429268116prc_f0110748ccam01358l1.PNG
- Image file** (187 KB)
Quicklook image
- Image file** (2 KB)

This browse image is not the actual data product.

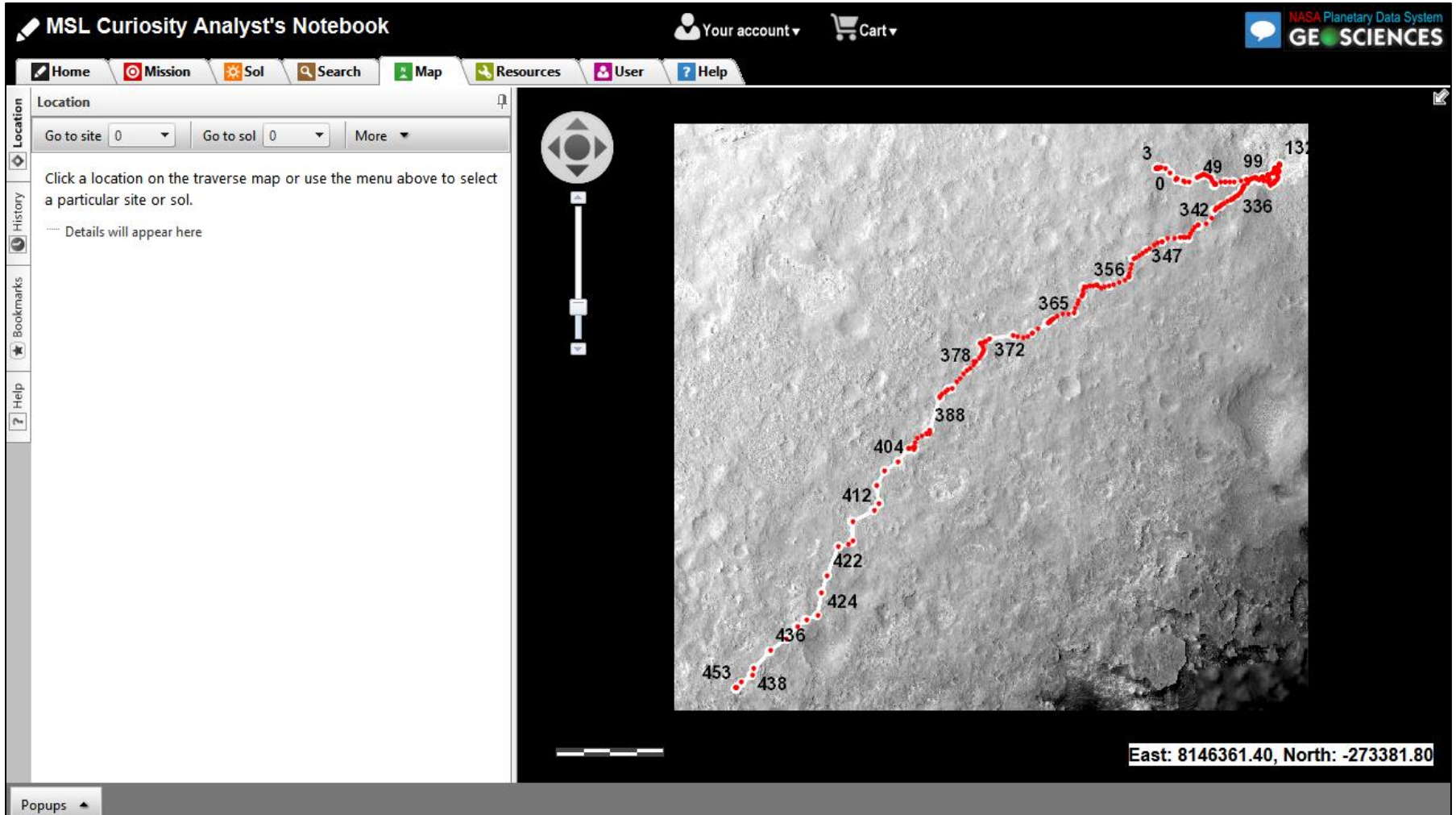
Popups: CC CR0_429268116PRC_F01 NC N_L000_0358_ILT012CYL 74723 MC 0342ML0013870001081 CC CR0_429268116PRC_F01 358

Full-resolution images



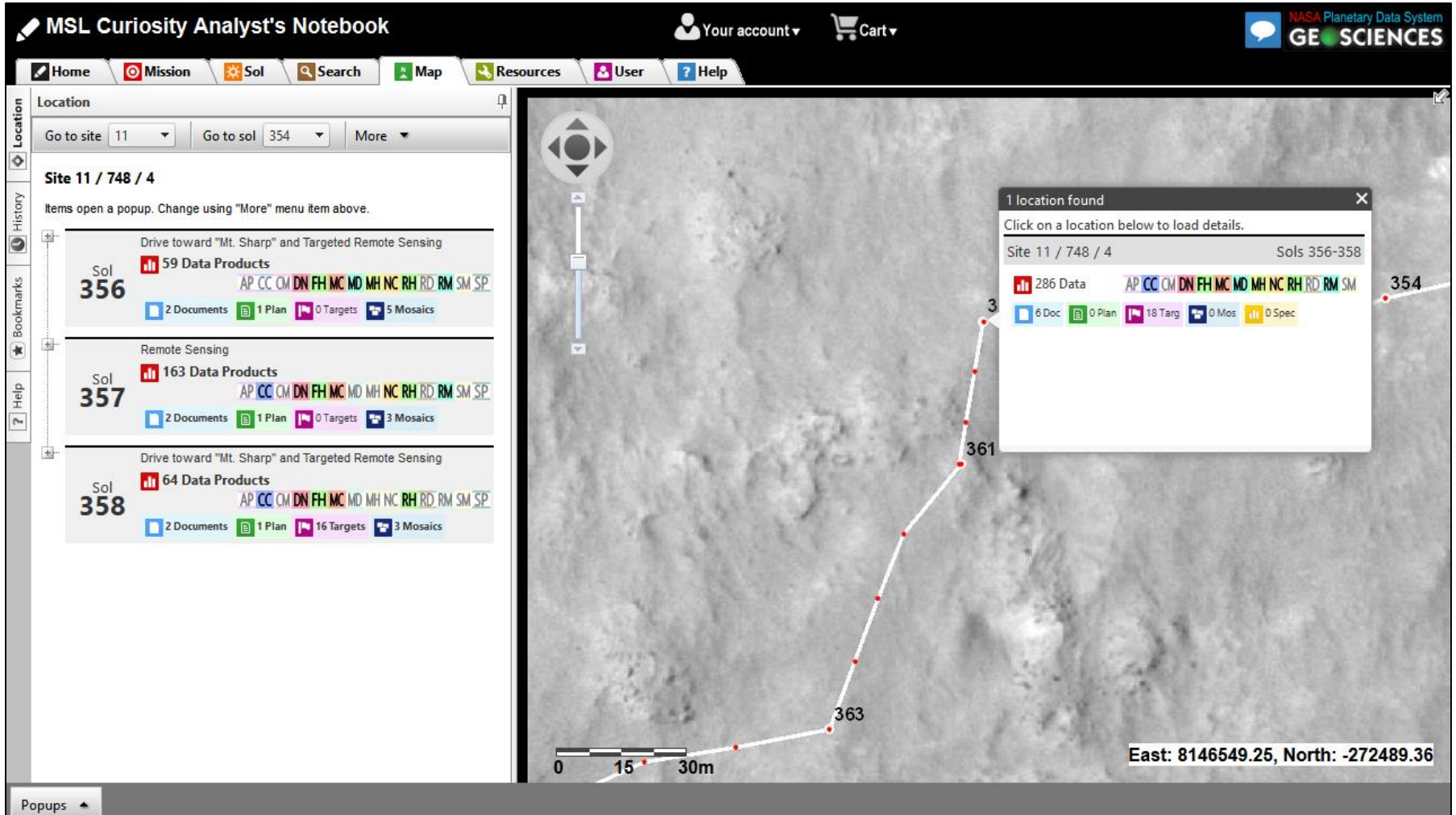
The screenshot displays the MSL Curiosity Analyst's Notebook web interface. At the top, the title bar reads "MSL Curiosity Analyst's Notebook" and includes navigation links for Home, Mission, Sol, Search, Map, Resources, User, and Help. On the right side of the header, there are links for "Your account" and "Cart", along with the NASA Planetary Data System and GE SCIENCES logos. The main content area shows a large, high-resolution grayscale image of a rocky Martian surface, identified by the URL "CR0_429268116PRC_F0110748CCAM01358L1". The interface includes a left sidebar with "Summary", "History", and "Bookmarks" sections. Below the main image, a "Popups" bar contains several small thumbnail images with their respective IDs: "CR0_429268116PRC_F01", "NC_N_L000_0358_ILT012CYL", "74723", "0342ML00138700001081", "CR0_429268116PRC_F01", and "358".

Traverse map



The screenshot displays the MSL Curiosity Analyst's Notebook interface. At the top, there is a navigation bar with links for Home, Mission, Sol, Search, Map, Resources, User, and Help. The main content area is divided into a left sidebar and a central map. The sidebar includes a 'Location' section with dropdown menus for 'Go to site' (0) and 'Go to sol' (0), and a 'Details will appear here' section. The central map shows a grayscale image of the Martian surface with a red dotted line representing a traverse route. The route is marked with numbered sites: 453, 438, 436, 424, 422, 412, 404, 388, 378, 372, 365, 356, 347, 342, 336, 99, 49, 3, and 13. A scale bar and a coordinate box at the bottom right of the map indicate 'East: 8146361.40, North: -273381.80'. The interface also features a 'Popups' button at the bottom left.

Find data by location



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Home | Mission | Sol | Search | Map | Resources | User | Help

Location
 Go to site: 11 | Go to sol: 354 | More

Site 11 / 748 / 4
 Items open a popup. Change using "More" menu item above.

- Sol 356**
 Drive toward "Mt. Sharp" and Targeted Remote Sensing
 59 Data Products | 2 Documents | 1 Plan | 0 Targets | 5 Mosaics
 AP CC CM DN FH MC MD MH NC RH RD RM SM SP
- Sol 357**
 Remote Sensing
 163 Data Products | 2 Documents | 1 Plan | 0 Targets | 3 Mosaics
 AP CC CM DN FH MC MD MH NC RH RD RM SM SP
- Sol 358**
 Drive toward "Mt. Sharp" and Targeted Remote Sensing
 64 Data Products | 2 Documents | 1 Plan | 16 Targets | 3 Mosaics
 AP CC CM DN FH MC MD MH NC RH RD RM SM SP

Map View:
 1 location found
 Click on a location below to load details.
 Site 11 / 748 / 4 | Sols 356-358
 286 Data | 6 Doc | 0 Plan | 18 Targ | 0 Mos | 0 Spec
 354, 361, 363, 364

East: 8146549.25, North: -272489.36

MSL Curiosity Analyst's Notebook Your account Cart NASA Planetary Data System **GE SCIENCES**

Home Mission Sol Search Map Resources User Help

Location: Go to site 11 Go to sol 354 More

Site 11 / 748 / 4
Items open a popup. Change using "More" menu item above.

Sol 356
Drive toward "Mt. Sharp" and Targeted Remote Sensing
59 Data Products AP CC CM DN FH MC MD MH NC RH RD RM SM SP
2 Documents 1 Plan 0 Targets 5 Mosaics

Sol 357
Remote Sensing
163 Data Products AP CC CM DN FH MC MD MH NC RH RD RM SM SP
2 Documents 1 Plan 0 Targets 3 Mosaics

Sol 357 overview
Sol 357 data products (163)

- ChemCam (110)
 - EPW Sol 357 SCLK 429178803
Seq ccam00357 Site 11 / 748 / 4
7 products : CC0
 - EDR Sol 357 SCLK 429179448
Seq ccam01357 Site 11 / 748 / 4
34 products : CL9
 - PRC Sol 357 SCLK 429181458
Seq ccam15022 Site 11 / 748 / 4
5 products : CR0 CL59

1 location found
Click on a location below to load details.
Site 11 / 748 / 4 Sols 356-358
286 Data AP CC CM DN FH MC MD MH NC RH RD RM SM
6 Doc 0 Plan 18 Targ 0 Mos 0 Spec

East: 8146549.25, North: -272489.36



Search for data, documents, targets

MSL Curiosity Analyst's Notebook Your account Cart NASA Planetary Data System **GE SCIENCES**

Home Mission Sol Search Map Resources User Help

Data product search

Time

Sol:

SCLK:

UTC date:

L sub s:

LTST:

Location

Site:

Drive:

Pose:

Instrument

All AP APXS MD MARDI RH Rear Hazcam

CC ChemCam MC Mastcam RM REMS

CM CheMin MH MAHLI SM SAM

DN DAN NC Navcam SP SA/SPaH

FH Front Hazcam RD RAD

Command

Sort order: Show in results:

Popups

Search results

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Home Mission Sol Search Map Resources User Help

Results

Return to search More

Showing results for Products, Sols 350-358, Instrument ChemCam (471 data products found.)

Items open a popup. Change using "More" menu item above.

Sol 350 (76 products)

AP CC CM DN FH MC MD MH NC RH RD RM SM

Sol 352 (124 products)

AP CC CM DN FH MC MD MH NC RH RD RM SM

<input type="checkbox"/>		EPW Sol 352	SCLK 428734620	
		Seq ccam00352	Site 11 / 302 / 4	
		7 products : CC0		
<input type="checkbox"/>		EDR Sol 352	SCLK 428735266	
		Seq ccam01352	Site 11 / 302 / 4	
		34 products : CL9		
<input type="checkbox"/>		PRC Sol 352	SCLK 428737249	
		Seq ccam15022	Site 11 / 302 / 4	
		5 products : CR0 CL59		
<input type="checkbox"/>		PRC Sol 352	SCLK 428738410	
		Seq ccam02352	Site 11 / 302 / 4	
		21 products : CR0 CL159		
<input type="checkbox"/>		PRC Sol 352	SCLK 428739143	
		Seq ccam03352	Site 11 / 302 / 4	

ChemCam

Sol 352 - Site 11 / 302 / 4

Group of 5 products from sequence ccam15022

Group views | Product views | Actions | ?

CR0_428737249PRC_F0110302CCAM15022L1

This group comprises the products below.

Click on product for details (will appear here). Click on to open product in popup or new window.

indicates product(s) with quicklook image

- ChemCam Partially rad-corrected image**
- CR0_428737249PRC_F0110302CCAM15022L1
- ChemCam First order product**
- CL9_428737408EDR_F0110302CCAM15022M1
- ChemCam Initial LIBS Spectrum**
- CL5_428737433RDR_F0110302CCAM15022P3
- ChemCam First order product**
- CL9_428737468EDR_F0110302CCAM15022M1
- ChemCam Partially rad-corrected image**
- CR0_428737491PRC_F0110302CCAM15022L1

Quick share

Add checked items to cart Clear all Check all

Popups CR0_428737249PRC_F01

16 Mar 2014

ChemCam Community Workshop

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Data set documents

MSL Curiosity Analyst's Notebook
Your account ▾
Cart ▾
NASA Planetary Data System
GE SCIENCES

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Mission and instrument data set documents

Access archive documents for the mission and individual instruments.

- 📍 **Mission specific**
- AP **APXS**
- CC **ChemCam**
- CM **CheMin**
- DN **DAN**
- FH **Front Hazcam**
- MH **MAHLI**
- MD **MARDI**
- MC **Mastcam**
- NC **Navcam**
- RD **RAD**
- RH **Rear Hazcam**
- RM **REMS**
- SM **SAM**
- SP **SA/SPaH**

CC ChemCam data set documents

These documents are designed to promote understanding of the mission, spacecraft, instruments, and data formats. For documentation detailing day-to-day mission operations refer to the Sol Summaries.

The data set documents below are collected from the archive volumes for this instrument. (The particular archive volume is shown following the file name.) Thus, there may be multiple documents with the same file name.

The Software Interface Specification (SIS) documents contain technical, detailed descriptions of the instrument and the data product format. Consider reading this document when working with the data. It is listed under the "Documents" group below.

Archive documentation

	AAREADME.TXT	from RDR volume MSLCCM_1XXX	View	Download
7 KB	Description of the format of the ChemCam Archive volumes			
	AAREADME.TXT	from EDR volume MSLCCM_0XXX	View	Download
10 KB	Description of the format of the ChemCam Archive volumes			
	ERRATA.TXT	from RDR volume MSLCCM_1XXX	View	Download
6 KB	Release notes and errata for the MSL CCAM RDR data set			
	ERRATA.TXT	from EDR volume MSLCCM_0XXX	View	Download
4 KB	Release notes and errata concerning the MSL ChemCam EDR archive			
	VOLDESC.CAT	from RDR volume MSLCCM_1XXX	View	Download
2 KB	Detailed documentation about the mission, instrument, and data set, as well as an index table			
	VOLDESC.CAT	from EDR volume MSLCCM_0XXX	View	Download
2 KB	Detailed documentation about the mission, instrument, and data set, as well as an index table			



Data orders via the cart

The screenshot shows the MSL Curiosity Analyst's Notebook interface. At the top, there is a navigation bar with links for Home, Mission, Sol, Search, Map, Resources, User, and Help. A user account menu and a cart icon are also present. The main content area is titled 'Cart checkout' and features a three-step process: 1. Review cart, 2. Choose options, and 3. Submit request. The 'Review cart' step is currently active. Below this, there is a 'Review cart' section showing 52 products (39 MB), 0 mosaics, and 0 documents. A 'Continue to step 2' button is visible. The 'Cart contents' section explains that items are grouped based on selection and provides a 'Clear cart' button. The 'Items in your cart' section shows a list of products, specifically 'Products, Sol 353, Instrument ChemCam', with options to 'Show details', 'Place on hold', and 'Remove from cart'.

http://an.rsl.wustl.edu

Currently available:
MSL, MER, Phoenix, Apollo, LCROSS

