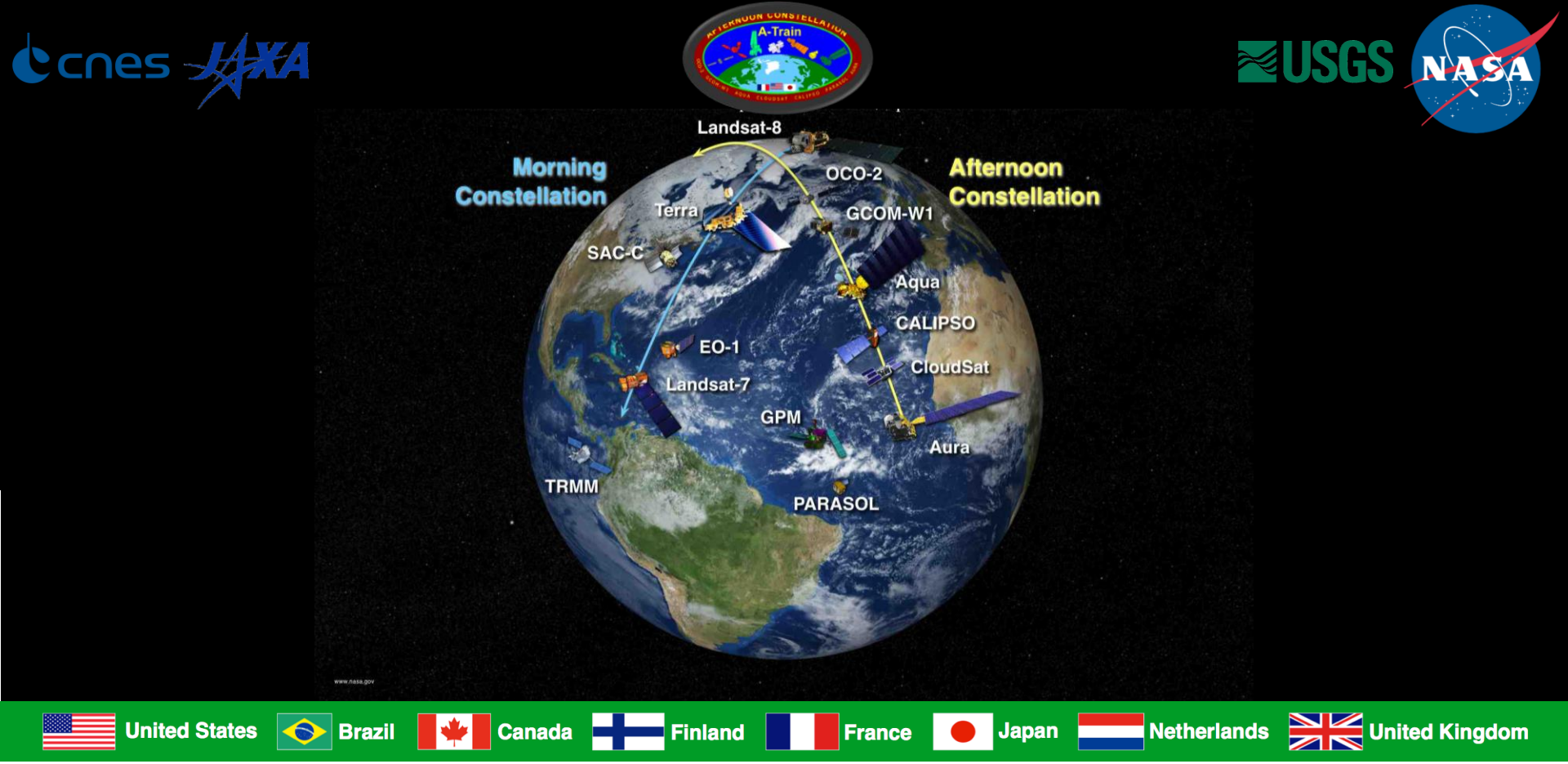

International Earth Science Constellation Mission Operations Working Group

June 5 - 7, 2019

Constellation Coordination System (CCS) Status

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Christopher Axthelm, Author, Systems Engineer, a.i. solutions, Inc., NASA GSFC Code 595

Agenda

- CCS Purpose and Goals
- CCS 2019.1
- CCS Demo
- CCS Future
  - Releases 2019.2
- Feedback
  - Feedback and Discussion

CCS Purpose and Goals

- CCS is a system for coordinating and monitoring Constellation safety of the Earth Sciences Constellation (ESC) missions and is a central source of data sharing and operational planning.
  - Primary tool for monitoring the Constellation configurations.
  - Supports information exchange among/between partner ESC missions.
  - Transfer critical data between the Mission Operation Centers (MOCs), Conjunction Assessment Risk Analysis (CARA), and other authorized mission users.
  - Mission Analysis tools and automated health and safety monitoring.
    - Automated constellation safety warning notifications.
    - Graphical visualization of orbital data.
- The latest release, CCS 2019.1, was deployed to operations on 05/01/2019.

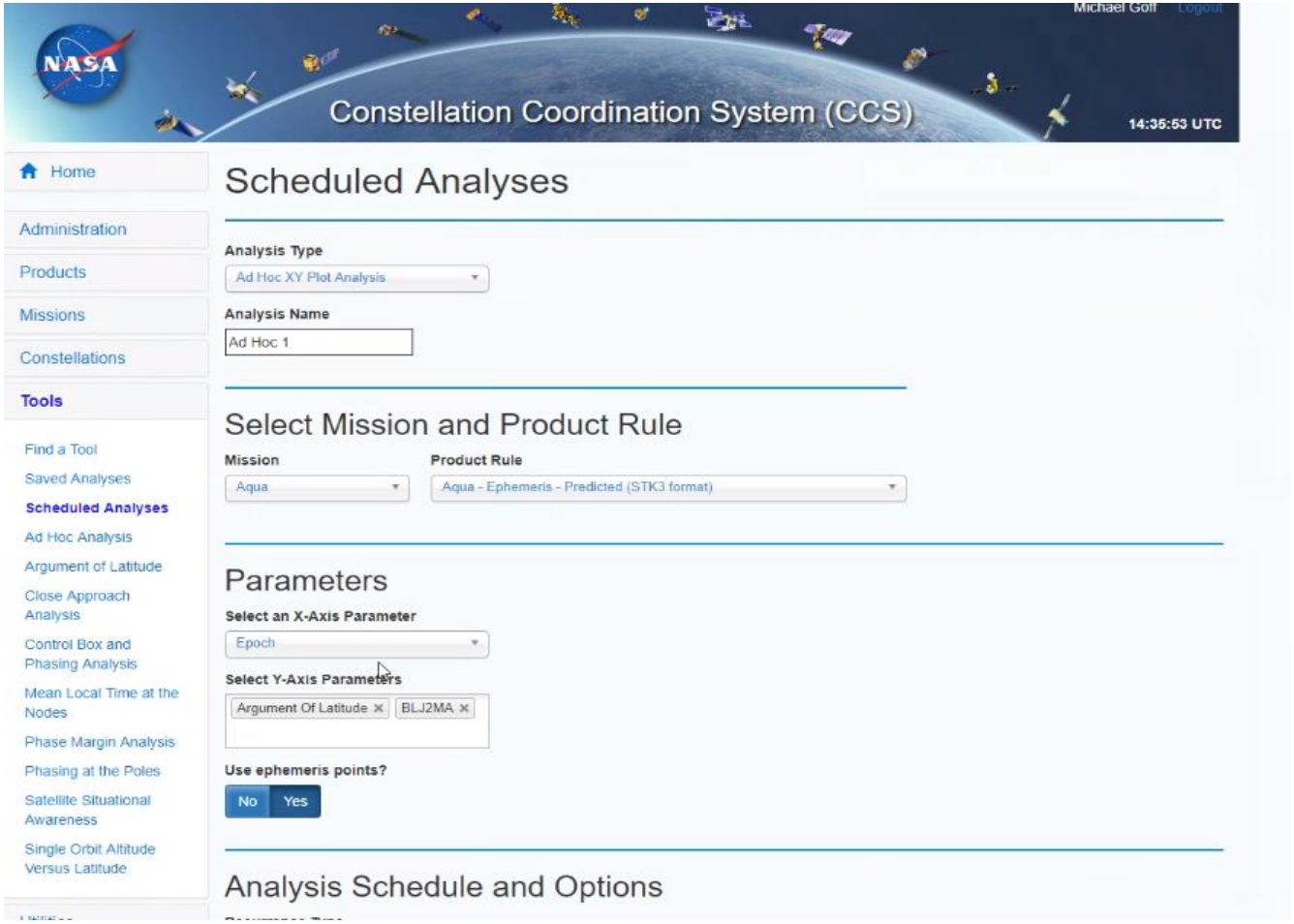
CCS 2019.1 New Features

Released: 1st of May 2019

- Scheduled Analyses - Allowing users to create recurring tool analyses and receive the results files via email.
  - Can be run when products are acquired, or on a scheduled basis using the most recent product, such as daily, weekly, or monthly.
- Recently Acquired Products – A display of the most recent products acquired by CCS.
  - Allows user to see all products for a single mission acquired after a certain date
- Date-Range Downloads - For retrieving large sets of products in a single download.
  - Choose a product and a date range, and download all the products that were acquired in the selected range

CCS 2019.1

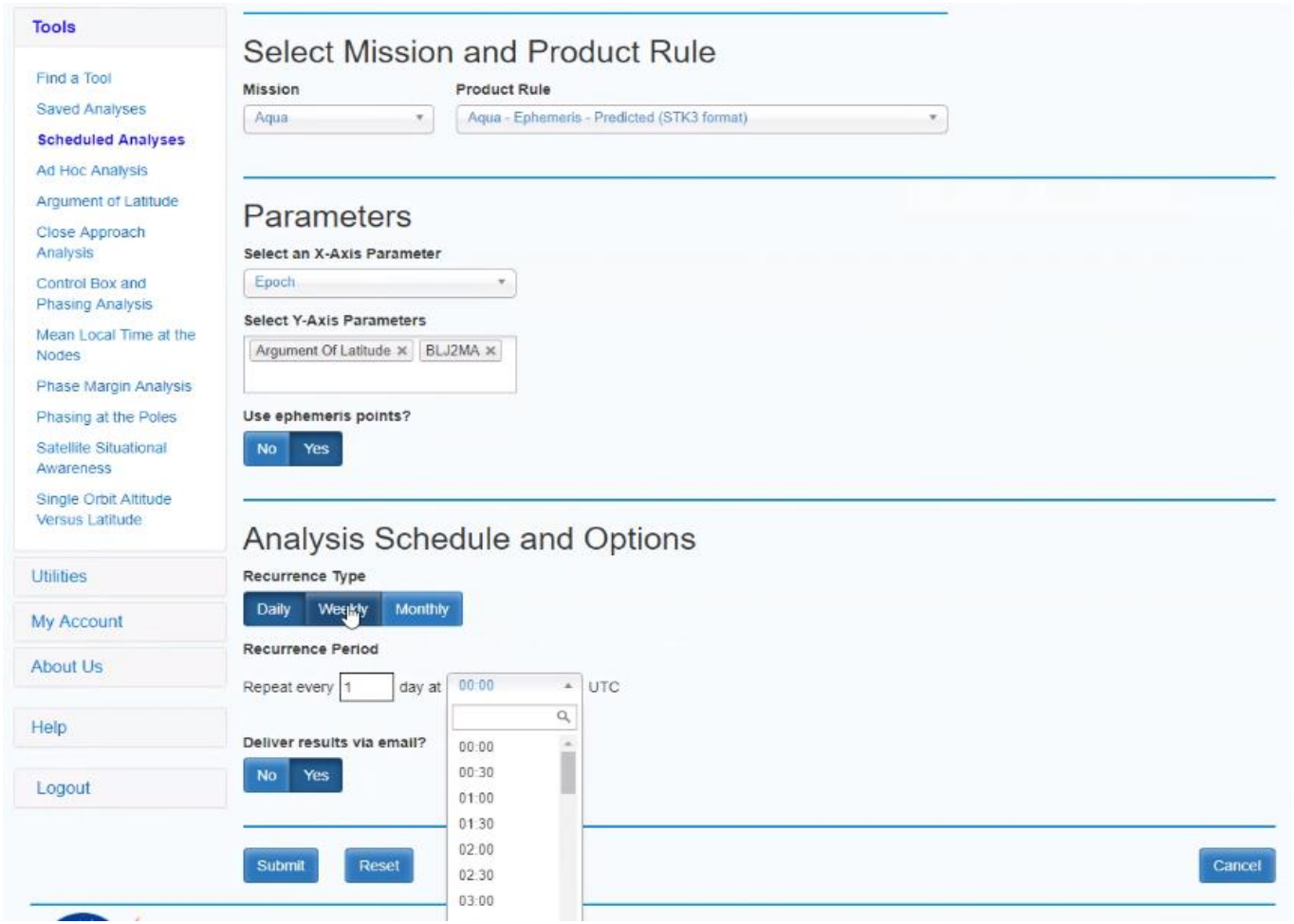
Released: 1st of May 2019



Creating a Scheduled Analysis through the Scheduled Analysis Main Page

CCS 2019.1

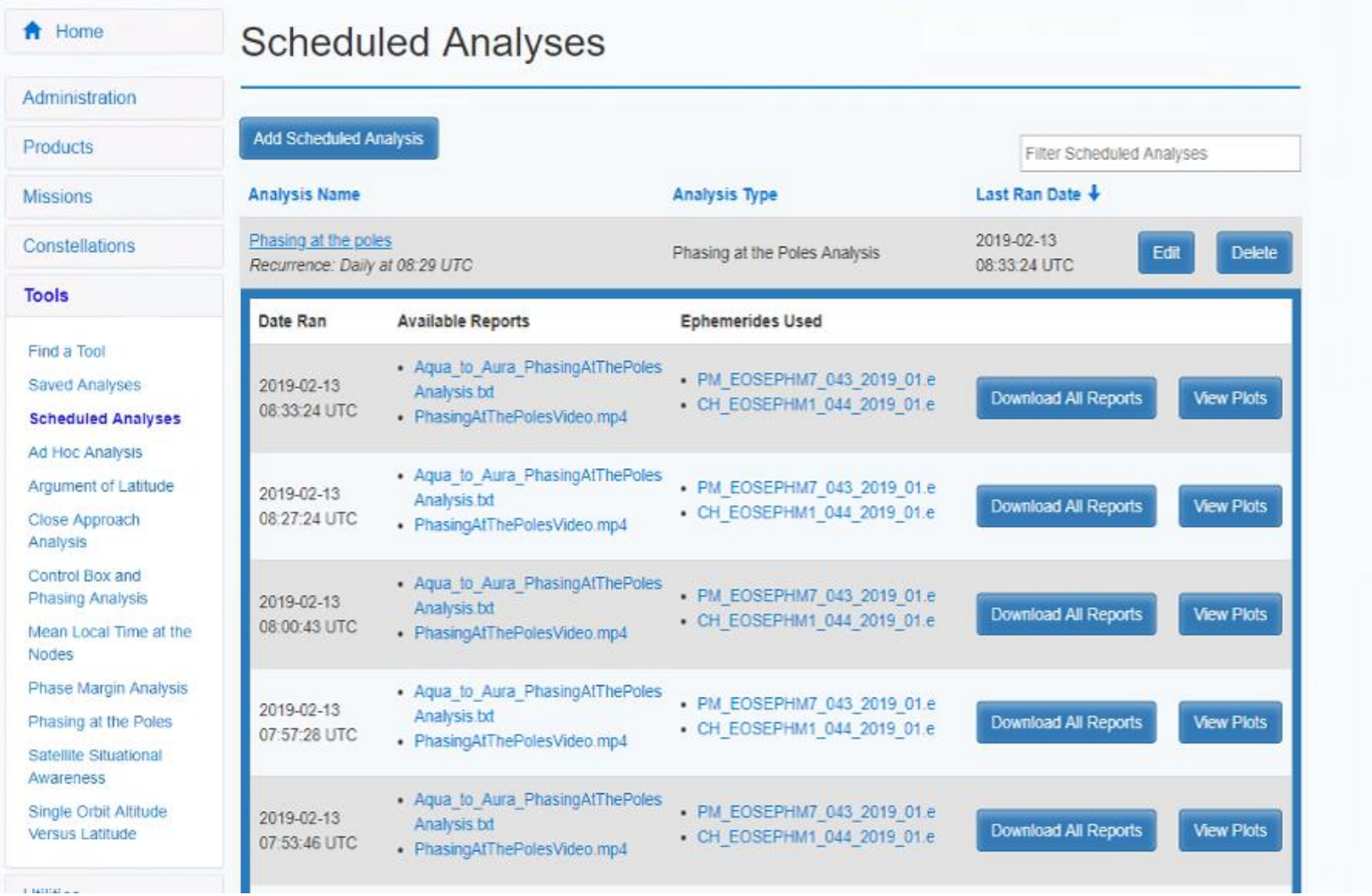
Released: 1st of May 2019



Picking a Recurrence Time through the Scheduled Analysis Main Page

CCS 2019.1

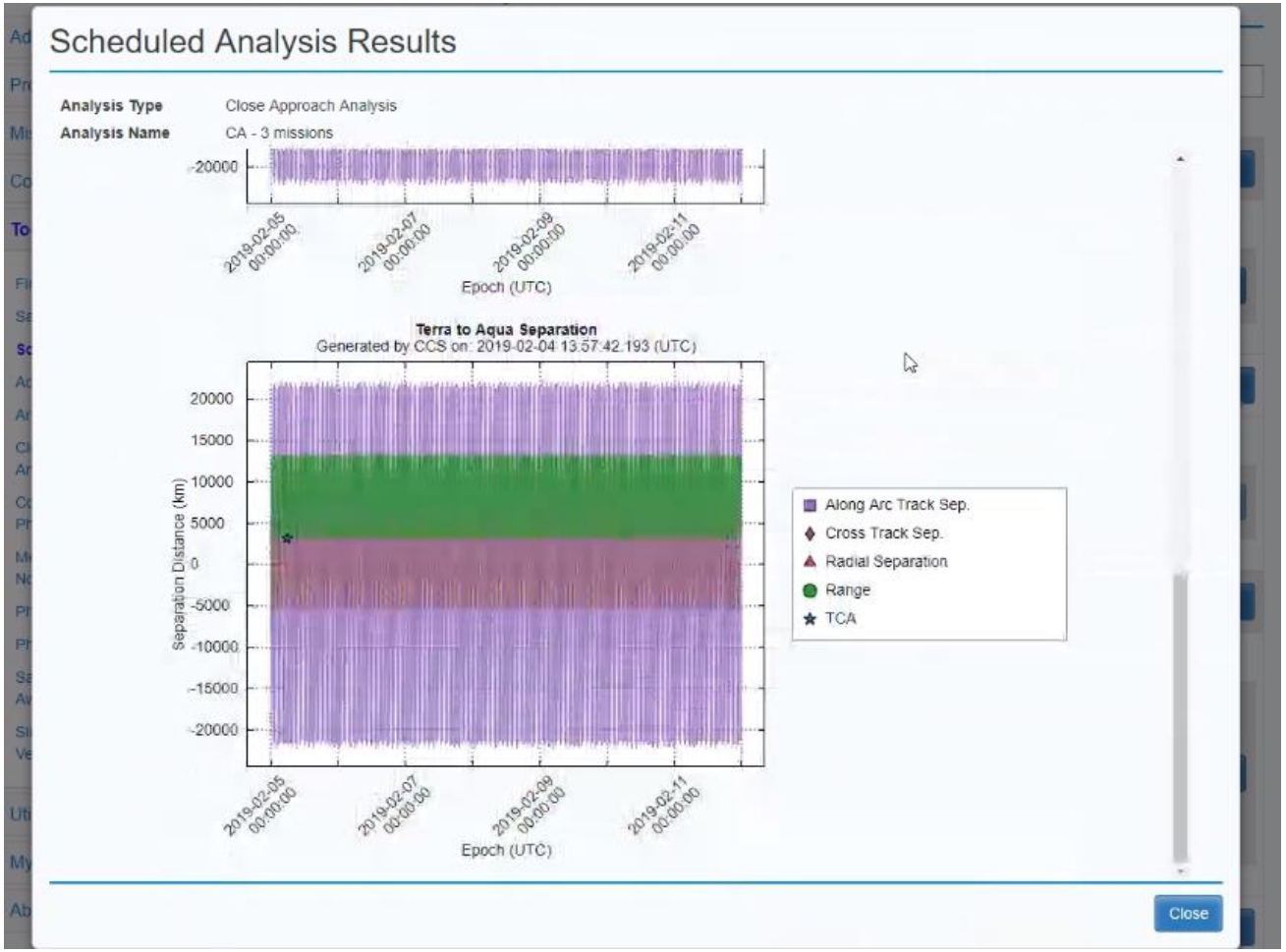
Released: 1st of May 2019



Selecting a Scheduled Analysis from the Scheduled Analysis Main Page

CCS 2019.1

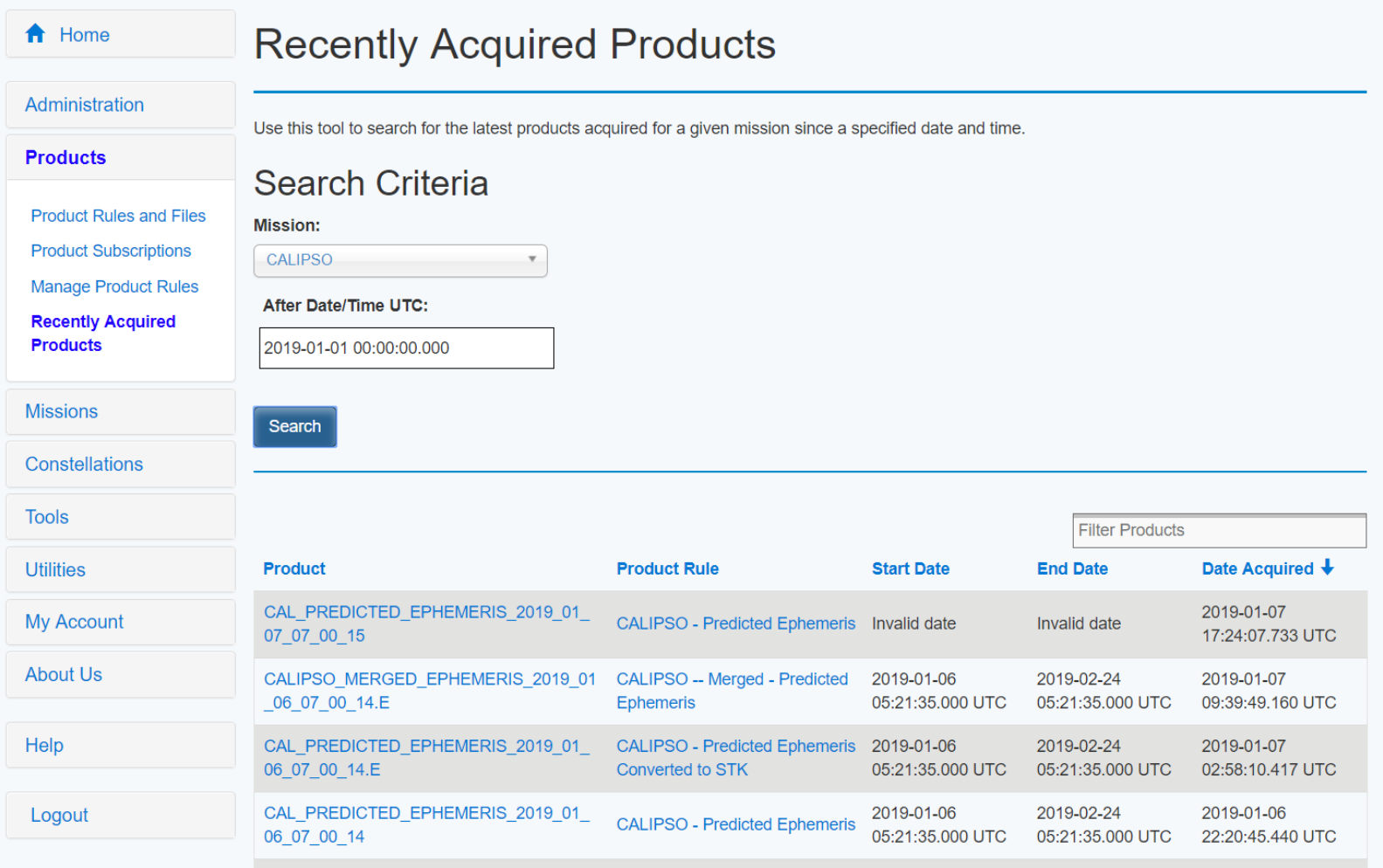
Released: 1st of May 2019



Results Page for a Scheduled Close Approach Analysis

CCS 2019.1

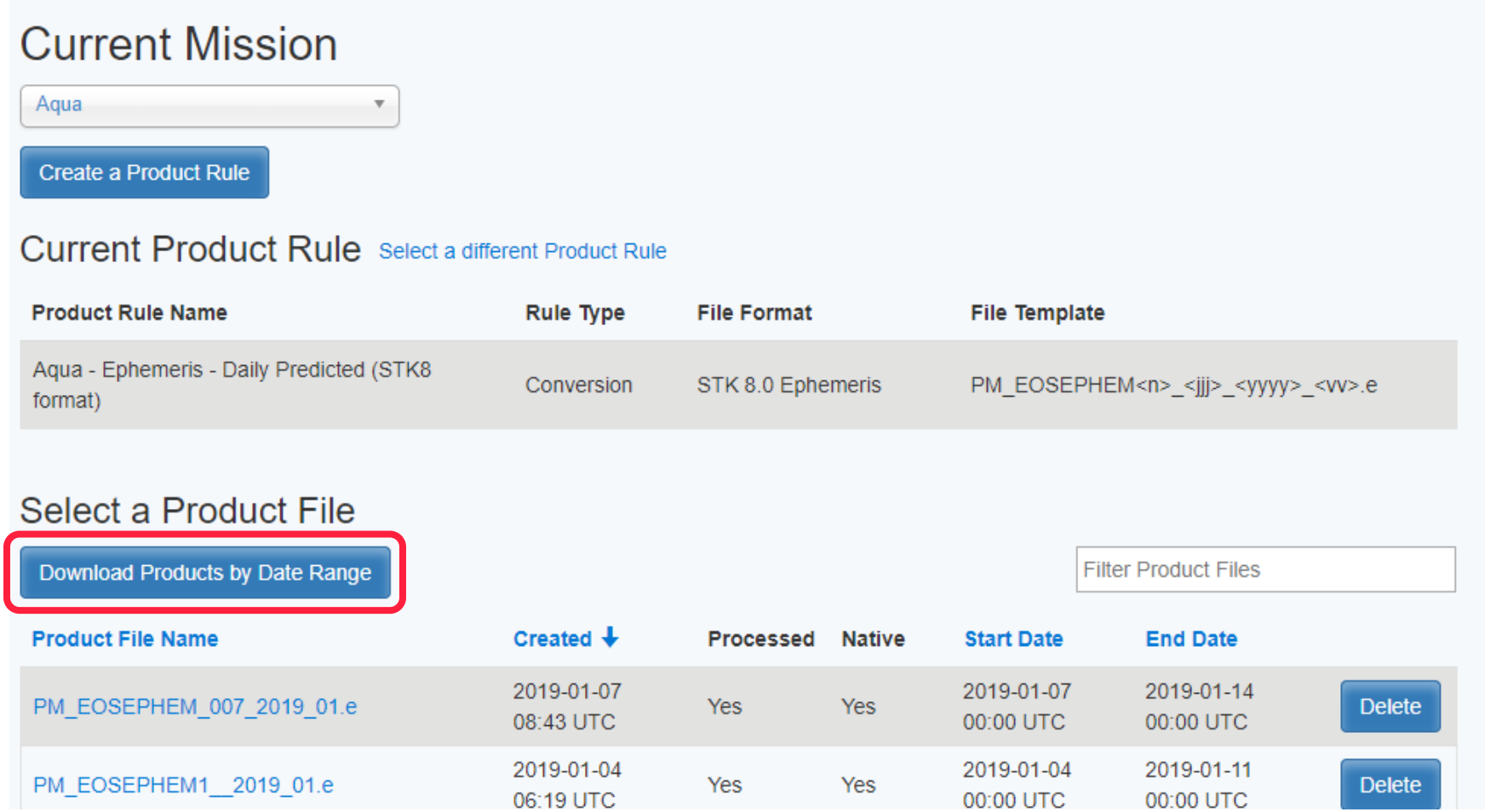
Released: 1st of May 2019



Recently Acquired Products page displays all products and rules CCS has acquired over time.

CCS 2019.1

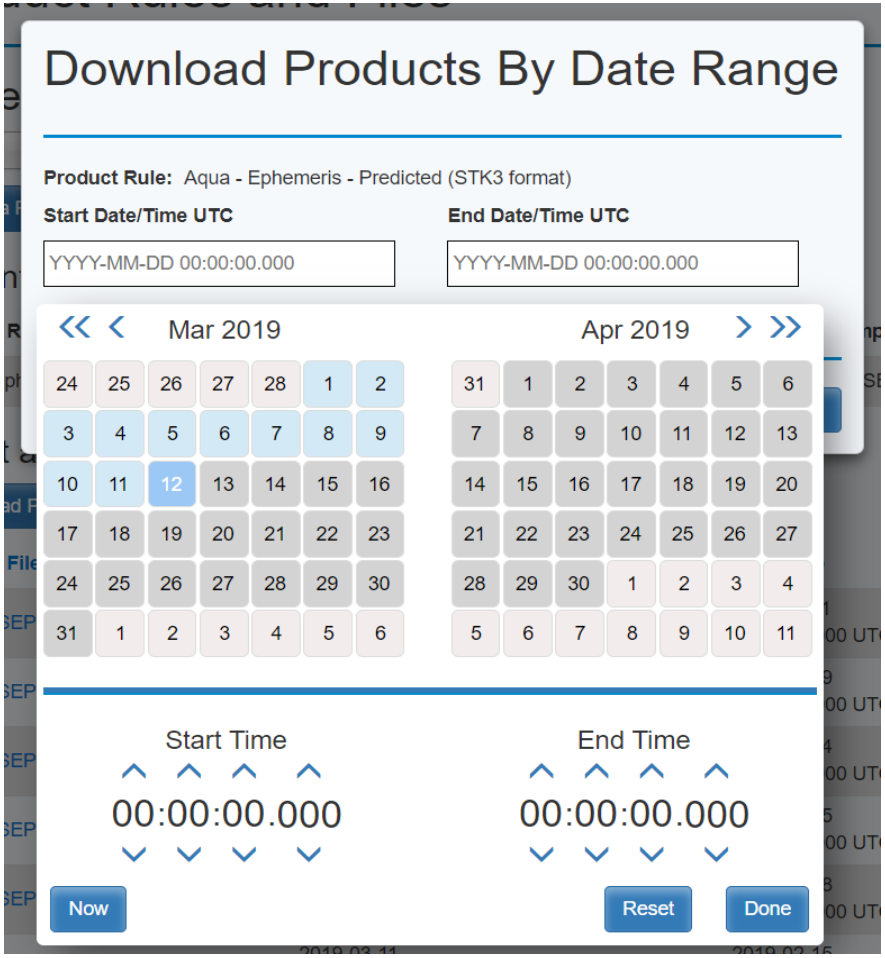
Released: 1st of May 2019



The new Bulk Download Button, found on every Product Rule page

CCS 2019.1

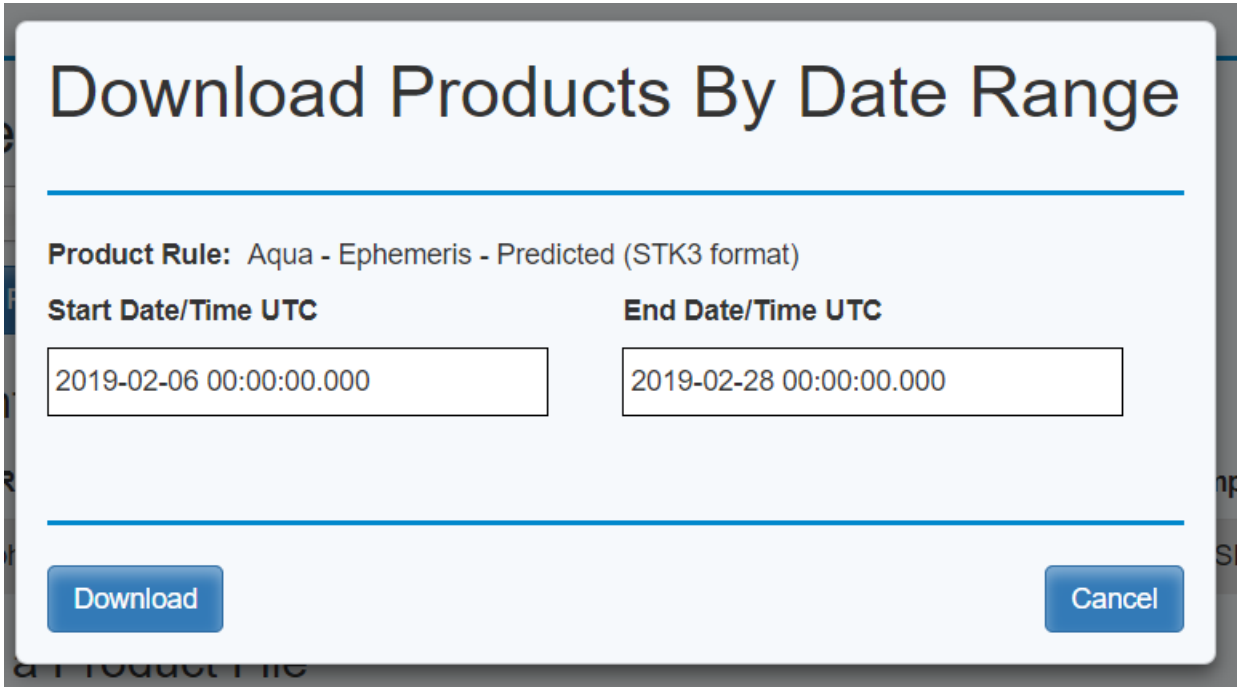
Released: 1st of May 2019



Selecting a Date Range for the Bulk Product Download

CCS 2019.1

Released: 1st of May 2019



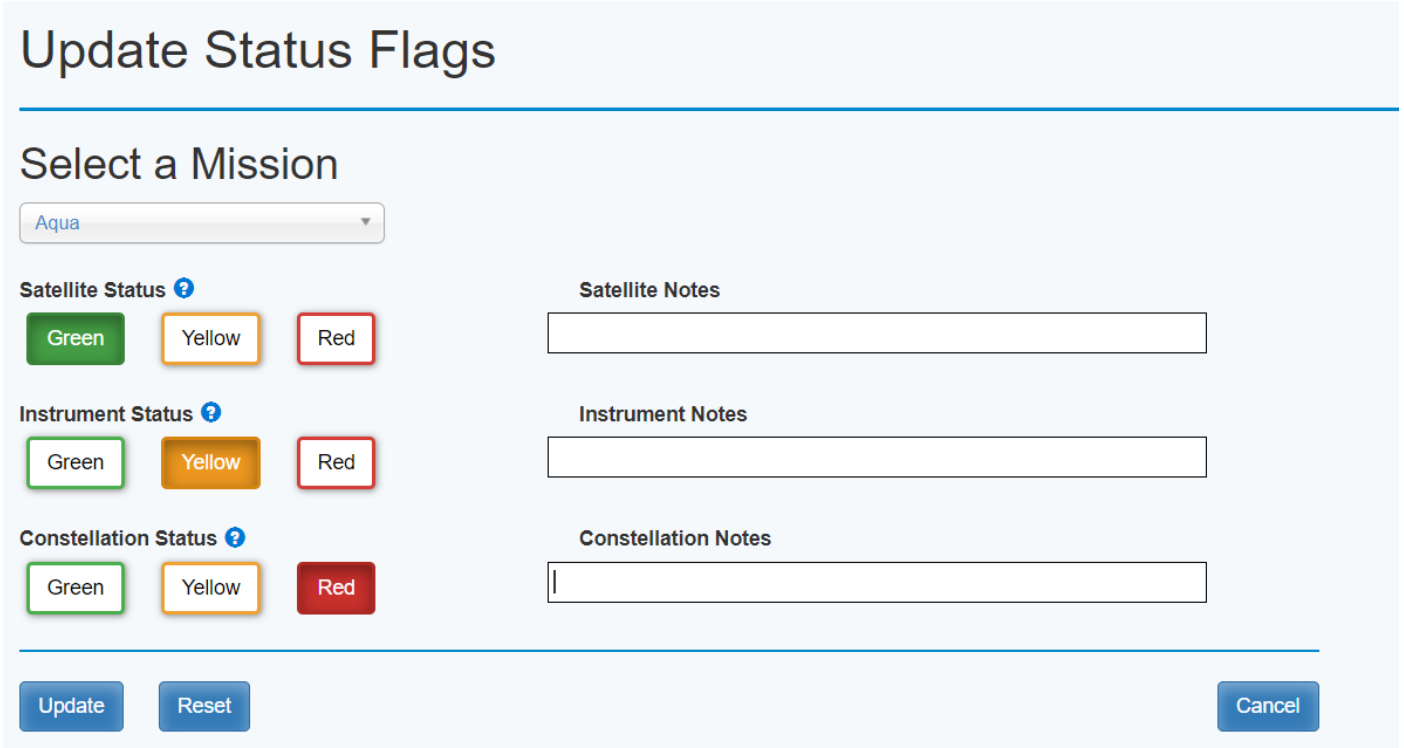
Selecting a Date Range for the Bulk Product Download

CCS 2019.1

Released: 1st of May 2019

Small updates and fixed "Pain Points:"

- Users can now log in using either their username or the email associated with their account.
- Added clearer visual for updating a mission's status.



Demo

Demo Time!

CCS 2019.2 New Features

Release: End of Summer (estimated)

- The CCS website is receiving a small facelift to help the site be more responsive on your smaller and larger screens.
- The Close Approach and Control Box emails are being updated to reduce the volume of emails received each day.
- Tools are being unified into a single form, similar to the Scheduled Analyses creation page, to help pick the right content for their inquiry.
- Subscriptions are being streamlined to allow users to send multiple products to a single FTP site.

Feedback

- What ideas or suggestions do you have?
- What are the capabilities you find most useful currently?
- What would make CCS more useful to you?
- Would additional training and/or outreach be beneficial to you?

Thank you

- Thank you for your continued support!

- For all CCS communications please contact:

ccs-support@lists.hq.nasa.gov