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| Version 2.0 | June, 2016 |
| * Released the data cube by moving it from AGDC version 1 to version 2 and porting all the associated algorithms with it.
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| Version 2.1 | 9/20/2016 |
| * Refactored the template system to be more flexible.
* Modified the WOFS water analysis process found in the python notebooks in order to optimize for a low memory footprint.
* Used the existing template in order to include the WOFS tool in the python notebooks.
* Used the existing template in order to add the WOFS tool into the CEOS Data Cube UI.
* Modified the task manager to include additional tasks such as water detection.
* Included an empty sample application template in order to add any tools in future.
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| Version 2.2 | 10/19/2016 |
| * Refactored the template system to be more flexible.
* Enabled basic parallel processing for quick output generation.
* Integrated compositor tool into the CEOS Data Cube.
* Used the existing template in order to include the Total Suspended Matter (TSM) tool in the python notebooks.
* Used the existing template in order to add the TSM tool into the CEOS Data Cube UI.
* Used the existing template in order to include the Fractional Cover RAPP tool in the python notebooks.
* Used the existing template in order to add the Fractional Cover RAPP tool into the CEOS Data Cube UI.
* Added more comments in order to improve readability of the existing source code.
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| Version 2.3 | 12/30/2016 |
| * NDVI Anomaly python notebook
* L5/7/8 Combined WOfS notebook and UI
* SLIP notebook and UI
* Basic website features such as account creation, newer menus, etc
* Refactor of database design to reduce duplication
* More documentation
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| Version 2.4 | 1/18/2017 |
| * Added Jupyter notebook demonstrating basic Data Cube metadata and data access using the AGDC-V2 and CEOS COVE APIs
* Added Jupyter notebook illustrating calculation of mean NDVI over time series data
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| Version 2.5 | 2/21/2017 |
| * Added two (2) Coastal Change products to the UI.
* Improved styling and responsiveness of UI.
* Combined Mosaics for a hybrid L7-8 product.
* Added more pixel metadata (date and satellite).
* Performed clean-up of UI source code.
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| Version 2.6 | 3/28/2017 |
| * Updated agdc-v2 codebase to latest
* ALOS, JERS, and Sentinel-1 ingestion scripts and configuration files
* Generalized ingestion script (Related to Colombia's request – meant to ingest arbitrary GeoTIFF data)
* Sentinel-1 mosaic example – Jupyter notebook
* Sentinel-1 and Landsat Clustering example – Jupyter notebook
* Sentinel-1 water detection example – Jupyter notebook
* UI based test ingestion
* Data Cube database manager functionality
* Minor UI updates, documentation, and refactoring
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| Version 2.7 | 6/2/2017 |
| * Updated documentation, notebook examples, source code with Leaflet
* Tweaked configuration files/scripts for the newer Landsat Collections data
* Added Sentinel-1 preprocessing script cloned from a GA repo
* Added PyCCD implementation, Clustering utility, SAR data processing utility and notebook example
* Auto generation of UI pages ability, automation for UI setup –only configuration details
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| Version 2.8 | 7/10/2017 |
| * Cloud cover percentage algorithm on Jupyter Notebooks and UI
* Urbanization algorithm on Jupyter Notebooks and UI
* Lake Chad Case Study with GPM/Landsat – Tutorial Jupyter Notebooks
* 2D plots within the UI
* Data Cube manager functionality including interaction with the database using a UI, configuration validation, add/delete datasets and dataset types, and ingestion using UI
* Ingestion on-demand
* Bug fixes and optimizations for all utilities/UI pages
* Updated documentation, including new ingestion documentation and improvements throughout our existing documentation
* Integration of visualization tool
* Transect plot UI tool and notebook
* Additional ingestion/dataset configuration files
* Updated core AGDC/ODC codebase to latest stable version based on the official ODC release
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| Version 2.9 | 9/1/2017 |
| * Example Jupyter notebooks showcasing Data Cube algorithms and functionality
* Spectral indices calculator UI application
* New TSM UI products including max, min, and variability
* General refactor and update of various UI files include staticfiles, database dumps, and documentation
* Utility reorganization and a start to automated testing
* Changes to Data Cube on Demand (Sub-setting of Cube) that allows for ingestion requests from existing ingested data
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| Version 2.10 | 9/14/2017 |
| * WCS implementation for fetching data from a remote data cube.
* WCS test scripts/data for testing the newly developed WCS implementation.
* WCS documentation such as user’s guide, getting started guide, etc.
* WCS url made available for testing the QGIS ODC Plugin
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| Version 2.11 | 10/11/2017 |
| * Plotting utility to the UI
* Refactoring source code
* Bug fixes to UI
* Addition of new ingestion configuration
* More documentation
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| Version 2.12 | 02/04/2018 |
| * QGIS ODC Plugin
* Sentinel-1 notebook for exploration
* Advanced Land Observation Satellite (ALOS) notebook for exploration
* Python Continuous Change Detection (PyCCD) notebook with new plots
* Water Across Synthetic Aperture Radar Data (WASARD) (on Sentinel-1) notebook
* Water Across Synthetic Aperture Radar Data (WASARD) (on ALOS) notebook
* Geometric median mosaicking of Landsat imagery (notebook and UI)
* Transect and Hovmoller Plots notebook
* Clustering (K-means) notebook
* Ghana basic training notebooks (RGB, spectral indices, etc.) (for its own EC2 instance)
* Refactoring source code
* Bug fixes to UI
* Additional documentation on installation, ingestion, and analysis, etc. including common mistakes and their their resolution
* Addition of new ingestion configuration such as ALOS ScanSAR, etc
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| Version 2.13 | 03/30/2018 |
| * Jutyper notebooks with regions from Caqueta, Samoa, Tonga, South Africa, Honduras with Landsat, S1, ASTER DEM, ALOS2 PALSAR ScanSAR data
* Jutyper Notebooks such as Deutscher algorithm, NDVI trend, NDVI Anomaly, pixel\_qa visualization/report
* Refactoring source code: general reorganization of notebook utilities/front end UI code
* Additional documentation on installation, ingestion, and analysis, etc.
* Addition of new ingestion configuration such as S1 from GEE, ALOS ScanSAR, etc.
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| Version 2.14 | 06/30/2018 |
| * NDVI Thresholds notebook
* NDVI Standard Deviation notebook
* NDVI Phenology notebook
* Clustering notebook with a plot to indicate the percentage of pixel in each class
* Random Forest machine learning notebook for land classification
* EVI notebook to support "looping over chunks" instead of processing monolithic data in-place
* Time-series plot for a single band statistic (CometTS-like)
* Bug fixes to UI
* Change from line to scatter plot to the UI time-series pixel drill chart
* CEOS Data Cube User Interface User’s Guide
* Refactoring source code: general reorganization of notebook utilities/front end UI code
* Additional documentation on installation, ingestion, and analysis, etc.
* Addition of new ingestion configuration such as S1 from GEE, ALOS ScanSAR, etc.
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| Version 2.15 | 09/30/2018 |
| * Updated NDVI Anomaly notebook
* Updated NDVI Phenology notebook with newer plots
* Updated NDVI STD notebook
* Updated ALOS PALSAR Demo notebook with newer analysis
* Updated Landsat-based WASARD notebook
* Updated Sentinel-1 Deutchser algorithm notebook
* A new Landsat scene analysis notebook
* Updated Random Forest machine learning notebook for land classification
* Utilities functions for plotting custom timeseries
* Several bug fixes to the UI in config and source code
* Geometric Median functionality in the UI
* Refactoring source code: general reorganization of notebook utilities/front end UI code
* Additional documentation on installation, ingestion, and analysis, etc.
* Move from agdc-v2 to the latest ODC core for all the CEOS-SEO systems – UI/Notebooks.
* Documentation update from agdc-v2 to the latest ODC core for all the CEOS-SEO systems.
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| Version 2.16 | 10/26/2018 |
| * UN SDG Water Extent Notebook
* UN SDG Water Extent Notebook on S3 L-1 Landsat index data
* UN SDG Urbanization Notebook
* UN SDG Land Degradation Notebook
* Shallow Water Bathymetry Notebook
* Addition of a shapefile capability to the mosaic notebook
* Demo Notebook for allowing users to input UTM coordinates (Easting/Northing) vs. Lat-Lon
* Addition of Min-NDVI to notebook library for mosaics
* Several bug fixes to the UI in config and source code
* Refactoring source code: general reorganization of notebook utilities/front end UI code
* Additional documentation on installation, ingestion, and analysis, etc.
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