



# GHRC Python Libraries/notebooks

Manil Maskey

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- pyCMR

- Python Client Library for Common Metadata Repository
- CMR Search/Ingest/Update/Delete/Verification

- Airborne Data Recipes

- HS3 datasets

- System for all EOSDIS metadata for all EOSDIS data holdings
- Designed to handle metadata at the Concept level
  - beyond just Collections and Granules
- Designed to handle hundreds of millions of metadata records
- Standards compliant
- Improved metadata quality, consistency, and usability for end users

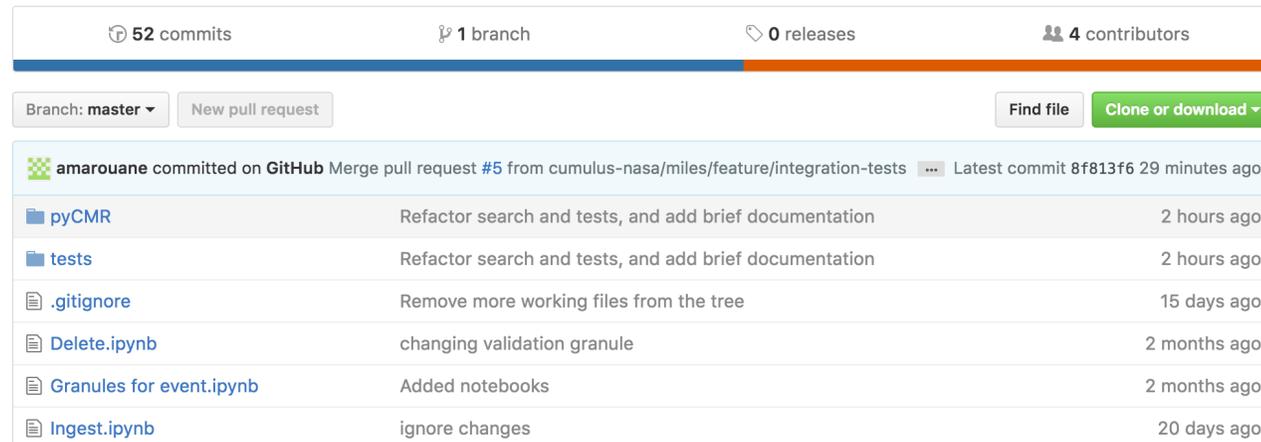
- **Goals:**

- Hide low level message details
- CMR response into python data structure
- Python workflow
- Validation
- Eventually - a workflow editor
- Useful for other DAACs

- Uses CMR REST API
- Collection and Granule Concepts
- Search for collection and granules using CMR allowed parameters
- Download granules
- Ingest/Update/Delete collection and granule
- Modular
- Extendible

- Opensource
  - Contribution from community
- Cloud Analysis Toolkit to Enable Earth Science (CATEES)
- Presentations:
  - SERVIR Geospatial Information Technology Exchange
  - Earthdata Unified Technical Committee Meeting

Client for CMR APIs



The screenshot shows a GitHub repository page for 'Client for CMR APIs'. At the top, it displays repository statistics: 52 commits, 1 branch, 0 releases, and 4 contributors. Below this, there are buttons for 'Branch: master', 'New pull request', 'Find file', and 'Clone or download'. The main content area shows a commit history table with the following entries:

Commit	Description	Time
amarouane committed on GitHub Merge pull request #5 from cumulus-nasa/miles/feature/integration-tests		Latest commit 8f813f6 29 minutes ago
pyCMR	Refactor search and tests, and add brief documentation	2 hours ago
tests	Refactor search and tests, and add brief documentation	2 hours ago
.gitignore	Remove more working files from the tree	15 days ago
Delete.ipynb	changing validation granule	2 months ago
Granules for event.ipynb	Added notebooks	2 months ago
Ingest.ipynb	ignore changes	20 days ago

- Mainly for HS3 datasets
  - Data access, subset, and visualization
- Uses OPeNDAP
- Contributed to Cloud Analysis Toolkit to Enable Earth Science (CATEES) effort





## Discussion

1. Do you see yourself using these libraries?
2. What else can we add to the libraries?

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