PO.DAAC
PHYSICAL OCEANOGRAPHY
DISTRIBUTED ACTIVE ARCHIVE CENTER

HITIDE

The **HI**gh-level **T**ool for **I**nteractive **D**ata **E**xtraction (**HITIDE**) is a web-based interface facilitating the search, imaging, and extraction of select Level 2 "swath" data products from PO.DAAC's archive.

Richard Kim
Senior Science Software Engineer
NASA Jet Propulsion Laboratory

Challenges

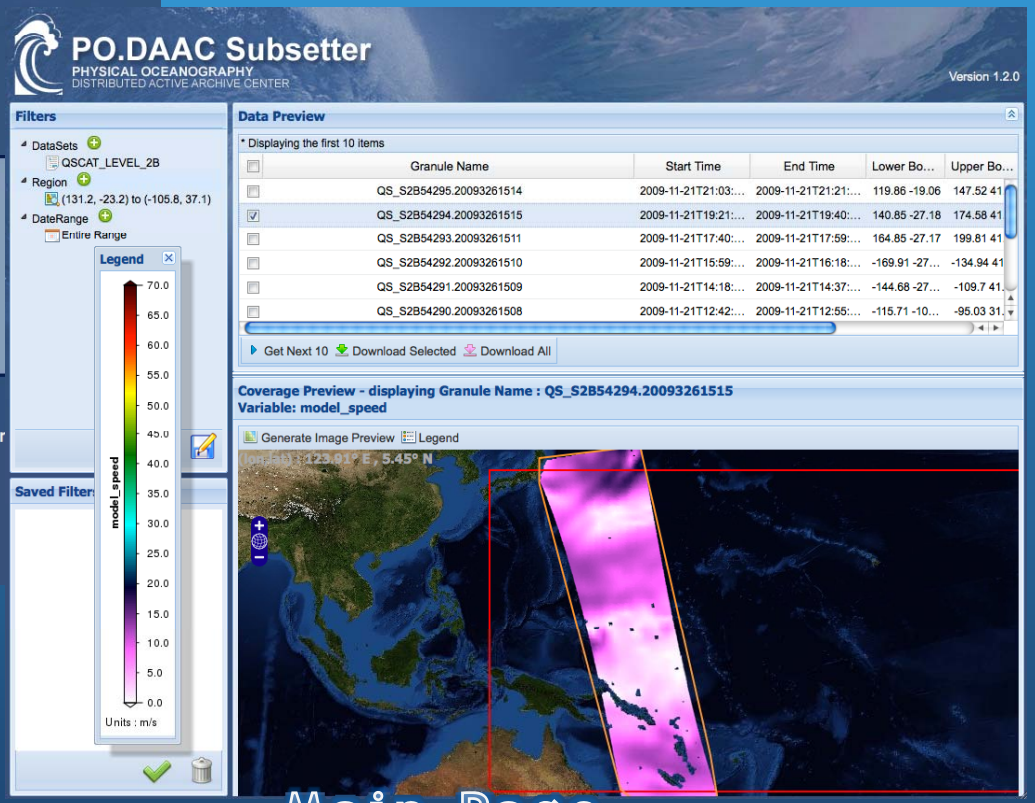
- Allow users to search Level 2 granules (non-gridded), preview them, subset, and download them.
- Intuitive GUI
- Design to expand

Datasets

- AIRS Carbon Dioxide (HDF4)
- GHRSST Level 2P MODIS Aqua Satellite (NetCDF3 CF)
- GHRSST Level 2P MODIS Terra Satellite (NetCDF3 CF)
- GHRSST Level 2P AMSR-E (NetCDF3 CF)
- MODIS AQUA Sea Ice (HDF4)
- MetOp-A ASCAT Level2 (NetCDF3 CF)
- OSTM/Jason-2 (NetCDF3 CF)
- SeaWinds on QuickSCAT (HDF4)

User Interface

Wizard Mode



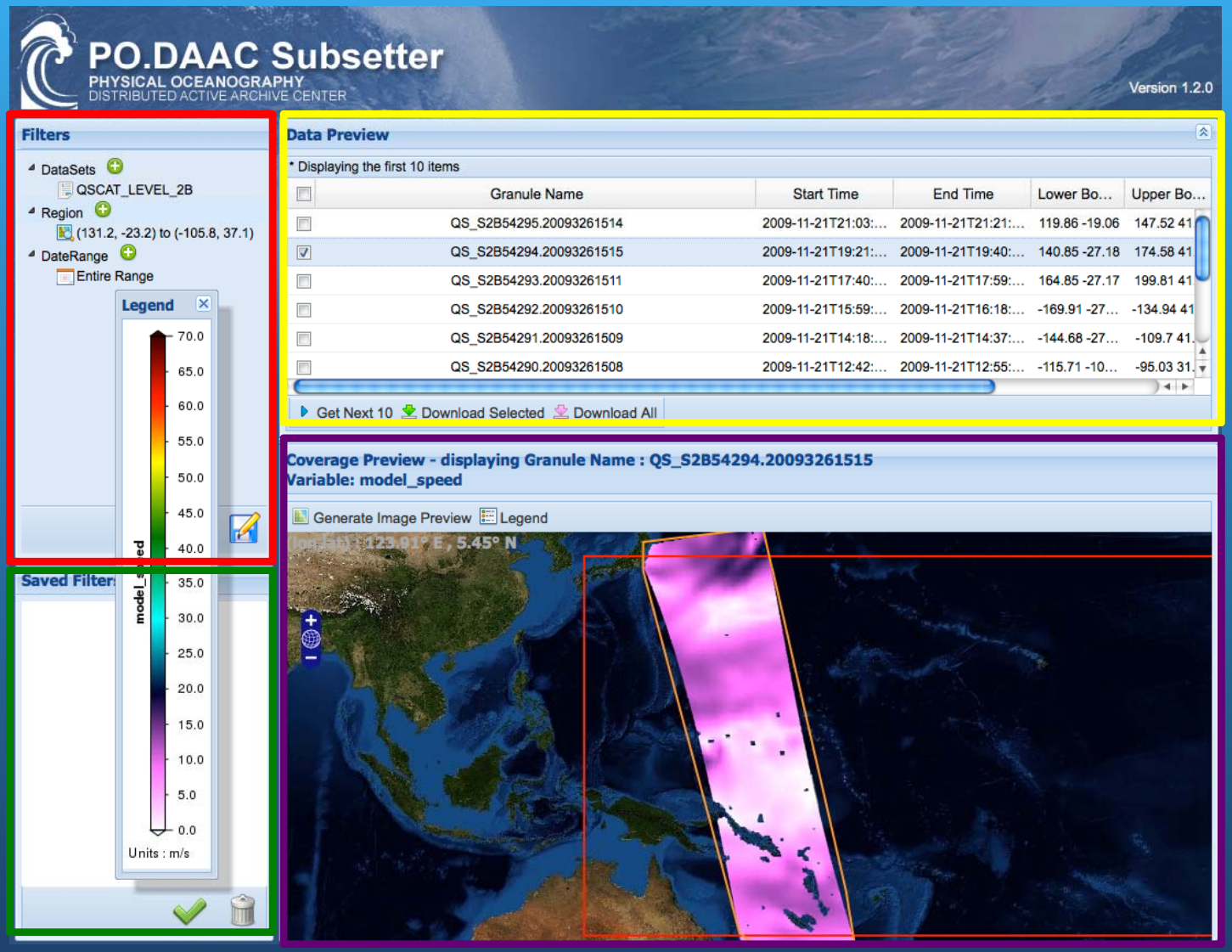
Main Page

Two ways to search.

User Interface

Search filters. Dataset, spatial, and temporal constraints

Saved filters.



Search results in table

Coverage preview, image preview

Image Preview

Select what to image from HDF or NetCDF

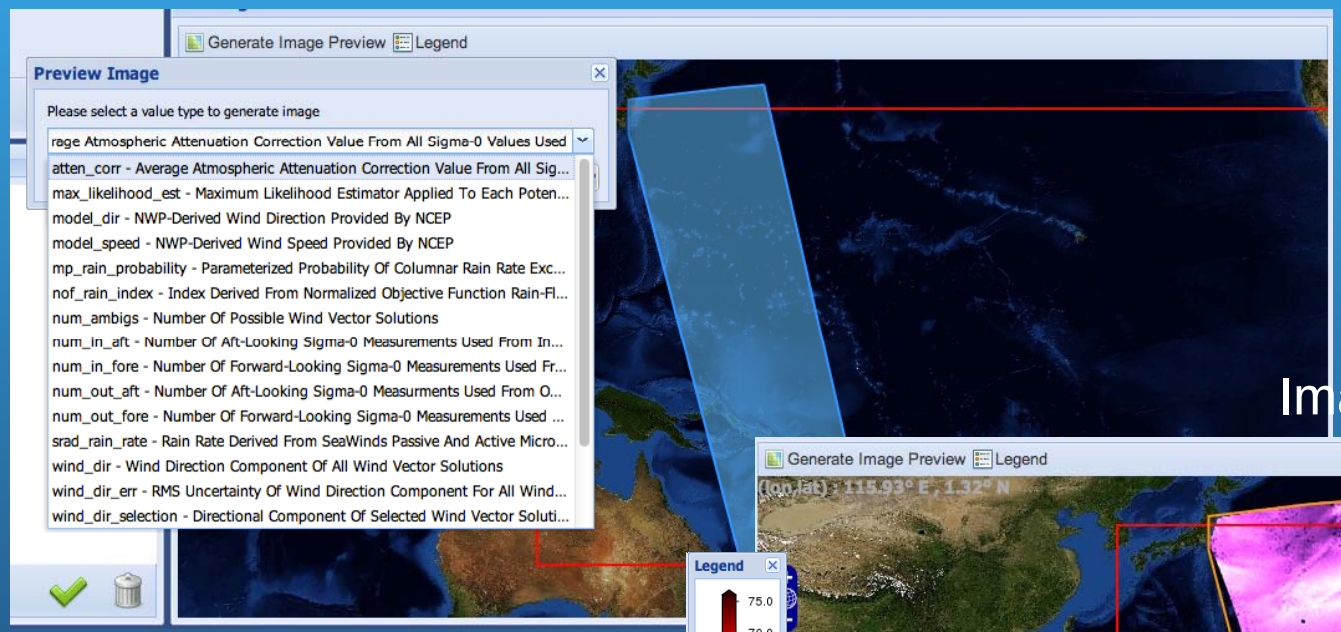


Image generation on the fly

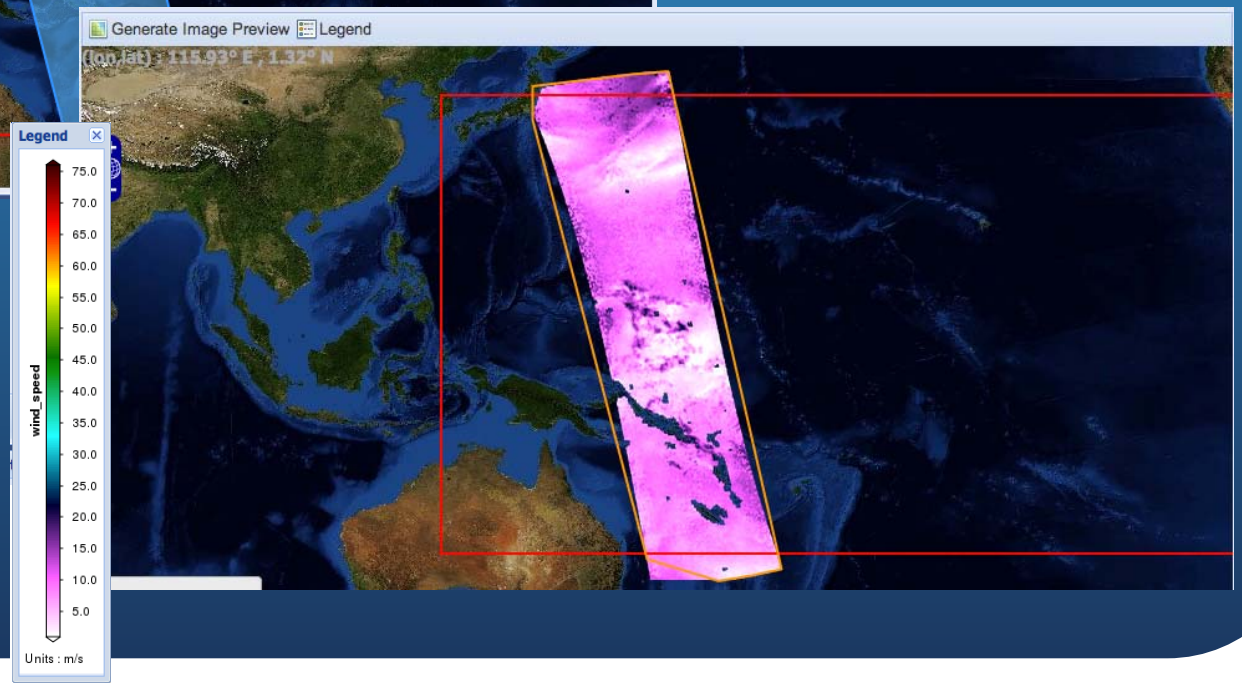
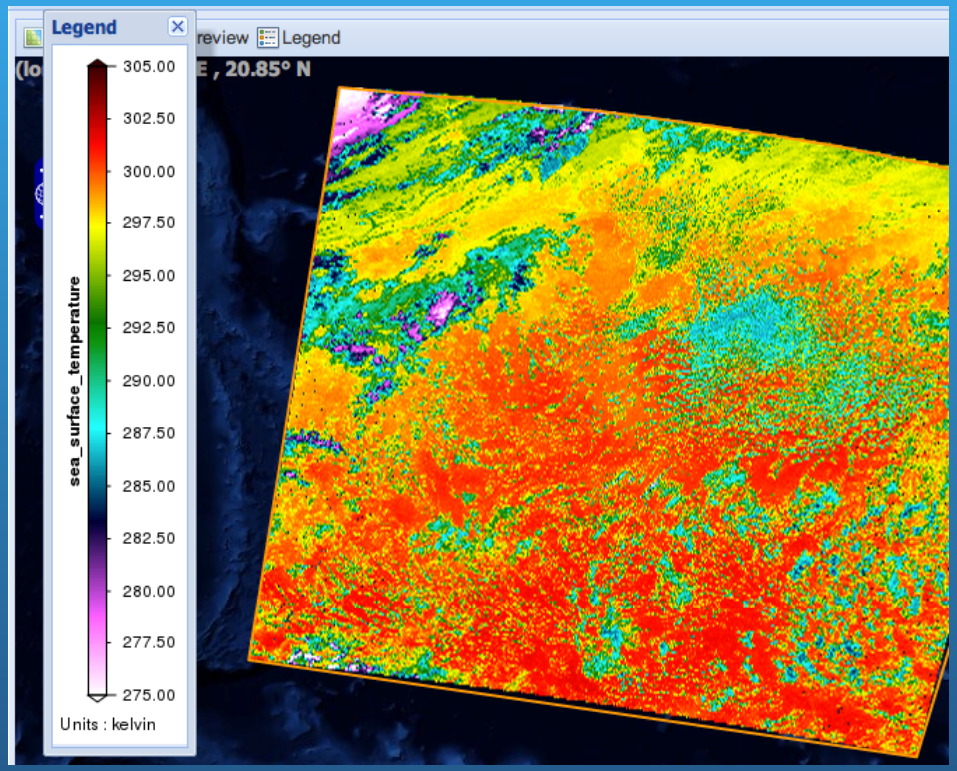
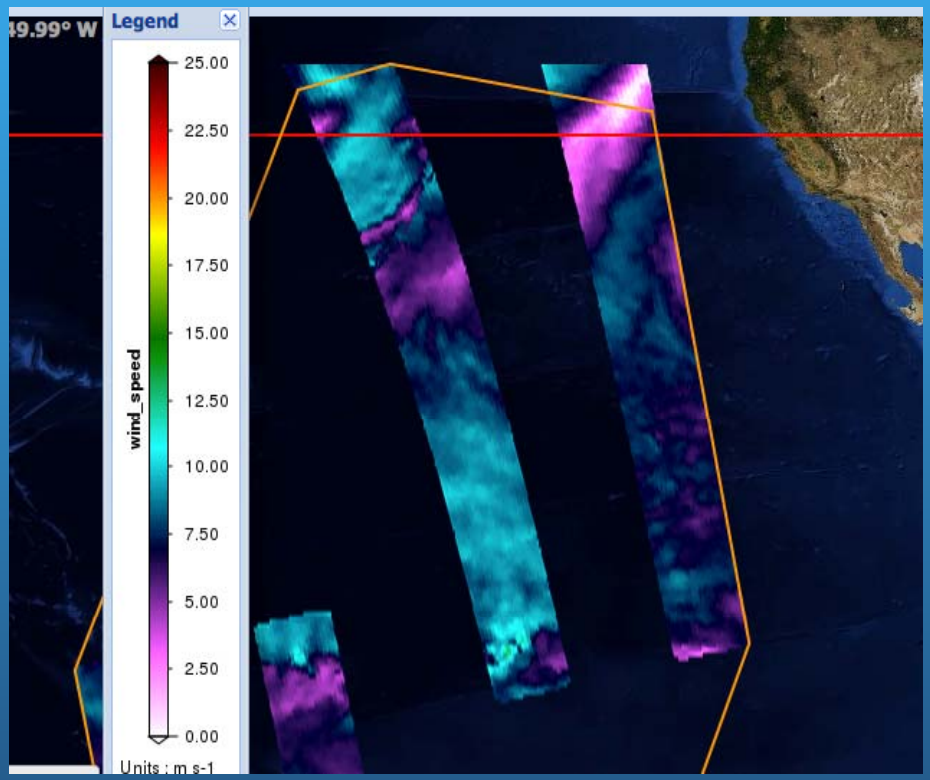


Image Preview Examples

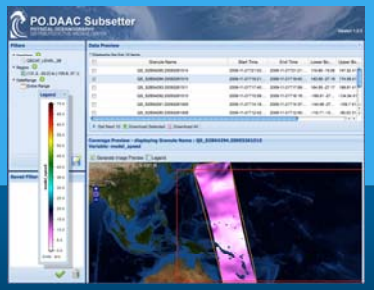


MODIS A - Sea Surface Temperature



ASCAT – Wind Speed

Under the Hood (SOA)



HITIDE GUI

WebServices through HTTP

Search WebService

Image WebService

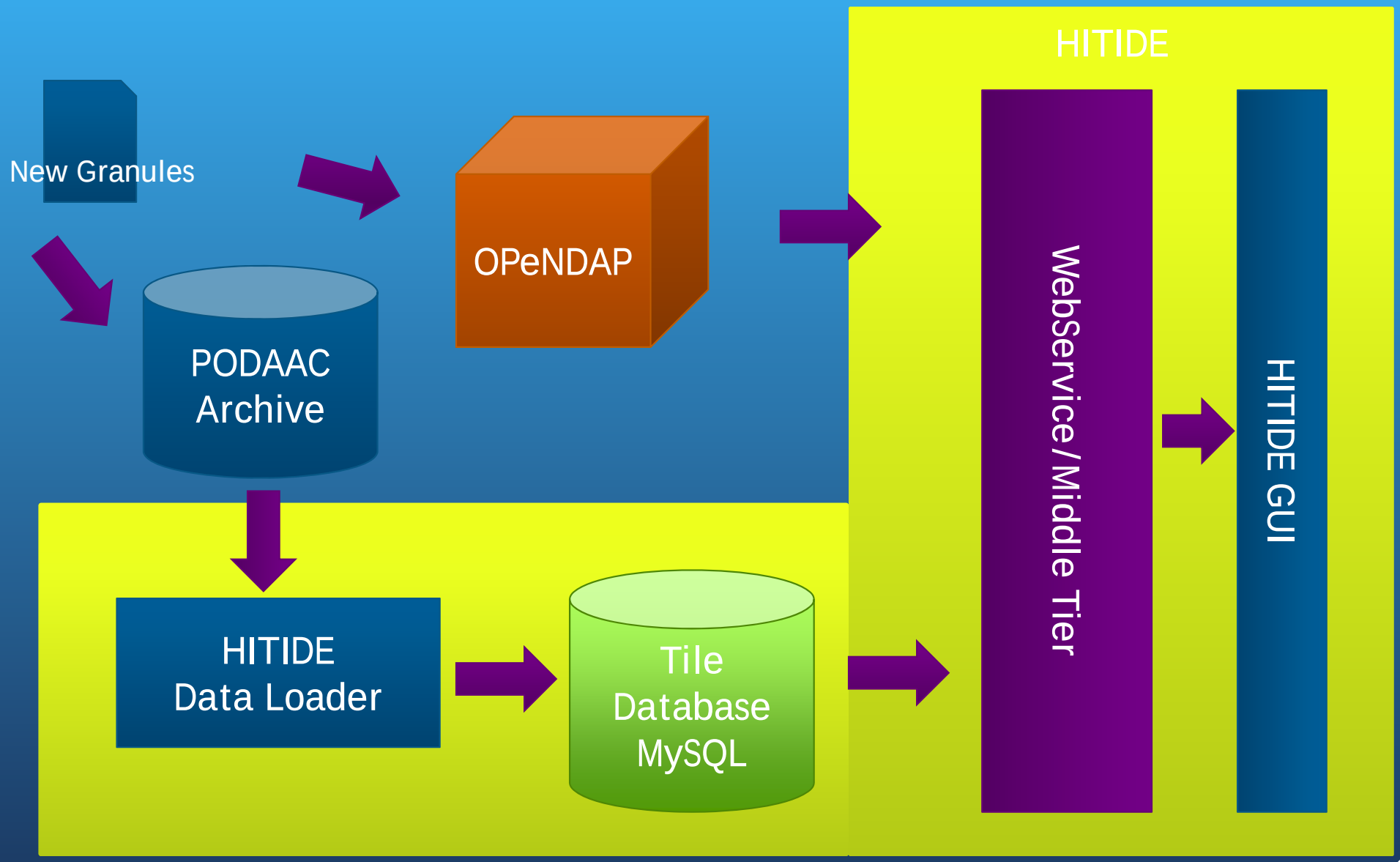
Extract WebService

Lfremer

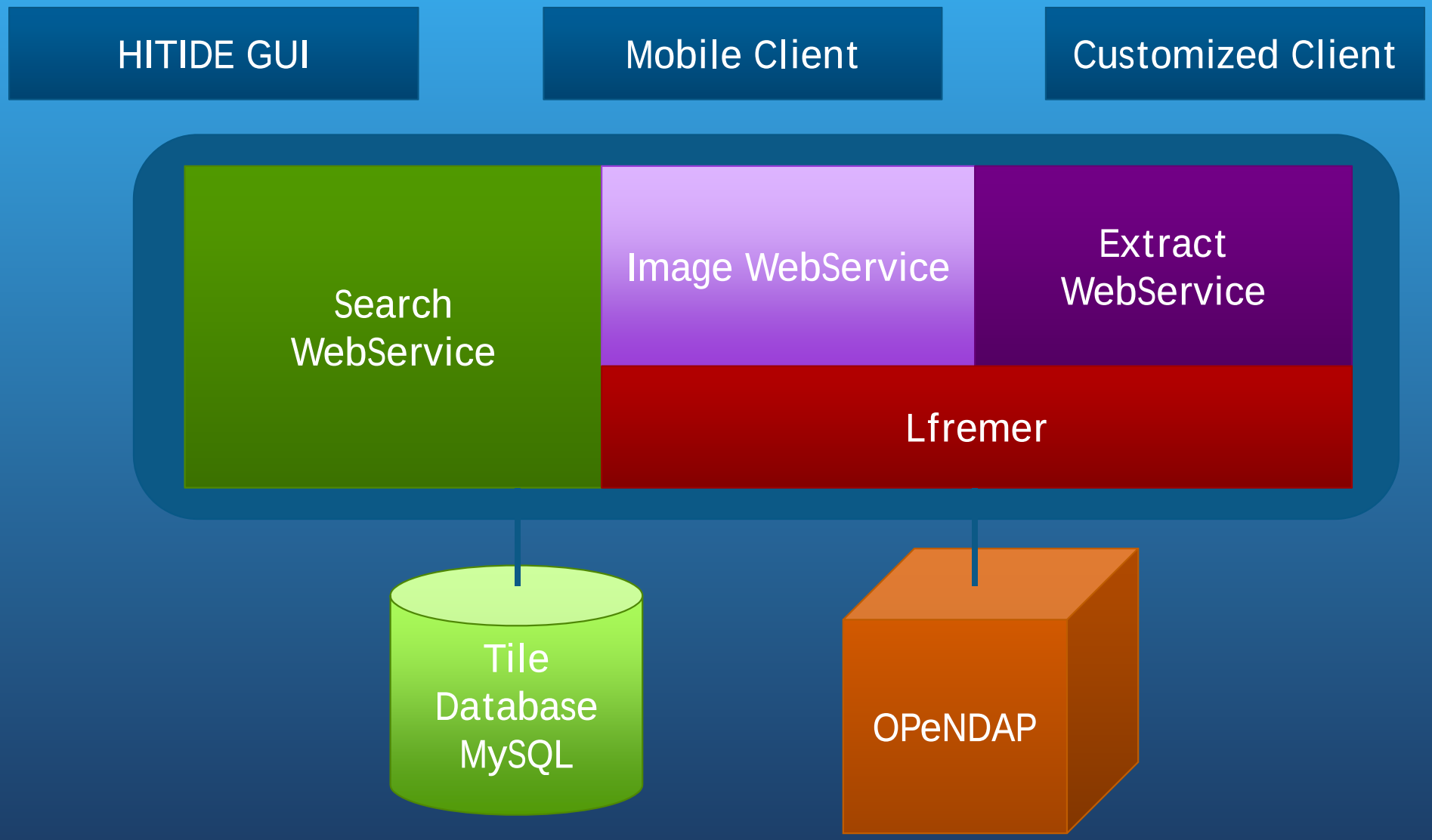
Tile Database MySQL

OPeNDAP

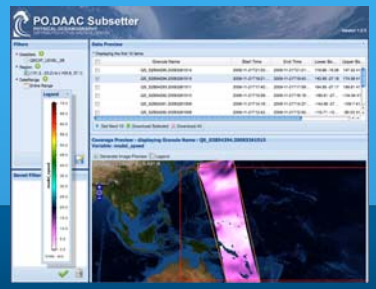
Dataflow


HITIDE
New Granules
OPeNDAP
PODAAC
Archive
WebService/Middle Tier
HITIDE GUI
HITIDE
Data Loader
Tile
Database
MySQL

Allows Multiple Clients



Different Engine



HITIDE GUI

WebServices through HTTP

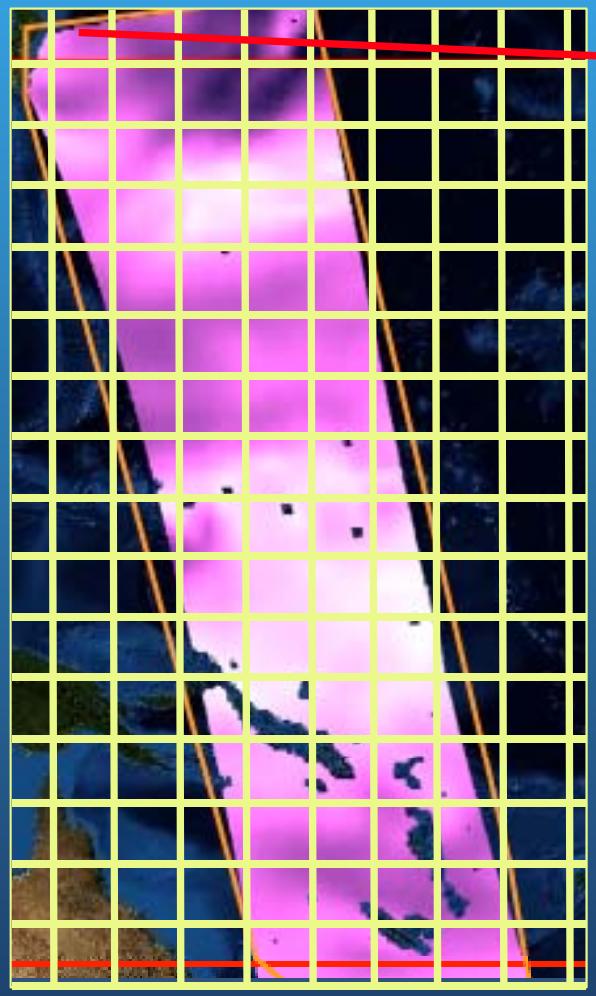
Level 3 Gridded Data Search WebService	Level 3 Gridded Data Image WebService	Level 3 Gridded Data Extract WebService

Near future plan

- HITIDE Beta released. Will be in operation.
- Faster performance search through NoSQL db or indexer such as Apache Solr
- Allow statistical variable search
- Faster performance Imaging and extracting
- Color Palettes for image preview
- Support level 3 & 4 data

Extra

Tile Database



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13847129	1938592	1999-07-19 ...	1999-07-19 ...	0	0
13847130	1938592	1999-07-19 ...	1999-07-19 ...	0	0
13847131	1938592	1999-07-19 ...	1999-07-19 ...	0	0
13847132	1938592	1999-07-19 ...	1999-07-19 ...	0	0
13847133	1938592	1999-07-19 ...	1999-07-19 ...	0	0
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13847137	1938592	1999-07-19 ...	1999-07-19 ...	0	0
13847138	1938592	1999-07-19 ...	1999-07-19 ...	0	0

Each tile cell is one row in the Database table.