

# The CoastWatch Utilities 2021 Update

Peter Hollemans

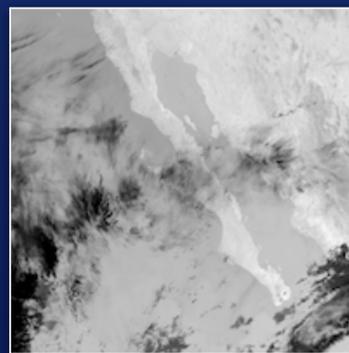
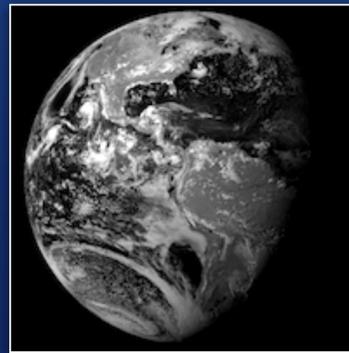
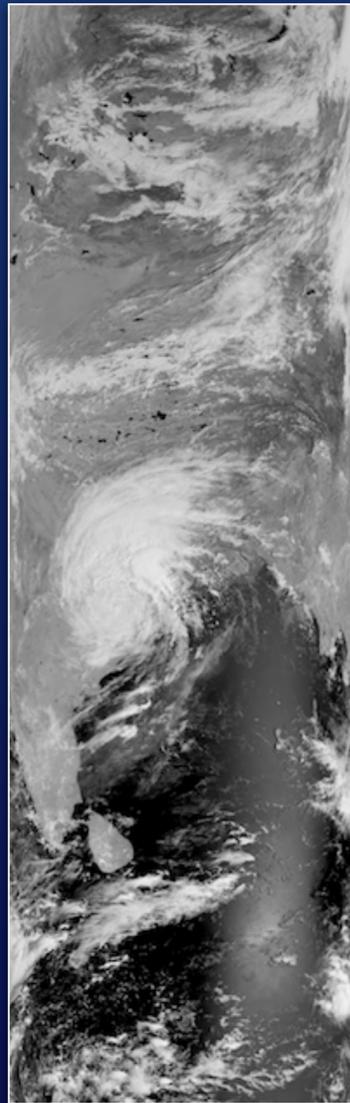


Terrenus Earth Sciences for  
NOAA/NESDIS CoastWatch Central Operations

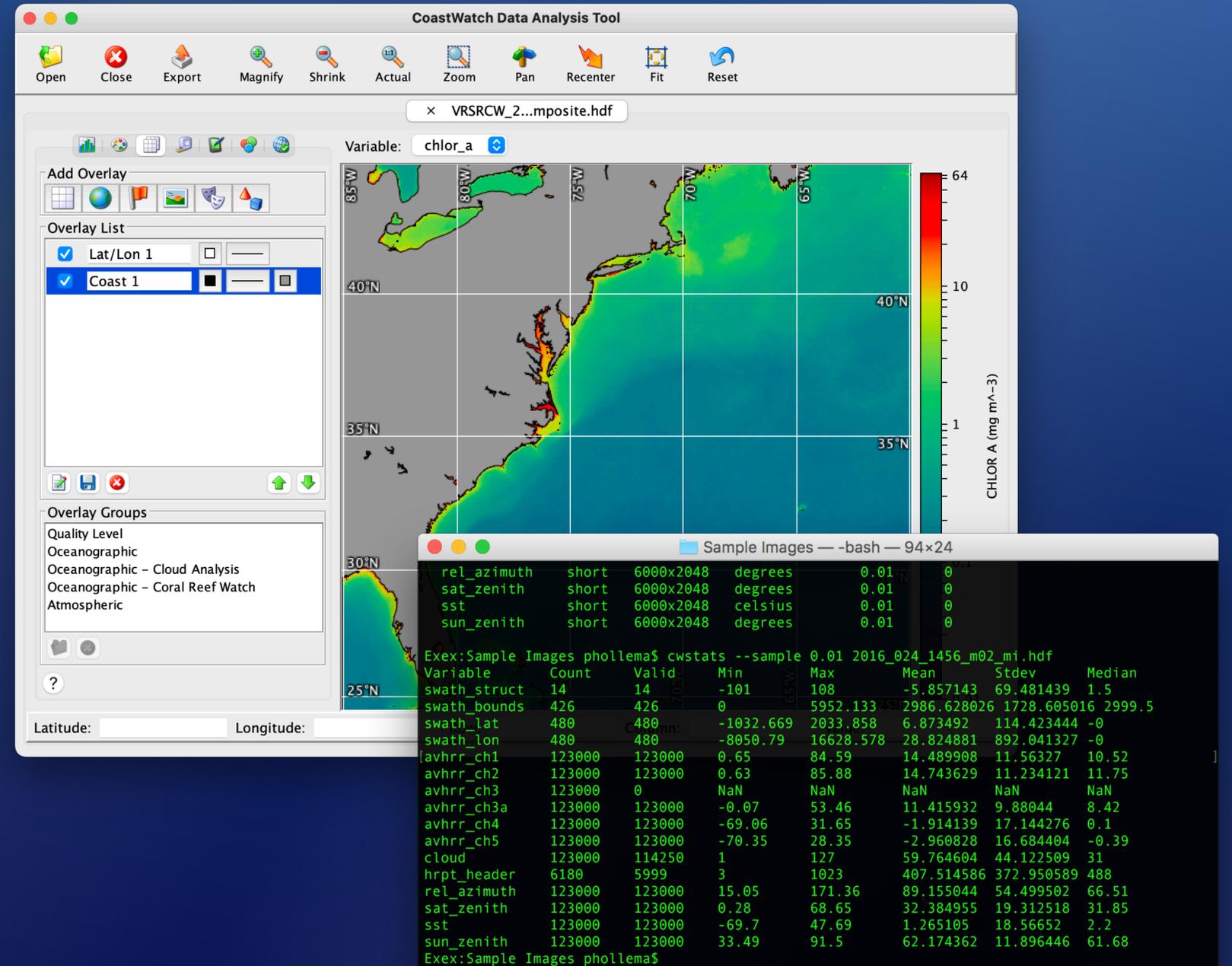


CoastWatch Annual Meeting, Virtual Version (East Coast Node), Sep 2021

# The CoastWatch Utilities are designed to process and transform satellite data in useful ways for data producers and users.



HDF  
NetCDF  
+ more ...

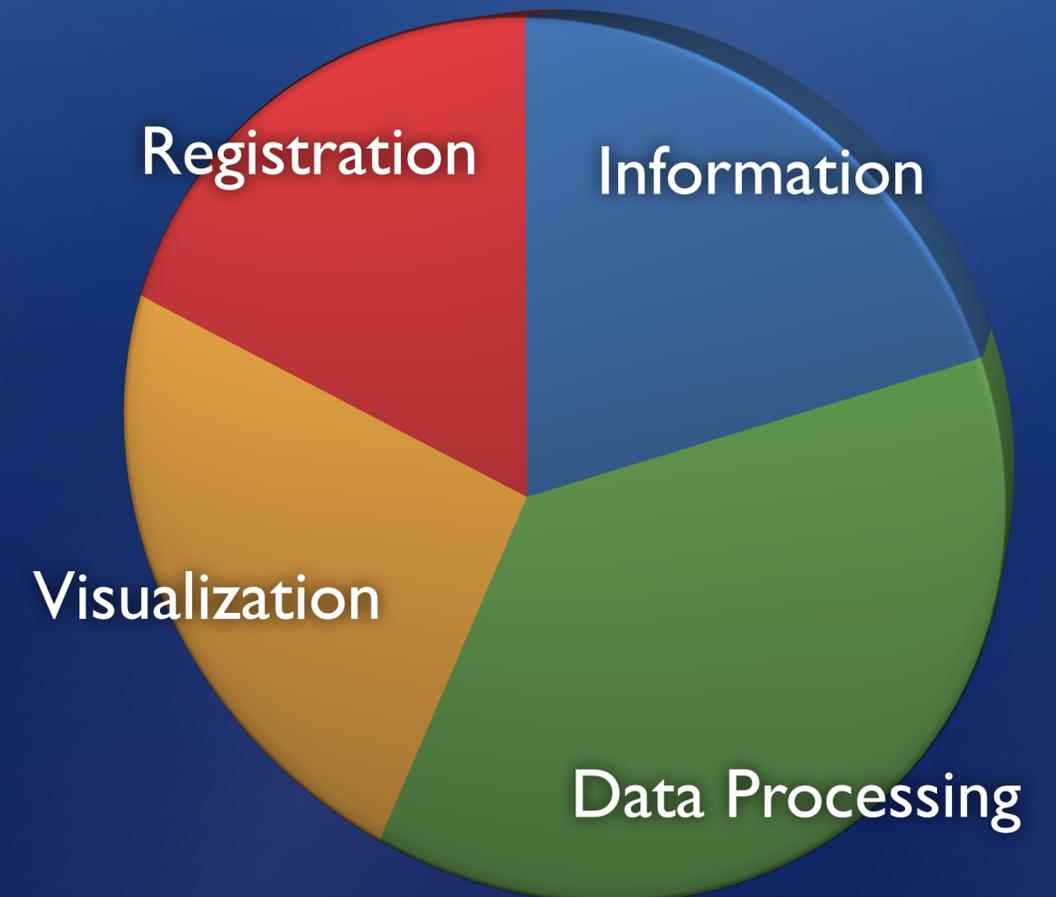


The software is actively used by a number of groups and forms an essential part of data processing systems.

Use of  
functionality



1	CW central operations
2	ACSPO Regional Monitor for SST
3	East Coast & Great Lakes Nodes
4	Commercial data users
5	NOAA/NESDIS staff (ad hoc)
6	CDAT users (global)



New versions are created twice a year and distributed from the CoastWatch central operations website.

~6-month release schedule

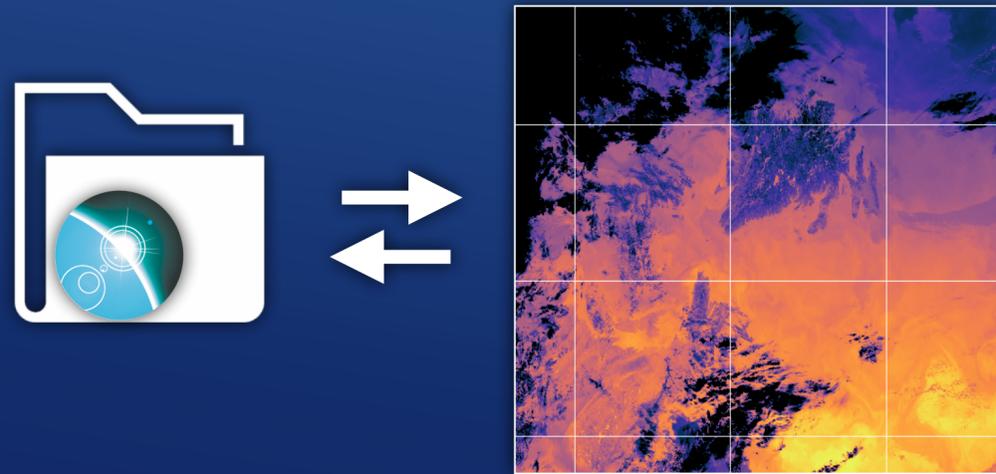
Aug 2020	3.6.0
Mar 2021	3.6.1
Sep 2021	3.7.0



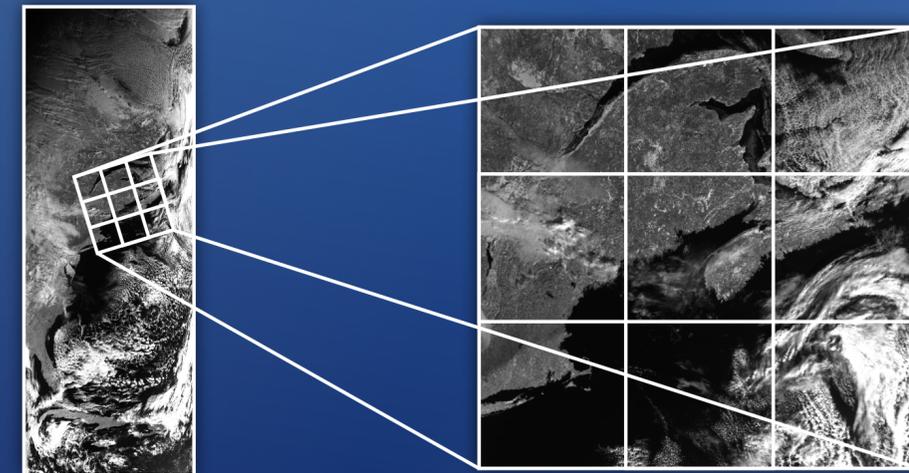
Installable packages: [coastwatch.noaa.gov](https://coastwatch.noaa.gov) (look under User Resources)

Open source: [github.com/phollemans/cwutils](https://github.com/phollemans/cwutils)

# The latest version includes a number of useful improvements.



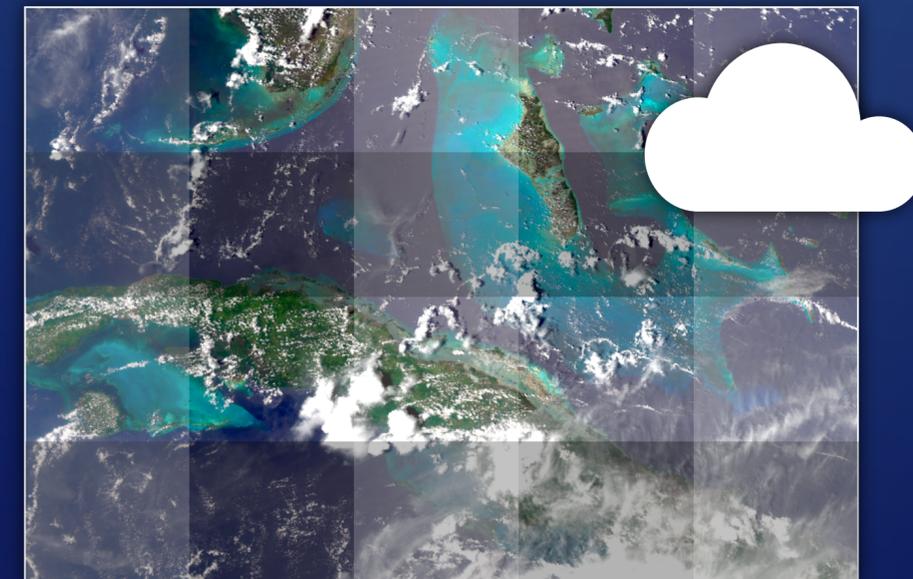
NetCDF file read/write



Registration algorithms

```
phollema — less — man cwcomposite — 80x24
CWCOMPOSITE(1)      User's Reference Manual      CWCOMPOSITE(1)
NAME
  cwcomposite - combines a time series of earth data.
SYNOPSIS
  cwcomposite [OPTIONS] input [input2 ...] output
  cwcomposite [OPTIONS] --inputs=FILE output
Options:
  -c, --coherent=VARIABLE1[/VARIABLE2[...]]
  -h, --help
  -k, --keephistory
  -m, --match=PATTERN
  -M, --method=TYPE
  -p, --pedantic
  * --serial
  -t, --collapsetime
  -v, --verbose
  -V, --valid=COUNT
  --version
```

Documentation



Cloud optimization

# Demo