

High Level Overview of DOMS nc4 Output File Structure

Attribute/Variable blocks	Description
Dimensions	data array dimension (ie. all data arrays indexed by MatchupID)
Global Attributes	CF & ACCD global attributes (mandatory + recommended per these standards)
DOMS Global Attributes/Group	Metadata Group containing DOMS specific matchup global attributes NOT covered by standard attributes (could alternatively be just normal globals with attribute names prefixed by "DOMS_")
Satellite Data Group	Group containing matched Satellite Lat, Lon, Time, Measurements, PlatformType, Metastring, & projection variables all indexed by matchupID
In-situ Data Group	Group containing matched In-situ Lat, Lon, Time, Measurements, PlatformType, Metastring, & projection variables all indexed by matchupID (potentially 1-to-many relation with corresponding matched satellite

Draft DOMS Output File Specification: Corresponding CSV

Comprised of a header block at the top with the same DOMS globals as the ncd output file
 A row of column field names based on the ncd file Variable StandardName concatenated with the corresponding units as necessary

Global Attribute Name	Example	Note
Conventions	CF-1.6, ACDD-1.3	Static value
title	DOMS satellite-in situ matchup output file	Static value
history	Processing_Version = V1.0, Software_Name = DOMS, Software_Version = 1.03	Static value
Institution	JPL, FSU, NCAR	Static value
source	doms.jpl.nasa.gov	Static value
standard_name_vocabulary	CF Standard Name Table v27, BODC controlled vocabulary	Static value
cdm_data_type	Point/Profile, Swath/Grid	Static value
processing_level		4 Static value
project	Distributed Oceanographic Matchup System (DOMS)	Static value
keywords_vocabulary	NASA Global Change Master Directory (GCMD) Science Keywords	Static value
keywords		Intentionally blank
creator_name	NASA PO.DAAC	Static value
creator_email	podaac@podaac.jpl.nasa.gov	Static value
creator_uri	https://podaac.jpl.nasa.gov/	Static value
publisher_name	NASA PO.DAAC	Static value
publisher_email	podaac@podaac.jpl.nasa.gov	Static value
publisher_uri	https://podaac.jpl.nasa.gov/	Static value
acknowledgment	DOMS is a NASA/AIST-funded project. NRA NNH14ZDA001N.	Static value
Platform	orbiting satellite, drifting surface float, moored surface buoy, ship, drifting sub	Comma Separated list of all platforms in file
time_coverage_start	2013-10-21T00:00:00-0000	Match-up search domain start time
time_coverage_end	2013-10-31T23:59:59-0000	Match-up search domain end time
geospatial_lon_min		-30 Match-up search domain minimum longitude
geospatial_lat_min		15 Match-up search domain minimum latitude
geospatial_lon_max		-45 Match-up search domain maximum longitude
geospatial_lat_max		30 Match-up search domain maximum latitude
geospatial_lat_resolution	point	Static value
geospatial_lon_resolution	point	Static value
geospatial_lat_units	degrees_north	Static value
geospatial_lon_units	degrees_east	Static value
geospatial_vertical_min		0 Match-up search domain minimum depth
geospatial_vertical_max		5 Match-up search domain maximum depth
geospatial_vertical_units	m	Static value
geospatial_vertical_resolution	point	Static value
geospatial_vertical_positive	down	Static value
DOMS_matchID	957a8b6a-fdd5-4a6e-abfa-0fd9065ac3bb	DOMS execution ID
DOMS_TimeWindow		24 DOMS time tolerance
DOMS_TimeWindow_Units	hours	Static value
DOMS_depth_min		0 Match-up search domain minimum depth
DOMS_depth_min_units	m	Static value
DOMS_depth_max		5 Match-up search domain maximum depth
DOMS_depth_max_units	m	Static value
DOMS_platforms	1,2,3,4,5,6,7,8,9	Match-up platforms selected
DOMS_SearchRadius		24000 Match-up radius tolerance
DOMS_SearchRadius_Units	m	Static value
DOMS_bounding_box	-30,15,-45,30	Match-up search domain bounding box (West, South, East, North)
DOMS_primary	AHRR_OI_L4_GHRST_NCEI	Match-up primary dataset name
DOMS_matchup	loads,spurs	Match-up source(s)
DOMS_ParameterPrimary	sst	Match-up primary parameter of interest
DOMS_time_to_complete		23 Match-up execution time
DOMS_time_to_complete_unit	seconds	Static value
DOMS_num_matchup_matched		3394 Total number of match-up values matched
DOMS_num_primary_matched		3394 Total number of primary values with at least one match
DOMS_num_matchup_checked	N/A	Static value
DOMS_num_primary_checked	N/A	Static value
date_modified	2017-01-31T23:37:17+0000	Date and time this CSV file was created
date_created	2017-01-31T23:37:17+0000	Date and time this CSV file was created

Satellite Data										In-situ Data																		
id (uuid)	source	lon	lat	time	platform	sea_water_salinity_depth	sea_water_salinity	sea_water_temperature_depth	sea_water_temperature	wind_speed	wind_direction	wind_u	wind_v	id	source	lon	lat	time	platform	sea_water_salinity_depth	sea_water_salinity	sea_wate	sea_wate	sea_wate	spewind	dirwind	dirwind	wind_v