## How to Access VIIRS Flood Map Datasets (RSVFM) via NOAA CLASS

The tutorial shows how users can access the VIIRS Flood Map Datasets in the NOAA Comprehensive Large Array-Data Stewardship System (NOAA CLASS). The VIIRS Flood Map products (RSVFM) consist of daily and 5-day composites at 375-m spatial resolution. The data is created from the VIIRS near-real-time Global Flood Environmental Data Records (EDR). The datafiles are in NetCDF format. Note, steps 7 and 8 describe how users can access and download the VIIRS Flood Map granule datasets (JPSS\_GRAN). Any questions can be directed to Jorel Torres (Jorel.Torres@colostate.edu), William Straka (wstraka@ssec.wisc.edu), and Sanmie Li (slia@gmu.edu).

**Step 1**: Access the NOAA CLASS website. Click on the following link: <u>https://www.avl.class.noaa.gov/</u>. In the top-left corner, click on 'Login'.



**Step 2:** Provide your username and password to log into NOAA CLASS. Note, if users do not have a username and password, click on 'Register' (in the top-left corner) to create a free NOAA CLASS account.



**Step 3:** Once logged into NOAA CLASS, click on the 'Please select a product to search' tab at the top of the webpage. Scroll down and select the 'River and Surface Flood Map Products (RSVFM)'. Once the products are selected, click 'Go'.



**Step 4:** Flood product information will be displayed in four sections: Data Description, Details and Documentation, Temporal and Advanced Search. In the Temporal section, users can specify the dates and times of interest. Users can then select the datatypes in the Advanced Search section. The VIIRS Flood Map 1-Day Gridded Composite and 5-Day Gridded Composites are available for users to select. Once the dates and data types are determined, then click on 'Quick Search & Order'.

River and Surface Flood Map Products (RSVFM)	Temporal (maximum rance is 366 days)			
Search - RSVFM	(maximum range is 300 aprs) Start Date (format: YYY-MM-DD) 2022-12-28  Start Time (UTC) (format: HH-MM-SS) 00:00:00			
Data Description River and Surface Flood Map Products (RSVFM) - The River and Flood Forecast Maps data family includes flood map products generated	End Date (format: YYYY-MM-DD) 2022-12-29 EI [10 (format: HH-MM-SS) [23:59:59]			
from imagery acquired by the Visible Infrared Imaging Radiometer Suite (VIIRS). In the future additional flood map products generated from the Geostationary Operational Environmental Satellite (GOES) instrument will be included in this data family The VIIRS Instrument includes 22 spectral bancks: 16 moderate-resolution, narrow-sectral-band at 750 meter resolution, five imagina-resolution, narrow-	Specify the range of the times for: $\bigcirc$ Each Day Or $\ensuremath{ extsf{0}}$ The Entire Range Of Days			
spectral-band at 375 meter resolution and one Day-Night Band imaging broadband at 750 meter resolution. The VIIRS 1-Day and 5-Day	Advanced Search			
flood map products are generated from the VIIRS NRT Global Flood EDR at a resolution of 375 maters. These composite products are rendered using Area of Interest (AOI) maps. The globe is divided into 136 (15 x 15 degree) AOI maps, with each map showing the maximum 1-Day or 5-Day AOI flood extent. The 1-Day product is generated by compositing VIIRS NRT Global Flood EDR granules into AOI maps and the 5-Day product is generated by agregating the 1-Day maps over a fixe day period This data set is produced by the	Datatype UHRS Flood Map 1-Day Gridded Composite UHRS Flood Map 5-Day Gridded Composite			
NOAA Environmental Satellite, Data, and Information Service (NESDIS) and is distributed by the Comprehensive Large Array-Data Stewardship System (CLASS) as 15 degree AOI interest files in the NetCDF file format with metadata attributes included. Expand the				
"Details - Metadata, Documentation" section below for more details, Individual product (Datatype) descriptions, documentation, and possible bulk access options are available via the "Product Details" link.	Quick Search & Order to place large order without reviewing inventory or granule (file) metadata.			
	Search to place small order after reviewing inventory and granule metadata, including browse images when available.			
	Save Criteria Dataset Name View Reset			

**Step 5:** Make sure to type an email address to receive the datasets. Add the email address to the text box in the top-right corner. Then click 'Place Order'.

» CLASS Home » Logout	»Help ⇒About CLASS » RSS			» SEAR	
Around CLASS	Please select a product to se	arch		✓ »GO	
» Home	Shopping Cart				
» Subscriptions	enopping exit				
» Search for Data	Total size of selected data sets:	810,458,713 Bytes You will b	e notified at: firstname	e.lastname@gmail.com	
» Upload Search	Number of data sets:	668 Ord	er Comment:		
» Search Results					
» Shopping Cart	Advanced Options				
» Order Status					
» Help	PlaceOrder Commit Changes Remove All Reset				
User Account					
» User Profile					
» User Preferences	Quick Search Criteria for RSVFM Estimated 668 hits. Estimated size 810,458,713 bytes.				
Advanced Options		Datatype	VFM1DAY		
» Download Keys		Datatype	VFM5DAY		
» FTPS Instructions		Start Date:	2022-12-21		
Release Info		Start Time:	00:00:00		
» Version 8.3.2		End Date: End Time:	2022-12-22 23:59:59		
December 7, 2022					
Other Links		Delivery Preferences to be ap	plied are set User Preferences		
» CLASS Home					
» NCEI					
» NESDIS					
» NOAA					
» DOC					

**Step 6:** Once the order is placed, users will receive two email notifications: one verification email of the data ordered (1), and another email confirmation that the order is processed and contains the FTP instructions to access the data (2).

## notification@class.noaa.gov CLASS Order 8273534615 Verification

** Caution: EXTERN	AL Sender **
Subject: CLASS Orde	r 8273534615 Verification
NOAA COM	PREHENSIVE LARGE ARRAY-DATA STEWARDSHIP SYSTEM
Δ SER	VICE OF:
	TIONAL DATA CENTERS
CLASS ORDER SUMN	ΑΛΡΥ
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Your order 8273534	615, submitted on 2022-12-29 19:38:55,
is being processed.	
Order comments:	
The line items conta	ined in this order are:
Item: 9365688536. I	Inventory Id: 1041981016
	S-Flood-5day-GLB136_v1r0_blend_s202212200022330_e202212242346140_c202212250409084.nc
Item: 9365688537. I	Inventory Id: 1041980914
	S-Flood-5day-GLB133_v1r0_blend_s202212200032310_e202212242353210_c202212250408414.nc
Item: 9365688538. I	Inventory Id: 1041980894
	S-Flood-5day-GLB009_v1r0_blend_s202212200041020_e202212242313320_c202212250350481.nc
Item: 9365688539, I	Inventory Id: 1041980936
	S-Flood-5day-GLB069_v1r0_blend_s202212200041020_e202212242313320_c202212250359109.nc

CLASS Notification <notification@class.noaa.gov> CLASS Order 8273534615 Processing Complete

2)

1)

ftp <u>ftp.avl.class.noaa.gov</u> - Logon to CLASS system

**Step 7:** To access the VIIRS Flood granule data, click on the 'Please select a product to search' tab. Scroll down and click on 'JPSS VIIRS Products (Granule) (JPSS\_GRAN)'. Then click 'Go'.



**Step 8:** Scroll down to the 'Spatial' section and create a box (i.e., domain) of the area of interest. In the 'Temporal' section, add the dates and times of interest. In the 'Advanced Search' section, there is a list of datatypes. Check the box 'VIIRS Flood Map Global' and click on the satellite(s) that you want data from. Scroll down and click on 'Quick Search & Order'. Lastly, click 'Place Order'.

