## <u>Access for Subsurface Float Dataset –</u> <u>Instructions</u>

To access subsurface float data, please visit the NOAA GDP ERDDAP webpage at

<u>https://erddap.aoml.noaa.gov/gdp/erddap/tabledap/RAFOS\_SOFAR\_Floats.html</u>. Here, you will see the list of possible variables. Examples include: Experiment\_Name, floatID, trajectoryID, date ranges, temperature data, pressure data, etc.

1. To begin, select "Uncheck All" and clear the pre-set time parameters.

ERDDAP Easier access to scientific data				
ERDDAP > tabledap > Data Access Form @				
Dataset Title: Subsurface Floats ⊠ ⊠539 Institution: NOAVAOML & WHOI (Dataset ID: RAFOS_SOFAR_Floats) Information: Summary ❷   Leense ❷   FGDC   ISO 19115   Metadater background ❷   Subset   Files   Make a graph				
Variable 🛿 Check All Uncheck All	Optional Constraint #1 😵	Optional Constraint #2	Minimum 💞 or a List of Values 🔗	
Experiment_Name	>= ~	<= ~		
🗌 trajectoryID 😵	>= ~	<=		
floatID (float serial number)	>= ~		│ <b>→ - + Ø</b>	
float_type 😨		<= ~	✓-+ Ø	
🗆 time (UTC) 🖗	>= (	)<=[	1972-09-28T00:00:00Z	
☐ latitude (degrees_north) �	>= ~	<= >	-65.782	
longitude (degrees east)	>= ~	<= >	-135.647	
deploy_date (Deployment date and time, UTC)	>= \	<= >	✓ - + 😢	
deploy_lat (degrees_north)	>= ~	<= >	✓ -+ Ø	
deploy_lon (degrees_east)	>= ~	<= >	✓-+ Ø	
surface_date (Surface date and time, UTC) 😵	>= ~	<= >	· -+ Ø	
surface_lat (Surface latitude, degrees_north)	>= ~	<= >	✓ -+ Ø	
surface_lon (degrees_north)	>= ~	<= >	✓-+ Ø	
🗆 lon360 (Longitude, degrees_east) 🤣	>= ~	<= >	0.0	
🗌 pressure (sea water pressure, decibar) 🥝	>= ~	<= >	-25.7	
temperature (degree_Celsius)	>= ~	<= >	-26.279	
ve (Eastward velocity, m/s)	>= ~	<= >	-2.817	
vn (Northward velocity, m/s)	>= ~	<= \	-3.1256	
Institution 😢	>= ~	<= ~		

2. Once all boxes are unchecked, select your desired variable(s). For example, if you are interested in time, latitude, longitude, pressure, and temperature, you would check the following selections:

ERDDAP Easier access to scientific data					
ERDDAP > tabledap > Data Access Form					
Dataset Title: Subsurface Floats ☑ 1053 Institution: NOAA/AOML & WHOI (Dataset ID: R/ Information: Summary @   License @   FGDC   ISO	NFOS_SOFAR_Floats) 19115   Metadata   Backgroui	nd &   Subset   Files   Make a	graph		
Variable 🖉 Check All Uncheck All	Optional Constraint #1 😰	Optional	ora	Minimum 😧 List of Values 😰	
Experiment Name 🖗	>= >	<= ~			
□ traiectoryID 💡	>= ~	<= >	i		
🗹 floatID (float serial number) 🔮 🔺 🚤	= ~	<= ~		+ 0	
□ float type Ø		<= ~	$\sim$	-+ 0	
🗹 time (UTC) 🖗 🔺 🚽	>= ~	<= >	1972-09-28T00:00:0	DZ	
			, ,		
🗹 latitude (degrees_north) 🔮 🛛 🛨 🛛 👞	>= ~	<= >	-65.782		
			,	Select desire	
🗹 longitude (degrees_east) 🖗 🛛 🖊 🚽	>= ~	<b>K</b> =	135.647	variables	
				variables.	
□ deploy_date (Deployment date and time, UTC) @	>= ~	<= >		- + 🕐	
deploy lat (degrees_north) 🖗	>= ~	<= >			
deploy_lon (degrees_east) ?	>= ~	<= ~	√-+ ⊘		
surface_date (Surface date and time, UTC)	>= ~	<= ~		✓ - + Ø	
surface_lat (Surface latitude, degrees_north)	>= ~		│		
surface_lon (degrees_north)	>= ~		) -+ 0		
□ Ion360 (Longitude, degrees_east) 😵	<b>XE</b> Y	<= >	0.0		
Z pressure (sea water pressure, decibar) 🛛 🔭 🥈	>= ~	<= ~	-25.7		
✓ temperature (degree_Celsius) ②	= ~	<= >	-26.279		
			0.047		

\*\*Please note: If you desire a specific float ID, coordinates, and/or a time parameter, you must enter these values In the "Optional Constraint" boxes to the right of each field. \*\*

For example, to search for float ID 1021, you would type the float ID surrounded by double quotes ("1021") under Optional Constraint #1 to the right of floatID. Make sure to change the operand sign from ">=" to "=".

Additionally, if you are interested in searching for float ID 1021 transmissions during the month of January 2012, you would enter two constraints for the time variable. For "Optional Constraint #1", enter the starting date in YYYY-MM-DD format, without quotes. Then, list the ending date in the "Optional Constraint #2" box.

ERDDAP Easier access to scientific data			
ERDDAP > tabledap > Da	ita Access Fo	orm ø	
Dataset Title: Subsurface Floats 🖂 🔤 Institution: NOAA/AOML & WHOI (Dataset ID: R/ Information: Summary @   License @   FGDC   ISO	AFOS_SOFAR_Floats) 19115   Metadata   Backgro	und 🗗   Subset   Files   Make a	graph
Variable 😢 Check All Uncheck All	Optional	Optional	Minimum 🖗
Experiment_Name  traiectoryID			
✓ floatID (float serial number) ②	= ~ "1021"		<b>→</b> -+ <b>②</b>
□ float_type 🥝	>= >	<= ~	✓ - + Ø
🗹 time (UTC) 🤣	>=<2012-01-01	<= 2012-01-31	1972-09-28T00:00:00Z
☑ latitude (degrees_north) Ø	>= ~	] <= ∨[	-65.782
✓ Iongitude (degrees_east)	>= ~	<= >	-135.647
			, ,
deploy_date (Deployment date and time, UTC)	>= ~	<= ~	✓ -+ Ø
deploy_lat (degrees_north)	>= ~	<= ~	✓ - + Ø
deploy_lon (degrees_east)	>= ~	<= ~	✓ - + Ø
surface_date (Surface date and time, UTC) Ø	>= ~	<= ~	✓ - + Ø
surface_lat (Surface latitude, degrees_north)	>= ~	<= >	✓ -+ Ø
surface_lon (degrees_north)	>= ~	<= >	· · · + Ø
🗌 lon360 (Longitude, degrees_east) 🤣	>= ~	<= >	0.0
🗹 pressure (sea water pressure, decibar) 🧐	>= ~	<= >	-25.7
temperature (degree_Celsius)	>= ~	<= ~	-26.279

3. OPTIONAL: Once all desired variables have been chosen, for best output results, under "Server-side Functions", order variables by "time". In doing so, the output will be displayed by time (chronologically).

WARNING: Using the "orderBy" feature on large ERDDAP requests may trigger a HTTP 413 "outOfMemoryError" response when you complete step 6. If this error appears, we suggest that you divide your original data request into multiple smaller requests, or resubmit your original request without the "orderBy" feature.

## ERDDAP > tabledap > Data Access Form •

Detect Title: Subourfees Floats M

Institution: NOAA/AOML & WHOI (Dataset ID: R	AFOS_SOFAR_Floats)		
Information: Summary 2   License 2   FGDC   ISO	19115   Metadata   Backgro	und 🖗   Subset   Files   Make a	graph
Variable 🖗 Check All Uncheck All	Optional Constraint #1 🧐	Optional Constraint #2 🔗	Minimum 🖗 or a List of Values 🖗
Experiment_Name	>= ~	<= >	
trajectoryID	>= ~	<= ~	
🗹 floatID (float serial number) 🤣	= ~ "1021"	<= ~	+♥
float_type 😢	>= ~	<= ~	✓ - + Ø
🗹 time (UTC) 🖗	>= ~ 2012-01-01	<= ~ 2012-01-31	1972-09-28T00:00:00Z
✓ latitude (degrees_north) Ø	>= ~	] <= ∨	-65.782
☑ longitude (degrees_east) ❷	>= \	<= >	-135.647
□ deploy date (Deployment date and time, UTC) Ø	>= ~	<= >	√-+ 0
deploy_lat (degrees_north) 2	>= ~	<= ~	√-+0
deploy_lon (degrees_east)	>= ~	<= ~	
surface_date (Surface date and time, UTC)	>= ~	<= ~	· · - + ∅
surface_lat (Surface latitude, degrees_north)	>= ~	<= ~	✓ - + Ø
surface_lon (degrees_north)	>= ~	<= ~	✓ -+ Ø
Ion360 (Longitude, degrees_east) 2	>= ~	<= ~	0.0
🗹 pressure (sea water pressure, decibar) ᅇ	>= ~	<= ~	-25.7
🗹 temperature (degree_Celsius) 🤣	>= ~	<= ~	-26.279
ve (Eastward velocity, m/s)	>= ~	<= >	-2.817
vn (Northward velocity, m/s) Ø	>= ~	<= ~	-3.1256
Institution 🔮	>= ~	<= ~	
Principal_Investigator	>= ~	<= >	
Server-side Functions @			
orderBy V@ ("time			

4. To select the desired output format, select from the options within "File type". Format options include comma separated (.csv), MATLAB (.mat), PDF (.pdf), ASCII (.asc), etc.

## ERDDAP > tabledap > Data Access Form @

Dataset Title: Subsurface Floats 🖂 🕅 🛤				
Institution: NOAA/AOML & WHOI (Dataset ID: R/	AFOS_SOFAR_Floats)	nd 🕄   Subset   Eiles   Mekele a	week	
Information. Summary & License & FODC 150	19115   Meladala   Backgrou	nd 🗠   Subset   Files   Make a g	гарп	
Variable 🖗 Check All Uncheck All	Optional Constraint #1 🗐	Optional Constraint #2 🤣	Minimum 🖗 or a List of Values 🖗	
Experiment_Name	>= 🗸	<= V		
trajectoryID 😢	>= 🗸	<= ¥		
floatID (float serial number)	= 🗸 "1021"	<= V	"1021" 🗸 - + 😢	
□ float_type 🥝	>= 🗸	<= ¥	✓ - + 😢	
✓ time (UTC) Ø	>= 🗸 2012-01-01	<= 🗸 2012-01-31	1972-09-28T00:002	2019-01-23T18
✓ latitude (degrees_north) ❷	>= ~	 ] <= v	-65.782	76.515251
✓ longitude (degrees_east)	>= 🗸	<= V	-135.647	187.803
	· · · ·			
deploy date (Deployment date and time, UTC)	>= 🗸	<= v	✓ - + 🤣	
deploy lat (degrees north)	>= 🗸	<= ~	<	
deploy_lon (degrees_east)	>= ~	<= ~	✓ - + Ø	
surface_date (Surface date and time, UTC)	>= ~	<= ~	✓ - + 🥹	
surface_lat (Surface latitude, degrees_north)	>= 🗸	<= ¥	<-+ ∅	
surface_lon (degrees_north)	>= 🗸	<= ~	▼-+ 0	
Ion360 (Longitude, degrees_east)	>= V	<= V	0.0	359.999601
🗹 pressure (sea water pressure, decibar) 🧐	>= 🗸	<= V	-25.7	4805.44
✓ temperature (degree_Celsius) Ø	>= 🗸	<= ¥	-26.279	44.85
ve (Eastward velocity, m/s)	>= 🗸	<= V	-2.817	4.3694
vn (Northward velocity, m/s) Ø	>= 🗸	<= >	-3.1256	3.689
Institution 😢	>= ~	<= V		-+ ∅
Principal_Investigator	>= 🗸	<= V		✓ - + 🖗
Server-side Functions				
distinct()				
orderBy				
	<b>\_</b> ")			
File type: (more information)				
.htmlTable - View a UTF-8.html web page with the data in a table. Times are ISO 8601 strings.				
Just generate the URL: https://erddap.aomi.noaa.gov/gdp/erddap/tabledap/RAFOS_SOFAR_Fic				
(Documentation / Bypass this form @)				

Submit (Please be patient. It may take a while to get the data.)

5. Once you have entered the desired information and chosen the output file type, click "Submit" to receive the data.