

Integrated Rig Instrumentation System
iRIS GENERAL USER INTERFACE
 User's Manual for *JOIDES RESOLUTION*

READ IN CONJUNCTION WITH THE FOLLOWING MANUALS:

- iRIS Quick Start Guide
- iRIS Driller's Quick Start Guide
- iRIS Operations Superintendent Quick Start Guide

Version	Version Date	Approved By
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Overview

The Integrated Rig Instrumentation System (iRIS) is a replacement rig instrumentation system (RIS), used by the International Ocean Discovery Program – *JOIDES Resolution* Science Operator (IODP-JRSO) to measure, collect, and archive ship operations, including drilling, coring, navigational, and science-related systems in the collection and recovery of deep earth samples. This system is a direct replacement of the long-used RigWatch™ RIS that was in use on the *JOIDES RESOLUTION* (JR) from approximately 2009 until iRIS' scheduled deployment in early 2023. The new iRIS system is based on National Instruments LabVIEW™ programming language and utilizes existing sensor and control infrastructure to accomplish its objectives.

The purpose of this manual is to provide instructions to execute, configure, and produce custom datalogging files for offline calculations and visualization of drilling/coring procedures using the iRIS General User's Interface (GUI) Software package, available on the *JOIDES Resolution network shares*. Please see the on-board Marine Computer Specialists for assistance in installation. Summarized instructions for other actions can be found in the iRIS Quick Start Guide (QSG) found in the *JOIDES Resolution* documentation repository, Confluence to access.

1. Computer / Software Requirements

To use the iRIS GUI, the following minimum requirements are required

a) Computer Requirements:

- **Big ole' processor**
- **Little bit of memory**
- **Little bit of hard drive space**

NOTE: YOU MUST BE CONNECTED TO THE JR'S ON-BOARD NETWORK TO CONNECT AND LOG FROM IRIS. PLEASE SEE THE JRSO MARINE COMPUTER SPECIALIST STAFF IF YOU REQUIRE ASSISTANCE.

b) Software Requirements:

- IODP iRIS General Users Interface Software package
- LabVIEW Runtime Software

2. Installing the iRIS GUI Package

1. Download and unpack/unzip the iRIS installation package
2. Double click on the installer
3. The installer will create a folder named, *C:\IRIS\<USERNAME>*. *See Figure 1*
4. The installer will create the subfolders. *See Figure 2:*

`\EXPORT_ASCII`

`\EXPORT_DATALOGS`

`\EXPORT_DEFS`

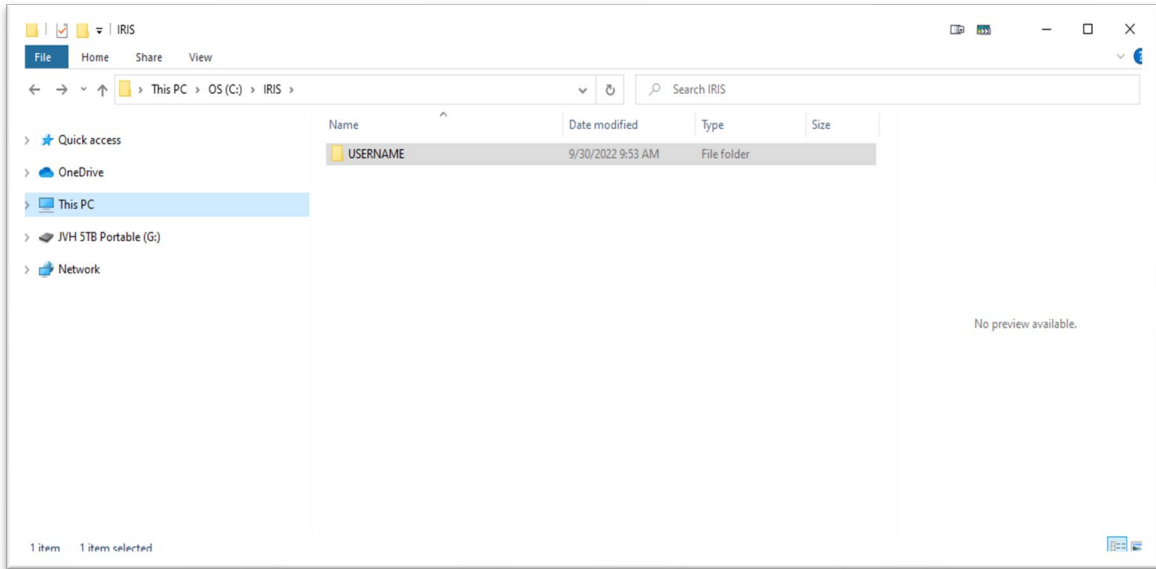


Figure 1. iRIS Installer Folder Creation

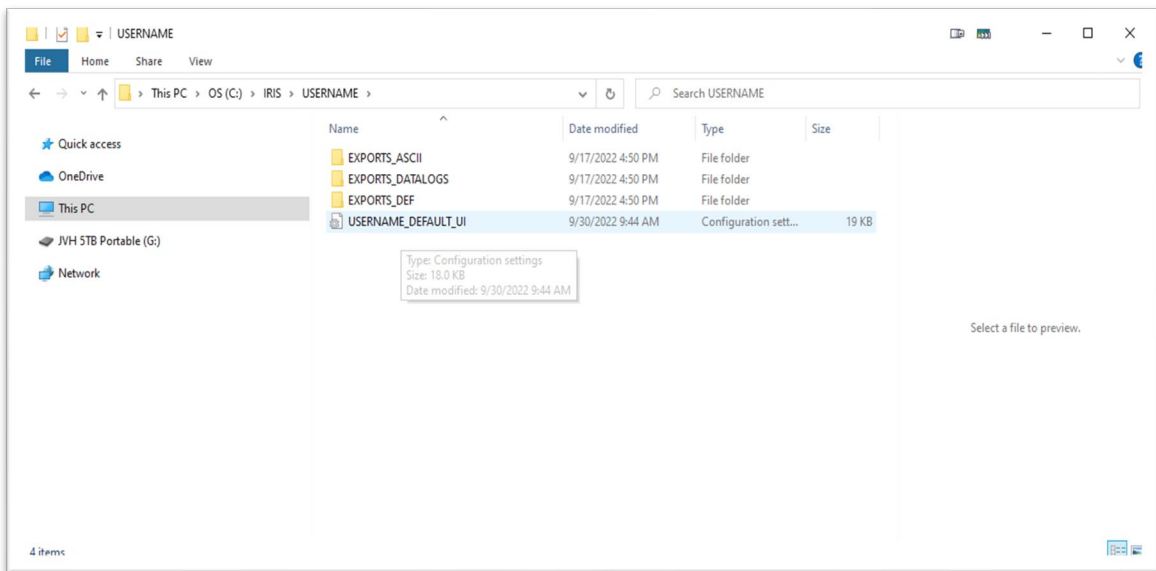


Figure 2. iRIS subfolder creation

Once the installer completes, the program is ready to run. Double click on the iRIS General UI icon to start the program:



Figure 3. iRIS Program Icon

The iRIS General UI will start and present the User with the following table:

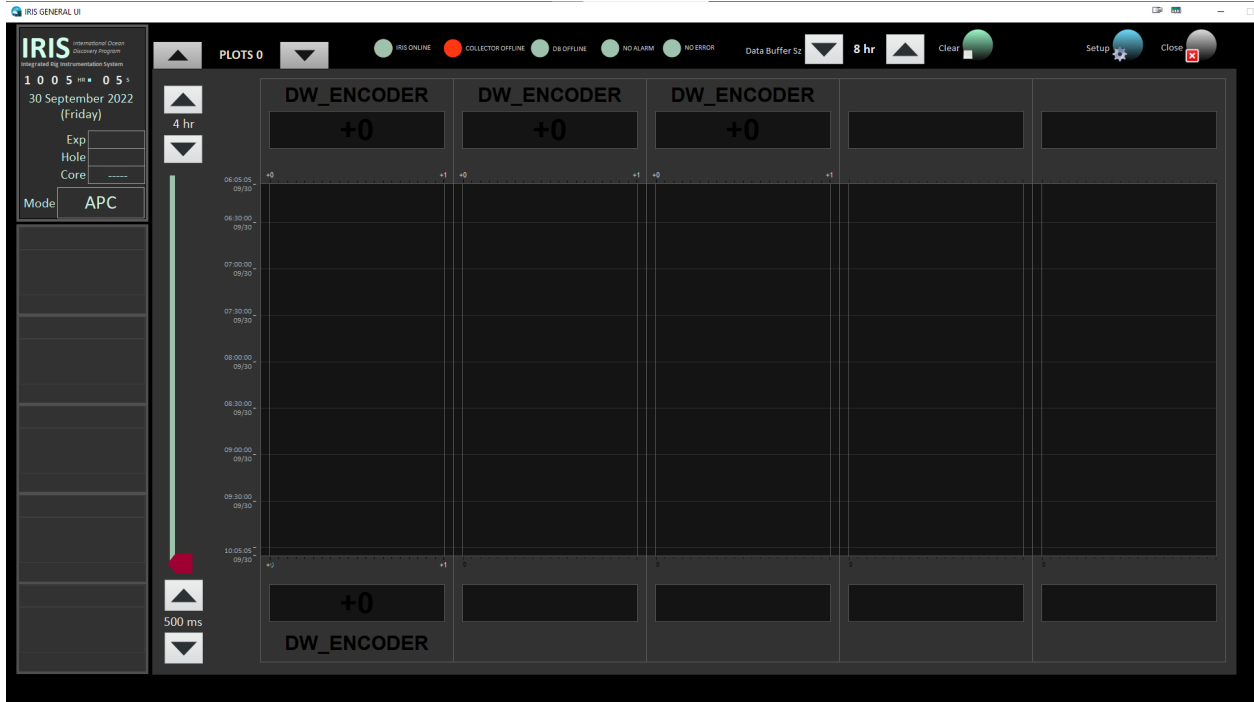


Figure 4. iRIS General User Interface

3. iRIS User Interface Layout

The iRIS General User Interface is divided into several functional areas detailed below.

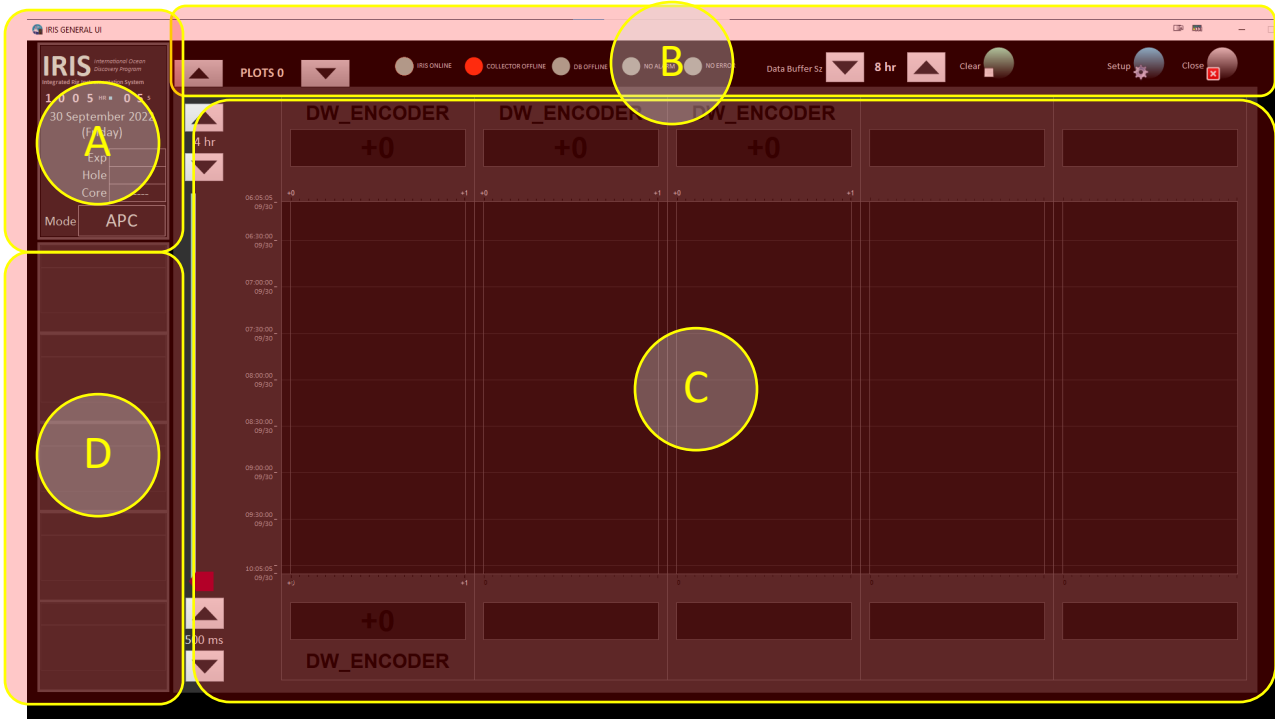


Figure 5. iRIS GUI Functional Areas

The functional areas are as follows:

- a) Expedition Information Summary

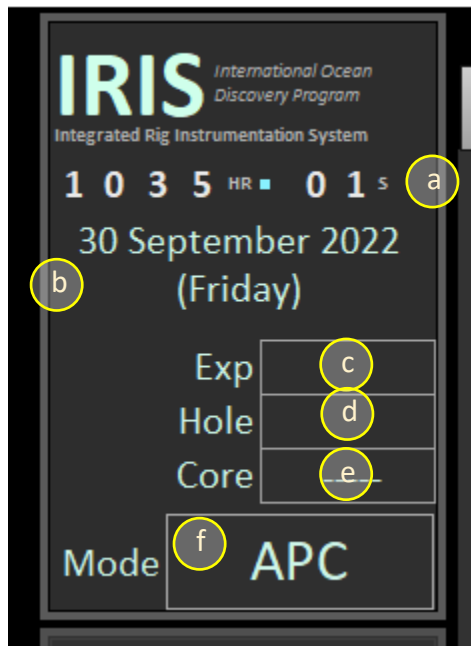


Figure 6. Expedition Information Summary Functional Area

The Expedition Information Summary contains information related to:

- a. Ship's Time (local time, 24hr format)
- b. Date and Day
- c. Expedition Number (entered by the JRSO Operations Superintendent)
- d. Current Hole Number (entered by the JRSO Operations Superintendent)
- e. Current Core number (entered by the Siem Drilling Crew)
- f. Current Core Recovery Method (e.g., APC, RCB, XCB)

- b) Plot Control / Program Status

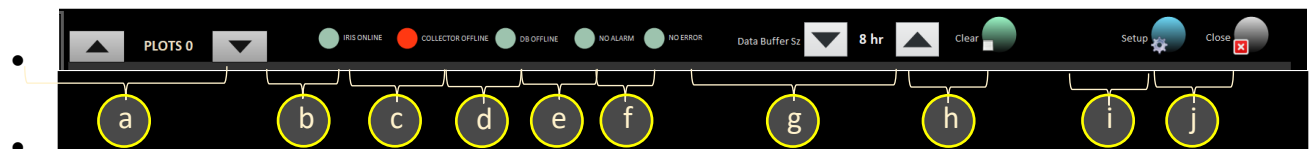


Figure 7. Plot Control / Program Status Functional Area

The Plot Control / Program Status functional area gives the User control over the graphing display area, plus gives the status of

- a. Waterfall plot display selection drop down menu (Choice of "PLOTS 0", "PLOTS 1", "BIG", "NAV", "CORE SUM", and "EXPORT")
- b. iRIS controller (online/offline)
- c. Data Collector subsystem status (online/offline)
- d. Datalogging database status (online/offline)

- e. General alarm status (alarm active/clear)
- f. General error status (alarm active/clear)
- g. Data buffer selection
- h. Clear graph window
- i. Configuration File Setup
- j. Close iRIS program

c) Interactive Display Field

The User can switch between several different data displays by selecting the appropriate drop-down menu item located in the Plot Control / Program Status area as show below in Figure 8. Alternatively, the User can scroll through the selections using the scroll buttons located next to the drop-down menu.



Figure 8. Screen Selection Drop-Down

a. Graphing Display Screen (PLOTS 0 and PLOTS 1)



Figure 9. Graphical Plot Display Functional Area

The graphing display screen functional area is the location where the User will select a variety of drilling, coring, environmental, and navigational criteria in which to display in both numerical and waterfall graphing. Each plot “lane” can display two (2) plots each, with both numerical and graphical data displayed. In addition, each plot is auto scaled to best fit data in the lane. A total of twenty (20) plots can be displayed between the two (2) plot screens (identified as PLOTS 0 and PLOTS1).

- a. Time scale adjustment. User selectable from 30 seconds to 4 hours
- b. Numerical display. The top numerical display is used for the “left” side graphs, and the bottom numerical display is used for the “right” side graphs in each lane
- c. Waterfall graph area
- d. Slider used to shift graphs back in time to review historical data
- e. Data collection frequency, measured in milliseconds. Adjustable from 100ms to 2000 ms

b. Navigational Information Display (NAV)

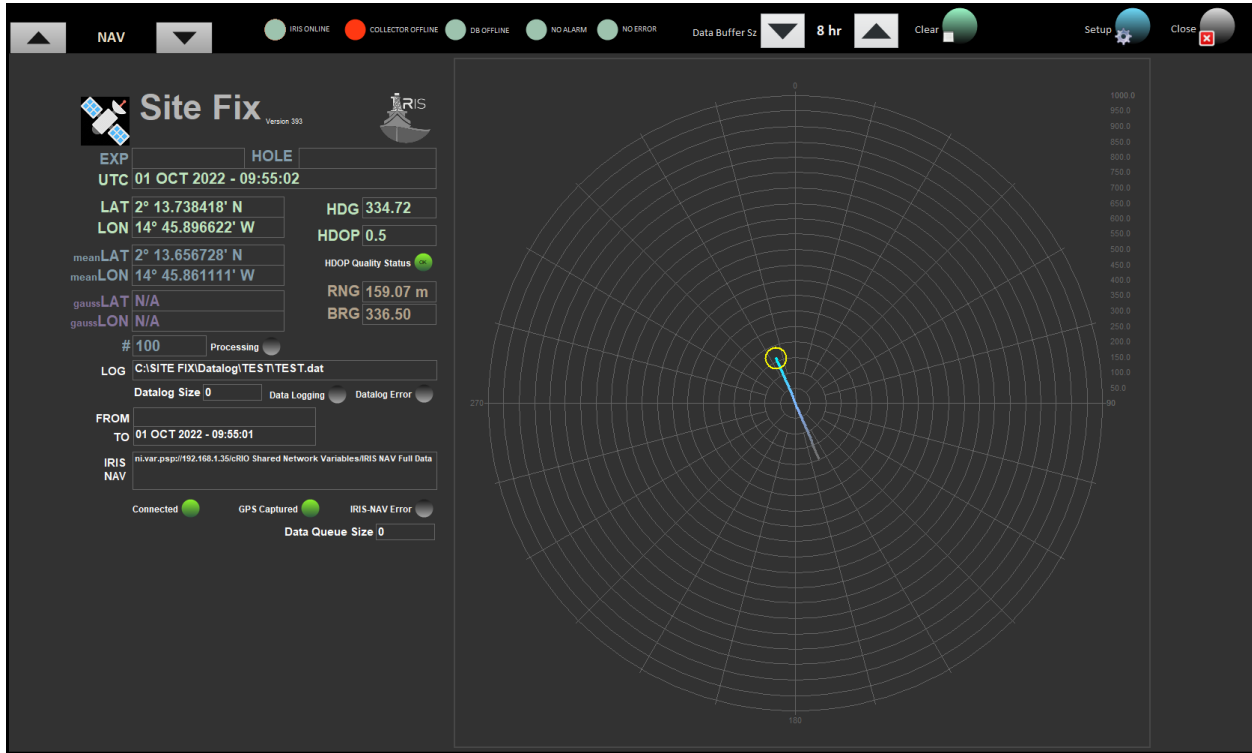


Figure 10. Navigational Information Display

The navigational display functional area current GPS fixes, UTC time, and other related information. No other datalogging is available through this display.

c. Core Summary Display (CORE SUM)

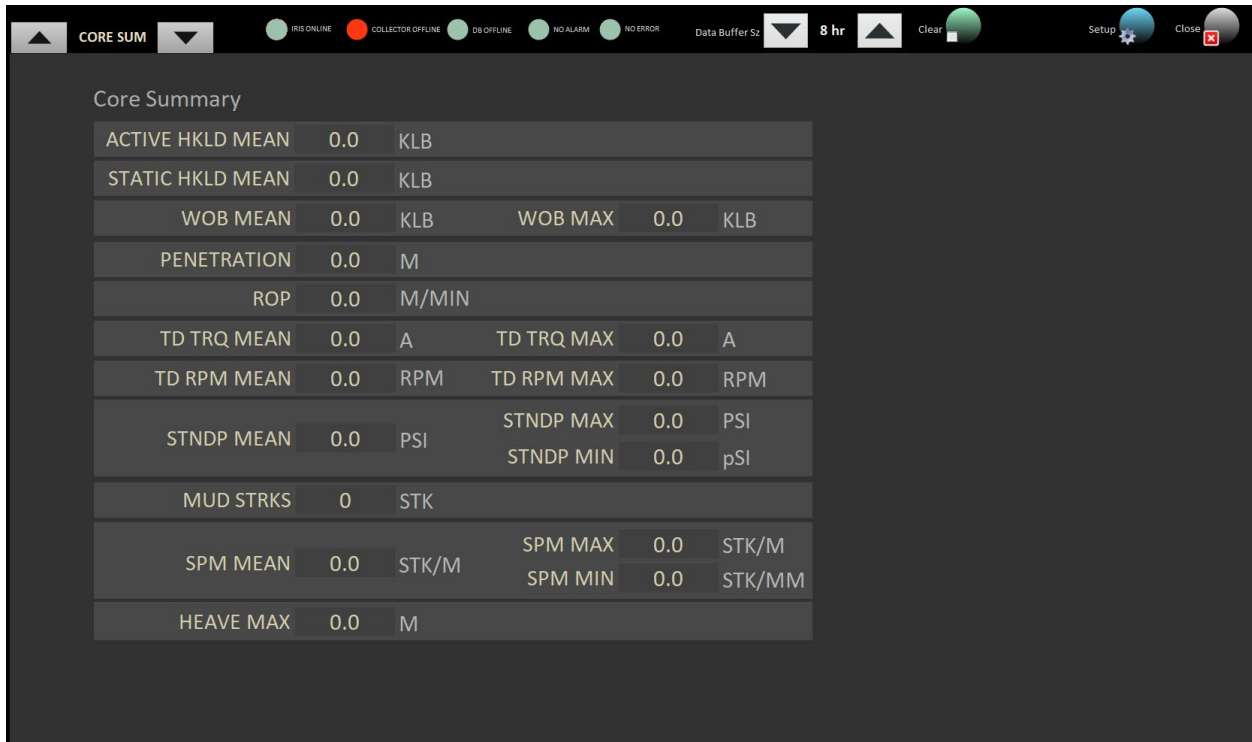


Figure 11. Core Summary Display Screen

The Core Summary read only display is updated during coring operations by the Drilling Staff. Once a core has been sampled, the Driller will enter the appropriate data, and the information on this screen will be updated and displayed.

d. Datalogging Collection and Export Screen (EXPORT)



Figure 12. Datalogging Collection and Export Screen

The Datalogging Collection and Export screen is where the User can configure and log a set of data streams to an output ASCII file for later analysis.

- a. Data stream selection
- b. Data logging rate setpoint
- c. Start/Stop log capture
- d. Select previous datalog definitions
- e. Review previous datalog files

d) Sidebar

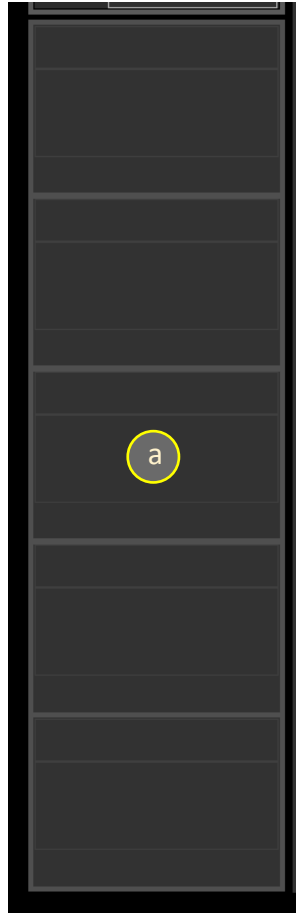


Figure 13. Sidebar Display

The sidebar display is an area where the User can configure up to five (5) data stream to show numerical values of selected criteria.

- a. Numerical display of data channels. User can select and configure up to six (6) data channels to view.

NOTE: THE SIDEBAR IS ONLY USED FOR NUMERICAL DISPLAY, NOT GRAPHING.

Configuring iRIS GUI for Viewing and Plotting Data

The next several sections of this manual will detail how to configure iRIS to display data in the Graphing Display Screen and the Sidebar display. Before the details of configuration and display of the graphing functions of the iRIS system are presented, the types of data types and parameters must be presented so the User can understand what is being graphed by the software.

NOTE: THE COMPUTER MUST BE CONNECTED TO THE JR NETWORK (WIRELESS OR WIRED) FOR IRIS GUI TO RETRIEVE DATA. IF YOU NEED ASSISTANCE, PLEASE CONTACT THE JR MARINE COMPUTER SPECIALIST.

1. iRIS Data Classes for Graphing and Datalogging

The iRIS system provides a wide variety of drilling, coring, vessel, environmental, and other data categories available for the User to visually track and datalog. While most users will not be familiar nor have reason to be interested in most of these parameters, this section will separate the classes into groups and offer a short description to give the User an idea of how each parameter affects drilling and coring processes.

a) Drilling / Drill Rig Parameters

Parameter Label	Name	Units	Description	Effect on Drilling / Coring
BLOCK POS	Block Position	Meter	Traveling block height above the drilling floor	Used in the bit depth calculation
COMP STRK	Compensator Stroke	Meter	Passive heave compensator stroke	Indicates amount of heave the JR is experiencing. The compensator moves vertically to counteract the effects of heave on drilling and coring
COMP DRIFT	Compensator Drift	Meter	Passive heave compensator drift	Indicates how much air has leaked from the heave compensator, lowering the drill string
BIT MBSF	Bit - Meters Below Sea Floor	Meter	Drill/Coring bit position below sea floor	Bit position relative to seafloor
BIT MBRF	Bit – Meters Below Rig Floor	Meter	Drill/Coring bit position below rig floor	Bit position relative to the top of elevator stool
KELLY ADV	Kelly Advance	Meter	Drilling/Coring advance on drill string	Indicates the depth of advance on a single joint of drill pipe. When the “Kelly” is down, a new joint of drill pipe must be inserted into the drill string so drilling/coring can continue
PENETRATION	Penetration	Meter	Drilling/Coring depth of the drill string	Depth of the drill string below the sea floor
ROP	Rate of Penetration	Meters per hour	Drilling/Coring speed of penetration	An indication of the hardness of the formation being drilled or cored
TIDE - future	Local height of tide			Reserved for future use
HKLD ACTIVE	Hook Load - Active	Kilopounds (kips)	Active weight of drill string	Weight of entire drill string being suspended, including acceleration due to heave
STATIC HKLD MEAS	Static Hook Load – Measured	Kilopounds (kips)	Measured weight of drill string	Weight of entire drill string as measured from load sensors in the drill derrick
STATIC HKLD CALC	Static Hook Load – Calculated	Kilopounds (kips)		
WOB MEAS	Weight on Bit – Measured			Reserved for future use
WOB CALC	Weight on Bit - Calculated	Kilopounds (kips)	Weight being applied to the drilling/coring bit	Total calculated weight of the drilling/coring string being applied to the bit, minus the effects of heave. Affects the rate of penetration into formation

TD AMPS	Top Drive Amperage	Amps	Amount of electrical current applied to the top drive motor to turn the drill string and bit	Related to the electrical energy needed to generate mechanical torque to drill through a particular geologic formation
TD RPM	Top Drive Revolutions per Minute	Count	How fast the top drive motor turns per minute	Related to the total energy needed to drill/core through a particular geologic formation
PIPE CNT	Pipe Count	Stands	Indicates the number of stands of drill pipe currently in the drill string	Indication of the total length of all drill pipe in the drill string, measured in “stands” (i.e., 3x drill pipe joints)

Table 1. Drilling/Coring Parameters

b) Fluid Flow Parameters

Parameter Label	Name	Units	Description	Effect on Drilling / Coring
STAND PRESS	Standpipe Pressure	PSI	Current pressure of in drill string	Used to clean out the borehole and cool the drilling/coring components
MUD1 STRKS				
MUD1 SPM	Mud Pump Number 1 Stroke Rate	Number Per Minute	Used to calculate drilling mud flow rate	Used to clear borehole debris out to the seafloor. Flow is calculated by multiplying strokes per minute by volume per stroke
MUD1 VOL	Mud Pump Number 1 Stroke Volume	Barrels	Used to calculate drilling mud flow rate	Used to clear borehole debris out to the seafloor. Flow is calculated by multiplying strokes per minute by volume per stroke
MUD1 VOL RATE				
MUD1 PRESS	Mud Pump 1 Pressure	PSI		
MUD2 STRKS				
MUD2 SPM				
MUD2 VOL				
MUD2 VOL RATE				
MUD2 PRESS				
MUD1-2 STRKS				
MUD1-2 SPM				
MUD1-2 VOL				
MUD1-2 RATE				
CEM STRKS				
CEM1 SPM				
CEM1 VOL				
CEM1 VOL RATE				
CEM2 STRKS				
CEM2 SPM				
CEM2 VOL				

CEM2 VOL RATE				
CEM PRESS				

Table 2. Fluid Flow Parameters

c) Environmental Parameters

Parameter Label	Name	Units	Description	Effect on Drilling / Coring
HEAVE	Ship Heave	Meters	Indicates the amount of vertical motion the ship is experiencing	Indicates the amount of compensation the passive heave compensator must provide to maintain bit position in the borehole
ROLL	Ship Roll	Degrees	Indicates the amount angular motion the ship is experiencing along its long axis (fore-aft)	Maintenance of weight on bit of the drill string
PITCH	Ship Pitch	Degrees	Indicates the amount of angular motion the ship is experiencing along its short axis (port-starboard)	Maintenance of weight on bit of the drill string
ALTITUDE		Meters		Reserved for future use
SHIP DRAFT		Meters		Reserved for future use
WATER DEPTH	Water Depth	Meters		Depth to reach seafloor below sea level
MAGNETICS				Reserved for future use
NAV GYRO	Navigational Gyro	Navigational Degrees	Direction the front of the ship is pointing relative to Earth's magnetic field	Current ship location

Table 3. Environmental Parameters

d) Coreline Parameters

Parameter Label	Name	Units	Description	Effect on Drilling / Coring
CLINE TENSION	Coreline Tension	Kilo pounds (kips)	Current weight suspended by the coreline	Weight of coreline package and coreline wire
CLINE DEPTH	Coreline Depth	Meters	Current depth of the coreline relative to rig floor	Used to estimate core on deck (COD) time
CLINE SPEED	Coreline Speed	Meters per Minute	Current rate of travel of the coreline deployment/recovery	Used to estimate core on deck (COD) time

Table 4. Coreline Parameters

e) Vibration Isolated Television (VIT) Camera Parameters

Parameter Label	Name	Units	Description	Effect on Drilling / Coring
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VIT TENSION	VIT Tension	Kilopounds (kips)	Current weight suspended by the VIT winch	Weight of VIT package and umbilical
VIT DEPTH	VIT Depth	Meters	Current depth of the VIT below moon pool	Generic level indicator
VIT SPEED	VIT Speed	Meters per Minute	Current rate of travel of the VIT deployment/recovery	Generic rate indicator

Table 5. VIT Parameters

f) Wireline Parameters

Parameter Label	Name	Units	Description	Effect on Drilling / Coring
SLB TENSION	Wireline Tension	Kilopounds (kips) or lbs?	Current weight suspended by the wireline winch	Weight of wireline package
SLB DEPTH	Wireline Depth	Meters	Current depth of the wireline below rig floor	Generic level indicator
SLB SPEED	Wireline Speed	Meters per Minute or FPM?	Current rate of travel of the Wireline deployment/recovery	Generic rate indicator

Table 6. Wireline Parameters

2. Configuring the Graphical Display Screen Waterfall Plots (PLOTS 0 and PLOTS 1)

To setup a waterfall plot in the Graphical Display Screen, select the desired parameter (*See Figure 7*) by using the drop-down menu in the Plot Control / Program Status functional area (*See Section C(2) - Plot Control / Program Status*). First, click on the “Edit” button located above the lane to configure, the iRIS Plot Editor Window will open (*See Figure 15 below*)

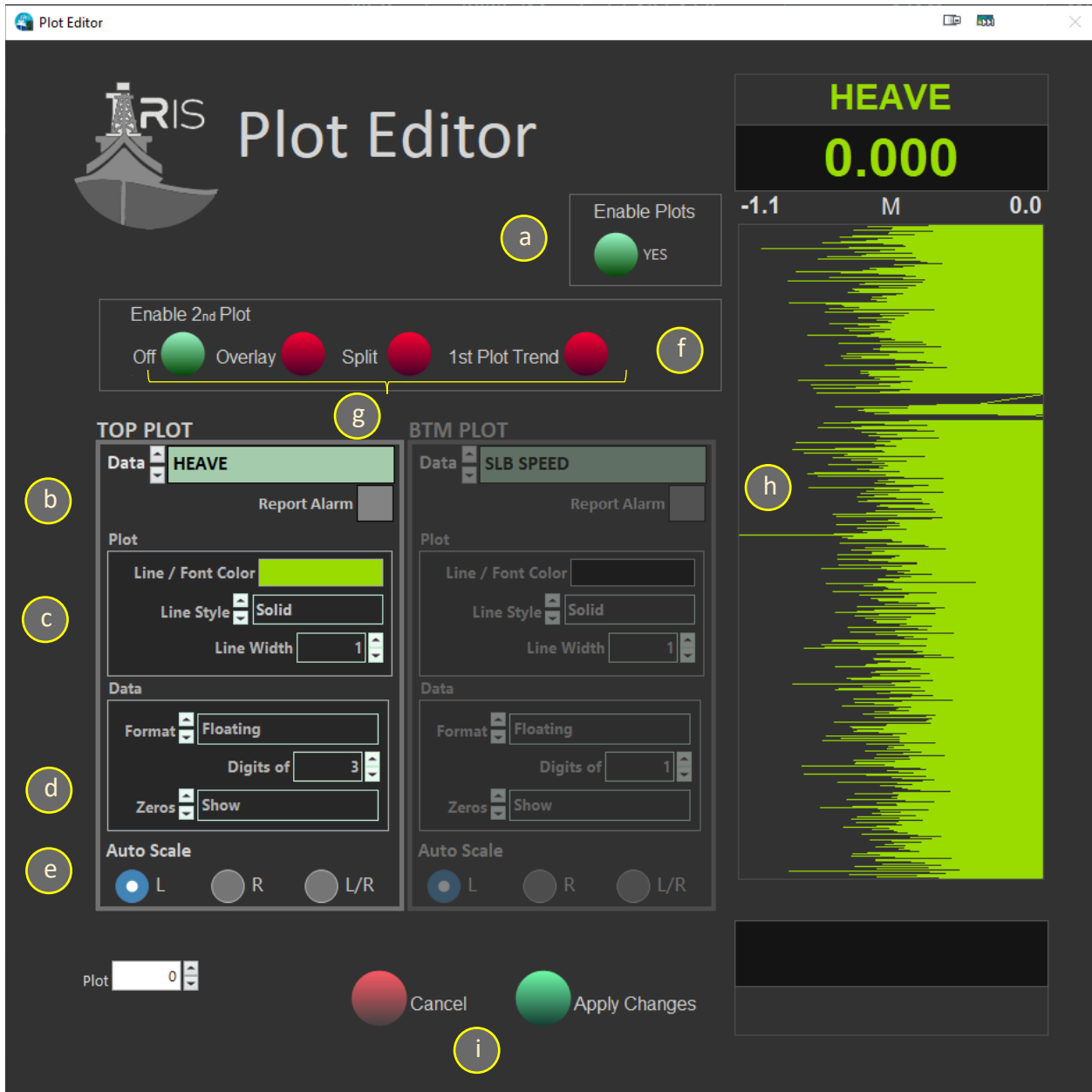


Figure 14. iRIS Plot Editor Window

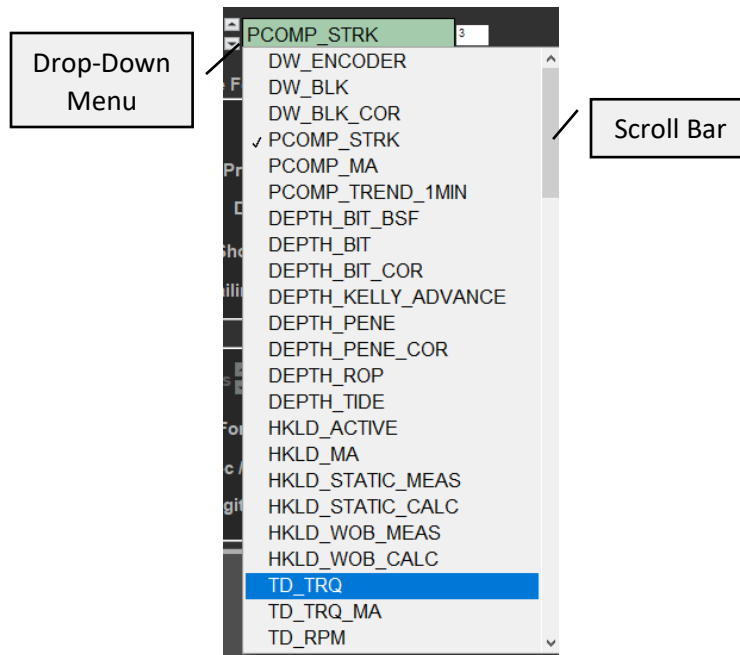


Figure 15. Plot Parameter Drop-Down Menu

In the iRIS Plot Editor Window, the User can apply the following controls to generate a custom plot for the five (5) “swim lanes” available in the Plot Display Window. Each plot can be configured as follows:

NOTE, AS CUSTOM SETTINGS ARE SELECTED A PREVIEW OF THE PLOT WILL APPEAR IN THE PREVIEW WINDOW.

- a. Click “Enable Plots” to activate the graphing function. Click a second time to deactivate the plot. *See Figure 14 above*
- b. Select one of the parameters that appear in the drop-down menu. To find a particular parameter, begin typing the name. Alternatively, click and drag the scroll bar located to the right of the menu. *See Figure 15 above*

NOTE: THE “REPORT ALARM” CHECK BOX IS A FUTURE FEATURE AND NOT ACTIVE AS OF THIS VERSION

- c. Configure Plot Display
 1. LINE/FONT COLOR: Select custom line and font color
 2. LINE STYLE: Solid, Long Dash, Short Dash, Dash-Dot, Dash-Dot-Dot
 3. LINE WIDTH: Used to adjust the line thickness
- d. Configure Data Formatting
 1. FORMAT: Floating Point, Decimal, Scientific Notation, Engineering Notation, SI Notation
 2. DIGITS: Number of digits to be displayed
 3. TRAILING ZERO: Show/Hide trailing zeros
- e. Select how to Auto Scale the plot
 1. LEFT: Will anchor the plot to the left side of the waterfall diagram and auto scale the graph to the right
 2. RIGHT: Will anchor the plot to the right side of the waterfall diagram and auto scale the graph to the left

- 3. L/R: Will center the plot in the lane and auto scale the plot in the center of the lane
- f. Select “Enable 2nd Plot to add a second plot in the same lane. If enabled, the parameter title will appear at the bottom of the swim lane. The second plot can be customized in “BTM PLOT” with some added features
- g. The User can customize the 2nd plot as well
 - 1. OFF: Toggles the 2nd plot on/off
 - 2. OVERLAY: Lays the 2nd plot on top of the primary plot
 - 3. SPLIT: Displays the 2nd plot in a split lane configuration and automatically scales both plots to their respective half lane
 - 4. 1ST PLOT TREND: Displays
- h. Preview plot view
 - 1. “TOP PLOT” preview shows in the upper title area
 - 2. “BTM POT” preview shows in the lower title area
- i. Commit changes or cancel activity by selecting the appropriate button

iRIS allows up to two (2) plots per lane in the five (5) lanes, and two (2) separate plotting functional areas, for a total of twenty (20) customized waterfall diagrams.

3. Adjusting Plot Layout and Displays

Once the User has configured the desired graphs, iRIS GUI allows the User to change the time scale, sampling frequency, and view historical graphs to view trends.

a) Adjusting Plot Time Scale

iRIS GUI Allows the User to increase or decrease the time scale of the plot area. To adjust the time scale, click on the appropriate arrow on the Display functional area. *See Figure 16 below*

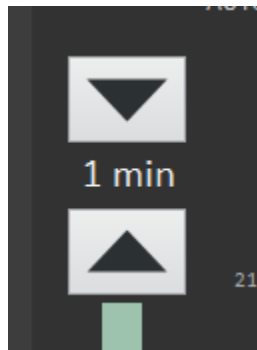


Figure 16. Time Scale Adjustment

The User has the following time scale choices

Seconds	10	30					
Minutes	1	5	15	30			
Hours	1	1.5	2	2.5	3	3.5	4

Table 7. Available Time Scale Adjustments

b) Customize Sampling Frequency

The User can also adjust the sampling frequency that the plot area polls the central datalogger. By adjusting the sampling frequency, events that occur quickly (e.g., firing of the Advanced Piston Core barrel) can be more readily visualized. *See Figure 17 below*

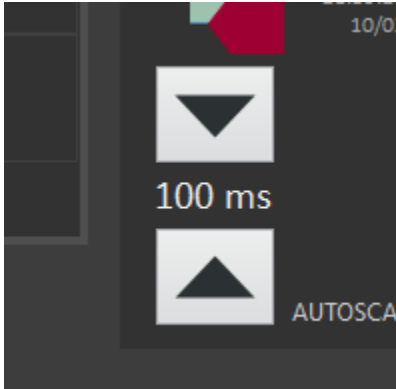


Figure 17. Sample Frequency Adjustment

The available frequencies are (in milliseconds per sample):

100 ms	250 ms	500 ms	1000 ms	2000ms
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Table 8. Sample Frequency Timing

c) Reviewing Historical Data in Plot Area

The iRIS GUI gives the User the ability to review up to four (4) previous hours of data. *See Figure 18*

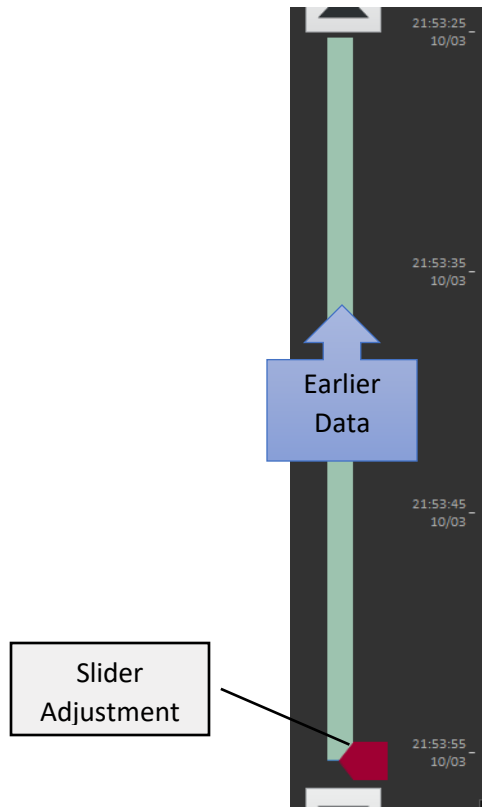


Figure 18. Historical Data Slider

Click and drag the slider bar up to review historical data, and then back down to get more recent data.

NOTE: THE SLIDER BAR MUST BE RETURNED TO THE BOTTOM OF THE SLIDER TRACK IN ORDER FOR THE PLOTTING OF DATA TO CONTINUE

d) Clearing the Plot Area

To clear the plot area, click the “Clear Plot” button. *See Figure 19*



Figure 19. Clear Plot Button

Once selected, all plots will clear of current data and refresh the plot area, and then resume plotting from the bottom of the plot area.

4. Configuring the BIG and SIDEBAR Displays



Figure 20. BIG and SIDEBAR Displays

In addition to the ten (10) graphical displays available with the PLOTS 0 and PLOTS1 functional areas, the User also has a wide variety of non-graphing displays that can be configured to show a simplified, clean numerical display for quick reference parameters described previously in *iRIS Data Classes for Graphing and Datalogging*.

- a. BIG display area divided into six (6) individual display panels
- b. SIDEBAR display area divided into five (5) individual display panels

a) Selecting Data Parameters for BIG and SIDEBAR Displays

To select a data parameter in the BIG or SIDEBAR display, simply click anywhere in the individual panel which brings up the respective Display Editor

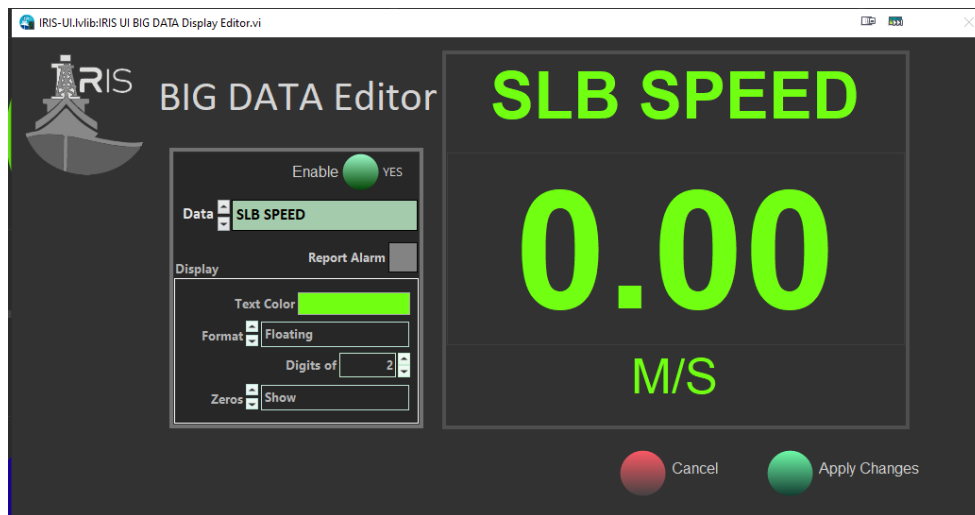


Figure 21. BIG Display Editor

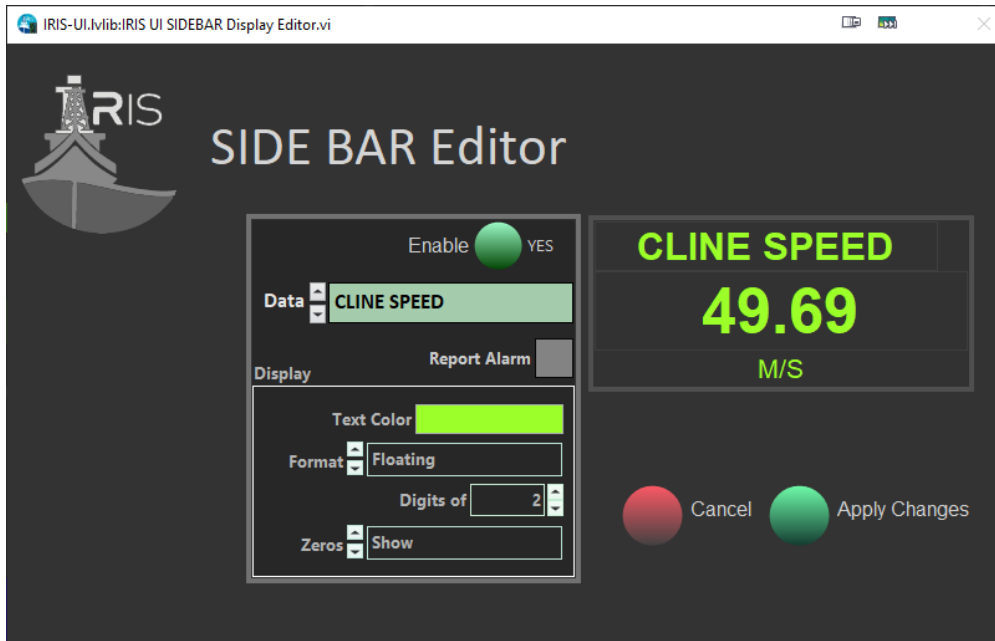


Figure 22. SIDEBAR Display Editor

The User then can modify the display as described previously in *Configuring the Graphical Display Screen Waterfall Plots (PLOTS 0 and PLOTS 1)*

5. SITE FIX – Real Time Navigational Display

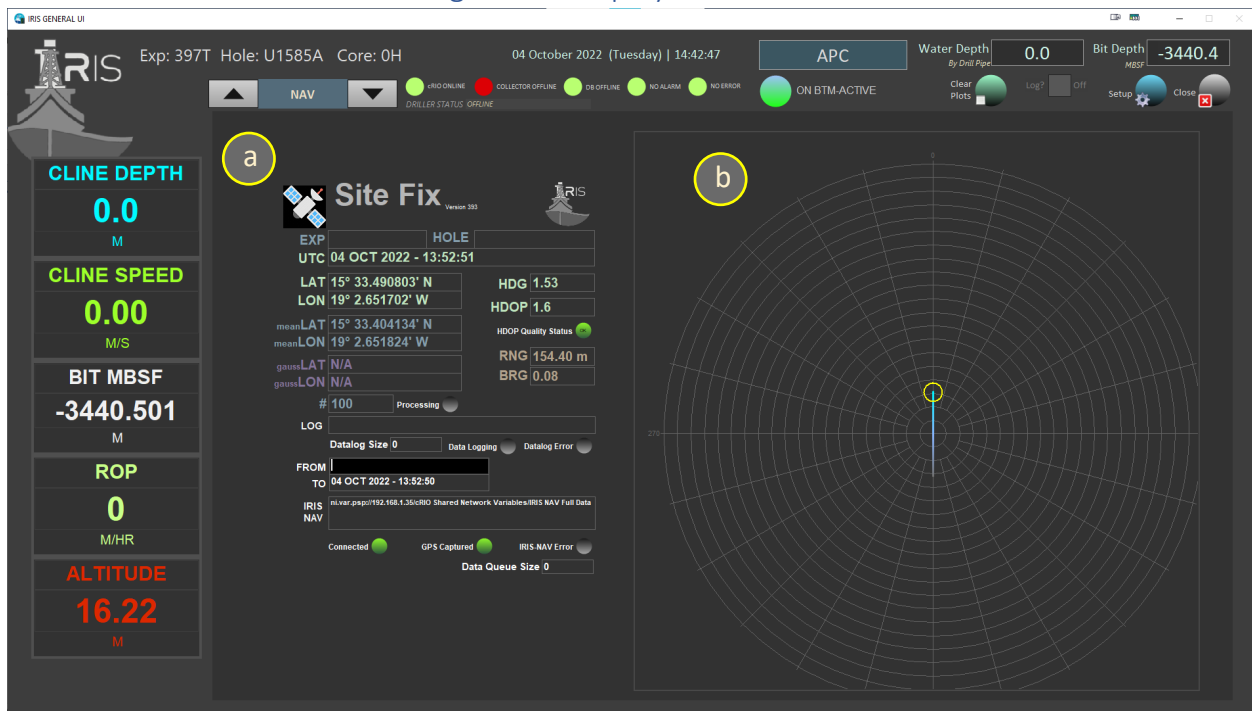


Figure 23. SITE FIX Navigational Information Display

The iRIS GUI offers the User to view real-time GPS location during drilling/coring operations, and during transit periods. The SITE FIX display consists of two separate panels (*See Figure 23. SITE FIX Navigational Information Display*).

- a. GPS Information: This panel displays current Expedition and Hole information, UTC time, Latitude/Longitude, and ship’s heading
- b. The compass shows the current heading of the JR

NOTE: FEATURES ON THE SITE FIX FUNCTIONAL PAGE ARE CURRENTLY IN “READ ONLY” MODE AND FUTURE FEATURES WILL BE ADDED.

6. Core Summary (CORE SUM) Display

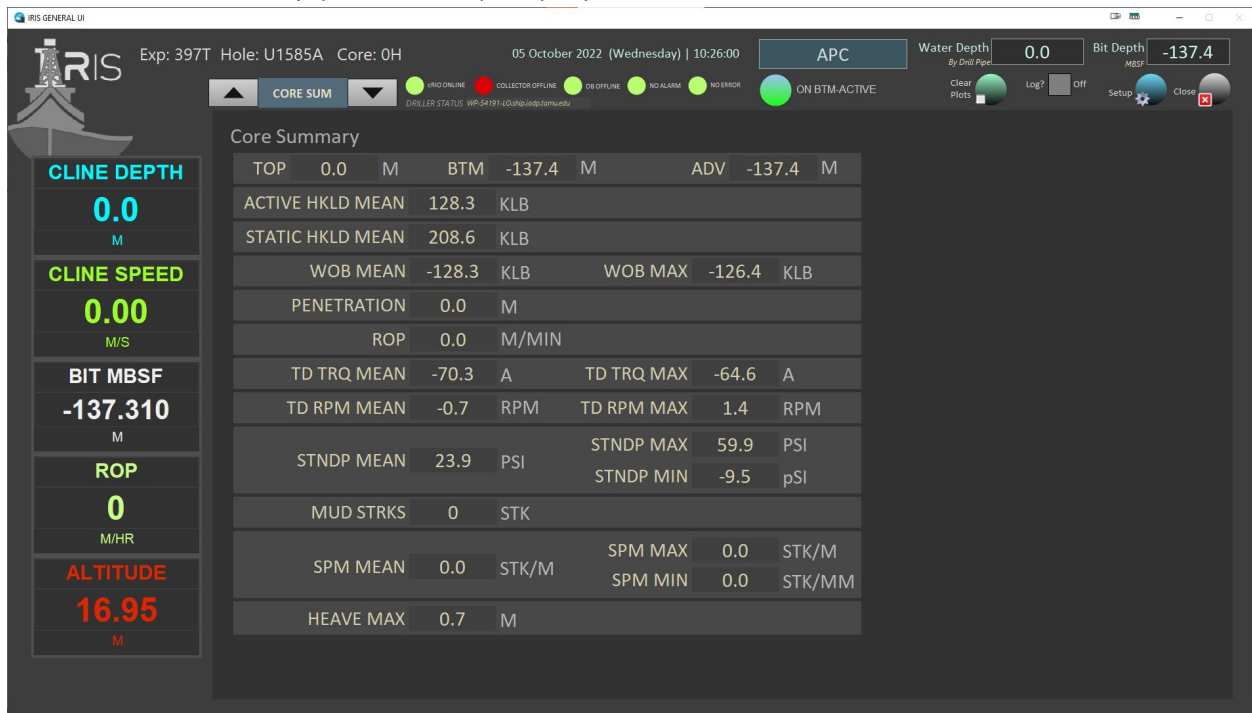


Figure 24. CORE Summary Display

The CORE SUMMARY display (*Figure 24. CORE Summary Display*) is a non-configurable, display-only page that is updated when the Driller completes one (1) core sampling operation. The page will be updated with coring and drilling information. No User input is available.

7. Datalog Export Display

iRIS allows the User to create custom designed datalogging files that can be used to collect and convert any of the parameters that are collected. Further, the Export feature allows multiple configuration files to be developed, saved, and recalled, which allows the User to have multiple types of reports for analyzing specific data for specific scenarios, like having APC versus RCB-specific coring data sets. The Exporter can also export the data into ASCII and CSV-formatted files to be imported into analysis packages. *See Figure 25.*

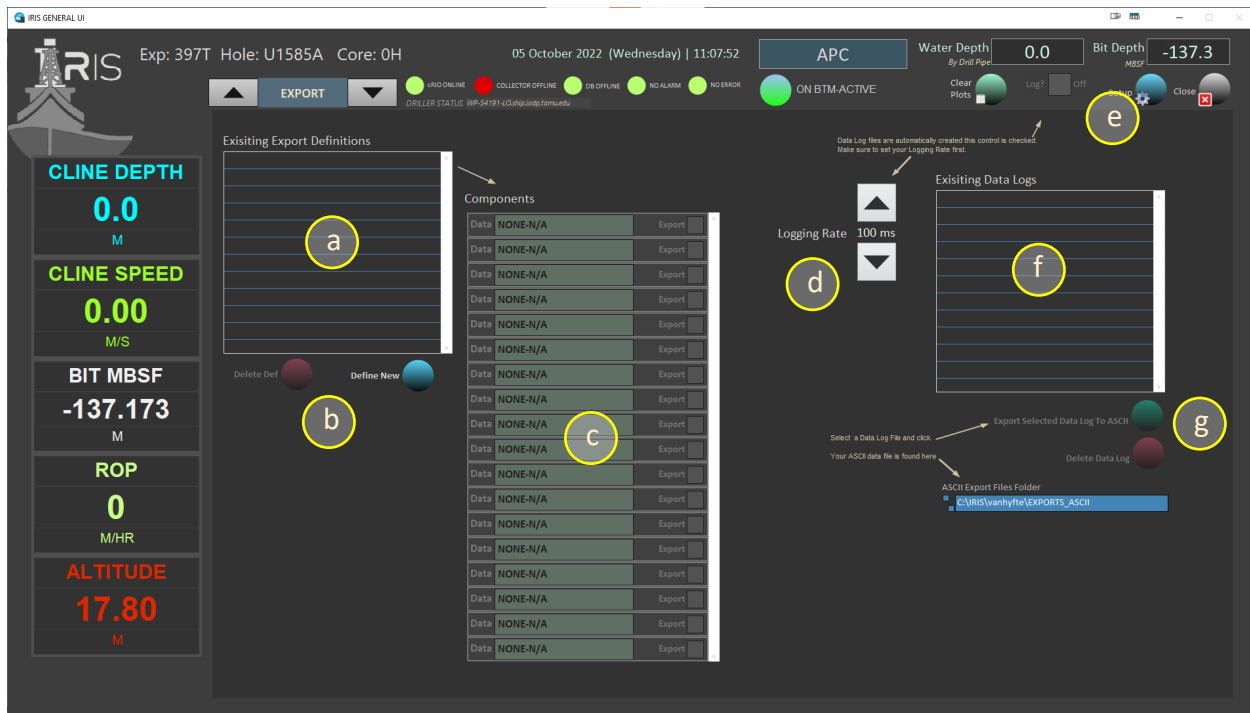


Figure 25. Data Export (EXPORT) Display

The display screen consists of the following controls:

- a. List of existing data definition files available to configure for logging
- b. Define new data definition file or delete existing file
- c. List of parameters that will be collected for datalogging
- d. Set data capture rate in milliseconds (ms)
- e. Toggle to being capturing data
- f. List of existing datalog files available, with newest file at the top of the list
- g. Export selected data file to ASCII (or CSV) format or delete selected datalog file

a) Create New or Modify Existing Data Definition File

To capture a datalog from iRIS, the User must first create a Data Definition File (DDF). The DDF is simply an iRIS-readable list of drilling/coring/environmental parameters the User wishes to collect in a datalogging session. iRIS will allow the User to generate many multiple DDF's that can be created for a wide variety of scenarios, such as different coring types, drilling plans, environmental conditions, geologic formations, etc.

To create a data definition file, click on the "Define New" button on the EXPORT front panel.

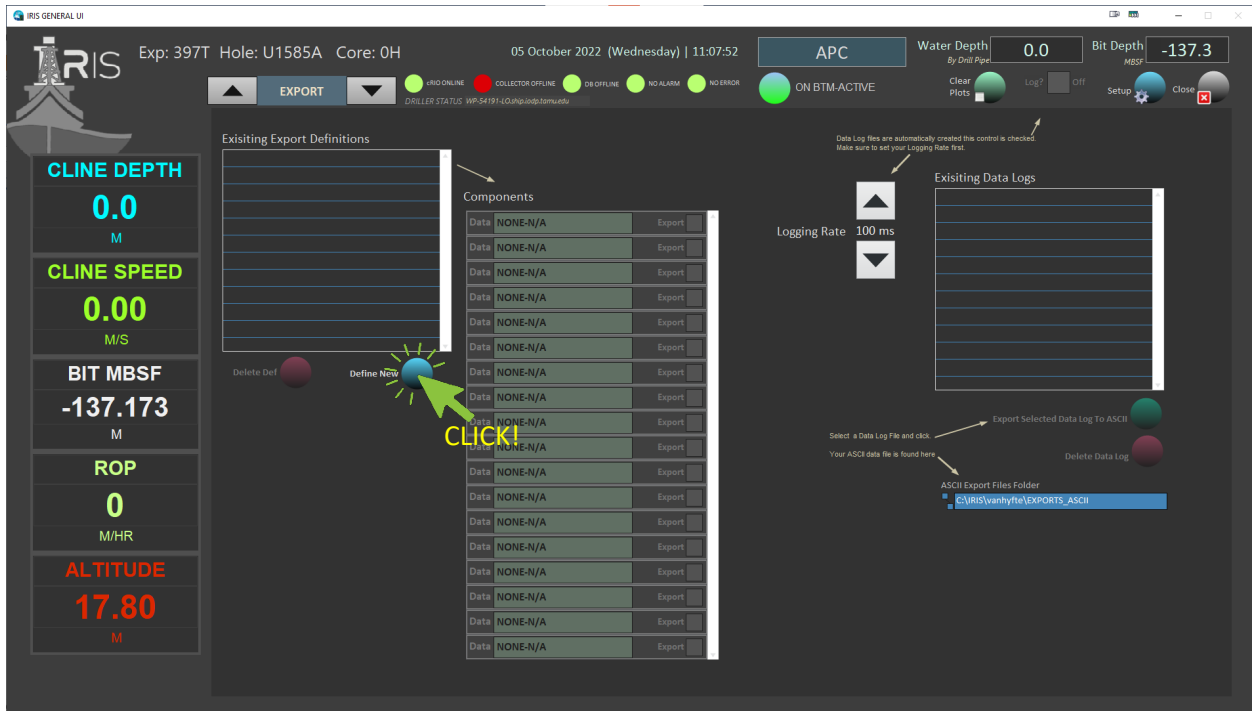


Figure 26. EXPORT Front Panel

This will bring up the Export Definition Panel. (See Figure 27)

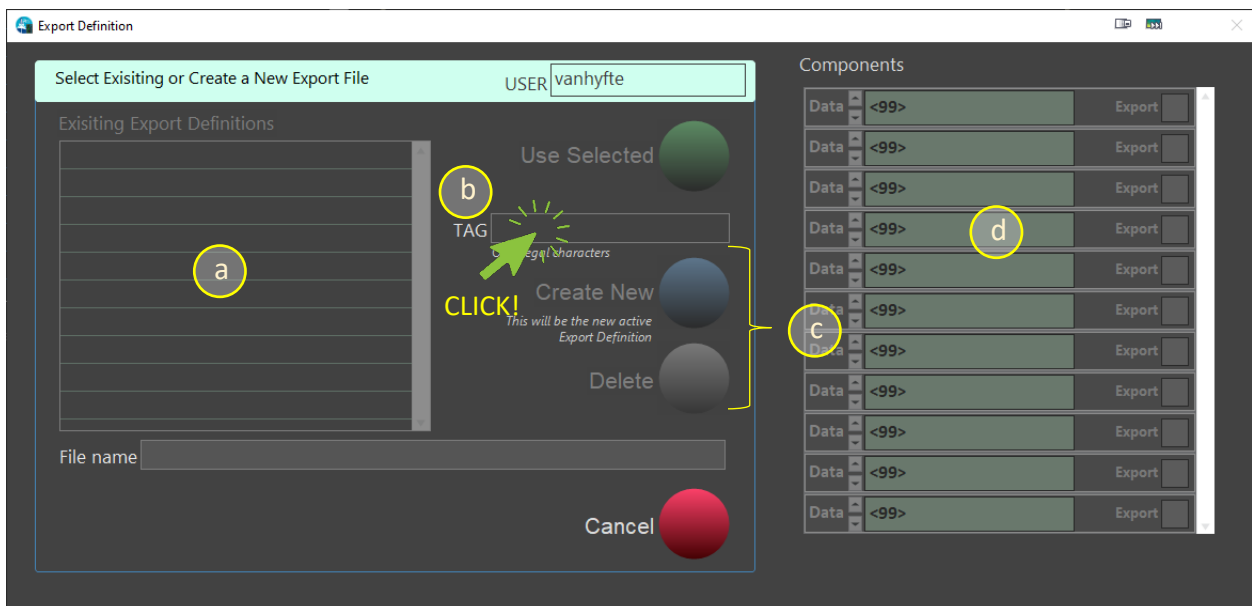


Figure 27. Export Definition Panel

In this panel, the User can perform the following functions:

- a. See existing data definitions files in a list
- b. Enter a new filename for a new definition file
- c. Create a new file or delete an existing file

d. Review the selected logged parameters

To start the process, click in the “TAG” box and start typing the name the file that is to be used. Simultaneously, iRIS will begin to append that name with “_Export_Def” to make the final file name <filename_Export_Def.dat> located in the “\.<username>\EXPORTS_DEF” folder that was created during installation of iRIS. See [Figure 28 below](#).

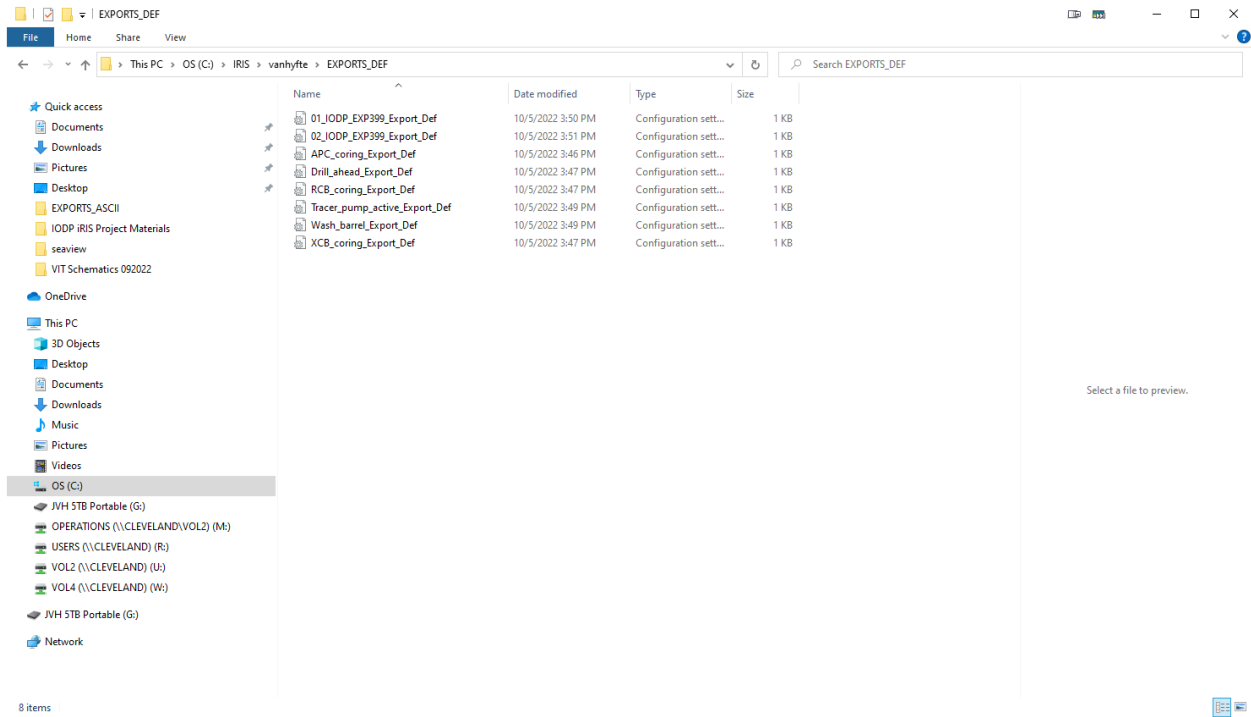


Figure 28. EXPORT_DEF folder

Once the new definitions file is created, click on the “Create New” button to bring up the “Select Export Components” dialog box ([See below](#)).

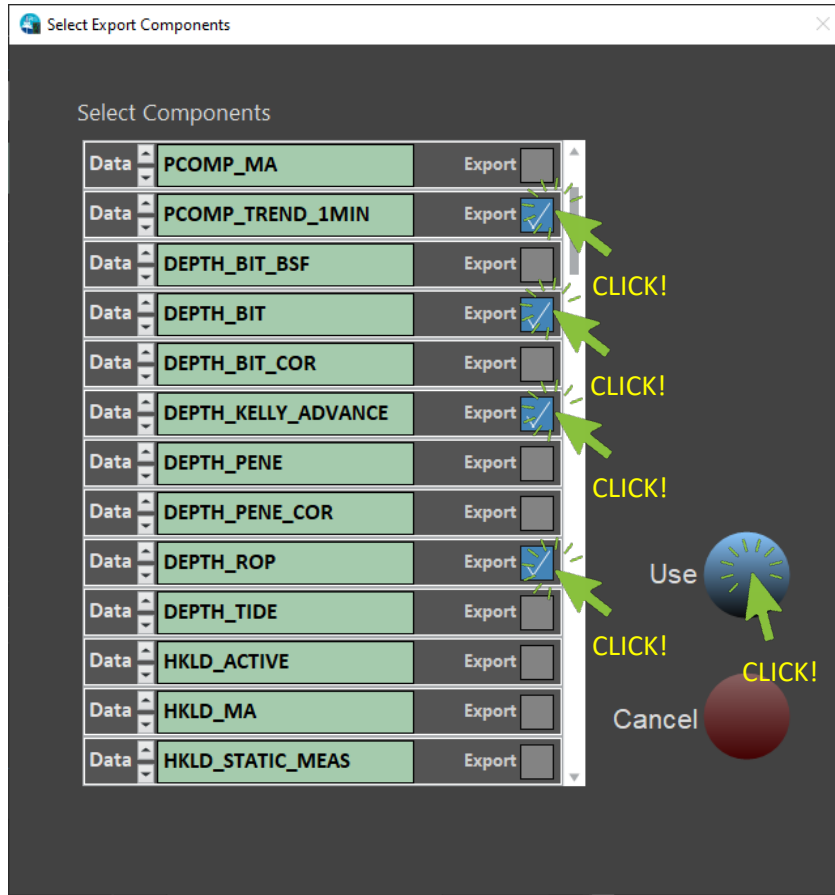


Figure 29. Select Export Components Dialog Screen

In this screen, the User will select the desired components to be included in the datalogging session. The User can also scroll down the list to see all available parameters. Once all the desired parameters are selected, click on the “USE” button to close the window. The User will be returned to the EXPORT front panel, but now with the Components table now populated with the selected parameters.

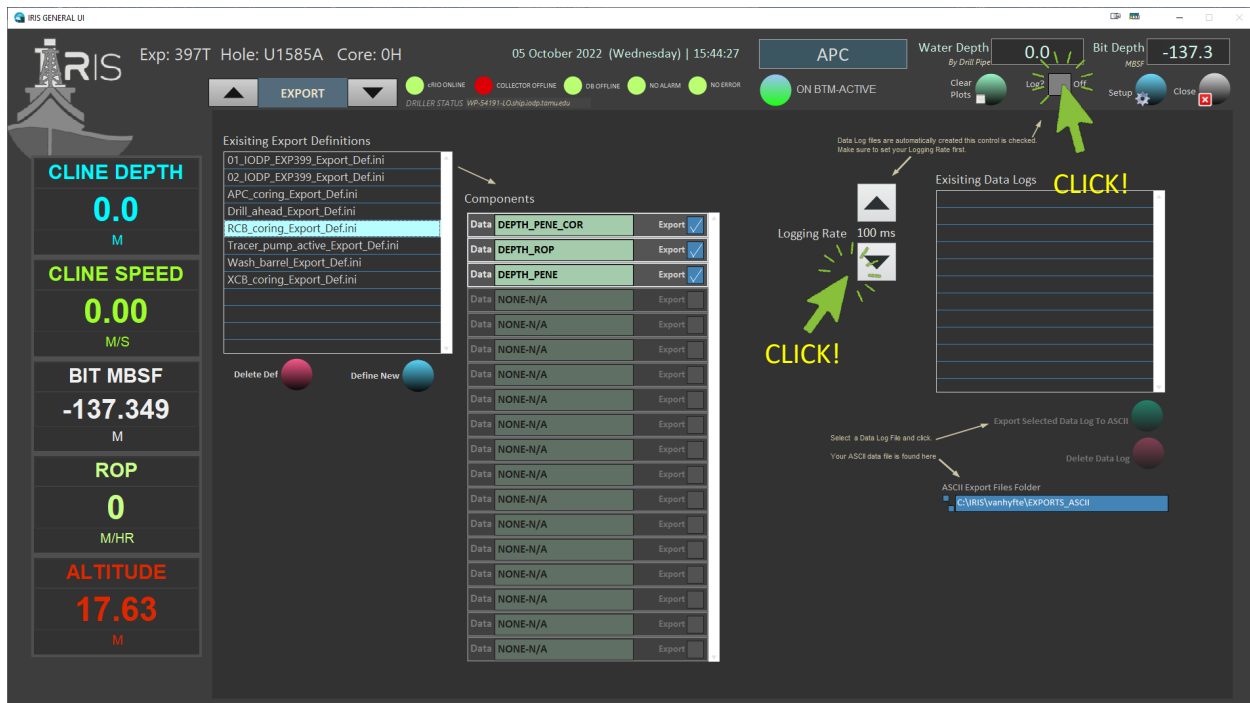


Figure 30. Data Definitions Selected

Next, the User selects the desired Logging Frequency using the Logging Rate selector (*see above*). The User has the option to select capture rates of 100ms, 250ms, 500ms, 1000ms, and 2000ms. Once selected, the User then will click the “LOG” checkbox to begin collecting data. This is indicated by the display showing the number of records collected iRIS will continue to collect data until the “Log” checkbox is deselected.

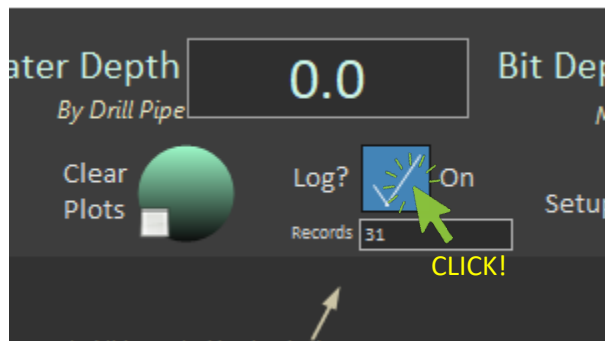


Figure 31. Datalog Collecting Records

NOTE: THE “LOG” INDICATOR WILL BE DISPLAYED DURING DATA COLLECTION OPERATIONS, EVEN WHEN THE USER CHANGES TO ANOTHER DISPLAY PANEL. THE LOGGING FUNCTION ONLY STOPS WHEN THE “LOG” CHECKBOX IS DESELECTED.

Once the logging is stopped, iRIS will write the data into the .DAT file as indicated. The user could then start another logging session using the same definitions file, select another definitions file, or convert one or more .DAT files into ASCII. See

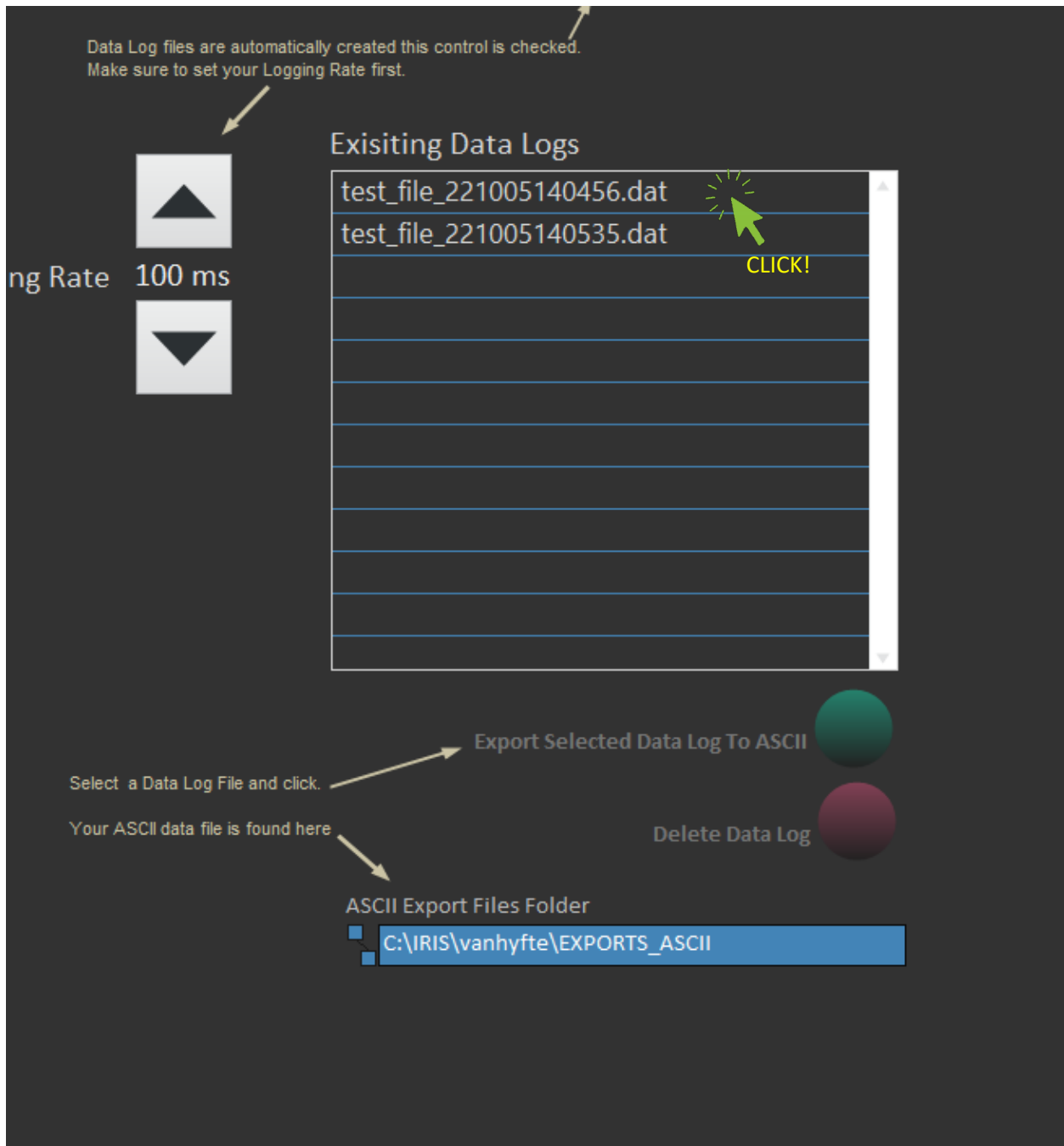


Figure 32. Data Files Ready for Conversion

To convert a data (.DAT) file, click on the filename in the list shown, then click on the “Export the Selected Data Log to ASCII” button. iRIS then requests a filename and location to save the file, with the default folder being the \.<USERNAME>\EXPORTS_ASCII folder. iRIS then converts the file to either a text file (.TXT) or Comma Separated Value (.CSV) file.

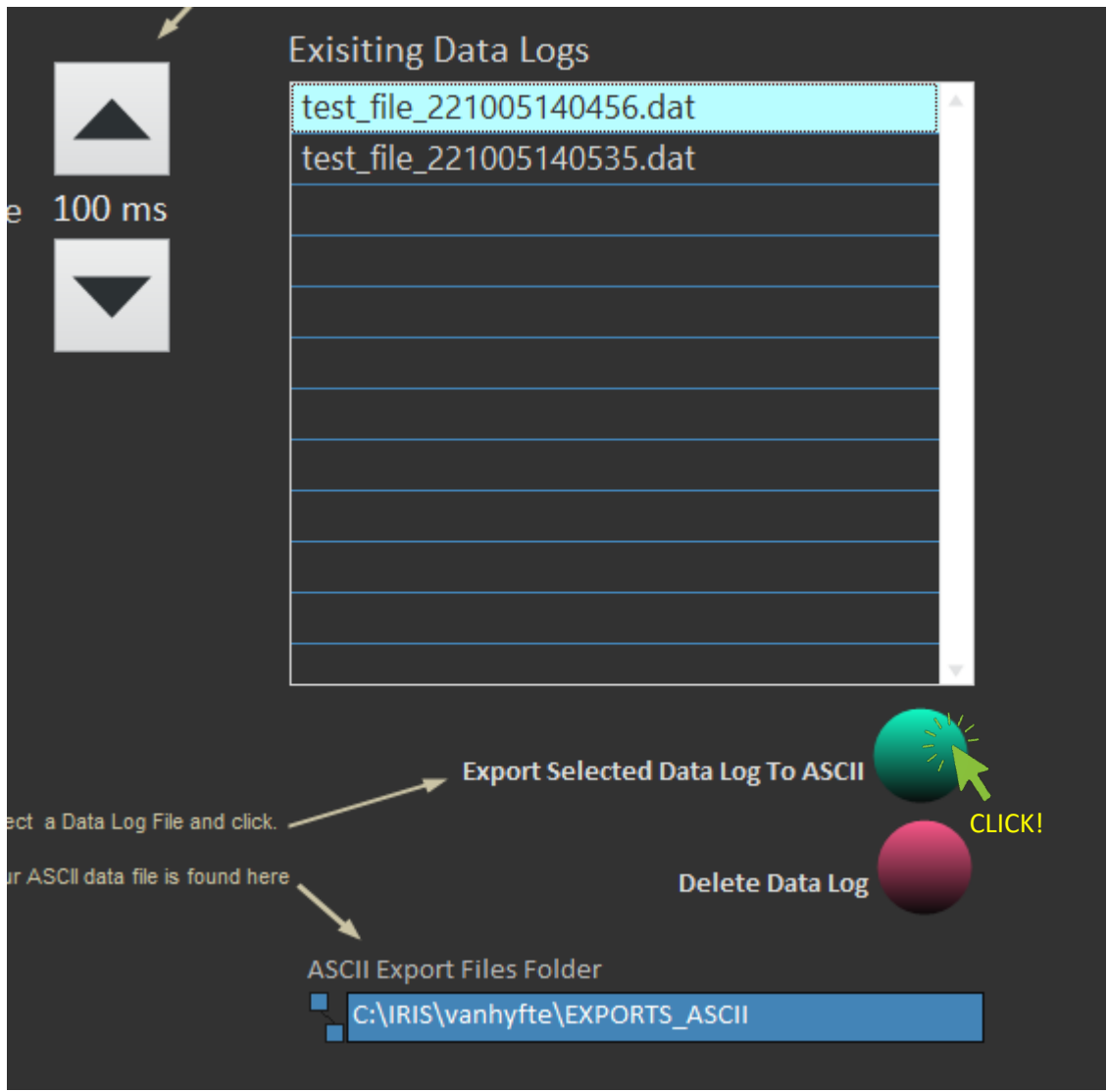


Figure 33. Export .DAT File to ASCII

The file is converted to the desired filetype. (See Figure 34 below)

	A	B	C	D	E	F	G	H	I
1		DW_ENCODER	DW_BLK	DW_BLK_COR	PCOMP_TREND_1MIN	DEPTH_BIT	DEPTH_KELLY_ADVANCE	DEPTH_ROP	
2	5/10/2022 14:04	16	-1.26	-1.26	16	3303.47	1.26	0	
3	5/10/2022 14:04	16	-1.26	-1.26	16	3303.47	1.26	0	
4	5/10/2022 14:04	16	-1.058	-1.06	16	3303.27	1.058	0	
5	5/10/2022 14:04	16	-1.058	-1.06	16	3303.27	1.058	0	
6	5/10/2022 14:04	16	-1.266	-1.27	16	3303.48	1.266	0	
7	5/10/2022 14:04	16	-1.266	-1.27	16	3303.48	1.266	0	
8	5/10/2022 14:04	16	-1.213	-1.21	16	3303.42	1.213	0	
9	5/10/2022 14:04	16	-1.213	-1.21	16	3303.42	1.213	0	
10	5/10/2022 14:04	16	-1.265	-1.27	16	3303.48	1.265	0	
11	5/10/2022 14:04	16	-1.265	-1.27	16	3303.48	1.265	0	
12	5/10/2022 14:04	16	1.089	1.1	16	3303.21	1.089	0	

Figure 34. Converted CSV Data File

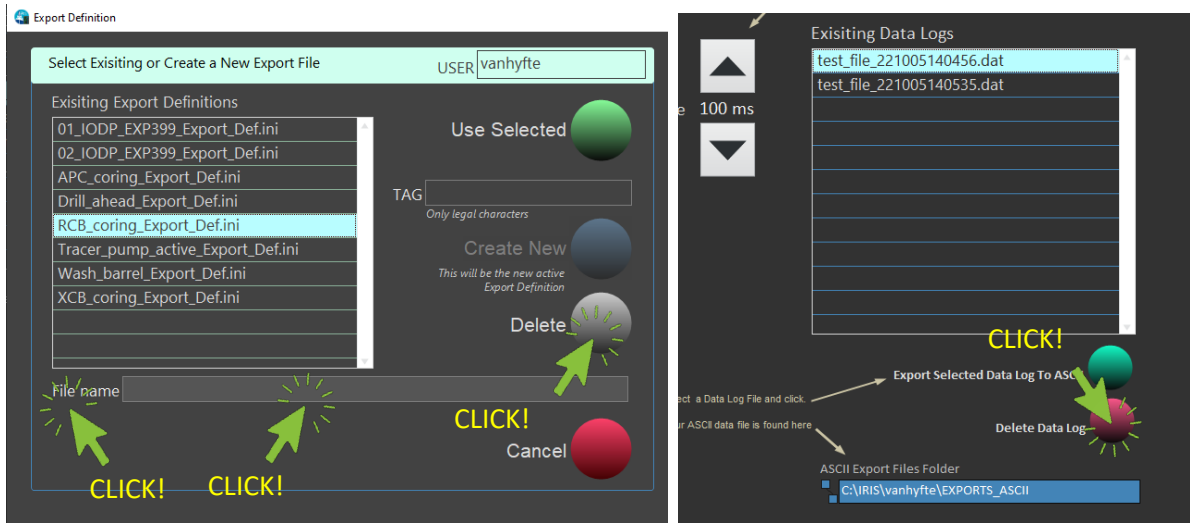


Figure 35. Deleting Data Definitions and Data Log Files

b) Modifying a Data Definitions File

To modify a data definitions file, simply click the “Define New” button in the EXPORT Front Panel. IRIS will bring up the saved file parameters to be modified. Then click the next blank parameter drop-down and select the new parameter(s). Alternatively, the User can also deselect any previous parameter to stop logging of that item. Remember to also check the “Log” button as well, prior to saving the changes. Then click the “Use Selected” button to save your revisions. Once the EXPORT front panel returns, the User can start logging the new parameters by repeating the process shown in [Figure 31 above](#).

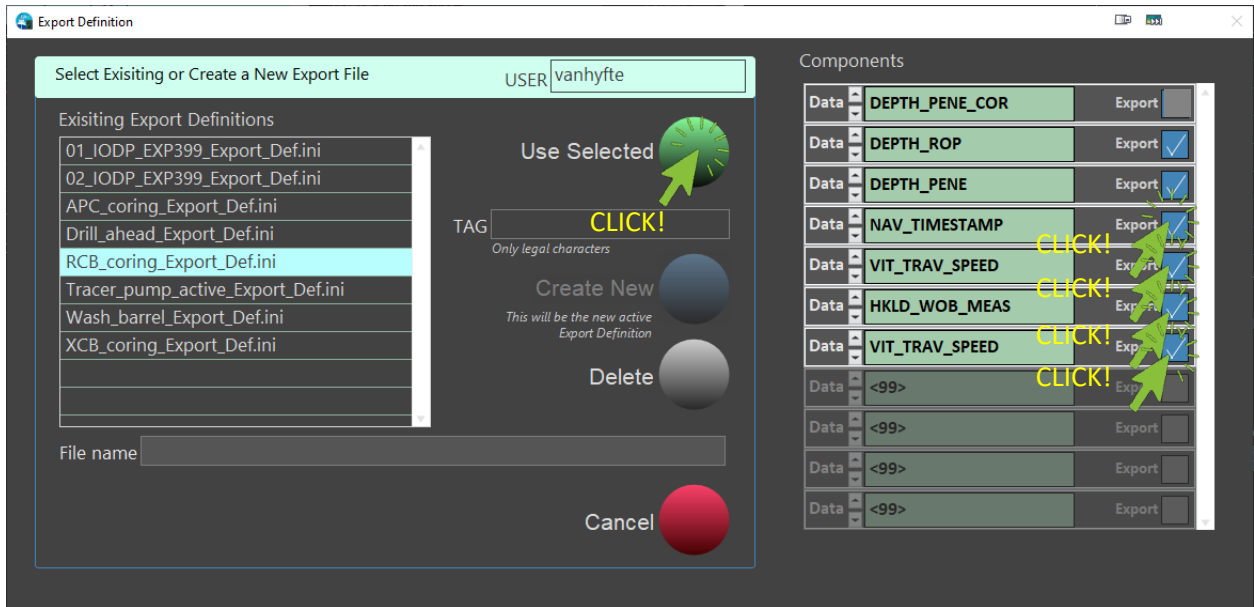


Figure 38. Revised Logging Parameters

Troubleshooting

Revision Log

REVISION NUMBER	DESCRIPTION	REVISION DATE
0	Initial release	22-10-08