5. The Quick Look Window

The Quick Look Window (QLW) is used to display IRIS products. Products can be sent automatically to the QLW or users can request products. The Live IRIS feature allows you to interactively generate and display many types of radar products right in the QLW without having to go through the product configuration, scheduling and output steps. Some QLW features are:

- Easy selection of product images for single-frame browsing, looping and slide show
- Selection of range rings, overlays, shadowing and color scales.
- Geographic cursor mode for position read-outs in radar and latitude/longitude coordinates.
- Interactive tracking, annotation and forecasting of radar echo features, such as typhoons or severe convective storms.
- Forecasting to shift radar displays forward in time. This feature can use the Forecast product or speed and directions entered manually.

The Quick Look Window is very easy to use and with just a little practice, you will soon be a power user.

In this chapter:

Setup and Start-Up	**Section 5.1**
General Window Layout	**Section 5.2**
Window Control and Monitoring	**Section 5.3**
Selecting Products for Display	**Section 5.4**
Live IRIS Product Generation/Display	**Section 5.5**
Changing Window Size and Zoom	**Section 5.6**
Color Scale Tool	**Section 5.7**
Display Options Tool	**Section 5.8**
Animation or Loop Tool	**Section 5.9**
Slide Show Tool	**Section 5.10**
Cursor Read-out Tool	**Section 5.11**
Track/Annotate Tool	**Section 5.12**
Forecast Tool	**Section 5.13**
Cross-section tool	**Section 5.14**
Product Output Options Tool	**Section 5.15**
Print and File Export	**Section 5.16**
Summary of Keyboard Commands	**Section 5.17**

5.1 Setting-Up and Starting the Quick Look Windows

You do not have to do anything to start the Quick Look Windows. When IRIS is started, the windows that have been configured by your system manager (in **setup/output**) will automatically appear on the screen. The initial size of the window and its position on the screen and name (shown in the title bar) are all configured in **setup/output**. Most systems are set to have at least two windows, but you can have more (check with your system manager).

Windows can also be exported over the network from an IRIS workstation to other workstations that are running X-Windows, even PC's running X-Window's software under MS Windows. These workstations do not need to run IRIS (free displays). However, if you export displays over the network, your loop performance will not be as good as when you run loops on your local IRIS workstation. Again, your system manager, through the **setup/output** utility can configure these remote windows.

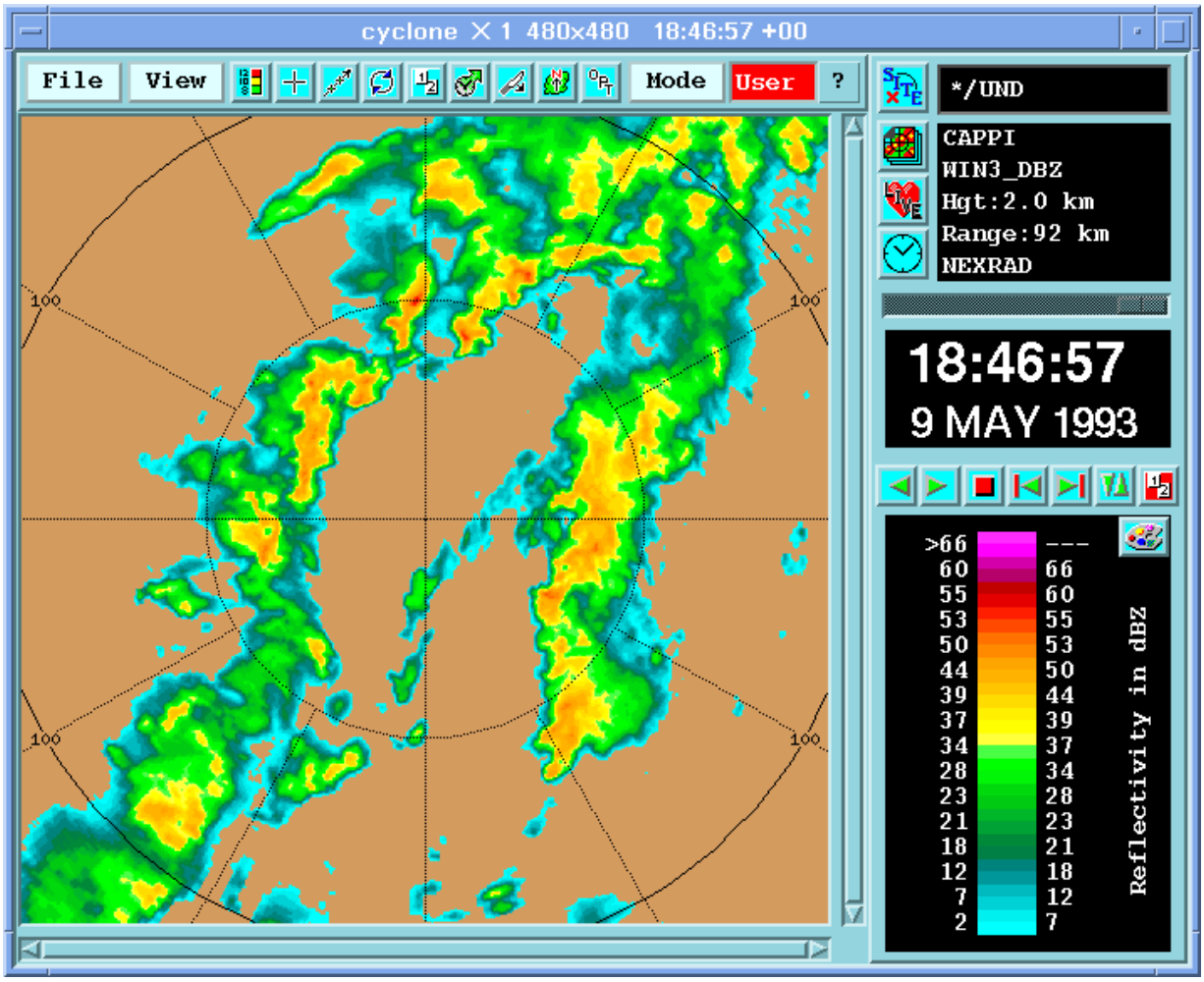
If you logon to a system where IRIS is already running but there is no X-session running (e.g., screen lock or log out), then the windows will appear after one or two minutes. It takes IRIS a little while to realize that you are back.

After a window is up, there is no way to get rid of it except to iconify it where it is handy for quick viewing. This prevents users from killing windows either inadvertently or intentionally so that that weather images are always available. The iconified window will show a small "thumbnail" picture of the image in the display.

In the unlikely event that our software is not perfect and a window "crashes", don't worry. IRIS is not damaged and all radar operation and other IRIS functions will continue normally. After a minute or two, the window will automatically be restarted. Please file a report at support@sigmet.com detailing what you were doing when this happened.

5.2 General Window Layout

The appearance of the window is shown in the next figure. The example is a PPI reflectivity image to 300km of typhoon near the Marshall Islands courtesy of Aeromet, Inc.



This example is of a 480 by 480 window size with range rings and overlay (note the small islands and atolls). The general features of the layout are described in this section.

Top Title Bar

The top title bar is always displayed. It contains basic information on the window itself, i.e.,

- Name of the window that was assigned by the operator in **setup/output.** The name is the “Alias” that has been assigned. The example shows the name “wind #1”.

- Zoom level which is selected by the **View** tool. The example shows “X 1” which indicates no zoom.
- Window size in pixels which is selectable via the **View** tool. The example shows 480 x 480 pixels. This refers to the size of the image area. The actual window size is larger because of the borders and legends.
- The data time of the image that is being display

Window Naming Hints to Operators: If a VIL product is assigned by the Product Output menu to be displayed automatically in the window, then it may be helpful to name the window “VIL”. Another helpful naming convention is to make the name of the window match the name of the workstation “work space” in the Common Desktop Environment (CDE) if this is supported on your workstation.

Tools Area

Beneath the title bar are icons for the various interactive functions of the QLW such as loop configuration, track, cursor, forecast and cross-section. Clicking on the icon will pop-up the relevant tool. Much of this chapter is devoted to describing how to use these interactive tools to get the most out of your IRIS system. At the far right hand side of the tool area is the QLW Mode Button and the QLW Indicator Panel which visually alerts operators to a change in the status of automatically assigned images in the QLW.

Legend Area

The legend area provides tools for selecting radar sites, products and times and displaying this information. The control buttons provide for looping and single-frame browsing. The color legend is displayed and labeled. The **Color Scale** legend tool allows users to select default color scales assigned by the operator, or to make their own color scales.

5.3 General Window Control/Monitoring

Quick Look Window Update Indicator

The Quick Look Window Update Indicator alerts an operator about the status of the images displayed in the QLW. This allows users to see, even from a distance, that a window is set to display live data. (The Quick Look Window Update Indicator is located next to the Mode Button in the Tool Area.)

(Green means automatic updating from IRIS)

(Red means no automatic updating from IRIS)

Window Modes

The Quick Look Window operates in the following modes:

(Green Background)

- **Auto Mode**– The image is updated automatically by the Product Output Menu (as set by the operator) with new images. This is non-interactive use of the window.

(Red Background)

- **User Mode**– The user determines what images are displayed in the window and is actively manipulating these images (e.g. creating a cross-sections or tracks without an interruption from new products arriving from the Product Output menu). Images are not automatically displayed from the IRIS Product Output Menu.

(Green Background)

- **Slide Mode** – Images are displayed based on the Slide Show tool configuration.

(Green Background)

- **Loop Mode** – Images are displayed based on the Loop/Animation tool configuration and the "Most Recent" button is checked so new images are being displayed as they arrive from IRIS.

(Red Background)

- Images are displayed based on the Loop/Animation tool configuration and the "Most Recent" button is NOT checked so new images are not being displayed.

Note:User and Auto Mode can be selected by clicking the Mode button in the tools area. Loop and Slide Mode are selected automatically whenever a slide show or animation/loop is started.

In practice, it is very rare that you have to manually switch the display mode, since IRIS does it automatically for you:

- When you first start to do something in the display, IRIS will automatically switch from **Auto** to **User**. IRIS will not interrupt you by sending images while you are using the window.
- The QLW will automatically switch to **Auto** mode after five minutes of inactivity.

Legend ON/OFF Button

The legend area, title bar and scroll bars may by toggled off by the **Legend** icon which is located on the left side of the tool section. Click the right mouse button in the display window to restore the legend or if you are using a touch screen double tap

the upper left corner (100x100 pixels) of the window. Turning the legend off is useful if you want to reduce the size of the windows so that you can fit more windows on your screen.

Hint: This feature is useful for "tiling" the display windows such as for creating a multi–panel slide show. The startup location of each window and whether the legend is on/off is controlled in setup/output.

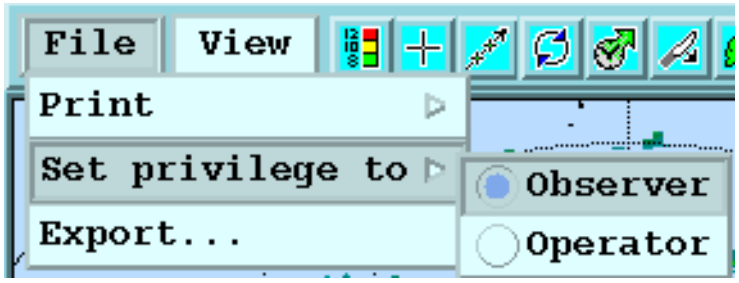
Hint: With the legend turned off, you may want to enable the internal legend feature that shows a legend right in the display window rather than as a side menu. Refer to section 5.8 which describes how the Display Options Tool is used to enable an internal legend in a window.

Setting Operator Password

There are a few functions in the Quick Look Window that are for Operators only since they could effect other Windows. These are:

- Creating or deleting "home" reference points in the **Cursor** and **Track** tools.
- Creating or deleting names for virtual overlays (special combinations of various overlay layers) in the **Display Options** tool.

If you need to access these features, use the **File** tool to set the operator window password that has been configured in **setup/general.**



Select "Operator" and you will be prompted to enter the password. Note that in general, the window password that has been configured in **setup/general** will not be the same as the UNIX operator password.

When you are done, use the File tool to set the privilege back to Observer

---

5.4 Selecting Products for Display

The legend area is used to select the radar site, product, and time for display.

Radar Site (Filter/Display)

The **Site** icon allows you to set a filter so that you will only see data from a particular site, or from all sites (select *). The three-letter site code is displayed– the first field shows your filter request and the second field shows the site of the product that is being displayed (please refer to the example).

Hint: For networks with a single site, it is easiest to simply select the wild card * for the site filter.

In the preceding example, the XXX/XXX indicates that we are filtering to see the site XXX and the actual image is from site XXX.

The site ID XXX is often used to denote sites that are "unidentified", i.e., not configured in the setup/general site list.

Product Selection

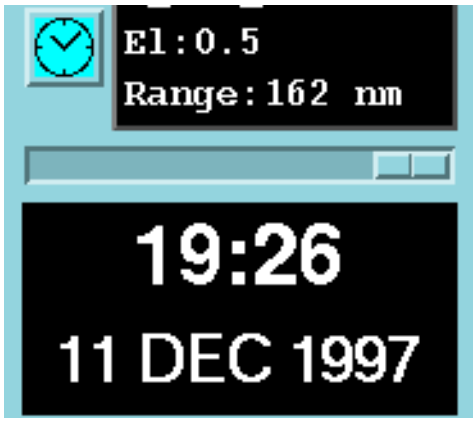
Clicking on the **Product** icon pops up a list of available products. First choose the type (e.g., CAPPI, PPI) and then choose the product name of the product that you want to display.

For convenience, only products that are actually on your IRIS system for the selected site will be shown in the list.

Time Selection

The **Time** icon pops up a list of the actual times at which there are images available for the selected site, product type and name. Select any time from this list. This is a convenient way to select a specific time.

Another way to select a time is to use the **Time Slider** located under the **Time** icon.



You can drag to select a time, and then release to display the product for that time. You can also click in the in the slider to move forward and back by single frames.

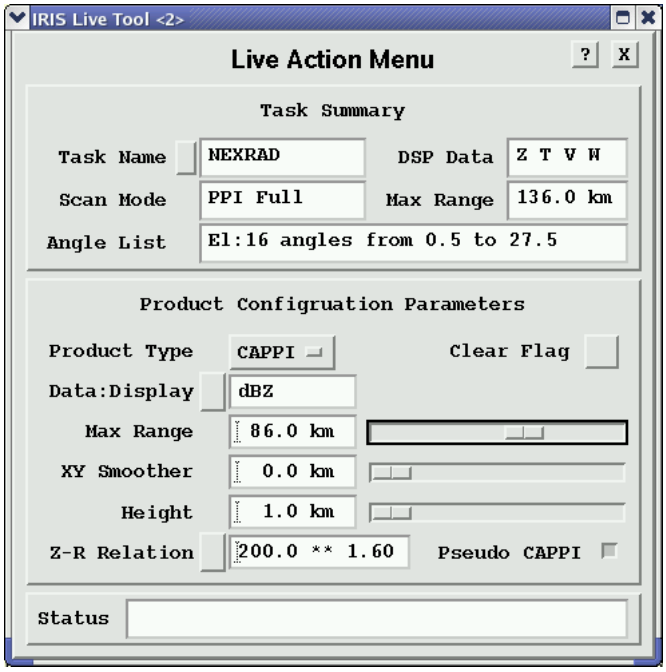
For convenience, the loop control buttons are included in the legend area and can be used to select which time is displayed.

These are described in detail in Section 5.9.

5.5 Live Action Tool- Product Generation and Display

The Live Action tool allows users to interactively configure, generate and display many IRIS products (see list in figure below). If one of these products is on the display, then the Live IRIS tool becomesactive. Clicking the tool pops–up a “lite” version of the relevant product configuration menu. An example of the Live Action Tool for CAPPI is shown below:

Live Action Tool Example for CAPPI.



Supported Live Action Products:

- BASE
- CAPPI
- PPI
- RAINN
- SHEAR
- SRI
- TOPS
- VIL
- XSECT

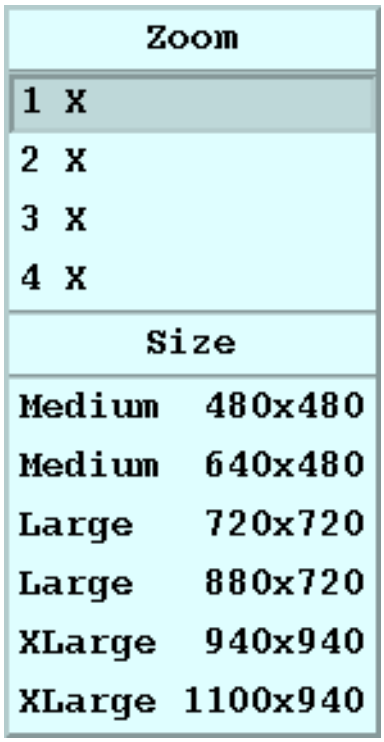
Users can then modify the product sttings on the fly such as the cross-section line position or CAPPI height, and see continuous “live” updates on the display- typically at more than 10 frames per second. For example, the VIL layer top can be scanned to observe the VIL at various heights above the freezing level. The CAPPI hight can be scanned up and down to observe the vertical structure of the precipitation echoes. The type of display (Z, T, V, W) is also brought out to the user in the Live menu.

Since the Live Action feature actually re-generates the product, it is necessary to send RAW data to the display so that the Ingest Files are available. Also, the display must be licensed for the Live Action feature.

Please refer to the relevant section of Chapter 2 for a full description of the product configuration options for each product. Note that in this chapter, the Live Action icon is displayed next any product that is supported by the Live Action feature.

5.6 Changing the Size of the Window and Zoom Level

Click on the **View** icon at the top of the window to select the zoom level and the window size from the **View** tool



Zoom

Select a zoom level and then use the scroll bars to position your display in the area of interest. When you zoom, IRIS will try to preserve the center of the display.

Size

When you select a new window size, the image will be rescaled to exactly fit in the new size. The sizes are the number of pixels in the image area for the window (not including the legend and boarders).

- Square image areas are recommended.
- Rectangular image sizes are useful if the legend information is included in the image itself (selectable as an output option in the QLW or in the Product Output Menu in the case of automatic outputs to a window).

Try square images and then use the Legend icon to toggle legend on/off.
