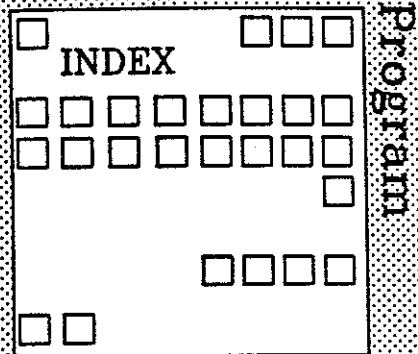


# Index Panel

SLC Control



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All that Fits is News to Print

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## History Buffer Comparative Plots

November 7, 1990

Author: *Gregory R. White*  
Panel Changes: *Few*

Subsystem: *SLC*  
Documents: *Forthcoming*

User Impact: *Small*  
Help File: *Yes*


A facility to plot more than one history buffered device over a common time axis is now available from the SCP.


The control panel for History Buffer Correlations may be reached with the  button

available from any existing History Plots panel from which a time range can be selected

Each device to be plotted is entered as a "dependent variable". Between one and three dependents may be defined which are labeled as A, B, and C. The buttons corresponding to each dependent variable are arranged on the row to the right of the variable label.

There are two ways of assigning a device name to a dependent variable:

-  button assigns the name of the last device plotted from any panel in the existing history plots facility.

-  button initiates a request for a device name. The input format consists of primary, micro, unit, secondary, and channel. These parameters may be entered individually or together on the same line, space delimited. The channel will always be requested; if it is not applicable simply hit return when prompted. Hitting return in response to any of the above parameters other than the channel will cause the definition to be cleared.

## Time Axis

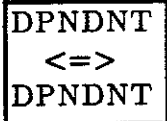
The common time range for all the dependent variables must be selected from an existing History Plots panel prior to going to the History Buffer Correlations panel.

## Scaling


Auto or manual scaling can be toggled independently for all dependents. A minimum or maximum range value entered for manual scaling, will be rejected if it is inconsistent with the existing opposite end of the range. This is a fact that may become irritating if not noted.

Manual scaling in History Correlations behaves slightly differently from the existing History Plots facility. Here, the MIN and MAX bounds are marginally adjusted if doing so would include all the data points.

## Swapping Dependent Definitions

The device names assigned to dependents can be swapped using the  button. Either (or both) of these dependents may be null when they are swapped. This function does not swap the scaling specified for the dependents; this is so that loci may be compared under fixed scaling factors.

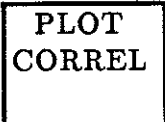
## Available Charts

A number of chart types are available to present the data from selected devices over a common time span. Chart types are cycled using the  button. Currently the chart types are:

- **Stripchart** - plots as many dependents as have been defined, horizontally stacked on the screen. The time axis is written once on the bottom plot
- **Overlay** - plots 1 or 2 devices overlaid (if a third is defined it is ignored).

Within the limitations of the chart-type, all dependents defined will be plotted. For instance, if A, B, and C are defined and an Overlay requested, then A and B will be plotted. If A and C are defined and Stripchart requested, then two plots, one above the other will be plotted.

## Data Acquisition and Plotting

Unlike regular history plots, no chart is plotted until the  button is pushed (though if the time range is changed the chart will automatically update).

## Planned Enhancements

The following enhancements are planned for the next release of the History Correlations facility:

- Add plots of the type  $[A + (n * B)]$  and  $[A/(n + B)]$ .
- Add A vs. B correlation plot with suitable statistics.
- Enhance the dialog for entering a device name.

**New Check Phase Klystron HSTA Mode State**

November 7, 1990

**Author:** *Bob Hall*  
**Panel Changes:** *None***Subsystem:** *Linac*  
**Documents:** *No***User Impact:** *Small*  
**Help File:** *Yes*

When work is being done which affects a klystron phase detector, there is a need to indicate this condition on klystron displays. When the new "check phase" (CKP) state appears for a unit on the Klystron Status Display and other klystron displays, this indicates that the optimum phase needs to be re-measured by Operations before using the klystron.

The new "check phase" state may be entered when pressing the HSTA Mode button on klystron panels. Along with the previously existing five choices for the state of a klystron or subbooster (ON, OFF, MAINT, TBR, or ARU), the new option CKP (Check Phase) may be entered in response to the prompt. Entering this new CKP state will cause the letters CKP to appear in yellow on the Klystron Status Display and other klystron displays to indicate the status of the unit.

**CAMAC Crate Profiles from DEPOT**

November 5, 1990

**Author:** *Patrick Clancey*  
**Panel Changes:** *None***Subsystem:** *CAMAC*  
**Documents:** *None***User Impact:** *Small*  
**Help File:** *Yes*

DEPOT is a SPIRES database maintained on VM which includes the description, location history, and maintenance history of all equipment which have been formally identified. It also includes the Crate Profiles for the SLC control system – the theoretical description of what module SHOULD occupy which slot in which CAMAC or Multibus crate.

Using Depot, one may display the Functional Crate Profile, together with the current inventory of a control system Micro or CAMAC crate. The command for querying the database from VAX is:

```
CRATE micro/crate
```

where *micro* is a formal name of micro such as DR12, or LI02 and *crate* is the crate number such as CR03. It should be noted that the crate argument is optional and if it is not included, then the "/" should also be omitted. Examples of valid commands include:

```
Crate DR13
```

```
Crate LI02/CR02
```

The CRATE command lists the crate profile alongside the inventory of the modules actually listed as occupying the crate.

The information is extracted from the Depot database on VM, mailed to your VAX account, saved in a file (*microcrate.PRF* – eg: *DR13.PRF* or *LI02CR02.PRF* for the above examples) and the file is then typed on your terminal.

More detailed information about systems and individual modules may be obtained by logging on to VM and typing the command "GIME DEPOT". Then enter the database by typing the command "DEPOT". There is extensive online help for most operations.

For additional help, suggestions, or documentation contact Patrick Clancey (CLANCEY@SLACVM) ext. 2339.