Forward Neutron Counter L4 Histos

13-April-1999 / FNC group

To monitor the performance of the FNC detector there are presently four histograms defined in the L4 program:

Histogram 19451:

What is shown? This Histogram shows which of the FADC stations are present in the data. Zero histogram bin shows the number of calls to the FNC monitoring routine. Bins 1-8 correspond to the FADC 1-8.

What to check? The histogram should have contents for all bins 0-8 equal (and nonzero if FNC data is present).

What to do if something is not OK? Check whether the FNC DAQ system is running (See detailed shift instructions).

Histogram 19452:

What is shown? Displayed is the number of times the integrated FADC signal exceeds a low threshold for each channel.

What to check? Compare to the corresponding reference histogram. If FNC high voltage is off/standby then ignore the histogram.

What to do if something is not OK? Check whether the FNC HV is applied (See detailed shift instructions). Check whether the FNC DAQ system is running (See detailed shift instructions).

Histogram 19453:

What is shown? Displayed is the number of times the integrated FADC signal exceeds a high threshold for each channel.

What to check? Compare to the corresponding reference histogram. If FNC high voltage is off/standby then ignore the histogram.

What to do if something is not OK? Check whether the FNC HV is applied (See detailed shift instructions). Check whether the FNC DAQ system is running (See detailed shift instructions).

Histogram 19454:

What is shown? The spectrum of average over all FADC channels voltage is shown.

What to check? Compare to the reference histogram. There should be a two peak spectrum, the first peak is broad and more prominent and the second is narrow and small (it might be necessary to use a logarithmic scale to see this peak). The second peak corresponds to monitoring events.

What to do if something is not OK?

If both peaks are missing or shifted to the left side:
Check whether the FNC DAQ system is running (See detailed shift instructions).
Check whether the FNC HV is switched on (See detailed shift instructions).

If the second peak is missing:
Check that the FNC monitor trigger (subtrigger 123) is in the actual trigger set. Check that the HERA empty bunch signal is delivered to the system. Check that the FNC monitoring system is running (see detailed shift instructions).

How to call the FNC support:

First try to phone the FNC offices:
Office phone: 4168 and 4169
If nobody is there; try the Cityfon:
Cityfon: 0168/4453808