Performance of FRS detectors in RUN313 (MAY-2007)

Primary beam:
^{64}Ni at 300 MeV/u. Primary beam intensity was 5x10^{3}/spill.

MWPC:
All MWPC were operated in 1-stage mode (with U_A only) except MW41. MW21 did not work.

MW11: Works well at U_A= 2000 V.
MW21: we tried with UA= 2600 V, maybe was too low.
MW22: Needs U_A= 2500 V.
MW31: Works well with U_A= 2200 V.
MW41: Mounted in air. Needs very high voltage, U_A=3000 V, U_G=-7100 V, U_T=-1200 V.
MW42: Mounted in air. Works well at U_A= 2500 V.

TUM MUSIC-80:
MUSIC1 and MUSIC2 (pre-amp type A in) were installed at S4. HV_Music1 = 4100 V, HV_Music2 = 4000 V. Two anodes ch. 4 and 5 of MUSIC1 were bad.

Scintillator signals:
The scintillator 5 mm thick has been installed at S4, worked with HV_L-R-O=2100 V and HV_U=2200 V.
At S2, the scintillator 3mm thick (pos. 195) worked at HV_L-R=1900 V.
Time resolution S2-S4 was σ_t = ? ps for 100 ns TAC range.
Another scintillator Sc42 was installed at S4 behind a vacuum tube and in front CAT detector.

Electronics:
During the run the signal form SC21L, SC41L and SC42R were moved from ch. 9, 10 and 11 of the Caen V792 VME QDC to ch. 13, 14 and 15. The problem is the Land QDC. SC21R-41R was changed from ch. 3 to ch. 17 in the Caen V785 VME ADC. The ch 16 and 4 are not working. Is it the ADC or the yellow panel not working ?

DAQ: Standard MBS with two VME crates and X86-8 event builder was used (see rising/mbsrun/may_2007 for DAQ sources).

Online Analysis: The Go4 version used can be found in /misc/rising/plamen/Go4v2.

Physics program:
Tof measurement between Sc41 and Sc42 after a degrader at S4. Energy losses were scanned changing the degrader thickness.