

Details

Purpose of the test was to investigate a drop in amplitude of the last 4 BBCs of board C in the PV DBBC3 system. This drop has been seen during the GMVA fringe tests [f191a](#) and [f192a](#).

Test Setup

The 4-8GHz noise source was connected to all 4 IF inputs of the DBBC3. The DDC_V 124 was loaded and all 32 BBCs were tuned to the same frequency. A test recording was done.

Prior to the recording the system was checked by the monitorDDC.py script: PPS and samplers were in an OK state.

Results

All baselines to board C show a drop in amplitude between BBC 1-4 and 5-8. In addition the phase on these baselines is not constant. A double peak in the multiband delay suggests that there is a delay of approx. 6 ns between the BBC groups.

baseline	fringe plot	
A-B	AB.pdf	
A-C	AC.pdf	
A-D	AD.pdf	
B-C	BC.pdf	
B-D	BD.pdf	
C-D	CD.pdf	