

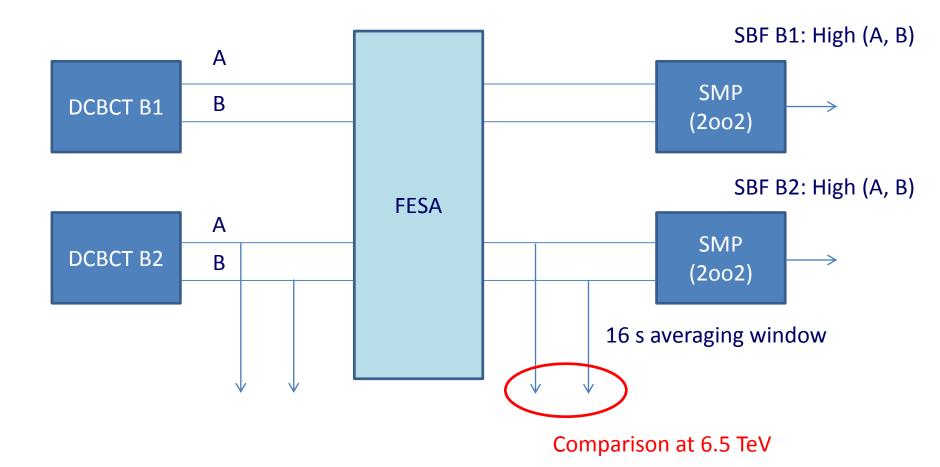
# DCBCT signals from the SMP before and after logic change

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#### **SMP Input Signals**



No significant difference expected before the change

Visible difference after the change (e.g. after a beam dump)



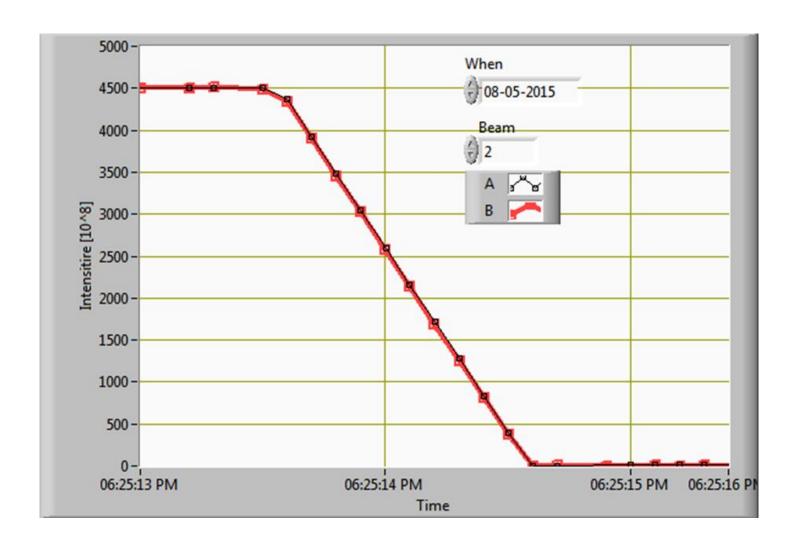
#### SMP: Data Retrieval

- Individual SMP variables not readable from the logging database
- Raw history buffer data (to be decoded: <u>Labview</u>
  + Matlab)
- Selection of events before/after the change on the DCBCT side

SBF data for comparison (to be done)



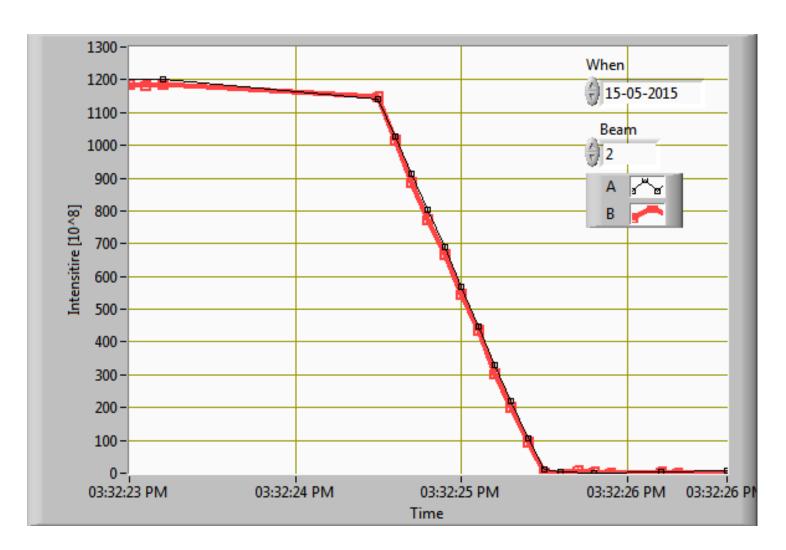
### Before Change: 08/05/2015



No evidence of 16 s average window



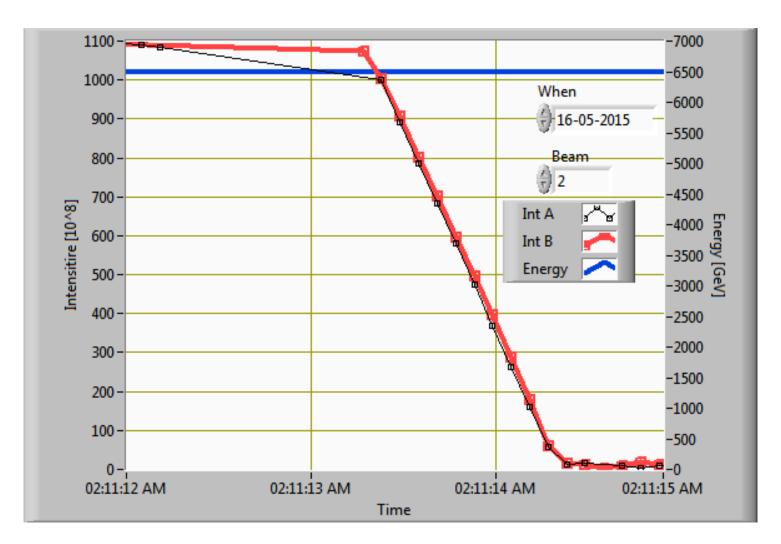
## Before Change: 15/05/2015



No evidence of 16 s average window



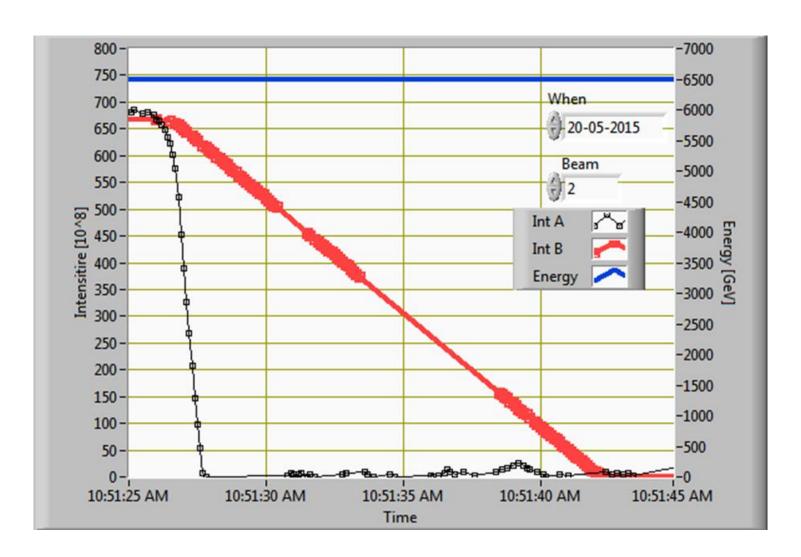
#### Before Change: 16/05/2015



No evidence of 16 s average window



#### After Change: 20/05/2015



Clear evidence of 16 s average window on B2 B



#### Conclusions

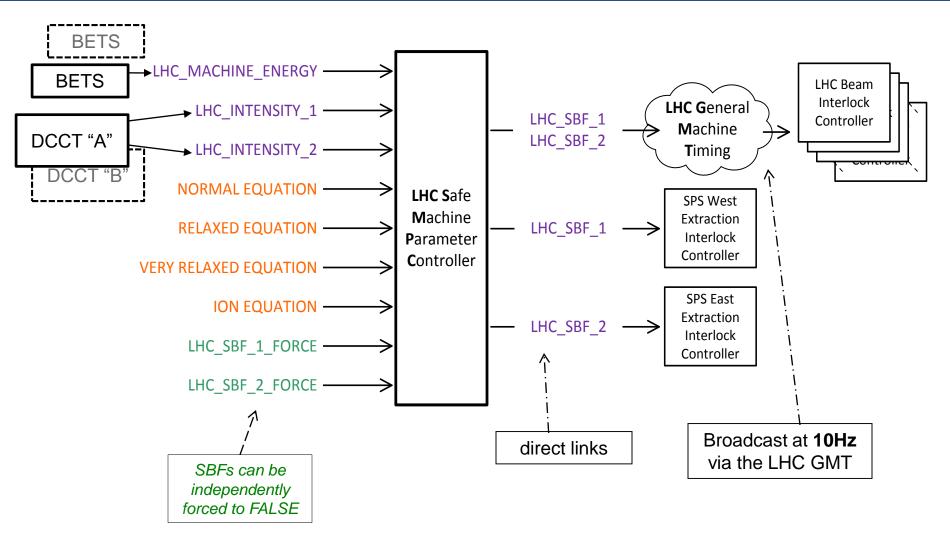
- ☐ Cross-check from the SMP side confirms the 16 s averaging window
- □ SBF: 2002 logic + highest value taken → no implications for MPS
- No expected dumps in the future due to noise on the DCBCT
- Normal settings of the SMP should now be enforced



# THANKS A LOT FOR YOUR ATTENTION!



#### LHC Setup Beam Flag: implementation



B. Todd