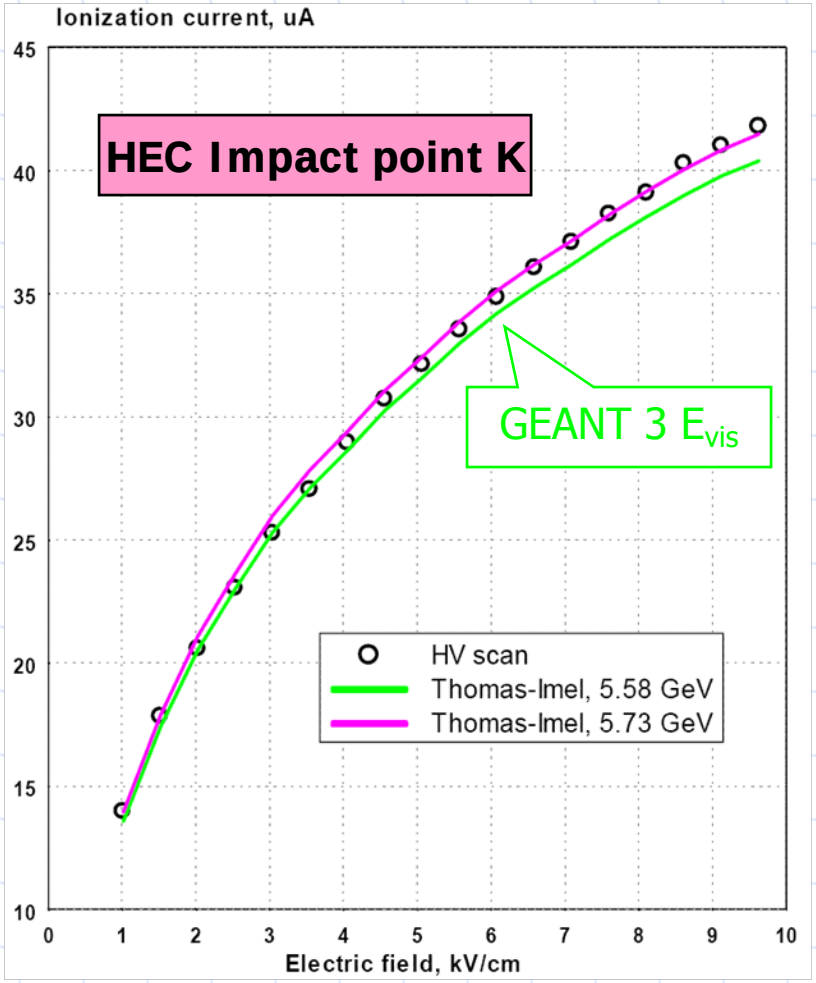
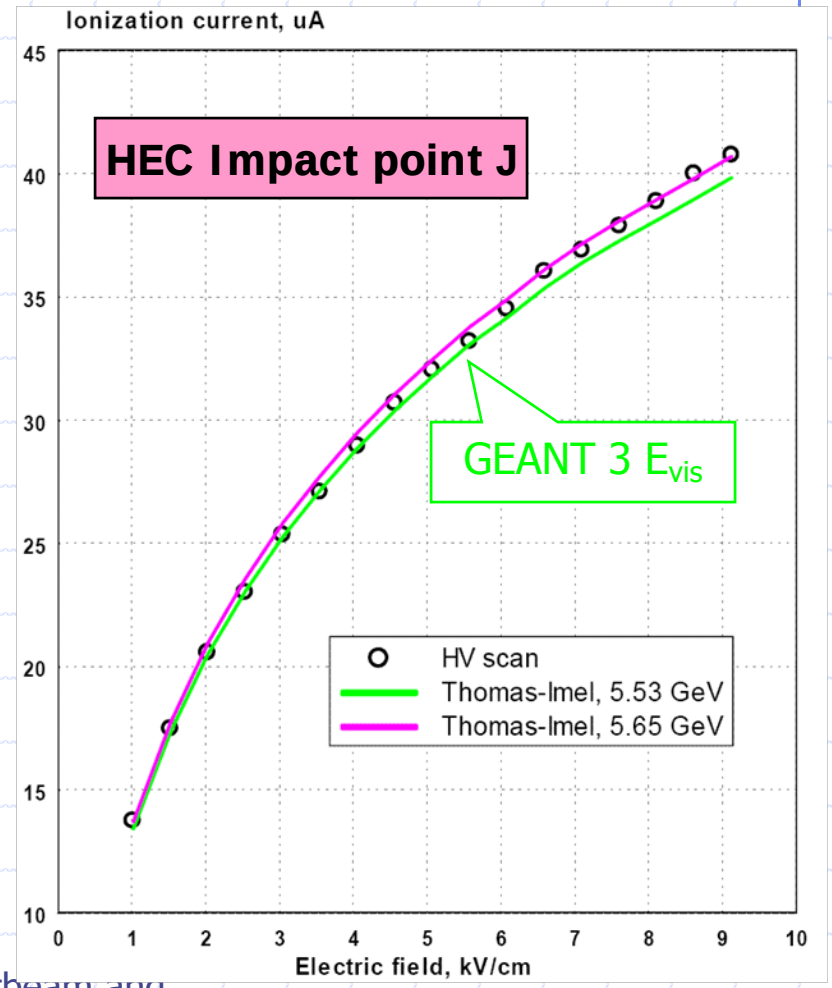
HV corrections: what are the uncertainties?

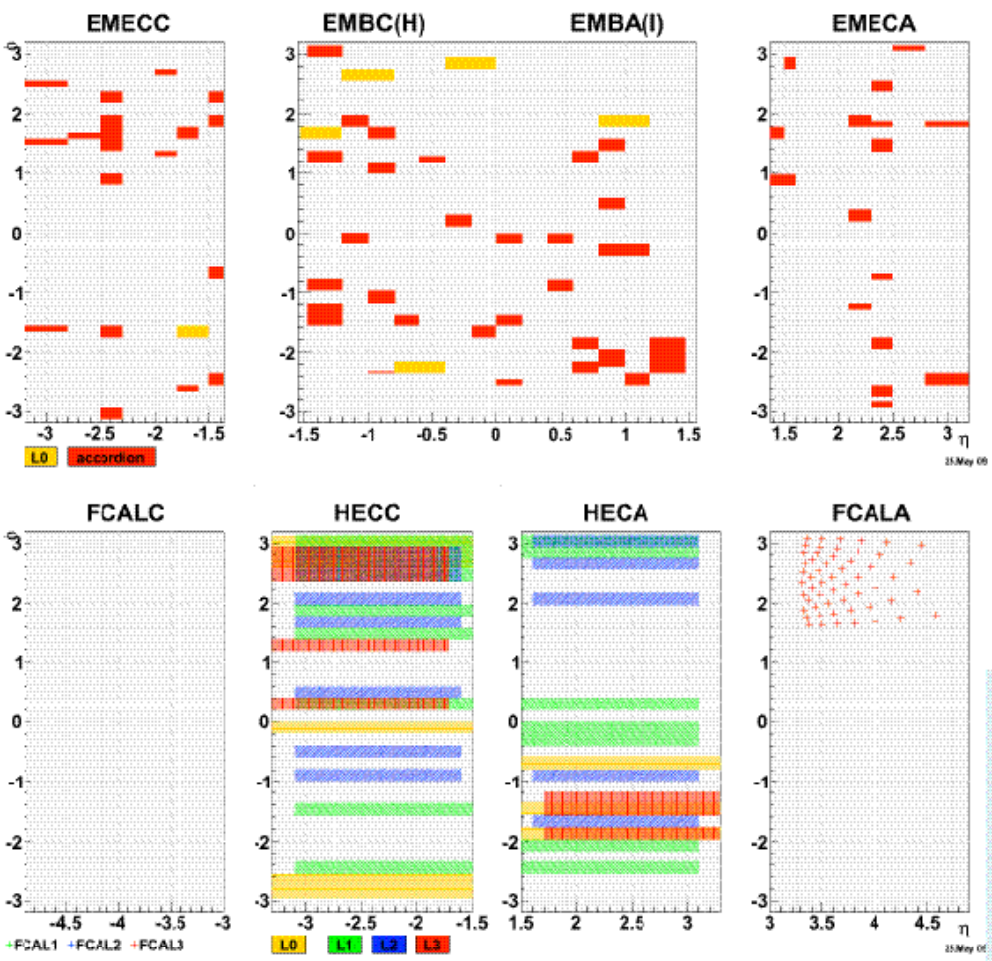
- e.g. **HEC**: HV curves **well understood**; but largest uncertainty results from not knowing the position of the short on the electrode (covering the full η range of a given φ wedge!) coupled with the uncertainty on the resistivity of the HV electrode foil;





ATLAS performance: status HV

- **Channels with HV corrections**

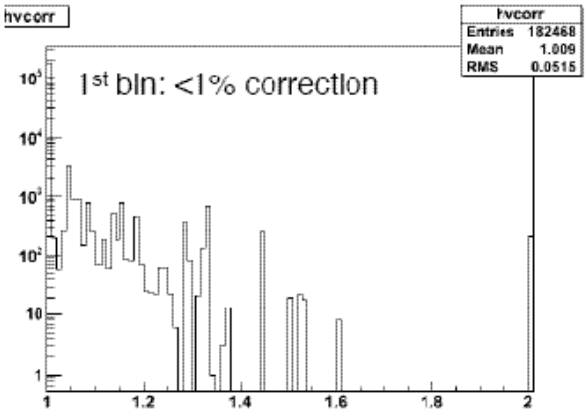


HV correction:

•> 1% correction factor, as obtained from actual HV settings

•No dead readout channels due to HV

•For FCAL some additional channels need HV correction (currently counted only as "distorted calibration")




```
EMB:      7075 of 109568 (6.46%)
EMEC:     2936 of 63744 (4.61%)
EM tot:  10011 of 173312 (5.78%)
HEC:      1017 of 5632 (18.1%)
FCAL:     55 of 3524 (1.56%)
total:    11083 of 182468 (6.07%)

(total October 2008: 10983)
```

HV corrections: what are the uncertainties?

- **HEC**: HV variation of the potential across the electrode affected (where the short is) is typically 60% to 100%, depending on the position of the point relative to the short position and the two HV connections; but remember: typically HEC has 4*8 resp. 4*16 electrodes, the uncertainty refers only to the shorted electrode! Needs to be studied using single tracks or/and dependence of trigger rate on trigger tower; this will yield finally a second level HV correction, depending on η;