

Post Flight Calibration of DOSTEL with
Heavy Ions During the First and Third
ICCHIBAN Run at HIMAC, Chiba

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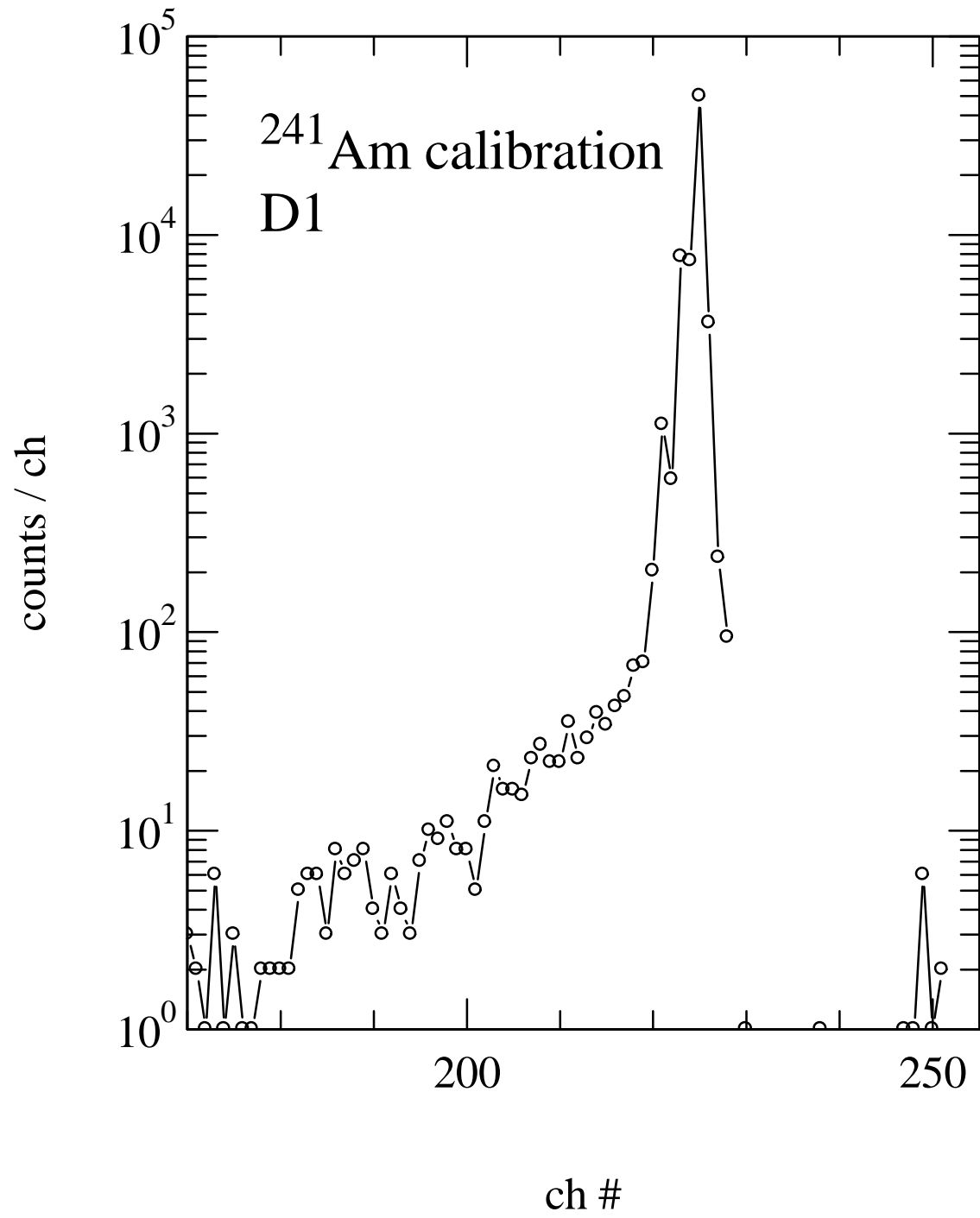
3-5 September 2003, LBNL, Berkeley, USA

Calibration with ^{241}Am

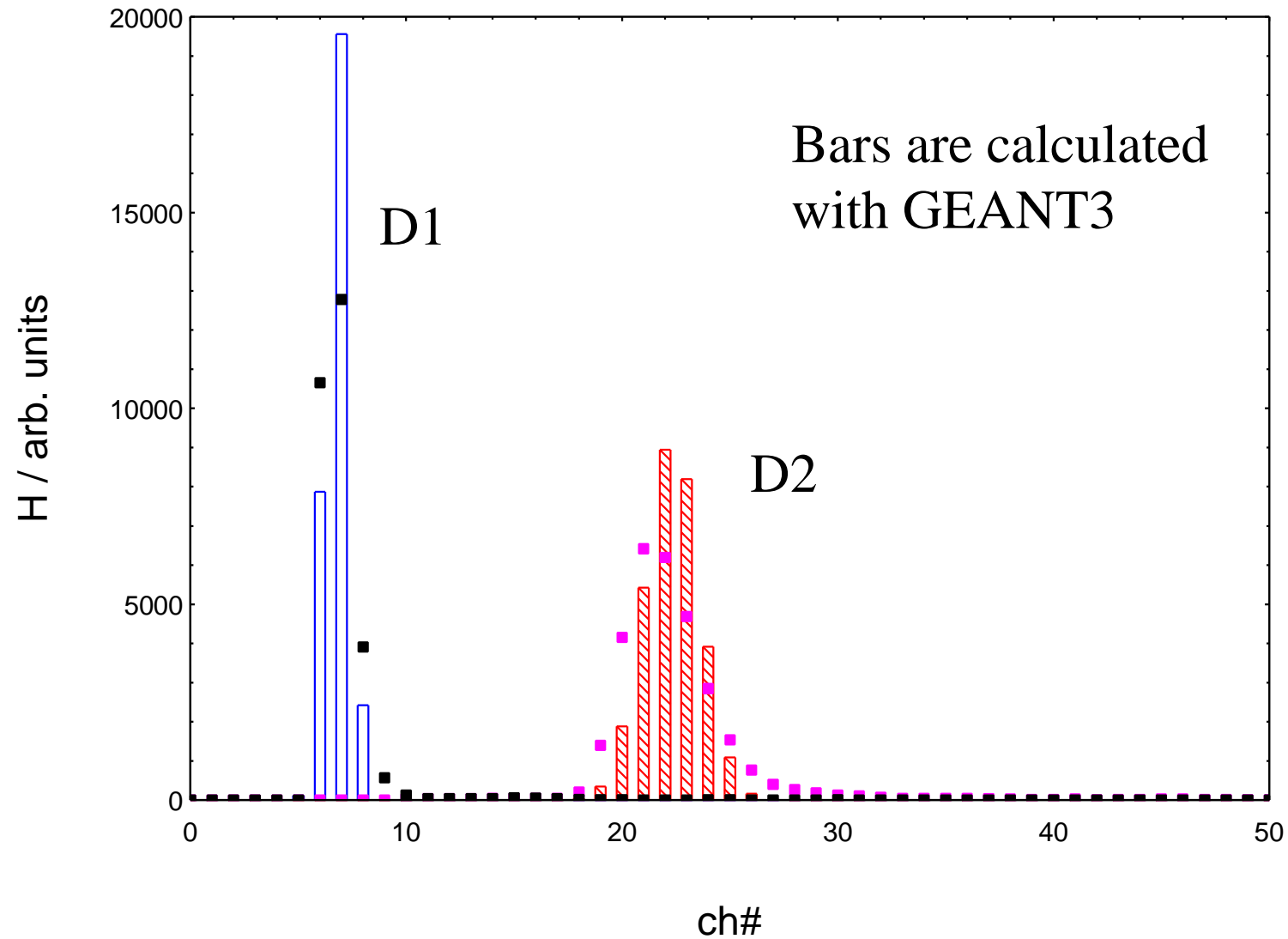
- in a vacuum chamber (pressure 0.1 hPa, distance 10 cm)
- the dead layer of the detectors is specified at about $0.1\mu\text{m}$ so it can be neglected and the peak is attributed to stopping alpha-particles of 5.48 MeV (their range in Si is about $28\mu\text{m}$)

Calibration with ^{241}Am

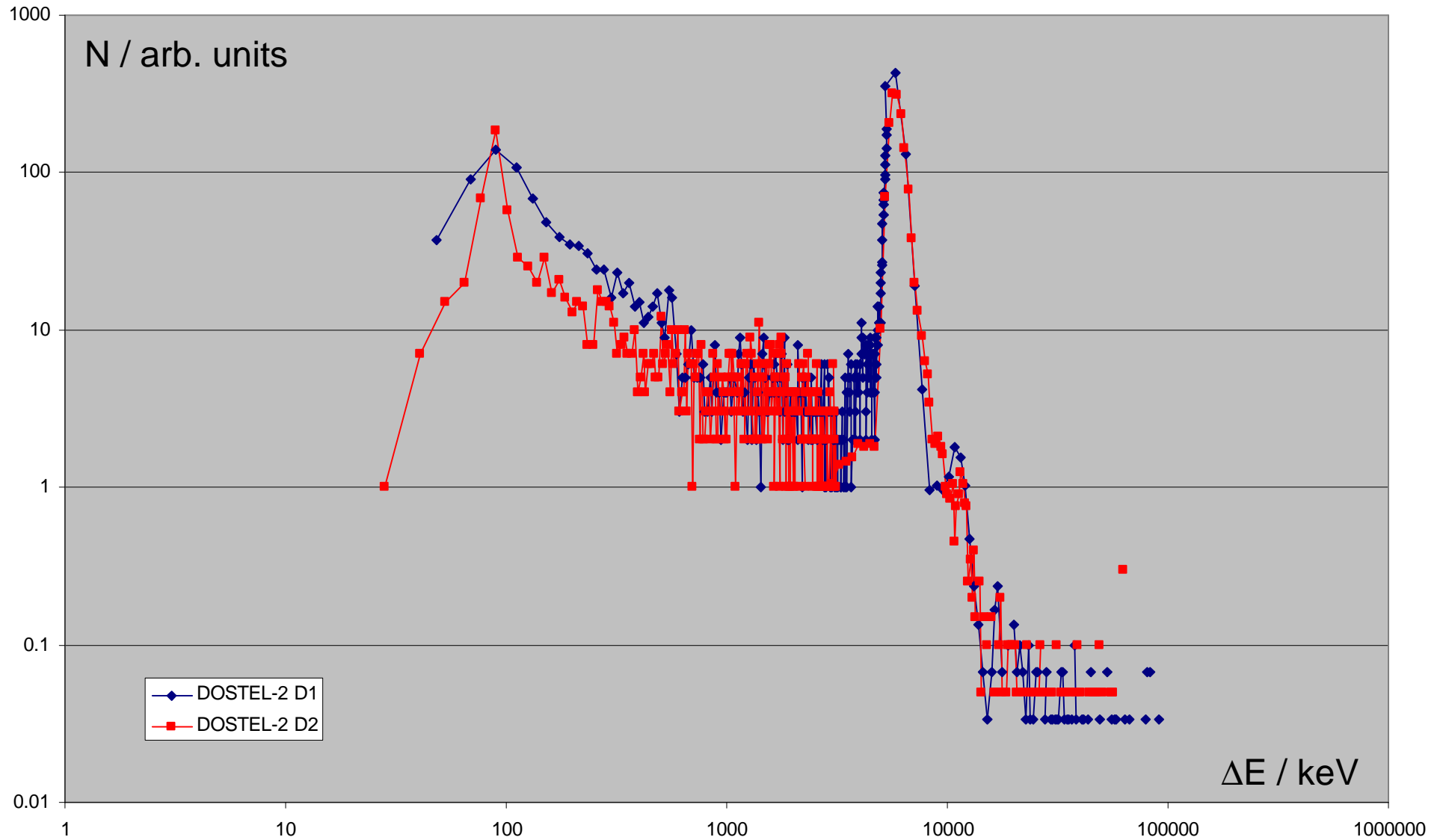
- the gain of the pulse amplifiers was reduced in order to yield the 5.48 MeV peak at the high end of the low energy deposit channels
- The ultimate response is calculated from the nominal gain of the pulse amplifiers which is better than 2%
- The overall linearity for the low and high energy deposit range was verified by using test pulses from a tail pulse generator



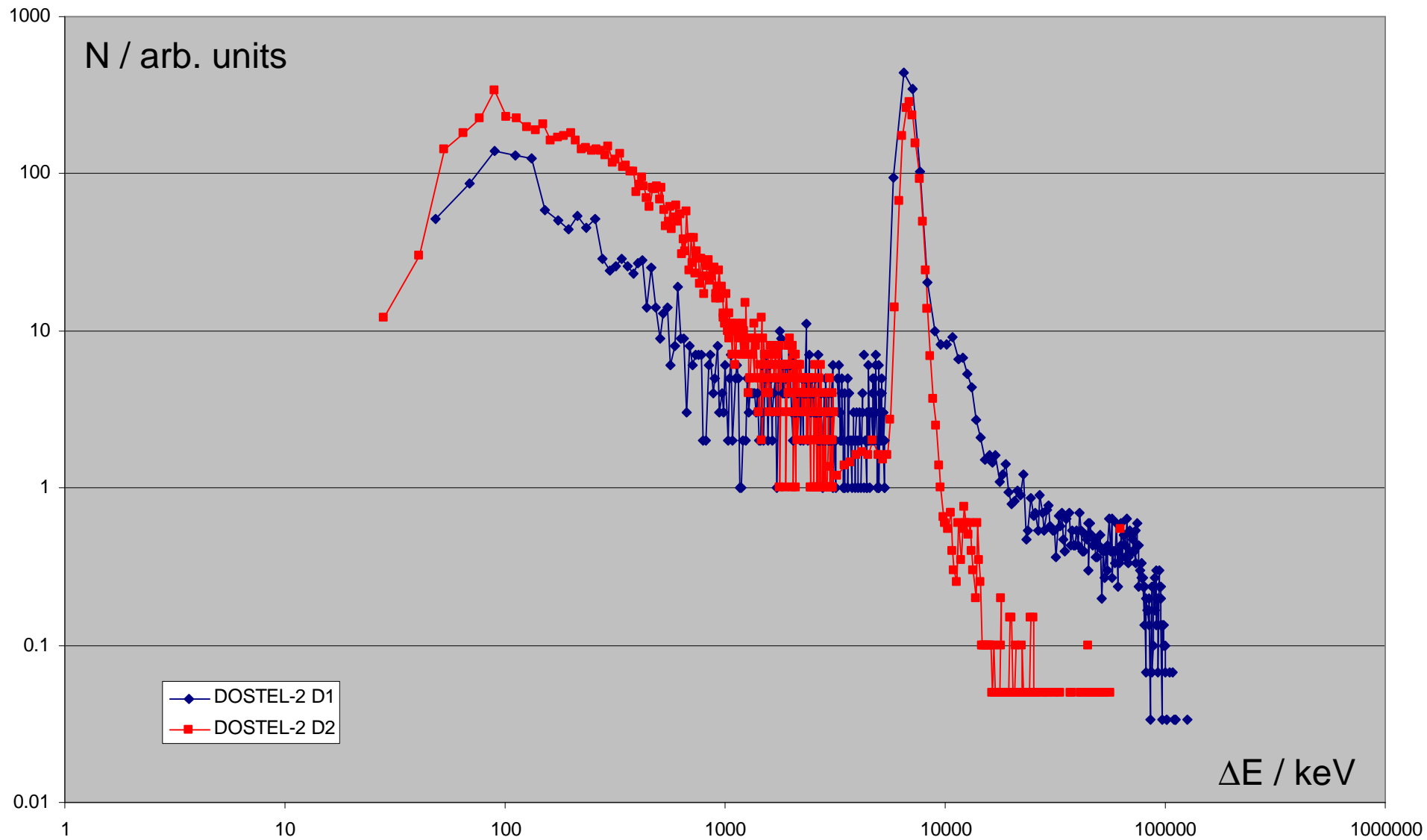
Calculated and Measured Channels for ^{12}C



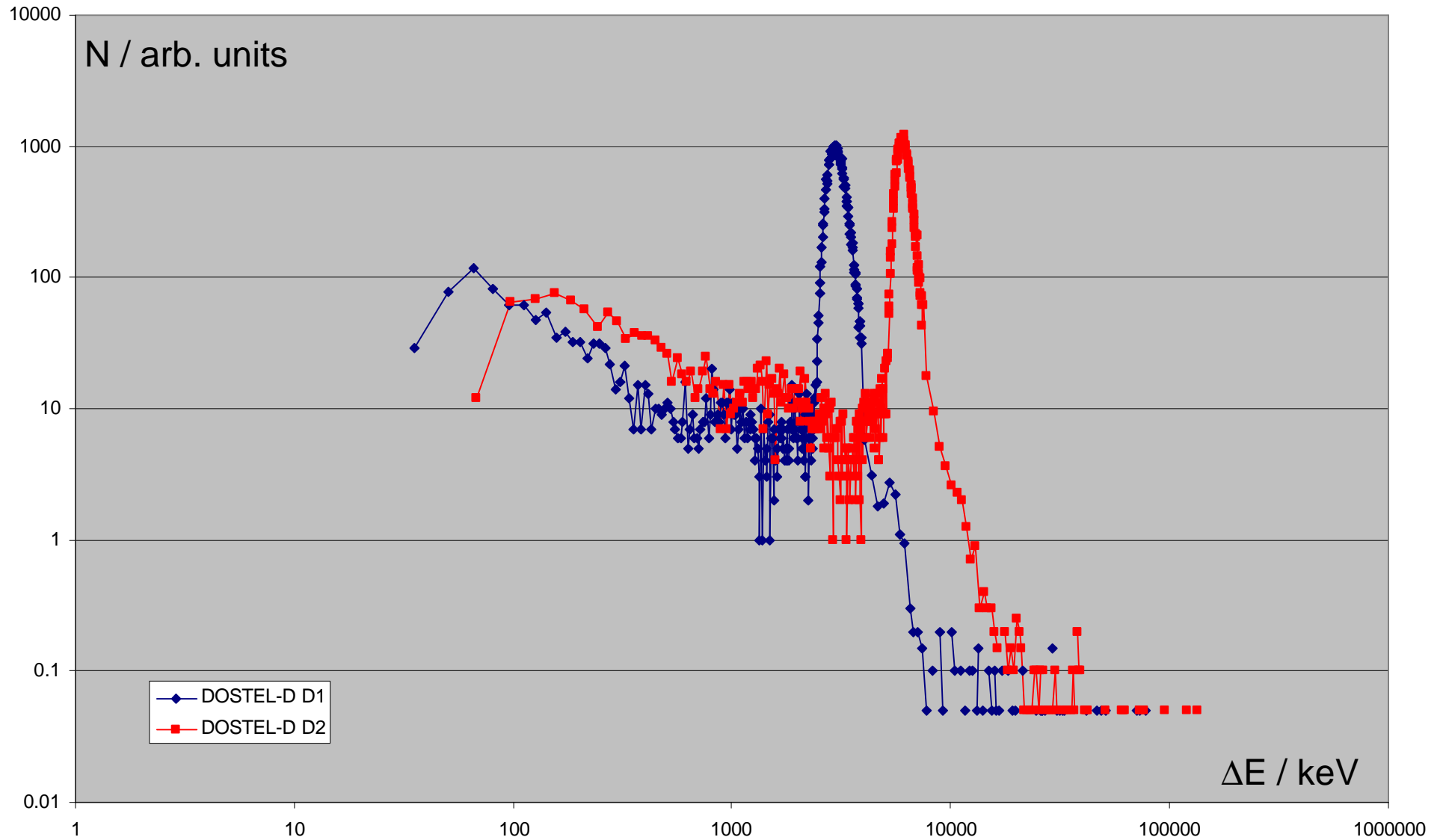
DOSTEL-2 ^{12}C 0° centered



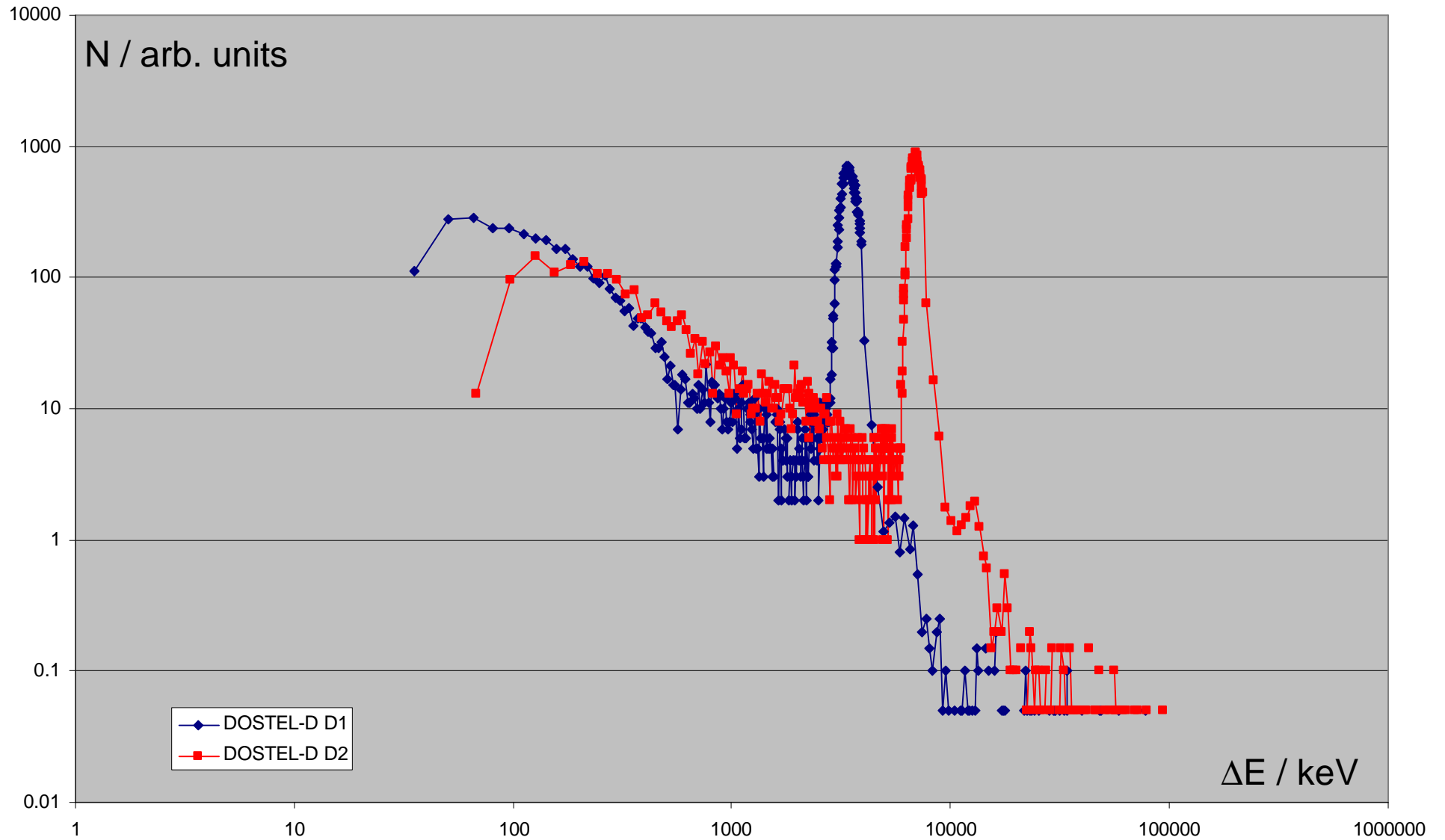
DOSTEL-2 ^{12}C 30° centered



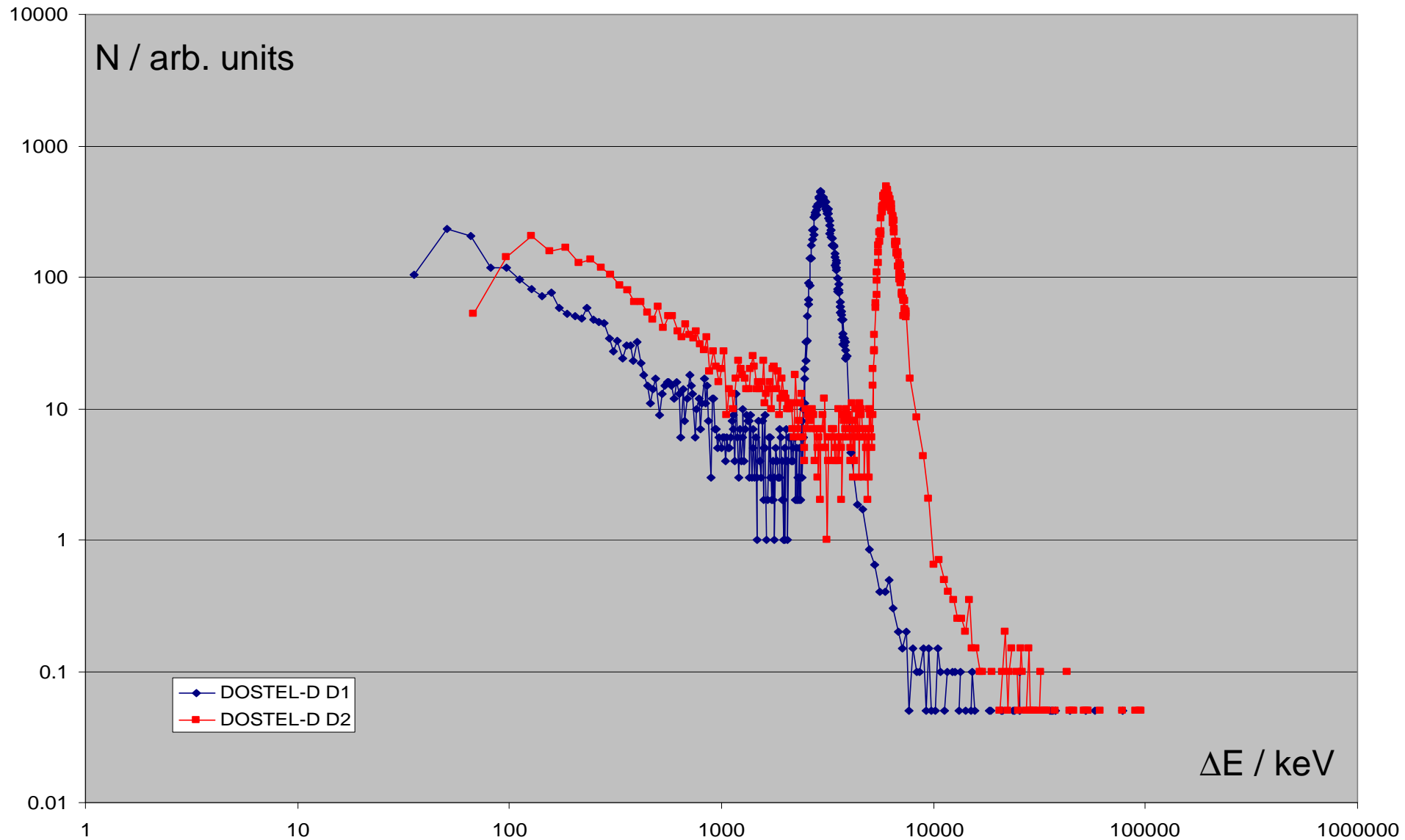
DOSTEL-D ^{12}C 0° centered



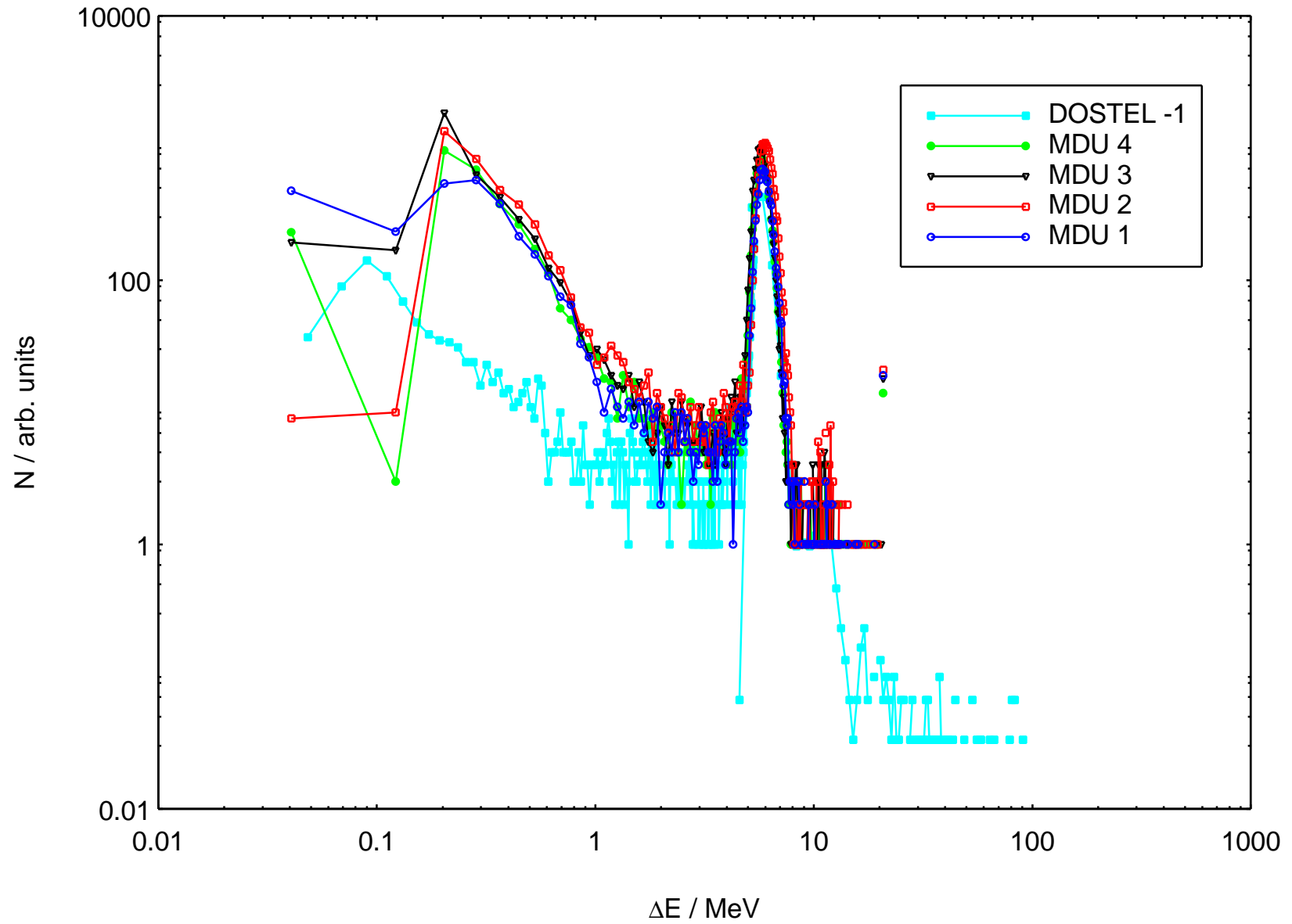
DOSTEL-D ^{12}C 30° centered



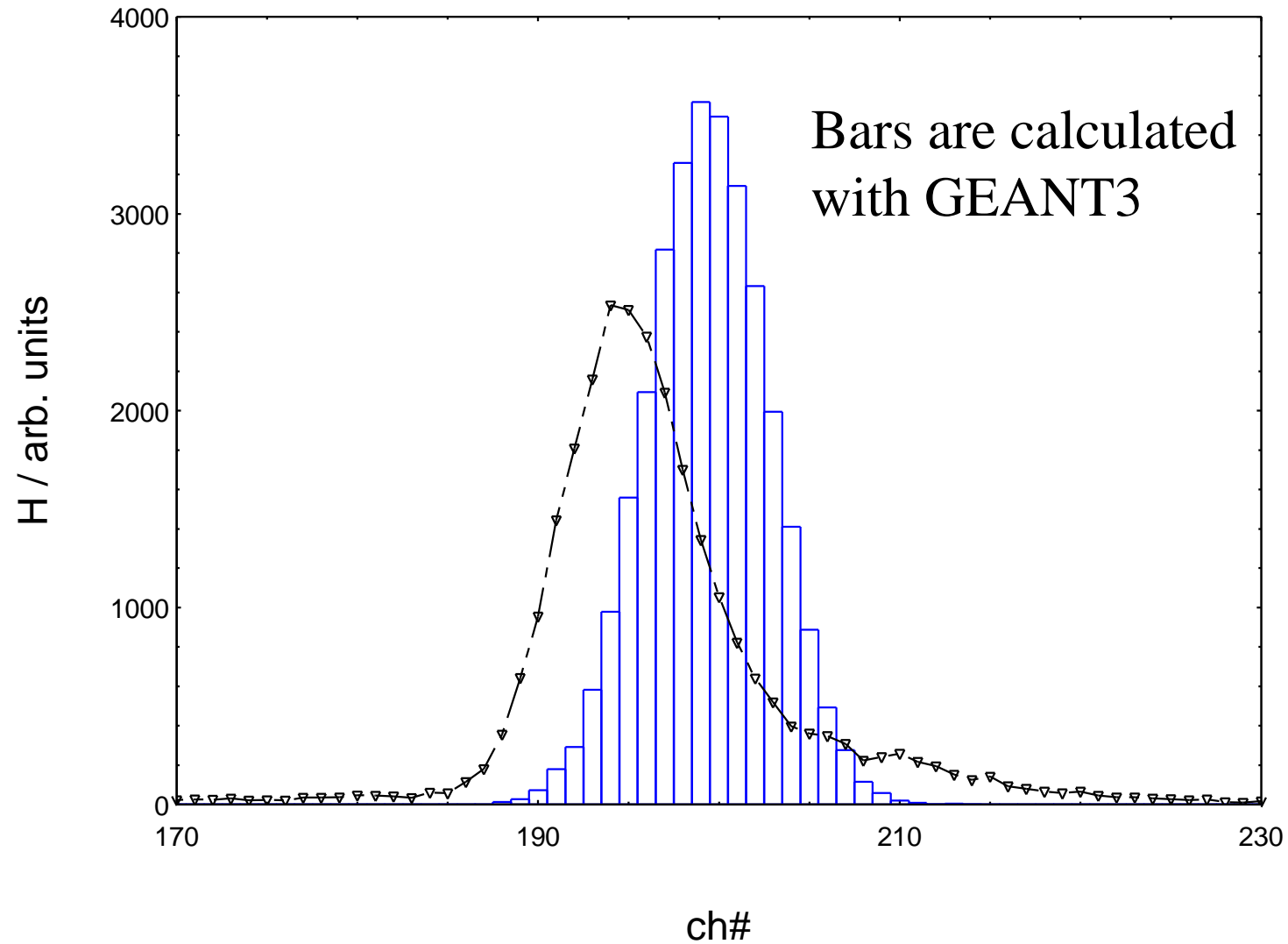
DOSTEL-D ^{12}C 0° X+15mm, Y+15mm



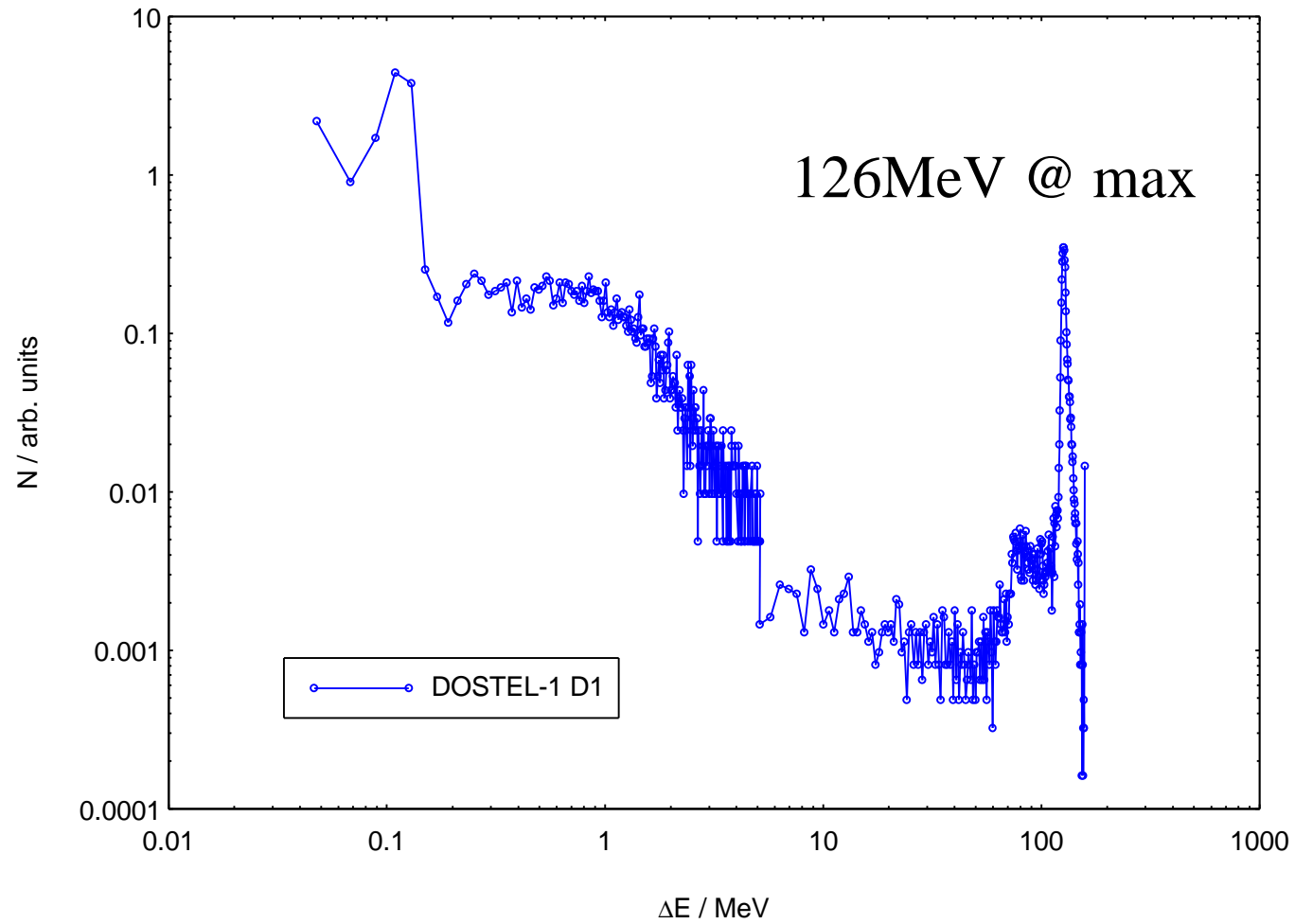
DOSTEL-2 ^{12}C 0° centered



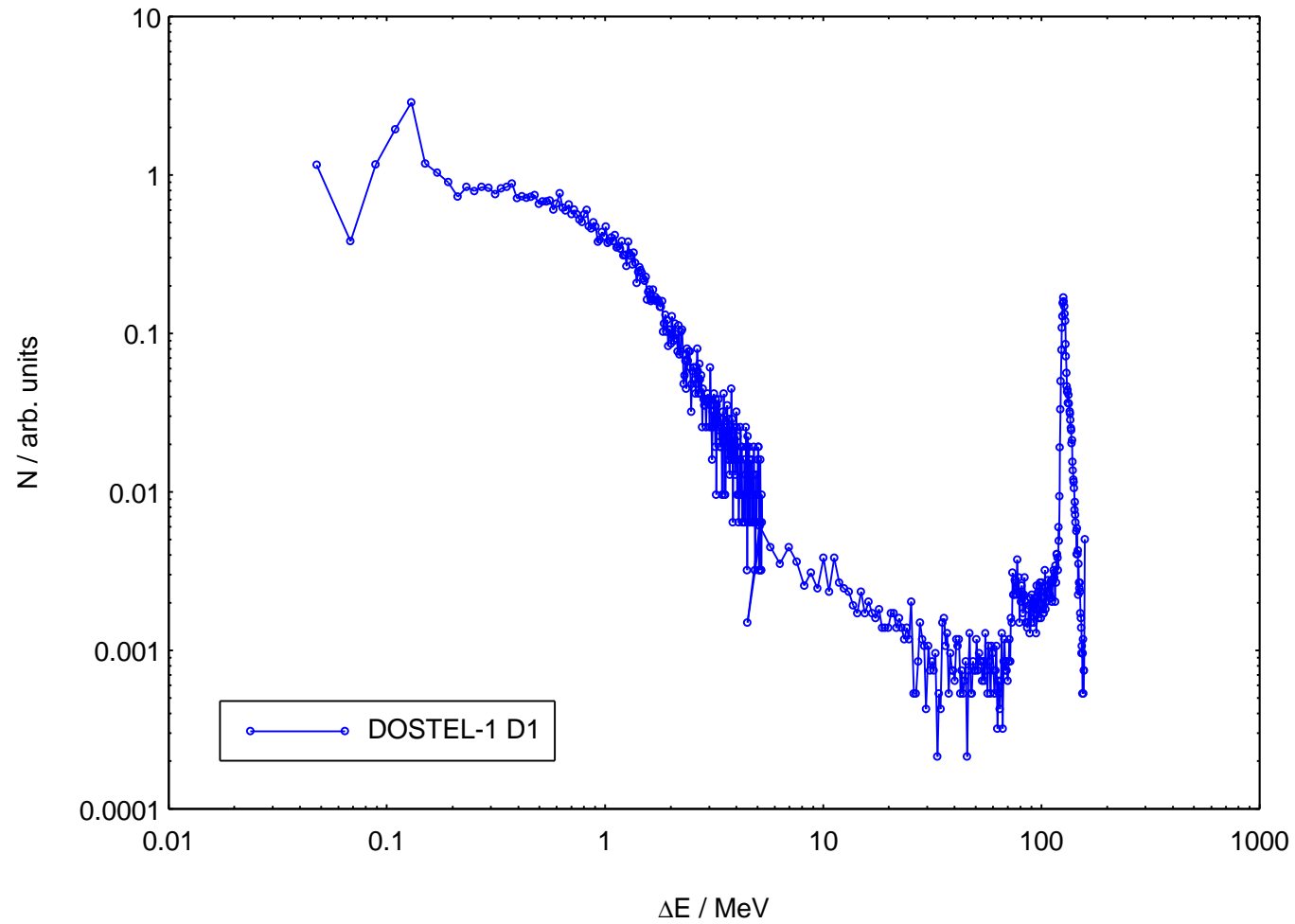
Calculated and Measured Channels for ^{56}Fe



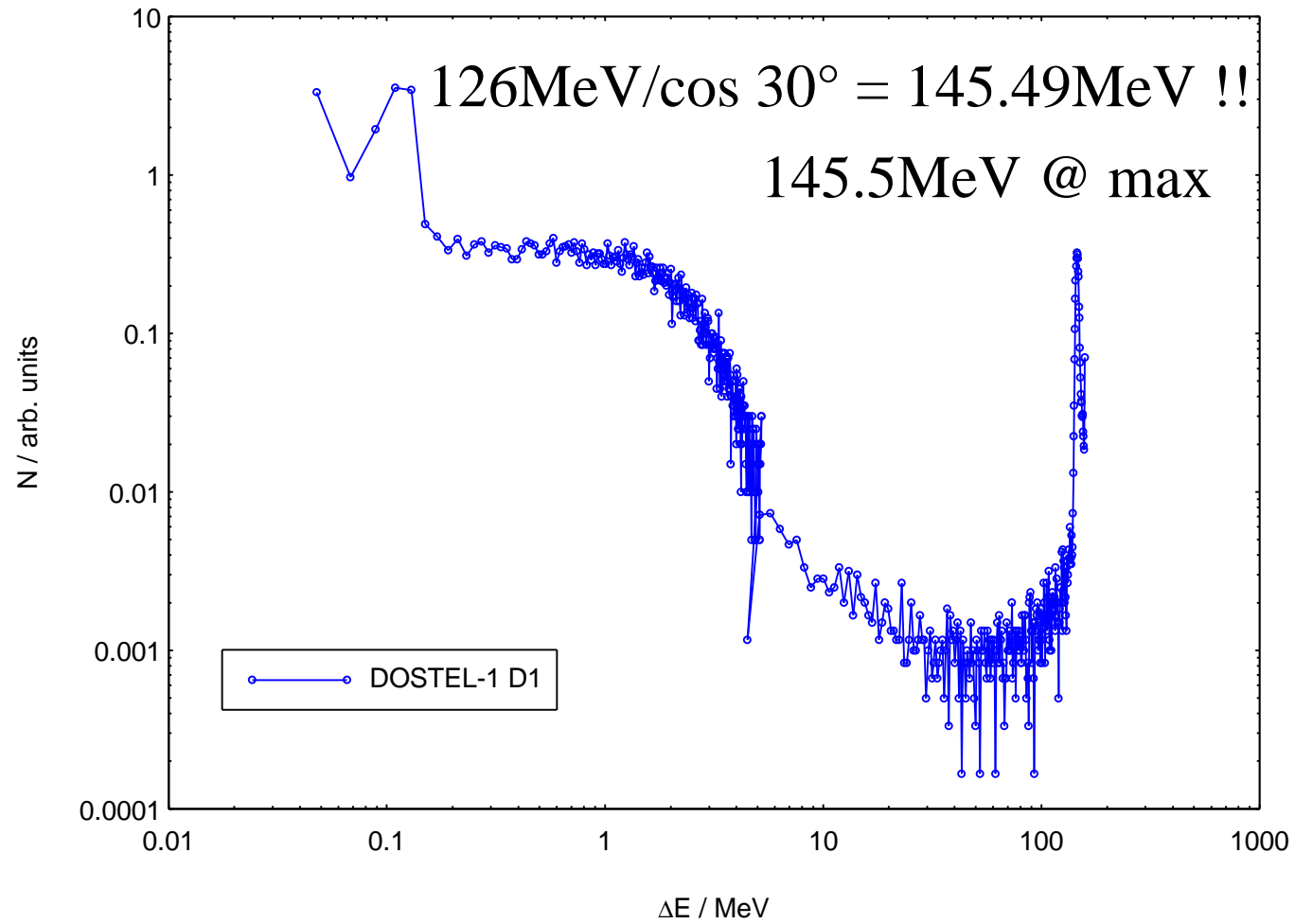
DOSTEL-1 ^{56}Fe 0° centered



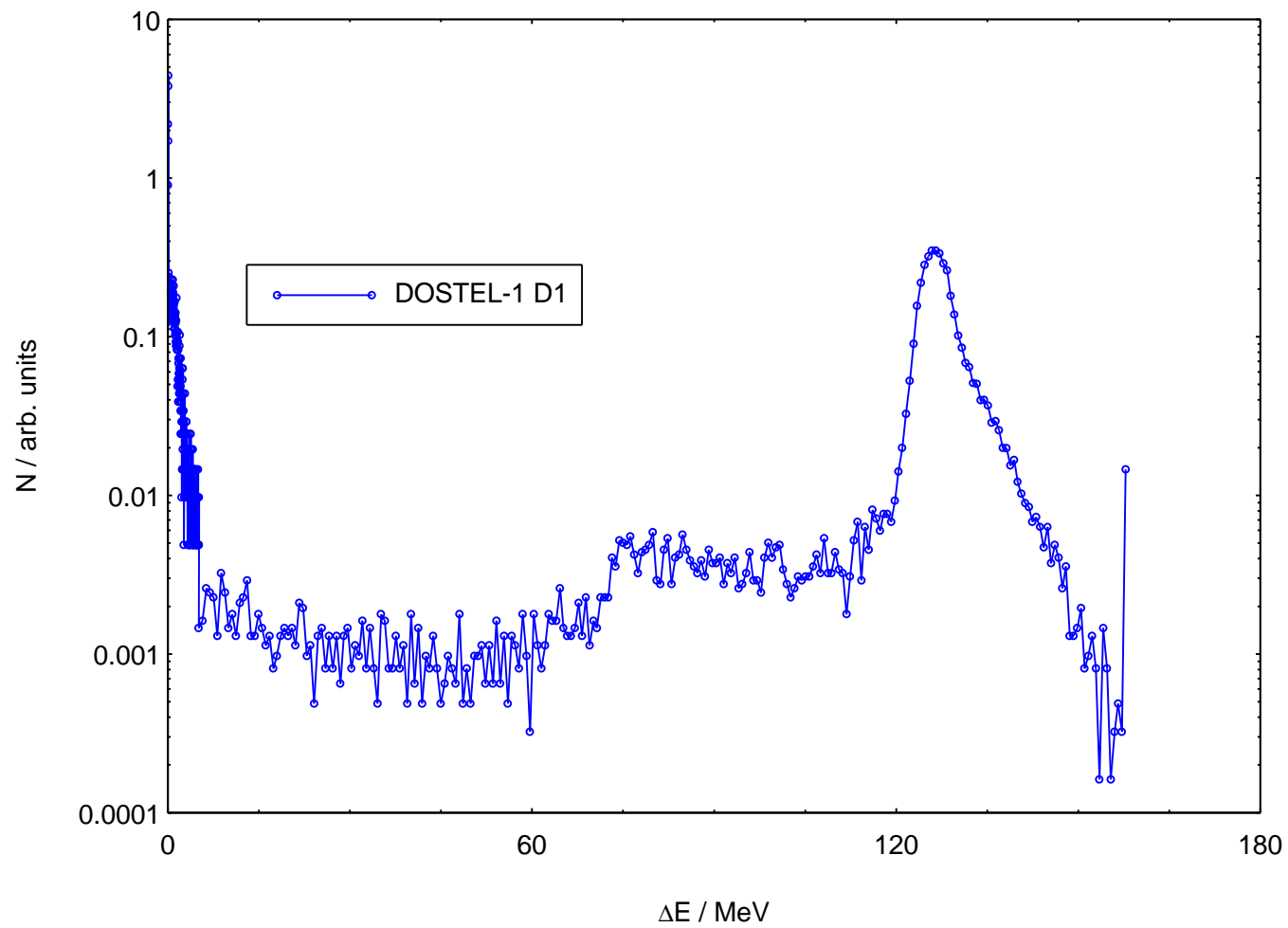
DOSTEL-1 ^{56}Fe 0° X+15mm Y+15mm



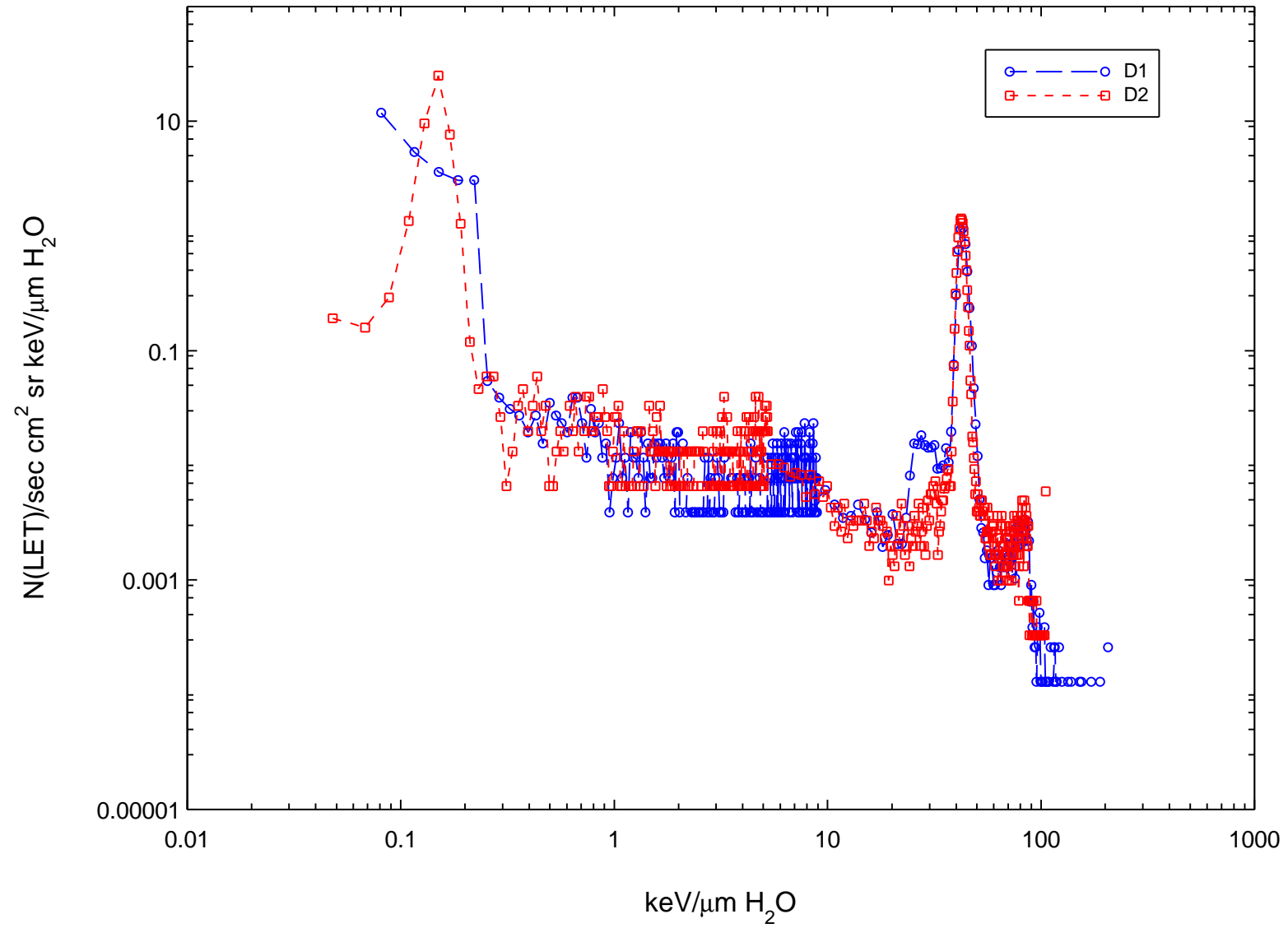
DOSTEL-1 ^{56}Fe 30° centered



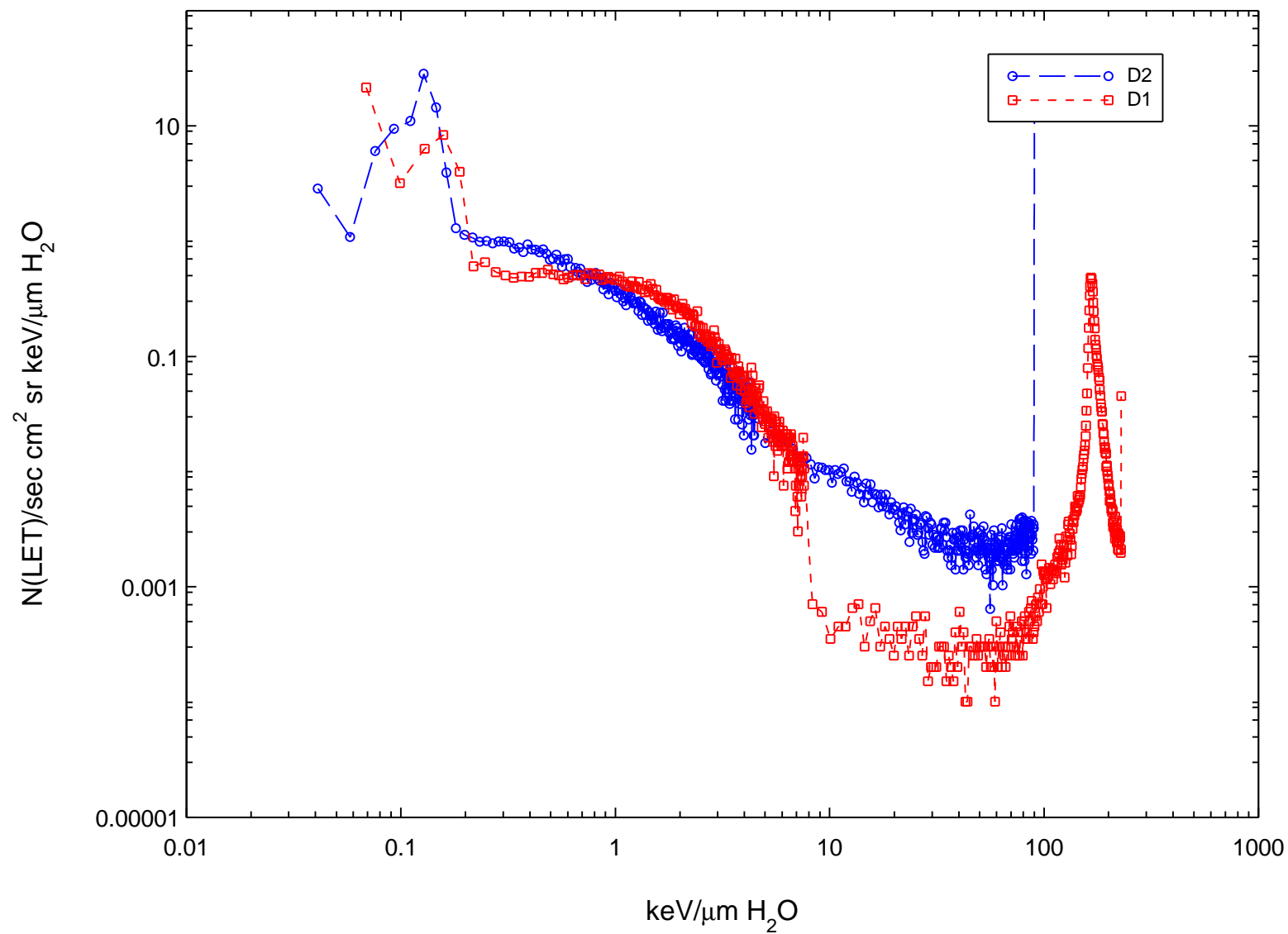
DOSTEL-1 ^{56}Fe 0° centered



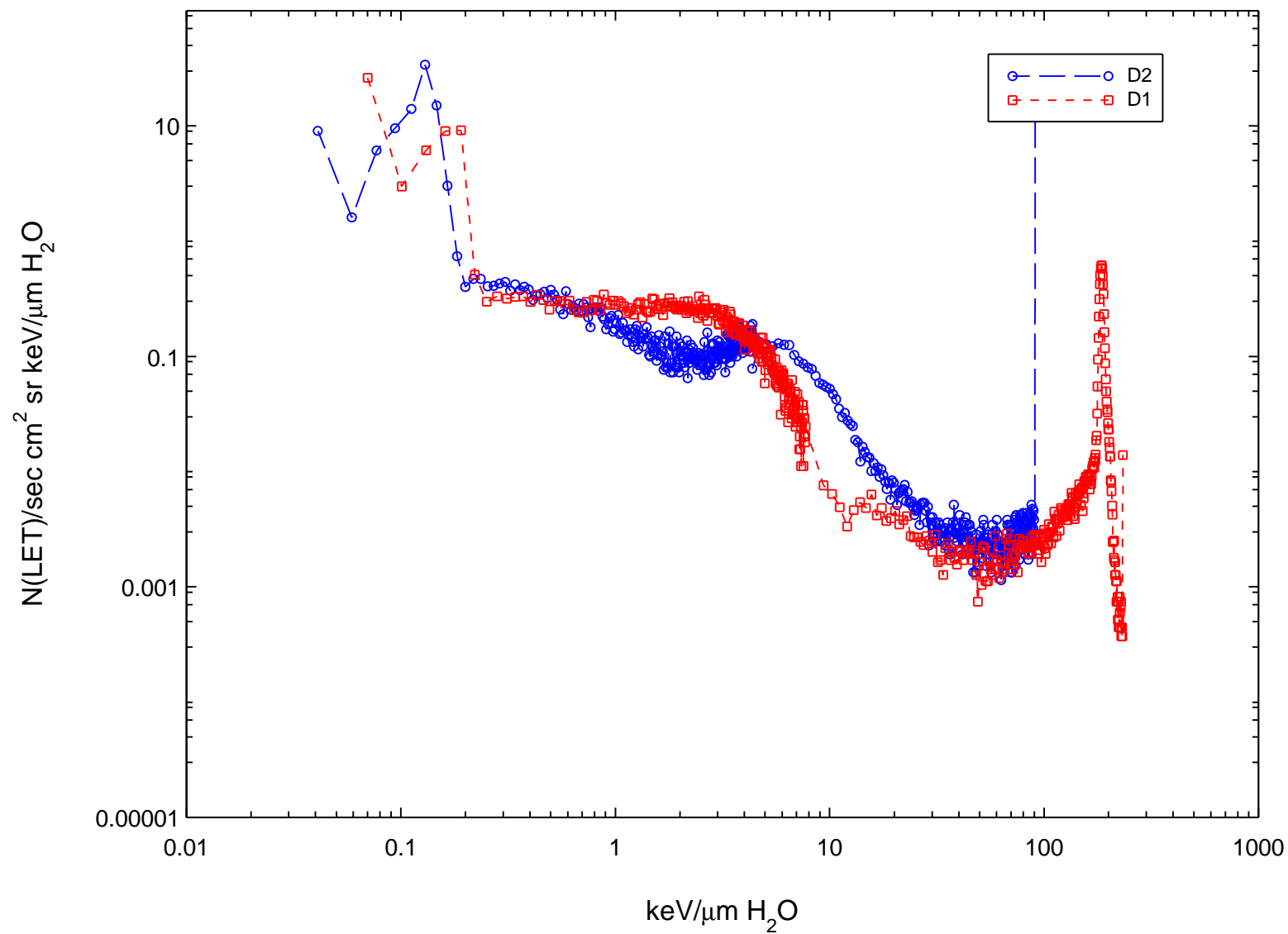
800 MeV Si , 0°



Fe 500MeV, 30° in beamline



Fe 500MeV, Fragmentation in beam



Neon 400MeV BIO-Room, 0° in beamline

