

POES detector calibration factors

Mark A. Clilverd¹, Craig J. Rodger²

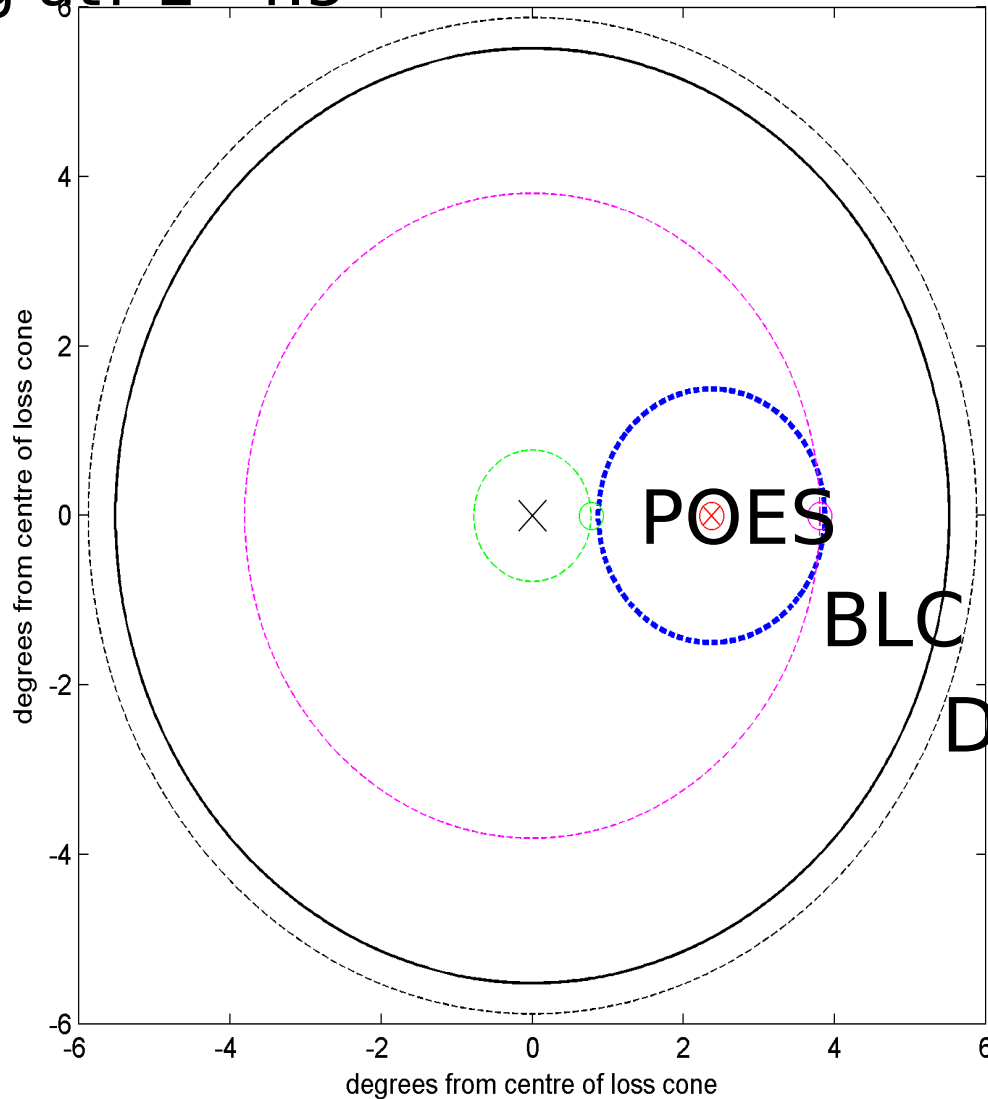
1. British Antarctic Survey, Cambridge, United Kingdom.
2. Physics Department, University of Otago, Dunedin, New Zealand.

ISSI science team : Geospace coupling to the polar atmosphere

“How does the forcing from the Sun and the near-Earth space induce changes in the polar atmosphere from low to high altitudes, particularly through precipitation of high energy particles?”

What fraction of the bounce loss cone is POES looking at? $L=4.5$

POES' view of the BLC above Halley (mapped to equator)

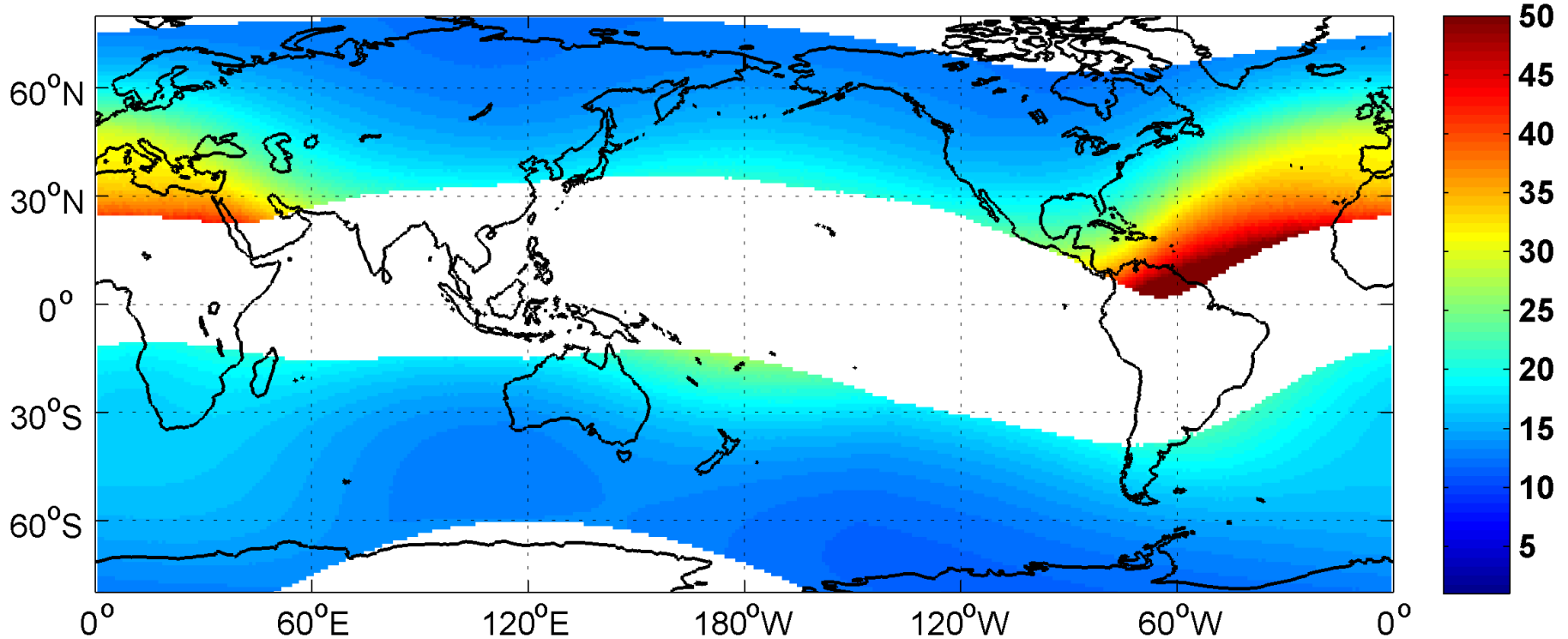


Halley
bic

Geometric
factor at
this location
= 13

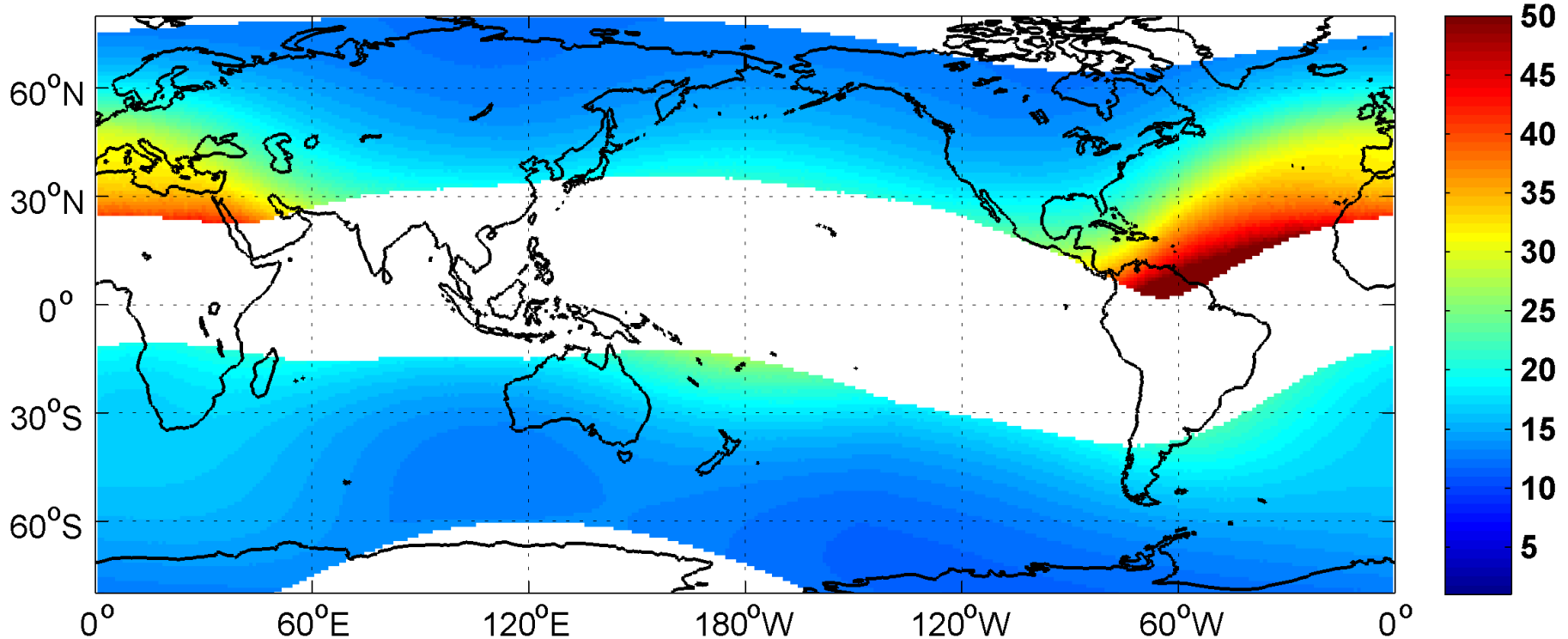
POES: fraction of the BLC – a map

POES 0-deg Fraction of BLC Area Observed (NORTH)



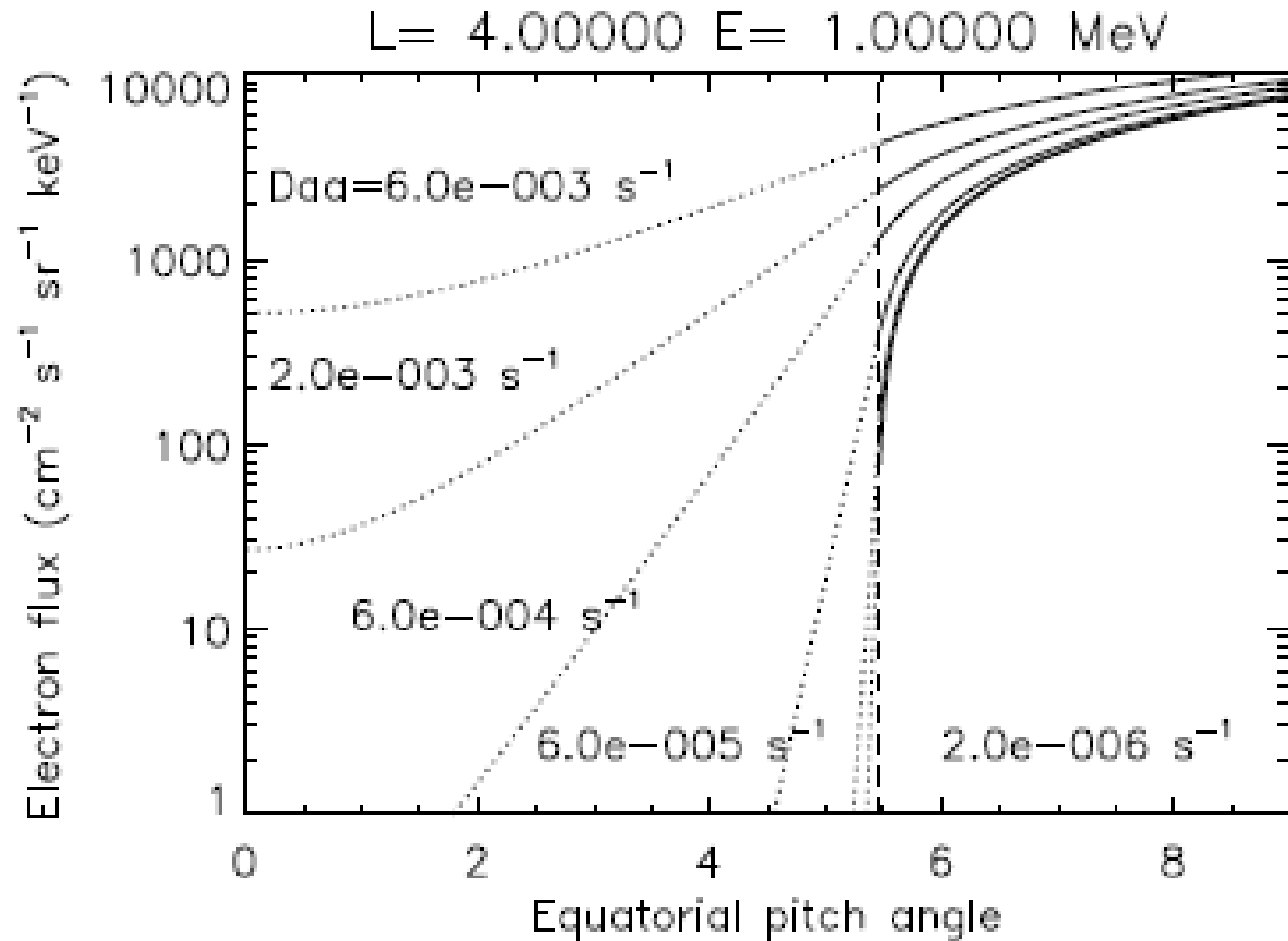
POES: fraction of the BLC – a map

POES 0-deg Fraction of BLC Area Observed (NORTH)



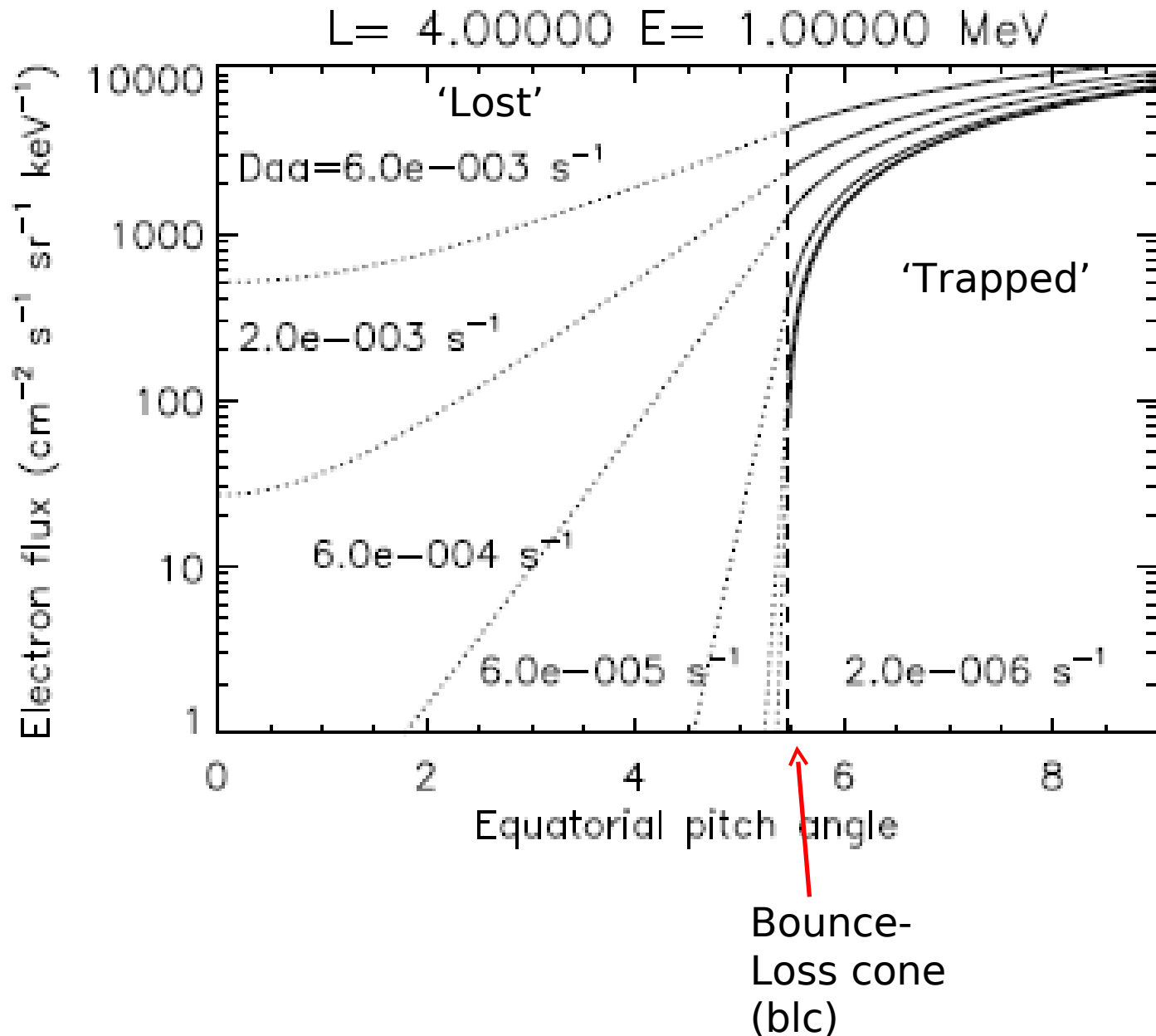
But this is not where in the blc the detector is looking!

What Satellites see of the electron precipitation.

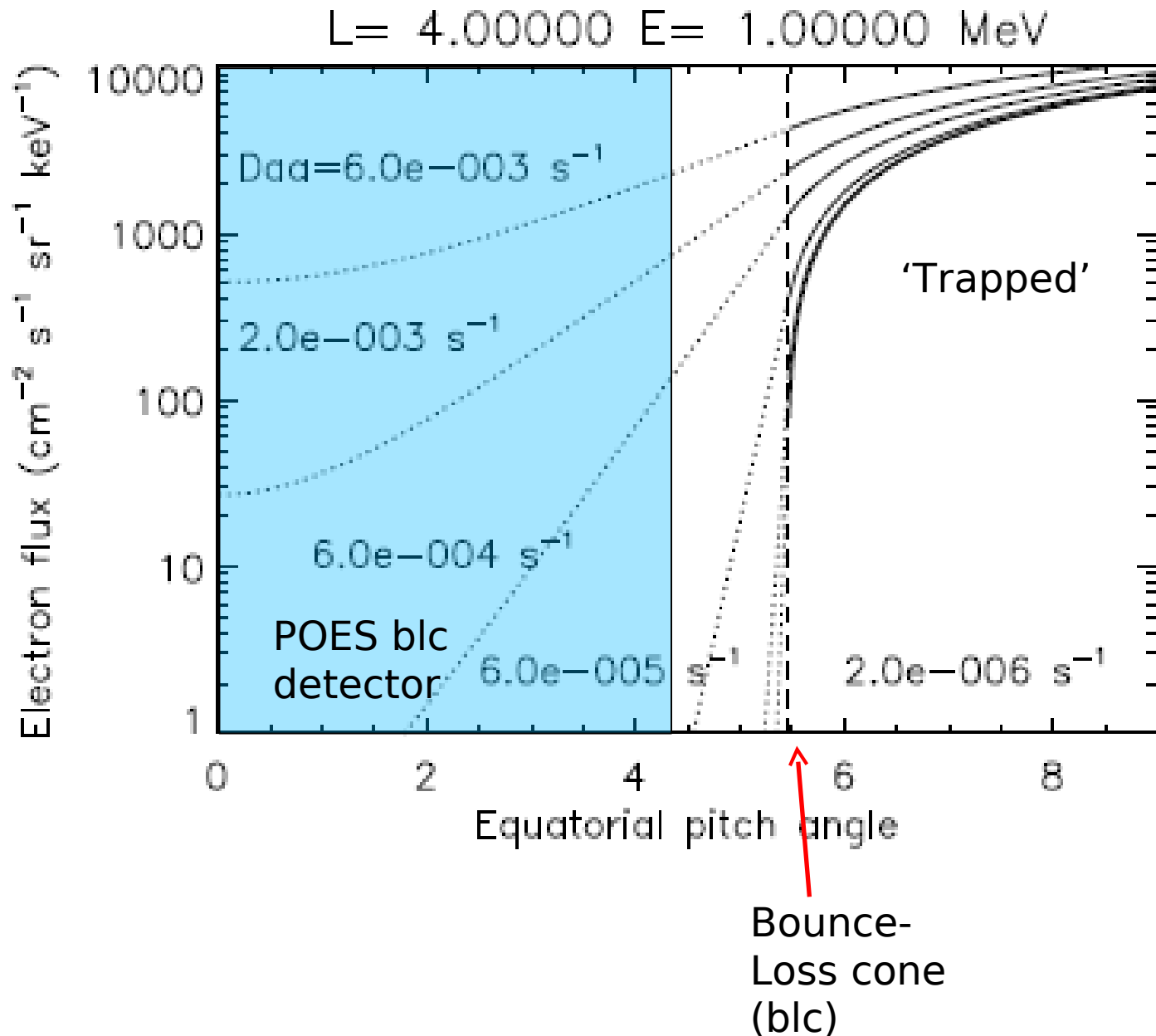


The effect of Space weather on strong/weak diffusion conditions - Richard Horne.

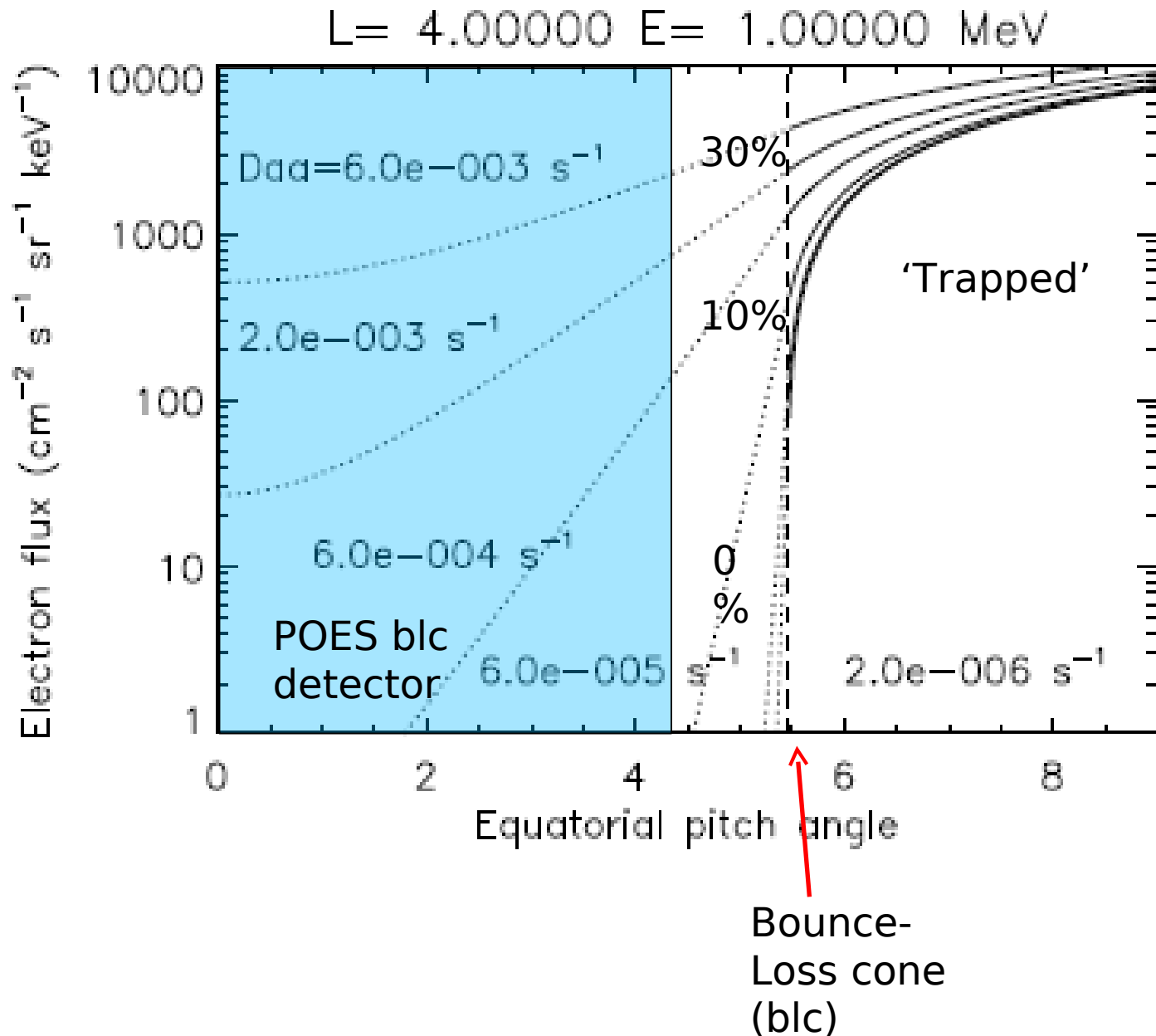
What Satellites see of the electron precipitation.



What Satellites see of the electron precipitation.



What Satellites see of the electron precipitation.



Summary: This could be the global correction factor for energies >100 keV

POES 0-deg Fraction of WEIGHTED BLC Area Observed (NORTH)

