

$$f_{Al} A_{Al} = [(.032)(2200 \text{ ppb})] \quad (2) \quad (.08) \quad (1.5) \quad \left(\frac{35 \text{ cm}}{150 \text{ cm}} \right) \quad \left(\frac{300 \text{ ppb}}{2200 \text{ ppb}} \right)$$

Qweak correction

e-Al / e-p ratio
higher

ep radiative tail
under Moller

More e-Al than e-p
radiative tail

4x more hydrogen

Smaller Al asym. In
MOLLER than Qweak

$\sim (.18\%) (300 \text{ ppb}) \sim \boxed{0.5 \text{ ppb}} (\sim 1.5\% \text{ of Moller asymmetry of } 34 \text{ ppb})$