

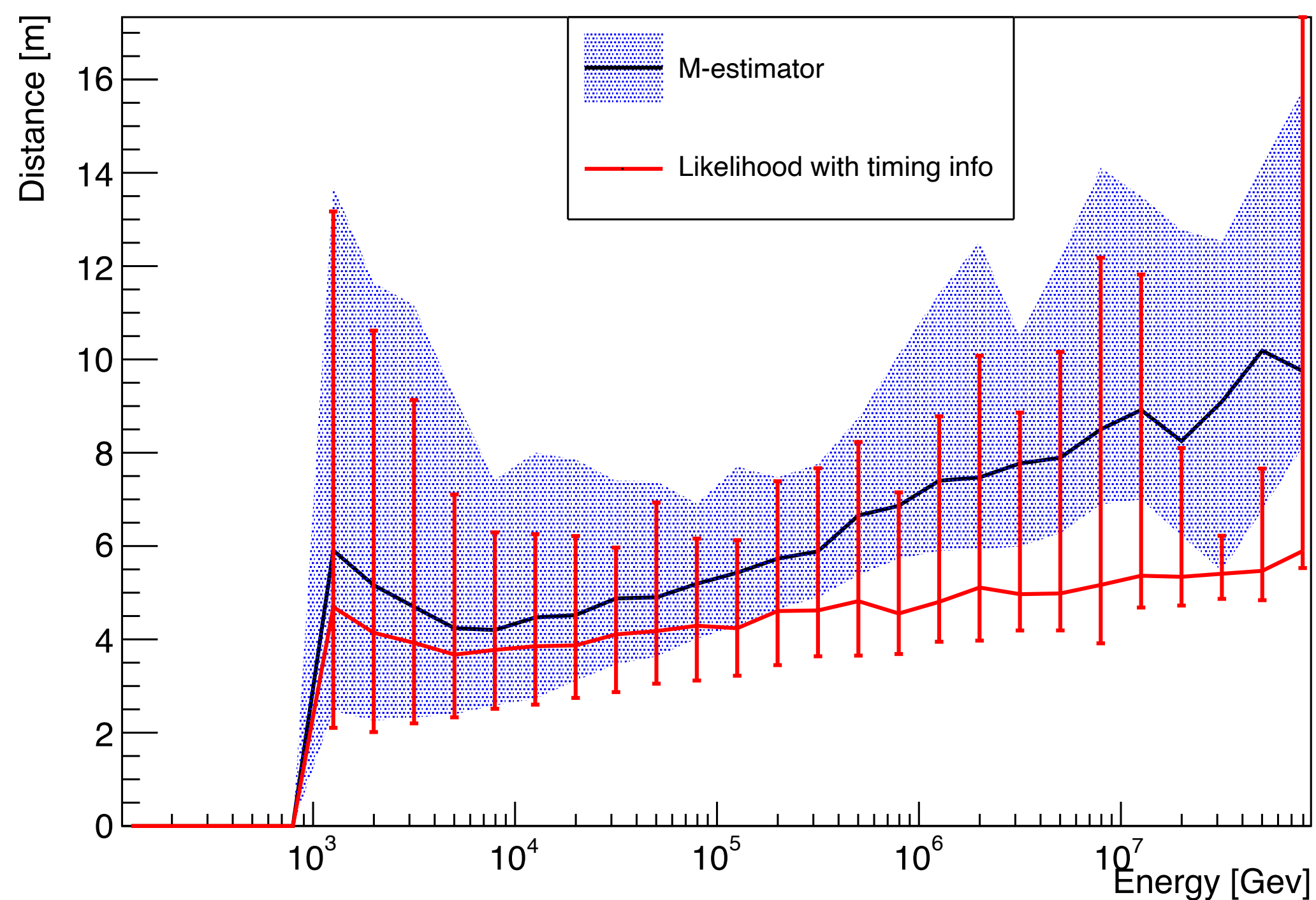
Vertex fit

Thijs van Eeden - 15th of July 2020 - Groupmeeting

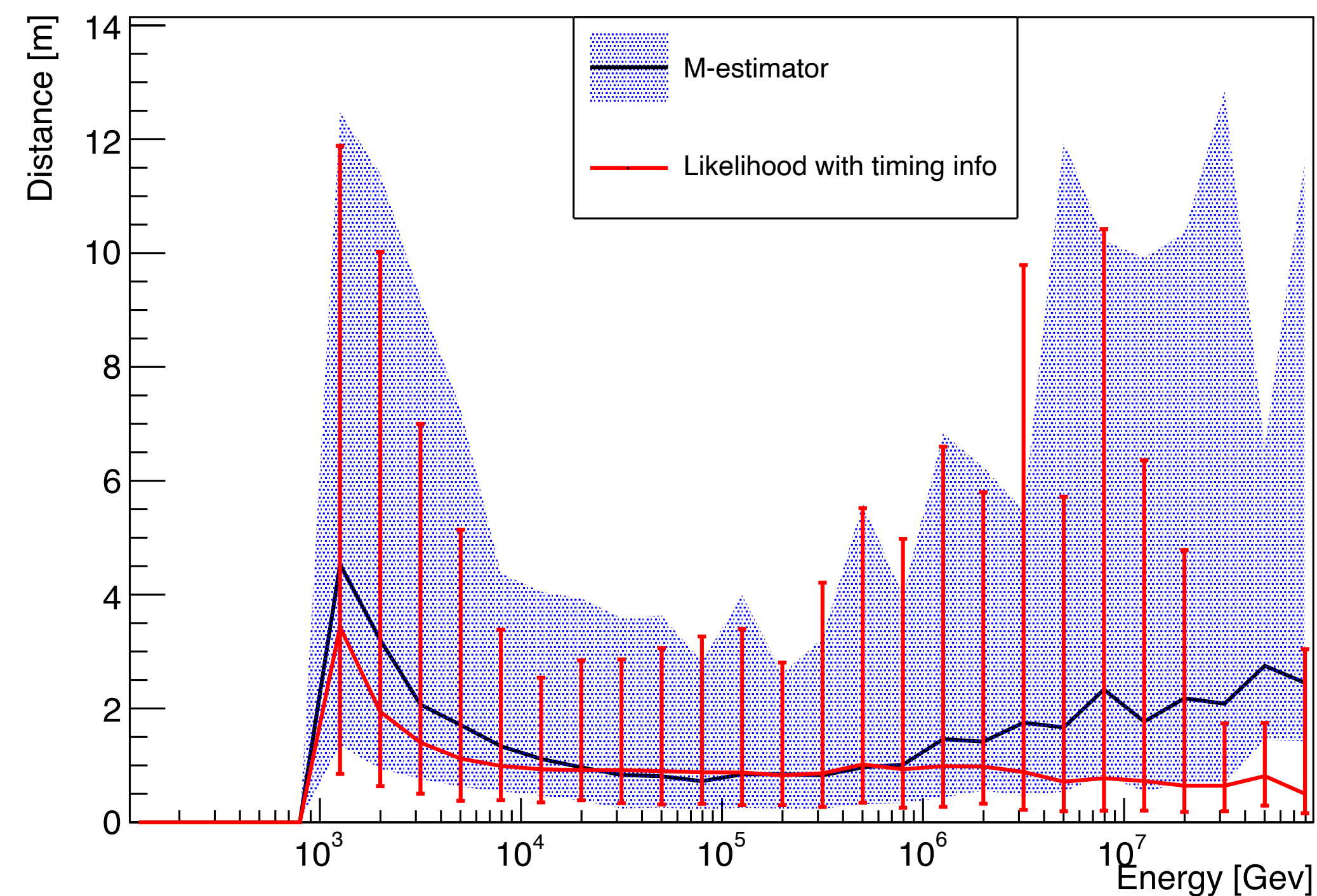
Recap: single vertex fit (nueCC)

M-estimator vs likelihood with timing information

Distance along shower axis



Distance perpendicular to shower axis

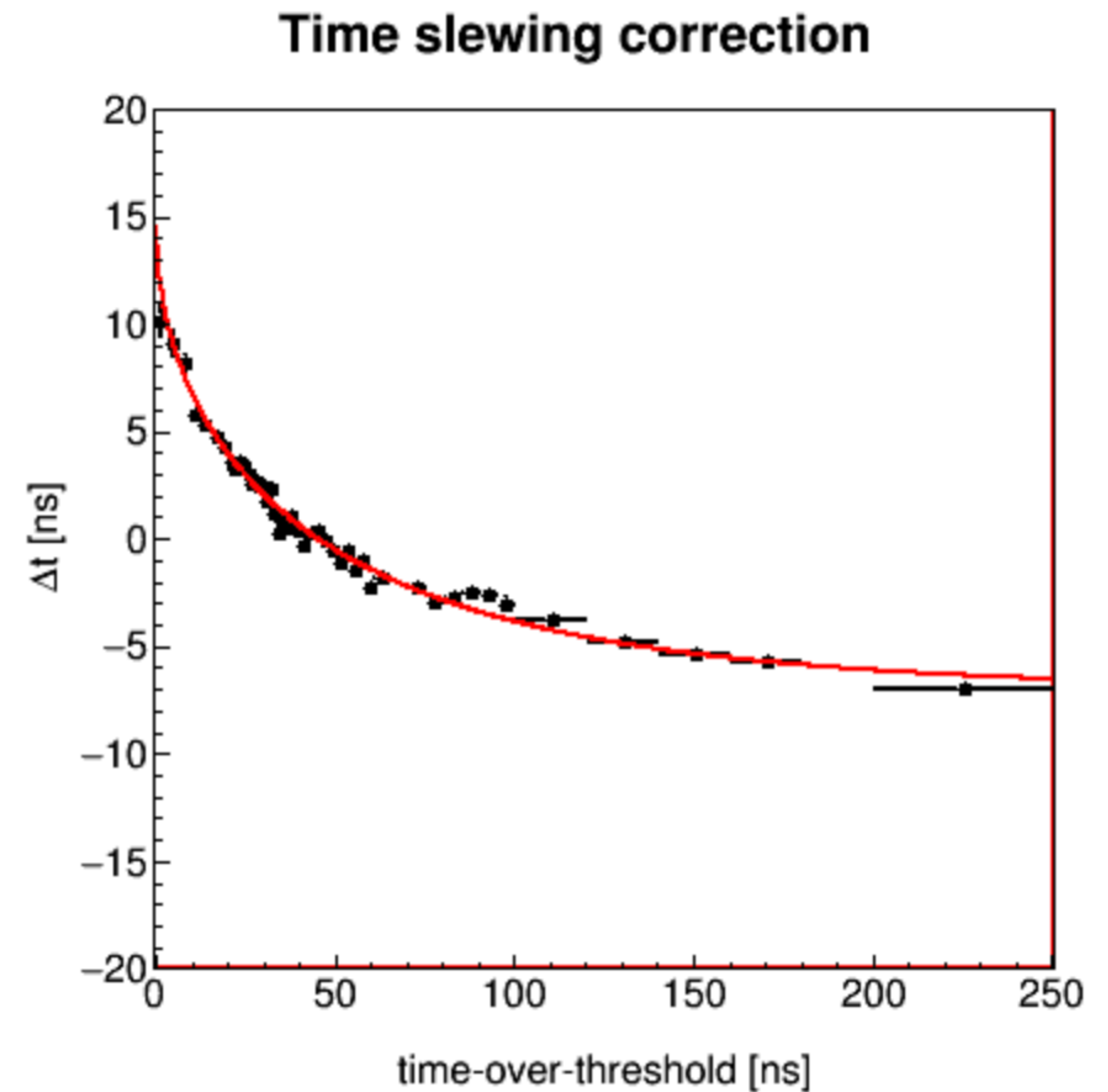


Why do we stick at 1-2 m perpendicular to the shower axis?

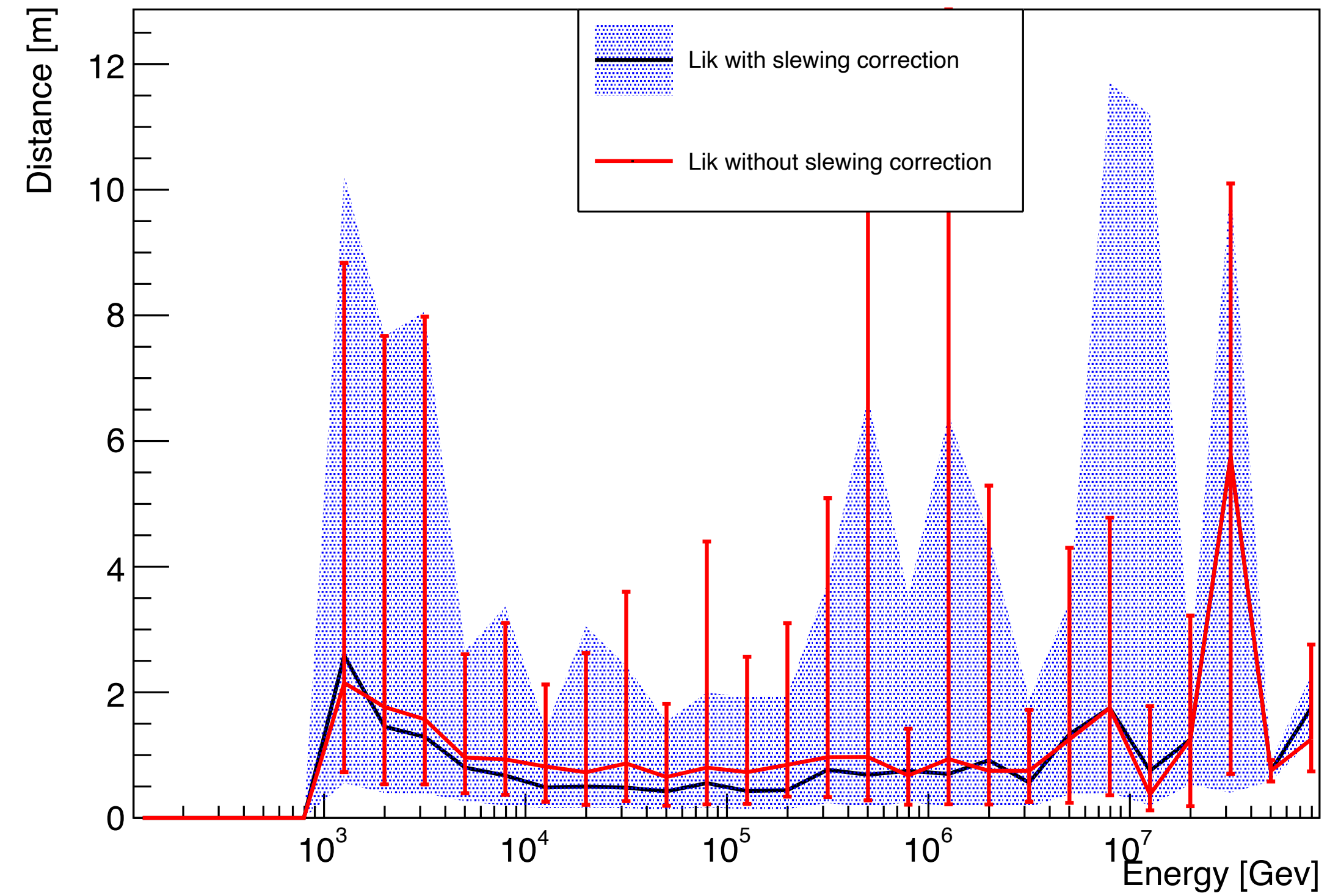
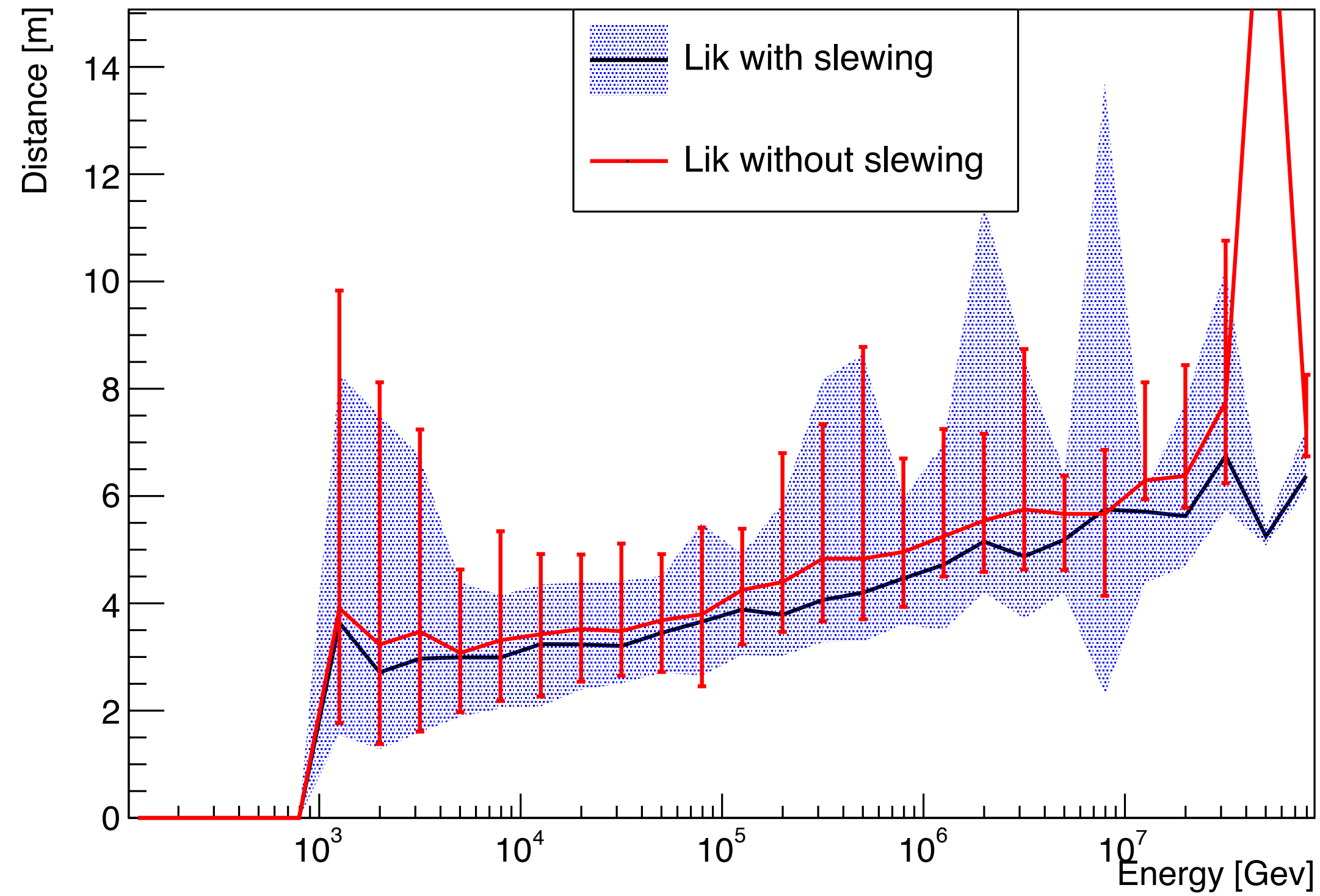
Nanosecond precision \rightarrow ~cm precision!

Time slewing correction

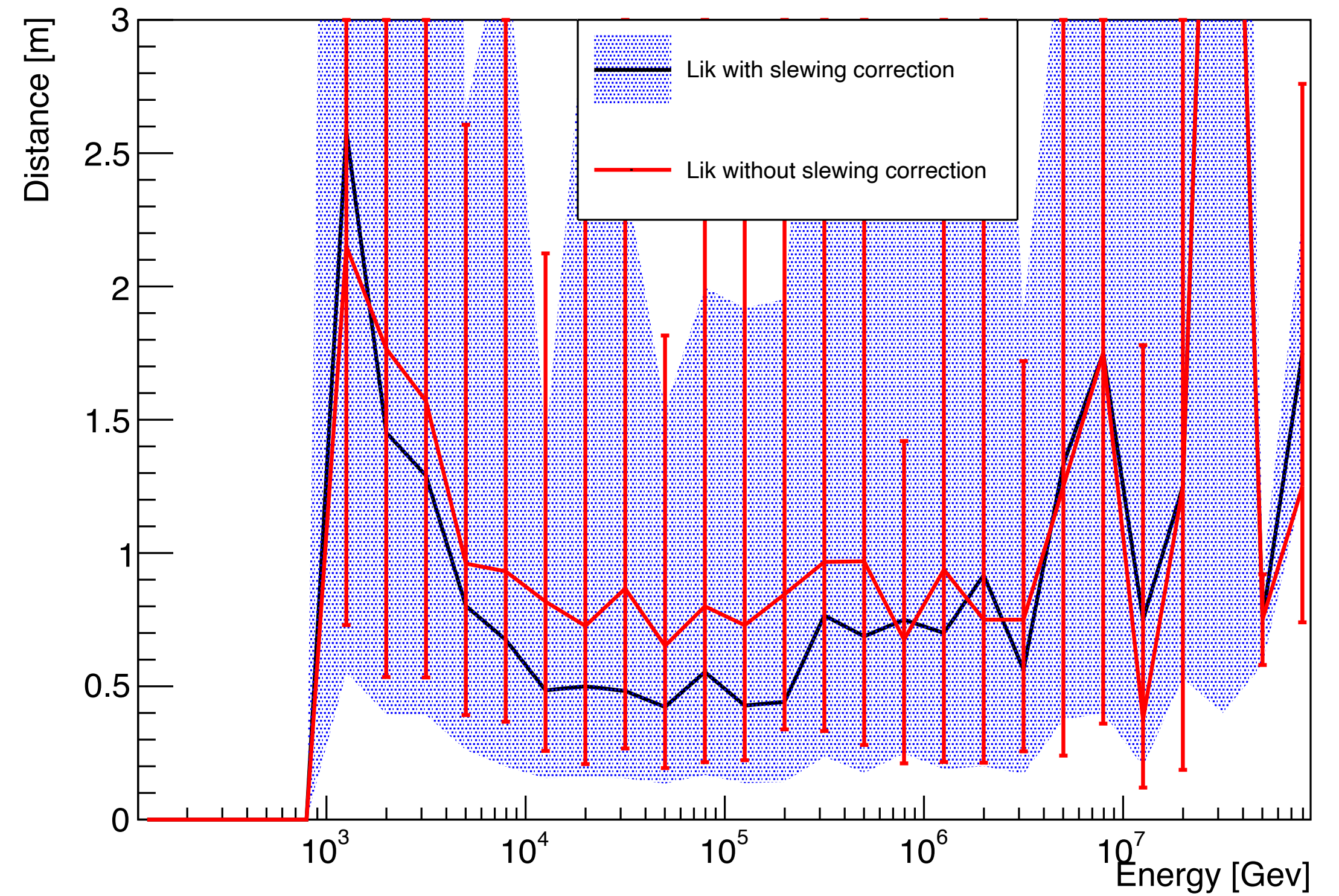
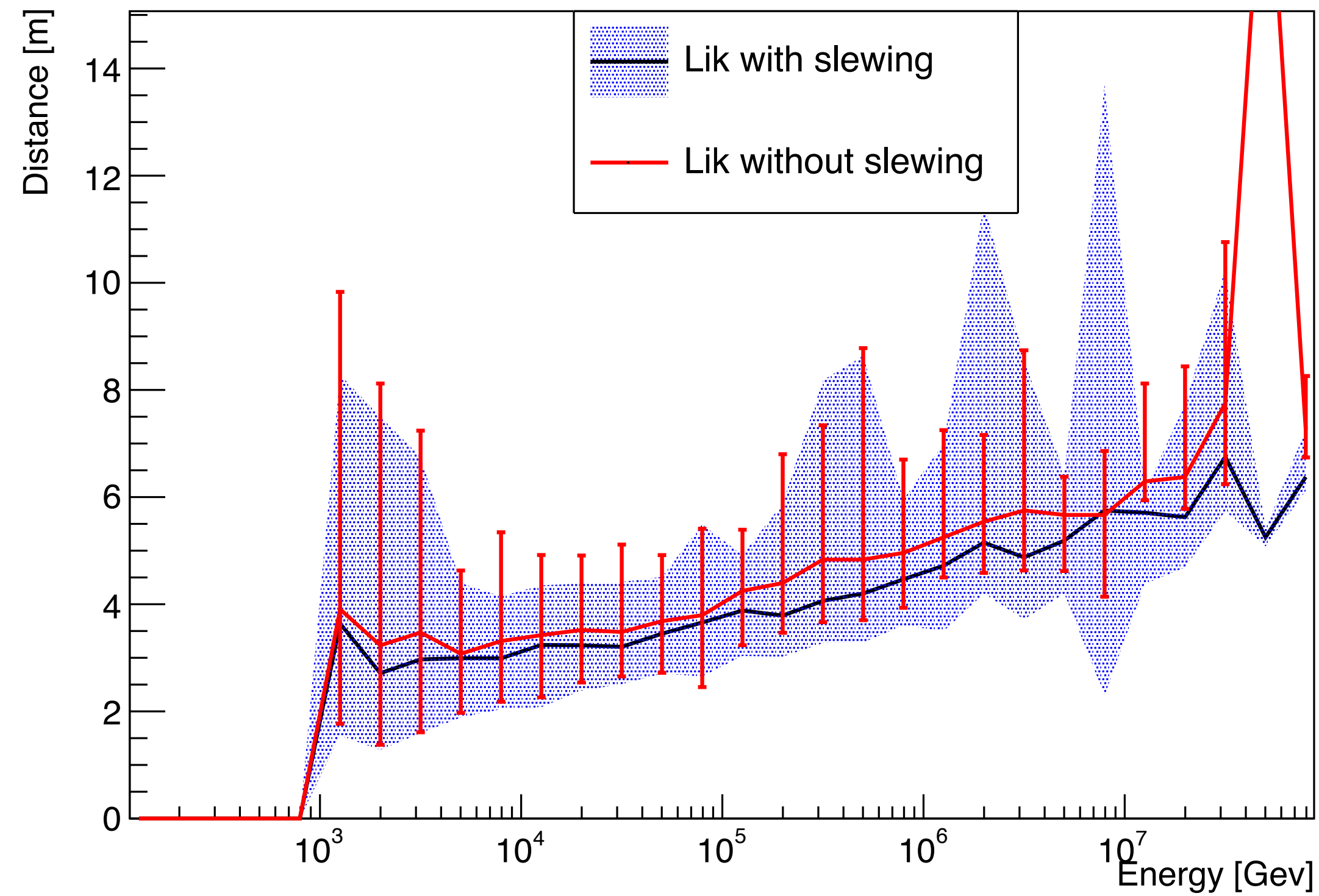
- Maarten's suggestion
- [Elog](#)
- Arrival time should be corrected depending on the ToT



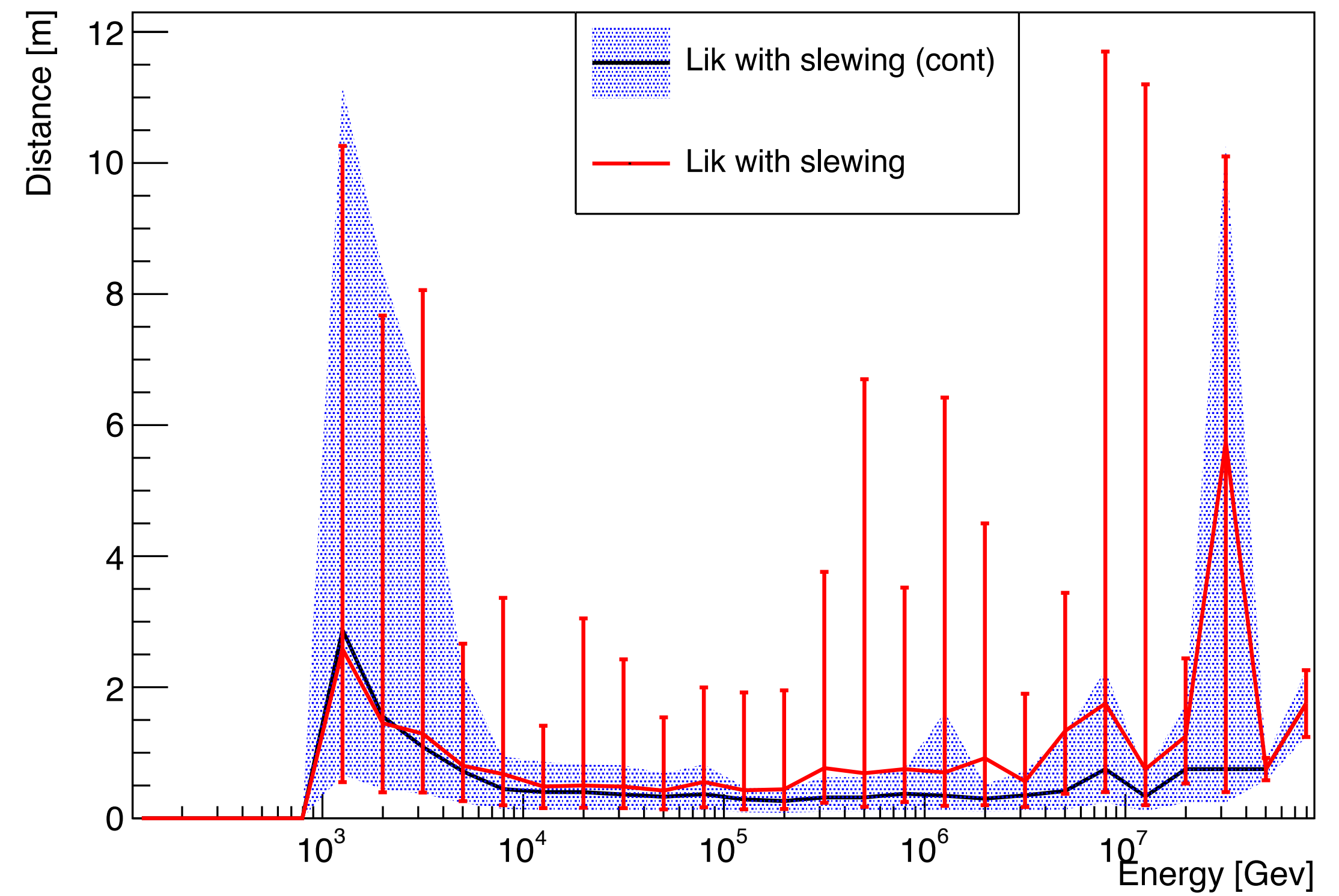
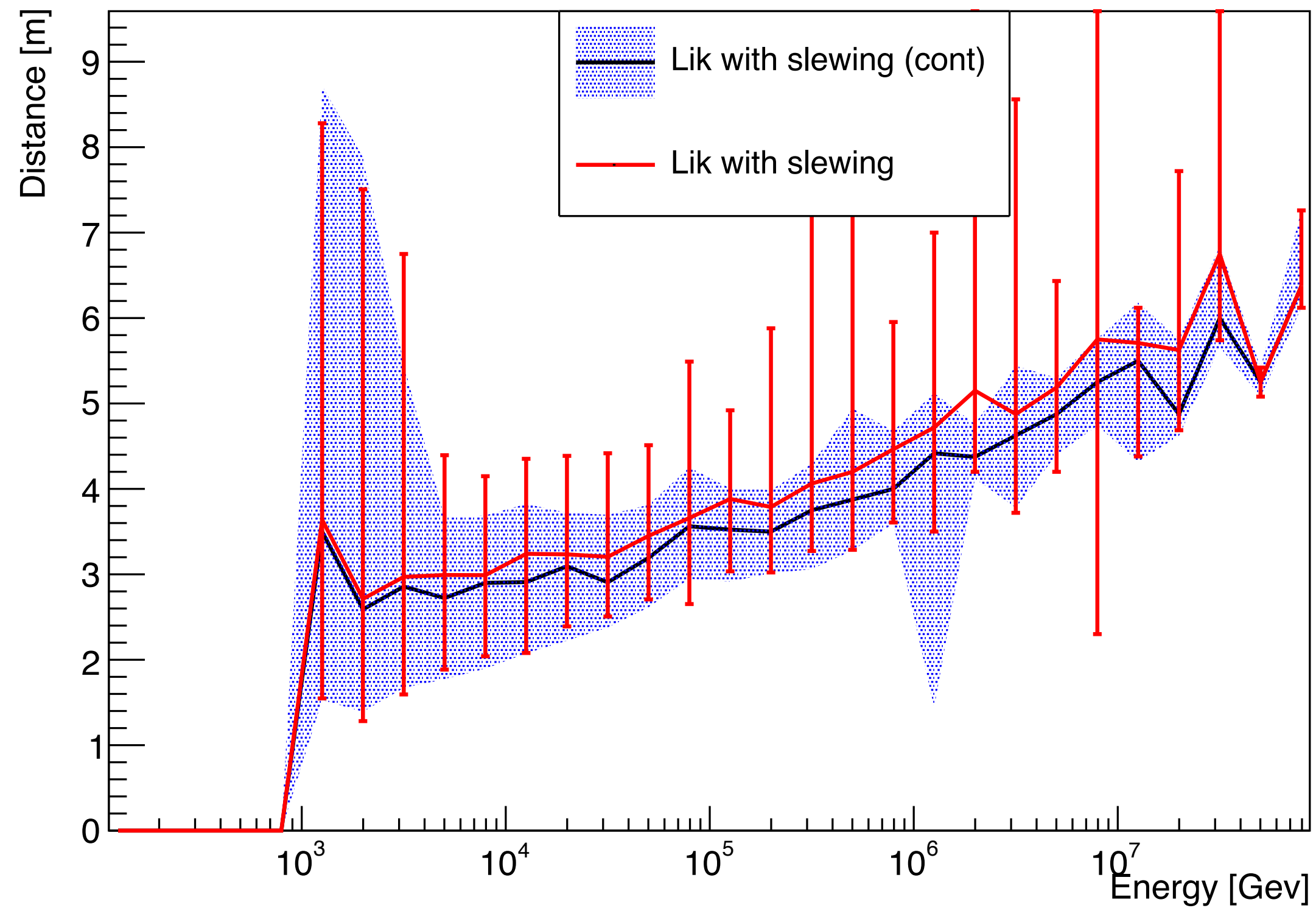
Time slewing correction



Time slewing correction



Time slewing correction + containment



Time slewing correction + containment

