Muon flux at surface – MCEq vs. CORSIKA
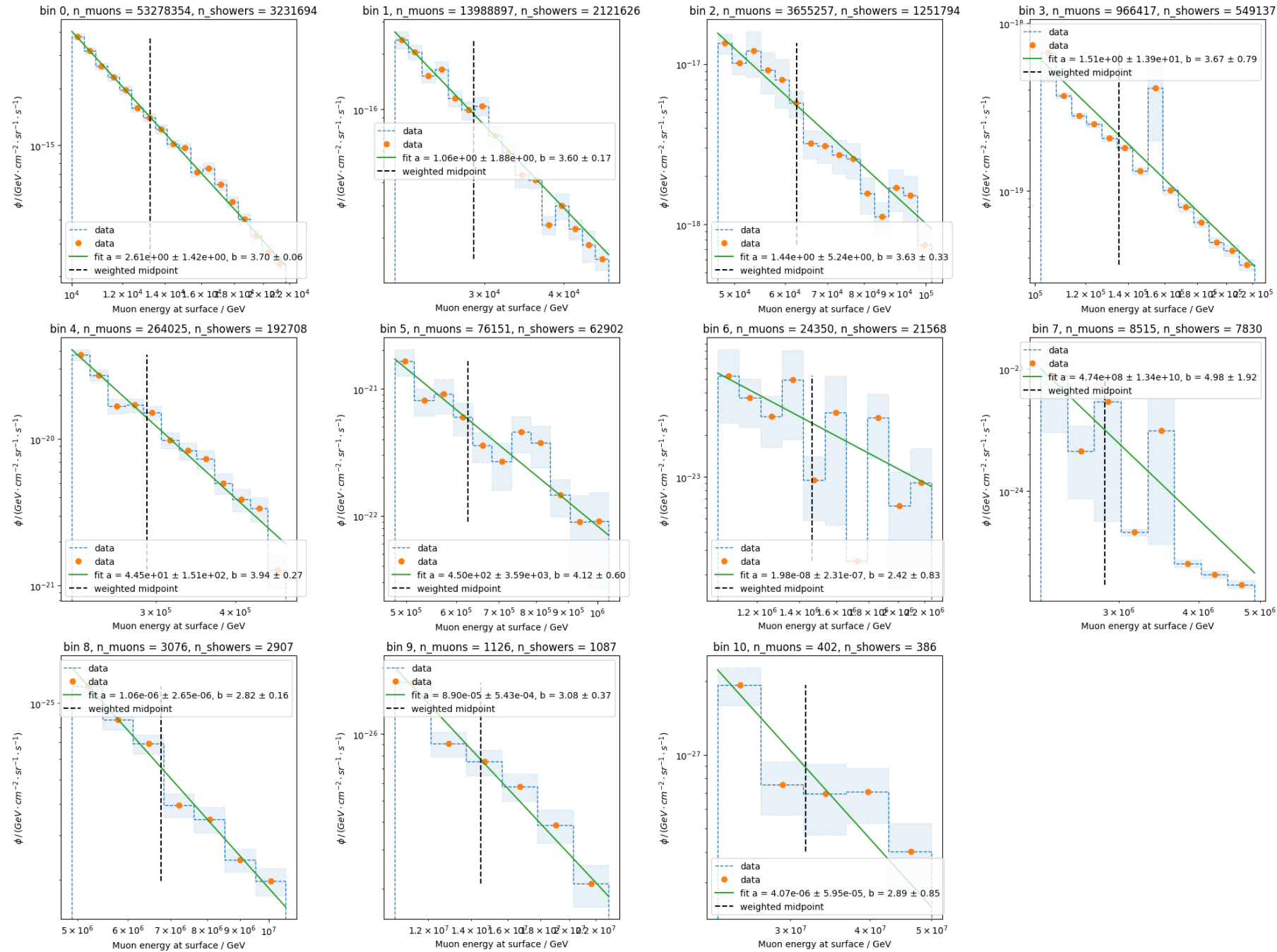
Pascal Gutjahr

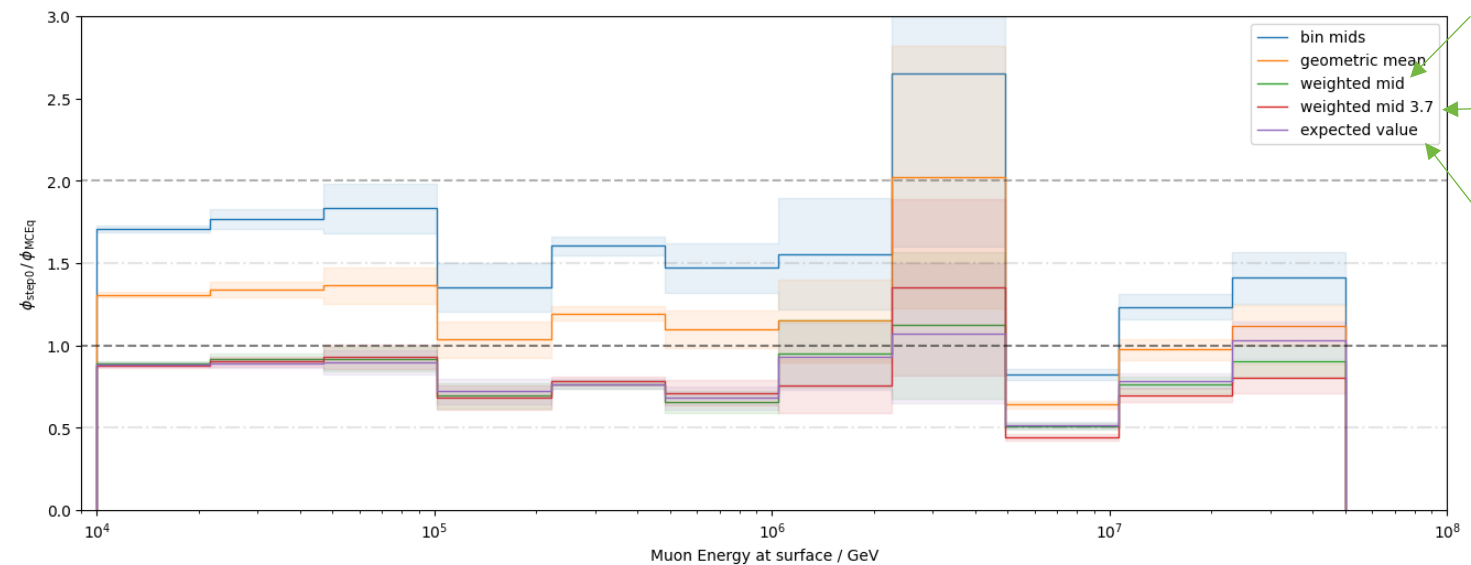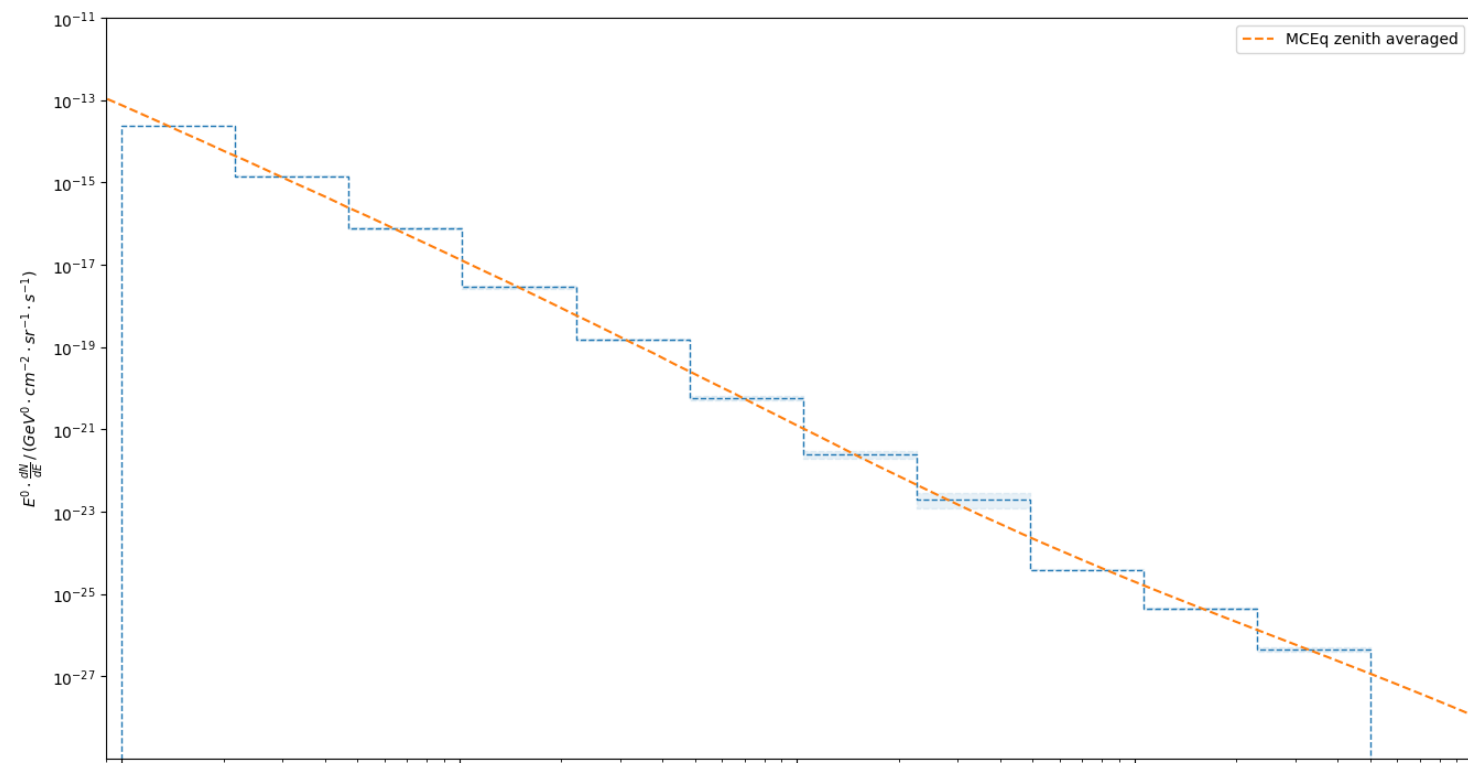July 18, 2024

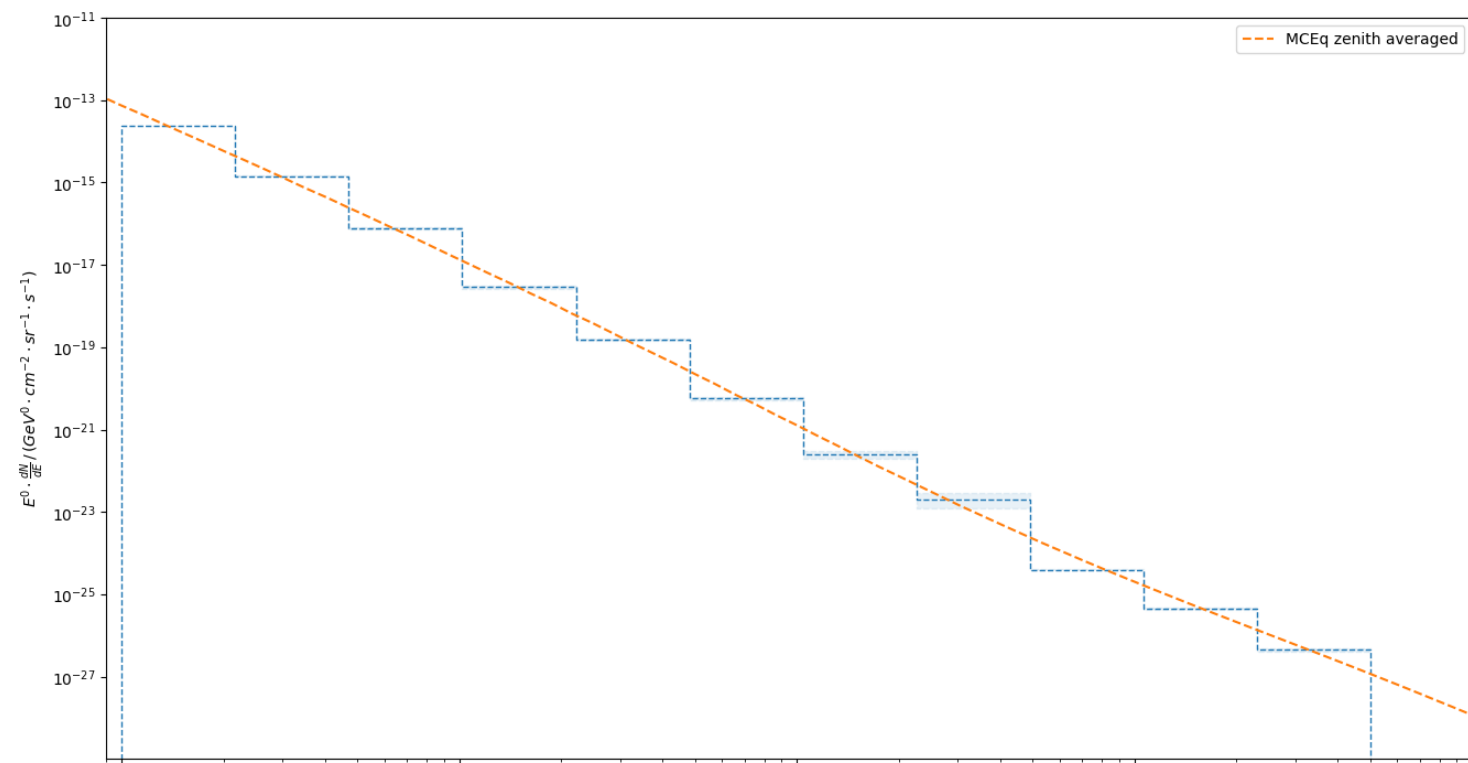Fit spectral index per bin

Check different bin "mids"

fitted spectral index

fixed 3.7

COG
(Karolin/Samuel)

Zoom in

what happens here?

pascal.gutjahr@tu-dortmund.de
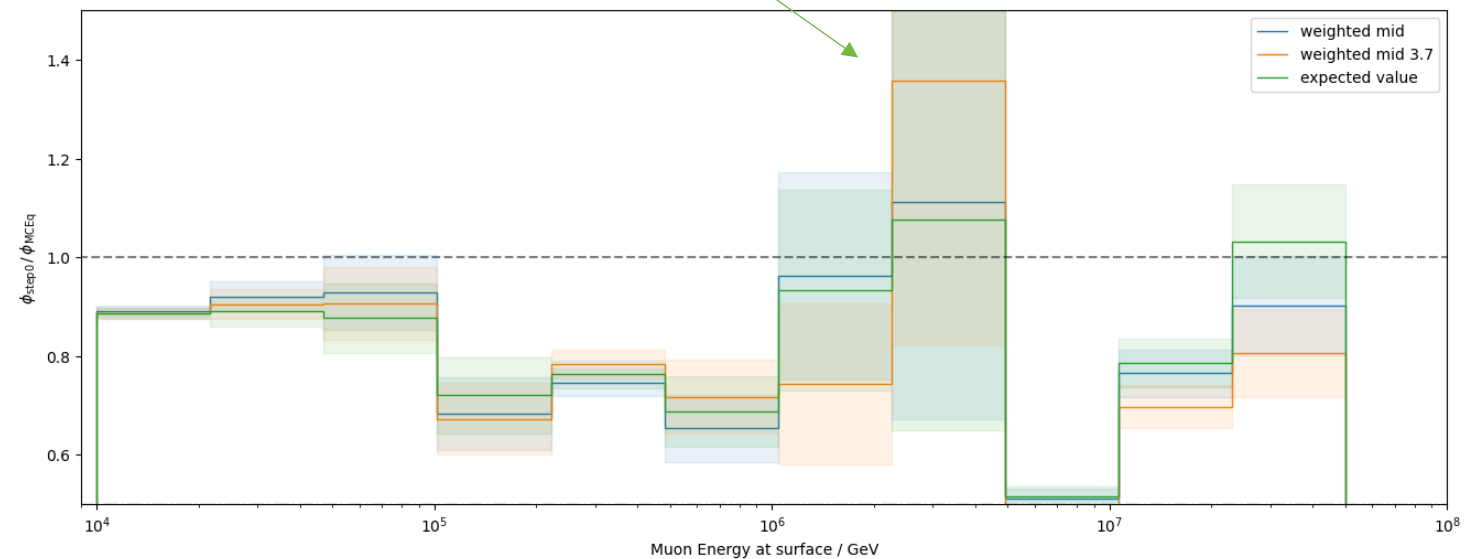
Muons at surface (check statistics)
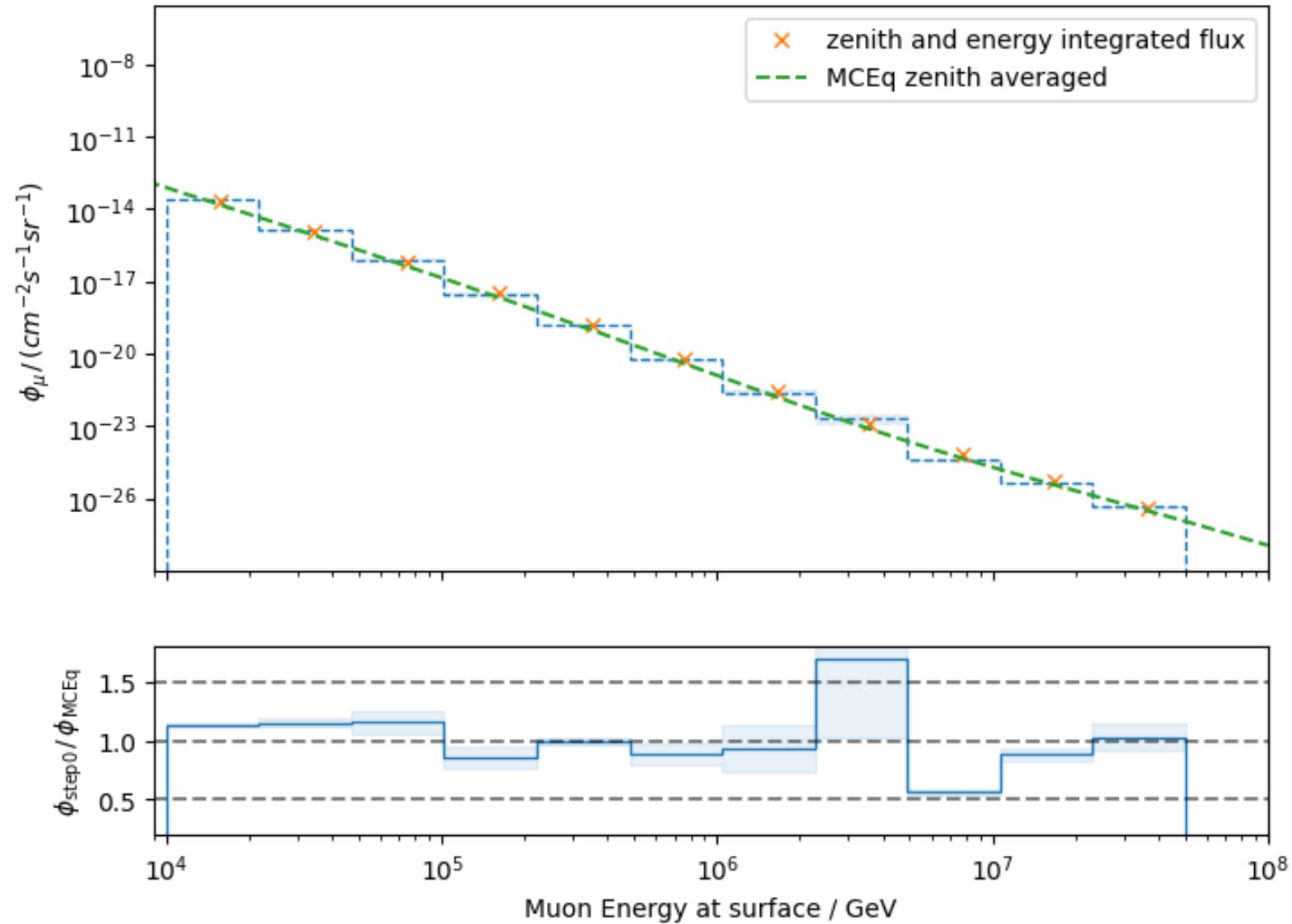

missing statistics from very high-energetic showers??
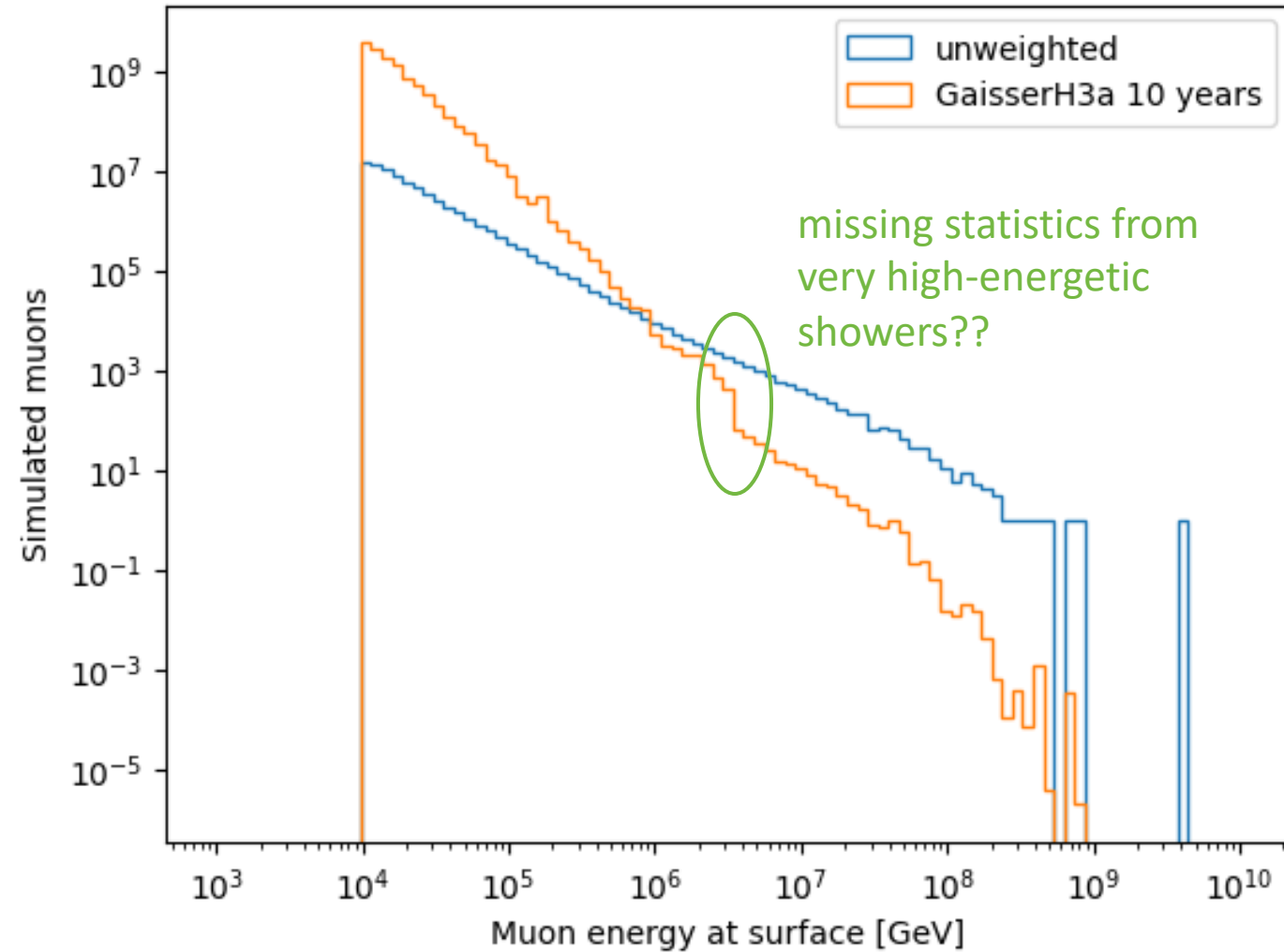
MCEq muon flux – zenith averaged
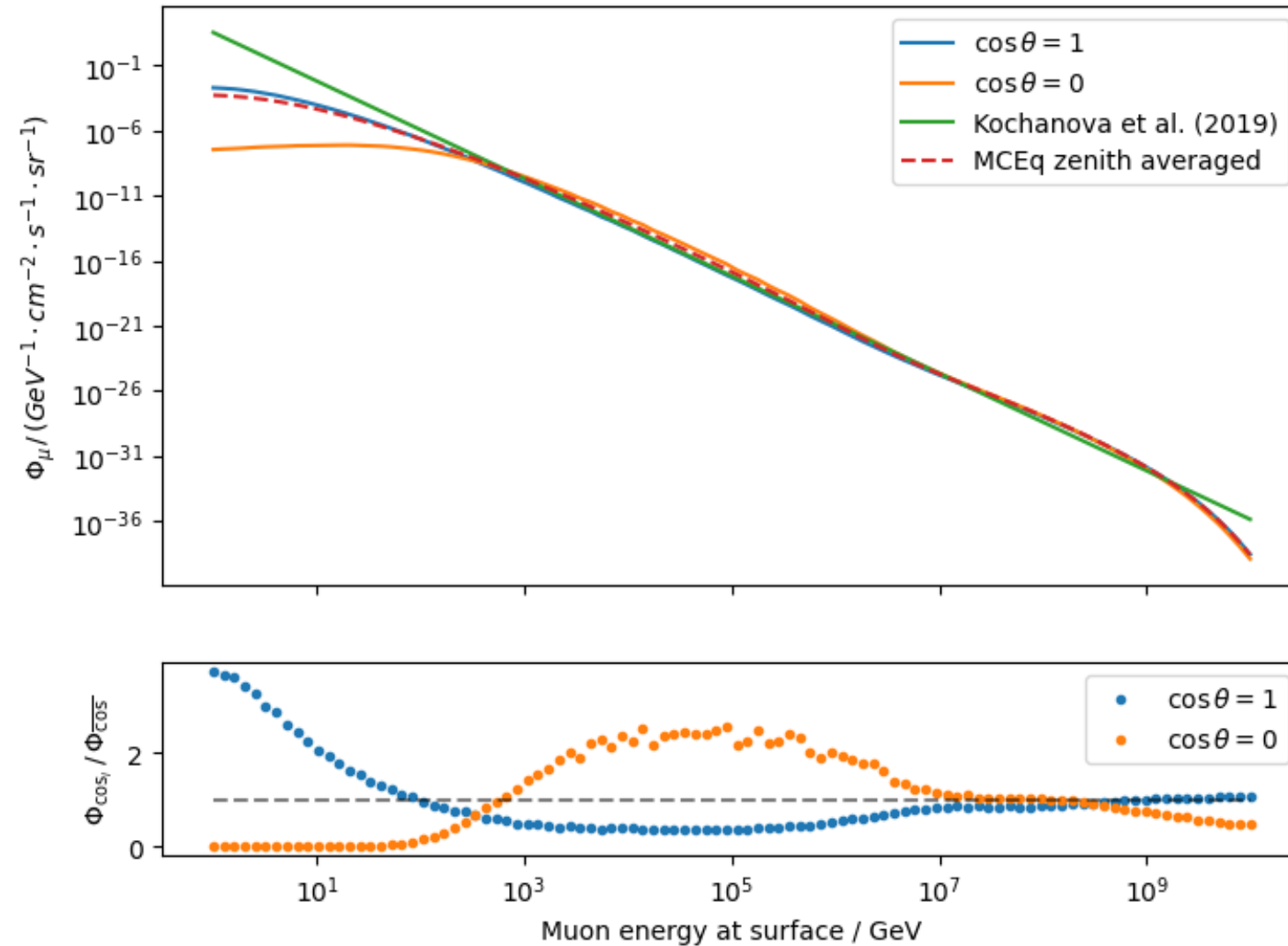
Check very small binning → less impact of bin "mids"
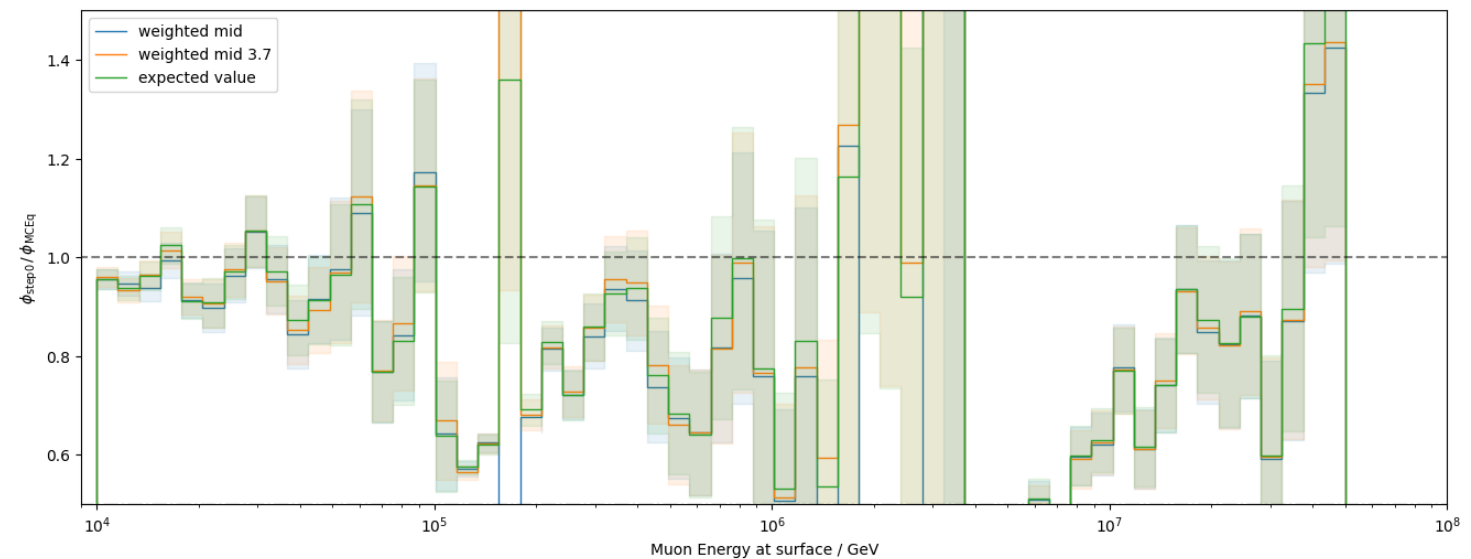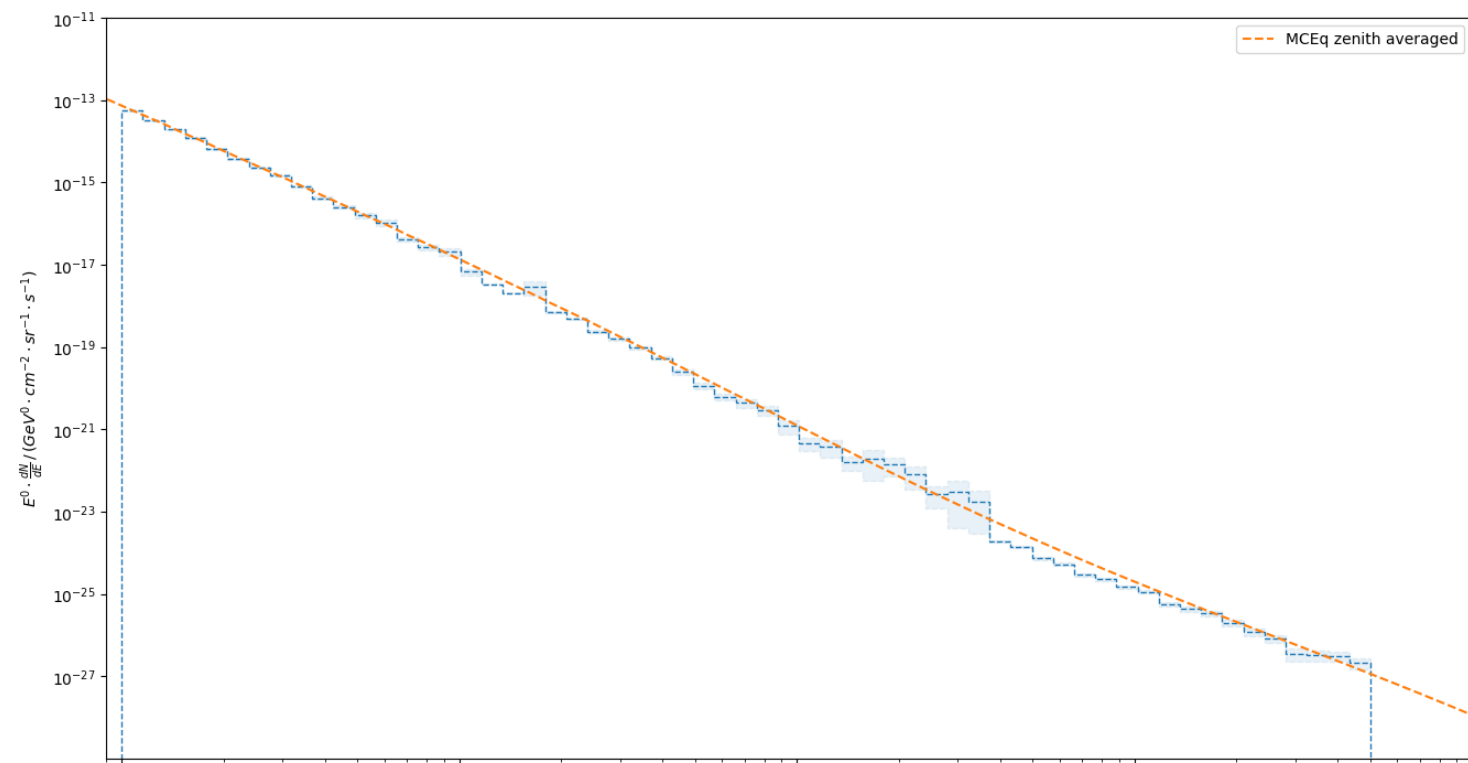
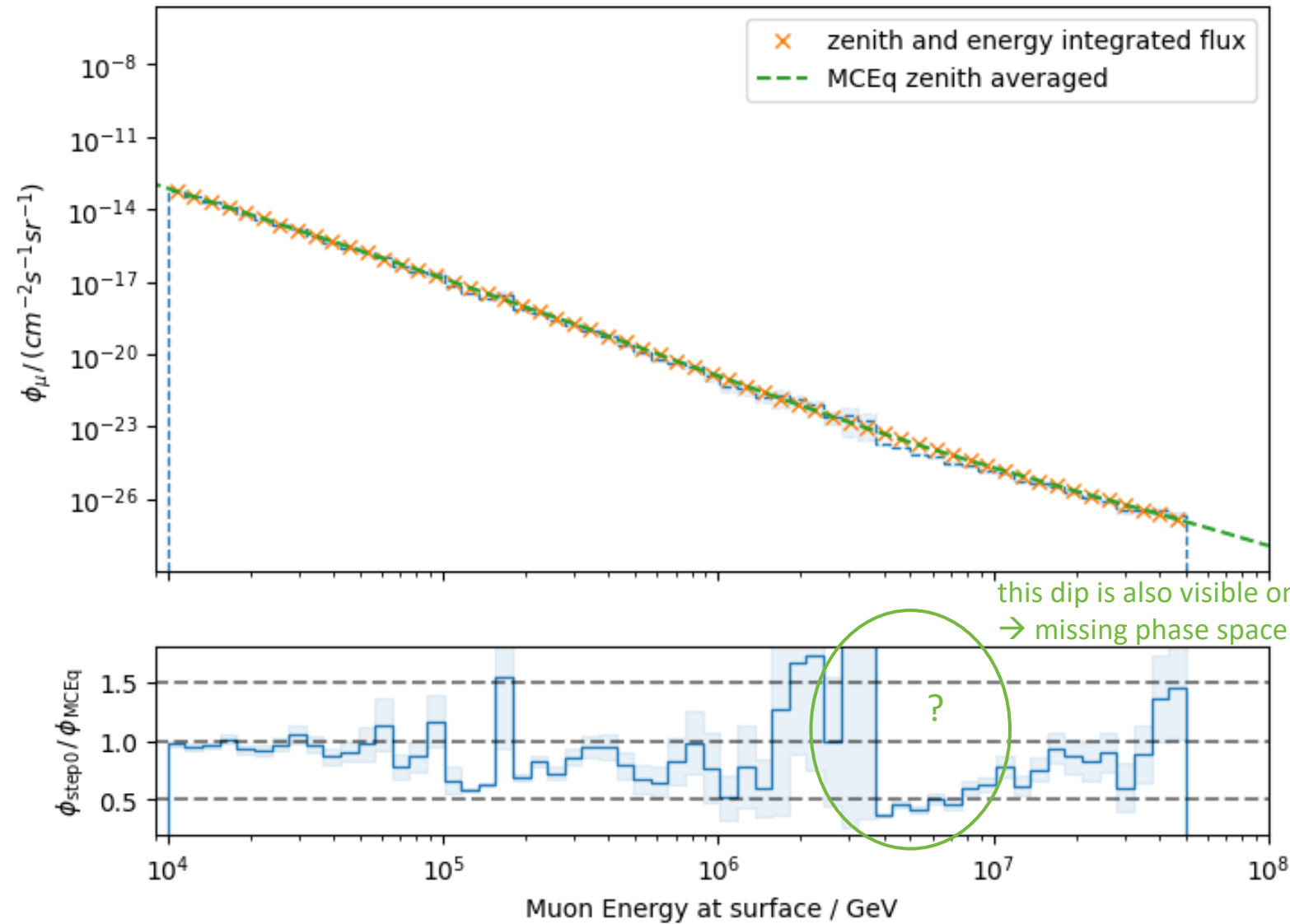# Integrate MCEq flux over energy → bin mids have no impact anymore

- energy integration is preliminary

Integrate MCEq flux over energy → smaller bins

this dip is also visible on slide 5
→ missing phase space / events?

- energy integration is preliminary