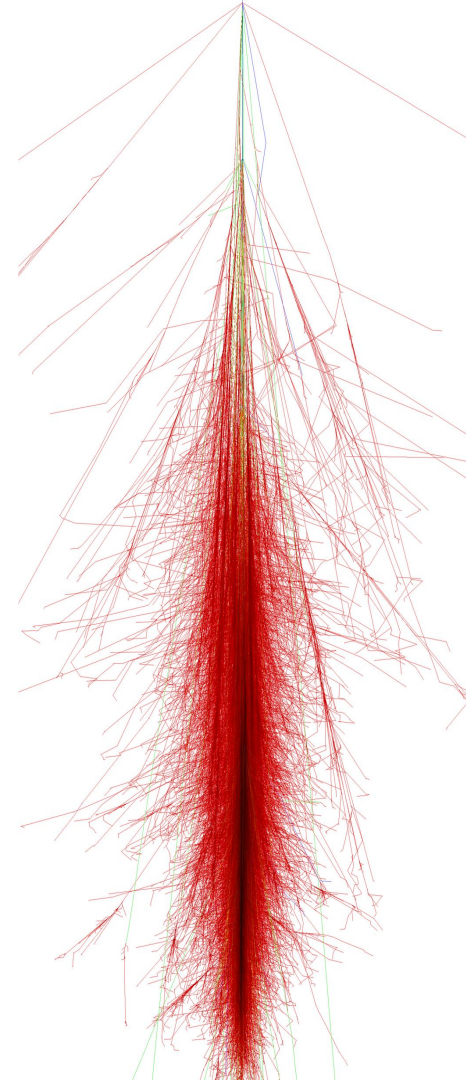


18.01.2024

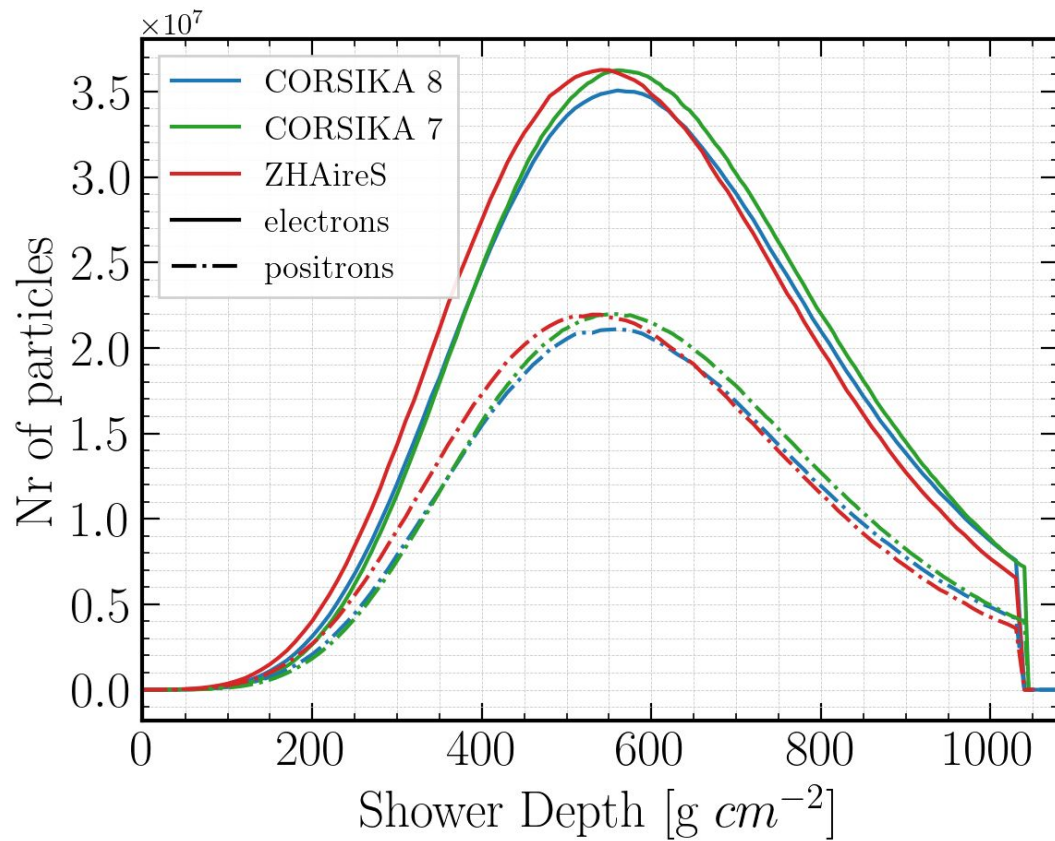
- 1) Updated radio plots using the latest tag**
- 2) CoREAS vs ZHS study (30-80MHz & 50-350MHz)**

Nikos Karastathis

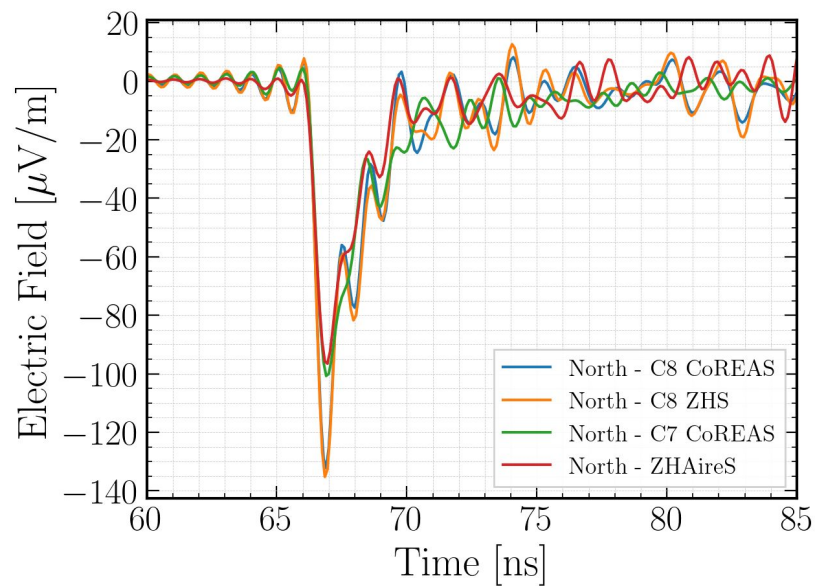
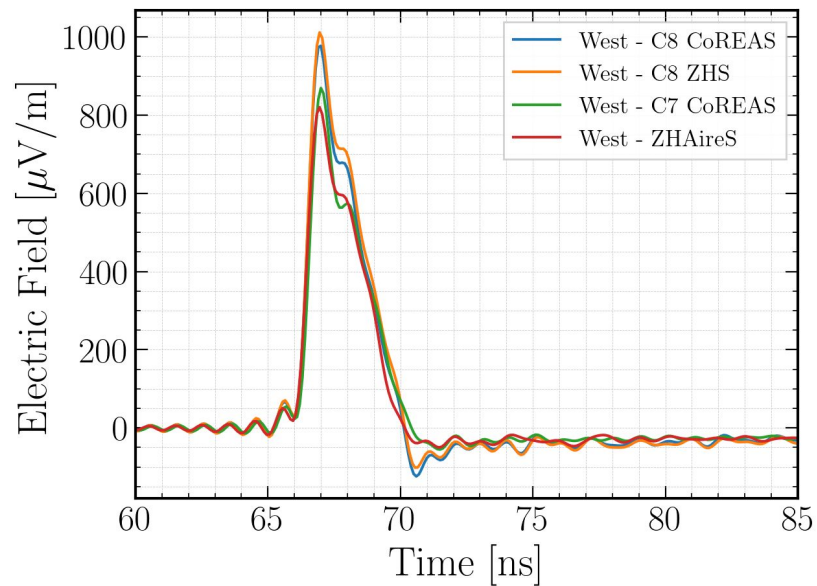
CORSIKA 8 call



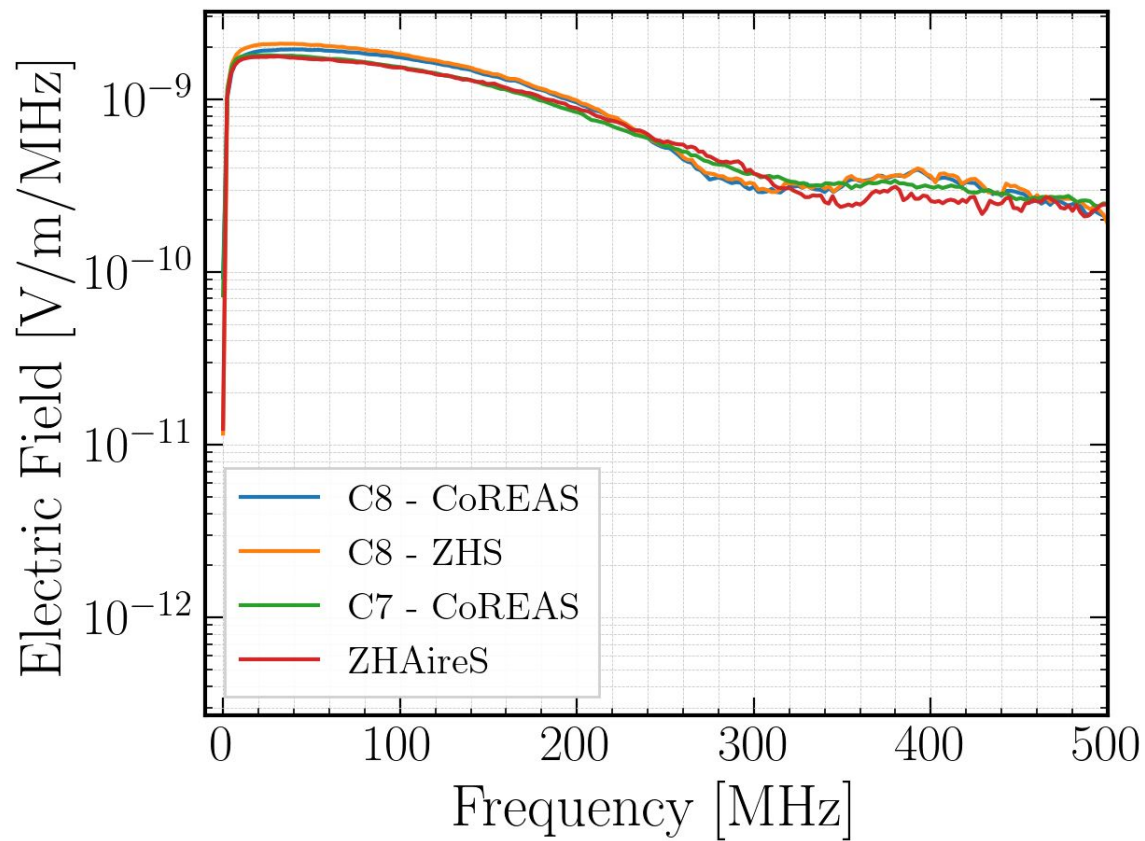
TAG



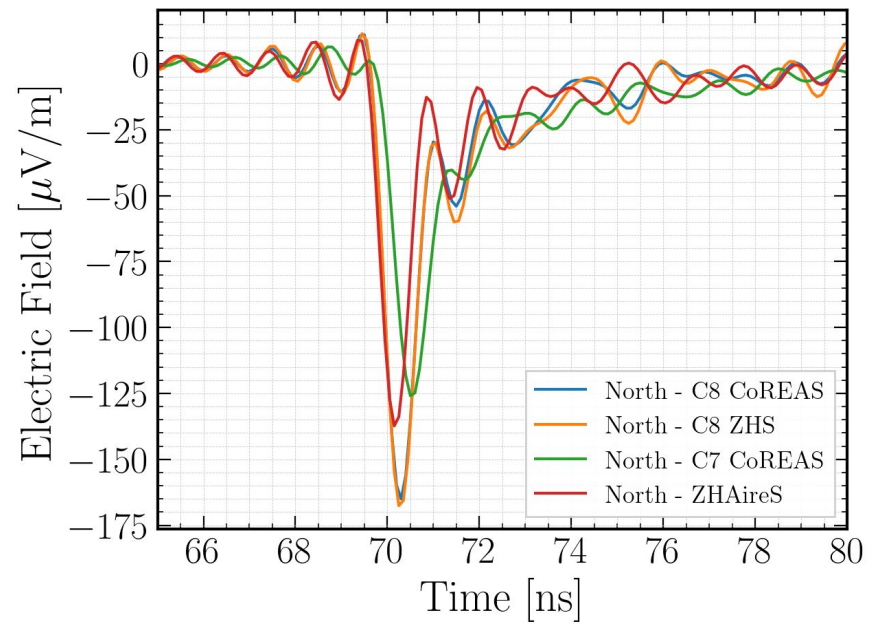
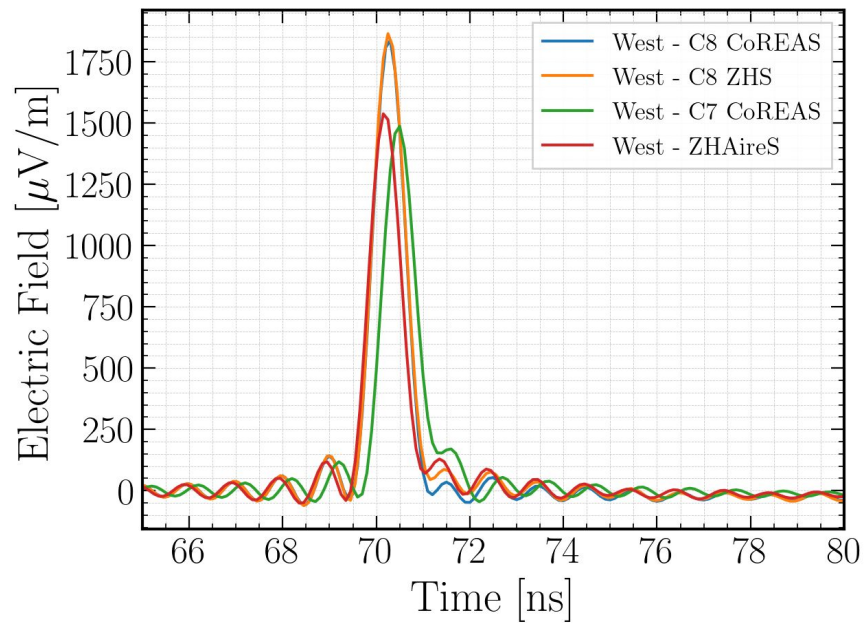
TAG - 50m



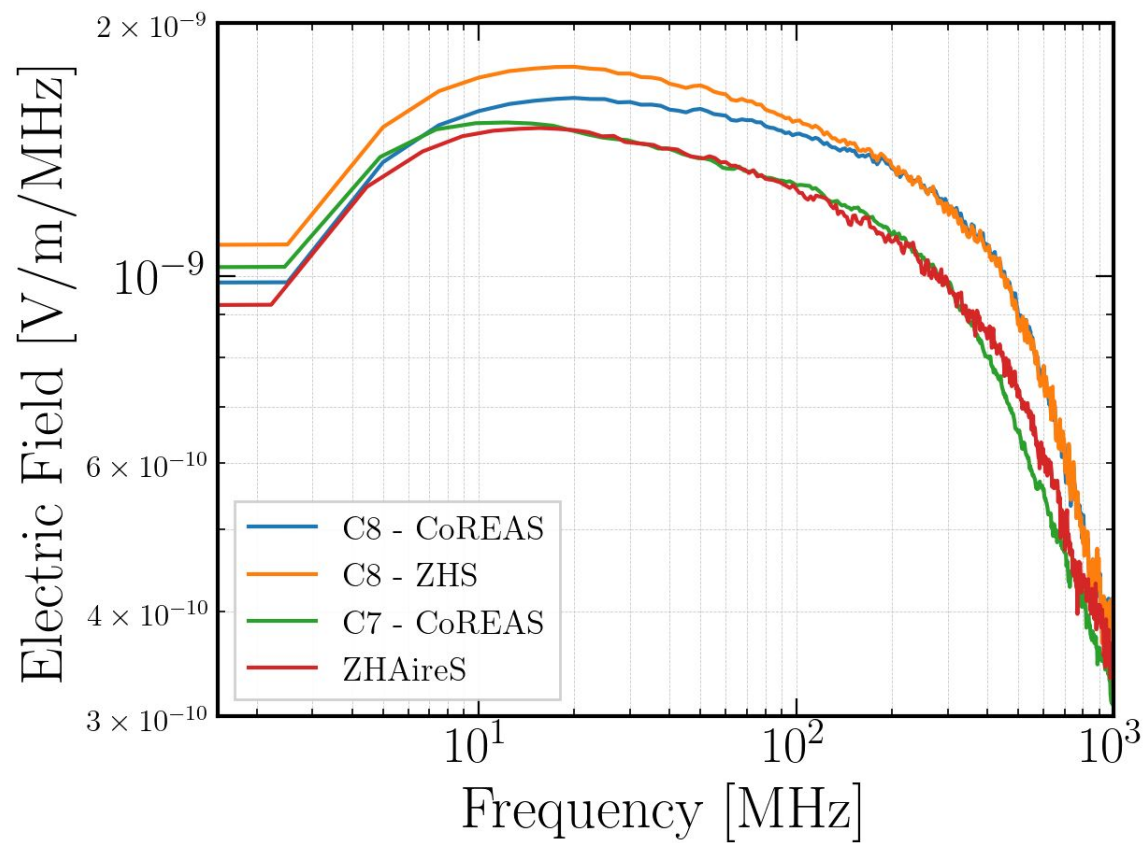
TAG - 50m



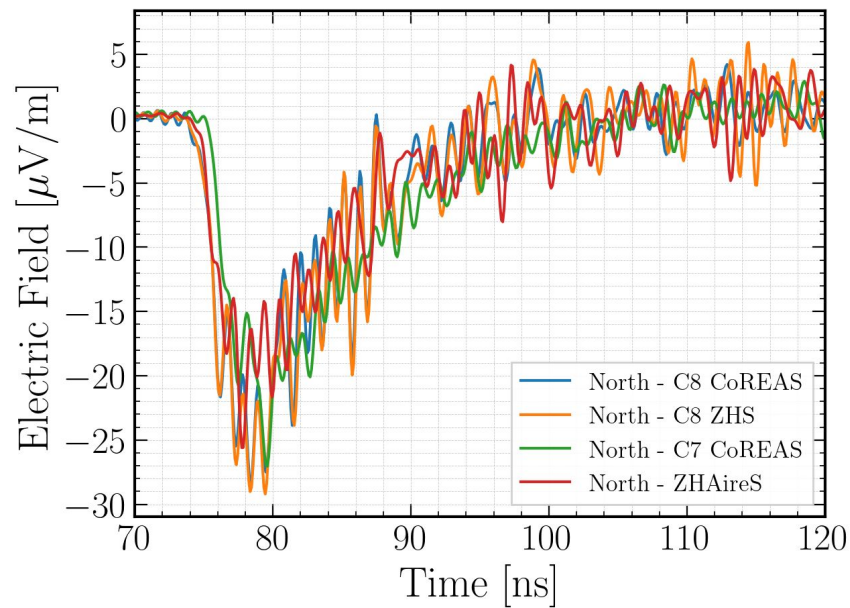
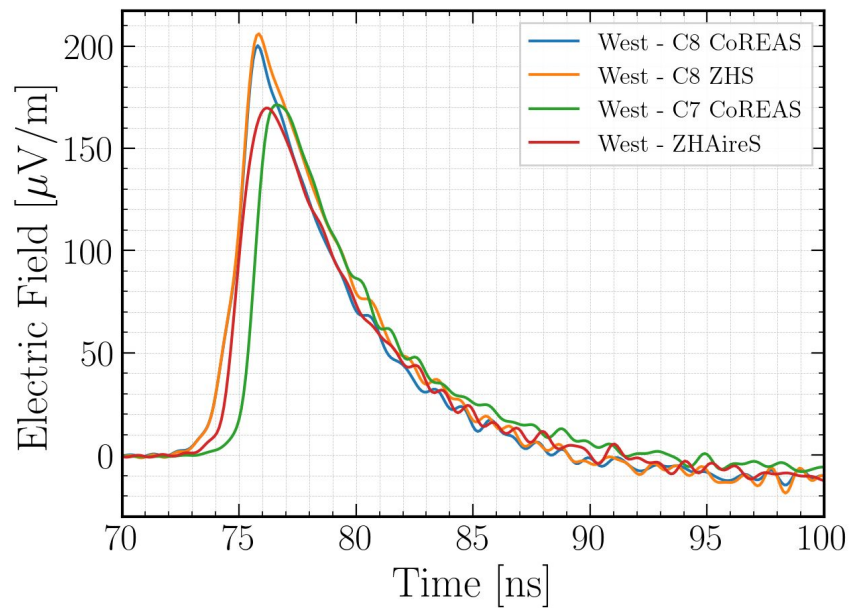
TAG - 100m



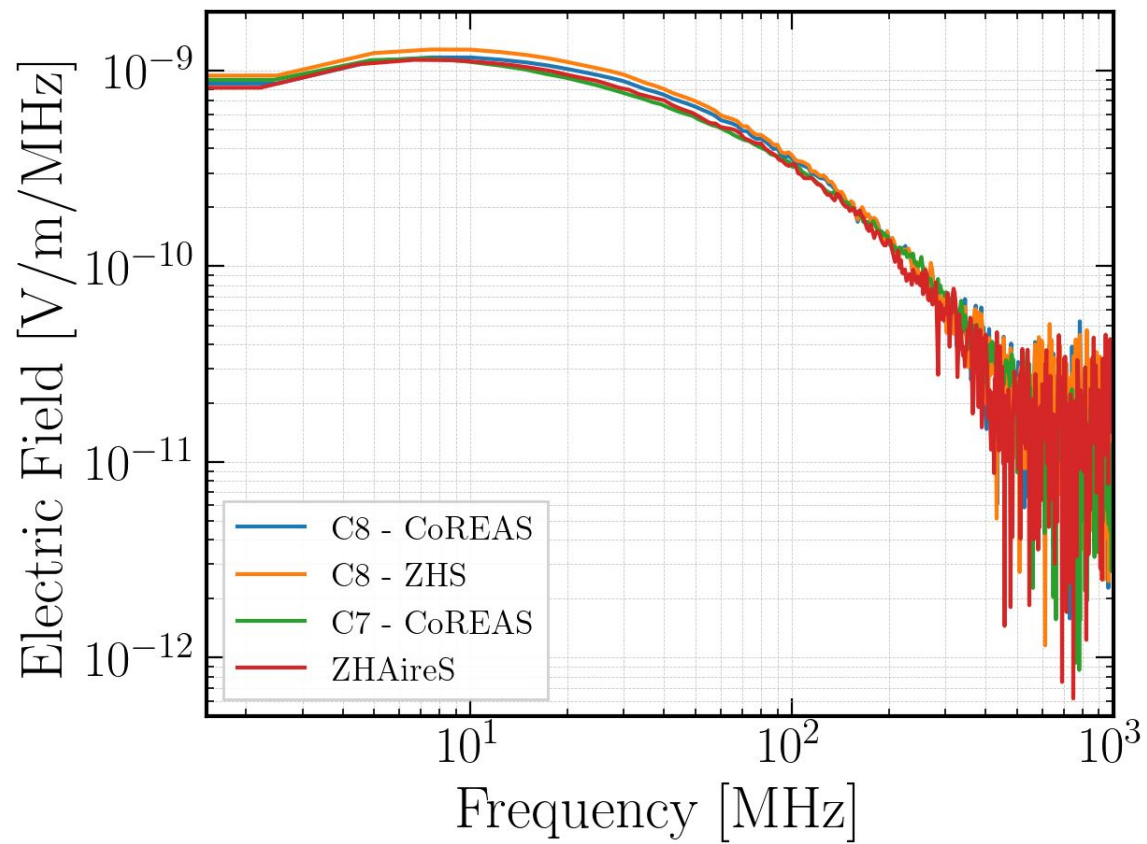
TAG - 100m



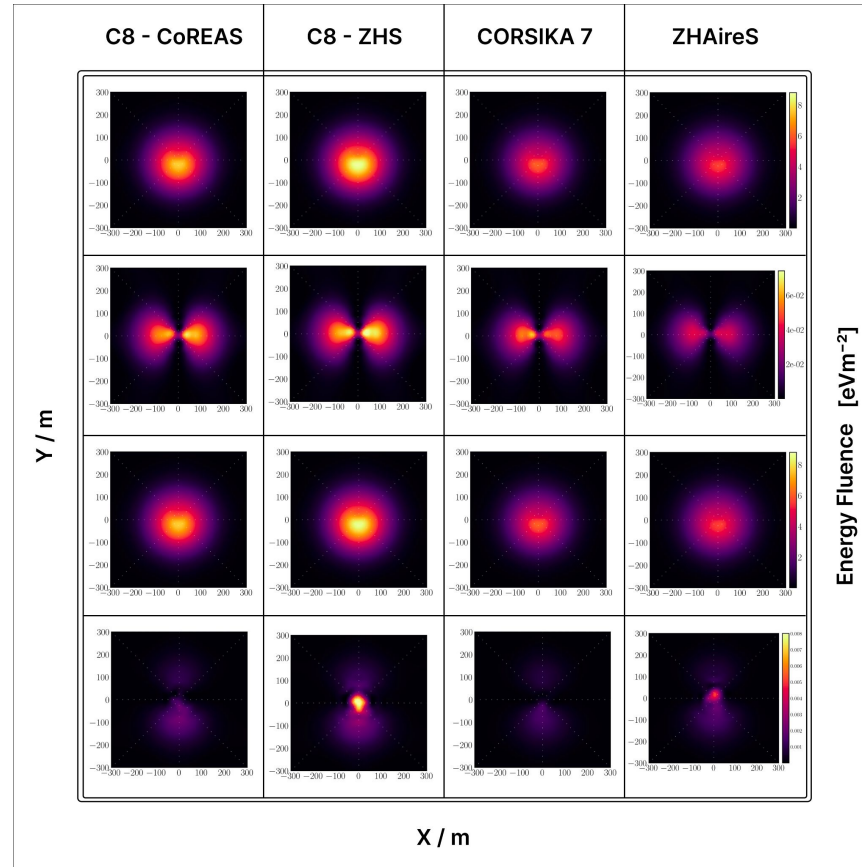
TAG - 200m



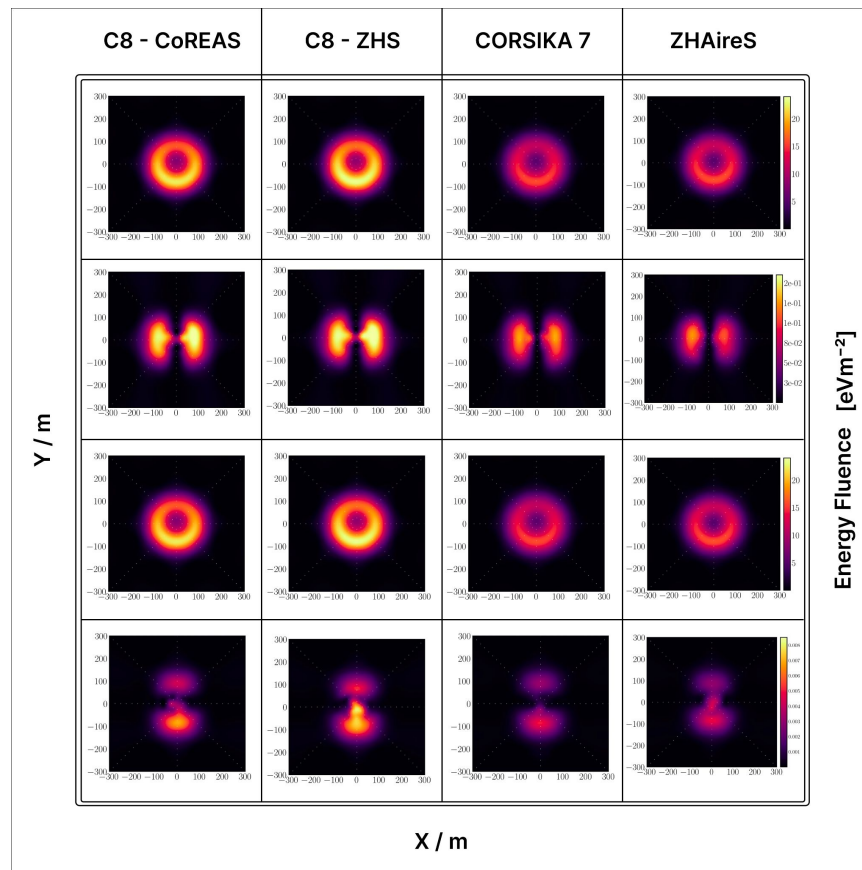
TAG - 200m



TAG - 30-80MHz



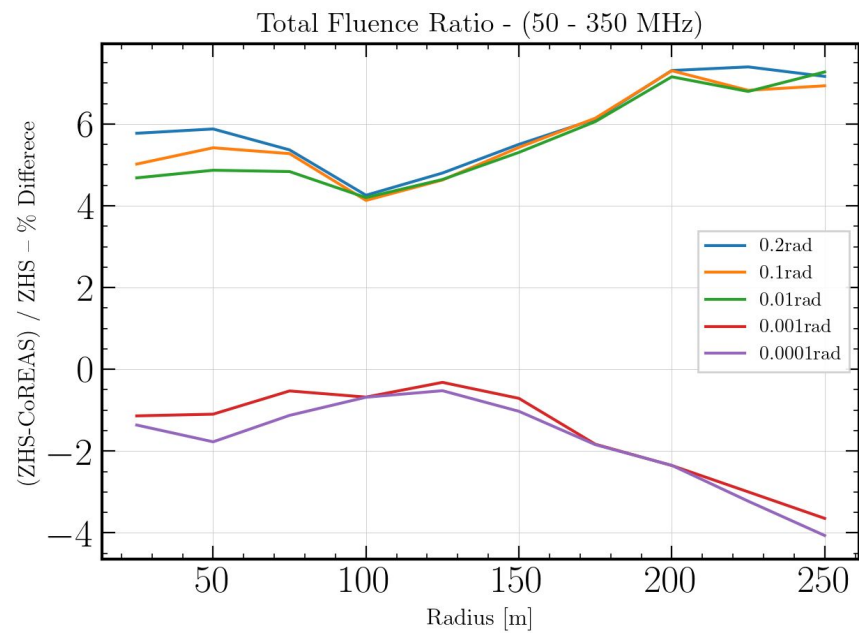
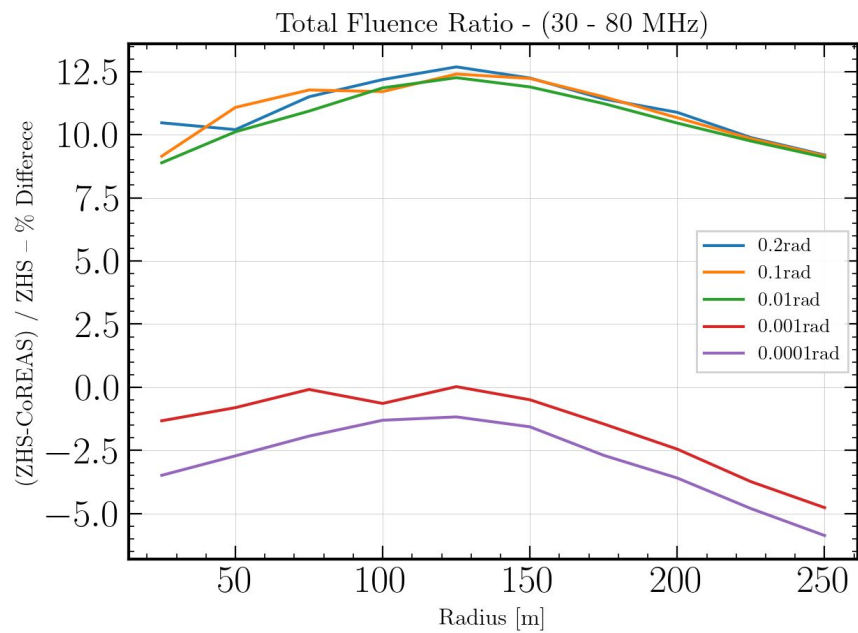
TAG - 50-350MHz



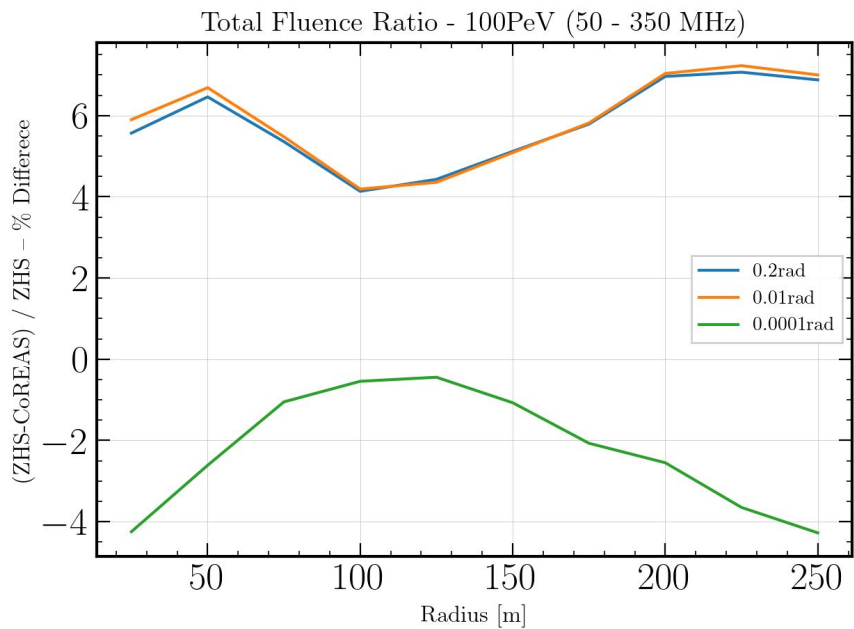
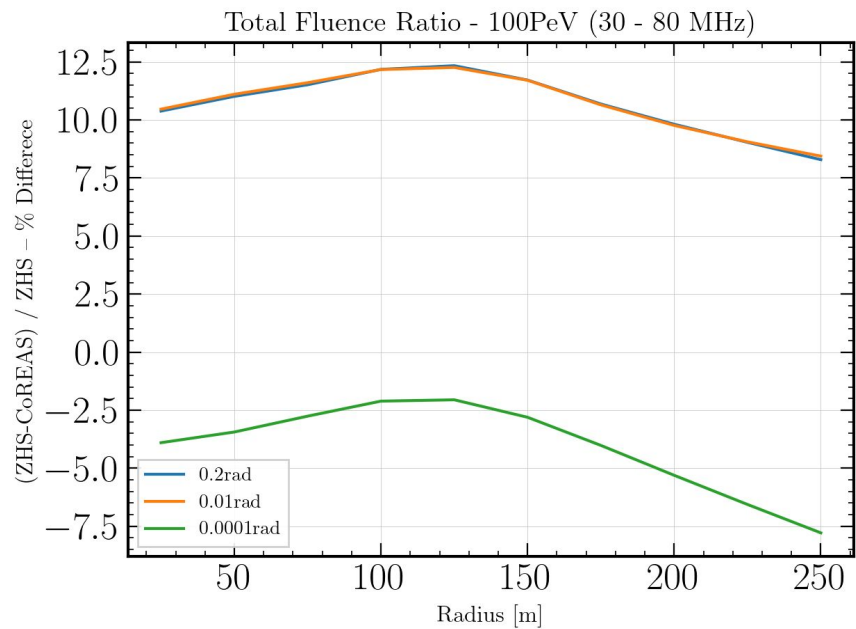
1PeV iron induced vertical air shower

1. I simulate 1 (!) shower with the same settings except the maxRad variable. I simulate with values 0.2rad, 0.1rad, 0.01rad, 0.001rad and 0.0001rad. This effectively makes the track length smaller.
2. I study the difference of CoREAS vs ZHS in total fluence.
3. I perform the same study for 200 1PeV iron showers.

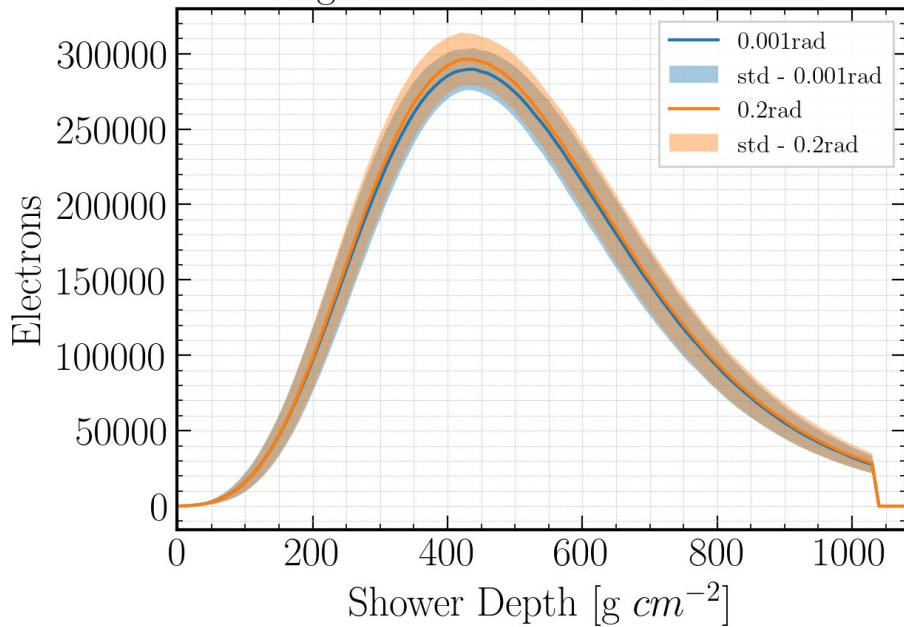
TOTAL FLUENCE DIFFERENCE - 1PeV - JUST 1 SHOWER!



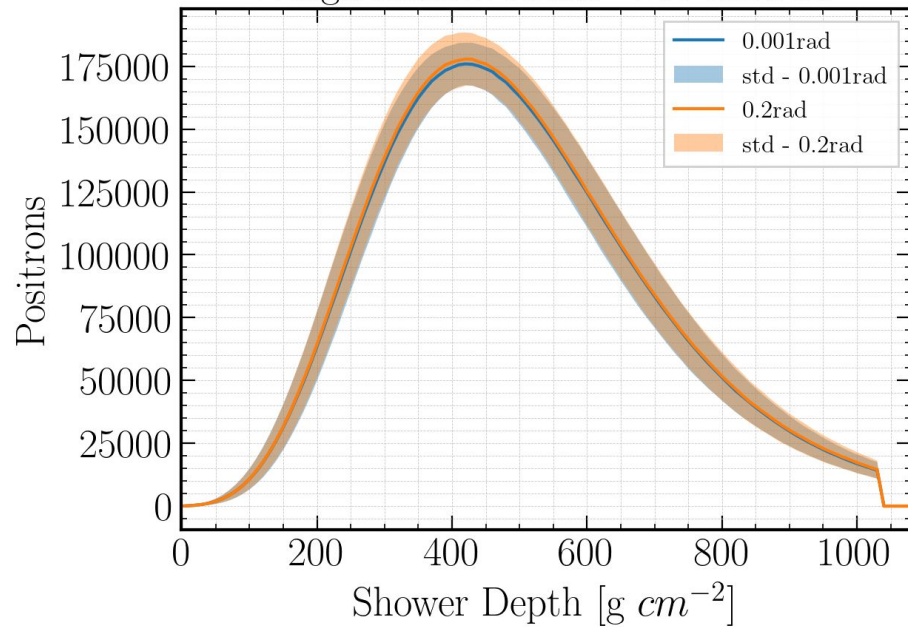
TOTAL FLUENCE DIFFERENCE - 100PeV - JUST 1 SHOWER!



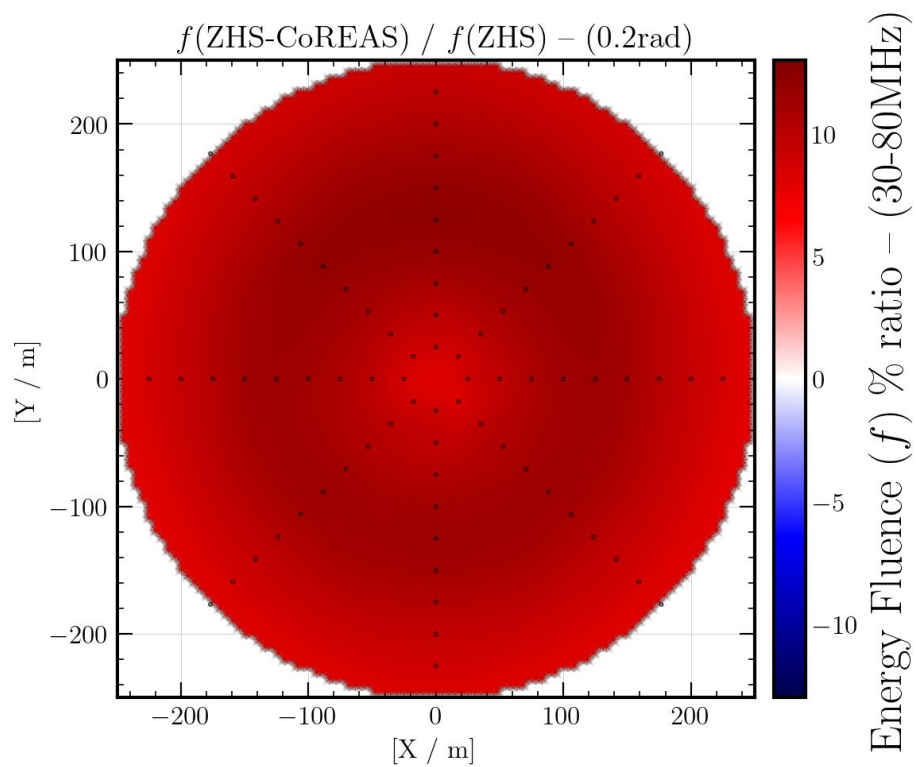
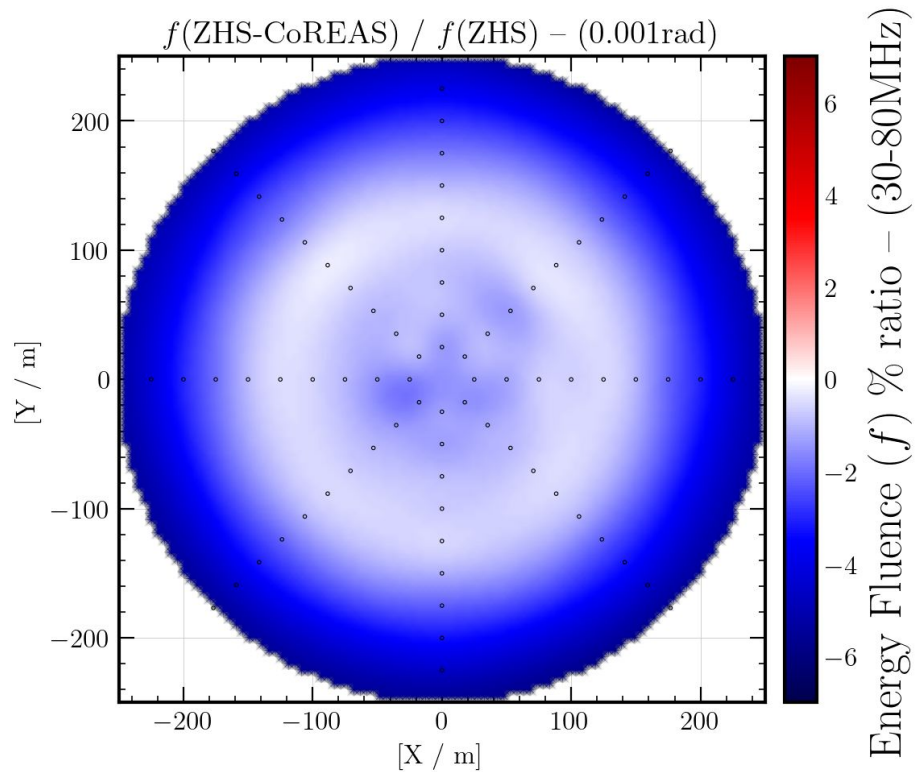
Longitudinal Profiles - 200 showers



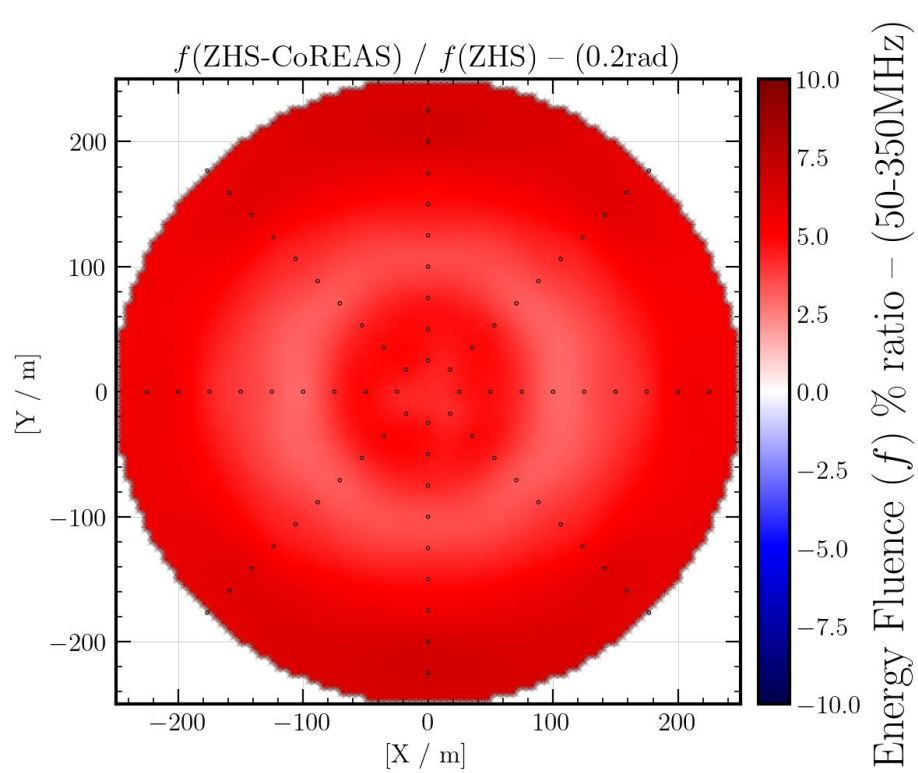
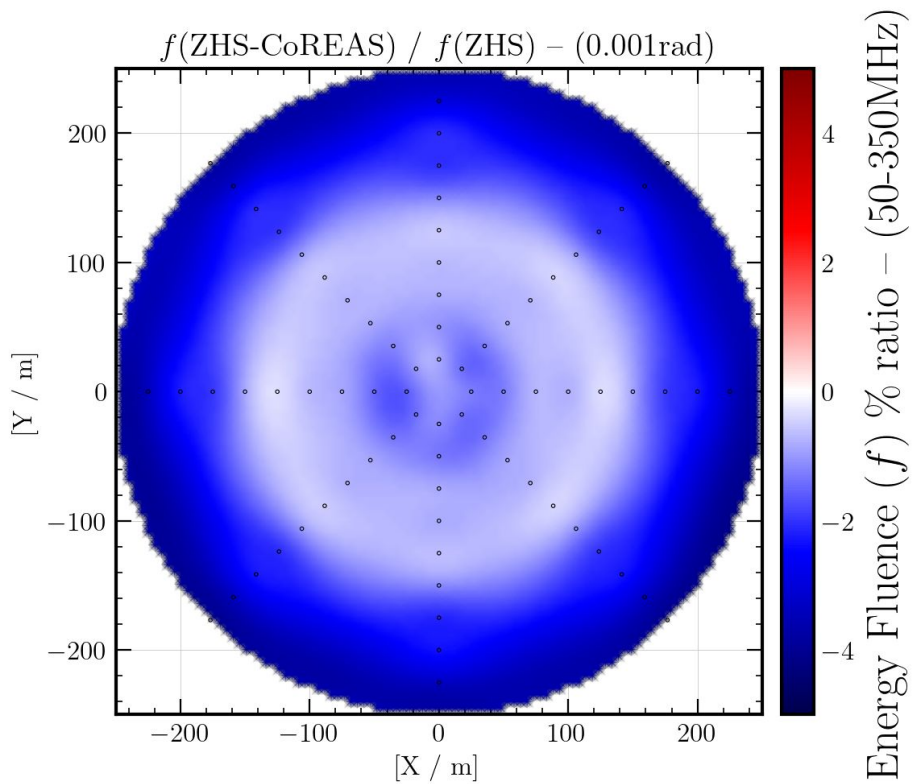
Longitudinal Profiles - 200 showers



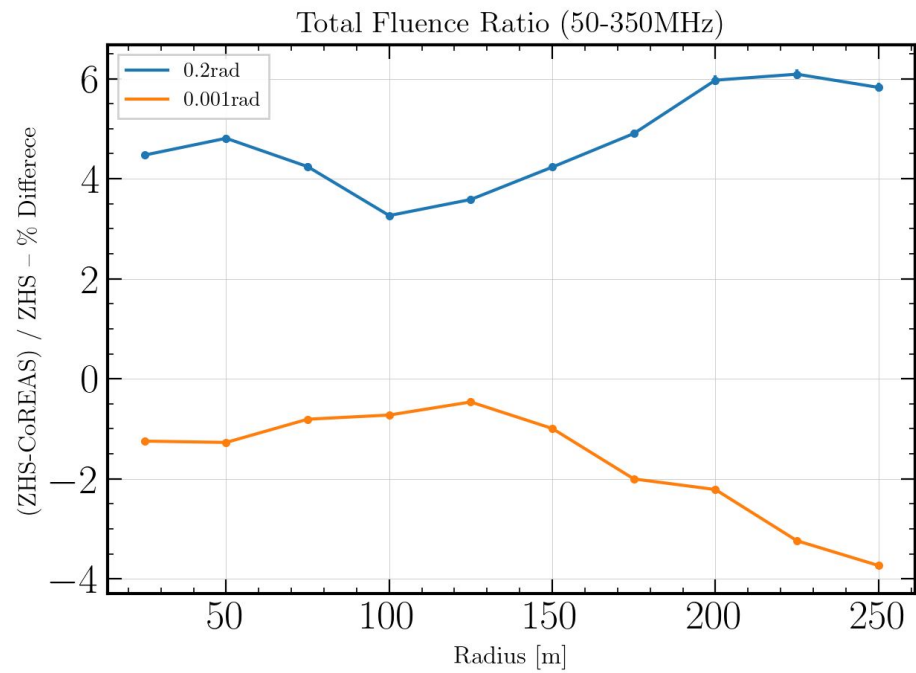
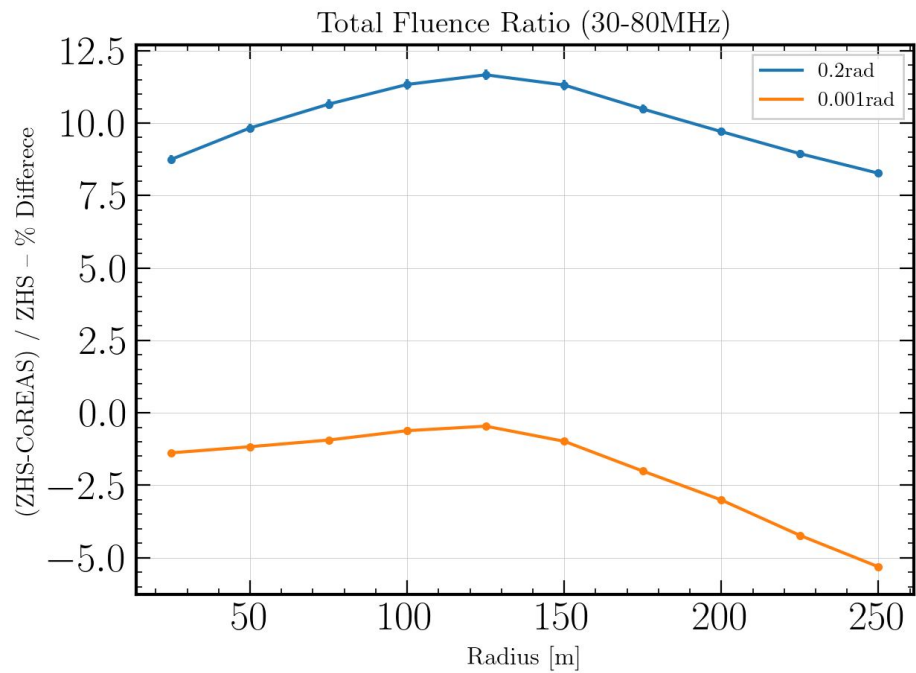
TOTAL FLUENCE DIFFERENCE - 1PeV - 200 SHOWERS



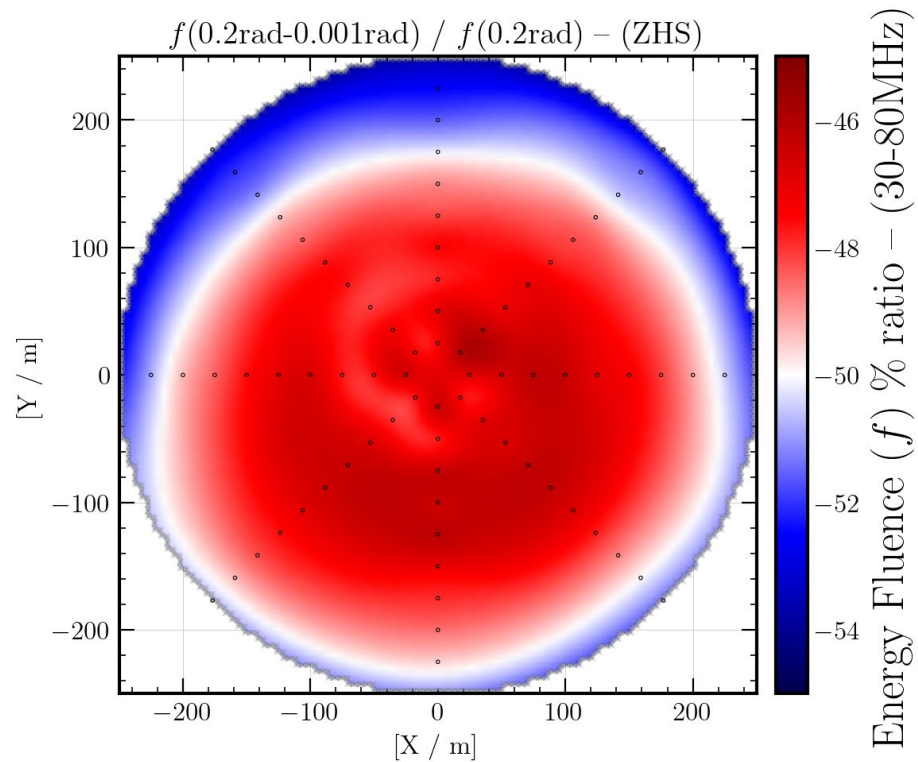
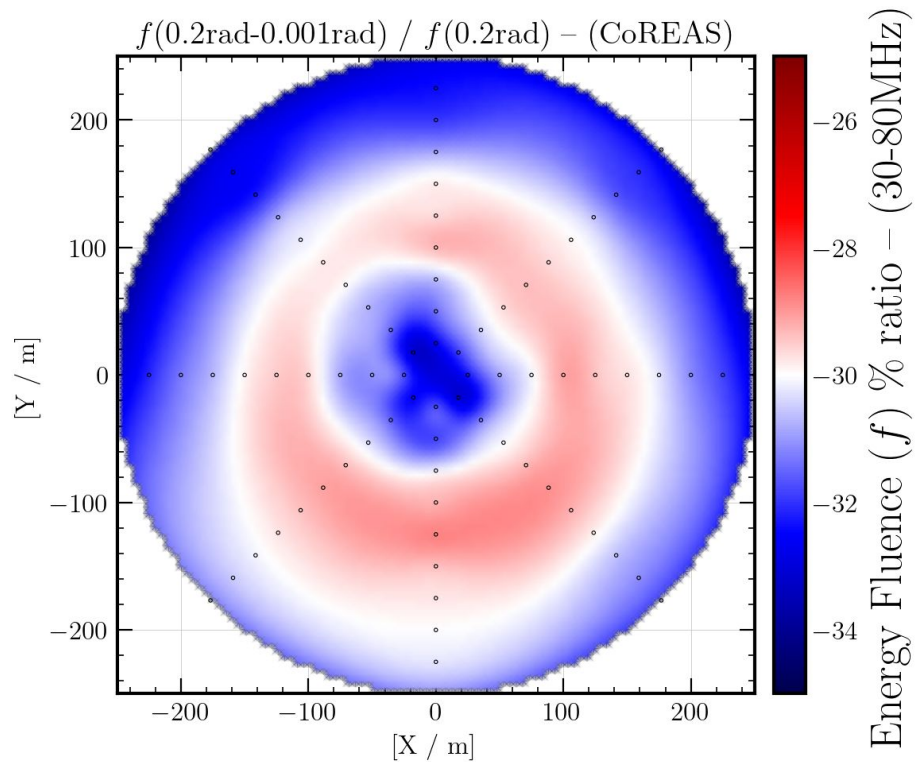
TOTAL FLUENCE DIFFERENCE - 1PeV - 200 SHOWERS



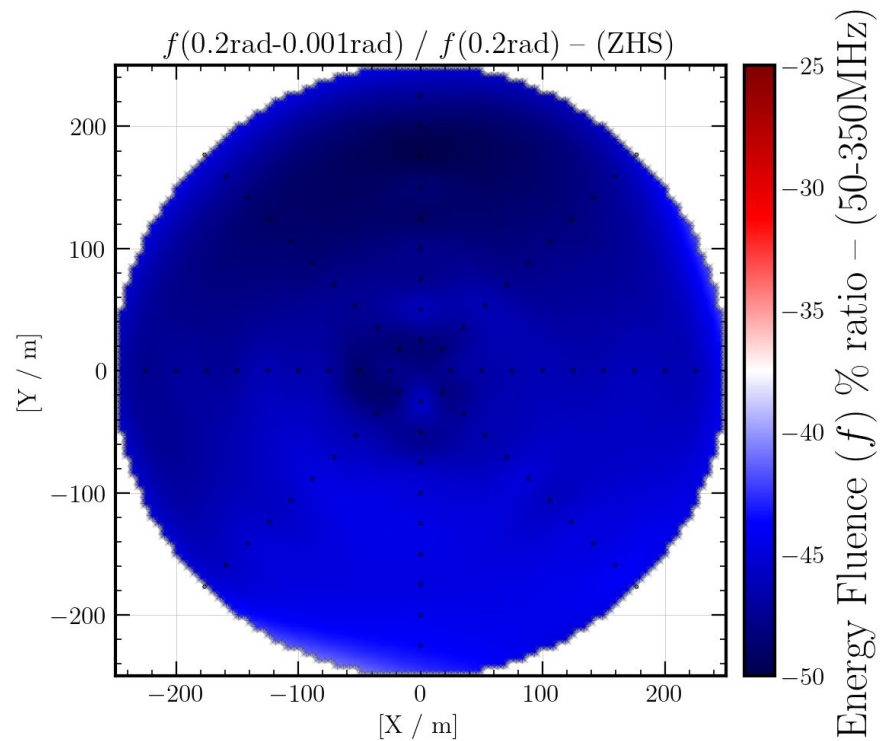
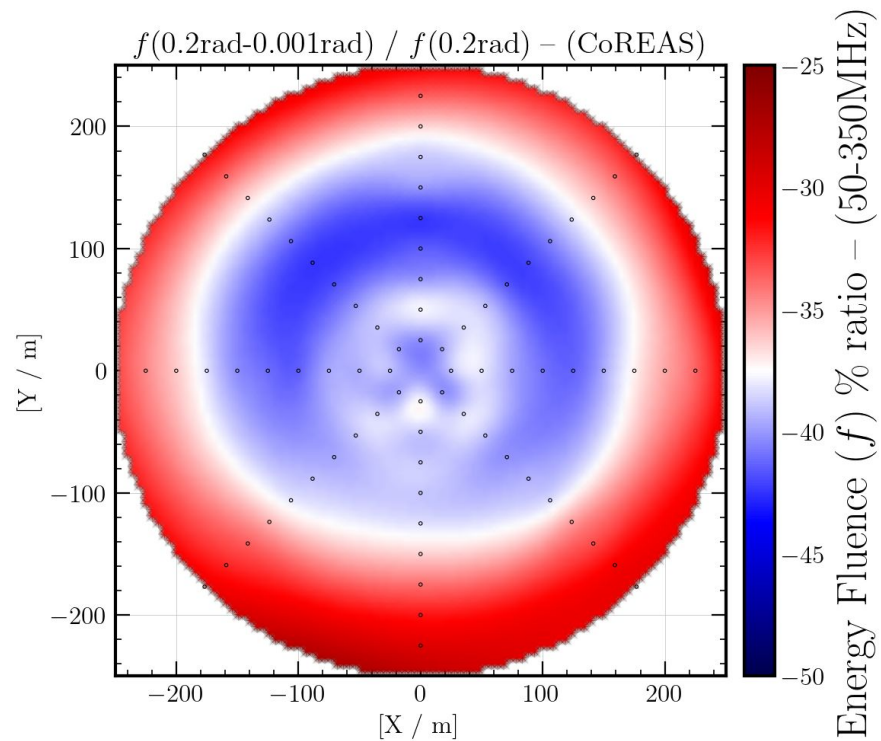
TOTAL FLUENCE DIFFERENCE - 1PeV - 200 SHOWERS



TOTAL FLUENCE DIFFERENCE - 1PeV - 200 SHOWERS - CoREAS 0.2rad vs CoREAS 0.001rad & ZHS 0.2rad vs ZHS 0.001rad

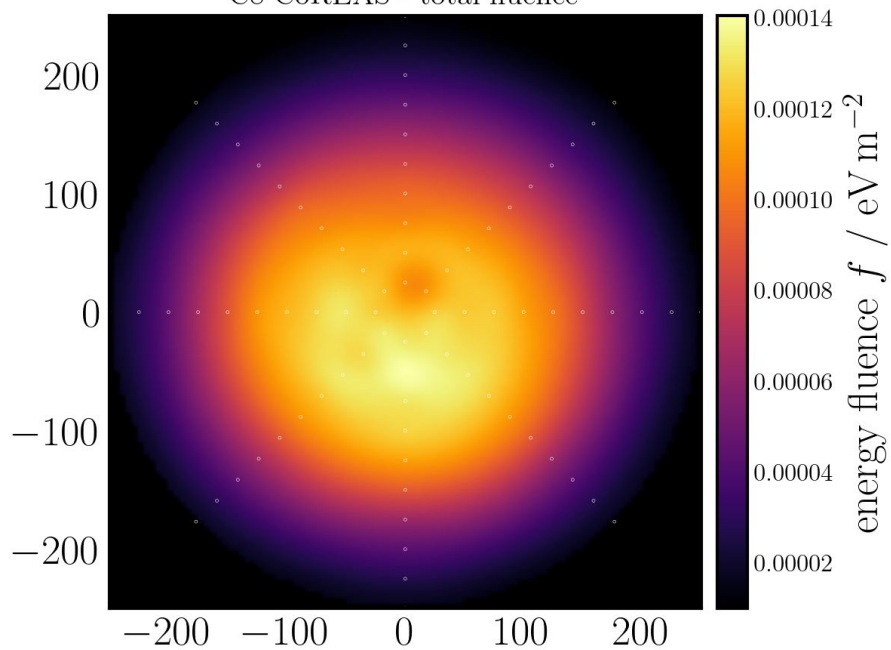


TOTAL FLUENCE DIFFERENCE - 1PeV - 200 SHOWERS - CoREAS 0.2rad vs CoREAS 0.001rad & ZHS 0.2rad vs ZHS 0.001rad

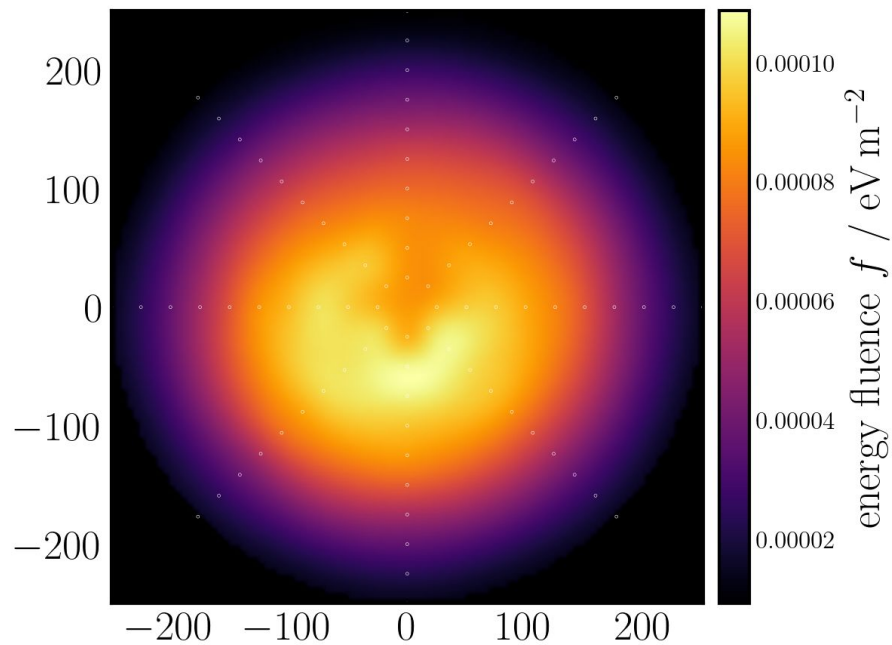


TOTAL FLUENCE MAP - 1PeV - 0.2rad vs 0.001rad - 30-80MHz

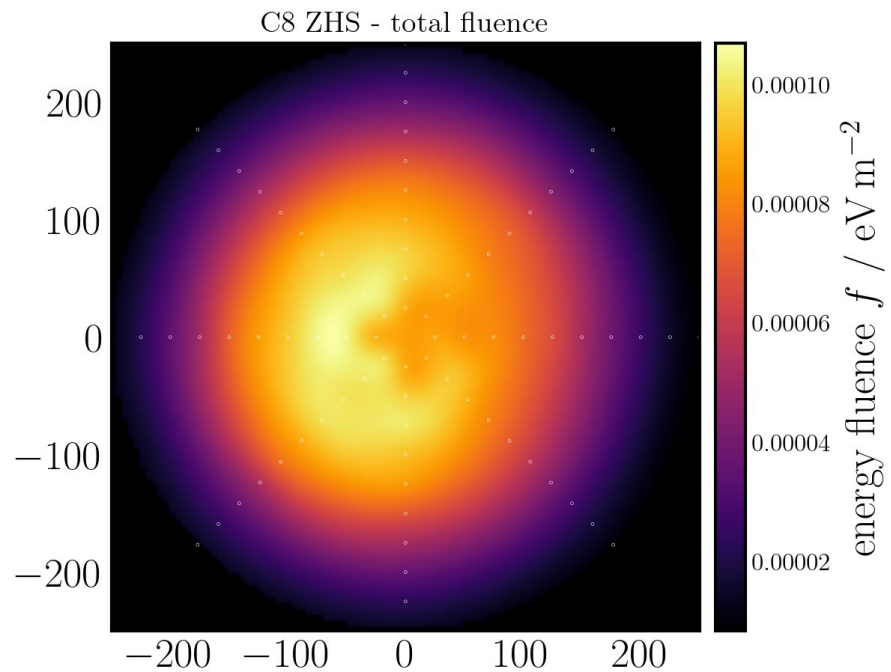
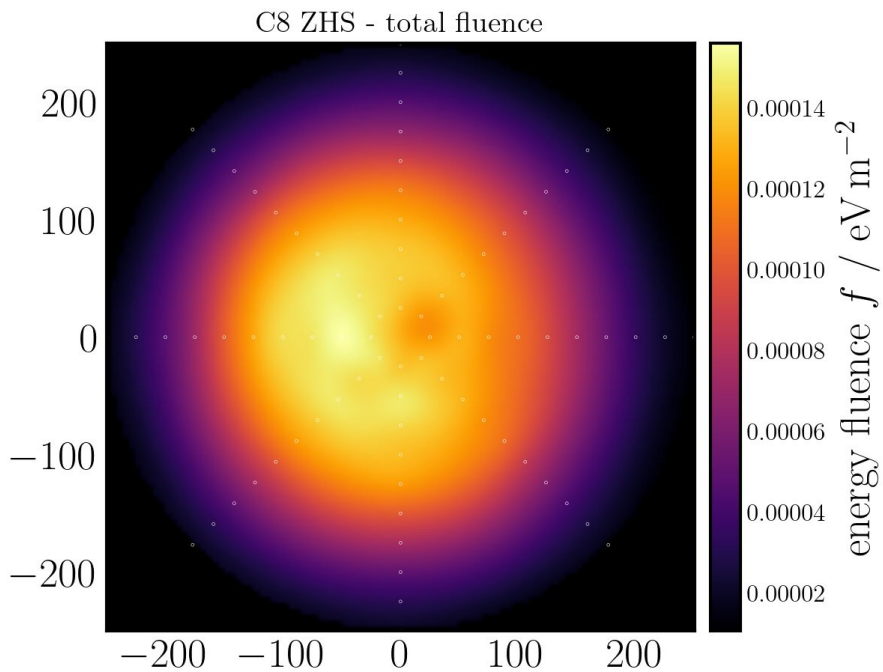
C8 CoREAS - total fluence



C8 CoREAS - total fluence

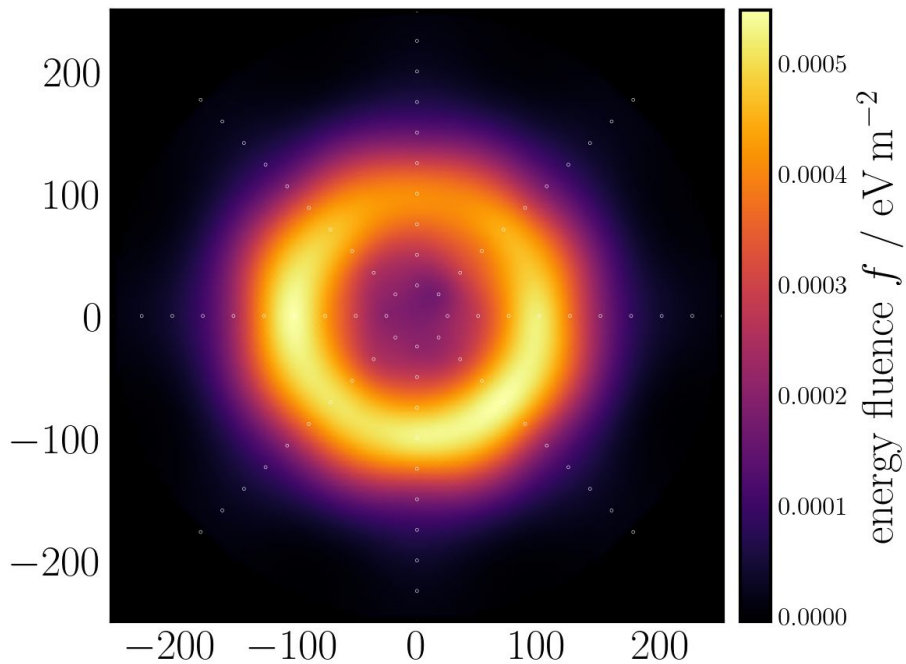


TOTAL FLUENCE MAP - 1PeV - 0.2rad vs 0.001rad - 30-80MHz

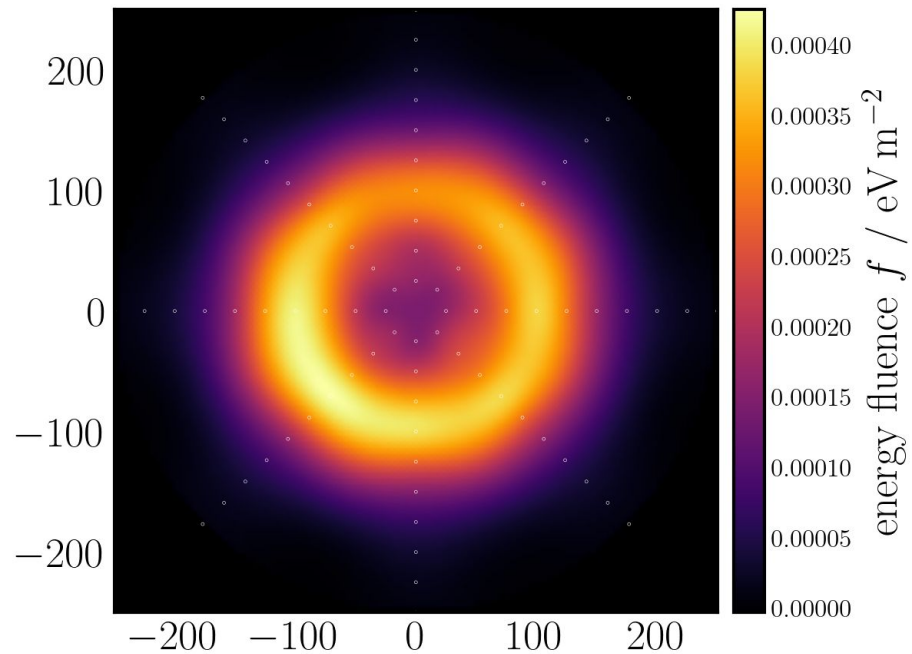


TOTAL FLUENCE MAP - 1PeV - 0.2rad vs 0.001rad - 50-350MHz

C8 CoREAS - total fluence

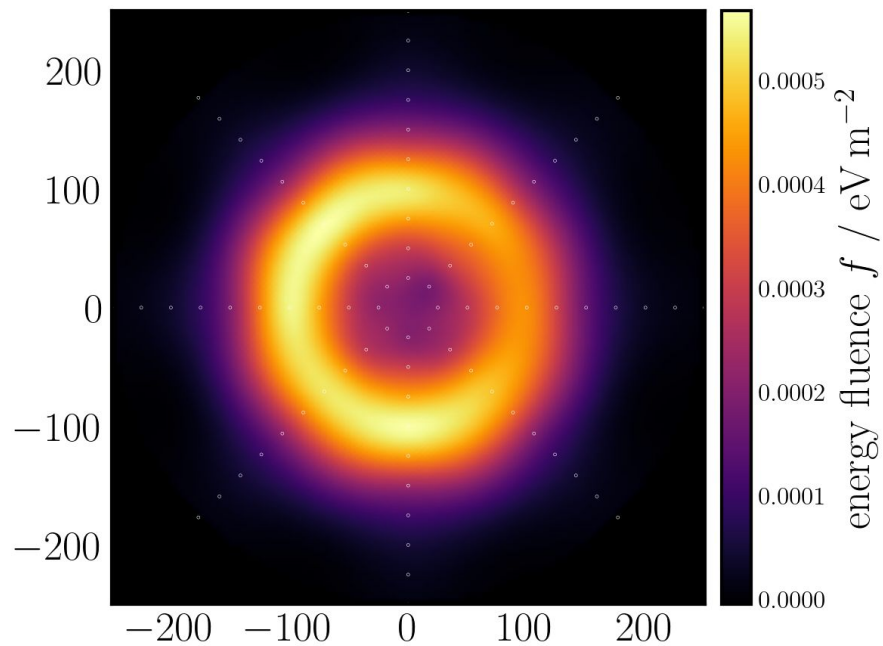


C8 CoREAS - total fluence



TOTAL FLUENCE MAP - 1PeV - 0.2rad vs 0.001rad - 50-350MHz

C8 ZHS - total fluence



C8 ZHS - total fluence

