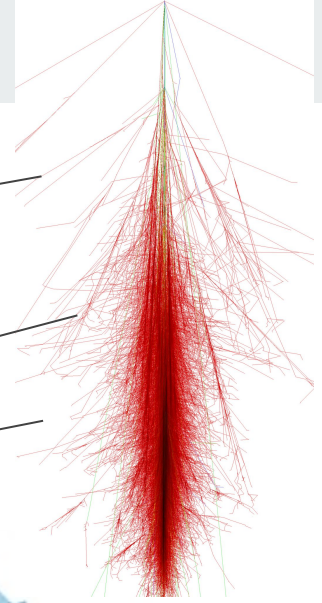




Radio module CORSIKA 8

Radio emission simulation



C8

Radio Process<Detector, Formalism, Propagator>

<Propagator>

Signal Path
Collection

<Formalism>

CoREAS

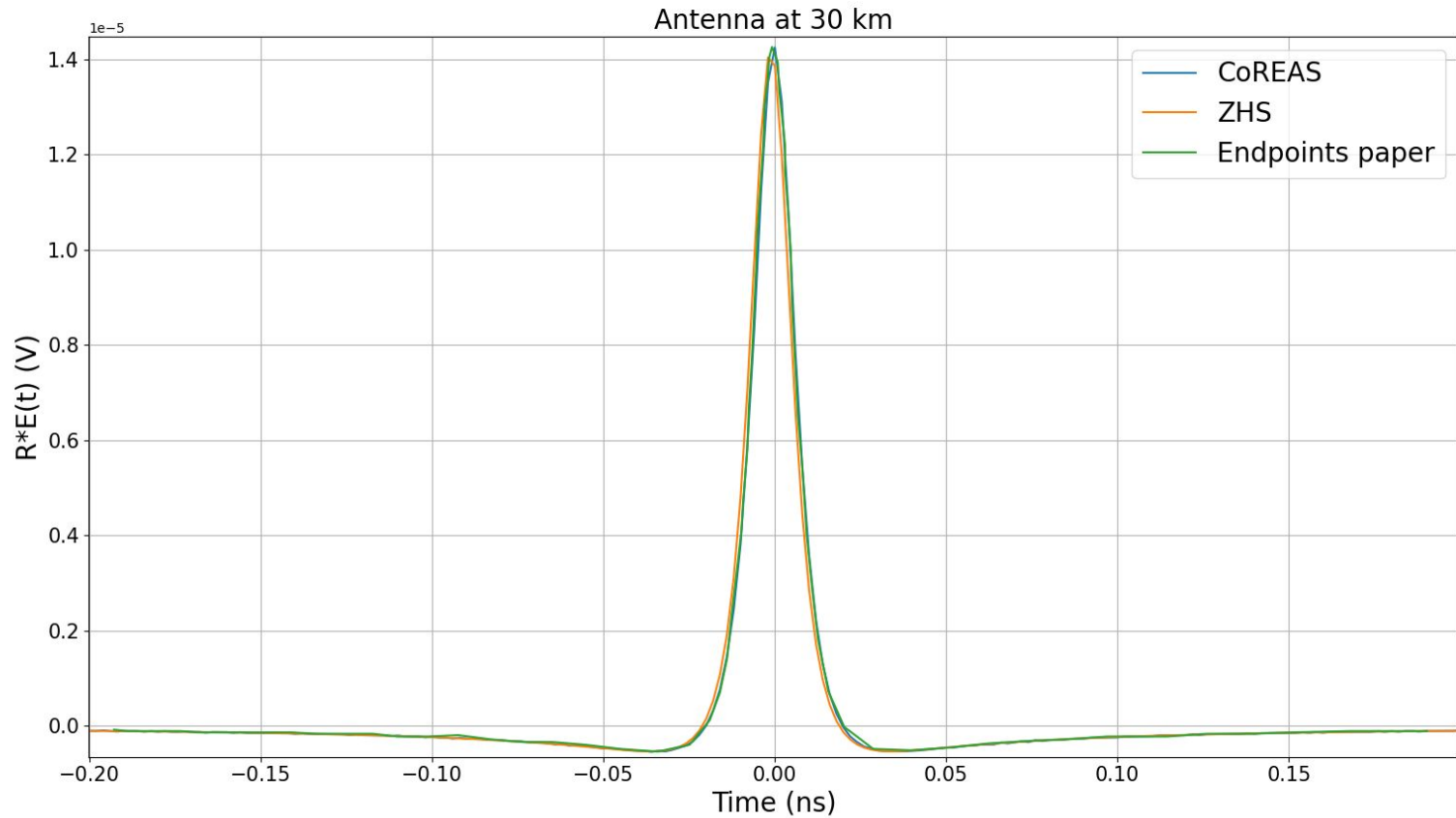
ZHS

pulses

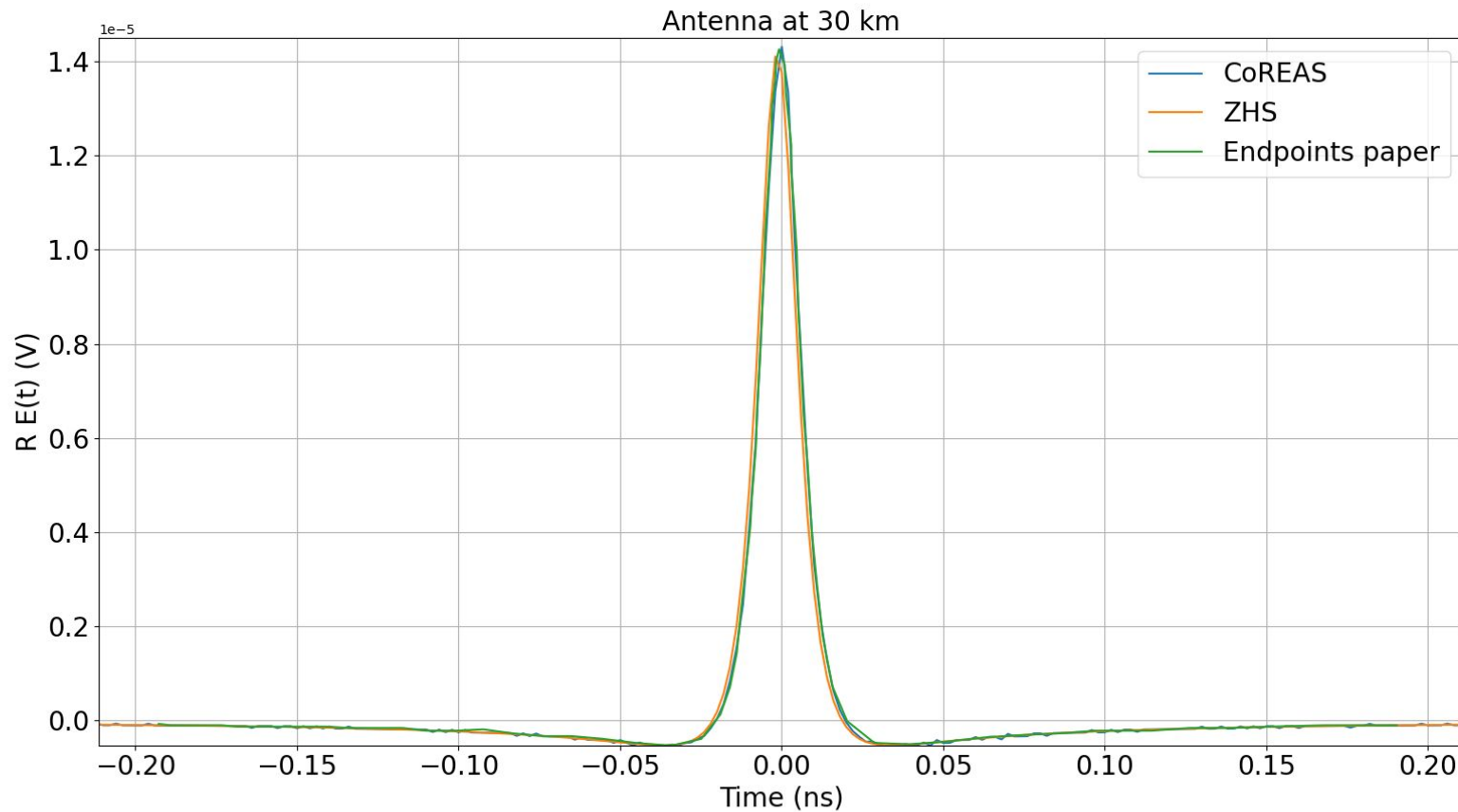
<Antenna Collection>



Synchrotron radiation - Straight tracks algorithm



Synchrotron radiation - CORSIKA 8

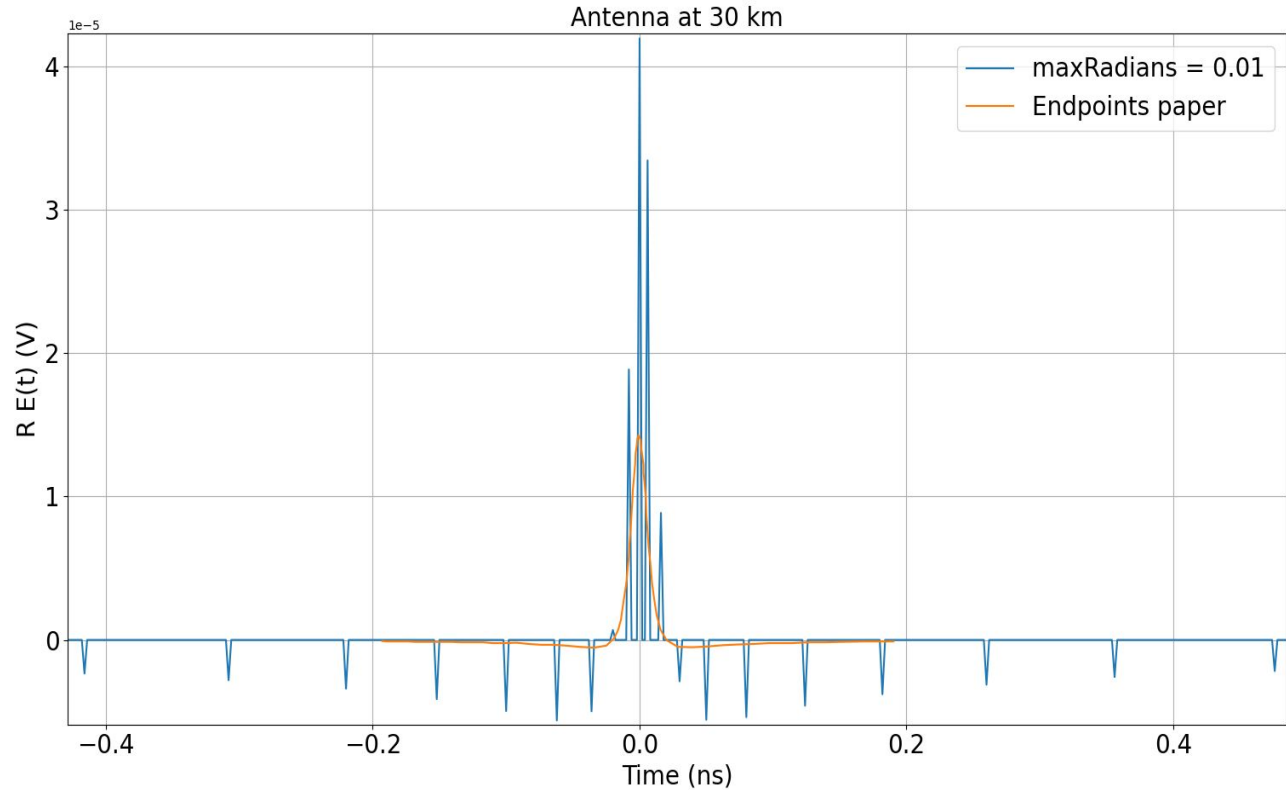


CORSIKA 8 samples by default a circle with few segments

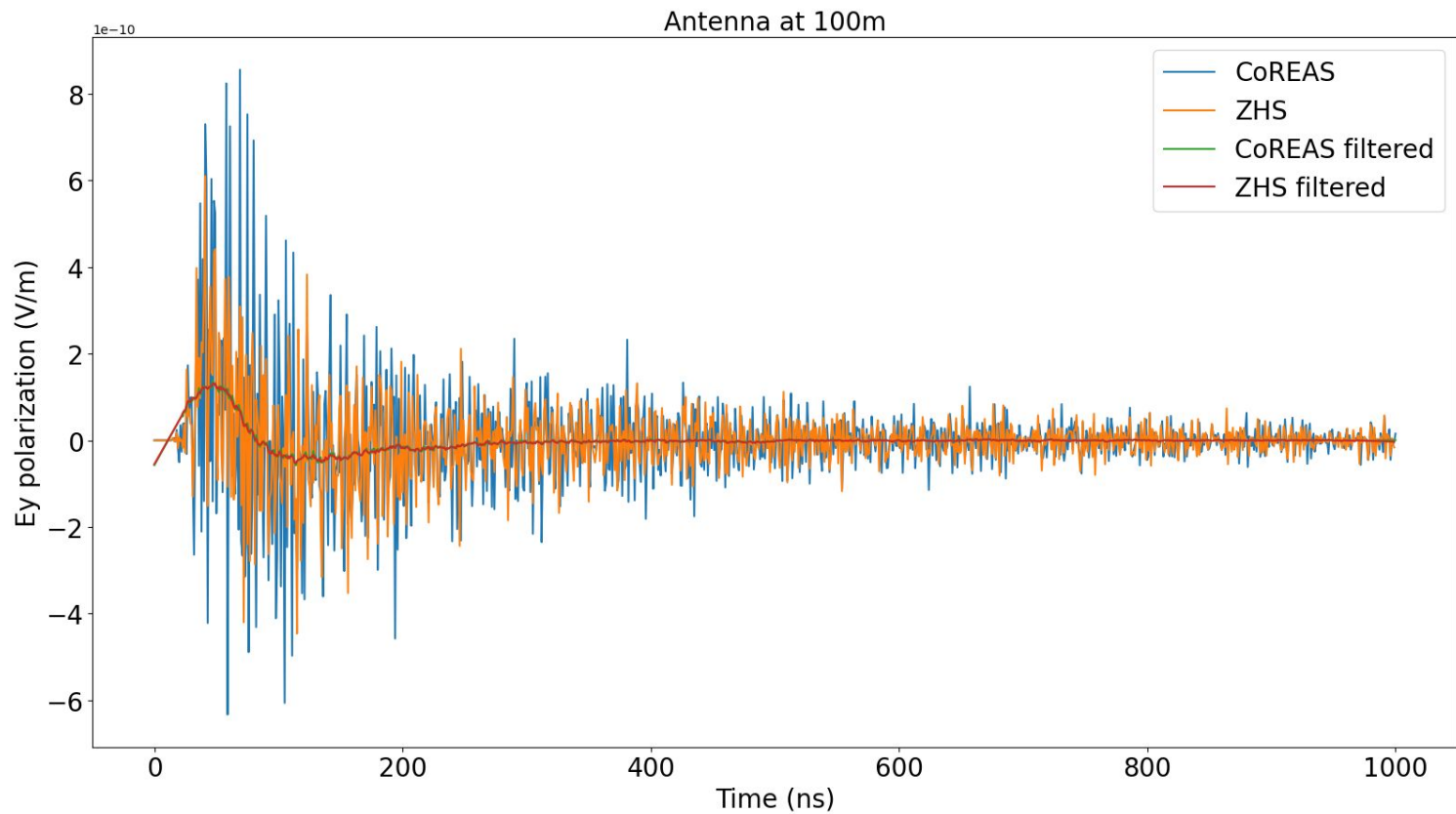


-Large number of tracks-

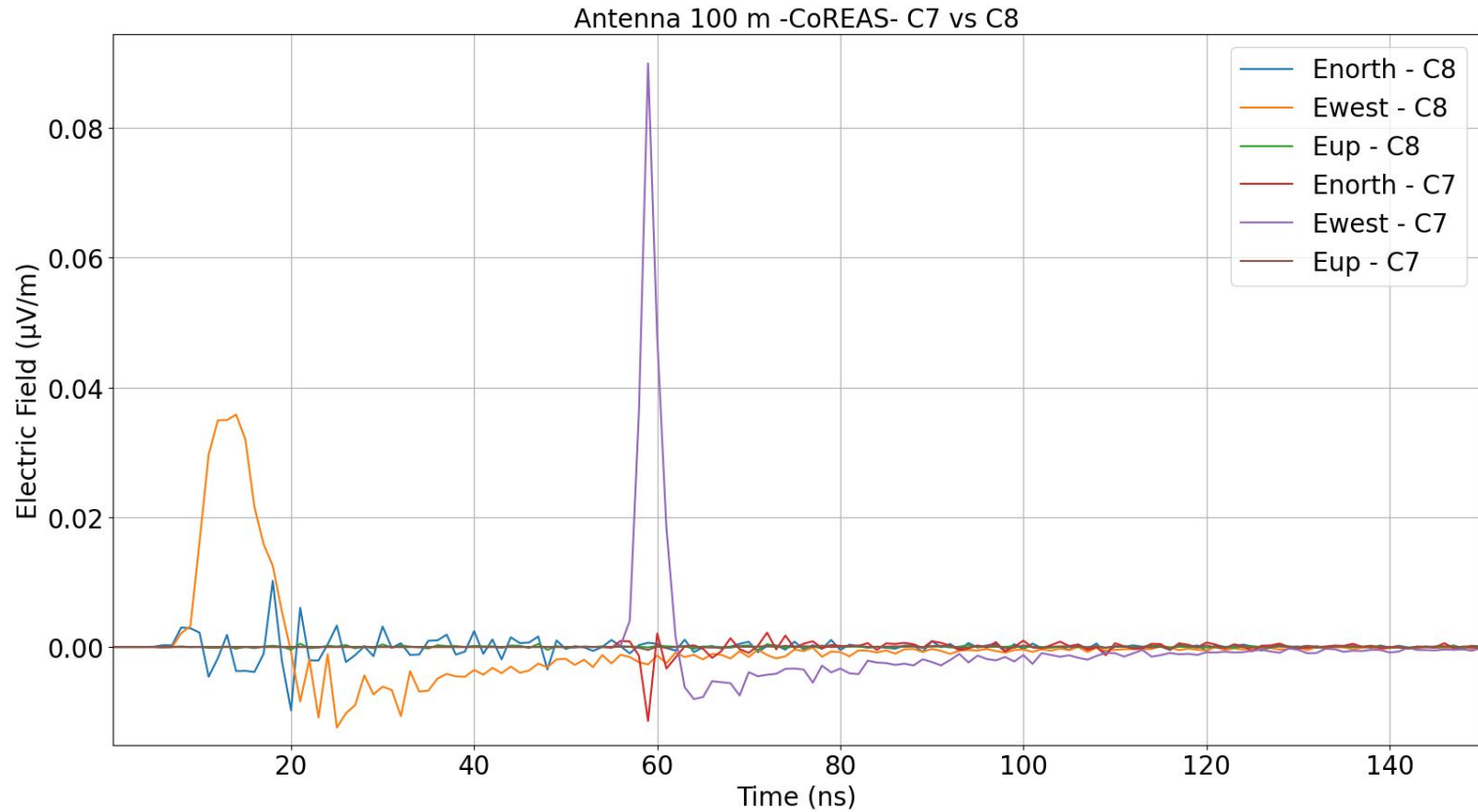
-Hurts CPU times-



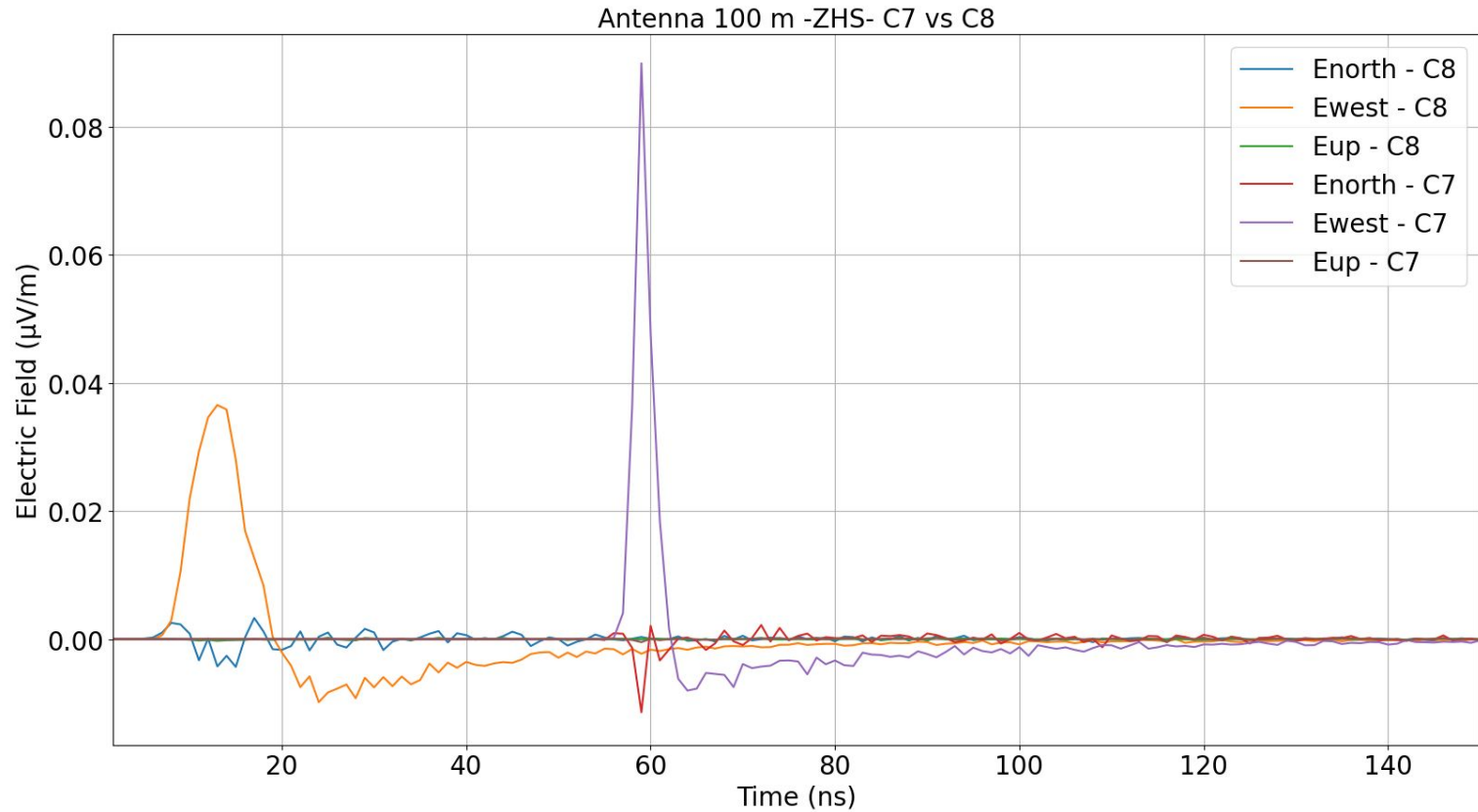
The result is noise



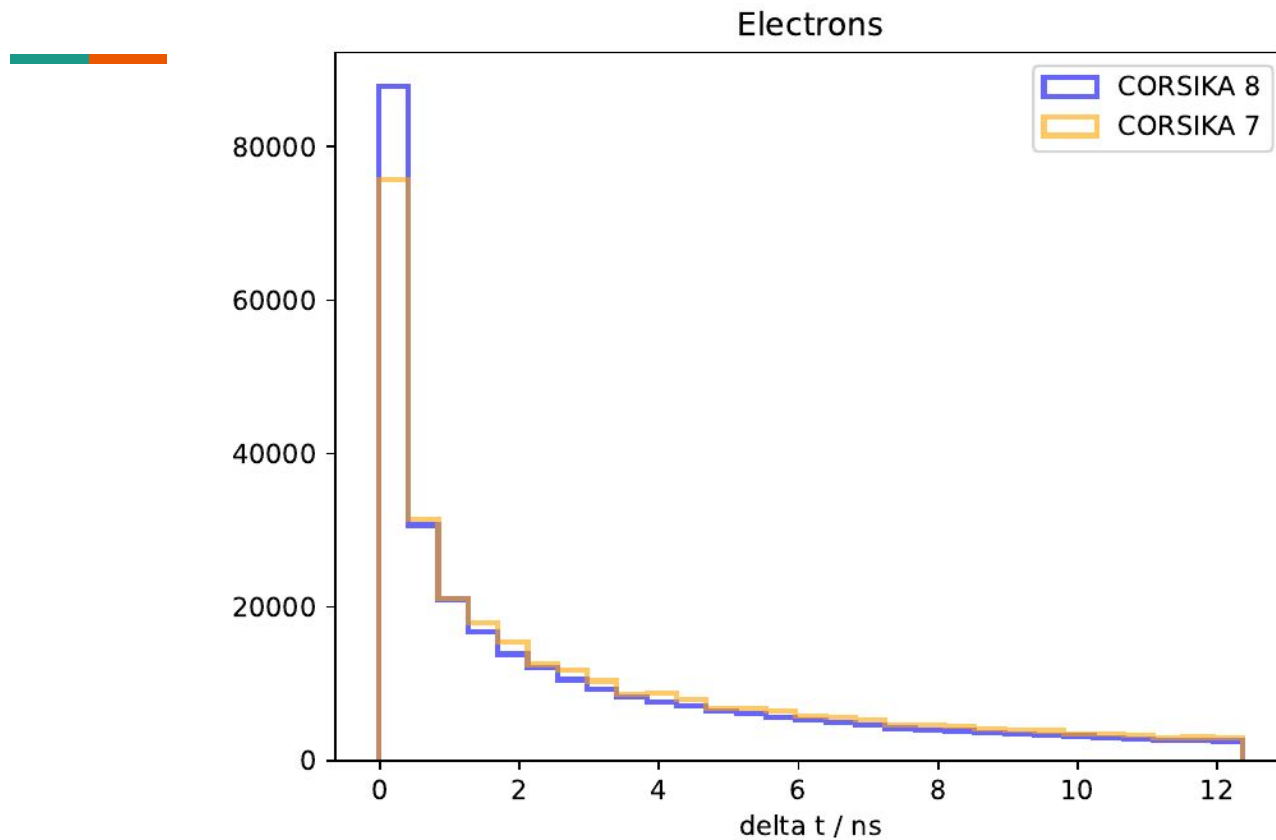
10 TeV electron shower - CoREAS



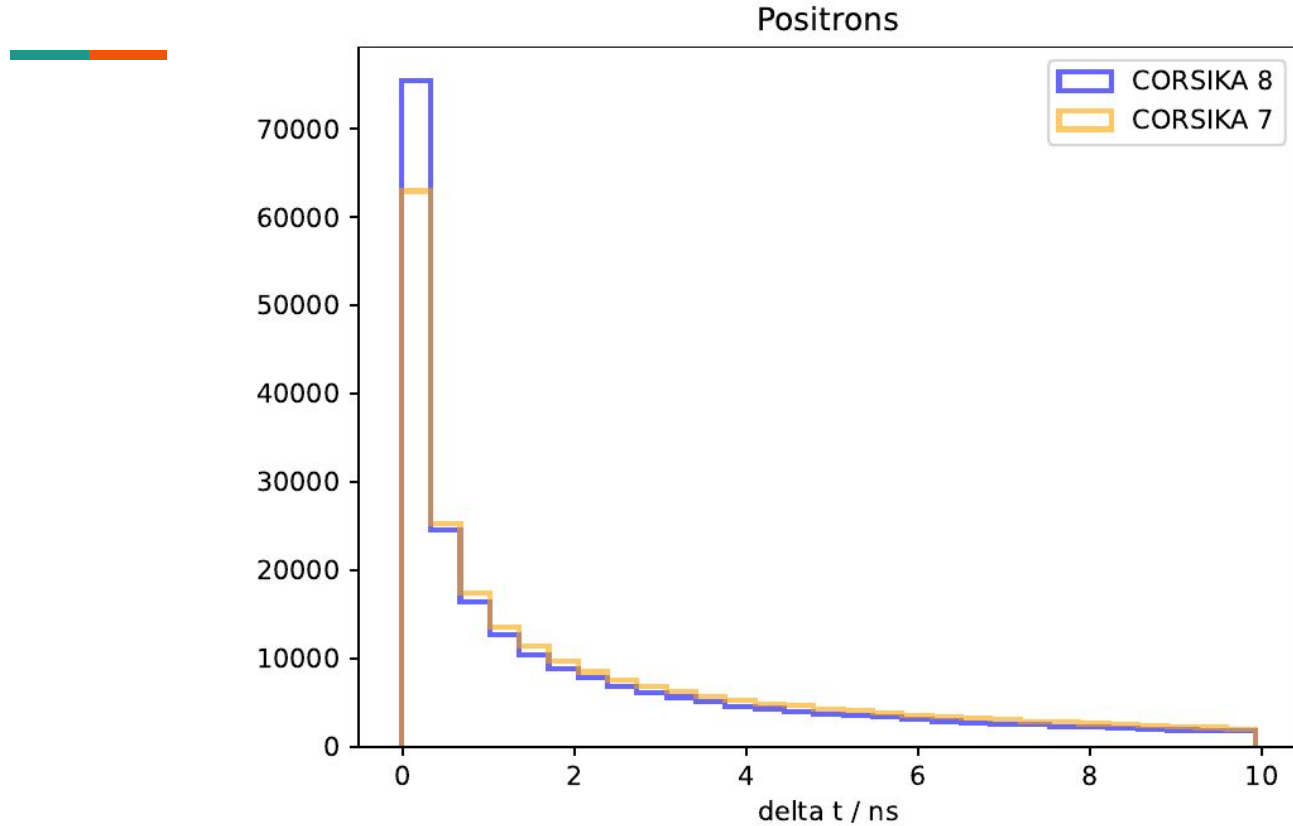
10 TeV electron shower - ZHS



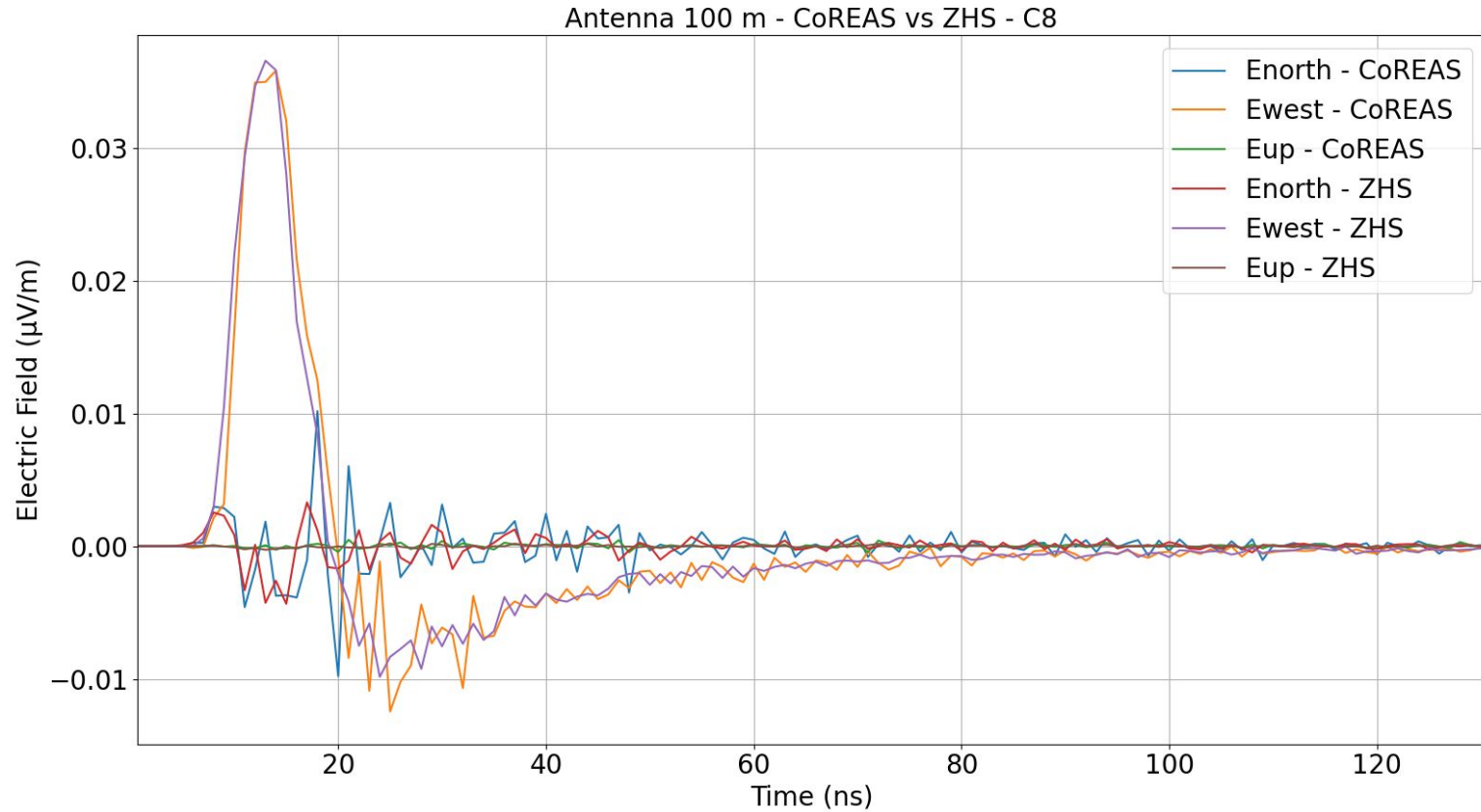
10 TeV - Time arrival distributions C7 vs C8



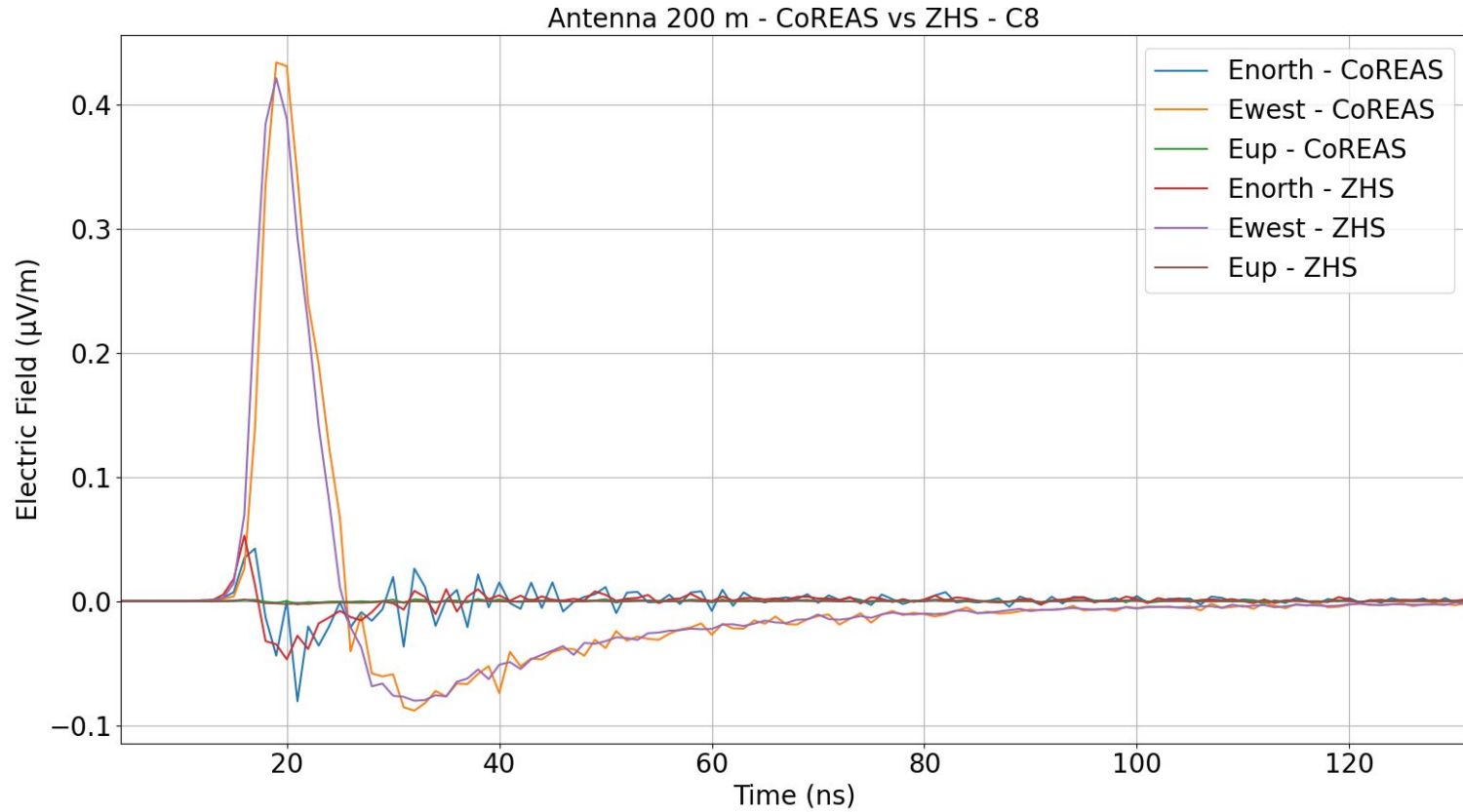
10 TeV - Time arrival distributions C7 vs C8



10 TeV electron shower - CoREAS vs ZHS



100 TeV electron shower - CoREAS vs ZHS





Thank you!