

Benchmark Scenarios for C8

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- A 10^{16} eV proton shower 10^{16} , 30° zenith angle
- A 10^{15} eV proton shower, 45° zenith angle, with 200 radio antennas
- A 10^{15} eV proton shower, 85° zenith angle, with 200 radio antennas
- A run with 100 proton/gamma showers of 5×10^{12} eV, 30° zenith angle, possibly cut off at 4,000 m asl.
- A run with 100,000 proton showers of 10^9 eV, varying zenith angles
- A run with 1,000 electron showers of 5×10^{11} eV, 0.01° zenith angle, no magnetic field, with 99 Cherenkov telescopes
- A non-C7 use case like a shower transitioning from air to ice, compare in-ice part with PROPOSAL.

Thoughts/Boundary conditions

- Logging switched to „warning“ level
- All compiler optimizations switched on
- Energy cuts to be discussed and set same on C7 and C8
- Profiling as a follow-up step
- Also monitor memory usage?
- Evolve into validation tests? (Statistics over many showers! Regular tests not too long.)