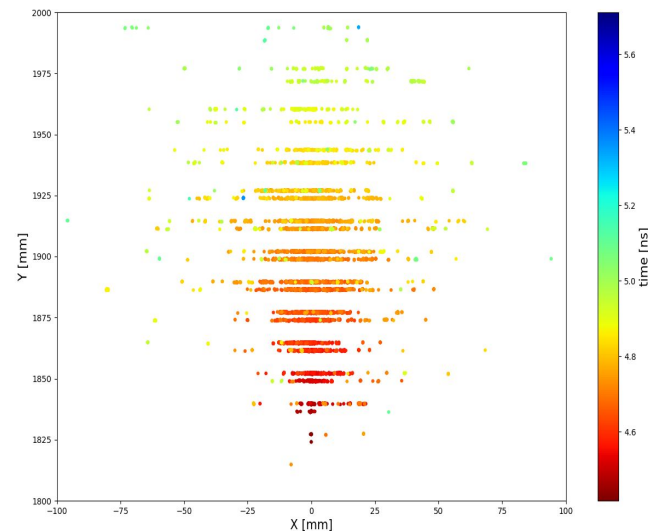
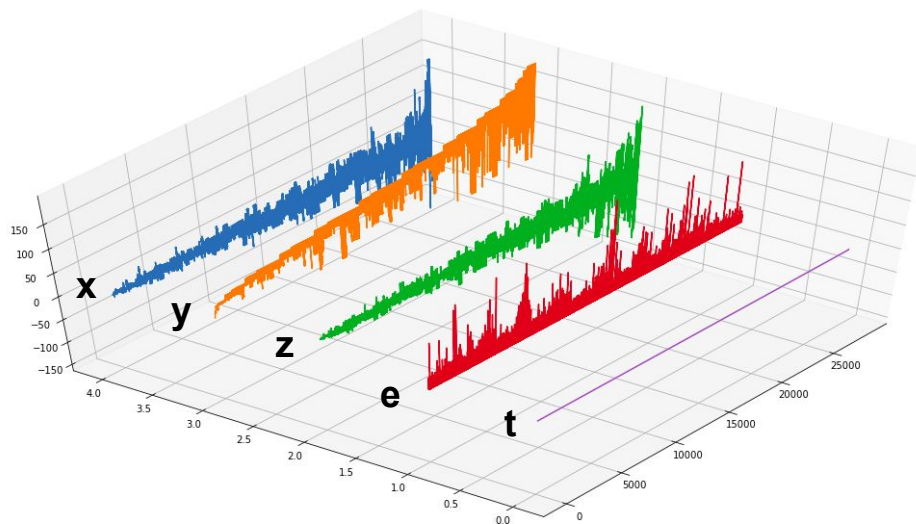


GAN on 1D Showers

Data

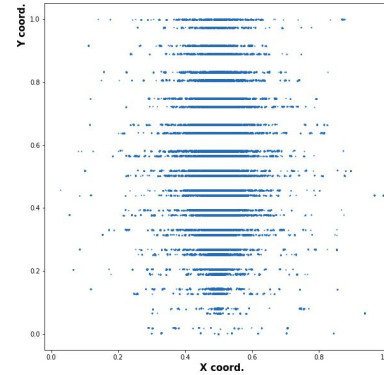
- Considering the shower as a sequence of (x, y, z) coordinates and the hit energy of the all MC interactions, sorted with respect to the time of the hit
- 90 GeV Photons, ~25k events



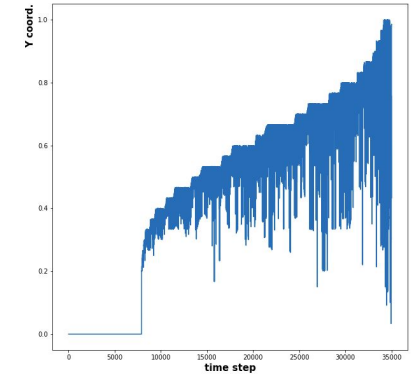
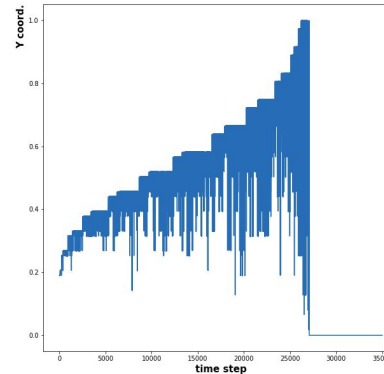
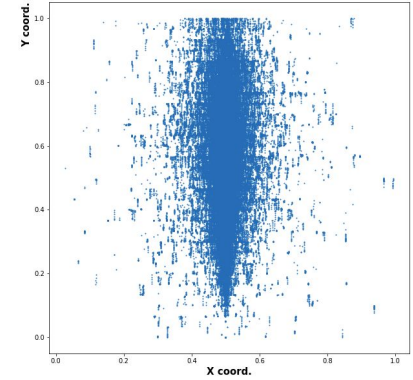
Data Update

- Gaps between layers has been removed
- Zero padding moved to the beginning of the sequence
- Normalization unchanged

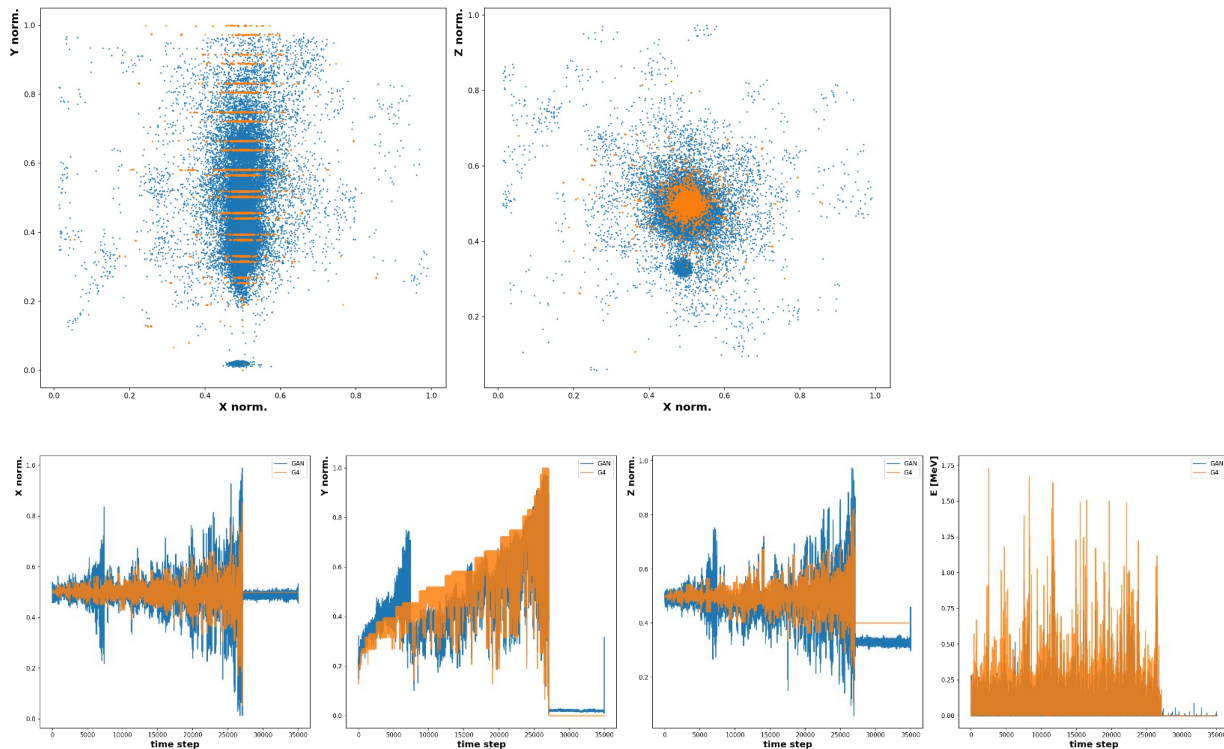
old preprocessing



new preprocessing

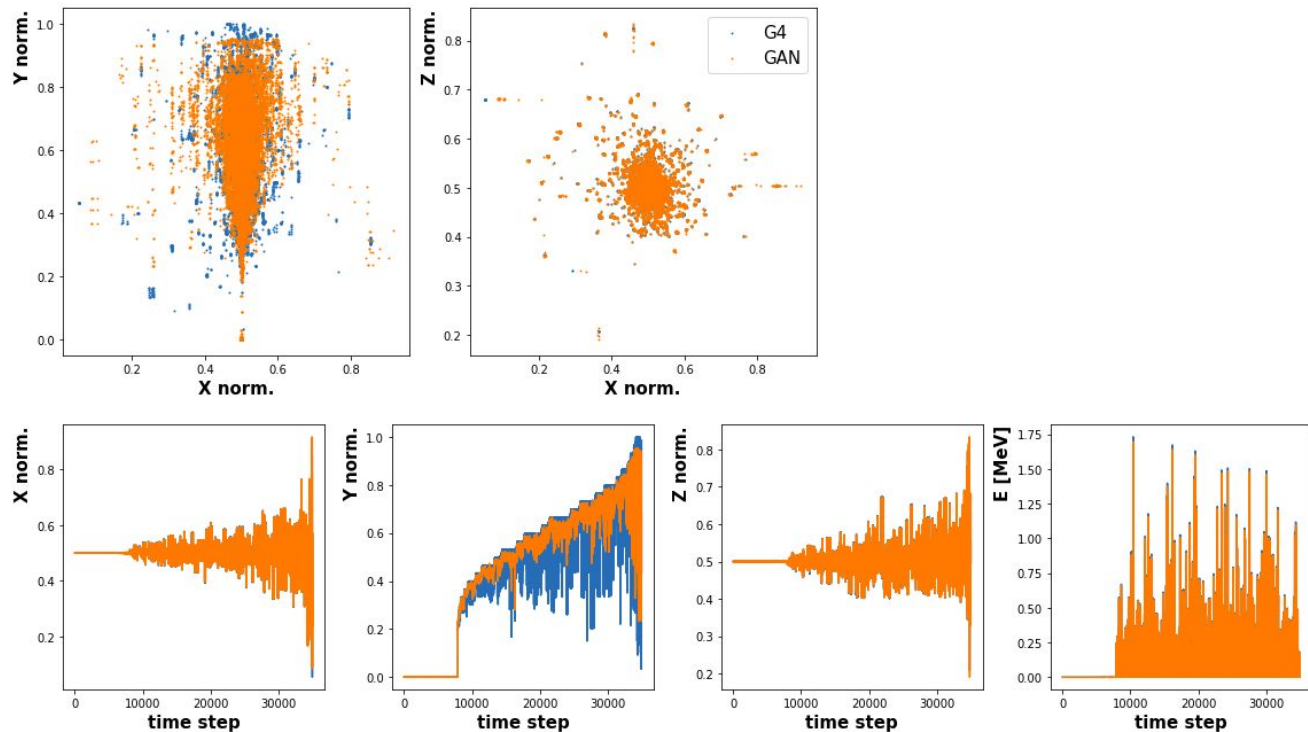


Overfitting Single Event (old preprocessing)



- Fixed \mathbf{Z} vector, $\text{MSELoss}(\mathbf{x}, \mathbf{x}')$

Overfitting Single Event (new preprocessing)



- Fixed **Z** vector, MSELoss (x, x')

Overfitting Single Batch (new preprocessing)

