Cherenkov profile

CIDeR-ML meeting

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Bug

- I found that recent WCSimFQTuner (Cherenkov profile generation program) has been changed to use mm as unit in track length
  - It does not affect other results (such as fiTQun tuning)

```
170    170              s_true = primaryUnitMom.unit().dot(opPhotonsPos.at(i) - primaryVtx);
171    171              s_avg = opPhotonMeanDir.unit().dot(opPhotonsPos.at(i) - primaryVtx);
172    172
173         +-          // mm -> cm
174         -           s_true *= 0.1;
175         -           s_avg *= 0.1;
176         -
```

- What I showed in the previous meeting was in mm track length (not cm)
  - Since I made the sample with 0-600 track length, I must modify the samples…

Plans for next CM

- check interpolation between training sample points
- check hyper-parameter (frequency of SIREN) dependence
  - probably this is related to the above topic
- check μ, and π samples