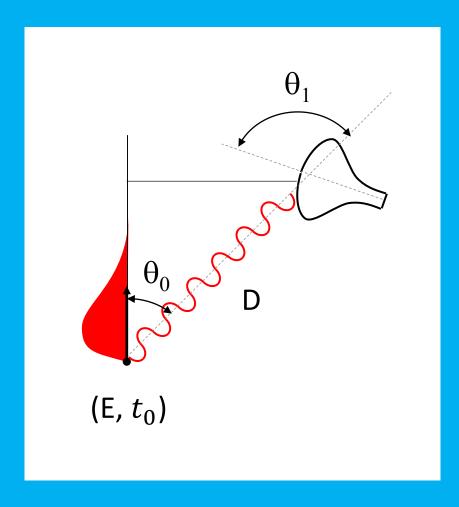
Comparison km3–JSirene

M. de Jong

The following plots have simply been obtained with (latest versions of) JDomino[.sh] & plot-Domino.sh

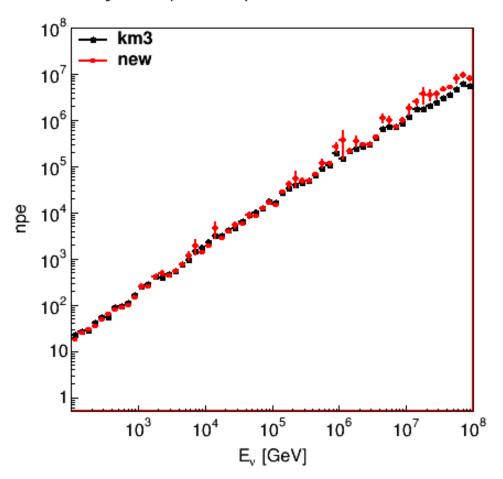
$$\nu_e + N \rightarrow e + X$$



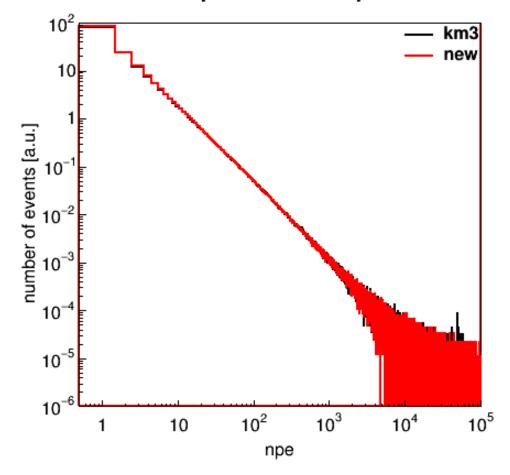
$$t_1 \equiv t_0 + \frac{D}{nC}$$

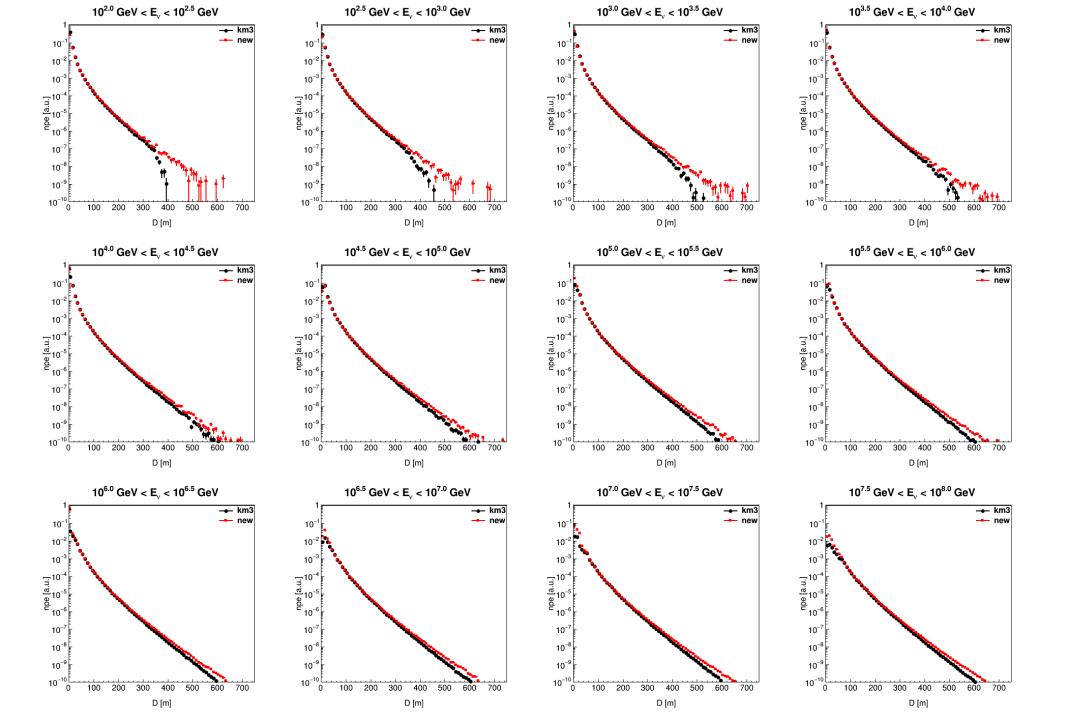
$$\Delta t \equiv t_{hit} - t_1$$

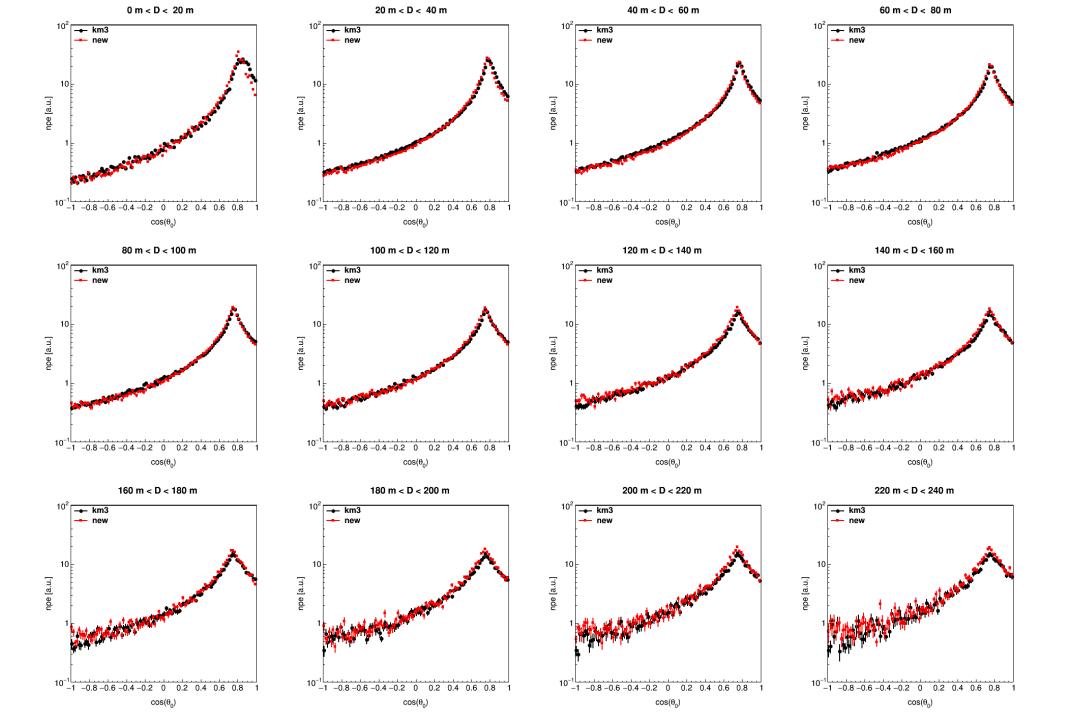
Average number of photo-elecrons per event inside the instrumented volume

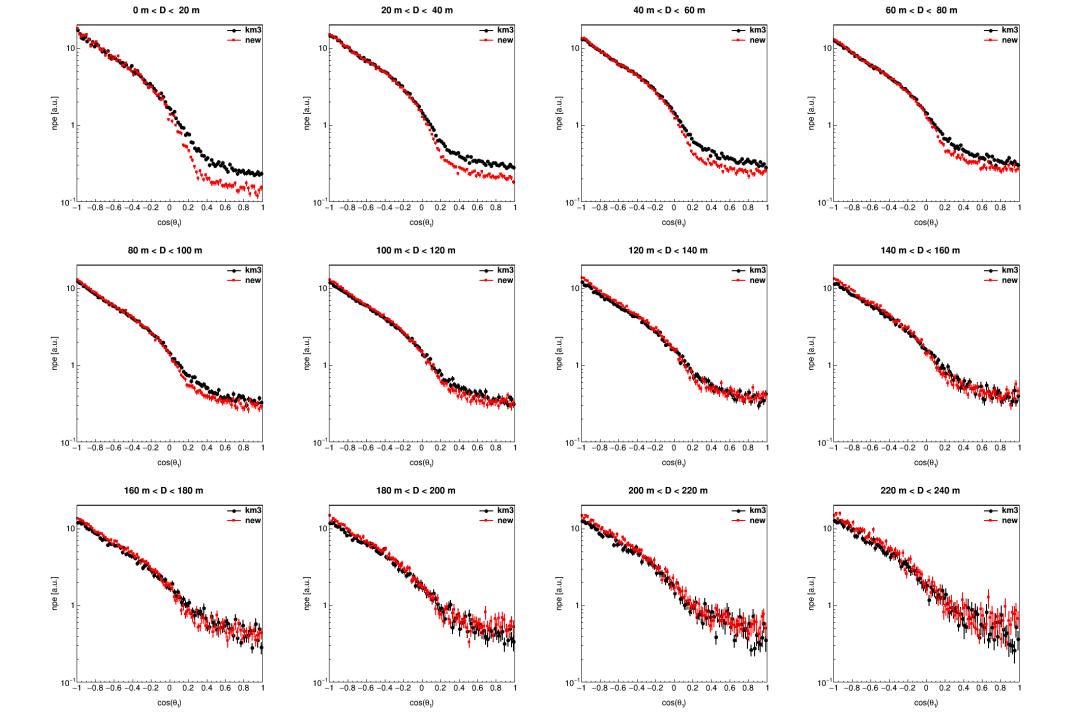


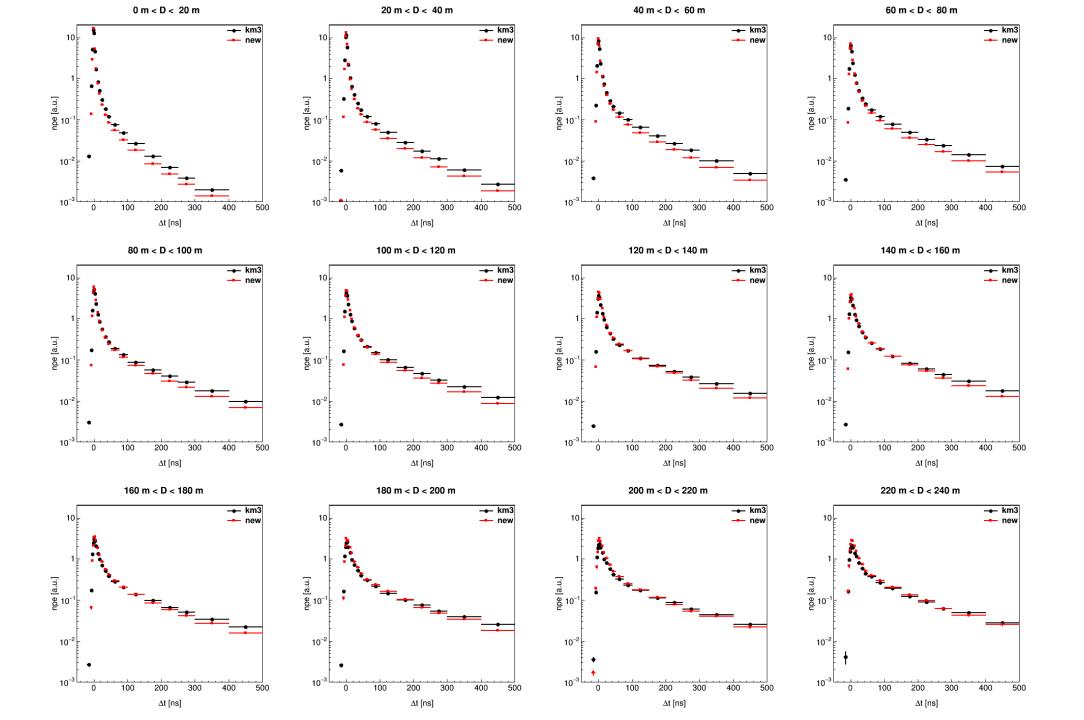
number of photo-electrons per PMT



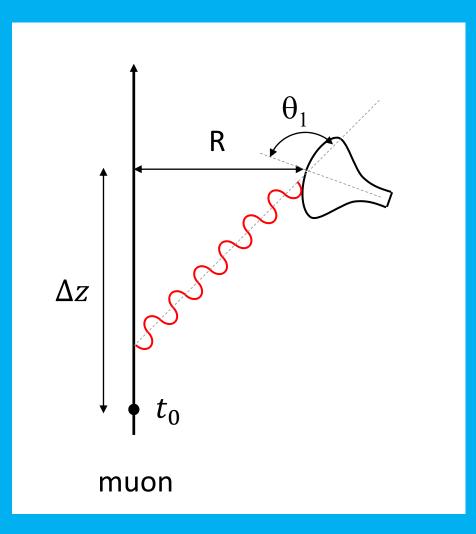








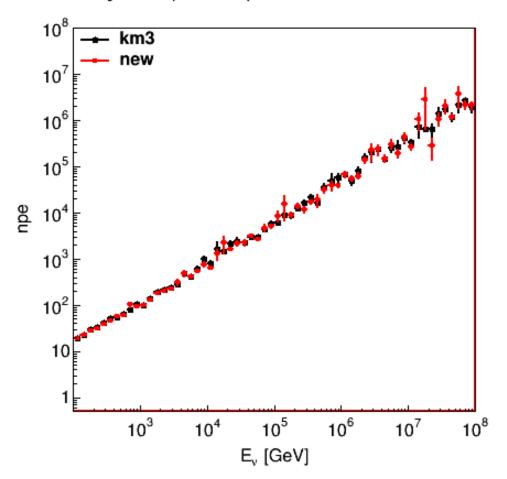
$$\nu_{\mu} + N \rightarrow \mu + X$$



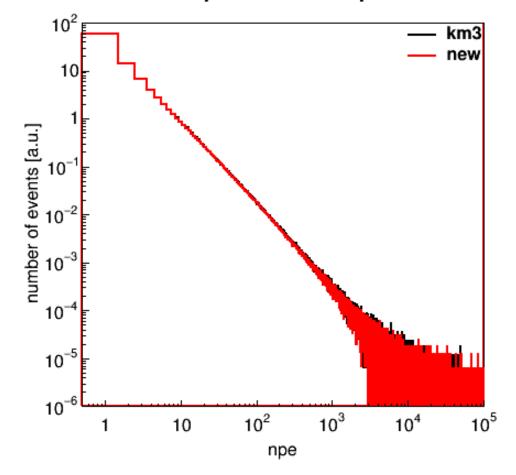
$$t_1 \equiv t_0 + \frac{\Delta z + R\kappa}{C}$$

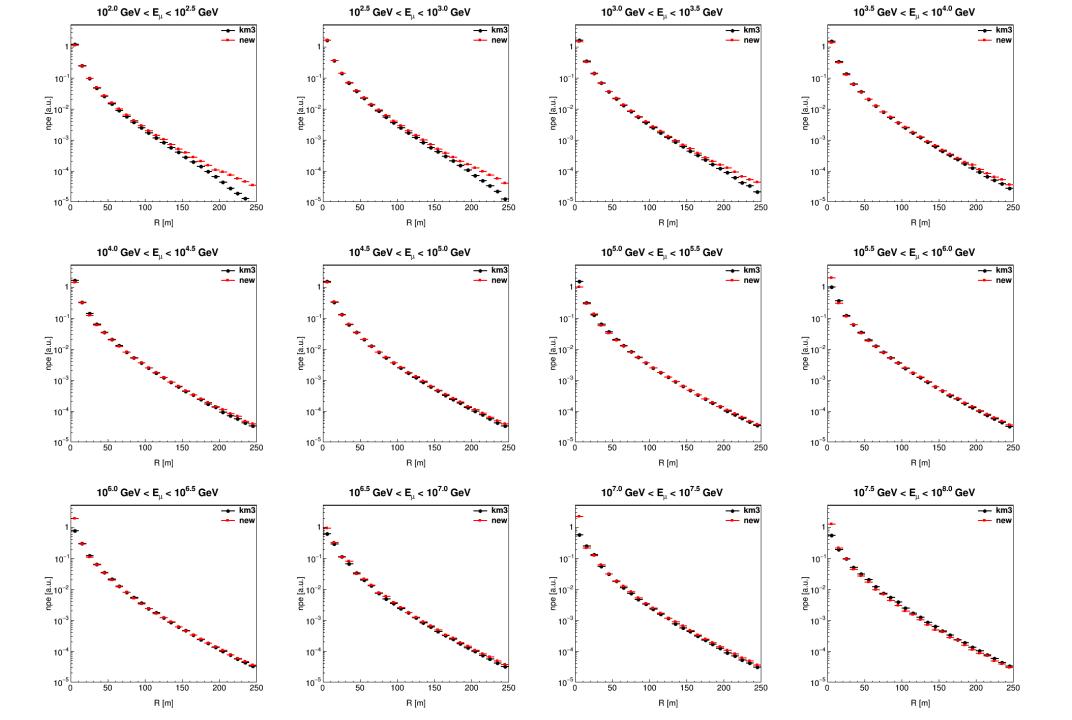
$$\Delta t \equiv t_{hit} - t_1$$

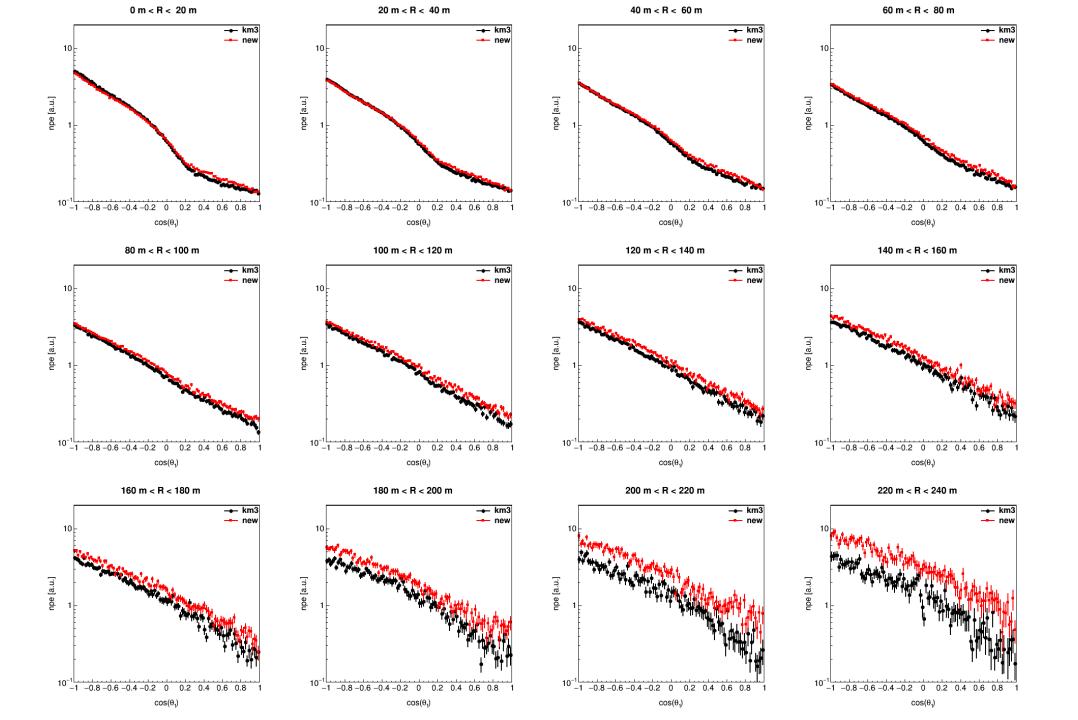
Average number of photo-elecrons per event inside the instrumented volume

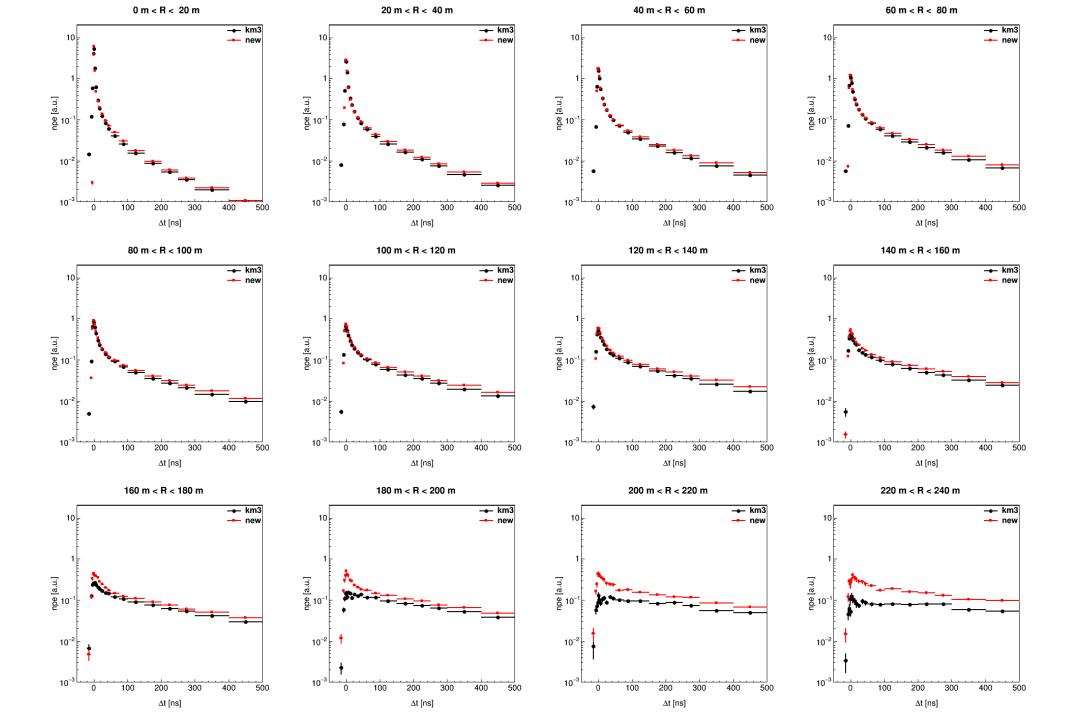


number of photo-electrons per PMT









Summary & Outlook

- Jpp can readily be used to check and/or compare Monte Carlo productions
 - to be integrated in QA/QC program
- Good agreement between km3 and JSirene
 - some subtle differences remain?
 - semi-analytical PDFs are accurate!
- More detailed comparisons can be made using JHistPD(F|G) – JMakeHD(F|G) – JPlotPD(F|G)
 - to be integrated in production chain?
- Pseudo experiments can reveal origin of differences
 - revive hit types?