

# Homestake Atmospheric $\nu$ Flux

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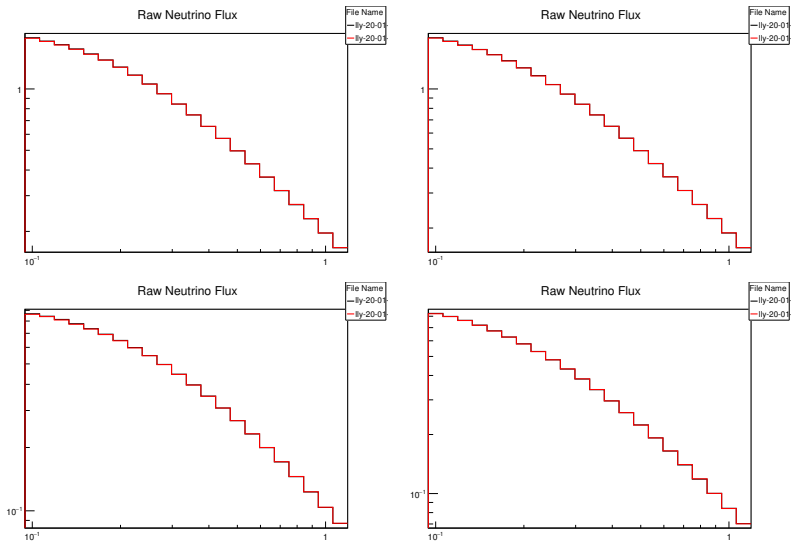
University of Notre Dame

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# Honda 2014 Flux

- ▶ Made for many locations
- ▶ Asked for Homestake mine
- ▶ No mountain
- ▶ From 100 MeV to 10 TeV

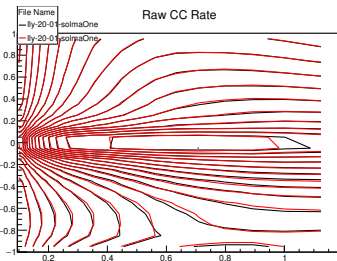
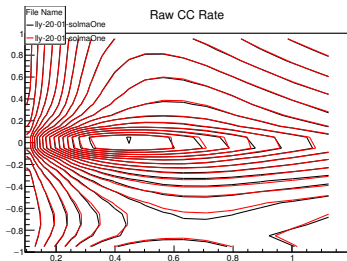
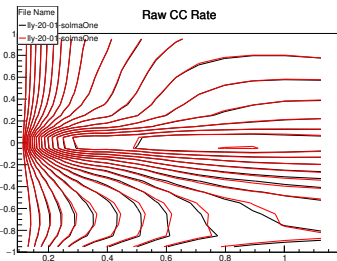
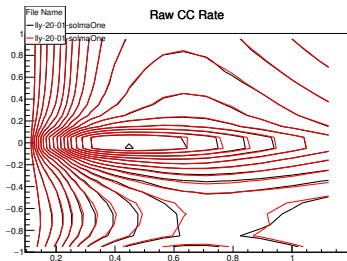
# Compare to Sudbury – Unoscillated spectrum



Black is SNO and Red in Homestake:  $\nu_\mu$   $\bar{\nu}_\mu$   $\nu_e$   $\bar{\nu}_e$

Loglog plot barely distinguishable

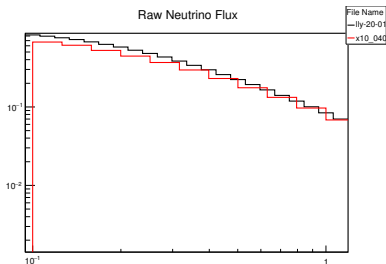
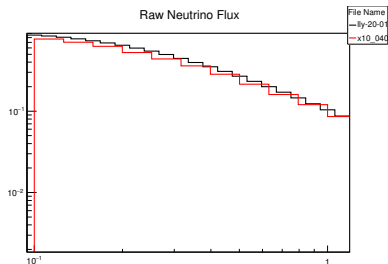
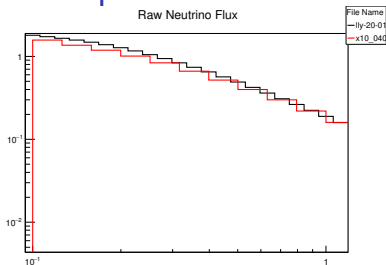
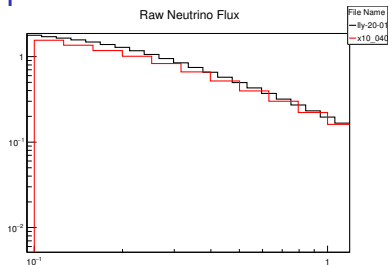
# Compare to Sudbury – Energy and Zenith – CC Events



Black is SNO and Red in Homestake:  $\nu_\mu$   $\bar{\nu}_\mu$   $\nu_e$   $\bar{\nu}_e$

Contour plot of CC event rates barely distinguishable

# Compare to Soudan – Unoscillated spectrum

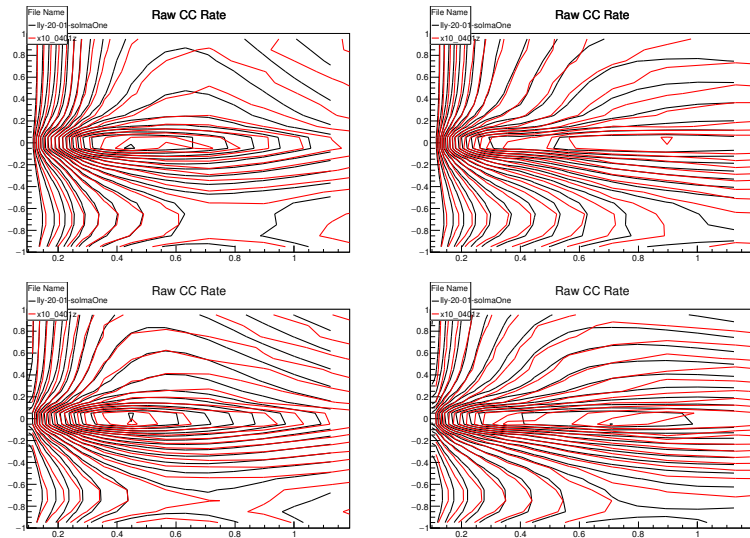


Red is Soudan (Gaisser) and Black is Homestake (Honda):  $\nu_\mu$   $\bar{\nu}_\mu$

$\nu_e$   $\bar{\nu}_e$

Loglog plot

# Compare to Soudan – Energy and Zenith – CC Events



Black is SNO and Red in Homestake:  $\nu_\mu$   $\bar{\nu}_\mu$   $\nu_e$   $\bar{\nu}_e$   
Contour plot of CC event rates barely distinguishable

