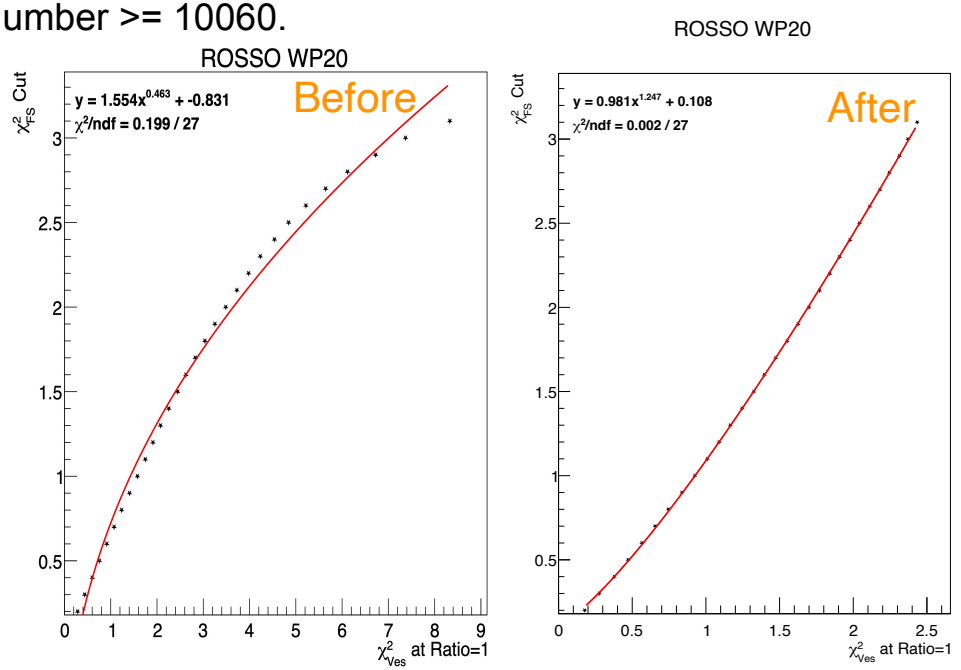
ROSSO FS Data Sets

	Run number	Total run	Hours
Track4p_ROSSO_ME_fs.root	10052 - 11137	873	639.14
Track4p_ROSSO_ME_fs_whole.root	10003 - 13457	3150	2609.85

*also: ROSSO **Free-sky: Run #10061-13457***

- Mariaelena did not consider the ROSSO freesky runs (10003, 10052) and (11137, 13457), why they are not good? especially the later part.
- And starting from **10060?**
- Redone the Golden Selection procedures when ROSSO FS run number >= 10060.

- NERO 25 runs are a bit hard to trace where are they…

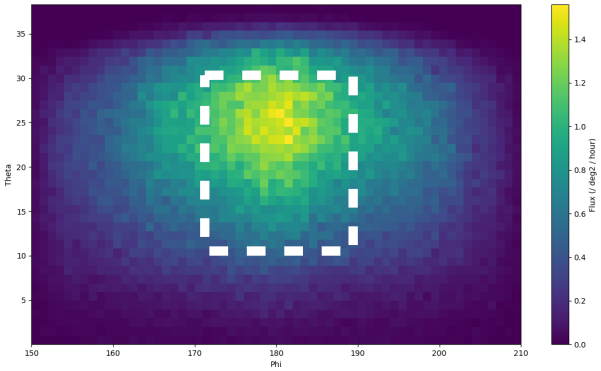


Acceptance Function

- acceptance function, $\mathcal{T}$

$$N(\varrho) = \Delta T \times \mathcal{T} \times I(\varrho)$$

- $\mathcal{T}(\theta,\phi) = \dfrac{N^{\text{fs}}_{\text{meas}}(\theta,\phi) \,/\, \Delta T}{I^{\text{fs}}_{\text{sim}}(\theta,\phi)}$, [in $cm^{-2}sr^{-1}$]

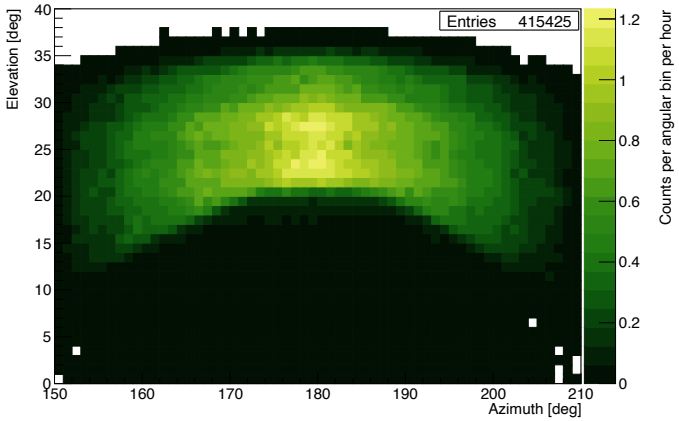


- $I^{\text{fs}}_{\text{sim}}(\theta,\phi)$ is from MCEq corrections , Al = 596m;

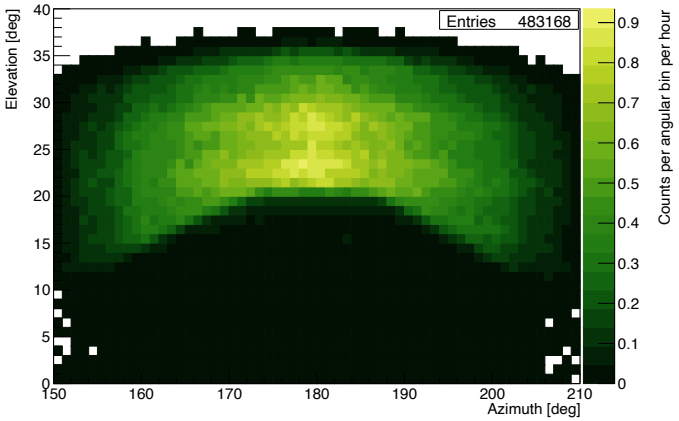
- $N^{\text{fs}}_{\text{meas}}(\theta,\phi) \,/\, \Delta T$

Selected Counts per hour per angular bin

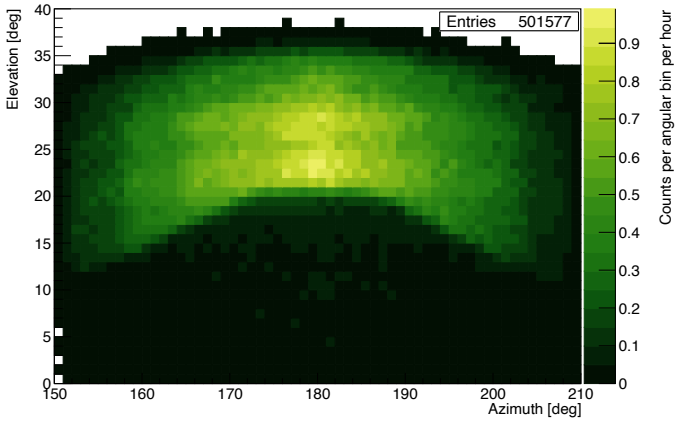
NERO Vesuvius WP20



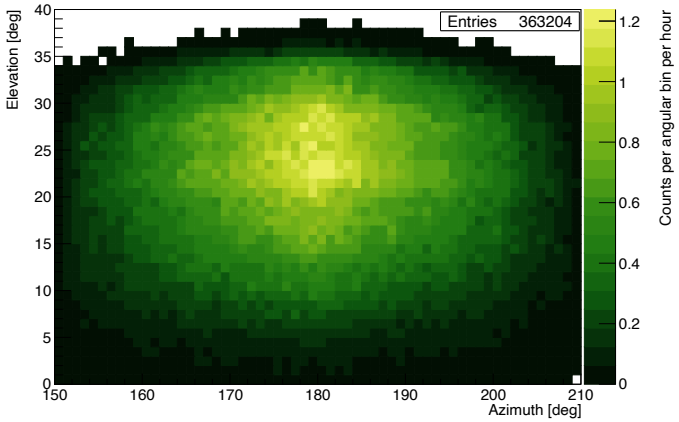
ROSSO Vesuvius WP20



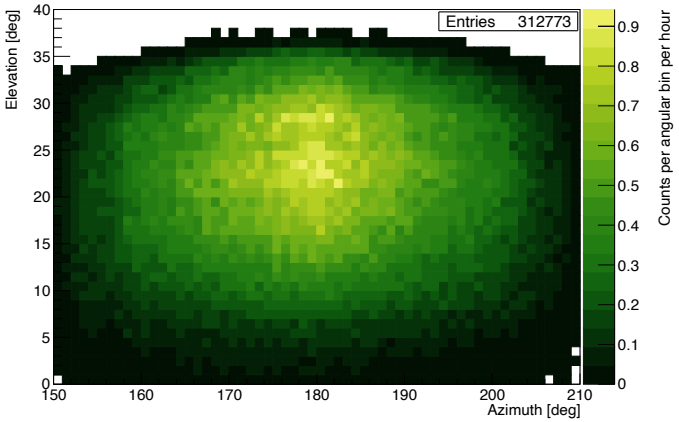
ROSSO Vesuvius WP25



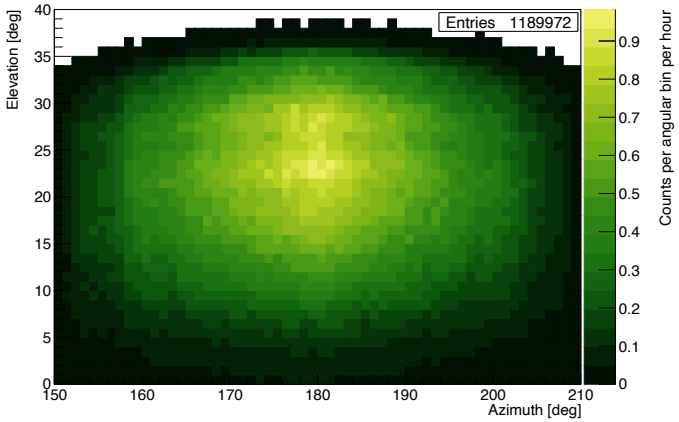
NERO Freesky WP20



ROSSO Freesky WP20



ROSSO Freesky WP25



Acceptance Function

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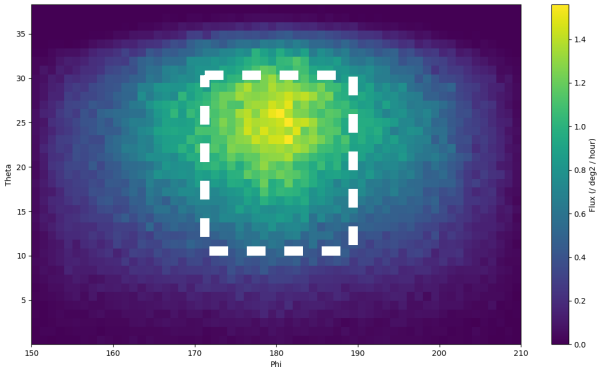
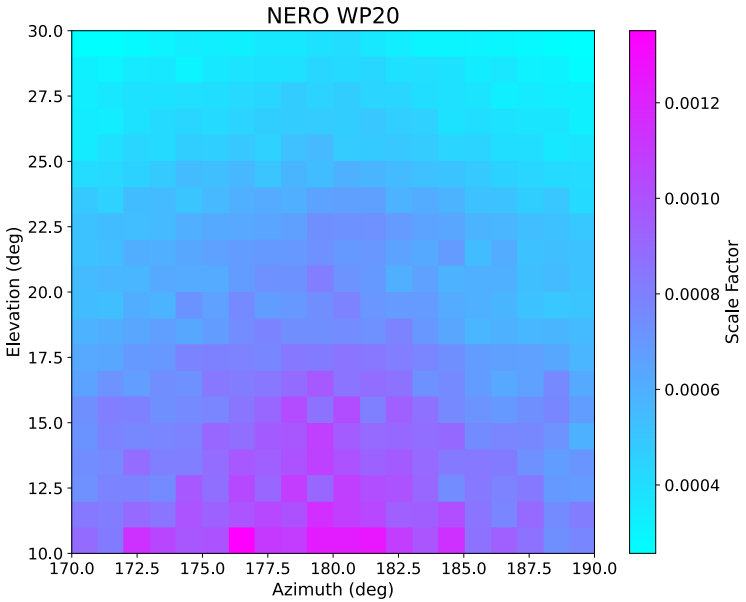
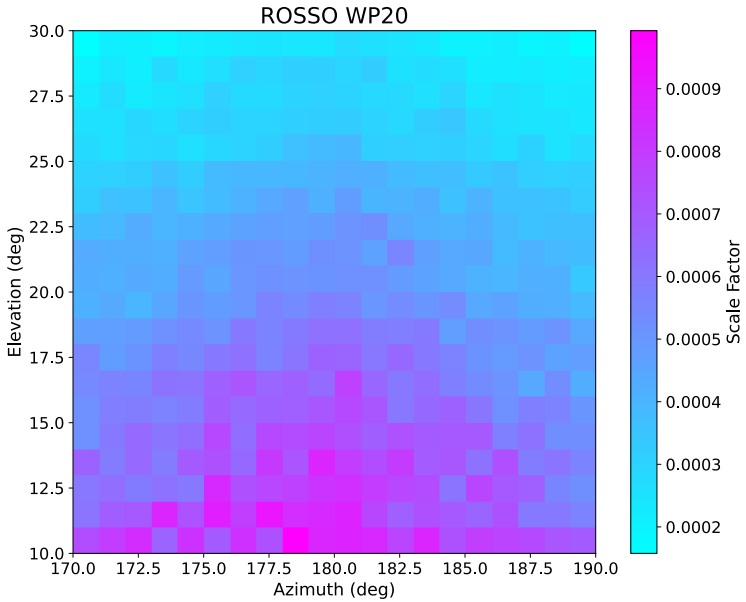
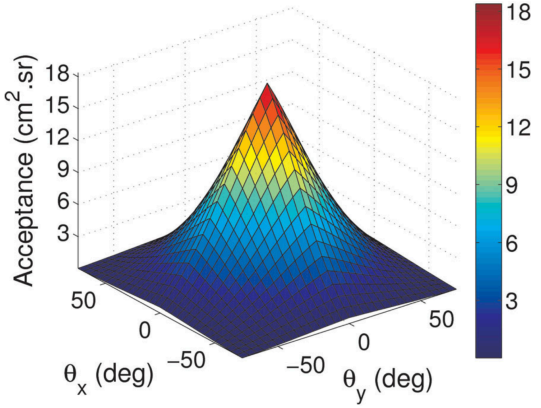








Reference: *Lesparre2010, Lesparre2012*

Density Extraction Methode

$$N(\varrho) = \Delta T \times \mathcal{T} \times I(\varrho)$$

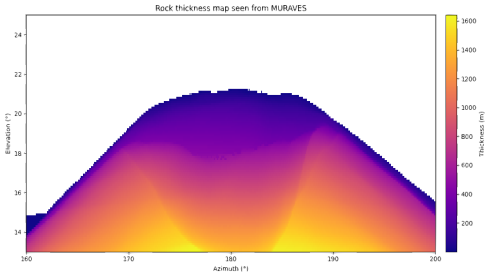
- $N^{Ves}_{expected} / \Delta T = \mathcal{T}(\theta, \phi) \times I^{Ves}_{Calculation}$
  - which $I^{Ves}_{Calculation}$ is from Gabor calculations, with 1.0, 2.0, 3.0 g/cm3

- $\text{ratio}_N = \dfrac{N^{Ves}_{meas} / \Delta T}{N^{Ves}_{expected} / \Delta T}$

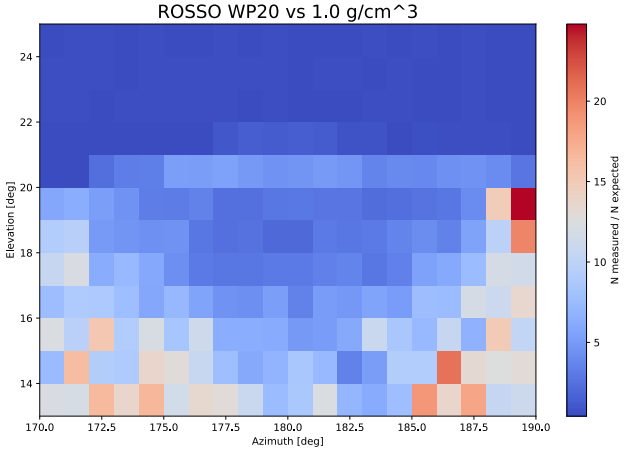
Density Extraction Methode

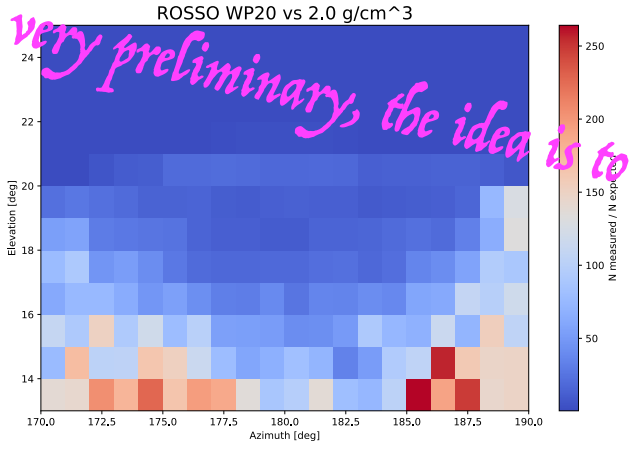
$$N(\varrho) = \Delta T \times \mathcal{T} \times I(\varrho)$$

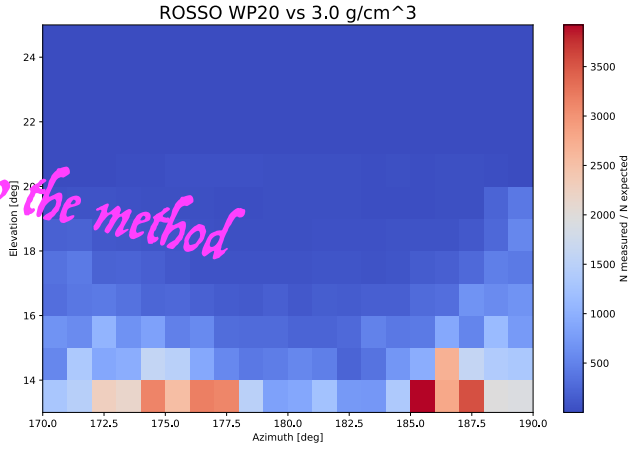
$$\text{ratio}_N = \frac{N^{Ves}_{meas} \,/\, \Delta T}{N^{Ves}_{expected} \,/\, \Delta T}$$

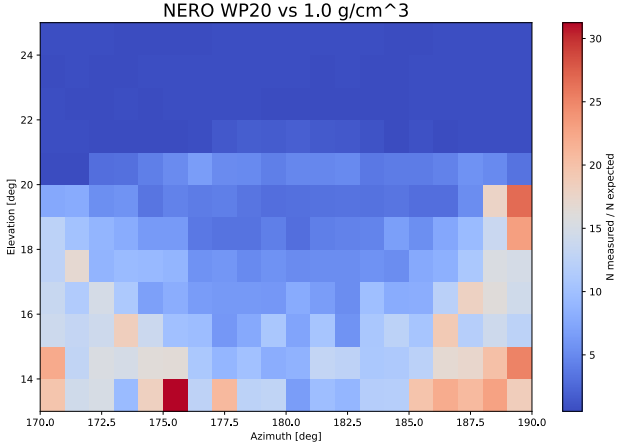


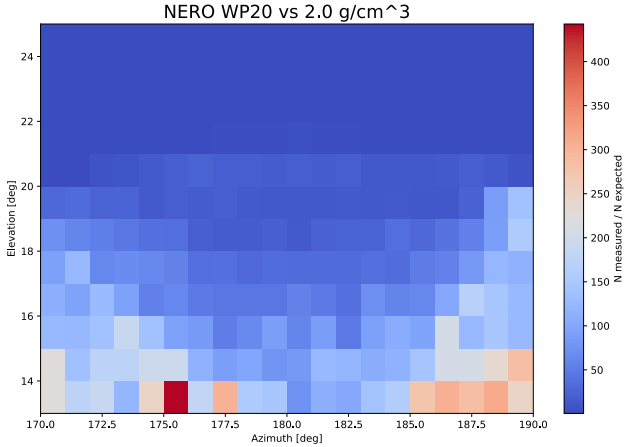
Very very preliminary, the idea is to show the method

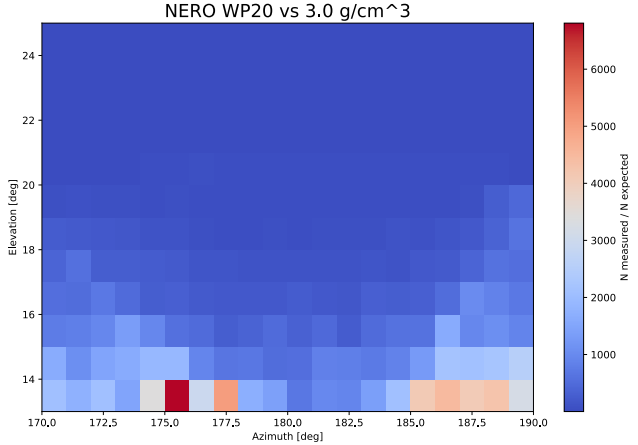












VRIJE
UNIVERSITEIT
BRUSSEL