Anisotropy studies at the highest energies

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data

- Herald data up to Sep ’13
- New VCV catalogue (13th edition)
prescription

$E/EeV \geq 55.0, \ z \leq 0.017, \ \psi \leq 3.2$
scan in energy

\[ \frac{E}{EeV} \geq 51.9, \ z \leq 0.017, \ \psi \leq 2.8 \]
full scan

\[ \frac{E}{E_{eV}} \geq 52.4, \ z \leq 0.009, \ \psi \leq 6.5 \]
full scan

Herald events with $E > 52 \text{ EeV}$

VCV 13th edit., $z < 0.008$, $\sigma = 6.5^\circ$
Swift-BAT

\[ E/E_{eV} \geq 57.1, \ z \leq 0.019, \ \psi \leq 2.6 \]
Swift-BAT

Herald events with $E > 57$ EeV

Swift-BAT 70 mo ($z < 0.019$), $\sigma = 3.2^\circ$
vertical events
all events...
on-going

• Implement weights: redshift, exposure, etc.
• Magnetic spectrometer
• All zenith angles?
• Also tried Fermi HE catalogue
Backups
Herald events with $E > 52$ EeV

Swift 70 mo (unknown $z$), $\sigma = 3.2^\circ$
Old study
Old study

\[ E/E_{eV} \geq 46.7, z \leq 0.017, \psi \leq 3.1 \]