

In order to analyse arrival directions of EAS events at the highest energies, we have selected showers detected with $E > 8 \text{ EeV}$, zenith angle $q < 8 \text{ EeV}$ in Galactic coordinates. Numerous local regions of positive and negative, high and low, excess around expected-for-isotropy values are seen over the entire sphere. This suggests that the UHECR anisotropy, if exists, is multipolar in pattern.

No excess flux is observed from the Galactic Disk, except the spot at $l_G = 137.4^\circ$ where Galactic and Supergalactic planes intersect. There is no slightest hint at an excess flux even from the Galactic Center, where the most active and powerful matter conversion processes take place. There is no excess flux at the exit of the Local Galactic Arm either. These facts probably indicate the minor role the Galaxy plays in generation of particles in the energy region above 8 EeV .

A completely different picture opens up in the Supergalaxy. A correlation between UHECR arrival directions and the Supergalactic Plane (shown by solid curve) is seen in the Northern hemisphere. A pronounced excess in the sector $l_{SG} (0^\circ - 210^\circ)$, with its maximum at $l_{SG} = 120^\circ$ is also seen. However, there is no such clear correlation in the Southern Hemisphere, except the local region of the sky with equatorial coordinates

$\alpha = 0^\circ$

and

$\delta = -85^\circ$

. Curiously, it lies near the Supergalactic plane in a direction that is almost opposite to that of the Northern hemisphere. A whole picture indicates a dominant role the Supergalaxy (Local Supercluster of galaxies) plays in forming the excess cosmic ray flux at energies above 8 EeV .