

## 2022 report from the Auger-TA working group on UHECR arrival directions

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The origin of ultra-high-energy cosmic rays (UHECRs) remains a mystery. The interactions of UHECRs with background photons restricts their propagation length to at most a few hundred megaparsecs. Because the distribution of extra-Galactic matter at such distances is anisotropic, we expect the angular distribution of UHECR arrival directions to bear information about this anisotropy. However, because UHECRs are deflected by poorly-known Galactic and extra-Galactic magnetic fields, the anisotropy is distorted and suppressed. In previous works of the Auger-TA anisotropy working group we presented full-sky searches for dipole and quadrupole modulations, as well as correlations with classes of nearby galaxies. Full-sky searches, combining data from both detectors, allow us to significantly reduce certain uncertainties compared to single-hemisphere results. In this contribution we update on those results with the most recent available data. Moreover we offer an interpretation of these results by comparing the experimental data to a suite of simulated datasets with varying composition and propagation models.

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