On the possible method of identification of two probably cognate extensive air showers

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The persistent attempts are undertaken to show existence and investigate the special pairs of Extensive Air Showers (EAS) that can be suspected in common origin in the near space, i.e. to observe some consequence of existence of Cosmic Ray Ensembles (CRE). The remote cosmic ray stations observing EAS events are useful for this investigation. Such stations are operating within the GELATICA net (GEorgian Large-area Angle and TIme Coincidence Array) and are planed within the CREDO Collaboration (Cosmic Ray Extremely Distributed Observatory) as the CREDO-Maze project. The possible criteria are developed in the paper for detecting of two specific showers which ancestors have probable mutual proximity in their past.

Keywords

cosmic ray ensembles; large scale cosmic ray correlations; extensive air showers; pair of showers; relativistic invariant parameters; proximity definition;

other Collaboration

Cosmic Ray Extremely Distributed Observatory (CREDO) Collaboration

Subcategory

Theoretical Methods

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