



Contribution ID: 458

Type: Oral contribution

## A study of the first harmonic of the large scale anisotropies with the KASCADE-Grande experiment

*Thursday, July 30, 2015 12:00 PM (15 minutes)*

In this contribution we present the results of a search for large scale anisotropies performed, using the East-West method, with the whole data set of the KASCADE-Grande experiment. The counts distribution in sidereal time intervals of 20 minutes, obtained applying the East-West analysis technique (correctly removing instrumental and atmospheric effects), is analyzed in terms of a dipole component. The amplitude obtained with the whole data set has a 3.5 sigma significance, therefore an upper limit is derived:  $A < 0.47 \times 10^{-2}$ .

To investigate a possible variation of the phase of the first harmonic with energy the search has been repeated in shower size intervals. The errors on the phases obtained in all energy intervals are of the order of 20-30 degrees. The phases obtained point at a sky direction that agrees with those measured at lower energies by the EAS-TOP, IceCube and IceTop experiments and at higher energy by the low energy extension of the Pierre Auger Observatory.

### Collaboration

KASCADE-Grande

### Registration number following "ICRC2015-I"

0412

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**Session Classification:** Parallel CR01 Aniso

**Track Classification:** CR-EX