

## CR-SA hysteresis phenomenon on the basis of satellite data, 2. Alpha-particles fluxes

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**Abstract.** We analyzed satellite 5-min data on alpha-particle fluxes in energy intervals 60-160 MeV, 160-260 MeV and 330-500 MeV during January 1986 May 2000. In the first we excluded periods with great CR increasings caused by particle acceleration in solar flare events. Then we determined monthly averaged fluxes as well as 5 months and 11 months smoothed data. We corrected these data on drift effects according to the procedure described in Dorman et al. (2001) in dependence of alpha-particle energies. Corrected on drifts alpha-particles fluxes we compare with expected according to convection-diffusion modulation for different values of  $X_0$  from 1 to 60 av. months (described in Dorman et al., 2001). By this way we can determine  $X_{0max}$ , at what the correlation coefficient reaches the maximum value. Then it can be determined the dimension of modulation region (with

taking into account the influence of nonlinear processes on the solar wind speed in the outer Heliosphere according to Le Roux and Fichtner, 1997), the radial diffusion coefficient and transport path as well as expected alpha-particle intensity out of the modulation region and absolute alpha-particle modulation (relative to the alpha-particle intensity level in the interstellar space).

### REFERENCES

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