

ANALYSIS OF INTENSITY RATIO FOR MgXII Ly α
COMPONENTS FROM INTERCOSMOS 7 OBSERVATIONS

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We discuss the Mg XII Ly α line profile measurements obtained by means of Bragg crystal spectrometer aboard INTERCOSMOS 7 satellite. The design of this spectrometer allows to clearly resolve both components ($\alpha_{1/2}$ and $\alpha_{3/2}$) of the Ly α spin doublet. The intensities of each of these components we derived by means of fitting two Voigt profiles to the measured Mg XII Ly α shape. More than 100 spectra were analyzed in this way providing the statistical information on the value of intensity ratio $a = \alpha_{1/2} / \alpha_{3/2}$. Derived average value of a is close to the theoretically expected 0.5, but in many cases the value of a is significantly different from 0.5 (both lower and higher values occur). We present examples of the fit and the histograms showing correlations of a value with the values of other flare parameters. Present analysis consist the observational part of the larger paper under the preparation with Prof. R.W.P. McWhirter theoretical group.