

# Green corona synoptic charts with positions of limb prominences for the period 1964-1991

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**Abstract.** Synoptic charts of the green corona (530.3 nm, Fe XIV) line intensities derived from homogeneous coronal data set with positions of limb prominences over the period 1964-1991 are available on a PC diskette.

**Key words:** the Sun - solar corona - prominences

## 1. Observations and results

Green corona (Fe XIV, 530.3 nm) synoptic charts with positions of limb prominences, observed at the Lomnický štít coronal station, are constructed separately for the east and the west limbs for each Carrington rotation over the period 1964-1991. We have used daily green coronal line intensities (Rybanský and Rušin 1992 and references therein), a revised version of the "Catalogue of solar prominences 1967-1986" by Rušin et al. (1988) and the continuation of this catalogue for the years 1987-1991 (to be published). The isolines on the charts (see Figure 1) represent the green coronal line intensities in absolute coronal units at a height of 40'' (1.04  $R_{\odot}$ ) above the sun's limb and the asterisks are centered on the heliographic coordinates of the prominences. The synoptic charts set is available on PC diskettes upon request directly from the authors in a form suitable for a number of printers and plotters.

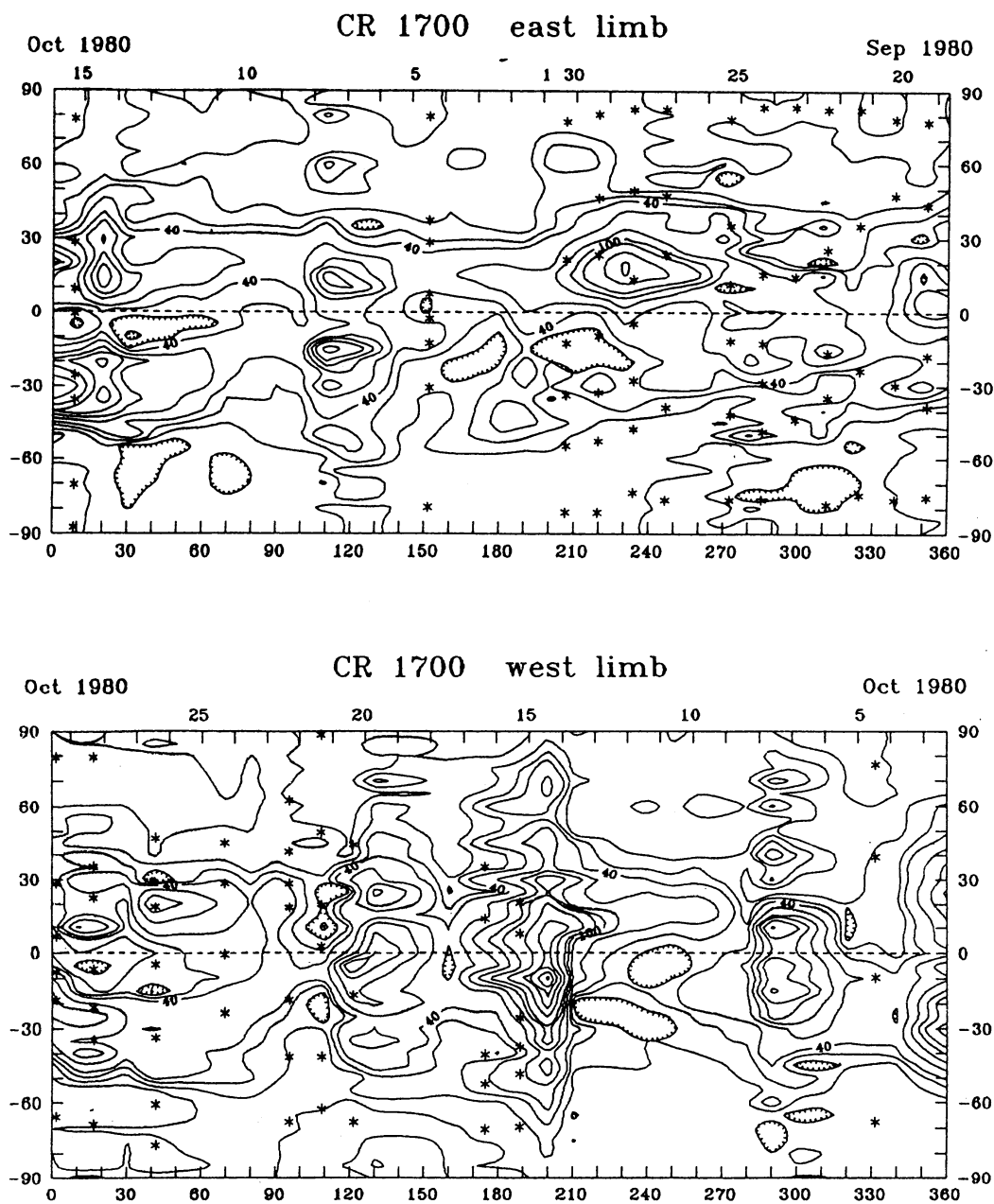
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## References

- Rušin, V., Rybanský, M., Dermendjiev V., Stavrev, K.Ya.: 1988, *Contrib. Astron. Obs. Skalnaté Pleso* **17**, 63  
Rybanský, M., Rušin, V.: 1992, *Contrib. Astron. Obs. Skalnaté Pleso* **22**, 229

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*Contrib. Astron. Obs. Skalnaté Pleso* **23**, (1993), 133- 134.



**Figure 1.** Green corona synoptic charts for the east (top) and the west (bottom) limbs for Carrington rotation No. 1700. The adopted isolines' scale is as follows: 10, 20, 30, 40, 60, 100, 120, 160, 200, ... absolute coronal units. The asterisks indicate the "centers" of the limb prominences