

Stars suspicious of bright active regions

Milan Zboril

Astronomical Institute

Tatranska Lomnica, Slovakia



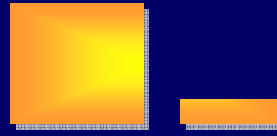
- T Tauri type
- FGK spectral type
- W UMa, Algols, RS CVn, BY Dra
- red giants and dwarfs
- white and brown dwarfs
- neutron star

Contents

- methods
- I. bright spots in late-type stars
- II. in eclipsing binaries
- III. in T Tauri stars
- a catalogue (first version)
- references

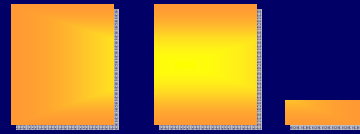
Methods

- Photometry (color excess, light curves)
- Doppler Imaging



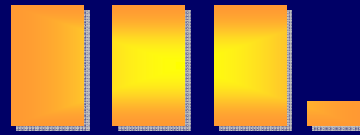
- (U-B) vs. (B-V)
- (U-B) vs. (R-I)

- flares
- chromospheric emission
- chromo/corona X-ray back heating
- plages



- color indexes + light curves
- rarely still DI

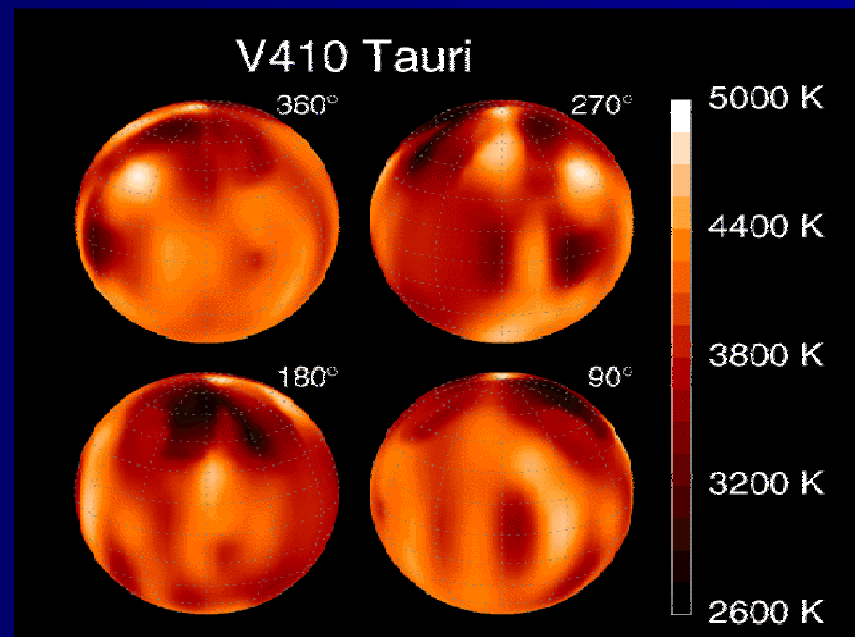
- number of stars with preferred longitudes for spots
- less clear about spot latitudes



- WTTS stars, precursor of MS stars
- CTTS stars, common envelope
+ accretion

Bright spots

- Rice and Strassmeier 1996, AA, 316, 164



Catalogue

- 134 stars in catalogue
- about 20% binaries with spots close to L-point (neck-zone)
- term 'spot' typical over HR diagram

References

- Aarum Ulvas, V., Henry, G. W. 2004, 13th Cool Star Workshop, Hamburg
- Zboril, M. 2009, AN, 330, 42
- Zboril, M. 2009, 6th SREAC Meeting, Belgrade