

**Program
pozorovania premenných hviezd
na hvezdárni "Júlia",
výsledky, plány a perspektívy.**

Bahýl, V. - Gajtanská, M.

hvezdáreň „Júlia“, Zvolenská Slatina

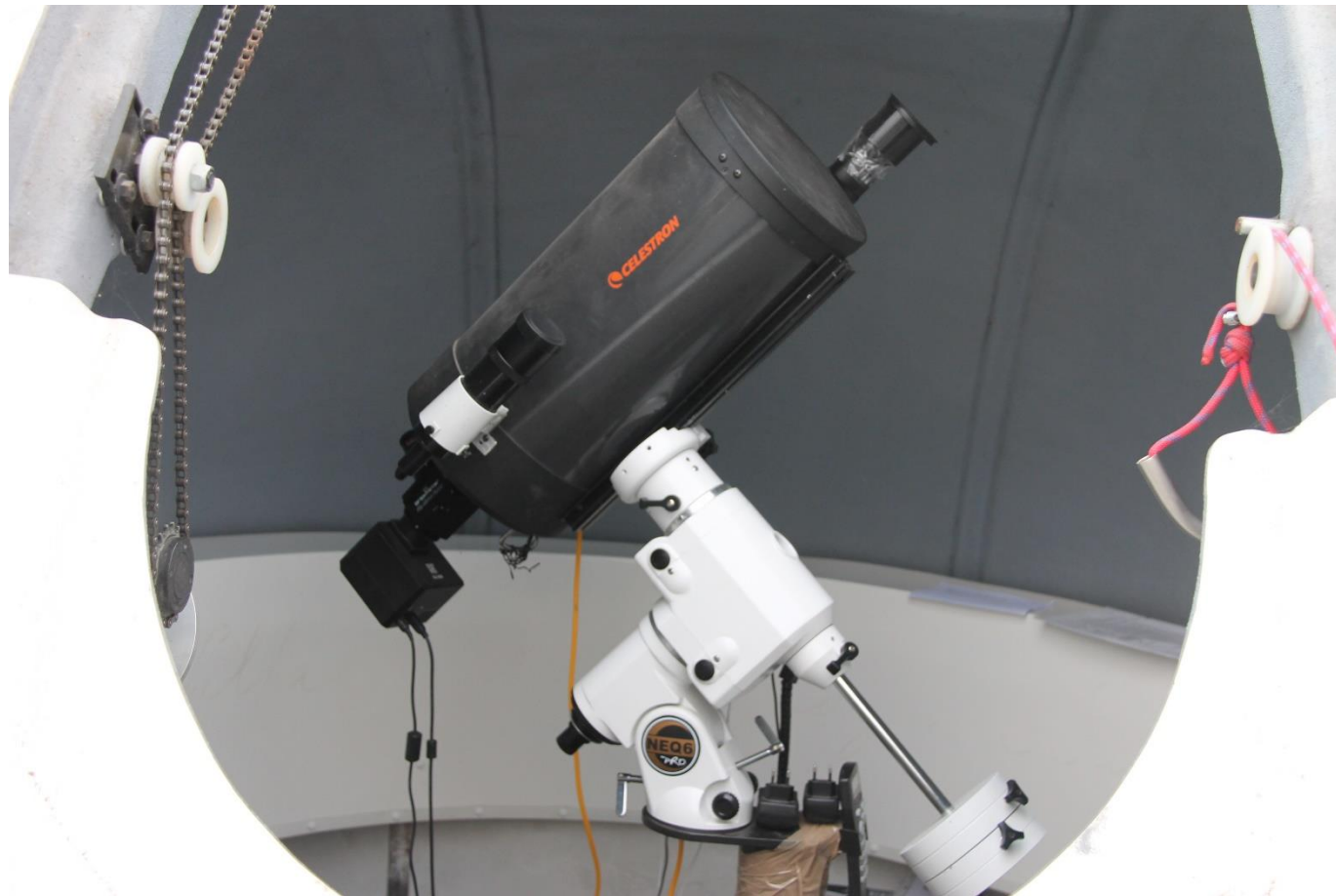
KFEAM, DF TU vo Zvolene, Zvolen, Slovensko

hvezdáreň „Júlia“



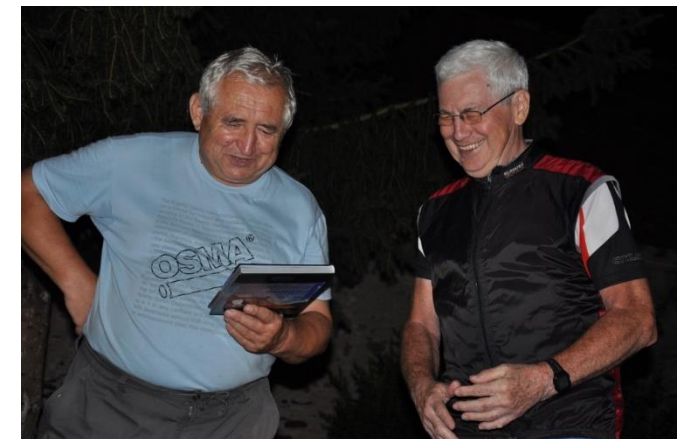
Vybavenie

Plne automatizovaný Celestron 9,25" + MI G2-1600 kamera



Jedenást' rokov hvezdárne „Júlia“

- budovanie
- ustálenie ďalekohľadu
- Bright Bolid Watch
- astrofoto
- DSLR fotometria
- MI G2-1600
- CEMeNt
- kométy
- Asteroidy Target asteroids
- Vzácne návštevy



DSLR fotometria

- 2012

- AR Aurigae
- I Bootis

- 2013

- Nova Delphini 2013
- AG Draconis
- BETA Lyrae
- CU Virginis
- Nova Vulpeculae 2013

- 2014

- AB Andromedae
- AG Draconis
- AR Aurigae

- 2015

- AG Draconis
- AR Aurigae
- BT Trianguli
- IU Cancr
- PY Bootis
- V2790 Orionis
- XY Leonis
- CK Bootis

MI G2-1600 Fotometria

- 2016

- BT Trianguli
- CS Lacrtae
- IM Aurigae
- MW Comae
- RX Aurigae
- UZ Equlei
- V793 Cassiopheie

- 2017

- BT Trianguli
- UZ Equlei
- V477 Pegasi
- IW Persei
- EPSILON Aurigae
- HP Herculi

- 2018

- IW Persei
- QS Virginis
- TT Piscium
- U Sagittae

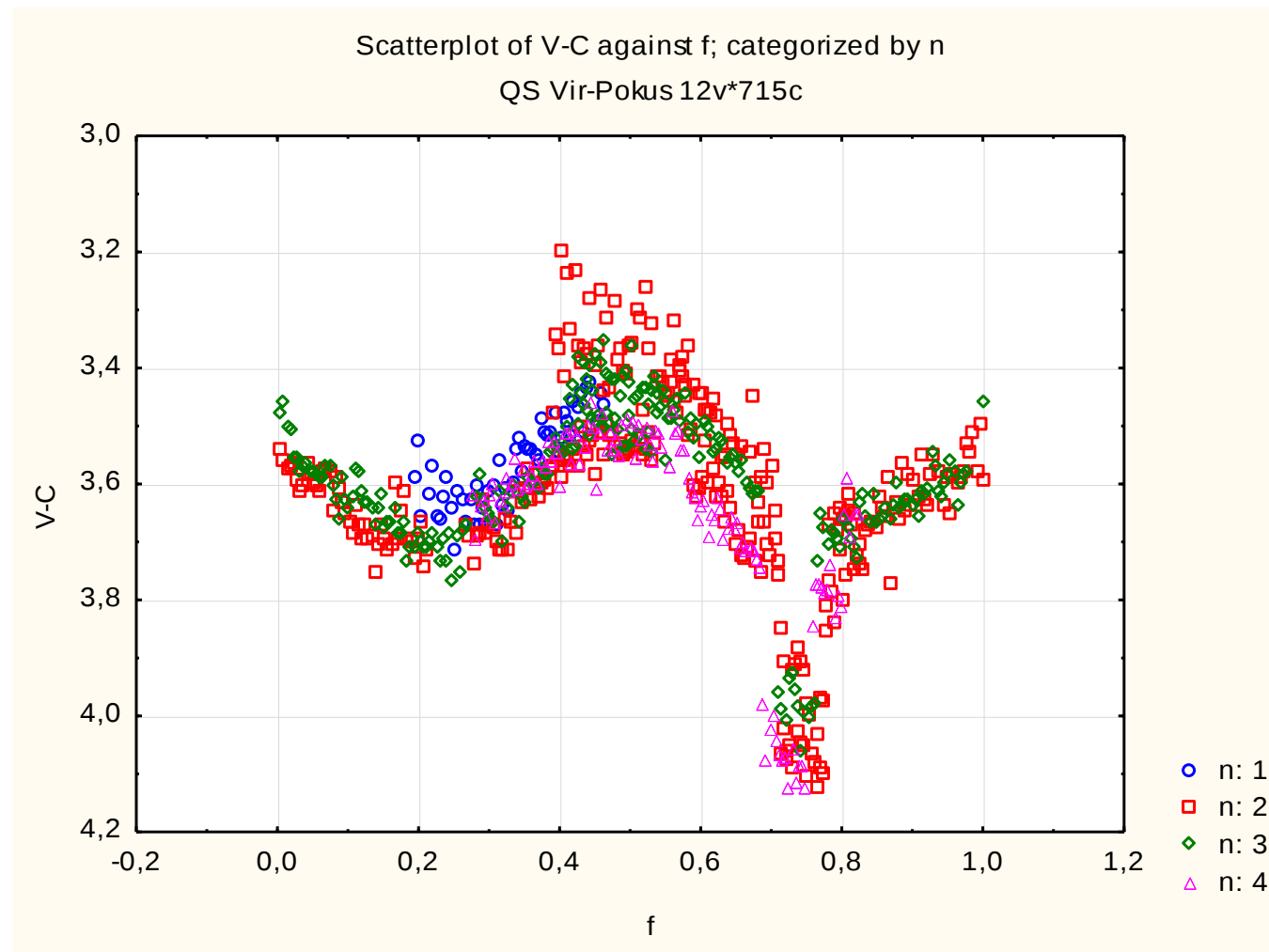
- 2019

- AB Andromedae
- AD Leonis
- BETA Lyrae
- IH Lacertae
- MU Cassiopheie
- QS Virginis

- 2020

- HI Lacertae
- QS Virginis

Z výsledkov

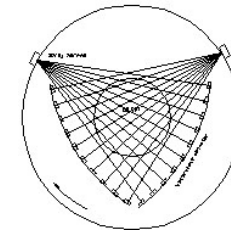
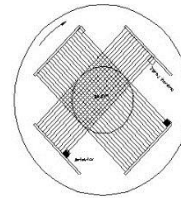
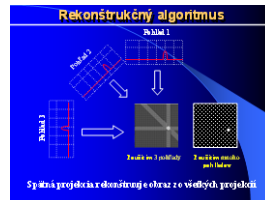
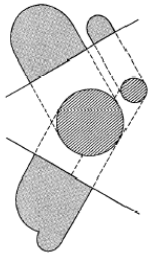


Počítačová tomografia

- integrál – Newton Leibnitzov vzorec
- podintegrálna funkcia – Radonova transformácia

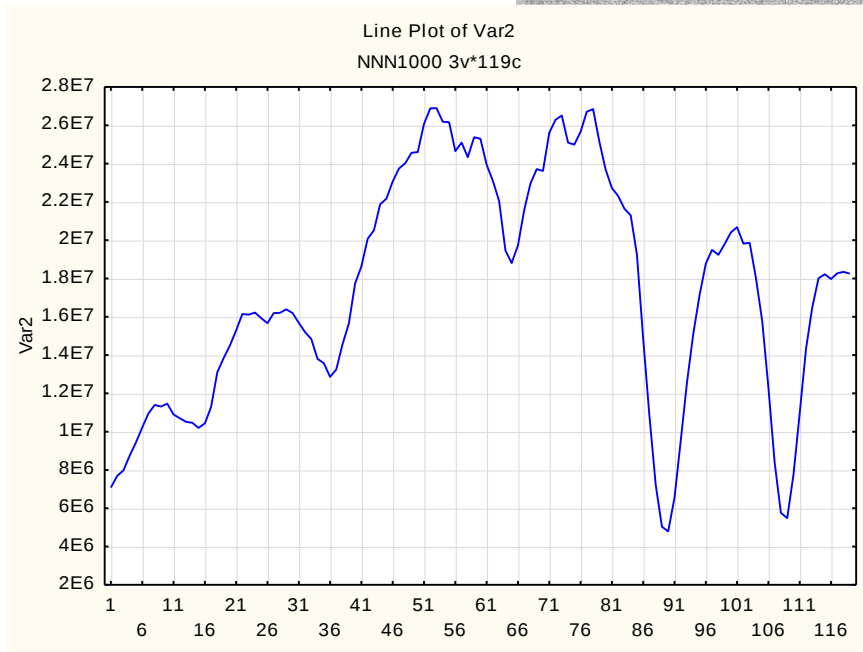
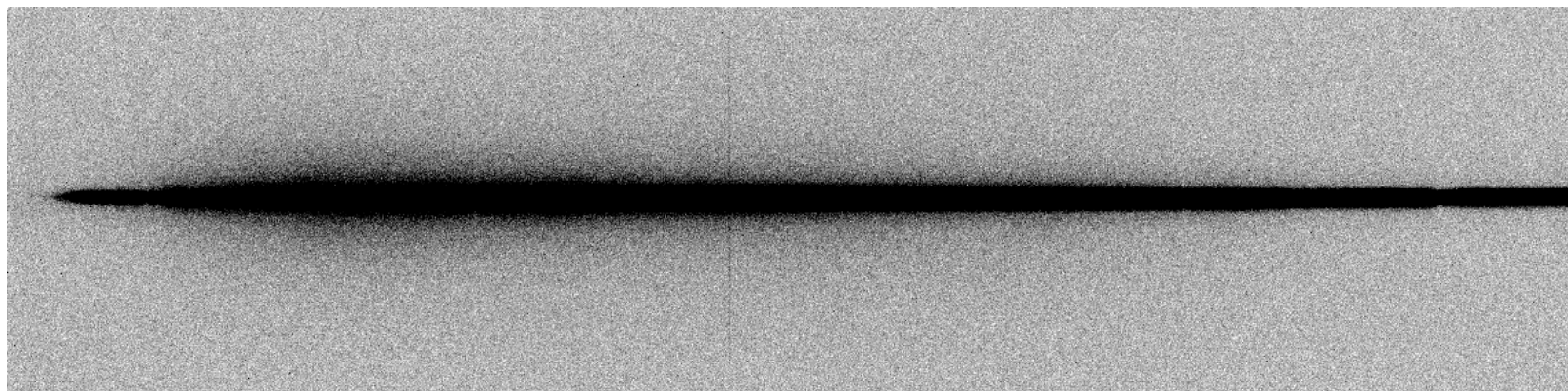
$$\int_a^b f(x) dx = F(b) - F(a).$$

$$\mathcal{R}[f](\alpha, r) = \int_{-\infty}^{\infty} f(r \sin(\alpha) - t \cos(\alpha), r \cos(\alpha) + t \sin(\alpha)) dt$$

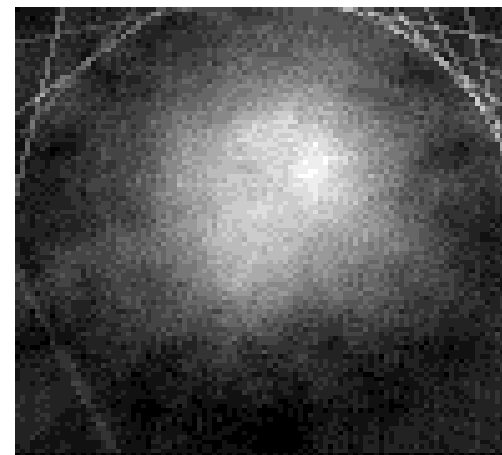
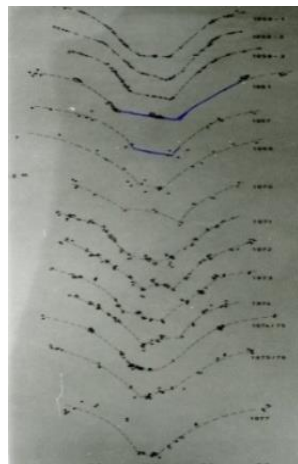


Dopplerovská tomografia – spektrálne čiary

Polárka

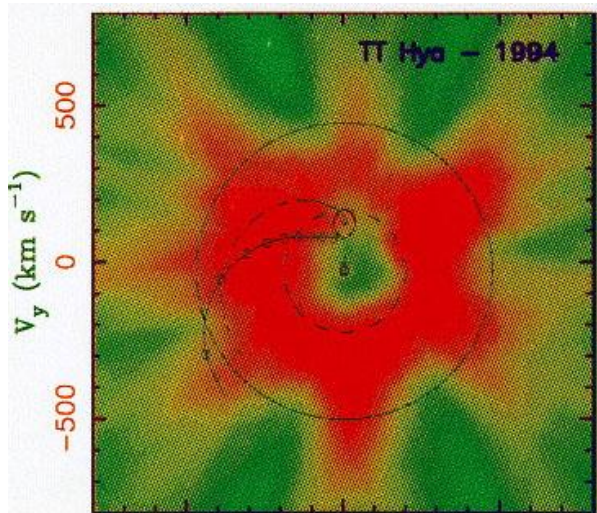


Dopplerovská tomografia – svetelné krivky dávne a skromné začiatky

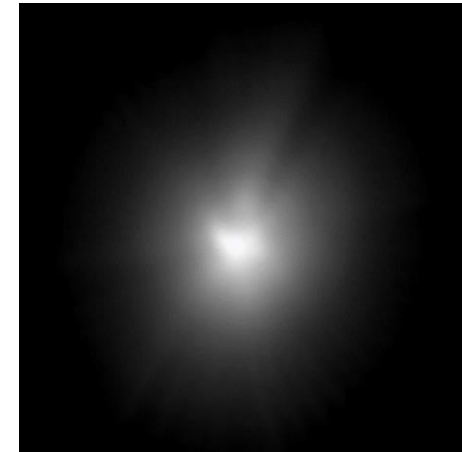
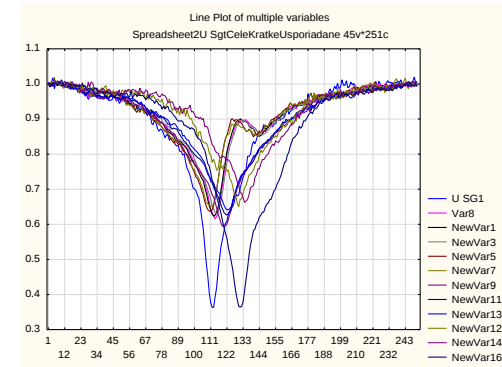
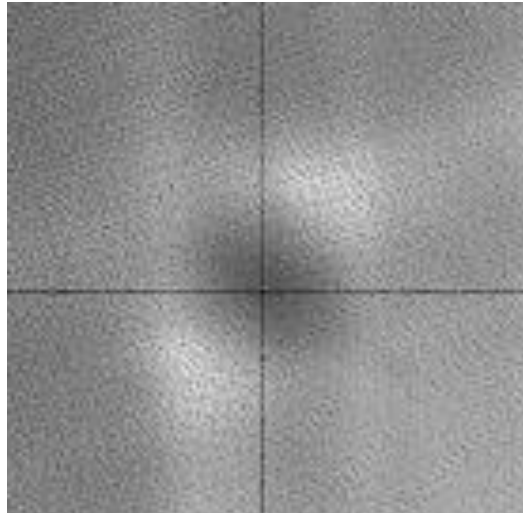


Dopplerovská tomografia spektrá

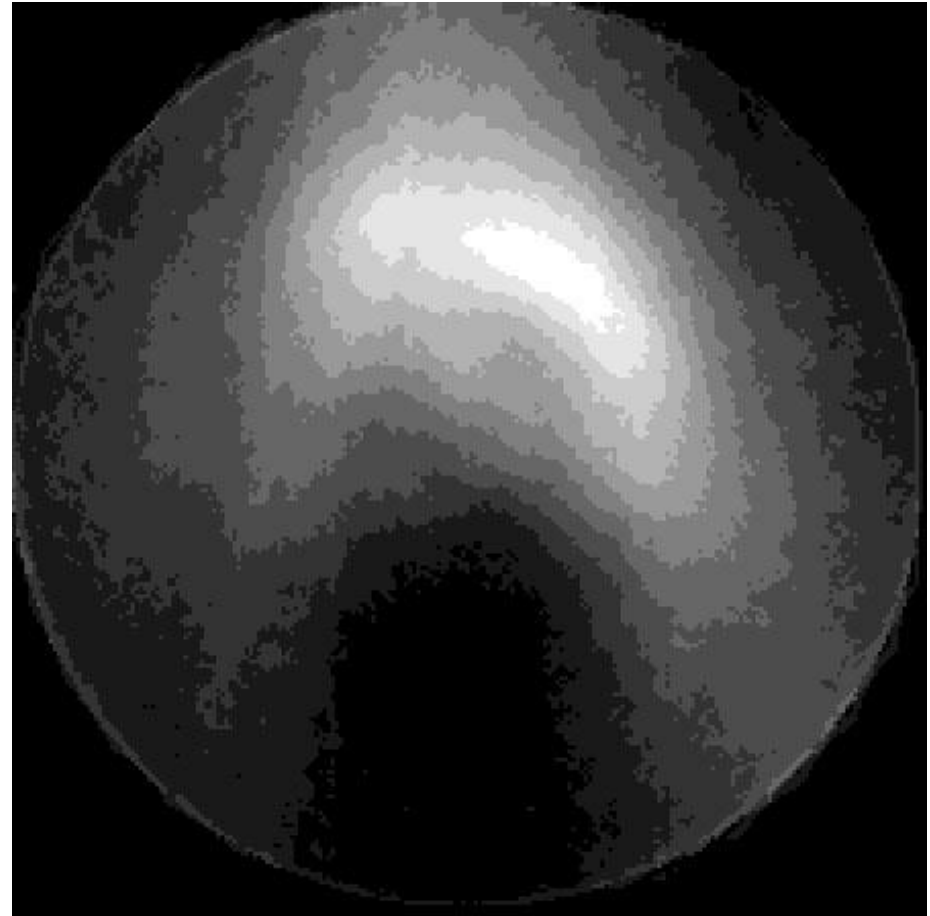
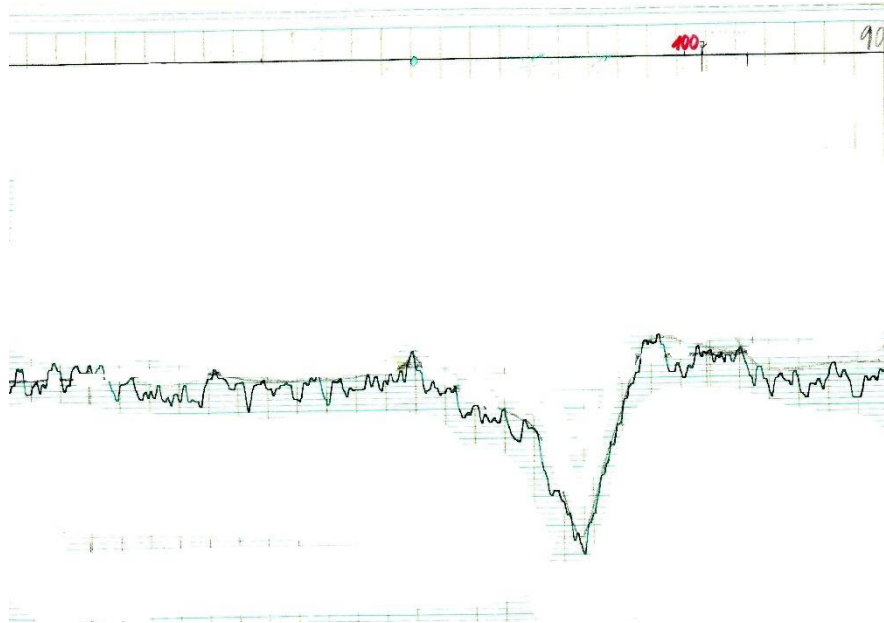
- TT Hydrae



- BETA Lyrae



BETA Lyrae H gamma



Doppler tomography – svetelné krivky netradičná možnosť

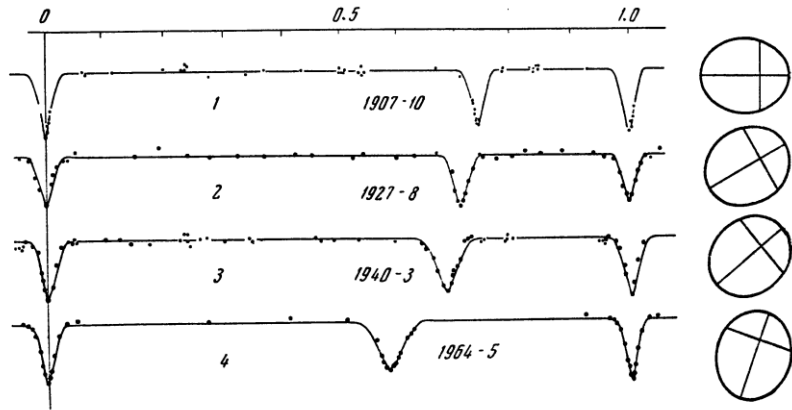
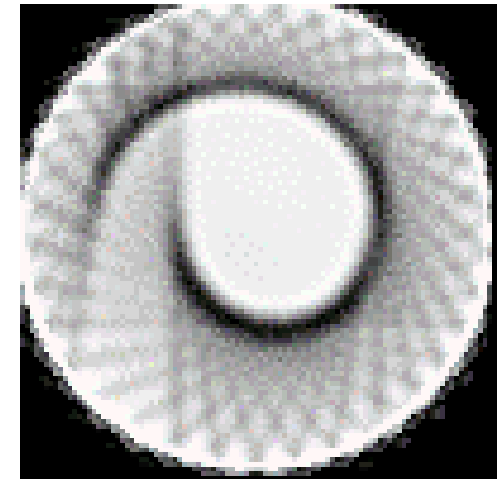
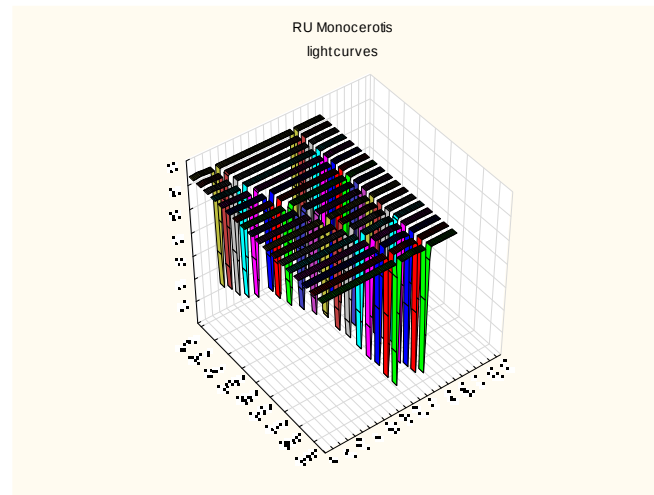


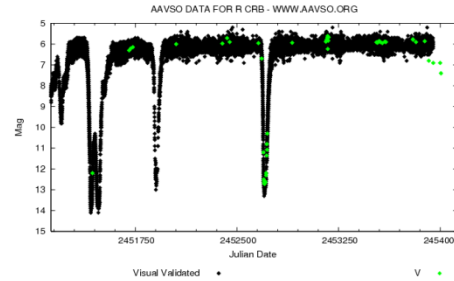
Fig. 1. Progressive displacement of the secondary minimum of RU Mon and its change in shape during 1908-1965 due to rotation of the line of apsides. The light curves represent observations by 1) Wendell; 2) A. D. Dubyago and D. Ya. Martynov; 3) D. Ya. Martynov; 4) B. J. Bok and D. Ya. Martynov. The corresponding positions of the orbital ellipse are shown at the right.



Žiaci

- Stanko Novák

Ibi contemptus attingit astra



- Vdp. Pavol Cerovský



- Pavol Kaliský



- MVDr. Štefan Šimon

Ďakujeme za pozornosť.

