SALT Science Programs at Göttingen Wolfram Kollatschny

Mafikeng, Nov. 2013



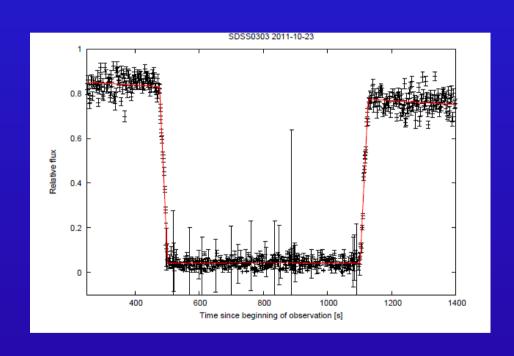


University Observatory

Institute for Astrophysics

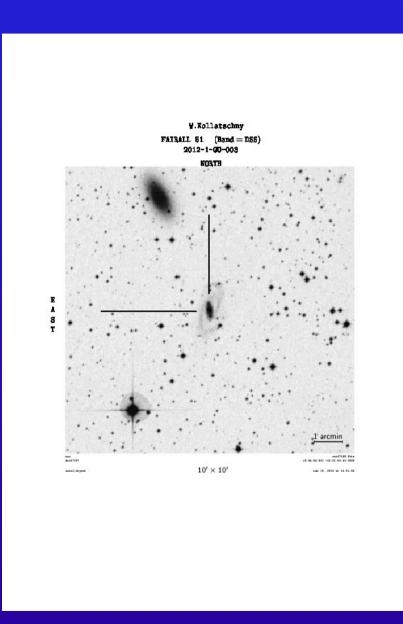
Search for planets in eclipsing binaries (Stefan Dreizler, Tim Oliver Husser et al.)

with SALTICAM



SALT:- eclipse of WD by M-star - deviations of eclipse time due to planets

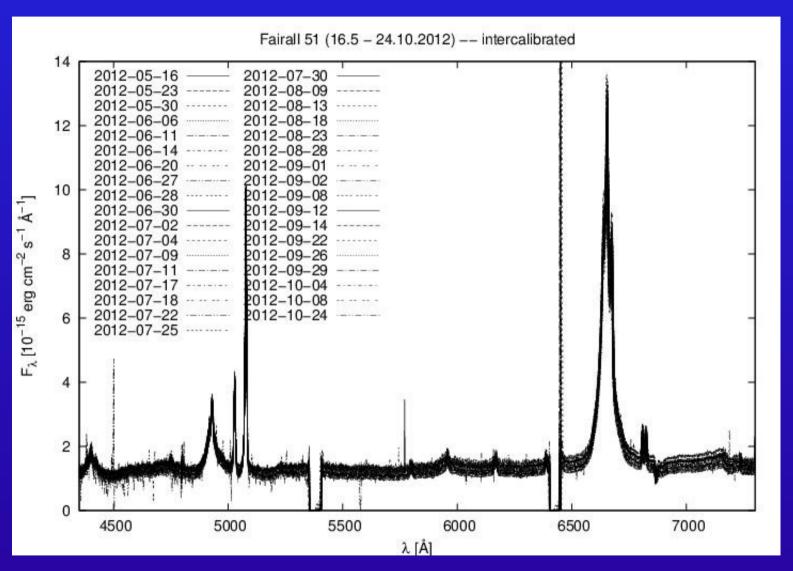
Spectral variability of Fairall 51



- Seyfert 1 galaxy
- mv ~ 15
- 35 SALT spectra between May 16 and October 24, 2012

Spectral variability of Fairall 51

SALT spectra taken between May and October, 2012



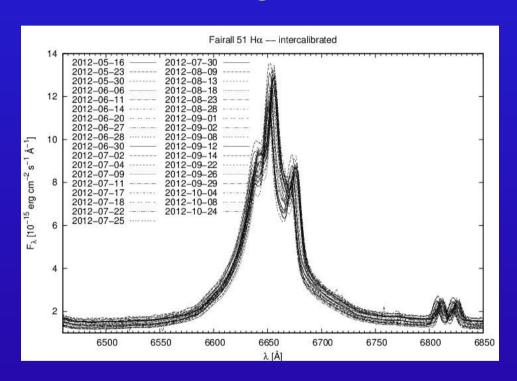
calibrated with respect to the [OIII] lines

Line and cont. intensity variations in Fairall 51

Hβ region

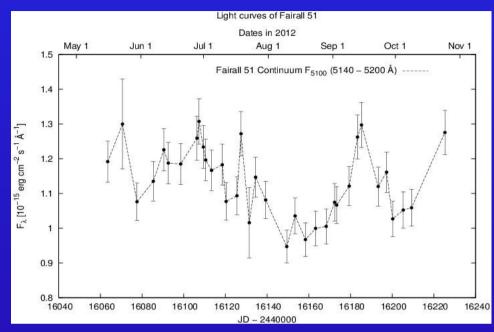
Fairall 51 HB - intercalibrated 2012-07-30 2012-05-16 2012-05-23 2012-08-09 2012-05-30 2012-08-13 2012-08-18 2012-06-06 2012-06-11 2012-06-14 2012-08-28 2012-06-20 2012-06-27 2012-09-02 F_{λ} [10⁻¹⁵ erg cm⁻² s⁻¹ Å⁻¹] 2012-06-30 2012-07-02 2012-07-04 2012-07-09 2012-07-11 4850 4900 4950 5000 5050 λ [Å]

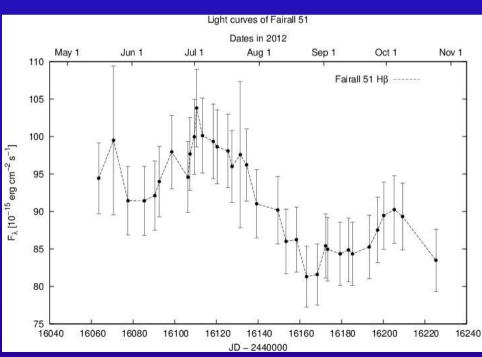
Hα region



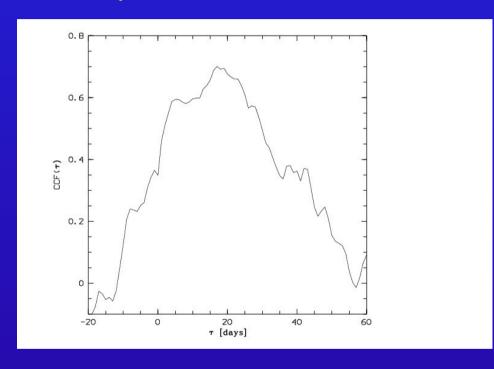
calibrated with respect to the [OIII] lines

HB and continuum light curves in Fairall 51





Cros-correlation function of H β Ic. with respect to the continuum Ic.



mean distance of H β line emitting region: 16 \pm 5 light days

2D spectral variability under reduction

Spectral variability in ESO141-G38

ongoing project

SALT observations of the X-ray weakest QSO

Simultaneous optical (SALT), UV (HST), and X-ray (XMM, Norbert Schartel) observations of the X-ray (α opt-X) weakest Quasar in August 2013:

we got the SALT spectrum, data under reduction

