

OGLE

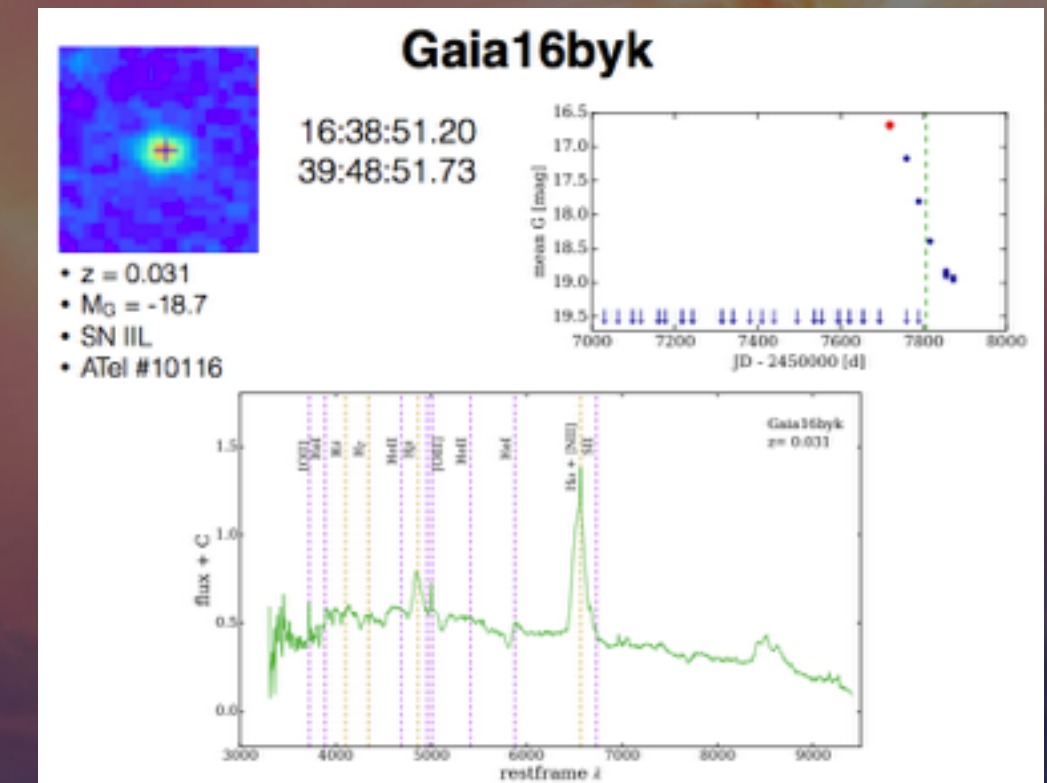
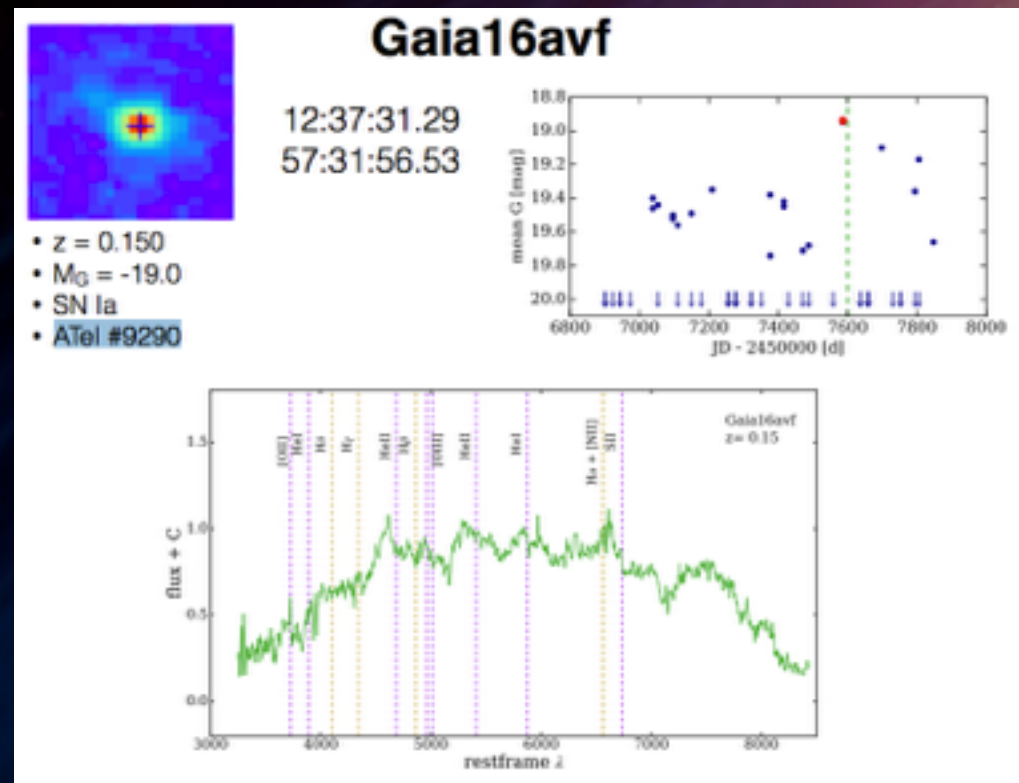
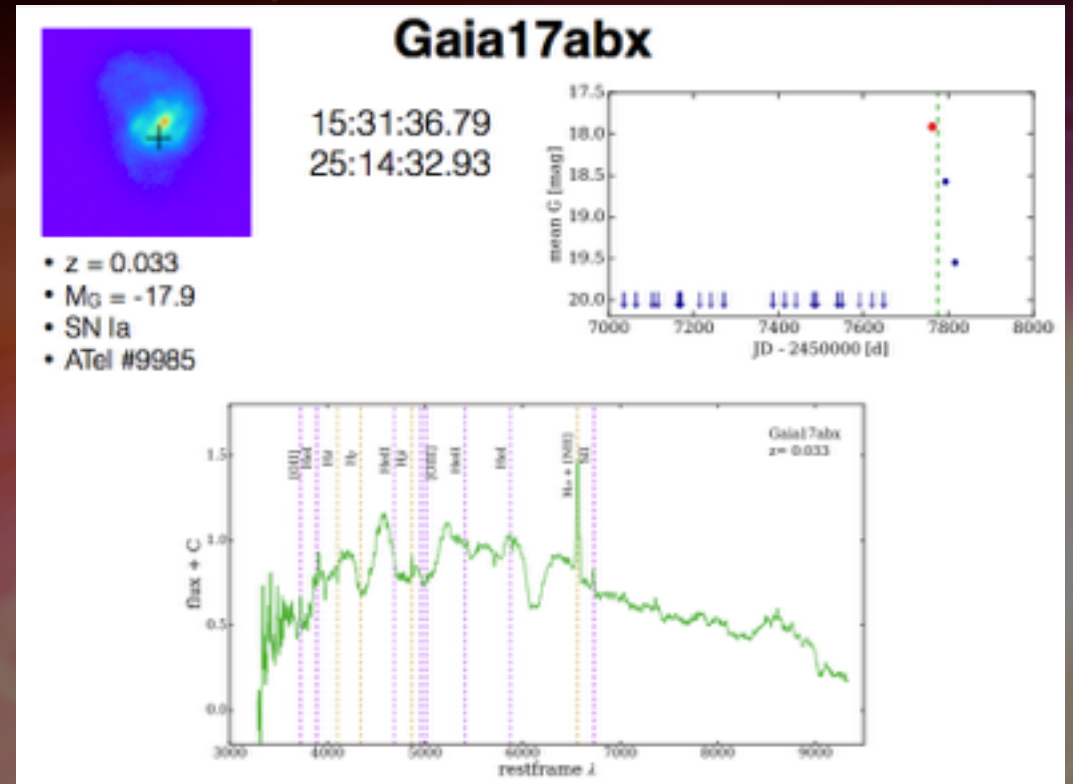
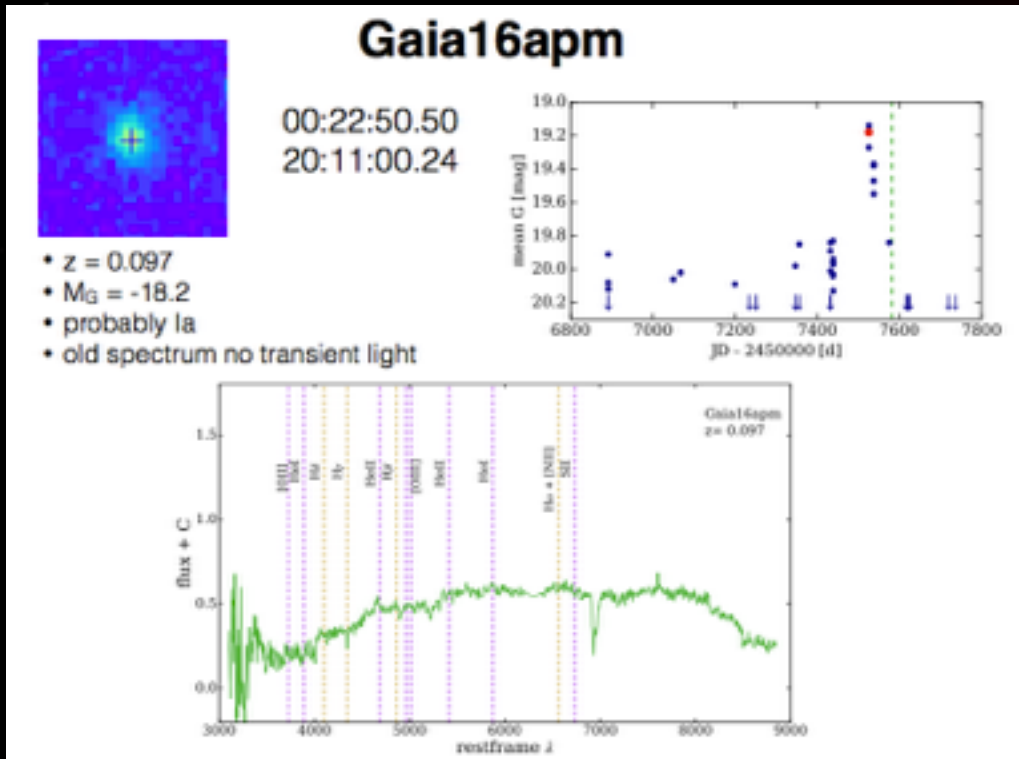
Highlights from Warsaw nuclear transients search

Mariusz Gromadzki
Warsaw University Observatory



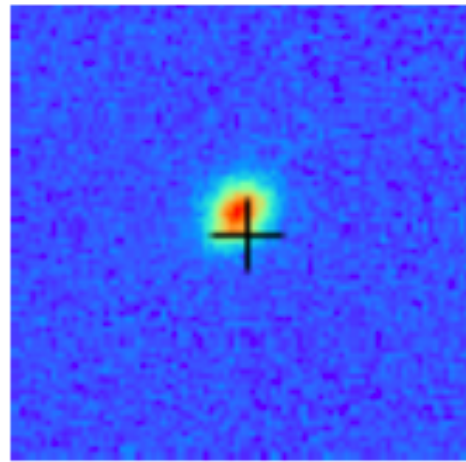
Gaia Alerts Workshop in Warszawa, Dec 6-8 2017

Almost SN Ia



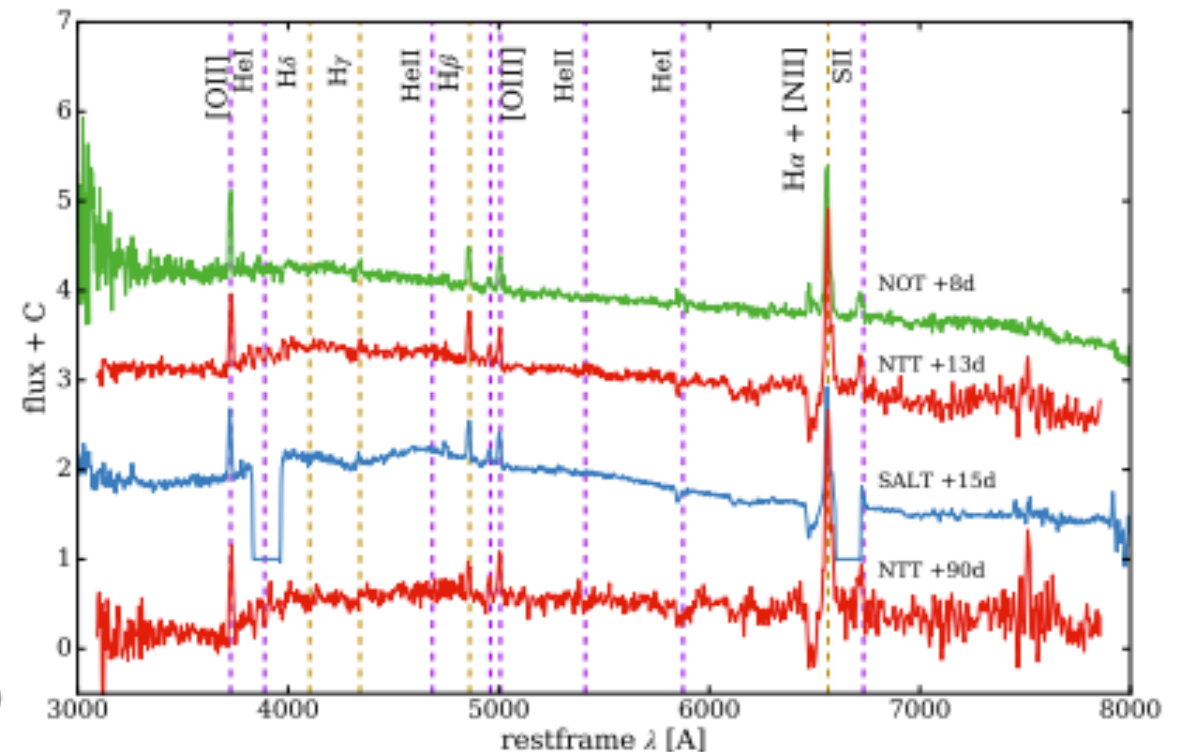
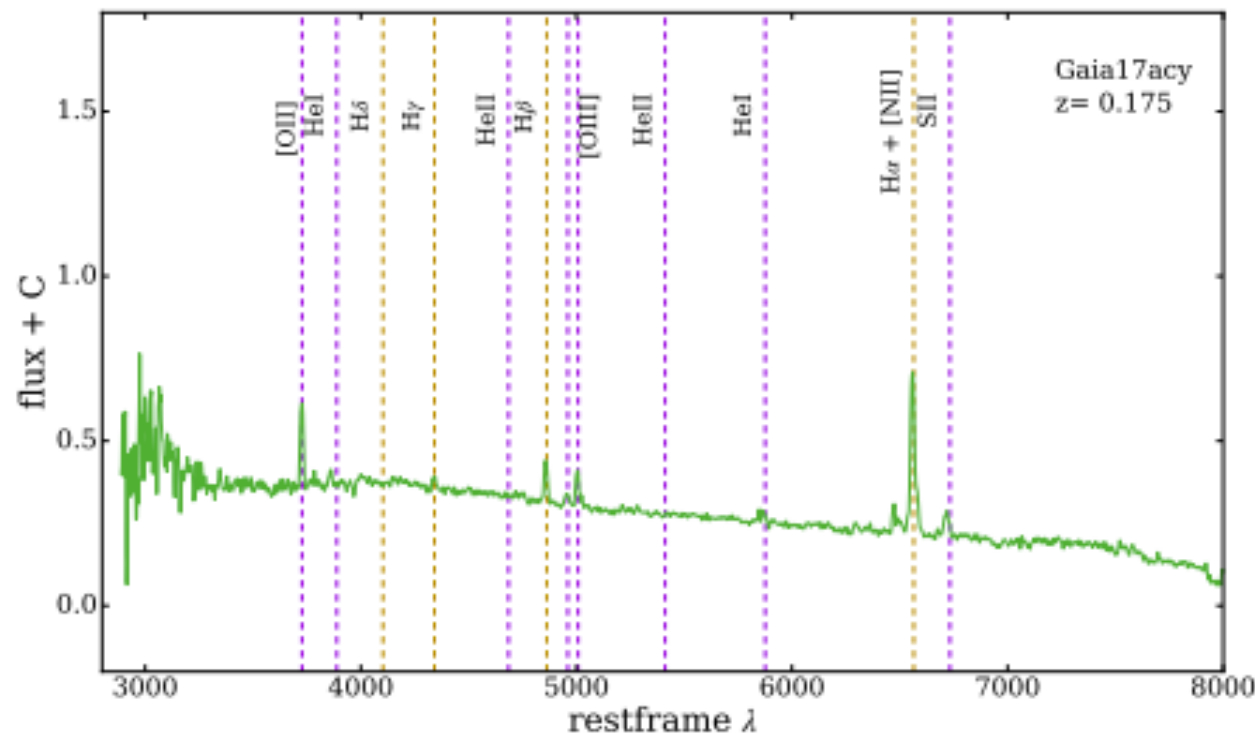
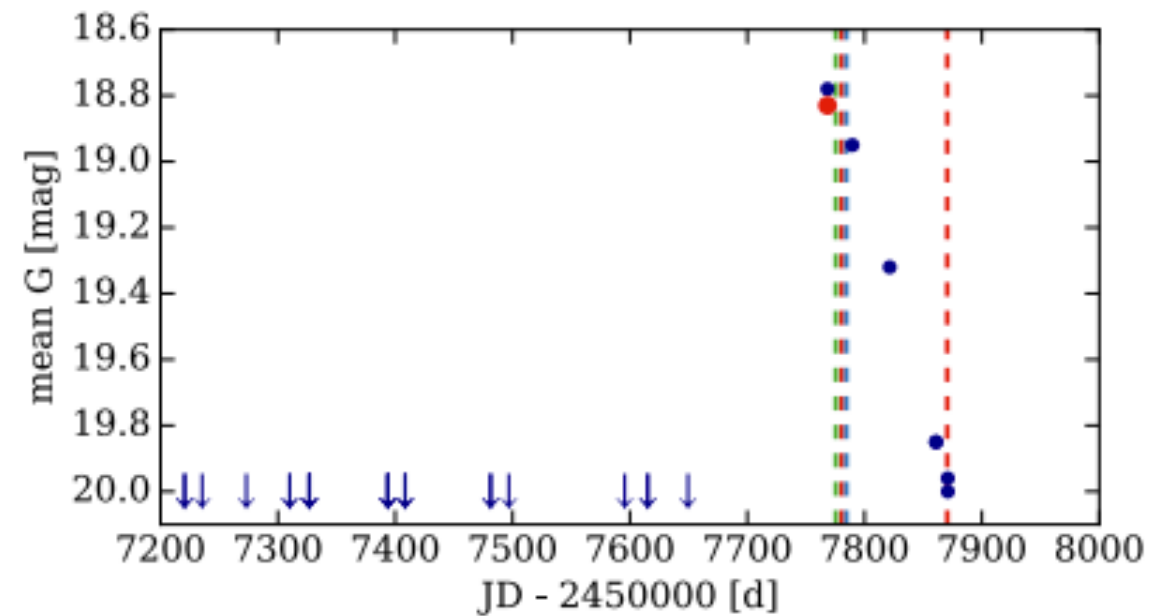
Gaia17acy

Gaia17acy



05:00:06.77
-13:08:31.56

- $z = 0.175$
- $M_G = -20.3$
- Swift UV detection, $T = 11000\text{K}$
- SN IIn or TDE?

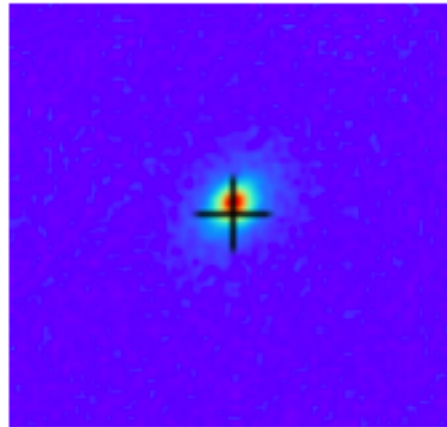


Surveys



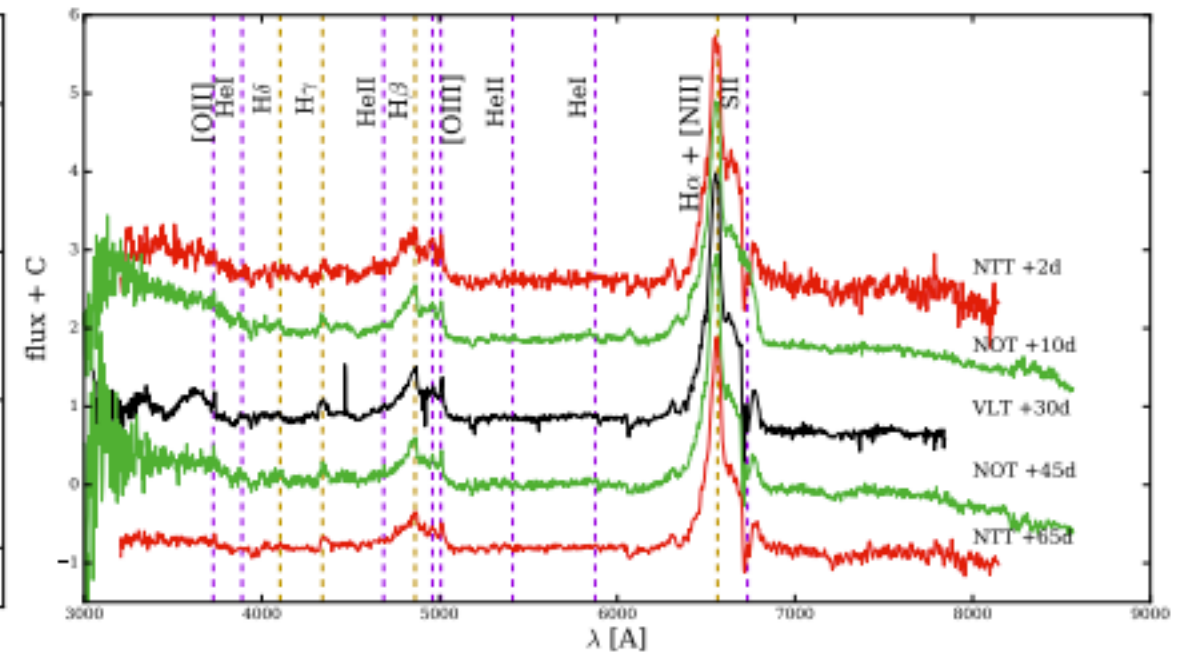
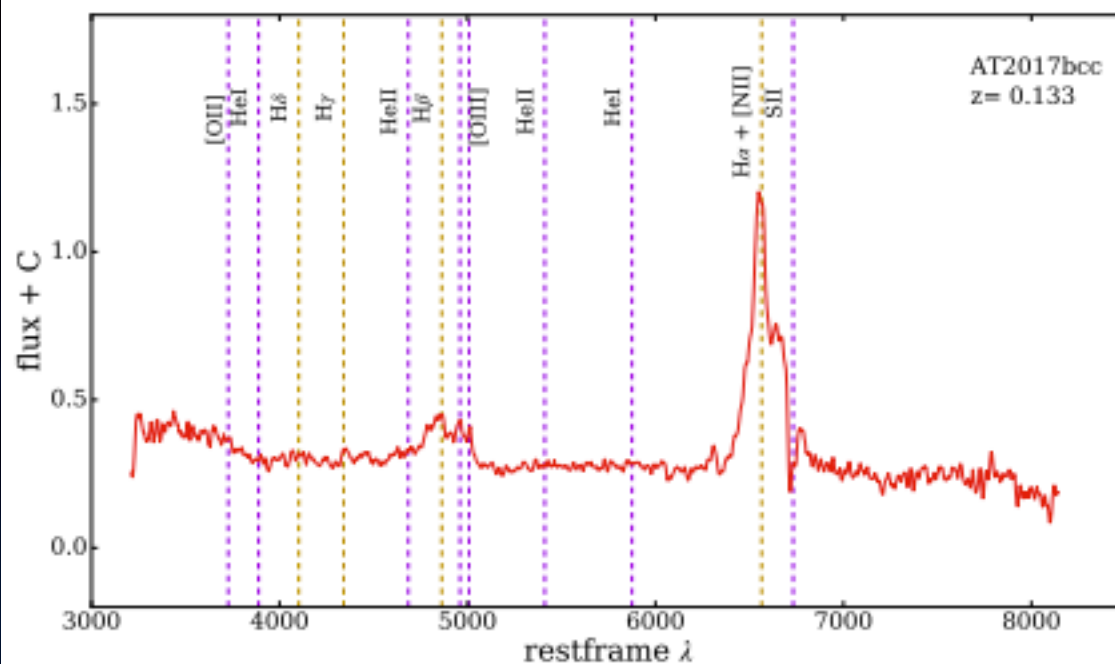
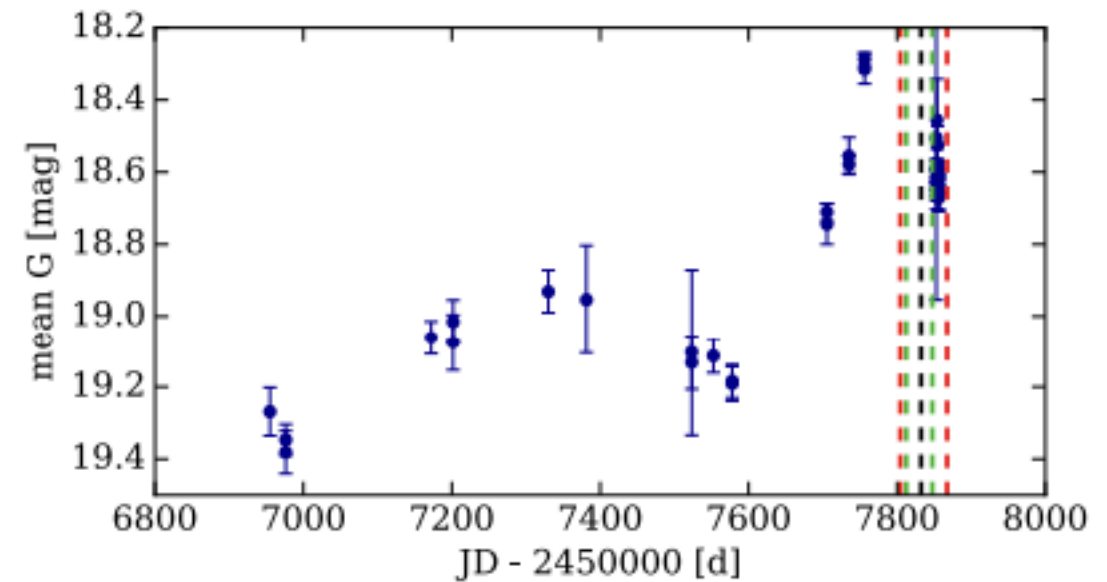
AT2017bcc/PS17bgn

AT2017bcc (PS17bgn)

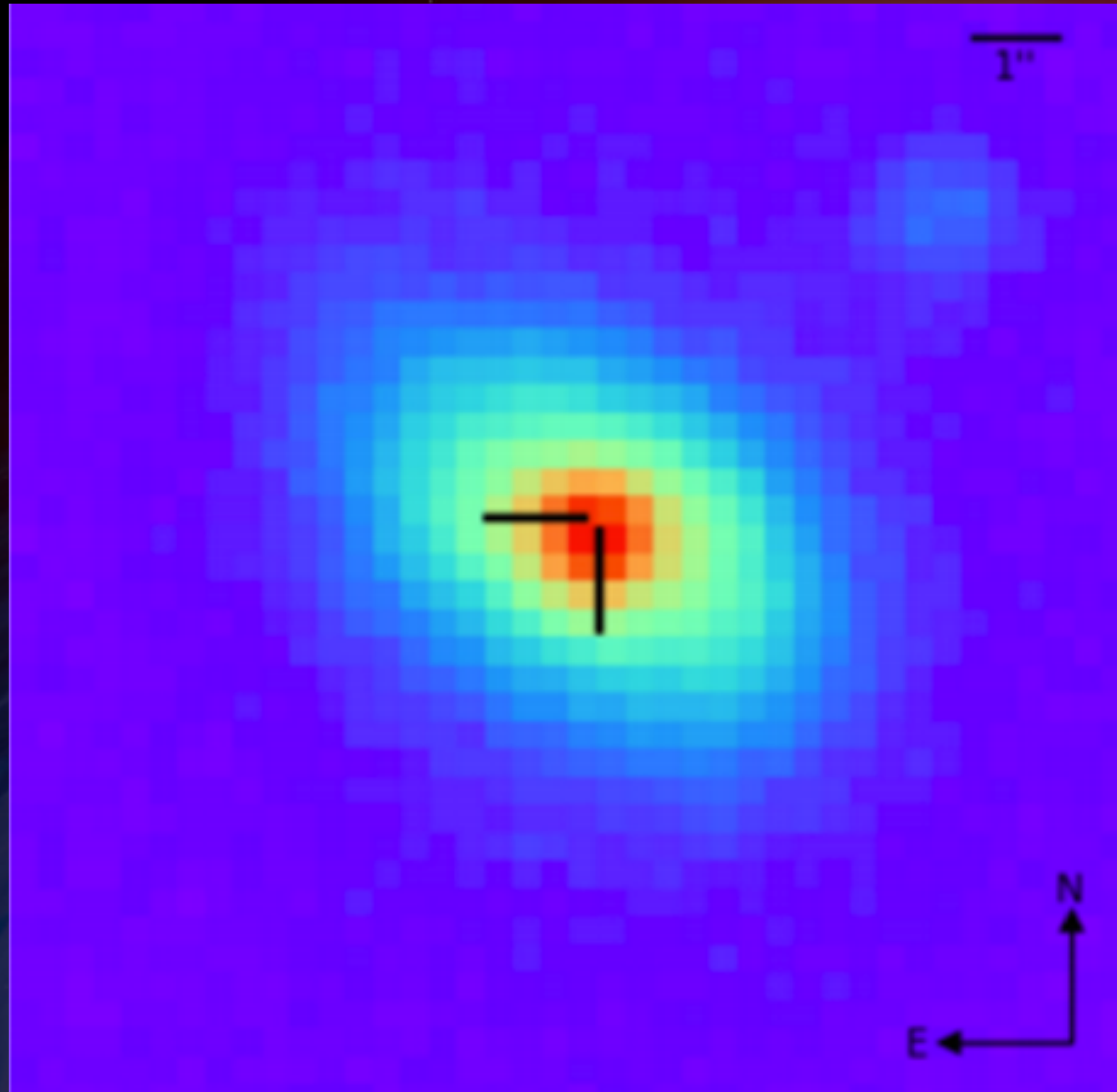


11:31:52.99
+29:59:45.13

- $z = 0.133$
- $M_G = -20.0$
- TDE candidate
- Swift: X-ray detection



OGLE17aaj



OGLE17aaj

RA= 01:56:24.92

DEC=-71:04:15.9

$z=0.116$

$M(I)=-18.8$

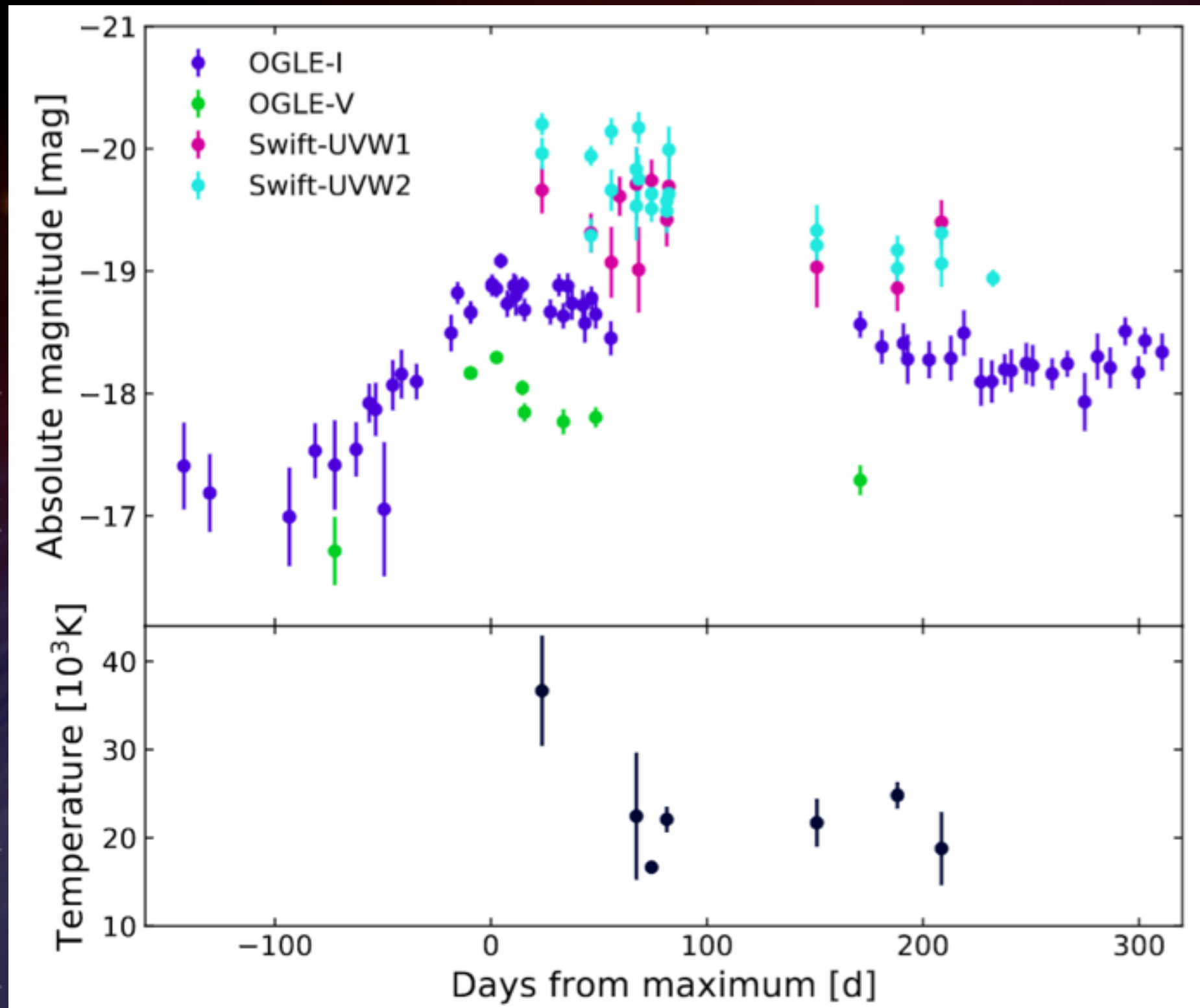
Slow rise ~60d

TDE?

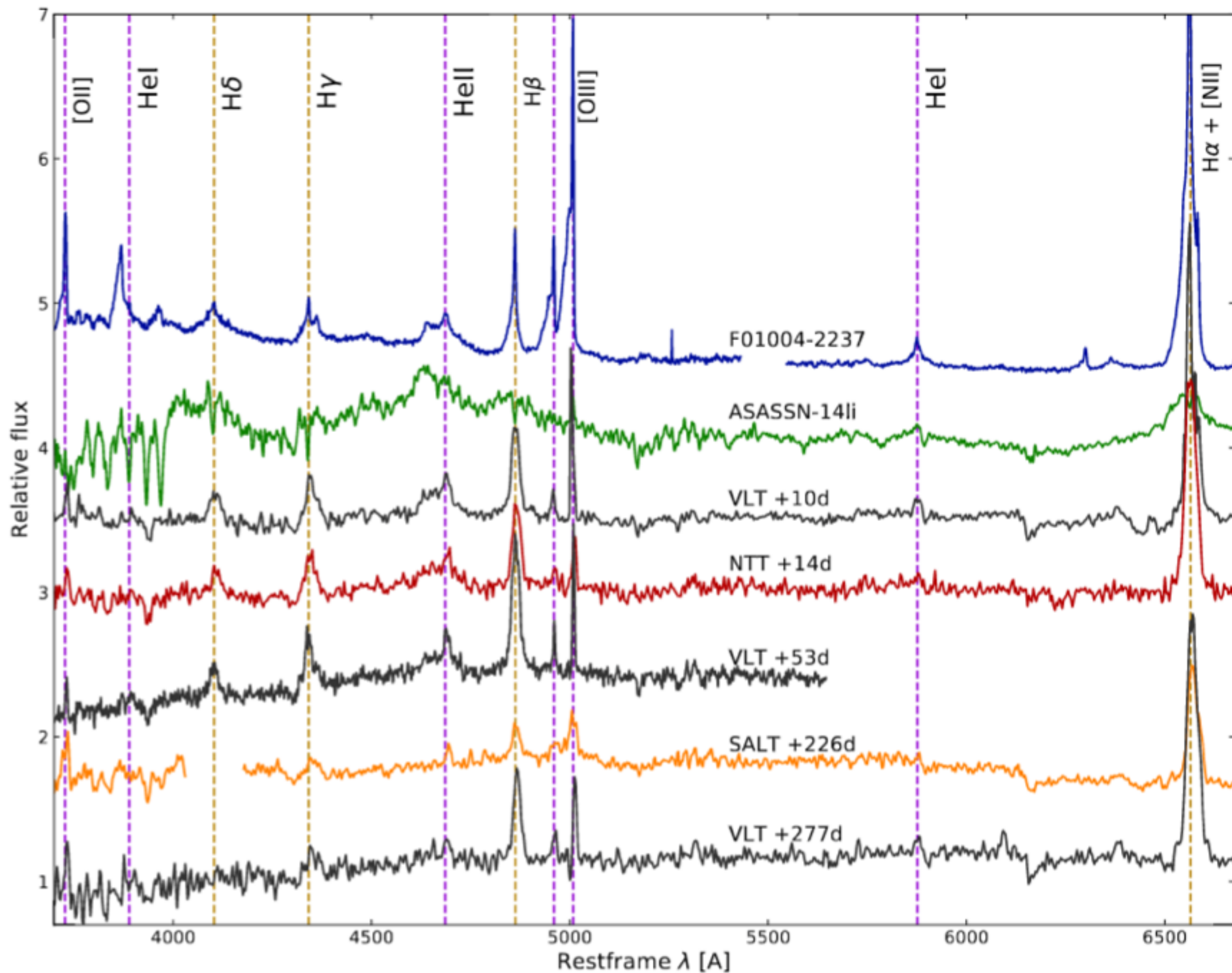
Similar to F01004-2237

URLIG TDE

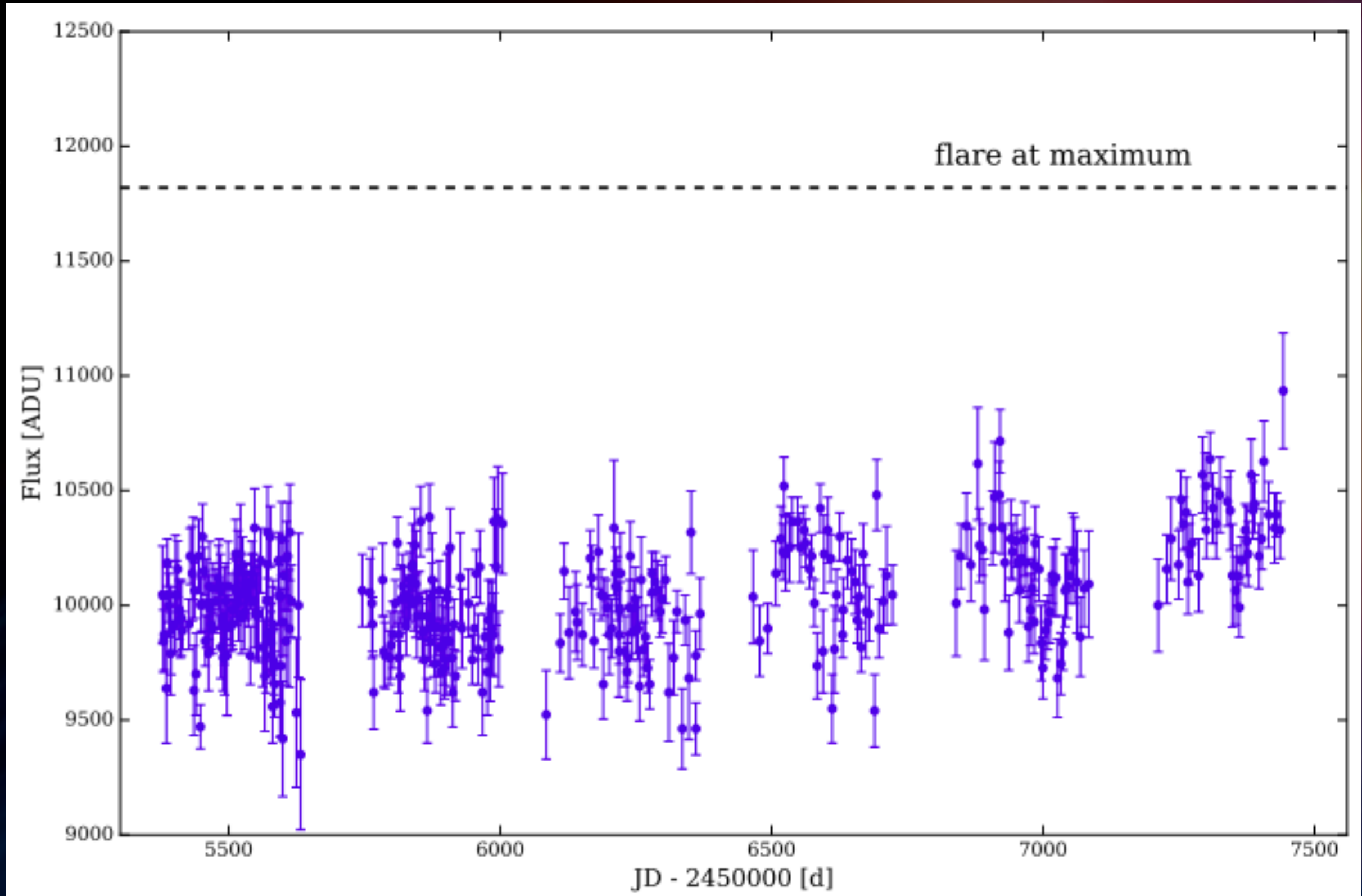
(Tadhunter et al. 2017)



OGLE17aaj - spectral evolution

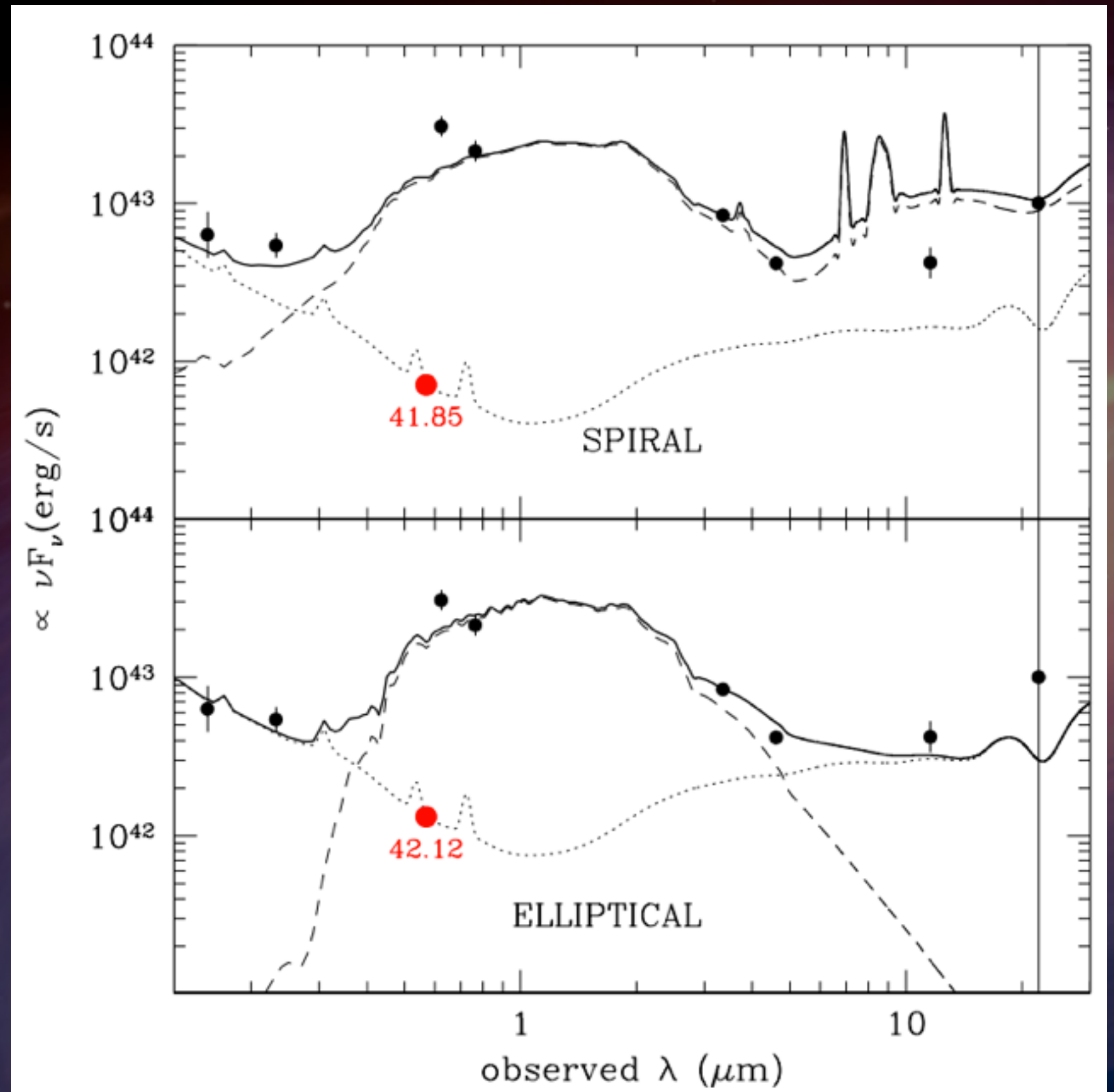


OGLE17aaj - host- pre-outburst variability



OGLE17aaj - host - black hole mass

FWHM(Hb)=1500 km/s
 $M(\text{BH}) \sim 10^6 M_{\text{sun}}$



Future

- TDEs rate from Gaia/OGLE data
- Gaia/OGLE will be still providing interesting candidates to classification and follow-up
- Improved Gaia alerts will also contribute to the discoveries