X-ray news from RW Auriga

Optical dimming with iron rich plasma and an exceptional column density

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Chandra observations and lightcurve
Chandra spectra: Vastly different every time we look

In the spectrum we observe: between 2013 and 2017
- emission at high energies multiplies
- absorbing column density $N_H$ increases from $1 \times 10^{21}$ to $4 \times 10^{23} \text{ cm}^{-2}$
- Fe abundance in corona increases from 0.5 to 15 times solar
Absorber

- Optical extinction is gray $\rightarrow$ thick absorber or large grains
- $N_H / A_V$ skyrockets: gas rich absorber? (or at least non-ISM grains)
Summary

- $N_H$ goes up by 400
- Fe abundance goes up by 30
- Need to accrete Fe rich material
- Limited knowledge of precursor of the Fe rich material

New Chandra observations coming, but not yet scheduled!
Chandra observations and lightcurve

ObsID 14539 (2013)  
ObsID 17644 (2015)  
ObsID 17764 (2017)  
ObsID 19980 (2017)