FLARING ACTIVITY ON THE DISK OF CLASSICAL T TAURI STARS: EFFECTS ON DISK STABILITY

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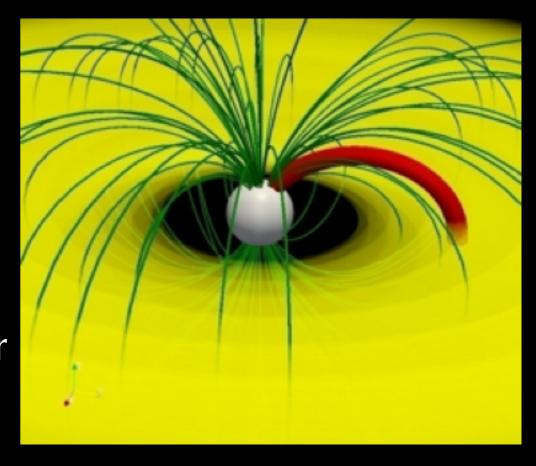




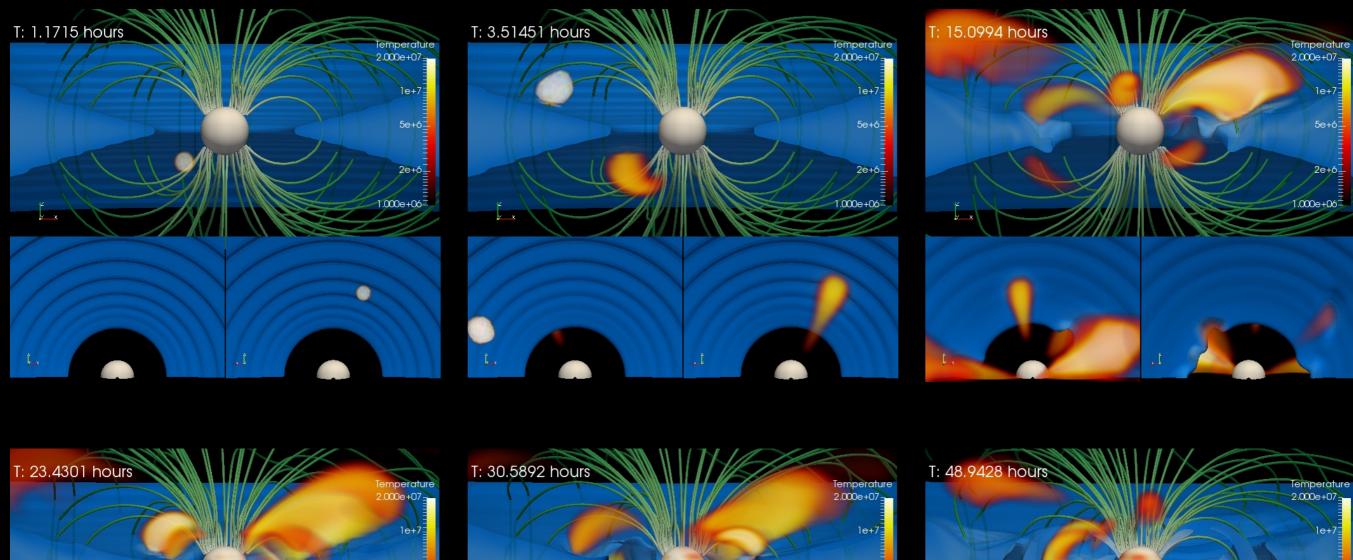
AIMS

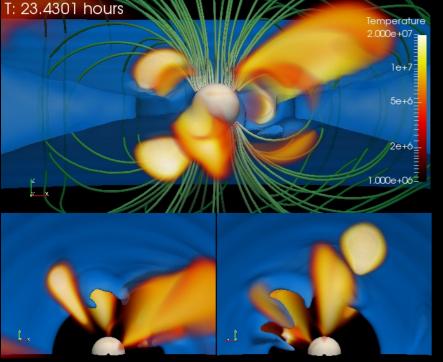
CTTSs are characterized by a strong flaring activity.

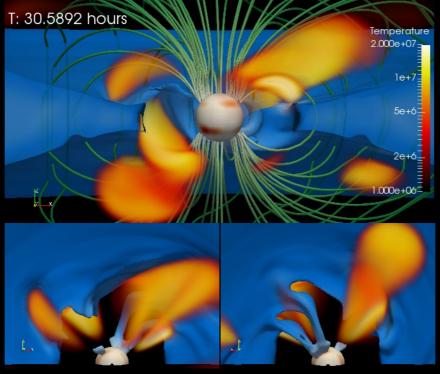
- This activity was observed during COUP campaign (Favata et al., 2005)
- Some flares can connect the disk to the star
- •Orlando et al. 2010 proved that a big energetic flare can perturb the disk and trigger accretion

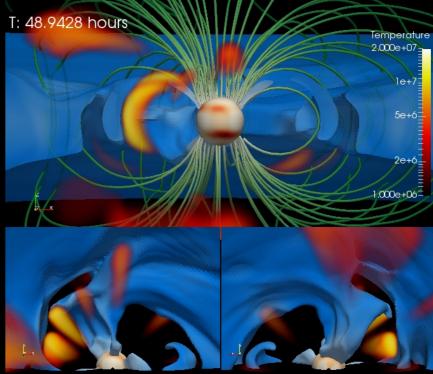


Can an intense flaring activity with low-to-medium energy flares trigger accretion?









RESULTS

A storm of flares determines:

- The formation of an extended hot corona which links the disk to the stellar surface.
- The formation of density structured accretion columns.
- Accretion events with accretion rate comparable with those inferred from X-ray observations.

Colombo et al. in prep

