



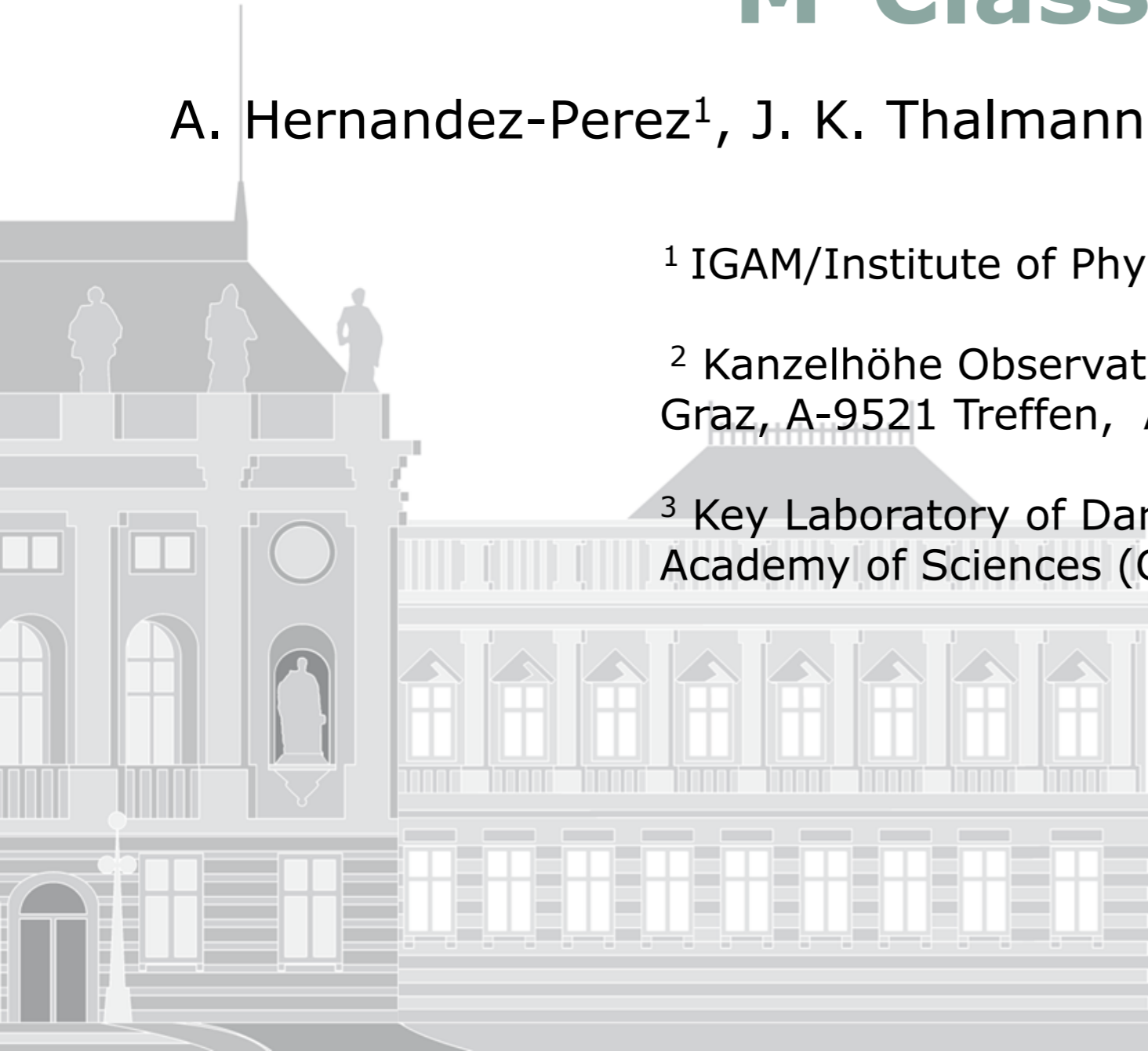
Studies of a circular-ribbon M-Class flare

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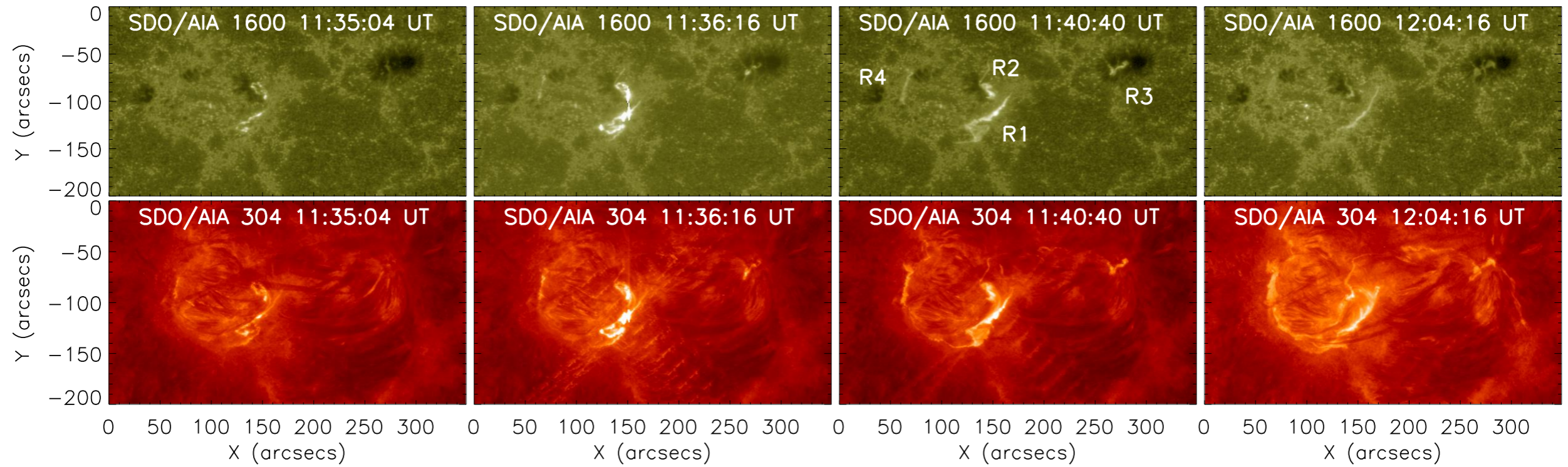
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³ Key Laboratory of Dark Matter and Space Astronomy. Academy of Sciences (CAS), 210008 Nanjing, China

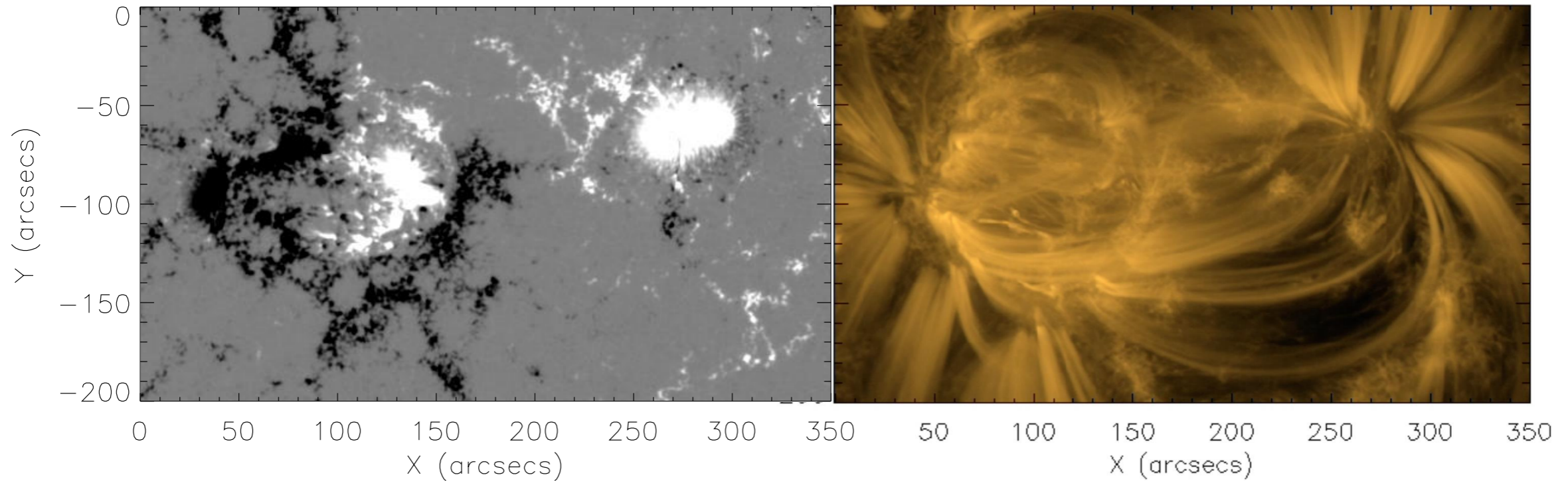


1. Ribbons and Magnetic Field Structure.

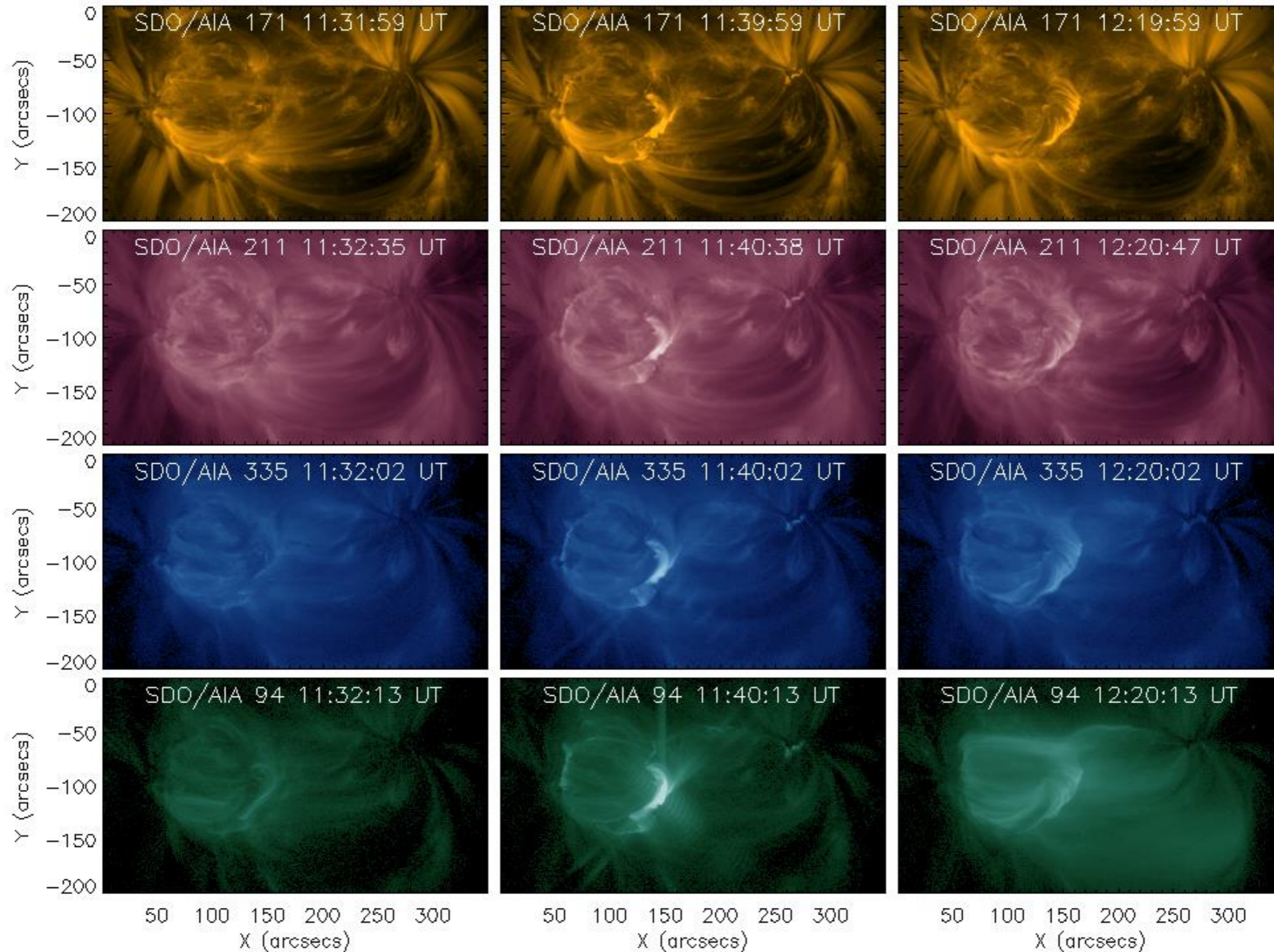


29-Jan-2015 11:41:52 UT

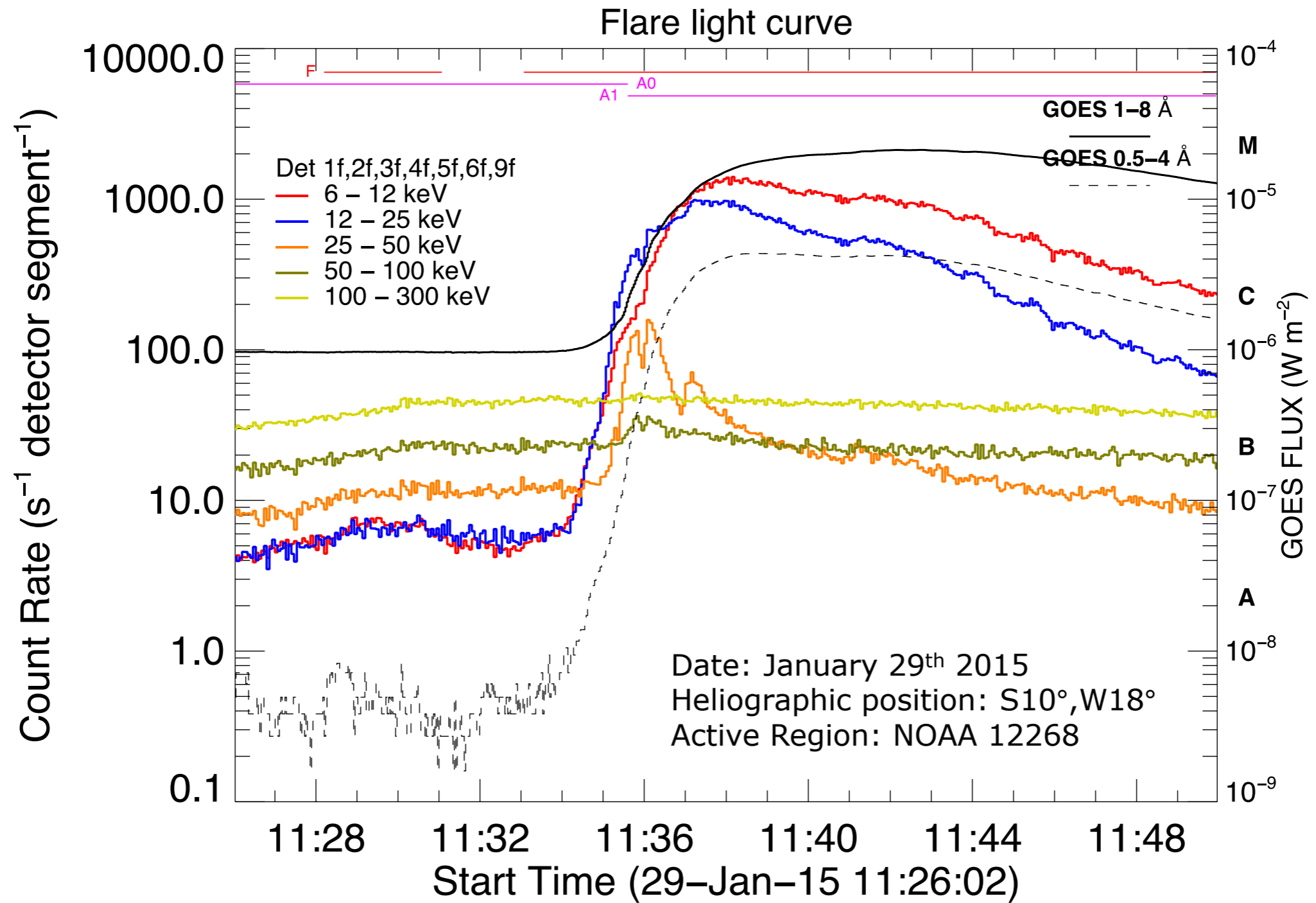
SDO/AIA 171 11:05:11 UT



2. EUV Evolution.



3. Flare Lightcurve.

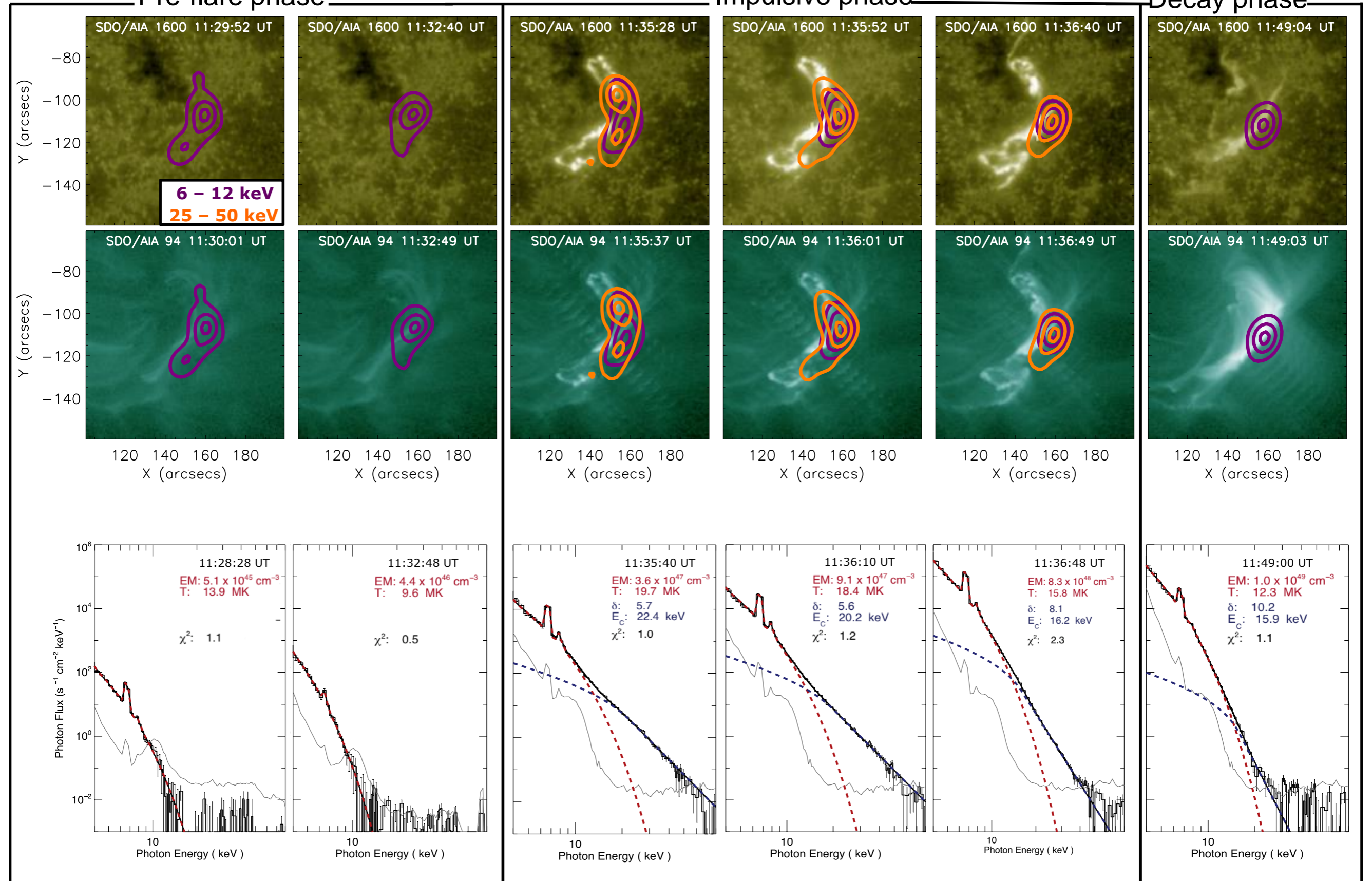


4. RHESSI X-Ray Emission

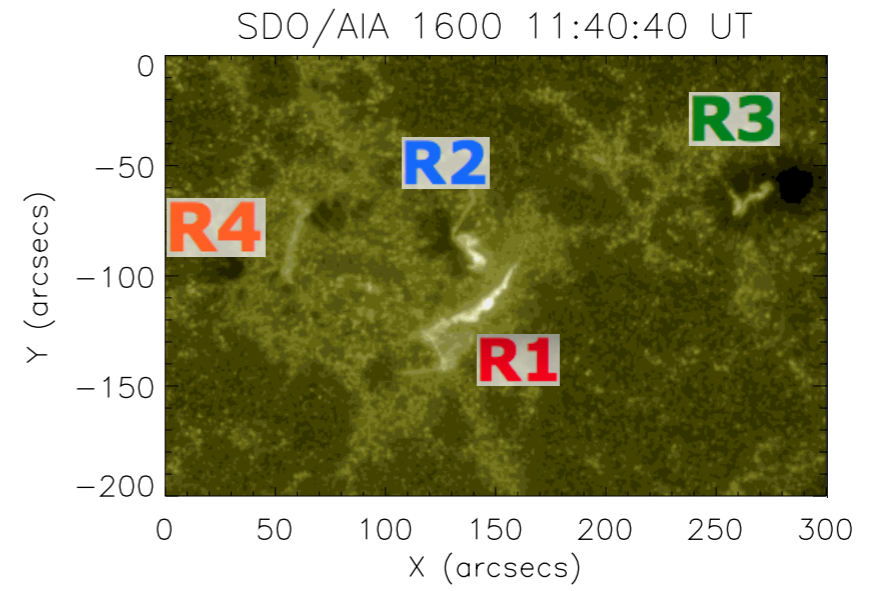
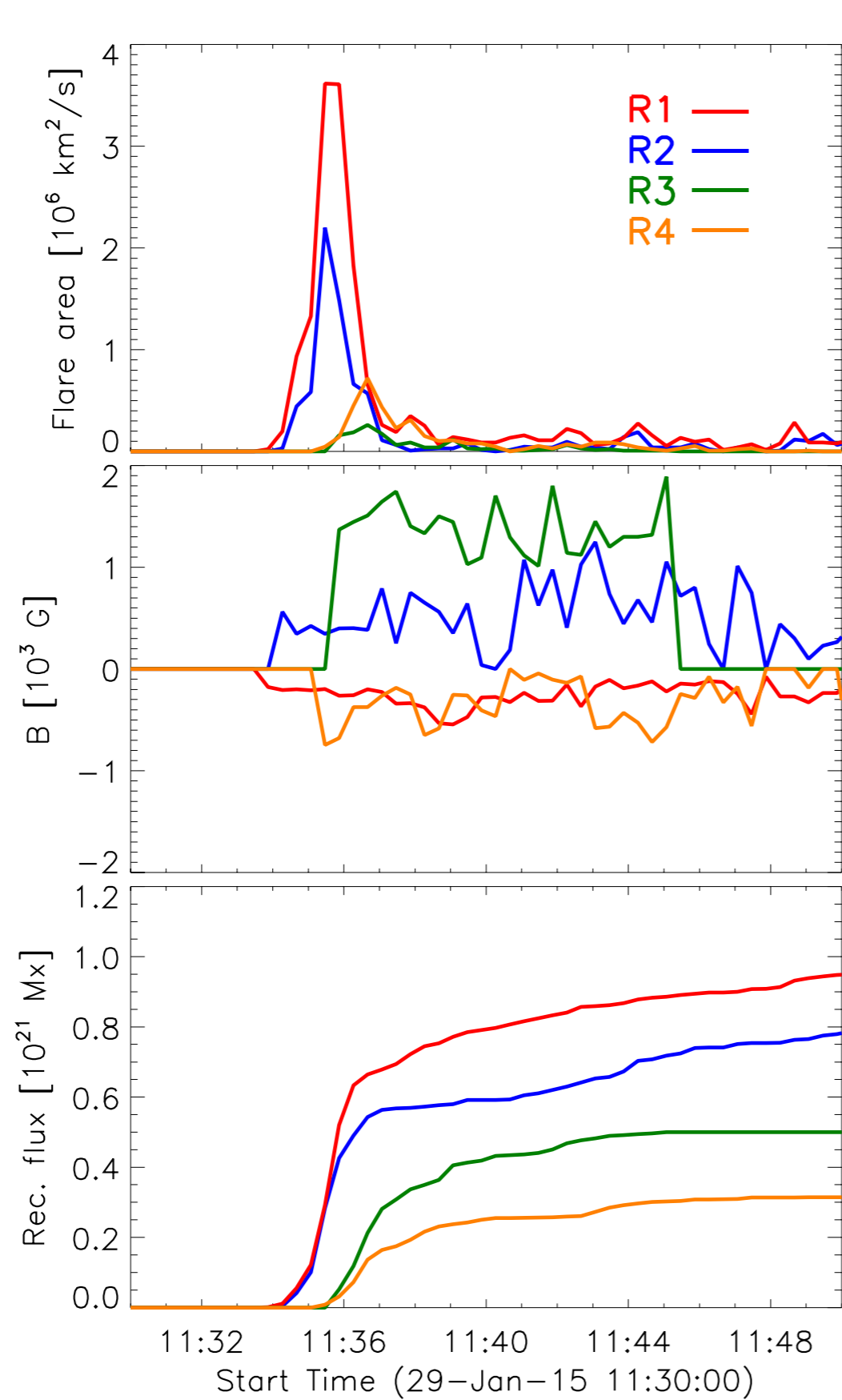
Pre-flare phase

Impulsive phase

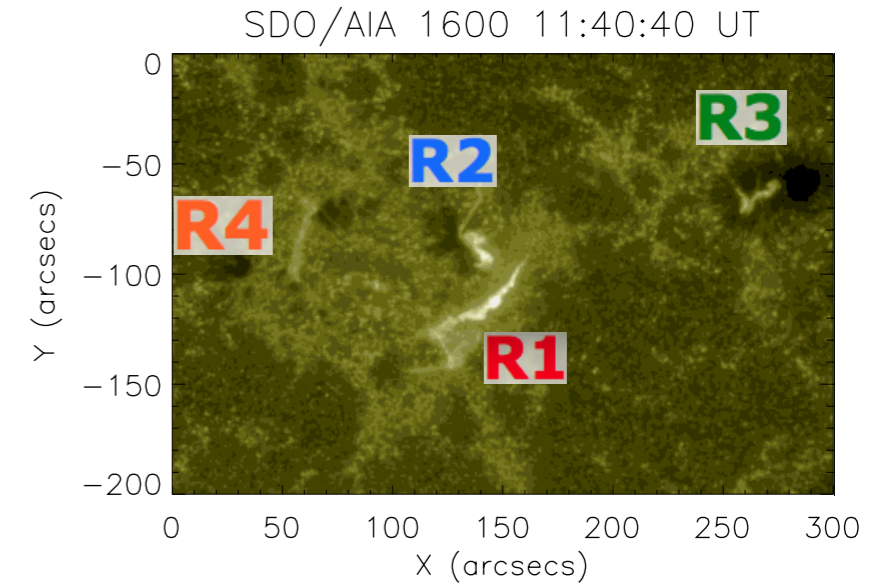
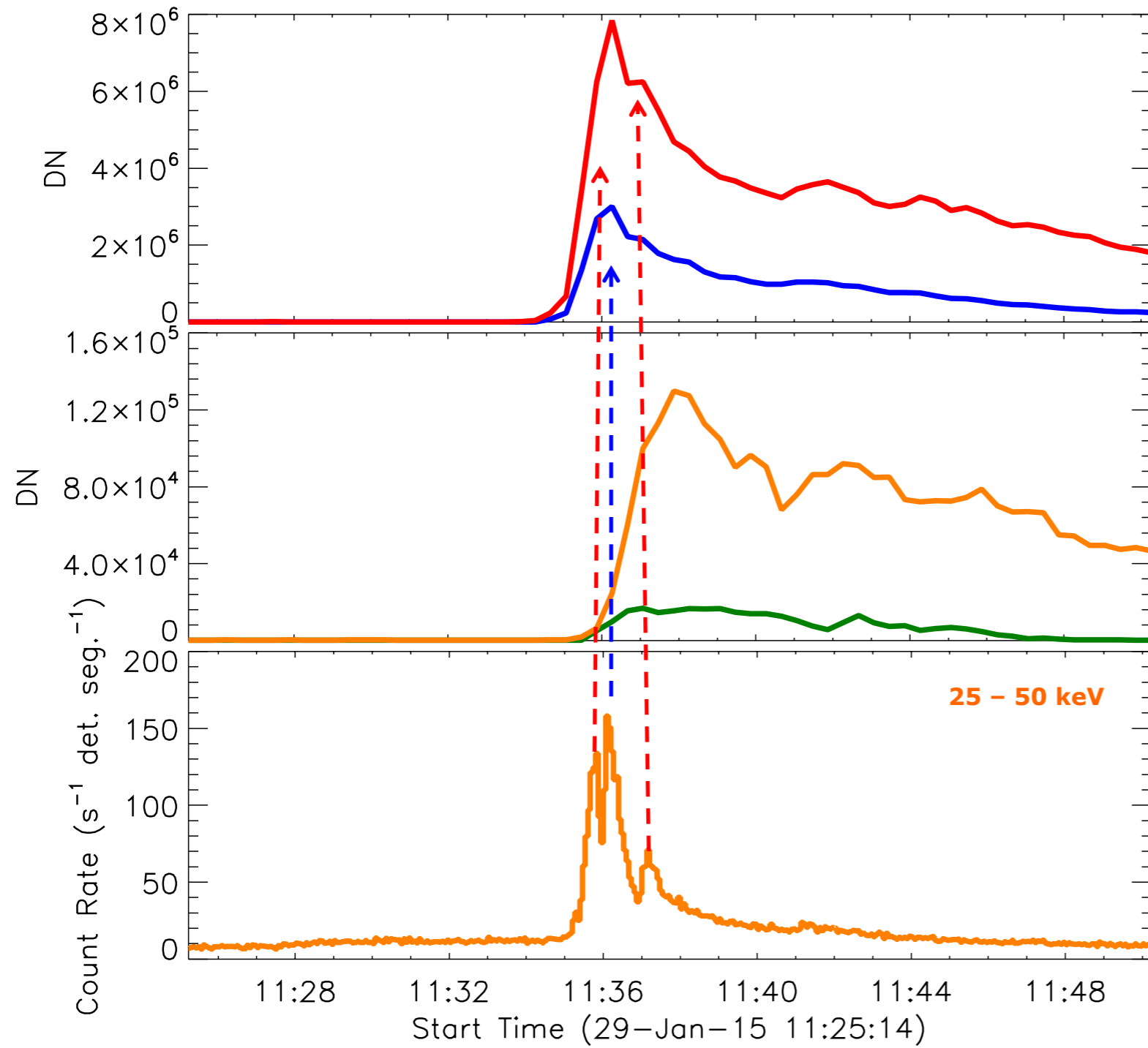
Decay phase



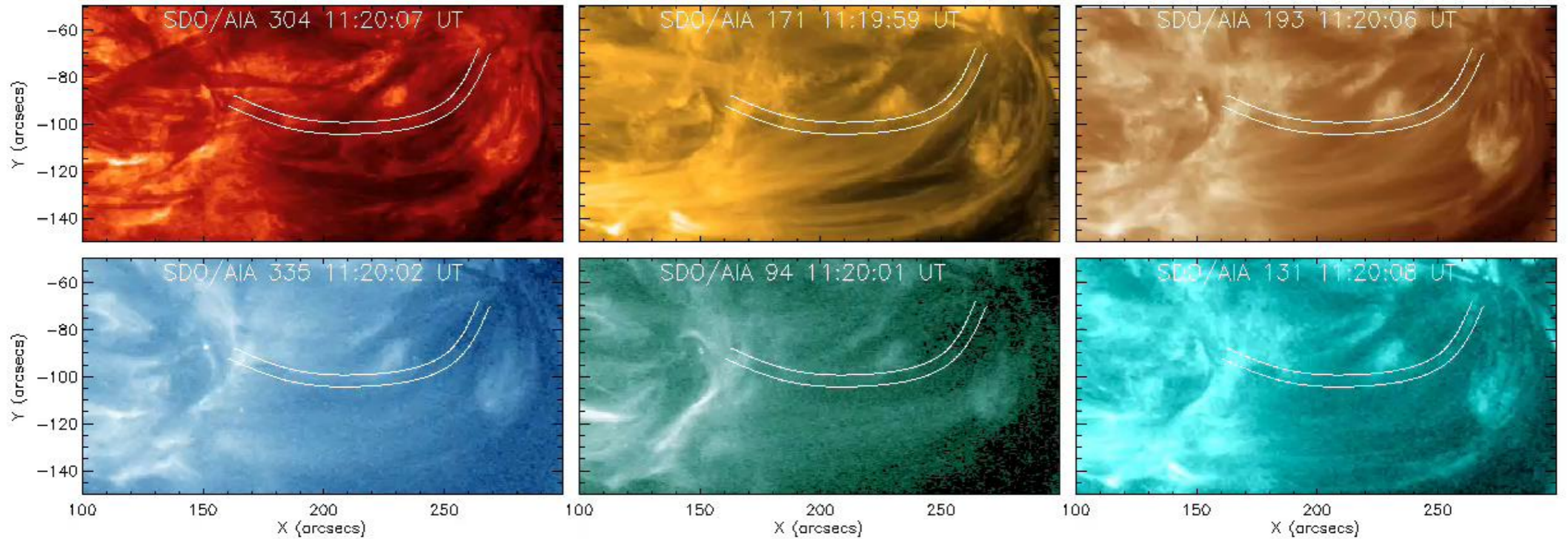
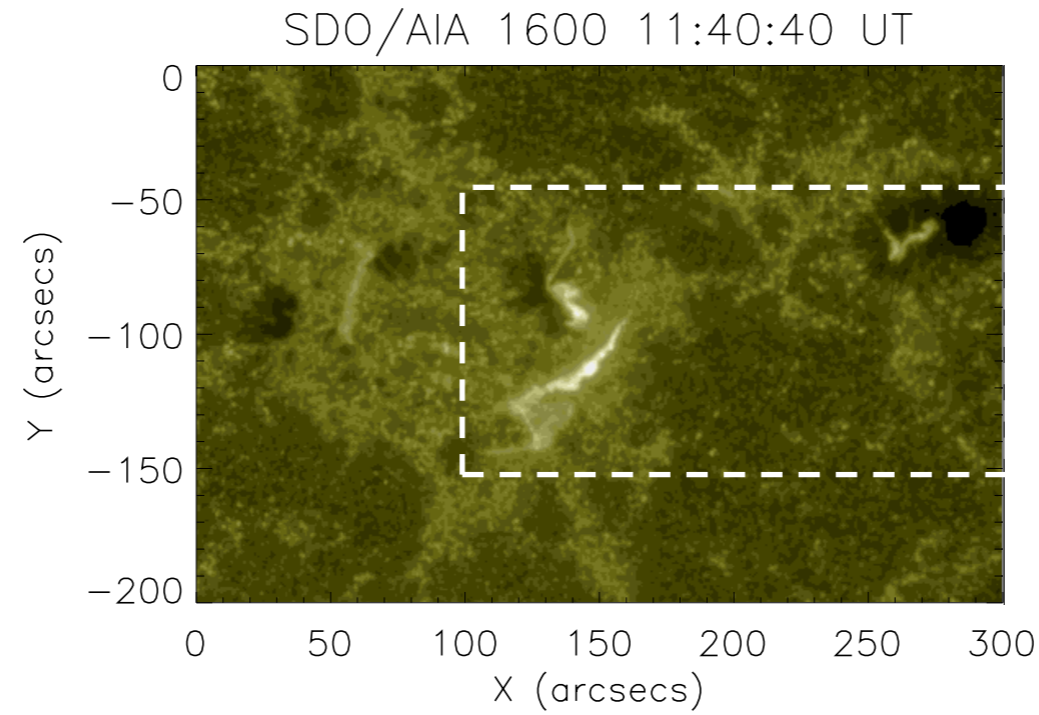
5. Reconnection Rates and RHESSI HXR.



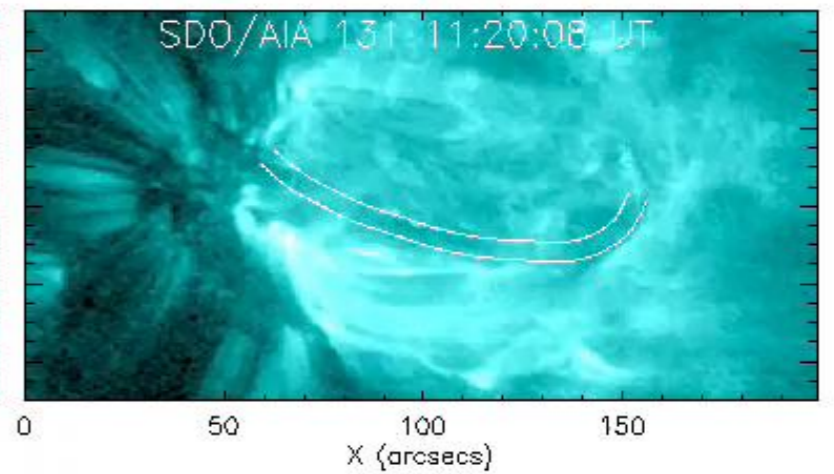
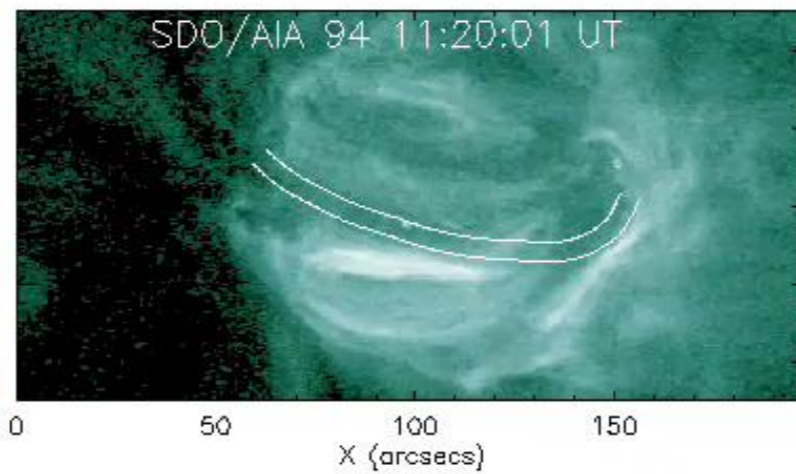
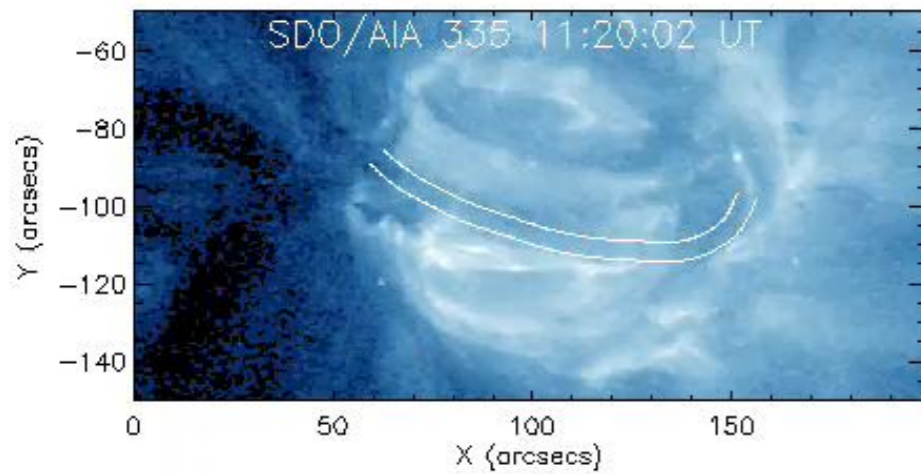
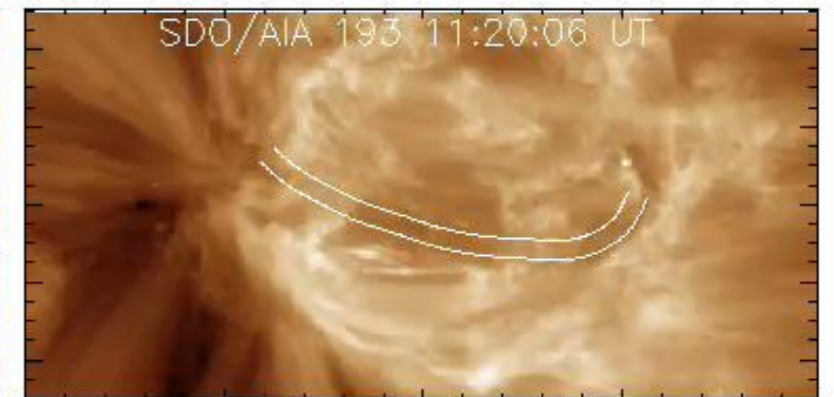
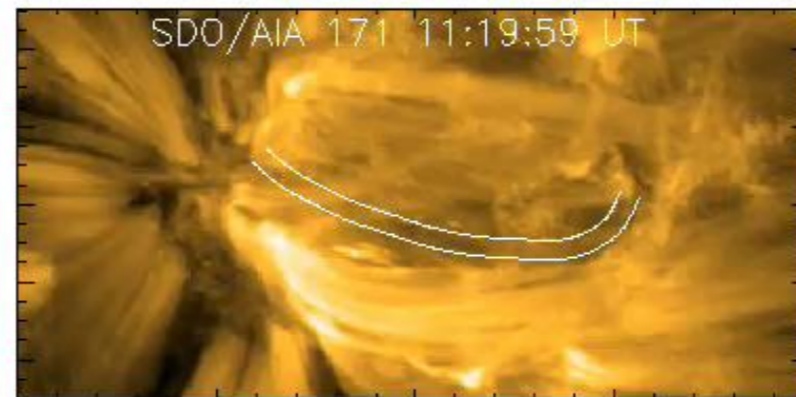
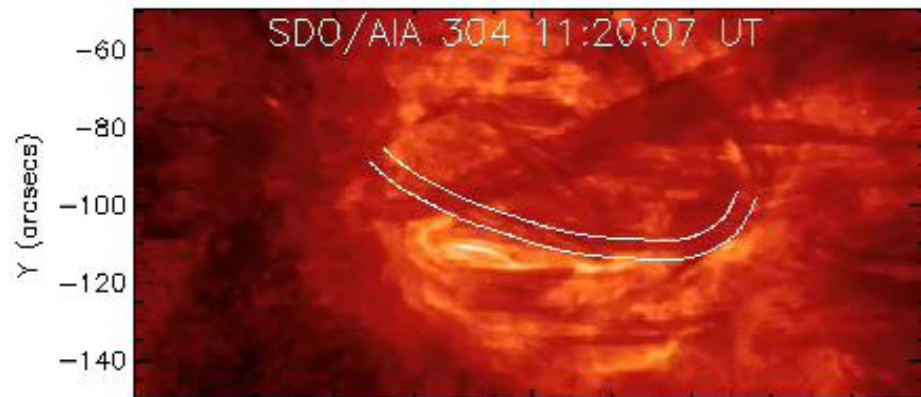
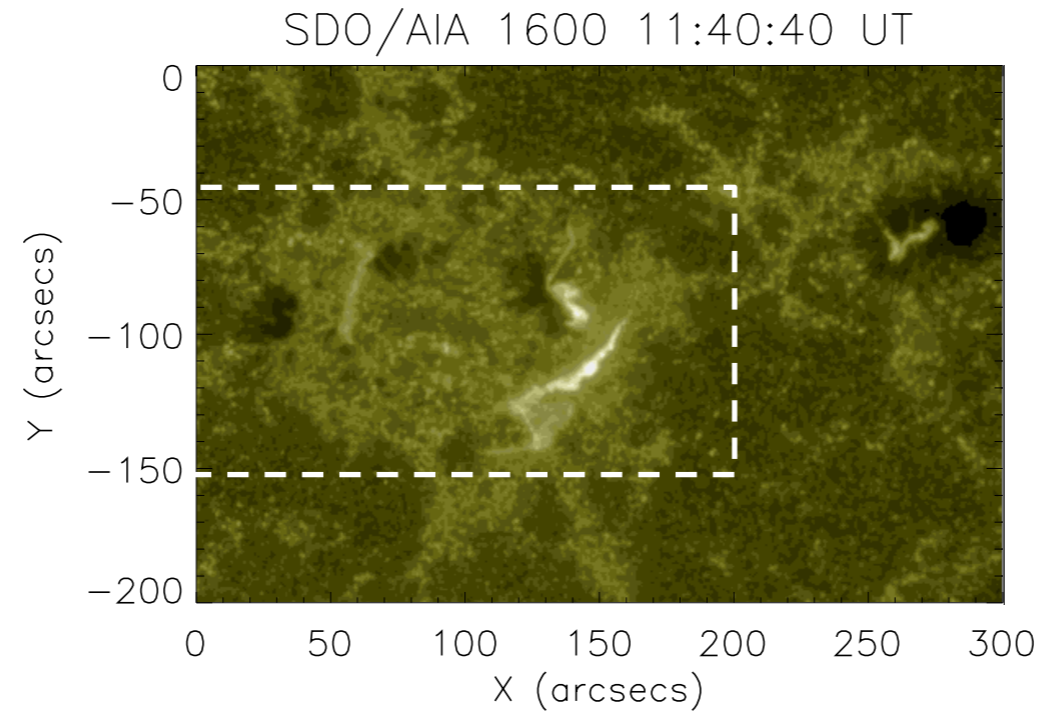
6. Comparison of the Lightcurves with RHESSI HXR flux.



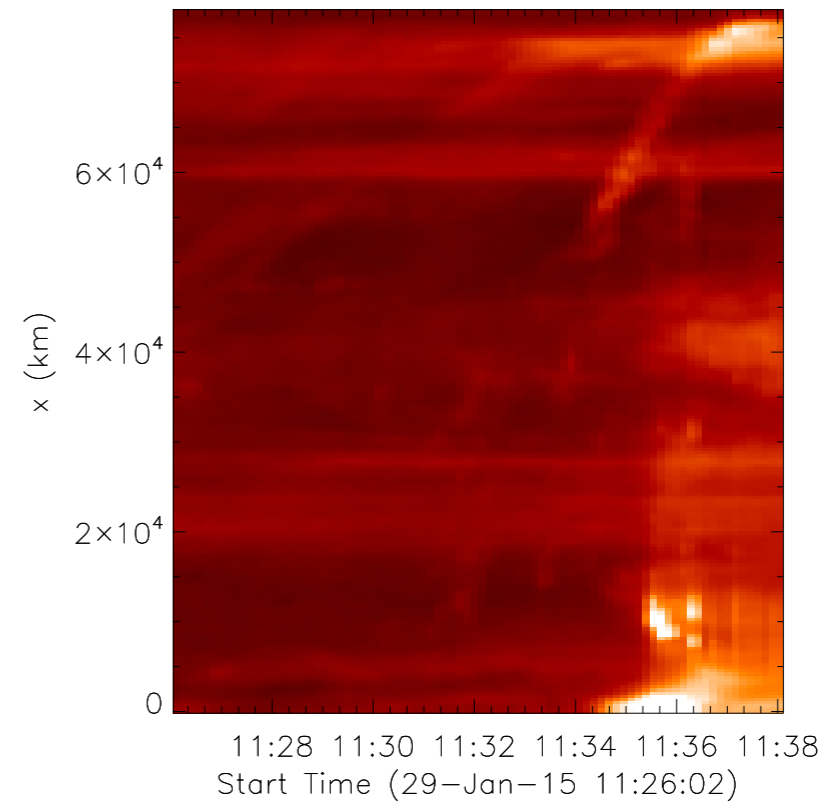
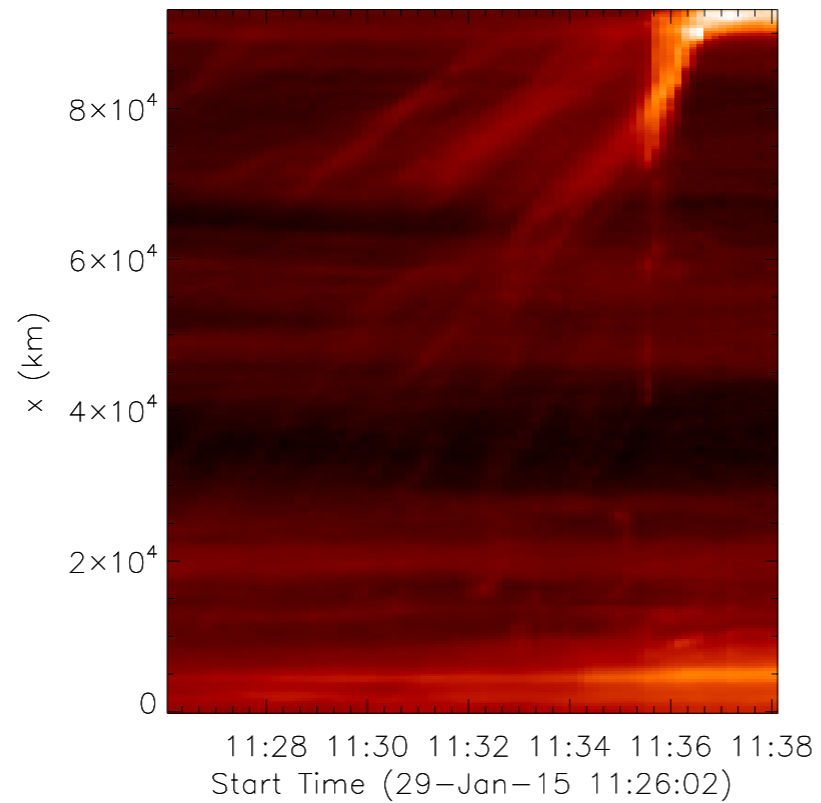
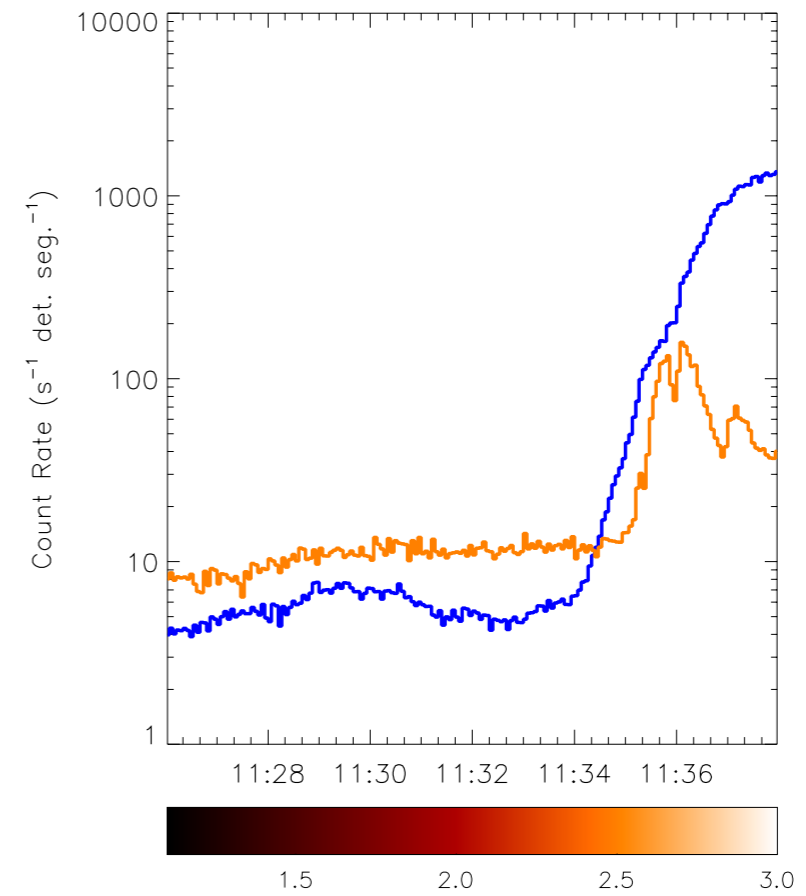
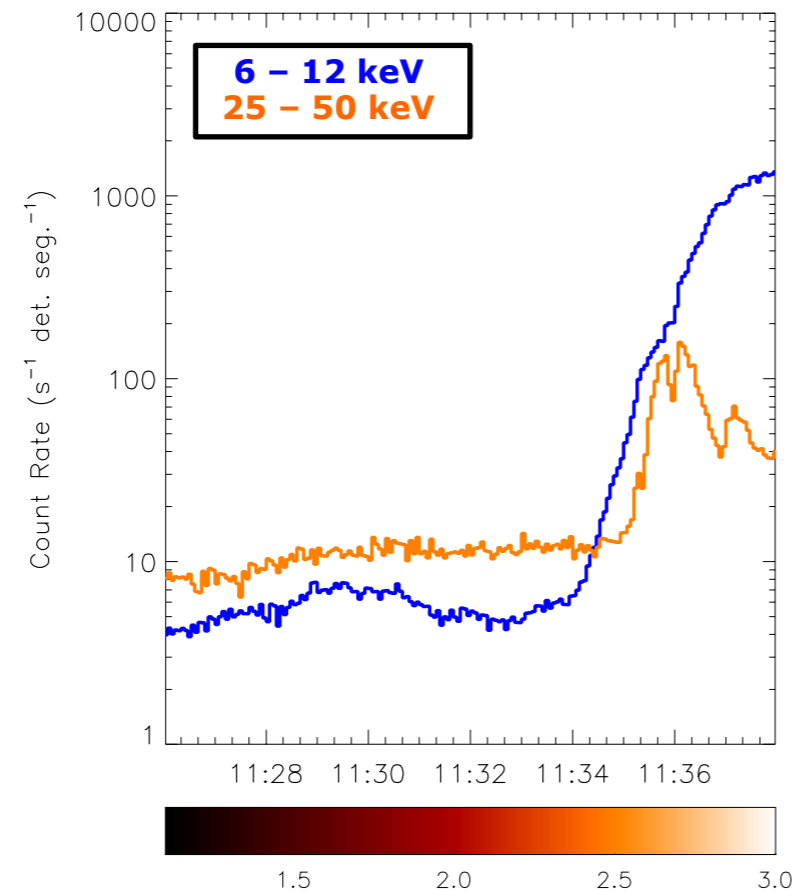
7. Connectivity.



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8. Time-distance plots.



9. Summary.

We have studied a circular ribbon flare that exhibited a quadrupolar ribbon structure in SDO/AIA 1600 Å.

RHESSI images show that there is thermal and non-thermal emission coming from the location where the primary ribbons form but not from the locations of the secondary ribbons.

The observed blobs seem to trigger the secondary ribbons.