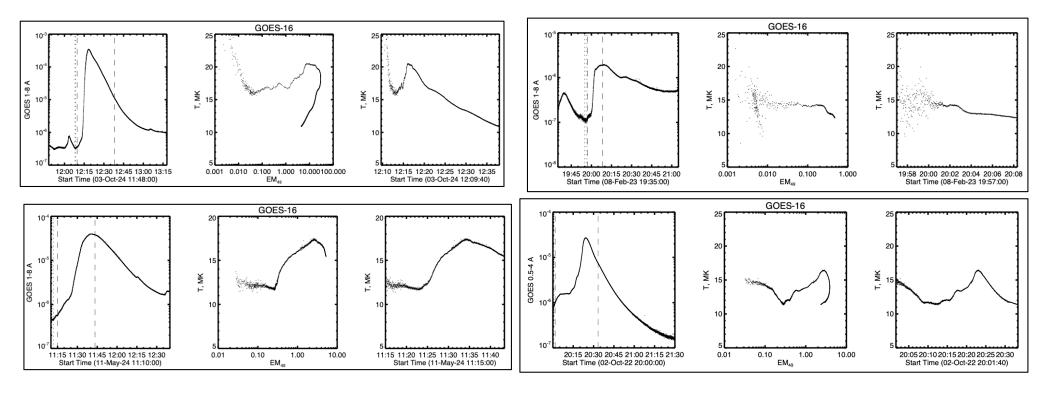
## In HOPE, is dT/dt interesting?

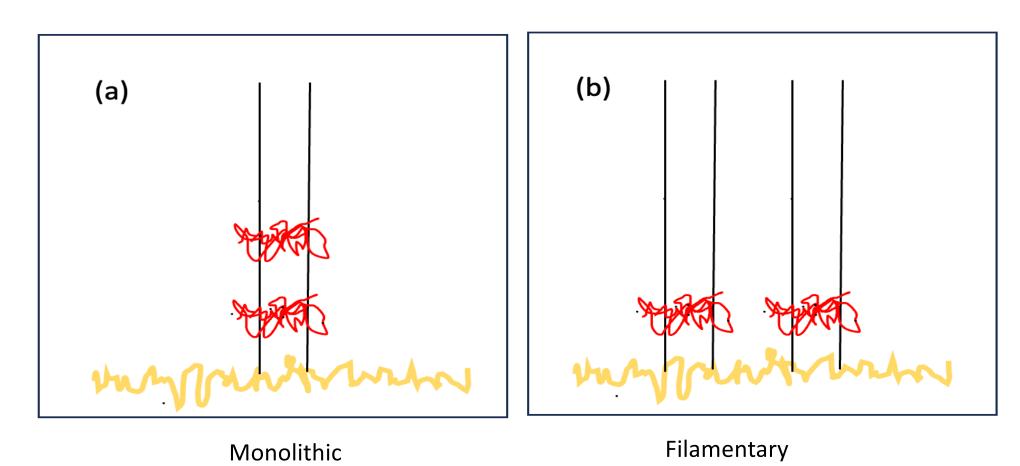
Hugh S. Hudson
U of Glasgow, UC Berkeley, WKU



The central panels here show the [DEM, T] correlations for the most recent four examples I've looked at:

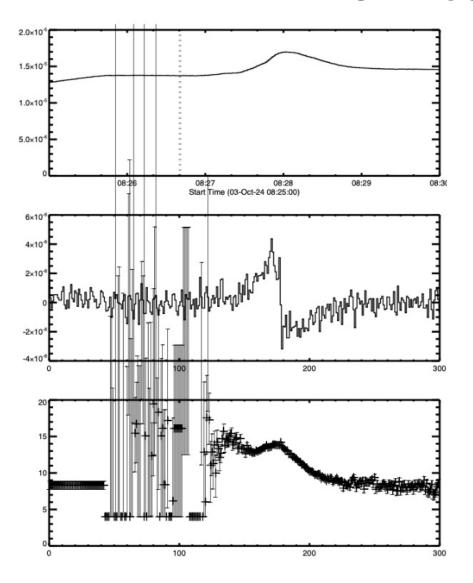
- The precursor invariably shows a "horizontal branch" in which T remains roughly constant
- For minor events, this hot onset can be hotter than the flare itself
- We do not know yet if this property extends to "Hyder events" (purely filament eruption)

## Sun-as-a-star limitations

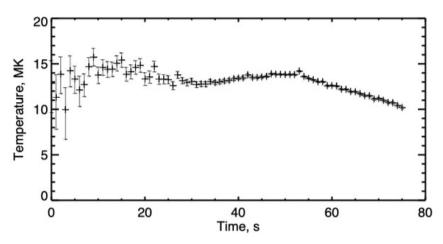


• Note that this dichotomy applies to *all* astronomical observations

## How to fit?



Fast event SOL2024-10-03T08 (M1.5, "feels-like" class C4)



## Possible models

- Heaviside function?
- Ramp up + level?
- Flare fast-rise/slow-decay?