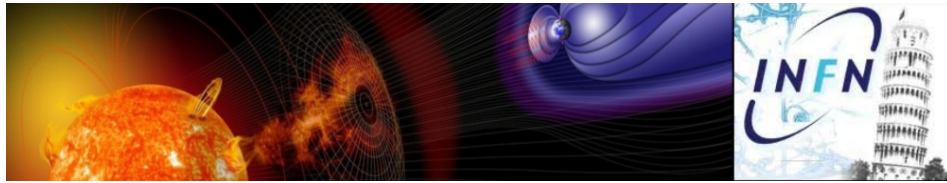


# RHESSI-20 Workshop: Preparing for the Next Decade in High-Energy Solar Physics Research



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## Flare hot onsets: linear emission-measure growth

*Thursday, 8 July 2021 17:40 (50 minutes)*

Flare X-ray emission prior to the impulsive phase typically corresponds to a GOES isothermal temperature in the range 10-15 MK, regardless of flare type. Hudson et al. demonstrate this in a small but representative sample of flare events, and confirm the GOES temperatures with RHESSI. This “hot onset” phase appears commonly in many if not all solar flares. We show here that it is characterized by a linear growth of emission measure with time, which may last for more than a minute. We have found no evidence for simple heating of any fixed plasma, in the sense of  $dT/dt > 0$ , and have extended the characterization to the 1-s sampling of the GOES-R/XRS.

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