



Campfires observed by EUI: What have we learned so far?

D. Berghmans, F. Auchére, A. Zhukov, M. Mierla, Y. Chen, H. Peter, N.K. Panesar, L.P. Chitta, P. Antolin, R. Aznar Cuadrado, H. Tian, Z. Hou, O. Podladchikova

Royal Observatory of Belgium, Université Paris-Saclay, MPI for Solar System Research, Lockheed Martin, University of St Andrews, PMOD-WRC

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HRIEUV 10x10 Mm2

HRIEUV 10x10 Mm2

HRIEUV 10x10 Mm2



Campfires = Quiet Sun EUV brightenings Observed by HRIEUV





HRIEUV 10x10 Mm2



AIA171 10x10 Mm2 (+1s)







AIA171 10x10 Mm2 (+0s)



HRIEUV 10x10 Mm2







campfires are quiet Sun EUV brightenings, similar but smaller/shorter than before

work by F. Auchere in Berghmans et al 2021: campfires in HRIEUV







campfires are quiet Sun EUV brightenings, similar but smaller/shorter than before





Chitta, Peter, Young, 2021 EUV bursts in SDO/AIA

Berghmans, Clette, Moses, 1998 Quiet sun brightenings by EIT







campfires are likely the smaller heating events in the flare family: picoflares



work by P. Antolin, in Berghmans et al 2021

solar orbiter

Campfires, what have we learned so far?



campfires are likely the smaller heating events in the flare family: picoflares







campfires are located at 1-4 Mm height, at the edge of the chromospheric network



Next presentation

Zhukov, Mierla, Auchere et al 2021, AA



campfires are located at 1-4 Mm height, at the edge of the chromospheric network





work by R. Aznar Cuadrado, in Berghmans et al 2021

Next presentation

Zhukov, Mierla, Auchere et al 2021, AA









using MuRAM simulations



Chen, Przybylski, Peter et al 2021, AA













Chen, Przybylski, Peter et al 2021, AA

Panesar et al 2021, ApJ Lett

Kahil, F. et al 2021, in preparation





What do we want to do in 2022?

- closer Solar Orbiter perihelion will result resolution 2x
- temperature & density by spectrographs
- comparison with other quiet Sun events: explosive events, blinkers, dots, etc
- what is the connection with the underlying photosphere/chromosphere?
- what do the microjets tell us about the reconnection process?





Thank you.

Questions:david@sidc.beReferences:http://sidc.be/eui/community/publications