



# LYRA status update

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Latest news



- ❑ ESA Science funding of PROBA2 ending end of the year
  - ❑ From 2019 onward: Funding by SSA + PRODEX
- ❑ Full reprocessing of LYRA data started
- ❑ Data archived at ESAC

# Instrument health



# Degradation

## □ Status as of August 15, 2018

Channel	Remaining signal
Unit 1	
Channel 1-1	65%
Channel 1-2	64%
Channel 1-3	60%
Channel 1-4	72%

Channel	Remaining signal
Unit 2	
Channel 2-1	<0.5%
Channel 2-2	<0.5%
Channel 2-3	1%
Channel 2-4	13%

Channel	Remaining signal
Unit 3	
Channel 3-1	57%
Channel 3-2	2%
Channel 3-3	10%
Channel 3-4	52%



# Update of the calibration

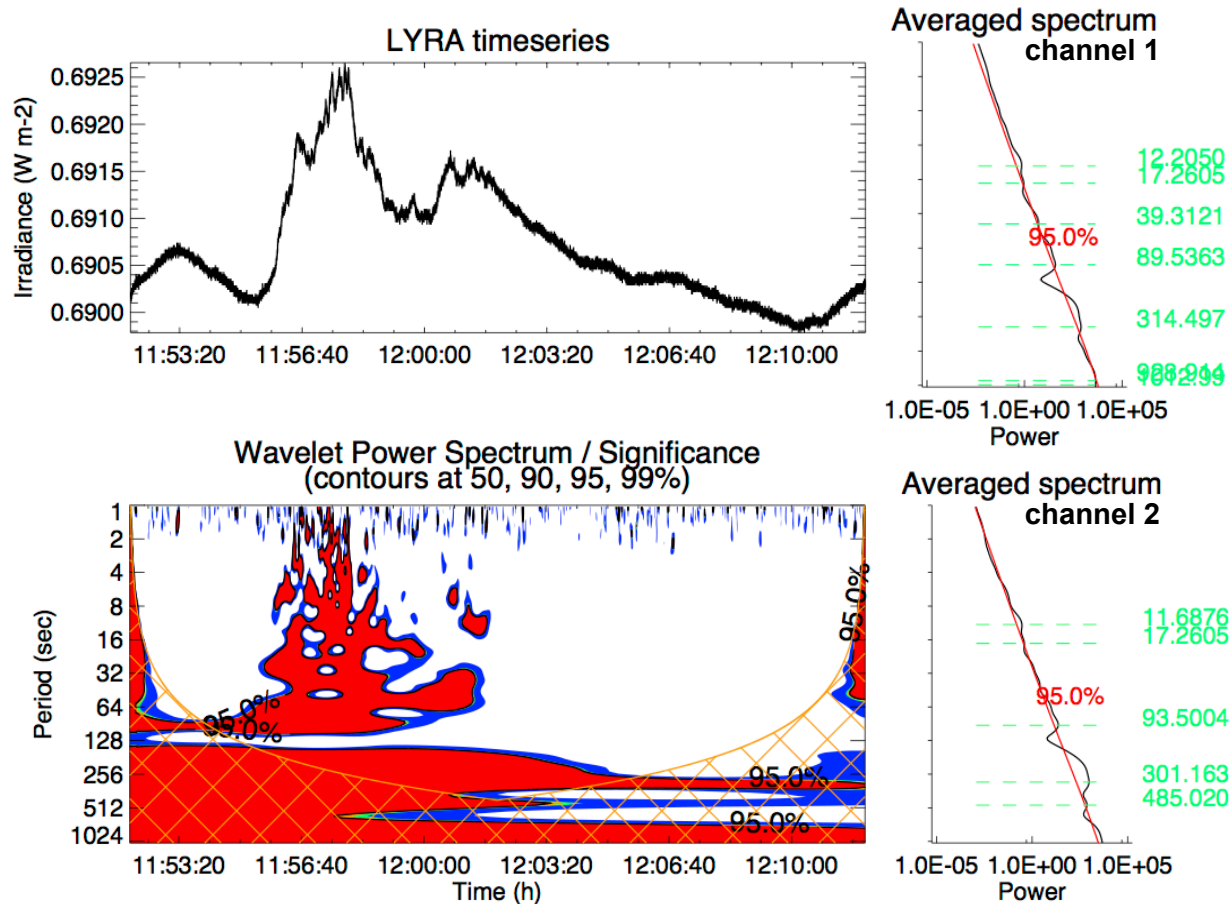
- ❑ The new corrections for dark current and degradation are now also available for units 1 and 3
- ❑ The update is taken into account in the reprocessing
- ❑ New SolarSoft routines for calibrating LYRA data under development



Latest results



# Quasi-periodic pulsations in solar flares



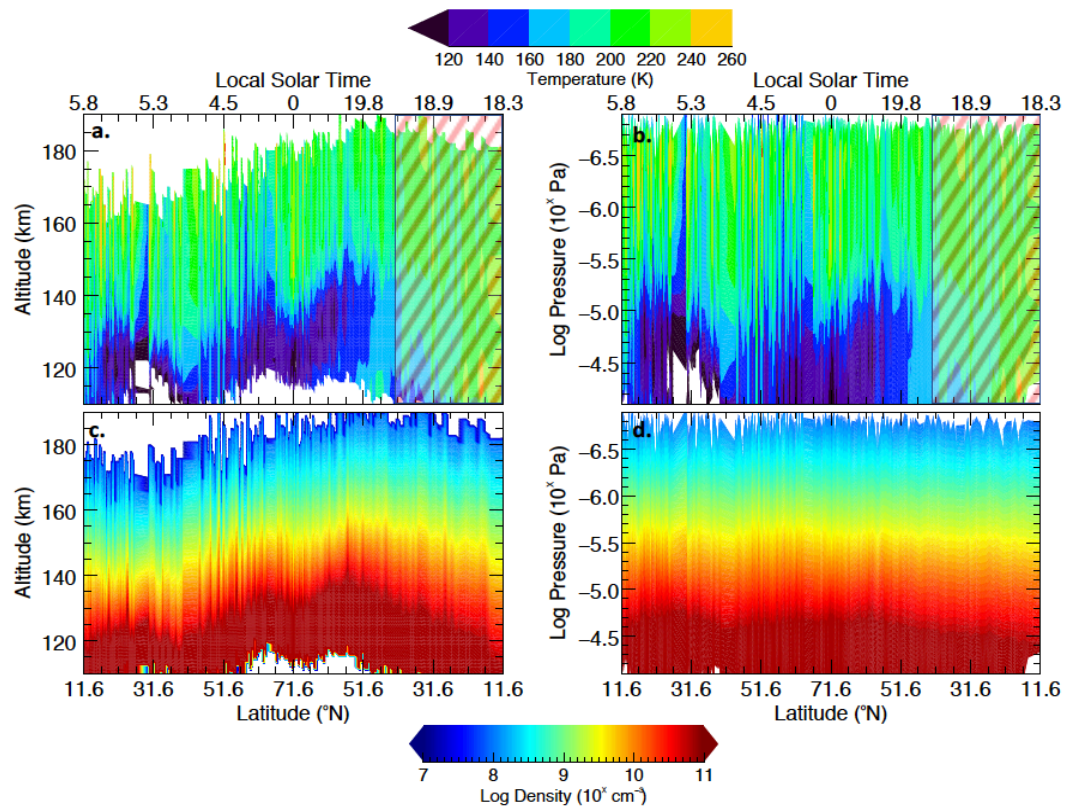
**Analysis of the big flares of September 2017 ongoing**



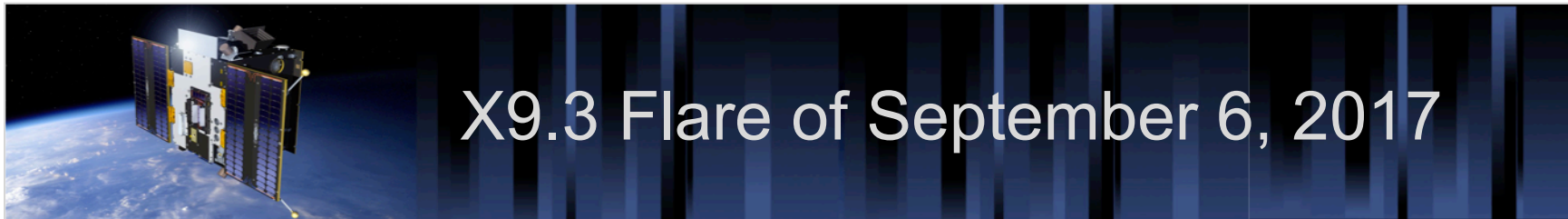


# Impact of solar variability on atmospheric densities and temperatures

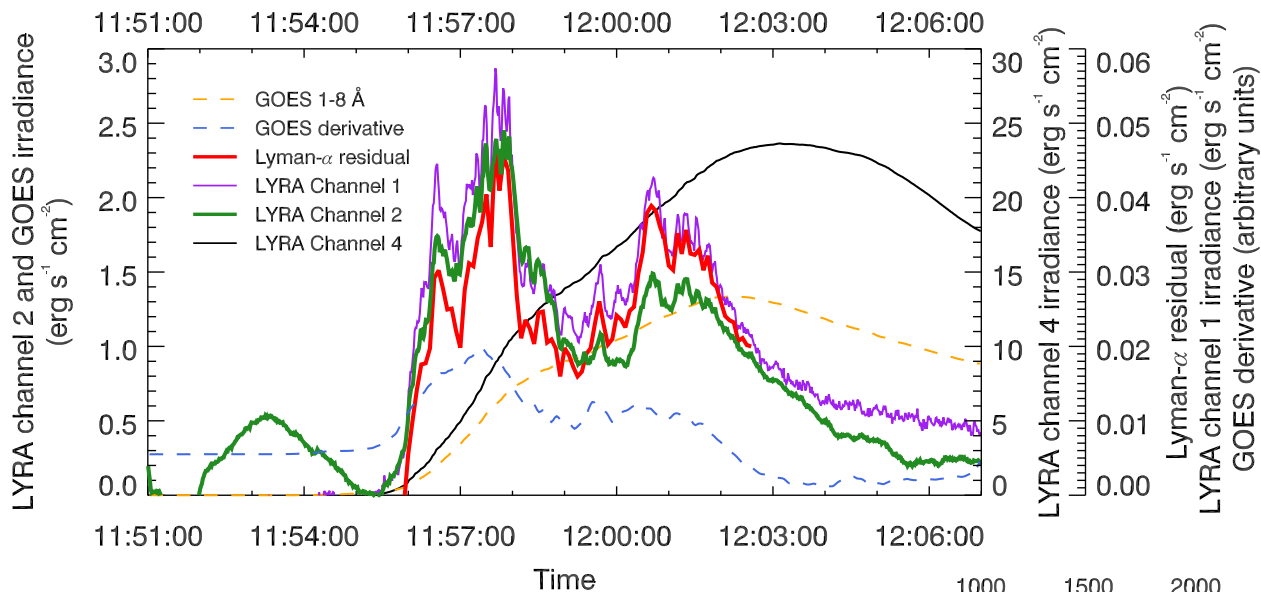
Thiemann et al. published in JGR



A new long-term backup campaign for analyzing the occultation is starting

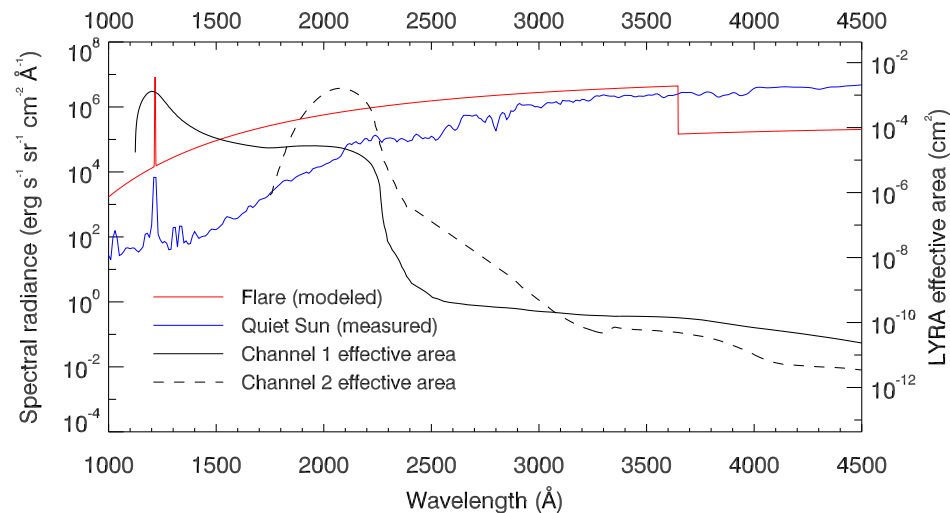


# X9.3 Flare of September 6, 2017



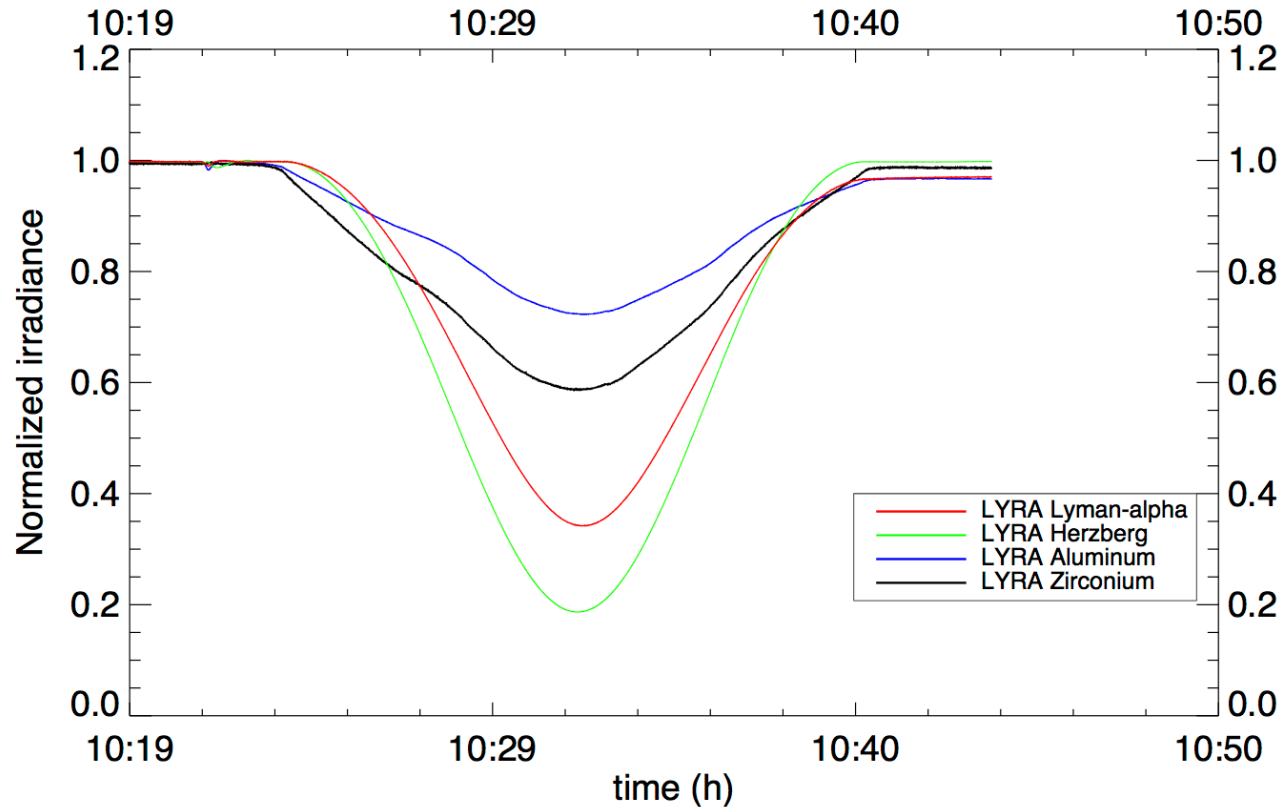
Dominique et al., 2018  
doi:10.3847/2041-8213/aaeace

- Detection of the emission in the Blamer continuum in channel 2 (Herzberg)
- "Cleaning" of the channel 1 (Lyman alpha)

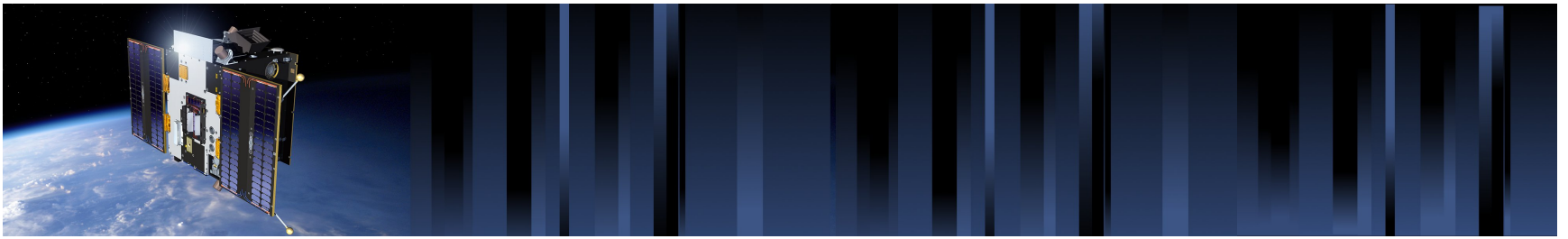




# Eclipse observations on July 13 and August 11



New analysis of the evolution of the Sun diameter on-going.



THANKS!



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