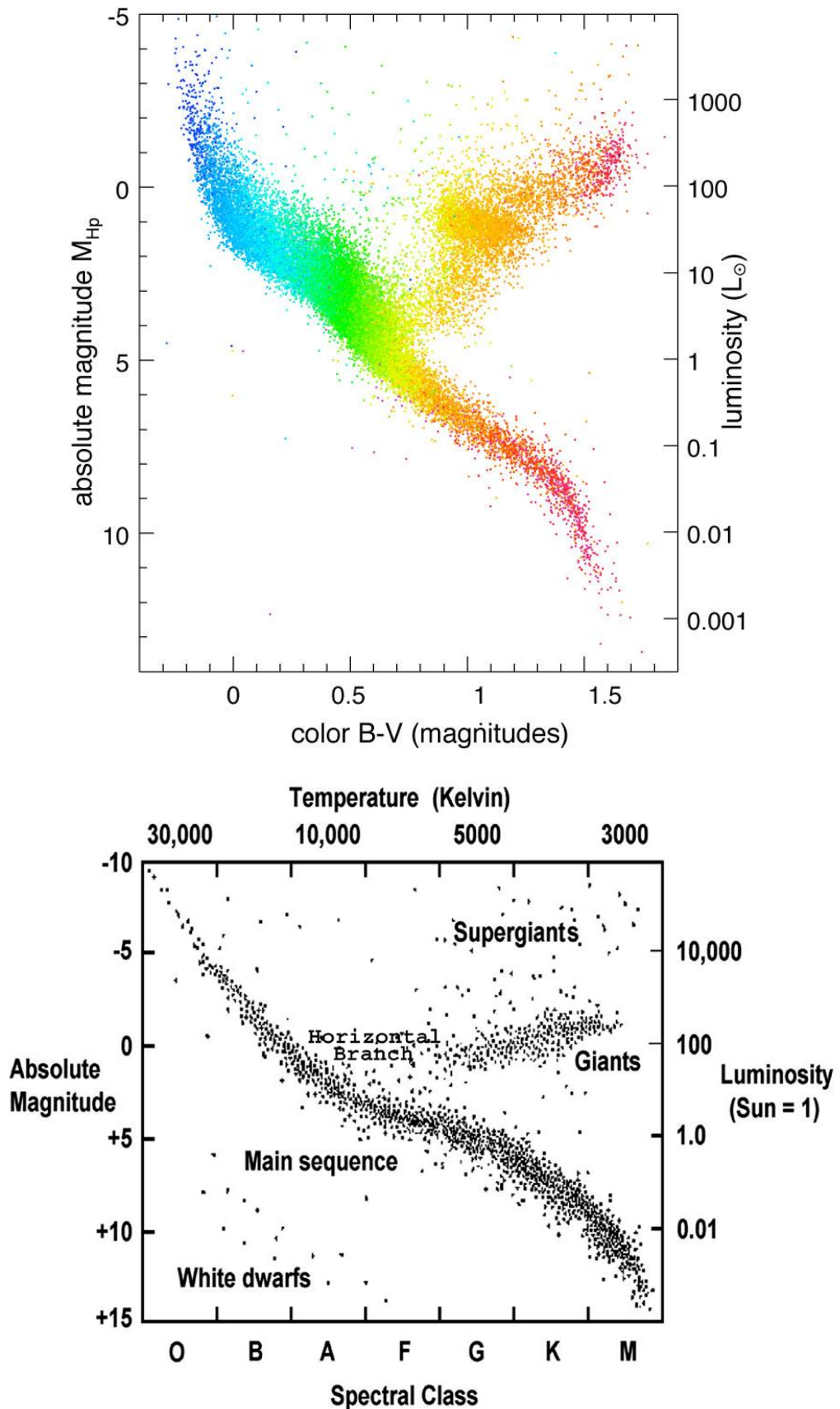


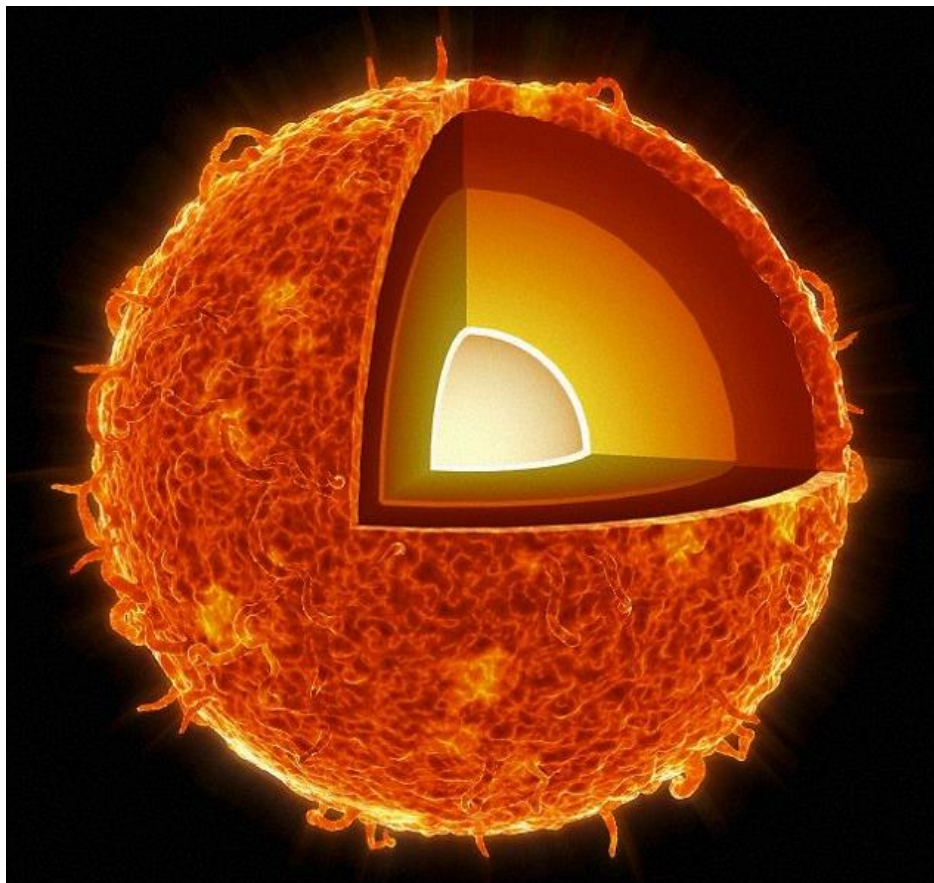
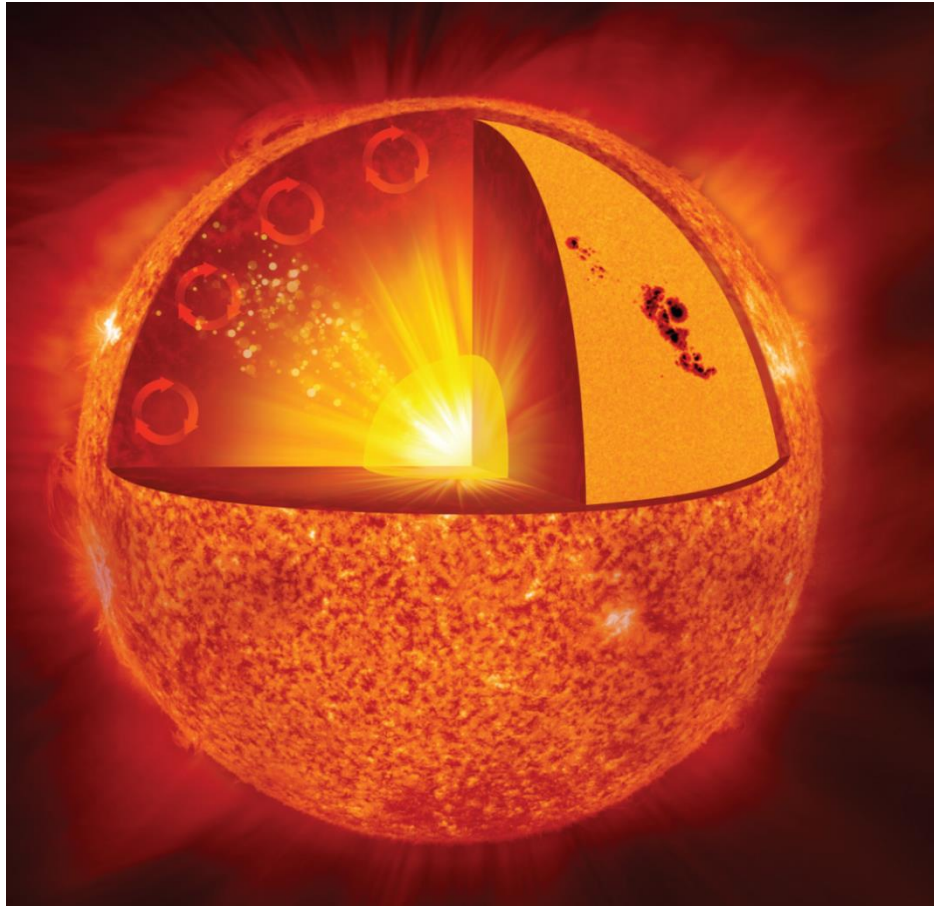
# ADVANCED SOLAR PHYSICS AND SPACE WEATHER

## List 0 (*preliminary*)

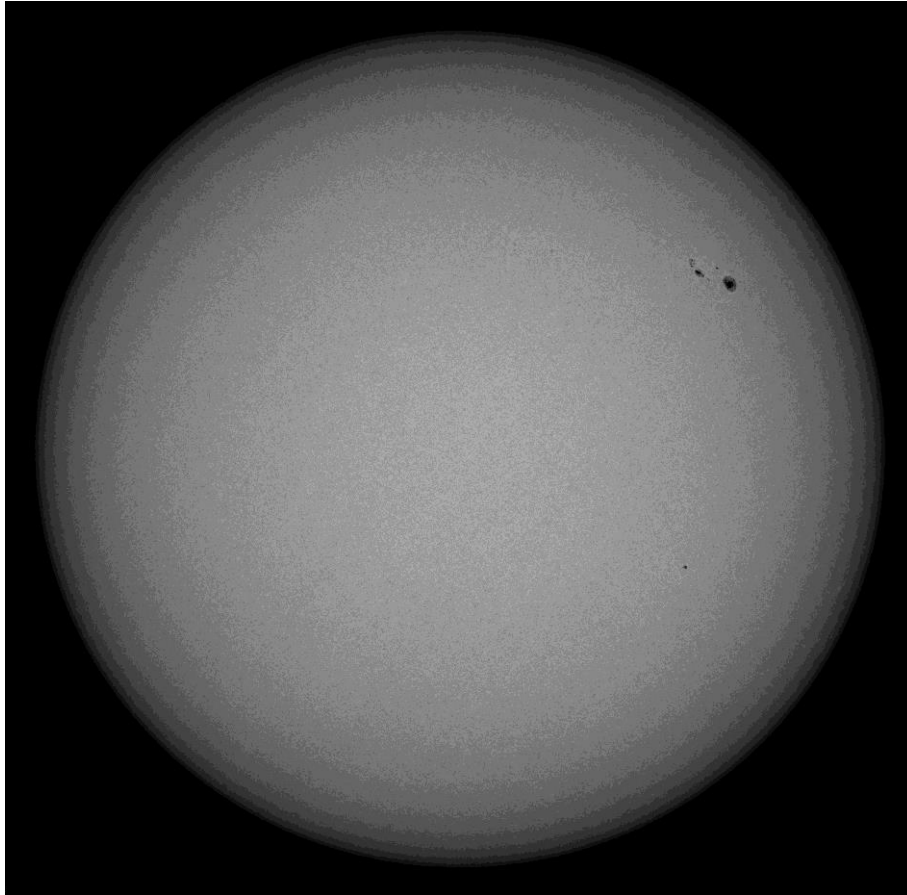
1. Characterize the position of the Sun on the H-R diagram. What does the evolution of the Sun look like on the H-R diagram? Discuss briefly the most important stages of solar evolution (on H-R diagram).



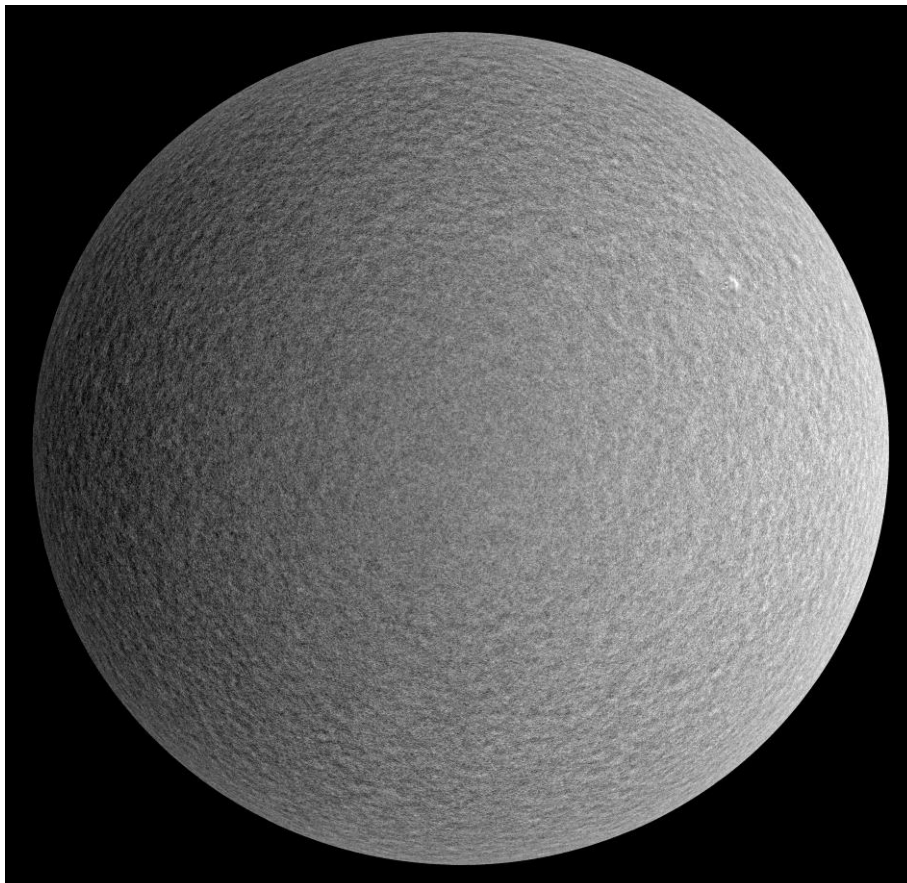
**2.** Internal structure of the Sun. Briefly characterize subsequent layers - starting from the internal (central) part of the Sun up to extensive/external atmosphere.



- 3.** The Sun in different wavelengths. Describe the images of the Sun (a - d).
- What types are these images or in what wavelengths were registered?
  - What is visible in this images?

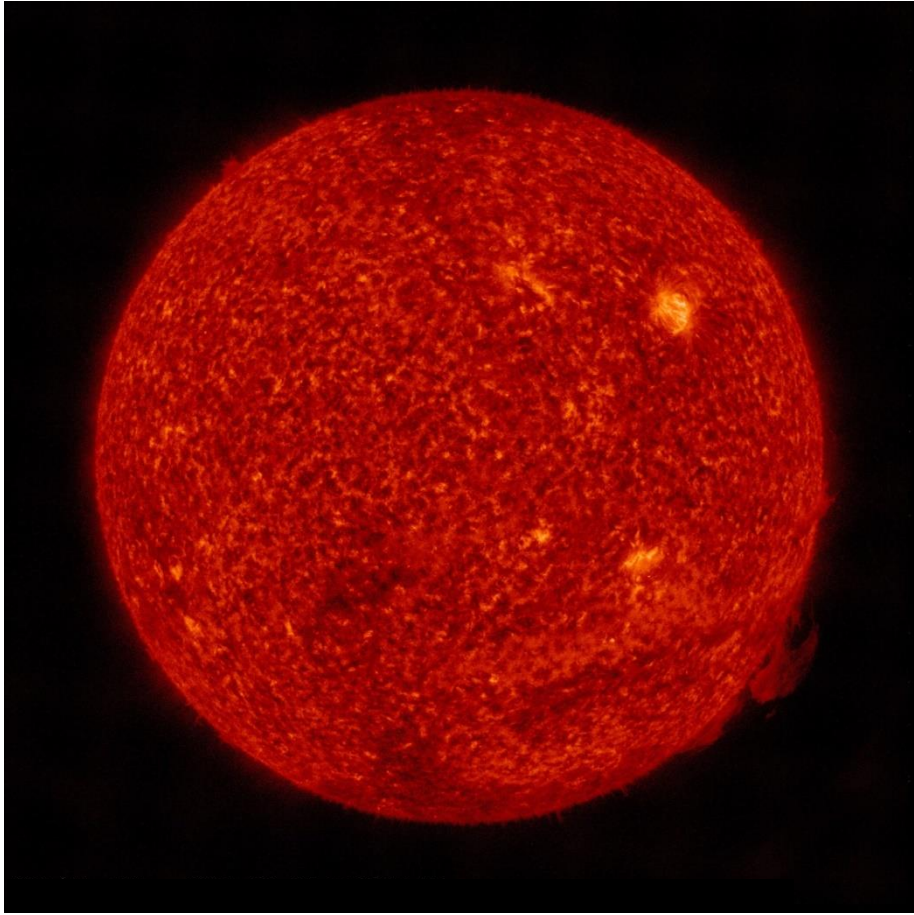


a)

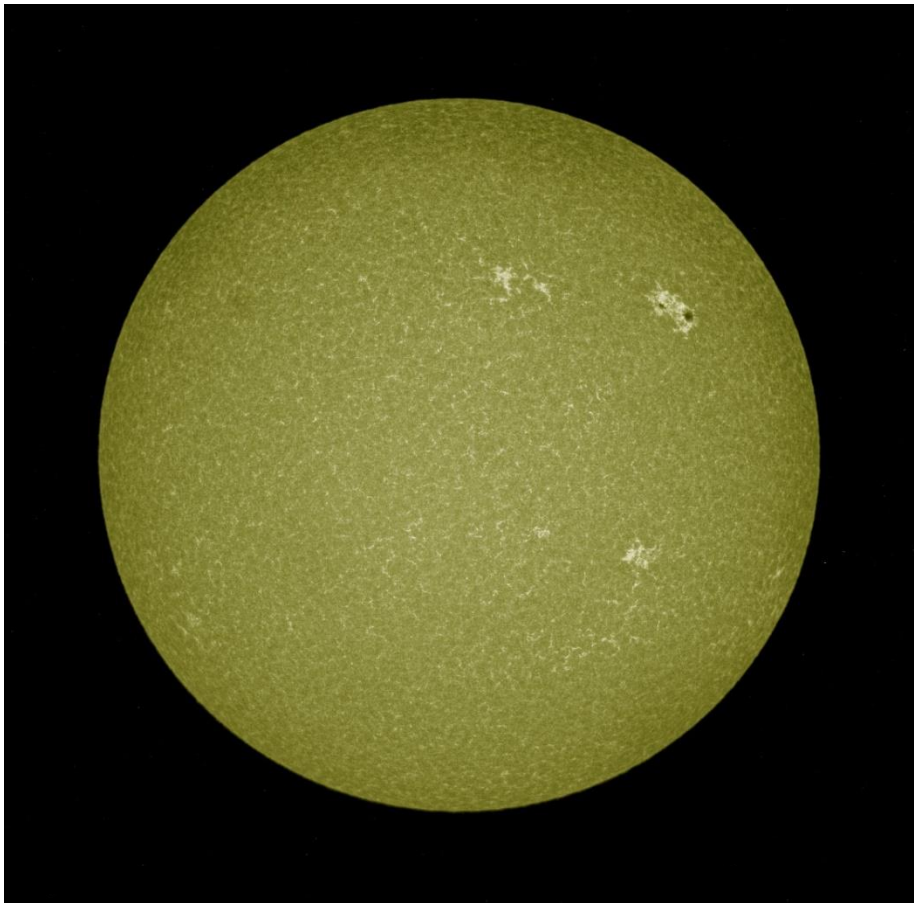


b)



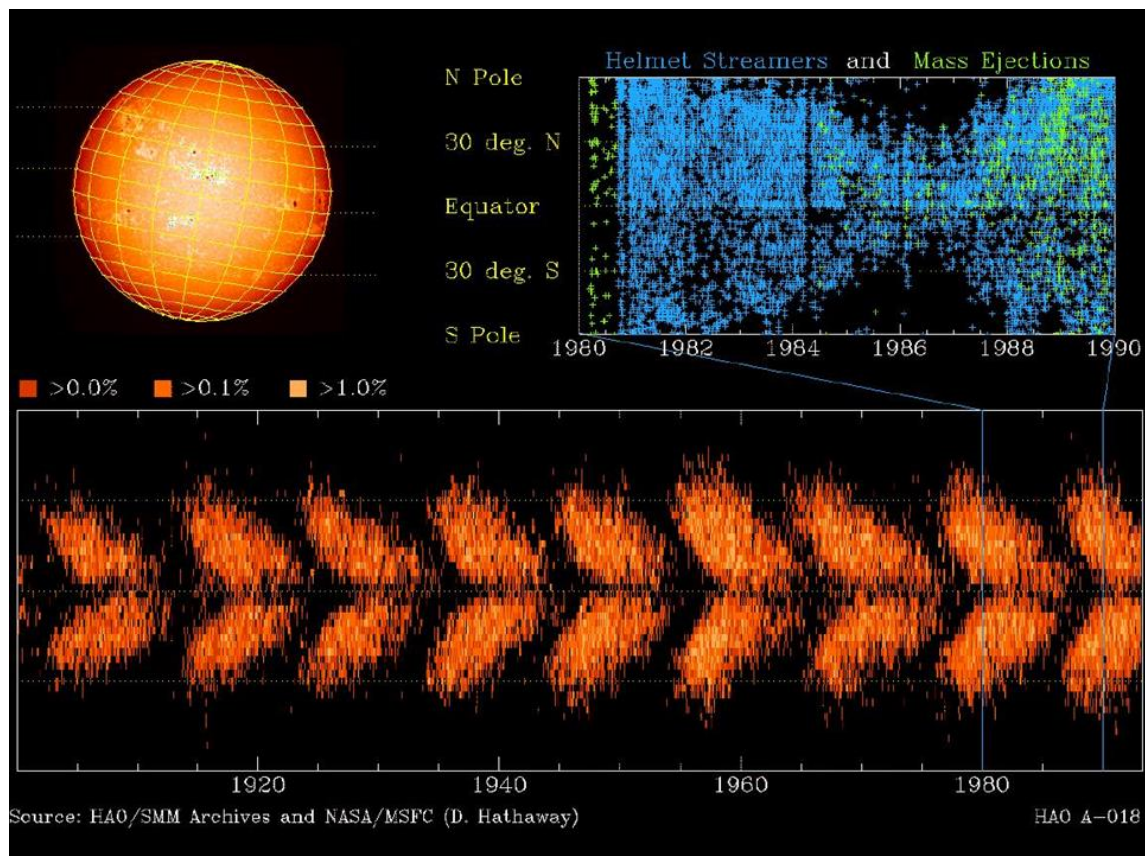


c)



d)

4. What is the so-called butterfly diagram in heliophysics? How is formed a characteristic butterfly pattern and how should it be interpreted? Can patterns of a different shape (than butterflies) be created?



*Krzysztof Radziszewski*