

## Peer Review

# Review of: "Solar Flare Spectroscopy at Pic du Midi Observatory (1956–1968) in the Frame of the International Geophysical Year"

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The manuscript is of great interest, particularly because there are very few articles that clearly document the history behind the development of new instruments and solar observation techniques. This type of contribution is especially valuable to the scientific community, as it provides essential context for technological advancements by linking them to their experimental and observational origins. Below are several specific comments that I believe could strengthen the content and presentation of the article:

1. **Manuscript structure:** I suggest adding, at the end of the introduction, a paragraph that briefly outlines the content and purpose of each section. This would serve as a guide for the reader and help clarify the narrative flow.
2. **Consistency in notation:** There is a lack of uniformity in the terminology used to refer to instruments throughout the text. For example, on page 4, both "*4-metre solar spectrograph*" and "*4 m solar spectrograph*" appear. I recommend choosing one of these forms and applying it consistently across the entire manuscript.
3. **Conceptual clarity:** Not all readers will be familiar with technical terms such as *ciloscope* or *spectrograph*. It would be helpful to include a brief description of these instruments: what their function is, what type of data they produce, and, in general terms, how that data is interpreted. This would enrich the text and make it more accessible to a broader audience, including early-career researchers or those from adjacent fields.
4. **Figure authenticity:** Regarding Figures 6, 13, and 14, it would be advisable to clarify whether they were created by the authors. If so, this should be stated explicitly in the figure captions. In addition, I

suggest avoiding abbreviations such as “OP” unless they are defined upon first mention; using the full name of the institution or observatory is preferable for clarity.

**5. Conclusions and scientific impact:** The conclusions could be strengthened by more explicitly highlighting the impact that the observations at Pic du Midi had on the development of later instruments and techniques. How did these observations influence contemporary observing strategies? Did they lead to improvements in data precision, a better understanding of solar phenomena, or the emergence of new lines of research? Addressing these questions would help underscore the historical and scientific significance of the work presented.

**6. Citation Formatting:** There is an issue with citation formatting. Each citation appears to include an unintended character at the beginning.

Overall, I believe the article is a valuable contribution, and with these improvements, it can achieve an even higher level of clarity and depth.

## **Declarations**

**Potential competing interests:** No potential competing interests to declare.