

Reply to the 'Comment on egusphere-2026-3506' by Anonymous Referee #2, 07 Sep 2026

The authors present a manuscript discussing the origin and terminology of Stream Interaction Regions (SIRs) versus Corrotating Interaction Regions (CIRs) and attempt to introduce a new term for “special/super” CIRs: SCIRs. I believe the discussion regarding SIRs and CIRs is important due to the existing confusion around their definitions in the community, and a clarification is definitely needed. However, the introduction of a new term does not aid this goal. With some revisions, I believe this manuscript would make a valuable contribution to the community.

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- We have deleted reference to a SCIR now.

Major Comments:

- **General Comment:** I agree that the terms SIR and CIR are poorly defined and understood in the community, which leads to confusion. This warrants a community-wide discussion to establish common terminology, and this paper serves as a good starting point in that regard. However, the manuscript currently focuses heavily on favoring CIR over SIR. The authors should explore the possibility that SIR might actually be the better and more accurate term to adopt, as it provides a clearer physical description of the structure (i.e., emphasizing the stream interaction itself) and helps clear up confusion surrounding what is meant by “corotation.” Crucially, relying on historical precedence for CIR is not, on its own, a valid scientific argument for its continued use.

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- Thank you. We argue why we think the term CIR is the best one to use.

- **On the proposed “SCIR” term:** While bringing up the SIR vs. CIR discussion is important and the arguments against using “SIR” have merit, the rationale behind introducing the new term “SCIR” remains unclear. I do not see any clear benefit to this definition; rather than resolving confusion, adding another loosely defined term for interplanetary structures will likely amplify it. Furthermore, in their case study event the authors claim that “This event is believed to have a very different solar source than typical CIRs,” which implies that the high-speed stream (HSS) does not originate from a coronal hole, a claim for which no evidence is provided. It is far more likely that this event represents an interaction between known transients rather than a distinct, newly categorized phenomena.

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- We have deleted discussion for an SCIR. But please read our justification for why this unusual CIR was published in the first place in JGR.
 - Please note that we were very concerned what this unusual interplanetary structure might be. So, we consulted a very experienced solar physicist to think about what it might or might not be. Our conclusion is what was written in the paper. There of course can never be a solar observation confirming a small chunk of reconnection material getting out into space and then propagating through interplanetary space to reach 1 AU. Just like we do not have detailed observations of the initial formation of an CME. It is our best hypothesis of what this unusual CIR might be.

- **Scope and Focus:** The authors should keep the primary focus of this short paper on the SIR/CIR terminology. They may mention that complicated edge cases exist (which is to be expected

when dealing with such complex space plasma systems), but they should refrain from introducing yet another term.

- As mentioned above, we have deleted reference to SCIRs.

Minor Comments:

- **Paragraph starting at Line 50:** The term “coronal hole” was originally coined around 1956 by Max Waldmeier, who associated M-regions with areas of reduced density in coronagraph images. Furthermore, Krieger et al. were not the sole group to revisit and reintroduce the term to the community in the 1970s, but rather one of several key contributors. In a historical context, all pioneering authors should be given proper credit.
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- Thank you for the reference. We have added it to the paper. However, please note that what you stated is incorrect as far as we can tell. We have written a more correct statement in the paper. In the 1956 paper Waldmeier found that these M-regions were devoid of sunspots. He called these C-regions. People did not accept the term and kept calling them M-regions.