**Comment 1 and 2:**

In your introduction briefly connect the importance of fracture modeling to broader implications in the field of hydrocarbon extraction and energy resources.

The introduction is comprehensive but could benefit from improved clarity and flow. Breaking down some of the longer sentences into shorter, more digestible parts could enhance readability.

**Response 1 and 2:**

Thank you for your comment. We have added a significant amount of content and reorganized the introduction to cover your concerns. Please let us know if any specific topic still deserves our attention or lacks proper emphasis.

**Comment 2:**

Please state the novel contributions of the paper in the introduction. This helps readers understand the unique aspects of the research and its significance.

**Response 3:**

Thank you for bringing up this aspect. I have updated the last two paragraphs in the introduction to make it more clear the paper relevance and the text organization. We strongly believe the contribution of this work is to provide a critical review of the area with guidance for future researchers work.

**Comment 4 and 5:**

4) Please review line 199 and 200 (Error! Reference source not found)

5) Please review all the figures reference in the text.

**Response 4 and 5:**

Sorry for that. It should be ok now.