

**Title:** Observations of traveling ionospheric disturbances driven by gravity waves from sources in the upper and lower atmosphere.

### **Overview of Manuscript**

This work presents Observations of traveling ionospheric disturbances driven by gravity waves from sources in the upper and lower atmosphere. They use a multi-instrument approach with the aim of attributing observed TIDs to atmospheric gravity waves generated in the lower thermosphere at midlatitudes. The work has the potential to contribute to existing literature if revised and some issues fixed.

I therefore recommend the manuscript be accepted after revision.

### **Comments**

1. The authors did not capture the important aspects of the work done. Please rewrite the abstract so it captures the attention of the reader and gives a clear overview of the work.
2. The introduction is not very clear. It is very confusing to read and is more of a literature review than an introduction of the subject matter. Please rewrite it.
3. The authors keep citing and referring the reader to works done without stating exactly in the text what they want the reader to know. Please cite and state the point you want to let the readers know in the text.
4. Please elaborate on the SECS inversion technique and its advantage over other techniques.
5. Please can the authors represent the instruments used and also the location of the studies in a table or map? This will help the reader.
6. The methods used to arrive at the results are very shallow and would be difficult for replication by the reader. The authors should please give detailed and step-by-step write-up of the methodology employed.
7. Please the authors should state clearly in the text the contribution (the new findings) of this work to already existing literature.