

Review of the paper "Atmospheric and surface observations during the Saint John River Experiment on Cold Season Storms (SAJESS)" by Thompson et al. submitted to Earth System Science Data (ESSD).

This paper provides a dataset for studying rainfall-on-snow. I think the dataset is valuable, especially for modelers, and the manuscript has been well written. I just have a few comments:

1. Since soil moisture and temperature were measured at the Flux tripod, could you please provide soil types of the site at different layers. It could be useful in modeling.
2. Line 114: you may want to remove "(a)" in the line.
3. From Figure 3, it seems the instruments at MUST are very close to a group of trees. Could you please give more information on the impact of trees on the observations.
4. Likely, this dataset is going to be used by modelers, which is a group of people who do not have rich knowledge on field instruments. Thus, could you please specifically point out what types of data are collected by different instruments? For example, I could not find the descriptions on what variables were being measured by the hotplate precipitation gauge, micro rain radar, multi-angle snowflake camera?
5. Line 211: You mentioned re-extending the 10-m mast several times. Could you please include such information in your data, say, make markers on the date of re-extending.
6. Line 299-305: if you have any reasons for the consistent bias?