

Interactive comment on “High-resolution in situ observations of atmospheric thermodynamics using dropsondes during the Organization of Tropical East Pacific Convection (OTREC) field campaign” by Holger Vömel et al.

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High-resolution in situ observations of atmospheric thermodynamics using dropsondes during the Organization of Tropical East Pacific Convection (OTREC) field campaign by Vömel et al. is a concise and clear description of the dataset and of the instrument used to obtain the data. I recommend publication after one important and a few minor concerns are addressed:

Biggest concern: There is minimal mention of the data formats in which the dataset

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is presented. There is also no mention of how problematic data as mentioned in Section 3.2 are noted in the dataset, if they are. It would be useful to have a little more explanation of this in Section 6.

1. Lines 87-88: It would be good to know some of the details of this removal: How does ASPEN define “outliers?” How does ASPEN define “suspect data points?”
2. Lines 91-94: Is a similar correction not necessary for moisture measurements?
3. Line 95: How is the smoothing done?
4. Line 100: Since this value has a direction, it should be velocity, not speed.
5. Line 117: Does paroscientific refer to the company, or something else?
6. Lines 120-124: How do these values correspond to the expected accuracy or the sensor? Are the values meaningful, or are they within the noise of the sensor?
7. Line 129: Does this issue impact sondes other than the NRD41, like the RD41? This would be important in looking at other dropwindsonde datasets.
8. Lines 136-137: How do you know that these data are erroneous, rather than just taken within a small-scale feature by chance?
9. Line 144: Should this read “within 3% RH” rather than 3%?
10. Line 179: Remove “may.”
11. Line 259: “a multitude of other meteorological research questions” is mentioned, but it would be good to surmise as to what some of them might be.

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