

Interactive comment on “Global Hawk dropsonde observations of the Arctic atmosphere during the Winter Storms and Pacific Atmospheric Rivers (WISPAR) field campaign” by J. M. Intrieri et al.

Anonymous Referee #1

Received and published: 21 May 2014

The manuscript describes the potential of a high-altitude UAS observing system. The text is well-written, interesting, and in-scope of the Journal. I enjoyed reading it and recommend accepting it for publication with minor revisions, as follows:

1. (Intro, lines 1-16): Focusing exclusively on the Arctic sea ice misleads reader from the main point of the paper. I suggest motivating the need of this observing system, for instance, with the lack of high-resolution in situ profiles in poorly observed regions for diagnosis of atmospheric structures, and less emphasis on climate monitoring.
2. Intro: I suggest adding a short review on how Global Hawk relates to other existing

C960

UASes in terms of performance, coverage, etc.

3. page 4072, line 17: Is RD94 the standard sonde or the one deployed in Global Hawk. Please clarify.
4. page 4073, line 13: You mention surface; I wonder how you obtain the sfc pressure, and does the sonde float and continue transmitting?
5. Fig 4: I suggest displaying differences rather than absolute values (same in Fig. 6; Figure 7 is nice!).

Interactive comment on Atmos. Meas. Tech. Discuss., 7, 4067, 2014.

C961