Interactive comment on “Hygroscopic growth effect on aerosol light scattering in the urban area of Beijing: a long-term measurement by a wide-range and high-resolution humidified nephelometer system” by P. Zhao et al.

Anonymous Referee #2

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Review of "Hygroscopic growth effect on aerosol light scattering 1 in the urban area of Beijing: a long-term measurement by a wide-range and high-resolution humidified nephelometer system" by Zhao et al.

This study reports on ambient f(RH) measurements in Beijing, China. The general topic of aerosol hygroscopicity is of interest to readers of this journal. This work definitely requires English editing if there is a subsequent version. The manuscript is sloppy with many writing errors that I did not fully outline below but should be fixed. The main issue of this work is the lack of novelty in the scientific findings. There is a general lack
of depth in the analysis and the paper reads like a very brief lab report currently that still lacks many easily reportable basic descriptive statistics of their data. The paper is disorganized with an example of this being that Section 3.3 is disjointed from the rest of the paper. The authors are encouraged to review the literature better and to examine their dataset more deeply to find novel results that would be of broad interest to readers rather than being a quick report of values very specific to their region. In my view, to make this paper reach the level of quality ACP warrants, the authors should use the other datasets they advertised they would use in Lines 196-198.

Specific Comments: Line 47: remove the word "the"

Line 64-66: Numerous techniques can measure g(RH) and not just the HTDMA. Authors should mention other techniques used to measure g(RH) in field studies.

Line 109: Remove "As we all know" since we all may not know as well as the authors about that region.

Line 395: 16 pm doesn't make much sense. Use military time

Figure 1: Too small to read anything in the panels.