Interactive comment on “Mercury fluxes over an Australian alpine grassland and observation of nocturnal atmospheric mercury depletion events” by Dean Howard and Grant C. Edwards

Anonymous Referee #2

Received and published: 27 October 2017

The manuscript reports the GEM data along with ozone and pertinent meteorological parameters as well as the flux data measured by the aerodynamic gradient (AGM) method over an alpine grassland in Australia’s Snowy Mountains region over a three-week period. Although the context of this study does not introduce new sciences beyond what has been proposed in the literature, the presented datasets and analysis are of high quality for a land-use type that has limited data availability, and therefore deserve consideration for publication. This is one of the few manuscripts that are organized and well-drafted with in-depth, comprehensive analysis appropriately supported by pertinent data. The only area that I would suggest the authors consider revising is the generalized conclusion made (the annual deposition and deposition velocity for this land use) using the short-term measurement data. Perhaps the Conclusions and Abstract sections can make clear that the values represent the estimates in late winter season to avoid potential confusion. I recommend publication of the manuscript with the minor revision and congratulate the authors on a great work done.