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Sporadic-E occurrence rates from GPS radio occultation (RO) measurements have shown to vary by nearly an order of magnitude between studies, motivating a comparison with a ground-based measurement. In an attempt to find an accurate GPS-RO technique for monitoring sporadic-E formation, occurrence rates predicted using five previously developed GPS-RO techniques are compared to those derived from Digisonde measurements over the eight-year period of 2010-2017. GPS-RO measurements within 170 km of a Digisonde site are used to calculate sporadic-E occurrence rates that can be compared to the ground-truth Digisonde measurements at the same location. The different techniques are compared separately for each Digisonde site and then combined to find the most accurate GPS-RO technique for binary sporadic-E measurements. In most cases the Yu et al. (2020) S4 method showed the closest agreement with ionosonde measurements during the span of 2010-2017 and is the recommended technique for future GPS-RO based Es climatologies.
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