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Oral
Atmospheric Rivers (AR) are comparatively narrow regions in the atmosphere that are responsible for most of the horizontal transport of water vapor in the extratropics. ARs are responsible for many extreme precipitation events and floodings at mid-latitudes, including Europe and the US.

While the integrated water vapor content of ARs can be well measured with microwave and infrared sounders, the vertical structure is less well known. We studied if GNSS radio occultation (RO) data are suited to detect atmospheric rivers, using RO data processed with the WEGC occultation processing system, version 5.6.

By analyzing differences between daily values and long-term averages, we can clearly see the temporal evolution and vertical structure of Atmospheric Rivers.
OSTS session
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