Anmeldung eines Themas für eine Bachelorarbeit

Thema Datum	Mixed-phase clouds above Neumayer III station – long-term statistics of thermodynamic prerequisites Mischphasenwolken über der Neumayer III Station – Langzeitstatistik der thermodynamischen Voraussetzungen
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Kurzbeschreibung:	Mixed-phase clouds above the Southern Ocean and Antarctica are still not well understood due to a lack of suitable observations. In preparation of the deployment of the Oceanet remote sensing suite to Neumayer III station, the thermodynamic prerequisites for the formation of mixed-phase clouds should be investigated based on the long-term dataset of radiosonde ascends. Of special interest is the availability of moisture in the temperature regime of mixed-phase clouds (-38 to 0°C). In a further step, typical transport regimes and vertical air velocity should be characterized.
Literatur:	Gorodetskaya, I.V., Silva, T., Schmithüsen, H. *et al.* (2020) Atmospheric River Signatures in Radiosonde Profiles and Reanalyses at the Dronning Maud Land Coast, East Antarctica. *Adv. Atmos. Sci.* **37,** 455–476. https://doi.org/10.1007/s00376-020-9221-8 Wang, J., Bian, J., Brown, W. O., Cole, H., Grubišić, V., & Young, K. (2009). Vertical Air Motion from T-REX Radiosonde and Dropsonde Data, *Journal of Atmospheric and Oceanic Technology*, 26(5), 928-942 https://doi.org/10.1175/2008JTECHA1240.1 Klöwer et al., Aspects of weather parameters at Neumayer station, Antarctica, and their representation in reanalysis and climate model data, Met. Z., https://doi.org/10.1127/0941-2948/2013/0505 Data source: https://www.pangaea.de/?q=Radiosonde+GVN&offset=40