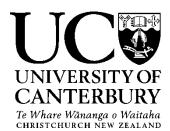
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Chapter 3: Kuma, P., McDonald, A. J., Morgenstern, O., Querel, R., Silber, I., Flynn, C.: Ground-based lidar processing and simulator framework for comparing models and observations (ALCF 1.0), Geoscientific Model Development (submitted), https://doi.org/10.5281/zenodo.3785715. 2020.

Chapter 4: Kuma, P., McDonald, A. J., Morgenstern, O., Hartery, S., Williams, J., Varma, V., Zeng, G., Harvey, M., Parsons, S., Graeme, P: Improving Southern Ocean boundary layer cloud parametrisation in the general circulation model HadGEM3-GA7.1/UM11.4, manuscript in preparation, 2020.

Please detail the nature and extent (%) of contribution by the candidate:

Chapter 2: Peter Kuma participated on methodology development, voyage observations, data analysis, writing and reviewing of the manuscript. Extent: approx. 70%.

Chapter 3: Peter Kuma wrote the code of the framework, performed the data analysis of the case studies and wrote the text of the manuscript. Extent: approx. 80%.

Chapter 4: Peter Kuma participated on the TAN1802 field measurements, performed the model runs, analysis and wrote the manuscript. Extent: approx. 80%.

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