



Figure A4. Evaluation of MAR to match snowfall timing observed with micro-rain radar at Dumont D'Urville station ( $66^\circ \text{S}$ ,  $140^\circ \text{E}$ , Grazioli et al. 2017). Micro-rain radar data indicates snow passing through the atmospheric layer 300 m above the surface, while modelled snowfall is shown for the surface only, where some of the snow may have been sublimated. (a) time-series of modelled and observed snowfall for the year 2016. (b) scatter plot of observed vs modelled snowfall. The Pie-chart indicates the percentage of days with matching or mis-matching snowfall in both model and observations, with discrepancies noted for about 18 % of days in total.

# Antarctica



