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Properties of low-level clouds during the DACCIWA aircraft campaign derived from remote sensing and airborne measurements

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We present a set of observations of low-level cloud measured over southern West Africa (SWA) during July 2016 as part of the DACCIWA campaign. Cloud top height and optical thickness derived from the satellite-mounted SEVIRI spectrometer are used to develop an overview of the horizontal and vertical distribution of cloud over SWA at different times of day. This overview is then used to provide context for airborne microphysics measurements of low-level cloud, which were carried out at the same time. Microphysical properties such as cloud drop number concentration, size distributions, and vertical profiles then provide more detail in specific cases than is available from remote sensing measurements. The complementary dataset of remote sensing and in situ measurements will be used to inform modelling studies of low-level clouds in the region.