## A meteorological and chemical overview of the DACCIWA field campaign in West Africa in June–July 2016 SUPPLEMENTARY MATERIAL

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Figure S1: As Fig. 6 in the main paper but showing anomalies relative to the 1998–2016 TRMM climatology.

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Figure S2: Spatial distribution of the AEJ core occurrence frequency as objectively identified from ERA-I re-analysis data as in Fig. 8 in the main paper. (a) Phase 1 (01–21 June 2016), (b) Phase 2 (22 June–20 July 2016), (c) Phase 3 (21–26 July 2016) and (d) Phase 4 (27–31 July 2016).



Figure S3: Long-lived MCSs during June-July 2016. Red lines mark objectively tracked MCSs with a lifetime of at least 24 hours and 4–15°N meridionally averaged brightness temperatures (grey shading) based on Channel 9 (10.8 µm) of SEVIRI. See sect. 2 for more details on data and method. These tracks are also shown in Fig. 10 in the main paper. The four Phases of the DACCIWA campaign are marked with horizontal dashed yellow lines.



Figure S4: Cold surges during June-July 2016. Hovmöller diagrams of temperature anomalies at 850 hPa from ERA-I averaged longitudinally over 20°W–0° (a) and 10–30°E (b). Anomalies are computed against the 1979–2016 15-day running mean. Horizontal dashed lines mark the four Phases of the DACCIWA campaign.

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