

1 Using Cave Drip Loggers to Characterize Groundwater Infiltration 2 and Examine Hydrological Response in Cretaceous Karst Formation

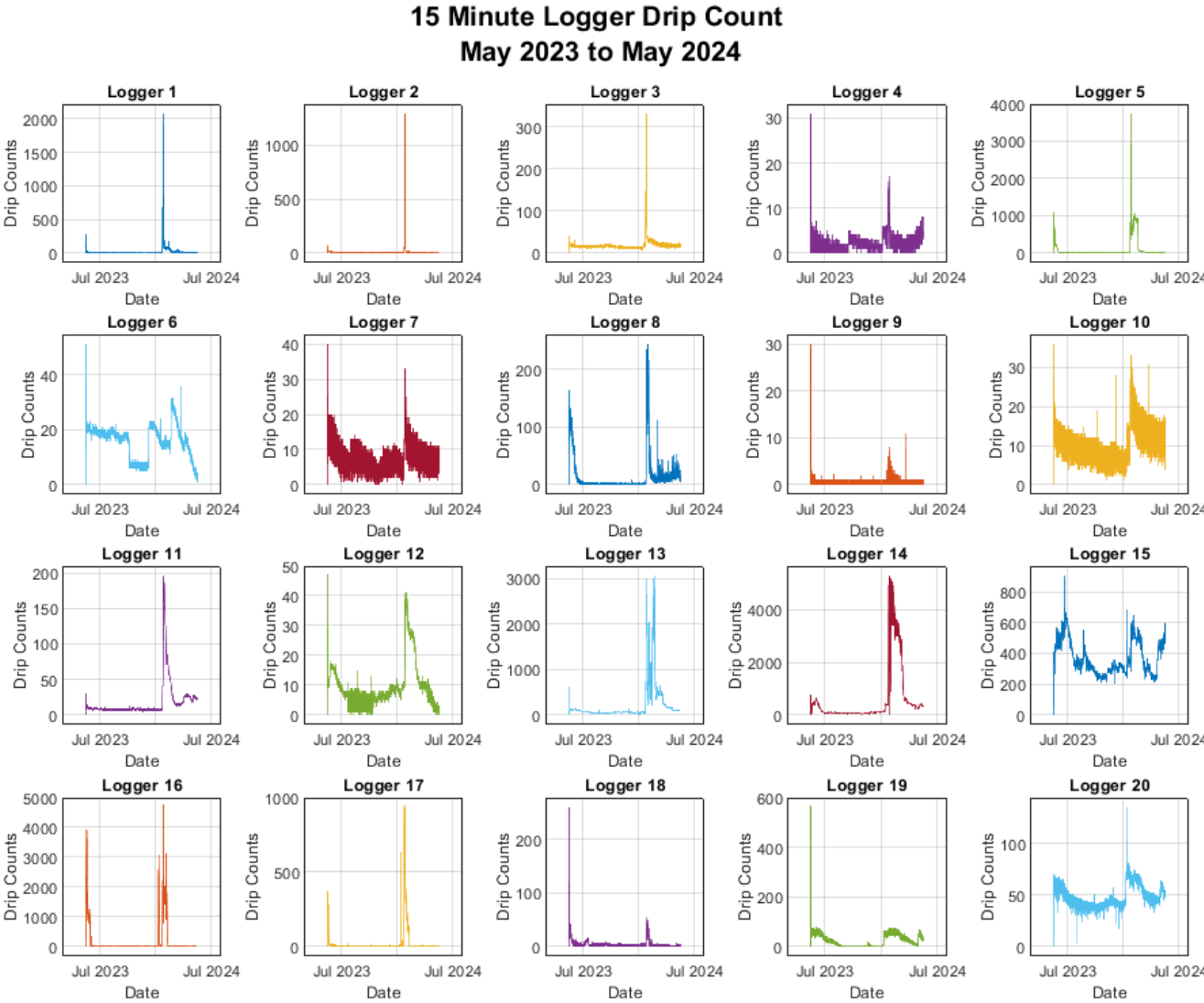
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11 FIGURE S1 - All twenty drip logger time series for one hydrological year (May 2023 to May 2024).

Daily Rainfall (mm) vs Total Daily Logger Drip Count **May 2023 to May 2024**

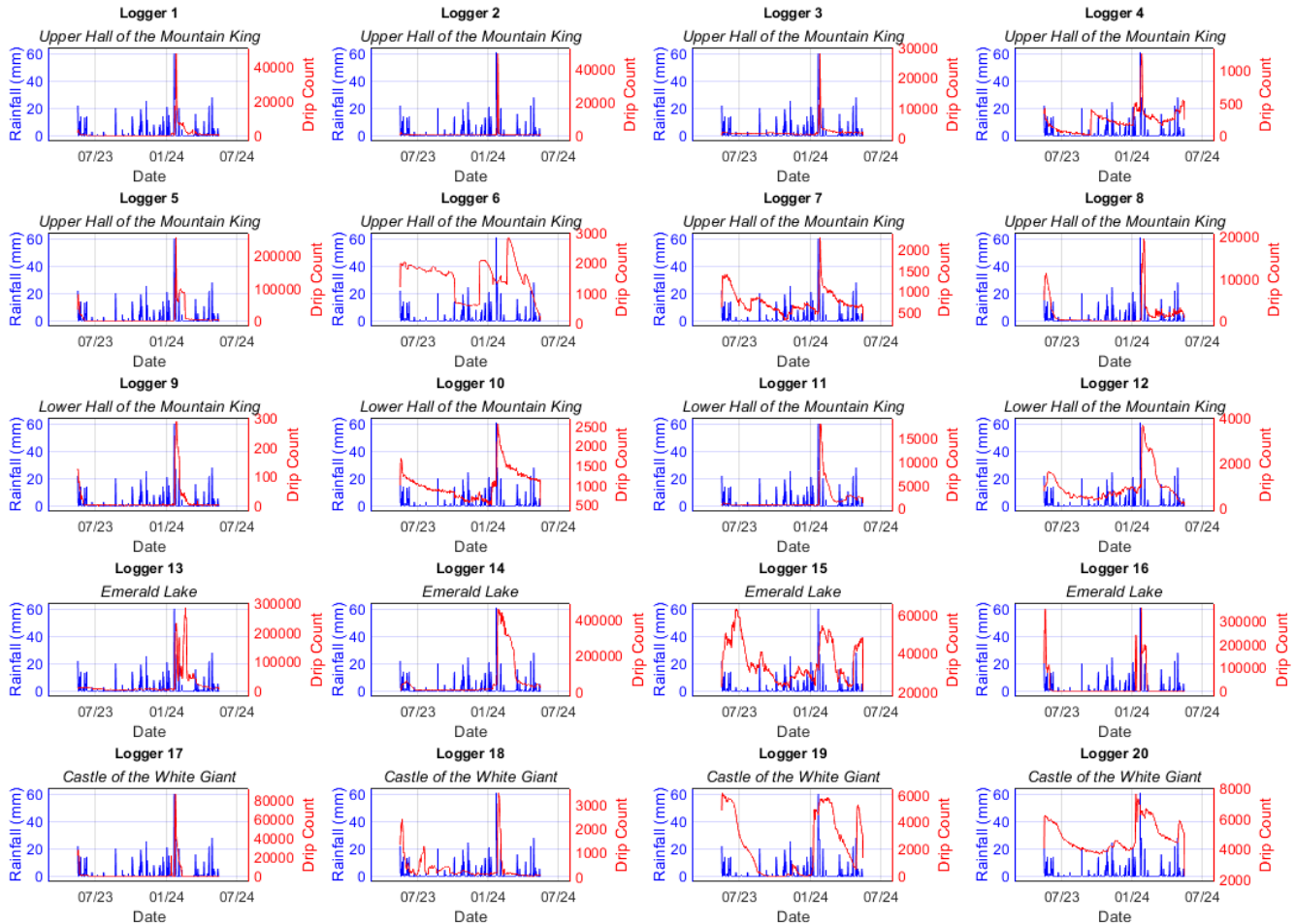
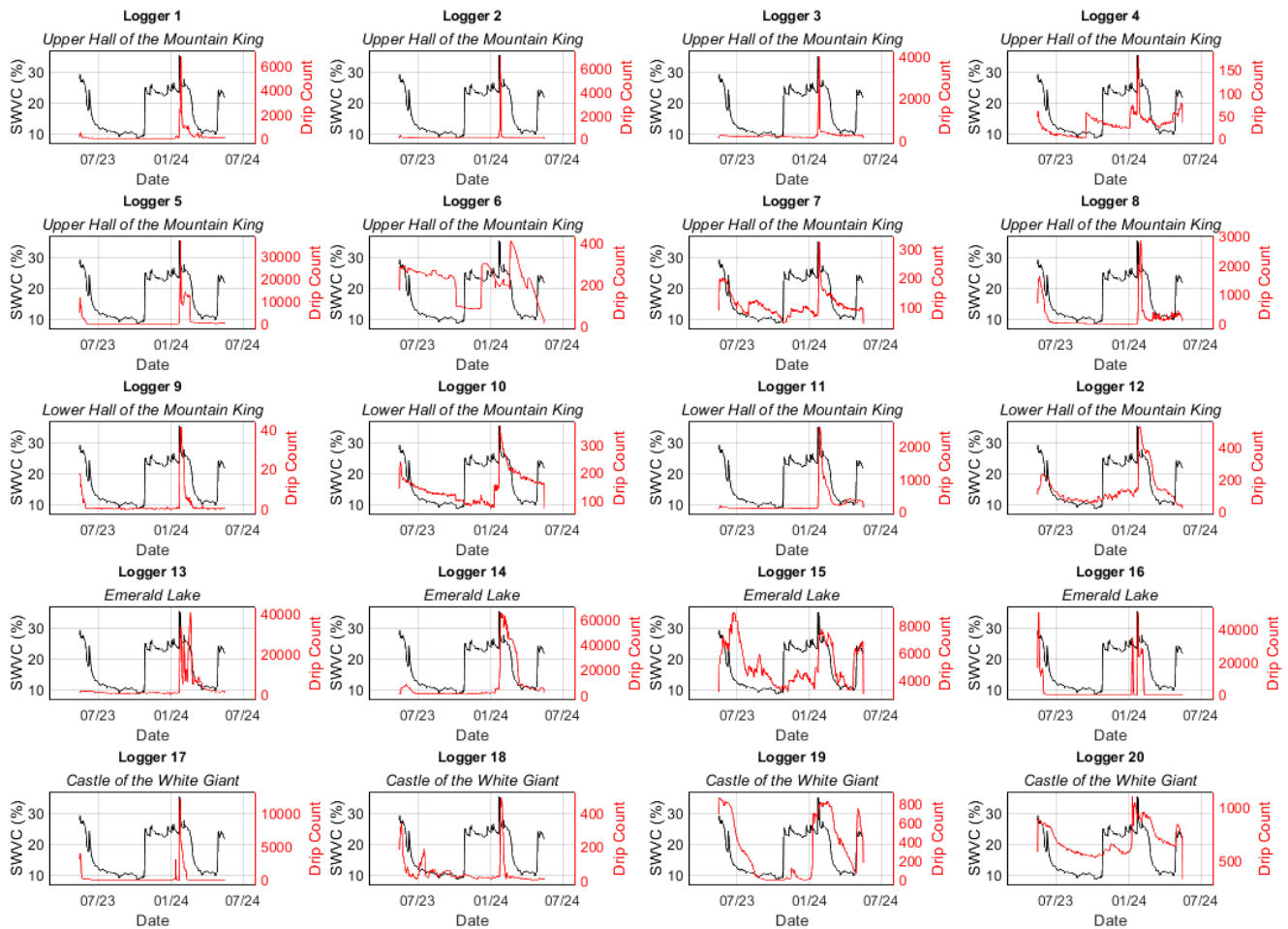


FIGURE S2 - Daily Rainfall (mm) versus Total Daily Logger Drip Count. Several sites display some response to antecedent precipitation events with a rapid increase from baseline drip rate (Loggers 1,2,3,4,5,9). Some display an almost instantaneous response while others exhibit a delayed response in particular to the January 2024 rainfall event (Loggers 6,8)

Daily Soil Water Content [SWC] (%) vs Total Daily Logger Drip Count **May 2023 to May 2024**



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17 **FIGURE S3 - Daily Soil Water Content (SWC) vs Total Daily Logger Drip Count.**

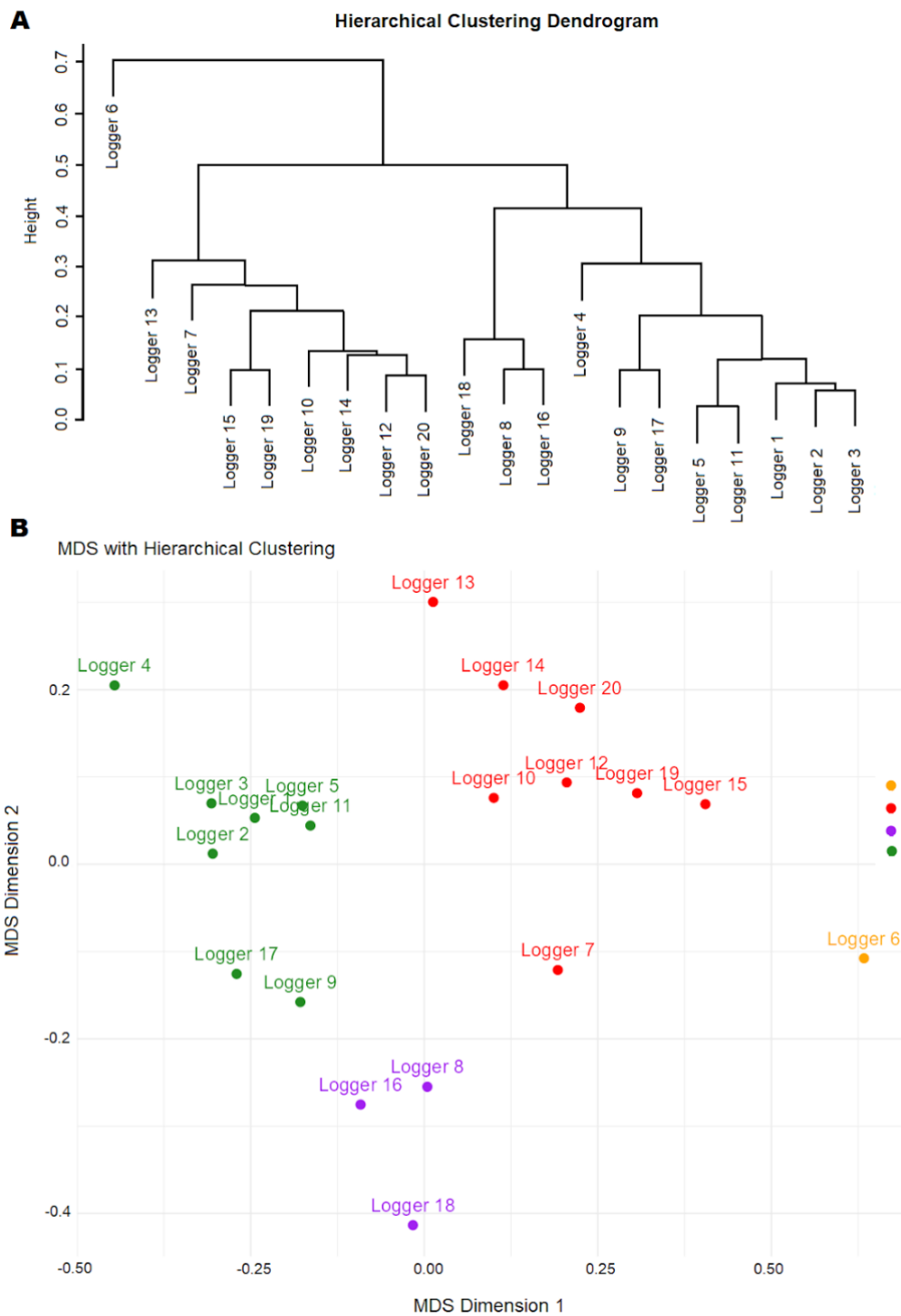


FIGURE S4 – (A) Hierarchical clustering dendrogram showing cluster tree. (B) Results of the hierarchical clustering grouping for loggers at NBC drip sites.

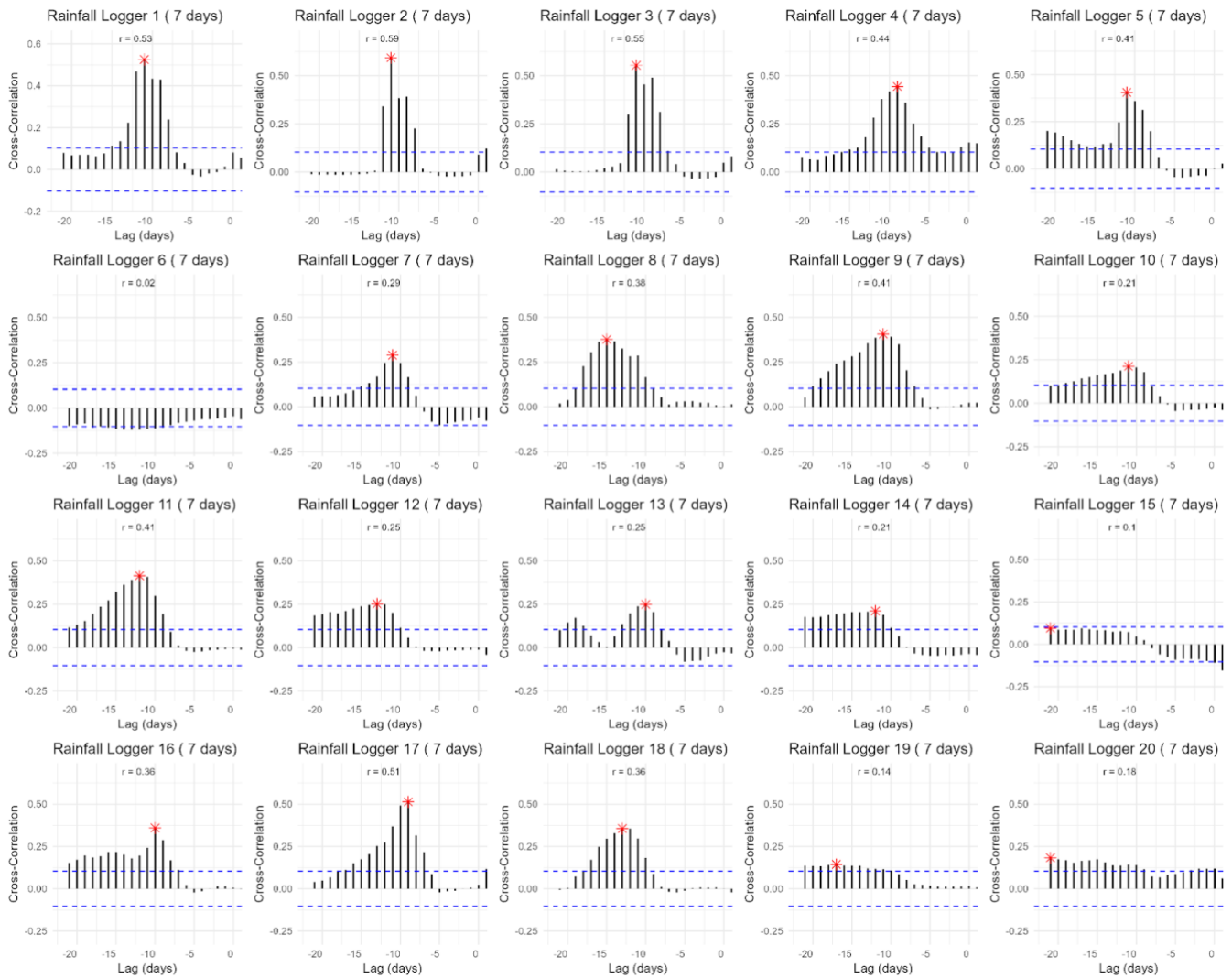


FIGURE S5 - Cross correlation plot of 7-day antecedent rainfall maintained a highly correlated relationship up to 14 days.

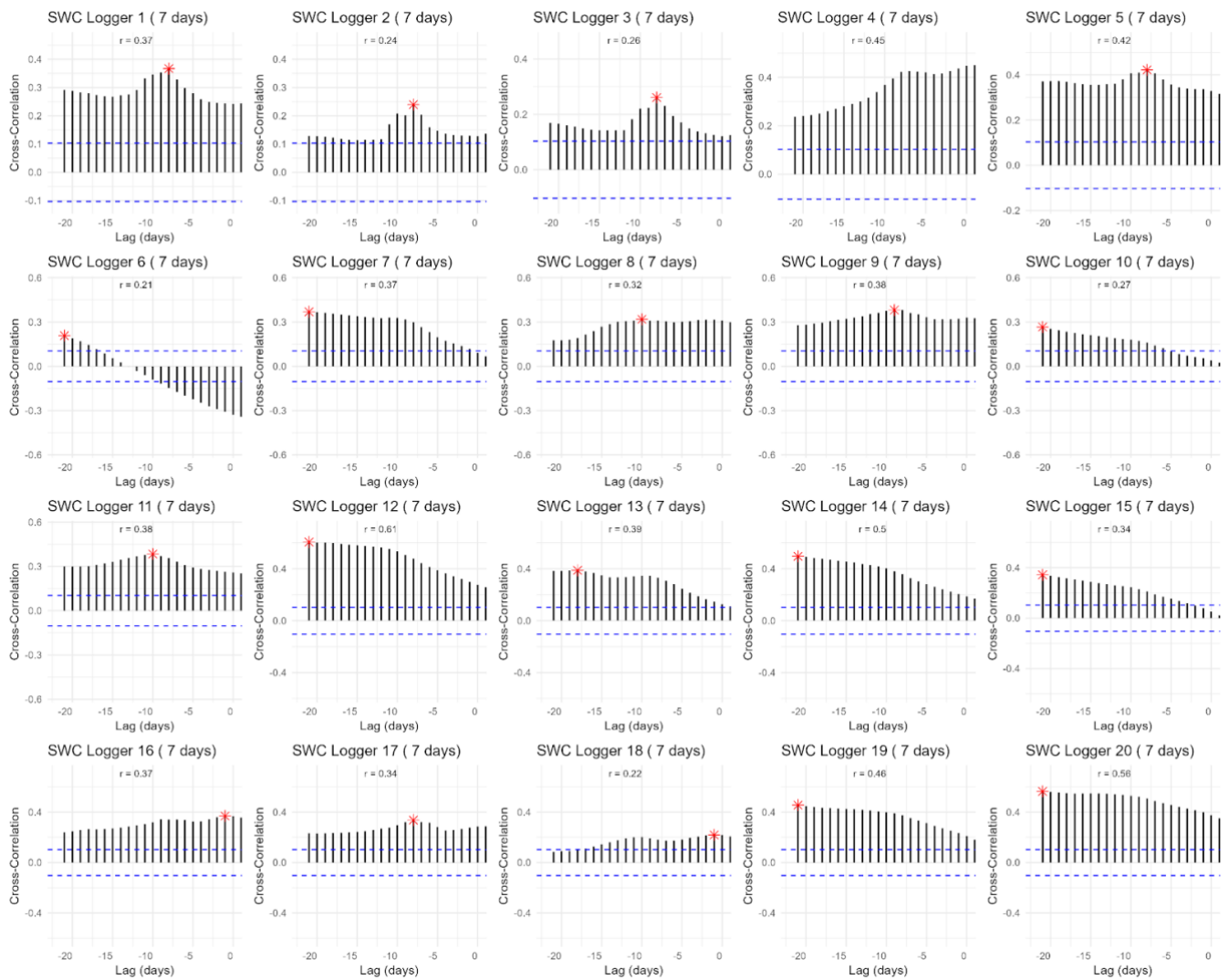


FIGURE S6 - Cross correlation plot of 7-day antecedent soil water content (SWC) maintained a highly correlated relationship up to 14 days.