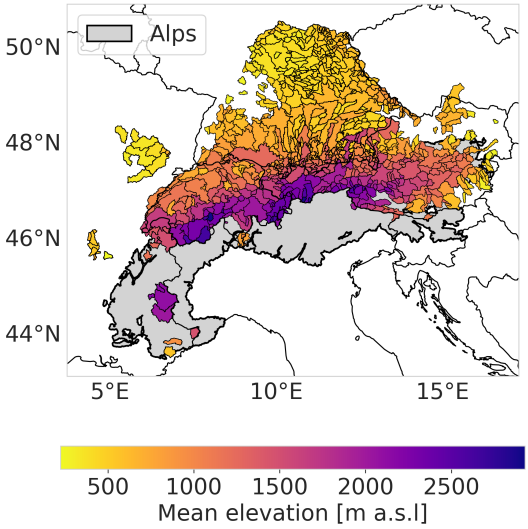

Figure S1. Mean elevation of the catchments studied and an outline of the Alps (Snethlage et al., 2022).

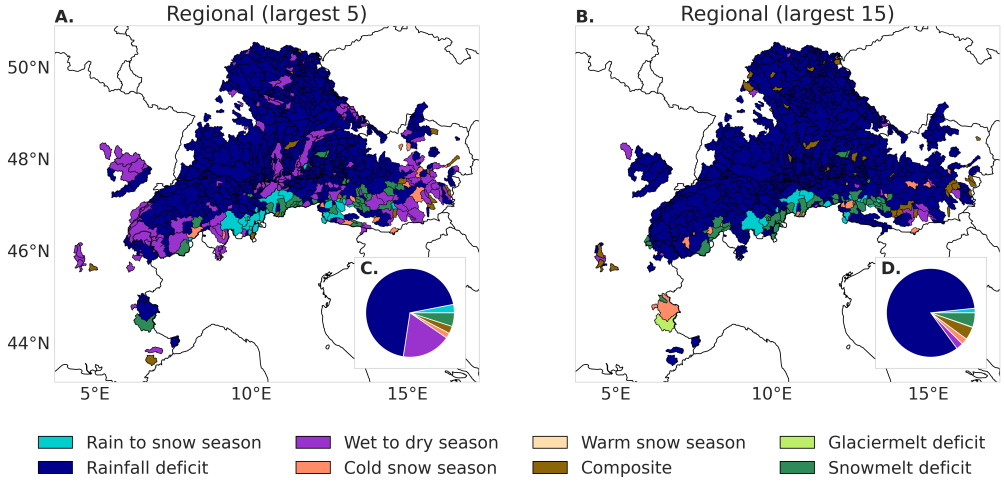

Figure S2. A. Most common drought type for the 5 largest droughts (A.) and 15 largest droughts (B.) in each catchment. The pie charts in the bottom right corners of the plots show the proportion of catchments with a specific most common drought type for the 5 largest droughts (C.) and for the 15 largest droughts (D).

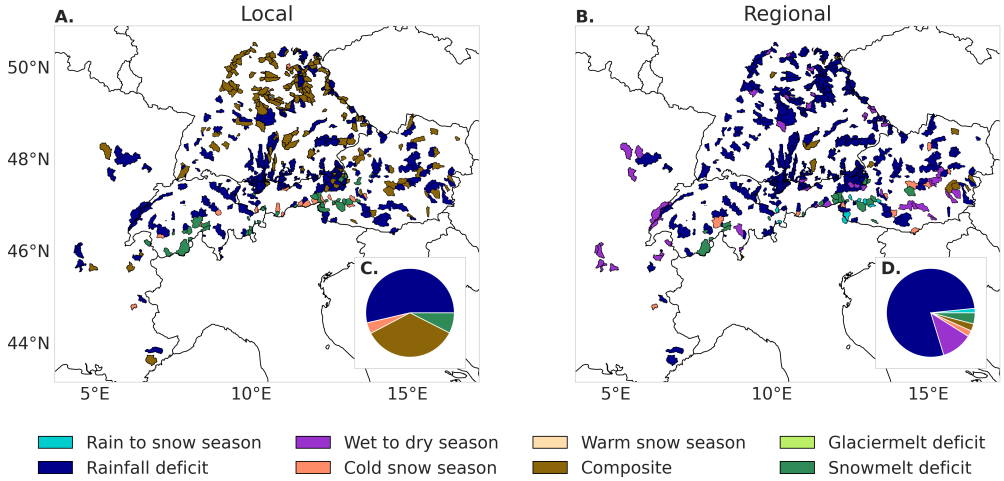

Figure S3. A. Most common drought type in each catchment when only considering unnested catchments. B. Most common drought type for the 10 largest (i.e. regional) droughts in each catchment when only considering unnested catchments. The pie charts in the bottom right corners of the plots show the proportion of catchments with a specific most common drought type for all droughts (C) and for the 10 largest droughts (D).

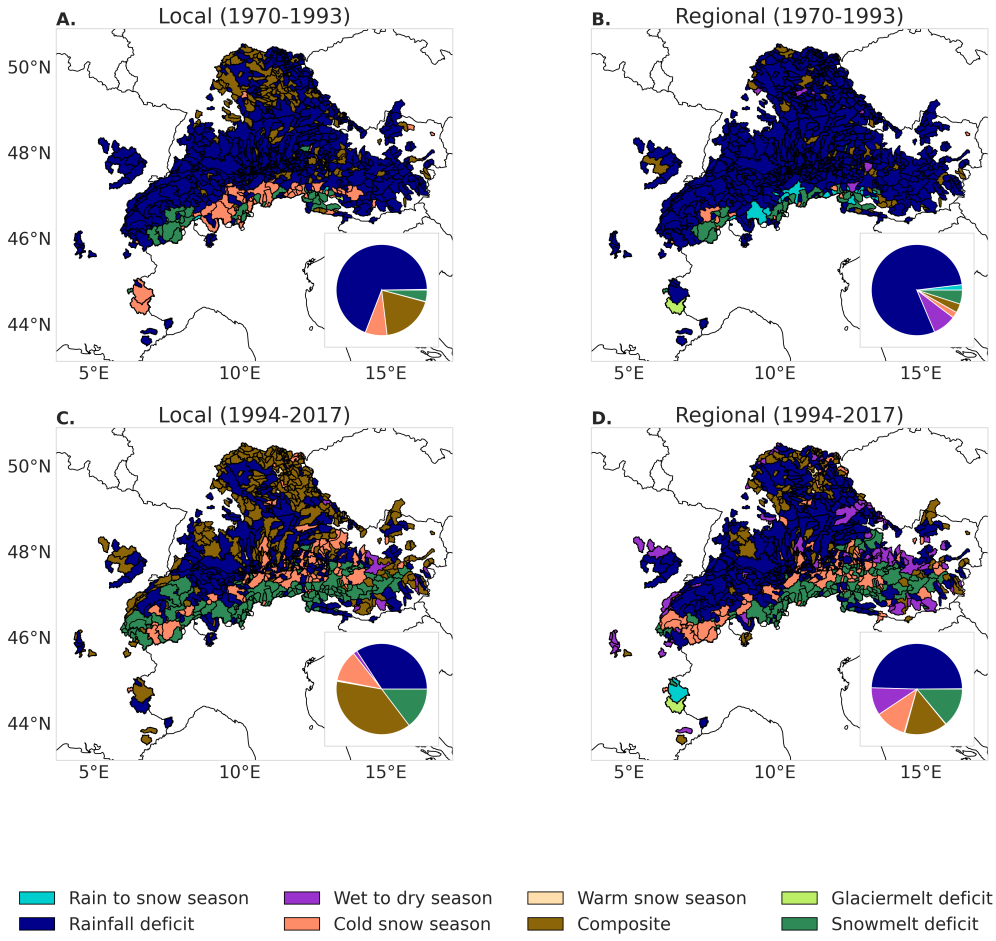

Figure S4. Most common drought type in each catchment for 1970-1993 (A.) and for 1994-2017 (C.). Most common drought type for the 10 largest (i.e. regional) droughts in each catchment for 1970-1993 (B.) and 1994-2017 (D.). The pie charts in the bottom right corners of the plots show the proportion of catchments with a specific most common drought type for all droughts and for the 10 largest droughts.

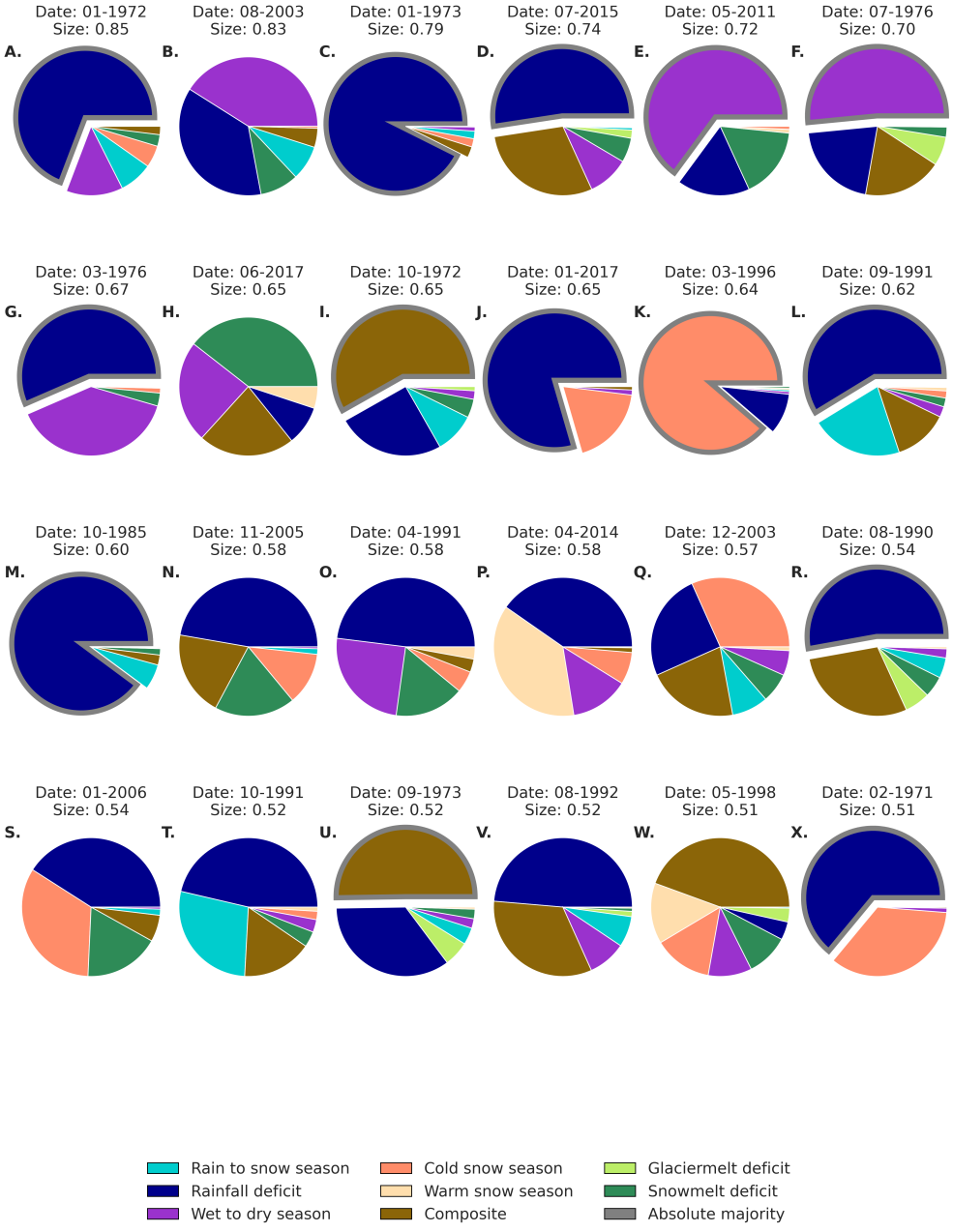

Figure S5. The contribution of different drought types to all detected large events in the study period. Size is here defined as the total fraction of catchments under drought on the given date.

References

Snethlage, M. A., Geschke, J., Ranipeta, A., Jetz, W., Yoccoz, N. G., Körner, C., Spehn, E. M., Fischer, M., and Urbach, D.: A hierarchical inventory of the world's mountains for global comparative mountain science, Scientific Data, 9, 149, https://doi.org/10.1038/s41597-022-01256-y, 2022.