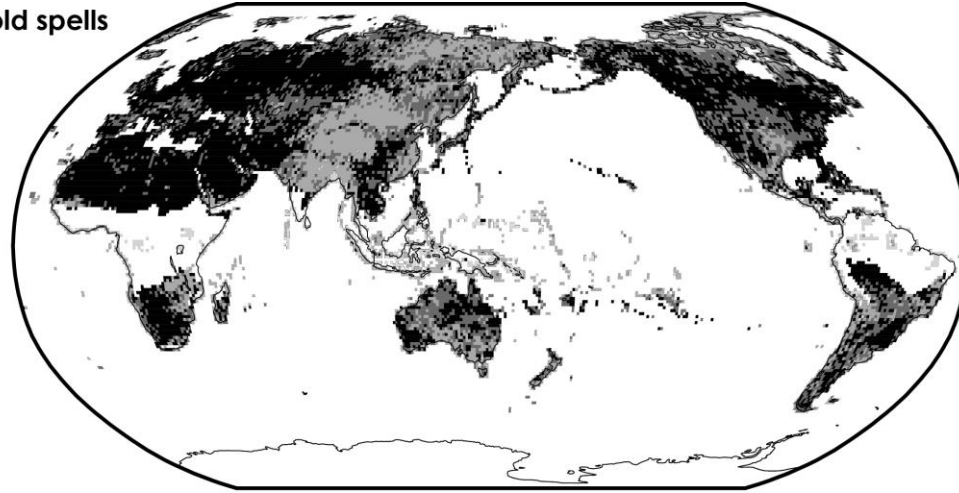


Cold spells



Weak

Moderate

Good

Excellent

Hot spells

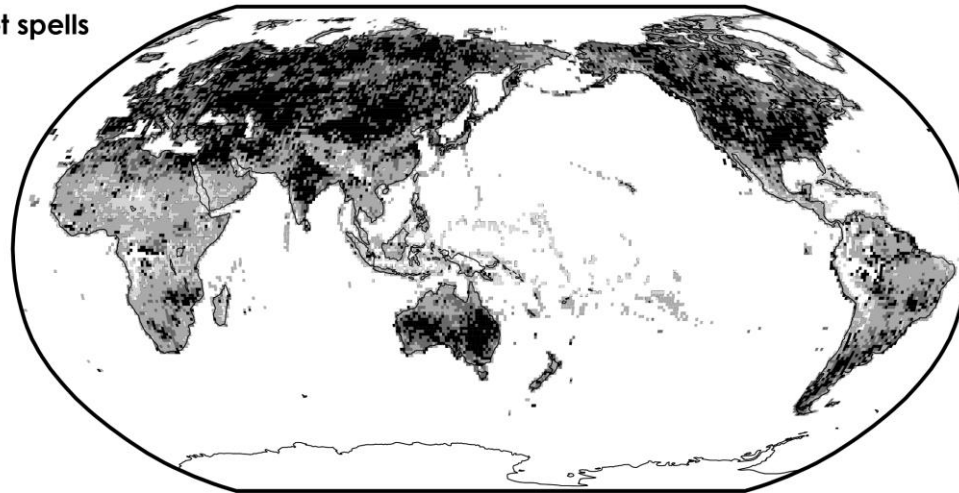


Figure 7.1 How well can we forecast severe heat or cold? Ability to discriminate (see Box 7.2) cold (top) and hot (bottom) spells from all other days. The spells are defined as temperatures beyond the 5th and 95th percentiles, respectively, on at least two consecutive days. The forecasts are derived from ECMWF's ensemble prediction system (see § 7.3.2.4), and are verified against the ECMWF analysis (which means that the quality of the forecasts are over-estimated). The score is classified as 'excellent' (> 95%), 'good' (90 – 95%), 'moderate' (67 – 90%), or 'weak' (< 67%), and guessing would score 50%. Some areas show no score because of insufficient numbers of spells. (Data source: adapted from Coughlan-Perez et al.)