



Figure 4.6 The regionally optimized downscaling approach applied to the alpine region. Shown, for each season, are statistically detected patterns of seasonal mean sea level pressure anomalies that account for the year-to-year variability of seasonal mean temperature at the inner-Alpine site of Sion (analysis interval 1901-47, anomalies in hPa). The patterns were obtained from a Canonical Correlation Analysis between a large-scale signal comprising a vector consisting of the seasonal mean sea level pressure and the near-surface temperature field, and a regional-scale vector consisting of seasonal mean temperature and square-root transformed total seasonal precipitation. The dots denote Sion's approximate position, and the temperatures refer to the local anomalies associated with the sea-level pressure anomalies.