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forcesPlant controls on transpiration; Evaporation of intercepted water; Evaporation from wetlands; Total evaporation from an area; Estimating evaporation; Evaporation when water is limited; Evaporation and transpiration: an overview; 3.5 Soil moisture; 3.6 Groundwater; Aquifer properties; Recharge processes; Groundwater movement; Where does groundwater go?; 3.7 Runoff generation and streamflow; Streamflow and runoff; Runoff generation processes; Humid environments; Dry environments; Cold environments; 3.8 An overview
Soil water contentSoil water movement; Infiltration into the soil; Variation in soil moisture over space; Where does soil water go?; Chapter 4 Patterns of hydrological behaviour; 4.1 Introduction; 4.2 Indicators of hydrological behaviour; River flows; Groundwater recharge and levels; Evaporation; 4.3 Variations in hydrological behaviour over space; Annual, monthly and daily flow regimes; Year-to-year variations in annual and seasonal runoff; Variations in flood characteristics; Variations in low flow characteristics; Groundwater levels and recharge; Variations over space: an overview
4.4 Variations in hydrological behaviour over timeThe "long term": variations in hydrological regime over the last few thousand years; The instrumental period: the mid-1800s to the present; Understanding variability over time in hydrological behaviour; Hydrological records with memory: lakes; 4.5 Hydrological behaviour: an overview; Chapter 5 Water quality and the flux of materials; 5.1 Introduction; 5.2 Physical water quality; Sediment load; Water colour; Water temperature; Dissolved oxygen; 5.3 Chemical water quality; Sources and processes; Variations over space; Variations over time
Total chemical load: solute and suspended sediment transport

Sommario/riassunto

Hydrology and Global Environmental Change presents the hydrological contribution to, and consequences of, global environmental change. Assuming little or no prior knowledge on the part of the reader, the book looks at the main processes of global environmental change - global scale processes, large regional processes, repetitive processes - and how the hydrological cycle, processes and regimes impact on GEC and vice-versa.
