

# Isotopes in the Water Cycle

Past, Present and Future of a  
Developing Science



**IAEA**

International Atomic Energy Agency

Edited by

Pradeep K. Aggarwal,  
Joel R. Gat and Klaus F.O. Froehlich



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Environmental isotope and nuclear techniques provide unmatched insights into the processes governing the water cycle and its variability under past and present climates. This volume, recommended for advanced students and specialists, presents a historical perspective, state of the art applications and new developments of isotopes in hydrology, environmental disciplines and climate change studies.

The spectrum of isotope applications addressed in this book ranges from the assessment of groundwater resources in terms of recharge and flow regime, identification of palaeogroundwater, water balance of river basins and lakes, to studies of past and present global environmental and climate changes. The contributions are written by renowned specialists in the various application fields.

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