N. Kämpfer, University of Bern, Switzerland (Ed)

Monitoring Atmospheric Water Vapour

Ground-Based Remote Sensing and In-situ Methods

Atmospheric water plays a key role in climate. Water vapour is the most important greenhouse gas and its condensed forms exert a profound influence on both incoming solar and outgoing infrared radiation. Unfortunately, accurate, height-resolved global-scale measurements of atmospheric humidity are difficult to obtain. The change in concentration of five orders of magnitude from the ground to the stratosphere means there is no standard instrument that will measure everywhere. This has led to different measuring techniques, all with strengths and weaknesses.

Features
- Covers all the different techniques of remote sensing and monitoring of atmospheric water vapour
- Provides fact sheets summarizing the main strengths and limits of the techniques
- Provides fact sheets about individual instruments that are operated on a long term monitoring basis, which contributes to the investigation of trend studies in climate change

Contents

Fields of interests
Remote Sensing/Photogrammetry; Climate Change; Extraterrestrial Physics, Space Sciences

Target groups
Research

Discount group
Professional Non-Medical

D. Sui, The Ohio State University, Columbus, OH, USA; S. Elwood, University of Washington, Seattle, WA, USA; M. Goodchild, University of California, Santa Barbara, CA, USA (Eds)

Crowdsourcing Geographic Knowledge

Volunteered Geographic Information (VGI) in Theory and Practice

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