Hydrology and Earth System Sciences

An Interactive Open Access Journal of the European Geosciences Union

| EGU.eu | | EGU Journals | Contact |

Home

Online Library HESS

- Recent Final Revised Papers
- Volumes and Issues
- Special Issues
- Library Search
- Title and Author Search

Online Library HESSD

Alerts & RSS Feeds

6 - - - - - - | | - f - - - - - + ! -

Submission

Review

Production

.

Impact Factor 2.270

ISI indexed



■ Volumes and Issues ■ Contents of Issue 2 ■ Special Issue Hydrol. Earth Syst. Sci., 12, 353-362, 2008 www.hydrol-earth-syst-sci.net/12/353/2008/ © Author(s) 2008. This work is licensed under a Creative Commons License.

The decreasing importance of acidification episodes with recovery from acidification: an analysis of the 30-year record from Birkenes, Norway

R. F. Wright

Norwegian Institute for Water Research, Gaustadallèen 21, 0349 Oslo, Norway

Abstract. The 30-year record 1975– 2004 of weekly samples of streamwater chemistry from Birkenes, Norway, shows 106 acid episodes below the threshold of ANC–50 μ eq I $^{-1}$. The frequency, severity and duration of episodes have diminished since about 1990 due to chemical recovery following reduced deposition of sulphur. In particular SO₄-driven episodes in the first runoff following drought have become less intense and less frequent, whereas episodes driven by climate (wind, high flow) continue. The data show significant empirical relationships between strength of the driver, degree of chemical recovery, and severity of ANC depression.

■ Final Revised Paper (PDF, 1583 KB) ■ Discussion Paper (HESSD)

Citation: Wright, R. F.: The decreasing importance of acidification episodes with recovery from acidification: an analysis of the 30-year record from Birkenes, Norway, Hydrol. Earth Syst. Sci., 12, 353-362, 2008. ■ Bibtex ■ EndNote ■ Reference Manager



Search HESS

Author Search

News

- New Service Charges
- Financial Support for Authors
- ISI Impact Factor: 2.270

Recent Papers

01 | HESSD, 28 Apr 2009: Integrating field and numerical modeling methods for applied urban karst hydrogeology

02 | HESSD, 28 Apr 2009: Analyzing the relationship between peak runoff discharge and land-use pattern – a spatial optimization approach

03 | HESSD, 27 Apr 2009: Dynamically vs. empirically downscaled medium-range precipitation forecasts