

CIAM Activities

TFIAM/EMEP Centre for Integrated Assessment Modelling (at IIASA)

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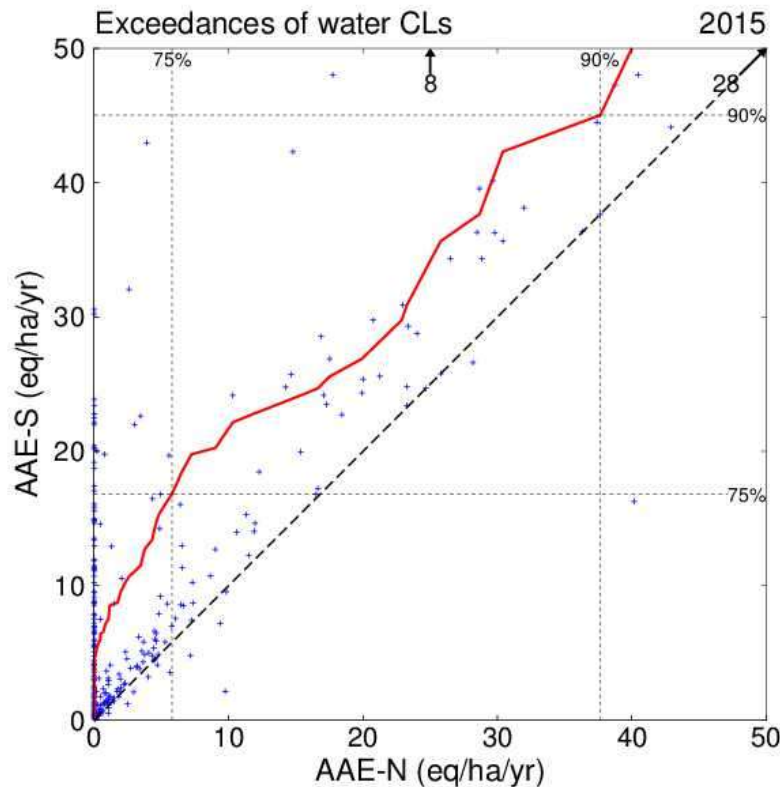
Transfer of 2017 Critical Loads to CIAM/GAINS

After approval of the 2017 CLs (acidity and eutrophication, but *not* biodiversity) they were transferred in 2018 to the GAINS model for use in IAM

Tests were carried out as well ...

Already reported to WGE/EMEP in fall 2018

Contribution to ICP-Waters Report on State of Acidification (see Kari's presentation)



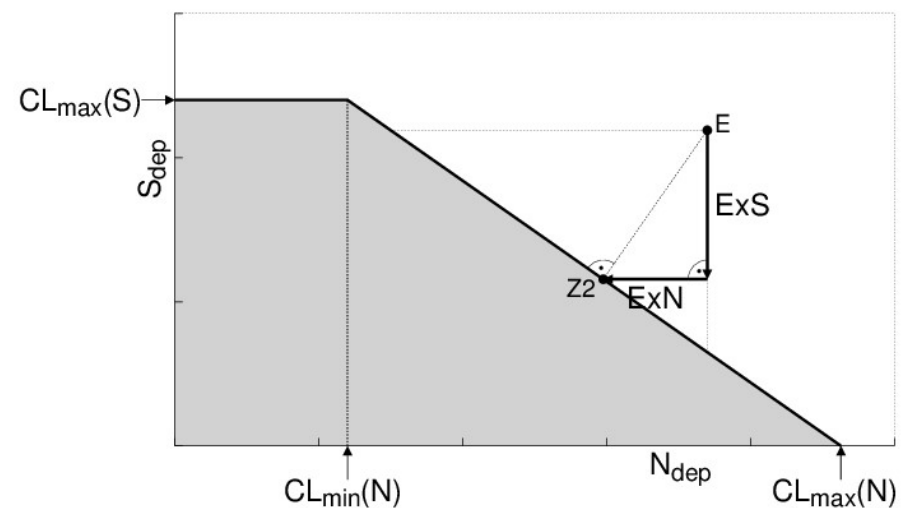
Note: most lakes not exceeded!

Acidity CLs of surface waters:

$$AAE = AAE-N + AAE-S$$

AAE-S > AAE-N (mostly)
(does not mean depS > depN!!)

red: p-p-line



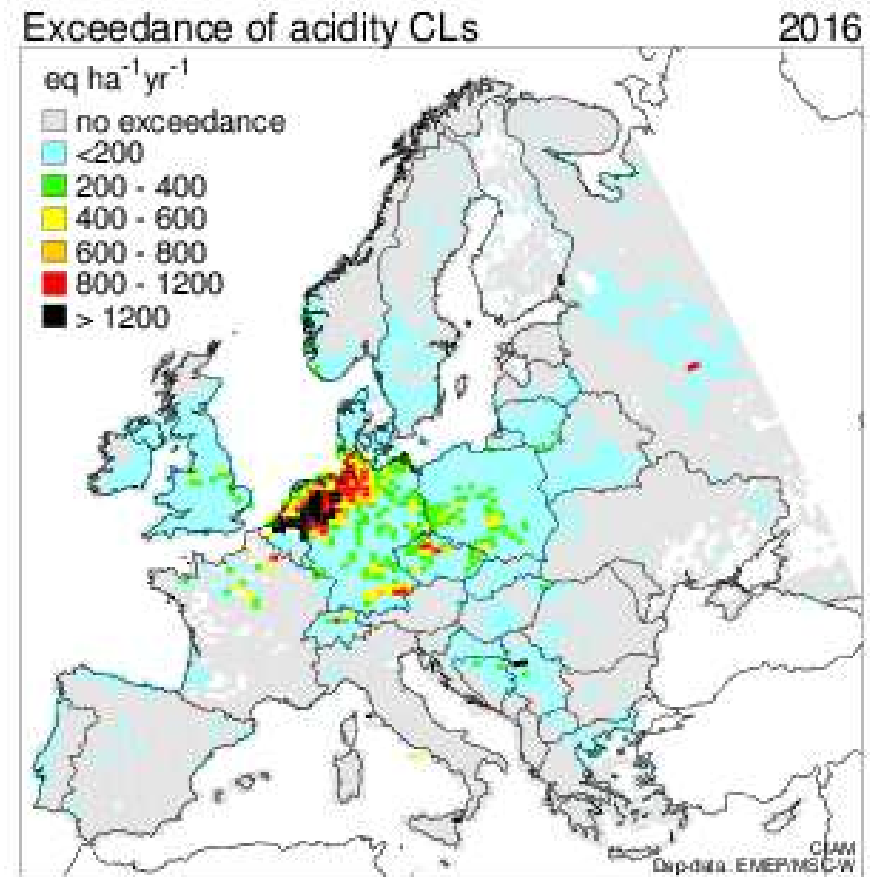
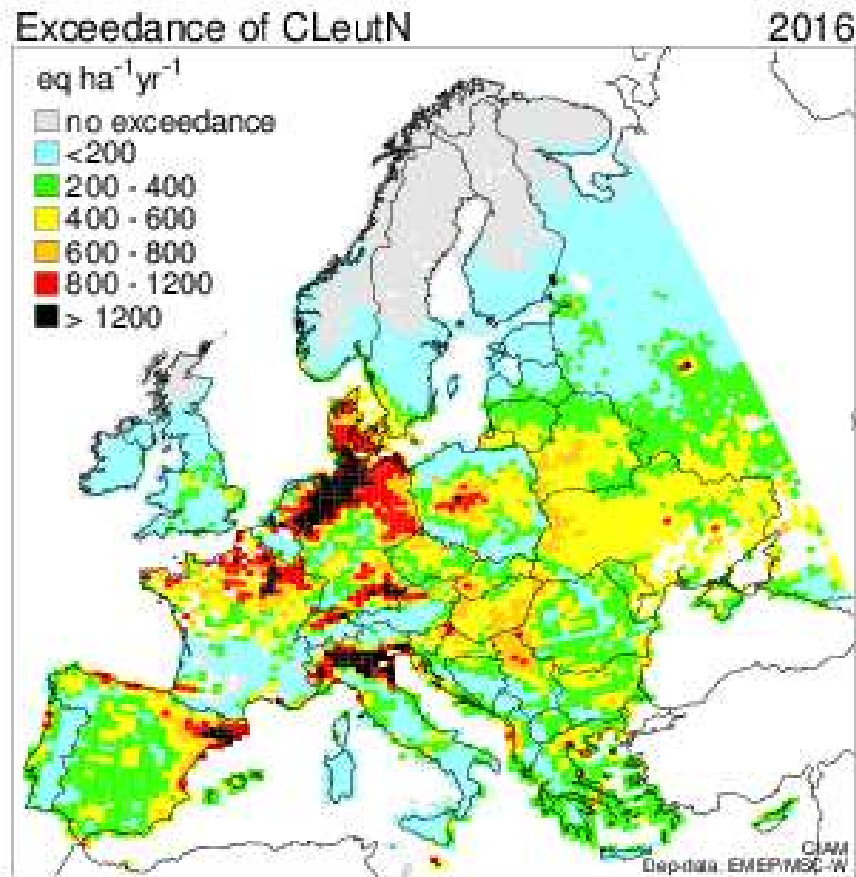
Contribution to 2018 EMEP Status Report

EMEP produced S, NO_x and NH₃ deposition on a 0.1°× 0.1° grid for the years 2000-2016 (meteo and emissions).

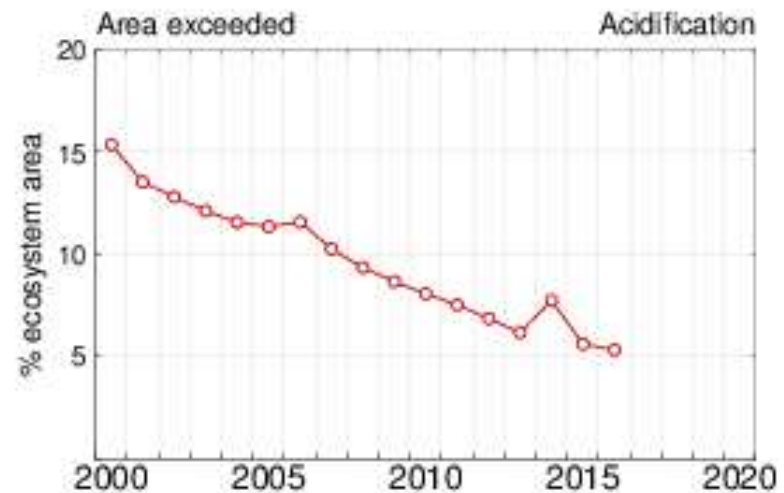
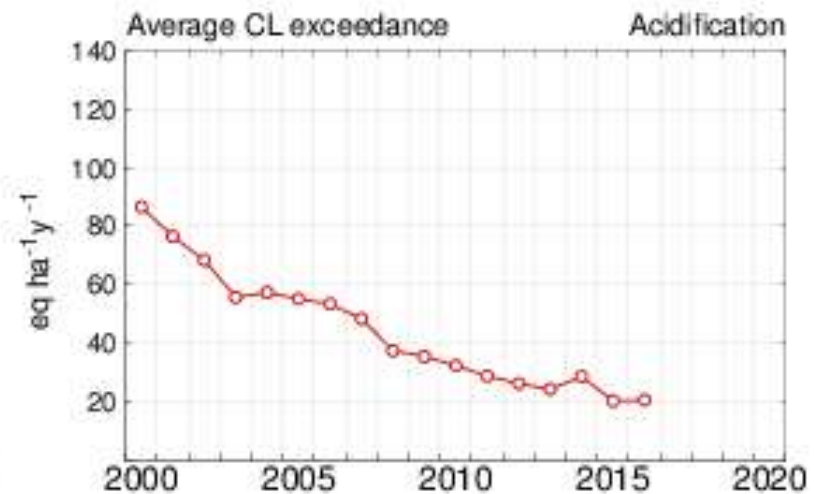
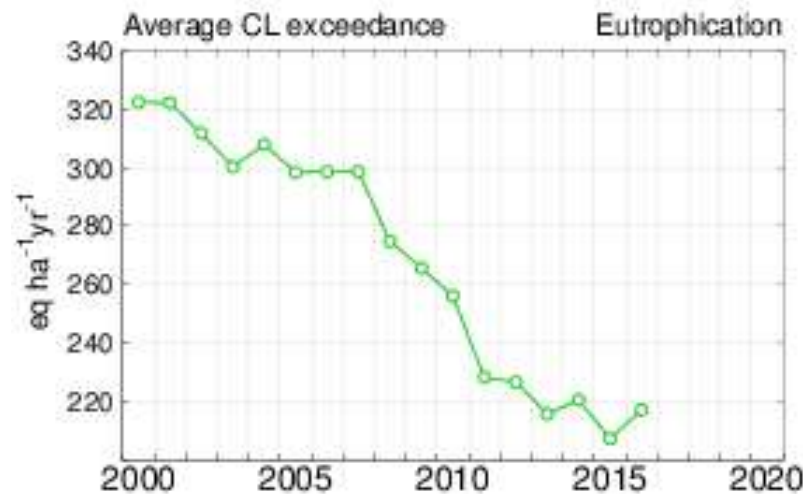
CIAM computed and mapped exceedances of the 2017 CLs in the GAINS model (aci and eut) using those depositions

Results described and published 2018 EMEP Status Report (see EMEP website)

Exceedance of 2017 CL_{eutN} and CL_{aci} using $0.1^\circ \times 0.1^\circ$ EMEP deposition with 2016 emissions & meteorology



Exceedance & exceeded area of 2017 CLeutN and Claci using $0.1^\circ \times 0.1^\circ$ EMEP deposition with 2000-2016 emissions & meteorology



Further activities at CIAM/GAINS:

- Separate transfer matrices (emissions → depositions/concentrations, SRMs) for Serbia, Montenegro and Kosovo now available (earlier: 1 SRM)
- Also for Caucasus countries (AM, AZ, GE) SRMs have been prepared by EMEP/MSC-W and are currently implemented into GAINS (Heur-EECCA!)
- Assisted new CCE in issues related to CLs
- CIAM hosted WGE/EMEP Bureaux meeting at IIASA (2 week ago)
- Fact: Emphasis since some time on Human Health (PM etc.)

Thank You! 😊

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Comments? 😐

Questions? 😞

Name
Program
Email
Web