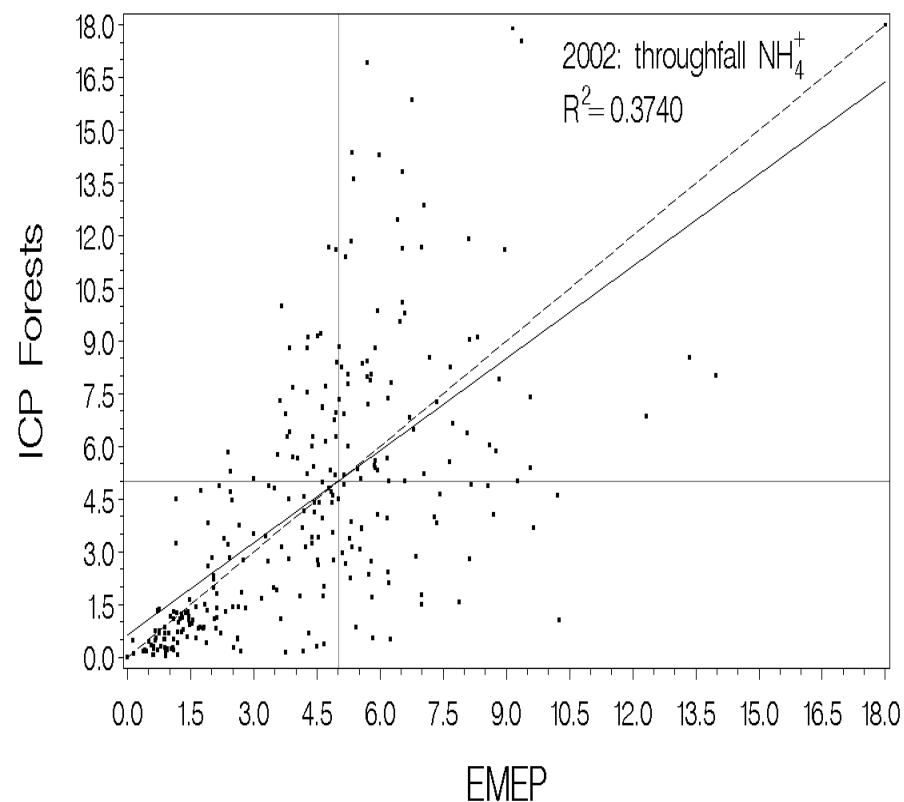


Item 5 Results and reports of ICP Forests in 2010

Technical Report:

Chapter 3.5 „Comparison of measured and modelled deposition“

- ✿ Item of 2010 Workplan of WGE
- ✿ Approach by EMEP: Simpson et al. (2006)
 - ✿ Model: EMEP MSC-W Eulerian Chemical Transport Model
 - ✿ Predicts deposition across Europe
 - ✿ To be tested against measured data
 - ✿ Test for 1997 and 2000
 - ✿ Sulphate
 - ✿ „EMEP wet open field“ vs. „ICP Forests bulk“
 - ✿ „EMEP wet + dry“ vs. „ICP Forests throughfall“
 - ✿ Nitrate and ammonium
 - ✿ „EMEP wet open field“ vs. „ICP Forests bulk“
 - ✿ R^2 between 0.29 and 0.79



Item 5 Results and reports of ICP Forests in 2010

Technical Report:

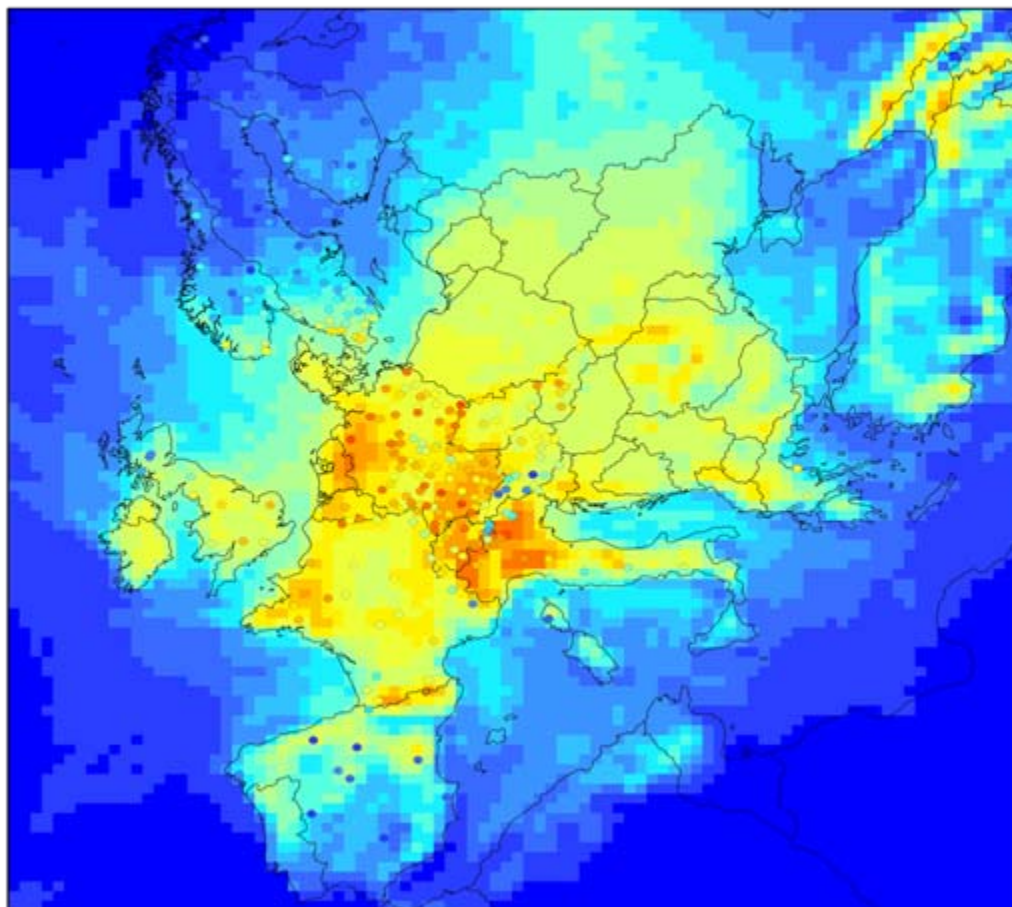
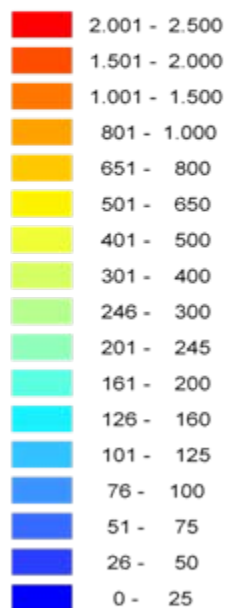
Chapter 3.5 „Comparison of measured
and modelled deposition“

- ✿ PCC applied approach
for 2002 and 2003
- ✿ r^2 are much lower, with two highest
 - ✿ Nitrate throughfall: $r^2 = 0.41$
 - ✿ Ammonium throughfall: $r^2 = 0.37$
- ✿ r^2 of all other correlations smaller

NH₄-Deposition 2002

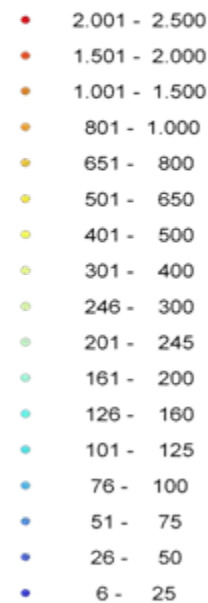
Wet Deposition EMEP

WDEP_RDN02 (mg/m²)



Throughfall Dep Level II

RDN02_tf (mg/m²)



Item 5 Results and reports of ICP Forests in 2010

Conclusion

- ✿ Approach by PCC very similar to that by EMEP
- ✿ But correlations
 - ✿ much lower
 - ✿ Implausible

Suggestion how to proceed

- ✿ Consider this an exercise
- ✿ Receive comments from Task Force
- ✿ Discuss with EMEP
 - ✿ Differences in approaches?
 - ✿ Differences in parameters involved?
- ✿ Calculate again with latest available data
- ✿ Replace existing Chapter 3.5