







ICP Forests: Activities 2014/2015

Walter Seidling,

Thünen Institute of Forest Ecosystems



1st EMEP / WGE session 14-18 Sept. 2015



Working Group on Effects of the

Convention on Long-range Transboundary Air Pollution



Activities of ICP Forests 2014/15

June 10 Tuesday



International Cross calibration Course Crown Condition (Central Europe)

June 10, 2014 at 6pm to June 13, 2014 at 12pm – Witzenhausen, Germany

Cross calibration course Here you will find the 2. Announcement for download Second_announcement.pdf

Organized by German Federal Ministry of Food and Agriculture in co-operation with the Nordwest German Forestry Research Station | Type: scientific

October 29 Wednesday



PCG Meeting of ICP Forests

October 29, 2014 at 1pm to October 30, 2014 at 1pm – German Federal Ministry of Food and Agriculture

The agenda will include the following main topics: Reporting Data management Data analyses Future meetings New ICP Forests strategy Please find attached the provisional agenda of the next PCG meeti...

Organized by PCC | Type: strategic

April 21 Tuesday



Combined EP Meeting

April 21, 2015 to April 24, 2015 – Göttingen, Germany, Northwest Forest Research Station Combined Expert Panel meeting in Göttingen (Germany) 21.-24.4.2015 Meeting of the EP's Foliar, Ambient Air Quality, Soil and Soil Solution, Deposition, Crown Condition and WG QA/QC in Labs Invitatio...

Organized by Nils König, Henning Meesenburg | Type: scientific,





Activities of ICP Forests 2014/15

May 19 Tuesday



4th ICP Forests Scientific Conference

May 19, 2015 at 4pm to May 21, 2015 at 2pm – Ljubljana, Slovenia

http://www.icp-

forests.org/DocsEvents/SC_2015/ICPForests_SciConf_Session
1.zipThe 4th ICP Forests Scientific Conference with the title
"Long-term trend and effects of air pollution on forest ecosyste...
Organized by M. Ferretti, W. Seidling, A. Michel, D. Žlindra |
Type: scientific

May 20 Wednesday



31st Task Force Meeting of ICP Forests

May 20, 2015 at 8pm to May 22, 2015 at 4pm – Ljubljana, Slovenia

The 31st Task Force Meeting of ICP Forests will take place in Ljubljana, Slovenia, on May 20-22, 2015. This meeting is open for official delegates of ICP Forests and invited experts only. The dinner...

Organized by Walter Seidling, Alexa Michel, Daniel Žlindra | Type: administrative

June 1 Monday





IUFRO NICE 2015: Global Challenges of Air Pollution and Climate Change to Forests"

June 1, 2015 to June 6, 2015 – Palais de la Méditerranée IUFRO 7.01 Meeting and COST Action "GreenInUrbs"; Presentations can be downloaded from the following link: http://iufro-nice2015.com/programSchedule.php Organized by Pierre Sicard | Type: conference





Maintaining the Monitoring Programme

- Ongoing data acquisition of more than 500 parameters according to the manual by our member states at both intensity levels
- Data submission rules could be adapted: since December 2014 continuous data submission throughout the year is possible. A deadline (15th of February) decides, whether data will be regarded in the most recent evaluations (important for crown condition data as some Ministries are still highly interested in these evaluations).
- Continuation and further development of standard evaluation routines for administrative reporting; the WGE trend report has set some new standards, but we still see a need for further more meaningful descriptive statistics.
- There is still a need for further meaningful integrated evaluations on cause effect relationships.



Task Force Meeting of ICP Forests

The 31th Task Force Meeting was held on 19 - 22 May 2015 at Ljubljana/Slovenia chaired by Michael Köhl (minutes available on Web page of ICP Forests)

Agenda of the 31th Task Force Meeting of ICP Forests at Ljubljana/Slovenia

PCC of ICP Forests at Thünen Institute of Forest Ecosystems, Eberswalde,
Germany
Slovenian Forestry Institute, Ljubljana, Slovenia



TFM ICP Forests Compressed Agenda #1

Thursday, 21 May 2015

Task Force Meeting (afternoon), venue: GRAND Hotel Union

Opening by the Chairman Michael Köhl and the Host Country

Item 1 Adoption of the agenda

PCC: agenda for adoption, overview meeting docs. Adoption minutes 30th TFM

Item 2 Report by PCC

PCC: report on activities and progress since the 30th Task Force Meeting

Item 3 Reporting PCC of ICP Forests

implementation of the 2014/2015 Workplan of WGE

contributions to WGE Trends report

draft of the Technical Report 2015

Executive Report 2014

30 year anniversary publication.



TFM ICP Forests Compressed Agenda #2

Item 4 Reports of sister ICPs

Franc Batic (ICP Vegetation, NFC Slovenia)

Lars Lundin (Chairman of ICP Integrated Monitoring)

Item 5 Activities of Expert Panels and other bodies of ICP Forests chairs of Expert Panels, Quality Assurance Committee, Working Group on Quality in Laboratories and Chair of the Scientific Evaluation Committee.

Conference Dinner with 30 years anniversary statement(s)

Item 6 Data analysis by external institution and ICP Forests Expert Panels
On-going studies based on ICP Forests data will be presented



TFM ICP Forests Compressed Agenda #3

Item 7 Status of the data base and future developments of the data infrastructure

Overview by PCC on the recently submitted data

Overview by PCC on current/future developments of the data infrastructure

Experiences with manually operated data up-dates by PCC

Experiences with changeover towards a continuous data submission system

Revised Data Policy of ICP Forests

Item 8 Co-operations with international organisations

Reports on co-operations with LTER, EANET, IUFRO, efforts under COST

Item 9 Obligations against WGE / CLRTAP

"Executive Summary 2015" will be presented for discussion and adoption by the Task

Force and for submission to WGE.

PCC will report on CLRTAP Assessment Report 2016

Item 10 Medium-term Strategy (2016 – 2023) of ICP Forests

Draft will be presented and discussed



LRTAP





4th Scientific Conference

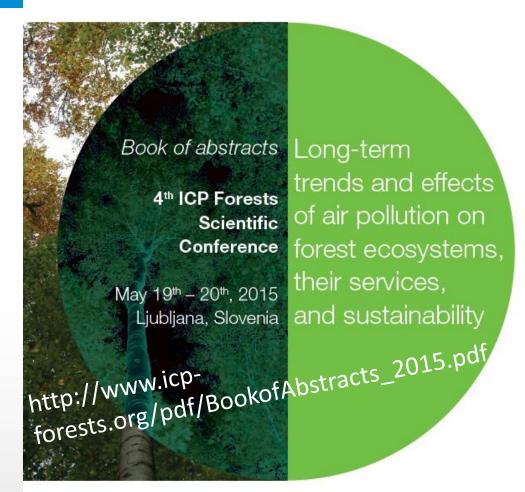
 Session 1: Measuring and modelling air pollution trends and effects in Europe.

Chair: Karin Hansen

 Session 2: Measuring and modelling air pollution trends and effects in Europe (cont.).
 Chair: Nenad Potočić

Session 3: Forest response:
 health, diversity and growth.
 Chair: Walter Seidling

Session 4: New developments.
 Chair: Marcus Schaub









"Global Challenges of Air Pollution and Climate Change to Forests"



Contributions from ICP Forests (*: presenting, ** EMEP MSC-W. ***: ICP M+M)

- M. Nicolas :
 Global challenges of air pollution and climate change to the public forest management in France.
- M Ferretti*, K Hansen, V Calatayud, M Camino-Serrano, N Cools, B De Vos, TM Nieminen, N Potocic, P Rautio, M Schaub, V Timmermann, L Ukonmaanaho, P Waldner:
 - Monitoring and modeling the long-term impact of air pollution on forest health and growth in Europe.
- T Sanders, W Seidling*:
 Accumulating influences on individual tree parameters: Focus on crown condition.
- M. Schaub*, M. Haeni, M. Ferretti, E. Gottardini, D. Simpson**, V. Calatayud:
 Ozone risk assessment for European forests a ten-year study on permanent monitoring plots.



"Global Challenges of Air Pollution and Climate Change to Forests"



Contributions from ICP Forests (*: presenting, ** EMEP MSC-W. ***: ICP M+M)

- O. Badea*, I. Popa, S. Leca, D. Silaghi:
 Effect of climate change on tree growth from intensive forest monitoring network in Romania.
- W. de Vries*, S. Etzold, M. Posch***, G. Jan Reinds***, L. Bonten, S. Solberg, P. Waldner, M. Schaub, D. Simpson**:

Assessment of impacts of nitrogen deposition, ozone exposure and climate change on carbon sequestration by monitoring and modeling.









ICP Forests: Technical Report 2015 and other Documentations

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Thünen Institute of Forest Ecosystems

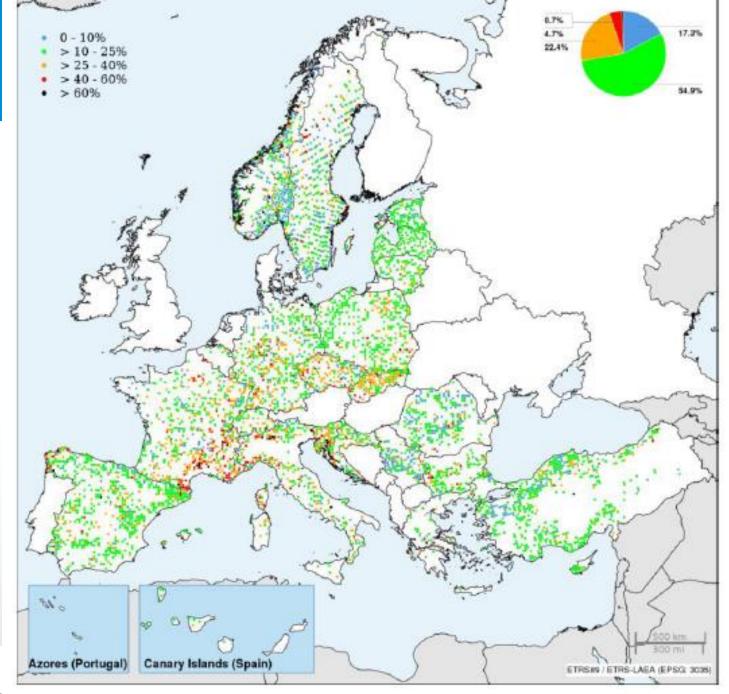


1st EMEP / WGE session 14-18 Sept. 2015



Working Group on Effects of the

All species 2014



Seite 14 14-18.09 2015

 $1^{\text{st}}\,j\text{O}\text{in}$ Figure 3-5. Mean plot defoliation of all species in 2014.

Overall trend of crown condition in Beech

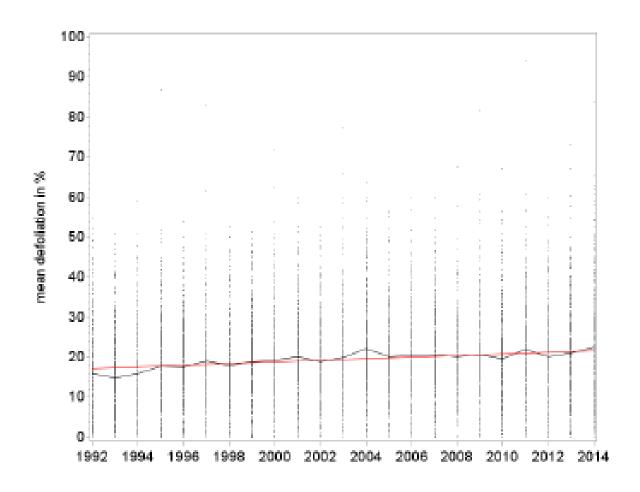
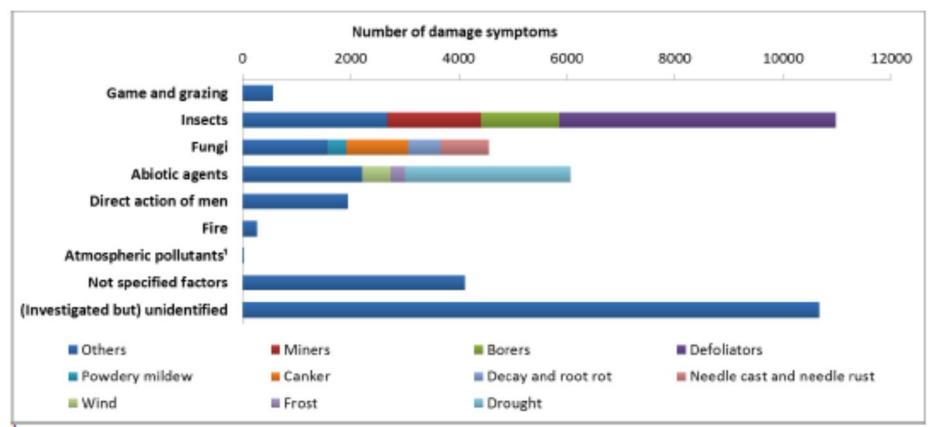


Figure 3-16. Over-all trend (regional Sen's slope = 0.2, p < 0.001; minimum length of time span: 20 years , red line) and yearly over-all mean defoliation (black line) of *Fagus sylvatica* at Level I sites; points represent annual plot means, for clarity these are not interconnected from year to year.



Overall registered cases of damages by causal agents



Visible symptoms of direct atmospheric pollution impact only (cf. Figure 3-1)

Figure 3-30. Damage symptoms according to agent group and specific agents/factors (n=39 146). Each agent group was only counted once per tree.



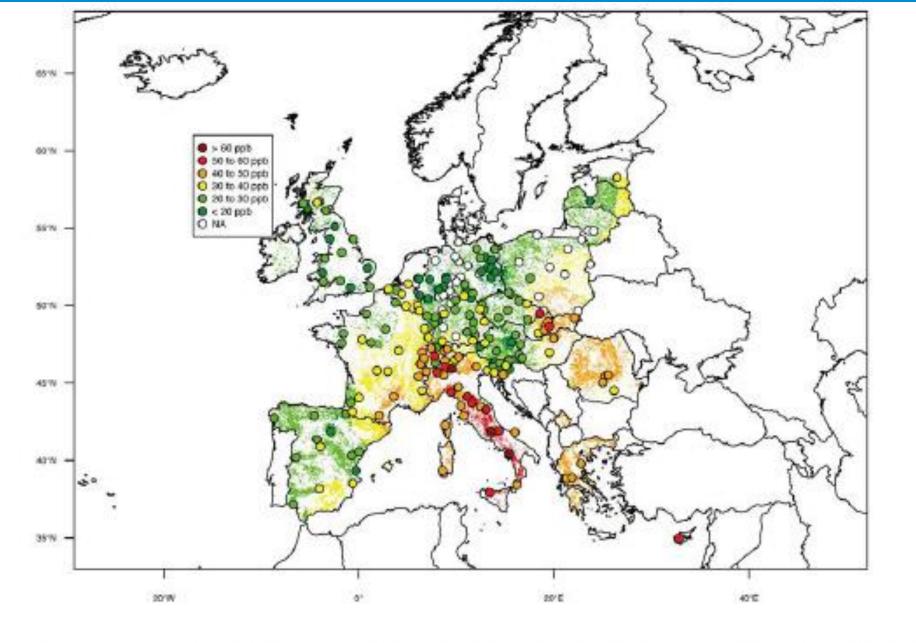


Figure 5-2. Spatial distribution of April-September mean ozone concentrations (ppb) from passive samplers on 203 plots and 20 countries during 2000-2013.

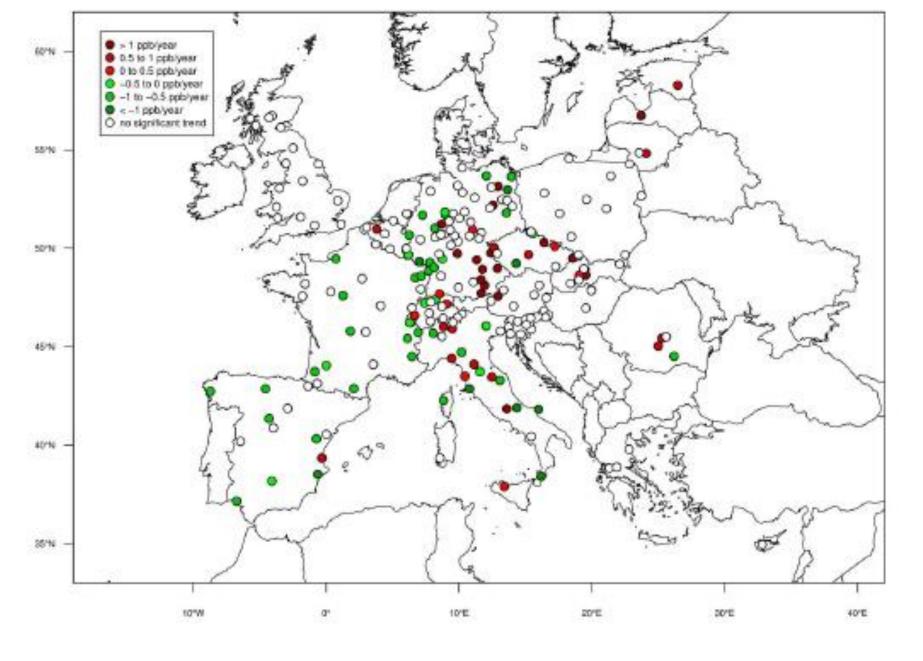
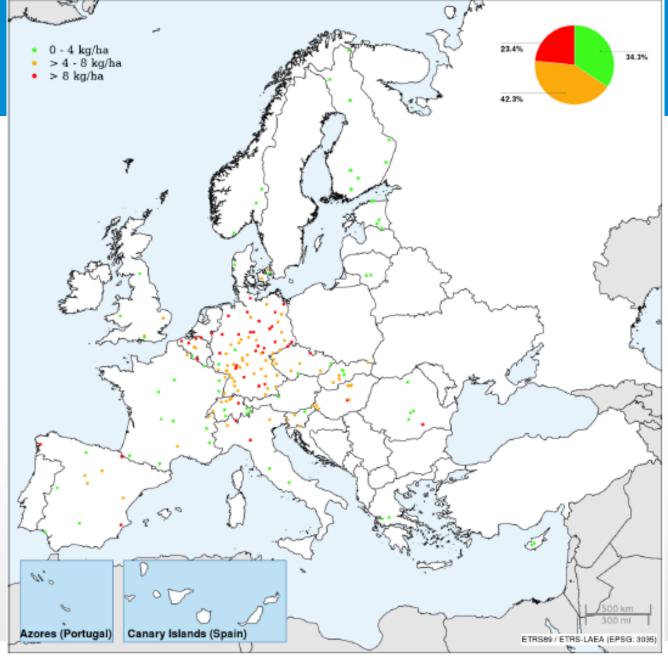


Figure 5-5. Spatial distribution of significant trends for weighted mean ozone concentrations on 203 sites with at least 4 years and 120 days per season (April-September) of data coverage from 2000-2013.

NH₄-N throughfall

Wet deposition



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Figure 6-4. Throughfall (and stemflow where applicable) deposition of ammonium nitrogen (NH₄-N) in European 1st joint EMEP/W(forests in 2013.

NO₃-N throughfall

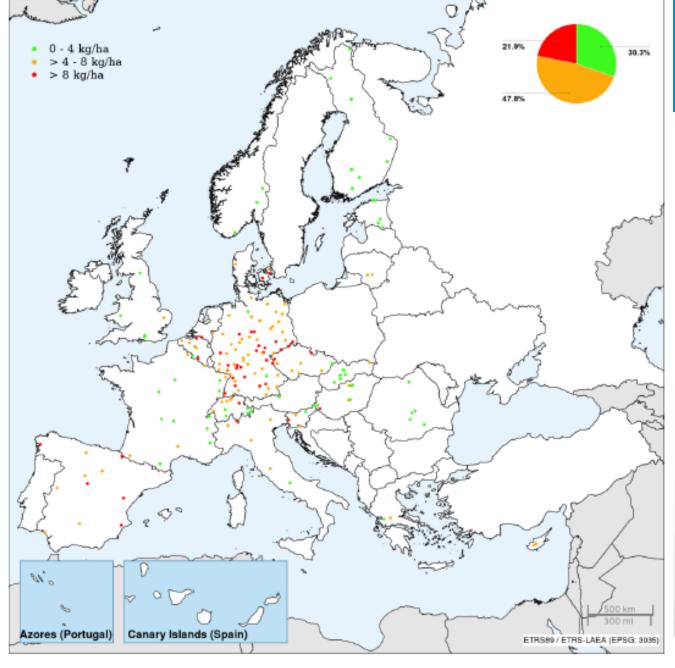


Figure 6-5. Throughfall (and stemflow where applicable) deposition of nitrate nitrogen (NO₃-N) in European forests in 2013.

SO₄-S throughfall

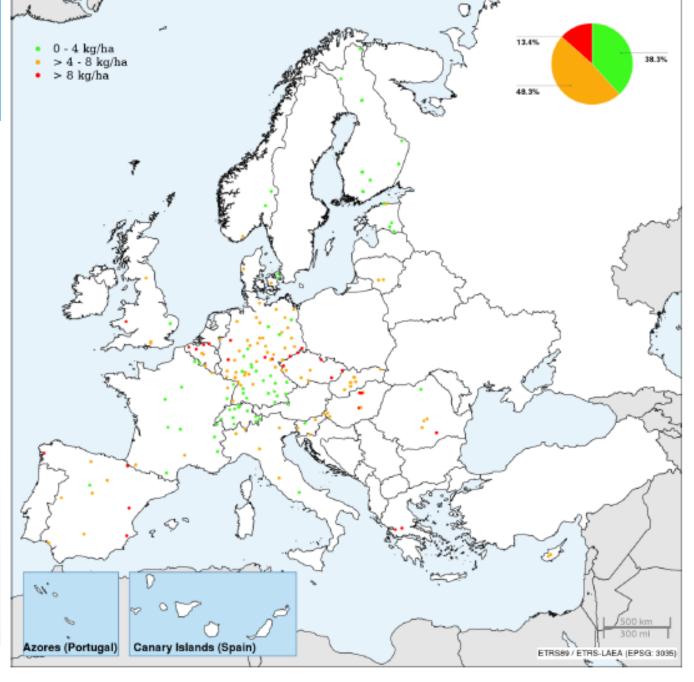


Figure 6-6. Throughfall (and stemflow where applicable) deposition of sulphate sulphur (SO₄-S) in European forests in 2013 without sea salt correction.

Ca (corrected) throughfall

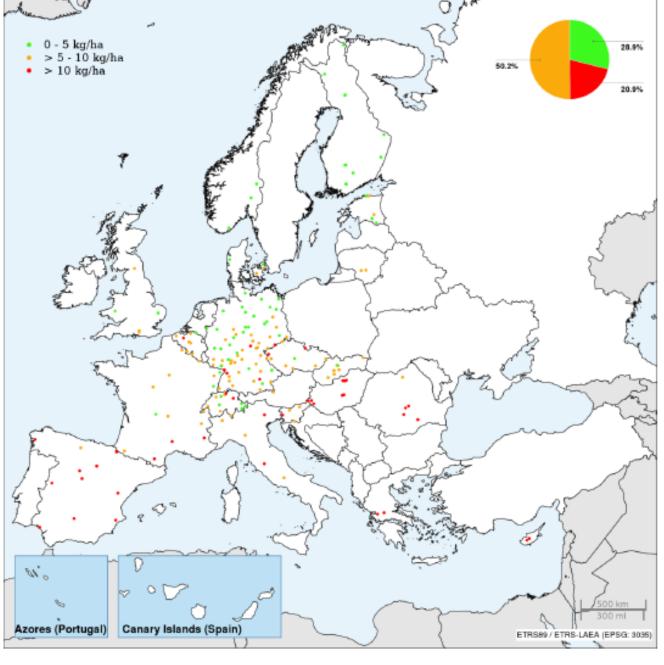


Figure 6-9. Sea salt corrected throughfall (and stemflow where applicable) deposition of calcium in European forests in 2013.

Mg (corrected) throughfall

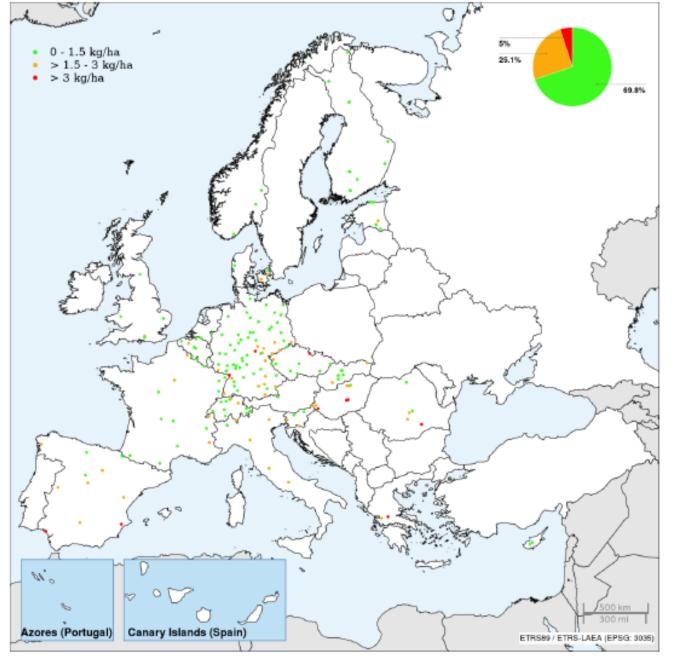


Figure 6-11. Sea salt corrected throughfall (and stemflow where applicable) deposition of magnesium in European forests in 2013.

2014 Executive Report





In Press

Contents:

- Forest vitality in Europe
- Forests in a changing climate
- Role and distribution of abiotic and biotic damaging agents
- Nitrogen: between pollutant and ferilizer
- Ground level ozone and its impact on European forests

THE CONDITION OF FORESTS IN EUROPE

2014 EXECUTIVE REPORT





2014

30 Years Anniversary Report











Thank you for your attention

