

Gerhard Smiatek: List of Publications

1 In Journals

1. R. Kiese. B. Fersch, C. Baessler, C. Brosy, K. Butterbach-Bahl, C. Chwala, M. Dannenmann, J. Fu, R. Gasche, R. Grote, C. Jahn, J. Klatt, H. Kunstmann, M. Mauder, T. Rödiger, G. Smiatek, M. Soltani, R. Steinbrecher, I. Völksch, J. Werhahn, B. Wolf, M. Zeeman, H.P. Schmid (2018): *The TERENO-preAlpine Observatory: integrating meteorological, hydrological and biogeochemical measurements and modelling.* Vadose Zone, 19, doi:10.2136/vzj2018.03.0060
2. Dieng D. B., Laux, P., Smiatek, G., Heinzeller, D., Bliefernicht, J., Kunstmann, H. G., et al. (2018): *Performance analysis and projected changes of agroclimatological indices across West Africa based on high-resolution regional climate model simulations.* Journal of Geophysical Research: Atmospheres, 123, 7950–973. doi: 10.1029/2018JD028536
3. Heinzeller, D., Dieng, D., Smiatek, G., Olusegun, C., Klein, C., Hamann, I., Salack, S., Bliefernicht, J. and H. Kunstmann (2018): *The WASCAL high-resolution regional climate simulation ensemble for West Africa: concept, dissemination and assessment.*, Earth Syst. Sci. Data, 10, 815-835, doi: 10.5194/essd-10-815-2018
4. Smiatek, G., Keis, F. Chwala, C., Fersch, B. and H. Kunstmann (2017): *Potential of commercial microwave link network derived rainfall for river runoff simulations.* Environmental Research Letters, 12, doi: 10.1088/1748-9326/aa5f46
5. Dieng, D., Smiatek, G., Bliefernicht, J., Heinzeller, D., Sarr, A., Gaye, A. T. and H. Kunstmann (2017): *Evaluation of the COSMO-CLM high-resolution climate simulations over West Africa.* Journal of Geophysical Research, 122, 1437–1455, doi:10.1002/2016JD025457
6. Smiatek, G., H. Kunstmann and A. Senatore (2016): *EURO-CORDEX regional climate model analysis for the Greater Alpine Region: Performance and expected future change.* Journal of Geophysical Research, 121, 7710–7728, doi:10.1002/2015JD024727
7. Smiatek, G. and H. Kunstmann (2016): *Expected future runoff of the Upper Jordan River simulated with a CORDEX climate data ensemble.* Journal of Hydrometeorology, 17, 865–879, doi:10.1175/JHM-D-15-0066.1
8. Smiatek, G., Helmert, J. and E.-M. Gerstner (2016): *Impact of land use and soil data specifications on COSMO-CLM simulations in the CORDEX-MED area.* Meteorologische Zeitschrift, 25, 215–230, doi: 10.1127/metz/2015/0594
9. Smiatek G., (2014): *Time invariant boundary data of regional climate models COSMO-CLM and WRF and their application in COSMO-CLM.* Journal of Geophysical Research, 119 (12), 7332–7347, doi: 10.1002/2013JD021267
10. Smiatek G., Heckl, A. and H. Kunstmann (2014): *High Resolution Climate Change Impact Analysis on Expected Future Water Availability in the Upper Jordan Catchment/Near East.* Journal of Hydrometeorology, 15 (4), doi: 10.1175/JHM-D-13-0153.1
11. Smiatek G., Kaspar S. and H. Kunstmann (2013): *Hydrological climate change impact analysis for the Fiqeh Spring in Damascus area, Syria.* Journal of Hydrometeorology, 14, 577–593, doi: 10.1175/JHM-D-12-065.1
12. Guillod B., Davin E.L., Kündig Chr., Smiatek G. and S. I. Seneviratne (2013): *Impact of soil map specifications for European climate simulations.* Climate Dynamics, 40, 123–141, doi:10.1007/s00382-012-1395-z
13. Smiatek G., Kunstmann H. and J. Werhahn (2012): *Implementation and performance analysis of a high resolution coupled numerical weather and river runoff prediction model system for an Alpine catchment.* Env. Mod. & Softw., 38, 231–243, doi: 10.1016/j.envsoft.2012.06.001
14. Hartmann, A. Lange, J. Vivó Aguado A., Mizyed N., Smiatek G. and H. Kunstmann (2012): *A multi-model approach for improved simulations of future water availability at a large Eastern Mediterranean karst spring.* Journal of Hydrology 468-469, 130-138, 10.1016/j.jhydrol.2012.08.024

15. Samuels R., Smiatek G., Krichak, S., Kunstmann, H. and Alpert, P. (2011): *Extreme Value Indicators in Highly Resolved Climate Change Simulations for the Jordan River Area*, Journal of Geophysical Research,116, D24123 doi:10.1029/2011JD016322
16. Smiatek G., H. Kunstmann and A. Heckl (2011): *High resolution Climate Change Simulations for the Jordan River Area*. J. Geophys. Res. 116, D16111, doi:10.1029/2010JD015313
17. Senatore A., Mendicino G., Smiatek G. and H. Kunstmann (2011): *Regional climate change projections and hydrological impact analysis for a Mediterranean basin in Southern Italy*. Journal of Hydrology, doi: 10.1016/j.jhydrol.2010.12.035
18. Smiatek G., H. Kunstmann, R. Knoche and A. Marx (2009): *Precipitation and temperature statistics in high - resolution regional climate models: evaluation for the European Alps*. J. Geophys. Res. 114, D19107, doi:10.1029/2008JD011353
19. Steinbrecher R., G. Smiatek, R. Köble, G. Seufert and J. Theloke, K. Hauff, P. Ciccioli, R.Vautard and G. Curci (2009): *VOC emissions from Natural and Semi-Natural Vegetation for Europe and neighbouring countries in the East and South: Intra-/Inter-Annual Variability*. Atmospheric Environment,43, doi:10.1016/j.atmosenv.2008.02.070, pp. 1380-1391
20. Smiatek, G. , B. Rockel and U. Schättler (2008): *Time invariant data preprocessor for the climate version of the COSMO model (COSMO-CLM)*. Meterologische Zeitschrift Vol. 17 (4), 395–405
21. Curci G., M. Beekmann, R. Vautard, G. Smiatek, R. Steinbrecher, J. Theloke and R. Friedrich (2008): *Modelling study of the impact of isoprene and terpene biogenic emissions on European ozone levels*. Atmospheric Environment, doi:10.1016/j.atmosenv.2008.02.070, pp. 1444–1455
22. Smiatek G. (2007): *Parallelization of a grid-oriented model on the example of a biogenic volatile organic compounds emission model*. Env. Mod. & Softw., doi:10.1016/j.envsoft.2007.07.009
23. Smiatek G. and R. Steinbrecher (2006): *Temporal and spatial variation of forest VOC emissions in Germany in the decade 1994 - 2003*. Atmospheric Environment (40), doi:10.1016/j.atmosenv.2005.11.071, pp. 166–177
24. Smiatek G. and M. Bogacki (2005): *Uncertainty assessment of potential biogenic volatile organic compound emissions from forests with the Monte Carlo method: Case study for an episode from 1 to 10 July 2000 in Poland*. J. Geophys. Res., Vol 110, D23304,doi:10.1029/2004JD005685
25. Kesik, M., P. Ambus, R. Baritz, N. Brüggemann, K. Butterbach-Bahl, M. Damm, J. Duyzer, L. Horvath, R. Kiese, B. Kitzler, A. Leip, C. Li, M. Pihlatie, K. Pilegaard, G. Seufert, D. Simpson, U. Skiba, G. Smiatek, T. Vesala, S. Zechmeister-Boltenstern (2005): *Inventories of N_2O and NO emissions from European forest soils*. Biogeosciences Discussions, Vol. 2, pp 779-827, 15-7-2005
26. Smiatek, G. (2005): *Distributed run of a one-dimensional model using SOAP-based WEB Services*. Journal of Atmospheric Environment 39 (10), doi:10.1016j.atmosenv.2005.01.017, pp. 1961-1966
27. Smiatek, G. (2004): *SOAP-based Web Services in GIS/RDBMS environment*. Environmental Modelling & Software 20 (6), doi:10.1016/j.envsoft.2004.04.008, 775–782
28. Stewart E.H., Hewitt, C.N., Bunce, R.G.H., Steinbrecher, R., Smiatek, G. and Schoenemeyer, Th.(2003): *A highly spatially and temporally resolved inventory of biogenic isoprene and monoterpene emissions - model description and application to Great Britain*. J. Geophys. Res,108, D20, doi:10.1029/2002JD002694
29. Smiatek, G. (2003): *WEB Service - based Mapping Tool for Meteorology and Chemistry Transport Models*. Environmental Software Systems, Vol.5, pp. 113 – 121
30. Jacobs, H.J., Tilmes, S., Heidegger, A, Nester, K. and Smiatek, G. (2002): *Short-term ozone forecasting with a network model system during summer 1999*. Journal of Atmosph. Chemistry, 42(1), pp 23–40
31. Schnitzler, J. P., Bauknecht, N., Brüggemann, N., Einig, W., Forkel, R., Hampp, R., Heiden, A. C., Heizmann, U., Hoffmann, T., Holzke, C., Jaeger, L., Klauer, M., Komenda, M., Koppmann, R., Kreuzwieser, J., Mayer, H., Rennenberg, H., Smiatek, G., Steinbrecher, R., Wildt, J.,Zimmer, W.(2002): *Emission of biogenic volatile organic compounds: An overview of field, laboratory and*

- modelling studies performed during the Tropospheric Research Program (TFS) 1997 - 2000.* Journal of Atmospheric Chemistry, 42(1), pp 159–177
32. Smiatek, G. und Schoenemeyer, Th. (1999): *GIS-Unterstützung für das multiskalige atmosphärische Modell MCCM.* Geo - Informations - Systeme (GIS) H. 4, Vol. 12, S. 12 - 17
 33. Richter, K., Knoche, R., Schoenemeyer, Th., Smiatek, G. und Steinbrecher, R.: (1998): *Abschätzung biogener Kohlenwasserstoff-Emissionen* Umweltwissenschaften und Schadstoff-Forschung 10 (6) pp. 319 - 325, doi: 10.1007/BF03037672
 34. Smiatek, G. (1996): *Cluster versus Pixelstichproben mit Fernerkundungsdaten.* Zeitschrift für Photogrammetrie und Fernerkundung - ZPF, H. 6, pp. 202 - 206
 35. Smiatek, G. (1995): *Sampling Thematic Mapper Imagery for Land Use.* Remote Sensing of Environment, Vol. 52, No. 2, pp. 116 - 121
 36. Smiatek, G. (1994): *Methode der dreifachen Stichprobe zur Erfassung der Flächennutzung aus LANDSAT/TM-Daten.* Zeitschrift für Photogrammetrie und Fernerkundung - ZPF, Vol. 62, H. 3, S. 83 - 89
 37. Smiatek, G. (1993): *Einbindung von ARC.INFO-Karten in TeX-Dokumente.* Geo-Informations-Systeme (GIS), Vol. 6, H. 3, S. 27 - 28 (short communications)
 38. Köble, R. u. Smiatek, G. (1992): *Datenbedarf und Datenverarbeitung in der Kartierung kritischer Luftbelastungen.* Geo - Informations - Systeme (GIS), Vol. 5, H. 3, S. 1 - 7

2 Conference Papers

1. Smiatek, G. (2009): High performance computing in regionalization of global climate change scenarios. International Symposium on Environmental Software Systems (ISESS) 2009, Venice, Italy, October 6-9, pp. 1- 9
2. Senatore A., G. Mendicino, G. Smiatek and H. Kunstmann (2008): Climate change scenarios in southern Italy through joint atmospheric-hydrological modeling. 31. Convegno di Idraulica e Costruzioni Idrauliche, Perugia, 9-12 Settembre, 2008
3. Mendicino,G., A. Senatore, G. Smiatek and H. Kunstmann (2008): Impact analysis of climate change on water resources in southern Italy through joint atmospheric-hydrological modeling. 1st International Conference on Drought Management: Scientific and Technological Innovations, Zaragoza, 12-14 June, 2008
4. Smiatek, G., R. Knoche, R. Marx, A. and H. Kunstmann (2007): Assessment of high resolution climate change data for hydrological impact studies. CAIWA 2007, International Conference on Adaptive & Integrated Water Management, Basel, CH, November 12-15, 2007.
5. Smiatek, H. Kunstmann, R. Marx and J. Werhahn (2007): Implementation of an operational flood warning system for an alpine catchment with a state and event driven system. Swayne, D.A. et al. [Hrsg.]: Environmental Software Systems: Dimension of Environmental Information; Proceedings of the 6th International Symposium on Environmental Software Systems (ISESS 07), Prague, Czech Republic, May 22-25, 2007.
6. Smiatek, G. (2006). *Environmental modeling in an event-driven multitasking network environment.* In: Voinov, A., Jakeman, A., Rizzoli, A. (eds). Proceedings of the iEMSs Third Biennial Meeting: Summit on Environmental Modelling and Software. International Environmental Modelling and Software Society, Burlington, USA, July 2006. CD ROM. Internet: <http://www.iemss.org/iemss2006/sessions/all.html>
7. Steinbrecher R., Graus M., Grabmer W., Hansel A., Wisthaler A., Lindinger L., Klemm O., Forkel R., Hauff K., Klauer M., Pfichner A., Rappenglück B., Smiatek G., Steigner D. (2006): *Isoprenoid Fluxes of Norway Spruce Forests in Europe: Results from Field and Modelling Studies in Germany and Finland.* In: The Changing Chemical Climate of the Atmosphere, Sandro Fuzzi, Michela Maione (eds), ARCNE editrice, Rome ISBN 88-548-0851-2, pp. 82-89.

8. Smiatek, G. (2005): *Distributed memory parallelization of a semi-empirical biogenic Volatile Organic Compounds emission model*. In: Hill, D., Barra, V. and Traore, M. K. (ed): Open international Conference on Modeling and Simulation - OICMS 2005, Blaise Pascal University, Clermont-Ferrand, France, pp. 199 - 206
9. Forkel, R., Smiatek, G., Hernandez, F., Iniestra, R., Rappenglck, B. and R. Steinbrecher (2004): *Numerical simulation of ozone level scenarios for Mexico-City*. AMS Conference, 11. -15. Jan. 2004, Seattle
10. Smiatek, G.(2002): Geographic Information System (GIS) Methods in Support of Meteorology /Chemistry Transport Models. Proceeding of the 6th GLOREAM Workshop, Aveiro, Portugal, 4 - 6 September 2002, pp. 15 – 21
11. Steinbrecher, R., Schaab, G, Smiatek, G. and Zimmer, W: (2001):*Biogenic Emission Modelling on Regional Scale: Some Recent Improvements*. In: Midgley, P.M., Reuther, M. and Williams (Eds.): Proceedings from the EUROTAC-2 Symposium 2000, Berlin, Heidelberg 2001, pp. 203 - 209 Air Quality Management, Antwerp Apr. 13-14, 2000, pp 47–51
12. Smiatek, G. (2001): *GIS and RDBMS Class System in Support of BVOC Emission Inventories*. In: Proceedings of the 5th. GLOREAM Symposium, Wengen Switzerland, September 24 - 26, 2001, pp 1 –6
(http://people.web.psi.ch/keller_j/GLOREAM/WS2001/Final/Table_of_contents.html)
13. Smiatek, G. (2000): *Scale Effects and GIS*. In: Proceedings of the SIMPAQ Symposium: Scale Interactions in Models and Policies for Air Quality Management, Antwerp Apr. 13-14, 2000, pp 47–51
14. Smiatek, G.(2000):*Application of GIS to Land Use Mapping for Numerical Atmospheric Meteorology/Chemistry Models*. Annali Facolta di Scienze Nautiche, Instituto Universitario Navale, Napoli, Special Issue on Global and Regional Atmospheric Modelling, pp 219 - 227
15. Smiatek, G. and Stockwell, W. R. (1999): *Application of A Geographical Information System (GIS) to Land UseMapping for Biogenic Emission Modeling in Germany and Europe*. In: Proceedings of the 8th A&WMA Conference, The Emission Inventory: Living in a Global Environment. New Orleans Dec. 8-10, 1988, pp. 626 - 636
16. Smiatek, G. (1999): *Mapping Land Use in Europe for Modelling Biogenic and Anthropogenic and Emissions*. In: Borrell,P. M. and Borrell, P. (Ed.): Proc. of EUROTAC2 Symp. '98, pp. 251 - 254
17. Memmesheimer, M., Jakobs, H. J., Tippke, J., Ebel, A. Piekorz, G. Weber, M. Geiss, H., Jansen, S., Wickert, B.,Friedrich, R., Schwarz, U. und Smiatek, G. (1999): *Simulation of a summer-smog episode in July 1994 on the European and urban scale with special emphasis on the photo-oxidant plume of Berlin*. In: Borrell, P. M. and Borrell, P. (Ed.): Proceedings of EUROTAC2 Symposium '98, pp. 591 - 596
18. Köble, R. and Smiatek, G. (1997):*Mapping Land Cover for Europe*. In: Ebel, A, Friedrich, R. and Rodhe, H. (Ed.): Tropospheric Modelling and Emission Estimation. Berlin, pp. 261 - 267
19. Smiatek, G. (1996): *European Land Use Database*. IGBP- Infobrief Nr. 25
20. Smiatek, G. and Köble, R.(1996): *Mapping Land Use and Land Cover in Europe*. In: Borell, P. M., Borell, P. Cvitas, T, Kelly, K and Seiler, W. (Ed.): Proceedings of EUROTAC Symposium '96, Vol. 2, pp. 70 -72
21. Smiatek, G.(1996): *Crop Area Estimates Using ERS-1 SAR Data*. International Archives of Photogrammetry and Remote Sensing. Vol. XXXI, Part B7. XVIII SPRS Congress Vienna, 9.-19. July 1996, pp. 624 - 626
22. Smiatek, G., Köble, R. und Gauger, Th. (1995):*Critical Loads und Levels*. In: Arndt, U., Bäker, R. und Kohler, A. (Hrsg.): Grenzwerte und Grenzwertproblematik im Umweltbereich. 27. Hohenheimer Umwelttagung 27. Januar 1995, S. 111 - 119
23. Köble, R. und Smiatek, G. (1994): *Mapping Land Use for Modelling Emission and Deposition in Europe*. EUROTAC- Annual Report, Part 5, Section II, pp. 74 -79

24. Smiatek, G.: (1993): *Mapping Critical Levels and Critical Loads and Areas in Germany where they are Exceeded*. Kongresshandbuch Geotechnica, Köln, 5. - 8. Mai. 1993, pp. 152 - 153
25. Smiatek, G. u. Köble, R. (1992): *Critical Levels Exceedances in Germany. UN ECE Workshop on Critical Levels*. Background papers. Egham, UK, 23-26 March 1992, pp. 172 - 184
26. Smiatek, G. u. Köble, R. (1991): *Kartierung der kritischen Werte für Depositionen in der Bundesrepublik Deutschland*. 13. Statusseminar "Waldschäden/Luftverunreinigungen" 10./11 Oktober 1991, Schmallenberg/ Grafschaft
27. Smiatek. G., Bönsch, E. und Teufel, J.(1990): *Kartierung kritischer Luftbelastungen - Critical Loads/Levels*. 12. Statusseminar "Waldschäden/Luftverunreinigungen" 11./12. Oktober 1990, Schmallenberg/ Grafschaft. S. 108 - 124
28. Teufel, J., Smiatek, G. und Bösch, E. (1990): *Erfassung immissionsempfindlicher Biotope in der Bundesrepublik Deutschland und in anderen ECE - Ländern*. 12. Statusseminar "Waldschäden/ Luftverunreinigungen" 11./12 Oktober 1990, Schmallenberg/Grafschaft. S. 125 - 150

3 Books and Chapter in Books

1. Kunstmann, H., H. Fröhle, F. Hattermann, A. Marx, G. Smiatek und C. Wanger (2017): Wasserhaushalt. In: Brasseur, G. P. , D. Jacob und S. Schuck-Zöller (Hrsg.) Klimawandel in Deutschland. Entwicklung, Folgen, Risiken und Perspektiven. Springer, Berlin, 161–172
2. Barnes I., Becker K., Bruckmann P., Gilge S., Smiatek G., Steinbrecher R., and P. Wiesen (2011): *Reinheit und Qualität der Luft haben Grenzen*. (in) Zellner, R. et al. (eds): Chemie über den Wolken ... und darunter, Wiley-VCH Verlag, pp. 85-96
3. Smiatek, G. H.R. Knoche und H. Kunstmann (2008): Bodenphysikalische Parameter in Klima – Modellen. UBA-TEXTE 2008
4. Smiatek, G. und Köble, R.(1998): Critical Level. Critical Levels Exceedance. In: Nagel, H.-D. und Gregor, H.-D. (Hrsg.): Ökologische Belastungsgrenzen Critical Loads & Levels. Springer Verlag Berlin u.a., S. 42 - 51 und S.223 - 232
5. Köble, R. und Smiatek, G.(1998): Erfassung der Immission. Critical Levels Exceedance. In: Nagel, H.-D. und Gregor,H.-D. (Hrsg.): Ökologische Belastungsgrenzen Critical Loads & Levels. Springer Verlag Berlin u.a., S. 149 - 167
6. Gauger, Th., Köble, R. und Smiatek, G.(1998): Erfassung der nassen Deposition. In: Nagel, H.-D. und Gregor, H.-D. (Hrsg.): Ökologische Belastungsgrenzen Critical Loads & Levels. Springer Verlag Berlin u.a., 259 S. S. 171-194
7. Nagel, H.-D., Smiatek, G. und Werner, B. (1994): Das Konzept der kritischen Eintragsraten als Möglichkeit zur Bestimmung von Umweltbelastungs- und -qualitätskriterien. Materialien zur Umweltforschung herausgegeben vom Rat von Sachverständigen für Umweltfragen. Heft 20, 70 S.
8. Köble, R., Nagel, D., Smiatek, G. und Werner, B. (1993): National Report Germany. In: Downing, R. J., Hettelingh,J.-P. and de Smet, P.A.M.(edt.): Calculation and Mapping of Critical Loads in Europe: Status Report 1993. Bilthoven, pp. 82 - 87
9. Smiatek, G.: (1993): Erfassung der Flächennutzung mit Hilfe von LANDSAT/TM - Stichproben. Dissertation am Institut für Navigation , Stuttgart, 152 S.
10. Bönsch, E. und Smiatek, G. (1990): Activities on Mapping Critical Levels. In: UN ECE: Manual on Methodologies and Criteria for Mapping Critical Levels/Loads and Geographical Areas where they are Exceeded. Annexes II and III, 38 p.

3.1 Other publications

1. Smiatek, G. and H. Kunstmann (2011): Climate change investigations for the Figeh spring area, Syria. Final Report to the KfW. 31 p.
2. Smiatek, G., Knoche, H., Marx, A. and H. Kunstmann (2007): Evaluation of Regional High Resolution Climate Change Data for the Alpine Region (ClimChAlp), Final Report to LfU. 77p.
3. Smiatek, G. (2005): Skript zur Vorlesung: Einführung in die Fernerkundung II. Institut für Navigation der Universität Stuttgart. 3. Auflage, 178 S.
4. Smiatek, G. und Garcia Raynoso, A.(2001): Konzeption für ein Informationssystem für die Commission Ambiental Metropolitana (CAM). (in englisch und spanisch). GTZ-Mexico
5. Köble, R., Smiatek, G. und Gauger, Th. (1997): Kartierung kritischer Belastungskonzentrationen und -raten für empfindliche Ökosysteme in der Bundesrepublik Deutschland und anderen ECE-Ländern. Teil 1: Deposition Loads, 126 S., Teil 2: Critical Levels, 75 S und Teil 3: Informationssystem CANDIS, 26 S. Endbericht zum Vorhaben 106 01061, Umweltbundesamt Berlin, Stuttgart.
6. Smiatek, G. und Köble, R.(1996): Landnutzung und digitale topographische Kartierung in Europa. Abschlußbericht zum BMBF-Projekt 07 EU825/4.Institut für Navigation der Uni Stuttgart, 92 S.
7. Köble, R., Nagel, D., Smiatek, G., Werner, B. und Werner, L. (1993): Kartierung der Critical Loads und Levels in der Bundesrepublik Deutschland. Abschlußbericht zum Forschungsvorhaben FE 108 02 080 des Umweltbundesamtes. Stuttgart, Berlin, 177 S.
8. Hartl, Ph., Chang, F., Bönsch, E., Klaedtke, H.-G., Smiatek, G. und Ziemann, H. (1990): Weiterentwicklung der Technik und aktuelle Nutzanwendung der Fernerkundung im Bereich Umweltschutz. Abschlußbericht zum Studienauftrag 92 411/17 des Umweltbundesamtes 1987
9. Bönsch, E. u. Smiatek, G. (1990): Deskriptive Statistik und Kartographie der Waldschadens- und wirkungsdaten. Abschlußbericht zum FE - Vorhaben 108 03 046/47 des Umweltbundesamtes. 68 S.
10. Smiatek, G.(1988): Möglichkeiten des Einsatzes von Fernerkundungsverfahren zur Hochrechnung der Erntemengen unter besonderer Berücksichtigung neuerer und zukünftiger Fernerkundungssysteme. Deutsche Forschungsgemeinschaft Ha 802/9-3, Stuttgart, 166 S.