



FACCE-MACSUR

MACSUR Phase 1 Final Administrative Report (public release)

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Instrument:	Joint Programming Initiative
Topic:	Agriculture, Food Security, and Climate Change
Project:	Modelling European Agriculture with Climate Change for Food Security (FACCE-MACSUR)
Start date of project:	1 June 2012
Duration:	36 months
Theme, Work Package:	Hub 3
Deliverable reference num.:	D-H3.3
Deliverable lead partner:	Thünen Institute
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Confidential till:	—

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1.0	First Release	2015-09-01
1.1	Public release (confidential section on funding removed), editorial corrections	2015-09-25



MACSUR - FIRST PHASE REPORT

*to be filled in and submitted
by the MACSUR coordinator
to ptj-faccejpi@fz-juelich.de until 01.09.2015*

A – General data

Project Title	Modelling European Agriculture with Climate Change for Food Security		
Acronym	FACCE MACSUR		
Official Start (dd/mm/yy)	01/06/2012	Expected End (dd/mm/yy)	31/05/2015
Signature date of the Consortium Agreement:	12/06/2013		
Total cost of the project (in k€; this is the sum of the individual project costs for each partner)	8'028 k€		
Total spent funding “in cash” until 31/05/2015 (in k€; this is the sum of the in cash funding spent for each partner)	5'993 k€		
Total “in kind” spent until 31/05/2015 (in k€; this is the difference between the project costs and the spent funding)	2'035 k€		
Total “in kind” contribution (in k€; this is the difference between the project costs and the granted funding)	649 k€		
Total number of Person-Months contributed to MACSUR	1460.26 PM		
Total number of “in kind” Person-Months	657.58 PM		

B - Outputs of MACSUR (max. 1 page)

Please provide all lists in Annex

1.Number of articles in peer reviewed international journals and submitted manuscripts	278
1a. Of which, joint publications	172
2.Number of contributions in books	22
3.Number of other publications	21
4.Number of input to policy makers (estimated)	11
5.Number of oral and poster presentations in scientific congresses	480
6.Number of organized major international congresses	8
7.Number of press, radio, TV, and internet appearances	20
8.Number of new external grant and total amount of new external grant money, the application resulting from MACSUR activities	9 17'416'972 €
9.Number of supervised theses	20
10.Number of joint patents (between partners or resulting from project)	2
11.Number of new collaborations (subset of group or group asking for additional (new) funding)	13
12.Number of scientific acknowledgements (Prizes, honorary doctorates, memberships in scientific academies, major international duties, etc.)	3
13.Data access: number of new datasets or data/model assets generated in MACSUR (provide in the annex explanations on the storage: is this centralised or in each group? capture data sharing and evidence for this)	>12
14.Number of other activities (please list them by categories in the annex)	13

C – Networking (max. 2 pages)

Please provide relevant lists in Annex

1.Number of theme or cross-theme meetings (list in annex)	10
2.Number of consortium meetings (whole MACSUR; list in annex)	8
3.Number of workshops (list in annex)	7
4.Was the coordination across themes sufficient/satisfactory/adequate? Why? What is the potential for improvement?	
<p>a) During phase 1, we achieved an in-depth understanding of the requirements for cross-Theme coordination and different approaches applied in the Themes. We satisfactorily managed to streamline coordination towards similar organisational structures, used similar formats for inventories and descriptions of available models, agreed on common core climate and socio-economic scenario assumptions for modelling activities, and jointly set research priorities. This resulted in a wealth of joint scientific publications, training workshops, and new collaborations (funded and unfunded) with scientists and institutions within and outside the knowledge hub.</p> <p>b) We adequately accomplished this through the following:</p> <ul style="list-style-type: none"> • Monthly (on average) meetings (physical or online) among Theme and Hub coordinators • Distribution of Theme newsletters (bi-monthly) to all MACSUR members • Attendance of Theme representatives at other Theme meetings • Close collaboration on joint tasks (e.g. stakeholders, uncertainty, scaling methods, metadata exploration, regional pilot studies) and in specialist meetings <p>c) Potential for improvement most likely lies in, and may be realized, for example, through:</p> <ul style="list-style-type: none"> • Introduction of additional cross-cutting tasks that require close interaction among co-leaders from different Themes – specifically, in areas such as developing a position paper for MACSUR; further operationalization and intensification of stakeholder involvement, tackling and further harmonizing the work on uncertainty and risk analysis, scaling methods, scenario development and the development of efficient ways of sharing information across Themes and tasks. This might require strengthening of the organisation structure of the knowledge hub, as by the recently established Project Leadership Team composed of topical and managerial leaders. Moreover, strengthening the network could be facilitated by allocating more responsibilities to task leaders. • A considerable period of time is necessary to align interests and approaches for the development and implementation of WPs and tasks in order to create a coherent project structure and facilitate knowledge exchange; all partners ought to be actively involved in this process to ensure they have ownership and understand the overall purpose of activities. The planning period was better for phase 2 than phase 1 but not yet ideal. • Stronger interaction between researchers from different Themes at events or cross-thematic publications organized by other Themes with explicit invitations to other Themes to participate. • Addressing more prominently and intensively cross-theme topics in the MACSUR Hub Newsletter 	
5.Was the integration of work packages sufficient/satisfactory/adequate? Why? What is the potential for improvement?	
<p>Overall, engagement varied because, for example, the financial resources of teams were limited in terms of carrying out research and travelling to workshops and conferences.</p> <p>Within all Themes, regular WP leaders meetings (on-line and in person), task and WP level workshops and information sharing with partners through extended minutes and the documentation of meetings facilitated good internal integration of activities. Regular newsletters were produced and shared by CropM, LiveM and TradeM. Across Themes, bilateral visits /exchanges of visiting scientists within WPs and frequent (mutual) invitations of guest speakers from the MACSUR pool to national conferences furthered integration and raised awareness of activities.</p> <p>Within CropM, integration of the six WPs, (C1-C4 on scientific excellence; C5 on capacity building and C6 on case studies impact assessment) was excellent. Integration was achieved by monthly WP leaders meetings; bi-weekly meetings of CropM co-leaders and additional meetings for planning workshops and numerous joint publications, PhD student supervisions and joint interactions (meetings/publications) with other networks such as AgMIP, CCAFS, etc.; WP-specific workshops (with one or more WPs involved; 3-4 per year); exchange through extended minutes/ documentation of meetings</p>	

and workshops; PhD courses (two per year) with input from various WPs, and joint organisation and execution of the CropM international symposium and workshop at Oslo, Feb. 2014 (120 participants of which the majority was from CropM – but also other theme-representatives plus AgMIP and CCAFS scientists participating in key roles e.g. session chairs, keynotespeakers); Newsletter to all CropM and hub members (bi-monthly to quarterly) – bilateral visits/exchange of visiting scientists within WPs and frequent (mutual) invitations of guest speakers from CropM to national conferences.

As the research communities involved in LiveM are very disparate (grassland modellers, animal disease modellers, farm-scale modellers etc.) all contacts and exchanges of information through MACSUR represent important strides in understanding. Workshops and task engagement brought WP members together to a greater extent. Integration within LiveM has facilitated the production of joint publications, reports and contributions to international conferences. In Oct. 2014, LiveM organised the Livestock and Grassland Modelling and Research Colloquium (hosted by BC3 in Bilbao, Spain) at which representatives of all three Themes along with invited guests from the Global Research Alliance, EAAP and the Animal Task Force shared their research and were involved in constructive group discussions on the role of the MACSUR knowledge hub and approaches to better integration.

In TradeM a tight integration – linking advancements in science, application in pilot studies, trans-disciplinary approaches including stakeholders, and interaction and capacity building for researchers - is under way. This is convincingly demonstrated in the regional case studies (one of which was featured in *Nature*), which bring together TradeM with CropM and LiveM researchers to investigate region-specific agricultural challenges through an integrated trans-disciplinary approach. While such effort does not comprise all research groups at the same intensity, big strides have been made in achieving more even involvement. Variable involvement is mainly due to variations in the (limited) financial resources available in different countries. Better integration was achieved by regular personal interaction between researchers who have not been aware of each other previously. TradeM intends to organize at least two workshops per year. The substantial contributions of time and efforts of the partners organizing such workshops creates a network where actually "work" is done. Such workshops have stimulated more consistency in modelling (e.g. shared baseline scenario; model input parameters, etc.) to enhance comparability of integrated regional assessments and other studies in the various partner countries; workshops also helped to initiate enhanced model linkages.

There are several areas in which improvements could be achieved:

- The project structure needs to include more interlinking tasks with specific outcomes requiring collaboration between WPs and avoid creation of artificial structural barriers.
- Some partners had no access to funding even for travel to meetings, which hinders their involvement and reduces their level of 'buy-in' to project objectives – this constraint needs to be overcome.
- Meetings across themes outside regular workshops to further build cohesion within the diverse community of agricultural modellers.
- Organisation of events that have reach beyond the MACSUR network and beyond science.
- Regularly updated presentations of findings, suitable and relevant for farmers' organisations and ministries.
- Allocating/generating more funding resources for exchange of scientists and (PhD) students among partners/WPs

6. Equality of engagement of all research teams involved in the theme

Engagement varied due to, for example, the huge differences in available financial resources of the teams for carrying out research /participating in workshops and conferences (travelling and fees).

7. Number of links to national projects or facilities (list in annex)	1
8. Number of links created to other EU or international groups (list in annex)	7
9. Number of stakeholder interactions (list in annex)	28

10. Did any partner join at a later stage? Who?

1. Walloon Agricultural Research Centre, Belgium
2. MTA Centre for Ecological Research, Hungary
3. International Institute for Applied Systems Analysis, Austria
4. EURAC Research, Italy
5. Center for Ecology and Hydrology, United Kingdom

D - Capacity building (max. 1 page)

Please provide relevant lists in Annex

1.Number of trained scientists¹	622
1a. In the frame of workshops (multiple participations included)	452
1b. As PhD students	10
1c. In the frame of mobility actions (multiple participations included)	150
2.Number of training workshops (list in annex)	9
3.Number of specialist workshops (list in annex)	10
4.Number of established scientific staff (list in annex)	49
5.Was the collaboration between countries sufficient/satisfactory/adequate?	
Yes	
6.Did the project provide opportunities for partners/scientists to become part of the international community of researchers in this field or to further strengthen their own role?	
Yes	
7.Number of research communities in the themes (list in annex)	12

¹ Including 2 B.Sc. and 8 M.Sc.

E - Project coordination and management (max. 2 pages)

Please quantify where possible

1.Number of deliverables performed (please provide list with due date and delivery date in annex)	106
2.Number of milestones achieved (please provide list with due date and achievement date in annex)	78
3.Definition of, and agreement on, procedures and annually updated plans of work	
Yes.	
4.How could the administrative burden of theme-leaders and project coordinators be reduced?	
<ul style="list-style-type: none"> • Help through qualified coordination support staff (incl. their funding) would be most effective • Better quality and easy to use conference organisation software (better than current conventional packages ...) • Infrastructure for efficient shared document workflow • If we cannot refrain from double reporting (national level and FACCE level, then a common format should be used or be accepted) 	
5.Was there a written research consortium agreement?	
Yes: http://macsur.eu/images/download/CA%20with%20Annexes%20FINAL%20small.pdf	
6.How was the quality of the call procedure? (MACSUR2-preparation)	
6a.Was the submission process appropriate?	
Generally appropriate; one short-coming was that forms were provided in locked Microsoft-Word format that could not be worked on in track-change mode by several people	
6b.Was the call office available for questions?	
Yes	
6c.Was the information given clear?	
Yes	
7.Which challenges did you face, from an organizational perspective?	
<ul style="list-style-type: none"> • Tight timelines for composing a large scientific project • Very heterogeneous administrative setup of partners groups in the various countries, e.g. funding periods • The double function of the knowledge hub as a networking and research instrument provides challenges for the legal arrangements for intellectual property in MACSUR. For example, knowledge created by members within MACSUR with „in-kind“ funding from other projects cannot be shared easily with the whole community; confidential or licensed external data obtained by one MACSUR member (or even the hub) cannot be shared with all MACSUR members without additional negotiations with the data owner because the consortium agreement forbids one member to act on behalf of other members due to concerns of the involved institutes about liability of misappropriated intellectual property. • The double nature of the knowledge hub with decentralised funding requires a difficult balance between bottom-up driven decisions by consensus, imposed by the structure, and top-down directions necessary for quick progress and co-ordinated research activities. This could be partially addressed by putting some money into a central funding pool; decision-making on prioritization of hub activities would also be made easier if there were more clearly expressed expectations of knowledge hub output by the GB. Clear focus and adequate funding of hub structures is vital to ensuring and facilitating effective inter-disciplinary collaboration, which often requires neutral brokers to help frame and arbitrate the nature and rules of co-working. • Unexpected /unplanned (and therefore non-funded) trips for presentations to GB and SAB and StAB. • Existing national funding rules not adapted to novel conditions/requirements of a "knowledge hub" 	

8. Which areas could be improved, from an organizational perspective?

- The structure of MACSUR1 with a Hub and Themes was appropriate in MACSUR1 for establishing stronger ties within the Themes (especially LiveM and TradeM) but made it harder to knot ties across Themes. Therefore, in MACSUR2 more emphasis will be given to cross-Theme links.
- Within the short time available for preparing the proposal of MACSUR1, activities have been planned without knowing the actual funding for partners and their contributions. The reliance on in-kind funds seems to have been over-optimistic in several cases. With the decentralised funding structure of a JPI it would be advisable to revise the planned activities according to the actual funding provided before the implementation of MACSUR2. This would have required earlier national funding decisions (March 2015) – or a revision of workplans at the onset of MACSUR2.
- Funding for some Hub and Theme activities (meeting organisation, internet presence, dissemination activities, stakeholder engagement, travelling scholarship for students) could come from the countries of the coordinators, from a money pool that each country contributes to, or from higher fees per participant of workshops and conferences. The latter option, however, makes the planning of events very difficult because the number of participants is not known in advance.
- Funding level of activities must be commensurate with the Governing Board's, the Scientific Advisory Board's, and the Stakeholder Advisory Board's expectations for research, stakeholder involvement, capacity building and networking. "In-kind funding" is often constrained by purpose, time, space or legal conditions and cannot be allocated or redistributed by the coordinators.

9. In which areas and by what means can FACCE JPI assist MACSUR in its progress?

- Establish/maintaining a database of partners during the call process for later use by the hub coordinators
- Provision/administration of central funds for meetings, travelling/stipends
- Requiring a common start date of the project from the funders
- Provisions for partners from non-FACCE members to join (as implemented later)
- Projects involving many members need to invest a proportionally greater share of time and personnel to organisation, project management, and internal communication than smaller projects. Funding agencies must be aware of the need of funding of organisational tasks within a knowledge hub.
- Institutional administrators are still confused about how a knowledge hub is financed. Maybe a flyer targeted at institutional administrators produced by FACCE JPI jointly with the funding organisations might help.
- Evaluation criteria and metrics for future knowledge hubs should be available before or during their planning for guidance when decisions involving trade-offs are necessary.
- The reporting requirements and formats should be co-ordinated among countries and FACCE. MACSUR members must report to national funding agencies, MACSUR/FACCE, and usually to their institution. FACCE should be able to obtain financial reports through the involved funding organisations. A central FACCE database for outputs that can accept the standard bibliographic RIS format (works also for conferences etc.) as interface would reduce tedious manual work (and errors). This database could also be used for the reporting to national agencies. Import and export links to academia.edu, researchgate, orcid.org, researcherid.com would be a plus.

F - Impact of MACSUR (max. 3 pages)

Please quantify where possible

1. To what extent is MACSUR influencing planning and setting priorities for national programmes?

National programmes benefit from contributions of MACSUR in various ways:

- MACSUR results are published in international journals where they are eventually picked up by national administrators.
- MACSUR coordinators are invited by the FACCE GB (with national representatives) to provide overviews of results and identify the contributions of MACSUR to policy support in the participating countries.
- National, FACCE and EU representatives attend scientific meetings (in Europe and elsewhere) where MACSUR results are presented by MACSUR members.
- MACSUR reports are sent to the FACCE Knowledge Hub Evaluation Board for passing on to the GB, SAB, and StAB.
- Meetings, workshops and congresses organized in the context of MACSUR are frequently attended by representatives administering national programmes. The direct dialogues between them and other participants of the scientific events are likely shaping national programmes as well.
- Some partners of MACSUR are part of national boards involved in national programming. Their work therefore contributes directly to setting priorities in national programmes.
- Some partners of MACSUR have met frequently with national representatives on bilateral basis (GB members, etc.) or multi-laterally (national sector level research and ministries) in small groups (national meetings) among others on MACSUR progress – such dialogue directly results in setting priorities in national programmes.

2. To what extent is MACSUR influencing FACCE-JPI and the update of FACCE Strategic Research Agenda (SRA)?

MACSUR has no means or direct channels to influence SRA. But there are many indirect ways of exerting an influence:

- MACSUR results are published in international journals where they are eventually picked up by national administrators.
- MACSUR coordinators are invited by the FACCE GB (with national representatives) to provide overviews of results.
- Through his role a member of the FACCE-JPI scientific advisory board (SAB) a MACSUR steering committee member channels experiences from MACSUR into the SAB and hence the formulation of the SRA
- National, FACCE and EU representatives attend scientific meetings where MACSUR results are presented by MACSUR members.
- MACSUR reports are sent to the FACCE Knowledge Hub Evaluation Board for passing on to the GB, SAB, and StAB.
- Greater engagement by FACCE-JPI through attendance at theme and hub-level conferences could help to cement strong communication, guide effective and timely inputs into the SRA update, and provide the FACCE-JPI governing board with a clearer understanding of the benefits and challenges relating to the knowledge hub and similar networking approaches.

3. Main overlaps and gaps identified between research groups/countries during the MACSUR preparation and implementation/Potential for alignment

Overlaps:

- there are many and intended thematic overlaps, e.g. identifications of adaptation strategies in the different regions / countries under consideration;
- there are other intended overlaps, like the work on models, sometimes even the same model
- the spread of best practice and greater engagement between themes in relation to developing community-wide capacity building resources (for example on-line training for modellers and for agricultural professionals) will be an important aspect of MACSUR2, and is required to produce a more joined up and collaborative approach across all three themes in this area.

Gaps:

- there is not an equal distribution of scientist of the disciplines involved with access to funds across

countries or regions - in some countries only economists are funded;

- many livestock researchers engaged in MACSUR are located in the UK and receive no additional funding for MACSUR research;
- Further improvements (with funding) are needed to bridge the gap between science and business and policy making - the traditional channels of knowledge transfer are not sufficiently developed yet to make this possible

4. Main achievements, outcomes, outputs, etc... which would not have been possible without MACSUR

Among the main achievements and outcomes which would not have been possible without MACSUR are:

- Awareness of who is active in the area of CC impacts on agriculture.
- Integrated view of CC impacts on agriculture across disciplines and scales.
- Development of a research agenda for improving existing models and working on new models.
- Collaborative papers.
- Exchange of ideas, concepts, and theories between researchers.
- Understanding of data/model demands of other disciplines.
- Communication with stakeholders on models.
- Capacity building among the partners involved.
- Create synergies among research in the participating countries.
- Establishment of a network in Europe that is on par with other international networks.

5. To what extent did MACSUR generate project outcomes contributing to solving problems relevant to tackling the societal challenge of FACCE-JPI?

- Awareness of broader implications of CC and policies in agriculture by including constraints and buffer mechanisms from socio-economy.
- Contributions to external publications (EEA, AgMIP, GB, scientific papers) by MACSUR members.
- Development of recommendations to effectively anticipate projected climate change effects on food security
- Presents in public media to highlight progress and challenges for addressing societal challenges of FACCE-JPI
- Interactions with regional, national and international stakeholders on MACSUR results to address challenges of FACCE-JPI

6. Progress towards alignment of research in the field of MACSUR among the countries involved

A major objective of MACSUR is to promote an alignment of research between partner countries without sacrificing diversity and innovative new ideas and concepts. This is achieved by various means:

- Alignment of research by developing scenarios in international teams and identification of a common focus of research topics,
- work on joint papers across different nationalities, in particular work on publications with case studies from various countries;
- international comparison of methodologies and performance of models, development of resources (data, presentation),
- establishing contacts between stakeholders across countries
- the development of joint research proposals with partners from other countries that would otherwise not be accessible;

7. MACSUR contribution to the FACCE vision: **“An integrated European Research Area** addressing the challenges of Agriculture, Food Security and Climate Change to achieve sustainable growth in agricultural production to meet increasing world food demand and contributing to sustainable economic growth and a European bio-based economy while maintaining and restoring ecosystem services under current and future climate change”

MACSUR is contributing significantly to major elements of the vision of FACCE, including:

- the establishment of a vibrant community of international researchers committed to improve existing models and to develop new approaches to be able to deliver answers to challenging questions in a quantitative manner;
- MACSUR partners have developed a clear focus on climate change and food security and works actively to improve interaction between researchers and stakeholders of various fields;
- MACSUR partners have further improved models that capture all aspects of a bio-economy under changing climate condition.

8. MACSUR contribution to the FACCE SRA Core Theme 1

MACSUR has contributed in various aspects to several elements of Core Theme 1. Among them by

- promoting and facilitating interdisciplinary dialogue that forms the basis of quantitative integrated analyses,
- establishing links between models across disciplines by defining protocols, interfaces and sets of coherent scenario assumptions,
- partners of MACSUR have been involved in international/global efforts to compare model assumptions and results,
- the activities in various networks made available data that were previously not accessible to the international scientific community.

9. To what extent is MACSUR leveraging European competitiveness in the field of MACSUR internationally, international relevance and impact of MACSUR?

- European competitiveness and relevance has improved in various ways.
- A major value added is the establishment of a network across national borders in the EU and beyond (Norway, Israel).
- By building a platform for many disciplines across many countries it was possible to reap network effects.
- The international visibility of MACSUR is confirmed by the partnership agreement with AgMIP .

Annexes to sections B – E

B Output	2
<i>B1. Articles in peer reviewed international journals and submitted manuscripts</i>	2
<i>B2. Contributions in books</i>	14
<i>B3. Other publications</i>	15
<i>B4. Input to policy makers</i>	17
<i>B5. Oral and poster presentations in scientific congresses</i>	17
<i>B6. Organized major international congresses</i>	44
<i>B7. Press, radio, TV, and internet appearances</i>	45
<i>B8. New external grant and total amount of new external grant money, the application resulting from MACSUR activities</i>	45
<i>B9. Supervised theses</i>	46
<i>B10. Joint patents (between partners or resulting from project)</i>	46
<i>B11. New collaborations (subset of group or group asking for additional (new) funding)</i>	46
<i>B12. Scientific acknowledgements (Prizes, honorary doctorates, memberships in scientific academies, major international duties, etc.)</i>	47
<i>B13. Data access: new datasets or data/model assets generated in MACSUR (provide in the annex explanations on the storage: is this centralised or in each group? capture data sharing and evidence for this)</i>	47
<i>B14. Other activities (listed by categories)</i>	47
C Networking	48
<i>C1. Theme or cross-theme meetings</i>	48
<i>C2. Consortium meetings (whole MACSUR)</i>	49
<i>C3. Workshops</i>	49
<i>C7. Links to national projects or facilities</i>	49
<i>C8. Links created to other EU or international groups</i>	50
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D Capacity building	51
<i>D2. Training workshops</i>	51
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B Output

B1. Articles in peer reviewed international journals and submitted manuscripts

- Abadie, L.M., I.Galarraga, A. B. Milford and G. W. Gustavsen 2015. Achieving Emission Reduction Targets by Changing Eating Habits in Norway. (under revision)
- Allan Catherine, Nguyen Phuoc Lai, Seddaiu Giovanna, Wilson Ben, Roggero Pier Paolo (2013). Integrating local knowledge with experimental research: case studies on managing cropping systems in Italy and Australia. ITALIAN JOURNAL OF AGRONOMY, vol. 8, p. 108-116, <http://dx.doi.org/10.4081/ija.2013.e15>
- Angulo, C., Gaiser, T., Rötter, R. P., Børgesen, C. D., Hlavinka, P., Trnka, M., & Ewert, F. (2014). 'Fingerprints' of four crop models as affected by soil input data aggregation. *European Journal of Agronomy*, 61, 35-48. <http://dx.doi.org/10.1016/j.eja.2014.07.005>
- Angulo, C., Rötter, R.P., Lock, R., Enders, A., Fronzek, S. & Ewert, F. (2013). Implication of crop model calibration strategies for assessing regional impacts of climate change in Europe. *Agricultural and Forest Meteorology*, 170, 32-46.
- Angulo, C., Rötter, R.P., Trnka, M., Pirttioja, N., Gaiser, T., Hlavinka, P. & Ewert, F. (2013). Characteristic 'fingerprints' of crop model responses to weather input data at different spatial resolutions. *European Journal of Agronomy*, 49, 104-114.
- Asseng S, Ewert F, Martre P, Rotter RP, Lobell DB, Cammarano D, Kimball BA, Ottman MJ, Wall GW, White JW and others. Rising temperatures reduce global wheat production. *Nature Clim. Change* 2015;5(2):143-147., <http://dx.doi.org/10.1038/nclimate2470>
- Asseng, A., Ewert, F., Rosenzweig, C., Jones, J.W., Hatfield, J.L., Ruane, A., Boote, K.J., Thorburn, P., Rötter, R.P., Cammarano, D., Brisson, N., Basso, B., Martre, P., Aggarwal, P.K., Angulo, C., Bertuzzi, P., Biernath, C., Challinor, A.J., Doltra, J., Gayler, S., Goldberg, R., Grant, R., Heng, L., Hooker, J., Hunt, L.A., Ingwersen, J., Izaurralde, R.C., Kersebaum, K.C., Müller, C., Kumar, S.N., Nendel, C., O'Leary, G.O., Olesen, J.E., Osborne, T.M., Palosuo, T., Priesack, E., Ripoche, D., Semenov, M.A., Shcherbak, I., Steduto, P., Stöckle, C., Stratonovitch, P., Streck, T., Supit, I., Tao, F., Travasso, M., Waha, K., Wallach, D., White, J.W., Williams, J.R. & Wolf, J. (2013). Uncertainties in simulating wheat yields under climate change. *Nature Climate Change* 3, 827-832.
- Baker, Alison; Ceasar, S. Antony; Palmer, Antony J; Paterson, Jaimie B.; Qi, Wanjun; Muench, Stephen P.; Baldwin, Stephen A. REPLACE, REUSE, RECYCLE: IMPROVING THE SUSTAINABLE USE OF PHOSPHORUS BY PLANTS. Breeding plants to cope with future climate change., <http://dx.doi.org/10.1093/jxb/erv210>
- Balkovič J, van der Velde M, Schmid E, Skalský R, Khabarov N, Obersteiner M, Stürmer B, Xiong W. 2013. Pan-European crop modelling with EPIC: Implementation, up-scaling and regional crop yield validation. *Agric Syst* 120: 61–75., <http://dx.doi.org/10.1016/j.agsy.2013.05.008>
- Baranowski P., Jędrzycka M., Mazurek W., Babula-Skowrońska D., Siedliska A., Kaczmarek J. Hyperspectral and thermal imaging of the response of oilseed rape (*Brassica napus*) to fungal species of the genus *Alternaria*, *PLoS One*. 2015 Mar 31;10(3):e0122913, <http://dx.doi.org/10.1371/journal.pone.0122913>.
- Baranowski, P.; Krzyszczyk, J.; Slawinski, C.; Hoffmann, H.; Kozyra, J.; Nieróbca, A.; Siwek, K.; Gluza, A.: Multifractal analysis of chosen meteorological time series to assess climate impacts. In: CR SPECIAL: Modelling Impacts for food security, <http://dx.doi.org/10.3354/cr01321>
- Bassu S, Brisson N, Durand J-L, Boote K, Lizaso J, Jones JW, Rosenzweig C, Ruane AC, Adam M, Baron C, Basso B, Biernath C, Boogaard H, Conijn S, Corbeels M, Deryng D, De Sanctis G, Gayler S, Grassini P, Hatfield J, Hoek S, Izaurralde C, Jongschaap R, Kemanian AR, Kersebaum KC, Kumar NS, Makowski D, Müller C, Nendel C, Priesack E, Pravia MV, Soo HK, Sau F, Shcherbak I, Tao F, Teixeira E, Timlin D, Waha K, (2014). Do various maize crop models give the same responses to climate change factors? *Global Change Biology*, <http://dx.doi.org/10.1111/gcb.12520>
- Baum Zvi, Ruslana Rachel Palatnik, Iddo Kan and Mickey Rappaport-Rom "Economic Impacts of Water Scarcity under Diverse Water Salinities". *Water Economics and Policy (WEP)*, Special Issue on Economics of Salinity Impacts and Management.
- Bellocchi, G., Rivington, M., Matthews, K., Acutis, M., 2015. Deliberative processes for comprehensive evaluation of agroecological models. A review. *Agronomy for Sustainable Development* 35, 589-605., <http://link.springer.com/article/10.1007%2Fs13593-014-0271-0>
- Below, T. B. ; Mutabazi, K. D. ; Kirschke, D. ; Franke, C. ; Sieber, S. ; Siebert, R. ; Tscherning, K. (2012): Can farmers' adaption to climate change be explained by socio-economic household-level variables?. - *Global Environmental Change*.22 (1): 223-235, <http://dx.doi.org/10.1016/j.gloenvcha.2011.11.012>
- Bennett, E. M.; Carpenter, S. M.; Gordon, L.; Ramankutty, N.; Balvanera, P.; Campbell, B.; Cramer, W.; Foley, J.; Folke, C.; Carlberg, L.; Lui, J.; Lotze-Campen, H.; Mueller, N.; Peterson, G. D.; Polasky, S.; Rockstrom, J.; Scholes, R. J.; Spirenburg, M.: Toward a more resilient agriculture. In: *Solutions*. 2013 (accepted)
- Bennetzen EH, Smith P, Soussana JF & Porter JR (2012). Identity-based estimation of greenhouse gas emissions from crop production: Case study from Denmark. *European J. Agronomy*, 41, 66– 72.
- Bernabucci U., Biffani S., Buggiotti L., Vitali A., Lacetera N., Nardone A. 2014. The effects of heat stress in Italian Holstein dairy cattle. *Journal of Dairy Science*, 97, 471-486.
- Bernardoni E., Acutis M., Ventrella D. 2012. Long-term durum wheat monoculture: modelling and future projection. *Italian Journal of Agronomy*, 7:e13, 86-92, <http://dx.doi.org/10.4081/ija.2012.e13>

- Bertocchi L., Vitali A., Lacetera N., Nardone A., Varisco G., Bernabucci U. (2014) Seasonal variations in the composition of Holstein cow's milk and temperature-humidity index (THI) relationship. *Animal*, 8, 667-674.
- Biewald, A., Rolinski, S., Lotze-Campen, H., Schmitz, S., Dietrich, A. (2014): Valuing the impact of trade on local blue water. *Ecological Economics* 101: 43–53., <http://dx.doi.org/10.1016/j.ecolecon.2014.02.003>
- Bodirsky BL, Müller C. Robust relationship between yields and nitrogen inputs indicates three ways to reduce nitrogen pollution. *Environmental Research Letters* 2014;9(11):111005., <http://dx.doi.org/10.1088/1748-9326/9/11/111005>
- Bodirsky BL, Popp A, Lotze-Campen H, Dietrich JP, Rolinski S, Weindl I, Schmitz C, Müller C, Bonsch M, Humpenöder F, Biewald A, Stevanovic M (2014): Reactive nitrogen requirements to feed the world in 2050 and potential to mitigate nitrogen pollution, *Nature Communications*, 5, 3858, <http://dx.doi.org/10.1038/ncomms4858>
- Boeckx, Tinne; Winters, Ana L; Webb, K Judith; Kingston-Smith, Alison H. Polyphenol oxidase in leaves; is there any significance to the chloroplastic localisation? *Breeding plants to cope with future climate change*, <http://dx.doi.org/10.1093/jxb/erv141>
- Bojar W. Verburg R. Żarski J. Brouwer F. Circumstances of climatic changes impacts on agricultural production taking attention regional characteristics. *Studies&Proceedings of Polish Association for Knowledge Management*. T 61 p. 29-44 2012
- Bojar W., Knopik L., Żarski J. and Kuśmierk-Tomaszewska R. Integrated assessment of crop productivity based on food supply forecasting. *Agricultural Economics (Zemědělská ekonomika)*
- Bojar W., Knopik L., Żarski J., Sławiński C., Baranowski P., & W., Ż. (2014). Impact of extreme climate changes on the forecasted agriculture production. *Acta Agrophysica*, 21(4), 415-431.
- Bonatti, M. ; Schlindwein, S. L. ; de Vasconcelos, A. C. F. ; Sieber, S. ; D'Agostini, L. R. ; Lana, M. A. ; Fantini, A. C. ; Homem, I. H. I. ; Canci, A. (2013): Social organization and agricultural strategies to face climate variability: a case study in Guaraciaba, Southern Brazil. - *Sustainable Agriculture Research*, <http://www.ccsenet.org/journal/index.php/sar/article/view/20608>
- Bourgeois C., Ben Fradj N., Jayet P.A., (2014), How cost-effective is a mixed policy targeting the management of three agricultural N-pollutants ?, *Forthcoming, Environmental Modeling and Assessment*.
- Bressan Ra, Park Hc, Orsini F, Oh Dh, Dassanayake M, Inan G, Yun Dj, Bohnert Hj, Maggio A, 2013. Biotechnology for mechanisms that counteract salt stress in extremophile species: a genome-based view. *Plant Biotechnol Rep*. 7:27-37, <http://dx.doi.org/10.1007/s11816-012-0249-9>
- Bulak P, Walkiewicz A, Brzezinska M (2014) Plant growth regulators-assisted phytoextraction. *Biologia Plantarum*, 58, 1–8, <http://dx.doi.org/10.1007/s10535-013-0382-5>
- Calanca P & Semenov MA (2013) Local-scale climate scenarios for impact studies and risk assessments: integration of early 21st century ENSEMBLES projections into the ELPIS database *Theor.Appl.Climatol*, 113:445-455, <http://dx.doi.org/10.1007/s00704-012-0799-3>
- Camacho C. and A. Perez-Barahona (2014), "Land use change and the environment: a spatial dynamics approach", *Journal of Economic Dynamics and Control*, under revision.
- Camacho C. and A. Perez-Barahona (2014), "On the uniqueness of the solution to an optimal control problem subject to a parabolic differential equation", *Journal of Economic Theory*, submitted.
- Cantelaube P, Jayet P.A., Carré F., Bamps C., Zakharov P, (2012), Geographical downscaling of outputs provided by an economic farm model calibrated at the regional level, *Land Use Policy.*, vol. 29, pp 35-44.
- Caubel Julie, Garcia de Cortazar-Atauri Iñaki, Launay Marie; de Noblet-Ducoudré Nathalie; Huard Frédéric; Bertuzzi Patrick; Graux Anne-Isabelle. Broadening the scope for ecoclimatic indicators to assess crop climate suitability according to ecophysiological, technical or quality criteria., <http://dx.doi.org/10.1016/j.agrformet.2015.02.005>
- Challinor, A., Martre, P., Asseng, S., Thornton, P., Ewert, F. 2014. Making the most of climate impacts ensembles. *Nature Climate Change* 4, 77–80., <http://dx.doi.org/10.1038/nclimate2117>
- Christen, B., Kjeldsen, C., Dalgaard, T. and Martin-Ortega, J. (2014) Can Fuzzy Cognitive Mapping Help in Agricultural policy design and communication? *Land Use Policy* (re-submitted after revision)
- Comadira, Gloria; Rasool, Brwa; Karpinska, Barbara; Morris, Jenny; Verrall, Susan R; Hedley, Peter E; Foyer, Christine H; Hancock, Robert D. Nitrogen deficiency in barley (*Hordeum vulgare*) seedlings induces molecular and metabolic adjustments that trigger aphid resistance. *Breeding plants to cope with future climate change*, <http://dx.doi.org/10.1093/jxb/erv276>
- Conradt, T.; Roers, M.; Schröter, K.; Elmer, F.; Hoffmann, P.; Koch, H.; Hattermann, F. F.; Wechsung, F.: Vergleich der Extremhochwässer 2002 und 2013 im deutschen Teil des Elbegebiets und deren Abflusssimulation durch SWIM-live. In: *Hydrologie und Wasserbewirtschaftung*, 57, 5, http://dx.doi.org/10.5675/HyWa_2013,5_4
- Conradt, T.; Wechsung, F.; Bronstert, A.: Three perceptions of the evapotranspiration landscape: comparing spatial patterns from a distributed hydrological model, remotely sensed surface temperatures, and sub-basin water balances. In: *Hydrology and Earth System Sciences*, 17, 7, <http://dx.doi.org/10.5194/hess-17-2947-2013>
- Coucheney Elsa; Buis Samuel; Launay Marie; Constantin Julie; Mary Bruno; Ripoché Dominique; Beaudoin Nicolas; Ruget Françoise; Garcia de Cortazar-Atauri Iñaki; Andrianarisoa Sitiraka; Justes Eric; Léonard Joël. Accuracy, robustness and behavior of the STICS v-8 soil-crop model for plant, water and nitrogen outputs: evaluation over a wide range of agro-environmental conditions. Submitted manuscript., <http://dx.doi.org/10.1016/j.envsoft.2014.11.024>

- Crout N, Craigon, Cox G, Jao Y, Tarsitano D, Wood A, Semenov MA (2014) An objective approach to model reduction: application to the SIRIUS wheat model. *Agri. Forest Meteor.* 189–190:211-219, <http://dx.doi.org/10.1016/j.agrformet.2014.01.010>
- Czech Academy of Agricultural Sciences 159/2014-AGRICECON (<http://www.agriculturejournals.cz/web/agricecon.htm?type=futureArticles>)
- Dáder B, Gwynn-Jones D, Moreno A, Winters A, Fereres A. 2014. Impact of UV-A radiation on the performance of aphids and whiteflies and on the leaf chemistry of their host plants. *Journal of Photochemistry and Photobiology B: Biology*, 138, 307-316.
- Dáder B, Plaza M, Fereres A, Moreno A. 2015. Flight behaviour of vegetable pests and their natural enemies under different UV-blocking enclosures. *Annals of Applied Biology.*, <http://dx.doi.org/10.1111/aab.12213>
- Dáder, B., Gwynn-Jones, D., Moreno, A., Winters, A., Fereres, A. 2014. Impact of UV-A radiation on the performance of aphids and whiteflies and leaf chemistry of their hosts pepper and eggplant. *Journal of Photochemistry and Photobiology B: Biology*. 138: 307-316., <http://dx.doi.org/10.1016/j.jphotobiol.2014.06.009>
- Dass P, Müller C, Brovkin V, Cramer W (2013): Can bioenergy cropping compensate high carbon emissions from large-scale deforestation of mid to high latitudes? *Earth Syst. Dynam.*, 4, 409-424, <http://dx.doi.org/10.5194/esd-4-409-2013>
- De Pascale S, Orsini F, Caputo R, Palermo Ma, Barbieri G, Maggio A. (2012). Seasonal and multiannual effects of salinisation on tomato yield and fruit quality. *Functional Plant Biology* 39(8):689–698.
- De Pascale, S., Maggio, A., Orsini, F., Stanghellini, C., & Heuvelink, E. (2015). Growth response and radiation use efficiency in tomato exposed to short-term and long-term salinized soils. *Scientia Horticulturae*, 189, 139-149., <http://dx.doi.org/10.1016/j.scienta.2015.03.042>
- De Sanctis G, Roggero PP, Seddaiu G, Orsini R, Porter CH, Jones JW 2012. Long term no tillage increased soil organic carbon content of rain-fed cereal systems in a Mediterranean area. *European Journal of Agronomy* 40:18-27, <http://dx.doi.org/10.1016/j.eja.2012.02.002>
- Dietrich JP, Schmitz C, Lotze-Campen H, Popp A, Müller C (2014): An outlook on agricultural productivity - Implementing endogenous technological change in a global land-use model. *Technological Forecasting and Social Change*, 81, 236–249, <http://dx.doi.org/10.1016/j.techfore.2013.02.003>
- Dietrich, J. P.; Popp, A.; Lotze-Campen, H.: Reducing the loss of information and gaining accuracy with clustering methods in a global land-use model. In: *Ecological Modelling*, 263. 2013. 233-243 p., <http://dx.doi.org/10.1016/j.ecolmodel.2013.05.009>
- Dietrich, J. P.; Schmitz, C.; Lotze-Campen, H.; Popp, A.; Müller, C.: Forecasting technological change in agriculture - An endogenous implementation in a global land use model. In: *Technological Forecasting and Social Change*, 81. 2014. 236-249 p., <http://dx.doi.org/10.1016/j.techfore.2013.02.003>
- Dirnböck, T.; Bezák, P.; Dullinger, S.; Haberl, H.; Lotze-Campen, H.; Mirtl, M.; Peterseil, J.; Redpath, S.; Singh, S. J.; Travis, J.; Wijdeven, S. M. J.: Critical Scales for Long-Term Socio-ecological Biodiversity Research. In: *Long Term Socio-Ecological Research*. Ed.: Singh, S. J.; Haberl, H.; Chertow, M.; Mirtl, M.; Schmid, M. Dordrecht : Springer. 2013. Human-environment interactions ; 2. 123-138 p.
- Dockter C, M Hansson, WM Waterworth, CM Bray, CE West, R Rötter, F Tao, T Palosuo, D Pilbeam, P Meyer, J Ramirez-Villegas, A Challinor, N Halford, BD McKersie, T Lawson, S Driever, C Raines, L Firbank, MS Lopes, I Salah, S Baezinger, C Royo, T Payne, K Kunert, CA Cullis, CH Foyer, P Martre, AB Heinemann, C Barrios Perez, JC Medeiros, D Arongo, O Bonilla-Findji, J Ramirez Villegas, A Jarvis, J Smith, F Beed, D Hemming J Kroschel, J Watson, B Zheng, S Chapman, K Chenu, B Zheng, S Chapman, J Christopher, T Frederiks, B Biddulph, K Chenu, J Cairns. (2015). Breeding Plants to cope with Future Climate Change. *Journal of Experimental Biology* 66: Special Issue
- Dockter, Christoph; Hansson, Mats Improving barley culm robustness for secured crop yield in a changing climate. *Breedign plants to cope with future climate change*, <http://dx.doi.org/10.1093/jxb/eru521>
- Dono Gabriele, Cortignani Raffaele, Doro Luca, Giraldo Luca, Ledda Luigi, Pasqui Massimiliano, Roggero Pier Paolo (2013). An integrated assessment of the impacts of changing climate variability on agricultural productivity and profitability in an irrigated Mediterranean catchment. *WATER RESOURCES MANAGEMENT*, p. 1-16, <http://dx.doi.org/10.1007/s11269-013-0367-3>
- Dono Gabriele, Raffaele Cortignani, Luca Doro, Luca Giraldo, Luigi Ledda, Massimiliano Pasqui, Roggero Pier Paolo (2013). Adapting to uncertainty associated with short-term climate variability changes in irrigated Mediterranean farming systems. *Agricultural systems*, vol. 117, p. 1-12, <http://dx.doi.org/10.1016/j.agsy.2013.01.005>
- Dono Gabriele, Raffaele Cortignani, Luca Giraldo, Pier Paolo Roggero (2014) Climate change and irrigated farming in the Mediterranean: lower expectation of favorable conditions to profitability rather than harshening of adverse conditions. Submitted manuscript.
- Dono Gabriele, Raffaele Cortignani, Luca Giraldo, Roggero Pier Paolo (under revision) Climate change and irrigated farming in the Mediterranean: Less protability from a lower probability of favorable weather conditions, not a higher frequency of adverse conditions. *German Journal of Agricultural Economics*, www.gjae-online.de/
- Dumont B., Leemans, V., Mansouri, M., Bodson, B., Destain, J.-P., Destain, M.-F., 2014 Parameter identification of the STICS crop model, using an accelerated formal MCMC approach. *Environmental Modelling and Software*, 52, 121-135, <http://dx.doi.org/10.1016/j.envsoft.2013.10.022>

- Dumont, B., Basso, B., Bodson, B., Destain, J.-P., Destain, M.-F. Climatic risk assessment to improve nitrogen fertilisation recommendations : A strategic crop model-based approach. *European journal of Agronomy* 65, 10-17, <http://hdl.handle.net/2268/178920>
<http://www.sciencedirect.com/science/article/pii/S1161030115000040>
- Dumont, B., Basso, B., Leemans, V., Bodson, B., Destain, J.-P., Destain, M.-F. A comparison of within season yield prediction algorithms based on crop model behaviour analysis. *Agricultural and Forest Meteorology* 204, 10-21, <http://hdl.handle.net/2268/178919>
<http://www.sciencedirect.com/science/article/pii/S0168192315000246#>
- Dumont, B., Basso, B., Leemans, V., Bodson, B., Destain, J.-P., Destain, M.-F. Systematic analysis of site-specific yield distributions resulting from nitrogen management and climatic variability interactions, *Precision agriculture* 16: 361-384., <http://dx.doi.org/10.1007/s11119-014-9380-7>
- Dumont, B., Leemans, V., Ferrandis, S., Bodson, B., Destain, J.-P., & Destain, M.-F. (2014). Assessing the potential of an algorithm based on mean climatic data to predict wheat yield. *Precision Agriculture* 15:255-272., <http://hdl.handle.net/2268/163330>
- Dumont, B., Leemans, V., Mansouri, M., Bodson, B., Destain, J.-P., & Destain, M.-F. (2014). Parameter identification of the STICS crop model, using an accelerated formal MCMC approach. *Environmental Modelling & Software*, 52, 121-135., <http://dx.doi.org/10.1016/j.envsoft.2013.10.022>
- Dumont, B., Vancutsem, F., Seutin, B., Bodson, B., Destain, J.-P., & Destain, M.-F. (2012). Simulation de la croissance du blé à l'aide de modèles écophysologiques : Synthèse bibliographique des méthodes, potentialités et limitations. *Biotechnologie, Agronomie, Société et Environnement* 16(3), 376-386., <http://hdl.handle.net/2268/129589>
- Eitzinger, J., Thaler, S., Schmid, E., Strauss, F., Ferrise, R., Moriondo, M., Bindi, M., Palosuo, T., Rötter, R.P., Kersebaum, K.C., Olesen, J.E., Patil, R.H., Saylan, B., Caldag, B. & Caylak, O. (2013). Sensitivities of crop models to extreme weather conditions during flowering period demonstrated for maize and winter wheat in Austria. *The Journal of Agricultural Science*, 151, 813-835.
- Elliott J, Deryng D, Müller C, Frieler K, Konzmann M, Gerten D, Glotter M, Flörke M, Wada Y, Best N, Eisner S, Fekete B, Folberth C, Foster I, Gosling SN, Haddeland I, Khabarov N, Ludwig F, Masaki Y, Olin S, Rosenzweig C, Ruane AC, Satoh Y, Schmid E, Stacke T, Tang Q, Wisser D (2014): Constraints and potentials of future irrigation water availability on agricultural production under climate change, *Proceedings of the National Academy of Sciences of the United States of America*, 111, 9, 3239-3244, <http://dx.doi.org/10.1073/pnas.1222474110>
- Elliott J, Müller C, Deryng D, Chryssanthacopoulos J, Boote KJ, Büchner M, Foster I, Glotter M, Heinke J, Iizumi T and others. The Global Gridded Crop Model Intercomparison: data and modeling protocols for Phase 1 (v1.0). *Geosci. Model Dev.* 2015;8(2):261-277., <http://dx.doi.org/10.5194/gmd-8-261-2015>
- Elsgaard, L., Børgesen, C.D., Olesen, J.E., Siebert, S., Ewert, F., Peltonen-Sainio, P., Rötter, R.P. & Skjelvåg, A.O. (2012). Shifts in comparative advantages for maize, oat, and wheat cropping under climate change in Europe. *Food Additives & Contaminants: Part A*, 29, 1514-1526.
- Eory, V., M. MacLeod, S. Shretsha, D. Roberts, (under revision), Linking an economic and a life-cycle analysis biophysical model to support agricultural greenhouse gas mitigation policy . *German Journal of Agricultural Economics*, www.gjae-online.de/
- Ewert Frank, Reimund P Rötter, Marco Bindi, Heidi Webber, Mirek Trnka, Christian K Kersebaum, Jorgen E Olesen, Martin K Van Ittersum, Sander Janssen, Mike Rivington, Micha A Semenov, Daniel Wallach, John R Porter, Derek Stewart, Jan Verhagen, Thomas Gaiser, Taru Palosuo, Fulu Tao, Claas Nendel, Pier Paolo Roggero, Lenka Bartosova, Senthold Asseng (2014). Crop modelling for integrated assessment of climate change risk to food production. (in press), doi:10.1016/j.envsoft.2014.12.003
- Francone C., C. Cassardo, R. Richiardone, R. Confalonieri (2012). Sensitivity analysis and investigation of the behaviour of the UTOPIA Land-Surface Process Model: a case study for vineyards in Northern Italy. *BOUNDARY-LAYER METEOROLOGY*, vol. 144, p. 419-430, ISSN: 0006-8314, <http://dx.doi.org/10.1007/s10546-012-9725-6>
- Francone C., Katul G.G., Cassardo C., Richiardone R. (2012). Turbulent transport efficiency and the ejection-sweep motion for momentum and heat on sloping terrain covered with vineyards. *AGRICULTURAL AND FOREST METEOROLOGY*, vol. 162-163, p. 98-107, ISSN: 0168-1923, <http://dx.doi.org/10.1016/j.agrformet.2012.04.012>
- Frederiks, Troy M; Christopher, John T; Sutherland, Mark W; Borrell, Andrew K. Post-head-emergence frost in wheat and barley: defining the problem, assessing the damage, and identifying resistance. *Breeding Plants to cope with future climate change*, <http://dx.doi.org/10.1093/jxb/erv088>
- Fürst, C., K. Helming, C. Lorz, F., P.H. Verburg. 2013. Integrated land use and regional resource management - Across-disciplinary dialogue on future perspectives for a sustainable development of regional resources. *Journal of Environmental Management* 127:S1-S5
- Gabaldón-Leal C., Lorite I.J., Mínguez M.I., Lizaso J.I., Dosio A., Sanchez E., and Ruiz-Ramos M., 2015. Local adaptation strategies for maize in Andalusia to cope with climate change and extreme temperature events in the 21st century. *Climate Research*, in press
- García-López J, Lorite IJ, García-Ruiz R, Domínguez J (2014) Evaluation of three simulation approaches for assessing yield of rainfed sunflower in a Mediterranean environment for climate change impact modelling. *Climatic Change* 124:147-162

- GHaley BB, SANDHU HS, PORTER JR (2015). Relationship between C:N:C:O stoichiometry and ecosystem services in managed production systems. *PlosOne*, DOI:10.1371/journal.pone.0123869.
- Ghaley BB, Vesterdal L & Porter JR (2014). Quantification and valuation of ecosystem services in diverse production systems for informed decision-making. *Environmental Science and Policy*, 39, 139-49.
- Ghaley, BB & Porter JR (2014). Determination of biomass accumulation in mixed belts of *Salix*, *Corylus* and *Alnus* species in combined food and energy production system. *Biomass and Bioenergy*, 63, 86-91.
- Ghaley, BB & Porter JR (2014). Ecosystem function and service quantification and valuation in a conventional winter wheat production system with the DAISY model in Denmark. *Ecosystem Services*, 10, 79-83.
- Ghaleyab, Bhim B.; Porter, John R. & Sandhu, Harpinder S. 2014, Soil-based ecosystem services: a synthesis of nutrient cycling and carbon sequestration assessment methods. *International Journal of Biodiversity Science, Ecosystem Services & Management* 10: 177-186., <http://dx.doi.org/10.1080/21513732.2014.926990>
- Graef F, Sieber S, Mutabazi K, Asch F, Biesalski HK, Bitegeko J, Bokelmann W, Bruentrup M, Dietrich O, Elly N and others. Framework for participatory food security research in rural food value chains. *Global Food Security* 2014;3(1):8-15., <http://dx.doi.org/10.1016/j.gfs.2014.01.001>
- Graß, R., Thies, B., Kersebaum, K.C., Wachendorf, M. (2015). Simulating dry matter yield of two cropping systems with the simulation model HERMES to evaluate impact of future climate change. *Eur. J. Agronomy*, accepted
- Gutierrez, Luciano; Piras, Francesco, Roggero, Pier Paolo. (2014) A Global Vector Autoregression Model for the Analysis of Wheat Prices". *Forthcoming American Journal of Agricultural Economics*
- Gutzler C, Helming K, Balla D, Dannowski R, Deumlich D, Glemnitz M, Knierim A, Mirschel W, Nendel C, Paul C, Sieber S, Stachow U, Starick A, Wieland R, Wurbs A, Zander P. 2015. Agricultural land use changes - a scenario-based sustainability impact assessment for Brandenburg, Germany. *Ecological Indicators* 48:505-517., <http://dx.doi.org/10.1016/j.ecolind.2014.09.004>
- Hakala, K., Jauhiainen, L., Himanen, S.J., Rötter, R.P., Salo, T. & Kahiluoto, H.(2012).Sensitivity of barley varieties to weather in Finland. *The Journal of Agricultural Science*, 150, 145-160.
- Heinemann, Alexandre Bryan; Perez, Camilo Barrios; Villegas, Julian Ramirez; Londoño, David Arango; Findji, Osana Bonilla; Medeiros, João Carlos Carlos; Jarvis, Andrew. Variation and impact of drought stress pattern across upland rice target population of environments in Brazil. *Breedign plants to cope with future climate change.*, <http://dx.doi.org/10.1093/jxb/erv126>
- Heinke J, Ostberg S, Schaphoff S, Frieler K, Müller C, Gerten D, Meinshausen M, Lucht W (2012): A new climate dataset for systematic assessments of climate change impacts as a function of global warming. *Geosci. Model Dev.*, 6, 5, 1689-1703, <http://dx.doi.org/10.5194/gmd-6-1689-2013>
- Helming, K., K. Diehl, D. Geneletti, H. Wiggering. 2013. Mainstreaming ecosystem services in European policy impact assessment. *Environmental Impact Assessment Review* 40:82-87.
- Hidy, D., Barcza, Z., Haszpra, L., Churkina, G., Pintér, K., Nagy, Z. (2012): Development of the Biome-BGC model for simulation of managed herbaceous ecosystems. *Ecological Modelling*, 226, 99-119., <http://dx.doi.org/10.1016/j.ecolmodel.2011.11.008>
- Himanen, S., Ketoja, E., Hakala, K., Rötter, R.P., Salo, T. & Kahiluoto, H. (2013). Cultivar diversity has great potential to increase yield for feed barley. *Agronomy for Sustainable Development*, 33, 519-530.
- Hlavinka, P., Kersebaum, K.C., Dubrovsky, M., Fischer, M., Pohankova, E., Balek, J., Zalud, Z., Trnka, M. (2014): Water balance and drought stress for field crop rotations in present and future conditions. Manuscript submitted to *Climatic Research*
- Hlavinka, P., Trnka, M., Kersebaum, K.C., Cermák, P., Pohanková, E., Orság, M., Pokorný, E., Fischer, M., Brtnický, M., Žalud, Z. (2014): Modelling of yields and soil nitrogen dynamics for crop rotations by HERMES under different climate and soil conditions in the Czech Republic. *The Journal of Agricultural Science* 152, 188-204.
- Höglind M, Thorsen SM, Semenov MA (2013) Quantifying uncertainty in impact of climate change on grass production in Northern Europe using ensembles of climate predictions. *Agricultural and Forest Meteorology*, 170:103-113, <http://dx.doi.org/10.1016/j.agrformet.2012.02.010>
- Höhn, J., Rötter, R.P. (2014). Impact of global warming on European cereal production. *CAB Reviews* 9(22), 1-15., <http://dx.doi.org/10.1079/pavsnr20149022>
- Humblot P., Jayet P.A., Clerino P., Leconte-Demarsy D., Szopa S., Castell J.F., (2013), Assessment of ozone impacts on farming systems: a bio-economic modeling approach applied to the widely diverse French case, *Ecological Economics*, Volume 85, January 2013, Pages 50–58
- Humpenöder F, Popp A, Dietrich JP, Klein D, Lotze-Campen H, Bonsch M, Bodirsky BL, Weindl I, Stevanovic M, Müller C. Investigating afforestation and bioenergy CCS as climate change mitigation strategies. *Environmental Research Letters* 2014;9(6):064029., <http://iopscience.iop.org/1748-9326/9/6/064029/>
- Irz, X. & Kuosmanen, N. 2013. Explaining growth in demand for dairy products in Finland: An econometric analysis. *Food economics* 9. Supplement 5: 47-56., <http://www.tandfonline.com/doi/abs/10.1080/2164828X.2013.862168>
- Jabloun, M., Schelde, K., Tao, F. & Olesen, J.E. Effect of changes in temperature and precipitation in Denmark on nitrate leaching in cereal cropping systems. *European Journal of Agronomy*, 62, 55-64, <http://dx.doi.org/10.1016/j.eja.2014.09.007>
- Jacek Źarski, Stanisław Dudek, Renata Kuśmierk-Tomaszewska, Waldemar Bojar, Leszek Knopik, Wojciech Źarski AGRO- CLIMATOLOGICAL ASSESSMENT OF THE GROWING SEASON RAINFALL IN THE

- BYDGOSZCZ REGION Infrastructure and Ecology of Rural Areas no. 3, p. 643-656,
http://www1.bg.us.edu.pl/bazy/czasopisma/czasop_full.asp?id=1689
- Jayet P.A., Petsakos A., (2013), Evaluating the efficiency of a uniform N-input tax under different policy scenarios at different scales, *Environmental Modeling and Assessment*. Vol 18, Issue 1, pp 57-72.
- Jing, Q., Bélanger, G., Baron, V., Bonesmo, H., Virkajärvi, P. 2013. Simulating the nutritive value of timothy summer regrowth. *Agronomy journal* 105 3: 563-572., <http://dx.doi.org/10.2134/agronj2012.0331>
- Jing, Q., Bélanger, G., Baron, V., Bonesmo, H., Virkajärvi, P., Young, D. 2012. Regrowth simulation of the perennial grass timothy. *Ecological Modelling* 232: 64-77., <http://dx.doi.org/10.1016/j.ecolmodel.2012.02.016>
- Kahiluoto, H., Kaseva, J., Himanen, S., Hakkala, K., Rötter, R.P. & Trnka, M., (2014). Cultivating resilience by empirically revealing response diversity. *Global Environmental Change*, 25, 186-193.,
<http://dx.doi.org/10.1016/j.gloenvcha.2014.02.002>
- Kanellopoulos, A., P. Reidsma, J. Wolf, M. van Ittersum. 2014. Assessing climate change and associated socio-economic scenarios for arable farming in the Netherlands: An application of benchmarking and bio-economic farm modelling. *European Journal of Agronomy* 52, Part A, 69-80.,
<http://dx.doi.org/10.1016/j.eja.2013.10.003>
- Kässi, P., Känkänen, H., Niskanen, O., Lehtonen, H. & Höglind, M. 2014. Farm level approach to manage grass yield variation in changing climate in Jokioinen, Kuopio and St Petersburg.
- Kersebaum, K.C., Boote, K.J., Jorgenson, J.S., Nendel, C., Bindi, M., Frühauf, C., Gaiser, T., Hoogenboom, G., Kollas, C., Olesen, J.E., Rötter, R.P., Ruget, F., Thorburn, P., Trnka, M., Wegehenkel, M. (2014): Analysis and classification of data sets for calibration and validation of agro-ecosystem models. *Env. Model. Software*, in press (online available), <http://dx.doi.org/10.1016/j.envsoft.2015.05.009>
- Kersebaum, K.C., C. Nendel (2014): Site-specific impacts of climate change on wheat production across regions of Germany using different CO2 response functions. *Eur. J. Agronomy* 52A: 22-32,
<http://dx.doi.org/10.1016/j.eja.2013.04.005>
- Kim Y, Berger S, Kettering J, Tenhunen J, Haas E, Kiese R (2014). Simulation of N2O emissions and nitrate leaching from plastic mulch radish cultivation with LandscapeDNDC. *Ecological Research* 29: 441-454,
<http://dx.doi.org/10.1007/s11284-014-1136-3>
- Kipling, R.P., Özkan, Ş. (2015). Improving the design of research structures to meet societal challenges. *Journal of Environmental Science and Policy*. Under review
- Klatt, Steffen, Kraus, David, Karl-Heinz Rahn, Christian Werner, Ralf Kiese, Klaus Butterbach-Bahl, Edwin Haas (2014). Parameter-induced uncertainty quantification of a regional N₂O and NO₃ inventory using the biogeochemical model LandscapeDNDC. Submitted manuscript
- Klein, D.; Luderer, G.; Kriegler, E.; Strefler, J.; Bauer, N.; Leimbach, M.; Popp, A.; Dietrich, J. P.; Humpeöder, F.; Lotze-Campen, H.; Edenhofer, O.: The value of bioenergy in low stabilization scenarios: an assessment using REMIND-MAgPIE. In: *Climatic Change*, 123, 3-4. 2014. 705-718 p., <http://dx.doi.org/10.1007/s10584-013-0940-z>
- Kollas, C.; Kurt C Kersebaum; Claas Nendel; Kiril Manevski; Christoph Müller; Taru Palosuo; Cecilia M Armas-Herrera; Nicolas Beaudoin; Marco Bindi; Monica Charfeddine; Tobias Conrad; Julie Constantin; Josef Eitzinger; Frank Ewert; Roberto Ferrise; Thomas Gaiser; Iñaki Garcia de Cortazar-Atauri; Luisa Giglio; Petr Hlavinka; Holger Hoffmann; Munir P Hoffmann; Marie Launay; Remy Manderscheid; Bruno Mary; Wilfried Mirschel; Marco Moriondo; Jørgen E Olesen; Isik Öztürk; Andreas Pacholski; Dominique Ripoche-Wachter; Pier Paolo Roggero; Svenja Roncossek; Reimund P Rötter; François Ruget; Behzad Sharif; Mirek Trnka; Domenico Ventrella; Katharina Waha; Martin Wegehenkel; Hans-Joachim Weigel; Lianhai Wu (2015). Crop rotation modelling - a European model intercomparison. *Eur. J. Agronomy*, in press
- König, H.J., Uthes, S., Schuler, J., Zhen, L., Purushothaman S; Suarma, U.; Sghaier, M.; Ma-kokha, S.; Helming, K.; Sieber, S.; Chen, L.; Brouwer, F.; Morris, J.; Wiggering. 2012. Regional impact assessment of land use scenarios in developing countries using the FoPIA approach: findings from five case studies. *Environmental Management* 127: S56–S64, <http://dx.doi.org/10.1016/j.jenvman.2012.10.021>
- Kopacz M, Twardy S. 2012. A spatial analysis of biogenic load differentiation of an agricultural origin in the Carpathian basin. *Polish Journal of Environmental Studies*. 21(5A): 196-200.
- Kopacz M, Twardy S. 2014. Spatial modeling as a tool supporting the management of catchment area of retention reservoir. *Polish Journal of Environmental Studies*. 23(3A): 53-57.
- Kopacz M, Twardy S. 2014. The importance of extensive meadow and pasture kind of land use for the implementation of cross-compliance in mountain areas. Submitted.
- Kowalczyk A, Kuźniar A. 2012. The threats of water erosion in the Grajcarek river basin. *Polish Journal of Environmental Studies*. 21(5A): 217-221.
- Kraus D, Weller S, Klatt S, et al. (2014) A new LandscapeDNDC biogeochemical module to predict CH₄ and N₂O emissions from lowland rice and upland cropping systems. *Plant Soil* 1–25.,
<http://dx.doi.org/10.1007/s11104-014-2255-x>
- Kros, J., M.M. Bakker, P. Reidsma, A. Kanellopoulos, S. Jamal Alam, W. de Vries, 2015. Impacts of agricultural changes in response to climate and socio economic change on nitrogen deposition in nature reserves. *Landscape Ecology* 30: 871-885., <http://dx.doi.org/10.1007/s10980-014-0131-y>
- Kunert, Karl; van Wyk, Stefan; Cullis, Chris; Vorster, Barend J; Foyer, Christine H. 2015. The potential use of phytocystatins in crop improvement and protection against the negative impacts of climate change. *J. Exp. Bot.* 66: 3559-3570., <http://dx.doi.org/10.1093/jxb/erv211>

- Kyle P, Müller C, Calvin K, Thomson A (2014): Meeting the Radiative Forcing Targets of the Representative Concentration Pathways with Agricultural Climate Impacts. *Earth's Future*, 2, 83-98, <http://dx.doi.org/10.1002/2013EF000199>
- Lampe, M. von; Willenbockel, D.; Ahammad, H.; Blanc, E.; Cai, Y.; Calvin, K.; Fujimori, S.; Hasegawa, T.; Havlik, P.; Heyhoe, E.; Kyle, P.; Lotze-Campen, H.; Mason d'Croz, D.; Nelson, G. C.; Sands, R. D.; Schmitz, C.; Tabeau, A.; Valin, H.; Mensbrugge, D. van der; Meijl, H. van (2014) Why do global long-term scenarios for agriculture differ? An overview of the AgMIP Global Economic Model Intercomparison. *Agricultural Economics* 45: 3-20., <http://dx.doi.org/10.1111/agec.12086>
- Lardy, R., Bellocchi, G., Marrtin, R., 2015. Vuln-Indices: Software to assess vulnerability to climate change. *Computers and Electronics in Agriculture* 114, 53-57., <http://www.sciencedirect.com/science/article/pii/S0168169915001015>
- Leclère D, Jayet P.A., De Noblet Ducoudré N., (2013), Farm-level autonomous adaptation of European agricultural supply to climate change, *Ecological Economics*, Volume 87, March 2013, Pages 1-14.
- Legarra, S. Velazquez, E., Aguado, P., Fereres, A., Morales, I., Rodriguez, D., Del Estal, P., E. Viñuela. 2014. Effects of a uv-absorbing greenhouse net on the performance and host finding ability of *Aphidius ervi* in a lettuce crop. *Biocontrol* 59: 265-278, <http://dx.doi.org/10.1007/s10526-014-9564-0>
- Legarra, S., M. Betancourt, M. Plaza, A. Fraile, F. García-Arenal, and A. Fereres. 2012. Dynamics of nonpersistent aphid-borne viruses in lettuce crops covered with UV-absorbing nets. *Virus Research* 165: 1-8., <http://dx.doi.org/10.1016/j.virusres.2011.12.012>
- Lehtonen H. (in revision) Evaluating development of Finnish agriculture in adaptation to climate and global change.
- Lehtonen, H. & Irz, X. 2013. Impacts of reducing red meat consumption on agricultural production in Finland. *Agricultural and Food Science* 22:356-370., <http://ojs.tsv.fi/index.php/AFS/article/view/8007/6412>
- Leogrande R., Lopedota O., Montemurro F., Vitti C., Ventrella d. 2012 . Effects of irrigation regime and salinity on soil characteristics and yield of tomato. *Italian Journal of Agronomy*, 7:e8, 50-57, <http://dx.doi.org/10.4081/ija.2012.e8>.
- Lessire, F., Hornick, J.-L., Minet J., Dufrasne, I. (2015) Ruminant time, milk yield, milking frequency of grazing dairy cows milked by a mobile automatic system during mild heat stress. *Advances in Animal Biosciences*. 6:12-14, <http://dx.doi.org/10.1017/S2040470014000417>
- Lindeskog, M.; Arneeth, A.; Bondeau, A.; Waha, K.; Seaquist, J.; Olin, S.; Smith, B.: Implications of accounting for land use in simulations of ecosystem carbon cycling in Africa. In: *Earth System Dynamics*, 4, 2. 2013. 385-407 p., <http://dx.doi.org/10.5194/esd-4-385-2013>
- Lipiec, J. Doussan, C. Nosalewicz, A. Kondracka. K. Effect of drought and heat stresses on plant growth and yield: a review *International Agrophysics* 27, 4, 463-477.
- Liu, X., Lehtonen, H., Purola, T., Pavlova, Y., Rötter, R. & Palosuo, T. 2014. Dynamic economic modelling of crop rotation with farm management practices under future pest pressure
- Lopes, Marta S; El-Basyoni, Ibrahim; Baenziger, Peter Stephen; Singh, Sukhwinder; Royo, Conxita; Ozbek, Kursad; Aktas, Husnu; Ozer, Emel; Ozdemir, Fatih;
- Lorite I.J., García-Vila M., Santos C., Ruiz-Ramos M., and Fereres E., 2013. AquaData and AquaGIS: Two computer utilities for temporal and spatial simulations of water-limited yield with AquaCrop. *Computers and Electronics in Agriculture* 96, 227-237
- Lotze-Campen, H.; von Lampe, M.; Kyle, P.; Fujimori, S.; Havlík, P.; van Meijl, H.; Hasegawa, T.; Popp, A.; Schmitz, C.; Tabeau, A.; Valin, H.; Willenbockel, D.; Wise, M.: Impacts of increased bioenergy demand on global food markets: an AgMIP economic model intercomparison. In: *Agricultural Economics*, 45, 1. 2014. 103-116 p., <http://dx.doi.org/10.1111/agec.12092>
- Lotze-Campen, H.: Bevölkerungswachstum und Ressourcenknappheit. In: *AMOSinternational*, 7, 1. 2013. 13-19 p.
- Luciano Gutierrez, Francesco Piras, Piier Paolo Roggero (2014) A Global Vector Autoregression Model for the Analysis of Wheat Prices". Forthcoming *American Journal of Agricultural Economics*
- Ma, S., Lardy, R., Graux, A.-I., Ben Touhami, H., Klumpp, K., Martin, R., Bellocchi, G., 2015. Regional-scale analysis of carbon and water cycles on managed grassland systems. *Environmental Modelling & Software*, doi:10.1016/j.envsoft.2015.03.007., <http://www.sciencedirect.com/science/article/pii/S1364815215000870>
- Maggio A, De Pascale S, Orsini F, Barbieri G. (2014). Addressing cultivation practices and nutritional quality of tomato crops to improve the sustainability of organic farming systems. Submitted manuscript.
- Mandryk, M. P. Reidsma, A. Kanellopoulos, J. C.J. Groot, M.K. van Ittersum. 2014. The role of farmers' objectives in current farm practices and adaptation preferences: a case study in Flevoland, the Netherlands. *Regional Environmental Change* 14 (4), 1463 - 1478., <http://link.springer.com/article/10.1007/s10113-014-0589-9/fulltext.html>
- Mandryk, M., P. Reidsma, M.K. van Ittersum. 2012. Scenarios of farm structural change for assessing adaptation strategies to climate change: a case study in Flevoland, the Netherlands. *Landscape Ecology* 27 (4), 509-527., <http://www.springerlink.com/openurl.asp?genre=article&id=doi:10.1007/s10980-012-9714-7>
- Manickavelu, Alagu; Ban, Tomohiro; Vikrant, Prashant. Exploiting genetic diversity from landraces in wheat breeding for adaptation to climate change. *Breeding plants to cope with future climate change*, <http://dx.doi.org/10.1093/jxb/erv122>
- Mansouri, M., Dumont, B., Destain, M.-F. Predicting Biomass and Grain Protein Content Using Bayesian Methods.

- Mansouri, M., Dumont, B., Destain, M.-F. (2012). Modeling and prediction of nonlinear environmental system using Bayesian methods. *Computers and Electronics in Agriculture* 92, 16-31, <http://dx.doi.org/10.1016/j.compag.2012.12.013>
- Mansouri, M., Dumont, B., Leemans, V., & Destain, M.-F. (2014). Bayesian methods for predicting LAI and soil water content. *Precision Agriculture*, 15(2), 184-201, <http://hdl.handle.net/2268/156796>
- Martre P, Wallach D, Asseng S, Ewert F, Jones JW, Rötter RP, Boote KJ, Ruane AC, Thorburn PJ, Cammarano D and others. Multimodel ensembles of wheat growth: many models are better than one. *Global Change Biology* 2015;21(2):911-925., <http://dx.doi.org/10.1111/gcb.12768>
- Martre, P., Wallach, D., Asseng, S., Ewert, F., Rosenzweig, C., Jones, J.W., Hatfield, J.L., Ruane, A., Boote, K.J., Thorburn, P., Rötter, R.P., Cammarano, D., Aggarwal, P.K., Angulo, C., Basso, B., Bertuzzi, P., Biernath, C., Brisson, N., Challinor, A.J., Doltra, J., Gayler, S., Goldberg, R., Grant, R., Hengu, L., Hooker, J.E., Hunt, L.E., Ingwersen, J., Izaurrealde, R.C., Kersebaum, K.C., Müller, C., Kumar, S.N., Nendel, C., O'Leary, G., Olesen, J.E., Osborne, T.M., Palosuo, T., Priesack, E., Ripoche, D., Semenov, M.A., Shcherbak, I., Steduto, P., Stöckle, C.O., Stratonovitch, P., Streck, T., Supit, I., Tao, F., Travasso, M., Waha, K., White, J.W. & Wolf, J. 2015. Evaluating an ensemble of 27 crop simulation models in diverse environments: Are multi-models better than one? Submitted manuscript.
- Martre, Pierre; He, Jianqiang; Le Gouis, Jacques; Semenov, Mikhail. 2015. *In silico* system analysis of physiological traits determining grain yield and protein concentration for wheat as influenced by climate and crop management. *Journal of Experimental Botany* 66: 3581-3598., <http://dx.doi.org/10.1093/jxb/erv049>
- McKersie, B. 2015. Planning for food security in a changing climate. *Journal of Experimental Botany* 66: 3435-3450, <http://dx.doi.org/10.1093/jxb/eru547>
- Meyer, Peter. 2015 Epigenetic variation and environmental change. *Journal of Experimental Botany* 66: 3541-3548, <http://dx.doi.org/10.1093/jxb/eru502>
- Minet, J., Bellocchi, G., François, L. (2015). Sensitivity of simulated grassland productivity to climate change factors in Europe and Israel using the CARAIB model. *Ecological Informatics*. Under review
- Minet, J., Laloy, E., Tychon, B., and François, L. 2015. Bayesian inversions of a dynamic vegetation model at four European grassland sites, *Biogeosciences* 12: 2809-2829., <http://dx.doi.org/10.5194/bg-12-2809-2015>
- Mitter H, Schmid E, Sinabell, F (under revision) Integrated modeling of protein crop production responses to impacts of climate change and agricultural policy scenarios in Austria
- Mitter, H., C. Heumesser, E. Schmid, 2015, Spatial modeling of robust crop production portfolios to assess agricultural vulnerability and adaptation to climate change. *Land Use Policy* 46:75-90
- Montesino- San Martin, M., Olesen, J.E. & Porter, J.R. Climate impact uncertainties with generic crop modelling approaches. Submitted manuscript.
- Montesino-San Martin M, Olesen JE & Porter JR (2014). A genotype, environment and management (GxExM) analysis of adaptation in winter wheat to climate change in Denmark. *Agricultural and Forest Meteorology* 187: 1–13.
- Montesino-San Martin M, Olesen JE & Porter JR (2015). Can crop-climate models be accurate and precise? A case study for wheat production in Denmark. *Agricultural and Forest Meteorology* 202: 51–60., <http://dx.doi.org/10.1016/j.agrformet.2014.11.003>
- Montesino-San Martin, M., Olesen, J.E. & Porter, J.R. A theoretical analysis of uncertainty interactions in climate impact models of crop production. (submitted)
- Morales, I., B. M. Diaz, A. Hermoso de Mendoza, M. Nebreda, A. Fereres. 2013. The development of an economic threshold for *Nasonovia ribisnigri* (Mosley) (Hemiptera: Aphididae) on lettuce in central Spain. *Journal of Economic Entomology* 106 (2): 891-898, <http://dx.doi.org/10.1603/EC12275>
- Moraru, P. I., T. Rusu, P. Guş, I. Bogdan, A. I. Pop, 2015. The role of minimum tillage in protecting environmental resources of the Transylvanian Plain, Romania. *Romanian Agricultural Research*, no. 32. First Online: April, 2015. DII 2067-5720 RAR 2015-86. pag. 1-9, <http://www.incda-fundulea.ro/rar/nr32/rar32.10.pdf>
- Moriondo, M.; R. Ferrise; G. Trombi; L. Brilli; C. Dibari; M. Bindi (2015) Modelling olive trees and grapevines in a changing climate. *Environmental Modelling & Software*, <http://dx.doi.org/10.1016/j.envsoft.2014.12.016>
- Müller C (2013): African lessons on climate change risks for agriculture. *Annual Reviews of Nutrition*. 33, 395-411, <http://dx.doi.org/10.1146/annurev-nutr-071812-161121>
- Müller C, and Robertson R. 2014, Projecting future crop productivity for global economic modeling, *Agric. Econ.*, 45, 37-50, <http://dx.doi.org/10.1111/agec.12088>
- Müller C, Elliott J, Levermann A. 2014. Food security: Fertilizing hidden hunger. *Nature Clim. Change* 4(7):540-541., <http://dx.doi.org/10.1038/nclimate2290>
- Müller C, Waha K, Bondeau A, Heinke J (2014): Hotspots of climate change impacts in sub-Saharan Africa and implications for adaptation and development. *Global Change Biology* 20: 2505–2517, <http://dx.doi.org/10.1111/gcb.12586>
- Nelson GC, Valin H, Sands R, Havlík P, Ahammad H, Deryng D, Elliott J, Fujimori S, Heyhoe E, Kyle P, Von Lampe M, Lotze-Campen H, Mason d'Croz D, van Meijl H, van der Mensbrugge D, Müller C, Popp A, Robertson R, Robinson S, Schmid E, Schmitz C, Tabeau A, and Willenbockel D (2014): Climate change effects on agriculture: Economic responses to biophysical shocks, *Proceedings of the National Academy of Sciences of the United States of America*, 111, 9 3274-3279, <http://dx.doi.org/10.1073/pnas.1222465110>
- Nelson GC, van der Mensbrugge D, Hasegawa T, Takahashi K, Sands R, Kyle P, Calvin K, Havlík P, Valin H, Mason d'Croz D, Kavallari A, Tabeau A, Schmitz C, Lotze-Campen H, Müller C, von Lampe M (2014):

- Agriculture and Climate Change in Global Scenarios: Why Don't the Models Agree. *Agricultural Economics*, 45, 1, 85-101, <http://onlinelibrary.wiley.com/enhanced/doi/10.1111/agec.12091/>
- Nendel, C., Kersebaum, K.C., Mirschel, W., Wenkel, K.-O. (2014): Testing farm management options as climate change adaptation strategies using the MONICA model. *Eur. J. Agronomy* 52: 47-56
- Nendel, C., R. Wieland, W. Mirschel, X. Specka and K.C. Kersebaum (2013): Simulating winter wheat yields using input data of different spatial resolution. *Field Crop. Res.* 145, 67–77., <http://dx.doi.org/10.1016/j.fcr.2013.02.014>
- Olesen, J.E., Børgesen, C.D., Elsgaard, L., Palosuo, T., Rötter, R.P., Skjelvåg, A.O., Peltonen-Sainio, P., Börjesson, T., Trnka, M., Ewert, F., Siebert, S., Brisson, N., Eitzinger, J., van Asselt, E.D., Oberforster, M. & van der Fels-Klerx, H.J. (2012). Changes in time of sowing, flowering and maturity of cereals in Europe under climate change. *Food Additives & Contaminants: Part A*, 29, 1527-1542.
- Orsini, F., Alnayef, M, Bona, S, Maggio, A, Gianquinto, G, 2012. Low stomatal density and reduced transpiration facilitate strawberry adaptation to salinity. *Environmental and Experimental Botany* 81: 1-10.
- Özkan, Ş., Ahmadi, B.V., Bonesmo, H., Østerås O., Stott, A.W. and Harstad. O.M. (2015). Impact of animal health on greenhouse gas emissions. *Advances in Animal Biosciences*. 6:24-25, <http://dx.doi.org/10.1017/S2040470014000454>
- Özkan, Ş., Farquharson, B., Hill, J., Malcolm, B. (2015) A stochastic analysis of the impact of input parameters on profit of Australian pasture-based dairy farms under variable carbon price scenarios. *Journal of Environmental Science and Policy*. 48:163-171., <http://dx.doi.org/10.1016/j.envsci.2014.12.012>
- Özkan, Ş., Hill, J., Cullen, B. (2014) Effect of climate variability on pasture-based dairy feeding systems in south-east Australia. *Animal Production Science*. In press, <http://dx.doi.org/10.1071/AN14493>
- Özkan, Ş., Hill, J. (2015) Implementing innovative farm management practices on dairy farms: a review of feeding systems. *Turkish Journal of Veterinary and Animal Sciences*. 39:1-9, <http://dx.doi.org/10.3906/vet-1311-95>
- Palatella L., Vitale D., Ventrella D., Rana G. 2012. The water deficit and aridity indexes in the Capitanata plain calculated by statistical downscaling. *Italian Journal of Agronomy*, 7:e3, 13-18, <http://dx.doi.org/10.4081/ija.2012.e8>
- Patil RH, Laegdsmand M, Olesen JE & Porter JR. (2014). Soil temperature manipulation to study global warming effects in arable land: performance of buried heating-cable method. *Environment and Ecology Research*, 1, 196-204.
- Patil, R.H., Laegdsmand, M., Olesen, J.E. & Porter, J.R. (2013). Soil temperature manipulation to study global warming effects in arable land: Performance of buried heating-cable method. *Environment and Ecology Research* 1, 196-204.
- Perego A., Giussani A., Fumagalli M., Sanna M., Chiodini M., Carozzi M., Alfieri L., Brenna S., Acutis M. (2013) Crop rotation, fertilizer types and application timing affecting nitrogen leaching in nitrate vulnerable zones in Po Valley. *Italian Journal of Agrometeorology* (in press)
- Perego A., Giussani A., Sanna M., Fumagalli M., Carozzi M., Alfieri L., Brenna S., Acutis M. (2013) The ARMOSA simulation crop model: overall features, calibration and validation results. *Italian Journal of Agrometeorology* (accepted)
- Perego A., Sanna M., Giussani A., Chiodini ME, Fumagalli M., Pilu SR, Bindi M, Moriondo M., Acutis M. (2014) Designing a high-yielding maize ideotype for a changing climate in Lombardy plain (northern Italy). *Science of the Total Environment*, 499: 497-509
- Persson T., Höglind M., Gustavsson A.M., Halling M., Jauhiainen L., Niemeläinen O., Thorvaldsson G., Virkajärvi P. (2014). Evaluation of the LINGRA timothy model under Nordic conditions. *Field Crops Research* 161, 87-97.
- Persson, T., Kværnø, S. & Höglind, M. 2015. Impact of soil type extrapolation on timothy yield under baseline and future climate conditions in south-eastern Norway. *Climate Research*. In press.
- Pilbeam, David J. Breeding crops for improved mineral nutrition under climate change conditions. *Breeding plants to cope with future climate change*, <http://dx.doi.org/10.1093/jxb/eru539>
- Piontek F, Müller C, Pugh T, Clark D, Deryng D, Elliott J, Colón-González F, Flörke M, Folberth C, Franssen W, Frieler K, Friend AD, Gosling S, Hemming D, Khabarov N, Kim H, Lomas M, Masaki Y, Mengel M, Morse A, Neumann K, Nishina K, Ostberg S, Pavlick R, Ruane A, Schewe J, Schmid E, Stacke T, Tang Q, Tessler Z, Tompkins A, Warszawski L, Wisser D, and Schellnhuber H (2014): Multisectoral climate impact hotspots in a warming world, *Proceedings of the National Academy of Sciences of the United States of America*, <http://dx.doi.org/10.1073/pnas.1222471110>
- Piotr Baranowski, Jaromir Krzyszczyk, Cezary Slawinski, Holger Hoffmann, Jerzy Kozyra, Anna Nieróbca, Krzysztof Siwek, Andrzej Gluza, Multifractal analysis of chosen meteorological time series to assess climate impact, submitted to *Climate Research*
- Pirttioja, Nina; Timothy R. Carter, Stefan Fronzek, Marco Bindi, Holger Hoffmann, Taru Palosuo, Margarita Ruiz-Ramos, Fulu Tao, Miroslav Trnka, Marco Acutis, Senthold Asseng, Piotr Baranowski, Bruno Basso, Per Bodin, Samuel Buis, Davide Cammarano, Paola Deligios, Marie-France Destain, Benjamin Dumont, Frank Ewert, Roberto Ferrise, Louis François, Thomas Gaiser, Petr Hlavinka, Ingrid Jacquemin, Kurt Christian Kersebaum, Chris Kollas, Jaromir Krzyszczyk, Ignacio J. Lorite, Julien Minet, M. Ines Minguez, Manuel Montesino, Marco Moriondo, Christoph Müller, Claas Nendel, Isik Öztürk, Alessia Perego, Alfredo Rodríguez, Alex C. Ruane, Françoise Ruget, Mattia Sanna, Mikhail A. Semenov, Cezary Slawinski, Pierre Stratonovitch, Iwan Supit, Katharina Waha, Enli Wang, Lianhai Wu, Zhigan Zhao, Reimund P. Rötter,

- Temperature and precipitation effects on wheat yield across a European transect: a crop model ensemble analysis using impact response surfaces, *Climate Research*, in press
- Podhara, A., K. Helming, L. Adenäuer, T. Heckelei, P. Kautto, P. Reidsma, K. Rennings, J. Turnpenny, J. Jansen. 2013. The policy-relevancy of impact assessment tools: Evaluating nine years of European research funding. *Environ. Sci. Policy* 31: 85-95., <http://dx.doi.org/10.1016/j.envsci.2013.03.002>
- Ponti, L., Gutierrez, A. P., Ruti, P. M., & Dell'Aquila, A. (2014). Fine-scale ecological and economic assessment of climate change on olive in the Mediterranean Basin reveals winners and losers. *Proceedings of the National Academy of Sciences*, 111(15), 5598-5603., <http://dx.doi.org/10.1073/pnas.1314437111>
- Ponti, Luigi; Gutierrez, Andrew Paul; Ruti, Paolo Michele; Dell'Aqua, Alessandro (in press). Fine-scale ecological and economic assessment of climate change on olive in the Mediterranean Basin reveals winners and losers. *Proceedings of the National Academy of Sciences of the U.S.A.*, <http://www.pnas.org/cgi/doi/10.1073/pnas.1314437111>
- Popp A, Humpenoder F, Weindl I, Bodirsky BL, Bonsch M, Lotze-Campen H, Müller C, Biewald A, Rolinski S, Stevanovic M and others. Land-use protection for climate change mitigation. *Nature Clim. Change* 2014;4(12):1095-1098., <http://dx.doi.org/10.1038/nclimate2444>
- Popp, A.; Rose, S. K.; Calvin, K.; Vuuren, D. P. van; Dietrich, J. P.; Wise, M.; Stehfest, E.; Humpenöder, F.; Kyle, P.; Vliet, J. Van; Bauer, N.; Lotze-Campen, H.; Klein, D.; Kriegler, E.: Land-use transition for bioenergy and climate stabilization: model comparison of drivers, impacts and interactions with other land use based mitigation options. In: *Climatic Change*, 123, 3-4. 2014. 495-509 p., <http://dx.doi.org/10.1007/s10584-013-0926-x>
- Porter JR & Wratten S. (2014). Moving onto a carbon currency standard. *Nature*, 506, 295.
- Porter JR, Dyball R, Dumaresq D, Deutsch L & Matsuda H (2014). Feeding capitals: Urban food security and self-provisioning in Canberra, Copenhagen and Tokyo. *Global Food Security*
- Porter, J. R. and Christensen, S. 2013. Deconstructing crop processes and models via identities. *Plant, Cell & Environment* 36:1919-1925+2229., <http://dx.doi.org/10.1111/pce.12107>
- Ramirez-Villegas, Julian; Watson, James; Challinor, Andrew J. Identifying traits for genotypic adaptation using crop models. (2015) *Breeding Plants to cope with Future Climate Change*, <http://dx.doi.org/10.1093/jxb/erv014>
- Refsgaard, J.C., Madsen, H., Andréassian, V., Arnbjerg-Nielsen, K., Davidson, T.A., Drews, M., Hamilton, D., Jeppesen, E., Kjellström, E., Olesen, J.E., Sonnenborg, T.O., Trolle, D., Willems, P. & Christensen, J.H. (2014). A framework for testing the ability of models to project climate change and its impacts. *Climatic Change* 122, 271-282.
- Refsgaard, JC, Arnbjerg-Nielsen, K, Drews, M, Halsnaes, K, Jeppesen, E, Madsen, H, Markandya, A, Olesen, JE, Porter, JR & Christensen, JH (2013). The role of uncertainty in climate change adaptation strategies - a Danish water management example. *Mitigation and Adaptation Strategies for Global Change*, 18, 3, 337-359.
- Reidsma, P. J. Wolf, A. Kanellopoulos, B. F. Schaap, M. Mandryk, J. Verhagen, M. K. van Ittersum, 2015. Climate change impact and adaptation research requires integrated assessment and farming systems analysis: a case study in the Netherlands. *Environmental Research Letters* 10 (2015) 045004, <http://stacks.iop.org/1748-9326/10/045004>
- Reidsma, P., M. M. Bakker, A. Kanellopoulos, S. J. Alam, W. Paas, J. Kros, W. de Vries. 2015. Sustainable agricultural development in a rural area in the Netherlands? Assessing impacts of climate and socio-economic change at farm and landscape level. *Agricultural Systems*. Submitted.
- Roberto Lai, Giovanna Seddaiu, Luca Gennaro, Roggero Pier Paolo (2012). Effects of N fertilizer sources and temperature on soil CO2 efflux in Italian ryegrass crop under Mediterranean conditions. *Italian Journal of Agronomy*, vol. 7, p. 196-201, <http://dx.doi.org/10.4081/ija.2012.e27>
- Roers, M.; Gottschalk, P.; Conradt, T.; Rachimow, C.; Wechsung, F.: SWIM-live 1.0 - Tagesaktuelle Simulation des Wasserhaushalts und der landwirtschaftlichen Pflanzenentwicklung im Elbegebiet. In: *Hydrologie und Wasserbewirtschaftung*, 57, 5. 2013. 225-240 p., http://dx.doi.org/10.5675/HyWa_2013_5_3
- Rosenzweig C, Elliott J, Deryng D, Ruane AC, Müller C, Arneth A, Boote KJ, Folberth C, Glotter M, Khabarov N, Neumann K, Piontek F, Pugh TAM, Schmid E, Stehfest E, Yang H, and Jones JW (2014): Assessing agricultural risks of climate change in the 21st century in a global gridded crop model intercomparison, *Proceedings of the National Academy of Sciences of the United States of America*, 111, 9, 3268-3273, <http://dx.doi.org/10.1073/pnas.1222463110>
- Rötter, R. P., Tao, F., Höhn, J. G., & Palosuo, T. (2015). Use of crop simulation modelling to aid ideotype design of future cereal cultivars. *Journal of Experimental Botany* 66: 3463-3476, <http://dx.doi.org/10.1093/jxb/erv098>
- Rötter, R.P. (2014). Robust uncertainty. *Nature Climate Change*, 4, 251-252., <http://dx.doi.org/10.1038/nclimate2181>
- Rötter, R.P., Höhn, J. & Fronzek, S. (2012). Projections of climate change impacts on crop production – a global and a Nordic perspective. *Acta Agriculturae Scandinavica, Section A Animal Science*, 62, 166-180.
- Rötter, R.P., Höhn, J., Trnka, M., Fronzek, S., Carter, T.R., Kahiluoto, H. (2013). Modelling shifts in agroclimate and crop cultivar response under climate change. *Ecology and Evolution* 3, 4197-4214., <http://dx.doi.org/doi:10.1002/ece3.782>
- Rötter, R.P., Palosuo, T., Kersebaum, K.-C., Angulo, C., Bindi, M., Ewert, F., Ferrise, R., Hlavinka, P., Moriondo, M., Olesen, J.E., Takáč, J. & Trnka, M. (2012). Simulation of spring barley yield in different

- climatic zones of Northern and Central Europe: A comparison of nine crop growth models. *Field Crops Research*, 133, 23-36.
- Rötter, Reimund P; Tao, Fulu; Höhn, Jukka G; Palosuo, Taru. Use of crop simulation modelling to aid ideotype design of future cereal cultivars. *Breeding plants to cope with future climate change*, <http://dx.doi.org/10.1093/jxb/erv098>
- Ruiz-Ramos M., Rodríguez A., Dosio A., Goodess C. M., Harpham C., Mínguez M.I., Sánchez E. Crop impact projections in Iberian Peninsula for mid and end of C21 improved by bias correction of RCM outputs. Manuscript submitted to *Climatic Change*
- Rusu, T., 2014. Energy efficiency and soil conservation in conventional, minimum tillage and no-tillage. *International Soil and Water Conservation Research* 2: 42-49, <http://www.sciencedirect.com/science/article/pii/S2095633915300575>
- Rusu, T., P. I. Moraru, 2015. Impact of climate change on crop land and technological recommendations for the main crops in Transylvanian Plain, Romania. *Romanian Agricultural Research*, no. 32. First Online: April 2015. DII 2067-5720 RAR 2015-89, pag. 1-9, <http://www.incda-fundulea.ro/rar/nr32/rar32.12.pdf>
- Rusu, T., P. I. Moraru, I. Bogdan, A. Pop, C. Coste, D. I. Marin, M. Mihalache, 2013. Impacts of climate change on agricultural technology management in the Transylvanian Plain, Romania. *Scientific Papers, Series A. Agronomy*, Vol. LVI: 113-118., <http://agronomyjournal.usamv.ro/pdf/vol.LVI/Art22.pdf>
- Rusu, T., P. Moraru, C. Coste, H. Cacovean, F. Chețan, C. Chețan (2014). Impact of climate change on climatic indicators in Transylvanian Plain, Romania. *Journal of Food, Agriculture & Environment* Vol. 12 (1): 469-473., <http://world-food.net/impact-of-climate-change-on-climatic-indicators-in-transylvanian-plain-romania>
- Sakschewski B, von Bloh W, Huber V, Müller C, Bondeau A. 2014. Feeding 10 billion people under climate change: How large is the production gap of current agricultural systems? *Ecological Modelling* 288:103-111., <http://dx.doi.org/10.1016/j.ecolmodel.2014.05.019>
- Sanchez B, Rasmussen A & Porter JR (2014). Temperatures and the growth and development of maize and rice: a review. *Global Change Biology* 20: 408–417, <http://dx.doi.org/10.1111/gcb.12389>
- Sandhu HS, Wratten S, Costanza R, Pretty J, Porter JR, & Reganold (2015). Significance and value of non-traded ecosystem services on farmland. *The Peer Journal* 3:e762, <http://dx.doi.org/10.7717/peerj.762>
- Sándor R., Ma S., Acutis M., Barcza Z., Ben Touhami H., Doro L., Hidy D., Koechy M., Lellei-Kovacs E., Minet J., Perego A., Rolinski S., Ruget F., Seddaiu G., Wu L., Bellocchi G. (2015) Uncertainty in simulating biomass yield and carbon water fluxes from grasslands under climate change. *Advances in Animal Biosciences*. 6:49-51, <http://dx.doi.org/10.1017/S2040470014000545>
- Sándor, R., Barcza, Z., Hidy, D., Lellei-Kovács, Ma, S., Bellocchi, G., 2015. Modelling of grassland fluxes in Europe: evaluation of two biogeochemical models. *Agriculture, Ecosystems & Environment*, accepted <http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=9563231>
- Sanna M., Bellocchi G., Fumagalli M., Acutis M. Interrelationship and optimal choice of indicators to evaluate performance of agrometeorological models
- Sanz-Cobena A, García-Marco S, Quemada M, Gabriel JL, Almendros P, Vallejo A, 2014. Do cover crops enhance N₂O, CO₂ or CH₄ emissions from soil in Mediterranean arable systems? *Science of the Total Environment* 466–467: 164–174
- Sanz-Cobena A, Sánchez-Martín L, García-Torres L, Vallejo A., 2012. Gaseous emissions of N₂O and NO and NO₃ – leaching from urea applied with urease and nitrification inhibitors to a maize (*Zea mays*) crop. *Agriculture, Ecosystems and Environment* 149: 64–73
- Schaap, B., P. Reidsma, J. Verhagen, J. Wolf, M.K. van Ittersum. 2013. Participatory design of farm level adaptation to climate risks in an arable region in the Netherlands. *European Journal of Agronomy* 48: 30-42., <http://dx.doi.org/10.1016/j.eja.2013.02.004>
- Schmitz C, Kreidenweis U, Lotze-Campen H, Popp A, Krause M, Dietrich J, Müller C. Agricultural trade and tropical deforestation: interactions and related policy options. *Regional Environmental Change* 2014:1-16., <http://dx.doi.org/10.1007/s10113-014-0700-2>
- Schmitz, C.; Lotze-Campen, H.; Gerten, D.; Dietrich, J. P.; Bodirsky, B.; Biewald, A.; Popp, A.: Blue water scarcity and the economic impacts of future agricultural trade and demand. In: *Water Resources Research*, 49, 6. 2013. 3601-3617 p, <http://onlinelibrary.wiley.com/doi/10.1002/wrcr.20188/abstract>
- Schönhart M, Mitter H, Schmid E, Heinrich G, Gobiet A. 2013. Integrated analysis of climate change impacts and adaptation measures in Austrian agriculture. *Ger J Agric Econ* 63, 156–176.
- Schönhart, M., I. Nadeem, 2015, Direct climate change impacts on cattle indicated by THI models. *Advances in Animal Biosciences*, 6:17-20
- Semenov M.A., Pilkington-Bennett S, and Calanca P (2013) Validation of ELPIS 1980-2010 baseline scenarios using the European Climate Assessment observed dataset. *Climate Research* 51(1) 1-9., <http://dx.doi.org/10.3354/cr01164>
- Semenov MA & Stratonovitch P (2013) Designing high-yielding wheat ideotypes for a changing climate. *Food and Energy Security* 2:185-196, <http://dx.doi.org/10.1002/fes3.34>
- Semenov MA, Mitchell RAC, Whitmore A, Hawkesford MJ, Parry MAJ & Shewry PR (2012). Shortcomings in wheat yield predictions, *Nature Climate Change* 2 (6):380-382, <http://dx.doi.org/10.1038/nclimate1511>
- Semenov, M.A., Stratonovitch P., Alghabari F., Gooding, M.J. 2014, Adapting wheat in Europe for climate change, *Journal of Cereal Science* 59: 245-256, <http://dx.doi.org/10.1016/j.jcs.2014.01.006>

- Shrestha S, P Ciaian, M Himics and B Van Doorslaer, 2013. Impacts of climate change on EU agriculture. *Review of Agricultural and Applied Economics*, 2: 24-39, <http://roaae.org/issue/review-of-agricultural-and-applied-economics-raae-vol-16-no-2/?article=impacts-of-climate-change-on-eu-agriculture>
- Shrestha, S., T. Hennessy, M. Abdalla, D. Forristal, M.J. Jones, (under revision), Determining short term responses of Irish dairy farms under climate change, *German Journal of Agricultural Economics*, forthcoming, www.gjae-online.de/
- Shrestha S, M Abdalla, T Hennessy, D Forristal and M Jones, 2014. Irish farms under climate change – is there a regional variation on farm responses? *Journal of Agricultural Science* (in press), <http://dx.doi.org/10.1017/S0021859614000331>
- Siczek, A, Horn, R., Stratonovitch, Pierre; Semenov, Mikhail. Heat tolerance around flowering in wheat identified as a key trait for increased yield potential in Europe under climate change. Breedign plants to cope with future climate change, <http://dx.doi.org/10.1093/jxb/erv070>
- Sieber, S. ; Amjath-Babu, T. S. ; Jansson, T. ; Müller, K. ; Tscherning, K. ; Graef, F. ; Pohle, D. ; Helming, K. ; Rudloff, B. ; Saravia-Matus, B. S. ; Gomez y Paloma, S. (2013): Sustainability impact assessment using integrated meta-modelling: simulating the reduction of direct support under the EU common agricultural policy (CAP). - *Land Use Policy*.33 : 235-245, <http://dx.doi.org/10.1016/j.landusepol.2013.01.002>
- Smoroń S, Kowalczyk A. 2012. Nitrogen and Phosphorus dynamics in the surface flowing waters of the loessial areas in Northern Malopolska. *Polish Journal of Environmental Studies*. 21(5A): 392-395.
- Sollitto D., De Benedetto D., Castrignanò A., Crescimanno G., Provenzano G., Ventrella D. 2012. Spatial data fusion and analysis for soil characterization: a case study in a coastal basin of south-western Sicily (southern Italy). *Italian Journal of Agronomy*, 7:e4, 19-27., <http://dx.doi.org/10.4081/ija.2012.e4>
- Soussana JF, Fereres EP, Long SP, Mohren FGMJ, Pandya-Lorch R, Peltonen-Sainio P, Porter JR, Rosswall T & von Braun J. (2012) A European science plan to sustainably increase food security under climate change. *Global Change Biology*, 18, 3629-3271.
- Strauss F, Moltchanova E, Schmid E. 2013. Spatially Explicit Modeling of Long-Term Drought Impacts on Crop Production in Austria. *Am J Clim Change* 2: 1–11., <http://dx.doi.org/10.4236/ajcc.2013.23A001>
- Tao F., Rötter R.P., Palosuo T., Höhn J., Peltonen-Sainio P., Rajala A., Salo T. Assessing climate impacts on wheat yield and water use in Finland using a super-ensemble-based probabilistic approach. Submitted manuscript
- Tao, F., Zhang, S., Zhang, Z., & Rötter, R. P. (2014). Maize growing duration was prolonged across China in the past three decades under the combined effects of temperature, agronomic management, and cultivar shift. *Global Change Biology*, 20(12), 3686-3699., <http://dx.doi.org/10.1111/gcb.12684>
- Toscano P, Ranieri R, Matatesa A, Porter JR et al. (2012). Durum wheat modeling: The Delphi system, 11 years of observations in Italy. *European J. Agronomy*, 43, 108–18.
- Trnka, M., Rötter, R. P., Ruiz-Ramos, M., Kersebaum, K. C., Olesen, J. E., Žalud, Z., & Semenov, M. A. (2014). Adverse weather conditions for European wheat production will become more frequent with climate change. *Nature Climate Change*, 4, 637–643. <http://dx.doi.org/10.1038/nclimate2242>
- Twardy S, Kopacz M. 2014. Comparison of concentrations and loads of macronutrients brought with precipitation and leaching from the soil profile. *Polish Journal of Environmental Studies*. 23(3A): 132-136.
- Van Bussel, Ewert, F. et al. Spatial sampling of weather data for regional crop yield simulations. Submitted manuscript
- Van Oijen, M. & Höglind, M. (submitted). Toward a Bayesian procedure for using process-based models in plant breeding, with application to ideotype design. *Euphytica*.
- Van Oosten M.J., Sharkhuu, A., Batelli, G., Bressan, R.A., Maggio, A. 2013. The *Arabidopsis thaliana* mutant air1 implicates SOS3 in the regulation of anthocyanins under salt stress. *Plant Molecular Biology*. *Plant Molecular Biology* 83: 405-415.
- Ventrella D., Charfeddine M., Giglio L., Castellini M. 2012. Application of DSSAT models for an agronomic adaptation strategy under climate change in Southern Italy: optimum sowing and transplanting time for winter durum wheat and tomato. *Italian Journal of Agronomy*, 7:e16, 109-115, <http://dx.doi.org/10.4081/ija.2012.e16>
- Ventrella D., Charfeddine M., Moriondo M., Rinaldi M., Bindi. (2012): Agronomic adaptation strategies under climate change for winter durum wheat and tomato in southern Italy: irrigation and nitrogen fertilization. *Regional Environmental Change*, 12(3), 407-419., <http://dx.doi.org/10.1007/s10113-011-0256-3> or <http://link.springer.com/article/10.1007/s10113-011-0256-3/fulltext.html>
- Ventrella D., Giglio L., Charfeddine M., Dalla Marta A. 2015. Consumptive use of green and blue water for winter durum wheat cultivated in Southern Italy. *Italian Journal of Agrometeorology*, 1:33-44., http://www.patroneditore.com/ricerca_digital_downloads.html
- Ventrella D., Giglio L., Charfeddine M., Lopez R., Castellini M., Sollitto D., Castrignanò A., Fornaro F. 2012. Climate change impact on crop rotations of winter durum wheat and tomato in southern Italy: yield analysis and soil fertility. *Italian Journal of Agronomy*, 7:e15, 100-108, <http://dx.doi.org/10.4081/ija.2012.e15>
- Vitali A, Lana E, Amadori M, Bernabucci U, Nardone A, Lacetera N. *Journal of Animal Science*, <http://www.ncbi.nlm.nih.gov/pubmed/25349357>
- Vosough Ahmadi, B., Shrestha, S., Thomson, S. G., Barnes, A. P., & Stott, A. W. (2015). Impacts of greening measures and flat rate regional payments of the Common Agricultural Policy on Scottish beef and sheep farms. *The Journal of Agricultural Science*, 1-13., <http://journals.cambridge.org/action/displayAbstract?jsessionid=918E6FF0EF5692C608EC968DB119AC9D.journals?aid=9625637&fileId=S0021859614001221>

- Waha K, Müller C, Rolinski S (2013): Separating the effects of temperature and precipitation change on maize yields in sub-Saharan Africa. *Global and Planetary Change*, 106,1-12, <http://dx.doi.org/10.1016/j.gloplacha.2013.02.009>
- Waha, K.; Müller, C.; Bondeau, A.; Dietrich, J. P.; Kurukulasuriya, P.; Heinke, J.; Lotze-Campen, H.: Adaptation to climate change through the choice of cropping system and sowing date in sub-Saharan Africa. 2013. *Global Environmental Change* 23: 130-143, <http://dx.doi.org/10.1016/j.gloenvcha.2012.11.001>
- Waterworth, Wanda M; Bray, Clifford Melville; West, Christopher E. The importance of safeguarding genome integrity in germination and seed longevity. *Breeding plants to cope with future climate change*, <http://dx.doi.org/10.1093/jxb/erv080>
- Watson J, Challinor AJ, Fricker TE, Ferro CAT (2014). Comparing the effects of calibration and climate errors on a statistical crop model and a process-based crop model. *Climatic Change*, <http://dx.doi.org/10.1007/s10584-014-1264-3>
- Webber, H., Kahiluoto, H., Rötter, R.P. & Ewert, F. (2014). Enhancing climate resilience of cropping systems. Chapter 11. In J. Fuhrer & P. Gregory (eds.) *Climate Change Impact and Adaptation in Agricultural Systems*. Wallingford: CAB International, 167-185 (in press).
- Witkowska-Walczak B., Slawinski C., Bartmiński P., Melke J., Cymerman J. Water conductivity of arctic zone soils (Spitsbergen). *International Agrophysics*. In press. (2014, issue 4)
- Wu, L., Whitmore, A.P., Bellocchi, G., 2015. Modelling the impact of environmental changes on grassland systems with SPACSYS. *Advances in Animal Biosciences* 6, 37-39., <http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=9563213>
- Yin, X., Olesen, J.E., Li, W., Wang, M. & Zhang, H. (2015) Contributions of climatic, technological and social factors to maize yield in the northeast farming region of China during 1985 to 2009. submitted manuscript
- Yin, X., Olesen, J.E., Li, W., Wang, M., Öztürk, I. & Chen, F. (2015). Climate effects on crop yield in the northeast farming region of China during 1961 to 2010. Submitted manuscript
- Yin, X., Olesen, J.E., Wang, M., Öztürk, I. & Chen, F. (submitted). Observed and anticipated impacts and adaptation of crop production systems to climate change in the northeast farming region of China. Submitted manuscript
- Zhao, Gang;Hoffmann, Holger; van Bussel, Lenny; Enders, Andreas; Specka, Xenia; Sosa, Carmen; Yeluripati, Jagadeesh; Tao, Fulu; Constantin, Julie; Teixeira, Edmar; Grosz, Balasz; Doro, Luca; Zhao, Zhigan; Nendel, Claas; Kiese, Ralf; Raynal, Helene; Eckersten, Henrik; Haas, Edwin; Wang, Enli; Kuhnert, Matthias; Trombi, Giacomo; Bindi, Marco; Moriondo, Marco; Lewan, Elisabet; Bach, Michaela; Kersebaum, Kurt-Christian; Rötter, Reimund; Roggero, Pier Paolo; Wallach, Daniel; Krauss, Gunther; Siebert, Stefan; Gaiser, Thomas; Ewert, Frank (2015) Weather data aggregation's effects on simulation of cropping systems: a model, production system and crop comparison. *Climate Research* (accepted).
- Zhen L, Deng X, Wei Y, Jiang O, Lin Y, Helming K, Wang C, König H (2014). Future Land Use and food Security Scenarios for the Guyuan District of Remote Western China. *iFor-est, - Biogeosciences and Forestry.*, <http://dx.doi.org/10.3832/ifer1170-007>
- Zheng, Bangyou; Chapman, Scott C; Frederiks, Troy M; Christopher, Jack T; Chenu, Karine. Frost trends and their estimated impact on yield in the Australian wheatbelt. *Breeding plants to cope with future climate change*, <http://dx.doi.org/10.1093/jxb/erv163>

B2. Contributions in books

- Acutis, M., Bellocchi, G., 2014. Protocol for model evaluation. JPI-FACCE, project MACSUR, D-L2.2. Adapting and Building the Climate Resilience of Cropping Systems. Chapter 13. In J. Fuhrer & P. Gregory (eds.) *Climate Change Impact and Adaptation in Agricultural Systems*. Wallingford: CAB International, 204-215 (in press), (<http://limesurvey.macsur.eu/upload/surveys/393228/files/ProtocolForModelEvaluation.pdf>)
- Conradt, T.; Hattermann, F. F.; Koch, H.; Wechsung, F.: Klima- und Landnutzungsszenarien in ihren Wirkungen auf den Wasserabfluss. In: *Die Elbe im globalen Wandel*. Ed.: Wechsung, F.; Hartje, V.; Kaden, S.; Venohr, M.; Hansjürgens, B.; Gräfe, P. Berlin : Weißensee Verl., 2013. 177-209 p.
- Conradt, T.; Koch, H.; Hattermann, F. F.; Wechsung, F.: Validierung von Lokalkorrekturen der Verdunstung bei den Simulationen des Wasserabflusses. In: *Die Elbe im globalen Wandel*. Ed.: Wechsung, F.; Hartje, V.; Kaden, S.; Venohr, M.; Hansjürgens, B.; Gräfe, P. Berlin : Weißensee Verl. 2013. 211-231 p.
- Dumont, B., Basso, B., Leemans, V., Bodson, B., Destain, J.-P., & Destain, M.-F. (2013). Yield variability linked to climate uncertainty and nitrogen fertilisation. In J. V., Stafford (Ed.), *Precision agriculture '13* (The Wageningen Academic Publishers, pp. 427-434). Springer., <http://hdl.handle.net/2268/152075>
- Ewert Frank, Lenny van Bussel, Gang Zhao, Holger Hoffmann, Thomas Gaiser, Xenia Specka, Claas Nendel, Kurt-Christian Kersebaum, Carmen Sosa, Elisabet Lewan, Jagadeesh Yeluripati, Matthias Kuhnert, Fulu Tao, Reimund Rötter, Julie Constantin, Helene Raynal, Daniel Wallach, Edmar Teixeira, Balasz Grosz, Michaela Bach, Luca Doro, Pier Paolo Roggero, Zhigan Zhao, Enli Wang, Ralf Kiese, Henrik Eckersten, Edwin Haas, Giacomo Trombi, Marco Bindi, Christian Klein, Christian Biernath, Florian Heinlein, Davide Cammarano, Senthold Asseng, Joshua Elliott, Michael Glotter, Bruno Basso, Guillermo A. Baigorria and Consuelo C. Romero (2014). Chapter 20 - Uncertainties in Scaling up Crop Models for Large Area Climate Change Impact Assessments. In: *Handbook of Climate Change and Agroecosystems: The Agricultural Model Intercomparison and Improvement Project (AgMIP)*". Eds. Cynthia Rosenzweig and Daniel Hillel.pp. 261-277., http://dx.doi.org/10.1142/9781783265640_0010

- Helming K, De la Flor I, Diehl K. 2012. Integrated Approaches for ex-ante impact assessment tools - the example of land use. In: Raggamby, A. von and F. Rubik (eds.): Sustainable De-velopment, Evaluation and Policy-making. Edward Elgar, Cheltenham. 91-110.
- Helming K. 2014. Impact Assessment for Multifunctional Land Use. In: Mueller L, Saparov A, Lischeid G (Edts). Novel Measurement and Assessment tools for monitoring and management of land and water resources in agricultural landscapes of Central Asia. Environmental Science and Engineering., http://dx.doi.org/10.1007/978-3-319-01017-5_12
- Hoff, H.; Gerten, D.; Waha, K.; Warner, J.: Green and Blue Water in Africa: How Foreign Direct Investment can Support Sustainable Intensification. In: Handbook of Land and Water Grabs in Africa Ed.: Allan, T.; Keulertz, M.; Sojamo, S. Abingdon : Routledge 2013. 359-375 p.
- Kahiluoto, H., Rötter, R.P., Webber, H. & Ewert, F. (2014). The Role of Modelling in Adapting and Building the Climate Resilience of Cropping Systems. Chapter 13. In J. Fuhrer & P. Gregory (eds.) Climate Change Impact and Adaptation in Agricultural Systems. Wallingford: CAB International, 204-215 (in press).
- Knopik L., Bojar W., 2013. Możliwości zastosowania metody wielo - agentowej w analizie wybranych modeli „Possibilities of multiagent application for analysis of selected models”. Pages 199-208 in „Zarządzanie wiedzą w tworzeniu przewagi konkurencyjnej” (Knowledge management in creating comparative advantage). Warsaw Technical University edited by Katarzyna Rostek, Warsaw.
- Lehtonen, H., Liu, X. & Purola, T. 2015. Balancing Climate Change Mitigation and Adaptation with Socio-Economic Goals at Farms in Northern Europe. In: Paloviita, A. and Järvelä, M. (Eds) Climate Adaptation, Policy and Food Supply Chain Management in Europe (Routledge, in press)., http://www.amazon.co.uk/books/dp/1138796662/ref=sr_1_1?s=books&ie=UTF8&qid=1432654002&sr=1-1
- Mansouri, M., Dumont, B., & Destain, M.-F. (2013). Modeling and Prediction of Time-Varying Environmental Data Using Advanced Bayesian Methods. In A., Masegosa, P., Villacorta, C., Cruz-Corona, S., Garcia-Cascales, M., Lamata, & J., Verdegay (Eds.), Exploring Innovative and Successful Applications of Soft Computing (pp. 112-137). Hershey PA, USA: IGI Global. <http://hdl.handle.net/2268/146909>
- Mitter, H., F. Sinabell and E. Schmid, 2014, Climate change and policy impacts on Austrian protein crop supply balances. Jahrbuch der ÖGA (Österreichische Gesellschaft für Agrarökonomie), 2014., <http://oega.boku.ac.at>
- Mitter, H., E. Schmid and F. Sinabell (forthcoming), Climate change and policy impacts on Austrian protein crop supply balances. Jahrbuch der ÖGA 2015
- Mitter, H., M. Schönhart, I. Meyer, K. Mechtler, E. Schmid, F. Sinabell, G. Bachner, Agriculture. In: K. Steiniger and M. König (ed.s) Cost of Inaction in Austria. Springer, Vienna
- Mueller, L., Schindler, U., Graham Shepherd, T., Ball, B.C., Smolentseva, E., Hu, C., Hennings, V., Schad, P., Rogasik, J., Zeitz, J., Schindwein, S.L., Behrendt, A., Helming, K., Eulenstein, F. (2012): A framework for assessing agricultural soil quality on a global scale, Archives of Agronomy and Soil Science, 58(1):76-82.
- Olesen, J.E. (in press). Rainfed intensive crop systems. In Fuhrer, J. & Gregory, P.J. (Eds) Climate change impact and adaptation in agricultural systems. CABI.
- Porter JR., Xie L., Challinor A, Cochran K, Howden M, Iqbal MM., Lobell D & Travasso MI (2014). Food Security and Food Production Systems. In: Climate Change 2014: Impacts, Adaptation. and Vulnerability. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change., <http://www.ipcc-wg2.gov/>
- Porter, John R, Jean-Francois Soussana, Elias Fereres, Stephen Long, Fritz Mohren, Pirjo Peltonen-Sainio and Joachim von Braun. 2012. European Perspectives: An Agronomic Science Plan for Food Security in a Changing Climate. In: Hillel, P. and Rosenzweig, C. (eds.) Handbook of Climate Change and Agroecosystems: Global and Regional Aspects and Implications. World Scientific Publishing Company, American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America. 320 pp. ISBN: 978-1-84816-983-8 (hardcover), ISBN: 978-1-84816-984-5 (ebook)., <http://www.worldscientific.com/worldscibooks/10.1142/p876>
- Prange, S.; Vohland, K.; Conradt, T.; Hattermann, F. F.: Klimabedingte Veränderungen der Abflussdynamik von ausgewählten deutschen Fließgewässern und ihre naturschutzfachliche Bedeutung. In: Schutzgebiete Deutschlands im Klimawandel - Risiken und Handlungsoptionen. Ed.: Vohland, K.; Badeck, F.; Böhning-Gaese, K.; Ellwanger, G.; Hanspach, J.; Ibisch, P. L.; Klotz, S.; Kreft, S.; Kühn, I.; Schröder, E.; Trautmann, S.; Cramer, W. Bonn-Bad Godesberg : Bundesamt für Naturschutz, 2013. 55-69 p. Naturschutz und Biologische Vielfalt ; 129,
- Twardy S. Kopacz M. 2014. Sustainable use of mountain lands as a basis of permanent quality maintaining of natural environment. Monograph. Falenty-Krakow. pp.133.
- Twardy S. Kopacz M. 2015. The role of permanent grasslands in mountain areas (Study on agri-environmental importance of permanent grasslands - based on research carried out in the upper Dunajec River basin and Grajcerek Stream basin). Monograph. Falenty-Krakow. pp.156.

B3. Other publications

- Barbier-Brygoo H, Chilliard Y, Durand J-L, Elmayan T, Goldringer I, Porter JR (2014). Rapport du groupe de travail sur la Propriété Intellectuelle dans le végétal, du conseil scientifique nationale de l'INRA. Rapport de L'INRA Conseil Scientifique, Paris, France, 43pp.

- Biewald, A.; Lotze-Campen, H.; Gerten, D.: Nachhaltiges Wassermanagement in einer globalisierten Welt. Projektbericht. 10. BMBF-Forum für Nachhaltigkeit (Leipzig 2013)
- Bojar W. Short information on progress in MACSUR in: the UTP bulletin named FORMAT UTP no. 68. 2014. p.63
- Bojar W. Verburg R. Żarski J. Brouwer F. pt. „Circumstances of climatic changes impacts on agricultural production taking attention regional characteristics”. Studies&Proceedings of Polish Association for Knowledge Management 61: 29-44., http://www.pszw.edu.pl/images/stories/ksiazki/pdf/T_61.pdf
- Bojar W., Dzieża G, Sikora M., Śpiewak j., Wyszowska Z., Januszewski A., Żółtowski M. (Selected methods of limiting of risk factors in agriculture in a view of contemporary challenges) Wybrane metody ograniczania działania czynników ryzyka w rolnictwie w świetle współczesnych wyzwań. Y ograniczania działania czynników ryzyka w rolnictwie. Roczniki naukowe ekonomii rolnictwa i rozwoju obszarów wiejskich, T. 101, z. 4, 2014, s. 7-18
- Bojar W., Knopik L., Żarski J. 2013. Analiza wpływu warunków klimatycznych na plonowanie roślin uprawnych w regionie kujawsko-pomorskim. „Analysis of impact of climate conditions on yielding of crops in Kujavian & Pomeranian region” Studies & Proceedings of Polish Association for Knowledge Management No 64. S.31-44., http://www.pszw.edu.pl/images/stories/ksiazki/pdf/T_64.pdf
- de Visser, C., Schoorlemmer, H., Gołaszewski, J., Olba-Zięty, E., Stolarski, M., Brodziński, Z., Myhan, R., Baptista, F., Silva, L.L., Murcho, D., de Castro Neto, M., Meyer-Aurich, A., Briassoulis, D., Panagakis, P., Balafoutis, A., Lutsyuk, C. and Dalgaard, T. (2013) Agenda for Transnational Co-operation on energy efficiency in agriculture. Project deliverable report 4.5. FP7 EU project: Agriculture & Energy Efficiency (AGREE, www.agree.aau.gr). Wageningen UR, The Netherlands. 34 p., www.agree.aau.gr
- Ghaley BB, Porter JR & Sandhu HS (2014). Soil-based ecosystem services: a synthesis
- Kirchner, M., E. Schmid, H. Mitter, M. Schönhart, Modeling the Impacts of Climate Change and Market Integration on Agricultural Production and Land Use Management in Austria. IIASA Interim Report Young Scientists Summer Program.
- Kopacz M, Twardy S. 2012. Water and sewage management in the upper Dunajec river basin compared to the socio-structural transformations and surface water quality. Woda Środowisko Obszary Wiejskie. ITP Falenty. 12(3): 103-122., http://www.itep.edu.pl/wydawnictwo/woda/zeszyt_39_2012/artykuly/Kopacz%20Twardy.pdf
- Kopacz M, Twardy S. 2013. Analysis of changes of permanent grasslands in the Carpathians based on the example of upper Dunajec and Raba river catchments. Water-Environment-Rural Areas. ITP Falenty. 13(3): 91-103.
- Kowalczyk A, Twardy S. 2012. Comparison of the water erosion magnitude estimated by the modified USLE methods. Woda Środowisko Obszary Wiejskie. ITP Falenty. 12(1): 83-92., http://www.itep.edu.pl/wydawnictwo/woda/zeszyt_37_2012/artykuly/Kowalczyk%20Twardy.pdf
- Rötter, R.P., Höhn, J., (2014). An overview of climate change impacts on crop production and its variability in Europe, related uncertainties and research challenges. Chapter 4 in: Proceedings, FAO Expert consultation on Climate Change and Food Systems: Global implications for food security, water and trade, 5-6 Nov 2013, pp.106-145 (in press).
- Ruiz-Ramos M. and Trnka M., 2015. Riesgos asociados a los eventos extremos meteorológicos para la producción de trigo en Europa. Tierras, 224: 92-98
- Sinabell, F., E. Schmid, M. Schönhart, (forthcoming), Landwirtschaft und Klimawandel: Konsequenzen für die österreichische Landwirtschaft auf der Grundlage internationaler Forschungsergebnisse. Ländlicher Raum.
- Smoroń S. 2012. The risk of surface waters eutrophication in loessial uplands of Małopolska. Woda Środowisko Obszary Wiejskie. ITP Falenty. 12(1): 167-179., http://www.itep.edu.pl/wydawnictwo/woda/zeszyt_37_2012/artykuly/Smoron.pdf
- Smoroń S. 2013. Dynamics of the mountain meadow yielding in period of 25 years after fertilization abandonment. Water-Environment-Rural Areas. ITP Falenty. 13(2): 111-120., http://www.itep.edu.pl/wydawnictwo/woda/zeszyt_42_2013/artykuly/Smoron.pdf
- Twardy S, Kopacz M. 2012. The dynamics of the rainfall - runoff relations in the Biała Woda and Czarna Woda streams in the hydrological year 2010. Woda Środowisko Obszary Wiejskie. ITP Falenty. 12(3): 197-210., http://www.itep.edu.pl/wydawnictwo/woda/zeszyt_39_2012/artykuly/Twardy%20Kopacz.pdf
- Virkajärvi, P., Jing, Q., Bélanger, G., Baron, V., Bonesmo, H., Young, D. 2013. Modeling grassland with CATIMO - focus on the second cut. In: Nordic forage model applications - predicting forage yield and quality in a variable and changing climate : NJF seminar 455, Forssa, Finland, 30-31 January 2013. NJF Report 9 1: p. 9-13., [http://www.njf.nu/filebank/files/20130612\\$211351\\$fil\\$Vhq2e6i45GQC39R9keOH.pdf](http://www.njf.nu/filebank/files/20130612$211351$fil$Vhq2e6i45GQC39R9keOH.pdf)
- Waha, K.; Müller, C.: The essential temperature routines in LPJmL for wheat simulations. Workshop Modeling Wheat Response to High Temperature (Mexico, DF 2013)., <http://repository.cimmyt.org/xmlui/bitstream/handle/10883/3211/98024.pdf?sequence=1#page=86>
- Żarski J., Dudek S., Kuśmierk-Tomaszewska R., Bojar W., Knopik L, Żarski W. 2014. Agroklimatologiczna ocena opadów atmosferycznych okresu wegetacyjnego w rejonie Bydgoszczy. (Agro climatic assessment of precipitation in a vegetation period in Bydgoszcz region). Infrastruktura i Ekologia Terenów Wiejskich. Nr 2014/ II, pp 643-656)

B4. Input to policy makers

- Austrian MACSUR Stakeholder Workshop. Vienna, Austria. From 24.05.2013 to 24.05.2013 (TradeM). Goal: stakeholder participation. Attendance: 15. Organised by WIFO, Austrian Institute of Economic Research. distributed among participants, available upon request
- Climate-change impacts on farming systems in the next decades:— why worry when you have CAP? A FACCE MACSUR workshop for policymakers. Brussels, Belgium. From 06.05.2015 to 06.05.2015 (Hub). Goal: Stakeholder interaction and learning. Attendance: 40. Organised by Thünen Institute. <http://ojs.macsur.eu/index.php/Reports/issue/view/7>
- Colloque du réseau Agriculture - Changements Climatiques. Arlon, Belgium. From 20.05.2015 to 20.05.2015 (LiveM/CropM). Goal: conference/networking. Attendance: 35. Organised by Université de Liège. <http://www.macsur.ulg.ac.be/projet-macsur/20-mai-2015/>
- Köchy, M.: MACSUR. Poster presentation at »GAP nach 2013 und weitere Analysen der agrarökonomischen Institute des Thünen-Instituts«. 09.12.2013 (Hub)
- MACSUR (Banse, Ewert, Brouwer, van Middelkopp, Roggero, Lotze-Campen, Köchy): Climate-change impacts on farming systems in the next decades:— why worry when you have CAP? MACSUR workshop for policymakers, Brussels, Attendance: 45. 06.05.2015 (Hub/LiveM/CropM/TradeM)
- Palatnik, R.R.: Meeting with chief economist of the Israeli Ministry of Agriculture Dr. Yael Kahal to define policy scenarios for the project analysis. 09.04.2014 (TradeM)
- Paljonko lisämaasta kannattaa maksaa? (How much to pay for additional farmland?). Nivala, Finland. From 26.11.2013 to 26.11.2013 (TradeM). Goal: Stakeholder information. Attendance: 37 participants, mostly farmers, and 4 researchers. Organised by MTT. <http://www.metla.fi/hanke/7515/index.htm>
- Pohjois-Savon maatalouden sopeutuminen ilmastonmuutokseen ("Agricultural adaptation to climate change in North Savo region"). Kuopio, Finland. From 20.11.2014 to 20.11.2014 (TradeM, LiveM, CropM). Goal: Stakeholder interaction. Attendance: 35. Organised by MTT. http://www.mtt.fi/modags/modags_KuopioSeminar.html
- Wilson, A.: ANIHWFA Foresight Workshop on Disease Driver Prioritisation. 2014-04-02 to 2014-04-03 (LiveM)
- Wilson, A.: STAR-IDAZ workshop on Meeting Future Research Needs on Infectious Diseases of Animals and Zoonoses. 2014-06-17 to 2014-06-20 (LiveM)
- Workshop "Adaptation strategies of Italian agricultural systems to climate change", Cagliari, Italy in the context of Agrosenari-Macsur.. Cagliari, Italy. From 19.06.2013 to 19.06.2013 (CropM/LiveM/TradeM). Goal: Meeting with Stakeholders including regional and national policy makers. Attendance: 150. Organised by University of Sassari.

B5. Oral and poster presentations in scientific congresses

- Acutis M., Bellocchi G. – Briefing on CropM-LiveM model intercomparison protocol – JPI FACCE MACSUR CropM and LiveM cross-cutting activity Helsinki, Finland – From 06.06.2013 till 07.06.2013 – (CropM)
- Ahmadi BV, Thomson S, Shrestha S and Stott AW. – Predicting the implications of CAP reform using a bio-economic modelling approach – 133rd EAAE seminar "Developing Integrated and Reliable Modeling Tools for Agricultural and Environmental Policy Analysis", Crete, Greece – From 15.06.2013 till 16.06.2013 – (LiveM)
- Angelova D. – The state-contingent approach to production and choice under uncertainty: usefulness as a basis for economic modeling – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancements', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/233>
- Audsley, E. – CLIMSAVE interactive platform for climate change impacts in Europe – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancements', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/251>
- Audsley, E. – The results of applying the CLIMSAVE (TradeM+CropM+LiveM) model to the regional case studies – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – <http://www.macsur.eu/> (TradeM)
- Ayalon, O. – Welcome Address of the Director Natural Resource and Environmental Research Center – MACSUR TradeM workshop: "Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security", The Natural Resource and Environmental Research Center (NRERC), University of Haifa, Israel – From 03.03.2013 till 05.03.2013 – <http://www.macsur.eu/> (TradeM)
- Bannink, A. – Application of a Tier 3 approach for estimating enteric fermentation in dairy cows: Advantages and disadvantages – International Livestock Modelling and Research Colloquium, Bilbao, Spain – From 14.10.2014 till 15.10.2014 – <http://www.livem2014bilbao.com> (LiveM)
- Bannink, A. – Trade-offs of N-reducing dietary measures on enteric methane emission and phosphorus excretion in lactating cows – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://macsur.eu/index.php/events/macsur-science-conference> (LiveM)

- Banse M. – FACCE-JPI Achievements to date: MACSUR – FACCE-JPI 3-year Anniversary Date – From 22.10.2013 till 22.10.2013 – (Hub)
- Banse M. – What drives meat consumption? Combining cross-country analysis with an applied trade model – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-3>
- Banse M., Köchy M. – Opportunities for collaboration: MACSUR – 4th Annual AgMIP Workshop, New York, USA – From 28.10.2013 till 30.10.2013 – (Hub)
- Banse, M. – MACSUR (Modelling European Agriculture with Climate Change for Food Security) – LIAISE Annual Meeting, Tallinn, Estonia – From 25.03.2013 till 28.03.2013 – (Hub)
- Banse, M. – MACSUR European experience in addressing the complexity of climate impact research in agriculture: Lessons for replication elsewhere – Global Forum on Climate Change, Food Security and Trade, FAO, Rome – From 03.06.2014 till 04.06.2014 – (Hub)
- Banse, M., Köchy, M. and Tiffin, R. – MACSUR – A European network of crop, livestock and trade modelling activities for assessing impacts of climate change on food security – United Nations Convention to Combat Desertification 2nd Scientific Conference, Bonn, Germany – From 09.04.2013 till 12.04.2013 – http://2sc.unccd.int/fileadmin/unccd/upload/documents/Extended_Abstracts.pdf (Hub)
- Baranowski P., Krzyszczak J., Sławinski C. – Multifractal analysis of chosen meteorological time series to assess climate impact in field level – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (CropM)
- Baranowski P., Krzyszczak J.R., Sławiński C.F. – Self-similarity analysis of chosen agro-meteorological time series – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/181>
- Baranowski P., Mazurek W., Pastuszka-Wozniak J. – Supervised classification of bruised apples on the base of hyperspectral imaging data. – 10th International Conference on Agrophysics – From 05.06.2013 till 07.06.2013 – http://www.ipan.lublin.pl/uploads/sekretariat/ica_book_of_abstracts_all.pdf (CropM)
- Baranowski P., Sławinski C., Krzyszczak J. – Short presentation of partner's P139 involvement in CropM – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – (TradeM/CropM)
- Baranowski, P., Jaromir Krzyszczak, Cezary Sławiński – Multifractal analysis of meteorological time series to assess climate impact on chosen regions of Europe – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – (CropM)
- Barber HM, Gooding MJ, Semenov MA (2014) – Improving modelling of wheat responses to high temperature stress under climate change. – XIII ESA congress, Debrecen, Hungary – From 25.08.2014 till 29.08.2014 – (CropM)
- Barnes A., Shrestha S., Thomson S., Toma L., Mathews K., Sutherland L.A. – Comparing visions for CAP reforms post 2015: Farmer intentions and farm bio-economic modelling – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/180>
- Bartley D. – Do modellers dream of electric sheep? – Practical to mathematical and back again. – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/215>
- Baum Z. – The Economic Impact of Water Scarcity Under Diverse Water Qualities and Desalination Policies: The Case of Israel – TradeM International Workshop on Economics of Integrated Assessment Approaches for Agriculture and the Food Sector – From 25.11.2014 till 27.11.2014 – (TradeM)
- Baum, Z. – Assessing the impact of climate change on agriculture and a water economy with a diverse mix of water types – the Israeli case study – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – <http://www.macsur.eu/> (TradeM)
- Baum, Z., R. R. Palatnik – Assessing the Impact of Climate Change on the Israeli Water Economy via a Linked CGE and Farm-Level Model – MACSUR TradeM workshop: "Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security", The Natural Resource and Environmental Research Center (NRERC), University of Haifa, Israel – From 03.03.2013 till 05.03.2013 – <http://www.macsur.eu/> (TradeM)
- Bellocchi G., Martin R., Shtiliyanova A., Ben Touhami H., Carrère P. – Vul'Clim – Climate change vulnerability studies in the region Auvergne (France) – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/209>
- Bellocchi G., Rivington M., Acutis M. – Deliberative processes for comprehensive evaluation of agro-ecological models – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/193>

- Bellocchi, G., Acutis, M., Ferrise, R., Rivington, M. – Fuzzy-logic based multi-site crop model evaluation – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – (CropMLiveM)
- Bellocchi, G., Ehrhardt, F. – Collaborations with initiatives and projects outside MACSURAgMIP – Grassland & Livestock – International Livestock Modelling and Research Colloquium, Bilbao, Spain – From 14.10.2014 till 16.10.2014 – http://www.livem2014bilbao.com/archivo/ficheros/Thursday16/11-LiveMBilbao_AgMIP.pdf (LiveM)
- Ben touhami, H., Bellocchi, G. – Bayesian calibration of the Pasture Simulation model (PaSim) to simulate emissions from long-term grassland sites: a European perspective – Livestock, Climate Change and Food Security, Madrid, Spain – From 19.05.2014 till 20.05.2014 – (LiveM)
- Ben Touhami, H., Lardy, R., Klumpp, K., Bellocchi, G. – Bayesian calibration of the Pasture Simulation model (PaSim) to simulate emissions from long-term European grassland sites: a case study at Laqueuille (France) – Greenhouse Gases & Animal Agriculture 2013, Dublin, Ireland – From 23.06.2013 till 26.06.2013 – <http://www.ggaa2013.ie/> (LiveM)
- Biewald A. – Ethical aspects in the economic modeling of water policy options – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-6>
- Biewald A. – The development of cereals and oilseed production until 2050 under different socioeconomic conditions in Finland – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/236>
- Biewald, A. – Quantifying and Qualifying the Impact of Agricultural Trade on Water Resources - Achievements and Challenges – Water Research Horizon Conference, Berlin, Germany – From 25.06.2013 till 26.06.2013 – (TradeM)
- Biewald, A. – The development of agricultural production under different socioeconomic conditions in Finland – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – <http://www.macsur.eu/> (TradeM)
- Biewald, A. – The impact of agricultural policies and different socioeconomic developments on future agricultural production in Finland – 2nd GLP Open Science Meeting, Berlin, Germany – From 09.09.2013 till 11.09.2013 – (TradeM)
- Biewald, A., Lotze-Campen, H. – Land und Wasser für die globale Landwirtschaft: Herausforderungen und Lösunge – Leopoldina-Symposium, Das zukünftige Modell der agrarischen Landnutzung - Intensivierung und Ökologisierung?, Halle, Germany – From 28.10.2013 till 29.10.2013 – (TradeM)
- Biewald, A., Rolinski, S., Lotze-Campen, H., Schmitz, C. – Global valuation of agricultural, virtual blue water trade measured on a local scale – Conference paper presented at the 10th Annual meeting of the International Water Resource Economics Consortium, Stockholm, Sweden – From 27.08.2012 till 28.08.2012 –
- Bodin P. – Assessing modelling approaches for simulating the effect of high temperature stress on yield – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-7>
- Bodin P. – Simulating the sensitivity of carbon and water fluxes as well as yield within the ClimAfrica project – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/186>
- Bojar W. – Methods to limit risks in agriculture in the era of climate change – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – (TradeM)
- Bojar W. – WP1 TASKS Existing, tools, data, models – tasks of WP1 package – Kickoff Meeting and Workshop Modelling European Agriculture with Climate Change for Food Security – From 15.10.2012 till 16.10.2012 – <http://macsur.eu/index.php/internal-documents/func-startdown/112/> (TradeM)
- Bojar W., Knopik L. – Application of Markov chains approach for expecting extreme precipitation changes having impact on food supply – TradeM International Workshop 2014 »Economics of integrated assessment approaches for agriculture and the food sector«, Hurdalsjøen, Norway – From 25.11.2014 till 27.11.2014 – http://www.nilf.no/forskning_og_utredning/prosjekter/economics_of_integrated_assessment_approaches_for_agriculture_and_the_food_sector (TradeM)
- Bojar W., Knopik L., Żarski J. – Integrated assessment of business crop productivity and profitability for use in food supply forecasting – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/210>
- Bojar W., Sinabell F., Verbrug R. – Economic and Trade Models to Analyze Climate Change Risk and Food Security for European Agriculture - A Survey – International Workshop Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security – From 03.03.2013 till 05.03.2013 – http://www.macsur.eu/index.php/files/file/MACSUR%20TradeM/TradeM%20Workshop%20Haifa%202013/Workshop%20Haifa%202013%20Presentations/Sinabell_Modelcomparison%252Epdf (TradeM)

- Bojar W., Zarski J. – “Methods of management with processes and resources in organizations and the economy”, “Application of water saving irrigation and fertigation systems in plants cultivation” – FACCE MACSUR Mid-Term Scientific Conference ‘Achievements, Activities, Advancemen’, Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/197> (TradeM)
- Bojar, W. – WP1 TASKS Existing, tools, data, models – tasks of WP1 package” – – Kickoff Meeting and Workshop
- Bojar, W., Leszek Knopik, Jacek Żarski, Wojciech Żarski, Cezary Sławiński, Piotr Baranowski – Integrating TradeM and CropM MACSUR models for regional case studies in Poland – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – <http://www.macsur.eu/> (TradeM)
- Bojar, W., Sinabell, F., Verburg, R. – Economic and Trade Models to Analyze Climate Change Risk and Food Security for European Agriculture - A Survey – MACSUR TradeM workshop: "Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security", The Natural Resource and Environmental Research Center (NRERC), University of Haifa, Israel – From 03.03.2013 till 05.03.2013 – http://www.macsur.eu/index.php/files/file/MACSUR%20TradeM/TradeM%20Workshop%20Haifa%202013/Workshop%20Haifa%202013%20Presentations/Sinabell_Modelcomparison%252Epdf (TradeM)
- Bojar, W., Sinabell, F., Verburg, R. – Inventarisation of TradeM models – Kickoff Meeting and Workshop
- Bonesmo, H.S., Beauchemin, K. A., Harstad, O. M., Skjelvåg, A. O. – GHG emissions mitigation potential of Norwegian dairy and beef farms – Sustainable Intensification: The pathway to low carbon farming – From 25.09.2013 till 27.09.2013 – http://www.sruc.ac.uk/downloads/file/1650/dr_helge_bonesmo-ghg_emissions_mitigation_potential (LiveM)
- Bourne M.G., Philippidis G. – MACSUR Conference 2015 – FACCE MACSUR Mid-Term Scientific Conference ‘Achievements, Activities, Advancemen’, Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ojs.macsur.eu/index.php/Reports/article/view/175>
- Bourne, M.G. – A CGE analysis of Spanish greenhouse gas targets to 2020 – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – <http://www.macsur.eu/> (TradeM)
- Brouwer F., Sinabell F. – TradeM planning session of pilot studies – FACCE MACSUR Mid-Term Scientific Conference ‘Achievements, Activities, Advancemen’, Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/257>
- Brouwer, F. – Agricultural markets and prices – "Climate-change impacts on farming systems in the next decades — why worry when you have CAP?" A FACCE MACSUR workshop for policymakers, Brussels – From 06.05.2015 till 06.05.2015 – <http://macsur.eu/index.php/events/macsur-workshop-for-policymakers> (TradeM)
- Brouwer, F. – Objectives of MACSUR project and TradeM theme – MACSUR TradeM workshop: "Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security", The Natural Resource and Environmental Research Center (NRERC), University of Haifa, Israel – From 03.03.2013 till 05.03.2013 – <http://www.macsur.eu/> (TradeM)
- Brower, F., K. Helming – Workshop Introduction – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – <http://www.macsur.eu/> (TradeM)
- Brüser, K. – Crop production – "Climate-change impacts on farming systems in the next decades — why worry when you have CAP?" A FACCE MACSUR workshop for policymakers, Brussels – From 06.05.2015 till 06.05.2015 – <http://macsur.eu/index.php/events/macsur-workshop-for-policymakers> (CropM)
- Brylińska M. – Factors underlying changes in population of *Phytophthora infestans* in Poland – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-9>
- Brzezinska, M., Piotr Bulak, Jaromir Krzyszczak, Marek Pazur, Anna Walkiewicz, Andrzej Bieganowski, Jerzy Lipiec, Cezary Slawinski – What is a stronger determinant of soil respiration: soil temperature or moisture? – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – (CropM)
- Camacho C., Perez-Barahona A. – Land use dynamics and the environment – FACCE MACSUR Mid-Term Scientific Conference ‘Achievements, Activities, Advancemen’, Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/249>
- Cammarano D, RP Rötter, S Asseng, F Ewert, C Rosenzweig, JW Jones, JL Hatfield, B Basso, A Ruane, KJ Boote, P Thorburn, N Brisson, P Martre, PK Aggarwal, C Angulo, Pertuzzi, C Biernath, AJ Challinor, J Doltra, S Gayler, R Goldberg, L Heng, J Hooker, LA Hunt, J Ingwersen, RC Izaurralde, KC Kersebaum, C Müller, S Naresh Kumar, C Nendel, G O’Leary, JE Olesen, TM Osborne, T Palosuo, E Priesack, D Ripoché, MA Semenov, I Shcherbak, P Steduto, C Stöckle, P Stratonovitch, T Streck, I Supit, F Tao, M Travasso, K Waha, D Wallach, JW White, JR Williams, J Wolf – Quantifying Uncertainties in Modeling Crop Water Use under Climate Change – Impacts World 2013, International Conference on Climate Change Effects, Potsdam, Germany – From 27.05.2013 till 30.05.2013 – http://www.climate-impacts-2013.org/files/hcaw_cammarano.pdf (CropM)

- Carter T. – Scenarios and related data for MACSUR2 Timothy Carter Finnish Environment – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-11>
- Castañeda-Vera A., Garrido A., Ruiz-Ramos M., Sánchez-Sánchez E., Mínguez M.I. – Quantitative assessment of current and future risks related rainfall in processing tomato in the Guadiana river basin (SW Spain) – European GeoSciences Union (EGU), General Assembly 2013 – From 07.04.2013 till 12.04.2013 – <http://www.egu2013.eu/> (CropM)
- Caubel, J., Garcia de Cortazar-Atauri, I., Huard, F., Launay, M., Ripoche, D., Gouache, D., Bancal, M.O., Graux, A.I., de Noblet, N., and the ORACLE project team – Ecoclimatic indicators to study crop suitability in the context of climate change – European GeoSciences Union (EGU), General Assembly 2013 – From 07.04.2013 till 12.04.2013 – <http://www.egu2013.eu/> (CropM)
- Cezary Sławiński, Jaromir Krzyszczak – Institute of Agrophysics PAS and MACSUR presentation – "Rola lasu w pochłanianiu dwutlenku węgla z atmosfery", Tlen, Poland – From 22.10.2014 till 24.10.2014 – (CropM)
- Challinor, A. et al. (2014) – How have uncertainties in projected yields changed between AR4 and AR5? – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – http://www.research.ed.ac.uk/portal/files/17967937/MACSUR_Oslo_Feb_2014.pdf (CropM)
- Cohen, S. – Climate change and Israeli Agriculture – resilience, adaptation, land use and production – MACSUR TradeM workshop: "Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security", The Natural Resource and Environmental Research Center (NRERC), University of Haifa, Israel – From 03.03.2013 till 05.03.2013 – <http://www.macsur.eu/> (TradeM)
- Conradt, T. – Introduction to the eco-hydrological model SWIM, recent applications and new developments – Solicited lecture at the Faculty of Agricultural Sciences of Baoding Normal University, Baoding, Hebei, P. R. China – From 20.10.2013 till 27.10.2013 –
- Cortignani R. – Common Agricultural Policy and climate variability changes: an impact assessment of the first-pillar reform on an agricultural area of Grana Padano in different climate scenarios – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-12>
- Coucheney E. – Sensitivity of crop water and N stress to soil input data in regional crop yield simulations and the implications for data aggregation effects: a case study with the COUP-model – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-13>
- Curnel Y.R.W. – Meteorological risks as drivers of environmental innovation in agro-ecosystem management – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancements', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/231>
- Daccache A. – Assessing water and energy footprint of irrigated agriculture in the Mediterranean – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancements', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/179>
- Dáder B, Fereres A, Moreno A. (2014) – Effects of UV radiation on pests and plant pathogens. Keynote lecture. – Conference Horticultural Stakeholders UV4Growth COST-Action FA0906. Odense, Denmark. – From 09.03.2014 till 11.03.2014 – (CropM)
- Dáder B, Fereres A, Trebicki P. (2014) – Studying Myzus persicae performance and feeding behaviour, and associated plant viruses under increasing CO2. – Annual Conference of the Australian Entomological Society. Canberra, Australia. – From 28.09.2014 till 01.10.2014 – (CropM)
- Dáder B, Moreno A, Fereres A. (2013) – Direct and plant-mediated impact of UV-absorbing films on plant growth and performance of insect vectors of plant viruses. – UV4Growth COSTAction FA0906 2nd Annual Network Meeting. Mikulov, Czech Republic. – From 14.04.2013 till 16.04.2013 – (CropM)
- Dáder B, Moreno A, Fereres A. (2014) – Impact of UV-A radiation on the performance of aphids and whiteflies and on the leaf chemistry of their host plants. – Annual Conference of the Australian Entomological Society. Canberra, Australia. – From 28.09.2014 till 01.10.2014 – (CropM)
- Dáder B, Winters A, Moreno A, Fereres A, Gwynn-Jones D. – Differences in plant chemistry and crop growth under specific wavelengths of the UV region. – Final Network Meeting of COST Action FA0906 UV4Growth. Bled, Slovenia. – From 30.03.2014 till 02.04.2014 – (CropM)
- Dader B. – Elevated CO2 impacts bell pepper growth with consequences in the feeding behaviour and performance of the green peach aphid, Myzus persicae – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-14>
- Dader, B., Moreno, A., Fereres, A. – Direct and plant-mediated impact of UV-absorbing films on plant growth and performance of insect vectors of plant viruses. – COST-Action FA0906 2nd Annual Network Meeting Mikulov, Czech Republic – From 14.04.2013 till 16.04.2013 – (CropM)
- Dáder, B., Winters, A., Moreno, A., Fereres, A., Gwynn-Jones, D. – Differences in plant chemistry and crop growth under specific wavelengths of the UV region – Final Network Meeting of COST Action FA0906 UV4Growth. Bled, Slovenia – From 30.03.2014 till 02.04.2014 – (CropM)
- Dalgaard T. – LiveM WP4: Methods for regional scale farming systems modelling and uncertainty assessment – sustainability assessment case studies of production, nutrient losses and greenhouse gas emissions from

- grassland based systems – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/266>
- Dalgaard T. – Models for regional scale farming system evaluation of climate change mitigation options and environmental impact assessment – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-15>
- Dalgaard T., Hutchings N., Noe E. – Methods for regional scale farming systems modelling and uncertainty assessment – sustainability assessment case studies of production, nutrient losses and greenhouse gas emissions from grassland based systems – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/267>
- Dalgaard, Tommy; Kjeldsen, Chris; Meyer-Aurich, Andreas; Özkan, Şeyda; Rolinski, Susanne; Köchy, Martin; Olesen, Jørgen E.; Brouwer, Floor; van den Pol-van Dasselaar, Agnes; Kipling, Richard. – Farming systems models for regional scale impact assessment in Europe - case studies of N-losses and greenhouse gas emissions – Scaling in global, regional and farm models – From 24.09.2014 till 24.09.2014 – http://franz.sinabell.wifo.ac.at/macsur/final/Dalgaard_et_al_Macsur_Vienna_Workshop_24-9-2014_final.pdf (LiveM)
- Del Prado, A., Van Den Pol-Van Dasselaar A., Chadwick D., Misselbrook T., Sandars D.L., Audsley E., Mosquera-Losada, M.R. – Synergies between mitigation and adaption to climate change in grassland-based farming system – 25th EGF General Meeting on "EGF at 50: The Future of European Grasslands". - Grassland Science in Europe 19 (2014). Aberystwyth, Wales : EGF, 2014 - p. 61 - 74. – From 07.09.2014 till 11.09.2014 – <http://www.europeangrassland.org/fileadmin/media/EGF2014.pdf> (LiveM)
- Deligios P, Ledda L, Farci R, Doro L, Roggero Pier Paolo – Impatto dei cambiamenti climatici sulla produzione di colza da bioenergia in un ambiente mediterraneo. – XLI Convegno annuale Società Italiana di Agronomia, Bari, Italy – From 19.09.2012 till 21.09.2012 – (CropM)
- Dell'Unto D. – Modeling the effects of Climate Change on dairy farms: an integration of livestock and economic models. – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-16>
- Destain M.-F. – Filtering methods for predicting and modelling wheat yield in the context of climate change – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/201>
- Dibari C., Argenti G., Catolfi F., Moriondo M., Stagliano N., Bindi M. – Climate change impacts on natural pasturelands of Italian Apennines – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/253>
- Doltra, J., Olesen, J.E., Báez, D., Chirinda, N. – Simulating seasonal nitrous oxide emissions from maize and wheat crops grown in two different cropping systems in Atlantic Europe. – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (CropM)
- Dono G. – Climate change impact on production and income of Mediterranean farming systems: a case study – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-17>
- Dono G. – The economic impact of changes in climate variability on milk production in the area of Grana Padano – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-18>
- Dono G., Cortignani R., Doro L., Roggero P.P. – The adaptation of farm and awareness of ongoing climate change (CC) – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/261> (CropM)
- Dono Gabriele, Raffaele Cortignani, Paola Deligios, Luca Doro, Luca Giraldo, Luigi Ledda, Graziano Mazzapicchio, Massimiliano Pasqui, Pier Paolo Roggero – Economic assessment of the impact of uncertainty associated with short-run change in climate variability in Mediterranean farming systems. – MACSUR TradeM workshop: "Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security", The Natural Resource and Environmental Research Center (NRERC), University of Haifa, Israel – From 03.03.2013 till 05.03.2013 –
- Dono, G. – Climate change scenarios and simulations on adaptation of Mediterranean agriculture: preliminary results of productive and economic impact – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – <http://www.macsur.eu/> (TradeM)
- Dono, G. – Cross-Cutting Issues in Hot Spot Areas – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – <http://www.macsur.eu/> (TradeM)
- Dumont Benjamin, Basso Bruno, Leemans Vincent, Bodson Bernard, Destain Jean Pierre, Destain Marie-France – A Site-Specific Grain Yield Response Surface : Computing the Identity Card of a Crop Under Different Nitrogen Management Scenarios – EFITA-WCCA-CIGR 2013 - Sustainable Agriculture Through

- ICT Innovation, Torino, Italy – From 23.06.2013 till 26.06.2013 – <http://orbi.ulg.ac.be/handle/2268/150070> (CropM)
- Dumont Benjamin, Basso Bruno, Leemans Vincent, Destain Jean Pierre, Bodson Bernard, Destain Marie-France – Yield variability linked to climate uncertainty and nitrogen fertilisation – 9th ECPA - European Conference on Precision Agriculture, Lleida, Spain – From 07.07.2013 till 11.07.2013 – (CropM)
- Dumont, B., Basso, B., Bodson, B., Destain, J.-P., Destain, M.-F., 2013. – A comparison of within season yield prediction methodologies – Proceedings of the ASA, CSSA & SSSA International Annual Meetings "Water, Food, Energy & Innovation for a Sustainable World", Tampa, Florida. – From 03.11.2013 till 06.11.2013 – <http://hdl.handle.net/2268/160224>
- Dumont, B., Basso, B., Bodson, B., Destain, J.-P., Destain, M.-F., 2013. – Assessing nitrogen fertilisation strategies according to climate variability : A modelling approach – Proceedings of the ASA, CSSA & SSSA International Annual Meetings "Water, Food, Energy & Innovation for a Sustainable World", Tampa, Florida. – From 03.11.2013 till 06.11.2013 – <http://hdl.handle.net/2268/160223>
- Dumont, B., Basso, B., Destain, J.-P., Bodson, B., & Destain, M.-F., 2014. – A Comparison of Optimal Nitrogen Fertilisation Strategies Using Current and Future Stochastically Generated Climatic Conditions – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – <http://hdl.handle.net/2268/162425>
- Dumont, B., Basso, B., Leemans, V., Bodson, B., Destain, J.-P., Destain, M.-F., 2013. – A Site-Specific Grain Yield Response Surface : Computing the Identity Card of a Crop Under Different Nitrogen Management Scenarios – Proceedings of the EFITA-WCCA-CIGR 2013 - Sustainable Agriculture through ICT innovation, Torino (Italy). – From 03.11.2013 till 06.11.2013 – <http://hdl.handle.net/2268/150070>
- Dumont, B., Ferrandis Vallterra, S., Leemans, V., Bodson, B., Destain, J.-P., & Destain, M.-F. – Vers un système de prédiction du rendement en temps réel. – IXeme Seminaire STICS, Orléans, Sainte Montaine (France). – From 16.10.2012 till 16.10.2012 – <http://hdl.handle.net/2268/135090> (CropM)
- Dumont, B., Leemans, V., Ferrandis Vallterra, S., Vancutsem, F., Seutin, B., Bodson, B., Destain, J.-P., & Destain, M.-F. – A first step towards a real-time predictive yield support system. – CIGR-AgEng 2012, International Conference on Agricultural Engineering, Valencia (Spain). – From 07.07.2012 till 12.07.2012 – <http://hdl.handle.net/2268/129591> (CropM)
- Dumont, B., Leemans, V., Ferrandis Vallterra, S., Vancutsem, F., Seutin, B., Bodson, B., Destain, J.-P., & Destain, M.-F. – Assessing the potential of an algorithm based on mean climatic data to predict wheat yield. – 11th International Conference on Precision Agriculture. Indianapolis (USA). – From 15.07.2012 till 18.07.2012 – <http://hdl.handle.net/2268/129590> (CropM)
- Event date. Bruges, Belgium – From 23.04.2014 till 25.04.2014 – <http://hdl.handle.net/2268/164603>
- Ewert F., Rötter R. – MACSUR CropM – progress overview – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/279>
- Ewert, F., R. Rötter – State of Affairs in CropM – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – <http://www.macsur.eu/> (TradeM, CropM)
- Fereres A, Dáder B, Moreno A, Gwynn-Jones D, Winters A. – Aphid and whitefly performance is directly affected by UV radiation on horticultural crops. – Final Network Meeting of COST Action FA0906 UV4Growth. Bled, Slovenia. – From 30.03.2014 till 02.04.2014 – (CropM)
- Fereres A. – Insect behaviour and management options under UV-deficient enclosures – "Plant responses to UV radiation: from individuals to ecosystems". COST UV4Growth (FA0906: "UV-B radiation: A specific regulator of plant growth and food quality in a changing climate"). – From 25.04.2012 till 26.04.2012 – (CropM)
- Fereres, A. – Photosensitive barriers for managing insect vectors of virus diseases in protected environments – Agricultural Film International Conference (Madrid) – From 06.11.2012 till 08.11.2012 – (CropM)
- Fereres, A. – Virus-vector-host plant interactions: Factors that influence the spread of hemipteran-borne plant viruses. – American Phytopathological Society Conference Austin, Texas – From 10.08.2013 till 14.08.2013 – (CropM)
- Fereres, A., Dáder, B., Moreno, A., Gwynn-Jones, D., Winters, A. – Aphid and whitefly performance is directly affected by UV radiation on horticultural crops – Final Network Meeting of COST Action FA0906 UV4Growth. Bled, Slovenia – From 30.03.2014 till 02.04.2014 – (CropM)
- Ferrise R, Moriondo M, Pasqui M, Toscano P, Semenov MA & Marco Bindi M – Using seasonal forecasts for predicting durum wheat yield over the Mediterranean Basin – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (CropM)
- Ferrise R., Moriondo M., Pasqui M., Primicerio J., Toscano P., Semenov M., Bindi M. – Within-season predictions of durum wheat yield over the Mediterranean Basin – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/252>
- Floor Brouwer, Franz Sinabell, Waldemar Bojar, Oyvind Hoveid, Gabriele Dono, Katharina Helming – The main findings of TradeM, achieved during the first year – Workshop on Regional Pilot Studies Braunschweig, Germany – From 05.06.2013 till 07.06.2013 – (TradeM)

- Fox, Naomi – Climate, soil-transmitted helminths and livestock production – Workshop: Modelling interactions between climate and livestock pathogen transmission – From 22.01.2014 till 22.01.2014 – <http://www.research.pirbright.ac.uk/intent/macsur/workshop/> (LiveM)
- François L., Jacquemin I., Fontaine C., Minet J., Dury M., Tychon B. – Implementing agricultural land-use in the CARAIB dynamic vegetation model – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/237>
- Frank, S., Witzke, P., Zimmermann, A., Havlik, P., Ciaian, P. – Climate Change Impacts on European Agriculture: A Multi Model Perspective – 14th EAAE Congress, Ljubljana (Slovenia) – From 26.08.2014 till 29.08.2014 – (TradeM)
- Frank, St. – Model intercomparison-Globiom and CAPRI – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – <http://www.macsur.eu/TradeM>
- Fung, Fai – Modelling livestock and grassland systems under climate change – Workshop: Modelling interactions between climate and livestock pathogen transmission – From 22.01.2014 till 22.01.2014 – <http://www.research.pirbright.ac.uk/intent/macsur/workshop/> (LiveM)
- Gabaldón C., Lorite I.J., Mínguez M.I., Lizaso J.I., Dosio A., Sánchez-Sánchez E., and Ruiz-Ramos M. – Quantifying the effect of Tmax extreme events on local adaptation to climate change of maize crop in Andalusia for the 21st century. – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 09.04.2015 till 08.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/175> (TradeM)
- Gabaldón C., Lorite I.J., Mínguez M.I., Dosio A., Sánchez-Sánchez E., Ruiz-Ramos M. – EVALUATION OF LOCAL ADAPTATION STRATEGIES TO CLIMATE CHANGE OF MAIZE CROP IN ANDALUSIA FOR THE 21ST CENTURY – European GeoSciences Union (EGU), General Assembly 2013 – From 07.04.2013 till 12.04.2013 – <http://www.egu2013.eu/> (CropM)
- Gabaldón-Leal, C., Lorite I.J., Mínguez, M.I., Lizaso, J.I., Dosio, A., Sanchez E., and Ruiz-Ramos M (2014). – Adaptation Strategies to Climate Change for summer crops on Andalusia: evaluation for extreme maximum temperatures. – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 –
- Gallo A., Mereu V., Spano D. – Projected climate change impact on wheat and maize in Italy – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/243>
- Giglio L., Ventrella D. (2012). – Vulnerabilità di frumento duro e pomodoro ed analisi di adattamento agronomico ai cambiamenti climatici nel territorio agricolo Pugliese. In: De Mastro G., Ventrella D., Verdini L. (Eds). 2012 Atti dell 480-482. – XLI Convegno annuale Società Italiana di Agronomia, Bari, Italy – From 19.09.2012 till 21.09.2012 –
- Gøtke N. – Opening remarks by the chair of the FACCE JPI Governing Board – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/277>
- Grosz B. – The implication of input data aggregation on upscaling of soil organic carbon changes – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-19>
- Grosz B., Dechow R. – Comparison of measured and modelled soil organic carbon for a northern European long-term experiment site – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/211>
- Gubbins, Simon – Climate, insect-borne viruses and livestock production – Workshop: Modelling interactions between climate and livestock pathogen transmission – From 22.01.2014 till 22.01.2014 – <http://www.research.pirbright.ac.uk/intent/macsur/workshop/> (LiveM)
- Gutierrez, L, F. Piras, P. Roggero – Short and long-run impact of climate changes on worldwide grain prices – MACSUR TradeM workshop: "Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security", The Natural Resource and Environmental Research Center (NRERC), University of Haifa, Israel – From 03.03.2013 till 05.03.2013 – <http://www.macsur.eu/> (TradeM)
- Haas E. – Responses of soil N2O emissions and nitrate leaching on climate input data aggregation: a biogeochemistry model ensemble study – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-20>
- Haas E., Klatt S., Kiese R., Santa Barbara Ruiz I., Kraus D. – Parameter-induced uncertainty quantification of a regional N2O and NO3 inventory using the biogeochemical model LandscapeDNDC – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/199>
- Harstad, Odd Magne; Bonesmo, Helge Sverre; Özkan, Şeyda – MACSUR – utfordringer for husdyrproduksjon i et framtidig klima (MACSUR- Challenges for livestock production in a future climate) – Bioforsk-

- konferansen 2014, Hamar Norway – From 01.02.2014 till 04.02.2014 – http://www.bioforsk.no/ikbViewer/Content/109909/FOKUS_9-3_Bioforsk-konferansen_2014.pdf (LiveM)
- Havlik P., Leclere D., Valin H., Herrero M., Schmid E., Obersteiner M. – Effects of climate change on feed availability and the implications for the livestock sector – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/222>
- Havlik, P. – Climate change impacts on agricultural sector: A global perspective – TradeM Stakeholder Workshop Vienna – From 24.03.2014 till 24.03.2014 – (TradeM)
- Havlik, P. E. Schmid, S. Fuss, D. Leclere, M. Obersteiner, A. Mosnier, H. Valin, N. Khabarov – Linking bio-physical, bottom-up and top-down economic models to analyze climate change impacts and adaptation on Austrian agriculture – MACSUR TradeM workshop: "Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security", The Natural Resource and Environmental Research Center (NRERC), University of Haifa, Israel – From 03.03.2013 till 05.03.2013 – <http://www.macsur.eu/> (TradeM)
- Helming J. – Implementation of the GTAP emission database in MAGNET; applications at European and global scales – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-21>
- Helming K., Janssen S. – LIAISE – Linking Impact Assessment instruments with sustainability expertise – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/192>
- Helming K., Podhora A., König H. – Policy impact assessment – a venue for the science policy interface – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/191>
- Herbst, M. ; Welp, G. ; Klosterhalfen, A., Amelung, W., Hädicke, A., Vereecken, H. – Linking soil organic carbon pools with measured fractions – Soil carbon modeling in agricultural and forest ecosystems, Tsukuba, Japan. – From 11.11.2013 till 14.11.2014 – (CropM)
- Hidy, D., Balogh, J., Churkina, G., Haszpra, L., Horváth, F., Iltzész, P., Iltzész, D., Ma, S., Nagy, Z., Pintér, K., Barcza, Z. (2014) – Structural development and web service based sensitivity analysis of the Biome-BGC MuSo model – EGU 2014, Vienna – From 28.04.2014 till 02.05.2014 – Poster in EGU 2014 Session BG2.5/SSS7.19 (LiveM)
- Hlavinka, P., Kersebaum, Dubrovský, M., Pohanková, E., Balek, J., Žalud, Z., Trnka, M. – Water balance and yield estimates for field crop rotations present versus future conditions based on transient scenarios. – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (CropM)
- Hoffmann H. – Effects of soil and climate input data aggregation on modelling regional crop yields – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-22>
- Hoffmann H., Zhao G., Van Bussel L. et al. – Effects of climate input data aggregation on modelling regional crop yields – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/195>
- Höglind M, Persson T. – Yields and harvest security in Nordic forage production in the future – examples from simulation studies using the LINGRA model – NJF Seminar 455 Nordic Forage Model Applications- predicting forage yield and quality in a variable and changing climate, Forssa, Finland, NJF Report Vol. 9 No. 1 2013, p 4-5. – From 30.01.2013 till 31.01.2013 – (CropM)
- Höglind M. – Europeisk landbruk i et klima i endring, MACSUR – Bioforsk-konferansen 2014, Hamar Norway – From 05.02.2014 till 06.02.2014 – http://www.bioforsk.no/ikbViewer/Content/108300/FOKUS_9-3_Bioforsk-konferansen_2014.pdf (CropM)
- Höglind, M, Persson T, van Oijen M. – Identifying target traits for forage grass breeding under a changing climate in Norway using the BASGRA model. – Proceedings of the 22nd International Grasslands Congress, Sydney, Australia – From 15.09.2013 till 19.09.2013 – (CropM)
- Höglind, M, Persson T, van Oijen M. (2014) – Breeding forage grasses: simulation modelling as a tool to identify important cultivar characteristics for winter survival and yield under future climate conditions in Norway. – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (CropM)
- Höglind, M, Persson T, van Oijen M. (2014). – Breeding forage grasses: simulation modelling as a tool to identify important cultivar characteristics for winter survival and yield under future climate conditions in Norway. – Conference on Genetic Resources for Food and Agriculture in a Changing Climate, Lillehammer, Norway. – From 27.01.2014 till 29.01.2014 – (CropM)
- Holman I, Audsley E, Sandars D, Janes V, Trnka M, Sabate S – Where is future European land use robust to climate and socio-economic uncertainty? – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – (LiveM)
- Horváth, F., Iltzész P., Iltzész, D., Barcza, Z., Dobor, L., Hidy, D., Marosi, A., Hardisty, A. – (2014): Supporting environmental modelling with Taverna workflows, web services and desktop grid technology. In iEMSS 2014 proceedings edited by DP Ames, NWT Quinn and AE Rizzoli (in press) – 7th International Congress

- on Environmental Modelling and Software, San Diego, California, USA – From 15.06.2014 till 19.06.2014 – N (LiveM)
- Hoveid Ø. – A prototype stochastic dynamic equilibrium model of the global food system – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-24>
- Hoveid Ø. – An economist's wish list for soil and crop modelling – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-25>
- Hoveid Ø. – Prototype stochastic general equilibrium model of a global food system – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/227>
- Hoveid, Ø. – Progress on Tools, Data, Models – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – <http://www.macsur.eu/> (TradeM)
- Hoveid, Ø.2014 – An economist' wish list for crop modelling. – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (TradeM)
- Hoveid, Ø.2014 – Linking models of climate, weather, crops and economic behavior by Bayesian calibration." – MACSUR TradeM workshop: "Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security", The Natural Resource and Environmental Research Center (NRERC), University of Haifa, Israel – From 03.03.2013 till 05.03.2013 – (TradeM)
- Hutchings N. – Farm-scale modelling – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancement', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/280>
- Hutchings N., De Haan M., Özkan Ş., Sandars D. L. – A Comparison Of Farm-Scale Models To Estimate Greenhouse Gas Emissions From Dairy Farms In Europe – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://www.slideshare.net/danielsteph/results-for-macsur-science-confererece-v6> (LiveM)
- Hutchings, Nicholas; Sanders, Daniel; Özkan, Şeyda; De Haan, Michel – Farm model comparison – International Livestock Modelling and Research Colloquium, Bilbao, Spain – From 14.10.2014 till 16.10.2014 – <http://www.livem2014bilbao.com/archivo/ficheros/Wednesday15/5-Farm-model-comparison-plenum.pdf> (LiveM)
- Ibañez M. – Ammonia and nitrous oxide emissions from grazing cattle in Kenya – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-27>
- Iglesias, A. – Impacts of CAP relative to climate with respect to adaptation – "Climate-change impacts on farming systems in the next decades — why worry when you have CAP?" A FACCE MACSUR workshop for policymakers, Brussels – From 06.05.2015 till 06.05.2015 – <http://macsur.eu/index.php/events/macsur-workshop-for-policymakers> (TradeM)
- J. Krzyszczak – Modelling of CO2 exchange in cultivated field – Summer school: Flux measurement techniques for non CO2 GHG: methods, sensors, databases and modelling – From 04.05.2013 till 12.05.2013 – (CropM)
- Jabloun, M., Li, X., Olesen, J.E., Schelde, K., Tao, F. – RDAISY: a comprehensive modelling framework for automated calibration, sensitivity and uncertainty analysis of the DAISY model. – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (CropM)
- Jaromir Krzyszczak, Piotr Baranowski, Cezary Sławiński – Field experiment in Lubelskie region to validate crop growth models in temperate climate – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – http://www.macsur.eu/images/eventlist/meeting_docs/CropM_Oslo_Symposium_Abstract_Book.pdf (CropM)
- Jorgenson J.S. – Data format standards and variable mapping – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/185>
- Jorgenson, J. – Integrated Modelling: Data and Protocols – CIMSANS Round Table on Opportunities for New Public-Private Collaborations on Modeling of Sustainable Nutrition Security (Dublin) – From 10.04.2013 till 10.04.2013 – (Hub)
- Jorgenson, J. S. – Options for Cloud computing – MACSUR TradeM workshop: "Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security", The Natural Resource and Environmental Research Center (NRERC), University of Haifa, Israel – From 03.03.2013 till 05.03.2013 – <http://www.macsur.eu/> (TradeM, Hub)
- Kahn, I., M. Rpaort-Rom – Assessing the Impact of Climate Change on Vegetative Agriculture in Israel – The VALUE Model – MACSUR TradeM workshop: "Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security", The Natural Resource and

- Environmental Research Center (NRERC), University of Haifa, Israel – From 03.03.2013 till 05.03.2013 – <http://www.macsur.eu/> (TradeM)
- Kan I. – Assessing the Impact of Climate Change on Vegetative Agriculture in Israel – The VALUE Model – MACSUR TradeM workshop: "Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security", The Natural Resource and Environmental Research Center (NRERC), University of Haifa, Israel – From 03.03.2013 till 05.03.2013 – <http://www.macsur.eu/> (TradeM)
- Kässi P., Niskanen O., Känkänen H. – Farm level approach to manage grass yield variation in changing climate in Jokioinen and St. Petersburg – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/255>
- Kauer K., Tein B., Loit E. – The long-term trends in soil carbon stock and crop productivity depending on management in Estonia – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/225>
- Kersebaum K.C., Kollas C., Bindi M. et al. – Model inter-comparison on crop rotation effects – an intermediate report – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/214>
- Kersebaum, K.C. (2012) – Analysing climate change impact on agriculture (in German). – Education seminar for water regulatory authorities of Hesse/Germany "Experiences for Water Framework Directive", Rauschholzhausen/Germany – From 27.11.2012 till 27.11.2012 – (CropM)
- Kersebaum, K.C., Bindi, M. – Progress report WP1 Model inter-comparison and improvement – JPI FACCE MACSUR CropM and LiveM cross-cutting activity Helsinki, Finland – From 06.05.2013 till 06.05.2013 – (CropM)
- Kersebaum, K.C., Bindi, M., Olesen, J.E. and Trnka, M. – WP 1/WP2 Data sharing and handling policy – JPI FACCE MACSUR CropM and LiveM cross-cutting activity Helsinki, Finland – From 06.05.2013 till 06.05.2013 – (CropM)
- Kersebaum, K.C., Boote, K.J., Jorgenson, J.S., Kollas, C., Nendel, C., Wegehenkel, M., Bindi, M., Olesen, J.E., Frühauf, C., Gaiser, T., Ruget, F., Rötter, R.P., Trnka, M. (2014) – A scheme to evaluate suitability of experimental data for model testing and improvement – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (CropM)
- Kersebaum, K.C., C. Kollas, M. Bindi, C. Nendel, R. Ferrise, M. Moriondo, J.E. Olesen, B. Sharif, I. Öztürk, H. Hoffmann, M. Launay, D. Ripoche, F. Ruget, P. Bertuzzi, I. Garcia De Cortazar, N. Beaudoin, C. Armas-Herrera, B. Mary, C. Müller, K. Waha, D. Ventrella, T. Palosuo, R. Rötter, M. Trnka, P. Hlavinka, L. Wu, M. Wegehenkel, W. Mirschel, T. Conradt, F. Wechsung, H.-J. Weigel, R. Manderscheid, J. Eitzinger – Modelling complex crop rotations and management across sites in Europe with an ensemble of models – ASA-CSSA-SSSA Int. Annual Meeting, Long Beach, CA, 2-5 November 2014 – From 02.11.2014 till 05.11.2014 – <https://scisoc.confex.com/scisoc/2014am/webprogram/Paper88064.html> (CropM)
- Kersebaum, K.C., Kollas, C., Palosuo, T., Bindi, M., Nendel, C. – WP1 - Protocols, data formats and data classification scheme– JPI FACCE MACSUR CropM and LiveM cross-cutting activity Helsinki, Finland – From 06.05.2013 till 06.05.2013 – (CropM)
- Kersebaum, K.C., Nendel, C. (2013) – Requirements for data from variety trials – justification and purpose (in German). – Association of Federal Agricultural Chambers, Coordination Panel for field trials. Berlin/Germany – From 13.11.2013 till – (CropM)
- Kersebaum, K.C., Nendel, C., Rötter, R.P. (2013) – Documentation of temperature algorithms in the models HERMES, MONICA and WOFOST. – AgMIP workshop "Wheat Response to High Temperature", El Batan/Mexico. – From 19.06.2013 till 21.06.2013 – (CropM)
- Kipling R., Özkan Ş. – Communicating Modelling – TradeM International Workshop 2014 »Economics of integrated assessment approaches for agriculture and the food sector«, Hurdalsjøen, Norway – From 25.11.2014 till 27.11.2014 – https://www.researchgate.net/profile/Seyda_Ozkan/publication/271205445_Communicating_Modelling/links/54c149b40cf2d03405c51e10.pdf (LiveM)
- Kipling R.P., Don A., Topp K. – Assessing the availability of data on grassland Carbon sequestration in Europe – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/258>
- Kipling R.P., Saetnan E.R., Van den Pol-van Dasselaar A., Scollan N.G. – Building modelling capacity for livestock systems: progress in LiveM – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/219>
- Kipling R.P., Scollan N.G. – Livestock production and the feed challenge – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/221>
- Kipling, R.P., Saetnan, E., Scollan, N.D., Bartley, D., Bellocchi, G., Hutchings, N.J., Dalgaard, T., van den Pol-van Dasselaar, A. – Modelling livestock and grassland systems under climate change – 25th EGF General

- Meeting on "EGF at 50: The Future of European Grasslands". - Grassland Science in Europe 19 (2014). Aberystwyth, Wales : EGF, 2014 - p. 61 - 74. – From 07.09.2014 till 11.09.2014 – (LiveM)
- Kipling, R.P., Saetnan, E.R., van den Pol-van Dasselaar, A., Scollan, N.D. – SOLID project workshop and annual meeting, MTT Finland – Overview of LiveM – From 21.05.2014 till 23.05.2014 – (LiveM)
- Kipling, R.P., Saetnan, E.R., van den Pol-van Dasselaar, A., Scollan, N.D., Bartley, D., Bellocchi, G., Hutchings, N.J., Dalgaard, T. – Modelling interactions between climate and livestock pathogen transmission, Pirbright Institute, UK – Workshop: Modelling interactions between climate and livestock pathogen transmission – From 22.01.2014 till 22.01.2014 – (LiveM)
- Kipling, Richard – Modelling climate variability and change: outputs available for transmission modelling – Workshop: Modelling interactions between climate and livestock pathogen transmission – From 22.01.2014 till 22.01.2014 – <http://www.research.pirbright.ac.uk/intent/macsur/workshop/> (LiveM)
- Kipling, R. – Modelling dairy systems: Opportunities for cross-theme collaboration within MACSUR – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – <http://www.macsur.eu/> (TradeM)
- Kirchner, M., Mitter, H., Schönhart, M., Schmid, E., Kindermann, G. – A spatially explicit integrated assessment of agricultural policy and climate change impacts on Austrian land use and environment. – 133rd EAAE seminar "Developing Integrated and Reliable Modeling Tools for Agricultural and Environmental Policy Analysis", Crete, Greece – From 15.06.2013 till 16.05.2013 – (TradeM)
- Kirchner, M., Mitter, H., M. Schönhart, E. Schmid, G. Kindermann, 2014, – A spatially explicit integrated assessment of agricultural policy and climate change impacts on Austrian land use and environment. – EAAE 2014 Congress "Agri-Food and Rural Innovations for Healthier Societies". Ljubljana, Slovenia – From 26.08.2014 till 29.08.2014 – (TradeM)
- Kirchner, M., M. Schönhart, H. Mitter, E. Schmid, 2014 – How does climate change adaptation impact GHG emissions - the case of Austrian Agriculture. – Lebensmittelversorgung, Lebensmittelsicherheit und Ernährungssouveränität Food security, safety and sovereignty, 24 . Jahrestagung der Österreichischen Gesellschaft für Agrarökonomie, Wien – From 25.09.2014 till 26.09.2014 – (TradeM)
- Kjeldsen C. – An approach to sustainability management within partnerships between heterogeneous actors – example from a Danish water catchment, dominated by dairy farms – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-29>
- Klatt S., Haas E., Kiese R. – Responses of soil N2O emissions and nitrate leaching on climate input data aggregation: a biogeochemistry model ensemble study – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/200>
- Klosterhalfen, A. ; Herbst, M. ; Schmidt, M. ; Vereecken, H. Weihermüller, L. – AgroC - Development and First Evaluation of a Model for Carbon Fluxes in Agroecosystems – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (CropM)
- Klosterhalfen, A.; Herbst, M.; Schmidt, M.; Weihermüller, L.; Vanderborght, J.; Vereecken, H. – AgroC - Development and evaluation of a model for carbon fluxes in agroecosystems – 2015 EGU General Assembly – From 04.12.2015 till 2015-17-04 – <http://meetingorganizer.copernicus.org/EGU2015/EGU2015-5408-1.pdf> (CropM)
- Klosterhalfen, A.; Weihermüller, L.; Herbst, M.; Schmidt, M.; Vanderborght, J.; Vereecken, H. – AgroC - Development and Evaluation of a Model for Carbon Fluxes in Agroecosystems – 2014 AGU Fall Meeting, San Francisco, USA – From 2014-15-12 till 2014-19-12 – (CropM)
- Knox J. – Meta-analysis of recent scientific evidence on climate impacts and uncertainty on crop yields in Europe – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-30>
- Köchy M., Banse M. – Common assumptions about future agricultural trends across MACSUR integrated case studies – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – (Hub)
- Köchy M., Banse M. – Modelling Efforts and Integrated Regional Studies in FACCE MACSUR – 4th Annual AgMIP Workshop, New York, USA – From 28.10.2013 till 30.10.2013 – (Hub)
- Köchy M., Banse M., Tiffin R. et al. – General outline of plans for an extension phase of MACSUR – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/262>
- Köchy M., Lehtonen H, Schönhart M, Roggero PP – Gesellschaftliche und wirtschaftliche Bedingungen für die europäische Landwirtschaft bis 2050 – GAP nach 2013 – From 09.12.2013 till 10.12.2013 – (Hub)
- Köchy, M. – FACCE MACSUR: Modelling Agriculture with Climate Change for Food Security – Climate-smart agriculture 2015. Global Science Conference. Montpellier, France – From 15.03.2015 till 18.03.2015 – <http://csa2015.cirad.fr/program> (Hub)

- Köchy, M. – FACCE MACSUR: Modelling Agriculture with Climate Change for Food Security – ECCA 2015: 2nd European Climate Change Adaptation Conference – From 12.05.2015 till 14.05.2015 – http://ecca2015.eu/images/ECCA_Abstract_book_by_topic-FINAL.docx (Hub)
- Köchy, M. – The FACCE knowledge hub 'MACSUR' – FACCE JPI Mapping Meeting on Core Theme 3: Assessing and reducing tradeoffs: food production, biodiversity & ecosystems services – From 11.06.2012 till 12.06.2012 – (Hub)
- Köchy, M. – The Knowledge Hub »FACCE MACSUR« Modelling European Agriculture with Climate Change for Food Security – „Our Climate – Our Future“, Regional perspectives on a global challenge – From 06.10.2014 till 09.10.2014 – <https://reklam-conference-2014.de/fileadmin/reklam-2014/uploads/dokumente/Topic7-Sessionprogramm.pdf> (Hub)
- Köchy, M. – The Knowledge Hub »FACCE MACSUR« Modelling European Agriculture with Climate Change for Food Security – International REKLIM conference “Our Climate – Our Future, Regional perspectives on a global challenge” – From 06.10.2014 till 09.10.2014 – http://www.reklam.de/fileadmin/user_upload/redakteur/home/Aktuelles_und_Aktivitaeten/REKLIM_Veranstaltungen/Berlin-2014/sessions/Webversion-ges.pdf (Hub)
- Köchy, M. and Banse, M. – Food security – is climate important at all? – Impacts World 2013, International Conference on Climate Change Effects, Potsdam, Germany – From 27.05.2013 till 30.05.2013 – http://www.climate-impacts-2013.org/files/cwi_koechy.pdf (Hub)
- Köchy, M., Banse, M., Brouwer, F., Dono, G. and Gutierrez, L. – Integrated modelling of climate impacts on food and farming at regional to supranational scales – United Nations Convention to Combat Desertification 2nd Scientific Conference, Bonn, Germany – From 09.04.2013 till 12.04.2013 – http://2sc.unccd.int/fileadmin/unccd/upload/documents/Extended_Abstracts.pdf (Hub)
- Köchy, M., Wilson, A. – Introductory Presentation: Potential funding streams for LiveM – International Livestock Modelling and Research Colloquium, Bilbao, Spain – From 14.10.2014 till 16.10.2014 – <http://www.livem2014bilbao.com/archivo/ficheros/Thursday16/8-LiveM-funding-opportunities.pdf> (Hub)
- Kollas, C., Kersebaum, K.C., Bindi, M., Wu, L., Sharif, B., Öztürk, I., Trnka, M., Hlavinka, P., Nendel, C., Palosuo, T., Müller, C., Waha, K., Herrera, C., Olesen, J.E., Eitzinger, J., Roggero, P.-P., Conradt, T., Martre, P., Ferrise, R., Moriondo, M., Ramos, M., Ventrella, D., Rötter, R.P., Wegehenkel, M., Eckersten, H., Torres, I., Hernandez, C., Launay, M., Witt, A., Hoffmann, H. (2014) – Improving yield predictions by crop rotation modelling? a multi-model comparison. – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (CropM)
- Kondracka K., Nosalewicz A., Lipiec J – Abiotic stresses: drought and high temperature – 12 International Workshop for Young Scientists "BioPhys Spring 2013". Lublin, Poland – From 21.05.2013 till 23.05.2013 – <http://bps2013.ipan.lublin.pl/uploads/biopys-2013.pdf> (CropM)
- Kondracka K., Nosalewicz A., Lipiec J. – Abiotic stresses: drought and high temperature. – 12th International Workshop for Young Scientists "BioPhys Spring 2013". Lublin, Poland. – From 21.05.2013 till 23.05.2013 – <http://bps2013.ipan.lublin.pl/uploads/biopys-2013.pdf> (CropM)
- Kondracka K., Nosalewicz A., Lipiec J. – Effect of drought and heat stresses on transpiration and photosynthesis of wheat – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/182>
- Kondracka K., Nosalewicz A., Lipiec J. – Effect of heat stress and water deficit on photosynthesis. – III Conference of Young Scientists, Lublin, Poland – From 25.05.2014 till 26.05.2014 – Proceedings, p. 88-89
- König H.J. – Operationalising sustainability impact assessment of land use scenarios in developing countries: A stakeholder-based approach with case studies in China, India, Indonesia, Kenya, and Tunisia – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/228>
- Kopacz M., Twardy S. – Spatial Modeling as a Tool Supporting the Management of Catchment Area of Retention Reservoir – VII Conference on Environmental Protection and Engineering - Sustainable Development held at AGH University of Science and Technology in Krakow – From 26.06.2014 till 27.06.2014 – <http://szkola.imir.agh.edu.pl/konferencja/?n0=referaty> (LiveM/CropM)
- Korhonen P. – Intercomparison of timothy models in northern countries – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-31>
- Kozyra, J., Nieróbca, A., Borzęcka-Walker, M., Pudełko, R., Żyłowska, K., Łabędzki, L., Bąk, J., Faber, A., Krasuska, E. (2014) – Adaptation to climate change in Central Europe – needs and reality – XIII ESA congress, Debrecen, Hungary – From 25.08.2014 till 29.08.2014 – <http://www.esa2014.hu/proceedings/> (CropM)
- Kozyra, J., Nieróbca, A., Żyłowska, K. (2014) – Changes in winter wheat phenology in Poland during the years 1975-2011 – XIII ESA congress, Debrecen, Hungary – From 25.08.2014 till 29.08.2014 – <http://www.esa2014.hu/proceedings/> (CropM)
- Krzyszczak J., Baranowski P., Sławiński C – Field experiment in Lubelskie region to validate crop growth models in
- Krzyszczak J.R., Baranowski P., Sławiński C. – CO2 flux measurements in the vegetation period of winter wheat in Lubelskie province – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities,

- Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/183>
- Krzyszczak, Jaromir; Baranowski, Piotr; Sławiński, Cezary – Chamber system measurements of carbon dioxide fluxes from winter wheat field in a Lubelskie province – 6-th Ukrainian-Polish Scientific and Practical Conference "ELECTRONICS AND INFORMATION TECHNOLOGIES", Lviv-Chynadiyev, Ukraine – From 28.08.2014 till 31.08.2014 – <http://www.electronics.lnu.edu.ua/en/arkhiv-konferencii/elit-2014/main.html> (CropM)
- Kuhnert M. – Impact of climate aggregation over different scales on regional NPP modelling – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-32>
- Kurt Kersebaum M. – Simulating crop rotations and management across climatic zones in Europe – an intercomparison study using fifteen models – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-28>
- Kuźniar A., Kowalczyk A., Kostuch M. – Analysis of criteria for determination of less favored areas in the mountains. – Priorities of sustainable rural development 2014-2020 in the light of scientific research. Institute of Technology and Life Sciences at Falenty, Poland. – From 25.04.2013 till 26.04.2013 – <http://www.itep.edu.pl/konferencje/index.php?id=ko20130425> (CropM)
- Lacetera N. – Season and temperature humidity index related changes of productive and health parameters in dairy cows and pigs – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-33>
- Lacetera N., Vitali A., Bernabucci U., Nardone A. – Relationships between temperature humidity index, mortality, milk yield and composition in Italian dairy cows – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/174>
- Lamorski K., Pastuszka T., Krzyszczak J., Sławinski C., Witkowska-Walczak B. – Modelling soil water Dynamics Using the physical and soft-computing methods. – 10th International Conference on Agrophysics – From 05.06.2013 till 07.06.2013 – (CropM)
- Lamorski, K. – Application of X-ray computational microtomography and modeling for estimation of the saturated water conductivity of the porous media. – 12th International Workshop for Young Scientists "BioPhys Spring 2013". Lublin, Poland. – From 21.05.2013 till 23.05.2013 – (CropM)
- Lauwers L. – Participatory modelling for strategy design on dairy farms – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-34>
- Lazar, C. – Modelling of crop growth and development as an instrument for analysis of orientations in agricultural research in the context of climate changes (context and opinions) (In Romanian: Modelarea creșterii și dezvoltării plantelor de cultură ca instrument de analiză a direcțiilor de cercetare agricolă în contextul schimbărilor climatic) – Workshop on climate change organized by Romanian Academy of Sciences (Bucharest, Romania) – From 23.11.2012 till 23.11.2012 – (CropM)
- Lehtonen H. – Pilot study at North Savo region – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-35>
- Lehtonen H. – Sector level agricultural development following different adaptations to climate change – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-36>
- Lehtonen H.S., Kässi P., Korhonen P. et al. – Problems and opportunities in climate change adaptation in North Savo region – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/282>
- Lehtonen H.S., Kässi P., Korhonen P. et al. – Problems and opportunities in climate change adaptation in North Savo region – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/284>
- Lehtonen H.S., Kässi P., Korhonen P., Niskanen O., Rötter R., Palosuo T., Liu X., Purola T. – Specific problems and solutions in climate change adaptation in North Savo region – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/254>
- Lehtonen H.S., Liu X., Purola T., Rötter R., Palosuo T. – Farm level dynamic economic modelling of crop rotation with adaptation practices – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/244>
- Lehtonen, H., Irz, X., Kahiluoto, H., Jansik, C., Kuisma, M., Kuosmanen, N., Känkänen, H., Kässi, P., Mäkinen, H., Niskanen, O., Rimhanen, K., Sinisalo, A. – Adaptation of the food sector and socio-economic impacts of climate change in North-East Europe : Dairy sector adaptations and socio-economic implications of climate change in Finland and Leningrad Oblast in Russia (ADIOSO). In: FICCA seminar : Research programme

- on climate change. April 16th, Helsinki. MTT. 1 p. – FICCA seminar : Research programme on climate change. April 16th, Helsinki – From 16.04.2013 till 16.04.2013 – http://www.aka.fi/Tiedostot/Tiedostot/FICCA/FICCA%2016.04.2013/Posters/Adioso_poster_10_04_2013_Lehtonen.pdf (TradeM)
- Lehtonen, H., Liu, X. & Purola T. – Endogenising yield development through management and crop rotation decisions in dynamic farm level modeling. – 42. Jahrestagung der Österreichischen Gesellschaft für Agrarökonomie, Wien – From 25.09.2014 till 26.09.2014 – not yet available (TradeM)
- Lehtonen, H., R. Rötter, T. Paluso – Farm level analysis as a key to integrated regional case studies in Finland – MACSUR TradeM workshop: "Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security", The Natural Resource and Environmental Research Center (NRERC), University of Haifa, Israel – From 03.03.2013 till 05.03.2013 – <http://www.macsur.eu/> (TradeM)
- Lehtonen, H.S. – Northern Europe case: Scenarios for northern Europe and first outcomes of adaptation analysis – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – <http://www.macsur.eu/> (TradeM)
- Lellei-Kovács E., Barcza Z., Hidy D., Horváth F., Ittész D., Ittész P., Ma S., Bellocchi G. – Application of Biome-BGC MuSo in managed grassland ecosystems in the Euro-Mediterranean region – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancements', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/198>
- Lembcke, F., Lotze-Campen, H. – Säkularstation und Wetterküche / Ernährung und Klimawandel – Evangelische Grundschule Potsdam, Klasse 6 – From 19.12.2012 till 19.12.2012 –
- Lessire F. – Effects of heat stress periods on milk production, milking frequency and rumination time of grazing dairy cows milked by a mobile automatic system in 2013 – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-37>
- Liu, X., Lehtonen, H., Purola, T., Pavlova, Y. & Rötter, R. & Palosuo, T. (2014) – Dynamic economic modelling of crop rotation with adaptation practices. – 14th EAAE Congress, Ljubljana (Slovenia) – From 26.08.2014 till 2014-29-08 – (TradeM)
- Lotze-Campen, H. – Agriculture in a 4°C warmer world – A day about Future Agriculture, Ultuna/Uppsala, Sweden – From 16.10.2013 till 17.10.2013 –
- Lotze-Campen, H. – EU-level assessments and scenarios – "Climate-change impacts on farming systems in the next decades — why worry when you have CAP?" A FACCE MACSUR workshop for policymakers, Brussels – From 06.05.2015 till 06.05.2015 – <http://macsur.eu/index.php/events/macsur-workshop-for-policymakers> (TradeM)
- Lotze-Campen, H. – Panel Discussion: "A Place at the Table" – 2013 Borlaug Dialogue: Biotechnology, Sustainability and Climate Volatility, Des Moines, Iowa /USA – From 15.10.2013 till 2013-1018 –
- Lotze-Campen, H. – Sustainable land use and climate change: Monitoring, modelling, managing – Vortrag im Rahmen des Berufungsverfahrens zur Besetzung der W3-S-Professur "Nachhaltige Landnutzung und Klimawandel", Humboldt-Universität Berlin, Landw.-Gärtn. Fakultät – From 08.01.2013 till 08.01.2013 –
- Lotze-Campen, H. – Von globalen Klimawandel zu regionalen Anpassungsstrategien – Vom globalen Klimawandel zu regionalen Anpassungsstrategien, Göttingen, Germany – From 02.09.2013 till 03.09.2013 – <http://www.kliff-niedersachsen.de/vweb5-test.gwdg.de/wp-content/uploads/2012/11/P-Hermann-Lotze-Campen.pdf>
- Lotze-Campen, H. – What have we Learned from Crop-Economic Model Comparison in AgMIP – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – <http://www.macsur.eu/> (TradeM)
- Ma, S., Acutis, M., Barcza, Z., Ben Touhami, H., Doro, L., Hidy, D., Köchy, M., Minet, J., Lellei-Kovács, E., Perego, A., Rolinski, S., Ruget, F., Seddaiu, G., Wu, L., Bellocchi, G., – The grassland model intercomparison of the MACSUR (Modelling European Agriculture with Climate Change for Food Security) European knowledge hub – 7th International Congress on Environmental Modelling and Software – From 15.06.2014 till 19.06.2014 – http://www.iemss.org/sites/iemss2014/papers/Volume_4_iEMSS2014_pp_1817-2386.pdf (LiveM)
- Ma, S., Ben Touhami, H., Lellei-Kovács, E., Barcza, Z., Hidy, D., Bellocchi, G. – Grassland model intercomparison of the knowledge hub MACSUR: illustrative results from the models PaSim and Biome-BGC MuSo – XIII ESA congress, Debrecen, Hungary – From 25.08.2014 till 29.08.2014 – http://www.esa2014.hu/doc/esa2014_proceedings.pdf (LiveM)
- Maggio A. – Crop responses to soil salinization in the context of climate change – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancements', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/270>
- Manevski, K., Børgesen, C.D., Andersen, M.N., Olesen, J.E. (2014). – Maize production and nitrogen dynamics under current and warmer climate in Denmark: simulations with the DAISY model. – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (CropM)

- Mansouri M., Dumont B., Destain M.-F. – Bayesian methods for predicting LAI and soil moisture. – 11th International Conference on Precision Agriculture. Indianapolis (USA) – From 15.07.2012 till 18.07.2012 – <http://hdl.handle.net/2268/115357> (CropM)
- Mansouri, M., Dumont, B., & Destain, M.-F. (2014). – Predicting Grain Protein Content of Winter Wheat – 22nd European Symposium on Artificial Networks, Computational Intelligence and Machine Learning
- Mansouri, M., Dumont, B., & Destain, M.-F., 2014. – Bayesian methods for predicting and modelling winter wheat biomass – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – <http://hdl.handle.net/2268/162538>
- Martre P et al. – Error and uncertainty of wheat multimodel ensemble projections. – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (CropM)
- Martre P et al. – Reducing uncertainty in prediction of wheat performance under climate change – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/103> (CropM)
- McIntyre, Marie – Predicting the effects of climate change on pathogens – Workshop: Modelling interactions between climate and livestock pathogen transmission – From 22.01.2014 till 22.01.2014 – <http://www.research.pirbright.ac.uk/intent/macsur/workshop/> (LiveM)
- Mereu V., Spano D., Gallo A., Carboni G. – Climate change impacts and adaptation strategies evaluation on staple food crops in different agro-climatic zones – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/248>
- Mikhail <MiddleName>A Semenov – Heat tolerance in wheat identified as a key trait for increased yield potential in Europe under climate change – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-60>
- Milford A.B. – Achieving Emission Reduction Targets by Changing Eating Habits in Norway – Forskermøtet 2015, The 37th Annual Meeting of the Norwegian Association of Economists – From 05.01.2015 till 06.01.2015 – (TradeM)
- Milford A.B. – Sustainable food consumption as a mitigation and adaptation strategy – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/202>
- Minet J., Laloy E., Tychon B., François L. – Bayesian inference of a dynamic vegetation model for grassland – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/238>
- Minet, J., Laloy, E., Tychon, B., François, L. – Outcomes from the MACSUR grassland model inter-comparison with the model CARAIB – International Livestock Modelling and Research Colloquium, Bilbao, Spain – From 14.10.2014 till 16.10.2014 – http://www.livem2014bilbao.com/archivo/ficheros/Wednesday15/2-2014_10_14_MACSUR_LiveM_Bilbao_Minnet.pdf (LiveM)
- Minet, Julien; Tychon, Bernard; Jacquemin, Ingrid; François, Louis – Can a global dynamic vegetation model be used for both grassland and crop modeling at the local scale? – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (CropM, LiveM)
- Mingelgrin, Uri – Alternative Water Sources to Compensate For Loss of Water Availability to Agriculture due to Climate Change – TradeM International Workshop, Securing Food Using Non-Conventional Water Sources – From 24.02.2015 till 24.02.2015 – <https://drive.google.com/folderview?id=0B4oPwB7wQMT9fVTQndXY3piekVzcU9Oa1ppOV9kbUFvV3JuVmI0ZExPWUIzWFJMMGFPT2s&usp=sharing> (TradeM)
- Mittenzwei K. – Incorporating uncertainty in a deterministic agricultural sector model – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/189>
- Mittenzwei K., Hoveid Ø., Persson T., Øygarden L., Özkan Ş. – Integrated Assessment Modelling At The Regional Case Study Scale – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – (CropM)
- Mittenzwei K., Persson, T., Høglind, M, and Kværnø, S. – The importance of climate and policy uncertainty in Norwegian agriculture – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – (LiveM)
- Mitter, H., F. Sinabell, E. Schmid – Assessing climate change and policy impacts on protein crop production in Austria – Impacts World 2013, International Conference on Climate Change Effects, Potsdam, Germany – From 27.05.2013 till 30.05.2013 – http://www.climate-impacts-2013.org/files/wism_mitter.pdf (TradeM)
- Mitter, H., F. Sinabell, E. Schmid – Climate change impacts on crop supply balances in Austria. – Grenzen der Qualitätsstrategie im Agrarsektor - 41. Jahrestagung der Schweizer Gesellschaft für Agrarwirtschaft und Agrarsoziologie und 23. Jahrestagung der Österreichischen Gesellschaft für Agrarökonomie, ETH Zürich – From 12.09.2013 till 13.09.2013 – oega.boku.ac.at (TradeM)
- Mitter, H., Schönhart, M., Schmid, E. – Integrated climate change impact and adaptation assessment for the agricultural sector in Austria. – MACSUR CropM International Symposium and Workshop: Modelling

- climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 2014-0212 – (TradeM)
- Mitter, H., Sinabell, F., Schmid, E. – Integrated assessment of climate change and policy impacts of food security: a case study for protein crop supplies in Austria. – 4th Annual AgMIP Workshop, New York, USA – From 28.10.2013 till 29.10.2013 – (TradeM)
- Mitter, H., C. Heumesser, E. Schmid, 2014, – Modelling robust crop production portfolios to assess agricultural vulnerability to climate change. – EAAE 2014 Congress "Agri-Food and Rural Innovations for Healthier Societies". August 26 to 29, 2014, Ljubljana, Slovenia – From 26.08.2014 till 29.08.2014 – (TradeM)
- Modelling European Agriculture with Climate Change for Food Security – From 15.10.2012 till 16.10.2012 – (TradeM)
- Modelling European Agriculture with Climate Change for Food Security – From 15.10.2012 till 16.10.2012 – <http://macsur.eu/index.php/internal-documents/func-startdown/112/> (TradeM)
- Mueller C. – A crop modeling response to economists' wishlists – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/234>
- Müller C – Climate change impacts, uncertainties and implications – First Workshop Expert Network "Management of Climate change induced Risks", Hamburg, Germany – From 20.03.2013 till 21.03.2013 – (CropM)
- Müller C – Impacts of Climate Change and Agricultural Modeling – Capacity Building Workshop for Regional Scientists Turn Down the Heat III: Regional Analysis (MNA/LAC/ECA), The Case for Resilience, Potsdam, Germany – From 11.03.2014 till 13.03.2014 – (CropM)
- Müller C – Multi-sector interaction in climate change impact analysis – Impacts World 2013, International Conference on Climate Change Effects, Potsdam, Germany – From 27.05.2013 till 30.05.2013 – (CropM)
- Müller C, Elliott J – AgMIP's Global Gridded Crop Model Intercomparison – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (CropM)
- Müller C, Elliott J – The Global Gridded Crop Model Intercomparison - Approaches, insights and caveats of modeling climate change impacts on agriculture at the global scale – FAO expert consultation on climate change and trade, Rome, Italy – From 05.11.2013 till 06.11.2013 – (CropM)
- Müller C, Elliott J – The Global Gridded Crop Model Intercomparison Project – 4th Annual AgMIP Workshop, New York, USA – From 28.10.2013 till 30.10.2013 – (CropM)
- Müller C, Stehfest E, van Minnen J, Strengers B, von Bloh W, Beusen A, Schaphoff S, Kram T, Lucht W – Reversal of the land biosphere carbon balance under climate and land-use change – European Geosciences Union General Assembly 2013, Vienna, Austria – From 07.04.2013 till 12.04.2013 – (CropM)
- Nendel, C., F. Ewert, R.P. Rötter, C. Rosenzweig, J.W. Jones, J.L. Hatfield, S. Asseng, A.C. Ruane, M. Banse, R. Tiffin, F. Brouwer, F. Sinabell, N. Scollan, J. Meijs, C. Angulo, J.M. Antle, G. Baigorria, B. Basso, M. Bindi, K.J. Boote, T. Gaiser, S. Janssen, K.C. Kersebaum, G. Nelson, J.E. Olesen, T. Palosuo, C.H. Porter, J.R. Porter, M. Rivington, M. Semenov, D. Stewart, P. Thorburn, M. Trnka, M.K. van Ittersum, J. Verhagen, D. Wallach and J.M. Winter – Addressing challenges and uncertainties for the use of agro-ecosystem models to assess climate change impact and food security across scales. – Climate Change and Regional Responses Conference, Dresden – From 27.05.2013 till 27.05.2013 – http://www.regklam.de/fileadmin/ccrr-2013/abstracts/1a_CCRR2013_abstract_Nendel.pdf (CropM)
- Nendel, C., R. Wieland, W. Mirschel, X. Specka and K.C. Kersebaum – Die Simulation von Winterweizenerträgen in Thüringen unter Verwendung von meteorologischen Daten unterschiedlicher räumlicher Auflösung. – 33. GIL-Jahrestagung in Potsdam 2013 - Massendatenmanagement in der Agrar- und Ernährungswirtschaft – From 21.02.2013 till 21.02.2013 – http://www.gil-net.de/Publikationen/25_231-234.pdf (CropM)
- Nendel, C., R. Wieland, W. Mirschel, X. Specka and K.C. Kersebaum – The simulation of winter wheat yields in Thuringia, Germany, using meteorological data with different spatial resolution. – 12th Congress of the European Society for Agronomy Helsinki, Finland – From 21.08.2012 till 21.08.2012 – <http://hdl.handle.net/10138/36048> (CropM)
- Nguyen T.P.L., Seddaiu G., Tidore C., Roggero P.P. – Adaptation to climate change of Italian agricultural systems: the analysis of explorative scenarios. – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/263>
- Nieróbca, A., Kozyra, J., Doroszewski, A., Żyłowska, K. – The agro-meteorological model for yields of winter triticale. – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 –
- Nikolic, U., Mitter, H., E. Schmid, F. Sinabell – Stand und Perspektiven des Sojaanbaues in Serbien (situation and outlook of soy bean production in Serbia) – 42. Jahrestagung der Österreichischen Gesellschaft für Agrarökonomie, Wien – From 25.09.2014 till 26.09.2014 – oega.boku.ac.at (TradeM)
- Nosalewicz A. – The effect of combination of drought and heat stresses on plant transpiration and photosynthesis – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-41>

- Nosalewicz A., Kondracka K., Lipiec J., – The effect of combination of drought and heat stresses on plant transpiration and photosynthesis – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – (TradeM)
- Oijen M.V. – Methods for risk analysis and spatial upscaling of process-based models: Experiences from projects Carbo-Extreme and GREENHOUSE – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-69>
- Olesen J.E., Jabloun M., Schelde K. – Reconciling estimates of climate change effects on nitrate leaching from agricultural crops – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/246>
- Olesen J.E., Porter J.R., Christensen J.H. – Centre for Regional change in the Earth System – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/194>
- Olesen J.E., Vignjevic M., Wollenweber B. – Modelling adaptation of wheat cultivar to increasing temperatures and heat stress – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/247>
- Øygarden L., Höglind M., Harstad O.M., Hoveid Ø. (2013 – Modelling European Agriculture with Climate change for food security. – Bioforsk conference 2013. Proceedings in; Bioforsk Fokus Vol. 8 Nr 2. 2013. pp 372-374. Editors; Erling Fløistad & Morten Gunther. 390 pp. ISBN 978-82-17-00998-6. – From 06.02.2013 till 07.02.2013 – <http://www.bioforsk.no/ikbViewer/Content/102141/Bioforskkonferansen%202013.pdf> (CropM)
- Øygarden, L – MACSUR- a knowledge Hub – National Conference- Research Council Norway- about JPI- FACCE.Oslo, Norway. – From 25.09.2014 till 25.09.2014 – (Hub)
- Özkan Ş., Bonesmo H., Østerås O., Harstad O.M. – Effect of Increased Somatic Cell Count and Replacement Rate on Greenhouse Gas Emissions in Norwegian Dairy Herds – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/172>
- Özkan Ş., Østergaard S., Strøm T. – Modelling The Impact Of Diseases On Greenhouse Gas Emissions In Dairy Cows. – Animal Health & Greenhouse Gas Emissions Intensity Network 2nd meeting, Montpellier, France – From 15.03.2015 till 15.03.2015 – (LiveM)
- Özkan Ş., Østergaard S., Strøm T. – The Relationship Between Level Of Somatic Cell Count And Greenhouse Gas Emissions – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/124> (CropM)
- Özkan Ş., Vosough Ahmadi B., Bonesmo H., Østerås O., Stott A., Harstad O.M. – The Relationship Between Subclinical Mastitis And Emissions In Dairy Cows – Animal Health & Greenhouse Gas Emissions Intensity Network Regional Meeting, Addis Abeba, Ethiopia – From 05.11.2014 till 05.11.2014 – (LiveM)
- Özkan, Şeyda; Ahmadi, Bouda Vosough; Bonesmo, Helge Sverre; Østerås, Olav; Stott, Alistair; Harstad, Odd Magne – Environmental impacts and economics of high somatic cell count in Norwegian dairy herds – NJF seminar 476: Economics of Animal Health and Welfare – From 02.10.2014 till 03.10.2014 – (LiveM)
- Özkan, Şeyda; Ahmadi, Bouda Vosough; Bonesmo, Helge Sverre; Østerås, Olav; Stott, Alistair; Harstad, Odd Magne – Impact of animal health on greenhouse gas emissions in Norwegian dairying – International Livestock Modelling and Research Colloquium, Bilbao, Spain – From 14.10.2014 till 16.10.2014 – http://www.livem2014bilbao.com/archivo/ficheros/Thursday16/6-ozkan_bilbao.pdf (LiveM)
- Özkan, Şeyda; Bonesmo, Helge Sverre; Harstad, Odd Magne. – Greenhouse gas emissions and mitigation potential of Norwegian dairy sector – Scaling in global, regional and farm models – From 24.09.2014 till 24.09.2014 – http://franz.sinabell.wifo.ac.at/macsur/final/Seyda_Ozkan_Macsur_Vienna_Workshop_24-9-2014_final.pdf (LiveM)
- Palatnik R, Baum Z., Kan I., and Rappaport-Rom M – The Impact Of Climate Change On Agriculture And A Water Economy With A Diverse Mix Of Water Types - The Israeli Case Study – Western Economic Association International 89th Annual Conference – From 27.06.2014 till 01.07.2014 – <http://www.weai.org/AC2014> (TradeM)
- Palatnik R, Baum Z., Kan I., and Rappaport-Rom M – The Impact Of Climate Change On Agriculture And A Water Economy With A Diverse Mix Of Water Types - The Israeli Case Study – World Congress of Environmental and Resource Economists 2014- WCERE2014 – From 28.06.2014 till 02.07.2014 – <http://www.wcere2014.org/en/> (TradeM)
- Palatnik R. R. – Assessing The Impact Of Climate Change On Agriculture And A Water Economy With A Diverse Mix Of Water Types - The Israeli Case Study – Western Economic Association International 89th Annual Conference, Denver, USA – From June 27, 2014 till July 1, 2014 – (TradeM)
- Palatnik R. R. – Assessing the Impact of Climate Change on the Israeli Water Economy via a Linked CGE and Farm-Level Model – MACSUR TradeM workshop: "Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security", The Natural Resource and Environmental Research Center (NRERC), University of Haifa, Israel – From 03.03.2013 till 05.03.2013 – <http://www.macsur.eu/> (TradeM)

- Palatnik R. R. – Economic Impacts Of Water Scarcity Under Diverse Water Salinities – Annual Conference of the European Association of Environmental and Resource Economists EAERE 21, Helsinki, Finland – From 24.06.2015 till 27.06.2015 – <http://www.webmeets.com/eaere/2015/prog/viewpaper.asp?pid=267> (TradeM)
- Palatnik R. R. – Economic Impacts Of Water Scarcity Under Diverse Water Salinities – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/viewFile/171/142> (LiveM)
- Palatnik R. R. – Economic Impacts Of Water Scarcity Under Diverse Water Salinities – TradeM International Workshop, Securing Food Using Non-Conventional Water Sources – From 24.02.2015 till 24.02.2015 – <https://drive.google.com/folderview?id=0B4oPwB7wQMT9fVTQndXY3piekVzcU9Oa1ppOV9kbUfV3JuVml0ZExPWUizWFJMMGFPT2s&usp=sharing> (TradeM)
- Palosuo, T., Rötter, R.P., Lehtonen, H., Virkajärvi, P. & Salo, T. – How to assess climate change impacts on farmers' crop yields? 327-334. – Impacts World 2013, International Conference on Climate Change Effects, Potsdam, Germany – From 27.05.2013 till 30.05.2013 – <http://dx.doi.org/10.2312/pik.2013.001>
- Pasqui M., Quaresima S., Tomozeiu R., Dono G., Doro L., Cortignani R., Ledda L., Roggero P.P. – A comprehensive climate characterization of the Oristano (Sardinia) regional pilot case study. – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/265>
- Perego, A., Sanna, M., Bellocchi, G., Acutis – Simulazione di flussi di carbonio da ecosistemi pratensi: applicazione del modello colturale ARMOSA al sito di Laqueuille (Francia) – XLIII Congress of the Italian Society for Agronomy – From 17.09.2014 till 19.09.2014 – (LiveM)
- Persson T, Höglind M, Gustavsson AM, Halling M, Jauhianen L, Niemeläinen O, Torvaldsson G, Virkajärvi P. – Evaluation of the BASGRA timothy model under Nordic conditions. – NJF Seminar 455 Nordic Forage Model Applications- predicting forage yield and quality in a variable and changing climate, Forssa, Finland, NJF Report Vol. 9 No. 1 2013, p 4-5. – From 30.01.2013 till 31.01.2013 – (CropM)
- Persson T, Höglind, M. – Assessment of harvest security of timothy under climate change condition using a set of simple criteria. – Proceedings of the 22nd International Grasslands Congress, Sydney, Australia – From 15.09.2013 till 19.09.2013 – <http://csa2015.cirad.fr/program> (CropM)
- Persson T., Kværnø S. – Impact of soil properties regionalization methods on regional wheat yield in southeastern Norway. – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (CropM)
- Persson T., Kværnø S., Höglind M. – Determining the impact of soil regionalization and climate change on wheat and timothy grass yield in southeastern Norway – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/239>
- Persson T., Kværnø S., Höglind M. – Impact of soil properties regionalization procedures on regional timothy dry matter yield and variability in southeastern Norway. – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (CropM)
- Persson, T., Kværnø, S., Riley, H., Höglind, M., Øygarden, L. – Determining the variability in optimal sowing date of spring cereals in South Eastern Norway – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – (TradeM)
- Piayda A. – The FACCE-ERA-Net Plus project "Climate smart Agriculture on Organic Soils" (CAOS) – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-44>
- Piotr Baranowski, Jaromir Krzyszczak, Cezary Sławiński – Multifractal analysis of chosen meteorological time series to assess climate impact in field level – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – http://www.macsur.eu/images/eventlist/meeting_docs/CropM_Oslo_Symposium_Abstract_Book.pdf (CropM)
- Pirttioja N et al. – Examining wheat yield sensitivity to temperature and precipitation changes for a large ensemble of crop models using impact response surfaces. – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (CropM)
- Pirttioja, N., S. Fronzek, R.P. Rötter and T.R. Carter – Probabilistic assessment of crop adaptation options under a changing climate – Second Nordic International Conference on Climate Change Adaptation – From 29.08.2012 till 30.08.2012 – NORDCLAD-Net/NONAM, Adaptation Research meets Adaptation Decision-Making: Programme and Abstracts of the Second Nordic International Conference on Climate Change Adaptation. Nordic climate change adaptation research network (NORDCLAD-Net) and Nordic network on adaptive management in relation to climate change (NONAM), Helsinki, Finland, p. 50. (CropM)
- Pirttioja, N., S. Fronzek, R.P. Rötter and T.R. Carter – Simulating Adaptive Management Using Impact Models in a Risk Framework – Adaptation Futures. Tucson, AZ, USA – From 29.05.2012 till 31.05.2012 – https://elsevier.conference-services.net/resources/247/2898/pdf/CLAD2012_0613.pdf (CropM)

- Pirttioja, Nina; Timothy R. Carter, Stefan Fronzek, Marco Bindi, Holger Hoffmann, Taru Palosuo, Margarita Ruiz-Ramos, Fulu Tao, Miroslav Trnka, Marco Acutis, Senthold Asseng, Piotr Baranowski, Bruno Basso, Per Bodin, Samuel Buis, Davide Cammarano, Paola Deligios, Marie-France Destain, Benjamin Dumont, Frank Ewert, Roberto Ferrise, Louis François, Thomas Gaiser, Petr Hlavinka, Ingrid Jacquemin, Kurt Christian Kersebaum, Chris Kollas, Jaromir Krzyszczak, Ignacio J. Lorite, Julien Minet, M. Ines Minguez, Manuel Montesino, Marco Moriondo, Christoph Müller, Claas Nendel, Isik Öztürk, Alessia Perego, Alfredo Rodríguez, Alex C. Ruane, Françoise Ruget, Mattia Sanna, Mikhail A. Semenov, Cezary Slawinski, Pierre Stratonovitch, Iwan Supit, Katharina Waha, Enli Wang, Lianhai Wu, Zhigan Zhao, Reimund P. Rötter – A crop model ensemble analysis of wheat yield sensitivity to changes in temperature and precipitation across a European transect – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/176> (CropM)
- Potopová V. – Observed and simulated growth, development and yield of field-grown tomato in the Elbe lowland, the Czech Republic – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-47>
- Powell J. – Productivity Implications of Extreme Precipitation Events: the case of Dutch Wheat Farmers – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-48>
- Quaranta G., Salvia R. – Using indicators to inform agricultural decision making – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/273>
- Rasche L., Sos Del Diego R. – How does a crop model calibrated to national yield data perform on the field scale? – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/245>
- Reidsma, P. J. Wolf, A. Kanellopoulos, B. F. Schaap, M. Mandryk, J. Verhagen, M. K. van Ittersum – Climate change impact and adaptation research requires integrated assessment and farming systems analysis: a case study in the Netherlands – Agriculture and Climate Change Conference 2015. Adapting Crops to Increased Uncertainty – From 15.02.2015 till 17.02.2017 – (CropM)
- Reidsma, P., M.M. Bakker, A. Kanellopoulos, S.J. Alam, W. Paas, J. Kros, W. de Vries – Assessing changes in farm management and farm structural change and impacts on sustainable development in a rural area in the Netherlands – 5th International Symposium for Farming Systems Design. Montpellier – From 07.09.2015 till 09.09.2015 – (CropM)
- Reidsma, P., M.M. Bakker, A. Kanellopoulos, S.J. Alam, W. Paas, J. Kros, W. de Vries – Impacts of climate and socio-economic change at farm and landscape level in the Netherlands: climate smart agriculture? – Climate-smart agriculture 2015. Global Science Conference. Montpellier, France – From 15.03.2015 till 18.03.2015 – <http://csa2015.cirad.fr/program> (CropM)
- Rivington M. – AgriMod - The Agricultural Modelling Knowledge Hub – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-49>
- Rivington M. – Agrimod: The Agricultural Modelling Knowledge Hub Website – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/268>
- Rocca A., Bellocchi G., Giussani A., Sanna M., Perego A., Fumagalli M., Carozzi M., Chiodini M., Bregaglio S., Confalonieri R., Acutis M. – Correlation between evaluation model indicators. – XVI National congress of Agrometeorology. Firenze, Italy – From 04.06.2013 till 06.06.2013 – (CropM)
- Rodríguez-Carretero M.T., Lorite I.J., Ruiz-Ramos M., Dosio A., Gómez J.A. – Impact of climate change on water balance components in Mediterranean rainfed olive orchards under tillage or cover crop soil management – European GeoSciences Union (EGU), General Assembly 2013 – From 07.04.2013 till 12.04.2013 – <http://www.egu2013.eu/> (CropM)
- Roggero P.P., Pulina A., Baldoni G. et al. – IC-FAR: Linking Long Term Observatories with Crop Systems Modeling For a better understanding of Climate Change Impact, and Adaptation Strategies for Italian Cropping Systems – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/256>
- Roggero P.P., Seddaiu G., Ledda L. et al. – Combining modeling and stakeholder involvement to build community adaptive responses to climate change in a Mediterranean agricultural district – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/278>
- Roggero, PP. – Oristano, Sardinia, Italy – "Climate-change impacts on farming systems in the next decades — why worry when you have CAP?" A FACCE MACSUR workshop for policymakers, Brussels – From 06.05.2015 till 06.05.2015 – <http://macsur.eu/index.php/events/macsur-workshop-for-policymakers> (CropM)
- Rolinski S., Weindl I., Heinke J., Bodirsky B.L., Biewald A., Lotze-Campen H. – Environmental impacts of grassland management and livestock production – FACCE MACSUR Mid-Term Scientific Conference

- 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/229>
- Rolinski, S., J. Heinke, and I. Weindl – Grazing effects on grassland productivity - Linking livestock production to grass yields – Livestock, Climate Change and Food Security, Madrid, Spain – From 19.05.2014 till 20.05.2014 – http://animalchange.files.wordpress.com/2014/05/abstracts_book_madrid.pdf (LiveM)
- Rolinski, S., J. Heinke, and I. Weindl – Modelling the effects of grassland management on the carbon cycle – EGU 2014, Vienna – From 28.04.2014 till 02.05.2014 – <http://meetingorganizer.copernicus.org/EGU2014/EGU2014-13309.pdf> (LiveM)
- Rötter R. – Crop yield variance and yield gap analysis for evaluating technological innovations under climate change: the case of Finnish barley – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-50>
- Rötter R.P. – Cross-cutting uncertainties in MACSUR impact projections – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/205>
- Rötter RP et al. – Uncertainties in modelling impacts of climate change and variability on crop production – focus on Europea-led efforts in FACCE MACSUR. – FAO expert consultation on climate change and trade, Rome, Italy – From 05.11.2013 till 06.11.2013 – (CropM)
- Rötter, R. – Improving capacity of current crop models for simulating impacts of climatic extremes – ISI-MIP side event at the Impacts World 2013, International Conference on Climate Change Effects, Potsdam – From 27.05.2013 till 30.05.2013 – http://www.macsur.eu/images/ISI-MIP_27_May_2013_CSM_Extremesfin-select_RPR.pdf (CropM)
- Rötter, R.P., F. Ewert, T. Palosuo, M. Bindi, K.C. Kersebaum, J.E. Olesen, M. Trnka, M.K. van Ittersum, S. Janssen, M. Rivington, M. Semenov, D. Wallach, J.R. Porter, D. Stewart, J. Verhagen, C. Angulo, T. Gaiser, C. Nendel, P. Martre, A. de Wit – Challenges for Agro-Ecosystem Modelling in Climate Change Risk Assessment for major European Crops and Farming systems – Impacts World 2013, International Conference on Climate Change Effects, Potsdam, Germany – From 27.05.2013 till 30.05.2013 – http://www.climate-impacts-2013.org/files/wism_roetter_1.pdf
- Rötter, R.P., Höhn, J. – Climate change impacts on crop production and its variability in Europe: an overview. – FAO expert consultation on climate change and trade, Rome, Italy – From 05.11.2013 till 06.11.2013 –
- Rötter, R.P., Höhn, J. & Fronzek, S. – Projections of climate change impacts on crop production – a global and a Nordic perspective. – Agriculture and greenhouse gases, NJF (Association of Nordic Agronomists) seminar 453. Oslo, Norway – From 05.11.2012 till 06.11.2012 – <http://www.njf.no/site/seminarRedirect.asp?p=1004&intSeminarID=453&strSemInfoType=pro> (CropM)
- Rötter, R.P., Palosuo, T., Semenov, M., Ruiz-Ramos, M., Tao, F., Fronzek, S., Pirttioja, N.K., Bindi, M., Carter, T.R., Hoffmann, H., Höhn, J., Kersebaum, K.C., Trnka, M. – Designing new cereal cultivars as an adaptation measure using crop model ensembles. – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (CropM)
- Rötter, RP et al (2014) – Examining wheat yield sensitivity to temperature and precipitation changes in Europe for a large crop model ensemble using impact response surfaces – International MACSUR/CropM PhD course, 11-13 November 2014, University of Florence, Italy – From 13.11.2014 till 13.11.2014 – (c)
- Ruiz-Ramos M, Ferrise R., RodríguezA., Mínguez M.I., Lorite I.J., 3, Tao F., Pirttioja N., Fronzek S., Palosuo T., 4, Carter T.C., Bindi M., Höhn J.G., Kersebaum K.C., Trnka M., Hoffmann H., Rötter R.P., 2015. – Simulating wheat adaptation to climate change in Europe using an ensemble approach with impact response surfaces – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/127> (CropM)
- Ruiz-Ramos M., 2015 – Les modèles de culture face au changement climatique : les enjeux des projets nationaux, européens et internationaux – Xe Colloque STICS. March 24-26, Rennes, France – From 24.03.2015 till 26.04.2015 – <https://colloque.inra.fr/stics2015/Programme> (CropM)
- Ruiz-Ramos M., Pérez-Lopez D., Sánchez-Sánchez E., Centeno A., Dosio A., Rodríguez A. – Improving modelled impacts on the flowering of temperate fruit trees in the Iberian Peninsula of climate change projections for 21st century – European GeoSciences Union (EGU), General Assembly 2013 – From 07.04.2013 till 12.04.2013 – <http://www.egu2013.eu/> (CropM)
- Ruiz-Ramos M., Rodríguez A., Dosio A., Goodess C., Harpham C., Mínguez M.I., Sánchez-Sánchez E., 2013. – Improving crop simulations by bias reduction of RCM climate change projections: Evaluation on the present climate. – International Conference On Regional Climate - CORDEX 2013 A partnership between WCRP, the European Commission and IPCC 4th-7th. November 2013, Brussels, Belgium – From 04.11.2013 till 07.11.2013 – <http://cordex2013.wcrp-climate.org/> (CropM)
- Rusu T. – Impact of Climate Change on Crop Land and Technological Recommendations for the Main Crops in Transylvanian Plain, Romania – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/187>

- Rusu T. – Impacts of Climate Change on Agricultural Technology Management in the Transylvanian Plain, Romania – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-52>
- Saetnan E. – Are we building a better connected community? – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-53>
- Saetnan E.R., Veneman J.B. – MitiGate: an On-line Meta-Analysis Database of Mitigation Strategies for Enteric Methane Emissions – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/204>
- Saetnan, E. – State of Affairs in LiveM – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – <http://www.macsur.eu/> (TradeM, LiveM)
- Saetnan, E., Kipling, R.P., Scollan, N.D., Bartley, D., Bellocchi, G., Hutchings, N.J., Dalgaard, T., van den Polvan Dasselaar, A. – MACSUR LiveM – a knowledge-hub for integrated modelling of climate change impacts on livestock production systems: lessons learned and future developments – Livestock, Climate Change and Food Security, Madrid, Spain – From 19.05.2014 till 20.05.2014 – (LiveM)
- Salamon, P., Banse, M., Köchy, M. – MACSUR: Modelling European Agriculture with Climate Change for Food Security – 23rd World Outlook Conference, Seville, Spain – From 12.05.2014 till 13.05.2014 – (Hub)
- Sandars D.L., Audsley E., Holman I. – Predicting the optimum land use at any location for any future scenario (CLIMSAVE/IMPRESSIONS) – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/276>
- Sandars D.L., Audsley E., Holman I. – Understanding Europe's future ability to feed itself within an uncertain climate change and socio-economic space – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/165> (CropM)
- Sandars, D.L., Audsley, E. – Optimal Land-use Future Scenarios Nordic Area – TradeM International Workshop 2014 »Economics of integrated assessment approaches for agriculture and the food sector«, Hurdalsjøen, Norway – From 25.11.2014 till 27.11.2014 – <http://ojs.macsur.eu/index.php/Reports/article/viewFile/SP4-14/75> (Trade M)
- Sándor, R., Ma, S., Acutis, M., Barcza, Z., Ben Touhami, H., Doro, L., Hidy, D., Köchy, M., Lellei-Kovács, E., Minet, J., Perego, A., Rolinski, S., Ruget, F., Seddaiu, G., Wu, L., Bellocchi, G. – Uncertainty in simulating biomass yield and carbon-water fluxes from Euro-Mediterranean grasslands under climate changes – International Livestock Modelling and Research Colloquium, Bilbao, Spain – From 14.10.2014 till 16.10.2014 – <http://www.livem2014bilbao.com/archivo/ficheros/Wednesday15/3-Uncertainty%20in%20simulating%20biomass%20yield%20and%20carbon-water%20fluxes%20from%20Euro-Mediterranean%20grasslands%20under%20climate%20changes.pdf> (LiveM)
- Sándor, R., Ma, S., Acutis, M., Barcza, Z., Doro, L., Hidy, D., Köchy, M., Minet, J., Lellei-Kovács, E., Perego, A., Rolinski, S., Ruget, F., Seddaiu, G., Wu, L., Bellocchi, G. – Sensitivity and uncertainty analysis of grassland models in Europe and Israel – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – (LiveM)
- Sanna M., Acutis M., Bellocchi G. – Interrelationship between evaluation metrics to assess agro-ecological models – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/203>
- Sanz-Cobena A. – Ammonia and nitrous oxide emissions from grazing cattle in Kenya – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-56>
- Schaap, B. P. Reidsma, J. Verhagen – Agro Climate Calendar, a simple methodology to identify local adaptation for farm objectives – Climate-smart agriculture 2015. Global Science Conference. Montpellier, France – From 15.03.2015 till 18.03.2015 – <http://csa2015.cirad.fr/program> (CropM)
- Schechter, M. – Welcome Address of the Founder and Distinguished Chair of Natural Resource and Environmental Research Center – MACSUR TradeM workshop: "Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security", The Natural Resource and Environmental Research Center (NRERC), University of Haifa, Israel – From 03.03.2013 till 05.03.2013 – <http://www.macsur.eu/> (TradeM)
- Schils R, Kersebaum KC, Nieróbca A, Żyłowska K, Boogaard H, De Groot H, Rijk B, Van Bussel L, Wolf J and Van Ittersum M – Global Yield Gap Atlas; cereals in Europe – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – (LiveM)
- Schils R, Kersebaum KC, Nieróbca A, Żyłowska K, Boogaard H, De Groot H, Rijk B, Van Bussel L, Wolf J and Van Ittersum M – Global Yield Gap Atlas; cereals in Europe – XIII ESA congress, Debrecen, Hungary – From 25.08.2014 till 29.08.2018 – (CropM)

- Schils R, Kersebaum KC, Nieróbca A, Żyłowska K, Boogaard H, De Groot H, Van Bussel L, Wolf J and Van Ittersum M, – Yield gap analysis of cereals in Europe supported by local knowledge, – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – http://www.macsur.eu/images/eventlist/meeting_docs/CropM_Oslo_Symposium_Abstract_Book.pdf (CropM)
- Schmitz, A. Biewald, H. Lotze-Campen – Interactions between agricultural trade liberalisation and the environment - An analysis with a global land use model – MACSUR TradeM workshop: "Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security", The Natural Resource and Environmental Research Center (NRERC), University of Haifa, Israel – From 03.03.2013 till 05.03.2013 – <http://www.macsur.eu/> (TradeM)
- Schneider U. – Land use science in the 21st century – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/281>
- Schönhart M. – Regional Pilot Case Study: Mostviertal – AT, upcoming project phase – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/285>
- Schönhart M. – Spillovers between MACSUR and Austrian climate change research projects – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/213>
- Schönhart M. – Uncertainty analysis and management in the regional pilot case study 'Mostviertel region' – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/216>
- Schönhart M., Nadeem, I. – Direct climate change impacts on cattle in Austria indicated by THI-models – International Livestock Modelling and Research Colloquium, Bilbao, Spain – From 14.10.2014 till 16.10.2014 – <http://www.livem2014bilbao.com/> (LiveM)
- Schönhart M., Schauppenlehner T., Schmid E. – Integrated land use modelling of climate change impacts – preliminary results from two Austrian case study landscapes – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/212>
- Schönhart M., Schauppenlehner T., Schmid E. – Integrated Land Use modelling of climate change impacts in two Austrian case study landscapes at field level – 14th EAAE Congress, Ljubljana (Slovenia) – From 26.08.2014 till 29.08.2014 – <http://www.eaae2014.si/> (TradeM)
- Schönhart M., Schauppenlehner T., Schmid E., Sinabell F. – Regional Pilot Case Study Mostviertel – AT: Preliminary Results – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/286>
- Schönhart, M., Dono, G., Hoveid, Ø., Lehtonen, H., Zander, P. – Analysis of climate change adaptation with bio-economic farm models: lessons from MACSUR regional pilot studies – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – (CropM)
- Schönhart, M., E. Schmid, F. Sinabell – Das Mostviertel - die Fallstudie im Projekt MACSUR TradeM (The Mostviertel Region - the Austrian Regional Pilot Study in MACSUR - TradeM) – TradeM Stakeholder Workshop Vienna – From 24.03.2014 till 24.03.2014 – (TradeM)
- Schönhart, M., Koland, O., Schmid, E. – Linking bio-physical, bottom-up and top-down economic models to analyze climate change impacts and adaptation on Austrian agriculture. – MACSUR TradeM workshop: "Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security", The Natural Resource and Environmental Research Center (NRERC), University of Haifa, Israel – From 03.03.2013 till 05.03.2013 – <http://www.macsur.eu/> (TradeM)
- Schönhart, M., Kuttner, M., Schauppenlehner, T., Schmid, E. – Integrated impact analysis of agricultural adaptation and mitigation measures on landscape appearance and biodiversity. – Grenzen der Qualitätsstrategie im Agrarsektor - 41. Jahrestagung der Schweizer Gesellschaft für Agrarwirtschaft und Agrarsoziologie und 23. Jahrestagung der Österreichischen Gesellschaft für Agrarökonomie, ETH Zürich – From 12.09.2013 till 14.09.2013 – (TradeM)
- Schönhart, M., Mitter, H., Schmid, E., Heinrich, G., Gobiet, A. – An integrated analysis on Austrian agriculture - Climate change impacts and adaptation measures. – 4th Annual AgMIP Workshop, New York, USA – From 28.10.2013 till 29.10.2013 – (TradeM)
- Schönhart, M., Schauppenlehner, T., Kuttner, M., Kirchner, M., Schmid, E. – Integrated Assessment of Climate Change Mitigation and Adaptation Impacts at Field and Farm level in the Austrian Mostviertel Region. – TradeM International Workshop 2014 »Economics of integrated assessment approaches for agriculture and the food sector«, Hurdalsjøen, Norway – From 25.11.2014 till 27.11.2014 – (TradeM)
- Schönhart, M., Schauppenlehner, T., Kuttner, M., Kirchner, M., Schmid, E. – Integrated Assessment of Climate Change Mitigation and Adaptation Impacts at Landscape level in the Austrian Mostviertel Region – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 08.04.2015 – (TradeM)

- Schönhart, M., Schauppenlehner, T., Kuttner, M., Kirchner, M., Schmid, E. – Integrated Assessment of Climate Change Mitigation and Adaptation Impacts at Landscape level: Mostviertel, Austria – "Climate-change impacts on farming systems in the next decades — why worry when you have CAP?" A FACCE MACSUR workshop for policymakers, Brussels – From 06.05.2015 till 08.05.2015 – (TradeM)
- Schönhart, M., Schmid, E., Sinabell, F. – Integrated analysis of climate change adaptation and rural development in an Austrian case study region. – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – (TradeM)
- Schönhart, M., T. Schauppenlehner, E. Schmid, 2014, – Integrated Land use modelling of climate change impact in two Austrian case study landscapes at field level. – EAAE 2014 Congress "Agri-Food and Rural Innovations for Healthier Societies". August 26 to 29, 2014, Ljubljana, Slovenia – From 26.08.2014 till 29.08.2014 – (TradeM)
- Seifried, A., F. Sinabell, H. Mitter, E. Schmid, 2014, – Analysing stochastic dominance of soybean and maize production in Austria. – Lebensmittelversorgung, Lebensmittelsicherheit und Ernährungssouveränität Food security, safety and sovereignty, 24. Jahrestagung der Österreichischen Gesellschaft für Agrarökonomie, Wien – From 25.09.2014 till 26.09.2014 – (TradeM)
- Semenov MA – Delivering local-scale CMIP5-based climate scenarios for impact assessment in Europe. – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (CropM)
- Semenov MA (2013) – Modelling predicts that heat stress, not drought, will increase vulnerability of wheat in Europe. – InterDrought IV, Perth, Western Australia – From 02.09.2013 till 06.09.2013 – (CropM)
- Semenov MA & Pilkington-Bennett S – Validation of ELPIS baseline scenarios using ECA&D observed data. Geophysical Research Abstracts, vol. 14, EGU 2012-4151-2, – EGU General Assembly 2012 – From 22.04.2012 till 27.04.2012 – <http://www.egu2012.eu> (CropM)
- Semenov MA & Stratonovitch P (2012) – Application of evolutionary algorithms for model calibration. – Genetic and Evolutionary Computation Conference (GECCO 2012), Philadelphia, USA. – From 07.07.2012 till 11.07.2012 – (CropM)
- Semenov MA, Stratonovitch P (2013) – ELPIS: delivering local-scale climate scenarios for impact assessments. Impacts World 2013 – Impacts World 2013, International Conference on Climate Change Effects, Potsdam, Germany – From 27.05.2013 till 30.05.2013 –
- Semenov MA, Stratonovitch P (2014) – Adapting wheat for uncertain future. – XIII ESA congress, Debrecen, Hungary – From 25.08.2014 till 29.08.2018 – (CropM)
- Sharif B. – Inter-comparison of statistical models for projecting winter oilseed rape yield in Europe under climate change – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-61>
- Sharif B., Olesen J.E., Schelde K. – Statistical learning approach for modelling the effects of climate change on oilseed rape yield – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancements', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/223>
- Sharif, B., Olesen, J.E. – Effects of tillage, fertilizer and residue management on crop growth dynamics in winter wheat at Foulum, Denmark. – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (CropM)
- Sharif, B., Olesen, J.E. – Probabilistic assessment of agroclimatic effects on winter rapeseed yield in Denmark. – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (CropM)
- Shechter M. – Assessing The Impact Of Climate Change On Agriculture And A Water Economy With A Diverse Mix Of Water Types - The Israeli Case Study – World Congress of Environmental and Resource Economists 2014- WCERE2014, Istanbul, Turkey – From June 28, 2014 till July 2, 2014 – <http://www.webmeets.com/wcere/2014/prog/viewpaper.asp?pid=1543> (TradeM)
- Shrestha S, B Vosough Ahmadi, S Thomson and A Barnes – An assessment of the post 2015 CAP reforms: winners and losers in Scottish farming. – 88th Annual Conference, Paris, France – From 09.04.2014 till 11.04.2014 – (TradeM)
- Shrestha S. – Comparing the cost effectiveness of GHG mitigation options on different Scottish dairy farm groups – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-62>
- Shrestha S., Ahmadi BV., Thomson S and Barnes A. – Scottish beef and sheep farms - will they be affected under greening of the CAP? – 133rd EAAE seminar "Developing Integrated and Reliable Modeling Tools for Agricultural and Environmental Policy Analysis", Crete, Greece – From 15.06.2013 till 16.06.2013 – (LiveM)
- Sieber S. – The Tanzanian case study in MACSUR II – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-63>
- Sieber, St. – Trans-SEC and the Tanzanian Case Studies Morogoro and Dodoma – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for

- Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – <http://www.macsur.eu/> (TradeM)
- Sinabel F., Brouwer F. – TradeM theme progress overview – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/218>
- Sinabell F. – Adaptation in Austrian cattle and milk production – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/220>
- Sinabell F. – Climate change and policy impacts on protein crop production: a case study on integrated modeling – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-64>
- Sinabell F., Brouwer F. – TradeM synergies with AGMIP – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/217>
- Sinabell, F., E. Schmid – JPI FACCE Knowledge Hub - Modelle zur europäischen Landwirtschaft (Models for agriculture in Europe) – TradeM Stakeholder Workshop Vienna – From 24.03.2014 till 24.03.2014 – (TradeM)
- Sinabell, F., Mitter, H., E. Schmid – Exploring production and market risks in Austrian agriculture – 42. Jahrestagung der Österreichischen Gesellschaft für Agrarökonomie, Wien – From 25.09.2014 till 26.09.2014 – oega.boku.ac.at (TradeM)
- Slawinski, C., M. Brzezinska, J. Lipiec – MACUR -Modelling European Agriculture with Climate Change for Food Security. – A seminar on presenting the objectives of FCCE-JPI MACSUR project and discussing the participation of the Institute of Agrophysics PAS in this project (cooperation between partners: 139, 158, 162), Institute of Agrophysics Polish Academy of Sciences, Lublin, Poland, – From 29.10.2012 till 29.10.2012 – (CropM)
- Smith P. – Addressing the joint challenges of climate change and food security – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-65>
- Spanna F., Cassardo C., Cavalletto S., La Iacona T., Vitali M., Balanzino A. – MACSUR Project – The case study of vineyards. Eco-physiological and biophysical modeling applied to the growth and productivity of vineyards in northwestern Italy. – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/259>
- Stefańczyk E., Sobkowiak S., Śliwka J. – Identification of fungi associated with dry rot of potato tubers – Classical and molecular approaches in pathogen and pest taxonomy, Warszawa Poland – From 10.09.2013 till 12.09.2013 – (CropM)
- Stefańczyk E., Sobkowiak S., Śliwka J. – Polish population of fungi belonging to Fusarium genus and associated with potato dry rot – Summer School of Bioinformatics, Poznań, Poland – From 19.08.2013 till 23.08.2013 – (CropM)
- Stocco, L., Adenäuer, M., Zimmermann, A. – Global land use response in agricultural sector models: estimating supply and area response in Argentina – 133rd EAAE seminar "Developing Integrated and Reliable Modeling Tools for Agricultural and Environmental Policy Analysis", Crete, Greece – From 15.06.2013 till 16.06.2013 – (TradeM)
- Tantari A. – The role of CAP direct payment in the support and stabilisation of farm income: empirical evidences from a constant sample of Italian farms – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-66>
- te Roller, J. – Agricultural model for the Nile Basin Decision Support System – MACSUR TradeM workshop: "Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security", The Natural Resource and Environmental Research Center (NRERC), University of Haifa, Israel – From 03.03.2013 till 05.03.2013 – <http://www.macsur.eu/> (TradeM)
- temperate climate – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (CropM)
- Topp C. – Pesticide management in Scottish spring barley – insights from sowing dates – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-68>
- Topp K. – Synergies and trade-offs of adaptation and mitigation on dairy farms – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-67>
- Twardy S. – Contamination of surface water bodies with biogenic substances, taking into account the impact of agriculture in the Western Carpathians. – Baltic Deal at Malopolska - training workshops for counselors within the Baltic Deal project. Agricultural Advisory Centre Malopolska. Karniowice, Poland. – From 25.07.2012 till 25.07.2012 – <http://www.modr.pl/index.php?wyd=210> (CropM)
- Twardy S. – The ecological potential - sustainable development of rural areas in the Carpathians. – Third International Mountain Forum entitled Innovation in Mountainous Regions. Zakopane, Poland. – From 10.10.2012 till 12.10.2012 –

- http://www.forumgorskie.pl/archiwum/art_577_iii_miedzynarodowe_forum_gorskie_10__12_pazdziernika_2012_roku.html?page=1 (LiveM/CropM)
- Twardy S. – The usefulness of the research results conducted on the permanent grasslands for carrying out the pro-environmental management in mountain areas. – Priorities of sustainable rural development 2014-2020 in the light of scientific research. Institute of Technology and Life Sciences at Falenty, Poland. – From 25.04.2013 till 26.04.2013 – <http://www.itep.edu.pl/konferencje/index.php?id=ko20130425> (CropM)
- Twardy S., Kopacz M. – Comparison of Concentrations and Loads of Macronutrients Brought with Precipitation and Leaching from the Soil Profile – VII Conference on Environmental Protection and Engineering - Sustainable Development held at AGH University of Science and Technology in Krakow – From 26.06.2014 till 27.06.2014 – <http://szkola.imir.agh.edu.pl/konferencja/?n0=referaty> (LiveM/CropM)
- Twardy S., Kopacz M. – Sustainable and durable development of mountain areas. – Workshops in 8 secondary schools - in accordance with the Project implementation schedule. – From 09.05.2014 till 28.05.2014 – (LiveM/CropM)
- Van den Pol-van Dasselaar A. – Stakeholder consultation on functions of grasslands in Europe – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/271>
- Van den Pol-van Dasselaar A., Bellocchi G., Hutchings N., Olesen J., Saetnan E. – AnimalChange – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/190>
- Van Middelkoop, J. – Livestock and feed production, especially dairy and beef – "Climate-change impacts on farming systems in the next decades — why worry when you have CAP?" A FACCE MACSUR workshop for policymakers, Brussels – From 06.05.2015 till 06.05.2015 – <http://macsur.eu/index.php/events/macsur-workshop-for-policymakers> (LiveM)
- Van Middelkoop, Jantine – Promoting climate mitigation on agricultural and forest land through the CAP – Workshop European Commission Brussels – From 06.03.2015 till 06.03.2015 – <http://capmetaworkshop.aeasolutions.co.uk/> (LiveM)
- Ventrella D. – Climate change impact on green and blue water consumptive use for winter durum wheat and tomato cultivated in Southern Italy – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-70>
- Ventrella D., Giglio L., Charfeddine M., Castellini M. 2012. – Effects of climate change on soil fertility of a typical cropping system of Southern Italy. (Ed. Fred Stoddard, Pirjo Mäkelä), ISBN 978-952-10-4323-9, 480-481. – 12th Congress of the European Society for Agronomy Helsinki, Finland – From 20.08.2012 till 24.08.2012 –
- Ventrella D., Giglio L. – Regional analysis of climate change impact and adaptation strategies for winter durum wheat and tomato yield cultivated in Southern Italy – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/177>
- Ventrella D., Giglio L. 2013. – Green and blue water for the cultivation of tomato in Puglia. Patron Editore Bologna. 105-106. ISBN 978-88-555-3235-8. – Convegno "Agrometeorologia per la sicurezza ambientale ed alimentare. Firenze, 4-6 Giugno. – From 04.06.2013 till 06.06.2013 –
- Ventrella D., Giglio L., Charfeddine M. – Climate change and nitrogen fertilization for winter durum wheat and tomato cultivated in Southern Italy – 18th Nitrogen Workshop. The nitrogen challenge: building a blueprint for nitrogen use efficiency and food security – From 30.06.2014 till 03.07.2014 – <http://www.initrogen.org/node/199> (CropM)
- Ventrella D., Giglio L., Charfeddine M. 2014. – Climate change and nitrogen fertilization for winter durum wheat and tomato cultivated in Southern Italy. – Lavoro accettato per gli Atti del "18th Nitrogen Workshop", Lisbona. – From 30.06.2014 till 03.07.2014 –
- Viaggi, D. – Cross-cutting results of session 3 on cross-theme studies – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – <http://www.macsur.eu/TradeM>
- Virkajärvi, P. – Northern Savo, Finland – "Climate-change impacts on farming systems in the next decades — why worry when you have CAP?" A FACCE MACSUR workshop for policymakers, Brussels – From 06.05.2015 till 06.05.2015 – <http://macsur.eu/index.php/events/macsur-workshop-for-policymakers> (LiveM)
- Vosough Ahmadi B, S Shrestha, S G. Thomson, A P. Barnes and A W. Stott – Health, welfare and profitability in Scottish sheep farms: assessing the impacts of CAP 2015 reforms – 88th Annual Conference, Paris, France – From 09.04.2014 till 11.04.2014 – (TradeM)
- Vosough, Ahmadi B.; Shrestha S., Barnes A., Özkan Ş. – Impacts Of Common Agricultural Policy 2015 Reforms On Animal Health And Welfare Of Scottish Dairy Herds – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 08.04.2015 – (TradeM)
- Wacker., F. – International Cooperation, World Food Affairs – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – <http://www.macsur.eu/TradeM>

- Waldemar Bojar – WP1 tasks – tasks of WP1 package – The first meeting of the TradeM Steering Committee – From 05.09.2012 till 05.09.2012 – <http://macsur.eu/index.php/internal-documents/func-startdown/30/> (TradeM)
- Walkiewicz A., Brzezinska M. – Methane oxidation in forest and fertilized soils – 12th International Workshop for Young Scientists "BioPhys Spring 2013". Lublin, Poland. – From 21.05.2013 till 23.05.2013 – <http://bps2013.ipan.lublin.pl/uploads/biopys-2013.pdf> (CropM)
- Wallach, D., Mearns, L. O., Asseng, S., Rötter, R. P. – Using ensembles of models in climate and crop modelling. – XIII ESA congress, Debrecen, Hungary – From 25.08.2014 till 29.08.2014 – (CropM)
- Wang E et al. – Causes for uncertainty in simulating wheat response to temperature. – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – (CropM)
- Weihermüller L. – AgroC – Development and first evaluation of a model for carbon fluxes in agroecosystems – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/184>
- Wilson A.J., Gubbins S. – Modelling interactions between climate and livestock pathogen transmission – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/275>
- Wilson, Anthony – Introduction and purpose of meeting – Workshop: Modelling interactions between climate and livestock pathogen transmission – From 22.01.2014 till 22.01.2014 – <http://www.research.pirbright.ac.uk/intent/macsur/workshop/> (LiveM)
- Witzke, P., Frank, S., Zimmermann, A., Havlík, P., Ciaian, P. – The impact of climate change on food security – results from a European perspective – First International Conference on Global Food Security, Noordwijkerhout, The Netherlands – From 29.09.2013 till 02.10.2013 – (TradeM)
- Wolf P., Holz K. – LandPaKT – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/240> (LiveM)
- Woolnough S. – Climate Modelling and Sub-seasonal to Seasonal Prediction: Opportunities and Challenges – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-71>
- Wu, L, A. P. Whitmore – Using SPACSYS to analyse the interaction between plant and environment in a systems approach – MACSUR TradeM workshop: "Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security", The Natural Resource and Environmental Research Center (NRERC), University of Haifa, Israel – From 03.03.2013 till 05.03.2013 – <http://www.macsur.eu/> (TradeM)
- Yin X. – Effects of climatic factors, drought risk and irrigation requirement on maize yield in the northeast farming region of China over 1961 to 2010 – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-72>
- Zander P. – Scenarios of regional agricultural land use under climate change for 4 case study regions in Northern Germany – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – <http://ojs.macsur.eu/index.php/Reports/article/view/SP5-73>
- Zander P., Schuler J., Porwollik V., Hecker J.-M. – Modelling approach and first results on irrigation as climate change adaptation strategy of the project NaLaMa-nT – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/269>
- Zander, P. – Modelling regional land use and climate change adaptation strategies in NorthernGermany – MACSUR TradeM workshop: "Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security", The Natural Resource and Environmental Research Center (NRERC), University of Haifa, Israel – From 03.03.2013 till 05.03.2013 – <http://www.macsur.eu/> (TradeM)
- Zander, P., J.-M., Hecker, J. Hufnagel, V. Porwollik, N. Svoboda – Modelling regional land use and climate change adaptation strategies in Northern Germany – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – <http://www.macsur.eu/> (TradeM)
- Zavalloni M., Marconi V., Viaggi D., Raggi M. – Climate change adaptation: a farm level model to assess investment decisions in water storage – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancemen', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/232>
- Zavalloni M., Raggi M., Viaggi D. – Economic analysis of Water Harvesting Reservoirs with Internal Water Reallocation: a Case Study in Emilia Romagna, Italy. – Italian Society of Economists, SIE 54th annual conference. Bologna, Italy – From 24.10.2013 till 26.10.2013 – <http://www.siecon.org/online/en/convegni/2013-54ma-rsa-bologna/> (TradeM)
- Zavalloni M., Raggi M., Viaggi D. – Water markets for climate change. – MACSUR TradeM workshop: "Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate

- change on food security", The Natural Resource and Environmental Research Center (NRERC), University of Haifa, Israel – From 03.03.2013 till 05.03.2013 –
- Zhao G., Hoffmann H., Van Bussel L. et al. – Weather data aggregation's effects on simulation of cropping systems: a model, production system and crop comparison – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancements', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/196>
- Zimmermann A. – Exploring yield gaps in the EU, concept and data – FACCE MACSUR Mid-Term Scientific Conference 'Achievements, Activities, Advancements', Sassari, Italy – From 01.04.2014 till 04.04.2014 – <http://ocs.macsur.eu/index.php/Hub/Mid-term/paper/view/226>
- Zimmermann, A. – Yield trends and variability in the EU – MACSUR Conference 2015 "Integrated Climate Risk Assessment in Agriculture & Food", Reading – From 08.04.2015 till 10.04.2015 – (LiveM)
- Zimmermann, A., Britz, W., Adenauer, M., Heckeley, T. – Food Security Assessment with CAPRI – MACSUR TradeM workshop: "Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security", The Natural Resource and Environmental Research Center (NRERC), University of Haifa, Israel – From 03.03.2013 till 05.03.2013 – <http://www.macsur.eu/> (TradeM)
- Zimmermann, A., Witzke, P. – MACSUR-TradeM Baseline Scenario in CAPRI – MACSUR TradeM Workshop on Global Food Security Challenges – European Research approaches. Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg, Germany – From 18.11.2013 till 20.11.2013 – <http://www.macsur.eu/> (TradeM)
- Żyłowska, K., Nieróbca, A., Kozyra, J., Syp, A. (2014) – Climatic condition for yielding of maize in Poland in the period 1971-2010. – MACSUR CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security, Oslo, Norway – From 10.02.2014 till 12.02.2014 – http://www.macsur.eu/images/eventlist/meeting_docs/CropM_Oslo_Symposium_Abstract_Book.pdf (CropM)

B6. Organized major international congresses

- Soil Minimum Tillage Systems, 7th International Symposium. Cluj-Napoca. From 02.05.2013 to 03.05.2013 (CropM). Goal:Conservative tillage systems: minimum tillage and no-tillage. Research systems for soil, water and carbon preservation. Technological alternatives in conservative agriculture system. Research priorities concerning soil tillage, land improvement and environmental protection. Attendance: 120. Organised by Conservative tillage systems: minimum tillage and no-tillage. Research systems for soil, water and carbon preservation. Technological alternatives in conservative agriculture system. Research priorities concerning soil tillage, land improvement and environmental protection. . <http://www.usamvcluj.ro/SMDT/symposium2013/index.php>
- CropM International Symposium and Workshop: Modelling climate change impacts on crop production for food security. Oslo, Norway. From 10.02.2014 to 12.02.2014 (CropM). Goal:Knowledge exchange and networking Attendance: 120. Organised by MTT Finland in cooperation with the Norwegian partners. <http://macsur.eu/index.php/international-symposium-and-workshop>
- Breeding Plants to Cope with Future Climate Change. Leeds. From 16.06.2014 to 18.06.2014 (CropM). Goal:Dissemination and discussions Attendance: 101. Organised by University of Leeds.
- AgMIP Wheat Workshop. Clermon(-Ferrand, France. From 24.06.2014 to 26.06.2014 (CropM). Goal:Conference/networking/report on progress of AgMIP-Wheat Attendance: 73. Organised by INRA / University of Florida / University of Bonn.
- International Livestock Modelling and Research Colloquium. Bilbao, Spain. From 14.10.2014 to 16.10.2014 (LiveM). Goal:Conference/networking Attendance: 50. Organised by BC3 / Aberystwyth University / Wageningen University. <http://www.livem2014bilbao.com/>
- TradeM International Workshop, Economics of integrated assessment approaches for agriculture and the food sector. Hurdalsjøen, Norway. From 25.11.2015 to 27.11.2015 (TradeM). Goal: Knowledge exchange and networking. Attendance: 33. Organised by Norwegian Agricultural Economics Research Institute (NILF). <http://macsur.eu/index.php/tradem/2015-03-09-10-38-26>
- MACSUR Conference 2015: Integrated Climate Risk Assessment in Agriculture and Food. Reading, UK. From 08.04.2015 to 09.04.2015 (Hub). Goal:Knowledge exchange and networking Attendance: 120. Organised by Reading University. <http://ojs.macsur.eu/index.php/Reports/issue/view/8>
- Soil Minimum Tillage Systems, 8th International Symposium. Cluj-Napoca. From 25.06.2015 to 26.06.2015 (CropM). Goal:Conservative tillage systems: minimum tillage and no-tillage. Research systems for soil, water and carbon preservation. Technological alternatives in conservative agriculture system. Research priorities concerning soil tillage, land improvement and environmental protection. Attendance: 80. Organised by Conservative tillage systems: minimum tillage and no-tillage. Research systems for soil, water and carbon preservation. Technological alternatives in conservative agriculture system. Research priorities concerning soil tillage, land improvement and environmental protection. . <http://www.usamvcluj.ro/SMDT/symposium2015/index.php>

B7. Press, radio, TV, and internet appearances

- Agra-Europe: vTI koordiniert neues Forschungsprojekt 'Macsur' in Agra-Europe 35/12, p. 26. 27.08.2012 (Hub)
- BBC World Service: Radio interview with A. Wilson on bluetongue control for Science in Action. 24.10.2014 (LiveM)
- BBC Radio 4 : Costing the Earth: Outbreak, Radio interview with A. Wilson. 21.03.2012 (LiveM)
- Bojar, Waldemar: Website of the UTP Description of the project MACSUR goals and progress in the tasks realization. 01.12.2013 (TradeM)
- DEPI News - Grampians: Spanish student in Horsham to study capsicum pests. Thursday, October 16, 2014. Department of Environmental and Primary Industries. 16.10.2014 (CropM)
- HR3: Interview with M. Köchy on 'Alle Wetter' HR3 German public TV. 03.09.2012 (Hub)
- Julien Minet: Publication of a website about FACCE and MACSUR activities in Belgium, with a blog about conferences and events related to topics of MACSUR. (CropM, LiveM)
- KlimAktiv: Forscher ergründen Zusammenhänge zwischen Klimawandel und Ernährung' by KlimAktiv gGmbH. 27.08.2012 (Hub)
- La Nuovo Sardegna, 2013, Cambiamenti climatici, esperti da tutto il mondo. La Nuovo Sardegna 2014-04-01.
- NDR Info: Wie wirkt sich der Klimawandel auf die Landwirtschaft aus?' Radio interview with Dr. Martin Banse on NDR Info show "logo!". 05.10.2012 (Hub)
- Palatnik, R.: Call for TradeM workshop in Haifa, Israel on the website of EAERE-European Association of Environmental and Resource Economists. 01.02.2013 (TradeM)
- Regjo: Klimafolgen für Lebensmittel. Regjo. Das Regional-Journal für Südostniedersachsen. 05.2012, p. 52. 01.10.2012 (Hub)
- Rolinski, S., Biewald, A.: Studio Campus of the regional radio station (science meets journalism). 18.02.2014 (TradeM)
- Kronenzeitung: Expertenforum: Nachhaltige Landwirtschaft - Erfolge sind da, der Weg ist aber noch lang* (sustainable agriculture - success is there but there is still a long way to go). Contribution of F. Sinabell. 2014-03-22 (TradeM)
- Kronenzeitung: Expertenforum: Wie höhere Produktivität im Agrarsektor der Wirtschaft nutzt* (Benefits of a productive agricultural sector for the economy). Contribution of F. Sinabell. 2014-06-07 (TradeM)
- Śliwka, J.: W Europie szerzą się nowe genotypy Phytophthora infestans, organizmu powodującego zarazę ziemniaka - a popular science article in Ziemiak Polski, in Polish. 01.06.2013 (CropM)
- Sobkowiak, S., Śliwka, J. : Grzyby z rodzaju Fusarium powodujące suchą zgniliznę bulw ziemniaka - a popular science article in Ziemiak Polski, in Polish. 01.12.2013 (CropM)

MACSUR Homepage: <http://macsur.eu>

MACSUR on Facebook: <https://www.facebook.com/pages/FACCE-MACSUR>

MACSUR on Twitter: <https://twitter.com/faccemacsur>

B8. New external grant and total amount of new external grant money, the application resulting from MACSUR activities

- Adaptation in Austrian cattle and milk production (ADAPT-CATMILK). Austrian Climate Research Programme research grant. Partners: WIFO, BOKU, University Cranfield, Thünen Institute (TradeM, reported by Martin Schönhart, 20.05.2014, 247'113 €)
- AGROSCENARI – Scenari di adattamento dell'agricoltura italiana ai cambiamenti climatici (CropM, reported by M. Köchy, 18.12.2013, 8'143'268.70 €)
- IC-FAR — Linking Long Term Observatories with Crop Systems Modeling For a better understanding of Climate Change Impact, and Adaptation Strategies for Italian Cropping Systems. National Project funded by the Ministry of Education, University and Research, linked with MACSUR (CropM, reported by M. Köchy, 09.07.2013, 868'000 €)
- Integrated modelling of Nordic farming systems for sustainable intensification under climate change (CropM, reported by M. Köchy, 10.07.2013, 661'912 €)
- New research project "Metrics, Models and Foresight for European Sustainable Food and Nutrition Security (SUSFANS)" funded by the European Commission, 2015-2019 (TradeM, reported by Andrea Zimmermann, 02.07.2015, 5'299'993.64 €)
- New research project "Pathways linking uncertainties in model projections of climate and its effects (PLUMES)" funded by the Academy of Finland, 2014-2018 (CropM, reported by Stefan Fronzek, 02.07.2015, 989'707 €)
- Research project with some partners involved in MACSUR funded by the Belgian Federal Science Policy (BELSPO): Modelling and Assessing Surface Change impacts on Belgian and Western European climate (MASC) (CropM, reported by Julien Minet, 20.05.2014, 1'196'978 €)
- Transferencia científico-tecnológica para evaluación del impacto del cambio climático en los sistemas agrarios de Ecuador y los recursos hídricos (CropM, reported by M. Ruiz-Ramos, 21.05.2015, 10'000 €)

B9. Supervised theses

- Angulo, C. (2014) Scaling methods in using crop modelling for climate impact assessment. University of Bonn Germany. PhD thesis. (CropM)
- Bulak, P. (in progress) Effect of abiotic stresses on activity of selected antioxidant enzymes in wheat. Institute of Agrophysics of the Polish Academy of Sciences. PhD thesis. (CropM)
- Curnel (2015) Satellite remote sensing priorities for better assimilation in crop growth models: winter wheat LAI and grassland mowing dates case studies - <http://hdl.handle.net/2078.1/160968>. Université Catholique de Louvain (UCL). PhD thesis. (CropM, LiveM)
- Dumont, B., (2014) Uncertainty linked to crop modelling in order to develop decision support tools. 193 p. <http://orbi.ulg.ac.be/handle/2268/164963>. Gembloux Agro-Bio Tech, University of Liege. PhD thesis. (CropM)
- Högner, K. (2013) Improving the methodology for global agricultural water availability and identifying hot spots for potential dam sites in East-Africa. Potsdam Institute for Climate Impact Research. M.Sc. thesis. (TradeM)
- Kondracka, K. (in progress) Effect of combined drought and heat stress on wheat growth. Institute of Agrophysics of the Polish Academy of Sciences. PhD thesis. (CropM)
- König, H. (2013) Operationalising sustainability impact assessment of land use scenarios in developing countries : a stakeholder-based approach with case studies in China, India, Indonesia, Kenya, and Tunisia. <http://opus.kobv.de/ubp/volltexte/2013/6367/>. Leibniz-Zentrum für Agrarlandschaftsforschung e.V. PhD thesis. (TradeM)
- Matoga, W. (in progress) Extensive sheep grazing in terms of the mountain pastures protection. Institute of Technology and Life Science at Falenty. PhD thesis. (LiveM)
- Mula, L. (2014) Adaptation scenarios of Mediterranean forage systems to climate change. <http://eprints.uniss.it/9500/>. University of Sassari. PhD thesis. (LiveM)
- Nikolic, U. Soy bean production in Serbia - actual situation and production outlook. Started January 2014. Institut für nachhaltige Wirtschaftsentwicklung, BOKU Vienna. M.Sc. thesis. (TradeM)
- Paas, W. (2013) Impacts of climate change and socio-economic drivers dairy farms in 'the Baakse Beek', the Netherlands. . Plant Production Systems Group, Wageningen University. MSc. thesis. (CropM)
- Patuszka, T. (in progress) The impact of soil physical properties modified by post-fermentation sludge on GHG emission. Institute of Agrophysics of the Polish Academy of Sciences. PhD thesis. (CropM)
- Purola, T. (in progress). Using farm level modelling to analyse adaptation of Nordic farming systems to climate variability and change. University of Helsinki (PhD thesis).
- Schäfer, A.S. (2014) Landwirtschaftliche Erträge und ihre ökonomischen Einflussfaktoren. Institute for Food and Resource Economics, University of Bonn. B.Sc. thesis. (TradeM)
- Schmidt, C. (2013) Die Rolle der landwirtschaftlichen Primärproduktion bei der Gewährleistung globaler Ernährungssicherung. University of Bonn. B.Sc. thesis. (TradeM)
- Schürkmann, A. (2013) Estimating the benefit-cost ratio of infrastructural measures to increase water supply for irrigation on a global scale. Potsdam Institute for Climate Impact Research. M.Sc. thesis. (TradeM)
- Seifried, A. A.Soy bean production in Austria - actual situation and production potential in a climate change scenario. Started January 2014. Institut für nachhaltige Wirtschaftsentwicklung, BOKU Vienna. M.Sc. thesis. (TradeM)
- Świerk, W (2012) Changes in the quality of surface water bodies against the background of the implementation of the sustainable development program of rural areas in the catchment. Institute of Technology and Life Science at Falenty. PhD thesis. (CropM)
- Walkiewicz, A. (in progress) Effect of soil-water conditions on methane oxidation in agricultural soils. Institute of Agrophysics of the Polish Academy of Sciences. PhD thesis. (CropM)
- Zhou, Z. (2013) Improving a grass yield model to assess impacts of climate change on grass yields around 2050 at plot level in the Dutch region Baakse Beek. Plant Production Systems Group, Wageningen University. MSc. thesis. (CropM)

B10. Joint patents (between partners or resulting from project)

- Smoroń S. 2012. Patent application entitled "The mobile set lifting - weight". Declaration No.: P.401855 submitted to the Polish Patent Office. (CropM, LiveM)
- Twardy S, Kopacz M. 2012. Device for measuring the precipitation water leaching from a soil profile. Patent No. P.389892 granted by the Polish Patent Office. Decision of 14.08.2012. (CropM)

B11. New collaborations (subset of group or group asking for additional (new) funding)

- Coordination of a joint proposal in the Joint Programming Initiative "Agriculture, Food Security and Climate Change (FACCE-JPI)". Phase II <http://www.chil.org/profile/spanish.macsur/main> (Partners participating: MTT Agrifood Finland, University of Bonn, INRA France, Polytechnical University of Madrid) (TradeM, reported by Anne Biewald, 15.05.2014)
- Coordination of Spanish participation in the Joint Programming Initiative "Agriculture, Food Security and Climate Change (FACCE-JPI)". Phase I <http://www.chil.org/profile/spanish.macsur/main> (CropM, TradeM, LiveM, reported by M Ruiz-Ramos, 09.07.2013)

Coordination of Spanish participation in the Joint Programming Initiative "Agriculture, Food Security and Climate Change (FACCE-JPI)". Phase II <http://www.chil.org/profile/spanish.macsur/main> (CropM, TradeM, LiveM, reported by M Ruiz-Ramos, 09.07.2013)

FACCE-ERA-NET+ on Climate Smart Agriculture: Joint application, Project Acronym: NEMANICHE - Predicting and testing climate change-induced range shifts in phytopathogenic nematodes in the European agricultural biosphere; date to be decided, September 2014. (TradeM, reported by C.Hoffmann, 20.05.2014)

H2020 SFS18-2015. FairFarm. Stage-2-proposal submitted June 2015. MACSUR partners EURAC, Thünen Institute, James Hutton Institute and non-MACSUR members. (Hub, reported by M. Köchy, 08.07.2015)

JPI- FACCE- SURPLUS. Coordination of a joint application "Towards sustainably intensified and resilient production systems in European Agriculture. Prospects for integrating dairy and bioenergy production systems (DAIRYENERGY)", submitted 04.03.2015. MACSUR partners from Norway, Belgium, Italy. (CropM, reported by Lillian Øygarden, 28.06.2015)

Norwegian partners participating in 3 submissions with partners in MACSUR to the call FACCE/ERANET+ Climate Smart Agriculture (CropM, TradeM, reported by Lillian Øygarden, 26.05.2014)

Setting-up of a regional network related to FACCE and MACSUR in Wallonia, Belgium (see www.facce.be) (CropM, LiveM, reported by Julien Minet, 09.07.2013)

Soy Bean Production in the River Danube Basin. Research proposal submitted to the Austrian Climate Change Research Program ACRP. (TradeM, reported by Franz Sinabell, 10.09.2013)

Submission of a research project within the Belgian partners involved in MACSUR to a Belgian national funding scheme. Unfortunately rejected. (CropM, LiveM, reported by Julien Minet, 09.07.2013)

Submission of two research projects with partners involved in MACSUR and private partners to the call FACCE/ERANET+ Climate Smart Agriculture (LiveM, reported by Julien Minet, 20.05.2014)

Submission to Norwegian Research council (April 2014) application involving MACSUR partners Norway, MTT Finland, Potsdam (CropM, TradeM, reported by Lillian Øygarden, 26.05.2014)

Technical efficiency and challenges of the agricultural sector in Austria and New Zealand. Research proposal submitted to the Austrian Chamber of Agriculture (TradeM, reported by Franz Sinabell, 10.05.2014)

B12. Scientific acknowledgements (Prizes, honorary doctorates, memberships in scientific academies, major international duties, etc.)

Porter, John (2014) Lead author of IPCC AR5-WG2 Chapter on food security (CropM)

Sinabell, Franz (2012) nominated by AUSTRIA to the Steering Committee of the High Level Panel of Experts on food security and nutrition (HLPE), which will provide regular inclusion of structured expertise as an important input to the reformed Committee on World Food Security (CFS). (TradeM)

Kersebaum, Kurt Christian (Leibniz Centre ZALF (Muencheberg, Germany), selected by Soil Science Society of America for this years' L.R. Ahuya Agricultural Systems Modeling Award (CropM)

B13. Data access: new datasets or data/model assets generated in MACSUR (provide in the annex explanations on the storage: is this centralised or in each group? capture data sharing and evidence for this)

Sinabell, F., March 2014, CAPRI data set for the analysis of the baseline scenarios within TradeM (TradeM). Stored centrally.

Data may be published and deposited in AgriMod (<http://agrimod.org>), the Open Data Journal of Agricultural Research (<http://odjar.org>), created by MACSUR members and the GeoNetwork Archive at University of Aarhus. 11 Datasets in the GeoNetwork Archive will be publicly available once the corresponding data use agreements have been confirmed. JANSSEN, Sander et al. (2015) Operational database for storing and extracting data. FACCE MACSUR Reports 6, D-C2.2, Available at: <http://ojs.macsur.eu/index.php/Reports/article/view/D-C2.2>. Date accessed: 26 Aug. 2015. Many more data sets have been created and are stored decentrally but have not been reported.

B14. Other activities (listed by categories)

B14a New technologies

Hansen, J.G. et al. (2014). MACSUR CropM database. Data catalogue. <http://agro.au.dk/macsur-catalog> (CropM)

Hansen, J.G. et al. (2014). MACSUR data visualization platform, <http://agro.au.dk/macsur-toolbox> (CropM)

Jorgenson J., Janssen, S. (2013) Working with SEMAGROW to provide data hosting/publishing system using Open Journal Systems (Hub, CropM)

Jorgenson, J.S., Kersebaum, K.C., Kollas, C. et al. (2014) Software for the evaluation and classification of data sets for modelling. (Hub, CropM)

Kersebaum (during 2013-14) Integration of the HERMES crop growth sub-module into the AMBAV system of the German Weather Service (DWD). (CropM)

- Klosterhalfen et al. (2014). AgroC: An agroecosystem model (CropM)
- Ruiz Ramos M, Mínguez and Rodríguez, 2014. AGROCLIMA-SSP v.2.0 (Software, scientific support to policies tool, delivered to Spanish administration, in Spanish). (CropM)
- Semenov M (during 2013-14) Incorporation of the CMIP5 climate projections in to the ELPIS dataset of local-scale climate scenarios for Europe. (CropM)
- Trnka et al (2014). Software AgriCLIM expert system for automatic calculation of agroclimatic indicators in Europe – version for wheat (CropM)

B14b Various

- Jorgenson, J. (2013) Attended AgMIP development sprint in Wageningen June 19-21, and initiated collaboration efforts regarding model and dataset integration that will encourage the use of standardised protocols and formats. (Hub)
- Slawinski, C. (2013) Starting a new experiment in south-east of Poland for gathering highest quality data for calibration and validation of crop models including climate change (CropM)
- Twardy, S. (2013) Under the Project there are gathered data and other information (current and historical) on changes in grass biomass production taking into account the elevation of land above sea level and diversified slope exposures. These materials will be used for a dissertation and developed in the form of scientific publications. Also there is collected data on the quantity and quality of biomass depending on the differentiated frequency of sward use. (CropM, LiveM)
- Wallach, D., Rivington, M., Mearns, L. O., Antle, J. (2014). MACSUR CropM Report on Characterizing and Quantifying Uncertainty: D C4.1.2. A framework structure to integrate improved methods for uncertainty evaluation, and protocols for methods application. (CropM)

C Networking

C1.Theme or cross-theme meetings

- CropM WP leaders meeting .
Bonn, Germany. From 12.06.2012 to 13.06.2012 (CropM). Goal:Planning of CropM in MACSUR1
Attendance: 12. Organised by University of Bonn. internal minutes
- CropM WP leaders meeting. Schiphol, Netherlands. From 25.02.2013 to 25.02.2013 (CropM). Goal:Regular Meeting for update and further planning Attendance: 14. Organised by University of Bonn, LAP. internal minutes
- MACSUR - CropM workshop, Work Packages 1, 2 and 4. From 06.05.2013 to 07.05.2013 (CropM).
Goal:Planning Attendance: 27. Organised by CropM - MACSUR.
- Global Food Security Challenges – European Research approaches: Case studies in MACSUR TradeM.
Müncheberg, Germany. From 18.11.2013 to 20.11.2013 (TradeM). Goal:Exchange of MACSUR activities, engagement of stakeholders, discussion of test cases across themes and modules Attendance: 70.
Organised by ZALF (Hannes König, Katharina Helming). <http://www.macsur.eu/index.php/downloads/hub-newsletters/file/MACSUR%20Hub%20Newsletter%202013-06%252Epdf>
- CropM WP leaders meeting. Berlin, Germany. From 04.12.2013 to 04.12.2013 (CropM). Goal:Regular Meeting for update and further planning Attendance: 13. Organised by University of Bonn, LAP. internal minutes
- CropM WP leaders meeting. Sassari, Italy. From 02.04.2014 to 02.04.2014 (CropM). Goal:Regular Meeting for update and further planning Attendance: 8. Organised by University of Sassari. internal minutes
- CropM WP leaders meeting. Florence, Italy. From 14.11.2014 to 14.11.2014 (CropM). Goal:Regular Meeting for update and further planning Attendance: 13. Organised by University of Florence. internal minutes
- CropM WP leaders meeting. Reading, UK. From 09.04.2015 to 09.04.2015 (CropM). Goal:Regular Meeting for update and further planning Attendance: 11. Organised by University of Reading. internal minutes
- LiveM Leaders meeting and theme review.. Reading, UK. From 16.09.2013 to 17.09.2013 (LiveM). Goal:To develop future plans, review progress and identify challenges Attendance: 12. Organised by LiveM, Led by Aberystwyth University.
- Exploring new ideas for trade and agriculture model integration for assessing the impacts of climate change on food security. Haifa, Israel. From 03.03.2013 to 05.03.2013 (TradeM). Goal:Review and discussion of the models involved in analyzing the effects of climate change on food security. Introducing innovative ideas that combine economic models with crops and livestock models Attendance: 100. Organised by NRERC - Natural Resource and Environmental Research Centre, University of Haifa, Israel.
<http://macsur.eu/index.php/files/MACSUR%20TradeM/TradeM%20Workshop%20Haifa%202013>

C2. Consortium meetings (whole MACSUR)

- Project Steering Committee meeting. Bonn, Germany. From 11.06.2012 to 12.06.2012 (CropM). Goal: Planning. Attendance: 7. Organised by University of Bonn.
- MACSUR Kickoff Workshop. Berlin, Germany. From 15.10.2012 to 16.10.2012 (Hub). Goal: Planning, networking. Attendance: 140. Organised by Thünen Institute. <http://ojs.macsur.eu/index.php/Reports/issue/view/1>
- Project Steering Committee meeting. The Hague, Netherlands. From 18.02.2013 to 19.03.2013 (Hub). Goal: Planning. Attendance: 10. Organised by LEI.
- MACSUR Cross-Theme Workshop: Regional Pilot Studies and Scenarios. Braunschweig, Germany. From 05.06.2013 to 07.06.2013 (Hub). Goal: Agreement on scenarios and case studies. Attendance: 30. Organised by Thünen Institute. <http://www.macsur.eu/images/reports/RegionalPilotStudiesWorkshop.pdf>
- Project Steering Committee meeting. Reading, UK. From 17.09.2013 to 18.09.2013 (Hub). Goal: Planning. Attendance: 10. Organised by Reading University.
- FACCE-MACSUR Mid-Term Scientific Conference – 'Achievements, Activities, Advancement'. Sassari, Sardinia, Italy. From 01.04.2014 to 04.04.2014 (Hub). Goal: Presentation of results to stakeholders, planning, capacity building, networking. Attendance: 120. Organised by Thünen Institute and University of Sassari. <http://ocs.macsur.eu/index.php/Hub/Mid-term>
- Project Steering Committee meeting. The Hague, Netherlands. From 04.09.2014 to 05.09.2014 (Hub). Goal: Planning. Attendance: 10. Organised by LEI.
- Workshop on Within Theme and Cross-cutting Activities for MACSUR2. Reading, UK. From 10.04.2015 to 11.04.2015 (Hub). Goal: Planning and networking. Attendance: 100. Organised by Reading University. <http://ojs.macsur.eu/index.php/Reports/issue/view/8>

C3. Workshops

- 1st meeting for Coordination of Spanish participation in the Joint Programming Initiative "Agriculture, Food Security and Climate Change (FACCE-JPI)". Phase I. Spain. From 15.03.2012 to 15.03.2012 (.). Goal: Planning. Attendance: 14. Organised by CEIGRAM, Technical University of Madrid, Spain. <http://www.chil.org/profile/spanish.macsur/main>
- 2nd meeting for Coordination of Spanish participation in the Joint Programming Initiative "Agriculture, Food Security and Climate Change (FACCE-JPI)". Phase I. Spain. From 26.09.2012 to 26.09.2012 (CropM/LiveM/TradeM). Goal: Planning. Attendance: 16. Organised by CEIGRAM, Technical University of Madrid, Spain. <http://www.chil.org/profile/spanish.macsur/main>
- A seminar on presenting the objectives of FACCE-JPI MACSUR project and discussing the participation of the Institute of Agrophysics PAS in this project (cooperation between partners: 139, 158, 162). Poland. From 29.10.2012 to 29.10.2012 (CropM). Goal: Internal networking. Attendance: 40. Organised by Institute of Agrophysics Polish Academy of Sciences.
- TradeM International Workshop on " Exploring New Ideas for Trade and Agriculture Model Integration for Assessing the Impacts of Climate Change on Food Security. Haifa, Israel. From 03.03.2013 to 05.03.2013 (TradeM). Goal: Knowledge exchange and networking. Attendance: 100. Organised by University of Haifa. <http://nrerc.haifa.ac.il/images/stories/macsur%20haifa%20workshop%20agenda%20final.pdf>
- A series of one-day meetings between partners 139, 158, 162 concerning realization of tasks in CropM module.. Lublin, Poland. From 20.03.2013 to 29.05.2013 (CropM). Goal: Planning. Attendance: 6. Organised by Institute of Agrophysics Polish Academy of Sciences, Lublin, Poland.
- Meeting of the TradeM and CropM partners on common research carried out for contribution to MACSUR goals.. Lublin, Poland. From 15.05.2013 to 15.05.2013 (TradeM, CropM). Goal: Planning. Attendance: 5. Organised by University of Technology and Life Sciences in Bydgoszcz, Institute of Agrophysics Polish Academy of Sciences in Lublin, Poland.
- An integrative analysis of the Austrian agri-environmental program - observations and options for improving its effectiveness. Lincoln University. From 26.6.2014 to 26.06.2014 (TradeM). Goal: Networking. Organised by Lincoln University and F. Sinabell.

C7. Links to national projects or facilities

- New collaborations with directorates of 8 secondary schools where workshops and trainings for 8*20=160 students of secondary schools were conducted. There were distributed instructional materials prepared in advance. (CropM, LiveM, reported by S. Twardy, 22.05.2014)

C8. Links created to other EU or international groups

AgMIP, Memorandum of Understanding signed 2014-02-19 (Hub, reported by M. Köchy, 27.05.2014)
Collaboration with agricultural, meteorological agencies and Escuela Politécnica Nacional from Ecuador to develop a research line on agricultural impacts and adaptation to climate change, with focus on water resources (CropM, reported by M. Ruiz-Ramos, 21.05.2015)
Eol written with WUR to the FACCE SURPLUS call (CropM, reported by A. Whitmore, 26.05.2015)
Global Research Alliance's Animal Health and Greenhouse Gas Emissions Intensity Network and MACSUR's Task on Animal Health and Greenhouse Gas Emissions organising a joint workshop for MACSUR 2 (LiveM, reported by Ş. Özkan, 29.05.2015)
Information on MACSUR2 structure sent to JRC (Hub, reported by M. Köchy, 08.07.2015)
Initiation of collaboration between LiveM and SOLID (Sustainable Organic and Low Input Dairying project) (LiveM, reported by R. Kipling, 2013)
Working with SEMAGROW to provide data hosting/publishing system using Open Journal Systems, following attendance at the SEMAGROW meeting in Wageningen June 17-18, 2013 (Hub, reported by J. Jorgenson, 20.06.2013)

C9. Stakeholder interactions

Banse, M.: Participation in Global Forum on Climate Change, Food Security and Trade, FAO, Rome. 03.06.2014 (Hub)
Bojar, W., Bieganski, J., Depta, P.: Potential synergic effects between MACSUR models and the UTP team other models. SYNERGIC EFFECTS ARE ADDRESSED to STAKEHOLDERS:FARMERS, POLITICIANS, SELF GOVERNMENT AGENDAS, e.g. devoted problem of development of farmer cooperation within the EU countries. (TradeM)
Dalgaard, T.: Coordinated by the www.dnmark.org research alliance a series of workshops are organized with local farmers about scenarios for future farming, and methods are reviewed together with other similar methods applied in MACSUR. (LiveM)
Harstad, O.M.: Udfordringer for husdyrproduktion i et fremtidig klima (Challenges for livestock production under changing climate) Bioforsk conference 2014. (National meeting-research, stakeholders,media). 05.02.2014 (LiveM, CropM)
Höglind, M. : Europeisk landbrug i et klima i endring- MACSUR (European agriculture under changing climate - Macsur). Bioforsk Conference 2014. (National conference-research-stakeholders-media). 05.02.2014 (CropM)
Jayet, P.A.: Developments and prospects of farm-level modelling for post 2013 CAP impact analysis. EU Commission, Brussels. 06.06.2012
Köchy, M., Banse, M.: Meeting with Junge DLG (Young German Farmers Ass.) on climate change impacts on farming incomes. Braunschweig, 30 pers. 06.03.2015 (Hub)
Lotze-Campen, H.: Meeting with German MP Groneberg on the topics of agriculture, climate change and agricultural economy. Berlin, Germany. 14.05.2013 (TradeM)
Minet, J.: Presentation of MACSUR activities at the international agricultural event "Foire de Libramont 2013". 30.07.2013 (CropM, LiveM)
Minguez, I., Ruiz-Ramos, M.: Workshop at the Spanish Agency of Meteorology, on Meteo and Climate Services for Agriculture. Presentation "Crop models and climate projections". 30.05.2013 (CropM)
Palatnik, R.R.: Meeting with the chief scientist of the Israeli Ministry of Agriculture Dr. Perel to report on the progress of the project and to check the possibility of Israeli cooperation in Stage II of MACSUR. 24.04.2014 (TradeM)
Roggero, P.P.: Two meetings (December 13, 2013; January 15, 2014) with the governing board of the Arborea Farmers' Cooperative and some associates were organized aiming to develop further common understanding on the kind of adaptive strategies suitable at local level, using modelling outcomes as boundary object to engage dialogue with stakeholders. These activities were developed also in the context of regional innovation projects that are strongly linked to some key issues of LiveM and that represent a complementary process to feed the MACSUR follow-up with new scenarios in the context of ongoing regional pilot studies. 15.01.2014
Roggero, P.P.: Several interviews to different stakeholders (experts, technicians, professionals, "ordinary people", etc.) aiming to investigate their perception about climate change and the impacts generated by their activities on this change. These interviews were synthesized in video-spots that were broadcasted during the MACSUR mid-term meeting held in Sassari on 1-4 April 2014. . (CropM/LiveM)
Roggero, P.P.: The NRD-UNISS team actively participated to local events and activities organised by different local actors (Cooperatives, Local Committees, Council etc.) in the regional pilot study area. This participation aimed at both extending the Macsur exploration of the local dynamics, and contextualizing and better framing NRD-UNISS research through a bidirectional communication pathway. (CropM/LiveM)
Roggero, P.P.: P62 is interacting with the Italian Ministry of Agricultural Food and Forestry Policies to create the pre-conditions for a MACSUR-Italy follow-up. A high level meeting will be held shortly to invite policy makers to recognize the relevance of the knowledge hub in the context of supporting adaptive responses for Italian agriculture. (CropM, LiveM, TradeM)

- Roggero, PP.: Workshop "Adaptation strategies of Italian agricultural systems to climate change", Cagliari, Italy in the context of Agrosenari-Macsur. Meeting with Stakeholders including regional and national policy makers. 150 participants. 19.06.2013 (Hub)
- Ruiz-Ramos, M.: Workshop at the Ministry of Economy and Innovation, Spanish Institute of Agricultural Research. Presentation "The Spanish participation in MACSUR". 22.04.2013 (CropM)
- Ruiz-Ramos, M.: Workshop at the Spanish Office on Climate Change. Presentation "Agroclima: Escenarios climáticos, impactos, evidencias, vulnerabilidades y sistemas agrarios". 29.01.2014 (CropM)
- Schönhart, M., Schmid, E., Sinabell, F. : Regional Pilot Case Study Mostviertel – AT. Projektpräsentation und – diskussion FACCE MACSUR. WIFO Wien. 24.03.2014 (TradeM)
- Sinabell, F.: JPI FACCE Knowledge Hub Modelle zur europäischen Landwirtschaft. Projektpräsentation und – diskussion FACCE MACSUR. WIFO Wien. 24.03.2014 (TradeM)
- Sinabell, F.: Agrarzukunft 2030 – nationale und internationale Trends – ein Ausblick unter Unsicherheit (Agriculture 2030 - national and international trends - an outlook under uncertainty). Agrarforum Exklusiv, Amt der OÖ Landesregierung, Linz. 02.06.2013 (TradeM)
- Sinabell, F.: Herausforderungen an die österreichische Agrarwirtschaft (Challenges for the Austrian agricultural sector). Studientag Umweltpädagogik, Hochschule für Agrar- und Umweltpädagogik, Wien. 15.01.2013 (TradeM)
- Sinabell, F.: Entwicklung der Landwirtschaft - nationale und internationale Trends (Agricultural development - national and international trends) Wintertagung Fachschule Mistelbach, Mistelbach. 13.01.2013 (TradeM)
- Sinabell, F.: Bulle oder Bär? Trends an den internationalen Märkten (bull or bear - trends on global markets). 60. Wintertagung, Fachtagung Unternehmen Bauernhof, Wieselburg. 13.01.2013 (TradeM)
- Slawinski, C.: Seminar for polish funding agencies regarding the participation of polish teams in MACSUR2. 24.06.2014 (CropM/TradeM)
- Trnka, M.: Presentation of MACSUR to policymakers at "Agricultural research and food security – Outlook to Horizon 2020 and beyond Czech contribution to common European effort". 05.06.2014 (CropM)
- Twardy, S.: Organic fertilizers management and low-cost pro-environmental pastoral economy in mountain areas. Meeting with stakeholders in Grywałd (Poland, the Krościenko community). 25.07.2012 (LiveM, CropM)
- Twardy, S.: The rational management of mountain pastures under conditions of low-cost means of agricultural production. 22.07.2014 (LiveM, CropM)

D Capacity building

D2. Training workshops

- The art of crop modelling. Quantifying crop growth in face of global food security and climate effects through modelling tools. From 04.03.2013 to 08.03.2013 (CropM). Goal: Training of PhD students Attendance: 30. Organised by Wageningen UR.
- A beginners seminar on „Ecological Modelling“. From 05.08.2013 to 08.08.2013 (CropM). Goal: Training Attendance: . Organised by Estonian University of Life Sciences.
- Modeling climate effects on crops and cropping systems. From 23.09.2013 to 29.09.2013 (CropM). Goal: Training of PhD students Attendance: . Organised by Aarhus University.
- MACSUR modelling workshop “Working with dynamic crop models”. From 19.05.2014 to 23.05.2014 (CropM). Goal: Training Attendance: 34. Organised by ZALF.
- Model oriented field experiments for climate change impact assessment. From 10.11.2014 to 13.11.2014 (CropM). Goal: Training of PhD students Attendance: 25. Organised by University of Florence.
- Dynamic land use optimization under global change, University of Natural Resources and Life Sciences; training by Uwe Schneider (Hamburg University). From 11.03.2013 to 15.03.2013 (TradeM). Goal: This course taught applied mathematical programming for the assessment of land use decisions, policies, and impacts and concentrated on the formulation and interpretation of related optimization models. Attendance: 10. Organised by Institute for Sustainable Economic Development at University of Natural Resources and Life Sciences, Vienna. Students within and outside MACSUR, mainly TradeM, received training in applied programming modelling including development of interfaces to LiveM and CropM themes.
- International workshop on "Modelling European Agriculture with Climate Change for Food Security". From 23.03.2014 to 26.03.2014 (TradeM). Goal: training graduated and PhD students as well as stakeholders Attendance: 25. Organised by University of Haifa and Zalf, Germany. internal minutes
- International workshop: Sustainability assessment of land use scenarios: what needs to be considered and how can it be done?. Haifa, Israel. From 23.03.2014 to 26.03.2014 (TradeM). Goal: Understand formalized processes of decision making as well as decision makers needs for evidence. 2. Provide training on integrated modeling/assessments. For this purpose the Framework for Participatory Impact Assessment (FoPIA) was introduced to provide an integrated and well-established method that guides experts and/or decision makers through a policy impact assessment while emphasizing: (i) the development of scenarios, (ii) the analysis of the regional sustainability context, (iii) assessment of possible policy impacts and sustainability trade-offs. The case study dealt with the biosphere reserve of Ramat Menashe. . Attendance:

16. Organised by NRERC- Natural Resource and Environmental Research Center, University of Haifa, Israel and ZALF, Germany. The participants submitted working papers with academic literature review and scientific analysis of biosphere reserve of Ramat Menashe.

Integrated land use modelling; Training, held by Mathias Kirchner, Hermine Mitter, Ewin Schmid, Martin Schönhar. From 07.04.2014 to 11.04.2014 (TradeM). Goal: The module aimed at strengthening skills in advanced land use optimization modelling by integrating disciplinary concepts, data, methods and scenarios. The students shall be able to build bottom-up land use optimisation models at farm to landscape scale as well as at regional to global scale and to perform integrated impact analysis of climate change, trade, and policy on agricultural land use, production and environment. Attendance: 11. Organised by Institute for Sustainable Economic Development at University of Natural Resources and Life Sciences, Vienna. Students within and outside MACSUR, mainly TradeM, received training in applied programming modelling including development of interfaces to LiveM and CropM themes.

Integrated Land use Modelling. Vienna. From 20.04.2015 to 25.04.2015 (TradeM). Goal: Training of PhD students. Attendance: 10. Organised by BOKU.

D3. Specialist workshops

Joint modelling workshop LiveM - TradeM. Aberystwyth, UK. From 18.11.2013 to 18.11.2013 (LiveM). Goal: To develop mutual understanding of interests and plan future collaborative interactions. Attendance: 10.

Organised by LiveM, Aberystwyth University.

CAPRI Graphical User Interface (GUI) training.. Berlin, Germany. From 18.11.2013 to 18.11.2013 (TradeM).

Goal: To enable participants to extract data from the CAPRI model. Attendance: 10. Organised by WIFO.

Modelling interactions between climate and livestock pathogen transmission, Pirbright, UK. UK.

From 22.01.2014 to 22.01.2014 (LiveM). Goal: To review the state of the art in disease modelling and develop ideas for collaborative activities. Attendance: 20. Organised by LiveM, Pirbright Institute.

Carbon turnover modelling, development, validation and application. Lublin, Poland. From 10.12.2014 to 10.12.2014 (CropM). Goal: Useful information for PhD students. Attendance: 16. Organised by Institute of Agrophysics of the Polish Academy of Sciences.

TradeM International Workshop, Securing Food Using Non-Conventional Water Sources. Haifa, Israel.

From 24.02.2015 to 24.02.2015 (TradeM). Goal: Knowledge exchange and networking. Attendance: 70.

Organised by University of Haifa.

<https://drive.google.com/folderview?id=0B4oPwB7wQMT9fIVTQndXY3piekVzcU9Oa1ppOV9kbUFv3JuVml0ZExPWUizWFJMMGFPT2s&usp=sharing>

Modelling climate impacts on water and energy use in European irrigated agriculture . Cranfield.

From 05.05.2015 to 07.05.2015 (CropM). Goal: Training. Attendance: 13. Organised by Cranfield University.

Modelling interactions between climate and livestock pathogen transmission, Pirbright, UK. From 22.01.2014 to 22.01.2014 (LiveM). Goal: To review the state of the art in disease modelling and develop ideas for collaborative activities Attendance: 20. Organised by LiveM, Pirbright Institute.

Modelling capacities for agricultural policy support in Europe. From 05.06.2012 to 05.06.2012 (TradeM).

Goal: Knowledge exchange Attendance: 22. Organised by Trade-M-ZALF, LIAISE, EC-JRC.

CAPRI Graphical User Interface (GUI) training. From 18.11.2013 to 18.11.2013 (TradeM). Goal: To enable participants to extract data from the CAPRI model Attendance: 10. Organised by WIFO.

TradeM International Workshop, Securing Food Using Non-Conventional Water Sources. From 24.02.2015 to 24.02.2015 (TradeM). Goal: Knowledge exchange and networking Attendance: 70. Organised by University of Haifa.

<https://drive.google.com/folderview?id=0B4oPwB7wQMT9fIVTQndXY3piekVzcU9Oa1ppOV9kbUFv3JuVml0ZExPWUizWFJMMGFPT2s&usp=sharing>

D4. Established scientific staff

<i>Institute</i>	<i>Persons</i>	<i>Full-time equivalents</i>
Aarhus University	17	88.79
European Academy of Bolzano	1	3
Forschungszentrum Jülich	1	12
INRA	1	24
Norwegian University of Life Sciences	1	20
PIK Potsdam	5	18.05
Technical University of Madrid (UPM)	1	18
Thünen Institut	3	52
Université de Liège	1	28.8
University of Bonn	2	14
University of Milan	2	24
University of Reading	1	33
ZALF	2	40
IBERs. Aberystwyth University. UK	1	24
IHAR-PIB. Młochów. Poland	3	10
INRA. France	1	9
MTA Centre for Ecological Research. Hungary	1	6
NRERC. University of Haifa. Israel	2	48
University of Tuscia. Viterbo. Italy	1	18
Total	49	490.64

D7. Research communities in the themes

Names of research communities	Level of research community (national, regional, European, international)	Description of interaction
CropM: Modelling crop rotations	International	Workshops, joint papers
CropM: Data quality evaluation and labelling for modelling	International	Workshops, joint papers with AgMIP, public available software tool
CropM: Scaling	International	Workshops, joint papers
CropM: Impact response surface analysis	International	Workshops, joint papers
CropM: Model-aided crop ideotyping	International	Workshops, joint papers
CropM: Tree cropping systems.	International	Review papers, joint papers
CropM/LiveM/TradeM: Regional case studies	Regional, European	Knowledge exchange, workshop at the midterm conference and the stakeholder workshop in Brussels

Names of research communities	Level of research community (national, regional, European, international)	Description of interaction
LiveM: Livestock disease research and modelling	European (with plans for linkage with GRA)	Initial workshop in Pirbright, UK, to discuss the state-of-the-art in the field; exchanges of information and knowledge between Italian, Norwegian and Spanish modelling groups in this area. Identification and initial contact with international institutes active in this area
LiveM: Permanent grassland modelling	International	Collaborative efforts developing protocols for model evaluation and inter-comparison (uncalibrated and calibrated runs) and completion of exercises in these areas; Input (and leadership regarding methods employed) to AgMIP grassland group activities Linkage of community and joint activities with grassland modellers in CropM theme
LiveM: Farm-scale modellers	European	Knowledge exchange, inventory of models, model inter-comparison exercise, Joint workshop with TradeM and progress towards assessment of state-of-the-art in farm-scale modelling of livestock systems in Europe
TradeM: AGMIP	International	TradeM workshop announced in AGMIP
TradeM: AGMIP	International	Joint book plan

E Project coordination and management

E1. Deliverables performed

Deliverable ID	Description	Month planned	Month achieved
D-H1.1	Review of the opportunities for using cloud computing	2013-05	2013-03
D-H1.2	Review of models and methods, together with Themes	2013-09	2015-09
D-H1.3	Review of upscaling methodologies	2014-05	— ¹
D-H1.4	Report on model integration approaches	2015-04	— ¹
D-H2.1/D-C6.1	Overview of case studies	2015-05	2015-07
D-H2.2/D-C6.3	A strategic map for the engagement with national/EU policy maker on adaptation and mitigation	2015-05	⇒D-C6.3
D-H2.3/D-C6.4	Final version: Strategic map for the enengagement of the agri-food chain	2015-05	⇒D-C6.4
D-H2.4/D-C6.5	A strategy for the dissemination outputs at the national, EU and global levels	2012-12	2013-07
D-H3.1	FACCE MACSUR Website	2015-05	2015-05
D-H3.2	Definition of clear responsibilities	2012-11	2012-11
D-H3.3	Regular Progress Reports	2015-05	2015-05
D-H3.3	Progress report M8	2013-01	2013-03
D-H3.3	Progress report M14	2013-08	2013-06
D-H3.3	Progress report M20	2014-02	2014-06
D-H3.3	Progress report M32	2015-01	2014-09
D-H3.3	Final report	2015-05	2015-08
D-H3.4	Dissemination of the outputs of the network-activities and facilitating collaboration with other relevant European and international organizations and networks	2015-05	2015-05
D-H3.5	Administrative tasks and reports	2014-06	2013-06
D-C0.1	CropM website	2012-06	2012-06
D-C0.2	Regular (3-monthly) newsletters	2015-05	2015-06
D-C0.3	Report about the strategy for future research	2015-01	2014-12
D-C1.1	List of identified crops and related models	2012-07	2013-02
D-C1.2	Data classification and criteria catalogue for data requirements	2012-08	2013-04
D-C1.3	Data format for model in- and output	2012-11	2013-04
D-C1.4	Refined model evaluation methods and protocols	2014-05	2014-06
D-C1.5	Results of uncalibrated model runs available	2013-11	2014-05
D-C1.6	Model inter-comparison for calibrated models	2015-03	2015-01
D-C1.7	Regional data set for model inter-comparison	2014-07	2014-12
D-C2.1	Final set of compiled experimental data available	2015-05	2015-05
D-C2.2	Operational database for storing and extracting data	2013-11	2015-01
D-C2.3	Protocol for empirical data analyses finalised	2013-07	2013-05
D-C2.4	Reports on field experimental network meetings	2015-05	2015-07
D-C2.5	Empirical analysis on crop-weather relationships	2015-05	2015-06
D-C2.6	Online web tool for data visualisation	2014-11	2015-06
D-C3.1	Review of scaling methods for different purposes	2014-10	2014-10
D-C3.2	Inventory of data and data sharing mechanism for model linking and scaling exercises	2014-07	2015-07
D-C3.3	Report of scaling methods that have been compared in case studies	2015-01	2014-12
D-C3.4	Report on the comparison of model linking protocols in different test cases	2015-01	2015-02
D-C4.1.1	Defined terms and typology of uncertainty	2012-09	2013-05
D-C4.1.2	Framework structure to integrate improved methods for uncertainty evaluation, and protocols for methods application	2013-05	2014-07
D-C4.1.3	Estimates of crop responses to climate change with quantified ranges of uncertainty	2014-05	2015-07
D-C4.1.4	Communication strategy for uncertainty	2014-11	2014-12
D-C4.2.1	Standardised methods and protocols based on current best practices to conduct sensitivity analysis	2014-09	2014-12
D-C4.2.2	Identification and quantification of differences between models	2014-10	2014-12
D-C4.2.3	Quantified evidence of error propagation	2015-05	2015-06
D-C4.2.4	Information to support input data quality and model improvement	2015-05	2015-06
D-C4.3.1	State-of-the-art scenarios from climate model ensemble simulations (CMIP5) for local/regional applications	2014-09	2014-09

¹ Principal researcher with long-term illness

Deliverable ID	Description	Month planned	Month achieved
D-C4.3.2	Local-scale daily climate scenarios	2015-01	2014-09
D-C4.3.3	Evaluation of future diurnal variability and projected changes in extremes of precipitation and temperature and their impacts	2015-05	2015-07
D-C4.4.1	A versatile method for combining probabilistic projections of future climate with crop model sensitivity and uncertainty analysis	2014-05	2014-07
D-C4.4.2	Further development and operationalization of method for overlaying probabilistic climate projections with impact response surfaces	2014-11	— ¹
D-C4.4.3	Evaluation of different approaches for probabilistic assessment of climate change impacts on crop production	2015-05	2015-06
D-C4.5.1	Concepts and methods developed for probabilistic evaluation of a number of alternative adaptation options	2015-02	2015-07
D-C4.5.2	Development, operationalization and evaluation of method for probabilistic evaluation of different adaptation options	2015-01	2015-02
D-C4.5.3	Ultra-high yielding wheat ideotypes optimized for future climate change	2015-05	2015-02
D-C4.5.4	High yielding and resilient barley and maize ideotypes suited to future climates	2015-05	2015-02
D-C5.1	Report on inter-institute exchanges	2015-05	2015-06
D-C5.2	Report of crop and other modeling courses	2015-05	2015-06
D-C5.4	Internet course implementation	2014-11	2014-11
D-C5.3	Report on internet course in crop physiology	2015-01	2015-06
D-C6.1/D-H2.1	Overview of case studies	2015-05	2015-07
D-C6.3/D-H2.2	A strategic map for the engagement with national/EU policy maker on adaptation and mitigation	2015-05	2015-07
D-C6.4/D-H2.3	A strategic map for the engagement with the agri-food chain	2015-05	2015-07
D-C6.5/D-H2.4	A strategy for the dissemination outputs at the national, EU and global levels	2012-11	2013-07
D-L0.1	Agreed co-ordination structure and processes for operation of LiveM	2012-08	2013-05
D-L1.1	Identified relevant datasets	2012-11	2013-06
D/M-L1.2.1	Dataset completed	2013-05	2013-05
D/M-L1.2.2	Analysis of inter-annual and seasonal variations of productive, reproductive and health data	2014-05	2014-10
D/M-L1.2.3	Relationships between (THI) and dairy cow performances established	2015-05	2015-01
D-L1.3	Identified datasets	2013-05	2013-05
D-L1.4.1	Report on the desired meta-data for C-sequestration inventories	2014-05	2014-05
D-L1.4.2	List of sources of C-sequestration data identified within Europe	2014-10	2014-09
D-L1.4.3	Inventory of C-sequestration dataset meta-data established and available online	2015-05	2014-06
D-L1.5	Identified uncertainties in climate change prediction	2013-05	2013-06
D-L2.1.1	A list of models and modelling teams is available	2013-11	2013-10
D-L2.1.2	Datasets classification and criteria for data requirements	2013-11	2013-10
D-L2.2	Model evaluation protocols	2014-05	2014-06
D-L2.3	Results of uncalibrated model runs	2014-04	2014-06
D-L2.4	Model inter-comparison	2015-05	2015-06
D-L3.1	Internet database is operational	2013-09	2014-06
D-L3.1.2	Report on data collection for running and testing farm-scale models	2015-04	2014-07
D-L3.2	Report on farm modelling methodologies	2014-05	2014-07
D-L3.3	Review of the applicability and effectiveness of mitigation and adaptation measures	2015-01	2015-01
D-L4.1	Review of regional scale models in the EU, and the methods commonly used when modelling outcomes of the implementation of climate change mitigation policies	2013-09	2015-06
D-L4.2	Report on stakeholder involvement methodologies	2015-05	2015-04
D-L4.3	Report on multidisciplinary approaches, contribution to Hub report	2015-05	2015-04
D-T0.1	TradeM website	2012-06	2012-10
D-T0.2	Clear definition of responsibilities, roles of the partners, an agreement on quality criteria	2013-05	2012-11
D-T0.3	Regular (6-monthly) progress report after the kick-off-meeting, each workshop and the congress	2015-03	2015-05
D-T0.4	Presentations, papers, data, and results of (amended) models	2012-08	2015-05
D-T1.1	Factsheets of the models	2012-07	2012-09
D-T1.2	Scenario report	2012-09	2013-06

¹ Principal researcher on maternity leave

Deliverable ID	Description	Month planned	Month achieved
D-T1.3	Model results and comparison of model outputs	2013-08	2015-04
D-T1.4	Description and analysis of price data consistent with AGMIP scenario	2013-11	2015-04
D-T2.1	Climate dependent yields	2014-05	2015-07
D-T2.2	Updated data base	2014-05	2014-04
D-T2.3	Climate dependent equilibrium model. Report on model with open source computer code.	2014-11	2015-07
D-T2.4	Integration possibilities and eventual contrasts with up-scaling activities in other networks	2015-05	2015-07
D-T2.5	Prototype of stochastic equilibrium model of the food system. Report on model with open source computer code	2015-05	2015-04
D-T3.1	Most relevant aspects of climate change in hot-spot analysis	2013-01	2013-07
D-T3.2	Report identifying storylines and scenario to be the basis for simulations in each hot-spot area	2013-03	2013-07
D-T3.3	Identification of models to be applied in each hot-spot area	2013-07	2013-11
D-T3.4	First round of simulations: Report	2014-12	2014-11
D-T3.5	Workshop for discussion of simulation results	2014-05	2014-04
D-T3.6	Workshop for discussion of political insights from simulation results	2014-11	2014-11
D-T3.7	Workshop to present the results stemming from the new round of simulations	2015-01	2015-04
D-T3.8	Publication of a book summarising the obtained research results	2015-05	2014-06
D-T4.1	Curriculum for training course on policy impact assessment	2013-11	2014-06
D-T4.2	Curriculum for training course on agricultural production and environmental modelling with GAMS	2014-01	2013-03

E2. Milestones achieved

Milestone ID	Description	Month planned	Month achieved
M-H1.1	Improved integrated modelling activities	2014-11	2014-09
M-H1.2	Advanced achievements in modelling activities	2015-01	2015-04
M-H2.1/H3.1/C6.1	Kickoff meeting	2012-08	2012-10
M-H2.2/M-C6.2	Engagement meetings with national and EU policy actors	2015-05	2015-05
M-H2.3/M-C6.3	Engagement meetings with the agri-food chain sector	2015-05	2015-05
M-H2.4/M-C6.4	A portfolio of dissemination outputs at the national, EU and global level	2015-05	2015-05
M-H2.5	Publication of a book summarising the obtained research results	2015-05	2015-09
M-H3.1	Kickoff meeting of FACCE MACSUR	2012-08	2012-10
M-H3.2	FACCE MACSUR progress workshop among theme coordinators	2012-10	2012-10
M-H3.3	Workshop M8	2013-01	2013-06
M-H3.4	Workshop M14	2013-09	2013-09
M-H3.5	Mid-term Workshop (Workshop M20)	2013-05	2014-04
M-H3.6	Final Science Conference (Workshop M36)	2015-05	2015-04
M-H3.7	Final Stakeholder Congress	2015-05	2015-05
M-C0.1	CropM Kickoff (M2)	2012-08	2012-10
M-C0.2	CropM Progress workshop (M13)	2013-06	2013-05
M-C0.3	CropM Progress workshop (M25)	2014-06	2014-02
M-C0.4	CropM Final workshop (M36)	2015-05	2015-04
M-C1.1	Protocol for model inter-comparison	2012-11	2012-11
M-C1.2	Model inter-comparison of uncalibrated results	2013-11	2014-05
M-C1.3	Model inter-comparison of calibrated results and sensitivity	2014-08	2014-06
M-C1.4.1	Common workshop on model evaluation	2015-05	2014-02
M-C1.4.2	Special issue of a scientific journal on model evaluation	2015-05	— ¹
M-C1.5	Model inter-comparison at regional scale	2015-05	2015-07
M-C2.1	First set of compiled experimental data	2012-12	2012-12
M-C2.2	Data scheme of database finalized	2013-05	2013-05
M-C2.3	Protocol prepared and made available	2012-11	2012-11
M-C2.6	Description of visualisation tools	2013-09	2014-10
M-C3.2	Decision on data sharing mechanism for scaling and model linking exercises	2013-05	2013-05
M-C3.3	Decision on test cases, aims and upscaling methods to be compared	2013-05	2013-05
M-C3.4	Decision on test cases, aims and models to be linked	2013-05	2013-05

¹ not sufficient contributions

Milestone ID	Description	Month planned	Month achieved
M-C4.1.1	Kick-off workshop on the state-of-the-art on uncertainty analysis for crop models	2012-11	2012-11
M-C4.1.2	Consensus on typology and defined terms, and desired end products	2013-01	2013-01
M-C4.1.3	Framework structure, including communication strategy	2013-05	2013-05
M-C4.2.1	Kick-off workshop on the state of the art concerning sensitivity analysis for crop models	2012-11	2012-10
M-C4.2.2	Methods and protocols for sensitivity analysis, including responses to CO2 and extreme temperatures and water stress	2013-05	2013-05
M-C4.2.3	Quantified evidence of uncertainty within and between crop models provided by sensitivity analysis	2014-11	2014-11
M-C4.3.1	Accessible probabilistic projections, monthly TEMP and PRECIP changes grid-based (25x 5) over Europe	2013-05	2012-10
M-C4.3.2	Climate scenario workshop to present and evaluate local-scale daily climate scenarios based on the LARS-WG	2014-05	2013-06
M-C4.4.2	Evaluation workshop on probabilistic impact assessment methods (with regional cases)	2015-05	2015-05
M-C4.5.1	Session on impact uncertainty as part of overall CropM results workshop	2015-01	2015-04
M-C5.1	Scientific exchanges initiated	2012-11	2012-11
M-C5.2	Crop modeling courses initiated	2012-11	2013-03
M-C5.3	Internet course initiation	2013-02	2013-02
M-C6.1	Kickoff meeting to discuss the case and pilot studies to be utilised	2012-08	2012-10
M-C6.2/M-H2.2	Engagement meetings with national and EU policy actors	2015-05	2015-05
M-C6.3/M-H2.3	Engagement meetings with the agri-food chain sector	2015-05	2015-05
M-C6.4/M-H2.4	A portfolio of dissemination outputs at the national, EU and global level	2015-05	2015-05
M-L0.1	Annual reports on progress within the Theme	2015-05	2015-07
M-L1.3	List of required variables and parameters	2012-05	2014-03
M-L1.4	List of papers and reports to be reviewed	2014-05	2014-05
M-L1.5	List of uncertainties based on results of workshops	2013-05	2013-06
M-L2.1	A minimum dataset for models is defined	2013-05	2013-06
M-L2.2	Workshop: protocol for model evaluation	2013-05	2014-02
M-L2.3	Indicators of model performance are identified and calculated	2015-05	2014-06
M-L3.1	Review of farm models and active farm modelling groups	2013-05	2013-05
M-L3.1.2	Workshop to discuss data collection for testing farm-scale models	2014-09	2014-10
M-L3.2	Workshop to discuss farm modelling methodologies	2013-11	2014-10
M-L3.3	Workshop to discuss modelling the effect and effectiveness of climate-related policy measures applied at the farm scale	2014-05	2014-10
M-L4.1	Workshop on regional scale models	2013-05	2014-10
M-L4.2	Workshop on stakeholder involvement methodologies	2014-05	2014-04
M-L4.3	Stakeholder workshops on multidisciplinary approaches	2014-11	2014-10
M-T0.1	Kickoff meeting (M2)	2012-07	2012-09
M-T0.2	Workshop (M6)	2012-11	2012-10
M-T0.3	Workshop (M12)	2013-03	2012-03
M-T0.4	Workshop (M18)	2013-11	2013-11
M-T0.5	Workshop (M24)	2014-07	2014-04
M-T0.6	Workshop (M30)	2015-01	2014-11
M-T0.7	Congress (M36)	2015-05	2015-04
M-T1.1/M-T0.1	Start-up workshop	2012-08	2012-09
M-T1.2	First results of existing models	2012-11	2013-03
M-T1.3	Assessments of existing models	2013-06	2013-06
M-T2.1	Improved integrated modelling activities	2014-11	2014-11
M-T2.2	Advanced achievements in modelling activities	2015-05	2015-04
M-T3.1	Decisions taken regarding the simulations in each hot-spot area.	2013-12	2013-12
M-T4.1	Training course on policy impact assessment announced	2014-01	2013-11
M-T4.2	Training courses on policy impact assessment finalised	2015-02	2014-03
M-T4.3	Training course on agricultural production and environmental modelling with GAMS announced	2014-01	2013-01
M-T4.4	Training courses on agricultural production and environmental modelling with GAMS finalised	2015-02	2015-04