

## Risk Habitat Megacity

A Helmholtz Research Initiative 2007 – 2011

Final Report | August 2011



German Aerospace Center | Karlsruhe Institute of Technology | GFZ German Research Centre for Geosciences | Helmholtz Centre for Infection Research | Helmholtz Centre for Environmental Research – UFZ | Universidad de Chile | Pontificia Universidad Católica de Chile | Pontificia Universidad Católica de Valparaíso | Economic Commission for Latin America and the Caribbean of the United Nations (ECLAC/CEPAL) | Universidad Alberto Hurtado

<http://www.risk-habitat-megacity.ufz.de>





The Project was supported by the “Initiative and Networking Fund” of the Helmholtz Association.

**Imprint:**

**Publisher:** Helmholtz Centre for Environmental Research - UFZ  
Internet: [www.ufz.de](http://www.ufz.de)

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Leipzig, August 2011

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## 1. Summary/Preface

Today, worldwide more people are living in urban areas than in the countryside. Of this mega-trend urbanization that breeds both risks and opportunities, the emergence of the Megacity is perhaps the most visible expression. Aiming to analysing the complex urban processes, interactions and feedback mechanisms that turn megacities into a risk habitat, the international and interdisciplinary *Risk Habitat Megacity* research initiative was established. By investigating the processes and associated risks of mega-urbanization and developing implementation solutions for sustainable urban development in a comprehensive and interdisciplinary manner, new knowledge for orientation and application could be provided.

The *Risk Habitat Megacity* research initiative reflects the joint work of a network of about sixty natural and social scientists and engineers from more than ten Universities and research centres from Latin American countries, including the Economic Commission for Latin America and the Caribbean of the United Nations (ECLAC/CEPAL), and the Helmholtz Association in Germany. Five Helmholtz Centres participated: the German Aerospace Centre (DLR), the Karlsruhe Institute of Technology (KIT), the Helmholtz Centre for Infection Research (HZI), the GeoForschungsZentrum Potsdam (GFZ), and the Helmholtz Centre for Environmental Research (UFZ) where the initiative was coordinated. The funding by the Helmholtz Initiative and Networking Fund was a decisive complement of the involved Helmholtz Centres that likewise contributed by their own resources.

This final report of the research initiative aims at summarizing in brief the variety of results that evolved. This includes both, specific results within the various research topics as well as overall results developed by the entire initiative. It is the outcome of an innovative research design that includes an ‚integrative‘ approach, combining and integrating different thematic perspectives on one selected city region, Santiago de Chile, that led to conclusions of the complex system Megacity. While attempting to discover the state of and development in individual realms of Santiago de Chile, the initiative gained a more thorough understanding of the entire urban system and its constitutive elements. With its problem perspective and context-specific investigation, this approach links the generation of orientation knowledge with action-oriented knowledge and the implementation of solutions.

Given that the number and size of mega-large and mega-complex systems will continue to grow in the future, there is significant potential for further research in this direction. It is hoped that the approach and its intention of shifting governance in megacities “from response to action” and from “sectors to systems” will make a valuable contribution. Currently, the work of *Risk Habitat Megacity* continues with a re-focus on climate change adaptation.

With this final report, we would like to thank the Helmholtz Association for supporting the research initiative through its Initiative and Networking Fund.

## 2. Work and results report

- A) Starting point
- B) Progress of the work carried out
- C) Major results
- D) Special aspects of the project
- E) Future work
- F) Potential for application

## 2. Work and results report

### A) Starting point

The international and interdisciplinary *Risk Habitat Megacity* research initiative was established aiming to analysing complex urban processes, interactions and feedback mechanisms that turn megacities into a risk habitat. The work of the initiative was driven by the fact that the year 2007 was marked by the 'urban turn' that finds for the first time in history more people living in urban areas than in the countryside, with the emergence of the Megacity as perhaps the most visible expression of the mega-trend urbanization. The Helmholtz research initiative therefore based the work on the following objectives that were explored for one selected case, the Metropolitan Region of Santiago de Chile:

- » **Assess characteristic risks** and their driving factors and interdependencies by combining and applying natural, applied and social scientific risk research approaches to the perspectives of hazardous events and vulnerabilities.
- » **Design strategies and instruments for risk management** as key tools for a more sustainable urban development.
- » **Develop scenarios for future urban developments** and a system of appropriate and locally adopted indicators for evaluating risks.
- » **Develop implementation solutions** that take institutional, political, economic and social backgrounds into consideration.
- » **Build a platform for continuous** interdisciplinary, cross-cultural **learning** and application to integrate academic research and practice.
- » Create a suitable environment for **young researchers**, where activities comprise training and education by the Chilean and German research partners.
- » **Transfer results and knowledge** into academic and professional practice.

According to these main objectives, the *Risk Habitat Megacity* research initiative developed an innovative comprehensive and interdisciplinary approach that combines basic theoretical and conceptual considerations with empirical and application-oriented analysis. By investigating the processes and associated risks of mega-urbanization and developing implementation solutions for sustainable urban development, it presents new knowledge for orientation and application.

The project was structured according to three Cross-Cutting Concepts (CCCs) and seven Fields of Application (FoA). The three CCCs *Sustainability*, *Risk* and *Governance* represented the integrative conceptual framework of the initiative. The sustainability concept formulates the target dimension (defining sustainability targets for the future development of Santiago de Chile), the risk concepts indicate the problem dimension (pointing at the severity of certain problems) and the governance concept concentrates on the action side (providing strategies and instruments for mitigating risks and adapting to risks). These CCCs have been analysed and evaluated according to the following seven megacity-typical empirical FoA: Land use management, Socio-spatial differentiation, Energy system, Transportation, Air quality and health, Water resources and services, and Waste management.

Three outstanding features characterized the overall structure and the work of the initiative:

1. An 'integrative' approach that combines and integrates different thematic perspectives on one selected city region, Santiago de Chile – this leads to conclusions of the complex system "Megacity"
2. A future orientation that builds on scenarios and indicators – this guides the development of sustainable development strategies for Santiago de Chile
3. The training and integration of 20 young researchers in an interdisciplinary and international context.

## B) Progress of the work carried out

The research initiative carried out its work according to the following six main milestones:

1. Problem analysis
  2. Risk analysis
  3. Scenario analysis
  4. Development of measures for mitigating and adapting to risks
  5. Integration of measures in recommendations for a consistent sustainability strategy
  6. Transferring results to other Latin American Megacities
- » Ad 1: The **problem analysis** was finalized by all FoA. The results were presented at status conferences in June 2008 in Santiago de Chile and in September 2009 in Leipzig.
- » Ad 2: Based on three different risk concepts on urban risks that were selected and further developed for the purpose of the initiative (hazardous risks; sustainability risks; systemic risks), all FoA finalized the **risk analysis**. The results were presented in May 2010 in Santiago and are in the focus of the Risk Habitat Megacity book that will be published in 2011 by Springer Publisher.
- » Ad 3: The **scenario analysis** builds on the work with indicators – developed in intensive exchange with local stakeholders. Three alternative framework scenarios were developed for the year 2030 (Business as Usual; Market Individualism; Collective Responsibility). These framework scenarios were contextualized in all FoA, resulting in FoA specific storylines, and future perspectives. The results were presented at the stakeholder conference in October 2010. The scenarios and

the scenario process will be published in a scenario book.

- » Ad 4 and 5: Based on the scenario results, **context-specific measures** and policy **recommendations for a consistent sustainability strategy** for Santiago de Chile were developed. A summary of results was published as a synthesis report in 2010 in English and Spanish. The report was distributed among local stakeholders and other Megacity researchers.

The Regional Government (GORE) has been intensively involved in the discussion on scenarios as they are currently developing a regional development strategy for Santiago for the year 2030. The main results of the research initiative have been handed over to them, to be included in their development strategy.

- » Ad 6: **Results were transferred to other Latin American megacities** (Buenos Aires, Lima, Mexico, Sao Paulo, Bogotá). Several workshops were realized in Bogotá. A solid research network was established in Latin America. One of the results is a comparative Panorama on the sustainability of six Latin America megacities – published by CEPAL/ECLAC in 2011.

However, the efforts of transfer could not be transformed into 'real' research within all five megacities beyond Santiago as the second envisaged implementation phase of RHM (beginning in 2010) was not approved. This was the main modification to the original work plan.

Changes in the financial planning were necessary as the scenario process and the embedding of the Chilean PhD candidates took more time than expected. A financial prolongation was approved until February 2011. According to the time table, given the prolongation until February 2011, all milestones were accomplished.



The total number of PhD students financed by the initiative is 20. PhD students in Chile are still working on their thesis, while in Germany all PhD students are expected to get finished in the year 2011, the first four have already defended their thesis (see appendix).

No exceptional problems were encountered during the duration of the research initiative. Among the main challenges were intercultural and interdisciplinary differences between the partners (quite a “normal” problem in an international context) that had to be dissolved. Some difficulties arose from the changes in the Regional Government (GORE) that made the exchange with political stakeholders especially challenging. The severe Chilean 2010 earthquake was likewise reflected in the work of the initiative as some workshops could not be held as planned. Nevertheless, none of the mentioned difficulties endangered the successful accomplishment of the main objectives of the initiative (see also point c) in this report).

## C) Major results

The *Risk Habitat Megacity* research initiative delivered a great variety of results on different levels: On the one hand, there are specific results within the various research topics (Fields of Applications as well as Cross-Cutting Concepts). On the other hand, overall results were developed by the entire initiative.

### 1. Selective results on the level of individual research topics:

In the different research topics, advances in empirical findings, methods, models, tools and measures could be achieved. The following results represent a selection of major outcomes:

- » A tour-based approach for modelling activity and travel pattern considering time-space constraints

in Santiago de Chile was developed in order to better understand existing individual travel behaviour. This new approach extends existing trip-based transport demand models and allows, based on the analysed exemplary tour, the application to further tour types to estimate the entire transport demand of Santiago city.

- » A reliable model of the S-wave velocity (the velocity of secondary waves that typically follow the primary waves during an earthquake) for the basin of Santiago de Chile was derived that indicates the influence of local geologic conditions modifying the ground motion when earthquakes occur well outside of the Santiago basin. Furthermore, seismic hazard scenarios were calculated.
- » Changes in runoff were modelled based on land-use developments, urban planning laws, climate change predictions, and expert interviews and allow for predictions about the changes in flood hazard which the adjacent urban areas are facing after heavy winter precipitation events.
- » To gain a perspective on the future development of the energy system, an existing energy system model was adapted for the case of Chile. The integration in the future scenario analysis allowed for conclusions on sustainability-related risks of Chile’s energy system.
- » Model calculations were performed to estimate the amount of landfill gas emitted and to assess the impact of waste composition and the capturing and flaring of the gas on landfill gas emission.
- » The main drivers of socio-spatial differentiation processes were analysed and hot-spots identified that bear the potential of social exclusion. A household questionnaire survey and expert interviews were undertaken for analysing the potential of social integration in socially mixed areas.



## 2. Overall results on the level of the entire initiative:

The topic-related results represent essential products that have been integrated and synthesized at the overall level of the initiative. The most important outcomes for the implementation phase in Santiago de Chile regarding risks and sustainable development can be summarized as follows:

### Risk analysis and risk management proposal

Regarding the risk analysis and risk management proposals, three separate risk concepts were developed and applied for the different FoA, following the idea that a multiple perspective is a more adequate approach to risk in complex situations than a single perspective. This likewise considers that a single risk concept would fail to satisfy the analysis requirements for the broad range of risks concerned in megacities. This multiple risk approach refers to hazardous, sustainability and systemic risks. It extends the current knowledge of complex risks in megacities and creates added value to risk discourses. Furthermore, it deepens the understanding of the emergence of risks and their severity and opens up a new perspective for researchers and stakeholders embedded in “traditional thinking”. All results and conclusions will be available in the book “Risk Habitat Megacity” that will be published in 2011.

### Sustainability analysis, sustainability deficits and recommendations

The sustainability analysis of Santiago de Chile was conducted based on the operationalizing of the Helmholtz Associations’ Integrative Sustainability Concept that serves as a framework of sustainability goals and rules. The concept builds essentially on the use of indicators and scenarios. A global explorative framework scenario was defined based on a set of driving factors. Based on this, three alternative scenarios were formulated, each describing a different possible path for the development in Santiago de Chile until the year 2030 (Business as Usual; Market Individualism; Collective Responsibility). The development of indicators, driving factors and storylines included intensive discussion with experts and stakeholders in Santiago de Chile.

The contextualization of indicators and scenarios in all FoA was the basis for the analysis of topic-specific current sustainability deficits as well as future development paths that lead in a final step to concrete policy recommendations. The framework, the overall analytical approach of indicators and scenarios and its context-specific application represent an innovative tool that helps to deal with uncertainties and complexities, to sensitize for behavioural change,

to create participatory processes and to support decision-making. The main results were summarized in a Spanish and English synthesis report that has been published as an UFZ report in 2010. This report was distributed among stakeholders in Santiago de Chile and researcher from other Megacity programmes.

## 3. Highlights:

There is a great number of further outcomes that are listed below. For publication details and the education of young researchers, see Appendix.

- » **New knowledge.**  
According to the interdisciplinary character of the initiative, interdisciplinary knowledge was exchanged and applied. This holds especially true for joint publications and the education of young researchers.
- » **Chilean-German exchange.**  
The overall success of the initiative was guaranteed through continuous Chilean-German coordination meeting, and continuous exchange between the German and Chilean counterparts. Three annual status conferences were organised with all project partners. Two of them took place in Santiago de Chile (2008 and 2010). The 2009 status conference was organised in Leipzig. Each of the status conference included a PhD specific activity like poster session or individual PhD workshops.
- » **PhD education.**  
The status conferences were accompanied by PhD summer/winter schools (Los Andes, Naumburg, Santiago de Chile) whereof two were mainly organised by the PhD themselves.
- » **Regional Implementation.**  
Transdisciplinarity was assured by strong collaboration with the Regional Government (GORE) in Santiago and intensive exchange with local experts both scientists and practitioners in the different topics. In this context several workshops on different levels were organized.



» **German Platform on Megacity Research.**

Intensive exchange with other scientists, politicians, etc. as well as representativeness of the research initiative could be achieved by participating in several Innovation forum (BMBF), giving joint presentations with other Megacity research initiatives (BMBF + DFG) at conferences (e.g. World Urban Forum), and throughout a good reputation of individual topics and the overall initiative at international conferences in general.

» **International Programmes.**

An excellent research network in Chile and Latin America could be established and visibility within the broader scientific community (UGEC (Urbanization and Global Environmental Change) project of the International Human Dimension Program -IHDP, World Bank, Siemens, etc.) and among politicians could be achieved. This was underlined by the co-organisation of the Forum Bogotá - Berlín - Beijing - Desafíos y Soluciones para las Megaciudades, as an integrated scientific event of the ExpoDeutschland 2008 in Bogotá (Columbia).

» **International Conference.**

The research initiative organized the international conference 'Megacities: Risk, Vulnerability and Sustainable Development' with more than 200 participants in 2009 in Leipzig. This conference offered a platform for exchange within the worldwide Megacity research community. The conference included more than 100 presentations, three key note speeches, a poster session and a young researchers' workshop.

» **Regional Platform Latin America.**

Among the results is a regional Panorama, a comparative study on Sustainability in six Latin American Megacities under the auspices of the United Nations Economic Commission for Latin America and the Caribbean.

» **Web-based meta data system.**

Through the elaboration and establishment of a meta data system, exchange of data between all participating partners of the initiative could be guaranteed and facilitated.

» **Trilingual glossary.**

A web-application with Megacity-specific terms related to Risk, Governance and Sustainability was elaborated and implemented. This is a very useful tool to strengthen the common understanding across geographical and disciplinary boundaries.

» **Videos.**

For visualization and learning, a series of videos were developed explaining the overall problems of Santiago de Chile and tackling the FoA-specific risks and opportunities. Both German and Latin American involved scientists stated their proper points of view.

» **Atlas.**

The development of an urban geo-science Spanish-English web-based Atlas is still under consideration. This Atlas will make the main results in terms of maps available for the public.

» **UN Decade.**

Furthermore, the research initiative was awarded as an official project of the UN decade 'Education for sustainable development' 2009/2010.

» **German minister Shavan** visiting RHM project.

In 2009 the initiative was visited in Santiago de Chile by the German minister of education (Mrs. Schavan).



## D) Special aspects of the project

### 1. Features decisive for funding

Among the main features that were decisive for funding was

- a) The general increasing interest in mega-urbanization given the fact that more than half of the world population is living in cities and the amount of megacities is increasing. In this context, Latin American as one of the most urbanized continents represents an especially interesting case study.
- b) The good and long lasting contacts with researchers and organisations in Santiago de Chile that facilitated the establishment of a Chilean-German research consortium.
- c) The innovative integrative and interdisciplinary research approach. The focus lied on investigating a wide range of complex and overlapping processes as well as multiple risks in one Megacity, Santiago de Chile. The research approach comprises the combination of conceptual, theory-based knowledge with empirical findings, predictions in the future (scenarios) as well as the exchange with local stakeholders.
- d) The strong integration of in total 20 German and Latin American PhD students. Thereby contributing to capacity building in an interdisciplinary, intercultural and international research environment.

### 2. Added value

The funding by the Helmholtz Initiative and Networking Fund was a decisive complement of the involved Helmholtz Centres that likewise contributed by their own resources. The additional funds were especially valuable for the support of the 20 PhD students as well as travel costs that allowed intensive contact with the

Chilean partners. The funds therefore fostered the exchange between disciplines, cultures, science and policy and helped to develop an intensive network in Latin America. Without that additional funding, the project would not have succeeded.

### 3. Strategic benefit

Among the strategic benefits is the 'Positioning' and 'Visibility' of the Helmholtz Association within the Megacity research community in general and in Latin America in particular. Together with the two other German Megacity research initiatives of the DFG and the BMBF, a German Initiative of Megacity research was established through continuous exchange and joint representation. In general, the *Risk Habitat Megacity* research initiative serves as an outstanding example of strategic partnerships and its 'Architektenrolle' in international projects and co-operations.

## E) Future work

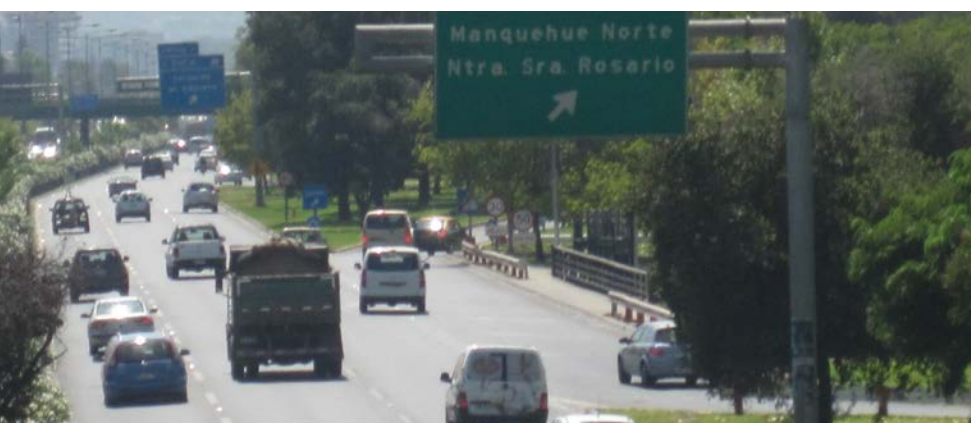
The partners of the *Risk Habitat Megacity* research initiative recognized the potential for continuing topic-specific work as well as integrative work of high importance. The transfer of the conceptual framework, results and knowledge to other Latin Americas megacities would have been a beneficial and logical continuation of the initiative. But as no additional funding was available, this could not be followed up.

Fortunately, Megacity research can be followed up within the ClimateAdaptationSantiago (CAS) project. This project is financed by the International Climate Initiative of the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU). The work of Risk Habitat Megacity continues with a re-focus on climate change adaptation.

The main objective of the CAS project is the development of adaptation measures for the Metropolitan Region of Santiago de Chile. The work includes a strong participatory process and the establishment of a Regional Learning Network on climate change adaptation in Latin American large agglomerations. Partners in this project are two Helmholtz Centres, the Karlsruhe Institute of Technology (KIT) and the Helmholtz Centre for Environmental Research (UFZ), coordinating the project. Among the Chilean partner institutions are the Pontificia Universidad Católica de Chile, the University de Chile and the United Nations Economic Commission for Latin America and the Caribbean.

#### F) Potential for application

The results of the *Risk Habitat Megacity* research initiative in form of policy recommendations have been handed over to the regional and local stakeholders who will hopefully include them in development strategies. The project does not address business – therefore licences, patents and co-operation with business was not envisaged. <<



### 3. Annex Products 2007- 011

- A) Qualification of junior researchers
  - PhD theses
  - Habilitation thesis
  - Diploma/Bachelor/Master theses
- B) Publications
  - Published contributions
  - Unpublished working papers
- C) Public lectures, presentations
- D) Award
- E) Press releases

## 2. Annex - Products 2007 - 2011

### A) Qualification of junior researchers

#### PhD theses

Azócar de la Cruz, Gabriela  
Universidad Alberto Hurtado  
“Coordination as a mechanism of risk observation”

Clerc, Jacques  
Universidad de Chile  
“Applied general equilibrium and sustainability indicators for Santiago”

Durán Saavedra, Gustavo A.  
Pontificia Universidad Católica de Chile  
“Power morphology in the capitalist city. Urban poverty, governance and water market in Santiago de Chile”

Godoy Barbieri, Cristián Hernán  
Universidad de Chile  
“Simulation model for riverine systems: local morphologic changes and water management (Tentative)”

González Martínez, Tahnee  
Karlsruhe Institute of Technology (KIT)  
“Analysis of different municipal waste management concepts for the megacity Santiago de Chile and their impacts on the informal sector” (thesis defended)

Höhnke, Carolin  
Helmholtz Centre for Environmental Research – UFZ  
“Public transport governance in the light of decentralization – the cases of Santiago de Chile and Bogotá”

Justen, Andreas  
German Aerospace Center  
“Model based evaluation of transport policies in megacities – the case Santiago de Chile” (thesis defended)

López Ospina, Héctor Andrés

Universidad de Chile

“A model of the urban dynamic system: predicting the emerging urban sustainability from agents behavior and system constraints using a multi-scales approach”

Lukas, Michael

Helmholtz Centre for Environmental Research – UFZ

“Political participation in the context of periurban megaprojects in Santiago de Chile”

Müller, Annemarie

Helmholtz Centre for Environmental Research – UFZ

“The influence of land use and land cover changes on the flood risk in Santiago de Chile” (thesis defended)

Muñoz, José

Universidad de Chile

“Multiscale traffic model”

Paredes Martinez, Gonzalo

Universidad de Chile

“Modelling energy systems in megacities with a focus on sustainable development”

Perez, Adriana

Universidad de Chile

“Seismic hazard in the central Chilean region”



Pilz, Marco  
GFZ German Research Centre for Geosciences  
“Site effect characterization by means of seismic noise and earthquake analysis in large urban areas of Santiago de Chile” (thesis defended)

Quiroga, Marko  
Pontificia Universidad Católica de Chile  
“Comparative sustainability in regional megacities (the cases of Bogotá, Mexico City and Santiago): towards the construction of a system of third generation indicators”

Rasse, Alejandra  
Pontificia Universidad Católica de Chile  
“Spatial proximity and social integration. The dimensions of social integration and its application to the urban space”

Rugiero, Vanessa  
Pontificia Universidad Católica de Chile  
“Urban growth and its effects in the increase or decrease of natural risks in the Andean piedmont of the metropolitan region of Santiago de Chile”

Salas, Alejandra  
Pontificia Universidad Católica de Chile  
“Targets and indicators for sustainable development in the Santiago Metropolitan Region: a critical institutional perspective”

Schleenstein, Gerhard  
Ingeniería Alemana S.A.  
“Alternatives for a sustainable management of stormwater in megacities of emerging countries – the case of Santiago de Chile”

Welz, Juliane  
Helmholtz Centre for Environmental Research – UFZ  
“Ambivalent segregation patterns considering spatial and temporal dimensions of social integration – the case of Santiago de Chile”

#### Habilitation thesis (finished)

Heinrichs, D. (2011): Urban Development and Spatial Planning. Berlin.

#### Diploma/Bachelor/Master theses (finished)

Berge, M. (2011): Historische Klimaanalyse in Santiago de Chile von 1920 bis 1985 unter dem Einfluss von El Niño und La Niña. Leipzig.

Brenck, M. (2010): Barrieren und Erfolgsfaktoren für die Implementierung eines virtuellen Kraftwerks mit 100% erneuerbaren Energien. Stuttgart.

Chow, I.G. (2010): Landfill Gas Generation and Use Alternatives as well as Financing Possibilities through the Clean Development Mechanism. Köln.

Fuenzalida, E. (2011): Sistemas Comunitarios: Capital Físico, Financiero, Humano y Social para el Abastecimiento de Aguas Domiciliarias en el Periurbano de la Región Metropolitana de Santiago. Santiago de Chile.

Godoy, E.V. (2010): Landfill Gas Generation and Use Alternatives as well as Financing Possibilities through the Clean Development Mechanism. Köln.

Hörmann, F. (2008): Mobilität und soziale Exklusion in Megacities. Eine explorative Untersuchung am Beispiel des Transmilenios in Bogotá, Kolumbien. München.

Huck, A. (2011): Mapping of urban land use structure in Santiago de Chile using multispectral Quickbird data and ground reference information. Jena.

Hundt, M. (2011): Quiero mi barrio – Chancen und Herausforderungen eines Stadterneuerungsprogramms. Potsdam (ongoing).

Keil, M. (2008): Gründe für den Autokauf und Auswirkungen des Autobesitzes auf das individuelle Mobilitätsverhalten in Santiago de Chile. München.

Klementz, F. (2008): Auswirkungen von verkehrspolitischen Maßnahmen auf die Verkehrsnachfrage. Das Beispiel Santiago de Chile. Berlin.

Nogalski, M. (2010): Modellierung und Berechnung der Verkehrsemissionen in Santiago de Chile – Ist-Situation und Prognose für 2030. Garmisch-Partenkirchen.

Otte, I. (2010): Zur Problematik des Klimawandels in der Metropolregion Santiago de Chile. Eine qualitative Studie zu den Auswirkungen auf die Energie- und Wasserwirtschaft. Lüneburg.

Reiter, J. (2009): Vulnerabilität gegenüber Überflutungen in ausgewählten Stadtteilen von Santiago de Chile. Berlin.

Romero, A.I.C. (2010): Analyse der Probleme und Möglichkeiten der Elektrizitätswirtschaft im Ballungsraum “Caracas Metropolitan Region” in Venezuela. Stuttgart

Schwarz, C. (2010): Potenziale für solare Großkraftwerke zur Unterstützung der Energieversorgung von Santiago de Chile. Stuttgart.

Seidl, N. (2008): Auswahl und Analyse von Nachhaltigkeitsindikatoren für den Bereich Abfall für Santiago de Chile. Koblenz-Landau.

Stork, K. (2010): Wasserbezogene Naherholung in der Metropolregion Santiago de Chile. Heidelberg.

Stumpf, A. (2008): Landslide Susceptibility Assessment in Central Chile. Dresden.





Valdivia, P. (2010): La yuxtaposición geográfica de la pobreza y los problemas ambientales en la comuna de Lampa, RM de Santiago. Santiago de Chile.

Vogel, J. (2010): Städte unter Anpassungsdruck: Klimawandel am Fallbeispiel Sao Paulo. Passau.

Vollath, C. (2011): Empirische Erfassung von Kennwerten zur Abschätzung des Güterverkehrsaufkommens in Santiago de Chile. Erlangen-Nürnberg.

## B) Publications

### Published contributions

**Abraham, W.-R.** (2011): Megacities as sources for pathogenic bacteria in rivers and their fate downstream. *International Journal of Microbiology*, vol. 2011, Article ID 798292, doi:10.1155/2011/798292.

**Banzhaf, E.; Höfer, R.** (2008): Monitoring urban structure types as spatial indicators with CIR aerial photographs for a more effective urban environmental management. *IEEE Transactions on Geoscience and remote sensing*.

**Banzhaf, E.; Netzband, M.** (2011): Urban Land Use Changes. Richter, M.; Weiland, U. (eds.): *Urban Ecology. A Global Framework*. Blackwell & Wiley Publ. (in press).

**Banzhaf, E.; Reyes-Paecke, S.; Ruiz de Viñaspre, P.** (2011): Land-use dynamics as major driver for changing thermal patterns in the urban environment. 31st EARSeL Symposium 2011 in Prague, Czech Republic, 4th Workshop on Land Use & Land Cover, 30.05.-03.06.2011, EARSeL eProceedings.

**Barton, J.; Heinrichs, D.** (forthcoming): Santiago de Chile: Adaptation, Water Management and the Challenges for Spatial Planning. In: Rosenzweig, C.; Solecki, W.; Hammer, S. (eds.): *Mayors' IPCC: International Panel on Climate Change in Cities* (working title).

**Bräutigam, K.-R.; Gonzalez, T.** (2010): Evaluation of municipal solid waste management in Santiago de Chile regarding sustainability. In: *International Solid Waste Association-World Congress (ISWA)* (ed.): *Urban development and sustainability - a major challenge for waste management in the 21st century*. Hamburg (online and CD).

**Bräutigam, K.-R.; Gonzalez, T.; Seidl, N.; Seifert, H.; Szanto, M.** (2008): Risk Habitat Megacity - Waste management in Santiago de Chile. In: Gallardo, A.; Bovea, M.D.; Colomer, F.J.; Monros, G.; Carlos, M. (eds.): *Ingeniería de residuos. Hacia una gestión sostenible*. Castellón, Spanien, Castelló de la Plana: Universitat Jaume I, 125.

**Büscher, C.** (forthcoming): Risiko-Lebensraum Megastadt. Karlsruhe: pre-print ITAS/KIT ([www.itas.fzk.de/deu/lit/epp/2010/bues10-pre01.pdf](http://www.itas.fzk.de/deu/lit/epp/2010/bues10-pre01.pdf): 30.03.2010), In: Birle, P.; Dewey, M.; Mascareño, A. (eds.): *Durch Luhmanns Brille: Herausforderungen an Politik und Recht in Lateinamerika und in der Weltgesellschaft*. Baden-Baden: Nomos.

**Büscher, C.; Mascareño, A.** (2011): *Sociología del territorio*. *Labor Interdisciplinaria de Desarrollo Regional* 18 (2) (accepted, forthcoming).

**Ebert, A.; Banzhaf, E.** (2011): Indikatorenbasierte Analyse des Überflutungsrisikos als Folge von urbaner Expansion am Beispiel von Santiago de Chile. In: *Tagungsband Arbeitskreis Lateinamerika* (in print).

**Ebert, A.; Höfer, R.** (2010): Mapping urban vulnerability from a multi-hazard perspective. Extended abstract, Workshop: "Spatial assessment and analysis of vulnerability" of the 22nd AGIT-Symposium in Salzburg, Austria, conference proceedings.

**Ebert, A.; Müller, A.** (2010): Bewertung von Vulnerabilität gegenüber Hochwasser in Santiago de Chile mithilfe einer dienstebasierten WebGIS-Anwendung. Reviewed paper, In: Strobl, J.; Blaschke, T.; Griesebner, G. (eds.): *Angewandte Geoinformatik 2010. Beiträge zum 22. AGIT-Symposium Salzburg*. Wichmann Verlag, 840-849, conference proceedings.

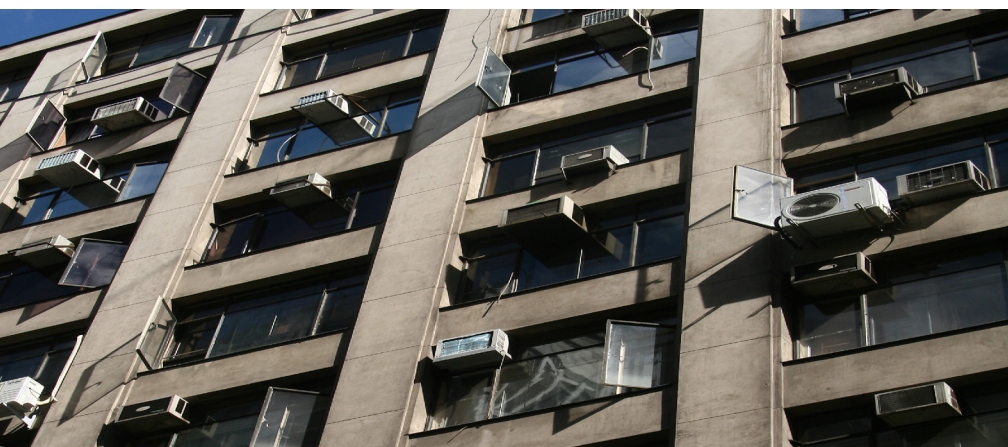
**Ebert, A.; Müller, A.** (2010): Offene, dienstebasierte GIS-Architekturen zur Kommunikation von Forschungsergebnissen am Beispiel eines Teilprojektes der internationalen Forschungsinitiative "Risk Habitat Megacity". In: Bill, R.; Flach, G.; Klammer, U.; Niemayer, C. (eds.): *GeoForum MV 2010 - Vernetzte Geodaten: vom Sensor zum Web*, 9-15, Conference proceedings.

**Ebert, A.; Banzhaf, E.; McPhee, J.** (2009): The influence of urban expansion on the flood hazard in Santiago de Chile. A modeling approach using remote sensing data. *Joint Urban Remote Sensing Event*, 20.-22.05.2009, Shanghai, China.

**Ebert, A.; Kerle, N.; Stein, A.** (2008): Urban social vulnerability assessment with physical proxies and spatial metrics derived from air- and spaceborne imagery and GIS data. *Natural Hazards* 48 (2), 275-294.

**Ebert, A.; Welz, J.; Heinrichs, D.; Krellenberg, K.; Hansjürgens, B.** (2010): Socio-environmental change and flood risks: the case of Santiago de Chile. *Erdkunde* 64 (4), 303-313.

**Godoy, C.; Gatica, N.; McPhee, J.** (2010): Towards management and regulation of gravel mining in urban areas: application of an optimization/morphological model to Maipo River. In: Dittrich; Koll; Aberle; Geisenhainer (eds.): *River Flow 2010*. 1443-1450.



**Hansjürgens, B.; Heinrichs, D.** (forthcoming): **Megacities and Climate Change: Early Adapters, Mainstream Adapters, and Capacities.** In: Kraas, F.; Aggarwal, S.; Coy, M.; Mertins, G. (eds.): *Megacities – Our global urban future.* Dordrecht: Springer Science.

**Hansjürgens, B.; Heinrichs, D.** (2007): **Mega-Urbanisierung: Chancen und Risiken für Nachhaltige Entwicklung in Megastädten.** In: Bundeszentrale für Politische Bildung: *Online Dossier Megastädte*, [http://www.bpb.de/themen/OTB0ZA,,0,MegaUrbanisierung%3A\\_Chancen\\_und\\_Risiken.html](http://www.bpb.de/themen/OTB0ZA,,0,MegaUrbanisierung%3A_Chancen_und_Risiken.html).

**Hansjürgens, B.; Samaniego, J.** (forthcoming): **Urban Climate Change Adaptation: Competences and Finances from an Economic Perspective.** In: Rosenzweig, C.; Solecki, W.; Hammer, S. (eds.): *Mayors' IPCC: International Panel on Climate Change in Cities* (working title).

**Hansjürgens, B.; Heinrichs, D.; Kopfmüller, J.; Lehn, H.; Nuissl, H.** (eds.) (2007): **Risk Habitat Megacity ¿Sostenibilidad en Riesgo? A Helmholtz Research Initiative 2007-2013, Research Plan, Leipzig.**

**Hansjürgens, B.; Heinrichs, D.; Kuhlicke, C.** (2007): **Mega-urbanization, risk and social vulnerability.** In: Warner, K. (ed.): *Megacities: Social vulnerability and resilience building. Summer Academy for Social Vulnerability, United Nations University UNU EHS and Munich Re Foundation.*

**Heinrichs, D.** (2011): **Review of Cities and Development.** In: Beall, J.; Fox, S. (eds.): *International Development Planning Review* 33 (1), 313–315.

**Heinrichs, D.** (2010): **Ressourcenverknappung und Umweltrisiken. Der Klimawandel in der Metropolregion Santiago de Chile.** *PLANERIN* 6/2010, 63-65.

**Heinrichs, D.** (2009): **Megacity mit Zukunft gesucht. Aus der Forschungspraxis. Politische Ökologie, Themenheft Megacitys - Risikolebensräume mit Zukunft, 114, 44-46.**

**Heinrichs, D.** (2007): **Mega-urbanization and Sustainable Development. Why Research Matters.** *Dialog Zeitschrift für Planen und Bauen in der Dritten Welt* 92 (1/2007), Südost-Verlag (SVS), 7-9.

**Heinrichs, D.** (2007): **Das System Megacity. Chancen und Risiken für Nachhaltige Entwicklung.** *key Magazin für Wirtschaft und Wissen* 12, 55-61.

**Heinrichs, D.; Kabisch, S.** (2010): **Urban socio-spatial segregation in Latin America: Contrasting perspectives and empirical evidence.** In: Abdel-Hadi, A. et al. (eds.): *Environment, Health and Sustainable Development.* Hogrefe, 141-152.

**Heinrichs, D.; Kabisch, S.** (2006): **Risikolebensraum Megacity. Strategien für eine nachhaltige Entwicklung in Megastädten und Ballungszentren.** *GaiA* (2/2006), Oekom Verlag, 157-216.

**Heinrichs, D.; Krellenberg, K.** (2011): Climate Adaptation Strategies: Evidence from Latin American City-Regions. In: Otto-Zimmermann, K. (ed.): Resilient Cities: Cities and Adaptation to Climate Change – Proceedings of the Global Forum 2010. Local Sustainability 1, 232-230.

**Heinrichs, D.; Nuissl, H.** (2009): Fresh Wind or Hot Air? Does the Governance Discourse Have Something to Offer to Spatial Planning? Journal of Planning, Education and Research, 1-13, doi: 10.1177/0739456X10392354.

**Heinrichs, D.; Nuissl, H.** (2008): Megastädte als Risikolebensraum – Strategien für eine nachhaltige urbane Entwicklung. Die Helmholtz-Forschungsinitiative “Risk Habitat Megacity”. In: Wehrhahn, R. (ed.): Risiko – Verwundbarkeit – Sicherheit in Lateinamerika aus geographischer Perspektive. Kieler Geographische Schriften 117, 293-301.

**Heinrichs, D.; Nuissl, H.** (2007): Destrucción del medio ambiente y desarrollo sostenible. In: doingbusiness. Cámara de Industria y Comercio Colombo-Alemana 53, 51.

**Heinrichs, D.; Nuissl, H.** (2007): Peripheral expansion and central decline in Latin American megacities: recent trends and the new challenges for governance. In: Kenneweg, H.; Tröger, U. (eds.): Landschaftsentwicklung und Umweltforschung. Schriftenreihe der Fakultät Planen – Bauen – Umwelt, Band S20, Technische Universität Berlin, 367-371.

**Heinrichs, D.; Aggrawal, R.; Barton, J.; Bharucha, E.; Butsch, C.; Fragkias, M.; Johnston, P.; Kraas, F.; Krellenberg, K.; Lampis, A.; Ling, O.G.** (2011): Adapting Cities to Climate Change: Opportunities and Constraints. In: Hoornweg, D. et al. (eds.): Cities and Climate Change. Responding to an urgent Agenda. Washington: The World Bank, 193-224.

**Heinrichs, D.; Krellenberg, K.; Hansjürgens, B.; Martínez, F.** (eds.) (2011): Risk Habitat Megacity. Heidelberg (forthcoming).

**Heinrichs, D.; Kuhlicke, C.; Meyer, V.; Hansjürgens, B.** (2009): Mehr als nur Bevölkerung: Größe, Geschwindigkeit und Komplexität als Herausforderung für die Steuerung von Megastädten. In: Altrock, U.; Kunze, R.; Pahl-Weber, E.; Schubert, D. (eds.): Jahrbuch Stadterneuerung. Arbeitskreis Stadterneuerung an deutschsprachigen Hochschulen und dem Institut für Stadt- und Regionalplanung der Technischen Universität Berlin, 47-57.

**Heinrichs, D.; Lukas, M.; Nuissl, H.** (forthcoming): Privatisation of the fringes – a Latin American version of post-suburbia? The Case of Santiago de Chile. In: Phelps, N. (ed.): Post-Suburbia. Oxford: Blackwell.

**Heinrichs, D.; Nuissl, H.; Rodriguez-Seeger, C.** (2009): Dispersión urbana y nuevos desafíos para la gobernanza (metropolitana) en América Latina: el caso de Santiago de Chile [Urban Sprawl and new Challenges for (metropolitan) governance in Latin America – the case of Santiago de Chile]. Revista EURE 35, 29-46.

**Heinrichs, D.; Nuissl, H.; Stelzer, V.** (2007): Risk Habitat Megacity – Strategies for Sustainable Development in Megacities and Urban Agglomerations. Beitrag für das 8. Forum DKKV/CEDIM: Disaster Reduction in Climate Change, Universität Karlsruhe, 15.-16.10.2007 (CD).



**Hölzl, C.; Nuissl, H.** (2010): Governance in Santiago de Chile – Stakeholder Prospects for the Future. UFZ-Discussion Paper 3/2010, Leipzig.

**Hölzl, C.; Krellenberg, K.; Heinrichs, D.; Welz, J.; Kabisch, S.** (2011): How sustainable are processes of social and spatial differentiation in Santiago de Chile? Current situation and future scenarios for social inclusion. UFZ-Discussion Paper 2/2011, Leipzig.

Höfer, R.; **Banzhaf, E.** (2009): Räumlich-zeitliche Analyse und Bewertung urbaner Wärmebelastung in einer großstädtischen Agglomeration und deren Auswirkung auf die Bevölkerung. In: Mörsdorf, F.L.; Ringel, J.; Strauß, C. (eds.): *Anderes Klima. Andere Räume! Zum Umgang mit Erscheinungsformen des veränderten Klimas im Raum*. ISB Institut für Stadtentwicklung und Bauwirtschaft, 19, 263-274, conference proceedings.

Höfer, R.; **Banzhaf, E.; Ebert, A.** (2009): Delineation of urban structure types (UST) in a heterogeneous urban agglomeration with VHR and TerraSAR-X data. In: *Proceedings of Joint Urban Remote Sensing Event, 20.-22.05.2009, Shanghai, China*.

Höfer, R.; **Banzhaf, E.; Romero, H.** (2009): Analysing dynamic parameters for urban heat stress incorporating the spatial distribution of urban structure types. In: *Proceedings of Joint Urban Remote Sensing Event, 20.-22.05.2009, Shanghai, China*.

Huck, A.; Hese, S.; **Banzhaf, E.** (2011): Delineating parameters for an object-based urban structure in Santiago de Chile using Quickbird data. ISPRS Workshop “High-Resolution Earth Imaging for Geospatial Information”, Universität Hannover, 14.-17.06.2011.

**Kopfmüller, J.** (forthcoming): The integrative sustainability concept of the Helmholtz Association: the Risk Habitat Megacity project as case of application. In: Nelson, G.; Parodi, O.; Banse, G. (eds.): *Sustainability 2010: The Cultural Dimension*.

**Kopfmüller, J.** (forthcoming): From the Cultural Dimension of Sustainable Development to the Culture of Sustainable Development. In: Ayestaran, I.; Banse, G.; Parodi, O. (eds.): *Sustainable Development. Relationships to Knowledge, Ethics and Culture*. Series “Karlsruhe Studies Technology and Culture”, Karlsruhe: Karlsruhe Scientific Publishing.

**Kopfmüller, J.** (2009): Von der kulturellen Dimension nachhaltiger Entwicklung zur Kultur nachhaltiger Entwicklung. In: Banse, G.; Parodi, O.; Schaffer, A. (eds.): *Interdependenzen zwischen kulturellem Wandel und nachhaltiger Entwicklung*. Ergebnisse des 9. Weimarer Kolloquiums vom 30.-31.10.2008. Karlsruhe: Forschungszentrum Karlsruhe, Wissenschaftliche Berichte, FZKA 7497, 25-37.

**Kopfmüller, J.; Lehn, H.** (2009): Megacities – ein zentraler Faktor für eine global nachhaltige Entwicklung – Einführung in den Schwerpunkt. *Technikfolgenabschätzung – Theorie und Praxis* Nr. 1, 18, 4-7.

**Kopfmüller, J.; Lehn, H. (2006):** Nachhaltige Entwicklung in Megacities. Die HGF Forschungsinitiative "Risk Habitat Megacity". In: Kopfmüller, J. (ed.): Ein Konzept auf dem Prüfstand. Das Integrative Nachhaltigkeitskonzept in der Forschungspraxis. Berlin: edition sigma, 269–282.

**Kopfmüller, J.; Stelzer, V. (2009):** Energieszenarien für Megacities - Konzept und erste Ergebnisse des HGF-Verbundprojekts "Risk Habitat Megacity". In: Möst, D.; Fichtner, W.; Grunwald, A. (eds.): Energiesystemanalyse. Tagungsband des Workshops „Energiesystemanalyse“ vom 27. November 2008 am KIT Zentrum Energie, Karlsruhe: Universitätsverlag Karlsruhe, 99-115.

**Kopfmüller, J.; Lehn, H.; Heinrichs, D.; Nuissl, H.; Krellenberg, K. (2009):** Die HGF Forschungsinitiative "Risk Habitat Megacity": Ziele, Ansatz, Fragestellungen. Technikfolgenabschätzung – Theorie und Praxis, 1, 18, 35-45.

**Kopfmüller, J.; Lehn, H.; Nuissl, H.; Krellenberg, K.; Heinrichs, D. (2009):** Sustainable Development of Megacities: An Integrative Research Approach for the Case of Santiago Metropolitan Region. DIE ERDE 140 (4), 417-448.

**Krellenberg, K.; Heinrichs, D. (2010):** Urban Latin America under climate change: do adaptation strategies of city-regions respond to the challenges? In: Endlicher, W.; Gerstengarbe, F.-W. (eds.): Continents under Climate Change. Nova Acta Leopoldina, 112, 384, 267-274.

**Krellenberg, K.; Heinrichs, D.; Barton, J. (2010):** Climate Change and Adaptation Strategies in Latin American City Regions: The Case of Santiago de Chile. In: Fragkias, M.; Griffith, C. (eds.): Integrative Perspectives on Urbanization and Climate Change. UGEC Viewpoints 3, 4-7.

**Krellenberg, K.; Heinrichs, D.; Kabisch, S.; Rodríguez-Seeger, J.; Welz, J. (2009):** Risk Habitat Megacity. Una Iniciativa de Investigación Latinoamericana y su Enfoque de la Vulnerabilidad Socio-Ambiental. Cuadernos Geográficos 45 (2009/2), 293-309.

**Krellenberg, K.; Höfer, R.; Welz, J. (2011):** Relaciones y dinámicas recientes entre el uso de suelo y la composición socioeconómica en Santiago de Chile: el caso de la comuna de Peñalolén. Revista de Geografía Norte Grande 48, 107-131.

**Krellenberg, K.; Kopfmüller, J.; Barton, J. (2010):** How sustainable is Santiago de Chile? Current Performance – Future Trends – Potential Measures. Synthesis report of the Risk Habitat Megacity research initiative (2007–2011), UFZ-Report 4/2010.

**Krellenberg, K.; Kopfmüller, J.; Barton, J. (2010):** ¿Qué grado de sostenibilidad presenta Santiago de Chile? Situación actual - Tendencias futuras - Medidas potenciales. Informe de la iniciativa de investigación Risk Habitat Megacity (2007-2011) UFZ-Report 4/2010.



**Lehn, H.; Kopfmüller, J.** (2009): Megacities - A Crucial Factor for a Globally Sustainable Development. *DIE ERDE* 140 (4), 337-340.

**Lehn, H.; Parodi, O.** (2009): Wasser – elementare und strategische Ressource des 21. Jahrhunderts. Teil I. Eine Bestandsaufnahme. *Umweltwiss. Schadst. Forsch.* 21, 272–281.

Macedo, J.; **Abraham, W.-R.** (2009): Ambivalent role of microbial communities in polluted rivers. In: **Gallo, M.N.; Ferrari, M.H.** (eds.): *River Pollution Research Progress*. Nova Science Publishers.

**Martínez, F.; Cortés, C.** (2010): A time-space hierarchical framework to model dynamic urban systems. World Conference on Transport Research, Lisbon, Portugal, conference proceeding.

**Martínez, F.; Cortés, C.; Justen, A.** (2009): Methodology for an integrated modelling of macro and microscopic processes in urban transport demand. 12th International Association of Travel Behavior Conference, Jaipur, India, conference proceeding.

**Martínez, F.; Justen, A.; Cortés, C.** (2010): Time and spatial dependent activities and travel choices: results from Santiago de Chile. PANAM Conference, Lisbon, Portugal, conference proceeding.

**Mascareño, A.** (2011): Strukturelle und normative Interdependenz in der Weltgesellschaft und der lateinamerikanische Beitrag. In: **Birle, P.; Dewey, M.; Mascareño, A.** (eds.): *Durch Luhmanns Brille. Herausforderungen an Politik und Recht in Lateinamerika und in der Weltgesellschaft*, Stuttgart (accepted, forthcoming).

**Mascareño, A.** (2010): *Diferenciación y contingencia en América Latina*. Santiago: Ediciones UAH.

**Mascareño, A.** (2010): Soziologische Erkenntnisblockaden und der lateinamerikanische Weg der Moderne. *Leviathan Sonderheft* 26, 336-356.

**Mascareño, A.** (2010): Social Co-ordination Through Public Policies: the Chilean Case. *CEPAL Review* 101, 107-122.

**Mascareño, A.** (2009): Acción y estructura en America Latina. *Persona y Sociedad* 23 (2), 65-89.

**Mascareño, A.; Chernilo, D.** (2009): Obstacles and perspectives of Latin American Sociology. In: *Soziale Systeme* 15 (1), 72-96.

**Müller, A.; Reinstorf, F.** (2011): Exploration of land-use scenarios for flood hazard modeling – the case of Santiago de Chile. *Hydrol. Earth Syst. Sci. Discuss.* 8, 3993-4024, doi:10.5194/hessd-8-3993-2011.

Netzband, M.; **Banzhaf, E.; Höfer, R.; Hannemann, K.** (2009): Identifying the poor in cities - How can remote sensing help to profile slums in fast growing cities and megacities? *IHDP Update* 1, March 2009, 22-28, [http://www.ihdp.unu.edu/file/IHDP+Updates/IHDP\\_Update\\_2009\\_1?menu=60](http://www.ihdp.unu.edu/file/IHDP+Updates/IHDP_Update_2009_1?menu=60).

**Nuissl, H.** (2007): Risk Habitat Megacity. Strategies for Sustainable Development in Megacities and Urban Agglomerations. *Dialog Zeitschrift für Planen und Bauen in der Dritten Welt* 92 (1/2007), Südost-Verlag (SVS), 10-11.

**Nuissl, H.; Hilsberg, J.** (2009): "Good Governance" auf lokaler Ebene – Ansätze zur Konzeptualisierung und Operationalisierung. *UFZ-Discussion Paper 7/2009*, Leipzig.

**Pilz, M.; Parolai, S.; Leyton, F.; Campos, J.; Zschau, J.** (2009): A comparison of site response techniques using earthquake data and ambient seismic noise analysis in the large urban areas of Santiago de Chile. *Geophys. J. Int.* 178, 713-728.

**Pilz, M.; Parolai, S.; Picozzi, M.; Wang, R.; Leyton, F.; Campos, J.; Zschau, J.** (2010): Shear wave velocity model of the Santiago de Chile basin derived from ambient noise measurements: A comparison of proxies for seismic site conditions and amplification. *Geophys. J. Int.* 182, 355-367.

**Pilz, M.; Parolai, S.; Picozzi, M.; Zschau, J.** (2011): Comparing different proxies for the evaluation of seismic site conditions in urban areas: the example of Santiago de Chile. *Physics and Chemistry of the Earth*, doi: 10.1016/j.pce.2011.01.007.

**Pilz, M.; Parolai, S.; Stupazzini, M.; Paolucci, R.; Zschau, J.** (2010): Shear-wave velocity model of the Santiago de Chile basin derived from ambient noise measurements for 3D simulations of ground motion. *Conference on Geotechnical Earthquake Engineering, Santiago, Chile, conference proceeding.*

**Reyes-Paecke, S.; Figueroa Aldunce, I.M.** (2010): Distribución, superficie y accesibilidad de las áreas verdes en Santiago de Chile. *EURE* 36 (109), 89-110.

Schulz, J.; Brand, F.; **Kopfmüller, J.**; Ott, K. (2008): Building a "theory of sustainable development": two salient conceptions within the German discourse. *International Journal for Sustainable Development* 7 (4), 465-482.

**Seeger, R.C.; Reyes-Paecke, S.** (2008): Propuesta Metodológica para la elaboración de un Plan de Ordenamiento Territorial Sustentable. *Revista Digital Proyección* 4, Cuyo: 34.

**Stelzer, V.** (2010): Kultur in der systematischen Nachhaltigkeitsbewertung. In: Parodi, O.; Banse, G.; Schaffer, A. (eds.): *Wechselspiele: Kultur und Nachhaltigkeit. Annäherungen an ein Spannungsfeld.* Berlin: edition sigma, 237-262.

Vásquez, A.; Smith Guerra, P.; **Banzhaf, E.** (2011): Urban riparian zones as sustainability indicators. 31st EARSeL Symposium 2011, Prague, Czech Republic, 4th Workshop on Land Use & Land Cover 30.05.-03.06.2011, EARSeL eProceedings.

**Weiland, U.** (2006): Sustainability Indicators and Sustainable Development. In: Wuyi, W.; Krafft, T.; Kraas, F. (eds.): *Global Change, Urbanization and Health.* Beijing: China Meteorological Press, 241-250.

**Weiland, U.; Kindler, A.; Banzhaf, E.; Ebert, A.; Reyes-Paecke, S.** (2011): Indicators for Sustainable Land Use Management in Santiago de Chile. *Ecological Indicators* 11 (5), 1074-1083, doi: 10.1016/j.ecolind.2010.12.007.



## Unpublished working papers

**Barton, J.; Kopfmüller, J.; Stelzer, V.** (2010): Quantitative Variables: Tendencies and Scenario Estimations for 2030.

**Barton, J.; Salas, A.; Kopfmüller, J.; Stelzer, V.; Jörisen, J.** (2007): A preliminary set of sustainability indicators for Santiago de Chile – data sources and deficits, first results.

**Barton, J.; Vargas, L.; Jordan, R.; Rodriguez, C.; Salas, A.; Samaniego, J.** (2008): Assumptions for future driving factor values and according storylines for 4 alternative scenarios for the case of Santiago/Chile.

**Büscher, C.** (2008): Risk Habitat Megacity. A Sociological Perspective.

**Heinrichs, D.; Krellenberg, K.** (2008): Risk Habitat Megacity – A Helmholtz Research Initiative 2007–2013. Research Plan (Summary).

**Heinrichs, D.; Krellenberg, K.; Rodriguez, C.** (2008): Risk Habitat Megacity – ¿Sostenibilidad en Riesgo? Una Iniciativa de Investigación de Helmholtz 2007–2013. Plan de Investigación (Resumen).

**Kabisch, S.; Heinrichs, D.; Welz, J.; Cortés, E.** (2008): Social inclusion, content, approach and interlinks to some related concepts.

**Kabisch, S.; Heinrichs, D.; Welz, J.; Krellenberg, K.; Rodriguez, J.** (2008): The role of intraurban migration in socio-spatial differentiation patterns in Santiago de Chile.



**Kopfmüller, J.** (2008): Sustainability Indicators in “Risk Habitat Megacity” (RHM): Functions - types - conceptual proposals.

**Kopfmüller, J.; Simon, S.; Stelzer, V.:** (2008) How to implement scenario analyses in RHM: A guideline - exemplified for the FoA “Energy System”.

**Quiroga, M.** (2010): Sustainable metropolitan development in Latin America - the case of the metropolitan area of Bogotá.

**Quiroga, M.** (2010): Sustainable metropolitan development in Latin America - the case of the metropolitan area of Mexico City.

Risk Habitat Megacity Forschungskonsortium (2008): Report of the First Annual Status Conference in Santiago de Chile (02.-05.06.2008).

**Salas, A.** (2010): Los sistemas de información urbanos en los procesos de toma de decisiones. ¿Cómo y con qué información se toman decisiones?

**Salas, A.** (2010): The Role of Systematised Information in the Planning Processes of the Santiago Metropolitan Region: the cases of the Metropolitan Development Strategy and the Metropolitan Regulatory Plan.

Woll, T. (2010): Synopsis of Global Scenario Surveys. Final report, March 2010.

### C) Public lectures, presentations

**Baier, F.:** A global monitoring system for climate and environment. Deutsche Physikalische Gesellschaft (DPG), Joint-session with the European Physical Society (EPS) - Environmental Physics Division “Energy and Environment”, Darmstadt, 13.03.2008.

**Baier, F.; Bittner, M.; Holzer-Popp, T.; Martynenko, D.; Bergemann, C.; Erbertseder, T.; Meyer-Arne, J.:** Activities of the German Aerospace Center to support satellite based air quality monitoring. International Symposium on Near Real Time Data Application in Air Quality Forecast, WMO GURME Pilot Project Expert Meeting, Hangzhou, China, 02.-04.03.2011.

**Banzhaf, E.; Ebert, A.; Höfer, R.; Mallast, U.:** Detecting land use dynamics and their impacts on disaster risk in the fast growing city of Santiago de Chile with high resolution remote sensing and GIS data. EARSeL Joint Workshop “Remote Sensing: New challenges of high resolution”, Developing countries, Urban remote sensing, Bochum, 05.-07.03.2008 (poster presentation).

**Banzhaf, E.; Kindler, A.; Ebert, A.; Weiland, U.; Reyes-Paecke, S.; Pilz, M.:** Land Use Management. Third Status Conference of the Risk Habitat Megacity research initiative, Santiago de Chile, 18.05.2010.

**Barton, J.:** Challenges and constraints of implementing sustainability in urban planning: the case of Santiago de Chile. Future Megacities in Balance – New Alliances for Energy- and Climate-Efficient Solutions, Essen, 12.10.2010.

**Barton, J.:** “Urban Sustainability” on the IEUT Masters programme on Human Settlements and the Environment at the Catholic University of Santiago de Chile, 03.-07.2010.

**Barton, J.:** Midiendo la sustentabilidad: lo medible y lo incommensurable. Guest lecture, Centro de Investigaciones Tropicales, Universidad Veracruzana, Xalapa, Mexico, 06.11.2008.

**Barton, J.:** Indicadores de tercera generación en el contexto urbano-regional. Taller “Indicadores Urbanos de Sostenibilidad”, ECLAC/CEPAL, Santiago de Chile, 28.05.2008.

**Barton, J.:** Pudahuel, Santiago de Chile: cooperación para un desarrollo mas sustentable en una comuna periurbana. II Congreso de Casos Exitosos “Educación para Sociedades Sustentables”, Veracruz, Mexico, 06.05.2008.

**Barton, J.:** Is there a unified urban environment? Discussing the dismembered city thesis. International Seminar “La Ciudad Justa”, Pontificia Universidad Católica, Santiago de Chile, 26.03.2008.

**Barton, J.; Kopfmüller, J.:** Future research priorities in the field of sustainable urban development in Latin American megacities. Presentation at the international panel “Sustainable urban development in Latin American megacities: policy challenges and a research agenda 2010-2020“, Santiago de Chile, 28.10.2010.

**Bräutigam, K.-R.:** Escenarios de manejo de residuos solidos en 2030. Primer Seminario Internacional “Técnicas de reciclaje y valorización de residuos sólidos urbanos”, Santiago de Chile, 26.10.2010.

**Bräutigam, K.-R.:** Waste management in Santiago de Chile. Status Conference Megacity, Santiago de Chile, 12.-20.05.2010.

**Bräutigam, K.-R.:** Tratamiento y Gestión de los Desechos Sólidos. Foro internacional Bogotá - Berlín - Beijing: Desafíos y Soluciones para las Megaciudades, Bogotá, 02.10.2008.

**Bräutigam, K.-R.; Gonzalez, T.:** Management von Siedlungsabfällen in Santiago de Chile – Recycling, Vorbehandlung und Deponierung. “Waste-to-Resources 2011”, IV International Conference MBA & Sortierung, Hannover, 24.-27.05.2011 (contribution to the conference proceedings handed in and accepted).



**Bräutigam, K.-R.; Gonzalez, T.:** Evaluation of MSW Management in Santiago de Chile. ISWA World Congress 2010 “Urban Development and Sustainability - a major challenge for waste management in the 21st century”, Hamburg, 15.-18.11.2010.

**Büscher, C.:** Risiko-Lebensraum Megastadt. Ein soziologische Perspektive. International symposium “Durch Luhmanns Brille: Herausforderungen an Gesellschaft, Politik und Recht in Lateinamerika”, Berlin, Ibero-Amerikanisches Institut, 10.-11.12.2007.

**Durán, G.:** Nueva pobreza urbana y gobernanza del agua en Chile: Morfología de la inequidad en la distribución del consumo de agua potable en el Gran Santiago (1977-2009). “Reflexiones sobre el sentido de los derechos habitacionales: Elementos para el debate sobre la facultad del ser humano para construir su hábitat”, Coloquio INJAVIU 2010, Bogotá, 09.11.2010.

**Durán, G.:** Nueva pobreza urbana y gobernanza del agua en Chile: Morfología de la inequidad en la distribución del consumo de agua potable en el Gran Santiago (1977-2009). XI Seminario Internacional RII Red Iberoamericana de Investigadores sobre Globalización y Territorio, Mendoza, Argentina, 30.10.2010.

**Durán, G.:** Pobreza urbana y acceso al agua en San Bernardo: Una aproximación morfológica a la noción de nueva pobreza urbana en Santiago de Chile. “Congreso latinoamericano ciencias, tecnologías y culturas. Diálogo entre las disciplinas del conocimiento. Mirando al futuro de América Latina y el Caribe. Mesa 68: Cambios demográficos y espacios en transformación: movilidad y ciudad”, Universidad Santiago de Chile (USACH), Santiago de Chile, 30.10.-02.11.2008.

**Ebert, A.:** Flood risk assessment in Santiago de Chile. 3rd Status Conference of the Project “Risk Habitat Megacity”, Santiago de Chile, 17.05.2010.

**Ebert, A.:** Flood risk assessment in Santiago de Chile. Social geographic research seminar at the Institute of Geography, University of Leipzig, Leipzig, 12.05.2010.

**Ebert, A.:** And when the rain begins to fall. Flood risk assessment in Santiago de Chile. UFZ-PhD conference, Leipzig, 27.04.2010.

**Ebert, A.:** Bewertung von Vulnerabilität gegenüber Hochwasser in Santiago de Chile mit Hilfe einer dienstebasierten WebGIS-Anwendung, UFZ-Forum “Extremereignisse”, Leipzig, 25.03.2010.

**Ebert, A.; Höfer, R.:** Mapping urban vulnerability from a multi-hazard perspective. GI-Forum Workshop “Spatial assessment and analysis of vulnerability”, 22. AGIT-Symposium, Salzburg, 06.06.2010.

**Ebert, A.; Müller, A.:** Bewertung von Vulnerabilität gegenüber Hochwasser in Santiago de Chile mithilfe einer dienstebasierten WebGIS-Anwendung. 22. AGIT-Symposium, Salzburg, 08.06.2010.



**Ebert, A.; Weiland, U.:** An indicator-based flood vulnerability assessment in Santiago de Chile. 21. IAPS Conference “Vulnerability, Risk and Complexity: Impacts of Global Change on Human Habitats”, Leipzig, 29.06.2010.

**Franck, U.:** Exposure by urban airborne particulates and cardiovascular health effects. Bilateral Workshop on Air Quality, Climate Change and Health in Central Mexico, GZ: 444 MEX-121/11/08, Mexico City, 19.-21.05.2008.

**Godoy, C.; McPhee, J.; Niño, Y.:** Towards management and regulation of gravel mining in urban areas of Santiago, Chile: analysis of the sediment budget in Maipo river. Joint meeting of the “7th Symposium on Ecohydraulics” and “8th Conference on Hydroinformatics”, Concepción, Chile, 01.2009.

**Gonzalez, T.:** Actividades de Reciclaje y Rol del Sector Informal en Santiago de Chile. Primer Seminario Internacional “Técnicas de reciclaje y valorización de residuos sólidos urbanos”, Santiago de Chile, 26.10.2010.

**Gonzalez, T.:** Analysis of different municipal solid waste management systems for Santiago de Chile. Young Researchers Day, Risk Habitat Megacity Research Initiative, Third Status Conference, 17.05.2010.

**Gonzalez, T.:** Risk Habitat Megacity – Recycling Systems in Santiago de Chile. Junior Scientist Conference 2008, Vienna University of Technology, Vienna, 16.–18.11.2008 (poster presentation).

**Gonzalez, T.; Bräutigam, K.-R.; Seifert, H.:** Municipal solid waste management in Santiago de Chile - Towards sustainability? Future Megacities in Balance: New Alliances for Energy- and Climate-Efficient Solutions, Young Researchers Workshop Essen, 09.-10.10.2010.

**Gonzalez, T.; Bräutigam, K.-R.; Seifert, H.:** Evaluation of the Municipal Solid Waste Management in Santiago de Chile with Respect to Sustainability. Summer Symposium on Sustainable Systems (4S) 2010, Sannäs, Finland, 15.–17.06.2010.

**Hansjürgens, B.:** Keynote lecture on Megacities, Risk and Social Vulnerability. Summer Academy for Social Vulnerability, United Nations University UNU EHS and Munich Re Foundation, Munich, 21.07.2007.

**Hansjürgens, B.; Krellenberg, K.; Martínez, F.:** Objetivos, enfoque y resultados de la iniciativa de investigación Risk Habitat Megacity (RHM). Risk Habitat Megacity Stakeholder Conference “Santiago Sustentable 2030”, Sustainable Urban Development in Latin American Megacities, 27.-28.10.2010, Santiago de Chile.

**Heinrichs, D.:** The Impact of Climate Change on Megacities and Possible Responses. Public lecture “Urban Development Planning” organized by VGU, USSH and Goethe Institute, Ho Chi Minh City, 16.06.2010.

**Heinrichs, D.:** Cities and Climate Change and “Local Urban Governance”, Master programme “Urban Development Planning”, Vietnamese-German University (VGU), Ho Chi Minh City, 06.2010.

**Heinrichs, D.:** Socio-environmental change and flood risks: the case of Santiago de Chile. World Urban Forum, Rio de Janeiro, 23.03.2010.

**Heinrichs, D.:** Local Urban Governance. Master Programme “Urban Management” at Technische Universität Berlin, winter terms 2009/2010 and 2010/2011.

**Heinrichs, D.:** Lecture within the teaching module „Local Urban Governance“. Master programme “Urban Management”, Habitat Unit, Fakultät VI, Technische Universität Berlin, winter terms 2007/08 and 2008/09.

**Heinrichs, D.:** Risk Habitat Megacity ¿Sostenibilidad en riesgo? Scientific forum within the 10. Lateinamerika Konferenz der Deutschen Wirtschaft, Santiago de Chile, 27.09.2008.

**Heinrichs, D.:** Risiken und Chancen. Megastädte als Laboratorien des Wandels. Annual conference of E+S Rückversicherung, Hannover, 22.08.2008.

**Heinrichs, D.:** Megastädte: Chance oder Risiko? Die Helmholtz Forschungsinitiative “Risk Habitat Megacity”. Symposium Megastädte, Geoforschungszentrum Potsdam, 17.06.2008.

**Heinrichs, D.:** Risiken für die Nachhaltigkeit Lateinamerikanischer Megacities – Die Forschungsinitiative “Risk Habitat Megacities” der Helmholtz-Gemeinschaft. Deutscher Geographentag, Bayreuth, 30.09.-04.10.2007.

**Heinrichs, D.; Krellenberg, K.:** Ciudades y Adaptación al Cambio Climático: Los Desafíos para la Institucionalidad de Bogotá. Innovationsforum (BMBF), Bogotá, 11.-13.11.2009.

**Heinrichs, D.; Nuissl, H.:** Slums als Herausforderung der Stadtentwicklung von Megastädten. Das Beispiel Santiago de Chile. Symposium “Destitution Slum - Destination Slum - Einblicke in die Slums von Megacities aus zwei Perspektiven”, Gesellschaft für Erdkunde, 02.02.2011.

**Heinrichs, D.; Nuissl, H.:** Urban Sprawl and New Challenges for (metropolitan) Governance in Latin American – the Case of Santiago de Chile. “A suburban world? Global Decentralisation and the New Metropolis”, Virginia Tech. Reston (VA) (International Conference Centre), 06.-08.04.2008.

**Heinrichs, D.; Nuissl, H.:** Urban Sprawl and New Challenges for Governance – the Cases of Santiago de Chile and Berlin. Coloquio “Del País Urbano al País Metropolitano”, Pontificia Universidad Católica de Chile (PUC), Santiago de Chile, 02.-04.12.2007.

**Heinrichs, D.; Nuissl, H.:** Peripheral expansion and central decline in Latin American megacities – recent trends and new challenges for governance. 2nd International Congress on Environmental Planning and Management, Technische Universität Berlin, Berlin, 05.-10.08.2007.

**Heinrichs, D.; Welz, J.:** Intra-urban migration and new patterns of socio-spatial differentiation in Santiago de Chile: an opportunity for social integration? Conference “Die Lateinamerikanische Stadt im Wandel”, 31.10.-01.11.2008.

**Heinrichs, D.; Kabisch, S.; Krellenberg, K.; Welz, J.:** Intra-urban migration and new patterns of socio-spatial differentiation in Santiago de Chile: opportunities for social integration? Megacities: Risk, Vulnerability and Sustainable Development Conference, Leipzig, 09.-11.09.2009.

**Heinrichs, D.; Krellenberg, K.; Vogel, J. (2009):** Climate Change and Adaptation Strategies: Perspectives of Latin American City Regions. 2nd German Environmental Sociology Summit “Reshaping Nature: Old Limits and New Possibilities”, Leipzig, 05.-07.11.2009.

Höfer, R.; **Krellenberg, K.; Welz, J.:** Analyse der Zusammenhänge zwischen Landnutzungsdynamiken und sozio-ökonomischen Entwicklungen in Santiago de Chile. 29. DGPF annual conference, Jena, 24.-26.03.2009.

**Höhnke, C.:** With or without the city – Planning and implementation of public transport reforms in Santiago de Chile and Bogotá, International Conference “Future Megacities in Balance – New Alliances for Energy- and Climate-Efficient Solutions”, Essen, 11.-13.10.2010.

**Höhnke, C.:** Challenges of multi-level transport governance. The cases of the public transport reform projects in Santiago de Chile and Bogotá. Summer School “Understanding Change” of the UK Transport Research Centre, Leeds (UK), 07.-09.09.2010 (poster presentation).

**Höhnke, C.:** Challenges of public transport governance – the case of the public transport reform in Santiago de Chile. 21st IAPS conference “Vulnerability, Risk and Complexity: Impacts of Global Change on Human Habitats”, Young Researchers Workshop, Leipzig, 27.06.-02.07.2010.

**Hölzl, C.:** Urban Conflicts in Santiago de Chile and Buenos Aires: Current strategies of Participation in Urban Development. 21st IAPS conference “Vulnerability, Risk and Complexity: Impacts of Global Change on Human Habitats”, Leipzig, 27.06.-02.07.2010.

**Hölzl, C.:** Conflictos urbanos en Santiago de Chile y Buenos Aires. Efectos de las actuales estrategias de participación ciudadana en el desarrollo urbano. “Antropología en el Bicentenario”, VII Chilean Congress of Anthropology, San Pedro de Atacama, Chile, 25.-29.10.2010.

**Justen, A.:** Transport policies towards sustainability in large urban agglomerations. Foro internacional Bogotá - Berlin - Beijing: Desafíos y Soluciones para las Megaciudades, Bogotá, 02.10.2008.

**Kabisch, S.:** Abschlusskonferenz “Megacities: Faszination oder Schrecken?”, Geographiestudenten auf der Reise in das Unbekannte – Ein Dialog, 09.07.2009.

**Kabisch, S.:** Participation in the competition “Zwischen Hörsaal und Projekt” 2009. Initiative of the GTZ - Deutsche Gesellschaft für Technische Zusammenarbeit, cooperation with project partners in Mexico.



**Kabisch, S.:** Project seminar “Herausforderung Megacity – soziale, ökonomische und ökologische Konsequenzen von Megaurbanisierung”, Institut für Geographie der Universität Leipzig, winter term 2008/09 and summer term 2009.

**Kabisch, S.:** Supervision of students participating in the programme of the GTZ “Zwischen Hörsaal und Projekt”, winter term 2008/09.

**Kabisch, S.; Sabatini, F.; Heinrichs, D.; Welz, J.:** Santiago de Chile – an urban system in rapid transition? Contemporary changes of the socio-economic residential segregation patterns under the influence of real estate markets. IAPS conference “Urban Diversities, biosphere and well-being”, Rome, 28.-31.07.2008 (poster presentation).

**Kabisch, S. (Convenor); Sabatini, F.; Jordán, R.; Krellenberg, K.; Heinrichs, D.:** Symposium: “Multiple urban diversities of metropolitan areas in Latin America”, IAPS conference “Urban Diversities, biosphere and well-being”, Rome, 28.-31.07.2008.

**Kindler, A.; Reyes-Paecke, S.; Banzhaf, E.; Ebert, A.; Weiland, U.; Krellenberg, K.; Kabisch, S.; Welz, J.; Hölzl, C.:** Gestión del uso de suelo sostenible. Relaciones entre cambio del uso del suelo, dinámicas socio-espaciales y riesgo de inundación. Conferencia internacional “Desarrollo urbano sostenible en Megaciudades de América Latina: Santiago 2030”, Santiago de Chile, 27.-28.10.2010.

**Kopfmüller, J.:** Sustainable metropolitan development in Latin America. The “Risk Habitat Megacity” (RHM) project and the “Climate Adaptation Santiago” (CAS) project: concept and methods. Conference “Desarrollo Sustentable en Megaciudades de America Latina en tiempos de cambio climático: el ejemplo de Santiago de Chile”, Lima, 05.11.2010.

**Kopfmüller, J.:** Die globale Dimension nachhaltiger Entwicklung. 2nd international workshop “Grundlagen einer nachhaltigen Ökonomie”, Hochschule für Wirtschaft und Recht, Berlin, 29.09.2010.





**Kopfmüller, J.:** Leitbild nachhaltige Entwicklung – Funktion, Kontroversen, Perspektiven. Conference “Prinzip Nachhaltigkeit. Theologische, philosophische und ethische Perspektiven”, Evangelische Akademie Hofgeismar, 11.06.2010.

**Kopfmüller, J.:** The Integrative Sustainability Concept of Helmholtz. Case of application: the “Risk Habitat Megacity” project. 7th Workshop of the Forum on Sustainable Technological Development in a Globalising World “Sustainability 2010 – the Cultural Dimension”, Berlin, 10.06.2010.

**Kopfmüller, J.:** Sustainable Development – from concepts to applications. International IEF/STE Conference “Sustainable Development in the Energy Sector”, FZ Jülich, 09.06.2010.

**Kopfmüller, J.:** Santiago de Chile 2030 – towards sustainability? Indicators and scenario analysis. Results from the German-Chilean research initiative “Risk Habitat Megacity”. Lecture at the Pontificia Universidad Católica de Chile, Sustentabilidad Urbana, 07.05.2010.

**Kopfmüller, J.:** Megacities und nachhaltige Entwicklung – das Beispiel Santiago de Chile. Workshop “Nachhaltige Ökonomie”, Hanoi, Vietnam, 06.04.2010.

**Kopfmüller, J.:** Nachhaltige Entwicklung: Herausforderungen, Konzept, Kontroversen. Workshop “Nachhaltige Ökonomie”, Hanoi, Vietnam, 06.04.2010.

**Kopfmüller, J.:** Megacities und nachhaltige Entwicklung – das Beispiel Santiago de Chile. Lecture at the Water Resources University Hanoi, Vietnam, 05.04.2010.

**Kopfmüller, J.:** Nachhaltige Entwicklung: Herausforderungen, Konzept, Kontroversen. Lecture at the Water Resources University Hanoi, Vietnam, 05.04.2010.

**Kopfmüller, J.:** Energieszenarien für Megacities: Konzept und erste Ergebnisse des HGF-Verbundprojekts “Risk Habitat Megacity”. KIT-Workshop “Energiesystemanalyse”, Universität Karlsruhe, 27.11.2008.

**Kopfmüller, J.:** Das integrative Nachhaltigkeitskonzept der HGF: Entstehung – Architektur – Anwendung. Presentation at the symposium of the DBU “Was heißt eigentlich ‘nachhaltig?’”, Berlin, 06.07.2007.

**Kopfmüller, J.:** The Helmholtz sustainability concept and the generation of urban indicators. Seminar “Indicadores Urbanos de Sostenibilidad”, ECLAC/CEPAL, Santiago de Chile, 28.05.2008.

**Krellenberg, K.:** A science-policy approach towards local adaptation planning: The case of Santiago de Chile. Resilient Cities 2011, 2nd World Congress on Cities and Adaptation to Climate Change, Bonn, 03.-05.06.2011.

**Krellenberg, K.:** Adapting Cities: How Climate Changes Spatial Planning. Conference “Future Megacities in Balance – New Alliances for Energy- and Climate-Efficient Solutions”, Essen, 11.-13.10.2010.

**Krellenberg, K.:** Megaciudades y el cambio climático – el caso de agua: Riesgos y desafíos asociados. Expo Agua Pereira, Pereira, Columbia, 11.-13.08.2010.

**Krellenberg, K.:** Städte im Zeichen des Klimawandels: zwischen globaler Klimapolitik und lokalem Handeln. Dialogue conference and panel discussion Inwent “Heiße Luft braucht kühle Köpfe: Klimapolitik zwischen Anspruch und Wirklichkeit”, Zschortau, 24.02.2010.

**Krellenberg, K.:** Megacities: Spaces of Risk and Opportunities. “Risk Habitat Megacity” Research Initiative, World Urban Forum, Nanjing, 03.-07.11.2008.

**Krellenberg, K.:** Manejo del riesgo en megaciudades – retos para la administración. Foro internacional Bogotá – Berlín – Beijing: Desafíos y Soluciones para las Megaciudades, Bogotá, 01.-02.10.2008.

**Krellenberg, K.:** Steering land-use diversity to guarantee urban well-being – the importance of green and open spaces. IAPS Conference “Urban Diversities, biosphere and well-being”, Rome, 28.-31.07.2008.

**Krellenberg, K.:** Risk Habitat Megacity Research Initiative – ¿Sostenibilidad en Riesgo? I Seminário Internacional sobre Aquecimento Global nas Cidades, Curitiba, 16.-17.06.2008.

**Krellenberg, K.:** Possibilities, benefits and problems analysing urban public and private green areas using terrestrial and remote sensing data. Urbio 2008, Erfurt, 21.-23.05.2008.

**Krellenberg, K.; Heinrichs, D.:** Climate adaptation strategies. Evidence from Latin American city-regions. ICLEI Conference “Resilient Cities 2010”, Bonn, 28.-30.05.2010.

**Krellenberg, K.; Heinrichs, D.:** Urban Latin America under climate change: Do adaptation strategies of city-regions respond to the challenges? Conference on the occasion of the 20th anniversary of the Humboldt-Universität zu Berlin “Continents under Climate Change”, Berlin, 21.-23.04.2010.

**Krellenberg, K.; Heinrichs, D.; Barton, J.:** Consumo de Agua y Uso de Suelo en Santiago: Condiciones de Adaptación al Cambio Climático. Innovationsforum (BMBF), Santiago de Chile, 06.10.2009.

**Krellenberg, K.; Heinrichs, D.; Vogel, J.:** Klimawandel und Anpassungsstrategien: Perspektive lateinamerikanischer Stadtregionen, Deutscher Geographentag, Wien, Austria, 19.-26.09.2009.

**Krellenberg, K.; Hölzl, C.; Welz, J.; Kabisch, S.:** Diferenciación socio-espacial en Santiago de Chile – son los procesos sostenibles? Inclusión social: Análisis de la situación actual y posibles escenarios futuros. Risk Habitat Megacity Stakeholder Conference “Santiago Sustentable 2030”, Sustainable Urban Development in Latin American Megacities, Santiago de Chile, 27.-28.10.2010.

**Krellenberg K.; Welz, J.; Heinrichs, D.; Reyes-Paecke, S.:** Urban green spaces: new potential for social integration? Megacities: Risk, Vulnerability and Sustainable Development Conference, Leipzig, 09.-11.09.2009.

**Lehn, H.:** Nachhaltige Entwicklung als Ziel für ein Wassermanagement. KIT - Oberrheingraben-Workshop, 22.03.2011.

**Lehn, H.:** Risk Habitat Megacity: Nachhaltiges Management von Wasserressourcen und Wasserdienstleistungen – das Beispiel Santiago de Chile. Status conference RECAST Urumqi, Universität Heidelberg, 07.2010.

**Lehn, H.:** Risk Habitat Megacity – Stakeholder Participation. 5th World Urban Forum Rio de Janeiro, Brazil, 25.03.2010.

**Lehn, H.:** Risk Habitat Megacity –¿Sostenibilidad en riesgo? 5th World Urban Forum Rio de Janeiro, Brazil, 22.03.2010.

**Lehn, H.:** Wasser – elementare und strategische Ressource des 21. Jahrhunderts. Lecture within the ethico-philosophical elementary studies programme, Geographisches Institut der Universität Heidelberg, summer term 2008 and winter term 2008/09.

**Lehn, H.:** Risk Habitat Megacity – Helmholtz-Forschungsinitiative 2007–2013. “Ringvorlesung Umwelt” TU München, 10.12.2008.

**Lehn, H.:** Tratamiento y Gestión del Recurso Hídrico para un desarrollo sostenible. Foro Internacional Bogotá – Berlín – Beijing: Desafíos y Soluciones para las Megaciudades, Bogotá, 02.10.2008.

**Lehn, H.:** Criteria and indicators for sustainable sanitation. IWA World Water Congress 2008 – Development Dialogue, Wien, 10.09.2008.

**Lehn, H.:** Risk Habitat Megacities. IPF, Universität Karlsruhe, 16.07.2008.

**Lehn, H.:** Risk Habitat Megacity - zur Nachhaltigkeit von Wasserdienstleistungen in einer Metropole Lateinamerikas. CESR, Universität Kassel, 24.06.2008.

**Lehn, H.:** Sustainable Water Resources Management in the 21st Century. Stube accompanying seminar for students from Africa, Asia, Latin America, Ev. Akademie Bad Boll, 16.05.2008.

**Lehn, H.:** Risk Habitat Megacity - Helmholtz-Forschungsinitiative 2005 bis 2013. Poster presentation at the FZK stand during the IFAT, München, 05.-09.05.2008.

**Lehn, H.:** Risk Habitat Megacity. Alumni expert seminar “Catástrofes naturales - Gestión y prevención de catástrofes”, Universität Karlsruhe, 31.03.2008.

**Lehn, H.:** Risk Habitat Megacity - Iniciativa de Investigación Helmholtz 2007–2013. First Alumni-Seminar Latin America of the University of Karlsruhe in Santiago de Chile, 31.03.2008.

**Lehn, H.; Kopfmüller, J.; Nuissl, H.; Bartosch, A.:** Do megacities and metropolitan areas pose a risk to sustainable development? Workshop 6 “The Sustainable City”, World-Water-Week, Stockholm, 20.08.2008.

**Lehn, H.; Lüthi, C.; Panesar, A.:** Sanitation in cities – a framework for action. 11th SuSanA-meeting, Rio de Janeiro, Brazil, 20.03.2010.

**Lenz, B.; Martínez, F.; Suppan, P.; Sanhueza, F.; Cortés, C.E.; Schmitz, R.; Justen, A.; Kihm A.; Franck, U.:** Santiago 2030: Perspectivas del sistema de transporte urbano y de la calidad de aire. Conferencia Internacional “Desarrollo urbano sostenible en Megaciudades de América Latina: Santiago 2030”, Santiago de Chile, 27.10.2010.

**Lukas, M.:** Megaproyectos suburbanos en Santiago: Actores, intereses y estrategias en Colina y Pudahuel (1994– 2010). XXXI Congreso Nacional y XVI Internacional de Geografía, Instituto de Geociencias, Facultad de Ciencias, Universidad Austral de Chile, Valdivia, Región de Los Ríos, Chile, 19.-22.10.2010.

**Lukas, M.:** Edge-urban city-building through large scale development projects. Actors, interests and institutional change in Santiago de Chile, Young Researchers’ Workshop of the 21st IAPS conference “Vulnerability, Risk and Complexity: Impacts of Global Change on Human Habitats”, Leipzig, 27.06.-02.07.2010.

**Lukas, M. (2010):** Pushing the City to its Limits: Planning “New Towns” in Latin America. 6th UFZ-DocConference, Leipzig, 27.04.2010.

**Lukas, M.:** Desarrollo Urbano Glocal. Conceptualizar los Megaproyectos Residenciales en la Perifería de Santiago de Chile desde la Geografía Política. Coloquio “Del País Urbano al País Metropolitano”, Pontificia Universidad Católica de Chile (PUC). Santiago de Chile, 02.-04.12.2007.

**Mascareño, A.:** Lateinamerika als Region der Weltgesellschaft: funktionale Differenzierung und Inklusions-/Exklusionszonen. International symposium "Durch Luhmanns Brille: Herausforderungen an Gesellschaft, Politik und Recht in Lateinamerika", Berlin, Ibero-Amerikanisches Institut, 10.-11.12.2007.

**McPhee, J.:** Impacts, conflict and integrated watershed management in the Upper Maipo River Basin. International Conference "Megacities: Risk, Vulnerability and Sustainable Development", Leipzig, 07.-09.09.2009.

**Nuissl, H.:** Project Seminar Urban Sprawl und Landnutzung in Lateinamerika. Potsdam University, Institute of Geography, WS 2008/2009.

**Nuissl, H.:** Oberseminar "Megacities – Nachhaltigkeit, Risiko, Governance", Geographisches Institut, Universität Potsdam, 2008.

**Nuissl, H.:** Seminar "Megacities" – Nachhaltigkeit, Risiken und Governancefragen in großen Agglomerationen. Potsdam University, Institute of Geography, SS 2008.

**Parolai, S.:** Vorlesung "Surface wave based seismic technique", TU Berlin.

**Reyes-Paecke, S.; Kindler, A.; Banzhaf, E.; Ebert, A.; Weiland, U.:** Planificación territorial, usos de suelo y riesgo de inundación: escenarios para Santiago 2030. Internacional conference "Desarrollo urbano sostenible en Megaciudades de América Latina: Santiago 2030"; Santiago de Chile, 27.-28.10.2010.

**Rodríguez Seeger, C.:** Vorschlag einer Methode zur Entwicklung eines "Plan Regional de Ordenamiento Territorial Sostenible". Module of an adult education programme for stakeholders from public authorities in Chile (cooperation of Subsecretaría de Desarrollo Regional - SUBDERE-Chile and CEPAL), 08.2008.

**Rodríguez Seeger, C.** in cooperation with Nuissl, H.; Kabisch, S.: International colloquium "Dinámicas demográficas y espacios en transformación", Pontificia Universidad Católica de Chile, Santiago de Chile, 02.09.2008.

**Rodríguez Seeger, C.;** Reyes-Paecke, S.: Seminar "Gestión Ambiental". Pontificia Universidad Católica de Chile, Santiago de Chile, 2007 and 2008.

**Schleenstein, G; Lehn, H.:** Alternatives for a sustainable management of stormwater in megacities of emerging countries – the case of Santiago de Chile. IWRM - Integrated Water Resources Management, Karlsruhe, 24.11.2010.

**Schulz, C.:** Urban Governance in the light of decentralization – development of public transport in Latin America. The cases of Santiago de Chile and Bogotá. IAPS Conference "Urban Diversities, biosphere and well-being", Young Researchers Workshop, Rome, 28.07.-01.08.2008.

**Schulz, C.:** ÖPNV-Modernisierung in Santiago de Chile. Seminar on traffic planning "Megacity und Verkehr", Technische Universität Berlin, Berlin, 07.05.2008.

**Seifert, H.:** Energía a Partir de los Residuos – Una Solución Sustentable. Primer Seminario Internacional “Técnicas de reciclaje y valorización de residuos sólidos urbanos”, Santiago de Chile, 26.10.2010.

**Stelzer, V.:** Zukunft der Energieversorgung. Fortbildungstag der EnBW Energie Baden-Württemberg, Ruppurr, 02.07.2010.

**Stelzer, V.:** Seminar in Renewable Energy, at the Engineering School, Faculty of Physics and Mathematics, University of Chile, 2010.

**Stelzer, V.:** Sustainable Development in the Energy Sector. German-Turkish TU9-Workshop on Sustainable Energy, 12.-14.11.2008, TUBITAK Marmara Research Center, Gebze, 12.11.2008.

**Stelzer, V.:** Wandel der Stadtentwicklung unter dem Einfluss zunehmender Probleme in der Energieversorgung. International workshop “Die lateinamerikanische Stadt im Wandel”, Berlin, 31.10.2008.

**Stelzer, V.:** Global Change in der systematischen Nachhaltigkeitsbewertung von Santiago de Chile. 4. workshop of the working group “Latin America” of the DGFG “Global Change: Herausforderungen für Lateinamerika”, Universitätszentrum Obergurgl der Universität Innsbruck, Innsbruck, 04.10.2008.

**Stelzer, V.:** Nachhaltige Energieversorgung in lateinamerikanischen Städten. Foro internacional Bogotá - Berlín - Beijing: Desafíos y Soluciones para las Megaciudades, Bogotá, 01.-02.10.2008.

**Stelzer, V.:** Nachhaltigkeit in der Energieversorgung. Lecture at the Fortbildungszentrum für Technik und Umwelt (FTU), Kurs U721-1 Umweltmanagement, Forschungszentrum Karlsruhe, 11.07.2008.

**Stelzer, V.:** Risk Habitat Megacity. Regionalwissenschaftliches Kolloquium am Institut für Regionalwissenschaft an der Universität Karlsruhe (TH), 12.12.2007.

**Stelzer, V.:** Sostenibilidad, riesgo y gobernabilidad en las metrópolis latinoamericanas. Jornadas “Ciudades Sostenibles en América Latina y el Caribe: políticas, estrategias e instrumentos”, ausgerichtet von der Economic Commission for Latin America and the Caribbean in the United Nations (ECLAC/CEPAL), Santiago de Chile, 22.11.2007.

**Stelzer, V.:** Das Integrative Konzept zur Bewertung Nachhaltiger Entwicklung – IKoNE. Deutscher Geographentag “Umgang mit Risiken. Katastrophen – Destabilisierung – Sicherheit”, Bayreuth, 03.10.2007.

**Stelzer, V.; Kopfmüller, J.; Jörissen, J.:** Sustainability in megacities. Foro internacional Bogotá - Berlín - Beijing: Desafíos y Soluciones para las Megaciudades, Bogotá, 01.- 2.10.2008.

**Stelzer, V.; Vargas, L.; Quintero, A.; Simon, S.; Paredes, G.; Kopfmüller, J.; Nienhaus, K.:** Suministro energético sustentable de la RMS. Presentation at the international panel “Sustainable urban development in Latin American megacities: policy challenges and a research agenda 2010-2020”, Santiago de Chile, 28.10.2010.

**Strauch, G.; Oyarzun, R.; Reinstorf, F.; Oyarzun, J.; Schirmer, M.; Knöller, K.:** Assessment of water components in the semi-arid Huasco and Limarí river basins, North Central Chile. 4th Alexander-von-Humboldt Conference, Santiago de Chile, 24.-28.11.2008.

**Suppan, P.:** Air Pollution, Climate Change and Health. Invited talk at the School of Public Health, Peking University, Beijing, China, 29.11.2010.

**Suppan, P.:** Climate Change and Air Pollution: A challenge for multidisciplinary research in Megacities. Seminar at Universidad Tecnológica Nacional Buenos Aires/Argentina, 02.11.2010.

**Suppan, P.; Gurjar, B.R.:** Climate change and air pollution in megacities: A challenge for interdisciplinary research. European Geosciences Union, General Assembly 2010, AS3.7 “Megacities: Air Quality and Climate Impacts from Local to Global Scales”, Vienna, Austria, 02.-07.05.2010.

**Suppan, P.:** Air quality in megacities as a challenge for interdisciplinary research. Seminar at the China University of Mining and Technology, Beijing, China, 27.04.2010.

**Suppan, P.:** Luftqualität, Klimaänderung und Gesundheit - Eine Herausforderung für die multi-disziplinäre Forschung. 3. Sitzung des Gesundheitsforums im Fachzentrum Klimawandel Hessen, Hessisches Landesamt für Umwelt und Geologie, Wiesbaden, 16.03.2010.

**Suppan, P.:** Megacities: A Challenge for Air Quality Research. Seminario Sobre Calidad del Aire en Megaciudades, SEMEX-DAAD, Museo Nacional de Antropología, México, D.F., 20.10.2008.

**Suppan, P.:** Environmental issues in urban agglomerations. Deutsche Physikalische Gesellschaft (DPG), Joint-Session with the European Physical Society (EPS) - Environmental Physics Division "Energy and Environment", Darmstadt, 13.03.2008.

**Suppan, P.:** Climate change and its impact on air pollution as a challenge for future investigations, 2nd ENERO Workshop on Air Pollution and Climate Change, Brussels, 14.02.2008.

**Suppan, P.:** Luftqualität in Megacities als interdisziplinäres Forschungsthema. Conference: Wissenschaftszentrum Umwelt (WZU) Augsburg, 08.02.2008.

**Suppan, P.:** Air quality impact studies - An interdisciplinary approach for megacities. Bilateral Workshop on Air Quality, Climate Change and Health in Central Mexico, GZ: 444 MEX-121/11/08, Mexico City, 19.-21.08.2008.

**Suppan, P.:** Megacities: Eine Herausforderung für die Forschung in der Luftqualität. Meteorologentagung DACH 2007, Hamburg, 10.-14.09.2007.

**Suppan, P.; Forkel, R.; Junkermann, W.; Franck, U.:** Megacities: Risiken aus Sicht der Luftqualität. 8. Forum DKKV/ CEDIM "Disaster Reduction in Climate Change", Universität Karlsruhe, 15.-16.10.2007.

**Suppan, P.; Forkel, R.; Schmitz, R.; Muñoz, R.:** Megacities: A Challenge for Air Quality Research. ExpoAlemania 2008 - Forum: "Bogotá - Berlin - Beijing", Desafios y Soluciones para las Megaciudades, Deutscher Akademischer Austausch Dienst (DAAD) & Deutsch-Kolumbianische Industrie- und Handelskammer (AHK), Bogotá, 01.10.2008.

**Vargas, L.:** Costo de Racionamiento de Larga Duración (o Costo de Falla) en el Mercado Eléctrico. Congreso de Energía, Potencia, Instrumentación y Medidas 2008 (EPIM 2008), Montevideo, 16.-17.10.2008.

**Vargas, L.; Bräutigam, K.-R.; Gonzalez, T.; Kopfmüller, J.; Lehn, H.; Nienhaus, K.; Paredes, G.; Quintero, A.; Seifert, H.; Simon, S.; Simon, L.; Stelzer, V.; Szanto, M.:** Suministro energético sustentable de la RMS: La contribución de agua y basura. International panel "Sustainable urban development in Latin American megacities: policy challenges and a research agenda 2010-2020", Santiago de Chile, 28.10.2010.

**Weiland, U.:** Chair of the technical meeting 55 "Risiken für eine nachhaltige Stadtentwicklung in Lateinamerika". Deutscher Geographentag, Bayreuth, 30.09.-04.10.2007.

**Welz, J.:** Ambivalent segregation patterns considering spatial and temporal dimensions of social integration: The case of Santiago de Chile. IAPS Conference "Urban Diversities, biosphere and well-being", Young Researchers Workshop, Rome, 28.07.-01.08.2008.

**Welz, J.:** Does spatial proximity between different social groups lead to social integration? Effects of new gated communities in former deprived residential areas in the north of Santiago de Chile. Latin American Network for Housing and Urban Research, ENHR Conference, Dublin, 07.-09.07.2008.

**Welz, J.; Kabisch, S.:** Is spatial proximity leading to social integration? New gated communities in former low income residential areas in the north of Santiago de Chile. Conference "Persistent Divides: Marginalization and Social Exclusion in Latin America", Grand Valley State University, Grand Rapids, 14.-15.03.2008.

## D) Award

2009/2010: Awarded as official project of the UN Decade of Education for Sustainable Development

## E) Press release

### 08.03.2009

Deutsche Welle: "El proyecto de las megaciudades sostenibles", interviewed K. Krellenberg; article by Lydia Aranda Barandiain, available at: <http://www.dw-world.de/dw/article/0,,4109145,00.html>.

### 13.03.2009

www.Taz.de: „Lebensraum Megacity“, article by K. Höhnke, available at: <http://www.taz.de/1/archiv/print-archiv/printressorts/digi-artikel/?ressort=wi&dig=2009%2F03%2F13%2Fa0170&cHash=fcb2ebb650>.

### 17.03.2009

Informationsdienst Wissenschaft: „Santiago de Chile als Labor der Megastadt von morgen – Bundesministerin Schavan besucht Helmholtz-Forscher“, interviewed D. Heinrichs; article by T. Arnold, available at: <http://idw-online.de/pages/de/news305517>.

### 28.04.2010

Berliner Zeitung; Wiener Zeitung (11.05.2010), Frankfurter Rundschau, Sächsische Zeitung (10.06.2010): "Steinerne Giganten: Wissenschaftler erforschen die Chancen und Risiken von Mega-Citys mit mehr als zehn Millionen Einwohnern", interviewed D. Heinrichs, article by K. Viering.

### 29.04.2010

www.welt.de: „Megacities leiden unter Klimawandel“, interviewed D. Heinrichs; article by R. Knauer, available at: <http://www.welt.de/dossiers/expo2010/article7379297/Megacities-leiden-unter-Klimawandel.html>.

### 30.04.2010

www.welt.de: „Studienobjekt Santiago de Chile“, interviewed D. Heinrichs; article by R. Knauer, available at: <http://www.welt.de/die-welt/vermischtes/article7405675/Studienobjekt-Santiago-de-Chile.html>.

### 08.05.2010

LATERCERA: interviewed F. Martínez, conclusions of the RHM project.

### 11.05.2010

Rheinpfalz: „Riesige Städte, große Probleme“, interviewed D. Heinrichs; article by K. Viering.

### 20.05.2010

eltiempo.com: „Expoagua 2010 será un evento para que Pereira muestre su experiencia en el manejo de este recurso.“, available at: <http://www.eltiempo.com/archivo/documento/CMS-7716890>.

**23.05.2010**

www.amur.cl: “Presidenta de la asociación de municipios rurales de la r.m. se reúne con profesionales de proyecto CAS”, interviewed K. Krellenberg, available at: <http://www.amur.cl/portal/?p=529>.

**10.06.2010**

www.expoaguapereira2010: “EXPOAGUA PEREIRA 2010” available at: <http://www.colombiaincluyente.org/ver-proyecto.php?id=294>.

**11.08.2010**

ECOticias.com: „Ministra Beatriz Uribe hace apertura oficial de Expoagua 2010“, available at: <http://www.ecoticias.com/eco-america/30927/rss.php>.

**18.08.2010**

La Tercera: “Santiago se pone a la vanguardia frente al cambio climático”, available at: <http://latercera.com/noticia/santiago/2010/08/1731-284906-9-santiago-se-pone-a-la-vanguardia-frente-al-cambio-climatico.shtml>.

**18.08.2010**

www.ecoamericana.cl: „Cambio Climático: Región Metropolitana compromete estrategia para enfrentar el cambio climático”.

**19.08.2010**

www.La Nacion.cl: “Así se prepara Santiago para el cambio climático”. interviewed K. Krellenberg; article by Ch. Espinoza, available at: <http://www.lanaciondomingo.cl/asi-se-prepara-santiago-para-el-cambio-climatico/noticias/2010-08-18/201930.html>.

**09.2010**

Talks with “Automotive Agenda”: interviewed A. Justen, topic “Megacities und Verkehr”.

**18.02.2011**

www.elmostrador.cl: interviewed C. Rogriguez Seeger: “La empresa Chile y el Medio Ambiente: caso Isla Riesco.” available at: <http://www.elmostrador.cl/opinion/2011/02/18/la-empresa-chile-y-el-medio-ambiente-caso-isla-riesco/>.

**28.03.2011**

Weltwassertag 2011: „Wasser für die Stadt Santiago de Chile“, interviewed H. Lehn; L. Simon.

**04.2011**

www.dlr.de: interviewed F. Martínez during research stay at DLR, available at: <http://www.dlr.de/desktopdefault.aspx/tabid-12/>.



