

Dr. Ursula Gessner

CURRENT TASKS

- Head of team ‚Agroecosystems and Phenology‘
- Project acquisition and project management
- Coordination of EO-based research and information product development
- Development of concepts and methods for the analysis of earth observation time series for agroecosystem-related research
- Research and coordination activities in interdisciplinary research projects

RESEARCH TOPICS

- Land management and agricultural land use
- Agroecosystems
- Climate change adaptation
- Phenology and vegetation dynamics
- Land surface – climate interactions
- Method development and analysis of multi-sensor earth observation time series

EDUCATION

- **Dissertation (Dr. rer. nat.)** at the University of Wuerzburg, Remote Sensing Unit, in cooperation with the German Aerospace Center (DLR) (2011).
- **Diploma degree** in Geography at the University of Augsburg with focus on GIS, soil science and remote sensing (2005).

EMPLOYMENT RECORD

- **03/2011 - present** Research Associate at the German Remote Sensing Data Center (DFD), German Aerospace Center (DLR), Oberpfaffenhofen, Germany.
- **01/2007 - 02/2011** Research Associate at the Remote Sensing Unit, University of Wuerzburg, in cooperation with the German Aerospace Center (DLR), Germany.
- **01/2006 – 06/2006** Department of Land Information (DLI), Satellite Remote Sensing Services, Perth, Australia.
- **06/2005 – 12/2005** Associate at Gesellschaft f. Angewandte Fernerkundung (GAF), Munich, Germany.

PUBLICATIONS

Reviewed Journals

- Klein, I.; Mayr, S.; **Gessner, U.**; Hirner, A.; Kuenzer, C. (2021): Water and hydropower reservoirs: High temporal resolution time series derived from MODIS data to characterize seasonality and variability. Remote Sensing of Environment 253, 112207.
- Holzwarth, S.; Thonfeld, F.; Abdullahi, S.; Asam, S.; Da Ponte Canova, E.; **Gessner, U.**; Huth, J.; Kraus, T.; Leutner, B.F.; Kuenzer, C. (2020): Earth Observation Based Monitoring of Forests in Germany: a Review. Remote Sensing 12, 3570.
- Orynbaikyzy, A.; **Gessner, U.**; Mack, B.; Conrad, C. (2020): Assessing the Impact of Feature Selection, Optical Data Availability, and Parcel Sizes on the Accuracies. Remote Sensing 12(17), 2779.
- Huth, J.; **Gessner, U.**; Klein, I.; Yesou, H.; Lai, X.; Oppelt, N.; Kuenzer, C. (2020): Analyzing Water Dynamics Based on Sentinel-1 Time Series – a Study for Dongting Lake Wetlands in China. Remote Sensing 12(11), 1761.

- Reiner mann, S.; **Gessner, U.**; Asam, S.; Kuenzer, C.; Dech, S. (2019): The Effect of Droughts on Vegetation Condition in Germany: An Analysis Based on Two Decades of Satellite Earth Observation Time Series and Crop Yield Statistics. *Remote Sensing* 11, 1783.
- Mayr, S.; Kuenzer, C.; **Gessner, U.**; Klein, I.; Rutzinger, M. (2019): Validation of Earth Observation Time-series: A Review for Large-area and Temporally Dense Land Surface Products. *Remote Sensing* 11(22), 2616.
- Orynbaikyzy, A.; **Gessner, U.**; Conrad, C. (2019): Crop type classification using a combination of optical and radar remote sensing data: A review. *International Journal of Remote Sensing*, 1-43.
- Bliedernicht, J.; Berger, S.; Salak, S.; Guug, S.; Hingerl, L.; Heinzeller, D.; Mauder, M.; Steinbrecher, R.; Steup, G.; Bossa, Aymar; Waongo, M.; Quansah, E.; Balogun, A.; Yira, Y.; Arnault, J.; Wagner, S.; Klein, C.; **Gessner, U.**, Straub, A.; Knauer, K.; Schönrock, R.; Kunkel, R.; Rogmann, A.; Neidl, F.; Jahn, K.; Dieckrueger, B.; Aduna, A.; Barry, B.; Kunstmann, H. (2018): The WASCAL Hydro-Meteorological Observatory in the Sudan Savanna of Burkina Faso and Ghana. *Vadose Zone Journal* 17(1).
- Faye, B.; Webber, H.; Naab, J.; MacCarthy, D.S.; Adam, M.; Ewert, F.; Lamers, J.P.A.; Schleussner, C.F.; Ruane, A.; **Gessner, U.**; Hoogenboom, G.; Boote, K.; Shelia, V.; Saeed, F.; Wissler, D.; Hadir, S.; Laux, P.; Gaiser, T (2018): Impacts of 1.5 versus 2.0°C on cereal yields in the West African Sudan Savanna" *Environmental Research Letters* 13, 034014.
- Winkler, K.; **Gessner, U.**; Hochschild, V. (2017): Identifying Droughts Affecting Agriculture in Africa Based on Remote Sensing Time Series between 2000–2016: Rainfall Anomalies and Vegetation Condition in the Context of ENSO. *Remote Sensing* 9(8), 831.
- Klein, I.; **Gessner, U.**; Dietz, A.J.; Kuenzer, C. (2017): Global WaterPack – A 250 m resolution dataset revealing the daily dynamics of inland water bodies. *Remote Sensing of Environment* 198, 345-362.
- Knauer, K.; **Gessner, U.**; Forkuor, G.; Fensholt, R.; Kuenzer, C. (2017): Monitoring Agricultural Expansion in Burkina Faso over 14 Years with 30 m Resolution Time Series: The Role of Population Growth and Implications for the Environment. *Remote Sensing* 9(2), 132.
- Dietz, A.; Klein, I.; **Gessner, U.**; Frey, C.; Kuenzer, C.; Dech, S. (2017): Detection of Water Bodies from AVHRR Data – a TIMELINE thematic Processor. *Remote Sensing* 9, 57.
- Klein, C.; Bliedernicht, J.; Heinzeller, D.; **Gessner, U.**; Klein, I.; Kunstmann, H. (2016): Modelled feedbacks of observed inter-annual vegetation changes on the West African monsoon. *Earth System Dynamics*, published online in June 2016.
- Knauer, K.; **Gessner, U.**; Fensholt, R.; Kuenzer, C. (2016): An ESTARFM fusion framework for the generation of large-scale time series in cloud-prone and heterogeneous landscapes. *Remote Sensing* 8, 425.
- **Gessner, U.**; Machwitz, M.; Esch, T.; Tillack, A.; Naeimi, V.; Kuenzer, C.; Dech, S. (2015): Multi-sensor mapping of West African land cover using MODIS, ASAR and TanDEM-X/TerraSAR-X data. *Remote Sensing of Environment* 164, 282-297.
- Machwitz, M.; **Gessner, U.**; Conrad, C.; Falk, U.; Richters, J.; Dech, S. (2015): Modelling the Gross Primary Productivity of West Africa with the Regional Biomass Model RBM+, using optimized 250 m MODIS FPAR and fractional vegetation cover information. *International Journal of Applied Earth Observation and Geoinformation* 43, 177-194.
- Klein, I.; Dietz, A.; **Gessner, U.**; Dech, S.; Kuenzer, C. (2015): Results of the Global WaterPack: a novel product to assess inland water body dynamics on a daily basis. *Remote Sensing Letters* 6 (1), 78-87.
- Knauer, K.; **Gessner, U.**; Kuenzer, C.; Dech, S. (2014): Remote sensing of vegetation dynamics in West Africa. *International Journal of Remote Sensing* 35, 6357-6396.
- Kuenzer, C.; van Beijma, S.; **Gessner, U.**; Dech, S. (2014): Land surface dynamics and environmental challenges of the Niger Delta, Africa: *Remote*

sensing-based analyses spanning three decades (1986-2013). *Applied Geography* 53, 354-368.

- Klein, I.; Dietz, A.; **Gessner, U.**; Galayeva, A.; Myrzakhmetov, A.; Kuenzer, C. (2014): Evaluation of seasonal water body extents in Central Asia over the past 27 years derived from medium-resolution remote sensing data. *International Journal of Applied Earth Observation and Geoinformation* 26, 335-349.
- **Gessner, U.**; Niklaus, M.; Kuenzer, C.; Dech, S. (2013): Intercomparison of Leaf Area Index Products for a Gradient of Sub-Humid to Arid Environments in West Africa. *Remote Sensing* 5, 1235-1257.
- **Gessner, U.**; Naeimi, V.; Klein, I.; Kuenzer, C.; Klein, D.; Dech, S. (2013): The relationship between precipitation anomalies and satellite-derived vegetation activity in Central Asia. *Global and Planetary Change* 110, 74-87.
- **Gessner, U.**; Machwitz, M.; Conrad, C.; Dech, S. (2013): Estimating the fractional cover of growth forms and bare surface in savannas. A multi-resolution approach based on regression tree ensembles. *Remote Sensing of Environment* 129, 90-102.
- Klein, I.; **Gessner, U.** and Kuenzer, C. (2012): Regional land cover mapping and change detection in Central Asia using MODIS time-series. *Applied Geography* 35, 1-16.
- Dietz, A.J.; Kuenzer, C.; **Gessner, U.** and Dech, S. (2012): Remote Sensing of snow – a review on available methods. *International Journal of Remote Sensing* 33(13), 4094-4134.
- Hüttich, C.; **Gessner, U.**; Herold, M.; Strohbach, B.J.; Schmidt, M.; Keil, M. and Dech, S. (2009): On the Suitability of MODIS Time Series Metrics to Map Vegetation Types in Dry Savanna Ecosystems: A Case Study in the Kalahari of NE Namibia. *Remote Sensing* 1, 620-643.

Conferences

- Urban, M.; Hirner, A.; Ziemer, J.; Mueller, M.; **Gessner, U.**; Baade, J.; Mogonong, B.; Morgenthal, T.; Feig, G.; Ramoelo, A.; Heckel, K.; Nghiyalwa, H.; Schmullius, C. (2021): Sentinel-1 and Sentinel-2 Time Series Breakpoint Detection as Part of the South African Land Degradation Monitor (SALDI), IEEE International Geoscience and Remote Sensing Symposium, 12 – 16 July 2021, online.
- Meier, J.; **Gessner, U.** (2021): Verbesserte Niederschlagsinformation und Nutzung von Niederschlagswasser für eine an die Klimavariabilität angepasste Landwirtschaft in Burkina Faso. Arbeitskreis Subsahara Afrika, 18 – 19 June 2021, online.
- Reinermann, S.; **Gessner, U.**; Asam, S.; Kuenzer, C. (2021): Satellite time series-based analyses of grassland use intensity and yields, 21st Symposium of the European Grassland Federation 2021, 17 – 19 May 2021, online.
- Schmullius, C.; Urban, M.; Hirner, A.; Berger, C.; Schellenberg, K.; Ramoelo, A.; Smit, I.; Strydom, T.; Chirima, G.; Morgenthal, T.; Melly, B.; **Gessner, U.**; Mashiyi, N.; Mlisa, A.; Kganyago, M.; Baade, J. (2020): Earth Observation Strategies for Degradation Monitoring in South Africa with Sentinels – Results from the SPACES 2 SALDI Project Year 1. IEEE International Geoscience and Remote Sensing Symposium, 26 September - 2 October 2020, online, 4 pages.
- Reinermann, S.; Asam, S.; **Gessner, U.**; Kuenzer, C.; Dech, S. (2019): Extreme Hot and Dry Summers in Germany - Analysis of Long-term Earth Observation Time Series of vegetation Condition. ESA Living Planet Symposium 2019, 13 – 17 May 2019, Milan, Italy.
- Orynbaikyzy, A.; **Gessner, U.**; Mack B.; Conrad, C. (2019): An optimal combination of optical and radar features for a crop type classification. Living Planet Symposium 2019. 13 – 17 May 2019, Milan, Italy.
- Orynbaikyzy, A.; **Gessner, U.**; Conrad, C. (2019): Investigating Dense Time Series of Optical and SAR Earth Observation data for crop type classification. EARSeL 2019. 1 – 5 July 2019, Salzburg, Austria.

- **Gessner, U.** (2018): Fernerkundung für Landwirtschaft und Ernährungssicherheit, Key note, 7. Gemeinsame Tagung Fernerkundung DGfG & DGPF, 4 – 5 October 2018, Heidelberg.
- **Gessner, U.**; Klein, I.; Hirner, A.; Kuenzer, C. (2018): Crop type mapping in Southern Germany using the full annual Landsat archive and LUCAS in-situ data. 38th Annual EARSeL Symposium, 9 – 12 July, Chania, Greece.
- **Gessner, U.**; Esch, T.; Dietz, A.; Leinenkugel, P.; Kuenzer, C. (2018): Potential and Challenges of Earth Observation Time Series for the Analysis of Global Change. Key note, 38th Annual EARSeL Symposium, 9 – 12 July, Chania, Greece.
- Esch, T.; Fathalrahman, A.; Bachofer, F.; Boudinaud, L.; Hirner, A.; **Gessner, U.**; Knauer, K.; Metz-Marconcini, A.; Marconcini, M.; Uereyen, S.; Winkler, K.; Zeidler, J. (2018): New Opportunities for Urban Land Governance by Exploiting Big Data from Earth Observation. World Bank Land and Poverty Conference 2018: Land Governance in an Interconnected World, March 2018, Washington DC, USA.
- Kusche, J.; Doell, P.; Bolch, T.; van Dam, T.; Dettermin, D.; Eicker, A.; Engels, O.; Foglia, L.; **Gessner, U.**; Güntner, A.; Kuenzer, C.; Müller Schmied, H.; Seitz, F.; Sneeuw, N.; Tourian, M. (2018): The GlobalCDA Project - Understanding the global freshwater system by combining geodetic and remote sensing information with modelling, using a calibration/data assimilation approach, EGU General Assembly, 8-13 April 2018, Wien, Austria.
- Hadjimitsis, D.; Christofe, A.; Agapiou, A.; Lysandrou, V.; Themistocleous, K.; Nisantzi, A.; Tzouvaras, M.; Papoutsas, C.; Mamouri, R.; Mettas, C.; Evagorou, E.; Lasaponara, R.; Masini, N.; Danese, M.; Sileo, M.; Krauss, T.; Cerra, D.; **Gessner, U.**; Schreier G. (2018): ATHENA Twinning project: Remote sensing for cultural heritage, , EGU General Assembly, 8 – 13 April 2018, Wien, Austria.
- Klein, I.; **Gessner, U.**; Hirner, A.; Dietz, A.; Dech, S.; Kuenzer, C. (2018): A surface water body dataset with daily temporal resolution – Selected examples and application potential of the Global WaterPack: ESA Mapping Water Bodies from Space, 28 – 29 March 2018, Frascati, Italy.
- Klein, I.; **Gessner, U.**; Hirner, A.; Dietz, A.; Dech, S.; Kuenzer, C. (2018): Daily dynamics of water bodies over 15 years. Selected examples for the relationship of water body extents, temperature and precipitation. DLR Climate Change Conference, 17 – 19 April 2018, Cologne, Germany.
- **Gessner, U.**; Klein, I.; Dech, S.; Kuenzer, C. (2017): Dynamics of global wetlands reflected in the daily time series product Global WaterPack. ISRSE 2017, 8 – 12 May 2017, Tshwane, South Africa.
- Olusegun, C.F.; **Gessner, U.**; Hirner, A.; Salack, S.; Forkuor, G.; Berger, S.; Heinzeller, D.; Dieng, D.; Sylla, B.; Kunstmann, H.; Lamers, J. P.A.; Tondoh, J. (2017) WASCAL - West African Science Center on Climate Change and Adapted Land Use. Subsidiary Body for Scientific and Technological Advice (SBSTA), Ninth meeting of the Research Dialogue, 10 May 2017, Bonn, Deutschland.
- **Gessner, U.**; Knauer, K.; Machwitz, M.; Dech, S.; Kuenzer, C. (2016): Impacts of Socio-economic development and urbanization on natural resources – case studies from Africa. IGARSS, 10 – 15 July 2016, Beijing, China.
- Klein, I.; **Gessner, U.**; Dietz, A.; Leinenkugel, P.; Dech, S. Kuenzer, C. (2016): Detection of inland water bodies with high temporal resolution – assessing dynamic threshold approaches. IGARSS, 10 – 15 July 2016, Beijing, China.
- **Gessner, U.**; Knauer, K.; Klein, I.; Kuenzer, C. (2016): Assessing socio-economic and climate related impacts on natural resources in rural areas of West Africa. EARSeL Symposium, 20 – 24 June 2016, Bonn, Germany.
- Eisfelder, C.; **Gessner, U.**; Xinwu, L.; Huang, C.; Dech, S.; Künzer, C. (2016): Remote Sensing based Modelling of Net Primary Productivity for China – Analysing trends, monitoring human impact and forest disturbance. EARSeL Symposium, 20 – 24 June 2016, Bonn, Germany.
- Agapiou, A.; Lysandrou, V.; Themistocleous, K.; Lasaponara, R.; Masini, N.; Krauss, T.; Cerra, D.; **Gessner, U.**; Schreier, G.; Hadjimitsis, D. (2016): Searching data for supporting archaeo-landscapes in Cyprus: an overview of

aerial, satellite and cartographic datasets of the island. Proceedings of SPIE 4th International Conference on Remote Sensing and Geoinformation of the Environment Vol. 9688, 10 pages.

- Hadjimitsis, D.; Agapiou, A.; Lysandrou, V.; Themistocleous, K.; Lasaponara, R.; Masini, N.; Krauss, T.; Cerra, D.; **Gessner, U.**; Schreier, G. (2016): Establishing a remote sensing science center in Cyprus: first year of activities of ATHENA project, 6th International Euro-Mediterranean Conference (EuroMed 2016), 31 October – 5 November 2016, Nicosia, Cyprus.
- Hadjimitsis, D. G.; Agapiou, A.; Lysandrou, V.; Branka, C.; Themistocleous, K.; Nisantzi, A.; Lasaponara, R.; Masini, N.; Krauss, T.; Cerra, D.; **Gessner, U.**; Schreier, G. (2016): ATHENA: Center of Excellence in Cyprus in the Field of Remote Sensing for Cultural Heritage in the Areas of Archaeology and Cultural Heritage, 6th GEOBIA 2016, 14 – 16 September 2016, Enschede, The Netherlands.
- Hadjimitsis, D. G.; Agapiou, A.; Lysandrou, V.; Branka, C.; Themistocleous, K.; Lasaponara, R.; Masini, N.; Krauss, T.; Cerra, D.; **Gessner, U.**; Schreier, G. (2016): ATHENA: Remote Sensing Science Center for Cultural Heritage in Cyprus. European Geosciences Union – EGU, General Assembly 2016, 17 – 22 April 2016, Vienna, Austria.
- Hadjimitsis, D. G.; Agapiou, A.; Lysandrou, V.; Branka, C.; Themistocleous, K.; Nisantzi, A.; Lasaponara, R.; Masini, N.; Krauss, T.; Cerra, D.; **Gessner, U.**; Schreier, G. (2016): Establishment of a center of excellence in the field of remote sensing for cultural heritage at the Cyprus university of technology: the 'ATHENA' Horizon 2020 Twinning project, Fourth International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2016), 4 – 8 April, 2016, Cyprus.
- **Gessner, U.**; Forkuor, G.; Knauer, K.; Klein, I.; Kuenzer, C. (2015): Landbedeckung, Landnutzung und Klimawandel in Westafrika. Fernerkundungsbasierte Arbeiten im Projekt WASCAL. Jahrestreffen des AK Subsaharisches Afrika, 27 – 28 November 2016, Cologne, Germany.
- Knauer, K.; **Gessner, U.**; Fensholt, R.; Kuenzer, C. (2015): Remote Sensing of Vegetation Dynamics in West Africa: Improved Satellite Time Series for Agricultural Analyses. Jahrestreffen des AK Subsaharisches Afrika, 27 – 28 November 2016, Cologne, Germany.
- Klein, C.; Heinzeller, D.; Bliefernicht, J.; **Gessner, U.**; Klein, I.; Kunstmann, H. (2015): Modelled feedback of observed inter-annual vegetation changes on the West African monsoon. Water and Energy Cycles in the Tropics. 17 – 19 November 2015, Paris, France.
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- **Gessner, U.**; Leinenkugel, P.; Klein, I.; Dietz, A.; Kuenzer, C. (2015): Assessment of land surface dynamics based on time series of OLCI-type moderate resolution earth observation data. Sentinel-3 for science workshop, 2 – 5 June 2015, Venice, Italy.
- **Gessner, U.**; Knauer, K.; Kuenzer, C. (2015): Tree cover patterns and changes in the West Sudanian Savanna and observed socio-economic impacts. 36th International Symposium on Remote Sensing of Environment, 11 – 15 May 2015, Berlin, Germany.
- Knauer, K.; **Gessner, U.**; Dech, S.; Kuenzer, C. (2015): Remote sensing of vegetation dynamics in West Africa: Improved satellite time series for phenological analyses. 36th International Symposium on Remote Sensing of Environment, 11 – 15 May 2015, Berlin, Germany.
- Kuenzer, C.; Leinenkugel, P.; Frey, C.; Huth, J.; Ottinger, M.; **Gessner, U.**; Dech, S. (2015): The Land-Use Dynamics and Water Nexus for the transboundary Mekong

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- Huth, J.; Ahrens, M.; Klein, I.; **Gessner, U.**; Hoffmann, J.; Kuenzer, C. (2015): WaMaPro – a user friendly tool for water surface derivation from SAR data – and further products derived from optical data. ESA Mapping Water Bodies from Space Conference 2015 18 – 19 March 2015, Frascati, Italy.
- **Gessner, U.**; Knauer, K.; Thiel, M.; Forkuor, G.; Kuenzer, C.; Dech, S. (2014): High resolution tree cover mapping in the West Sudanian Savanna based on multi-temporal Landsat data. 10th International Conference of the African Association of Remote Sensing of the Environment, 27 – 31 October 2014, Johannesburg, South Africa.
- **Gessner, U.**; Knauer, K.; Bliefernicht, J.; Arnault, J.; Klein, C.; Kuenzer, C.; Müller, A.; Kunstmann, H.; Dech, S. (2014): Enhanced land surface dynamics from remote sensing and their use in regional climate modeling. Climate Symposium 2014, 13 – 17 October 2014, Darmstadt, Germany.
- **Gessner, U.**; Hartmann, A., Huth, J., Machwitz, M., Naeimi, V., Esch, T., Dech, S., Kuenzer, C. (2014): Exploiting multi-sensoral earth observation time series for regional land cover mapping. 5th Workshop of the EARSeL Special Interest Group on Land Use and Land Cover, 17 – 18 March 2014, Berlin, Germany.
- Knauer, K.; **Gessner, U.**; Kuenzer, C.; Dech, S. (2014): Challenges in the generation of LAI time series for West Africa: difficulties and potential improvements. GV2M, 3 – 7 February 2014, Avignon, France.
- Bliefernicht, J.; Kunstmann, H.; Hingerl, P.; Rummler, T.; Andresen, S.; Mauder, M.; Steinbrecher, R.; Fries, R.; Gochis, D.; **Gessner, U.**; Quensah, M.; Awoutuse, A; Neidl, F.; Jahn, C.; Boubacar, B. (2013): Field- and simulation experiments investigating regional land-atmosphere interactions in West Africa: experimental set-up and first results. Proceedings of H01, IAHS-IAPSO-IASPEI Assembly, Gothenburg, Sweden, July 2013 (IAHS Publ. 359, 2013) 226-232.
- **Gessner, U.**; Naeimi, V.; Klein, I.; Kuenzer, C.; Klein, D.; Dech, S. (2013): The response of vegetation to rainfall anomalies in Central Asia. 35th International Symposium on Remote Sensing of Environment, April 22 – 26, Beijing, China.
- Dietz, A.; Klein, I.; **Gessner, U.**; Kuenzer, C. (2012): The dynamics of Aral Sea, Caspian Sea, and Shardara Water Reservoir during the past decade based on MODIS data classification. 32nd International Geographical Congress, 26 – 30 August 2012, Cologne, Germany.
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- Bachmann, M.; Müller, A.; Heiden, U.; Kuenzer, C., **Gessner, U.**; Günther, K. (2012): Requirements for and potential of Sentinel-2 for Regional Applications. Sentinel-2 preparatory Symposium, April 23 – 27 2012, Frascati, Italy.
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- **Gessner, U.**; Wehrmann, T.; Huth, J.; Gebhardt, S.; Naeimi, V.; Kuenzer, C. and Dech, S. (2011): Towards transferable large area land cover mapping in central Asia using MODIS time series. 34th International Symposium on Remote Sensing of Environment, April 10 – 15 2011, Sydney, Australia.
- Klein, D.; Asam, S.; **Gessner, U.** and Dech, S. (2011): Assessment of Mountainous Ecosystems In Central Asia by using Remote Sensing Based Vegetation Cover Fractions. 34th International Symposium on Remote Sensing of Environment. April 10 – 15 2011, Sydney, Australia.
- Lex, S.; **Gessner, U.** and Dech, S. (2010): Identifizierung der Antriebskräfte von Landnutzungs- und Landbedeckungsänderungen in der Region Kavango in

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- Hüttich, C.; **Gessner, U.**; Schmidt, M.; Keil, M.; Strohbach, B. and Dech, S. (2009): Ecosystem Assessment in Savanna Ecosystems based on multi-scale Earth Observation data. 33rd International Symposium on Remote Sensing of Environment. May 4 – 8 2009, Stresa, Italy.
- Huettich, C.; Dech, S.; Fox, T.; Gessner, U.; Keil, M.; Schmidt, M.; Strohbach, B. (2009): Remote Sensing for Mapping Vegetation Types and Dynamics in Savanna Ecosystems of Namibia: Concepts for Integrated Vegetation Diversity Assessments, DIVERSITAS Open Science Conference, Cape Town, South Africa.
- **Gessner, U.**; Conrad, C.; Hüttich, C.; Keil, M.; Schmidt, M.; Schramm, M. and Dech, S. (2008): A multi-scale approach for retrieving proportional cover of life forms. IEEE International Geoscience & Remote Sensing Symposium, July 6 – 11 2008, Boston, USA.
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Book Contributions

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