

# Scientific Presentations

## Invited Presentations and Keynotes at International Conferences

- Steiner, A. K.**, F. Ladstädter, M. Stocker, M. Schwärz, K. Yessimbet, K. Rac, Advances in using GNSS radio occultation for climate, COSMIC/JCSDA Workshop and IROWG-10, Boulder, CO, USA, September 2024 (keynote).
- Steiner, A. K.**, Radio Occultation for Climate – Wegener Center Perspectives, GPS/MET – COSMIC Anniversary Session, COSMIC/JCSDA Workshop and IROWG-10, Boulder, CO, USA, September 2024.
- Steiner, A. K.**, Observing the atmosphere and climate with GNSS radio occultation, Meteorological Seminar, Meteorologisches Institut, LMU, Munich, Germany, July 2024.
- Steiner, A. K.**, Climate monitoring using GNSS radio occultation, GNSS Remote Sensing Colloquium 2023, UCAR Cosmic, Boulder, CO, USA, June 2023.
- Steiner, A. K.**, Atmospheric climate change – observing variability, trends, and extremes with GNSS RO, DCG Seminar, NCAR, Boulder, CO, USA, July 2023.
- Steiner, A. K.**, F. Ladstädter, and M. Stocker, Temperature changes and trends in the stratosphere from observations, 11th International Workshop on Long-Term Changes and Trends in the Atmosphere – *TRENDS 2022*, Helsinki, Finland, May/June 2022.
- Steiner, A. K.**, F. Ladstädter, and the SPARC ATC Activity, Atmospheric temperature trends from four decades of observations, *AGU Fall Meeting 2021*, New Orleans, USA (online), December 2021.
- Steiner, A. K.**, Klimaschutz aus naturwissenschaftlicher Sicht – Die Fakten zum Klimawandel, *Österreichische Umweltrechtstage „Klimaschutz im Recht“*, Johannes-Kepler-Universität Linz, September 2021.
- Steiner, A. K.**, Atmospheric climate change – Insights from GNSS RO, *8th International Radio Occultation Working Group Meeting – IROWG-8*, virtual meeting, April 2021.
- Steiner, A. K.** (keynote), GNSS RO for monitoring atmospheric climate change, *EUMETSAT–ROM SAF–C3S Workshop 2020*, online, December 2020.
- Steiner, A. K.** and the SPARC ATC Activity, Observed temperature trends in the troposphere and stratosphere over the last four decades, *5th International Conference on GPS Radio Occultation – ICGPSRO 2020*, Hsinchu, Taiwan (virtual conference), October 2020.
- Steiner, A. K.** and the SPARC ATC Activity, SPARC Activity on Atmospheric Temperature Changes and their Drivers (ATC), *ISSI Team Meeting on Middle Atmosphere Dynamics*, Bern, Switzerland, March 2019.
- Steiner, A. K.**, F. Ladstädter, and the SPARC ATC Activity, Atmospheric temperature trends from observations – an update, *AGU Fall Meeting 2018*, Washington, D.C., USA, December 2018.
- Steiner, A. K.**, Detection and attribution: trends and extremes (Part II of: Climate change, impacts and attribution of anthropogenic causes: status and challenges by Kirchengast G., A.K. Steiner, D.Maraun), *Climate Change, Responsibility and Liability International Conference*, Graz, November 2018.
- Steiner A. K.**, Klimavariabilität und Trends in der Atmosphäre, *Sitzung 12/18 der Kommission Klima und Luftqualität der Österreichischen Akademie der Wissenschaften*, Wien, Austria, October 2018.
- Steiner A. K.**, F. Ladstädter, and H. Wilhelmssen, Temperature trends and climate variability from GPS RO, radiosondes, and AMSU, *ICGPSRO 2018 – 4th International Conference on GPS Radio Occultation and 11th FORMOSAT-3/COSMIC Data Users' Workshop*, Taipei, Taiwan, April 2018.
- Foelsche\* U., G. Kirchengast, J. Danzer, M. Schwärz, **A. K. Steiner**, V. Proschek, B. Angerer, F. Ladstädter, and J.Innerkofler, Studying atmosphere and climate with GNSS RO data: recent results from the Wegener Center, Graz, Austria, *ICGPSRO 2018 – 4th International Conference on GPS Radio Occultation and 11th FORMOSAT-3/COSMIC Data Users' Workshop*, Taipei, Taiwan, April 2018 (\*presenter).
- Kirchengast\*, G., and **A. K. Steiner**, GNSS radio occultation for climate science: where do we stand and what are key next steps? *SGCS17 - IAG Workshop on Satellite Geodesy for Climate Studies*, Bonn, Germany, September 2017 (\*presenter).
- Steiner, A. K.** and the ARSCLISys group, Atmospheric Climate Monitoring with GNSS Radio Occultation, *14th Annual Meeting Asia Oceania Geosciences Society – AOGS 2017*, Singapore, August 2017.

- Steiner, A. K.** and the ARSCLiSys group, Recent advances in climate monitoring with GNSS radio occultation capturing atmospheric variability and trends, GC41A-1069, *American Geophysical Union (AGU) Fall Meeting 2016*, San Francisco, CA, USA, December 2016.
- Kirchengast\*, G., and **A. K. Steiner**, GNSS radio occultation for climate: new results and advances for monitoring variability, trends, and extreme events, *IAG/CPGPS International Conference on GNSS+ (ICG+2016)*, Shanghai, China, July 2016 (\*presenter).
- Steiner, A. K.**, Einblicke in unsere Atmosphäre mittels GPS Radio-Okkultation: Klimavariabilität, Trends, und Extremereignisse, *Jahreshauptversammlung der Österreichischen Gesellschaft für Meteorologie, ZAMG, Wien, Austria*, March 2016.
- Steiner, A. K.**, B. Scherllin-Pirscher, F. Ladstädter, L. Brunner, M. Schwaerz, R. Biondi, J. Fritzer, J. Schwarz, U. Foelsche, and G. Kirchengast, Observing climate variability and change with GPS radio occultation, *Our Common Future Under Climate Change – CFCC15*, Paris, France, June 2015.
- Steiner, A. K.**, B. Scherllin-Pirscher, F. Ladstädter, R. Biondi, L. Brunner, G. Kirchengast, and the ARSCLiSys group, Atmospheric variability modes and trends in the UTLS from the RO record, *SPARC Stratospheric Temperature Trends Workshop*, Victoria, BC, Canada, April 2015.
- Steiner, A. K.**, B. Scherllin-Pirscher, F. Ladstädter, M. Schwärz, L. Brunner, T. Rieckh, R. Klingler, R. Biondi, J. Fritzer, J. Schwarz, U. Foelsche, and G. Kirchengast, Observing atmospheric variability, extreme events, and climate change from space with GPS radio occultation, *The Climate Symposium 2014*, Darmstadt, Germany, October 2014.
- Steiner, A. K.**, Climate monitoring with GPS RO – Achievements and challenges, *Eighth FORMOSAT-3/COSMIC Data Users' Workshop*, Boulder, CO, USA, September/October 2014.
- Steiner, A. K.**, Status of the RO record with focus on stratospheric trend analysis, *SPARC Stratospheric Temperature Trends Workshop*, Reading, UK, September 2013.
- Steiner, A. K.** (keynote), Climate monitoring and change detection with GPS Radio Occultation, *2nd International Conference on GPS Radio Occultation (ICGPSRO)*, Taipeh, Taiwan, May 2013.
- Steiner, A. K.**, GNSS radio occultation – Utility for weather and climate, *First Gfg2 (GNSS for Global Environmental Earth Observation (GEE0) and GEOSS) Consultation Workshop*, Oslo, Norway, October 2011.
- Steiner, A. K.**, GPS radio occultation for climate monitoring and change detection: Error characteristics, uncertainty, applications, *Stratospheric Processes And their Role in Climate (SPARC) Temperature Trend Assessment Meeting*, Paris, France, September 2011.
- Steiner, A. K.**, B. C. Lackner, F. Ladstädter, B. Scherllin-Pirscher, G. C. Hegerl, U. Foelsche, and G. Kirchengast, GPS RO for observing atmosphere and climate, *UCAR/COSMIC Seminar*, Boulder, CO, USA, August 2010.
- Steiner A. K.**, B. C. Lackner, F. Ladstädter, G. Kirchengast, B. Pirscher, G. C. Hegerl, and U. Foelsche, GPS radio occultation for climate applications, *Intl. Beacon Satellite Symposium*, Barcelona, Spain, June 2010.
- Steiner, A. K.** (invited), G. Kirchengast, B. C. Lackner, B. Pirscher, and U. Foelsche, Atmospheric climate change detection based on GPS/Met and CHAMP radio occultation records 1995 to 2007, *Geophysical Research Abstracts*, Vol. 10, EGU2008-A-09177, *European Geosciences Union (EGU) General Assembly 2008*, Vienna, Austria, April 2008.
- Steiner, A. K.**, G. Kirchengast, M. Borsche, and U. Foelsche, A multi-year comparison of lower stratospheric temperatures from CHAMP radio occultation data with MSU/AMSU records, *3rd International Workshop on Occultations for Probing Atmosphere and Climate (OPAC-3)*, Graz, Austria, September 2007.
- Steiner, A. K.**, Climate change monitoring and atmospheric change analysis by radio occultation, *United Nations/Austria/European Space Agency Symposium on "Space Tools and Solutions for Monitoring the Atmosphere in Support of Sustainable Development"*, Graz, Austria, September 2007.
- Steiner, A. K.**, U. Foelsche, A. Gobiet, and G. Kirchengast, Simulation studies on the analysis of radio occultation data, *2nd GRAS SAF User Workshop*, Helsingør, Denmark, June 2003.
- Kirchengast, G., U. Foelsche, and **A. K. Steiner\***, Climate monitoring using GNSS occultation, From promises via simulation studies to real monitoring and beyond, *4th Oersted International Science Team Conference (OIST-4)*, Copenhagen, Denmark, September 2002 (\*presenter).
- Steiner, A. K.**, G. Kirchengast, U. Foelsche, L. Kornblueh, E. Manzini, and L. Bengtsson, GNSS occultation sounding for climate monitoring, *Geophysical Research Abstracts*, Vol. 2, *25th Gen. Assembly of the Europ. Geophys. Society (EGS)*, Nice, France, April 2000.

## Presentations as First or Presenting Author at International Conferences

- Steiner, A. K.**, M. Stocker, F. Ladstädter, S. Po-Chedley, and the APARC ATC Activity, Tropospheric and stratospheric temperature trends from observations, *WCRP EPESC – LEADER Science Meeting*, APEC Climate Center, Busan, Republic of Korea, July 2025.
- Ladstädter F., M. Stocker, S. Scher, and **A. K. Steiner\***, Observed Trends in lapse rate tropopause temperature and height over the past two decades, *BACO 2025 - Busan IAMAS-IACS-IAPSO Joint Assembly*, BEXCO Conference Center, Busan, Republic of Korea, July 2025 (\*presenter).
- Steiner, A. K.**, M. Kriegl, M. Pichler\*, The influence of double jet streams on the occurrence of heatwaves in the northern hemisphere, EGU25-15789, *EGU General Assembly 2025*, Vienna, Austria, April-May 2025 <https://doi.org/10.5194/egusphere-egu25-15789> (\*presenter).
- Steiner, A. K.**, F. Ladstädter, M. Stocker, and APARC ATC, Atmospheric Temperature Trends from Observations, *APARC ATC Activity Workshop on Atmospheric Temperature Changes and their Drivers*, Wegener Center, University of Graz, Graz, Austria, April 2025.
- Steiner, A. K.**, and S. Po-Chedley, Report on the APARC Activity on Atmospheric Temperature Changes and their Drivers (ATC), *APARC SSG Meeting 2024*, Forschungszentrum Jülich, Germany, October 2024.
- Steiner, A. K.**, and P. Vergados, Presentation of the recommendations of the IROWG Climate Subgroup, *COSMIC/JCSDA Workshop and IROWG-10*, Boulder, CO, USA, 12–18 September 2024.
- Steiner, A. K.**, F. Ladstädter, M. Stocker, Monitoring atmospheric climate change - Advances with GNSS radio occultation, *WCRP Open Science Conference 2023*, Kigali, Ruanda (hybrid), October 2023 (online attendance).
- Steiner, A. K.**, ATC Activity report 2022/23 – Atmospheric temperature changes and their drivers, 31<sup>st</sup> *SPARC SSG Meeting 2023*, DLR, Oberpfaffenhofen, Germany, July 2023 (online attendance).
- Steiner, A. K.**, GNSS Radio Occultation for climate monitoring, *BOKU-Met Seminar*, University of Natural Resources and Life Sciences, Vienna, November 2022.
- Steiner, A. K.**, F. Ladstädter, M. Stocker, and the SPARC ATC Activity, Observing atmospheric temperature change – New insights with GNSS radio occultation, *SPARC 7<sup>th</sup> General Assembly*, Multi-hub conference, October 2022 (online attendance).
- Steiner, A. K.**, F. Ladstädter, M. Stocker, and the WEGC RO Team, Observing atmospheric temperature trends and extremes – Advances with GNSS radio occultation, *2nd Climate Observation Conference*, Darmstadt, Germany, October 2022 (online attendance).
- Steiner, A. K.**, F. Ladstädter, and M. Stocker, Observing atmospheric temperature change – Advances with GNSS radio occultation, Seggau Castle, Austria, September 2022.
- Steiner, A. K.**, and A. Maycock, ATC Activity report – Atmospheric temperature changes and their drivers, 29<sup>th</sup> *SPARC SSG Meeting 2022*, virtual meeting, January 2022.
- Steiner, A. K.**, F. Ladstädter, M. Stocker, H. Wilhelmson, Satellite observations for detection and attribution of atmospheric temperature change, *WCRP workshop on attribution of multi-annual to decadal changes in the climate system*, virtual conference, September 2021.
- Steiner, A. K.**, Global climate change – detection, attribution and uncertainties, *Winter School - Doctoral Programme Climate Change "Decision Making under Uncertainty in Responding to Climate Change*, DK Climate Change, University of Graz, Graz (online), February 2021.
- Steiner, A. K.**, and A. Maycock, Activity report – Atmospheric temperature changes and their drivers, 28<sup>th</sup> *SPARC SSG Meeting 2021*, virtual meeting, February 2021.
- Steiner, A. K.**, and K. Steininger, Das Wegener Center - von Klimaphysik bis Klimaökonomik, *Sitzung 04/2020 der Kommission Klima und Luftqualität der ÖAW (Austrian Academy of Sciences)*, Graz, Austria, January 2020.
- Steiner, A. K.**, F. Ladstädter, M. Stocker, H. Wilhelmson, M. Gorfer, and G. Kirchengast, Recent advances in atmospheric climate monitoring with GNSS radio occultation, *AGU Fall Meeting 2019*, San Francisco, USA December 2019.
- Steiner, A. K.**, and N. Livesey, Long-term records for climate understanding – summary of SPARC Activity presentations, *SPARC SSG Meeting 2019*, Boulder, CO, USA, December 2019.
- Steiner, A. K.**, F. Ladstädter, and the SPARC ATC Activity, Atmospheric temperature trends from observations – an update on recent advances, *ROM SAF-IROWG 2019*, Elsinore, Denmark September 2019.
- Steiner, A. K.**, F. Ladstädter, and the Wegener Center Team, Temperature trends in the free atmosphere from observations – contributions to the IPCC AR6, *ROM SAF-IROWG 2019*, Elsinore, Denmark September 2019.

- Steiner, A. K.**, F. Ladstädter, H. Wilhelmssen, M. Stocker, and P. Peter, Klimavariabilität und Trends in der freien Atmosphäre aus Beobachtungsdaten, *DACH 2019*, Garmisch-Partenkirchen, Germany, March 2019.
- Unterberger, C., L. Brunner, S. Nabernegg, K. W. Steining, **A. K. Steiner\***, E. Stabentheiner, S. Monschein, H. Truhetz (poster), Spring frost risk for regional apple production under a warmer climate, *DACH 2019*, Garmisch-Partenkirchen, Germany, March 2019 (\*presenter).
- Steiner, A. K.**, and A. C. Maycock, Atmospheric temperature changes and their drivers - Activity report, 26th *SPARC Scientific Steering Group meeting*, Kyoto, Japan, October 2018.
- Steiner, A. K.**, F. Ladstädter, H. Wilhelmssen, M. Stocker, M. Schwärz, and G. Kirchengast (poster), Advances in GNSS radio occultation for atmospheric climate monitoring, *SPARC General Assembly 2018*, Kyoto, Japan, October 2018.
- Steiner, A. K.**, F. Ladstädter, and H. Wilhelmssen, Temperature trends from atmospheric observations, *SPARC ATC Activity 2<sup>nd</sup> Workshop on Atmospheric Temperature Changes and their Drivers*, Paris, France, June 2018.
- Maycock, A. C., W. J. Randel, and **A. K. Steiner\***, Revisiting the mystery of recent stratospheric temperature trends, *SPARC ATC Activity 2nd Workshop on Atmospheric Temperature Changes and their Drivers*, Paris, France, June 2018 (\*presenter).
- Steiner, A. K.**, Attribution of extreme events to human induced climate change, *DK Climate Change Annual Workshop*, Wegener Center, Graz, Austria, June 2018.
- Steiner, A. K.**, F. Ladstädter, and H. Wilhelmssen (poster), Temperature trends variability in the troposphere and stratosphere from GPS Radio Occultation, *Geophys. Res. Abstracts, Vol. 20, EGU2018-1528, EGU General Assembly 2018*, Vienna, Austria, April 2018.
- Steiner, A. K.**, and A. C. Maycock, Atmospheric temperature changes and their drivers - Activity report, 25th *SPARC Scientific Steering Group meeting*, Incheon, South Korea, October 2017.
- Steiner, A. K.**, F. Ladstädter, H. Wilhelmssen, and G. Kirchengast (poster), Atmospheric variability and trends from the GPS RO record, *7. Österreichischer MeteorologInnenstag*, Graz, Austria, November 2017.
- Steiner, A. K.**, M. Mochart, F. Ladstädter, B. Angerer, M. Schwärz, C. Ao, H. Gleisner, D. Hunt, T. Schmidt, A. von Engeln, U. Foelsche, S-P. Ho, G. Kirchengast, Y-H. Kuo, K.B. Lauritsen, A.J. Mannucci, C. Marquardt, W. Schreiner, S. Syndergaard, and J. Wickert, Multi-mission GPS RO observations from different processing centers - consistency and structural uncertainty, *COSMIC-IROWG 2017*, Estes Park, CO, USA, September 2017.
- Steiner, A. K.**, F. Ladstädter, H. Wilhelmssen, B. Angerer, and G. Kirchengast (poster), Atmospheric variability and trends from the GPS RO record, *COSMIC-IROWG 2017*, Estes Park, CO, USA, September 2017.
- Steiner, A. K.**, G. Kirchengast\*, and Research Teams, Climate use of GNSS radio occultation data, *RO Science Advisory Group 4th Meeting*, EUMETSAT, Darmstadt, May 2017.
- Steiner, A. K.**, F. Ladstädter, and H. Wilhelmssen (poster), Vertically resolved trends from GPS Radio Occultation and their uncertainties, *Geophys. Res. Abstracts, Vol. 19, EGU2017-9489, EGU General Assembly 2017*, Vienna, Austria, April 2017.
- Ladstädter, F., **A. K. Steiner\***, B. Angerer, and H. Wilhelmssen (poster), Vertically resolved trends and imprints of recent record years in the UTLS from GPS RO, A13G-0381, *American Geophysical Union (AGU) Fall Meeting 2016*, San Francisco, CA, USA, December 2016 (\*presenter).
- Steiner, A. K.**, B. Scherllin-Pirscher, F. Ladstädter, H. Wilhelmssen, and B. Angerer, Vertically resolved atmospheric trends from the RO record 2001 to 2016, *OPAC-IROWG 2016 International Workshop*, Seggau Castle, Austria, September 2016.
- Steiner, A. K.**, B. Scherllin-Pirscher, F. Ladstädter, R. Klingler, B. Angerer, C. Ao, H. Gleisner, D. Hunt, T. Schmidt, A. von Engeln, U. Foelsche, S-P. Ho, G. Kirchengast, Y-H. Kuo, K. B. Lauritsen, A. J. Mannucci, C. Marquardt, W. Schreiner, S. Syndergaard, and J. Wickert, Consistency of multi-satellite RO records from different data centers: First result, *OPAC-IROWG 2016 International Workshop*, Seggau Castle, Austria, September 2016.
- Steiner, A. K.**, B.C. Lackner, M. A. Ringer, and G. Kirchengast, Model evaluation with GPS radio occultation observations in the UTLS, *SPARC ATC Activity Workshop Atmospheric Temperature Changes and their Drivers*, Graz, Austria, April 2016.
- Steiner, A. K.**, A. C. Maycock, and W. Randel, Atmospheric Temperature Changes and their Drivers (ATC) – New Avenues of the Stratospheric Temperature Trends Activity, *SPARC ATC Activity Workshop Atmospheric Temperature Changes and their Drivers*, Graz, Austria, April 2016.

- Steiner, A. K.**, R. Biondi, G. Kirchengast, and T. Rieckh, Characterization of cyclones and volcanic clouds with GPS radio occultation, *3rd International Conference on GPS Radio Occultation (ICGPSRO)*, Taipei, Taiwan, March 2016.
- Steiner, A. K.**, A. C. Maycock, and W. Randel, Atmospheric temperature changes: new avenues of the stratospheric temperature trends activity, *SPARC 23rd Scientific Steering Group meeting*, Boulder, CO, USA, November 2015.
- Steiner, A. K.**, B. Scherllin-Pirscher, F. Ladstädter, M. Schwaerz, R. Biondi, L. Brunner, U. Foelsche, and G. Kirchengast, GPS radio occultation: applications of an emerging reference climate record, *SPARC Regional Workshop on Chemical and Physical Processes in the Climate System*, Boulder, CO, USA, November 2015.
- Steiner, A. K.**, B. Scherllin-Pirscher, F. Ladstädter, L. Brunner, M. Schwaerz, R. Biondi, J. Fritzer, J. Schwarz, U. Foelsche, and G. Kirchengast (poster), Observing climate variability and change with GPS radio occultation, *Our Common Future Under Climate Change – CFCC15*, Paris, France, June 2015.
- Steiner, A. K.**, B. Scherllin-Pirscher\*, L. Brunner, M. Schwärz, and G. Kirchengast (poster), Temperature trends in the upper troposphere to lower stratosphere from radio occultation climate records 2002 to 2012, *5th SPARC General Assembly*, Queenstown, New Zealand, January 2014.
- Steiner, A. K.**, B. Scherllin-Pirscher, L. Brunner, M. Schwärz, and G. Kirchengast\* (poster), Temperature trends in the upper troposphere to lower stratosphere from radio occultation climate records 2002 to 2012, *AGU Fall Meeting*, San Francisco, CA, USA, December 2013.
- Steiner, A. K.**, J. Schwarz, M. A. Ringer, and G. Kirchengast, Evaluation of climate models with radio occultation observations, *OPAC-IROWG 2013 International Workshop*, Seggau Castle, Austria, September 2013.
- Steiner, A. K.**, B. C. Lackner, M. Schwärz, M. A. Ringer, and G. Kirchengast (poster), Evaluation of climate models using radio occultation observations – Tropical convection regimes in the HadGEM model, *4th WGNE Workshop on systematic errors in weather and climate models*, Exeter, UK, April 2013.
- Steiner, A. K.**, Beobachtung von Klimaänderungen mittels GPS Radio-Okkultation, *Habilitationskolloquium*, University of Graz, Graz, Austria, January 2013.
- Steiner, A. K.**, D. Hunt, S-P. Ho, G. Kirchengast, A. J. Mannucci, B. Scherllin-Pirscher, H. Gleisner, A. von Engel, T. Schmidt, C. Ao, S. S. Leroy, E. R. Kursinski, U. Foelsche, M. Gorbunov, S. Heise, Y-H. Kuo, K. B. Lauritsen, C. Marquardt, C. Rocken, W. Schreiner, S. Sokolovskiy, S. Syndergaard, and J. Wickert, Assessing structural uncertainty in climate data records from GPS radio occultation, *Geophysical Research Abstracts*, Vol. 14, EGU2012-9319-1, *European Geosciences Union (EGU) General Assembly 2012*, Vienna, Austria, April 2012.
- Steiner, A. K.**, B. C. Lackner, M. Schwärz, M. A. Ringer, and G. Kirchengast, Evaluation of climate models using radio occultation observations – Tropical convection regimes in the HadGEM model, *Int'l Radio Occultation Working Group 2nd Workshop (IROWG2)*, Estes Park, CO, USA, March 28 to April 3, 2012.
- Steiner, A. K.**, D. Hunt, S-P. Ho, G. Kirchengast, A. J. Mannucci, B. Scherllin-Pirscher, H. Gleisner, A. von Engel, T. Schmidt, C. Ao, S. S. Leroy, E. R. Kursinski, U. Foelsche, M. Gorbunov, Y-H. Kuo, K. B. Lauritsen, C. Marquardt, C. Rocken, W. Schreiner, S. Sokolovskiy, S. Syndergaard, S. Heise, and J. Wickert, Quantification of structural uncertainty in climate data records from GPS radio occultation, *Int'l Radio Occultation Working Group 2nd Workshop (IROWG2)*, Estes Park, CO, USA, March 28 to April 3, 2012.
- Steiner, A. K.**, D. Hunt, S-P. Ho, G. Kirchengast, A. J. Mannucci, B. Scherllin-Pirscher, H. Gleisner, A. von Engel, T. Schmidt, C. Ao, S. S. Leroy, U. Foelsche, Y-H. Kuo, E. R. Kursinski, K. B. Lauritsen, S. Syndergaard, M. Gorbunov, C. Marquardt, C. Rocken, W. Schreiner, S. Sokolovskiy, and J. Wickert (poster), Towards Earth system data records from GPS radio occultation: Assessing structural uncertainty, Abstract IN21A-1406, *American Geophysical Union (AGU) Fall Meeting 2011*, San Francisco, CA, USA, December 2011.
- Lackner B. C., **A. K. Steiner\***, M. A. Ringer, and G. Kirchengast (poster), Evaluation of tropical convection regimes in the HadGEM2 model using radio occultation observations, Abstract GC41A-0780, *American Geophysical Union (AGU) Fall Meeting 2011*, San Francisco, CA, USA, December 2011 (\*presenter).
- Ladstädter, F., **A. K. Steiner\***, L. Haimberger, C. Tavalato, U. Foelsche, and G. Kirchengast, Beobachtung der Temperatur der unteren Stratosphäre mit (A)MSU, Radiosonden und GPS Radio-Okkultation: Ein Vergleich, *4. Österr. MeteorologInnenstag*, Klagenfurt, Austria, November 2011 (\*presenter).
- Steiner, A. K.**, S-P. Ho, D. Hunt, G. Kirchengast, A. J. Mannucci, B. Scherllin-Pirscher, H. Gleisner, A. von Engel, T. Schmidt, C. Ao, S. S. Leroy, U. Foelsche, Y-H. Kuo, E. R. Kursinski, K. B. Lauritsen, S. Syndergaard, C. Marquardt, C. Rocken, W. Schreiner, S. Sokolovskiy, J. Wickert, Structural uncertainty of the CHAMP RO climate record from different data centers, *5th Formosat-3/COSMIC Data Users Workshop and Int'l Conference on GPS Radio Occultation (ICGPSRO) 2011*, Taipei, Taiwan, April 2011.

- Steiner, A. K.**, S-P. Ho, D. Hunt, G. Kirchengast, A. J. Mannucci, B. Scherllin-Pirscher, H. Gleisner, A. von Engeln, T. Schmidt, C. Ao, S. S. Leroy, U. Foelsche, Y-H. Kuo, E. R. Kursinski, K. B. Lauritsen, S. Syndergaard, C. Marquardt, C. Rocken, W. Schreiner, S. Sokolovskiy, J. Wickert, Structural uncertainty of the CHAMP climate record from different data centers, *Int'l Workshop on Occultations for Probing Atmosphere and Climate (OPAC) 2010*, Graz, Austria, September 2010.
- Scherllin-Pirscher B., **A. K. Steiner\***, U. Foelsche, G. Kirchengast, and Y.-H. Kuo (poster), Error characteristics of GPS radio occultation atmospheric profiles, *OPAC 2010 International Workshop*, Graz, Austria, September 2010 (\*presenter).
- Steiner, A. K.**, U. Foelsche, B. Scherllin-Pirscher, B. C. Lackner, F. Ladstädter, and G. Kirchengast, Monitoring des Klimawandels mit Satellitenmethoden – GPS Radio-Okkultation, *Summer University – Graz in Space 2010*, Univ. of Graz, Austria, September 2010.
- Steiner A. K.**, G. Kirchengast, B. C. Lackner, G. C. Hegerl, B. Pirscher, and U. Foelsche (poster), Climate change detection in the UTLS with the GPS radio occultation record, *Eos Trans. AGU 90(52)*, Fall Meet. Suppl., Abstract A31D-0154, *American Geophysical Union (AGU) Fall Meeting 2009*, San Francisco, CA, USA, December 2009.
- Steiner A. K.**, G. Kirchengast, B. C. Lackner, G. C. Hegerl, B. Pirscher, and U. Foelsche (poster), Climate change detection with the GPS radio occultation record, *3. Österr. MeteorologInnentag*, Graz, Austria, November 2009.
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