

Agenda of the first MS-GWaves Workshop

21-23 September 2015 in Schmitten

Monday 21 September

9:30-12:00 Project Meeting GW-TP

12:00-13:00 *Lunch*

Session 1 - Chair: Andreas Dörnbrack

13:00-13:15 Introduction (Ulrich Achatz)

13:15-14:00 Joan Alexander (invited): Stratospheric gravity waves, momentum flux, and mean-flow interactions

14:00-14:15 Manfred Ern (SV): Satellite GW climatologies from the IR limb sounders HIRDLS and SABER and the nadir instrument AIRS

14:15-14:45 *Break*

Session 2 - Chair: Peter Preusse

14:45-15:30 David Fritts (invited): Highlights of First Results from the DEEPWAVE Airborne and Ground-Based Measurement Program over and around New Zealand in 2014

15:30-15:50 Franz-Josef Lübken (PACOG): Overview of PACOG

15:50-16:00 Markus Rapp (PACOG): Lidar observations of gravity waves during DEEPWAVE-NZ

16:00-16:16 Benedikt Ehard (PACOG): Extracting and quantifying internal gravity waves from lidar measurements

16:15-16:45 *Break*

Session 3 - Chair: Ulrich Achatz

16:45-17:00 Isabell Krisch (ROMIC-GW-LCYCLE): Simulations: of 3D tomographic GW measurements with GLORIA

17:00-17:15 Johannes Wagner (ROMIC-GW-LCYCLE): Observations of gravity waves during GW-LCYCLE 1 and DEEPWAVE-NZ -- campaign overview and selected case studies

17:15-17:45 Discussion

17:45-18:45 Project Meetings

19:00 *Dinner*

20:00-22:30 Informal discussions

Tuesday 22 September

Session 4 - Chair: Markus Rapp

8:15-8:30 Eliza Manzini (GWING): The quasi-biennial oscillation in a warmer climate: sensitivity to different gravity wave parameterizations

8:30-8:45 Sebastian Borchert (GWING): Towards MA-ICON - A non-hydrostatic GCM for studying gravity waves from troposphere to thermosphere

8:45-9:00 Rupert Klein (GW-TP): Asymptotic analysis of wavepacket--tropopause interactions

9:00-9:15 Vera Bense (GW-TP): Idealized Simulations of Orographic Waves Affected by a Tropopause of Various Character

9:15-9:30 Sonja Gisinger (GW-TP): Internal gravity wave characteristics in the upper troposphere and lower stratosphere revealed from radiosoundings

9:30-9:45 Erich Becker (ROMIC-METROSI): The ROMIC-project METROSI and its relation to MS-GWAVES

9:45-10:15 *Break*

Session 5 - Chair: Elisa Manzini

- 10:15-11:00 Riwal Plougonven (invited): Emission of gravity waves from jets and fronts
- 11:00-11:15 Joran Rolland (SI): Extracting 4D information from simulations of spontaneous gravity waves emission in the rotating annulus and in ICON.
- 11:15-11:30 Steffen Hien (SI): Gravity-wave emission and propagation in a 3D periodic domain
- 11:30-11:45 Lena Schoon (SI): Diagnosing gravity wave properties from unbalanced atmospheric flows
- 11:45-12:00 Ion Dan Borcia (SI): Inertia-gravity waves in the differentially heated rotating annulus
- 12:00-12:15 Olga Kaiser (SI): Data analysis of the gravity wave signal
- 12:15-13:15 *Lunch*

Session 6 - Chair: Peter Spichtinger

- 13:15-14:00 Hye-Yeong Chun (invited): Parameterization of Convective GWs: Source-level Momentum Flux and Some Issues
- 14:00-14:15 Tai Trinh (SV): Tuning free parameters dx, dt in the Yonsei convective source model based on HIRDLS satellite data
- 14:15-14:30 Mark Schlutow (3DMSD): Stability of large amplitude gravity waves
- 14:30-14:45 Ulrich Achatz (3DMSD): The interaction between large-scale balanced flow and a mesoscale wave field throughout the whole atmosphere
- 14:45-15:15 *Break*

Session 7 - Chair: Hauke Schmidt

- 15:15-15:30 Gergely Bölöni (3DMSD): Numerical implementation of WKB theory
- 15:30-15:45 Bruno Ribstein (ROMIC-GRAVITY): The interaction between gravity waves and solar tides: Results from 4-D ray tracing coupled to a linear tidal model
- 15:45-16:00 Arata Amemiya (guest): A study on gravity wave parameterization including three dimensional propagation
- 16:00-16:45 Discussion
- 16:45-18:15 Project meetings
- 18:30 *Dinner / Gender dinner*
- 19:30-22:30 Informal discussions / Gender discussion

Wednesday 23 September

- 8:30-10:00 Research Area Meetings (D1, D2, P1, P2, P3, I1)
- 10:00-10:30 *Break*
- 10:30-12:00 Discussion
- 12:00-13:00 *Lunch*
- 13:00-16:30 Project meetings / Discussion groups