

Virtual MS-GWaves Meeting 23-25 November 2020

Agenda

Monday 23 November

17:30 - 19:00 ECS Career discussion with Anne Smith and Inna Politchouk

Tuesday 24 November

Session 1: Introduction/3DMSD/GW-ICE

Chair: Fabienne Schmid

10:45 - 11:00 Introduction

11:00 - 11:25 *Mark Schlutow (3DMSD):* The gas centrifuge - An opportunity to study atmospheric gravity waves in the laboratory

11:25 - 11:50 *Georg Sebastian Völker (3DMSD):* Triadic Wave-Wave Interactions in the Vicinity of Strong Shear Flows

11:50 - 12:15 *Peter Spichtinger(GW-ICE):* Gravity-waves impact on ice clouds in the tropopause region

12:15 - 14:00 **Lunch**

Session 2: GWING

Chair: Sonja Gisinger

14:00 - 14:25 *Andrea Schneidereit (GWING):* Does resolution matter? Signatures of gravity waves with changing vertical resolution.

14:25 - 14:55 *Gergely Bölöni (GWING):* Latest developments of MS-GWaM in ICON

14:55 - 15:15 **Break**

Session 3: SV

Chair: Robert Reichert

15:15 - 15:40 *Young-Ha Kim (ROMIC-QBICC):* Coupling of gravity wave drag to the equatorial Kelvin wave simulated by ICON/MS-GWaM

15:40 - 16:05 *Markus Geldenhuys (SV):* Orographically Induced Spontaneous Imbalances within the Jet causing a Large Scale Gravity Wave Event

16:05 - 16:35 **Break**

16:35 - 17:00 *Lukas Krasauskas (SV):* Double Hexagon Flight during SOUTHTRAC

17:00 - 17:25 *Sebastian Rhode (ROMIC-WASCLIM):* Orographic GW Distributions via Ridge Parameterization

17:25 - 17:50 *Fanni Dora Kelemen (SV):* Topography representation in Pinc Floit

17:50 - 18:20 **Break**

Session 4: Invited Presentations

Chair: Andrea Schneidereit

18:20 - 19:05 *Anne Smith(NCAR):* What is the contribution of gravity waves to driving zonal winds in the tropical upper stratosphere?

19:05 - 19:50 *Christopher Kruse (NCAR):* Constraining Middle-Atmosphere Mountain Wave Momentum Flux and Drag with Satellite Observations, a mini-MIP, and an OSSE

Time frame: 25 min presentation: 17 min presentation +8 min discussion

45 min presentation: 35 min presentation + 10 min discussion

Wednesday 25 November

Session 5: SI

Chair: Gergely Bölöni

- 11:00 - 11:25 *Costanza Rodda (SI)*: Gravity wave turbulence in laboratory experiments
11:25 - 11:50 *Fabienne Schmid (SI)*: Efficient modeling of baroclinic life cycles with a semi-implicit pseudo-incompressible model for the study of spontaneous inertia-gravity wave emission
11:50 - 12:15 *Christoph Zülicke (SI)*: Lagrangian perspective on jet-generated gravity waves
12:15 - 14:00 **Lunch**

Session 6: PACOG

Chair: Jens Söder

- 14:00 - 14:25 *Robert Reichert (PACOG)*: Wave climatology from long-term CORAL measurements at Rio Grande, Argentina
14:25 - 14:50 *Sonja Gisinger (PACOG)*: Comparison of in-situ flight level data with outputs of various high-resolution NWP models
14:50 - 15:10 **Break**

Session 7: PACOG/SOUTHTRAC

Chair: Sonja Gisinger

- 15:10 - 15:35 *Bernd Kaifler (PACOG)*: Airborne gravity wave measurements and analysis using ALIMA during ST08 of SouthTRAC-GW
15:35 - 16:00 *Aman Gupta (LMU München)*: Monthly Climatologies of Gravity Wave Momentum Fluxes in ERA5
16:00 - 16:25 *Jens Söder (PACOG)*: Gravity wave attenuation: From turbulence measurements to a case study
16:25 - 16:55 **Break**

Session 8: PACOG/Invited/Discussion

Chair: Markus Geldenhuys

- 16:55 - 17:20 *Irina Strelnikova and Harikrishnan Charuvil Asokan (PACOG)*: Lidar and radar observations in comparison with UA-ICON general circulation model
17:20 - 18:05 *Inna Politchouk (ECMWF)*: Representation and generation of resolved gravity waves in high-resolution global atmospheric models

18:05 - 20:00 **Discussion time**

Time frame: 25 min presentation: 17 min presentation +8 min discussion
45 min presentation: 35 min presentation + 10 min discussion