

EXTROP Miami Workshop

Investigation of Tropical and Extra-tropical cyclones using passive and active microwave radar

NOAA AOML, 4301 Rickenbacker Cswy, First Floor Seminar Room, **Feb 27-28**

RSMAS, **March 1st**

Excursion National Hurricane Center, morning March 2nd

Excursion CSTARS Receiving Station, morning March 3rd

Monday, February, 27: AOML First Floor Conference Room

Introduction

- 9:00** R. Atlas, Director, NOAA- Atlantic Oceanographic and Meteorological Lab
- Welcome and Introduction
- 9:10** F. Marks, Director, NOAA/AOML- Hurricane Research Division
- Introduction
- 9:20** M. Brown, Provost- University of Miami; Dean- Rosenstiel School of Marine and Atmospheric Sciences
- Welcome and Introduction
- 9:30** H. Grassl, Professor and past Director- University of Hamburg, Land and Climate Division, Max Planck Institute for Meteorology
- Introduction and Overview Project EXTROP
- 10:00** H. von Storch, Director GKSS, University of Hamburg
- Introduction of GKSS
- 10:15** S. Lehner, Professor, DLR/IMF- German Aerospace Center and University of Miami/RSMAS- Applied Marine Physics
- Introduction of DLR
- 10:30** Coffee **BREAK**

Long Term Statistics

- 11:00** H. von Storch, GKSS: Statistics of Northeast Atlantic Cyclones
- 11:30** C. Landsea, National Hurricane Center: Hurricane Statistics
- 12:00** S. Bakan, MPI, Met, Hamburg: The HOAPS (Hamburg Ocean Atmosphere Parameters and Fluxes from Satellite Data) Climatology

12:30 – 2:00 **LUNCH**

- 2:00** S. Lehner, DLR & UM/RSMAS/AMP: Wind and Ocean Wave Statistics from Radar Data Sets
- 2:30** H. Krogstad, NTNU: Extreme Value Analysis in Geophysics

Assimilation

- 3:00** R. Atlas, NOAA/AOML: Representation of Hurricanes and ET in Global Models
3:30 S. Majumdar, UM/RSMAS- Meteorology and Physical Oceanography: Adaptive sampling for ET in THORPEX

4:00 Coffee Break

- 4:30** H. Günther , GKSS-, Assimilation in Ocean Wave Models
5:00 W. Zhao, UM/RSMAS/MPO: Assimilation of Scat Data in Hurricane Ocean Wave Models
5:30 H. von Storch, F. Feser, GKSS: Retrospective analysis of NE Atlantic weather (especially storms)
6:00 Adjourn

Evening: Dinner and Steering Committee meeting

Tuesday, February, 28: AOML First Floor Conference Room

Remote Sensing – Miami/EXTROP Community Talks: RSMAS/NOAA

- 9:00** M. Donelan, UM/RSMAS/AMP & Director Air Sea Interaction Laboratory: Air Sea Interaction in Hurricanes
9:30 F. Marks, NOAA/AOML/HRD: Rain measurements in Hurricanes from TRMM
10:00 W. Drennan, UM/RSMAS/AMP: Water Vapour Measurements in Cyclones

10:30 **Coffee BREAK**

- 11:00** P. Black, NOAA/AOML/HRD & CBLAST Chief Scientist: Aircraft Remote Sensing & Coupled Boundary Layer Air Sea Transfer (CBLAST) Experiment Overview
11:30 N. Shay, UM/RSMAS/MPO: In Situ Air-Sea Measurements in Hurricanes
12:00 S. Aberson, NOAA/AOML/HRD: Airborne Observations of Extra-tropical Transition (ET) Events

12:30 – 2:00 **LUNCH** (on your own)

- 2:00** J. Dunion, NOAA/AOML/HRD & 2006 Hurricane Field Program Director: Impact of the Saharan Air Layer on Atlantic Tropical Cyclones

Remote Sensing of Waves and Wind in EXTROP

- 2:30** J. Horstmann, GKSS: SAR Wind Retrieval with Respect to Extreme Winds
3:00 C. Klepp, University of Hamburg: Remote Sensing of Polar Lows

3:30 **Coffee BREAK**

- 4:00** J. Schulz-Stellenfleth, DLR: Recent Developments in SAR Wave retrieval
4:30 W. Rosenthal, GKSS: Towards Investigation of Individual Ocean Wave Height

5:00 General Discussion

5:30 Adjourn

Evening: Social Event

Wednesday, March 1st: morning: Seminar Room , afternoon: Library

Introduction and EXTROP Talks from PhD Students

9:00 H. Grassl, MPI, Introduction to student Program

9:30 B.Chapron, RSMAS, Remote Sensing of the Air Sea Interface

10:00 H. Graber, UM/RSMAS/AMP & Co-Director CSTARS:
Synthetic Aperture Radar Acquisition over Hurricanes at CSTARS

10:30 Coffee Break

11:00 Ax. Anderson, Uni HH: Validation and improvement of HOAPS

11:20 A. Blechschmidt, Uni HH: Development and structure of tropical cyclones and severe storm systems

11:40 An. Reppucci, DLR: Analysis of SAR Wave Mode Images taken under extreme wind and wave conditions

12:00 M. Zahn, Uni HH/GKSS: Case studies of polar lows

12:20 Lunch

2:00 O.Brown; RSMAAS, Overview Remote Sensing at RSMAS

2:30 J. Zhang, UM/RSMAS/AMP: Evidence for Roll Vortex Boundary Layer Circulations in Tropical Cyclones

2:50 Ivan: TBD

3:10 M. Desflots, UM/RSMAS/MPO: Modeling TC Winds and Waves

3:30 Coffee Break

4:00 S. Wilkenskjaeld, GKSS: Extreme wind waves from WAM

4:20 J.Winterfeld Added Value of wind fields from regional models

4:40 Discussion & Summary , EXTROP matters

6:00 adjourn

Special program for interested participants

Thursday morning- 10 am, March 2nd: Tour National Hurricane Center, F. Lepore and S. Stewart

12:00 – 1:30 LUNCH, Shorty's Barbeque

Friday, March 3rd- 10 am: Tour CSTARS, H.Grabner, T.Dixon

