XUNTA DE GALICIA

gain
AXENCIA DE INNOVACIÓN

AIRBUS

USC
UNIVERSIDADE DE SANTIAGO DE COMPOSTELA

DEPUTACIÓN DE LUGO

Concello de Lugo

Concello de Castro de Rei

Aerolugo

INTA

CIAR

MEETING SCHEDULE

	Mon 15	Tu 16	Wed 17	Th 18	Fr 19	Mon 22	Tu 23
8:30h-10 h		METEOROLOGY	UAS AND NEW INSTRUMENTATION	NEW INSTRUMENTATION, AEROSOL AND BOUNDARY LAYER	BOUNDARY LAYER		
10h-10:30h		C	C	C		C	C
10:30h-12h		METEOROLOGY	UAS AND NEW INSTRUMENTATION	NEW INSTRUMENTATION, AEROSOL AND BOUNDARY LAYER	Visit to CIAR & Closing	F 1	F 4
12h-13:30h		L	L	L	L	L	L
13:30h-15h		METEOROLOGY	UAS AND NEW INSTRUMENTATION	NEW INSTRUMENTATION, AEROSOL AND BOUNDARY LAYER		F 2	F 5
15h-15:30h		C	C	C		C	C
15:30h-17h		METEOROLOGY	POSTER SESSION & STANDS	NEW INSTRUMENTATION, AEROSOL AND BOUNDARY LAYER		F 3	Closing
17h-20h	Reception in Domus de Mitreo and Town Hall	Cultural activities	Cultural activities	Cultural activities			
20h-22h				CONFERENCE DINNER			

Cultural activities	Breaks and meals	Sessions	Flights

Meeting Schedule

Monday (15 July)

17.00-20.00: Reception in Domus de Mitreo and Town Hall

Tuesday (16 July)

Session 1: Meteorology

8.00 - 8.30 : Registration

8.30 - 9.00 : GAIN : Civil UAVS Initiative

9.00 - 9.20 : Gyöngyösi A. Z. : Meteorological data in the OGN network

9.20 - 9.40 : Reuder J. : The ISOBAR Campaigns at Hailuoto, Finland, 2017 and 2018—Current Status on Data Analysis and Results

9.40 - 10.00 : Brian R. Greene : Synthesis and Validation of Meteorological Parameters from Different RPAS During the ISOBAR Campaigns at Hailuoto

10.00 - 10.30 : Coffee break

10.30 - 11.00 : Díaz R.A.; Cillero C. : Low cost RPAS for agriculture, forestry and environment monitoring: a good partner for atmospheric research?

11.00 - 11.20 : Natalie V. : Results from the 2018-2019 CLOUD-MAP Coordinated Flight Campaigns

11.20 - 11.40 : Anders A. Jensen : Quantifying the impact of UAS-sensed data on high-resolution WRF forecasts using the Data Assimilation Research Testbed (DART)

11.40 - 12.00 : Tripp D. : Towards improving winter weather forecasts using high-resolution uas data

12.00 - 13.30 : Lunch break

13.30 - 14.00 : Sánchez J.L. : Meteorology for UAVs: observation facilities and forecast models available at the CIAR (Rozas aerodrome)

14.00 - 14.20 Chilson P. B. : Ten years of atmospheric research with UAS at the University of Oklahoma. Takeaways and lessons learned

14.20 - 14.40 : Schluchter C. : MeteoDrones – Influence of UAV data on Short-Term Fog and Cloud Forecasting

14.40 - 15.00 : Cione J. J. : Recent and Future NOAA operations using small Unmanned Aircraft Systems in Tropical Cyclones

15.00 - 15.30 : Coffee break

15.30 – 15.50 : Roberts G.: NEPHELAE. Network for studying Entrainment and microPHysics of cLouds using Adaptive Exploration

15:50 - 16.10 : Vránics D. F. : Meteorological sensor placement considerations for a fixed-wing Unmanned Aircraft System

16.10 - 16.30 : Hirsikko A. : Reliability of drone-borne dropsonde observations in the atmospheric vertical profile

16.30 - 16.50 : Erwin A. : Assessing Deep Convection Initiation in a Mountain-Valley System Using Unmanned Aircraft System Observations

17.00 - 20.00 : Cultural activities

Wednesday (17 July)

Session 2: UAS and New Instrumentation
8.30 - 9.00 : Registration new attendees

9.00 - 9.20 : Logue J. J. : The Design and Manufacture of a Vertical Takeoff and Landing Fixed Wing Unmanned Aerial System for Use in Atmospheric Sampling

9.20 - 9.40 : Mauz M. : First Identification and Quantification of Detached Tip Vortices Behind a WEC Using Fixed Wing UAS

9.40 - 10.00 : Nobrega R. : Exploring advantages and challenges of deploying water resistant RPAS for maritime operations

10.00 - 10.30 : Coffee break

10.30 - 11.00 : Houston A. L. : Sensitivity of capping inversion representation to UAS ascent rate and sensor response time

11.00 - 11.20 : Fernández-Guisuraga J. M. : Monitoring post-fire regeneration after large wildfires using unmanned aerial vehicles

11.20 - 11.40 : Shah A. : Methane flux quantification downwind of hydraulic fracturing of shale rock in the United Kingdom and successful method testing, using UAV sampling

11.40 - 12.00 : Hupsel de Azevedo G. B. : One Year Review of the Development of an Integrated CO2 Sensor Package for Rotary and Fixed Wing UAS

12.00 - 13.30 : Lunch break

13.30 - 13.50 : Houston A. L. : Targeted Observation by Radars and UAS of Supercells (TORUS). Summary of the 2019 field campaign

13.50 - 14.10 : Seidl A. W. : Development and Field testing of a net-landing system for ship based SUMO operations

14.10 - 14.40 : Keleshis C. : New Unmanned Aerial Systems solutions for dense atmospheric profiling and free tropospheric air masses characterization

14.40 - 15.00 : de Boer G. : MiniFlux: A new miniaturized instrument suite for measurement of atmospheric fluxes

15.00 - 15.30 : Coffee break

15.30 - 17.00 : Poster session & Stands

17.00 - 20.00 : Cultural activities

Thursday (18 July)

Session 3: New Instrumentation, Aerosols and Boundary layer
8.00 - 8.30 : Registration new attendees

8.30 - 9.00 : Corzo R. ; Sánchez L. : FENYX - Large Aircraft for Research and Experimentation

9.00 - 9.20 : Rautenberg A. : The multi-purpose airborne sensor carrier MASC-3 for turbulence measurements in the lower atmosphere

9.20 - 9.40 : Dumas E. : Unmanned Aircraft Systems (UAS) for Weather with Observing Strategies Suitable for Transition into Routine NOAA Applications using the multi-testbed approach

9.40 - 10.00 : Girdwood J. : The Development of a Small Unmanned Aircraft for the Sampling of Atmospheric Aerosol and Droplets, Among Other Atmospheric Variables

10.00 - 10.30 : Coffee break

10.30 - 11.00 : Formella A.; González H. : Presentación de la Escuela de Ingeniería Aeronáutica de la Universidad de Vigo

11.00 - 11.20 : Segales A. R. : The CopterSonde. An Insight into the Development of a Smart Tool for Atmospheric Boundary Layer Research

11.20 - 11.40 : Keleshis C. : The Next Generation of UAV-sensor Systems: New Perspectives for In-situ Profiling of Aerosol Properties

11.40 - 12.00 : Quinn P. K. : Shipboard Launch and Recovery of an Unmanned Aerial System with Aerosol Payload Capabilities

12.00 - 13.30 : Lunch break

13.30 - 14.00 : Zayas M. : UAS en AIRBUS

14.00 - 14.20 Bretschneider L. : Studying the horizontal and vertical distribution of aerosol particles with UAS around Ny-Ålesund during late spring in 2018

14.20 - 14.40 : Schön M. : Analysing the wind field near Ny-Ålesund, Spitsbergen using UAS measurements

14.40 - 15.00 : Calmer R. : Aerosol flux, wave state and wind field measurements above the ocean surface using unmanned aerial systems

15.00 - 15.30 : Coffee break

15.30 - 15.50 : Padmakumari B. : Aerial measurements of Elevated Pollution Layers during Indian Monsoons

15.50 - 16.10 : Hirsikko A. : Properties of aerosol and gases in the vertical profile during LAPSE-RATE campaign

16.10 - 16.30 : Philipp A. : Boundary layer variability observed by unmanned aerial systems in Berlin and Stuttgart for model validation

16.30 - 16.50 : Bell T. M. : Confronting the Boundary Layer Data Gap. Evaluating New and Existing Methodologies of Probing the Lower Atmosphere

17.00 - 20.00 : Cultural activities

20.00 - 22.00 : CONFERENCE DINNER

Friday (19 July)

Session 4: Boundary layer
8.00 - 8.30 : Registration new attendees

8.30 - 8.50 : Hemingway B. L. : High Resolution Vertical Estimation of the Temperature Structure Parameter in the Atmospheric Boundary Layer

8.50 - 9.10 : Dumas E. : Toward Obtaining Daily Vertical Profiles of Boundary Layer Temperature and Moisture Fields using Small Unmanned Aircraft Systems

9.10 - 9.30 : Pillar-Little E. A. : Measurements of the Vertical Structure of Carbon Dioxide in the Atmospheric Boundary Layer and the Atmospheric Surface Layer using UAS

9.30 - 9.50 : Varentsov M. I. : The quadcopter-based research of the atmospheric boundary layer structure over the inhomogeneous terrain in winter conditions

9.50 - 10.30 : Coffee break

10.30 - 10.50 : zum Berge K. : In-situ wind measurements in complex terrain using an UAS

10.50 - 11.10 : Corrales A. and Seoane N.: CIAR: Rozas Airborne Research Center

11.10 - 12.45 : Visit to CIAR: Seoane N., Méndez A. and Fernández J.M.

12.45 - 13.00 : Closing

13.00 - 14.30 : Lunch break

Poster session – Note that posters will be accessible all day

1. Petersen E.: First 2.5 dimensional results of intensive operation periods for evaluating a Smart Air Quality Network in Augsburg, Germany
2. Verdu T.: Flight patterns for clouds exploration with a fleet of UAVs
3. Sánchez J. L.: Scientific basis to improve the accuracy of advection and radiation fogs forecast
4. Gorraz M.: Development of integrated UAV system for atmospheric research
5. Redelstein J.: Determination of the boundary layer height with unmanned aerial vehicles
6. Adkins K. A.: Development of a Meteorological Sensor Suite for Atmospheric Boundary Layer Measurement Using a Small Multirotor Unmanned Aerial System
7. Cayez G.: Using ultra-light drone (flying wing) for regular tropospheric profiling
8. Goncharenko I.: Optical characteristics of Black Sea Waters obtained by above Water Measurements with ship based Passive Optical Complex EMMA and prospects for the use of unmanned aerial vehicles
9. Mitchell T.: Tracking and field measurement of severe storms in the US Southern Plains region
10. Ricketts H.: Measuring methane on board a UAV platform using a prototype greenhouse gas analyser
11. Corzo R.: FENYX: Modifications in an aerial platform for research
12. Sánchez-Munoz L.: FENYX research aircraft: scientific operations and advantages
13. Corrales A.: Test Techniques of the Control and Navigation System in a UAS
14. Seoane N.: Atmospheric Instrumentation Integration in a RPAS Investigation Aerial Platform in the CIAR (Rozas Research Center)

STANDS - Note that stands will be accessible all day

1. GAIN
2. INTA
3. USC & UVIGO

Monday (22 July)

10.00 - 10.30 : Briefing

10.30 - 12.00 : Flight · USC

12.00 - 13.30 : Lunch break

13.30 - 15.00 : Flight · University of Augsburg: hexacopter DJI M600 Pro, skywalker Eve-2000 and an A2

15.00 - 15.30 : Coffee break

15.30 - 17.00 : Flight · University of Augsburg: hexacopter DJI M600 Pro, skywalker Eve-2000 and an A2

Tuesday (23 July)

10.00 - 10.30 : Briefing

10.30 - 12.00 : Flight · INTA: ALO

12.00 - 13.30 : Lunch break

13.30 - 15.00 : Flight · University of Hertfordshire: octo-copter SUA

15.00 - 15.30 : Coffee break

15.30 - 17.00 : Closing

Meeting points

Monday 15th of July will be opened with a reception in “Domus de Mitreo” (Address: Praza Pío XII, 3, 27001 Lugo), we will meet there at 17:00.

The rest of the week conferences will take place at the assembly hall of “Escuela Politécnica Superior” (Address: Rúa Benigno Ledo, 2, 27002 Lugo).

Monday and Tuesday of the next week you will be able to see flight tests of new instruments and systems that are being developed in the Rozas Airborne Research Center (CIAR).