# **SPSAS Climate Change**

São Paulo School of Advanced Science on Climate Change: Scientific basis, adaptation, vulnerability and mitigation

3-15 July 2017

Instituto de Astronomia, Geofísica e Ciências Atmosféricas, Universidade de São Paulo, São Paulo, Brazil

## Welcome

**Hosts:** 

















#### Outline for the day

- **10:00 11:00** Opening remarks:
  - Tercio Ambrizzi (INCLINE)
  - Pedro Dias (IAG Director)
  - Marcella Ohira (IAI)
- **11:00 11:20** Coffee break
- 11:20 11:40 FAPESP (Newton La Scala Junior)
- 11:40 12:30 SPSASCC information (Tercio Ambrizzi)
- **12:30 14:00** Lunch Break
- **14:00 15:30 Class:** José A. Marengo
- **15:30 16:00** Coffee break
- **16:00 17:30 Class:** José A. Marengo















#### **SPSASCC**

- The Advanced School will include theoretical classes, work in groups, poster sessions, science-policy discussions, and visits to key institutions in the State of São Paulo conducting climate change research with policy applications.
- The School is organized by
  - INterdisciplinary CLimate INvestigation cEnter (INCLINE)
  - Inter-American Institute for Global Change Research (IAI)
- The School is sponsored by
  - São Paulo Research Foundation (FAPESP),
  - Pró Reitoria de Pesquisa/University of São Paulo (PRP/USP),
  - IAI
  - Santander















#### **SPSASCC** aims

- The School aims to contribute to the training of graduate students in the area of climate change.
- The school will foster the exchange of knowledge from many disciplines and sectors, among the participants and with School lecturers and organizers.
- It will also promote the development of collaborative networks to gather a critical mass of young scientists interested in climate change and its impacts on ecosystems and society.















## **SPSASCC** background

- Environmental research is complex and involves a variety of topics, such as water, land, biodiversity, pollution, food security.
- Climate change adds to the complexity and enhances the discussion of environmental problems.
- It requires more comprehensive and interdisciplinary studies to aid decision-making and actions needed for the benefit of the planet and society.
- Because of its overarching importance, climate change has been constantly in the public eye, especially since the creation of the Intergovernmental Panel on Climate Change (IPCC) in 1988.















## **SPSASCC** background

- Programs have been established to foster climate change studies in many countries.
- Examples of research programs on climate change in Brazil are:
  - FAPESP Research Program on Global Climate Change (RPGCC),
  - the Brazilian Research Network on Global Climate Change (Rede Clima),
  - the Brazilian Panel on Climate Change (PBMC),
  - the INCT for Climate Change (INCTMC).
- In the Brazilian academic field, research groups, such as INCLINE, have contributed to the discussion of climate change sciences with contributions from many scientists and universities in the country.















#### **SPSASCC** goals

- To provide graduate students with advanced knowledge on climate change science and related topics, including aspects of public policy.
- Participants will discuss with renowned scientists important themes of the three Fifth IPCC Assessment Report Working Groups, in a multidisciplinary and multicultural context.















#### **Scientific Organising Committee**

- Tercio Ambrizzi
  - Academic Director
  - tercio.ambrizzi@iag.usp.br
  - IAG-USP, Brazil
- Arlindo Philippi Jr
  - aphij@usp.br
  - FSP-USP, Brazil
- Cristiano Chiessi
  - chiessi@usp.br
  - EACH-USP, Brazil
- Edmo Campos
  - edmo@usp.br
  - IO-USP, Brazil
- Eduardo A. Haddad
  - ehaddad@usp.br
  - FEA-USP, Brazil

- Eduardo Mendiondo
  - emm@sc.usp.br
  - CEMADEN, Brazil
- Holm Tiessen
  - incline.aca@iag.usp.br
- Marcella Ohira
  - marcella@dir.iai.int
  - IAI
- Paulo Artaxo
  - artaxo@if.usp.br
  - IF-USP, Brazil
- Pedro Jacobi
  - prjacobi@usp.br
  - IEE-USP, Brazil
- Weber Amaral
  - wana@usp.br
  - Esalq-USP















## **Local Organising Committee**

- Executive Secretariat
  - <u>Lívia Dutra</u>
- IAG Organizing Committee
  - Tercio Ambrizzi (chair)
  - Lívia Dutra
  - Luciana Silveira
  - Sandra Nava
  - Rosely Vieira de Sousa
  - Amanda Rehbein
  - Eduardo Marcos de Jesus
- IAI Organizing Committee
  - Marcella Ohira
  - Paula Richter
  - Mariana Toledo

- Airport SPSASCC Guides
  - Victor Raul Chavez Mayta
  - Alan Jesús García Rosales
  - Eduardo Marcos de Jesus
  - Amanda Rehbein
  - Sergio Ibarra Espinosa
  - Dejanira Ferreira Braz
  - Decker Guzmán Zabalaga
  - Jose Leandro Campos
  - Paola Gimenes Bueno











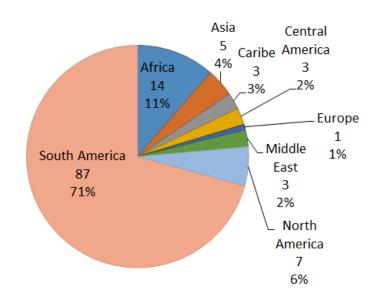


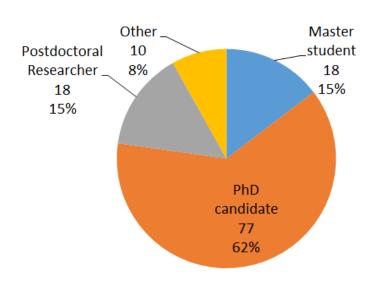


#### 123 participants from 30 countries

REGION	NUMBER
Africa	<b>14</b>
Asia	5
Caribe	3
Central America	3
Europe	1
Middle East	3
North America	7
South America	87
TOTAL	123

CURRENTLY	NUMBER
Master student	18
PhD candidate	77
Postdoctoral Researcher	18
Other	10





#### 123 participants from 30 countries

	COUNTRY OF RESIDENCE		PhD candidate	Postdoctoral Researcher	Other	TOTAL
1	Argentina	0	3	4	0	7
2	Bangladesh	0	1	0	0	1
3	Bolivia	0	1	0	0	1
4	Brazil	15	39	9	4	67
5	Canada	1	1	0	0	2
6	Chile	0	2	1	0	3
7	Colombia	1	1	0	0	2
8	Costa Rica	0	0	0	1	1
9	Côte d'Ivoire	0	1	0	0	1
10	Cuba	0	2	0	0	2
11	Egypt	0	1	1	0	2
	Ethiopia	0	1	0	0	1
13	Guatemala	0	2	0	0	2
14	India	0	1	1	0	2
15	Jamaica	0	1	0	0	1

#### 123 participants from 30 countries

	COUNTRY OF RESIDENCE		PhD candidate	Postdoctoral Researcher	Other	TOTAL
16	Kenya	0	1	0	0	1
17	Mexico	0	2	0	0	2
18	Mozambique	0	0	0	1	1
19	Nepal	0	1	0	0	1
20	Nigeria	0	1	1	4	6
21	Peru	1	0	0	0	1
22	Portugal	0	1	0	0	1
23	Russia	0	1	0	0	1
24	South Africa	0	2	0	0	2
25	Togo	0	1	0	0	1
26	Turkey	0	0	1	0	1
27	Uganda	0	1	0	0	1
28	Uruguay	0	2	0	0	2
29	USA	0	3	0	0	3
30	Venezuela	0	4	0	0	4

# **SPSAS Climate Change**

## University of São Paulo















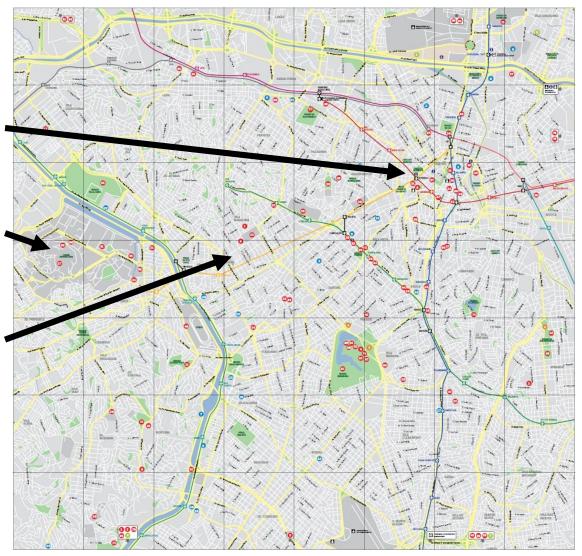


#### São Paulo

**Central São Paulo** 

University of São Paulo main campus

**Golden Tower Hotel** 

















#### **USP**

- A public university
- Founded in 1934
- Largest Brazilian public university
- The best university in all of Latin America
- Most prestigious educational institution in Brazil
- Ranked 91-100 worldwide in reputation by Times Higher Education World University Rankings in 2017
- A significant proportion of scientific papers published by Brazilian researchers are produced at USP
- The university scientific productivity corresponds to at least 30% of all that is produced in Brazil











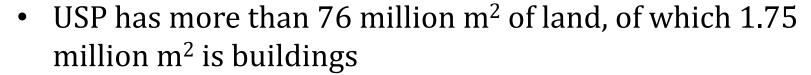






#### **USP**

- 289 undergraduate programs
- 222 graduate programs
- Covering all areas of knowledge:
  - natural sciences,
  - biological and health sciences,
  - humanities,
  - arts,
  - communications,
  - social sciences



















#### **USP**

#### **Includes:**

- 42 libraries across campus
- four affiliated hospitals,
- 24 museums and galleries
  - with half a million visitors per year
- two theatres,
- a cinema,
- its own TV channel run by students
- an orchestra

















# **SPSAS Climate Change**

# Instituto de Astronomia, Geofísica e Ciências Atmosféricas

















# **SPSAS Climate Change**

# INterdisciplinary CLimate INvestigation cEnter

















#### **INCLINE** main goals

• **INCLINE** aims to form the "vertebrae" of the center column of the Climate Change theme, combining the "state of the art" of science developed by the University of São Paulo (USP) and providing the necessary integrated work of teachers, researchers, graduate/undergraduate students and scientific initiative around a key theme for USP, Brazil and the world.















#### **INCLINE** main goals

- **INCLINE** integrates and leverages key collaborations in the multidisciplinary area of climate change. The research center involves hundreds of researchers from USP and external collaborators, organized across 18 subprojects integrated into the theme of global change.
- Interdisciplinarity is guaranteed by creating a collaborative environment where the physical, chemical, biological, socioeconomic and health sciences can all work together.
- Different international ranking systems invariably place USP as the most productive university in Brazil and occupying the first place in Latin America. Within the scope of INCLINE, the University is taking a leading role in scientific research on climate change.







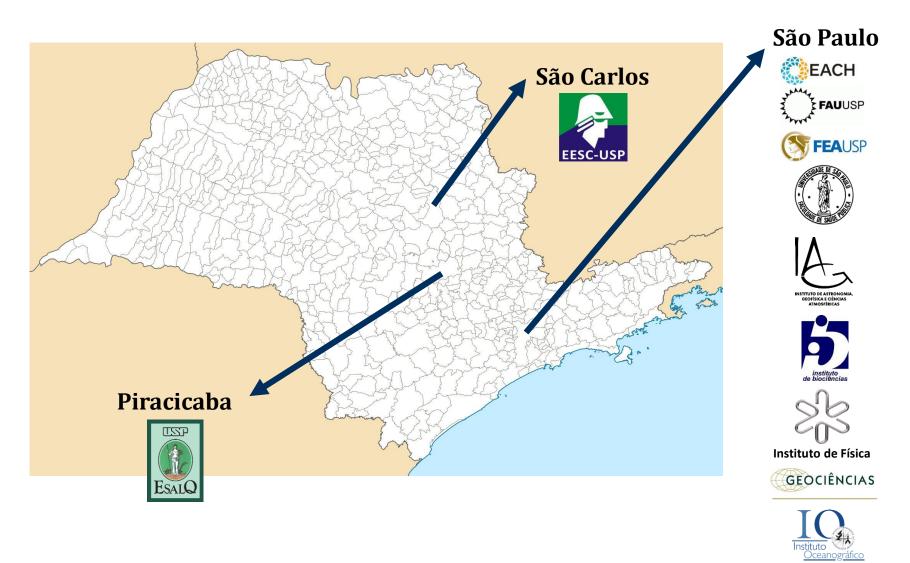








#### **INCLINE-USP** institutes













Instituto de Física













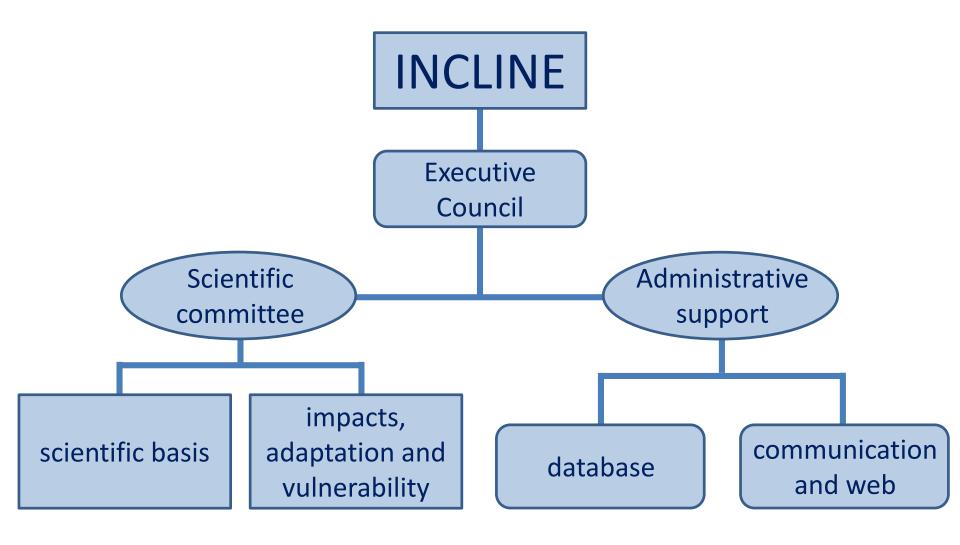








#### INCLINE management and organization













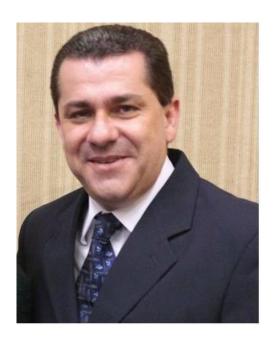






## **INCLINE**

#### **General Coordinator**



Tercio Ambrizzi IAG/USP

#### **Deputy General Coordinator**



Paulo Artaxo IF/USP















## **INCLINE**

#### **Subprojects coordinators**











































- 1) Detection, attribution and natural climate variability
  - Tercio Ambrizzi, IAG/USP
  - Rosmeri Porfirio da Rocha, IAG/USP
- 2) Climate change and its effects on the Amazon environment
  - Paulo Artaxo, IF/USP
- 3) Biogeochemical cycles and water resources
  - Humberto Ribeiro da Rocha, IAG/USP
- 4) Climate change and its impacts in the South Atlantic Ocean
  - Ilana Wainer, IO/USP
- 5) Megacities / air pollution
  - Maria de Fatima Andrade, IAG/USP















- 6) Impacts of climate change in the South Atlantic on the physics, biology and biogeochemistry off the South and Southeastern Brazilian coastal zone
  - Edmo José Dias Campos, IO/USP
- 7) Paleoclimate
  - Cristiano Mazur Chiessi, EACH/USP
  - Francisco William da Cruz Junior, IGc/USP.
- 8) Past and future evolution of rainfall extremes
  - Maria Assunção Faus da Silva Dias, IAG/USP
- 9) Technological innovation, bioenergy and sustainable productions systems and their contribution to the reduction of greenhouse gases
  - Weber Antonio Neves Amaral, ESALQ/USP















## 10) Health - vulnerability and adaptation in the environmental health context

Arlindo Philippi Junior, FSP/USP

#### 11) Human biometeorology

Fabio Luiz Teixeira Gonçalves, IAG/USP

#### 12) Economics of climate change

- Eduardo Amaral Haddad, FEA/USP
- Carlos Roberto Azzoni, FEA/USP

#### 13) Water resources and climate change

Eduardo Mario Mendiondo, EESC/USP

#### 14) Land use change

Luiz Antonio Martinelli, CENA/USP















- 15) Radiation, aerosols and clouds
  - Marcia Akemi Yamasoe, IAG/USP
- 16) Environmental governance
  - Pedro Roberto Jacobi, IEE/USP
- 17) Impacts of climate/environmental change on the fauna: an integrative approach
  - Carlos Arturo Navas Iannini, IB/USP
- 18) The role of planning, urban and building design for climate adaptation in the microscale. Contributions to an interdisciplinary approach
  - Denise Helena Silva Duarte, FAU/USP















#### www.incline.iag.usp.br

















# **SPSAS Climate Change**

São Paulo School of Advanced Science on Climate Change: Scientific basis, adaptation, vulnerability and mitigation

3-15 July 2017

Instituto de Astronomia, Geofísica e Ciências Atmosféricas, Universidade de São Paulo, São Paulo, Brazil

## **SPSASCC Information**

**Hosts:** 

















#### 1. Observations and Future Projections (Scientific basis)

- Introduction: indicators of climate change and treatment of uncertainties (José A. Marengo)
- Observations: atmosphere, ocean and surface (José A. Marengo)
- Detection and attribution of climate change: from global to regional (**José A. Marengo**)
- Information from paleoclimate archives (Cristiano Chiessi)
- Evaluation of climate models & tendencies (Iracema Cavalcanti)

#### 2. Impacts

• Impacts of modes of climate variability: monsoon, ENSO, annular modes (Iracema Cavalcanti)

#### 3. Vulnerability

- Urban areas in the global change context (Maria de Fatima Andrade)
- Natural and managed resources and systems, and their uses (freshwater resources; coastal systems and low-lying areas) (Gerardo Perillo)
- Societies' and economies' vulnerability related to water insecurity by climate change (**Stefan Uhlenbrook**)
- Natural and managed resources and systems, and their uses (food security and food production systems) (Weber Amaral)
- Human health, well-being, and security (human health: impacts, adaptation, and co-benefits; human security; livelihoods and poverty) (Maria Carmen Lemos)

#### 4. Adaptation and Mitigation

- Adaptation (adaptation needs and options; adaptation planning and implementation; adaptation opportunities, constraints, and limits; economics of adaptation) (Edwin Castellanos)
- Agriculture, forests and other land uses (José Paruelo)
- Consequences on ecosystem functioning and ecosystem services provision (José Paruelo)
- New Maps & New Destinations in our Age of Discovery (Christopher Kutarna)

#### 5. The Paris Agreement: Are 1.5 degrees a reasonable limit?

• A debate (Inés Camilloni & Holm Tiessen)















#### 1. Observations and Future Projections (Scientific basis)

- Introduction: indicators of climate change and treatment of uncertainties (José A. Marengo)
- Observations: atmosphere, ocean and surface (José A. Marengo)
- Detection and attribution of climate change: from global to regional (José A. Marengo)
- Information from paleoclimate archives (Cristiano Chiessi)
- Evaluation of climate models & tendencies (Iracema Cavalcanti)



José A. Marengo



Cristiano Chiessi



Iracema Cavalcanti















#### 2. Impacts

 Impacts of modes of climate variability: monsoon, ENSO, annular modes (Iracema Cavalcanti)



Iracema Cavalcanti













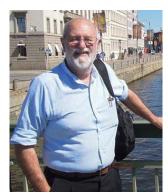


#### 3. Vulnerability

- Urban areas in the global change context (Maria de Fatima Andrade)
- Natural and managed resources and systems, and their uses (freshwater resources; coastal systems and low-lying areas)
   (Gerardo Perillo)
- Societies' and economies' vulnerability related to water insecurity by climate change (Stefan Uhlenbrook)







Gerardo Perillo



Stefan Uhlenbrook















#### 3. Vulnerability

- Natural and managed resources and systems, and their uses (food security and food production systems) (Weber Amaral)
- Human health, well-being, and security (human health: impacts, adaptation, and co-benefits; human security; livelihoods and poverty) (Maria Carmen Lemos)



**Weber Amaral** 



**Maria Carmen Lemos** 















#### 4. Adaptation and Mitigation

- Adaptation (adaptation needs and options; adaptation planning and implementation; adaptation opportunities, constraints, and limits; economics of adaptation) (Edwin Castellanos)
- Agriculture, forests and other land uses (José Paruelo)
- Consequences on ecosystem functioning and ecosystem services provision (José Paruelo)
- New Maps & New Destinations in our Age of Discovery (Christopher Kutarna)



**Edwin Castellanos** 



José Paruelo



Christopher Kutarna















#### 5. The Paris Agreement: Are 1.5 degrees a reasonable limit?

A debate (Inés Camilloni & Holm Tiessen)



**Inés Camilloni** 



**Holm Tiessen** 















#### Week 1

Monday (03)	Tuesday (04)	Wednesday (05)	Thursday (06)	Friday (07)	Saturday (08)
08:00 - 10:00	09:00 - 10:30	09:00 - 10:30	09:00 - 10:30	09:00 - 10:00	09:30 - 10:45
Student registration	Class: José A. Marengo	Class: Cristiano Chiessi	Class: Iracema Cavalcanti	Skype: Stefan Uhlenbrook	Poster session
10:00 - 11:00	10:30 - 11:00	10:30 - 11:00	10:30 - 11:00	10:00 - 11:00	10:45 - 11:00
Opening remarks:	Coffee break	Coffee break	Coffee break	Class: Gerardo Perillo	Coffee break
Tercio Ambrizzi Pedro Dias	11:00 - 12:30	11:00 - 12:30	11:00 - 12:30	11:00 - 11:30	11:00 - 12:15
Marcella Ohira	Class: José A. Marengo	Class: Cristiano Chiessi	Class: Iracema Cavalcanti	Coffee break	Poster session
11:00 - 11:20				11:30 - 12:30	
Coffee break				Class: Gerardo Perillo	
<b>11:20 - 11:40</b> FAPESP					
(Newton La Scala Junior)					
11:40 - 12:30 SPSASCC information (Tercio Ambrizzi)					
12:30 - 14:00	12:30 - 14:00	12:30 - 14:00	12:30 - 14:00	12:30 - 14:00	
Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	
14:00 - 15:30	14:00 - 15:30	14:00 - 15:30	14:00 - 15:30	14:00 - 15:00	
Class: José A. Marengo	Class: José A. Marengo	Class: Iracema Cavalcanti	Class: Maria de Fatima Andrade	Class: Gerardo Perillo	
15:30 - 16:00	15:30 - 16:00	15:30 - 16:00	Andrade	15:00 - 16:15	
Coffee break	Coffee break	Coffee break	15:30 - 16:00	Poster session	
			Coffee break		
16:00 - 17:30	16:00 - 18:00	16:00 - 18:00		16:15 - 16:30	
Class: José A. Marengo	Class: José A. Marengo	Class: Iracema Cavalcanti	16:00 - 18:00	Coffee break	
			Class: Maria de Fatima		
	19:00 - 21:00		Andrade	16:30 - 17:45	
	Networking dinner			Poster session	















#### Week 2

Monday (10)	Tuesday (11)	Wednesday (12)	Thursday (13)	Friday (14)	Saturday (15)
08:30 - Official photo	09:00 - 10:30	06h20 - buses leave hotel to	09:00 - 10:30	09:00 - 10:30	09:00 - 10:30
	Class: Edwin Castellanos	IAG	Class: José Paruelo	Class: Christopher Kutarna	Discussions within the WGs
09:00 - 10:30					(guidance: Inés Camilloni &
Class: Weber Amaral	10:30 - 11:00	<b>06h45</b> – buses leave IAG to	10:30 - 11:00	10:30 - 11:00	Holm Tiessen)
Class. Webel Amarai	Coffee break	CEMADEN, São José dos	Coffee break	Coffee break	
10:30 - 11:00		Campos			10:30 - 11:00
Coffee break	11:00 - 12:30	dampos	11:00 - 12:30	11:00 - 12:30	Coffee break
Control Bream	Class: Edwin Castellanos		Class: José Paruelo	Class: Christopher Kutarna	11.00 10.00
11:00 - 12:30		09:00 - 12:00			11:00 - 12:30
Class: Weber Amaral		Visit to CEMADEN, São José			Presentation based on each
		dos Campos			WG's discussion to the
					whole class
12:30 - 14:00	12:30 - 14:00	12:00 - 14:00	12:30 - 14:00	12:30 - 14:00	12:30 - 13:00
Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Closing of the Advanced
					School
14:00 - 15:30	14:00 - 15:30	14:00 - 17:00	14:00 - 15:30	14:00 - 15:30	
Class: Maria Carmen Lemos	Class: Edwin Castellanos	Visit to CPTEC, Cachoeira	Class: José Paruelo	Class: Inés Camilloni & Holm	
		Paulista		Tiessen	
15:30 - 16:00	15:30 - 16:00		15:30 - 16:00		
Coffee break	Coffee break		Coffee break	15:30 - 16:00	
				Coffee break	
16:00 - 18:00	16:00 - 18:00		16:00 - 18:00		
Class: Maria Carmen Lemos	Class: Edwin Castellanos		Class: José Paruelo	16:00 - 18:00	
				Class: Inés Camilloni & Holm	
				Tiessen	
				Students to divide into	
				working groups (WGs)	















# **SPSAS** Climate Change

## **CEMADEN & CPTEC**

Key institutions in the State of São Paulo conducting climate change research with policy applications















#### CEMADEN

- Centro Nacional de Monitoramento e Alertas de Desastres Naturais (National Center for Natural Disaster Monitoring and Alerts)
- ✓ Monitoring of natural hazards in risk areas in Brazilian municipalities susceptible to the occurrence of natural disasters
- ✓ Research and technological innovations that may contribute to the improvement of its early warning system

✓ Ultimate goal of reducing the number of fatalities and material

damages throughout the country.

In view of the increase in extreme events over the last few years, this center has become a national and South American reference, with a highly advanced situation room and specialized professionals.

















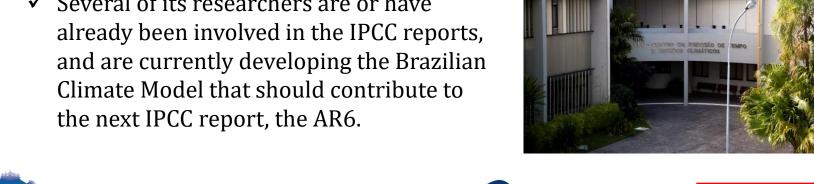
#### **CPTEC**

Centro de Previsão de Tempo e Estudos Climáticos - (Center for Weather Forecasting and Climate Studies)

This center has the first supercomputer in Latin America and its mission is to provide the country with the state of the art in weather and climate forecasts and to have the scientific and technological capacity to continuously improve these For the benefit of society.



Several of its researchers are or have Climate Model that should contribute to the next IPCC report, the AR6.

















## **CEMADEN / CPTEC visit**

- On the day of visits to CEMADEN and CPTEC (Wednesday July 12<sup>th</sup>), we will check your attendance onboard the buses.
- The buses will depart from **Golden Tower São Paulo Hotel** at **6:20am**, collecting all participants staying at this hotel. The buses will then drive to IAG/USP, to collect all other participants.
- All SPSASCC participants who are **not** staying at Golden Tower São Paulo Hotel must board at **IAG/USP at 6:45am**, so please make sure to arrive on time. Again the buses will leave IAG at 6:45am.
- Please bring an **ID** (RG, RNE, passport) for the visit, **as well as** the **SPSASCC badge/nametag**, as these will both be required to enter CPTEC.
- CPTEC is hosted at INPE (National Institute of Space Research). It is **prohibited** to enter there wearing tank tops, low-cut sweaters, short skirts, shorts, caps, slippers and other similar items. Therefore, to avoid inconvenience in this visit, do not wear any of these clothes listed.















## **CEMADEN / CPTEC visit**

- Lunch on this day will be at Posto e Restaurante Arco Íris
   Roseira
- Everyone will need to pay their own meal with cash/debit/credit card;
- Some of you were granted with R\$40 for this purpose; don't forget to bring this cash on this day!













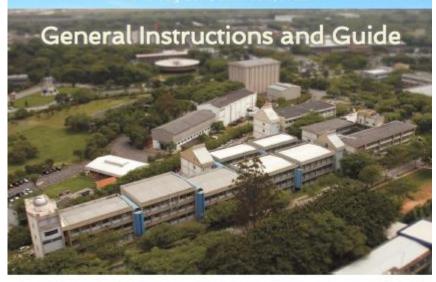




#### SPSAS Climate Change

São Paulo School of Advanced Science on Climate Change: Scientific basis, adaptation, vulnerability and mitigation

3-15 July 2017, São Paulo, Brazil



Instituto de Astronomia, Geofísica e Ciências Atmosféricas, Universidade de São Paulo (IAG/USP). Rua do Matão, 1226. Cidade Universitária, São Paulo – SP, Brazil. CEP: 05508-090.

Advanced School website: www.incline.iag.usp.br/data/spsascc.php IAG website: www.iag.usp.br IAI website: www.iai.int INCLINE website: www.incline.iag.usp.br

















- Getting from GRU Airport to the hotel
- Getting from CGH Airport to the hotel
- Hotel accommodation
- SPSASCC general information

Registration
Venue
Getting to the venue
Wi-Fi at SPSASCC venue: IAG Net
Your responsibilities
Meals
Visits to CEMADEN and CPTEC
Social activities
Transportation to School activities

# SPSAS Climate Change São Paulo School of Advanced Science on Climate Change: Scientific basis, adaptation, vulnerability and mitigation 3-15 July 2017. São Paulo, Brazil General Instructions and Guide

Instituto de Astronomia, Geofísica e Ciências Atmosféricas, Universidade de São Paulo (IAG/USP). Rua do Matão, 1226. Cidade Universitária, São Paulo – SP, Brazil. CEP: 05508-090.

Advanced School website: www.incline.iag.usp.br/data/spsascc.php IAG website: www.iag.usp.br IAI website: www.iac.incline.iag.usp.br INCLINE website: www.incline.iag.usp.br

















#### • Other general information

Visiting Brazil Health and immunization Food and water Currency Language The city of São Paulo Top rated places in São Paulo Getting around São Paulo Driving in São Paulo How to charge and connect your gadgets Wi-fi internet and mobile internet Making phone calls in Brazil

Emergency numbers in Brazil

#### Wi-Fi access at IAG during SPSASCC

IAG Net

Username: spsascc

Password: spsascc@2017

















#### Computer access at IAG during SPSASCC

- If you need to access a computer at IAG (e.g. to access internet, check emails)
  - Room 114 (Main IAG Building)
  - Windows 10 PCs
  - Username: curso2
  - Password: spsas
  - Only during the days of the event, only between the hours of 12pm to 2pm (12:00

to 14:00)





















#### Your responsibilities

- Participants must attend all School activities, including all lectures, poster sessions and the visits to CEMADEN and CPTEC (July 12<sup>th</sup>).
- Always wear your SPSASCC badge/nametag while inside the IAG building.
- It is recommended that you bring and use every day of the School the mug you will receive in the first day of the School. Using this mug will help to reduce waste of the plastic cups.



















## Flight boarding passes

- If we have covered the cost of your flights to attend the course:
  - If you have not already given us your original boarding pass(es) for your outbound flight to Sao Paulo, please give it to us at the coffee/lunch breaks.
  - For your return flight to your home city/country:
    - we will try to make your check-in ourselves here on the 15<sup>th</sup> July
    - so that we can already get your original electronic boarding passes
    - in the cases where this is not possible:
      - You must **post** your **original** boarding pass(es) to us **by mail** once you have arrived home
      - Before you post it by mail, please also scan all your boarding pass(es) and email them to INCLINE as a backup for it getting lost in the mail
      - We will hand you out envelopes later with our IAG address on for you
  - VERY IMPORTANT: We will only email your certificates of participation to SPSASCC after we receive your original boarding passes















#### Your responsibilities - signing attendance

- VERY IMPORTANT: All participants must sign the attendance list in the days of School activities.
- In the days of lectures and poster sections it will be available on a table desk in the adjoining area of the Auditorium.
- We kindly ask you to sign this list as you arrive to the School.
- On the day of visits to CEMADEN and CPTEC (Wednesday July 12<sup>th</sup>), we will check your attendance onboard the buses.















## **Hotel to SPSASCC transportation**

- Those staying at the Golden Tower Hotel will be offered transportation to all School activities.
- The buses will be waiting in the street in front of entrance.



- Please pay attention to the bus schedule and be ready to board at the parking lot on time.
- The School will also provide your transportation back from the course venue to the Golden Tower São Paulo Hotel.
- The buses will leave according to the timetable below, so **don't be late**. If you miss the bus, you will have to take care of your own transportation to the School. There are no regular city buses directly connecting the hotel to the campus so don't miss the bus!















#### **Bus timetable**

http://inclineusp.wixsite.com/spsascc/transportation

Date	Departure time at hotel	Destination
03 July (MON)	7:00am	IAG (USP campus)
04 July (TUE)	8:00am	IAG (USP campus), networking dinner
05 July (WED)	8:00am	IAG (USP campus)
06 July (THU)	8:00am	IAG (USP campus)
07 July (FRI)	8:00am	IAG (USP campus)
08 July (SAT)	8:30am	IAG (USP campus)
09 July (SUN)	-	No bus service
10 July (MON)	7:40am	IAG (USP campus)
11 July (TUE)	8:00am	IAG (USP campus)
12 July (WED)	6:20am	CEMADEN & CPTEC
13 July (THU)	8:00am	IAG (USP campus)
14 July (FRI)	8:00am	IAG (USP campus)
15 July (SAT)	8:00am	IAG (USP campus)









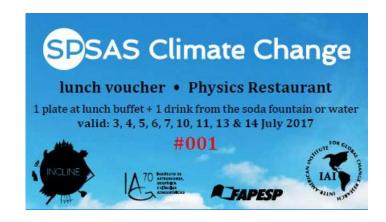






#### Lunchtimes at the SPSASCC

- Lunch during the days of the course: if you were granted with financial support in this category, you will receive 9 Lunch Vouchers
- To be used on the following days: July  $3^{rd}$ ,  $4^{th}$ ,  $5^{th}$ ,  $6^{th}$ ,  $7^{th}$ ,  $10^{th}$ ,  $11^{th}$ ,  $13^{th}$  and  $14^{th}$ .
- Each voucher allows you 1 plate of self-serve lunch and 1 drink from the soda fountain or water at the Physics Restaurant / Lanchonete da Física (300m from IAG).
- This voucher is already paid for and does not include dessert or alcoholic beverages.



















#### Coffee breaks at the SPSASCC

- Coffee breaks will be served at the adjoining area by the Auditorium according to the School schedule.
- There is a cafeteria within IAG, but any purchases there are not covered by the SPSASCC.
- Additional meals, snacks or drinks will not be paid by the School.















#### **Dinners at Golden Tower Hotel**

- For participants staying at Golden Tower São Paulo Hotel:
  - Lunch (on weekends) and dinner at the Golden Tower São Paulo Hotel will also be paid for by SPSASCC for selected participants (depending on the type of financial support you were granted).
  - Those participants will receive a predetermined number of meal vouchers from hotel reception at check in.
  - These are only valid for use at the
     "Mediterranean Restaurant" within
     the hotel and only for the special
     "USP" selected menu (other meals are
     not included).
- Lunch hours are 12pm (noon/midday) to 3pm (15:00)
- Dinner hours are 7pm (19:00) to 11pm (23:00)

















#### **Breakfast at Golden Tower Hotel**

- For participants staying at Golden Tower São Paulo Hotel:
  - Breakfast at the hotel is included for **all hotel guests**, starting at 6am (weekdays) or 6:30am (weekends).
  - Except on July 12<sup>th</sup> (the CEMADEN and CPTEC visit day), when the breakfast at the hotel will begin at 5:30am.
  - There is enough time to have a good breakfast before boarding the School bus, so set your alarms accordingly.





















#### **Networking dinner – tomorrow**

- This is the opportunity to get to know your fellow SPSASCC participants.
- The dinner will take place at Ponteio Restaurant after the end of all classes tomorrow evening, approximately 7pm (19h) until 9pm (21h).
- All participants are invited and all meals are already paid for.
- All School participants will be offered transportation from IAG to this restaurant, and at the end, transportation back to the Golden Tower São Paulo Hotel will be provided for participants staying there.





















## **Networking dinner – tomorrow**

- The buffet menu includes:
  - the starter/entree (including: mini meat pasty, mini cheese pasty, coxinha (fried chicken parcels), meat croquettes, and others),
  - the rodízio (buffet) of meats,
  - the buffet of salads, vegetables, cold meat cuts (including hams) and cheeses,
  - one drink per person (choose between beer, water, juice or soda).
- The restaurant website
   is: <a href="http://www.achurrascaria.com.br/">http://www.achurrascaria.com.br/</a>
- The restaurant address is: Av. Jaguaré, 1600 -Jaguaré - São Paulo – SP
- There is free parking at the restaurant for those that need it.





















#### **Poster sessions**

- Here at IAG you will be able to hang your poster on the designated poster boards and it will remain there throughout the weeks.
- If you couldn't bring it with you today or forgot, don't worry: you can bring it on the following days.
- But remember: by July 07th all posters must be already hanged on all poster boards.

















#### **Poster sessions**

- As a group you have been divided into two subgroups to present on either Friday afternoon (7th July) or Saturday morning (8th July).
- You will find your name in one of the two groups posted beside the poster boards (and emailed to you last week) to inform you of which session you will be expected to present on.



- Besides your name on these two lists, is the number of your poster to assign the designated poster board to you.
- All participants are expected to attend both sessions in order to learn from and present to each other.















#### **Poster sessions**

- Posters PDFs will be uploaded on the website
- Posters abstracts will also uploaded on the website

http://inclineusp.wixsite.com/spsascc











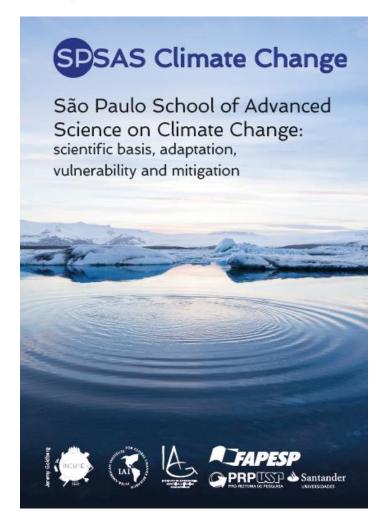






## Participant profiles

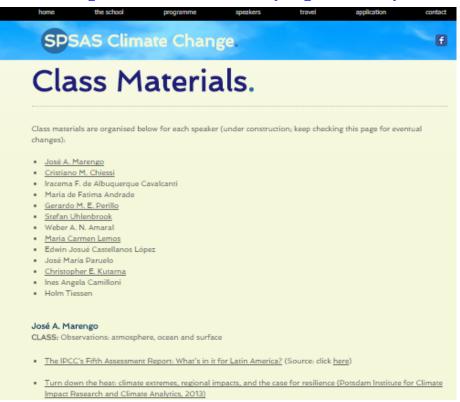
- PDF of all participants will be uploaded on the website
- This has also been given to you in print format



#### Class materials

Class materials will be updated and available on the website accordingly

(<a href="http://inclineusp.wixsite.com/spsascc/class-materials">http://inclineusp.wixsite.com/spsascc/class-materials</a>)

















## SPSASCC USB stick/pen drive

- Inside your pack
- Along with a SPSASCC pen



















## Student satisfaction questionnaire

- We would like to have your feedback on the quality of the SPSASCC.
- You will be given this questionnaire on the final Friday (14<sup>th</sup> July) in order for you to complete and return by the final morning of the school (Saturday 15<sup>th</sup> July).















#### **Golden Tower Hotel checkout**

- Depending on your travel schedule:
  - Some of you will check-out on 15<sup>th</sup> July (Saturday)
  - Others will check-out on 16<sup>th</sup> July (Sunday)
  - (check with the hotel or with our local organizing committee when your check-out day is)
- For those who check-out on 15<sup>th</sup> July:
  - You will need to check-out of your room in the morning of July 15<sup>th</sup>, before coming to the last day of classes
  - You can use the hotel's luggage storage provided for guests (free of charge)
  - After the end of classes on this day (~1PM), you will be transported back to the hotel where you can collect your luggage















#### Minibuses to GRU Airport – 15<sup>th</sup> July

- We will provide 2 minibuses on this day, from Golden Tower hotel to GRU airport, departing:
- 1) 15 July at 19:00 (departures between 01:00 and 01:30)
- 2) 15 July at 22:00 (departures between 03:00 and 05:55)















#### Minibuses to GRU Airport – 16<sup>th</sup> July

- We will provide 2 minibuses on this day, from Golden Tower hotel to GRU airport, departing:
- 1) 16 July at 07h30 (departures between 12:00 and 14:35)
- 2) 16 July at 16h30 (departures between 21:00 and 23:30)
- For participants whose departures at GRU are on an other range of hours, we suggested the use of a pooled taxi together;
- Talk with the local organizing committee during the week for more information















# **SPSAS Climate Change**

## Welcome!

## **Enjoy the course**













