# WCRP Workshop on Extremes in Climate Prediction Ensembles (ExCPEns)

- Online from APEC Climate Center 25-27 October 2021
- Early Career Scientist training and discussion forum 27-28 October 2021

The focus of this workshop is exploiting subseasonal, seasonal, annual to decadal and longer-term prediction ensembles to improve the prediction and understanding of extreme weather and climate events.

#### **Sessions:**

- 1. Identification of extremes in observations and climate prediction ensembles
- 2. Physical mechanisms of extremes in observations and climate prediction ensembles
- 3. Regional climate extreme information relevant to impacts, vulnerability and adaptation
- 4. Prediction and predictability of large-scale climate variability relevant to extreme events
- 5. Prediction and predictability of specific extreme events (>10 days)
- 6. Quantifying current and future risks of climate extremes

#### **Sponsored by**

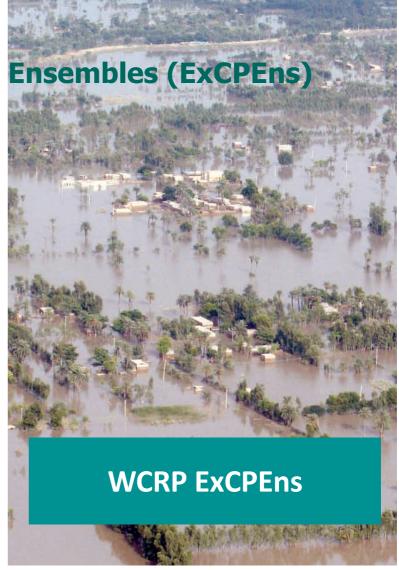












## WCRP Workshop on Extremes in Climate Prediction Ensembles(ExCPEns)

# **ECS Training and Discussion**

- 27 - 28 October 2021 -

27 Octobe	r, Wednsec	lay			
	T	IM	E		AGENDA
GMT	KST		GMT	KST	
10:00	19:00		12:00	21:00	ECS Discussion and Network Forum Chair: Dr. Xuebin Zhang, ECCC
10:00	19:00	1	11:30	20.30	Plenary Session Introduction of ECS, lecturers, and experts
11:30	20:30	- 1	11:40	20:40	Break
11:40	20:40	-	12:40	21:40	Small group discussion 6 breakout sessions for each group in parallel
11:40	20:40	1	12:00	21:00	Summary Share summaries of each small group discussion * Rapporteurs report on summary of each group discussion

### WCRP Workshop on Extremes in Climate Prediction Ensembles(ExCPEns)

## **ECS Training and Discussion**

- 27 - 28 October 2021 -

8 October, Thurseday I						
GMT KST GMT				KST	AGENDA	
4:00	13:00		6:30	15:30	ECS Training Program 1 Chair: Dr. William Merryfield (WCRP/WGSIP)	
4:00	13:00	-	4:05	13:05	Session introduction	
4:05	13:05	-	4:35	13:35	[S1_Extreme] Lecture 1. Detection of extreme events using Machine Learning (Sookyung Kim, PARC)	
4:35	13:35		4:50	13:50	Lecture 1. Q&A	
4:50	13:50	-	5:20	14:20	[S1_Extreme] Lecture 2. Extreme event attribution (Megan Kirchmeier – Young, ECCC)	
5:20	14:20	-	5:35	14:35	Lecture 2. Q&A	
5:35	14:35	-	5:45	14:45	Break	
5:45	14:45	-	6:15	15:15	[S2_Projection] Lecture 1. How to use the AR6 WGI interactive Atlas for climate change studies (Jin-Ho Yoon, GIST)	
6:15	15:15		6:30	15:30	Lecture 3. Q&A	

28 Octobe	r, Thurseda	ıy II			
	1	IM	E		AGENDA
GMT	KST		GMT	KST	
10:00	19:00		12:30	21:30	ECS Training Program II Chair: Dr. June-Yi Lee (RCCS, ICCP)
10:00	19:00	-	10:05	19:05	Session introduction
10:05	19:05	- 1	10:35	19:35	[S1_Extreme] Lecture 3. Predictability of extreme events in S2S time scale (Frederic Vitart, ECMWF)
10:35	19:35	- 1	10:50	19:50	Lecture 1. Q&A
10:50	19:50	- 1	11:20	20:20	[S2_Projection] Lecture 2. Low likelihood high impact events assessed in AR6 WGI Chapter 4 (Erich Fischers, ETH Zurich)
11:20	20:20	- 1	11:35	20:35	Lecture 2. Q&A
11:35	20:35	- 1	11:45	20:45	Break
11:45	20:45		12:15	21:15	[S2_Projection] Lecture 3. Change of extremes assessed in AR6 WGI Chapter 11 (Xuebin Zhang, ECCC)
12:15	21:15	- 1	12:30	21:30	Lecture 3. Q&A

# **Special Issue of APJAS**

# **Special Issue**

Extreme Weather and Climate Events: Dynamics, Predictability and Ensemble Simulations



We invite studies and review articles with a focus on

- prediction and predictability of extremes on time scales of more than 10 days
- risks and mechanisms of extremes in past, current and future climates
- use of ensembles for predictability and attribution studies of extremes
- Deadline for manuscript submission: March 31st, 2022
- · Accepted articles will be immediately published online
- Open access option



