

World Weather Research Programme (WWRP) **- Catalyzing Innovation in Weather, climate and Environmental Sciences**

Paolo Ruti and Estelle de Coning
World Meteorological Organization



WMO OMM

World Meteorological Organization
Organisation météorologique mondiale

WEATHER CLIMATE WATER
TEMPS CLIMAT EAU

The World Weather Research Programme

WMO's mechanism to foster and progress cooperative research for improved weather and environmental prediction services from minutes to months

Mission

"The WMO World Weather Research Programme (WWRP) promotes international and interdisciplinary research for more accurate and reliable forecasts from minutes to seasons, expanding the frontiers of weather science to enhance society's resilience to high-impact weather and the value of weather information for users. WWRP aims at *Seamless Prediction* by increasing convergence between weather, climate and environmental approaches. WWRP strengthens academic – operational partnerships and interdisciplinary collaborations, and enhances the role of Early Career Scientists



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Three Core Projects



- Multi-scale forecasts, warnings and impacts
- Predictability & Uncertainty
- Vulnerability & Risk
- User communication
- Timescale:
Minutes to two weeks
- **Urban jointly with GAW**



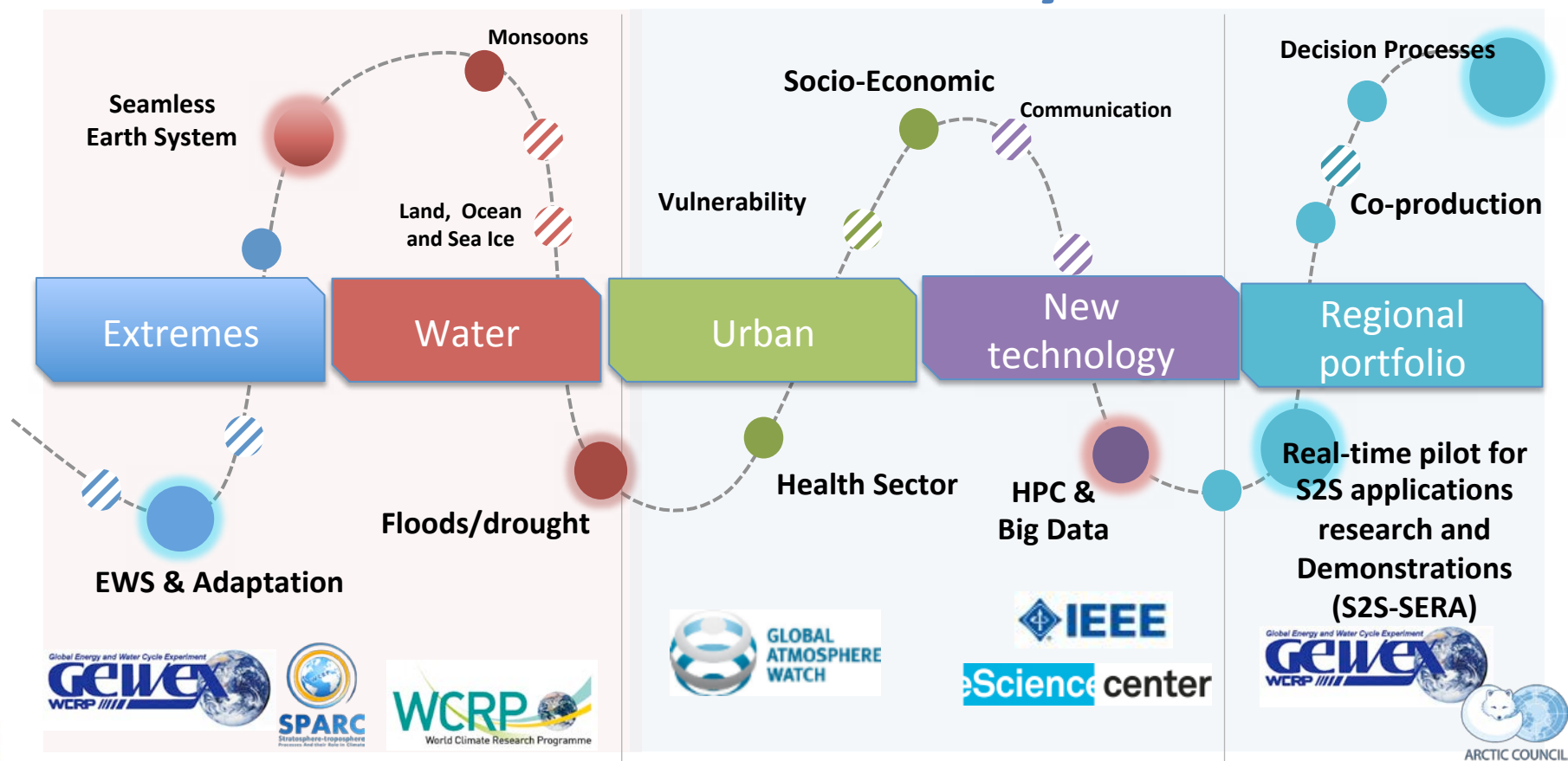
- Improve forecast skill
- Tropical cyclones, droughts, floods, heat waves, monsoons,...
- Data exchange and accessibility
- S2S Database
- Timescale:
Two weeks to seasons
- **Jointly with WCRP**



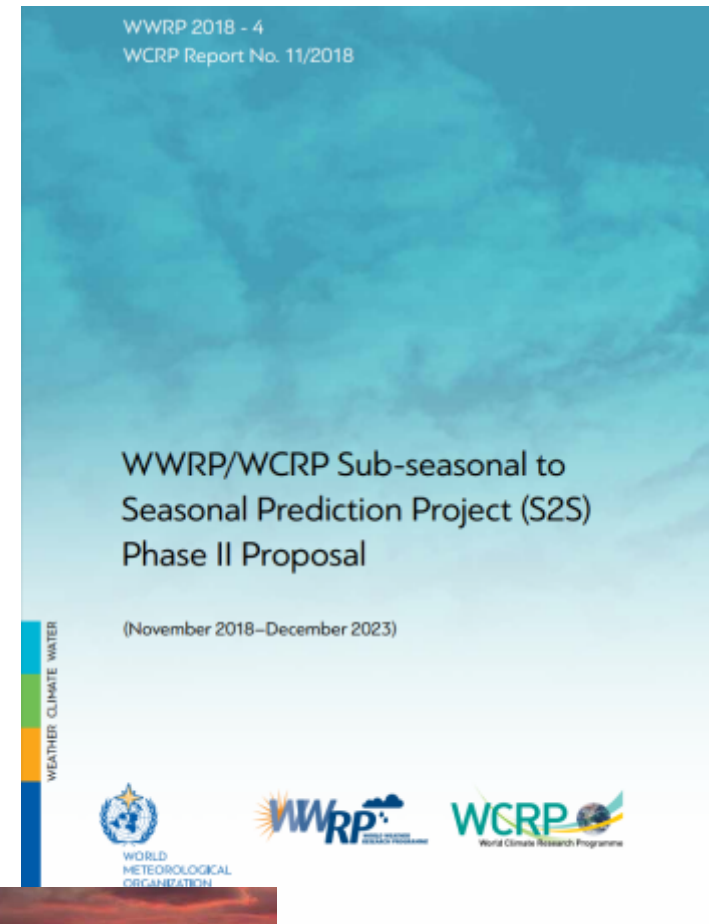
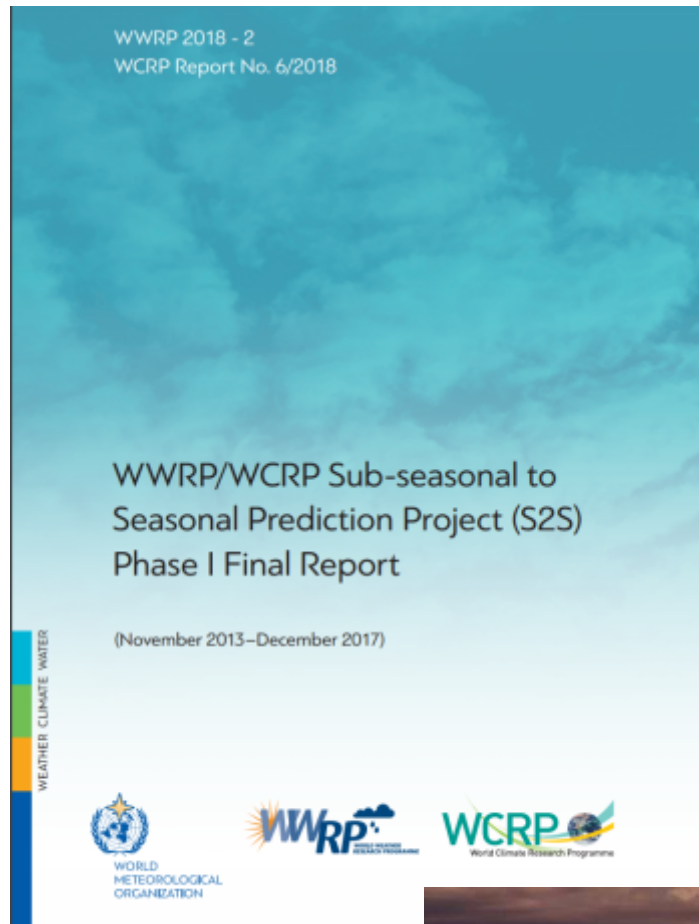
- Develop improved weather and environmental prediction services
- Year of Polar Prediction: (mid 2017-mid 2019)
- Timescale:
From hours to seasons
- **In coordination with WCRP, OBS**



WWRP – 4 challenges and interconnectivity



S2S Phase I and II



**Sub-seasonal to Seasonal
Prediction Project**

Int Coordination Office – South Korea

Seamless prediction

In the context of WMO, seamless prediction considers not only all compartments of the **Earth system**, but also all disciplines of the weather–climate–water–environment **value cycle** (monitoring and observation, models, forecasting, end-user products, dissemination and communication, perception and interpretation, decision-making and feedback to research requirements) to deliver tailored weather, climate, water and environmental information covering **minutes to centuries and local to global scales**.

Goals of this S2D conference

- to bring together the scientists, producers, and users who are at the forefront of S2S and S2D prediction and related research, development, and application areas **to foster the exchange of information and knowledge between the communities towards more seamless subseasonal to decadal predictions;**
- to highlight the current level of **progress and accomplishments** in S2S and S2D predictions;
- to **identify the challenges** for transitioning S2S and S2D prediction **research efforts into operations;**
- to review current abilities to make **skillful predictions** on timescales of interest;
- to identify **new initiatives, collaborations, and emerging science questions**

Seamless approach S2S-S2D

S2S project (WWRP/WCRP) and this conference with S2D represent *a very concrete example of how different research communities can tackle **issues of common interest** and deliver very tangible and measurable outcomes* while moving towards **more integrative science** to respond to the international climate agenda and a society which will be **resilient to climate variability and change**.



WWRP wishes you a successful
S2D conference



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Thank you
Merci