

## WORLD CLIMATE RESEARCH PROGRAMME

**Joint Scientific Committee Update** 

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On behalf of Guy Brasseur, Chair JSC
Pan WCRP Modeling Meeting
9 October 2017
MetOffice, Exeter, UK











## WCRP's mission....

... is to facilitate analysis and prediction of Earth system variability and change for use in an increasing range of practical applications of direct relevance, benefit and value to society.

The two overarching objectives of WCRP are:

to determine the predictability of climate

to determine the effect of human activities on climate



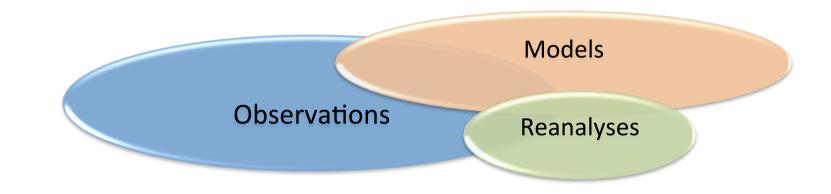


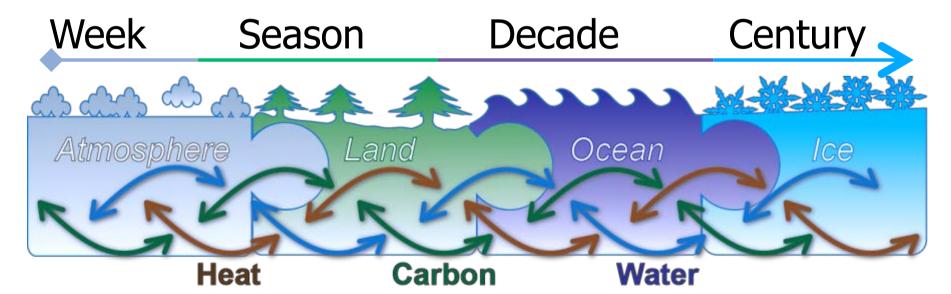






# Scope of WCRP















## WCRP Structure

#### JOINT SCIENTIFIC COMMITTEE (JSC)

WCRP MODELLING ADVISORY COUNCIL (WMAC)

WCRP DATA ADVISORY COUNCIL (WDAC)

#### WORKING GROUPS ON:

SUBSEASONAL TO INTERDECADAL PREDICTION (WGSIP) NUMERICAL EXPERIMENTATION (WGNE)

COUPLED MODELLING (WGCM) REGIONAL CLIMATE (WGRC)



CRYOSPHERE-CLIMATE



OCEAN-ATMOSPHERE



LAND-ATMOSPHERE



TROPOSPHERE-STRATOSPHERE



JOINT PLANNING STAFF (JPS)

REGIONAL CLIMATE DOWNSCALING

#### **GRAND CHALLENGES**

CLOUDS, CIRCULATION AND CLIMATE SENSITIVITY

REGIONAL SEA-LEVEL CHANGE AND COASTAL IMPACTS

CARBON FEEDBACKS IN THE CLIMATE SYSTEM

**NEAR-TERM CLIMATE PREDICTION** 

**MELTING ICE AND GLOBAL CONSEQUENCES** 

WATER FOR THE FOOD BASKETS OF THE WORLD

UNDERSTANDING AND PREDICTING WEATHER AND CLIMATE EXTREMES











## The way ahead

- Evolution of climate policy and services (COP21, GFCS, ...)
- Evolution of research (fundamental vs applied science, weather and climate seamless enterprise, WMO CAS,...)
- Sponsors' review
   (focus, structures, ...)
- Overall mission still very relevant
- New emphasis needed











# **New WCRP Strategy**

### Strategic Plan for 2019-2029 (the "what"):

- must respond to societal needs and be transformative
- new intellectual challenges to galvanize the community
- open process: consultation with WCRP community and stakeholders (sponsors, agencies, partner programmes, early career scientists networks, end users, etc) - cf on-going Survey
- main content: emphasis, science questions and imperatives
- first consolidated draft ready by JSC39 in April 2018





# **New WCRP Implementation**

### Implementation Plan 2019-2024 (the "how"):

- drafting will start in Spring 2018
- targets
- resources
- partnerships
- structures













## This week

#### Unique opportunity:

- to review progress and challenges in modeling activities
- to maximize synergies between groups
- to bring new ideas (and to throw some old ones...)
- to feed into the WMAC session
- to contribute to the Strategic Planning
- to have fun



Many thanks to the UK MetOffice for hosting us!

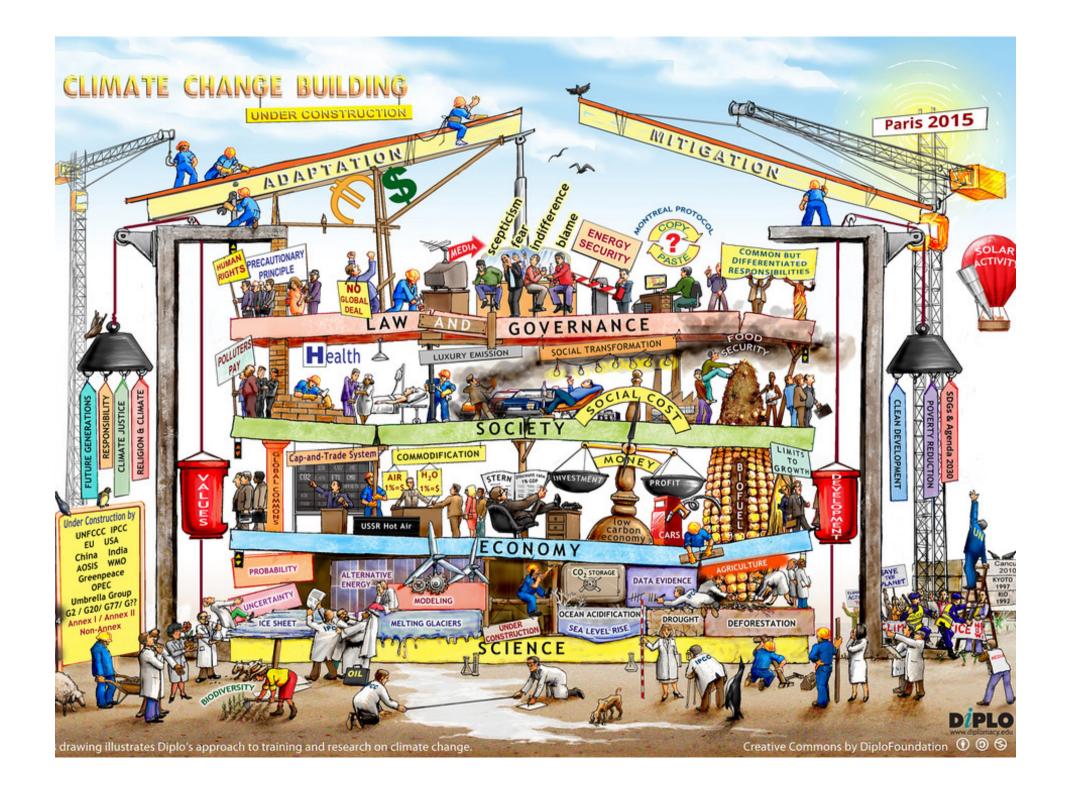














Thank you for your attention!









