



ICSU

International Council for Science

The World Climate Research Programme (WCRP)

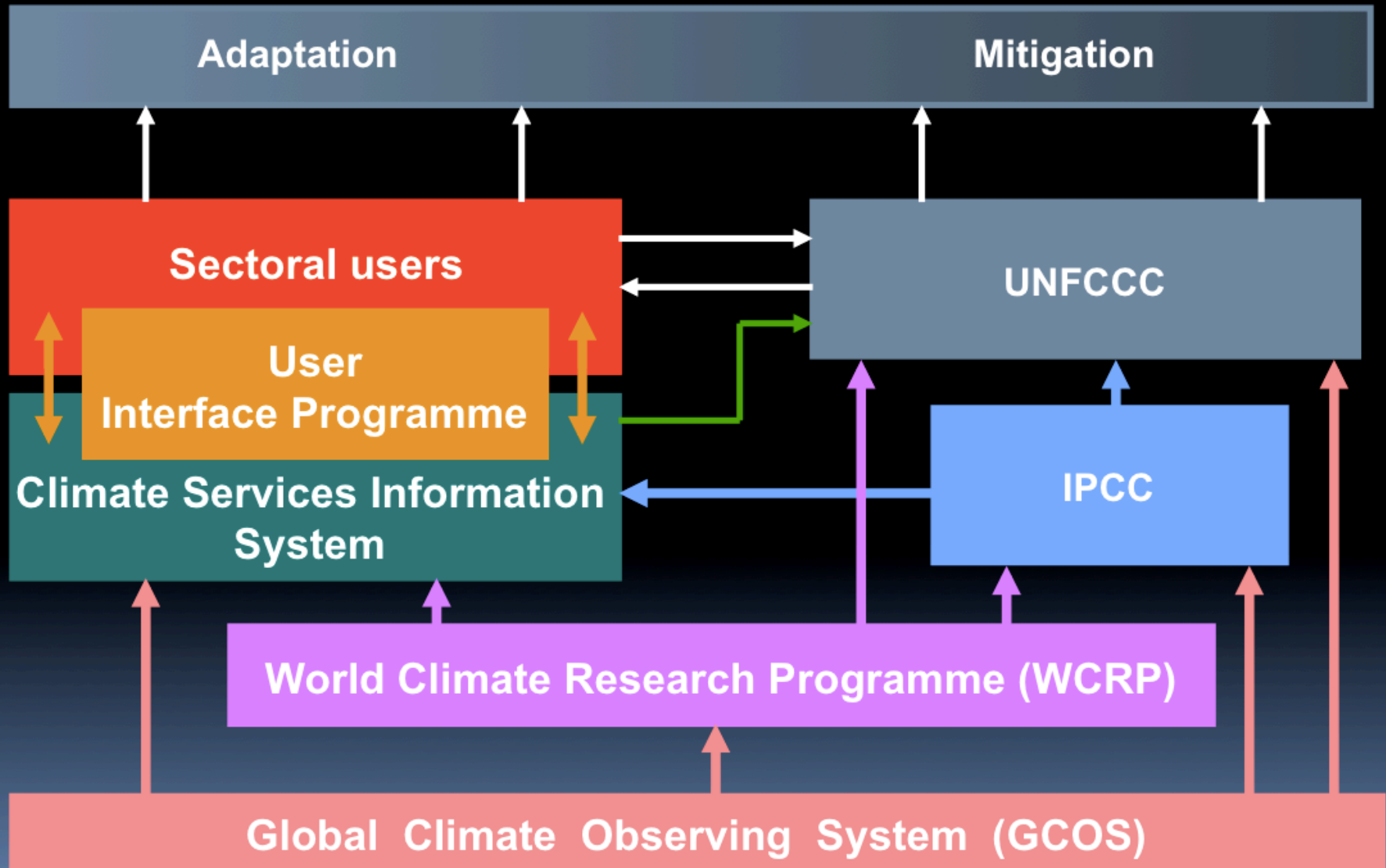
Guy Brasseur
Chair WCRP/JSC

WCRP's Mission

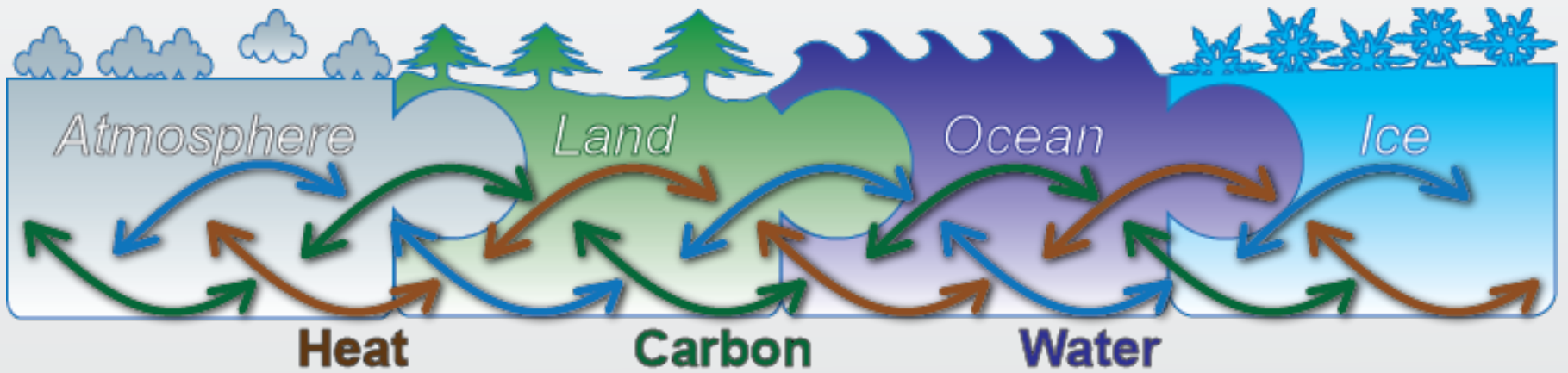
To facilitate **analysis** and **prediction** of **Earth system variability** and **change** for use in an increasing range of **practical applications** of direct **relevance**, benefit and value to **society**.

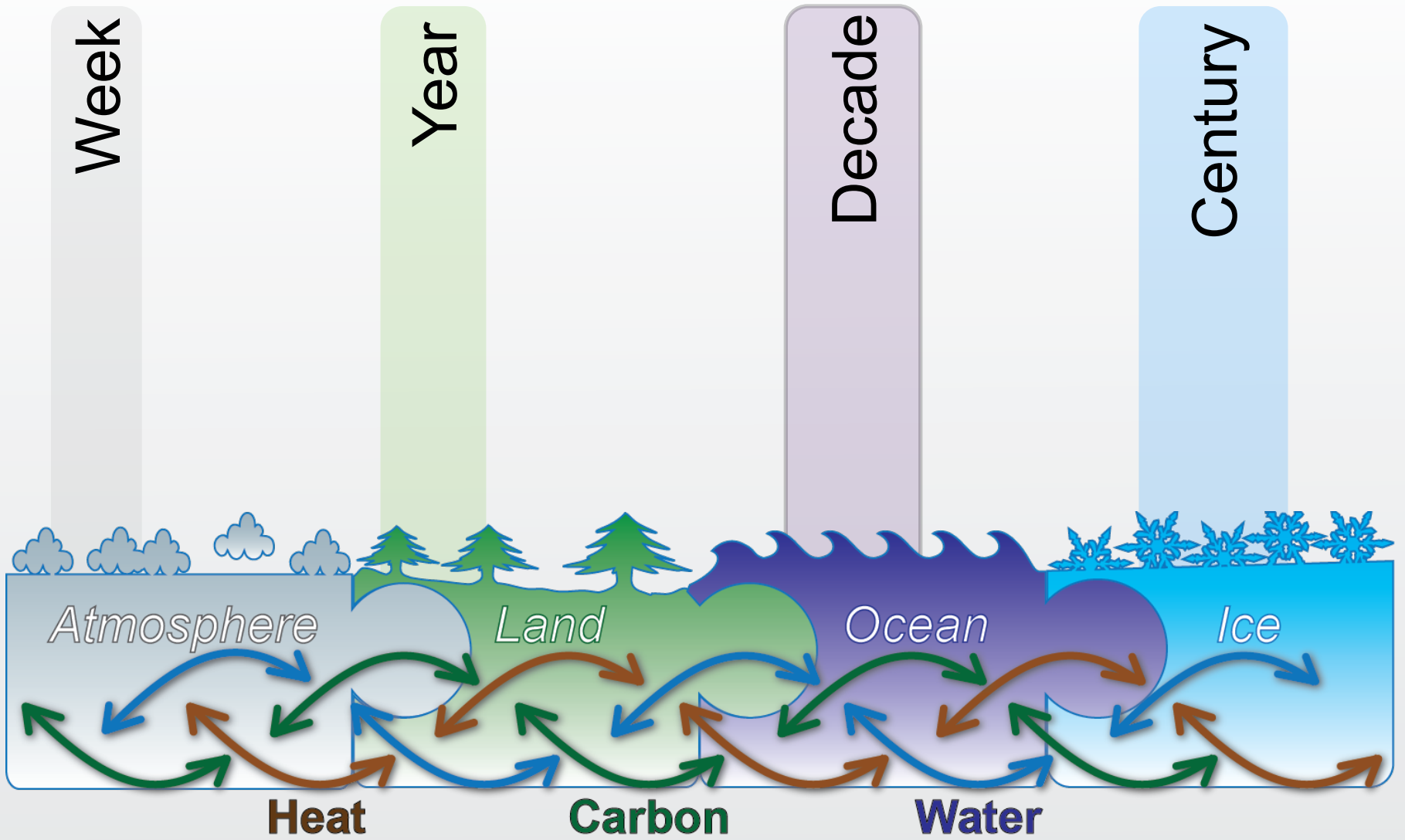


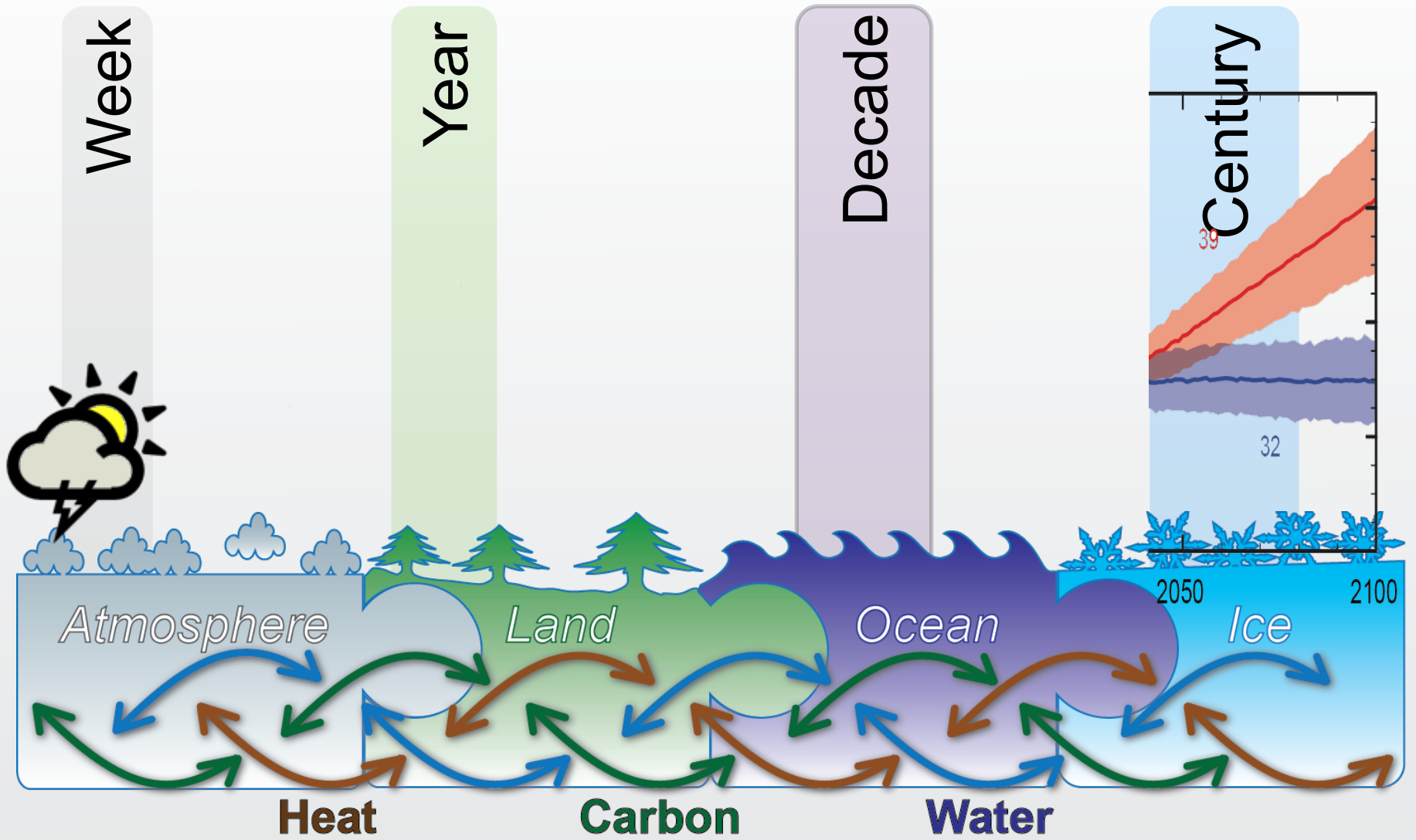
The Strategic Position of WCRP





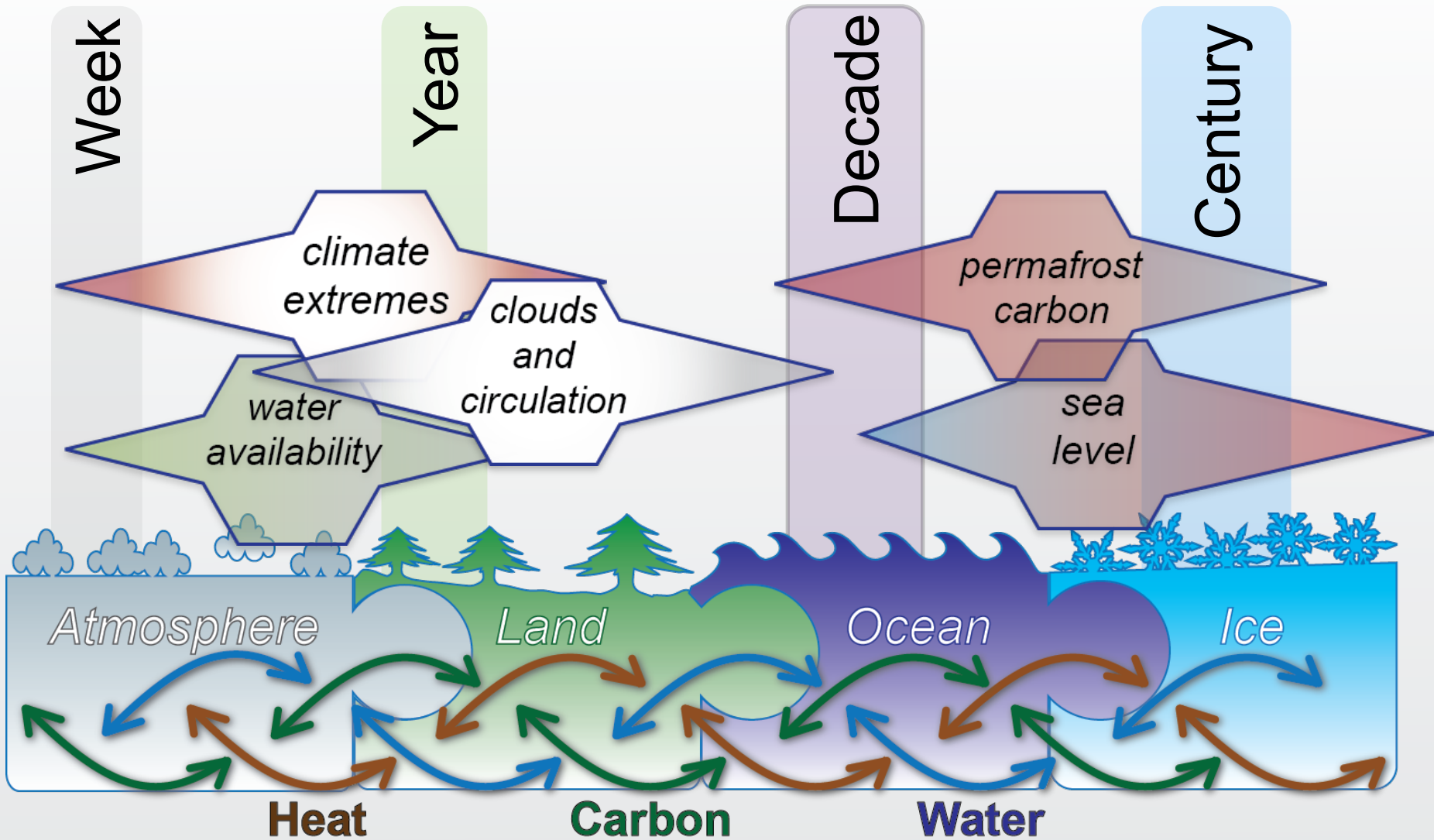


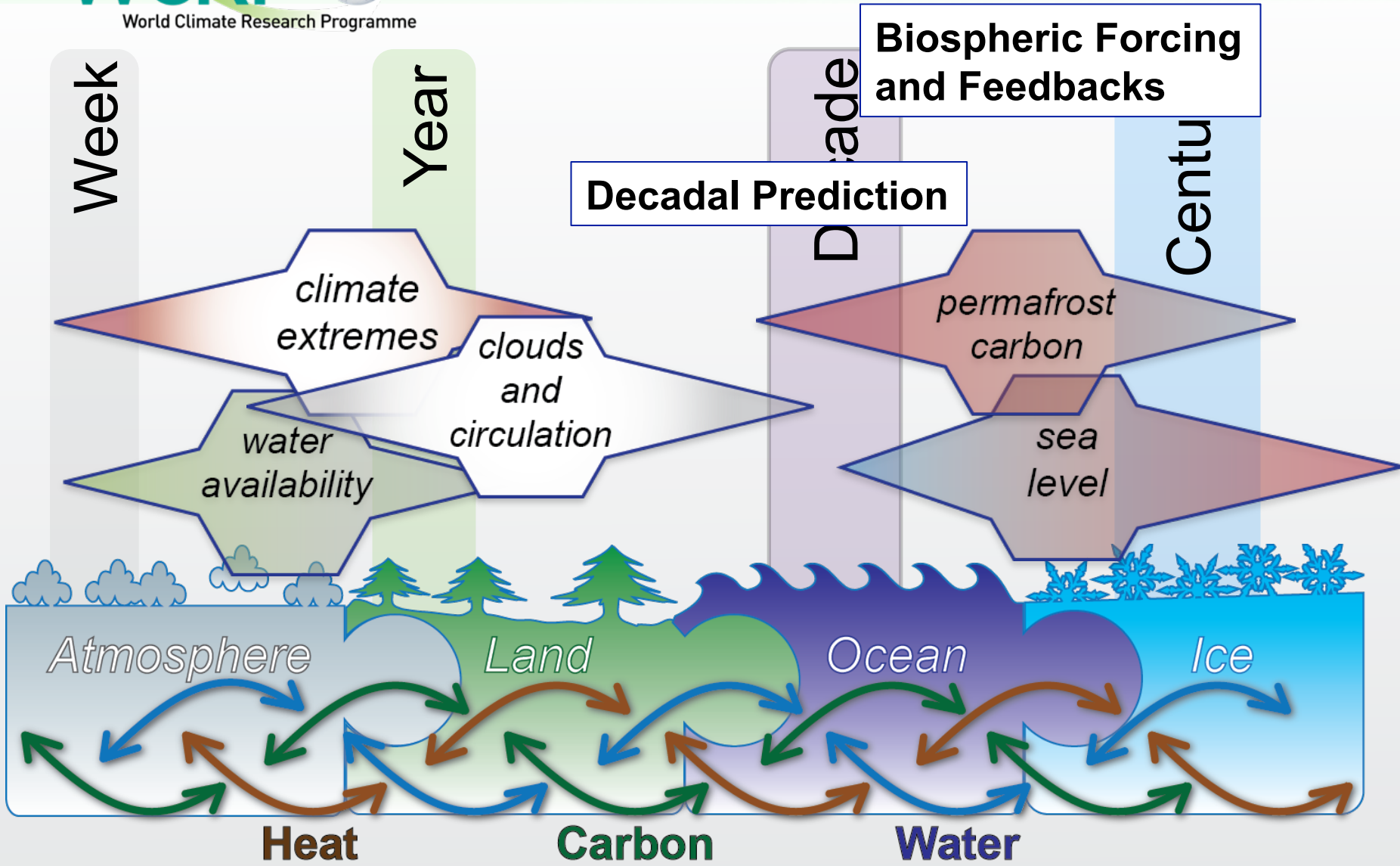




12 Strategic Directions (Part 1)

- 1. Support frontier research
- 2. Support the core projects (CLIC, CLIVAR, GEWEX, SPARC)
- 3. Make the Grand Challenges successful





CMIP6

CLIVAR

Experiments Analysis

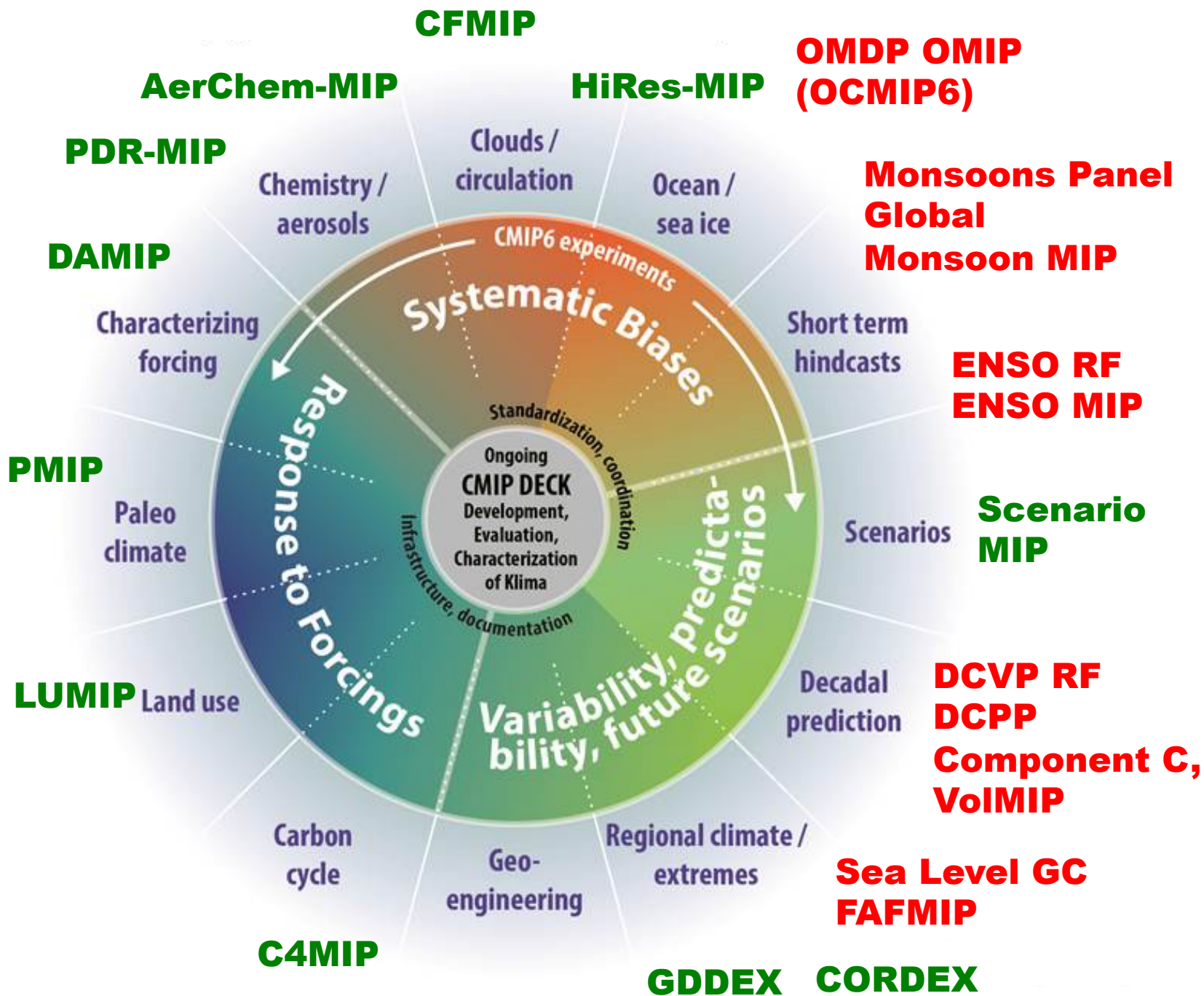


Table 1. Overview of the 21 CMIP6-Endorsed MIPs endorsed by mid-August 2015. MIPs marked with * are “Diagnostic MIPS”.

	Short name of MIP	Long name of MIP
1	AerChemMIP	Aerosols and Chemistry Model Intercomparison Project
2	C4MIP	Coupled Climate Carbon Cycle Model Intercomparison Project
3	CFMIP	Cloud Feedback Model Intercomparison Project
4	DAMIP	Detection and Attribution Model Intercomparison Project
5	DCPP	Decadal Climate Prediction Project
6	FAFMIP	Flux-Anomaly-Forced Model Intercomparison Project
7	GeoMIP	Geoengineering Model Intercomparison Project
8	GMMIP	Global Monsoons Model Intercomparison Project
9	HighResMIP	High Resolution Model Intercomparison Project
10	ISMIP6	Ice Sheet Model Intercomparison Project for CMIP6
11	LS3MIP	Land Surface, Snow and Soil Moisture
12	LUMIP	Land-Use Model Intercomparison Project
13	OMIP	Ocean Model Intercomparison Project
14	PMIP	Palaeoclimate Modelling Intercomparison Project
15	RFMIP	Radiative Forcing Model Intercomparison Project
16	ScenarioMIP	Scenario Model Intercomparison Project
17	VolMIP	Volcanic Forcings Model Intercomparison Project
18	CORDEX*	Coordinated Regional Climate Downscaling Experiment
19	DynVar*	Dynamics and Variability of the Stratosphere-Troposphere System
20	SIMIP*	Sea-Ice Model Intercomparison Project
21	VIACS AB*	VIACS Advisory Board for CMIP6

12 Strategic Directions (Part 2)

- 4. Introduce a few new research themes
- 5. Develop an active interface with downstream activities
- 6. Enhance WCRP's regional presence

Introduce New Research Themes

- The WCRP-IPCC meeting in Bern has highlighted several new themes:
 - Climate modes of variability, climate cycles, **seasonal-to-decadal** predictions
 - The dynamics, physics and biogeochemistry of the **ocean**
 - The **biogeochemical cycle** of carbon and other elements
 - **Aerosols, clouds, atmospheric chemistry**
 - **Urbanization** and climate change

Develop an two-way interface between WCRP and “downstream” activities

- We should establish a permanent process by which WCRP synthesizes **relevant** scientific information and **provides regional information** to relevant institutionalized groups including:
 - IPCC
 - Future Earth
 - Global Framework for Climate Services (GFCS)
 - Climate Information Providers (e.g. ECMWF C3S initiative, national climate services, weather services)
- This **interface** should support **two-way** interactions and information exchanges

Enhance the Regional Presence of WCRP

- WCRP is developing a multi-year strategy that supports the organization of **regionally focused activities** with related workshops and symposia organized in **cooperation** with regional institutions (e.g., space agencies, meteorological services) to attract and **involve regional scientists**.
- Climate Research for Development (CR4D) in Africa and Latin America Climate Change (LACC) initiatives are excellent examples of such decentralized activities.

12 Strategic Directions (Part 3)

- 7. Develop a sustained capacity development program
- 8. Simplify the organizational structure of WCRP
- 9. Promote diversity
- 10. Develop a new public relation/ communication approach
- 11. Enhance the role of JSC members
- 12. Develop a long-term funding strategy

Some other ideas

- Out-of-the-box science workshop
- Science in support of society (to be organized by climate services)
- WCRP Regional Advisory Committee
- Focusing regional role of WCRP as an interface between WCRP research and service organizations
- CORDEX closer to CMIP
- Support of the YESS group of emerging scientists
- New role of JSC members
- New approaches to improve financial situation
- Outreach: strategic plan, brochures, visits to national funding agencies (how can we support them)

WCRP CLIVAR Open Science Conference

September 2016

➤ **Three segments**

- Early Career Scientists Symposium (2.5 days)
- Regional stakeholder forum (1 day)
- Main Conference (4.5 days)

➤ **Estimated participants: 600**

➤ **Scientific Organizing Committee**

- WCRP projects, WMAC groups, and partner projects

➤ **Sponsored by China SOA FIO**

➤ **Support sought from USCLIVAR, SCOR, APN, START, ICES, PICES...*fundraising launched!!***



A satellite view of Earth from space, showing the Atlantic Ocean, parts of North and South America, and Europe. The image is centered on the Atlantic Ocean, with the Americas on the left and Europe on the right. The text "Thank you !" is overlaid in the center of the image.

Thank you !

SeaWiFS Project (NASA/GSFC et Orbimage)