

WCRP Statement for SBSTA 47, November 2017

To be delivered by Professor Guy Brasseur, Chair of WCRP Joint Scientific Committee

The World Climate Research Programme, on behalf of thousands of dedicated climate scientists worldwide, welcomes this opportunity to address and contribute to SBSTA 46.

Our continuing role is to provide the best information possible on the current and future climate of our planet. After the Fifth Assessment Report (AR5), the Intergovernmental Panel on Climate Change (IPCC) continuously relies on the **Coupled Model Intercomparison Project (CMIP)**, a collaborative climate modelling process coordinated by WCRP. The WCRP community now works diligently on the 6th phase of CMIP at climate centres around the world to produce advanced analyses that make the basis for the IPCC's Sixth Assessment Report.

WCRP's focused effort to improve understanding on the climate process – combined with skilfully-assembled data sets, dedicated advocacy on free and open access policy, rigorous analyses and modelling – has enabled scientists in the world to contribute time and information to **community-based indicators of the climate system**. We are pleased to share with you of the latest development in taking stock of the **Earth's energy imbalance**, and earnestly seek your participation in extending systematic observation and data archiving for ocean heat content and net flux at Top Of Atmosphere (ToA). Various space-based and in-situ observing systems now allow to study the **global mean sea level budget** and to analyse respective contributions, both in terms of trend and interannual variability. CORDEX, WCRP's coordinated effort for **regional downscaling**, joins climate data to climate information to be applied for regional users.

Meanwhile, allow me to take this opportunity to re-emphasize the incomplete status of our knowledge. State of climate science is far from its completion to understand the future changes with confidence. Emerging questions of cross-disciplinary nature require basic science to push further the boundaries in knowledge on basic climate processes and their future changes. **Continuous support for fundamental science** is crucial in ensuring our climate actions kept in a sustainable direction.

Thank you for your attention.