

nederlandse



natuurkundige vereniging

**Symposium 'Climate, seas and oceans'**  
***Current status and latest developments in modeling,  
observations and processes***

**Locatie: DIFFER, Eindhoven**  
**Vrijdag 9 september 2022**

**Summary of the findings of the 6<sup>th</sup> assessment IPCC report**

Rob van Dorland (KNMI and Head of Delegation at the IPCC plenary sessions)

The Intergovernmental Panel on Climate Change (IPCC) Working Group I Session approved the *Summary for Policy Makers (SPM)* of the first part of the IPCC Sixth Assessment Report, *Climate Change 2021: the Physical Science Basis*, at the 6<sup>th</sup> of August 2021. The 54<sup>th</sup> IPCC Plenary Session accepted the SPM and the underlying 12 chapters of the WGI report including supplementary material and annexes. Due to the Covid-19 pandemic, for the first time an IPCC report was adopted in a virtual format.

The report addresses the most updated physical understanding of the climate system combining multiple lines of evidence from observations, paleorecords, process understanding, and from global and regional climate simulations. It shows how and why climate has changed to date and provides regional information for climate risk assessments. The report also assesses how the climate responds to five illustrative greenhouse gas emission pathways, including very low and low emissions that align with the Paris Agreement's goals.

The science is clear: current climate change is unprecedented, fast and many changes are irreversible, humans have caused this change, and further warming will lead to a climate state that is unknown to humanity, including new and compound extreme events, and strong and sustained reductions in emissions of carbon dioxide (CO<sub>2</sub>) and other greenhouse gases would limit climate change and its consequences.

This presentation will take you through the main conclusions and updated insights in the physical aspects of climate change. Also, the process of approval of the Summary for Policy Makers will be highlighted.