



Asia-Pacific Climate Change Adaptation Information Platform

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What is **AP-PLAT**?

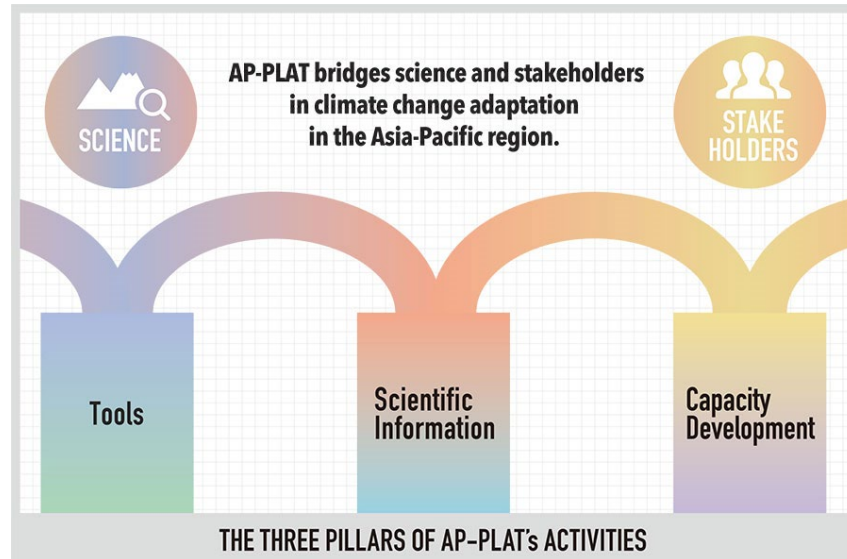
AP-PLAT is a web-based information platform on climate change adaptation in Asia-Pacific region.

AP-PLAT was established in Jun. 2019
on the G20 Ministerial Meeting



Promoting climate change adaptation
by providing

1. Scientific information
2. Scientific tools
3. Capacity development.



Kintai Bridge



In Iwakuni city

Why does CCCA develop **AP-PLAT**?

Climate Change Adaptation Act has been enforced since Dec. 2019.

■ **Article 18: Promotion of International Cooperation**

The national government shall develop **an international system for sharing information on Climate Change**, etc., as well as endeavor to develop international cooperation including technical cooperation for developing areas for Climate Change Adaptation.



(Asia-Pacific Climate Change Adaptation Platform)

Scientific information



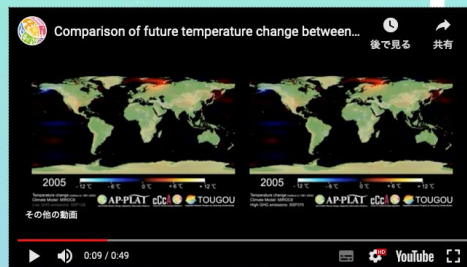
CLIMATE CHANGE

Climate change is an undeniable phenomenon. The latest scientific findings highlight the impacts of anthropogenic activities on the climate in the past and future; additionally, the findings indicate that global temperatures are increasing faster than expected, which is why carbon neutrality should be achieved as soon as possible.

CLIMATE CHANGE →

TEMPERATURE PROJECTION VIDEO

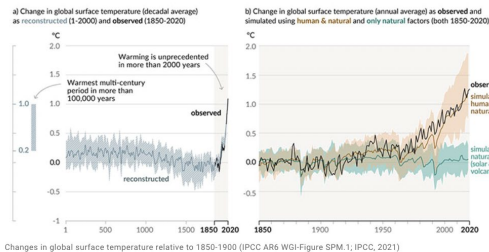
Climate models are primary tools to investigate the responses of the climate system to various influencing factors that can facilitate climate predictions from seasonal to decadal time scales, and project future climate. This animation shows the changes in air temperature (2 m from the ground surface) at each point on Earth starting from early 1980s to the future using a projection by climate models, such as the Model for Interdisciplinary Research on Climate version 6 (MIROC6).



Is the climate really changing?

Yes, the climate is changing. The global surface temperature was 1.09 °C higher in 2011–2020 than in 1850–1900. Extreme weather events, such as heatwaves, droughts, and floods, are being observed more frequently.

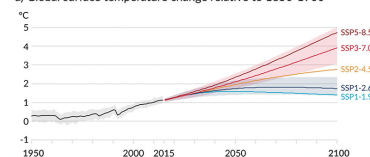
Changes in global surface temperature relative to 1850–1900



What about the future?

The increase in the global mean surface temperatures for 2081–2100 relative to 1850–1900 is projected to range from 1.0 °C to 5.7 °C.

a) Global surface temperature change relative to 1850–1900



Global surface temperature changes in °C relative to 1850–1900. (IPCC AR6 WGII Figure SPM.9; IPCC, 2021) These changes were obtained by combining CMIP6 model simulations with observational constraints based on past simulated warming, as well as an updated assessment of equilibrium climate sensitivity. Changes relative to 1850–1900 based on 20-year averaging periods are calculated by adding 0.85 °C (the observed global surface temperature increase from 1850–1900 to 1995–2014) to simulated changes relative to 1995–2014. Very likely ranges (shading) are shown for SSP1-2.6 and SSP3-7.0.

These ranges are associated with uncertainties of future projections in socio-economic pathways and climate models (see 'How is future climate projected?' section). In the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), the scientific community assessed the climate response to five scenarios that include the possible future development of anthropogenic drivers of climate change that have been studied previously. The scenarios include those with high and very high GHG emissions (SSP3–7.0 and SSP5–8.5, respectively) and with CO2 emissions that are approximately twice the current levels by 2100 and 2050, respectively, scenarios with intermediate GHG emissions (SSP2–4.5) and CO2 emissions maintained near current levels until the mid-century, and scenarios with very low and low GHG emissions and CO2 emissions declining to net zero around or after 2050, followed by varying levels of net negative CO2 emissions (SSP1–1.9 and SSP1–2.6, respectively) (IPCC AR6 WGII, 2021). The Fifth Assessment Report of the IPCC used a set of four scenarios denoted as representative concentration pathways (RCPs). They are identified by their approximate total radiative forcing in the year 2100 relative to 1750: 2.6 W m⁻² for RCP2.6, 4.5 W m⁻² for RCP4.5, 6.0 W m⁻² for RCP6.0, and 8.5 W m⁻² for RCP8.5. These four RCPs include one mitigation scenario leading to a low forcing level (RCP2.6), two stabilization scenarios (RCP4.5 and RCP6.0), and one scenario with very high GHG emissions (RCP8.5).

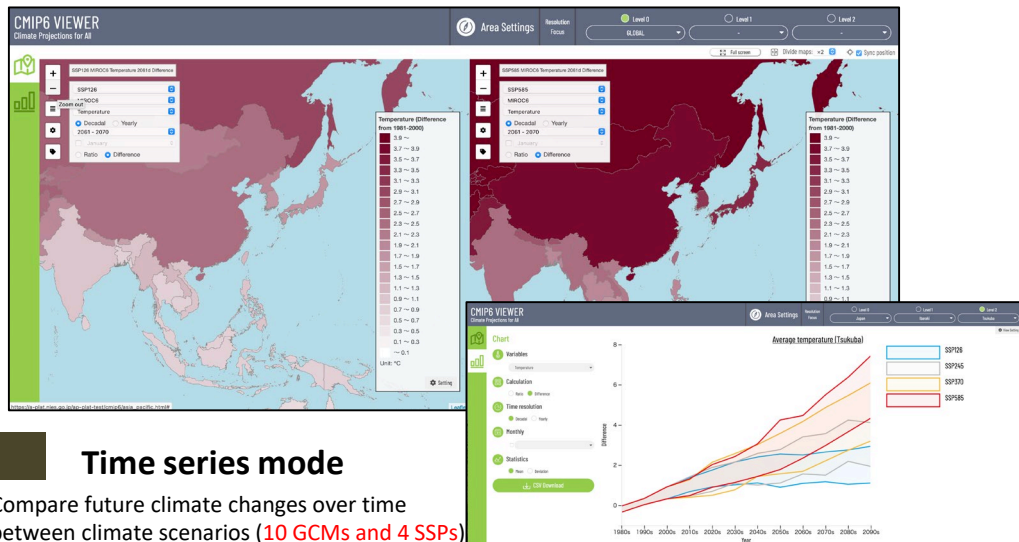
We provide basic information on climate change

Scientific tools

ClimoCast (CMIP6 Climate Viewer)

Map mode

You can geographically compare future climates between climate scenarios (10 GCMs and 4 SSPs)



Time series mode

Compare future climate changes over time between climate scenarios (10 GCMs and 4 SSPs)

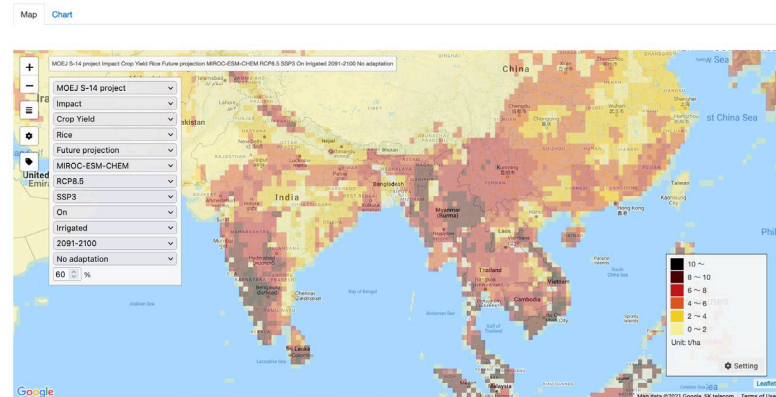
You can download data in CSV format by one click

Climate Impact Viewer

Map viewer

You can geographically understand climate change impacts and the effect of adaptation

AP-PLAT CLIMATE IMPACT VIEWER



A wide range of sectors

Extreme weather, Sea level rise, Health, Agriculture, Water resources, and Ecosystem

ClimoKit (Database of tools and data)



HOME > SCIENTIFIC DATA & TOOLS

ClimoKit is a database of free online scientific data and tools for climate change adaptation planning and action.

Instructions

ClimoKit allows you to filter listed resources by information type, sector/theme, and region.

In the information type filter, you can choose data or tool type (or both). While the definition of these terms varies, in the ClimoKit database they are defined as follows:

- Data** The resource is categorized as data if it gives you direct access to various data, which can be in the form of a map, a downloadable csv file, an online database and so on. "Data" resources are often easy to use and navigate.
- Tool** The resource is categorized as tool if it involves processing specific input data to produce a unique set of output data. "Tool" resources may require specific computer skills or knowledge for the user to take full advantage of them.

Type: Sector/Theme: Region: type keyword Search Reset

58 results

ClimoCast

National Institute for Environmental Studies (NIES), Japan

ClimoCast is a climate projection tool that shows climate projections up to the year 2100 in four representative greenhouse gas emissions scenarios (SSP126 - S85) and ten major climate simulation models. The tool covers all countries and allows users to compare different scenarios and models, as well as downscale the results to sub-national level. Climate data can be downloaded in CSV format.



- Type: Data, Tool
- Sector/Theme: Climate
- Region: Global

Climate Impact Viewer

National Institute for Environmental Studies (NIES), Japan

Climate Impact Viewer shows the results of a climate change impact assessment based on the Integrated Climate Assessment - Risks, Uncertainties and Society (ICA-RUS) and Comprehensive Research on the Development of Global Climate Change Risk Management Strategies (S-10 Strategic Research Project) supported by the Environment Research and Technology Development Fund of the Ministry of the Environment of Japan. Process-based impact models for multiple sectors were used for future influence projections.



- Type: Data
- Sector/Theme: Climate, Coast, Disaster, Food, Water
- Region: Global

G-Portal (Global Portal System)

Japan Aerospace Exploration Agency (JAXA)

G-Portal offers earth observation data free of charge for use in various fields. It is a portal system allowing users to search and download products acquired by JAXA's Earth observation satellite. Data are searchable from various geophysical quantities (precipitation, snow depth, vegetation, ocean color, etc.) classified by atmosphere, cryosphere, terrestrial and ocean groups. Data are also searchable by spacecraft/sensor. No registration is required for download.



- Type: Data
- Sector/Theme: Climate
- Region: Global

GEOGLAM Crop Monitor

Group on Earth Observations Global Agricultural Monitoring Initiative (GEOGLAM)

Crop Monitor provides open, timely, and science-driven information on crop conditions in support of market transparency (Crop Monitor for AMIS) and early warning of production shortfalls (Crop Monitor for Early Warning). It focuses on four primary crops: wheat, maize, rice, and soybeans. The Crop Monitor for AMIS, developed for the G20 Agricultural Market Information System (AMIS), is an internationally recognized source of information on global crop prospects. It brings together over 40 partners from national, regional (e.g., sub-continental) and global monitoring systems, space agencies, agriculture organizations and universities. The Crop Monitor for Early Warning (CMAEW) is a source of reliable information on crop conditions in vulnerable countries at risk of food often used to inform humanitarian allocation and assistance.



- Type: Data
- Sector/Theme: Climate, Disaster, Food, Water
- Region: Global

GIEWS Data & Tools

Food and Agriculture Organization of the United Nations (FAO)

GIEWS (Global Information and Early Warning System on Food and Agriculture) monitors food supply and demand and other key indicators for assessing the food security situation in all countries. GIEWS collects various data for its activities, and to facilitate widespread use of these datasets in the policy making by individual countries, it has developed several web-based tools: Country Cereal Balance Sheet, Food Price Monitoring and Analysis (FPMA) Tool, Earth Observation for Crop Monitoring, and Food Aid Shipments.



- Type: Data
- Sector/Theme: Climate, Food
- Region: Global

E-learning contents



HOME > ADAPTATION LITERACY

RESOURCES



E-LEARNING COURSES

We are developing self-paced e-learning videos for the emerging adaptation issues such as Nature-based Solutions. Start now to learn.



WEBINARS

Past collaborative activities with key institutions to promote knowledge exchange are available here. Get access to our past webinars here.



TOOLS

Applying appropriate scientific tools is essential to plan, implement, monitor, and finance adaptation projects. Explore our datasets and state-of-the-art applications for forecasting future climate impacts under different scenarios.

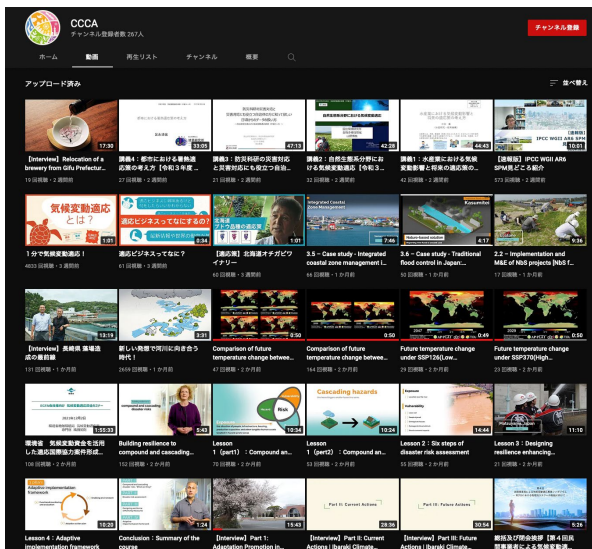
A screenshot of a YouTube channel page for 'ccca nbs'. The page shows a list of videos related to Nature-based Solutions (NBS). The videos include 'Cccta, different tags - ACROBiosystems', 'Antigen mutants for VoCs', '3.1 - Learn with case studies[NbS for the local communities]', '1.2 - The four types of Nature-based Solutions[NbS for the local communities]', 'Conclusion and course wrap-up[NbS for the local communities]', and '2.1 - Use NbS in your project development with a four-step process.[NbS for the local communities]'. Each video has a thumbnail, title, view count, and upload date.

Youtube

<https://www.youtube.com/channel/UCYy-YwbZEFNwVpWDwr2zJew/videos>



CCCA
channel



AP-PLAT Seminar@



COP27
SHARM EL-SHEIKH
EGYPT 2022

Hybrid

Nov 11 (Fri.)

10:30-12:30@Egypt (17:30-19:30@Tokyo)

JAPAN Pavilion Seminar at COP27
Sharm el-Sheikh Climate Change Conference, Egypt

Formulation and Implementation of National Adaptation Plans (NAPs) in the Asia Pacific

- Establishing a System to Promote Adaptation Towards
the Achievement of the Global Goal on Adaptation (GGA)

Date & Time

2022. 11.11 (Fri)

10:30-12:30 EET (17:30-19:30 JST)

Venue JAPAN Pavilion

Zoom: <https://us02web.zoom.us/join/9t0ZtWtYqSc73TR>



Effective formulation and implementation of National Adaptation Plans (NAPs) are essential to achieving climate resilience in the Asia-Pacific region, which is home to more than 50% of the global population and includes some of the world's most climate-vulnerable communities. The purpose of this session is to highlight the significance of NAP formulation and implementation based on the latest scientific findings and to review the current situation, good practices, initiatives, and challenges in addressing the impacts of climate change in the Asia-Pacific region.

Opening remarks

Mr. Hiroshi Ono

Vice-Minister for Global Environmental Affairs, Ministry of the Environment, Japan

SPEAKERS

Mr. Genichiro Tsukada, Director, Climate Change Adaptation Office, Ministry of the Environment (MOE), Japan

Mr. Augusto Manuel Pinto, NDCC Director/National Focal Point (NFP-UNFCCC) at National Directorate of Climate Change (NDCC),

Secretary of State for the Environment, Timor-Leste

Mr. Mizanul Hoque Chowdhury, Additional Secretary, Ministry of Environment, Forest and Climate Change (MoEFCC) and National

Project Director of the NAP Formulation project, Bangladesh

Prof. Rajib Shaw, Professor, Keio University

Ms. Akane Matsuo, IGES Policy Researcher, Institute for Global Environmental Strategies (IGES)

Dr. Yuji Masutomi, Section Head, Center for Climate Change Adaptation (CCCCA), National Institute for Environmental Studies (NIES)

Dr. Linda Anne Stevenson, Head of Knowledge Management and Scientific Affairs, Asia-Pacific Network for Global Change Research (APN)

Closing remarks

Mr. Yasuo Takahashi

Executive Director, Institute for Global Environmental Strategies (IGES)

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Summary

AP-PLAT bridges between stakeholders and scientists by providing scientific information and data to promote adaptive actions in Asia-Pacific region.



Thank you for your attention