CMIP6 Climate Projection Tool
ClimoCast

With ClimoCast you can see future climate projections on the map, compare climate scenarios and download the data.

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Main concept: *Climate Projections for ALL*

We deliver latest climate projections to *everyone*.

Sub concept: *Quick and easy access*

*By using ClimoCast, you can climate projections the fastest and easiest.*
Goals and approach for training

• 【Minimum】: You can recognize and remember ClimoCast
• 【Intermediate】: You can get climate data through ClimoCast
• 【Final】: You use ClimoCast in your work

• Approach

Lectures **Iterative** Exercises
Step0: Go to ClimoCast!!

Search “ClimoCast” in Google and click it

or https://a-plat.nies.go.jp/ap-plat/cmip6/global.html
STEP 1-1: Area setting

Here

Level0: Country
Level1: Province
Level2: City

Sorry, for Maldives, no level 1 and 2
STEP 1-2: Click “CSV Download”

- Save it to your PC and open it.

The value shows temperature increase in your town!!
Exercise 1: Answer temperature increase in your town
**STEP2: Change setting**

① Emission scenario
- SSP126: Low
- SSP245: Intermediate
- SSP370: High
- SSP585: Very high

② Climate model (10 Climate models)
- There are many climate projections provided by different climate models.
- 10 Climate model projections are included in ClimoCast.
- Different climate models show different climate projections.
- It is impossible to know best or worst models at this stage.
  - You must not ask which one is best?
  - **Climate model uncertainty**
STEP 2: Change setting

③ Variable
- Average temperature
- Minimum temperature
- Maximum temperature
- Precipitation

④ Period
- Decadal or yearly
- 1981-2000

⑤ Monthly
- You can select Jun-Dec if you check

⑥ Calculation
- Ratio: ratio to 1981-2000 (for precipitation)
- Difference: difference from 1981-2000 (for temperature)
Exercise 2-1 (Emission scenario)

• i: Answer how much degree will maximum temperature (Variable) increase in your town in 2091-2100 (Period) under SSP126 (Emission scenario) according to MIROC6 (Climate model)?

• ii: Answer how much degree will maximum temperature (Variable) increase in your town in 2091-2100 (Period) under SSP370 (Emission scenario) according to MIROC6 (Climate model)?

• iii: Which emission scenario show higher maximum temp. increase and how much is the difference?
  • It shows the effect of mitigation!!
Exercise 2-2 (Climate model)

• i: Answer how much degree will maximum temperature (Variable) increase in your town in 2091-2100 (Period) under SSP370 (Emission scenario) according to UKESM1-0-LL (Climate model)?

• ii: Which climate model (MIROC and UKESM1-0-LL) show higher maximum temp. increase and how much is the difference?
STEP3: Chart mode

• The graph shows each projection of climate models and emission scenarios.

• You can understand climate change over time through the graph.

• You can download all projection data for the area you selected.
  • You can analyze the data
  • You can make tables and figures in your favorite style.
STEP3: Chart mode

① Area setting
② Chart setting
③ Download
STEP3: Chart mode

④ You can change climate projections shown in the graph
Step 4: Map mode

- You can geographically understand climate change in your country and province.
  - You can geographically compare climate change across countries, provinces, and towns.
  - Which province will have highest temperature increase?
Step 4: Map mode (Change region by hands)

① Zoom in and out
② Scroll the map
STEP5: Map mode (Split view)

① Split view (1, 2, or 4 maps)
② Synchronize the maps
Tutorial series on ClimoCast at Youtube

• Introduction
  • https://www.youtube.com/watch?v=WMr4EWnFenQ

• Map mode
  • https://www.youtube.com/watch?v=iO6DUSnqnHM

• Chart mode
  • https://www.youtube.com/watch?v=qnRK3el5Wqo

• Conclusion
  • https://www.youtube.com/watch?v=HGGjMfw4zyw
Goals

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• 【Final】: You use ClimoCast in your work

Thank you so much
Contact me if you have any questions about AP-PLAT and tools.

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