



# Using the CMIP6 Data

A starting guide for your All Climate Is Local project

## OVERVIEW

The CMIP6 Climate Dataset has been used along with historical climate data by researchers at the Native Climate project to predict climate futures at 34 Tribal Colleges and Universities. These projections show a variety of potential future conditions up to the year 2100, calculated for four possible Shared Socioeconomic Pathways (SSPs). Each SSP represents a different course humanity may take, from increasing our reliance on fossil fuels and causing rising emissions, to a future in which we work to preserve our ecosystems and implement better environmental policies. These data also cover a wide range of variables beyond temperature, including wind speeds, precipitation, growing seasons, number of days with extreme heat, and more.

## ACCESSING THE DATA

1. Visit the Data Projections page on the Native Climate website by following the link here: <https://native-climate.com/climate-data/607-2/>
2. Read the page information on the dataset. Click on the button which says “Go to the Data”. This will bring you to the data download page.
3. Select your Tribal College or University and click on the name to download.
4. Once the file has downloaded, open your documents and right click on the zipped file icon. Select “Extract all”.
5. Click on the file folder to access extracted files. The folder will contain an excel document with the climate data and a PDF document with more information and a set of graphs based on the statistics.

## YOUR PROJECT

These projects are an opportunity for you to tell your climate story, your way. The numbers presented on the spreadsheet translate into tangible effects like dry rivers, heatstroke, loss of traditional plants, and altered landscapes. Is there a particular set of statistics which relates to your experiences? For example, changing growing seasons may have a special resonance with you if you live in an agricultural community or if gardening is an important part of your traditions.

---

Datasets also contain both historical and future statistics, creating an opportunity to tell intergenerational stories. While historical statistics are valuable, personal testimonies can add tremendous depth to the data. Thinking towards the future, younger generations who have grown up with constant awareness of global warming may have unique perspectives on how climate change will influence their lives.

Separate data for the four SSPs provides a different avenue of interpretation. How significant will the impact be on your community if we fail to cut our emissions? Many tribal nations are already doing significant work to address climate issues. What kind of local initiatives might make a difference on that outcome?

Choose an approach which is applicable to your community and your experiences. You are not expected to incorporate the entire dataset, but to use it as an inspiration to tell your own story.

## **ADDITIONAL RESOURCES**

You may draw upon a large number of references for researching and creating your project, or it may be based upon interviews with members of your community and your lived experiences. However, gaining more context for local climate data may be useful. Native Climate partners with the [USDA climate hubs](#) which are reliable sources of information about the latest regional climate issues. The [US Climate Resilience Toolkit](#) also offers excellent regional summaries of climate issues and relevant resources, and has a section dedicated to tribal climate issues.

The Native Climate website also has several articles highlighting the intersection of climate data and traditional ecological knowledge which you may find useful while formulating your project. Read about willow restoration in Nevada [here](#), and wind management using traditional methods on the Blackfeet reservation [here](#). Check our [news](#) page for more stories and updates.

ACL team members are standing by to assist in your projects! If you have any questions about the project guidelines or climate data, please email Kyle Bocinsky at the ACL email address, [allclimateislocal@gmail.com](mailto:allclimateislocal@gmail.com). Kyle or ACL data intern Faith Wells will get back to you ASAP.

## **PROJECT TIMELINE**

ACL team members will host office hour-style check-ins on Monday, January 30 and Monday, February 27, from 10:00–noon (Mountain Time). This is an opportunity to chat with team members about your project, get any questions you have answered, and get any other assistance you may need. We will add additional dates and times for check-ins if necessary.

---

A draft of your story/project is due Wednesday March 15, emailed to [allclimateislocal@gmail.com](mailto:allclimateislocal@gmail.com). If your project itself isn't easily emailed (say, if it is a piece of art), please send an email describing your project and progress towards completion. ACL team members will review your project and give comments or any last-minute assistance.

We are aiming to host an All Climate is Local student workshop towards the end of April, either virtually or in person, so that project participants may share their work. We will follow up soon with more details.