

Group meeting

6/26/24

Yunlong Pan

Outline

- ChatIAMs
 - Application
 - Assistant API
 - Web
 - Research
 - Level 2 Experiments

Assistant API

- Q: What's Assistant API?
- <https://platform.openai.com/docs/assistants/overview>

Assistants API Beta

The Assistants API allows you to build AI assistants within your own applications. An Assistant has instructions and can leverage models, tools, and files to respond to user queries. The Assistants API currently supports three types of tools: **Code Interpreter, File Search, and Function calling**.

You can explore the capabilities of the Assistants API using the [Assistants playground](#) or by building a step-by-step integration outlined in this guide.

Overview

A typical integration of the Assistants API has the following flow:

- 1 Create an **Assistant** by defining its custom instructions and picking a model. If helpful, add files and enable tools like Code Interpreter, File Search, and Function calling.
- 2 Create a **Thread** when a user starts a conversation.
- 3 Add **Messages** to the Thread as the user asks questions.
- 4 **Run** the Assistant on the Thread to generate a response by calling the model and the tools.

This starter guide walks through the key steps to create and run an Assistant that uses **Code Interpreter**. In this example, we're **creating an Assistant** that is a personal math tutor, with the Code Interpreter tool enabled.

Assistant API

- Why Assistant API?
- Ex1: When the Surface Air Temperature will Change about 2 degree under ssp 585?



A chatbot enhanced by [IAMs](#) from [IPCC](#)



When the Surface Air Temperature will Change about 2 degree under ssp 585?



The Surface Air Temperature Change reaches approximately 2 degrees Celsius under the SSP 585 scenario around the year **2042**.

If you need further analysis or details, feel free to ask!

Assistant API

- Why Assistant API?
- Ex2: Which scenario that we can limit Surface Air Temperature Change 1.5 degree in 2100?



A chatbot enhanced by [IAMS](#) from [IPCC](#)



Which scenario that we can limit Surface Air Temperature Change 1.5 degree in 2100?



The scenarios where the Surface Air Temperature Change is limited to 1.5 degrees Celsius by 2100 are:

1. Model: IMAGE, Quantile: 0.005, Scenario: ssp119, Temperature Change: 1.26 K
2. Model: IMAGE, Quantile: 0.025, Scenario: ssp119, Temperature Change: 1.27 K
3. Model: IMAGE, Quantile: 0.500, Scenario: ssp119, Temperature Change: 1.50 K

All these scenarios correspond to the "ssp119" scenario, suggesting that it is a key scenario for limiting global temperature rise to 1.5 degrees Celsius by 2100.

Web

- <https://github.com/yl1127/ChatIAMs>
- [IAMs](#)
- [IPCC Annex III: Scenarios and Modelling Methods](#)

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OpenAI API Key

[Get an OpenAI API key](#)

[View the web source code](#)

[Open in GitHub y1127](#)

Available Variables:

- Surface Air Temperature Change
- Atmospheric Concentrations(CO2)
- Effective Radiative Forcing
- Effective Radiative Forcing(CO2)
- Effective Radiative Forcing(Aerosols)
 - Effective Radiative Forcing(Aerosols|Direct Effect|BC
 - Effective Radiative Forcing(Aerosols|Direct Effect|OC
 - Effective Radiative Forcing(Aerosols|Direct Effect|SOx
 - Effective Radiative Forcing(Aerosols|Direct Effect
 - Effective Radiative Forcing(Aerosols|Indirect Effect
- Sea Level Change

Available Scenarios:

- ssp119
- ssp126
- ssp245
- ssp370
- ssp460
- ssp585

Available Year:

From 2024 to 2100



Deploy ⓘ

Level 2 Experiments

- ClimateX
- << ClimRetrieve: A Benchmarking Dataset for Information Retrieval from Corporate Climate Disclosures>>
 - Authors: Tobias Schimanski, Jingwei Ni, Roberto Spacey, Nicola Ranger, Markus Leippold
 - Submitted on *14 Jun 2024*
 - <https://arxiv.org/abs/2406.09818>
 - <https://github.com/anomized-for-submission>

Next week

- Application
 - Add source or reference(search tool)
 - Overall summary 2050s
 - Web (Assistant API)
- Research (Paper)
 - ClimateX
 - << ClimRetrieve: A Benchmarking Dataset for Information Retrieval from Corporate Climate Disclosures>>

Discussion