# twinlab.Emulator.plot

**Emulator.plot(*x_axis, y_axis, x_fixed={}, params=<twinlab.params.PredictParams object>, x_lim=None, n_points=100, label='Emulator', color='#009FE3', verbose=False*)**

Plot the predictions from an emulator across a single dimension with one and two standard deviation bands.

This will make a call to the emulator to predict across the specified dimension. Note that a multi-dimensional emulator will be sliced across the other dimensions. The matplotlib.pyplot object is returned, and can be further modified by the user.

**Parameters:**

- **x_axis** (*str*) – The name of the x-axis variable.
- **y_axis** (*str*) – The name of the y-axis variable.
- **x_fixed** (*dict, optional*) – A dictionary of fixed values for the other X variables. Note that all X variables of an emulator must either be specified as x_axis or appear as x_fixed keys. To pass through “None”. either leave x_fixed out or pass through an empty dictionary.
- **params** (`PredictParams`) – (PredictParams, optional). A parameter configuration that contains optional prediction parameters.
- **(tuple[float** (*x_lim*) – The limits of the x-axis. If not provided. the limits will be taken directly from the emulator.
- **float]** – The limits of the x-axis. If not provided. the limits will be taken directly from the emulator.
- **optional]** – The limits of the x-axis. If not provided. the limits will be taken directly from the emulator.
- **n_points** (*int, optional*) – The number of points to sample in the x-axis.
- **label** (*str, optional*) – The label for the line in the plot. defaults to “Emulator prediction”.
- **color** (*str, optional*) – The color of the plot. Defaults to digiLab blue. Can be any valid matplotlib color (https://matplotlib.org/stable/gallery/color/named_colors.html).
- **verbose** (*bool, optional*) – Display detailed information about the operation while running.

**Return type:**

`plot`

### Examples

```
emulator = tl.Emulator("emulator_id")
plt = emulator.plot("Time", "Temperature", x_fixed={"Latitude": 0, "Longitude": 30})
plt.show()
```

Previous
twinlab.Emulator.sample

Next
twinlab.Emulator.heatmap