

Deep Learning Final Project

May 12, 2025

Predicting Temperature Anomalies

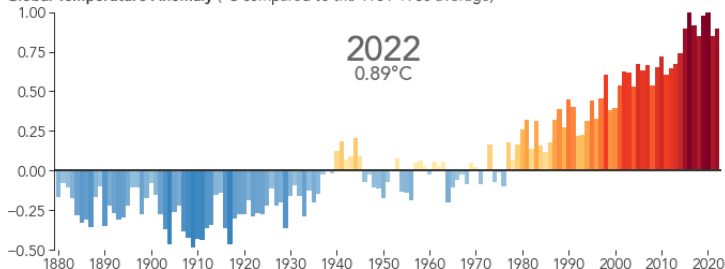
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Predicting Temperature Anomalies

My project was to predict future temperature anomalies—i.e. the global temperature difference from the average for a day. In essence, this is a time series modelling problem where we have 1-dimensional data and we want to predict what comes next in the series.

Last 9 Years Warmest on Record

Global Temperature Anomaly (°C compared to the 1951-1980 average)



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I settled on a temporal convolutional network. These took less time to train, had smaller file sizes and were less prone to overfitting.

Results

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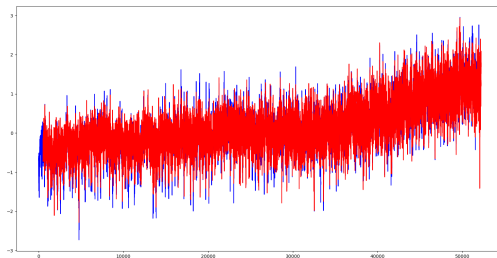


Figure 1: Predictions v. actual data

Results (cont.)

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