

Coinbase Bitcoin Data

Compiled from Coinbase and retrieved from FRED, Federal Reserve Bank of
St. Louis

Contributed by

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1. Introduction

This document provides a detailed description of the Coinbase Bitcoin dataset. The dataset consists of the daily closing prices of **Bitcoin** in **U.S. Dollars** from **Coinbase**, **not seasonally adjusted**, with data starting from December 1, 2014, up to June 23, 2024. The data is recorded daily at 5 PM PST and is provided with a 7-day frequency.

2. Broad Objective

The broad objective of this dataset documentation is to provide researchers, analysts, and enthusiasts with comprehensive information about the Coinbase Bitcoin dataset. This includes its source, format, contents, and potential applications in financial analysis, econometrics, and cryptocurrency research.

3. Purpose of Data Collection

The Coinbase Bitcoin dataset was collected to facilitate comprehensive analysis and understanding of the daily closing prices of Bitcoin in U.S. Dollars over a significant period. The primary objectives of collecting this data include:

- **Time Series Analysis:** To analyze and model the trends, patterns, and volatility exhibited by Bitcoin prices over time.
- **Statistical Modeling:** To develop statistical models that can capture the stochastic nature of Bitcoin price movements, aiding in forecasting future prices.
- **Market Behavior Studies:** To study the behavior of the Bitcoin market, including identifying regime shifts and exploring correlations with external factors.

- **Investment Analysis:** To provide insights for investors and stakeholders interested in Bitcoin as an investment asset, helping them make informed decisions.
- **Research and Education:** To support academic research and educational initiatives focused on cryptocurrencies, financial markets, and quantitative finance.

4. Data Sources

The following table summarizes the data source and its associated web link used to compile the dataset:

Table 1: List of data sources used to construct the dataset.

Coinbase Bitcoin (CBBTCUSD) on FRED	2014-2024
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This dataset contains the daily closing prices of Bitcoin in U.S. Dollars as **provided by Coinbase**. The information is compiled and made available by the **Federal Reserve Bank of St. Louis** on the **FRED platform**. Below, we describe the columns of the constructed dataset.

5. Data Description

The description of column-names of the dataset is given in the table below:

Table 2: Description of each column of the dataset.

Attributes	Description	Data type
Date	The date of the recorded Bitcoin price	Character
CBBTCUSD	Closing price of Bitcoin in U.S. Dollars at 5 PM PST	Character

Source Name	Duration
Coinbase	Dec 2014 - Jun 2024

6. Data file format

This dataset is stored in the following file formats:

CSV: Coinbase_Bitcoin_Data.csv

A random subset of size 5 is selected from the dataset and printed below for clarity.

Table 3: A random subset of the constructed dataset.

Date	Price
2015-01-01	320.53
2016-05-15	457.34
2017-12-31	13377.60
2019-07-10	12193.99
2022-11-20	16604.48