

## Description

In this course we will study the behavior of returns under a very general framework. We will develop tools to estimate, analyze risk and forecast risk. The theory we will study requires the use of high-frequency data. Below you will find links to download the high-frequency data for various stocks and at different sampling frequencies.

## Stock Assignments

The assignments will require you to work with data on 2 different stocks. For most of the assignments all you need is data at the 5-minute sampling frequency. However, some assignments may require extra data, and, when they do, refer back to this page to find out what you should download.

Use the table below to find out what stocks and extra data you should download. The table uses the last two digits of your unique Duke ID number (back of your Duke card) to assign your data. For example, if my Duke unique ID ended in 81, then I would download the data for IBM and WMT (5-Min and 1-Min frequency), and for BAC2008 (5-Sec data).

Last Two Digits	1st Stock	2nd Stock	Ultra HF Data
00 to 06	SPY	JPM	GOOG-2016
07 to 13	AAPL	KO	BAC-2010
14 to 20	AXP	MCD	BAC-2011
21 to 26	BA	MMM	IBM-2017
27 to 33	BAC	MRK	TSLA-2014
34 to 40	CAT	MSFT	BAC-2013
41 to 46	CSCO	NKE	GOOG-2017
47 to 53	CVX	PFE	IBM-2009
54 to 60	DIS	PG	BAC-2015
61 to 66	GE	UNH	BAC-2012
67 to 73	GS	UTX	BAC-2014
74 to 80	HD	VZ	TSLA-2016
81 to 86	IBM	WMT	BAC-2016

87 to 93	INTC	XOM	BAC-2017
94 to 100	JNJ	SPY	IBM-2014

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## Stocks

The data can be obtained [here](#) (requires Duke login). It is divided in 3 folders:

- Stocks1Min: contains data on stocks sampled every 1 minute of the day.
- Stocks5Min: contains data on stocks sampled every 5 minutes of the day. For most projects you will use data from this folder.
- Stocks5Sec: contains data on stocks sampled every 5 seconds of the day.

Go ahead and download the data for your stocks and any extra data you may need.

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