CME Group

Market Depth Files

The CME DataMine Market Depth files provide all market data messages required to recreate the order book, including 5-10 orders deep in futures markets and 3 orders deep in options markets as well as trade data for all Globex traded products.

How far back do you maintain Market Depth records?

The start date of Market Depth records is dependent on the product. Product start dates can be found here.

What is the granularity of the timestamp for orders and trades?

Trades and orders are time stamped to the millisecond.

How many levels of depth are available? Has this depth changed over time?

All CME Globex futures markets are 10 orders deep and options markets are 3 orders deep. Futures and options markets used to be 5 and 1 level deep, respectively. Dates for the conversion can be found in the table below:

5/4/2008:	CBOT Globex Interest Rate Options (3 deep)
2/22/2009:	CME Globex Equity Options (3 deep)
3/1/2009:	CME Globex FX Options (3 deep)
3/1/2009:	CBOT Globex Equity Index Options (3 deep)
3/22/2009:	CBOT Globex Commodity Futures (10 deep)
3/22/2009:	CBOT Globex Equity Index Futures (10 deep)
3/29/2009:	CBOT Globex Interest Rate Futures (10 deep)
4/19/2009:	NYMEX Crude Futures (10 deep)
4/19/2009:	NYMEX Non-Crude Energy Futures (10 deep)
4/19/2009:	NYMEX Metals, Softs, and Alternative Markets COMEX Futures (10 deep)
5/31/2009:	CME Globex Equity Futures (10 deep)
5/31/2009:	MGEX Globex Futures (10 deep)
5/31/2009:	KCBT Globex Futures (10 deep)
6/14/2009:	DME Futures (10 deep)

What is the format of the Market Depth files?

CME DataMine Market Depth files are currently available exclusively in FIX/FAST format. A file layout guide and examples are available here. In the past, messages were available in RLC format. For dates on the conversion from FIX/FAST to RLC, please reference our product availability document here.

Are spreads included in the Market Depth files?

Market depth for exchange-listed spread products is included in a separate file when an order is placed for the outright futures. Depth is offered for both futures and options spreads.

Are NYMEX Crack Spreads included in Market Depth files?

Crack spreads are included in the Market Depth files. Like all other spreads, they will be uploaded to customer directories in a separate file whenever an order is placed for the outright futures contract. For example, if an order for Market Depth for the Heating Oil contract, a separate file will be included containing Market Depth information for the Heating Oil/Crude Oil Crack Spread.

How are spreads prices reflected in the Market Depth files?

The Market Depth records for exchange-listed spreads contain the price as it is entered through CME Globex, which is the spread differential price.

Does Market Depth come from the same source as Top-of-Book and Time & Sales data?

No, our Market Depth files are produced from CME Globex Market Data Platform FIX/FAST feeds, while our Top-of-Book and Time & Sales data come from an internal post-trade processing system. The granularity of the timestamps for the data offerings is different due to the sources.

How is data aggregated? Is there a difference in aggregation between FIX/FAST and RLC formats?

Yes, RLC data aggregates partial fill trade messages to a single market data message whereas FIX/FAST sends out partial fills as individual trade messages. For example, a 100 lot trade that gets filled in four 25 lot partial fills would have been sent as a single 100 lot trade message in RLC, but four separate 25 lot trade messages in FIX/FAST.

Where can I obtain Security Definitions for the data in the Market Depth data?

A security definition file is published daily and can be accessed via ftp: ftp://ftp.cmegroup.com/pub/fix/Production/. A history of security definition files is also available by contacting the DataMine sales team.

Our Market Depth offering also includes the opportunity to order a daily subscription in which files are automatically placed in the customer's FTP directory at the chosen time interval. Below are frequently asked questions from our Market Depth subscription customers:

What time are the daily update files uploaded to my FTP directory?

CME Group's process to distribute Market Depth files to customer directories begins at midnight and is typically complete by 2am. Please be aware that the arrival time of files can vary considerably due to delays in upstream processes.

If I purchase daily updates of Market Depth data, will I get historical data as well?

No. When an order is placed for daily updates of Market Depth data, the first file included will be generated for the start date of the subscription. However, files are maintained in customer FTP directories for two weeks, enabling the customer to reference previous day's data.