

Global Futures Trade and Quote Data File Format Document

Version 1.8

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I. Trade Data

A. File Layout

Tick Data delivers its futures trade data in compressed, comma-delimited ASCII text files.

<u>Prior to Jul-1-2003</u>: Tick Data's historical futures data contains only day-session pit trading activity for all markets that were not electronic-only (i.e. had pit-only or pit and electronic trading). Electronic-only markets have partial night session trading (i.e. e-Mini trading days begin at 12:00am and close on the day session close), but do not have trading volume. Prior to Jun-30-2003, some of our data is time stamped to the second (HH:MM:SS), but most is time stamped to the minute (HH:MM). While additional fields can be outputted via the included TickWrite® software, the as-traded data contains five (5) fields:

Date

Time

Price (always the filtered price)

Volume (always zero)

Market Flag ('P' or 'E' for Pit or Electronic trades)

TickWrite® can also output:

Symbol

Tick Count

Up-Ticks

Down-Ticks

Date and Time *

* Combines the Date and Time fields into one field (use this "Date and Time" field if you are importing your data into NinjaTrader®).

<u>From Jul-1-2003 through Jun-30-2011</u>: Tick Data's historical futures data contains a second stamp (HH:MM:SS), volume for all electronic trades, and the five (5) fields:

Date

Time

Price (always the filtered price)

Volume (except in a few markets pit trades do not show Volume)

Market Flag ('P' or 'E' for Pit or Electronic trades)

<u>From Jul-1-2011 to Present</u>: Tick Data's historical futures data contains a millisecond time stamp (HH:MM:SS.000) and includes additional information in the following eight (8) fields:

Date

Time

Price (filtered price)

Volume (except in a few markets pit trades do not show Volume)

Market Flag (P/E for Pit or Electronic trades)

Sales Condition (if available; see below for exchange-specific information)

Exclude Record Flag (flags off-exchange trades, i.e. EFPs and block trades)

Unfiltered Price

B. Field Descriptions

Field Name	Type	Description	
Date	MM/DD/YYYY	Trade date.	
, , , , , , , , , , , , , , , , , , ,		Trade time. To the second or minute (HH:MM:SS or HH:MM) prior to Jul-1-2003, to the second (HH:MM:SS) from Jul-1-2003 to Jun-30-2011, and to the millisecond (HH:MM:SS.000) from Jul-1-2011 to present.	
Price	Number (14,7)	Trade price per contract. Up to seven (7) decimal places.	
Volume	Integer (9)	Number of contracts traded (Since Jul-1-2011).	
Market Flag	Character (1)	P = Pit Trade E = Electronic Trade	
Sales Condition	Character (up to 4)	If available; see below for exchange-specific information.	
Exclude Record Flag	Character (up to 4)	Flag identifies trades executed away from the exchange, including Block Trades and Exchange-For-Physicals (EFPs), etc.	
Unfiltered Price	Number (14,7)	The "raw," unfiltered price before any tick filtering by Tick Data, Inc. Available from Jul-1-2011.	

More information can be found at the FAQ on Tick Data's website: https://www.tickdata.com/futures-faq/

II. Quote Data

A. File Layout

Tick Data delivers its futures quote data in compressed, comma-delimited ASCII text files.

<u>From Jan-4-2010 to Present</u>: Tick Data's historical futures data contains Level I quote data (bid/ask price with size), time stamped to the millisecond (HH:MM:SS.000), and includes these eight (8) fields:

Date

Time

Bid Price

Bid Size

Ask Price

Ask Size

Market Flag (P/E for Pit or Electronic trades)

Quote Condition (if available; see below for exchange-specific information)

B. Field Descriptions

Field Name	Type	Description
Date	MM/DD/YYYY	Quote date.
Time	HH:MM:SS.000	Quote time.
Bid Price	Number (14,7)	Bid price per contract. Up to seven (7) decimal places.
Bid Size	Integer	Bid size.
Ask Price	Number (14,7)	Ask price per contract. Up to seven (7) decimal places.
Ask Size	Integer	Ask size.
Market Flag	Character (1)	P = Pit Quote E = Electronic Quote
Quote Condition	Character (up to 4)	If available; see below for exchange-specific information

More information can be found at the FAQ on Tick Data's website: https://www.tickdata.com/futures-faq/

III. Futures Sales Condition Codes

TOCOM - Japan A.

Value	Description	Excluded by Filter
0	No trade condition	
1	Late trade	X
2	Internal trade / crossing	
4	Bulletin board trade	X
6	Off market trade	X
	Trade occurring between SCOs (Standard	
7	Combinations Order).	X

ICE Futures (U.S. & Europe) B.

Prior to 10/5/2020

Value	Description	Excluded by Filter
0	Normal Trade	
1	EFP CCX block trade	X
2	Broker Deal with no condition	X
3	Crack Price Leg	X
4	System Price Leg	X
5	EFP block trade	X
6	EFS EFP Contra block trades	X
7	Hedge Price Leg	X
10	Adjusted price	X
1111	Implied Spread at Market Open	X
13	Block trade	X
17	NG EFS/EFP block trade	X
21	QV Deal	X
23	EFS block trade	X
24	Contra block trade	X
26	Off-Exchange block trade	X
31	Cross Contra block trades	X
33	RFC Crossing trade	
36	Trade is a Result of an Implied Order	

 $^{^{\}rm 1}$ Prior to 3/6/2013, condition code 11 stood for Unofficial Settle.

Beginning 10/5/2020

Value	Description	Excluded by Filter
0	Standard trade	
AA	Asset Allocation	X
AAL	Asset Allocation leg trade	X
ADJ	Adjusted trade	X
BAS	Basis trade	X
BLK	Block trade	X
BLKC	Block crack leg trade (System priced)	X
BLKL	Block leg trade (System priced)	X
BLKS	Block leg trade from composite strategy (System priced)	X
COMP	Composite strategy leg (System priced)	X
CRK	Crack leg trade (System priced)	X
EFM	Exchange of Futures for Related Market (EFM)	X
EFP	Exchange for Physical (EFP)	X
EFPL	EFP leg trade	X
EFS	Exchange for Swap (EFS)	X
EFSP	EFS/EFP trade	X
EOO	Exchange of Options for Options (EOO)	X
GCR	Guaranteed Cross	
IMO	Implied spread trade at market open	
IMP	Standard trade from implied order	
IPL	Implied trade outside Interval Price Limits	X
LEG	Strategy leg trade (System priced)	X
RFC	Request for Cross (RFC) trade	
RFCL	RFC Cross leg trade	X

C. Montreal Exchange – Canada

Trades

Value	Description	Excluded by Filter
0	Regular Trade	
1	As of Trade	X
2	Block Trade	X
4	Crossed	X
5	EFP Reporting	X
9	Implied Trade	X
13	Committed Block	X
14	Late Trade	X
16	Strategy Reporting	

22	EFR Reporting	X
24	Committed	X
26	Volume Adjustment	X

Quotes

From inception through 6/10/2022, the 'Quote Condition' field in Montreal futures data showed code '17' for every trade. This code just means the market is open, and this field is of no other use. From 6/13/2022 forward, the field is empty.

D. MEFF Renta Variable – Spain

Value	Description	Excluded by Filter
0	Market	
1	Cross Trade out of trading hours	X
2	Cross Trade during trading hours	X
3	Delta	X
4	Rollover	X
5	Trade associated with Rollover	X

E. ICE Precious Metals Futures – USA

Value	Description	Updates O/H/L/C	Excluded by Filter
6	Conventional Trade	Yes	
7	Block Trade	No	X
8	Basis Trade	No	X
9	Professional Trade	No	X
10	Guaranteed Cross Trade	Yes	
11	Against Actual Trade	No	X
12	Asset Allocation Trade	No	X
13	External Match Trade	No	X
14	Exchange For Swap Trade	No	X
15	Exchange For Physical Trade	No	X
16	Strategy Leg Trade	Yes	
33	RFC Crossing trade	Yes	

F. Tokyo Stock Exchange Derivatives – Japan

Trades

Value	Description	Excluded by Filter
0	Normal sale	
1	Limit Up sale condition	X
2	Limit Down sale condition	X
3	Temporary stoppage	X
4	Release from temporary stoppage	X
5	Suspension for arrangement of order	X
6	Interruption	X
7	System shutdown	X
8	Release from system shutdown	X
9	Trade price in relation to each expiry month for bond calendar spread trades	X
10	ToSTNeT Single-issue transaction	X
11	ToSTNeT Basket transaction	X
12	ToSTNeT Previous day closing price transaction	X
13	ToSTNeT Previous day VWAP transaction	X
14	ToSTNeT Morning-session closing price transaction	X
15	ToSTNeT Morning-session VWAP transaction	X
16	ToSTNeT Today's closing price transaction	X
17	ToSTNeT Afternoon session VWAP transaction	X
18	ToSTNeT All-day VWAP transaction	X
19	ToSTNeT Temporary stoppage	X
20	Block Trade	X
21	Basis Trade	X
22	Against Actual	X
23	External match	X
24	Guaranteed cross	
25	Professional	X
26	Asset allocation	X
27	Indicative opening	X
28	Indicative closing	X
29	Exchange for swap	X
30	Exchange for physical	X
31	Unknown condition	X

Quotes

From Inception through 12/8/2011 (no Quote condition codes from 12/9/2011 forward):

Value	Ask Condition	Bid Condition
1	General ask	General bid quote
2	No ask	Bid before opening
3	No ask	General bid quote
4	No ask	Continuous bid quote before stoppage
5	No ask	Special bid quote
6	No ask	Attention bid quote
11	No ask	Special bid quote before stoppage
12	Ask before opening	No bid
201	Ask before opening	Bid before opening
202	Ask before opening	General bid quote
203	Ask before opening	Continuous bid quote before stoppage
204	Ask before opening	Special bid quote
205	Ask before opening	Attention bid quote
210	Ask before opening	Special bid quote before stoppage
211	General ask	No bid
212	General ask	Bid before opening
302	General ask	Special bid quote
303	General ask	Attention bid quote
304	General ask	Continuous bid quote before stoppage
306	General ask	Special bid quote before stoppage
406	Special ask	No bid
407	Special ask	Bid before opening
410	Special ask	General bid quote
412	Special ask	Special bid quote
501	Special ask	Attention bid quote
503	Special ask	Continuous bid quote before stoppage
504	Special ask	Special bid quote before stoppage
505	Attention ask quote	No bid
506	Attention ask quote	Bid before opening
507	Attention ask quote	General bid quote
511	Attention ask quote	Special bid quote
512	Attention ask quote	Attention bid quote
602	Attention ask quote	Continuous bid quote before stoppage
603	Attention ask quote	Special bid quote before stoppage
604	Continuous ask before stoppage	No bid
605	Continuous ask before stoppage	Bid before opening
606	Continuous ask before stoppage	General bid quote
607	Continuous ask before stoppage	Market bid quote

Value	Ask Condition	Bid Condition
610	Continuous ask before stoppage	Special bid quote
611	Continuous ask before stoppage	Attention bid quote
612	Continuous ask before stoppage	Final bid quote
1002	Special ask before stoppage	No bid
1003	Special ask before stoppage	Bid before opening
1004	Special ask before stoppage	General bid quote
1006	Special ask before stoppage	Special bid quote
1007	Special ask before stoppage	Attention bid quote
1011	Special ask before stoppage	Bid quote omitted
1012	Special ask before stoppage	Special bid quote before stoppage

G. Osaka Securities Exchange Futures – Japan

Value	Description	Excluded by Filter
0	Deal (normal, or Deal among J-NET participants)	
3	J-NET trade	X
5	J-NET cross trade	X
7	Deal between combination series	X
20	Auction Trade	
36	Tailor-Made Combination leg trade	X
43	Trade from implied order	

H. Euronext Liffe Equity Index, Interest Rate, and Commodity Derivatives

Value	Description	Comments	Affects O/H/L/C	Affects volume	Excluded by Filter
6, 31716	Standard trade	Standard auto-matched trade	Yes	Yes	
7, 21413	Block trade	High volume off-book trade	No	Yes	X
8, 20123	Basis trade	Off-book trade where a futures contract (generally a fixed income contract) is traded against its underlying security.	No	Yes	X
9, 202217	Professional trade	High volume off-book trade, where both sides must be entered individually by separate participants.	No	Yes	X
10, 32223	Guaranteed Cross	Cross trade, executed on-book	Yes	Yes	
11, 10324	Against Actual	Off-book trade exchanging commodity futures contracts for an equivalent quantity of the underlying commodity. Note: Against Actual trades will have a trade price of zero.	No	Yes	X

Value	Description	Comments	Affects O/H/L/C	Affects volume	Excluded by Filter
12, 230114	Asset Allocation	Off-book trade allowing two related contracts to be traded simultaneously at a fixed price, enabling participants to transfer exposure between the two contracts without execution risk.	No	Yes	X
13, 53024	3, 53024 External Match Cross trade, executed off-book		No	Yes	X
14	Off-book trade exchanging commodity futures for an OTC swap in the underlying commodity. Note: EFS trades will have a trade price of zero.		No	Yes	X
15	Exchange For Physical (EFP)	Same as Against Actual	No	Yes	X
29, 23	Standard strategy trade leg	Outright leg of a strategy trade. May result either from the execution of two spread orders, or from the simultaneous execution of orders in each outright leg.	Yes	Yes/No*	
30, 230214	Block strategy trade leg	Outright leg of a strategy Block trade	No	Yes	X
31, 230201	Basis strategy trade leg	Outright leg of a strategy Basis trade	No	Yes	X
32, 232022	Professional strategy trade leg	Outright leg of a strategy Professional trade	No	Yes	X
	Guaranteed Cross strategy leg		Yes	Yes	
34, 230103	Against Actual strategy leg	Outright leg of a strategy Against Actual trade. Note: Against Actual trades will have a trade price of zero.	No	Yes	X
35	Asset Allocation strategy leg	Outright leg of a strategy Asset Allocation trade	No	Yes	X
36	External Match strategy leg	Outright leg of a strategy External Match trade	No	Yes	X
37	EFS strategy leg	Outright leg of a strategy EFS trade. Note: EFS trades will have a trade price of zero.	No	Yes	X
38	EFP strategy leg	Same as Against Actual strategy leg	No	Yes	X
39, 23024	BClear trade	Off-book trade reported via BClear	No	No	X
26	Volatility Trade	Identifies futures legs of a volatility trade (where a strategy is executed involving both futures and options contracts).	No	No	X

^{*} Where a strategy trade is executed via implied markets (i.e. as a result of the simultaneous matching of orders in each outright leg) Liffe will report both a standard trade and a standard strategy leg trade for each leg. In this situation the strategy leg trade report will not be factored into the total volume. However, when a strategy trade results from the execution of two strategy orders Liffe will report only a single strategy leg trade in each outright leg - in which case that trade will count towards total volume.

I. CME Group

Includes:

- CBOT Regular Trading Hours (RTH) Pit US
- CBOT Electronic Markets US
- CME Futures Regular Trading Hours (RTH) US
- New York Commodities Exchange (COMEX) US
- CME eMini Equity Futures US
- New York Mercantile Exchange Energy Futures US

Value	Description	Excluded by Filter
0	Normal Trade	
1	Asset Allocation	X
2	Block Trade	X
3	Option Privately Negotiated Trade	X
4	Trade calculated by CME (Globex)	X
5	Cancellation of trade calculated by CME (Globex)	X
7	Against Actual	X
11	Unofficial Settlement	X
12	Last Price is Bid (CURRENTLY NOT USED)	X
13	Last Price is Ask (CURRENTLY NOT USED)	X
20	Exchange for Physical	X
22	Exchange Risk	X
23	Basis	X
24	Subtrades (substitutions for forwards)	X
25	Exchange Option for Option (EOO)	X
27	Exchange for Swap	X

J. Hong Kong Stock Exchange – Hong Kong

Value	Description	Affects O/H/L/C	Affects volume	Excluded by Filter
0	Matched by system automatically	Yes	Yes	
1	Matched by system manually	Yes	Yes	
2	Deal made at the end of the auction	Yes	Yes	
3	Tailor-made combination trade (spreads only)	Yes	Yes	
4	Combo versus outright trade	Yes	Yes	
5	Matched outside of exchange, different brokers	Yes	Yes	
6	Matched outside of exchange, different brokers, regulated by exchange	Yes	Yes	
7	Matched outside of exchange, one broker	Yes	Yes	

Value	Description	Affects O/H/L/C	Affects volume	Excluded by Filter
. x	Matched outside of exchange, one broker, regulated by exchange	Yes	Yes	
	Combination Order matched against another combination order, electronically (Legs of spread only)	Yes	Yes	
10	Tailor-made combination Trade (Legs of spread only)	Yes	Yes	

K. Singapore Exchange (SGX) Derivatives – Singapore

From Inception through 4/24/2020:

Value	Description	Excluded by Filter
0	No Information	
1	Married Trade	X

After 4/24/2020:

Value	Description	Excluded by Filter
0	No Information	
1	Printable Order Book Trade	
	Printable Off-Book Trade (Updates Last price like a regular trade)	
3	Non-Printable Off-Book Trade	X

L. Eurex Exchange – Germany

Value	Description	Excluded by Filter
0	Regular Trade	
1	Block Auction Trade	X
2	Basis Trade	X
5	EFP Trade	X
14	EFP Index Futures Trade	X
15	OTC Block Trade	X
16	EFP Fin Trade	X
22	Volatility Trade	X
23	EFS Trade	X
23	Trade from the leg of a Strategy Trade	X

M. ASX Sydney Futures – Australia

Value	Description	Excluded by Filter
0	Regular Trade	

1	Auction trade (was Sweeping trade until 20170318)	
2	Leveling Trade (until 20170320)	X
3	Spread-to-Underlying Trade	X
4	Intra-spread to Intra-spread Trade (Spread-to-spread)	X
5	Inter-spread to Inter-spread Trade (Inter-product spread)	X
6	Strip-to-Strip Trade	X
7	Strip to outright trade	

N. Borsa Italiana Derivatives – Italy

Value	Description	Excluded by Filter
0	Normal Trade	
1	Implied Trade	
2	As-of-Trade	X
3	Late Trade	X
4	Strategy Report	X
5	Exchange Granted Trade	X
6	Black Trade	X
7	Committed Block	X
8	Committed	
9	Crossed Trade	
10	Market Order	

O. National Stock Exchange of India – India

No condition codes

P. Chicago Board of Options Exchange (CBOE)

Value	Description	Excluded by Filter
0	Normal Trade	
4	Transaction is being reported late, but is in the correct sequence, i.e., no later transactions have been reported have been reported for the particular contract	
12	Transaction is a reopening of a contract in which trading has been previously halted. Trade condition appears solely for information; process as a regular transaction	
14	Transaction represents a trade in two contract months in the same class (a buy and a sell in the same class). Trade condition appears solely for information; process as a regular transaction.	
22	Block Trade	X

Q. BM&F Bovespa – Brazil

Value	Description	Excluded by Filter
0	Normal Trade	
1	Cross Trade	
24	After-Market Trade	X
0	Out-of-Sequence Trade	X

R. Multi Commodity Exchange of India (MCX)

No condition codes

S. New York Futures Exchange

No condition codes

T. Korea Exchange

Value	Description	Excluded by Filter
10	Opening auction	
11	Delayed opening	
20	Auction	
30	Closing auction	
40	Continuous trading	
46	Negotiated trade	X
50	Volatility auction	
51	Delayed re-opening	

U. Oslo Bors

Value	Description	Excluded by Filter
1	Central Limit Order Book	
4	Off-book Trade	X

V. JSE Equity Derivatives Market

Condition Codes begin 4/29/2019; no codes before this date

Value	Description	Excluded by Filter
0	Standard Trade	
1	Auction Trade	

W. Nordic Derivatives Exchange

Value	Description	Excluded by Filter
1	Central Limit Order Book	
4	Off-book Trade	X

X. Moscow Exchange

Value	Description	Excluded by Filter
0	Regular trade	
1	Block trade	X
45	Option exercise	X
1000	Futures expiration	X
1003	Option expiration	X

Y. Bursa Malaysia Derivatives

Value	Description	Excluded by Filter
0	Regular trade	
1	Asset allocation	X
2	Block trade	X
3	Privately negotiated trade	X
4	Strategy leg trade	X
7	Against Actual	X
20	Exchange for Physical	X
22	Exchange for Risk	X
23	Basis trade	X
25	Exchange of Options for Options	X
27	Exchange for Swap	X

Z. Shanghai Futures Exchange

No condition codes

AA. Zhengzhou Commodity Exchange

No condition codes

BB.	Dalian	Commodity	Exchange
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No condition codes