Cboe DataShop

Option EOD Summary

Description:

Our daily summary contains two market snapshots, one at 15:45 U.S. Eastern and another at end-of-day (market closing time is product dependent). The end-of-day (EOD) snapshot has open, high, low, and closing prices (OHLC), trade volume, VWAP, and open interest. The data covers Regular Trading Hours (RTH) only.

Coverage:

- Options on U.S. listed Stock, ETFs, and Indices disseminated over the Options Price Reporting Authority (OPRA) market data feed
- Note: Options on Futures & non-U.S. markets are not supported

Filename pattern:

- Order with Calcs included: UnderlyingOptionsEODCalcs_YYYY-MM-DD.zip (Zipped CSV)
- Order with Calcs excluded: UnderlyingOptionsEODQuotes_YYYY-MM-DD.zip (Zipped CSV)

Fields:

Column Label	Data Type	Description
underlying_symbol	string	The underlying stock or index. An index will utilize a caret (^) prefix, i.e. ^NDX,^SPX,^VIX…etc. Underlyings with classes may utilize a dot (.) instead of a slash or space, i.e. BRK.B, RDS.A, RDS.B.
quote_date	yyyy-mm-dd	The trading date the data represents
root	string	The option trading class symbol. Non-standard roots may end with a digit
expiration	yyyy-mm-dd	The explicit expiration date of the option
strike	numeric	The exercise/strike price of the option
option_type	string	C for Call options, P for Put options
open	numeric	The trade price of the first trade in the series on the date (zero if no trades occurred or trade condition not eligible to update OHLC)
high	numeric	The highest trade price in the series on the date (zero if no trades occurred or trade condition not eligible to update OHLC)
low	numeric	The lowest trade price in the series on the date (zero if no trades occurred or trade condition not eligible to update OHLC)
close	numeric	The trade price of the last trade in the series on the date (zero if no trades occurred or trade condition not eligible to update OHLC)
trade_volume	integer	The total option contracts traded in the series on the date
bid_size_1545[1]	integer	The largest size from an options exchange participant on the best bid price (NBB) at 15:45 or 3:45pm U.S. Eastern on this date
bid_1545[1]	numeric	The best bid price (NBB) in this series at 15:45 or 3:45pm U.S. Eastern on the date
ask_size_1545[1]	integer	The largest size from an options exchange participant on the best ask price (NBO) at 15:45 or 3:45pm U.S. Eastern on this date
ask_1545[1]	numeric	The best ask price (NBO) in this series at 15:45 or 3:45pm U.S. Eastern on the date
underlying_bid_1545[2]	numeric	The bid price at 15:45 or 3:45pm U.S. Eastern for the underlying instrument on the date. Value of 0 (zero) if not available
underlying_ask_1545[2]	numeric	The ask price at 15:45 or 3:45pm U.S. Eastern for the underlying instrument on the date. Value of 0 (zero) if not available

Column Label	Data Type	Description
implied_underlying_price_1545[3]	numeric	This field is deprecated, it will default to 0 (zero)
active_underlying_price_1545[3]	numeric	The underlying price at 15:45 or 3:45pm Eastern used in the calculation model.
implied_volatility_1545[3,4]	numeric	The option implied volatility at 15:45 or 3:45pm U.S. Eastern
delta_1545[3]	numeric	The option delta at 15:45 or 3:45pm U.S. Eastern
gamma_1545[3]	numeric	The option gamma at 15:45 or 3:45pm U.S. Eastern
theta_1545[3]	numeric	The option theta at 15:45 or 3:45pm U.S. Eastern
vega_1545[3]	numeric	The option vega at 15:45 or 3:45pm U.S. Eastern
rho_1545[3]	numeric	The option rho at 15:45 or 3:45pm U.S. Eastern
bid_size_eod[1]	integer	The largest size from an options exchange participant on the best bid price (NBB) at the close on this date
bid_eod[1]	numeric	The ask price on the last quote in this series on the date
ask_size_eod[1]	integer	The largest size from an options exchange participant on the best ask/offer price (NBO) at the close on this date
ask_eod[1]	numeric	The ask price on the last quote in this series on the date
underlying_bid_eod[2]	numeric	The best bid price on the last quote for the underlying instrument on the date. Value of 0 (zero) if not available
underlying_ask_eod[2]	numeric	The best ask price on the last quote for the underlying instrument on the date. Value of 0 (zero) if not available
vwap	numeric	The volume weighted average price in the series on the date (zero if no eligible trades occurred)
open_interest	integer	The start-of-day (SOD) open interest in the series from the Options Clearing Corporation (OCC)
delivery_code	string	This field is deprecated, it will be empty

Notes

1. *Snapshots of Options Price Reporting Authority (OPRA) feed message based on the criteria of Price, Size, and Time of updates from exchange participants. For additional information, please see the Best Bid and Best Offer (BBO) Overview section in the OPRA feed specifications.*
2. *Certain underlying instruments do not have an underlying bid & ask quote disseminated in their source feeds. These fields will default to 0 (zero) when no quote is available. i.e. Most indices will not have an underlying bid/ask, nor will underlyings on the OTC market.*
3. *Only orders with a selection to include Calcs will contain these fields. The columns are not present in orders without calcs selected.*
4. *Implied volatility will be zero in cases where the calculation model did not have sufficient input data (i.e. no quoted markets), the option price was below intrinsic value, or the implied volatility exceeded the acceptable upper limit*
5. *On early close trading days, the value in the "1545" will be taken at 12:45 pm ET and the column name of "1545" will be unchanged.*
6. *Data may be excluded/zero for the ^SPX July 19, 2021 expiry on the trading date of June 21, 2021. The expiry was an unscheduled add done at approximately 14:04PM US Eastern on 2021-06-21. During both quote scans at 15:45 and market close for this expiry, all series' quotes were absent.*