Cboe DataShop

Option Sentiment Specification

Description:

The Option Sentiment dataset is a daily and historical product that facilitates quantitative and qualitative order flow analysis for traders, brokers, and research teams.
This rich dataset is assembled from trade-level information produced by proprietary systems designed to identify the initiating side of nearly 5 million executions daily and supports daily and intraday identification of unusual option activity, directional bias, volatility changes, and indications of retail interest and stock-loan considerations. Baseline averages are included for contextualization of activity, while open interest data supports concentration analysis.

- For historical data orders complete file(s) will be delivered at the end of the day, and by default the file grouping is 'Per Day'. It means that for multiple dates orders there will be as many files as many trading days in the order.
- For subscriptions two files will be delivered. Preliminary file – after market close the same day[1]. Complete file – next day by 5 AM ET.

Filename pattern:

Preliminary - HighLevelOptionSentiment_Preliminary_YYYY-MM-DD.zip (applies only to subscriptions)

Final (complete) - HighLevelOptionSentiment_Complete_YYYY-MM-DD.zip

Subscription delivery frequency & timing: Monday - Friday (except holidays where U.S. markets are closed)

Layout & Field Definitions:

Field #	Column Name	Data Type	Field Description
1	trade_date	date	date
2	underlying_symbol	string	underlying symbol
3	call_volume	integer	total call volume
4	put_volume	integer	total put volume
5	total_volume	integer	total option volume
6	avg_call_volume	integer	avg daily call volume (20d mov avg)
7	avg_put_volume	integer	avg daily put volume (20d mov avg)
8	avg_total_volume	integer	avg daily option volume (20d mov avg)
9	call_trades	integer	count of call trades
10	put_trades	integer	count of put trades
11	total_trades	integer	count of option trades
12	avg_call_size	float	avg call trade size
13	avg_put_size	float	avg put trade size
14	underlying_volume	integer	total underlying volume
15	call_premium	float	total $ call premium
16	put_premium	float	total $ put premium
17	spot_close	float	spot closing price
18	split_adj_close	float	spot closing price, adjusted for splits
19	net_option_delta	integer	net option delta for directional trades[2]
20	oi_calls	integer	total call open interest
21	oi_puts	integer	total put open interest

Field #	Column Name	Data Type	Field Description
22	call_premium_bought	integer	total $ call premium trading offer side, directional trades[2]
23	call_premium_sold	integer	total $ call premium trading bid side, directional trades[2]
24	put_premium_bought	integer	total $ put premium trading offer side, directional trades[2]
25	put_premium_sold	integer	total $ put premium trading bid side, directional trades[2]
26	calls_bought	integer	total call volume offer side, directional trades[2]
27	puts_bought	integer	total put volume offer side, directional trades[2]
28	iv30	float	at the money implied vol, 30 day interpolated term
29	hv20	float	realized 20 trading day volatility
30	vega_total	integer	total $ vega traded
31	cust_volume	integer	occ clearing customer volume
32	firm_volume	integer	occ clearing firm volume
33	mkt_mkr_volume	integer	occ clearing market maker volume
34	exch_vol_cboe	integer	Cboe Options Exchange Volume
35	exch_vol_c2	integer	Cboe C2 Options Exchange Volume
36	exch_vol_edgx	integer	Cboe EDGX Options Exchange Volume
37	exch_vol_bzx	integer	Cboe BZX Options Exchange Volume
38	exch_vol_phlx	integer	NASDAQ PHLX Options Exchange Volume
39	exch_vol_nom	integer	NASDAQ Options Exchange Volume
40	exch_vol_bxo	integer	NASDAQ BX Options Exchange Volume
41	exch_vol_gem	integer	NASDAQ GEMX Options Exchange Volume
42	exch_vol_ise	integer	NASDAQ ISE Options Exchange Volume
43	exch_vol_merc	integer	NASDAQ MRX Options Exchange Volume
44	exch_vol_amex	integer	NYSE AMEX Options Exchange Volume
45	exch_vol_arca	integer	NYSE ARCA Options Exchange Volume
46	exch_vol_miax	integer	MIAX Options Exchange Volume
47	exch_vol_pearl	integer	MIAX PEARL Options Exchange Volume
48	exch_vol_emld	integer	MIAX EMLD Options Exchange Volume
49	exch_vol_box	integer	BOX Options Exchange Volume
50	implied_borrow	float	market implied borrow cost, near term >7 dtx
51	norm_25d_skew_30	float	normalized 30day 25delta put-call skew
52	iv90	float	at the money implied vol, 90 day interpolated term
53	underlying_security_type	string	Underlying Type: E = ETF, I = Index, S = Stock
54	otm_call_oi	integer	out of the money call open interest
55	otm_put_oi	integer	out of the money call put interest

1- On the **first day of the subscription** order the preliminary file will be generated around the same time as the complete file. Both files will have the same content.

2- net option delta for directional trades (direction is relative to the midpoint; if above midpoint, trade is considered a Buy, and below midpoint - a Sell. Spread, late and tied trades are excluded)

Notes:

- Some fields are expected to be blank when there is no value – avg_call_size, avg_put_size, cust_volume, firm_volume, mkt_mkr_volume
- Cancelled trades are backed out from the totals