

IV Data Cloud User's guide

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Introduction

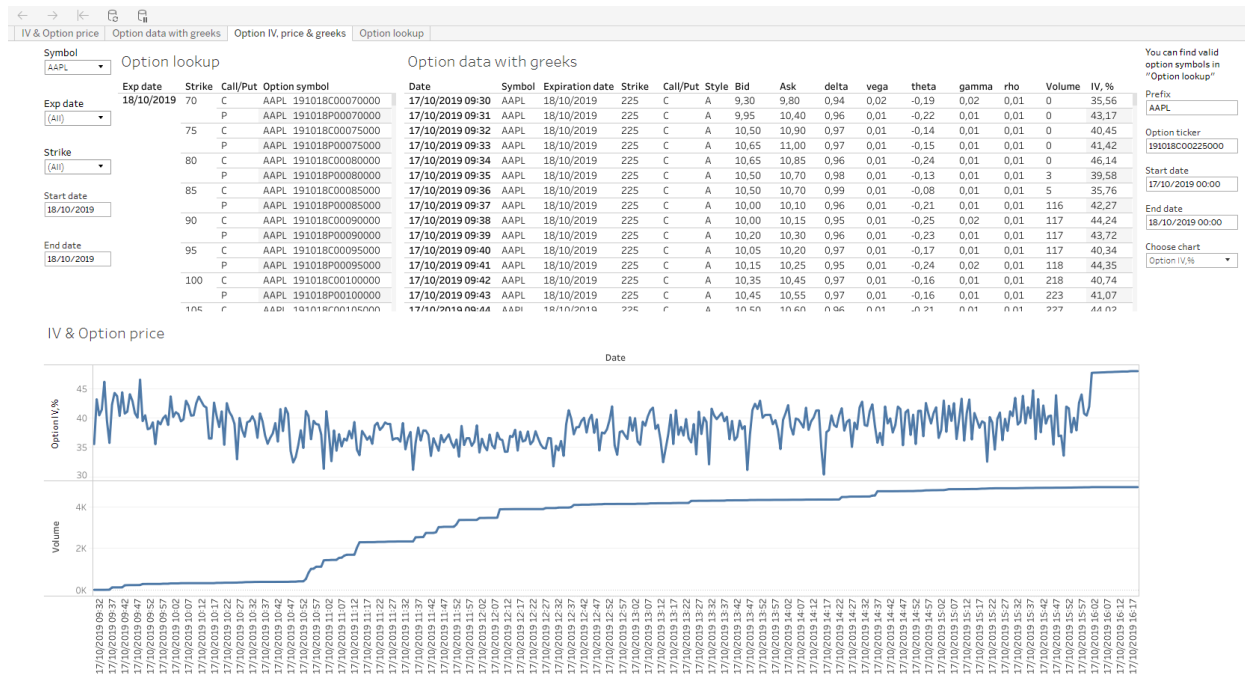
The IV Data Cloud service is designed for options traders' quick access to high frequency options database. It allows you to visualize data using most popular queries with predefined screens, tables and charts, and download options data based on selected filters. In this setup data coverage includes USA stocks, ETFs, indices and OPRA options with prices, volumes, OI, Implied Vol, Greeks and much more with up to 1 minutely frequency historical data. As of now, coverage includes 4,300+ underlyings and about 1 million options contracts. With the IV Data Cloud trader now can focus on just querying required data instead of arranging local storage for saving terabytes of data.

Data for new trading day appears now after 10pm EST time.

IV Data Cloud consists of four tabs: Data Visualization, Intraday Data Download, EOD Data Download.

Data visualization

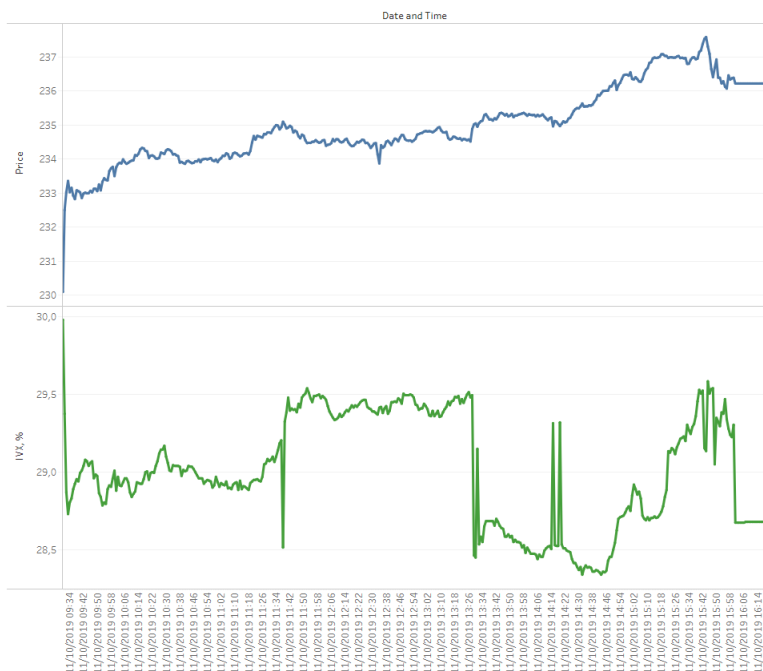
1.1 INTRADAY – US Option IV, price & greeks



Start by searching for option tickers in «Option lookup» area. You can specify equity symbol, expiration dates, strikes, and start-end dates. In the nearby table you will find filtered option tickers. Copy the equity symbol to «Prefix» field, option symbol to the «Option ticker» and specify Start – End datetime fields. After doing this steps, option table and IV/Volume charts will be filled by relevant data. You can choose between option IV and option Price charts using «Choose chart» drop-down list.

1.2 INTRADAY – US Equity price & IVX

Stock IVX chart



Stock IVX table

Symbol	Date and Time	Price	Period	IVX, %
AAPL	11/10/2019 09:30	230.09	30	29.98
	11/10/2019 09:31	232.49	30	29.37
	11/10/2019 09:32	233.02	30	28.87
	11/10/2019 09:33	233.35	30	28.72
	11/10/2019 09:34	233.01	30	28.80
	11/10/2019 09:35	233.15	30	28.82
	11/10/2019 09:36	232.92	30	28.88
	11/10/2019 09:37	232.82	30	28.92
	11/10/2019 09:38	233.08	30	28.95
	11/10/2019 09:39	233.05	30	28.94
	11/10/2019 09:40	233.02	30	28.99
	11/10/2019 09:41	232.85	30	29.00
	11/10/2019 09:42	232.98	30	29.03
	11/10/2019 09:43	233.01	30	29.08
	11/10/2019 09:44	232.99	30	29.07
	11/10/2019 09:45	232.99	30	29.04
	11/10/2019 09:46	233.06	30	29.05
	11/10/2019 09:47	233.01	30	29.06
	11/10/2019 09:48	233.12	30	28.96
	11/10/2019 09:49	233.12	30	28.98
	11/10/2019 09:50	233.05	30	28.97
	11/10/2019 09:51	233.25	30	28.86
	11/10/2019 09:52	233.07	30	28.83
	11/10/2019 09:53	233.32	30	28.78
	11/10/2019 09:54	233.43	30	28.80
	11/10/2019 09:55	233.38	30	28.79
	11/10/2019 09:56	233.36	30	28.89
	11/10/2019 09:57	233.64	30	28.91
	11/10/2019 09:58	233.72	30	28.90
	11/10/2019 09:59	233.76	30	28.96
	11/10/2019 10:00	233.49	30	29.00
	11/10/2019 10:01	233.75	30	28.88
	11/10/2019 10:02	233.84	30	28.97
	11/10/2019 10:03	233.88	30	28.91
	11/10/2019 10:04	233.86	30	28.90
	11/10/2019 10:05	233.99	30	28.93
	11/10/2019 10:06	233.90	30	28.95
	11/10/2019 10:07	233.85	30	28.95
	11/10/2019 10:08	233.88	30	28.93
	11/10/2019 10:09	233.92	30	28.86

Symbol
AAPL

Start date
11/10/2019

End date
11/10/2019

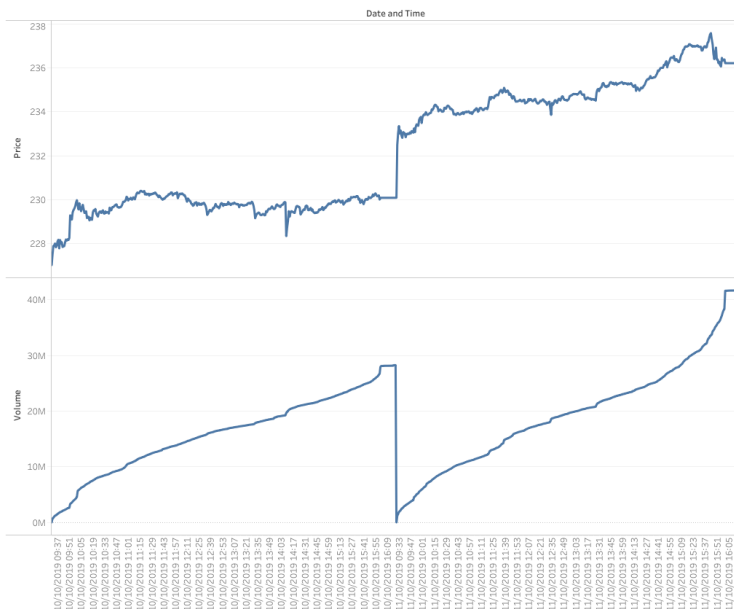
IVX Period
30

IVX Period
30

Specify equity ticker, start-end datetime fields and IVX Periods. IVX 30 is chosen by default. You can select multiple periods in «IVX Period» drop-down list.

1.3 INTRADAY – US Equity price & volume

Stock price and Volume chart



Stock Price and Volume table

Date and Time	Price	Ask	Bid	Volume
10/10/2019 09:45	227.89	227.92	227.89	2 194 577
10/10/2019 09:46	228.07	228.08	228.06	2 287 335
10/10/2019 09:47	228.19	228.20	228.18	2 361 085
10/10/2019 09:48	228.14	228.16	228.14	2 437 255
10/10/2019 09:49	228.20	228.21	228.19	2 553 590
10/10/2019 09:50	228.17	228.19	228.17	2 586 602
10/10/2019 09:51	228.26	228.27	228.24	2 609 646
10/10/2019 09:52	229.29	229.27	229.23	3 306 325
10/10/2019 09:53	229.20	229.22	229.20	3 437 469
10/10/2019 09:54	229.10	229.12	229.10	3 544 900
10/10/2019 09:55	229.43	229.45	229.43	3 757 930
10/10/2019 09:56	229.54	229.55	229.52	3 900 611
10/10/2019 09:57	229.60	229.61	229.59	4 037 319
10/10/2019 09:58	229.70	229.72	229.70	4 172 970
10/10/2019 09:59	229.88	229.90	229.86	4 327 715
10/10/2019 10:00	229.98	229.99	229.97	4 575 222
10/10/2019 10:01	229.74	229.73	229.71	5 684 556
10/10/2019 10:02	229.56	229.62	229.59	5 797 275
10/10/2019 10:03	229.84	229.85	229.83	5 916 864
10/10/2019 10:04	229.62	229.63	229.62	6 056 209
10/10/2019 10:05	229.48	229.49	229.47	6 215 808
10/10/2019 10:06	229.62	229.63	229.61	6 282 059
10/10/2019 10:07	229.77	229.77	229.74	6 397 054
10/10/2019 10:08	229.58	229.59	229.58	6 448 948
10/10/2019 10:09	229.40	229.41	229.39	6 540 788
10/10/2019 10:10	229.45	229.47	229.46	6 730 433
10/10/2019 10:11	229.48	229.48	229.46	6 811 741
10/10/2019 10:12	229.17	229.18	229.16	6 901 029
10/10/2019 10:13	229.22	229.23	229.22	6 995 406
10/10/2019 10:14	229.23	229.23	229.22	7 054 820
10/10/2019 10:15	229.06	229.07	229.06	7 141 928
10/10/2019 10:16	229.18	229.18	229.15	7 326 303
10/10/2019 10:17	229.11	229.15	229.13	7 365 472
10/10/2019 10:18	229.09	229.12	229.09	7 415 974
10/10/2019 10:19	229.43	229.43	229.42	7 555 283
10/10/2019 10:20	229.52	229.53	229.52	7 611 222
10/10/2019 10:21	229.50	229.51	229.49	7 691 014
10/10/2019 10:22	229.58	229.57	229.56	7 838 784
10/10/2019 10:23	229.37	229.37	229.35	7 901 973
10/10/2019 10:24	229.29	229.28	229.26	7 974 262
10/10/2019 10:25	229.22	229.28	229.25	8 078 398

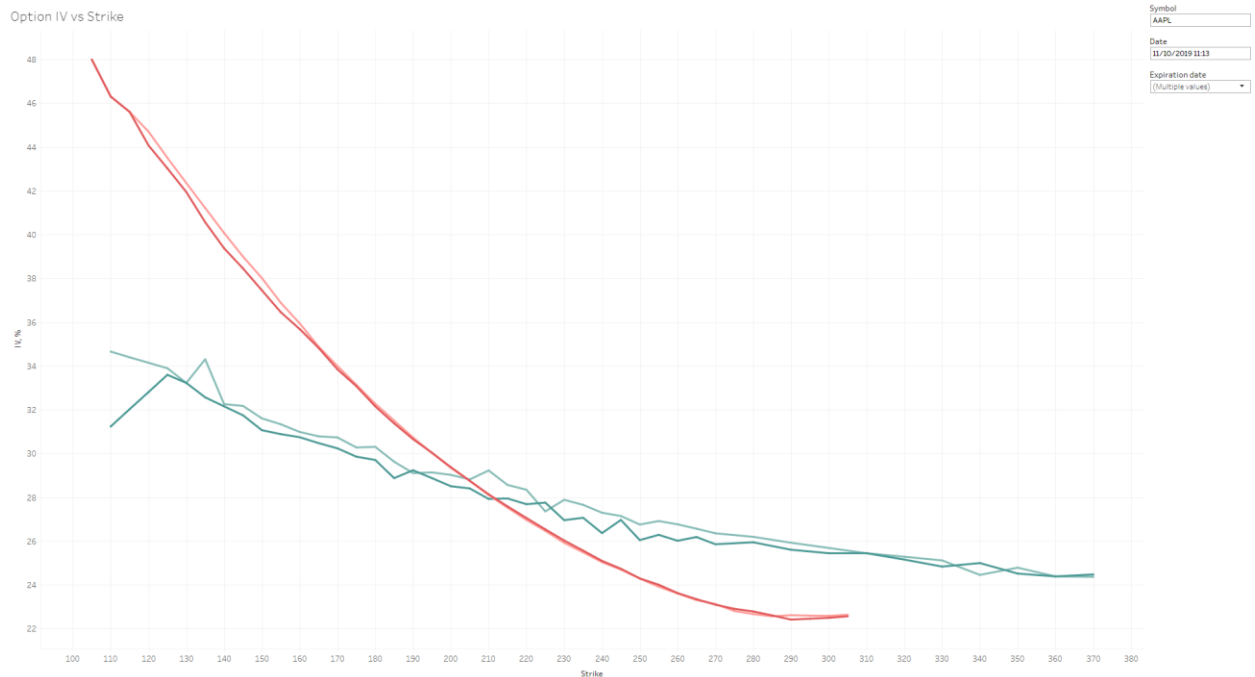
Symbol
AAPL

Start date
10/10/2019

End date
11/10/2019

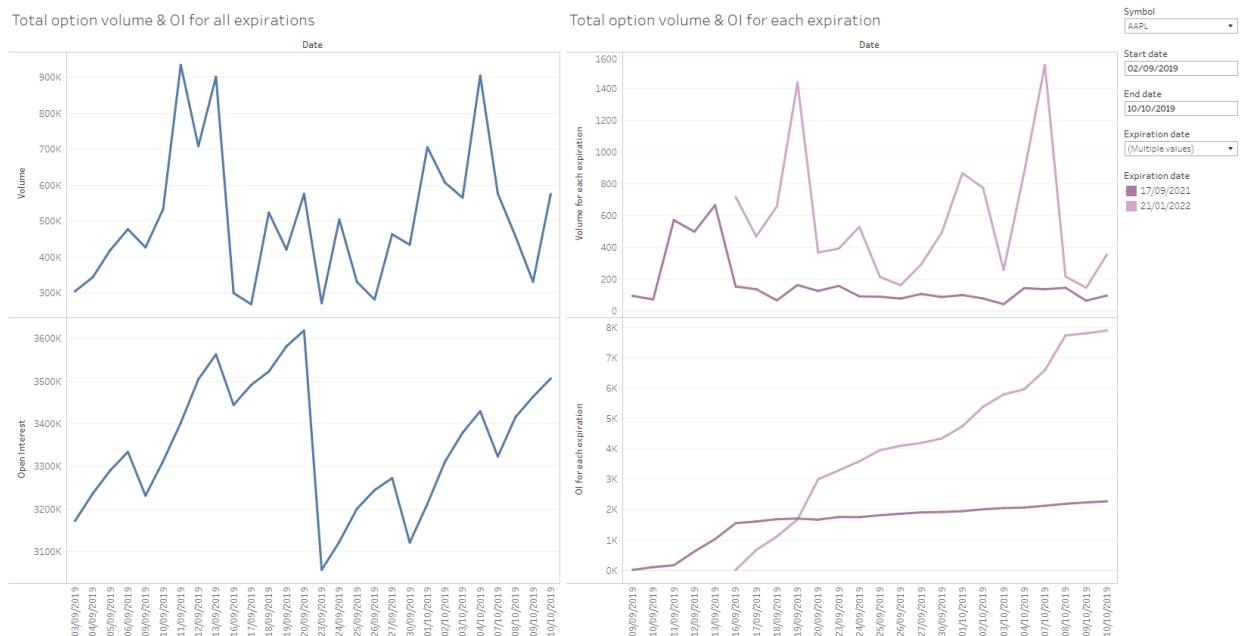
Specify equity ticker and start date/end date datetime fields.

1.4 INTRADAY – US Options vol skew



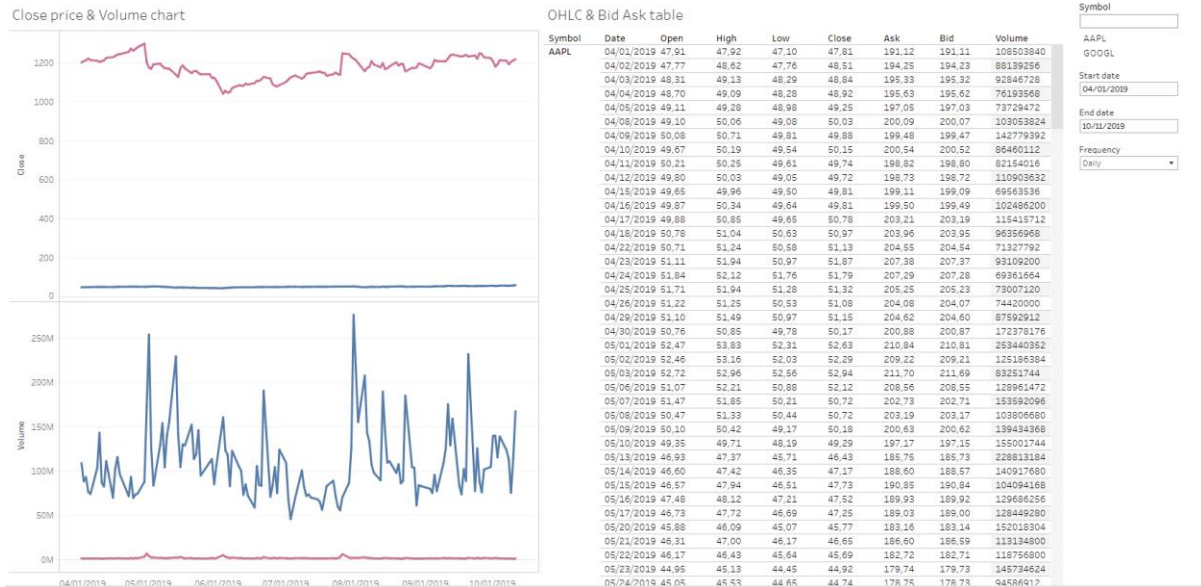
Select equity symbol, date & time and Expiration dates.

1.5 EOD – Total Option Volume & OI



Select equity symbol, start/end dates and one or more expiration dates.

1.6 EOD – US Equity price & volume



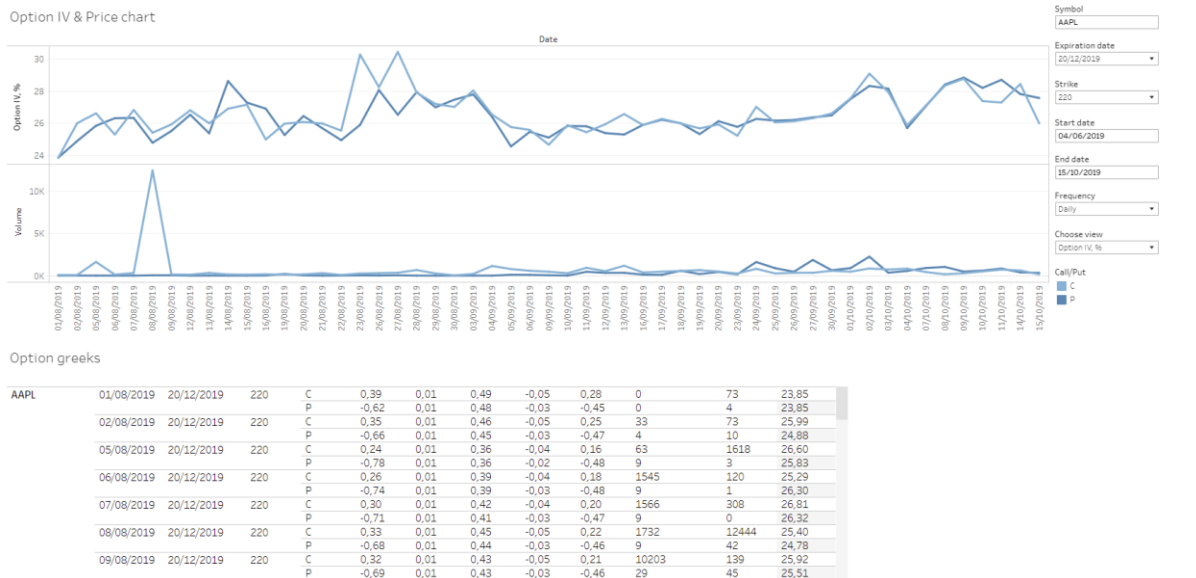
Select equity symbol, start/end dates and Frequency.

1.7 EOD – US Equity price, IVX, HV



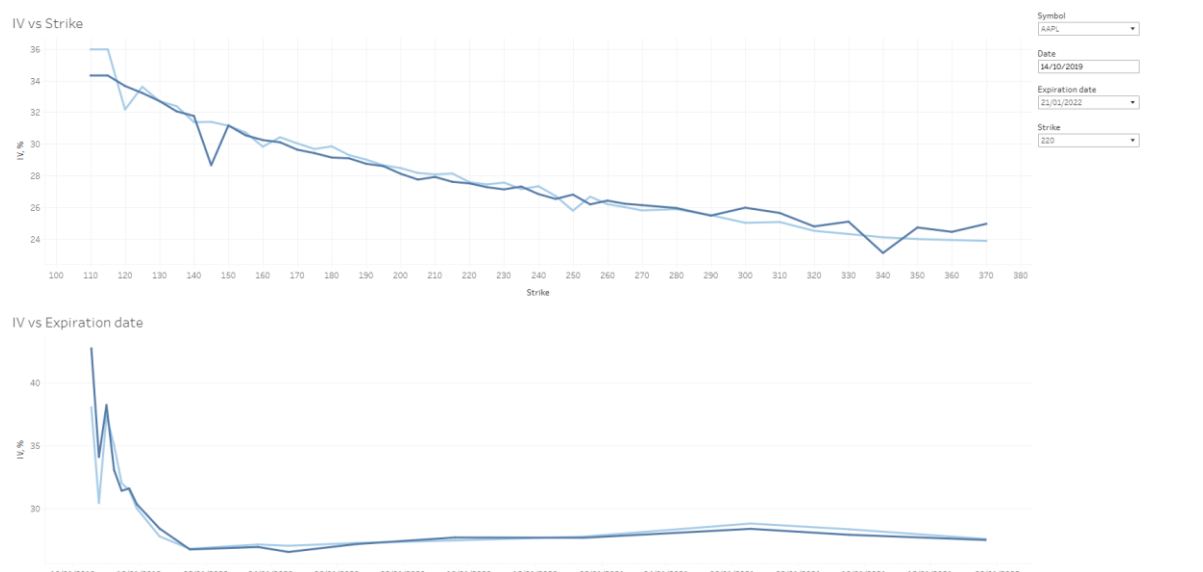
Specify equity ticker, start-end date fields and IVX/HV Periods. IVX 30 and HV 20 terms are chosen by default. You can select multiple periods in «IVX Period» drop-down list.

1.8 EOD – US Option IV & price with greeks



Specify equity ticker, start-end date fields, strike & expiration date. You can choose between two views: Option IV and Option Price.

1.9 EOD – US Options Vol skew (smile), Time skew charts



Specify equity ticker, trading date, strike & expiration date

1.10 EOD – US Top options by volume & OI

USA Top 100 options by volume

308 450	T	01/17/2020	30	C	19 160
285 306	T	10/18/2019	34	C	45 472
248 413	T	10/18/2019	36	C	42 039
188 331	T	10/18/2019	35	C	27 972
142 437	T	10/18/2019	33	C	23 992
132 203	T	01/17/2020	25	C	5 280
127 304	T	01/15/2021	25	C	5 105
108 707	SPY	10/09/2019	290	P	10 695
106 680	T	01/17/2020	28	C	4 175
102 458	XLV	10/25/2019	92	C	89
101 414	XLV	10/25/2019	91	C	373
98 741	T	01/15/2021	28	C	11 185
71 327	SPY	10/09/2019	289	P	5 966
70 971	SPY	10/09/2019	291	C	5 808
70 453	BAC	10/11/2019	27.5	P	12 596
63 727	SPY	10/09/2019	292	C	3 589
63 672	FXI	10/18/2019	42	C	75 145
63 034	T	10/18/2019	32	C	8 262
60 118	SPY	10/09/2019	288	P	9 525
54 742	SPY	10/09/2019	290	C	2 947
52 103	T	11/15/2019	44	C	90
50 592	SPY	10/11/2019	290	P	42 516
49 227	VIX	10/16/2019	29	C	96 900
48 655	SPY	10/09/2019	293	C	4 710
46 758	VIX	10/16/2019	16	P	120 915
44 766	SPY	10/09/2019	287	P	6 038
44 202	T	11/15/2019	33	C	5 965
43 594	SPY	10/18/2019	280	P	122 758
43 174	VIX	10/16/2019	15	P	169 135
42 130	SPY	10/09/2019	285	P	8 868
41 923	VZ	10/18/2019	57.5	C	7 873
41 583	SPY	10/11/2019	289	P	13 887
41 152	VZ	01/17/2020	50	C	9 988
40 938	AAPL	10/11/2019	225	P	10 191
39 246	SPY	10/09/2019	291	P	7 375
38 307	SPY	10/09/2019	295	C	27 701

USA Top 100 options by open interest

297 020	IEF	10/18/2019	96	P	0
283 124	EEM	10/18/2019	40	P	6 550
279 077	EEM	12/20/2019	39	P	4 180
272 893	CHK	01/17/2020	7	C	0
263 690	HYG	12/20/2019	82	P	1
256 714	EEM	10/18/2019	40	C	704
252 502	VIX	10/16/2019	25	C	32 658
249 227	CLDR	06/18/2021	5	P	4
248 024	EEM	10/18/2019	42	C	2 882
241 242	EEM	12/20/2019	37	P	2 944
236 825	FXI	01/17/2020	35	P	17 640
223 150	HYG	12/20/2019	84	P	2
221 692	EEM	12/20/2019	36	P	304
220 475	VIX	10/16/2019	23	C	3 271
212 076	VIX	12/18/2019	21	C	92
206 847	CVS	01/15/2021	90	C	41
204 471	HYG	11/15/2019	84	P	3 479
196 698	HYG	11/15/2019	80	P	187
196 168	SPY	12/20/2019	310	C	4 853
192 266	GE	10/18/2019	7	P	2 008
191 721	EEM	12/20/2019	35	P	3 924
185 087	SPY	12/20/2019	268	P	998
183 542	HYG	10/18/2019	82	P	0
178 930	VIX	10/16/2019	30	C	27 024
178 499	BKLN	10/18/2019	22	P	0
172 826	VIX	10/16/2019	28	C	7 332
171 281	VIX	10/16/2019	26	C	8 549
171 178	EEM	12/20/2019	30	P	0
170 143	SPY	12/20/2019	150	P	3
170 124	BAC	01/17/2020	32	C	1 494
169 603	HYG	12/20/2019	83	P	9
169 495	TWTR	01/17/2020	70	C	1
169 493	XLF	01/15/2021	24	P	1
169 135	VIX	10/16/2019	15	P	43 174
168 905	F	01/15/2021	7	P	1 537
167 102	VIX	01/17/2020	23	P	2 152

Date
08/10/2019

This dashboard contains top options by several volume and open interest.

1.11 EOD – US Top stocks

EOD US Top Stocks for 01/10/2019

Top price gainers

61.54	SPHX	1,3000	2,1000
47.13	CGIX	3,0870	4,5420
19.35	CFMS	1,8600	2,2200
17.49	CNST	6,4600	7,5900
15.23	HTGM	0,6645	0,7657
12.93	PLG	1,4700	1,6600
12.78	GERN	1,3300	1,5000
12.00	HYRE	2,5000	2,8000
11.71	STON	1,1100	1,2400
11.18	DRIP	65,4167	72,7333

Top volatility gainers

65.94	STWD	0,268	24,0800
58.22	E	0,511	30,2900
57.42	FF	0,904	8,8692
56.35	EZJ	0,649	34,2999
55.70	FR	0,391	39,0900
53.76	RDNT	0,712	13,9000
53.32	PFGC	0,615	46,3100
52.87	VNQL	0,136	58,2100
51.77	UBS	0,531	11,1400
49.95	ACIA	0,145	64,9600

Top option volume gainers

1 215 630	SPY	3 392 394	293,2400
370 832	IWM	620 796	148,3700
271 605	AAPL	704 404	56,1475
266 304	XLF	300 845	27,4100
131 203	VIX	374 938	18,5600
111 710	GE	175 093	8,6100
108 962	QQQ	662 331	187,2700
99 068	X	135 928	11,9300
98 025	HAL	112 366	18,5800
76 813	UVXY	137 723	27,6200

Date
01/10/2019

Top price losers

-26.32	NERV	7,7500	5,7100
-25.95	FELPQ	0,3083	0,2283
-25.39	REED	1,3000	0,9699
-22.01	LUMO	14,3100	11,1600
-17.77	ROYTL	1,9700	1,6200
-17.61	SURF	1,4200	1,1700
-17.55	SSINQ	1,8800	1,5500
-17.44	AXSM	20,2400	16,7100
-16.50	CYCN	12,1200	10,1200
-16.25	HMMY	0,0040	0,0033

Top volume gainers

38 089 081	NOK	16 059 887	54 148 968
36 466 228	SPY	51 883 404	88 349 632
35 027 312	AAPL	104 233 760	139 261 072
33 607 792	GE	35 307 352	68 915 144
30 712 806	SCHW	4 982 382	35 695 188
29 291 816	NIO	58 851 064	88 142 880
26 311 885	GOVT	4 548 939	30 860 824
24 210 276	XLF	30 662 244	54 872 520
23 076 972	VXX	24 020 284	47 097 256
20 087 169	X	10 835 571	30 922 740

Top option OI gainers

138 822	VIX	7 343 457	18,5600
90 629	AAPL	3 210 686	56,1475
85 054	HYG	3 817 976	86,6200
84 067	NIO	2 086 098	1,3200
68 724	VXX	1 407 043	24,7900
56 954	AMD	2 729 354	28,7600
55 703	BABA	1 648 907	165,1500
54 425	GDX	2 983 553	26,9200
47 953	BAC	3 960 524	28,4400
41 787	MSFT	2 028 202	137,0700

This dashboard contains top stocks by several parameters for a specific date.

Intraday Data Download

On this tab you can choose between Equity Prices and Equity Options Prices datasets. Futures Prices and Futures Options Prices datasets will be added soon.

1) Equity Prices

[← Back to dataset selection](#) [Read Wizard Guide](#)

Equity prices

Instrument

[Advanced search](#)


Select...



From

To





Frequency

Minute



Make an order

This dataset contains USA equity intraday data, including stocks, indexes and ETF's

To make an order you need to fill «Instrument», «From» and «To» fields.

The «Instrument» field contains equity symbols. You can choose several instruments in one query. Advanced search can help you find stocks by company name.

The «From» and «To» datetime fields are needed to specify requested time range.

You can select frequency in corresponding drop-down menu. The settings button can be used to set custom minutes.

Example: 0,20,40

When you type anything in «Minutes» field, the value of «Frequency» will be set to «Custom»

The data column information is described in Table 1 below.

Table 1. Equity Prices dataset

Column	Comment	Type
timestamp	Date and time	timestamp
stock_id	Internal stock identifier	int
Stock Symbol	Symbol of an underlying	string

type	Equity type. 'S' for stock, 'I' for index, 'F' for fund, 'X' for FX index	string
currency	Currency	string
bidPrice	Highest price a buyer will currently pay for a security.	float
askPrice	Lowest price at which a seller will currently sell a security.	float
lastPrice	Last Price.	float
bidDateTime	Last bid date	timestamp
askDateTime	Last ask date	timestamp
lastDateTime	Last trade date	timestamp
bidSize	The minimum quantity of a security a buyer is willing to purchase at a specified bid price.	int
askSize	The amount of a security that a seller is offering to sell at the ask price	int
lastSize	Last trade size	int
bidExchange	Last exchange for bid	string
askExchange	Last exchange for ask	string
lastExchange	Last trade exchange	string
volume	Stock Volume is the actual number of stock shares traded on a particular day	int
calcTimestamp	Date and time of the last changing of the row	timestamp

2) Equity Options Prices

[← Back to dataset selection](#) [Read Wizard Guide](#)

Equity Options prices

Instrument

[Advanced search](#)

Select...



From

To





Expiration Date

Strike

Call/Put

Select...



Select...



All



Call



Put

Frequency

Minute



Make an order

This dataset contains USA equity options intraday data.

Here you can also specify certain expiration dates, strike and option type. However, these fields are not required.

The data column information is described in Table 2 below.

Table 2. Equity Option Prices dataset

Column	Comment	Type
t_date	Date and time	timestamp
stockid	Internal stock identifier	int
stock_symbol	Symbol of an underlying	string
expiration_date	Option expiration date	timestamp
strike	Option strike	float
call_put	Call (C) or Put (P)	
style	Option style. 'E' for European, 'A' for American	string
option_symbol	Option ticker	string

price_bid	Highest price a buyer will currently pay for a security.	float
price_ask	Lowest price at which a seller will currently sell a security.	float
Date_bid	Last bid date	timestamp
Date_ask	Last ask date	timestamp
Size_bid	The minimum quantity of a security a buyer is willing to purchase at a specified bid price.	int
Size_ask	The amount of a security that a seller is offering to sell at the ask price	int
Exchange_bid	Last exchange for bid	string
Exchange_ask	Last exchange for ask	string
volume	Option Volume	int
iv	Implied volatility is equal to pre_iv (see below) in cases where it was calculated or interpolated linearly between strikes and linearly by variance between expirations for missing points based on pre_iv	float
price_opt	Underlying price used in calculations, this price is synchronized with options bid/ask prices.	float
delta	Delta. (Greek) Change of an option's price relative to a \$1 change in the underlying's price.	float
gamma	Gamma. (Greek) Change of Delta relative to a \$1 change in the underlying's price.	float
theta	Theta. (Greek) Loss of an option's value relative to a one day decrease in time to expiration (time decay).	float
vega	Vega. (Greek) Change of an option's price relative to a 1% (absolute) change in its implied volatility.	float
rho	Rho. (Greek) Change of an option's price relative to a 1% (absolute) change in its interest rate.	float
pre_iv	Implied volatility calculated directly from option price, if	float

	volatility is not calculated it is set to “-1”	
implied_yield	Implied Yield is calculated by parity formula and is used in volatility and greeks calculations for indexes and ETFs	float
calc_date	Date and time of the last changing of the row	timestamp

End of Day Data Download

At this page, you can choose one dataset from the six available: Options Prices, RawIV, IVIndex, Vol Surface by Moneyness, HV and Underlying Prices by clicking on the dataset name. You can see dataset description and prices using “i” button. Also you can switch between equities and futures using the “Type” field.

Choose data type

Choose dataset

Equities

Futures

Options prices (NBBO) i

RawIV i

IV Index i

IV Surface i

Historical Volatility i

Underlying Prices i

When you have chosen the dataset you can start to put together your order. Choose requires instruments type in a list of instruments in the search field. In case the ticker is not found, you can use our ‘**Advanced search**’.

Then enter start ('From' field) and end ('To' field) dates for your ticker list; they are applied to all names in your list (unless one of them has a later start date).

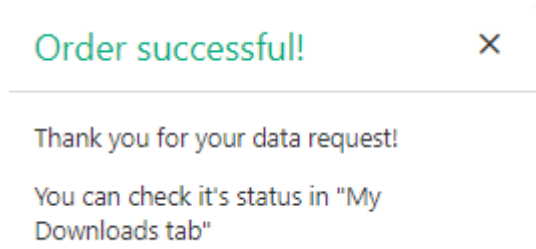
Earliest options data start November 2000 for US/Canada, Europe starts 2000 but many markets were added later, Asia starts November 2008. After the earliest start date, we usually have options data since the very first day they appeared in the market.

In some cases (when choosing IVIndex) you may see a start date for US May-1999, indeed, IVIndex 30 days starts in 1999, while other terms (60 to 180) start Nov-2000.

Earliest US stock prices data start in 1995 (this applies only to HV data).

Also you can choose daily, weekly or monthly (first/last business day) data (in the 'Frequency' field).

If the charge goes through, you will see the following notice:













If there are any problems with your order, you will be given a notification and would need to contact us at support@ivolatility.com.

All your downloads are saved in "My Downloads" page. You can always re-load data later for free:

My Downloads

☒ ALL
 ☐ INTRADAY
 ☐ EOD

Order date	Dataset	Symbol	Start Date	End Date	Frequency	Contract	Download
2020-11-13 09:19	INTRADAY Equity Prices	A	2020-11-10 18:19	2020-11-11 18:19	1 minute	-	
2020-11-13 09:16	INTRADAY Equity Prices	A	2020-11-10 18:14	2020-11-10 18:14	5 minutes	-	
2020-11-13 09:15	INTRADAY Equity Prices	A	2020-11-10 18:14	2020-11-10 18:14	5 minutes	-	
2020-11-13 08:47	EOD Underlying Prices	TSLA:NASDAQ	2020-10-30 00:00	2020-10-30 00:00		-	
2020-11-13 08:01	EOD Options prices (NBBO) with volume and open interest	NEE:NYSE	2020-11-10 00:00	2020-11-12 00:00	Daily	-	
2020-11-13 07:12	EOD Options prices (NBBO) with volume and open interest	GOOG:NASDAQ	2020-11-10 00:00	2020-11-12 00:00	Daily	-	
2020-11-13 07:08	EOD Options prices (NBBO) with volume and open interest	AAPL:NASDAQ	2020-11-10 00:00	2020-11-12 00:00	Daily	-	
2020-11-13 06:58	EOD Options prices (NBBO) with volume and open interest	AAPL:NASDAQ	2020-11-10 00:00	2020-11-12 00:00	Daily	-	
2020-11-13 06:51	EOD Options prices (NBBO) with volume and open interest	AAPL:NASDAQ	2020-11-10 00:00	2020-11-12 00:00	Daily	-	
2020-11-11 07:51	EOD Options prices (NBBO) with volume and open interest	SPX:CBOE	2020-11-10 00:00	2020-11-10 00:00	Daily	-	

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Use All/Intraday/End of Day radio buttons to filter your history queries.

The «Download» column of the table indicates the status of your order:



- File is being prepared.



- File is ready. Click this button to start downloading. The resulting file has .csv format. Note, that if your query contains more than 100 000 records, then the file will have gzip compression. So, to get the csv data, you need to unpack the archive. You can use such compression tools like WinRar (<https://www.win-rar.com/start.html?&L=2>), 7-zip (<https://www.7-zip.org>) or others. Maximum size of file ~30 Mb gzipped, 200 Mb unpacked.



- File is expired. By clicking on this button you will make a new order with same filters.

By clicking on download icon, the download will start.

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