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XTech Flow™- US Equity Flow Analytics – *Indigo Panther*

Based on the US Consolidated Feed trades this analytic applies deep high frequency trading knowledge of US EQUITY market microstructure to identify the direction of active risk taking by institutional buy-side, market makers and retail traders. This trading activity leaks information into the markets through their measurable trading behavior which we characterize with this dataset. The *Indigo Panther* dataset identifies buying and selling activity for both institutional and retail trader. The direction of the active risk takers is determined using multiple proprietary inference methods. The resulting trading flows of the active traders are aggregated on a minutely basis which is an ideal dataset to begin developing institutional investment strategies ranging from holding periods of minutes to months. Advanced versions of this product are available and provide aggregations by trader type (Fund, Retail) and exchange.

Product: XTech Flow™ US Equity Flow Analytics

Version: Indigo Panther Version 1.2

Coverage: US Equities

Delivery Frequency: Daily;15 min delayed; or real-time

Delivery Time: T+1 9:30 AM UTC; 15 min Delayed ; or real-time (3 seconds delayed)

Delivery Method: Unifier API

Data Frequency: 1 minute, Hourly, Daily, Weekly

Data Description: Contains Net Buying/Selling by All Active Investor Types

Data Size: 50-200 MB/day

Deep History: 1/1/2007-Present (17+ years)

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For further information or trial access via our unifier API please contact sales@exponential-tech.ai

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Data Dictionary

Column Name	Data Type	Description
asof_date	string	Trade date in **ISO 8601 format (America/New York)** (e.g., YYYY-MM-DDTHH:MM:SS.sssZ). Represents the trading day associated with the data.
timestamp	number (bigint)	Epoch timestamp in **milliseconds (America/New York)** representing the time of the data record.
asof_datetime	number (bigint)	Epoch timestamp in **milliseconds (America/New York)** indicating the latest moment at which the data would be available in a real-time feed.
extended_hours / includes_extended_hours	int	Indicates if the minute bar is during or completing during the extended hours session (1: Extended Session; 0: Regular Session starts at 09:31:00 NYT and ends at 16:01:00 NYT). Note: - The daily dataset uses the column name `includes_extended_hours`. - The 1-minute dataset uses the column name `extended_hours`.
ticker	string	Security trading symbol.
trade_count	Int	Number of discrete trades in time period.
dollar_volume	Double	Dollar volume of trades in time period.
method1__inst_buy	double	Buy dollar volume calculated using method1 to identify institutional trades.
method1_inst_sell	double	Sell dollar volume calculated using method1 to identify institutional trades.
method1_inst_buy_count	int	Buy trade count calculated using method1 to identify institutional trades.
method1_inst_sell_count	int	Sell trade count calculated using method1 to identify institutional trades.

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Column Name	Data Type	Description
method2_inst_buy	double	Buy dollar volume calculated using method2 to identify institutional trades.
method2_inst_sell	double	Sell dollar volume calculated using method2 to identify institutional trades.
method2_inst_buy_count	int	Buy trade count calculated using method2 to identify institutional trades.
method2_inst_sell_count	int	Sell trade count calculated using method2 to identify institutional trades.
method3_inst_buy	double	Buy dollar volume calculated using method3 to identify institutional trades.
method3_inst_sell	double	Sell dollar volume calculated using method3 to identify institutional trades.
method3_inst_buy_count	int	Buy trade count calculated using method3 to identify institutional trades.
method3_inst_sell_count	int	Sell trade count calculated using method3 to identify institutional trades.
method4_inst_buy	double	Buy dollar volume calculated using method4 to identify institutional trades.
method4_inst_sell	double	Sell dollar volume calculated using method4 to identify institutional trades.
method4_inst_buy_count	int	Buy trade count calculated using method4 to identify institutional trades.
method4_inst_sell_count	int	Sell trade count calculated using method4 to identify institutional trades.
method5_inst_buy	double	Buy dollar volume calculated using method5 to identify institutional trades.

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Column Name	Data Type	Description
method5_inst_sell	double	Sell dollar volume calculated using method5 to identify institutional trades.
method5_inst_buy_count	int	Buy trade count calculated using method5 to identify institutional trades.
method5_inst_sell_count	int	Sell trade count calculated using method5 to identify institutional trades.
retail_buy	double	Buy dollar volume calculated using method6 to identify retail trades.
retail_sell	double	Sell dollar volume calculated using method6 to identify retail trades.
retail_buy_count	int	Buy trade count calculated using method6 to identify retail trades.
retail_sell_count	int	Sell trade count calculated using method6 to identify retail trades.
date	string	Date in **ISO 8601 format (America/New York)**. Represents the normalized trading date for aggregation and filtering.

How is this dataset unique?

This is a new dataset, with unprecedented 1 minute granularity and 15 years of history. It offers analysts the unique ability to distinguish institutional and retail flow. The team that developed this product has over 20 years of experience in HFT and other systematic strategies across all major asset classes. It provides near-realtime market flow color comprehensively across the entire US market. Fundamental and systematic investors alike can utilize this data to interpret market action and reaction to new events to directly disentangle whether returns are explained by market impact vs changes in expectations based on new information. In the near futures, extended versions of this data will built upon this foundational dataset and will provide even greater granularity, flow decomposition and more investor types.

What are potential uses for this dataset?

- Identify critical support/resistance levels by symbol
- Estimate market impact functions overall and by investor type
- Visualize cross-asset flow correlations overall and by investor type
- Identify Momentum Signals

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- Identify Reversal Signals
- Overlay on stat arb models to understand when temporary market impact is ending
- Identify what types of players are responsible for unexplained or curious HFT behaviors observed in other strategies
- Analyze Concentration Risk
- Understand Stock Option Short Gamma Behavior of Dealers
- Other Example Strategies Might Be:
    - Enter after large position changes
    - Enter positions based on price threshold + position increases
    - Enter based on position threshold and exist after a certain period of time
- Identifying large market moving trades as they happen
- Intraday momentum trades
- 13D/13F Announcement Predictions
- M&A Position Tracking
- Index Add/Delete Strategy Tracking
- Closed-End-Fund Arbitrage Strategies
- Open/Closing Auction Imbalance Prediction
- Close-Open Returns
- Open-Close Returns
- Can be combined with XTech Option Flow Analytic to provide complete view of order imbalances each minute

Known Errata:03/08/2019[1]
03/13/2019[1]
03/14/2019[1]
03/15/2019[1]
03/18/2019[1]
06/07/2019[1]
11/30/2023[1]
01/02/2025[1]01/03/2025[1]01/06/2025[1]01/07/2025[1]01/08/2025[1]
[1] We have detected that as many as 10 symbols are missing from these days. Our research team is working with our data sources to patch these dates.

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