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BMLL Daily Analytics

Historical Time-Series Analytics Derived from BMLL Level <u>3 Data</u>

bmlltech.com

BMLL Daily Analytics provide the most granular historical (T+1) view of the market whilst removing the need for firms to capture, process and store full-depth order book data.

CHOOSING DAILY ANALYTICS FROM THE HISTORICAL LEVEL 3 DATA SPECIALIST

BMLL Daily Analytics are derived from BMLL Level 3 Data. As the T+1 Level 3 Data provider, BMLL has industry-leading normalisation and harmonisation data engineering processes. Traders, quants and researchers gain the cleanest order book data available anywhere in the capital markets.

BMLL DAILY ANALYTICS SUPPORT A BROAD RANGE OF USE CASES

Market quality

Compare venue quality across fragmented markets to optimise smart order routers and assess regulatory change Understand venue liquidity over time to develop compliance models execution algorithms or to benchmark and compare exchanges

Venue performance

Market microstructure

Understand how the market truly behaves to develop market surveillance models or generate new sources of alpha

BMLL DAILY ANALYTICS PROVIDE A COMPLETE VIEW OF THE MARKET

- · All analytics derived from the Level 3 order book
- · Coverage includes all major equity markets across Europe, the Americas and Asia
- · Time series analytics available at a daily frequency
- · Analytics available from 2016 (venue dependent)
- All daily analytics are via API/SFTP



Data Collection	Data Curation	Data Harmonisation	Analytics Generation
Venues and licenses - 3 separate licenses per venue - Dedicated headcount to data sourcing and legal & commercial discussions	 Daily data processing Reference data & complex venue/security mapping framework Each venue's unique fields mapped to the data schema Data maintenance Consistent and robust data 	Data harmonisation logic layer - Unique harmonised data schema across all venues	Analytics Generation - Harmonised data and reference mapping allow for easy analytics computation across all venues at the millisecond level - 30bn data points in BMLL API suite derived from Level 3 Data
Data Quality Cl	testing approach	entation Features &	- 4 market-leading APIs delivering analytics Data Quality Checks Issues Feedback Loop

Users can select over 300 analytics from 14 metric groups, or choose from our most popular metric bundles.

Bundles	Metrics	Use Case
Liquidity Analytics	 Liquidity Cost Liquidity Around BBO Liquidity Classification 	 Buy-side - Improve execution and transaction cost analysis using a consistent view of pricing across fragmented markets Sell-side - Optimise execution algorithms by understanding pre and post-trade liquidity Exchanges - Compare your liquidity against peers to understand how your market performs
Order Lifecycle	 Order Fill Behaviour Order Placement Statistics Execution Market Impact 	 Buy-side - Better understand market microstructure to generate new sources of alpha Sell-side - Optimise smart order routing decisions and client communications by understanding order book characteristics Surveillance - Contextualise order and trade behaviour by understanding market dynamics
Venue Quality	 Trade Quality Volatility Spread Metrics Venue Price Quality 	 Sell-side - Optimise smart order routers by comparing market behaviour across different exchanges Exchanges - Improve order book liquidity provision with peer venue analyses
Prices & Volumes	 Trade Prices OHLC Bars 	 Buy-side - Backtest models using trades and quotes data, derived from BMLL Level 3 Data
Auction Analytics	 Auction Dislocation Auction Order Imbalance 	 Buy-side - Build a complete picture of the auction to better inform your traders Sell-side - Optimise your algorithms to utilise the auction and continuous trading periods Regulators - Understand auctions dynamics and their evolution to inform policy changes

BMLL INTRADAY ANALYTICS ARE AVAILABLE VIA API and SFTP



