Historical Data Glossary

v2

ℹ This is extensive list for every API endpoint. Choose the category of historical data you're analysing in the right sidebar for quick access. ➡ ➡ ➡

Shared columns

Columns in the table below are part of each category:

Column Unit Precision Description ts int seconds(since 1970) Unix timestamp of the event. txSig pubkey

Transaction signature. slot int

Slot number of the event. user pubkey amount int programId pubkey

Solana program identifier (AMM* = Drift protocol mainnet). marketType perp/spot

Type of market where the order was filled ("Spot", "Perpetual"). marketIndex int

Perpetual contract[market index(opens in a new tab)] spotMarketIndex int

Index of the spot market. perpMarketIndex int

Index of the perpetual contract market. userAuthority pubkey

Public key of the user's authority account (wallet). oraclePrice int

Oracle price at the time of an event (provided by Pyth/Switchboard).

Trades

Column unit precision description fillerReward int

Reward received by the filler for filling the order. baseAssetAmountFilled int

Amount of the base asset filled in the order. quoteAssetAmountFilled int

Amount of the quote asset filled in the order. takerFee int

Fee charged to the taker for filling the order. makerRebate int

Rebate provided to the maker for placing the order. referrerReward int

Reward received by the referrer for referring the order. quoteAssetAmountSurplus int

Amount of the quote asset remaining unfilled after the order is completed. takerOrderBaseAssetAmount int

Total amount of the base asset the taker ordered to buy or sell. takerOrderCumulativeBaseAssetAmountFilled int

Cumulative amount of the base asset filled for the taker's order. takerOrderCumulativeQuoteAssetAmountFilled int

Cumulative amount of the quote asset filled for the taker's order. makerOrderBaseAssetAmount int

Total amount of the base asset the maker ordered to buy or sell. makerOrderCumulativeBaseAssetAmountFilled int

Cumulative amount of the base asset filled for the maker's order. makerOrderCumulativeQuoteAssetAmountFilled int

Cumulative amount of the quote asset filled for the maker's order. makerFee int

Fee charged to the maker for placing the order (if not a maker rebate). action fill

Action type for the order fill event (e.g., "Fill"). actionExplanation orderExpired/orderFilledWithMatch

Explanation of the action type. filler pubkey

Address of the entity that filled the order. fillRecordId int

Unique identifier for the order fill record. taker pubkey

Address of the taker who placed the order. takerOrderId int

Unique identifier for the taker's order. takerOrderDirection long/short

Direction of the taker's order (e.g., "Buy", "Sell"). maker pubkey

Address of the maker who placed the opposing order. makerOrderId int

Unique identifier for the maker's order. makerOrderDirection long/short

Direction of the maker's order (e.g., "Buy", "Sell"). spotFulfillmentMethodFee int

Fee associated with the spot fulfillment method used.

Market Trades

Column unit Precision Description fillerReward int

Reward received by the filler for filling the order. baseAssetAmountFilled int

Amount of the base asset filled in the order. quoteAssetAmountFilled int

Amount of the quote asset filled in the order. takerFee int

Fee charged to the taker for filling the order. makerRebate int

Rebate provided to the maker for placing the order. referrerReward int

Reward received by the referrer for referring the order. quoteAssetAmountSurplus int

Amount of the quote asset remaining unfilled after the order. takerOrderBaseAssetAmount int

Total amount of the base asset the taker ordered to buy or sell. takerOrderCumulativeBaseAssetAmountFilled int

Cumulative amount of the base asset filled for the taker's order. takerOrderCumulativeQuoteAssetAmountFilled int

Cumulative amount of the quote asset filled for the taker's order. makerOrderBaseAssetAmount int

Total amount of the base asset the maker ordered to buy or sell. makerOrderCumulativeBaseAssetAmountFilled int

Cumulative amount of the base asset filled for the maker's order. makerOrderCumulativeQuoteAssetAmountFilled int

Cumulative amount of the quote asset filled for the maker's order. makerFee int

Fee charged to the maker for placing the order (if not a maker rebate). action fill

Action type for the order fill event (e.g., "Fill"). actionExplanation orderFilledWithMatch/ orderFilledWithMatchJit/ orderFilledWithAmmjit

Explanation of the action type. filler pubkey

Address of the entity that filled the order. fillRecordId int

Unique identifier for the order fill record. taker pubkey

Address of the taker who placed the order. takerOrderId int

Unique identifier for the taker's order. takerOrderDirection long/short

Direction of the taker's order (e.g., "Buy", "Sell"). maker pubkey

Address of the maker who placed the opposing order. makerOrderId int

Unique identifier for the maker's order. makerOrderDirection long/short

Direction of the maker's order (e.g., "Buy", "Sell"). spotFulfillmentMethodFee int

Fee associated with the spot fulfillment method used.

Funding Rates

Column unit precision Description recordId int

Unique order fill identifier. fundingRate int

Perpetual contract funding rate (long/short). fundingRateLong int

Funding paid by long positions. fundingRateShort int

Funding paid by short positions. cumulativeFundingRateLong int

Long positions' cumulative funding. cumulativeFundingRateShort int

Short positions' cumulative funding. oraclePriceTwap int

TWAP of oracle price (period). markPriceTwap int

TWAP of mark price (period). periodRevenue int

Market revenue for a specific period. baseAssetAmountWithAmm int

Total base asset in the AMM pool. baseAssetAmountWithUnsettledLp int

Unsettled base asset with LPs.

Funding Payments

Column unit precision description fundingPayment int

Amount of funding paid by the user (positive for long, negative for short). baseAssetAmount int

Amount of the base asset involved in the funding payment. userLastCumulativeFunding int

User's last cumulative funding rate at the time of the event. ammCumulativeFundingLong int

AMM's cumulative funding rate for long positions at the time of the event. ammCumulativeFundingShort int

AMM's cumulative funding rate for short positions at the time of the event.

Deposits

Column unit Precision Description marketDepositBalance int

Current total market deposits. marketWithdrawBalance int

Current total market withdrawals. marketCumulativeDepositInterest int

Total deposit interest accrued. marketCumulativeBorrowInterest int

Total borrow interest accrued. totalDepositsAfter int

Total market deposits after this event. totalWithdrawsAfter int

Total market withdrawals after this event. depositRecordId int

Unique identifier for the deposit/withdrawal record. direction deposit/withdrawal

Deposit or withdrawal. explanation (optional) str

Liquidations

Column unit precision description liquidationType liquidatePerp/ liquidateSpot/ liquidateBorrowForPerpPnl/ liquidatePerpPnlForDeposit/ perpBankruptcy/ spotBankruptcy

Liquidation type liquidator pubkey

Liquidator marginRequirement int

Minimum collateral required totalCollateral int

User's total collateral marginFreed int

Collateral returned to user liquidationId int

Unique liquidation ID bankrupt bool

User became bankrupt canceledOrderIds ListContainer

Array of canceled order IDs during liquidation liquidatePerp (marketIndex, oraclePrice, ...) int

Liquidation type with additional details. liquidateSpot (assetMarketIndex, assetPrice, ...) int

Liquidation type with additional details. liquidateBorrowForPerpPnl (perpMarketIndex, marketOraclePrice, ...) int

Liquidation type with additional details. liquidatePerpPnlForDeposit (perpMarketIndex, marketOraclePrice, ...) int

Liquidation type with additional details. perpBankruptcy (marketIndex, pnl, ...) int

Liquidation type with additional details. spotBankruptcy (marketIndex, borrowAmount, ...) int

Liquidation type with additional details.

Settle PNL

Column Unit Precision Description pnl int

User's profit or loss. baseAssetAmount int

Amount of base asset involved. quoteAssetAmountAfter int

Amount of quote asset after settlement. quoteEntryAmount int

Amount of quote asset before settlement. settlePrice int

Settlement price. explanation none

LP (BAL)

Column Unit Description action addLiquidity / settleLiquidity nShares int Number of perpetual contract shares traded. deltaBaseAssetAmount int Change in base asset position due to the trade. deltaQuoteAssetAmount int Change in quote asset position due to the trade. pnl int Profit or loss from the trade.

Insurance Fund

Column Unit Precision Description vaultAmountBefore int

Total amount deposited into the vault before the event. insuranceVaultAmountBefore int

Total amount in the insurance vault before the event. totalIfSharesBefore int

Total number of IF shares in circulation before the event. totalIfSharesAfter int

Total number of IF shares in circulation after the event. userIfFactor int

User's individual IF factor before the event. totalIfFactor int

Total IF factor for all users before the event.

Insurance Fund Stake

Column Unit Precision Description action stakeTransfer ifSharesBefore int

Total IF shares in circulation before staking. userIfSharesBefore int

User's individual IF share balance before staking. totalIfSharesBefore int

Total IF factor for all users before staking. ifSharesAfter int

Total IF shares in circulation after staking. userIfSharesAfter int

User's individual IF share balance after staking. totalIfSharesAfter int

Total IF factor for all users after staking. insuranceVaultAmountBefore int

Total amount in the insurance vault before staking.

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Trades

Column unit Precision description Ext. Link id int programId publickey

the on-chain program interacted with (AMM* == drift protocol mainnet) recordId int

sequential count of all trades that ever occured (ensures proper ordering vs by the second timestamp) userAuthority publickey user publickey baseAssetAmount int 1e13 BASE amt of swap (e.g. SOL-PERP) quoteAssetAmount int 1e6 USDC of swap markPriceBefore int 1e10 markPriceAfter int 1e10 fee int 1e6 fee paid to AMM by user for swap liquidation bool

was trade a forced liquidation direction Long | Short

did user go Long (buy) or Short (sell) the Base amt blockChainTimeStamp int seconds(since 1970) unix on-chain time stamp serverTimeStamp int seconds(since 1970) exchange history server off-chain time stamp (can be delayed due to outages) marketIndex int

market Index in Markets Account that user swapped markets(opens in a new tab) oraclePrice int 1e10 oracle price at time of swap (provided by pyth/switchboard)

Historical Data v2 Referral Link