Historical Data Product Manual

Version 3.0.1

(Updated on 2021-12-10)

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1 Historical data service and delivery method

The provision of historical data is divided into subscription data and special customized data packages. Depend on service and the volume of data, historical data will be delivered by SFTP, USB or portable hard disk.

Subscription of current historical data service

The current historical data is transmitted to AWS workdocs drive and provide account for user to login to download. The historical data is updated on daily basis before 9pm for trading days. The public cloud platform will keep the current 2 weeks trading data. Users can download each trading day data for maximum three times (we do not set the restriction but we monitor the download history).

For any emergency causing public cloud fail to provide service, CIIS cloud platform will provide temporary SFTP link and temporary account for users to download historical data until the public cloud service is recovered.

To download workdoc drive, user can download from the following link:
https://amazonworkdocs.com/en/clients

For the user guide of workdoc drive, user can find the following link which provide the installation and the mounting method:
https://docs.aws.amazon.com/workdocs/latest/userguide/workdocs_drive_help.html

Specific historical data packages

The specific data packages are extracted from past historical data according to the trading period which user requests. It determines the delivery method based on the volume of data.

For the data volume is less than 5GB, it is provided by SFTP of third-party public cloud platform for users to download. User who have subscribed to current data can use their subscription account to download on the third-party cloud platform. User who does not contain subscription account, we will allocate a temporary account of the third-party cloud platform for user to login and download within 30 days from the time of URL provided. After 30 days, the temporary account will be disable.

For the data volume is 5GB-256GB, the historical data will be stored in USB

For the data volume is greater than 256GB, the historical data will be stored on the portable hard disk.

2 Data definition

For market division, it includes SSE Level-1 Market, SSE Level-2 Market, SSE Stock Options Market and China Indices Market. For data content, it includes snapshot data, tick by tick data, auction data, K-line(day) data and K-line(minute) data.

The specific terms are as follows:

1. Snapshot
   Each snapshot interval is 3 seconds or 5 seconds (if the adjacent snapshots are identical, the first one is retained), the snapshots of all securities for one day are stored in a file in chronological order.

2. K-line(day) and K-line(minute)
   On the basis of providing K-line data for both day and minute, providing previous close price and basic data.

3. Tick by Tick
   It provides detailed transaction data for each transaction of securities and store transactions of all securities for one day in a file in chronological order.

4. End of day (EOD)
   It provides the market data of Day-end closing data. Each file contains the whole year of EOD data.

5. Auction
   It provides securities open auction data. The open auction data of all securities for one day are stored in a file in chronological order.

6. Tick by Tick order queue
   It provides securities tick by tick order queue data. The tick by tick order queue data of all securities are stored in a file in chronological order.

3 File Format

For the files of snapshot, k-line and tick by tick, the files are in CSV format. Each field is separated by "," (English half-width) and encoded by UTF-8

The format of the first line:
HEAD: version number,yyyy/MM/dd HH:mm:ss
For example: HEAD:v1,2021/01/21 11:50:53
HEAD is a fixed string. The version number is the file interface version number. The date and time are the execution time of the data cleaning program.

For end of day data, the file is in text format. Each field is separated by "|" and encoded by GB2312.

4 Directory hierarchy

Subscription of current historical data service

Data type	Hierarchy format
Snapshot	<Market>/<Product_type>/<Date>/<Product_type>.csv E.g. SH2/Snapshot/20200811/Snapshot.csv
After-market fixed price snapshot	<Market>/<Product_type>/<Date>/<Product_type>.csv E.g. SH2/Snapshot/20200811/FpTradeSnap.csv
Tick	<Market>/<Product_type>/<Date>/<Product_type>.csv E.g. SH2/Tick/20200811/Tick.csv
Bond tick-by-tick	<Market>/<Product_type>/<Date>/<Product_type>.csv E.g. SH2/Tick/20211210/BondTick.csv
After-market fixed price tick by tick	<Market>/<Product_type>/<Date>/<Product_type>.csv E.g. SH2/Tick/20200811/FpTradeTick.csv
Auction	<Market>/<Product_type>/<Date>/<Product_type>.csv E.g. SH2/Auction/20180811/Auction.csv
K-line(Day)	<Market>/<Product_type>/<Date>/<Product_type>.csv E.g. SH2/K-line/20180811/Day.csv
K-line(Minute)	<Market>/<Product_type>/<Date>/<Product_type>.csv E.g. SH2/K-line/20180811/Minute.csv
Tick by Tick Order Queue	<Market>/<Product_type>/<Date>/<Product_type>.csv E.g. SH2/Entrust/20180811/Entrust.csv

End of day	EOD \<Year>\ se003sshqyyyymmdd.txt

Specific historical data packages

Data type	**Hierarchy format**
Snapshot	<Market>/<Date>/<Product_type>.csv E.g. SH2/20200811/Snapshot.csv
After-market fixed price snapshot	<Market>/<Date>/<Product_type>.csv E.g. SH2/20200811/FpTradeSnap.csv
Tick	<Market>/<Date>/<Product_type>.csv E.g. SH2/20200811/Tick.csv
Bond tick-by-tick	<Market>/<Date>/<Product_type>.csv E.g. SH2/20211210/BondTick.csv
After-market fixed price tick by tick	<Market>/<Date>/<Product_type>.csv E.g. SH2/20200811/FpTradeTick.csv
Auction	<Market>/<Date>/<Product_type>.csv E.g. SH2/20180811/Auction.csv
K-line(Day)	<Market>/<Date>/<Product_type>.csv E.g. SH2/20180811/Day.csv
K-line(Minute)	<Market>/<Date>/<Product_type>.csv E.g. SH2/20180811/Minute.csv
Tick by Tick Order Queue	<Market>/<Date>/<Product_type>.csv E.g. SH2/20180811/Entrust.csv
End of day	EOD \<Year>\ se003sshqyyyymmdd.txt

4.1 Market Mapping table

Market	**Market Short name**

SSE Level-1	SH1
SSE Level-2	SH2
SSE Stock Options	SHO
SSE Fixed Income	SHFI
China Indices	CSI

4.2 Type Mapping table

Type	**Type name**
Market Snapshot Data	Snapshot
After-market fixed price trading snapshot	FpTradeSnap
Tick by Tick Data	Tick
After-market fixed price trading tick by tick	FpTradeTick
Tick by Tick order queue	Entrust
Auction	Auction
K-line(day)	Day
K-line(min)	Minute

5 Product List

The types of historical data provided by different markets are different. Please read the table below for details:

Product	**Content**	**First Issue Date**
Shanghai Stock Exchange ("SSE") Level-1 Historical Data (excluding Stock Options)	1. SSE Level-1 Snapshot and K-line file 2. SSE Fix Income Snapshot file	2 January 2014
SSE Level-2 Intra-Day Snapshot Historical Data (excluding Stock Options)	1. SSE Level-2 Snapshot and K-line file 2. SSE Fix Income Snapshot file	2 January 2014

SSE Level-2 Historical Tick Data (excluding Stock Options)	1. SSE Level-2 Tick Data file 2. SSE Fix Income Tick Data file	2 January 2014
SSE Level-2 Historical Tick by Tick Order Queue Data (excluding Stock Options)	1. SSE Level-2 Tick by Tick Order Queue Data file	2 January 2015
SSE Stock Options Intra-Day Snapshot Historical Data	1. SSE Stock Options Snapshot and K-line file	9 February 2015
China Indices Intra-Day Snapshot Historical Data	1. China Indices Snapshot and K-line file	3 January 2017
SSE and China Indices End of Day Historical Data (excluding Stock Options)	1. SSE and China Indices EOD file with Text format	19 December 1990

6 Market Data

The number is the bracket indicates number of decimal places. (e.g NUMBER(3), it indicates there are 3 decimal places)

6.1 Shanghai Level-1

6.1.1 Snapshot

Filename: sh1\yyyymmdd\Snapshot.csv

Field Name	Definition	Type	Remark
SecurityID	Security Code	STRING	
DateTime	Date and time	NUMBER	Business time, e.g 20150803093008
PreClosePx	Previous close price	NUMBER(3)	
OpenPx	Open price	NUMBER(3)	

HighPx	High price	NUMBER(3)	
LowPx	Low price	NUMBER(3)	
LastPx	Last price	NUMBER(3)	
Volume	Volume	NUMBER	Stocks: Shares Warrant: Contract Bond: Lot Index: Lot
Amount	Turnover	NUMBER(2)	Unit: dollars
BidPrice[5]	BID price (5 market depth)	NUMBER(3)	
BidOrderQty[5]	Quantity of BID order (5 market depth)	NUMBER	
OfferPrice[5]	ASK price (5 market depth)	NUMBER(3)	
OfferQty[5]	Quantity of ASK order (5 market depth)	NUMBER	
NumTrades	Number of trades	NUMBER	Level-1 FAST
IOPV	Indicative Optimized Portfolio Value	NUMBER(3)	Level-1 FAST
NAV	Net Asset Value	NUMBER(3)	Level-1 FAST
PhaseCode	Phase Code	STRING	This field is an 8 characters string. Each character from the left represents a specific meaning. It is blank if there is no specific meaning. The first character: 'S' represents the market pre-open period; 'C' represents the call auction period; 'T' represents the continuous auction period; 'B' represents the afternoon market closed period; 'E' represents the end-of-day market closed period; 'P' represents the instrument suspended temporarily; 'M' represents the circuit breaking period which is resumable for trading (intraday call auction); 'N' represents the circuit breaking period which is not resumable

			for trading (trading suspension until market closure); 'D' represents the period between the end of the open call auction period and the continuous auction period(if any). The second character: ‘0’ indicates the instrument cannot be traded normally; ‘1’ indicates the instrument can be traded normally, blank for no specific meaning. The third character: ‘0’ indicates the instrument is unlisted; ‘1’ indicates the instrument is listed. The fourth character: ‘0’ indicates the new order declaration is not accepted for the instrument in the current period; ‘1’ indicates the new order declaration is accepted for the instrument in the current period, blank for no specific meaning.
AvgPx	Average price	NUMBER(3)	
ClosePx	Closing price	NUMBER(3)	
MsgSeqNum	Message sequence number	NUMBER	
SendingTime	Message sending time	NUMBER	e.g 20150803093008

6.1.2 After-market fixed price trading snapshot (STAR Board)

Filename: sh1\yyyymmdd\FpTradeSnap.csv

Field Name	Definition	Type	Remark
SecurityID	Security Code	STRING	
DateTime	Date and time	NUMBER	Business time, e.g 20150803093008
TradeVolume	Traded volume	NUMBER	
TotalValueTraded	Turnover	NUMBER(2)	
ClosePrice	Close price	NUMBER(3)	

BuyVolume	Buy Volume	NUMBER	
SellVolume	Sell Volume	NUMBER	
TradingPhaseCode	Trading phase code	STRING	The 0th character: 'I' indicates market pre-open period; 'A' indicates call auction period; 'H' indicates continuous call auction period; 'D' indicates market close period; 'F' indicates suspension. The 1st character: '0' indicates the instrument does not accept new order declaration; '1' indicates the instrument accepts new order declaration;
TimeStamp	Latest transaction timestamp	STRING	HHMMSSss

6.1.3 K-line

Filename: Daily K-line sh1\yyyymmdd\Day.csv;
Minute K-line sh1\yyyymmdd\Minute.csv

Field Name	Definition	Type	Remark
SecurityID	Security Code	STRING	
DateTime	Date and time	NUMBER	Daily K-line: 20151123
		NUMBER	Minute K-line: 20151123091630
PreClosePx	Previous close price	NUMBER(3)	
OpenPx	Open price	NUMBER(3)	
HighPx	High price	NUMBER(3)	
LowPx	Low price	NUMBER(3)	
LastPx	Last price	NUMBER(3)	
Volume	Volume	NUMBER	
Amount	Turnover	NUMBER(2)	
IOPV	Indicative Optimized	NUMBER(3)	Level-1 Fast

	Portfolio Value		
fp_Volume	After-market fixed price trading volume	NUMBER	kshare
fp_Amount	After-market fixed price trading turnover	NUMBER(3)	kshare
AvgPx	Average price	NUMBER(3)	
MinuteNum	Number of minute K-lines	NUMBER	
TradingDay	Trading day	NUMBER	

6.2 SSE Level-2

6.2.1 Snapshot

Filename: sh2\yyyymmdd\Snapshot.csv

Field Name	Definition	Type	Remark
SecurityID	Security Code	STRING	
DateTime	Date and time	NUMBER	Business time 20151123091630
PreClosePx	Previous close price	NUMBER(3)	
OpenPx	Open price	NUMBER(3)	
HighPx	High price	NUMBER(3)	
LowPx	Low price	NUMBER(3)	
LastPx	Last price	NUMBER(3)	
TotalVolumeTrade	Total volume traded	NUMBER	Stocks: Shares Warrant: Contract Bond: Lot Index: Lot

TotalValueTrade	Turnover	NUMBER(2)	Unit: dollars
InstrumentStatus	Trading Status	STRING	
BidPrice[10]	BID price (10 market depth)	NUMBER(3)	
BidOrderQty[10]	Quantity of BID order (10 market depth)	NUMBER	
BidNumOrders[10]	Total Number of BID orders(10 market depth)	NUMBER	
BidOrders[50]	Recent 50 transactions on BID(1) price	NUMBER	
OfferPrice[10]	ASK price (10 market depth)	NUMBER(3)	
OffeOrderQty[10]	Quantity of ASK order (10 market depth)	NUMBER	
OfferNumOrders[10]	Total Number of ASK orders(10 market depth)	NUMBER	
OfferOrders[50]	Recent 50 transactions on ASK(1) price	NUMBER	
NumTrades	Number of trades	NUMBER	
IOPV	Indicative Optimized Portfolio Value for ETF	NUMBER(3)	
TotalBidQty	Total quantity of BID orders	NUMBER	Stocks: Shares Warrant: Contract Bond: Lot
TotalOfferQty	Total quantity of ASK orders	NUMBER	Stocks: Shares Warrant: Contract Bond: Lot
WeightedAvgBidPx	Weighted Average BID Price	NUMBER(3)	
WeightedAvgOfferPx	Weighted Average ASK price	NUMBER(3)	
TotalBidNumber	Total number of BID orders	NUMBER	
TotalOfferNumber	Total number of ASK orders	NUMBER	
BidTradeMaxDuration	Maximum duration of BID trade	NUMBER	

OfferTradeMaxDuration	Maximum duration of ASK trade	NUMBER	
NumBidOrders	Number of BID order levels	NUMBER	
NumOfferOrders	Number of ASK order levels	NUMBER	
WithdrawBuyNumber	Number of withdrawing buy orders	NUMBER	
WithdrawBuyAmount	Quantity of withdrawing buy orders	NUMBER	
WithdrawBuyMoney	Amount of withdrawing buy orders	NUMBER(2)	
WithdrawSellNumber	Number of withdraw sell orders	NUMBER	
WithdrawSellAmount	Quantity of withdrawing sell orders	NUMBER	
WithdrawSellMoney	Amount of withdrawing sell orders	NUMBER(2)	
ETFBuyNumber	Number of ETF buy orders	NUMBER	
ETFBuyAmount	Quantity of ETF buy orders	NUMBER	
ETFBuyMoney	Amount of ETF buy orders	NUMBER(2)	
ETFSellNumber	Number of ETF sell orders	NUMBER	
ETFSellAmount	Quantity of ETF sell orders	NUMBER	
ETFSellMoney	Amount of ETF sell orders	NUMBER(2)	
AvgPx	Average price	NUMBER(3)	Effective from 2021-12-01
ClosePx	Close price	NUMBER(3)	Effective from 2021-12-01
MsgSeqNum	Message sequence number	NUMBER	Effective from 2021-12-01
SendingTime	Sending time	NUMBER	e.g 20150803093008 Effective from 2021-12-01
WarLowerPx	Weighted average price of bond repo instruments	NUMBER(3)	Effective from 2021-12-01
TradingPhaseCode	Trading phase code	STRING	Effective from 2021-12-01

NumImageStatus	Type of snapshot	NUMBER	1: full 2: incremental Effective from 2021-12-01

6.2.2 After-market fixed price trading snapshot (STAR Board)

Filename: sh2\yyyymmdd\FpTradeSnap.csv

Field Name	Definition	Type	Remark
SecurityID	Security Code	STRING	
DateTime	Date and time	NUMBER	e.g 20150803093008000(ms)
ClosePx	Close price	NUMBER(3)	
InstrumentStatus	Trading Status	STRING	INIT - Start PCALL - Call Auction Period POSTMT - Continuous Call Auction Period ENDPT - Close POSSP - Suspension
NumTrades	Number of trade transactions	NUMBER	
TotalVolumeTrade	Total volume traded	NUMBER	
TotalValueTraded	Turnover	NUMBER(2)	
TotalBidQty	Total quantity of BID orders	NUMBER	
TotalSellQty	Total quantity of ASK orders	NUMBER	
WtihdrawBuyNumber	Number of withdrawing buy orders	NUMBER	
WithdrawBuyAmount	Quantity of withdrawing buy orders	NUMBER	

WtihdrawSellNumber	Number of withdrawing sell orders	NUMBER	
WithdrawSellAmount	Quantity of withdrawing sell orders	NUMBER	
BidOrderQty	BID orders quantity	NUMBER	
BidNumOrders	Number of BID Orders	NUMBER	
BidOrders[50]	Top 50 levels BID quantity	NUMBER	
OfferOrderQty	ASK orders quantity	NUMBER	
OfferNumOrders	Number of ASK Orders	NUMBER	
OfferOrders[50]	Top 50 levels ASK quantity	NUMBER	

6.2.3 Call Auction

Filename: sh2\yyyymmdd\Auction.csv

Remark: Auction data is no longer available after 20181224

Field Name	Definition	Type	Remark
SecurityID	Security Code	STRING	
DateTime	Date and time	NUMBER	e.g 20151123091630
Price	Price	NUMBER(3)	Level-2
VirtualAuctionQty	Virtual matched quantity	NUMBER	
LeaveQty	Virtual unmatched quantity	NUMBER	
Side	Matching status	STRING	0=Without unmatched orders 1= unmatched orders remained on BID side 2 =unmatched orders remained on ASK side

6.2.4 Tick-by-Tick

Filename: sh2\yyyymmdd\Tick.csv

Field Name	Definition	Type	Remark
SecurityID	Security Code	STRING	
TradeTime	Trade time	NUMBER	Business time 2015112309163002 (to the nearest 1/100 secs) v2 to the nearest ms, e.g: 20151123091630020
TradePrice	Trade price	NUMBER(3)	
TradeQty	Traded volume	NUMBER	
TradeAmount	Turnover	NUMBER(3)	
BuyNo	Buy side order number		
SellNo	Sell side order number		
TradeIndex	Trade Index	NUMBER	0=Without unmatched orders 1= unmatched orders remained on BID side 2 =unmatched orders remained on ASK side
ChannelNo	Channel number	NUMBER	
TradeBSFlag	Active Buy/Sell orders symbol	STRING	Active Buy/Sell orders symbol: B- Active buy order S- Active sell order N- Unknown
BizIndex	Business index	NUMBER	Business serial number and transaction number are unified, starting from 1 and continuing by channel number
SendingTime	SendingTime	NUMBER	e.g: 20151123091630020 Field effective after 2021-12-01

6.2.5 After-market fixed price trading tick-by-tick (STAR Board)

Filename: sh2\yyyymmdd\FpTradeTick.csv

Field Name	Definition	Type	Remark
SecurityID	Security Code	STRING	
DateTime	Date and time	NUMBER	2015112309163002 (to the nearest 1/100 secs) v2 to the nearest ms, e.g： 20151123091630020
TradePrice	Trade price	NUMBER(3)	
TradeQty	Traded volume	NUMBER	
TradeMoney	Turnover	NUMBER(2)	
TradeBuyNo	BID order number	NUMBER	
TradeSellNo	ASK order number	NUMBER	
TradeBSFlag	Active Buy/Sell orders symbol	STRING	Active Buy/Sell orders symbol: B- Active buy order S- Active sell order N- Unknown
TradeIndex	Trade index	NUMBER	
TradeChannel	Trade channel	NUMBER	

6.2.6 Tick-by-Tick order queue

Filename: sh2\yyyymmdd\Entrust.csv

Field Name	Definition	Type	Remark
SecurityID	Security Code	STRING	
TransactTime	Order time	NUMBER	2015112309163002 To the nearest ms
OrderNo	Order number	NUMBER	
Price	Order price(dollar)	NUMBER(3)	
Balance	Remaining order number	NUMBER	
OrderBSFlag	Buy or sell order flag	STRING	Buy or sell order flag: B- Buy order

			S- Sell order
OrdType	Order type	STRING	Order type: A – Add order D – Delete order
OrderIndex	Order Index	NUMBER	
ChannelNo	Channel number	NUMBER	
BizIndex	Business index	NUMBER	Business serial number and transaction number are unified, starting from 1 and continuing by channel number

6.2.7 Bond tick-by-tick

Filename: sh2\yyyymmdd\BondTick.csv

This file was provided since 2021-12-01. The data in the file is subject to the actual business launch time.

Field Name	Definition	Type	Remark
SecurityID	Security Code	STRING	
TickTime	Order or transaction time	NUMBER	Business time 2015112309163002 to the nearest ms, e.g: 20151123091630020
Type	Type	STRING	A – New order D – Delete order S – Product status order T – Transaction
BuyOrderNo	Buy order number	NUMBER	If it is a product status order or a sell order, it is meaningless.
SellOrderNo	Sell order number	NUMBER	If it is a product status order or buy order, it is meaningless
Price	Price	NUMBER(3)	Unit: dollar If it is a product status order or a deleted order, it is

			meaningless.
Qty	Quantity	NUMBER	Unit: lot If it is a product status order, it is meaningless
TradeMoney	Turnover	NUMBER(3)	Unit: dollar This field is only applicable on transaction
TickBSFlag	Buy and sell flag	STRING	Applicable to new order or deleted order: B – Buy order S – Sell Order Applicable to product status order: ADD – Instrument is not listed START – Start OCALL – Market open call auction TRADE – Continuous Auction SUSP – Suspended CLOSE – Market closed ENDTR – End of trading day Applicable to transaction: B – Active buy order S – Active sell order
TickIndex	Tick index	STRING	Starting from 1 on each channel
ChannelNo	Channel number	NUMBER	
SendingTime	SendingTime	NUMBER	e.g: 20151123091630020

6.2.8 K-line

Filename: Daily K-line sh2\yyyymmdd\Day.csv;
Minute K-line sh2\yyyymmdd\Minute.csv

Field Name	Definition	Type	Remark
SecurityID	Security Code	STRING	
DateTime	Date and time	NUMBER	Daily K-line: 20151123

		NUMBER	Minute K-line: 20151123091630
PreClosePx	Previous close price	NUMBER(3)	
OpenPx	Open price	NUMBER(3)	
HighPx	High price	NUMBER(3)	
LowPx	Low price	NUMBER(3)	
LastPx	Last price	NUMBER(3)	
Volume	Volume	NUMBER	
Amount	Turnover	NUMBER(2)	
IOPV	Indicative Optimized Portfolio Value	NUMBER(3)	
fp_Volume	After-market fixed price trading volume	NUMBER	kshare
fp_Amount	After-market fixed price trading turnover	NUMBER(3)	kshare

6.3 SSE Stock Option

6.3.1 Snapshot

Filename: sho\yyyymmdd\Snapshot.csv

Field Name	Definition	Type	Remark
SecurityID	Security Code	STRING	
DateTime	Date and time	NUMBER	e.g 20150803093008

PreClosePx	Previous close price	NUMBER(4)	Unit: dollar
OpenPx	Open price	NUMBER(4)	Unit: dollar
HighPx	High price	NUMBER(4)	Unit: dollar
LowPx	Low price	NUMBER(4)	Unit: dollar
LastPx	Last price	NUMBER(4)	Unit: dollar
TotalLongPosition	Total long position	NUMBER	Unit: contract
TotalVolumeTrade	Total volume on the trading day	NUMBER	Unit: lot
TotalValueTrade	Turnover on the trading day	NUMBER(2)	To the nearest cent
BidPrice[5]	BID price (5 market depth)	NUMBER(4)	Unit: dollar
BidOrderQty[5]	Quantity of BID order (5 market depth)	NUMBER	
OfferPx[5]	ASK price (5 market depth)	NUMBER(4)	Unit: dollar
OfferQty[5]	Quantity of ASK order (5 market depth)	NUMBER	
PhaseCode	Phase Code	STRING	This field is a 4 characters string. Each character from the left represents a specific meaning. It is blank if there is no specific meaning. The first character: 'S' represents the market pre-open period; 'C' represents the call auction period; 'T' represents the continuous auction period; 'B' represents the afternoon market closed period; 'E' represents the end-of-day market closed period; 'V' represents circuit breaker triggered due to volatility; 'P' represents the instrument suspended; 'U' represents close call auction; 'M' represents the circuit breaking period which is resumable for trading (intraday call auction); 'N' represents the circuit breaking period

			which is not resumable for trading (trading suspension until market closure); 'D' represents the period between the end of the open call auction period and the continuous auction period(if any). The second character: ‘0’ indicates the instrument is not continuous suspended ‘1’ indicates instrument is continuous suspended (reserved, blank currently). The third character: ‘'0' indicates open position is not restricted; '1' indicates opening position with cover is limited, '2' indicates open short position; '3' indicates opening short position and cover open position are limited; '4' indicates opening long position is limited; '5' indicates opening long position and opening positions with cover are limited, '6' indicates opening long and short positions are limited; '7' indicates opening long, short and cover positions are limited. The fourth character: ‘0’ indicates the new order declaration is not accepted for the instrument in the current period; ‘1’ indicates the new order declaration is accepted for the instrument in the current period.
AvgPx	Average price	NUMBER(4)	
PreSettlePx	Settle price on the previous trading day	NUMBER(4)	
SettlePx	Settle price on the trading day	NUMBER(4)	

6.3.2 K-line

Filename: Daily K-line sho\yyyymmdd\Day.csv;

Minute K-line sho\yyyymmdd\Minute.csv

Field Name	Definition	Type	Remark
SecurityID	Security Code	STRING	
DateTime	Date and time	NUMBER	Daily K-line: 20151123
		NUMBER	Minute K-line: 20151123091630
PreClosePx	Previous close price	NUMBER(4)	
OpenPx	Open price	NUMBER(4)	
HighPx	High price	NUMBER(4)	
LowPx	Low price	NUMBER(4)	
LastPx	Last price	NUMBER(4)	
Volume	Volume	NUMBER	
Amount	Turnover	NUMBER(2)	
LongPosition	Long Position	NUMBER	
AvgPx	Average price	NUMBER(4)	
PreSettlePx	Settle price on the previous trading day	NUMBER(4)	
SettlePx	Settle price on the trading day	NUMBER(4)	

6.4 SSE Fixed Income tick data

6.4.1 Snapshot

Filename: shfi\yyyymmdd\Snapshot.csv

Field Name	Definition	Type	Remark
SecurityID	Security Code	STRING	
DateTime	Date and time	NUMBER	e.g 20150803093008
PreClosePx	Close price on the previous trading day	NUMBER	Unit: percent For the bond repo repurchase agreement, it is the repurchase interest rate is accurate to 3

			decimal places of %. The actual interest rate is enlarged by 100,000 times as the representation of this field. For example: 3.456% in reality should fill in 3456 in this field. The rules for filling in the interest rate in the repurchase agreement are the same as below.
PreWeightedAvgPx	weighted average price on the previous trading day	NUMBER	Unit: percent For the bond repo repurchase agreement, it is the weighted average interest rate of all transactions of this variety on the previous trading day.
OpenPx	Open price	NUMBER	Unit: percent For the bond repo repurchase agreement, it is the repurchase interest rate.
HighPx	High price	NUMBER	Unit: percent For the bond repo repurchase agreement, it is the repurchase interest rate.
LowPx	Low price	NUMBER	Unit: percent For the bond repo repurchase agreement, it is the repurchase interest rate.
LastPx	Last price	NUMBER	Unit: percent For the bond repo repurchase agreement, it is the repurchase interest rate.
WeightedAvgPx	Weighted average price	NUMBER	Unit: percent Add up the sum of the security (the price of each transaction multiplied by the number of transactions) and divide by (the total number of transactions)
TotalVolumeTrade	Volume on the trading day	NUMBER	Unit: lot
TotalValueTrade	Turnover on the trading day	NUMBER	Unit: 10 thousand dollars

TotalNumTrades	Number of transactions on the trading day	NUMBER	
PreCloseYield	Yield on the previous trading day	NUMBER	Percentage (4 decimal places)
PreWeightAvgYield	Weighted average yield on the previous trading day	NUMBER	Percentage (4 decimal places)
OpenYield	Open yield	NUMBER	Percentage (4 decimal places)
HighYield	High yield	NUMBER	Percentage (4 decimal places)
LowYield	Low yield	NUMBER	Percentage (4 decimal places)
LastYield	Last yield	NUMBER	Percentage (4 decimal places)
WeightAvgYield	Weighted average yield on the trading day	NUMBER	Percentage (4 decimal places)
AccruedInterestAmt	*Accrued interest amount*	*NUMBER*	*Unit: 0.1%*
BidNetPx[10]	*Bid net price*	*NUMBER*	*Unit: percent*
BidVolume[10]	*Bid volume*	*NUMBER*	*Unit: lot*
BidOrdersNum[10]	*Number of Bid orders*	*NUMBER*	
BidOrderNo[500]	*Bid order number*	*NUMBER*	*50*10, top 50 orders*
BidAuctionTime[500]	*Bid Auction time*	*NUMBER*	*HHMMSS*
BidAuctioneer[500]	*Bid Auctioneer*	*STRING*	*Trader abbreviation*
BidOrderQty[500]	*Quantity of the bid orders*	*NUMBER*	*Unit: lot*
BidYieldToMaturity[500]	*Bid yield to maturity*	*NUMBER*	*Percentage (4 decimal places)*
OfferNetPx[10]	*Offer net price*	*NUMBER*	*Unit: percent*
OfferVolume[10]	*Offer volume*	*NUMBER*	*Unit: lot*
OfferOrdersNum[10]	*Number of Offer orders*	*NUMBER*	

OfferOrderNo[500]	*Offer order number*	*NUMBER*	*50*10, top 50 orders*
OfferAuctionTime[500]	*Offer Auction time*	*NUMBER*	*HHMMSS*
OfferAuctioneer[500]	*Offer Auctioneer*	*STRING*	*Trader abbreviation*
OfferOrderQty[500]	*Quantity of the offer orders*	*NUMBER*	*Unit: lot*
OfferYieldToMaturity [500]	*Offer yield to maturity*	*NUMBER*	*Percentage (4 decimal places)*

Remarks: Some fields in italics are temporarily not available.

6.4.2 Tick-by-Tick

Filename: shfi\yyyymmdd\Tick.csv

Field Name	Definition	Type	Remark
SecurityID	Security Code	STRING	
TradeTime	Trade time	NUMBER	20151123093630
TradeNetPrice	Trade net price	NUMBER	Unit: percent
AccruedInterestAmt	Accrued interest amount	NUMBER	Unit: 0.1 percent
TradeFullPrice	Trade full price	NUMBER	Percentage (4 decimal places)
YieldToMaturity	Yield to maturity	NUMBER	Percentage (4 decimal places)
TradeQty	Volume	NUMBER	Unit: lot
TradeMoney	Turnover	NUMBER	Unit: 10 thousand dollars
TradeMethod	Trade method	STRING	1: Confirm quotation transaction 2: Pending quotation transaction 3: Inquiry and transaction 4: Agreement transaction 5: On-site emergency 6: Designated counterparty

6.5 CSI

6.5.1 Snapshot

Filename: csi\yyyymmdd\Snapshot.csv;

Field Name	Definition	Type	Remark
IndexID	Index ID	STRING	
DateTime	Date and time	NUMBER	YYYYMMDDHHMMSS
Market	Market Code	STRING	Market Code 1: Shanghai Stock Exchange; 2: Shenzhen Stock Exchange; 3: Shanghai and Shenzhen; 4: Hong Kong; 5: Asia Pacific; 6: bond market; 9: others; 0: global
PreCloseIndex	Close Index on previous day	NUMBER(4)	
OpenIndex	Open index on that day	NUMBER(4)	
HighIndex	Highest index on that day	NUMBER(4)	
LowIndex	Lowest index on that day	NUMBER(4)	
LastIndex	Last value	NUMBER(4)	The last value is the index at market close
Volume	Volume	NUMBER	Stock: quantified in shares Bond: quantified in
Amount	Turnover	NUMBER(5)	Amount (as in 10,000 dollars)
ExchangeRate	Exchange rate	NUMBER(8)	Exchange rate will be 0.00000000 during trading hours It is used to calculate index at market close

Currency	Currency	STRING	Currency: 0: RMB 1: Hong Kong dollar; 2: US dollar; 3: Taiwan dollar; 4: Japanese yen
IndexSeq	Index sequence	NUMBER	
LastIndex2	Last index 2	NUMBER(4)	If the index is global index, last index is the closing value of the Asia-Pacific on that day
LastIndex3	Last index 3	NUMBER(4)	If the index is a global index, the last index is the closing value of the European on that day.

6.5.2 K Line

Filename: Daily K-line csi\yyyymmdd\Day.csv;

Minute K-line csi\yyyymmdd\Minute.csv

Field Name	Definition	Type	Remark
SecurityID	Security Code	STRING	
DateTime	Date and time	NUMBER	Date Time K Line (day): YYYYMMDD K Line (Min): YYYYMMDDHHMMSS
PreClosePx	Previous close price	NUMBER(4)	
OpenPx	Open price	NUMBER(4)	
HighPx	High price	NUMBER(4)	
LowPx	Low price	NUMBER(4)	
LastPx	Last price	NUMBER(4)	
Volume	Volume	NUMBER	
Amount	Turnover	NUMBER(2)	
Reserved	Reserved	NUMBER	Filled with 0

7 EOD Data

7.1 SSE and China Indices End of Day Historical Data

Field Name	Field Type	Description
TradeDate	string	YYYYMMDD
Security Code	char[6]	
Security Name	char[8]	
Open Price	number(4)	Open price Individual Index / stock suspension will fill in “0” value
Close Price	number(4)	Close price Individual Index / stock suspension will keep previous close price value
High Price	number(4)	High price Individual Index / stock suspension will fill in “0” value
Low Price	number(4)	Low price Individual Index / stock suspension will fill in “0” value
Trade Volume	number(4)	Volume of trade Individual Index / stock suspension will fill in “0” value
Trade Amount	NUMBER	Amount of trade Individual Index / stock suspension will fill in “0” value