

Equity Closing Prices Used for Index Calculation

Morningstar Indexes

November 2019

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All close times are in local time, unless otherwise noted. Morningstar reserves the right to use an alternative pricing source, if necessary. For indexes calculated in real-time, the last trade price intraday is used. For exchange closures and holidays, the prior day's closing value will be used.

In the event of a U.S. exchange interruption where an opening price is unavailable, the "Consolidated Tape" will be used. If this is not available, the previous closing price will be used. In addition, real time calculations will switch to a "Composition Tape" for all impacted securities. If the interruption is not resolved by market close, the closing prices list provided by the exchange will be used. If a closing prices list is not provided, the last trade on the "Composition Tape" for the respective security will be used.

In the event a non-U.S. exchange faces an interruption, real-time calculations will cease until a confirmation is received from the exchange that activities have resumed. If the interruption is not resolved by market close, the closing prices list provided by the exchange will be used. If a closing prices list is not provided, the last trade price for the respective security will be used.

Country	Exchange (MIC)	MIC	Close Price	Close Time
Australia	Australian Stock Exchange	XASX	Auction close	4:12 PM
Austria	Wiener Boerse AG	XWBO	Auction close	5:34 PM
Belgium	Euronext Brussels	XBRU	Auction close	5:35 PM
Brazil	B3 - Brasil Bolsa Balcao	BVMF	Auction close	6:00 PM (Oct-Mar) 6:00 PM (Mar-Oct)
Canada	Toronto Stock Exchange	XTSE	Market on close	4:00 PM
Chile	Bolsa Comercio Santiago	XSGO	VWAP	5:00 PM(Nov-Mar) 4:00 PM(Mar-Nov)
China	Shanghai Stock Exchange	XSHG	Auction close	3:00 PM
China	Shenzhen Stock Exchange	XSHE	Auction close	3:00 PM
Colombia	Bolsa de Valores de Colombia	XBOG	Last traded price	4:00 PM(Nov-Mar) 3:00 PM(Mar-Nov)
Czech Republic	Prague Stock Exchange	XPRA	Last traded price	4:20 PM
Denmark	NASDAQ Copenhagen	XCSE	Auction close	5:00 PM
Egypt	Egypt Stock Exchange	XCAI	VWAP	2:30 PM
Finland	NASDAQ Helsinki	XHEL	Auction close	6:30 PM
France	Euronext Paris	XPAR	Auction close	5:35 PM
Germany	Xetra Stock Exchange	XETR	Auction close	5:30 PM
Greece	Athens Stock Exchange	XATH	Auction close	5:20 PM
Hong Kong	Hong Kong Stock Exchange	XHKG	Auction close/ Median close	4:10 PM
Hungary	Budapest Stock Exchange	XBUD	Last traded price	5:00 PM
India	Bombay Stock Exchange	XBOM	VWAP	3:30 PM
Indonesia	Indonesia Stock Exchange	XIDX	Auction close	3:50 PM
Ireland	Irish Stock Exchange	XDUB	Auction close	4:30 PM
Israel	Tel Aviv Stock Exchange	XTAE	Auction close	5:15 PM
Italy	Borsa Italiana	MTAA	Auction close	5:35 PM
Japan	Nagoya Stock Exchange	XNGO	Auction close	3:30 PM
Japan	Tokyo Stock Exchange	XTKS	Auction close	3:00 PM

Country	Exchange (MIC)	MIC	Close Price	Close Time
Malaysia	Bursa Malaysia	XKLS	Auction close	5:00 PM
Mexico	Bolsa Mexicana de Valores	XMEX	VWAP/ Last traded price	3:00 PM
Netherlands	Euronext Amsterdam	XAMS	Auction close	5:35 PM
New Zealand	New Zealand Stock Exchange	XNZE	Last traded price	5:00 PM
Norway	Oslo Bors	XOSL	Auction close	4:25 PM
Pakistan	Pakistan Stock Exchange	XKAR	VWAP	3:30 PM (Mon - Thu) 4:30 PM (Fri)
Peru	Bolsa de Valores de Lima	XLIM	Auction close/ Last traded price	4:10 PM(Nov-Mar) 3:10 PM(Mar-Nov)
Philippines	Philippines Stock Exchange	XPHS	Auction close	3:30 PM
Poland	Warsaw Stock Exchange	XWAR	Auction close/ Last traded price	5:00 PM
Portugal	Euronext Lisbon	XLIS	Auction close	4:35 PM
Qatar	Doha Securities Market	DSMD	Auction close	1:15 PM
Russia	Moscow Exchange	MISX	Auction close	6:50 PM
Saudi Arabia	Saudi Stock Exchange, Tadawul	XSAU	Auction close	3:00 PM
Singapore	Singapore Stock Exchange	XSES	Auction close	5:06 PM
South Africa	Johannesburg Stock Exchange	XJSE	Auction close / VWAP	5:00 PM
South Korea	KOSDAQ Stock Exchange	XKOS	Auction close	3:30 PM
South Korea	Korean Stock Exchange	XKRX	Auction close	3:30 PM
Spain	Mercado Continuo	BMEX	Auction close	5:35 PM
Sweden	NASDAQ Stockholm	XSTO	Auction close	5:30 PM
Switzerland	SWX Europe	XVTX	Auction close	5:20 PM
Switzerland	Swiss Stock Exchange	XSWX	Auction close	5:20 PM
Taiwan	Taipei Exchange	ROCO	Auction close	1:30 PM
Taiwan	Taiwan Stock Exchange	XTAI	Auction close	1:30 PM
Thailand	Stock Exchange of Thailand	XBKK	Auction close	4:40 PM
Turkey	Borsa Istanbul	XIST	Auction close	6:00 PM
United Arab Emirates	Abu Dhabi Securities Market	XADS	Last traded price	2:00 PM
United Arab Emirates	Dubai Financial Market	XDFM	Last traded price	2:00 PM
United Arab Emirates	NASDAQ Dubai	DIFM	Last traded price	2:00 PM
United Kingdom	London Stock Exchange	XLON	Auction close	4:35 PM
United States	NASDAQ	XNAS	Closing cross	4:00 PM
United States	NYSE American	XASE	Auction close	4:00 PM
United States	NYSE Arca	ARCX	Auction close	4:00 PM
United States	New York Stock Exchange	XNYS	Auction close	4:00 PM



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