CRSP U.S. STOCK & INDEX RELEASE NOTES

JUNE 2020 QUARTERLY UPDATE

These release notes pertain to the June 2020 Quarterly release of the CRSP US Stock and Index databases, available in July 2020.

NEW CALENDAR FREQUENCY FILES AVAILABLE

CRSP has created a new set of tables that accompany all SAS, ASCII, and R Stock database files. Monthly, Quarterly, and Annual frequency tables are built from aggregated daily time series data to facilitate ease of use for subscribers.

These aggregate tables include new reference flag to provide insights into prices, returns, delisting data, and volumes.

New tables are automatically included when downloading the Stock databases from the CRSP MOVEit site. Files became available with the May 2020 databases released in June 2020.

Details can be found in the CRSP US Stock and Indexes Databases for SAS, ASCII, and R.

For more information, contact support@crsp.org.

JUNE 2020 DATA EDITS

The following fields have been changed in the SIZ R aggregate files:

FILE	OLD	NEW
SFZ_AGG_ANN.RDS	DISCNT	ANNDISCNT
SFZ_AGG_MTH.RDS	DISCNT	MTHDISCNT
SFZ_AGG_QTR.RDS	DISCNT	QTRDISCNT

GROUP EDITS

BEGDT	ENDDT	DESC
1968	2017	RESEARCHED SHARES OUTSTANDING DATA WHERE SECURITIES CHANGED EXCHANGES. EDITS WERE MADE TO ABOUT 150 SECURITIES AND INCLUDE CHANGES TO SHARES OUTSTANDING AMOUNTS AND CHANGES TO SHARES FLAG RANGING FROM 1968-2017

INDIVIDUAL EDITS

PERMNO	COMNAM	DESC
13743	ERA GROUP INC	CHANGED COMPANY NAME TO ERA GROUP INC FROM E R A GROUP INC FOR ENTIRE HISTORY
10275	SENETEK PLC	CHANGED COMPANY NAME TO SENETEK PLC FROM SENETEK P L C FOR 20020211-20041109
35917	FIRST MIDWEST BANCORP INC	CHANGED COMPANY NAME TO FIRST MIDWEST BANCORP INC FROM FIRST MIDWEST BANCORP DE FOR ENTIRE HISTORY
14565	F S K K R CAPITAL CORP	UPDATED SHARE CODE FROM 11 TO 14 FOR PERIOD 20140416-20200615.
14306	FUQUA ENTERPRISES INC	CHANGED SHARES OUTSTANDING TO 3712 FROM 8095 FOR 19900629-19900927
25735	COMPUTER COMMUNICATIONS INC	CHANGED SHARES OUTSTANDING TO 6742 FROM 5642 FOR 19840525-19840628
84911	STEPHAN CO	CHANGED SHARES OUTSTANDING TO 3675 FROM 4726 FOR 19940526
86319	EMRISE CORP	CHANGED SHARES OUTSTANDING TO 2940 FROM 11391 FOR 19961231-19970330
13405	CARLYLE GROUP L P	CHANGED COMPANY NAME TO CARLYLE GROUP L P FROM THE CARLYLE GROUP L P FOR 20200102-PRESENT
16309	TRADE DESK INC	CHANGED COMPANY NAME TO TRADE DESK INC FROM THE TRADE DESK INC FOR ENTIRE HISTORY

PERMNO	COMNAM	DESC
17891	LOVESAC CO	CHANGED COMPANY NAME TO LOVESAC CO FROM THE LOVESAC COMPANY FOR ENTIRE HISTORY
37728	FRESHER COOKER INC	CHANGED COMPANY NAME TO FRESHER COOKER INC FROM THE FRESHER COOKER INC FOR ENTIRE HISTORY
51327	1411 HOLDING CO	CHANGED COMPANY NAME TO 1411 HOLDING CO FROM THE 1411 HOLDING CO FOR 19850919-19860205
80603	GROUP INC	CHANGED COMPANY NAME TO GROUP INC FROM THE GROUP INC FOR 19900205-19900808
82225	PET PRACTICE INC	CHANGED COMPANY NAME TO PET PRACTICE INC FROM THE PET PRACTICE INC FOR ENTIRE HISTORY
86989	MEET GROUP INC	CHANGED COMPANY NAME TO MEET GROUP INC FROM THE MEET GROUP INC FOR 20170410-PRESENT
87093	KEITH COMPANIES INC	CHANGED COMPANY NAME TO KEITH COMPANIES INC FROM THE KEITH COMPANIES INC FOR ENTIRE HISTORY
92240	CUSHING MLP & INFRA TOT RET FD	CHANGED COMPANY NAME TO CUSHING MLP & INFRA TOT RET FD FROM THE CUSHING MLP & INFRA TT R FD FOR 20180220-PRESENT

MAY 2020 DATA EDITS

GROUP EDITS

BEGDT	ENDDT	DESC
1968	2019	RESEARCHED DISTRIBUTIONS WITH EX-DATES GREATER THAN A SECURITY'S DELISTING DISTRIBUTION EX-DATE. EDITS WERE MADE TO ABOUT 90 SECURITIES AND INCLUDE CHANGES TO DIVIDEND AMOUNTS, DISTRIBUTION CODES, EX-DATES AND REMOVING ENTIRE DISTRIBUTIONS RANGING FROM 1968-2019

INDIVIDUAL EDITS

PERMNO	COMNAM	DESC
19314	METEN EDTECHX EDUCATION GRP LTD	CHANGED COMPANY NAME TO METEN EDTECHX EDUCATION GRP LTD FROM METEN EDTECHX EDUCATION GROUP LT FOR ENTIRE HISTORY
89475	SANOFI	CHANGED DISTRIBUTION AMOUNT TO 1.6994 FROM 1.75345 FOR DISTRIBUTION ON EX-DATE 20200430
89169	DELCATH SYSTEMS INC	ADDED ZERO NAMELINES FOR THE PERIOD 20170915-20200430 TO REFLECT OFF EXCHANGE TRADING
82156	WINDTREE THERAPEUTICS INC	ADDED ZERO NAMELINES FOR THE PERIOD 20170505-20200519 TO REFLECT OFF EXCHANGE TRADING
13017	INVESCO CURRENCYSHARES CHI REN T	CHANGED DELIST CODE TO 450 FROM 470 AND ADDED FINAL LIQUIDATION PAYMENT ON EX-DATE 20200218
91290	INVESCO CURRENCYSHARES SE KRONA	CHANGED DELIST CODE TO 450 FROM 470 AND ADDED FINAL LIQUIDATION PAYMENT ON EX-DATE 20200218
13767	INVESCO CURRENCYSHARES SG DLR TR	CHANGED DELIST CODE TO 450 FROM 470 AND ADDED FINAL LIQUIDATION PAYMENT ON EX-DATE 20200218
13504	STRATEGY SHARES	CHANGED DELIST CODE TO 450 FROM 470 AND ADDED LIQUIDATION PAYMENT ON EX-DATE 20200421

APRIL 2020 DATA EDITS

GROUP EDITS

BEGDT	ENDDT	DESC
1962	2020	RESEARCHED SHARES OUTSTANDING DATA WHERE SECURITIES CHANGED EXCHANGES OR HAD SHARES CHANGES ON 19620702. EDITS WERE MADE TO ABOUT 50 SECURITIES AND INCLUDE CHANGES TO SHARES OUTSTANDING AMOUNTS AND CHANGES TO SHARES FLAG RANGING FROM 1962-2020

INDIVIDUAL EDITS

PERMNO	COMNAM	DESC
15165	VIRGINIA CAROLINA CHEM CORP	CHANGED SECURITY STATUS TO W FROM Q FOR 19251231-19260603
15927	VANECK VECTORS E T F TRUST	CHANGED TICKER TO EINC FROM YMLP FOR 20191202-PRESENT
13744	EXCHANGE TRADED CONCEPTS TR	CHANGED TRADING SYMBOL AND TICKER TO FLAG FROM DUAL ON 20200331
19147	WISEKEY INTERNATIONAL HOLDING AG	CHANGED CLOSING PRICE TO -5.51 FROM 0, ASKHIGH TO 6.07 FROM 0, BIDLOW TO 4.95 FROM 0 AND VOLUME TO 0 FROM 115 ON 20200323

PERMNO	COMNAM	DESC
17311	BIOFRONTERA AG	CHANGED CLOSING PRICE TO -7.735 FROM 0, ASKHIGH TO 8.05 FROM 0, BIDLOW TO 7.42 FROM 0 AND VOLUME TO 0 FROM 98 ON 20200316
17080	RHINE WESTPHALIA ELEC PWR CORP	CHANGED SHARE CODE TO 30 FROM 10 FOR ENTIRE HISTORY
68929	LIBERTY ALL STAR GROWTH FD INC	ADDED RIGHTS DISTRIBUTION OF .456 ON EXDATE 20200207.
14575	NEW YORK REIT INC	CHANGED DELIST CODE TO 470 FROM 450, CHANGED DISTRIBUTION CODE TO 2844 FROM 2255 ON EX-DATE 20181105, AND ADDED LIQUIDATION PAYMENTS ON EX-DATES 20190315, 20190513, 20190812 & 20191112
13162	MID CON ENERGY PARTNERS L P	REMOVED REVERSE SPLIT ON EX-DATE 20200324
15962	INVESCO E T F TRUST II	CHANGED DELIST CODE TO 450 FROM 470 AND ADDED FINAL LIQUIDATION PAYMENT ON EX-DATE 20200218
89749	INVESCO EXCHANGETRADED FD TRUST	CHANGED DELIST CODE TO 450 FROM 470 AND ADDED FINAL LIQUIDATION PAYMENT ON EX-DATE 20200218
14931	INVESCO E T F TRUST II	CHANGED DELIST CODE TO 450 FROM 470 AND ADDED FINAL LIQUIDATION PAYMENT ON EX-DATE 20200218
15781	INVESCO E T F TRUST II	CHANGED DELIST CODE TO 450 FROM 470 AND ADDED FINAL LIQUIDATION PAYMENT ON EX-DATE 20200218
89561	INVESCO BLDRS INDEX FDS TRUST	CHANGED DELIST CODE TO 450 FROM 470 AND ADDED FINAL LIQUIDATION PAYMENT ON EX-DATE 20200214
89560	INVESCO BLDRS INDEX FDS TRUST	CHANGED DELIST CODE TO 450 FROM 470 AND ADDED FINAL LIQUIDATION PAYMENT ON EX-DATE 20200214
89563	INVESCO BLDRS INDEX FDS TRUST	CHANGED DELIST CODE TO 450 FROM 470 AND ADDED FINAL LIQUIDATION PAYMENT ON EX-DATE 20200214

FILE VERSION SPECIFICS

This table contains version specific information for the CRSP Stock Files with data ending June 2020. It contains the number of securities and information about the maximums of the event arrays.

DATA FREQUENCY	# OF SECURITIES	MAX NAMES	MAX DISTS	MAX SHARES	MAX DELISTS	MAX GROUPS	MAX NASDIN	FIRST PERMNO	LAST PERMNO
DAILY	33812	28	1538	3262	1	4	2789	10000	93436
MONTHLY	33840	28	1538	3262	1	4	2789	10000	93436

CALENDAR	DATE RANGE	DATE INDEX RANGE
DAILY TRADING CALENDAR	19251231-20200630	1-24918
MONTH-END TRADING CALENDAR	19251231-20200630	1-1135
YEAR-END TRADING CALENDAR	19251231-20201231	1-97
QUARTER-END TRADING CALENDAR	19251231-20201231	1-385
WEEKLY TRADING CALENDAR	19260102-20200630	1-4931

CRSPACCESS PRODUCT INFORMATION

To simplify installation for our subscribers, data are bundled into product groups. Information relevant to each product group is listed in the table below.

PRODUCT NAME	DATABASE	SIZE	INDEXES	PORTFOLIOS	COMPONENTS & DESCRIPTION
CRSP 1925 US STOCK AND INDEX DATABASE	FIZYYYYMM SIZYYYYMM (R/SAS/ASCII)	4.1 GB	ALL CRSP INDEXES AND PORTFOLIO ASSIGNMENTS	ALL PORTFOLIOS	DI - 1925 DAILY US STOCK & INDEX DATABASE MI - 1925 MONTHLY US STOCK & INDEX DATABASE IF - CRSP SUPPLEMENTAL US INDEXES
CRSP 1925 US STOCK	FAZYYYYMM SAZYYYYMM (R/SAS/ASCII)	3.7 GB	CRSP NYSE/ AMEX/ NASDAQ VALUE-WEIGHTED MARKET, CRSP NYSE/ AMEX/ NASDAQ EQUAL-WEIGHTED MARKET, S&P 500 COMPOSITE, NASDAQ COMPOSITE		DA - 1925 DAILY US STOCK MA - 1925 MONTHLY US STOCK IN - CRSP LIMITED US INDEXES
CRSP 1962 US STOCK	A6ZYYYYMM S6ZYYYYMM (SAS/ASCII)	3.3 GB	CRSP NYSE/ AMEX/ NASDAQ VALUE-WEIGHTED MARKET, CRSP NYSE/ AMEX/ NASDAQ EQUAL-WEIGHTED MARKET, S&P 500 COMPOSITE, NASDAQ COMPOSITE		D6 - 1962 DAILY US STOCK M6 - 1962 MONTHLY US STOCK IN - CRSP LIMITED US INDEXES
CRSP 1962 US STOCK AND INDEX DATABASE	AXZYYYYMM SXZYYYYMM (R/SAS/ASCII)	3.6 GB	SEE FIZ	ALL PORTFOLIOS	DX - 1962 DAILY US STOCK & INDEX DATABASE MX - 1962 MONTHLY US STOCK & INDEX DATABASE IF - CRSP SUPPLEMENTAL US INDEXES
CRSP 1925 US INDEXES	IFZYYYYMM SFZYYYYMM	122 MB			IF - CRSP SUPPLEMENTAL US INDEXES
CRSP 10	STZYYYMM	121KB	ROLLING 10-YEAR WINDOW OF US STOCK DATA		MONTHLY DATA - ROLLING 10 YEARS
CRSP/COMPUSTAT MERGED DATABASE	CMZYYYYMM CFZYYYYMM (FULL PRODUCT) CLZYYYYMM (LINK PRODUCT) (R/SAS/ASCII)	10.37 GB			CM - COMPUSTAT DATA FORMATTED IN CRSPACCESS DATABASE
DAILY & MONTHLY TREASURIES IN CRSPSIFT	TRZYYYYMM	278 MB			TR - DATABASE FORMAT FOR USE WITH CRSPSIFT
DAILY & MONTHLY TREASURIES FILES	TFZYYYYMM	1.75 GB			TF - EXPANDED DAILY AND MONTHLY FILES IN EXCEL, SAS, AND ASCII FORMATS
MUTUAL FUND DATABASE	MFZYYYYMM	10 GB			MF - MUTUAL FUNDS
CRSP/ZIMAN DAILY & MONTHLY REIT	RAZYYYYMM	251 MB			RD - DAILY REITS RM - MONTHLY REITS

DELIVERY METHOD, INSTALLS, AND DATA FORMATS

DELIVERY

CRSP data delivery for all products is available only through the Cloud, utilizing IPSwitch's MOVEit Cloud product. (https://crsp.moveitcloud.com)

If you have not yet accessed your account, or need assistance, contact support@crsp.chicagobooth.edu, or call 312-263-6400, Option 2.

While DVDs are no longer available from CRSP, you are welcome to create your own once you have downloaded the data, and use as long as you have an active license to do so.

ZIP INSTALLS

CRSP uses a zip process for data installation. ZIP utilities that are standard on all platforms should work to unzip the databases. On Windows computers, CRSP recommends using 7-ZIP, which can be downloaded from this site: http://www.7-zip.org/

Several important items to note follow:

- All directories are extracted to lower case letters. For example: C:\crspdata\miz201308
- All Windows Users: Extracting a zipped file does not create an installed program in Windows. It will not show in the Windows Control Panel. When uninstalling the data, just delete the directories that contain the detailed files
- Red Hat Linux Users: If your version of Red Hat is earlier than 6.0, you will need to install an updated version of the "File Roller" program in order to install the data

ZIP FILE STRUCTURE AND PROCESS

WINDOWS 7/XP PRODUCTS:

PRODUCT LABEL	PRODUCT NAME	FILE NAME
A6Z1_YYYYMM_SLD	CRSP 1962 US STOCK	A6ZYYYYMM_CADB.ZIP
AXZ1_YYYYMM_SLD	CRSP 1962 US STOCK AND INDEX	AXZYYYYMM_CADB.ZIP
FAZ1_YYYYMM_SLD	CRSP 1925 US STOCK	FAZYYYYMM_CADB.ZIP
FIZ1_YYYYMM_SLD	CRSP 1925 US STOCK AND INDEX	FIZYYYYMM_CADB.ZIP
IFZ1_YYYYMM_SGD	CRSP 1925 INDEXES	IFZYYYYMM_CADB.ZIP

RED HAT LINUX PRODUCTS:

PRODUCT LABEL	PRODUCT NAME	FILE NAME
A6Z1_YYYYMM_SLD	CRSP 1962 US STOCK	A6ZYYYYMM_CADB.ZIP
AXZ1_YYYYMM_SLD	CRSP 1962 US STOCK AND INDEX	AXZYYYYMM_CADB.ZIP
FAZ1_YYYYMM_SLD	CRSP 1925 US STOCK	FAZYYYYMM_CADB.ZIP
FIZ1_YYYYMM_SLD	CRSP 1925 US STOCK AND INDEX	FIZYYYYMM_CADB.ZIP
IFZ1_YYYYMM_SGD	CRSP 1925 INDEXES	IFZYYYYMM_CADB.ZIP

FLAT FILE PRODUCTS:

PRODUCT NAME	FILE NAME
SAS ZIP	S*ZYYYYMM_SAS.ZIP
ASCII ZIP	S*ZYYYYMM_ASCII.ZIP
R ZIP	S*ZYYYYMM_R.ZIP

STEPS TO INSTALL:

- From the directory containing your downloaded zip file, right click (in Windows) or run File Roller (in Red Hat)
- Set the extract destination to the current higher level directory where data is normally stored and unzip will add the rest of the path (default is C:\ in Windows or /home in Red Hat)
- For example, in Windows, extracting to C:\ will install the data under C:\crspdata

Contact CRSP Client Services for assistance at: support@crsp.chicagobooth.edu or call 312-263-6400, Option 2.

SETTING ENVIRONMENT VARIABLES

The zip process will not automatically set environment variables for use with command line tools. The following steps will do so.

NOTE: CRSPSift does not use and therefore does not require environment variables.

LINUX

NOTE: The new zip installs are now saving to directories with lower case letters – for example, `~/crspdata/diz201308`

Check the current state of the environment variables by entering this command: `env | grep crsp`

- If you have admin privileges on your machine, open the .profile file, and make updates to the following lines to

update the paths for the new data installed:

- ○ CRSP_DSTK=<full path name>/<daily stock directory> (*example:* `CRSP_DSTK=~/crspdata/diz201308`)
- ○ CRSP_MSTK==<full path name>/<monthly stock directory> (*example:* `CRSP_DSTK=~/crspdata/miz201308`)
- ○ CRSP_IND=<full path name>/<index directory> (*example:* `CRSP_IND=~/crspdata/ifz201308`)
- If you are using the bash shell (or any Bourne-style shell), enter the same commands above and export each one. This will make changes for your current session only and does not save to the .profile file.
- A shell script is available to make changes that can be reused for each update done. Note that this will only make changes to your current session and does not save to the .profile file.
  - ○ Navigate to where the CUPL tools are loaded and then enter: `cd accbin`
  - ○ Start the script by entering: `./crsp_setup.sh`
  - ○ The script will prompt for the following:
    - ▪ File name (*will be appended with* `.kshrc`)
    - ▪ Top level directory (this should be where CUPL tools are located (*example:* `~/crsp`)
    - ▪ Scratch directory for error messages – name can be anything
    - ▪ Enter path for daily stock directory (*example:* `~/crspdata/diz201308`)
    - ▪ Enter path for monthly stock directory (*example:* `~/crspdata/miz201308`)
    - ▪ Enter path for index directory (*example:* `~/crspdata/ifz201308`)
    - ▪ Enter path for CCM directory – enter to leave blank
    - ▪ Enter path for CST directory – enter to leave blank
    - ▪ Execute script by running: `. ./<file name created above>.kshrc` *(note there is a space between the two dots)*

WINDOWS:

The CRSP Client Environment utility provides users a way to check the location of the software and to set environment variables. The utility can be started by locating it under installed programs CRSPAccess/CRSP Client Environment, or by navigating to the /accbin folder where the CUPL tools are installed and running: Client_Environment.exe (screen shot is displayed below). After making any changes, be sure to log off and back into Windows for the settings to be saved.

Note: For subscribers of the CRSP Compustat Merged database, additional CCM database environments will be displayed for the location of the Compustat data.