CRSP U.S. STOCK & INDEX RELEASE NOTES

MARCH 2020 QUARTERLY UPDATE

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

ANNOUNCING CRSP10!

CRSP is pleased to introduce CRSP10, a variation of our research-quality stock database. CRSP10 holds 10 years of monthly history for active and inactive securities and is ideal for use in the classroom and for training. The full dataset, delivered in a single Excel workbook, contains the time series and event history data for which CRSP is renowned. All existing stock database subscribers are entitled to access to this database! **Click here for more information.**

ANNOUNCING 'R' FORMAT DATASETS

Starting with the December 2019 data release, the CRSP USE Stock and Index Family of Database products became available in 'R' format datasets. The 'R' datasets are in the zip file s*z20*_r. zip in the same folder on MOVEit Cloud as the other formats of the data. The first release of these files was January 31, 2020.

PRECISION CHANGES

CRSP is in the process of re-engineering our back office to remove phantom precision and increase the real precision throughout the Stock and Indexes flat files. Phantom precision from SAS was removed. For example, IBM's price on 11/27/2015 of \$138.46 was internally in SAS as 138.460006713867. It is now internally 138.460000000000. Second, in preparation for expanded precision in the future any floating point field in ASCII that was previously seven significant digits (e.g. 1.384600E+02) has been expanded to ship with 14 significant digits (the limit of the a 8-byte floating point number) in scientific notation (e.g. 1.3846000000000E+02).

MARCH 2020 DATA EDITS

GROUP EDITS

BEGDT	ENDDT	DESC
1925	1962	REVIEWED ALL SECURITIES WITH TRADING BEFORE 7/2/1962 WITH ZERO NAMELINES LESS THAN FOUR MONTHS. ZERO NAMELINES
		WERE REMOVED FROM NAME HISTORY FOR 31 SECURITIES.

INDIVIDUAL EDITS

PERMNO	COMNAM	DESC
17595	PROSHARES TRUST	CHANGED ASKHIGH TO 61.22 FROM 58.30 AND OPEN TO 61.22 FROM 0 ON 20200211
19252	PROFESSIONAL HOLDING CORP	CHANGED OPEN PRICE FROM \$4.10 TO \$19.95 ON 20200212
83532	MOUNTAIN PROVINCE DIAMONDS INC	CHANGED DELIST CODE FROM 562 TO 552
85674	AUTOSPA CORP	ADDED ASKHI AND BIDLO ON 19890201
17850	BEVERLY HILLS SVGS & LN ASSN	ADDED ASKHI AND BIDLO ON 19850416
35271	FIRST CAPITAL FINANCIAL CORP	ADDED ASKHI AND BIDLO ON 19830908
10051	HANGER INC	CHANGED EXCHANGE CODE TO 0 FROM 1 FOR 20160229-20180226
77375	TRIPLE CHECK INC	REMOVED NEXT DATE FROM DELISTING ARRAY ON 19820915
64768	NEWHALL INVESTMENT PPTYS	REMOVED NEXT DATE FROM DELISTING ARRAY ON 19880916
13346	NATIONAL BELLAS HESS CO INC	REMOVED NEXT DATE FROM DELISTING ARRAY ON 19320317
14621	STUDEBAKER CORP NJ	REMOVED NEXT DATE FROM DELISTING ARRAY ON 19350223

PERMNO	COMNAM	DESC
12335	HOUSTON OIL CO TEX	CHANGED DISTRIBUTION WITH DISTRIBUTION CODE 5543 ON EX-DATE 19301021 TO TWO DISTRIBUTIONS WITH DISTRIBUTION CODES 5523 AND 5533
12861	LIMA HAMILTON CORP	CHANGED DISTRIBUTION CODE TO 5533 FROM 5552 AND DIVIDEND AMOUNT TO 0 FROM 0.8875 ON EX-DATE 19411117
13610	OLIN CORP	CHANGED DISTRIBUTION CODE TO 5533 FROM 5552 AND DIVIDEND AMOUNT TO 0 FROM 0.54687 ON EX-DATE 19290905
17291	SAFEWAY STORES INC	CHANGED DISTRIBUTION CODE TO 5533 FROM 5552 AND DIVIDEND AMOUNT TO 0 FROM 1.43125 ON EX-DATE 19291210
17486	SPENCER KELLOGG & SONS INC	CHANGED DISTRIBUTION CODE TO 5533 FROM 5552 AND DIVIDEND AMOUNT TO 0 FROM 0.58375 ON EX-DATE 19370730
10089	ALPHA TECHNOLOGIES GROUP INC	CHANGED DISTRIBUTION CODE TO 4999 FROM 4888 ON EX-DATE 20001130
85355	BELL CANADA INTL INC	CHANGED DISTRIBUTION CODE TO 4999 FROM 4888 ON EX-DATE 20011214
83850	C C C INFORMATION SVCS GROUP INC	CHANGED DISTRIBUTION CODE TO 4999 FROM 4888 ON EX-DATE 20011204
27634	CORDERO INDUSTRIES INC	CHANGED DISTRIBUTION CODE TO 5523 FROM 5543 ON EX-DATE 19870217
33372	EQUITEX INC	CHANGED DISTRIBUTION CODE TO 4999 FROM 4888 ON EX-DATE 20050203
87107	FOCAL COMMUNICATIONS CORP	CHANGED DISTRIBUTION CODE TO 4999 FROM 4888 ON EX-DATE 20011217
61111	HARCOR ENERGY INC	CHANGED DISTRIBUTION CODE TO 5523 FROM 5553 ON EX-DATE 19910410
74393	KESTREL ENERGY INC	CHANGED DISTRIBUTION CODE TO 4999 FROM 4888 ON EX-DATE 20000202
77642	BANCO COMERCIAL PORTUGUES SA	CHANGED DISTRIBUTION CODE TO 4999 FROM 4888 ON EX-DATE 20010309
75036	BLUE CHIP VALUE FUND INC	CHANGED DISTRIBUTION CODE TO 4563 FROM 4848 AND DIVIDEND AMOUNT TO 0.046 FROM 0 ON EX-DATE 20020222
30437	CENTRAL SECURITIES CORP	CHANGED DISTRIBUTION CODE TO 5533 FROM 5552 ON EX-DATE 19800129
30437	CENTRAL SECURITIES CORP	ADDED DISTRIBUTION WITH DISTRIBUTION CODE OF 5533 AND FACTOR TO ADJUST PRICE & FACTOR TO ADJUST SHARES OF 0.071429 TO REPLACE TWO DISTRIBUTIONS WITH DISTRIBUTION CODES OF 5552 & 5554 ON EX-DATE 19790205
75604	COOKER RESTAURANT CORP	CHANGED DISTRIBUTION CODE TO 4999 FROM 4888 ON EX-DATE 20000114
79767	ENEL AMERICAS S A	CHANGED DISTRIBUTION CODE TO 4999 FROM 4888 ON EX-DATE 20001006
75957	INTEGRATED ORTHOPAEDICS INC	CHANGED DISTRIBUTION CODE TO 4999 FROM 4888 ON EX-DATE 20001129
22605	NVFCO	REMOVED DISTRIBUTION WITH DISTRIBUTION CODE 5543 AND REPLACED IT WITH 2 DISTRIBUTIONS WITH DISTRIBUTION CODES 5523 & 5533 ON EX-DATE 19750602
13688	P G & E CORP	CHANGED DISTRIBUTION CODE TO 4999 FROM 4888 ON EX-DATE 20010102
79064	CONSORCIO G GRUPO DINA SA DE CV	REMOVED NEXT DATE AND NEXT AVAILABLE PRICE FROM DELISTING ARRAY ON 20010216
50412	M C M CORP	REMOVED NEXT DATE AND NEXT AVAILABLE PRICE FROM DELISTING ARRAY ON 20010216
87173	LOOKSMART LTD	REMOVED REVERSE SPLIT ON EX-DATE 20151028, CHANGED EX-DATE FOR DISTRIBUTION WITH DISTRIBUTION CODE 3723 FROM 20151029 TO 20151028 AND DIVIDEND AMOUNT FROM \$6.5602 TO \$0.99166 AND CHANGED EX-DATE FOR DISTRIBUTION WITH DISTRIBUTION CODE 3863 FROM 20151029 TO 20151028, DISTRIBUTION CODE TO 3823 FROM 3863, SET FACTORS TO ADJUST SHARES AND PRICES TO -1 FROM 0 AND DIVIDEND AMOUNT TO \$0.00907 FROM \$0.06.
14816	TOOTSIE ROLL INDS INC	CHANGED SHARES OUTSTANDING TO 101 FROM 100 FOR 19320415-19321230
13407	FACEBOOK INC	CHANGED SIC CODE TO 7373 FROM 9999 FOR 20190917-20200102 AND TO 7375 FROM 9999 FOR 20120518-20190916 & 20200103-PRESENT
18125	PARINGA RESOURCES LIMITED	REMOVED HALT RECORD FROM 20191223-20200228 AND CHANGED DELIST DATE TO 20191220
16379	BANK MANHATTAN	CHANGED FACTOR TO ADJUST PRICE FROM 0.9856 TO 0 AND FACTOR TO ADJUST SHARES FROM 0.1428 TO 0 FOR RIGHTS DISTRIBUTION ON EX-DATE 19281029

PERMNO	COMNAM	DESC
78922	CITIZENS FINANCIAL CORP KY	REMOVED REVERSE SPLIT ON EX-DATE 20071114, CHANGED DATE OF NEXT AVAILABLE INFORMATION TO 20080304 FROM 20071114 AND NEXT AVAILABLE PRICE TO \$3.52 FROM \$1150 ON DELISTING ARRAY
91285	VESTIN REALTY MORTGAGE II INC	REMOVED REVERSE SPLIT ON EX-DATE 20170330, CHANGED DATE OF NEXT AVAILABLE INFORMATION TO 20170629 FROM 20170331 AND NEXT AVAILABLE PRICE TO \$3.50 FROM \$2349.50 ON DELISTING ARRAY
16459	NATIONAL PK BK	CHANGED FACTOR TO ADJUST PRICE FROM 0.7165 TO 0 AND FACTOR TO ADJUST SHARES FROM 0.25 TO 0 FOR RIGHTS DISTRIBUTION ON EX-DATE 19290523
28281	LERNER STORES CORP	CHANGED NEXT DATE OF AVAILABLE INFORMATION TO 0 FROM 19620511 FOR DELISTING ARRAY ON 19620511
36863	STELLAR INDUSTRIES INC DE	CHANGED NEXT DATE OF AVAILABLE INFORMATION TO 0 FROM 19751119 FOR DELISTING ARRAY ON 19741118

FEBRUARY 2020 DATA EDITS

INDIVIDUAL EDITS

PERMNO	COMNAM	DESC
19150	BLACKROCK HEALTH SCIENCES TR II	CHANGED SHARE CODE FROM 41 TO 44
91283	BATTALION OIL CORP	ADDED ZERO NAMELINES FOR THE PERIOD 20190723 - 20200219 TO REFLECT OFF EXCHANGE TRADING
20415	JEFFERIES FINANCIAL GROUP INC	CHANGED DISTRIBUTION CODE TO 3753 FROM 3783 AND REMOVED THE -1 FACTORS TO ADJUST SHARES AND PRICES FROM DISTRIBUTION ON EX-DATE 20190927
19227	U S XPRESS ENTERPRISES INC	ADDED THE 1994-2007 DATA FROM PERMNO 81021, ASSIGNED A DUMMY CUSIP TO DIFFERENTIATE FROM PERMNO 81021 AND ASSIGNED NEW PERMNO 19227
81021	U S XPRESS ENTERPRISES INC NEW	REMOVED THE 1994-2007 DATA FROM PERMNO 81021 (ADDED IT TO PERMNO 19227) AND CHANGED COMPANY NAME TO U S XPRESS ENTERPRISES INC NEW FROM U S XPRESS ENTERPRISES INC FOR 20180614-PRESENT
87043	QUANTUM CORP	ADDED ZERO NAMELINE FOR THE PERIOD 20190115 - 20200131 TO REFLECT OFF EXCHANGE TRADING
18933	ISHARES TRUST	CHANGED PERMCO TO 37493 FROM 56884 FOR ENTIRE HISTORY
19156	ISHARES TRUST	CHANGED PERMCO TO 37493 FROM 56884 FOR ENTIRE HISTORY
19157	ISHARES TRUST	CHANGED PERMCO TO 37493 FROM 56884 FOR ENTIRE HISTORY
19160	ISHARES TRUST	CHANGED PERMCO TO 37493 FROM 56884 FOR ENTIRE HISTORY
27407	COSMO COMMUNICATIONS CORP	CHANGED START DATE TO 19830429 FROM 19830520 AND ADDED MISSING PRICE RECORDS FOR 19830429-19830519
34981	INTERACTIVE DATA CORP	CHANGED START DATE TO 19820714 FROM 19820817 AND ADDED MISSING PRICE RECORDS FOR 19820714-19820816
15704	AMERICAN PWR & LT CO	CHANGED SHARES OUTSTANDING TO 1648 FROM 1681 ON 19260513

JANUARY 2020 DATA EDITS

INDIVIDUAL EDITS

PERMNO	COMNAM	DESC
91907	SUPER MICRO COMPUTER INC	ADDED ZERO NAMELINE FOR THE PERIOD 20180823 - 20200113 TO REFLECT OFF EXCHANGE TRADING
10349	A M F I CORP	REMOVED DISTRIBUTIONS WITH EX-DATES 20150714, 20170720, 20180727 & 20190729
12141	ALTAIR CORP	REMOVED DISTRIBUTIONS WITH EX-DATES 20131231, 20141210, 20151209, 20161207, 20171201, 20181203 & 20191203
41276	HAYWARD MANUFACTURING INC	REMOVED DISTRIBUTIONS WITH EX-DATES 20070831, 20081016, 20091013, 20201130, 20111028, 20121130, 20151029 & 20161031
71837	ECOLOGY & ENVIRONMENT INC	CHANGED END DATE TO 20191230 FROM 20191231 AND ADDED DELISTING INFORMATION

FILE VERSION SPECIFICS

This table contains version specific information for the CRSP Stock Files with data ending March 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	33691	39	1538	3200	1	4	2754	10000	93436
MONTHLY	33663	39	1538	3200	1	4	2754	10000	93436

CALENDAR	DATE RANGE	DATE INDEX RANGE
DAILY TRADING CALENDAR	19251231-20200331	1-24855
MONTH-END TRADING CALENDAR	19251231-20200331	1-1132
YEAR-END TRADING CALENDAR	19251231-20201231	1-97
QUARTER-END TRADING CALENDAR	19251231-20201231	1-385
WEEKLY TRADING CALENDAR	19260102-20200331	1-4918

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/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.
 - o Navigate to where the CUPL tools are loaded and then enter: cd accbin
 - o 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.