## CRSP U.S. STOCK \& INDEX RELEASE NOTES

FEBRUARY 2020 MONTHLY UPDATE

These release notes pertain to the February 2020 Monthly release of the CRSP US Stock and Index databases, available in March 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).

## 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 T0 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 T0 37493 FROM 56884 FOR ENTIRE HISTORY |
| 19156 | ISHARES TRUST | CHANGED PERMCO T0 37493 FROM 56884 FOR ENTIRE HISTORY |
| 19157 | ISHARES TRUST | CHANGED PERMCO T0 37493 FROM 56884 FOR ENTIRE HISTORY |
| 19160 | ISHARES TRUST | CHANGED PERMCO T0 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 |


| PERMNO | COMNAM | DESC |
| :--- | :--- | :--- |
| 34981 | INTERACTIVE DATA CORP | CHANGED START DATE TO 19820714 FROM 19820817 AND ADDED MISSING PRICE RECORDS FOR <br> $19820714-19820816$ |
| 15704 | AMERICAN PWR \& LT CO | CHANGED SHARES OUTSTANDING TO 1648 FROM 1681 ON 19260513 |

## FILE VERSION SPECIFICS

This table contains version specific information for the CRSP Stock Files with data ending February 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 | 33672 | 39 | 1538 | 3178 | 1 | 4 | 2748 | 10000 | 93436 |
| MONTHLY | 33644 | 39 | 1538 | 3178 | 1 | 4 | 2748 | 10000 | 93436 |


| CALENDAR | DATE RANGE | DATE INDEX RANGE |
| :--- | :--- | :--- |
| DAILY TRADING CALENDAR | $19251231-20200228$ | $1-24833$ |
| MONTH-END TRADING CALENDAR | $19251231-20200228$ | $1-1131$ |
| YEAR-END TRADING CALENDAR | $19251231-20201231$ | $1-97$ |
| QUARTER-END TRADING CALENDAR | $19251231-20201231$ | $1-385$ |
| WEEKLY TRADING CALENDAR | $19260102-20200228$ | $1-4913$ |

## 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 <br> 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 <br> MA - 1925 MONTHLY US STOCK <br> IN - CRSP LIMITED US INDEXES |
| CRSP 1962 US STOCK | AGZYYYYMM 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 <br> M6 - 1962 MONTHLY US STOCK <br> 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 <br> 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 |
| DALIY \& MONTHLY TREASURIES IN CRSPSITT | TRZYYYYMM | 278 MB |  |  | TR - DATABASE FORMAT FOR USE WITH CRSPSIFT |


| PRODUCT NAME | DATABASE | SIZE | INDEXES | PORTIFOLIOS | COMPONENTS \& DESCRIPTION |
| :--- | :--- | :--- | :--- | :--- | :--- |
| DALLY \& MONTHLY <br> TREASURIES FILES | TFZYYYYMM | 1.75 GB |  |  | TF - EXPANDED DAILY AND MONTHLY FILES IN <br> EXCEL, SAS, AND ASCII FORMATS |
| MUTUAL FUND DATABASE <br>  <br> MONTHLY REIT | MFZYYYYMM | 10 GB |  | MF - MUTUAL FUNDS <br> RD - DAILY REITS <br> 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 312-2636400, 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:\crspdatalmiz201308
- 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 |
| RZIP | $S^{*}$ 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 $\mathrm{C}:$ : in Windows or /home in Red Hat)
- For example, in Windows, extracting to $\mathrm{C}: \backslash$ will install the data under $\mathrm{C}:$ Icrspdata

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.

