

CRSP U.S. STOCK & INDEX RELEASE NOTES

DECEMBER 2023 MONTHLY UPDATE

These release notes pertain to the December 2023 Monthly release of the CRSP US Stock and Index databases, available in January 2024.

IMPORTANT NOTICE REGARDING DECEMBER 2023 DATA RELEASED IN JANUARY 2024

FOLDER STRUCTURE CHANGE FOR STOCK AND INDEXES DATABASES AND CRSPACCESS

Subscribers who utilize Ipswitch MOVEit Transfer to retrieve files will see an additional Stock and Indexes Database Flat File Format 1.0 (SIZ) folder that contains data files generated from CRSP's new back office available with the December 2023 Stock and Indexes data cut. The new folder reflects the following structure:

- INDICES_SO_format_period*
- STOCK_25_SA_format_period
- STOCK_25i_SI_format_period
- STOCK_62_S6_format_period
- STOCK_62i_SX_format_period

*Note: format = ASCII, R, SAS and period = Monthly, Quarterly, Annual

Subscribers are encouraged to compare the existing files with the new files, as beginning with the January 2024 data cut released in February, only the files generated from CRSP's new back office as indicated above will be provided, as CRSP is sunsetting its legacy back office. The three tables on the next page summarize these known differences.

SIZ files generated from CRSP's new back office will continue to be available to subscribers until December 2024 at which time all subscribers must be migrated to the Stock and Indexes Database Flat File Format 2.0 (CIZ) files, which were made available in summer 2022.

Please contact your Client Services support representative at support@crsp.org with questions and if you have not already done so, the preferred file format for your institution: SAS, ASCII, or R. Subscribers will be provided with ASCII format by default.

Also, the following changes will be made to the MOVEit folder structure for CRSPAccess with the January data released in February, as the files will be generated from CRSP's new back office system:

- STOCK_25_SA_CADB_period*
- STOCK_25i_SI_CADB_period
- STOCK_62_S6_CADB_period
- STOCK_62i_SX_CADB_period

*Note: period = Monthly, Quarterly, Annual

Please contact your Client Services support representative at support@crsp.org if you need access to the CRSPAccess files.

SUMMARY OF KNOWN DIFFERENCES BETWEEN LEGACY SIZ AND NEW BACK OFFICE SIZ

ACCEPTED DIFFERENCE	DESCRIPTION	FIELD IMPACTED	TABLE IMPACTED
SECURITY CAP DIFFERENCES	THERE ARE SECURITY CAPITALIZATION DIFFERENCES DUE TO SHARES ROUNDING AND/OR BID/ASK PRICE PRECISION DIFFERENCES. THIS IS ALSO AFFECTING CLOSEST NON MISSING (CNM) RETURN SERIES.	SHROUT, PRC	SFZ_SHR, SFZ_DP_DLY
BREAKPOINT – LOW SECURITY KEY	A DIFFERENT SECURITY KEY IS REPORTED DUE TO PRECISION; DOES NOT CAUSE ASSIGNMENT DIFFERENCES (1000028 / 1964-12-31, 1000109/1983-12-30, 1000107/2017-12-29)	KEYSET	SFZ_PORTD, SFZ_PORTM
ASSIGNMENT DIFFERENCES – STDDEV	INDNO ASSIGNMENT CHANGE DUE TO STATISTIC VALUE PRECISION - (NASDAQ ONLY 1100172 ON 1972-12-29)	INDFAM	SFZ_PORTD, SFZ_PORTM, SFZ_MTH
ASSIGNMENT DIFFERENCES – MONTHLY SECURITY CAP	PERMNO 20338 BETWEEN 2020 AND 2021. THIS IS AN EDGE CASE BUG IN LEGACY, THAT IS HANDLED CORRECTLY IN NEW BACK OFFICE (THE SECURITY CHANGES EXCHANGE TWICE IN ONE MONTH)	MTCAP	SFZ_PORTD, SFZ_PORTM, SFZ_MTH
ASSIGNMENT DIFFERENCES – MONTHLY SECURITY CAP	INDNO ASSIGNMENT CHANGE DUE TO STATISTIC VALUE PRECISION – 1000427/8 ON 1964-12-31	MTCAP	SFZ_PORTD, SFZ_PORTM, SFZ_MTH
USDVAL DIFFERENCES – STDDEV AND BETA EQ	NEW BACK OFFICE ADDING 0 TO USDVAL WHEN TCAP IS MISSING	USDVAL, TCAP	SFZ_DIND, SFZ_MIND, SFZ_DP_DLY
ASSIGNMENT DIFFERENCES	ASSIGNMENT FLIPS DUE TO BREAKPOINTS PRECISION - SEE “BREAKPOINT/ASSIGNMENT DIFFERENCES“ TABLE. THESE FLIPS ARE CAUSING ASSIGNMENT DIFFERENCES ACROSS ALL RELATED INDNOS, SINCE ALL INDNOS USE THE NYSE SERIES BREAKPOINTS.		ISSUERCAPITALIZATION
CNM SECURITY RETURN SERIES ACCEPTED DIFFERENCES	UPSTREAM CNM RETURN SERIES (NEW BACK OFFICE SECURITY RETURNS) KNOWN DIFFERENCES THAT ARE CAUSING DOWNSTREAM INDEX DIFFERENCES	RET, RETX	SFZ_DP_DLY, SFZ_MTH
FULL MARKET MISSING ASSIGNMENTS FROM NEW BACK OFFICE – INCLUSION METHODOLOGY	DUE TO INCLUSION METHODOLOGY THERE ARE MISSING ASSIGNMENTS IN THE NEW BACK OFFICE WHEN COMPARED WITH THE LEGACY. SEE “MISSING FULL MARKET ASSIGNMENTS” TABLE		
PORTM REPORTING DIFFERENCES	1. LAST ROW PER PERMNO/KEYSET COMBINATION IS THE LAST ROW WITH A VALID ASSIGNMENT OR NON-MISSING STATISTICS 2. ISSUER STATISTIC MISSING FLAG IS SET PER PERMCO/KEYSET COMBINATION IN NEW BACK OFFICE, AS OPPOSED TO PERMNO/KEYSET IN LEGACY 3. ISSUERS WITH MULTIPLE SECURITIES DURING GAP PERIODS ARE ONLY REPORTED ONCE PER PERIOD, AS OPPOSED TO ONCE PER PERMNO PER PERIOD IN LEGACY	PERMNO/KEYSET, PERMCO/KEYSET PERMNO/KEYSET, PERMCO/KEYSET PERMNO/KEYSET, PERMCO/KEYSET	SFZ_PORTM SFZ_PORTM SFZ_PORTM
MIND NULL VS. 0 RETURN	TOTAL, PRICE, AND INCOME RETURN VALUES ARE NULL IN SIZ AND 0 IN LEGACY ON STARTDT FOR CAP-BASED INDNOS	MTRET, MARET, MIRET	SFZ_MIND

BREAKPOINT/ASSIGNMENT DIFFERENCES

PERMCO	NEW BACK OFFICE ICG	NEW BACK OFFICE PORT	LEGACY ICG	LEGACY PORT	PERIODDT
20798	1080302	3	1080301	2	3/31/1932
22856	1080303	4	1080304	5	6/30/1931
22424	1080305	6	1080306	7	6/30/1931
22327	1080307	8	1080308	9	6/30/1931
21665	1080308	9	1080307	8	3/31/1932
22187	1080301	2	1080302	3	3/31/1932
74	1080305	6	1080304	5	3/31/1932
22709	1080303	4	1080302	3	3/31/1932

MISSING FULL MARKET ASSIGNMENTS

CALDT	PERMNO	PERMCO
10/31/77	48864	793
10/31/79	33400	2562
1/31/86	93199	7776
10/31/22	79666	29969
4/30/84	36899	1649
1/29/93	78120	20106
22709	1080303	4

NEW! CRSPMI 2013 HISTORICAL INDEXES RESEARCH DATABASE

CRSP is excited to announce a new research data product that was made available with the 202309 quarterly data cut released in October. This product is initially being offered at no charge through November 2024 to existing academic and government subscribers of both CRSP's 1925 US Stock & 1925 US Indexes Databases. Data is available quarterly, with a one month lag.

The **CRSPMI 2013 Historical Indexes** database provides day-by-day index levels, opening and closing constituents, and pro forma data from CRSP's suite of investable Market Indexes from 2013 to present day.

Please email subscriptions@crsp.org if your institution subscribes to or would like to subscribe to both the 1925 US Stock and 1925 US Indexes databases in order to obtain a no-charge data license agreement to access this new dataset.

NEW FIELDS IN FLAT FILE FORMAT 2.0 (CIZ) STOCK AND INDEX PRODUCTS WITH 202309 DATA CUT

Starting with the 202309 data cut, the Flat File Format 2.0 (CIZ) Stock and Index files reflect the following changes:

UES SECTOR CLASSIFICATION

A new column named "UESIndustry" has been added to the four following CIZ files, positioned next to the "ICBIndustry" column: StkSecurityInfoHist, StkSecurityInfoHdr, StkIssuerInfoHist, & StkIssuerInfoHdr.

DISAMOUNTSOURCETYPE

A new DisAmountSourceType field is available to subscribers in the CIZ.StkDistributions file. The new column called DisAmountSourceType is at the end of the file. This field describes the amount source type code of the distribution and address the issue where subscribers were unable to differentiate between various codes.

FLAT FILE FORMAT 2.0 (CIZ) FOR STOCK AND INDEX DATABASES

CRSP's Flat File Format 2.0 (CIZ) for the CRSP US 1925 and 1962 Stock and Stock with Index Databases was released mid-2022. [Click here for more information](#). As was true for the Flat File Format 1.0 (SIZ), the files are available in SAS, ASCII and R formats.

Please email support@crsp.org and indicate your preferred file format. If we do not receive your preferred file format, your organization will not have access to the new Flat File Format 2.0 (CIZ).

FILE VERSION SPECIFICS

This table contains version specific information for the CRSP Stock Files with data ending December 2023. It contains the number of securities and information about the maximums of the event arrays.

DATA FREQUENCY	# OF SECURITIES	MAX NAMES	MAX DIST	MAX SHARES	MAX DELISTS	MAX GROUPS	MAX NASDIN	FIRST PERMNO	LAST PERMNO
DAILY	37776	28	1538	4707	1	4	2939	10000	93436
MONTHLY	37747	28	1538	4707	1	4	2939	10000	93436

CALENDAR	DATE RANGE	DATE INDEX RANGE
DAILY TRADING CALENDAR	19251231-20231229	1-25799
MONTH-END TRADING CALENDAR	19251231-20231229	1-1177
YEAR-END TRADING CALENDAR	19251231-20241231	1-100
QUARTER-END TRADING CALENDAR	19251231-20241231	1-397
WEEKLY TRADING CALENDAR	19260102-20231229	1-5113

DECEMBER 2023 DATA EDITS

INDIVIDUAL EDITS

PERMNO	COMNAM	DESC
17628	WISDOMTREE TRUST	REMOVED DECLARE DATE FROM DISTRIBUTION ON EX-DATE 20231124
17629	WISDOMTREE TRUST	REMOVED DECLARE DATE FROM DISTRIBUTION ON EX-DATE 20231124
17630	WISDOMTREE TRUST	REMOVED DECLARE DATE FROM DISTRIBUTION ON EX-DATE 20231124
18964	ADAMS NATURAL RESOURCES FUND INC	CHANGED ACQUIRING PERMNO TO 0 FROM -99 AND ACQUIRING PERMCO TO 0 FROM -99 ON EX-DATE 20231117
88818	ENERPLUS CORP	CHANGED DIVIDEND AMOUNT TO \$0.06 FROM \$0.5995 ON EX-DATE 20231129
65665	RAND CAPITAL CORP	CHANGED DIVIDEND AMOUNT TO \$0.20 FROM \$0.38 ON EX-DATE 20221216 AND ADDED DISTRIBUTION WITH DISTRIBUTION CODE 1272 AND DIVIDEND AMOUNT OF \$0.18 ON EX-DATE 20221216
86946	REYNOLDS AMERICAN INC	CHANGED SHARES OUTSTANDING TO 714551 FROM 636832 FOR 20150731-20150830
42906	HUNTINGTON BANCSHARES INC	CHANGED SHARES OUTSTANDING TO 1084782 FROM 799154 FOR 20160930-20161230
86830	INFORMATICA CORP	CHANGED SHARES OUTSTANDING TO 108704 FROM 104311 FOR 20141231-20150129
24497	BROOKFIELD REINSURANCE LTD	CHANGED SHARE CLASS TO 1 FROM A FOR ENTIRE HISTORY

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

PRODUCT NAME	DATABASE	SIZE	INDEXES	PORTFOLIOS	COMPONENTS & DESCRIPTION
CRSP 10	STZYYYYMM	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.org, 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: <https://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_MSTK=~ /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.