

STOCK & INDEX RELEASE NOTES

DECEMBER 2016 QUARTERLY UPDATE

These release notes pertain to the December 2016 Quarterly release of the CRSP US Stock and Index databases, available in January 2017.

SUN SOLARIS SUPPORT ENDING

In order to ensure that our subscribers continue to have robust and dependable data access, CRSP is retiring big-endian databases for use on Solaris platforms following publication of the December 2016 data cut that is available in January 2017. After this time CRSP databases will be available in flat file formats that can be used on all platforms, through our partner distributors such as WRDS and TQA, and for use with CRSP tools on the following CRSP-supported platforms:

- Windows 8.1 & 10 – 32-bit & 64-bit
- Red Hat Linux – 32-bit & 64-bit

Oracle's Solaris support at CRSP ended in June 2016. CRSP is making efforts to contact our subscribers impacted by this change to ensure a timely transition. Should you have immediate questions, please contact us at:

User Support – CRSP Research Products:

Support@crsp.ChicagoBooth.edu, or 312-263-6400 select # 2

DECEMBER 2016 DATA EDITS

GROUP EDITS

BEGDT	ENDDT	DESCRIPTION
20010102	20161230	Added missing ADR distributions and made corections to distributions and codes from 2001-2016.
19900102	20161230	Added Facpr for distribuions for about 80 securities within the date range of 19900102 to 20161230

INDIVIDUAL EDITS START ON THE NEXT PAGE

INDIVIDUAL EDITS

PERMNO	COMPANY NAME	DESCRIPTION	BEGDT	ENDT					
15629	VANGUARD MUNICIPAL BOND FUNDS	Change distribution code from 1213 to 1223 on ex-date 20150901, from 1222 to 1223 on ex-date 20151001, from 1222 to 1223 on ex-date 20151102, from 1222 to 1223 on ex-date 20151201 & from 1262 to 1223 on ex-date 20151223							
OLD VALUE:									
Code	Divamt	Facpr	Facshr	Dclrdt	Exdt	Rcrddt	Paydt	Aperm	Acomp
1213	0.01900	0.0000	0.0000	0	20150901	20150903	20150908	0	0
1222	0.07600	0.0000	0.0000	20150929	20151001	20151005	20151007	0	0
1222	0.06700	0.0000	0.0000	20151030	20151102	20151104	20151106	0	0
1222	0.03200	0.0000	0.0000	20151127	20151201	20151203	20151207	0	0
1262	0.10300	0.0000	0.0000	20151221	20151223	20151228	20151230	0	0
NEW VALUE:									
Code	Divamt	Facpr	Facshr	Dclrdt	Exdt	Rcrddt	Paydt	Aperm	Acomp
1223	0.01900	0.0000	0.0000	0	20150901	20150903	20150908	0	0
1223	0.07600	0.0000	0.0000	20150929	20151001	20151005	20151007	0	0
1223	0.06700	0.0000	0.0000	20151030	20151102	20151104	20151106	0	0
1223	0.03200	0.0000	0.0000	20151127	20151201	20151203	20151207	0	0
1223	0.10300	0.0000	0.0000	20151221	20151223	20151228	20151230	0	0
15980	UNDER ARMOUR INC	Changed trading symbol to UACWI from UAWI for 20160323-20160407 and to UAC from UA for 20160408-20161130							
89922	TESSERA TECHNOLOGIES INC	Change company name to TESSERA TECHNOLOGIES INC from TESSERA TECHNOLOGIES for entire history							
77069	NUVEEN MI QUALITY INCOME MUNI FD	Change name to NUVEEN MI QUALITY INCOME MUNI FD from NUVEEN MI QLTY INC MUNI FD INC for 20130107-20161130	1/7/2013	11/30/2016					
13702	D S HEALTHCARE GROUP INC	Removed halt from 20160405 to 20161130. Changed enddate to 20160404 and added delisting information.	4/5/2016	11/30/2016					
63079	KEY ENERGY SERVICES INC	Added zero nameline for the period 20160728 to 20161215 to reflect off-exchange activity.	7/28/2016	12/15/2016					
16275	NUVEEN HIGH INCOME NOVEMBER 2021	Changed shares outstanding to 50000 from 1400 for 20160824-20161229	8/24/2016	12/29/2016					
86996	S B A COMMUNICAITONS CORP	Added Class A designation for entire history.	6/16/1999	12/30/2016					
92681	CHINA HOUSING & LAND DEVELOP INC	Removed reverse split on ex-date 20161219							

PERMNO	COMPANY NAME	DESCRIPTION	BEGDT	ENDT					
87173	LOOKSMART LTD	Change distribution code from 3888 to 3863 and distribution amount from 0.0 to 0.06.							
OLD VALUE:									
Code	Divamt	Facpr	Facshr	Dclrdt	Exdt	Rcrddt	Paydt	Aperm	Acomp
5523	0.00000	-0.6667	-0.6667	0	20131106	20131106	20131106	0	0
5523	0.00000	-0.8488	-0.8488	0	20151028	20151028	20151028	0	0
3723	6.56020	-1.0000	-1.0000	0	20151029	20151027	20151027	15796	55469
3888	0.00000	0.0000	0.0000	0	20151029	20151027 2	0151028	0	0
NEW VALUE:									
Code	Divamt	Facpr	Facshr	Dclrdt	Exdt	Rcrddt	Paydt	Aperm	Acomp
5523	0.00000	-0.6667	-0.6667	0	20131106	20131106	20131106	0	0
5523	0.00000	-0.8488	-0.8488	0	20151028	20151028	20151028	0	0
3723	6.56020	-1.0000	-1.0000	0	20151029	20151027	20151027	15796	55469
3863	0.06000	0.0000	0.0000	0	20151029	20151027	20151028	0	0
19852	SMITH A O CORP	Added closing price, highask, bidlow and volume for 19831003	10/3/1983	10/3/1983					
15388	ACCUSHARES TRUST I	Added closing price to -4.455 from 0, highask to 4.82 from 0, bidlow to 4.09 from 0, ask to 4.82 from 0 & bid to 4.09 from 0 for 20160720	7/20/2016	7/20/2016					
12445	E T F S WHITE METALS BASKET TR	Changed delisting code from 470 to 450 and added final liquidating distribution of \$28.96033 on exdate 20160601	3/2/2016	6/1/2016					
12445	E T F S WHITE METALS BASKET TR	Changed delisting code from 470 to 450 and added final liquidating distribution of \$28.96033 on exdate 20160601	3/2/2016	6/1/2016					

NOVEMBER 2016 DATA EDITS

INDIVIDUAL EDITS

PERMNO	COMPANY NAME	DESCRIPTION	BEGDT	ENDDT
14877	LIMBACH HOLDINGS INC	Added zero nameline for 20160712-20161115 to reflect off-exchange activity	7/12/2016	11/15/2016
86536	DIFFUSION PHARMACEUTICALS INC	Added zero namelines for 19981222-20161108 to reflect off-exchange activity	12/22/1998	11/8/2016
11206	AMERICAN ADVENTURE INC	Changed exchange code to 33 from 3 and security status to W from R for 19870326-19870512	3/26/1987	5/12/1987
15379	MEDIGUS LTD	Changed sharecode from 11 to 12 for 20151109-20161130.	11/9/2015	11/30/2016
85234	CORECIVIC INC	Changed sharecode from 11 to 18 for 20130102-20161130	1/2/2013	11/30/2016
26650	CONSOLIDATED TOMOKA LAND CO	Changed SIC Code from 3825 to 6552 from 20161021-20161130.	10/21/2016	11/30/2016

OCTOBER 2016 DATA EDITS

GROUP EDITS

BEGDT	ENDDT	DESCRIPTION
1998	2010	Changed all company names to MORGAN STANLEY TRUSTS for CNUM 61745P

INDIVIDUAL EDITS

PERMNO	COMPANY NAME	DESCRIPTION	BEGDT	ENDDT
92133	POWERSHARES E T F TRUST II	Changed company name to POWERSHARES E T F TRUST II from POWERSHARES GLOBAL E T F TRUST for 20070906-20161031.	9/6/2007	10/31/2016
92134	POWERSHARES E T F TRUST II	Changed company name to POWERSHARES E T F TRUST II from POWERSHARES GLOBAL E T F TRUST for 20070906-20161031.	9/6/2007	10/31/2016
92138	POWERSHARES E T F TRUST II	Changed company name to POWERSHARES E T F TRUST II from POWERSHARES GLOBAL E T F TRUST for 20070906-20161031.	9/6/2007	10/31/2016
92139	POWERSHARES E T F TRUST II	Changed company name to POWERSHARES E T F TRUST II from POWERSHARES GLOBAL E T F TRUST for 20070906-20161031.	9/6/2007	10/31/2016
14709	UNITED DEVELOPMENT FUNDING IV	Removed halt record from 20160219-20160930 and added delist array on 20160218.	2/18/2016	9/30/2016
92802	CENTRAIS ELETRICAS BRASILEIRAS S	Added zero nameline for 20160518-20161012 to reflect off-exchange activity	5/18/2016	10/12/2016

FILE VERSION SPECIFICS

This table contains version specific information for the CRSP Stock Files with data ending December 2016. It contains the number of securities and information about the maximums of the event arrays.

FILE CODE	# OF SECURITIES	MAX NAMES	MAX DISTS	MAX SHARES	MAX DELISTS	MAX GROUPS	MAX NASDIN	FIRST PERMNO	LAST PERMNO
DAZ	31628	39	1538	2393	1	4	2619	10000	93436
MAZ	31599	39	1538	2393	1	4	2619	10000	93436

CALENDAR	DATE RANGE	DATE INDEX RANGE
Daily trading calendar	19251231-20161230	1-24039
Month-end trading calendar	19251231-20161230	1-1093
Year-end trading calendar	19251231-20171229	1-93
Quarter-end trading calendar	19251231-20171229	1-369
Weekly trading calendar	19260102-20161230	1-4748

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	FIZyyyyymm SIZyyyyymm (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	FAZyyyyymm SAZyyyyymm (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	A6Zyyyyymm S6Zyyyyymm (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	AXZyyyyymm SXZyyyyymm (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	IFZyyyyymm SFZyyyyymm	122 MB			IF - CRSP Supplemental US Indexes
CRSP/Compustat Merged Database	CMZyyyyymm	10.37 GB			CM - Compustat Data formatted in CRSPAccess Database
Daily & Monthly Treasuries in CRSPSift	TRZyyyyymm	278 MB			TR - Database format for use with CRSPSift
Daily & Monthly Treasuries Files	TFZyyyyymm	1.75 GB			TF - Expanded daily and monthly files in EXCEL, SAS, and ASCII formats
Mutual Fund Database	MFZyyyyymm	10 GB			MF - Mutual Funds
CRSP/Ziman Daily & Monthly REIT	RAZyyyyymm	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	a6zyYYYYMM_cadb.zip
AXZ1_YYYYMM_SLD	CRSP 1962 US Stock and Index	axzyYYYYMM_cadb.zip
FAZ1_YYYYMM_SLD	CRSP 1925 US Stock	fazyYYYYMM_cadb.zip
FIZ1_YYYYMM_SLD	CRSP 1925 US Stock and Index	fizyYYYYMM_cadb.zip
IFZ1_YYYYMM_SGD	CRSP 1925 Indexes	ifyYYYYMM_cadb.zip

Red Hat Linux Products:

PRODUCT LABEL	PRODUCT NAME	FILE NAME
A6Z1_YYYYMM_SLD	CRSP 1962 US Stock	a6zyYYYYMM_cadb.zip
AXZ1_YYYYMM_SLD	CRSP 1962 US Stock and Index	axzyYYYYMM_cadb.zip
FAZ1_YYYYMM_SLD	CRSP 1925 US Stock	fazyYYYYMM_cadb.zip
FIZ1_YYYYMM_SLD	CRSP 1925 US Stock and Index	fizyYYYYMM_cadb.zip
IFZ1_YYYYMM_SGD	CRSP 1925 Indexes	ifyYYYYMM_cadb.zip

Solaris SPARC Products:

PRODUCT LABEL	PRODUCT NAME	FILE NAME
A6Z1_YYYYMM_SBD	CRSP 1962 US Stock	a6zyYYYYMM_sparc.zip
AXZ1_YYYYMM_SBD	CRSP 1962 US Stock and Index	axzyYYYYMM_sparc.zip
FAZ1_YYYYMM_SBD	CRSP 1925 US Stock	fazyYYYYMM_sparc.zip
FIZ1_YYYYMM_SBD	CRSP 1925 US Stock and Index	fizyYYYYMM_sparc.zip
IFZ1_YYYYMM_SGD	CRSP 1925 Indexes	ifyYYYYMM_sparc.zip

Flat File Products:

PRODUCT NAME	FILE NAME
SAS Zip	s*zyyyymm_sas.zip
ASCII Zip	s*zyyyymm_ascii.zip

STEPS TO INSTALL:

- From the directory containing your downloaded zip file, right click (in Windows) or run File Roller (in Red Hat and Solaris)
- 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 and Solaris)
- 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 AND SUN SOLARIS

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.

