

CRSP/ZIMAN REAL ESTATE DATA SERIES RELEASE NOTES

AUGUST 2009 MONTHLY UPDATE

FILE VERSION SPECIFICS

- The CRSP/Ziman Real Estate Data Series contains data through August 2009.
- The data series contains 510 securities of which 153 are currently trading.
- There is one CD included with this release that may be installed on three platforms: Windows, Linux and Sun. ASCII and SAS versions of the data series are available for all three platforms, and in addition, a Microsoft Access database is available for Windows.
- Installation is done with InstallShield®. Because files are compressed, in order to access them, they must first be installed on your computer.

RESEARCH AND PROGRAMMING NOTES

- Prices and indices in this product begin in January of 1980. This is true even when the Ziman REIT Info table states that the REIT was in existence prior to 1980.
- The base year for the CRSP/Ziman Indices is 12/30/1994, at which point they are set to a value of 100. This differs from CRSP Market Indices which are set to 100 on 12/29/1972.
- Due to some inconsistent trading early in the time series, a few additional rules were implemented to improve the continuity of the portfolios used to calculate the indices. Please refer to Chapter 2 of the CRSP/Ziman Real Estate Data Series Guide for an explanation of universe and price selection criteria.

200908 REIT INDICES SUMMARY

CRSP ADDS, DELISTS AND CHANGES

PERMNO 92999 (STARWOOD PROPERTY TRUST INC) added on 20090812*

**92999 STARWOOD PROPERTY TRUST INC added on 20090812 is in the CRSP_NAMES table and listed erroneously as a non-REIT however that data is correctly included in the REIT database.*

PERMNO 92331 (DUPONT FABROS TECHNOLOGY INC) changed to REIT status for the trading period 20071019-20090831.

PERMNO 91207 (STARWOOD HOTELS & REST WLDWD INC) removed REIT status for the period 20060410-20090831.

CRSP DATABASE CHANGES:

PERMNO 52214 (MISSION WEST PPTYS INC MD) had a shares outstanding change to 21770 from 21748 for the period 20090630-20090731

PERMNO 55029 (MONMOUTH REAL ESTATE INVT CORP) had a shares outstanding change to 25288 from 25007 for the period 20090630-20090730.

PERMNO 81087 (SUPERTEL HOSPITALITY INC) had a shares outstanding change to 21880 from 21788 for the period 20090630-20090731

INDICES DIFFS:

(any change over 5% for 1000808 and 1000850, except new adds and drops, or any suspicious change in returns, usdval or usdcnt for any indno)

The extreme diffs for INDNO's 1000808 & 1000858 have been higher this month due to the deletion of PERMNO 91207 STARWOOD HOTELS & REST WLDWD INC and the addition of PERMNO 92331 DUPONT FABROS TECHNOLOGY INC to the REIT database.

Daily:

INDNO 1000858 has an absolute percentage change of 8.33 of usdcnts on 20080130 due to the deletion of PERMNO 91207 from the REIT database.

INDNO 1000808 has an absolute percentage change of 8.33 of usdcnts on 20090731 due to the deletion of PERMNO 91207 from the REIT database.

INDNO 1000800 has an absolute percentage change of 1000% of addcnts on 20071022 due to the addition of PERMNO 92331 on 20071019

INDNO 1000801 has an absolute percentage change of 1000% of addcnts on 20071022 due to the addition of PERMNO 92331 on 20071019

INDNO 1000807 has an absolute percentage change of 1000% of addcnts on 20071022 due to the addition of PERMNO 92331 on 20071019

INDNO 1000808 has an absolute percentage change of 100% of addcnts on 20060401 due to the deletion of PERMNO 91207 on 20060410

INDNO 1000800 has an absolute percentage change of 1000% of addvals on 20071022 due to the addition of PERMNO 92331 on 20071019

INDNO 1000800 has an absolute percentage change of 100% of addvals on 20060411 due to the deletion of PERMNO 91207 on 20060410

SYSTEM REQUIREMENTS

- SAS version 8 or higher, Microsoft Access, or an analytical tool of your choice
- A CD-ROM drive
- Sufficient disk space to load and manipulate the data series.*

| DATA SERIES FORMAT | MONTHLY DATA SERIES | DAILY/MONTHLY DATA SERIES |
|--------------------|---------------------|---------------------------|
| ASCII | 7.76 MB | 164 MB |
| Microsoft Access | 7.55 MB | 141 MB |
| SAS V 9.1 | 9.11 MB | 175 MB |

*Additional disk space will be needed for data manipulation.

FILE NAME SPECIFICATIONS AND INSTALLATION**ASCII**

All files contain variable-width records, ending with line-feeds, with pipe-delimited "|" fields. There are no header records. See Table Definitions in Chapter 3 for field order in each file.

| FILE NAME | DESCRIPTION |
|------------------------------|---|
| crsp_daily_data.txt* | daily REIT security data |
| crsp_header.txt | security REIT header data |
| crsp_monthly_data.txt | monthly REIT security data |
| crsp_names.txt | security name history of REITS |
| crsp_ziman_daily_index.txt* | daily index results |
| crsp_ziman_monthly_index.txt | monthly index results |
| index_type_map.txt | definitions of REIT indexes and characteristics |
| price_type.txt | definitions of available price types |
| Property_type.txt | definitions of available REIT property types |
| reit_type.txt | definitions of available REIT categories |
| sub_property_type.txt | definitions of available REIT property subtypes |
| ziman_reit_info.txt | REIT information |

* present in daily/monthly product only

Column names and labels are embedded in the data sets. The full descriptions for fields can be found in the table definitions section of Chapter 3.

| FILE NAME | DESCRIPTION |
|-----------------------------------|---|
| crsp_daily_data.sas7bdat* | daily REIT security data and index |
| crsp_daily_data.sas7bndx* | |
| crsp_header.sas7bdat | security REIT header data and index |
| crsp_header.sas7bndx | |
| crsp_monthly_data.sas7bdat | monthly REIT security data and index |
| crsp_monthly_data.sas7bndx | |
| crsp_names.sas7bdat | security name history of REITS and index |
| crsp_names.sas7bndx | |
| crsp_ziman_daily_index.sas7bdat* | daily index results and index |
| crsp_ziman_daily_index.sas7bndx* | |
| crsp_ziman_monthly_index.sas7bdat | monthly index results and index |
| crsp_ziman_monthly_index.sas7bndx | |
| index_type_map.sas7bdat | definitions of REIT indexes and characteristics |

| FILE NAME | DESCRIPTION |
|----------------------------|---|
| price_type.sas7bdat | definitions of available price types |
| Property_type.sas7bdat | definitions of available REIT property types |
| reit_type.sas7bdat | definitions of available REIT categories |
| sub_property_type.sas7bdat | definitions of available REIT property subtypes |
| ziman_reit_info.sas7bdat | REIT information and index |
| ziman_reit_info.sas7bndx | |

* present in Daily/Monthly product only

MSACCESS

A Microsoft Access database is provided named `reit_db.mdb` containing all data tables. The database is in Access 2000 file format. The design view menu within Access can be used to view available fields, data types, and descriptions.

DATA INSTALLATION

Instructions and screen shots for installation are written for Windows. Differences related to Linux and Sun are noted where applicable.

WINDOWS:

To install data, insert your CD into the drive and from the Start Menu, select Run `d:\setupwin32.exe`. Click **OK** to proceed.

LINUX:

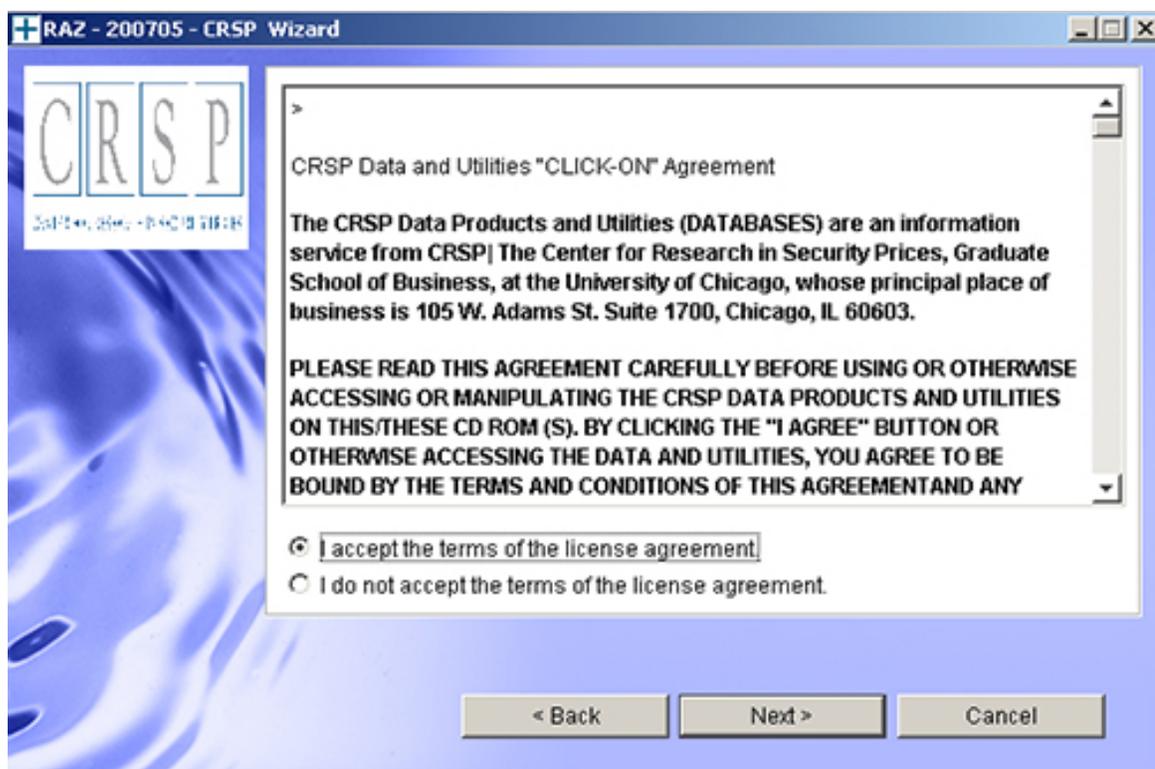
Upon insertion of the CD, a file manager will open with the file, `SETUPLINUX.BIN`. Double click on this setup file and run in a terminal to begin the installation process.

SUN:

Upon insertion of the CD, a file manager will open with the file, `SETUPSOLARIS.BIN`. Double click on this file to begin the installation process.



After clicking on **Next** on the Welcome screen, scroll through and read the CRSP Data and Utilities Agreement. Click to accept the terms and select **Next**.

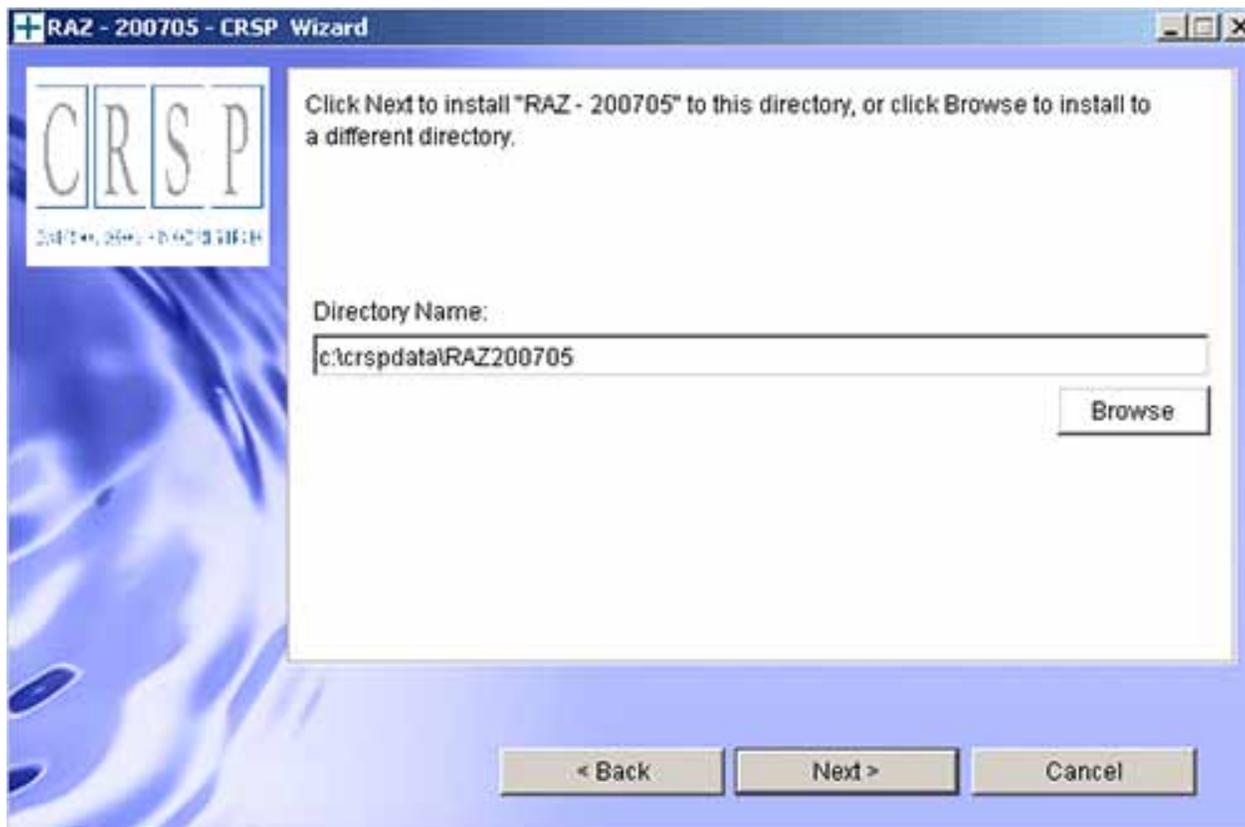


WINDOWS:

The default directory for the data installation is `c:\crspdata\RAZyyyyymm` for daily/monthly and `c:\crspdata\RMZyyyyymm` for monthly only. You may accept or modify the location. Click Next.

LINUX AND SUN:

The default directory for the data installation is `/crspdata/RA(or M)Zyyyyymm`. You must create a root directory, for example, `/home/username/crspdata/RA(or M)Zyyyyymm`.

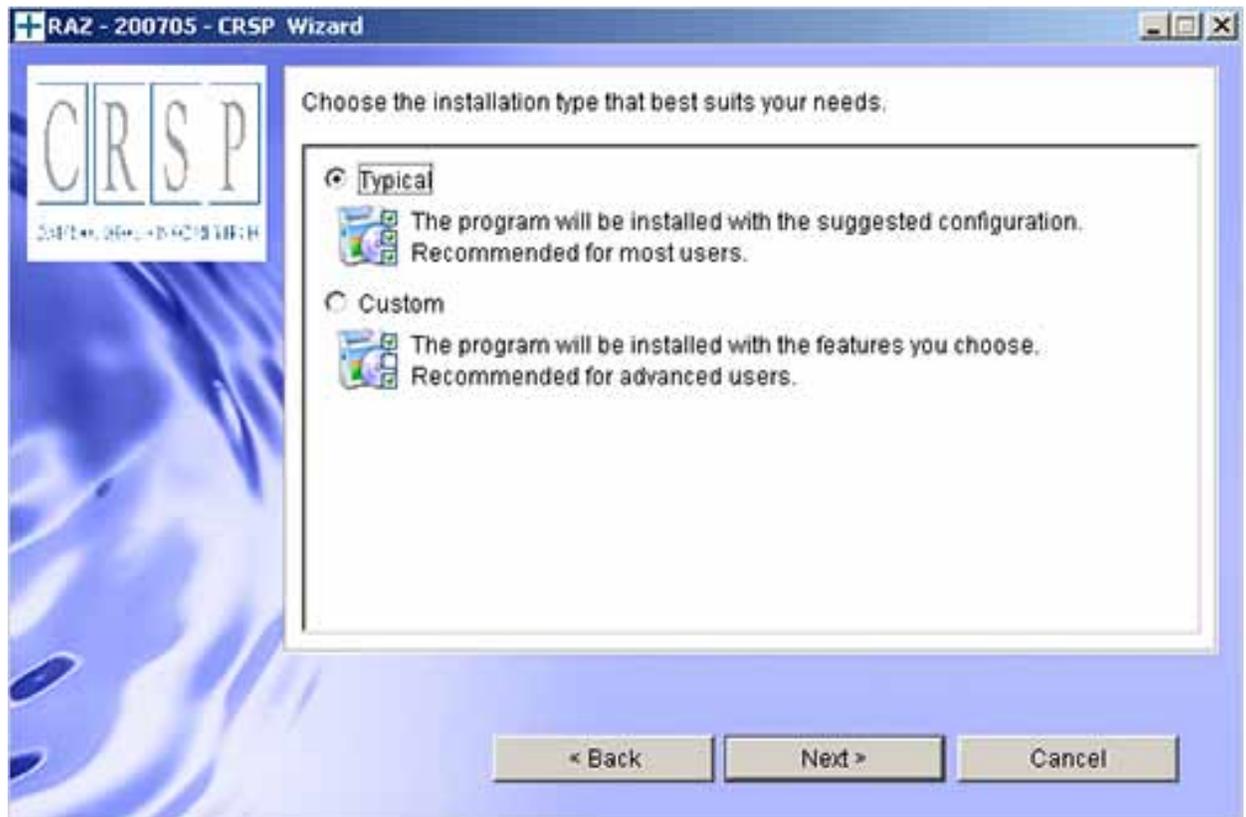


WINDOWS:

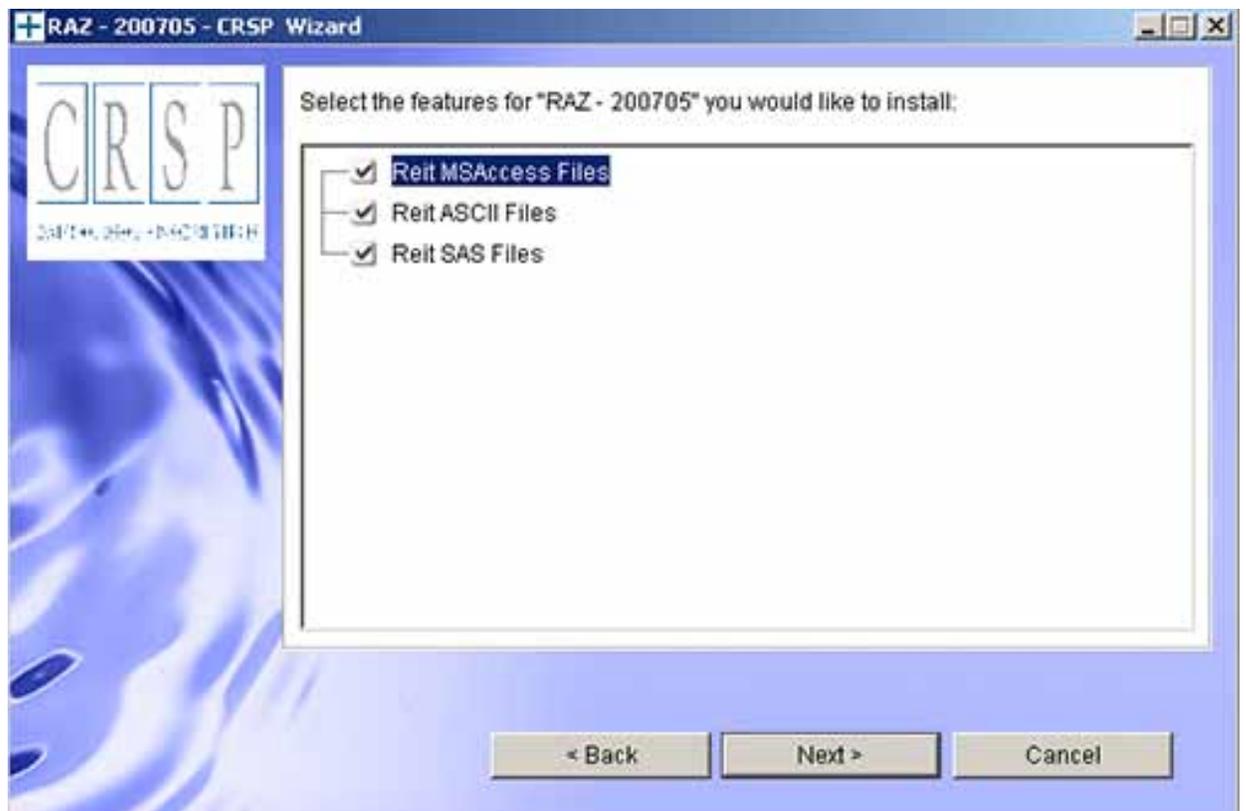
You have the choice of either a typical or custom installation. The typical installation will install *all* data formats (ASCII, Microsoft Access, and SAS).

LINUX AND SUN:

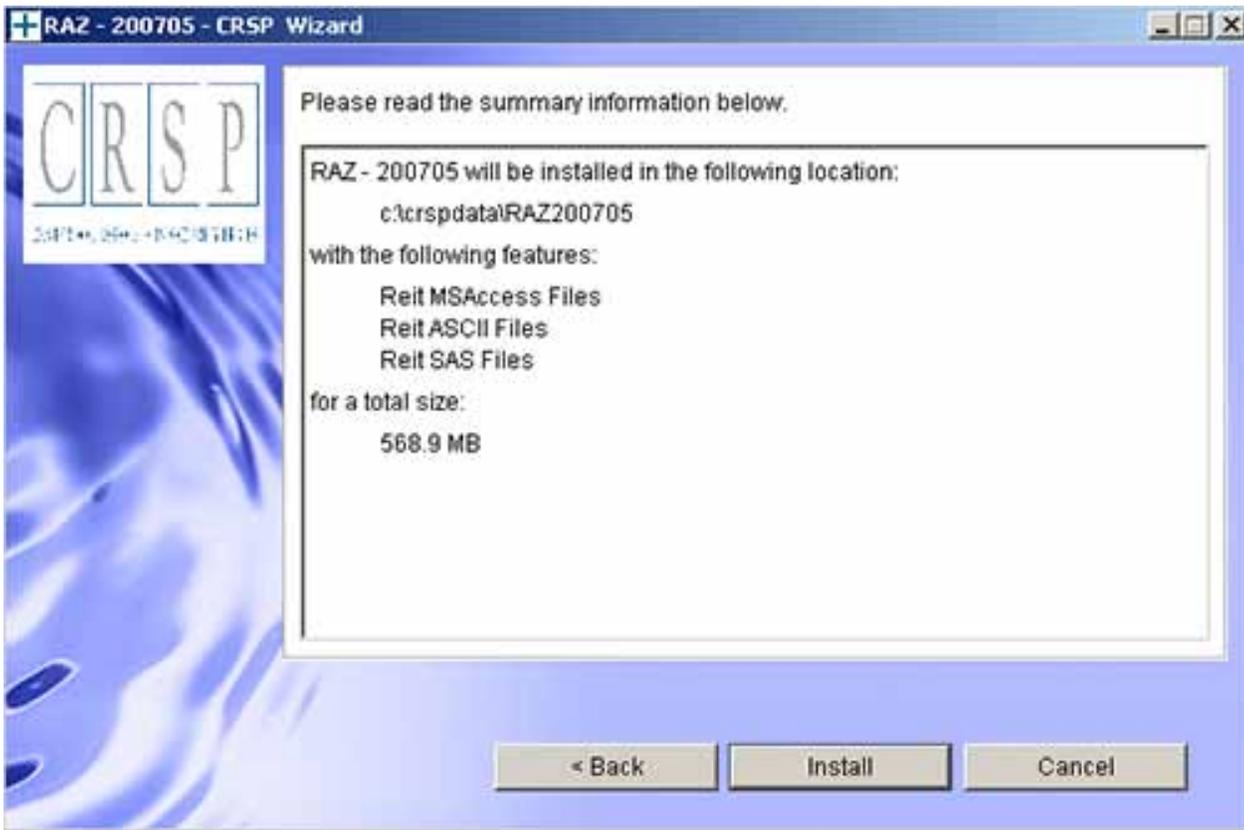
ASCII and SAS data files are available for installation on Linux and Sun.



Selecting the Custom option will allow you to pick and choose the file types that you wish to install to your computer. Once you have checked the files you wish to install, click **Next**.



Once files are selected for installation, a confirmation screen with summary information is displayed, including location, data components and the amount of space that is required for the data. You may select the **Back** button if changes are needed, or **Install** to proceed.



A message indicating the success of the installation appears when the process is complete. Click **Finish**.

