

# CRSP/ZIMAN REAL ESTATE DATA SERIES RELEASE NOTES

DECEMBER 2009 ANNUAL UPDATE

## FILE VERSION SPECIFICS

- The CRSP/Ziman Real Estate Data Series contains data through December 2009.
- The data series contains 515 securities of which 157 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.

## **200912 REIT INDICES SUMMARY**

### **CRSP ADDS, DELISTS AND CHANGES**

PERMNO 93178 (PEBBLEBROOK HOTEL TR) added on 20091209

PERMNO 85896 (ANTHRACITE CAPITAL INC) delisted on 20091201

PERMNO 86365 (AMERICAN COMMUNITY PPTYS TR) delisted on 20091230

PERMNO 90077 (COHEN & CO INC) went from REIT status to common stock on 20091216

### **CRSP DATABASE CHANGES:**

PERMNO 55029 (MONMOUTH REAL ESTATE INVT CORP) had a shares outstanding change from 25382 to 25784 for the period 20090930-20091019

PERMNO 85472 (INVESTORS REAL ESTATE TRUST) had a shares change from 73453 to 73502 for the period 20091030-20091130.

PERMNO 82639 (IMPAC MORTGAGE HOLDINGS INC) had delisting price change from .04 to the next good trading day price of .05 and PTYPE from 10 to 4 on 20081128

PERMNO 82639 (IMPAC MORTGAGE HOLDINGS INC) had a delisting price change from .04 to the next good trading day price of 3.520 and PTYPE from 10 to 7 on 20081121

## 200911 REIT INDICES SUMMARY

### CRSP ADDS, DELISTS AND CHANGES

PERMNO 92477 (ARMOUR RESIDENTIAL REIT INC) added on 20091109.

### CRSP DATABASE CHANGES:

PERMNO 55029 (MONMOUTH REAL ESTATE INVT CORP) had a shares outstanding change to 18414 from 18833 for the period 20050930-20051130, 20015 shares from 20187 for the period 20060929-20061130, 23969 shares from 23941 for 20070928-20071031, and 24366 shares from 24567 shares for the period 20080930-20081128.

PERMNO 64653 (PUBLIC STORAGE) has a shares outstanding change to 169490 from 168344 for the period 20090529.

PERMNO 91285 (VESTIN REALTY MORTGAGE II INC) had a shares outstanding change from 13741 from 13785 for the period 20090930-20091030.

PERMNO 91373 (VESTIN REALTY MORTGAGE I INC) had a shares outstanding change to 6500 from 6593 for the period 20090930-20091030.

PERMNO 92680 (AMERICAN CAPITAL AGENCY CORP) had a shares outstanding change to 24322 from 19322 for the period 20091030.

PERMNO 93070 (TWO HARBORS INVESTMENT CORP) had a shares outstanding change to 13401 from 32811 for the period 20091030

## 200910 REIT INDICES SUMMARY

### CRSP ADDS, DELISTS AND CHANGES

PERMNO 93070 (TWO HARBORS INVESTMENT CORP) added on 20091029.

### CRSP DATABASE CHANGES:

PERMNO 79770 (LEXINGTON REALTY TRUST) had a shares outstanding change to 105880 from 113342 for the period 20090831-20090929.

PERMNO 90787 (J E R INVESTORS TRUST INC) had a shares outstanding change to 4988 from 5000

for the period 20090227-20090330.

PERMNO 92680 (AMERICAN CAPITAL AGENCY CORP) had a shares outstanding change to 19322 from 18759 for the period 20090930.

## 200909 REIT INDICES SUMMARY

### CRSP ADDS, DELISTS AND CHANGES

PERMNO 93014 (APOLLO COMMERCIAL RL EST FIN INC) added on 20090924

PERMNO 93018 (COLONY FINANCIAL INC) added on 20090924

PERMNO 93019 (CREXUS INVESTMENT CORP) added on 20090917

PERMNO 35553 (PRESIDENTIAL REALTY CORP NEW) delisted on 20090911

### CRSP DATABASE CHANGES:

PERMNO 85472 (INVESTORS REAL ESTATE TRUST) had a shares outstanding change to 63788 from 63461 for the period 20090731-20090831

## 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

## 200907 REIT INDICES SUMMARY

### CRSP ADDS, DELISTS AND CHANGES

PERMNO 92976 (PENNYMAC MORTGAGE INV TR) was added on 20090730.

### CRSP DATABASE CHANGES:

PERMNO 85472 (INVESTORS REAL ESTATE TRUST) had a shares outstanding change to 60304 from 59155 for the period 20090430-20090601 and a shares change to 63461 from 63431 for the period 20090630.

## 200906 REIT INDICES SUMMARY

### CRSP ADDS, DELISTS AND CHANGES

PERMNO 92948 (GOVERNMENT PROPERTIES INCOME TR) added on 20090603

PERMNO 92945 (CYPRESS SHARPRIDGE INVTS INC) added on 20090612

PERMNO 92951 (INVESCO MORTGAGE CAPITAL INC) added on 20090626

### CRSP DATABASE CHANGES:

PERMNO 85909 (WALTER INVESTMENT MGMT CORP) had a shares outstanding change to 19871 from 173 for the period 20090420-20090429

## 200905 REIT INDICES SUMMARY

### CRSP DATABASE CHANGES:

PERMNO 55029 (MONMOUTH REAL ESTATE INVT CORP) had a shares outstanding change to 24965 from 24783 for 20090331

PERMNO 55029 (MONMOUTH REAL ESTATE INVT CORP) had a shares outstanding change to 25012 from 24783 for 20090430

## 200904 REIT INDICES SUMMARY

### CRSP ADDS, DELISTS AND CHANGES

PERMNO 79129 (GENERAL GROWTH PROPERTIES INC) delisted on 2009415.

PERMNO 90787 (JER INVESTORS TRUST INC) delisted on 20090331

### CRSP DATABASE CHANGES:

PERMNO 55029 (MONMOUTH REAL ESTATE INVT CORP) had a shares outstanding change to 24783 from 24775 for 20090331.

## 200903 REIT INDICES SUMMARY

### CRSP DATABASE CHANGES:

PERMNO 52214 (WEST PPTYS INC MD) had a shares outstanding change to 21748 from 19748 for 20090227

PERMNO 79770 (LEXINGTON REALTY TRUST) had a shares outstanding change to 100642 from 100300 for 20090227

PERMNO 80381 (AVALONBAY COMMUNITIES INC) had a dividend amount change to \$0.8925 from \$2.70 for ex-date 20081224 and distribution code 1232

PERMNO 81087 (SUPERTEL HOSPITALITY INC) had a shares outstanding change to 20925 from 20924 for 20081231-20090227

PERMNO 85472 (INVESTORS REAL ESTATE TRUST) had a shares outstanding change to 59127 from 58793 for 20090130-20090227

PERMNO 91285 (VESTIN REALTY MORTGAGE II INC) had a shares outstanding change to 13799 from 14570 for 20081231-20090129 and to 13785 from 14570 from 20090130-20090227

PERMNO 91373 (VESTIN REALTY MORTGAGE I INC) had a shares outstanding change to 6631 from 6875 for 20081231-20090129 and to 6593 from 6875 from 20090130-20090227

## 200902 REIT INDICES SUMMARY

### CRSP ADDS, DELISTS AND CHANGES

PERMNO 70818 (AMERICAN LAND LEASE INC) delisted on 20090217

### CRSP DATABASE CHANGES:

PERMNO 55029 (MONMOUTH REAL ESTATE INVT CORP) had a shares outstanding change to 24765 from 24586 for 20081231-20090201

PERMNO 89823 (GLADSTONE COMMERCIAL CORP) had a shares outstanding change to 8563 from 8565 for 20081231-present

## 200901 REIT INDICES SUMMARY

### CRSP ADDS, DELISTS AND CHANGES

PERMNO 26535 (TARRAGON CORP NEV) delisted on 20090121.

## 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

### SAS

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
price_type.sas7bdat	definitions of available price types
Property_type.sas7bdat	definitions of available REIT property types

FILE NAME	DESCRIPTION
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.

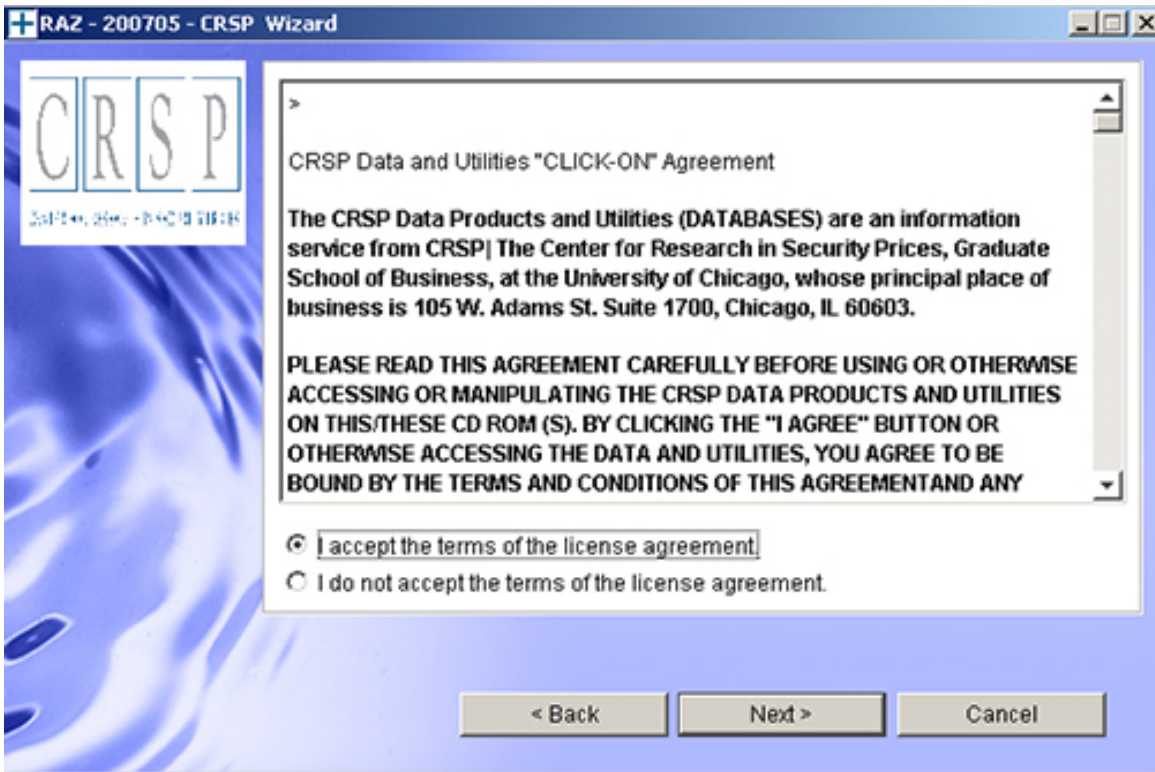
### SUN:

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**.

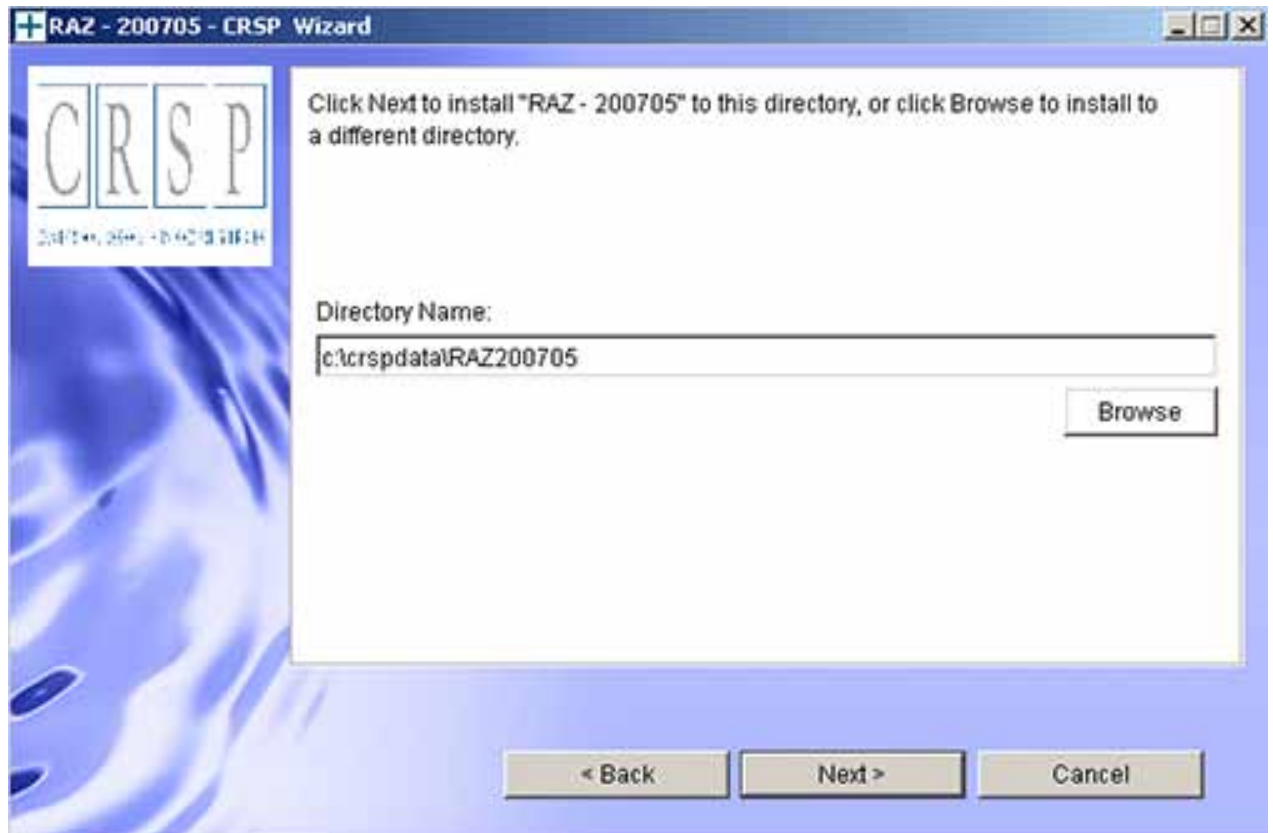


#### WINDOWS:

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`.

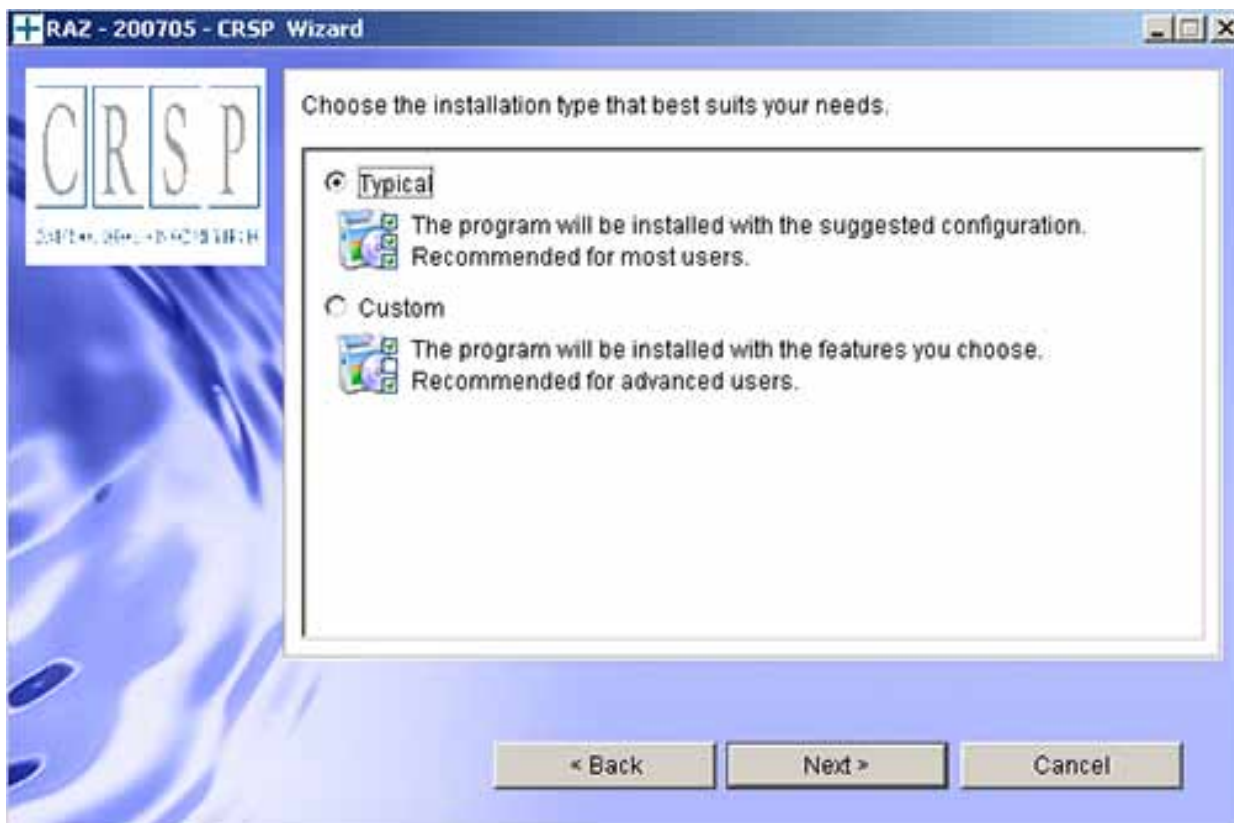
**WINDOWS:**

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

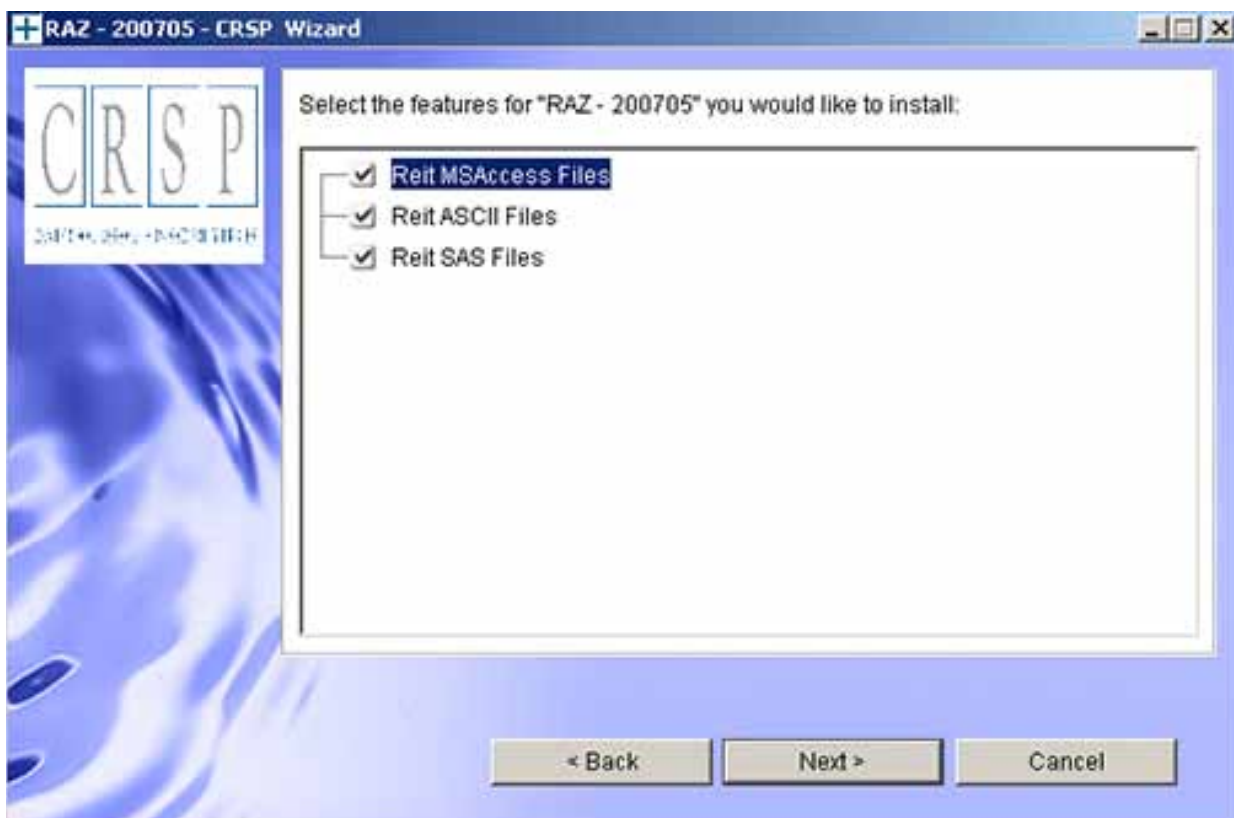
**LINUX AND SUN:**

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

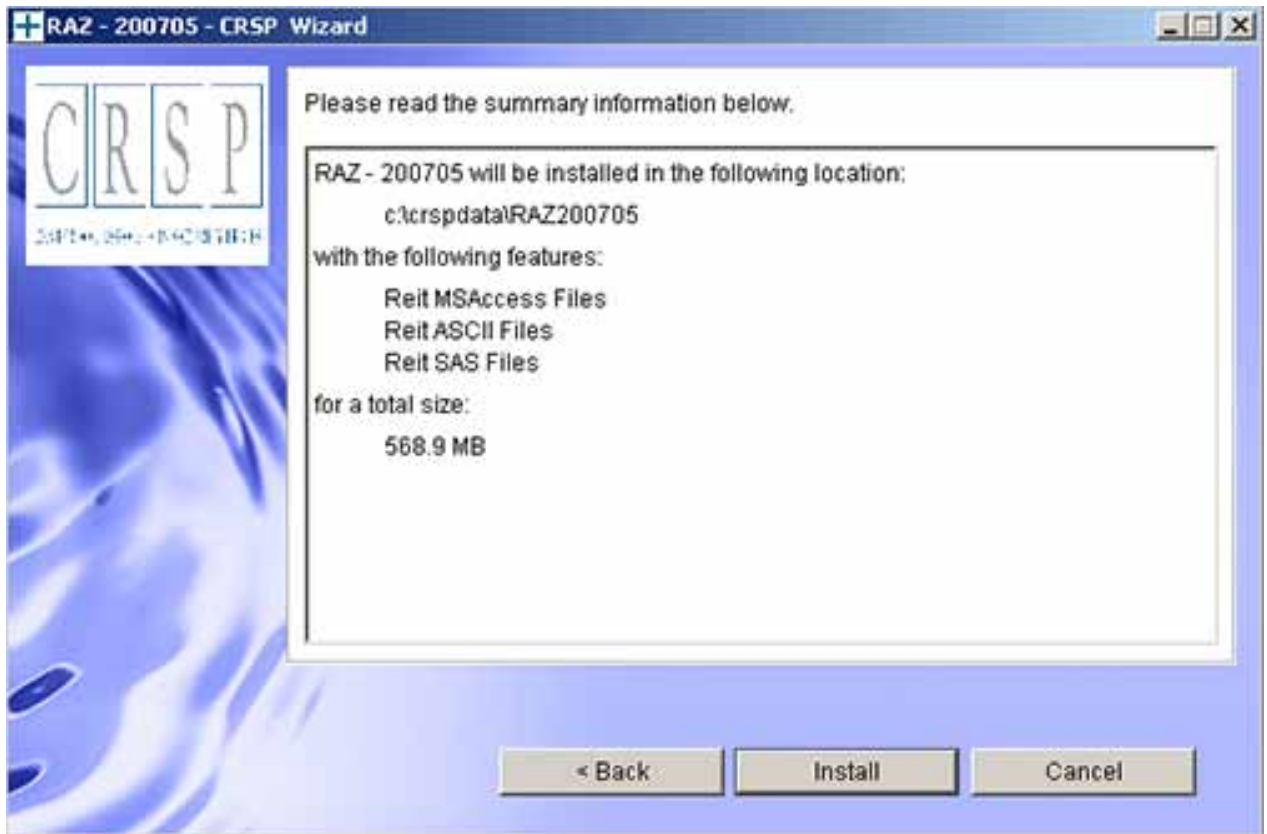




Selecting the Custom option will allow you to pick and choose the file types that you wish to install to your computer. Once you have checked the files you wish to install, click **Next**.



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**.

