

TECHNICAL NOTE

Importing Sounding Data to DigiCORA® 3.64

PUBLISHED BY

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CHAPTER 1

GENERAL INFORMATION

This chapter provides general notes for the manual.

About This Manual

This manual provides information on the changes in Radiosonde RS92-SGP humidity (U) and temperature (T) calculations implemented in DigiCORA release 3.64, and on simulating archived ozone data created with an earlier version of the software. The manual explains how to take the improved calculations into use and how to simulate old sounding results.

In this manual, old sounding data means data from soundings performed prior to DigiCORA version 3.64.

Contents of This Manual

This manual consists of the following chapters:

- Chapter 1, General Information, provides general notes for the manual.
- Chapter 2, Simulating Old Sounding Data with the New Calculations, explains how to calculate sounding information using the improved calculation features available in DigiCORA version 3.64.
- Chapter 3, Simulating Archived Ozone Data, explains how to simulate old ozone data with later versions of DigiCORA sounding software.

Version Information

Table 1 Manual Revisions

Manual Code	Description
M211299EN-B	September 2011. Importing ozone data added.
M211299EN-A	November 2010. This manual is valid from DigiCORA version 3.64 onwards.

Related Manuals

Manual Code	Manual Name
M210489EN	DigiCORA® Technical Reference

Documentation Conventions

Throughout the manual, important safety considerations are highlighted as follows:

WARNING	Warning alerts you to a serious hazard. If you do not read and follow instructions very carefully at this point, there is a risk of injury or even death.
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CAUTION	Caution warns you of a potential hazard. If you do not read and follow instructions carefully at this point, the product could be damaged or important data could be lost.
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NOTE	Note highlights important information on using the product.
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Recycling



Recycle all applicable material.



Dispose of batteries and the unit according to statutory regulations. Do not dispose of with regular household refuse.

Trademarks

DigiCORA® is a registered trademark of Vaisala Oyj.

Windows® is a registered trademark of Microsoft Corporation in the United States and/or other countries.

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CHAPTER 2

SIMULATING OLD SOUNDING DATA WITH THE NEW CALCULATIONS

This chapter explains how to calculate sounding information using the improved calculation features available in DigiCORA version 3.64.

CAUTION

If you simulate using the Research mode, the improved calculations are only partially in use.

NOTE

Note that the parameters and scripts in the sounding database file are version-dependent. If you import an old database for simulation, the parameters or scripts in the current database are not replaced.

General

DigiCORA sounding software version 3.64 includes improved calculation features for temperature (T) and humidity (U).

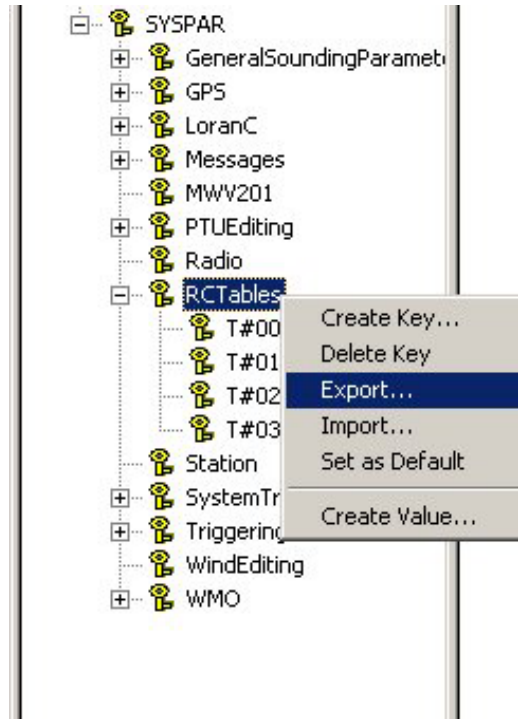
For temperature calculations, the changes include modification of existing solar radiation correction of the radiosonde temperature sensor. For humidity calculations, the changes include timelag and solar radiation correction algorithms of the radiosonde humidity sensor.

The changes are implemented in DigiCORA release 3.64 and they are applicable only for radiosonde RS92-SGP and DigiCORA Sounding Systems MW31 and MW21.

Exporting RCTables

To calculate sounding data using the improved calculation features you must first save the subkey called RCTables under database key SYSPAR to DigiCORAI directory. Follow the steps below to save the subkey:

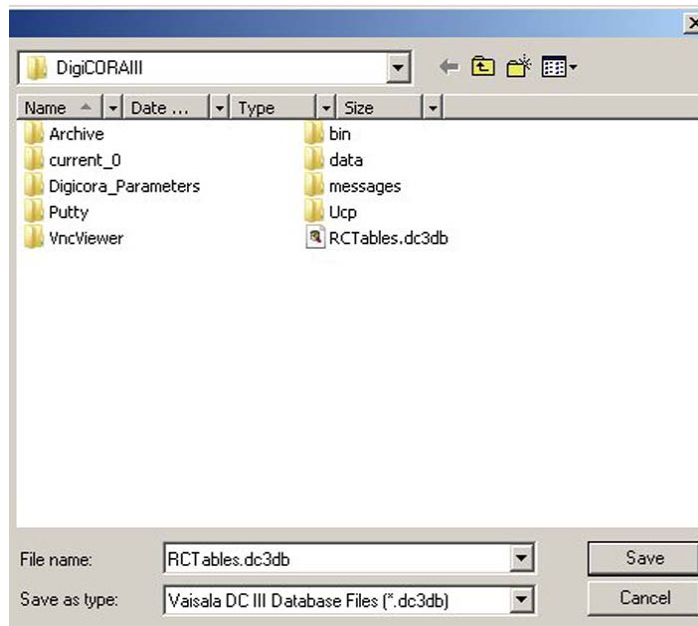
1. In DigiCORA user interface, click **System Settings** and **Connect**. DbManager opens.
2. Click **SYSPAR** and select **RCTables**. Right-click and select **Export**.



1011-076

Figure 1 Exporting RCTables

3. Save the subkeys under RCTables to directory DigiCORAIII:



1011-077

Figure 2 Saving RCTables

Calculating Old Sounding Data

To calculate old sounding data using the improved calculations, you must first import the subkey RCTables under SYSPAR and add the new parameter *Use2010CalculationForTU* under the key PTUEditing.

Importing RC Tables

1. Copy an old sounding you wish to simulate to the DigiCORA Archive directory.
2. Open Archive Manager and select the sounding you copied.
3. Click **Parameters**.
4. Click **SYSPAR**. Right-click and select **Import**.

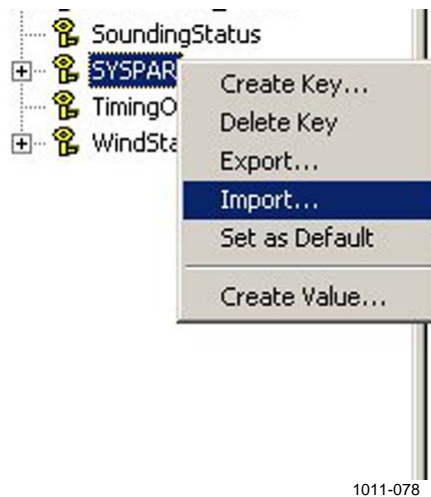
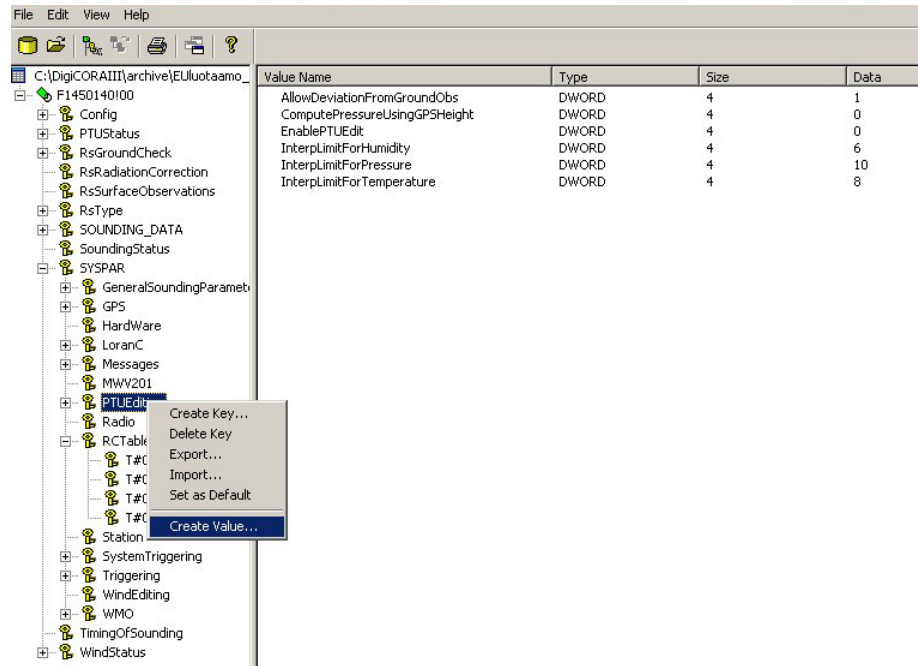


Figure 3 **Importing RCTables**

5. Select the RCTables file you saved earlier. The RCTables subkey will appear under the SYSPAR key and it replaces the old RCTables subkey.

Creating Parameter Use2010CalculationForTU

1. When you have added the new RCTables keys under SYSPAR, click the **PTUEditing** key. Right-click and select **Create Value**.



1011-079

Figure 4 **Creating Value**

2. Enter the name of the parameter *Use2010CalculationForTU* in the Value Name text field. For Type, select **SZ**. Type **Yes** in the Data text field.

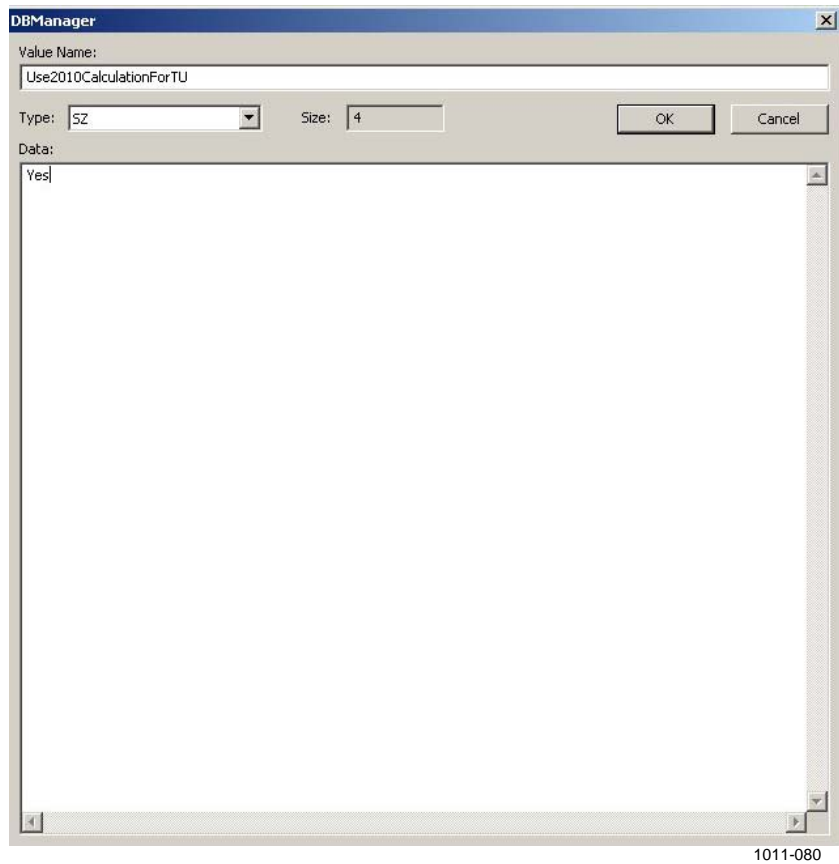


Figure 5 Entering New Value Name

3. Click **OK**. The parameter appears under the list of Value Names:

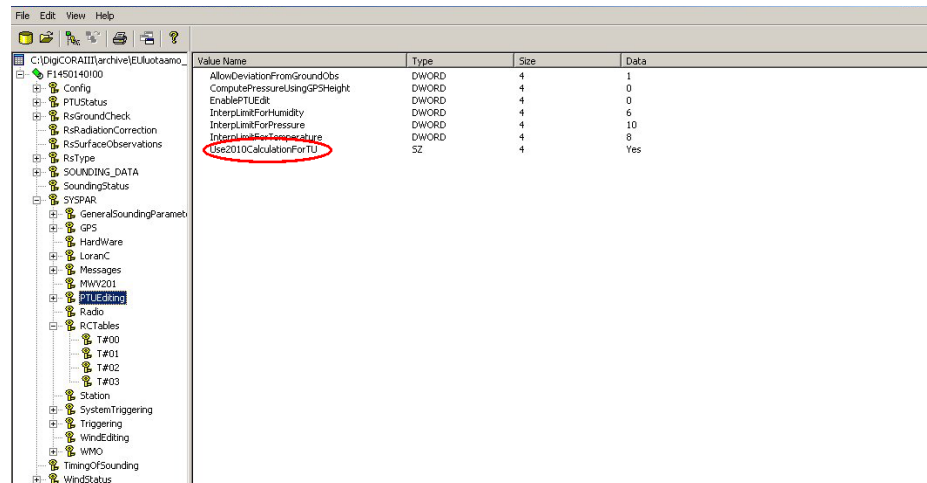


Figure 6 New Value Name

4. Open Archive Manager and select **Simulate**. You can now use the new parameter and the improved calculations to calculate old sounding data.

CHAPTER 3

SIMULATING ARCHIVED OZONE DATA

This chapter explains how to simulate old ozone data with later versions of DigiCORA sounding software.

CAUTION If you simulate using the Research mode, the improved calculations are only partially in use.

NOTE Note that the parameters and scripts in the sounding database file are version-dependent. If you import an old database for simulation, the parameters or scripts in the current database are not replaced.

Exporting Ozone-OIF92

Before importing subkey Ozone-OIF92 from the new software, you must first save the current subkey Ozone-OIF92. Follow the steps below to export and save the current subkey:

1. In DigiCORA user interface, click **System Settings** and **Connect**. DbManager opens.

2. Click **SYSPAR** and select **Triggering - Ozone-OIF92**. Right-click and select **Export**.

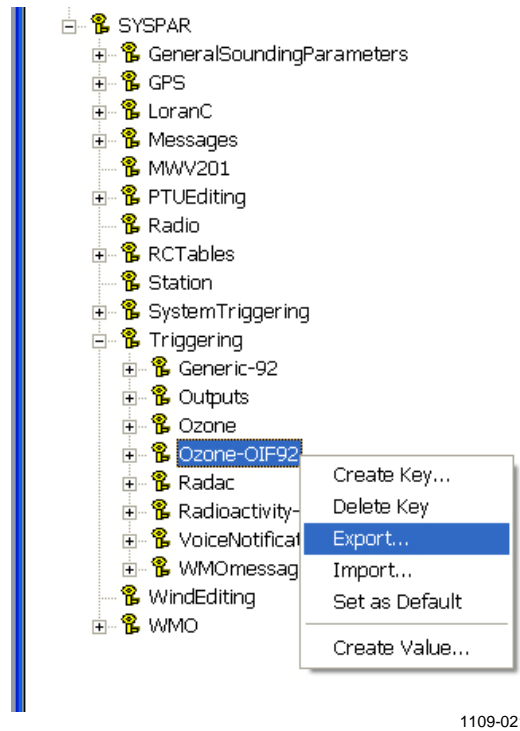


Figure 7 Exporting Ozone-OIF92

3. Save the subkey to directory DigiCORAIll:

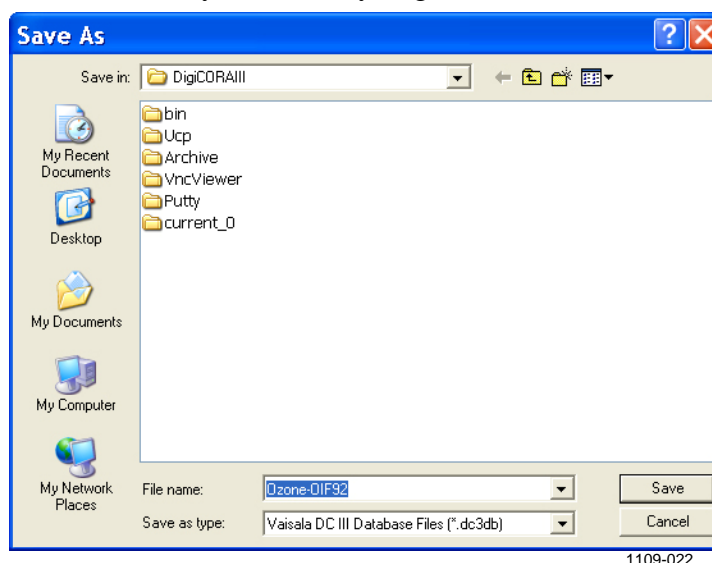


Figure 8 Saving Ozone-OIF92

Simulating Archived Ozone Data

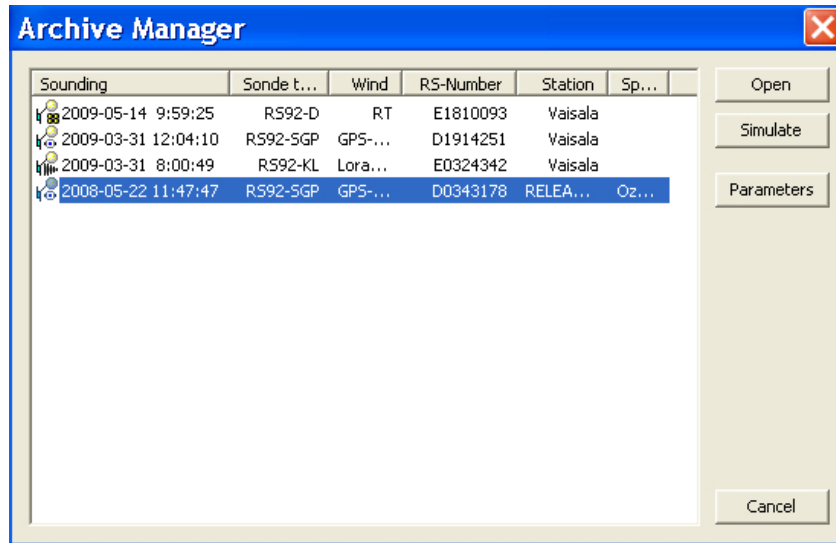
To simulate archived ozone data using a new version of DigiCORA software, you must first export the ozone sounding data from the archived sounding data and save it, and then import the subkeys Ozone-OIF92 and Parameters.

Exporting Parameters Subkey from Archived Sounding Data

Follow the steps below to export and save the Parameters subkey from archived sounding data:

1. In DigiCORA user interface, open the Archive Manager by clicking the **Archive Manager** button on the left. The Archive Manager opens.

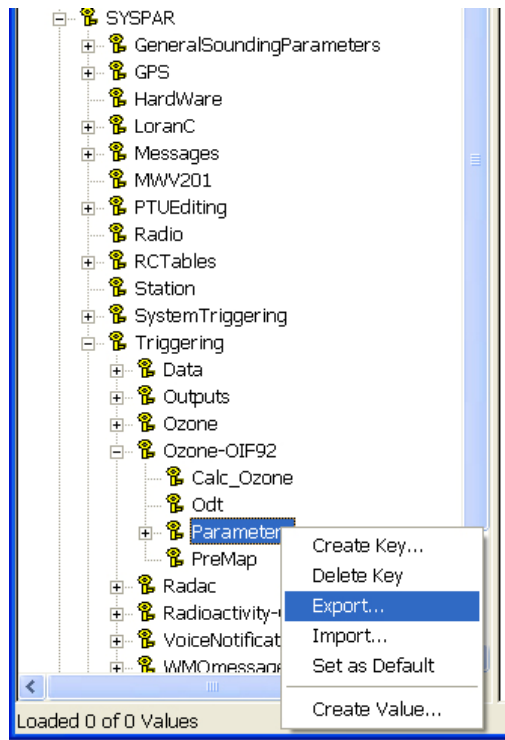
2. Select a the sounding whose data you wish to import and click the **Parameters** button on the right.



1109-027

Figure 9 Archive Manager

3. The DbManager opens. Click **SYSPAR** open and select **Triggering - Ozone-OIF92 - Parameters**. Right-click and select **Export**.



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Figure 10 Exporting Parameters

4. Save the subkey to directory DigiCORAIll:

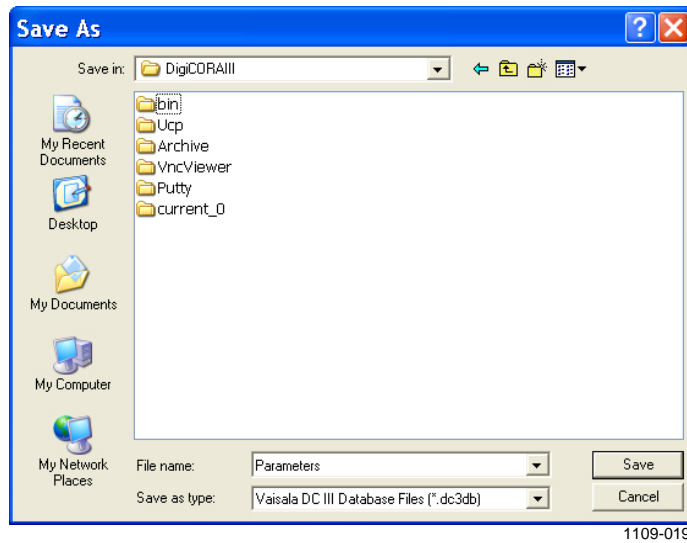


Figure 11 Saving Parameters

Importing Ozone-OIF92 and Parameters

1. Select **Triggering**.
2. Right-click and select **Import**.

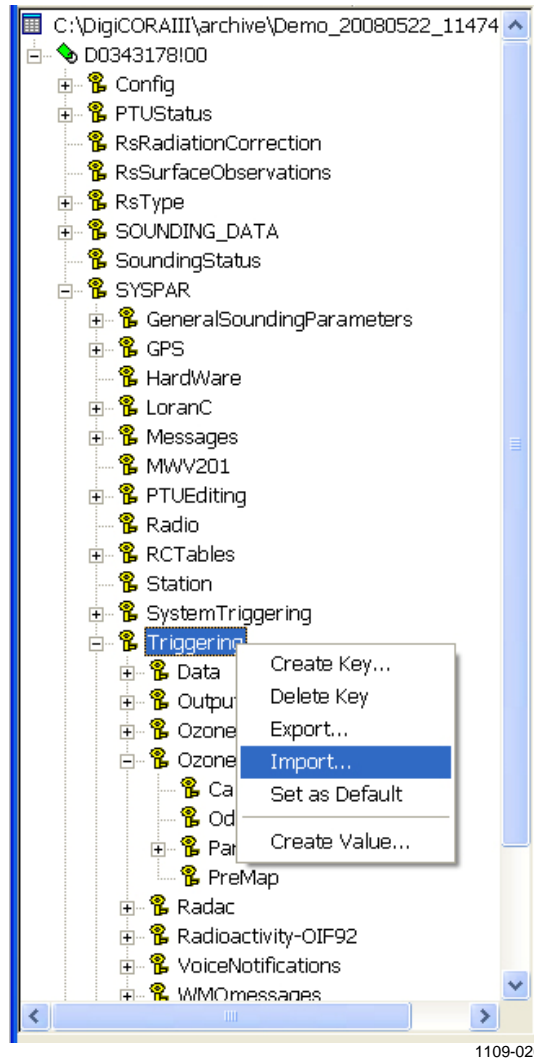
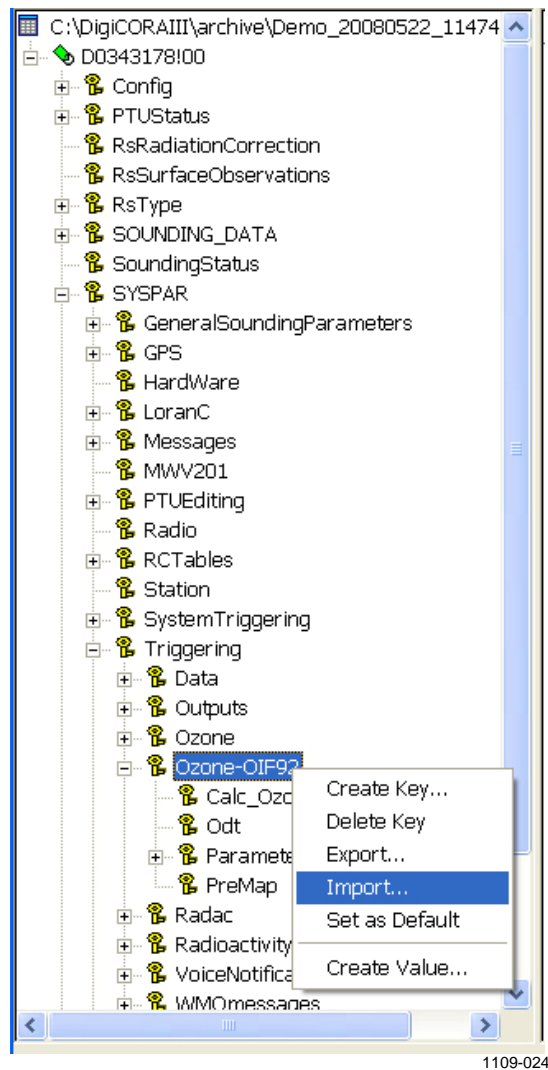


Figure 12 Importing Ozone-OIF92

3. Select the Ozone-OIF92 file you saved earlier in the DigiCORAI directory. The Ozone-OIF92 subkey will appear under the Triggering key and it replaces the old Ozone-OIF92 subkey.

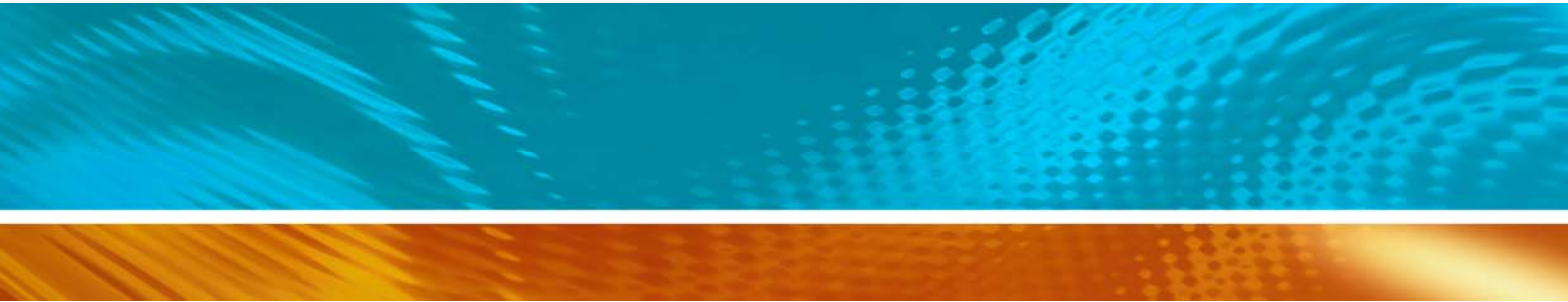
- Next, select **Ozone-OIF92**. Right-click and select **Import**.



1109-024

Figure 13 Importing Parameters

- Select the Parameters file you saved earlier in the DigiCORAI directory. The Parameters subkey will appear under the Ozone-OIF92 key and it replaces the old Parameters subkey. You can now start simulating archived ozone data with the new sounding software.



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