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GREAT-ER GREAT-ER Sediment Exposure Module Installation

Geo-referenced Regional Exposure Assessment Tool for European Rivers

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This document has been designed with $\[Mathbb{E}]_{EX}$. It is available as source code, PDF- and HTML-format.

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1 Introduction

The *GREAT-ER Sediment Exposure Module* extends GREAT-ER 2.0 (Desktop Client, Database and Model System) with an explicit modelling of sediment exposure. Read the modules extension's documention packaged with the installation for details.

The installation will upgrade the GREAT-ER Desktop Client and the GREAT-ER Model System by replacing some files from earlier versions and by installing new files. The GREAT-ER Database will be upgraded by new parameter definitions. In addition some files will be uploaded into the database.

The GREAT-ER Sediment Exposure Module installation will replace and copy files on the file system and will update and insert records in the database. New files are uploaded to the database as well.

Although the installation has been tested carefully, it is strongly recommended to make safety backups of your GREAT-ER Desktop Client, GREAT-ER Model System and GREAT-ER Database before starting the installation!

2 Requirements

The GREAT-ER Sediment Exposure Module simply upgrades an existing GREAT-ER installation. The setup program provides three scenarios equivalent to the GREAT-ER 2.0 installation:

- Single User
- Network Client
- Network Server

Single User

The GREAT-ER Sediment Exposure Module requires a successful installation of GREAT-ER - Single User. The client installation directory is guessed, the upgrade requires a running database and the Oracle software for single user installed and configured.

Network Client

The client installation directory is guessed, a complete Network Client installation fulfills all requirements.

Network Server

In the line of the GREAT-ER Network Server installation the scripts to upgrade the database are only extracted to the file system. The actual upgrade is subject to the manual installation executed by the database administrator.

3 Installation

3.1 Installation with Setup Program

The GREAT-ER Sediment Exposure Module setup program allows an easy upgrade of the GREAT-ER Single User and Network Client installations. The Network Server upgrade must be completed with manual steps.

It is recommended to stop all running GREAT-ER Clients (Desktop as well as Model) before staring the upgrade.

The upgrade kit is started with a double click on GREAT-ER-Seds-1.0.exe.

The following welcome screen appears:



Cancel Exit the setup program.

It is checked if you are executing the setup program as administrator or as normal user:



If you installed your GREAT-ER system as the user account, the upgrade usually will be successful. If your GREAT-ER system has been installed under another account, we suggest to run the upgrade with administrator permissions, since it is not ensured that files can be overwritten and newly installed as needed.

Confirm the information with clicking the OK-Button. You can use the navigation buttons of the next dialog to either proceed wirth the installation or to exit the setup, login as another user and restart the setup program.

The GREAT-ER Sediment Exposure Module is released as Free Software under the GNU General Public Licence, the same licence applies already for the GREAT-ER 2.0 system.

The next dialog displays the licence which is accept by proceeding with the installation: The GREAT-ER Sediment Exposure Module is released as Free Software under the GNU General Public Licence, the same licence applies already for the GREAT-ER 2.0 system.

🌍 GREAT-ER Sediment Exposure Module Setup			
License Agreement This software is licensed under the terms of the GNU General Public License (GPL) which guarantees your freedom to share and change Free Software.	•		
Press Page Down to see the rest of the agreement.			
GNU GENERAL PUBLIC LICENSE Version 2, June 1991			
Copyright (C) 1989, 1991 Free Software Foundation, Inc. 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.			
Preamble			
The licenses for most software are designed to take away your	•		
In short: You are allowed to run this software. You may distribute it as long as you give the recipients the same rights you have received.			
< Back Next > Cance	el		

Back Navigate back to the previous dialog.

Next > Accept the licence and continue the installation process.

Cancel Exit the setup program.

GREAT-ER 2.0 can be installed as a single user version or a network version. This upgrade package supports both version of installation.

Select the appropriate version matching your installation of GREAT-ER 2.0 from the next screen:

GREAT-ER Sediment Expos	ure Module Setup				
Choose Components Please choose the component setup type of your GREAT-ER 2.0 installation.					
Check the components you want to install and uncheck the components you don't want to install. Click Next to continue.					
Select components to install:	 ✓ Single User Installation Client Installation Server Installation 	Description Position your mous over a component see its description,	e to		
Space required: 1.0MB					
Nullsoft Install System v2.06					
	< Back	Next > 0	ancel		

< Back Navigate back to the previous dialog.

Next > Continue the installation process for the selected type.

Cancel Exit the setup program.

Depending on your selection the upgrade continues with different actions:

• Single User:

The local installations of GREAT-ER Desktop and GREAT-ER Model are upgraded as well as the local GREAT-ER Database. The file system location of the installation and an administrative account for the database are needed.

• Network Client:

The local installations of GREAT-ER Desktop and GREAT-ER Model are upgraded. The file system location of the installation is needed.

• Network Server:

The upgrade package only extracts the scripts to update the database. The directory to place the scripts is needed.

3.1.1 Single User

The setup package checks if GREAT-ER 2.0 is installed on the local computer and tries to determine the installation directory. The latter may fail due to a bug in the original GREAT-ER 2.0 setup tool. In this case you must specify the GREAT-ER 2.0 installation directory (the GREAT-ER 2.0 base directory (usually named GREAT-ER2) with the sub-directories GREAT-ER, GREAT-ER-DB and GREAT-ERModel (among others)) manually:

🟶 GREAT-ER Sediment Exposure Module Setup	
Choose Install Location Please choose the folder of your GREAT-ER 2.0 installation to be upgraded.	
The installation directory of GREAT-ER was not found, although it seems that GREAT-E is installed. This may be due to a bug in the GREAT-ER installation procedure. Please the path to the GREAT-ER 2.0 installation directory (the GREAT-ER base directory with sub-directories GREAT-ER, GREAT-ER-DB and GREAT-ERModel (among others)) manua	R 2.0 specify the Ily.
Destination Folder C:\Programme\GREATER2 Browse	
Space required: 1.0MB Space available: 501.6MB	
Nullsoft Install System v2.06	ancel

< Back Navigate back to the previous dialog.

Next > Continue the installation process with the specified directory. The directory will be checked if it qualifies as a GREAT-ER 2.0 base directory.

Cancel Exit the setup program.

Enter the correct path directly or click the Browse... to open the common directory selection dialog.

When continuing the installation the directory selection will be checked again. A warning is raised if the chosen directory doesn't qualify as a GREAT-ER 2.0 base directory:

🇊 GREAT	r-ER Sediment Exposure Module Setup
⚠	No installation of GREAT-ER was found at the specified path. Please specify the path to the GREAT-ER 2.0 installation directory or abort the installation.
	ОК

In the final step of collecting information for the upgrade the database parameters have to be entered:

• Database: The database name, depending on your configuration.

In a default single user installation this can be left blank, since GREAT-ER is the default database.

• Username: The user name of the GREAT-ER database administrative account. The user name is mandatory.

In the default single user installation this account is greater2.

• Password: The password of the GREAT-ER database administrative account. The password is mandatory.

In the default single user installation this has been initially greater2.

GREAT-ER Sediment Exposure Module Setup	
Update Database Update the GREAT-ER database	
Database:	
Username:	
greater2	
Password:	
Vullsoft Install System v2,06	
< Back Install	Cancel

Back Navigate back to the previous dialog.

Install Start the upgrade.

Cancel Exit the setup program.

Before the upgrade starts the database settings are checked:

• You will be asked to enter at least the parameters Username and Password.

• If the authentication to log into the database fails a warning is raised:

🌐 GREAT	-ER Sediment Exposure Module Set 🗙
8	Authentication failed.
	ОК

Please enter a matching combination of database, user name and password for an administrative GREAT-ER database account.

• It is check if the autheticated user has administrative permissions for the GREAT-ER database. If not, a warning is raised:

🇊 GREAT	-ER Sediment Exposure Module Setup
⊗	User is not member of admin group: Permission denied
	ОК

Please enter a matching combination of database, user name and password for an administrative GREAT-ER database account.

A progressbar reports the progress of the upgrade. While updating the database two console windows will pop up briefly and close immediately. This is the correct behaviour, in case of an error the dialogs will be kept open.

GREAT-ER Sediment Exposure Module Setup	
Installation Complete Setup was completed successfully.	
Completed	
Show details	
Nullsoft Install bystem v2.06	Cancel

Next > Navigate to the next step in the upgrade.

A last screen confirms the successful upgrade:



Finish Finish the upgrade.

3.1.2 Network Client

The network client upgrade only upgrades the local files of GREAT-ER Desktop Client and GREAT-ER Model System.

The setup package checks if GREAT-ER 2.0 is installed on the local computer and tries to determine the installation directory. The latter may fail due to a bug in the original GREAT-ER 2.0 setup tool. In this case you must specify the GREAT-ER 2.0 installation directory (the GREAT-ER 2.0 base directory (usually named GREAT-ER2) with the sub-directories GREAT-ER, GREAT-ER-DB and GREAT-ERModel (among others)) manually:

🎲 GREAT-ER Sediment Exposure Module Setup	- 🗆 🗵
Choose Install Location Please choose the folder of your GREAT-ER 2.0 installation to be upgraded.	
The installation directory of GREAT-ER was not found, although it seems that GREAT-E is installed. This may be due to a bug in the GREAT-ER installation procedure. Please the path to the GREAT-ER 2.0 installation directory (the GREAT-ER base directory with sub-directories GREAT-ER, GREAT-ER-DB and GREAT-ERModel (among others)) manua	ER 2.0 specify h the ally.
Destination Folder C:\Programme\GREATER2 Browse	
Space required: 1.0MB Space available: 501.6MB	
Nullsoft Install System v2,06	Cancel

< Back Navigate back to the previous dialog.</p>

Next > Continue the installation process with the specified directory. The directory will be checked if it qualifies as a GREAT-ER 2.0 base directory.

Cancel Exit the setup program.

Enter the correct path directly or click the Browse... to open the common directory selection dialog.

When continuing the installation the directory selection will be checked again. A warning is raised if the chosen directory doesn't qualify as a GREAT-ER 2.0 base directory:



A progressbar reports the progress of the upgrade.

GREAT-ER Sediment Exposure Module	5etup	
Installation Complete Setup was completed successfully.		
Completed		
Show details		
Nullsoft Install System v2.06	[
	< Back Next	> Cancel

Next > Navigate to the next step in the upgrade.

A last screen confirms the successful upgrade:



Finish Finish the upgrade.

3.1.3 Network Server

The network server upgrade simply extracts the necessary files to upgrade your GREAT-ER database to the file system. The actual upgrade has to be performed manually (see section 3.2).

A directory to extract the files to is mandatory. The hints presented by the dialog can be ignored.

🏶 GREAT-ER Sediment Exposure Module Setup	
Choose Install Location Please choose the folder of your GREAT-ER 2.0 installation to be upgraded.	
The installation directory of GREAT-ER was not found, although it seems that GREAT- is installed. This may be due to a bug in the GREAT-ER installation procedure. Please the path to the GREAT-ER 2.0 installation directory (the GREAT-ER base directory with sub-directories GREAT-ER, GREAT-ER-DB and GREAT-ERModel (among others)) manua	ER 2.0 specify h the ally.
Destination Folder C:\Programme\GREATER2 Browse	
Space required: 1.0MB Space available: 501.6MB	
Nullsoft Install System v2,06	ancel

< Back Navigate back to the previous dialog.

Next > Continue the installation process with the specified directory. The directory will be checked if it qualifies as a GREAT-ER 2.0 base directory.

Cancel Exit the setup program.

Enter the correct path directly or click the Browse... to open the common directory selection dialog. Directories will be created by the setup if necessary.

Continuing the installation the necessary files to upgrade your GREAT-ER database are extracted into a directory *GREAT-ER* under the path you specified. On success a reminder is displayed to finalise the upgrade manually:

🧊 GREAT-ER Sedi	ment Exposure Module	Setup	<u> </u>
Installing Please wait while	GREAT-ER Sediment Expos	ure Module is being installed.	(iii)
Extract: ssc_grou	up-c.csv		
Show details	GREAT-ER Sedimer	it Exposure Module Set 🗙	
	SQL scripts h c:\temp\GRE/	ave been extracted to AT-ER\	
	Please execu	te the scripts manually.	
		OK	
Nullsoft Tostall Syste	m v2 06		
Holisofe 2 local 5yste		< Back Next >	Cancel
GREAT-ER Sedi	ment Exposure Module Iplete	Setup	_ _ ×
GREAT-ER Sedit Installation Com Setup was comple	ment Exposure Module Iplete eted successfully.	Setup	
GREAT-ER Sedia Installation Com Setup was completed	ment Exposure Module Iplete eted successfully,	Setup	
GREAT-ER Sedi Installation Com Setup was comple Completed Show details	ment Exposure Module aplete eted successfully.	Setup	
GREAT-ER Sedi Installation Com Setup was completed	ment Exposure Module aplete eted successfully.	Setup	
GREAT-ER Sedi Installation Com Setup was comple Completed Show details	ment Exposure Module aplete eted successfully.	Setup	
GREAT-ER Sedi Installation Com Setup was comple Completed Show details	ment Exposure Module aplete eted successfully.	Setup	
GREAT-ER Sedi Installation Com Setup was comple Completed Show details	ment Exposure Module aplete eted successfully.	Setup	
GREAT-ER Sedi Installation Com Setup was comple Completed Show details	ment Exposure Module aplete eted successfully.	Setup	

Next >

Navigate to the next step in the upgrade.

You can show the details about the extraction by clicking the Show details button:

🗊 GREAT-ER Sediment Exposure Module Setup	_ 🗆 🗙
Installation Complete Setup was completed successfully.	
Completed	
Output folder: c:\temp\GREAT-ER Extract: update-db.sql Extract: upload-ssc.ctl Extract: ssc_group-a.csv Extract: ssc_group-b.csv Extract: ssc_group-c.csv Completed	
Nullsoft Install System v2.06	Iancel

A last screen confirms the successful upgrade:





3.2 Manual Steps

The manual steps must only be executed, if the setup type *Network Server* has been selected:

- Update the GREAT-ER Database (new parameter definitions, GUI elements and phrases).
- Upload files for the suspended sediment concentration bands statistics.

This requires the tool sqlplus. It is assumed that the tool is located in a directory included in your PATH environment variable.

Open a console (cmd.exe) and change to the directory where the upgrade files have been extracted.

3.2.1 Update the GREAT-ER Database

sqlplus <greateradm>/<greaterpwd>@<database> @update-db.sql

Example:

sqlplus greater2/greater2@greater @update-db.sql

Parameter:

- <greateradm>: Administrative GREAT-ER database user (must be member of the administration group).
- <greaterpwd>: Password for administrative user of GREAT-ER database.

<database>: Alias of the GREAT-ER database

3.2.2 Upload of files into the GREAT-ER Database

The SSC bands statistics files must be uploaded into the GREAT-ER database using the GREAT-ER Administration tool.

Start the GREAT-ER Administration tool from the start menu or by double clicking the *ad-ministration.exe* from the GREAT-ER directory.

Login as an administrative user for the GREAT-ER Database:

🤏 GR	EAT-ER A	Iministrati	on						_	
File / User	Group	Istomizing E Parameter T	sase Data ree Phrase	GIS Data Exc e Message	hange H Session	ieip Substance	Environment	Catchment	Binary Object	I
	User ID	Group ID	Creation Date	Modificatior Date	Status	Remark		_	_	
				Authenticat	ion		×			
				Database: Username:	greater2					
				Password:	******					
						Lancel				
	New			Edit)elete		Reload	
	- 112/1		<u> </u>				not conr	nected		

After successful login, select *Binary Object* from the menu *GIS Data* to open the binary objects table and related operations.

Clicking the *New* ... button opens a dialog to edit the new binary objects attributes and to specify the source file to be loaded.

🦄 G	REAT-ER Ad	ministra	tion							<u>_ ×</u>
File	Access Cus	stomizing	Bas	e Data 🛛 GIS Data 👘	Exchange	Help				
Use	r Group I	Parameter	Tree	Phrase Message	Session	Substance [P	nvironment [] (Catchment	Binary Obje	at 💶 🕨
				Enter new Binary	object		×			
	Binary Object ID	Object ID		Object ID:	-1			Jser ID	Privilege	
1	1	1	cat	Name:	ssc arou	1D		EATER2	3	CAT
2	2	1	cat		,			EATER2	3	CATI
3	3	1	cat	User ID:	GREATE	ER2	_	EATER2	3	CATI
4	4	1	disc	Privilege:	3 · V/E o	wner, V group, ol	ther 🔽	EATER2	3	CATI
5	5	1	disc					EATER2	3	CATI
6	6	1	disc	Object Type:	MODEL			EATER2	3	CATI
7	7	1	disc	Object Sub Type:	SSC GF	OUP A		EATER2	3	CATI
8	8	1	disc	Denedu	1000700			EATER2	3	CATI
9	9	1	disc	Remark:				EATER2	3	CATI
10	10	1	rive					EATER2	3	CATI
11	11	1	rive	1				EATER2	3	CATI
12	12	1	rive	Enter path of binary	y object to	load:		EATER2	3	CATI
13	13	2	cat	ER2\Intevation\G	REAT-ER	\ssc_group_a.cs [,]	4 🖻	EATER2	3	CATI
14	14	2	cat					EATER2	3	CATI
15	15	2	cat	Create	-	Can	cel	EATER2	3	CATI
19	110	2	dia					CATEDO	2	CAT
Ľ			-					.		
	New			Edit	D	elete	Reload		Downloa	ad
							GREATER:	2 GREATER.	HQ	

Attributes:

- **Object ID** : The object id is predominantly used to relate binary objects to catchments. Since the SSC bands statistics are independent from catchments enter *-1*.
- **Name** It is suggested to set the name to *ssc_group* for identification purposes.
- **User ID** : The owner of the new binary object.
- **Privilege** It is recommended to change the Privilege to 3 V/E owner, V group, other.
- **Object Type** The object type **must** be *MODEL* (in upper case letters)!
- **Object Sub Type** The object subtype **must** be the file's basename without suffix in upper case letters (e.g. *SSC_GROUP_A*)!
- **Remark** A remark can be entered optionally.
- **Path** The path to the group file to be uploaded. Select one from the directory where files have been extracted to.

The upload has to be executed for the three files

• ssc_group_a.csv (Object Type: MODEL, Object Sub Type: SSC_GROUP_A)

- ssc_group_b.csv (Object Type: MODEL, Object Sub Type: SSC_GROUP_B)
- ssc_group_c.csv (Object Type: MODEL, Object Sub Type: SSC_GROUP_C)

4 Uninstallation

Uninstallation means that the GREAT-ER 2.0 tool is reset to the status before installing the GREAT-ER Sediment Exposure Module. The GREAT-ER 2.0 tool is not deleted by executing the uninstallation of the GREAT-ER Sediment Exposure Module.

The uninstallation of the GREAT-ER Sediment Exposure Module is splitted into two parts, desktop client and database. Depending on the actual installation a single or both uninstallation steps must be executed:

- Single User: Desktop client and database
- Network Client: Desktop client
- Network Server: Database

4.1 Desktop Client

The desktop client can be uninstalled using a tool copied to the computer during installation of the GREAT-ER Sediment Exposure Module. The tool can be accessed:

- directly: *GREAT-ER-Seds-uninstall* from the subdirectory *SYS_SAVE* of the GREAT-ER 2.0 installation.
- via Control Panel / Software, entry GREAT-ER Sediment Exposure Module.

A dialog is opened and asks for confirmation.

🗑 GREAT-ER Sediment Exposure Module Uninstall	
Uninstall GREAT-ER Sediment Exposure Module Remove GREAT-ER Sediment Exposure Module from your computer.	
GREAT-ER Sediment Exposure Module will be uninstalled from the following folder. Uninstall to start the uninstallation.	Click
Uninstalling from: C:\GREATER2\SYS_SAVE\	
Nullsoft Install System v2.06 — Uninstall	Cancel

Uninstall Start the uninstallation of the GREAT-ER Sediment Exposure Module

Cancel Cancel the uninstallation. The GREAT-ER Sediment Exposure Module will be kept unchanged.

When starting the uninstallation, a dialog with a progress bar reports the progress of the uninstallation.

🗑 GREAT-ER Sediment Exposure Module Uninstall	
Uninstallation Complete Uninstall was completed successfully.	6
Completed Show details	
Nullsoft Install System v2.06	Cancel

Close Close the dialog after successful uninstallation of GREAT-ER Sediment Exposure Module.

4.2 Database

A SQL-Script is provided to downdate the database of GREAT-ER 2.0. The name and location of the script depends on your actual installation:

- Single User: *downdate-db.GREAT-ER-Seds.1.0.sql*, located in the SYS_SAVE directory of your GREAT-ER 2.0 installation.
- Network Server: *downdate-db.sql*, located in the directory the update scripts have been installed to.

This requires the tool sqlplus. It is assumed that the tool is located in a directory included in your PATH environment variable.

Open a console (cmd.exe) and change to the directory where the downdate files have been extracted.

```
sqlplus <greateradm>/<greaterpwd>@<database> @downdate-db.sql
```

Example:

sqlplus greater2/greater2@greater @update-db.GREAT-ER-Seds.1.0.sql

Parameter:

<greateradm>: Administrative GREAT-ER database user (must be member of the administration group).

<greaterpwd>: Password for administrative user of GREAT-ER database.

<database>: Alias of the GREAT-ER database

<downdate-db.sql>: The SQL script to downdate the GREAT-ER database