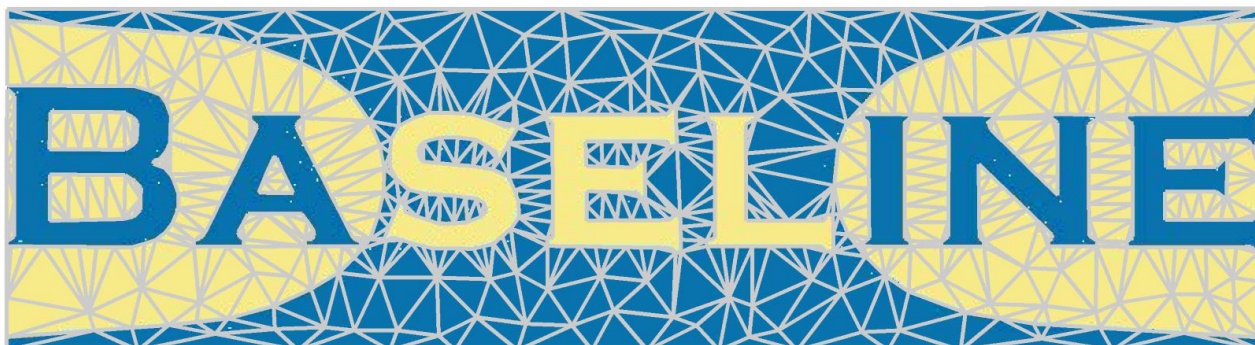




Baseline 7 | Installation Manual

Valid for Baseline 7.2.0 (and higher)

July 2026



1 Introduction

Baseline 7 is a combination of an ArcGIS Pro add-in and a geographical database. The application is meant for storage, editing and presenting geo-referenced data of water systems like rivers, lakes and seas. In addition Baseline can be used to convert data to input files for model systems like D-HYDRO Suite, specifically D-Flow Flexible Mesh (D-Flow FM).

The ArcGIS add-in and (file geo) database are suitable for use with ArcGIS Pro 3.2 or higher with an ArcGIS-Advanced license and 3D Analyst extension. For the conversion of elevation data to a grid cell-averaged elevation model for use in D-HYDRO Suite or SWAN the Spatial Analyst extension is required.

The geographical database and extension are developed on behalf of Rijkswaterstaat. However, Baseline can be used whenever a structured storage of river data and/or a link of flow models with a GIS environment is desired.

Although Baseline has been developed as an ArcGIS Pro add-in, the application is primarily aimed at users of hydrodynamic models. They will need basic knowledge of ArcGIS Pro.

The purpose of this document is to guide the user in installing Baseline 7. The user is referred to the Baseline_Help and Baseline_DataProtocol for guidance in using Baseline 7 and the differences with Baseline 6.

This is the Installation Manual for Baseline 7.2.0 (and higher versions).

2 Installation

2.1 Requirements

- ArcGIS Pro 3.0 up to 3.4.2 – preferred¹
 - License: Advanced, with extensions:
 - 3D Analyst
 - Spatial Analyst (only for 'conversion to D-Flow FM' using the option 'elevation interpolation') and for Subgrid'
 - System requirements: <https://pro.arcgis.com/en/pro-app/latest/get-started/arcgis-pro-system-requirements.htm>
- A separate (cloned) python environment containing the Baseline Tools package (can be cloned using Baseline):
 - baseline_tools (VERSION >= 8.0.0)

2.2 Setup

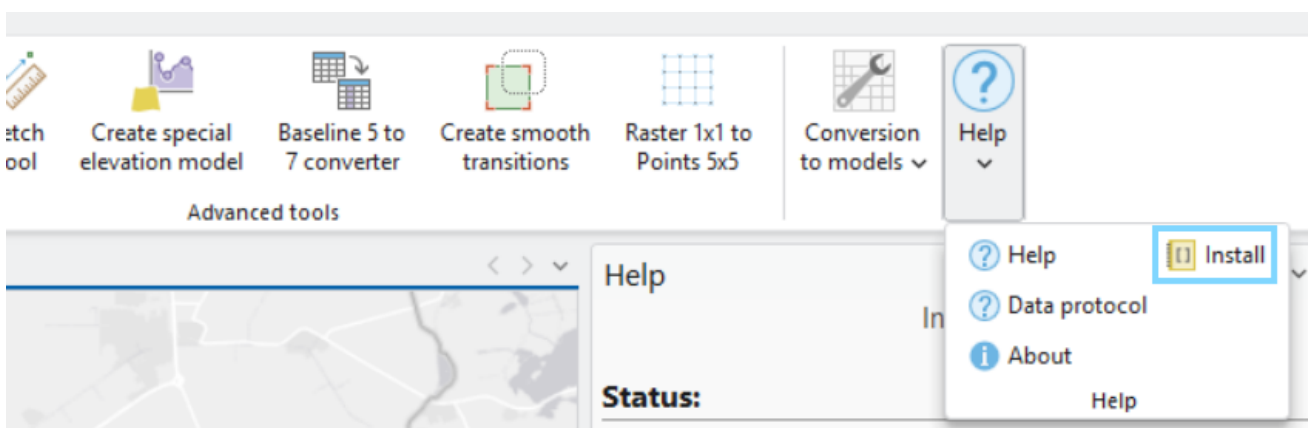
Make sure that ArcGIS Pro 3.2+ is installed on your computer and any previously installed Baseline (7+) version is removed.

2.2.1 Install Baseline Add-In

Use the Baseline setup program to install the Add-In and the required files. This setup registers the Add-In in ArcGIS Pro and creates the additional required files. When the installation is done, Baseline is installed and you can run ArcGIS Pro.

2.2.2 Clone the python environment

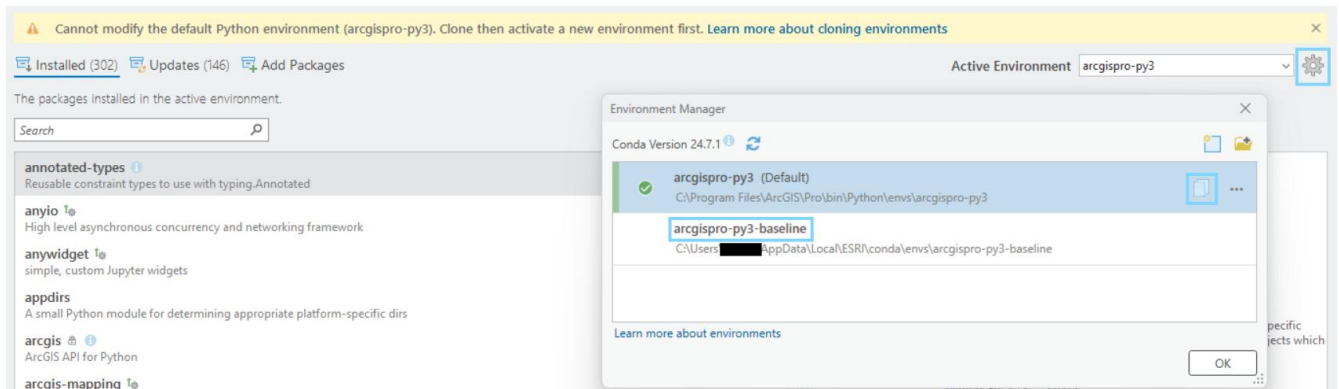
To be able to run the python tools, you need to clone the default python environment of ArcGIS Pro. Use the install button showed below to clone the environment using the Add-In. This clones the environment and installs the Baseline Tools package that was delivered with the Baseline setup (2.2.1). ***This can take some time. Do not close ArcGIS Pro while the installation is still running.*** After the installation, the environment is automatically activated. It will always activate when you start ArcGIS Pro with Baseline.



¹ Mark that ArcGIS Pro 3.4.3 and higher have a bug in the 'Interpolate shape' geoprocessing tool. When using these ArcGIS Pro versions an alternate function is activated (automatically). The cost is a significant longer processing time.

2.3 Manually cloning the python environment

It is also possible to clone the environment manually. Go to Settings, Package manager to clone the default environment. Open the environment menu (see below) and use the clone button to clone the 'arcgispro-py3' environment. Make sure to name the cloned environment 'arcgispro-py3-baseline'.



After this has finished, the Baseline Tools package still needs to be installed. This can be done by pressing the 'Install' button again shown in section 2.2.2, or manually by following the next steps:

1. Find the location where Baseline is installed, one of the following paths:
 - a. (User) 'C:\Users\<USER>\AppData\Local\Deltares\Baseline'
 - b. (Computer) 'C:\Program Files\Deltares\Baseline'
2. Copy the path to the 'baseline_tools-<VERSION>-py3-none-any.whl' file
3. Go to the 'C:\Users\<USER>\AppData\Local\ESRI\conda\envs\arcgispro-py3-baseline' folder
4. Open the command prompt in this folder (right click, open terminal)
5. Run the following command:
 - a. python.exe -m pip install "<The path that you copied in step 2>"

2.3.1.1 User installation

Run the installer and follow the steps. Choose the option 'Alleen uzelf'. The required files are installed in the user's appdata folder (C:/Users/<User>/AppData/Local/Deltares/Baseline), finish the process to install Baseline on this location.

2.3.1.2 Computer installation

The installer is required to run as an admin. Open the command prompt as administrator and run the installer through this command prompt (use the path to the installer as a command). Follow the installation steps and choose the option 'Iedereen' to install Baseline at the program folder (C:/Program Files/Deltares/Baseline). Finish the process to install Baseline on this location. The Add-in is now installed as a 'shared' Add-in across all users.

Note: The user's appdata folder is still used for localized data (the python toolbox, templates and settings). Those files are automatically copied to the user's appdata folder (C:/Users/<User>/AppData/Local/Deltares/BaselineUserData) when the user opens the Baseline add-in in ArcGIS Pro for the first time.

Note: The installation path is stored in the variable: BASELINEDIR and INSTALLUSER stores the type of installation (0=Local user, 1=Machine)



2.4 Check the installation

Navigate to the installation folder at the following location(s):

- (User) 'C:/Users/<USER>/AppData/Local/Deltares/Baseline'
- (Computer) 'C:/Program Files/Deltares/Baseline'
- (User Data) 'C:/Users/<USER>/AppData/Local/Deltares/BaselineUserData'

The installation folder should contain the following items:

- Baseline.AddIn.esriAddinX
- Help/
- Toolbox/
- baseline_tools-<VERSION>-py3-none-any.whl
- Executables.zip
- Templates.zip

Additionally, when Baseline is used for the first time, a user data folder is created. This folder contains the unzipped data from the installation folder. This folder should contain the following items:

- Default_templates/
- Executables/
- Templates/
- Log-file.log
- Settings.settings

If any folder is missing, delete the installation folder and rerun the setup (make sure to close ArcGIS Pro beforehand).

The files in the user data folder are automatically copied if they are missing or if a different version of Baseline was found.