

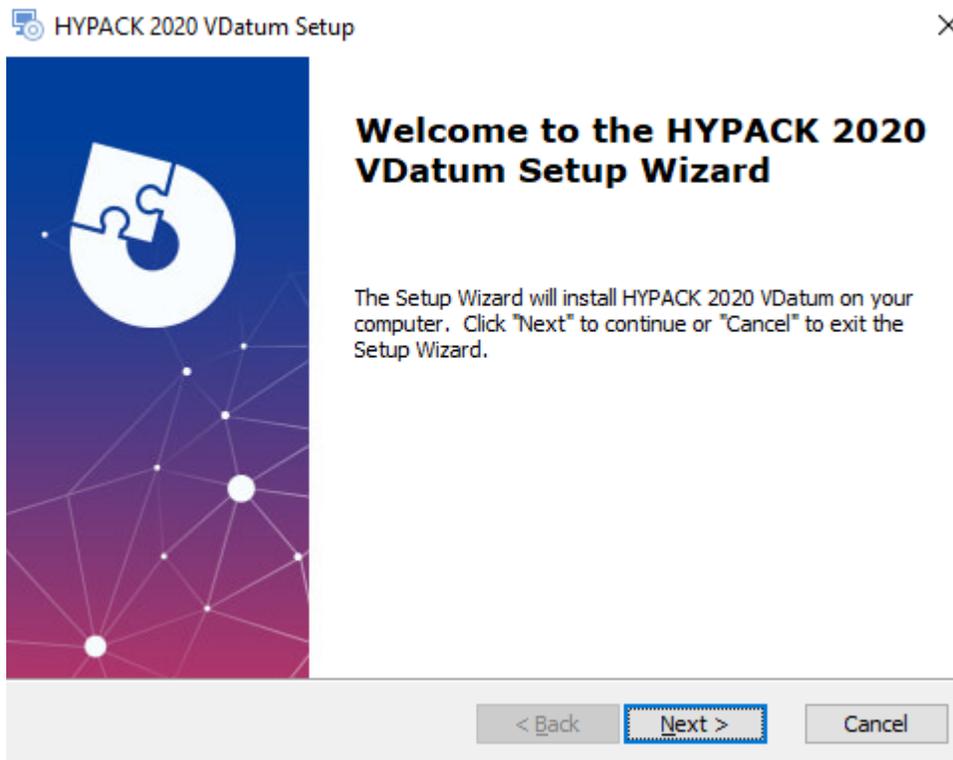


HYPACK
a xylem brand

Sounding Better!

HYPACK 2020 and VDatum

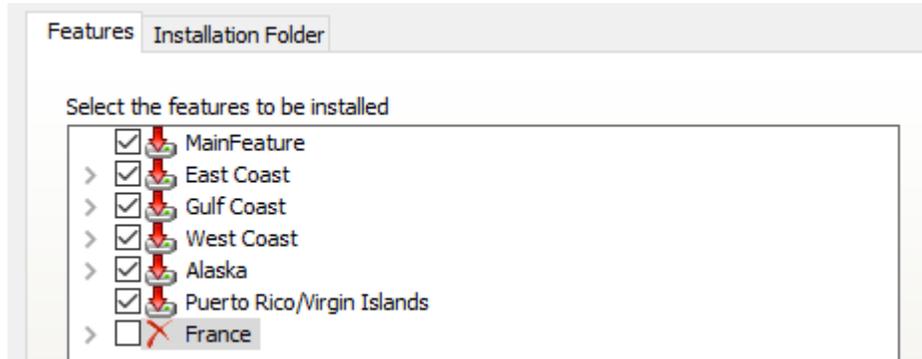
By John Lindberg



With the release of HYPACK 2020, we also released an install of the latest VDatum files available from NOAA. The HYPACK 2020 VDatum install contains version 4.01 files released by NOAA back in October 2019.

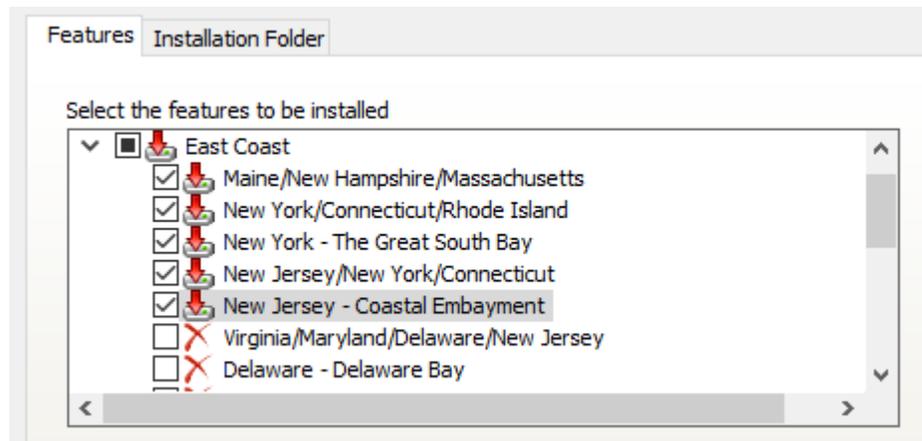
Even though the HYPACK 2020 VDatum install defaults to installing all zones, users have the option to install specific zones. As you run through the install, you will notice that the VDatum install is divided into regional zones (East Coast, West Coast, etc.) as shown in the following figure. All zones are selected by default.

FIGURE 1. Select VDatum Files to Install



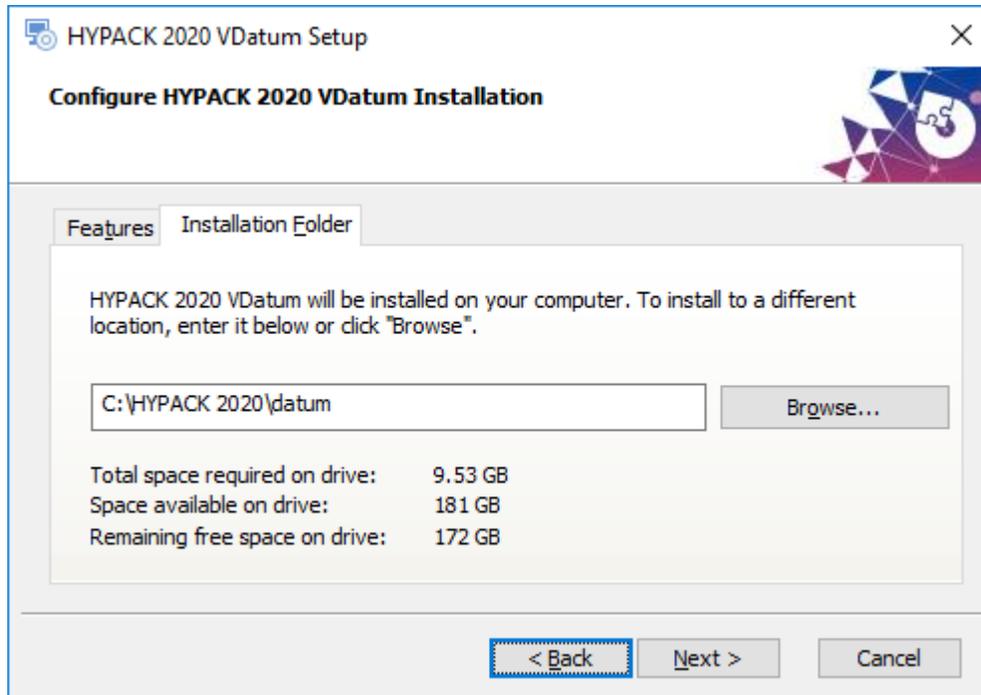
You have the option to select specific zones, as the majority of users are not surveying in more than a very few zones in their area: Uncheck the Main Feature option and click on the down arrow for the area in which your zone is located. In the example below I selected the northeastern most zones under the East Coast region.

FIGURE 2. Installing the Northeastern Most Zones Under the East Coast Region



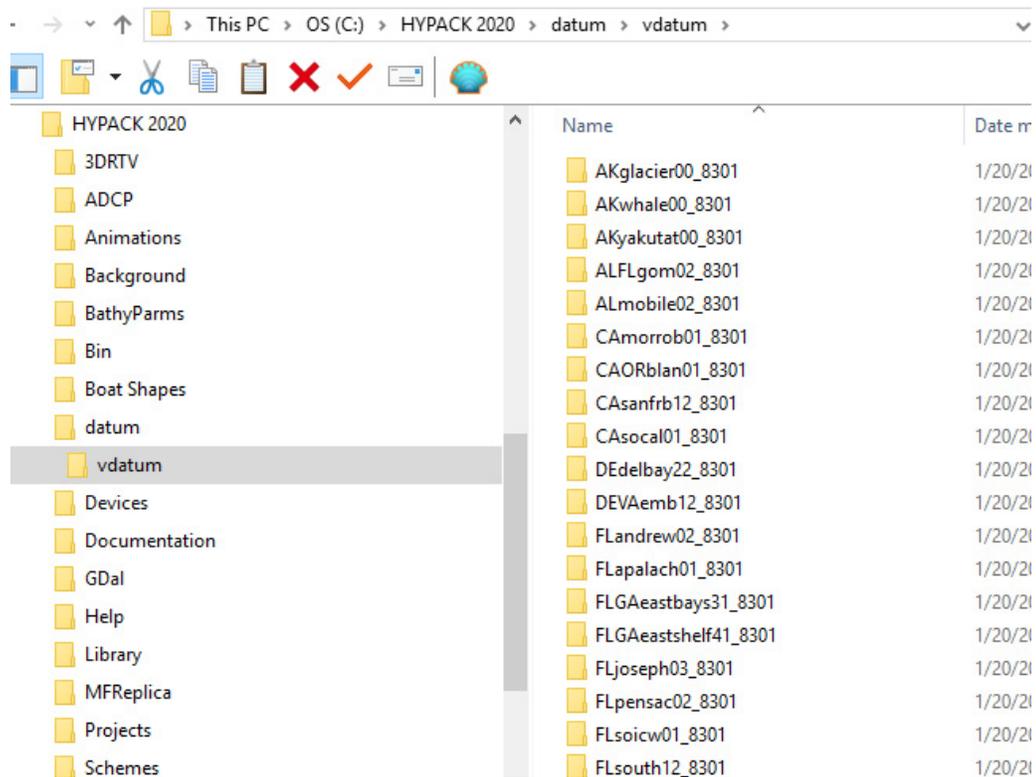
Before you click the “Next” button, open the “Installation Folder” tab to ensure that the VDatum files will install to the correct folder. For HYPACK 2020 you should see this:

FIGURE 3. HYPACK 2020 Installation



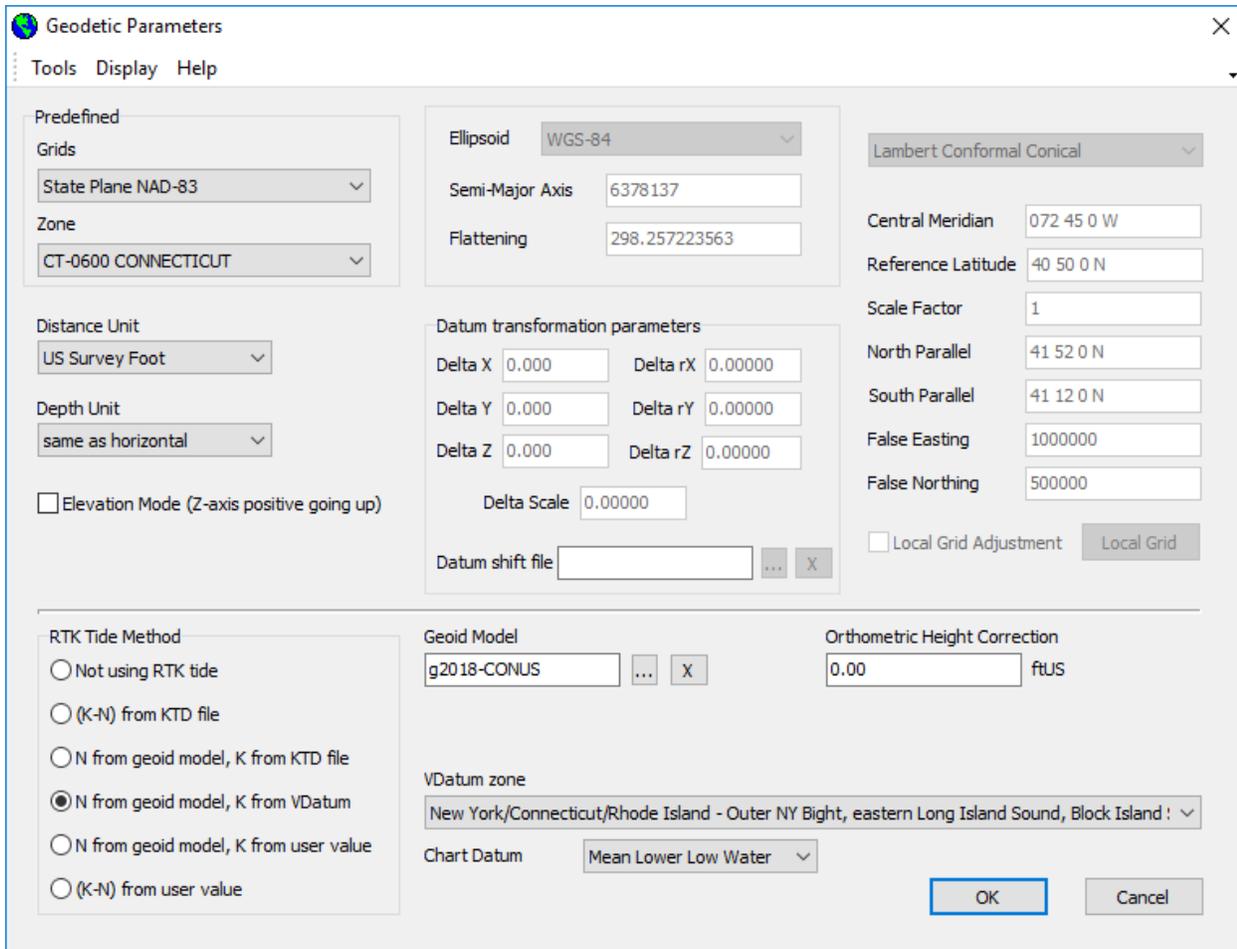
You can verify this was installed correctly by going to Windows Explorer and verifying that the \vdatum folder has been installed in the HYPACK 2020\datum folder. Inside the \vdatum folder will be separate folders for each zone. In my example below, I installed all the zones. If you installed only 3 zones you will see 3 folders inside the \vdatum folder.

FIGURE 4. HYPACK 2020\datum\vdatum Folder—All VDatum Files Installed



The next step, of course, would be to set up your project with the correct VDatum zone and chart datum. In the example below, I set up my project in Connecticut State Plane, NAD83, using the g2018-CONUS geoid model and NY/CT/RI VDatum zone, referenced to mean lower low water.

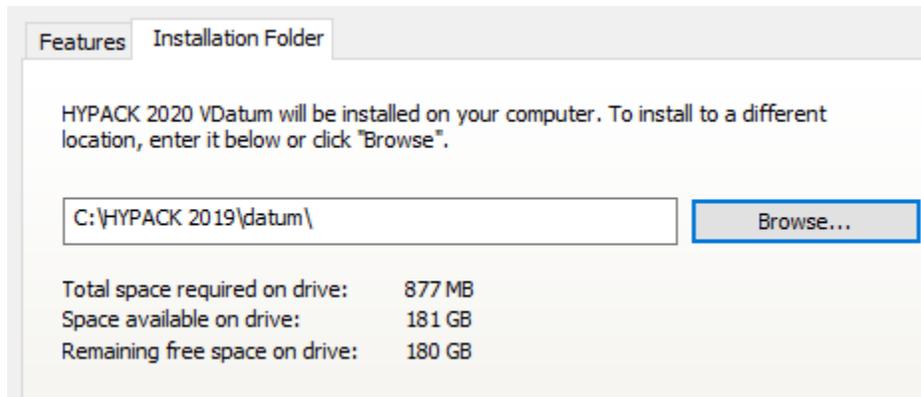
FIGURE 5. Using your VDatum in your HYPACK® Project



USING THE VDATUM 2020 FILES IN HYPACK 2019

You can use the HYPACK 2020 VDatum install with HYPACK 2019, though you may have to “point” the install folder to the \HYPACK 2019\datum folder.

FIGURE 6. *Installing the VDatum Files for HYPACK 2019*



This has been untested in versions earlier than HYPACK 2019, though I don't see why it would not work.

INSTALLING FILES DIRECTLY FROM NOAA'S VDATUM SITE

Although this can be done, the user should proceed with caution. With the HYPACK 2020 VDatum install, we are also installing an updated geopar.db file, an SQL database file that contains files specific to VDatum v4.0.1. HYPACK's Geodetic Parameters program uses this database file to associate the folders with the proper VDatum zone name. If you install newer (or older) versions of Vdatum directly from NOAA they may not appear in Geodetic Parameter's zone list.

The current VDatum files (v4.0.4) that HYPACK is using are located on the NOAA site at this link:

<https://vdatum.noaa.gov/download.php>

NOAA updates VDatum zones about once a year, so we try to keep our database file updated with the latest zone changes. In the future, we hope to avoid the actual install, and allow users to download the NOAA VDatum files directly from NOAA while Geodetic Parameters refreshes automatically without having to update the database file. Stay tuned!