## Tutorial Equidistant points on sphere

I added the tool to an addin made with XCAD from Xarial (Thank you @Artem Taturevych!) This will make it easier for everyone that wants to test it.

For installation instructions have a look at:

https://xcad.xarial.com/extensions/deployment/

Basically you use a command prompt/powershell and copy the following command to add it to the registry. (make sure Solidworks is closed)

> %windir%\Microsoft.NET\Framework64\v4.0.30319\RegAsm.exe "Full Path To Add-in dll"

Once installed you will see it in the Addin manager of SolidWorks:

EquiDistant Points Addin		EquiDistant Points Addin
SWPUC32 - Equidistant Points on a Hemisphere (The Thomson Problem)	<b>1</b> □	SOLIDWORKS XPS Driver 221
		SwAddInSample
C:/Users/Eddy/source/REPOS_C#/EquiDistAddin/EquiDistAddin/bin/Release/EquiDistAddin.DLL		CurCCAddin Edal

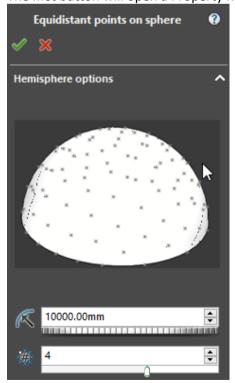
And a TAB is created in the command manager with the name EQUIDIST:

EQUIDIST

When you activate that TAB you will see 2 buttons

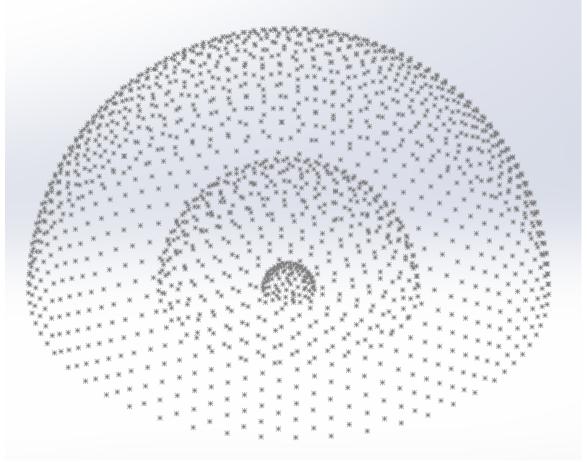


The first button will open a Property Manager Page:



You can change the radius and the recursion level. When you click OK a 3D Sketch with the requested points will be made.

Example showing points with radius 1 m, 5 m and 10 m lmage5  $\,$ 



I added tha part file the image was made from as an attachment too.

The other button reveals the tools that where used ;-)

It is very easy to draw fi. the normals from those points by just adding some code.

I tested using a fixed constraint for all the points, but that uses a lot of resources. If you want it, you can do it manually, because the points can be dragged otherwise.

Have fun playing with it.

Eddy