

QGIS 3

Creating Custom Projection – UNOCHA Globes

As of 14 January 2022, version 1.0

1. UNOCHA Globes

UNOCHA Globes are based on the **World\_Vertical\_Perpective** Coordinate System (**WKID:54049**)

As of now, the only way I have found for this projection to work properly in QGIS is to:

1. Build a GeoPackage for each Globe, saving layers **projected**, using specific **World\_Vertical\_Perspective**,
2. Create custom projections in QGIS (as described below)
3. **Apply again** *Custom projection* to layers.

Here is how the Africa Globe looks like when I bring in the already projected (World\_Vertical\_Perspective) layers.

The current CRS is EPSG: 4326



When I change the current CRS to the Custom Africa Globe that I created, the layers project correctly.

1. Creating your own projections

Go to **Settings**> **Custom Projections**… and you will see this dialog.



Click on  button to create a new projection.

1. Africa Globe

Enter Africa Globe **in Name** field (or name of your choice).

In Format, select **Proj String**

Add the following String in **Parameter** field: +proj=nsper +lat\_0=10 +lon\_0=20 +h=15000000 +x\_0=0 +y\_0=0 +datum=WGS84 +units=m +no\_defs

Click **OK**

This creates the custom projection:



1. Other Globes

To define other custom projections, go through the same steps as above. Give the custom projection a relevant name and paste in the **Parameters** window the following **Proj Strings**.

* 1. Americas Globe

+proj=nsper +lat\_0=-10 +lon\_0=-80 +h=15000000 +x\_0=0 +y\_0=0 +datum=WGS84 +units=m +no\_defs

* 1. Asia Globe

+proj=nsper +lat\_0=30 +lon\_0=90 +h=100000000 +x\_0=0 +y\_0=0 +datum=WGS84 +units=m +no\_defs

* 1. Europe Globe

+proj=nsper +lat\_0=50 +lon\_0=15 +h=100000000 +x\_0=0 +y\_0=0 +datum=WGS84 +units=m +no\_defs

* 1. Middle East Globe

+proj=nsper +lat\_0=30 +lon\_0=50 +h=15000000 +x\_0=0 +y\_0=0 +datum=WGS84 +units=m +no\_defs

* 1. Oceania Globe

+proj=nsper +lat\_0=-20 +lon\_0=150 +h=100000000 +x\_0=0 +y\_0=0 +datum=WGS84 +units=m +no\_defs

* 1. Pacific Globe

+proj=nsper +lat\_0=20 +lon\_0=120 +h=100000000 +x\_0=0 +y\_0=0 +datum=WGS84 +units=m +no\_defs +type=crs

1. Applying Custom projection
2. Click on the  Current CRS button at the right of the status bar to change the project CRS
3. Choose your newly defined **projection** (search for its name in the **Filter** field)
4. On applying this **projection**, the map will be reprojected