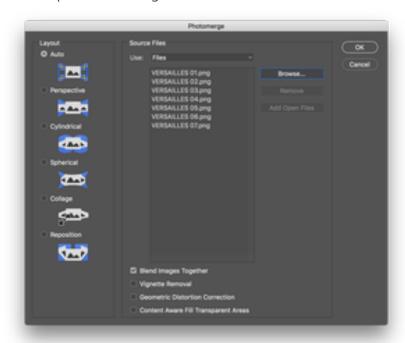
## **Generate custom Skyboxes for BIMx**

A custom skybox can be really useful for locating your project on a real site. Here are the steps to create a custom skybox.

- 1. In Google Earth, locate your project site and take screenshots of the site in 15° increments. Use thetools Google Earth navigation to keep the horizon line consistent for each of the panoramic images. This is essential for the correct stitching of images.
- 2. At the *help from the* function *Photomerge ... from* Photoshop, *assemble* screenshots in a panoramic image.



- 3. In Photoshop, resize the image / canvas to be 2: 1.  $10000 \times 5000$  pixels works fine.
- 4. Align the panoramic view so that the horizon is just above the middle of the canvas



- 5. Add a custom sky to the background, as the panoramic sky will not be high enough to fill the screen. Chris recommended this site for high quality sky images:https://www.cgskies.com/skies.php
- 6. The entire foreground can be blacked out, as the foreground will be under the
- 7. artwork Save the final panoramic view in .jpg format
- 8. Convert the panorama to 6 skybox images. If the image is not tiled or wrapped, it will not be converted correctly. If this happens, use the command *Offset* photoshops to properly secure the seam between the right and left tiles. To convert to skybox images, use for example: https://jonaszeitler.se/cubemap-toastmap-generator/
- 9. Save each of the 6 sides in a .png image, where each of the side images will be named:

Right = XP

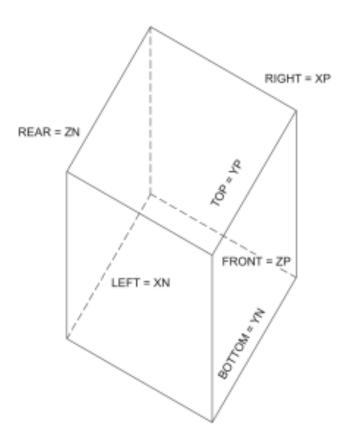
Left = XN

Before = ZP

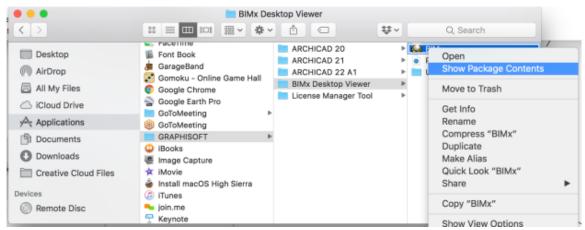
Rear = ZN

High = YP

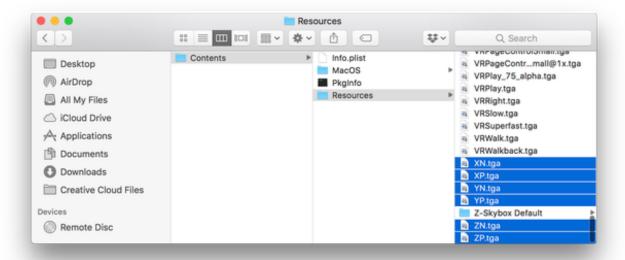
Low = YN



- 10. Reopen each of the 6 fi les in Photoshop and save them in .tga format Locate the images
- 11. in the bimx skybox. Go to Applications> Graphisoft> BIMx. Right click on the BIMx desktop viewer application, choose "show package contents"



12. In "Resources" archive the default images then move all the .tga image fi les into this folder. Make sure that the name and format of these 6 fi les match the original exactly.



- 13. Once the .tga fi les have been loaded into the applications folder, your BIMx application will now use it as the default skybox. If you need to revert to the generic skybox, just save the custom .tga in your project folder on the fi le server and move the default .tga images to the main Resources folder. It is important to note that the skybox is specific to each computer, so each member of the project team will have to load the images from the skybox before opening BIMx.
- 14. If, when opening BIMx, the background is not oriented correctly, use the BIMx parameter for the position of the sun to locate north correctly. This is a parameter that will need to be adjusted each time BIMx is opened.