

CAD 2710 CHATGPT

CREATING VRAY ENVIRONMENTS WITH CHATGPT



PROMPT GENERATION

GOAL: GENERATE A V-RAY ENVIRONMENT BASED UPON AN EXISTING IMAGE

Input:

Based on this image, can you help me recreate this environment in Vray for Rhino using Preetham et. al. model, paying careful attention to the visibility of clouds and sky colors, including detailed parameters for all variables being changed.

IMAGE:

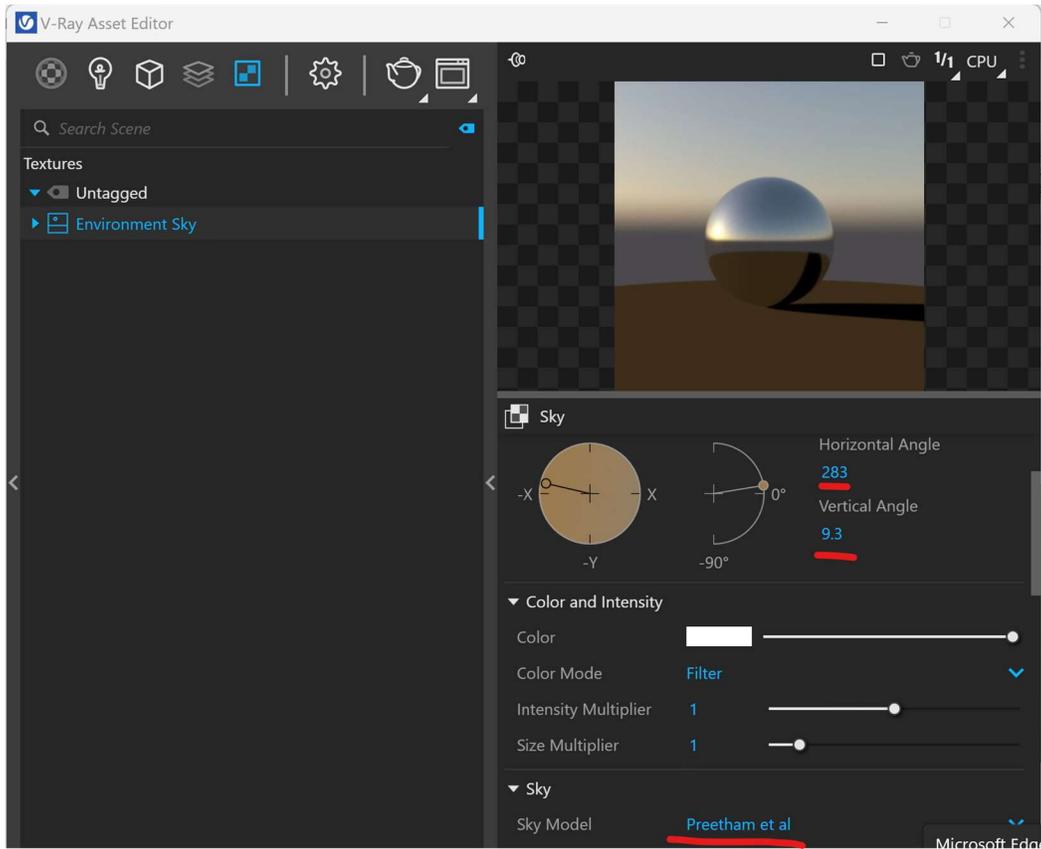


Use File Attachment feature OR Copy + Paste image into prompt bar

Output #1:

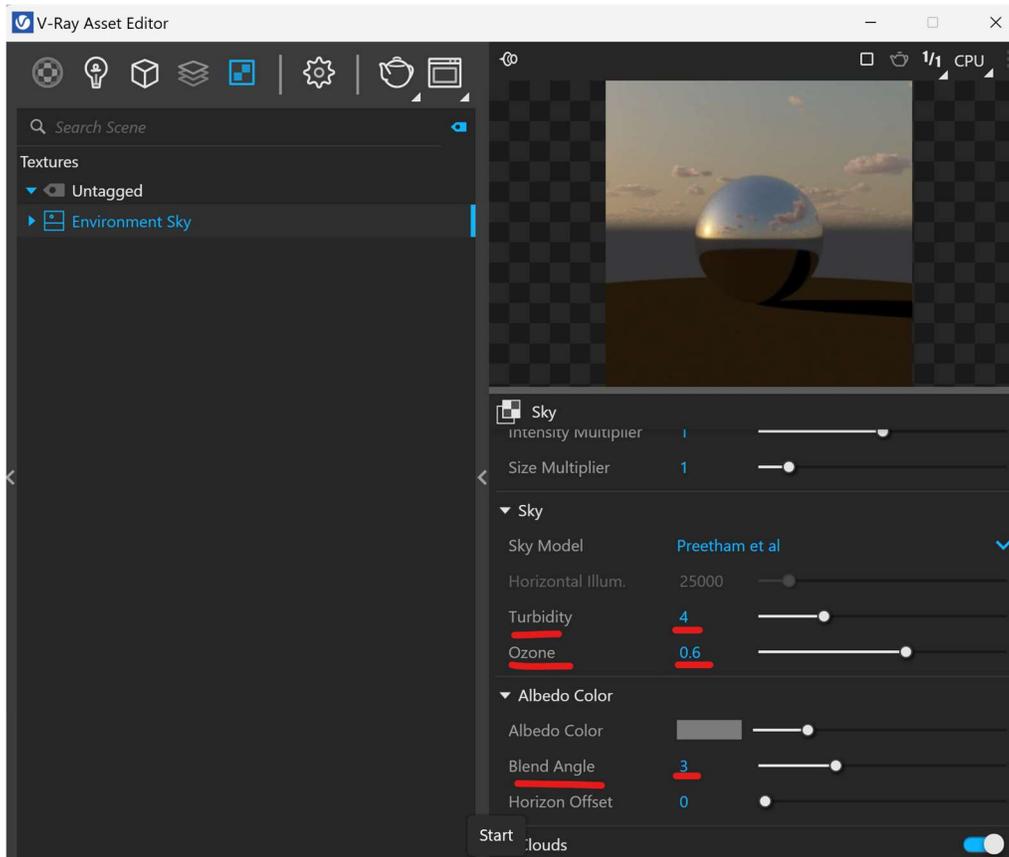
1. SKY MODEL SETUP (PREETHAM)

- **Sky Type:** Use the PREETHAM ET AL. sky model in Vray's sun/sky system.
- **Sun Position:** Position the sun low in the sky to simulate the sunset. This can be done by adjusting the SUN ANGLE to approximately 5-15 degrees above the horizon.
- **Azimuth Angle:** Align the sun's horizontal position so that it aligns with where the sun is visible in the uploaded image.



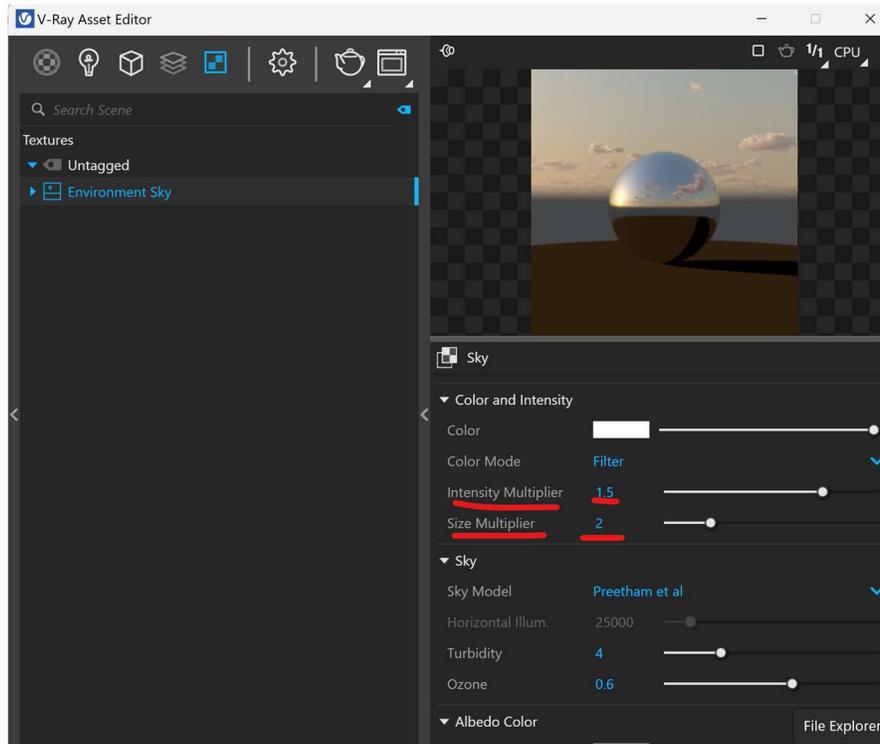
2. ENVIRONMENT SETTINGS

- **Sky Intensity Multiplier:** Set the multiplier to around **1.0-2.0** to ensure the sky remains vivid and not overly washed out.
- **Horizon Blur:** Increase the **HORIZON BLUR** to around **0.2-0.3** to simulate the softer transition between sky and water.
- **Ozone Level:** Increase the ozone to around **0.5-0.7** for a more vivid orange and purple tone at sunset.
- **Turbidity:** Set the turbidity level between **3.0-6.0**. This creates the hazy, warm color effect seen during sunsets.



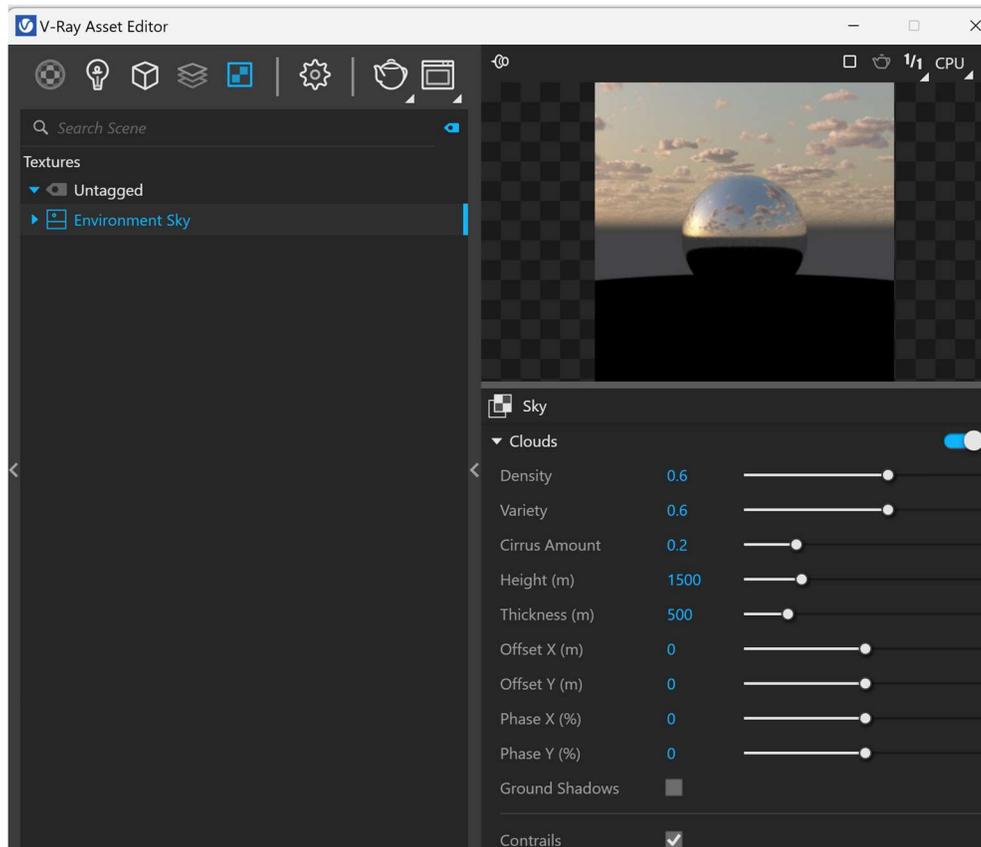
3. SUN LIGHT PARAMETERS

- **Size Multiplier:** Adjust the SIZE MULTIPLIER to around **2.0-3.0** for softer sun shadows, which enhances the warm, late-afternoon glow.
- **Intensity Multiplier:** Maintain an INTENSITY MULTIPLIER of around **1.0-1.5** to avoid overly bright scenes.
- **Color Mode:** Ensure the color mode is set to **TEMPERATURE**, with a temperature value around **3500K-4500K** for warm sunset lighting.



4. CLOUDS AND SKY DETAIL

- **Cloud Density:** Enable and set CLOUD DENSITY to **0.4-0.6** to create visible clouds like those in the image.
- **Cloud Opacity:** Set CLOUD OPACITY to **0.8-1.0** for well-defined clouds.
- **Variety:** Adjust CLOUD VARIETY to **0.5-0.7** to create a natural look with different cloud shapes.
- **Cloud Height:** Position cloud height at **low to mid-level** (approximately 1.5-3 km in virtual height) to replicate a sunset look.
- **Sky Color Mapping:** Choose a gradient sky color scheme to match the orange and blue hues.



5. REFLECTIONS AND WATER MATERIAL (OPTIONAL)

- **Water Material:** Ensure the water material in the scene has:
 - **Reflectivity** set to **0.8-0.9** for a mirrored surface.
 - **Bump/Displacement** maps to simulate realistic ripples.
 - Adjust the IOR (Index of Refraction) to **1.33** (standard for water).

6. ADDITIONAL TIPS

- **Render Settings:** Use high-quality anti-aliasing to capture details like the fine lines in clouds.
- **Camera Settings:** Set the camera to a wide-angle lens (e.g., **24-35mm**) and adjust exposure for balanced highlights and shadows.

Good: Gives us a highly-detailed step-by-step of the entire process, with included numbers for specific parameters.

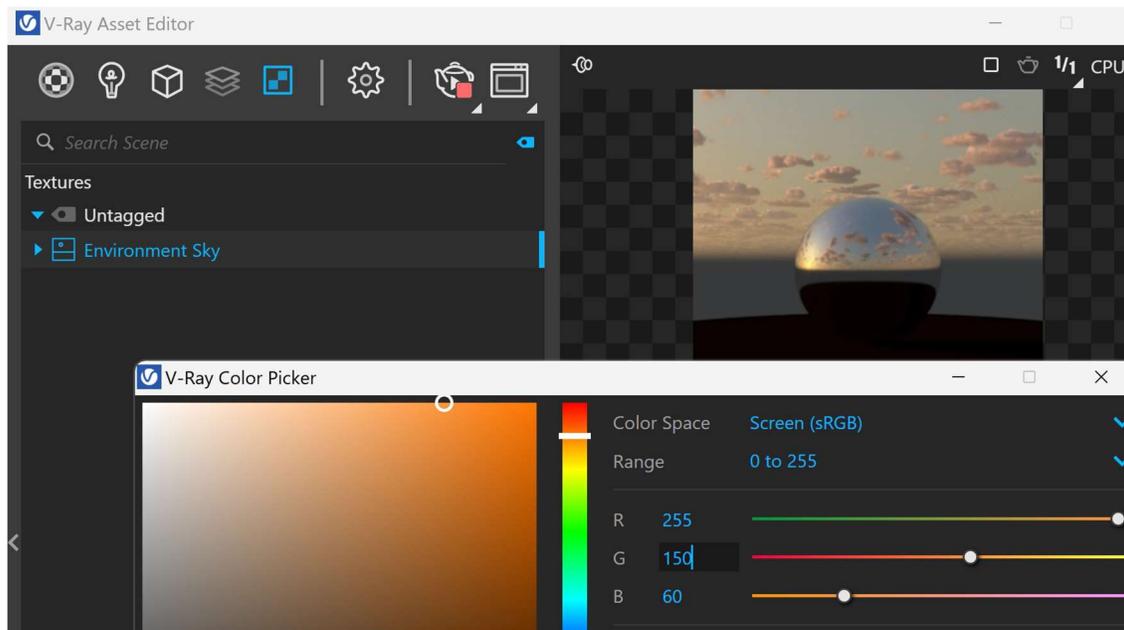
Problem: However, the “Color Mode” instructions include parameters that don’t exist in V-Ray.

Revision: There is no color mode called temperature, what should I adjust to make up for this?

Output #2:

1. SUN COLOR:

- **Manual Color Adjustment:** Instead of using a temperature-based approach, you can manually change the color of the sun to a warm, orange-yellow hue. Choose a color with RGB values approximately **R: 255, G: 150-180, B: 60-90**.
- **Filter Color:** You can use the **FILTER COLOR** option to tint the sun and sky. Set it to an orange color similar to **R: 255, G: 170, B: 100** for a warm effect.



2. SUN INTENSITY (SEE ABOVE):

- Lower the **INTENSITY MULTIPLIER** if the scene appears too bright, typically between **0.8-1.5**, to balance the warm color without washing it out.

3. TURBIDITY (SEE ABOVE):

- Adjust **TURBIDITY** to higher values (e.g., **3.0-6.0**) to enhance the warmth and diffusion of the sunlight through the atmosphere, replicating the look of a sunset.

4. VRAY ENVIRONMENT OVERRIDES (OPTIONAL):

- Use the VRAY ENVIRONMENT tab to adjust the GI (SKYLIGHT) and REFLECTION overrides. Set the skylight color to a warm gradient transitioning from orange near the horizon to a deeper blue as it moves up the sky.
- Manually create a gradient using a VRAY COLOR or GRADIENT TEXTURE map for the sky background to control the transition from warm tones near the sun to cooler tones farther away.

OUTPUT:



FURTHER TWEAKS:

ADJUSTING SKY GRADIENT FOR WARMER/REDDER COLOR

POST-PRODUCTION IN FRAME BUFFER FOR WARMER/REDDER COLOR

PROMPT GENERATION

GOAL: GENERATE A V-RAY ENVIRONMENT BASED UPON AN EXISTING IMAGE

Input:

Based on the image, can you help me recreate this environment in Vray for Rhino using Preetham et. al. model, considering the Sun Position, color and intensity sliders, turbidity and ozone, albedo color, and clouds?

IMAGE:

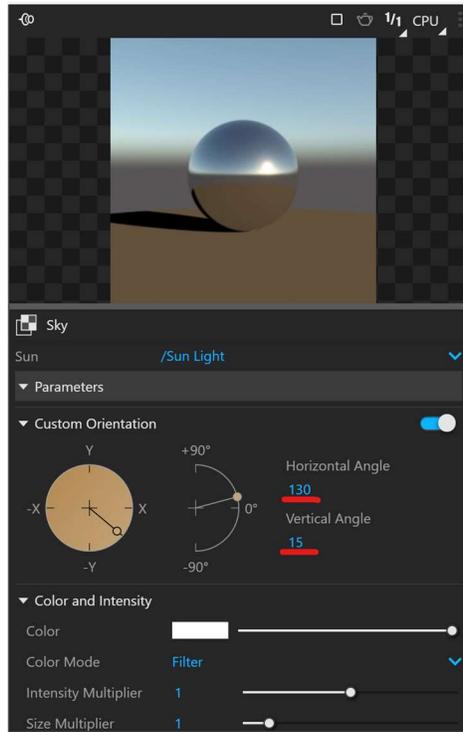


Use File Attachment feature OR Copy + Paste image into prompt bar

Output #1:

SUN POSITION (HORIZONTAL AND VERTICAL ANGLES):

- 1. Vertical Angle (Elevation):**
 - The Sun in the image appears to be relatively low, suggesting it is either early morning or late afternoon.
 - Set the elevation angle to approximately **15°–20°** above the horizon.
- 2. Horizontal Angle (Azimuth):**
 - Based on the shadows and the position of light, the Sun is to the **left of the camera, slightly forward**.
 - Use a horizontal angle (azimuth) between **120° and 150°**.



SKY PARAMETERS (PREETHAM MODEL):

1. **Turbidity:**

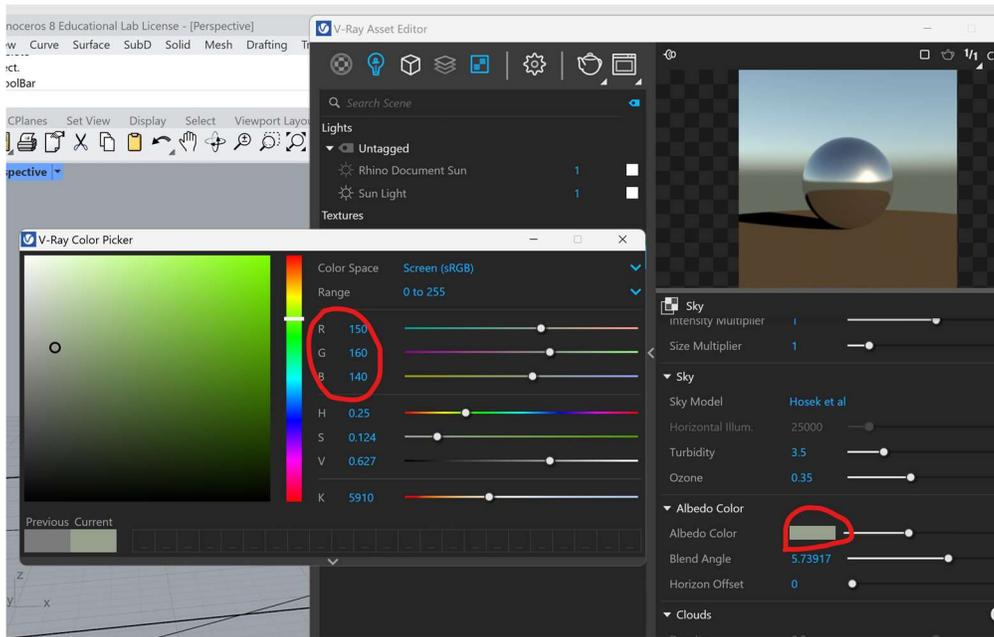
- The sky shows a moderate level of scattering, typical for a slightly hazy atmosphere.
- Set turbidity to **3.5–4.5**.

2. **Ozone:**

- This parameter controls the blueness of the sky. In this environment:
 - Set ozone to **0.3–0.4** for slightly muted blues.

3. **Albedo:**

- Albedo impacts how much light the ground reflects. Since the foreground contains snow and vegetation:
 - Use an albedo value of **0.5** with a slightly greenish-gray tone (**RGB: 150, 160, 140**).



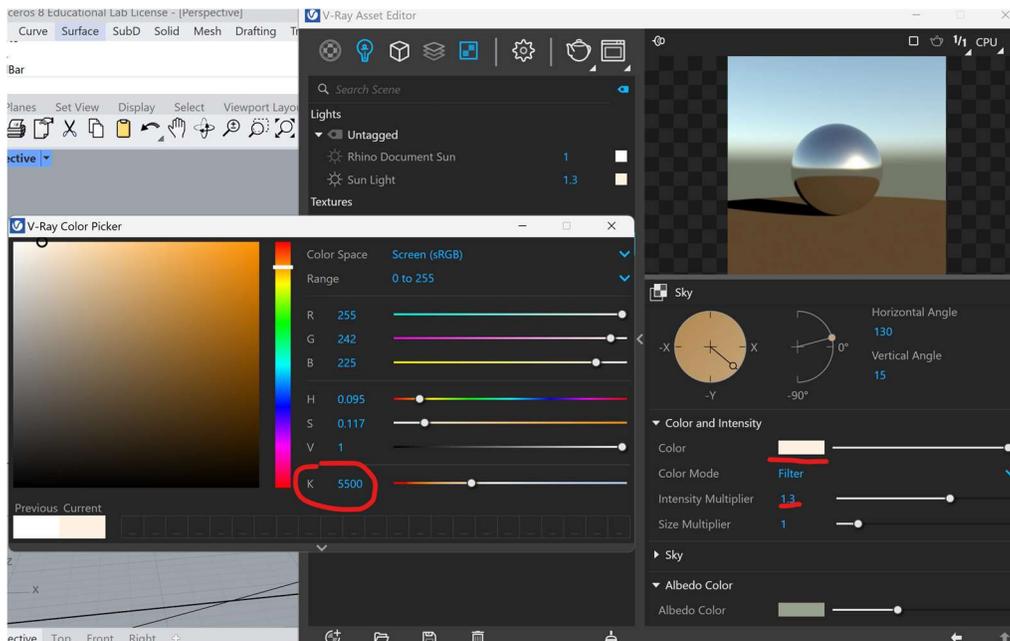
SUNLIGHT:

1. Color and Intensity Sliders:

- **Intensity Multiplier:** Set the Sun intensity to **1.3–1.5** for soft, realistic lighting.
- **Color Temperature:** Use a warm tone to match the golden sunlight, around **4500K–5000K**.

2. Shadows:

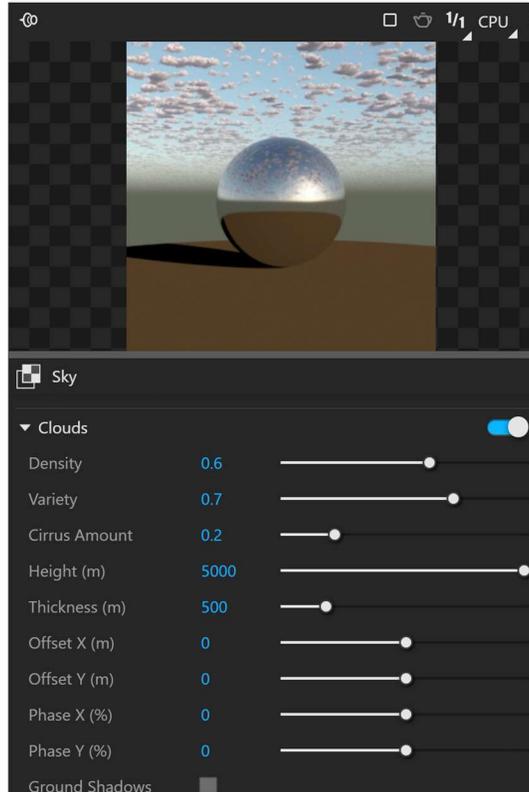
- Enable **soft shadows** for realism, matching the long, diffuse shadows seen in the image.



CLOUDS:

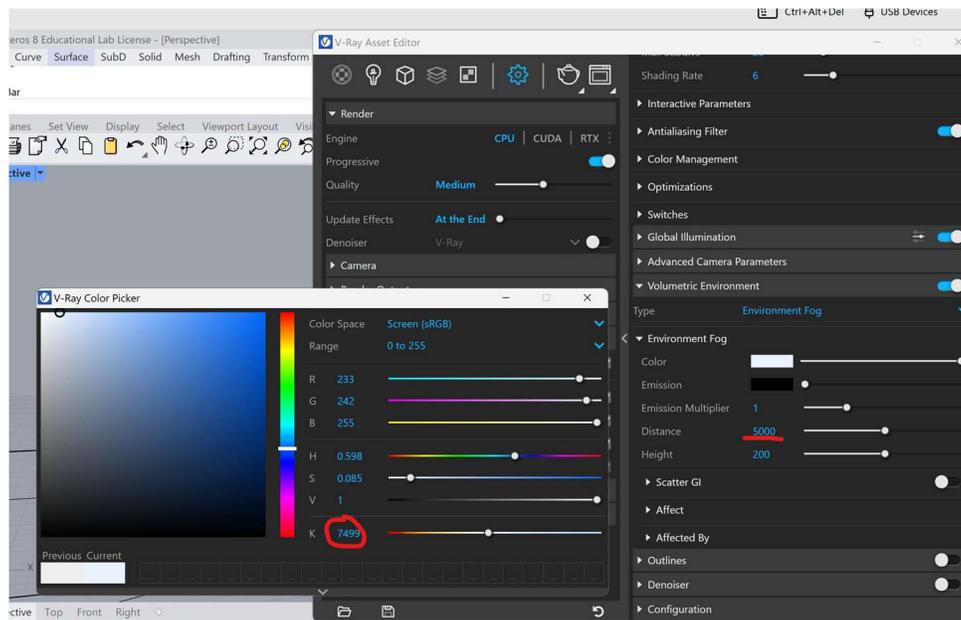
1. Enable V-Ray's **Cloud System**:

- **Cloud Density:** Set to **0.4–0.6** for the scattered clouds.
- **Cloud Variety:** Increase the variety to introduce irregular patterns.
- **Cloud Opacity:** Adjust to **0.5** for translucency.
- **Cloud Height:** Place clouds at higher altitudes, around **6,000–10,000 meters**.



ENVIRONMENT FOG:

- Use **Environment Fog** to add depth to the distant mountains:
 - Set the fog distance to a large value (**5000–8000 units**).
 - Use a slightly bluish fog color to mimic aerial perspective.



FINAL ADJUSTMENTS:

- **Camera Settings:** Adjust exposure and white balance to enhance the natural lighting.
- **Global Illumination (GI):** Enable GI for soft light bouncing.
- **Reflection Settings:** Use low reflectivity on trees and terrain for subtle light interactions

OUTPUT:

