Max Sky Best Practices

Introduction

Max Sky allows you to present your weather story in the most realistic and visually compelling way possible. This guide is designed to help you get the most out of your Max Sky software and highlight the best ways to use the layer for effective weather presentations. For more training and information about Max Sky, please visit https://selectondemand.wsi.com for in-depth tutorials.

Setting Up Your Environment

- Consider the width of your camera view. Large waves may look good from afar but when zoomed in often look too large.
- When using the atmospheric haze feature on a wide view, an exaggerated setting will display a nice earth halo effect but will cause some issues if the sun or moon pass behind the horizon. Try using a lower exaggeration when zoomed out.

- A low haze setting works best for wider views, while higher haze settings works best for zoomed in views to create a more realistic earth view. Haze and exaggeration are keyframe-able properties in the Earth Environment layer so don’t forget that you can change the haze as conditions change in your area (winter vs. summer, frontal passages, etc.).
- High and low haze settings are particularly useful to change at sunrise/sunset to give you a more realistic depiction of the weather story.

- When using night views, make sure to adjust your nighttime lights within the Earth environment settings. A lower setting works better when zoomed in. Also consider using a golden color at 50-70% transparency for your streets while zoomed in to give roadways a more realistic glow as MAX only illuminates the city buildings at night.

- When zoomed in during the day, you can use a 90-99% transparency for your streets to allow for automatic labels to show while allowing streets to be seen without street lines.
Camera Orientation

- When zoomed in, use the vertical and horizontal camera orientation arrows to show more of the sky compared to the ground, or to provide a more natural perspective for your 3D city skyline.

![Standard Tilt Applied](image1)
![Adjustment made by changing vertical orientation](image2)

- A wide camera view will give a realistic looking ‘satellite’ view of the weather story. A tight camera view with low tilt angle under the clouds will simulate what viewers see on the ground.

Moving Within 3D Environment

- Static camera views work best for Max Sky. Choose a view that highlights your city’s buildings and shows the best weather story for the day. Don’t be afraid to change the view from day to day as the weather changes.
- If using a zoom camera motion, Max Sky will look better when starting from a wide view and zooming in gradually.
Max Sky is designed to simulate the real atmosphere. When the camera is moved with Max Sky, clouds need time to ‘grow’ just like in the real life. Slower and more gradual camera movements allow for a more realistic and ‘fuller’ cloud and precipitation field. Even a small zoom-in motion can provide a visually dynamic scene, such as flying through a cloud layer.

3D Buildings & Terrain

- Be sure to adjust the terrain to appropriately fit your 3D building set so buildings don’t ‘fall into’ the Earth. A terrain setting of about 1.0 generally works for most cities, but each city is different. Too much exaggerated terrain will cause your buildings to disappear, too little will cause your earth to look flat. Experiment with the terrain setting in the Earth environment layer to find the ideal setting for your area and always err on the side of being flat.
- If you aren’t using 3D buildings, exaggerate the terrain to provide the most realistic and visually compelling story for your area.
- Use the Cast Shadows feature to allow your buildings to cast realistic shadows as your data time changes.
Adjusting Sky Variables

- Max Sky is based on WSI RPM model output. You can adjust the individual Sky elements (Clouds, Precipitation, Lightning) within the layer to tweak the visual representation of the model forecast. For example, if Sky is outputting spotty showers instead of just cumulus clouds, you can lower the density of the rain effect to visually eliminate the appearance of rain.

- Turning off the clouds but leaving precipitation on with RPM model data will give you a particle effect that matches your model data from a top down view.

Data Time & Scene Length

- Be mindful of the length of your scene vs. the length of your data time. The more hours of forecast you want to show, the longer your scene should be to provide Max enough time to ‘grow’ clouds and precipitation in your environment.
- Generally speaking, Max Sky scenes should be at least ten seconds in length but will vary based on your specific needs. A few examples include:
  - Static camera, single moment in time: 5-8 second scene length.
  - Static camera, 12 hr forecast: 10-12 second scene length.
WSI°

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- Slow camera pan, single moment in time: 8-10 second scene length.
- Slow camera pan, 12 hr forecast: 12-15 second scene length
- You can also adjust the start or end of your data time within your scene by moving the green or red boxes, respectively, along your timeline.

In this example, the data time would not begin to change until the :01 mark in the scene.

Additional Data With Max Sky

- While a visual representation of the atmosphere is a powerful storytelling tool, people still want to see numbers. Tie your Max Sky data to data text or dynamic panels in the scene layer to highlight elements you can’t see such as temperature and winds speed.
- Make sure not to cover up too much of the sky!
Other alternative ideas for displaying data text include, but are not limited to:
- Using the logo instead of the entire banner at the top of your scene.
- Relying on your news bug for your logo and/or branding.
- Creating a panel containing your logo and/or branding.
- Make sure you add a timestamp to your banner or to an element in your scene so your audience knows when to expect storms or sunshine.
- Combine various data layers such as wind particles or contours with Sky to give your viewers a unique and detailed visual description of the forecast.
- If you have Max Traffic, consider adding Max Sky to a scene with predictive traffic flows to show how tonight’s snowstorm will impact tomorrow’s commute.

**Known Issues**
- When Sea Floor Terrain is turned on, the nighttime Earth lights will not display on the Earth.