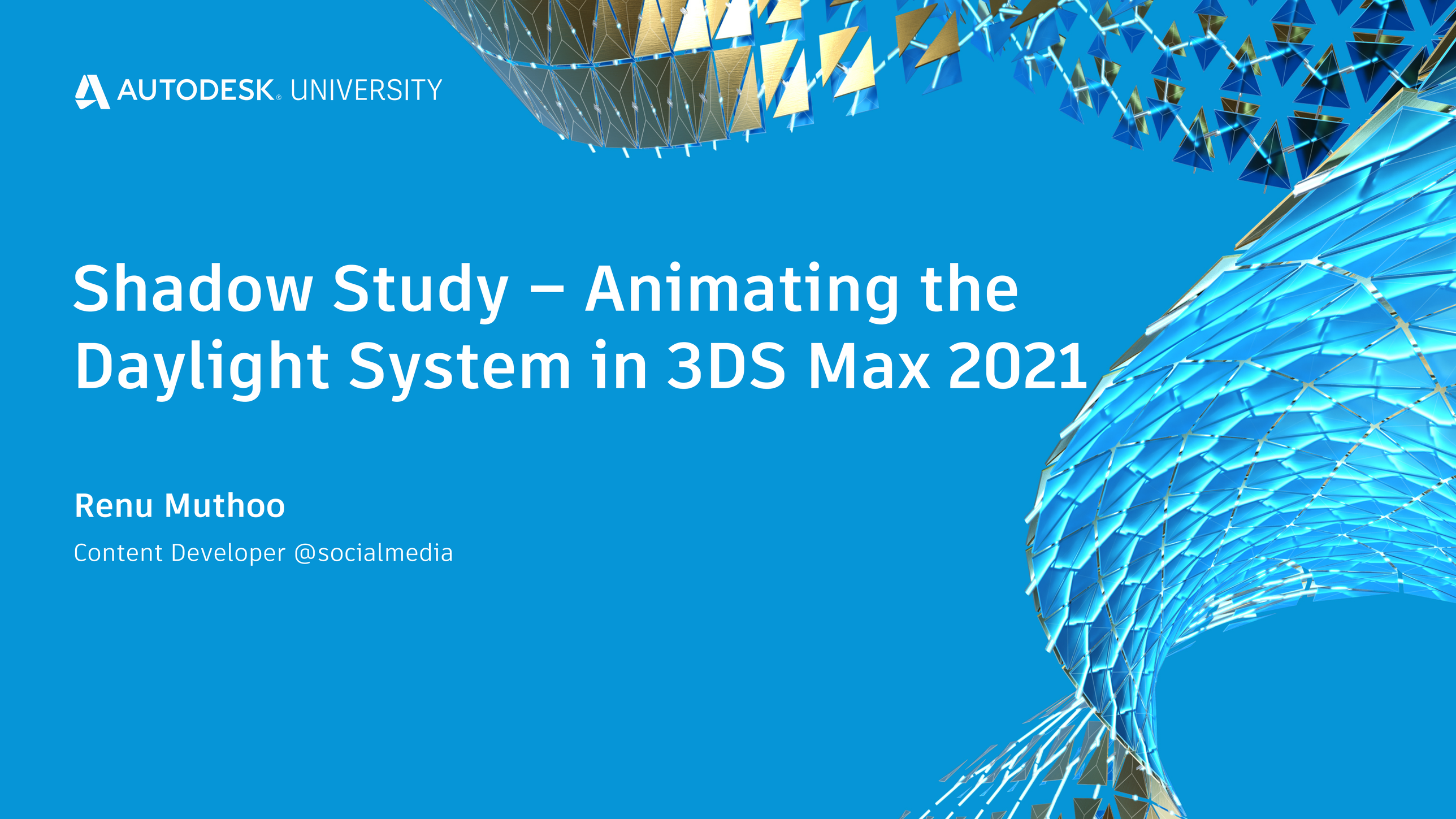
AUTODESK. UNIVERSITY

Shadow Study – Animating the Daylight System in 3DS Max 2021

Renu Muthoo

Content Developer @socialmedia



About the speaker

Renu Muthoo

- **Experienced in 3ds Max and AutoCAD (including verticals)**
- **Over 23 years experience working on Autodesk products**
- **Developed over 50 training guides, including:**
  - 3ds Max
  - AutoCAD (3 titles)
  - AutoCAD Electrical; AutoCAD Mechanical
  - Plant Design
  - AutoCAD - User Certification Exam Guide

Learning Objectives

- Create a Daylight system using the Sun Positioner
- Modify the parameters of the sun positioner to get a rendering at a given location
- Create renderings at different time of the day during different seasons
- Animate the movement of the sun to create a shadow study

Shadow Study

- **How and where the shadows are cast**
- **Movement of the sun**
- **Position of the sun**
- **Used in:**
  - Solar study
  - High rise development
  - Project planning of surrounding areas
  - Lighting and heating of buildings

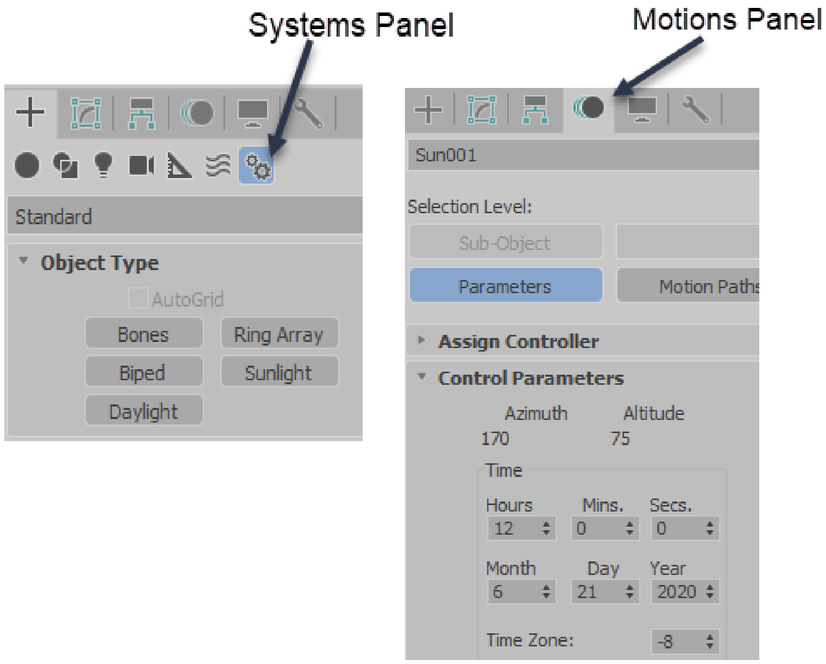
Shadow Study

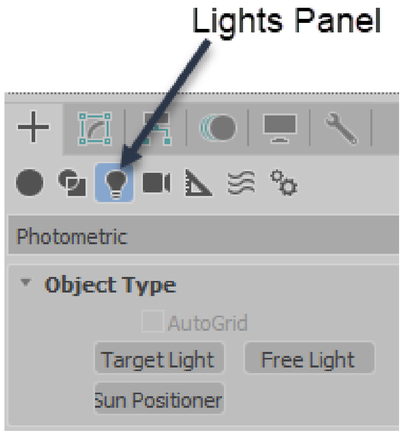
SHADOW STUDY IN 3DS MAX

- **Create a Daylight system**
- **Animate the sun object**

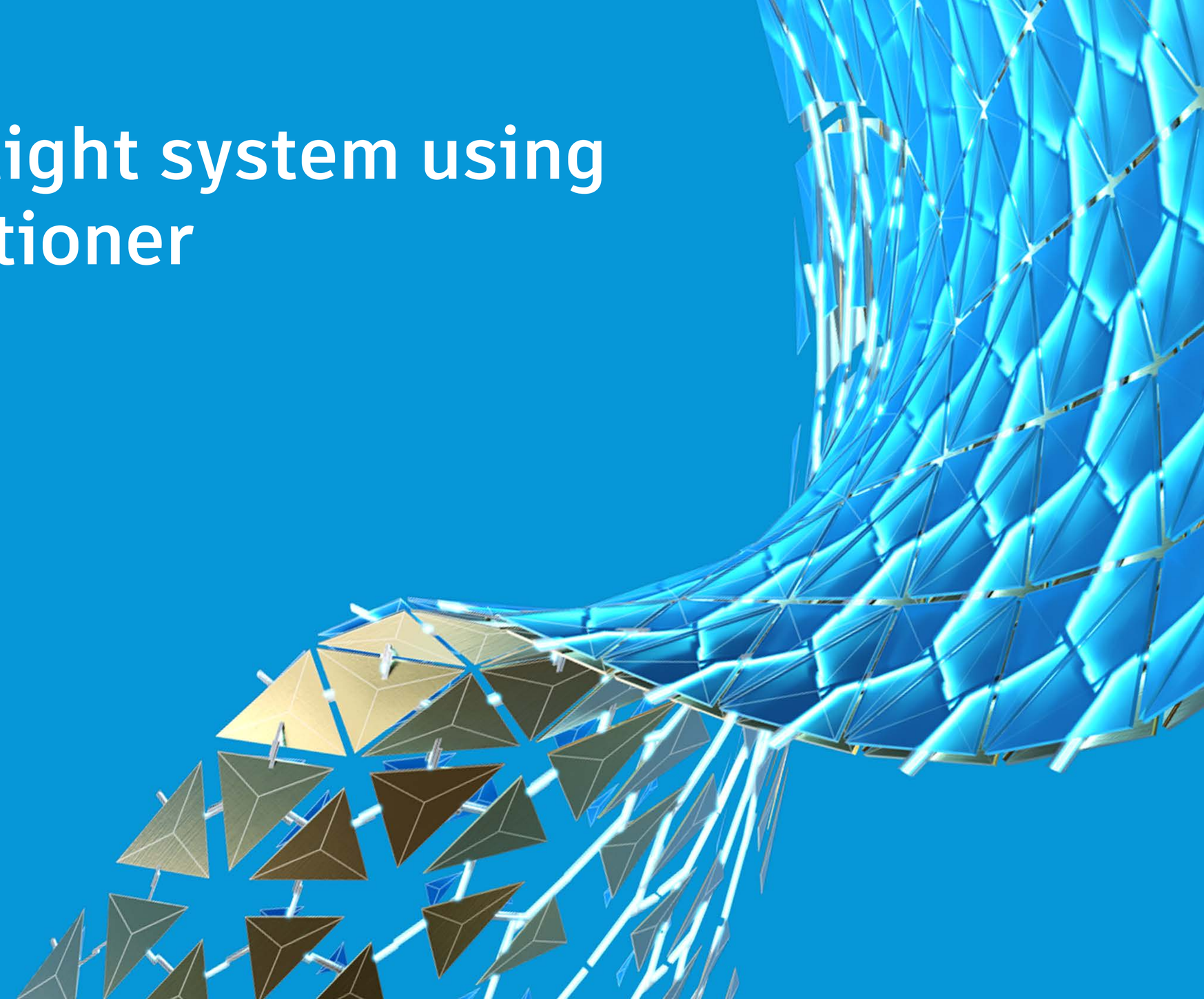
DAYLIGHT SYSTEM IN 3DS MAX

- **Sun Positioner**
- **Sunlight and Skylight system**



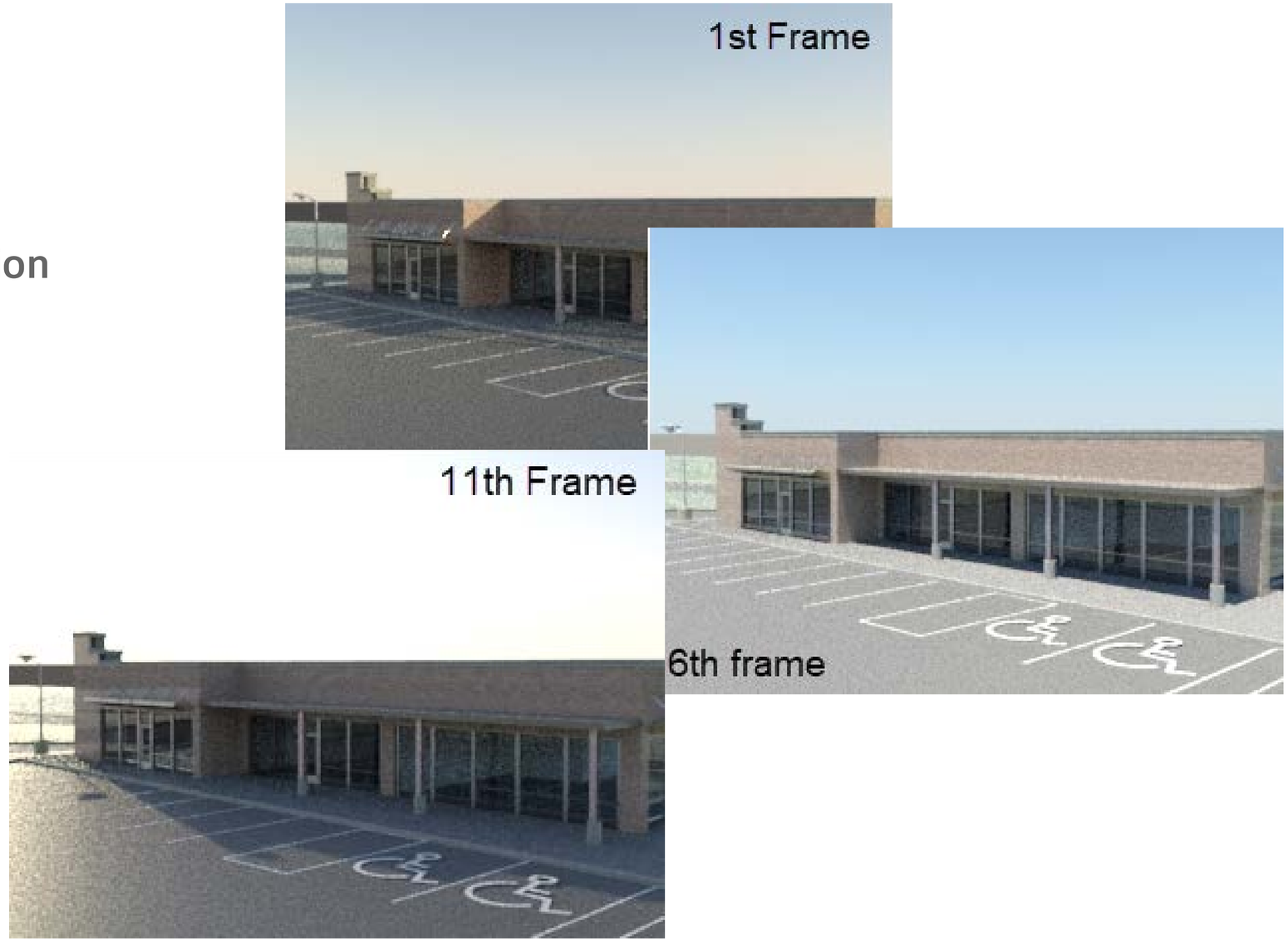


Create a daylight system using the Sun Positioner



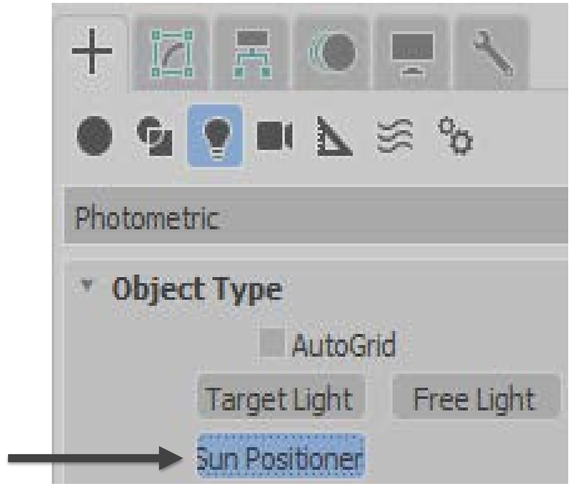
Sun Positioner

- Realistic sunlight
- Full sky environment
- Geographically correct position
- Environment map
- Exposure control



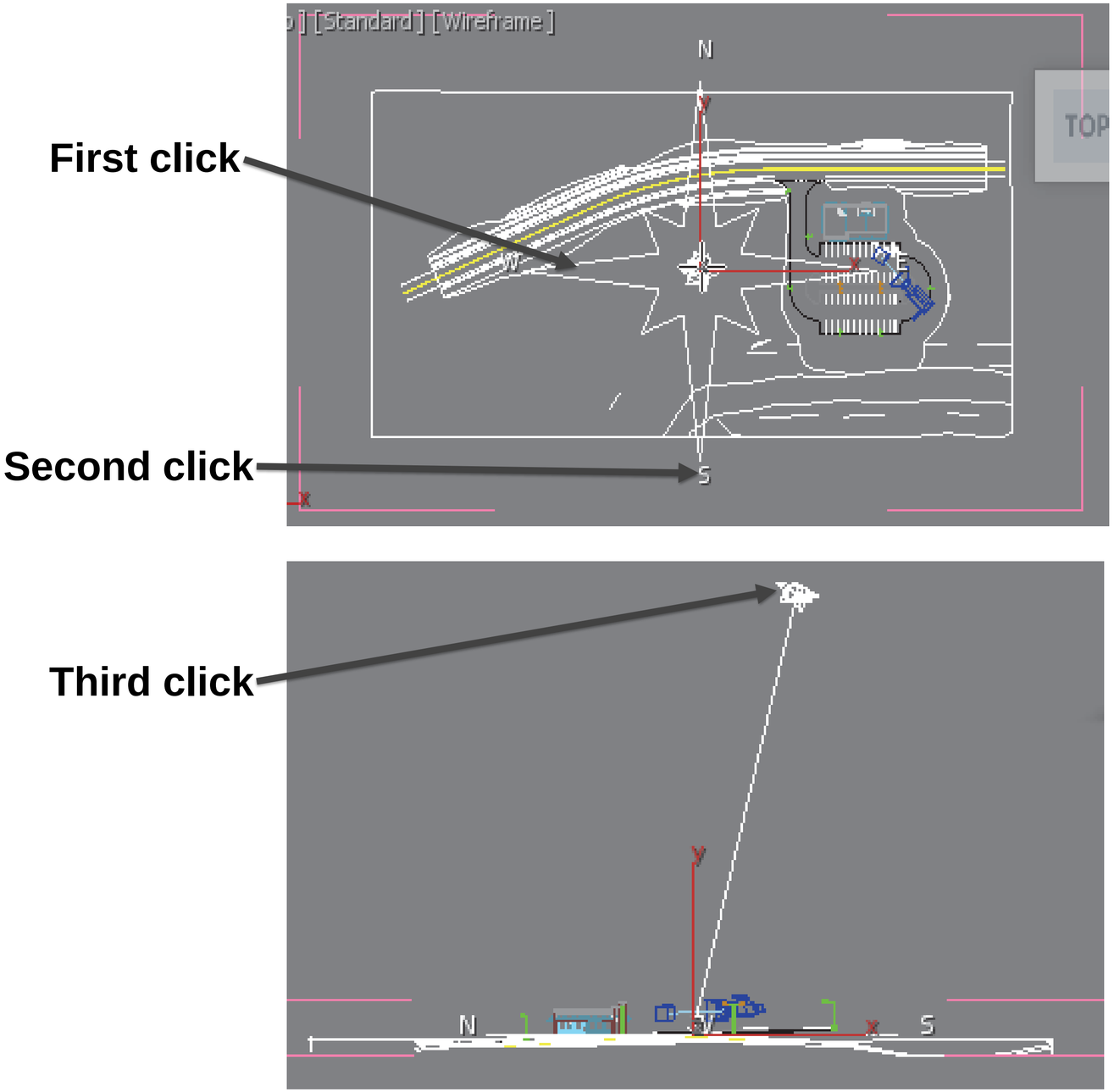
Sun Positioner

- Create panel (+) > Lights
- *Object Type* rollout
- Sun Positioner

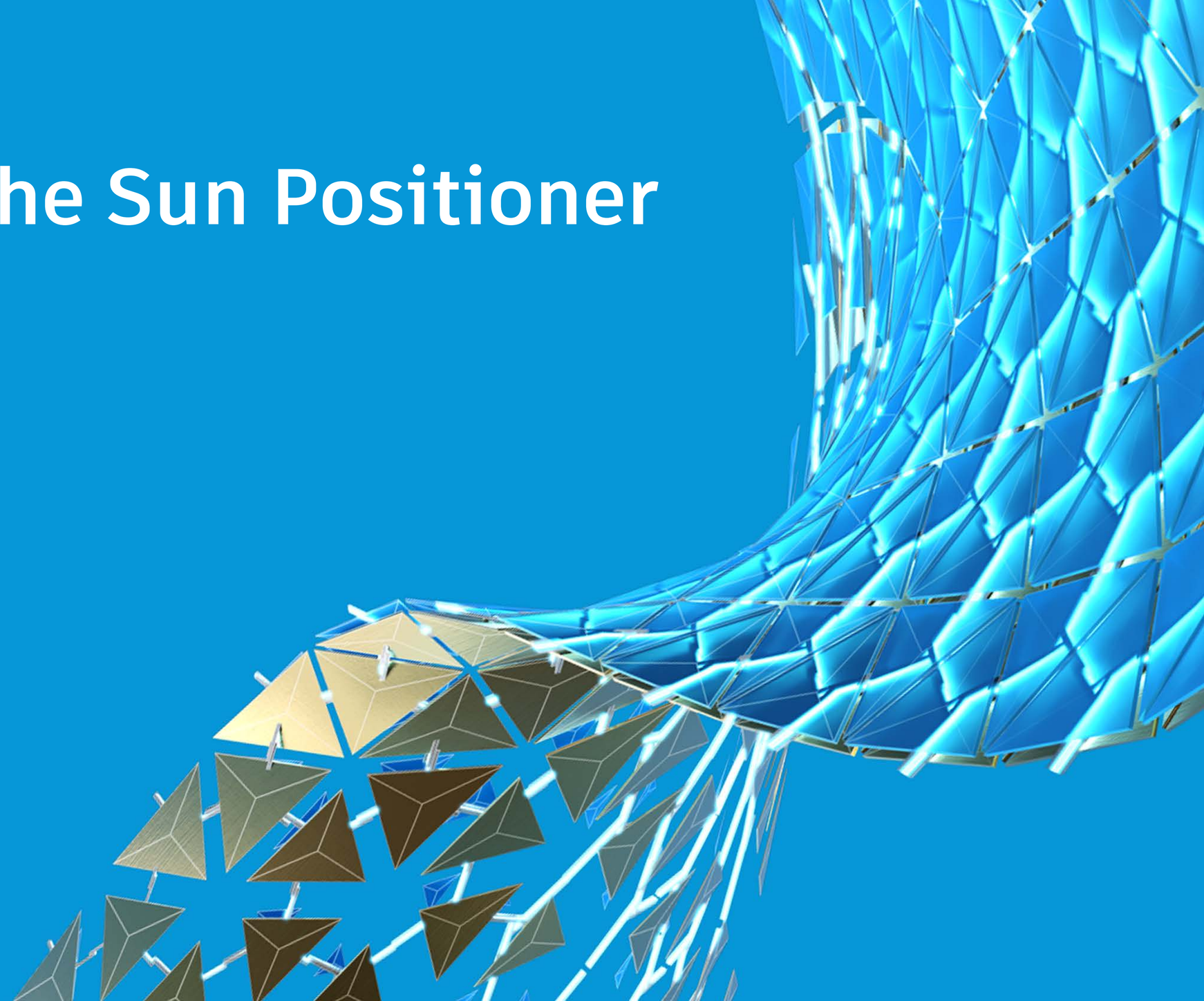


Sun Positioner

- Compass Rose
- Sun Orientation
- Sun Distance

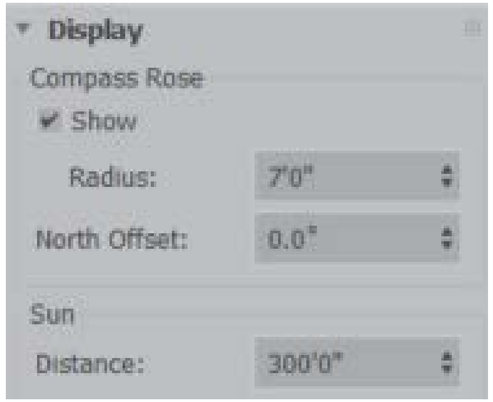


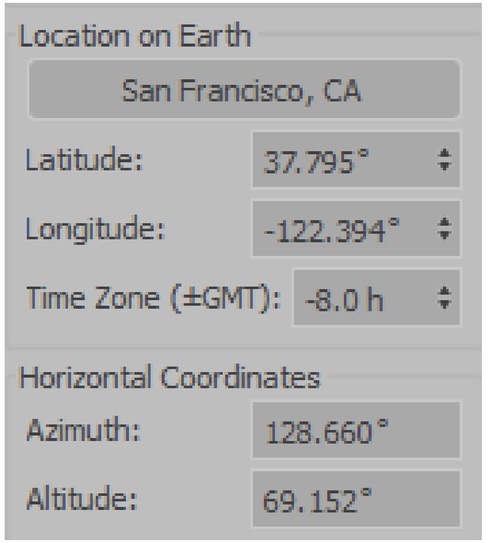
Modifying the Sun Positioner

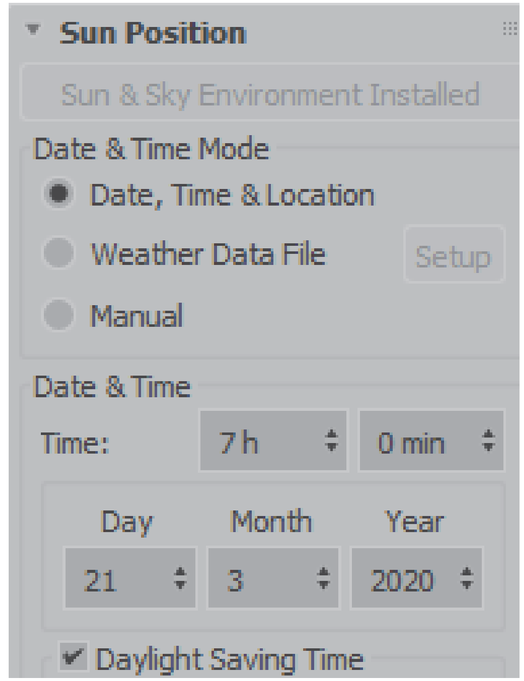


Sun Positioner

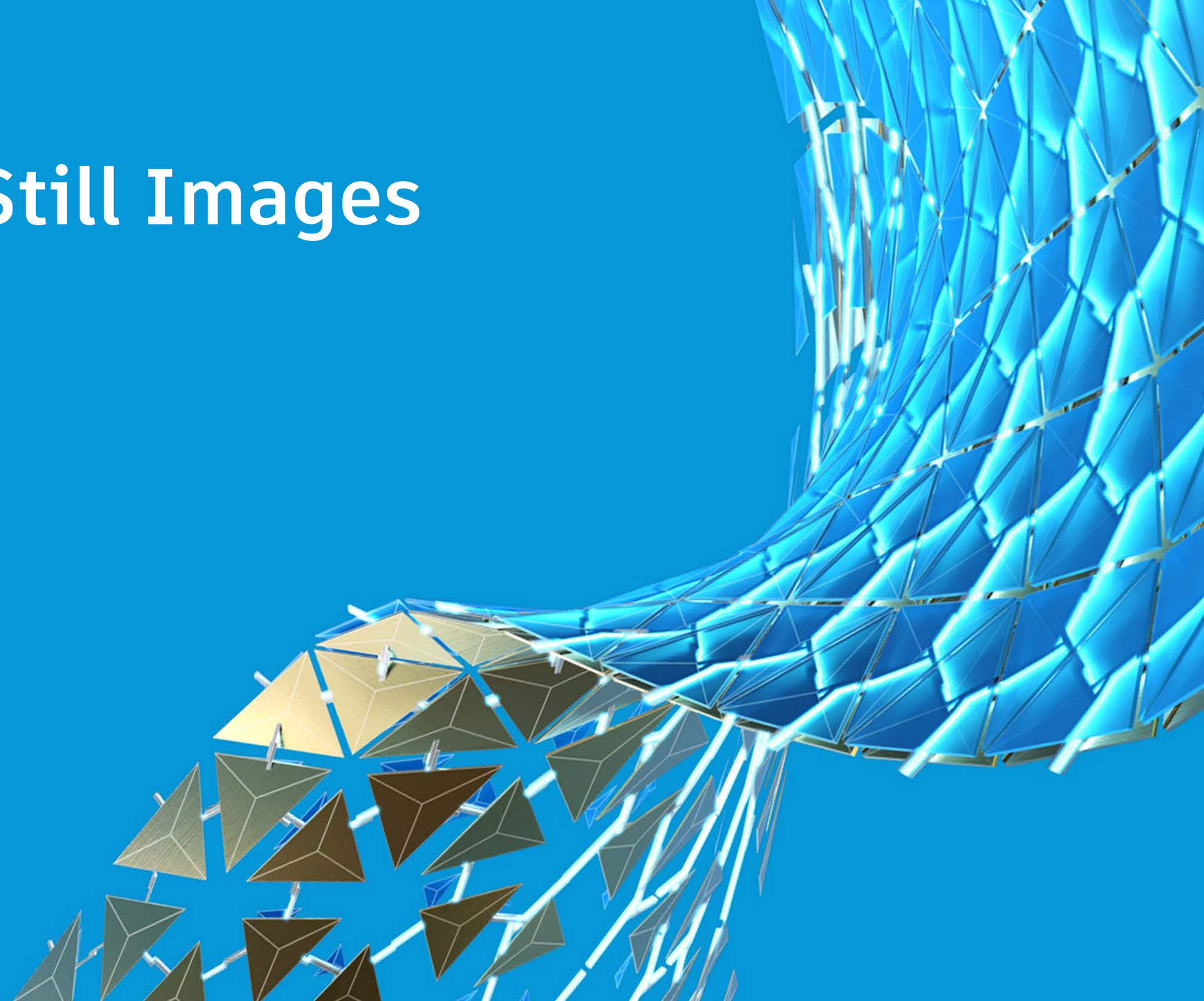
- Display rollout
- Sun Position rollout
- Date & Time
- Location on Earth





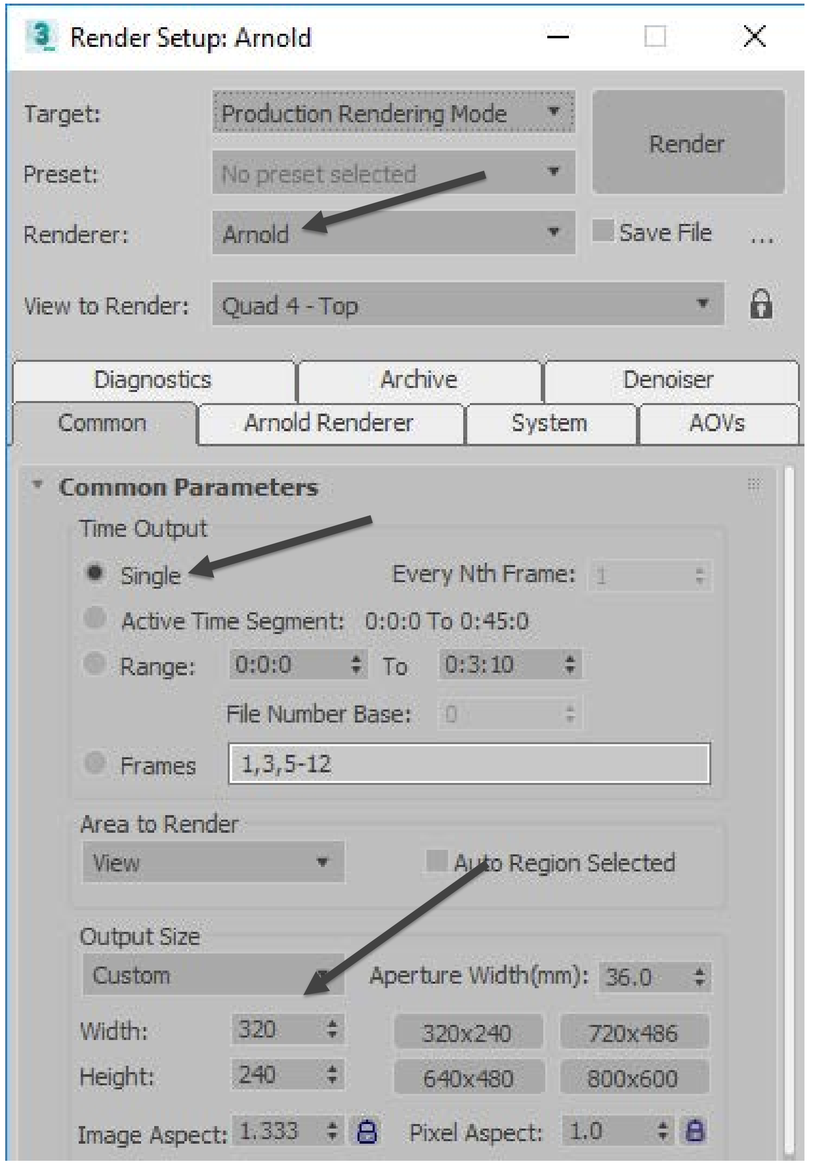


Rendering Still Images



Render Setup

-  (Render Setup)
- Renderer
- Time Output
- Output Size

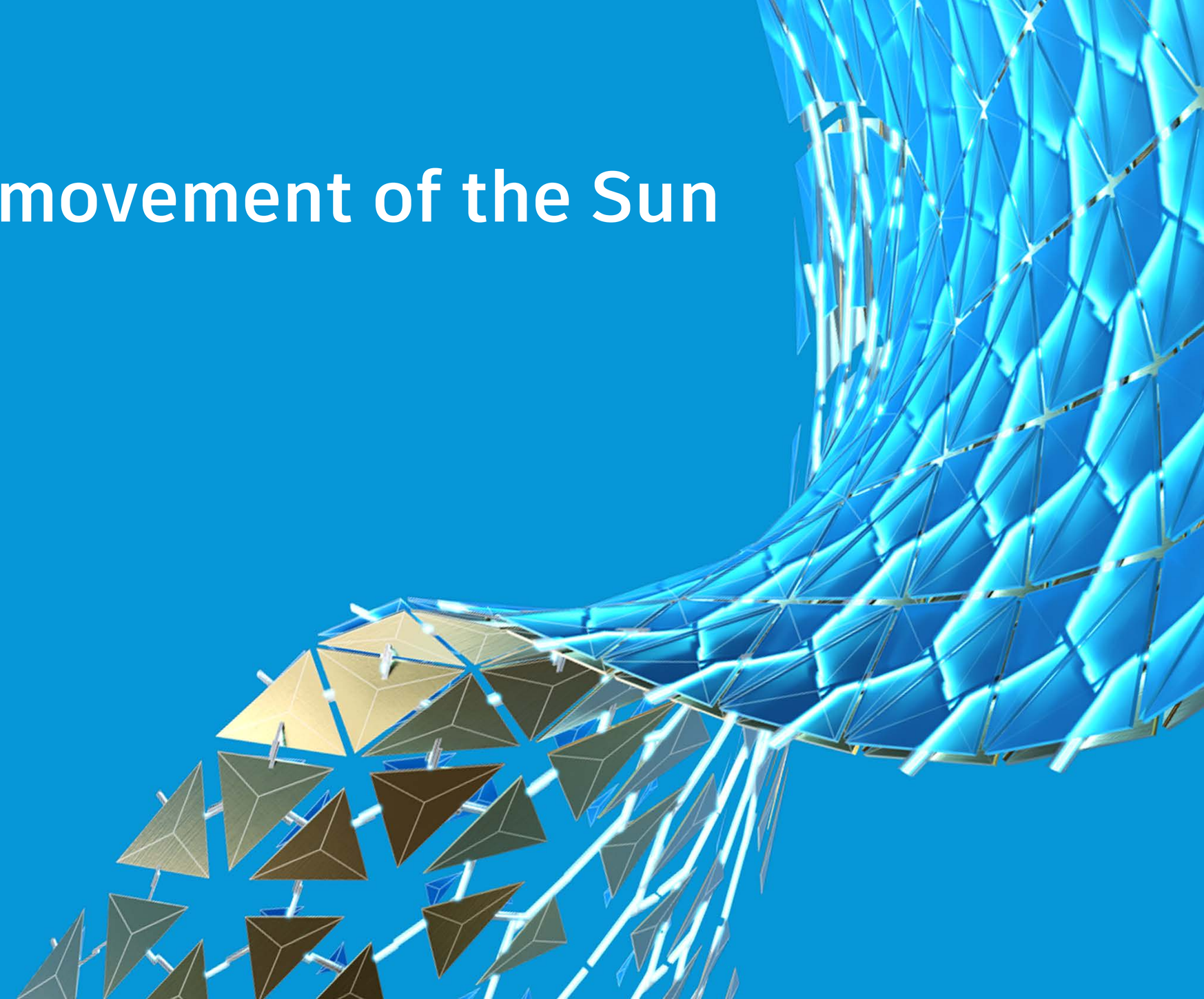


Rendered still images

7 a.m in June

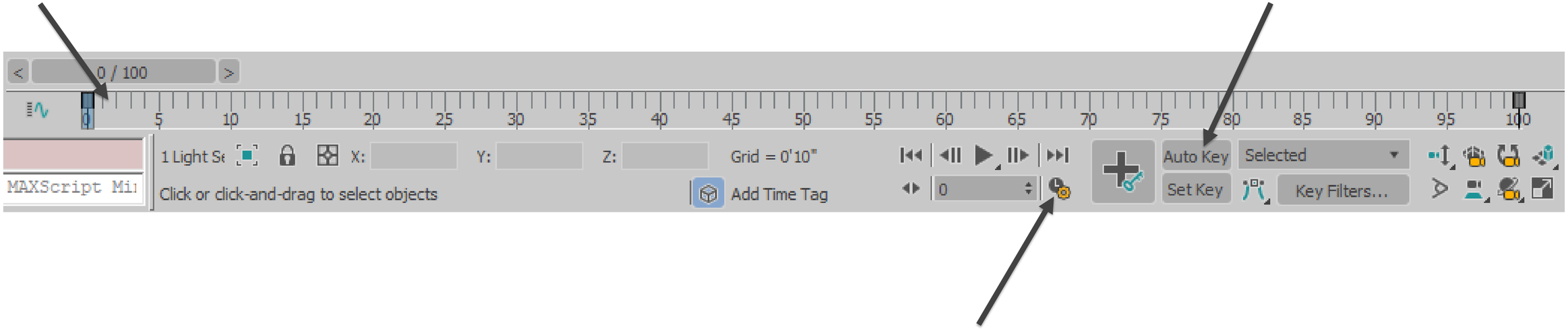
7 p.m. in June

Animate the movement of the Sun



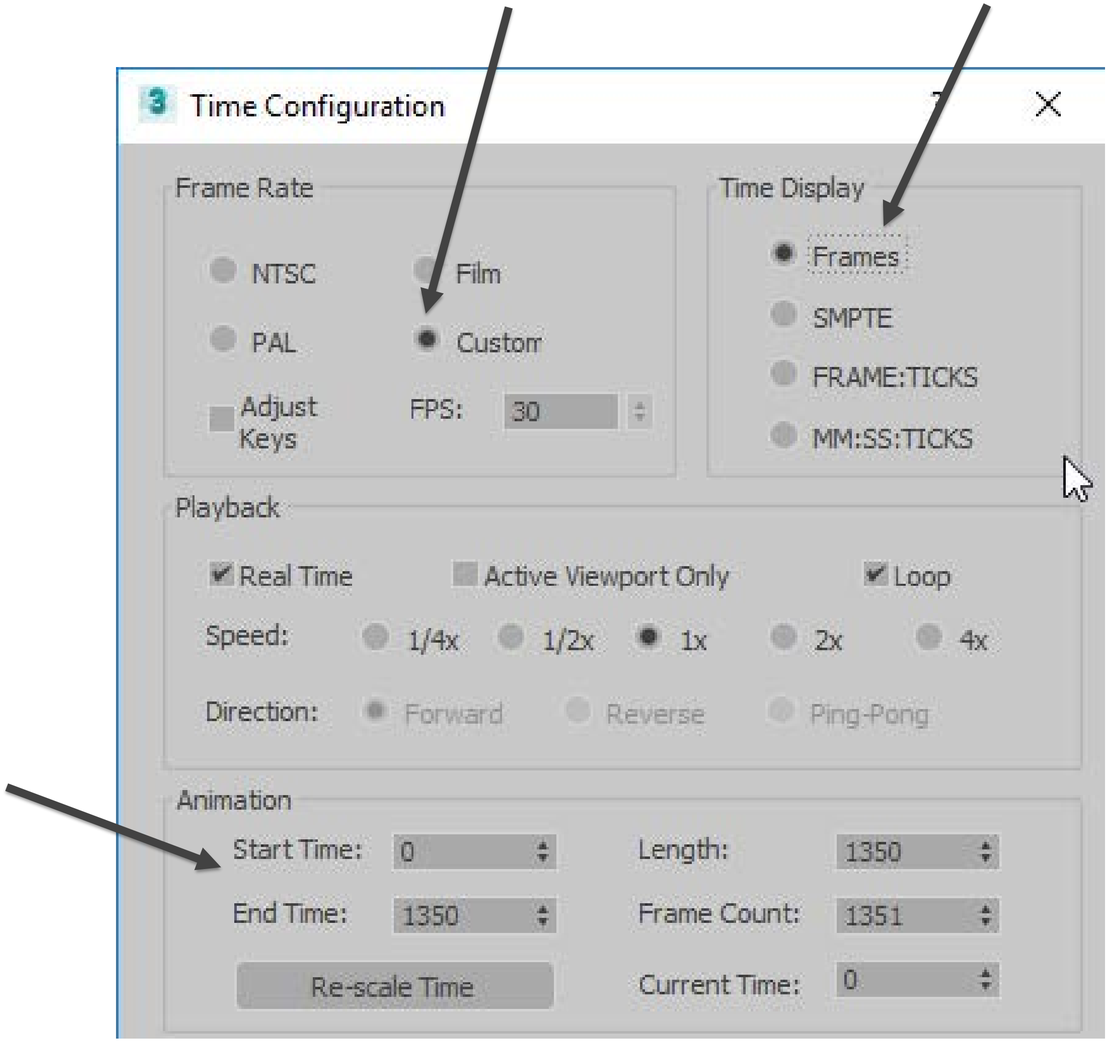
Animation Controls and Slider Bar

- Auto Key
-  Time Configuration
- Slider Bar



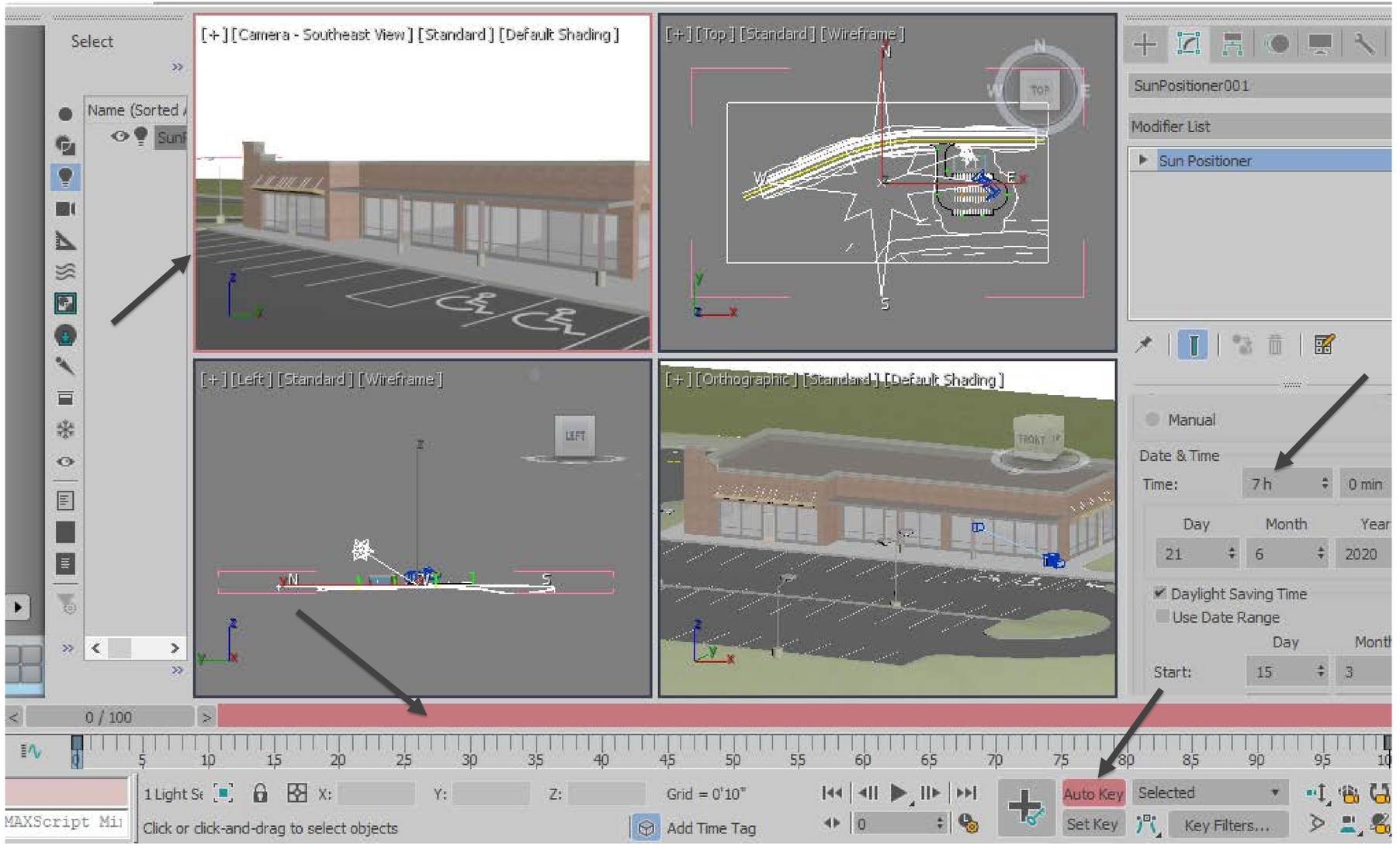
Time Configuration

- Time Configuration
- Frame Rate
- Time Display
- Animation



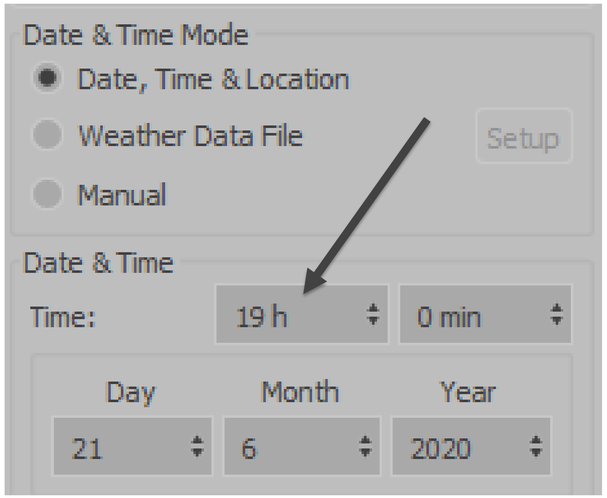
Animation Controls

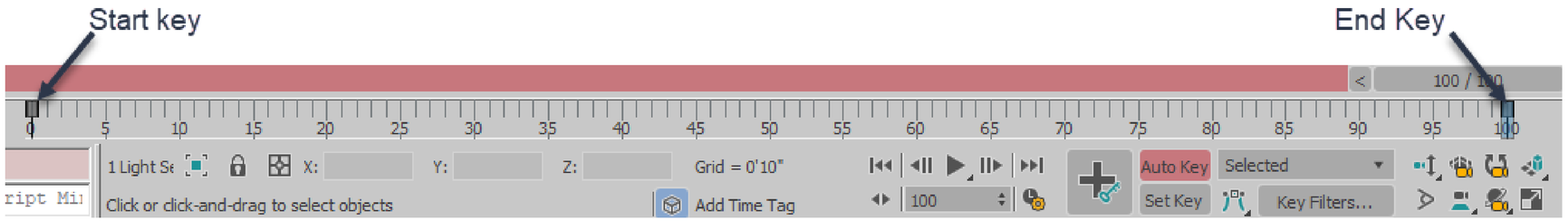
- **Auto Key**



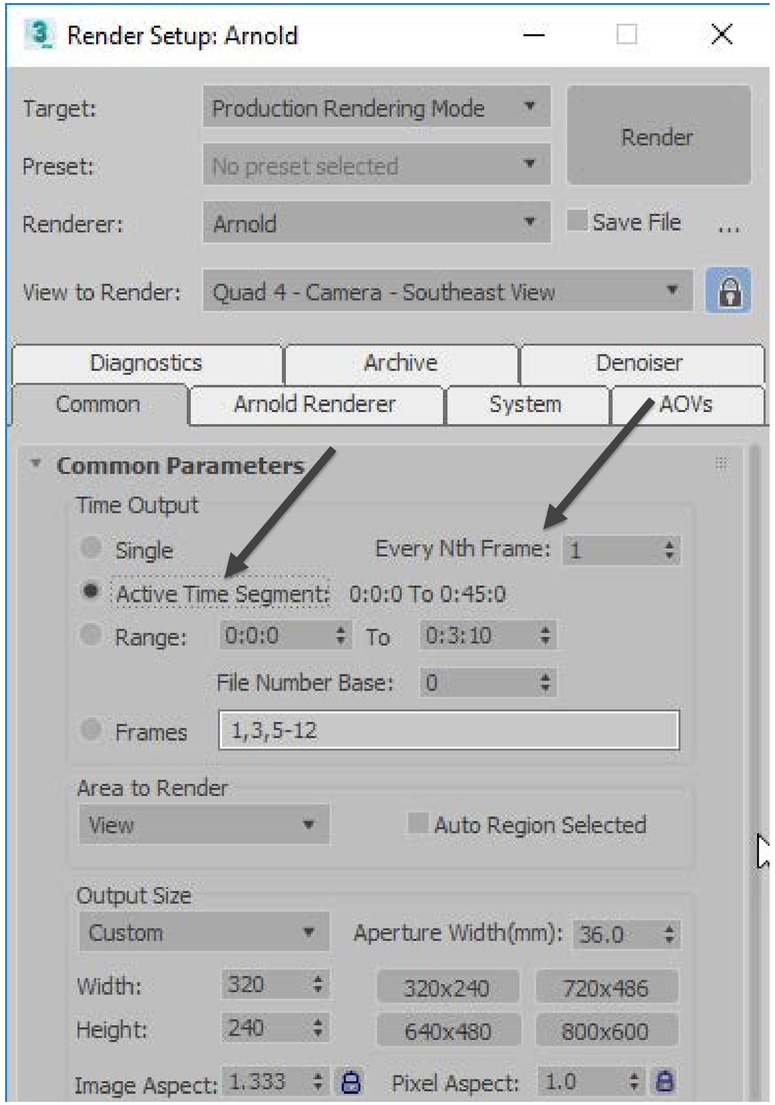
Animation Controls

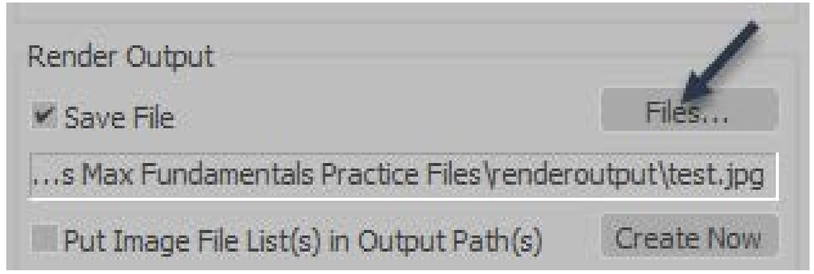
- **Auto Key**





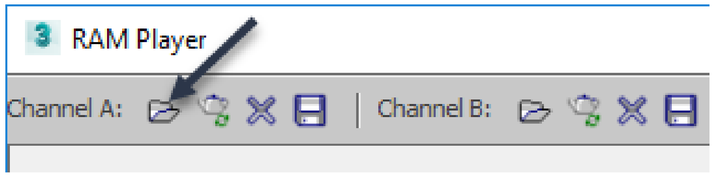
Saving the Animation

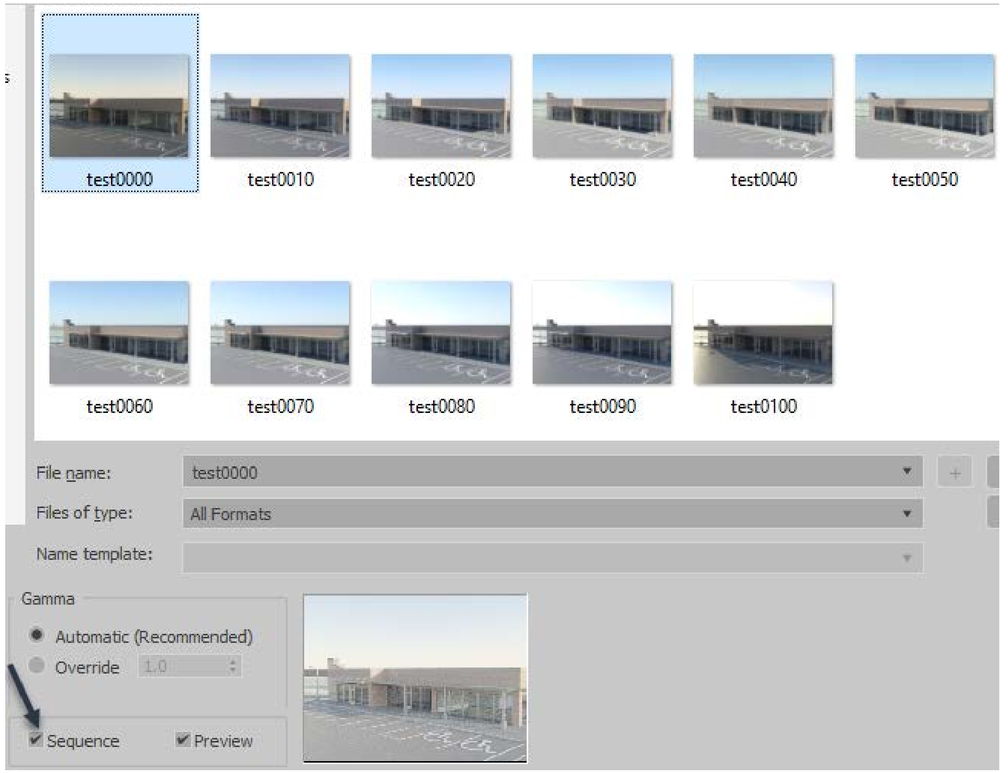




Compiling the Animation

- RAM Player





Objectives Review

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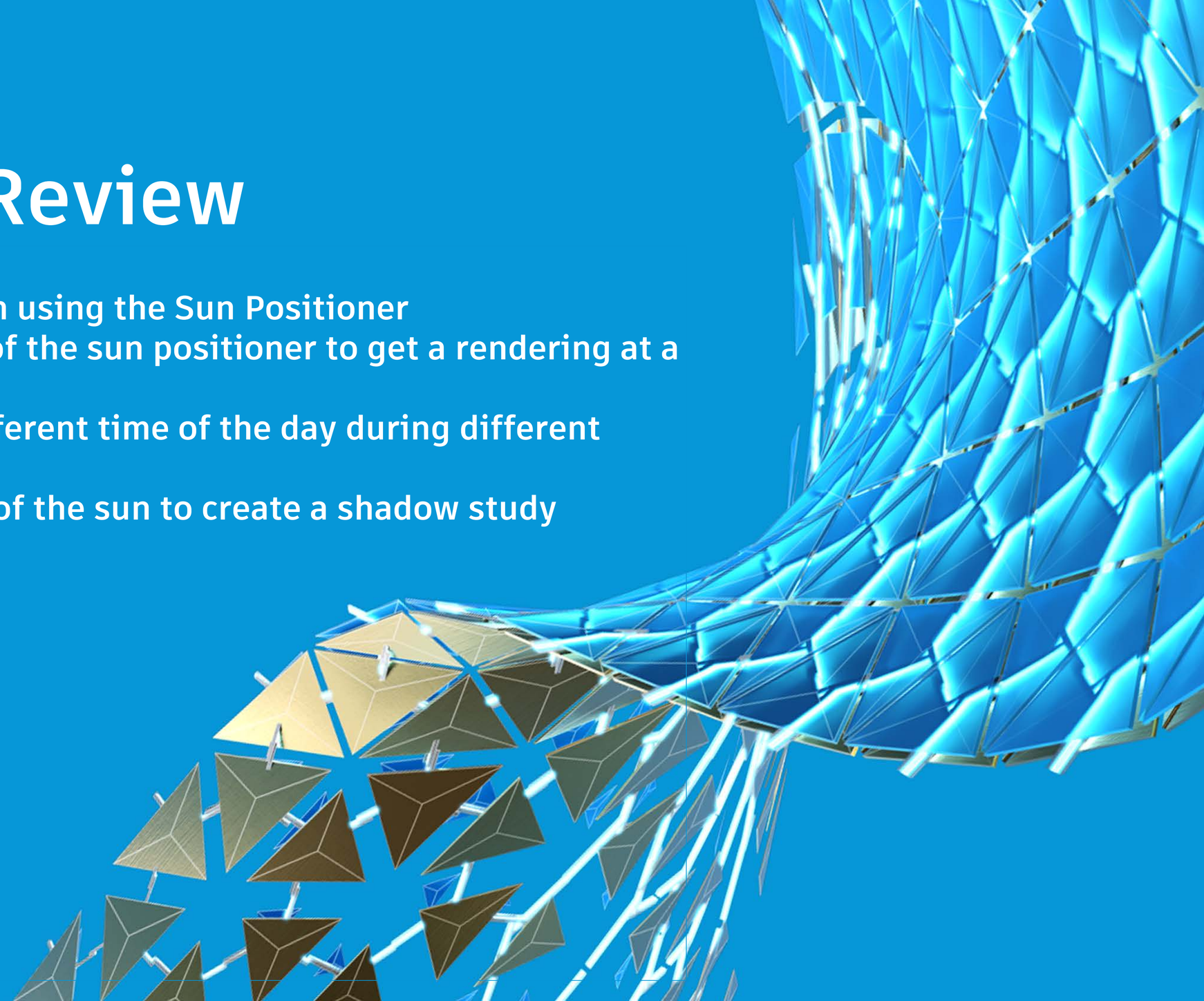

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CENTER FOR TECHNICAL KNOWLEDGE

THANK YOU!

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