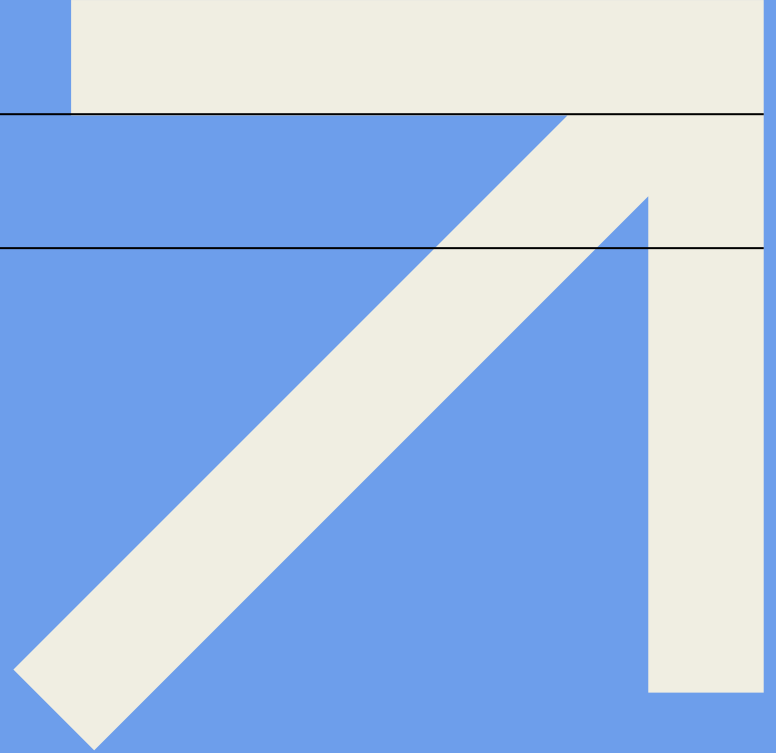


# KTX2 Viewer



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01

## Overview

Slide 03

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02

## Milestone 3 Features

Slide 04

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03

## Live Demo

Slide 06

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04

## Next Steps

Slide 07

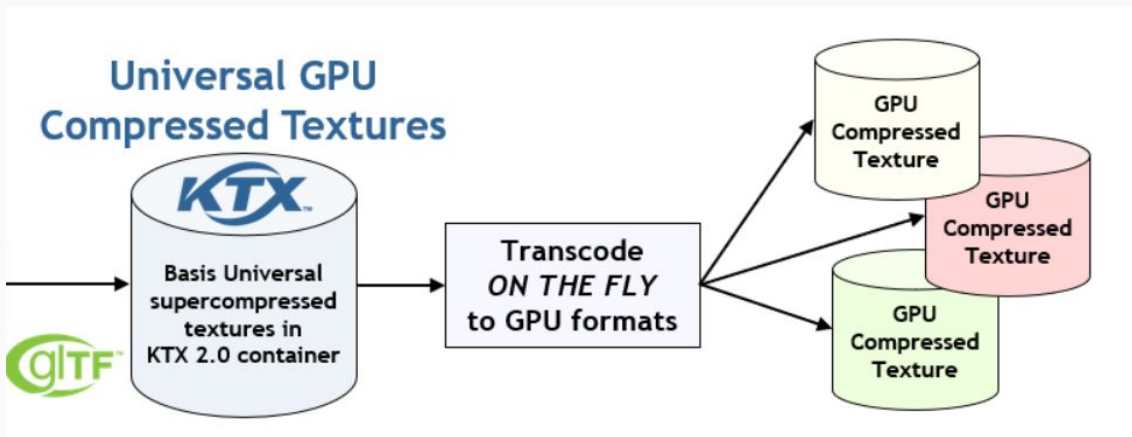
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# Overview

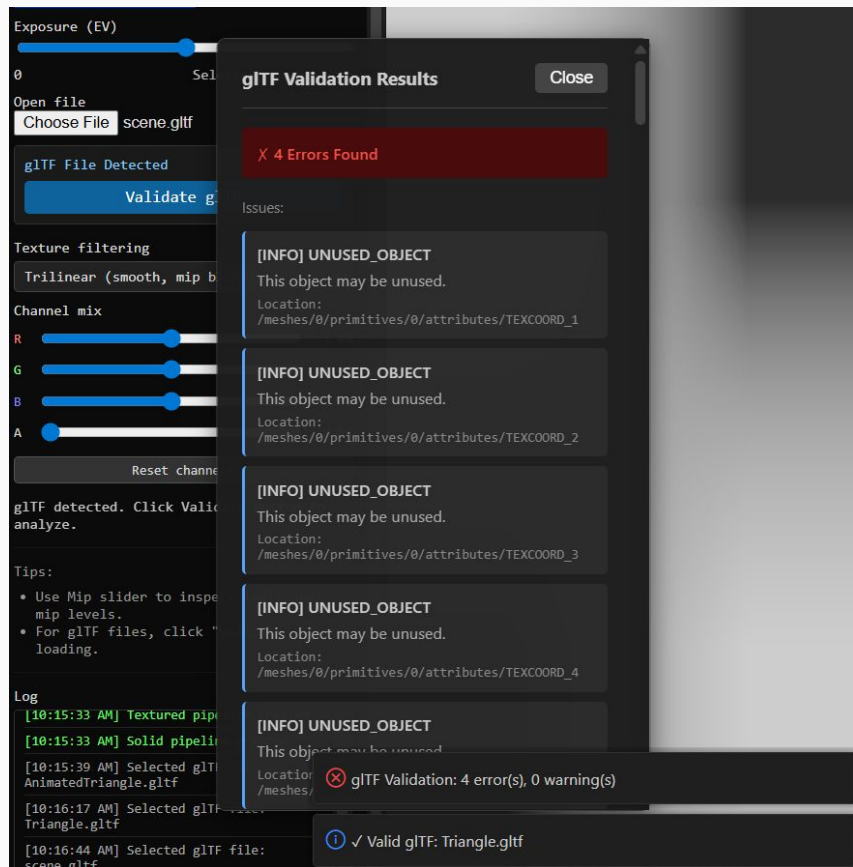
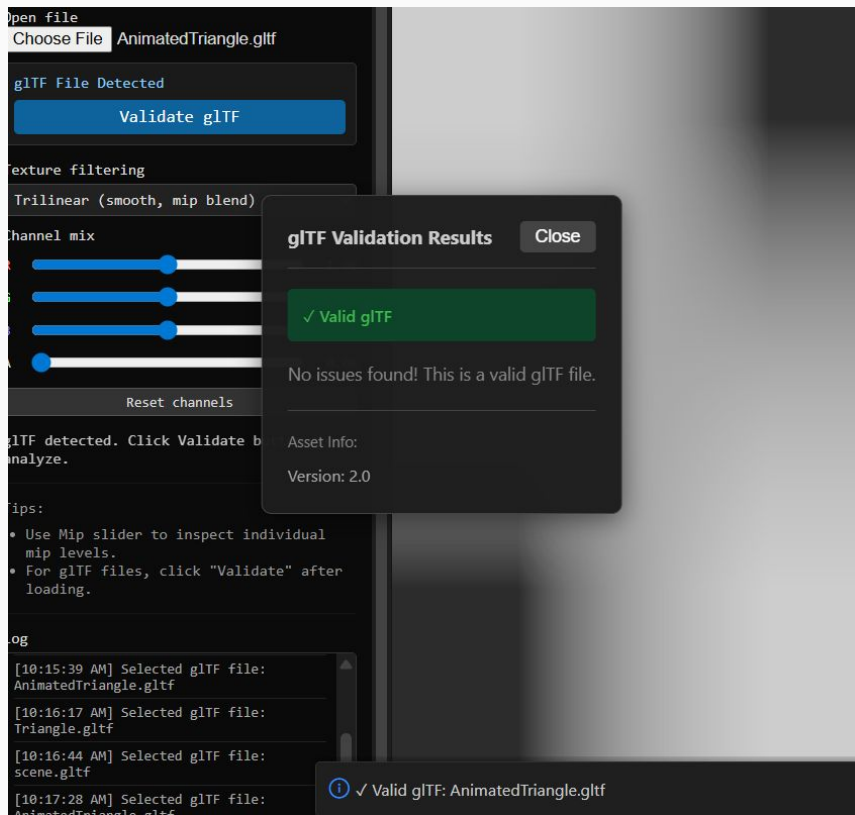
Support HDR **KTX2** Viewing within 2 pipelines: VSCode and RenderDoc

Goals:

- Adding UI
- Mobile Deployment
- GLTF Validate
- Tonemapping



# glTF Validate



# UI and Web Deployment

- Greatly enhanced UI
- Added previewing features
- Added texture info and log
- Ported everything to the web using github pages ([click here](https://harriskoko.github.io/VSCoDe-KTX-Viewer/))



Texture filtering

Nearest (sharp/pixelated) ▼

Trilinear (smooth, mip blend)

Bilinear (smooth, sharp mips)

Nearest (sharp/pixelated)

Anisotropic (high quality)

Texture Info

Dimensions:  
4096 × 2048 (2.000:1)

Format:  
BC6H FLOAT

Mip Levels:  
13

File Size:  
10.67 MB

GPU Memory:  
42.67 MB

Compression:  
4.00x (GPU/File)

Supercompression:  
None

KVD:  
KTXswizzle, KTXwriter

DFD:  
colorModel=133, transfer=1

Mipmap preview

6

☒ Show only selected mip

Channel mix

R 1.00

G 1.00

B 1.00

A 0.00

Reset channels

Log

[11:57:42 AM] WebGPU initialized successfully

[11:57:42 AM] Shaders compiled

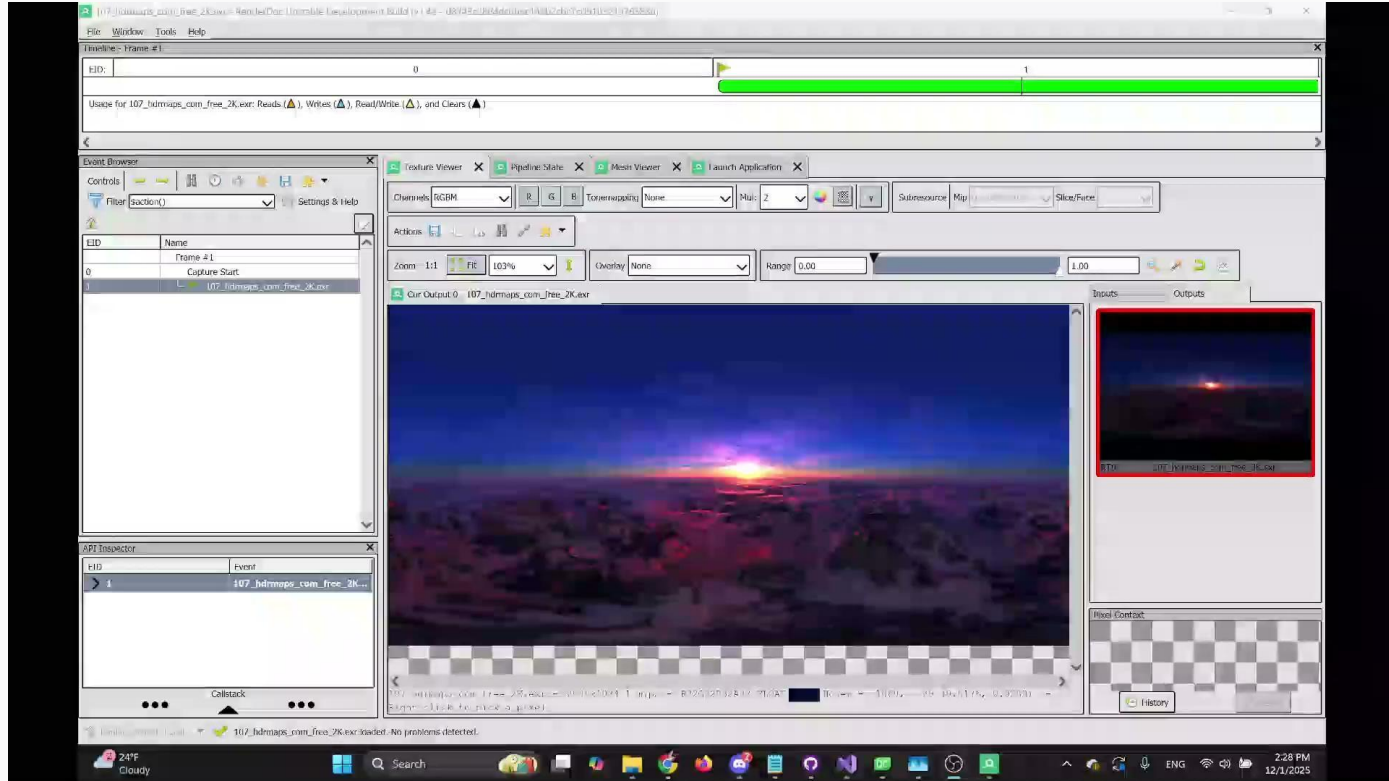
[11:57:42 AM] Textured pipeline created

[11:57:42 AM] Solid pipeline created

[11:58:06 AM] Loading KTX2 bc6h\_test.ktx2...

[11:58:06 AM] Successfully loaded KTX2

# Tonemapping (Renderdoc)



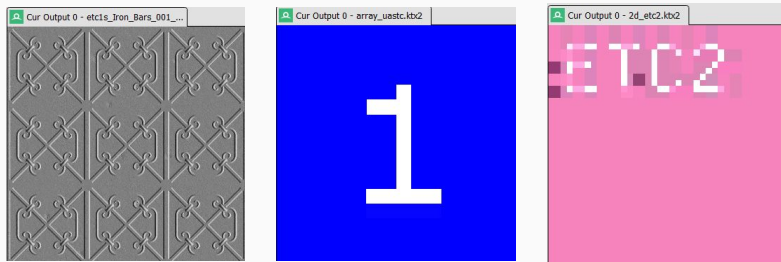
# Next Steps

## Final Presentation Goals:

- User Interaction
  - Transfer function toggle + dithering
  - Tonemapping (VSCoDe)
  - Min/max exposure controls
- Steph/Rich update
- Get ETC working on mobile

# Tonemapping

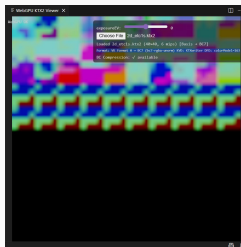
## RenderDoc



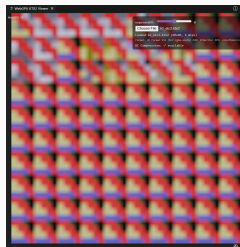
ETC1s/UASTC (supercompressed mobile)

ETC2 WIP

## VSCode



ETC1S WIP



ETC2 WIP

img	vkFormat	model
BASIS ETC1S	—	KHR_DF_MODEL_ETC1S
BASIS UASTC	—	KHR_DF_MODEL_UASTC

img	vkFormat	colorspaces
ASTC 4x4	ASTC_4x4_SRGB_BLOCK	"srgb"
ETC1	ETC2_R8G8B8_SRGB_BLOCK	"srgb"
ETC2	ETC2_R8G8B8A8_SRGB_BLOCK	"srgb"
BC1	BC1_RGB_SRGB_BLOCK	"srgb"
BC3	BC3_SRGB_BLOCK	"srgb"
BC5	BC5_UNORM_BLOCK	"srgb"
BC7	BC7_SRGB_BLOCK	"srgb"