Youtube UGC Dataset

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- [https://media.withyoutube.com/](https://media.withyoutube.com/)
- 1500 20s. raw Creative Commons videos
- 15 categories
- Resolutions 360 to 4k

Challenges with User Generated Content (UGC)

- Initial Raw Video
  - pristine
- Non-pristine uploaded version
  - huge Size
  - small Size

Misleading reference metrics

Original

- PSNR = 29.02, SSIM = 0.86, VMAF = 58.15
- Banding = 0.10, Noise = 0.12, SLEEQ = 0.21

Transcoded

- PSNR = 29.02, SSIM = 0.86, VMAF = 58.15
- Banding = 0.10, Noise = 0.12, SLEEQ = 0.18

Non-pristine uploaded version

- uploaded version (e.g. blurred)

Dataset Selection

Coverage

84% of the input samples covered

No-reference Metrics

- Spatial = 4.17
- Temporal = 1.03
- Color = 0.08
- Chunk Variation = 22.26

- PSNR = 29.02, SSIM = 0.86, VMAF = 58.15
- Banding = 0.10, Noise = 0.12, SLEEQ = 0.21

All Video Clips

Sampled Video Clips

- Avg(P/I)
- Avg(I)
- Color

- Sampled/P
- Width
- Height

- Sampled/I
- Height
- Frame

- SSE
- y_{trans}
- y_{orig}

- SSE
- y_{trans}
- y_{orig}

- std (bitrate)