

# A REAL-WORLD SATELLITE VIDEO SUBJECTIVE QOE DATABASE

## Supplementary Material

### 1. Database Description

The LIVE-Viasat Real-World Satellite QoE Database is an innovative and comprehensive resource designed to address the critical challenges faced by Internet Service Providers (ISPs), particularly in the domain of satellite streaming services. This database is based on 179 videos from actual streaming sessions over satellite networks as well as the QoE measurements and the related network packets. The videos included encompass a variety of network-induced distortions, such as stalls, bitrate changes, and resolution variations. This diversity is crucial for understanding the full spectrum of streaming challenges. Also, the database is enhanced with insights from a study involving 54 participants who provided detailed feedback on their streaming experiences.

### 2. Database Organization

```
| - Video Clips
    | - Type1
        | - video1.mkv
        | - video2.mkv
        .....
    | - Type2
        | - video1.mkv
        | - video2.mkv
        .....
    | - Type3
        | - video1.mkv
        | - video2.mkv
        .....
    | - Type4
        | - video1.mkv
        | - video2.mkv
        .....
| - pcap_files
    | - satellite
        | - pcap_file1.pcap
        | - pcap_file2.pcap
        .....
    | - fiber
        | - pcap_file1.pcap
        | - pcap_file2.pcap
        .....
| - Video_data.csv
| - Measurements_Info.csv
```

You can find the video clips of our database in the folder named 'Video\_Clips' and the network packets of the captured videos in the folder named 'pcap\_files'. The retrospective and continuous Mean Opinion Scores (MOS) according to each video clip are saved in the 'Video\_data.csv'. The QoE measurements including stall information, resolution, framerates are saved in the file 'Measurements\_Info.csv'.

### 3. Download

We are making the LIVE-Viasat Real-World Satellite QoE Database available to the research community free of charge. You can find the open-sourced database at:

<https://utexas.box.com/s/yvfk49tbd7ck1l1bndg46fthdbyhgq1>

### 4. Copyright Notice

-----COPYRIGHT NOTICE STARTS WITH THIS LINE-----

Copyright (c) 2024 The University of Texas at Austin

All rights reserved.

Permission is hereby granted, without written agreement and without license or royalty fees, to use, copy, modify, and distribute this database (the videos, the results and the source files) and its documentation for any purpose, provided that the copyright notice in its entirety appear in all copies of this database, and the original source of this database, Laboratory for Image and Video Engineering (LIVE, <http://live.ece.utexas.edu>) at the University of Texas at Austin (UT Austin, <http://www.utexas.edu>), is acknowledged in any publication that reports research using this database.

IN NO EVENT SHALL THE UNIVERSITY OF TEXAS AT AUSTIN BE LIABLE TO ANY PARTY FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF THIS DATABASE AND ITS DOCUMENTATION, EVEN IF THE UNIVERSITY OF TEXAS AT AUSTIN HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

THE UNIVERSITY OF TEXAS AT AUSTIN SPECIFICALLY DISCLAIMS ANY WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE DATABASE PROVIDED HEREUNDER IS ON AN "AS IS" BASIS, AND THE UNIVERSITY OF TEXAS AT AUSTIN HAS NO OBLIGATION TO PROVIDE MAINTENANCE, SUPPORT, UPDATES, ENHANCEMENTS, OR MODIFICATIONS.

-----COPYRIGHT NOTICE ENDS WITH THIS LINE-----