Hybrid Project – Boulder 2014 – session 2

# Objective results:

Do proponents agree to put their names and model type on the model performance analysis?

Do proponents agree to exchange the objective data among the other proponents?

**All proponents agreed.**

# Issues with PVSs:

## VGA3

Tandem coding: Encode at bitrate b\_1, the re-encode at bitrate b\_2, with b\_2 > b\_1

v03\_src12\_hrc15\_h264.pcap (2.36MB/885kB = 2.73)

Content-Base: rtsp://192.168.169.77/Tandem\_coding2\_512kbits\_1380kbits/HybridVGA3\_src12\_512\_1380kbit\_gop50\_baseline\_tandem.264/

**Open**: v03\_src12\_hrc15.

**Agreed to remove v03\_src12\_hrc15.**

## WVGA2:

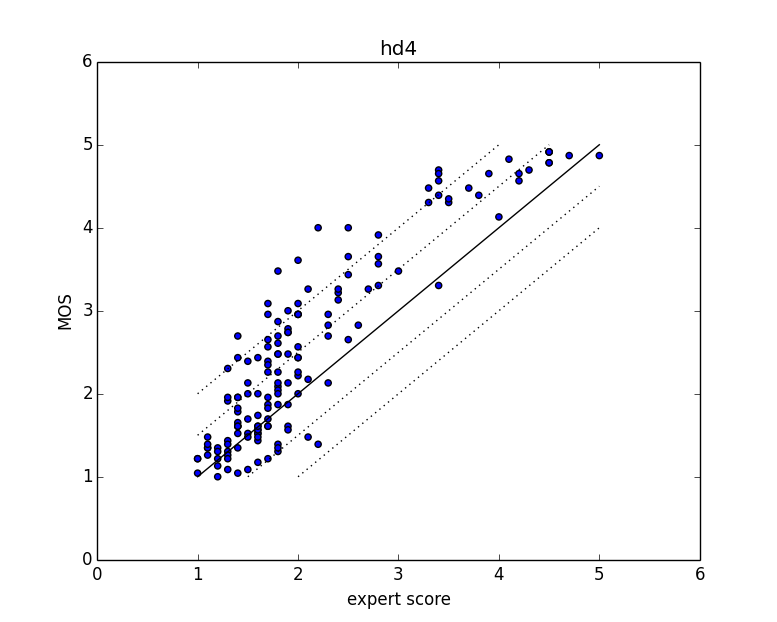
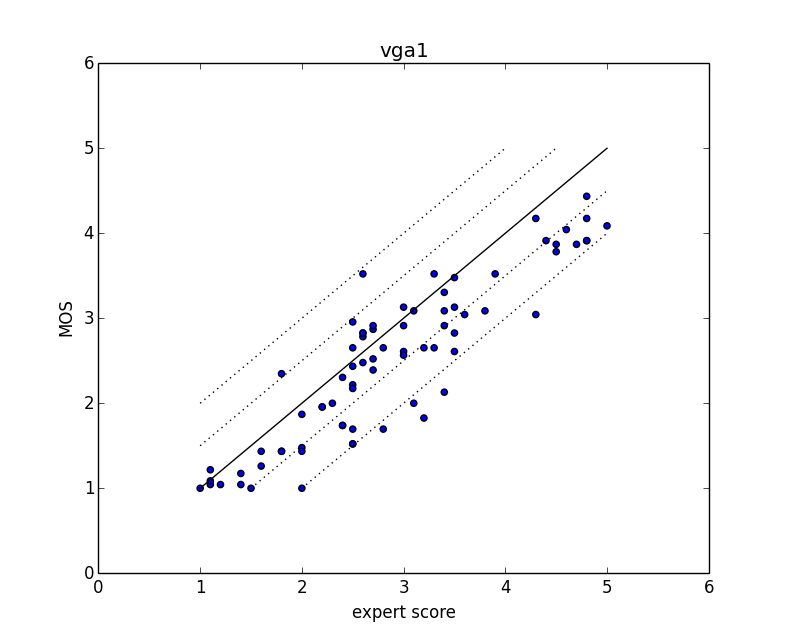
Down-up-sampling PVSs: MOS has to be equal or larger to the MOS of the samples transmitted without resizing.

|  |  |  |  |
| --- | --- | --- | --- |
| Down-Up-sampling | HRC11 | HRC04 | Same resolution |
| HybridWGA2\_src01\_hrc11\_WVGA\_25fps.avi | 1.52 | 2.96 | HybridWGA2\_src01\_hrc04\_WVGA\_25fps.avi |
| HybridWGA2\_src02\_hrc11\_WVGA\_25fps.avi | 1.57 | 1.30 | HybridWGA2\_src02\_hrc04\_WVGA\_25fps.avi |
| HybridWGA2\_src03\_hrc11\_WVGA\_25fps.avi | 1.39 | 1.57 | HybridWGA2\_src03\_hrc04\_WVGA\_25fps.avi |
| HybridWGA2\_src04\_hrc11\_WVGA\_25fps.avi | 1.61 | 1.04 | HybridWGA2\_src04\_hrc04\_WVGA\_25fps.avi |
| HybridWGA2\_src05\_hrc11\_WVGA\_25fps.avi | 1.57 | 1.48 | HybridWGA2\_src05\_hrc04\_WVGA\_25fps.avi |
| HybridWGA2\_src06\_hrc11\_WVGA\_25fps.avi | 1.39 | 1.91 | HybridWGA2\_src06\_hrc04\_WVGA\_25fps.avi |
| HybridWGA2\_src07\_hrc11\_WVGA\_25fps.avi | 1.35 | 1.09 | HybridWGA2\_src07\_hrc04\_WVGA\_25fps.avi |
| HybridWGA2\_src08\_hrc11\_WVGA\_25fps.avi | 1.57 | 2.09 | HybridWGA2\_src08\_hrc04\_WVGA\_25fps.avi |
| Average | 1.49 | 1.68 |  |
|  |  |  |  |
| HybridVGA3\_csrc02\_hrc11\_WVGA\_25fps\_dec.avi | 2.35 |  |  |
| HybridVGA3\_csrc04\_hrc11\_WVGA\_25fps\_dec.avi | 2.52 |  |  |
|  |  |  |  |
|  | HRC09 | HRC03 |  |
| HybridWVGA1\_csrc01\_hrc09\_WVGA\_25fps\_dec.avi | 1.22 |  |  |
| HybridVGA2\_csrc03\_hrc09\_WVGA\_25fps\_dec.avi | 1.09 | 1.65 | HybridWVGA2\_csrc03\_hrc03\_WVGA\_25fps\_dec.avi |
| HybridWGA2\_src01\_hrc09\_WVGA\_25fps.avi | 3.87 | 3.09 | HybridWGA2\_src01\_hrc03\_WVGA\_25fps.avi |
| HybridWGA2\_src02\_hrc09\_WVGA\_25fps.avi | 3.43 | 2.48 | HybridWGA2\_src02\_hrc03\_WVGA\_25fps.avi |
| HybridWGA2\_src03\_hrc09\_WVGA\_25fps.avi | 3.00 | 2.52 | HybridWGA2\_src03\_hrc03\_WVGA\_25fps.avi |
| HybridWGA2\_src04\_hrc09\_WVGA\_25fps.avi | 3.52 | 1.78 | HybridWGA2\_src04\_hrc03\_WVGA\_25fps.avi |
| HybridWGA2\_src05\_hrc09\_WVGA\_25fps.avi | 2.74 | 2.00 | HybridWGA2\_src05\_hrc03\_WVGA\_25fps.avi |
| HybridWGA2\_src06\_hrc09\_WVGA\_25fps.avi | 3.43 | 2.35 | HybridWGA2\_src06\_hrc03\_WVGA\_25fps.avi |
| HybridWGA2\_src07\_hrc09\_WVGA\_25fps.avi | 3.22 | 2.00 | HybridWGA2\_src07\_hrc03\_WVGA\_25fps.avi |
| HybridWGA2\_src08\_hrc09\_WVGA\_25fps.avi | 3.78 | 3.17 | HybridWGA2\_src08\_hrc03\_WVGA\_25fps.avi |

**Agreed to keep HRC11.**

# Review of Subjective Results

## Expert ratings for some data sets:



Comments:

VGA1: the MOS scores are in general lower than the expert scores. This might partly explain the low MOS on the reference sequences.

HD4: the plot shows a strong non-linear relationship between expert scores and MOS scores.

## Source scores:

Some sources have a MOS below 4 (see plots MOS of sources, analyse\_subjective\_score\_source.py).

hd1\_src02.avi

hd2\_src03.avi

hd2\_src05.avi

hd2\_src08.avi

vga1\_src03.avi

vga1\_src09.avi

vga1\_src10.avi

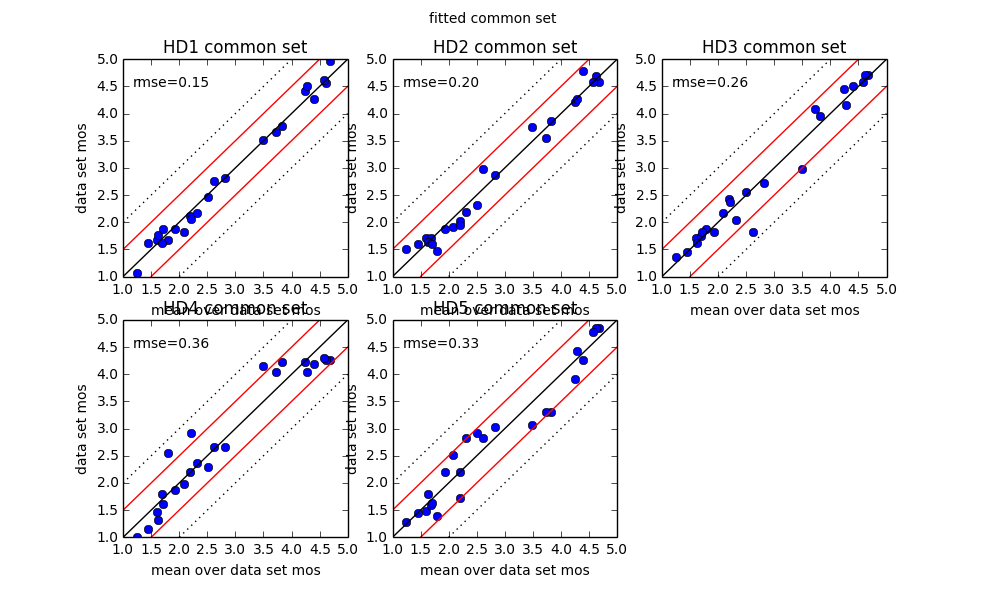
vga3\_src05.avi

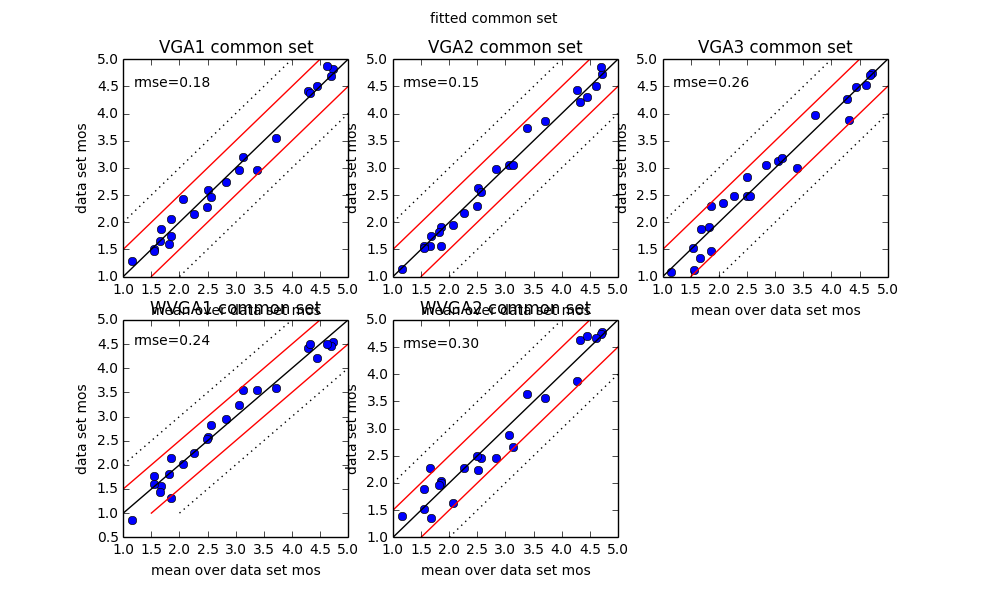
ILG will review these source videos and make a decision.

# Common Set Mapping

Common set ratings, difference per experiment

(See plots analyse\_subjective\_score\_common.py)





**Accepted: Move superset analysis to secondary analysis.**