# COSPAD EXPERIMENT @ ACREO

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### EXPERIMENT DESIGN

- Passive 3DTV (Hyundai S456D 46 inch)
- Splitting PVS in two set of equal quality distribution
- Repeating SRCxHRC set as common set (Basket)
- Two viewing distances (3H and 5H)

	3H	5H
Group 1	VideoSet A	VideoSet B
Group 2	VideoSet B	VideoSet A



### USED SCALES

Rate the following properties of the video sequence

Video quality	Visual discomfort	Sense of presence
<ul> <li>Excellent</li> </ul>	<ul> <li>No discomfort</li> </ul>	○ Excellent
Good	Strange feeling, but not discomfortable	Good
∘ Fair	<ul> <li>Slightly discomfortable</li> </ul>	∘ Fair
<ul> <li>Poor</li> </ul>	<ul> <li>Discomfortable</li> </ul>	○ Poor
∘ Bad	<ul> <li>Very discomfortable</li> </ul>	∘ Bad
	[]	
	OK	



### TEST SUBJECTS

- mean 33.7, median 29, max 62 and min 18
- 14 Swedish subjects and 14 international
- 1 pre-screened and 3 post-screened



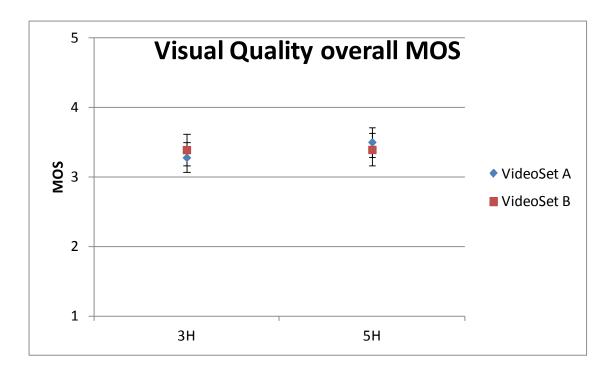
#### **CROSSLAB CORRELATION**

	FRA	KOR	SWE
FRA	1,00	0,97	0,98
KOR		1,00	0,98
SWE			1,00



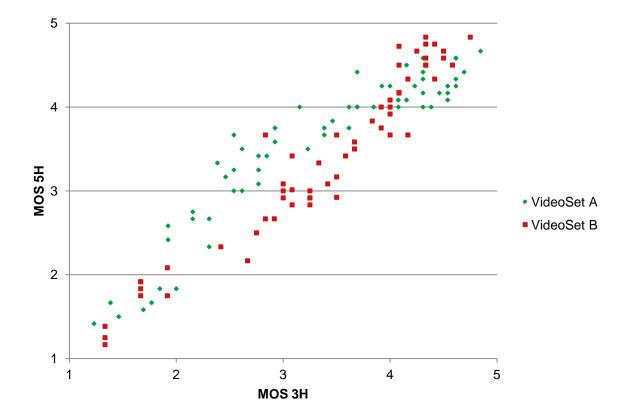
### QUALITY @ 3H AND 5H

- Analysis only separate (so far)
- Difference non-significant



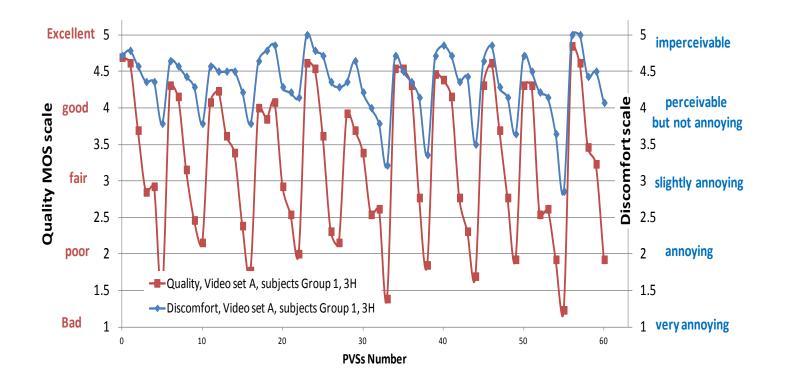


#### QUALITY @ 3H AND 5H





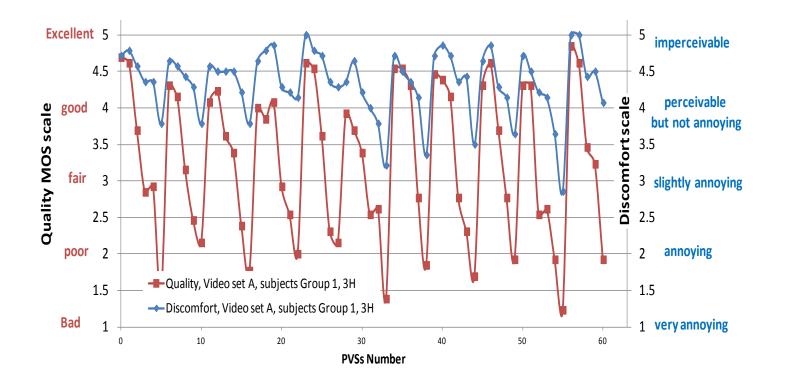
### QUALITY VS DISCOMFORT



Correlation: 0.87 for 3H and 0.95 for 5H



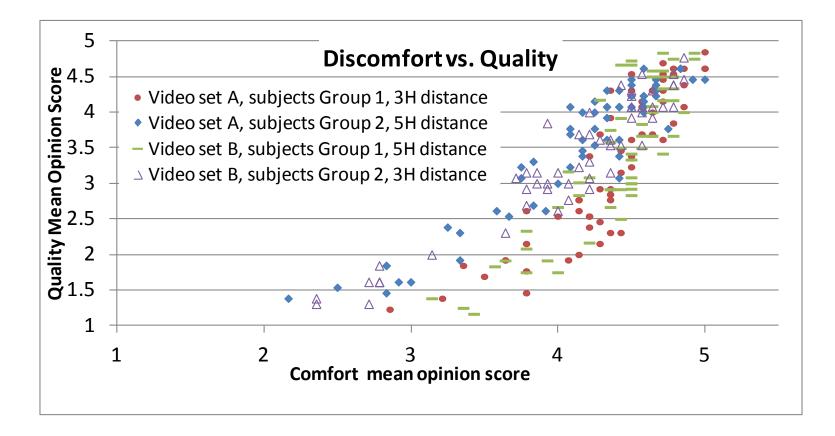
### QUALITY VS PRESENCE



Correlation: 0.86 for 3H and 0.93 for 5H



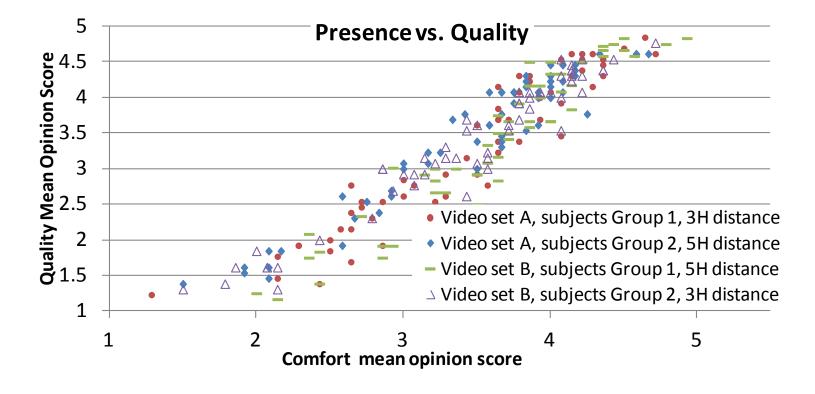
### QUALITY VS DISCOMFORT



Significant difference between Group 1 and Group 2 in discomfort



### QUALITY VS PRESENCE



No Significant difference found



## CONCLUSIONS

- No significand visual quality difference: 3H & 5H
- In questionniare a majority preferred 5H
- Close relation between different scale
  - Likely due to the conditions are not demanding enough
- Group 1 discomfort ratings significantly different each other (Questionnaire supports that)

