Comparison between ACR and SAMVIQ

Kyoto VQEG meeting
March 2008

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ACR vs SAMVIQ

ACR	SAMVIQ
Category rating	continuous scale (label, numbers+ graphical)
No explicit reference	Explicit reference + hidden
PVS is viewed only once (80 PVS per 30 min.)	PVS can be replayed on request (around 40 PVS per 30 min.)
Randomisation per session	Randomisation per content

Subjective QA Experiments at different resolution

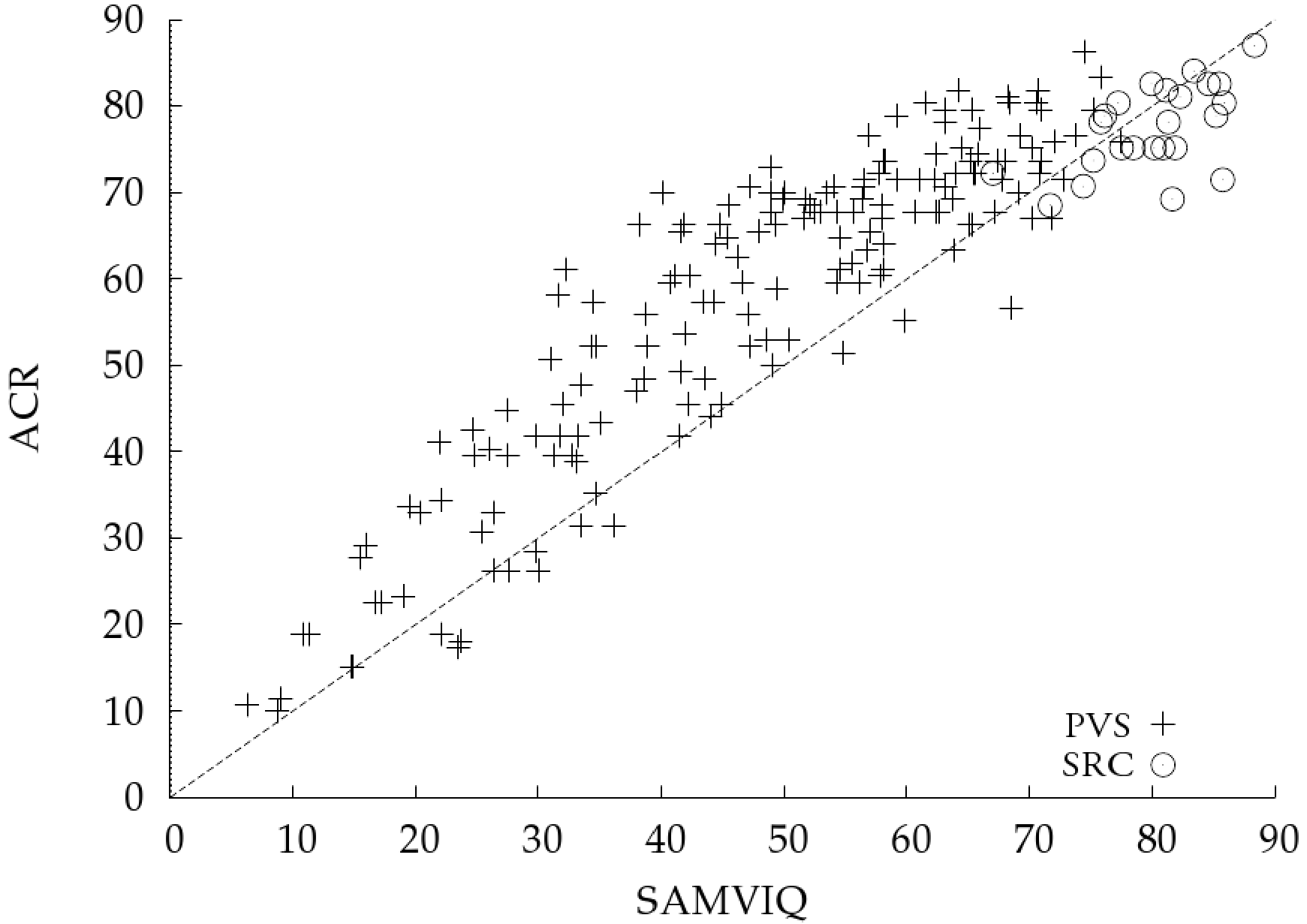
Format	Resolution	d	f (in °)
QVGA	320×240	$6H$	13
CIF *	352×288	$6H$	12
VGA	640×480	$4H$	19
TVHD	1920×1080	$3H$	33

* From Matthew D. Brotherton, Quan Huynh-Thu, David S.Hands, and Kjell Brunnström, "Subjective multimedia quality assessment," IEICE Trans. Fundam. Electron. Commun. Comput. Sci., vol. E89-A, no. 11, pp. 2920–2932, 2006.

Correlation coefficients between ACR and SAMVIQ

QVGA	0.969
CIF	0.94
VGA	0.942
HD	0.899

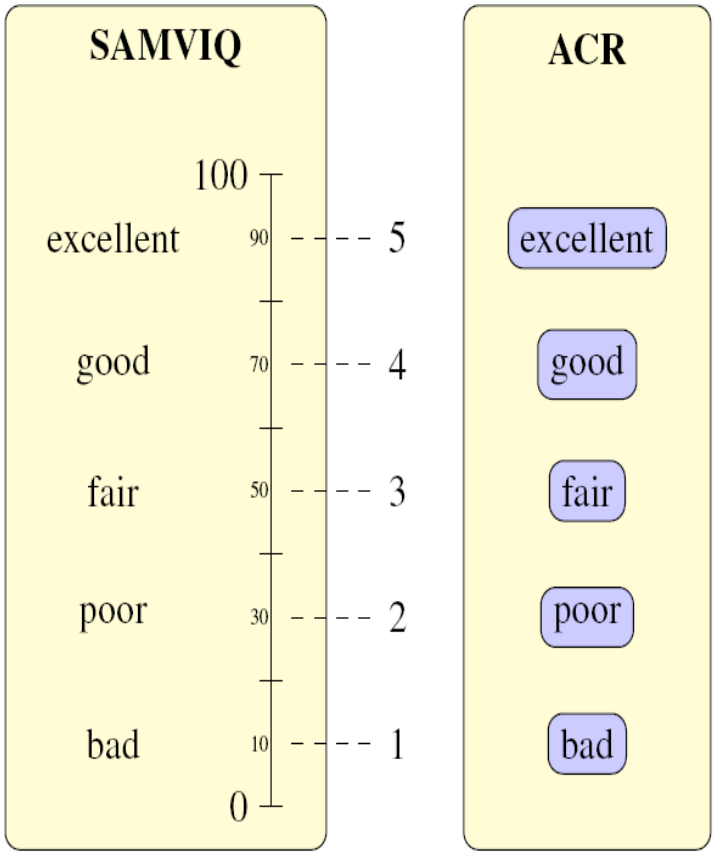
HD set



Scales adjustment

ACR => between 1 and 5

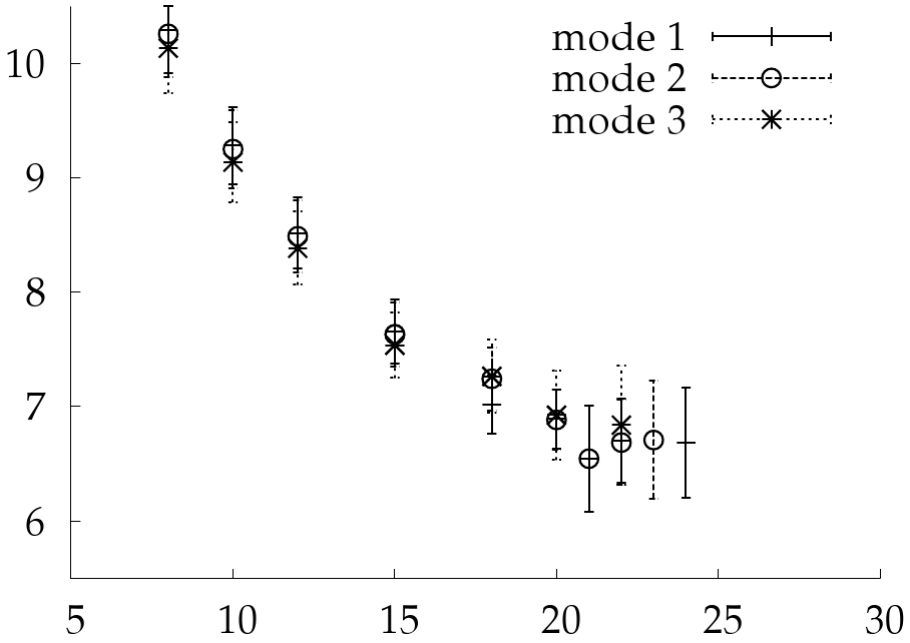
SAMVIQ => between 0 and 100



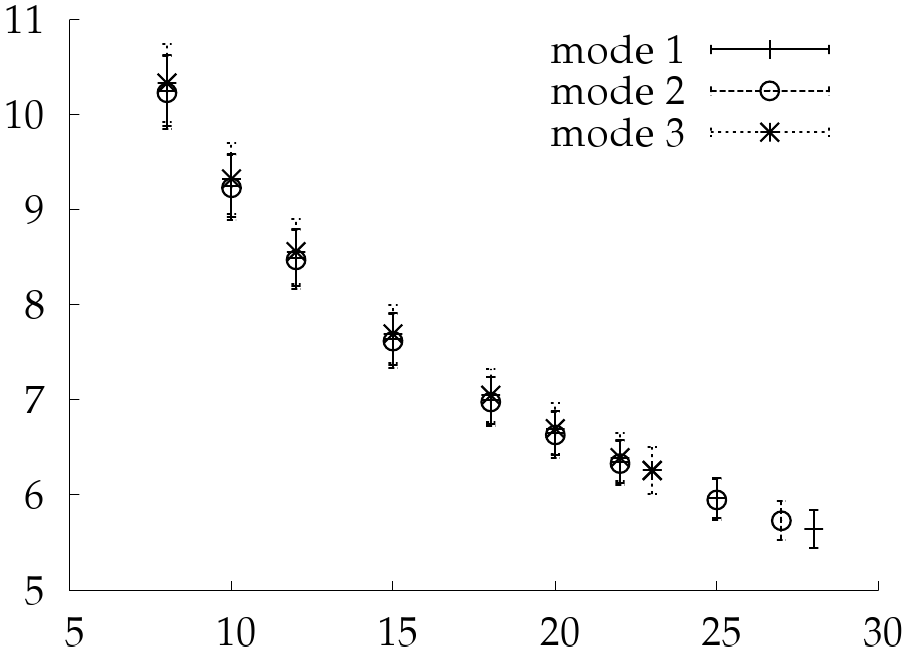
Philip Corriveau, Christina Gojmerac, Bronwen Hughes, and Lew Stelmach, "All subjective scales are not created equal: the effects of context on different scales," Signal Processing, vol. 77, no. 1, pp. 1–9, 1999.

Confidence intervals and the number of observers

from SAMVIQ



from ACR



mode 1 : without rejection
mode 2 : with ACR rejection
mode 3: with SAMVIQ rejection

Confidence intervals in function of the number of observers

# observers	CI SAMVIQ	CI ACR
8	10.296	12.815
10	9.284	11.567
12	8.519	10.619
15	7.658	9.550
18	7.014	8.749
20	6.893	8.315
22	6.701	7.940
25	5.964	7.461