

$(Y/\Delta Y) / (Y/\Delta Y)_u$

HAULAB-Y contrast

normalized to  $(Y/\Delta Y)_u$

$$C_r/C_{ru} = (Y/\Delta Y)/(Y/\Delta Y)_u$$

$$L^* = s(Y/Y_n)^n - d \quad (Y_n=100, Y_u=30, s=163,9, n=0,31, d=63,9) \quad [1a]$$

$$L^* = r(Y/Y_u)^n - d \quad (r = s(Y_u/Y_n)^n = 96,32, L^*_u = r - d = 32,4) \quad [1b]$$

$$Y/dY = Y / \{ [ (Y_n / (n s) ) ] (Y / Y_n)^{1-n} \} \quad [4c]$$

