

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

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

HAULAB-Y contrast  
normalized to  $(Y/\Delta Y)_u$

$$L^* = s(Y/Y_u)^n - d \quad (Y_u=100, Y_u=39, s=137,2, n=0,31, d=52,8) [1a]$$

$$L^* = r(Y/Y_u)^n - d \quad (r = s(Y_u/Y_u)^n = 80,63, L^*_u = r-d = 27,7) \quad [1b]$$

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

$$(Y/Y_u) = Y_u / \{ [(Y_u/(n s)](Y_u/Y_u)^{1-n} \} \quad [4d]$$

$$(Y/dY) / (Y/dY)_u = (Y/Y_u)^n \quad [4e]$$

