NW-achromatic, and *RG*- and *YB*-chromatic thresholds as function of Y

experiments and data: BAM-research report no. 115 (1985), page 72, see
$\log[\Delta Y, \Delta a \cdot Y, \Delta b \cdot Y]$ https://nbn-resolving.org/urn:nbn:de:kobv:b43-3350

tristimulus value threshold ΔY, **see LABJND in TR CIE 230:219**
RG-**chromaticity threshold** $\Delta a \cdot Y$
YB-**chromaticity threshold** $\Delta b \cdot Y$
$\Delta a = x_1 / y_1 - x_2 / y_2$
$\Delta b = z_1 / y_1 - z_2 / y_2$
office-application range
according to ISO 9241-306

$\Delta b \cdot Y$ **YB-direction**
$\Delta a \cdot Y$ **RG-direction**
ΔY **NW-direction**

$\Delta Y = Y_2 - Y_1$
Y_1 Y_2
$Y_u = 18$
$Y_w = 90$

$Y_W = 90$

$\Delta Y = s + c\, Y = 0{,}017 + 0{,}0058\, Y$
$\Delta Y / \Delta Y_u = (1 + 6{,}14\, Y/Y_u) / (1 + 6{,}14)$

ΔY_W
ΔY_u
ΔY_N
ΔY_{N1}

$Y_{N1} = 0{,}9$ $Y_N = 3{,}6$ $Y_u = 18$

$\log Y$