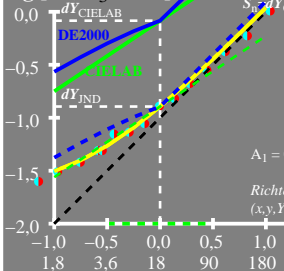


$\log [dY, A_3 \cdot \Delta a \cdot Y]$



$$dY = A_1 [1 + A_2/A_1 Y]$$

$$S_u = dY_{\text{CIELAB}} / dY_{\text{JND}} = 6.4$$

x_r	dY_u	Y
-1.0	0.027	1.8
-0.5	0.059	5.6
0.0	0.127	18.0
0.5	0.274	56.9
1.0	0.592	180

$$A_2/A_1 = 0.2895$$

$$A_1 = 0.0205 \quad A_2 = 0.0059$$

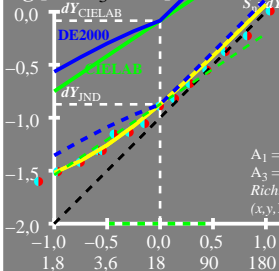
Richter_D_PO2_022S (red and blue dots)

$$(x, y, Y)_u = (0.33, 0.36, 18)$$

$$x_r = \log[Y/Y_{18}]$$

1.8 3.6 18 90 180 Y

$\log [dY, A_3 \cdot \Delta a \cdot Y]$



$$dY = A_1 [1 + A_2/A_1 Y]$$

$S_9 \cdot dY_{CIE LAB} / dY_{JND} = 6.1$

x_r	dY_u	Y
-1.0	0.028	1.8
-0.5	0.062	5.6
0.0	0.133	18.0
0.5	0.288	56.9
1.0	0.621	180

$$A_2/A_1 = 0.3405$$

$$A_1 = 0.0187 \quad A_2 = 0.0063$$

$$A_3 = 1.0 \quad A_4 = 1.0$$

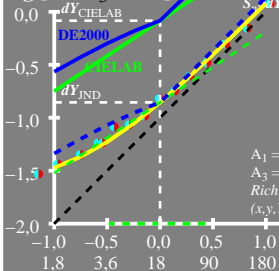
Richter_D_PO2_066S (red and blue circles)

$$(x, y, Y)_u = (0.33, 0.36, 18)$$

$x_r = \log[Y/Y_{18}]$

1.8 3.6 18 90 180 Y

$\log [dY, A_3 \cdot \Delta a \cdot Y]$



$$dY = A_1 [1 + A_2/A_1 Y]$$

$$S_{dY} = dY_{CIE LAB} / dY_{JND} = 5.9$$

x_r	dY_u	Y
-1.0	0.03	1.8
-0.5	0.064	5.6
0.0	0.139	18.0
0.5	0.3	56.9
1.0	0.647	180

$$A_2/A_1 = 0.298$$

$$A_1 = 0.0219 \quad A_2 = 0.0065$$

$$A_3 = 1.179 \quad A_4 = 1.685$$

Richter_P_PO4_066A ●

$$(x, y, Y)_u = (0.33, 0.36, 18)$$

$$x_r = \log[Y/Y_{18}]$$

1.8 3.6 18 90 180 Y