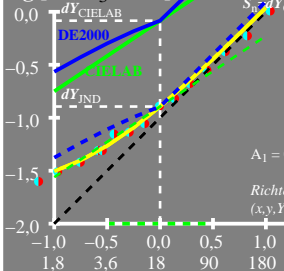


$\log [dY, A_3 \cdot \Delta a \cdot Y]$



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

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

x_r	dY_n	Y
-1.0	0.031	1.8
-0.5	0.054	5.6
0.0	0.127	18.0
0.5	0.359	56.9
1.0	1.091	180

$$A_2/A_1 = 0.2895$$

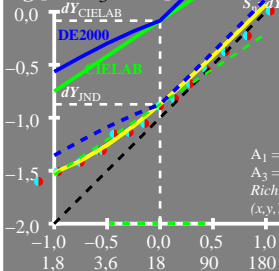
$$A_1 = 0.0205 \quad A_2 = 0.0059$$

Richter_D_PO2_022S ● ●
 $(x, y, Y)_u = (0.33, 0.36, 18)$

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

1.8 3.6 18 90 180 Y

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



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

x_r	dY_n	Y
-1.0	0.03	1.8
-0.5	0.055	5.6
0.0	0.133	18.0
0.5	0.382	56.9
1.0	1.17	180

$$A_2/A_1 = 0.3405$$

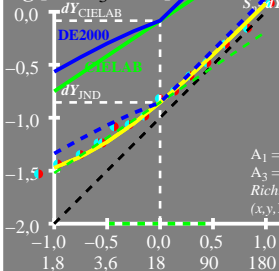
$$A_1 = 0.0187 \quad A_2 = 0.0063$$

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

Richter_D_PO2_066S (red and cyan circles)

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

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



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

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

x_r	dY_n	Y
-1.0	0.033	1.8
-0.5	0.059	5.6
0.0	0.139	18.0
0.5	0.394	56.9
1.0	1.198	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 ●

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

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

$$Y$$