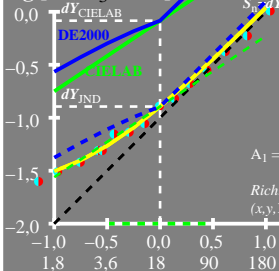


$\log [dY, A_3 \cdot \Delta a \cdot Y]$



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

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

x_r	dY_n	Y
-1.0	0.042	1.8
-0.5	0.077	5.6
0.0	0.127	18.0
0.5	0.397	56.9
1.0	1.257	180

$$A_2/A_1 = 0.2895$$

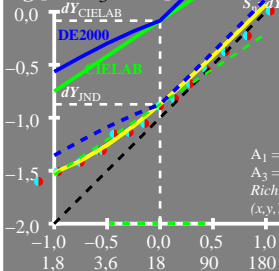
$$A_1 = 0.0205 \quad A_2 = 0.0059$$

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

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



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

$S_9 \cdot dY_{\text{CIELAB}}/dY_{\text{JND}} = 6.1$

x_r	dY_n	Y
-1.0	0.044	1.8
-0.5	0.081	5.6
0.0	0.133	18.0
0.5	0.417	56.9
1.0	1.319	180

$$A_2/A_1 = 0.3405$$

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

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

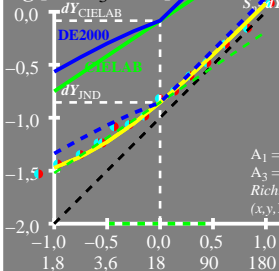
Richter_D_PO2_066S (red and cyan circles)

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

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

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_n	Y
-1.0	0.045	1.8
-0.5	0.085	5.6
0.0	0.139	18.0
0.5	0.434	56.9
1.0	1.375	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