

### log(L\*) LABJND1-Helligkeit

log(L\*)  $\Delta L^*$

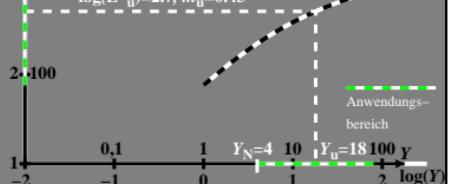
4 10000

$$L^*_{\text{LABJND1}} = (t/a) \ln (1 + a \cdot Y) \quad a=0.3411 \quad t/a=258.6$$

$$L^*_{\text{LABJND1}} = (t/a) \ln [1 + b \cdot (Y/Y_u)] = 6.1411 \quad t/a=258.6$$

$$L^*_u=508, Y_u=18, dY_u=0.08, dY_u/Y_u=0.004$$

$$\log(L^*_u)=2.7, m_u=-0.43$$



BGT10-1A

### log ΔY LABJND1-Normfarbwertdifferenz

log(ΔY)  $\Delta Y^*_{\text{LABJND1}} = (t/a) \ln (1 + a \cdot Y) \quad a=0.3411 \quad t/a=258.6$

$$dL^*/dY = t / (1 + a \cdot Y) \quad s=0.017 \quad q=0.0058$$

$$dL^*/dY = t / [1 + (a \cdot Y_u) (Y/Y_u)] \quad t=88.23$$

#### LABJND1-Normfarbwertdifferenz

$$\log(dY) = \log [(s + q \cdot Y) / c] \quad c=1.5$$

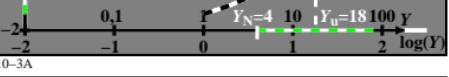
$$= \log [(1 + a \cdot Y) / t] \quad t=c/s=88.23$$

$$= \log [(1 + (a \cdot Y_u) (Y/Y_u)) / t] \quad t=c/s=88.23$$

$$= \log [(1 + b \cdot (Y/Y_u)) / t] \quad b=Y_u=6.14$$

$$Y_u=18, dY_u=0.08, dY_u/Y_u=0.004$$

$$\log(dY)=-1.09, m_u=0.86$$



BGT10-3A

log(ΔY/Y)

log(C\_r)  $C_r=(\Delta Y/Y)$

### LABJND1-Normfarbwertempfindlichkeit

$$L^*_{\text{LABJND1}} = (t/a) \ln (1 + a \cdot Y) \quad a=0.3411 \quad t/a=258.6$$

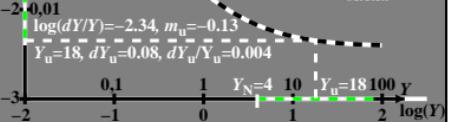
#### LABJND1-Normfarbwertempfindlichkeit

$$\log(dY/Y) = \log [(1 + a \cdot Y) / (t \cdot Y)]$$

$$= \log [(1 + b \cdot (Y/Y_u)) / (t \cdot Y)]$$

$$Y_u=18, dY_u=0.08, dY_u/Y_u=0.004$$

$$\log(dY/Y)=-2.34, m_u=-0.13$$



BGT10-5A

log(Y/ΔY)

log(S\_r)  $S_r=(Y/ΔY)$

### LABJND1-Normfarbwertkontrast

$$L^*_{\text{LABJND1}} = (t/a) \ln (1 + a \cdot Y) \quad a=0.3411 \quad t/a=258.6$$

#### LABJND1-Normfarbwertkontrast

$$\log(Y/dY) = \log [(1 + a \cdot Y) / (t \cdot Y)]$$

$$Y_u=18, dY_u=0.08, Y_u/dY_u=222$$

$$\log(Y/dY)=2.34, m_u=0.13$$



BGT10-7A

### log(L\*/L\*\_u) Relative LABJND1-Helligkeit

log(L\*/L\*\_u)

2 100

$$L^*/L^*_{\text{u}} = (t/a) \{ \ln (1 + a \cdot Y) - \ln (1 + a \cdot Y_u) \}$$

$$L^*/L^*_{\text{u}} = (t/a) \{ \ln [1 + b \cdot (Y/Y_u)] - \ln [1 + b \cdot (Y_u/Y)] \}$$

$$a=0.3411 \quad t=88.23 \quad b=6.1411 \quad t/a=258.6$$

1 10

$$L^*_u=508, Y_u=18, dY_u=0.08, dY_u/Y_u=0.004$$

$$\log[(L^*)/(L^*_u)]=0, m_u=0.43$$



BGT10-2A

### log(ΔY/ΔY\_u) Relative LABJND1-Normfarbwertdifferenz

log(ΔY/ΔY\_u)

2 100

$$L^*_{\text{LABJND1}} = (t/a) \ln (1 + a \cdot Y) \quad a=0.3411 \quad t/a=258.6$$

#### Relative LABJND1-Normfarbwertdifferenz

$$\log(dY/dY_u) = \log [(1 + a \cdot Y) / t] - \log [(1 + a \cdot Y_u) / t]$$

$$= \log [(1 + b \cdot (Y/Y_u)) / t] - \log [(1 + b \cdot (Y_u/Y)) / t]$$

$$Y_u=18, dY_u=0.08, dY_u/Y_u=0.004$$

$$\log[(dY)/(dY_u)]=0, m_u=0.86$$



BGT10-4A

### log [(ΔY/Y) / (ΔY\_u/Y\_u)] Relative LABJND1-Normfarbwertempfindlichkeit

2 100

$$L^*_{\text{LABJND1}} = (t/a) \ln (1 + a \cdot Y) \quad a=0.3411 \quad t/a=258.6$$

#### Relative LABJND1-Normfarbwertempfindlichkeit

$$\log((dY/Y) / (dY_u/Y_u)) = \log [(1 + a \cdot Y) / (t \cdot Y)] - \log [(1 + a \cdot Y_u) / (t \cdot Y_u)]$$

$$Y_u=18, dY_u=0.08, dY_u/Y_u=0.004$$

$$\log[(dY)/(dY_u)]=0, m_u=-0.13$$



BGT10-6A

### log [(Y/ΔY) / (Y\_u/ΔY\_u)] Relative LABJND1-Normfarbwertkontrast

2 100

$$L^*_{\text{LABJND1}} = (t/a) \ln (1 + a \cdot Y) \quad a=0.3411 \quad t/a=258.6$$

#### Relativer LABJND1-Normfarbwertkontrast

$$\log((Y/dY) / (Y_u/dY_u)) = \log [(1 + a \cdot Y) / (t \cdot Y)] - \log [(1 + a \cdot Y_u) / (t \cdot Y_u)]$$

$$Y_u=18, dY_u=0.08, Y_u/dY_u=222$$

$$\log[(Y/dY) / (Y_u/dY_u)]=0, m_u=0.13$$



BGT10-8A

BGT10-7N