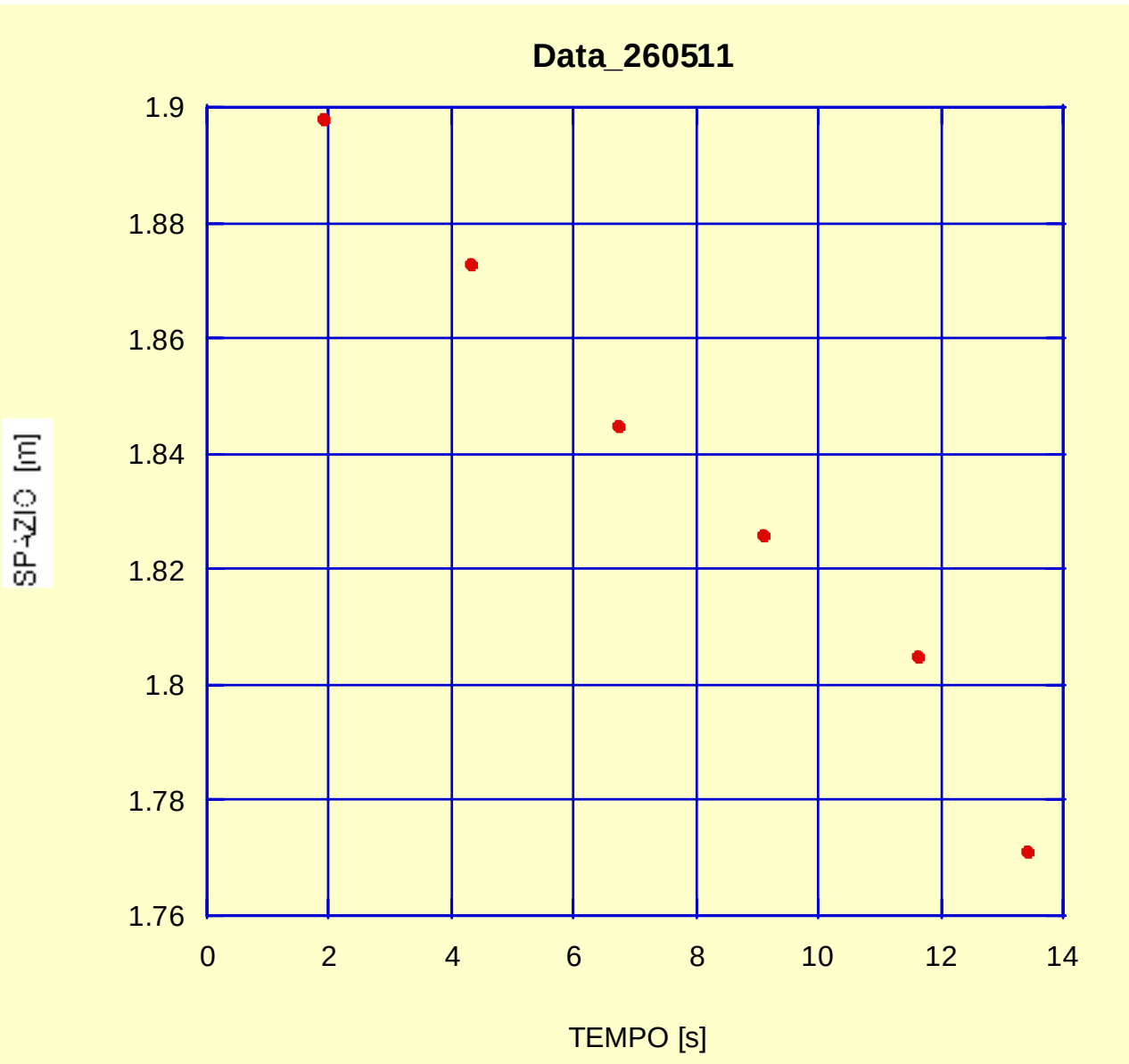
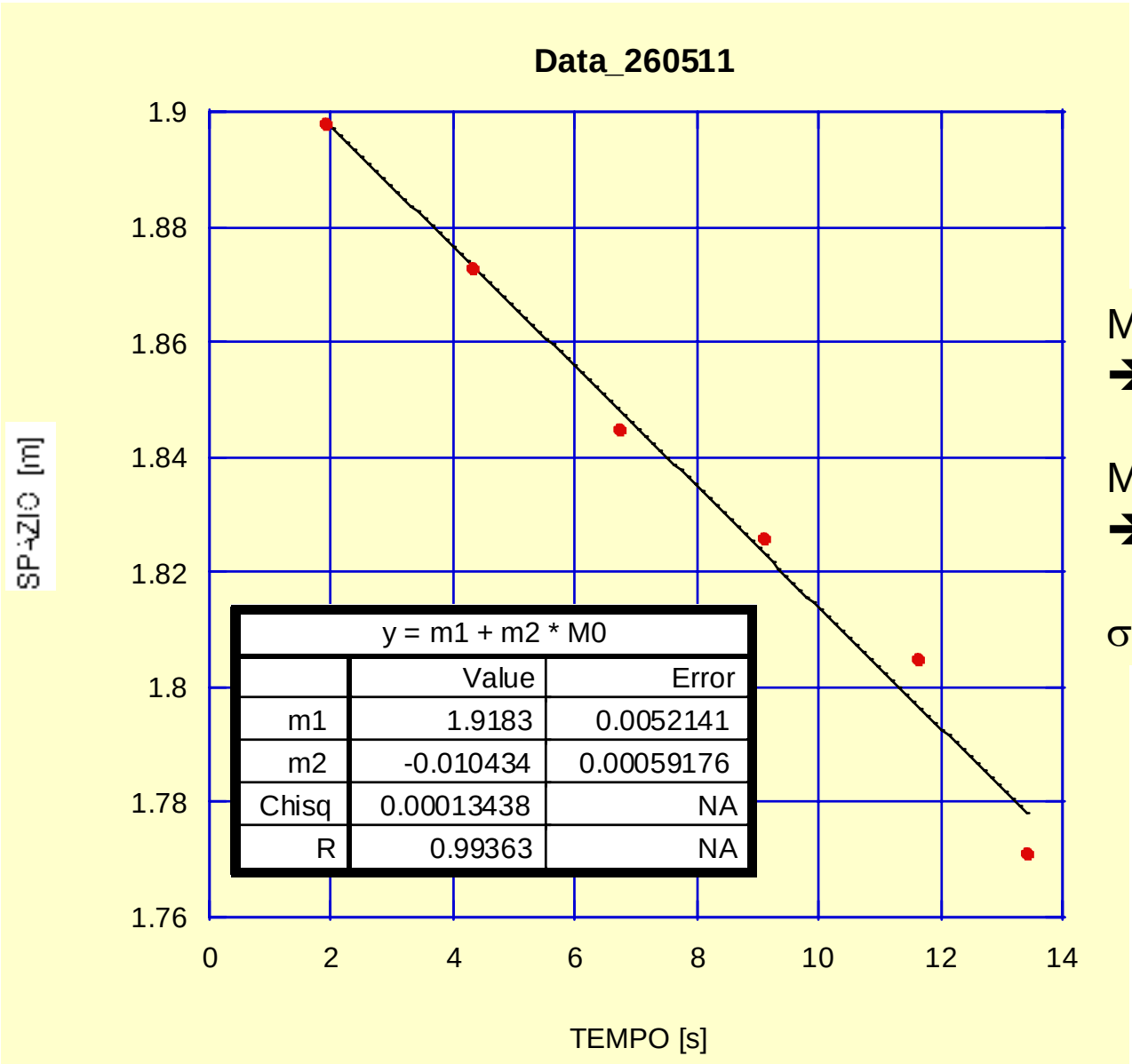
# Note su:
# scelta tra varie dipendenze funzionali "fittate" con KALEIDAGRAPH sui dati

# … misure di ampiezze smorzate nel moto di un carrello su piano inclinato con molla




| [s] | [m] |
|---|---|
| 1.9130 | 1.8980 |
| 4.3150 | 1.8730 |
| 6.7170 | 1.8450 |
| 9.1190 | 1.8260 |
| 11.622 | 1.8050 |
| 13.424 | 1.7710 |

# m1 + m2 * M0; m1 = 1; m2 = 1



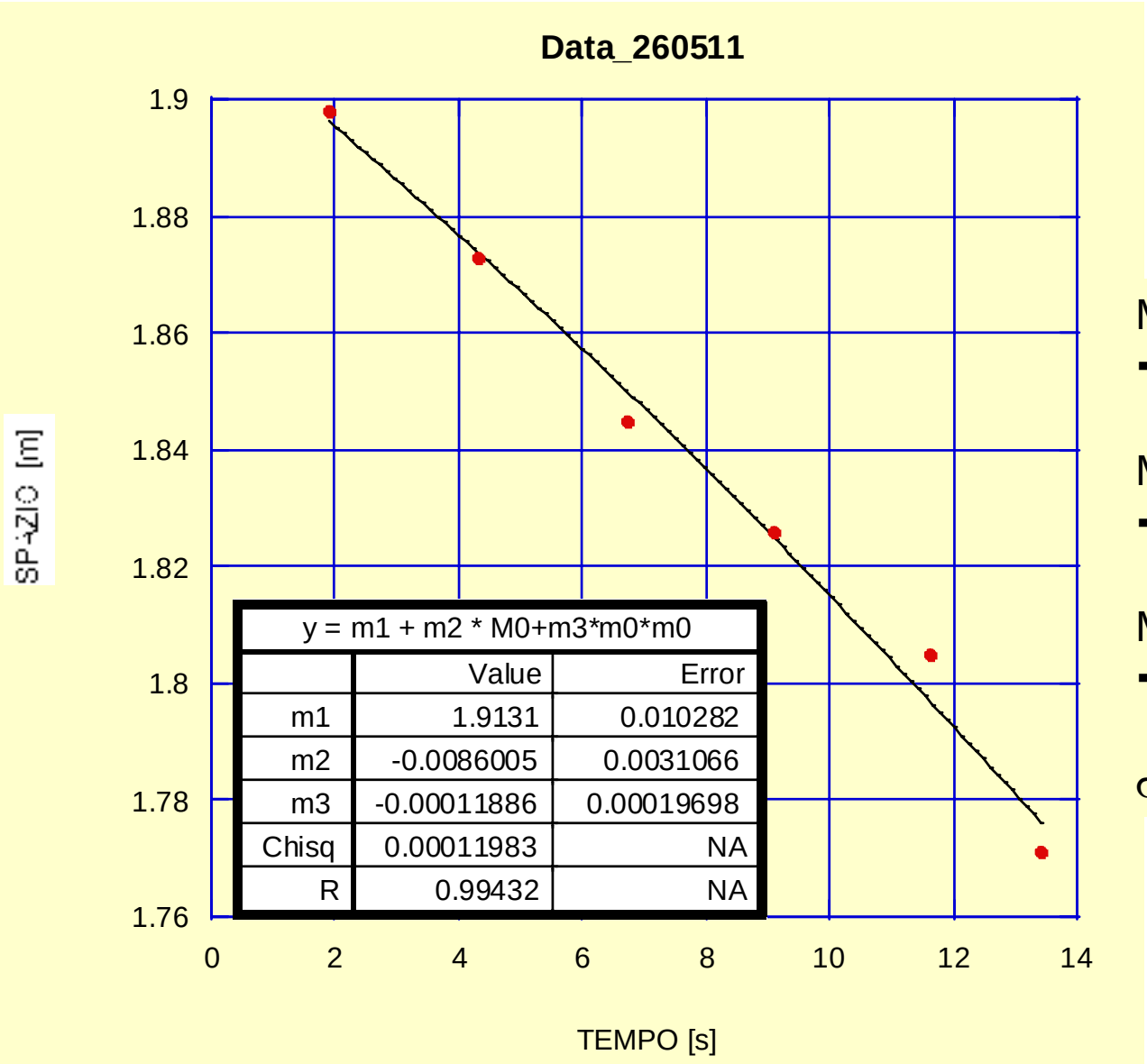

... RETTA

M1=(1.9183 ± 0.0052) m
➔± 0.27 %

M2=(0.01004 ± 0.00059) $ms^{-1}$
➔± 5.9 %

$\sigma_{fit}$ = 0.0058 m

# m1 + m2 * M0+m3*m0*m0; m1 = 1; m2 = 1;m3=1




**… PARABOLA**

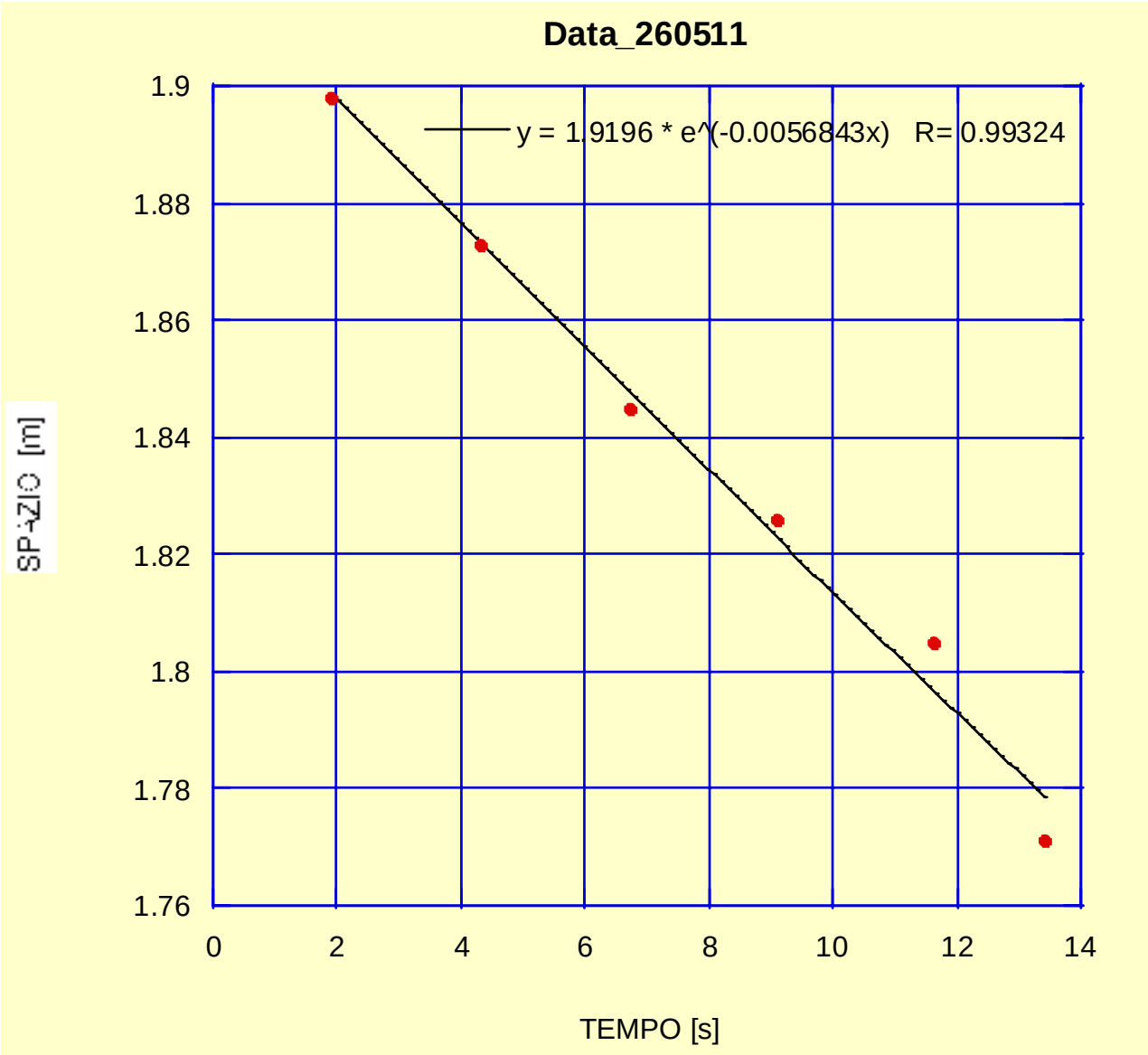
M1=(1.913 ± 0.010) m
➔ ± 0.52 %

M2=(0.0086 ± 0.0031) $ms^{-1}$
➔± 36 % !!!

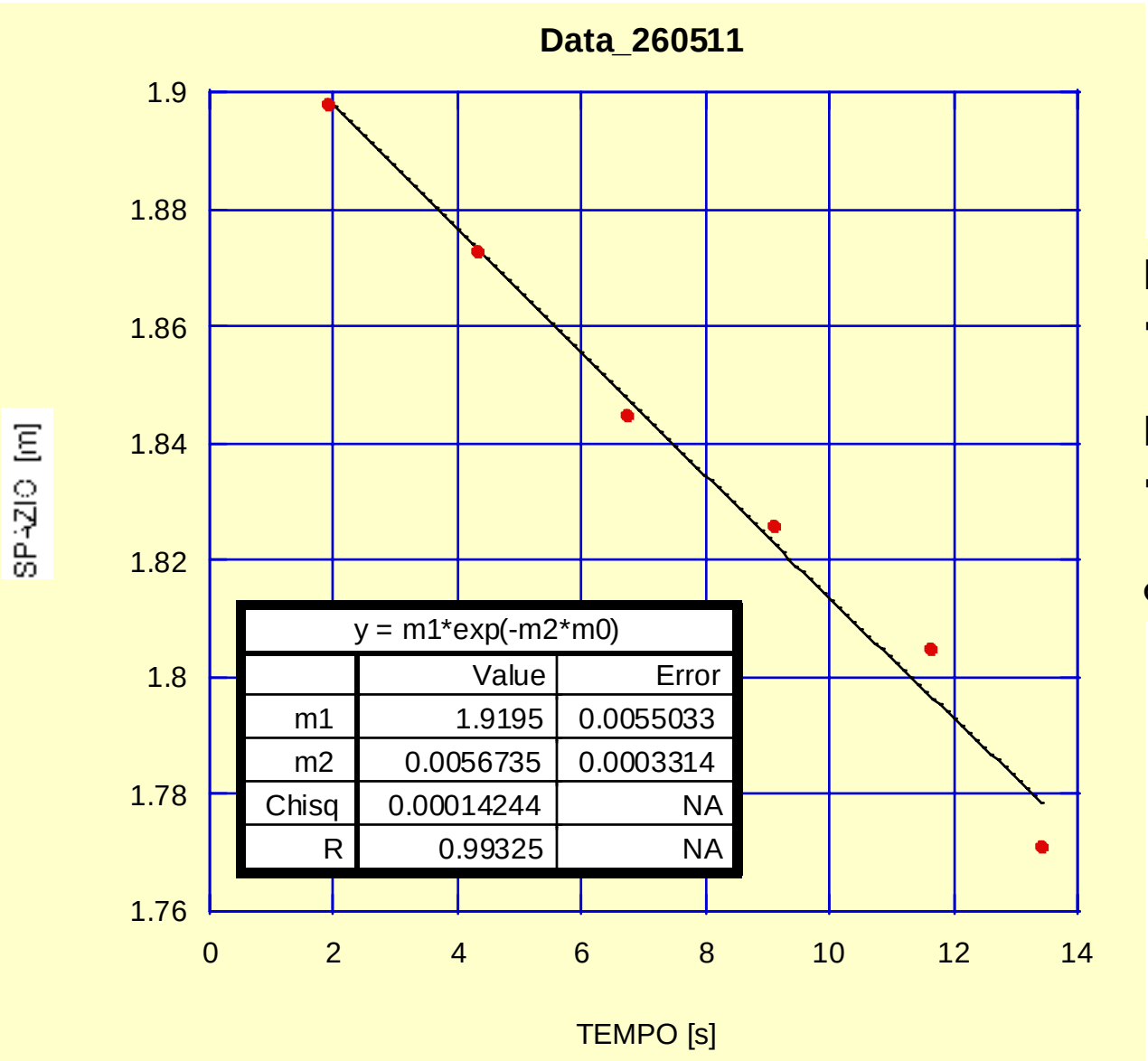
M3=(0.00012 ± 0.00020) m
➔ ± 1.7 !!!

$\sigma_{fit}$ = 0.0063 m

# … tentativo per i migliori parametri…..ma senza i relativi errori!



# m1*exp(-m2*m0);m1=1.9;m2=0.006




## … ESPONENZIALE

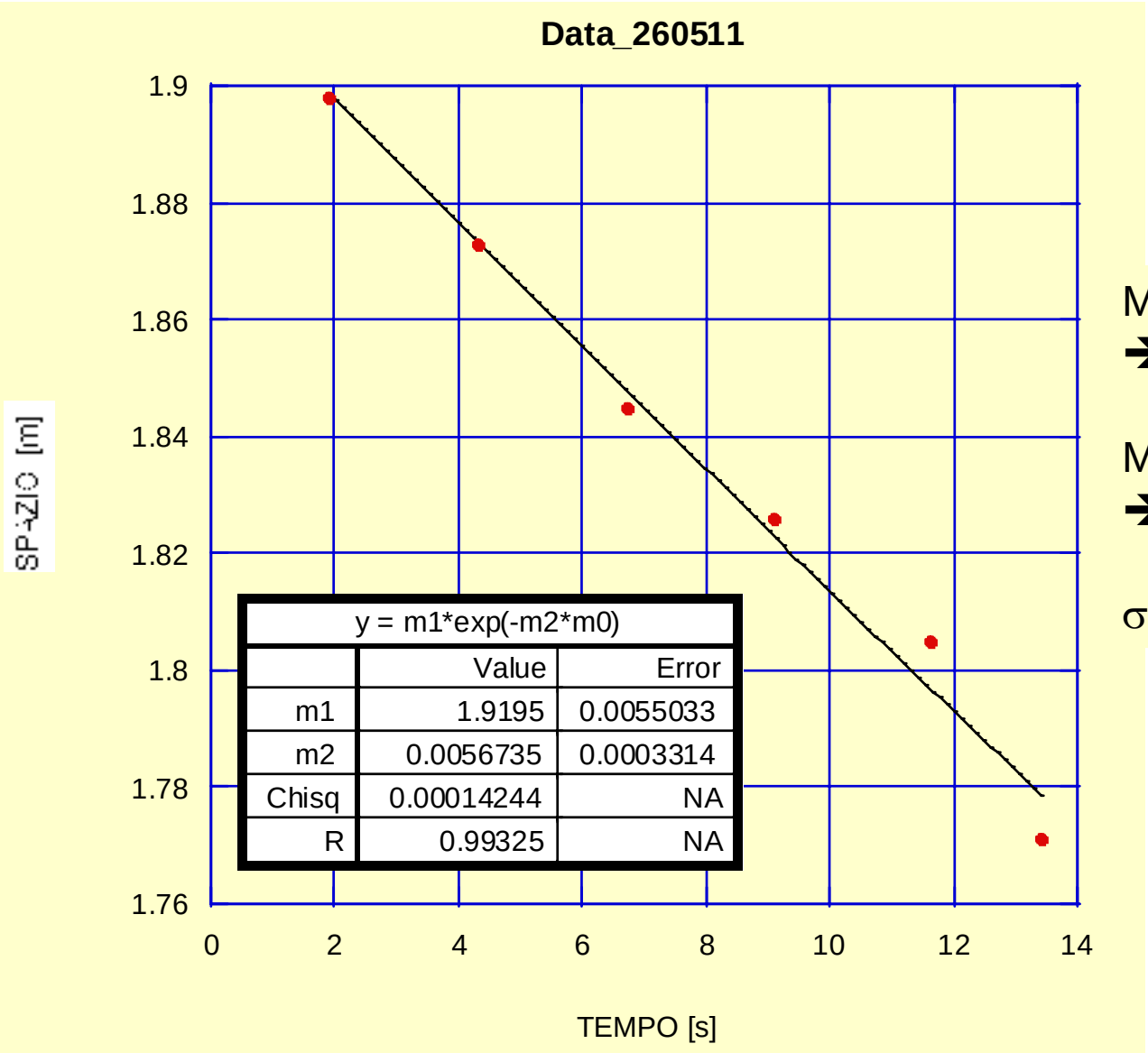
M1=(1.9195 ± 0.0055) m
➔± 0.29 %

M2=(0.00567 ± 0.00033) $ms^{-1}$
➔± 5.8 %

$\sigma_{fit}$ = 0.0060 m

# … ESPONENZIALE

**m1*exp(-m2*m0);m1=1;m2=1**



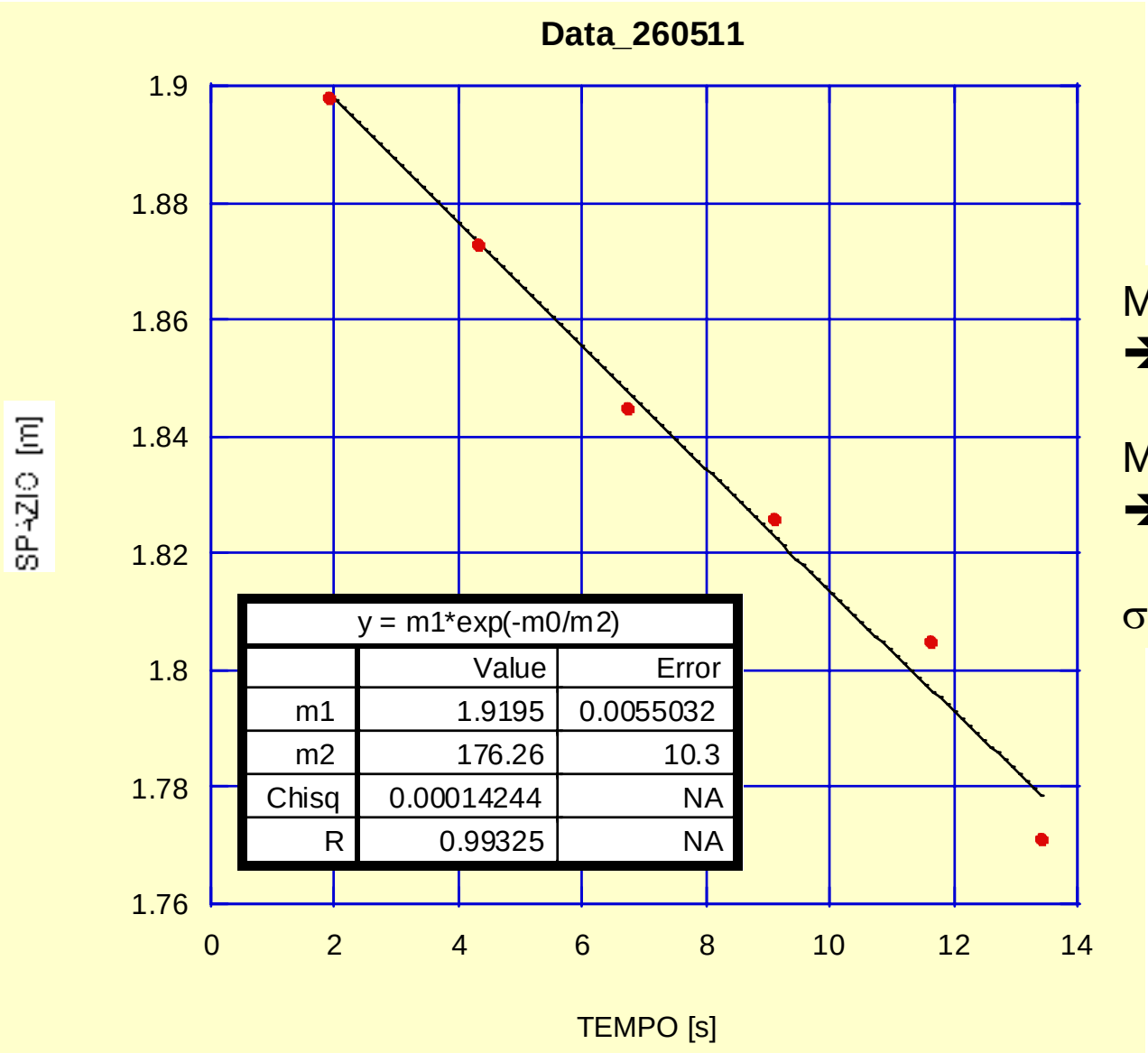

M1=(1.9195 ± 0.0055) m
➔± 0.29 %

M2=(0.00567 ± 0.00033) $ms^{-1}$
➔± 5.8 %

$\sigma_{fit}$ = 0.0060 m

# … ESPONENZIALE

**m1*exp(-m0/m2);m1=1;m2=1**




M1=(1.9195 ± 0.0055) m
➔± 0.29 %

M2=(176 ± 10) $ms^{-1}$
➔± 5.7 %

$\sigma_{fit}$ = 0.0060 m

$$\sigma_{fit}^{RETTA} < \sigma_{fit}^{EXP} < \sigma_{fit}^{PARABOLA}$$