

Damped Oscillator

$y = A_o e^{-bx} \sin(\omega x + \delta) + C$

$\chi^2_{\text{reduced}} = \mathbf{0.87}$

$\delta x$

$\delta y$

| Parameter | Value      | Uncertainty |
|-----------|------------|-------------|
| $A_o$     | 2.117e-01  | 1.298e-03   |
| $b$       | 5.606e-03  | 1.871e-03   |
| $\omega$  | 4.087e+00  | 2.127e-03   |
| $\delta$  | 1.492e+00  | 7.268e-03   |
| $C$       | -6.589e-03 | 5.003e-04   |

A graph that details the Occilation of a pendulum

