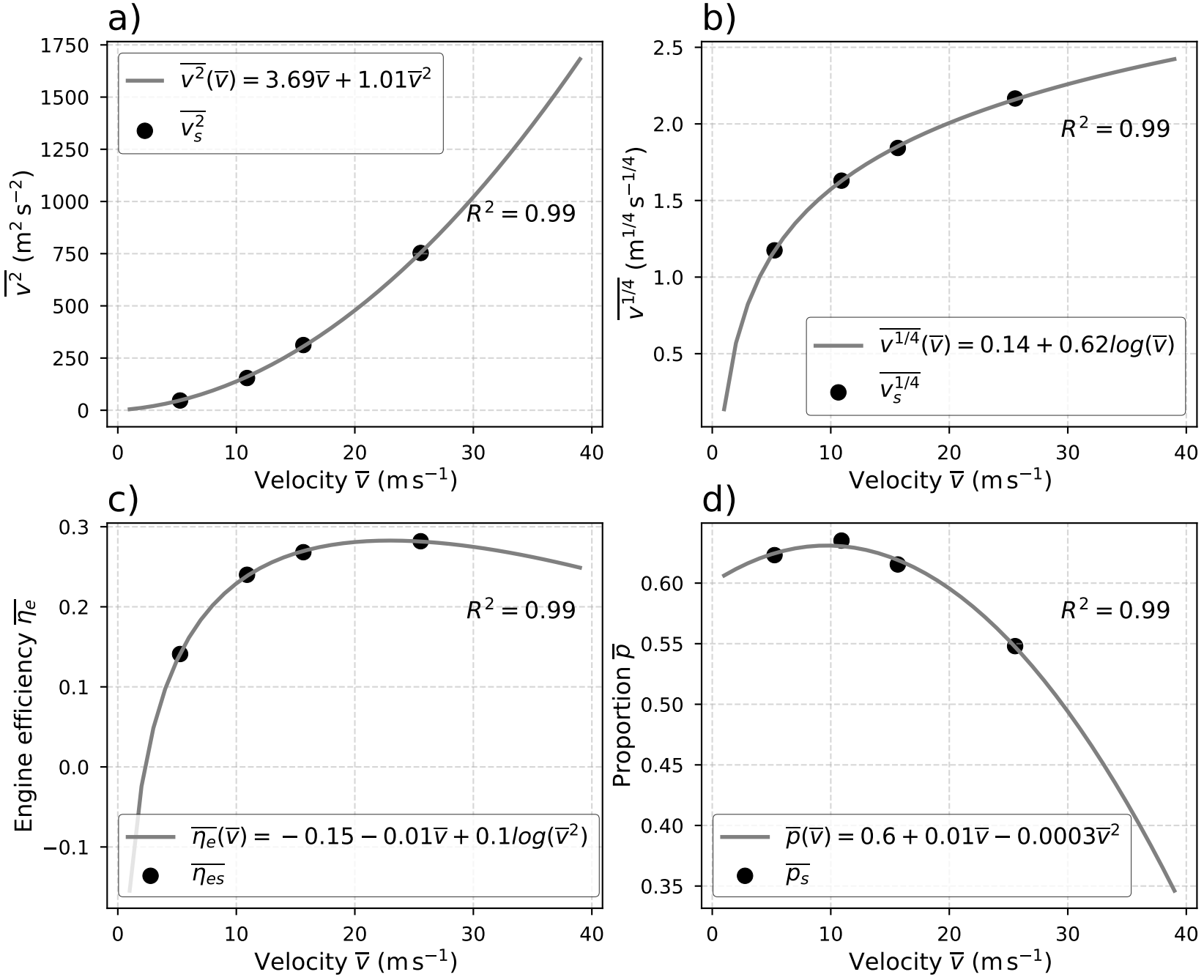
a)
$\overline{v^2}(\overline{v}) = 3.69\overline{v} + 1.01\overline{v}^2$
$\overline{v_s^2}$
$R^2 = 0.99$
$\overline{v^2}$ (m^2 s^{-2})
Velocity $\overline{v}$ (m s^{-1})
b)
$R^2 = 0.99$
$\overline{v^{1/4}}(\overline{v}) = 0.14 + 0.62log(\overline{v})$
$\overline{v_s^{1/4}}$
$\overline{v^{1/4}}$ (m$^{1/4}$ s$^{-1/4}$)
Velocity $\overline{v}$ (m s^{-1})
c)
$R^2 = 0.99$
$\overline{\eta_e}(\overline{v}) = -0.15 - 0.01\overline{v} + 0.1log(\overline{v}^2)$
$\overline{\eta_{es}}$
Engine efficiency $\overline{\eta_e}$
Velocity $\overline{v}$ (m s^{-1})
d)
$R^2 = 0.99$
$\overline{p}(\overline{v}) = 0.6 + 0.01\overline{v} - 0.0003\overline{v}^2$
$\overline{p_s}$
Proportion $\overline{p}$
Velocity $\overline{v}$ (m s^{-1})