

Table 1. Expected mean squares for the repeated measures analysis of variance.

Source	Degrees of Freedom	Mean Square	Expected Mean Square	Denominator
T	(t-1)	MS(T)	$\sigma^2 + ps\sigma_{TD}^2 + psd\sigma_T^2$	MS(T×D)
P(T)	t(p-1)	MS(P(T))	$\sigma^2 + sd\sigma_P^2$	MSE
S	(s-1)	MS(S)	$\sigma^2 + tp\sigma_{SD}^2 + tpd\sigma_S^2$	MS(S×D)
T×S	(t-1)(s-1)	MS(T×S)	$\sigma^2 + p\sigma_{TSD}^2 + \sigma_{TS}^2$	MS(T×S×D)
S×P(T)	(s-1)t(p-1)	MS(S×P(T))	$\sigma^2 + d\sigma_{SP}^2$	MSE
D	(d-1)	MS(D)	$\sigma^2 + tps\sigma_D^2$	MSE
T×D	(t-1)(d-1)	MS(T×D)	$\sigma^2 + ps\sigma_{TD}^2$	MSE
S×D	(s-1)(d-1)	MS(S×D)	$\sigma^2 + tp\sigma_{SD}^2$	MSE
T×S×D	(t-1)(s-1)(d-1)	MS(T×S×D)	$\sigma^2 + p\sigma_{TSD}^2$	MSE
Error		MSE	σ^2	

T, treatment (t, 2 levels)

P, pond: wetland research cell (p, 3 levels)

S, site: location in the wetland (s, 3 levels)

D, dates (d, 6 levels)