







s = sqrt(MSE)







PRESS residual

Var(e(i)) = Var(ei)/(1-hii)2 = σ2(1 – hii)/ (1-hii)2 = σ2/ (1-hii)

So the standardized PRESS residual is

e(i) / σ/ sqrt(1-hii) =e(i) sqrt(1-hii) / σ = ei/ σ sqrt(1-hii)

If you use s=sqrt(MSE) to estimate σ, then the standardized PRESS residual is just the studentized residual. (internally scaled)

(3) Externally studentized residual also known R-student is given by

ti = ei/sqrt(s2(i)(1-hii)) where s2(i) is MSE computed with the ith

observation excluded.

ti ~ t(n-p-1) MSE from model with ith observation deleted as (n-1) – p df.

Cook’s Distance



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