

Set1	Min	Grubb's Test	F-test	Set 2
12.45	2.576242909	Significant outlier		14.41
16.38	Max	Z=2,29	set 1	15.1
17.77	0.640528401		Set 2	15.11
18.1			F	15.46
18.85			F critical	16.84
19				16.99
19.1			H0 is accepted	18.1
19.12				
19.15				
19.28				

SET1	Set 2	N
16.38	14.41	Average
17.77	15.1	Variance
18.1	15.11	
18.85	15.46	T test
19	16.84	DOF
19.1	16.99	Sp
19.12	18.1	T
19.15		T crit
19.28		H0 is rejected

min            Grubb's Test  
 0.67329627 no significant outlier  
 max            Z=2,02  
 1.58505164

                  9                    7  
 18.5277778 16.0014286  
 0.91601944 1.75291429

$$T = \frac{\bar{Y}_1 - \bar{Y}_2}{\sqrt{s_1^2/N_1 + s_2^2/N_2}}$$

$$v = \frac{(s_1^2/N_1 + s_2^2/N_2)^2}{(s_1^2/N_1)^2/(N_1 - 1) + (s_2^2/N_2)^2}$$

where  $N_1$  and  $N_2$  are the sample sizes,  $\bar{Y}_1$  and  $\bar{Y}_2$  are the sample means, and  $s_1^2$  and  $s_2^2$  are the sample variances.

If equal variances are assumed, then

$$T = \frac{\bar{Y}_1 - \bar{Y}_2}{s_p \sqrt{1/N_1 + 1/N_2}} \quad s_p^2 = \frac{(N_1 - 1)s_1^2 + (N_2 - 1)s_2^2}{N_1 + N_2 - 2}$$

$$v = N_1 + N_2 - 2$$

$$s_2^2/(N_2 - 1)$$

and  $\bar{Y}_2$  are the sample means, and  $s_1^2$  and

$$\frac{(N_1 - 1)s_1^2 + (N_2 - 1)s_2^2}{N_1 + N_2 - 2}$$