

Input 1 - Length - Move vs Flip Mutation

F-Test Two-Sample for Variances

Move

Flip

	<i>Variable 1</i>	<i>Variable 2</i>
Mean	-26.0015	-33.7084
Variance	0.768971	13.13069
Observations	199	199
df	198	198
F	0.058563	
P(F<=f) one-tail	0	
F Critical one-tail	0.791084	

$M(v1) > M(v2)$ and $F < F\text{-Critical} \Rightarrow$ Equal Variance

t-Test: Two-Sample Assuming Equal Variances

	<i>Variable 1</i>	<i>Variable 2</i>
Mean	-26.0015	-33.7084
Variance	0.768971	13.13069
Observations	199	199
Pooled Variance	6.949832	
Hypothesized Mean Difference	0	
df	396	
t Stat	29.16099	
P(T<=t) one-tail	6.2E-101	
t Critical one-tail	1.648711	
P(T<=t) two-tail	1.2E-100	
t Critical two-tail	1.965973	

$t > t\text{ Critical} \Rightarrow$ Move is better