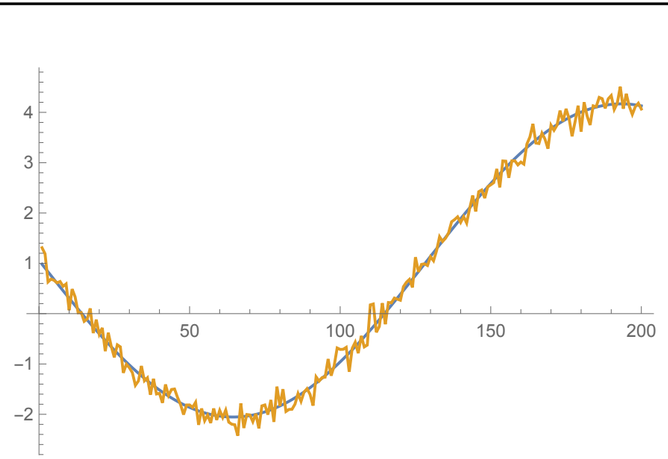
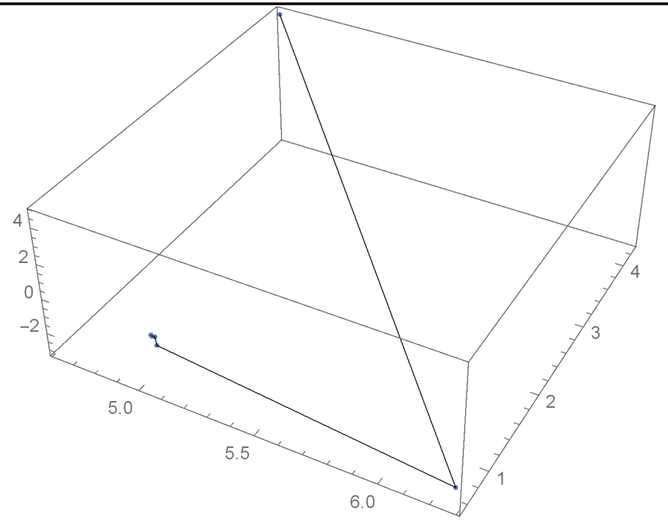
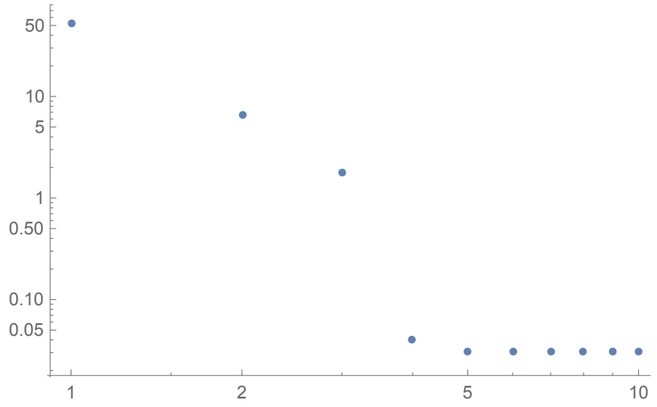
Out[219]=

Data vs Function	Parameter Space	Error over iterations
		
Parameters, dir, Delta	**Iterations, corrections, α, β, LSTolerance, factor**	
{4.87348, 1.05752, −3.11153} $\{2.02242\times10^{-7}, 1.54165\times10^{-7}, -4.8081\times10^{-8}\}$ $\{2.27264\times10^{-7}, 1.21669\times10^{-7}, -1.27298\times10^{-8}\}$	{9, 0} { , 0.374932, 0.0222902} $\{5.21781\times10^{-6}, 0.01\}$	{0.176537, 53.845}

Frequency indices: {2, 17, 23, 31, 33, 35, 41, 46, 49, 55, 57, 68, 72, 76, 81, 84, 87, 90, 97, 101}
Data frequencies: {5.27788, 102.981, 139.927, 191.072, 203.198, 210.675, 254.218, 280.67, 304.357, 341.931, 355.188, 424.995, 448.054, 474.129, 500.079, 519.494, 540.48, 559.392, 604.819, 631.334}
Not Normalized
TrueParams {4.88203, 0.838181, −3.10589}
InitialParams {4.62589, 4.26107, 4.87057}
FitFunction: #4*Sin[#1*#2] + #3 &
LSTemp and LSTolerance: 0.005 0.001