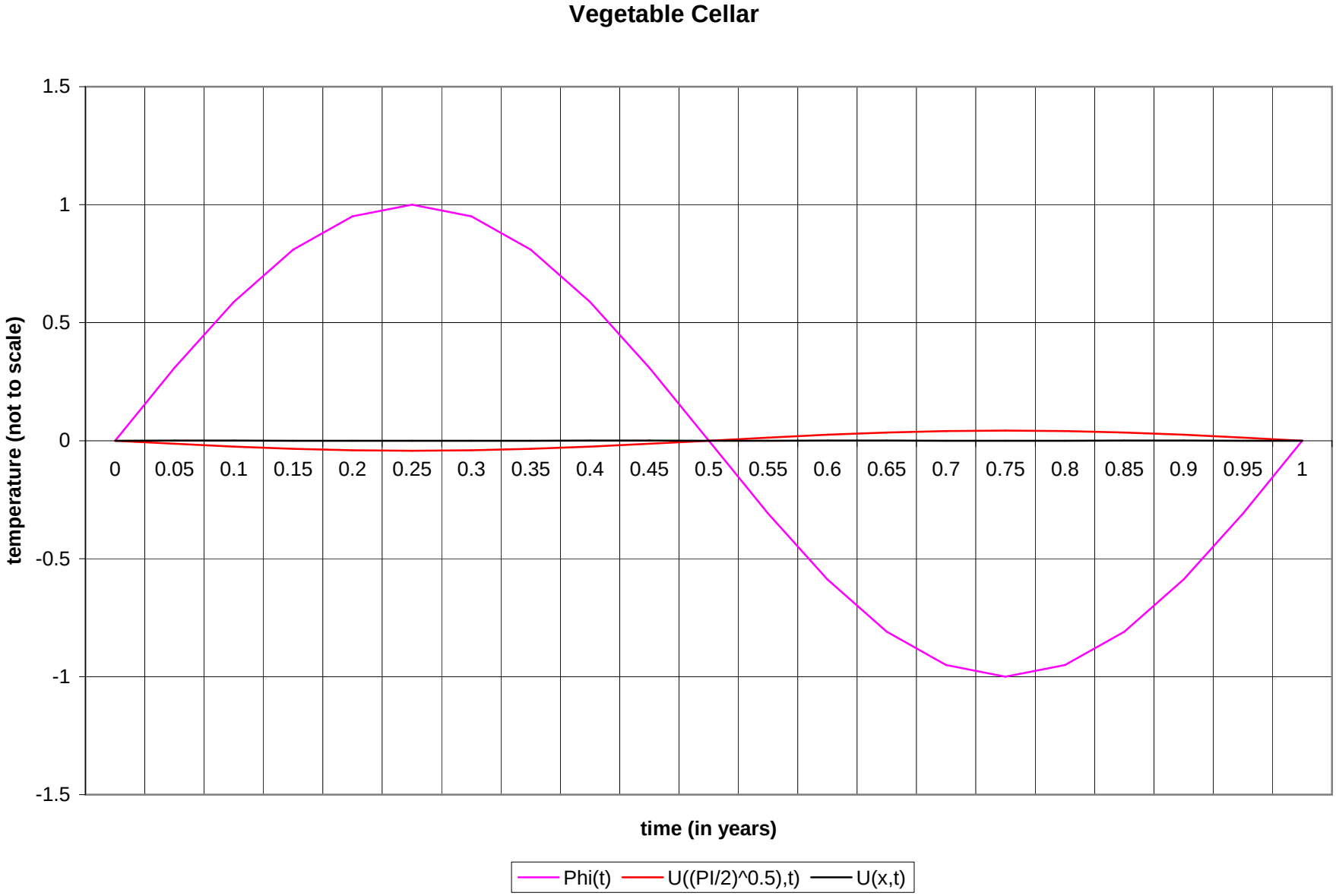
Vegetable Cellar
1.5
1
0.5
0
-0.5
-1
-1.5
temperature (not to scale)
0
0.05
0.1
0.15
0.2
0.25
0.3
0.35
0.4
0.45
0.5
0.55
0.6
0.65
0.7
0.75
0.8
0.85
0.9
0.95
1
time (in years)
Phi(t)
U((PI/2)^0.5),t)
U(x,t)

optimal value for these functions to show desired fluctuations is (PI/2)^0.5 1.25331414

play with this value to get an idea of the fluctuations of temp. compared to depth 13

time	phi(t)	U(x,t)	
0	0	-2.44852E-17	-6.48924E-15
0.05	0.309017	-0.013353835	4.91262E-15
0.1	0.587785	-0.025400504	4.08695E-15
0.15	0.809017	-0.034960794	-4.91262E-15
0.2	0.951057	-0.041098879	-7.01657E-15
0.25	1	-0.043213918	-6.48924E-15
0.3	0.951057	-0.041098879	-7.01657E-15
0.35	0.809017	-0.034960794	-4.91262E-15
0.4	0.587785	-0.025400504	4.08695E-15
0.45	0.309017	-0.013353835	4.91262E-15
0.5	5.67E-16	0	-6.48924E-15
0.55	-0.309017	0.013353835	-2.09552E-16
0.6	-0.587785	0.025400504	6.96684E-15
0.65	-0.809017	0.034960794	2.09552E-16
0.7	-0.951057	0.041098879	-5.35304E-15
0.75	-1	0.043213918	-6.48924E-15
0.8	-0.951057	0.041098879	-5.35304E-15
0.85	-0.809017	0.034960794	2.09552E-16
0.9	-0.587785	0.025400504	6.96684E-15
0.95	-0.309017	0.013353835	-2.09552E-16
1	1.53E-15	-9.06598E-17	-6.48924E-15