

Functional Decomposition

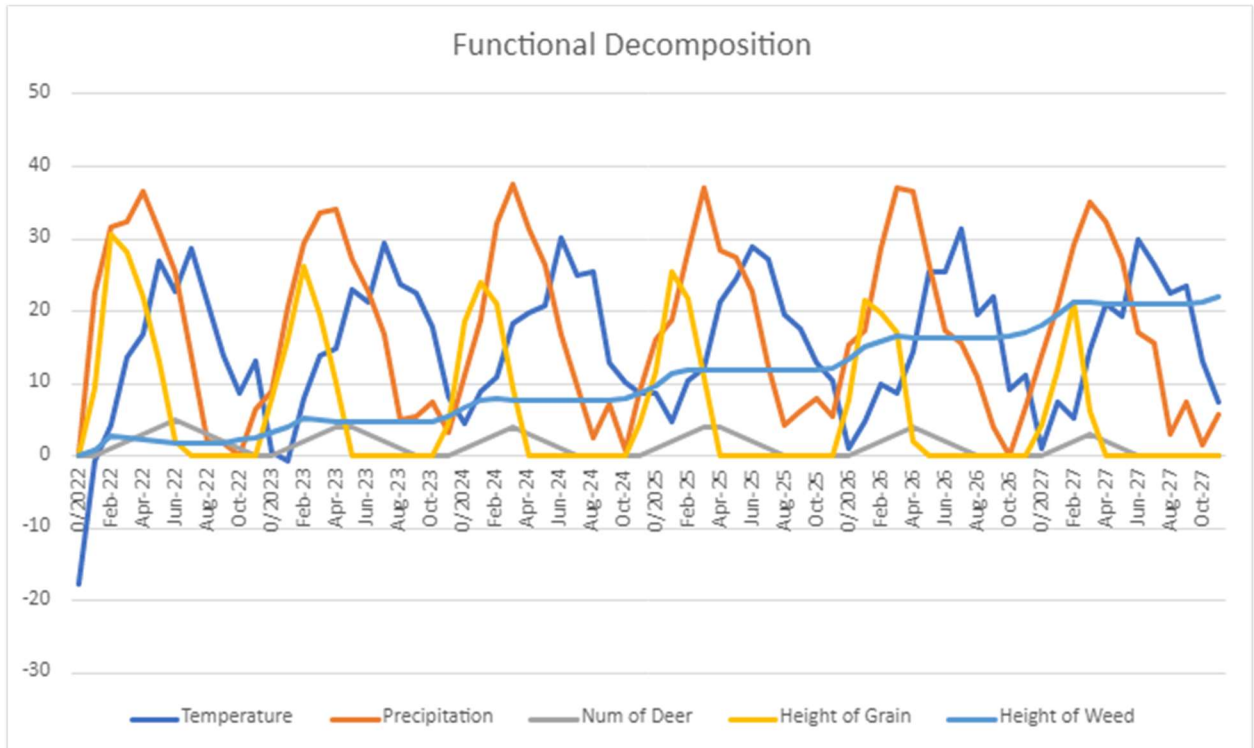
1. A table showing values for temperature, precipitation, number of deer, height of the grain, and your own-choice quantity as a function of month number.

	Temperature	Precipitation	Num of Deer	Height of Grain	Height of Weed
0/2022	-17.777778	0	0	0	0
Jan-22	-0.718606	22.37043	0	9.501717	0.844597
Feb-22	4.291083	31.693109	1	30.561981	2.659141
Mar-22	13.624335	32.296219	2	28.076876	2.476585
Apr-22	16.767896	36.523689	3	21.896253	2.208053
May-22	26.99941	31.06181	4	13.172229	1.989091
Jun-22	22.667046	25.371269	5	2.018169	1.857412
Jul-22	28.626972	13.973113	4	0	1.83723
Aug-22	21.234461	2.075936	3	0	1.837324
Sep-22	13.891351	1.682123	2	0	1.884474
Oct-22	8.761041	0	1	0	2.293209
Nov-22	13.126871	6.451925	0	0	2.394482
0/2023	0.590636	8.803041	0	8.02139	3.213916
Jan-23	-0.633493	20.483665	1	15.96381	3.982535
Feb-23	8.050624	29.27954	2	26.086538	5.125474
Mar-23	13.810499	33.589515	3	19.644866	4.97137
Apr-23	14.722818	34.157249	4	10.201255	4.833773
May-23	22.865507	27.053872	4	0	4.731794
Jun-23	21.36628	22.818479	3	0	4.731982
Jul-23	29.436052	16.910077	2	0	4.731982
Aug-23	23.633219	4.991506	1	0	4.731989
Sep-23	22.608795	5.36232	0	0	4.732014
Oct-23	17.745353	7.384584	0	0	4.735996
Nov-23	8.136077	3.369849	0	4.560044	5.351821
0/2024	4.40172	11.146535	1	18.567778	6.789212
Jan-24	8.84793	18.773951	2	24.027073	7.616325
Feb-24	10.806107	32.047828	3	20.891419	7.887389
Mar-24	18.199738	37.577609	4	9.367249	7.681988
Apr-24	19.670207	31.407875	3	0	7.589367
May-24	20.814663	26.49668	2	0	7.589711

Jun-24	30.067444	16.885636	1	0	7.589711
Jul-24	24.908799	9.696654	0	0	7.589713
Aug-24	25.381249	2.494839	0	0	7.589714
Sep-24	12.973425	7.314199	0	0	7.705632
Oct-24	10.189648	0.751919	0	0	7.977595
Nov-24	8.675577	8.946113	0	4.423673	8.72537
0/2025	8.574278	16.136771	1	11.57757	9.70483
Jan-25	4.655702	18.73085	2	25.491445	11.482947
Feb-25	10.406992	28.235852	3	21.805166	11.862273
Mar-25	12.212685	37.064138	4	10.874388	11.877142
Apr-25	21.1473	28.520832	4	0	11.768636
May-25	24.512829	27.390295	3	0	11.768641
Jun-25	28.899265	22.831501	2	0	11.768641
Jul-25	27.092569	12.426802	1	0	11.768641
Aug-25	19.540685	4.210755	0	0	11.769271
Sep-25	17.599691	6.13656	0	0	11.773467
Oct-25	12.869852	8.037588	0	0	11.901147
Nov-25	10.493802	5.434592	0	0	12.235852
0/2026	1.145056	15.433847	0	7.655354	13.460144
Jan-26	4.733018	17.289965	1	21.51399	15.213698
Feb-26	9.918357	28.605144	2	19.889055	15.756062
Mar-26	8.763078	37.068479	3	17.046547	16.45633
Apr-26	14.448829	36.616709	4	1.932954	16.351159
May-26	25.555543	26.555283	3	0	16.331831
Jun-26	25.472035	17.35942	2	0	16.331833
Jul-26	31.472651	15.696781	1	0	16.331833
Aug-26	19.559335	10.836599	0	0	16.332725
Sep-26	22.005547	3.892908	0	0	16.33277
Oct-26	9.250357	0	0	0	16.686467
Nov-26	11.223195	6.752381	0	0	16.953924
0/2027	0.995854	13.875444	0	4.179887	18.078978
Jan-27	7.401013	20.765208	1	11.798129	19.517866
Feb-27	5.249704	29.254736	2	21.374267	21.344334
Mar-27	14.704692	35.100166	3	6.274374	21.188573
Apr-27	20.897051	32.24971	2	0	21.126123
May-27	19.223633	27.213247	1	0	21.127831
Jun-27	30.006748	17.000981	0	0	21.127831
Jul-27	26.47711	15.491516	0	0	21.127831
Aug-27	22.592536	2.987227	0	0	21.127853

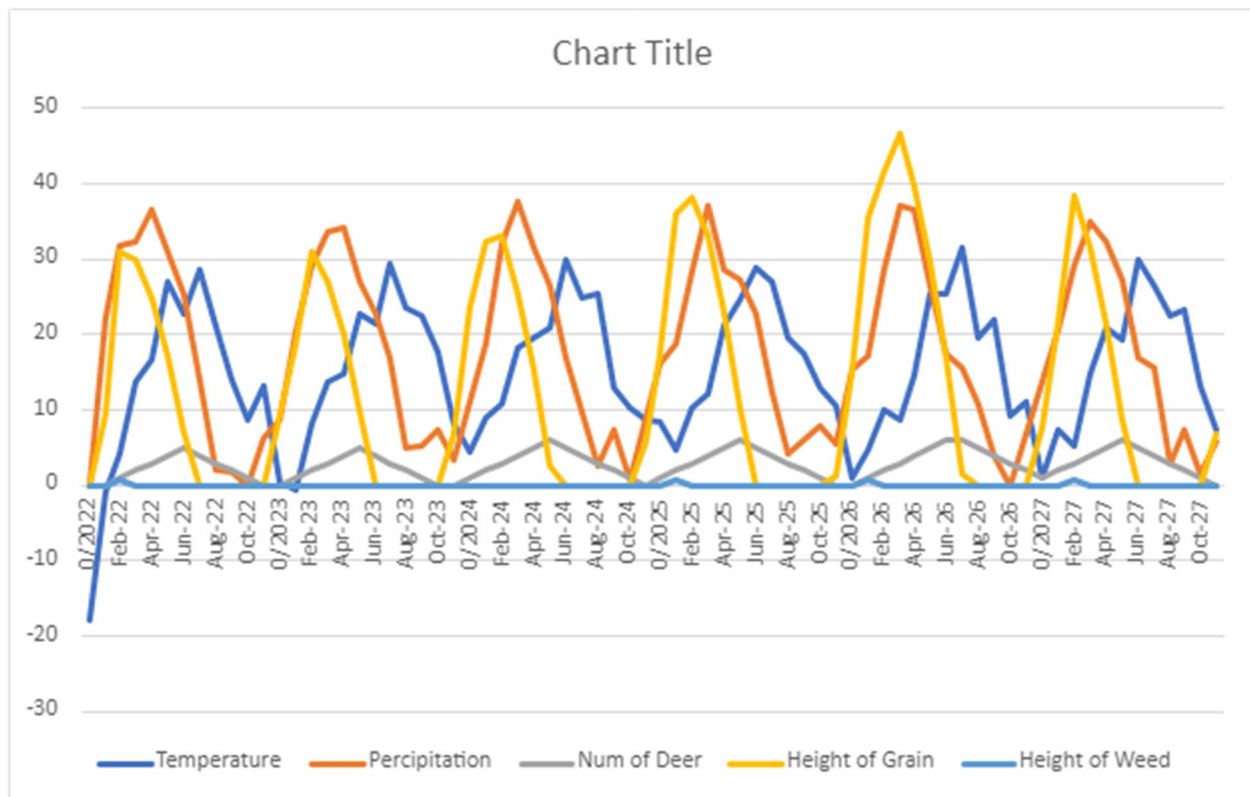
Sep-27	23.423979	7.340555	0	0	21.127863
Oct-27	13.230309	1.494532	0	0	21.196579
Nov-27	7.384644	5.733498	0	0	22.039767

- A graph showing temperature, precipitation, number of deer, height of the grain, and your own-choice quantity as a function of month number.



- A commentary about the patterns in the graph and why they turned out that way. What evidence in the curves proves that your own quantity is actually affecting the simulation correctly?

This is the graph without weeds, as you can see, the Height of Grain and the Number of Deer are maintained over years.



Next is the chart with weeds. While the Height of Weed keeps growing, the Height of Grain and the Number of Dear are dropping slowly over years.

