

May18

May 18, 2020

1 Review

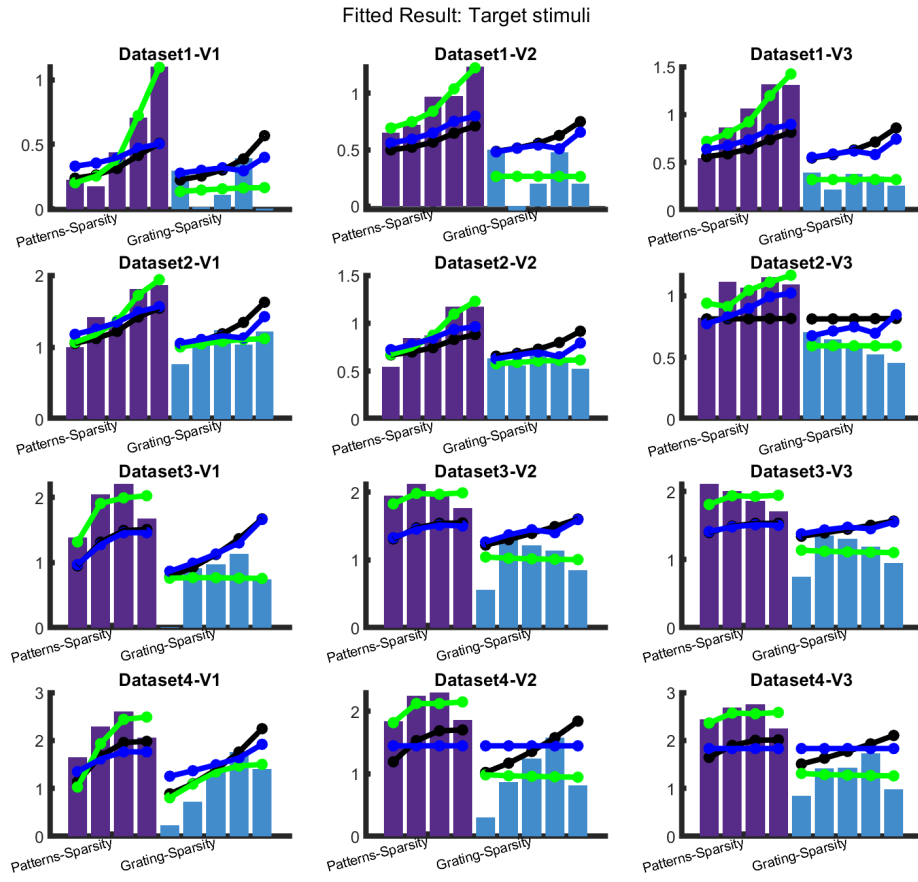
1.1 Mostly About figure

1. Change color, because black, purple, and blue are not distinguishable.
2. Thin line, large scatter
3. Axis??? (thinner?)
4. Tick direction (horizontal)
5. figure-size? A4? A5? Letter?
6. Add blank
7. Fixed x axis for losses plot

1.2 Look at the parameters and losses

Basically show tables.

1.3 Some bugs



2 What to do this week

2.1 Show tables

2.1.1 Target, no cross-validation

-----V1-----

r2_table =

4×5 [table](#)

model	dataset1	dataset2	dataset3	dataset4
{'contrast' }	0.15521	0.39022	0.26868	0.48797
{'normVar' }	0.86859	0.84095	0.75478	0.72349
{'soc' }	0.44043	0.87626	0.19201	0.37951
{'oriSurrond'}	0.54385	0.53969	0.66664	0.81203

-----V2-----

r2_table =

4×5 [table](#)

model	dataset1	dataset2	dataset3	dataset4
{'contrast' }	0.062113	0.15652	0.077588	0.22083
{'normVar' }	0.84745	0.88194	0.79018	0.7201
{'soc' }	0.47597	0.7622	0.042924	0.13831
{'oriSurrond'}	0.35977	0.32903	0.38097	0.60273

-----V3-----

r2_table =

4×5 [table](#)

model	dataset1	dataset2	dataset3	dataset4
{'contrast' }	0.080046	0.00029089	0.035865	0.10277
{'normVar' }	0.9374	0.84472	0.74035	0.82283
{'soc' }	0.58774	0.52767	0.014862	0.052681
{'oriSurrond'}	0.4268	0.0073458	0.27302	0.4415

-----V1-----

R^2 table

-----V1-----

rmse_table =

4×5 [table](#)

model	dataset1	dataset2	dataset3	dataset4
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
{'contrast' }	0.29814	0.26112	0.5539	0.50497
{'normVar' }	0.11759	0.13336	0.32074	0.37109
{'soc' }	0.24265	0.11763	0.58221	0.55589
{'oriSurrond'}	0.21908	0.22687	0.37397	0.30596

-----V2-----

rmse_table =

4×5 [table](#)

model	dataset1	dataset2	dataset3	dataset4
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
{'contrast' }	0.36876	0.21558	0.49514	0.5744
{'normVar' }	0.14872	0.080654	0.23615	0.34427
{'soc' }	0.27564	0.11446	0.50436	0.60405
{'oriSurrond'}	0.30468	0.19227	0.40562	0.41015

-----V3-----

rmse_table =

4×5 [table](#)

model	dataset1	dataset2	dataset3	dataset4
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
{'contrast' }	0.3908	0.25337	0.44337	0.64442
{'normVar' }	0.10194	0.099856	0.23009	0.28636
{'soc' }	0.26161	0.17416	0.44818	0.66216
{'oriSurrond'}	0.30848	0.25248	0.385	0.50842

rmse table

params table

-----V1-----

```
param_table =
```

11x9 [table](#)

model	dataset1: mean	dataset1: sem	dataset2: mean	dataset2: sem	dataset3: mean	dataset3: sem	dataset4: mean	dataset4: sem
('contrastModel: g')	2.0902	NaN	3.0826	NaN	2.4584	NaN	3.5641	NaN
('contrastModel: n')	0.5135	NaN	0.25347	NaN	0.29434	NaN	0.35484	NaN
('normVarModel: w')	111.27	NaN	81.864	NaN	114.91	NaN	16.819	NaN
('normVarModel: g')	72.861	NaN	7.2695	NaN	8.9291	NaN	6.8817	NaN
('normVarModel: n')	0.6844	NaN	0.22561	NaN	0.27366	NaN	0.29624	NaN
('socModel: c')	1	NaN	0.99999	NaN	0.1	NaN	0.1	NaN
('socModel: g')	100	NaN	99.821	NaN	2.5543	NaN	3.044	NaN
('socModel: n')	0.83966	NaN	0.6526	NaN	0.1972	NaN	0.24513	NaN
('oriSurroundModel: w')	45.605	NaN	82.67	NaN	10	NaN	9.2948	NaN
('oriSurroundModel: g')	64.703	NaN	25.149	NaN	10	NaN	10	NaN
('oriSurroundModel: n')	1	NaN	0.5555	NaN	0.57565	NaN	0.51472	NaN

-----V2-----

```
param_table =
```

11x9 [table](#)

model	dataset1: mean	dataset1: sem	dataset2: mean	dataset2: sem	dataset3: mean	dataset3: sem	dataset4: mean	dataset4: sem
('contrastModel: g')	1.3892	NaN	1.4693	NaN	1.8563	NaN	2.4823	NaN
('contrastModel: n')	0.24221	NaN	0.19605	NaN	0.10831	NaN	0.22725	NaN
('normVarModel: w')	861.72	NaN	112.48	NaN	9978.9	NaN	869.8	NaN
('normVarModel: g')	85.945	NaN	5.6105	NaN	27.503	NaN	17.052	NaN
('normVarModel: n')	0.44623	NaN	0.24754	NaN	0.18402	NaN	0.22155	NaN
('socModel: c')	1	NaN	1	NaN	1	NaN	0.1	NaN
('socModel: g')	100	NaN	99.518	NaN	2.7837	NaN	2.4794	NaN
('socModel: n')	0.76617	NaN	0.72857	NaN	0.14206	NaN	0.14427	NaN
('oriSurroundModel: w')	103.81	NaN	100.39	NaN	10	NaN	10	NaN
('oriSurroundModel: g')	99.999	NaN	13.883	NaN	4.632	NaN	9.4027	NaN
('oriSurroundModel: n')	0.89024	NaN	0.52427	NaN	0.31907	NaN	0.51397	NaN

-----V3-----

```
param_table =
```

11x9 [table](#)

model	dataset1: mean	dataset1: sem	dataset2: mean	dataset2: sem	dataset3: mean	dataset3: sem	dataset4: mean	dataset4: sem
('contrastModel: g')	1.6411	NaN	0.83861	NaN	1.7099	NaN	2.4983	NaN
('contrastModel: n')	0.25337	NaN	0.0083384	NaN	0.063026	NaN	0.12953	NaN
('normVarModel: w')	433.39	NaN	633.01	NaN	9986.4	NaN	9981.9	NaN
('normVarModel: g')	51.193	NaN	6.8687	NaN	16.781	NaN	41.252	NaN
('normVarModel: n')	0.43676	NaN	0.19806	NaN	0.15115	NaN	0.19407	NaN
('socModel: c')	1	NaN	1	NaN	1	NaN	0.10001	NaN
('socModel: g')	100	NaN	43.877	NaN	2.0646	NaN	2.4333	NaN
('socModel: n')	0.74559	NaN	0.59488	NaN	0.072659	NaN	0.075707	NaN
('oriSurroundModel: w')	101.06	NaN	82.704	NaN	10	NaN	10	NaN
('oriSurroundModel: g')	99.999	NaN	1.2282	NaN	3.3564	NaN	6.9622	NaN
('oriSurroundModel: n')	0.87009	NaN	0.075874	NaN	0.22302	NaN	0.36402	NaN

2.1.2 All, no cross-validation

-----V1-----

r2_table =

3×5 [table](#)

model	dataset1	dataset2	dataset3	dataset4
-----	-----	-----	-----	-----
{'contrast'}	0.34499	0.6745	0.45943	0.51265
{'normVar' }	0.55424	0.73156	0.55973	0.5454
{'soc' }	0.30792	0.67927	0.46735	0.53903

-----V2-----

r2_table =

3×5 [table](#)

model	dataset1	dataset2	dataset3	dataset4
-----	-----	-----	-----	-----
{'contrast'}	0.23237	0.49324	0.18071	0.081495
{'normVar' }	0.5407	0.61378	0.60462	0.60911
{'soc' }	0.23765	0.53615	0.25384	0.13069

-----V3-----

r2_table =

3×5 [table](#)

model	dataset1	dataset2	dataset3	dataset4
-----	-----	-----	-----	-----
{'contrast'}	0.20371	0.32828	0.17265	0.09663
{'normVar' }	0.55874	0.48178	0.53114	0.55641
{'soc' }	0.26117	0.47882	0.26806	0.17266

R^2 table -----V1-----

-----V1-----

rmse_table =

3x5 [table](#)

model	dataset1	dataset2	dataset3	dataset4
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
{'contrast'}	0.20844	0.23993	0.39165	0.48168
{'normVar' }	0.17195	0.21789	0.35345	0.46521
{'soc' }	0.21426	0.23817	0.38876	0.46846

-----V2-----

rmse_table =

3x5 [table](#)

model	dataset1	dataset2	dataset3	dataset4
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
{'contrast'}	0.25632	0.1778	0.4072	0.58877
{'normVar' }	0.19827	0.15522	0.28288	0.38409
{'soc' }	0.25544	0.1701	0.3886	0.57278

-----V3-----

rmse_table =

3x5 [table](#)

model	dataset1	dataset2	dataset3	dataset4
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
{'contrast'}	0.24305	0.20134	0.40312	0.69846
{'normVar' }	0.18092	0.17684	0.30347	0.48944
{'soc' }	0.23411	0.17735	0.37917	0.66842

rmse table

params table

-----V1-----								
param_table =								
8×9 table								
model	dataset1: mean	dataset1: sem	dataset2: mean	dataset2: sem	dataset3: mean	dataset3: sem	dataset4: mean	dataset4: sem
{'contrastModel: g'}	1.7621	NaN	3.857	NaN	1.8371	NaN	2.4403	NaN
{'contrastModel: n'}	0.43781	NaN	0.30066	NaN	0.20906	NaN	0.23119	NaN
{'normVarModel: w' }	117.08	NaN	38.861	NaN	30.209	NaN	17.87	NaN
{'normVarModel: g' }	6.1744	NaN	5.5408	NaN	4.0127	NaN	4.5304	NaN
{'normVarModel: n' }	0.34409	NaN	0.1964	NaN	0.19815	NaN	0.19682	NaN
{'socModel: c' }	0.10002	NaN	0.10001	NaN	1	NaN	1	NaN
{'socModel: g' }	1.5078	NaN	3.4871	NaN	2.2113	NaN	3.014	NaN
{'socModel: n' }	0.24037	NaN	0.16288	NaN	0.1251	NaN	0.13912	NaN
-----V2-----								
param_table =								
8×9 table								
model	dataset1: mean	dataset1: sem	dataset2: mean	dataset2: sem	dataset3: mean	dataset3: sem	dataset4: mean	dataset4: sem
{'contrastModel: g'}	1.4245	NaN	1.934	NaN	1.5047	NaN	1.3877	NaN
{'contrastModel: n'}	0.22432	NaN	0.23858	NaN	0.091735	NaN	0.088276	NaN
{'normVarModel: w' }	191.24	NaN	50.108	NaN	200.89	NaN	351.76	NaN
{'normVarModel: g' }	4.4509	NaN	2.9112	NaN	5.6148	NaN	14.76	NaN
{'normVarModel: n' }	0.21917	NaN	0.16842	NaN	0.1717	NaN	0.26373	NaN
{'socModel: c' }	0.99993	NaN	0.99998	NaN	1	NaN	1	NaN
{'socModel: g' }	1.5264	NaN	2.0266	NaN	1.7252	NaN	1.6196	NaN
{'socModel: n' }	0.1358	NaN	0.13669	NaN	0.063158	NaN	0.064164	NaN
-----V3-----								
param_table =								
8×9 table								
model	dataset1: mean	dataset1: sem	dataset2: mean	dataset2: sem	dataset3: mean	dataset3: sem	dataset4: mean	dataset4: sem
{'contrastModel: g'}	1.3777	NaN	1.6214	NaN	1.5333	NaN	1.7627	NaN
{'contrastModel: n'}	0.17069	NaN	0.18649	NaN	0.08601	NaN	0.092493	NaN
{'normVarModel: w' }	196.75	NaN	79.352	NaN	262.05	NaN	325.69	NaN
{'normVarModel: g' }	3.8093	NaN	2.5717	NaN	5.3407	NaN	14.187	NaN
{'normVarModel: n' }	0.18236	NaN	0.14297	NaN	0.15577	NaN	0.23903	NaN
{'socModel: c' }	1	NaN	1	NaN	1	NaN	1	NaN
{'socModel: g' }	1.6093	NaN	1.8937	NaN	1.7764	NaN	2.1249	NaN
{'socModel: n' }	0.11895	NaN	0.12497	NaN	0.062096	NaN	0.071164	NaN

2.1.3 All, cross-validation

R^2 table

-----V1-----

r2_table =

2x5 [table](#)

model	dataset1	dataset2	dataset3	dataset4
{'contrast'}	0.2815	0.64485	0.4084	0.46938
{'normVar' }	0.49279	0.69139	0.46418	0.46457

-----V2-----

r2_table =

2x5 [table](#)

model	dataset1	dataset2	dataset3	dataset4
{'contrast'}	0.1663	0.44171	0.099992	-0.0040208
{'normVar' }	0.48181	0.55261	0.51906	0.53634

-----V3-----

r2_table =

2x5 [table](#)

model	dataset1	dataset2	dataset3	dataset4
{'contrast'}	0.13434	0.26018	0.092733	0.013087
{'normVar' }	0.50516	0.40155	0.4388	0.46441

rmse table

-----V1-----

rmse_table =

2x5 [table](#)

model	dataset1	dataset2	dataset3	dataset4
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
{'contrast'}	0.21831	0.25062	0.40971	0.50261
{'normVar' }	0.18342	0.23362	0.38992	0.50488

-----V2-----

rmse_table =

2x5 [table](#)

model	dataset1	dataset2	dataset3	dataset4
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
{'contrast'}	0.26712	0.18662	0.42679	0.61556
{'normVar' }	0.2106	0.16706	0.31199	0.41832

-----V3-----

rmse_table =

2x5 [table](#)

model	dataset1	dataset2	dataset3	dataset4
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
{'contrast'}	0.25341	0.2113	0.42214	0.73004
{'normVar' }	0.1916	0.19004	0.33201	0.5378

params table

-----V1-----								
param_table =								
5x9 table								
model	dataset1: mean	dataset1: sem	dataset2: mean	dataset2: sem	dataset3: mean	dataset3: sem	dataset4: mean	dataset4: sem

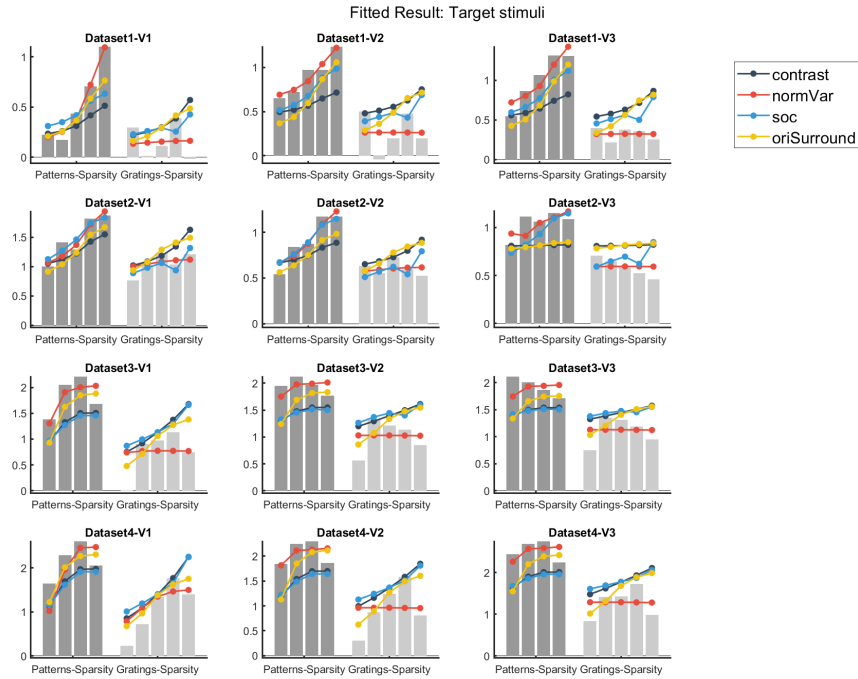
{'contrastModel: g'}	1.7647	0.094347	3.8575	0.066604	1.8374	0.028939	2.4408	0.031692
{'contrastModel: n'}	0.43788	0.013553	0.30064	0.004732	0.20909	0.0059498	0.23125	0.0061325
{'normVarModel: w' }	117.14	6.0286	38.886	1.5337	30.472	3.5322	18.001	1.7143
{'normVarModel: g' }	6.1955	0.36308	5.5442	0.098346	4.0219	0.18041	4.5361	0.18477
{'normVarModel: n' }	0.34432	0.0073346	0.19645	0.0024205	0.19827	0.0060639	0.19684	0.0066779
-----V2-----								
param_table =								
5x9 table								
model	dataset1: mean	dataset1: sem	dataset2: mean	dataset2: sem	dataset3: mean	dataset3: sem	dataset4: mean	dataset4: sem

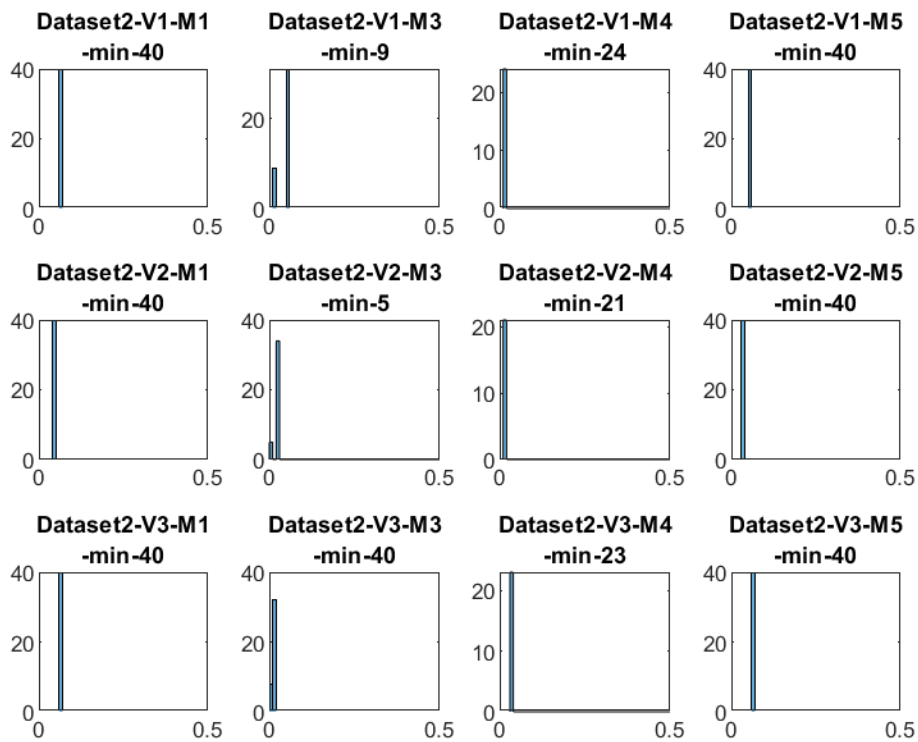
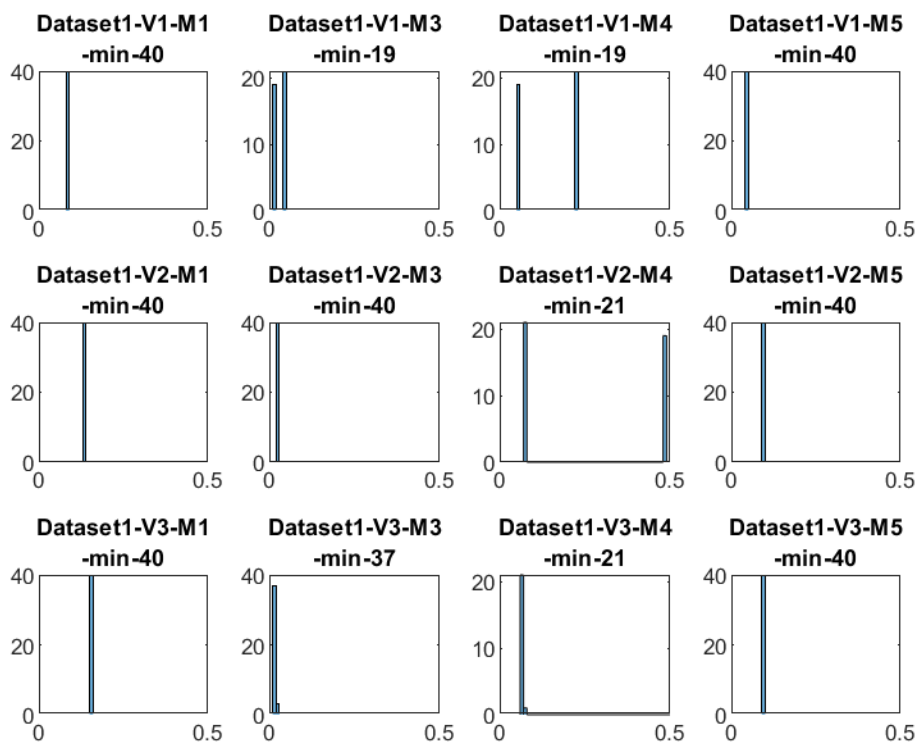
{'contrastModel: g'}	1.4256	0.050481	1.9344	0.043676	1.5049	0.023025	1.3881	0.032149
{'contrastModel: n'}	0.22437	0.0086334	0.23856	0.0061653	0.09172	0.0050872	0.088291	0.007095
{'normVarModel: w' }	191.36	8.9332	50.134	2.1646	201.67	17.098	349.18	25.807
{'normVarModel: g' }	4.459	0.18149	2.9134	0.073718	5.6272	0.26527	14.736	0.95744
{'normVarModel: n' }	0.2193	0.0047395	0.16847	0.0033556	0.1718	0.0040333	0.26377	0.0054888
-----V3-----								
param_table =								
5x9 table								
model	dataset1: mean	dataset1: sem	dataset2: mean	dataset2: sem	dataset3: mean	dataset3: sem	dataset4: mean	dataset4: sem

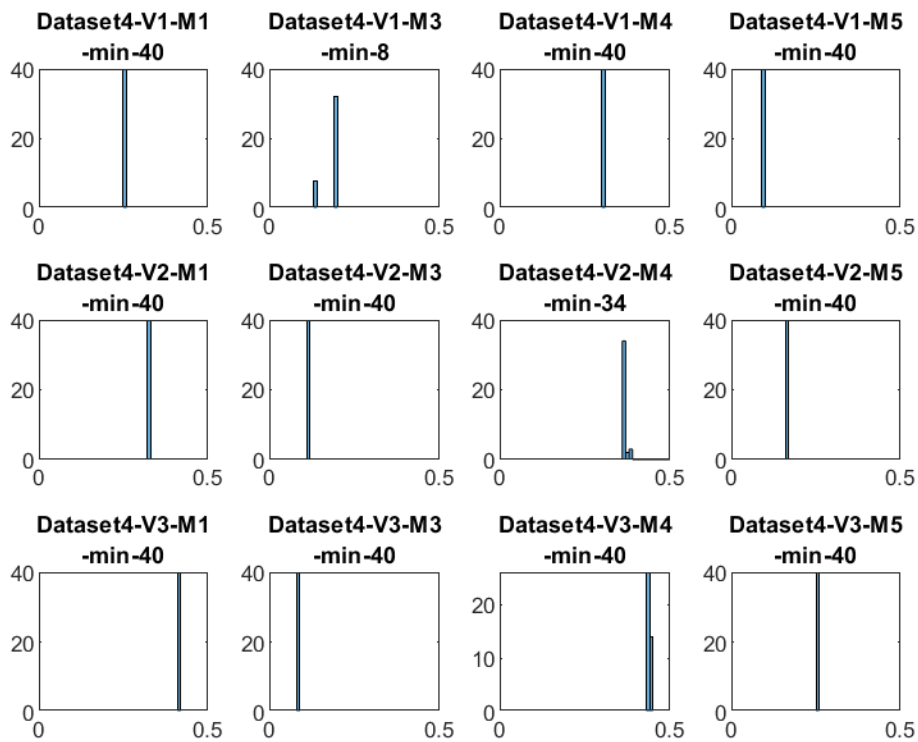
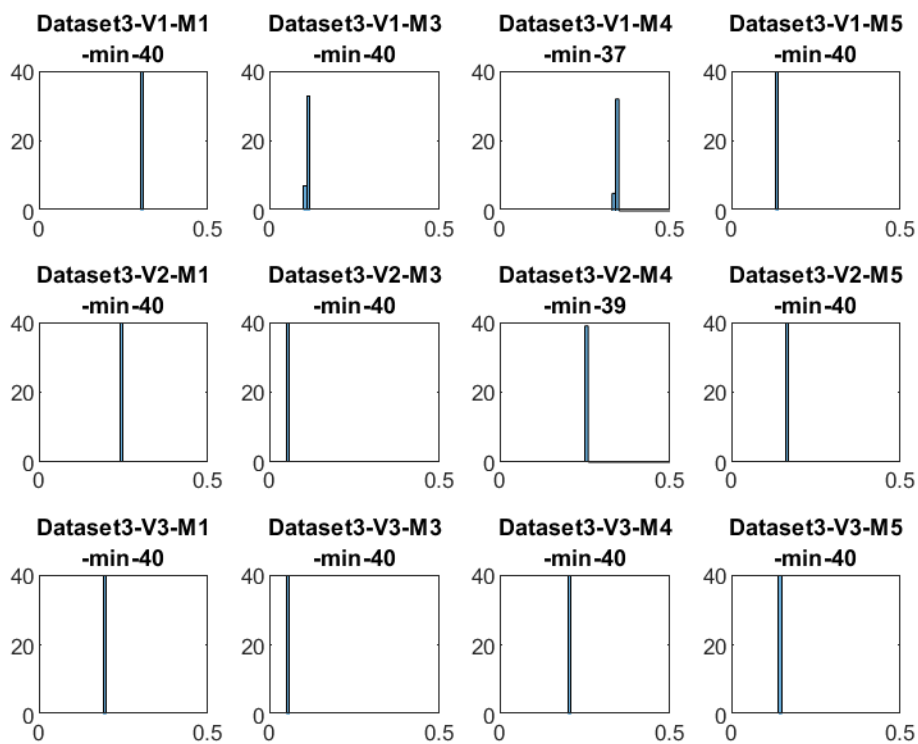
{'contrastModel: g'}	1.3784	0.042085	1.6216	0.040313	1.5334	0.020715	1.7631	0.035955
{'contrastModel: n'}	0.17072	0.0071771	0.18644	0.0068995	0.085998	0.0048974	0.092511	0.0069293
{'normVarModel: w' }	196.97	8.3126	79.468	4.2256	263.17	24.8	324.18	30.345
{'normVarModel: g' }	3.8135	0.1242	2.5737	0.078124	5.3526	0.25722	14.188	0.96998
{'normVarModel: n' }	0.18241	0.003534	0.143	0.0038245	0.15587	0.0039548	0.23914	0.0052565

2.2 Show plots

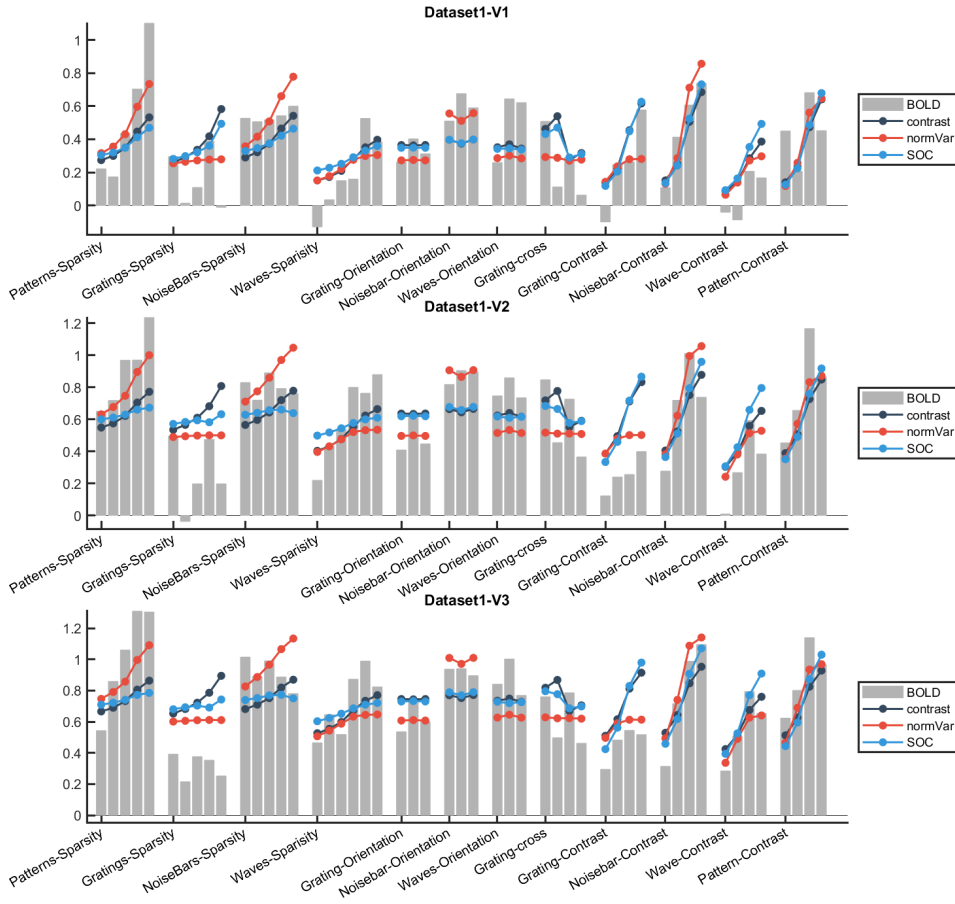
2.2.1 Target, no cross

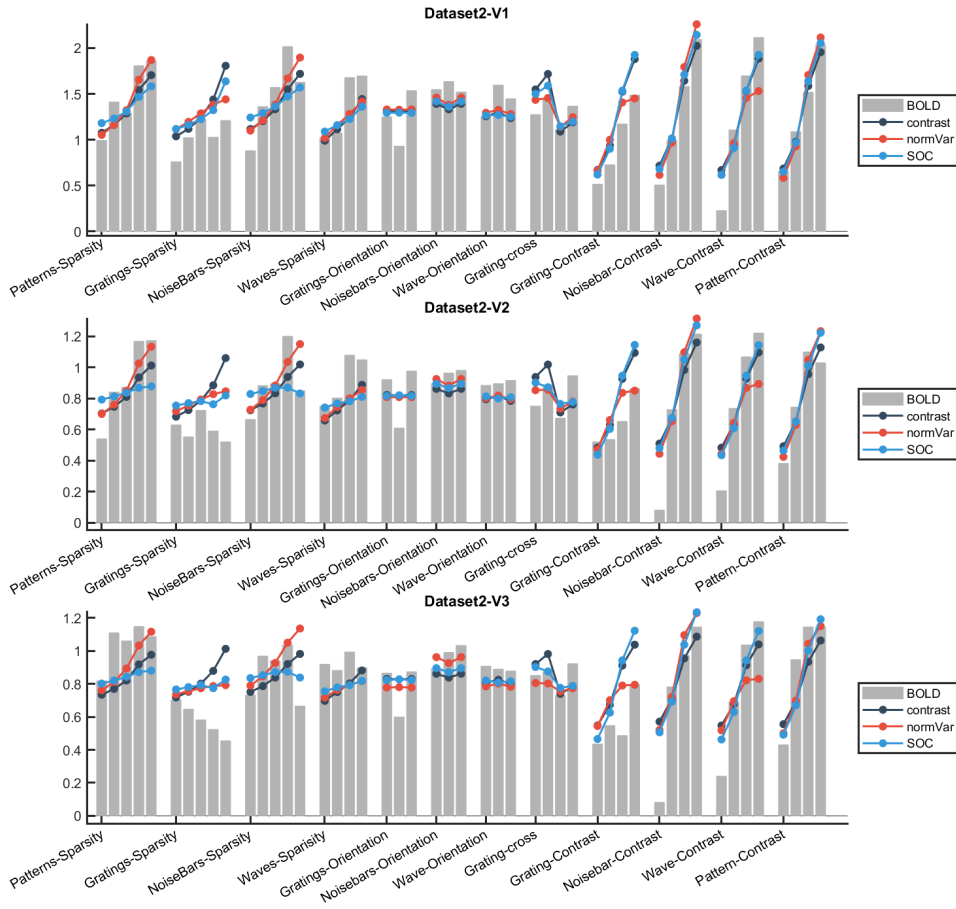


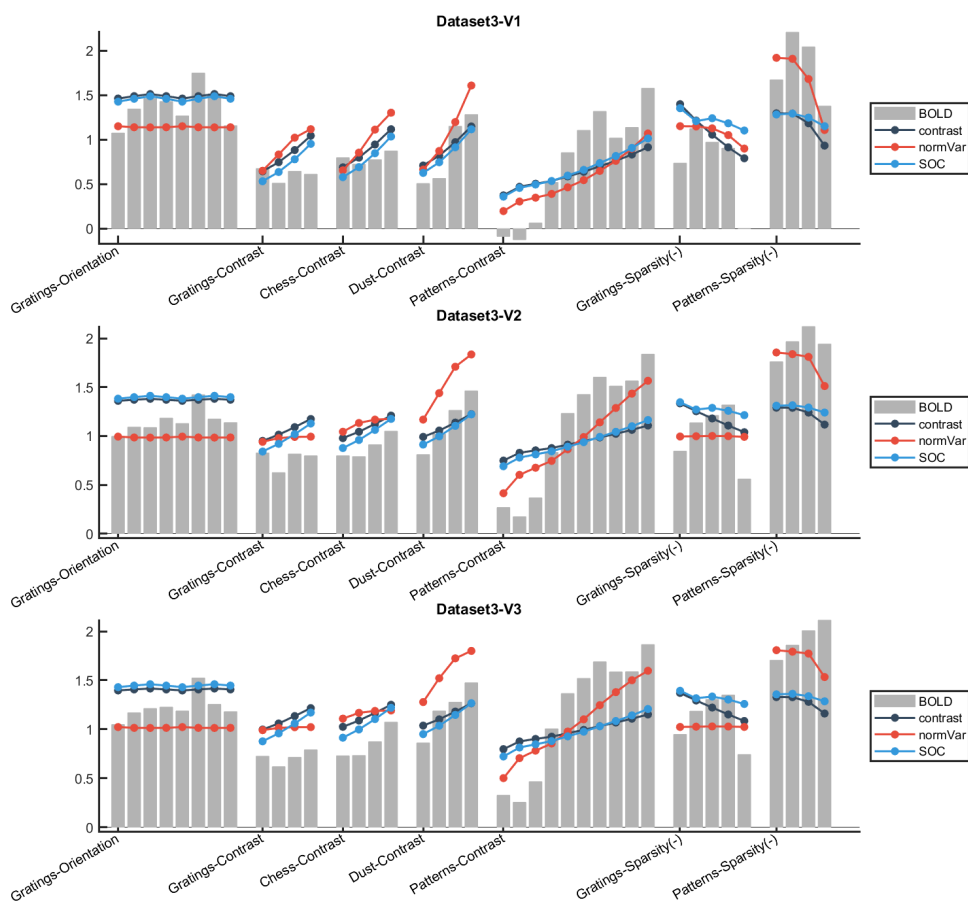


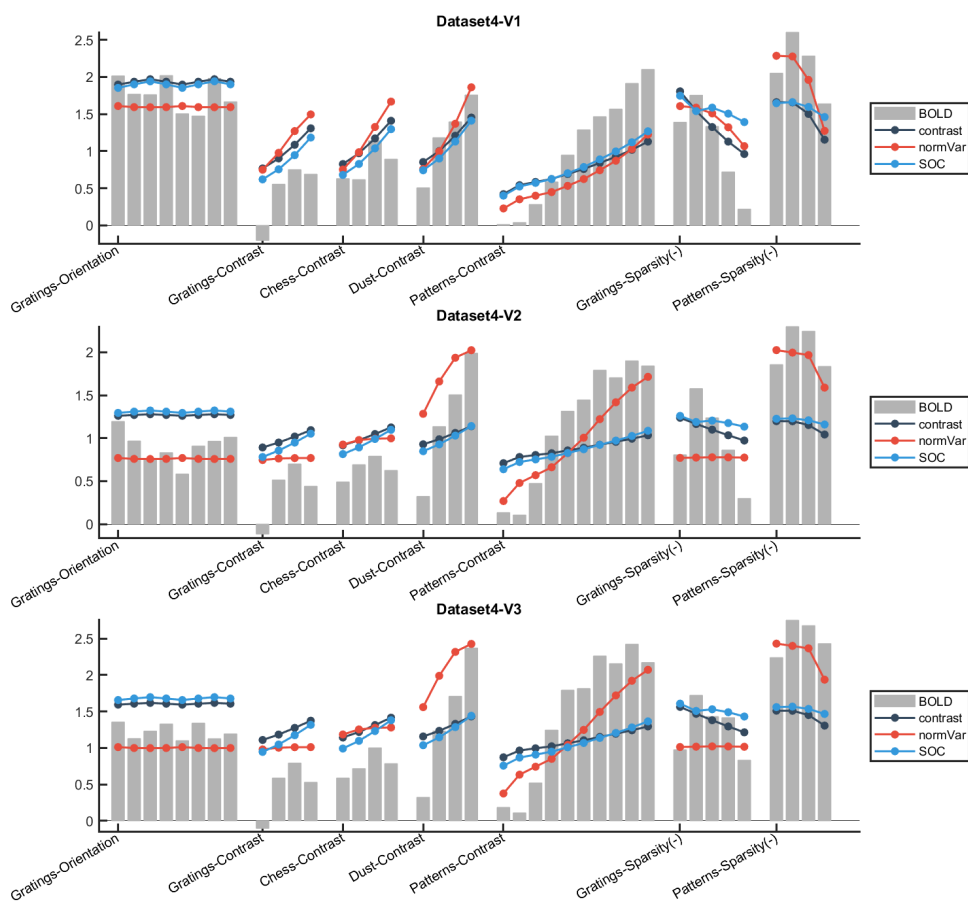


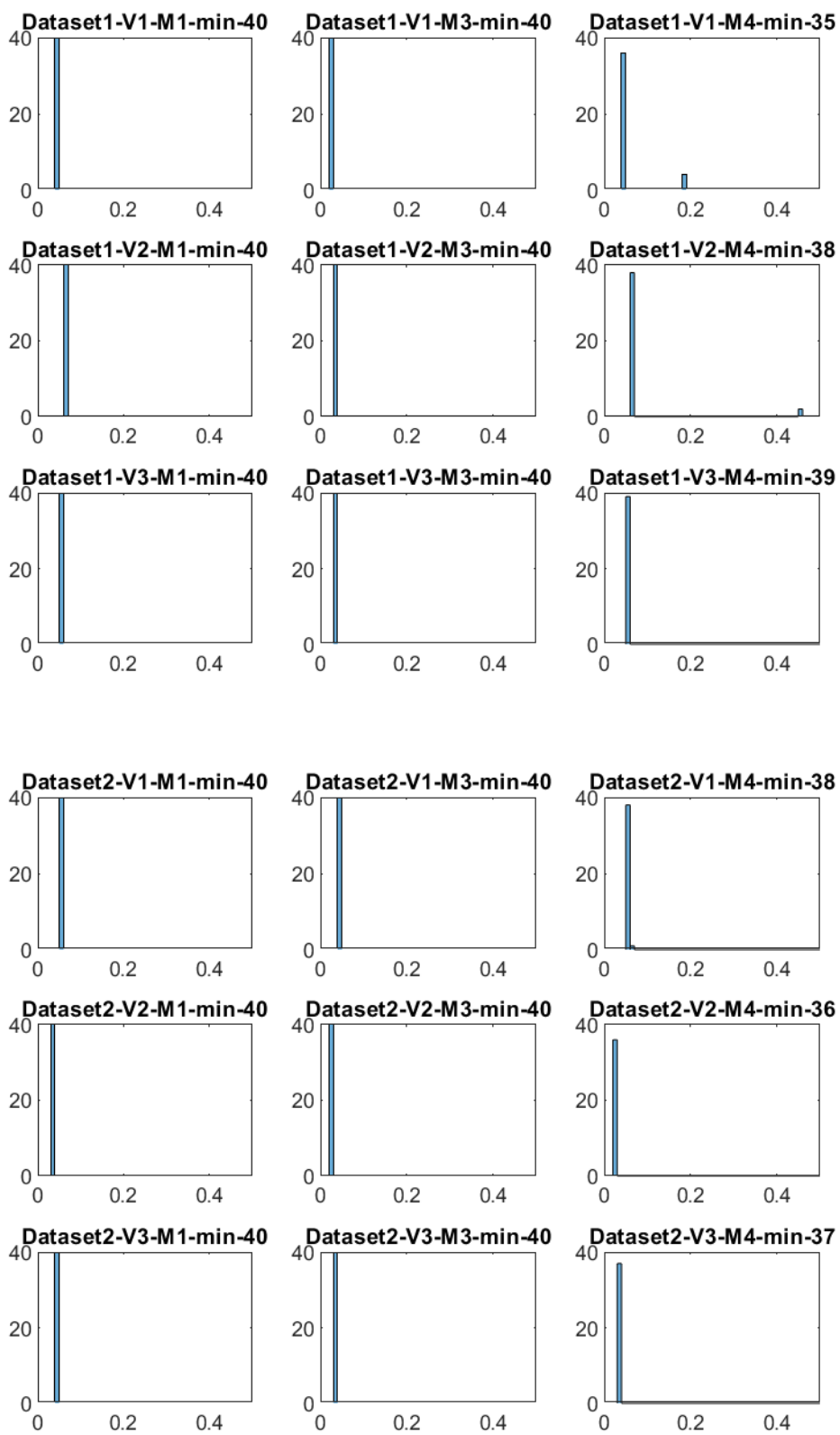
2.2.2 All, no cross

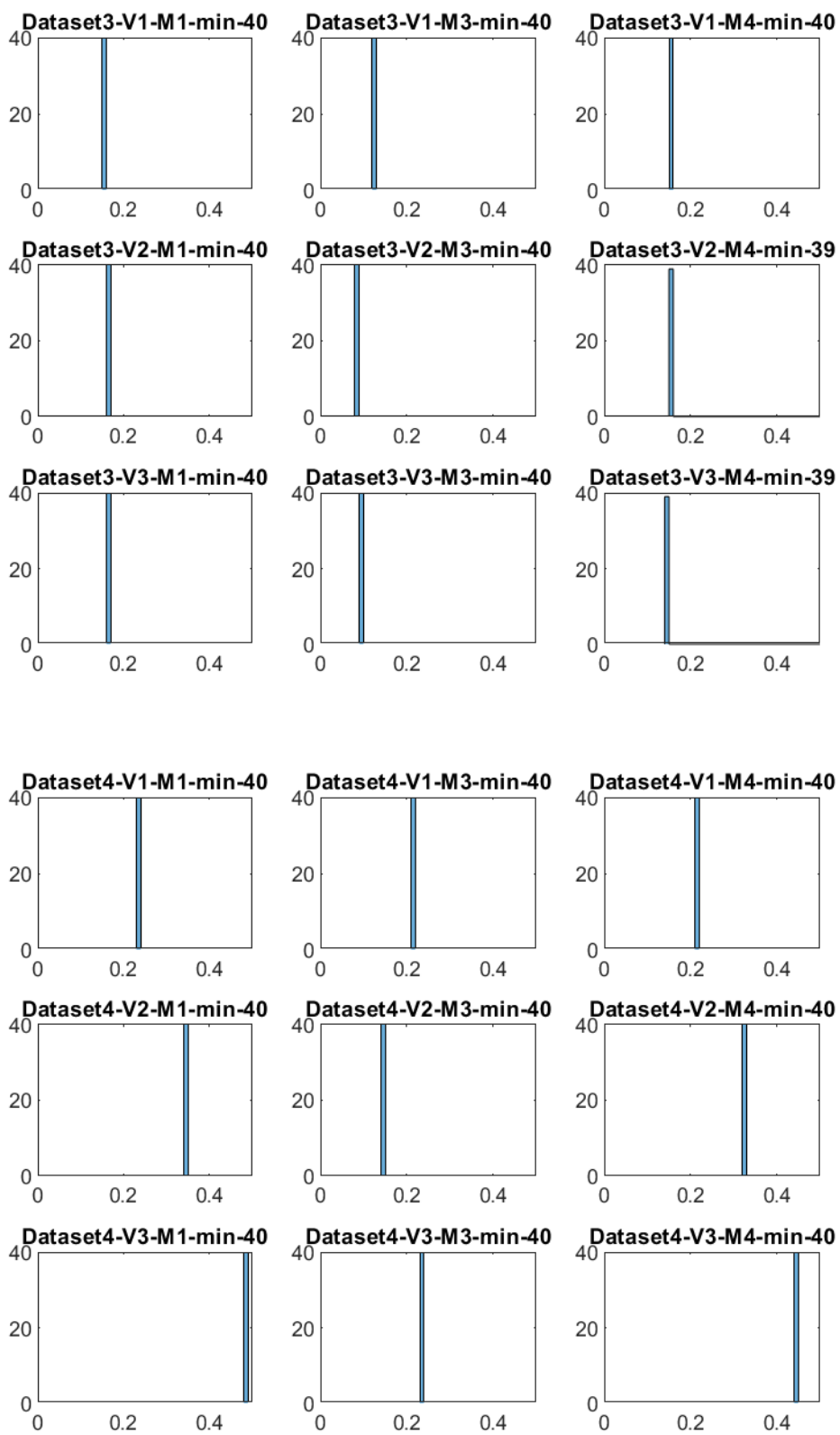








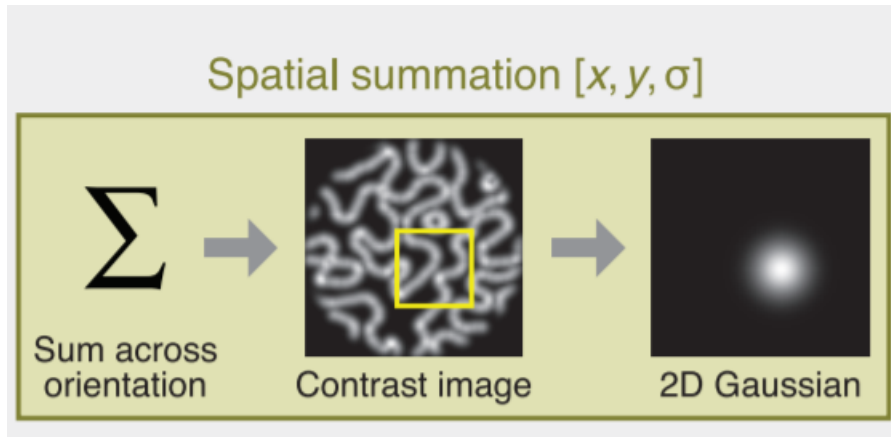




2.3 About the bug

The previous dataset4 returns NaN. I guess this comes from one of the trick we used when runing the model.

2.4 Problem about SOC



[]: