Srategy	Model Name	k = ?	ndcg@k	mrr@k	MAE@k	RMSE@k
3	N _Y	3	0.625659	0.611111	1.166667	1.420826
	N _Y	4	0.618743	0.520833	1.150000	1.383549
	N _Y	5	0.629465	0.463083	1.130000	1.379838
	N _Y	6	0.645734	0.424417	1.093333	1.335429
	N _Y	7	0.645667	0.392036	1.095714	1.354117
	N _Y	8	0.654692	0.366187	1.060000	1.314101
	N _Y	9	0.668419	0.345003	1.054444	1.320688
	N _Y	10	0.664851	0.327278	1.070000	1.343837
	N _Y	11	0.680467	0.312197	1.091818	1.363034
	N _Y	12	0.689456	0.300418	1.094091	1.374190
	N _Y	13	0.703568	0.291441	1.119732	1.400116
	N _Y	14	0.710394	0.285255	1.112589	1.390550
	N _Y	15	0.712467	0.279736	1.086399	1.370181
	N _Y	16	0.718028	0.274776	1.050982	1.347354
	N _Y	17	0.725675	0.270291	1.031497	1.330432
	N _Y	18	0.730215	0.266214	1.041954	1.337090
	N _Y	19	0.737107	0.262490	1.009206	1.316798
	N _Y	20	0.747539	0.259072	0.999732	1.308291
4	N_Y_G_D_C	3	0.586806	0.611111	1.033333	1.412555
	N_Y_G_D_C	4	0.616315	0.520833	1.075000	1.442773
	N_Y_G_D_C	5	0.629650	0.459083	1.110000	1.429357
	N_Y_G_D_C	6	0.647132	0.420417	1.090000	1.404660
	N_Y_G_D_C	7	0.645386	0.388036	1.118571	1.442424
	N_Y_G_D_C	8	0.640321	0.362187	1.090000	1.418943
	N_Y_G_D_C	9	0.658741	0.342238	1.101111	1.428274
	N_Y_G_D_C	10	0.669496	0.325389	1.160000	1.481997
	N_Y_G_D_C	11	0.674912	0.311709	1.146364	1.457200
	N_Y_G_D_C	12	0.695585	0.299930	1.151667	1.458760
	N_Y_G_D_C	13	0.707284	0.292942	1.170897	1.469909
	N_Y_G_D_C	14	0.709559	0.286756	1.151667	1.449230
	N_Y_G_D_C	15	0.718521	0.281237	1.128333	1.429007
	N_Y_G_D_C	16	0.718649	0.276277	1.132917	1.434066
	N_Y_G_D_C	17	0.722520	0.271793	1.101667	1.412207
	N_Y_G_D_C	18	0.726467	0.267716	1.107222	1.416081
	N_Y_G_D_C	19	0.729109	0.263991	1.096404	1.402672
	N_Y_G_D_C	20	0.734619	0.260573	1.091667	1.397232
8	N_Y_G_D_C_Clyrs_Summary	3	0.565580	0.611111	1.000000	1.474302
	N_Y_G_D_C_Clyrs_Summary	4	0.527938	0.520833	1.050000	1.620756
	N_Y_G_D_C_Clyrs_Summary	5	0.593598	0.448667	1.040000	1.520624
	N_Y_G_D_C_Clyrs_Summary	6	0.613395	0.410000	1.040000	1.481157
	N_Y_G_D_C_Clyrs_Summary	7	0.646112	0.375578	1.040000	1.454944
	N_Y_G_D_C_Clyrs_Summary	8	0.654498	0.348423	1.065000	1.489308
	N_Y_G_D_C_Clyrs_Summary	9	0.658671	0.326376	1.173333	1.633599
	N_Y_G_D_C_Clyrs_Summary	10	0.667165	0.308071	1.200000	1.657241
	N_Y_G_D_C_Clyrs_Summary	11	0.674027	0.294252	1.185455	1.630526
	N_Y_G_D_C_Clyrs_Summary	12	0.680741	0.284692	1.194545	1.617529
	N_Y_G_D_C_Clyrs_Summary	13	0.690732	0.275124	1.233007	1.679952
	N_Y_G_D_C_Clyrs_Summary	14	0.693593	0.270175	1.192348	1.651317

Srategy	Model Name	k = ?	ndcg@k	mrr@k	MAE@k	RMSE@k
	N_Y_G_D_C_Clyrs_Summary	15	0.699872	0.265759	1.210443	1.659319
	N_Y_G_D_C_Clyrs_Summary	16	0.704504	0.261792	1.226276	1.669760
	N_Y_G_D_C_Clyrs_Summary	17	0.707793	0.258204	1.204953	1.649534
	N_Y_G_D_C_Clyrs_Summary	18	0.714753	0.254942	1.219332	1.658602
	N_Y_G_D_C_Clyrs_Summary	19	0.715582	0.251963	1.200618	1.641032
	N_Y_G_D_C_Clyrs_Summary	20	0.718384	0.249228	1.203776	1.645731
	N_Y_G_D_C_60_Summary	3	0.607359	0.606800	1.019400	1.227712
	N_Y_G_D_C_60_Summary	4	0.645405	0.511758	1.043210	1.276645
	N_Y_G_D_C_60_Summary	5	0.683953	0.447438	1.049118	1.300513
	N_Y_G_D_C_60_Summary	6	0.709517	0.408780	1.062934	1.324723
	N_Y_G_D_C_60_Summary	7	0.729109	0.384044	1.072928	1.338907
	N_Y_G_D_C_60_Summary	8	0.743623	0.366902	1.080518	1.351930
	N_Y_G_D_C_60_Summary	9	0.756914	0.353869	1.083898	1.357119
	N_Y_G_D_C_60_Summary	10	0.766184	0.344349	1.088542	1.363600
6	N_Y_G_D_C_60_Summary	11	0.773966	0.337563	1.090001	1.365723
	N_Y_G_D_C_60_Summary	12	0.779897	0.332449	1.091084	1.367755
	N_Y_G_D_C_60_Summary	13	0.785164	0.328553	1.093899	1.371304
	N_Y_G_D_C_60_Summary	14	0.789789	0.325390	1.094131	1.372151
	N_Y_G_D_C_60_Summary	15	0.792488	0.322913	1.094392	1.372522
	N_Y_G_D_C_60_Summary	16	0.795808	0.320884	1.096236	1.374789
	N_Y_G_D_C_60_Summary	17	0.798751	0.319185	1.096308	1.375701
	N_Y_G_D_C_60_Summary	18	0.800934	0.317690	1.095864	1.375456
	N_Y_G_D_C_60_Summary	19	0.803584	0.316376	1.097664	1.378334
	N_Y_G_D_C_60_Summary	20	0.805869	0.315215	1.097060	1.377902
	N_Y_G_D_C_35_Summary	3	0.585039	0.608760	1.028582	1.233673
	N_Y_G_D_C_35_Summary	4	0.622841	0.514755	1.029510	1.265795
	N_Y_G_D_C_35_Summary	5	0.655655	0.449955	1.046604	1.301372
	N_Y_G_D_C_35_Summary	6	0.680920	0.409550	1.066128	1.332880
	N_Y_G_D_C_35_Summary	7	0.698301	0.382211	1.088824	1.361218
	N_Y_G_D_C_35_Summary	8	0.713647	0.362316	1.097136	1.374659
	N_Y_G_D_C_35_Summary	9	0.726736	0.347586	1.100091	1.379534
	N_Y_G_D_C_35_Summary	10	0.736367	0.336301	1.103852	1.384396
7	N_Y_G_D_C_35_Summary	11	0.743648	0.327644	1.103558	1.383853
	N_Y_G_D_C_35_Summary	12	0.750937	0.320890	1.104579	1.385875
	N_Y_G_D_C_35_Summary	13	0.757268	0.315618	1.108612	1.391101
	N_Y_G_D_C_35_Summary	14	0.762322	0.311328	1.109212	1.391662
	N_Y_G_D_C_35_Summary	15	0.767038	0.307675	1.106995	1.389396
	N_Y_G_D_C_35_Summary	16	0.770746	0.304638	1.106708	1.390104
	N_Y_G_D_C_35_Summary	17	0.774006	0.302034	1.106687	1.390044
	N_Y_G_D_C_35_Summary	18	0.778285	0.299741	1.106746	1.389913
	N_Y_G_D_C_35_Summary	19	0.781424	0.297762	1.107882	1.391272
	N_Y_G_D_C_35_Summary	20	0.784879	0.296033	1.108213	1.391522
	ItemKNN	3	0.666807	0.577635	0.764572	0.874424
	ItemKNN	4	0.775456	0.461015	0.781569	0.924249
1	ItemKNN	5	0.702806	0.434972	0.756953	0.897630
	ItemKNN	6	0.835816	0.363208	0.787884	0.940145
	ItemKNN	7	0.769780	0.339508	0.763233	0.920975
	ItemKNN	8	0.809433	0.326418	0.830834	0.985972

Srategy	Model Name	k = ?	ndcg@k	mrr@k	MAE@k	RMSE@k
	ItemKNN	9	0.814622	0.302123	0.795449	0.966896
	ItemKNN	10	0.712040	0.284746	0.743291	0.902974
	ItemKNN	11	0.800051	0.254390	0.715882	0.883465
	ItemKNN	12	0.807938	0.251479	0.773702	0.942231
	ItemKNN	13	0.809734	0.227081	0.832302	1.016711
	ItemKNN	14	0.836437	0.225421	0.793729	0.973480
1	ItemKNN	15	0.720429	0.215214	0.757847	0.930824
	ItemKNN	16	0.800876	0.179224	0.796349	0.970492
	ItemKNN	17	0.830382	0.198743	0.745125	0.915377
	ItemKNN	18	0.850553	0.189262	0.709508	0.909329
	ItemKNN	19	0.873207	0.175462	0.788567	0.949786
	ItemKNN	20	0.735517	0.174771	0.772685	0.955683
	Random	3	0.662273	0.596238	1.014816	1.210288
	Random	4	0.775272	0.469678	1.044588	1.222335
	Random	5	0.698966	0.440076	1.011056	1.231444
	Random	6	0.834218	0.371384	0.997929	1.231046
	Random	7	0.772362	0.340537	1.081960	1.302956
	Random	8	0.814406	0.307632	1.013143	1.249527
	Random	9	0.819685	0.287155	1.007981	1.251707
	Random	10	0.707672	0.284463	0.985628	1.232351
	Random	11	0.799811	0.247362	1.069498	1.291206
	Random	12	0.803594	0.236481	1.081738	1.314943
2	Random	13	0.808720	0.220297	1.080848	1.329889
	Random	14	0.831890	0.213566	1.013648	1.247016
	Random	15	0.716071	0.217991	0.974362	1.223044
	Random	16	0.807648	0.190426	1.009015	1.236122
	Random	17	0.837349	0.189889	0.975184	1.180509
	Random	18	0.844475	0.184006	0.899239	1.096430
	Random	19	0.862216	0.175087	0.977598	1.204564
	Random	20	0.730450	0.176804	0.983759	1.235195
	SVD	3	0.666665	0.596596	0.773489	0.899331
	SVD	4	0.775456	0.487417	0.815373	0.953406
	SVD	5	0.702713	0.447926	0.761455	0.919306
	SVD	6	0.835816	0.384906	0.765347	0.937020
	SVD	7	0.769780	0.359541	0.797961	0.977377
	SVD	8	0.809433	0.328254	0.835674	1.005093
	SVD	9	0.814622	0.306808	0.782155	0.977304
	SVD	10	0.711906	0.288413	0.748738	0.924264
	SVD	11	0.800157	0.260513	0.770459	0.934330
3	SVD	12	0.807938	0.247251	0.786199	0.966231
	SVD	13	0.809734	0.234766	0.823968	1.012654
	SVD	14	0.836437	0.225517	0.782006	0.967832
	SVD	15	0.720209	0.217955	0.758866	0.948035
	SVD	16	0.800876	0.197800	0.758875	0.935250
	SVD	17	0.830382	0.200195	0.781259	0.925608
	SVD	18	0.850553	0.186704	0.709417	0.887047
	SVD	19	0.873207	0.183234	0.772592	0.944016
	SVD	20	0.735431	0.176663	0.771256	0.970031

Srategy	Model Name	k = ?	ndcg@k	mrr@k	MAE@k	RMSE@k
	SVD++	3	0.667394	0.596289	0.772971	0.901377
	SVD++	4	0.775456	0.489893	0.802259	0.951827
	SVD++	5	0.703129	0.446580	0.760538	0.921779
	SVD++	6	0.835816	0.383019	0.752085	0.928547
	SVD++	7	0.769780	0.359271	0.784550	0.966372
	SVD++	8	0.809433	0.330146	0.822464	0.994662
	SVD++	9	0.814622	0.307530	0.792527	0.993110
	SVD++	10	0.712287	0.288907	0.751620	0.931060
4	SVD++	11	0.800157	0.259304	0.757352	0.923789
	SVD++	12	0.807938	0.250467	0.798744	0.977644
	SVD++	13	0.809734	0.236939	0.807608	0.997153
	SVD++	14	0.836437	0.225921	0.787323	0.973660
	SVD++	15	0.720632	0.218249	0.762284	0.956613
	SVD++	16	0.800876	0.198466	0.760344	0.941674
	SVD++	17	0.830382	0.197535	0.801065	0.941585
	SVD++	18	0.850553	0.185969	0.698722	0.883461
	SVD++	19	0.873207	0.181786	0.768922	0.933875
	SVD++	20	0.735863	0.177128	0.775844	0.979846
	UserKNN	3	0.666807	0.604007	0.848069	0.970202
	UserKNN	4	0.775456	0.496700	0.901222	1.042089
	UserKNN	5	0.702814	0.450794	0.832655	0.988212
	UserKNN	6	0.835816	0.391038	0.829462	0.996206
	UserKNN	7	0.769780	0.361390	0.827192	1.023618
	UserKNN	8	0.809433	0.326766	0.862993	1.043240
	UserKNN	9	0.814622	0.304856	0.880291	1.064158
	UserKNN	10	0.712075	0.290473	0.814840	0.994556
5	UserKNN	11	0.800051	0.261050	0.891429	1.064883
	UserKNN	12	0.807938	0.248449	0.913602	1.087560
	UserKNN	13	0.809734	0.233626	0.931827	1.132504
	UserKNN	14	0.836437	0.223160	0.831457	1.017417
	UserKNN	15	0.720403	0.219946	0.823527	1.017474
	UserKNN	16	0.800876	0.204191	0.806289	1.021111
	UserKNN	17	0.830382	0.198064	0.822915	0.973179
	UserKNN	18	0.850553	0.189365	0.742380	0.895589
	UserKNN	19	0.873207	0.180827	0.807357	0.979028
	UserKNN	20	0.735631	0.178817	0.843356	1.045890
	BPR	3	0.144400	0.303200	1.950800	2.100300
	BPR	4	0.143600	0.303200	1.968600	2.132800
	BPR	5	0.145400	0.303200	1.991400	2.160700
	BPR	6	0.148100	0.303200	2.001500	2.173900
	BPR	7	0.149800	0.303200	2.009100	2.183100
	BPR	8	0.150500	0.303200	2.013000	2.191300
	BPR	9	0.151400	0.303200	2.016000	2.195800
	BPR	10	0.152000	0.303200	2.014700	2.195600
6	BPR	11	0.154300	0.303200	2.020700	2.202400
	BPR	12	0.154800	0.303200	2.023700	2.206400
	BPR	13	0.155000	0.303200	2.025300	2.208400
	BPR	14	0.155100	0.303200	2.028800	2.211900

Srategy	Model Name	k = ?	ndcg@k	mrr@k	MAE@k	RMSE@k
	BPR	15	0.155100	0.303200	2.029900	2.213800
	BPR	16	0.155700	0.303200	2.029400	2.213600
	BPR	17	0.156300	0.303200	2.030000	2.214000
	BPR	18	0.157200	0.303200	2.031600	2.215700
	BPR	19	0.158100	0.303200	2.032700	2.217000
	BPR	20	0.159500	0.303200	2.032900	2.217200
	VBPR	3	0.573500	0.697300	2.424900	2.573400
	VBPR	4	0.565700	0.697300	2.453200	2.611000
	VBPR	5	0.561700	0.697300	2.451600	2.621300
	VBPR	6	0.554300	0.697300	2.465600	2.636100
	VBPR	7	0.548700	0.697300	2.479700	2.651900
	VBPR	8	0.543300	0.697300	2.479100	2.653100
	VBPR	9	0.535000	0.697300	2.486200	2.663300
	VBPR	10	0.528000	0.697300	2.490700	2.670000
7	VBPR	11	0.521400	0.697300	2.493600	2.674500
	VBPR	12	0.514100	0.697300	2.498300	2.681200
	VBPR	13	0.506900	0.697300	2.501000	2.685100
	VBPR	14	0.502000	0.697300	2.503600	2.689000
	VBPR	15	0.498400	0.697300	2.505700	2.691800
	VBPR	16	0.493800	0.697300	2.510200	2.697100
	VBPR	17	0.489500	0.697300	2.511600	2.699300
	VBPR	18	0.485800	0.697300	2.513300	2.701800
	VBPR	19	0.481400	0.697300	2.514200	2.703200
	VBPR	20	0.477500	0.697300	2.514500	2.704600
	PMF	3	0.116200	0.230500	0.738200	0.848800
	PMF	4	0.110400	0.230500	0.752200	0.879900
	PMF	5	0.106200	0.230500	0.750500	0.888600
	PMF	6	0.103000	0.230500	0.752700	0.898300
	PMF	7	0.101300	0.230500	0.753300	0.903800
	PMF	8	0.099200	0.230500	0.754900	0.908400
	PMF	9	0.099000	0.230500	0.757100	0.912600
	PMF	10	0.097600	0.230500	0.757400	0.914900
8	PMF	11	0.096500	0.230500	0.758400	0.917500
	PMF	12	0.096700	0.230500	0.758700	0.919100
	PMF	13	0.096400	0.230500	0.758500	0.920600
	PMF	14	0.095800	0.230500	0.759700	0.922400
	PMF	15	0.095600	0.230500	0.759600	0.922700
	PMF	16	0.094900	0.230500	0.758800	0.921800
	PMF	17	0.094700	0.230500	0.760200	0.923900
	PMF	18	0.094100	0.230500	0.761300	0.925400
	PMF	19	0.094100	0.230500	0.760800	0.925600
	PMF	20	0.094400	0.230500	0.760800	0.926000
	MCF	3	0.057100	0.138500	0.780100	0.888900
	MCF	4	0.057100	0.138500	0.780300	0.901900
	MCF	5	0.056400	0.138500	0.781000	0.906600
	MCF	6	0.056000	0.138500	0.782300	0.913200
	MCF	7	0.054700	0.138500	0.779500	0.912900
	MCF	8	0.055100	0.138500	0.782900	0.918300

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Srategy	Model Name	k = ?	ndcg@k	mrr@k	MAE@k	RMSE@k
	MCF	9	0.055000	0.138500	0.785000	0.922300
	MCF	10	0.055900	0.138500	0.786600	0.925300
	MCF	11	0.056100	0.138500	0.786800	0.926100
	MCF	12	0.056400	0.138500	0.788100	0.928500
	MCF	13	0.057700	0.138500	0.789300	0.930300
	MCF	14	0.058200	0.138500	0.788900	0.930200
	MCF	15	0.058800	0.138500	0.789300	0.931200
	MCF	16	0.059900	0.138500	0.790400	0.932800
	MCF	17	0.061100	0.138500	0.791100	0.933800
	MCF	18	0.061500	0.138500	0.791400	0.934100
	MCF	19	0.062000	0.138500	0.792000	0.935100
	MCF	20	0.062400	0.138500	0.792300	0.935500
	GridSearch_VAECF	3	0.289700	0.474700	1.333300	1.633000
	GridSearch_VAECF	4	0.283900	0.474700	1.750000	2.061600
	GridSearch_VAECF	5	0.278100	0.474700	1.400000	1.843900
	GridSearch_VAECF	6	0.277100	0.474700	1.666700	2.081700
	GridSearch_VAECF	7	0.278300	0.474700	2.000000	2.449500
	GridSearch_VAECF	8	0.279000	0.474700	2.125000	2.524900
	GridSearch_VAECF	9	0.280200	0.474700	1.888900	2.380500
	GridSearch_VAECF	10	0.281600	0.474700	1.800000	2.280400
	GridSearch_VAECF	11	0.283700	0.474700	1.818200	2.256300
10	GridSearch_VAECF	12	0.285300	0.474700	1.666700	2.160200
	GridSearch_VAECF	13	0.287100	0.474700	1.692300	2.148300
	GridSearch_VAECF	14	0.289700	0.474700	1.714300	2.138100
	GridSearch_VAECF	15	0.291900	0.474700	1.800000	2.206100
	GridSearch_VAECF	16	0.294700	0.474700	1.812500	2.193700
	GridSearch_VAECF	17	0.297200	0.474700	1.823500	2.182800
	GridSearch_VAECF	18	0.299400	0.474700	1.777800	2.134400
	GridSearch_VAECF	19	0.300700	0.474700	1.842100	2.188500
	GridSearch_VAECF	20	0.303600	0.474700	1.850000	2.179400
	RandomSearch_VAECF	3	0.294100	0.475400	1.333300	1.633000
	RandomSearch_VAECF	4	0.284000	0.475400	1.750000	2.061600
	RandomSearch_VAECF	5	0.280300	0.475400	1.400000	1.843900
	RandomSearch_VAECF	6	0.278300	0.475400	1.666700	2.081700
	RandomSearch_VAECF	7	0.278500	0.475400	2.000000	2.449500
	RandomSearch_VAECF	8	0.276800	0.475400	2.125000	2.524900
	RandomSearch_VAECF	9	0.279200	0.475400	1.888900	2.380500
	RandomSearch_VAECF	10	0.281100	0.475400	1.800000	2.280400
	RandomSearch_VAECF	11	0.283500	0.475400	1.818200	2.256300
11	RandomSearch_VAECF	12	0.285300	0.475400	1.666700	2.160200
	RandomSearch_VAECF	13	0.285400	0.475400	1.692300	2.148300
	RandomSearch_VAECF	14	0.287400	0.475400	1.714300	2.138100
	RandomSearch_VAECF	15	0.289900	0.475400	1.800000	2.206100
	RandomSearch_VAECF	16	0.292900	0.475400	1.812500	2.193700
	RandomSearch_VAECF	17	0.295000	0.475400	1.823500	2.182800
	RandomSearch_VAECF	18	0.296700	0.475400	1.777800	2.134400
	RandomSearch_VAECF	19	0.298000	0.475400	1.842100	2.188500
	RandomSearch_VAECF	20	0.300700	0.475400	1.850000	2.179400

Srategy	Model Name	k = ?	ndcg@k	mrr@k	MAE@k	RMSE@k
	LightGCN	3	0.447500	0.637800	1.780300	1.999600
	LightGCN	4	0.435800	0.637800	1.788700	2.036800
	LightGCN	5	0.430400	0.637800	1.785200	2.048000
	LightGCN	6	0.427800	0.637800	1.777100	2.049600
	LightGCN	7	0.421400	0.637800	1.766100	2.046500
	LightGCN	8	0.418700	0.637800	1.765500	2.050800
	LightGCN	9	0.415300	0.637800	1.764800	2.055500
	LightGCN	10	0.408900	0.637800	1.764800	2.056300
	LightGCN	11	0.404500	0.637800	1.760000	2.052600
12	LightGCN	12	0.400800	0.637800	1.757400	2.053800
	LightGCN	13	0.397800	0.637800	1.753500	2.052500
	LightGCN	14	0.394500	0.637800	1.753500	2.054600
	LightGCN	15	0.391500	0.637800	1.752500	2.054600
	LightGCN	16	0.388900	0.637800	1.756300	2.059500
	LightGCN	17	0.386400	0.637800	1.754400	2.057900
	LightGCN	18	0.384700	0.637800	1.754900	2.058900
	LightGCN	19	0.382400	0.637800	1.751800	2.057300
	LightGCN	20	0.381200	0.637800	1.752000	2.057900
	NGCF	3	0.362400	0.563100	2.213400	2.419800
	NGCF	4	0.351200	0.563100	2.198000	2.428700
	NGCF	5	0.345200	0.563100	2.192700	2.435400
	NGCF	6	0.342500	0.563100	2.187700	2.436700
	NGCF	7	0.340500	0.563100	2.175500	2.429300
	NGCF	8	0.336700	0.563100	2.174200	2.431500
	NGCF	9	0.333500	0.563100	2.176100	2.435800
	NGCF	10	0.330500	0.563100	2.172900	2.434200
	NGCF	11	0.328800	0.563100	2.168200	2.430500
13	NGCF	12	0.325700	0.563100	2.168200	2.432600
	NGCF	13	0.322500	0.563100	2.163800	2.430400
	NGCF	14	0.320300	0.563100	2.166600	2.432700
	NGCF	15	0.317600	0.563100	2.165900	2.433000
	NGCF	16	0.315200	0.563100	2.165100	2.433300
	NGCF	17	0.314200	0.563100	2.162500	2.432000
	NGCF	18	0.312300	0.563100	2.162200	2.432300
	NGCF	19	0.310300	0.563100	2.158600	2.430400
	NGCF	20	0.307900	0.563100	2.155900	2.428600