
Bijikon server guideline

VMO Holdings .Jsc



20-01-2021

Mục lục

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1 WNI script

1.1 Diagonalization result script

1.1.1 Requirements

Given a table of prediction in different timestamps and localtion, export an diagonalized table for each lclid (location name)

The columns in the given table include:

- context
- lclid
- t_0
- t_1
- ...
- t_36

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	context	lclid	t_0	t_1	t_2	t_3	t_4	t_5	t_6	t_7	t_8	t_9	t_10	t_11	t_12	t_13
2	NONE	淮安市	20210313 0100	0.8416976	0.53675437	7.4792595	2.878951	2.4813795	4.852856	2.8326895	2.825183	2.2636557	2.8018532	0	1.7523365	0.76092803
3	NONE	市川市	20210313 0100	0.17039359	0	0	3.0846443	3.2580235	2.8057814	2.8995419	2.7939916	1.6734556	0.8089317	0.1199491	0.23601758	0
4	NONE	鎌ヶ谷市	20210313 0100	0.5306661	1.0029906	0.9374049	0	2.9784143	0.6724137	1.2594023	0.2043153	0.88425136	0.7927877	1.1912606	0.9426259	3.8039093
5	NONE	吉川市	20210313 0100	0	0	0	0	0	0	0	0	0	0	0	0	0
6	NONE	大田区	20210313 0100	3.4096198	5.5684195	3.456168	0.8586477	3.7581859	3.502962	3.502962	3.502962	3.4176857	1.7570533	1.1789975	0.4207549	0.81377363
7	NONE	世田谷区	20210313 0100	0	0	0	0	0	0.0147771835	0	0.26210797	0.49896812	0	1.1281085	0	0
8	NONE	目黒区	20210313 0100	0.02622199	0.025218844	0.025218844	0.17913544	0	0	0.2053914	0.025218844	0.025218844	0	0	0	0.007828474
9	NONE	海老名市	20210313 0100	0.5164372	0.5211414	0.5211414	0.5211414	0.5211414	0.5211414	0.5211414	0.5211414	0.3589965	0.7146013	7.785676	10.2489999	0
10	NONE	浦安市	20210313 0105	1.1426318	1.8475721	1.2277472	1.9217184	0	1.8256123	6.5536394	8.675783	1.0716494	1.4031386	0.7680681	0.1514504	2.697336
11	NONE	市川市	20210313 0105	0.53592825	0.47093153	0.0524472	0	0	0	0.9095167	0.7925377	3.3291585	3.1892989	5.0072374	0.93567646	0
12	NONE	鎌ヶ谷市	20210313 0105	0.7154453	1.2792753	0.5948349	0.20497763	0.12538862	0.9528272	1.3242402	0.21546578	0.17980063	1.4948201	2.7359285	2.182465	0.93455493
13	NONE	吉川市	20210313 0105	0	0	0	0	0	0	0	0	0	0	0	0	0.47442734
14	NONE	大田区	20210313 0105	1.7780306	1.3480629	0.28648353	1.2878541	1.3058074	1.9810896	1.973481	2.2493162	2.3467374	2.3467374	1.9791487	1.9192443	2.5769649
15	NONE	世田谷区	20210313 0105	3.6009314	0	0	0	0	1.6388776	2.0943954	2.2019606	0	0	0	0	0.20337296
16	NONE	目黒区	20210313 0105	0	0	0	0	0	0	0.2807815	0	0	0	0	0	0
17	NONE	海老名市	20210313 0110	0.52149475	0.526199	0.526199	0.526199	0.526199	0.526199	0.526199	0.526199	0.526199	0.7964598	14.962672	9.568468	9.599917
18	NONE	浦安市	20210313 0110	2.7204843	6.309289	3.985684	0.9293511	0.9293511	4.5870123	0.70371723	0.6962106	0.6962106	0.6962106	0.68849946	0.5105978	0.029122353
19	NONE	市川市	20210313 0110	0.6822535	0	0	5.2587	0	0.3911605	0.07839024	1.7703631	0.015512109	0.015512109	0.015512109	0.015235305	0.015235305
20	NONE	鎌ヶ谷市	20210313 0110	0.27861607	1.4373021	2.8870316	5.899424	1.1432104	1.0359274	1.1538216	0.9587238	0.5256733	2.2800736	1.2987295	0.057228684	0.21388185
21	NONE	吉川市	20210313 0110	0	0	0	0	0	0	0	0	0	0.4104241	0	0	0
22	NONE	大田区	20210313 0110	0.5708853	0.6249007	2.171526	1.7955537	3.447507	3.447507	3.447507	3.447507	3.447507	3.447507	3.447507	3.4472308	3.4472308
23	NONE	世田谷区	20210313 0110	3.66821	0	0	0	0	2.7386932	1.6190407	1.6078012	0	0	0	0	0
24	NONE	目黒区	20210313 0110	0.003448248	0.0024451017	0.14466298	0	0.22130442	1.0395852	1.4078146	0.0024451017	0.0024451017	0.0024451017	0.0024451017	0.002169013	0.002169013
25	NONE	海老名市	20210313 0110	0.5307498	0.53545403	0.53545403	0.53545403	0.53545403	0.53545403	0.37330914	0.53545403	0.53545403	0.53545403	1.5632079	6.472422	0
26	NONE	浦安市	20210313 0115	1.3389595	0	1.6789411	2.026494	1.3925815	0.6023234	1.6941848	0.60153294	0.58333325	1.5411172	0.04414165	0.83697224	0.97138345
27	NONE	市川市	20210313 0115	0.36426938	0.04287207	0	0.23229432	1.1653247	0.16794169	0.669454	1.1653247	0.88794136	0.8770466	0	0	0
28	NONE	鎌ヶ谷市	20210313 0115	1.6893697	1.4861584	0.55176544	0.50384223	0.4203683	0.46151304	1.7012908	0.33194268	1.3682224	1.2731116	0.29008305	0.24419296	1.3381705
29	NONE	吉川市	20210313 0115	0	0	0	0	0	0	0	0	0	0.27560592	0	0.15234518	1.0903487
30	NONE	大田区	20210313 0115	2.3472018	0.7020707	1.4682348	0.31841183	3.1588287	2.3320935	2.3545356	1.8735502	1.9869472	2.3545356	2.3545356	2.3542595	2.3542595
31	NONE	世田谷区	20210313 0115	4.155401	0	0	0	0	1.8021315	1.8040745	1.6202956	0	0	0	0.76223624	0.05308163
32	NONE	目黒区	20210313 0115	0	0	0	0	0	0	0	0.15979743	0	0.09977496	0	0	0
33	NONE	海老名市	20210313 0115	0.5148039	0.5195081	0.5195081	0.5195081	0.5195081	0.5195081	0.5195081	0.5195081	0.5195081	1.1442214	6.465171	4.3794813	4.123646

Hình 1: Data from customer

Important columns:

1. lclid: place name
2. t_1 -> t_36: accuracy

For each lclid, rearrange data as follow:

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR										
		事例 1 LCUID : 世田谷区																																																			
		予測対象時刻																																																			
SD		0.00	0.33	0.12	0.16	0.68	0.25	0.26	0.64	1.15	1.97	3.81	3.28	2.26	2.30	2.47	2.28	2.82	2.92	2.89	2.77	2.47	2.06	1.79	1.64	1.32	1.04	1.65	1.59	1.42	1.00	1.54	2.30	3.79	3.39	2.84	2.62	4.10	4.16	3.60	2.88	3.50	3.07										
発表時刻		0:05	0:10	0:15	0:20	0:25	0:30	0:35	0:40	0:45	0:50	0:55	1:00	1:05	1:10	1:15	1:20	1:25	1:30	1:35	1:40	1:45	1:50	1:55	2:00	2:05	2:10	2:15	2:20	2:25	2:30	2:35	2:40	2:45	2:50	2:55	3:00	3:05	3:10	3:15	3:20	3:25	3:30										
0:00		3.00	1.75	1.83	2.48	0.93	0.18	0.00	0.73	0.62	0.38	1.00	1.78	3.23	5.78	5.44	6.75	6.64	7.61	4.11	3.03	3.43	2.99	2.04	0.59	0.15	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
0:05			1.29	1.60	2.20	2.58	0.78	0.00	0.00	1.20	0.78	0.81	1.49	2.94	4.45	6.14	6.54	6.68	7.64	4.12	3.18	3.32	2.98	2.05	0.84	0.00	0.35	0.44	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
0:10				1.66	2.12	1.79	0.51	0.00	1.53	4.19	6.72	12.91	10.96	6.52	5.08	6.99	6.10	3.73	3.17	2.46	2.98	4.35	3.53	2.46	2.23	1.63	2.66	7.87	6.95	6.34	2.28	1.91	0.55	0.30	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
0:15					2.23	2.36	0.73	0.00	0.10	1.37	2.62	5.42	6.51	5.65	4.33	4.14	4.44	3.87	4.21	4.83	4.79	4.24	3.44	2.46	1.95	1.62	1.47	2.78	4.99	4.43	3.20	1.53	0.94	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
0:20						2.47	0.86	0.08	0.40	1.27	1.86	2.55	3.10	3.63	3.59	4.52	5.83	7.71	6.69	6.40	5.60	4.91	3.23	2.70	3.11	2.56	1.98	1.49	0.91	0.36	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
0:25							0.68	0.00	0.00	0.63	1.75	2.49	2.68	1.97	2.30	3.81	4.84	6.26	7.10	6.59	4.73	3.30	1.79	1.86	1.80	1.53	1.55	0.97	0.96	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
0:30								0.89	1.59	1.25	0.83	1.46	1.92	1.18	0.28	1.31	3.08	3.91	6.27	7.16	7.26	5.94	4.10	2.71	1.27	0.66	0.60	0.65	0.76	0.78	1.05	1.72	1.84	1.75	1.67	1.66	1.27	1.61	2.26	2.16	3.80	6.40	6.88										
0:35									0.48	0.75	0.70	0.49	0.55	0.59	0.00	0.52	2.50	5.44	4.82	6.56	7.83	7.19	6.05	4.28	2.13	0.70	0.59	0.49	0.52	0.73	0.89	0.93	1.90	2.54	1.17	1.26	2.06	1.18	2.78	2.59	3.29	4.25	6.44										
0:40										0.25	0.38	0.08	0.00	0.00	0.00	1.84	5.54	8.06	7.66	7.36	6.76	6.37	6.37	6.61	6.39	4.56	2.59	1.86	1.17	0.72	0.26	1.01	1.43	1.57	1.67	1.84	3.05	3.52	2.76	1.46	1.25	1.90	3.31										
0:45											0.00	0.00	0.00	0.00	0.00	1.04	4.43	3.68	10.14	10.49	9.32	6.96	4.74	4.47	4.39	3.34	2.12	2.64	2.46	1.26	0.53	0.26	1.51	1.25	0.92	0.84	1.98	2.38	1.81	0.90	1.14	2.28	5.01										
0:50												0.00	0.00	0.00	0.00	1.13	3.53	7.08	7.84	8.48	6.02	3.65	2.52	2.26	2.52	3.31	2.98	1.81	1.87	2.15	2.52	3.14	5.74	6.92	4.83	3.21	1.80	0.00	0.00	0.00	0.00	0.00	0.00										
0:55													0.00	0.00	0.00	1.69	4.00	7.72	7.36	4.88	2.23	1.21	1.22	1.30	1.64	2.30	1.99	1.33	1.79	2.46	2.54	3.84	4.11	5.03	2.74	1.55	0.00	0.00	0.00	0.00	0.00	0.00											
1:00														0.00	0.00	1.82	2.03	4.92	5.31	4.06	2.88	1.42	0.83	0.54	0.19	0.08	0.16	0.27	0.70	2.17	4.50	10.42	19.43	16.06	10.02	5.21	4.04	8.08	8.69	15.74	13.32												
1:05															0.00	0.00	0.29	1.76	2.91	4.50	3.17	1.79	0.84	0.32	0.00	0.00	0.16	0.45	0.61	2.55	6.63	5.68	8.64	11.35	9.60	14.07	8.84	3.29	6.00	8.97	13.13	11.15											
1:10																0.00	0.45	2.86	3.10	2.80	1.69	0.58	0.00	0.00	0.00	0.78	1.06	0.88	0.96	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00											
1:15																	0.00	0.26	1.60	1.16	0.88	0.00	0.00	0.00	0.00	0.27	0.59	0.57	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00											
1:20																		0.00	0.38	0.90	0.80	0.53	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.95	0.67	0.79	2.37	4.58	2.93	1.56										
1:25																			0.18	0.52	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.59	0.50	0.22	0.66	0.90	1.57	1.81											
1:30																				0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.86	1.97	2.63	2.31										
1:35																					0.43	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	1.78	3.15										
1:40																																					0.49	1.49	2.29	3.59	4.48	5.77	4.34	3.93	6.41								
1:45																																					0.00	0.59	2.82	3.11	3.21	4.47	4.08	4.42	5.04								
1:50																																					0.00	0.76	1.95	2.82	2.97	3.63	2.54	2.93	1.80	1.31							
1:55																																					0.00	0.00	0.15	0.00	0.39	0.00	0.00	0.00	0.00	1.38	2.11	1.37	2.17	1.35	1.54	2.04	1.21
2:00																																					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	2.16	1.63	2.42	2.77	5.01	5.81	5.67	3.01	
2:05																																					0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.51	1.38	2.25	4.36	7.59	4.79	2.51			
2:10																																					0.00	0.00	0.00	0.00	0.00	0.76	2.59	1.98	1.77	4.80	11.68	10.26	7.94	5.01			
2:15																																					0.00	0.24	0.27	0.00	0.00	0.00	0.27	1.75	1.62	1.37	5.51	11.16	8.99	5.93	4.31		
2:20																																					0.00	0.00	0.00	0.00	0.00	0.98	1.88	1.96	1.05	1.51	3.87	4.13	3.32				
2:25																																					0.09	0.53	0.00	0.00	0.24	0.75	2.24	2.33	1.36	3.29	3.49	4.18	4.81				
2:30																																					0.44	0.55	1.01	1.23	1.38	1.72	3.40	4.38	2.19	0.39	0.28	2.81					
+ 目 Baratsuki		Time-series plot[0530]		kaku_世田谷区		kaku_吉川区		kaku_大田区		kaku_市川市		kaku_浦安市		kaku_海老名市		kaku_目黒区		kaku_藤谷市																																			

Hình 2: Rearranged data

The script has been finished and can use immediately.

1.2 Transpose accuracy result script

1.3 Storm and map drawing script using matplotlib

2 Improve accuracy of WNI nowcasting using deep learning instead of traditional machine learning method

2.1 Applied deep learning on local optical flow

2.2 Applied deep learning on global optical flow

2.3 Applied deep learning on radar image prediction