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Begin training Undirected\_GRUGAT. Training data list on a single error type: crash\_camera\_driver1, 1 samples.

Total number of graphs: 8877, Presence of class 0: 8877, Presence of class 1: 2048

Epoch 1, Total weighted loss: 0.55767, Macro recall: 0.97248, Total accuracy: 0.97664, Macro F1-score: 0.69274. Loss backpropagated 2048 times.

Total number of graphs: 8877, Presence of class 0: 8877, Presence of class 1: 2048

Epoch 2, Total weighted loss: 0.34646, Macro recall: 0.93863, Total accuracy: 0.97771, Macro F1-score: 0.68974. Loss backpropagated 2050 times.

Total number of graphs: 8877, Presence of class 0: 8877, Presence of class 1: 2048

Epoch 3, Total weighted loss: 0.37668, Macro recall: 0.93166, Total accuracy: 0.94177, Macro F1-score: 0.58545. Loss backpropagated 2047 times.

Recall score not improving. Early stopping triggered.

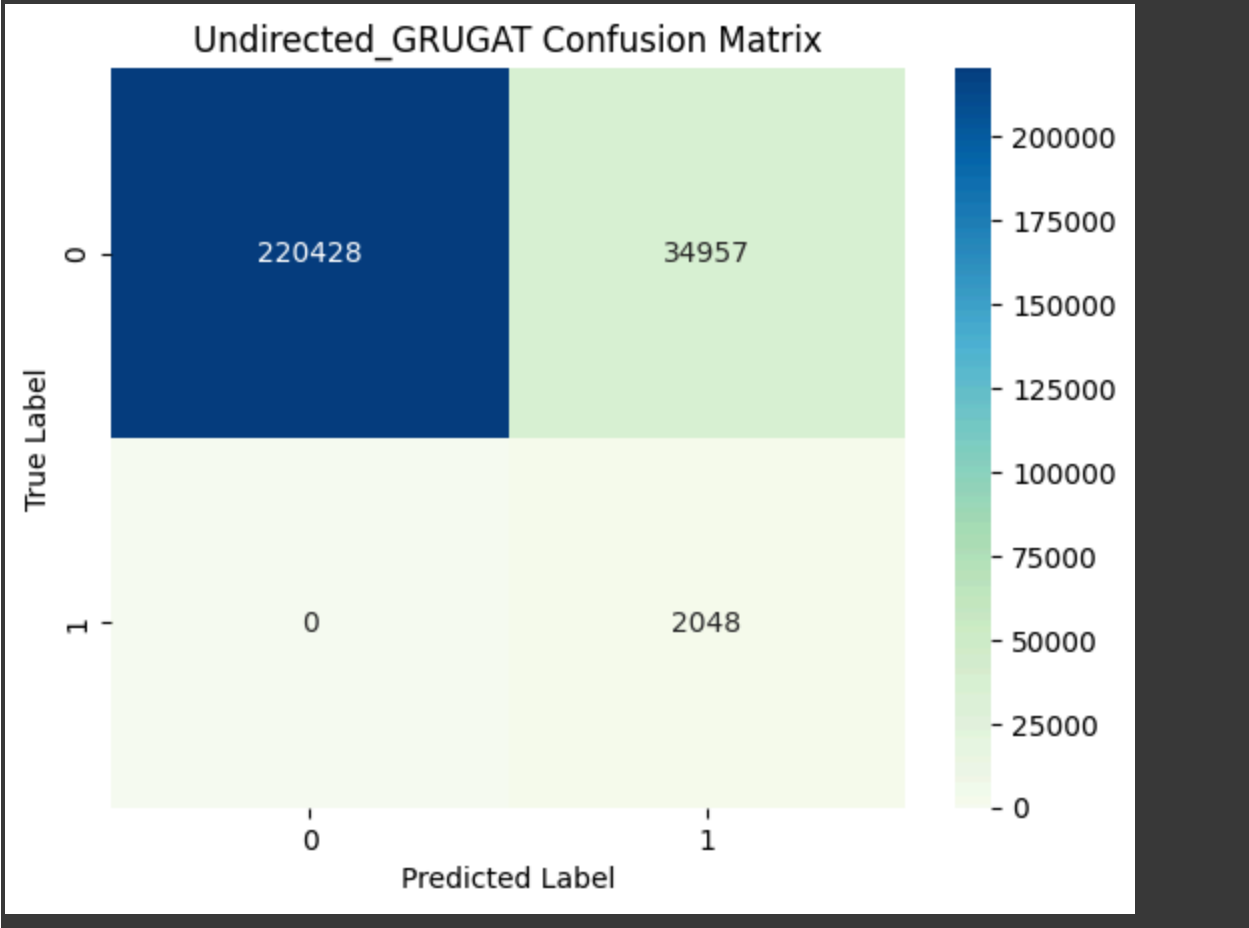
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Test 1: Evaluate Undirected\_GRUGAT on the training dataset.

Model: Undirected\_GRUGAT

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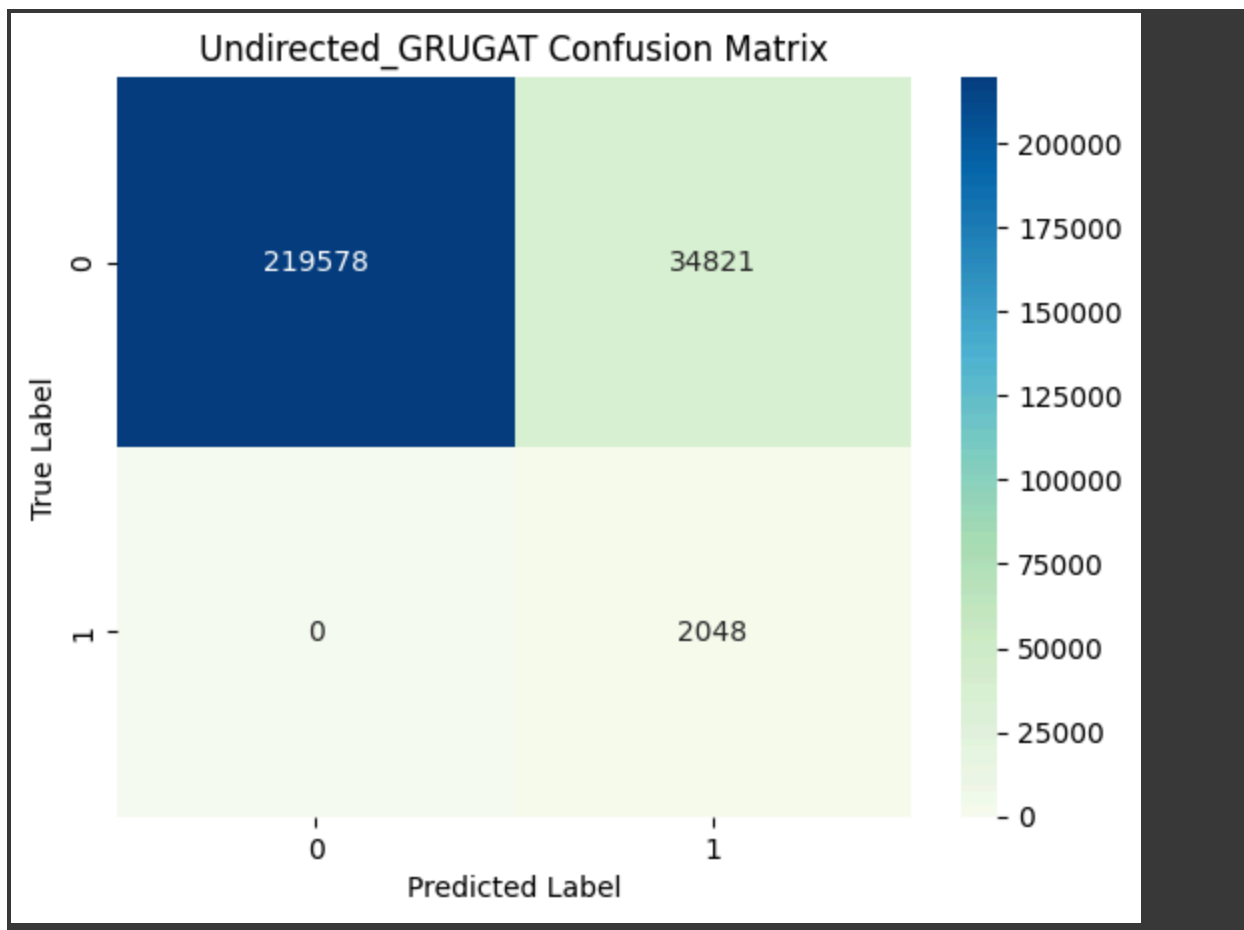
	precision	recall	f1-score	support
0	1.0000	0.8631	0.9265	255385
1	0.0553	1.0000	0.1049	2048
accuracy		0.8642		257433
macro avg	0.5277	0.9316	0.5157	257433
weighted avg	0.9925	0.8642	0.9200	257433



Test 2: How does the model perform on unseen data, of the same error type?: crash\_camera\_driver1, 1 samples.

Model: Undirected\_GRUGAT

	precision	recall	f1-score	support
0	1.0000	0.8631	0.9265	254399
1	0.0555	1.0000	0.1052	2048
accuracy		0.8642		256447
macro avg	0.5278	0.9316	0.5159	256447
weighted avg	0.9925	0.8642	0.9200	256447



Test 3: How does the model perform on unseen data, of a different error type?: crash\_tracker, 1 samples.

Model: Undirected\_GRUGAT

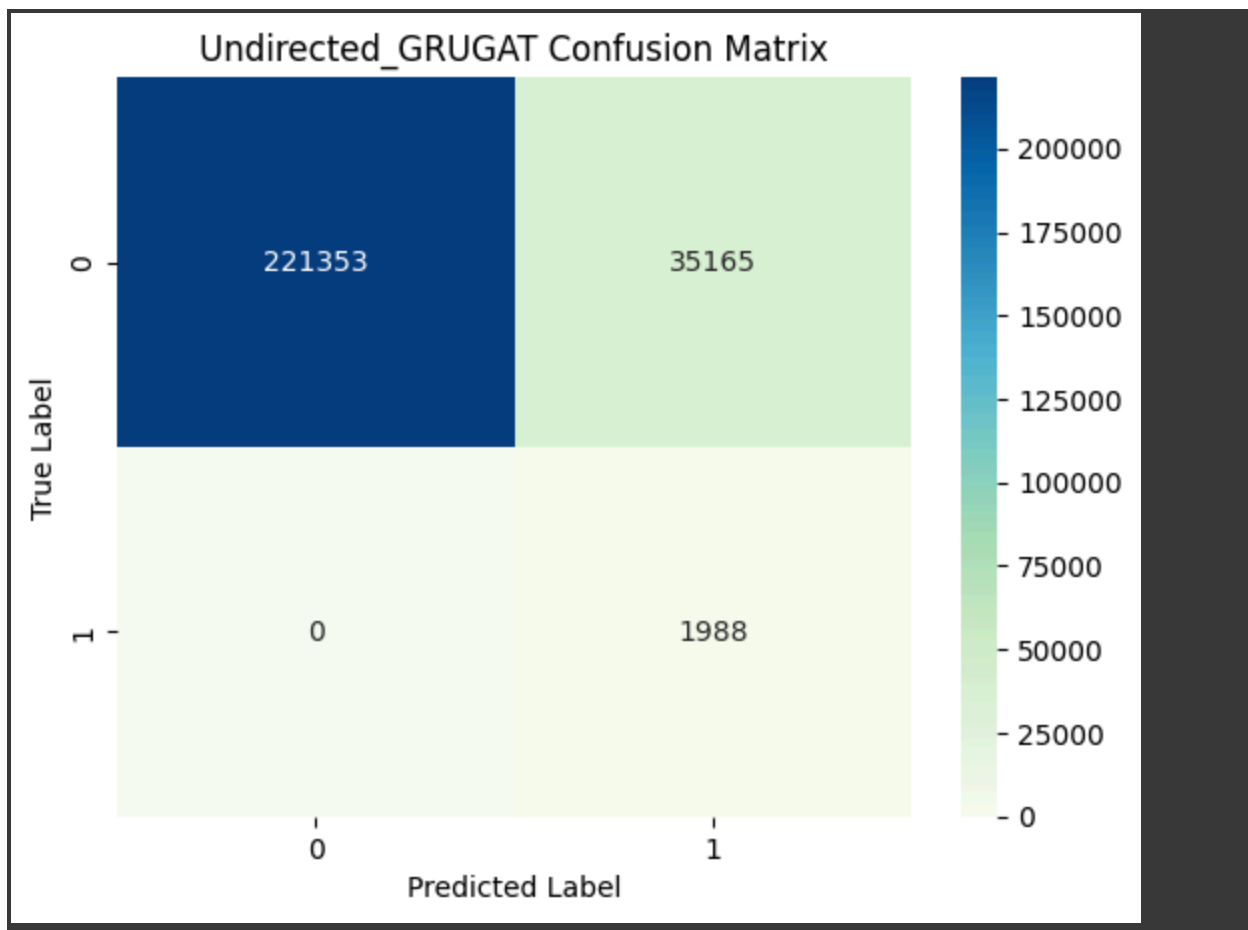
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      precision  recall f1-score  support

0   1.0000   0.8629   0.9264   256518
1   0.0535   1.0000   0.1016     1988

accuracy                0.8640   258506
macro avg   0.5268   0.9315   0.5140   258506
weighted avg   0.9927   0.8640   0.9201   258506

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Begin training Directed\_GRUGAT. Training data list on a single error type: crash\_camera\_driver1, 1 samples.

Total number of graphs: 8877, Presence of class 0: 8877, Presence of class 1: 2048

Epoch 1, Total weighted loss: 0.57085, Macro recall: 0.98196, Total accuracy: 0.99929, Macro F1-score: 0.97780. Loss backpropagated 111 times.

Total number of graphs: 8877, Presence of class 0: 8877, Presence of class 1: 2048

Epoch 2, Total weighted loss: 0.35389, Macro recall: 0.99798, Total accuracy: 0.99983, Macro F1-score: 0.99462. Loss backpropagated 41 times.

Total number of graphs: 8877, Presence of class 0: 8877, Presence of class 1: 2048

Epoch 3, Total weighted loss: 0.33895, Macro recall: 0.99563, Total accuracy: 0.99950, Macro F1-score: 0.98437. Loss backpropagated 73 times.

Total number of graphs: 8877, Presence of class 0: 8877, Presence of class 1: 2048

Epoch 4, Total weighted loss: 0.32924, Macro recall: 0.99060, Total accuracy: 0.99864, Macro F1-score: 0.95975. Loss backpropagated 236 times.

Total number of graphs: 8877, Presence of class 0: 8877, Presence of class 1: 2048

Epoch 5, Total weighted loss: 0.32545, Macro recall: 0.97871, Total accuracy: 0.99908, Macro F1-score: 0.97117. Loss backpropagated 161 times.

Total number of graphs: 8877, Presence of class 0: 8877, Presence of class 1: 2048

Epoch 6, Total weighted loss: 0.32275, Macro recall: 0.99139, Total accuracy: 0.99876, Macro F1-score: 0.96312. Loss backpropagated 132 times.

Total number of graphs: 8877, Presence of class 0: 8877, Presence of class 1: 2048

Epoch 7, Total weighted loss: 0.32617, Macro recall: 0.97487, Total accuracy: 0.99579, Macro F1-score: 0.89040. Loss backpropagated 445 times.

Recall score not improving. Early stopping triggered.

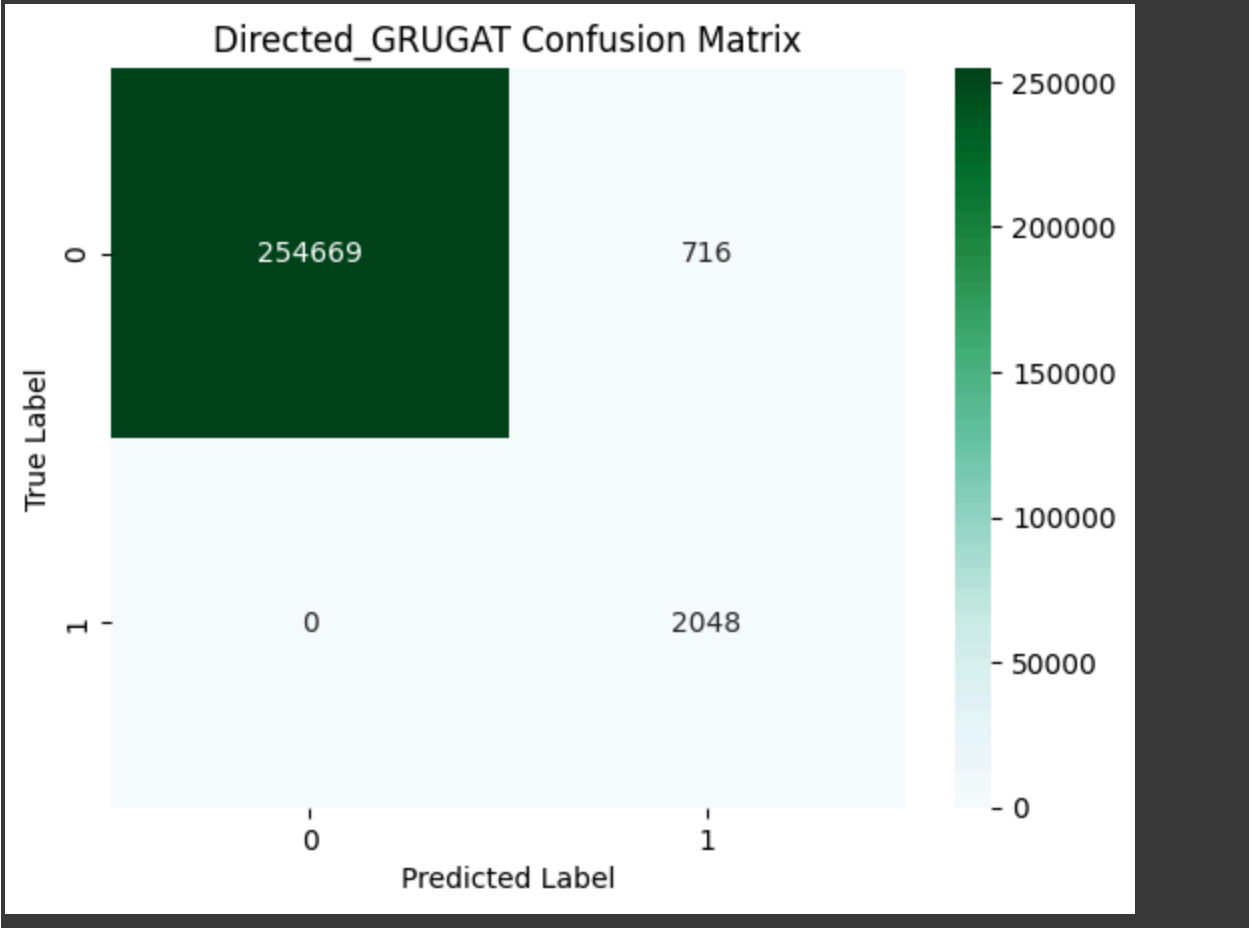
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Test 1: Evaluate Directed\_GRUGAT on the training dataset.

Model: Directed\_GRUGAT

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	precision	recall	f1-score	support
0	1.0000	0.9972	0.9986	255385
1	0.7410	1.0000	0.8512	2048
accuracy		0.9972		257433
macro avg	0.8705	0.9986	0.9249	257433
weighted avg	0.9979	0.9972	0.9974	257433



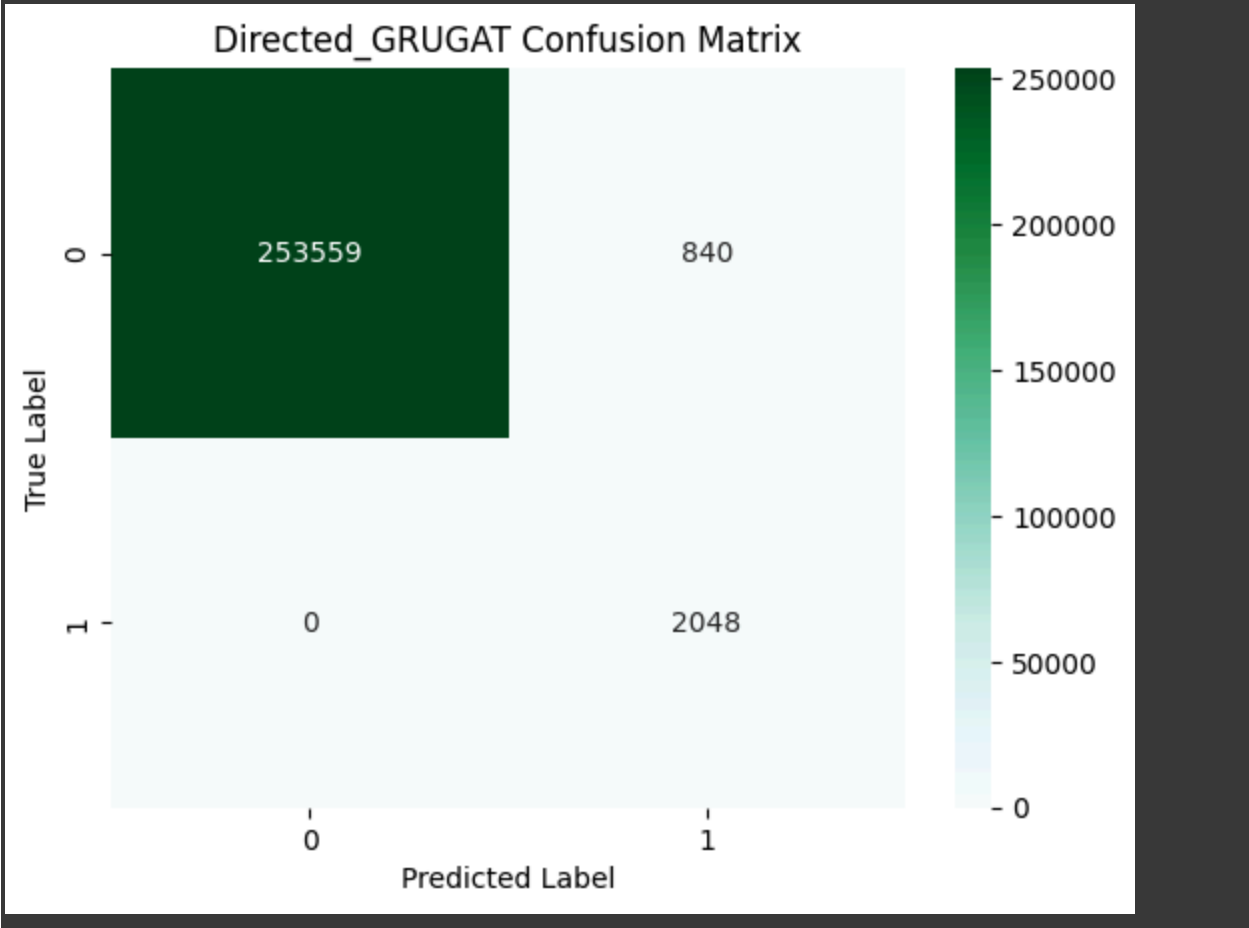
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Test 2: How does the model perform on unseen data, of the same error type?: crash\_camera\_driver1, 1 samples.

Model: Directed\_GRUGAT

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	precision	recall	f1-score	support
0	1.0000	0.9967	0.9983	254399
1	0.7091	1.0000	0.8298	2048
accuracy		0.9967		256447
macro avg	0.8546	0.9983	0.9141	256447
weighted avg	0.9977	0.9967	0.9970	256447



Test 3: How does the model perform on unseen data, of a different error type?: crash\_tracker, 1 samples.

Model: Directed\_GRUGAT

	precision	recall	f1-score	support
0	0.9923	1.0000	0.9961	256518
1	0.0000	0.0000	0.0000	1988
accuracy			0.9923	258506
macro avg	0.4962	0.5000	0.4981	258506
weighted avg	0.9847	0.9923	0.9885	258506

