

SVM Model Results

(Created: 10/17/2021 8:16:04 PM)

1) Input Files

Land cover 1	1971ForestOtherBuilt1
Land cover 2	1985ForestOtherBuilt1
Independent variable 1	1971ForestOtherBuilt1_Class_3distance

2) Overall Parameters and Accuracy

Training parameter mode	Grid searching
Kernel type	Radial Basis Function
Coef0	NONE
Degree	NONE
Epsilon	0.0100
Class number	5
Total SV number	869
Total Sample number	1020
Overall CV accuracy	0.5461
Overall Out-of-sample accuracy	0.4502
Overall skill measure	0.0957
Training time (seconds)	8.9870

3) Model Parameter and Accuracy Breakdown by Class

Class	SV number	Sample number	CV accuracy	Out-of-sample accuracy	Skill measure
Transition: Forest to Other	174	204	0.4069	0.0068	-0.4898
Transition: Forest to	197	204	0.5882	0.7316	0.5974

Built					
Transition: Other to Built	149	204	0.8382	0.7284	0.4568
Persistence: Forest	200	204	0.4118	0.3088	-0.0368
Persistence: Other	149	204	0.4853	0.4755	-0.0490

4) Model Parameter and Accuracy Breakdown by Modeling Stage

Stage: 1

Categories	3
Persistence class	Forest
Transition class 1	Forest to Other
Transition class 2	Forest to Built
Penalty parameter C	8192.0000
Gamma	8.0000
CV accuracy	0.4690
Out-of-sample accuracy	0.3491
Skill measure	0.0236

Stage: 2

Categories	2
Persistence class	Other
Transition class	Other to Built
Penalty parameter C	128.0000
Gamma	0.1250
CV accuracy	0.6618
Out-of-sample accuracy	0.6019
Skill measure	0.2039