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Genauigkeiten der Klassifizierungsergebnisse

Accuracy assessment

CLASSIFICATION ACCURACY ASSESSMENT REPORT

Image File : h:/classi_developer/.../exportclass_result_mit_hrsc_02_04.img
 Project : Accuracy Assessment: Classification result (segmentation with HRSC nDOM)
 Date : Tue Apr 10 17:40:15 2007

ERROR MATRIX

Classified Data	Reference Data													Row Total
	Asph	Build	Conc	Im gra	Rail	Sand	Shad	Soil	Sp fie	Sw pool	Veg high	Veg low	Wat	
Asph	37	0	2	0	0	0	0	0	0	0	0	1	0	40
Build	0	36	1	0	0	0	1	1	0	0	0	0	0	40
Conc	0	0	39	0	0	0	0	1	0	0	0	0	0	40
Im gra	0	1	0	36	0	0	0	1	0	0	0	2	0	40
Rail	0	0	1	0	39	0	0	0	0	0	0	0	0	40
Sand	0	0	12	0	0	28	0	0	0	0	0	0	0	40
Shad	0	0	0	0	0	0	39	0	0	0	0	1	0	40
Soil	5	0	4	0	0	0	2	23	0	0	0	5	1	40
Sp fie	2	0	7	0	0	1	0	1	29	0	0	0	0	40
Sw Fool	0	0	0	0	0	1	0	0	0	40	0	0	0	40
Veg high	0	0	0	0	0	0	1	0	0	0	38	1	0	40
Veg low	0	0	3	0	0	0	1	1	0	0	1	34	0	40
Wat	0	0	0	0	0	0	0	0	0	0	0	0	40	40
Column Total	44	37	69	36	39	30	44	28	29	40	39	44	41	520

----- End of Error Matrix -----

ACCURACY TOTALS

Class Name	Reference Totals	Classified Totals	Number Correct	Producers Accuracy	Users Accuracy
Asphalt	44	40	37	84.09%	92.50%
Buildings	37	40	36	97.30%	90.00%
Concrete	69	40	39	56.52%	97.50%
Imitation grass	36	40	36	100.00%	90.00%
Railway	39	40	39	100.00%	97.50%
Sand	29	40	28	96.55%	70.00%
Shadow	44	40	39	88.64%	97.50%
Soil	28	40	23	82.14%	57.50%
Sport field	29	40	29	100.00%	72.50%
Swimming pool	40	40	40	100.00%	100.00%
Vegetation high	39	40	38	97.44%	95.00%
Vegetation low	44	40	34	77.27%	85.00%
Water bodies	41	40	40	97.56%	100.00%
Totals	519	520	458		

Overall Classification Accuracy = **88.08%**

----- End of Accuracy Totals -----

KAPPA (K^) STATISTICS

Overall Kappa Statistics = **0.8709**

Conditional Kappa for each Category.

Class Name	Kappa
Asphalt	0.9181
Buildings	0.8923
Concrete	0.9712
Imitation Grass	0.8926
Railway	0.9730
Sand	0.6823
Shadow	0.9727
Soil	0.5508
Sport field	0.7088

Swimming pool 1.0000
 Vegetation high 0.9459
 Vegetation low 0.8361
 Water bodies 1.0000

----- End of Kappa Statistics -----

CLASSIFICATION ACCURACY ASSESSMENT REPORT

Image File : h:/classi_developer/.../export_class_result_mit_lidar_29_03.img
 Project : Accuracy Assessment: Classification result (segmentation with LIDAR nDOM)
 Date : Thu Mar 29 14:42:08 2007

ERROR MATRIX

Classified Data	Reference Data													Row Total
	Wat	Im gra	Veg high	Veg low	Asph	Sand	Soil	Sp fie	Sw pool	Buil d	Rail	Shad	Conc	
Wat	40	0	0	0	0	0	0	0	0	0	0	0	0	40
Im Gra	0	38	0	2	0	0	0	0	0	0	0	0	0	40
Veg high	0	0	38	1	0	0	0	0	0	0	0	1	0	40
Veg low	0	0	2	35	1	0	1	0	0	0	0	0	1	40
Asph	0	0	0	0	36	0	0	0	0	0	0	0	4	40
Sand	0	0	0	5	0	25	0	0	0	0	0	0	15	40
Soil	0	2	0	0	4	0	22	0	0	0	0	0	7	40
Sp fie	0	0	0	0	40	0	2	33	0	0	0	0	1	40
Sw pool	0	0	0	0	0	0	0	0	38	0	0	0	2	40
Build	0	0	0	0	0	0	0	0	0	38	0	1	1	40
Rail	0	0	0	0	0	0	0	0	0	0	38	0	2	40
Shad	0	0	0	2	0	0	0	0	0	1	0	37	0	40
Conc	0	0	0	0	1	2	0	0	0	0	0	0	37	40
Column Total	40	40	40	45	46	27	25	33	38	39	38	39	70	520

----- End of Error Matrix -----

ACCURACY TOTALS

Class Name	Reference Totals	Classified Totals	Number Correct	Producers Accuracy	Users Accuracy
Waterbod	40	40	40	100.00%	100.00%
Imitation grass	40	40	38	95.00%	95.00%
Vegetation high	40	40	38	95.00%	95.00%
Vegetation low	45	40	35	77.78%	87.50%
Asphalt	46	40	36	78.26%	90.00%
Sand	27	40	25	92.59%	62.50%
Soil	25	40	22	88.00%	55.00%
Sport field	33	40	33	100.00%	82.50%
Swimming pool	38	40	38	100.00%	95.00%
Buildings	39	40	38	97.44%	95.00%
Railway	38	40	38	100.00%	95.00%
Shadow	39	40	37	94.87%	92.50%
Concrete	70	40	37	52.86%	92.50%
Totals	520	520	455		

Overall Classification Accuracy = 87.50%

----- End of Accuracy Totals -----

KAPPA (K^) STATISTICS

Overall Kappa Statistics = 0.8646

Conditional Kappa for each Category.

Class Name	Kappa
Waterbodies	1.0000
Imitation Grass	0.9458
Vegetation high	0.9458
Vegetation low	0.8632
Asphalt	0.8903

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Sand          0.6045
Soil          0.5273
Sport field   0.8131
Swimming pool 0.9461
Buildings     0.9459
Railway       0.9461
Shadow        0.9189
Concrete      0.9133

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----- End of Kappa Statistics -----

CLASSIFICATION ACCURACY ASSESSMENT REPORT

Image File : h:/classi_developer/.../exportclass_result_withoutlidar_30_03.img
Project : Accuracy Assessment: Classification result (segmentation without nDOM)
Date : Fri Mar 30 16:18:18 2007

ERROR MATRIX

Classified Data	Reference Data													Row Total
	Asph	Buil d	Conc	Im Gra	Rail	Sand	Shad	Soil	Sp Fie	Sw Pool	Veg high	Veg low	Wat	
Asph	38	0	2	0	0	0	0	0	0	0	0	0	0	40
Build	0	40	0	0	0	0	0	0	0	0	0	0	0	40
Conc	0	0	39	1	0	0	0	0	0	0	0	0	0	40
Im Gra	0	0	0	39	0	0	0	0	0	0	0	1	0	40
Rail	0	0	2	0	38	0	0	0	0	0	0	0	0	40
Sand	0	0	17	0	0	23	0	0	0	0	0	0	0	40
Shad	0	3	0	0	0	0	37	0	0	0	0	0	0	40
Soil	4	0	4	1	0	0	0	28	0	0	0	3	0	40
Sp Fie	3	0	7	0	0	1	0	5	24	0	0	0	0	40
Sw Pool	0	0	3	0	0	0	0	0	0	37	0	0	0	40
Veg high	0	0	0	0	0	0	0	0	0	0	37	3	0	40
Veg low	0	0	1	0	0	0	0	0	0	0	1	38	0	40
Wat	0	0	0	0	0	0	0	0	0	0	0	0	40	40
Column Total	45	43	75	41	38	24	37	33	24	37	38	45	40	520

----- End of Error Matrix -----

ACCURACY TOTALS

Class Name	Reference Totals	Classified Totals	Number Correct	Producers Accuracy	Users Accuracy
Asphalt	45	40	38	84.44%	95.00%
Buildings	43	40	40	93.02%	100.00%
Concrete	75	40	39	52.00%	97.50%
Imitation grass	41	40	39	95.12%	97.50%
Railway	38	40	38	100.00%	95.00%
Sand	24	40	23	95.83%	57.50%
Shadow	37	40	37	100.00%	92.50%
Soil	33	40	28	84.85%	70.00%
Sport field	24	40	24	100.00%	60.00%
Swimming pool	37	40	37	100.00%	92.50%
Vegetation high	38	40	37	97.37%	92.50%
Vegetation low	45	40	38	84.44%	95.00%
Water bodies	40	40	40	100.00%	100.00%
Totals	520	520	458		

Overall Classification Accuracy = 88.08%

----- End of Accuracy Totals -----

KAPPA (K^) STATISTICS

Overall Kappa Statistics = 0.8708

Conditional Kappa for each Category.

Class Name	Kappa
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Asphalt	0.9453
Buildings	1.0000
Concrete	0.9708
Imitation grass	0.9729
Railway	0.9461
Sand	0.5544
Shadow	0.9193
Soil	0.6797
Sport field	0.5806
Swimming pool	0.9193
Vegetatio high	0.9191
Vegetation low	0.9453
Water bodies	1.0000

----- End of Kappa Statistics -----
