Confusion Matrix for NOAA and CCI predictability of Coral Bleaching

Vanessa Hui Fen Neo

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Table 1: Confusion Matrix for predictability of bleaching using Degree Heating Week values from CCI data

Reef	Balanced Accuracy	Accuracy	F1	Sensitivity	Specificity	Pos Pred Value	Neg Pred Value	AUC	Lower CI	Upper CI	Kappa	MCC	Detection Rate	Detection Prevalence	Prevalence
Browse Island	0.90	0.81	0.22	1.00	0.80	0.12	1.00	0.90	0.85	0.95	0.18	0.32	0.03	0.22	0.03
Cocos (Keeling) Islands	0.84	0.92	0.67	0.75	0.94	0.60	0.97	0.84	0.68	1.00	0.62	0.62	0.08	0.14	0.11
Houtman Abrolhos	0.93	0.86	0.29	1.00	0.86	0.17	1.00	0.93	0.89	0.97	0.25	0.38	0.03	0.17	0.03
Ningaloo Reef	0.58	0.87	0.17	0.25	0.90	0.13	0.95	0.58	0.41	0.74	0.11	0.12	0.01	0.10	0.06
Scott Reef	0.55	0.78	0.20	0.25	0.84	0.17	0.90	0.55	0.47	0.62	0.08	0.08	0.03	0.17	0.11

Table 2: Confusion Matrix for predictability of bleaching using Degree Heating Week values from NOAA data

Reef	Balanced Accuracy	Accuracy	F1	Sensitivity	Specificity	Pos Pred Value	Neg Pred Value	AUC	Lower CI	Upper CI	Kappa	MCC	Detection Rate	Detection Prevalence	Prevalence
Browse Island	0.82	0.66	0.15	1.00	0.65	0.08	1.00	0.82	0.76	0.88	0.10	0.23	0.03	0.38	0.03
Cocos (Keeling) Islands	0.62	0.91	0.40	0.25	1.00	1.00	0.90	0.62	0.46	0.79	0.37	0.48	0.03	0.03	0.12
Houtman Abrolhos	0.93	0.86	0.31	1.00	0.85	0.18	1.00	0.93	0.88	0.97	0.27	0.39	0.03	0.17	0.03
Ningaloo Reef	0.57	0.86	0.18	0.25	0.90	0.14	0.95	0.57	0.41	0.74	0.11	0.12	0.02	0.11	0.06
Scott Reef	0.73	0.72	0.40	0.75	0.71	0.27	0.95	0.73	0.65	0.81	0.26	0.32	0.09	0.35	0.12

Table 3: Confusion Matrix for predictability of bleaching using Degree Heating Months values from CCI data

Reef	Balanced Accuracy	Accuracy	F1	Sensitivity	Specificity	Pos Pred Value	Neg Pred Value	AUC	Lower CI	Upper CI	Kappa	MCC	Detection Rate	Detection Prevalence	Prevalence
Browse Island	0.83	0.67	0.14	1.00	0.66	0.08	1.00	0.83	0.77	0.88	0.10	0.22	0.03	0.36	0.03
Cocos (Keeling) Islands	0.73	0.72	0.38	0.75	0.72	0.25	0.96	0.73	0.56	0.90	0.25	0.31	0.08	0.33	0.11
Houtman Abrolhos	0.87	0.75	0.18	1.00	0.74	0.10	1.00	0.87	0.82	0.92	0.14	0.27	0.03	0.28	0.03
Ningaloo Reef	0.72	0.82	0.27	0.60	0.84	0.18	0.97	0.72	0.56	0.88	0.20	0.25	0.03	0.19	0.06
Scott Reef	0.62	0.72	0.29	0.50	0.75	0.20	0.92	0.62	0.54	0.71	0.15	0.18	0.06	0.28	0.11

Table 4: Confusion Matrix for predictability of bleaching using Degree Heating Months values from NOAA data

Reef	Balanced Accuracy	Accuracy	F1	Sensitivity	Specificity	Pos Pred Value	Neg Pred Value	AUC	Lower CI	Upper CI	Kappa	MCC	Detection Rate	Detection Prevalence	Prevalence
Browse Island	0.76	0.53	0.12	1.00	0.52	0.06	1.00	0.76	0.70	0.82	0.06	0.18	0.03	0.50	0.03
Cocos (Keeling) Islands	0.71	0.88	0.50	0.50	0.93	0.50	0.93	0.71	0.53	0.90	0.43	0.43	0.06	0.12	0.12
Houtman Abrolhos	0.90	0.81	0.25	1.00	0.81	0.14	1.00	0.90	0.85	0.95	0.21	0.34	0.03	0.22	0.03
Ningaloo Reef	0.69	0.86	0.31	0.50	0.89	0.23	0.96	0.69	0.53	0.86	0.25	0.27	0.03	0.14	0.06
Scott Reef	0.69	0.64	0.34	0.75	0.63	0.22	0.95	0.69	0.61	0.77	0.19	0.25	0.09	0.42	0.12

Table 5: Degree Heating Week Confusion Matrix of CCI (left) and NOAA (right)

Reef	Balanced Accuracy	Reef	Balanced Accuracy
Browse Island	0.90	Browse Island	0.82
Cocos (Keeling) Islands	0.84	Cocos (Keeling) Islands	0.62
Houtman Abrolhos	0.93	Houtman Abrolhos	0.93
Ningaloo Reef	0.58	Ningaloo Reef	0.57
Scott Reef	0.55	Scott Reef	0.73

Table 6: Degree Heating Month Confusion Matrix of CCI (left) and NOAA (right)

Reef	Balanced Accuracy	Reef	Balanced Accuracy
Browse Island	0.83	Browse Island	0.76
Cocos (Keeling) Islands	0.73	Cocos (Keeling) Islands	0.71
Houtman Abrolhos	0.87	Houtman Abrolhos	0.90
Ningaloo Reef	0.72	Ningaloo Reef	0.69
Scott Reef	0.62	Scott Reef	0.69