

Appendix A. Evaluation metrics

$$Accuracy = \frac{1}{n} \sum_{i=1}^n (\hat{y}_i = y_i) \quad (A.1)$$

where n is the size of the dataset, $\hat{y}_i$ is the prediction made by the model and y_i is the expected response.

$$Sensitivity = \frac{TruePositive}{TruePositive + FalseNegative} \quad (A.2)$$

$$Specificity = \frac{TrueNegative}{TruePositive + FalsePositive} \quad (A.3)$$

$$MAE = \frac{1}{n} \sum_{i=1}^n |\hat{y}_i - y_i| \quad (A.4)$$

$$RMSE = \sqrt{\frac{1}{n} \sum_{i=1}^n (\hat{y}_i - y_i)^2} \quad (A.5)$$

Appendix B. Score tables for the different models

Table 1. Evaluation of classification models : Accuracy (%), Specificity (%) and Sensitivity (%), D to $D+14$

Day	Accuracy (%)	Specificity (%)	Sensitivity (%)
+0	94.3	96.71	99.64
+1	94.41	97.42	98.56
+2	94.3	96.64	99.64
+3	95.05	97.55	98.19
+4	94.95	97.61	98.19
+5	94.73	97.61	98.55
+6	93.98	97.48	98.55
+7	94.52	97.61	98.55
+8	94.73	97.1	99.28
+9	95.38	97.48	99.28
+10	95.48	97.61	99.28
+11	95.48	98	98.55
+12	93.44	97.03	98.19
+13	94.84	97.35	98.55
+14	95.7	98.06	98.91

Table 2. *Evaluation of zonal regression models : MAE and RMSE, D to D+14*

Day	MAE	RMSE
+0	0.13	0.18
+1	0.13	0.17
+2	0.13	0.17
+3	0.14	0.18
+4	0.13	0.18
+5	0.14	0.18
+6	0.14	0.19
+7	0.14	0.18
+8	0.13	0.18
+9	0.13	0.18
+10	0.14	0.19
+11	0.14	0.19
+12	0.13	0.18
+13	0.14	0.19
+14	0.13	0.18

Table 3. Evaluation of zonal regression models : Accuracy (%), Specificity (%) et Sensitivity (%), from D to D+14, for North Grande-Terre (NGT), South Grande-Terre (SGT), la Désirade, la Basse-Terre (BT), les Saintes (LS) et Marie-Galante (MG), green highlighted values are the optimal scores for each metric and the worst are in red.

Day	Metrics	NGT	SGT	Désirade	BT	LS	MG	Average
+0	Accuracy (%)	90.28	90.42	90.97	90.01	89.46	90.21	90.22
	Specificity (%)	97.25	98.8	98.33	97.13	96.62	97.55	97.61
	Sensitivity (%)	84.21	82.31	87.76	87.73	85.32	86.28	85.6
+1	Accuracy (%)	90.21	91.79	92.27	90.28	90.49	90.9	90.99
	Specificity (%)	97.63	98.5	98.71	98.96	97.95	98.48	98.37
	Sensitivity (%)	87.5	86.15	87.76	89.17	88.74	87	87.72
+2	Accuracy (%)	90.83	91.38	91.1	90.42	91.1	90.08	90.82
	Specificity (%)	98.09	98.35	97.72	97.38	97.6	97.55	97.78
	Sensitivity (%)	80.92	89.23	88.44	89.53	87.37	89.89	87.56
+3	Accuracy (%)	90.14	91.03	91.03	90.14	88.84	88.91	90.02
	Specificity (%)	98.09	98.42	97.72	97.89	97.17	96.71	97.67
	Sensitivity (%)	78.95	84.62	85.71	84.84	83.62	88.09	84.3
+4	Accuracy (%)	91.51	91.1	90.35	90.69	89.53	88.57	90.29
	Specificity (%)	98.47	98.05	97.95	97.3	97.69	97.38	97.81
	Sensitivity (%)	80.26	83.85	83.67	86.64	87.03	85.56	84.5
+5	Accuracy (%)	91.72	90.69	89.39	90.08	89.32	89.39	90.1
	Specificity (%)	97.86	97.15	97.79	97.47	95.8	97.3	97.23
	Sensitivity (%)	81.58	86.92	85.03	85.92	88.05	88.45	85.99
+6	Accuracy (%)	90.97	91.58	90.9	89.53	88.77	88.43	90.03
	Specificity (%)	98.17	98.42	97.79	98.14	97.26	96.96	97.79
	Sensitivity (%)	85.53	87.69	80.95	83.39	83.28	84.48	84.22
+7	Accuracy (%)	90.42	91.58	91.85	90.42	89.32	89.66	90.54
	Specificity (%)	96.33	97.97	97.49	97.21	96.58	97.13	97.12
	Sensitivity (%)	82.89	87.69	84.35	89.89	84.98	88.45	86.38
+8	Accuracy (%)	92.74	91.38	90.49	90.01	89.53	88.71	90.48
	Specificity (%)	98.17	97.97	97.34	96.28	97.35	96.88	97.33
	Sensitivity (%)	88.16	81.54	88.44	88.81	86.69	86.28	86.65
+9	Accuracy (%)	89.66	89.94	90.9	91.38	89.6	89.25	90.12
	Specificity (%)	96.87	98.05	97.26	97.38	97.26	97.3	97.33
	Sensitivity (%)	84.21	83.85	87.76	88.45	85.67	87.73	86.28
+10	Accuracy (%)	90.14	89.87	89.73	89.46	90.01	88.16	89.56
	Specificity (%)	98.09	98.12	97.87	96.96	97.17	97.64	97.64
	Sensitivity (%)	85.53	81.54	82.31	86.64	82.59	80.87	83.25
+11	Accuracy (%)	91.79	91.65	90.9	89.46	89.46	89.6	90.48
	Specificity (%)	98.7	98.5	97.34	97.21	97.52	97.55	97.8
	Sensitivity (%)	82.24	80	83.67	84.48	83.96	82.67	82.84
+12	Accuracy (%)	90.76	90.69	90.76	90.69	90.08	88.64	90.27
	Specificity (%)	98.17	98.2	98.02	97.64	97.17	96.88	97.68
	Sensitivity (%)	82.24	81.54	80.95	85.56	86.01	85.56	83.64
+13	Accuracy (%)	89.8	91.65	91.72	90.35	89.12	89.05	90.28
	Specificity (%)	98.17	98.2	98.02	97.47	96.58	96.54	97.5
	Sensitivity (%)	76.97	86.92	85.03	87.73	84.98	88.81	85.07
+14	Accuracy (%)	91.72	91.72	91.1	89.94	89.73	89.8	90.67
	Specificity (%)	98.01	98.27	97.87	96.71	96.66	96.62	97.36
	Sensitivity (%)	78.95	87.69	84.35	89.17	86.35	87	85.58
Average	Accuracy (%)	90.85	91.1	90.9	90.19	89.62	89.29	-
	Specificity (%)	97.87	98.2	97.81	97.41	97.09	97.23	-
	Sensitivity (%)	82.68	84.77	85.08	86.89	85.64	86.47	-