



Correction

Correction: Lanz et al. The InflateSAR Campaign: Developing Refugee Vessel Detection Capabilities with Polarimetric SAR. Remote Sens. 2023, 15, 2008

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Error in Figure

In the original publication [1], there was a mistake in the legend for Figures 11a–h, 12a–d and 13a–d. All 16 Figures have the headline “Incidence Angle” which is wrong and was removed in the corrected figures below. The correct Figures 11–13 appears below.

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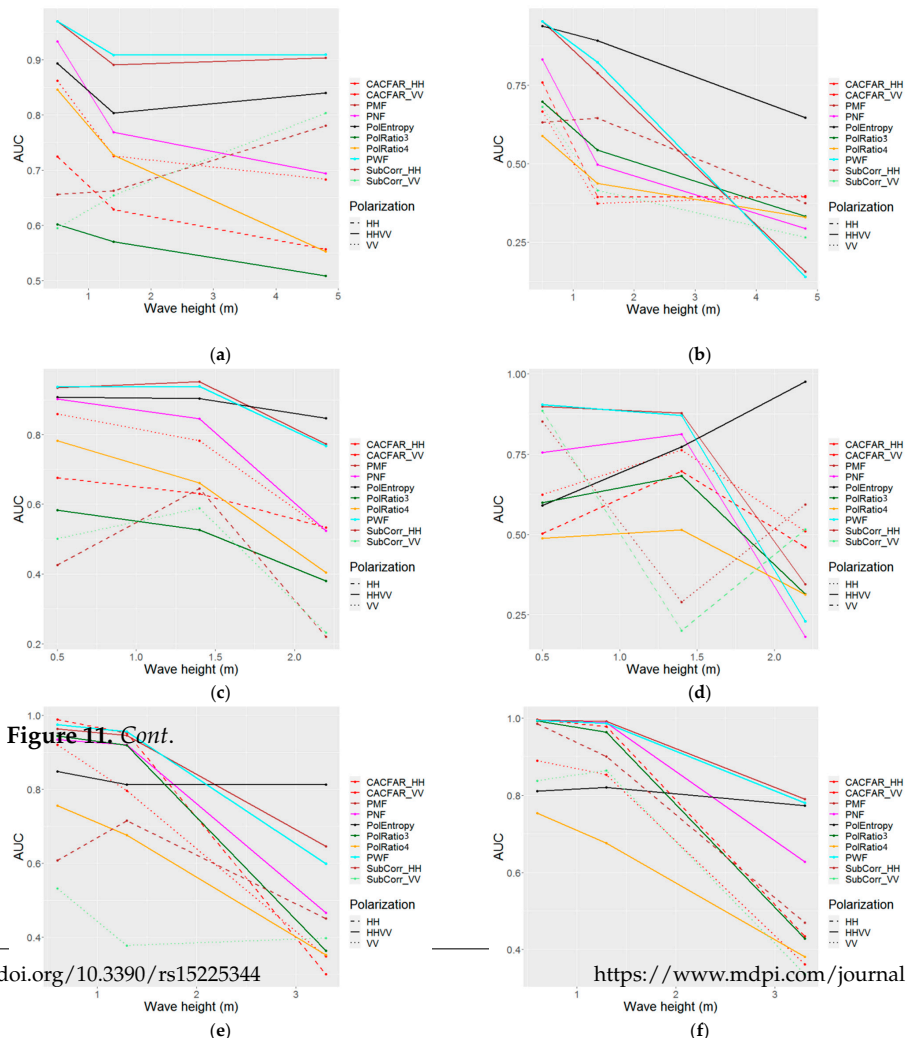


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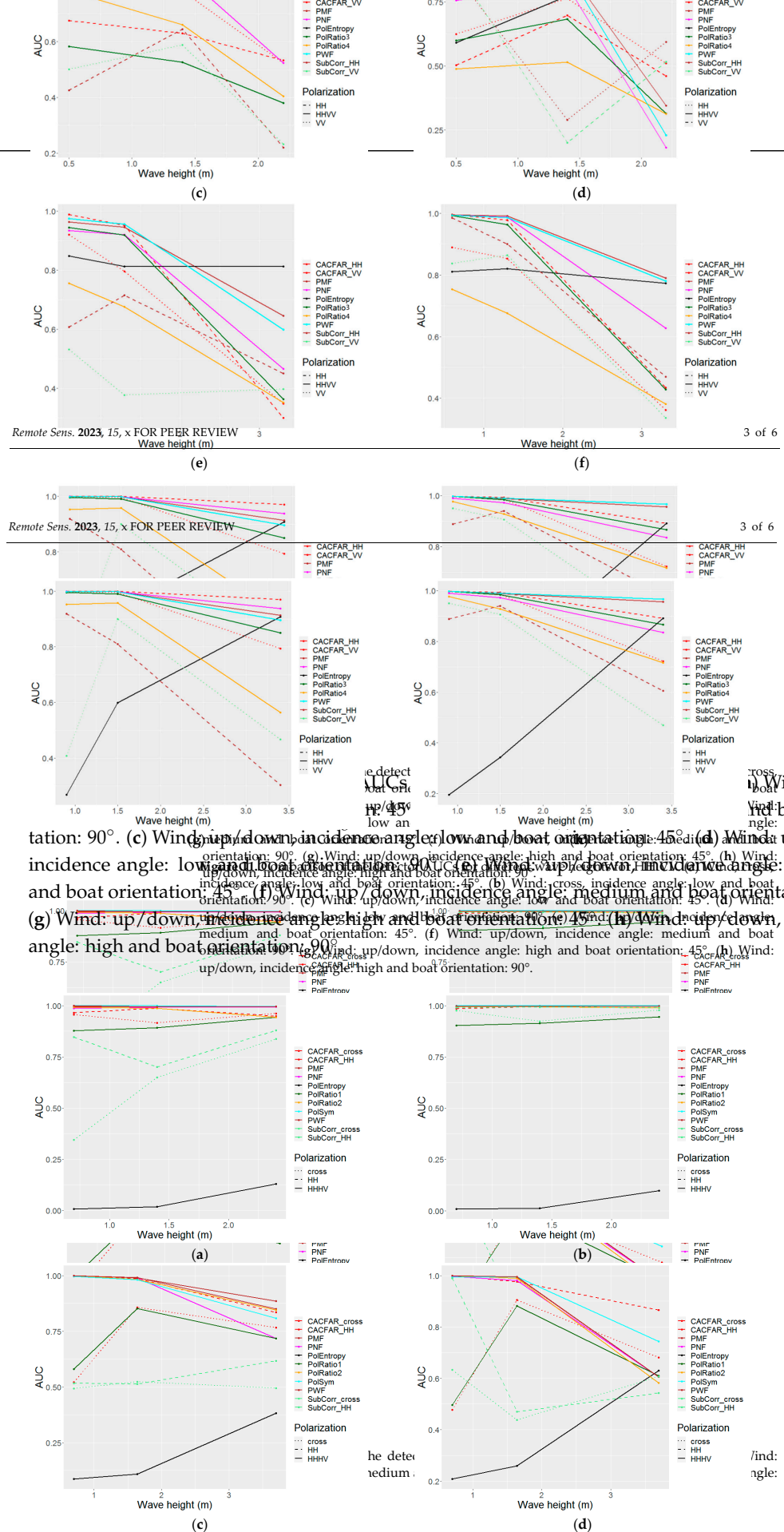


Figure 12. Comparison of the detector AUCs for different wave heights for HV HH. (a) Wind: up/down, incidence angle: medium and boat orientation: 45°. (b) Wind: up/down, incidence angle: medium and boat orientation: 90°. (c) Wind: up/down, incidence angle: high and boat orientation: 45°. (d) Wind: up/down, incidence angle: high and boat orientation: 90°. (e) Wind: up/down, incidence angle: low and boat orientation: 45°. (f) Wind: up/down, incidence angle: low and boat orientation: 90°. (g) Wind: up/down, incidence angle: high and boat orientation: 45°. (h) Wind: up/down, incidence angle: high and boat orientation: 90°.

medium and boat orientation: 90°. (c) Wind: up/down, incidence angle: high and boat orientation: 45°. (d) Wind: up/down, incidence angle: high and boat orientation: 90°.

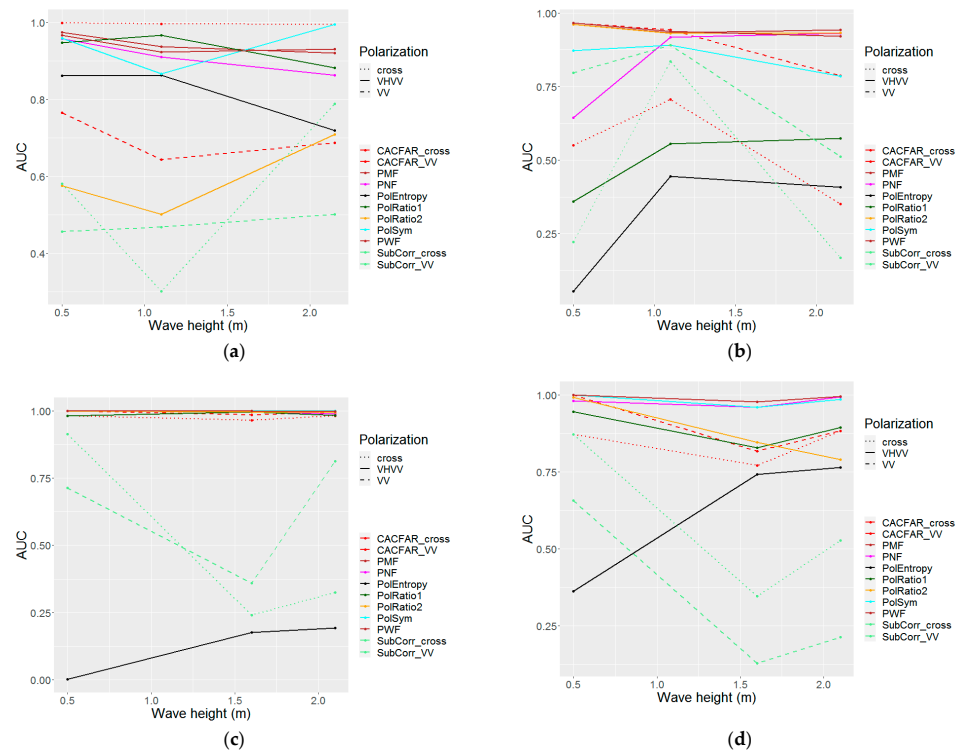


Figure 13. Comparison of the detector AUCs for different wave heights for VH/VV. (a) Wind: up/down, incidence angle: medium and boat orientation: 45°. (b) Wind: up/down, incidence angle: high and boat orientation: 45°. (c) Wind: up/down, incidence angle: medium and boat orientation: 90°. (d) Wind: up/down, incidence angle: high and boat orientation: 90°.

Error in Table

In the original publication [1], there was a mistake in Tables 11–13 as published. The names of the detectors in row 5 (“PolRatio1”) and in row 6 (“PolRatio2”) are incomplete. The corrected Tables 11–13 appears below. The authors state that the scientific conclusions in the original publication, there was a mistake in Tables 11–13 as published. The names of the detectors in row 5 (“PolRatio1”) and in row 6 (“PolRatio2”) are incomplete. The corrected Tables 11–13 appears below.

Table 11. The vessel detection algorithms AUCs with different sensor parameters.

Polarization	Incidence Angle	HH VV			HV VH		VH VV		Avg
		Low	Medium	High	Low	High	Low	High	
PMF	0.787	0.888	0.976	0.996	0.906	0.945	0.995	0.928	
PWF	0.779		0.975	0.997	0.912	0.941	0.995	0.926	
PNF	0.67		0.956	0.994	0.984	0.986	0.883		
PolEntropy	0.834		0.046	0.279	0.559	0.373	0.491		
PolRatio1/3	0.529	0.768	0.947	0.913	0.689	0.714	0.939	0.786	
PolRatio2/4	0.554	0.599	0.849	0.983	0.9	0.768	0.936	0.799	
SubCorr_HH	0.565	0.688	0.744		0.608			0.701	
SubCorr_VV	0.528	0.557	0.684			0.604	0.481	0.571	
SubCorr_cross				0.785	0.531	0.483	0.537	0.584	
CACFAR_HH	0.6	0.775	0.975	0.98	0.943			0.854	
CACFAR_VV	0.628	0.695	0.915			0.798	0.946	0.797	
CACFAR_cross				0.972	0.701	0.766	0.909	0.837	
PolSym				0.999	0.92	0.895	0.991	0.951	
avg	0.647	0.749	0.856	0.869	0.752	0.759	0.826		

Table 12. The AUCs of the vessel-detection algorithms with high sea states (SPAN > −17 dB). The background colours indicate different AUCs from white (low AUCs) to dark green (very high AUCs).

Polarization Incidence Angle	HH VV			HV HH		VH VV		Avg
	Low	Medium	High	Medium	High	Medium	High	
PMF	0.787	0.843	0.935		0.728	0.945		0.848
PWF	0.779	0.83	0.932		0.745	0.941		0.846
PNF	0.67	0.75	0.887		0.662	0.871		0.768
PolEntropy	0.834	0.804	0.9		0.506	0.559		0.721
PolRatio1/3	0.529	0.669	0.858		0.664	0.714		0.687
PolRatio2/4	0.554	0.521	0.64		0.714	0.768		0.639
SubCorr_HH	0.565	0.634	0.455		0.58			0.558
SubCorr_VV	0.528	0.494	0.468			0.604		0.523
SubCorr_cross					0.551	0.483		0.517
CACFAR_HH	0.6	0.666	0.931		0.85			0.762
CACFAR_VV	0.628	0.59	0.758			0.798		0.694
CACFAR_cross					0.723	0.766		0.745
PolSym					0.776	0.895		0.835
avg	0.647	0.68	0.776		0.682	0.759		

Table 13. The AUCs of the vessel-detection algorithms with different orientations of the rubber vessel. The blue background colours indicate better AUCs for the 45° inclined vessel, the orange colours show higher AUCs for the vessel oriented at 90°.

Polarization Incidence Angle	HH VV			HV HH		VH VV		Avg
	Low	Medium	High	Medium	High	Medium	High	
PMF	0.23	−0.07	−0.01	0	0.08	0	0.01	0.03
PWF	0.25	−0.08	−0.02	0	0.09	0	0.01	0.04
PNF	0.22	−0.10	0.05	−0.01	0.04	0.08	0.02	0.04
PolEntropy	0.06	0.02	0.12	0.01	−0.17	0.51	−0.50	0.01
PolRatio1/3	0	−0.05	0	−0.02	0.05	0.44	0.1	0.07
PolRatio2/4	0.22	−0.01	−0.05	−0.02	0.09	−0.35	0.12	0
SubCorr_HH	0	−0.19	−0.13	−0.18	−0.12			−0.13
SubCorr_VV	0.07	−0.24	−0.18			−0.26	0.3	−0.06
SubCorr_cross				−0.35	−0.06	0.15	−0.09	−0.09
CACFAR_HH	0.05	−0.06	0.03	−0.03	−0.01			0
CACFAR_VV	0.22	−0.01	0.03			−0.20	0.09	0.03
CACFAR_cross				−0.06	0.03	0.46	0.14	0.14
PolSym				0	0.02	0.09	0.02	0.03
avg	0.13	−0.08	−0.02	−0.06	0	0.08	0.02	0.01

The authors state that the scientific conclusions are unaffected. This correction was approved by the Academic Editor. The original publication has also been updated.

Reference

1. Lanz, P.; Marino, A.; Simpson, M.D.; Brinkhoff, T.; Köster, F.; Möller, M. The InflateSAR Campaign: Developing Refugee Vessel Detection Capabilities with Polarimetric SAR. *Remote Sens.* **2023**, *15*, 2008. [[CrossRef](#)]

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