Near real-time automatic oil spill detection in SAR images
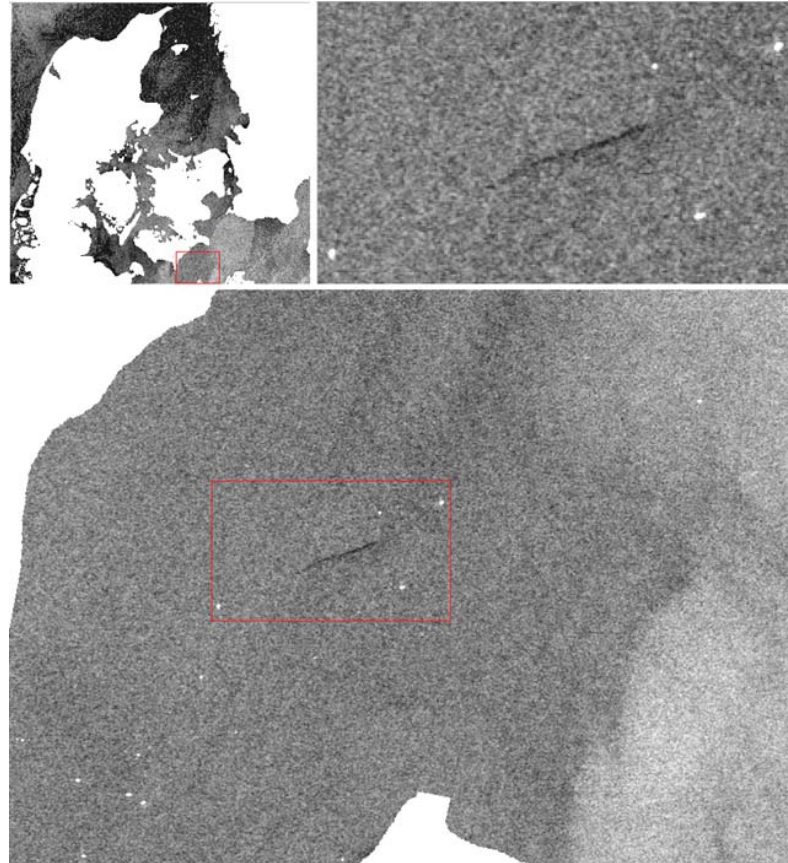
Øivind Due Trier and Ragnar Bang Huseby

Norwegian Computing Center
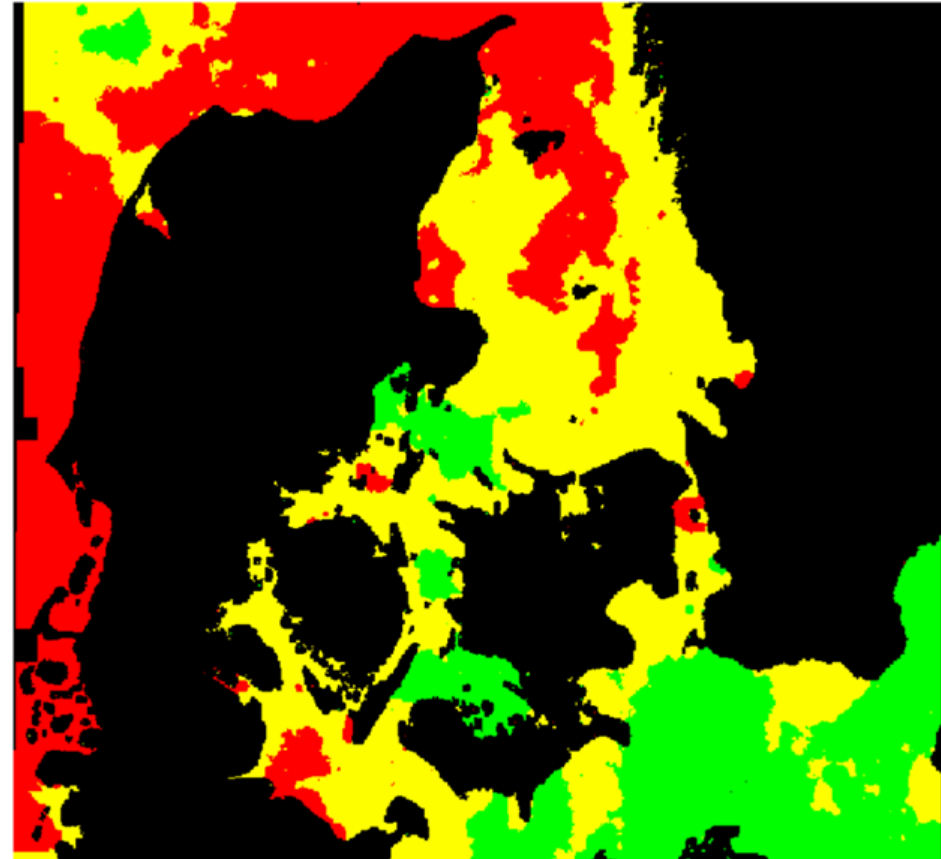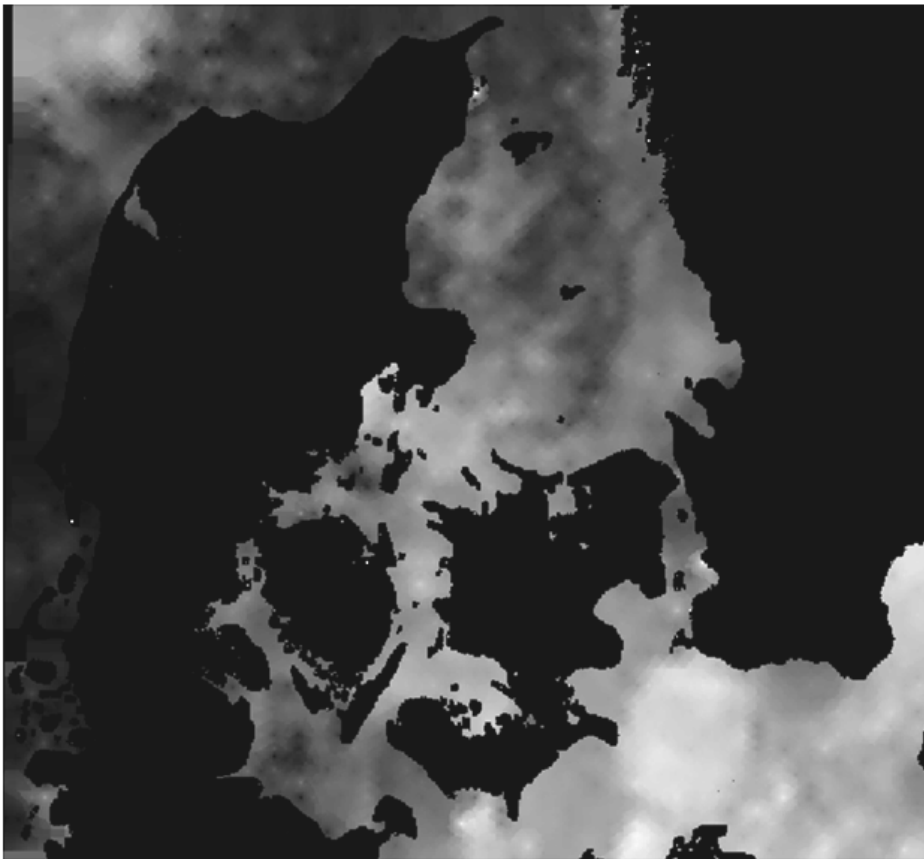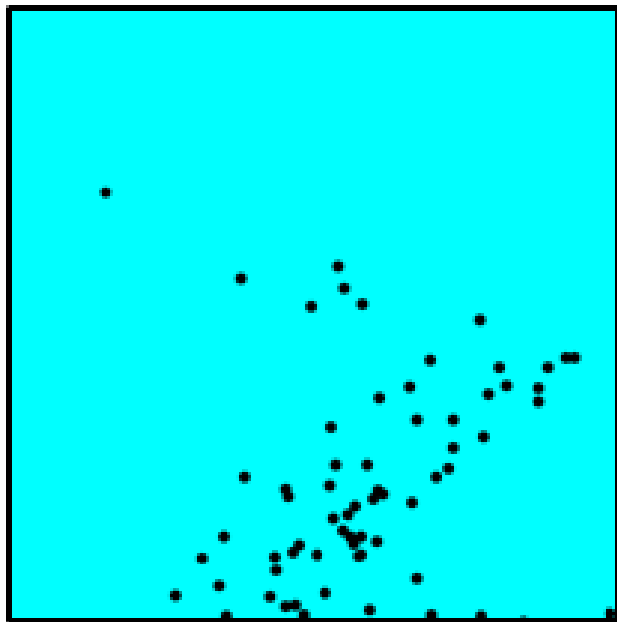
ISRSE-33
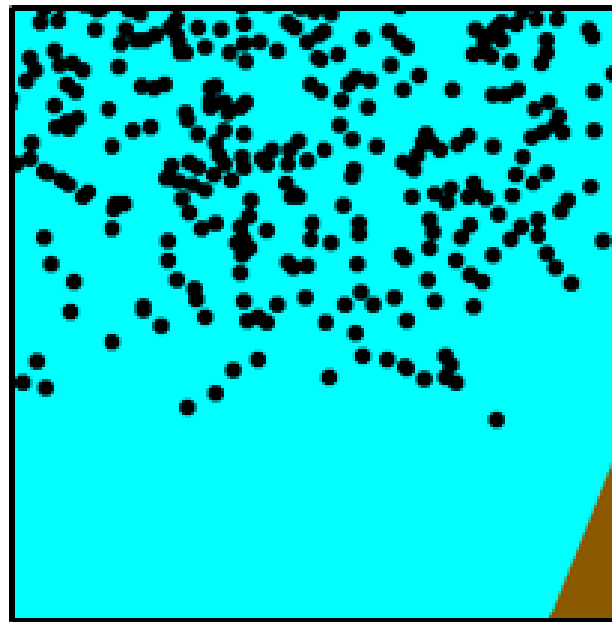
Example oil spill detection
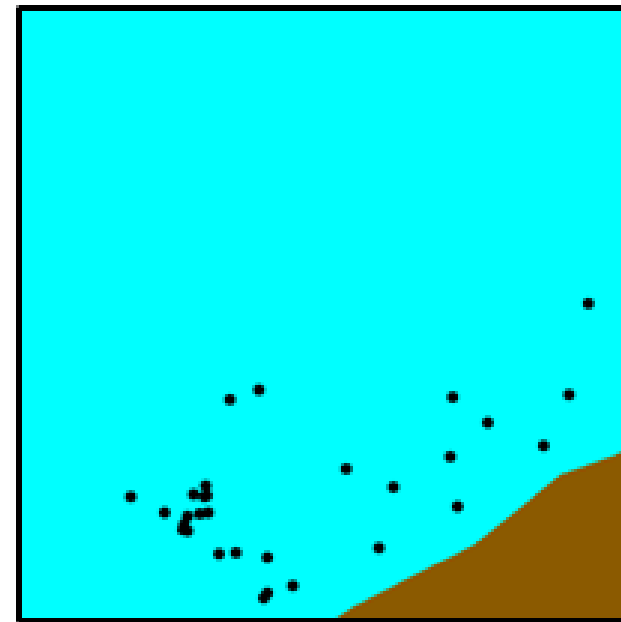
SAR wind speed

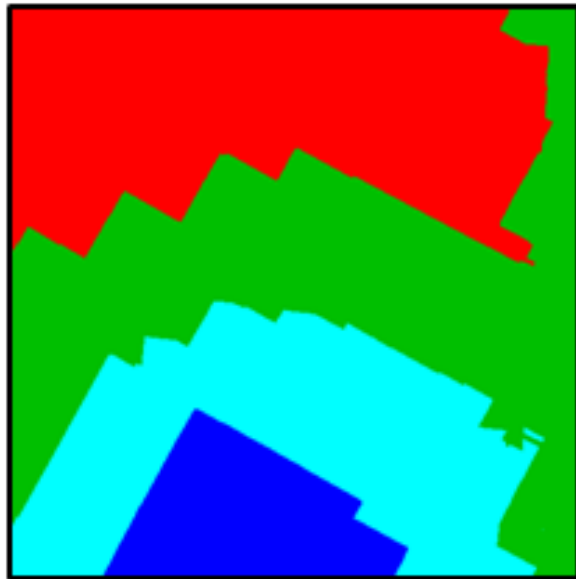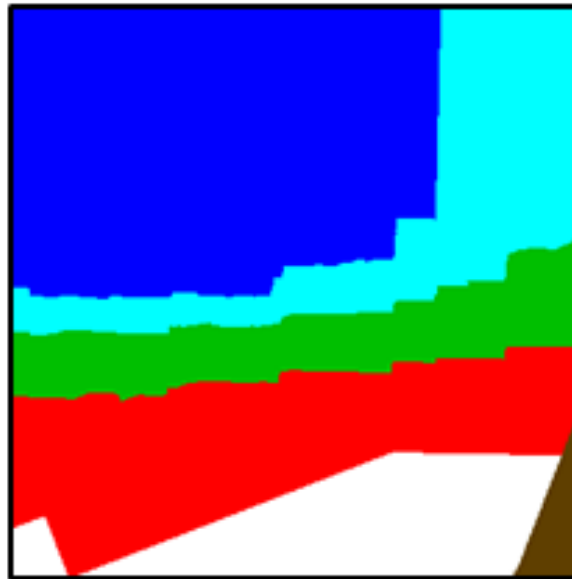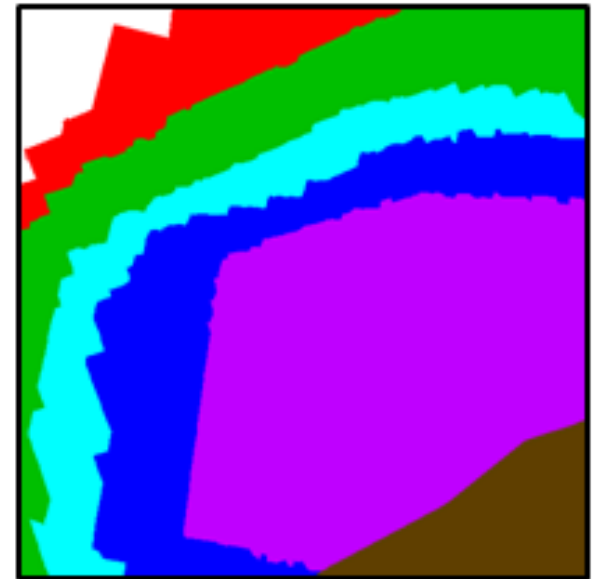Land Confidence: low medium high

Detected oil spills

(a) (b) (c)

SAR scene coverage

(a)   (b)   (c)

Land	Covered by 50-99 scenes
No coverage	Covered by 100-199 scenes
Covered by 1-9 scenes	Covered by 200 or more scenes
Covered by 10-49 scenes	

Combine detections with coverage
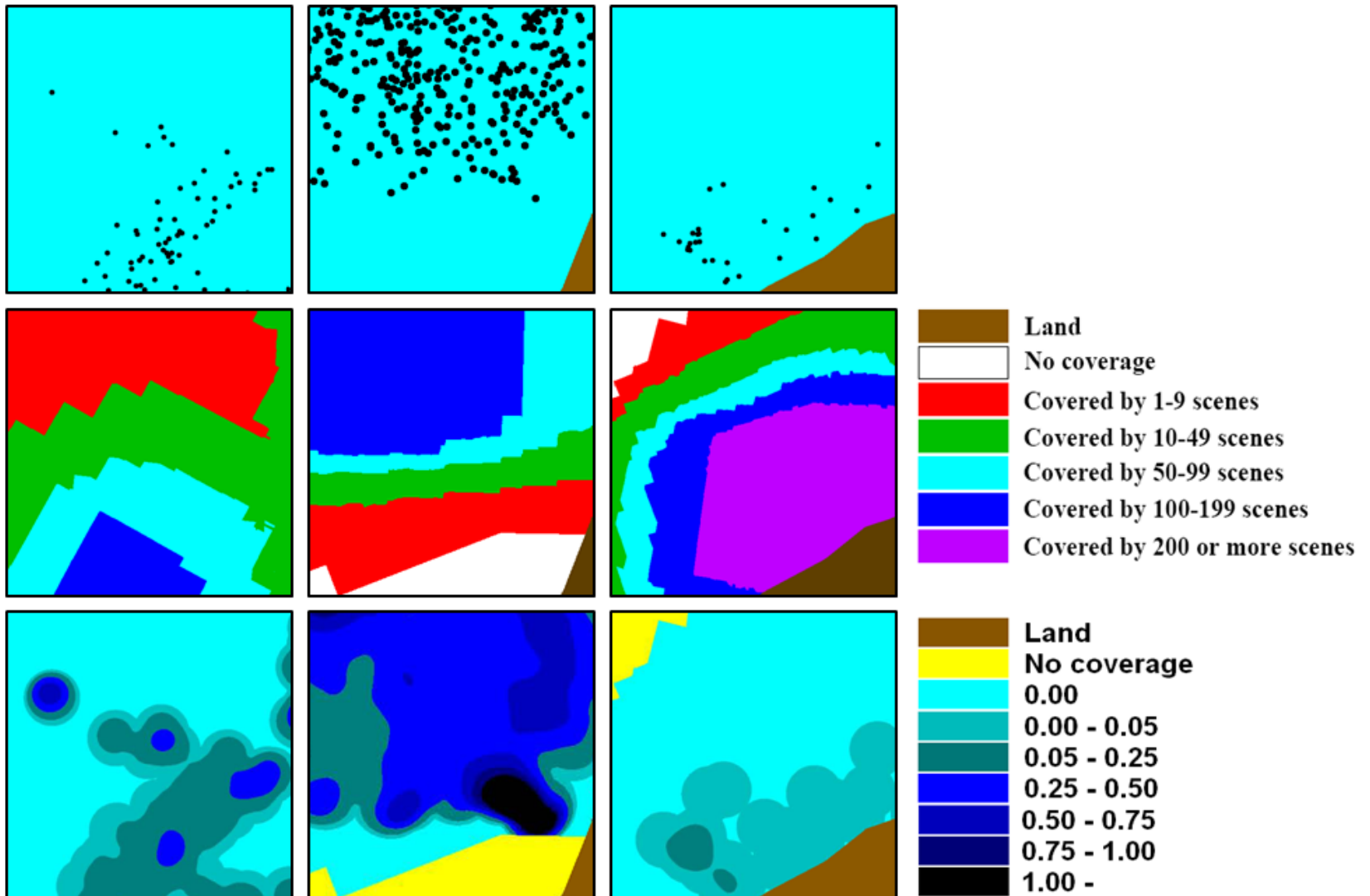

Land
No coverage
Covered by 1-9 scenes
Covered by 10-49 scenes
Covered by 50-99 scenes
Covered by 100-199 scenes
Covered by 200 or more scenes
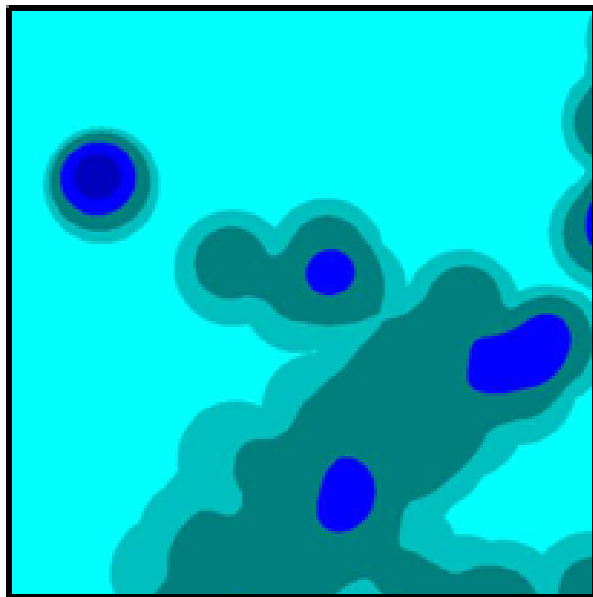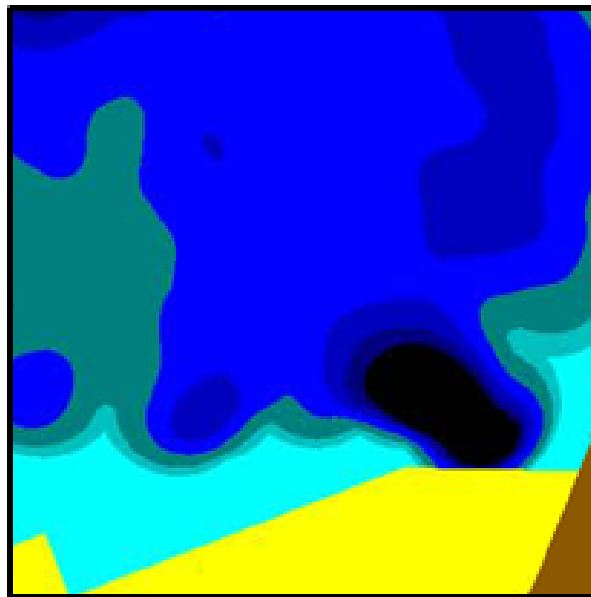
Land
No coverage
0.00
0.00 - 0.05
0.05 - 0.25
0.25 - 0.50
0.50 - 0.75
0.75 - 1.00
1.00 -

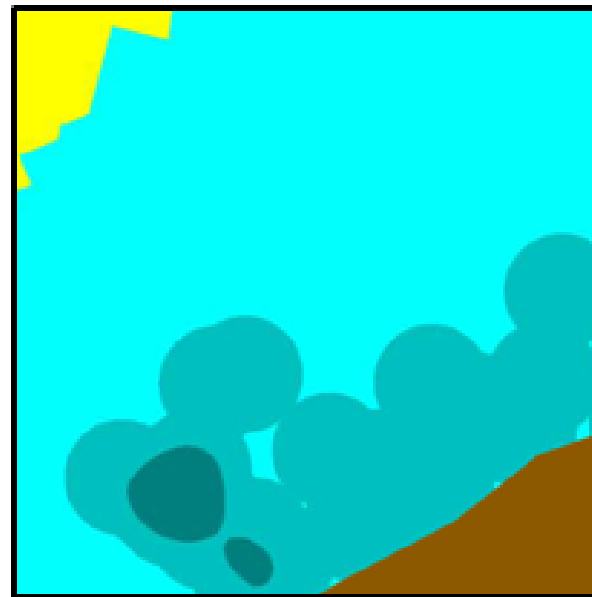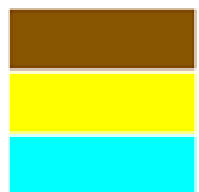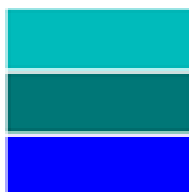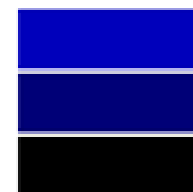**NR** **Norsk Regnesentral** NORWEGIAN COMPUTING CENTER

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Estimated oil spill intensity

(a)   (b)   (c)

Color	Legend
Land (brown)	Land
No coverage (yellow)	No coverage
0.00 (cyan)	0.00
0.00 - 0.05	0.00 - 0.05
0.05 - 0.25	0.05 - 0.25
0.25 - 0.50	0.25 - 0.50
0.50 - 0.75	0.50 - 0.75
0.75 - 1.00	0.75 - 1.00
1.00 -	1.00 -