

SAR Webinar

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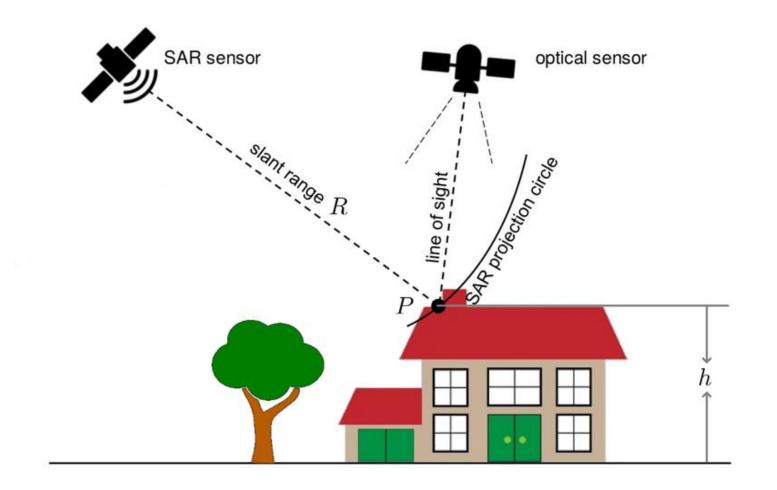






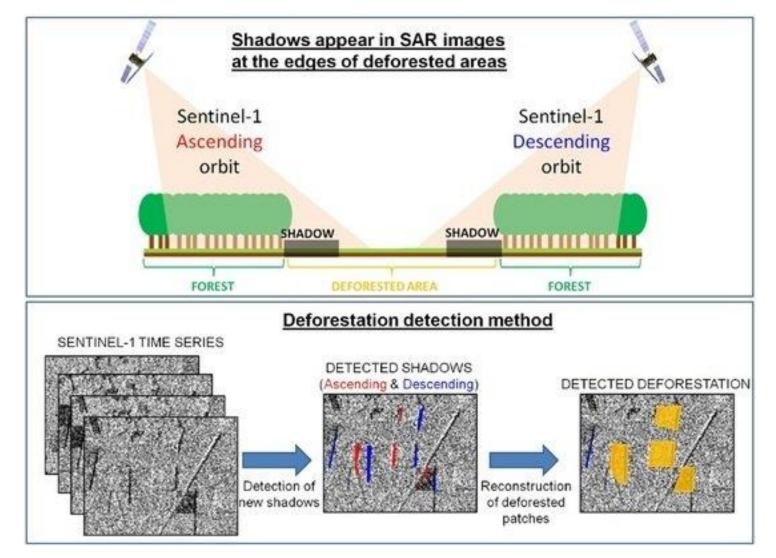


SAR Basic concepts: Geometry



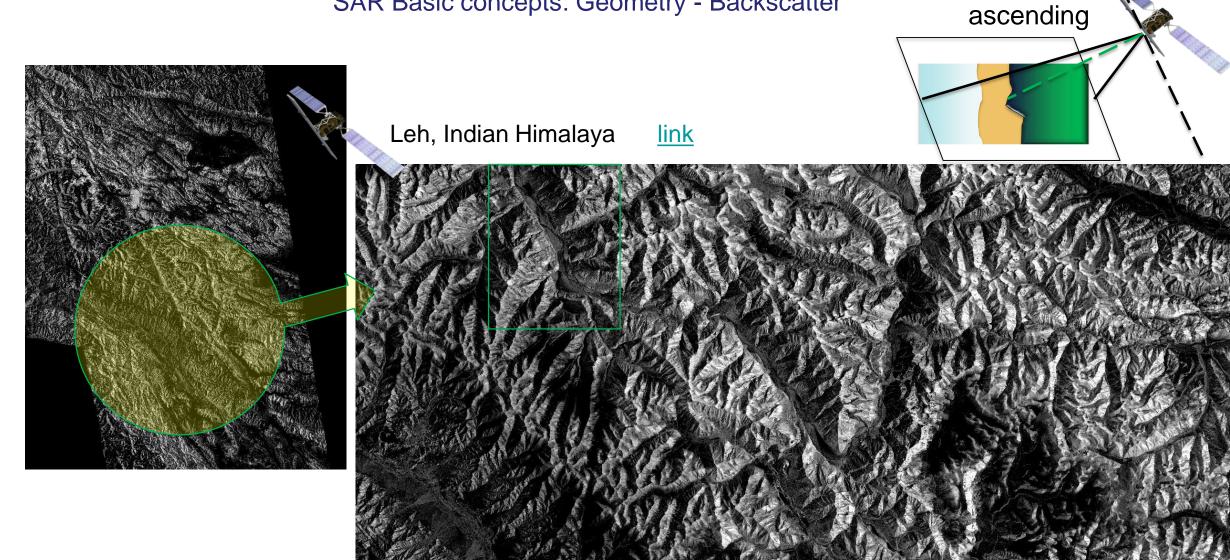


SAR Basic concepts: Geometry - Shadows



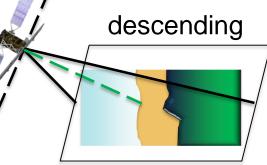


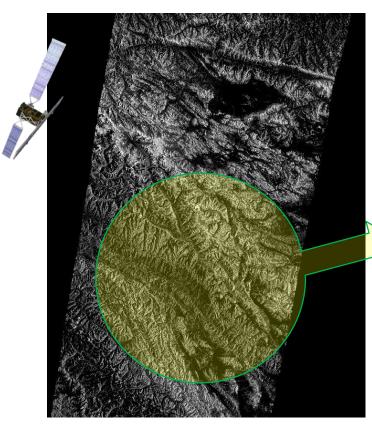
SAR Basic concepts: Geometry - Backscatter



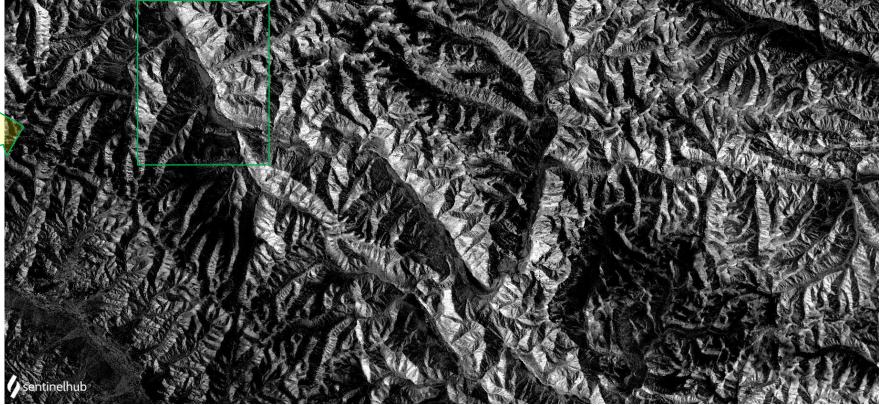


SAR Basic concepts: Geometry - Backscatter





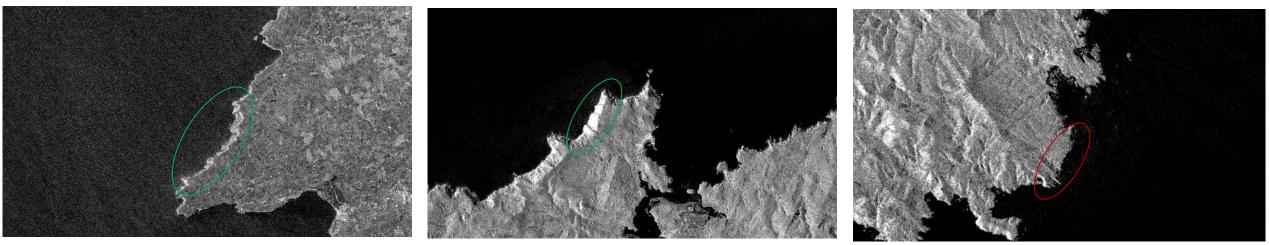
Leh, Indian Himalaya





descending

SAR Basic concepts: Geometry - Backscatter



Cliffs of Moer

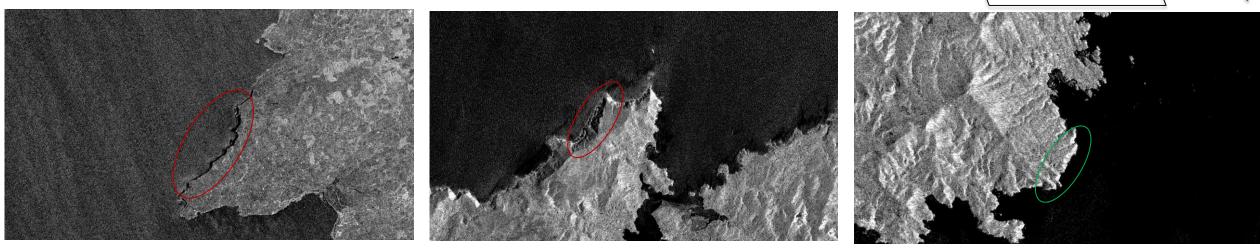
Cariño

Cadaqués

1



SAR Basic concepts: Geometry - Backscatter



Cliffs of Moer

Cariño

Cadaqués

ascending



- Waterlines production phase
- Digital Terrain Model (DTM) under development
- Bathymorphology (waves length and direction) under development



- Waterlines

Three different quality control parameters can be found in the product



- Waterlines

Three different quality control parameters can be found in the product **1- Backscatter difference between see and land**

A backscatter difference two small can indicate that the boundary between the water and the land would be poorly identified

Will only be useful in case bad images overall. The common value for that difference is around 0.15.



- Waterlines:

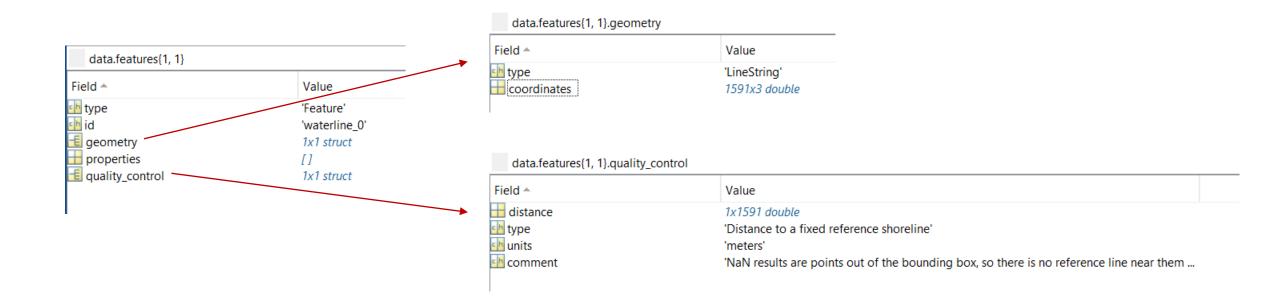
Three different quality control parameters can be found in the product **2- Quality Control: distance**

The computed distance between the reference line and the current waterline retrieved.



- Waterlines:

Three different quality control parameters can be found in the product **2- Quality Control: distance**



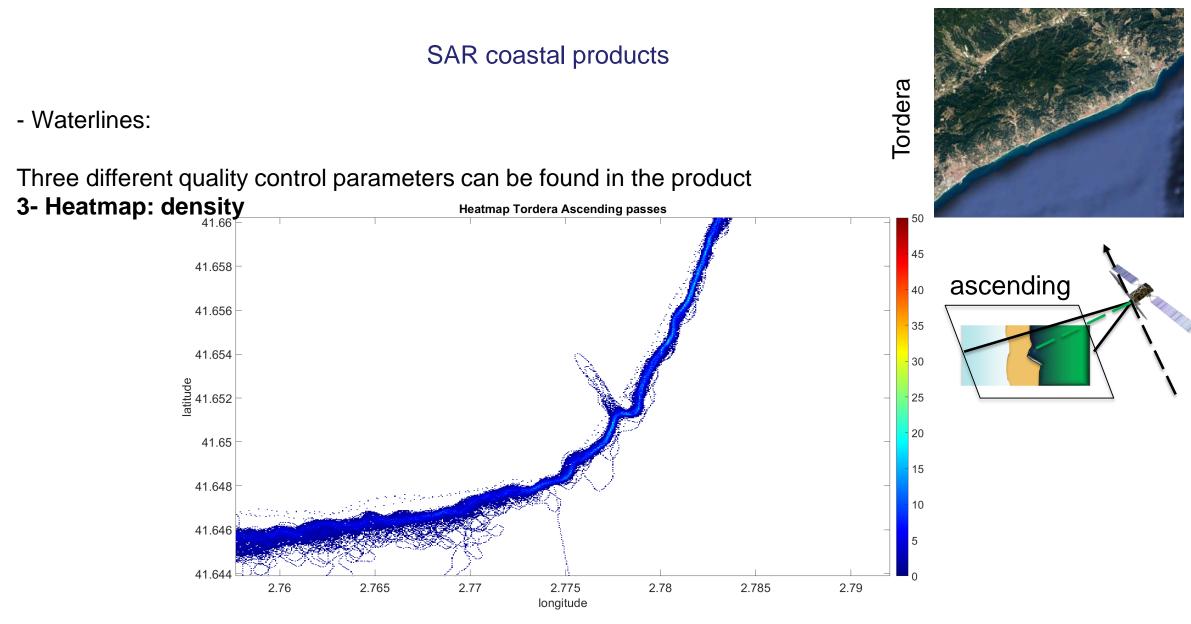


- Waterlines:

Three different quality control parameters can be found in the product **3- Heatmap: density**

S1B_IW_GRDH_1SDV_20191017T060027_20191017T060052_018511_022E12_43DE_QC.geojson 🛛	S1B_IW_GRDH_1SDV_20191017T060027_20191017T060052_018511_022E12_43DE_QC_HM.geojson 🗵
	▲ 8828 I
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[2.361396642,41.81579262,0],	8852 [2.361396642, 41.81579262, 0],
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[2.361337547, 41.81553971, 0],	8857 [2.36137547,41.8155397],01,
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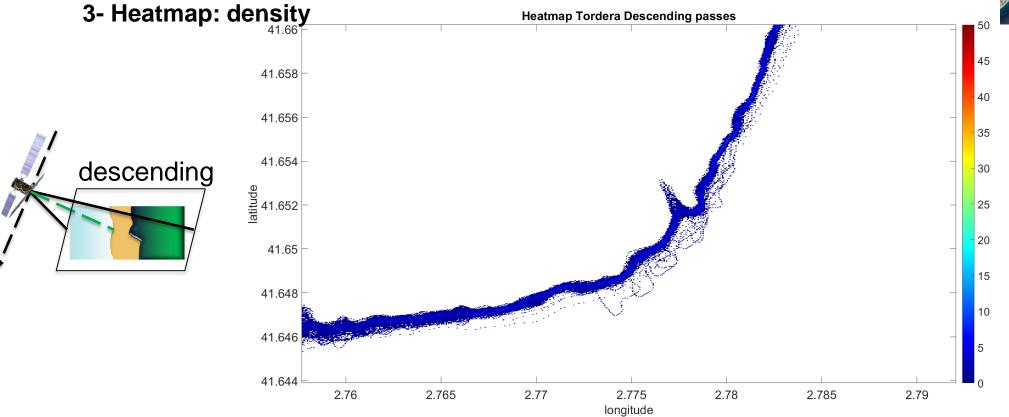






- Waterlines:

Three different quality control parameters can be found in the product



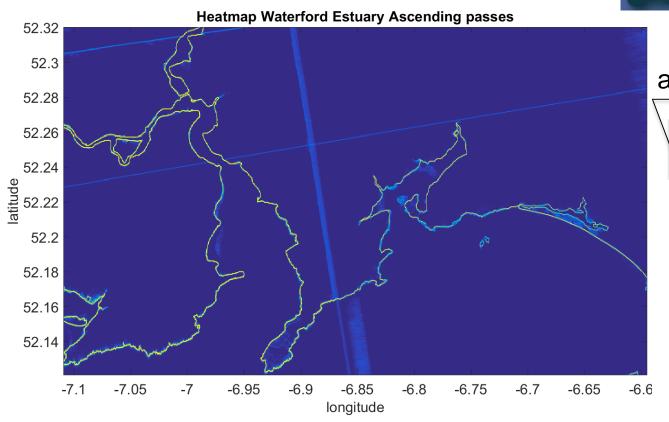


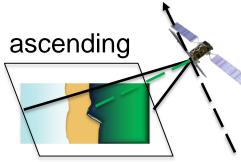
Tordera



- Waterlines:

Three different quality control parameters can be found in the product **3- Heatmap: density**



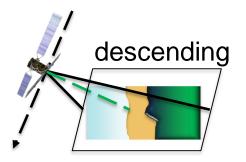


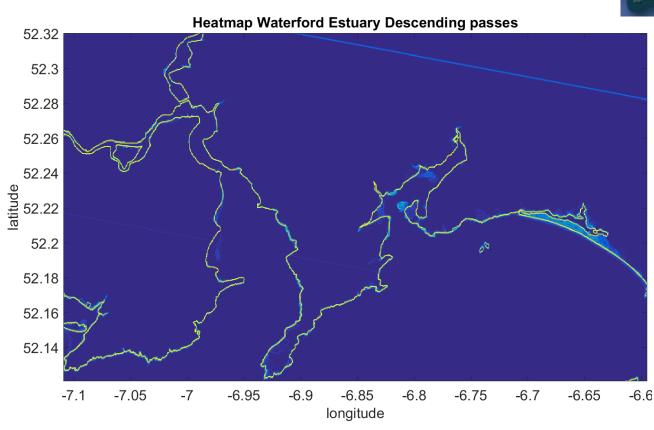
Waterford



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Three different quality control parameters can be found in the product **3- Heatmap: density**



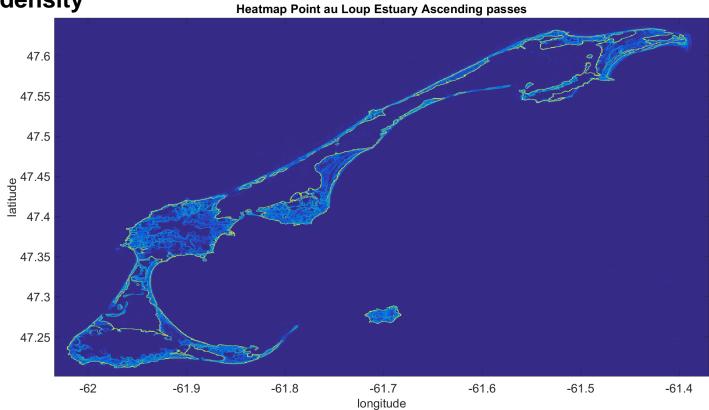




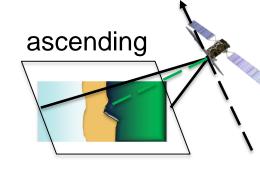


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Three different quality control parameters can be found in the product **3- Heatmap: density**



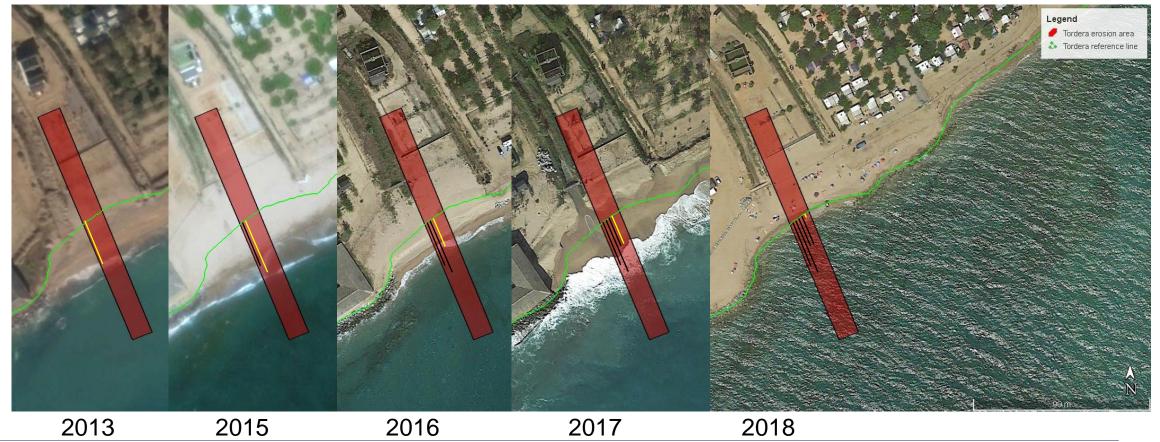






- Waterlines:

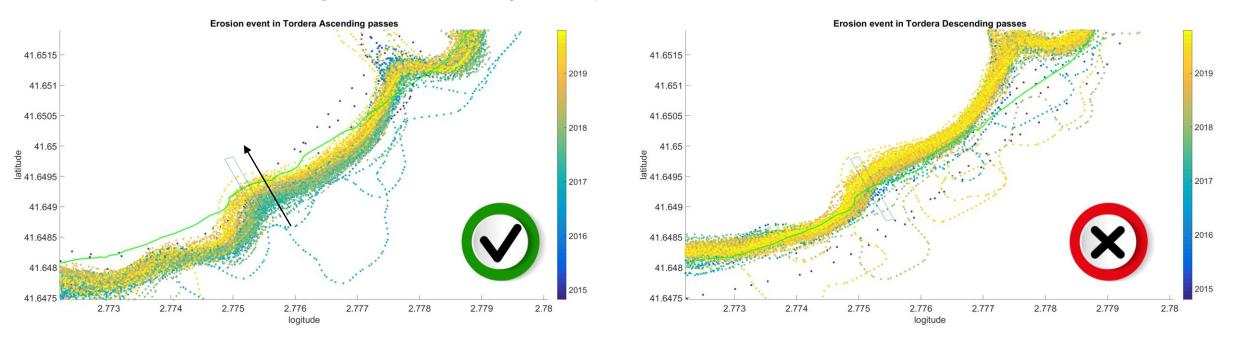
Use case: Erosion in Tordera Delta, around **32 meters** can be seen between **2015** and **2018 in Google Earth**





- Waterlines:

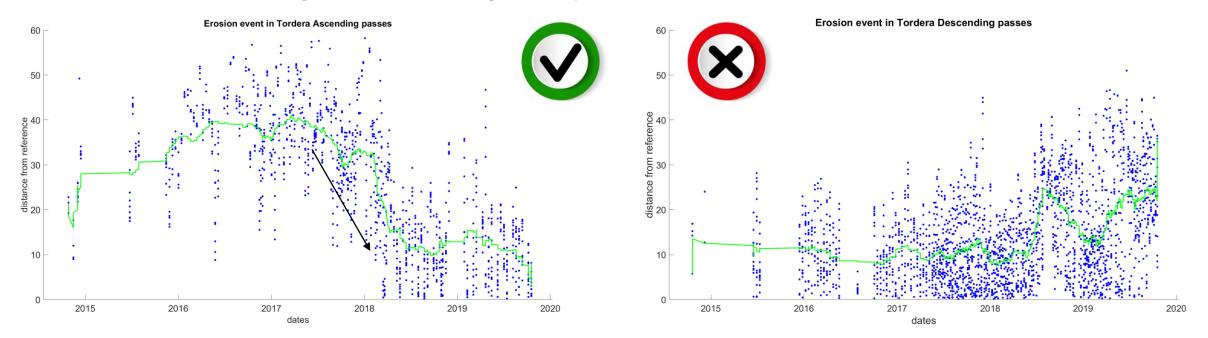
Use case: Erosion in Tordera Delta, similar erosion rate can be seen in the **ascending waterlines**, but **not in the descending** (not favourable geometry)





- Waterlines:

Use case: Erosion in Tordera Delta, similar erosion rate can be seen in the **ascending waterlines**, but not in the descending (not favourable geometry)



Plot of the QC distance parameter for the points inside the blue polygon from previous slide