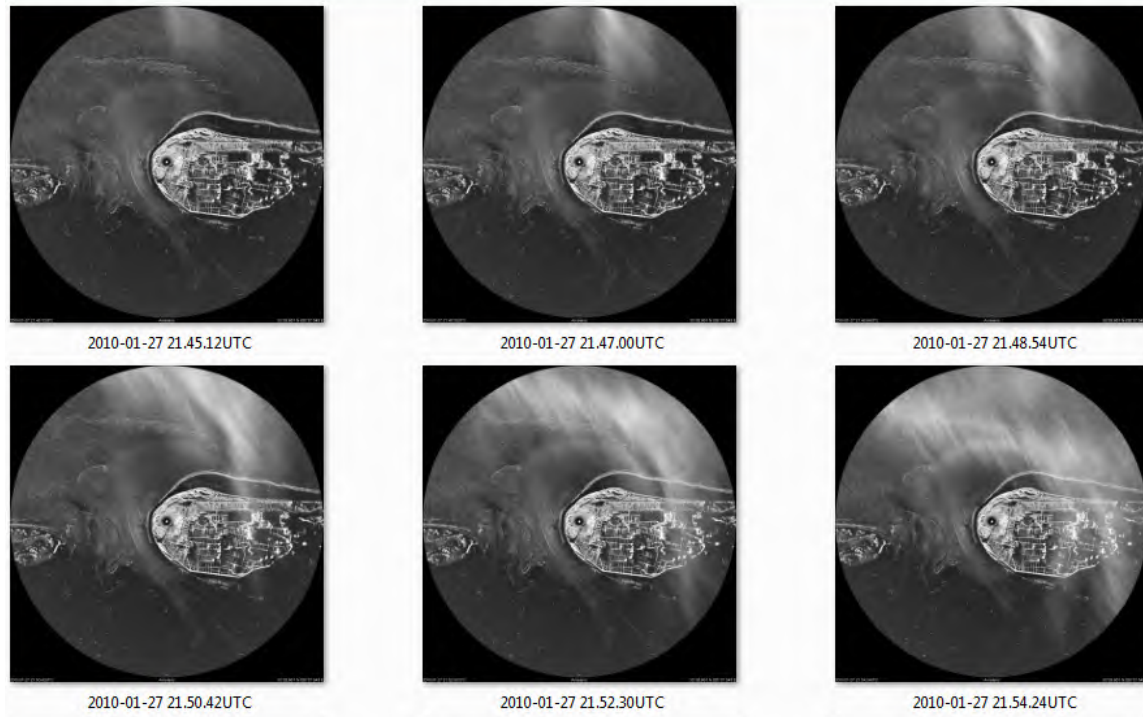


Using coastal radars for rainfall measurement

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Introduction

Monitoring of ship traffic along the Dutch coast and main rivers is carried out using X-band radars. However, data from these radars can also be used to monitor ocean currents and waves. A source of error for determining currents and waves is the occurrence of precipitation.



The figure above shows a series of radar images for a radar situated on top of the Ameland lighthouse on which a rainfall event can be seen. It is clear that in order to estimate rainfall from these images, a significant amount of filtering should be performed.

Activities

Data collected by Rijkswaterstaat will be analyzed to investigate how well rainfall can be estimated from these radar images. The main challenges are filtering the radar returns from the ground and the sea, and interpreting the resulting filtered images. Especially filtering the returns from the sea will be done in close collaboration with Rijkswaterstaat.