

Significant wave heights from Sentinel-1 SAR: validation and applications

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Additional Supporting Information (Files uploaded separately)

Table S1 (tableS1.csv): Coefficients used in neural network for CWAVE wave mode 1 images.

Table S2 (tableS2.csv): Coefficients used in neural network for CWAVE wave mode 2 images.

Table S3 (tableS3.csv): Coefficients used in neural network for Fnn wave mode 1 images.

Table S4 (tableS4.csv): Coefficients used in neural network for Fnn wave mode 2 images.

Introduction

Each supporting (.csv) file contains the coefficients used to go from the synthetic aperture radar image parameters to estimate significant wave heights for the Sentinel-1 platform. Please see main text and appendix for a complete description of how the functions were created and how to practically implement them.

Table S1. (tableS1.csv) Coefficients used to convert image parameters for CWAVE wave mode 1 images to significant wave heights. The input are: sigma0 (dB), normalized variance, S1, S2, ..., S19, S20. See main text for a detailed description of how the parameters were computed.

Table S2. (tableS2.csv) Coefficients used to convert image parameters for CWAVE wave mode 2 images to significant wave heights. The input are: sigma0 (dB), normalized variance, S1, S2, ..., S19, S20. See main text for a detailed description of how the parameters were computed.

Table S3. (tableS3.csv) Coefficients used to convert image parameters for Fnn wave mode 1 images to significant wave heights. The input are: azimuth cutoff (m), sigma0 (dB), image normalized variance, image skewness, cosine(2*angle relative to the range direction), and peak wave length (m). Please see main text for a detailed description of how the parameters were computed.

Table S4. (tableS4.csv) Coefficients used to convert image parameters for Fnn wave mode 2 images to significant wave heights. The input are: azimuth cutoff (m), sigma0 (dB), image normalized variance, image skewness, cosine(2*angle relative to the range direction), and peak wave length (m). Please see main text for a detailed description of how the parameters were computed.