Operational Wave and Water Level model
Impact Case Study #10

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What is your interest in the SWEEP-OWWL forecast?

Natural Resources Wales (NRW) currently provide a national coastal flood forecast and overtopping system. It's been interesting to talk with the SWEEP team and explore the additional value that the SWEEP-OWWL forecast could potentially provide us – particularly around data input from a greater number of more localised, dynamic beach profiles (rather than the static, winter survey based profiles currently used by NRW), with annual/bi-annual updates of these profiles.

Initial engagement with the OWWL model has provided evidence that some additional forecast locations may be beneficial within NRW's model to support the coastal flood forecasting service.

How do you see NRW benefitting from the SWEEP-OWWL model in the future?

NRW are interested in looking at comparative sites with the two systems, to help our understanding of the accuracy and validity of our existing system compared with a demonstrable alternative. In particular, we would like to compare post event outputs and verification data at Saundersfoot and Mumbles where we have shared forecast locations.

We would also like to expand the number of profiles captured by the OWWL model that match NRW forecast locations, so we have more comparative sites to review and build an evidence base.

I believe the modelling approach taken by SWEEP OWWL would be considered to inform any future wholescale review of NRW's coastal forecasting model.