



Case Study: Acclimatize Project

Aberystwyth University recently purchased a MiniMet Automatic Weather Station to be placed in Cemaes Bay on the Island of Anglesey. The weather station is being used as part of an Ireland-Wales Programme Project that which they are involved with.

The project, named Acclimatize, aims to improve the quality of beaches and coastline of both Wales and Ireland while also identifying sources of pollution and their impacts on the water. It is hoped that the project will help develop a range of smart tools and technologies that can be used to monitor water quality, protect human health and protect the marine environment.

The MiniMet Weather Station originally consisted of 8 Skye products; a DataHog datalogger (SDL 5000 series), Pyranometer (SKS 1110), UVA and UVB sensors (SKU 421 & SKU 430), Raingauge (ARG 100), Temperature and Humidity using our RHT+ (SKH 2070), and a Barometer (SKPS 800). However, due to the modular design of the MiniMet, the customer was able to upgrade their system to have remote access using our GPRS system, making the set up far more convenient for the customer as data was transmitted directly to their PC.

The MiniMet Weather Station has already allowed the project to introduce changes that are benefiting the local areas, with the main infrastructure improvements being seen at Cemaes Bay. UV disinfection has been introduced at a sewage treatment works to treat effluent that drains into the local river to try and improve water quality. However, due to the high levels of the residual microbial load, made worse following rainfall where river flow increases, the local community hasn't seen the changes they had hoped. These results and changes have prompted Natural Resources Wales to investigate microbial sources within the catchment area.

Our customer also has a similar system in place in Swansea, installed in 2013, and is reliant on a Skye UVA sensor (SKU 421). It was identified to be the most important predictor of water quality as it inactivates micro-organisms in the water.



Acclimatize

Acknowledgements and Contacts

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mark@crehwyer.demon.co.uk

Skye Instruments Ltd

21, Ddole Enterprise Park, Llandrindod Wells, Powys LD1 6DF, United Kingdom

TEL: +44 (0)1597 824811 EMAIL: skyemail@skyeinstruments.com WEB: www.skyeinstruments.com