The Database of British and Irish Hills

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The main developments in 2024 were the eagerly anticipated publication of new Welsh LIDAR data, and the addition of two new lists to the DoBIH. Early in 2020 Natural Resources Wales awarded Bluesky International a contract to map the whole of Wales, paralleling the National LIDAR 1m project in England and replacing the patchwork of data published in 2016. The data was released last March, and once again we are grateful to Joe Nuttall for running his surface analysis model. The Bluesky data is all at 1m resolution, i.e. the elevations are interpolated on a uniform grid with horizontal spacing 1m, whereas the older data is a mixture of 1m and 2m resolution.

There are some conflicts between the new data and the old. In general, the DTM algorithm appears to have been run less aggressively in the Bluesky data. We see this particularly with bridges and cairns. Another difference is that, contrary to customary practice, some of Bluesky's data has not been flown in winter. An example is Garth Wood (hill 19525). The 2016 dataset covers the summit only, whereas Bluesky covers both summit and col and gives a different summit location. Our practice is to map both the DSM and DTM data, and where non-trivial height is removed, the DSM-DTM difference to see what the algorithm is doing. Here, the DSM-DTM height differences are far greater in the Bluesky data. Swathes of ground have >20m of height removed in the Bluesky, whereas only isolated points in the older data have more than 5m of vegetation removed. Google Earth imagery shows the wood is deciduous, with no noticeable change since 2000. When comparing datasets, it can be helpful to map the difference between the DTM heights at each position. The DTM heights in the wood are all higher in the Bluesky data, mostly by <0.5m but >1m at one of the summits. At breaks in the canopy the difference between the datasets is only 1-2cm so there is a negligible systematic difference between the surveys. The col lies outside the wood with no vegetation issues. Given the severe tree interference in the Bluesky data it was clear that we should prefer the older data for summit location and height. Combined with Bluesky data at the col, this resulted in a drop of 29.8m and deletion from the Tumps.

Brackla Hill (15893) presented a comparable situation: no col data in 2016 and tree interference in 2023. In this case the Tump survived. Esgair Wen (7638) was trickier. The drop of 29.78m from old LIDAR at 2m resolution led to the Tump's deletion in 2017. Bluesky gives P30.04. Usually we'd say 1m data trumps 2m but the summit is a flat area of tussock grass and the difference has little to do with data resolution. The two col heights are identical. We have averaged the data, keeping the status quo.

There was a further small release of NLP data in England in 2023, but at the time of writing SE00, SE01, NY85 and a large patch of the North Yorkshire coast have holes. Hopefully they'll fly the missing areas.

The new lists were added in response to popular demand. The Ethels of the Peak District were created in April 2021 by Doug Colton of CPRE and achieved possibly the fastest growth of popularity ever witnessed for a hill list. Alan Dawson's 1033 High Hills of Britain is more

niche but probably more appealing to relative hill baggers. The book was reviewed in the 2021 *Relative Matters* journal.

EastWest maps published four more of their highly accurate Irish maps covering Cooley and the Dingle Peninsula. Three changes to the lists resulted. A map of Mweelrea & The Reek at 1:25,000 scale was published in February this year.