

HadISDH.land Update Document

Kate Willett (MOHC), 4th April 2025

General Notes:

The HadISDH.land.4.6.1.2024f contains all 12 months of 2024. There are no major changes (X), no bug fixes or minor changes (Y).

All other processing steps for HadISDH.extremes remain identical. The new version of HadISD (3.4.1.2024f) has pulled through some historical changes to stations which are passed on to HadISDH.land resulting in 9948 compared to 9667 initial stations. The end station count is further reduced after completeness checks and homogenisation. The homogeneity adjustments differ slightly due to sensitivity to the addition and loss of stations, historical changes to stations previously included and the additional 12 months of data. More information can be found at <https://hadisdh.blogspot.com/2025/04/2024-update-from-hadisdhland4612024f.html>.

Version Number X.Y.Z.0000p/f:

4.6.1.2024f

Major changes X:

- None

Bug fixes and minor changes Y:

- None

Minor bug fixes / historical data updates Z:

- 9948 compared to 9667 initial selection stations last year.
- Use of HadISD.3.4.1.2024f as the basis which includes retrospective improvements (to correct data, add or remove data sections) to the historical data in NCEI's ISD archive are ongoing. These are not documented.

Start Date DD.MM.YYYY: 1973-01-01

End Date DD.MM.YYYY: 2024-12-31

Hadisdh Data Format (Baseline documentation): [10.5281/zenodo.7357310](https://doi.org/10.5281/zenodo.7357310)

Reference: No change

- Willett, K. M., Dunn, R. J. H., Thorne, P. W., Bell, S., de Podesta, M., Parker, D. E., Jones, P. D., and Williams Jr., C. N.: HadISDH land surface multi-variable humidity and temperature record for climate monitoring, *Clim. Past*, 10, 1983-2006, doi:10.5194/cp-10-1983-2014, 2014.
- Willett, K. M., Williams Jr., C. N., Dunn, R. J. H., Thorne, P. W., Bell, S., de Podesta, M., Jones, P. D., and Parker D. E., 2013: HadISDH: An updated land surface specific humidity product for climate monitoring. *Climate of the Past*, 9, 657-677, doi:10.5194/cp-9-657-2013.
- Smith, A., N. Lott, and R. Vose, 2011: The Integrated Surface Database: Recent Developments and Partnerships. *Bulletin of the American Meteorological Society*, 92, 704-708, doi:10.1175/2011BAMS3015.1.

Other notes: The update blog post is here: <https://hadisdh.blogspot.com/2025/04/2024-update-from-hadisdhland4612024f.html>