



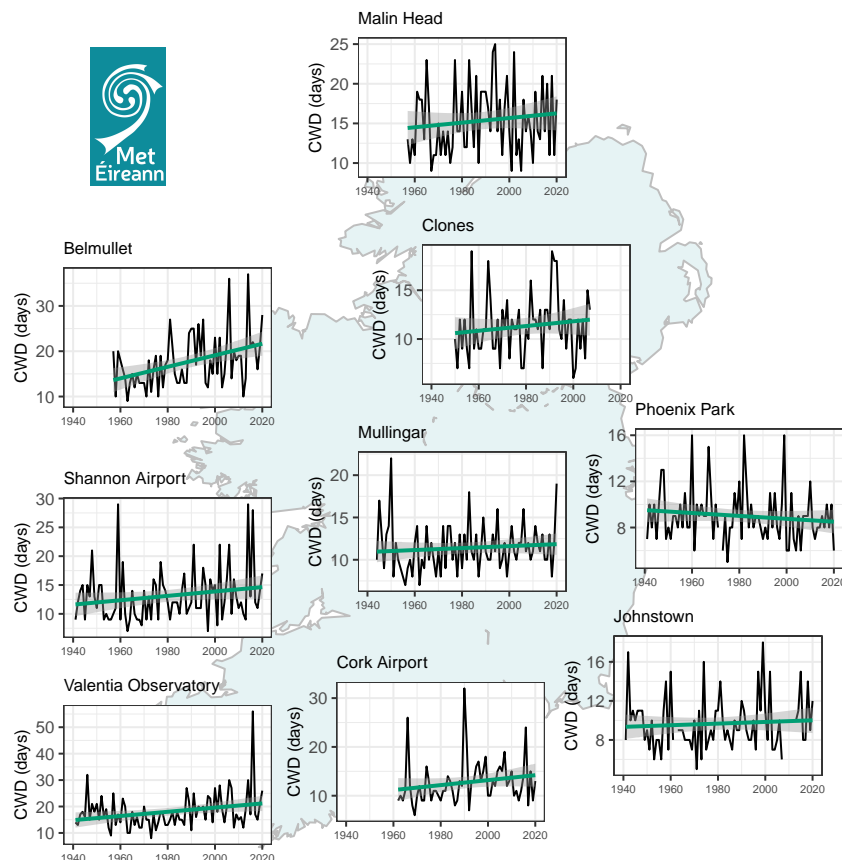
## Consecutive Wet Days (CWD)

### Key Message

- Some stations are seeing increases in the number of consecutive wet days (mostly in the west), but the majority of stations do not have significant long-term trends.

### Definition

- Daily precipitation (**R**), from 09UTC - 09UTC observations, are used to calculate this index.
- The **CWD** index is the largest number of consecutive “wet days” (where  $R \geq 1\text{mm}$ ) during the period of interest (year, season or month).





## Trends

- The graphs above indicate that **CWD** is primarily increasing at some western coastal locations, with a lack of statistically significant trends elsewhere.
- Ongoing research into data rescue and homogenisation indicate that the significance of these positive trends in **CWD** weaken when data was extended back to the start of the 20th century, [Ryan et al., 2021].
- Globally averaged **CWD** does not exhibit a strong signal but there are isolated pockets where trends are present, [Dunn et al., 2020]. One such area is around Ireland, where increasing trends are found but are generally not statistically significant.
- The largest value for **CWD** occurred at Valentia Observatory between the 23rd of November 2015 and 17th of January 2016, a period of 56 consecutive days with at least 1mm of rainfall recorded.

## Data Access

Data for this index can be downloaded through the web-page below (or the QR code in the header):

- <https://www.met.ie/climate/climate-change-indices-etccdi/>

For further information contact Met Éireann Climate Enquiries: [enquiries@met.ie](mailto:enquiries@met.ie)

## References

- Robert JH Dunn et al. Development of an updated global land in situ-based data set of temperature and precipitation extremes: HadEX3. *Journal of Geophysical Research: Atmospheres*, 125(16):e2019JD032263, 2020. doi: <https://doi.org/10.1029/2019JD032263>.
- Ciara Ryan et al. Long-term trends in extreme precipitation indices in Ireland. *International Journal of Climatology*, 2021. doi: <https://doi.org/10.1002/joc.7475>.