

## Simulation of the risk of salmonellosis in humans conditional to weather using modelling

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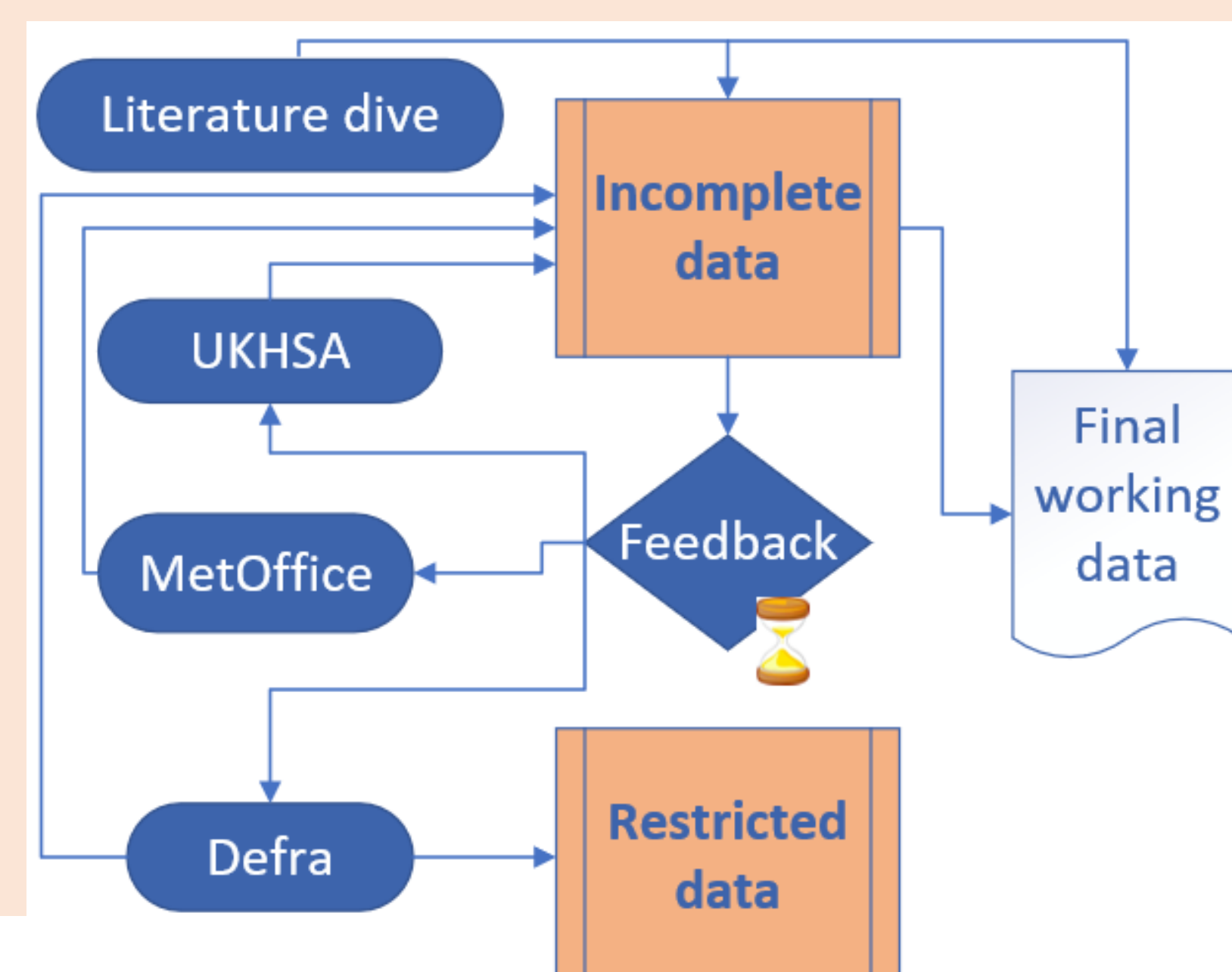
### BACKGROUND:

- The **impact of the environment** on infectious diseases is commonly accepted but it is difficult to quantify.
- We aim to evaluate the **contribution of the weather** variables to the risk of people getting infected with *Salmonella*.

### DATA COLLECTED

1. **Disease:** Salmonellosis cases (UKHSA) from 1989-2020.
2. **Coordinates of Diagnostic Labs** (UKHSA)
3. **Demography:** number of residents for an area around the labs (UKHSA, GIS team)
4. **Weather values,** spatio-temporally linked to diagnostic laboratory postcode level (MetOffice).

### CHALLENGES FACED



# Getting health-related data is tedious and often depending on the good willing of collaborators.

Early-stage research



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### Proposed OPEN RESEARCH PRACTICE

- Heavy data exchange in protected environment → **UoS Secure Temporal Data Storage.**
- Sharable R code to ensure reproducibility → **UoS Open Access Repository, GitHub.**



### Questions for you, viewer:

- What should I know before starting to use **GitHub**?
- Do you have experience in **sharing a clean R code**?
- How to **persuade** general public, stakeholders, public and private sector about the **usefulness of data sharing** for academic research and its societal benefits..?

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