



# Use of ODB at Met Office

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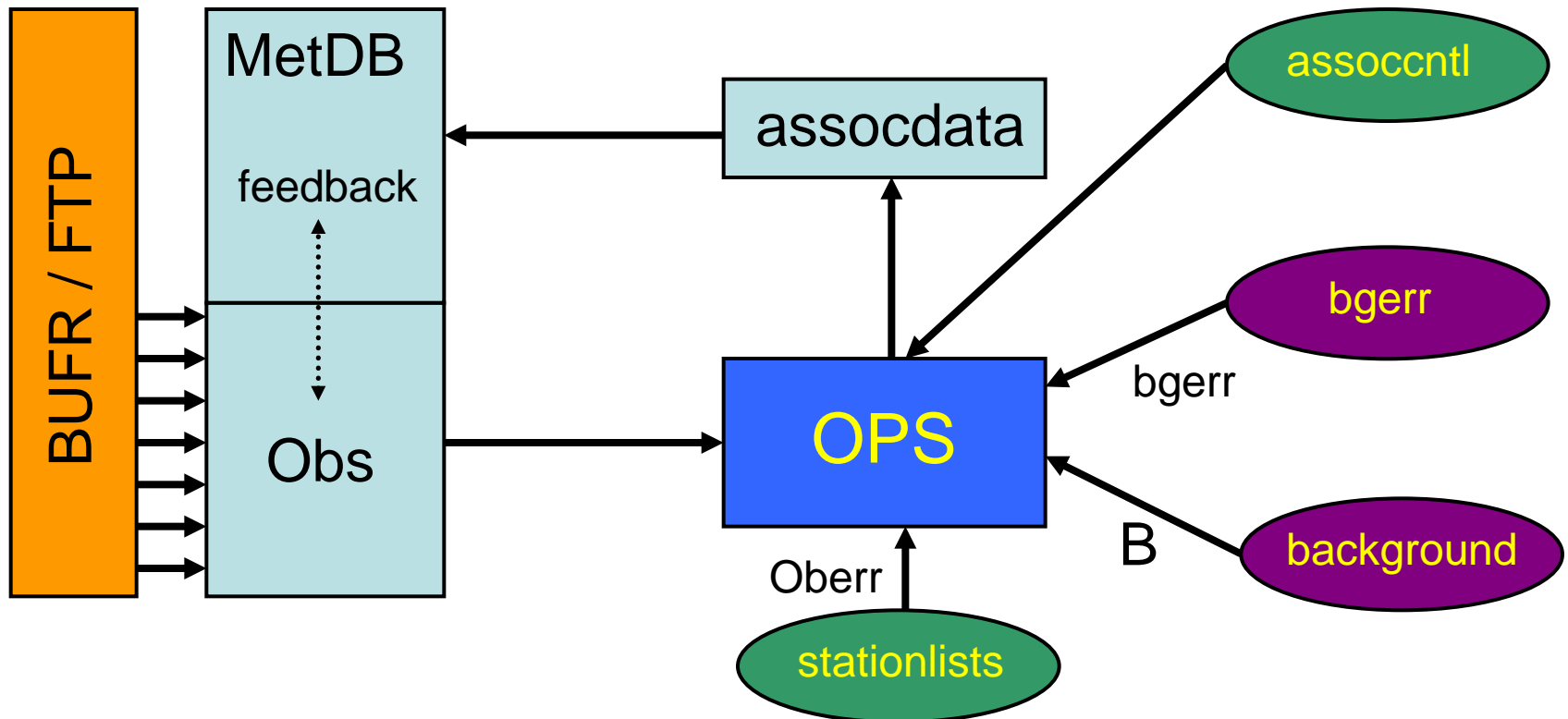


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# Why is Met Office using it?

- **Current monitoring processes** are not good enough





# MetDB mergeback issues

- MetDB provides convenient storage and interface, but no unified monitoring tools
- Therefore, huge number of separate, bespoke applications
- High maintenance costs, single experts
- Cannot use for research trials
- MetDB not owned by Weather Science
- Development can take a long time



# Better solution?

## ODB addresses these issues

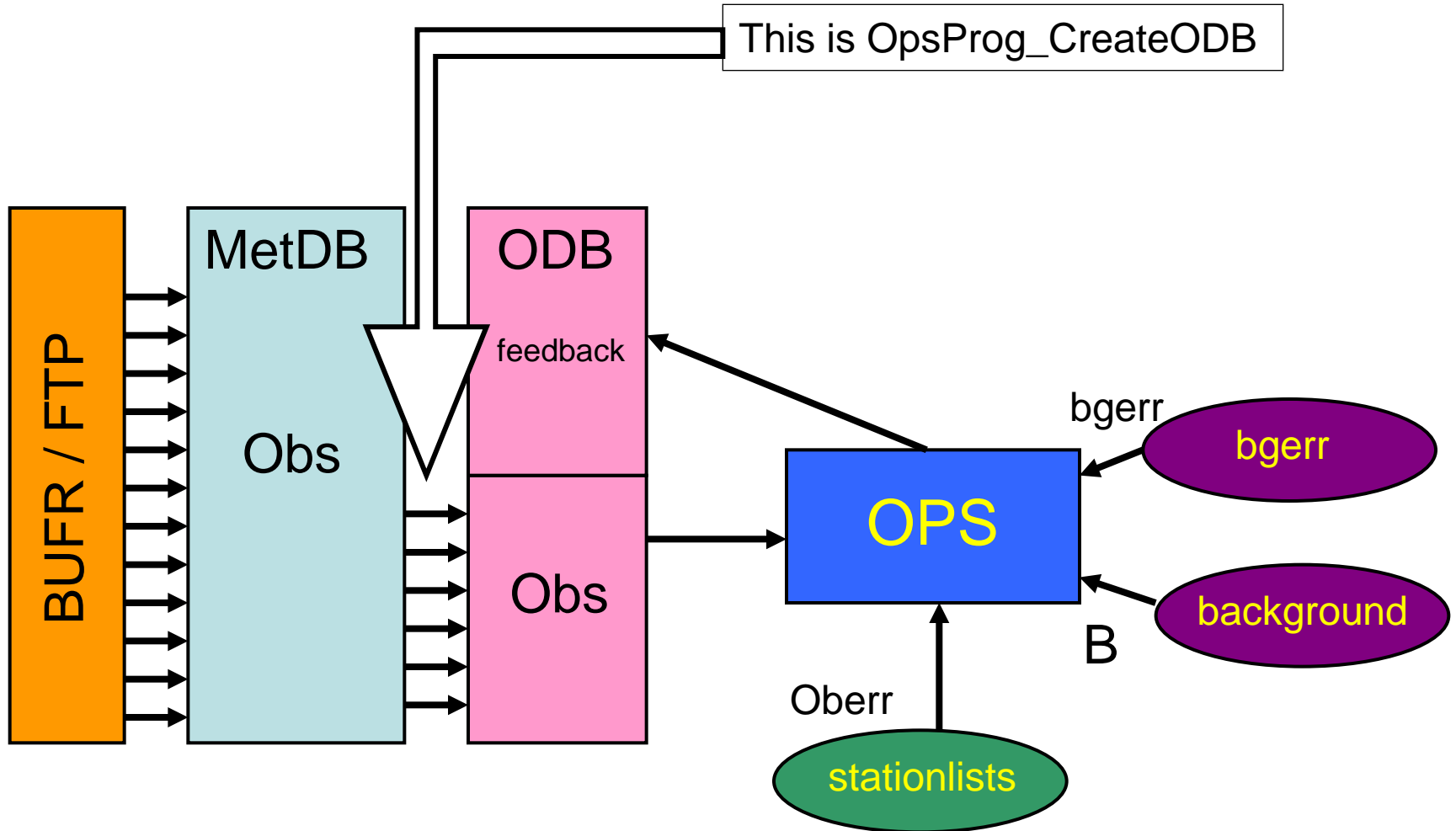
- With obstat, magics, Metview etc, all scientists can use the same basic framework
- Weather Science can “own” the system
- Implement in operations and any research experiment or trial



# ODB content

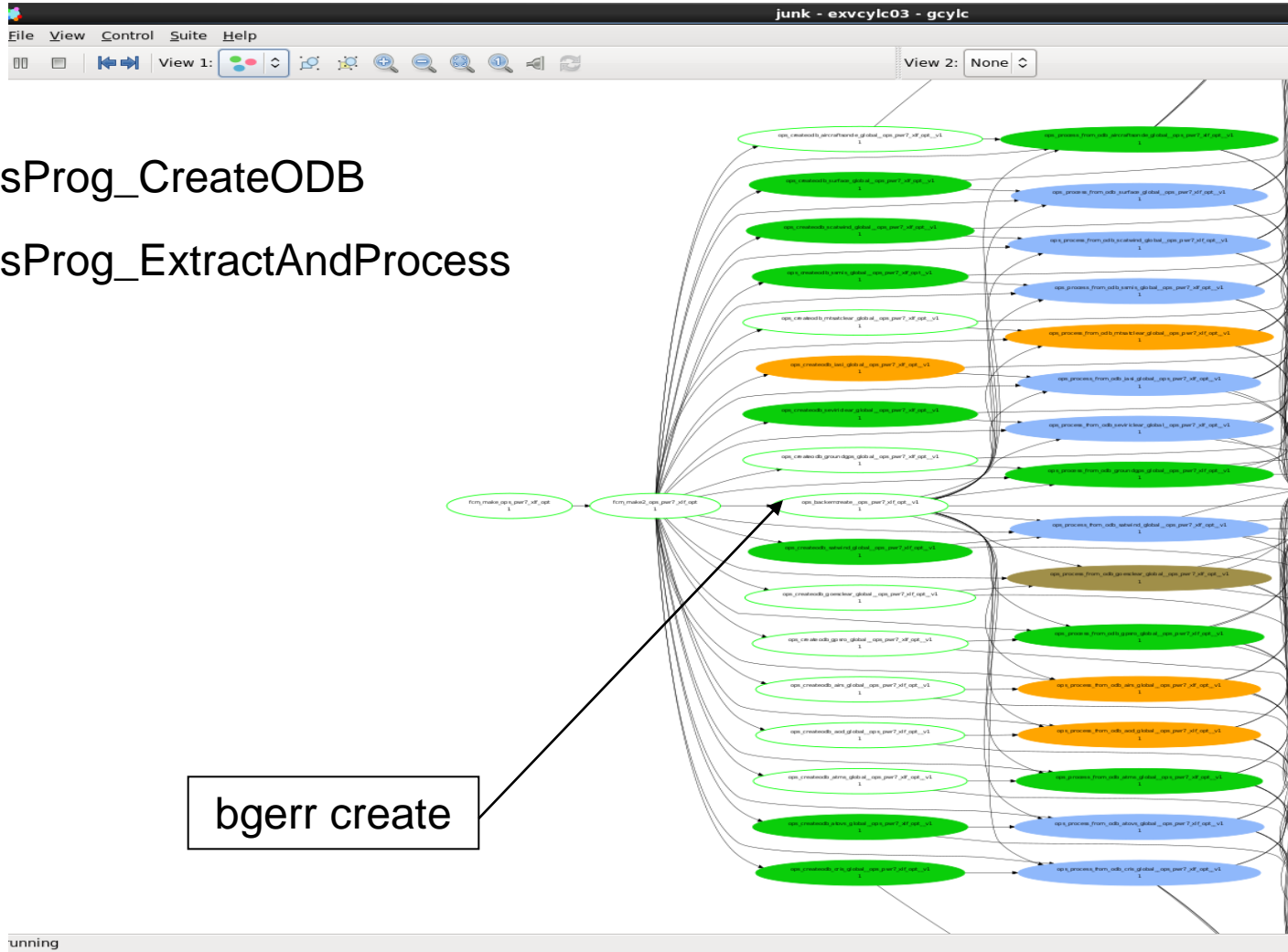
- We can put what we want in ODB
- Any observed, derived, model background quantity, flag, correction, metadata. In fact anything that OPS knows about
- To do this, we add a column - or varno - to the ODB schema and change OPS code to write to it
- Applications are (should be) independent of the schema

# Implementation in OPS





# Implementation in rose suite



16 x OpsProg\_CreateODB

16 x OpsProg\_ExtractAndProcess

bgerr create





# Current status

- Implemented in operational global model
- Implemented in research global suite(s)
- Working in regional research suites (UKV only – NAE to be retired soon)
- ODBs archived as per-cycle tarballs 🙄
- Rapidly developing obstat, Magics, Metview applications



# Work to do

- Develop substantial range of automatic monitoring for global (Mar 2014)
- Implement in operational UKV (~Apr 2014)
- Interface with VER (~now)
- Proper archiving solution. Quite possibly MARS - or “MARS lite”. (~mid 2014)
- Enable production of ODB without MetDB (~Mar 2014, with KMA)



# Acknowledgments

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Met Office



Questions?