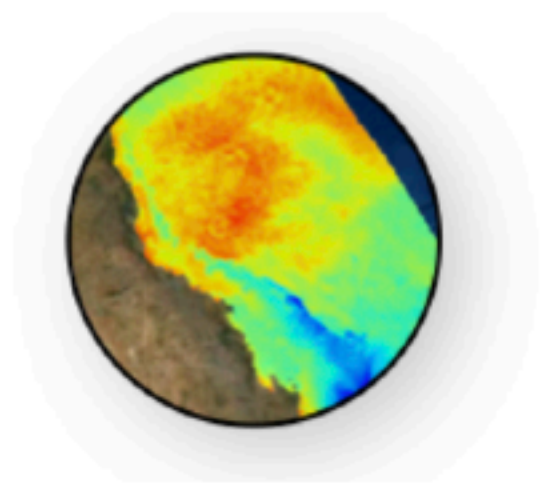


eRefs ODP addresses





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eReefs data catalogs

There are many places where you could find eReefs dataset. Here is a non-exhaustive list of some of the servers we will be using during the course.

Hosted by the Australian Institute of Marine Science (AIMS)

The [AIMS eReefs THREDDS server](#) provides access via OPeNDAP for all NetCDF files produced by the AIMS eReefs system.

The AIMS eReefs THREDDS service contains regridded and aggregated format of the eReefs model output.

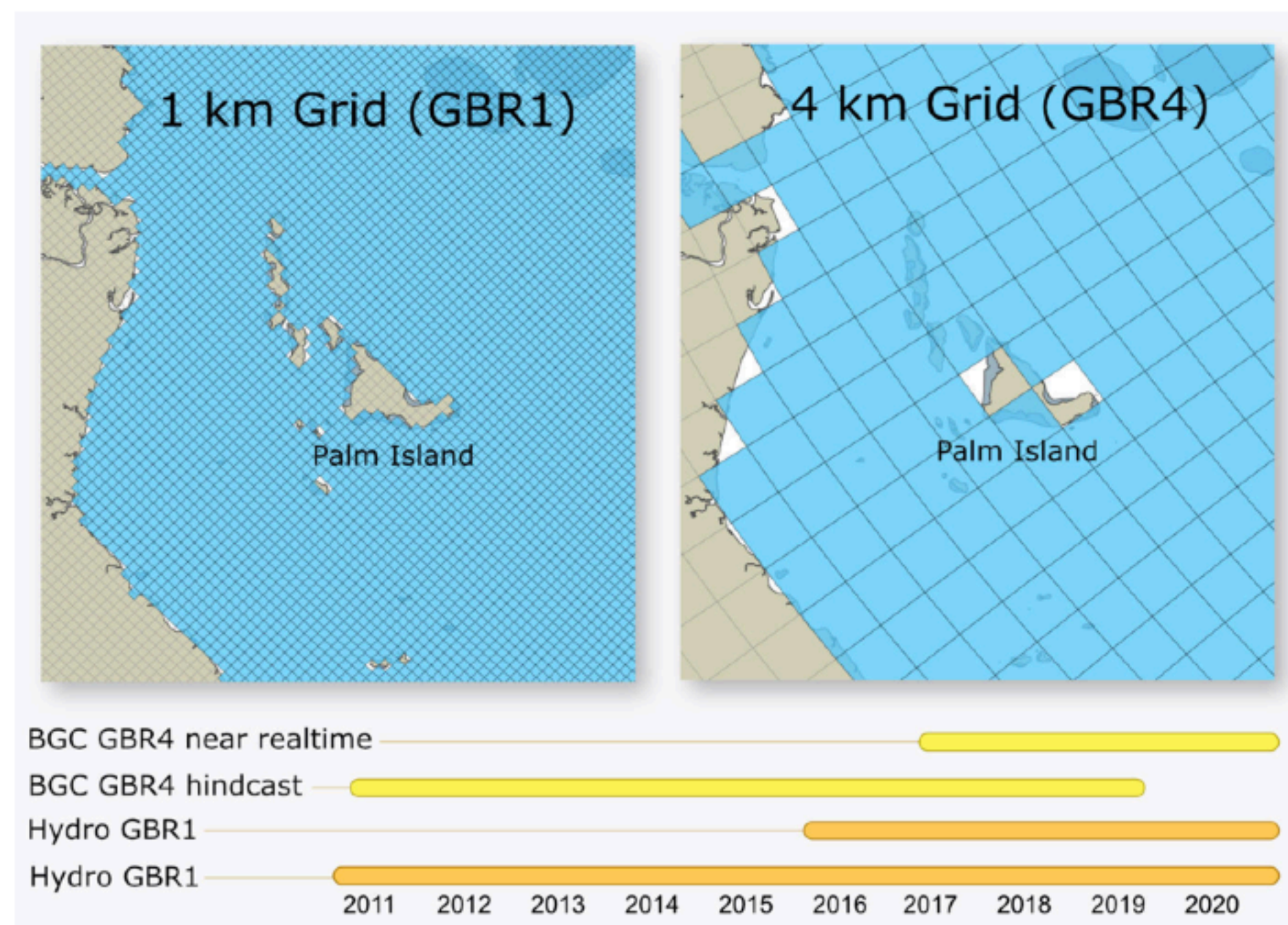


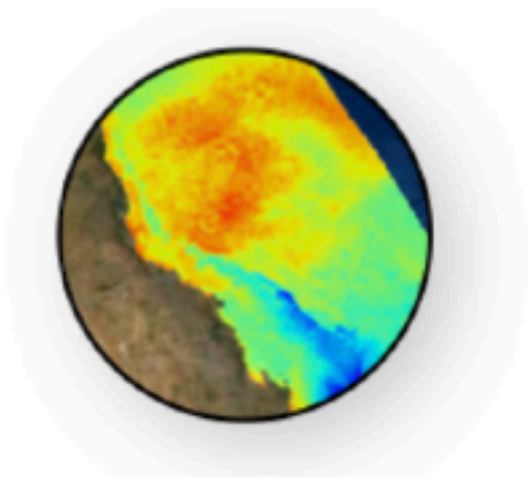
Fig. 6 Different time span and sample rate for eReefs dataset

All eReefs Data
Catalog links are
available from the
Jupyter Book.



eReefs OPeNDAP addresses

All eReefs Data Catalog links are available from the [Jupyter Book](#).



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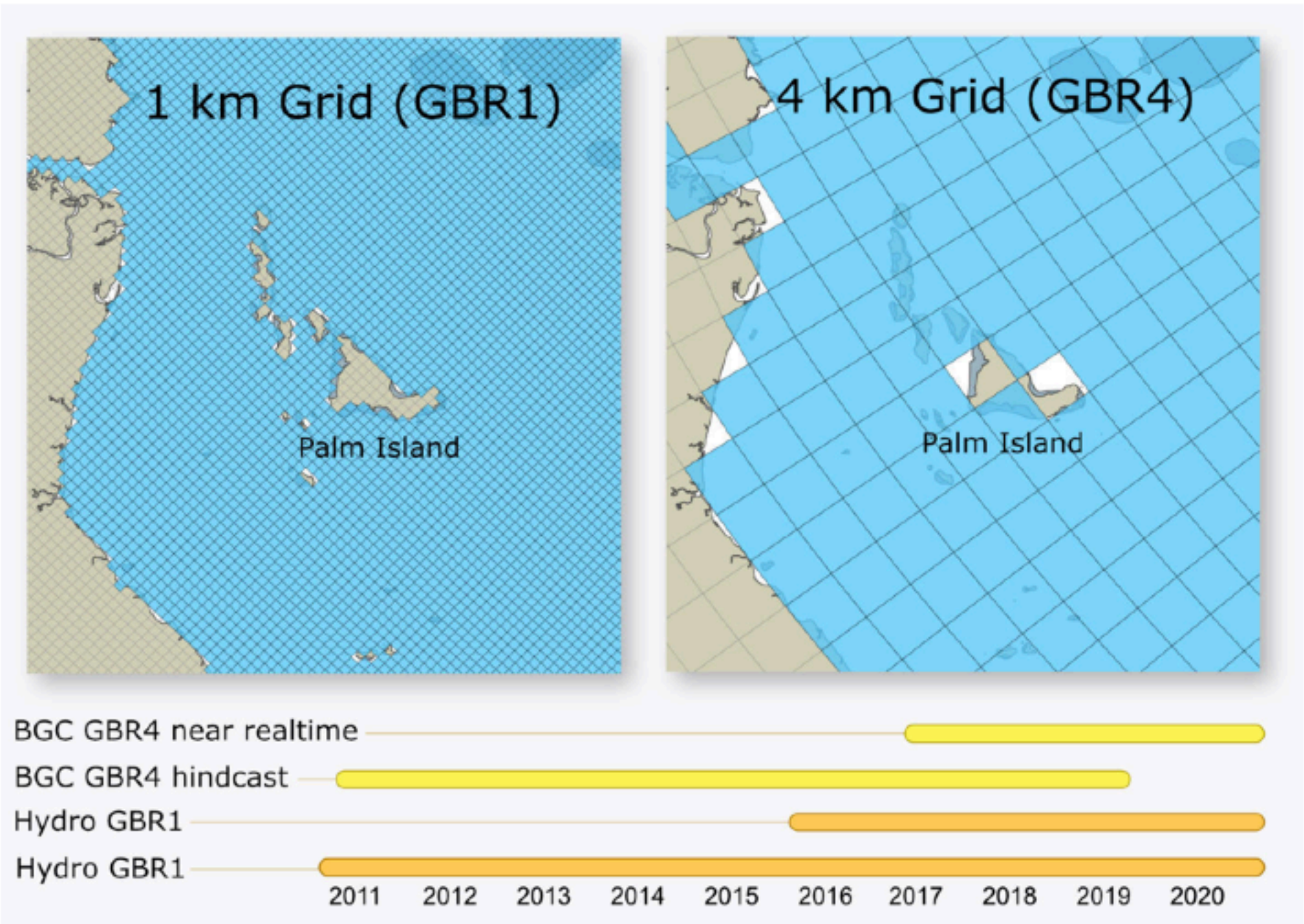


Fig. 6 Different time span and sample rate for eReefs dataset

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UoS Coding Platform



The [Jupyter Notebook](#) is an open-source web application that allows you to create and share documents that contain live computer code, equations, visualisations and narrative text.

If you are new to Jupyter Notebooks, don't be scared! You can learn about them and try them out on the [Jupyter website](#). I also have prepared a tutorial for you in this lecture.

The screenshot displays the Jupyter Notebook web interface. On the left, a file browser sidebar is visible, showing a directory structure under '/ book /'. The files listed are: '_bibliogra...', '_static', 'docs', 'img', 'week_01', '_config.yml', '_toc.yml', 'qe-logo-la...', and 'welcome.i...'. The 'welcome.i...' file is selected. The main area on the right shows the 'welcome.ipynb' notebook. The notebook has a title 'Welcome' and contains the following text: 'Lecture notes of the master lecture [ENVI5809 - Environmental Simulation Modelling](#), taught to 2nd semester students at the University of Sydney. This lecture is tailored for a 12 weeks-long class, but these notes might also be of interest to other (geo-)scientists wanting to learn how to query, analyse and visualise dataset from webserver. **Welcome to you all!**' Below this text is a code cell containing the following code:

```
----  
figclass: margin  
name: margin_figure  
----
```

 The notebook also has a section titled 'What we will use and why we care' which contains the following text: 'This unit of study introduces approaches to simulation modelling in understanding and predicting behaviour of natural systems. It covers fundamental concepts, logic, and techniques (including sensitivity analysis), and develops skills in application to environmental problems such as catchment management and population dynamics.' Below this text is a code cell containing the following code:

```
:::{note} Today, numerical modelling and ocean data query techniques are routinely applied by governmental agencies, companies and research organisations to tackle complex coastal problems. It is based on advanced physical models and engineering approaches designed to describe and observe the connections between ocean dynamics and coastal evolution. :::
```