

# Connecting the Dots

# Joint Cetacean Data Programme

How the JCDP is transforming cetacean data sharing



**Peter Evans**  
on behalf of the ICES Working  
Group for the JCDP

# Monitoring cetaceans



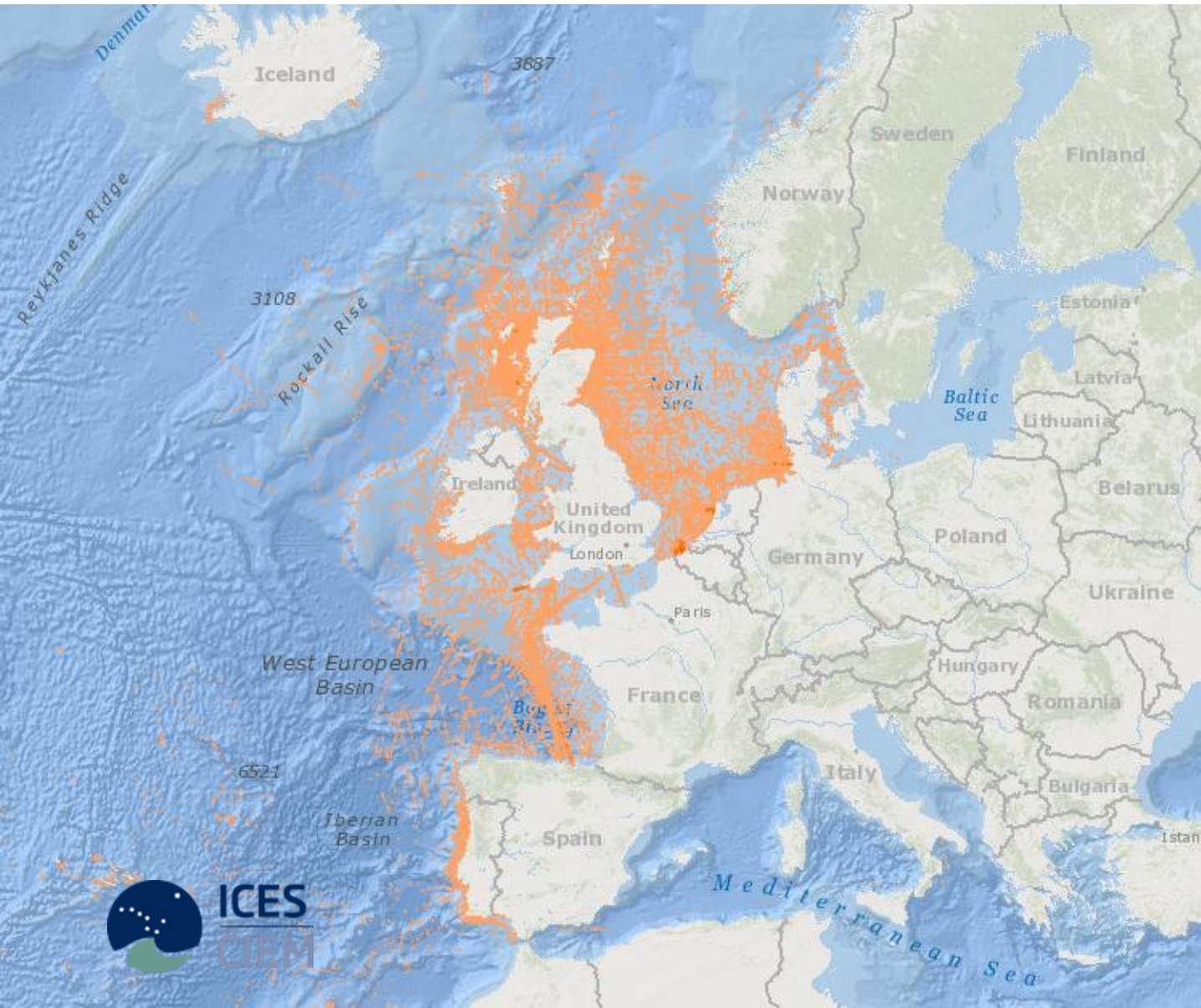
- Cetaceans (whales, dolphins and porpoises) are highly mobile wide-ranging and cryptic species which make them challenging to observe
- Data collection is often resource-intensive e.g. vessel surveys
- Data are vital to improving our understanding to draw accurate conclusions on population size, dynamics and changes over time
- Cetacean data are currently collected by a wide range of organisations for a wide variety of purposes, with a common goal
- Fragmented and inconsistent cetacean data hinder effective marine conservation and policy-making efforts globally
- Cue – the JCDP...

# What is the JCDP?



International initiative addressing key cetacean data challenges by standardising and centralising effort-based cetacean survey data

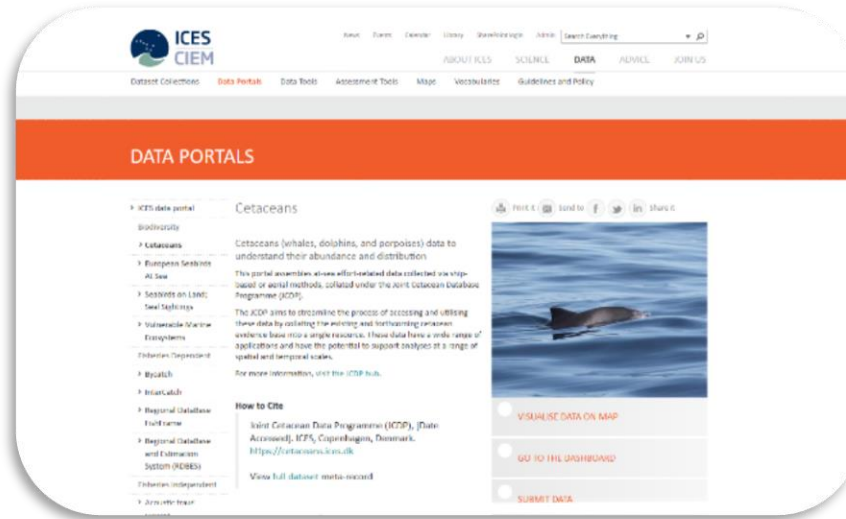
# JCDP Vision



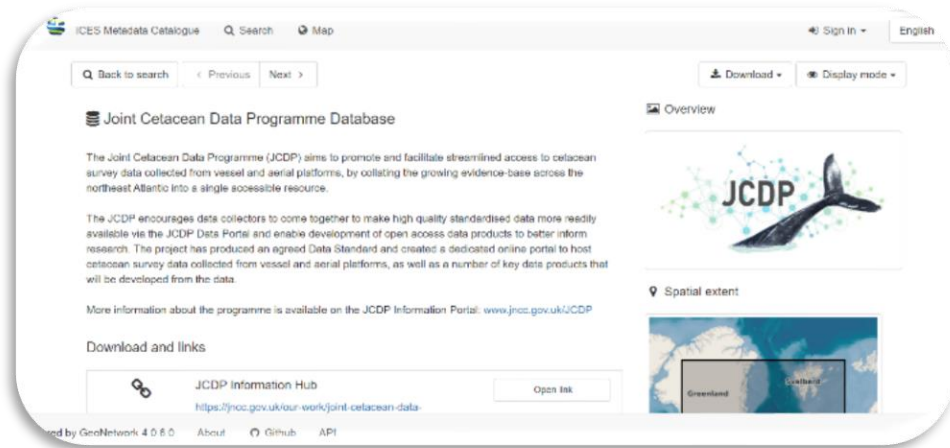
Promote and facilitate cetacean data **standardisation** and maximise value through **collation** and enabling of universal **access**

# JCDP Platform

JCDP Data Portal  
[www.cetaceans.ices.dk](http://www.cetaceans.ices.dk)



JCDP Information Hub  
[www.JNCC.gov.uk/JCDP](http://www.JNCC.gov.uk/JCDP)



Metadata Catalogue  
[gis.ices.dk/geonetwork](http://gis.ices.dk/geonetwork)



[www.jncc.gov.uk/JCDP](http://www.jncc.gov.uk/JCDP)



# Standardising Cetacean Data



The JCDP has developed a **universal data standard** in consultation with a wide range of stakeholders

- Standard hosted on the JCDP Hub and linked through MEDIN, Ocean Best Practices and the JCDP Data Portal
- Widescale application of the standard will significantly increase quality and value of data

# Standardising Cetacean Data



## AlphaID:

Drop-down list of scientific names for cetacean species and ancillary species which can be submitted to the JCDP. Species names and codes are as recorded in the World Registry of Marine Species (WORMS) <http://www.marinespecies.org/>

AlphaID	Sci name	Common Name (English accepted)	Taxonomic level
231390	<i>Arctocephalus</i>		genus
231435	<i>Arctocephalus australis</i>	South American fur seal	species
255008	<i>Arctocephalus galapagoensis</i>	Galápagos fur seal	species
231404	<i>Arctocephalus gazella</i>	Antarctic fur seal	species
255006	<i>Arctocephalus philippii</i>	Juan Fernandez fur seal	species
231410	<i>Arctocephalus pusillus</i>	Cape fur seal	species
231432	<i>Arctocephalus tropicalis</i>	subantarctic fur seal	species
137086	<i>Balaena mysticetus</i>	Bowhead whale	species
136978	<i>Balaenidae</i>	Right and bowhead whales	family
137087	<i>Balaenoptera acutorostrata</i>	Common minke whale	species
231405	<i>Balaenoptera bonaerensis</i>	Antarctic minke whale	species
137088	<i>Balaenoptera borealis</i>	Sei whale	species
137089	<i>Balaenoptera edeni</i>	Bryde's whale	species complex
137090	<i>Balaenoptera musculus</i>	Blue whale	species
343896	<i>Balaenoptera omurai</i>	Omura's whale	species
137091	<i>Balaenoptera physalus</i>	Fin whale	species

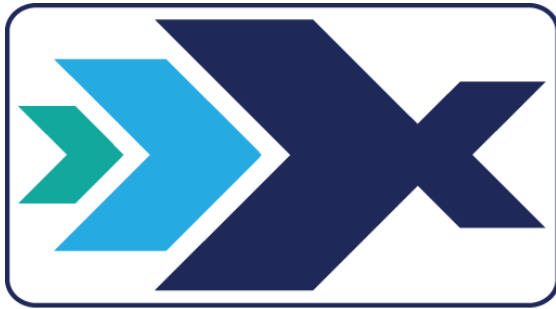
- Core fields
- Vocabulary
- Conversions and conventions

## SwellWaveHeight:

Conversions from other conventions are outlined below:

JCDP convention	Corresponding WMO Sea State Codes	WMO Wave height range	Categories
Not recorded	N/A	N/A	N/A
None (0 meters)	0-2	0 – 0.5 metres	None
Low (0 -1 meters)	3	0.5 to 1.25 metres	Present without affecting detection
Medium (1 - 2 meters)	4	1.25 to 2.5 metres	Present and affecting detection
High (2-3 meters)	5	2.5 to 4 metres	Present and affecting detection/confused swell (swell converging from more than one direction)
Very high (3+ meters)	6-9	4 to >14 metres	Present and affecting detection

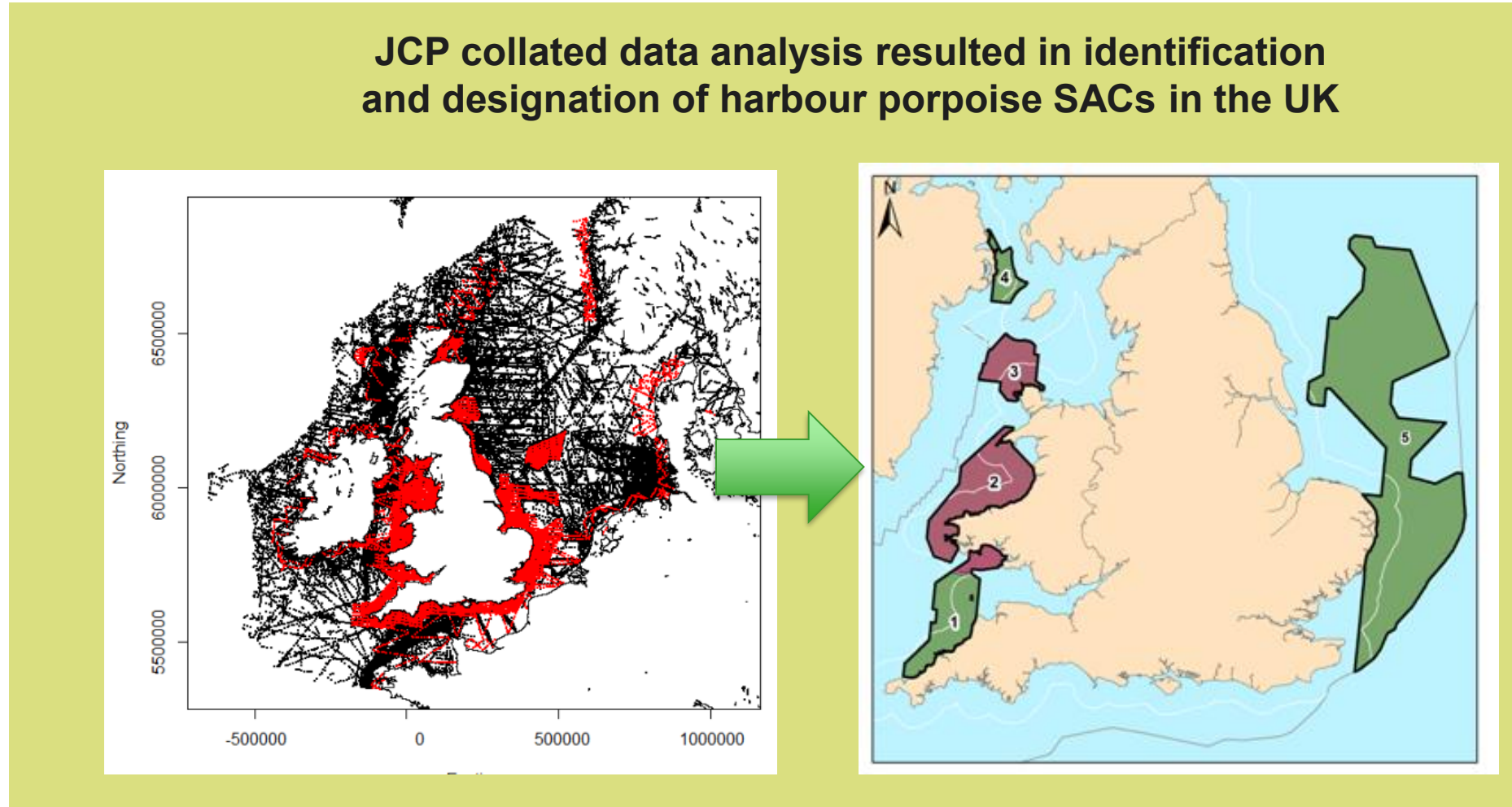
# Applying collated data



**Marine Ecosystems  
Research Programme**



Planning  
Offshore Wind  
Strategic  
Environmental  
Impact  
Decisions

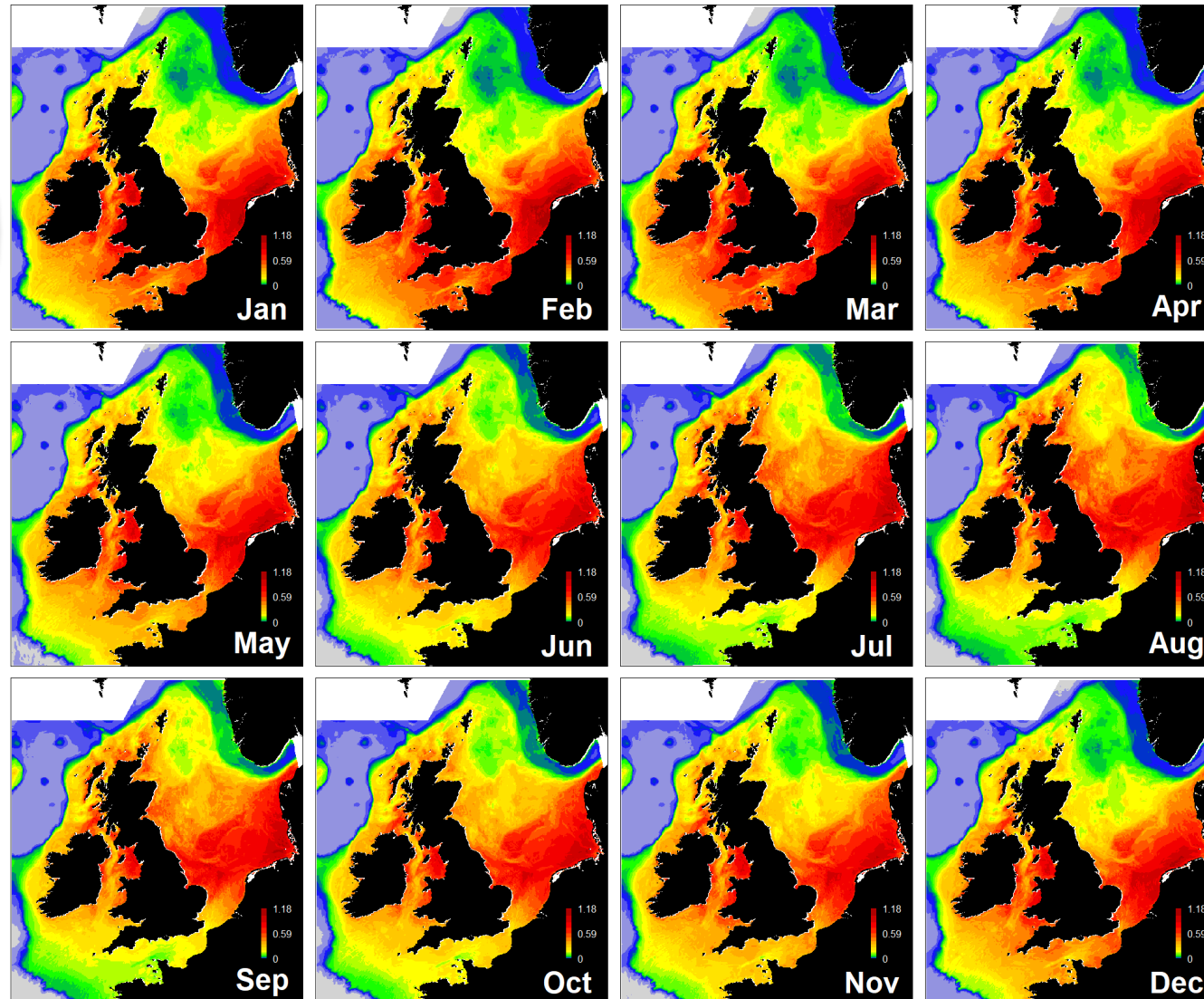


# Applying collated data

[www.jncc.gov.uk/JCDP](http://www.jncc.gov.uk/JCDP)

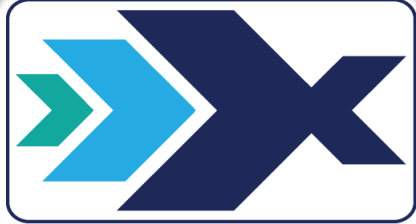


*Harbour Porpoise*



- 40 data sources from 11 countries
- 2.6 million km of surveys
- Aerial, digital & vessel effort-based data from 1979 to 2017
- Data used only where sufficient information on survey protocols existed plus variables affecting detection rates
- Cleaned & processed into single spreadsheet

**Source:**  
Waggitt et al. (2020)



Marine Ecosystems  
Research Programme



Planning  
Offshore Wind  
Strategic  
Environmental  
Impact  
Decisions



ICES  
CIEM

# Applying collated data



[www.jncc.gov.uk/JCDP](http://www.jncc.gov.uk/JCDP)



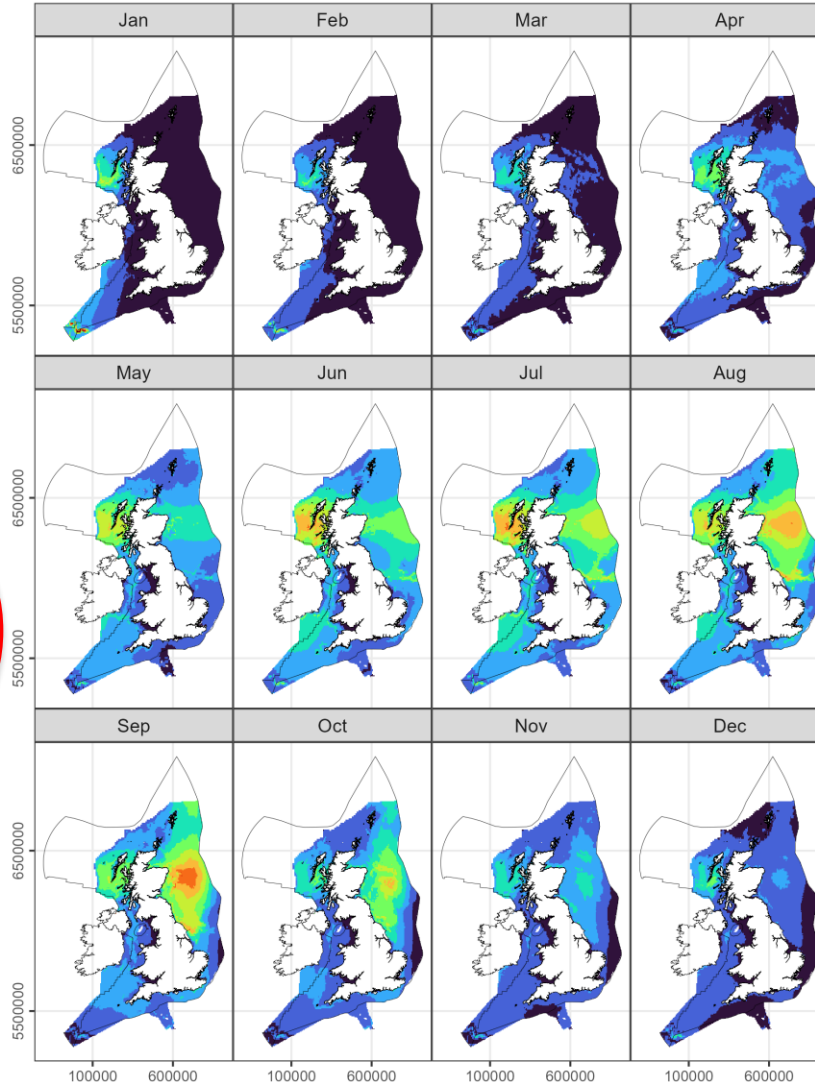
**Marine Ecosystems  
Research Programme**

Planning  
Offshore Wind  
Strategic  
Environmental  
Impact  
Decisions



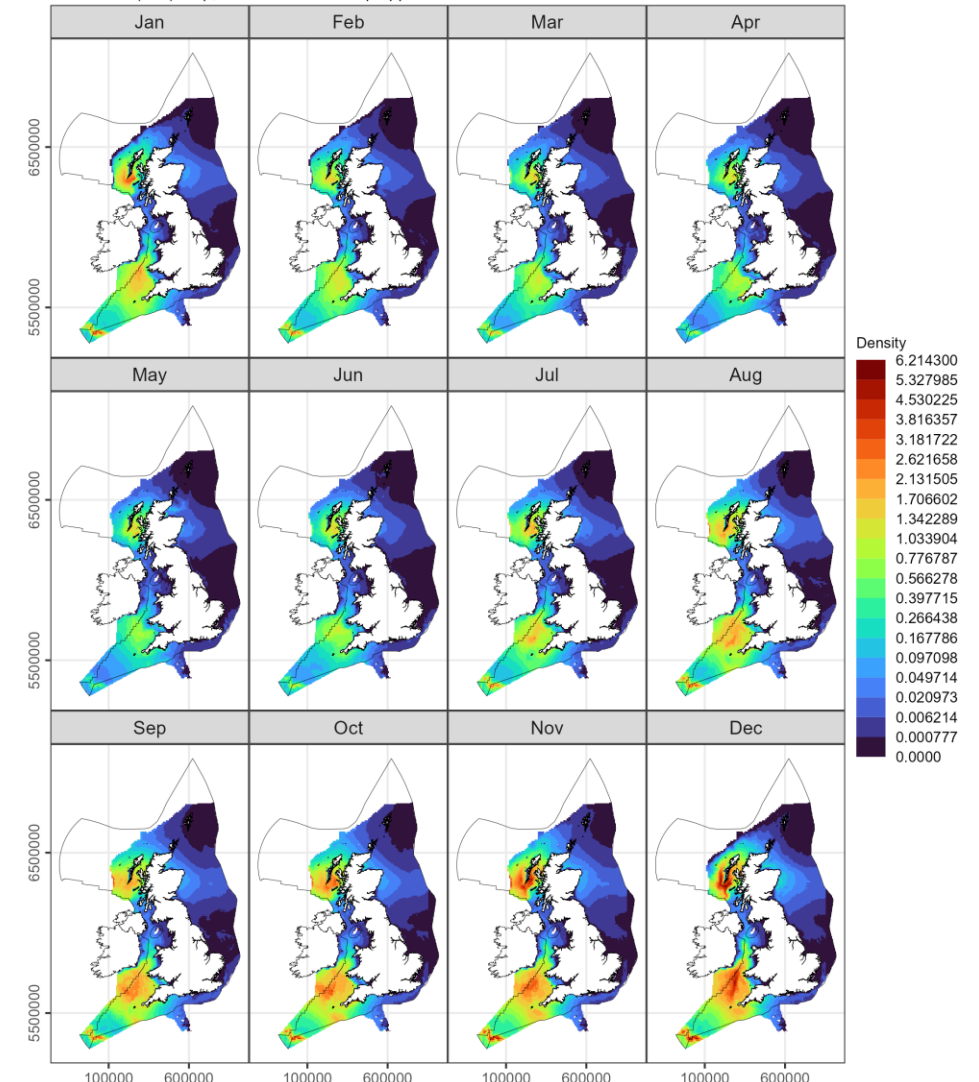
**Source:**  
Paxton et al. (2020)

**Minke Whale DSM Monthly Medians (2004 - 2024)**  
With 300m (NW) crop, and 0.9997 % clamp applied



© POSEIDON (Paxton,C, Burt,M.L, Waggitt,J, Evans,P, McNie,F, Banks,A, Harwood,A, Owen,C, et al,2025).  
CP2 data from <https://www.data.gov.uk> (OGL). Plots FMc.2025-09-15.  
NOT TO BE USED FOR NAVIGATION. CRS = EPSG:32630.

**Common Dolphin DSM Monthly Medians (2004 - 2024)**  
With 300m (NW) crop, and 0.9997 % clamp applied



© POSEIDON (Paxton,C, Burt,M.L, Waggitt,J, Evans,P, McNie,F, Banks,A, Harwood,A, Owen,C, et al,2025).  
CP2 data from <https://www.data.gov.uk> (OGL). Plots FMc.2025-09-15.  
NOT TO BE USED FOR NAVIGATION. CRS = EPSG:32630.

# Making data FAIR



The JCDP enables:

- Consistent data submission
- Data storage
- Quality assurance
- Improved data visibility / accessibility

Data are Findable, Accessible, Interoperable and Reusable (FAIR)

# Replicable framework



- Transferable model for other taxa – many already evident e.g. ICES datacentre
- Scalable solution for other marine data needs
- Talks to other platforms e.g. ESAS database



# Connecting the Dots

# Joint Cetacean Data Programme

How the JCDP is transforming cetacean data sharing

## Thanks for listening



Peter Evans  
on behalf of the ICES Working  
Group for the JCDP

Contact: [nikki.taylor@jncc.gov.uk](mailto:nikki.taylor@jncc.gov.uk)