

Archives and Climate Research

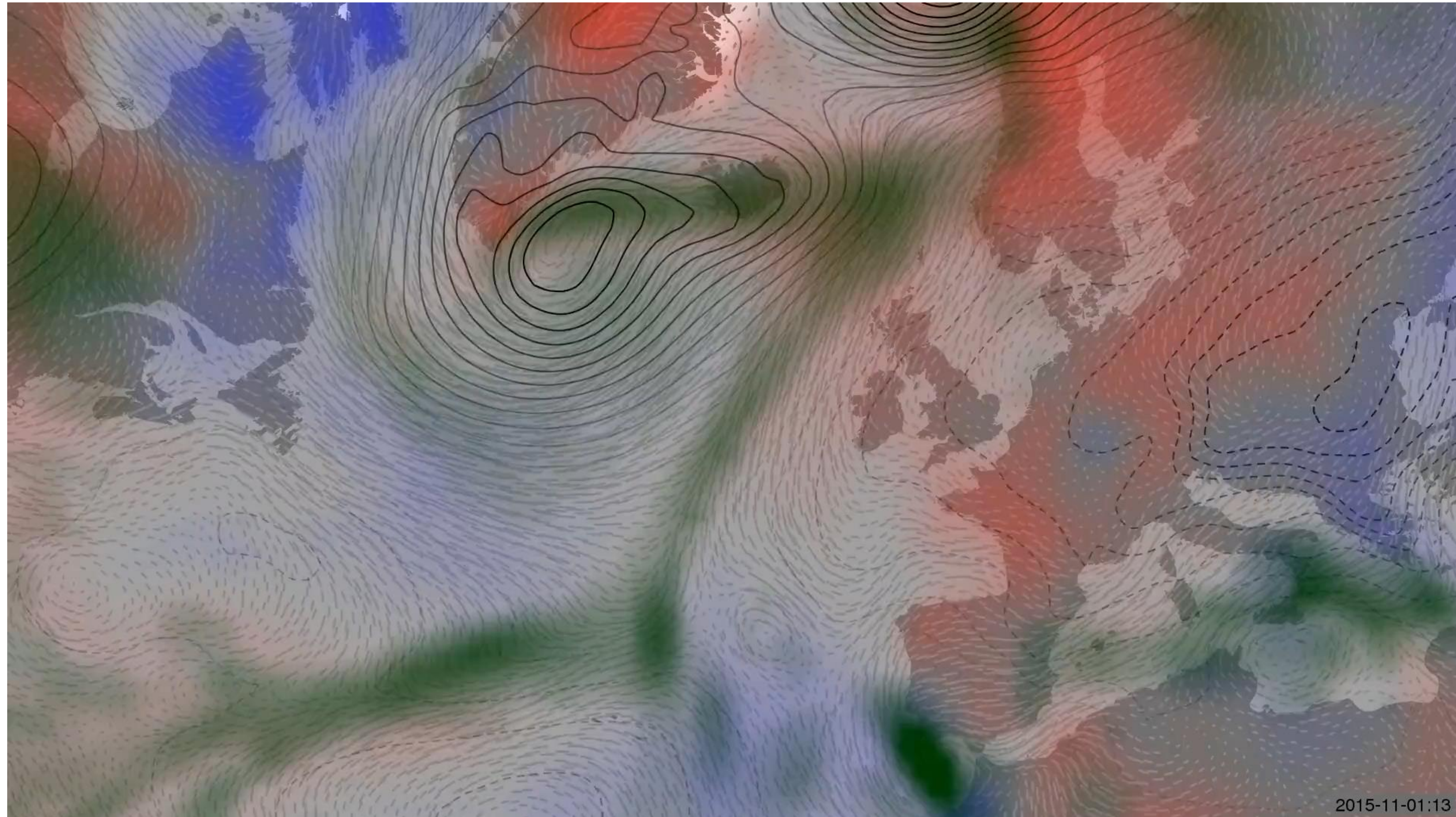
Using Historical Documents to Reconstruct the Weather and Climate of the Past

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 & CSW Associates Data Services
Sally Wilkinson CSW Associates Data Services
Philip Brohan Met Office, Exeter, UK

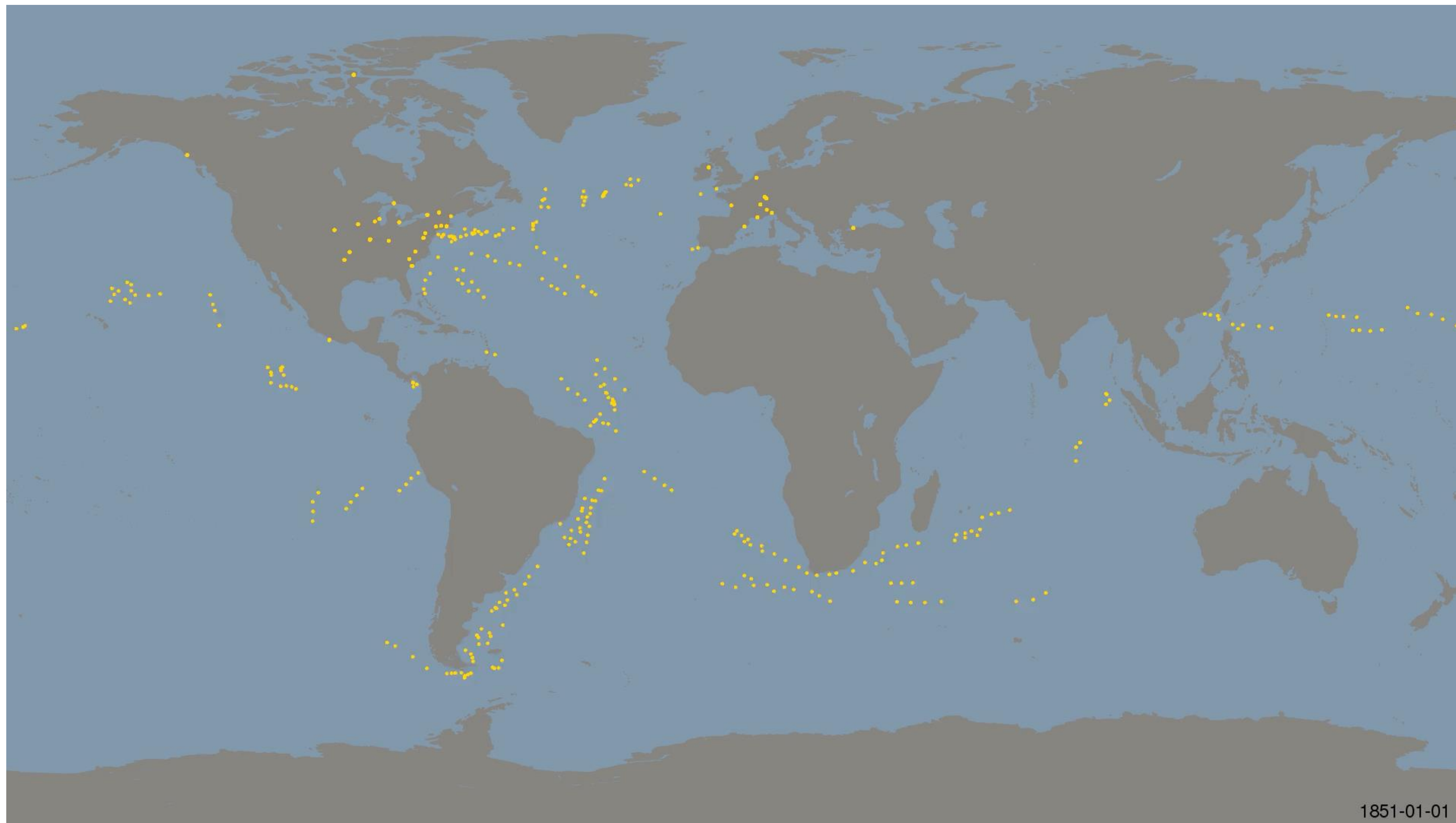


CSW Associates - Data Services
Meteorology – Oceanography - Glaciology

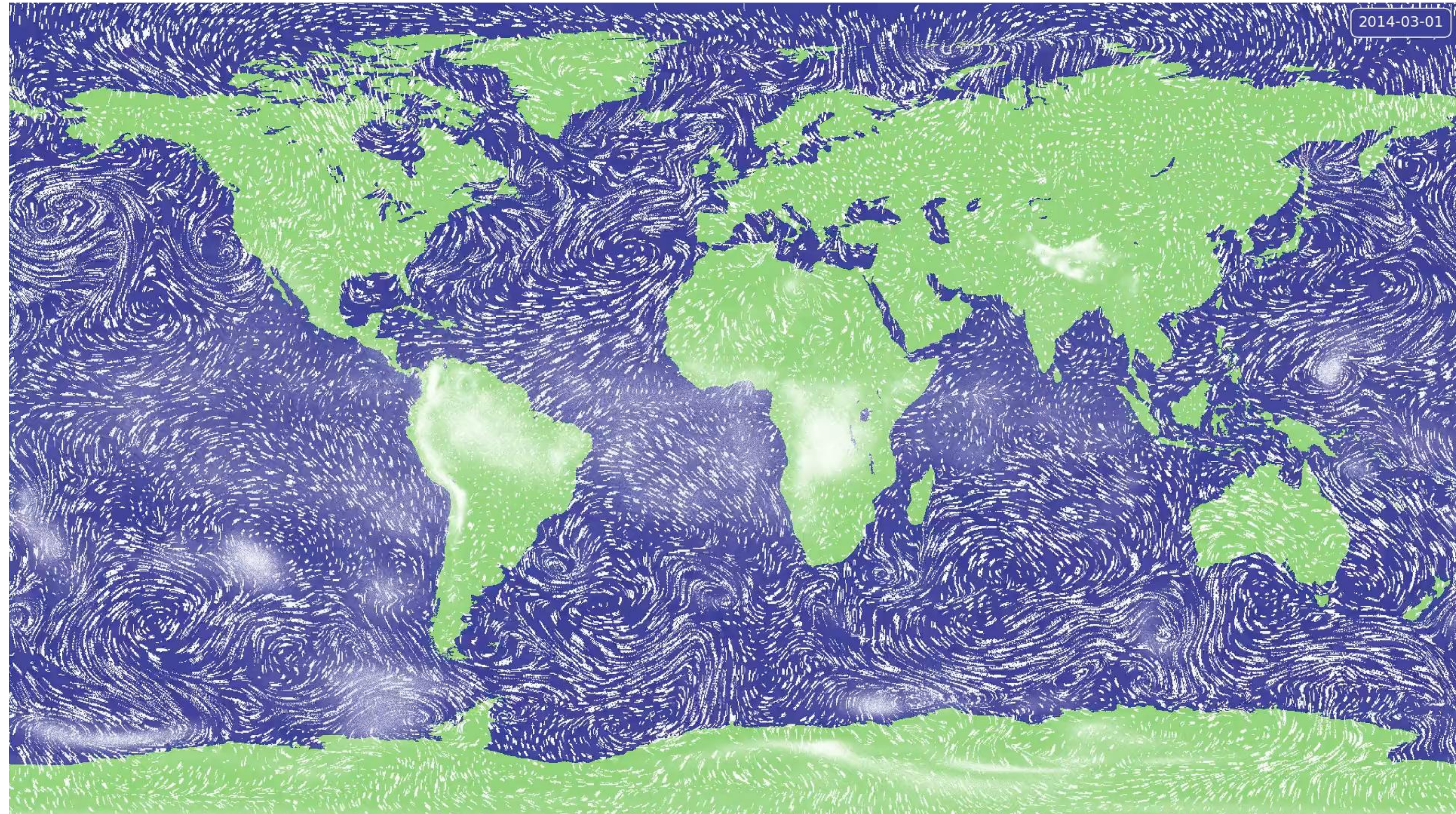
Weather - Winter 2015-2016



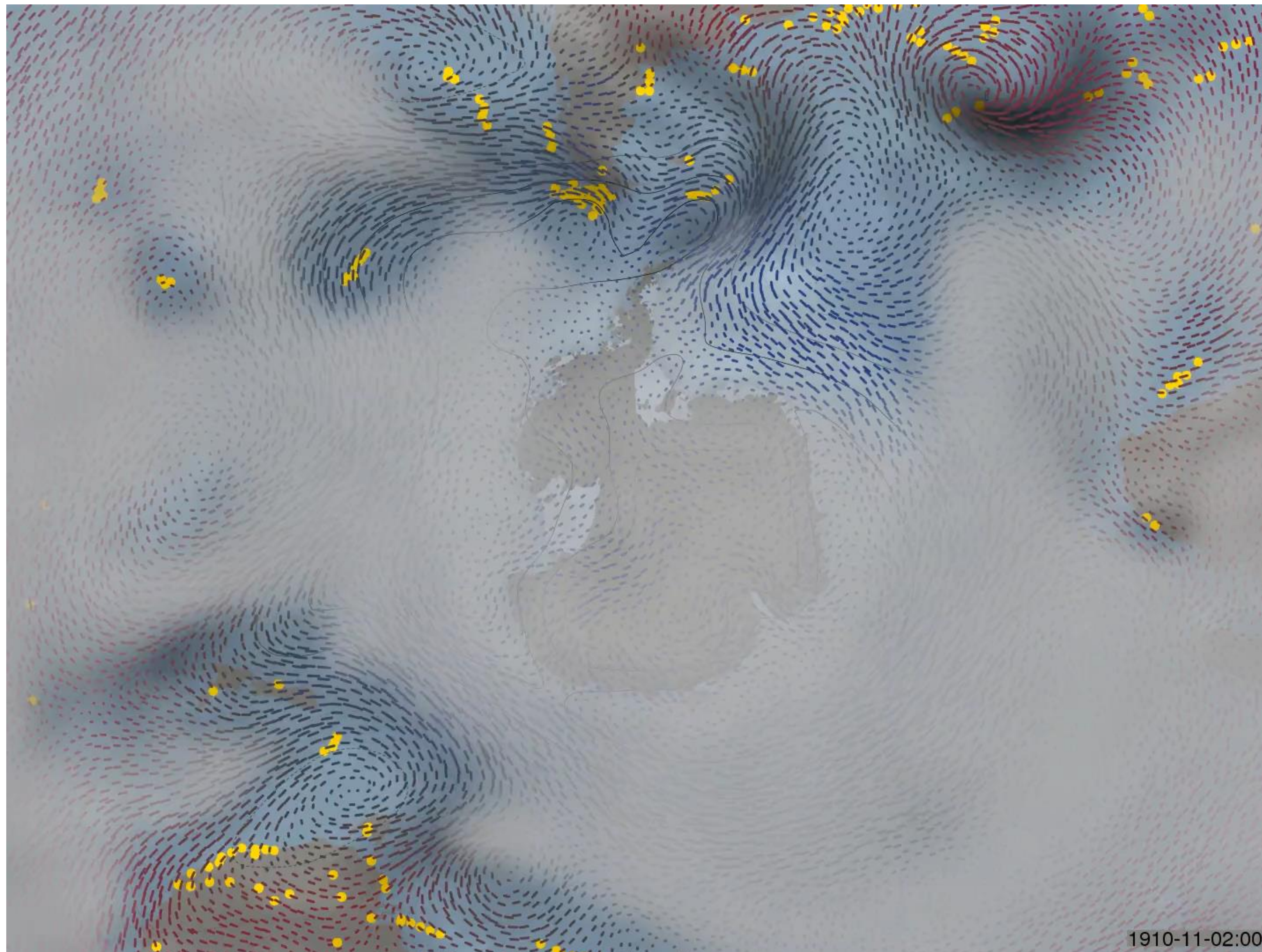
158 Years of Weather Observations - 1851-2008



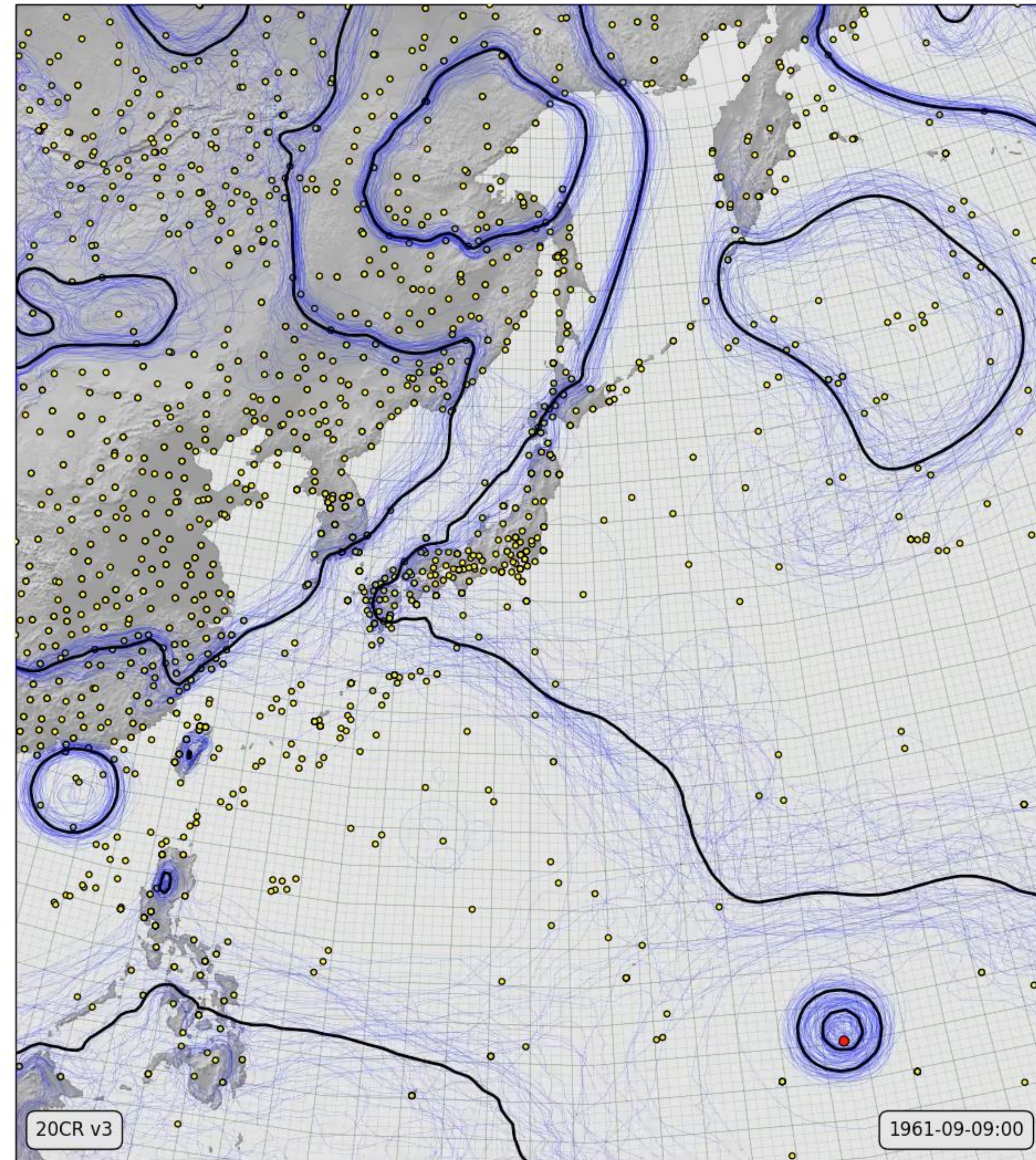
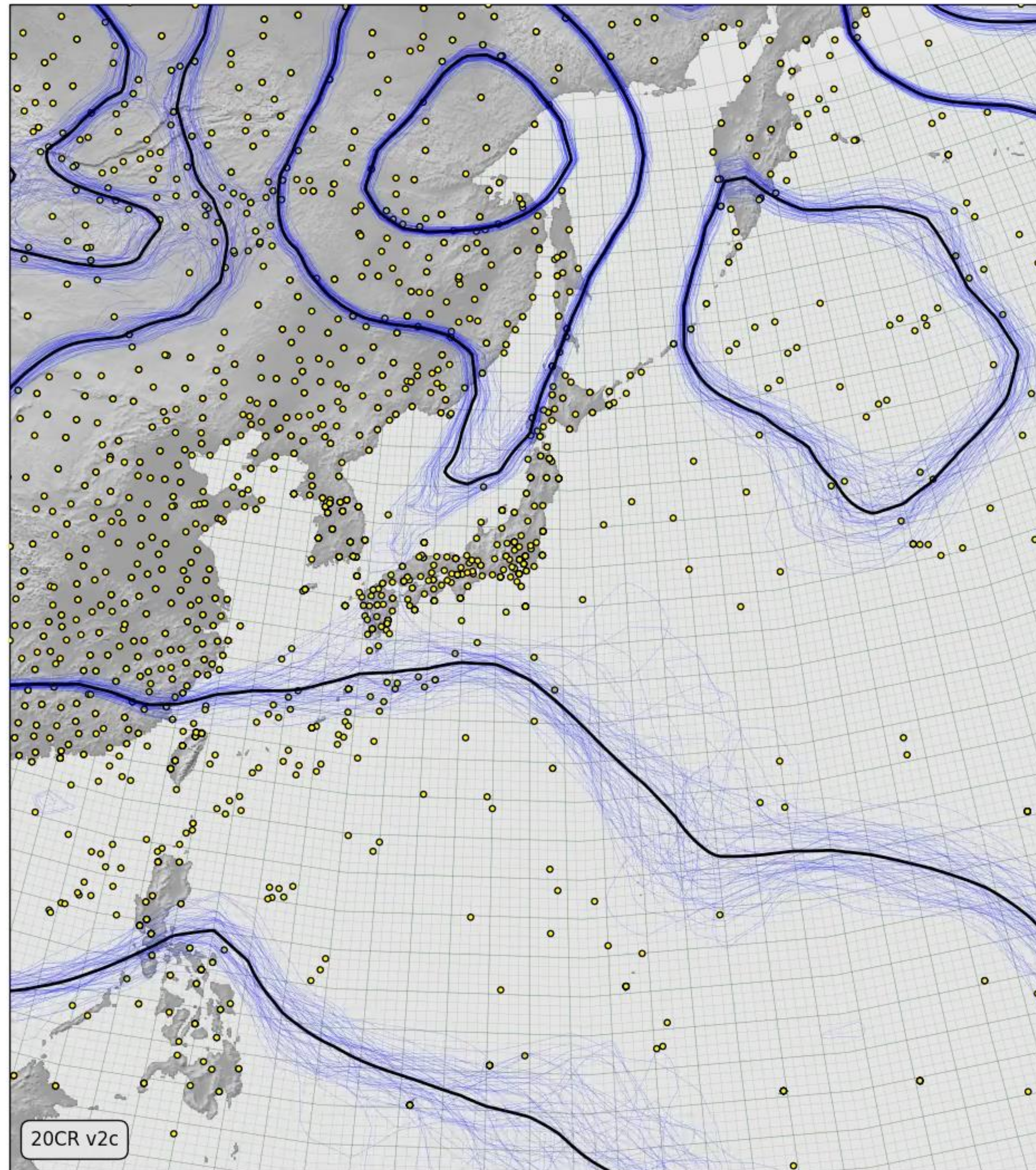
The Fog of Ignorance - How the Quality of the Weather Reconstruction Degrades Further Back in Time Due to a Sparse Observations



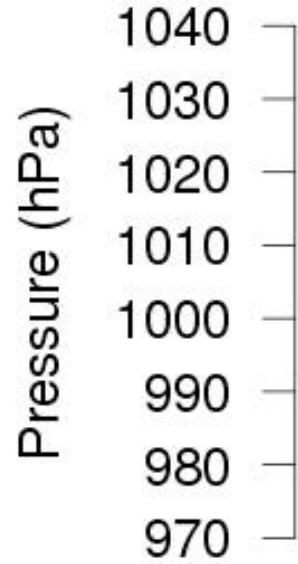
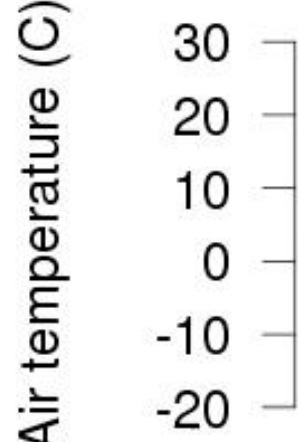
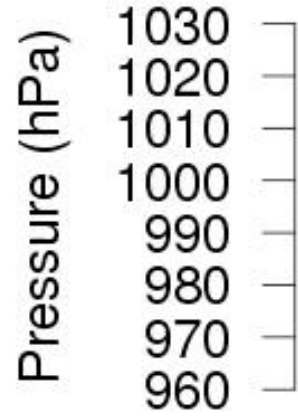
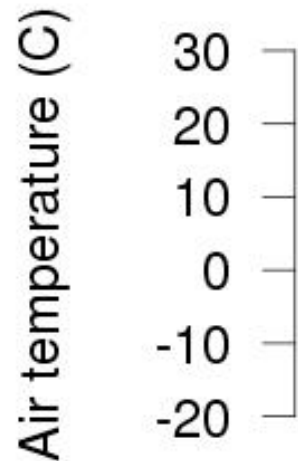
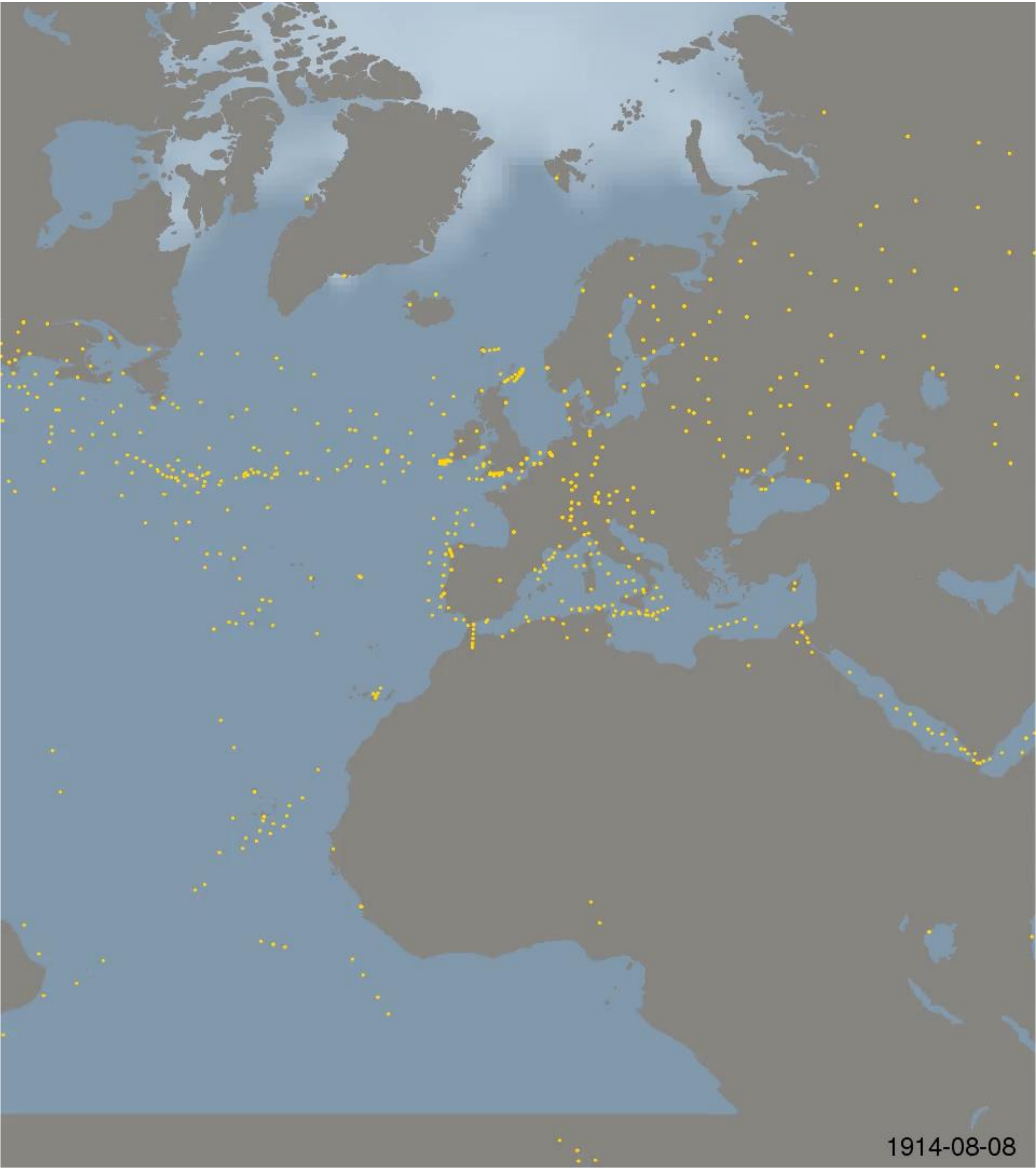
Antarctic Weather 1910-1912



Super-Typhoon Nancy (1961) - 20CR v2 and 20CRv3 with additional observations



International Trans-Antarctic Expedition 1914-1916 *Endurance* and *Aurora*



Norwegian Polar Institute



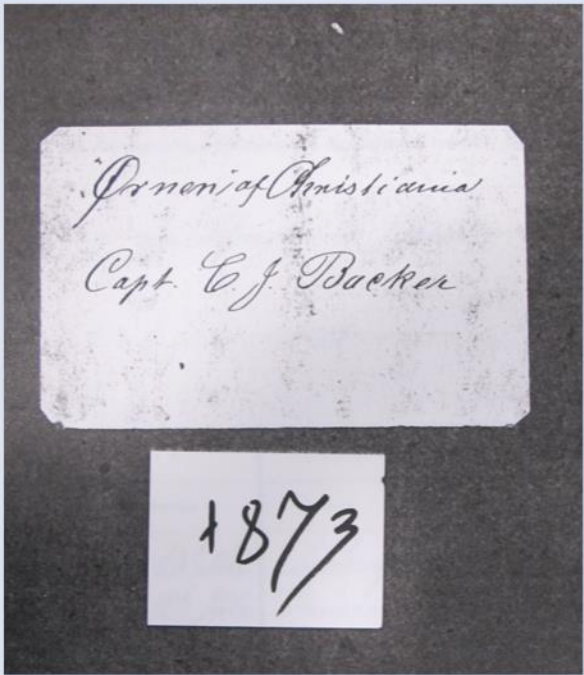
ICOADS Deck 188
– Norwegian
factory ship data
1932-1939



ACSYS– Ice Chart
Archive

19thC Arctic Logs

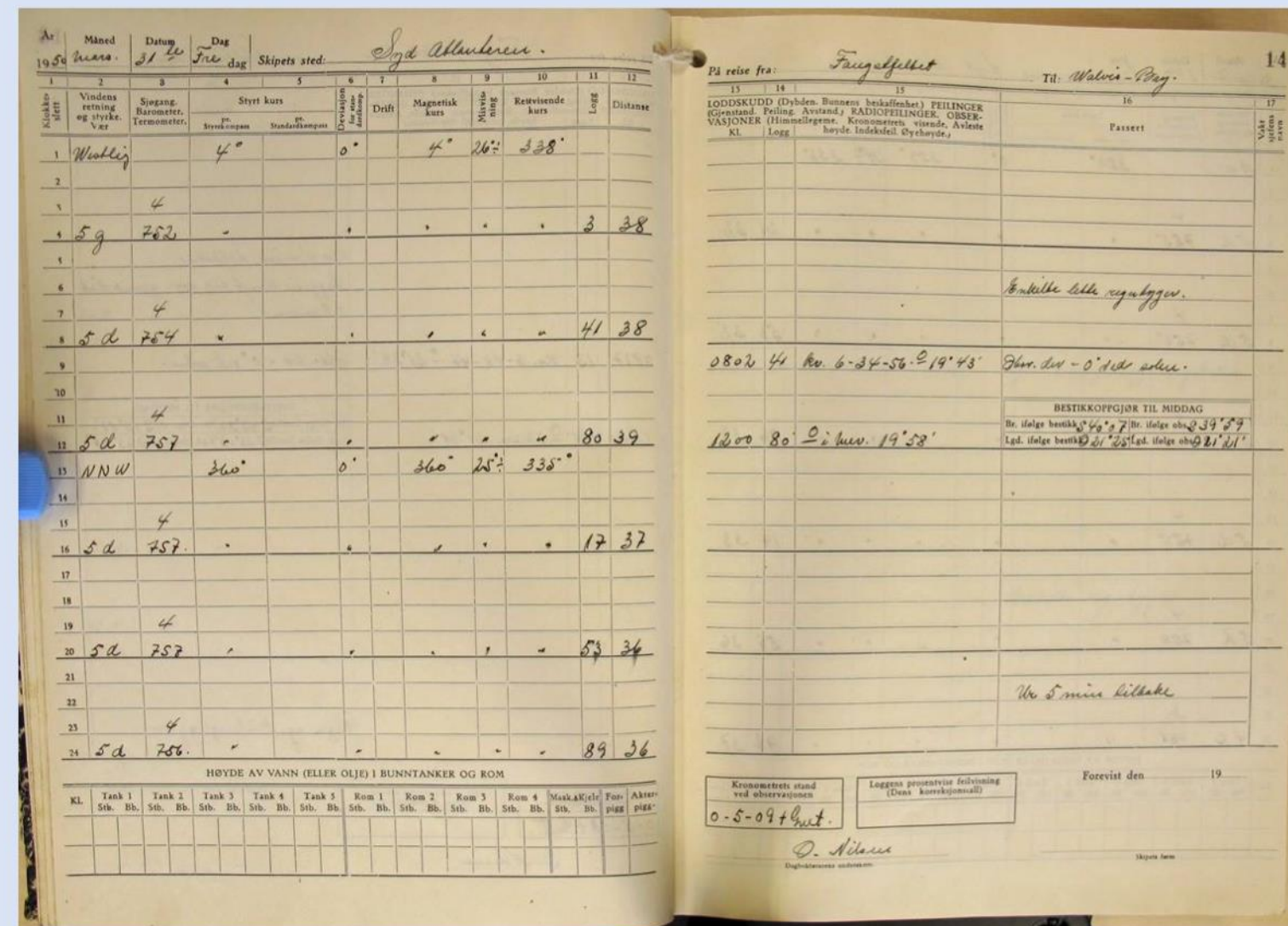
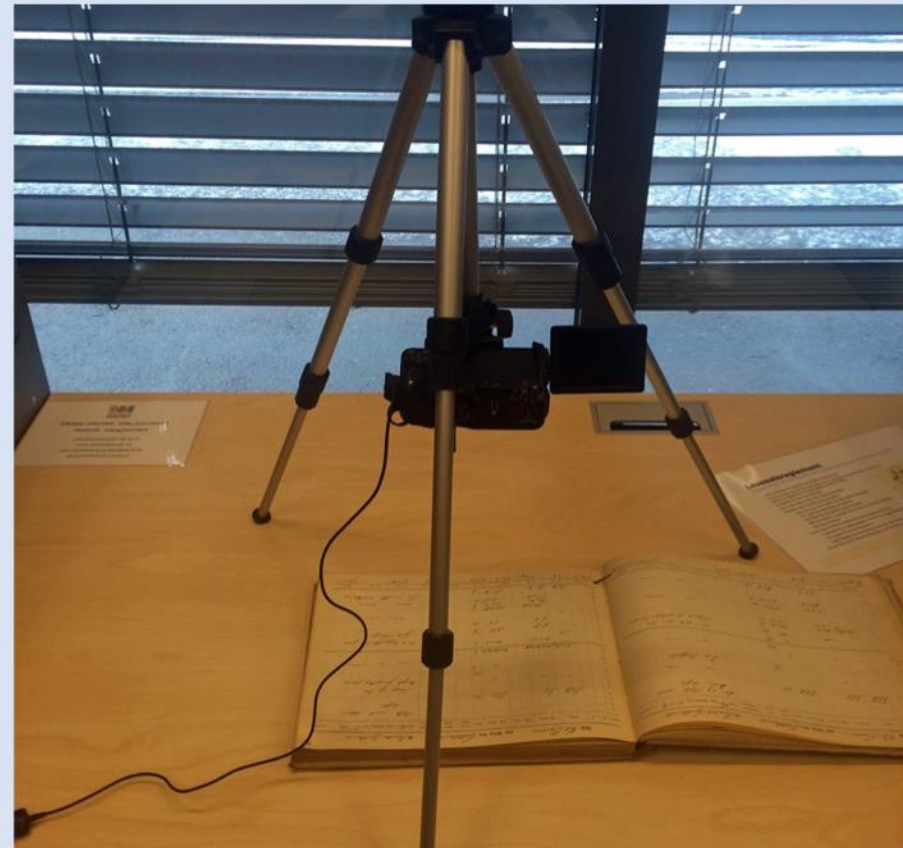
Data sent to UCAR
but only the air and
sea temperatures
were keyed



Handwritten log entry from a 19th-century Arctic expedition. The header includes "Nordishavet" and "Misvianing = 20° SW". The table contains columns for "Paaserende Plads", "Barometer", "Temperatur", "Vind", "Sky", "Regn", "Sne", and "Anmerkninger". The data is written in cursive script.

Paaserende Plads	Barometer	Temperatur	Vind	Sky	Regn	Sne	Anmerkninger
4	28.5%	6 1/2	250	4	7	4	
8	28.4	7	250	3	8	4	
MD	28.5	8	250	4	7	4	
4	28.5%	6 1/2	250	2	7	4	
8	28.6	6 1/2	250	2	5	4	
MN	28.6	6 1/2	250	2	4	4	
4	28.5%	6 1/2	250	2	6	4	
8	28.5%	6 1/2	250	2	8	4	
MD	28.5%	6 1/2	250	2	7	4	
4	28.5%	6	250	2	6	4	
8	28.5	7	250	1	4	4	
MN	28.5%	5 1/2	250	1	5	4	
4	28.5%	6 1/2	250	1	5	4	
8	28.5%	7 1/2	250	1	7	4	
MD	28.5%	7	250	2	5	4	
4	28.6	7	250	3	4	4	
8	28.6%	6 1/2	250	3	6	4	
MN	28.7	5	250	3	7	4	
4	28.7%	4 1/2	250	3	8	4	
8	28.7%	4 1/2	250	3	8	4	
MD	28.7%	5 1/2	250	3	6	4	
4	28.7%	5 3/4	250	2	6	4	
8	28.7	5 3/4	250	2	6	4	
MN	28.8%	4 3/4	250	2	7	4	
4	28.7%	6	250	2	7	4	
8	28.8	6 1/2	250	2	7	4	
MD	28.8%	7	250	2	8	4	
4	28.7%	7	250	2	7	4	
8	28.8%	7	250	2	7	4	
MN	28.8%	7	250	2	7	4	
4	28.8%	6 1/2	250	1	8	4	
8	28.8%	7	250	1	8	4	
MD	28.8%	6 1/2	250	1	8	4	
4	28.9	6	250	1	7	4	
8	28.8%	5	250	2	5	4	
MN	28.0	5 1/2	250	2	7	4	

Scanning the Documents



Logbooks from Thor Dahl whaling ships
imaged – other collections are uncatalogued

Transcribing the Logbook of HMS Invincible 1914-1915

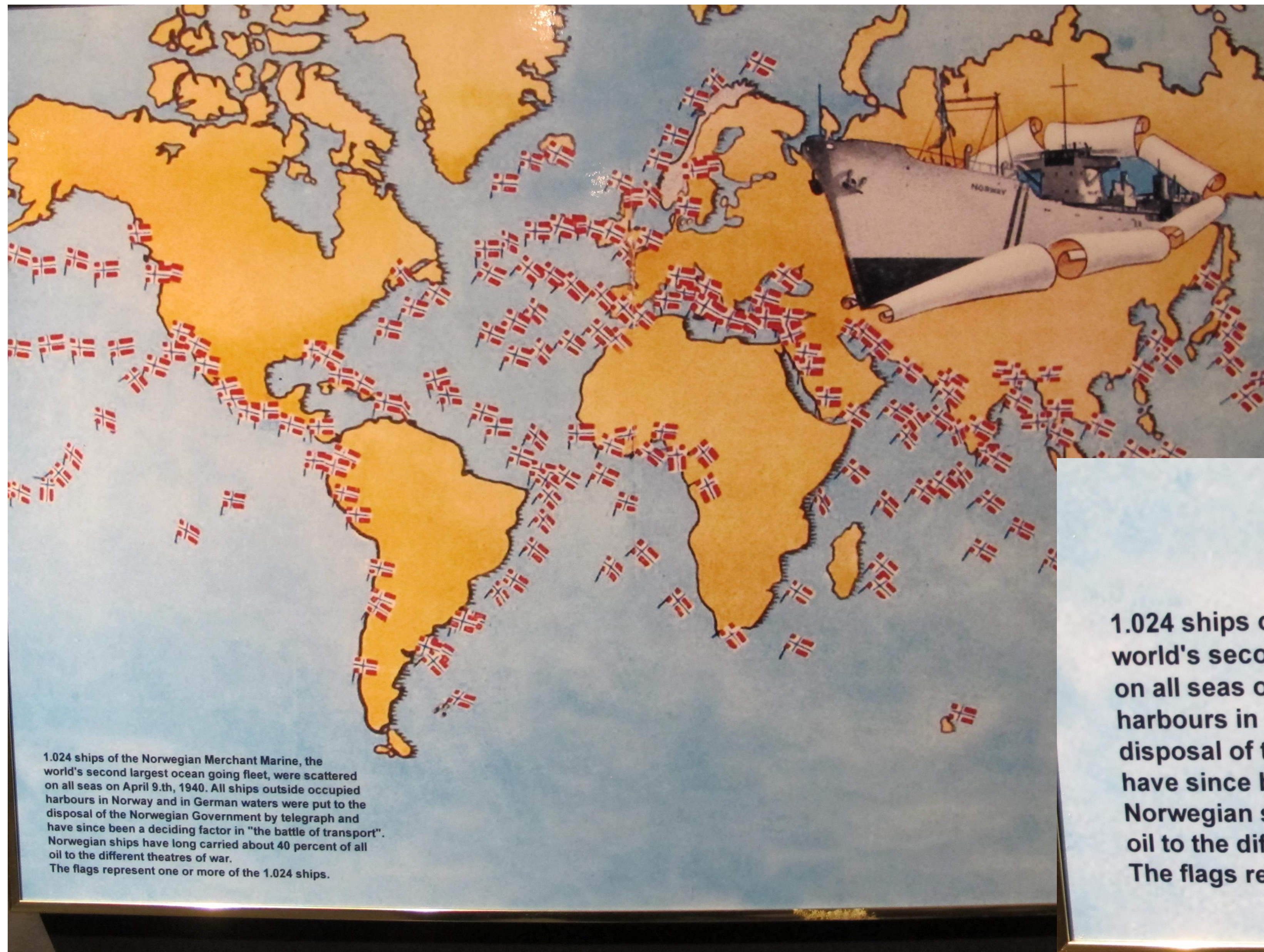
http://oldweather.s3.amazonaws.com/ADM53-44888/ADM53-44888-001_0.jpg



4caf870acadfd34197018f4e

Why we are Interested in Exploring the Norwegian Archives

Display from the Norwegian Maritime Museum, Oslo



1.024 ships of the Norwegian Merchant Marine, the world's second largest ocean going fleet, were scattered on all seas on April 9.th, 1940. All ships outside occupied harbours in Norway and in German waters were put to the disposal of the Norwegian Government by telegraph and have since been a deciding factor in "the battle of transport". Norwegian ships have long carried about 40 percent of all oil to the different theatres of war. The flags represent one or more of the 1.024 ships.

Kon Tiki as a Weather Observing Platform - April-August 1947

