Dutch and colonial historical MSLP

Günther Können and Theo Brandsma

Royal Netherlands Meteorological Institute (KNMI)

Dutch pressure data

LAND

1. Antiques observations (pre-1850)
2. KNMI-yearbooks (from 1850 onwards)
3. ECA & D (European Climate Assessment & Dataset)

SEA

1. CLIWOC (1751-1850)
2. COADS (1854–1938)
3. Lightvessel data (digitized from 1887 onwards)

Antiques data (mostly 3 times daily data)

Blue=digitized; green=being digitized

			18th century										19th century									
plaats	**periode**	**wn /d**	1701 1710	1711 1720	1721 1730	1731 1740	1741 1750	1751 1760	1761 1770	1771 1780	1781 1790	1791 1800	1801 1810	1811 1820	1821 1830	1831 1840	1841 1850	1851 1860	1861 1870	1871 1880	1881 1890	1891 1900
Zwanenburg	1735–1861	3																				
Alkmaar	1741–1748	3																				
Amsterdam	1784–1914	24[i]																				
Amsterdam	1759–1778	3																				
Amsterdam	1775–1786	3																				
Bergen	1741–1746	3																				
Haarlem	1735–1742	3																				
Haarlem	1788–1842	3																				
Delft	1705–1726	3																				
Delft	1777–1818	3																				
Leiden	1697–1698	x[ii]																				
Leiden	1720–1725	3																				
Leiden	1740–1758	3																				
Leiden	1776–1792	3																				
Rijnsburg	1727–1734[iii]	3,4																				
Middelburg	1780–1788																					
Vlissingen	1768–1773	2																				
Utrecht	1728–1739	3																				
Utrecht	1836–1848	3																				

Breda	1708–1741	1																			
Breda	1773–1782	3,2																			

i Before 1784 irregular; from 1784 onwards temperature 24/d, from 1823 onwards also pressure
ii Measurement times unknown, presentation daily.
iii From 1720–1723 only evaporation measurements

KNMI-yearbooks (from about 1850 onwards; blue=digitized; red=not-digitized)

		19th century					20th century			
plaats	**periode**	1801 1820	1821 1840	1841 1860	1861 1880	1881 1900	1901 1920	1921 1940	1941 1960	1961 1980
A'dam (Fil. Inr.)	1865:1959									
Assen	1851:1904									
Breda	1850:1917									
De Bilt	1897:1900									
Delfzijl	1886:1904									
Den Helder	1850:1905									
Groningen	1839:1905									
Hellevoetsluis	1854:1963									
Hoorn (Tersch)	1885:1970									
Katwijk a.d. Rijn	1893:1958									
Leeuwarden	1850:1970									
Maastricht	1811:1970									
Nijkerk	1894:1903									
Oude Wetering	1891:1970									
Oudenbosch	1893:1970									
R'dam (Fil. Inr.)	1889:1959									
Sittart	1897:1904									
Slijk-Ewijk	1894:1900									
Tilburg	1877:1904									
Utrecht	1848:1896									
Vlissingen	1854:1905									
Wapenvelde	1895:1903									
Winterswijk	1894:1970									
Zutphen	1894:1912									

ECA & D (European Climate Assessment & Dataset)

European Climate Assessment & Dataset (ECAD) - Microsoft Internet Explorer

Bestand Bewerken Beeld Favorieten Extra Help

Vorige Zoeken Favorieten Media

Adres http://www.knmi.nl/samenw/eca/index.html Ga naar Koppelingen

EUROPEAN CLIMATE ASSESSMENT & DATASET (ECA&D)

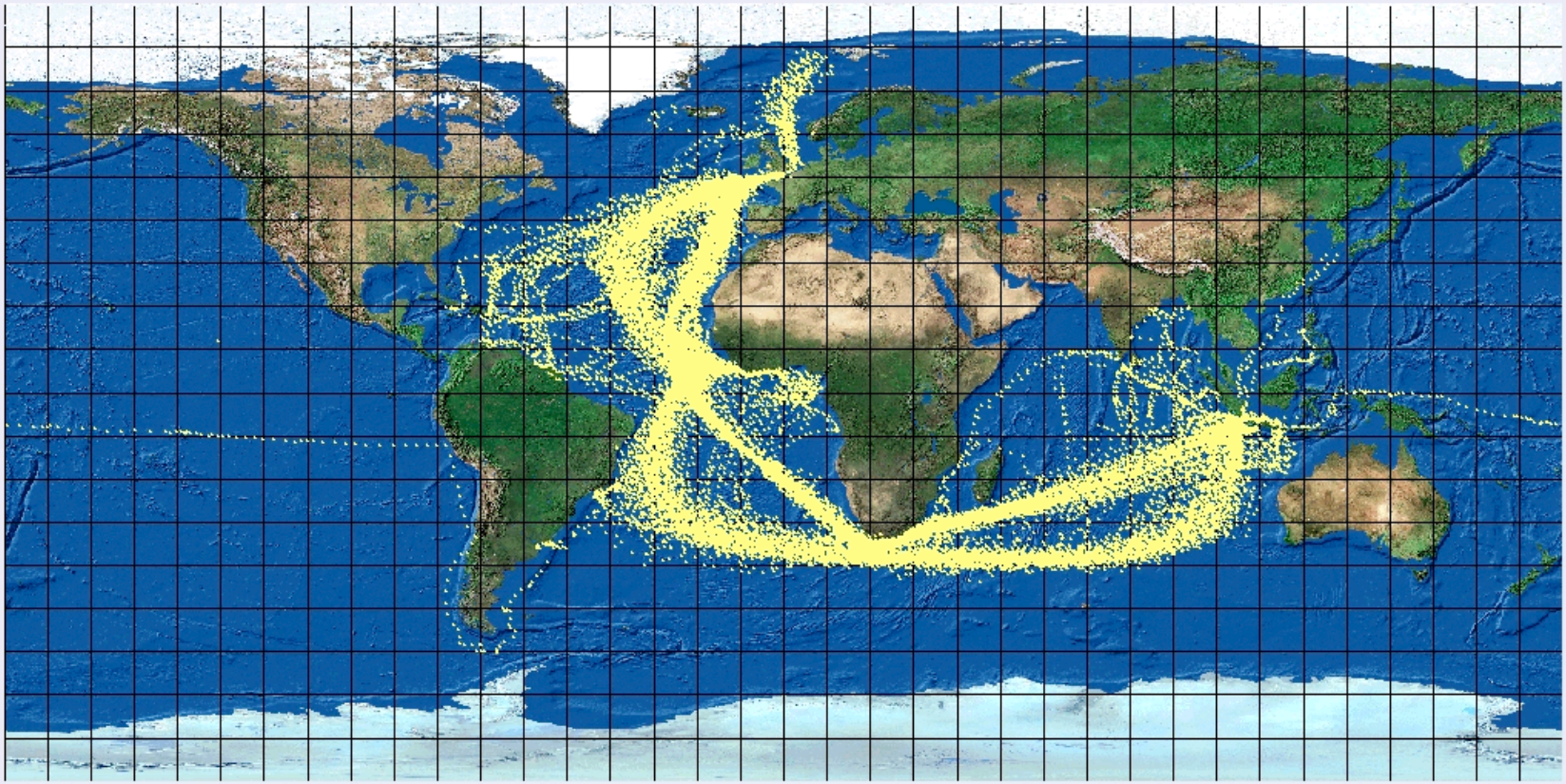
Home	Daily dataset	Reports & papers	
Project summary	Indices dictionary	Presentations	
Participants	Indices graphs	Links	
News	Indices trendmaps	Contact us	
© KNMI, 2002	last updated: October 2002	Albert.Klein.Tank@knmi.nl	download 2002 ECA-report

Home

Welcome to the web-site of the European Climate Assessment & Dataset project: ECA&D.		The main objective of ECA&D is to issue a new assessment report on the state of the climate in Europe and the Mediterranean by the year 2006.
	ECA&D is initiated by the European Climate Support Network ECSN.	
Presented are indices of climate extremes and a daily dataset consisting of temperature, precipitation and surface air pressure series from over 200 meteorological stations in Europe and the Mediterranean.		The new assessment report will update the 2002 publication: "Climate of Europe; assessment of observed daily temperature and precipitation extremes". download 2002 ECA-report
	ECA&D is supported by the Network of European Meteorological Services EUMETNET.	
The information and data at this site can be used freely provided that the sources are acknowledged.		**START** >> select a link from the menu above.

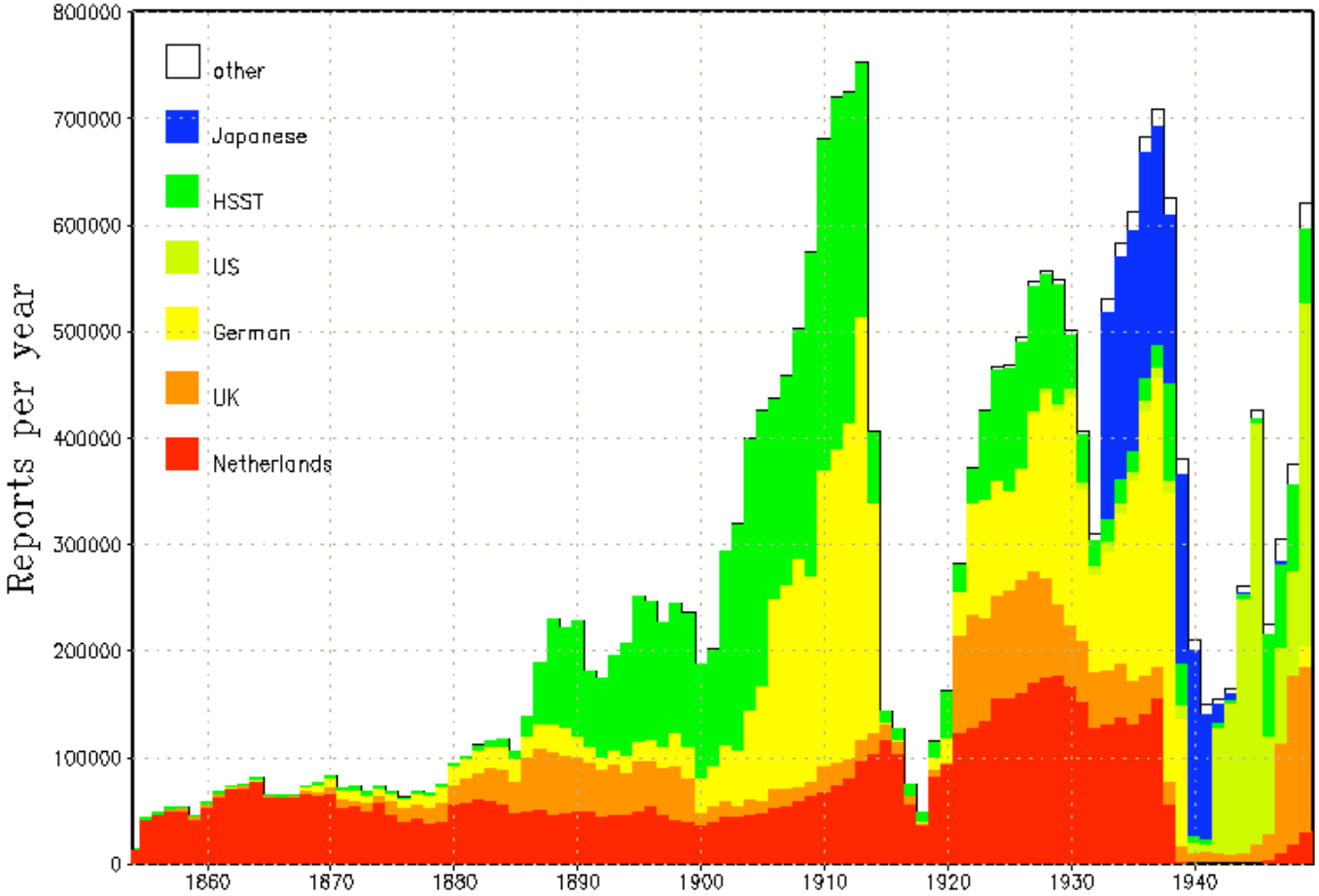
Internet

CLIWOC-Dutch data



http://www.knmi.nl/~koek/cliwoc.htm

COADS (1854–1938)



after: Woodruff et al., *Phys. Chem. Earth*, **23:** 517–526, 1998

‘Colonial’ pressure data

LAND

1. Daily MSLP in Dutch yearbooks
2. Pressure reconstruction Indonesian data
   - daily: pre-1876 SOI reconstruction *status: finished*
   - hourly: 1866-1950 QBO reconstruction *status: in preparation*
3. Pressure reconstruction Japanese data
   - Japan (reconstruction pre-1872 era) *status: in progress*

Stations with mostly 3 measurements per day outside Europe from KNMI-yearbooks

Most stations measure at least pressure and temperature
Blue=digitized; red=not digitized

			19th century										20th century	
plaats	**period**	**meas /day**	1801 1810	1811 1820	1821 1830	1831 1840	1841 1850	1851 1860	1861 1870	1871 1880	1881 1890	1891 1900	1901 1910	1911 1920
Suriname														
Paramaribo	1851:1904	3												
Burnside Coronie	1889:1898	3												
Sommelsdijk	1896:1897	3												
Groningen	1896:1898	3												
Nieuw Nickerie	1896:1899	3												
Placer L & F de J	1899	3												
Panama														
Culebra	1886	3												
Argentinië														
Buenos Aires	1868:1877	3												
Indonesië														
Buitenzorg	1841:1855	2,3,4												
Jakarta	1859:1920	24												
Banjouwangi	1850:1857	4												
Amboina	1850:1854	4												
Padang	1850:1853	4												
Palembang	1850:1856	4												
Banjermassing	1850:1858	4												
Medan-Poetri	1874:1889	1[1]												
Japan														
Decima	1825:1877	3												
Osaka	1869	3												
Saudi- Arabië														
Djeddah														
Tunesië														
Tunis	1854	3[2]												
Libië														
Tripoli	1855	2												
Ghana														
St.G. d'Elmina	1860:1862	2,3												
Kongo														
San Salvador	1885:1886	3												
Kinshassa	1889	3												
Upoto	1892	3[3]												
Meluna	1896:1897	1												
Brazaville	1891:1895	3												
Quesso	1893:1894	3[4]												
Libranga	1893:1894	3[5]												
Yakoma	1893	3												

[1] Only precipitation
[2] Only wind direction. Also monthly values for the period 1851–1854 (windspeed and direction)
[3] Only temperature and wind direction
[4] Only temperature
[5] Only temperature

Factory Wilhelm.	1894	3[6]												
Zuid-Afrika														
Bloemfontein	1882	2												
Krokodildrift	1889:1890	2												
Komatiepoort	1890:1891	2												

[6] Only temperature