L. Index – Images

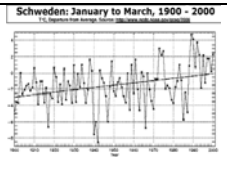
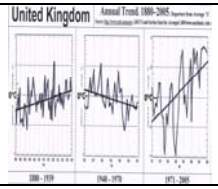
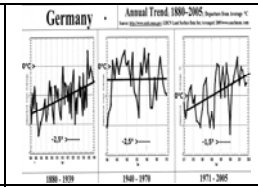
Page finder to 14 temperature maps in color (TM)

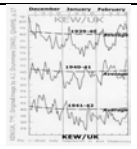
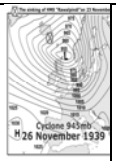
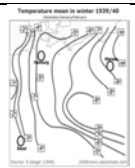
Maps in Color	TM1, p. 5 (A2)	TM2, p.15 (A3)	TM3, p. 25 (B)	TM4, p. 45 (C1)
TM5, p. 59 (C4)	TM6, p. 69 (C5)	TM7, p. 93 (C8)	TM8, p. 109 (D)	TM9, p. 125 (E1)
TM10, p. 143 (E4)	TM11, p. 157 (F)	TM12; p.163 (G1)	TM13 p. 181 (H)	TM14, p. 191 (I)

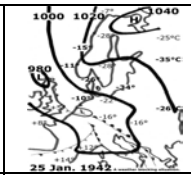
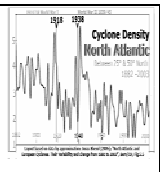
Books printed and distributed outside Europe may not show the 14 full page Temperature Maps in color. Those readers are kindly requested to consult www.seaclimate.com.

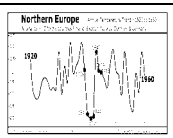
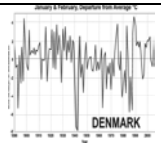
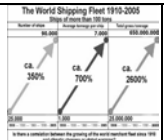
Abbreviation: T = Temperature; NA = North Atlantic; NH = Northern Hemisphere, SST = Sea water temperature

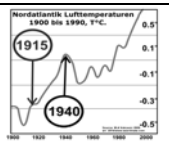
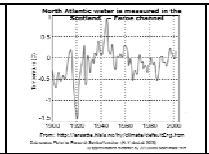
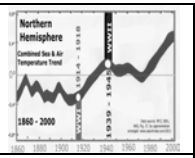
A. A Guide to understand climate change (pp. 1 – 18)

A1. Introduction to climate change and man's contribution			
p. 1-2	A1-1; Sweden T°C Jan-March 1900 to 2000.	A1-2; UK temperature trend 1880-2005	A1-3; Germany T°C Trend 1880-2005

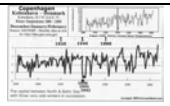
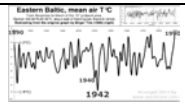
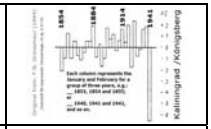
A2. The experts who do not see a war		Temperature Trend European countries **IRE** **CH** **BE** **NL** **BYL** **AUS** **RU** **NO** **F** **UKR** **SW** **RO** **FIN**	**T-map** **TM 2**		
p. 3-12	A2-1; Kew/UK Winter 40/41/42	Diverse; A2- [2-7], [11-13], [14-15], [18-19].	A2-8	A2-9; 26. Nov. 39	A2-10 Winter 1939/40

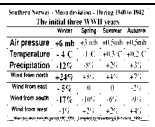
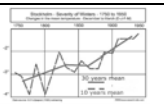
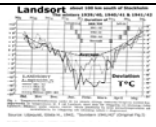
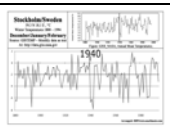
					
A2-14, NYT, 06 Jan. 1940	A2-16; Weather map, 25 Jan.40	A2-17; NA cyclone	A2-20, Icy conditions	A2-21, Ice	A2-22, Icy conditions

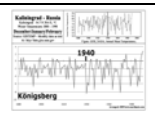
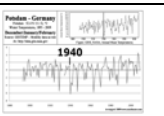
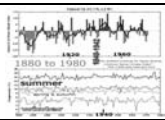
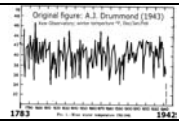
A3. Man made climate – since 1850			**T-map** **TM 2**		
p. 13-22	A3-1, T°C, North Europe , 1920-60	A3-2, T Jan + Feb, Denmark	A3-3	A3-4, merchant fleet	A3-5, Ocean Dimension

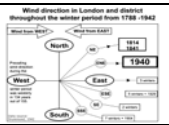
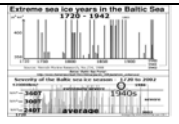
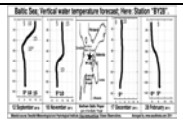
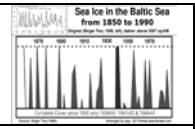
				
A3-6, Air T°C, NH, 1900-2000	A3-7, SST°C North Atlantic	A3-8, www.whatisclimate.com	A3-9, NH T°C 1860 -2000	A3-10, Wake of torpedo boat

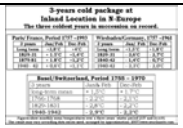
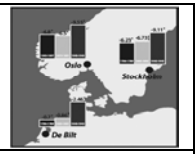
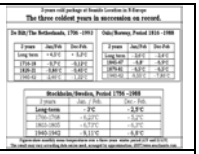
B. A three year cold package. - Providing evidence? (pp. 23– 42)

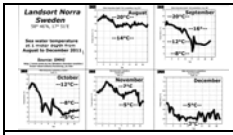
B. A three year cold package			Temperature map **TM3**	
p. 23-42	B-1; Winter T°C Copenhagen	B-2; NorthEurope Winter TC	B-3	B-4; Groissmayr on winter T

				
B-5; S-Norway 3y winter cond.	B-6; 3y Winter Stockholm	B-7; Warming trend Stockholm	B-8; Winter 1940, 41,42 Landsort	B-9; Winter T°C Stockholm

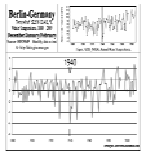
				
B-10; Winter T°C, Kaliningrad	B-11; Winter, St. St. Petersburg	B-12; Winter T°C Postdam/Berlin	B-13; Oxford T°C, all seasons	B-14; Winter T°C Kew; 1783-1940

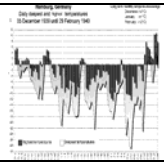
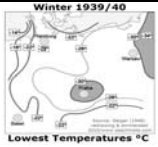
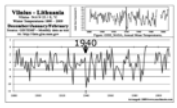
				
B-15; Wind direction at Kew	B-16; Sea ice Baltic Sea	B-17; Water Temp. profile	B-18; Baltic sea ice 1850-1990	B-19; W-Baltic ice 1500-2000

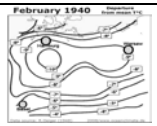
				
B-20; Water T°C Arkona Becken	B-21; Record winter T°C	B-22; Table for B-21	B-23; record winter T°C	B-24; Table for B-23

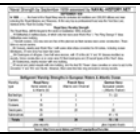
				
B-25; Landsort Norra Water T (1m depth)	B-26; ship wake			

C. Winter 1939/40 (pp. 43 – 104)

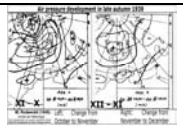
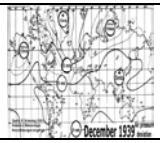
C1. **War brings ice age back**				
p. 43-46	C1-1; Naval ships ploughing the sea	C1-2; War activities 1939	C1-3; Depth charge exploding	C1-4; winter Berlin Tempelh.

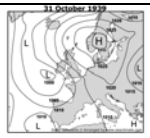
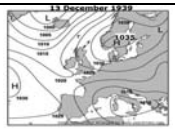
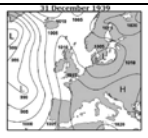
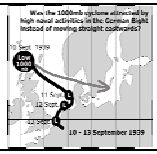
	Temperature map **TM4**		**C2.** **Records, Records, Records – Introduction to the unexpected**	
C1-5; Hamburg winter 1939/40	C1-6	C1-7; C-Europe winter 1939/40	**p. 47-50**	C2-1; Winter T°C Vilnius

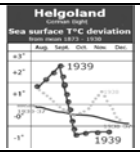
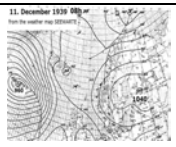
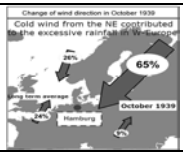
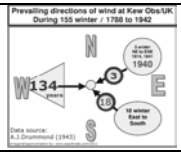
			**C3.** **War at sea 1939 - Facts and events**	
C2_2; Mid January T°C	C2-3; Mid February T°C	C2-4; Feb. T°C deviation	**p. 51-56**	C3-1; Battle ship en route

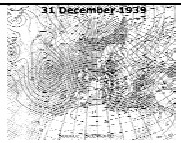
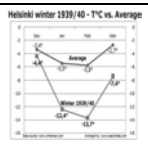
				
C3-2; In the wake of a battle ship	C3-3; Fleet strength	C3-4; Sinking of *HMS Courageous*	C3-5; Sea mine fields UK NorthS.	C3-6; Exploding Sea mine

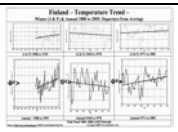
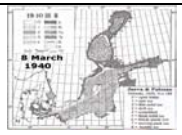
			**C4.** **The sky cries because of the war? Dry, Rain, Cold!**	
C3-7; Sea mines German Bight	C3-8; Floating WWII sea mine	C3-9; Navel ships in sea ice	**p. 57-66**	C4-1; Heavy rain area

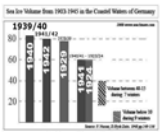
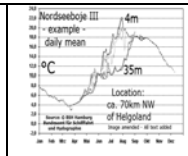
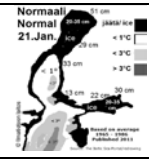
Temperature map **TM5**				
C4-2	C4-3; NYT 1st Sept. 1939	C4-4; Air pressure change	C4-5 Dec.39 air pressure	

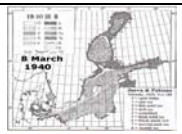
C5 Jet stream blocked by bombs and mines?				
p. 67-74	C5-1; weather map 31 Oct.39	C5-2; weather map 13 Dec.39	C5-3; weather map 31 Dec.39	C5-4; Cyclone path 10-13 Sept.

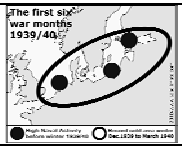
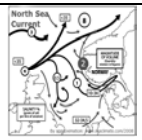
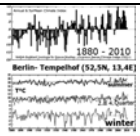
	Temperature map **TM6**			
C5-5; SST Heligoland	C5-6	C5-7; weather map 11 Dec.1939	C5-8; Wind shift October 1939	C5-9; Wind shift Kew Obs.

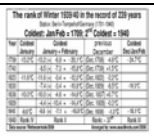
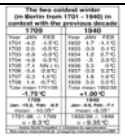
		**C6 The weather attacked in the Winter War: Russia vs. Finland**		
C5-10; Dec.39 , air pressure	C5-11; weather map 31 Dec. 39	**p. 75-78**	C6-1; Russia invades Finland	C6-2; Winter T°C Helsinki

	**C7. The evidence in the ice of the Baltic Sea**			
C6-3; T°C Trend Finland	**p. 79-90**	C7-1; Sea ice 8 March 1940	C7-2, Baltic Sea map	C7-3; Water T°C at depth 0,5m

				
C7-4; Sea ice German coast	C7-5; Kattegat, sea ice 13.Feb.	C7-6; Sea ice German coast	C7-7; Water T°C at NS station	C7-8; Mean sea ice condition

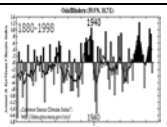
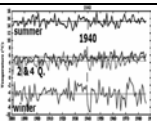
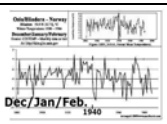
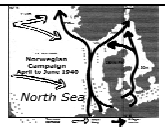
				
C7-9; 02 Feb. 1940	C7-10; 16 Feb. 1940	C7-11; 08 March 1940	C7-12; 15 March 1940	C7-13; 12 April 1940

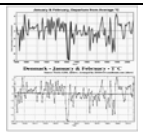
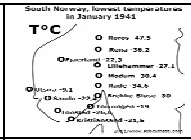
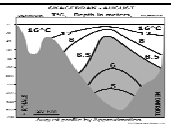
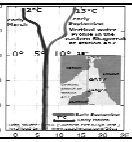
C8 From the North Sea to the Atlantic		Temperature map **TM7**			
p. 91-100	C8-1; Major activity and cold	C8-2	C8-3; NS current	C8-4; NS structure	C8-5; Berlin-T seasonal T°C

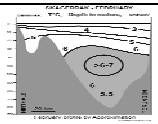
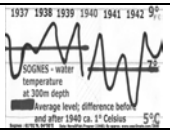
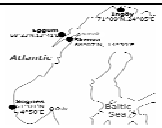
				**C9.** **Finally on the first war winter**
C8-6; Berlin-T, rank in 239 years	C8-7; Berlin-T, 1701/9 vs 1932/8	C8-8; Winter 40, deviation vs 35/9	C8-9; Winter 40, deviation vs 35/9	**p. 101-104**

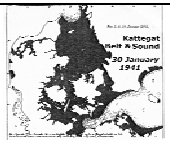
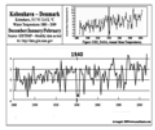
D. Winter 1940/41 a climatic research delight (pp. 105 – 122)

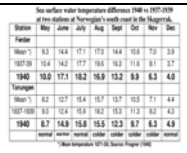
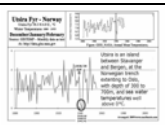
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D-1; Germ. Navy in a fjord	D-2; Oslo annual T°C	D-3; Oslo seasonal	D-4; Oslo winter T°C, 1 Q.1940	D-5; Norwegian Campaign.

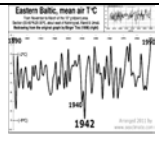
Temperature map **TM8**				
D-6	D-7; Jan.+ Feb. T°C Denmark	D-8; T° S-Norway January 1940	D-9; Skagerrak August-T-profile	D-10; T-profile at station A17

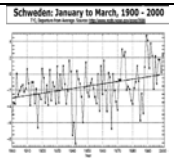
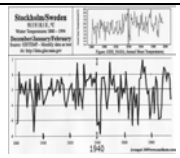
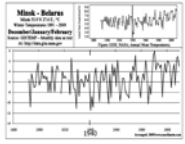
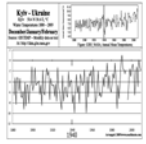
				
D-11; Skagerrak February-T-profile	D-12; German sea mine barrage	D-13; Sognes 300m water T°C	D-14; Norway map	D-15; Skrova 300m water T°C

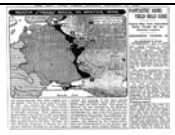
				
D-16; Sea ice 07 Feb. 1941	D-17; Sea ice 14 March 1941	D-18; Sea ice 11 April 1941	D-19; Kattegat sea ice 30 Jan.41	D-20; Winter T° Copenhagen

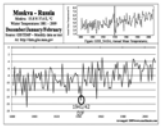
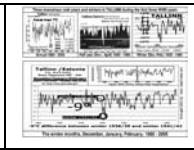
				
D-21; SST Skagerrak	D-21; Utsira Fry winter T°C	D-22; Cold center Skagerrak	D-23; German Navy in a fjord	

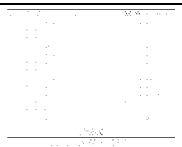
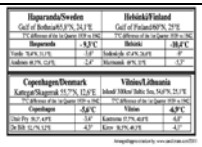
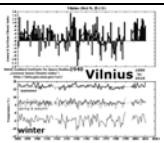
E. The War Winter 1941/42 (pp. 123 – 154)

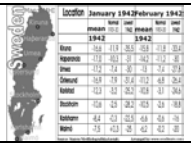
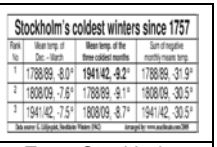
E1. Did naval war stop Adolf Hitler before Moscow?				Temperature map **TM9**
p. 123-128	E1-1; T°C in East Baltic	E1-2; Axis advances	E1-3; Troop strength	E1-4

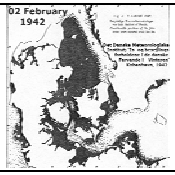
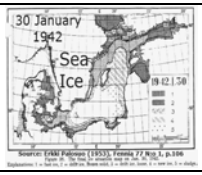
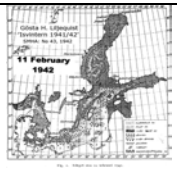
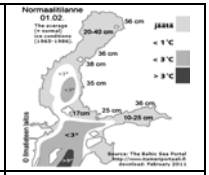
E2 "Barbarossa" & its appendix, - The naval war in the Baltic				
p. 129-134	E2-1; T°C Sweden Jan-Mar	E2-2; Winter T°C Stockholm	E2-3; Winter T°C Minsk	E2-4; Winter T°C Kiev

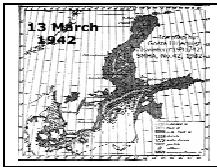
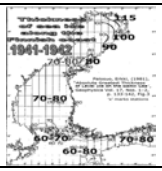
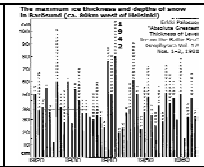
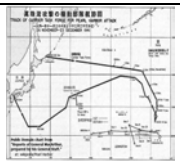
			**E3 When the weather broke down along the Eastern Front**	
E2-5; Kattegat ice 02 Feb. 1942	E2-6; Kattegat ice 11 Feb. 1942	E2-7; NYT January 11, 1942	**p. 135-140**	E3-1; German Navy in the Baltic

				
E3-2; German Navy in the Baltic	E3-3; Winter T°C Moscow	E3-4; div T°C periods at Tallinn	E3-5; Cold centre Baltic; 6 months	E3-6; Tallinn Dec-May T°C

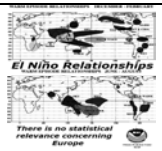
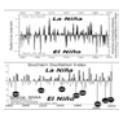
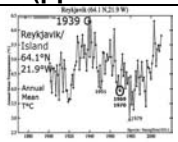
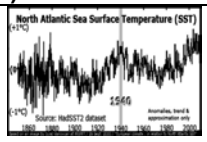
				
E3-7; Tallinn 1930 to 1940	E3-8; T°C deviation at stations	E3-9; Div. Vilnius seasons		

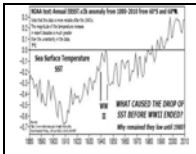
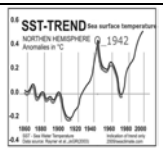
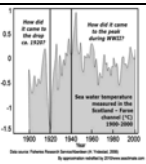
E4 The winter of 1941/42		Temperature map **TM10**		
p. 141-148	E4-1; UK snow 1940-1942	E4-2	E4-3; Swedish winter 1942	E4-4; Stockholm record winter

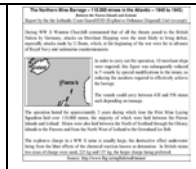
E5 What evidence does sea ice offer in the Baltic				
p. 149-152	B5-1; Kattegat sea ice Feb. 2/42	E5-2; Baltic sea ice 30 Jan. 1942	E5-3; Baltic sea ice 11 Feb.42	E5-4; Mean sea icing

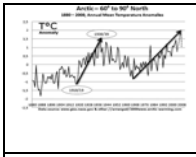
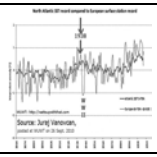
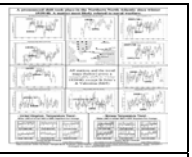
			**E6 Summary: Easy climate research with the winter 1941/4**	
E5-5; Sea ice 13 March 1942	E5-6; ice thickness 1942	E5-7; sea ice 1942 at Barösund	**p. 153-154**	E6-1; Japans assault on Hawaii

F. Any role of El Niño? (pp. 155 - 160)
&
G. Global Cooling from 1940-1970 (pp. 161 – 176)

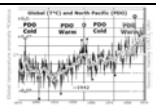
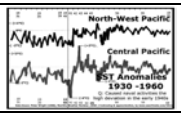
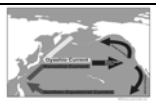
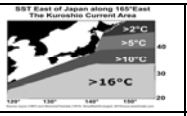
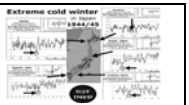
	Temperature map **TM11**		***G1.*** **An Atlantic matter?**		
F-1; Statistical relevance El Niño	F-2	F-3 & 4; El Niño events	p. 161-168	G1-1; Reykjavik annual T°C	G1-2; North Atlantic SST

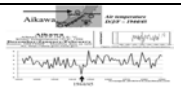
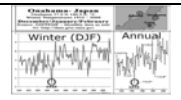
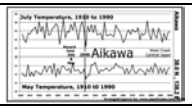
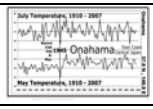
	Temperature map **TM12**			Temperature Trend __Jan & Feb. __Annual, for: United Kingdom Ireland Germany Ukraine
G1-3; SST 60°S to 60°N	G1-4	G1-5; SST North Atlantic	G1-6; SST Faeroe & UK	G1-[7-10]

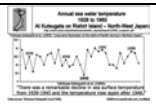
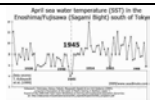
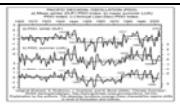
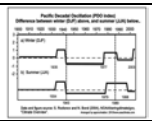
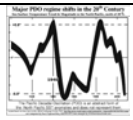
G2 **What does the 'Battle of the Atlantic' mean to the marine environment?**				**G3** **Discussing the kick off to global cooling**
p. 169-172	G2-1; Convoy in South Atlantic	G2-2; NA Mine barrage	G2-3; USA Ship losses	**p. 173-176**

				
G3-1; Arctic T°C 60°-90°N	G3-2; The wake of naval ships	G3-3; Atlantic activities 03/12 42	G3-4; NA SST vs SAT in Europe	G3-5; Div. T°C NA stations

H. Pacific War, 1942-1945, contributing to Global Cooling? (pp. 177-188)

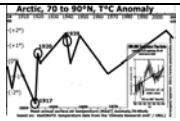
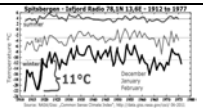
				
H-1; POD phases since 1900	H-2; SST North Pacific	H-3; N-Pacific current system	H-4; T°C Kuroshio current	H-5; cold winter T°C at stations

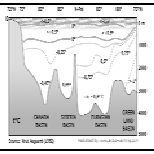
		Temperature map **TM13**		
H-6; Aikawa winter T°C	H-7; Onahama winter T°C	H-8	H-9; Aikawa summer T°C	H-10; Onahama summer T°C

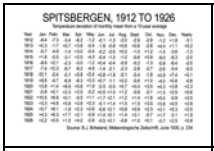
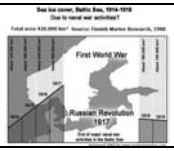
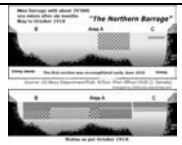
				
H-11; Rishirt Island, SST	H-12; Sagami Bight, April SST	H-13; PDO analysis	H-14; Simplifi-cation of H-13	H-15; Major PDO regime

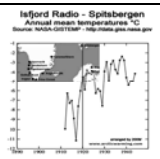
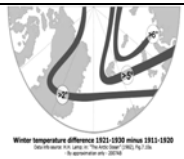
				
H-16; Philippine Naval battle	H-17; Bombing at sea	H-18; US battle ships	H-19; Pacific fronts 1st Jan.45	

I. Warming before Cooling – The trace to the First World War (pp. 189-200)

			Temperature map **TM14**	
I-1; Four years sea ice NA	I-2 Arctic T°C Anomaly	I-3; Spitsbergen, T°C 1912-1975	I-4	I-5; Sea ice March 1917

				
I-6; Sea ice April 1917	I-7; Sea ice June 1917	I-8; Sea ice July 1917	I-9; Structure Polar Sea	I-10; Depth charge exploding

				
I.11; T°C record Spitsbergen	I-12; Sea ice Baltic Sea WWI	I-13; Mine barrage 1918	I-14; Barrage construction	I-15; NA current system

		**J. Results: Page 201-202**	**K. Reference: Page 203-210**	**L. Index – Images: Page 211 - 222**
I-16; T°C Spitsbergen	I-17; Warming in the 1920s			