

CENTRE FOR ENVIRONMENT, FISHERIES AND
AQUACULTURE SCIENCE

SCIENCE SERIES DATA REPORT
Number 40

**NEAR SURFACE SEA TEMPERATURES IN
COASTAL WATERS OF THE NORTH SEA,
ENGLISH CHANNEL AND IRISH SEA – VOLUME II**

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LOWESTOFT
2001

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Sci. Ser., Data Rep., CEFAS, Lowestoft, (40), 31pp.

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CONTENTS

Page

1. Introduction 5

2. Data collection 5

Acknowledgements 5

3. Reference 5

DATA INDEX 7

1. INTRODUCTION

The report presents tabulations of monthly mean sea surface temperature data and standard deviations, for 38 stations around the English and Welsh coast.

To meet the requirements of fisheries scientists, the Centre for Environment, Fisheries and Aquaculture Science (CEFAS) laboratory at Lowestoft has managed a network of observers recording regular near-surface sea temperature results, at selected locations, since the mid 1960s. A map showing the location of these stations is shown in Figure 1.

Nineteen stations have been sampled by CEFAS observers. In addition, measurements have been obtained from other sources, such as Powergen, BNFL, CEGB, National Power, Great Lakes (UK) Ltd., British Energy Generation (UK) Ltd., The Associated Ocel Co Ltd., The Wildlife Trust West Wales, and Borough and District Councils. The data series cover from 8 to 108 years, and the time span of each station is shown in the data index.

The report updates that of Jones and Jeffs (1991), who presented Monthly, Annual and Grand Monthly mean sea surface temperature measurements made until December 1989, for 99 stations, totalling over 3100 years of data. This publication shows all data for locations still in use after 1989.

Copies of both reports are now available on the CEFAS web site:

<http://www.cefasc.co.uk/publications/Catalogue.htm>

2. DATA COLLECTION

CEFAS observers use a portable thermistor to record coastal sea temperature, approximately 6 to 12 times per month, usually close to the time of high water. The frequency of non-CEFAS observations varies depending on the station, from monthly means to daily values. The data index shows if daily values are available for a station, or monthly means only.

The CEFAS equipment is calibrated at Lowestoft to an accuracy of ± 0.1 deg. C. The accuracy of observations from non-CEFAS sources is not known, but is thought to be generally at least as good as ± 0.2 deg.C.

Acknowledgements

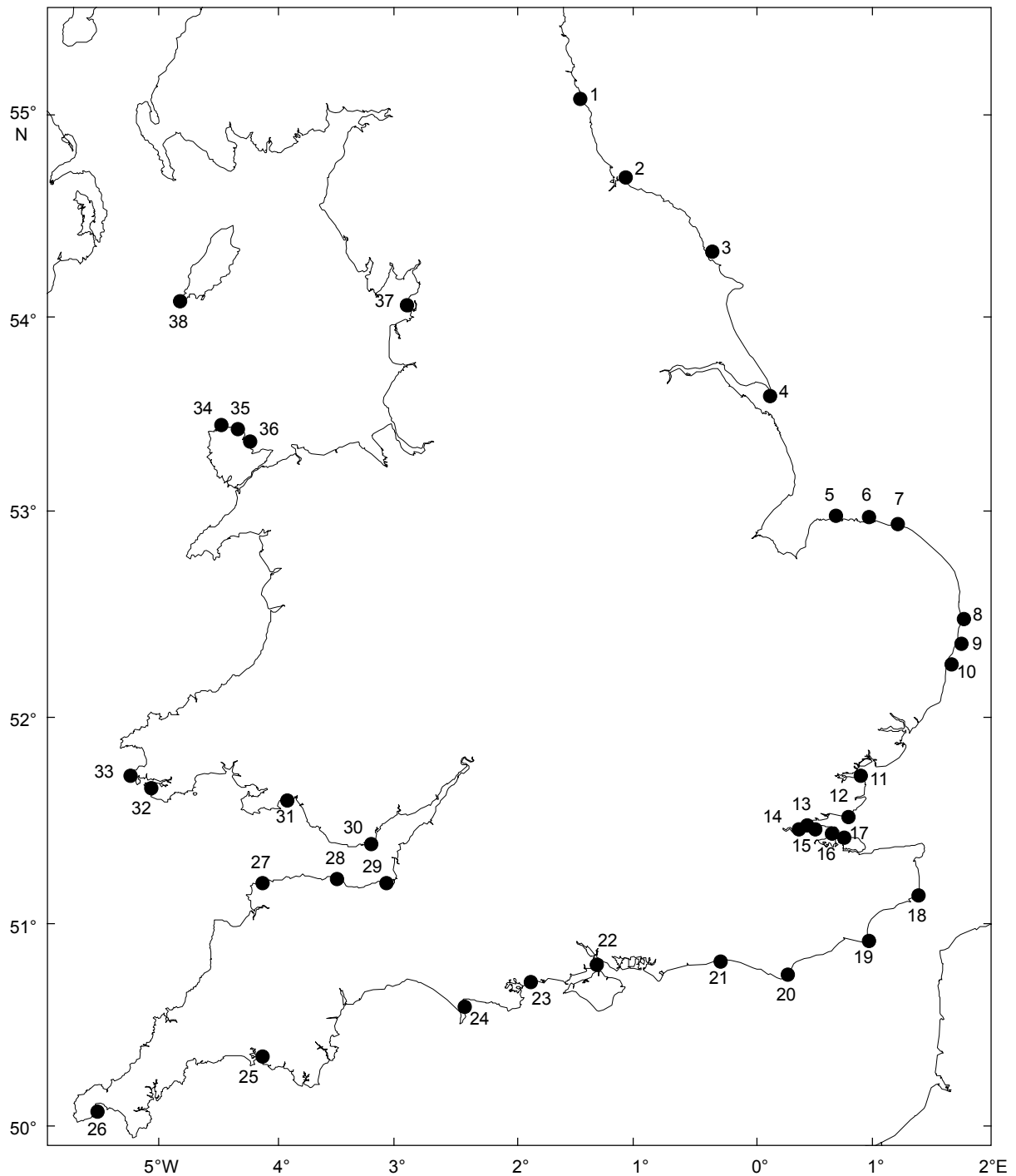
The authors wish to thank the following CEFAS observers for their dedication over the years:

Mr M Eynon, Mr T Wright, Mr S Billing,
Mr W Browning, Mr A Putt, Mr E Jones,
Mr P Jackson, Mr G Bullimore, Mrs C Knapp,
Mr D Knapp, Mrs J Phillips, Mr W Stannard,
Mr B Bevan, Mr J Powell, Mr H Philcox,
Capt. P Tambling, Mr M Hellyer, Mr R Roch.

Also, grateful thanks to all non-CEFAS establishments previously mentioned, who have freely given permission for their data to be included in this report.

3. REFERENCE

JONES, S.R., AND JEFFS, T.M., 1991. Near-surface sea temperatures in coastal waters of the North Sea, English Channel and Irish Sea. Data Rep., MAFF Direct. Fish. Res., Lowestoft, **24**: 70pp.



- | | | |
|------------------------|-------------------|----------------|
| 1. Blyth Power Station | 14. West Thurrock | 27. Ilfracombe |
| 2. Redcar | 15. Tilbury | 28. Minehead |
| 3. Scarborough | 16. Kingsnorth | 29. Hinkley |
| 4. Spurn Point | 17. Grain | 30. Barry |
| 5. Brancaster | 18. Dover | 31. Swansea |
| 6. Blakeney | 19. Dungeness | 32. Angle |
| 7. Cromer | 20. Eastbourne | 33. Skomer |
| 8. Lowestoft | 21. Shoreham | 34. Wylfa |
| 9. Southwold | 22. Fawley | 35. Amlwch |
| 10. Sizewell | 23. Bournemouth | 36. Moelfre |
| 11. Bradwell | 24. Weymouth | 37. Heysham |
| 12. Leigh on Sea | 25. Plymouth | 38. Port Erin |
| 13. Littlebrook | 26. Newlyn | |

Figure 1. Coastal sea temperature station positions

DATA INDEX

Table No.	Location	Source	Start Year	End Year	Daily observations Available	Page
1	Blyth PS	National Power and CEGB	1978	1998	No	9
2	Redcar	CEFAS	1966	2000	Yes	9
3	Scarborough	CEFAS	1970	2000	Yes	10
4	Spurn Point	CEFAS	1966	2000	Yes	10
5	Brancaster	CEFAS	1966	2000	Yes	11
6	Blakeney	CEFAS	1966	2000	Yes	11
7	Cromer	CEFAS	1966	2000	Yes	12
8	Lowestoft	CEFAS	1966	1992	Yes	12
9	Southwold	CEFAS	1966	2000	Yes	13
10	Sizewell PS	British Energy Generation UK Ltd., BNFL, CEGB	1967	1999	No	13
11	Bradwell PS	BNFL, CEGB	1964	1999	No	14
12	Leigh on Sea	CEFAS	1966	2000	Yes	14
13	Littlebrook PS	National Power, CEGB	1964	1998	No	15
14	West Thurrock PS	CEGB	1964	1993	No	15
15	Tilbury PS	National Power, CEGB	1964	1998	No	16
16	Kingsnorth PS	Powergen UK, CEGB	1971	2000	No	16
17	Grain PS	Powergen UK, CEGB	1979	1996	No	17
18	Dover	District Council and CEFAS	1926	2000	Yes (1968 onwards)	18
19	Dungeness PS	British Energy Generation UK Ltd., BNFL	1968	1999	No	19
20	Eastbourne	Borough Council	1892	2000	Yes	20-21
21	Shoreham	CEFAS	1966	1999	Yes	21
22	Fawley PS	National Power	1984	1998	No	22
23	Bournemouth	Borough Council	1970	2000	Yes	22
24	Weymouth	CEFAS	1966	2000	Yes	23
25	Plymouth	Plymouth City Council	1957	1993	No	23
26	Newlyn	IOS Proudman Laboratory	1984	1994	Yes	24
27	Ilfracombe	CEFAS	1992	2000	Yes	24
28	Minehead	CEFAS	1972	1998	Yes	24
29	Hinkley Point PS	BNFL, CEGB	1976	1999	No	25
30	Barry	CEFAS	1978	1999	Yes	25
31	Swansea	CEFAS	1976	2000	Yes	26
32	Angle	CEFAS	1990	2000	Yes	26
33	Skomer Island	CEFAS and The Wildlife Trust West Wales	1985	1999	Yes	26
34	Wylfa PS	BNFL, CEGB	1967	1999	No	27
35	Amlwch	Great Lakes UK Ltd., The Associated Octel Co. Ltd.	1964	1999	No	27
36	Moelfre	CEFAS	1966	2000	Yes	28
37	Heysham PS	British Energy Generation UK Ltd., NW and N Wales SFC	1955	1999	No	29
38	Port Erin	University of Liverpool	1903	2000	No	30-31

Table 1. Monthly Mean Sea Temperature for BLYTH POWER STATION at 55° 8'N, 1° 32'W

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1978	6.2	5.1	5.8	7.1	8.7	10.4	13.1	13.2	13.8	12.6	11.6	7.9	9.6
1979	5.7	4.4	4.9	5.4	7.7	10.0	12.1	12.6	12.9	11.6	9.3	8.7	8.8
1980	6.0	3.7	4.0	4.9	7.4	12.0	13.7	14.1	13.7	11.9	9.6	8.3	9.1
1981	6.3	6.2	5.4	7.7	8.5	10.4	13.3	15.2	15.0	11.8	10.0	7.9	9.8
1982	4.3	6.0	6.6	7.9	9.6	12.2	13.9	13.1	11.3	10.0	9.8	7.1	9.3
1983	5.5	5.0	5.5	6.5	8.4	11.0	12.8	13.9	13.4	11.2	9.0	7.1	9.1
1984	5.6	5.9	5.4	7.0	9.5	11.6	13.2	14.6	14.1	11.6	9.9	7.7	9.7
1985	5.7	5.7	5.6	6.6	8.2	10.8	12.5	13.5	12.0	11.5	9.0	6.5	9.0
1986	6.5	5.1	6.0	6.5	7.5	11.7	13.5	12.5	11.5	11.0	9.0	6.9	9.0
1987	6.0	6.1	6.8	7.0	9.7	11.2	14.0	13.5	13.0	10.5	10.0	8.9	9.7
1988	9.0	7.2	6.5	8.9	10.0	12.0	14.5	13.3	13.0	11.5	9.0	8.5	10.3
1989	8.0	7.5	7.1	8.5	10.5	11.5	15.1	14.5	14.0	11.5	8.1	7.8	10.3
1990	7.0	6.5	7.9	9.2	11.5	12.2	13.8	16.1	13.5	12.0	8.5	9.0	10.6
1991	7.3	6.5	7.0	8.9	9.7	12.4	14.2	14.9	14.0	12.0	9.3	8.6	10.4
1992	8.0	6.5	8.2	8.2	11.1	14.5	14.9	14.5	13.5	10.8	9.0	8.5	10.6
1993	7.0	7.5	7.5	8.8	9.8	10.5	16.5	13.5	14.0	12.5	10.0	7.0	10.4
1994	6.3	5.6	5.9	6.5	8.4	10.5	13.3	14.2	12.3	11.7	10.2	8.8	9.5
1995	6.6	6.7	6.3	6.9	7.4	10.3	13.3	15.2	14.6	13.1	10.9	8.7	10.0
1996	6.2	5.2	4.7	7.7	6.7	10.6	11.9	13.2	13.2	11.1	10.9	8.4	9.2
1997													
1998	8.0	9.0	8.5	9.0	10.0	11.7	14.4	13.9	13.3	11.3		6.9	
obs.	20	20	20	20	20	20	20	20	20	20	19	20	
mean	6.6	6.1	6.3	7.5	9.0	11.4	13.7	14.0	13.3	11.6	9.6	8.0	
sdev	1.09	1.20	1.19	1.22	1.32	1.05	1.07	0.93	0.96	0.72	0.87	0.79	

Table 2. Monthly Mean Sea Temperature for REDCAR at 54° 38'N, 1° 5'W

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1966	4.6	4.8	5.7	5.4	7.6	11.0	13.1	13.9	13.6	12.3	8.5	6.5	8.9
1967	5.5	5.7	5.9	6.8	9.1	11.5	12.8	13.0	12.5	11.6	8.7	7.0	9.2
1968	5.2	4.9	5.5	6.8	8.2	11.4	12.2	14.5	13.4	11.8	9.2	7.6	9.2
1969	6.0	4.2	4.4	6.1	7.3	9.7	12.6	13.5	13.3	12.5	8.9	6.0	8.7
1970	5.0	4.4	5.0	5.8	8.5	12.2	12.6	13.2	12.5	11.9	8.9	6.9	8.9
1971	5.8	6.2	6.1	6.7	9.0	12.2	14.9	14.1	13.4	11.8	7.9	7.2	9.6
1972	6.1	6.0	6.2	7.4	9.2	11.0	13.6	13.8	12.8	11.6	8.5	7.1	9.4
1973	6.4	6.1	6.0	7.4	9.8	11.3	13.4	13.8	14.0	11.2	9.4	6.7	9.6
1974	5.9	5.9	5.9	6.9	9.2	10.9	12.9	13.9	12.6	10.4	8.2	7.8	9.2
1975						11.7	14.1	15.2	13.1	11.3	9.8	7.0	
1976	6.1	5.5	5.9	7.4	8.4	11.8	13.0	15.6	13.4	12.1	8.3	7.1	9.6
1977	5.2	5.2	5.8	6.4	8.8	11.2	13.0	14.4	13.0	11.4			
1978					9.5	12.5	13.6	14.3	13.4	12.0	9.6	7.5	
1979	4.4	4.0	4.6	6.7	8.1	11.1	13.5	13.5	13.1	11.6	8.5	8.0	8.9
1980	5.1	5.7	5.8										
1981													
1982													
1983													
1984													
1985					9.3	11.8	12.8	13.1	12.3	11.5	8.1	7.0	
1986	4.7	3.1	3.9	5.2	7.5	10.7	12.7	12.7	11.9	11.0	8.6	7.3	8.3
1987	4.7	4.5	4.6	6.3	8.5	10.3	13.1	13.8	13.3	11.5	9.6	7.5	9.0
1988	7.4	6.4	6.5	8.2	9.6	12.1	13.6	13.5	13.1	11.4	8.5	8.1	9.9
1989	7.6	7.2	6.6	7.4	10.2	12.4	14.6	13.6	13.7	11.5	9.6	6.8	10.1
1990	6.3	6.9	7.2	8.1	10.7	12.1	13.6	14.7	13.9	12.0	9.5	7.0	10.2
1991	5.6	4.8	7.1	8.0	9.9	12.6	14.1	14.7	13.7	11.0	9.5	7.5	9.9
1992	6.9	7.3	7.2	7.9	10.9	13.3	14.6	14.4	13.3	11.6	7.7	6.2	10.1
1993	5.7	6.5	6.3	7.6	9.3	12.0	13.9	14.2	13.5	12.1			
1994							15.0	15.4	13.2	11.6	9.6	7.6	
1995	5.8	7.0	7.3	7.7	9.0	12.4	14.9	16.2	14.8	12.9	9.6	7.1	10.4
1996	6.1	4.8	5.1	6.1	8.8	11.3	13.4	14.8	14.0	11.9	8.3	6.4	9.3
1997	5.1	5.5	7.1	8.4	10.1	12.7	13.2	15.6	13.6	11.9	10.2	7.7	10.1
1998	6.8	6.9	7.2	8.0	10.6	12.6	14.1	14.1	13.1	11.5	8.0	6.8	10.0
1999	5.8	5.5	6.9	7.8	9.8	12.0	14.2	14.6	14.1	12.0	9.2	7.2	9.9
2000	5.7	5.7	6.9	6.8									
obs.	27	27	27	26	27	28	29	29	29	29	27	27	
mean	5.8	5.6	6.0	7.1	9.1	11.7	13.6	14.2	13.3	11.7	8.9	7.1	
sdev	0.81	1.06	0.96	0.88	0.95	0.80	0.77	0.84	0.60	0.49	0.68	0.5	

Table 3. Monthly Mean Sea Temperature for SCARBOROUGH at 54° 17'N, 0° 22'W

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1970			5.0	6.1	8.2	10.8	11.9	12.9	12.4	11.5	10.1	6.9	
1971	6.1	6.0	5.9	6.8	8.1	9.9	12.7	13.9	14.1	12.2	8.8	6.5	9.3
1972	6.0	5.1	5.5	7.2		10.7	11.8	12.4	11.0	10.5	10.0	8.4	
1973	7.6	6.8	6.9	8.0	9.9	11.2	11.4	13.3	14.2	11.9	9.5	5.3	9.7
1974	3.9	4.0									7.8	7.4	
1975	6.7	5.9	6.6	6.4	8.3	10.2	12.6	13.2	13.4	11.8	9.8	6.8	9.3
1976	6.7	4.8	5.5	6.9	8.8	10.5	11.2						
1977	5.0	5.3	5.7	6.5	8.4	10.6	12.9	14.2	13.4	11.9	9.3	6.9	9.2
1978	5.6	4.7	6.0	6.1	7.9	11.2	12.5	13.3					
1979	3.6	3.4	4.0	5.1	6.9	9.4	12.5	12.5	11.4	11.0	8.2	6.9	7.9
1980	5.0	5.3	5.2	6.4	8.2	10.9	12.1	14.0	13.8	11.2	9.0		
1981		4.5	5.0	6.0	9.2	10.4	13.0	14.5	13.6	10.7	9.0	5.8	
1982	4.4	5.2	5.6	7.1	8.8	10.7	13.2	14.2	13.4	11.4	9.4	6.4	9.2
1983	5.9	4.5	5.5	6.2	7.6	10.1	12.6	13.9	12.5	10.7	8.6	7.2	8.8
1984	5.9	5.0	5.2	6.5	8.6	10.8	13.7	14.4	14.4	12.2	10.5	8.0	9.6
1985	5.7	5.4						12.7	12.2	11.7	8.1	6.9	
1986	5.1	3.5	4.0	5.4	7.4	9.2	12.3	12.0	11.4	10.9	8.9	6.8	8.1
1987	4.6	4.6	4.5	5.9		10.3	12.4	13.6	13.9				
1988	6.4	5.7	5.6	7.1	8.4	12.4	13.4	13.7	13.1	11.7	9.2	7.6	9.5
1989	6.8	6.5	6.4	7.2	9.6	11.9	14.1	14.7	13.8	12.6	10.3	8.3	10.2
1990	6.9	6.0	6.9	7.5	9.7	11.6	13.3	14.1	13.6	12.2	9.7	7.1	9.9
1991	5.4	4.7	6.2	7.2	9.4	10.4	12.7	13.8	13.8	11.1	7.7	6.7	9.1
1992	6.3	6.1	6.7	7.2	10.0	12.3	13.8	13.8	12.9	9.9	7.5	7.0	9.5
1993	5.5	5.8	5.7	7.2	9.4	11.3	13.2	13.2	12.6	10.4	8.7	6.8	9.2
1994	5.8	4.6	5.8	6.6	8.3	11.0	12.7	13.3	13.0	10.8	10.3	8.2	9.2
1995	6.3	6.2	5.9	7.2	9.4	11.1	13.3	14.4	15.0	13.5	10.6	7.9	10.1
1996	6.2	4.7	4.8	6.2	8.2	11.1	13.4	14.0	13.9	12.4	9.4	6.4	9.2
1997	4.8	5.9	7.3	8.2	9.6	11.6	13.1	14.4	13.3	12.2	10.5	8.9	10.0
1998	7.8	6.8	6.9	7.5	9.6	11.8	13.3	14.5	13.9	11.9	8.6	7.1	10.0
1999	6.6	5.6	6.8	7.9	9.1	10.8	13.0	14.7	14.2	11.7	9.6		
2000	6.2	6.3	7.3	8.1	9.9	11.2	13.2	14.7		12.5	9.9	8.3	
obs.	29	30	29	29	27	29	29	29	27	27	28	26	
mean	5.8	5.3	5.8	6.8	8.8	10.9	12.8	13.7	13.3	11.6	9.3	7.2	
sdev	1.00	0.89	0.90	0.78	0.84	0.76	0.69	0.74	0.97	0.81	0.89	0.84	

Table 4. Monthly Mean Sea Temperature for SPURN POINT at 53° 35'N, 0° 7'E

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1966	3.1	4.2	6.2	6.8	11.1	13.7	14.8	15.4	15.0	12.9	8.0	5.3	9.7
1967	3.9	5.4	6.3	7.1	10.0	13.8	16.5	15.9	14.4	11.5	7.8	4.8	9.8
1968	3.9	4.1	4.6	8.1	11.3	14.2	14.9	15.4	14.9	12.7	8.9	5.6	9.9
1969	4.8	2.6	3.0	6.9	9.5	13.2	15.7	16.4	14.0	13.2	7.8	4.7	9.3
1970	3.7	3.4	3.6	6.6	10.1	15.1	15.3	15.3	14.7	11.3	8.4	6.0	9.5
1971	4.4	4.8	5.5	7.7	11.0	13.3	16.1	16.4	15.7	12.6	7.5	6.0	10.1
1972	4.8	4.1	5.6	7.8	10.8	12.7	14.7	16.3	14.5	11.6	7.9	6.6	9.8
1973	5.5	5.1	5.9	6.8	10.2	14.9	16.3	16.9	15.6	11.4	6.1	3.7	9.9
1974	6.0	6.4	6.1	7.7	12.7	12.0		18.1	13.0				
1975				7.4	9.9	13.7	17.1	18.2	14.8	11.2	8.3	5.4	
1976	5.2	4.0	5.2	8.1	10.6	14.9	18.7	18.1	14.9	13.0	8.9	4.6	10.5
1977	3.5	4.7	6.4	7.7				15.9	14.5	12.7	7.7	5.8	
1978	4.6	3.4	6.1	7.4	10.7	14.1	15.0	16.5	14.8	11.6	9.9	6.6	10.1
1979	3.0	2.5	4.4	7.2	9.4	13.6	15.8	16.0	14.8	12.9	8.0	7.1	9.6
1980	4.3	5.8	6.1	7.7	11.5	14.1	15.4	16.4	15.5	11.6	7.9	5.3	10.1
1981	4.5	4.6	6.0	7.5	10.4	14.7	16.5	17.4	15.6	10.8	8.2	4.5	10.1
1982	3.4	4.9	5.7	8.4	11.5	14.6	16.2	16.6	14.9			5.2	
1983	4.9	3.6	5.0	6.7	9.4	13.3	16.7	18.3	14.5	11.3	7.8	5.7	9.8
1984	4.3	4.1	4.8	7.4	10.8	13.2	16.8	17.7	14.9	11.9	9.9	6.9	10.2
1985	2.9	2.4	4.5	7.6	8.8	13.3	16.2	15.4	14.5	12.5	7.1	6.1	9.3
1986	4.4	1.5	3.0	5.8	9.7	13.7	15.6	15.1	12.9	11.2	8.1	6.4	9.0
1987	3.3	3.5	4.4	7.4	10.9	13.6	15.4	15.3	14.9	12.0	8.8	5.8	9.6
1988	5.7	5.5	5.0	7.4	11.2	13.9	15.6	15.1	13.7	11.4	8.2	6.3	9.9
1989	6.3	5.9	6.6	7.5	11.1	14.7	17.5	17.3	15.4	12.7	9.1	6.3	10.9
1990	6.3	5.9		8.4	12.7	13.9	16.2	17.8	14.5	12.1	8.2	6.2	
1991	3.4	2.8	5.9	7.6	9.9	13.4	16.5	17.1	15.4	11.4	7.2	5.8	9.7
1992	5.4	5.0	6.5	7.8	12.0	15.5	17.1	16.5	13.7	10.4	7.3	5.9	10.3
1993	4.9	5.4	5.2	8.4	10.8	15.1	16.0	15.1	13.5	10.9	7.5	5.0	9.8
1994	4.0	3.9	5.2	7.7	11.0	14.3	17.9	17.2	14.0	11.0	10.2	7.7	10.3
1995	5.1	5.3	5.5	7.6	10.7	15.5	17.9	18.5	15.2		9.9	5.7	
1996	4.0	2.3	4.2	6.4	9.8	13.7	15.7	17.1	14.5	12.0	6.4	4.7	9.2
1997	2.6	4.6	7.5	9.1	10.6	14.4	16.4		15.4	12.4	9.1	7.2	
1998	5.5	5.9	7.2	8.3	11.5	14.1	15.5	16.3	15.0	11.7	7.3	5.5	10.3
1999	5.5	4.5	6.3	9.8	12.4	14.5	16.4	16.6	16.2	12.1	9.1	5.5	10.7
2000	4.5	5.4	7.1	7.9	11.8	13.8	15.3	16.9	15.6	13.0	8.6	6.7	10.6
obs.	34	34	33	35	34	34	33	34	35	32	33	33	
mean	4.5	4.3	5.5	7.6	10.8	14.0	16.2	16.6	14.7	11.9	8.2	5.8	
sdev	0.99	1.22	1.11	0.75	0.94	0.78	0.94	1.02	0.76	0.75	0.97	0.86	

Table 5. Monthly Mean Sea Temperature for BRANCASTER at 52° 58'N, 0° 38'E

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1966	2.7	4.4	5.7	7.1	12.9	16.1	16.5	16.4	15.6	12.7	7.8	5.1	10.3
1967	3.7	5.0	6.7	7.2	11.1	15.0	18.9	17.9	15.2	11.8	7.4	4.2	10.3
1968	3.5	3.5	4.9	8.4	11.0	15.7	16.5	16.2	15.2	12.7	8.4	5.1	10.1
1969	4.6	2.6	2.9	6.4	11.5	14.9	17.9	18.5	15.9	13.5	7.4	3.4	10.0
1970	3.8	2.5	4.3	7.4	11.7	16.1	16.2	17.3	14.7	11.7	7.6	5.4	9.9
1971	4.3	4.7	5.2	8.2	12.3	14.3	17.7	17.6	16.2	13.0	7.4	6.3	10.6
1972	4.6	3.9	5.9	8.7	12.0	14.3	16.4	16.6	14.5	11.6	7.6	6.0	10.2
1973	4.6	3.8	6.0	7.5	11.6	16.8	17.9	17.7	17.0	10.8	5.9	4.1	10.3
1974	4.9	5.2	6.0	8.0	12.1	15.2	16.4	17.6	13.8	9.5	6.8	5.9	10.1
1975	5.9	4.8	5.6	7.5	11.2	15.1	18.1	20.4	15.6	11.7	7.9	5.1	10.7
1976	5.4	3.8	5.0	8.6	12.0	17.6	20.3	19.2	16.0	12.9	8.0	3.7	11.0
1977	3.1	4.4	6.5	6.9	11.3	13.3	15.8	17.0	15.1	12.2	7.9	5.8	9.9
1978	3.4	2.2	5.6	6.6	10.7	15.1	15.7	16.8	14.4	12.3	9.8	4.9	9.8
1979	1.7	1.8	3.7	7.4	10.5	15.1	17.0	17.1	15.0	13.0	7.4	5.7	9.6
1980	2.9	5.0	5.3	8.6	11.5	15.6	14.8	17.5	15.7	10.4	7.9	4.8	10.0
1981	3.9	3.5	6.8	8.2	11.5	14.6	16.6	18.0	16.7	10.7	8.0	3.5	10.2
1982	2.3	4.4	5.5	8.4	12.7		18.8	17.6	15.4	11.1	8.3	5.2	
1983	4.5	2.5	5.5	7.6	10.9	15.6	18.0	19.7	13.9	11.0	7.4	5.4	10.2
1984	2.9	3.1	4.6	8.3	10.9	15.4	17.7	18.7	14.7	11.9	9.4	6.0	10.3
1985	2.9	2.1	4.1	8.7	11.1	13.9	18.1	15.9	15.4	11.4	6.4	6.2	9.7
1986	3.8	1.1	3.8	7.4	11.6	15.1	18.3	16.0	15.6	11.4	7.5	5.9	9.8
1987	1.3	3.0	4.6	8.5	11.7	14.7	16.9	16.8	15.4	11.1	8.1	6.1	9.9
1988	3.0	3.6	5.8		13.4	15.6	17.2	17.1	14.4	11.6	7.7	6.0	
1989	5.9	5.0	7.3	8.4	13.8	16.6	19.5	19.1	16.7	16.9	12.2	10.5	12.7
1990	9.5	11.2	11.7	13.1	19.9	20.2	23.0	23.4	19.7	16.2	12.3	9.4	15.8
1991	7.6	6.7	11.8	12.6	14.8	17.9	22.7	24.5	20.7	15.7	11.0	8.6	14.6
1992	8.5	8.9	11.1	12.3	17.9	21.4	22.0	21.8	18.4	13.8	10.5	8.6	14.6
1993	7.6	8.1	7.2	11.4	11.5	17.0	19.3	19.2		10.2	7.3	5.0	
1994	4.9	3.5	6.9	9.7	13.3	15.5	20.6					6.1	
1995	4.0	6.1	5.3	10.4	12.7	14.2	18.8	19.8	14.7	13.3	9.4	5.5	11.2
1996	4.2	1.7	3.7	8.6	11.5	14.9	16.4	17.4	14.7	12.3	8.1	3.5	9.8
1997	2.8	5.3	6.7	8.6	11.2	15.6	18.3	19.9	15.4	11.9	8.5	6.3	10.9
1998	5.4	6.5	7.4	9.2	12.3	15.4	16.6	18.4	14.8	11.7	6.4	5.3	10.8
1999	4.7	5.1	7.6	10.8	14.1	16.2	18.2	17.5	17.1	12.4	9.6	4.4	11.5
2000	4.5	5.2	7.8	9.5	11.5	17.1	18.0			11.3	7.4	5.4	
obs	35	35	35	34	35	34	35	33	32	34	34	35	
mean	4.4	4.4	6.1	8.7	12.3	15.8	18.0	18.3	15.7	12.2	8.3	5.7	
sdev	1.81	2.10	2.07	1.67	1.93	1.63	1.91	1.99	1.53	1.60	1.49	1.58	

Table 6. Mean Sea Temperature for BLAKENEY at 52° 58'N, 1° 0'E

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1966	3.2	5.5	5.9	7.0	12.5	16.4	17.0	16.9	15.5	12.3	7.2	4.9	10.4
1967	6.9	6.9	8.1	8.5	10.6	13.6	16.2	17.9	15.6	12.1	7.6	4.6	10.7
1968	4.2	3.4	4.7	8.7	11.6	15.5	16.4	15.3	14.6	12.3	7.3	6.0	10.0
1969	5.7	2.7	4.3	6.5	11.1	14.4	17.6	18.0	15.5	11.7	7.6	4.2	9.9
1970	4.8	3.9	4.6	5.9	12.1	16.5	16.7	17.1	14.5	11.8	8.6	6.9	10.3
1971	5.0	5.6	5.6	8.1	11.7	15.0	17.7	17.4	16.1	13.4	9.6	7.9	11.1
1972	6.3	3.7	6.4	9.1	10.9	14.4	16.7	17.7	15.9	14.2	11.7	6.4	11.1
1973	5.4	5.1	6.6	7.3	11.9	14.9	17.3	18.3	16.9	10.8	8.0	4.4	10.6
1974	5.1	4.9	6.4	8.2	11.0	13.9	16.4	17.3	14.9	9.5	5.9	5.3	9.9
1975	6.2	5.8	5.0	7.5	10.4	13.7	17.8	19.1	16.7	12.0	8.7	6.6	10.8
1976	5.5	3.6	5.3	7.8	11.1	16.4	18.6	18.3	15.9	13.5	8.7	4.6	10.8
1977	4.6	5.2	7.1	8.0	11.4	12.6	14.8	17.1	14.8	13.6	10.3	7.6	10.6
1978	5.8	5.0	7.9	8.2	11.1	14.9	15.7	16.6	14.4				
1979	2.5	2.9	5.1	7.6	11.8	14.1	16.8		13.4	13.1	8.1	6.0	
1980	3.8	6.2	6.4	8.1	11.6	15.6	15.9	17.6	16.0	10.9	6.7	4.8	10.3
1981	4.9	4.7	7.7	8.0	10.4	14.6	15.9	17.6	15.6	8.4	8.5	3.3	10.0
1982	3.5	4.9	7.0	9.2	11.9	16.8	17.0	17.7	15.3	12.2	8.7	4.6	10.7
1983	5.5	3.3	5.2	8.2	11.3	14.8	18.4	19.2	14.7	11.3	8.6	6.0	10.5
1984	4.1	4.1	4.6	9.3	10.8	14.3	18.0	18.3	14.5	12.3	9.6	5.9	10.5
1985	2.3	2.2	5.4	9.8	12.0	14.5	18.0	16.3	14.5	13.1	6.3	6.1	10.0
1986	3.5	1.8	6.0	6.5	12.2	14.3	18.4	16.3	13.7	11.8	8.4	6.0	9.9
1987	2.1	4.5	5.5	10.4	11.1	15.1	18.0	17.2	15.4	11.8	7.9	6.7	10.5
1988	5.4	4.7	6.3	9.5	13.0	15.3	16.9	17.8	14.5	11.8	7.0	6.3	10.7
1989	5.7	4.9	7.8	7.7	14.5	17.4	19.5	17.7	16.5	12.5	7.4	6.4	11.5
1990	5.8	6.0	7.7	9.2	15.0	16.1	19.0	18.7	14.7	12.5	7.9	5.4	11.5
1991	3.8	3.4	7.9	9.4	12.4	14.0	18.5	19.6	16.6	11.6	7.6	4.7	10.8
1992	4.9	5.5	7.3	9.2	14.9	18.2	18.8	17.7	14.3	9.4	7.0	5.5	11.1
1993	5.3	5.7	6.4	11.2	13.4	17.5	18.3	17.2	14.7	11.0	6.5	5.1	11.0
1994	5.0	4.2	7.7	8.8	13.0	15.8	19.9	18.7	14.2	10.8	9.5	6.4	11.2
1995	4.7	6.2	6.2	11.1	13.4	14.8	19.4	19.8	16.2	13.3	8.8	5.0	11.6
1996	4.4	2.4	4.4	7.7	11.3	16.3	17.4	17.1	14.8	12.2	6.9	4.2	9.9
1997	3.0	5.3	7.6	9.8	13.7	15.7	18.2	19.0	15.9	11.4	8.8	6.7	11.3
1998	5.3	6.7	7.5	9.6	13.8	15.8	16.6	18.2	15.7	11.4	6.1	5.4	11.0
1999	5.9	4.8	7.6	10.9	14.9	15.6	19.1	17.3	16.9	12.0	8.6	4.9	11.5
2000	4.4	5.7	7.6	9.0	13.9	17.1	16.1	19.2	17.3	11.4	7.4	7.2	11.4
obs	35	35	35	35	35	35	35	34	35	34	34	34	
mean	4.7	4.6	6.4	8.6	12.2	15.3	17.5	17.8	15.3	11.9	8.0	5.6	
sdev	1.17	1.29	1.20	1.28	1.35	1.25	1.22	1.00	0.97	1.22	1.24	1.06	

Table 7. Monthly Mean Sea Temperature for CROMER at 52° 56'N, 1° 18'E

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1966	3.1	3.8	6.2	6.9	10.5	13.4	15.9	16.4	15.4	12.2	7.6	5.9	9.8
1967	4.6	5.3	6.4	7.4	11.0	14.6	17.3	18.3	15.6	12.3	7.7	4.7	10.4
1968	3.6	3.7	4.9	7.7	10.9	15.1	16.1	15.7	15.2	13.1	8.3	5.0	9.9
1969	5.3	3.6	3.4	6.1	10.7	14.8	16.4	16.6	15.7	13.3	7.9	4.1	9.8
1970	3.5	4.0	3.9	5.9	11.6	15.7	17.4	18.9	13.9	13.5	9.3	6.6	10.4
1971	4.4	5.1	5.5	8.6	12.7	14.4	17.3	17.3	15.1	14.3	7.9	5.9	10.7
1972	4.0	3.5	6.9	8.7	10.7	13.4	16.0	16.6	14.6	12.0	9.9	9.2	10.5
1973	7.0	6.9	7.3	7.0	10.9	15.8	17.6	17.1	15.6	11.7	7.4	4.3	10.7
1974	4.4	5.7	6.6	7.4	10.9	15.4	16.5	17.5	14.8	9.9	7.3	5.4	10.2
1975	6.2	5.2	5.4	6.7	9.6	15.6	17.8	19.9	12.7	12.1	8.3	5.1	10.4
1976	3.7	5.3	4.6	6.3	10.8	17.3	19.1	19.2	16.5	13.7	7.5	4.2	10.7
1977	3.0	4.3	5.7	7.0	11.1	13.2	15.2	16.5	14.9	12.4	9.9	6.4	10.0
1978	4.5	3.2	5.1	6.9	10.7	15.4	16.1	15.8	14.3	14.2	9.0	7.8	10.3
1979	2.7	2.5	4.5	5.6	9.3	15.8	19.0	17.5	14.5	13.5	8.7		
1980		4.4	5.6	9.4	9.3	15.8	16.5	19.5	17.2	16.8	7.7	5.7	
1981	3.7	4.5	6.4	8.7	10.6	16.6	17.0	18.1	16.5	10.7	7.3	4.7	10.4
1982	3.1	4.3	5.6	8.0	10.6	16.3	17.4	16.6	14.3	12.2	9.3	6.4	10.3
1983	7.2	4.9	5.4	7.3	10.4	15.0	17.8	18.0	13.8	11.1	7.6	5.2	10.3
1984	3.9	3.2	4.7		10.3	13.1	16.8	17.2	16.2	14.4	10.7	5.3	
1985	2.8	1.9	4.4	7.5	9.7	13.2	16.1	15.7	16.5	14.5	7.7	6.9	9.7
1986	3.8	3.3	5.0	6.6	10.8	13.6	16.7	17.3	14.1	11.7	8.2	6.3	9.8
1987	3.9	2.5	3.2	6.3	10.5	13.5	16.6	16.2	15.7	12.8	10.0	9.5	10.1
1988	7.2	5.4	5.4	8.0	11.8	14.9	15.6	16.4	14.0	10.6	7.8	6.2	10.3
1989	5.2	5.7	6.6	7.2	12.2	15.3	18.6	18.4	16.3	13.3	9.7	6.9	11.3
1990	5.9	6.1	7.5	10.8	13.8	15.0	17.3	19.3	17.0	11.4	7.7	5.2	11.4
1991	3.7	3.5	6.3	8.7	10.1	13.3	16.7	19.2	16.8	11.3	7.5	6.3	10.3
1992	5.8	4.8	6.3	8.1	12.5	16.4	17.7	17.1	13.3	9.1	7.4	5.3	10.3
1993	4.4	4.5	5.6	8.2	11.9	15.5	16.8	16.8	13.6	10.3	8.3	5.0	10.1
1994	4.1	3.7	4.1	7.9	12.2	14.1	18.6	19.5	15.9	11.5	9.6	6.7	10.7
1995	4.6	5.3	5.4	8.2	11.8	14.7	17.7	19.3	15.1	13.4	10.4	6.2	11.0
1996	3.2	1.9	2.9	6.4	9.8	13.8	15.3	17.5	15.8	12.1	7.6	4.2	9.2
1997	3.5	4.2	7.8	9.8	12.5	16.3	17.9	18.1	16.8	13.1	9.4	7.4	11.4
1998	5.2	5.5	7.8	10.0	13.4	16.3	17.2	16.5	15.2	12.4	7.2	5.6	11.0
1999	5.2	5.5	7.3	10.7	13.8	15.9	18.2	19.2	15.7	11.5	9.0	6.0	11.5
2000	4.7	5.4	6.6	9.7	12.8	15.0	17.2	17.3	15.6	11.0	8.1	5.4	10
obs	34	35	35	34	35	35	35	35	35	35	35	34	
mean	4.4	4.4	5.6	7.8	11.2	15.0	17.1	17.6	15.3	12.4	8.4	5.9	
sdev	1.23	1.19	1.27	1.35	1.21	1.14	0.98	1.23	1.13	1.53	1.02	1.27	

Table 8. Monthly Mean Sea Temperature for LOWESTOFT at 52° 27'N, 1° 45'E

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1966	3.2	4.1	5.6	6.8	10.5	14.7	16.2	16.4	16.0	14.2	8.6	5.6	10.2
1967	4.0	4.7	6.3	7.6	11.6	14.7	17.8	18.4	16.1	13.9			
1968		3.7	4.1										
1969					10.5	13.9	17.8	18.6	16.5	14.3	8.7	4.8	
1970	3.0	3.4	4.9	5.2	11.3	14.7							
1971	4.5	5.3	5.5	8.0	12.3	14.9	18.0	18.5	17.4	13.8	8.4	6.6	11.1
1972	5.3	4.7	6.4	8.3	11.7	14.0	16.9	17.1	15.1	11.8	8.7	6.6	10.6
1973	4.4	4.7	6.2	7.7	11.8	16.0	18.2	18.7	18.0	12.1	8.0	4.5	10.9
1974	4.7	6.4	6.4	8.8	12.0	15.2	16.3	17.6	15.6	10.5	8.1	6.6	10.7
1975	6.5	5.6	5.9	7.5	10.7	14.9	17.8	20.5	17.5	12.6	9.0	5.9	11.2
1976	5.8	4.1	5.0	8.3	12.1	16.8	20.5	19.8	16.5	14.5	9.8	5.4	11.6
1977	4.1	5.1	6.9	7.6	11.2	13.9	16.0	17.1	15.8	13.6	9.4	6.5	10.6
1978	4.3	3.0	5.4	7.4	10.7	14.5	15.7	17.1	15.7				
1979	2.2	2.2	4.3	7.4	10.7	15.0	17.1	17.6	16.2	13.7	9.0	7.0	10.2
1980	4.0	5.2	5.7	8.4	11.6	15.6	16.0	17.8	16.6	12.4	8.2	5.6	10.6
1981	4.3	4.2	6.3	8.5	11.6	15.0	16.7	17.8	17.2	12.0	8.8	4.0	10.5
1982	3.1	4.4	6.2	8.8	12.6	16.2	18.0	18.4	17.1	13.4	10.3	6.3	11.2
1983	5.7	3.9	6.2	7.9	12.1	14.9	18.8	19.2	16.0	13.2	9.3	6.5	11.1
1984	4.7	4.3	5.7	8.1	11.3	14.3	16.8	19.0	16.4	13.5	10.8	7.5	11.0
1985	3.1	2.8	5.0	7.8	10.5	13.6	17.5	17.2	16.2	14.1	7.8	6.6	10.2
1986	4.2	1.9	3.7	6.4	11.8	15.5	18.4	17.3	14.6	13.0	9.6	7.1	10.3
1987	3.4	3.5	3.8	8.3	11.4	14.2	17.8	17.4	16.1	12.9	9.5	6.5	10.4
1988	6.3	5.3	5.7	8.2	12.7	15.0	16.7	17.7	15.5	12.8	8.5	6.7	10.9
1989	6.0	5.8	7.0	8.0	13.0	16.0	19.0	18.9	17.3	13.8	9.6	6.9	11.8
1990	6.7	6.9	7.7	9.3	13.7	15.6	17.8	19.4	15.8	13.2	9.4	6.0	11.8
1991	4.6	2.6	6.4	8.9	11.2	13.6	17.9	19.4	17.3	12.9	8.7	5.8	10.8
1992	4.8	4.9	6.5	8.6	13.3	16.8	18.1						
obs.	25	26	26	25	26	26	25	24	24	23	22	22	
mean	4.5	4.3	5.7	7.9	11.7	15.0	17.5	18.2	16.4	13.1	9.0	6.1	
sdev	1.18	1.24	0.99	0.86	0.87	0.89	1.10	1.02	0.83	0.95	0.75	0.87	

Table 9. Monthly Mean Sea Temperature for SOUTHWOLD at 52° 19'N, 1° 41'E

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1966	3.1	4.5	5.5	6.8	10.9	15.1	16.1	16.7	16.3	14.0	8.5	5.7	10.3
1967	3.6	5.2	6.5	7.5	11.6	14.5	17.7	18.2	16.4	13.7	8.9	5.5	10.8
1968	3.8	3.7	5.0	7.9	11.2	14.8	16.3	16.2	16.3	14.3	10.0	6.1	10.5
1969	4.8	3.7	3.4	6.3	10.8	14.5	17.0	19.4	16.3	14.5	9.3	5.0	10.4
1970	4.0	3.7	3.6	5.7	10.0	14.8	16.5	17.4	16.3	13.1	9.8	7.0	10.2
1971	4.7	5.0	4.7	7.4	11.5	13.7	16.7	17.9	16.7	13.8	9.2	6.7	10.7
1972	5.8	4.6	5.5	7.9	10.9	13.5	16.2	16.7	15.1	12.0	9.0	7.1	10.4
1973	5.5	4.7	5.9	7.3	11.0	16.2	17.8	18.2	16.9	12.0	8.4	5.0	10.7
1974	5.2	6.4	5.9	7.9	11.1	14.6	15.8	17.3	15.8	10.7	7.8	7.1	10.5
1975	6.4	5.4	5.7	5.9	9.0	14.9	16.2	18.6	16.3	12.9	8.3	5.9	10.5
1976	5.8	4.2	4.7	6.5	11.1	15.8	18.8	18.5	16.0	13.6	9.4	5.6	10.8
1977	5.1	5.3	7.0	7.8	11.4	14.0	15.0	16.3	15.2	13.2	9.2	7.1	10.6
1978	4.1	3.0	5.2	6.6	10.7	14.2	15.1	16.6	14.5	13.5	11.2	5.6	10.0
1979	2.2	2.2	4.4	6.7	10.5	15.0	16.9	17.1	15.0	13.3	8.5	7.2	9.9
1980	4.2	5.4	5.7	8.1	11.0	14.9	15.4	16.8	16.3	12.4	8.6	5.5	10.4
1981	4.0	4.6	5.7	7.7	11.0	14.3	16.5	17.3	16.8	12.4	9.7	4.5	10.4
1982	3.3	4.2	5.4	7.4	11.5	16.3	18.0	17.5	16.1	13.3	10.4	5.5	10.7
1983	5.4	3.8	4.9	6.6	11.1	14.1	18.5	18.6	14.9	13.0	10.3	6.0	10.6
1984	5.2	4.3	5.0	7.4	10.3	13.8	16.3	18.5	16.0	13.1	10.7	7.9	10.7
1985	3.1	3.6	3.9	7.5	9.8	13.2	16.9	16.7	15.9	14.1	7.8	6.7	9.9
1986	4.5	1.6	3.6	6.3	11.0	14.1	17.2	16.8	14.0	13.1	9.7	7.1	9.9
1987	3.3	3.7	3.7	7.5	10.3	13.4	16.5	16.3	15.7	12.9	9.8	6.5	10.0
1988	6.6	5.4	5.7	7.9	11.9	14.4	16.5	17.1	15.5	12.9	8.7	6.8	10.8
1989	6.4	6.2	7.2	7.7	12.0	15.0	18.0	18.7	17.2	13.9	10.1	7.3	11.6
1990	7.0	7.0	7.7	9.1	13.2	15.2	17.4	19.0	16.3	13.4	9.2	6.0	11.7
1991	5.2	2.6	6.3	8.4	10.6	13.3	17.2	19.0	17.3	13.0	9.1	6.3	10.7
1992	5.9	5.3	6.8	8.3	12.8	16.4	18.4	18.3	15.3	11.5	8.7	6.8	11.2
1993	5.9	5.5	6.2	9.3	12.1	15.6	17.1	17.2	15.4	12.3	8.5	6.1	10.9
1994	5.3	4.1	6.0	8.1	11.6	14.9	18.8	18.8	15.4	12.5	11.2	8.7	11.3
1995	5.2	6.3	7.4	8.9	12.1	14.2	18.7	19.9	16.8	15.0	11.4	6.4	11.9
1996	5.2	3.3	4.4	7.3	10.3	14.7	16.7	18.2	15.5	13.7	9.6	5.7	10.4
1997	3.2	5.9	7.9	9.4	12.6	15.6	17.9	20.4	17.3	13.1	10.4	7.7	11.8
1998	6.4	6.1	7.9	9.7	13.3	15.6	17.0	18.1	16.3	13.3	8.9	6.1	11.6
1999	6.6	4.7	6.4	9.4	13.5	16.0	18.9	18.7	18.3	13.8	10.0	6.4	11.9
2000	5.6	5.9	7.1	9.1	12.7	15.9	16.1	18.4	17.4	13.7	9.8	6.1	11.5
obs	35	35	35	35	35	35	35	35	35	35	35	35	
mean	4.9	4.6	5.7	7.7	11.3	14.8	17.0	17.9	16.1	13.2	9.4	6.4	
sdev	1.21	1.25	1.26	1.04	1.02	0.88	1.06	1.07	0.89	0.85	0.93	0.88	

Table 10. Monthly Mean Sea Temperature for SIZEWELL POWER STATION at 52° 13'N, 1° 38'E

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1967	4.0	4.7	5.2	7.0	10.0	13.5	16.0	17.0	16.0	13.5	8.3	5.6	10.1
1968	3.2	3.1	4.3	7.9	10.7	14.7	16.5	16.5	16.4	14.4	9.5	6.7	10.3
1969	4.3	3.0	3.0	6.5	11.0	14.2	17.0	17.0	16.3	15.2	10.1	5.5	10.3
1970	4.5	4.3	4.1	6.0	10.5	15.5	16.5	17.6	15.8	14.0	10.4	7.2	10.5
1971	5.5	5.6	5.7	8.5	12.0	15.6	18.3	18.7	17.6	14.2	10.0	7.1	11.6
1972	5.6	4.9	6.2	9.0	11.2	13.9	17.0	17.7	15.6	12.8	9.8	6.8	10.9
1973	6.3	6.0	6.0	7.4	10.3	15.4	18.0	18.0	17.9	13.6	9.5	4.9	11.1
1974	5.1	6.9	6.3	8.4	10.7	14.1	15.9	17.0	15.7	12.2	8.4	6.9	10.6
1975	5.9	6.2	6.1	7.0	9.9	13.2	17.4	19.5	18.4	14.1	10.9	7.3	11.3
1976	7.0	4.7	5.6	8.1	11.1	14.7	19.9	19.6	18.0	15.5	12.1	7.3	12.0
1977	4.7	5.5	7.2	7.9	11.3	14.0	16.7	17.6	16.4	14.2	10.6	7.0	11.1
1978	5.1	3.7	5.6	7.2	10.0	13.9	16.1	17.8	16.6	14.0	12.4	7.4	10.8
1979	4.0	3.0	4.3	7.0	9.8	14.9	17.2	18.0	17.2	14.4	10.7	8.2	10.7
1980	5.1	5.8	6.1	7.6	10.8	14.3	15.8	18.1	17.1	13.9	9.5	6.4	10.9
1981	5.1	5.0	5.5	8.1	9.9	14.1	16.0	17.7	17.6	13.5	10.5	6.4	10.8
1982	3.1	4.3	5.8	8.0	11.0	15.7	17.8	18.5	16.9	14.2	11.4	7.5	11.2
1983	6.4	3.9	5.4	7.2	11.2	14.6	18.8	19.3	16.9	14.0	10.3	7.3	11.3
1984	5.6	4.5	4.6	7.1	10.0	11.1	16.7	18.6	16.8	13.5	11.6	8.7	10.7
1985	3.8	2.8	4.0	7.6	9.3	13.1	16.6	16.8	16.4	15.5	9.9	7.2	10.3
1986	5.0	2.8	2.9	5.6	10.4	14.0	17.6	17.9	15.4	14.0	10.2	7.7	10.3
1987	4.4	4.0	4.0	7.5	10.1	13.0	17.1	16.8	17.1	14.1	11.7	7.5	10.6
1988	6.7	5.6	5.5	7.9	12.1	14.8	16.9	17.9	16.4	13.6	10.2	7.4	11.3
1989	7.0	6.5	6.9	8.1	12.3	15.5	18.8	19.2	17.9	14.9	11.6	8.0	12.2
1990	7.6	7.4	8.2	9.3	13.3	15.2	17.8	19.4	19.7	14.3	11.3	7.3	12.6
1991	5.6	3.4	6.2	8.7	10.1	13.8	17.4	19.6	18.7	14.3	10.3	7.4	11.3
1992	6.3	5.5	6.8	8.6	11.9	16.6	18.5	19.6	16.5	13.2	9.5	7.4	11.7
1993	6.1	6.0	6.2	9.4	13.3	16.4	17.9	18.1	16.5	12.2	8.7	6.3	11.4
1994	5.8	4.8	6.1	8.1	11.7	15.0	19.4	19.6	16.5	13.4	12.1	9.7	11.9
1995	5.8	6.4	6.7	8.9	12.0	14.9	19.4	21.9	18.6	16.5	13.1	8.0	12.7
1996	5.7	3.7	4.7	7.4	9.9	14.7	17.1	18.4	16.7	14.8	11.4	7.0	11.0
1997													
1998	7.4	6.4	8.0	10.0	12.8	15.4	17.7	19.0	17.6	14.7	11.2	7.9	12.3
1999	7.3	6.6	8.3	9.8	13.2	17.0	20.1	20.7	20.1	17.1	13.2	9.1	13.5
2000	6.7	6.9	8.5	10.5	14.1	17.6	18.6	20.3	19.6	15.7	12.1	10.5	13.4
obs.	33	33	33	33	33	33	33	33	33	33	33	33	
mean	5.5	5.0	5.8	8.0	11.1	14.7	17.5	18.5	17.2	14.2	10.7	7.4	
sdev	1.19	1.35	1.41	1.10	1.22	1.26	1.17	1.24	1.19	1.05	1.24	1.11	

Table 11. Monthly Mean Sea Temperature for BRADWELL POWER STATION at 51° 45'N, 0° 54'E

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1964	4.0	4.5	5.0	8.5	15.0	17.5	19.5	19.5	16.5	12.5	9.5	6.5	11.5
1965	4.0	4.5	5.5	10.5	14.0	16.0	17.0	17.5	16.0	14.0	8.5	5.5	11.1
1966	4.3	5.7	7.8	8.5	13.4	18.5	18.0	18.0	18.0	14.0	8.5	6.0	11.7
1967	4.0	5.5	7.5	9.0	13.0	17.5	20.5	19.5	17.5	13.5	8.5	5.5	11.8
1968	4.5	4.5	6.5	10.6	13.8	16.7	17.8	17.6	16.4	14.8	9.7	6.8	11.6
1969	5.5	3.7	4.7	8.6	13.5	16.8	20.3	20.2	17.2	15.2	9.9	3.7	11.6
1970	3.2	4.5	4.4	6.5	13.6	18.2	18.5	19.1	16.9	13.5	9.4	7.0	11.2
1971	4.8	6.3	6.5	9.2	12.3	15.8	19.5	18.9	17.2	13.5	9.1	6.8	11.7
1972	5.5	4.7	6.5	9.6	12.5	15.0	18.6	17.8	15.0	12.5	9.3	7.0	11.2
1973	5.8	5.4	7.2	8.4	12.3	18.0	19.0	19.5	17.5	12.1	9.4	4.8	11.6
1974	6.0	7.0	6.9	10.2	12.8	16.3	18.5	18.7	15.6	10.4	7.5	6.5	11.4
1975	6.7	5.5	5.9	7.8	11.9	15.7	18.5	21.1	17.8	13.2	9.9	6.2	11.7
1976	6.8	3.5	5.9	9.7	12.6	17.6	21.8	19.6	17.4	15.3	10.9	5.5	12.2
1977	5.0	6.5	9.0	9.1	13.0	15.7	19.0	18.5	17.0	14.0	10.0	7.0	12.0
1978	4.5	3.7	7.5	8.4	12.1	17.4	17.1	18.5	16.7	13.2	12.1	6.5	11.5
1979	2.3	2.6	6.0	9.2	11.5	16.4	18.4	18.4	16.6	14.4	9.1	7.3	11.0
1980	3.3	4.4											
1981													
1982		6.3	8.2	11.7	14.7	19.1	19.5	19.5	17.2	13.7	11.1	6.4	
1983	6.4	3.5	6.9	8.5	13.3	17.4	21.5	20.5	15.7	12.6	9.3	6.9	11.9
1984	5.5	5.0	5.8	9.3	12.2	16.5	18.8	21.2	16.9	13.4	10.9	7.7	11.9
1985	3.3	2.5	3.8	9.4	11.4	15.5	19.2	17.6	16.7	15.5	8.6	7.0	10.9
1986	4.5	2.6	3.9	7.4	12.8	16.0	20.2	18.8	14.9	14.1	10.2	8.2	11.1
1987	2.6	3.2	4.9	10.2	13.6	15.7	20.3	18.3	18.6	14.0	11.1	7.5	11.7
1988	7.6	6.2	7.5	9.7	14.4	16.9	18.2	18.9	16.6	14.1	9.6	7.4	12.3
1989	7.8	7.6	8.2	9.4	15.3	17.4	19.9					8.0	
1990	6.8	7.1	8.4	10.1	15.7	16.8	18.5	20.6	16.8	13.9	10.4	6.2	12.6
1991	5.0	2.4	7.7	9.8	11.8	14.5	19.2	20.7	17.9	13.1	9.5	6.9	11.5
1992	6.9	5.7	8.5	10.4	10.0		21.0	18.9	16.5	13.5	9.2	7.5	
1993	7.0	5.5	7.2	11.1	14.5	18.0	18.6	18.4	16.7	11.9	7.2	5.7	11.8
1994	5.4	4.4	7.3	9.3	14.1	17.0	21.9	20.6	16.0	12.7	11.4	9.1	12.4
1995	4.9	7.0	7.1	10.9	13.4	16.4	20.7	22.3	13.7	14.7	10.2	5.4	12.2
1996	4.7	2.3	4.7	8.8	11.5	17.4	18.4	19.7	15.7	13.6	9.8	5.0	11.0
1997	2.1	4.8	8.6	11.0	13.7	17.2	19.1	20.0	17.9	14.2	9.8	6.9	12.1
1998	6.3	4.9	7.8	10.0	14.2	16.7	17.7	19.6	16.5	13.3	9.1	5.4	11.8
1999	6.3	5.4	8.0	10.7	11.0	15.0	17.5	20.1					
2000							18.4	17.3	19.7	13.1	11.8	7.9	
obs.	34	35	34	34	34	33	35	34	33	33	33	34	
mean	5.1	4.8	6.7	9.5	13.1	16.7	19.2	19.3	16.8	13.6	9.7	6.6	
sdev	1.50	1.46	1.43	1.12	1.29	1.06	1.26	1.19	1.13	1.04	1.11	1.10	

Table 12. Monthly Mean Sea Temperature for LEIGH ON SEA at 51° 32'N, 0° 39'E

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1966	4.9	5.9	7.4	9.2	13.2	17.3	18.8	18.2	17.0	14.1	8.1	5.5	11.6
1967	3.9	5.6	7.3	8.9	13.0	15.9	19.5	19.1	15.4	12.2	8.8	8.1	11.5
1968	4.6	3.7	5.1	10.4	12.8	17.2	18.2	17.6	16.5	14.6			
1969	6.2	3.9	4.9	8.7	14.4	17.3	20.0	18.7	17.4	15.1	9.4	4.6	11.7
1970	4.1	4.8	5.0	8.6	14.9	18.6	18.6	18.7	16.7	13.1	8.9	6.4	11.5
1971	4.7	6.2	6.1	9.4	14.4	16.7	18.4	17.6	17.2	14.5	8.4	7.0	11.7
1972	6.2	5.2	7.5	9.8	13.4	15.1	18.5	17.8	14.6	12.3	8.9	6.9	11.4
1973	5.8	6.6	8.0	9.8	13.4	18.1	20.3	19.5	16.0	12.3	8.1	5.6	12.0
1974	6.8	7.6	7.8	10.4	12.2	14.3	16.8	18.9	15.3		8.3	6.8	
1975	7.2	7.3	5.9	7.5	13.4	16.0	18.7	21.4	17.1	12.0	9.8	6.5	11.9
1976	7.3	4.9	5.8	10.5	14.6	17.1	18.5	20.0	17.8	14.1	13.3	6.0	12.5
1977	4.4	6.1	8.1	8.1	12.1	15.7		18.3	15.1	12.6	7.2	6.3	
1978	3.8	3.9	6.8	8.5	12.9	15.0	15.9	17.3	16.3	13.1	8.9	6.5	10.7
1979	2.2	4.2	6.5	10.1	11.7	16.3	18.8	18.5	16.7	13.8	6.9		
1980	3.7	5.5	7.3	9.9	12.9	16.5	16.0	19.7	17.4	12.5	7.4	5.1	11.2
1981	4.9	7.2	8.8	9.3	11.4	15.5	17.7	17.5	17.0	11.5	9.5	3.4	11.1
1982	2.6	5.4		9.8	14.8	16.1	19.4	19.3	18.2	13.5	7.5	6.5	
1983	6.5	3.8		7.4	13.1	16.1	21.6	19.8	15.7	12.1	7.0	5.8	
1984	4.9		5.5	9.2	12.4	17.4	19.2	20.3	16.7	12.6	11.7	7.8	
1985	2.7	4.5	6.7	11.1	13.8	16.0	20.5	18.0	17.0	14.9	7.0	6.8	
1986	4.3		3.3	7.6	12.5	15.9	19.8	18.1	14.7	14.1	9.7	6.5	
1987	2.6	2.2	5.0	8.5	13.1	14.2	19.2	19.7	18.7	12.7	9.1	7.5	11.0
1988	7.0	6.0	8.2	9.0	13.6	17.5	18.2	17.7	16.0	12.9	4.2	6.4	11.4
1989	7.2	6.9	8.0	10.1	16.3	19.2	20.2	20.5	17.3	16.2	10.3	7.1	13.3
1990	8.2	9.4	10.7						15.8	14.0	8.7	4.7	
1991	4.5		8.2	9.3	13.2	13.9	19.3	21.6	19.5	13.5	8.7	7.0	
1992	5.8	4.0	7.9	9.2	15.4	18.8	19.5	18.0	14.7	11.7	8.5	6.3	11.7
1993	6.7	7.1	8.1	10.3	15.1	17.3	17.1	17.2	14.9	11.0			
1994					13.0	17.5	21.5	18.9	16.0	12.7	11.7	8.2	
1995	4.9	7.2	8.3	10.7		16.9	21.6	21.8	16.5	14.6	8.1	4.3	
1996	4.4	2.3	5.0	8.4	12.0	17.5	18.8	18.5	15.8	13.5	8.6	4.3	10.8
1997	1.7	4.7	11.4	12.0	14.1	14.9	18.2	21.9	18.8	14.3	9.1	7.2	12.4
1998	6.4	5.9		9.4	14.4	16.2	17.6	17.7	15.3	12.2	7.8	5.6	
1999	5.0	5.0		12.6	15.0	16.4							
2000	5.7	7.7	8.8	11.3	16.1	19.4	18.6	21.5	18.0	14.8	9.5	9.2	13.4
obs.	34	31	30	33	33	34	32	33	34	33	32	31	
mean	5.1	5.5	7.1	9.5	13.6	16.6	18.9	19.1	16.6	13.3	8.7	6.3	
sdev	1.62	1.63	1.76	1.21	1.23	1.37	1.41	1.41	1.24	1.20	1.64	1.26	

Table 13. Monthly Mean Sea Temperature for LITTLEBROOK POWER STATION at 51° 28'N, 0° 15'E

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1964				11.0		19.7	21.8	21.5	20.3	17.0	14.3	11.8	
1965	10.0	9.4	9.8	12.9	15.8	18.9	19.3	19.9	18.7	17.8	13.1	9.6	14.6
1966	8.5	10.6	11.5	11.7	15.5	19.5	19.0	20.3	20.0	19.0	13.0	10.5	14.9
1967	9.6	9.8	10.8	12.3	15.7	19.7	21.2	20.9	19.2	17.3	12.6	10.9	15.0
1968	8.3	9.8	9.6	12.2	16.8	20.2	21.0	20.0	19.7	17.7	13.0	12.0	15.0
1969	9.3	8.7	10.1	12.2	16.0	16.2	22.5	23.0	20.2	19.6	15.2	13.2	15.5
1970	11.8	11.0	10.9	12.2	18.0	22.0	22.8	22.4	20.4	17.8	14.7	11.4	16.3
1971	9.8	10.2	10.6	12.7	16.8	18.0	20.5	20.5	19.6	18.1	13.8	11.6	15.2
1972	10.8	9.9	12.1	14.2	16.1		21.1	21.6	19.0	15.7	14.4	10.9	
1973	10.4	10.6	11.4	12.9	14.8	19.5	21.5	21.5	20.1	16.4	13.2	8.9	15.1
1974	10.4	10.5	11.4	13.2	13.4	18.9	20.9	20.8	20.2	14.3	12.0	11.4	14.8
1975	11.1	9.8	9.6	9.7					18.5	15.8	12.8	12.0	
1976	12.7	10.0							19.6		15.4	11.7	
1977	9.5	10.9	11.2	10.2	13.8	17.3	20.2		17.6	18.5	13.7	11.0	
1978	9.6	8.7	10.3	9.9	12.0				16.9	12.1	14.4	11.0	
1979	8.0	9.4	9.6	10.1	12.8				18.0	18.0	16.2		
1980													
1981													
1982				10.8	14.1	20.0	20.5	20.5	18.7	14.9	12.2	8.0	
1983	8.2	6.1	8.4	10.3	13.8	17.5	22.3	22.1	17.7	15.1	12.8	7.8	13.5
1984	6.6	6.3	7.1	10.7	15.2	18.7	21.7	22.8	20.8	16.8	15.6	11.3	14.5
1985	6.2	6.7	8.1	10.5	12.5	16.7	20.2	19.5	19.0	17.8	12.1	9.3	13.2
1986	6.3	4.6	4.3	8.2	12.4	16.0	20.5	19.1	16.4	15.6	11.9	9.2	12.0
1987	5.1	5.2	6.3	9.2	14.2	16.0	20.5	19.7	19.6	15.2	12.1	8.6	12.6
1988	8.3	6.9	8.6	11.0	14.8	17.1	18.5	19.3	17.0	14.2	11.6	8.7	13.0
1989	9.1	8.9	9.2	10.9	14.4	20.0	21.7	21.2	19.3	16.4	13.3	10.4	14.6
1990	9.1	8.3	10.6	11.6	16.2	18.9	19.7	21.7	19.5	15.6	12.8	9.7	14.5
1991	7.7	6.0	9.2	11.8	12.7	15.8	19.4	21.2	19.9	15.4	10.5	9.7	13.3
1992	8.9	8.0	9.8	10.6	14.1	20.2	21.0	21.0	18.3	14.4	11.1	9.1	13.9
1993	7.9	8.9	7.9	10.4	14.2	17.9	19.9	19.4	17.5	13.9	10.7	7.6	13.0
1994	6.4	6.7	6.5	9.4		15.2	21.3	21.4	18.0	15.3	13.1	11.7	
1995	7.1	8.2	8.2	8.9	13.5	15.8	21.1		20.4	16.6	12.8	9.2	
1996	6.5	5.7	6.4	8.4			20.8	21.0	18.6	15.5	12.2	8.3	
1997													
1998	8.0	7.4	8.8	10.1	14.2		18.9	20.2			11.8	7.2	
obs.	30	30	29	31	27	25	28	26	31	30	32	31	
mean	8.7	8.4	9.3	11.0	14.6	18.2	20.7	20.9	19.0	16.3	13.1	10.1	
sdev	1.79	1.86	1.86	1.46	1.52	1.80	1.09	1.07	1.17	1.70	1.40	1.55	

Table 14. Monthly Mean Sea Temperature for WEST THURROCK POWER STATION at 51° 28'N, 0° 18'E

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1964	8.4	9.5	11.2	12.7	17.1	18.9			18.3	14.4	12.2	9.4	
1965	8.2	7.2	7.2	10.9	15.0	17.4	19.0	18.6	17.7	17.0	10.6	9.2	13.2
1966	7.1	9.7	10.2	11.4	15.0	17.0	19.4	19.1	19.6	18.0	12.3	9.4	14.0
1967	8.5	10.0	10.1	12.0		18.2	23.1	22.0	20.0	17.1	12.1	10.7	
1968	9.9	10.6	9.8	12.4	16.1	18.9	19.6	19.7	19.0	17.1	13.7	9.2	14.7
1969	8.1	6.8	7.0	9.3	13.7	17.4	20.9	20.5	19.6	17.7	13.1	9.5	13.6
1970	8.5	8.6	8.6	10.7	14.8	20.1	20.1	20.0	19.0	16.9	13.8	11.6	14.4
1971	9.3	9.7	10.1	11.6	16.6	17.8	20.3	21.2	19.5	15.8	11.6	9.6	14.4
1972	8.9	12.0	12.7	13.2	15.2	16.0	21.9	21.4	20.1	17.8	15.0	12.0	15.5
1973	10.6	10.6	9.7	12.5	14.4	20.0	21.7	21.1	20.7	16.3	14.1	9.6	15.1
1974	10.0	9.6	10.6	13.7		19.5	20.5	21.7	19.3	12.9	9.6	9.7	
1975	10.3	9.9	9.6	10.5	14.2	17.0	21.5	23.4	20.5	15.8	13.2	9.3	14.6
1976	9.3	7.6	8.9	11.5	14.7	19.1	24.3	22.0	19.1	17.5	13.6	8.1	14.6
1977	7.1	8.1	9.8	10.1	13.6	16.6	19.2	19.9	17.8	15.7	13.6	9.4	13.4
1978	7.6	6.0	8.9	10.3	13.5	17.9	18.2	19.6	18.6	15.8	14.0	9.1	13.3
1979	5.5	5.0	6.9	10.2	13.3	16.8	19.7	19.5	18.0	16.2	11.2	7.8	12.5
1980	5.8	7.7	8.8	10.8	13.7	17.4	17.5	19.8	18.8	16.0	10.9	8.6	13.0
1981	6.7	6.7	7.9	10.8	12.2	15.7	17.7	19.4	19.5	15.2	11.2	7.3	12.5
1982	5.6	8.5	8.8	11.6	14.3	19.6	20.6	20.7	19.2	15.6	12.5	8.1	13.8
1983	7.9	6.4	7.8	9.5	13.5	17.3	21.7	21.3	17.4	14.9	11.5	8.6	13.2
1984	6.9	6.5	7.0	9.5	14.3	18.5	21.2	22.1	20.8	16.7	15.6	11.5	14.2
1985	6.9	6.4	8.3	10.6	12.8	17.2	20.2	19.8	18.8	17.9	12.2	9.0	13.3
1986	5.8	5.0	5.0	7.9	11.8	16.8	20.6	19.3	16.0	15.7	11.6	9.5	12.1
1987	5.3	5.0	6.4	9.5	13.3	15.6	19.8	19.3	18.9	14.9	11.9	8.4	12.4
1988	8.1	6.7	8.0	10.9	14.5	16.9	18.3	19.4	17.1	14.4	12.2	8.2	12.9
1989	8.5	8.2	9.0	10.5	14.7	18.4	21.1	21.2	19.1	15.6	12.5	9.7	14.0
1990	8.0	8.0	9.0	11.0	15.6	17.3	20.0	21.0	18.6	15.9	13.1	9.0	13.9
1991	7.1	5.6	9.0	11.2	12.3	15.5	19.6	19.7	19.8	14.8	11.3	9.3	12.9
1992	8.7	7.4	9.0	10.8	14.1	19.9	20.7	20.7	17.8	14.7	11.0	9.2	13.7
1993	7.2	8.4	7.9										
obs.	30	30	30	29	27	29	28	28	29	29	29	29	
mean	7.9	7.9	8.8	11.0	14.2	17.7	20.3	20.5	18.9	16.0	12.5	9.3	
sdev	1.45	1.84	1.55	1.25	1.27	1.34	1.52	1.15	1.10	1.23	1.37	1.08	

Table 15. Monthly Mean Sea Temperature for TILBURY POWER STATION at 51° 27'N, 0° 24'E

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1964	7.9	8.5	8.6	11.3	16.4	19.3	20.9	21.1	19.6	15.9	13.1	10.8	14.5
1965	8.6	8.2	8.7	10.3	15.4	18.2	19.3	19.8	17.4	16.0	10.8	8.3	13.4
1966	6.7	9.1	9.9	10.9	14.7	18.0	19.0	18.9	18.5	17.2	11.2	9.4	13.6
1967	8.3	9.8	10.2	10.9	14.4	18.0	21.3	21.1	19.0	16.6	12.2	9.7	14.3
1968	8.0	8.4	9.2	12.1	15.5	18.3	19.5	19.0	19.0	17.4	13.3	10.5	14.2
1969	8.6	7.2	8.2	11.0	15.7	18.6	21.9	22.3	19.7	18.7	14.3	10.0	14.7
1970	9.3	7.4	8.3	10.6	16.6	20.8	21.0	21.7	20.0	16.6	13.6	10.7	14.7
1971	9.4	9.7	9.9	11.4	16.3	17.9	21.1	21.2	19.0	17.7	12.4	10.4	14.7
1972	9.7	8.2	11.5	13.2	14.6	16.9	19.7	20.8	18.3	15.6	13.2	10.9	14.4
1973	10.1	9.7	10.1	11.3	14.7	16.9	21.3	20.6	20.7	15.5	12.8	8.4	14.3
1974	8.5	9.8	10.7	12.2	14.7	18.1	20.5	21.2	18.9	13.7	11.4	10.2	14.2
1975	10.5	9.2	8.8	8.9	14.4	17.6	20.6	23.6	20.3	16.2	13.3	10.1	14.5
1976	9.1	7.4	8.9	11.6	14.0	19.1	23.4		18.1	17.0	13.0	8.8	
1977	7.4	7.9	10.4	10.7	12.9	16.4	19.7	20.2	19.0	15.9	13.3	9.0	13.6
1978	7.4	5.6	8.2	10.2	13.1	17.8	18.1	19.5	18.4	16.5	14.5	9.2	13.2
1979	5.4	5.0	6.9	10.8	14.1	16.5	19.5	19.6	18.2	16.4	12.1	10.3	12.9
1980	6.0	7.3	8.5	10.5	13.5	17.4	17.5	20.0	18.7	15.2	10.0	8.3	12.7
1981	6.6	6.7	8.3	11.3	12.3	16.3	18.7	20.3	20.3	15.7	12.1	7.1	13.0
1982	5.2	7.5	8.0	11.1	14.2	19.2	19.9	19.4	18.6	14.8	12.4	8.4	13.2
1983	8.2	6.0	7.3	9.7	13.3	17.4	22.0	21.6	17.6	14.7	11.1	8.6	13.1
1984	7.0	6.7	7.1	9.7	15.2	18.7	21.1	22.2	19.7	16.1	15.2	11.9	14.2
1985	7.1	6.6	7.4	10.7	12.8	16.7	20.3	19.5	18.6	17.4	12.0	9.0	13.2
1986	6.4	5.2	3.9	7.9	11.5	15.8	20.7	19.1	16.5	15.6	11.9	9.8	12.0
1987	5.5	5.2	6.1	8.6	12.7	15.8	19.5	19.2	18.8	15.1	12.1	8.6	12.3
1988	8.7	6.9	8.0	11.2	15.0	16.9	18.6	19.6	17.3	14.4	10.3	9.0	13.0
1989	8.7	8.7	9.2	10.4	14.7	18.4	21.3	20.8	19.7	15.7	12.1	10.2	14.2
1990	9.0	9.0	9.6	11.2	15.6	17.5	19.5	21.4	19.1	15.6	12.1	9.1	14.1
1991	9.0	9.0	9.6	11.2	15.6	17.5	19.5	21.4	19.1	15.6	12.1	9.2	14.1
1992	8.5	8.0	8.2	10.2	14.8	19.7	20.8	20.6	19.6	14.4	10.8	9.0	13.7
1993	8.0	8.2	7.7	10.2	14.0	17.8	19.9	19.1	17.5	14.0	10.2	7.1	12.8
1994	6.1	5.8	6.6	8.6	12.8	14.7	20.0	21.3	17.2	14.8	12.7	11.6	12.7
1995	7.0	8.1	8.2	10.4	13.1	15.5	19.9	22.1	19.0	15.9	13.5	9.0	13.5
1996	6.0	4.9	6.1	8.7	12.1	18.1	19.1	20.3	17.8	15.0	11.3	8.0	12.3
1997													
1998	7.9	6.6	9.0	10.9	13.8	17.2	18.0	19.6	17.8	14.8	11.7	7.6	12.9
obs.	34	34	34	34	34	34	34	33	34	34	34	34	
mean	7.8	7.6	8.5	10.6	14.3	17.6	20.1	20.5	18.7	15.8	12.3	9.4	
sdev	1.39	1.47	1.51	1.11	1.29	1.27	1.25	1.15	0.99	1.11	1.22	1.17	

Table 16. Monthly Mean Sea Temperature for KINGSNORTH POWER STATION at 51° 25'N, 0° 36'E

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1971	8.0	6.2	6.2	8.2	13.4	15.0	19.4	18.8	17.3	14.1	7.6	7.2	11.8
1972	5.5	5.5	8.0	10.3	12.2	14.3	17.9	17.7	15.7	12.1	9.3	7.1	11.3
1973	6.4	6.6	7.1	8.6	12.6	17.8	20.4	19.1	15.6	11.6	9.4	5.6	11.7
1974	7.6	8.2	8.3	11.6	13.3	16.5	18.2	20.2	16.9	12.1	8.7	8.1	12.5
1975	8.1	7.3	7.2	8.5	12.6	15.2	18.8	22.4	18.3	13.3	11.0	7.1	12.5
1976	7.1	3.9	6.3	10.3	12.7	17.5	22.1	19.5	17.5	15.2	11.1	6.4	12.5
1977	6.0	8.2	10.0	10.3	14.0	16.3	19.4	19.1	16.7	14.2	10.6	6.7	12.6
1978	5.5	4.3	7.2	9.6	12.8	18.2	18.3	19.7	17.5	15.0	13.3	8.0	12.5
1979	3.6	3.6	5.5	9.6	13.1	17.7	20.3	19.7	18.0	16.0	10.6	9.0	12.2
1980	5.0	6.9	7.9	10.5	14.4	17.5	17.8	20.9	18.8	14.7	9.7	7.4	12.6
1981	5.7	6.5	7.7	11.4	12.8	16.4	18.6	20.7	19.6	14.0	11.0	6.4	12.6
1982	5.6	6.7	6.8	11.0	14.8	19.8	20.6	20.5	18.7	14.3	11.8	7.3	13.2
1983	7.5	4.5	6.9	9.2	13.5	17.5	22.6	21.8	17.3	14.3	11.2	7.2	12.8
1984	5.6	5.6	6.4	9.7	13.9	18.0	21.2	22.1	19.1	14.8	12.6	9.4	13.2
1985	4.1	4.0	6.3	9.2	10.9	14.9	19.2	16.8	16.5	15.3	8.2	4.7	10.8
1986	4.0	3.4	3.5	7.5	11.6	16.3	21.5	19.5	15.9	15.1	12.1	8.6	11.6
1987	4.7	4.8	6.7	8.4	15.2	15.9	21.0	19.2	18.8	14.1	12.0	8.2	12.4
1988	7.5	6.6	7.8	10.8	14.7	17.0	18.1	18.7	16.4	14.1	10.5	7.9	12.5
1989	8.2	8.1	9.0	10.5	15.5	18.8	21.8	20.8	18.6	14.8	11.5	7.5	13.8
1990	7.0	8.0	8.4	11.0	17.5	16.8	19.8	22.6	17.5	14.5	11.0	6.9	13.4
1991	6.3	5.0	8.4	10.6	12.4	15.3	19.3	21.4	19.2	14.0	10.0	8.0	12.5
1992	7.3	6.4	8.7	10.5	14.4	20.1	20.6	20.6	17.3	14.3	10.3	7.8	13.2
1993	7.6	7.5	7.9	12.0	14.9	19.3	20.0	19.1	16.7	12.8	8.9	6.4	12.8
1994	6.5	6.1	8.8	10.3	14.5	18.9	22.2	21.3	16.4	13.4	12.4	9.9	13.4
1995	6.4	8.2	8.1	11.9	14.1	16.6	22.7	23.2	18.1	15.7	10.9	7.0	13.6
1996	6.5	3.7	6.3	10.2	12.3	18.6	19.9	21.0	17.5	14.8	11.1	6.9	12.4
1997	3.6	6.1	9.9	11.9	14.8	18.1	20.0	23.2	19.9	14.7	10.5	8.5	13.4
1998	7.8	6.5	9.2	11.3	15.2	18.1	19.2	20.8	18.6	15.0	10.8	7.6	13.3
1999	7.9	6.9	9.6	12.6	15.3	17.9	22.4	21.7	19.9	14.5	10.6	7.6	13.9
2000	6.9	7.7	9.9	11.0	16.0	18.6	19.1	21.2	19.6	15.2	11.1	8.4	13.7
obs	30	30	30	30	30	30	30	30	30	30	30	30	
mean	6.3	6.1	7.7	10.3	13.8	17.3	20.1	20.4	17.8	14.3	10.7	7.5	
sdev	1.38	1.52	1.46	1.24	1.44	1.49	1.48	1.55	1.26	1.04	1.29	1.07	

Table 17. Monthly Mean Sea Temperature for GRAIN POWER STATION at 51 26'N, 0 43'E

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1979								18.5	17.2	15.8	8.8	9.4	
1980	4.7	6.0	7.0	8.6	11.8	15.4			16.9	13.5	8.2	6.2	
1981	4.7	5.7	6.1	10.1	10.7	15.7		19.2	18.6	10.5	10.3	3.2	
1982	4.2	6.0	6.9	9.9	13.8	18.3	19.2	20.1	17.6	14.3	11.8	7.6	12.5
1983	7.3	4.4	6.4	8.1	12.2	17.5	20.9	21.0	15.2	11.9	9.4	7.7	11.8
1984	4.6	5.0	5.1	9.7	12.4	16.1	19.0	20.1	17.8	14.1	12.5	9.2	12.1
1985	4.2	3.7	5.5	9.3	10.3	15.0	18.7	17.2	16.1	15.5	9.7	6.4	11.0
1986	4.5	2.4	2.5	6.0	11.5	14.3	19.2	18.1	14.0	14.0	10.1	8.3	10.4
1987	2.2	3.4	3.7		11.2	14.4	18.5	18.0	17.5	12.8	10.1	6.3	
1988	6.0	5.4	4.6	8.3	12.8	15.3	16.1	16.3	14.8	12.9	8.3	6.1	10.6
1989	6.3	6.2	6.7	8.1	14.7	17.4	19.6	19.6	18.0	14.1	10.9	7.1	12.4
1990	7.0	6.8	8.4	10.3	14.4	16.1	17.5	20.1	20.0	13.8	11.3	6.0	12.6
1991	5.4	3.7	6.7	9.4	10.9	14.3	18.4	20.1	18.7	13.3	9.3	7.1	11.4
1992	6.6	4.9	6.8	8.6		17.3	18.8	19.0	15.6	13.6	9.0	7.9	
1993	5.7	6.5	6.5	9.8	13.2	17.9	18.2	18.3	15.4	11.6	7.2	5.9	11.4
1994	5.8	4.8	5.8	9.5	13.3	19.0		19.0		12.8	11.9	10.1	
1995	5.3	7.5	7.3		12.4		17.1	21.5		14.3	10.9	5.8	
1996	3.5	2.3	5.0	5.0		17.4	19.1	19.4	15.3	13.6	11.9	6.7	
obs.	17	17	17	15	15	16	14	17	16	18	18	18	
mean	5.2	5.0	5.9	8.7	12.4	16.3	18.6	19.1	16.8	13.5	10.1	7.1	
sdev	1.31	1.50	1.43	1.50	1.34	1.51	1.16	1.33	1.66	1.29	1.48	1.61	

Table 18. Monthly Mean Sea Temperature for DOVER at 51° 7'N, 1° 21'E

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1926					10.7	10.8	16.2	17.1	17.6	14.3	10.7	7.4	
1927	6.1	6.6	7.5	9.2	11.7	13.6	15.9	16.7	16.2	13.7	11.4	7.6	11.4
1928	6.1	7.1	7.5	8.8	10.7	13.7	16.3	17.4	16.8	14.1	11.6	8.5	11.6
1929	4.8	4.1	4.1	6.3	9.7	13.1	16.0	17.1	17.7	14.1	10.4	9.0	10.5
1930	8.2	6.3	6.3	8.6	10.7	14.2	15.9	16.6	16.6	14.2	10.9	9.1	11.5
1931	7.2	6.1	5.5	7.4	10.3	13.3	15.8	16.6	15.4	13.3	10.8	8.5	10.9
1932	7.4	5.4	5.0	7.7	10.1	13.2	15.8	17.3	16.8	13.5	9.8	7.3	10.8
1933	6.2	5.2	7.4	9.2	11.9	14.3	16.8	18.3	17.7	15.1	10.2	5.4	11.5
1934	5.6	4.9	5.4	7.7	10.4	14.3	17.2	17.3	17.3	14.7	11.0	10.3	11.3
1935	8.0	6.2	6.7	8.6	10.7	13.3	17.0	18.6	16.8	13.7	10.8	7.3	11.5
1936	7.3	5.9	7.1	8.3	10.8	13.7	16.0	17.1	17.2	13.2	9.7	7.8	11.2
1937	7.7	7.7	7.1	9.6	11.8	14.4	16.3	17.8	17.1	14.5	11.0	8.0	11.9
1938	6.7	6.2	6.7	8.5	10.4	13.3	15.4	17.3	16.6	14.3	12.3	7.9	11.3
1939	6.7	6.3	6.7	8.3	10.7	14.1	15.7	17.4	17.6	13.3	11.2	8.3	11.4
1940	4.2	3.7	6.4	7.6	10.9	14.5	16.3	16.9	16.2		10.4	7.2	
1941	3.8	5.0	6.4	7.3	9.3	12.3							
1942													
1943													
1944													
1945													
1946													
1947					10.9	13.9		18.7	19.1	15.4	12.0		
1948					12.1	14.2	15.3	17.1	16.5	15.0	12.0	10.2	
1949	7.1	6.3	5.6			13.9	16.8	17.8	18.5	16.9	13.2		
1950		6.8	7.8	8.9	11.1	14.5	16.6	17.7	16.7	14.3	10.5	8.1	
1951													
1952	6.9	5.2	6.4	8.0	11.2	13.9	16.9	17.3	16.0	13.0	9.7	5.9	10.9
1953	5.8	4.4	4.7	7.2	10.6	13.1	15.6	17.2	16.7	15.0	12.2	11.1	11.1
1954	6.2		6.1	8.1	10.4	12.8	14.9	15.8	15.8	13.9	11.9	9.4	
1955	5.6	5.6	4.4	6.1	9.4	12.3	15.6	17.8	17.2	14.4	10.6	8.3	10.6
1956	6.9			6.6	9.9	12.4	14.7	15.9	15.7	14.1	9.4	8.1	
1957	7.2	7.8	8.3	9.4	11.1	14.4	16.7	17.2	16.1	13.9	11.1	7.8	11.8
1958	6.7	6.7	5.6	6.7	10.0	13.3	15.6	16.7	16.7	14.4	11.7	8.3	11.0
1959	7.1	5.8	7.1	9.0	11.7	14.4	17.4	18.4	18.4	16.4	12.6	9.7	12.3
1960	6.9	6.5	7.1	8.9	11.1	14.1	16.3	17.3	17.1	13.9	11.8	9.6	11.7
1961	7.3	7.7	8.6	9.9	12.4	14.7	16.9	17.1	17.4	15.8	10.8	8.2	12.2
1962	6.2	5.9		6.7	9.5	12.6	14.8	16.1	16.1	14.6	10.8	7.3	
1963	1.7	0.9	3.4	6.1	9.2	12.8	14.5	16.4	15.9	14.3	12.2	7.9	9.6
1964	5.6	4.7	4.5	6.7	10.8		16.4	17.7	16.6	14.2	10.8	7.7	
1965	6.0	4.4	4.4	7.5	10.5	13.1	15.1	16.4	15.6	14.1	10.1	7.6	10.4
1966	5.0	6.7	7.6	8.4	11.3	14.2	15.9	16.4	16.3	16.0			
1967				8.3	10.7	13.7	16.5	17.2	16.2	14.4	10.8	6.9	
1968	4.8	5.1	5.3	7.7	10.1	13.0	15.2	16.4	16.5	15.1	11.2	8.7	10.8
1969	6.7	5.1	5.5		11.2	13.5	16.1	17.8	17.0	15.7	12.4		
1970	6.4	5.9	5.2	6.9	10.3	14.1	15.6	16.8	16.4	14.2	11.6	8.5	11.0
1971	6.2	6.9	6.0	7.5	10.5	13.3	16.1	17.0	16.6	14.7	10.3	7.9	11.1
1972	6.6	6.5	6.9	8.8	10.9	13.0	15.5	16.4	15.3	13.1	10.6	9.0	11.1
1973	7.7	6.9	6.5	7.6	10.9	13.9	16.4	17.2	17.0	13.4	10.2	6.2	11.2
1974	7.4	7.5	7.3	9.1	11.1	14.0	15.8	17.1	15.6	11.4	9.4	8.9	11.2
1975	8.4	7.1	6.9	7.4	10.4	13.0	15.8	18.0	16.8	13.5	10.3	7.4	11.3
1976	6.7	5.1	5.9	8.0									
1977							15.5	16.5	15.8	14.3	11.2	8.3	
1978	6.5	5.0	6.8	7.4	9.9	13.6	14.9	16.5	16.5	14.3	12.0	8.8	11.0
1979	5.2	3.8	4.9		10.4	12.9	15.4	16.2	16.1	14.7	11.6	9.7	
1980	6.0	7.2	6.9		10.8	13.3	14.7	16.9	16.9	13.9	9.5	6.8	
1981	5.7	5.1	7.0	8.8	10.7	13.1	15.2	16.8	17.0	13.7	11.6	6.9	11.0
1982	5.4	6.2	6.7	8.3	10.8	14.5	16.9	17.8	17.1	14.6	12.1	9.1	11.6
1983	7.9	4.5	6.1	7.7	10.5	13.7	16.7	18.3	16.9	14.4	10.9	9.1	11.4
1984	7.5	6.4	5.7	7.5	10.0	12.7	15.3	16.8	16.3	14.2	12.5	9.9	11.2
1985	4.8	4.3	5.4	8.0	9.9	13.2	15.5	16.2	16.3	15.1	9.4	9.0	10.6
1986	7.2	3.2	3.3	6.1	9.8	13.1	16.0	16.3	14.8	14.0	11.4	8.6	10.3
1987	4.2	3.7	4.6	7.4	10.5	12.9	15.7	16.7	16.7	14.1	11.4	7.4	10.4
1988	8.2	6.8	6.1	8.2	11.0	13.2	15.2	16.7	15.8	14.0	9.8	8.1	11.1
1989	8.0	7.4	8.1	8.9	12.2	14.9	17.6	18.3	17.8	14.9	9.9	8.9	12.2
1990	8.5	8.3	8.5	9.4	12.6	14.3	15.7	18.0	16.7	14.5	11.5	7.0	12.1
1991	6.7	4.4	7.0	8.5	9.8	12.0	14.7	17.7	17.9	14.4	11.1	8.6	11.1
1992	6.8	6.0	7.2	8.5	11.9	15.2	17.2	17.8	16.4	13.4	10.6	8.7	11.6
1993	7.6	7.2	6.0	8.9	11.6	15.0	16.5	17.0	16.3	13.0	9.5	8.1	11.4
1994	7.3	6.6	7.8	8.5	11.6	13.8	17.0	18.8	16.3	14.0	12.9	10.8	12.1
1995	7.5	8.2	8.0	9.3	11.4	14.1	16.6	19.5	17.4	15.4	11.9	8.8	12.3
1996	7.7	5.3	5.4	7.6	10.2	13.7	16.1	17.6	16.2	14.7	11.8	8.2	11.2
1997	3.6	6.1	8.1	9.4	11.8	14.8	16.5	18.6	17.5	14.9	12.1	10.2	12.0
1998	8.7	7.3	8.4	9.8	13.0	14.8	16.7	18.0	17.1	15.3	11.0	8.3	12.4
1999	8.4	7.0	7.9	9.9	12.7	15.3	17.9	19.1	18.8	15.4	11.4	9.0	12.7
2000	8.0	7.9	9.0	9.6	12.4	15.1	17.1	18.2	17.4	14.9	11.7	10.4	12.6
obs	63	62	62	61	66	66	66	67	67	66	66	63	
mean	6.5	5.9	6.4	8.1	10.8	13.7	16.0	17.3	16.7	14.4	11.1	8.4	
sdev	1.35	1.38	1.31	1.01	0.85	0.85	0.78	0.80	0.82	0.87	0.92	1.14	

Table 19. Monthly Mean Sea Temperature for DUNGENESS POWER STATION at 50° 55'N, 0° 58'E

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1968	8.0	8.0	7.0	9.5	11.9	14.0	16.2	16.9	17.5	14.7	10.9	8.6	11.9
1969	8.4	7.3	6.7	7.6	8.9	12.8	15.9	18.0	17.7	16.4	12.2	7.7	11.6
1970	6.6	6.4	5.9	6.6	8.8	12.4	15.1	16.3	16.0	13.9	11.3	8.5	10.7
1971	6.6	7.2	6.7	7.7	9.9	13.4	16.6	17.5	17.8	15.1	10.6	8.2	11.4
1972	7.0	6.7	7.2	9.2	9.8	12.2	14.5	16.3	16.6	13.6	11.2	9.6	11.2
1973	8.6	7.9	8.3	9.4	11.4	15.2	17.5	18.8	18.4	14.3	11.5	7.1	12.4
1974	7.4	7.7	7.8	9.9	11.0	14.6	15.9	17.4	16.8	12.9	10.1	8.8	11.7
1975	8.8	8.1	7.7	9.7	9.7	14.2	17.1	19.2	18.6	15.5	12.5	8.3	12.5
1976	7.8	5.6	6.9	8.8	10.7	13.7	16.3	17.8	17.0	15.3	12.1	7.9	11.7
1977	6.0	6.4	7.3	7.7	10.0	13.0	15.8	16.4	15.9	14.5	11.5	8.2	11.1
1978	6.3	4.5	4.4	4.6	8.6	12.1	14.7	16.2	16.3	14.5	13.0	9.4	10.4
1979	5.7	4.6	5.4	7.3		12.4	15.8	16.9	16.9	15.8	11.8	9.9	
1980													
1981													
1982	5.6	6.7	6.8	9.1	11.1	14.5	16.8	18.3	17.4	14.5	12.1	8.8	11.8
1983	7.8	5.1	6.2	7.5	10.1	13.2	16.3	18.1	16.7	14.2	10.9	8.8	11.2
1984	7.2	6.4	5.8	7.9	10.1	12.2	15.6	16.7	16.5	14.1	12.6	10.1	11.3
1985	5.4	4.9	5.5	7.7	9.6	12.7	15.3	16.6	16.5	15.5	11.2	8.9	10.8
1986	6.9	4.2	3.3	6.3	9.0	12.3	15.3	16.5	15.4	14.2	11.9	9.4	10.4
1987	5.1	3.8	4.7	7.5	10.5	12.4	15.4	16.7	17.3	15.2	12.6	8.2	10.8
1988	8.3	7.2	6.5	8.5	11.0	13.9	15.8	17.3	16.4	14.4	11.6	9.0	11.7
1989	8.8	8.3	8.4	9.3	11.8	14.9	17.6	18.9	18.4	16.4	13.8	10.6	13.1
1990	9.7	9.3	9.6	10.6	13.3	15.3	17.4	19.0	18.1	15.6	11.7	7.5	13.1
1991	6.7	4.0	6.6	8.6	10.0	12.2	14.6	16.8	17.8	15.6	12.4	9.9	11.3
1992	8.3	6.4	7.4	8.8	10.9	14.4	16.6	17.8	16.8	14.1	11.1	9.1	11.8
1993	7.9	8.0	6.7	9.3	12.3	14.5	16.9	17.7	16.8	14.0	10.6	8.6	11.9
1994	7.4	7.0	7.9	9.0	9.0	13.7	13.7	18.7	16.7	14.4	12.3	10.9	11.7
1995	7.8	8.5	8.3	10.0	11.8	13.5	15.8	18.9	17.6	15.8	13.1	8.9	12.5
1996	7.4	5.3	5.3	7.5	10.0	13.6	15.3	16.9	16.4	14.5	12.2	8.2	11.1
1997													
1998	9.1	7.4	8.7	10.0	12.1	14.6	16.6	18.2	17.9	15.4	12.1	9.1	12.6
1999	8.9	8.0	8.0	10.0	11.8	14.6	17.1	18.9	18.7	15.9	12.6	9.2	12.8
2000	8.0	7.0	8.4	9.0	11.8	14.0	15.5	17.4	17.7	15.0		10.0	
obs.	30	30	30	30	30	30	30	30	30	30	29	30	
mean	7.5	6.6	6.8	8.5	10.6	13.6	16.0	17.6	17.2	14.8	11.8	8.9	
sdev	1.18	1.48	1.40	1.32	1.21	1.01	0.95	0.96	0.85	0.84	0.84	0.89	

Table 20. Monthly Mean Sea Temperature for EASTBOURNE at 50° 46'N, 0° 18'E

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1892	4.6	4.4	4.3	7.7	11.3	14.3	16.8	17.5	16.3	12.2	9.2	6.6	10.4
1893	4.6	5.7	7.2	10.0	13.2	15.9	17.9	18.8	16.1	13.7	8.3	6.8	11.5
1894	4.3	5.6	6.9	10.3	11.6	14.3	17.3	16.8	14.9	12.2	10.9	7.9	11.1
1895	4.1	0.4	3.3	7.0	11.5	14.8	16.7	17.8	17.6	13.3	10.8	7.5	10.4
1896	6.4	5.8	7.7	9.4	12.4	15.8	17.7	17.3	16.1	11.9	7.6	6.3	11.2
1897	4.7	4.8	6.8	8.4	11.4	15.0	17.6	18.1	15.2	13.3	10.7	8.0	11.2
1898	7.9	6.7	5.6	8.2	11.2	14.2	16.7	18.2	17.8	14.3	11.6	9.7	11.8
1899	7.6	6.5	6.4	8.9	11.9	15.6	18.1	19.7	17.4	13.1	11.3	7.1	12.0
1900	6.8	5.4	6.2	8.1	11.1	14.7	17.7	17.7	16.8	13.6	10.8	9.1	11.5
1901	6.2	3.8	5.0	8.1	12.4	15.1	17.8	18.4	16.3	13.8	9.6	7.4	11.2
1902	6.7	3.0	6.4	8.3	10.2	13.9	16.8	17.1	16.6	12.4	10.2	7.2	10.7
1903	6.0	6.7	7.7	8.1	11.5	14.0	16.6	16.7	15.7	13.9	9.8	7.0	11.1
1904	5.3	5.7	5.5	8.5	11.4	14.5	17.7	18.1	15.7	13.0	9.7	8.2	11.1
1905	5.7	5.9	7.0	8.7	11.8	15.0	17.9	17.9	15.1	10.7	8.9	7.1	11.0
1906	6.4	5.1	5.7	7.3	10.6	14.0	17.1	18.0	16.7	14.6	11.1	6.6	11.1
1907	4.6	2.7	5.3	8.2	10.8	13.9	16.0	16.8	16.4	13.9	10.9	8.0	10.6
1908	4.6	5.0	5.6	7.5	11.2	15.3	17.2	17.4	15.3	14.5	10.3	8.0	11.0
1909	5.2	3.9	3.8	8.1	11.6	13.8	15.9	17.8	15.4	14.2	8.6	6.5	10.4
1910	6.2	5.6	6.9	8.2	11.5	15.1	15.9	17.4	15.2	13.9	8.9	8.2	11.1
1911	5.3	4.6	6.7	6.6	11.9	15.3	18.2	19.4	18.1	13.4	10.2	8.2	11.5
1912	7.2	5.9	7.8	9.6	12.9	15.4	18.1	16.1	13.8	11.8	9.2	8.2	11.3
1913	7.5	6.2	6.8	8.4	11.9	15.2	16.6	17.1	16.6	14.7	12.1	8.1	11.8
1914	3.7	6.0	7.2	9.8	12.2	15.4	17.4	18.2	16.7	13.2	10.0	8.1	11.5
1915	6.2	6.2	6.1	7.8	11.6	14.4	16.2	17.2	15.9	12.6	8.2	8.2	10.9
1916	7.8	6.5	5.6	8.2	12.3	13.6	16.1	18.1	15.9	13.9	10.1	6.5	11.2
1917	4.6	1.7	3.6	5.4	10.9	14.5	16.2	16.7	16.2	12.5	9.7	5.7	9.8
1918	3.6	5.7	5.9	7.7	11.7	14.6	16.4	17.8	15.8	12.4	9.6	9.2	10.9
1919	6.7	4.2	5.9	7.3	11.8	14.7	15.2	17.2	16.6	11.4	6.9	7.1	10.4
1920	6.6	6.8	7.5	9.7	12.3	15.3	16.4	16.3	15.3	13.6	10.1	6.8	11.4
1921	8.3	6.2	7.7	9.4	13.0	15.3	18.0	18.2	16.9	15.7	9.6	8.2	12.2
1922	6.4	6.2	6.7	6.9	11.3	15.0	15.4	16.3	14.9	11.7	7.8	6.8	10.5
1923	5.8	6.8	7.2	9.3	11.3	13.0	16.7	17.4	15.4	13.0	8.4	6.2	10.9
1924	6.1	4.9	5.0	6.6	11.2	14.3	16.7	16.7	15.5	13.4	10.1	8.8	10.8
1925	7.4	7.2	6.3	8.1	11.6	15.4	17.4	17.8	14.8	13.0	8.9	4.9	11.1
1926	5.8	6.9	7.1	8.9	11.0	14.0	16.9	17.6	17.7	13.1	10.1	6.4	11.3
1927	5.2	5.4	7.4	9.1	12.5	14.4	16.3	17.3	15.9	12.9	9.8	5.8	11.0
1928	5.8	6.4	6.7	8.7	11.6	14.4	17.7	17.8	16.4	13.7	10.9	7.5	11.5
1929	3.8	2.6	4.3	7.1	10.7	14.0	16.6	17.4	17.9	13.9	10.3	9.1	10.6
1930	7.9	5.4	6.0	8.4	11.6	15.3	16.9	17.1	16.7	13.2	10.2	8.3	11.4
1931	6.1	5.6	4.9	7.7	10.9	14.4	16.4	16.7	14.5	12.6	10.6	7.9	10.7
1932	7.7	4.9	4.7	7.4	10.6	14.1	16.4	18.2	16.5	12.9	9.6	6.6	10.8
1933	5.8	4.9	6.8	9.3	12.5	15.7	18.1	18.8	17.3	14.3	9.2	3.8	11.4
1934	5.1	3.9	5.2	7.9	11.7	15.1	18.2	17.8	17.3	13.9	9.6		
1935	7.0	5.9	6.4	8.7	10.9	14.4	18.0	18.7	16.6	13.3	10.8	6.8	11.5
1936	6.8	4.9	6.6	7.8	11.9	14.8	16.8	17.6	17.1	12.1	9.7	7.3	11.1
1937	7.2	6.9	6.1	8.8	11.6	15.1	16.8	18.2	16.7	13.8	9.9	7.1	11.5
1938	6.7	5.3	6.9	8.5	10.4	14.1	16.3	18.1	16.3	13.3	11.8	7.4	11.3
1939	6.3	5.9	6.6	8.5	11.6	15.1	16.5	17.9	17.2	12.3	10.7	7.2	11.3
1940	2.1	3.4	5.4	7.9	12.3	15.9	17.0	17.4	16.1	12.8	10.4	6.1	10.6
1941	2.8	3.4	6.6	7.6	10.1	14.3	17.9	16.7	16.3	13.7	9.2	7.9	10.5
1942													
1943													
1944													
1945													
1946													
1947	5.2	1.7	3.9	7.7	11.3	15.0	17.1	19.4	18.0	14.1	10.9	7.6	11.0
1948	7.8	5.9	6.7	9.6	13.2	15.2	16.1	17.5	16.2	13.9	10.7	8.5	11.8
1949	7.1	6.3	6.1	9.7	12.1	15.6	18.2	19.0	18.8	16.0	10.8	8.6	12.4
1950	6.9	6.7	7.8	9.2	12.2	16.3	17.9	18.2	16.4	13.1	9.7	5.8	11.7
1951	5.7	5.4	6.1	7.9	10.9	14.5	17.2	17.4	16.2	13.2	11.4	8.6	11.2
1952	6.2	4.4	6.4	8.6	12.8	15.6	17.6	17.8	14.8	12.0	8.1	5.4	10.8
1953	4.7	4.3	5.4	8.4	12.3	14.7	16.8	18.1	16.3	13.8	11.4	9.8	11.3
1954	4.9	3.1	6.6	8.5	11.3	14.2	15.8	16.5	15.9	13.9	11.2	8.9	10.9
1955	5.2	4.9	3.6	7.3	10.4	14.2	16.9	18.5	17.1	13.3	9.7	7.9	10.8
1956	6.6	2.3	4.4	7.6	11.6	13.9	16.4	16.3	15.8	12.9	8.2	7.6	10.3
1957	6.8	7.2	8.2	9.8	11.6	15.5	17.6	17.7	15.6	13.5	9.8	7.1	11.7
1958	6.2	6.4	5.3	7.3	11.5	14.9	16.7	17.4	17.3	14.3	10.4	8.1	11.3
1959	6.4	5.1	7.2	9.9	13.1	16.0	18.6	19.4	17.8	15.6	11.2	8.8	12.4
1960	6.3	5.9	7.1	9.0	12.4	15.8	16.8	17.9	16.3	13.3	11.1	8.3	11.7
1961	6.4	7.2	8.2	10.6	13.1	15.6	17.5	17.5	17.7	14.6	9.8	7.4	12.1
1962	6.2	5.6	3.9	7.6	10.3	13.8	16.1	16.9	15.6	13.6	9.5	5.9	10.4
1963	0.6	0.6	3.4	6.7	10.2	14.2	16.2	16.9	15.7	13.6	11.7	5.9	9.6
1964	5.2	5.0	4.6	7.4	12.2	14.9	17.2	17.9	16.6	12.7	10.1	7.4	10.9
1965	5.6	4.1	4.4	8.1	11.4	14.0	16.1	17.1	15.3	13.3	9.1	7.3	10.5
1966	4.7	6.6	9.7	8.4	11.7	15.4	16.9	17.1	16.6	14.6	9.2	7.5	11.5
1967	5.6	6.4	7.6	8.8	11.6	14.9	17.5	17.8	16.2	14.2	9.5	6.7	11.4
1968	5.3	5.1	5.6	8.4	11.2	14.7	16.6	17.0	16.7	14.8	10.2	7.1	11.1
1969	6.5	4.2	5.0	7.7	11.5	14.2	17.3	18.1	16.9	14.9	10.8	6.3	11.1
1970	5.9	5.6	5.3	7.1	11.8	15.7	16.2	17.4	16.3	13.7	11.1	7.6	11.1
1971	5.2	6.5	5.8	8.3	11.9	14.2	17.4	17.6	16.7	14.6	9.7	7.6	11.3
1972	5.9	6.0	6.8	8.9	9.7	13.8	16.4	17.0	15.0	12.5	9.8	8.4	10.9
1973	6.4	6.0	6.7	8.0	11.2	15.6	17.5	18.3	17.0	12.7	10.1	6.5	11.3
1974	7.3	7.2	7.0	9.9	12.0	14.8	16.6	17.7	16.0	11.4	9.4	8.4	11.5

Table 20. continued: Monthly Mean Sea Temperature for EASTBOURNE at 50° 46'N, 0° 18'E

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1975	8.3	7.3	6.9	7.6	11.1	14.7	17.0	18.6	16.9	12.8	9.9	6.6	11.5
1976	7.1	4.6	5.8	8.7	12.2	16.1	19.3	19.4	16.5	14.9	10.4	7.1	11.8
1977	6.1	6.7	8.0	8.3	11.5	14.0	16.7	17.8	15.5	14.0	10.5	7.6	11.4
1978	6.2	4.6	6.3	7.5	11.0	14.9	16.0	17.4	16.4	13.9	12.3	6.8	11.1
1979	4.4	4.1	5.5	7.8	10.8	14.2	16.9	16.9	16.3	14.4	11.0	8.8	10.9
1980	5.4	6.7	6.8	9.2	11.7	14.7	16.0	17.8	16.8	13.4	8.9	6.9	11.2
1981	5.7	5.0	6.6	9.7	11.5	14.2	16.2	18.1	17.1	13.0	10.2	5.9	11.1
1982	4.6	5.8	6.7	9.3	12.1	16.2	18.1	18.6	17.0	14.0	11.6	7.2	11.8
1983	7.6	4.5	5.4	7.7	11.2	14.6	18.4	19.1	17.3	14.4	10.1	6.9	11.4
1984	7.0	6.0	4.9	7.9	11.5	14.3	16.8	18.2	16.9	13.4	12.0	9.3	11.5
1985	3.7	3.8	4.9	8.0	10.7	13.9	17.1	16.8	16.3	14.8	9.5	8.2	10.6
1986	7.0	3.4	2.8	6.5	10.2	14.2	16.7	16.6	14.5	13.9	11.1	9.2	10.5
1987	5.3	3.4	4.5	7.4	11.4	14.5	17.0	17.4	17.0	14.1	11.4	9.2	11.1
1988	8.0	6.8	6.9	8.6	11.7	14.8	15.9	17.8	16.7	14.9	12.6	8.2	11.9
1989	8.0	7.7	7.8	8.6	11.2	15.3	17.7	19.4	18.1	15.6	13.2	10.0	12.7
1990	8.2	7.7	8.7	9.4	14.0	15.4	16.7	19.9	17.8	15.2	12.0	9.0	12.8
1991	6.2	3.4	5.6	7.7	9.2	12.0	15.3	18.1	18.5	14.8	9.9	7.1	10.7
1992	5.4	4.3	5.5	9.0	12.1	15.8	17.7	19.1	17.7	13.6	10.3	8.4	11.6
1993	7.0	6.2	6.5	8.7	12.6	15.6	17.8	17.5	16.1	13.6	8.5	6.0	11.3
1994	5.7	6.0	6.5	8.1	11.2	14.9	17.6	18.9	16.4	14.1	9.9	8.7	11.5
1995	7.8	7.5	8.6	9.3	12.9	15.0	18.9	20.4	17.4	15.8	12.0	7.8	12.8
1996	6.9	4.8	5.7	8.4	10.6	15.2	17.2	18.8	15.9	13.8	10.6	7.3	11.3
1997	3.0	5.6	8.2	10.3	13.2	15.8	17.5	19.3	17.6	14.4	11.4	8.7	12.1
1998	7.8	6.1	8.3	10.2	13.9	16.1	17.4	18.6	16.9	14.2	9.9	7.2	12.2
1999	7.5	6.2	8.1	10.2	13.3	16.3	18.5	19.2	18.5	13.7	10.3	7.7	12.5
2000	6.7	7.4	8.3	9.1	12.8	15.2	16.8	18.3	17.5	14.3	11.0	9.5	12.2
obs	104	104	104	104	104	104	104	104	104	104	104	103	
mean	6.0	5.3	6.2	8.4	11.6	14.8	17.0	17.8	16.5	13.6	10.2	7.5	
sdev	1.38	1.49	1.33	0.97	0.86	0.75	0.80	0.87	0.95	0.99	1.11	1.12	

Table 21. Monthly Mean Sea Temperature for SHOREHAM BY SEA at 50° 50'N, 0° 15'W

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1966					12.6	16.3	17.3	17.1	16.9	15.8	13.6	7.2	
1967	5.5	7.3	8.3	9.7	12.6	15.7	17.7	18.6	16.7	14.2	9.9	6.9	11.9
1968	5.4	5.3	6.5	9.4	12.1	15.8	17.9	17.5	17.3	14.9	10.8	7.5	11.7
1969	6.5	4.8	5.7	8.6	13.0	15.6	18.2	18.7	17.4	15.8	10.3	6.7	11.8
1970	6.3	5.3	5.7	8.0	12.3	16.5	17.3	18.2	16.8	14.5	10.7	8.1	11.6
1971	5.9	6.5	6.8	8.9	12.4	14.6	18.5	18.5	17.2	16.1	9.2	8.5	11.9
1972	6.6	6.7	7.8	9.4	12.0	15.0	16.7	17.6	15.2	13.1	9.8	8.2	11.5
1973	6.8	6.2	7.2	8.1	12.0	16.3	18.1	18.7	17.2	12.5	9.5	7.0	11.6
1974	6.8	6.8	7.4	9.5	12.2	15.3	17.1	18.1	15.6	11.4	9.6	8.3	11.5
1975	7.9	7.0	7.2	8.5	10.7	14.0	17.7	19.8	15.8	12.8	10.4	6.8	11.6
1976	6.8	5.1	6.3	8.7	14.3	17.4	19.8	19.5	17.4	15.5	10.5	7.3	12.4
1977	6.1	6.5	8.1	9.0	13.0	15.2	16.9	17.3	17.1	15.5	11.3	7.7	12.0
1978	6.1	5.0	7.3	8.3	11.8	15.4	17.1	17.5	16.3	13.2	11.4	6.8	11.4
1979	2.7	2.8	4.6	7.9	11.3	14.9	16.3	17.2	15.9	12.4	7.3	5.9	9.9
1980	2.6	5.3	5.3	6.9	10.1	13.2	14.3	17.6	13.9	8.0	6.1	3.5	8.9
1981	4.0	4.3	6.2	9.6	11.9	15.2	17.1	18.5	18.1	12.5	10.0	5.4	11.1
1982	5.4	6.5	7.4	9.9	14.7	17.8	19.3	19.1	18.0	13.8	11.2	7.8	12.6
1983	7.6	5.0	6.3	8.5	13.0	16.1	20.1	20.1	16.4	13.9	10.7	8.3	12.2
1984	7.0	6.6	7.1		12.6	13.6	15.9	16.3	13.3	11.8	7.5	5.6	
1985	3.6	4.8	6.8	10.4	12.7	15.8	20.0	17.4	17.3	15.0	9.3	9.2	11.9
1986	6.0	3.3	4.7	8.0	12.7	15.6	19.8	18.0	16.0	14.8	10.8	8.0	11.5
1987	4.8	4.2	5.9	10.8	12.8	12.7	15.9	18.7	17.5	13.1	10.4	7.3	11.2
1988	6.8	5.0	6.6	9.5	13.4	15.2	16.9	16.7	13.5	13.3	8.8	8.5	11.2
1989	8.1	7.1	8.7	11.3	15.4	17.5	19.6	19.7	17.5	14.6	10.6	8.0	13.2
1990	7.9	7.8	10.0	10.4	14.9	15.9	17.5	19.5	16.3	13.7	10.0	6.3	12.5
1991	5.1	4.4	7.7	9.1	11.5	15.0	18.2	19.5	18.0	12.7	9.2	6.5	11.4
1992	6.4	5.8	8.1	9.9	14.2	16.2	17.8	17.3	15.7	12.5	9.0	7.8	11.7
1993	6.8	6.8	6.8	10.3	12.8	16.6	16.9	17.4	15.9	12.8	9.0	6.0	11.5
1994	6.0	5.6	8.1	9.3	13.9	18.5	21.3	20.3	17.4	14.6	13.7	10.3	13.3
1995	7.6	8.4	8.3	12.5	14.7	17.5	20.1	20.5	17.3	16.4	12.1	8.6	13.7
1996	7.5	5.3	6.5	10.4	12.3	18.5	19.2	20.2	17.0	14.8	11.0	8.0	12.6
1997	5.1	6.7	9.1	11.1	14.5	16.3	18.2	19.5	17.8	13.5	10.8	8.1	12.6
1998	6.5	6.3	7.4	10.2	14.6	15.4	16.7	17.8	16.3	12.6	9.0	7.8	11.7
1999	8.2	6.1	8.5	10.0	12.5	14.7	20.3						
obs.	33	33	33	32	34	34	34	33	33	33	33	33	
mean	6.1	5.8	7.1	9.4	12.9	15.7	18.0	18.4	16.5	13.7	10.1	7.4	
sdev	1.42	1.25	1.22	1.16	1.24	1.35	1.54	1.14	1.22	1.67	1.54	1.26	

Table 22. Monthly Mean Sea Temperature for FAWLEY POWER STATION at 50° 50'N, 1° 20'W

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1984	7.5	6.3	6.4	9.4	12.4	16.3	19.3	20.3	18.0	14.6	12.4	9.9	12.7
1985	5.0	4.5	5.5	8.8	11.1	14.9	18.1	17.2	16.8	15.6	10.2	7.9	11.3
1986	6.6	3.9	3.7	7.0	10.8	14.9	18.7	17.9	16.0	14.5	11.8	9.2	11.3
1987	5.0	4.5	5.3	8.6	11.9	15.1	18.6	18.6	18.2	14.6	11.1	6.8	11.5
1988	7.5	6.7	7.0	10.1	14.3	16.6	17.4	17.8	16.1	14.0	10.6	8.6	12.2
1989	8.3	7.9	8.7	9.5	13.8	17.8	20.9	20.1	18.3	15.2	12.3	8.4	13.4
1990	8.6	9.0	9.3	10.2	15.5	16.0	18.6	20.0	18.2	15.2	11.4	7.4	13.3
1991	7.1	3.7	7.8	9.5	11.0	14.5	18.3	19.9		13.7	10.8	7.3	
1992	6.6	6.3	8.0	8.3			18.4	18.8		16.5			
1993	7.9	7.7	7.1	8.6	13.5	16.9	18.4	17.8	16.7	12.7	9.5	7.3	12.0
1994	6.7	5.7	7.2	9.5	11.8	15.3	20.2	20.7	18.4		13.5	11.3	
1995	7.6	8.5	8.3			16.1	19.8			16.8	13.5	8.3	
1996	4.7	4.8	6.8			17.8	19.3	20.3	16.9	15.3	11.6	8.0	
1997													
1998	9.2	6.4					17.7			14.7	13.8	8.6	
obs.	14	14	13	11	10	12	14	12	10	13	13	13	
mean	7.0	6.1	7.0	9.0	12.6	16.0	18.8	19.1	17.4	14.9	11.7	8.4	
sdev	1.37	1.71	1.53	0.92	1.59	1.12	0.97	1.23	0.95	1.10	1.33	1.22	

Table 23. Monthly Mean Sea Temperature for BOURNEMOUTH at 50° 44'N, 1° 52'W

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1970							16.6	17.2	16.0	13.5	11.4	8.6	
1971	6.5	6.9	6.4	8.5	11.9	13.9	17.8	18.2	16.3	14.3	10.2	8.3	11.6
1972	7.3	6.4	6.9	9.0	11.0	13.2	15.7	17.2	15.3	12.7	10.8	9.1	11.2
1973	6.2	6.4	7.5	8.8	11.5	15.2	17.3	17.8	16.8	13.5	11.0	8.6	11.7
1974	9.2	9.4	9.2	10.3	12.8	16.6	18.4	18.6	15.9	12.6	11.7	10.9	13.0
1975	10.7	9.6	9.3	10.1	13.0	16.2	19.6	21.4	19.1	15.6	12.7	9.7	13.9
1976	10.4	9.2	10.7	12.8	15.3	17.9	21.4	21.3	19.0	16.9	13.3	10.2	14.9
1977	8.8	9.8	10.8	10.3	10.6	12.2	15.6	16.6	15.2	13.8	10.4	7.6	11.8
1978	6.4	4.7	6.2	7.5	10.4	14.1	15.4	16.8	15.8	13.6	12.0	8.2	10.9
1979	4.7	4.3	5.7	7.5	10.3	13.6	16.7	16.4	15.5	13.9	10.5	9.7	10.7
1980	5.6	7.1	6.7	8.4	11.0	14.0	15.2	17.1	16.3	12.9	9.8	7.8	11.0
1981	6.6	5.7	7.7	9.1	10.5	13.0	15.3	17.2	17.0	12.9	10.5	6.9	11.0
1982	5.5	6.1	7.2	9.0	11.9	15.9	17.4	18.2	16.9	14.1	11.7	8.6	11.9
1983	8.3	5.5	6.2	7.8	11.1	15.5	19.4	20.2	16.7	13.8	10.9	8.6	12.0
1984	7.1	5.7	5.6	8.2	10.7	14.9	17.3	18.6	16.5	13.7	11.3	9.2	11.6
1985	4.6	4.0	4.6	7.6	10.7	13.3	16.3	15.7	15.6	14.0	9.2	8.0	10.3
1986	6.3	3.4	3.2	5.8	10.1	13.3	16.4	15.6	13.7	12.8	9.6	6.9	9.8
1987	3.0	2.6	3.1	5.9	10.0	13.1	16.5	17.3	16.7	12.8	9.2	5.7	9.7
1988	6.3	5.3	4.7	8.8	12.6	14.9	16.2	16.8	15.7	13.7	10.2	8.2	11.1
1989	8.5	8.4	9.9	9.6	13.0	16.2	19.1	19.0	17.8	15.2	12.6	9.7	13.3
1990	9.7	9.7	9.6	10.2	14.5	15.5	18.0	19.8	17.9	13.9	12.0	7.9	13.2
1991	7.7	4.8	7.3	9.0	11.0	13.4	16.9	18.5	18.4	14.5	11.5	8.8	11.8
1992	8.1	7.6	8.0	9.0	13.1	16.7	18.0	18.3	16.1	13.1	11.3	9.3	12.4
1993	8.1	7.9	7.8	9.7	12.3	15.6	17.8	17.9	15.3	13.2	9.4	8.3	11.9
1994	7.8	6.4	7.6	8.7	11.4	14.2	17.8	18.9	16.6	14.0	13.0	10.7	12.3
1995	8.1	8.8	8.0	10.8	13.3	15.8	19.2	21.3	18.2	16.5	12.5	8.4	13.4
1996	7.2	6.4	7.0	9.4	12.0	15.8	17.9	19.4	17.8	16.0	12.4	9.2	12.5
1997	5.5	7.0	9.4	9.3	11.3	14.7	18.5	20.5	18.3	16.5	12.8	10.7	12.9
1998	10.0	7.8	7.1	7.9	12.4	16.3	17.2	19.2	18.2	15.7	11.8	8.6	12.7
1999	9.3	8.4	9.3	8.4	12.2	16.0	18.5	19.5	18.6	14.9	11.7	8.9	13.0
2000	7.9	8.0	9.5	9.6	12.1	14.5	16.6	18.0	17.1	14.3	11.2	9.3	12.4
obs	30	30	30	30	30	30	31	31	31	31	31	31	
mean	7.4	6.8	7.4	8.9	11.8	14.9	17.4	18.3	16.8	14.2	11.2	8.7	
sdev	1.82	1.95	2.00	1.39	1.28	1.37	1.44	1.57	1.29	1.21	1.15	1.14	

Table 24. Monthly Mean Sea Temperature for WEYMOUTH at 50° 37'N, 2° 27'W

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1966					12.0	14.2	16.3	17.3	16.8	15.9	13.4	9.8	
1967	8.1	6.6	7.7	9.7	11.0	13.4	16.1	17.2	16.7	14.7	12.0		
1968	7.2	7.1	6.2	7.8	10.9	13.9	16.0	16.6	16.9	15.7	13.4	9.9	11.8
1969	7.1	6.5	6.5	7.8	9.0	11.2	15.3	16.4	16.5	15.6	13.1	8.8	11.2
1970	6.4	6.7	7.2	7.7	8.9	10.3					14.1	12.3	
1971	6.7	7.2	7.4	8.4	10.8	13.3	15.2	17.2	17.6	15.7	12.0	9.5	11.8
1972	9.0	8.3	8.7	9.4	11.3	13.1	15.0	16.5	16.0	13.9	11.9	9.9	11.9
1973	8.6	8.5	8.1	8.6	10.9	13.1	16.4	17.5	17.6	15.3	11.8	9.0	12.1
1974	8.4	8.0	8.1	8.9	10.3	12.9	16.0	17.5	16.0	13.5	11.5	10.8	11.8
1975	8.5	6.6	7.3	8.6	10.6	13.1	15.4	17.0	16.5	14.4	12.0	10.4	11.7
1976	7.5	6.2	6.9	8.2	10.4	12.7	15.2	16.6	16.2	14.7	12.3	10.4	11.4
1977	7.6	5.8	6.8	7.9	10.3	12.9	15.6	16.8	16.4	14.8	12.9	10.0	11.5
1978	7.5	6.2	6.8	8.2	11.1	12.7	14.9	16.5	16.6	14.5	12.4	9.9	11.4
1979	7.3	5.9	6.7	8.8	11.1			17.1	16.8	14.6	12.4	10.4	
1980	7.4	6.0	6.6	7.9	10.2	13.3	15.3	16.4	16.6	14.8	12.7	10.2	11.5
1981	7.0	6.0	7.1	8.8	10.6	12.8	15.2	16.4	16.2	14.6	12.9	10.2	11.5
1982	7.3	5.8	7.1	8.9	10.6		15.1	16.9	16.8	15.1	12.9	10.1	
1983	7.9	6.2	7.1	8.7	10.7	13.0	15.2	16.9	17.0	15.0	12.3	10.2	11.7
1984	7.6	6.3	7.1		10.8	13.5	15.6	16.9	16.9	15.3	13.0	10.6	
1985	8.0	6.1	6.8	9.1	10.9	13.5	15.5	17.3	16.8	15.0	13.0	10.6	11.9
1986	7.8	6.2	7.2	8.5	10.9	12.8	14.9		15.5	14.1	12.1	10.6	
1987	8.2	6.8	7.3	8.7	10.4	12.9	15.0	16.5	16.8	15.0	12.4	10.1	11.7
1988	8.9	8.0	7.7	8.9	11.1	13.4	15.1	15.9	15.8	14.9	12.7	11.0	12.0
1989				9.8	13.3	15.3	17.9	18.3	17.3	15.4	14.3	8.2	
1990		9.1	9.3	10.2	13.4	14.6	16.9	18.4	16.9	15.2	11.4	8.7	
1991	9.0	5.6	7.2	8.6	10.3	12.1	14.7	16.8	17.3	14.1	11.1	8.8	11.3
1992	7.2	6.8	7.9	8.7	11.7	14.6	16.1	17.2	15.5	12.8	10.9	9.0	11.5
1993	7.9	7.3	7.3	9.1	11.5	13.8	15.4	16.3	15.6	12.3	9.7	8.3	11.2
1994	7.8	7.2	7.9	8.4	10.9	12.8	16.0	17.5	15.8	13.6	12.8	10.4	11.8
1995	8.7	8.8	8.3	9.3	11.2	13.4	16.2	18.6	17.0	15.5	12.2	8.6	12.3
1996	7.4	5.2	6.1	7.6	9.2	12.5	14.9	17.0	15.6	14.2	10.8	8.0	10.7
1997	4.5	6.2	8.0	9.7	11.6	13.7	15.5	17.1	16.1	14.9	12.2	10.2	11.6
1998	8.9	7.8	8.9	8.9	12.2	13.3	15.6	17.3	16.4	14.6	10.8	9.2	12.0
1999	8.1	7.2	7.9	9.3	11.7		16.5	17.7	17.3	13.4	11.1	9.1	
2000	7.9	8.4	8.9	9.3	11.8		16.6	17.7	17.7	15.0	11.5	10.0	
obs	32	33	33	33	35	31	33	33	34	34	35	34	
mean	7.7	6.9	7.5	8.7	11.0	13.2	15.7	17.1	16.6	14.7	12.2	9.8	
sdev	0.90	1.00	0.78	0.65	0.95	0.93	0.70	0.62	0.61	0.82	0.97	0.92	

Table 25. Monthly Mean Sea Temperature for PLYMOUTH at 50° 22'N, 4° 10'W

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1957	9.3	9.2	10.1	11.0	12.3	14.7	15.8	15.6	15.2	14.4	11.7	9.9	12.4
1958	9.0	8.7	7.9	8.6	11.3	13.5	15.1	15.5	16.2	14.2	12.9	10.4	11.9
1959	9.2	8.2	9.0	10.2	12.4	14.4	15.9	17.1	17.4	15.6	13.7	10.9	12.8
1960	9.4	8.4	8.0	9.6	12.7	15.2	15.5	16.0	15.7	14.4	12.1	10.3	12.3
1961	8.7	9.2	10.0	11.2	12.3	14.7	16.3	16.1	16.4	15.0	12.1	9.7	12.6
1962	8.1	8.8	6.9	8.7	10.5	13.2	15.1	15.1	15.0	14.2	11.4	9.6	11.4
1963	5.4	4.7	6.4	8.3	10.2	13.3	14.5	15.0	14.3	13.4	12.0	9.4	10.6
1964	8.1	8.0	7.9	9.1	12.1	14.9	15.6	15.8	16.1	14.1	11.8	8.9	11.9
1965	8.2	7.2	7.4	9.2	11.5	13.9	15.2	15.3	14.4	14.2	11.1	9.7	11.4
1966	8.5	9.1	9.5	10.0	11.6	14.8	15.2	15.6	16.3	14.8	11.8	9.2	12.2
1967	9.0	8.6	9.1	9.5	11.1	13.8	16.0	15.8	15.1	13.9	10.5	9.4	11.8
1968	8.3	7.1	7.0	8.7	10.5	13.7	15.0	15.6	15.2	14.3	10.4	9.6	11.3
1969	9.4	7.4	6.9	9.2	10.0	14.1	15.5	15.9	15.5	15.3	12.2	9.5	11.7
1970	8.3	7.4	7.8	8.9	10.8	14.7	14.7	15.5	15.1	13.7	11.9	10.0	11.6
1971	8.2	8.0	8.3	9.6	11.1	13.3	16.0	16.0	15.7	15.1	11.7	10.9	12.0
1972	9.4	8.8	8.4	9.2	11.1	12.1	14.1	15.4	14.8	13.6	12.1	10.5	11.6
1973	9.4	8.9	8.6	9.3	10.8	13.4	15.2	15.7	15.3	13.9	12.3	9.7	11.9
1974	9.1	8.3	8.0	9.7	11.1	13.0	15.5	16.3	15.3	12.5	10.2	10.2	11.6
1975	9.4	8.6	8.9		10.0	14.9	16.2	17.5	15.5	13.5	11.8	10.9	
1976	9.4	7.5	7.8	9.4	11.3	14.3	16.8	17.4	15.6	14.1	11.0	9.3	12.0
1977	6.6	7.5	8.3	9.3	11.6	14.3	15.3	16.1	15.1	14.3	11.8	9.8	11.7
1978	9.0	7.0	7.4	8.0	10.8	13.3	14.1	15.3	15.4	13.9	12.7	10.2	11.4
1979	7.4	6.7	7.1	8.3	10.3	12.9	15.1	15.5	14.5	14.5	11.4	10.8	11.2
1980	8.6	8.7	8.9	9.6	11.5	13.4	14.1	15.1	13.5	13.0	10.8	9.6	11.4
1981	8.3	7.7	8.8	10.1	10.8	11.9	14.1	15.7	16.5	13.0	11.7	9.8	11.5
1982	7.8	8.2	8.5	9.9	11.5	14.2	15.6	16.3	15.6	14.0	12.2	9.8	12.0
1983	9.3	7.6	7.2	8.3	10.7	12.9	16.0	17.2	15.7	13.8	12.0	9.9	11.7
1984	8.9	8.1	7.7	8.8	10.5	12.8	15.0	16.7	15.6	13.6	12.0	10.3	11.7
1985	10.3	8.2	7.8	9.7	11.2	13.7	15.7	14.9	14.8	14.5	11.4		
1986	7.1	4.4	4.3	5.8	8.4	11.3	13.3	14.0	13.6	13.1	10.6	9.0	9.6
1987	6.6	5.0	6.3	9.0	10.2	12.3	16.0	16.4	15.3	13.4	10.6	8.0	10.8
1988	7.0	7.6	7.2	9.1	11.1	13.7	14.7	15.2	14.8	13.1	11.3	10.9	11.3
1989	9.6	9.1	9.1	9.9	12.4	14.8	17.0	17.8	16.7	15.0	11.9	9.7	12.8
1990	9.2	8.9	9.3	9.8	12.3	13.6	15.2	17.0	15.5	14.7	11.8	9.5	12.2
1991	8.1	7.0	8.8	9.8	11.4	13.0	14.5	15.4	17.0	14.2	11.8	10.3	11.8
1992	9.5	9.5	10.1	10.7	13.2	15.5	16.8	17.0	15.9	13.8	12.2	10.4	12.9
1993	9.8	9.9	9.7	11.0	13.1	14.8	16.2	16.7	16.5	14.4	11.7	10.2	12.8
obs.	37	37	37	36	37	37	37	37	37	37	37	36	
mean	8.6	7.9	8.1	9.3	11.2	13.7	15.3	16.0	15.5	14.1	11.7	9.9	
sdev	1.04	1.24	1.20	0.98	0.97	0.97	0.83	0.83	0.84	0.69	0.71	0.63	

Table 26. Monthly Mean Sea Temperature for NEWLYN at 50° 6'N, 5° 32'W

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1984	10.1	8.2	8.1	9.4	11.1	12.5	14.0		14.6	12.9	11.6	10.5	
1985	7.9	7.6	7.6	9.9	10.9	12.3	13.3	13.1	13.9	13.9	11.3	10.7	11.0
1986	9.5	6.0	6.5	7.4	9.6	11.5	13.3	13.7	13.6	13.7	11.9	10.6	10.6
1987	7.6	7.2	7.6	9.4	10.9	11.9	14.0	14.1	14.9	13.0	11.1	8.9	10.9
1988	9.4	8.4	8.1	9.2	10.5	12.7	12.8	14.3	14.1	13.3	11.7	11.2	11.3
1989	10.2	9.9	9.8	10.0	12.2	14.1	15.3	14.6	14.6	13.5	10.2	8.8	11.9
1990	9.3	9.5	9.0	9.5	12.1	13.1	14.6	16.0	14.8	13.5	11.2	9.3	11.8
1991	7.9	6.9	8.2	9.1	10.4	11.3	12.6	14.6	16.2	13.1	10.9	8.8	10.8
1992	7.2	7.6	8.3	8.6	10.5	13.5	13.7	13.4	12.7	11.6	10.8	10.2	10.7
1993	9.6	9.2	8.6	9.8	11.3	12.4	13.0	14.4	15.3	13.1	10.8	10.3	11.5
1994	9.2	8.5	9.2	9.5	11.5	12.3	14.2	16.5	14.9				
obs.	11	11	11	11	11	11	11	10	11	10	10	10	
mean	8.9	8.1	8.3	9.3	11.0	12.5	13.7	14.5	14.5	13.2	11.2	9.9	
sdev	1.05	1.18	0.89	0.73	0.76	0.83	0.81	1.07	0.92	0.63	0.51	0.89	

Table 27. Monthly Mean Sea Temperature for ILFRACOMBE at 51° 12'N, 4° 8'W

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1992				8.5	11.5	13.2	15.0	16.7	15.5	13.5	10.9	9.1	
1993	7.6	8.1	7.9	8.8	11.0	13.5	15.7	16.8	16.1	13.3	10.6	8.4	11.5
1994													
1995	8.9	8.6	8.3	9.0	10.6	12.9	15.8	17.8			13.3	10.0	
1996	8.2	6.7		8.5	10.5	13.7	15.7			14.4	11.9	9.3	
1997	6.2	7.5	8.7	9.6	11.7	14.4	14.2	14.2	13.4	11.6		9.2	
1998	7.0	7.2	7.7	8.0	8.8	12.0	14.0	15.9	15.5	11.5	9.5	8.9	10.5
1999	8.2		8.7	10.1	12.2	14.4	16.5	17.7	17.2	14.6	12.7	10.2	
2000	10.0	8.4	8.8	8.9	11.5	13.8	15.9		17.1	14.5	11.6	10.0	
obs	7	6	6	8	8	8	8	6	6	7	7	8	
mean	8.0	7.7	8.4	8.9	11.0	13.5	15.3	16.5	15.8	13.3	11.5	9.4	
sdev	1.25	0.73	0.47	0.66	1.05	0.80	0.87	1.33	1.40	1.33	1.29	0.63	

Table 28. Monthly Mean Sea Temperature for MINEHEAD at 51° 13'N, 3° 28'W

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1972								16.9	15.7	13.2	10.8	8.8	
1973	7.7	7.2	7.4	8.6	11.4	14.7	16.9	17.9	17.4	12.0	10.5	7.9	11.6
1974	7.4	7.5	7.6	9.2	11.8	15.9	16.5	17.3	15.2	11.9	9.7	8.9	11.6
1975	8.2	7.2	7.2	8.2	11.3	15.2	17.1	19.0	16.9	14.2	10.6	8.1	11.9
1976	7.4	5.4	6.4	8.4	12.5	16.4	18.5	19.1	16.7	14.2	9.8	6.7	11.8
1977	5.3	6.8		8.9	11.7	15.6	17.0	17.9	15.2	14.4	9.6	7.6	
1978	6.7	4.9	6.8	10.1	11.1	15.6	16.7	17.9	16.6	14.4	12.2		
1979													
1980													
1981													
1982													
1983													
1984													
1985													
1986													
1987													
1988	7.7	6.9	7.4	9.0	12.1	14.6	15.9	16.5	15.7	13.6	11.5	10.0	11.7
1989	8.3	7.7	7.9	9.0	12.1	15.6	18.4	18.5	17.3	14.6	11.2	8.0	12.4
1990	7.6	7.6	8.9	9.3	12.6	15.1	17.2	18.7	17.1	14.7	11.0	7.3	12.3
1991	5.6	4.5	7.9	9.8	11.2	12.8	16.2	17.9	18.0	14.8	11.9	9.3	11.7
1992	7.5	6.8	8.0	8.8	12.0	16.4	18.2	17.9	15.8	13.3	11.3	8.9	12.1
1993	7.4	7.9	8.1	8.9	11.0	14.6	17.3	17.9	17.1	13.1	10.6	8.8	11.9
1994	8.0	8.0	8.1	9.2	11.7	15.0	18.1	18.7	16.4	13.4	12.1	9.9	12.4
1995	7.5	8.2	8.2	8.7	10.7	13.8	17.9	19.9	17.1	15.1	12.2	8.9	12.4
1996	6.6	5.5	6.5	8.3	9.9	14.0	17.0	18.1	17.1	15.4	12.1	8.3	11.6
1997	5.3	6.2	8.1	9.6	10.9	12.7	16.1	19.6	18.2	15.0	12.4	8.7	11.9
1998	7.5	7.3	9.5	9.9									
obs.	17	17	16	17	16	16	16	17	17	17	17	16	
mean	7.2	6.8	7.8	9.1	11.5	14.9	17.2	18.2	16.7	14.0	11.1	8.5	
sdev	0.94	1.12	0.81	0.56	0.71	1.11	0.83	0.90	0.90	1.03	0.93	0.89	

Table 29. Monthly Mean Sea Temperature for HINKLEY POINT POWER STATION at 51° 13'N, 3° 7'W

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1976										15.2	11.0	7.7	
1977	5.7	7.4	8.3	10.9	13.7	15.7	18.5	18.5	16.9	14.5	11.0	8.8	12.5
1978	7.1	7.2	5.2	7.3	8.5	12.2	15.6	16.4	18.4	17.5	14.8	12.8	11.9
1979	4.4	3.6	5.7	8.9	11.4	14.9	18.5	17.7	17.6	15.9	11.7	8.7	11.6
1980	6.3	7.2	8.3	11.1	12.5	16.5	16.7	18.4	18.3	13.0	8.9	7.8	12.1
1981	7.6	7.5	9.7	10.8	12.8	17.0	18.1	19.8	19.0	16.3	11.0	8.1	13.1
1982	5.5	7.1	8.3	10.1	12.5	17.5	19.4	19.6	17.6	13.7	12.5	8.2	12.7
1983	7.6	5.3	6.4	7.9	11.5	15.5	21.3	21.1	16.9	14.3	11.3	9.6	12.4
1984	7.9	7.7	6.7	8.9	12.7	17.2	20.0	21.2	18.3	14.7	11.9	9.2	13.0
1985	5.4	4.3	5.7	8.9	12.4	15.8	18.9	18.1	17.1	15.9	9.9	8.4	11.7
1986	6.3	4.9	5.0	7.2	9.1	15.3	19.2	18.2	15.5	15.3	11.3	9.1	11.4
1987	5.9	4.5	6.2	9.4	13.3	15.4	18.1	18.8	18.4	14.6	11.8	7.7	12.0
1988	7.6	6.8	8.1	10.6	15.7	17.2	17.7	17.7	16.6	14.8	11.3	9.6	12.8
1989	9.7	8.0	9.5	10.5	14.0	17.5	20.5	20.8	18.8	16.0	12.0	8.0	13.8
1990	8.5	8.5	9.4	10.6	15.0	16.5	18.8	20.4	18.4	15.5	11.6	7.6	13.4
1991	6.6	4.8	7.7	9.6	13.1	15.0	18.0	20.0	19.8	14.7	10.9	8.3	12.4
1992	7.1	6.3	8.4	9.9	13.8	18.6	19.7	19.7	17.0	13.4	10.0	8.2	12.7
1993	7.4	7.9	8.1	10.6	12.9	16.9	19.1	18.8	16.6	12.8	9.5	7.0	12.3
1994	6.5	6.2	8.5	9.0	12.8	15.9	20.0	19.7	16.8	14.3	12.9	11.0	12.8
1995	8.1	8.3	8.0	11.0	13.4	16.7	20.4	22.6	18.8	16.5			
1996	6.7	3.9	5.0	9.7	12.2	16.3	19.2	19.9					
1997													
1998	6.5	6.0	7.5	10.3	13.8	16.5	18.3	19.5	18.3	15.3	11.5	9.0	12.7
1999	8.0	8.3	9.0										
obs.	22	22	22	21	21	21	21	21	20	21	20	20	
mean	6.9	6.4	7.5	9.7	12.7	16.2	18.9	19.4	17.8	15.0	11.3	8.7	
sdev	1.19	1.55	1.50	1.18	1.65	1.31	1.30	1.43	1.06	1.18	1.27	1.31	

Table 30. Monthly Mean Sea Temperature for BARRY at 51° 24'N, 3° 15'W

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1978				7.9	11.1	15.1	15.9	17.3	16.8	14.2	12.5	8.2	
1979	4.2	3.1	5.0	8.8	10.9	13.8	16.6	17.2	15.5	15.3	11.0	8.7	10.8
1980	5.7	6.6	7.1	8.8	11.5	14.4	15.8	17.4	17.2	13.1	9.5	7.6	11.2
1981	6.6	6.1	7.4	9.6	11.2	14.3	16.1	18.0	17.6	13.2	10.4	6.8	11.4
1982	4.2	5.9	7.1	9.4	12.5	16.3	17.7	18.0	16.8	14.0	11.3	7.8	11.8
1983	7.8	5.5	6.6	8.4	11.4	14.6	18.4	20.2	16.9	14.2	11.3	8.9	12.0
1984	6.8	6.3	6.8	8.3	11.7	15.5	18.2	19.2	17.4	14.3	11.2	8.8	12.0
1985	5.5	4.0	5.5	8.7	11.7	14.7	17.1	17.3	16.5	15.0	10.2	8.6	11.2
1986	6.5	3.5	4.7	7.7	11.3	15.1	17.7	16.8	14.9	13.4	10.6	8.6	10.9
1987	5.3	5.0	5.8	8.7	12.4	14.8	17.9	18.3	17.4	13.8	10.3	6.8	11.4
1988	7.3	6.7	7.5	9.8	12.8	16.1	17.0	17.3	16.2	13.7	10.6	9.2	12.0
1989	8.6	8.4	8.1	9.4	13.4	16.5	19.9	20.5	18.0	15.2	11.6	7.9	13.1
1990	7.8	7.8							16.0	15.1	11.2	7.9	
1991	6.4	4.1	6.8	9.1	11.8	14.0	17.1	18.7	17.7	13.1	8.6	6.5	11.2
1992		6.1	7.3	8.9	12.5	17.4	18.8	18.4	15.8	13.6	9.8	8.2	
1993	6.2	6.9	6.8	9.3	12.3	15.2	17.3	18.5	16.5	12.5	8.9	7.1	11.5
1994	6.1	5.6	7.3	8.6	11.9	15.0	18.0	18.4	15.6	12.9	11.9	8.9	11.7
1995	7.2	7.4	6.7	9.3	12.0	14.5	18.3	20.3	17.6	15.1	11.9	7.3	12.3
1996	5.0	3.6	5.0	7.9	10.5	14.8	17.3	18.7	16.6	14.2	9.6	6.7	10.8
1997	3.5	4.8	7.5	10.2	12.3	15.0	17.1	19.0	17.7	14.8	11.5	8.2	11.8
1998	7.3	7.9	8.6	9.7		14.4		17.4	17.0	14.4	10.7	8.1	
1999	7.7												
obs.	20	20	19	20	19	20	19	20	21	21	21	21	
mean	6.3	5.8	6.7	8.9	11.9	15.1	17.5	18.3	16.7	14.1	10.7	7.9	
sdev	1.36	1.56	1.07	0.68	0.72	0.90	1.02	1.08	0.84	0.83	1.01	0.82	

Table 31. Monthly Mean Sea Temperature for SWANSEA at 51° 36'N, 3° 56'W

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1976			6.5	9.0	12.3	16.1	19.3	19.3	16.4	13.8	10.6	7.3	
1977	5.5	6.4	7.6	8.6	12.0	14.4	17.0	17.8	16.0	13.9			
1978	5.9	4.9	5.8	8.2	11.8	14.9	15.5	17.1	16.3	14.1	12.1	8.3	11.2
1979	4.9	3.9	5.6	7.7	10.8	14.7	17.2	16.9	16.1	15.1	11.1	8.6	11.1
1980	5.4	7.0	6.8	9.4	12.1	14.4	15.5		16.1	13.4	10.3	8.1	
1981	7.0	6.2	7.3	9.7	11.5	14.7	17.0	18.1	17.1	12.4	9.8	5.8	11.4
1982	3.4	4.9	6.3	8.9	11.7	15.9	17.4	17.5	16.2	12.9	10.2	6.6	11.0
1983	6.4	3.8	5.1	7.4	10.7	13.9	18.5	19.7	16.6	14.0	11.4	8.8	11.4
1984	6.9	5.8	6.4	8.8	12.1	15.5	18.8	19.8	17.5	14.1	11.6	9.1	12.2
1985	5.6	4.4	5.8	8.3	11.7	14.5	17.2	16.6	16.4	14.7	9.7	8.7	11.1
1986	6.8	3.4	4.7	7.0	10.9	14.3	17.2	16.7	15.2	13.9	11.1	9.0	10.9
1987	5.5	5.3	5.8	9.0	12.2	14.1	17.0	17.7	16.8	13.1	10.1	6.9	11.1
1988	7.4	6.4	7.2	9.8	12.3	15.0	16.1	16.5	15.8				
1989		8.0	7.9	9.1	13.1	15.9	18.8	19.1	17.2	14.5	11.0	7.4	
1990	7.3	7.4	8.3	9.6	14.2	15.4	17.8	19.4	17.2	14.1	10.3	7.3	12.4
1991	5.7	3.4	6.6	8.9	11.6	14.0	16.8	18.3	18.2	13.1	9.6	7.6	11.2
1992	6.7	6.2	7.7	9.3	13.3	17.1	18.5	18.0	16.0	12.7	10.1	8.2	12.0
1993	8.4	8.1	8.5	10.8	13.7	16.7	18.3	18.5	17.2	13.6	9.8	8.2	12.7
1994	7.7	7.0	8.7	9.8	12.1	14.7	18.3	18.4	15.9	13.5	12.0	9.7	12.3
1995	7.7	7.7	7.3	9.7	12.5	15.3	19.0	21.0	17.6	15.3	11.9	7.5	12.7
1996	5.7	4.4	5.3	7.9	10.8	14.9	17.6	18.6	16.7	14.1	10.5	6.9	11.1
1997	3.8	5.4	7.8	10.3	12.4	15.4	17.9	19.6	17.3	14.6	10.9	8.7	12.0
1998	7.3	7.1	8.3	9.3	13.3	15.3	16.7	18.0	17.0	14.1	10.2	8.1	12.1
1999	6.9	6.8	7.7	9.9	13.3	15.4	18.5	18.6	18.0	14.2	11.1	8.3	12.4
2000	6.9	7.1	8.3	9.0									
obs	23	24	25	24	24	24	24	23	24	23	22	22	
mean	6.3	5.9	6.9	9.0	12.2	15.1	17.6	18.3	16.7	13.9	10.7	8.0	
sdev	1.24	1.47	1.16	0.90	0.94	0.82	1.05	1.16	0.74	0.73	0.77	0.93	

Table 32. Monthly Mean Sea Temperature for ANGLE at 51° 41'N, 5° 5'W

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1990											11.3	9.2	
1991	7.9	6.0	7.5	8.5	10.6	12.4	14.8	16.1	16.2	13.3	10.8	9.4	11.1
1992	8.9	8.2	8.6	9.2	11.8	13.9	15.2	15.8	14.8	12.5	10.7	8.9	11.5
1993	8.1	8.1	7.6	9.3	11.3	13.7	15.1	15.5	14.8	12.5	10.4	9.1	11.3
1994	8.2	6.8	8.1	8.4	10.7	12.9	15.1	16.1	14.9	13.2	12.6	11.0	11.5
1995	9.1	8.7	8.1	9.8	11.3	13.4	16.2	17.8	16.0	14.8	12.5	9.5	12.3
1996	8.1	6.7	7.0	8.5	10.3	12.9	15.2	16.0	15.4	13.6	11.3	8.4	11.1
1997	6.5	7.4	8.5	10.0	11.7	13.8	15.2	16.8	16.0	14.5	12.5	10.6	12.0
1998	9.2	9.2	9.1	9.1	11.8	13.2	14.8	15.6	15.2	13.4	10.9	8.5	11.7
1999	7.2	7.2	7.5	8.9	11.6	12.6	14.9	15.7	13.8	12.5	10.5	8.3	10.9
2000	8.5	8.3	8.5	8.9	11.7	13.3	15.1	16.3	16.1	13.8	10.7	9.5	11.7
obs	10	10	10	10	10	10	10	10	10	10	11	11	
mean	8.2	7.7	8.1	9.1	11.3	13.2	15.2	16.2	15.3	13.4	11.3	9.3	
sdev	0.84	1.00	0.65	0.54	0.55	0.51	0.40	0.69	0.77	0.80	0.85	0.86	

Table 33. Monthly Mean Sea Temperature for SKOMER ISLAND at 51° 44'N, 5° 17'W

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1985				8.2	10.0	12.5	13.9	15.0	15.0	14.3			
1986			6.2	6.8	8.8	11.6	13.5	14.4	13.8	13.1	11.4		
1987				8.4	10.0	11.5	13.8		14.9	14.0	12.2	9.8	
1988			8.1	9.3	10.8	12.7	13.9	15.1	14.9	13.7	12.3		
1989			9.1	9.0	11.0	12.5	14.2	15.8	15.6	14.8	12.4		
1990			9.2	9.2	11.1	12.8	14.4	16.1	15.6	14.3	12.6		
1991			7.7	8.5	10.1	11.7	14.1	15.3	16.0	14.1	12.0		
1992			8.7	8.9	10.9	12.9	14.0	15.3	14.9	13.3	11.1		
1993			7.9		10.8	12.9	14.4	15.1	15.1	13.7	11.7		
1994			8.2	8.6	10.3	12.2	14.1	15.3	14.8	13.8	13.1		
1995			8.7	9.5	10.8	12.5	14.5	16.4	15.8	15.0	13.9		
1996				8.3	9.7	12.0	14.0	15.5	15.4	14.3	12.4		
1997			8.6	9.6	11.1	12.8	14.4	15.8	16.1	15.9	12.4	11.6	
1998							13.7	15.6	15.5	14.3	14.1		
1999						8.1		8.9		10.9			13.2
obs.			10	12	13	14	14	14	14	15	13	3	
mean			8.2	8.7	10.4	12.1	14.1	15.0	15.2	14.0	12.4	11.5	
sdev			0.87	0.76	0.68	1.24	0.30	1.82	0.60	1.09	0.87	1.70	

Table 34. Monthly Mean Sea Temperature for WYLFA POWER STATION at 53° 25'N, 4° 29'W

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1967								13.9	16.0	10.9	11.0		
1968	7.0	6.3	6.6	7.3	9.2	12.3	14.0		14.2	13.2	10.8	9.6	
1969	7.2	5.2	5.1	7.2	9.4	11.5	13.8	15.1	15.4	14.6	10.8	8.3	10.3
1970	7.2	6.5	6.5	7.2	10.2	12.8	13.8	14.9	14.6	13.4	11.0	8.9	10.6
1971	7.8	6.9	7.1	9.0	11.1	13.2	14.8	15.4	16.5	13.5	11.3	9.9	11.4
1972	8.1	7.2	7.9	9.1	10.3	12.6	14.1	15.3	15.2	13.8	11.6	9.3	11.2
1973	8.6	8.1	8.1	8.6	10.1	12.6	14.9	15.9	15.7	13.5	11.3	9.3	11.4
1974	8.6	8.4	8.2	9.4	10.8	13.2	14.9	15.8	15.0	12.5	10.3	9.5	11.4
1975	9.1	8.2	8.4	8.2	10.3	13.0	14.6	16.2	14.8	12.6	11.3	9.9	11.4
1976	9.3	6.9	7.7	9.3	11.0	13.6	16.0	16.9	15.6	14.3	11.5	8.9	11.8
1977	6.8	7.3	7.6	8.6	10.9	13.1	15.2	16.1	15.5	14.4	10.6	9.5	11.3
1978	8.3	6.9	8.0	8.3	10.5	12.9	13.9	14.8	14.8	14.0	12.8	10.1	11.3
1979	7.1	5.6	6.3	7.5	9.0	11.9	13.6	14.8	14.9	13.9	11.3	9.4	10.4
1980	7.3	7.2	7.6	9.1	11.1	13.3	14.3	15.2	15.3	13.8	10.6	8.5	11.1
1981	8.1	7.6	7.7	9.3	10.2	12.8	14.4	16.0	15.6	13.3	11.1	9.0	11.3
1982	6.3	7.3	8.0	9.1	10.6	13.1	14.6	16.2	15.8	14.5	12.2	9.4	11.4
1983	8.8	7.4	7.7	8.3	9.8	11.0	14.2	15.6	14.9	13.6	11.4	9.8	11.0
1984	8.3	7.2	7.0	8.4	10.4	12.6	14.7	16.3	15.6	14.1	11.7	9.2	11.3
1985	7.3	5.9	6.3	7.4	8.9	12.0	14.0	14.2	14.4	13.6	10.7	9.2	10.3
1986	7.6	5.8	5.7	6.8	9.9	12.2	14.3	14.8	13.7	13.8	11.1	9.7	10.5
1987	7.1	7.0	7.1	9.0	10.9	12.9	14.9	15.8	16.0	13.9	12.0	9.9	11.4
1988	8.9	7.3	8.0	9.0	10.8	13.3	14.8	15.7	15.2	14.1	13.2	10.7	11.8
1989	8.8	8.0	7.8	8.4	10.4	12.9	15.0	15.9	15.2	14.2	11.5	9.1	11.4
1990	8.8	7.9	7.5	8.0	10.4	12.4	14.3	15.7	15.6	13.7	11.5	8.8	11.2
1991	6.9	5.8	6.9	8.2	10.1	11.5	15.0	15.9	16.0	14.1	11.5	9.6	11.0
1992	8.8	7.9	8.0	8.5	11.0	12.8	14.9	15.7	14.8	13.2	10.8	9.6	11.3
1993	7.8	7.3	7.3	8.5	10.9	13.0	14.5	15.3	14.6	11.6	9.9	8.0	10.7
1994	7.5	5.9	7.5	8.5	10.0	13.0	15.0	15.5	14.0	13.0	12.0	9.8	11.0
1995	7.9	7.8	8.0	8.5	11.0	14.0	16.0	16.9	16.0	14.0	12.0	8.0	11.7
1996	6.0	6.0	6.5	8.0	11.5	12.5	15.5	15.6	14.5	13.5	9.5		
1997	6.5	7.8	8.2	10.0	12.0	13.5	15.5	16.5	14.5	13.0	11.5	10.0	11.6
1998	8.5	8.5	9.0	11.0	12.0	12.0	15.0	16.0	15.0	13.0	11.0	9.0	11.7
1999	8.0	7.0	8.5	10.5	11.0	14.0	15.0	16.5	16.0	13.0	11.0	9.0	11.6
2000	8.0	7.5	8.0	9.0	10.5	12.5	14.5	16.5	14.5	12.5	11.5	8.5	11.1
obs.	33	33	33	33	33	33	33	33	34	34	34	32	
mean	7.8	7.1	7.4	8.6	10.5	12.7	14.7	15.7	15.2	13.5	11.3	9.3	
sdev	0.86	0.87	0.85	0.92	0.74	0.68	0.59	0.70	0.66	0.79	0.73	0.62	

Table 35. Monthly Mean Sea Temperature for AMLWCH at 53° 25'N, 4° 20'W

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1964	6.8	6.5	5.9	7.0	9.9	12.1	14.0	15.4	15.0	13.2	11.0	9.0	10.5
1965	7.0	5.6	5.4	7.3	9.3	11.8	13.7	14.8	14.2	13.4	10.0	8.1	10.1
1966	6.3	6.1	6.9	7.0	8.9	12.0	14.2	15.0	15.0	13.6	10.0	8.0	10.3
1967	6.6	7.0	7.3	7.5	9.1	11.6	13.8	15.0	14.8	13.3	10.5	8.3	10.4
1968	7.0	6.3	6.5	7.3	9.4	11.7	13.8	15.3	15.2	14.0	10.9	8.8	10.5
1969	7.0	5.5	4.8	6.3	8.6	11.2	13.7	15.2	15.3	14.4	11.3	7.9	10.1
1970	6.6	6.3	5.9	6.7	9.0	11.9	13.4	14.6	14.5	13.2	11.0	9.1	10.2
1971	7.5	6.9	6.8	7.8	10.0	11.8	14.0	15.1	15.7	14.6	11.2	9.4	10.9
1972	7.8	6.7	6.6	8.2	9.7	11.4	13.3	14.8	15.0	13.6	11.3	9.3	10.6
1973	8.1	7.6	7.3	7.9	10.0	12.0	14.2	15.3	15.4	13.2	10.9	8.5	10.9
1974	8.0	7.5	7.1	8.4	9.8	12.2	14.1	15.2	14.6	12.9	9.0	8.8	10.6
1975	8.2	7.1	6.9	7.1	9.3	12.5	14.2	15.7	15.3	13.2	11.1	8.8	10.8
1976	8.2	6.0	6.5	8.0	9.9	12.4	15.0	16.3	15.5	13.7	11.2	8.5	10.9
1977	6.3	6.5	6.5	7.7	9.6	11.9	13.9	15.3	15.1	13.7	12.3	8.2	10.6
1978	6.9	5.6	6.3	7.2	8.9	11.6	13.0	14.4	14.6	13.5	12.3	9.1	10.3
1979	5.9	4.4	5.3	6.5	8.4	10.8	13.2	14.4	14.4	13.4	11.0	9.4	9.8
1980	6.8	6.9	6.9	7.8	9.9	12.0	13.6	15.0	15.0	12.7	10.8	8.5	10.5
1981	7.2	6.6	6.9	8.5	9.6	11.7	13.7	15.1	15.4	12.8	10.7	8.0	10.5
1982	6.0	6.7	6.9	8.0	9.6	12.3	14.4	15.3	15.1	13.4	11.5	8.8	10.7
1983	7.9	5.5	6.1	6.9	8.8	11.1	13.8	15.7	15.0	13.5	11.3	9.6	10.4
1984	7.8	6.5	6.1	7.4	9.7	11.9	14.3	16.1	15.9	13.8	11.9	10.0	11.0
1985	7.1	5.5	6.0	7.3	8.9	11.4	13.5	14.3	14.5	14.0	10.4	8.9	10.2
1986			5.3	6.6	10.0	13.0	14.5	14.3	13.0	12.5	11.4	9.2	
1987	6.1	5.8	5.9	7.3	9.4	11.2	13.5	14.8	14.9	13.0	10.9	8.2	10.1
1988	7.8	6.7	6.3	7.7	9.7	12.2	13.9	14.7	14.4	12.8	10.9	9.5	10.6
1989	8.5	8.0	7.6	8.3	10.7	13.0	15.3	16.3	15.9	14.6	11.9	9.2	11.6
1990	8.6	8.0	7.7	8.2	10.4	12.5	14.5	16.1	15.7	14.0	11.4	8.8	11.3
1991	7.0	5.8	6.8	8.3	9.7	11.6	13.9	15.4	16.0	13.6	10.8	9.2	10.7
1992	8.5	7.8	7.8	8.3	10.4	12.9	14.8	15.4	14.4	12.5	10.4	8.6	11.0
1993	7.3	7.0	6.4	8.0	10.1	11.9	14.0	14.9	14.7	12.6	10.4	9.0	10.5
1994	7.6	6.3	6.6	7.6	9.8	11.8	14.8	15.4	14.0	13.4	12.2	10.6	10.8
1995	8.5	7.8	7.3	8.5	10.1	12.2	14.8	16.9	16.6	15.0	12.7	8.9	11.6
1996	6.8	5.4	5.7	7.2	9.4	12.0	14.2	15.7	15.7	14.1	11.3	8.0	10.5
1997													
1998	8.8	8.3	8.4	9.0	11.0	12.9	14.6	15.8	15.7	14.0	11.3	9.6	11.6
1999	8.3	7.4	7.1	8.6	10.7	12.6	14.8	16.1	16.1	14.0	11.9	9.4	11.4
obs.	34	34	35	35	35	35	35	35	35	35	35	35	
mean	7.4	6.6	6.6	7.6	9.6	12.0	14.1	15.3	15.1	13.5	11.1	8.9	
sdev	0.82	0.90	0.78	0.66	0.60	0.54	0.54	0.62	0.70	0.61	0.73	0.61	

Table 36. Monthly Mean Sea Temperature for MOELFRE at 53° 21'N, 4° 14'W

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1966	5.3	4.9	6.5	6.5	9.2	12.1	14.4	15.1	15.2	13.1	9.5	7.7	10.0
1967	6.2	6.3	7.2	7.6	9.0	13.3	14.4	15.0	14.7	12.8	10.0	8.1	10.4
1968	6.0	5.4	6.1	7.9	9.7	12.3	14.1	16.0	15.6	14.6	9.9	6.5	10.3
1969	6.0	4.6	4.0	6.0	9.1	12.2	14.1	15.6	15.6	14.0	10.3	6.2	9.8
1970	5.5	5.5	5.6	6.7	9.3	13.1	14.4	14.7	15.3	13.1	10.4	7.6	10.1
1971	5.9	6.3	6.3	7.5	9.6	12.7	15.2	16.1	15.5	13.8	9.9	8.1	10.6
1972	6.4	5.6	5.9	8.6	10.1	12.1	13.8	14.7	14.3	13.1	10.2	8.3	10.3
1973	6.5	6.9	7.8	9.3	10.2	12.9	15.8	15.7	15.0	12.9	11.1	7.6	11.0
1974	7.1	6.9	6.9	8.4	10.7	13.1	14.4	15.0	15.0	11.4	9.2	8.3	10.5
1975	7.2	7.3	6.8	7.4	12.3	14.2	15.8	16.0	14.9	12.8	10.0	8.0	11.1
1976	7.9	5.4	6.8	10.1	11.6	14.3	17.8	19.7	16.8	12.1	6.5	3.8	11.1
1977	5.0	5.4	6.4	8.1	11.6	14.2	15.3	16.3	14.6	13.1	10.0	7.8	10.7
1978	6.2	5.1	6.3	7.7	9.6	13.0	14.8	15.4	14.7	13.4	11.8	7.7	10.5
1979	4.9	4.2	5.0	5.7	7.2	8.4	10.6	11.0	10.9	9.5	6.6	4.2	7.4
1980					11.0	13.8	14.9	14.6	12.9	10.0	9.5	8.2	
1981	7.0	6.5	7.8	9.2	10.2	13.3	14.8	16.1	15.1	11.4	9.5	6.5	10.6
1982	4.8	5.0	6.9	8.2	10.4	14.6	16.1	16.2	14.2	11.8	9.2	7.3	10.4
1983	6.6	4.3	6.0	7.2	9.2	11.9	16.3	16.7	14.3	12.0	7.9	7.4	10.0
1984	6.0	5.3	5.4	7.5	11.3	14.1							
1985	4.2	3.3	5.3	8.4	9.1	10.2	12.4	13.1	14.6	13.8	9.3	7.9	9.3
1986	6.0	3.3	4.4	6.2	9.2	12.6	14.1		14.0	12.8	10.2	8.5	
1987	5.3	5.6	5.8	7.8	10.2	11.8	14.9	15.9	15.5	12.6	10.4	7.6	10.3
1988	7.5	6.4	6.3	8.4	10.7	13.7	14.6	15.7	14.0	12.1	9.7	8.7	10.7
1989	7.8	7.4	7.3	8.0	11.4	14.1	16.1	16.8	15.8	13.7	10.8	7.3	11.4
1990	7.7	7.5	7.4	8.1	11.6	12.4	15.2	16.7	15.3	13.3	10.4	7.8	11.1
1991	6.2	4.2	6.5	8.2	10.3	12.5	14.4	16.1	16.2	12.8	9.7	8.4	10.5
1992	7.9	7.1	7.6	8.0	10.6	13.5	16.0	16.3	14.2	11.7	10.1	8.0	10.9
1993	6.7	6.7	5.9	8.2	10.9	12.5	14.5	15.4	15.2	11.7	9.3	8.2	10.4
1994	7.1	5.8	6.2	7.4	10.7	13.5	14.5	15.7	14.5	12.6	11.6	9.6	10.8
1995	7.2	7.4	7.0	8.5	10.1	13.3	15.9	17.6	16.1	14.5	11.5	7.0	11.3
1996	4.8	4.4	5.4	7.4	9.4	12.3	14.9	16.2	15.1	13.7	10.4	7.2	10.1
1997	4.8	6.0	7.3	9.1	10.7	13.0	15.1	17.4	15.8	13.2	11.0	8.6	11.0
1998	8.1	8.0	8.0	8.9	11.5	13.2	15.0	15.6	14.4	13.6	10.6	8.9	11.3
1999	7.9	7.2	7.5	9.0	11.6	14.0	16.7	17.5	17.2	14.5	12.1	8.9	12.0
2000	7.4	7.5	7.9	8.1	11.0	13.5							
obs	34	34	34	34	35	35	33	32	33	33	33	33	
mean	6.4	5.8	6.5	7.9	10.3	12.9	14.9	15.8	14.9	12.8	10.0	7.6	
sdev	1.09	1.26	0.99	0.96	1.05	1.19	1.25	1.44	1.12	1.17	1.22	1.18	

Table 37. Monthly Mean Sea Temperature for HEYSHAM POWER STATION at 54° 2'N, 2° 50'W

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1955	2.5	2.0	2.2	8.6	11.3	14.0	18.9	18.4	14.7	10.9	6.2	5.1	9.6
1956	3.8	0.9	5.1	7.1	12.0	13.7	15.4	12.9	12.1	9.1	6.5	4.7	8.6
1957	3.2	3.4	6.1	8.2	10.3	14.9	16.8	15.6	11.3	9.4	5.6	3.6	9.0
1958	2.3	2.6	2.1	6.0	11.9	14.8	16.3	15.8	15.9	11.1	8.6	4.3	9.3
1959	2.1	4.2	6.9	9.5	13.7	15.8	17.8	17.4	16.2	12.5	7.4	5.1	10.7
1960	3.3	2.8	4.8	9.7	15.0	16.4	15.4	15.3	13.3	9.0	5.4	3.2	9.5
1961	3.8	6.1	6.8	9.1	12.6	14.1	14.7	14.6	13.9	10.1	5.6	5.0	9.7
1962													
1963	-0.6	0.0	4.4	7.1	10.9	14.6	15.1	14.4	13.9	10.6	8.3	3.7	8.5
1964	2.9	4.2	5.0	9.0	12.8	15.4	17.1	16.1	14.0	7.3	6.7	4.6	9.6
1965	2.8	2.9	5.2	7.9	12.9	15.2	15.4	15.1	13.2	12.6	3.3	2.3	9.1
1966	2.8	5.2	6.3	7.6	12.8	16.7	17.3	16.2	14.4	12.3	9.3	6.9	10.7
1967	5.8	5.3	6.2	9.8	13.7	16.9	18.2	17.3	15.2	12.1	6.1	3.9	10.9
1968	5.0	3.9	8.6	12.0	12.4	17.4	17.4	17.3	15.7	15.2	7.8	5.1	11.5
1969	5.4	2.5	3.9	9.3	11.4	16.3	18.2	17.7	14.9	12.3	5.2	4.4	10.1
1970	3.8	3.2	5.1	8.1	14.4	17.6	15.8	16.2	14.2	9.6	8.3	6.4	10.2
1971	4.3	4.8	5.8	9.9	13.8	15.8	19.4	16.0	15.1	12.1	7.2	5.2	10.8
1972	4.4	4.7	5.8	8.9	11.4	13.3	16.0	15.2	14.1	10.9	6.8	4.4	9.7
1973	3.9	5.6	6.6	8.4	12.4	16.2	18.2	18.1					
1974													
1975													
1976	5.3	4.3	5.7	8.4	11.3	19.4	19.9	19.0	13.5	11.3	7.3	4.1	10.8
1977	2.2	4.7	6.9	7.6	11.5	14.8	15.9	16.7	13.8	11.2	7.1	4.4	9.7
1978	3.8	1.8	7.0	9.7	11.3	11.8	14.8	15.4	12.9	12.8	10.3	3.0	9.6
1979	0.1	1.2	3.1	7.8	11.6	16.7	16.0	14.3	11.2	10.3	7.8	5.1	8.8
1980	2.6	5.6	5.4	9.7	11.2	15.6	15.3	17.2	14.6	9.7	7.4	4.8	9.9
1981	3.9	3.8	5.8	9.8	12.5	13.9	17.8	16.5	14.7	8.4	7.0	-0.3	9.5
1982	1.1	5.0	8.1	10.8	15.4	15.6							
1983													
1984													
1985													
1986													
1987													
1988													
1989													
1990	6.1	5.6	7.4	8.4	12.5			17.6	15.4	13.0	8.5	5.5	
1991											9.6	6.9	
1992	6.9	6.0	7.5	9.3	12.4	16.7	17.4	17.4	13.5	12.5	8.1	6.4	11.2
1993	5.4	6.7	7.6	9.5	11.4	15.6	16.6	15.8	14.9	9.5	7.5	6.1	10.6
1994	6.4	4.8	6.3	8.9	11.6	14.3	17.6	17.6	13.5	12.6	10.9	8.0	11.0
1995	5.6	6.2	6.6	9.6	12.1	15.0		19.6	16.1	13.2			
1996	4.6	3.0	4.9	7.0	11.0	15.1	16.6	16.1	15.5	12.1	8.2	5.5	10.0
1997													
1998	6.1	6.8	8.0	8.1	13.0	14.1	16.0	16.6	15.4	12.8	9.0	7.1	11.1
1999	6.1	6.2	7.3	9.9	12.9	15.3	17.6	17.0	16.7	12.4	9.9	5.9	11.4
obs.	33	33	33	33	33	32	30	32	31	31	31	31	
mean	3.9	4.1	5.9	8.8	12.3	15.4	16.8	16.5	14.3	11.3	7.5	4.9	
sdev	1.80	1.75	1.57	1.21	1.19	1.46	1.37	1.44	1.34	1.71	1.64	1.60	

Table 38. Monthly Mean Sea Temperature for PORT ERIN at 54° 5'N, 4° 46'W

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1903	7.6	7.8	7.6	8.1	9.4	10.9	12.9	13.9	13.3	12.7	10.9	9.2	10.4
1904	8.3	7.5	7.0	8.0	9.1	11.1	13.5	14.2	13.9	12.7	11.2	9.7	10.5
1905	8.2	7.3	7.5	8.1	9.8	11.9	14.3	14.4	13.8	12.1	10.5	9.5	10.6
1906	8.3	6.9	6.9	7.6	8.7	11.2	13.1	14.3	14.1	12.9	11.1	9.3	10.4
1907	8.2	6.6	6.8	7.7	8.9	10.6	12.4	13.3	13.3	12.2	10.8	9.3	10.0
1908	7.6	7.1	6.6	7.2	9.0	11.0	12.8	13.8	13.0	12.8	11.3	9.8	10.2
1909	8.0	6.8	6.1	7.6	9.3	11.2	12.6	13.7	12.9	12.2	10.1	8.5	9.9
1910	7.4	6.6	7.0	7.5	8.9	10.9	12.6	13.8	13.4	12.1	9.8	8.8	9.9
1911	7.8	7.0	6.7	7.2	9.5	11.5	13.3	15.0	14.3	12.4	9.9	9.2	10.3
1912	7.9	6.9	7.6	8.4	10.1	11.9	13.3	13.5	12.8	11.8	10.3	9.1	10.3
1913	8.0	7.5	7.1	7.7	9.3	11.4	12.7	13.9	13.6	12.8	11.4	9.3	10.4
1914	7.7	7.9	7.6	8.6	9.8	11.5	13.9	14.7	14.3	13.0	11.1	9.3	10.8
1915	7.8	6.9	6.8	7.7	9.0	11.1	12.9	14.0	13.9	12.4	9.8	8.6	10.1
1916	8.4	6.7	5.6	7.1	8.8	10.6	12.6	14.2	13.4	12.1	10.5	8.8	9.9
1917	6.6	5.3	5.5	6.0	8.0	10.9	12.9	13.6	13.6	11.4	9.9	8.0	9.3
1918	6.4	7.4	6.4	7.4	9.4	11.7	13.0	14.2	13.0	11.5	10.2	9.4	10.0
1919	7.8	6.5	6.4	7.4	9.0	11.2	12.1	13.8	13.0	11.3	9.0	8.3	9.7
1920	7.2	6.6	6.6	7.4	9.2	11.3	12.9	13.3	13.2	12.3	10.9	8.9	10.0
1921	8.8	7.5	7.8	8.4	10.1	12.0	14.0	14.4	14.0	13.6	11.0	10.0	11.0
1922	8.1	7.7	7.2	7.6	9.6	11.6	12.6	13.2	13.0	11.8	10.4	9.7	10.2
1923	8.2	7.9	7.9	8.4	9.4	10.9	13.2	13.7	13.1	12.0	9.7	8.4	10.2
1924	7.8	7.0	6.6	7.4	9.0	11.5	13.1	13.7	13.4	12.3	11.2	10.7	10.3
1925	8.9	7.9	7.5	8.1	9.2	11.2	13.4	14.6	13.5	12.7	10.9	8.9	10.6
1926	8.4	7.9	7.6	8.4	9.5	11.9	13.5	14.7	14.5	12.9	11.2	9.1	10.8
1927	8.6	7.3	7.7	8.2	9.5	11.1	12.8	14.5	14.0	12.9	11.2	8.9	10.6
1928	7.8	6.8	6.6	7.4	9.2	10.6	12.5	13.5	13.9	12.6	11.2	8.9	10.1
1929	7.6	7.0	6.8	7.6	9.0	11.6	13.3	14.0	14.2	12.4	11.1	9.9	10.4
1930	8.6	7.1	7.0	7.6	9.2	11.6	13.4	13.9	13.8	12.6	10.9	9.8	10.5
1931	8.2	7.2	6.1	7.0	8.8	11.0	13.2	13.8	13.4	12.6	11.6	10.2	10.3
1932													
1933													
1934													
1935													
1936													
1937													
1938													
1939													
1940													
1941													
1942													
1943													
1944													
1945													
1946													
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1948													
1949													
1950	8.9	7.9	8.4	8.5	9.9	12.3	13.8	14.5	13.6	12.3	10.3	8.6	10.8
1951	7.6	6.9	6.7	7.1	7.9	10.4	13.0	13.5	13.4	13.0	12.2	10.8	10.2
1952	8.6	6.9	6.9	8.5	9.4	11.4	13.5	14.1	13.2	11.5	9.9	8.3	10.2
1953	7.6	6.7	7.3	7.8	9.4	11.3	13.2	14.5	14.0	13.3	12.0	10.8	10.7
1954	8.9	7.7	7.5	8.5	9.3	11.3	12.8	13.7	13.4	12.7	11.0	9.8	10.6
1955	7.8	6.3	6.2	7.6	8.9	10.6	12.9	14.2	14.3	12.9	11.7	10.0	10.3
1956	8.3	6.7	7.0	7.8	9.4	11.2	13.1	13.3	13.3	12.6	11.1	9.9	10.3
1957	8.4	7.7	8.3	8.9	9.9	12.1	13.8	14.6	14.0	12.9	10.7	9.3	10.9
1958	7.8	7.6	6.8	7.4	9.3	11.2	13.0	14.2	14.1	13.3	11.8	10.1	10.6
1959	8.4	7.9	8.4	9.1	10.4	12.5	14.5	15.2	15.0	14.4	12.5	10.5	11.6
1960	8.8	7.9	7.6	8.8	10.6	12.5	13.7	14.6	14.4	12.9	11.4	9.3	11.0
1961	8.1	8.3	8.2	8.8	10.4	12.1	13.6	14.1	13.9	12.9	10.6	9.1	10.8
1962	7.9	7.0	6.2	7.3	9.2	10.7	12.2	13.7	13.2	12.3	10.6	8.8	9.9
1963	5.7	4.5	5.8	6.8	8.4	10.5	12.2	13.0	12.8	11.9	11.0	8.8	9.3
1964	8.5	7.3	6.8	7.9	10.0	11.5	13.3	14.1	13.9	12.8	11.3	9.4	10.6
1965	7.8	6.5	6.5	8.1	9.4	11.8	12.9	14.0	13.2	12.5	9.9	9.1	10.1
1966	7.4	6.7	7.3	7.0	9.2	11.7	13.4	13.8	13.9	12.9	10.7	9.2	10.3
1967	7.9	7.7	7.3	7.3	8.6	11.5	13.3	14.0	13.7	12.3	10.3	8.9	10.2
1968	8.0	6.8	7.1	7.6	9.2	11.8	13.0	14.3	14.1	13.3	10.7	9.6	10.5
1969	8.5	6.6	5.6	7.3	8.9	11.5	13.5	14.1	13.7	13.4	11.2	9.2	10.3
1970	7.8	7.1	6.3	7.2	9.4	11.4	12.8	13.8	13.6	12.6	11.0	9.4	10.2
1971	8.5	7.9	7.4	8.3	10.2	11.5	13.3	14.4	14.2	13.5	11.2	10.6	10.9
1972	8.5	7.8	7.8	8.7	9.8	11.0	12.9	13.7	13.6	12.9	11.1	9.9	10.6
1973	8.9	7.9	8.0	8.4	9.7	12.4	13.8	14.3	14.3	12.6	11.0	9.4	10.9
1974	8.8	8.2	7.9	8.7	9.9	11.7	13.4	14.4	13.6	11.7	10.6	9.2	10.7
1975	8.4	7.5	7.5	8.0	9.4	11.9	14.3	15.2	14.3	13.0	11.3	10.0	10.9
1976	8.9	7.3	7.2	7.8	9.5	12.0	13.8	14.3	13.5	13.0	11.5	9.7	10.7
1977	7.7	7.5	7.5	7.8	9.2	11.0	13.3	14.0	13.6	12.8	10.7	9.3	10.4
1978	7.8	6.4	7.1	7.5	9.0	11.0	11.8	13.2	13.3	12.7	12.0	9.6	10.1
1979	7.5	6.0	5.9	6.8	8.3	11.2	13.0	13.4	13.3	12.6	10.6	9.7	9.9
1980	7.8	7.9	7.4	8.2	9.5	11.7	12.7	14.5	14.6	12.7	11.1	9.5	10.6
1981	8.0	7.1	7.4	8.1	9.4	11.7	13.0	13.8	14.1	11.7	10.6	8.2	10.3
1982	7.2	6.9	6.9	8.1	9.4	11.8	13.1	13.8	13.3	12.4	10.9	8.9	10.2
1983	7.8	5.6	6.7	7.2	8.8	11.0	13.3	14.2	13.5	12.4	11.4	9.9	10.2

Table 38. continued: Monthly Mean Sea Temperature for PORT ERIN at 54° 5'N, 4° 46'W

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	mean
1984	7.8	7.0	6.9	7.6	9.1	11.6	13.4	14.6	14.2	12.9	11.6	10.5	10.6
1985	8.2	6.8	6.8	7.7	8.9	11.0	13.4	13.6	13.4	13.2	10.4	10.0	10.3
1986	7.6	5.3	6.2	6.5	8.5	10.3	12.4	12.7	12.5	12.1	10.7	9.4	9.5
1987	7.2	6.9	6.5	7.7	9.1	10.9	13.1	13.8	13.7	12.3	11.0	9.3	10.1
1988	8.8	7.4	7.2	8.0	9.6	11.9	13.6	14.3	13.4	12.3	11.3	10.4	10.7
1989	9.5	8.5	8.0	8.1	9.9	11.4	13.9	14.7	14.3	13.5	11.7	10.0	11.1
1990	9.4	8.4	7.8	8.1	10.0	12.0	13.3	15.0	14.2	13.0	11.2	9.4	11.0
1991	7.8	6.0	7.3	7.8	9.1	10.7	13.1	14.3	14.2	12.7	11.1	9.7	10.3
1992	8.5	8.0	8.0	8.1	9.8	11.8	13.4	14.6	13.6	12.0	10.6	9.6	10.7
1993	7.9	7.4	7.0	8.2	9.4	11.6	13.1	13.8	13.5	12.1	10.5	9.7	10.4
1994	8.0	6.7	7.2	7.5	9.0	11.1	13.3	13.8	13.3	12.3	11.9	11.0	10.4
1995	8.2	8.1	7.4	8.4	9.8	11.5	14.0	15.3	14.4	14.0	12.2	9.8	11.1
1996	8.6	7.1	6.9	8.0	8.7	11.4	13.1	14.1	13.7	13.0	10.5	9.1	10.4
1997	7.7	7.6	7.8	8.3	9.6	11.3	13.7	15.0	14.6	13.7	12.6	11.1	11.1
1998	9.6	9.1	8.9	9.0	10.5	12.2	14.0	14.8	14.7	13.5	11.6	10.2	11.5
1999	8.9	7.7	7.8	8.9	10.5	12.3	14.2	14.5	15.0	13.3	12.1	9.8	11.3
2000	8.3	7.8	8.0	8.2	10.3	12.1	13.7	15.2	15.1	13.4	11.0	10.1	11.1
obs.	80	80	80	80	80	80	80	80	80	80	80	80	
mean	8.1	7.2	7.1	7.8	9.4	11.4	13.2	14.1	13.7	12.6	11.0	9.5	
sdev	0.64	0.76	0.70	0.60	0.55	0.51	0.52	0.54	0.54	0.59	0.67	0.66	

