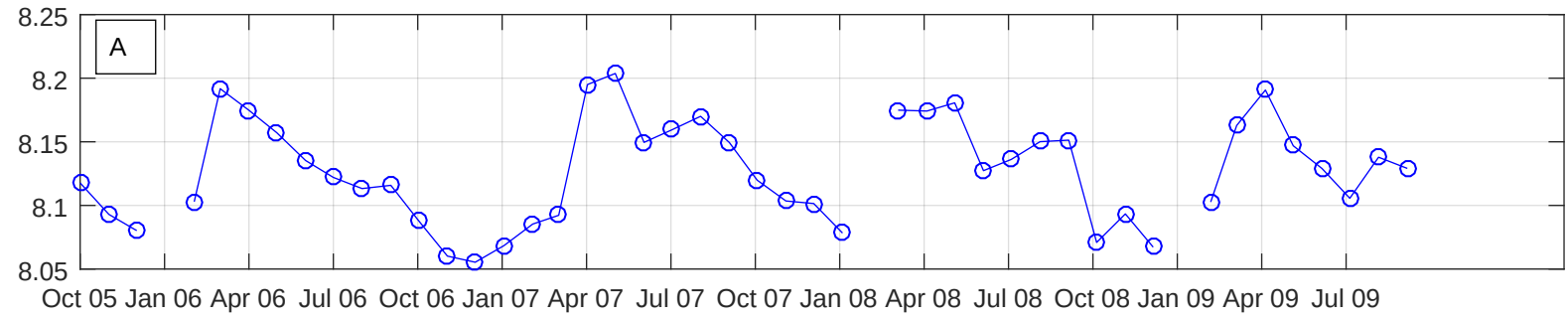
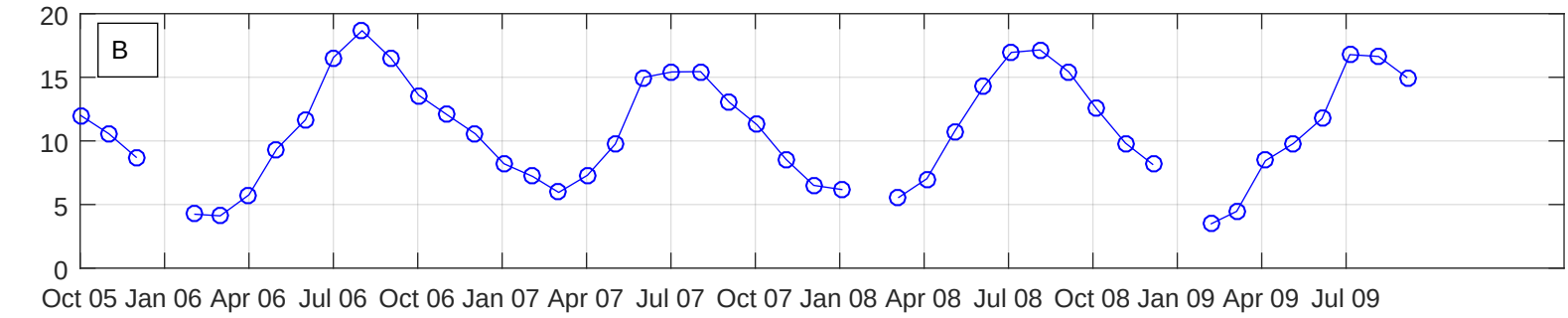
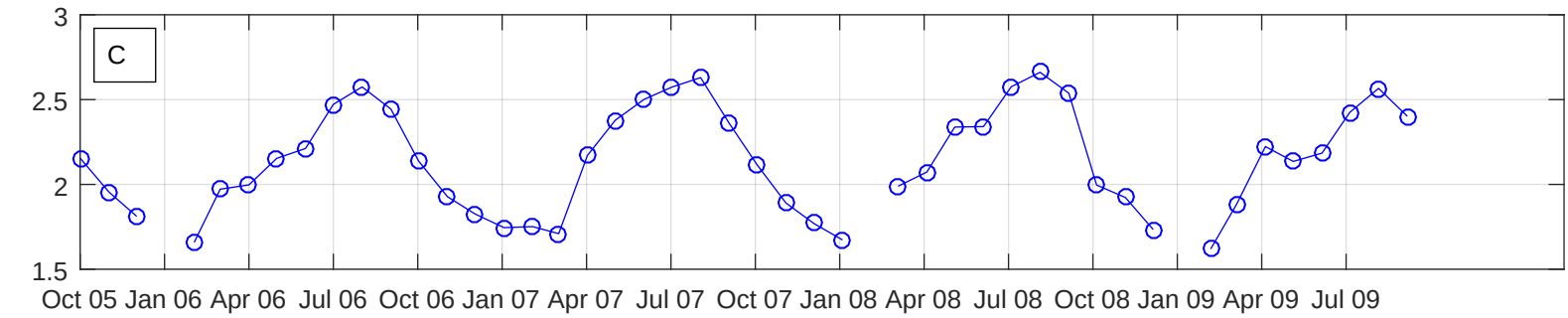
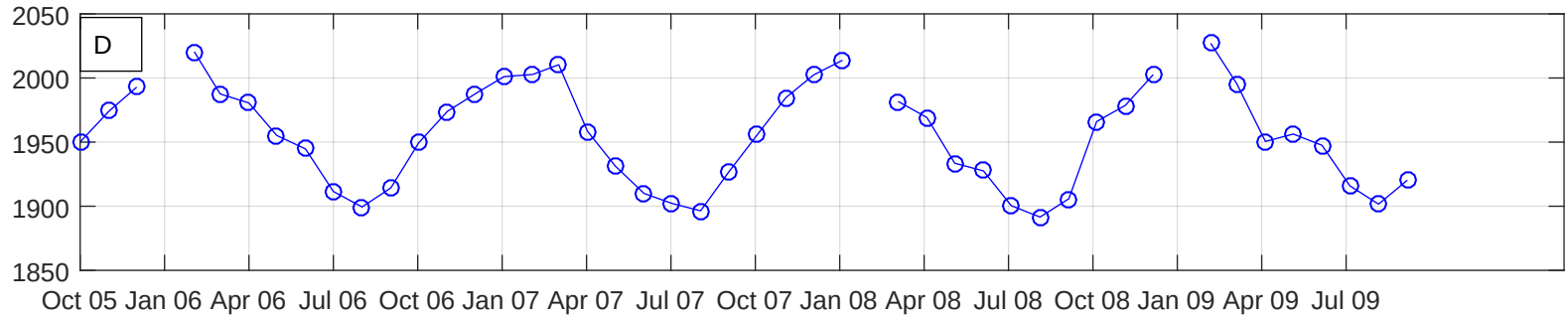
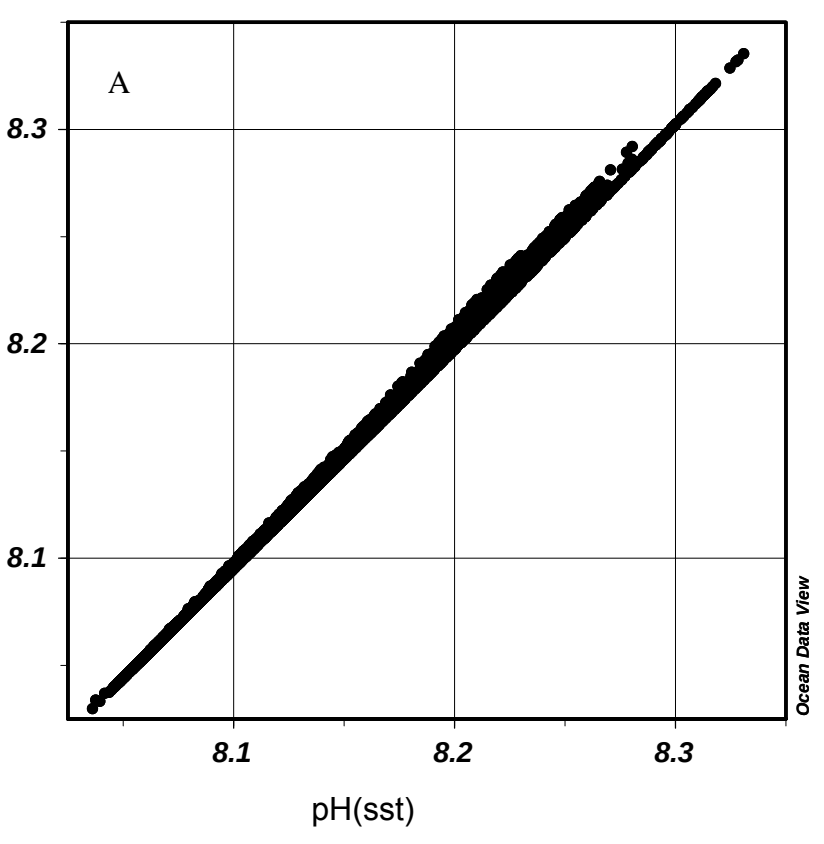

A
8.25
8.2
8.15
8.1
8.05
Oct 05 Jan 06 Apr 06 Jul 06 Oct 06 Jan 07 Apr 07 Jul 07 Oct 07 Jan 08 Apr 08 Jul 08 Oct 08 Jan 09 Apr 09 Jul 09


B
20
15
10
5
0
Oct 05 Jan 06 Apr 06 Jul 06 Oct 06 Jan 07 Apr 07 Jul 07 Oct 07 Jan 08 Apr 08 Jul 08 Oct 08 Jan 09 Apr 09 Jul 09


C
3
2.5
2
1.5
Oct 05 Jan 06 Apr 06 Jul 06 Oct 06 Jan 07 Apr 07 Jul 07 Oct 07 Jan 08 Apr 08 Jul 08 Oct 08 Jan 09 Apr 09 Jul 09


D
2050
2000
1950
1900
1850
Oct 05 Jan 06 Apr 06 Jul 06 Oct 06 Jan 07 Apr 07 Jul 07 Oct 07 Jan 08 Apr 08 Jul 08 Oct 08 Jan 09 Apr 09 Jul 09


A
8.3
8.2
8.1
8.1
8.2
8.3
pH(sst)
Ocean Data View

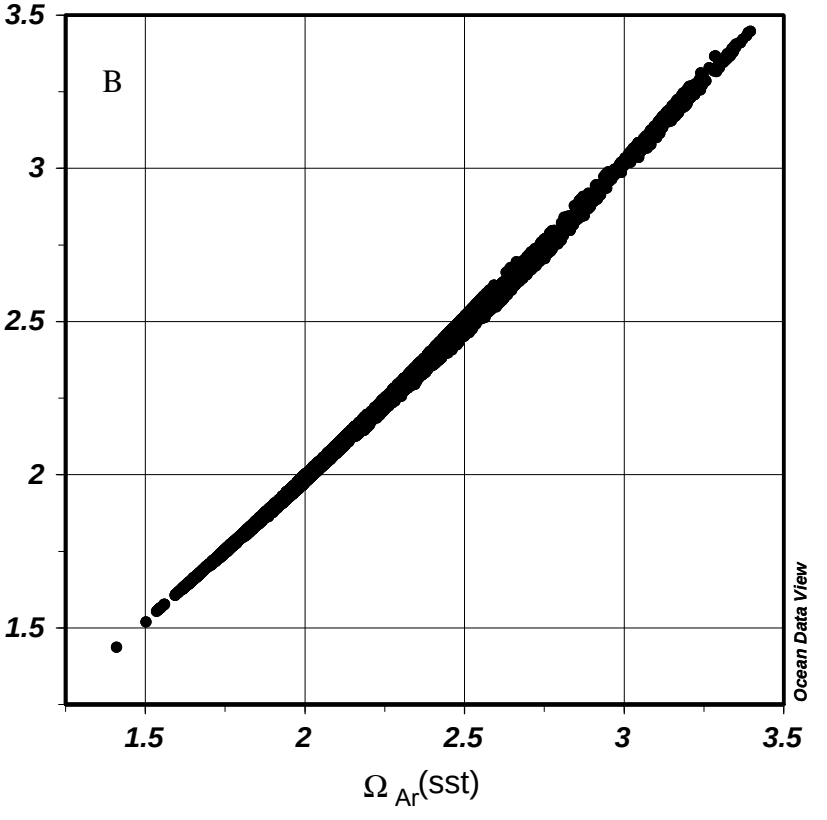

B
3.5
3
2.5
2
1.5
1.5
2
2.5
3
3.5
Ω Ar(sst)
Ocean Data View

Figure captions:

Fig. S1: Time series of monthly variations in **A**) pH(sst), **B)** SST, **C**) Ω_{Ar}(sst) and **D**) nDIC for the whole study area in 2005-2009.

Fig. S2: A) comparespH(sst) with pH values obtained from Eq. 5 (y-axis). **B**) Compares Ω_{Ar}(sst) with values obtained from Eq. 6 (y-axis).