



Permis Mer

NAVIGATION

LEX.BENTNER (LBENTNER@PT.LU)

Tidal Streams



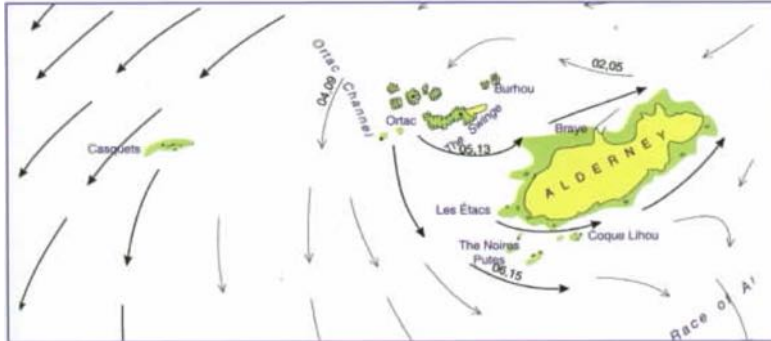


Fig 6.1 (above) As the tidal stream changes direction it becomes almost circular around the island of Alderney.
Fig 6.2 (right) In South Brittany the flow is into and out from the coast for most of the time.

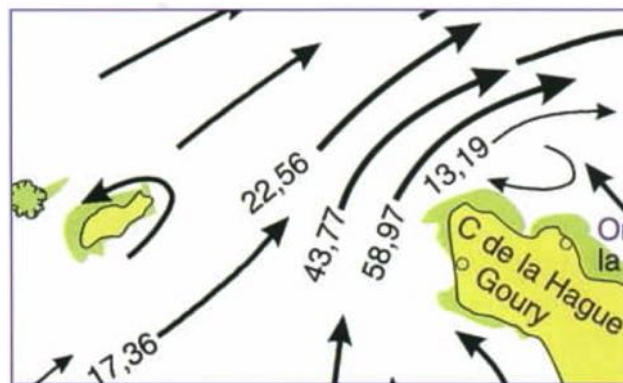


Fig 6.3 Tidal streams off the coast of Northern France.

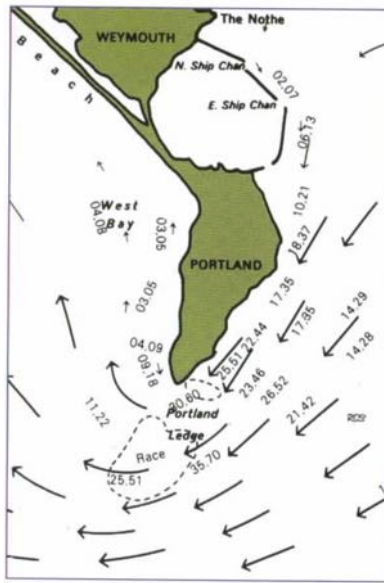
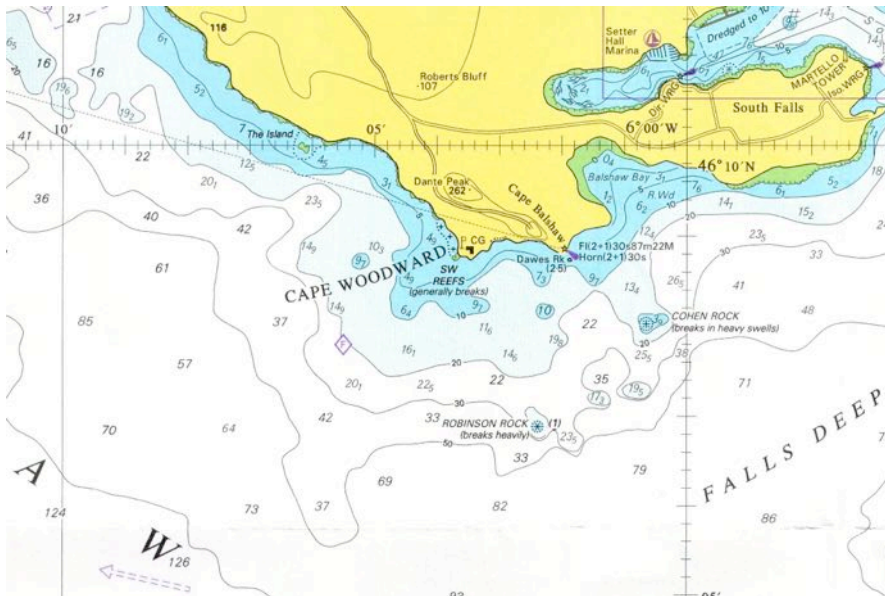
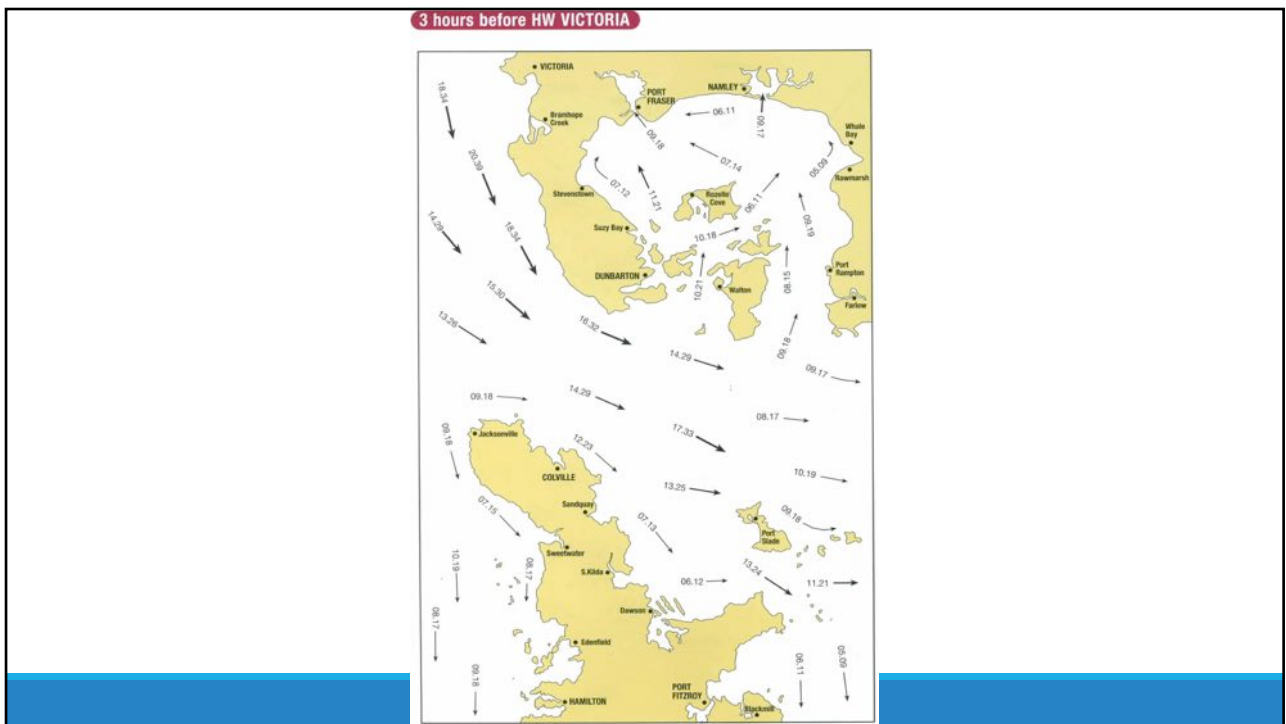
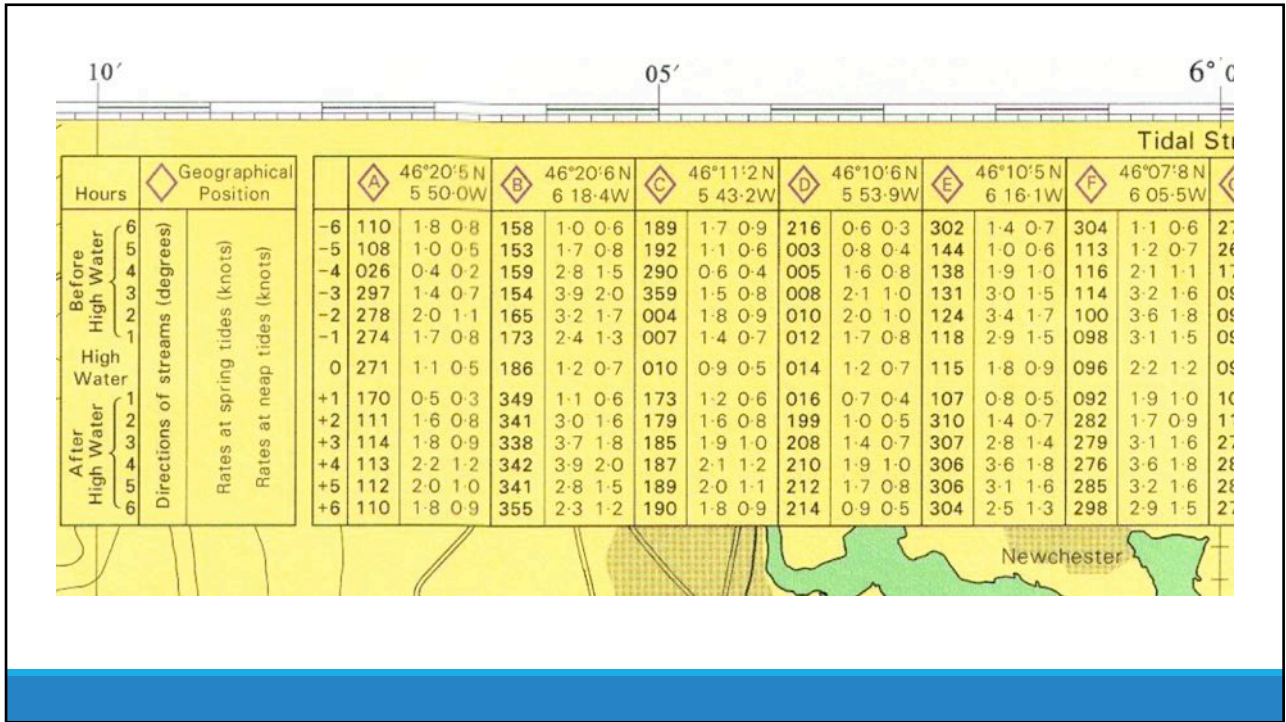


Fig 6.4 The tidal race off Portland Bill.





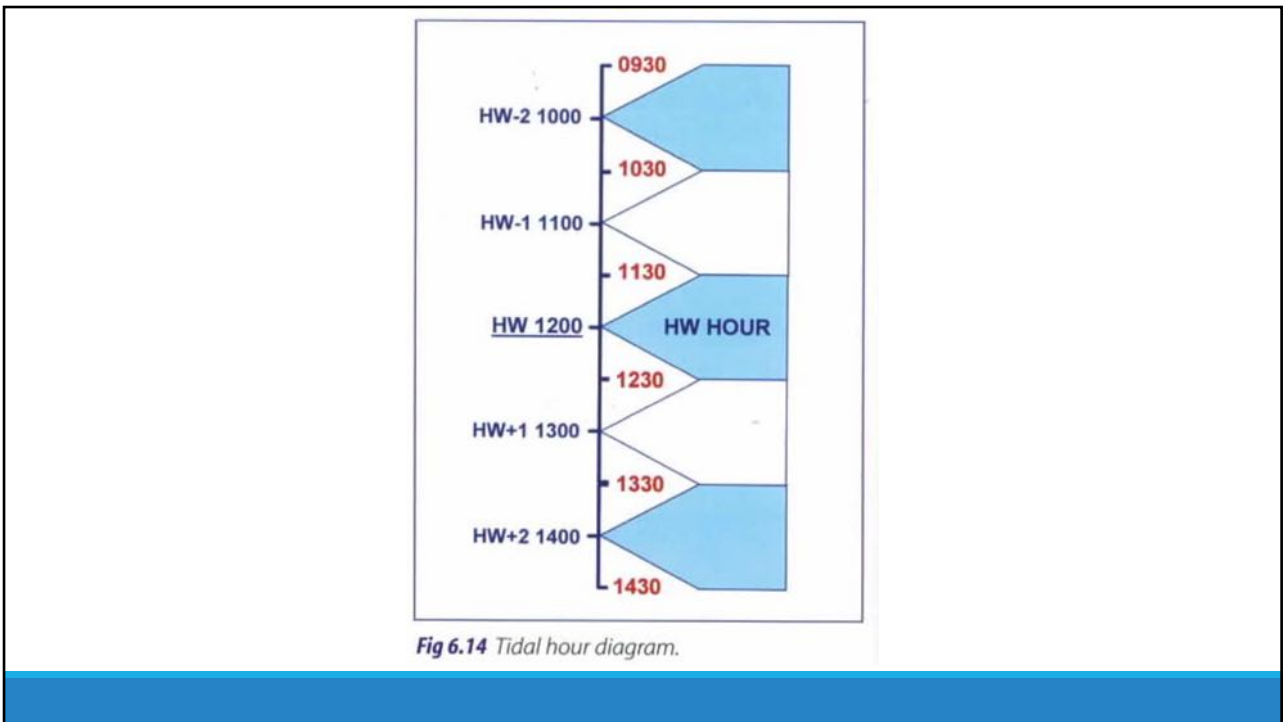
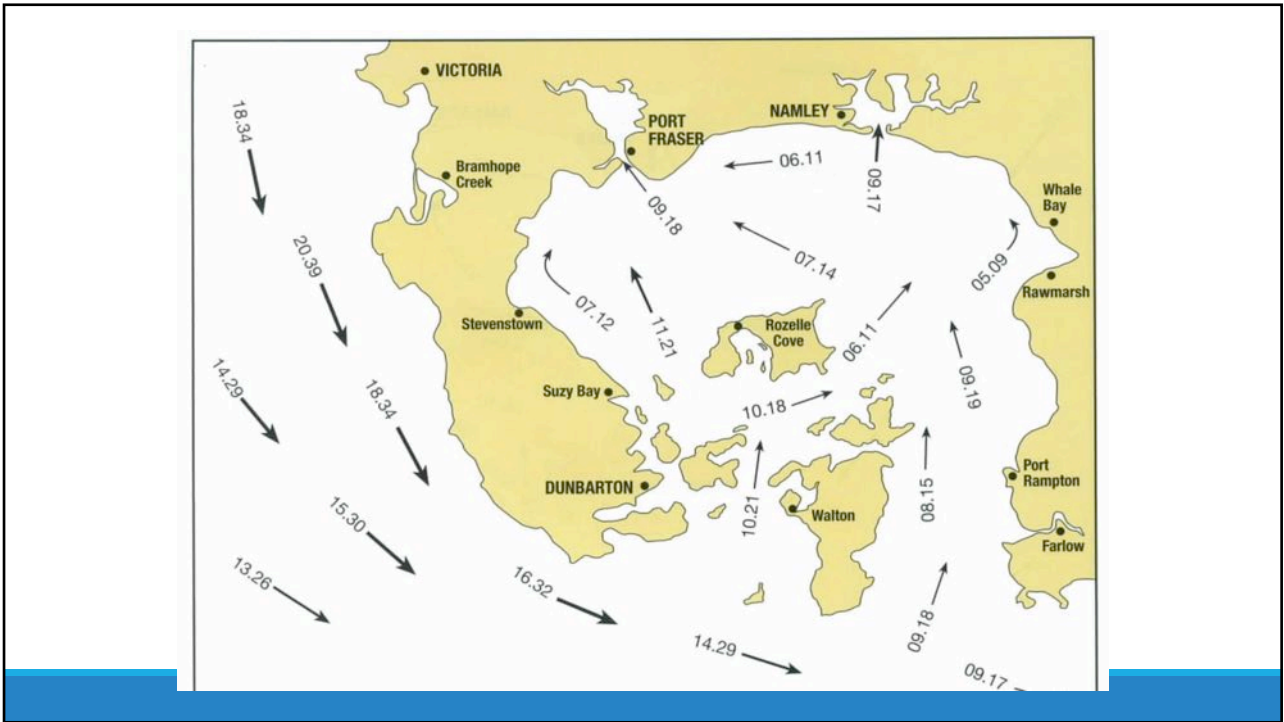


Fig 6.14 Tidal hour diagram.

From the example in Figure 6.14:
HW Dover is at **1200 BST**
 The HW value is therefore effective from **1130 to 1230** should we need to plot a course to steer to counteract the effect of the tidal stream.
 Before leaving harbour most wise navigators enter the tidal hour on every page of the atlas as part of their passage planning (see Figure 6.15).

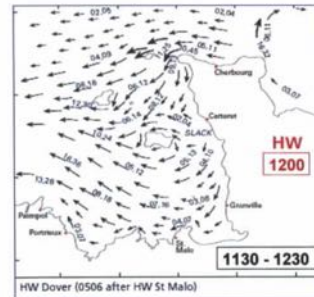
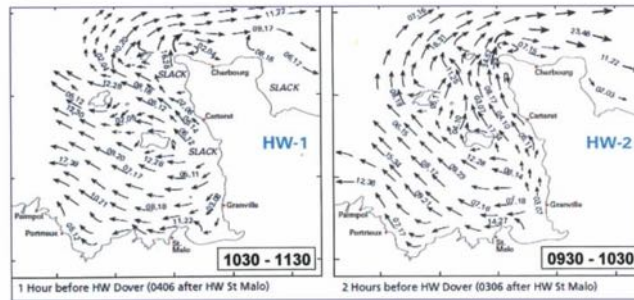


Fig 6.15 Times entered in the tidal stream atlas.



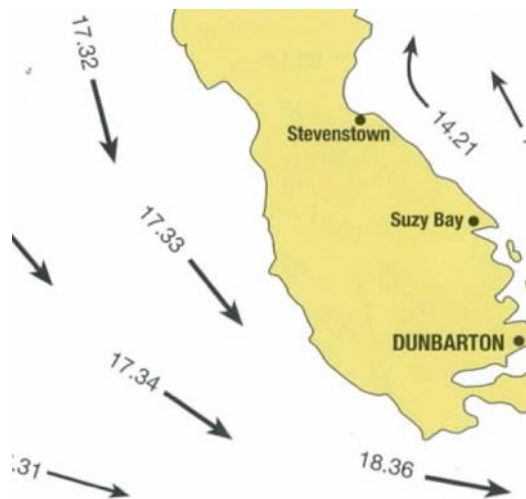
Mean Range Victoria METRES		Computation of rates		Mean Range Victoria METRES																																			
TIDAL STREAM RATE (in tenths of a knot): assume to vary with range of the tide at Victoria																																							
	0	02	04	06	08	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70			
6.6																																					6.6		
6.4																																					6.4		
6.2																																						6.2	
6																																						6	
5.8																																						5.8	
5.6																																						5.6	
5.4																																						5.4	
5.2																																						5.2	
5																																						5	
Springs																																						Springs	
4.6																																						4.6	
4.4																																						4.4	
4.2																																							4.2
4																																							4
3.8																																						3.8	
3.6																																							3.6
3.4																																							3.4
3.2																																							3.2
3																																							3
2.8																																							2.8
2.6																																							2.6
Neaps																																							Neaps
2.2																																							2.2
2																																							2
1.8																																							1.8
1.6																																							1.6

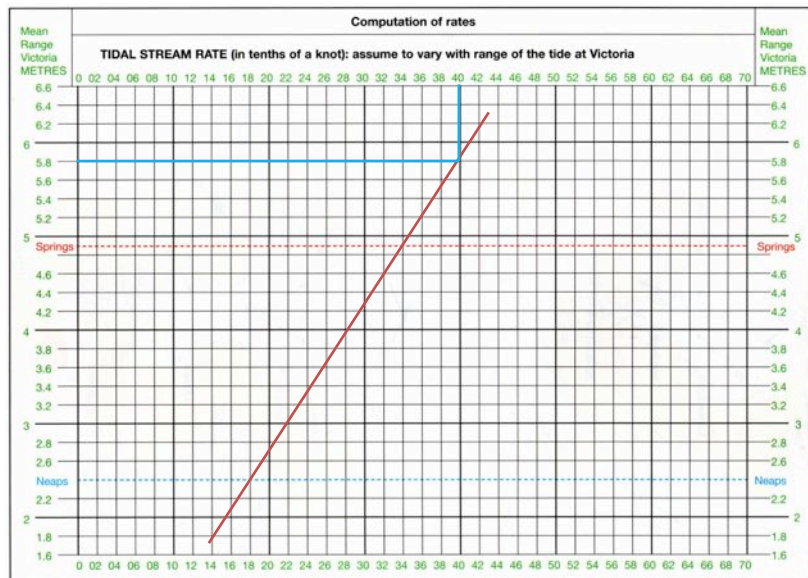
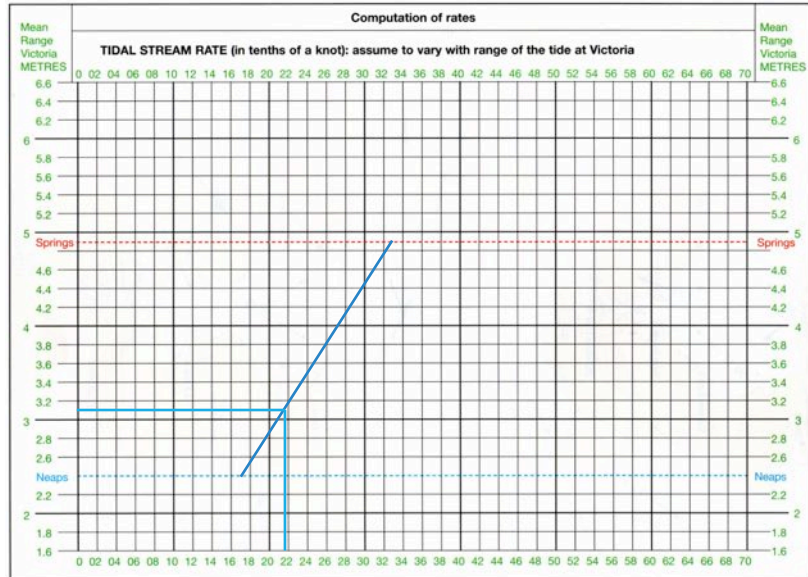
Übung

46° 15'.00 N; 006° 15'.00 W

19. Februar, 12:30

8. September, 21:12





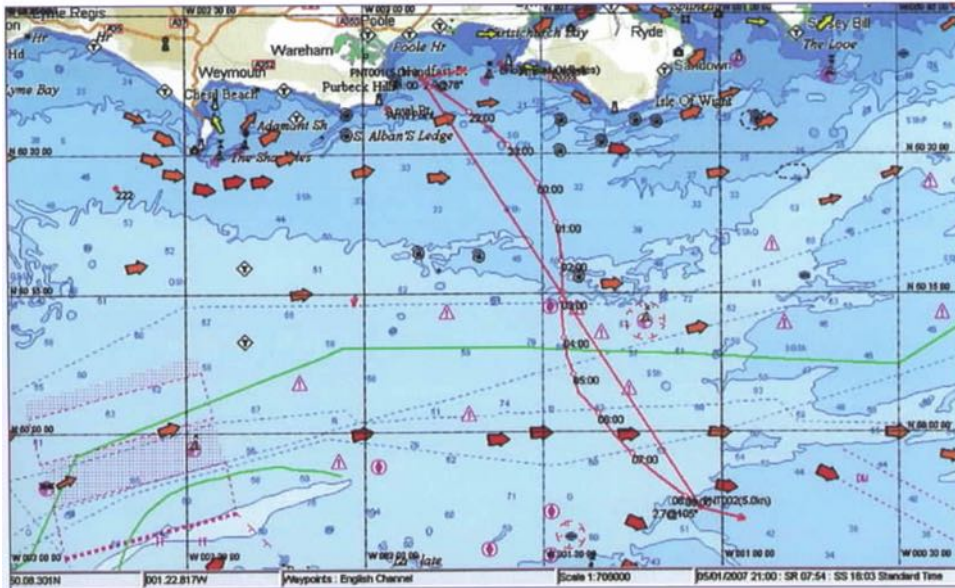


Fig 6.10 Data taken from Neptune tidal stream programme.



Fig 6.11 (top left) Buoy leaning to a strong tidal stream.

Fig 6.12 (above) The weak tidal stream is flowing from left to right. The small pick-up buoy is lying on the down-stream side.

Fig 6.13 (right) The yacht is lying downstream of the mooring buoy.