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Vertical log current meter measurements from the
Daunt Lightship, February 1963-May 1963

by
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In February 1963 a Carruthers vertical log current meter was installed on the Daunt Lightship. The date of installation was later than previous years due to bad weather conditions. No meter was installed on the Coningsbeg Lightship. It is intended, however, to keep the meter now on the Daunt in operation throughout the summer months. The run of the current was noted every hour and the direction every thirty minutes. The velocity and direction of the wind was noted every three hours. The resultant tidal drift and mean wind direction for each calendar month was calculated.

Daunt Lightship

<u>Current: period</u>	<u>No. of days</u>	<u>North Component</u>	<u>East Component</u>
22-28 Feb.	7	+ 216	-1631
1-31 Mar.	31	+3269	+2422
1-30 Apr.	30	- 439	+1189
1-31 May	31	+1828	+2706
22 Feb.-31 May	99	+4875	+4686

<u>Wind: period</u>	<u>No of days</u>	<u>North Component</u>	<u>East Component</u>
22-28 Feb.	7	-2272.4	+1942.2
1-31 Mar.	31	-4484.5	-2307.9
1-30 Apr.	30	-1943.9	- 900.9
1-31 May	31	+ 764.3	-4334.1
22 Feb.-31 May	99	-7936.5	-5600.7

The components of current and wind are resolved into the monthly mean velocity and direction. The equation now applicable is $y = .0016x + .30$, where y = velocity in knots and x = the number of half revolutions per hour. The data for the lightship is interpreted below.

<u>Current: period</u>	<u>Mean direction</u>	<u>Resultant</u>	<u>Velocity (knots)</u>
22nd Feb.-28 Feb.	278°	16,460	.432
1st-31st March	37°	40,690	.390
1st-30th April	110°	12,670	.323
1st-31st May	56°	32,670	.372
22nd Feb.-31st May	44°	67,360	.347

<u>Wind: Period</u>	<u>Mean direction</u>	<u>Resultant</u> (naut.miles)	<u>Velocity</u> (knots)
22nd Feb.-28th Feb.	138°	2897	17.2
1st-31st March	207°	5044	6.7
1st-30th April	205°	2143	2.9
1st-31st May	280°	4400	5.9
22nd Feb.-31st May	216°	9972	4.1

It should be emphasized that the bearings of wind and current are expressed with regard to conventional terminology; thus a west wind is expressed as 270° and an east going current as 90°.

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