XIX. Journal of a Voyage to The East Indies, in the Ship Grenville, (Communicated by the

EXPLANATION OF THE COLUMNS.

Ist, HE date (a).

2d, The beight of the thermometer, according to FAHRENHEIT'S scale, thermometer belonged to Mr. Russell, and hung in the open air in the balcony.

3d, including four columns, contains the register of the marine barometers which, as well as the thermometers, were made by NAIRNE and BLUNT: those R and D are quicksilver, of the kind usually made by them. That marked S is comp of quicksilver, and of a lighter fluid, for the purpose of making the alteration visible, which is a very great convenience at sea; a quicksilver thermometer being it for the sake of correcting its height, the heat by which is set down in the marked Th. next to that marked S.

4th, The weather and winds in four lines; 1st line from noon to 6 p.m.; 26 p.m. to midnight; 3d, from midnight to 6 A.M.; 4th, from 6 A.M. to noon.

In the column of weather, f. denotes fair; sq. squally; c. cloudy; h. bazy; r. ra bard rain; sr. small rain; dr. r. drizling rain; sh. showers; th. thunder; l. lightning.

It is proper to remark, that the winds are fet down according to the compass, with allowance for the Variation.

5th in 2, The difference between the daily alteration of latitude by account an vation; N. denoting that the observation was to the Northward of the account; S. was to the Southward .

(a) Here, for want of room, the day of the month only is expressed; but in the original journal the days of the of the Moon, are also inserted.

(b) Next to these columns in the original journal are the following, which are left out here only for want of room Correct course, lee-way variation &c. allowed, and the different courses reduced to one straight course.

Distance on that straight course.

Distance on that straight course.

Difference of latitude by account,
Difference of latitude by observation,
The departure,
The difference of longitude by account,
The difference of longitude by the time-keeper,

in minutes of a degree.

ville, Captain Burnet Abercrombie, in the Year 1775. By Alexander Dalrymple, E. by the Honourable Henry Cavendish, F. R. S.

Read January 29, 1778.

6th in 2, The difference between the daily alteration of longitu time-keeper; W. denoting that the longitude by the time-keeper waccount; E. that it was to the Eostward.

The result of those differences indicates the daily effect of error in the course sailed, or distance run by log, would make the c from what it really was.

7th, The longitude from Greenwich, in feven columns.

1st, The longitude by account.

ad, The longitude by the time-keeper, which was made by his late improvements.

3d, The difference between the longitudes deduced from obland from the time-keeper uncorrected; E. denoting the time East of a; w. denoting time-keeper to West of a. This keeper not to be liable to any sudden changes in its rate a precision with which the observations of the Moon may be stances of weather and of the ship's motion considered.

4th, The longitude by observations of the Moon's distance fi adjusted, by the log, to the noon nearest the time of observ 5th, The number of sights or distances observed.

6th, The object whose distance from the Moon was observed; * the Star; S. Spica Virginis; R. Regulus; A. Aldebaran; F. Fomalhaut; An. Antares.

7th, The axtreme difference between the bigbest and lowest ob minutes of a degree; when the seconds amount to more than above is taken, otherwise the next minute below.

8th, The latitude in two columns:

1st, The latitude by account, carried on from the land, in the longitude by account.

* D d d 2

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those marked compounded erations more being fixed to

v.; 2d, from

r. rain; hr.

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ple, Efq. F. R. S.

longitude by the account and per was to the Westward of

ct of current; however and the current appear different

de by ARNOLD, but without

m observations of the Moon the time-keeper to be to the

This, admitting the timerate of going, indicates the may be relied on, all circumd.

mee from the Sun or Stars, observation.

paran; At. Atair; P. Pollux;

vest observation; expressed in re than 30, the next minute

in the fame manner as the

2d, The latitude by observation; and where the latitude could not be had be vation, it is deduced by account from the last observation, in which ca included within [].

oth, The correct longitude from Greenwich deduced from the time-keeper can by the fight of lands, whereof the longitudes are known, and by observations of the taking a mean of the several observations of the Moon made within a short period other. The error of the time-keeper, between the longitude corrected by fight of observations of the Moon, is supposed to have arisen by the time-keeper having alterate of going uniformly between these observations; and the intermediate longitude determined by the time-keeper on this supposition. Where no observations of the were made, it is deduced by the account from the last observation of the time is then included within [].

10th, The magnetical observations of the variation and dip, in seven columns.

1st, The varia- azimuth, * before, denoting the observation to have to 2d, tion by amplitude, the morning; * after, denoting the observation have been in the evening. The variation was observed by the officers we compasses belonging to the ship.

3d, The dip with the face of the instrument to the East.

4th, Ditto, ditto, ditto, West.

5th, The mean dip of the foregoing observations.

6th, The mean corrected, or what is supposed to be the true dip.

7th, The circumstances under which the observations of the dip were made. 12th, The miles run by log.

The dip was observed with a dipping-needle belonging to the hon. Mr. CAVE made by SISSON.

The following remarks on the dipping-needle and observations are by Mr. CAVENI The ends of the axis of the dipping-needle are made conical, and turn in conical of bell-metal, in the manner of Mr. LORIMER's needle, described in Phil. Trans. vop. 79. The dip was constantly observed both with the face of the instrument to t and to the West, and the poles were changed twice during the voyage, in order whether the needle continued well balanced. The use of this method of observed in Phil. Trans. vol. LXVI. p. 396.

Grenville, Capt. Burnet abercrombie, 1775, kept by alexander Dalrymple.

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of the Moon, eriod of each bt of land or

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CAVENDISH

AVENDISH. conical holes anf. vol. LXV.

nt to the East 🧀 observing is

The mean dip corrected is what is supposed to be the true dip. correction is as follows.

By the observations on July 12th, when the poles were change eper corrected *) marked end of the needle was too heavy, so as to make that end too low at that place; and therefore, if we suppose that the force of strong in all parts of the earth, the error produced thereby in oth 15ths of a degree as the cofine of the dip to the radius. the poles were changed at Suez, agree well enough with this support longitudes are and all the observations the marked end of the needle pointed to the N is of the time (all that part of the voyage subsequent to July 12th is corrected by si

63° and 52° of a degree from the mean dip, North, and ac when the mean dip is between 143 the dip i 30

But as before the needle left London, changing the poles was for difference in the dip, the correction in the preceding part of the ve great, videlicet;

> of a degree is subtracted from the mean dip, when that dip is between

7.0° 62 52

43

35 30

25

The dip was observed on board the Grenville at Deptford, after h part of the ship in which the observations were usually made, and v more than 5' from that observed with the same needle in a pretty lar about five miles distant; so that the observations on board the Gre order to see) much influenced by the iron-work of the ship.

MPLE.

lip. The foundation of this

changed, it appears, that the t end point 15ths of a degree orce of magnetism is equally in other places should be to observations also made when supposition: therefore, as in the North, the mean dip in d by subtracting

and adding as much when e dip is as much South.

ras found to make very little the voyage is made not fo

	70° a	nd 62°
	62	52
1	52	43
1	43	35
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	30	25
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and was found not to differ tty large garden in London, ne Grenville feem to be not

Journal of a Voyage to The East-Indies, in the Ship Gre

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4							D	.L		.L.	Longi	tude fro
	Th.	M	arine Ba	rome	ter	Weather and Winds.		Ö.			Α.	TK.
1775		R.	S.	Th.	D.		N	S	W	E		
Apr.	0	In.Dec.	In.Dec	0	In.Dec.		,	,	,	,	°ẃ	°ẃ
28						f. h. f. SE. ESE. S by E. E by \$. ESE. SE. f.h. SF.V.WbS.WSW.SWbW.SW.WSW.V.C.V.WSW.						
29 30			30.2½	55		h. r. SW by S. WSW. W. h. WNW. NW by W. h. r. WNW. C. NNW.		6		7	6.19	6.12
May						r. f. NNW. NW by N. NW. f. NW by N. NW by W. WNW.						
1	59		30.4½	'61		f. NW by W. NW. f. WNW. W by N. f. W. WSW. W by S.	,	11		14	6.40	6.19
2	57			56		h. fr. WSW. SW by W. hr. r. SW by S. SW. W by S. r. h. fr. W. WNW. h. r. f. h. NW by W. WNW. NW by W.		9	33		7.22	7.34
3	54 ³ / ₄		30.0±	54		c. NW by N. C. c. C. c. C. E. c. h. E. E by N.		en e			7.29	
4	56 <u>1</u>		30.0 ³	5 6‡	e de la constante de la consta	h. ENE. h. ENE. h. c. ENE. V. c. NE. V. C.		31	9		7.57	8.18
5	57½		30.0	57½		h. C. W by S. c. h. W. WSW. SW. h. r. SW. WSW. h. fr. c. W by S. WSW. NE by N.		13	enter de la dela constitución de la constitución de	7	7.13	7.27
6	5 5 ³ ₄		30.2	55½		h. N. NNE. h. NNE. NE. ENE. h. c. ENE. ESE. E by N. c. f. E by N. E by S.		19	***************************************	12	8.36	8.38
7	57		30.2 ¹ / ₄	56½		f. ESE. f. E. f. E. f. E. E by N. ENE.		21	4		10.13	10.19
8	614		30.2 ³ / ₄	603	4.7	h. NE by E. NNE. h. NNE. h. NNE. h. NNE.		39 1	13		10.22	10.43
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bip Grenville, Capt. Burnet Abercrombie, 1775, kept by Alexander dalrymple.

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itı	ude from	n Gro	eenwic	h	,					Cor.	Vari	ation.		I):p				
	TK.	D. D T.K.	D		c	0	E D.	Lat	itude	Long.	Az.	Amp.		ace W.	MD.	C.D.		ML.	N. 1
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***************************************	°w	ŵ	°ẃ	-			1	°N'	°N′	°w′	°w′	w°	0	0	0	0			Between
						,			49.43	5.35			72.4	73.6 73.7	73.I	73.1 73.1			Lizard P
	6.12			ļ				49.25	49.19	6.12			73.	74•	73.4	73.4	Great fwell.	37	At 1 allo Nby N 1
		·									·						• •		and
	6.19:							48.42	48.25	6.19			72.	73.4	72.6	72.6		51	Light bre
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***************************************	7.34			-				48.51	48.43	7.34		:	72.4	73.	72.6	72.6	Great fwell.	47	Major pai
				-				48.34	[48.26]	[7.41]		-	72.	72.A	72.2	72.2		18	Mostly ca
								7-51	.,,,,,,	C) - 4 - 3			,	, - 4		,			
-	8.18			***************************************				47.51	47.20	8.18	,	·.	71.4	72.6	72.1	72.1	Very ficady.	48	Light bre
**********	7.27			***************************************		-		46.56	46.12	7.27		<i>2</i>	71.	72.4	71.6	71.6	Great motion.	68	First p ware ware
-								49.30						7 5.4	7	,	Great motion.		(ware
	8.38							45.58	44.55	8.38		18.42*	71.	72.	71.4	71.4	Good deal of motion.	83	Mostly li
	10.19							44 74	42.50	10.10			66.6	77	70.3	70.2	Very steady.	126	An incres
	10.19							44.34	42.30	10.19			09.0	/ 1 •	70.3	10.3	Very heady.	120	
	10.43	3	10.40		١,	3	27	41.52	40. 9	10.42			68.4	60.2	68 7	68.6	Dirra	142	First part,
	- 13	14	10.29	4	<u>+</u> [ٔ		46	- 7 -J*	70. 7	- 3			2014	77.4	/		Ar (Elige	620	* 1
1	<u> </u>				1	ا				il.									

N. B. Log-line 51 feet to 29"1.

Between Ram-head and the Lizard.

Lizard Point EIN=ENEIN. 7 or 8 leagues off shore.

At 1 P.M the Lizard Point bore by compass EIN. Variation allowed ENEIN 7 leagues. The Land's End N by E. Nby W. Take a departure from the Lizard in 49° 57' 30" N lat. Long. 5° 15' W. First and middle part, lights airs and calm. Latter, pleasant breezes. Great swell from W.

Light breezes; great swell from Westward.

Major part light breezes; great swell from Westward.

Mostly calm. A very large swell from Westward.

Light breezes and a great fwell.

First part, calm. Middle, an increasing breeze from Westward, with rain. Latter, a fine breeze from the Northward.

Mostly light breezes, with a swell from NW.

An increasing gale from the Eastward.

First part, fresh gales. Latter, moderate.

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					·	7			D	L.	D.		Longit	ude fror
	Th.	Ma	arine Ba	romet	er j		Weather and Winds.		A.	õ.	T.	K.	Α.	T.K.
1775		R.	s.	Th.	D.		- 		N	S	W	E		
May	0	In.Dec.	In.Dec.		In.Dec.	f. f. h.	NNE. NNE.)	,	,		,	w'	w
9	67		30.14	67		h. h. h.	NNE. E by S. E by S. V. ENE. NE. V.	_}		11		13	10.34	10.42
10	68		30.01	673		h. h. h.	V. N by E. N. V. V. SE by E. ESE. SE.	_}		4	19		11.7	11.34
11						f. f. f. h.	SE by S. C. C. ENE. E. E. NE by E. C. V. C.	_}		10	9		11.28	12,4
12	67½		30.33	67½		h. c. f. h. h.	NW by W. WNW. NW. NW by W. V. NW by W. NW by W. C. W by N. W. W by S. WNW.	_}		16		4	11.52	12.24
13	664	30.1	30.03	66	30.1	f. h. h. c.	WNW. NW by W. NW. NW. NW by N. NNE. N.	}		21	9		12.35	13.16
14	65	30.2½	30 . 2‡	6 <u>5</u> 4	30.21	fq. h. h. fq. c. c.	NE by N. NNE. N. N. N. NNE.	_}		20		8	15.0	15.33
15	67¾		30.2	67½		h. f. c. fq. c. c.	NNE. NE by N. NE by N. NE. W by N. WNW. C. W.	}		25	14		I 5.59 By acct	16.46
16	65½	30.12	30.1½	65½	30.0 <u>t</u>	c. c. c. h.	W. V. NE by E. NE by E. E by N. E by N. NE.	_}	2			7	from Ma- deira in [16.50] 16 56	16.41
17	67½		30.13	674		h. c. c. c.	NE by E. E by N. E by S. E by N. ESE.			18	2	-	17.3	16.50

Ship Grenville, Capt. Burnet abercrombie, 1775, kept by Alexander dalrymi

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tude fron	n Gre	enwich							Varia	ation	 	D	ip				
T.K.	D. (T.K.	Œ	s.	0.	E. D.		itude O.	Cor. Long.	Az.	Amp.	Fa E.	W.	MD.	C.D.		ML.	
°,	,	。, W				° ′ N	° ,	° ′ W	° ′ W	° ′ W	۰	0	°	. 0		620	
10.42	E 13		3	0	36	40.17		10.42	18.0*	17.43*	67.6	69.	68.3	68.2	Very steady.	96	Decreafii
11.34						39.26	37·33	11.34	20 38*	18.36*	67.2	68.4	67.7	67.6	Good deal of motion.	55	Most fup a h
12.4						39• 3	37.0	12. 4	20. 9*	19 57*	66.6	67 . 6	67.2	67.1	Ship yawing.	29	Light lows noon South visible if sh
12.24						38.28	36, 9	12.24			6 5. 6	67.2	6 6. 4	66.3	Ditto, needle very steady.	41	Light veffe cruiz they
13.16						37.46·	35, 6	13.16	20.17*	20.38*	66.	67.	66.4	66 . 3	Ditto, needle very un- fteady, bad observation.	62	An in there thro
15.33						36.36	33-30	15.33	19.28*	19.16*	6 4.6	6 5 .6	65.2	65.1	1	138	Fresh from
16.46						35-50	[32•24]	16.46			64.2	6 5. 6	654	64.7	> Very steady.	84	In Fi SEAT TO' i ALC: 1776 and 16th down and accou
16.41		:				31.18	31.20	16.41			63.2	64 . 6	64.	63.7		67	First page of finoot
16.50						29 57	29.41	16.50			62.2	63.6	63.	62.7		81	Thefe 24

LRYMPLE.

10 Decreasing breezes. Changed log-line 48 feet to 29"} Most part light airs. Several small land birds; two of them, supposed nightingales came on board, very tired; also faw a hawk. Light airs of wind Easterly, with calms. Some fwal-lows and other land birds, who feem very tired. In the afternoon, during the calm, when the ship's head was to the Southwestward, there was, for a little time, a counter current visible; it made like a wake on the ship's larboard beam, as if the was going broadfide foremost. Light airs of wind throughout. P.M. faw two three-mast veffels with latine fails; they were supposed to be Barbary cruizers, but did not come near enough to let us know what they were. Some swallows about the ship. An increasing breeze from the Northward. In the morning there were many petrils in the ship's wake: they continued throughout the day. Fresh breezes, with some squalls. At noon saw Porto Santo from the mast-head, W by S. per compass. In Funchal road. Major SEARS informed us, that Mr. SEARL, in confequence of our request, tried the therm. for to' in a cool cellar, and found it 68°. N. B. Captain ALCOCK informed me, he observed the therm. on May 14, 1776, at 6 A.M. at Funchal 68°, and in the cellar 61°: and Mr. SEARL wrote to Mr. CAVENDISH, that on the 16th of May the therm. which flood at 69°, was carried down at 1 P.M. to a cellar, where it remained till 4 o'clock, and then was found to be at 62°, fo that Major SEARS's account was probably erroneous. S First part, light airs. Middle and latter, pleasant breezes and smooth weather; several boats came off from Funcbale

These 24 hours pleasant breeze from Eastward

Journal of a Voyage to The East-Indies, in the Ship Gre

								Ī.	D.		Longi	tude fro
	Th.	M	arine Ba	romet	ter	Weather and Winds.			T.		Α.	TK.
1775		R.	S.	Th.	D.		N	S	W	Ε		
May 18	69	In.Dec. 30.2	In.Dec. 30.13		In.Dec. 30.2	h. ENE. h. E. ENE. h. E. ENE.	.,	15	,	10	w 17.9	W 16.46
19	68	30.2½	30.2 1	673	30.2 <u>1</u>	h. E by N. h. NE by N. h.c. N by W. C. N by W. NNE. c. f. NNE.		6	Ι		17.17	16.55
20	68	30.1 1	30.1½	68	30. 1 1	c. NNE. NE. c. NE. N by E. NE by N. N by E. c. N by E. NNE. c. NNE. f. c. NE by N. N by E.		24	and the second s	3	17.42	17.17
21	68 <u>‡</u>	30.1 <u>1</u>	30.1	68	30.1	c. N by E. N by W. c. f. N by W. N by E. f. N by E. NNE.		I	4		18.18	17.57
22	70	30.11	30.1 1	70₹	30.1½	f.c. N. NNE. c. NNE. c. NNE. NE by N. NE.		18			18.49	18.28
23	68	30.2	30.13	68	30.2	f. NE. NE by N. f. NE by N. f. NE by N. f. NE by N. NE by N. NE.				I	19.28	19.6
24	684	30.1	30.0½	68 <u>‡</u>	30.0¾	f. NE. NE by N. f. NE by N. f. c. NE by N. c. h. NE by N.		14	8		19.21	19.7
25	713	3 0. 0	29.9½	72	29•9‡	h. N by E. h. N by E. h. N by E. h. NNE.		1	4		18.33	18.23
26	76 <u>‡</u>	30.01	30.0	76 1	30.0	h. NE by N. h. V. WNW. NW. h. NW. V. NNE. h. c. NNE. E by S. ESE.		8	,	2	18.37	18.25

bip Grenville, Capt. Burnet Abercrombie, 1775, kept by Alexander Dalrymple.

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itude from	a Gr	eenwich							Varia	ation.	\	D	Dip		1		T.S.
TK.	D.D T.K.	D	S.		E D.	J	O.	Cor. Long.	Az.	Amp.	·	ace W.	MD.	C.D.		ML.	take theri mini
0 /	,	0 /				°N′	0 /	0 /	0 /	, ,	0	0	o	0		1273	
W 16.46	W	W				29· 4	N 28.33	W 16.46	*18.23	W	61.2	62.6	62.	61.6		53	Light rif S
16.55		5 7				27.53	27.16	16.55	16.53* *16.39	17. 6*	60.2	61.2	60.6	60.4		74	Pleafa Tene beari Eaft by ti longi reu on ti farth
17.17						26.46	25.45	17.20	16.37* 15.42*	16.17* 15.42*	59.2	60.2	59.6	59•4	Very steady.	70	farth feren tions Light in the
17.57	57	18.54	4	0	29	25. 5	24• 3	18. 3		15 36*	58.2	59.2	58.6	58.4		106	Pleafa found found trills
18.28	66	19.34	3	0	28	23.43	22.25	18.37	15.13*	*15. 2	56.4	57:4	57•	56.6		87	Light N.B. time lefs recte
19.6	41 65	19 47	3	00	47 7 I	21.54	[20.36]	19.18	14 35* *13. 9	*13. 7	54.	55.2	54.5	54.3		115	In the foun weat
19.7	79	20.26	3	0	37	19.21	17.49	19-22	13.56*	13.55*	51.	52.4	51.6	51.3	Much motion.	153	Thefe water
18.23		,				17. 1	15.28	18.41	13.18*	12.32*	48.6	49-4	49-1	48.6		150	Fresh rema the r the w
18.25						163	14.22	18.46			46.4	48.	47.2	46.7		59 2140	Light Ther a ve a fai cover veral

T.S. denotes the temperature of the sea-water taken up in a bucket about noon, and the thermometer immersed in this bucket for some minutes. Light breezes and fmooth water. At noon, Peak of Tenerif S 50° E. Pleasant breezes from the Eastward. At noon, Peak of Tenerif (variation allowed) bore N 24° 30′ E, which bearing, and the difference of latitude places it 27′ to the Eastward of our fituation at noon, when in 16°55 long. by time-keeper, and confequently by time k. 16°28 is the longitude of Peak of Tenerif, only 4' less than Pere FEUILLE makes it; but, by the observations of the Moon, farther West than the time-keeper represented, which dif-ference arose since the 9th of May, if the Lunar observations were to be relied on. 5 Light breezes and smooth water throughout. Several petrills in the wake. Pleasant trade. In Captain EKEBERG's chart there being foundings laid down not far to the Eastward of our fituation, founded at 8 P.M. but had no ground 40 fath. Several petrills in the wake of ship. Light breezes with fmooth water throughout. Many petrills. N.B. There was apparently an error in this day's long. by time-keeper. The succeeding days diff. long. was as much less as this day's was more than account. I have here corrected it as conformable to the Lunar observations. T.S. 600. In the evening, the water appeared of a muddy green, like foundings; but did not found. An increasing trade with fair weather, the water continuing of fame colour. T.S. 69°. These 24 hours a fresh trade, and mostly fair weather, the water remaining the same as before. T.S. 68°½. Fresh trade and hazy weather. In the afternoon the sea remarkably confused, breaking different ways. Sounded in the morning, but had no ground 40 fath. In the morning the water appeared blue again. T.S. 71°. Light breezes chiefly. In the night, no ground 70 fath. There were many blubbers in the thip's wake, which made a very luminous appearance: they feemed in shape like a faulage about 8 or 9 inches long. In the day, fea was covered with Portugueze men of war, of which took up feveral; also some pilot-fish and skip-jacks.

_							1.					
			•				D.	T.,	D.	L.	Longitu	ade from
	Th.	M	arine Ba	romet	er	Weather and Winds.	A.	ō.	T.		A.	T.K.
1775		R.	S.	Th.	D.		N	S	W	E	23.	1.11.
May 27		In.Dec.		° 76	In.Dec. 30.0	h. SE by E. h. c. V. E by N.	7	,	,	4	W 18.18	o / W 18. 2
28			30.0	78 <u>‡</u>		c. h. E by N. V. h. V. NNW. NE. f. NNE. N. f. N. NW by N. f. h. NW by N. h. NW by N. NW by N. NNW.	I			3	17.26	17. 7
29	8°O	30.1	30.14	80	30.1	h. C. SW. SW by W. h. SW by W. C. S. V. h. SW. SW by W. ESE. ENE.		2		8	17.16	16.49
30	77분	30 . 0¾	30.0 <u>3</u>	77	30.03	h. ENE. NE. V. W by S. h. SW by W. C. h. C. W. C. h. NW by N. NNW. N by W.	2			3	17. 9	16.39
31	8 0.	30.01	30.0	80	30.0	f. NNW. f. fq. hr. NW. NW by W. E. fq. hr. c. h. E. C. ENE. E by S. h. f. NE.	1		10		17. 4	16.44
June 1	82 <u>1</u>	30.1	30.1	821	30.1	f. NNE. N. NNW. f. SW by W. W. f. c. h. V. C. h. c. fq. h. NW. SE by E. SE. h. SE. W.	. 10			10	16.51	16.11
2	821/2	30.03	30.03	821	30.03		17				16.25	15.45
3	824	30.0 ¹ ⁄ ₄	30.01	813	30.01	h. NW. L. to E. fq. r. c. NW. NW by N. E. V. c. L. to E. V. S by W. V. E by S. ESE. h. f. E by S. E. ESE.		8		6	16. 6	15.20
4	814	30.01	30.0½	801	30.01	f. SE. SSE. SE by S. SSE. S by E. c. L. all round, fq. SSE. S by E. S by W. fq. SSW. C. fq. c. C. NNW.	10			10	16. 2	15. 6

Ship Grenville, Capt. Burnet abercrombie, 1775, kept by Alexander dalrymp

											agnet					,	
ude from	Gre	enwich						Cor.	Varia	ation ~		D	ip		,		
T.K.	D. (T.K.	(E.	Lat	itude	Long.	Az.	Amp.	Fa	ice	MD.	c.D.		ML.	
1.12.	T.K.	ď	s.	o.	Ď.	A.	0.		112.	mnp.	E.	w.		0.5.		WID.	
0	,	0 /	_			0 /	0 ,	c /	0 /	0 /			0	0		2140	Ti-l-
W 18. 2	E	W				N 15.32	N 13.48	W 18.26	W	W	46.	46.4	46.2	45.7		46	Light the n fome
						J.J	3.12				·	'	ľ	-			makir appear
17. 7						14.28	12.45	17⋅34		12. 0*	44.4	45.	44.6	44.3	Very steady.	82	Light Eastw in the
- / · /						14040		-7.31		-3.	111	13.			,,		32 fa noon,
16.49						13.57	12.12	17.19	12.27*	12.44*	126	11	43.7	124		37	First at fish at
10.49						*3.37	12.12	-70-9	14.3/		43		73.7	т Ст		31	Sound 8 A.N ground
		-															Light a
16.39						13.26	11.43	17.12		12.36*	42.6	43.4	43.1	42.6	Very steady.	32	lumin ing li birds.
									-								liketh Most 1
									٠	**			40.5			60	hard lightn
16.44						12.22	10.40	17.20	12.24*	12.42	41.0	42.4	42.1	41.5		69	like a very h
		·														·	Sound 40 fat
16.11						11.40	10. 8	16.50	13. 7*	12.46*	41.	42.	41.4	41.	Very unfteady.	53	Major p
																	. 77* 0
15.45						11.14	9 59	16.26	12.35*	12.31*	40.4	41.2	40 7	40.3	S Not very good observation.	39	First ar middle fath.
	·						, ,										fath.
15.20	35 62	15 55	3	0	3	10.38	9.15	16.09	12.48*	12.55*	38.6	39.6	39.2	38.6	Very steady.	45	Major j dozen
3	02	16.22	3	0	20		, 3		•	33			,	-	•		to 35:
								, , , ,Q			00 4					24	The la

LRYMPLE.

Light airs of wind, variable, with very damp weather. In the night, no ground 40 fath. Many fish about the ship; fome under the quarter, darting through the water, and making streaks of light in various directions, had a fine appearance. T.S. 75°.

Light breezes throughout. In the night, lightning to the Eastward. Many luminous blubbers and fish about the ship in the night. Passed several turtle. Had ground at 11 A.M. 32 fath. coarse sand, with black specks and shells. At noon, 30 fath. coarse fand and slat coral. T.S. 75°½.

First and latter, light breezes. Middle, calm. Great many fish about the ship, and in the morning vast flocks of birds. Soundings, fand of various kinds from 28 to 17½ fath. at 8 A.M.; at 9 A.M. 21 fath. blue mud; and at 11 A.M. no ground 35 fath. T.S. 77°.

Light airs and calm. At 5 P.M. 56 fath. green mud. At midnight, 45 fath. blue mud. In the night, the water very luminous when put in motion, and many shoals of fish looking like breakers. A.M. a turtle passed; vast slocks of sea birds. At noon, the sea covered with Portuguese men of war, like the ground with leaves in Oct. 23 s. blue mud. T.S.76°.

Most part pleasant land and sea breezes. At midnight, a hard squall from the land: it was preceded by great deal of lightning over the land, and long threatning before the squall came off. It rose in a dark black cloud, with a white streak like a bow under it, and below this very dark. It came off very hard, and raised the spray of the sea in a foam. P.M. Soundings, 25 to 21 fath. sand. A.M. No ground 60 and 40 sath. T.S. 80°.

Major part, light breezes. P.M. No ground 40 to 80 fath.

First and latter parts, pleasant breezes from Westward. The middle, calm, with hot sultry weather. At midnight, 8c fath, coarse black fand, with bits of coral. At noon, 26 fath, coarse brown sand. T. S. 81°.

Major part, light airs. Many fharks about the ship; above a dozen in fight at once; caught one. P.M. Soundings 27 to 35 fath. At noon, no ground 88 fath. T.S. 800 2.

The first part, light breezes of wind from the Southward. The latter, mostly calm, with hot weather. In the evening, the clouds very remarkable; fome appearing like dirty wool, and apparently very mear all round the horizon; the sky above, in many places, a fine pink, and blueish grey beneath it. In the morning, many grampuses about the ship. At noon, ground 60 fath. T.S. 33° 1.

Journal of a Voyage to The East-Indies, in the Ship Gi

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								D.	L.	D. A	L.	Longit	ude from
	T	ı.		arine Ba	romet		Weather and Winds.		0.	T.	K.	Α,	TK.
1.75	5		R.	S.	1 11.			_	_				
		Ι	n.Dec.	In.Dec.	0	In.Dec		1	,	,	,	o ,	w /
Jun	s 30	314	3 ⊃.o <u>₹</u>	30.0 <u>1</u>	8o	30.0½	\begin{cases} \begin{align*} \begin{cases} \	10			20	15.43	14.28
	6 8	3	30.03	30. 0≟	83	30.0₹	c. f. E by N. C. SSE. S by E.	11		8		15.41	14.34
	7 8:	2. <u>1</u>	30.11	30.1 <u>1</u>	824	30.1 ¹ / ₄	$ \begin{cases} h. & \text{SE by S. Sby E. C.} \\ h. c. & \text{V. SSE. SE by S.} \\ c. fq. & \text{S by W. V. C.} \\ fq. c. & \text{C. S by E. SSE. S.} \end{cases} $	11		19		15.41	14.53
	8 8	3	30.1 1	30.14	83	30.14	c. hr. and L. to s.w. S. C. V. SW. fq. c. fq. SW. SW by W. SW. c. C. c. f. C.	23			12	15.22	14.22
	9 8	4	30.01	30.0½	84	30.0 <u>1</u>	h. C. h. L. to weftw. C. h. c. C. W by S. c. W by S. f. c. fg. r. W. NNE.		3		3	15.18	14.14
1	0 8	14	30.01	30.0 <u>1</u>	80 <u>₹</u>	30.0	fq. r. c. NNE. V. C. c. L. to E ^d . hr. C. V. C. ENE. r. c. ENE. V. SW by W.	3		19		15.0	14.15
1	7	74	30.0 <u>1</u>	30.0½	76 <u>‡</u>	30 0 <u>1</u>	c. fq. r. SW. SW by S. c. f. c. fq. r. SW. fq. r. SSW. SW. WSW. hr. r. WSW. V. fhr. V. SW.	30			24	14.19	
1	2 8:	2	30.0 3	30.03	82	30.0∄	fr. r. c. SW. SW by S. SSW. c. r. SSW. C. V. c. C. V.					14.4	12.55
	3 8	1 1/2	30.01	30.0 <u>1</u>	811	30.0½	c. WNW. NW. c. L. to westw. NW. c. NW. NW by N. c. th. L. to SW. V. NNE.				2	13.50	12.39
. H	11	- 11		1	1	I	North Control of the	1)		١, ١		1	1

Ship Grenville, Capt. Burnet Abercrombie, 1775, kept by Alexander Dalrymple

								-		M	Iagnet	ical					
ude fron	n Gre	enwich				4 1		Cor.	Varia	ition	 	D	ip				
TK.	D.) T.K.	D	s.	O.	E. D.	ســـــــــــــــــــــــــــــــــــــ	itude O.	Long.	Az.	Amp	Fa E.	w.	MD.	c.D.		мL.	
0 /	7,	.0 /				0 /	0 /	0 /	0 /	0 /	٥	0	•			2577	
w	E	w				N.	N.	w	w	w							Mostly 1
14.28						9.43	8.40	15.43			38.2	38.4	38.3	37.7		48	hoard fi
7												Transmitted of the second of t					pool to no grou
14.34		,				9.12	8.20	15.53	*13.33		36.6	37.2	37.	36.4	Very fleady.	38	Mostly 1 wind ca nute or
-																	thunder
14.53						8.56	8.15	16.16		12.28*	36.6	37.6	37.2	36.6		31	Light airs c
									1								
14.22						8.33	8,15	15. 49			36.6	37.6	37.2	36.6	Very un- fleady, great fwell, and no fail.	30	First, list calm, mast by a pretty the top fore-top
14.14						8.29	8. 8	15.46			36.4	37.6	37.1	36.5	Pretty steady.	6	Moftly c up main
14.15	53	15.8	5	*\$	48	8. 1	7•43	15.51			35.6	36.6	36.2	3 5. 6	Very steady.	35	First, fair ble, with
•						7. 9	[7,14]	[14.53]			34.6	35.6	36.2	35.6	remarkably Ready.	64	Cloudy as Southw.
12.55	58	13.53	3	* S	39	6.53	7• 5	14.39			35.2	35·4	3 5 •3	34-7	Very fleady.	2 2	Calm and very lar the harp
12.39	115	14.34	3	*S	15	6.25	6.37	14.27	13.18*		32. 4 32.6	33·4 32.6	32.6	32.1	Tightened the ferews.		Light airs no groun
								<u> </u>			-					2882	

Mostly light breezes. Past 2 P.M. a hard squall, with great deal of thunder, lightning, and rain. P.M. a boat came on board from the Polly, a whaling vessel, from Boston in New England; the vessel was hull down when they came aboard. A.M. spoke with the Mary, Captain Jones, from Liverpool to Sierra Leon. P.M. 40 to 36 fath. coarse sand. A.M. no ground 55 fath. T.S. 83°L.

Mostly light airs and calms. At midnight, a violent gust of wind came off: its violence did not continue above a minute or two; but brought much rain, and was attended with thunder and lightning. A.M. no ground 88 fath. T.S. 82°.

Light airs chiefly: a long fwell from the SW. T.S. 82012.

First, light airs. Middle, fresh breezes and squally. Latter, calm, At midnight, carried away the main and fore-top-mast by the badness of the rigging. Had, for some hours, a pretty fresh SW wind; but not enough to have endangered the top-masts had the rigging been good. At 11 got fore-top-mast up. T.S. 83°.

Mostly calm, with swell from Southward. At 9 A.M. got up main-top-mast. T.S. 82°.

§ First, fair. Middle, squally, with hard rain. Latter, variable, with calms. T.S. 8101.

Southw. T.S. 81°.

Calm and cloudy: great long swell from Southward. A.M. a very large shark was struck with the harpon; but it broke the harpon, and got off. Many fish and birds. T.S. S2°.

§ Light airs and cloudy through. Many fish and birds. P.M. hooked a shark. T.S. $8r^{\circ}\frac{1}{2}$.

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					•		D	. L.	D	. L.	Longi	tude fron
	Th.	M	arine Ba	rome	ter	Weather and Winds.	A.	0.	T	. K.	A.	T.K.
1775		R.	S.	Th.	D.		N	S	W	E		
	0.	In.Dec.	In.Dec	•	In.Dec.	_c. V. C.		1	,	1	o / W	o W
June 14	8214	30.0 I	30.0∄	824	30.0	c. SW by S. SSW. c. SSW. SW. hr. c. r. c. C. V. S by E.	15		4		13.20	12.14
15	83	30.0 1	30.0¥	82 3	30.0	h. S by W. S. SSW. h. f. SSW. c. r. c. SSW. SW. V. c. T. to s.e. V. SW by W. SSW. SW.	15			7	12.39	11.26
16	82	30.0 1	30.0 <u>₹</u>	82	30.0	c. fr. fq. r. SW. V. S by W. fq. L. to n.e. S by W. V. C. SW. SW by S. c. SW by S. C. c. r. c. V. C. V.	5				12.27	
17	79 ¹ ⁄ ₂	30.0 <u>₹</u>	30 . 0≩	78 <u>₹</u>	30.0 <u>3</u>	fq. r. V. S by W. fq. r. c. V. SSW. c. r. c. SSW. S. SW. c. hr. c. SW by W. WSW. SW by W.	7			24	11.58	10.21
18	80 <u>1</u>	30.0∄	30.0 3	80₹	30 . 0¾	c. SW by W. SW. C. W by N. fq. c. W by N. W by S. V. C. c. C. NE. c. NE. ENE.	·	7		5	11.44	10. 2
19	80 <u>1</u>	30.0 <u>1</u>	30.0½	80	30.0 <u>‡</u>	h. NNE. C. V. L. to nd. c. V. WSW. c. WSW. W by S. V. c. fr. c. V. C. SW by S.	5			I	11.29	9.46
20	82	30.0 3	30 . 0≩	81	30.0 3	c. SSW. V. S by W. c. r. S by E. C. SE by S. V.	16			5	10.52	9- 4
21	79	30.0 <u>±</u>	30.0½	79	30.0½	c. S by E. S. SSW. c. L. from n. to s.e. fq. r. SSW. SW by S. SSE. S. r. hr. S. hr. c. r. S by E. C.	T 0		3		10.31	8.46
22	8o¾	30.0 1	30.0 1	80 <u>1</u>	30.0 <u>1</u>	hr. C. SSW. V. C. hr. C. ESE. V. hr. fq. hr. V. SSE. V. fq. r. 7 V.	13			13	10.50	8.52

Ship Grenville, Capt. Burnet abercrombie, 1775, kept by Alexander dalrymp

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ude from	n Gre	enwich						Cor.	Var	iation	1	Ι	Dip			
T.K.	D. (T.K.	¢	s.	0.	E. D.	Lat	itude O.	Long.	Az.	Amp.	F E.	ace W.	MD.	C.D.	ML.	
° ′ W	E	w.				N N	N	w′	w w	w'	0	•	•	o	2882	In the
12.14	120	14.14	3	*An.	48	6. 5	6.32	14. 6		13.28*	32.6	33.6	33.2	32.5	37	more the b: with groov pearan
11.26		ż				5.32	6.14	13.18		13.32*	32.	32.4	32.2	31.5	54	Light bree
	÷					5.18	6. 5	[12.59]			31.6	32.	31.7	31.2	19	PM.ma fharks.
10.21						4-55	5-49	12.13			30 .	30.6	30.3	29.6	43	First pa ter, li land to thick
10. 2						4.36	5.23	11.54			29.2	<i>3</i> 0.	29.5	28.7	24	S Pleafant Variable
9.46				٠.		4.15	5. 7	11.38	13.30*	13.50*	28.6	29.6	29.2	28.4	26	Light ai the mo any fqi
9• 4						3.49	4-57	10.56	14.23* *14.43	14.41*	28 6	29.6	29.2	28.4	46	Mostly error o allowa First an
8.46						3.45	[4.54]	10.38	14.40*	5	28.4	29.4	29.	28.2	44	In the leagues rock or of the The N
8.52						3.19	4-39	10.44			27.6	28.4	28.1	27.3	35	and the a hill, that of At Sur diffance Variab
								-		<u> </u>	<u> </u>			- 1		

LRYMPLE.

In the night, many fish. A.M. struck an albicore; it has from the back fin to the tail nine little yellow fins, and nine more such from the belly fin to the tail. Besides the fin or the back, it has another sin, composed of a thin membrane, with sharp prickly ribs; this fin it can strike, having groove to receive it; for hat there remains no projection or ar pearance of it. Light airs. No ground 65 to 70 fath. T.S. 8101 Light breezes, with a fwell from the Southward. T.S. 820. PM. many fish; but swimming very deep. A.M. caught three finarks. Most part light airs and calm with rain. T.S. 8102 First part, squally, with rain and wind Southerly. The lat-ter, light airs S.W. cloudy and rain. A.M. appearance of land to Eastward under the clouds, but very obscure, being thick and hazy weather. T.S. 81°. 5 Pleasant weather. A.M. some dolphins. Light airs of wind, 2 variable with calms. T.S. 8101. Light airs, with lightning and fome thunder in the night. Ir the morning, it looked very black, but was not attended with any fquall. T.S. 81°. [Mostly light breezes and cloudy, with rain. I ascribe the error of this day's log partly to the course having made no allowance for lee-way. T.S. 82°. heavy rain. The latter, calm, with cloudy weather and rain. In the morning, at 8 P.M. faw the land, bearing E by S 7 leagues. Sounded 46 fath, mud; but there was the mark of rock on the arming of the lead. At to A.M. the extremes of the land from N by E1E to E distance about 7 leagues. The N extreme I suppose is Puma Baixas near Sostos river, and the Southern extreme supposed about Boroa: There wa a hill, visible inland, to the left, which was supposed to be that of Baffa. T.S. 810. At Sun-fet, the extremes NIE to Eis (per compais) distance off shore about 6 leagues. 43 fath. blue mud. Variable winds, with very much hard rain. T.S. 810.

Journal of a Voyage to The East-Indies, in the Ship G

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	Th.	سننت ا	arine Ba			Weather and Winds.	-	.0.	-		A.	TK.
1775		R.	S.	Th.	D.			S	<u>w</u>	E —		
June		In.Dec.		J	In.Dec.	r. c. SSE. S. S by W.	,	,	,		w	w
23	82	30.0	-29.9 3	81 3	30.0	r. c. S by E. SSE. c. h. S. S by W. S. c. h. fq. r. S. S by W. SSW.	12		1		11.13	9.16
24	80 <u>1</u>	30:0	2 9. 93	80	29 , 9 3	fq. r. c. S by W. c. fq. c. S by W. c. fq. r. S by W. S.	3		3		11.42	9-48
25	77 ā	30.0½	30.0 <u>1</u>	76 <u>1</u>	30.0	h. c. S. S by W. SSW. c. SSW. c. SSW. c. r. SSW. V. C. W by S.	21			52	11.16	
26	80	30.0 <u>1</u>	30.0 <u>1</u>	80 <u>1</u>	30.0½	\begin{cases} \text{hr. c. fq.} & \text{V. SSW.} \\ \text{fq. r.} & \text{SW by S.} \\ \text{r.} & \text{SW by S. S by W. SSW.} \\ \text{r. c.} & \text{S by W.} \end{cases} \end{cases} \end{cases}					10. 2	7.40
27	8o <u>₹</u>	30.0½	30.0½	8o <u>∓</u>	30.0½	c. fq. SSW. SW by S. SSW. c. fq. SSW. S by W. fq. c. S by W. S. c. S. S by W. S.		24		44	10. 6	7. 0
28	80 <u>1</u>	30 . 0₹	30.03	8o <u>‡</u>	30.0 <u>3</u>	h. S. S by E. h. fq. f. c. S by E. fq. c. S. c. f. S. S by E.		13		2	14310	8. 2
29	79½	:30.1	30.1	79	30.1	c. S. S by E. S. c. S by E. S. c. f. S by E. S. f. S by E.		20	39		12.18	9.48
3°	78 <u>1</u>	30.2	30.1½	78 <u>₹</u>	30.1	f. S by E. f. c. S by E. c. f. S by E. f. S by E.	1		77		13.21	12.8
July 1	77½	30.1½	30.1½	76₃	30≋	c. S. c. S by E. c. f. S. S by E.	21		76		12.35	12.38
2	78 <u>1</u>	30.1½	30.1	78	3041	h. S by E. S. S by E. h. c. S by E. SSE. S by E. c. S. c. S. S by E. S.	14		62		13.33	14.38

Ship Grenville, Capt. Burnet Abercrombie, 1775, kept by Alexander Dalrymple

			<u> </u>		1					M	lagnet	ical					
ude from	n Gre	enwich						Cor.	Vari	ation.		L)ip				
TK.	D. » T.K.	D	s.	О.	Е. D.	Lati	o.	Long.	Az.	Amp.	E.	w.	MD.	C.D.	`.	ML.	
w 9.16		w			7	°N′ .3. °	N 4.32	W 11 6	°w′	w	28.	28.4	28.2	27.4	1	3210	Moderate
9-48					i	2.53	4.28					29.4		28.2	Very un-		Moft pai
9440						4.93	4.20	11.37			20.4	29.4	-9.	20.2		/ 3	Moft p
						2.35	[4.21]	[11.11]			27.4	27.6	27.5	26:7	Pretty fleady.	58	furgeon jolly be find his one glasso fath
7-40		·				2.23	4.16	926			26•4	27•4	27.	26.2	j	58	A fresh bre
7. 0						2÷13	3.42	.845			25.4	26.	25.6	25•		73	Mostly makin fuppose fpoke T.S. 8c
8. 2						1.34	2.50	945	14.42* *14.11		24.4	25.2	24.7	24•		76	Fresh b T.S. 8c
9.48		-				1, 0	1.56	11.29	14·37* *13·44	L4.25*	23.6	24•4	24 . I	23•2	Very unfleady.	79	Fresh bree:
12.8						0.14	1.11	13.48	13. 6* *12. 7		23.6	24.4	24.1	23.2	Pretty sleady.	78	Fresh b Some 1 man of
12.38						0.16	1.34	14.17	13.17*		24.6	24.4	24.5	23.6		66	Major part
14.38						S 0.22	1.10	16. 16	12.41*	12.47*	24.6	25.4	25.1	24.2	N.B. going to Westward encreases dip.	70 3895	Pleafant br

| Moderate breezes. T.S. 819.

Most part a fresh gale from Southward, with squalls and rain. T.S. 810.

Most part fresh breezes. At 8 P.M. Richard Jones, the furgeon's lad, fell over-board. Hove the ship to, and sent jolly boat and yawl in search of him; but they could not find him. No observation for latitude or time, not having one glimpse of the Sun all the forenoon. P.M. no ground 50 fath. T.S. 80°½.

A fresh breeze with much rain. P.M. no ground 70 fath. T.S.80°1.

Mostly fresh breezes. At 2 P.M. from mast-head land, making like islands, was seen bearing E by N=ENELN, supposed Cape Palmas. P.M. no ground 70 tath. At 3 P.M. spoke with a French ship from Haure to the coast of Angola. T.S. 80°.

Fresh breeze throughout, and a large Southerly swell.

Fresh breeze throughout. P.M. cloudy. A.M. fair. T.S. 79° 1

Fresh breezes with fair weather. P.M. many porposites. Some bottle noses, and vast slocks of slying fish. A.M. a man of war bird. T.S. 7603.

Major part moderate and cloudy. T.S. 78°.

Pleafant breeze, with fair weather and smooth water. T.S. 76°.

				*****							*****			
								D.	L.	D.		Longit	ude fro	m (
1775	Th.	R.	arine Ba	romet		Weather and Winds.	- 11			$\frac{T}{W}$		A.	T.K.	D. T.
-773							-	-		-		****		-
July 3	79	In.Dec.	30.03	79	In.Dec.	h. S. S by E. S. h. S by E. SSE. S by E. S. S by E. h. fq. c. S by E.	}	•	3	, 35		W 14.56	W 16.36	E
4	77₹	30.1	30.0 <u>1</u>	77	30.0₹	c. S by E. SSE. S by E. SSE. h. SSE. SE by \$. SE. SE by S. h. SE by \$. SE. h. f. c. SE by \$. c. f. SE.			14	30		15.44	17.55	
5	78 <u>1</u>	30.14	30.14	78 <u>₹</u>	30.1	h. SE. SE by E. ESE. h. f. ESE. f. c. f. ESE, SE by E. f. SE by S. SE.	}	2		¥5		16. ₄	18.30	9;
6	79³	30.1	30.03	79 3	30.0½	f. SE by E. SE. f. c. SE by E. SE. c. fq. r. c. SE. SE by E. SE by S. c. fq. r. SE by S.		12		29		16.49	19.44	
7	80	30.0½	30.0₹	80	30.0½	c. SE. SE by S. SE. c. f. SE. SE by E. SE. f. c. SE by E. c. fq. SE by E.	}		14	8		17.39	20.42	
8	79½	30.0½	30.0½	79₹	30.01	fq. r. fq. SE by E, SE, fq. c, SE, c. SE, c. fq. r. h. f, SE, SE by E.			¥4		5	18.42	21.40	
9	.79 1	30.12	30.14	79½	30.1½	f. fq. ESE. SE by E. SE. fq. f. SE. fq. c. SE. SE by E. c. SE by E. SE.			3		14	19.45	22.29	
10	7 7₹	30.1½	30.14	77½	30, 11/2	f. SE. SE by E. f. fq. SE by E. c. fq. SE. SE by E. fq. SE by E. ESE. SE.			5		21	20.37	23. 0	
. 11	77	30.2 ³ / ₄	30.2½	76≩	30.2₹		}				8	21.42	23.57	
12	76₹	30.3	30.25	762	30.24	h. SE. h. f. SE. SE by E. f. c. SE by E. c. fq. SE. SE by E.			I		4	22.29	24.40	

Ship Grenville, Capt. Burnet abercrombie, 1775, kept by Alexander Dalrympl

		0 C / 14 / 15 C			-									***			
le from Greenwich										M	agnet	ical				11	
e fron	n Gre	enwich							Vari	ation	1	Nort	h Dip				
^	ln -	r	1			T.at	itude	Cor. Long.		^ !	F	ace	<u>۸</u>	۱. الت دينة			
r.K.	D. (T.K.	C	C	6	E. D.		1 0.		Az.	Amp.	E.	w.	MD.	C.D.		ML.	
			- O.	L	<u>.</u>	A.	-0.				E.	W.					
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.6 . 36	E	W	-			S 1. 6	N 0.17	18.13	W 11.37*	W	24.2	24.6	24.4	23.5		97	Fresh breezes
). 													1				r.tem precse
~							S		10.31*				ŀ			-	
7.55		Ċ				2.13	1. 8	19.29	*9.0	*8.40	22.2	22.6	22.4	21.5	Very fleady.	86	Pleafant trade
								·				- 1 .					
8.30	93	20. 3	4	0	26	3.28	2.21	20. 3	8.59* *8.32	8.59*	19.6	20.6	20.2	19.3	Extremely fleady.	80	Night, fea breezes, v
															C neguy.		Section 1
0.44		•	-			1 =6		21.20	8.37*	Q =4*			6	, Q ,	Great fwell.	•	A.M. grea
9•44						4.56	3.37	N-124	1.21	0.54	19.2	20.2	19.0	10.7	Great (well	9 9	very close rain. F.
																	5 C 6 11
0.42						6.22	5.17	22.20	7.52*	7· 49*	15.4	16.2	15:7	¥5.	Very great fwell.	101	Great swell cloudy.
															Pretty steady,		
,1,40						8, 1	7.10	23.20	*6.26	*6.33	11,	12.6	11.7	II.	though great fwell; touch-	1-18	Ditto. Ditto
,		•					*						•		ed the screws, and found the same.		
			1										-				
2.29						9.45	8.57	24.11			7.2	8.4	7.7	7.	Pretty fleady.	121	Ditto. Fresh
													•				
3. O						11.33	10,50	24.44	5.44*	5.32*	3.6	5.0	4.3	3.4	S Ditto, but S great swell.	120	Ditto. Saw. T.S. 772.
															C Ricat i Matt.		
3.57						13. 7	12.34	25.43	*4.0		2.2	0.4	4 4	F., 4			Major part
2.21		1				-3. /	*****	-9'73	7. 0		*14	2.4	2.3,	Ir4	Not steady.	114	fwell. P. Towards r
									ľ			Sou	ith D	ip,			
4.40						14.48	14. 6	26.28	4.15*	4.20*	1.4	1.2	1.3	•	Pretty fleady.	111	Pleafant tra
			<u></u>	<u>. </u>			- 4									4942	bird, supp

YMPLE.

csh breeze throughout. T.S. 760.

eafant trade wind, with a Southerly swell. T.S. 7601.

Night, fea luminous supposed blubber. Major part, pleasant breezes, with a swell from SE. T.S. 76°\(\frac{1}{2}\).

A.M. great fwell. In the forenoon, hard rain, small drops, but very close. First part, fresh trade; latter, squally and some rain. F.S. 7701.

Great swell. The barometers very unsteady. Fresh gales and cloudy. T.S. 78° 1.

tto. Ditto Strong gales and fqually. T.S. 780.

to. Fresh gales throughout. TS. 789.

Ditto. Saw a peteril. Fresh gales from SE. with a large swell T.S. 77?.

Major part frosh gales and squally, with a great consused swell. P.M. a weather gall. A.M. Swell much abated Towards noon, moderate and fair. T.S. 75°.

Pleafant trade wind. Swell very much abated. A.M. faw a bird, fupposed to be a sheerwater. Mr. ROBERTS saw a man of war bird. T.S. 75°\frac{1}{2}.

Journal of a Voyage to The East-Indies, in the Ship C

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						D.L. A.	Longit	ude fror
	Th.		arine B			Weather and Winds. A.O. T.K.	Α.	TK.
1775	5	R.	S.	Th.		N S WE		
		In.Dec.	In.Dec	• •	In.Dec		0.1	
July	76	30.23	30.2½	76	30.2½	\begin{cases} \begin{array}{cccccccccccccccccccccccccccccccccccc	23.3°	W 25•47
14	76	30.34	30.3	76	30.2 <u>1</u>	f. fq. SE by S. SE. fq. f. SE by E. SE by S. c. fq. c. SE by S. SE. c. f. SE SE by E. SE.	24.27	26.53
15	76 ₄	30.2 <u>1</u>	30.2½	761	30.2±	f. c. fq. SE. SE by S. SE. c. r. c. fq. r. SE by E. SE by S. SSE. V. fq. r. c. SE. c. h. SE by E.	25.20	27.45
16	74½	30.3½	30.3	74½	30.2 ³ / ₄	c. SE. SE by E. c. SE by E. ESE. c. E by S. SE by E. E by S. SE by E. c. SE. ESE.	25.42	28. 8
17	73	30.4	30.3 1	73	3° 3½	c. SE by E. V. SSE. V. ESE. c. fr. fq. SE by E. V. SE. fq. fr. SE by E. V. fq. fr. c. fq. SE. E by S. ESE.	26. 2	28.33
18	75½	30.4	30.31/2	75½	30.3½	f. SE by E. SE. f. c. SE by E. SE. c. SE by E. SE. c. f. SE. E by S. ESE. E by S. c. fq. c. ENE.	26.29	29. 4
19	73½	30.4	30.3	731	30.3	fr. fq. V. ESE. r. fq. r. f. fq. r. V. C. NE. V. fq. r. c. f. C. N. V. N.	26.12	28.47

Ship Grenville, Capt. Burnet Abercrombie, 1775, kept by Alexander Dalrympli

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								1		N	1agne	etical				1	
tude from	m Gré	enwich						Cor.	Varia	ation		D	ip				
	D.D					Lat	itude	Long.				ace	1.00	tan			
TK.	D.D T.K.	D	s.	o.	E.	A.	O.		Az.	Amp.	E.	\widehat{W}	MD.	C.D.		M L	
0 /	,	0 /	T	-	_	0 /	0° 1	0 /	0 /	0 /	0			•		4942	C TRim C
$\ \mathbf{w}\ $	E	W				S.	s.	w	w	\mathbf{w}	1						First pa fair. perfect
25.47						16.17	15.33	27.37	*2.43	*2.42	3.4	3.4	3.4	34		. 111	fore fa Change rious t
														6	:		Ch Re
ļ									0.1								Dit Dit
26.53						17.46	16.59	28.45	*1.45	1.36* *1.49	5.2	5.4	5.3	6.2]	104	Constant tr
07.45						18.58	18.11	29.39	*1.21			8.	7,6	8.5	Not very fleady.	00	First part,
27.45						10.30		29.39	1.21		7.4	0.	7,,0	0.5	J.	00	r irit part,
28. 8						19.47	19. 1	30. 4	0.42*		9.2	9.6	9.4	10.3	Pretty fleady.	54	A.M fat
													•		recty heady.		abated.
						·	:										P.M. to curved nidada
							,										noon, breezes water.
28.33	105	30.18	3	*At	31	20.47	19.59	30-31			11.	11.2	1 1 . 1	12.		69	to lye i
	_	- '				.]		,									Its longi Mean di and 1
						. [-										Long. 8 By Dr. 1
				ľ		1			_ [T.S
29. 4	138	31.22 31. 4	3	0	I I	22. 9	21.29	31.15	E 0.20*	E 0.13*	13.	13.	13.	13.7	Very unsteady.	87	At Sun-fet,
	120	3** 4	3	۔ ا	-3								ĺ		·		•
28.47	145	31.12	3	0 1	15	22.48	22. 8	30.59		0.44*	14.4	14.4	14.4	15.3	Pretty steady.	47	Mostly ligh
	1	1														5502	
																-	- A-CHE-P

First part, fresh gales and squally. Latter, moderate and fair. A.M. Fog Bank exactly like an island, the outline perfectly well defined, except the extremities: I never before faw any cloud fo like land. T.S. 74°. Changed the poles of the dipping-needle. Mean of the various trials changed and re-changed 3½ S. viz.

Ē. Changed the poles, marked end down, Re-changed, ditto up, 2.7 4.6 Ditto, ditto down, 4.5 Ditto, ditto up, Mean

Constant trade wind. T.S. 740.

First part, moderate. Middle, hard squalls and rain. T.S. 7401

A.M saw a bird like a booby, but shorter winged and necked, called by failors, poor John. Light breezes, swell much abated. T.S. 74°.

P.M. to the NE. the clouds very remarkable, being in white curved rays, like the variation chart. At 7 A.M. faw Trinidada from mast-head SSE. At 9 visible from deck. At noon, Trinidada S 36º E 11 leagues. Major part, moderate breezes and cloudy weather; winds variable and imoot! water. By the bearings of Trinidada at noon, allowing it to lye in 200 27' S according to Dr. HALLEY.

Its longitude per T. K. Mean diff. T.K. and) 8 obs. 3 28.13 W 1.58 8 obs. @ 2.12 and 1* Long. 8 obf. o and) 1 obf. At. 30.11 8cbf. O&) 30.25 By Dr. HALLEY, 29.50 29.50 Diff. 0.21 T.S. 74°.

At Sun-fet, Trinidada E by S 2 S 8 or 9 leagues. T.S 760

Mostly light breezes and cloudy. T.S. 740.

							-, -					·
						·		L	D	. L. A.	Longit	tude from
	Th.	$\frac{M}{R}$	arine Ba	Th.		Weather and Winds.	-		-	. K.	Α.	т.к.
1775		K.	3.	1 11.	<i>D</i> .			0	W	152		
Ĵuly 2©	75	In.Dec. 30.4	In.Dec.		In.Dec. 30.3	f. C. f. C. NE. f. c. f. C. V. f. E. ENE.	,	3	5	,	W 26. 8	W 28.48
2:1	73	30.4	30•3≩	73 ¹	30.3 ¹ / ₄	f. C. ENE. f. c. ENE. E by N. c. h. E by N. ENE. h. c. ENE. NE. f. NE.		4			² 5•35	28.15
22	744	30.5	30 4½	74	30.4 ¹	f. h. fq. fr. NE. V. c. f. V. NE by E. V. f. V. ENE. c. f. E. E by S.		2		8	24.49	27.21
23	74	30.6	30.5½	74	30.5	f. E. E by N. E. f. E. by S. V. f. SE by E. f. SE by E. SE.		7	8		24-55	27.35
24	71‡	<i>3</i> 0.6	30.51	7 I ½	30.5	f. SE by E. ESE. f. c. ESE. c. ESE. SE by E.	2		14		25.20	28.12
25	72 <u>1</u>	30.6	30.5½	7.3	30 . 5	c. ESE. SE. SE by E. c. SE by E. c. h. ESE. SE by E. h. V. SE. c. E by S. SE by E. SIs.		2		3	25.49	28.38
26	71	30.6	30.52	71½	30 .5	c. fq. with fr. V. SE by B. fq. with fr. h. SE by E. V. h. f. SE. SE by E. V.		4	6		26.23	29.18
27	70 <u>4</u>	30. 6	30 .5 ½	70 ¹ / ₄	30.5	f. ESE. SE. f. SE. SE by E. ESE. V. f. V. ESE. f. E. F by S. f. V.		6		4	26.36	29.27
28	68	30.5½	30.4 <u>3</u>	68 <u>1</u>	30.45	, V	-	6	9		26.18	29. 0
29	661		30 3½			h. W by S. V. c. V. NW. c. NW. V. c. NW. V.	-	6	3		25.21	27.50

Ship Grenville, Capt. BURNET ABERCROMBIE, kept by ALEXANDER DALRYMPLE, 17

			Ī	Ī			4	Ī	T	N	lagnet	ical				ĺ	
ıde fron	n Gre	eenwich						Cor.	Vari	ation	 	Sout	h Dip				
T.K.	D. (T.K.	(S.	0.	E. D.	Lat	itude O.	Long.	Az.	Amp.		w.	MD	c.D.		ML.	de la caracter estado de la caracter
° ' W 28.48	, E 137	w '				S 22.57	s 22,20	o , W 31. 0	° ′ E	° ' E *0.44	° 14.6	°	14.7	15.6	Not very steady.	5502	Mostly cal:
28.15							4	30.27							motion, tho'		Major part
27.21	₹74 94	30.15 28.55	5 3	00	22 18	25.10	24.39	29.33	0.11* W *0.15	0.17* W *0.22	19.4	20.4	20.	20. 7	Very steady.	76	Pleafant bre
27.35	147 135 140	30. 2 29.50 29.55	3 3 3	⊙ ⊙ ⊙	24 16 20	26.12	25.48	29.47	E o. 6*	E 0.11*	21.	21.6	21.3	22.2	Extremely steady, though long fwell.	65	Pleafant bre
28.12						27.44	27.18	30.24	1. 0* *1.13	1.10*	234	24•	23.6	24.5		96	SPleafant T.S. 69°
28.38						28.54	28.30	30.50	2.12 * *1.52	2.16* *1.27	26.	27.	26.4	27•3		76	Light bre was a f a-stern.
29.18						29.55	29.35	31.29		1.52*	27.2	28.	27.5	28.4	> Very fleady.	69	Winds most
29.27						30.36	30.22	31.37	*3.0	*3.14	27.6	28.6	28.2	29.1		43	Light airs.
29. 0						30.45	30 37	31. 8	2.45*	2.16*	27.6	28.6	28.2	29.1]	18	Moilly calm
27.50						31. 5	31.33	30. 2	*2.10		29.	30.	29 4	30.3	Very unfleady.	53 5084	Major part l

E, 1775.

Mostly calm throughout, with smooth water. T.S. 740x.

Major part light breezes, with fmooth water. T.S. 720.

Picafant breeze and fmooth water. T.S. 720.

Pleafant breezes; a long fwell. T.S. 70%.

 $\begin{cases} \begin{cases} \begin{cases}$

Light breezes throughout. Passed by the sail at midnight; ir was a small two-mast vessel. At 6 A.M. saw the vesse a-stern. T.S. 69°½.

Vinds mostly variable. T.S. 6701.

light airs. T.S. 630.

Iodly calm. T.S. 669.

Tajor part light breezes. T.S. 6701.

Journal of a Voyage to The East-Indies, in the Ship

												- 11		
		:W /							D	.L.	D.		Longitu	ade from
		Th.	Ma	irine Ba	romet		Weather	and Winds.	A	.0.	T.	K.	Α.	TK.
	775		R.	S.	Th.	D.			N	S	W	E		
	ily		In.Dec.	,	Ů	In.Dec.	c. fq, r. c. fq. r. fq, r. c.	NW by W. NW by W. NW by N.	,	,	,	,	w	°w′
	30	6 5 ±	30.2½	30.13	651	30.1½	c. fq. f. c. fq. r.	NW by N. NW by N. NW by N.		7		5	22.36	25. 6
	31	62		29.8	62		fq, r. fq. r. hfq. hfq, r. fq, hr. hfq.	NW by N. NWbyN. NNW. NbyW. N. NNW.	5		26		19.14	
3	lug. I	614		29.81	614		fq, r, L. fq, r. fq. c. c.	NNW. NW. WNW. WNW. WNW. W by N.					16.28	19.24
-	2	.58½	29.9	29:84	58 <u>1</u>	29.8½	(c.	W. W. W by S. W by S. WSW. WSW. V. W by S.	2			16	14-53	17-33
er sancierimente estadore	3	5 5₹	29-3	29.21/2	55½	29.2 ¹ / ₄	e. fq, r. L. to e.n.e. h. fq. fq. L, r. c. L, r. c. L, r. fr.	SW. V. W. NE by N. ENE. V. NEbyE. N. WNW. V. W.		1		5	13.56	16.29
and the same	4	54 ³ -		29:8	54 ³		fq. c. r. fq, r. hard gales. ditto.	W by N. V. W by S. V. S by E. S by E. S by E. SSW.	2		12		71.45	14.30
	5	51 ³ / ₄		30.0½	50¾		fq. fq, hail. hfq, hail.	SSW. SW by S. SW by S. V. SSW. S by W.	I	I		3 5	9-24	11.34
	6	53		<u>.</u> 30.2≩	52		fq, r. fq, hail. fq, r. hail. fq, r. c. c. fq. fq, r. fq, r. fq. fr.	SSW. S by W. S by W. S. S. S. S by E.	I	4		2	7.19	9.27
A CONTRACTOR	7	56≩		30.03	56		c. f. h. h. c. fq, t. fq, r.	S by E. C. NNE. C. NNE. NE by N. V. NNE. NNE. NE by N.		23		6	6. 5	
	8	60 <u>1</u>	30.1	30.0	60	30.0	fq, r. c. fq, r. fq, r. c. fq, r. fq, r. f.	NNE. NNE. V. N by E. N. V. NNW. V.					3.55	5.57

e Ship Grenville, Capt. Burnet abercrombie, kept by Alexander Dalrymple, 17

			1	T						M	agnet	ical		. ^			
ade from	Gre	enwich						Cor.	Varia	tion.		South	Dip		·		
TK.	D.) T.K.	D	s.	0.	E D.	Lati	O,	Long.	Az.	Amp.		W.	MD.	C.D.		ML.	·
W		0 /			,	S	S	w	° E′ 2.26*	, , E	0	0	٥	o		6084	
25. 6						32. 3	32. 8	27.10	*1.27	*1.42	31.3	32.3	31.7	32.5	Not fleady.	1.52	An incre 9 P.M.
						33.14	[33.19]	[24• 3]	0.44*		-				No obf. too much motion.	184	Strong g. 12. 30.
19.24						33-35	33•35	21.22			34•	35•	34•4	35•2	Very unsteady.	141	First pa modera 4. 29.7
17.33					-	.34- 9	34. 7	19.28	*2·35		33-4	34•4	34•	34.6	Uniteady.	86	Major part
16.29						34.26	34-25	18.21		W 3.18*	34.4	35-4	35.	35.6	Not very un- leady.	55	Winds bar. 3 9 A.M to the
14.30						33-37	33•34	16.19					,		No obf. too much fea.	129	First pa hard g the shi 6. 29.2
11.34						33-37	33-23	13.20					35•	35.6	Very unfleady.	117	Squally Bar. 4 9 A.M
9.27						33-37	33. 9	11.10								103	First and great 5. 30.1
						33 37	[33-21]	[9-53]		:						62	First, liq with t rim rou
5 •57						33.51	33.48	7 ·37				ĵ.			**	109 7222	First an modera a pinta 9. 29.9

An increasing gale from NW quarter, with frequent squalle. 9 P.M. bar. 30.13. 8 A.M. 30.24. T.S. 6501.

Strong gales, with hard fqualls and rain. 9 P.M. bar. 30.1½. 12. 30.1. 8 A.M. 29.9½. 10. 29.9. 11½. 29.8½.

First part, blowing very fresh from N.W. Latter, more moderate, with very large sea. Bar. 14. 29.7½. 2½. 29.7. 4. 29.7½. 6. 29.8. 8. 29.8. 10. 29.8. A.M. 7. 29.8.

Major part, light breezes, with great fwell.

Winds variable, with fqually weather and confused feabar. 3 P.M. 29.8 6. 29.7 10. 29.7. 8 A.M. 29.3 9 A.M. 29.2 About noon, it appeared very threatning to the Northward, but the clouds dissipated.

First part, squally with some rain. The middle, excessive hard gales, with a great sea; and the spray so thick that the ship was covered with it. 2 P.M. bar. 29.2\frac{1}{4}. 4. 29.2.
6. 29.2\frac{2}{4}. 9. 29.5. 7 A.M. 29.7\frac{1}{2}. 9. 29.7\frac{2}{4}. 11. 29.8.

Squally weather, with much hail and rain, and a large swell.

Bar. 4 P.M. 29.8½. 6. 29.9. 8. 30.0. 7 A.M. 30.0¼.

9 A.M. 30.0¾.

First and middle, fresh gales and squally. Latter, moderate; great swell. AM. some silver birds. Bar. 2 P.M. 30.03. 5. 30.1. 10. 30.2. 7 A.M. 30.2. 9. 30.3.

First, light airs, with cloudy weather. Latter, fresh gales, with tain. P.M. Venus appeared very dim and fuzzy; a rim round the Moon. 9 A.M. bar. 30.11. 11. 30.03.

First and middle, hard gales, squally with rain. Latter, moderate and hazy; great swell. A.M. some silver birds, a pintado bird. Bar. 2 P.M. 29.9\frac{1}{2}. 8 A.M. 29.9\frac{1}{2}.

9. 29.9\frac{3}{4}. 10. \begin{cases}
30.0. \\ 30.0\frac{1}{4}.
\end{cases}

ļ							,,	
						D.L. D.L.	Longit	tude from
	Th.	M:	arine Ba	rome	ter,	Weather and Winds. A.O. Γ.K.	A.	TK.
1775		R.	S.	Th.	D.	N S W E		
		In.Dec.	ln.Dec.		In.Dec	cf. NW by N. NNW.	0 /	0 /
Aug. 9	б2 <u>т</u>		30.01	621	,	f. fq. h. fq, r. NNW. N by E. fq, r. r. fq. N by E. N. fq. fq, r. N.	W 1.29	W 3.14
10	624	30.2½	30.2	62	30.1½	fr. h. N. N by W. h. dr. h. N by W. N. h. c. N. N by E. c. N by E. 4	E 1.15	0.26
ır	61 <u>1</u>	30.1½	3 0. 0½	60 <u>1</u>	30.0	h. N by E. h. fq. N by E. NNE. fq. c. NNE. c. f. NNE.	4 5	E 2.25
12	60	30.1	30.0 <u>1</u>	5 9₹	29.9 1	h. N by E. h. fr. N by E. fr. N. V. hr. V.	6.17	5. 2
13	58 <u>₹</u>	30.2	30.1 1	5 9 [‡]	30.0	c. fr. c. f. NNW. NW. f. NW. NNW. f. f. fq, r. c. NNW. NW by W. W by N. W.	8.43	7.26
14	5.83	30 3½	30.3 1	59	30.2 <u>1</u>	f. WSW. SW by W. c. SW by W. SSW. S by W. c. S by W. V. c. V. WSW. C.	10. 4	9. 3
15	60 <u>1</u>	30.3	30.2 ³ / ₄	60 <u>‡</u>	30 1½	c. V. NNW.	11.10	10.41
16	60₹	30. 1 ½	30.14	60 <u>1</u>	30.03	c. N by W. c. f. c. N by W. fr. c. fq. c. fr. N by W. N by E. fr. c. N by E.	13.32	13 12 5
17	61	30.2	30,2	61	30.1	c. (q. fq, r. N by W. V. NNW. fq, r. NNW. NW by N. fq, r. N W by N. V. c. NW by N. f. N by E. N by W.	16.29	15.50 7
18	61	37.2½	30.22	61	30.1½	f. c. N by W. c. h. N by W. N. V. h. V.	19. 1	18.13

Ship Grenville, Capt. Burnet abercrombie, 1775, kept by Alexander dalrymple

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			T	T					1	N	Iagne	tical	-			1	
ide froi	n Gre	enwich						Carr	Vari	ation	 	Sout	h Dip				
Ţĸ.	D.D T.K.	D	s.	0.	E.	.	itude	Cor. Long.	Az.	Amp.	F.	ace	MD.	c.D.	Annual de Albertaine	ML.	
· /	1		-	┢	-	. ,	0 /		. ,	0 1						7222	
W 3.14	E	E				S 34. 6	S 34.11	W 4.51	W 8.50*	8. 1*	-				2	122	First, mod fqualls as 12½. 30.0
0.26						34. 6	34.15	2. 0			37•	39•	38.	38.6	Very unsteady.	136	Major par 7. 30.1. Two blac filver bird
E 2.25						34. 1	34.27	E 0.54	*12.43						· ·	140	Fresh gale 9 P.M. A.M. ma
5. 2					-	33-47	[34.36]	3•34			39.4	41.	40.2	41.	Unste≥dy.	110	Most part, to 30.0½. Johns. so pintado bi
7.26						33.37	34.13	6. 3	*16.9	•						122	Most part, 4- 30.04. Several potados.
9. 3						33.44	34- 4	7.43	16.43*		41.4	43.2	42.3	43.1	Very fleady.	67	First part, 30.13. fome porp
10.41						33-49	34- 9	9.24			41.4	43.4	42 4	43 ²	Extremely fleady.	5 5	First part, with cloud
13 12	94	11.38	4	Θ	ъз	3 3·53	34.15	11.58	18.18*	17.523	42.6	44•	43.3	44.	Very ficady.	119	Moderate par. 4 P 8 A.M. 30 feveral file about.
15.50	75	14-35	I	Θ) alt. 5°.	34. I	34.15	14.39	19.39*	19.56*	43·4	45•2	44 3	45.	Not very	146	Fresh gales P.M. lar sheerwate 7 A.M. 3
18.13						34. 5	34 15	17. 5	20.50* *22. 0	20.47*	45.6	46.4	46.1	46.6	J	126 8365	Pleafant b A.M. two fwallow-t ral grams

- First, moderate breezes and fair. Latter, fresh gales, with squalls and rain. Bar. 8 P.M. 30.1. 9. 30.04. 11. 30.0. 12½. 30.0 6 A.M. 29.9½. 8. 29.9½. 9½. 30.0½.
- Major part, fresh gales. Bar. $2\frac{1}{2}$ P.M. 30.0\frac{1}{2}. 5. 30.0\frac{3}{4}.
 7. 30.1. 8. 30.1\frac{1}{2}. 11\frac{1}{2}. 30.1\frac{1}{4}. 6 A.M. 30.2. 9. 30.2
 Two black alcatrasses. A.M. a new pintado birds and som. filver birds.
- Fresh gales, with squally weather and a large sea. Bar. 9 P.M. 30.2. 11. 30.1½. 9 A.M. 30.1. 10. 30.0½. A.M. many pintado birds, sheerwaters, &c. one alcatrass.
- Most part, fresh breezes and hazy. Bar. 1 to 10 P.M. 30.04 to 30.02. 8 A.M. 30.04. 9. 30.02. A.M. several poor Johns. some sheerwaters, and a young alcatrass, but no pintado birds.
- Most part, fresh gales with some rain. Bar. 1 P.M. 30.0.4.30.0.4. 8. 30.0.4. 8 A.M. 30.0.4. 9. 30.0.4. 11. 30.1.4. Several poor Johns, sheerwaters; and A.M. a few pintados.
- First part, fresh breezes. Latter, light airs. Bar. & PM. 30.14. 12. 30.24. 9 A.M. 30.34. 12. 30.34. A.M. some porpoises.
- First part, variable. Latter, an increasing gale from NW with cloudy weather. Bar. 9 P.M. 30.34. 11. 30.3.
- Moderate gales, with some light squalls and smooth water. Bar. 4 P.M. 30.2½. 6. 30.2. 10. 30.2¼. 12. 30.2. 8 A.M. 30.1½. 11. 30.1¼. A.M. some pintado birds, and several silver birds, some setting on the water, others slying about.
- Fresh gales throughout, with cloudy weather and some squalls. P.M. large black alcatrass. A.M. some pintado birds, sheerwaters, &c. Bar. 3 P.M. 30.1\frac{1}{2}. 9. 30.1\frac{1}{2}. 12. 30.1\frac{1}{2}. 7 A.M. 30.1\frac{1}{2}. 9. 30.1\frac{1}{4}.
- Pleasant breeze and messly hazy; Several pintado birds.

 A.M. two birds, somewhat larger than silver birds, with swallow-tails slying above the ship; also a Cape hen, and several grampusses. Bar. 9 P.M. 30.2\frac{1}{2}, 12. 30.2\frac{1}{4}, 9A.M. 30.2\frac{1}{2}

Journal of a Voyage to The East-Indies, in the Ship Grei

						D. L. Longitu	ade from
	Т.		arine Ba			Weather and Winds. A.O. T.K. A. O. W. W. A.	T.K. I
1775		R.	S.	Th.		N S W E	
Aug.	60 <u>1</u>	In.Dec. 30.1	In.Dec.		In.Dec. 30.0	h. N by E. WNW. NW by N. h. dr. NW by N. WNW. dr. fr. WNW. V. fr. V.	E 19. 9
20	61	30.0½	30.0½	60 <u>₹</u>	29.9½	h. NNW. N. V. NE by N. h. h. N by E. N. NNE. h. h. N by E. NE. N. N.	
21	_						

p Grenville, Capt. Burnet Abercrombie, 1775, kept by Alexander Dalrymple.

			1	1						M	iagnet	ical		-			
ide from	n Gre	enwich						Cor	Vari	ation		South	Dip				
т.к.	D. (T.K.	ď	s.	0.	E. D.	Lat	itude O.	Long.	Az.	Amp.	E.	ace	MD.	C.D.		ML.	
e /	j	• <i>'</i>				° ,	°, S	c E	。	w	٥	٥	•	٥		8365	Most par from ma
																·	At 51/2
19. 9		j ·				34.19	34.22	18. 6			45.2	46.6	₄ 6,	46.5	Very steady.	44	At!
		٠.						·					-				A
															-		Long Cape Long True Erro
					:						·					·	Major pa At 4 h. Sunfet *
							34.15			22.21*	45-6	45.6	45 6	46.2	Perfectly steady.	70	L
						28	343			24.01	73.0	43.0	43.0	7-13	reflective fleady.	,0	{ R
								Ay and					,		en e		Sunrise,
****																	Ar noon
						,											N. B. A
2	,									-	45.2	46.4	45.7	46. 4	Very steady.	8479	At 4 P.N in towal Ark W
			-		<u></u> :			1			<u> </u>			<u> </u>			

```
Most part, light breezes and hazy. At 2 P.M. saw the land
          from mast-hand ESE. per compass.
                                                  Peaked hum of Cape Good Hope, S 52.48 E
Hum. miftaken for Cape, S 57. E
L. ext. Table Land, E 4. N
                                                  L. ext. in fight,
Sugar Loaf,
N 69°. E
Table Land,
Cape Good Hope, S 60° E
                                                                                                                                                                                  E19.
                      At Sun-rife
                             At noon { L. ext. Cape Good Hope,
                                                                                                                                                               19. 9 E
                     Longitude per T.K.
Cape Good Hope per chart,
                                                                                                                                                                  0.21 E
                     Longitude of Cape per T.K.
True longitude of Cape,
                                                                                                                                                               19.30
                      Error of T.K.
Major part, moderate and hazy. In False Bay.
    At 4 h. Cape Good Hope, E 16°. S. Sunfet * L. ext. N 21°. E.
                              R 2.18 Bluff Point in one with Hummock.
                                       72.30 Cape Good Hope * 2d.
                                       86. 6 Hanglip.
                                                          * 2d Cape Good Hope.
                              L 24.30 Hummock, called Cape last night.
                                           7. o Hummock.
                                           1.50 Outer Hummock and highest part diff.
                                                                               Ridge.
   Ridge.

R 13.48 Hanglip.
Bellows, E 15°. S.

Sunrife, Hanglip, S 47°. E.

Cape Good Hope, S 36°. W.
White Sand Hills in Symmon's Bay, N 33°. W.

At noon

At noon

Cape Good Hope, S 50°. W

Noah's Ark, NW about 4' dift.

N. B. All these bearings are by compass, without allowing the state of 
    N. B. All these bearings are by compass, without allowing
        for variation.
      At 4 P.M. being calm, hoisted out the pinnace, and towed
        in towards the harbour. At 7 anchored in 20 fath. Noah's Ark W. Roman Rock NW ½ W dift. about two miles.
```

	1	
Aug. 21 Strong gales and squally.	S. S by E.	At 4 A.M. found ship drove, veered to a whole cab
Fresh gales with hard squalls. P.M. in-	S by E.	
23 Strong gales and excessive hard squalls. Towards midnight began to moderate.		At 8, gale increasing, swayed up lower yards. At
24 Moderate and fair.	SE.	At 1 P.M. anchored in Symmon's Bay, in $7\frac{1}{2}$ fath.
25 Moderate and cloudy.	NW.	
26 Fresh breezes, with some rain.	w. sw.	
[Light breezes mostly from SE, with fair]	SE.	:
27 weather.		
28 Light breezes and fair.	V.	Sailed a Dutch snow.
First and middle, moderate and cloudy,	NW toW.	Sailed La Bretagne, Capt. MANSON for Mauritius.
29 with some rain.		
Latter, squally.	SW.	Dadiiii 1
30 Strong gales and clear weather.	SSE.	Returned.
Sept. I Moderate and fair for most part, and a swell.	NW.	
2 Strong gales and hard squalls.	1	
Major part, squally with rain. Towards evening, light breezes and fair.	NW.	Sailed again.
4 Moderate and fair.	V.	
Strong gales and very hard squalls; could]	S by E.	
not fend a boat ashore.	1 1	
6 Moderate and fair.	V.	Court lought as the subsequently and the enghance w
Mostly light breezes.	V. Wy.	Sent long-boat to endeavour taking up the anchor: r
P.M. a fresh gale.	sw.	
8 Moderate breezes.	v.	
9 Moderate and fair.	S by E.	
10 Strong gales and hard fqualls. 1 Light winds from Southward, and fair weather.	Sy.	
12 Fair.	v.	
3 Fair.	v.	
14 Light airs and	c.	Sailed the Anson, Capt. TRYON, for England.
15 rift part, calm: Latter part, breezes,	C. Wy.	
16 Fair.	v.	Sent long-boat again to try for the anchor, but could
17 Strong gales, with rainy weather.	NW.	
18 Fresh gales.	NW.	
	t. Į	
(=:		

e Ship Grenville, Capt. Burnet Abercros	mbie, 1775, <i>ke</i> į	bt by ALEXAND	ER DALRYME
hole cable; got down top-gallant yards, lowered fore and i	main yards, and got s	neet anchor overfide.	
ds. At noon, close reefed top-sails, stopt the cable, and ca $7\frac{1}{2}$ fath, when moored, lower slag staff from Point WSW.		Roman Rocks E ₂ S,	Noah's Ark SE.
uriti us.			
nchor: returned with 80 fathoms of cable, but could not w	eigh the anchor.		

nd.

but could not purchase it.

LRYMPLE.

trk SE. Hanglip SE4S off shore 3 of a mile.

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		e de la capacita de capacita que esta de la capacita del capacita de la capacita de la capacita del capacita de la capacita del la capacita del la capacita de la capacita del la capacita de la capacita del la capacita d					D	. L.	•	L.	Longit	ude fro
. 57	Th.	R.	arine Ba	romet		Weather and Winds.	A	.O.	T.	K.	A.	тк.
177	<u> </u>	Κ.	D.				- -	-				
		In.Dec.	In.Dec	٥	ln.Dec.		1	,	,		° ′ E	° ' E
5ep 1	t. 9 : 59		30.1	59		f. NW. NW by W. c. f. NW by W. WNW. f. C. c. C. E. C. WNW. NW.)				18.43	18.52
2	.0 593		30.0≩	59		c. NW. NW by N. c. fq. NW by N. N by W. fq. c. N by W. NNW. c. fq. fq, r. NNW.	- 4]		21.26	
()	57		30.1½	5 7 ³ ⁄ ₄		c. NW by W. WNW. W by S. c. fq. c. W by S. W. c. W. W by S. c. fq. fq. fq. r. W by S.	8				24.22	
2	· 2 62		30.2½	62		fq. W by S. SW. c. f. S by W. S. f. c. S. C. V. c. f. NE. NE by E. ENE.	}		49		25.36	
.2	66		29.63	66		f. NE by E. ENE. f. NE by E. f. NE by E. f. NE by E. f. ENE. NE by E.	6				27. 8	
2	6.5		29.51	6.5		h. NE by E. h. NE by E. NE by N. V. h. c. V. W. c. W. WNW. NW by W.)	9			28.13	27.23
2	58		29.7	Š8 <u>₹</u>		c. W by N. V. W by N. c. h.c. r.c. W by N. WNW. V. NW. c. r. NW. V. r. fq. WSW.) 14	5	1		29.35	
2	:6 6:	29.9½	29.9	61	29.8 <u>‡</u>	fq. WSW. fq. fq, fr. fq. WSW. SW by W. c. r. SW by W. W by S. W by N. r. W by N. WNW.	21			31	32• 9	31.50
2	.7 62 1	30.11	30.14	62½	30.0₹	c. fq, r. h. NhW. W by N. fq, c. W by N. W. WhW.	1				35.18	

ne Ship Grenville, Capt. Burnet Abercrombie, kept by Alexander Dalrymple, 17

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it	ade fron	n Gre	enwich	1					Cor.	Varia	ation.	 	South	Dip				Carre
	TK.	D. D T.K.	Ð	s.	0.	E D.	Lati	tude O.	Long.	Az.	Amp.		ace	MD.	C.D.		ML.	Cape (
-	 Е	,	0 /			,	° ′ S	° ′ S	° ′ E	° ′ ′	, ° w	0	•	0	o			At Sui N by ext. i
3	18.52							34.48	18.52								17	land. 9 or ESE: from At nor
၌							35·5 9	35-55	[21.15]				A				154	lip N N 57 great
2							36.21	. 36. 9	[24• 1]						e .		144	Freih gal
5.							36,37	36.15	[25. 5]	-							66	First breez it wa Man
3							37•34	37. 6	[26.27]		·						92	First 1 confu 9. 3c tado
3	27.23						37-58	37•39	27.23								58	First a ver trasse
5							37 ·3 2	:36. 58	[29. 0]								69	29.6
)	31.50						37. 1	∶36. 6	31.50			52.4	5 3•4	53•	5:3-4	{ Not very fleady.	127	Strong alcati 2 P.1 29.9.
3							36.40	35•24	[34•55]						Š		158	First page fwell. 4 P. 30.1.

Cape of GOOD HOPE lat. 34.22 S. long. 18.27 E.

At Sun-set, Cape Good Hope NW=WNW. Table Land N by W=NW by N. Hanglip E 7 N=E 29½ N. Eastern ext. in fight E5°S=E 17½ N distance 6 leagues from nearest land. At Sun-rise, Cape Good Hope N by W½W=NW½N 9 or 10 leagues. Hanglip Point NE=NNE. Ext. to Ed. ESE=E. Saw a sail, supposed the Gatton, come round from Table Rux to ioin we

from Table Bay, to join us.

At noon, Cape Good Hope N per comp. = N 22½W. Hanglip N 35 E=N 12½E 9 leagues. Eastern ext. N 80 E= N 57½E. Major part, light breezes and fair weather, with great fwell from SW.

4 Fresh gale, with a very large sea. Bar. 9 P.M. 30.1. 8 A.M. 30.1.

.4 Fresh gales and great swell. Bar. 8 P.M. 30.1. 8 A.M. 30.1.

First part, decreasing gale. Middle, calm. Latter part, a breeze from the NE. Great swell. A.M. bar. 30.3. N.B. it was not observed at noon. Past I P.M. it was 30.2½ Many alcatrasses, pettrils, pintado birds, &c.

First part, fresh gales. Latter, hard gales, with great and confused sea, Mostly fair weather. 2 P.M. bar. 30.2½.
9. 30.1. 11. 30.0. 8½ A.M. 29.8. Many pettrils, pintado birds, &c.

First part, hard gales from Nd. Latter, from Wd. with a very large NE swell, confused in heaps. Many alcatrasses, pettrils, pintado birds, &c. Bar. 29.6 to 29.5½.

First part, light breezes. Latter part, fresh breezes. A.M. swell much abated. Many alcatrasses, pintado birds, pettrils, &c. Bar. 2 P.M. 29 5\frac{3}{4}. 3. 29.6. 12. 29.6. 8 A.M. 29.6\frac{1}{2}. 9. 29.6\frac{3}{4}.

Strong gales, mostly Wd. with squalls and some rain. Many alcatrasses, pintado birds, &c. and great many pettrils. Bar. 2 P.M. 29.6½. 4. 29.7. 6. 29.8. 9. 29.8½. 8 A.M. 29.9. 9. 29.9¼. 11. 29.9¼.

First part, fresh gales and squalls. Latter, moderate. A great swell. Many alcatrasses, pintado birds, pettrils, &c. Bar. 4 P.M. $29.8\frac{1}{2}$. 6. 29.9. 9. 29.9. 12. 29.9. 8 A.M. 30.1. 9. $30.1\frac{1}{4}$. 11. $30.1\frac{1}{4}$.

-														
1775	Th.	M:	arine Ba	romet		Weather and Winds.	-	A		D. T. W	λ. .Κ.	Longit	TK.	m (D. T.
		In.Dec.	In.Dec.		In.Dec	The state of the s	-	-	-	-		· /	0 /	
Sept. 28	62 <u>3</u>		30.2 ³ / ₄	62 <u>1</u>		h. fq, r. r. W by N. r. h. W. W by N. h. W by N. NW by W. h. V. NW by W.		•	I	9		E 36.54	E 36.26]
29	67 1	29 9 <u>1</u>	29.9 ¹ / ₄	67	29.9	f. NW by N. N by W. f. fq. h. fq. N by W. V. N by E. c. N by E. N. c. N. N by E.	}	4			27	39.48	39 47	
3 0	56 <u>1</u>	30.2	30.13	5 6₹	30.1 1	C. hfq, r, L, Th. N by E. N, V, L. tosw. c, V, W, c. fq, r. W by S. fq, r. h. c. W by S. SW by W. SW.	}	20			6	4 2.5 2	42.57	
O&. I	614	3 0. 3₹	30.3	61	30.2½	h. c. WSW. S by W. S. c. S. SSE. S by E. c. SE. SE by E. SE by S. c. SE. C. E. c. fr. E by S. E. V.	}	19		}	12	43.59		
2	65½	30.13	30.13	65	30.1	fr. c. fq. h. V. ESE. E. ENE. h. NE. h. NE. NE by N. f. NE.	کا					45.24	45.41	59
3	67 <u>‡</u>	30.3	30.23	67.	30.2	f. h. f. NE. f. fq. h. NE. h. f. NE. NE by E.			2	i g	3	47.36	47.56	32
4	66 <u>‡</u>	30.3 1	30.24	66	30.21	h. NE by É. h. NE. h. NNE. h. NNE.			2		6	50.15	50.41	34
5	67	30.2½	30.2 1	67	30 13	h. NE by N. h. NE by N. h. fq. c. NE by N. N. c. N.	}	2			14	53. 8	53.35	
6	52 <u>1</u>	30.2	30.13	62	30.14	h. N by W. h, N by W. NNW. h. NNW. NW. h. c. NW.WNW. NW. V. S by E. SSE. c. fq. r. SE by E. V. SSE.		12			20	55.14	56. I	
7	621	ვე.ვ ჰ	30.3 ³	62	30.2½	c. fq. r. SE by E. V. SSE. r. h. ESE. SE by S. S by E. S. h. f. S by W. f. S by W. V.	}	17			13	56.11	57.11	26

Ship Grenville, Capt. Burnet abercrombie, 1775, kept by Alexander Dalrymple.

Magnetical

				- 1	- 1	- 11			11	1						1	1	I
de from	n Gre	enwic	h						Cor.	Varia	ation		Sout	h Dip				G denot
тк.	D. D T.K.	D	s	.		E. C	Lati	tude O.	Long.	Az.	Amp.	E.	ace W	MD.	C.D.		ML.	Gatton
° ' E 36.26	É	° ′ E					° , S 36. 3	s 34·49	E 36.26	W	° ' W 27.30*	57.4	58.4	。 58.	°	Very unfteady.	88 ₅	Pleasant b
39 47	-						35•4 9	34-31	39.47	27.43*							144	Major part pettrils, & 30.2\frac{1}{4}. 5. 8. 29.9\frac{1}{2}.
42 57			Militari de la constitución de l	er in the same of the few services and the same of the		Adjan se sind bashan anni nama ang ilipina pe a Ada silipina dan mangan pangan ang atau atau atau atau atau atau	35•34	33.56	42•57								153	First and lightning, ther. Ma ver bird. 6. 29.73.
			THE PROPERTY OF THE PROPERTY O				35.22	33,25	[44·10]								64	First part, A.M. man 9. 30.3. 1
45.4 I	9 59W	45.30 46.40	2 6	O Min	2 2	1 6	35 ·55	33.58	45.41					590 r6 0		Extremely unsteady.	85	First part, trasses, &c 30.3. 8.
47.56°	32E	47.24	4 5	: 0	3	8	36. 6	34.11	47.56	26.49*	The state of the s	59.	6 0.	59 4	6 0.	Very und	110	Moderate 1 birds, grea 4 az. 260 30.14. 12
50.41	34W	51.1	5 3	0	2	6	36.13	34.20	50,41							Larboard-side of cabbin.	132	Mostly frest water smoot 30.2½. 4. 9. 30.3.
53-35							36.11	34.16	53 ·35	25· 5 7*	25.39*						143	Fresh breeze 4 az. 26° 30.24. 6
56. I	:	*	V 2				36. 4	33.57	56. I	24.42*		59.4	61,	ú 0.2	60.6	Very steady.	106	First part, an alcatrati var. 2 az. 2 10, 30, 3.
57.11	26E	56.4	5 4	· m.	3	3	35.49	33.25	57.11								<u>53</u>	$\begin{cases} First and mi \\ and fair v \\ and other b \\ g\frac{1}{2}, 30.2\frac{1}{2}. \end{cases}$

MPLE.

G denotes Capt. Money's Observations in the Gatton, the longitude reduced to noon.

Pleasant breeze. Many alcatrasses, pintado birds, pettrils, &c. Bar. 3 P.M. 30.1½. 6. 30.2. 10. 30.2½. 12. 30.2½. 8 A.M. 30.2¾.

Major part, fresh gales. Many alcatrasses, pintado birds, pettrils, &c. Gatton, var. az. 28°13'* W. Bar. I P.M. 30.2\frac{1}{4}. 5. 30.1\frac{1}{4}. 9. 30.1. 12. 30.0\frac{1}{2}. 6 A.M. 29.9\frac{1}{4}. 8. 29.9\frac{1}{2}. 10. 29.9\frac{1}{2}.

First and middle, fresh gales, with hard squalls, thunder, lightning, and rain. Latter, blowing fresh and hazy weather. Many pettrils, pintado birds, &c. and A.M. one silver bird. Bar. 2 P.M. 29.8\frac{1}{4}. 4\frac{1}{4}. 29.8\frac{1}{4}. 29.8\frac{1}{4}. 29.8\frac{1}{4}. 29.8\frac{1}{4}. 29.9\frac{1}{4}. 29.3\frac{1}{4}. 29.3\frac{1}{4}.

First part, fresh gales. Latter, light breezes and calm. A.M. many alcatrasses, &c. Bar. 2\frac{1}{2} P.M. 30.2. 5. 30.2. 9. 30.3. 12. 30.3. 6 A.M. 30.3\frac{1}{2}. 8. 30.3\frac{1}{4}. 11\frac{1}{4}. 30.3.

First part, light breeze. Latter, fresb. P.M. many alcatrasses, &c. G long. O and (, 45° 31' E. Bar. 5½ P.M. 3°.3° 8° 3°.3° 12° 3°.2° 8 A.M. 3°.1½.

Moderate breezes throughout, weather changeable. Few birds, great dews, and water remarkably fmooth. G var. 4 az. 26° 46'*, amp. 26° 47'*. Bar. 2 P.M. 30.1\(\frac{1}{2}\). 6, 30.1\(\frac{1}{2}\). 12. 30.2\(\frac{1}{4}\). 8 A.M. 30.2\(\frac{1}{2}\). 9\(\frac{1}{4}\). 30.3.

Mostly fresh gales. Some pintado birds. A.M. great dews; water smooth. G long. © and (50° 39' E. Bar. 1½ P.M. 30.2½. 4. 30.2½. 7½. 30.2. 12. 30.2. 6 A.M. 30.2½. 9. 30.3.

Fresh breezes. Some pintado birds. A.M. one pettril. G var. 4 az. 26° 9'*, amp. 26° 7'*. Bar. 2 P.M. 30.2\(\frac{1}{2}\). 6 A.M. 30.1\(\frac{1}{2}\). 8 30.2\(\frac{1}{2}\). 30.2\(\frac{1}{2}\).

Pirst part, fresh gales. Latter, light and variable. P.M. an alectrass. A.M. several alectrasses and pintado birds. G var. 2 az. 24° 42' . Bar. 13 P.M. 30.2. 4. 30.13. 6. 30.13. 10. 30. 3. 12. 30.13. 8 A.M. 30 13. 9. 30.2.

First and middle, light breezes and rain. Latter, light breezes and fair weather. P.M. a twile passed; several a leatrailies and other birds. Bar. 2½ P.M. 30.1½. 5. 30.1½. 6. 30.2. 9½. 30.2½. 12. 30.2½. 8 A.M. 30.2½.

Journal of a Voyage to The East-Indies, in the Ship

	Th.	M	arine Ba	romet	er.	Weather and Winds.), L. O.	4.7	1.	Longit	ude from
1775		R.	S.	Th.	D.		N	S	W	E		
O&. 8	61½.	In.Dec. 30.3½	In.Dec. 30.3	61	In.Dec. 30.2½	{ c.		2	,	23	° ' E 56.32	E 57·55
9	63½	30.4 1	30•3₹	63	3º 3 [‡]	f. NW by W. WNW. W by N. f. W by N. WSW. f. WSW. SW by W. f. h. SW by W. V. (h. f. S by W. S by E. SSE.	1	3		12	58.18	59.53
10	61½	30.4½	30.4	61‡	30.3½	f. V. SE by S. S by E. f. S by E. C. f. WNW. NW. WNW. (f. NW by W.	5			I	58.46	60.22
11	62₹	30 3 4	30.2₹	62₫	30.2½	f. c. NW by W. c. NW by W. WNW. c. f. WNW.	6	,		27	60.18	62.21
12	64‡	30.3₹	30.3	64	30.2½	f. WNW. f. h. c. WNW, c. WNW. h. NW by N. NNE,	4		-	12	61.39	63.54
13	65 1	30.24	30.1 1	65	30.14	h. NNE, N by E. h. c. N by E. c. fq. c. N by E. h. N by E.		2		10	63.34	65.59
14	66	30.3	30.2₹	65½		h. N by E. NNE. h. NNE. h. NNE. NE by N. f. NNE. NE.	2			21		67.52
15		30.0	29.9½	÷ .		f. fq. NE. SE by N. NNE. h. fq. NNE. NNE. NNE. SE NNE.		24		24	67.26	
	59	30.3	g0.2½		30.2	\begin{cases} \text{h. c,} & NW. & W by \ \ \text{s.} & SW by \ \ \ \text{s.} & SW \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \					69.34	72.44
17	624	30.44	30.4 ¹ / ₄	62 1	30.2½	c. SSE, SE by S. c. SE by S. ESE, V. c. V. C.	I	1	5		70.30	73.35

Ship Grenville, Capt. BURNET ABERCROMBIE, kept by ALEXANDER DALRYMPLE, 17

	-			1 1000													
,										M	agnet	ical					
ıde fron	n Gre	enwich						Cor.	Varia	ation.		South	Dip				
TK.	D. » T . K.	D	s.	0.	E. D.	Lati	O.	Long.	Az.	Amp.		W.	MD.	C.D.		ML.	
° 'E	É	° ,			,	° ′ S	° ′	° ′	° v′	, °	őı.	6°3.	6°2.	62.4	Pretty steady. Larboard-fide of cabbin.	1961	35.01
\$7.55						35.50	3 3.28	57.55	23.48*	24. 2*	61.4	62.	61.6	62.2	Ditto. Star- beard-fide of cabbin.	21	Moftly Few b P.M. 3
59-53	4	59-4 9	5	A *	3 2	36. 5	3 3 ·3°	59-53	23. 49*	23.57*	61,4	62.2	61.7	62.3	Very fleady.	89	Major p noon a fame ti fome d Bar 2½
60.22	45	59-37	6	A *	28	36. 0	33.20	60.22	21.43*	21.52*	61,4	62.4	62.	62.4	Pretty steady.	24	Mostly grampu az. 22°
62.21						36. 6	33.20	62.21	23.10*	22.47*	61.4	62.4	62.	62.4	Not very fleady.	77	Pleafant long fw
63.54						36.10	33.20	63.54	21, 5*	20.51*	62.2	63.2	62.6	63.2	Very steady.	68	$ \begin{cases} First pa \\ fwell f \\ 30.2\frac{3}{4} \end{cases} $
65.59				To the second se	page 11 to 1	36.14	33.2 6	65.59	20.27*	20.34*	62.4.	63.2	62.7	63.3	Not very fteady.	96	First par birds. G var. 10½. 3
67.52	W 25	68.17	5	0	27	36. 4	33.14	67.52	19.35*		61.6	62.4	62.1	62.5	Pretty steady.	78	Pleafant Bar. 6
	•					35.55	[33-17]	[70.24]	18.43*							117	First par damp v 6 P.M.
72.44	E 35	72. 9	2	0	19	35- 4	32.38	72.44			61.4	62.2	61.7	62.3	Not Ready.	120	Fresh g birds, 6. 29.7 10. 30
73.35	-					34-57	31.41	73.35			1					66	First par with a &c. 1 30.2\frac{3}{4}.

Mostly light airs and calms, with large swell from SW. Few birds. G var. 3 az. 23° 32'*, amp. 23°50'*. Bar. 6 P.M. 30.3½. 8 A.M. 30.3½. 10. 30.3½.

Major part, pleasant breezes and fair weather. Just before noon a seal passed close to the ship on the larboard side, at same time a slock of a wast number of small white birds at some distance on starboard quarter. G var. 2 az. 23° 25'*. Bar 2½ P.M. 30.3. 7. 30.2½. 1 A.M. 30.3¼. 9. 30.3½.

Mostly light airs, with a large swell from Wd. P.M. a grampus very near the ship. Several alcatrasses, &c. G var. az. 22°19'*, amp. 22°23'*.

S Pleasant breezes. Some pintado birds, &c. smooth water, but a long swell from SW. G var. az. 22° 30'*, amp. 22° 45'*.

First part, pleasant breezes. Latter, light airs, with great swell from SW. Some pintado birds, &c. Bar. 2 P.M. 30.2\frac{2}{3}. 11\frac{1}{2}. 30.2\frac{2}{3}. 8\frac{1}{2} A.M. 30.3.

First part, light breezes. Latter, moderate. Several pintado birds. A.M. a silver bird and pettril, several poor Johns. G var. 3 az. 21° 28'*, amp. 20° 59'*. Bar. 2 P.M. 30.2\frac{3}{4}. 10\frac{1}{2}. 30.2\frac{3}{4}. 1 A.M. 30.2\frac{1}{4}.

§ Pleafant breeze. Great dews. G long. ⊙ and) 67° 56'. Bar. 6 P.M. 30.2. 11. 30.2. 12. 30.2. 8 A.M. 30.2. 1.

First part, moderate. Latter, fresh gales and squally. Very damp weather. G var. 2 az. 19° 23'*, amp. 19° 43'. Bar. 6 P.M. 30.2. 12. 30.14. 9 A.M. 29.94.

Fresh gales, with squally weather. A.M. many pintado birds, some alcatrasses, &c. Bar. 2 P.M. 29.8½. 4. 29.8½. 6. 29.7½. 10. 29.8½. 12. 29.9. 7½ A.M. 30.1½. 9. 30.2 10. 30.2.

First part, moderate. Latter, light airs inclinable to calm, with a great swell. Several pintado birds, some alcatrasses, &c. At night, water luminous like blubbers. Bar. 2 P.M. 30.2 $\frac{1}{4}$. 4 $\frac{1}{2}$. 30.3. 6. 30.3. 10. 30.3 $\frac{1}{2}$. 12. 30.4. 8A.M. 30.4. 9. 30.4 $\frac{1}{2}$. 10. 30.4 $\frac{1}{2}$.

												
							D.	L.	D. A	L.	Longi	tude fro
	Th.	M	arine Ba	romet	er.	Weather and Winds.		ō.			Α,	TK.
1775		R.	S.	Th.	D.		N	S	W	E	21,	1 12.
	٥	In.Dec.	In.Dec.	٥	In Dec.	ef.c. V. C.	<i>,</i>	,		,	0. /	0 /
O&. 18	63 1	30.44	30.4	63	30.3 1	f. c. V. C. c. C. E by N. V. NE. V. c. h. c. NE by E. NE. V. c. V. N by E.			6		E 70.32	E 73·3 ¹
19	66 <u>1</u>	30.4	30.4	66 <u>1</u>	30.3	h. c. NNE. N. Nby E. NE. c. NNE. Nby E. NNE. NE. c. NE. NE by N. NNE. c. NE by N. Nby E.		5		10	71.18	74-27
20	65		30.3	64 <u>‡</u>		f. NE by N. f. NE by N. N by E. f. N. NNE. f. NNE. N by E. N.		ı		8	72.21	75.38
21	63‡	30.2½	30.2	644	30.1 <u>4</u>	f. N. N by W. f. c. N by W. c. fq. c. NNW. NW by N. c. fq. r. NW by N. NW. V. SW by S.	10			22	73.16	76.55
22	613	30.4	30.31	61½	30-3	f. SSW. f. SSW. c. SSE. c. SSE. se. SE.	7		15		74.46	78.10
23	66	30.34	30.34	66	30.3	c. SE by E. ESE. E. c. E. V. c. fq. E by N. fq. c. E by N.	21		4		75. 9	78.29
24	71	3⊃.3₹	30.3	71	30.2½	f. NE by E. f. NE by E. NE. f. NE. NE by E. f. NE by E. V.		3	24		74-43	77•39
25	714	3 0 ⋅3 ³ / ₄	30.3 ¹ / ₄	70₹	30.21	f. NE by N. C. f. ENE. E by S, C. f. c. C. c. f. C. SW by S. C.		5		2	74-47	77-45
26	70뒾	30.33	30.3	70₹	30.3	h. fq, r. S by W. S by E. SE. fq, r. fq. c. r. SE. ESE. r. fq, r. ESE. fq. fq, r. V.	8		1		75.43	78.40
27	71	30.3	30.2½	70 3	30.2	fq, r. fq. V. E. E by S. fq. fq, r. E by S. fq, r. E by N. E. E by N. fq, r. fq. E by N. E.	37		4		75.41	78.34

e Ship Grenville, Capt. Burnet abercrombie, 1775, kept by Alexander Dalrympi

			=	!				1		M	agnet	tical				i i	==
itude fro	m Green	nwich							Varia	tion	_^_	South	n Dip				
TK.	D. p T.K.	D	s.	o.	E. D.	Lati	O.	Cor. Long.	Az.	Amp.	F.	W	MD.	C.D.		мL.	
° ' E 73.31	,	° ′ E				° ' S 34·53	° ′ S 31·37	° ' E 73-31	w w	° ′	61.	°	61.4	62.	Pretty fleady.	27 17	C
74.27						34.52	31.41	74-27			6 0. 6	61.6	61.2	61.6	Very steady.	40	\ \{\bar{1}{2}
75.38		75 41 74 34 74 38				34-49	31.39	75.38	14. 9*	14.48*						5 5	{P
76.55		74.30	4		33 7	33-45	30.25	76.55			59•4	60.4	60.	60.4	Very steady.	84	\{ ,
78.10						31-47	28.20	78.10	12.44*	12.49*	58.	58.6	58.3	58.7	Not steady.	142	$\left\{ \begin{smallmatrix} F \\ \\ \cdot \end{smallmatrix} \right.$
78.29						29.55	26.28	78.29			56.4	57.2	56.7	5 7•3	Very fleady.	97	{\bar{\bar{\bar{\bar{\bar{\bar{\bar
77•39	u e	•				29- 4	25-37	77-39	7·53* * 10.10	8. ı*	56.2	56.6	56.4	57.		59	$\left\{\begin{smallmatrix}\mathbf{F}\\\\\\\end{smallmatrix}\right.$
77•45	·					29. 6	25.44	77-45	10. 3* *9.20	*9. 8	56.2	57•	56° 5 °	57.1	Extremely uniteady.	7	{ N F F
78.40						27.17	23 47	78.40								120	} [F
78.34						25•49	21.42	78.34								89 3443	t f t 1 1 1 1 1 1 1 1 1

RYN	IPLE.
мL.	
2717	
33	Mostly light airs and calm, with a large swell. At night, sea luminous like blubbers. Several alcatrasses, &c. lost sight of Gatton; got sight of her again before noon. Bar. 2 P.M. 30.4. 5½. 30.4. II. 30.4. I A.M. 30.4. 8. 30.4½. 10. 30.4½.
40	Light airs. Sea luminous at night like blubber. P.M. an uncommon bird like Cape hen, fome alcatraffes. Bar. 2 P.M. 30.4. 4 30.4. 10. 30.4. $12\frac{1}{2}$. 30.4. $7\frac{1}{2}$ A.M. $30.3\frac{3}{4}$. 8\frac{1}{2}. 30.4. 10. 30.4\frac{1}{4}.
5 5	Pleafant breezes. Sea luminous at night like blubbers. A.M. sky mare's tails. No birds. G var. 4 az. 15° 24'*. amp. 15° 2*. Long. @and) 75° 56'. Bar. 2½ P.M. 30.3¾. 11. 30.3¾. 1 A.M. 30.3¾. 8. 30.3½.
84	Moderate breezes. Sea luminous at night like blubbers. Towards evening became cloudy. No birds. G var. 2 az. 14° 10'*. Bar. 2 P.M. 30.3. 6. 30.2½. 8. 30.2½. 10. 30.2½. 12. 30.2½. 8 A.M. 30.2. 9. 30.1¾. 10. 30.2. 11. 30.2½.
142	Fresh gales. A.M. one or two poor Johns. No other birds. G var. 2 az. 12° 31'#, amp. 12° 51'#. Bar. 2 P.M. 30.2. 4. 30.1\frac{3}{4}. \(\frac{1}{2}\frac{1}{2}. \) 30.2. \(\frac{1}{2}\frac{1}{2}. \) 30.2\frac{1}{4}. \(\text{10}\frac{1}{2}. \) 30.2\frac{3}{4}. \(\text{12}\frac{1}{2}. \) 30.2\frac{3}{4}. \(\text{12}\frac{1}{2}. \) 30.2\frac{3}{4}.
97	Major part, moderate breezes. P.M. feveral poor Johns, though flenderer and smaller than usual. A.M. poor Johns, a pettril, and a sheerwater. Bar. 2 P.M. 30.3. 6½. 30.3½. 12. 30.3½. 8½. 30.3¾. 9. 30.3¾. 10. 30.3¾.
59	First part, pleasant breeze. Latter, light air and variable. P.M. an alcatrass. A.M. an alcatrass. G var. 2 az. 8° 54'*, amp. 9° 9'*. Bar. 2 P.M. 30.3. 4. 30.2\frac{1}{2}. 6. 30.3. 7\frac{1}{2}. 30.3. 11. 30.3.
7	Mostly calm. Some birds at distance. G var. az. 80 38 %. Bar. 2 P.M. 30.3. 8. 30.3. 10. 30.3 \$\frac{1}{4}\$. 8 A.M. 30.3. \$\frac{1}{2}\$. 30.3 \$\frac{1}{4}\$. 9. 30.3 \$\frac{1}{2}\$. Fresh gales, with squalls and rain; sometimes squalls very hard. Great irregular swell. Several birds, chiefly poor
120	Johns or black theerwaters, being of the colour of the former, and shape like the latter, but without white breasts. Bat. 2 P.M. 30.3. 5. 30.2\frac{3}{4}. 6. 30.2\frac{3}{4}. 8. 30.\frac{3}{2}. 12. 30.2\frac{3}{4}. 9 A.M. 30.3. Fresh gales and squally. Several sheerwaters, or birds like
89	forme white breafted and white under the wings. Bar. very unfteady these two days from ship's motion. Great irregular sea. Bar. 2 P.M. 20.23. 23. 20.2. 4.50.24.
3443	104 30.3. 12. 30.3. 8 A.M. 30.2½. 9. 30.2½. 10. 30.2½.

Journal of a Voyage to The East-Indies, in the Ship Gre

		l ₁		22	· ·	<u> </u>		11		=		h	
								D	. L .	D	. L. Λ.	Longit	ude from
		M	arine Ba	romet	er		Weather and Winds.		.ö.			A.	T.K.
1775		R.	S.	Th.	D.			N	S	W	E		
	•	In.Dec.	ln.Dec.	•	In.Dec.			1	1	,	,	0 1	0 /
O&. 28	72	30.2½	30.2	72	30.1½	fq. fq. r. fq. fq. c. fq.	E. E by S. E by S. ESE. E by S. ENERGY SEE	} 16			8	E 76. 9	79.10
29	7 3	30.2½	30.2	73 ²	30.1½	c. c. fq. h. h. h. f.	E by S. ESE. ESE. E by S. ESE. E by S. ESE. E by S. E by S. ESE. E by S.	}	2	8		76.52	79-45
3 Þ	75	30.2	30.1½	74½	30.1	f. fq. fq. c. c. c.	ESE. E by S. ESE. E by S. E by S. E by S.	}		15		77-39	80.17
3 1	77	30.1	30.0 <u>1</u>	77	30.0	h. fq. fq, r. fq. fq.	ESE. E by S. E by S. E by S. E. E, E by N.	}	3		3	78.10	80.51
Vov.	78	30.1	30.0 <u>‡</u>	78 <u>1</u>	3 0.0	fi. fq, r. h. fq, r. h. h. fq, hr. fq. c.	E. VE. E. VEy. VEy.	1			1	78.17	80.59
2	81	30 . 03	30.0 <u>₹</u>	18	30.0	h. h. h. h. h. f.	E by N. E by S. E by N. V. E. E by N. E by N. E.			10		78.26	80.58
3	81	30.0½	30.0	8 0¾	29.9½	f. c. c. c. f. f.	E. E. E.	5		9		79- 5	81.28
4	82	30.0½		82	29.9 ¹ / ₄	f. c. c. f. f. f.	E. E by S. E. E. E.	5	1 1	13	1 1	79.36	81.46
5	82	30.0	29 9½	/81½	29.9	{ h. h. f. h. f. f.	E. E. E. V. E. E.	7.		18		80.19	82.11

bip Grenville, Capt. Burnet abercrombie, 1775, kept by Alexander Dalrymple.

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								1		.	lagne	tical				1	1
tude from	n Gre	enwich		1				Cor.	Var	ation		Sout	h Dip				
T.K.	D. (T.K.	σ	s.	0.	E. D.	Lat	itude O.	Long.	Az.	Amp.	E.	ace	MD.	C.D		ML.	
e ,	É	° ′				° ′ S	°,	°, E	w	° ′ W	0	o	۰	0		3443	
79.10						24.17	19.54	79- 4								96	Mostl large Bar. 6. 30
79-45	35 56	79.10 78.49	4	0 0	27 10	22•54	18.33	79-33								93	Fresh P.M. high, G lor 6. 30. 10. 3
80.17						21.11	16.45	79-59		4.4*	46.2	47.2	46.6	47·3	Unsteady.	113	$\begin{cases} Strong \\ Vaft \\ 3.30 \\ 30.1\frac{1}{2} \end{cases}$
80.51						19. 8	14.45	80.27	*3.17		44•	45•	44•4	45.1	Ditto.	127	Squally unfett 4. 30 8. 30
80.59						17.15	12.51	80.29			41.	42 -	41.4	42 .1	Very Ready.	114	Squally shape, \bigcirc and $9\frac{1}{2}$. 3
80.58	114	79. 4 79.10	8 6	00	42 30	15-44	11.20	80.22	I.20* *I.I2	*1.42	38 . 6	39•4	39.1	39•7	Unsteady.	92	Moder: grey v more Bar. 30.04
81.28								80.46	o.59*		35 4	36.4	36.	36.6		123	$\begin{cases} Pleafan \\ a trop \\ tance, \\ var. a \\ 7\frac{1}{2}A. \end{cases}$
81.46	82 41	80.24 81. 5	6 6	* \text{\L.}	17	11.57	7-23	80:58	o; 3*	and the second s	32.6	33.6	33.2	34.	Not steady.	114	Major r
82.11			÷			10. 5		81.17	*o. 8		29.2	29.6	29.4	3° 3	Extremely fleady.	119 4434	Fresh g booby fomet! Southe like a ((az. *; 29.9.
																	- 7.3.

.3 Mostly fresh gales from Eastward, with squalls and rain and a large swell. Several birds as before. A.M. many flying fish. Bar. very unsteady, 1 P.M. 30.2½. 4. 30.1½. 5½. 30.2. 6. 30.2. 8. 30.2¼. 10. 30.2½. 12. 30.2½. 9 A.M. 30.2½. Fresh gales, with some squalls. Several birds as before P.M. a large white bird which slapped its wings and slew high, unlike the birds which are found in the main fea. G long. © and (77° 39' E. Bar, 2 P.M. 30.1\frac{1}{2}. 4.30.1\frac{1}{2}. 6.30.1\frac{1}{2}. 10.30.2. 11\frac{1}{2}.30.2. 8 A.M. 30.2\frac{1}{4}. 9.30.2\frac{1}{4}. 10.30.2\frac{1}{4}. Strong gales, with frequent squalls. Some birds as before. Vast flocks of flying fish. Swell abated. Bar. 2 P.M. 30.2. 3. $30.1\frac{1}{4}$. 4. $30.1\frac{1}{2}$. $10\frac{1}{4}$. 30.2. $12\frac{1}{4}$. 30.2. 8 A.M. $30.1\frac{1}{4}$. 9. $30.1\frac{1}{4}$. Squally. Few birds as before. Swell increased and weather unsettled. G long. © and) 79° 8′ E. Bar. 2 P.M. 30.1. 4. 30.1. 6. 30.0½. 10. 30.1. 12½. 30.1. 6 A.M. 30.0½. 8. 30.0½. 9. 30.0½. 10½. 30.0½. Squally. P.M. a tropic bird, which resembles a paroquet in thape, but is of a whitish grey. Swell much abated. G long. ② and (79° 10' E. Bar. 2 P.M. 29.9\frac{3}{4}. 4. 30.0. 6. 30.0. 9\frac{1}{2}. 30.0\frac{1}{4}. 12\frac{1}{2}. 30.0. 9 A.M. 30.0\frac{3}{4}. [Moderate breezes, with some squalls. A.M. few birds; the grey white under wings; frequently overcaft. A.M. a little more fwell from Northward. G var. 2° 3°*, amp. 2° 4*. Bar. 2½ P.M. 29.9½. 6. 30.0. 12½. 30.0½. 8 A.M, 30.0½. 9½. 30.0½. 11½. 30.0½. Pleafant gale, with fair weather. A.M. a bird, larger than a tropic bird, with black wings and white body at a diftance, it flapped the wings very much. A head swell. C var. az. 1°0's, 0°52's. Bar. 2 P.M. 30.0. 6. 30.0. $7\frac{1}{2}$ A.M. $30.0\frac{1}{2}$. 5 Major part moderate. P.M. some Southern lights, very rare and motionless. Bar. 21 P.M. 29.91. 6. 29.91. 8. 30.0. Fresh gales, with fair weather. P.M. a large bird of the booby kind above the thip; it had a long neck, and was fomething in fhape and fize like a wild goofe. At night, Southern lights, some diverging in rays downwards, some like a rare cloud, very little motion; a faint ring round ((. A.M. four tropic birds. G var. 4 az. 6° 21' *E. az. *0° 4' E. Bar. 2½ P.M. 29.9½. 6. 29.9¼. 1 A.M. 29.9. 8. 29.9 $\frac{1}{2}$.

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							D	L.	D.I		Longit	ude from
	Th.		arine Ba			Weather and Winds.	Α.	O.	T.]	K. `	Α.	TK.
1775		R.	S.	Th.	D.		N	9	$\mathbf{w}_{ }$	<u>-</u> .		
	0	In.Dec.	In.Dec	0	ln.Dec.		,	,	1		E .	°, E
Nov. 6	2 ³ 4	30.0 <u>1</u>	29.93	824	29.9 ¹ / ₄	c. E. c. E. c. E. E by N. E. c. E by N. E.	I		18		80.48	82.22
7	83	30.0	29.9½	82 <u>1</u>	29.9	h. E. E by S. h. E. E by S. h. ESE. c. SE by E.	9		31		81.46	82.49
8	83 1	30.0 ¹ / ₄	29 9 ፤	82 <u>1</u>	29.9 1	h. SE by E. h. E by N. ENE. E. h. fq. E. E by S. f. V. E.	17		20		82. 12	82•55
9	83¾	29.93	29•9	83 <u>1</u>	29.8½	f. V. E. f. E by N. E. f. hr. dr. E. E by N. V. c. E.		14	53		82.31	82.21
10	813	29·9 3	29 9	81 <u>‡</u>	29·9 3	c. E by S. E. E by S. c. r. c. V. c. V. E by N. E by S. c. fq. E by S. SE by E. SE. SE by E.	3		45		83. 19	82.24
. 11	83₹	29 9 3	29 9	83½	29.83	h. c. SE by E. c. E by S. ESE. E by S. c. E by S. E. E by S. fq, hr. c. ESE. V.	9		33		84. 5	82.37
12	80≩	29.9½	29.9	8o <u>‡</u>	29.81	\begin{cases} \begin{align*} \delta_i & v. & v			32		84.25	82.25
13	82	29 9 1	29.83	82	29.8 <u>1</u>	{ c. r. c. ' C. V. C. c. hr. c. L. to s. C. c. c. C. c. fq, r. c. C. V. NW. V. c. fq, hr. NW by W. V.	2		19		84 33	82.14
14	82	29•9½	29.83	82	29.8 <u>‡</u>	c. fq, hr. NW by W. V. c. V. NW. C. c. C. V. W by S. c. r. c. W by S. SW. SSW.			2		85. 0	82.39
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be Ship Grenville, Capt. Burnet abercrombie, kept by Alexander dalrymple, 1

										M	agnet	ical				1	
ude fron	n Gre	enwich					,	Cor.	Varia	ition.	 	South	Dip				
TK.	D. T.K.))			E	Lati	tude	Long.	Az.	Amp.	F	ace	MD.	C.D.		ML.	
	T.K.		s.	0.	Е D.	Α.	Ο.				E.	w.		0.5.			
°, 'E	, E	° '	,		,·	° ′ .	° ′ S	о , Е·	° '	, ° E	0	٥	•	0		4434	(Modera
82.22	75	81. 7	5	*F	37	8.24	3.44	81.22	*o. 8		26.2	26.6	26.4	27-3	Very steady.	101	motion
82.49						6.19	2.30	81.43	1.12*	1. 6*	24.4	25.	24.6	25.5	Not fleady, fhip laying to for boat.	89	Moderai Bar. 2
82•55						5.17	1.11	81.43			22.	22.2	22. I	23.	Extremely fleady.	69	Major the Ga Mr. H P.M.
82.21						4.20	0.18	81. 3			20.	20 4	20.2	21.1	Very steady.	61	{ Variable 9 A.M
82.24			·			3.18	N 0.47	81. 0	0.52*		19.4	19.	19.4	20.1	Not very	81	the ref the fits not fe
82.37						2. 3	2. I	81. 7			154	156	15.5	16.4	fleady.	82	29.83. S Most par latter es
82.25						I.12	2.52	80.49			15.4	16.	15.6	16.5	Pretty steady, but ship not having steer- age-way.	61	Winds land b distanc a gull. 8 A.M
82.14	95	80.39	3	0	28	1.12	2.54	80 32			14.4	15.4	15.	15•7	Very steady.	8	Light at &c. 4 O's li P.M. 2
82.39						1. 7	2.59	80.51			15.	16.	15.4	16.3	S Not very Meady.	28	$\begin{cases} \text{Winds :} \\ \text{plover:} \\ \text{Bar. 2 l} \\ \text{11}\frac{1}{2} \cdot 2 \end{cases}$
											,	·				5014	

Moderate breezes. Northern lights to Northward. Little motion, but great extent, and afterwards Southern lights. G var. amp. 0° 48' *E. Bas. 2 P.M. 29.9\frac{1}{2}. 1 A.M. 29.9\frac{1}{2}. 9. 30.0.

Moderate breezes. G var. az. 0° 45' *E, amp. 0° 13' *E, Bar. 2 P.M. 30.0. 6. 29.9½. 1 A.M. 29.9¾. 8. 29.9½.

Major part, moderate breezes. A.M. came on board from the Gatton Major seaks and Capt. Alcock for Madrais, Mr. Horsley went aboard that thip for Bombay. Bar. 2 P.M. 29.9. 12. 29.9. 9 A.M. 29.9.

Variable winds, with rain at times. Bar. 4 P.M. 29.83. 9 A.M. 29.73.

Mostly fresh breezes. At 10\frac{1}{2}\text{ A.M. there was to the SE. the appearance of something black like a rock, and at the same time like a shoal; but it being to windward, and ship having fresh way, could not determine whether it was a shoal or the reslection of the Sun behind the clouds. This is nearly the situation of the Ouro. A man sent to mast-head could not see any thing. Bar. 2 P.M. 29.8\frac{1}{2}\text{. 9. 29.8\frac{3}{4}\text{. 12.}}

Most part the wind Easterly, with some squalls towards the latter end. Bar. 1 A.M. 29.9. 8. 29.9.

Winds variable with unfettled weather. P.M. a bird like a land bird. A.M. many yellow tails; two black birds at a diffance like land birds: a white bird with black wings, like a gull. Bar. 2 P.M. 29.8½. 4. 29.8. 9. 29.9. 12. 29.9. 8 A.M. 29.9¼. 10½. 29.9½. 11. 29.8¾.

Light airs and calms, with hard rain. Many fish, porposites, &c. A.M. a mottled grey bird of the booby kind. The O's limb not diffinct when longitude observed. Bar. 2½ P.M. 29.8½. 12½. 29.8¾. 7½ A.M. 29.8¾. 8½. 29.9¾.

Winds and weather very unfettled. P.M. a sea bird like a plover: many fish. P.M. caught a stark. A.M. saw a sail. Bar. 2 P.M. 29.8½. 4. 29.8¼. 12¾. 29.9. 8 A.M. 29.5½. 11½. 29.9.

Journal of a Voyage to The East-Indies, in the Ship

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							D	.L.	D.	L.	Longit	ude fror
	Th.	M	arine Ba	romet	ter.	Weather and Winds.		ŏ.			A.	тк.
1775		R.	S.	Th.	D.		N	S	W	E		
Nov.		In.Dec.	In.Dec.		In.Dec.	c. sq. r. sq. hr. V. c. sq. r. V. W by N. W by S.	,		,		° ′ E	E
15	813	29.9½	29.9	813	29.81	r. fq, r. c. W by S. SSE. SSW.		19	2		86. 9	83.46
16	81	30.0	29.9 1	80 <u>1</u>	29 9	c. fq, hr. SW. S. hr. V. S by W. hr. c. S by W. SW.		9		6	87. 5	84.48
	i seri, n					(c. r. c. SW.						
17	80	29•9 3	29.9	80	29.83	c. hr. c. fq, hr. S by W. SSE. SE. fq, hr. V. S by E. r. c. S by E. C.	21			18	88. 2	86. 3
18	83 <u>‡</u>	30. 0	29.9 1	83 <u>1</u>	29.9	fr. c. C. E. E by S. c. r. E by S. r. c. E. E by N. NE by E. c. fq. NE by E. NE by N. N by E.	6		:	9	88.16	86.26
19	83	29.9 4	29•9	83	29.8¾	c.fq,r.fq,th,L,hr.NNW. NW. V. fq. th, L, hr. V. C. V. C. r. c. V. N. c. r. c. N. N by E. NE by N.		18		19	88.57	87.26
20	821	30.0	29.9½	824	29.9	fq, fr. fq. NE by N. NE. fq.fq,fx,L,hr.hr. NEbyE. EbyN. NEbyE. ENE. hr. fq. V. SE by E. SE. c. fq, flying fh. SSE. Sby W. f. SW. V.		30		13	90.27	89. 9
21	80 <u>³</u>	30.04	29.9 3	80 <u>‡</u>	29 9 ¹ / ₄	{ r, L. to nw. V. C. V. h. V. C. V. N. h. r. h. C. V. W. V. N.	15			27	90.54	90. 3
22	813	30.0	29.9½	813	29.9] I. Y.	14			55	91.17	91.21
23	82		29.9½	82		(r. c. NE by E. / C. c. C. E. V. c. V. E by N. c. h. NE by E. NE. h. NE by E. NE. NNE.	6			8	91.8	91.20

Ship Grenville, Capt. Burnet Abercrombie, 1775, kept by Alexander Dalrympi

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tude from	n Gre	enwich		-				Cor.	Varia	ation		Sout	h Dip	<u> </u>			
TK.	D. 5 T.K.	D	s.	0.	Ė.		itude O.	Long.	Az.	Amp.		ace W	MD.	c.D		ML.	
° ' E 83.46	É	E				S 0.57	N 2.50	E 81.52	w	° v	0	14.6	14.5	15.4	}	5014	Moftly
84.48	76	83.32	4	0	18	0.46	2,52	82.48			13.4	14.	13.6	14.5	> Very steady.	-57	First palatter, very 4. 29.
86. 3						0.32	3. 27,	83.57			14.4	15.2	14.7	15.6		5 9	2. 29. At firf was al when and fto E 14:
86.26						0.3	4. 2	84.13	•		I I.I	11.5	11,3	12.2	Pretty floady.	38	Mostly bird in pretty f
87.26						0. 3	3-44	85. 7			10.6	11.2	II.	11.7		44	Variable wings like a few ye like a 1 A.M
89. 9						0.17	3. 0	86.40			11.4	12.2	11.7	12.6	Not very steady.	102	Fresh b The li to be a like a 29.82.
90. 3						0. 3	3.29	87.28			10.2	10.6	10.4	113	Very steady.	30	Variabk A.M. 1 P.M 12 A. 12 A.
91.21			-			N 0. 9	3•55	88.39			10.6	11.2	11.	11.7	Very steady, but ship not having steer- age way.	30	Major j aboard kind. Water 12½ A.
91.20						0.45	4-37	88.31			7.6	8.4	811	9•	Very fleady.	39	First par weathe birds. Bar. 41 9. 30.0
	1															5484	

Mostly variable wind and rain. P.M. a fail; shewed French colours on firing a gun to speak with her, but did not shorten fail. Several birds and many fish. Bar. 2 P.M. 29.8½. 6. 29.9. 12. 29.9½. 8 A.M. 29.9¼.

First part, mostly squally with very heavy rain. Middle and latter, light airs and cloudy with some rain. O's limb not very distinct when long. observed. Bar. 2 P.M. 29.8\frac{1}{4}. 29.8\frac{1}{4}. 10. 29.9\frac{1}{2}. 12. 29.9\frac{1}{2}. 8 A.M. 29.9\frac{1}{2}. 9. 30.0.

Very unsettled weather with rain. Bar. 1 P.M. 29.9\frac{1}{4}. 20. 29.9. 4. 29.9. 9\frac{1}{2}. 30.0. 1 A.M. 29.9\frac{1}{4}. 9. 29.9\frac{1}{4}. 41 first the disping-needle bad no motion, but with the face East was at 120\frac{1}{4}; when moved a little, it remained motions of when moved with the face to West, the needle turned round, and flood any where. Moved several times, it pointed with face E 14\frac{1}{2}

W 15\frac{3}{4}

Very steady.

Mostly light breezes. P.M. saw two dolphins, heard a tropic bird in night. A.M. caught two dolphins. Dipping-needle pretty steady, and no appearance of defect as systerday. Bar. 2. P.M. 29.8\frac{1}{2}. 429.8\frac{1}{2}. 12\frac{1}{2}A.M. 29.9. 8. 29.9\frac{1}{2}. 112.9.\frac{1}{2}.

Variable winds, with rain. P.M. a swallow with short wings and white breast. A.M. a small land bird shaped like a water wag-tail, but in colour like a linnet, with a few yellowish seathers in the stank. A.M. a bird at distance like a gannet. Bar. 2 P.M. 29.8\frac{1}{2}. 4. 29.8\frac{1}{2}. 6. 29.8\frac{1}{2}.

1 A.M. 29.9\frac{1}{2}. 8. 29.9\frac{1}{2}.

Fresh breezes, with some squalls and a great deal of rain. The land bird aboard still. P.M. heard a bird, supposed to be a booby. A.M. passed a drist; a grey sea bird shaped like a plover. A black sea bird at a distance. Bar. I P.M. 29.8\frac{1}{2}. 6. 29.8\frac{1}{2}. I A.M. 29.9. 7\frac{1}{2}. 29.9\frac{1}{2}. 9. 29.9\frac{1}{2}.

10. 29.9\frac{1}{4}. 11. 29.9\frac{3}{4}. 11\frac{1}{4}. 29.9\frac{3}{4}.

Variable, with rain and calms. The land bird aboard ftill. A.M. faw a tropic bird. Paffed a drift. Light airs. Bar. $\frac{1}{2}$ P.M. 29.9 $\frac{1}{2}$. 2. 29.9. 4. 29.9 $\frac{1}{2}$. 6. 29.9 $\frac{1}{2}$. 7. 29.9 $\frac{1}{2}$. 12. $\frac{1}{2}$ A.M. 29.9 $\frac{1}{2}$. 8. 29.9 $\frac{1}{2}$. 10. 30.0.

Major part, light breezes, with fome rain. The land bird aboard still. P.M. saw a booby, some fish of the porpoise kind. A.M. a horse sly, several riplings, and many sish. Water luminous at night. Bar. 4 P.M. 29.9\frac{1}{4}. 5. 29.9\frac{1}{4}. 12\frac{1}{2} A.M. 29.9\frac{1}{4}. 7. 29.9\frac{3}{4}. 8\frac{1}{2}. 30.0. 9. 30.0. 10\frac{1}{2}. 30.0.

First part, calm. Latter, light breeze from NE, with hazy weather. The land bird aboard still. A.M. several tropic birds. Passed a bamboo adrist. Water luminous at night. Bar. 4 P.M. 29.94. 6. 29.9. 14\frac{1}{2} A.M. 29.9\frac{1}{2}. 8. 29.9\frac{3}{2}. 9. 30.0.

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								.L.	D.L. A.	Longit	ude from	m Gre
1775	Th.	R.	arine Ba	romet		Weather and Winds.	A	.0.	T.K. W _I E	Α.	TK.	D. 3 T.K.
		In.Dec.	In.Dec.	. •	In.Dec.		-	,		· /	• ,	
Nov. 24	824	30.0 <u>∓</u>	29.9	824	29.9	f. NNE. NE by N. NE. f. NE. r. f. NE by N. f. fq, r. c. NE.		10	32	90.29	90. 9	E
25	82	30 . 0‡	29.9 3	82	29•9 ‡	\begin{cases} \begin{cases} \begin{cases} c. & iq. & NE. & V. \\ fq. & c. & r. & V. & E & by & N. \\ fq. & r. & V. & ENE. \\ fq. & c. & fq. & NE & by & E. & NE. \\ \end{cases} \begin{cases} \begin{cases} c. & iq. & NE & by & E. & NE. & \end{cases} \end{cases} \begin{cases} c. & iq. & NE & by & E. & NE. & \end{cases} \end{cases} \begin{cases} c. & iq. & NE & by & E. & NE. & \end{cases} \end{cases} \begin{cases} c. & iq. & NE & by & E. & NE. & \end{cases} \end{cases} \begin{cases} c. & iq. & i		19	43	90.13	89.10	
26	82	30.0 <u>∓</u>	29.93	81 <u>4</u>	29.9₹	\begin{cases} \frac{fq, fr. c. fq, r. V. NE. V. \\ fq, r. fq. c. NE. V. \\ c. V. NE by E. \\ c. fq. NE. NE by E. V. \end{cases} \begin{cases} \frac{fq. NE. NE by E. V. \\ \end{cases} \]		8	30	90 19	88.46	
27	83½	30.0 1	29.94	831	29.9 <u>1</u>	fq. fq, r. NE. V. c. L. all round. V. E by N. fq. h. L. all rd. E. E by N. h. E by N.		3	55	90.48	88.20	79
28	841	29 . 9‡	29 9₹	84 <u>‡</u>	29.9	c. E by N. c. E by N. ENE. E by N. c. fq. E by N. E. fq. c. E by N.	4		20	90.50	88. 2	142
29	84½	30.0½	30. 0	84½	29.9 1 -	fq, r. c. fq. V. E. fq, r. c. V. ENE. c. ENE. c. h. NE by E. ENE. NE by E.	15	.1	3	90.39	87.38	152 139 160

in the Ship Grenville, Capt. Burnet abercrombie, kept by alexander dalrympl

	,	,	Ī	Ī	1	il	1		1		Magneti	ical			
ror	m Gre	eenwich					•	Cor.	Varia	ation.		South	Dip		
	D. » T.K.		s.	0.	E.		itude O.	Long.	Az.	Amp.		ace W.	MD.	C.D.	,
,	, E	° , E			,	° ′	°, N	° ′ E	° ,	, ° E	0	0	0	o	By estimation.
9				9		1.37	5.19	88.13		0.53*	{ 7. 6.4	7.2 6.6	7.1 6.5	8. 7·4	h. m. N.lat. Long. 11. oPM 4.39 88.29 9. oAM 5.21 88.26
0						2.50	6.13	8 ₇ . ₇			8.2 6.2 5.6 5. 4.4	8.4 6.6 6.2 5.4 5.	8 3 6.4 6. 5.2 4.6	9.2 7.3 6.7 6.1 5.5	9.15 5.23 88.10 12.30AM 5.45 88.11 9.10 6.4 87.25
ļ6						3.23	6.38	86.36			5 4	6.2	5 7	6.6	Very steady.
Ö	79	87. 1	5	0	43	3.28	6.40	86. 3			4.2	4.6	4.4	5·3	Very uniteady.
2	142	85.40	6	0	38	4. 46	8. 2	85.40			3.	3·4 2·2	3·2 2·		I. oAM 7.20 86. 2 Very fleady. 0.30 PM 8. 5 85 40
8	152 139 160	85. 6 85.19 84.58	5 7 6	000	37 20 21	5-57	9.28	85.10			0.4 0.2 0.0 ND. 0.2 1.2 1.2	0.6 0.4 0.2 ND. 1.6		1.3 1.1 0.7 ND. 0.5	9. 0 8.25 85.38 11.10 8.30 85 37 Very fleady.
_			<u> </u>	-											

	ML.	
mation. Long.	5484	Moderate breezes, and mostly fair. The land bird aboard still. A.M. saw a ship, the Dudley, Capt. BARRING TON, from Madrass to the Nicobars
88.29 88.26	73	I and Pegus the Cantain same as board As as
88.18 88.10 88.11 87.25	81	Winds from NE. with frequent squalls and rain. The land bird aboard still. I P.M. spoke the ship Floyer, from Madrass to Malay Coast, Capa Rich. Water luminous. Sea bird shaped like plover, grey with upper part of head black, and wings tipped with black. Same bird seems to have been about ship several days. Bar. 5 P.M. 29.9. 6. 29.9. I A.M. 29.9½. 8. 30.02 9. 30.04. II. 30.04.
	87	Fresh gales and squally throughout. The land bird aboard still. Sea very luminous. P.M. a small mew came on board. Bar. 2 P.M. 29.9\frac{1}{4}. 10. 30.0. 1 A.M. 29.9\frac{1}{2}. 8. 30.0.
	64	Winds most Easterly, with squalls and rain. Sent a boat on board a country snow with red colours; she was bound from Trankebar to Acheen. Sight O not very good. Bar. 4 P.M. 29.9\frac{1}{4}. 6.29.9\frac{4}{4}. 12\frac{1}{2} A.M. 29.9\frac{3}{4}. 8\frac{1}{2}. 30.0\frac{1}{4}.
86. 2 85 40	78	Moderate breezes, and mostly cloudy. Bar. 2. P.M. 29.9 $\frac{1}{2}$. 4. 29.9. 6. 29.9. 12 $\frac{1}{2}$ A.M. 29.9 $\frac{1}{2}$. 8. 29.9 $\frac{1}{4}$. 11. 29.9 $\frac{1}{2}$.
95.39 85.38 85.37 85.36 85.15	72	Increasing breeze from Eastward, with squally weather and rain. Bar. 3 P.M. 29.8\frac{3}{4}. 4.29.8\frac{5}{4}. 6. 29.9. 1 A.M. 29.9. 9. 30.0. 10. 30.0.
y steady.	5939	

Journal of a Voyage to The East-Indies, in the Ship Grer

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	Γh.	M.	arine Ba	Th		Weather and Winds. D. L. A. A.O. T. K. NIS WIE	Longit A.	ude from	10
1775				1 11					_
Nov. 30	84½	In.Dec.		85	in.Dec.	c. NE by E. c. ENE. c. h. ENE. NE by E.	e / E 90.15	E 87.19]
Dec.	78		30.0	77₹		h. NE by E. h. NE by E. N. NE by N. h. NE by N. NNE. h. c. fq, r. NNE. NE. fq, r. fq, hr. NE. V. fq, r. r. V.	90.36	87.34	
2	82½	30.0	29 9½	82	29. 94	r. c. V. NE. N by E. c. N by E. NE by N. NNE. c. NE by N. c. NE by N. NNE.	91.20	88.13	
3	83½	30.0	29.9	834	29.9	c. NE by N. NE. c. h. NNE. N by E. h. f. N. NNW. N by W. h. NNW. NW. NW by W. V.	92. 4	89. 6	9
4	83	30.0	29.9½	834	29.9	h. c. L. to nw. V. WNW. c. WNW. V. c. \$W. V. \$SW. h. \$SSW.	92.16	89.21	II
5	84	30.0 <u>∓</u>	29-9 3	831	29 9 1	h. SSW. S. h. f. S. V. SE by S. f. SE by S. f. SE. SE by E.	91.58	89. 8	
6	83	30 .0	30.0	83½	29.9	f. fq, r. fq, fr. SE by E. E. ENE. V. fq, hr. c. V. C. NE by E. c. E by N.	91.16	88.17	13'
7	80 <u>1</u>	30.0 <u>3</u>	30.0 <u>1</u>	80 <u>1</u>	2 9. 94	c. ENE. NE by E. c. NE by E. NE. NE by E. c. NE by E. c. f. NE by E. c. h. ENE.	89.26	86.10	
8	814	31.0½	31.0	814	30.0½	1	87. 9	X22 FO L	188 204
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o Grenville, Capt. Burnet Abercrombie, 1775, kept by Alexander Dalrymple.

Gree	enwich		1	1	11	-	11.	- 11	7.	1000-	** 1			,		4
Gree	nwich	1		•	- 11		11	11		/lagne	ticai				1	1
							Cor.	Var	iation	1	Sout	h Dip				
. () .K.	·	1		F	Lat	itude	Long.	A	Amn	F	ace	MD	CD		MI	
.K.	u	s.	0	Ď.	A.	0.		Az.	mp.	E.	W.		. С.Д		WIL.	
3	E				° ,	S	E	E	E	•	•	0	٥		5939	
					7.13	10.55	84 55			4.	4.4	4.2	3.3	Very fleady.	79	§ Moderate b 29.9♣. 8
								-								, ,,,
					7.24	[11. 1]	85.15			3.6	4.2	4.	3.1	Pretty steady.	61	$\begin{cases} Variable w \\ land bird \\ I P.M. 30 \\ I 2\frac{1}{2} A. M \end{cases}$
					7.17	10.50	85.58		•	2.2	2.6	2.4	1.5	Not Ready.	52	First part, very black and it ca A.M. the 4. 29.9. 7½. 29.9½.
7 8	87.29	4	*A *F	43	7. 8	10.33	86.49			3.	3.6	3 ·3	2.4	Not very fleady.	47	Decreasing 1 and bird. 4. 29.9. 29.9½.
5 8	87.25	6 3	*A	12	7.52	11.13	87. 2	1.32*	1.41*	5.4.	5.6	5.5	4.6	Very fleady.	52	Mostly ligh 29.83. 6.
-					8.39	12. 2	86.47	*1.12	*1.22	6.6	7.2	7.	6.1	Very steady.	50	Light breeze flew like at 7 A.M. 29
7 8	86. o	6	*P	28	9.42	12.56	85.44			7.6	8.2	8.	7.1	Pretty fteady.	75	First part, The same Saw a sno Bar. 4 P.I 10. 30.0. 29.93. 81
					11. 0	14. 2	83.45			8.6	9.2	9.	8.1	Pretty ficady.	134	Freih gales, board. Ar 4. 29.94.
8 8	30.42	5 *	*A	36 43	11.27	14 17	81.23			9.2	9.6	9.4	8.5	Very iteady.	135	Fresh breeze 2\frac{2\frac{3}{4}}{3} P.M. 29 30.0\frac{1}{2}. 9.
		1													6624	
7 5		87.29 87.25	87.29 4 87.25 6	87.29 4 *A 87.25 6 *A 86. 0 6 *P	87.29 4 *A43 87.25 6 *A 12 86. 0 6 *P 28	S. O. D. A. E S. 7.13 7.24 7.17 87.29 4 *A 43 7.8 87.25 6 *A 12 7.52 8.39 86. 0 6 *P 28 9.42 II. 0	E S. O. D. A. O. S. S. S. 7.13 10.55 7.24 [11. 1] 7.17 10.50 87.29 4 *A 43 7. 8 10.33 87.25 6 *A 12 7.52 11.13 8.39 12. 2 86. 0 6 *P 28 9.42 12.56 11. 0 14. 2	E S. O. D. A. O. E S S E 7.13 10.55 84.55 7.24 [11. 1] 85.15 7.17 10.50 85.58 87.29 4 *A 43 7. 8 10.33 86.49 87.25 6 *A 12 7.52 11.13 87. 2 8.39 12. 2 86.47 86. 0 6 *P 28 9.42 12.56 85.44 11. 0 14. 2 83.45	E S. O. D. A. O. Az. S S E E 7.13 10.55 84.55 7.17 10.50 85.58 87.29 4 *A 43 7.8 10.33 86.49 87.25 6 *A 12 7.52 11.13 87. 2 1.32* 8.39 12. 2 86.47 *1.12 86. O 6 *P 28 9.42 12.56 85.44 11. O 14. 2 83.45	E S. O.D. A. O. Az. Amp. S S E E E 7.13 10.55 84.55 7.24 [11. 1] 85.15 7.17 10.50 85.58 87.29 4 *A 43 7. 8 10.33 86.49 87.25 6 *A 12 7.52 11.13 87. 2 1.32* 1.41* 8.39 12. 2 86.47 *1.12 *1.22 86. 0 6 *P 28 9.42 12.56 85.44 11. 0 14. 2 83.45	S. O. D. A. O. Az. Amp. E. S. S. S. E E E E 7.13 10.55 84 55 4. 7.24 [11. 1] 85.15 3.6 7.17 10.50 85.58 2.2 87.29 4 *A 43 7. 8 10.33 86.49 3. 87.25 6 *A 12 7.52 11.13 87. 2 1.32* 1.41* 5.4. 8.39 12. 2 86.47 *1.12 *1.22 6.6 86. 0 6 *P 28 9.42 12.56 85.44 7.6 11. 0 14. 2 83.45 8.6	E S. O. D. A. O. Az. Amp. E. W. S S E E E A. 4.4 7.24 [11. 1] 85.15 3.6 4.2 7.17 10.50 85.58 2.2 2.6 87.29 4 *A 12 7.52 11.13 87. 2 1.32* 1.41* 5.4 5.6 88.39 12. 2 86.47 *1.12 *1.22 6.6 7.2 86. 0 6 *P 28 9.42 12.56 85.44	E S. O. D. A. O. Az. Amp. E. W. MD S S S E E E E A. 4.4 4.2 7.13 10.55 84.55 3.6 4.2 4. 7.17 10.50 85.58 2.2 2.6 2.4 87.29 4 *A 4.3 7.8 10.33 86.49 3. 3.6 3.3 87.25 6 *A 12 7.52 11.13 87. 2 1.32* 1.41* 5.4 5.6 5.5 8.39 12. 2 86.47 *1.12 *1.22 6.6 7.2 7. 86. 0 6 *P 28 9.42 12.56 85.44 7.12 *1.22 6.6 7.2 7. 86. 0 6 *P 28 9.42 12.56 85.44 7.12 *1.22 6.6 9.2 9.	E. O. D. A. O. Ar. Amp. E. W. MD. C.D. S S S E E E E A. 4.4.4 4.2 3.3 7.24 [11. 1] 85.15 7.17 10.50 85.58 2.2 2.6 2.4 1.5 87.29 4 *A 43 7. 8 10.33 86.49 87.25 6 *A 12 7.52 11.13 87. 2 11.32* 1.41* 5.4 5.6 5.5 4.6 8.39 12. 2 86.47 *1.12 *1.22 6.6 7.2 7. 6.1 86. 0 6 *P 28 9.42 12.56 85.44 11. 0 14. 2 83.45 8.6 9.2 9. 8.1	Az. Amp. E. W. MD. C.D. S. O.D. A. O. E. W. MD. C.D. S. S. E E E E E W. 10.55 84.55 2.2 2.6 2.4 1.5 Not fleady. 7.17 10.50 85.58 2.2 2.6 2.4 1.5 Not fleady. 87.29 4 A A 3 7. 8 10.33 86.49 3. 3.6 3.3 2.4 Not very fleady. 87.25 6 A 12 7.52 11.13 87. 2 1.32* 1.41* 5.4 5.6 5.5 4.6 Very fleady. 88.39 12. 2 86.47 *1.12 *1.22 6.6 7.2 7. 6.1 Very fleady. 86. 0 6 P 28 9.42 12.56 85.44 7.11 *1.12 *1.22 6.6 7.2 7. 6.1 Very fleady. 880.42 5 A 3 6 7.1 Pretty fleady. 880.42 5 A 3 6 7.1 Pretty fleady. 880.42 5 A 3 6 7.1 Pretty fleady.	Az. Amp. E. W. MD. C.D. ML. S. O. D. A. O. E. W. MD. C.D. ML. S S S E E E E E S S S S S S S S S S S

Moderate breezes, and mostly hazy. Bar. 3 P.M. 29.9\frac{1}{2}. 5. 29.9\frac{1}{3}. 8 A.M. 30.0.

Variable winds and weather, with much rain. A.M. a fmall land bird, probably fame we loft fome days ago. Ear. I P.M. 30.0. 3. 29.9\frac{1}{2}. 4. 29.9\frac{1}{2}. 6. 29.9\frac{1}{2}. 9\frac{3}{2}. 30.0\frac{1}{2}. \frac{1}{2}.
Decreasing breeze, with pleasant weather. A.M. the same land bird. A small mew about thip. Bar. $2\frac{1}{2}$ P.M. 29.9. 4. 29.9. 7. 29.9. 12. 29.9. 7 A.M. 29.9. 7. 29.9. 7. 29.9.

Mostly light airs. A.M. the fame land bird. Bar. 2 P.M. 29.83. 6. 29.83. 10. 29.94. 12. 29.94. 7 A.M. 29.9.

Light breezes. A.M. the fame land bird. P.M. a land bird, it flew like an owl. Bar. 3 P.M. 29.9. 4. 29.9 $\frac{1}{4}$. 7. 29.9 $\frac{1}{2}$. 7 A.M. 29.9 $\frac{1}{4}$. 11 $\frac{1}{2}$. 29.9 $\frac{3}{4}$.

First part, moderate breezes. Middle and latter, squally. The same land bird on board. A sand lark on board Saw a snow standing to Nd: it hoisted English colours. Bar. 4 P.M. $29.9\frac{1}{4}$. $7\frac{1}{2}$. 30.0. $7\frac{3}{4}$, in $\int quall$, $29.9\frac{3}{4}$. 10. 30.0. $12\frac{1}{2}$ A.M. $29.9\frac{1}{2}$. $12\frac{3}{4}$, before hard rain, 29.9. $29.9\frac{3}{4}$. $8\frac{1}{2}$. 30.0. $9\frac{1}{4}$. 30.0.

Tresh gales, with pleasant weather. The same land bird on board. A mottled bird came on board. Bar. 2\frac{1}{2} P.M. 29.9\frac{1}{4}.
4. 29.9\frac{1}{4}.
6. 29.9\frac{1}{4}.
10. 30.0.
8 A.M. 30.0\frac{1}{2}.
11. 30.0\frac{1}{2}.

Fresh breeze throughout. A small land bird aboard. Bar. 2\frac{1}{4} P.M. 29.9\frac{1}{2}. 4. 30.0. 6. 30.0. 1 A.M. 30.0. 30.0\frac{1}{2}. 9. 31.0\frac{1}{4}.

	Th.	M	arine Ba	ıromet	ter.		Weather	and Winds.		D.L A.O	. A	١. ا	Longitu	
5		R.	S.	Th.	D.				-	N _S	w	E	Α.	TK.
	o	in.Dec	In.Dec		In.Dec.		The International Indiana (Indiana)	antprocurement administrative first freedom service and	begangenisted fillingsage of her	//	,	,	。 , E	° ′ E
9	80		30.1	79½		h. h. h. h.	ENE. ENE. E. E. ENF	Е.	}	2	2 I		86.18	82.5
10 76						f.	ENE			in 5,	j L	urs,	86.14	
28	At an Afhe Ditto Ditto	ore, in t	Madraí	s Roa	d, in the Compar	Grenville ny's house	e's cuddy (conear the chu	abbin before th	ne round-la	ioufe)	-		_	in a
	B y be	the <i>latin</i> earings o egitude o	of Pulic of Fort of 9th no	CAT A St. Coon,	Flag Staff, George,	, we were , by eclipse	then from I	mber, and the Fort St. George, s first satellite,			8	2.5	Longit Longit	ude by

Lat. 13. 8. 0 N. 7th Oct. 1776, A.D. on board the Swallow stoop of war & merid. alt. by a Hadley made by Bird. 13. 8. 0 1761, Rev. Mr. Hirft, many obf. made not long ago with an excellent quadrant (vide Ph. Tr. vol. Lil. part I. p 396). N.B. It does not clearly appear whether these obf. were made by Mr. Hirst or by some other person.

13. 8. 0. Several of vations by Mr. William Nichelton, master of the Elizabeth man of war, p. 48. Remarks and Observations made on a voyage to the East Indies.

13. 7. 0 Major James Rennell, fur eyor-general of Bengal.

13. 4 54 Major William Stevens, chief engineer of Fort St. George.

13. 4 44 Rev. Mr. William Smith, alt. of *, some to Northward, some to Southward.

By a so way which has been made of the country from Fort St. } 14.36" W of Fort St. George.

GEORGE to All mparca, All m a va is 17 stati te miles, or From Fondicherry, by M. D'aprés, All mjarva is

Fort St. George Eaftward of Pondicherry,

13. 27.36

Long. from 80.28.45 H 80.15. 0 A

80.24. o A 80. 2.15 R

80.41. o R 81. 1.45 D

PONDICE

Ship Grenville, Capt. BURNET ABERCROMBIE, kept by ALEXANDER DALRYMPLE, 177

														-			
										. M	agneti	cal					
de fron	n Gre	enwich						Cor.	Varia	tion.		South	Dip				
TK.	D. D T.K.	D	s.		E D.	Lati	O.	Long.	Az.	Amp.	_	w.	MD.	C.D.		ML.	
e '	, E	° É			,	° ′ N	°,	e '	° ′ E	, °	o	o	0	٥		6624	Pleasant g fand; an
82.56						11. 9	13.37	80.42			5.6	6.2	5.	5.1	Very steady.	86	$ \begin{bmatrix} 2 \\ 2\frac{1}{2} \\ 3 \\ 4 \\ 5 \\ 6 \end{bmatrix} $
·						10.47	[13. 9]							•		22	7 8 9 10 10 1 1 1 1 2 At 6h. 30
1						-	13. 7 13. 8				5.6 5.6 5.6 5.6	6.6 5.6 6.	6.2 5 6 5.7 5.7	5·3 4·7 5· 5·			At 9h. 40
ide by	Time	by map-keeper. her fince	•	3th	Sep	t. in 83	days.			and 28th	ling on vards th th, and	the <i>tab</i> e <i>fiarb</i> 8th of	le in the eard fide October	Gren- of the	• •.		At noon,
Long. fro	m Gree	nwich.		·					d a view	of. ther	n.						\[\begin{pmatrix} \hbar{\text{We}} & \text{We} \\ \bar{\text{2}} & \\ \bar{\text{4}} & \\ \bar{\text{5}} & \\ \text{6} & \\ \text{8} & \\ \text{Follows} \end{pmatrix}
80.15. 0 80.24. 0	A.D. n A.D. G Rev. M Rev. M	nean of 5: and);	th C Trai	bler Oct. 1 nsit of Dr.	vatio 1776, f Vei Mail	, 3 lights er	ed together st. diff. 10' culation, Z	by the Ti	ly 1755. me-keeper, May 1777.		rnal.				To the Cape	6732 8479	ab
Pondi						769, is in 1	1.55.42 N	27.36	-	om Greenv	rich.						
	-	Which p	laces	For	t St.	George in		80.20. 0								1	

Pleafant gand; and	l at d	At 2½ F 1y-light	t faw the	l foun e land	dings, 2S fath. gravelly bearing SW by W.
8 9 10 10 10 11 11	Sout	hernmoi	l p art ir	2. 2. 2. 2. 2. 3. 2.2 2. 4. 3° N	30. no ground. 24. gravelly fand. 20. 19. 18. 17. ditto. 16 $\frac{7}{2}$. 18. 17 $\frac{1}{2}$. 20. ditto. 25. 25 $\frac{1}{2}$. 26. ditto. 25 $\frac{1}{2}$. 25. blue mud. 25 $\frac{1}{2}$. 26. ditto. 27. ditto. 27. 26. 25. 25. 24 $\frac{1}{2}$. 23. 21. 20. 19. 1 $\frac{5}{2}$. 18. 18. 17 $\frac{1}{2}$. 17 $\frac{1}{2}$. 17. 18. to 25. 10 or 12 miles off fhore. cat Ridge in fight, SW.
At 9h. 40.			e in haz Grove,		os.
At noon, *	35 L 4 14 22 * Pu R 33 46 L 50	16 Wh 38 Ext 37 High 25 Ket 40 Ext 10 LICAT 6 Ket 30 High 0 San 0 Poin	ite Buil in fight hest Pea itle Botto in figh Flag-sta itle Botto hest Pea dy Point nt to Sou	ding. It to to k of com, d t to to ff, S com, H ik, di it.	ne Southward: 52° W. Julicat Ridge,

At 5h. 30'. Anchored in Madraís Road in 10½ fath.

* FORT ST. GEORGE Flag stass, S31°W.

about 4 miles off shore.

R 14-31 Obelisk and Punch-house in one.
18-15 Armenian Church.
49-12 White-house on the Sea-beach.
L 18-47 Nabob's White-Building.
25. 9 St. Thomas's Mount.
28-40 Triplicane Pagoda.
29. 6 Peak of 4 Sierras.

S by W 4.5 27. 23.

10th December.
| Weather. | Winds. | Courfe. | K.F. | Soundings.

ERRATA and ADDENDA in the GRENVILLE'S

In the explanation of weather dr. denotes drizling rain, and a comma (,) after any all the weathers, so separated by comma, are connected: thus, sq, r, th, L. imples lightning: sq. r. th, L. imply squally, rain, thunder and lightning, to have all b but not at the same time.

In the explanation of the 5th column, for N denoting that the observation read N observation.

		$\ _{\mathbf{D}}$. L.	D.	L. L	ong. i	from Gr.			
	For			T.	K.	Α.	TK.	Lati	tude	Read
	F0)	N	S	W	E	Λ.	I.K.	A.	0.	Keaa
		1,	,	1	/ 0	E'	• /	0 /	· /	
May 2d, — — —	-	-	9	-	-	_	-			
4th, — — — —	-	-	31	-	-	-	_			
8th, — — —	-	-	39	-	-		-			_
9 th , – – –		-	11	-	-		-			-
10th, add 4' to Lat. A till 15th inclusive, and	-	-	-		-			39.26	_	-
14th, — — —	-	-	20	-	-	-				
15th, — — —	-	-	25	-	-					_
18th, in column T.K. for W read E				-	•		,			
22d, — — —		(I I	18	-	-	-			-	-
27th, subtract 10' from Lat. A till 20th of June inc		H 1	-	-	-		_	15.32		
June 1st, subtract 10' from Long. A to 25th of June inc	lufive, and	-	-	-	- 1	6.51	-	-		
5th, — — —		-	-	- 2	20	-	_	-	-	
9th, — — —	Demokra	-	-	-	- '		14. I	-	-	-
21st, subtract 11' from Lat. A till 1st July inclusive	, and	-	-	-	- '	-		3.45		
26th, — — —		2 I	-	-	- 1	0. 2				
27th, — — —	-	-		- -	- 1	0. 6	-		-	_
28th, — — —	-	-	-	- -	- 1	1.10	-			_
29th, add 13' to Long. A till 2d August inclusive, a	nd	-	-	- -	- I	2.18				_
July 2d, — — —	Provide 1	-	-	- -	-∥ '.			0.22 S		
3 ^d , – – –		-	-1	- -	- .		-	1.6		
4th, add 21' to Lat. A. till 19 August inclusive, and	-	-	-	- -	- •	-	-	2.13		
24th, add 2/1 to Long. T.K. till 28th July inclusive,	and	-	-	- -	- .		28.12			
28th, — — —		-	-1	9	- .	-		-		

ter any weather marked, implies that imply fqually with rain, thunder and all been in the period of fix hours,

ead N denoting that the latitude by

	b	L.	D.	L.	Long. f	rom Gr.		
Read	A.	C.	T.	K.	Α.	T.K.	Tat	tude
. Acaa	N	S	W	E	210	1.11	A.	Ο.
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_	9							
_	-	23						
_	-	19						
_	-	10						
	-	-	-	-	_		39.30	
	-	26						
	-	20						
	-	16	-					
		~	.	-	*****	4. 22 22	15.22	
_	-	-	٠	-	16.41			
				19				
-		-	-	-	-	14 15		
	-	-		-			3.34	
	18	-	-		10.16			
_	-		-	-	10,20			
_	-	-	-1	-	11.24			
_	-	-	-	-	12.31		*	İ
	-	-	-	-			0.33 S	
	-	-	-	-			1.23	ĺ
		-	-	-			2.34	
	-	-	-	-		28.14		
	-	-	-	9		į		
•	•	•	•	*	Ddd	1 15		•

				- 11	D. A.(L.	Α	.	Long. fr	om Gr.	T.ati	tude	
			Ì	For		—	W	-	A. '	T.K.	A.	0.	Read
					,	,	,	, ;	o /	• /	• /	0 /	•
July 29th, add	6' to Long.	r.K. till 10th	August inclu	afive, and	-	-	3	-	_	27.56	_	31.33	
Aug. 3d, add	11' to Long.	A. to 9th Au	gust inclusive	e, and	-	-	-	-	13.56				-
10th, subtract subtract 6' s	11' from Lor rom Long. T	ng. A. till 18 .K. till 12th	August inclus August inclus	five; and	-	-	-	-		2.25		-	
13th, fubtract	4' from Long	T.K. till 18t	h August inc	lufive, and	-	-1	-	-	_	7.26	_	_	
14th,				_	-	16	-	-	-		_	-	-
19th,			<u> </u>		-	-	-	-		19.9			_
Sept. 20th, fub	tract 10' from	Long. A. till	8th Dec. inc	lufive, and	-	-	-	-	21.26		_	_	
27th, subtract	20' from La	t. A. till 16th	Oct. inclus	ive, and	-		-	-	_		36.40	_	-
Oct. 17th, ful	otract 59' from	n Lat. A. till	22d inclusive	e, <u></u>	-	-	-	-	_	-	34-57	_	-
23d,					-	-	-	-			29.55	_	_
24th, subtract	41' from Lat	. A. till 10th	of Nev. inc	lufive, and	-	-	-	-	_	_	29. 4	_	-
Nov. 5th,			- Primpig		7	-	-	-	_	_		_	_
9th,		-			-	14	-	-,			_	-	
1 1th, subtract	31' from La	t. A. till 17tl	h inclusive,	and —	-	-	-	-	_		2. 3	-	
18th,	-	- Description			-	-	-	-		-	0. 3	-	
19th,	٠		30000	-	-	-	-	-	_	-	0. 3	-	_
20th,	-				-	-	-	-	_	_	0.17	_	-
21st,	-				-	-	-	-	-	_	0. 3	_	-
22d, add 31'	to Lat. A. ti	ll 9th Dec. ir	clusive, and		-	-	-	-		_	N 0. 9	_	_
Dec. 9th,	-	-	-	-	-	-	-	-	86.18	-		-	-
10th,		-			-]+	-	-	86.14	-	_	-	_

LE'S JOURNAL.

1	D.	T	D.	L.	Long. fi	om Gr.		i
Read	A.		А Т.	K.	A.	T.K.	Lati	tude
Reau	N	S	W	E	, A.	1.12.	A.	Ο.
	,	,	,	,	0 /	0 /	o , .	0 /
-	-	-	-	3		28. 2	31. 3	
-	-	-	-	-	14. 7	,		
_	-	-	-	-	_	2.19		
	-	_	_	_	-	7.22		
	16							
_	-	-	-	_		19. 5		
_	-	_	-		21.16			
_	-	-	-	-			36.20	
-	-	-	-	-		- -	33.58	
_	-	-	-	-	-		29.17	
-	-	-	-	-	·		28.23	
_	5							
_	-	4						÷
-	-	-	-	-	_		1.32	
							N	
	-	-	-	-		-	0.28	
	-	-	-	-	_	_	0.28	
-	-	-	-	-	_		0.14	
-	-	-	-	-	_	_	0.28	
-	-	-	-	-	-	-	0.40	
-	-	-	-	-	86. 8			
-	-	-	-	-	86. 2			

Register of the Dip in His Majesty's Sloop

N. B. The ship having an iron tiller, and much iron about the after part, it was found, the observations taken in were not consistent or meriting considence. From Anjengo they were all taken on the binnacle, which seemed to be sit place in the ship.

					_ N	Iagnet	tićal			
				Varia	ation	1	Sout	Dip)	
		Lat.	Long.			F	ace	lus		
1776			5.4	Az.	Amp.	E.	W	MD.	C.D.	
Oa. 14	Ashore at Trinquemalé on Ceyloan.	N, 8.32	E, 81.30	°w	°w′	3.6	°3.6	°3.6	å.5	
28	At anchor 10 fath, fand and finells, Anjingo Road,	8.41	76.54	1.12*	1.13*	3.4	3.4	3.4	4 3	Very steady.
30	, ,	9.58	75. 4			1.6	1.6	1.6	2.5	Pretty fleady.
31		9.54	74 24	1. 3*	0.53*	2.1	2.1	2.1	3.	Ditto.
Nov. 1	Off Kalpeny. } Lacadivé Isls {	9.57	73.35	1.25*		1.7	1.7	1.7	1	Not very steady.
2	Off Scheulpar.	9 59	72.30			1.5	1.5	1.5	1	Pretty steady.
3		9.38	71.18	The same area of the sa		2.7	2.7	2.7	1	Ditto.
4		9 49	70.26	1.30*		3.2	3.2	3.2	4.1	Ditto.
5		9.53	69.11	2 12*	1.54*	3.	3.	3.	3.7	Ditto.
6		9.55	67.35			3.	3⋅	3.	37	Not very steady.
7		10.43	65.30	4· 0* *4• 4	4· 3* *4.18	1.4	1.4	1.4	2.3	Ditto.
8		11.57	63.22	4.23*		ND.	ND. 0.4	ND. 04	0.3 ND.	Not steady, I when most at
9		12.45	60.34	5.15* *5.37		3.	3.	3•		Very unfteady.
10		12.59	57.21	6. 0* *7. 4	6. 6*	4.	4.	4.	3.1	Pretty fleady.
11		13.29	55.12	7.30° 48.24	7.54*	5	5.	5.	4.1	Ditto.
12	Off Socotra.	13.16	5 2 55	7.57*	8.15*	5-4	5 4	5 4	4.5	Ditto.
13		13.28	50.58	9.20* *8 5 9	8.58* *9. 0	56	6.6	6 2	5 3	Very steady.
14	In fight of Coast of Arabia.	13.51	49.37	9 35*	9.32*	7.2	8.6	8.	7.1	Quite steady.
15	Ditio.	13.37	48.33	9. 1* *8.46	9 30* *9 30	8.	9.	8.4	7.5	Ditto.

Sloop of War The Swallow, Captain JOHN ALEXANDER PANTON.

	1		11	<u> </u>	<u> </u>	N/A	lagne	tical		=
aken in the cabbin med to be the only					Vari		agner	Nort	h Di	_
			Lat.	Long.	Az.	Amp.	F	ace	MD	-
	1776					·	Е.	W.		-
	Nov.16	In fight of <i>Coast</i> of <i>Arabia</i> .	12.54	。, 47• 4	9.31* *10.38	9·39* *10.35	6.2	° 7.2	6.6	-
·	17	Cape Aden in fight.	12.41	45.25	*11.25	*11.30	6.2	7.2	6.6	
•	18		12.38	[44- 5]	11. 3* *11.14	11. 5* *11.18		8.2	7.6	
ady.	20	At anchor at Mocha.	13.22	44.10	11.35*	11.22*	8.6	9.6	9.2	
eady.	21	Ditto.	13.22			11. 2*	8.4	1 -	-	
		Athore at the Company's factory.	13.20	44.11		- X:	9.2	9.6	1	1
r fleady. eady.		In fight of Gebel Zeker.	14.24	43.35	12 10*	11.11*	l	1	1	ŀ
cauy.	23	In fight of Gebel Tar.	15.29	43.12	13.10* *13.14	12.50*	14.2	14.2	14.2	ŀ
	24	Ditto.	16. 2	42.49	14. 3* *12.57	13.53*	15.6	15.6	15.6	
fleady.	25		16.24	42.22	14. 2* *13.31	14.10#	16.6	16.6	16.6	
	26		17. 5	1 1	13.44*			1	1	
teady, but taken	27		18.14		13 54*			l.	-	ì
most at rest.	28		19.36	40 30	13.12* *12.56	13.19* *12.42	24.2	24.6	24.4	
Ready.	29	Off Judda.	20.59	39.56		12.59*				
eady.	30		21.43	39. 3		12.49*	29.6	29.6	29 6	2
	Dec. 1	In fight of Crast of Abysfinia.	21 55	37.57				abou-	30.	
	2		22.44	38.24			32.6	32.6	32.6	9
	3		22.46	38.11				32.		į
ady.	4		22.54	37•44		1		32.4	_	į
ady.	1	At anchor on Coast of Arabia.	24.16	38.29	7.40¥		34.0	34.6	34 0	3
	7	Off Coast of Arabia.	24.17	38.21	14.52*	15. 0				
	1		1			(į

ī			
ort	h Dip		
	^		
7.	MD.	C.D.	
		0	
.2	6.6	5.7	Pretty steady.
.2	6.6	5.7	Ditto.
•2	7.6	6.7	Ditto.
.6	9.2	8.3	Ditto.
•4	9.	8.1	Not fleady, much wind.
.6	9.4	8.5	
.4	12.4	11.5	Pretty sleady.
٠2	14.2	133	Very steady.
.6	15.6	14.7	Ditto.
.6	16.6	15.7	Ditto.
.ı	19.1	18.2	Ditto.
•	20.7	20.	Pretty fleady.
.6	24.4	23.5	Ditto.
.7	26.7	26.	Ditto.
.6	29 6	28.7	{ Very uniteady, much wind and patching.
ıu.	30:	İ	Very unsteady.
E	32.6	32.	Not very fleady.
	32.	31.2	Pretty steady.
4	32.4	31.6	Not very steady.
6	34 6	34.	Pretty steady.
	<u> </u>		

* Ddd 16

46.14.

			<u> </u>		Ma	agneti	cal			
				Varia	tion	1	South	Dip		
776		Lat.	Long.	Az.	Amp.	Fa E.	w.	MD.	C.D.	
		. ,	0 /	°E′	°E′	0	•	0	o	
ec. 8	Ashore on a small island on s	24.17	38.30			35•	35.	35.	34.2	Much wind.
9	Coast of Arabia.	11 11	38.30	1	14. 1*	35.	1 1	1	34.2	Pretty steady.
10					13 50*	35.	1	1	1	Very steady.
11	At anchor at <i>Bareedy</i> .	24 163	38.30		13.50*				34.2	1637
14	 			1		35.2	35.2	35.2	34.4	Very steady.
15		24.19	38.18			1	1			Not steady, swell from S
17	ł.	24.25	36.30	11 1		35.	1	1	1 .	Much motion, with win
19		25. 4	36.10	H .1	*11.41	36.2	36.2	36.2	35.4	Pretty steady.
20		25.45	36.26	11	1		1	1		Not very steady.
21		26. 9	36.11							Pretty steady.
22		26.25	36. 1		12. 5* *12.10	38.6	39•	38.7	38.1	Extremely steady.
23		26.55	35.38	12.58*	12.46*	* 39.7	40.7	40.3	39.5	Very steady.
1	In fight of Ras Mahomet.	27.36					1 .	1		Very unsteady, much w
26		27.47			13.197	ĸ	1			
27	.	27.58			13.29*	Ŕ				
28		28. 4				1 .	42.	42.	41.2	Pretty steady.
29	At anchor off Tor.	28.16	11'			42.2	42.2	42.2	41.4	Ditto, a little swell.
		-								Astronomical Obse
•	Long. from Greenwich.	P				11		L	ong. f	rom Greenwich.
								5.	1 1	lo la IE.
	$ \begin{array}{c ccc} D \cdot \mathfrak{C} \\ \Gamma \cdot K \end{array} $ $ \begin{array}{c ccc} \bullet & O \cdot S \cdot D \end{array} $							T.	ĸ.	(O.S. E.

Long. from Greenwich.	D. 0	S.	E.	
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
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T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
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T.K.	C	O.	S.	E.
T.K.	C	O.	S.	E.
T.K.	C	O.		

of War The Swallow, Captain John Alexander Panton.

				1		1	M	agneti	cal			
, and a second												,
						Varia	ition.		South	Dip		
				Lat.	Long.			F	ace			
	1777					Az.	Amp.		w.	MD.	C.D.	
									<u></u>			
			,	¢ /	• (•́Е′	Έ°	۰	0 -	•	o	Fresh wind ar
1	Jan. 2	At anchor at 5 fath. on	Coast of Africa	29.12				43.6	44.	43.7	43.2	of motion.
	3			29.35	4		12.50*	46.	46.	46.	45.3	Ditto.
dy, good	4	Off Suez.		29.51	32.12			45.2	45.6	45-4	44.7	Perfectly sleady.
					,							,
from Sd.		At anchor off Suez.	N. Lat. obs. 29.58.12	29.58	20 15			10.6	1,46	45.6	15.	
ith wind.	3	The anchor on barza	29.30.12	29.30	32.15			43.0	43.0	45.0	43	
Tell William	6	Ditto.	29.58. 1	29.58				45.2	45.2	45.2	44.5	Very fleady.
			-9.30	19.30				130-	73	73.2	77.5	,
	7	Ditto.						45.2	45.2	45.2	44.5	
		Changed the poles, u	nmarked end di	ps,		_ :				1		A little wind.
		Rechanged the poles,		-	-	<u> </u>						Ditto.
	8	At anchor off Suez.			1	1	1					Perfectly steady
nuch wind.	1 (2)	Ditto.	-									Ditto.
	10	Ditto.		29.58		·	ł					
	ŀ	Suez	29.58.10	30. 2	32.16		L					5
11												
11.	!	601 0 11										

Observations in The Swallow.

		Long	g. from Gre	eenv	wic.	ch.
		D. (T.K.	. (0.5	s.	E. D.
ott anchor in <i>Mocha Road</i> . oth. Observed an immersion of 1st sat. of Jupiter with my glass, a good deal of wind and ship not very still, Per watch — 11. 0.30 Watch slower than apparent time 1.52.19	Dec. 6. 1777 Jan. 4 {	°E′ •29	37 50. 32.12. 32.11. 32.42.	0000		Off Suez.
Eclipse per naut. alm. — 9 56.48 2.56. 1 = 44.0.15	6{		31.47.	0	1	At anchor in Suez Read.

h wind an motion.	d good de
ly steady.	
teady.	
e wind.	
•.	
tly steady.	:
	to the
z Road.	

XIX. Journal of a Voyage to The East Indies, in the Ship Grenville, Captain Burnet Abercrombie, in the Year 1775. By Alexander Dalrymple, Efq. F. R. S. Communicated by the Honourable Henry Cavendish, F. R. S.

Read January 29, 1778.

EXPLANATION OF THE COLUMNS.

Ift, THE date (0).

2d, The beight of the thermometer, according to FAHRENHELT'S scale. therm eter belonged to Mr. RUSSELL, and hung in the open air in the balcony.

3d, including four columns, contains the register of the marine barometers, all of which, as well as the thermometers, were made by NAIRNE and BLUNT: those marked R and D are quickfilver, of the kind ufually made by them. That marked S is compounded of quickfilver, and of a lighter fluid, for the purpose of making the alterations more visible, which is a very great convenience at sea; a quicksilver thermometer being fixed to it for the fake of correcting its height, the heat by which is fet down in the column a marked Th. next to that marked S.

4th, The weather and winds in four lines; 1st line from noon to 6 P.M.; 2d, from 6 P.M. to midnight; 3d, from midnight to 6 A.M.; 4th, from 6 A.M. to noon.

In the column of weather, f. denotes fair; fq. fqually; c. cloudy; h. bazy; r. rain; hr. bard rain; fr. small rain; dr. r. drizling rain; fh. showers; th. thunder; 1. lightning.

It is proper to remark, that the winds are fet down according to the compa/s, without any allowance for the Variation.

5th in 2, The difference between the daily alteration of latitude by account and observation; N. denoting that the observation was to the Northward of the account; S. that it was to the Southward(6).

(a) Here, for want of room, the day of the month only is expressed; but in the original journal the days of the week, and of the Moon, are also inserted.

(b) Next to these columns in the original journal are the following, which are left out here only for want of room:

Correct course, lee-way variation &c. allowed, and the different courses reduced to one straight course. Distance on that straight course.

Difference of latitude by account, Difference of latitude by observation,

The departure.

The difference of longitude by account, The difference of longitude by the time-keeper in minutes of a degree.

6th in 2, The difference between the daily alteration of longitude by the account and time-keeper; W. denoting that the longitude by the time-keeper was to the Westward of account; E. that it was to the Eostward.

The refult of those differences indicates the daily effect of current; however an error in the course failed, or distance run by log, would make the current appear different from what it really was.

7th, The longitude from Greenwich, in feven columns.

1ft, The longitude by account.

2d, The longitude by the time-keeper, which was made by ARNOLD, but without his late improvements.

3d, The difference between the longitudes deduced from observations of the Moon and from the time-keeper uncorrected; E. denoting the time-keeper to be to the East of c; w. denoting time-keeper to West of c. This, admitting the timekeeper not to be liable to any fudden changes in its rate of going, indicates the precision with which the observations of the Moon may be relied on, all circumstances of weather and of the ship's motion considered.

4th, The longitude by observations of the Moon's distance from the Sun or Stars, adjusted, by the log, to the noon nearest the time of observation.

5th, The number of fights or diffances observed.

6th, The object whose diflance from the Moon was observed; o denoting the Sun; * the Star; S. Spica Virginis; R. Regulus; A. Aldebaran; At. Atair; P. Pollux; F. Fomalhaut; An. Antares.

7th, The axtreme differences between the bigbest and lowest observation; expressed in minutes of a degree; when the feconds amount to more than 30, the next minute. above is taken, otherwife the next minute below.

8th, The latitude in two columns:

1st, The latitude by account, carried on from the land, in the same manner as the longitude by account.

* Ddd 2

2d, The latitude by observation; and where the latitude could not be had by obser- Co vation, it is deduced by account from the last observation, in which case it is correction is as follows. included within [].

by the fight of lands, whereof the longitudes are known, and by observations of the Moon, taking a mean of the feveral observations of the Moon made within a short period of each other. The error of the time-keeper, between the longitude corrected by fight of land or observations of the Moon, is supposed to have arisen by the time-keeper having altered its rate of going uniformly between these observations; and the intermediate longitudes are determined by the time-keeper on this supposition. Where no observations of the time (a all that part of the voyage subsequent to July 12th is corrected by subtracting were made, it is deduced by the account from the last observation of the time, and is then included within [].

10th, The magnetical observations of the variation and dip, in seven columns.

Ift, The varia-(azimuth,) * before, denoting the observation to have been in 2d, I tion by [amplitude, I the morning; * after, denoting the observation to have been in the evening. The variation was observed by the officers with the compasses belonging to the ship.

3d, The dip with the face of the instrument to the East.

West. 4th, Ditto, ditto, ditto,

5th, The mean dip of the foregoing observations.

6th, The mean corrected, or what is supposed to be the true dip.

7th, The circumstances under which the observations of the dip were made.

12th, The miles run by log.

The dip was observed with a dipping-needle belonging to the hon. Mr. CAVENDISH, (* made by sisson.

The following remarks on the dipping-needle and observations are by Mr. CAVENDISH.

The ends of the axis of the dipping-needle are made conical, and turn in conical holes of bell-metal, in the manner of Mr. LORIMER's needle, described in Phil. Trans. vol. LXV. and to the West, and the poles were changed twice during the voyage, in order to see) much influenced by the iron-work of the ship. whether the needle continued well balanced. The use of this method of observing is explained in Phil. Trans. vol. LXVI. p. 396.

The mean dip corrected is what is supposed to be the true dip. The foundation of this

By the observations on July 12th, when the poles were changed, it appears, that the oth, The correct longitude from Greenwich deduced from the time-keeper corrected and marked end of the needle was too heavy, so as to make that end point 11ths of a degree too low at that place; and therefore, if we suppose that the force of magnetism is equally strong in all parts of the earth, the error produced thereby in other places should be to-15ths of a degree as the cofine of the dip to the radius. The observations also made when the poles were changed at Suez, agree well enough with this fupposition: therefore, as in all the observations the marked end of the needle pointed to the North, the mean dip in

of a degree from the mean dip,
$$\begin{cases} 63^{\circ} \text{ and } 52^{\circ} \\ 52 \end{cases}$$
 North, and adding as much when when the mean dip is between $\begin{cases} 63^{\circ} \text{ and } 52^{\circ} \\ 52 \end{cases}$ the dip is as much South.

But as before the needle left London, changing the poles was found to make very little difference in the dip, the correction in the preceding part of the voyage is made not fo great, videlicet;

$$\begin{array}{c}
\frac{1}{8} \\
\frac{3}{8} \\
\frac{3}{8} \\
\frac{4}{8} \\
\frac{4}{8} \\
\frac{6}{8} \\
\frac{6}{8} \\
\frac{7}{8}
\end{array}$$
of a degree is fubtracted from the mean dip, when that dip is between
$$\begin{array}{c}
70^{\circ} \text{ and } 62^{\circ} \\
62 \\
52 \\
43 \\
43 \\
35 \\
30 \\
30 \\
25 \\
25 \\
0
\end{array}$$

The dip was observed on board the Grenville at Deptford, after her return, in the same part of the ship in which the observations were usually made, and was found not to differ more than 5' from that observed with the same needle in a pretty large garden in London, p. 79. The dip was constantly observed both with the face of the instrument to the East about five miles distant; so that the observations on board the Grenville seem to be not

51						1						111	1	Minister.	i		M	agnet	ical		10000	1		
			- 1			D.L.		Longi	tude fro	m Gr	eenwich				Cor.	Vari	ation.		I	рiр				
	^	_			Weather and Winds.	A.O.	T.K.	A.	тк.	D. D T.K		s o	E		Long.	Az.	Amp.	-	-	MD.	C.D.		ML.	N. B. Log-line 51 feet to 29" 1.
		_	in.Dec.	200000	EP FET CLUT PLAN PET EP	- .		°ẃ	°ẃ	ŵ	°ẃ	H	-	• N'	°w′	°w′	'w'	•			•	-		Serween Ram-head and the Lizard.
			- 1	f.h. SE.V.W	S.WSW.SWBW.SW.WSW.V.C.V.WS	sw.				1			1											Lizard Point Eanman ENE IN. 7 or 8 lasgnes off thore.
	30.23	55		h. r. r. f.	WNW. NW by W. WNW. C. NNW. NNW. NW by N. NW.	} 6	7	6.19	6.12				49.2	5 49.19	6.12			73.	74-	73-4	73-4	Great fwell,	37	At r P.M the Lizard Point bore by compain E&N. Variat allowed ENE&N 7 leagues. The Land's End N by E NbyW. Take a departure from the Lizard in 49° 57' N lat. Long. 5° 15' W. First and middle part, lights and calm. Latter, pleasant breezes. Great swell from V
	30.41	-61		ξ. 6.	NW by W. NW. WNW. W by N.	}	14	6.40	6.19				48.4	2 48.25	6.19			72.	73-4	72,6	72.6		51	Light breezes; great (well from Westward,
		56		h. fr. hr. r. r. h. fr. h. r. f. h.	WSW. SW by W. SW by S. SW. W by S. W. WNW. NW by W. WNW. NW by W.		33	7.22	7-34				48.5	1 48.43	7-34			72.4	73.	72.6	72.6	Great fwell.	47	Major past light breezes; great fwell from Westward.
	30.01	54	- Annual Control	6. 6. 6. b.	C. C. E. E. E by N.			7-29					48.3	4 [48.26	[7-41]			72.	72.4	72.2	72.2		18	Mostly calm. A very large swell from Westward.
	30.03	564		{ h. h. c. c. c.	ENE. V. NE. V. C.] 31	9	7-57	8.18				47-5	47.20	8.18			71.4	72.6	72.1	72.1	Very fleady.	48	Light breezes and a great fweil.
	30.0	571		h. c. h. h. r. h. fr. c.	C. W by S. W. WSW. SW. SW. WSW. W by S. WSW. NE by N.	} 13	7	7.13	7.27				46.5	6 46.12	7.27			71.	72.4	71.6	71.6	Great motion.	68	First part, calm. Middle, an increasing breeze from We ward, with rain. Latter, a fine breeze from the Nort ward.
	30.2	551		}h. h. c. c. f.	N. NNE. NNE. NE. ENE. ENE. ESE. E by N. E by N. E by S.	}	12	8.36	8.38				45-5	8 44-55	8-38		18.42*	71.	72.	71.4	71-4	Good deat of motion.	83	Modly light breezes, with a fwell from NW.
	30.23	561		{ c c c c c c c c c c c c c c c c c c c	E. E. E by N. ENE.	}	4	10.13	10.19				44-1	4 42.50	10.19			69.6	71.	70.3	70-3	Very fleady.	126	An increasing gale from the Eastward.
	30.22	601		бъ. Въ. Въ.	NE by E. NNE. NNE. NNE. NNE. NE	}	3	10.22	10.43	3 14	10.40	4 0	7 41.5	2 40. 9	10.43			68.4	69.2	68 7	68.6	Ditta	142	First part, fresh gales. Laster, moderate.
The state of the s	R. In.Dec.	R. S. In.Dec 30.2 30.0 30.0 30.2 30.2 30.2 30.2 30.2	R. S. Th. In.Dec. In.Dec . 30.21 55 30.41 61 56 30.01 54 30.01 561	In.Dec. In.Dec. 30.2\frac{1}{2} 55 30.4\frac{1}{2} 61 56 30.0\frac{1}{2} 56\frac{1}{2} 30.0\frac{1}{2} 56\frac{1}{2} 30.2\frac{1}{2} 56\frac{1}{2} 30.2\frac{1}{2} 56\frac{1}{2}	R. S. Th. D. In.Dec. In.Dec. 30.2\frac{1}{2} 55 30.4\frac{1}{2} 61 30.0\frac{1}{2} 54 30.0\frac{1}{2} 54 30.0\frac{1}{2} 54 30.0\frac{1}{2} 56\frac{1}{2} 30.2\frac{1}{2} 56	R. S. Th. D. In.Dec. In.Dec. In. In.Bey In. Est. In.Bey In. In.Bey In. In.Bey In. In.Bey In. In.Bey In. In.Bey In. In.Bey In. In.Bey In. In.Bey In. In.Bey In. In.Bey In. In.Bey In. In.Bey In. In.Bey In. In.Bey In. In.Bey In.Bey In. In. In. In. In. In. In. In. In. In.	R. S. Th. D. In.Dec. In.Dec. o In.Dec. in.Dec	Marine Baroineter Weather and Winds,	Marine Baroineter R. S. Th. D. In.Dec. In.Dec. o In.Dec. i. h. i. SE. ESE. Sby E. E by i. ESE. SE. In.Dec. In.Dec. o In.Dec. i. h. i. SE. ESE. Sby E. E by i. ESE. SE. In.Dec. In.Dec. o In.Dec. i. h. i. SE. ESE. Sby E. E by i. ESE. SE. In.Dec. In.Dec. o In.Dec. i. h. i. SE. ESE. Sby E. E by i. ESE. SE. In.Dec. In.Dec. o In.Dec. i. h. i. SE. ESE. Sby E. E by i. ESE. SE. In.Dec. In.Dec. o In.Dec. i. h. i. SE. ESE. Sby E. E by i. ESE. SE. In.Dec. In.Dec. o In.Dec. i. h. i. SE. ESE. Sby E. E by i. ESE. SE. In.Dec. In.Dec. o In.Dec. i. h. i. SE. ESE. Sby E. E by i. ESE. SE. In.Dec. In.Dec. o In.Dec. i. h. i. SE. ESE. Sby E. E by i. ESE. SE. In.Dec. In.Dec. o In.Dec. i. h. i. SE. ESE. Sby E. E by i. ESE. SE. In.Dec. In.Dec. o In.Dec. i. h. i. SE. ESE. Sby E. E by i. ESE. SE. In.Dec. In.Dec. o In.Dec. i. h. i. SE. ESE. Sby E. E by i. ESE. SE. In.Dec. In.Dec. o In.Dec. i. h. i. SE. ESE. Sby E. E by i. ESE. SE. In.Dec. In.Dec. o In.Dec. i. h. i. SE. ESE. Sby E. E by i. ESE. SE. In.Dec. In.Dec. o In.Dec. i. h. i. SE. ESE. Sby E. E by i. ESE. SE. In.Dec. In.Dec. o In.Dec. o In.Dec. In.Dec. In.Dec. o In.Dec.	Marine Barouneter Weather and Winds.	Marine Baroineter Weather and Winds, D. L. A. O. T.K. D. D. In. Dec. In. Dec.	Marine Barometer Weather and Winds,	Marine Barometer Weather and Winds.	Marine Barometer R. S. Th. D. in.Dec. in.Dec. n.Dec. in.Dec. in.Dec. in.Dec. in.Dec. in.Dec.	Marine Barometer	Marine Barometer	Marine Barouncter Weather and Winds.	Marine Barometer Weather and Winds.	Marine Barometer Weather and Winds, A. O. T.K. A.	Marine Barometer Weather and Winds, A.O. T.K. N.S. W E A. T.K. T.K. D. S. O.D. A. O. N. A. Amp. Face E. W.	Marine Barometer	Marine Barometer Weather and Winds. D. L. Longitude from Greenwich A. C. T.K. D. J. D. L. Latitude Cor. Co	Marine Barometer Weather and Winds. D. L. A. T.K. D. 3 D. L. A. T.K. D. 3 D. D. Latitude Cor. Long. Az. Amp. Face MD. C. D.	Marine Barometer Weather and Winds.

1						1			1	1					11	11					M	agnet	tical					
									D.L.	D.L.	Longit	ude from	m Gre	enwich					Cor.	Vari	ation	 	1	Dip				
75	Th.	R.	S.	Th.			Weather and W	inds.		T. K.	Λ.	т.к.	D. ¢ T.K.	4	s. o.	E. D.	Lat	O.	Long.	Az.	Amp.	-	w.	MD.	c.d.		ML.	
ay 9	67	In.Dec.	In.Dec 30.14		In.D		f. NNE. f. h. NNE. h. NNE. E by S. h. E by S. V.	}	, ,	13	w 10.34	w 10.42	E 13	w 10.55	3 0	36	N 40.17	N 38.24	W 10.42	w 18.0*	w 17-43	67.6	69.	68.3	68.2	Very fleady.	620 96	Decreasing breezes. Changed log-line 48 feet to 29 4-
10	68		30.0}	672		ł	h. ENE. NE. V. h. V. N by E. h. N. V. h. V. SE by E. ES	E. SE.	4	19	11.7	11.34					39.26	37-33	11.34	20 38*	18.36	67.2	68.4	67.7	67.6	Good deal of motion.	55	Most part light airs. Several small land birds; two of t fopposed nightingales came on bland, very tired; also a hawk.
11						Į,	f. SE by S. C. f. C. ENE. E. f. h. E. NE by E. C. h. V. C.		10	9	11.28	12.4					39- 3	37.0	12. 4	20. 9*	19 57*	66.6	67.6	67.2	67.1	Ship yawing.	29	Light airs of wind Eafterly, with calms. Some is lows and other land birds, who feem very tired. In the a noon, during the calm, when the fhip's head was to Southwestward, there was, for a little time, a counter ou wisible; it made like a wake on the ship's larboard bear if she was going broadside foremost.
12	671		30.3	673		{	h. e. NW by W. WN f. h. v. NW by W. h. NW by W. h. NW by W. C.	w ьу м. w.	16	4	11.52	12.24					38.28	36, 9	12.24			65.6	67.2	66.4	66.3	Ditto, needle very fleady.	41	Light airs of wind throughout. P.M. faw two three- vessels with latine fails; they were supposed to be Ba- creizers, but did not come near enough to let us know they were. Some swallows about the ship.
13	664	30.1	30.03	66	30.1	. {	f. h. Why S. WNW. f. h. WNW. NW by h. NW. NW by N. c. NNE. N.	w. nw.	21	9	12.35	13.16		,;·			37-46	35, 6	13.16	20.17*	20.38*	66.	67.	66.4	66.3	Ditto, needle very un- fready, bad observation.	62	An increasing breeze from the Northward. In the mo- there were many petrils in the ship's wake: they cont throughout the day.
14	65	30.21	30.24	654	30.2	2 1	fq. h. NE by N. h. NNE. N. fq. c. N. c. N. NNE.	}	20	8	15.0	15.33					36.36	33-30	15.33	19.28*	19.16*	64.6	65.6	65.2	65.1	1	138	Fresh breezes, with some squalls. At noon saw Porto S from the mast-head, W by S. per compass.
15	673		30.2	671		II.	h. NNE. f. c. NNE. NE by N. fq. c. NE by N. NE. c. WNW. C. W.		2.5	14	15-59 By acet from Ma- deira in	16.46					35.50	[32-24]	16.46			64.2	65.6	654	64.7	> Very fleady.	84	In Funchal road. Major shars informed us, that shart, in confequence of our request, tried the therm go' in a cool cellar, and found it 68°. N. B. Cap Alcock informed me, he observed the therm. on May 1776, at 6 A.M. at Funchal 68°, and in the cellar and Mr. shart wrote to Mr. cavendiss, that on 16th of May the therm. which stood at 69°, was caldown at 1 P.M. to a cellar, where it remained till 4 o'cl and then was found to be at 62°, so that Major and account was probably erroneous.
16	651	30.11	30.11	651	30.0	- 11 1	c. W. V. NE by E c. NE by E. E by N hE by N.		2	7	[16.50]	16.41		ēń			31.18	31.20	16.41			63.2	64.6	64.	63.7		67	First part, light airs. Middle and latter, pleasant breezes fmooth weather; several boats came off from Fanchas.
17	671		30,13	671		Į	h. NE. h. c. NE by E. c. E by N. E by S. c. E by N. ESE.]	18	2	17.3	16.50					29 57	29.41	16.50			62,2	63.6	63.	62.7]	81	These 24 hours pleasant breeze from Eastward.

	MUNICIPAL PROPERTY.					l l		T	T	1				TT	П			Ī	1	M	lagneti	ical			1		
								D.1	D!	Longi	tude fro	in Gr	enwich					Cor.	Vari	ation.	1	D)ip				T.S. denotes the temperature of the fea-water
75	Th.	R.	arine B	Th.		77	Weather and Winds.	-	D. T.K	- A.	TK.	D. D T.K	D	s.c.	E D.	A.	O.	Long.	Az.	Amp.	-	w.	MD.	C.D.		ML.	thermometer immerfed in this bucket for for minutes.
ay	-	In.Dec.	In.Dec	_	In.Dec.	(h.	ENE.		1	° v	° w	w	w	\dagger	,	°n′	o /	°,	w w	, °	-	0	0	9		1273	
18	69	30.2	30.13	681	30.2	h. h.	ENE. E. E. ENE. E. ENE.	1 1	5 10	179	16.46		0.045.0		ŀ	29. 4	28.33	16.46	11	100	61.2	62.6	62.	61.6	1	53	Light breezes and fmooth water At noon, Peak of Ten
19	68	30.2½	30.24	672	30.2	ба. В. С. С. С. С. С. С. С. С. С. С. С. С. С.	E by N. NE by N. N by W. C. N by W. NNE. NNE.	6	1	17.17	16.55					27.53	27.16	16.55	16.53* *16.39	17. 6	60.2	61.2	60.6	60.4		74	longitude of Peak of Tenerif, only 4' lefs than Per reulline makes it; but, by the observations of the Mood on the aiff and following days, it appears, the ship was I farther West than the time-keeper represented, which did
20	68	30.14	30.11	68	30.11	6 6 6	NNE. NE. NE. N by E. NE by N. N by E. N by E. NNE. NNE.	24	4 3	17.42	17.17					26.46	25.45	17.20	16.37* 15.42*	16.17	59-2	60.2	59.6	59-4	Very fleady.	70	ference arose fince the 9th of May, if the Lunar observe tions were to be relied on. Light breezes and smooth water throughout. Several petril in the wake.
2.1	681	30.14	30.1	68	30.1	€ c. f. f. c.	NE by N. N by E. N by E. N by W. N by W. N by E. N by E. NNE.	,	4	18.18	17.57	57	18.54	40	29	25. 5	24• 3	18. 3		15 36	58.2	59.2	58.6	58.4		106	Pleafant trade. In Captain EXEMERO's chart there being foundings laid down not far to the Eastward of our fituation founded at 8 P.M. but had no ground 40 fath. Several parills in the wake of thip.
22	70	30.11	30.11	701	30.11	f. c. c. c.	N. NNE. NNE. NNE. NE by N. NE. NE. NE by N.	18	B	18.49	18.28	66	19.34	3 0	28	23-43	22.25	18-37	15.13*	*15- 2	56.4	5744	57-	56.6		87	Light breezes with smooth water throughout. Many petril N.B. There was apparently an error in this day's long, time-keeper. The succeeding days diff, long, was as mules as this day's was more than account. I have here corrected it as conformable to the Lunar observations. T.S. 6.
23	68	30,2	30.13	68	30.2	{ t.	NE by N. NE by N. NE by N. NE. NE. NE by N.	14	1	19.28	19.6	41 65	19 47 20.11	4 0 3 0	47 71	21.54	[20.36]	19.18	14 35* *13. 9	*13. 7	54-	55.2	54-5	54-3	}	115	In the evening, the water appeared of a muddy green, if foundings; but did not found. An increasing trade with five weather, the water continuing of fame colour. T.S. 69°
24	681	30.1	30.01	681	30.01	f.c.h.	NE by N. NE by N. NE by N.		8	19.21	197	79	20,26	3 0	37	19.21	17.49	19-22	13.56*	13.55	51.	52.4	51.6	51.3	Much motion.	153	These 24 hours a fresh trade, and usually fair weather, the water remaining the same as before. T.S. 68°2.
25	713	30.0	29.91	72	29.91	} } } } }	N by E. N by E. N by E. NNE.	1	4	18-33	18.23					17. 1	15.28	18.41	13.18*	12.32*	48.6	49-4	49+1	48.6	1	150	Fresh trade and hazy weather. In the asternoon the forermarkably confused, becaking different ways. Sounded the morning, but had no ground 40 fath. In the snormin the water appeared blue again. T.S. 71°.
26	761	30.0}	30.0	761	30 0	h. h. h. h. c.	NE by N. V. WNW. NW. NW. V. NNE. NNE. E by S. ESE.	}	3 2	18.37	18.25					16. 3	14.22	18.46			46.4	48.	47.2	46.7	Very heady.	59	Light breezes chiefly. In the night, no ground 70 fath. There were many blobbers in the thip's wake, which made a very luminous appearance: they feemed in fluspe like a faulage about 8 or 9 inches long. In the day, fea was covered with Portugueze men of war, of which took up feverall, also force pilot-fish and fkip-jacks. T.S. 74°.

11			_	-		1		1	1	1	1			T	TT			1		M	agnet	ical					
								D.L	D. 1	Long	gitude f	rom G	reenwi	ch				Cor.	Vari	ation	1	D	ip				
775	Th.	R.	arine Ba	Th.	er D.		Weather and Winds.	A.C	T.I	- A.	т.	c. D. 6	g a	s	O.D		itude	Long.	Az.	Amp.	_	w.	MD.	C.D.		ML.	
//3 //ay 27	761	In.Dec	In,Dec 30.0	-	In.De	h.c.	SE by E. V. E by N. E by N. V. V. NNW. NE.	7		w 18.1	0.00			0.00		N 15-32	o , N 13.48	w 18.26	w′	w	0	0	6 46,2	45.7		2140	Light airs of wind, variable, with very damp weather, the night, no ground 40 fath. Many fish about the fome under the quarter, darting through the water, making streaks of light in various directions, had a appearance. T.S. 750.
28	781	30.0	30.0	781	30.0	{ f. f. f. h. h.	NNE. N. N. NW by N. NW by N. NW by N. NW by N. JWNW.	1		3 17.2	6 17.	7				14.28	12.45	17-34		13. 0*	44 4	45.	44.6	14-3	Very fleasly.	82	Light becezes throughout. In the night, lightning to Kashward. Many luminous blubbers and fish about the in the night. Passed several turtle. Had ground at 11 to 32 fath, coarse fand, with black specks and shells, noon, 30 fath, coarse fand and shat coral. T.S. 75%.
29	80	30.1	30.14	80	30.1	h. h. h.	W. C. SW. SW by W. SW by W. C. S. V. SW. SW by W. ESE. ENE.		2	8 17.1	6 16.	49				13.57	12.12	17.19	12.37*	12.44*	436	44-	43-7	+3 4		37	First and latter, light breezes. Middle, colm. Great fish about the ship, and in the morning wast slocks of a Soundings, fand of various kinds from 28 to 17½ fat 8 A.M.; at 9 A.M. 21 fath, blue mud; and at 11 A.M. ground 35 fath. T.S. 77°.
30	771	30.0}	30.03	77	30.0	h. h. h.	ENE. NE. V. W by S. SW by W. C. C. W. C. NW by N. NNW. N by W.	2		3 17.	9 16.	39				13.26	11-43	17.12		12.36*	42.6	43-4	43.1	\$2.6	Very fleady.	32	Light airs and calm. At 5 P.M. 56 fath, green much midnight, 45 fath, blue mud. In the night, the wate luminous when put in motion, and many thouls of fifting like breakers. A.M. a turtle palfed; vaft flocks birds. At noon, the fea covered with Portuguefe men of like the ground with leaves in Oct. 23 f. blue mud. T.S.
31	80.	30.0 <u>1</u>	30.0	80	30,0	f. f. fq. hr. fq. hr. c. h. h. f.	NE.	1	10	17.	4 16.	44				12.22	10.40	17.20	12.24*	12.42*	41.6	42.4	42.1	11.5		69	Most part pleasant land and sea breezes. At mides hard squall from the land: it was preceded by great slightning over the land, and long threatning before the came off. It rose in a dark black cloud, with a white like a bow under it, and below this very dark. It exvery hard, and raised the spray of the sea in a soam. Soundings, 25 to 21 fath. fand. A.M. No ground of seath. T.S. 80°.
une 1	821	30.1	30.1	821	30.1	1. c. n.	NNE. N. NNW. SW by W. W. V. C.	10		16.	1 16.	11				11.40	10. 8	16.50	13. 7*	12.46*	41.	42.	41.4	ı.	Very uniteady.	53	Major part, Eight breezes. P.M. No ground 40 to 80 fa
2	821	30.0}	30.01	821	30.0	t h. c. fq. h. h. h.	NW. SE by E. SE. SE. W. W. C. W. W. C. WNW. W by N W by N.	17		16.:	15.	45	1	-		11.14	9 59	16.26	12.35*	12.31*	40.4	41.2	40 7	to.3	Not very good observation.	39	First and latter parts, pleasant breezes from Westward, middle, calm, with hot fultry weather. At midnight fath, coarse black fand, with bits of coral. At noc fath, coarse brown sand. T. S. 81°.
3	823	30.0]	30.0	812	30.0	c. L. to E.	NW. r. c. NW. NW by N. E. V. V. Sby W. V. E by S. ESE.		8	6 16.	6 15.	20 35	15	55 3	3 0 3	10.38	9.15	16.09	12.48*	12.55*	38.6	39.6	39-2	38.6	Very fleady.	45	Major part, light airs. Many thanks about the thip; a dozen in tight at once; caught one. P.M. Soundin to 35 fath. At noon, no ground 88 fath. T.S. 80°4
4	814	30.0	30.0	8o <u>ł</u>	30.0	E S. L. all rou fq.	E by S. E. ESE. SE. SSE. SE by S. SSE. S by E. ad, fq. SSE. S by E. S by W. SSW. C. C. NNW.	10		16.	2 15.	6				10.23	9.10	15.58			38.4	39.2	38.7	8 3		34 2577	The first part, light breezes of wind from the South The latter, mostly calm, with hot weather. In the eve the clouds very remarkable; fome aspecting like dirty and apparently very mear all round the horizon; it above, in many places, a fine pink, and blueish grey be it. In the morning, many grampules about the ship noon, ground 60 fath. T.S. 83°4.

1	1		-	-			1	1	1					1		1		M	lagnet	ical					
	1						D.T	D.L.	Longi	ude from	m Gre	enwich				Cor.	Varia	tion	1_	D	ip				
	Гh.	-	arine B			Weather and Winds.	A.O	T.K	Α.	TK.	D.) T.K.	D	S. C. D		1.O.	Long.	Az.	Amp			MD.	c.d.		ML.	
5	_	R.		Th.			- -		-		-	-		-	-	-	-	-		-	-	_		0.535	
5		30.0}			30.0	h.c. C. W by S. c. L. all r ⁴ . r. W by S. WSW. V. NNW. r. h fq. and hr. fq. r. NNW. SE by E. E by S. V. h. V. S by E. SSE.	.}	20	W 15-43	W 14-28	E	·w		.N. 9-43	N. 8.40	W .	w	w	38.2	38.4	38.3	37-7		2577 48	Moffly light breezes. Paft 2 P.M. 2 hard fquall, with deal of thunder, lightning, and rain. P.M. 2 host or board from the Polly, a whaling veffel, from Bofton in England: the veffel was hull down when they came a A.M. fpoke with the Mary, Captain jones, from pool to Sierra Leon. P.M. 40 to 36 fath. course fand. no ground 55 fath. T.S. 83°E.
6	83	30.03	30.0	83	30.0	f. C. V. f. L. to Eaftw. SW by W. h fq. r. L. all rd. r. c. E by S. SE. E. E by N. c. f. E by N. C. SSE. S by E. h. SE by S. S by E. C.	}	8	15.41	14-34				9.12	8,20	15.53	•13.33		36.6	37.2	37•	36.4	Very fleady,	38	Mostly light airs and calms. At midnight, a violent g wind came off: its violence did not continue above note or two; but brought supch rain, and was attended thunder and lightning. A.M. no ground 88 fath. \$20.
7	821	30.11	30.1	824	30.1	h.c. V. SSE. SE by S.	} 11	19	15.41	14-53				8.56	8.15	16.16	10	12.28	36.6	37.6	37-2	36.6		31	Light airs chiefly: a long fwell from the SW. T.S. 820
8	83	30.14	30.1	83	30.1	fq. c. fq. SW. SW by W. SW. c. C. c. f. C.	} 23	1	15.22	14.22				8.33	8,15	15.49			36.6	37.6	37.2	36.6	Very un- fleady, great fwell, and no fail.		First, light airs. Middle, fresh breezes and squally, calm. At midnight, carried away the main and so mast by the badness of the rigging. Had, for some a pretty fresh SW wind; but not enough to have enda the top-masts had the rigging been good. At some top-mast up. T.S. 83°.
9	84	30.0 <u>1</u>	30.0	84	30.0	Ce. W by S.	}	3 3	15.18	14.14				8.29	8. 8	15.46			36.4	37.6	37.1	36.5	Pretty fleady.	6	Mostly calm, with fwell from Southward. At 9 A. up main-top-mast. T.S. 820.
0	814	30.01	30.0	80 <u>1</u>	30.0	fq. r. c. W. NNE. fq. r. c. NNE. V. C. c. L. to E ⁴ . hr. C. V. C. ENE. r. c. ENE. V. SW by W.	} 3	19	15.0	14.15	53	15.8	5 *8 4	8. 1	7-43	15.51			35.6	36.6	36.2	35.6	Very fleady.	35	SFirst, fair. Middle, squally, with hard rain. Latter, ble, with calms. T.S. 8104.
1	773	30.0₹	30.0	76 <u>1</u>	300	hr. r. WSW. V.	20	2	14.19					7. 9	[7,14]	[14.53]			34.6	35 6	36.2	35.6	{ remarkably fixady.	64	Cloudy and rainy, with a gentle breeze: great firel Southw. T.S. 81°.
2	82	30.03	30.0]	82	30.0				14-4	12.55	58	13.53	3 48 39	6.53	7- 5	14-39			35.2	35-4	35-3		Very fleady.	22	Calm and cloudy: great long fwell from Southward. very large thank was flruck with the harpon; but it the harpon, and got off. Many fifth and birds. T.S.
3	811	30.0}	30.0	814	30.0	c. L. to weftw. NW. c. L. to weftw. NW. c. NW. NW by N. c. th. L. to SW. V. NNE.	}	2	13.50	12.39	115	14-34	3 *\$ 15	6.25	6,37	14-27	13.18*		32.4 32.6	33.4	32.6	32.1	Tightened the	31 2882	Light airs and cloudy through. Many fift and birds. no ground 70 fath. A.M. hooked a fhark. T.S. 81°

H				500.700 000		1		-	1		X11851474.00	al vumma		111			1		Ma	gnetic	al		1	
1		9				1		Ď.	L. A		itude fro	m Gre	enwich				Cor.	Vari	ation		Dip		1	(9)
75	Th.	R.	arine B	Th.			Weather and Winds.	1-	S WIL	Α.	Т.к.	D. c.	. «	E. S. O. D.	A.	itude O.	Long.	Az.	Amp.	Face E.	_ M	D.C.D.	ML.	
ine		In.Dec. 30.04			In.De	C.		} '5	4	w 13.20	w 12.14	E 120	W 14.14	3 *An.	N 6. 5	N 6.32	° ' W 14. 6	w'	w 13.28*	32.6 3			2882	In the night, many fish. A.M. flruck an albicore; from the back fin to the tail nine little yellow fins, and more fuch from the belly fin to the tail. Befides the it the back, it has apother fin, composed of a thin member with their prickly ribs; this fin it can flrike, have groove to receive it, forthat there remains no projection of pearance of it. Light airs. No ground 65 to 70 fath. T.S.
15	83	30.01	30.0	823	30,0	C. T. to s.e.	S by W. S. SSW. SSW. SSW. SW. V. V. SW by W. SSW. SW.	}	1	12.39	11.26	-			5.32	6.14	13.18		13.32*	32. 32	4 32	2 31.5	54	Light breezes, with a fwell from the Southward. T.S. 82
16	82	30.01	30.01	82	30,0		SW. V. S by W. S by W. V. C. SW. SW by S. SW by S. C. V. C. V.	} 5	1	12.27					5.18	6. 5	[12.59]		3	1.6 32	. 31.	7 31.2	19	S PM. many fifth; but fwimming very deep. A.M. eaught thanks. Most part light airs and calm with rain. T.S.
17	791	30.01	30.0}	78 <u>‡</u>	30.0	[fq. r.	V. 5 by W. V. 55W. SSW. 5. SW. SW by W. WSW. SW by W.	}	2.	11.58	10.21				4-55	5-49	12.13		3	0. 30	6 30.	3 29.6	43	First part, squally, with rain and wind Southerly. The ter, light aim S.W. cloudy and rain. A.M. appearar land to Eastward under the clouds, but very obscure, thick and hazy weather. T.S. 81°.
8	80 <u>1</u>	30.0}	30.0}	801	30,0	€. fq. c. c. c.	SW by W. SW. C. W by N. W by N. W by S. V. C. C. NE. NE. ENE.	}	7 5	11.44	10, 2				4-36	5.23	11.54		2	9.2 30	29.	28.7	24	S Pleasant weather. A.M. some dolphins. Light airs of variable with calms. T.S. 81° §.
9	804	30.01	30.0}	80	30.0	h. L. to nd. c. c. c. fr. c.	NNE. C. V. V. WSW. WSW. W by S. V. V. C. 5W by S.	} 5	,	11.29	9.46				4.15	5- 7	11.38	13.30*	13.50* 2	8.6 29	6 29.	2 28.4	26	Light airs, with lightning and fome thunder in the night the assemble, it looked very black, but was not attended any figuall. T.S. 81°.
0	82	30.01	30,0	81	30.01	c.L. Sp. s. c. c. s.	SW by S. SSW. SW by S. SW by S. SSW. SW by S. SW. SSW. SSW. V. S by W. 8 by E. C. SE by S. V.	} 16	5	10.52	9- 4				3-49	4-57	10.56	14.23° *14.43	14.41* 2	8 6 29	6 29.	28.4	46	Mostly light breezes and cloudy, with rain. I aferth error of this day's log partly to the course having man allowance for lee-way. T.S. 82°. First and middle parts, light breezes, with some squalls, heavy rain. The latter, calm, with cloudy weather and
	79	30.01	30.01	79	30.0	c. L. from n. r. hr. hr. c. r.	S by E. S. SSW. to 1.c. fq. r. SSW. SW by S. SSE. S. S. S by E. C.	}	3	10.31	8.46				3 45	[4-54]	10.38	14.40*	2	8.4 29	4 29.	28.2	44	leagues. Sounded 46 fash, mud; but there was the marrock on the arming of the lead. At to A.M. the extreme of the land from N by E.E. to E diffance about 7 lea. The N extreme I (upper in Prome Reiner near Solver)
22	803	30.01	30.01	80 <u>1</u>	30.01	hr. hr. fq. hr. fq. r. ;	C. SSW. V. C. C. ESE. V. V. SSE. V.	}	13	10.50	8.52				3.19	4-39	10.44		2	7.6 28	4 28.	27.3	35	and the Southern extreme forposed about Bera: There a hill, visible inland, to the left, which was forposed that of Baffa. T.S. 81°. At Son-fet, the extremes NIE to EIS (per comdiffance off thore about 6 leagues. 43 fanh. blue Variable winds, with very much hard rain. T.S. 81°.

-	1	1	- ARILL	-		1			1						Π	H					M	agnetic	cal				1	1
								D.		D.L.	Longit	ude from	m Gre	enwich				1	Cor.	Vari	ation.	I	D)ip				
	Th.	M	arine B				Weather and Winds.	A.	0.7	Γ.K.	Α.	тк.	D.D T.K.	D		E.		tude	Long.	Az.	Amp.	Fa	-	MD.	C.D.		мL	
775		R.	S.	Th.					SV	WE					s. o	P.	Α.	0.	-			E.	w.	_	_		_	
une 23	n 1	In.Dec.	29.93	1	In.Dec	f. c. c. fq. r. c.	35E. S. S by W. S by W. S. S by E. S by E. SSE.	} ,	1	1	w 11.13	w 9-16	1	°w′		ľ	°N′ 3. °	N 4-32	W 11 6	°w′	w	28.	28.4	28.2	27-4	3	3210	Moderate breezes. T.S. 8:9.
24	80 <u>1</u>	30.0	29.93	80	29.9		S. S by W. S. S. S by W. SSW. S by W. S by W.	} 3	1	3	11-42	9-48					2.53	4.28	11.37			28.4	29-4	29.	28-2	Very un- ficady.	73	Most part a fresh gale from Southward, with squalls and rail
25	773	30.0}	30.0}	76	30.0	6. fq. r. 6. 6. 6. r.	5 by W. S. S. S by W. SSW. SSW. SSW. SSW. SSW. V. 'C. W by S.	}		52	11.16						2.35	[4.21]	[1141]			27.4	27.6	27.5	26:7	Pretty fleady.	58	Most part fresh breezes. At 8 P.M. Richard Jones, the furgeon's lad, fell-over-board. Hove the ship to, and fell-jolly boat and yawl in search of him; but they could ne find him. No observation for latitude or time, not having one glimpse of the Sun all the forenoon. P.M. no group to fath. T.S. 80°4.
26	80	30.01	30.0]	80]	30.0	fq. r. r. r. c.	V. SSW. SW by S. SW by S. S by W. SSW. S by W.	}			10. 2	7-40					2-23	4.16	926			26.4	27-4	27.	26.2	li a	l	A fresh breeze with much rain. P.M. no ground 70 fath. T.5.80°
27	8o1	30.0½	30.0]	801	30.0	C. 59.	SSW. SW by S. SSW. SSW. S by W. S by W. S. S. S by W. S.	}	24	44	10, 6	7. 0					2-13	3-42	-845			25-4	6.	25.6	25.		73	Mostly fresh breezes. At a P.M. from mass-head lass making like islands, was from bearing E by N=ENEAS fopposed Cape Palmas. P.M. no ground 70 tath. At 3 P.M. spoke with a French shap from theory to the coast of Ages T.S. 80%.
28	8oł	30.01	30.01	801	30.0		S. S by E. S by E. S. S. S by E.	}	13	2	14110	8. 2					1.34	2.50	945	14.42* *14.11		24-4	5.2	24-7	24.		76	Fresh breeze throughout, and a large Southerly five
29	79₹	30.1	30.1	79	30.1	6. 6. 6. 6.	S. S by E. S. S by E. S by E. S. S by E.	}	203	99	12.18	9.48					1. 0	1.56	11.29	14.37 ° *13.44	14.25*	23.6 2	4-4	24.1	23.2	Very unfleady.	79	Fresh breeze throughout. P.M. cloudy. A.M. fair. T.S. 79°
30	781	30.2	30.1	784	30.1	{ 6.6 6.6 6.1	S by E. S by E. S by E. S by E. S.	} 1	7	7	13.21	12.8					0.14	1.11	13.48	13. 6* *12. 7		23.6	4-4	24.1	23.2	Pretty fleady.	78	Fresh breezes with fair weather. P.M. many porpolife. Some bottle notes, and vast flocks of slying fish. A.M. man of war bird. T.S. 76°2.
uly 1	771	30.11	30.1}	763	3031	{ · ·	S. S. S by E. S. S. S by E. S.	}	7	6	12.35	12.38					0,16	1.34	14.17	13.17*		24.6	4-4	24-5	23.6		66	Major part moderate and cloudy. T.S. 78%.
2	78፤	30.11	30.1	78	30.1	6. f. h. c. c.	S by E. S. S by E. S by E. SSE. S by E.) 14	6	52	13.33	14-38					S 0.22	1.10	16.16	12.41	12.47*	24.6 2	5.4	25.1	24.2	C creates miles	70 3895	Pleasant breeze, with fair weather and smooth water. T.S. 760

ĺ						l			D	.L.	D.L.	Longit	ude fro	m Gr	eenwie	h				Cor.	Vari	ation	1	Nort	h Dip				
75	Th.	R.	S.	Th.				Weather and Winds.	11-	.O.	r. K. Vje	A.	т.к.	D. ¢		S.	E. O. D.	A.	itude .	Long.	Az.	Amp.	_	iw.	MD.	Ċ.D		ML.	
ily	°	In.Dec. 30.04	In.Dec. 30.0}		In.Do	16	h. h. h. sq. c.	S. Sby E. S. S by E. SSE. S by E. S. S by E. S by E. SSE. S by E. SSE.	.}	3 3	35	w 14.56.	w 16.36	É	w			S 2. 6	N 0.17	W 18.13	w 11.37*	w'	24-2	24.6	°	23.5		3895 97	Fresh breeze throughout. T.S. 76°.
4	77₹	30.1	30.04	77	30.0	Į {	h. h. h.f.c. c.f.	SSE. SE by S. SE. SE by S. SE by S. SE. SE by S. SE.	}	143	30	15.44	17.55					2.13	S 1. 8	19.29	10.31* *9. 0	*8.40	22.2	22.6	22.4	21.5	Very floady.	86	Pleasant trade wind, with a Southerly Swell. T.S. 7604.
5	781	30.14	30.14	78₹	30.1	15 8	h. h. f. f. c. f. f.	SE. SE by E. ESE. ESE. ESE, SE by E. SE by S. SE.	} 2	,	5	16. 4	18.30	93	20.	3 4	26	3.28	2.21	20. 3	8.59* *8.32	8.59*	19.6	20.6	20.2	19.3	Extremely fleady.	80	Night, fea luminous supposed blobber. Major part, please breezes, with a swell from SE. T.S. 76%.
6	791	30.1	30.03	79‡	30.0	2 1	f. f. c. c. fq. r. c. c. fq. r.	SE by E. SE. SE by E. SE. SE. SE by E. SE by S. SE by S.	}	1	9	16.49	19.44					4.56	3-37	21.20	8.37*	8.54*	19.1	20.2	19.6	18.7	Great (well.	99	A.M. great fwell. In the forenoon, hard rain, fmall drops, very close. First part, fresh trade; latter, squally and so rain. F.S. 77°4.
7	80	30.0	30.03	80	30.0	1	c. c. f. f. e. c. fq,	SE. SE by S. SE. SE. SE by E. SE. SE by E. SE by E.	}	14	8	17.39	20.42					6.22	5-17	22.20	7.52*	7-49*	15.4	16.2	15:7	15.	Very great fwell.		Great fwell. The barometers very unificady. Fresh gales a cloudy. T.S. 7804.
8	791	30.0}	30.0₹	79\$	30.0	1		SE by E. SE. SE. SE. SE. SE by E.	}	14	5	18.42	\$1,40					8. ı	7.10	23.20	*6-26	*6.33	11,	12.6	11.7	11.	Pretty fleady, though great fwell; touch- ed the ferews, and found the fame.	2-18	Ditto. Ditto Strong gales and fqually. T.S. 780.
9	79₹	30.15	30.14	791	30.1	x]	f. fq. fq. f. fq. c. c.	ESE. SE by E. SE. SE. SE. SE by E. SE by E. SE.	}	3	14	19.45	22.29					9.45	8.57	24-11			7.2	8.4	7.7	7.	Pretty fleady.	121	Ditto. Fresh gales throughout. T S. 78%.
10	771	30.15	30.12	775	30,1	1	f. fq. c. fq. fq.	SE. SE by E. SE by E. SE. SE by E. SE by E. ESE. SE.	}	5	21	20.37	23. 0					11.33	10.50	24-44	5-44*	5.32*	3.6	5.0	4-3	3-4	Dino, but grout finell.	120	Dicto. Saw a pettril. Fresh galos from SE, with a targe feet T.S. 77?.
11	77	30.24	30.2	761	30.2	1	h. Sq. p. c. c. Sq. Sq. c. c. S.	SE. SE by E. SE. SE by E. SE. SE. SE by E. SE by P. SE.	}		8	23.42	23-57					13. 7	12.24	25-43	*4. 0		2.2	2.4	2-3,	1,4	Not fleady.	114	Major part frosh gales and squally, with a great confuse fwell. P.M. a weather gall. A.M. Swell much abate Towards noon, moderate and fair. T.S. 75°.
12	761	30.3	30.23	761	30.2	11	h. h. f. f. c. c. fq.	SE. SE by E. SE by E. SE. SE by E.	}	1	4	22.29	24.40		je.			14-48	14. 6	26.28	4.15*	4.20*	1.4		ith D 1.3		Pretty fleady.	111	Pleafant trade wind. Swell very much shated. A.M. faw bird, supposed to be a successator. Mr. nonzava faw

	1					1					1								1		1		N	lagnet	ical				1	
ł	1					1					- 1	D.L	D.L.	Longi	ude fre	m Gre	enwich		1		Cor.	Vari	ation	1_	Di	P				
12	ГЬ.	M	arine B	arome	ter,		1. 8	Weather	and Wi	nds.			T.K.	Δ.	TK.	D. 1	D		La	titude	Long.	Az.	Amp.	Fa		MD.	C.D.		ML.	
75	1	R.	S.	Th.	D.							NIS	WE			T.K.		S. O.	A.	0.			0.0	E.	w					
	-	In.Dec.	In.Dec		In.De	c							1.		. ,		. ,		1. ,	0, 1	. ,	. ,	. ,	۰	0				4942	(First part, fresh gales and squally. Latter, moderate
ly	76	30.23	30.21	76	30.2	. II 1	h. fq. r. fq. r. c.	SE by E. E by S. S SE. SE b	E.		}	2	6	W 23.30	W 25.47	E	w		S. 16.1	S.	W 27.37	W *2.43	W *2.42	3-4	3.4	3-4	34		111	fair. A.M. Fog Bank exactly like an island, the or perfectly well defined, except the extremities: I new foce faw any cloud to like land. T.S. 74°. Changed the poles of the dipping-needle. Mean of the rious trials changed and re-changed 3½ S. viz.
								SE by S.	S by E.		_																			Changed the poles, marked end down, 4-4 4- Re-changed, ditto up, 2-6 3- Ditto, ditto down, 4-4 4-6
14	76	30.31	30.3	76	30.2	1 6	1. Sq. Sq. L 2. Sq. e. 2. t.	SE by S. SE by E. SE by S. SE. SE b	SE by S. SE.		}	3	9	24.27	26.53				17.40	16.59	28.45	1.48* *1.45	1.36* *1.49	5.2	5-4	5.3	6.2	11 2000 2	104	Mean 2.4 2.4 Mean 3.4 3.4 Coeffant trade wind. T.S. 74°.
15	761	30.21	30.21	761	30.2	{	f. c. fq. i. r. c. fq. r. fq. r. c.	SE. SE by SE by E. SE. SE by E.	y S. SE.		_}		1	25.20	27.45				18.58	18.11	29-39	*1.21		7.4	8.	7.6	8.5	Not very fleady,	88	First part, moderates Middle, hard squalls and rain. T.S. 7
6	741	30-31	30.3	741	30.2	100		SE. SE by SE by E. E by S. S. SE. ESE.	ESE. E by E. I	E by S. SE1	by E. }	1	1	25.42	28. 8				19.47	19. 1	30. 4	0.42*		9-2	9.6	9-4	10.3	Pretty fleady.	54	A.M faw a bird like a booby, but shorter winged and no called by failors, poor John. Light becezes, swell abated. T.S. 74°.
7 7	3	30.4	30.31	73	30 3	119	. fr. fq. q. fr. q. fr. c. fq.	SE by E. SE by E. SE by E. SE by E. SE by E.	V. SSE. V. SE. V. S. ESE.	v. ese	- }	2	5	26. 2	28.33	105	30.18	3 1. 31	20.47	19.59	30 31			11.	11-2 1	11.1	12.		69	F.M. to the NE. the clouds very remarkable, being in velocity of the variation chart. At 7 A.M. faw midsda from maft-head SSE. At 9 vifible from deck. noon, Trinidada S 36° E 11 leagues. Major part, most breezes and cloudy weather; winds variable and in water. By the bearings of Trinidada at noon, allowing to lye in 20° 17' S according to Dr. nalley. Its longitude per T. K. Mean diff. T.K. and B S obf. 28.13 W 28.13 W 28.13 W 28.13 W 28.13 W 28.13 W 28.13 W 29.10 And 1.8 Long. S obf. 30.11 Schf. 29.10 Diff. Diff. Diff. T.S. 74°.
8 7	5₹	30.4	30.31	751	30.3	(c.	c.	SE by E. SE by E. SE. E by S	SE.	E by S.	_}	8	4	26.29	29. 4	138	31.22 31. 4	3 0 23	22. 9	21.29	31.15	E 0.20*	E 0.13*	13.	3.	3.	3-7	Very unfleady.	87	At Sun-fet, Trinidada E by S { S 8 or 9 leagues. T.S 764
7	31	30.4	30.3	731	30.3	G.	. քզ. քգ. ռ ք. քգ. ռ.՝	ENE. V. ESE. V. C. NE C. N. V.	s. v. N.		}			26.12	28.47	145	31.12	3 0 15	22.48	22. 8	30 59		0.44*	14.4	4.4	4-4	5.3	Protty fleady.	47 3	Modly light breezes and cloudy. T.S. 74°.

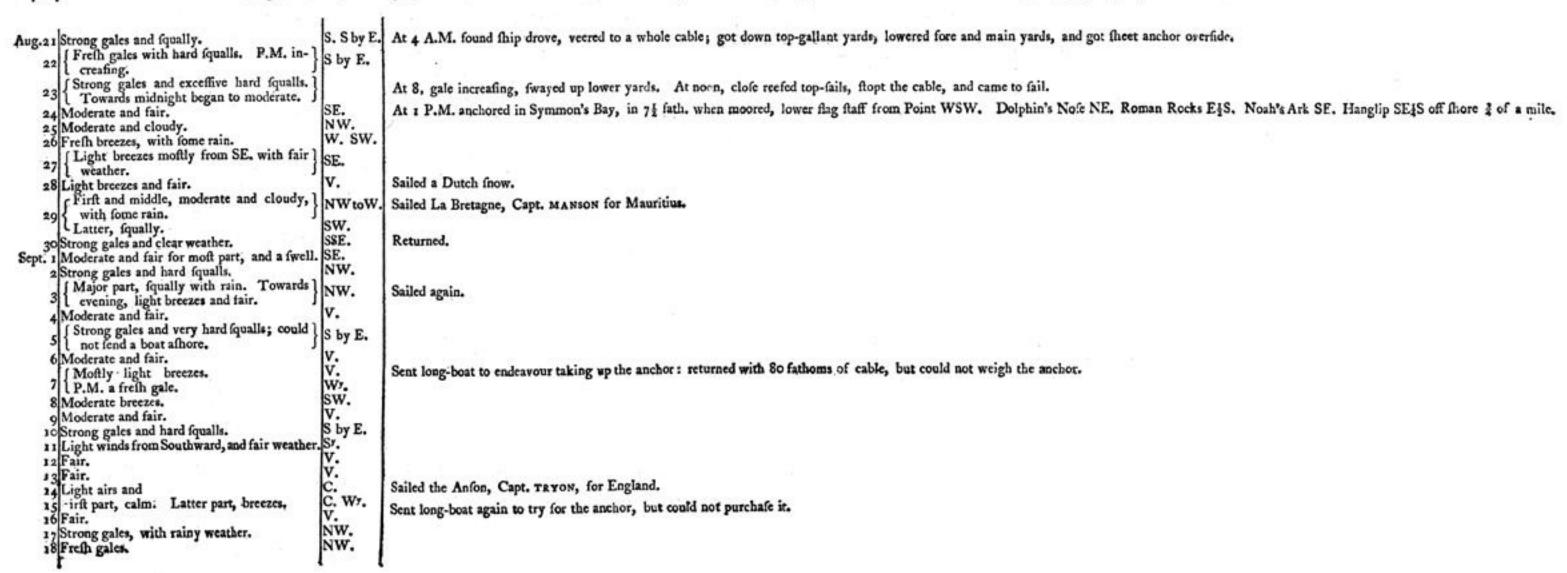
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75	Th.	R.	arine E	Th.		,	Weather and Winds.	A.	0.	r.K.	Α.	T.K.	D. ¢	¢	s. o. D		ititude 1 O.	Long.	Az.	Amp.	Fa E.	_	MD.	c.d.		мL	
y	۰	In.Dec.	In,Do	c	In.De	c.	c.	7	7	1	» , , W	° '	É	° ′		۰,	. ,	ů,	° ,	° ,		۰		0		5502	2
	75	30.4	30.3	743	30.3		C. NE. c. G. C. V. E. ENE.		3	5	26. 8	28.48		100000000000000000000000000000000000000	3 0 1	22.57	22,20	III CONTRACTOR	-	*0.44	14-6	15.	14-7	15.6	Not very fleady.	10	Moffly calm throughout, with smooth water. T.S. 7405
1.1	73	30.4	30.3	73	30.3		C. ENE. c. ENE. E by N. h. E by N. ENE. c. ENE. NE.	_}	4		25-35	28.15	115	30.10 30.23	3 @ 20	24. 7	23 34	30.27	*0.42	0.55* *1. 5	17.4	18.	17.6	18.5	Estremely unificady, the flip having an irregular motion, the fmooth water.		Major part light breezes, with smooth water. T.S. 720.
2	741	30.5	30 4	74	30.4	1 6	V. ENE.	_}	2	8	24-49	27.21	₹74 94	30.15 28.55	5 © 22 3 © 18	25.10	24-39	29-33	0.11* W *0.15	W		20.4	20.	20.7	Very fleady.	76	Picafant breeze and fenouch water. T.S. 72°.
3	74	30.6	30.5	74	30.5	{ 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	E. E by S. E. E by N. E. E by S. V. SE by E. SE by E. SE.	_}	7 8		24-55	27.35	147 135 140	30, 2 29.50 29.55	3 © 24 3 © 16 3 © 20	26.12	25.48	29.47	E o. 6*	E 0.11 ⁶	21.	21.6	21.3	22.2	Extremely theady, though long fwell.	65	Pleafant breezes; a long fwell. T.S. 70%.
4	714	30.6	30.5	711	30.5	{ 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	c. ESE. SE by E. ESE. ESE. SE by E.	_}	1.	4	25.20	28.12				27.44	27.18	30.24	1. 0* *1.13	1.10*	23 4	24-	23.6	24-5		96	SPleafant breeze. At 10 A.M. faw a fail bearing S T.S. 69°.
5	721	30.6	30.5	73	30.5	{ c c c c c c c c c c c c c c c c c c c	SE by E. h. ESE. SE by E. V. SE.	_}	2	3	25.49	28.38				28.54	28.30	30.50	2.12* *1.52	2.16* *1.27	26.	27.	26.4	27-3)	76	Light breezes throughout. Paffed by the fail at midni- was a finall two-mail veffel. At 6 A.M. faw the a-stern. T.S. 69° 1.
6	71	30.6	30.5	71}	30.5		E by S. SE by E. Sh. fq. with fr. V. SE by E. V. p. with fr. b. SE by E. V. f. SE. SE by E. V.	}	4 6	1	25.23	29.18				29.55	29.35	31.29		1.52*	27.2	28.	27.5	8.4		69	Winds mostly variable. T.5. 6703.
7	704	30.6	30.5	70±	30.5	1	SE. SE by E. ESE. V. V. ESR. E. E by S.	_}	6	4	26.36	29.27				30.36	30.22	31-37	•3. 0	*3.14	27.6	8.6	8.2	19.1	> Very fleady.	43	Light sim. T.S. 630.
	68	30.51	30.43	683	30.4	100	f. WNW, W by S.	}	6 9		26.18	29. 0				30.45	30 37	31. 8	2.45*	2.16*	27.6	8.6	8.2	9.1		18	Ma2)y calm. T.5. 66%
9	661	30.41	30 3	662	30.3	11 1	Why S. V. V. HW. NW. V.	}	6 3		25.21	27.50				31. 5	31-33	30. 2	02.10		9.	0, 2	9 4 3	0.3	'ery unfleady.	53	Major part l'gha brocars. T.S. 67' [.

1	1					1				1						11	1					N	lagne	tical		_			
I						1			D.I			Longit	ude from	n Gre	enwich					Cor.	Varia	ation.	1_	South	Dip				
1	Th.		rine Ba		-	4	Weather	and Winds.	A.C). T	.к.	Α.	TK.	D.D.	,		E		tude	Long.	Az.	Amp.	-	Face	MD	C.D.		мL.	
Į.	_	R.	S.	Th.	_	-1			N S	5 W	-					2.	D.D.	Α.	0.			_	E.	w.	_	_		_	
ŀ	٠ ا	n.Dec. 30.21			30.		(c. fq. z. c. fq. c. fq. z. c. c. c. fq.	NW by W. NW by W. NW by N. NW by N. NW by N.		7	5	w 22.36	w 25. 6		. ,		1	S 32. 3	S 32. 8	w 27-10	° E' 2.26* *1.27	, o E *1.42	31.3	32.3	31.7	32.5	Not fleady.	152	An increasing gale from NW quarter, with frequent 9 P.M. bar. 30.12. 8 A.M. 30.12. T.S. 65°1.
THE REAL PROPERTY.	62		29.8	62			f. c. fq. r. fq. r. fq. r. hfq. hfq. r. fq. hr. hfq.	NW by N. NW by N. NWbyN. NNW. NbyW. N.				19.14						33.14	[33-19]	[24- 3]	0.44*						No obf. too much motion.	184	Strong gales, with hard fqualls and rain. 9 P.M. bar 12. 30.1. 8 A.M. 29.92. 10. 29.9. 114. 29.82.
	61}		29.81	613			(fg, r, L. ∫ fg, r, L. fg, r. ∫ g, c. c.	NNW. NNW. NW. WNW. WNW. (W by N.	3	26		16.28	19.24					33-35	33-35	21.22			34.	35-	34-4	35-2	Very unfleady.	141	First part, blowing very fresh from N.W. Latter moderate, with very large sea. Bar. 14. 29.74. 14. 29.74. 6. 29.8. 8. 29.8. 10. 29.8. A.M. ;
The second second	581	29.9	29:81	581	29	.8 <u>1</u>	h. c. fq. r. L. fq. c. c. c. c. fq. r. L. to c.n.c.	W. V. W by S. W by S. WSW. WSW. V. W by S. SW. V. W.	2		16	14-53	17-33					34- 9	34- 7	19.28	*2.35		33-4	34-4	34-	34.6	Unificady.	86	Major part, light breezes, with great fweil.
2	55	29-3	29.21	551	29	-24	b. fq. fq. L, r. c. L, r. c. L, r. fr.	NE by N. ENE. V. NEbyE. N. WNW. V. W. W by N. V. W by S. V.		1	5	13.56	16.29					34.26	34-25	18.21		3.18	34.4	35-4	35.	35.6	Not very un-	55	Winds variable, with fqually weather and coeff bar. 3 P.M. 29.8 6. 29.74. 10. 29.7. 8 A. 9 A.M. 29.24. About noon, it appeared very the to the Northward, but the clouds dringated.
-	543		29.8	542			fq, r. hard gales. ditto. h. fq, r.	S by E. S by E. S by E. SSW.	2	1:	2	T1-45	14.30					33-37	.33-34	16.19							§ No obí. tao Emuch fea.	129	First part, squally with some rain. The middle, hard gales, with a great sea; and the spray so to the ship was covered with it. 2 P.M. bar 29-24. 6. 29-24. 9. 29-5. 7 A.M. 29-74. 9. 29-74.
-	51]		30.0}	50]			fq, r. fq, hail.	SW by S. V. SSW.	11		35	9-24	11.34					33-37	33-23	13.20					35.	35.6	Very unfleady.	117	Squally weather, with much hail and rain, and a lat Bar. 4 P.M. 29.8 6. 29.9. 6. 30.0. 7 A.B. 9 A.M. 30.0 .
-	53		30.2	52			hail. fq, r. c. c. fq. fq, r. fq, r. fq. fr.	S by W. S. S. S. S by E. S by E. C.	14		2	7.19	9-27					33-37	33- 9	11.10								103	(5. jo.s. 10. 30.s. 7 A.M. 30.s. 9. 30.3.
7	561		30.0¥	56			c.f.h. h.c.fg.t.	NNE. C. NNE. NE by N. V. NNE. NNE. NE by N.	,	23	6	-6. 5						33 37	[33-21]	[9-53]								62	First, light airs, with cloudy weather. Latter, free with rain. P.M. Venus appeared very dim and it rim round the Moon. 9 A.M. bar. 30.14. 11. 30. (First and middle, hard gales, squally with rain.
8	60J	30-1	30.0	60	30	.0	∫ fq, r, e, fq, r, fq, r, e, fq, r, fq, r, f,	NNE. NNE. V. Nby E. N. V. NNW. V.				3-55	5-57					33-51	33-48	7-37								109	moderate and hazy; great firell. A.M. fome films a pintado bird. Bar. 2 P.M. 29.94. 8 A.M.

1						1	-	1,100	100	1	-					T		1		1	Parameter 1	N	Jagne	tical		7.900		1	
									D.		A.	Longit	ude fre	om Gr	reenwic	h				Cor.	Vari	ation	1_	Sout	h Di	P			
775	Th.	R.	arine B	aromet		-	•	Weather and Winds.	A:	o. T	.K	Α.	TK.	D. 1	2	S.	O. D.	_	itude O.	Long.	Az.	Amp.	-	ace W	MD	.c.p	5.	ML.	
7		In.Dec.	In.Dec		In.De	c			-	1.		. ,	. ,	1		\top	1	. ,	. ,		.,	. ,					-	7222	
ug. 9	62 <u>1</u>	9 -	30.0	621		15 0		NW by N. NNW. NNW. N by E. N by E. N. N.	}	8	17	W 1.29	W 3.1.	4 E	E			S 34. 6	S 34.11	W 4-51	W 8.50°	8. 14						122	First, moderate breezes and fair. Latter, fresh gales, figualls and rain. Bar. 8 P.M. 30.1. 9. 30.01. 11. 31. 30.0 6 A.M. 29.96. 8. 29.96. 96. 30.06.
10	621	30.21	30.2	62	30.1	. 5	ír. h. h. dr. h. h. c.	N. N by W. N by W. N. N. N by E. N by E.	}	+	4	E 1.15	0.20	6				34. 6	34.15	2. 0			37-	39.	38.	38.6	Very undleady.	136	Major part, fresh gales. Bar. a. P.M. 30.0 5. 5. 30 7. 30.1 8. 30.1 11 30.1 6 A.M. 30.2 9. 3 Two black alcatrasses. A.M. a tew pintado birds and so silver birds.
11	614	30.1½	30.0	601	30.0	16	t. t. fq. fq. e. . f.	N by E. N by E. NNE. NNE. NNE.	}	17	1	4-5	E 2.25	5				34. 1	34-27	E 0.54	*12-43							140	Fresh gales, with squally weather and a large sea. I 9 P.M. 30.2. 11. 30.2. 9 A.M. 30.1. 10. 30. A.M. many pintado birds, sheerwaters, &c. one alcatras
12	60	30.1	30.01	591	29-9	1	t. t. lic. fr.	N by E. N by E. N. V. V.		10	25	6.17	5. 2	2				33-47	[34-36]	3-34			39-4	41.	40.2	41.	Uniterdy.	110	Most part, fresh breezes and hazy. Bar. 1 to 10 P.M. 30 to 30.04. 8 A.M. 30.04. 9. 30.04. A.M. feveral 1 Johns. fome sheerwaters, and a young alcatrass, but pintado birds.
13	584	30.2	30.1	59t	30.0	11:	. (r. c. f. . (r. c. f. . (q. r. c.	N by W. NNW. NNW. NW. NW. NNW. NNW. NNW. NNW. NW by W. W by N. W.			-	8.43	7.26	5				33-37	34-13	6. 3	*16.9							122	Most part, fresh gales with some rain. Bar. 1 P.M. 3 4-30-04. 8-30-04. 8 A.M. 30-04. 9-30-04. 11-30 Several poor Johns, sheerwaters; and A.M. a few particles.
14	581	30.31	30.3₹	59	30.2	16		WSW. SW by W. SW by W. SSW. S by W. S by W. V. V. WSW. C. V.	}	16	16	10. 4	9. 3	3				33-44	34- 4	7-43	16.43*		41.4	43.2	42.3	43.1	Very fleady.	67	First part, fresh broezes. Latter, light airs. Bar. 8 I 30.14. 12. 30.24. 9 Λ.Μ. 30.34. 12. 30.34. Λ. iome potpoifes.
15	60 <u>I</u>	30-3	30.2	60 <u>1</u>	30-1	11.		NW by W. NW. NW. WNW. V. V. NNW.	}		32	11.10	10.41					33-49	34- 9	9.24			41-4	43-4	42 4	43 2	Extremely fleady.	55	First part, variable. Latter, an increasing gale from N with cloudy weather. Bar. 9 P.M. 30.34. 11. 30.3.
16	60]	30.11	30.1	60 <u>I</u>	30.0	1 6	.f.e. r.c.fq.e.fr r.c.	N by W. N by W. N by W. N by E. N by E.	}	2	9	13.32	13 12	94	11.3	8 4	0 13	33-53	34-15	11.58	18.18*	17.52	42.6	44.	43-3	44-	Very fically.	119	Moderate gales, with fome light fqualls and fmooth wat Bar. 4 P.M. 30.24. 6. 30.2. 10. 30.24. 11. 30 8 A.M. 30.24. 11. 30.14. A.M. fome pintado birds, a feveral filver birds, fome fetting on the water, others flyi about.
17	61	30.2	30.2	61	30.1	1) 6	ரு ர. ஒ. ர. க.	N by W. V. NNW. NNW. NW by N. NW by N. V. NW by N.	} 8	19		16.29	15.50	75	14-3	5 1) alt. 5°.	34. 1	34-15	14-39	19.39*	19.56*	43-4	45.2	44 3	45.	Not very ficady.	146	Fresh gales throughout, with cloudy weather and fourt four P.M. large black alestrafs. A.M. fome pintado bit sheerwaters, &c. Bar. 3 P.M. 30.12. 9. 30.12. 12. 30. 7 A.M. 30.12. 9. 30.12.
18	61	39.21	37.21	61	30.1	641	. c. . h.	N by E. N by W. N by W. N by W. N. V. V.	} 4	9		19. 1	18,13					34- 5	34.15	17. 5	20.50° *22. 0	20.47*	45.6	46.4	46.1	46.6)	126 8365	Pleafant brown and meflly hazy. Several pintado him A.M. two birds, formwhat larger than filter birds, wi fwallow-tails flying above the fhip; alfox Cape hen, and for ral grampuffes. Bar. 9 P.M. 30. 14. 12. 30. 14. 9A.M. 30.

Journal of a Voyage to The East-Indies, in the Ship Grenville, Capt. Burnet abercrombie, 1775, kept by Alexander Dalrymple.

		1									20-20		and the	1	1							1	II	1	MASSIES	1	1		M	agnet	ical			1	1	
ĺ														D.	L.	A.L.	Long	tude f	rom (Gree	nwic	h	Ш			Cor		Varia	tion	_	South	h Dip				
-	т.	-	Marine		-	_		We	ther a	nd W	linds,			A.	0.7	. K.	A.	Т.	K. D.	K.	•		E.	_	atitude	Lon		Az.	Amp.		ce	MD.	c.D		ML.	
5	_	R.	s.	_		D.		 _						N	SV	E		_	-	1		S.	O, D.	A	0.	_	- -	_		E.	_	-	_		-	
ı	۰	In.Dec	in.D	ec.	. In	.Dec.									' '	1	e ,) °,		'	E			° s	s'	E	1	w i	w w		•		•		8365	Most part, light breezes and hazy. At a P.M. faw th from mash-band ESE. per compass.
g.	60]	30.1	30.0	60	o	0.0	h. dr. dr. fr.	NV	y E. V V by N. NW. V	WN		V by N.]	7		8	19.49				-			34-1		18.	6			45.2	46.6	46,	46.5	Very fleady.	44	At 5½ h. Peaked hum of Cape Good Hope, S 51
														-					-										ŭ.							Longitude per T.K. 19. 9 E Cape God Hope per chart, 0.21 E Longitude of Cape per T.K. 19.30 True longitude of Cape, 18.27 Error of T.K. 1. 3
20	61	30.0]	30.4	o <u>‡</u> 6o	O <u>₹</u> 2	9-91	h. h. h.	NI	W. W. N y E. N	. N		y N.													34-15				22.31*	45.6	45.6	45.6	46.3	Perfeelily fleady	70	Ridge, R 13-48 Hanglip, Rellian R 170 S.
-																													6	45.2	46.4	45-7	46.4	Very fleady.	9.40	Sunrife, Hanglip, S 47°. E. Cape Good Hope, S 36°. W. White Sand Hills in Symmon's Bay, N 33°. Hanglip Point, S 35°. E. Ar noon Cape Good Hope, S 50. W. Noah's Ark, NW about 6' dift. N. B. All these bearings are by compass, without all for variation. At 4 P.M. being calm, holded out the pinnace, and in towards the harbour. At 7 anchored in 20 fash. Mark W. Roman Rock NW & W dift. about two miles.



1	1		of a market			1		- 1	1	1		No.		11	1	1				M	lagneti	cal	10000	1	1865	1	010
								D.L	D.	L. Lor	gitude	from G	reenwic	h				Cor.	Vari	ation.	1_3	South	Dip				Cape of Good Hope lat. 34.22 S.
	Th.	Ma	arine Ba	romet	er	v	Veather and Winds.	A.O.	T.	K. A	T	K. D.			F	L	titude	Long.	Az.	Amp.	F	ace	MD.	C.D.		ML.	long. 18.27 E.
75		R.	S.	i h.	D.			NIS	W			K. T.K		S.	0.1). A.	0.	_			E.	w.					
		ln.Dec.	In.Dec	0	In.Dec.			1.	1	, e	° E	2.00	. ,			° s	° s	° '	w	w w	0	٠		0			At Sun-fet, Case Good Hope NW=WNW. Table N by W=NW by N. Hanglip E 7 N=E 20 N. E ext. in fight E 508=E 17 N diffrance 6 leagues from 1
pt.	-59		30,1	59		e. e. e. e. e. e. e. e. e. e. e. e. e. e	NW. NW by W. NW by W. WNW. C. C. E. C. WNW. NW.	}		18.	13 18	3.52					34-4	18.52								17	land. At Sun-rife, Cape Good Hope N by W&W = N 9 or to leagues. Hanglip Point NE NNE. Ext. of ESE = E. Saw a fail, supposed the Gatton, come from Table Bay, to join us. At noon, Cape Good Hope N per comp. = N 22 W. I lip N 3: E = N 12 E 9 leagues. Eastern ext. N 8: N 57 E. Major part, light breezes and fair weather, great swell from SW.
20	594		30.01	59		€. έq. έq. e. ε. έq. έq. r.		}	1	21.	26					35-5	35-55	[21.15]								154	Fresh gale, with a very large sea. Bar. 9 P.M. 30.1. 8 A.M
	571		30.13	573		€. fq. c. c. fq. fq, r.	W by S. W. W. W by S. W by S. W by S.	}		24.	22					36.2	36. 9	[24. 1]								144	Fresh gales and great swell. Bar. 8 P.M. 30.1. 8 A.M.
22	62		30.21	62		fq. c. f. f. c. c. f.	W by S. SW. S by W. S. S. C. V. NE. NE by E. ENE.	}	49	25.	36					36.3	7 36.15	[25. 5]								66	First part, decreasing gale. Middle, calm. Latter breeze from the NE. Great fwell. A.M. bar. 30.3. it was not observed at noon. Past x P.M. it was Many alcatrasses, pettrils, pintado birds, &c.
23	661		29.61	66		€ € €	NE by E. ENE. NE by E. NE by E. ENE. NE by E.	}		27.	8					37-3	4 37. 6	[26.27]								92	First part, fresh gales. Latter, hard gales, with gre confused fea, Mostly fair weather. a P.M. bar. 9. 30-1. 11. 30-0. 8 A.M. ag.8. Many pettril tado birds, &c.
2-4	65		29-52	65		h. h. c.	NE by E. NE by N. V. V. W. W. WNW. NW by W.	} 9]	28.	13 27	1.23				37-5	8 37-39	27.23								58	First part, hard gales from N4. Latter, from W4. a very large NE (well, confused in heaps. Many traffer, pettrils, pintado birds, &c. Bar. 29.6 to 29.5
25	581		29.7	583		6. h.c.r.c.	Wby N. V. Wby N. Wby N. WNW. V. NW. NW. V.	}	1	29.	35					37-3	2 .36.58	[29. 0]						,		69	First part, light breezes. Latter part, fresh breezes. fwell much abated. Many alcatrailes, pintado birdi trils, &c. Bar. 2 P.M. 29 54. 3. 29.6. 12. 29.6. 8 29.64. 9. 29.64.
:6	61	29 9 <u>I</u>	29.9	61	29.81	fq. fq. fr. fq. c. r.	WSW. WSW. SW by W. SW by W. W by S. W by N. W by N. WNW.	}	}	31	9 31	.50				37-	36. 6	31.50			52.4	53•4	53-	53-4 {2	Not very fleady	127	Strong gales, mostly Wd. with fqualls and fome rain. alcatraffes, pintado birds, Sec. and great many restrits 2 PML 29.6% 4. 29.7. 6. 29.8. 9. 29.8% 8 29.9. 9. 29.9% 11. 29.9%
27	621	30.11	30.14	624	30.01	€. €. fq. r. fq. r. h. fq. c.	N by W. N by W. NNW. NNW. W by N. W by N. W. WNW.	}		35.	18					36.4	35.24	[34-55]								158	First part, fresh gales and squalls. Latter, moderate. A fwell. Many alcatraises, pintado birds, pettrilis, &c. 4 P.M. 29-81. 6. 29-9. 9. 29-9. 12. 29-9. 8 30-1. 9. 30-12. 11. 30-14.

		1				1			1	1	1			10.00x.10=1	III	1		1			N	1agne	tical	- 15-10-		1	1	1
									D.L	D.L.	Longi	tude fro	m Gr	eenwich					Cor.	Varia	ation	1_	Sout	h Dip	_	1		G denotes Capt. Money's Observations in t
775	Th.	R.	larine B	arome			Weather and Winds	s.	A.O	W ₁ E	Α.	TK.	D.D T.K.	,	s. o.	E	Latitu	de O.	Long.	Az.	Amp.	-	ace W	MD.	c.D		ML.	Gatton, the longitude reduced to noon.
-	_	In.Dec	In.Dec		In.D	ec	2021		T.	1.	. ,	. ,	1,	. ,	$\forall \forall$	1.	, ,			. ,	. ,						885	
28	621	30.3	30.2	621	30.	- 11	h. fq, r. r. W by N. r. h. W. W by N. h. Wby N. NW by W. h. V. NW by W.	}	1	9	E 36.54	E 36.26	E	E		36.		S 4-49	E 36.26	w	w					Very unfleady.	86	Pleafant breeze. Many alcatraffes, pintado birds, petto &c. Bar. 3 P.M. 30.14. 6. 30.2. 10. 30.24. 12. 30
29	671	29 91	29.9	67	29.9	,	f. fq. h. fq. N by W. V. N by E. c. N by E. N. c. N. N by E.	. }	4	27	39.48	39 47				35.	49 3	4.31	39-47	27-43*							144	Major part, fresh gales. Many alcatraffes, pintado bir pettrils, &c. Gatton, var. az. 28° 13' W. Bar. I P. 30.24. 5. 30.14. 9. 30.1. 12. 30.04. 6 A.M. ag. 8. 29.94. 10. 29.94.
30	56 <u>1</u>	30.2	30.1	561	30.	ال.	c.hfq,r, L,Th. N by E. N. V. L. tosw. c. V. W. c. fq, r. W by S. fq, r. h. c. W by S. SW by W. S	28.00 Pl	20	6	42.52	42.57				35.	34 3	3.56	42.57								153	First and middle, fresh gales, with hard squalls, thund lightning, and rain. Latter, blowing fresh and hazy we ther. Many pettrils, pintado birds, &c. and A.M. one ver bird. Bar. 2 P.M. 29.8‡. 4‡. 29.8‡. 5‡. 29.66. 29.7‡. 8‡. 29.8‡. 9‡. 29.9. 11. 29.3.
A. 1	614	30.3	30.3	61	30.5	11	c. SE. C. E.	}	19)	43-59					35.	22 3	3-25	44.10]								64	First part, fresh gales. Latter, light breezes and cal A.M. many alcatrasses, &c. Bar. 2 § P.M. 30.2. 5, 30 9-30-3. 12-30-3. 6 A.M. 30-3 § 8-30-3 § 11 § 30
2	65}	30.13	30.12	65	30.1	-11	c. fr. E by S. E. V. fr. c. fq. h. V. ESE. E. ENE. h. NE. h. NE. NE by N.	}	-	J	45.24	45.41	9 59W	45-32 46.40	6 © 2 3 3 2	35.	55 3	3.58	45.41					590e6a		Extremely unfleady.	85	First part, light breeze. Latter, fresh. P.M. many alteraffes, &c. G long, @ and f., 45° 31' E. Bar. 52. P 30-3. 8. 30-3. 12. 30-2. 8 A.M. 30-14.
3	671	30.3	30.22	67	30.2	- 11	f. NE. f. h. f. NE. f. fq. h. NE. h. f. NE. NE by E.	}}	2	3	47-36	47.56	32E	47-24	5 0 3	8 36.	6 3	4.11	47.56	26.49*		59.	60.	59 4	60.	Very una ficady.	110	Moderate breezes throughout, weather changeable. Pobirds, great dews, and water remarkably fmosth. Gv. 4 az. 26° 46°*, amp. 16° 47°*. Bar. 2 P.M. 30.1§. 30.1§. 12. 30.1§. 8 A.M. 30.2§. 5§. 30.3.
4	661	30.31	30.24	66	30.2	2 {	h. NE by E. h. NE. h. NNE. h. NNE.	}	2	6	50.15	50.41	34W	51.15	3 0 2	6 36.	13 3	4-20	50,41							Larboard-fide of cabbin.	132	Mostly fresh gales. Some pintado birds. A.M. great dew water smooth. G long. ⊙ and € 50° 39' E. Ber. 1 1 1. 30.2 € A.M. 30.2 9. 30.3.
5	67	30.21	30.2	67	30 1	- 11	h. NE by N. h. fq. c. NE by N. c. N.	}	2	1	53. 8	53-35				36.	3.	4.16	53-35	25.57*	25.39						143	Fresh breezes. Some pintado birds. A.M. one pettril. G va. 4 ns. 260 9's, amp. 260 7's. Bar. 2 P.M. 30.2\$. 30.2\$. 6 A.M. 30.1\$. 8. 30.2. 9\$. 30.2\$.
6	621	30.2	30.13	62	30.1	- 11	h. N by W. h. N by W. NNW. h. NNW. NW. h. NNW. NW.		12	20	55-14	56, 1				36.	4 3	3-57	56. 1	24.42*		59.4	61.	60.2	69.6	Very Seady.	106	First past, fresh galet. Latter, light and variable. P.J. an alcatrasis. A.M. several alcatrasses and pirtudo birds. var. a sz. 140 41 42. Sar. 14 P.M. 30.2. 4. 30.14. 6. 30.1 10. 30. 2. 12. 30.14. 8 A.M. 30.14. 9. 30.24.
7	62]	32.33	30.32	62	30.2	ااي	c. fq. r. SE by E. V. SSE. r. h. ESE. SE by S. S by E. h. f. S by W. f. S by W. V.	s. s. }	17	13	56.11	57.11	26E	56-45	4 4 2	3 35-	49 3:	3.25	57.11								53	First and middle, light breezes and rain. Latter, light breeze and fair weather. P.M. a territ passed; several alestratic and other birds. But. 24 P.M. 10-12. 5. 30-12. 6. 30-12. 92. 30-22. 12. 30-22. 8 A.M. 30-22.

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1		ĺ						I,).L.	D.L.	Longi	tude fro	m Gr	enwich		П			Cor.	Vari	ation.	1_	South	Dip				
	Th.	R.	arine B	Th.			Weather and Winds.	1	1.0.	T.K.	Λ.	TK.	D.D T.K.)	50	ED.	Lat	tude O.	Long.	Az.	Amp.	-	ace W.	MD.	C.D.		ML.	
5	_		-	-	In.I				+	- -		-	-	-	H	F		-	-	-	-	-	-	-	-			
t. 8	° 61₫	In.Dec. 30.3½	30.3	1.		11	c. \$W. V. c. C. V. f. V. W. f. V. NW by W.	_}	2	23	E 56.32	E 57-55	É	Ě		Í	S 35.50	S 33.28	E 57+55	W 23-48	24. 28		1	100	62.4	Larboard-fide of cabbin.	1961	c Moder light air and also with how 6-11 6
9	631	30.41	30.31	63	30	11.6	f. NW by W. WNW. W by f. W by N. WSW. f. WSW. SW by W. f. h. SW by W. V. h. f. S by W. S by E. SSE.	}	3	12	58.18	59-53	4	59-4 9	5 A	32	36. 5	33.30	59-53	23.49*	23.57*	61.4	62.2	61.7	62.3	Very Steady.	89	Major part, pleasant breezes and fair weather. Just moon a feat passed close to the ship on the larboard is fame time a flock of a vast number of fmall subite is some distance on starboard quarter. G var. 2 az. 234 Bar 24 P.M. 30.3. 7. 30.2. 1 A.M. 30.3. 9. 30
0	613	30.41	30.4	611	30.	31	f. V. SE by S. S by E. E. S by E. C. f. WNW. NW. WNW.	_ } s		1	58.46	60.22	45	59-37	6 A	28	36. 0	33.20	60,22	21.434	21.52*	61,4	62.4	62.	62.4	Pretty fleady.	24	Mostly light airs, with a large swell from W4. P gramps: very near the ship. Several alcatrasses, &c. o az. 21°19'0, amp. 22°23'0.
1	621	30 3¥	30.22	624	30.	21/2	f. NW by W. f. c. NW by W. c. NW by W. WNW. c. f. WNW.	}		27	60.18	62.21				-	36. 6	33.20	62.21	23.10	22.47*	61.4	62.4	62.	62.4	Not very ficady.	77	S Pleafant breezes. Some pintado birds, &c. fmooth water long (well from SW. G var. az. 22° 30°*, amp. 22°.
12	641	30.31	30.3	64	30.	21/2	f. WNW. f. WNW. f. h. e. WNW. c. WNW.	}	1	12	61.39	63.54					36.10	33-20	63.54	21. 5	20.51*	62.2	63.2	62.6	63.2	Very Ready.	68	First part, pleafant breezes. Latter, light airs, with fwell from SW. Some pintado birds, &c. Bar. 2 30.22. 112. 30.22. 82 A.M. 30.3.
3	651	30.21	30.12	65	30.	11	h. NW by N. NNE. h. NNE. N by E. h. e. N by E. c. fq. c. N by E.	_}	2	10	63.34	65.59					36.14	33.26	65.59	20.27*	20.34*	62.4	63.2	62.7	63.3	Not very fleady.	96	First part, light broezes. Latter, moderate. Several places. A.M. a filver bird and pettril, several poor G var. 3 22.22° 28° , amp. 20° 39° . Bar. 2 P.M. 10§. 30.2§. 1 A.M. 30.2§.
4	66	30.3	30.2	651	30.	2 {	h. N by E. h. N by E. NNE. h. NNE. h. NNE.	}		21	65. 6	67.52	W 25	68.17	5 0	27	36. 4	33.14	67.52	19.35		61.6	62.4	62.1	62.5	Pretty fleady.	78	Pleafant breeze. Great dews. G long. ⊙ and Ŋ 6. Bar. 6 P.M. 30.2. 11. 30.2 €. 12. 30.2 €. 8 A.M.
15	641	30.0	29.9]	631	29.	81	f. NNE. NE. f. fq. NE. fq. h. NE. NE by N. NNE. h. fq. NNE.		24	24	67.26						35-55	[33.17]	[70.24]	18.43						10 105	117	First part, moderate. Latter, fresh gales and squally. damp weather. G var. 2 sz. 19° 23'4', amp. 19° 43'. 6 P.M. 30.2. 12. 30.1\$. 9 A.M. 29.9\$.
6	.59	30.3	ģ0.2 <u>}</u>	59	30.	- 41	bq, r. r. h. NNE. V. N. h. N. NNW. NW. h. c. NW. W by S. SW by S. c. SW by S. S by W.	1			69.34	72-44	E 35	72. 9	2 0	19	35. 4	32.38	72.44			61.4	62.2	61.7	62.3	Not fleady.	120	Frosh gales, with squally weather. A.M. many p birds, some alcatrassies, &c. Bar. 2 P.M. 29.8§. 4. 6. 29.7§. 10. 29.8§. 12. 29.9. 7§ A.M. 30.1§. 9 10. 30.2.
17	622	30.41	30.41	624	30.	24	c. SSE. c. SSE. SE by S. c. SE by S. ESE. V. c. V. C.		,	5	70.30	73-35	5				34-57	31.41	73-35								66	First part, moderate. Latter, light airs inclinable to with a great swell. Several pintado birds, some alcat &c. At night, water luminous like blubbers. Bar. 2 30.24. 44. 30.3. 6. 30.3. 10. 30.34. 12. 30.4. 8

- 1					1			1		1					1	B				M	lagnet	ical		- 1	1 1	
1								D.I	D.I		ngitude f	rom Gr	eenwiel	h				Cor.	Varia	tion	1_	South	Dip	7	1 1	12
775	Ть.	R.	S.	Th.	-		Weather and Winds.	A.C	s W	. A.	TK.	D.	D. D	s.	o. D.	A.	O.	Long.	Az.	Amp.	E.	w	MD.	.D.	ML.	n 15
a. 18	×	In.Dec. 30.44	In.Dec. 30.4		In.Dec. 30.34	€ 6. 6. 6. 6. 6. 6.	V. C. C. E by N. V. NE. V. NE by E. NE. V. V. N by E.	}	6	, E 70.	° ' E 73·3	,	°E			S 34-53	s 31.37	E 73-31	° v	w	61.	62.	61.4 6	2. Pretty fleady.	2717 33	Mostly light airs and calm, with large fwell. At a fea luminous like blobbers. Several aleatraffes, &c fight of Gatton; got fight of her again before noon. a P.M. 30-4. 5 30-4. II. 30-4. I A.M. 30-4.
19	661	30.4	30.4	66 <u>‡</u>	30.3	6. c. c. c.	NNE. N. Nby E. NE. NNE. Nby E. NNE. NE. NE. NE by N. NNE. NE by N. N by E.	}	5	71.	18 74.2	7				34-52	31.41	74-27			60.6	61.6	61.2	1.6 Very fleady.	40	30.46 10. 30.46. Light airs. Sea luminous at night like blobber. P.N uncommon bird like Cape htm, fome alcatraffes. Bar. 2 30.4 4 30.4 10. 30.4 12 30.4 7 A.M. 3 8 30.4 10. 30.46.
20	65		30.3	641		و د د	NE by N. NE by N. N by E. N. NNE. NNE. N by E. N.	}	1	8 72.	21 75-3	8 64	E 74	34 4	⊙ 37 ⊙ 51	34-49	31.39	75-38	14. 9*	14.48					55	Pleafant breezes. Sea luminous at night like blu A.M. fky mare's tails. No birds. G var. 4 az. 15° amp. 15° 2°. Long. Qand D 75° 56'. Bar. 2§ P.M. 3 11. 30.3\$. 1 A.M. 30.3\$. 8. 30.3\$.
21	634	30.21	30.2	641	30.14	f. f. c. c. fq. c. c. fq. r.	N. N by W. N by W. NNW. NW by N. NW by N. NW. V. SW by S.	} 10		73.	16 76.5	5 60	74-	38 4	⊙ 35 J	33-45	30.25	76.55			59-4	60.4	60. 6	0.4 Very fleady.	84	Moderate breezes. Sea luminous at night like blo
22	614	30-4	30.31	614	30.3	6. c.	SSW. S by E. SSE. SSE. SE.	} ,	15	74-	46 78.1	0				31.47	28.20	78.10	12.44*	12.49	58.	58.6	58.3 5	8.7 Not ficady.	142	Fresh gales. A.M. one or two poor Johns. No other G var. 2 az. 12° 31°0, amp. 12° 51°0. Bar. 2 P.M. 4. 30.12. 55. 30.2. 62. 30.24. 105. 30.24. 12. 9 A.M. 50.34.
23	66	30.31	30.31	66	30.3	€. €. €. ấq. ∫q. ∈.	SE by E. ESE. E. E. V. E by N. E by N.	} 21	4	75.	9 78.2	9				29-55	26.28	78.29			56.4	57.2	56.7 5	7.3 Very fleady.	97	Major part, moderate breezes. P.M. feveral poor though flenderer and fmaller than ufual. A.M. poor a pettril, and a fheerwater. Bar. 2 P.M. 30.3. 64. 12. 30.34. 84. 30.34. 9. 30.34. 10. 30.34.
24	71	30.31	30.3	71	30.21	€ € €	NE by E. NE by E. NE. NE. NE by E. NE by E. V.	}	3 24	74-	43 77-3	9				29. 4	25-37	77-39	7.53* * 10.10	8. 1*	56.2	56.6	56.4 5	7.	59	First part, pleafant breeze. Latter, light air and va P.M. an alcatrafs. A.M. an alcatrafs. G var. 8° 54°, amp. 9° 9°. Bar. 2 P.M. 30.3. 4 30.2 30.3. 76. 30.3. 11. 30.3.
25	714	30.32	30.35	70⅓	30.21	€ € € € € € € € € € € € € € € € € € €	NE by N. C. ENE. E by S, C. C. C. SW by S. C.	}	5	2 74-	47 77-4	5				29. 6	25-44	77-45	10. 3* *9.20	*9. 8	56.2	57-	56 \$ 5	FExtremely unitendy.	7	Mostly calm. Some birds at distance. G var. az. 3. Bar. 2 P.M. 30.3. 8. 30.3. 10. 30.3. 8 A.M. 81. 30.3. 9. 30.3. 10. 30.3. 8 A.M. Fresh gales, with squalls and rain; sometimes squall hard. Great irregular swell. Several birds, chiefly
26	70]	30.3	30.3	704	30.3	h. fq, r. fq, r. fq. r. fq, r. fq. fq, r.	c. r. SE. ESE. ESE.	} 8	1	75-	78.40	,				27.17	23-47	78.40							120	Johns or black theerwaters, being of the colour of the mer, and fhape like the latter, but without white b Bat. 2 P.M. 30.3. 5. 30.24. 6. 30.24. 8. 30.3. 30.24. 9 A.M. 30.3.
27	71	30.3	30.21	703	30.2	(δη, ε. (η. (η. (η. ε. (η. ε. (η. ε. (η.	Y. E. E by S.	37	4	75-4	78.3					25-49	21.42	78-34							89 3443	Fresh gales and squally. Several sheerwaters, or birds them, of different colours, grey, brown, and blac some white breasted and white under the wings. Bar. unsteady these two days from thip's motion. Great in lar sea. Bar. 2 P.M. 30.12. 24. 30.3. 4. 30.24. 6. 3 10. 30.3. 12. 30.3. 8 A.M. 30.24. 9. 30.24. 10. 30

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1									D	D.	L. L	ongit	ude fro	m Gr	eenwich					Cor.	Vari	ation	L	Sout	h Dip				
775		R.	arine E	Th.	-			Weather and Winds.	A. 0	S W	-1	Α.	T.K.	D. ¢	•	s. o	E.D	-	itude	Long.	Az.	Amp.	F	w.	MD.	c.D	5.	ML.	
13	-	In.Dec.			In.I	-			- -	, ,	-	. ,	. ,	-	. ,	1	-	. ,	. ,	. ,	. ,	. ,	0					3443	
28 28	72	30.21	30.2	72	30		- fq. fq. f. fq. fq. c. fq. fq. h.	E. E by S. E by S. ESE. E by S. E by S. ESE.	}16		8 7	E 6. 9	E 79.10	E	Е			S 24-17	S 19.54	E 79· 4	w	·w						96	Mostly fresh gales from Eastward, with squalls and rain large swell. Several birds as before. A.M. many siyin Bar. very unsteady, 1 P.M. 30.2§. 4 30.1§. 5§. 6.30.2. 8.30.2§. 10.30.2§. 12.30.2§. 9 A.M.
29	73	50.2 <u>1</u>	30.2	734	30	.11	c. c. fq. h. h. f.	ESE. E by S. ESE. E by S. ESE. E by S. E by S. ESE. E by S.	}	2 8	7	6.52	79-45	35 56	79.10 78.49	4 0	27 10	22.54	18.33	79-33		J						93	Fresh gales, with some squalts. Several birds as P.M. a large white bird which slapped its wings as high, unlike the birds which are sound in the ms G long. ⊙ and € 77° 39' E. Bar, 2 P.M. 30.12. 4. 6. 30.12. 10. 30.2. 11€. 30.2. 8 A.M. 30.24. 9. 10. 30.24.
3Þ	75	30.2	30.1	741	30	.1	fifq. fq. c. c.	ESE. E by S. ESE. E by S. E by S. E by S.	} 5	15	7	7-39	80.17					21.11	16.45	79-59		4. 4*	46.2	47.2	46.6	47-3	Unfleady.	113	Strong gales, with frequent fetalls. Some birds as
3/1	77	30.1	30.0	77	30	°	h. fq. fq. r. fq. fq.	ESE. E by S. E by S. E by S. E. E. E by N.	}	3	3 7	8.10	80.51					19. 8	14.45	80.27	*3.17		44-	45.	44-4	45.1	Disto,	127	Squally. Few birds as before. Swell increased and wasettled. G long. ⊙ and) 79° 8° E. Bar. 2 P.M. 4. 30.1. 6. 30.0‡. 10. 30.1. 124. 30.1. 6 A.M. 8. 30.0‡. 9. 30.0‡. 104. 30.04.
v.	78	30.1	30.0	.784	30	. IJ	h. fq. r. fq. r. h. h. fq. hr. fq. c.	E. VE. E. VEy. VEy.	}		1 7	8.17	80.59					17.15	12.51	80.29			41.	42-	41.4	42.1	Very fleady.	114	Squally. P.M. a tropic hird, which refembles a pare thape, but is of a whitifu grey. Swell much abated. Q and § 79° 10' E. Bar. a P.M. 29.92. 4. 30.0. 91. 30.02. 121. 30.0. 9 A.M. 30.02.
2	18	30.0}	30.0	81	30	11	h. h. h. h. f.	E by N. E by S. E by N. V. E. E by N. E by N. E.	}	10	71	8.26	80.58	114	79. 4 79.10	8 0	42 30	15-44	11.20	80.22	1.20* *1.12	*1.42	38.6	39-4	39.1	39-7	Unsteady.	92	Moderate breezes, with some squalls. A.M. few bird grey white under wings; frequently overcast. A.M. more swell from Northward. G var. 2° 3°, amp. Bar. 24 P.M. 29.94. 6. 30.0. 124. 30.04. 50.04. 94. 30.04. 114. 30.04.
3	81	30.0}	30.0	803	29	91	6 6 6	E. E. E.	}	9		^ [81.28				-	13.47	9.18		0-59*	1	35 4	36.4	36.	36.6	Not fleady.	123	Pleafact gale, with fair weather. A.M. a bird, large a tropic bird, with black wings and white body at
4	82	30.01	29-9	82	29	.9 <u>I</u>	LC. C.L. L.	E. E by S. E. E. E.	} 5	13	7	9.36	81.46	82 41	80.24 81. 5	6 A	17 28	11.57	7-23	80.58	0, 3*		32.6	33.6	33.2	34-]	114	Major part moderate. P.M. fome Saubern Tybes, ver and motionities. Bar. 24 P.M. 29-94. 6. 29-94. 8.
5	82	30.0	29 9	81	29	.9	h. h.c t.	E. E. V. E. E.	}	18	8	0.19	82.11					10. 5	5.26	81.17	*o. 8		19.2	29.6	29.4	30 3	Entremely steady.	119 4434	Fresh gales, with fair weather. P.M. a large bird booby kind above the thip; it had a long neck, as fomething in thap and fize like a wild goofe. At Starbers Egber, fome diverging in rays downwards, like a rare cloud, very little motion; a faint ring C. A.M. four tropic birds. G var. 4 az. 60 az. 400 4 E. Bar. 24 P.M. 29.94. 6. 29.94. 1 29.94. 8. 19.94.

R. n.Dec. 30.01 30.01	In.Dec	82 ² / ₄	D. In.Dec. 29-9‡	Weather and Winds. E. E. E. E. E. E. E. E. E. E. E. E. E. E		_		A	TK E 48 82.	c. D.	K.	É	5 °F 37	А. ° ,	O. S	Cor. Long.	Az.	Amp.	F	W.	-	c.d.		M L.	
R. n.Dec. 30.01 30.01	S. In.Dec 29.94	82 ² / ₄	D. In.Dec. 29-9‡	E. E. E. E. E. E. E. E. E. E. E. E. E. E		A.C). T.K	E 80.	° E	, ,		É	T	А. ° ,	O.	Long.	. ,	, ,	-	-		C.D.		_	
30.01 30.01 30.0	In.Dec 29.94 29.94	824 824	in.Dec. 29-9‡ 29-9	c. E by N. E. h. E. E by S. h. E. E by S. h. ESE. c. SE by E. h. SE by E.	}	9	18	E 80.		1	3	É	T	° ,	° ,	120000		, °	0			0		4434	
30.01 30.0 30.01	29.9‡ 29.9‡	82 ¹ / ₄	29-9‡ 29-9	c. E by N. E. h. E. E by S. h. E. E by S. h. ESE. c. SE by E. h. SE by E.	_}	9	18			1	3	£	5 °F 37	S	S	120000		E	0	٥	•	•		4434	
30.0}				h. E. E by S. h. E. E by S. h. ESE. c. SE by E. h. SE by E.	j	9	31	8,	1	- 1				3124	3-44	81.22	*o. 8		26.2	26.6	26.4	27-3	Very fleady.	101	Moderate breezes. Norshern lights to Northward.
	29 94	821	29.9 1	h. SE by E.					6 82.	49				6.19	2.30	81.43	1.12*	1. 6*	24-4	25.	24.6	25.5	Not fleady, thip laying to lor boot.	.89	Moderate breezes. G var. az. 00 43' *E, amp. 00 1 Bar. a P.M. 30.0. 6. 29.94. 1 A.M. 29.94. 8. 19.
20.01	100			h. fq. E. E by S. f. E by S.	}	17	20	\$2.	82.	55				5.17	1.11	81.43			22.	22.2	22. I	23.	Extremely Ready.	69	Major part, moderate breezes. A.M. came on board the Garon Major SEARS and Capt. ALCOCK for M. Mr. HORSLEY went aboard that this for Bombay. P.M. 29.9. 12. 29.9. 9 A.M. 29.9.
-3.34	29.9	834	29.8±	f. V. E. f. E by N. E. f. hr. dr. E. E by N. V.	}	1	4 53	\$2.	82.	21				4.20	0.18	81. 3			20.	20 4	20.2	21.1	Very steady.	61	Variable winds, with rain at times, Bar. 4 P.M.
29.91	299	811	29-9‡		seby E.	3	45	\$3.	19 82.	24				3.18	N 0.47	81. 0	0.52*		19.4	19.	19.4	20.1	Not very	81	Mostly fresh breezes. At 10 A.M. there was to the Sappearance of something black like a rock, and at the time like a steal; but it being to windward, and thip fresh way, could not determine whether it was a state respection of the San behind the clouds. This is the fituation of the Ours. A man fent to mask-head not see any thing. Bar. 2 P.M. 29.8 9. 29.8 29.8 A.M. 29.9 9.
29.94	29 9	831	29.83	c. E by S. ESE. E by S.	}	9	33	84.	5 82.	37				2. 3	2, 1	81. 7			154	156	15.5	16.4) many.	82	Most part the wind Easterly, with some squalls towar latter end. Bar. 1 A.M. 29.9. 8. 29.94.
29.91	29.9	804	29.81	fq. r. V. r. L. to nw. f. V. c. fq. r. L. to e. V. E by N.	j		32	84.:	82.	25				1.12	2.52	80.49			15.4	16.	15.6	16.5	Pretty fleady, but thip not having fleer- age-way.	61	8 A.M. 29.9\$ 10\$ 29.9\$ 11, 19.8\$
29 9 1	29.81	82	29.8 <u>‡</u>	c. r. c. ' C. V. C. c. hr. c. L. 10 s. C. c. C.	}	2	19	84 :	82.	14 95	8	0.39	3 0 28	1.12	2.54	80.32			144	15.4	15.	5.7	Very fleady.	8	Light airs and calms, with hard rain. Many fish, porp &c. A.M. a mottled grey bird of the booky kind. O's limb not diffinct when longitude observed. Ba P.M. 29.84. 124. 29.82. 74 A.M. 29.84. 84. 29.9
29.9½	29.83	82	29.8 <u>I</u>	c. fq. hr. NW by W. V. c. V. NW. C. c. C. V. W by S.	j		2	85.	0 82.	39				1. 7	2-59	80.51			15.	16.	15.4	6.3	Not very	28	Winds and weather very unfettled. P.M. a fea bird l plover: many fifth. P.M. caught a ffirk. A.M. faw Bar. 2 P.M. 2984. 4. 29.84. 122. 29.9. 8 A.M. 2 114. 29.9.
29	94 9-91 9-91	9.91 29.9 9.91 29.9	9.91 29.9 831 9.91 29.9 801 9.91 29.81 82	9.91 29.9 831 29.81 9.91 29.9 801 29.81	29 9 81	29 9 81	29 9 81	29 9 81\frac{1}{2} 29.9\frac{1}{4} 29.9\frac{1}{4} 29.9\frac{1}{4} 29.9\frac{1}{4} 29.9\frac{1}{4} 29.8\frac{1}{4} 29.8\	29 9 81 1/2 29.9 2	29 9 81	29 9 81½ 29.9½	29 9 81	29 9 81\frac{1}{4} 29.9\frac{1}{4} 29.9\frac{1}{4} 29.9\frac{1}{4} 29.9\frac{1}{4} 29.9\frac{1}{4} 29.9\frac{1}{4} 29.8\frac{1}{4} 29.8\	1.09\frac{1}{2} 29 9 81\frac{1}{2} 29.9\frac{1}{2} 29 9 83\frac{1}{2} 29.8\frac{1}{2} 3.18 3.19 3.29 3.11 3.18 3.19 3.29 3.11 3.18 3.19 3.20 3.11 3.18 3.19 3.20 3.11 3.18 3.19 3.20 3.11 3.18 3.19 3.20 3.20 3.20 3.20 3.20 3.20 3.20 3.20	1.12 2.52 29 81	3.18 3.19 3.18 3.19 3.18 3.19 3.18	1. 2. 29 81	3 3 3 3 3 3 3 3 3 3	29 9 81 1/2 29.9 81 1/2 29.9 81 1/2 29.9 81 1/2 29.8 81 1/	19.4 19. 19.4 1	19.4 29.9 81½ 29.9½ 6. V. Eby N. Eby S. SE by E. SE. SEby E. 3.19 82.24 3.18 0.47 0.52* 19.4 19. 1	3.18 0.47 0.52 19.4 19. 19.4 20.1 20.1 20.1 20.1 20.1 20.1 20.1 20.1	19.4 29.9	3.18 3.49 3.18 3.18 3.19 3.18	

1	1					1		1	T						H	11					M	Iagnet	tical			1	1	
I						ı		D.		D.L.	Longit	ude from	m Gre	enwic					Cor.	Varia	tion	1~	Sout	h Dip				
-	Th.		S.	Tb.		-	Weather and Winds.	A.	0.1	V E	A.	тк.	D. 5 T.K.	D	8	É.	Lat	O.	Long.	Az.	Amp.			MD.	C.D.		мL.	
5		к.	-	-	-	++-			-	-			-	-	-									-	-		-	
v.		In.Dec. 29.9 <u>1</u>	100		In.De	1	c. fq, r. fq, hr. V. c. fq. r. V. W by N. W by S. r. fq, r. c. W by S. SSE. SSW.	}	19 2	2 '	E 86. 9	E 83.46	É	° é			S 0.57	N 2.50	E 81.52	°w′	w w	14.4	14.6	14.5	15.4		5014 71	Mostly variable wind and rain. P.M. a fail; shewed colours on firing a gun to speak with her, but of shorten fail. Several birds and many fish. Bar. 29.84. 6. 29.9. 12. 29.94. 8 A.M. 29.94.
6	81	30.0	29.94	80 <u>‡</u>	29 9	K	c. fq, hr. SW. S. hr. V. S by W. hr. c. S by W. SW. c. r. c. SW.	}	9	6	87. 5	84.48	76	83.3	4	18	0.46	2.52	82.48			13.4	14.	13.6	14.5	Very steady.	57	First part, mostly squally with very heavy rain. Middlatter, light airs and cloudy with some rain. O's linvery diffinct when sog. observed. Bar. 2 P.M. 4. 29.8\$. 10. 29.9\$. 12. 29.9\$. 8 A.M. 29.9\$. 9 Very unsettled weather with rain. Bar. 1 P.M.
7	80	29-91	29.9	80	29.8	4	fq, hr. c. fq. S. V. c. hr. c. fq, hr. S by W. SSE. SE. fq, hr. V. S by E. r. c. S by E. C.	} 21		18	88. 2	86. 3					0.32	3-27	83.57			14.4	15.2	14.7	15.6]	59	2. 29.9. 4. 29.9. 94. 30.0. 1 A.M. 19.94. 9. At first the dispeny-needs had no motion, but with the fac was at 12.4; when moved a little, it remained most when moved with the face to Weft, the needle surned and stood any ophers. Moved several times, it pointed wit E 144.
18	831	30.0	29.91	831	29.9	U	fr. c. C. E. Eby S. c. r. Eby S. r. c. E. Eby N. NEby E. c. fq. NEby E. NEby N. Nby E.	} 6		9	88.16	86.26					о. з	4- 2	84.13			11.1	11.5	11.3	12,2	Pretty fleady.	38	W 15 Very fleady. Mostly light breezes. P.M. faw two dolphins, heard a bird in night. A.M. caught two dolphins. Dipping preny fleady, and no appearance of defect as sufferday. P.M. 29.82. 4. 29.82. 124 A.M. 29.9. 8. 29.94. 11.
9	83	29-9‡	29-9	83	29.8	*	c.fq,r.fq,th,L,hr.NNW. NW. V. fq.th, L, hr. V. C. V. C. r. c. V. N. c. r. c. N. N by E. NE by N.	}	18	19	89.57	87.26					0. 3	3-44	85. 7	-		10.6	11.2	11.	11.7	J	44	Variable winds, with rain. P.M. a fwallow with wings and white breaft. A.M. a fmall land bird like a water way-tail, but in colour like a linner, few yellowith feathers in the flank. A.M. a bird at d like a ganner. Bar. 2 P.M. 29.34. 4 29.34. 6. 1 A.M. 29.94. 8. 29.94.
0	821	30.0	29.9½	821	.29.9	K	fq, fr. fq. NE by N. NE. fq.fq,L,hr.hr. NE by E. Eby N. NE by E. ENE. NE. hr. fq. V. SE by E. SE. SSE. c. fq, flying fh. SSE. S by W.		30	13	90.27	89. 9					0.17	3. 0	86.40		ļ	11.4	12.2	11.7	12.6	Not very fleady.	102	Fresh breezes, with fome fqualls and a great deal of The land bird aboard fill. P.M. heard a bird, for
1	80]	30.0½	29.9‡	80¥	29 9	*	r, L. to nw. V. C. V. h. V. C. h. r. h. C. V. W. V. N.] 15		27	90.54	90. 3				П	0. 3	3.29	87.28		1	10.2	0.6	10.4	11 3	Very Besdy.		Variable, with rain and calms. The land bird aboard A.M. faw a tropic bird. Paffed a drift. Light airs. \$\frac{1}{4} P.M. 29.9\frac{1}{2}. 2. 29.9\frac{1}{2}. 4. 29.9\frac{1}{2}. 6. 29.9\frac{1}{2}. 7. 212\frac{1}{4} A.M. 29.9\frac{1}{2}. 8. 29.9\frac{1}{2}. 10. 30.0.
2	812	30.0	29.9 <u>‡</u>	812	29.9	1	fq. N. N by W. fq. hr. c. r. N by W. C. SE by S. V. r. V. r. c. NE by E. C.	} 14		55	91.17	91.21					N 0. 9	3-55	88-39			10.6	1.2	11.	11.7	Very fleady, but thip not having fleer- age way.		Major part, light breezes, with fome rain. The lam aboard fill. P.M. faw a booby, fome fifth of the policind. A.M. a horfe fly, feveral riplings, and many Water luminous at night. Bar. 4 P.M. 29.94. 5, 2 124 A.M. 29.94. 7. 19.94. 84. 30.0. 9. 30.0. 104.
3	82		29.9₹	82			c. C. E. V. c. V. E by N. c. h. NE by E. NE. h. NE by E. NE. NNE.	6		8	91. 8	91.20					0.45	4-37	88.31			7,6	8.4	81.1	9.	Very fleady.	39	First part, calm. Latter, light breeze from NE. with weather. The land bird shoard still. A.M. several birds. Passed a bamboo adrist. Water luminous at Bar. 4 P.M. 29.9\$. 6. 29.9. 11\$ A.M. 29.9\$. 8. 9. 30.0.

	1	Î	Ultra			1			11	1	1				II	1 1			1	1	1	Magneti	cal		I		-		1	
								9	2		Long	itude fro	m Gr	eenwich		П			Cor.	Vari	ation.		South	Dip						
1	Th.	М	arine B	aromet	ter.		V	Veather and Winds.		O. T.K		TK.	D.3			E	Lati	tude	Long.	Az.	Amp.	F	ace	MD.	C.D.				ML.	
75		R.	S.	Th.	D.				N	SWE			T.K.		s. o	Ď.	A.)	0.			Timp.	É.	w.							
ov. 24		In.Dec.			In.D	, {	É. E. T. E. É. Sq. T. C.	NNE. NE by N. NE. NE. NE by N. NE.	}	10 32	, E 90.29	E 90. 9	É	° É		,	N 1.37	N 5.19	E 88.13	ě	, ° E	° { 7. 6.4	7.2 6.6	7.1 6.5	8. 7-4	h. m. 11. oPM 9. oAM		mation.	5484 73	Moderate breezes, and mostly fair. The last aboard still. A.M. faw a ship, the Dudley, BARRING TON, from Madrais to the Ni and Pegus the Captain came on board. faw another ship. Bar. 6 P.M. 29.0. Standing to S.W. from 10 A.M. to 1 P.S. dipping needle increased in dip, the diffusee on 10 miles
25	82	30.01	29.93	82	29.	94	e. śą. śą. c. s. śą. r. śą. c. śą.	NE. V. V. E by N. V. ENE. NE by E. NE.	}	1943	90.13	89.10					2.50	6.13	87. 7	1-		8.2 6.2 5.6 5. 4-4	6.6	6.4	9.2 7.3	Very fleady. 1. oPM 9.15 12.30AM 9.10 0.30 PM	5.17 5.23 5.45 6. 4	88.18 88.10 88.11 87.25	81	Winds from NE. with frequent fqualls and The land bird aboard fill. 1 P.M. spoke the Floyer, from Madrass to Malay Cooff, Rich. Water luminous. Sea bird shape plover, grey with upper part of head black wings tipped with black. Same bird fee have been about ship several days. Bar. 5 29.9. 6. 29.9. 1 A.M. 29.9. 8. 30.0. 30.0. 11. 30.0.
26	82	30.0	29.9	811	29.	- 11	[α, ε. εα. ε. ε. ε. ε. εα.	V. NE by E. NE. NE by E. V.	}	8 30	90 19	88.46					3.23	6.38	86.36			5 4	6.2	57	6.6	Tery fleady,			87	Fresh gales and squally throughout. The bird aboard still. Sea very luminous. P small mew came on board. Bar. 2 P.M. 10. 30.0. 1 A.M. 29.9§. 8. 30.0.
27	831	30.01	29.9	834	29.	91		NE. V. 4.V. Eby N. I.B. Eby N. Eby N.	}	3 55	90.48	88.20	79	87. 1	5 0	43	3.28	6.40	86. 3			4.2	4.6	4-4	5.3 V	ory entlendy.			64	Winds most Easterly, with squalls and rain. a boat on board a country fnow with red co- she was bound from Transchar to Ashers. O not very good. Bar. 4 P.M. 29-94. 6.: 124 A.M. 29-94. 84. 30-04.
28	841	29.91	29 9	845	29.		ရေ လည်း ရေးလ	E by N. E by N. ENE. E by N. E by N. E. E by N.	}	20	90.50	88. 2	142	85.40	6 0	38	4-46	8. 2	85.40			۱ ۱	3.4	S		1. oAM Very fleady. 0.30 PM	2	86. 2 85 40	78	Moderate breezes, and mostly cloudy. B P.M. 29.9§. 4. 29.9. 6. 29.9. 12§ . 29.9§. 8. 29.9§. 11. 29.9§.
29	84½	30.0}	30,0	841	29.9	91-	fq, r. c. fq. fq, r. c. c. c. h.	V. E. V. ENE. ENE. NE by R. ENE. NE by E.	}	13	90.39	87.38	152 139 160	85. 6 85.19 84.58	5 © 7 © 6 ©	37 20 21	5-57	9.28	85.10			0.2		0.0 ND.	1.3 1.1 0.7 ND.	Very fleady, el 6.30 9. 0 11.10 Very fleady. 1. 0AM Pretty fleady, 9. 0 0.45PM.	8.20 8.25 8.30 8.35	85.39 85.38 85.37 85.36	72	Increasing breeze from Eastward, with squeather and rain. Bar. 3 P.M. 29.82. 4.2 6. 29.9. 1 A.M. 29.9. 9. 30.0. 10. 30.4

1	1					H					1				1	11	1		1		N	dagne	tical				II	1
	-					1		100	D L	D. L.	. Longi	tude fr	om G	reenwi	ich	11			Cor.	Vai	riation	1	Sout	h Dip		1		
	'n.		arine B				Weather and Winds.	1	A.O.	T.K	A.	T.K	D. T.	<u>.</u> .		E.	-	itude	Long.	Az.	Amp.	-	ace	MD	.c.D		ML	
75	_	к.	S.	Th	D.	-		-	NS	WE	-	-	-	-	-	. O.D.	Λ.	0.		_	-	E.	W.	_	-	-	_	
		In.Dec.	In.Dec		in.De	1	c. NE by E.	,	1		e ,	° E	E	e E			s,	s,	°,	e '	. , E			0			5939	
30	84}	30.24	30.0	85	29.9	. 11	c. ENE. c. h. ENE. NE by E. h. NE by E.	} '	1	5	90.15	87.1	9				7.13	10.55	84 55			4.	4.4	4.2	3.3	Very fleady.	79	Moderate breezes, and mostly hazy. Bar. 3 P.M. 29-91.
c.	78		30.0	771			h. NE by E. N. NE by N. h. NE by N. NNE. h. c. fq, r. NNE. NE. fq, r. fq, hr. NE. V.			6	90.36	87.3	4				7-24	[11. 1]	85.15			3.6	4.2	4.	3:1	Pretty fleady.	61	124 A. M. 29-92 74 30.0 8 30-01 88 30-01
2	821	30.0	29 9 ፤	82	29.9	. 11 1	iq, r. r. V. r. c. V. NE. N. by E. c. N. by E. NE by N. NNE. c. NE by N. c. NE by N. NNE.	ĺ	1	5	91.20	88.1	3				7-17	10.50	85.58			2,2	2.6	2.4	1.5	Not steady.	52	First part, fqually with rain. Paft 6 P.M. weather los very black and threatening, but the barometer did not
3 8	831	30.0	29.9	831	29.9	11.1	c. NE by N. NE. c. h. NNE. N by E. h. f. N. NNW. N by W.	}	8	9	92. 4	89. (97	87.2	4	*A 43	7. 8	10.33	86.49			3-	3.6	3-3	2.4	Not very fleady.	47	Decreasing breeze, with pleasant weather. A.M. the stand bird. A small mew about thip. Bar. 26 P.M. 2 4 29-9. 7- 29-94. 12- 29-94. 7 A.M. 29-94. 29-94.
4	83	30.0	29.91	831	29.9	{	h. NNW. NW. NW by W. V. h.c. L. tonw. V. WNW. c. WNW. V.	}	4	3	92.16	89.21	116	87.2	5 6	*A 12	7.52	11.13	87. 2	1.32*	1.41*	5-4.	5.6	5.5	4.6	Very fleady.	52	Modily light airs. A.M. the fame land bird. Bar. 2 P 29.8\$. 6. 29.8\$. 10. 29.9\$. 12. 29.9\$. 7 A.M. 29
5 8	84	30.04	29-9‡	83]	29 9		h. SSW. S. h. SSW. S. h. f. S. V. SE by S.	}		5	91.58	89. 8					8.39	12. 2	86.47	*1.12	*1.22	6.6	7.2	7.	6.1	Very fleady.	50	Light breetes. A.M. the fame land bird. P.M. a land bird flew like an owl. Bar. 3 P.M. 29.9. 4. 29.9\$. 7. 29 7 A.M. 29.9\$. 11\$. 29.9\$.
6	83	30.0	30.0	831	29.9		f. SE by S. f. SE. SE by E. f. fq, r. fq, fr. SE by E. E. ENE. V. fq, hr. c. V. C. NE by E. c. E by N.	}	9 9		91.16	88.17	137	86.	0 6	*P 28	9.42	12.56	85.44			7.6	8.2	8.	7.1	Pretty fleady.	75	First part, moderate broczes. Middle and latter, squa The same land bird on board. A sand lark on box Saw a frow flanding to Nd; it housed English color Bar. 4 P.M. 29.9\$. 7\$. 30.0. 7\$, in squall, 29.10. 30.0. 12\$ A.M. 29.9\$. 12\$, before bard rate, 29.9\$. 8\$. 30.0. 9\$. 30.0.
7 8	801	30.0}	30.01	80 <u>1</u>	29.9	1	ENE. NE by E. NE by E. NE. NE by E. NE by E. NE by E. NE by E.		12 1	7	89.26	86.10					11. 0	14. 2	83.45			8.6	9-2	9.	8.1	Pretty Ready.	134	Fresh gales, with pleafant weather. The fame land bird board. A mortied bird came on board. Bar. 24 P.M. 29. 4-29.94. 6. 29.94. 10. 30.0. S.A.M. 30.04. 11. 30.
8 8	814	31.01	31.0	811	30.0]	n c	E. E. ENE. NE. G. NE. ENE.	}	12 3	3	87. 9	83 50	188	80.4 80.1	2 5 6	*A 36	11.27	14 17	81.23			9.2	9.6	9-4	8.5	Very fleady.	135	Fresh breeze throughout. A small land bird aboard. I at P.M. 29.9 4. 4. 30.0. 6. 30.0. 1 A.M. 30.0. 30.0. 9. 31.04.
	-					1	f.h. ENE.	1																		le	6624	

11	1			1					T	1			5775		П						. M	agnet	cal				II.	1
									D.L.	D.L.	Longito	ude from	n Gree	enwich					Cor.	Varia	ation.	1	South	Dip				
ТЪ.	R.	Marine I	Th.			Weather and	l Winds.		N _I S	T.K.	Λ.	TK.	D. » T.K.		s. o.	E D.	Lati	O.	Long.	Az.	Amp.	E.	w.	MD.	c.d		ML.	
·	in.Dec	In.De	с .	în.Dec.						7	° ,	• , ' E	, E	Ě		,	° ′ N	° ′	° É	° É	, ° E	0	۰	0	0		6624	gth December. Pleafant gale. At a P.M. had foundings, aS fathfand; and at day-light faw the land bearing SW by h [Weather [Winds.]Courfe [K.F.] Soundings.
9 80		30.1	791		Б. Б. Б.	ENE. E. E. ENE.		}	22	1	86.18	82.56					11. 9	13.37	80.42			5.6	6.2	5.	5.1	Very fleady.	86	2 10. mo ground. 2 1 2 WSW 1.5 14 gravely fa
	ore, in					's cuddy (cabb			_	hours.	86.14	- -	<u> </u>				10.47	[13. 9] 13. 7 13. 8				5.6 5.6 5.6 5.6	5.6	6.2 5 6 5.7 5.7	5-3 4-7 5-		22	9 10 10 10 10 10 11 11 12 15 16 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18
* il	the las	of Pu	ICAT !	Flag floff GEORGE	we were t	of December then from Fort of Jupiter's fir	St. George,	80.29		82.5	Longit Longit	tude by	Time-	keeper		Sept.	. in 83	days.	-	N.B. A with the r ville's rous thip, excep and 10th October 1	ed-house too pt 2d, 3d, 6 and 28th	rounies ding on wards th	of the	dip wer	e taker		denochulus	14.15 Kettle Bottom, ditto. 22.40 Kat. in fight to the Southward. At noon, * Pulsicat Flag-daff, S 52° W. R 33. 6 Kettle Bottom, Pulsicat Ridge. 46.30 Higheft Peak, ditto. 50. 0 Sandy Point. L 5. 0 Point to Southward of Pulsicat. 19.30 Tuft near South ext. in fight.
Los	ngitude ngitude	of 9th by mea	noon,	ny map, 2 Dobjera	nations,			80.28 -14													-	-		-	-	1		10th Dreember.

* D d d 15

In the explanation of weather dr. denotes drizling rain, and a comma (,) after any weather marked, implies that all the weathers, so separated by comma, are connected: thus, sq, r, th, L. imply squally with rain, thunder and lightning: sq. r. th, L. imply squally, rain, thunder and lightning, to have all been in the period of six hours, but not at the same time.

In the explanation of the 5th column, for N denoting that the observation read N denoting that the latitude by observation.

					lo	L.	D.L.	Long.	from Gr.	1			lo	L	D.L.	Long.	from Gr.	1	
				Fo			T.K.	Α.	TK.	Lati	tude	Read			r.K.	A.	T.K.	I at	itude
				rn	N	S	WE		11.	A.	0.	Kraa	N	S	WE		1.6.	A.	0.
					1	,	1.	°E′	. ,	. ,	. ,	1	,	,				0 ,	
May 2d,	_		-	-	-	9	- -	-	-	-	-	_	9						
4th,					-	31	- -	-	-	-	-	-	-	23					
8th,	-		_	-	-	39	- -	-	-	-	-	-	-	19				1	
9th,	-	_	_	-	-	11	- -	-	-	-	-	-	-	10					
10th, add	4' to Lat. A ti	ill 15th inclu	five, and	-	-	-	- -	-	_	39.26		-	-	-	- -	_	1 -	39.30	
14th,			_	-	-	20	- -	-	-	- 1	-	-	-	26	18				
15th,		_		-	-	25	- -	-	-	- 1	-	-	-	20					
18th, in 6	column D.)	for W read E			11		1												
22d,	_	-	-		11 1		- -	-	-	- 1	-	_	-	16			-		
			oth of June inc				- -	-	_	15.32	-	_	-	-	- -	-	-	15.22	
une ift, f	ubtract 10' from	B Long. A to	25th of June inc	lufive, and	1-1	-	- -	16.51		- 1	-	-	-	-	- -	16.41			
gth,		-		_	-	-	- 20	-	_	-	-	-	-	-	- 19				
pth,	_	_	_	-	-		- -	-	14. 1	-	_	-	-	-	- -	-	14 15	H8-370	9
	ract 11' from	Lat. A till 1	it July inclusive	, and	-	- -	- -	-	_	3.45	-	_	-	-	- -	_	-	3.34	9
6th,		_	_	_	2 I		- -	10. 2	_	-	_	_	18	-		10.16			
7th,	_	_			1-1	-	- -	10. 6	-	-	-	_	-	-		10.20		1 1	
8th,	_	_	_	_	1-1	- -	- -	11.10	-	-	-	_	-	-		11.24			
	13' to Long.	A till 2d Aug	gust inclusive, a	nd	-	- -	- -	12.18	-	-		-	-	-	- -	12.31	1		
uly 2d,	_	-	_	_	-	- -	- -	-	-	0.22 S	-	-	-	-	- -		-	0.33 S	
d,	-	-	-	-	-	- -	- -	-	-	1. 6	-	-	-	-			-	1.23	
			tinclusive, and	_	-	- -	- -	-	-	2.13	-		-	-	- -	-	-	2.34	
	2'Ito Long. T	.K. till 28th	July inclusive,	and	-	- -	- -	-	28,12	-	-	-	-	-			28.14		
8th,	-	_	_	-	-	- 9	-	-	-	_		-	-	-	- 9		1		

ERRATA and ADDENDA in the GRENVILLE'S JOURNAL.

				1	D.	L	A.	Long. fr	om Gr.				D.	r.	D.I	LIL	ong. fr	om Gr.		
				For	A.	0.1	.K	Λ.	T.K.	Lati	tude	Read			T.F			T.K.	Latie	tude
				247		S	VE		1.12.	Α.	0.	Kraa	N	S	W	E	Α.	1.K.	Α.	0.
						,	,	٠,		. ,	. ,		,	,	,	,	. ,		. ,	۰
July 29th, ad	d 6' to Lon	g. T.K. till 1	oth August inc	lufive, and	-	-	3 -	-	27.56	-	31.33	-	-	-	-	3	-	28. 2	31. 3	
Aug. 3d, ad	d 11' to Lo	ng. A. to 9th	August inclusive	ve, and	-		- -	13.56	-	-	-	-	-	-	-	-	14. 7		100	
fubtract 6	from Long	Long. A. till . T.K. till 12	18 August inclu th August inclu	ufive; } and	-	-	- -	-	2.25	-	-	-	-	-	-	-	-	2.19		
			18th August in			- -	- -	-	7.26	-	-	-	-	-	-	-1	-	7.22		
14th,		_	-	_	-	16	- -	-	-	-	-	-	16			1				
19th,	_	-	-	_	-			-	19. 9	-	-	-	-	-	-	-	-	19. 5		
Sept. 20th, fu	abtract 10' fo	om Long. A.	till 8th Dec. in	clufive, and	-	- ·	- -	21.26	-	-	-	-	-	-	-	-	21.16		1	
27th, fubtra	& 20' from	Lat. A. till 1	6th Oct. inclu	five, and	-	-	- -	-	-	36.40	-	-	-	-	-	-	-	-	36.20	
O&. 17th, fi	ubtract 59' f	rom Lat. A.	till 22d inclusi	ve. —	-	-	- -	-	-	34-57	-	-	-	-	-	-	-	-	33.58	
23d,	-	_	-	_	-	-	- -	-	-	29.55	-	-	-	-	-	-	-	-	29.17	
24th, fubtra	A41' from	Lat. A. till 1	oth of Nev. in	clufive, and	4-	-	- -	-	-	29. 4	-	-	-	-	-	-	-	-	28.23	
Nov. 5th,	-	-	_	-	7	-	- -	-	-	-	-	-	5			-				
9th,	_	_	-	-	-	14	- -	-	-	-	-	-	-	4		-	100			
1 1th, fubtra	& 31' from	Lat. A. till	7th inclusive,	and —	-	-	- -	-	-	2. 3	-	-	-	-	-	-1	-	-	1.32	-
					۱	П			b= 8		872.27								N 0.28	
18th,	_	-	-		-	П	- -	-		0. 3	=		Ľ	-		-			0.28	
19th,	_	7.50		-	-	1-1	- -	-		0. 3		_	-	[-	_		0.14	
20th,	_	0.00	- ·		-	1-1	-1-			0.17	O	(92.50)	Γ		-	-	-		0.28	
21ft,	-	-	-	7	-	1-1	- -	-	-	0. 3 N	-	-	-	-		-1		77.5	a constant	
22d, add 3	t' to Lat. A	till 9th Dec	. inclusive, an	d —	-	-	- -	-	-	0. 9	-	-	-	-	-	- 1	-	-	0.40	1
Dec. 9th,	-	_	_	-	-	-	- -	86.18	-	-	-	-	-	-	-	-	86. 8			
10th,	-	-	-	-	1-	-	- -	86.14	-	-	-	-	-	-	-	-	86. 2			

V. D. The thin having an iron tiller, and	much iro	n about t	he after	part, it	was f	ound,	the	obser	vations taken in the cabbin	1	l	1	1	1	M	agnetic	al		1
N. B. The ship having an iron tiller, and were not confident or meriting confidence fit place in the ship.	e. From	n Anjeng	s they we	re all ta	ken o	n the	binna	cle, v	which feemed to be the only					Vari	ation	N	North D)ip	1
	1			N	lagne	tical						Lat.	Long.	Az.	Amp.	Fac		D.C.D	
}			Varia	ation	1_	South	Dip			1776					Zimp.	E. [w.	D. C.L	1
1776	Lat.	Long.	Az.	Amp.		W	MD.	C.D.		Nov.16	In fight of Coast of Arabia.	12.54	。 , 47· 4	9.31* *10.38	9.39* •10.35	6.2	7.2 6	.6 5.7	7 Pretty fleady.
At 14 Afhore at Trinquemale on Ceyloan	N, 8.32	E, 81.30	°w′	°w′	3.6	3.6	°3.6	å.5		17	Cape Aden in fight.	11	45.25	*11.25	*11.30 11. 5* *11.18	6.2	7.2 6.	6 5.7	Ditto.
25 At anchor 10 fath, fand and finells, Anjungs Road.		76.54	1.12*	1.13				1 92	Very fleady.	52.77	At anchor at Mecha.	11	1	10000	11.224		- 1	1	
30	9.58	\$500 BUT	1. 3*	0.53*				10000	Pretty fleady. Ditto.	6021	Ditto. Athore at the Company's fallory.	13.22	44-10		11. 2*	150500	9.4 9. 9.6 9.	- Sec.	Not fleady, much wind.
ov. 1 Off Kalpeny. Lucadivé Ist {	9·57 9·59	73.35	1.25*		1	50.50	100		Not very fleady. Pretty fleady.	550	In fight of Gebel Zeker.		43-35	13.10*					Pretty fleady.
3	9.38	71.18	1.30*		1000	2.7	2-7	3.6	Ditto.		In fight of Gebel Tar. Ditto.	15.29	1 1	13.10* •13.14 14. 3* *12.57	1 1		× 1	1572	Very fleady,
5	9-53	69.11	2 122		3.	3.	3.	3.7	Ditto. Not very fleady.	25	2000000	16.24			14.10				
7	9.55	67.35 65.30	4. 0%	4. 3* *4.18					Ditto.	26		III Second	41 54	13-44*	13.50*	19.1	9.1 19.	1 18.2	Ditto.
s	11.57	63.22			ND.	ND. 0.4	° 4	0.3 ND.	Not fleady, but taken when most at rest.	27 28		18.14		10000000	13.19*				Pretty fleady.
9	12.45	60.34	5.15* *5.37		3.	3.	~ I		Very unfteady.	29	Off Judda.	20.59	1 00		12.59*	26.7 2	6.7 26.	7 26.	Ditto.
10		57.21	, , ,	6. 6*		4.			Pretty fleady.	30 Dec. 1	In fight of Craft of Abyfinia.	21.43			12.49*		9.6 29 bou 30.		wind and paching.
11	11:	55.12			200			0.00	Ditto.	2		22.44	38.24			31.6 3	2.6 32.	6 32.	Not very fleady.
12 Off Secstra.	13.10	52 55 50.58	9.20%	8.58*	56	6.6	6 2	5 3	Very fleady.	3		22.54	38.11 37•44			32.4 3	2.4 32.	4 31.6	Pretty fleady. Not very fleady.
14 In fight of Cooff of Arabic.	13.51	49-37	9 35°	9.32*	7.2	8.6	8.	7.1	Quite fleady.	0 00000	At anchor on Cooff of Arabia. Off Cooff of Arabia.	1	38.29 38.21	14.52*		34.6 3	1.6 34	34.	Pretty itendy,
15 Dit o.	13-37	48.33	*8-46	9 30° *9.30	8.	9-	8.4	7.5	Ditto.										L

Register of the Dip in His Majesty's Sloop of War The Swallow, Captain John Alexander Panton.

1	1			M	agneti	cal			1							M	agneti	ical		1	
1		-	Varia	tion		South	Dip								Vari	ation.		South	Dip		
76	Lat.	Long.	Az,	Amp.	E.	w.	MD.	C.D.		1777			Lat.	Long.	Az.	Amp.	-	w.	MD.	C.D.	
Afhore on a fmall island on Coast of Arabia. 9 10 At anchor at Barudy.	24.16	38.30 38.30 38.30		13 50	35. 35.	35. 35. 35.2	35.1	34-2 34-3	Much wind, Pretty fleady. Very fleady.	3	At anchor at 5 fath. on	a Coast of Africa	29.35	• /	*E'	12.50*	46.		46.	45-3	Ditto.
11 14 15 17 17 17 17 17 17 17 17 17 17 17 17 17	24.19	38.18			35-2 35- 35-	35-2 35- 36-	35.2 35. 35.4	34-4 34-2 34-6	Not very fleady, good deal of wind. Very fleady. Not fleady, fwell from S ⁴ . Much motion, with wind.		Off Surz. At anchor off Surz.	N. Lat. obf. 29.58.12	29.51	To the second				45.6			Perfe&ly ficady.
19 20 21	25. 4 25.45 26. 9	36.26 36.11	11.30	11.40	* 38. 38.4	38. 38.4	38. 38.4	37.2 37.6	Pretty fleady. Not very fleady. Pretty fleady.	7	Ditto.	29.58. 1	29-58				45-2	45.2	45.2	44-5	Very fleady.
22 23 25 In fight of Ras Mahomet. 26	26.25 26.55 27.36 27.47	11			* 39-7	40.7		39-5	Extremely steady. Very steady. Very unsteady, much wind.		Changed the poles, a Rechanged the poles, At anchor off Suez. Ditto.	marked end di	ps,	- 			44 4 44-5	44-4 44-5	44-4 44-5	44- 44-	A little wind. Ditto. Perfectly fleady. Ditto.
27 28 29 At anchor off <i>Tor.</i>	27.58 28. 4 28.16			13.29	42.				Pretty fleady. Ditto, a little fwell.		ll _{Surz}	29.58.10	30. 2	32.16	1	Į,	l	1			3

D. 4 O.S. E.	D. D. C. O.S. E. D.	D. C O.S. E.
Nov. 1 .22 73.31.30 © 6 33 Kalpeny bearing N. 70.26. © 5 15 6 .30 67. 5. © 5 13 W 7 .22 65.52. © 4 6 E 15 1.22 47.11. © 6 20 16 .50 46.14. © 5 28	Nov.19 E 44. 8.18 © 5 14 At anchor in Mocho Road. 20 44.16. © 5 8 20th. Observed an immersion of 1st fat. of Jupiter with my 21 44. 6. % 3 15 8 20th. Observed an immersion of 1st fat. of Jupiter with my 21 42.28. % 3 15 8 20th. Observed an immersion of 1st fat. of Jupiter with my 22 24. 21 42.28. % 3 15 8 20th. Observed an immersion of 1st fat. of Jupiter with my 23 24. 6. % 3 15 8 20th. Observed an immersion of 1st fat. of Jupiter with my 24 21 42.28. % 3 15 8 20th. Observed an immersion of 1st fat. of Jupiter with my 25 25 25 25 25 25 25 25 25 25 25 25 25 2	Dec. 6 .29 37 50. 9 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3