

XXIII. *Astronomical Observations made by Samuel Holland Esquire, His Majesty's Surveyor General of Lands for the Northern District of North America, for ascertaining the Longitude of several Places in the said District. Communicated by the Astronomer Royal.*

Redde, Jan. 20, 1774.

KITTERY POINT, in the province of **MAIN**, in **PISCATAQUA** harbour.

Latitude $\left\{ \begin{array}{l} \text{by result of repeated observations,} \\ \text{of } \odot \text{ and fixed } \star \text{'s, made with} \\ \text{BIRD's astronomical quadrant,} \end{array} \right\} 43^{\circ} 4' 27'' \text{N.}$

Observed, with **DOLLOND's** 12 feet refracting telescope,

Immersion and Emersions of 4's satellites as follow,

	Apparent time.
	h ' "
1771	
April 11th, an immersion of the 1st,	at 15 43 30
27th, same	same 14 1 43
May 4th, same	same, 15 55 54

The **VARIATION** of the **COMPASS** at this place, is $7^{\circ} 46'$ West.

FORTSMOUTH,

PORTSMOUTH, province of NEW HAMPSHIRE.

Latitude $\left\{ \begin{array}{l} \text{by result of repeated observations,} \\ \text{of } \odot \text{ and fixed } * \text{'s, made with} \\ \text{BIRD'S astronomical quadrant,} \end{array} \right. 43^{\circ} 4' 15'' \text{ N.}$

Observed, with DOLLOND'S 12 feet refracting telescope,

Immersion and Emersions of μ 's satellites as follow,

		Apparent time.		
		h	'	''
1772,				
Sept.	6th, an emersion of the 2d, at	11	9	20
	18th, same	1st,	9	42 35
Oct.	11th, same	same,	10	5 4
Nov.	3d, same	same,	10	23 -54
	9th, same	2d,	10	51 39
	12th, same	1st,	6	48 1
	* 19th, same	same,	8	42 41
	23d, immersed entirely;	3d	6	8 6
	same, began to emerge,	same,	9	28 14
Dec.	4th, an emersion.	2d,	7	50 0
	5th, same,	1st,	6	57 44

The VARIATION of the COMPASS at this place is $7^{\circ} 48'$ West.

All these observations were made by time kept by GRAHAM'S time-piece, with a gridiron pendulum, rectified occasionally by equal altitudes of the Sun, corrected agreeably to the tables of M. DE LA LANDE, for the alteration of the declination in the intervals of corresponding observations.

SAMUEL HOLLAND.

* This satellite in emerging was in conjunction with another, which occasioned such a deception as to render this observation uncertain about 20 seconds sooner than what is marked here.