

B E I L A G E

Z U

No. 177. DER ASTRONOMISCHEN NACHRICHTEN.

Astronomische Beobachtungen von Herrn *Andrew Lang* auf St. Croix gemacht.

Vorwort des Herausgebers.

Folgende Beobachtungen und Auszüge aus Briefen des Herrn *Andrew Lang* sind schon seit längerer Zeit in meinen Händen, und erscheinen hier gesammelt auf einmal. S.

Meridian Transits of the Moon and some Stars, observed in St. Croix by *Andr. Lang*, with an Altitude and Transit-Circle, and Clock regulated to sidereal time.

Place of Observation 17° 44' 32" North Latitude.

1827.	1. Wire.	2. Wire.	Meridian or	4. Wire.	5. Wire.	Error of Clock.	Time of Transit	Names of stars.
			Center Wire.				corrected for	
			<small>h m s</small>				<small>h m s</small>	
July 31	—	—	14 37 18,6	44,8	12	— 1 7,05	14 36 11,55	Moon 1 Limb
	—	—	14 42 29,7	55,3	—	— 1 7,10	14 41 22,60	2 α Librae
	10	36,5	15 27 2,6	28	54	— 1 7,50	15 25 55,10	γ —
Aug. 1	—	10,4	14 42 36,4	1,8	28,5	— 1 13,80	14 41 22,60	2 α Librae
	17	43	15 27 9	34,4	0,8	— 1 13,99	15 25 55,10	γ —
	18	45	15 37 12,6	39	6,4	— 1 13,93	15 35 58,67	Moon 1 Limb
	48	14,5	15 56 41	7	34	— 1 14	15 55 27	β Scorpii
Sept. 13	38	4	5 7 29	54	20	— 1 12,50	5 6 16,50	Rigel
	16,4	42	5 17 7	—	—	— 1 12,50	5 15 54,50	γ Orionis
	9	36	5 28 3	29,4	57	— 1 12,50	5 26 50,50	Moon 2 Limb
	13	38,6	5 47 4	28,8	54,4	— 1 12,50	5 45 51,50	α Orionis
— 14	59,6	25,2	5 46 50,5	15,2	41	— 0 58,97	5 45 51,53	α Orionis
	42,2	9,4	6 19 36,6	3	30,6	— 0 58,70	6 18 37,90	Moon 2 Limb
	52	18,2	6 28 44,5	10	36,8	— 0 58,60	6 27 45,90	γ Geminorum
— 15	44,5	10,6	6 28 37	2,4	29	— 0 51,10	6 27 45,90	γ Geminorum
	54	21	7 10 48	14	41,2	— 0 50,70	7 9 57,30	Moon 2 Limb
Oct. 13	29	56,4	7 38 23	49	16	+ 1 2,26	7 39 25,26	Moon 2 Limb
	—	40	9 18 5	29,8	55,8	+ 1 2,66	9 19 7,66	α Hydrae
— 26	50,5	16	19 47 41	—	—	— 0 49,14	19 46 51,86	β Aquilae
	59	25	19 48 52,4	18,5	46	— 0 49,14	19 48 3,26	Moon 1 Limb
— 27	27	52,4	20 9 18	—	10	— 0 47,80	20 8 30,20	2 α Capricorni
	17	42,6	20 12 8	34	0	— 0 47,85	20 11 20,15	β —
	—	54	20 47 20,6	46,2	13	— 0 48,40	20 46 32,20	Moon 1 Limb
Nov. 11	15	41,2	8 58 7,3	33	59,3	— 0 6,20	8 58 1,10	Moon 2 Limb
	24	49,4	9 19 14,6	39,2	5	— 0 6,10	9 19 8,50	α Hydrae
	26,6	52,4	9 59 18,2	—	—	— 0 5,90	9 59 12,30	Regulus
1828. Jan. 24	47	14	1 44 40,5	6,8	34	+ 0 29,90	1 45 10,40	β Arietis
	6,3	34	1 57 0,9	27,7	55	+ 0 30	1 57 30,90	α —
	24,6	50,8	2 4 17	42,6	9,2	+ 0 30,10	2 4 47,10	Moon 1 Limb
	19	45	2 35 10	34,8	1	+ 0 30,60	2 35 40,60	μ Ceti
	58	23	2 52 48,2	13	38,4	+ 0 30,80	2 53 19,00	α —

1828.	1. Wire	2. Wire.	Meridian or Center Wire.		4. Wire.	5. Wire.	Error of Clock.		Time of Transit corrected for Error of Clock.			Names of stars.	
			h	m			s	h	m	s	h		m
April 6	37	4	19	10	31	57,2	24,8	+ 0	6,20	19	10	37,20	Moon 2 Limb
	—	—	19	42	18,3	—	9	+ 0	6,36	19	42	24,66	α Aquilae
— 7	31,5	57	19	42	22,4	—	—	+ 0	2,30	19	42	24,70	α Aquilae
	—	32,4	20	10	59	25	52	+ 0	2,10	20	11	1,10	Moon 2 Limb
July 20	18	Broken	14	13	9,5	34,5	0,95	— 0	31	14	12	38,50	Jupiters Center
	34	do.	14	21	27	52,8	19,80	— 0	31,24	14	20	55,76	Moon 1 Limb
	5,5	do.	14	41	57,5	23	49,50	— 0	31,87	14	41	25,63	2 α Librae
Aug. 4	47,2	do.	4	9	41	7,6	34,8	— 0	33,60	4	9	7,40	Moon 2 Limb
	47	do.	4	26	39,3	5	31,5	— 0	33,56	4	26	5,74	α Tauri
Aug. 19	10	do.	16	6	0,3	24,9	50,6	— 0	37,20	16	5	23,10	δ Ophiuchi
	37	do.	16	19	33	0,3	29	— 0	37,12	16	18	55,88	Antares
	31	do.	16	28	22	47	13	— 0	37,07	16	27	44,93	ζ Ophiuchi
	9	do.	16	52	3	29,6	57	— 0	36,94	16	51	25,06	Moon 1 Limb
	19,4	do.	17	1	11,4	37	3,6	— 0	36,89	17	0	34,51	η Ophiuchi
	36,2	do.	17	7	28,1	53,4	20	— 0	36,85	17	6	51,25	α Herculis

* A very satisfactory observation I think the best I have made.

A few Occultations of Stars by the Moon observed also at St. Croix by *A. Lang* viz.

A small Star a little to the West of β Capr.	Immersion.	1827	Septbr. 29	9 ^h 50 ^m 34 ^s	Mean time at St. Croix.
β Capricorni	Immersion.		Septbr. 29	10 9 0,5	
	Emersion.			10 20 41,5	
ϵ Tauri	Immersion.		Octbr. 8	19 39 40,3	
ϵ Piscium	Emersion.	1828	Febr. 18	6 52 52	
a small Star	Immersion		Febr. 18	7 59 18,5	

Emersion of 1st Satellite of Jupiter. August 15. 7^h 21^m 36^s
Mean Time at St. Croix.

The Satellite on first observing it, was an extremely minute point, rather dim, and it did not attain its brilliancy until

eighteen Seconds had elapsed from the time of my first perceiving it.

Andr. Lang.

In the Astr. Nachr. Nr. 126 some Meridian Transits of the Moon and some Stars observed by me here from November 1826 to May 1827 are published. Among these I observe an Error or an Omission which I now further correct from an attentive Examination of my Original Journal. It is the observation of 1826 Dec. 22. which in reference to the Meridian or Center wire and the Correction for clock, stands thus in the Nachrichten, viz:

	Mittelfaden.	δ U.	
	h m s	''	
1826 Dec. 22.	18 27 —	+ 2,6	γ Virginis
	18 50 28,8	+ 2,7	Mond Rd. 2
	19 10 10,2	+ 2,7	α Virginis.

The above should be corrected as follows viz:

	h m s	''	
1826 Dec. 22.	18 27 6,3	+ 2,6	γ Virginis
	18 50 28,8	+ 2,7	Mond Rd. 2
	19 10 10,2	+ 2,8	α Virginis

I would not have troubled you with the preceding remark, but on referring to my Journal it appears I considered this observation as tolerably good, and besides in the Astr. Nachr. Nr. 124. I find a corresponding observation on the same day, of the Moon and these Stars made at Åbo by Prof. *Argelander*. This I have calculated, and my Calculation of this single observation gives for the difference of Longitude between Åbo and my position 5^h 47^m 58^s.2

Now Åbo in Nr. 124 is considered 1^h 19^m 49^s.2 East of Paris, and Paris is East of Greenwich 9 21,6

therefore Åbo is East of Greenwich 1 29 10,8

which deducted from 5^h 47^m 58^s.2 gives 4^h 18^m 47^s.4. My observation cannot presume to the nice accuracy of Prof. *Argelander*, the clock I then used giving me constant trouble in detecting its irregularities by comparison with another in a different Room which I could depend on, neither have I appeared to notice the distinction of the two Stars which form γ Virginis.