

whence there will result two values of the radius, which remains unknown, either of which will produce an aberration equal to that of the other lens.

V. *Extract of a Letter from the Abbé De la Caille, of the Royal Academy of Sciences at Paris, and F. R. S. to William Watson, M. D. F. R. S. recommending to the Rev. Mr. Nevil Maskelyne, F. R. S. to make at St. Helena a Series of Observations for discovering the Parallax of the Moon.*

Lincoln's-Inn-Fields, 8 Jan. 1761.

Read Jan. 8,
1761.

DR. Watson lately received a letter from the Abbé De la Caille at Paris, in which he takes notice, “ That although the parallax of the moon seems sufficiently well determined, by the observations made in 1751, in Europe and at the Cape of Good Hope; nevertheless, an element of this importance cannot be too well ascertained. He is of opinion, that Mr. Maskelyne’s continuance in St. Helena may be advantageously employed in making new observations; since the base, upon which these parallaxes should be calculated, should exceed the earth’s radius.

“ That if the Royal Society does approve of his proposition, and recommend to Mr. Maskelyne the execution of the scheme of correspondence,
“ which

“ which he has drawn up, he promises to comply
“ with it punctually on his part.”

The Abbé has accordingly sent Dr. Watson a series of observations, which he recommends to Mr. Maskelyne to make, from the 13th of June 1761, a few days after the transit of Venus, till the 9th of May 1762. This paper Mr. Maskelyne has transcribed, and proposes to make these observations in concert with the Abbé De la Caille. And if a copy of this paper, which Dr. Watson proposes to lay before the Society, at their next meeting, was put into the hands of Dr. Bradley, that gentleman might likewise make correspondent observations.

The Abbé likewise adds, “ That he has supposed,
“ that the sector, which Mr. Maskelyne takes with
“ him to St. Helena, would take in five degrees and
“ a half on each side the zenith; and that his clock
“ would be regulated by sydereal time.” This sector extends much beyond the Abbé’s expectation, as it takes in eight degrees and a half on each side of the zenith.

The OBSERVATIONS recommended by the Abbé De la Caille to Mr. Maskelyne.

1761.	Sydera Observ.	Culmin.			Decl. A.	
		H.	M.	S.	G.	M.
Jun. 13. Vesp.	λ ♉ - -	14	6	15	12	16
	α ♉ - -	14	37	42	15	2
	ζ - - -	14	39	0	13	54
	γ ♉ - -	15	22	13	13	59
Jun. 14. Vesp.	ζ - - -	15	30	0	18	27
	β ♍ - -	15	51	37	19	7
	ν ♍ - -	15	57	41	18	48

1761.	Sydera Observ.	Culmin.			Decl. A.	
		H.	M.	S.	G.	M.
Jun. 15. Vesp.	♄ - - -	16	19	0	22	3
	♂ ♄ - -	17	59	31	21	6
Jun. 22. Mane.	♄ ♄ - -	21	26	52	17	44
	♄ ♄ - -	21	33	53	17	12
	♄ - - -	21	37	0	19	0
Jul. 10. Vesp.	♄ ♄ - -	14	6	15	12	16
	♄ - - -	14	26	0	12	30
	♄ ♄ - -	14	37	42	15	2
Jul. 11. Vesp.	♄ - - -	15	12	0	17	12
	♄ ♄ - -	15	51	36	19	7
	♄ ♄ - -	15	57	40	18	48
Jul. 12. Vesp.	♄ ♄ - -	15	51	36	19	7
	♄ - - -	16	2	0	21	0
	♄ ♄ - -	17	59	30	21	6
Jul. 19. Mane.	♄ - - -	21	26	0	20	20
	♄ ♄ - -	21	26	52	17	44
	♄ ♄ - -	21	33	53	17	12
Jul. 20. Mane.	♄ ♄ - -	21	26	52	17	44
	♄ ♄ - -	21	33	53	17	12
	♄ - - -	22	16	0	16	24
	♄ - - -	22	42	0	17	7
Aug. 6. Vesp.	♄ - - -	14	7	0	10	40
	♄ Ophi -	16	24	4	10	4
Aug. 7. Vesp.	♄ - - -	14	57	0	15	50
	♄ Ophi -	16	56	45	15	24
Aug. 8. Vesp.	♄ - - -	15	48	0	20	5
	♄ ♄ - -	17	59	30	21	6
Aug. 14. Vesp.	♄ ♄ - -	17	59	30	21	6
	♄ ♄ - -	18	55	35	21	23
	♄ - - -	21	9	0	21	35

1761.	Sydera Observ.	Culmin.			Decl. A.	
		H.	M.	S.	G.	M.
Aug. 15. Vesp. 16. Mane.	γ Ψ - -	21	26	52	17	44
	δ Ψ - -	21	33	53	17	12
	ϵ - - -	21	59	0	17	45
Aug. 17. Mane.	δ Ξ - -	22	42	0	17	7
	ϵ - - -	22	49	0	13	0
Sept. 11. Vesp.	γ Ψ - -	21	26	52	17	44
	δ Ψ - -	21	33	53	17	12
	ϵ - - -	21	40	0	19	20
Sept. 12. Vesp.	ϵ - - -	22	30	0	14	50
	δ Ξ - -	22	42	0	17	7
Oct. 8. Vesp.	π \mathcal{F} - -	18	55	35	21	23
	ϵ - - -	21	18	0	21	3
Oct. 9. Vesp.	γ Ψ - -	21	26	52	17	44
	δ Ψ - -	21	33	53	17	12
	ϵ - - -	22	11	0	16	55
	δ Ξ - -	22	42	0	17	7
Oct. 10. Vesp.	α Ψ - -	20	4	26	13	6
	ϵ - - -	22	58	0	11	55
Nov. 5. Vesp.	γ Ψ - -	21	26	52	17	44
	δ Ψ - -	21	33	53	17	12
	ϵ - - -	21	51	0	18	50
Nov. 6. Vesp.	δ Ψ - -	21	33	53	17	12
	ϵ - - -	22	37	0	14	16
	δ Ξ - -	22	42	0	17	7
Dec. 2. Vesp.	ϵ - - -	21	28	0	20	50
	β Ceti -	0	31	38	19	18
Dec. 3. Vesp.	ϵ - - -	22	17	0	16	12
	β Ceti -	0	31	38	19	18
Dec. 4. Vesp.	ϵ - - -	23	5	0	11	20
	ϵ Ceti -	2	28	5	12	54

1762.	Sydera Obferv.	Culmin.			Decl. A.	
		H.	M.	S.	G.	M.
Feb. 14. Mane.	λ m - -	14	6	17	12	16
	ζ - - -	14	17	0	13	0
Feb. 15. Mane.	α m - -	14	37	44	15	2
	ζ - - -	15	11	0	18	5
Mart. 13. Mane.	ζ - - -	13	54	0	10	25
	λ m - -	14	6	17	12	16
Mart. 14. Mane.	α m - -	14	37	44	15	2
	ζ - - -	14	46	0	16	6
Mart. 15. Mane.	ζ - - -	15	40	0	20	0
	β m - -	15	51	37	19	7
Apr. 10. Mane.	λ m - -	14	6	17	12	16
	ζ - - -	14	18	0	13	25
	α m - -	14	37	44	15	2
Apr. 11. Mane.	ζ - - -	15	16	0	18	48
	β m - -	15	51	37	19	7
	ν m - -	15	57	41	18	48
Maii 6. Vesp.	ζ - - -	13	57	0	10	55
	λ m - -	14	6	17	12	16
Maii 7. Vesp.	α m - -	14	37	44	15	2
	ζ - - -	14	50	0	16	35
Maii 9. Mane.	ζ - - -	15	44	0	21	20
	β m - -	15	51	37	19	7