

“ it is white, Gills and all ; for the *place*, that it grows in
 “ woods ; and for the *tast*, that 'tis hotter than Pepper. Se-
 “ veral particulars mention'd by you, are not observ'd or
 “ not mention'd by him. I cannot say, that I have as yet met
 “ with this Mushrom.

An Extract of Mr. Flamsteed's Letter written to the Publisher from Derby Novemb. 16. 1672. concerning the Appulses, by him calculated for A. 1673. of the Moon, and the other Planets to Fixed Stars ; together with an Observation of the Planet Mars, made by the same.

— I Herewith fend you my Annual task, but slightly done. Indeed my frequent Journeys and domestick businesss have kept me so employ'd, that I have not had time to make such Calculations as I intended. I have only noted the Time of the Moons true Conjunction with the Fixed Stars from the Learned *Heckerus* his *Ephemerides*, with the point then ascending at London ; with a conjecture therefrom, when the Visible Occultations shall happen : from which the intelligent Observer may be sufficiently inform'd, when to wait for any appearance, and what will be observable.

Besides, having of late observed, with my seven foot Tube, some Appulses of the other Planets to Fixed Stars, and collected all the Observable ones of the next year, I have added them to the *Lunar* Appulses. Both are very slender labours, but may be very useful.

September last I was at *Townley*. The first week that I intended to have observed δ there with Mr. *Townley*, I twice observ'd him, but could not make two Observations, as I intended, in one night. The first night after my return, I had the good hap to measure his distances from two Stars the same night ; whereby I find, that his *Parallax* was very small ; certainly not 30 seconds : So that I believe, the Suns *Parallax* is not more than 10 seconds. Of
 this

this Observation I intend to write a small Tract, when I shall gain leisure; in which I shall demonstrate both the Diameter and Distances of all the Planets by Observations; for which I am now pretty well fitted.

Having observ'd the Distances and Positions of the 3 Stars, by which *♃* made his *transit*, I find, that *Tycho* errs 5 minutes at least both in the Places and Latitudes of them compared one with another. And certainly he errs as much in many others; so that the labour of Monsieur *Hevelius* to rectify their places is very needful. Not that I find fault with *Tycho*; 'tis a wonder, (considering how difficult it is to set plain Sights to a small Star) that ever he performed so much and so well: But if M. *Hevelius* use not Glasses in their room, I fear, we shall but be where we were; and yet without this Restitution we cannot expect any thing certain, much less accurate, in Astronomy.

Luna

Lunæ ad Fixas Appulsus, *Londini* A. 1673. Observabiles: A locis ejus veris, in Ephemeridibus *Heckeri* consignatis, prævisi, & brevibus notis descripti à *Joh. Flamsteed* Anglo.

1673.

Januar.

d. h.

17. 8. 21. ☽ cum Fixa in Π 3. 34. cum lat. Sept. 4. 36. Fixæ latitudo 3°-57'. horoscopus \approx 29 $\frac{1}{2}$. Ergo Luna circa horam 9. abscondet Stellam Australi limbo.

h.

22. 10. 4. ☽ cum Fixa in Ω 18. 56. latitudo vera sua 0-46. Sept. Fixæ latitudo 0°-16'. Sept. Horoscopus \approx 11. Propterea Luna ante horam 9. abscondet \times ^m medio limbi sui, vel circa paludem *Marestratis*. Eadem nocte,

Hora 16. 10'. Luna cum alia Fixa in Ω 22°-45'. Lune tunc vera latitudo 0° 25'. Sept. Fixæ 0°-00'. Horoscopus \approx 17. Ergo Luna limbus borealis post horam ibit infra stellam.

24. 14. 7'. Lune in Υ 22°-28'. latitudo Meridionalis 2°-5'. Fixæ in eodem loco latitudo: item Mer. 3°-2'. Horoscopus \approx 25 $\frac{1}{2}$. Ergo Luna, paulo post mediâ noctem, vel stellam limbo Austriano abscondet, vel magis intervallo supertransibit.

Februar.

d. h.

16. 11. 21. Luna in \ominus 14-19. latitudo ejus 3°-16. Fixæ latitudo 2°-56'. Bor. Horosc. \approx 12. Ergo Luna, post semihoram, stellam lucis 6^m medio limbi obscuri sui occultabit.

h.

17. 15. 51. Luna cum Fixa in Ω 2 - 48. latitudo vera 2-12. Sept. Fixæ latitudo etiam Sept. 1°-14'. punctum oriens \approx 6. Luna propterea, post semihoram, Austriano limbo abscondet stellam.

h.

19. 7. 46. Luna in Ω 25. 52. latitudinem habet Aust. 1-5. Fixæ 1°-25'. Punctum Eclipticæ ascendens est \approx 6 $\frac{1}{2}$. Ergo Luna ante semihoram boreali parte limbi obscuri stellam lucis 5^m abscondet.

Martii

h.

12. 5-59. Luna cum lucida Pleiadum latitudo 5-10. borealissime inter Pleiades 4°. 28'. Sept. Horoscopus \approx 23 $\frac{1}{2}$. Luna ergo ante horam 8. australi limbo abscondet stellam.

h.

14. 7-11. Luna cum fixa in Π 23-59. latitudinem habet 4-40. Fixæ tantum 4°-6'. Sept. oriente \approx 5 $\frac{1}{2}$. Luna ergo Fixam medio limbi obscuri, post semihoram, occultabit.

h.
18. 10. 57. Luna in Ω 22. 45. latitudo borea $0^{\circ} 27'$. Fixa ibidem $00^{\circ} 0' \frac{1}{2}$. horoscopus III 27. propterea Luna in nonagesimo, paulo antea, Ecliptica, boreali parte obscuri limbi abscondet stellam.

Aprilis

d. h.

13. 6. 45. Nondum subducto Horizonti nostro sole, Lunæ Præsepis E iuncta latitudo vera $10^{\circ} 51'$. Sept. Præsepis $10^{\circ} 14'$. Horoscopus $\approx 29^{\text{th}}$. Ergo Luna in Nonagesimo limbi obscuri boreali quadrante conteget nebulosas.

Junii

d. h.

6. 8. 31. Luna in E 25. 0. latitudo $2^{\circ} 5'$. Sept. Fixa ibidem latitudo $1^{\circ} 15 \frac{1}{2}$. punctum oriens ± 28 . Propterea Luna post horam 9^{am} medio obscuri limbi conteget stellam.

h.

8. 10. 51. Luna in Ω 25. 52. latitudinem habet $0^{\circ} 40'$. Aust. Stella $1^{\circ} 25'$. etiam Australis. Oritur tunc ≈ 15 : propterea Luna descendens limbus si non attinget stellam, eam tamen quam proxime assequetur

h.

9. 11. 21. Luna in M 10. 21. habet latitudinem $0^{\circ} 50'$. Aust. Fixa $2^{\circ} 29'$. Oritur $\times 3 \frac{1}{2}$. Propterea Luna descendens stabit infra \ast^{m} .

h.

21. 15. 21. Luna cum Fixa in $\approx 13. 8$. latitudo $0^{\circ} 28'$. Aust. Fixa $1^{\circ} 16'$. item Aust. Horoscopus E 4 $\frac{1}{2}$. Ergo Luna post semihoram medio limbi lucidi abscondet stellam.

h.

29. 18. 00. Luna cum lucida Pleiadum latitudo $5^{\circ} 10'$. horoscopus Ω 9. Propterea oriente sole borealiores inter eas potest contegere.

Julii

d. h.

19. 14. 11. D° in $\approx 21-17$. latitudo Sept. $0^{\circ} 19'$. Fixa latitudo in eodem loco $0^{\circ} 10'$. Aust. Horoscopus E 12. Deinde post 22' temporis Luna cum sequenti stella, cujus locus $\approx 21-28$. Lat $0^{\circ} 14'$. A. Quamobrem circa hor. 15. Luna contiguas fixas parte limbi boreali conteget.

h.

27. 16. 57. Luna cum Fixa in II 3-35. latitudinem obtinet $5^{\circ} 4'$. Sept. Fixa $3^{\circ} 57'$. Oritur tunc Ω 19th. Luna transit supra stellam, cui proximè appropinquat, circa 16 hor.

Augusti

d. h.

22. 12. 11. Luna in C 13-58. cum latitudine boreali $5^{\circ} 12'$. Fixa cum ea latitudo 4-8. B. Horoscopus E 14. Propterea circa horam 10 $\frac{1}{2}$ p. m. Australi parte limbi lucidi abscondet Fixam.

23. 8^h-53'. Luna cum lucida Pleiadum in ϑ 25°. 25'. cum latitud. Sept: 5°-12'. Horoscopus ϑ 22°. Quamobrem Luna tunc exorta stellas Pleiadum praterit; à quibus tamen medico intervallo, tubis facillè capacioribus dimetiendo, distabit.
27. 15^h-17'. Luna in ϑ 25-0. latitudo vera borea 2°-2'. Fixa cum ea latitudo 1°-15'. Horoscopus Ω 20. Ergo circa horam 13 $\frac{1}{2}$ p.m. Luna fixam occultabit in Australi parte limbi lucidæ.

Septembris

- 19^h. 14^h-24'. Luna erit in ϑ 25°-25'. cum 5°-01'. latitud. septentrionali: Oritur tunc Ω 27. Luna propterea in nonagesimo limbus Austrinus borealiores teget Pleiadum, qui tunc tamen à media ϑ lucida 15 min. ad boream distabit.

Octobris

- 9^h. 11^h-31'. Luna in \approx 21°-28'. latitudo borealis 0°-33'. Fixa cum ea latitudo 0°-14'. Austr. Horoscopus Ω 9. Quamobrem Luna circa horam 12 $\frac{1}{2}$ fixam hanc, & huic contiguam, paulo ante occasum suum, Austrino limbo teget.
17. 11^h-21'. Luna in Π 3°-35'. ejus latitudo 4. 42. Sept. Fixa cum ea latitudo 3-57. Horoscopus Ω 12. Quamobrem circa horam 10. eam in Australi parte lateris lucidæ abscondet.

Novembris

- 12^d. 9^h-49'. Luna in ϑ 13°-58'. latitudinem habet 5. 0. Sept. Fixa cum ea 4°-08'. Sept. oriente Ω 14 $\frac{2}{3}$. Luna propterea, tunc in ipso Nonagesimo sita, vel fixam austrino limbo teget, vel modico ab ea intervallo distabit.
13. 5°-56'. Luna lucide Pleiadum verè juncta latitudinem habet veram borealem tantum 4°-52'. Horoscopus tunc ϑ 2. Propterea in Australi corporis sui semicirculo mediam lucidam abscondet Luna, in boreali borealiores. Appulsus 1^x circa solis occasum, ceteris subinde ordine conspiciendus.

Decembris

- 10^d. 16^h. 0'. Rursus Luna cum lucida Pleiadum, latitudinem obtinet 5°. 0'. Sept. Horoscopus \mathfrak{M} 11°. Quamobrem Luna mox occidentalem subteget, & paulo ante occasum, lucidam.
11. 6^h. 6'. Luna in Π 3°-35'. latitudo Sept. 4°. 43'. Fixa cum ea 3°-57'. Horoscopus ϑ 7. Luna ergo circa 5^h. medio corpore stellam teget.
13. 10^h. 41'. Luna in ϑ 5. 23. latitudo vera 2. 54. Sept. Fixa 2°-11°. Horoscopus \mathfrak{M} 17°. Quamobrem Luna plena paulo postea stellam occultabit medio Australis semicirculi.

Reliquorum quinque planetarum ad Fixas Appulsus, eodem Anno 1673 observabiles; ab iisdem J. Heckeri Ephemeridibus deducti à J. Flamsteed.

d.	H.r.	Planetarum loci.	Latitud. planet.	Distantiæ a fixis in Longitud.	In Latitud.
Jan.	6 6 vesper.	♂ in ♃	22°-59' 0". 36'	13' in ant. 20' ♃ ^{is} cum	0 — 2 ad Austr.
	6 vesper.	♀ in ♃	0-09 1-33	44 in ant. 15 ♃ ^{is} cum	0 — 23 Austr. ab ea
	13 6 vesper.	♀ ♃	7-30 1-23	25 in conf. 23 ♃ ^{is} cum	1 — 03 Austr.
	15 6 vesper.	♀ ♃	9-58 1-20	3 in ant. 24 ♃ ^{is} cum	0 — 04 Borca.
	17 6 vesper.	♀ ♃	12-25 1-16	14 in ant. 25 ♃ ^{is} cum	0 — 16 Austr.
Febr.	4 6 mane	♂ ♃	0-30 1-04	8 in ant. 6 ♃ ^{is}	0 — 16 Bor.
	5 6 vesper.	♂ ♃	10-36 0-57	E. cum stella 13 ♃ ^{is}	0 — 10 Austr.
	7 6 mane	♂ ♃	2-43 0-23	24 in ant. 10 ♃ ^{is}	0 — 08 Bor.
	8 6 vesper.	♂ ♃	12-28 0-58	5 in conf. 12 ♃ ^{is}	0 — 14 Austr.
	13 6 vesper.	♀ ♃	15-01 0-03	20 in ant. 13 ♃ ^{um}	0 — 54 ¹ Austr.
	14 6 vesper.	♂ ♃	16-12 1-01	4 in ant. 9 ♃ ^{is}	0 — 44 Austr.
Martii	6 6 vesper.	♂ ♃	28-40 1-09	E. 12 in ant. 24 ♃ ^{is}	0 — 03 Austr.
	7 6 vesper.	♀ ♃	10-34 1-29	E. 2 in ant. 13 ♃ ^{is}	0 — 22 Bor.
	8 6 vesper.	♀ ♃	11-42 1-33	E. 41 in ant. 12 ♃ ^{is}	0 — 21 Bor.
	9 6 vesper.	♀ ♃	12-50 1-37	E. 27 in conf. 12 ♃ ^{is}	0 — 25 Bor.
	12 6 vesper.	♀ ♃	16-11 1-49	E. 5 in ant. 9 ♃ ^{is}	0 — 03 Bor.
	14 6 vesper.	♀ ♃	18-55 1-57	E. 27 in ant. 11 ♃ ^{is}	0 — 39 Austr.
	14 6 vesper.	♂ ♃	03-41 1-11	E. 2 in conf. 23 ♃ ^{is}	0 — 36 Bor. }
	16 6 vesper.	♀ ♃	20-58 2-05	E. 14 in ant. 22 ♃ ^{is}	0 — 07 Bor. }
	18 6 vesper.	♀ ♃	13-38 1-36	E. 5 in conf. 26 ^e Aurigæ	0 — 27 Austr.
	20 6 vesper.	♂ ♃	7-27 1-12	E. cum stella 9 ^a ♃ ^{is}	0 — 09 Austr.
20 6 vesper.	♂ ♃	7-27 1-12	E. 9 in ant. 20 ♃ ^{is}	0 — 32 Bor.	
Aprilis	10 7 vesper.	♀ ♃	16-39 1-41	E. 23 in conf. 9 ♃ ^{is}	0 — 05 Austr.
	12 7 vesper.	♀ ♃	10-33 1-35	E. 3 in conf. 8 ♃ ^{is}	0 — 48 Austr.
	14 7 vesper.	♂ ♃	23-7 1-16	E. 11 in conf. 27 Aurigæ	0 — 10 ad Bor.
	17 8 vesper.	♀ ♃	23-28 3-34	E. 30 in ant. 24 Aur.	0 — 32 ad Austr.
	18 8 vesper.	♀ ♃	24-22 3-35	E. 23 in conf. 24 Aur.	0 — 31 Austr.
Maii	10 8 vesper.	♂ ♃	9-24 1-16 ¹	E. 14 in ant. 21 ♃ ^{um}	0 — 14 Austr.
	11 8 vesper.	♂ ♃	10-11 1-16 ¹	E. 23 in conf. dista fixæ	0 — 14 Austr.
	16 8 vesper.	♀ ♃	14-14 2-43	E. 5 in ant. 8 ^e ♃ ^{um}	0 — 13 Austr.
	28 4 mane	♀ ♃	13-26 2-31	E. ♃ cum fixa 14 ^e ♃ ^{um}	1 — 0 Austr.
Junii	4 8 vesper.	♂ ♃	25-1 1-15	E. 1 in conf. 8 ^e Cancrî	0 — 0 ¹ / ₂ Aust. *
	10 8 vesper.	♂ ♃	2-33 1-13	E. 15 in ant. 1 ^e Cancrî	0 — 1 Austr.
Julii	28 8 vesper.	♀ ♃	13-38 1-10	E. ♃ cum stella 9 ^a ♃ ^{is}	0 — 35 Austr.

	<i>d. Hor.</i>	<i>Planetarum loci.</i>	<i>Latitud. planet.</i>	<i>Distantiæ à fixis in Longitud.</i>	<i>In Latitud.</i>
Aug	17 4 mane	♂ ♄ 18°-50'	3°-37' Au.	16' in ant. 27° II ^{um}	0-11 Bor.
	18 4 mane	♂ ♄ 19°-42'	3-31 Au.	36 in conf. 27 diſtæ	0-17 Bor.
	26 5 mane	♂ ♄ 19-42	2-44 Au.	14 in conf. 10 Cancri	0-26 Auſtr.
Sept.	5 5 mane	♀ ♃ 6--48	1-40 Au.	1 in ant. 12 ♄ ⁱ	0-14 Bor.
	12 6 mane	♃ ♃ 22--14	1-00 E.	3 in conf. 17 ♃ ^s	0-41 Auſtr.
	20 6 mane	♀ ♃ 22--38	0-26 A.	7 in ant. 10° ♃ ^s	0-26 Auſtr.
	22 6 mane	♀ ♃ 24--48	0-16 A.	30 in ant. Cordis ♃ ^s	0-42 Auſtr.
	23 6 mane	♀ ♃ 25--54	0-12 A.	36 in conf. Cordis ♃ ^s	0-38 Auſtr.
	28 6 mane	♀ ♃ 1--31	0-11 E.	18 in ant. 15° ♃ ^s	0-03 Bor.
Octob.	1 6 mane	♀ ♃ 0--21	1-37 E.	4 in conf. 6 ♃ ^s	0-12 Bor.
	5 6 mane	♀ ♃ 9-27	0-40 E.	32 in ant. 38 ♃ ^s	0-40 Auſtr.
	6 6 mane	♀ ♃ 10--36	0-43 E.	37 in conf. diſtæ Stelle	0-37 Auſtr.
	11 5 mane	♀ ♃ 13--40	1-57 B.	2 in conf. 9 ♃ ^s	0-12 Bor.
	13 5 mane	♀ ♃ 18--39	1-06 E.	17 in ant. 11 ♃ ^s	0-50 Bor.
	16 5 mane	♀ ♃ 22--10	1-15 E.	23 in ant. 5° ♃ ^s	0-32 Bor.
	23 6 mane	♀ ♃ 00--29	1-32 E.	13 in conf. 6° ♃ ^s	0-07 Bor.
	29 6 mane	♃ ♃ 2-15	1-03 E.	7 in ant. 24 ♃ ^s	0-31 Bor.
	31 6 mane	♃ ♃ 10--04	1-47 E.	22 in conf. 1° ♃ ^s	0-08 Bor.
	Novem.	3 7 mane etiam	♂ ♃ 2--27	0-32 E.	4 in conf. 24° ♃ ^s
		♀ ♃ 13--38	1-50 B.	cum fixa 9' ♃ ^s	0-05 Bor. *
5 7 mane		♃ ♃ 4-00	1-01 B.	♃ in conſeq. ♂ 13' ♄	0-30 Borealiſſ.
		♂ ♃ 3-47	0-31 B.		
10 6 mane		♀ ♃ 22-05	1-55 E.	6' in ant. 17' ♃ ^s	0-10 Bor.
15 6 mane		♂ ♃ 10--33	0-25 B.	1' in conf. 1° ♃ ^s	0-01 Auſtr. *
23 6 mane	♃ ♃ 7-43	1-02 B.	♃ à ♀ .53' circ. ♀	0-50 Borealiſſ.	
	♀ ♃ 8-00	1-52 E.			
24 7 mane	♂ ♃ 9-17	1-51 E.	26' in ant. 2° ♃ ^s	0-04 Auſtr.	
Decemb.	8 6 mane	♂ ♃ 26--21	0-12 E.	16 in conf. 12 ♃ ^s	0-05 Bor.
	10 6 mane	♃ ♃ 10--33	1-03 E.	1 in conf. 1° ♃ ^s	0-37 Bor.
	11 6 mane	♀ ♃ 0-16	1-28 E.	11 in conf. 5° ♃ ^s	0-14 Auſtr.
	12 6 mane	♂ ♃ 29-09	0-10 E.	♃ cum fixa 6° ♃ ^s	1-04 Auſtr. *
	24 7 mane	♀ ♃ 16--30	0-58 E.	14 in ant. 27 Ophiuchi	0-34 Auſtr.
	26 7 mane	♀ ♃ 19-00	0-54 E.	22 in conf. 30 Ophiuchi	0-04 Auſtr. verſ.

Stella Jovis in Ephemeride assignati loci deficiunt hoc anno 13' ab iis quos cœlitus observavimus : propterea ejus omnes ad Fixas appulsus ante duos & amplius dies quàm consignantur observari possunt. At in ♂^{is} & ♀^{is} ad eum applicationibus, eadem 13 min. ipsius loco adjeci ; ut, si aliquid à descripta Planetarum positione observat a dissentiat, in illorum solis locis peccare Ephemerides credantur.

Sic omnes majorum Planetarum ad Fixas appulsus, Tubo Optico gradum unum recipiente, observabiles, brevi tabellâ complexus sum. Ne nos ulla observandi præter haberetur opportunitas imprævisa, cura fuit. Vestrum dehinc, fidi Cœlispices, fueris, ne harum ulla neglecta pereat : Ab his enim accuratè si tandem fixarum loci restituantur (quod plurimum desideratur,) optimè veri planetarum motus cognosci, restitui, & cœlis annuentes tabula construi possunt : quod in votis habet

Cœlorum & Cœlispicum
Assiduus Cultor