

“ 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 Pla-  
 nets to Fixed Stars ; together with an Observation of the  
 Planet Mars, made by the same.*

— I Herewith fend you my Annual task, but slight-  
 ly done. Indeed my frequent Journeys and do-  
 mestick 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 suf-  
 ficiently 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 col-  
 lected all the Observable ones of the next year, I have ad-  
 ded them to the *Lunar* Appulses. Both are very slender la-  
 bours, but may be very useful.

September last I was at *Townley*. The first week that I  
 intended to have observed  $\delta$  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 *Paral-  
 lax* 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  $\Pi$  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  $\Omega$  18. 56. latitudo vera sua 0-46. Sept. Fixæ latitudo 0°-16'. Sept. Horoscopus  $\approx$  11. Propterea Luna ante horam 9. abscondet  $\times$  medio limbi sui, vel circa paludem *Marestratis*. Eadem nocte,

Hora 16. 10'. Luna cum alia Fixa in  $\Omega$  22°-45'. Lune tunc vera latitudo 0° 25'. Sept. Fixæ 0°-00'. Horoscopus 7 17. Ergo Luna limbus borealis post horam ibit infra stellam.

24. 14. 7'. Lune in  $\Upsilon$  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 mediã noctem, vel stellam limbo Austriano abscondet, vel moxico 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<sup>ta</sup> medio limbi obscuri sui occultabit.

h.

17. 15. 51. Luna cum Fixa in  $\Omega$  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  $\Omega$  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<sup>a</sup> abscondet.

Martii

h.

12. 5-59. Luna cum lucida *Pleiadum* latitudo 5-10. borealissima 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  $\Pi$  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  $\Omega$  22. 45. latitudo borea  $0^{\circ} 27'$ . Fixa ibidem  $00^{\circ} 0\frac{1}{2}'$ . horoscopus  $\text{m}$  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  $\text{S}$  juncta latitudo vera  $10^{\circ} 51'$ . Sept. Præsepis  $10^{\circ} 14'$ . Horoscopus  $\approx 29^{\text{m}}$ . Ergo Luna in Nonagesimo limbi obscuri boreali quadrante conteget nebulosas.

Junii

*d. h.*

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

*h.*

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

*h.*

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

*h.*

21. 15. 21. Luna cum Fixa in  $\approx 13. 8$ . latitudo  $0^{\circ} 28'$ . Aust. Fixa  $1^{\circ} 16'$ . item Aust. Horoscopus  $\text{S}$  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  $\Omega$  9. Propterea oriente sole borealiores inter eas potest contegere.

Julii

*d. h.*

19. 14. 11.  $D^{\circ}$  in  $\approx 21-17$ . latitudo Sept.  $0^{\circ} 19'$ . Fixa latitudo in eodem loco  $0^{\circ} 10'$ . Aust. Horoscopus  $\text{S}$  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  $\text{II}$  3-35. latitudinem obtinet  $5^{\circ} 4'$ . Sept. Fixa  $3^{\circ} 57'$ . Oritur tunc  $\Omega$  19<sup>h</sup>. Luna transit supra stellam, cui proximè appropinquat, circa 16 hor.

Augusti

*d. h.*

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

23. 8<sup>h</sup>-53'. Luna cum lucida Pleiadum in  $\vartheta$  25°. 25'. cum latitud. Sept: 5°-12'. Horoscopus  $\vartheta$  22°. Quamobrem Luna tunc exorta stellas Pleiadum praterit; à quibus tamen medico intervallo, tubis facillè capacioribus dimetiendo, distabit.

27. 15<sup>h</sup>-17'. Luna in  $\vartheta$  25-0. latitudo vera borea 2°-2'. Fixa cum ea latitudo 1°-15'. Horoscopus  $\Omega$  20. Ergo circa horam 13 $\frac{1}{2}$  p.m. Luna fixam occultabit in Australi parte limbi lucidæ.

#### Septembris

19<sup>h</sup>. 14<sup>h</sup>-24'. Luna erit in  $\vartheta$  25°-25'. cum 5°-01'. latitud. septentrionali: Oritur tunc  $\Omega$  27. Luna propterea in nonagesimo limbus Austrinus borealiores teget Pleiadum, qui tunc tamen à media  $\vartheta$  lucida 15 min. ad boream distabit.

#### Octobris

9<sup>h</sup>. 11<sup>h</sup>-31'. Luna in  $\approx$  21°-28'. latitudo borealis 0°-33'. Fixa cum ea latitudo 0°-14'. Austr. Horoscopus  $\Omega$  9. Quamobrem Luna circa horam 12 $\frac{1}{2}$  fixam hanc, & huic contiguam, paulo ante occasum suum, Austrino limbo teget.

17. 11<sup>h</sup>-21'. Luna in  $\Pi$  3°-35'. ejus latitudo 4. 42. Sept. Fixa cum ea latitudo 3-57. Horoscopus  $\Omega$  12. Quamobrem circa horam 10. eam in Australi parte lateris lucidæ abscondet.

#### Novembris

12<sup>d</sup>. 9<sup>h</sup>-49'. Luna in  $\vartheta$  13°-58'. latitudinem habet 5. 0. Sept. Fixa cum ea 4°-08'. Sept. oriente  $\Omega$  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  $\vartheta$  2. Propterea in Australi corporis sui semicirculo mediam lucidam abscondet Luna, in boreali borealiores. Appulsus 1<sup>x</sup> circa solis occasum, cæteris subinde ordine conspiciendus.

#### Decembris

10<sup>d</sup>. 16<sup>h</sup>. 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<sup>h</sup>. 6'. Luna in  $\Pi$  3°-35'. latitudo Sept. 4°. 43'. Fixa cum ea 3°-57'. Horoscopus  $\vartheta$  7. Luna ergo circa 5<sup>h</sup>. medio corpore stellam teget.

13. 10<sup>h</sup>. 41'. Luna in  $\vartheta$  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' ♃ <sup>is</sup> cum	0 — 2 ad Austr.
	6	vesper. ♀ in ♃	0-09 1-33	44 in ant. 15 ♃ <sup>is</sup> cum	0 — 23 Austr. ab ea
	13 6	vesper. ♀ ♃	7-30 1-23	25 in conf. 23 ♃ <sup>is</sup> cum	1 — 03 Austr.
	15 6	vesper. ♀ ♃	9-58 1-20	3 in ant. 24 ♃ <sup>is</sup> cum	0 — 04 Borca.
	17 6	vesper. ♀ ♃	12-25 1-16	14 in ant. 25 ♃ <sup>is</sup> cum	0 — 16 Austr.
Febr.	4 6	mane ♃	0-30 1-04	8 in ant. 6 ♃	0 — 16 Bor.
	5 6	vesper. ♂ ♃	10-36 0-57	E. cum stella 13 ♃ <sup>is</sup>	0 — 10 Austr.
	7 6	mane ♃	2-43 0-23	24 in ant. 10 ♃	0 — 08 Bor.
	8 6	vesper. ♂ ♃	12-28 0-58	5 in conf. 12 ♃ <sup>is</sup>	0 — 14 Austr.
	13 6	vesper. ♀ ♃	15-01 0-03	20 in ant. 13 ♃ <sup>um</sup>	0 — 54 <sup>1</sup> Austr.
	14 6	vesper. ♂ ♃	16-12 1-01	4 in ant. 9 ♃ <sup>is</sup>	0 — 44 Austr.
Martii	6 6	vesper. ♂ ♃	28-40 1-09	E. 12 in ant. 24 ♃ <sup>is</sup>	0 — 03 Austr.
	7 6	vesper. ♀ ♃	10-34 1-29	E. 2 in ant. 13 ♃ <sup>is</sup>	0 — 22 Bor.
	8 6	vesper. ♀ ♃	11-42 1-33	E. 41 in ant. 12 ♃ <sup>is</sup>	0 — 21 Bor.
	9 6	vesper. ♀ ♃	12-50 1-37	E. 27 in conf. 12 ♃ <sup>is</sup>	0 — 25 Bor.
	12 6	vesper. ♀ ♃	16-11 1-49	E. 5 in ant. 9 ♃ <sup>is</sup>	0 — 03 Bor.
	14 6	vesper. ♀ ♃	18-55 1-57	E. 27 in ant. 11 ♃ <sup>is</sup>	0 — 39 Austr.
	14 6	vesper. ♂ ♃	03-41 1-11	E. { 2 in conf. 23 ♃ <sup>is</sup> 14 in ant. 22 ♃ <sup>is</sup>	0 — 36 Bor. } 0 — 07 Bor. }
	16 6	vesper. ♀ ♃	20-58 2-05	E. 5 in conf. 26 <sup>e</sup> Aurige	0 — 27 Austr.
	18 6	vesper. ♀ ♃	13-38 1-36	E. cum stella 9 <sup>a</sup> ♃ <sup>is</sup>	0 — 09 Austr.
	20 6	vesper. ♂ ♃	7-27 1-12	E. 9 in ant. 20 ♃ <sup>is</sup>	0 — 32 Bor.
Aprilis	10 7	vesper. ♀ ♃	16-39 1-41	E. 23 in conf. 9 ♃ <sup>is</sup>	0 — 05 Austr.
	12 7	vesper. ♀ ♃	10-33 1-35	E. 3 in conf. 8 ♃ <sup>is</sup>	0 — 48 Austr.
	14 7	vesper. ♂ ♃	23-7 1-16	E. 11 in conf. 27 Aurige	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 <sup>1</sup>	E. 14 in ant. 21 ♃ <sup>um</sup>	0 — 14 Austr.
	11 8	vesper. ♂ ♃	10-11 1-16 <sup>1</sup>	E. 23 in conf. dista fixæ	0 — 14 Austr.
	16 8	vesper. ♀ ♃	14-14 2-43	E. 5 in ant. 8 <sup>e</sup> ♃ <sup>um</sup>	0 — 13 Austr.
	28 4	mane ♃	13-26 2-31	E. ♃ cum fixa 14 <sup>e</sup> ♃ <sup>um</sup>	1 — 0 Austr.
Junii	4 8	vesper. ♂ ♃	25-1 1-15	E. 1 in conf. 8 <sup>e</sup> Cancrì	0 — 0 <sup>1</sup> / <sub>2</sub> Austr. *
	10 8	vesper. ♂ ♃	2-33 1-13	E. 15 in ant. 1 <sup>e</sup> Cancrì	0 — 1 Austr.
Julii	28 8	vesper. ♀ ♃	13-38 1-10	E. ♃ cum stella 9 <sup>a</sup> ♃ <sup>is</sup>	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 <sup>um</sup>	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 Cancrī	0-26 Auſtr.
Sept.	5 5 mane	♀ ♃ 6--48	1-40 Au.	1 in ant. 12 ♄ <sup>i</sup>	0-14 Bor.
	12 6 mane	♃ ♃ 22--14	1-00 E.	3 in conf. 17 ♃ <sup>s</sup>	0-41 Auſtr.
	20 6 mane	♀ ♃ 22--38	0-26 A.	7 in ant. 10° ♃ <sup>s</sup>	0-26 Auſtr.
	22 6 mane	♀ ♃ 24--48	0-16 A.	30 in ant. Cordis ♃ <sup>s</sup>	0-42 Auſtr.
	23 6 mane	♀ ♃ 25--54	0-12 A.	36 in conf. Cordis ♃ <sup>s</sup>	0-38 Auſtr.
	28 6 mane	♀ ♃ 1--31	0-11 E.	18 in ant. 15° ♃ <sup>s</sup>	0-03 Bor.
Octob.	1 6 mane	♀ ♃ 0--21	1-37 E.	4 in conf. 6 ♃ <sup>s</sup>	0-12 Bor.
	5 6 mane	♀ ♃ 9--27	0-40 E.	32 in ant. 38 ♃ <sup>s</sup>	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 ♃ <sup>s</sup>	0-12 Bor.
	13 5 mane	♀ ♃ 18--39	1-06 E.	17 in ant. 11 ♃ <sup>s</sup>	0-50 Bor.
	16 5 mane	♀ ♃ 22--10	1-15 E.	23 in ant. 5° ♃ <sup>s</sup>	0-32 Bor.
	23 6 mane	♀ ♃ 00--29	1-32 E.	13 in conf. 6° ♃ <sup>s</sup>	0-07 Bor.
	29 6 mane	♀ ♃ 2--15	1-03 E.	7 in ant. 24 ♃ <sup>s</sup>	0-31 Bor.
	31 6 mane	♀ ♃ 10--04	1-47 E.	22 in conf. 1° ♃ <sup>s</sup>	0-08 Bor.
	Novem.	3 7 mane etiam	♂ ♃ 2--27 ♀ ♃ 13--38	0-32 B. 1-50 B.	4 in conf. 24° ♃ <sup>s</sup> cum fixa 9' ♃ <sup>s</sup>
5 7 mane		♃ ♃ 4--00 ♂ ♃ 3--47	1-01 B. 0-31 B.	♃ in conſeq. ♂ 13' ♄	0-30 Borealiſſ.
10 6 mane		♀ ♃ 22-05	1-55 E.		
15 6 mane		♂ ♃ 10--33 ♃ ♃ 7--43	0-25 B. 1-02 B.	1' in conf. 1° ♃ <sup>s</sup>	0-01 Auſtr. *
23 6 mane		♀ ♃ 8--00	1-52 E.	♃ à ♀ .53' circ. ♀	0-50 Borealiſſ.
24 7 mane		♂ ♃ 9--17	1-51 E.	26' in ant. 2° ♃ <sup>s</sup>	0-04 Auſtr.
Decemb.	8 6 mane	♂ ♃ 26--21	0-12 E.	16 in conf. 12 ♃ <sup>s</sup>	0-05 Bor.
	10 6 mane	♃ ♃ 10--33	1-03 E.	1 in conf. 1° ♃ <sup>s</sup>	0-37 Bor.
	11 6 mane	♀ ♃ 0--16	1-28 E.	11 in conf. 5° ♃ <sup>s</sup>	0-14 Auſtr.
	12 6 mane	♂ ♃ 29--09	0-10 E.	♃ cum fixa 6° ♃ <sup>s</sup>	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 cælitus observavimus : propterea ejus omnes ad Fixas appulsus ante duos & amplius dies quàm consignantur observari possunt. At in ♂<sup>iii</sup> & ♀<sup>ii</sup> 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 Cælispices, fueris, ne harum ulla neglecta pereat : Ab his enim accuratè si tandem fixarum loci restituantur (quod plurimum desideratur,) optimè veri planetarum motus cognosci, restitui, & cælis annuentes tabula construi possunt : quod in votis habet*

Cælorum & Cælispicum  
Assiduus Cultor