

*Manuale observationum astronomicarum*  
*anni 1841. II.*

Apr. 28. <i>Urs. min.</i> 50.4									
<i>Urs. min.</i> 50.4	58.6	6.8	15.4	23.7	22	13			
<i>Urs. C. P.</i> 5	21.8	29.7	38.1	46.6	35	13			
$\alpha$ <i>Caprip.</i> 16.6	31.7	45.4	52.7	15.2	37	0			
<i>Urs. min.</i> 45.0	1.0	57.5	0.0	19.7		1			
	5.6	2	6	12	17				
	1	2	10	12					
	6.5	54.2	7.0	52.2					

$S = 13^h 26' 14''$   
 $F = 10 54 0$

11' 2

<i>Hydra</i> 45.7	51.6	2.5	10.5	17.4	25	9			
<i>Leonis</i> 39.4	47.7	55.8	44	12.8	38	9			
<i>Luce T.T.</i> -	48.5	46.4	9.3		0	10			
<i>Leonis</i> 26.0	34.6	42.6	50.8	59.7	29	10			
$\alpha$ <i>Urs. maj.</i> 34.7	52.9	10.5	28.2	46.6	59	10			
$\beta$ <i>Leonis</i> 56.7	5.5	13.4	22.2	31.1	46	11			
$\gamma$ <i>Urs. maj.</i> 16.6	30.9	44.7	58.7	13.5	51	11			
<i>Urs. min.</i> 56.2	51.4	40.5	44.7	43.0	36.0				
	9	10	12						
	045.8	38.5		49.0	37.6				

Azim. + 1.7 lines

obs. Dubia

+19.7 - 20.8  
+20.3 - 20.0

$S = 12^h 44' 30''$

$F = 10 8 26$

	N	P	F	b	l	e			
315° 57' 30" 47 48 50	15.9	19.0	42.60	27.688	+14.4	+13.6	16 56"		
57 47 47 44 46 48	15.0	19.4	42.68						
55 30 32 28 29 29	16.3	18.2	42.34						
351.49 25 20 24 23	15.0	20.2	42.49	27.664	+14.0	+16.5			J. 42.44 S 30.3 N 15.3
7 6 8 7	15.4	19.7	42.48						
319.2 8 6 8 6	14.6	20.6	42.75						58. 1
5 4 6 6	15.6	19.8	42.40						3. 15
7 6 8 6	15.3	19.9	42.54						9. 7
7 3 5 4	14.1	20.8	42.77	27.655	+14.2	+17.0	13. 35		16. 7
57 26 24 21 25 24	14.7	18.9	42.77	27.545	+13.4	+16.3			13. 35
36.51 48 47 49 51	12.9	19.5	42.89						
76.22 12 16 72 32	14.0	19.4	42.87	27.538	+13.1	+13.5	7. 7		J. 42.68 S 19.3 N 14.0
77.21 15. 9 11 14	16.7	17.1	42.06						Z. S.
344 52 44 42 45 43	17.2	16.6	41.92						+13.2
32 8 3 5 9	17.0	17.4	42.04						+15.1
352 54 28 27 28 28	17.1	17.0	42.00	27.528	+14.8	+14.7			+14.7
15 57 42 40 40	16.7	18.0	42.15						
48 44 48 49	17.4	17.0	41.98						
43 40 43 42	16.7	17.8	42.12						
41 40 42 42	17.0	17.6	42.12						

*Urs. min. Semelans, observatio impermissa quoad declinationem dubia.*

Merid  $S = 42.01$   $P = 17.0$   $N = 17.2$

58 10  
1 40  
11 43

	1	2	3	4	5	6	7	8	9	10	11	12
April 29 <sup>a</sup> Virginis	49.7	58.5	6.6	14.7	23.6	22	13					
Mend. C.	51.2	59.7	7.7	15.9	24.5	34	13					
off. maj	8.7	22.6	34.4	46.7	0.2	47	13					
$\alpha$ Androm	6.7	16.4	25.4	34.6	44.5	5	0					
$\alpha$ Pegasus	16.4	31.0	44.7	59.5	14.6	37	0					
$\alpha$ Ursa min	56	47.7	56.7									
	1	4.2	2	51.9								

+20.4 - 21.0  
20.7 20.2

Circulo ad Orientem verso.

Or. 1 = 6' 54.61 b = - 0.00347  
Or. 1 = 6' 55.576 = + 0.13533  
f. 1 = 0.96 b = + 0.1388

	11	12	13	14	15	16	17	18	19	20	21	22
$\alpha$ Ursa min	52.9	17	4.4									
		12	4.5	6	4.4							

Circulo ad Occidentem verso

+21.4 - 19.2  
20.8 - 19.1

20. $\alpha$ Caprop	14.7	50.4	44.6	58.7	13.6	37	0					
	56	1	6	11	17							
$\alpha$ Ursa min	31.5	49.0	57.5	57.0	7.0		1.					
	0	2	10	12								
	55.0	49.5	58.5	45.5								

+22.2 - 20.1  
21.3 - 20.7

Mars i. a Hyd.	44.9	52.6	7.7	9.9	18.6	25	9					
$\alpha$ Leonis	52.8	1.6	9.8	18.0	26.6	5	10					

Az. + 0.5  
+22.5 - 19.7  
21.3 20.9

	N	S	F	b	l	e						
815	57	43	42	43	45	17.5	17.1	42.00	27.518	+14.6	+13.6	54' 57"
57	47	47	41	46	46	16.4	18.0	42.10			+13.8	
55	25	17	13	15	17	16.6	18.0	42.12	27.514	+14.5	+13.5	
357	22	41	40	43	45	17.0	17.1	42.00				
19	16	3	0	2	9	16.1	18.9	42.03	27.437	+14.3	+17.7	
351	49	23	19	22	21	17.4	17.5	41.77			+18.3	
319	1	50	49	50	50	17.1	17.7	41.88	27.428	+14.5	+19.0	51' 43"
	53	52	54	54	54	17.4	17.1	41.85				53 46
	57	55	58	57	57	18.0	16.9	41.78				56 6
	59	58	60	59	59	18.0	16.6	41.73				58 26

41.70 41.98 N 17.4 16.2 S 17.7 18.6

8.10	20	20	25	22	20.0	16.5	78.90	27.546	+13.0	+11.5		
40	57	40	37	41	42	18.8	17.7	78.68				57. 8
	37	36	38	40	40	19.0	16.9	78.73				5. 18
	36	35	38	40	40	19.5	16.3	78.84				Merid
	39	37	39	41	41	19.1	16.7	78.85				14. h
	41	39	43	45	45	18.9	16.9	78.84	27.549	13.4	+12.3	17. 42
304	33	24	20	23	22	19.5	16.0	78.82	27.495	+14.0	+12.3	
325	15	39	39	40	40	20.0	15.8	78.90			+11.1	

F. 78.91 N 19.7 S 16.7

Stella tremulans.

1	2						
Maio 1.5	Leonis	54.6	4.4	12.5	20.4	29.0	18 11
e	Leonis	18.8	19.6	27.7	25.6	44.2	27 11
Luna	L	32.3	41.0	49.3	58.3	6.3	42 11
B	Leonis	56.0	4.5	13.4	21.5	30.2	46 11
γ	Urs. min	15.0	29.7	44.4	57.6	12.3	51 11
η	Virgin	46.3	54.7	2.7	10.8	19.3	17 12
α	Urs. min	56.0 <sup>2</sup>	42.5 <sup>1</sup>	43.5	38.5	11.4	7.2 17 13
		46.0 <sup>2</sup>	36.4	10.5	2.0	12.3	9.0
η	Virgin	49.0	57.6	5.8	14.0	22.6	22 13
Maio L	I	10.9	19.5	28.0	36.1	44.0	31 13
α	Urs. min	49.0	57.6	5.8	14.0	22.6	22 13
η	Virgin	49.0	57.6	5.8	14.0	22.6	22 13
Maio L	I	10.9	19.5	28.0	36.1	44.0	31 13
Urs. min		24.5	52.0	50.5	56.7	4.0	1 1
		56.0	50.0	2.5	52.2		1

$a = +0.572$   
 $b = +0.111$   
 $c = -0.063$

Diff.  $11^h 18' x = -5^h 14^m 14.6$  Rel. 0.279  
 Feb. 10<sup>h</sup> 2' x = +0' 19.54 Rel. 1.24  
 Merid. 2<sup>a</sup> Maji 23<sup>h</sup> 59' 39.72

$L = 12^h 46' 20''$   
 $F = 10 2 22$   
 $33.5^c$

	N	P	F	B	L	e		
19.25.13	11	14	11	19.8	16.1	78.76	27.315 +13.6 +10.7	
10.22.44	49	48	47	19.5	16.9	78.50	+10.7	
312 52 0 1	1	0	20.7	15.7	78.96	+9.9	42.55	
327 58 30 37	38	38	20.0	16.4	78.66			
7.5.15	14	17	15	20.2	16.0	78.55	27.520 +13.5 +10.6	
312 44 21 23	25	25	20.2	16.0	78.73	27.518 +13.3 +9.6		
44° 1'	57	56	56	59	19.1	17.4	78.45	
	58	56	57	58	20.8	16.0	78.88	56.55
	55	55	56	59	19.3	17.1	78.53	1 43
	57	57	57	59	19.1	17.6	78.41	11 47
	58	57	58	60	20.2	16.1	78.77	+7.9 16.8
302 11	57	57	59	58	19.7	17.0	78.44	27.527 +13.6
304 44	25	24	26	27	19.9	17.0	78.48	+8.1
	37	34	38	39	20.5	15.5	78.80	
40.57	41	38	42	42	20.0	16.2	78.63	57.58
	38	34	38	40	20.2	15.9	78.80	3. 21
	38	36	39	41	20.0	15.7	78.84	13 21
	40	37	40	42	20.2	15.9	78.80	15 17
	40	38	41	42	19.0	17.0	78.50	27.515 +13.5 +13.6 18.1

F. 87.54 N. 18.3 S. 17.1  
 F. 78.57 S. 17.0 N. 18.7  
 Limb. Septentrioni  
 Luna Limb. male deter.  
 F. 78.62 N. 0.1 S. 16.5

F. 78.77 N. 20.8 S. 15.6  
 Stella magnopere  
 tremulans

	1	2							
May 2. α Hydralis	4	53.9	2.3	10.4	18.6	25	9	Azim. +0.7	+22.0 -19.2 20.5 20.7
α Leonis	53.1	1.7	10.4	18.5	26.8	5	10		
α Ursae	32.7	52.6	10.4	27.8	45.9	5	9		
β Leonis	56.4	4.9	12.7	21.7	30.6	46	11		
γ Ursae	—	70.6	44.6	58.7	12.6	51	11		
δ Ursae	46.5	54.7	3.2	11.2	19.5	17	12		
ε L. I	4.4	13.4	21.7	30.0	38.3	31	12		
ζ Ursae	5.5	13.8	22.1	30.3	38.5	51	12		
η Ursae	56	35.4	46.0	44.0	48.5	17	13		
θ Ursae	0	53.0	2	41.5	—	10	49.5	45.0	
May 4. α Androm.	6.6	15.7	25.6	34.4	43.6	5	0		
α Cassio.	14.9	30.7	45.9	59.5	14.0	37	0		

	N	S	F	D	L	e			
304.33.19	18	20	17	18.0	17.0	78.34	27.400	+14.5 +13.9	T 78.52 N 18.4 S 16.0
329.15.35	35	39	36	19.1	15.7	78.58	27.402	+14.5 +12.8	T
15.6.56	57	54	55	19.0	16.0	78.60	27.414	+14.3 +12.1	T 78.60 N 18.4 S 16.0
327.58.45	47	39	37	20.7	19.2	78.77			<del>18.4 17</del>
7.8.14	13	17	16	20.5	15.0	78.90	27.419	+14.0 +11.9	
312.44	19	20	20	20.0	15.9	78.53		+11.1	
304.34	40	39	42	40	20.6	15.4	78.70	27.415	+13.8 +11.0 32' 17" Limb. bor.
303.51	15	13	16	15	20.9	15.0	78.94		
44.1	2	0	2	2	19.0	17.0	78.40	27.406	+13.6 +10.9 Merid.
	57	56	57	58	20.9	15.3	78.95		56' 0"
	60	58	59	0	20.4	15.9	78.70		58 42
	61	58	1	2	19.5	16.2	78.50		+10.9 0 53
	60	59	0	1	19.1	16.9	78.45		11 48
	57	58	58	59	20.0	16.0	78.64		14 55
304.49	8	7	8	8	20.0	16.1	78.43	27.405	+13.5 +10.4
340.45.35	37	40	37	19.0	17.3	78.33	27.403	+13.3 +14.9	T 78.74 N 20.7 S 15.9 78.33.18.4.17.7
8.10.18	18	21	20	18.9	17.5	78.34		+16.0	
340.43.38	39	41	39	19.0	15.7	78.58	27.451	+14.5 +16.1	T 78.44 N 18.4 S 16.1
8.10.19	20	21	21	18.0	16.5	78.34		+17.0	



16.  $\alpha$  Urs. min. <sup>56</sup> 59.0 <sup>2</sup> 20.8 <sup>7</sup> 26.0 <sup>12</sup> 20.6 <sup>17</sup> 23.5  
<sup>1</sup> 24.7 <sup>3</sup> 18.5 <sup>11</sup> 28.6 <sup>15</sup> 17.4

17.  $\gamma$  Urs. maj. <sup>27</sup> 41.7 <sup>53</sup> 9.6 <sup>24</sup> 2.2 <sup>51</sup> 11  
 $\alpha$  Urs. min. <sup>56</sup> 49.2 <sup>1</sup> 59.0 <sup>2</sup> 59.0 <sup>11</sup> 2.5 <sup>12</sup> —  
<sup>1</sup> 6.0 <sup>2</sup> 57.5 <sup>11</sup> 5.7 <sup>12</sup> 57.0

$+22.3 - 21.02$   $59' 51'' 42''$   $\gamma$   $\alpha$  Urs. min.  $+3.0$   
 $21.5$   $21.9$   $\sqrt{12.39}$   $0.7$   
 $a = +0.599$   $\gamma$   $13' 18'' x = -5' 25.935$   $\alpha$   $1.231$   
 $b = +0.031$   $\gamma$   $16.9$   $52 x = +0' 24.57$   $\alpha$   $0.35$   
 $c = -0.063$   
 $\mu$  ind.  $18''$   $23' 59'' 35.22$

$\alpha$  Martis II. 43.6 52.5 0.6 8.7 17.0 16 19  
 $\alpha$  Virginis 0.7 9.7 17.8 25.8 34.3 22 19  
 $\gamma$  Urs. maj. 19.7 33.0 45.7 58.5 11.5 47 19  
 $\alpha$  Bootis 95.6 44.6 53.5 1.8 10.7 14 14  
 $\alpha$  Androm. 19.3 28.7 37.8 46.9 56.5 5 0  $\alpha$   $+3.0$   
 $\alpha$  Caprip. 28.0 43.3 57.7 11.7 26.6 37 0

N P F B e e

32	30	34	34	19.7	18.0	78.75	27.552	+12.2	+13.0				
40	57	35	33	36	36	18.0	19.8	76.20		57	59		
	34	33	36	36	19.0	18.2	78.54			59	13		
	33	31	35	34	19.9	17.9	78.69			1	10		
	32	31	34	33	20.0	17.7	78.76			5	17		
	33	30	31	35	35	19.3	18.1	78.60		11	20		
	34	32	36	36	18.2	19.2	78.50			15	28		
7	5	14	12	17	16	17.6	18.8	78.35	27.490	+13.3	+11.9		
	61	57	62	61	16.0	20.4	77.90	27.499	+13.0	+11.1			
44	1	57	59	56	56	16.1	20.0	77.92		56	11		
	58	55	59	59	16.0	20.2	78.92			59	14		
	59	57	60	60	16.0	20.4	77.92			2	39		
	60	57	61	60	16.0	20.4	77.90			4	53		
	61	57	62	61	16.0	20.5	77.90			9	7		
30	5	32	59	59	61	59	16.7	19.9	78.00				
30	2	11	52	51	54	52	16.5	20.0	77.95	27.499	+13.0	+11.4	
2	36	56	55	58	60	17.1	19.1	78.20			+11.4		
33	2	37	13	33	32	35	34	17.6	19.0	78.20	27.510	+13.0	+11.0
34	0	43	37	37	40	38	17.0	20.5	77.95	27.518	+12.5	+12.9	
8	10	16	15	17	17	16.9	20.4	78.00			+13.8		

F. 78.50 Nig. 1 S 18.2.

F. 78.34 N 17.5 S 18.9.

Martis Centr.

F. 77.97 Nib. 2 S 20.0.

F. 78.40 Nig. 0 S 18.3

17. d Urs. min <sup>57</sup> 1.0 <sup>2</sup> 18.5 <sup>7</sup> 26.0 <sup>12</sup> 25.0 <sup>17</sup> 26.0 1.   
<sub>1</sub> 26.5 <sub>3</sub> 19.7 <sub>11</sub> 20.6 <sub>13</sub> 17.0

18 d Urs. min <sup>56</sup> 50.0 <sup>1</sup> 59.3 <sup>6</sup> 58.6 <sup>12</sup> 2.0 19. Az. + 3.0   
<sub>1</sub> 5.5 <sub>2</sub> 53.6 <sub>11</sub> 4.5 <sub>12</sub> 57.0

Mar. L.I.  $\alpha$  17.7 26.4 34.3 42.5 15 15   
 $\alpha$  Virginis 1.7 10.6 18.6 26.6 35.2 22 13   
 $\eta$  Urs. mij. 20.6 24.0 46.7 59.2 12.6 47 17   
 $\alpha$  Bootis 3.6 45.7 54.6 3.0 11.9 14 14   
 $\alpha$  Androm. 19.7 29.7 38.6 47.7 57.6 5 0   
 $\alpha$  Cassiop. 29.4 44.4 59.4 13.2 27.7 37 0   
 $\alpha$  Urs. min. <sup>57</sup> 5.1 <sup>2</sup> 23.0 <sup>7</sup> 31.0 <sup>12</sup> 26.0 <sup>17</sup> 39.3   
<sub>1</sub> 30.2 <sub>3</sub> 22.5 <sub>11</sub> 32.3 <sub>13</sub> 20.0

+22.7 -21.1   
 22.1 21.4

N P F B v e

32 30 32 32 18.7 18.1 78.44 27.520 +12.8 +14.6 J. 77.97 N16.6 S20.4   
 0.57 35 32 36 35 16.9 20.1 77.90 57. 26   
 33 30 34 34 18.1 18.7 78.29 1. 26   
 32 30 32 33 18.2 18.5 78.42 10. 44   
 34 31 33 34 17.7 19.2 78.28 15. 1   
 35 32 35 36 16.4 20.5 78.00 16. 0   
 61 59 62 62 15.8 20.0 77.95 27.400 17.8 11.7 J. 78.16 N16.5 S19.0   
 44.1.57 57 59 58 17.1 18.4 78.40 2- 57. 10   
 58 58 61 59 16.5 19.0 78.15 59 15   
 60 59 61 60 15.8 20.0 78.00 2. 30   
 60 60 62 60 15.8 20.0 77.96 4. 57   
 305.3357.51 52 51 16.0 19.6 78.00 Meris Centr.   
 302.11.59 52 54 52 16.0 19.6 77.97 +11.7   
 2.36.55 54 59 59 16.2 19.8 78.07 +11.8 J. 78.23 N17.0 S19.0   
 172.31.34 35 37 36 17.9 18.0 78.43 27.397 +13.5 +11.5   
 40 43 37 39 40 39 18.8 18.1 78.49 27.366 +12.7 +13.5   
 8 10 15 15 18 17 17.4 19.0 78.14 +14.3   
 60 57 30 32 32 18.2 18.0 78.38 27.365 +13.3 +15.8 Merid   
 36 35 37 38 16.0 20.6 77.83 27.368 +13.1 +15.2 56' 16" J. 78.20 N17.7 S19.0   
 35 34 36 36 17.0 19.0 78.20 59 14   
 33 32 33 34 18.1 18.0 78.35 1 30   
 30 30 32 32 15.9 20.5 77.87 11 8

chain 20.  $\beta$  Leonis 10.6 19.5 28.4 36.6 45.3 46 11 Az. + 3.7.  
 $\gamma$  Urs. maj. 29.9 44.7 59.2 12.6 27.5 51 11  
 $\alpha$  Androm. 22.0 31.7 40.8 50.3 59.5 5' 0  
 $\alpha$  Lapiop. 31.4 46.5 1.5 15.4 30.4 37 0  
 $\alpha$  Urs. min. 12.2 34.0 37.0 33.0 44.5 1.  
 37.7 29.5 39.5 29.3

$\left. \begin{matrix} +19.9 - 20.4 \\ 20.2 19.8 \end{matrix} \right\}$

Mai 22.  $\alpha$  Urs. min.  $\begin{matrix} 56 & 2 & 7 & 12 \\ 52.0 & 5.0 & 1.5 & 6.0 \\ 1 & 2 & 41 & \\ 9.4 & 58.0 & - & 9.0 \end{matrix}$  —

12.  $\left. \begin{matrix} +18.0 - 18.8 \\ 18.7 18.1 \end{matrix} \right\}$  F. 9 58 49 a = +0.733  
 S. 14 6 0 b = -0.007  
 c = -0.063  
 $S. 19^h 46' x = -5' 20.773 A 0.96$   
 $F. 9 59' x = +0 28.77 R. 0.84.$   
 merid. 23: 23 59' 30.74

Mart. L. J. 22.6 31.2 39.4 47.4 55.7 17 19  
 $\alpha$  Virg. 5.6 14.2 22.5 30.6 38.8 22 13

W P F B i e

40° 57' 32"	31	33	33	15.0	21.0	77.79			13' 20"
27.58	31	33	34	34	19.0	20.0	77.57		F. 78.07 N 14.8 S 18.2
7.5	9	11	12	12	15.0	19.7	77.57	27.341	+15.7 +16.7
40.45	25	36	38	36	15.1	19.0	77.89	27.468	+14.9 +16.0
8.10	15	15	18	16	15.1	19.0	77.90		+16.6
	31	29	32	32	17.0	17.0	78.35	27.476	+15.1 +17.8
10.57	34	32	37	36	15.0	18.9	77.86	<del>27.476</del>	<del>19.1</del> <del>17.8</del> 56.37
	33	31	34	35	15.9	18.0	78.14		59.33
	31	30	33	32	16.2	17.2	78.23		1.38
	31	29	33	32	16.7	17.1	78.35		9.46
	31	30	33	33	16.1	17.8	78.22		13.9
	32	31	34	33	15.4	18.1	78.05		15.39
	62	59	62	62	12.4	19.1	77.78		F. 78.00 N 13.1 S 18.0.
h. 1.	57	59	57	56	17.1	18.4	77.87		56.21
	59	57	60	58	12.8	18.9	77.82		59.20
	60	58	60	60	12.8	19.0	77.80		2.5
	61	60	62	62	12.4	19.1	77.78		4.57
	62	59	63	62	12.2	19.0	77.78		9.17
15.34	25	22	26	25	17.1	18.0	77.87	27.437	+16.7 +16.4
02.11	51	49	52	50	17.2	18.0	77.82		+16.3

Martin's Centre.



	57	2	7	12	18
$\alpha$ Virg. min	50.0	51.4	55.0	57.6	6.0
	1	3		12	13
	56.0	47.5	—	0.6	47.0

$\alpha$ Arietis	32.7	41.9	50.7	59.7	8.6	4	2
$\alpha$ Virginis	29.7	39.3	46.6	54.7	3.0	52	12
$\alpha$ Librae	15.5	24.6	33.0	41.4	50.1	5	12
	56	2		12	17		
$\alpha$ Virg. min	56.0	8.5	—	11.0	26.5	—	13
	1	3		11	14		
	14.6	3.0	—	14.0	6.3	—	

Arim. + 6.4.  
 Die 30<sup>a</sup> a = +0.580 b = -0.108 c = -0.063  
 15<sup>h</sup> 11'  $\alpha$  = -5' 30" 102 accel. 0.952 Seyffert.  
 11' 9'  $\alpha$  = + 35.45 Det. 0, 83 Jerschauer  
 Meridies die 31<sup>a</sup> 23<sup>h</sup> 59' 24" f \*

$\alpha$ Virginis	38.3	47.9	55.7	4.2	11.9	47	13
$\alpha$ Bootis	48.6	57.6	6.7	14.8	23.7	14	14
$\alpha$ Librae	18.4	27.4	35.6				
$\alpha$ " "		38.5	47.4	55.6	4.3	48	

$\alpha$  + 17.0 - 19.7  
 18.0 18.4

N S F D i e

29	28	30	30	16.0	16.9	78.50	27.580	+16.0	+15.5			
57	34	32	34	35	14.0	18.9	78.00		57.30			
32	31	33	32	14.7	18.0	78.20			59.42			
30	30	31	31	15.6	17.1	78.93			7.56			
30	28	30	30	16.0	16.9	78.48			5.41			
30	28	31	30	15.9	17.0	78.48			11.33			
25	13	30	30	33	30	14.3	18.1	78.10	27.581	+16.3	+16.5	
0	3	5	6	8	6	13.3	17.9	77.96	27.560	+17.1	+15.4	
0	0	24	3	5	1	0	15.0	16.0	78.35		6.15	
2	1	58	1	2			15.0	16.1	78.40		56.56	
0	57	0	0				14.8	17.0	78.23		58.48	
0	57	0	0				13.5	18.0	78.04		0.54	
2	0	5	4				14.8	16.8	78.38		8.31	
2	59	2	3				12.8	18.7	77.91		10.54	
0	59	2	1				12.9	17.1	78.17		15.22	
58	57	0	0				15.1	16.1	78.37	27.560	+17.0	+15.1
95	11	42	42	45	45		14.1	17.5	78.04	27.558	+17.0	+15.1
2	31	30	31	31	32		13.6	18.0	78.02	27.555	+17.0	+14.5
7	9	28	23	26	24		16.0	15.6	78.53	27.556	+15.9	+14.1

F 78.19 N 4.4 S 181  
 F 78.18 N 4.1 S 170.  
 L. S.

~~19.7 + 17.0~~  
 F = 78.03 N 3.5 S 18.0

Blas. min 56.9 29.8 1.0 31.6 36 58 14  
 24.5 35.6 — 25.8 37.2 57 14  
 α Coron. boreo. 7 30.7 39.7 48.7 58.0 33 15  $L=15^h 47' 55''$   
 α Serpens 51.7 0.3 8.5 16.6 24.6 42 15  $L=11^h 8' 45''$   
 α Scorpii 3.6 13.4 22.4 31.3 40.5 25 16  
 Jovis I. 13.6 I 52.6 I 53.5 I 52.8 I 4 17

I. II. 5.9 13.5 22.8 4. 17.  
 31. α Hermin 59.0 10.6 8.5 — — Az. + 6.8.  
 17.4 4.0 — — —

Mars. I. I. 22.3 30.7 39.1 47.3 55.6 12 13  
 α Virgin. 14.8 27.7 37.7 48.6 58.6 22 13  
 α Virginis 39.5 48.5 57.2 5.5 14.3 47 13  
 Luna I. I. 38.2 47.7 56.5 4.8 13.8 56 13  
 α Bootis 49.9 59.9 7.7 16.9 24.8 14 14  $\begin{cases} +16.6 - 19.0 \\ -17.2 - 18.1 \end{cases}$   
 α Librae 19.7 28.7 36.9 45.3 53.7 48 14  
 α Librae 58.5 31.3 2.7 23.0 4.7 58 14  
 Blas. min 25.7 37.0 — 27.4 38.4 57

N S F B i e

8' 23 24 25 26 16.0 15.9 78.54  
~~15.12~~ 78.46  
 45 53 50 54 53 14.9 17.0 78.20 27.556 +16.6 +13.6  
 26.52 52 53 53 15.0 17.0 78.20  
 28 57 56 58 58 14.5 18.0 77.95 27.551 +16.5 +12.7  
 30 29 25 28 27 15.4 17.5 78.04 27.550 +16.5 +12.7  
 3 0 3 4 12.0 18.7 77.86 27.468 +17.5 +17.3  
 2.0 56 59 59 19.0 19.9 78.96 56.27  
 2 58 1 0 19.5 17.9 78.00 59.21  
 2 59 2 2 12.2 18.3 77.90 1.36  
 3 0 3 3 12.1 18.2 78.68 4.53  
 19.19 18 21 20 12.1 18.3 77.80  
 11.50 45 50 50 12.6 18.0 77.84 27.470 +17.5 +17.4  
 11.45 42 44 44 12.8 18.0 77.90 +17.4  
 8.49 46 45 49 13.0 18.0 77.80 27.472 +17.5 +17.3 56.45 L. S.  
 31.30 31 34 33 12.8 18.0 77.90 +17.1  
 2 9 4 6 6 14.9 16.0 78.27 27.473 +17.5 +16.4  
 23 21 24 28 15.0 15.9 78.28

78.46 N. P. S. 16.0  
 77.92 N. P. S. 18.1  
 L. A.  
 78.04 N. 12.0 S. 17.9  
 78.04 N. 13.0 S. 17.9

Martis Centr.

