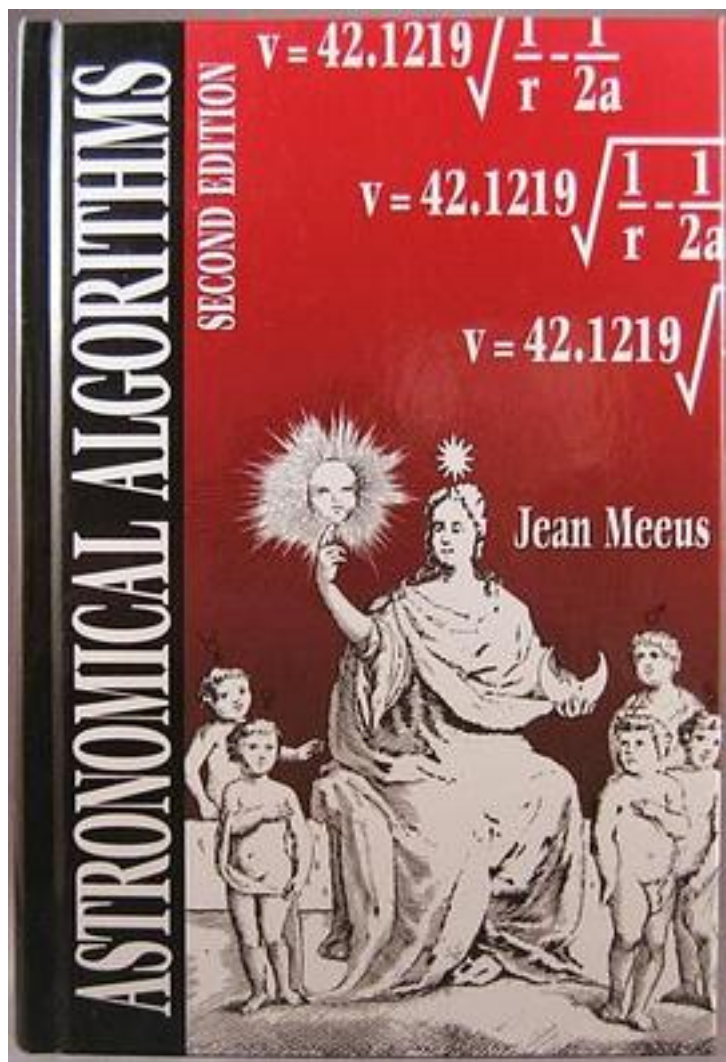


Astronomical Algorithms



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In the field of celestial calculations, Jean Meeus has enjoyed wide acclaim and respect since long before microcomputers and pocket calculators appeared on the market. When he brought out his *Astronomical Formulae for Calculators* in 1979, it was practically the only book of its genre. It quickly became the "source among sources," even for other writers in the field. Many of them have warmly acknowledged their debt (or should have), citing the unparalleled clarity of his instructions and the rigor of his methods.

And now this Belgian astronomer has outdone himself yet again with *Astronomical Algorithms*! Virtually every previous handbook on celestial calculations (including his own earlier work) was forced to rely on formulae for the Sun, Moon, and planets that were developed in the last century — or at least before 1920. The past 10 years, however, have seen a stunning revolution in how the world's major observatories produce their almanacs. The Jet Propulsion Laboratory in California and the U.S. Naval Observatory in Washington, D.C., have perfected powerful new machine methods for modeling the motions and interactions of bodies within the solar system. At the same time in Paris, the Bureau des Longitudes has been a beehive of activity aimed at describing these motions analytically, in the form of explicit equations.

Yet until now the fruits of this exciting work have remained mostly out of reach of ordinary people. The details have existed mainly on reels of magnetic tape in a form comprehensible only to the largest brains, human or electronic. But *Astronomical Algorithms* changes all that. With his special knack for computations of all sorts, the author has made the essentials of these modern techniques available to us all.

The second edition contains new chapters about the Jewish and Moslem Calendars, and on the satellites of Saturn, and a new Appendix giving expressions (polynomials) for the heliocentric coordinates of the giant planets Jupiter to Neptune from 1998 to 2025.

作者介绍:

目录: Table of Contents

Some Symbols and Abbreviations 5

1. Hints and Tips 7

2. About Accuracy 15

3. Interpolation 23

4. Curve Fitting 35

5. Iteration 47

6. Sorting Numbers 55

7. Julian Day 59

8. Date of Easter 67

9. Jewish and Moslem Calendars 71

10. Dynamical Time and Universal Time 77

11. The Earth's Globe 81

12. Sidereal Time at Greenwich 87

13. Transformation of Coordinates 91

14. The Parallactic Angle 97

15. Rising, Transit and Setting 101

16. Atmospheric Refraction 105

17. Angular Separation 109

18. Planetary Conjunctions 117

19. Bodies in a Straight Line	121
20. Smallest Circle Containing Three Celestial Bodies	127
21. Precession	131
22. Nutation and the Obliquity of the Ecliptic	143
23. Apparent Place of a Star	149
24. Reduction of Ecliptical Elements from One Equinox to Another One	159
25. Solar Coordinates	163
26. Rectangular Coordinates of the Sun	171
27. Equinoxes and Solstices	177
28. Equation of Time	183
29. Ephemeris for Physical Observations of the Sun	189
30. Equation of Kepler	193
31. Elements of the Planetary Orbits	197
32. Positions of the Planets	217
33. Elliptic Motion	223
34. Parabolic Motion	241
35. Near-Parabolic Motion	245
36. The Calculation of some Planetary Phenomena	249
37. Pluto	263
38. Planets in Perihelion and Aphelion	269
39. Passages through the Nodes	275
40. Correction for Parallax	279
41. Illuminated Fraction of the Disk and Magnitude of a Planet	283
42. Ephemeris for Physical Observations of Mars	287
43. Ephemeris for Physical Observations of Jupiter	293
44. Positions of the Satellites of Jupiter	301
45. The Ring of Saturn	317
46. Positions of the Satellites of Saturn	323
47. Position of the Moon	337
48. Illuminated Fraction of the Moon's Disk	345
49. Phases of the Moon	349
50. Perigee and Apogee of the Moon	355
51. Passages of the Moon through the Nodes	363
52. Maximum Declinations of the Moon	367
53. Ephemeris for Physical Observations of the Moon	371
54. Eclipses	379
55. Semidiameters of the Sun, Moon and Planets	389
56. Stellar Magnitudes	393
57. Binary Stars	397
58. Calculation of a Planar Sundial	401
Appendix I Constants	407
Appendix II Some Astronomical Terms	409
Appendix III Planets: Periodic Terms	413
Appendix IV Coefficients for the Heliocentric Coordinates of Jupiter to Neptune, 1998–2025	455
Index	
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