

## Recent publications relating to the history of astronomy

### *Books and Pamphlets*

- Agar, Jon. *Science and spectacle: the work of Jodrell Bank in post-war British culture*. Amsterdam, Harwood Academic Publishers, 1998. xx, 260 p. illus. (Studies in the history of science, technology and medicine, v. 5)
- Ancient astronomy and celestial divination. Edited by N. M. Swerdlow. Cambridge, Mass., MIT Press, 1999. 378 p. illus. (Dibner Institute studies in the history of science and technology)  
 Contents: Swerdlow, N. M. Introduction.—1. Reiner, E. Babylonian celestial divination.—2. Rochberg, F. Babylonian horoscopy: the texts and their relations.—3. Walker, C. B. F. Babylonian observations of Saturn during the reign of Kandalanu.—4. Hunger, H. Non-mathematical astronomical texts and their relationships.—5. Grasshoff, G. Normal star observations in late Babylonian astronomical diaries.—6. Brack-Bernsen, L. Goal-year tablets: lunar data and predictions.—7. Aaboe, A. A new mathematical text from the astronomical archive in Babylon: BM 36849.—8. Britton, J. P. Lunar anomaly in Babylonian astronomy.—9. Swerdlow, N. M. The derivation of the parameters of Babylonian planetary theory with time as the principal independent variable.—10. Jones, A. A classification of astronomical tables on papyrus.—11. Goldstein, B. R., and A. C. Bowen. The role of observations in Ptolemy's lunar theories.—12. Tihon, A. Theon of Alexandria and Ptolemy's *Handy Tables*.
- The Art of time. [Greenwich, Conn., Bruce Museum of Arts and Science, 1999?] 44 p. illus. (part col.)  
 Exhibition checklist and errata slip laid in.  
 Contents: Sturges, H. Acknowledgments.—Smith, M. The art of time.—Snellenburg, J. Measuring time.—Ehlinger, C. Connecticut clocks.—Bartky, I. R. Nineteenth-century American timekeeping.—Adams, G. Time in art.
- Astronomical amusements. Papers in honor of Jean Meeus. Edited by Fabrizio Bònoli, Salvo De Meis, Antonio Panaino. Roma, ISIAO; Milano, Mimesis, 2000. 158 p. illus., port.  
 Contents: Bònoli, F., S. De Meis, and A. Panaino. [Foreword]—Bezza, G. *Le tavole del primum mobile nel medioevo*.—Casanovas, J. A new approach to spherical astronomy.—Chapront-Touzé, M., and J. Chapront. Analytical ephemerides of the moon in the 20<sup>th</sup> century.—De Meis, S., and A. Vitagliano. Some unusual Meeus portraits.—Denoyelle, J. My joint venture with Jean Meeus.—Goffin, E. Orbit determination without Gauss.—Huber, P. J. Modeling the length of day and extrapolating the rotation of the earth.—Magni, T. *L'integrazione numerica di alta precisione per i non professionisti*.—Marsden, B. G. Astronomical collisions.—Mucke, H. *Zu der Entwicklung der Planetariums-Hauptprojektoren neueste Modelle von Zeiss nützen Daten von J. Meeus*.—Panaino, A. An "Avestan" planetary order?—Romano, G. *Matematica maya: ipotesi sulle operazioni aritmetiche*.—Sinnott, R. W. A line of planets.
- Bartky, Ian R. *Selling the true time: nineteenth-century timekeeping in America*. Stanford, Calif., Stanford University Press, 2000. xvi, 310 p. illus., facsim., group port., maps.
- Besomi, Ottavio, and Michele Camerota. *Galileo e il Parnaso Tychonico. Un capitolo inedito del dibattito sulle comete tra finzione letteraria a trattazione scientifica*. Firenze, L. S. Olschki, 2000. 274 p. facsim. (Biblioteca di Nuncius. Studi e testi, 41)  
 Contents: pt. 1. Camerota, M. Galileo e il Parnaso Tychonico. 1. "Gran portento di foco." 2. "Un assemblea fatta in Parnaso avanti Apollo." 3. Parnaso Tychonico. 4. Assemblea celeste. 5. Academico Danico. 6. Esopo in Parnaso.—pt. 2. Testi. Edizione critica e note a cura di Ottavio Besomi. 1. Assemblea celeste. 2. Abbozzi di Mario Guiducci in risposta all'*Assemblea celeste* (Firenze, Biblioteca Nazionale Centrale, Ms. Conv. Soppr. A.5. 1443).—Appendice. Discorso sopra il gran Cometa che si vede dal principio di Novembre di quest'anno 1618. Glossario dell'*Assemblea Celeste*.
- Borel, Pierre. *Discours nouveau prouvant la pluralité des mondes*. Ristampa anastatica dell'edizione Genève 1657 a cura di Antonella Del Prete. Lecce, Conte editore, 1998. xxiii, 80 p. (Aurifodina philosophica)
- Brunier, Serge, and Jean P. Luminet. *Glorious eclipses: their past, present, and future*. Translated by Storm Dunlop. Paris, Bordas; Cambridge, New York, Cambridge University Press, 2000. 192 p. illus. (part col.), facsim. (part col.), maps (part col.)  
 First published as *Éclipses, les rendez-vous célestes* in 1999.  
 Contents: Brunier, S. Journeys of an eclipse chaser.—Luminet, J. P. The story of eclipses, the story of people.—Luminet, J. P. The dance of the Sun and Moon.—Brunier, S. The great cosmic clockwork.—Luminet, J. P. By the light of eclipses.—Bruner, S. 11 August 1999: the last eclipse of the millennium.—Atlas of eclipses of the Sun and Moon.  
 Includes information on occultations and transits.
- Buffo, Alberto. *Ouranos theorem*. Cambridge, Mass., Bovolò Press, 2000. 338 p. illus.  
 "A Dialogue on the subject of how the distances to the farthest reaches of the Universe have

- been measured and on the many attempts since Antiquity to understand the architecture of the Cosmos, with a digression or two on a few related matters."
- Carvalho, Rómulo de. *Colectânea de estudos históricos (1953–1994); cultura e actividades científicas em Portugal*. Évora, Universidade de Évora, 1997. xxi, 538 p. illus., facsim., ports.
- Partial contents: I. Temas e personalidades de ciência: actividade e pensamento científico em Portugal. Portugal nas "Philosophical Transactions," nos séculos XVII e XVIII (1956). Posição histórica da invenção de nónio de Pedro Nunes (1960). Relações científicas do astrónomo francês Joseph-Nicolas de l'Isle com Portugal (1965). Os nomes portugueses na carta da Lua (1967). A doutrina heliocêntrica de Copérnico e a sua aceitação em Portugal (1973). A aceitação, em Portugal, da filosofia newtoniana (1991).
- Casati, Roberto. *La scoperta dell'ombra; da Platone a Galileo, la storia di un enigma che ha affascinato le grandi menti dell'umanità*. Milano, Mondadori, 2000. 278 p. illus., facsim.
- "Eppure le ombre sono state la chiave per risolvere alcuni grandi problemi scientifici: il perché delle eclissi, le distanze tra terra, luna e sole, la forma e la dimensione della terra, la struttura del sistema solare. Contemplando le ombre si è riusciti, tra l'altro, a determinare la latitudine di un luogo, si è visto che la luna è costellata di valli e montagne, si è capito che Saturno è circondato da straordinari anelli e che la luce viaggia a velocità finita."
- Chabás, José, and Bernard R. Goldstein. *Astronomy in the Iberian Peninsula: Abraham Zacut and the transition from manuscript to print*. Philadelphia, American Philosophical Society, 2000. 196 p. facsim. (American Philosophical Society, Philadelphia. Transactions, v. 90, pt. 2)
- Contents: Preface.—Introduction.—1. Abraham Zacut: supplementary notes for a biography.—2. Setting the scenes.—3. The *Hibbur*.—4. The *Almanach Perpetuum*.—5. The influence of Zacut's astronomical works.—Appendix 1. Zacut's *Judgments of the astrologer*.
- Coles, Peter. *Einstein and the total eclipse*. Duxford, Cambridge, Icon Books; New York, Totem Books, 1999. 71 p. illus. (Postmodern encounters)
- Constructions of time in the late Middle Ages. Edited by Carol Poster and Richard Utz. Evanston, Ill., Northwestern University Press, 1997. 206 p. illus. (Disputatio, an international transdisciplinary journal of the late Middle Ages, v. 2)
- Partial contents: Travis, P. W. Chaucer's *Chronographiae*, the confounded reader, and fourteenth-century measurements of time.—Laird, E. S. Astrolabes and the construction of time in the late Middle Ages.—Cárdenas, A. J. A learned king enthralls himself: escapement and the clock mechanisms in Alfonso X's *Libro del saber de astrologia*.—Vilhjalmsson, T. Time and travel in Old Norse society.—Akkach, S. Ibn 'Arabi's cosmogony and the Sufi concept of space and time.
- Conti, Giovan Stefano. *Lettere a Ruggiero Giuseppe Boscovich*. A cura di Edoardo Proverbio. Roma, Accademia nazionale delle scienze detta dei XL, 1996–98. 2 v. facsim. (Scritti e documenti, 18, 22) (Documenti boscovichiani, 4–5)
- Contents: v. 1. 1760–1771.—v. 2. 1771–1784.
- Couteau, Paul. *Le ciel est mon jardin*. Paris, Flammarion, 2000. 225 p.
- Des astres et des hommes. Sous la direction de Pierre Erny. Paris, L'Harmattan, 1996. 205 p. illus. (Collection Culture et cosmologie)
- Contents: Erny, P. Liminaire.—1. Erny, P. De l'ethnoastronomie.—2. Navet, E. Quelques réflexions sur l'idée d' "ethnoastronomie" et les "ethno ... quelque chose" à partir de la cosmologie des Indiens Ojibwé (Amérique du Nord).—3. Navet, E., and N. Mohia. Le proche et la lointain: éléments d'ethnoastronomie émerillon (Guyane Française).—4. Zahan, D. La lune "sale." Un thème cosmologique en Afrique méridionale et orientale.—5. Köhler, U. Le cycle lunaire et sa signification chez les Indiens mexicains.—6. Molet, L. Durée et temps à Madagascar.—7. Verdier, P. Les calendriers indo-européens.—8. Maillard, C. Dans le procès de l'astrologie, le rationalisme est-il tout à fait rationnel?—9. Viret, J. Musique et astronomie au Moyen Age: le cryptogramme "solaire" des notes de la gamme et la "musique céleste."—10. Triomphe, R. Le communisme et la lune. Contribution à une étude de la relance cosmique de l'idéologie soviétique.
- Seven of these papers first appeared in the *Série Astronomie et sciences humaines*, published by the Observatoire astronomique de Strasbourg.
- DeVorkin, David H. Henry Norris Russell, dean of American astronomers. Princeton, Princeton University Press, 2000. xix, 499 p., [8] p. of plates.
- Dick, Steven J. *Extraterrestrial life and our world view at the turn of the millennium*. Dibner Library Lecture, Smithsonian Institution Libraries, May 2, 2000. [Washington, Smithsonian Institution, 2000] 47 p. illus. (part col.), facsim., col. port.
- Drake, Stillman. *Essays on Galileo and the history and philosophy of science*. Selected and introduced by N. M. Swerdlow and T. H. Levere. Toronto, Buffalo, University of Toronto Press, 1999. 3 v. illus., facsim., plates, ports.
- Contents: v. 1. Preface. Acknowledgments. Introduction. Prologue. Drake's speech on receiving the international Galileo Prize for History of Italian Science. pt. 1. Galileo: biographical and general. pt. 2. Galileo: bibliographical and textual studies. pt. 3. Galileo: scientific method and philosophy of science. pt. 4. Galileo: astronomy.—v. 2. pt. 5. Galileo: *Dialogue*

- Concerning the Two Chief World Systems.* pt. 6. Galileo: motion and mechanics, including the *Discourses on Two New Sciences.*—v. 3. pt. 7. Galileo: instruments. pt. 8. History of science: ancient, medieval, Renaissance, Seventeenth Century. pt. 9. Philosophy of science and language. A bibliography of the writings of Stillman Drake. Index.
- Drevniaia astronomiia: nebo i chelovek. Tezisy dokladov mezhdunarodnoi nauchno-metodicheskoi konferentsii (19–24 noiabria 1997 goda); programma konferentsii. Moskva, Komissiiia po paleoastronomii EAAS, 1997. 68 p.
- Drössler, Rudolf. 2000 Jahre Weltuntergang; Himmelserscheinungen und Weltbilder in apokalyptischer Deutung. Würzburg, Echter, 1999. 184 p. illus. (part col.), facsims. (part col.)  
 Contents: Das Jahr 2000 und der Weltuntergang.—Der lichte Tag wird zur Nacht.—Der Mond schwimmt in seinem Blut.—Kometen verkünden Unheil.—Planeten machen Geschichte.
- Ducrocq, Albert. L'éclipse. Monaco, Éditions du Rocher, 1999. 259 p., [8] p. of plates. illus. (part col.), facsims. (part col.), port. + 1 éclipsographe.  
 Contents: 1. Quand une vague d'obscurité déferle.—2. Chaldéens et chinois observent longuement.—3. Une architecture conforme de l'univers: l'astronomie.—4. Le mouvement de la Lune fait le désespoir des astronomes.—5. Pourquoi une éclipse totale de Soleil est un phénomène critique.—6. Les ressources de l'informatique et de la règle à éclipse.—7. L'Éclipse la plus courte: beaucoup de grains de Baily.—8. La fantastique couronne du Soleil.—9. Planètes et étoiles d'un ciel étrange.—10. Les éclipses d'Einstein.—11. Quand finira le temps des éclipses.—12. Si la Lune n'avait pas existé.
- Elst, Koenraad. Update on the Aryan invasion debate. New Delhi, Aditya Prakashan, 1999. 342 p.  
 Partial contents: 2. Astronomical data and the Aryan question. 2.1. Dating the Rg-Veda. 2.2. Ancient Hindu astronomy. 2.2.1. Astronomical tables. 2.2.2. Ancient observation, modern confirmation. 2.2.3. The start of Kali-Yuga. 2.3. The precession of the equinox. 2.3.1. The slowest hand on the clock. 2.3.2. Some difficulties. 2.3.3. Regulus at summer solstice. 2.3.4. One Veda can hide another. 2.4. Additional astronomical indications. 2.4.1. The Saptarshi cycle. 2.4.2. A remarkable eclipse. 2.4.3. Cosmic data in Vedic ritual. 2.4.4. The Zodiac. 2.4.5. India as the metropolis. 2.5. Conclusion.
- Encyclopedia of the scientific revolution: from Copernicus to Newton. Editor, Wilbur Applebaum. New York, Garland Pub., 2000. xxxv, 758 p. illus., facsims., ports. (Garland reference library of the humanities, v. 1800)
- al-Farghānī. Astronomicheskie traktaty. Perevod s arabskogo, vvodnaia stat'ia i kommentarii B. A. Rozenfel'da, I. G. Dobrovol'skogo, N. D. Sergeevoi; pri uchastii P. G. Bulgakova; pod nauchnoi redaktsiei B. A. Rosenfel'da. Otv. redaktor A. Akhmedov. Tashkent, Glav. red. Izdatel'sko-poligraficheskogo kontšerna "Shark," 1998. 232 p. illus.
- 1543 and all that; image and word, change and continuity in the proto-scientific revolution. Edited by Guy Freeland, Anthony Coronas. Dordrecht, Boston, Kluwer Academic Publishers, 2000. xv, 404 p. illus., facsims., plan, ports. (Australasian studies in history and philosophy of science, v. 13)  
 Partial contents: Kemp, M. Vision and visualisation in the illustration of anatomy and astronomy from Leonardo to Galileo.—Freeland, G. The lamp in the temple: Copernicus and the demise of a medieval ecclesiastical cosmology.—Coronas, A. Copernicus, printing and the politics of knowledge.—Thomason, N. 1543—the year that Copernicus didn't predict the phases of Venus.—Brundell, B. Bellarmine to Foscarini on Copernicanism: a theologian's response.
- Gaspani, Adriano. La cultura di Golasecca; cielo luna e stelle dei primi Celti d'Italia. Aosta, Keltia editrice, 1999. 239 p. illus., maps, plans. (Le Antiche querce, v. 13)  
 Contents: Introduzione.—1. L'astronomia dei Celti.—2. Gli eventi astronomici straordinari.—3. L'astronomia e i luoghi sacri.—4. I tumuli del X secolo a.C.—5. I recinti tombali.—6. Le necropoli.—7. Gli insediamenti.—Conclusione.
- Gassendi, Pierre. Institution astronomique. Suivi du Discours inaugural tenu dans le Collège royal de Paris. Traduit pour la première fois du latin en français, avec un avertissement et des notes par Jean Peyroux. Bordeaux, J. Peyroux; Paris, Diff. A. Blanchard, 1997. 163 p. illus.  
 Translation of t. 4. of Gassendi's *Œuvres complètes* (1658).
- Gee, Emma. Ovid, Aratus and Augustus: astronomy in Ovid's *Fasti*. Cambridge, New York, Cambridge University Press, 2000. 226 p. illus.
- Die Geschichte der Astronomie in Berlin. Hrsg.: Dieter B. Herrmann, Karl-Friedrich Hoffmann. Berlin, Archenhold-Sternwarte und Wilhelm-Foerster-Sternwarte Berlin [1998?] 159 p. illus., facsims., ports.  
 Contents: Johann Carion und der Beginn der Astronomie in Berlin.—Kalendermacher und der Beginn der akademischen Astronomie.—Johann Elert Bode.—Die Akademiesternwarte unter dem Direktorat von Encke.—Wilhelm Julius Foerster—Forschungsorganisation und Wissenschaftspopularisierung.—Arthur von Auwers und "Die Geschichte des Fixsternhimmels."—Astrophysik—ein neues Forschungsgebiet an der Akademie der Wissenschaften und der Berliner Sternwarte.—Die astronomische Forschung nach dem II. Weltkrieg unter dem Dach der Akademie der Wissenschaften.—Universitäre Astronomie im geteilten Berlin.—Hundert Jahre populärwissenschaftliche Arbeit in der Astronomie.

Gingras, Yves, Peter Keating, and Camille Limoges. *Du scribe au savant; les porteurs du savoir de l'Antiquité à la révolution industrielle*. Paris, Presses universitaires de France, 2000. 361 p. illus., facsim., maps. (Science, histoire et société)

The first three chapters, on the ancient Near East, Greece, and Rome, include brief sections relating to the history of astronomy. See particularly chapters 7 and 8, "La révolution astronomique: de l'humaniste au savant" (p. 211–244) and "De la philosophie mécaniste à l'univers mathématique" (p. 245–287).

Giorgetti, Renzo. *Gli orologi da torre nella provincia di Lucca*. Lucca, Maria Pacini Fazzi Editore, 2000. 205 p. illus.

Giovanni Schiaparelli: storico della astronomia e uomo di cultura. Atti del Seminario di studi organizzato dall'Istituto italiano per l'Africa e l'Oriente e dall'Istituto di fisica generale applicata dell'Università degli studi di Milano. Milano, 12–13 maggio 1997, Osservatorio astronomico di Brera. A cura di Antonio Panaino e Guido Pellegrini. Milano, Mimesis—IsIAO, 1999. 193 p. illus., facsim. (Collana Mimesis)

Contents: Panaino, A., and G. Pellegrini. Prefazione.—Simili, R. Giovanni Schiaparelli astronomo e uomo di scienza.—Casaburi, M. Giovanni V. Schiaparelli e l'astronomia antico-testamentaria.—De Meis, S. Il *Planetarium Babylonicum* di G. V. Schiaparelli: problematiche astronomiche.—Hunger, H. Schiaparelli's notebook of Babylonian star names.—Mandrino, A. Giovanni Virginio Schiaparelli archivist and l'archivio della Specola di Brera.—Panaino, A. Giovanni V. Schiaparelli e la storia dei più antichi calendari iranici. Con tre inediti di G. V. Schiaparelli ed una Nota di S. De Meis.—Pellegrini, G. Il *Thema Mundi* nell'Oriente e nell'Occidente. Presentazione.—Pellegrini, G. Le configurazioni planetarie e la nascita di Rāma: una comunicazione di G. V. Schiaparelli ad A. Weber.—Bezza, G. Sulla tradizione del *Thema Mundi*.—Raffaelli, E. G. Il tema del mondo e il tema del *Gayōmard* nel *Bundahišn*.

The papers by Casaburi, De Meis, and Panaino, and the first paper by Pellegrini, are accompanied by short summaries in English.

Giuseppe Toaldo e il suo tempo, nel bicentenario della morte. Scienze e lumi tra Veneto e Europa. Atti del convegno, Padova, 10–13 novembre 1997. A cura di Luisa Pigatto; presentazione di Paolo Casini. Cittadella, Bertinello Artigrafiche, 2000. xix, 1033 p. illus., facsim., maps, plans, ports. (Contributi alla storia dell'Università di Padova, 33)

Partial contents: Sessione 1. Maestri, amici, corrispondenti di Giuseppe Toaldo. Baldini, U. La formazione scientifica di Toaldo. Ferrighi, A. Toaldo, Cerato e la fabbrica della Specola astronomica di Padova: un sodalizio eemplare tra astronomo e architetto.—Sessione 3. L'astronomia e i suoi strumenti, le discipline correlate (geodesia, geografia ecc.) e gli osservatori pubblici nel Settecento. Bònoli, F. L'evoluzione degli strumenti d'osservazione astronomici nel Settecento. Tucci, P. Brera astronomers' contributions to Celestial Mechanics from 1776 to 1821. Triarico, C. La Specola di Leonardo Ximenes a Firenze e la catalogazione dei suoi strumenti. Casanovas, J. L'insegnamento dell'astronomia nei Collegi dei Gesuiti nel Settecento. Calisi, M. Le Specole romane nel Settecento. Contardi, S. Concezioni museali e collezionismo scientifico nella Toscana settecentesca: l'Imperiale e Regio Museo di fisica e storia naturale di Firenze. Pagliari, M. La longitudine: una conquista del XVIII secolo attesa a lungo.—Sessione 6. La meteorologia e le sue relazioni con le scienze della natura (agricoltura, botanica, medicina, fenomeni della natura). Casati, S. La meteorologia lunare di Toaldo.

Gotteland, Andrée, and Georges Camus. *Cadrans solaires de Paris*. Nouv. éd. rev. et corr. Paris, CNRS Éditions, 1997. 223 p. illus. (part col.), facsim., maps.

Hail, Raven. *The Cherokee sacred calendar; a handbook of the ancient Native American tradition*. Rochester, Vt., Destiny Books, 1999. 141 p. illus.

Hamou, Philippe. *La mutation du visible; essai sur la portée épistémologique des instruments d'optique au XVII<sup>e</sup> siècle*. v. 1. *Du Sidereus Nuncius de Galilée à la Dioptrique cartésienne*. Villeneuve d'Ascq, Presses universitaires du Septentrion, 1999. 317 p., [8] p. of plates. illus., facsim. (Histoire des sciences)

Contents: Introduction. 1. ptie. La révélation galiléenne. ch. 1. Un message des étoiles. ch. 2. Vision télescopique et certitude sensible. ch. 3. L'optique de fortune. ch. 4. Le manifeste empiriste. ch. 5. L'expérience télescopique après Galilée — Gassendi, Hevelius, Huygens. — 2. ptie. La lunette dans l'ordre des raisons: Kepler et Descartes. Avant-propos: "À la honte de nos sciences." ch. 6. "Fait et cause": la discussion képlerienne du message télescopique. ch. 7. Le "panégyrique géométrique" de l'instrument: Kepler, la *Dioptrice* de 1611. ch. 8. L'invention méthodique de la lunette: Descartes, la *Dioptrique* de 1637.

A History of science in the Netherlands: survey, themes and reference. Edited by Klaas van Berkel, Albert Van Helden, Lodewijk Palm. Leiden, Boston, Brill, 1999. xxvii, 659 p. illus., facsim., ports.

The history of astronomy is not separately treated, and there is no subject index. However, the section of biographies includes sketches of Isaac Beeckman, Willem Janszoon Blaeu, Ejnar Hertzsprung, Johannes Hudde, Christiaan Huygens, Frederik Kaiser, Jacobus Cornelius Kapteyn, Marcel Gilles Jozef Minnaert, Jan Hendrik Oort, Antonie Pannekoek, Willem de Sitter, Willibrord Snel, Jan Hendrick van Swinden, and Pieter Zeeman.

Holmberg, Gustav. Reaching for the stars: studies in the history of Swedish stellar and nebular astronomy, 1860–1940. Lund, Lund University, 1999. 243 p. illus. (Ugglan, Lund studies in the history of science and ideas, 13)

Contents: From classical astronomy to astrophysics: an introduction.— New technologies, new astronomy.— Charlier and stellar statistics.— Lundmark and the Lund Observatory.— From Uppsala and Stockholm to the stars.— The many cultures of astronomy.

Homet, Jean M. Cadrans solaires en Queyras. Photographies de Franck Rozet. Aix-en-Provence, Édisud, 2000. 117 p. col. illus., col. map.

IAU Colloquium, 178th, Cagliari, 1999. Polar motion: historical and scientific problems. Edited by Steven Dick, Dennis McCarthy, and Brian Luzum. Historical sessions. San Francisco, Astronomical Society of the Pacific, 2000. (Astronomical Society of the Pacific conference series, v. 208) p. 1–219. illus., facsim., maps, ports.

Contents: Dick, S. J. Polar motion: a historical overview on the occasion of the centennial of the International Latitude Service.— pt. 1. History of early polar motion research. Abalakin, V. K. On Leonhard Euler's contribution to the theory of precession and nutation. Melchior, P. J. Theories of polar motion from Tisserand to Poincaré (1890–1910). Verdun, A., and G. Beutler. Early observational evidence of polar motion. Débarbat, S. V. Latitude observations at Paris Observatory prior to the ILS. Stavinschi, M. Romanian contribution to the study of polar motion. Šíma, Z. The observations of latitude changes measured in Prague. Brosche, P. Küstner's observations of 1884–85: the turning point in the empirical establishment of polar motion. Carter, M. S., and W. E. Carter. Seth Carlo Chandler Jr.: the discovery of variation of latitude.— pt. 2. History of the International Latitude Service, Bureau international de l'heure, International Earth Rotation Service and polar motion applications. Proverbio, E. The period of organization of the International Latitude Service: 1889–1899. Höpfner, J. On the contribution of the Geodetic Institute Potsdam to the International Latitude Service. Ehgamberdiev, S. A., S. K. Eshonkulov, and E. A. Litvinenko. Kitab as one of the five stations of the ILS: history and present. Uras, S., A. Poma, and P. Calleda. Browsing through the observing books of Carloforte. Guinot, B. History of the Bureau international de l'heure. Korsuñ, A. O. E. P. Fedorov as president of Commission 19 of the IAU during the period of the reorganization of ILS. Wilkins, G. A. Project MERIT and the formation of the International Earth Rotation Service. Mueller, I. I. The first decade of the IERS. Muller, P. M. Time and polar motion in early NASA spacecraft navigation.

Instrument—Experiment; historische Studien. Im Auftrag des Vorstandes der Deutschen Gesellschaft für Geschichte der Medizin, Naturwissenschaft und Technik hrsg. von Christoph Meinel. Berlin, Diepholz, Verlag für Geschichte der Naturwissenschaften und der Technik, 2000. 423 p. illus., facsim.

Partial contents: Staley, R. Michelson's interferometer: experiment or instrument?— Keil, I. Aus den Augsburg'schen optischen Werkstätten des 17. Jahrhunderts.— Oestmann, G. Uhren- und Instrumentenbau in Norddeutschland: die Dynastie der Hager in Braunschweig-Wolfenbüttel.— Voskuhl, A. Schein und Strahlung: die Anfänge der Messung von Sonnenstrahlung im 19. Jahrhundert und ihre Replikation.

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Includes lists of the Chinese characters representing romanized terms used in the respective papers.

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This revision includes, as part four, "Henry Cavendish's Scientific Letters" (p. 515–731).

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provides the public with a view of the moon, as well as an exact figure for its distance (24 million miles, measured to the inch).

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