

1. Record Nr.	UNINA9910807177403321
Titolo	Handbook of X-ray astronomy // edited by Keith A. Arnaud, Randall K. Smith, Aneta Siemiginowska [[electronic resource]]
Pubbl/distr/stampa	Cambridge : , : Cambridge University Press, , 2011
ISBN	1-107-22608-2 1-283-34095-X 1-139-15989-5 9786613340955 1-139-03423-5 1-139-16089-3 1-139-15884-8 1-139-15533-4 1-139-15708-6
Descrizione fisica	1 online resource (viii, 197 pages) : digital, PDF file(s)
Collana	Cambridge observing handbooks for research astronomers ; ; 7
Classificazione	SCI004000
Disciplina	522/.6863
Soggetti	X-ray astronomy
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	; 1. Optics / Daniel A. Schwartz -- ; 2. Detectors / Richard J. Edgar -- ; 3. Charge-coupled devices / Catherine E. Grant -- ; 4. Data reduction and calibration / Keith A. Arnaud and Randall K. Smith -- ; 5. Data analysis / Randall K. Smith, Keith A. Arnaud and Aneta Siemiginowska -- ; 6. Archives, surveys, catalogs, and software / Keith Arnaud -- ; 7. Statistics / Aneta Siemiginowska -- ; 8. Extended emission / Kip D. Kuntz -- Appendices.
Sommario/riassunto	Modern x-ray data, available through online archives, are important for many astronomical topics. However, using these data requires specialized techniques and software. Written for graduate students, professional astronomers and researchers who want to start working in this field, this book is a practical guide to x-ray astronomy. The handbook begins with x-ray optics, basic detector physics and CCDs, before focussing on data analysis. It introduces the reduction and

calibration of x-ray data, scientific analysis, archives, statistical issues and the particular problems of highly extended sources. The book describes the main hardware used in x-ray astronomy, emphasizing the implications for data analysis. The concepts behind common x-ray astronomy data analysis software are explained. The appendices present reference material often required during data analysis.

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