

ATOMIC COLLISION DATABASES AND DATA SERVICES -- A SURVEY¹

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Atomic collision databases and data services constitute an important resource for scientific and engineering applications such as astrophysics, lighting, materials processing, and fusion energy, as well as an important knowledge base for current developments in atomic collision physics. Data centers and research groups provide these resources through a chain of efforts that include producing and collecting primary data, performing evaluation of the existing data, deducing scaling laws and semiempirical formulas to compactly describe and extend the data, producing recommended sets of data, and providing convenient means of maintaining, updating, and disseminating the results of this process. The latest efforts have utilized modern database, storage, and distribution technologies including the Internet and World Wide Web. Given here is an informal survey of how these resources have developed, how they are currently characterized, and what their likely evolution will lead them to become in the future.

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