

## SBGrid Databank

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Access to experimental X-ray diffraction image data is fundamental for validation and reproduction of macromolecular models, and indispensable for development of improved data processing algorithms. We have established a diffraction data publication and dissemination system, the SBGrid Databank, to preserve diffraction datasets supporting published crystal structures. Published datasets are openly available through direct download and through Data Access Alliance (DAA) sites. Data deposition is open to all structural biologists, and datasets for unpublished structures can be held for later publication. Existing databases (such as the PDB and PubMed) are used to reduce the the amount of additional information depositors need to provide. Reprocessing of published datasets is used to provide a baseline for ensuring that the datasets will be useful to other researchers. A set of REST APIs supports reprocessing pipelines, and allows users to access information about published datasets programmatically.