Large Synoptic Survey Telescope

The LSST Data Products

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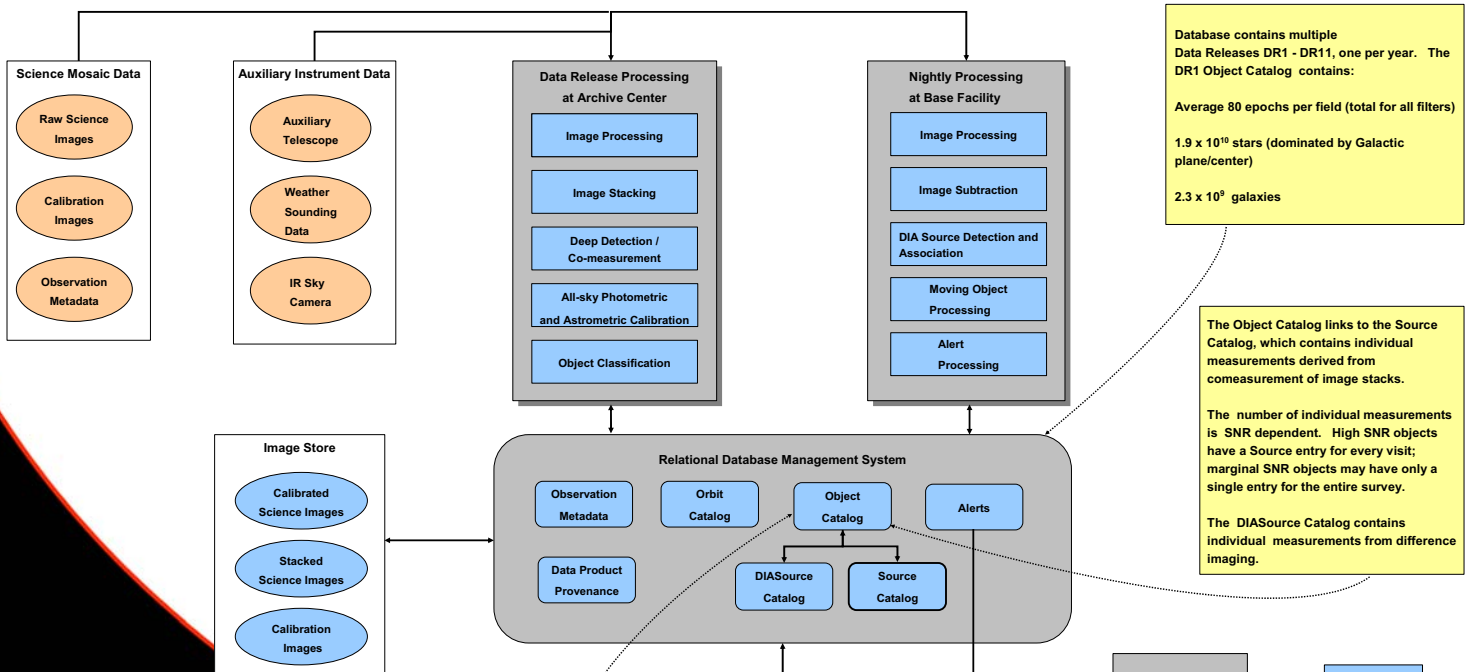
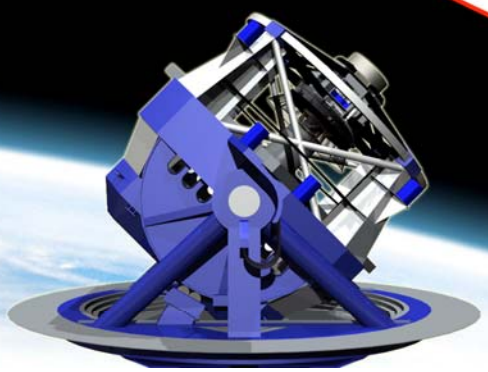
The LSST produces data products at two cadences. The nightly data products consist of raw images, low-latency alerts, and updates to the object, source, and orbit catalogs, all of which are archived and publicly available. Some additional data produced by the nightly pipelines, such as calibrated and subtracted images, are not necessarily archived but can be recreated on demand. At longer intervals, approximately twice a year, data releases are produced. A data release is the result of processing the survey images accumulated to date through the deep detection and classification pipelines, as well as the image processing pipeline. Once produced and validated, a data release is frozen and archived as an entity that can be readily accessed in the future. This will facilitate publishing papers that refer to specific LSST data releases. The principal data products in a release are the object catalog and stacked images. The object catalog includes a full range of object properties as co-measured from all images in all bands which contain the object, light curves over the duration of the survey, and object classifications. The photometry and astrometry in this catalog will be calibrated to a more precise level than available from the nightly data products, and in general the intent is that most science done with LSST will use this catalog directly. The stacked images are used internally for production of template images, as well as for producing RGB images useful for visual understanding of objects and for EPO.





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