# Strategic Planning Objectives

### ARD Analysis Ready Data

* USGS confirmed that Analysis Ready Data will be the standard product of the Landsat program beginning with Collection 2, and that production of these products is formally a part of the Landsat 9 development project. USGS noted that delivery of global Analysis- ready data is a core part of their work program, with firm deadlines in place, and that input from partners to validate the products will be important.

### Cloud Technologies

* Both parties continue to engage with the impact of cloud technology on their future architecture, noting that access to data and functionality in the cloud greatly expands the potential user base in a way that is not possible with internal or restricted systems. The business models under which Government enables exploitation of these technologies is something that requires ongoing consideration.

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* The importance of cloud computing to their future strategies was increasing. Both parties noted, however, that existing infrastructures (such as the National Computational Infrastructure in the case of GA and the Cassandra system in the case of USGS) would remain important assets for the next few years, and that roadmaps needed to take a long-term view.

### Landsat and Sentinel-2

* Both parties noted the ongoing desire to ensure high levels of interoperability between Landsat and Sentinel-2 data. Interoperability between these two missions will be a key enabler of downstream product development, and will act as a catalyst for the release of interoperable products by other space agencies, further helping users.

### Predictive Systems

* The desire to establish ‘predictive’ systems for environmental data was increasing, and that this would require comprehensive cross-disciplinary collaboration, and assimilation of heterogeneous data sets derived from remote and in-situ observations. GA noted Australian Government funding for scoping of an ‘environmental prediction system’, and USGS noted that projection was a key element of their LCMAP program that would require significant attention over coming years. Both agencies noted rapidly increasing interest in systems for monitoring and predicting water quality.

### ODC Collaboration and Promotion

* The USGS formally joined the Open Data Cube initiative, contributing to the leadership of the program and making technical contributions that will ensure that Landsat data was more easily accessible to the 40+ countries using the open-source platform to exploit Earth observation data.

#### Future Activity in ODC

* Encouraging the GEO community to develop “Open Data Cube”-ready algorithms/products. This will give GA and USGS, and their user communities, access to a richer set of products to adapt and apply to local needs. It will also make the Open Data Cube product more attractive to the broader user community and supports the USGS’s goal of global Landsat data exploitation.
* Identifying the functionality in the USGS LCMAP system that GA could interface or ‘port’ to the Open Data Cube project. Availability of this functionality would benefit the user communities of Digital Earth Australia and Landsat data, and ensure the Open Data Cube moves towards supporting internal USGS needs.
* Ensuring that the Open Data Cube project provides a platform that is easier to install, easier to customise, and easier to contribute both science algorithms and code to. A key priority will be ensuring users can more easily ingest authoritative Landsat data for their areas of interest.

Organized under the project framework as - Data Access and Analysis (DCA)

#### Data Cube and Access Development

* Understanding of how best to leverage commercial cloud computing to achieve organisational objectives.
* Increased access to open platforms that support local, national, regional, and global projects increases the use of Landsat data.
* Support for multi-mission application development by the broader user community, by providing a tool that is designed from this perspective from the beginning.
* Easier portability of algorithms, science code, products, and tools between GA, USGS, and the broader community.