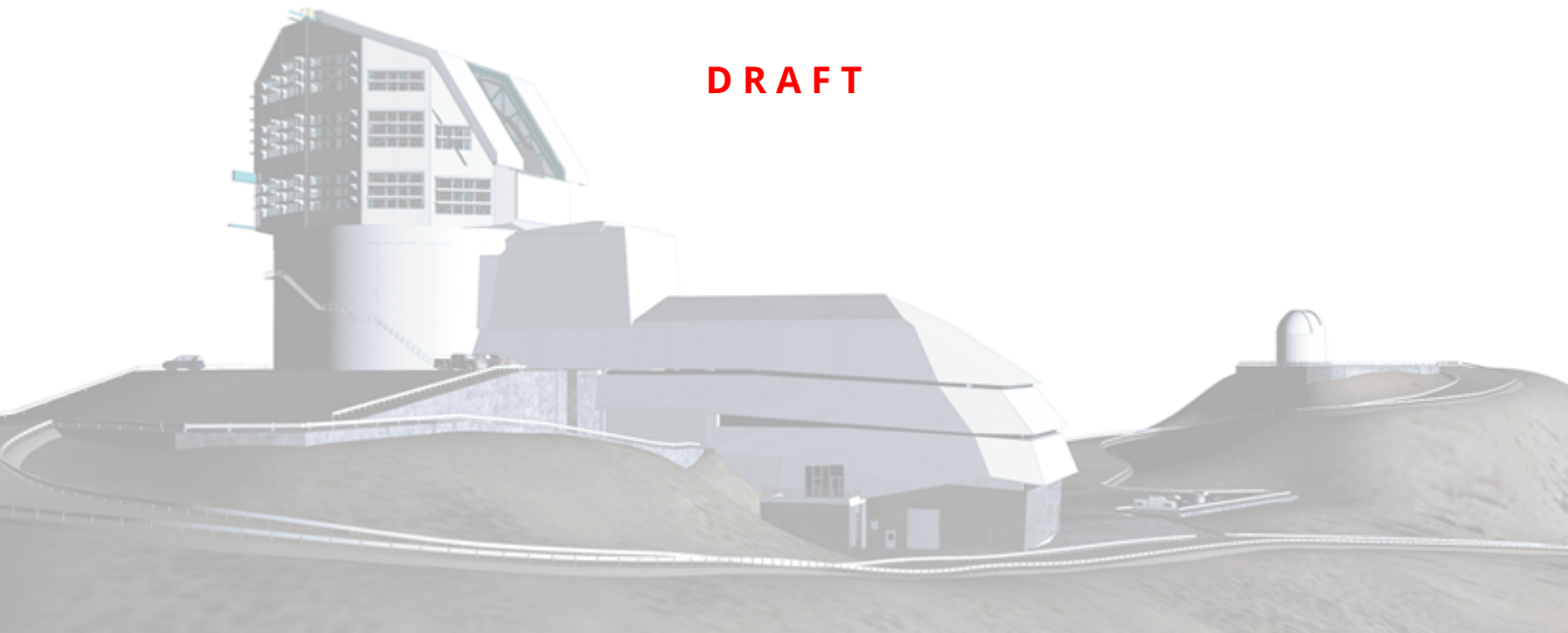

Vera C. Rubin Observatory
Software Test Report

LDM-503-xxx: Access to Processed HSC Public Data in the LSP Test Plan and Report

Gregory Dubois-Felsmann

DMTR-221

Latest Revision: 2021-01-29

DRAFT

Abstract

This is the test plan and report for **Access to Processed HSC Public Data in the LSP** (LDM-503-xxx), an LSST milestone pertaining to the Data Management Subsystem.

Change Record

Version	Date	Description	Owner name
	2020-03-30	First Draft	G. Dubois-Felsmann

Document curator: G. Dubois-Felsmann
Document source location: `https://github.com/lsst-dm/DMTR-221`
Version from source repository: 072cab4

Contents

LDM-503-xxx: Access to Processed HSC Public Data in the LSP Test Plan and Report

1 Introduction

1.1 Objectives

Verify the deployment of Rubin/LSST-processed HSC public release data, including at a minimum DRP-style products such as an Object-like catalog, coadded images, and calibrated single-epoch images, with image metadata, and access to this data through all three LSP Aspects. This includes Notebook Aspect access to catalogs, images, and image cutouts, and Portal Aspect access (via TAP) to catalogs and image metadata (ObsTAP-style) and through that to images. External API Aspect data access is not separately under test, as the API Aspect services are exercised by the other tests, and the ability to access them externally with authentication has been demonstrated previously.

1.2 System Overview

The system under test is an instance of the LSP, including Notebook Aspect, Portal Aspect, API Aspect services, back-end databases, and a Gen3 Butler repository on accessible mass storage.

Applicable Documents:

LSE-163, Data Products Definition Document
LDM-554, Data Management LSST Science Platform Requirements
? , Catalog Data Model (in development)

1.3 Document Overview

This document was generated from Jira, obtaining the relevant information from the LVV-P70 Jira Test Plan and related Test Cycles (LVV-C152).

Section 1 provides an overview of the test campaign, the system under test (LSP Services), the applicable documentation, and explains how this document is organized. Section 2 provides additional information about the test plan, like for example the configuration used for this test or related documentation. Section 3 describes the necessary roles and lists the individuals assigned to them.

Section 4 provides a summary of the test results, including an overview in Table 2, an overall assessment statement and suggestions for possible improvements. Section 5 provides detailed results for each step in each test case.

The current status of test plan LVV-P70 in Jira is **Draft** .

1.4 References

[1] **[LDM-554]**, Dubois-Felsmann, G., Ciardi, D., Mueller, F., Economou, F., 2018, *Science Platform Requirements*, LDM-554, URL https://ls.st/LDM-554

[2] **[LSE-163]**, Jurić, M., et al., 2017, *LSST Data Products Definition Document*, LSE-163, URL https://ls.st/LSE-163

2 Test Plan Details

2.1 Data Collection

Observing is not required for this test campaign.

2.2 Verification Environment

An instance of the LSP at the LDF will be used.

2.3 Entry Criteria

Confirmation from the relevant teams of the deployment of the test dataset.

2.4 Related Documentation

No additional documentation provided.

2.5 PMCS Activity

Primavera milestones related to the test campaign:

- LDM-503-xxx

3 Personnel

The personnel involved in the test campaign is shown in the following table.

T. Plan LVV-P70 owner:	**Gregory Dubois-Felsmann**
T. Cycle LVV-C152 owner:	**Gregory Dubois-Felsmann**

Test Cases	**Assigned to**	**Executed by**	**Additional Test Personnel**
LVV-T1825	Gregory Dubois-Felsmann		Someone with credentials allowing access to the instance of the LSP at the LDF on which the data are deployed.
LVV-T1824	Gregory Dubois-Felsmann		

4 Test Campaign Overview

4.1 Summary

T. Plan LVV-P70:	**LDM-503-xxx: Access to Processed HSC Public Data in the LSP**			Draft
T. Cycle LVV-C152:	**LDM-503-xxx - Access to Processed HSC Public Data in the LSP**			Not Executed
Test Cases	**Ver.**	**Status**	**Comment**	**Issues**
LVV-T1825	1	Not Executed		
LVV-T1824	1	Not Executed		

Table 2: Test Campaign Summary

4.2 Overall Assessment

Not yet available.

4.3 Recommended Improvements

Not yet available.

5 Detailed Test Results

5.1 Test Cycle LVV-C152

Open test cycle *LDM-503-xxx - Access to Processed HSC Public Data in the LSP* in Jira.

Test Cycle name: LDM-503-xxx - Access to Processed HSC Public Data in the LSP
Status: Not Executed

This test cycle verifies the deployment of Rubin/LSST-processed HSC public release data, including at a minimum DRP-style products such as an Object-like catalog, coadded images, and calibrated single-epoch images, with image metadata, and access to this data through all three LSP Aspects. This includes Notebook Aspect access to catalogs, images, and image cutouts, and Portal Aspect access (via TAP) to catalogs and image metadata (ObsTAP-style) and through that to images. External API Aspect data access is not specifically under test in this cycle, as the API Aspect services are exercised by the other tests, and the ability to access them externally has been demonstrated previously.

Access to single-epoch catalog data such as Source or ForcedSource, and access to AP-style products, including DIA* catalogs and difference images, are possible stretch goals. If adopted, they would be represented by additional test cases in the test cycle.

5.1.1 Software Version/Baseline

Not provided.

5.1.2 Configuration

Not provided.

5.1.3 Test Cases in LVV-C152 Test Cycle

5.1.3.1 LVV-T1825 - Notebook Aspect access to processed HSC data in the LSP

Version **1**. Open *LVV-T1825* test case in Jira.

Verify the availability through the Notebook Aspect of a dataset of Rubin/LSST-processed HSC public release data, including DRP-style products such as an Object-like catalog, coadded images, and calibrated single-epoch images, with image metadata.

If additional data products are available, such as DIA* outputs or Source/ForcedSource, testing those should be represented by an additional stretch-goal test case.

Preconditions:
Execution of a DRP-style processing of a TBD-sized collection of HSC data, up to the full HSC PDR2 dataset. Deployment of this dataset in databases accessible to an LSP instance, to a TAP service in that instance, to an image cutout (SODA) service, and in a Gen3 Butler repository accessible from a notebook.

Execution status: **Not Executed**

Final comment:

Detailed steps results:

Step 1	Step Execution Status: **Not Executed**
	Description
	Expected Result
	Actual Result

5.1.3.2 LVV-T1824 - Portal Aspect access to processed HSC data in the LSP

Version **1**. Open *LVV-T1824* test case in Jira.

Verify the availability through the Portal Aspect of a dataset of Rubin/LSST-processed HSC public release data, including DRP-style products such as an Object-like catalog, coadded images, and calibrated single-epoch images, with image metadata. Access will be based on TAP service of catalogs and image metadata (ObsTAP-style) and through that to images.

If additional data products are available, such as DIA* outputs or Source/ForcedSource, testing those should be represented by an additional stretch-goal test case.

Preconditions:
Execution of a DRP-style processing of a TBD-sized collection of HSC data, up to the full HSC PDR2 dataset. Deployment of this dataset in databases accessible to an LSP instance and to a TAP service in that instance.

Execution status: **Not Executed**

Final comment:

Detailed steps results:

Step 1	Step Execution Status: **Not Executed**
	Description
	Expected Result
	Actual Result

A Traceability

Test Case	VE Key	VE Summary
LVV-T1824		
LVV-T1825		

B Acronyms used in this document

Acronym	Description
AP	Alert Production
API	Application Programming Interface
DIA	Difference Image Analysis
DMTN	DM Technical Note
DRP	Data Release Production
HSC	Hyper Suprime-Cam
LDF	LSST Data Facility
LDM	LSST Data Management (Document Handle)
LSE	LSST Systems Engineering (Document Handle)
LSP	LSST Science Platform (now Rubin Science Platform)
LSST	Legacy Survey of Space and Time (formerly Large Synoptic Survey Telescope)
PDR2	Public Data Release 2 (HSC)
PMCS	Project Management Controls System
SODA	Server-side Operations for Data Access
TAP	Table Access Protocol
TBD	To Be Defined (Determined)
VE	vendor estimate