Criteria Key	Ticket ID	Criteria ID	Criteria Statement	Criteria Type	Test Case ID	Test Case Title
	CK_70_01	10	Configure CKSUM and ECS as valid checksum types. Configure STMGT to compute checksums for all science files for which a checksum is not available (for all the archives used during the test). For each valid checksum type, ingest a granule for whose files a checksum is specified in the PDR, as well as several granules for which the PDR does not specify any checksums. Include among the latter at least one Browse, one QA, and one Production History granule. Verify the following: a. the granules are ingested successfully.b. where the PDR specified a checksum for the science file, its type and value are stored in the SDSRV database.c. for each science file for which the PDR specified no checksums, an ECS checksum was computed, is stored in the SDSRV inventory, and its value is correct.d. No checksums are calculated and stored for the non-science files.[NOTE: Tested by E1]	FC	REL7001	End-To_End Checksum Capability
	CK_70_01	20	Configure STMGT to compute checksums for 25% of the science files for which a checksum is not available (for all the archives used during the test). Ingest 100 single file granules whose PDR specify no checksum. Verify that for between 20 and 30 of these files a checksum was computed and is stored in the SDSRV inventory.[NOTE: Since the test for checksum computation is statistical, the number of files with checksums does not have to be exactly 25.] [NOTE: Tested by E1	FC	REL7001	End-To_End Checksum Capability

	CK_70_01	30	For each of the following errors, submit an ingest request whose PDR contains that error: 1/ the checksum type is not among the configured valid checksum types; 2/ a valid checksum type is present but no checksum value is specified; 3/ checksum value is present but no checksum type is specified; 4/ a checksum value is present but contains illegal characters.Verify that in each case, the appropriate PDRD error disposition is returned. [NOTE: Tested by E1]	EC	REL7001	End-To_End Checksum Capability
	CK_70_01	40	Ingest two granules for whose metadata files the PDR specifies a checksum type and checksum value. For one of them, the PDR shall specify a valid checksum type and value also for the granule files, for the other, the PDR shall omit this. Verify the following:a. the granules are ingested successfully.b. where the PDR specified a checksum for the science file, its type and value are stored in the SDSRV database. [NOTE: Tested by E1]	FC	REL7001	End-To_End Cheksum Capability
	CK_70_01	50	Configure an ECS UserID for receivingchecksums in a DN. Submit an order for the science granules used during the test for criterion 10, once for this userID and once for another userID not configured to receive checksums. Verify that in the first case, the DN contains the correct checksum information and in the correct format; and that in the second case, the DN does not contain this information. [NOTE: Tested by E1]	FC	REL7001	End-To_End Checksum Capability

	CK_70_01	60	Configure an ECS UserID for receiving checksums in a DN. Using this UserID, submit an order for several of the granules used during the test for criterion 20, such that some of the files have checksums and some do not. Verify that the DN contains the correct checksum information in the correct format. [NOTE: Tested by E1]	FC	REL7001	End-To_End Checksum Capability
	CK_70_01	70	Configure the Data Pool to verify checksums on all inserts (for all the archives used during the test). Insert the science granules used during the test of criterion 10 into the Data Pool, but prior to doing so, alter the checksum of one of the files to be incorrect for each checksum type. In addition, insert into the Data Pool two granules without checksums. Verify the following:a. the Data Pool retries and ultimately fails the inserts of granules whose checksum was altered. b. the checksum verification errors are logged.c. as per log entries, the ECS checksum errors were discovered immediately after completion of the file transfer, where CKSUM checksum errors were discovered after rereading the file from the Data Pool. d. the files for which checksum verification failed were deposited in the appropriate error directory.e. an ECS checksum is stored in the Data Pool for the files for which there is no checksum, and that checksum is correct. (NOTE: additional verifications that respond to pending NCRs	EC	REL7001	End-To_End Checksum Capability
	CK_70_01	75	Configure the Data Pool collections for the granules used during the test for criterion 70 for compression (e.g., via gzip), then repeat the test in criterion 70. Verify that checksums for the uncompressed files are the same as resulted during the test of criterion 70, but that this time, an ECS checksum for the compressed files is stored as well and is correct. [NOTE: Tested by E1]	FC	REL7001	End-To_End Checksum Capability

	CK_70_01	80	Configure the Data Pool to not verify any checksums nor calculate any; then repeat the test in criterion 70. Verify that all granules are inserted into the Data Pool successfully and that for the files that had no checksums originally no checksum is stored in the Data Pool, whereas for the others a checksum is stored in the Data Pool. [NOTE: Tested by E1]	FC	REL7001	End-To_End Checksum Capability
	CK_70_01	100	Configure STMGT to verify checksums on all retrievals (for all the archives used during the test). Submit an order for the science granules used in the test for criterion 10, but prior to doing so, alter the checksum of one of the files to be incorrect for each valid checksum type. Verify the following:a. The checksum mismatch is detected and retrieval of the files whose checksums were altered is retried, but ultimately fails.b. The checksum verification errors are logged by STMGT.c. The order is suspended in DDIST with an appropriate error indication that tells the operator the nature of the error. [NOTE: Tested by E2.]	EC	REL7001	End-To_End Checksum Capability
	CK_70_01	110	Configure STMGT to not verify any checksums; then repeat the test in criterion 100. Verify that the order completes successfully. [NOTE: Tested by E2.]	FC	REL7001	End-To_End Checksum Capability

	CK_70_01	120	Configure STMGT to compute checksums on all inserts and retrievals (for the archives used during the test). Ingest a complete Landsat subinterval (i.e., both formats) without specifying a checksum in the PDR. Verify that the SDSRV contains the correct checksums for the subinterval files. Alter one of the checksums, and then submit a request for one of the scenes in this subinterval. Verify the following:a. The checksum mismatch is detected and the retrieval of the file whose checksum was altered is retried and ultimately fails.b. The checksum verification errors are logged by STMGT.c. The subsetting request is failed by the SDSRV. [NOTE: Tested by E2.]	EC	REL7001	End-To_End Checksum Capability
	CK_70_01	130	Use the standalone checksum utility to compute the checksums for the granule files used in the test for criterion 10 that have ECS checksums. Perform this test on each of the platforms the utility is required to support. Verify the checksums computed by the utility agree with the checksums stored in the SDSRV inventory. [NOTE: Tested by E2.]	FC	REL7001	End-To_End Checksum Capability