

Department of the Interior
US Geological Survey

Landsat 7 Calibration Parameter File Release

Version Description Document

Version 15.0

September 2002



Executive Summary

The Version Description Document (VDD) is required by the Landsat Program Configuration Control Board for all software releases put into the operational environment. This VDD is the primary configuration control document used to track and control versions of Calibration Parameter files released to the operational environment. It is a summary of the features and contents of the CPF changes, and identifies and describes the version of the CPFs being delivered.

Keywords: Version Description Document (VDD), Calibration Parameter File (CPF).

Table of Contents	Executive Summary	iii
Section 1	Preface	1
Section 2	Overview	2
Section 3	Reason for CPF Issuance and Changes	2
Section 4	List of CPFs in Effect	3
Section 5	List of Changed Units	4
5.1	New Groups or Fields to CPF File Structures	4
5.2	Deleted Groups or Fields in the CPF File Structures	4
5.3	Modifications to Existing CPF Values	4
Section 6	Operational Changes to be Expected with New CPFs	10

Section 1 Preface

This Calibration Parameter File (CPF) Change Description Document is controlled by the Mission Management Office System Engineering (MMOSE) and the Landsat 7 Data Handling Facility (DHF) Change Control Board (L7 DCCB) and accompanies the release of CPFs for the 4th Quarter of 2002.

Comments and questions regarding this document should be directed to:

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Section 2 Overview

This document details the Calibration Parameter Files (CPF) released for the quarter beginning 01 October 2002 and the changes made to them.

Section 3 Reason for CPF Issuance and Changes

This release is a routine quarterly release for the 4Q2002 CPF. The standard changes to the CPF attributes and the UT1 Parameters have been made to all CPFs.

Section 4 List of CPFs in Effect

The following table shows the CPFs in effect for each time period since the Launch of Landsat 7, as well as the preceding CPFs.

Period Covered	3Q2002 CPF Name	4Q2002 CPF Name
1 October – 31 December 2002	N/A	L7CPF20021001_20021231.01 (NEW)
1 July – 30 September 2002	L7CPF20020701_20020930.01	L7CPF20020701_20020930.02
1 April – 30 June 2002	L7CPF20020401_20020630.02	L7CPF20020401_20020630.03
1 January – 31 March 2002	L7CPF20020101_20020331.03	L7CPF20020101_20020331.04
1 October – 31 December 2001	L7CPF20011001_20011231.04	L7CPF20011001_20011231.05
01 July 2001 – 30 September 2001	L7CPF20010701_20010930.04	L7CPF20010701_20010930.05
01 April 2001 – 30 June 2001	L7CPF20010401_20010630.05	L7CPF20010401_20010630.06
01 January 2001 – 31 March 2001	L7CPF20010101_20010331.06	L7CPF20010101_20010331.07
01 October – 31 December 2000	L7CPF20001001_20001231.07	L7CPF20001001_20001231.08
19 July – 30 September 2000	L7CPF20000719_20000930.09	L7CPF20000719_20000930.10
01 July – 18 July 2000	L7CPF20000701_20000718.08	L7CPF20000701_20000718.09
01 April – 30 June 2000	L7CPF20000401_20000630.08	L7CPF20000401_20000630.09
01 January – 31 March 2000	L7CPF20000101_20000331.10	L7CPF20000101_20000331.11
09 December – 31 December 1999	L7CPF19991209_19991231.11	L7CPF19991209_19991231.12
24 November – 08 December 1999	L7CPF19991124_19991208.11	L7CPF19991124_19991208.12
01 October – 23 November 1999	L7CPF19991001_19991123.11	L7CPF19991001_19991123.12
01 July – 30 September 1999	L7CPF19990701_19990930.14	L7CPF19990701_19990930.15
01 April – 30 June 1999	L7CPF19990401_19990630.17	L7CPF19990401_19990630.18

Section 5 List of Changed Units

5.1 New Groups or Fields to CPF File Structures

There were no changes to the CPF file structure with any of the CPFs released this quarter.

5.2 Deleted Groups or Fields in the CPF File Structures

There were no deletions to the CPF file structure with any of the CPFs released this quarter.

5.3 Modifications to Existing CPF Values

The following changes were made to those CPFs newly generated or modified this quarter:

5.3.1 File: L7CPF20021001_20021231.01

This is the new CPF for the 4th Quarter of 2002. The contents are based on the CPF file from 3Q2002 (File: L7CPF20020701_20020930.01) with the following changes:

5.3.1.1 GROUP=FILE_ATTRIBUTES

Routine changes to show new filename and effectivity dates.

5.3.1.2 GROUP=ATTITUDE_PARAMETERS

Attitude Parameters have been refined based upon analysis from the IAS. ATTITUDE_PARAMETERS is the affected parameter.

5.3.1.3 GROUP=BIAS_LOCATIONS

Bias Locations have been refined based upon analysis from the IAS of IC region changes since launch. BIAS_LOCATIONS is the affected parameter.

5.3.1.4 GROUP=UT1_TIME_PARAMETERS

UT1 parameters have been updated based on estimated values as computed at the Naval Observatory.

5.3.2 File: L7CPF20020701_20020930.02

Changes made to the .01 version of this CPF include the following groups:

5.3.2.1 GROUP=FILE_ATTRIBUTES

Routine changes to show new filename and effectivity dates.

5.3.2.2 GROUP=ATTITUDE_PARAMETERS
Attitude Parameters have been refined based upon analysis from the IAS. ATTITUDE_PARAMETERS is the affected parameter.

5.3.2.3 GROUP=BIAS_LOCATIONS
Bias Locations have been refined based upon analysis from the IAS of IC region changes since launch. BIAS_LOCATIONS is the affected parameter.

5.3.2.4 GROUP=UT1_TIME_PARAMETERS
UT1 parameters have been updated based on estimated values as computed at the Naval Observatory.

5.3.3 File: L7CPF20020401_20020630.03
Changes made to the .02 version of this CPF include the following groups:

5.3.3.1 GROUP=FILE_ATTRIBUTES
Routine changes to show new filename and effectivity dates.

5.3.3.2 GROUP=ATTITUDE_PARAMETERS
Attitude Parameters have been refined based upon analysis from the IAS. ATTITUDE_PARAMETERS is the affected parameter.

5.3.3.3 GROUP=BIAS_LOCATIONS
Bias Locations have been refined based upon analysis from the IAS of IC region changes since launch. BIAS_LOCATIONS is the affected parameter.

5.3.3.4 GROUP=UT1_TIME_PARAMETERS
UT1 parameters have been updated based on estimated values as computed at the Naval Observatory.

5.3.4 File: L7CPF20020101_20020331.04
Changes made to the .03 version of this CPF include the following groups:

5.3.4.1 GROUP=FILE_ATTRIBUTES
Routine changes to show new filename and effectivity dates.

5.3.4.2 GROUP=BIAS_LOCATIONS

Bias Locations have been refined based upon analysis from the IAS of IC region changes since launch.
BIAS_LOCATIONS is the affected parameter.

5.3.4.3 GROUP=UT1_TIME_PARAMETERS

UT1 parameters have been updated based on estimated values as computed at the Naval Observatory.

5.3.5 File: L7CPF20011001_20011231.05

Changes made to the .04 version of this CPF include the following groups:

5.3.5.1 GROUP=FILE_ATTRIBUTES

Routine changes to show new filename and effectivity dates.

5.3.5.2 GROUP=BIAS_LOCATIONS

Bias Locations have been refined based upon analysis from the IAS of IC region changes since launch.
BIAS_LOCATIONS is the affected parameter.

5.3.6 File: L7CPF20010701_20010930.05

Changes made to the .04 version of this CPF include the following groups:

5.3.6.1 GROUP=FILE_ATTRIBUTES

Routine changes to show new filename and effectivity dates.

5.3.6.2 GROUP=BIAS_LOCATIONS

Bias Locations have been refined based upon analysis from the IAS of IC region changes since launch.
BIAS_LOCATIONS is the affected parameter.

5.3.7 File: L7CPF20010401_20010630.06

Changes made to the .05 version of this CPF include the following groups:

5.3.7.1 GROUP=FILE_ATTRIBUTES

Routine changes to show new filename and effectivity dates.

5.3.7.2 GROUP=BIAS_LOCATIONS

Bias Locations have been refined based upon analysis from the IAS of IC region changes since launch.
BIAS_LOCATIONS is the affected parameter.

5.3.8 File: L7CPF20010101_20010331.07

Changes made to the .06 version of this CPF include the following groups:

5.3.8.1 GROUP=FILE_ATTRIBUTES
Routine changes to show new filename and effectivity dates..

5.3.8.2 GROUP=BIAS_LOCATIONS
Bias Locations have been refined based upon analysis from the IAS of IC region changes since launch.
BIAS_LOCATIONS is the affected parameter.

5.3.9 File: L7CPF20001001_20001231.08
Changes made to the .07 version of this CPF include the following groups:

5.3.9.1 GROUP=FILE_ATTRIBUTES
Routine changes to show new filename and effectivity dates.

5.3.9.2 GROUP=BIAS_LOCATIONS
Bias Locations have been refined based upon analysis from the IAS of IC region changes since launch.
BIAS_LOCATIONS is the affected parameter.

5.3.10 File: L7CPF20000719_20000930.10
Changes made to the .09 version of this CPF include the following groups:

5.3.10.1 GROUP=FILE_ATTRIBUTES
Routine changes to show new filename and effectivity dates.

5.3.10.2 GROUP=BIAS_LOCATIONS
Bias Locations have been refined based upon analysis from the IAS of IC region changes since launch.
BIAS_LOCATIONS is the affected parameter.

5.3.11 File: L7CPF20000701_20000718.09
Changes made to the .08 version of this CPF include the following groups:

5.3.11.1 GROUP=FILE_ATTRIBUTES
Routine changes to show new filename and effectivity dates.

5.3.11.2 GROUP=BIAS_LOCATIONS
Bias Locations have been refined based upon analysis from the IAS of IC region changes since launch.
BIAS_LOCATIONS is the affected parameter.

- 5.3.12 File: L7CPF20000401_20000630.09
Changes made to the .08 version of this CPF include the following groups:
- 5.3.12.1 GROUP=FILE_ATTRIBUTES
Routine changes to show new filename and effectivity dates.
 - 5.3.12.2 GROUP=BIAS_LOCATIONS
Bias Locations have been refined based upon analysis from the IAS of IC region changes since launch.
BIAS_LOCATIONS is the affected parameter.
- 5.3.13 File: L7CPF20000101_20000331.11
Changes made to the .10 version of this CPF include the following groups:
- 5.3.13.1 GROUP=FILE_ATTRIBUTES
Routine changes to show new filename and effectivity dates.
 - 5.3.13.2 GROUP=BIAS_LOCATIONS
Bias Locations have been refined based upon analysis from the IAS of IC region changes since launch.
BIAS_LOCATIONS is the affected parameter.
- 5.3.14 File: L7CPF19991209_19991231.12
Changes made to the .11 version of this CPF include the following groups:
- 5.3.14.1 GROUP=FILE_ATTRIBUTES
Routine changes to show new filename and effectivity dates.
 - 5.3.14.2 GROUP=BIAS_LOCATIONS
Bias Locations have been refined based upon analysis from the IAS of IC region changes since launch.
BIAS_LOCATIONS is the affected parameter.
- 5.3.15 File: L7CPF19991124_19991208.12
Changes made to the .11 version of this CPF include the following groups:
- 5.3.15.1 GROUP=FILE_ATTRIBUTES
Routine changes to show new filename and effectivity dates.
 - 5.3.15.2 GROUP=BIAS_LOCATIONS

Bias Locations have been refined based upon analysis from the IAS of IC region changes since launch.
BIAS_LOCATIONS is the affected parameter.

5.3.16 File: L7CPF19991001_19991123.12

Changes made to the .11 version of this CPF include the following groups:

5.3.16.1 GROUP=FILE_ATTRIBUTES

Routine changes to show new filename and effectivity dates.

5.3.16.2 GROUP=BIAS_LOCATIONS

Bias Locations have been refined based upon analysis from the IAS of IC region changes since launch.
BIAS_LOCATIONS is the affected parameter.

5.3.17 File: L7CPF19990701_19990930.15

Changes made to the .14 version of this CPF include the following groups:

5.3.17.1 GROUP=FILE_ATTRIBUTES

Routine changes to show new filename and effectivity dates.

5.3.17.2 GROUP=BIAS_LOCATIONS

Bias Locations have been refined based upon analysis from the IAS of IC region changes since launch.
BIAS_LOCATIONS is the affected parameter.

5.3.18 File: L7CPF19990401_19990630.18

Changes made to the .17 version of this CPF include the following groups:

5.3.18.1 GROUP=FILE_ATTRIBUTES

Routine changes to show new filename and effectivity dates.

5.3.18.2 GROUP=BIAS_LOCATIONS

Bias Locations have been refined based upon analysis from the IAS of IC region changes since launch.
BIAS_LOCATIONS is the affected parameter.

Section 6 Operational Changes to be Expected with New CPFs

There are no major changes to operations or performance expected due to these CPFs. Slightly improved detector noise in the IC region may be noticed with the update of the BIAS_LOCATIONS group. Geodetic accuracy should be slightly improved with the removal of a small along-track bias. The bias was corrected through the update of the ATTITUDE_PARAMETERS group.