

# **CERES Software Bulletin 97-04**

**May 30, 1997**

## **DAAC Delivery Memo**

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### **Purpose:**

This software bulletin is designed to provide a copy of the delivery memo form to be sent to the DAAC by the CERES CM team 30 days prior to delivery of each CERES Subsystem. Each subsystem is responsible for filling in the appropriate information and providing the CERES CM team a copy of this memo to send to the DAAC. To assist in understanding what information is requested, a sample delivery memo is also provided as a part of this bulletin.

### **Delivery Memo Form:**

The delivery memo form is on pages 2-8 of this bulletin and can be copied to a new file for providing the memo to the DAAC.

### **Sample Delivery Memo:**

Pages 9-16 of this bulletin contain the sample delivery memo to provide an example of the information requested.

# DELIVERY MEMO

revised - May 1997

Please fill in the appropriate sections or supply references to applicable documentation.

## A. IDENTIFICATION

Instrument Team Name \_\_\_\_\_

Subsystem Name \_\_\_\_\_

Date \_\_\_\_\_

SCCR Number \_\_\_\_\_

Description \_\_\_\_\_

Point(s) of Contact (POC's) for questions on the delivery (include phone numbers and e-mail addresses):

## B. DESCRIPTION OF DELIVERY

1. Delivery:

a. Release Level

Beta \_\_\_\_\_ Engineering Version \_\_\_\_\_ Mission Version \_\_\_\_\_

b. Scope

Initial Subsystem Delivery (Incremental) \_\_\_\_\_ Delta \_\_\_\_\_

c. Delta Delivery Class (if applicable): Please refer to the SPD for definitions.

Functional \_\_\_\_\_ Nominal \_\_\_\_\_ Emergency \_\_\_\_\_

2. Purpose of Delivery (Check all that apply):

New S/W release \_\_\_\_\_ S/W Correction \_\_\_\_\_

S/W Enhancement \_\_\_\_\_ Documentation Delivery \_\_\_\_\_

Other (Please Describe) \_\_\_\_\_

3. Indicate the number of each element included in the delivery:

SDPS/W PGE(s) \_\_\_\_\_

SDPS/W Libraries \_\_\_\_\_

PGE Activation Rules \_\_\_\_\_

Test Data \_\_\_\_\_

Test S/W \_\_\_\_\_

Expected Test Results \_\_\_\_\_

Coefficient File(s)\_\_\_\_\_  
Control File(s)\_\_\_\_\_  
Ancillary File(s)\_\_\_\_\_

Documentation\_\_\_\_\_  
Other (Please Specify)\_\_\_\_\_

4. SCF Development Environment: Please provide current SCF environment.

- a. Hardware:
- b. Operating system and version number:
- c. Memory:
- d. Science Software:

Compilers (include versions):

Code Checkers (include version):

SDP Toolkit version:

- e. SCF-Provided COTS Software (include versions):
- f. Software libraries, tools and version numbers:

**C. DELIVERY LOGISTICS**

1. Date delivery files will be available\_\_\_\_\_

2. Method of delivery from SCF to DAAC

a. Via FTP

Push delivery (by SCF)\_\_\_\_\_

Pull delivery (by DAAC)\_\_\_\_\_

Indicate directory\_\_\_\_\_

b. Via Physical Media

Media type(8mm, 4mm, CD-ROM)\_\_\_\_\_

Number of units\_\_\_\_\_

Delivery method (Federal Express, etc.)\_\_\_\_\_

3. Format

a. tar files

Compressed (Y/N)\_\_\_\_\_

Compression utility\_\_\_\_\_

Number of tar files\_\_\_\_\_

Names and approximate sizes of tar files (bytes):

b. ascii

Compressed (Y/N)\_\_\_\_\_

Compression utility\_\_\_\_\_

Number of files\_\_\_\_\_

Names and sizes of files (bytes):

c. postscript

Number of files\_\_\_\_\_

Names and sizes of files (bytes):

d. other (repeat section as needed)

Format description\_\_\_\_\_

Number of files\_\_\_\_\_

Names and sizes of files (bytes):

#### D. LIST OF DELIVERY CONTENTS

Please organize delivered items by PGE. Referring to documentation already available at the DAAC whenever applicable, **respond to 1 through 14 FOR EACH PGE:**

NUMBER of PGEs in Delivery\_\_\_\_\_

1. PGE Name and Function Performed:

2. New PGE \_\_\_\_\_

Existing PGE \_\_\_\_\_

3. Developer-Assigned Version Number\_\_\_\_\_

4. PGE Point of Contact (name, e-mail, phone, FAX): (May reference section A1 if the same.)

5. References to environment variables and site configuration of PGE (ex. Toolkit, F90, any environment variables.)

6. Compilation information

a. Language(s) and version number(s):

b. Options (compiler flags) used to assist in porting to other compilers:

7. Summary of files associated with this PGE

For **EACH FILE included with this PGE delivery**:

The **file name** and **the size in bytes** must be provided. Please specify individual file version as necessary if different from PGE version. This may be included with the delivery memo or in a separate file provided with the delivery.

The following information, which should be static, should be included in the **Test Plan**:

- a. file name and/or identifier
- b. Format (i.e., ASCII, postscript, etc.)
- c. Type (i.e., C source code, makefile, test data, defect list)
- d. Short text description
- e. Deviations from established source standards
- f. file status of ancillary files (intermediate, archival, permanent)

8. Estimate of resources required for PGE execution(i.e., disk storage, cpu time (elapsed, user, and system), and memory which can be obtained via the unix time command). This information is necessary to enable the DAAC to plan multiple SSI&T activities.

9. List of processing dependencies and production rules

- a. Ancillary Data Requirements
- b. Pre-processing Requirements
- c. Subsystem Dependencies (Dependencies between other CERES Subsystems)
- d. Production Rules (How often job runs, rules for job activation, etc.)

10. PGE Set-up and Build Procedures

- a. If information is not available in other delivered documentation, please describe:

1. Operational procedures needed during compilation
  2. Operational procedures needed during execution
- b. If a listing of expected error codes and status messages from delivered items are not available in delivered documentation, include for each error code or status message:
1. Source of code or message (i.e., status log file, user log file, report log file, etc.)
  2. Description of code or message
  3. Appropriate action to be taken by the DAAC

#### 11. Testing for PGE (May refer to Test Plan)

- a. Test suite to be used:

Title:  
SCF Version no:  
Date Created:

- b. Expected test results:

File name:  
SCF Version no:  
Date Created:

- c. Results to send to SCF for validation/verification:

#### 12. QA Reports

May refer to appropriate sections of existing documents. For EACH report, include the following information:

Title:  
Description:  
Error Conditions:  
Actions to be taken at DAAC:  
Destination of Report:

### 13. Data Products Generated (at Production Time)

May refer to appropriate sections of existing documents, data flow diagrams. The delivered items will produce the following products:

- a. Archivable data products  
Data Product Identification number:
- b. Intermediate data products  
Description:
- c. Browse image(s)  
Description:
- d. Metadata  
Description:

## E. DOCUMENTATION

For **each document** being delivered, please include the following information:

Title:  
Date Created:  
Format:  
Point of Contact (name, address, e-mail, phone, FAX):

- 1. Test Plan(s)  
Final Draft: Beta, Engineering, and Mission Versions
- 2. Data Flow Diagrams (may be provided as part of other delivered documentation)  
Final Draft: Beta, Engineering, and Mission Versions
- 3. COTS User/Prog. Guides (for SCF-provided COTS products)  
S/W Programs
- 4. Operations Manual  
First Draft/Outline: Beta to Beta + 6 months  
Revised Draft: Engineering Version  
Final Draft: Mission Version
- 5. Processing Files Description Document  
First Draft/Outline: Beta to Beta + 6 months  
Revised Draft: Engineering Version  
Final Draft: Mission Version
- 6. Data Products Catalog  
First Draft/Outline: Beta to Beta + 6 months

Revised Draft:      Engineering Version  
Final Draft:         Mission Version

7. Data Set User's Guide

Final Draft:         Mission Version

8. System/Subsystem Architecture Description Document

First Draft:         Engineering Version  
Final Draft:         Mission Version

9. ATBD's

Final Draft:      Mission Version

10. On-Line Guides

(Note: There are four types of guides: project, dataset, source, and sensor. There is one dataset guide for each dataset produced but there may be only one project, source, and sensor guide depending upon the number of instruments used)

Final Draft:         Mission Version

11. DIF(s)

(Note: There are two types of DIF's: a project DIF and a dataset DIF)

Final Draft:         Mission Version

12. Interface Definition Document (Optional)

Final Draft:         Mission Version

13. Detailed Design Document(s) (Optional)

Final Draft:         Mission Version

**F. REPROCESSING REQUIRED DUE TO SOFTWARE MODIFICATION**

1. Number of products to be reprocessed
2. For EACH data product, indicate the following:
  - a. Data product ID:
  - b. Beginning Date:
  - c. Ending Date:

**G. ADDITIONAL INFORMATION AND/OR INSTRUCTIONS TO BE INCLUDED WITH THIS DELIVERY:**



# SAMPLE DELIVERY MEMO

revised - May 1997

Please fill in the appropriate sections or supply references to applicable documentation.

## A. IDENTIFICATION

Instrument Team Name: **CERES**

Subsystem Name: **Inversion (Subsystem 4.5-4.6)**

Date: **October 20, 1996**

SCCR Number: **0001**

Description: **Initial Subsystem Delivery for Release 2**

Point(s) of Contact (POC's) for questions on the delivery (include phone numbers and e-mail addresses):

**Sandy Nolan**

**SAIC**

**phone: 827-4652 fax: 825-9129**

**email - s.k.nolan@larc.nasa.gov**

## B. DESCRIPTION OF DELIVERY

1. Delivery:

a. Release Level

Beta\_\_\_\_ Engineering Version\_\_\_\_ Mission Version\_\_\_**X**\_\_

b. Scope

Initial Subsystem Delivery (Incremental) \_\_\_**X**\_\_\_ Delta\_\_\_\_\_

c. Delta Delivery Class (if applicable): Please refer to the SPD for definitions.

Functional\_\_\_\_\_ Nominal\_\_\_\_\_ Emergency\_\_\_\_\_

2. Purpose of Delivery (Check all that apply):

New S/W release\_\_\_**X**\_\_\_ S/W Correction\_\_\_\_\_

S/W Enhancement\_\_\_\_\_ Documentation Delivery\_\_\_\_\_

Other (Please Describe)\_\_\_\_\_

3. Indicate the number of each element included in the delivery:

SDPS/W PGE(s)\_\_\_1\_\_\_  
SDPS/W Libraries\_\_\_0\_\_\_  
PGE Activation Rules\_\_\_1\_\_\_

Test Data\_\_2\_\_\_  
Test S/W\_\_6\_\_\_  
Expected Test Results\_\_2\_\_\_

Coefficient File(s)\_\_\_0\_\_\_  
Control File(s)\_\_\_2\_\_\_  
Ancillary File(s)\_\_\_8\_\_\_

Documentation\_\_\_2\_\_\_  
Other (Please Specify)\_\_N/A\_\_\_

4. SCF Development Environment: Please provide current SCF environment.

a. Hardware: **SGI Power Challenge**

b. Operating system and version number: **IRIX 6.2**

c. Memory: **2 GB**

d. Science Software:

Compilers (include versions): **SGI F90 Version 7**

Code Checkers (include version): **N/A**

SDP Toolkit version: **Release A Version 5.1**

e. SCF-Provided COTS Software (include versions): **N/A**

f. Software libraries, tools and version numbers: **cereslib version 2**

### C. DELIVERY LOGISTICS

1. Date delivery files will be available **May 15, 1997**

2. Method of delivery from SCF to DAAC

a. Via FTP

Push delivery (by SCF)\_\_\_**X**\_\_\_

Pull delivery (by DAAC)\_\_\_\_\_

Indicate directory\_\_\_\_\_

b. Via Physical Media

Media type(8mm, 4mm, CD-ROM)\_\_\_\_\_

Number of units\_\_\_\_\_

Delivery method (Federal Express, etc.)\_\_\_\_\_

3. Format

a. tar files

Compressed (Y/N)\_\_\_**Y**\_\_\_

Compression utility\_\_\_\_\_ **UNIX compress**  
Number of tar files: **3**  
Names and approximate sizes of tar files (bytes):  
**Inversion\_SW\_Rel2.tar.Z**                 **849833 bytes**  
**Inversion\_Anc\_Data\_Rel2.tar.Z**     **125500923 bytes**  
**Inversion\_Test\_Data\_Rel2.tar.Z**   **250168 bytes**

b. ascii

Compressed (Y/N)\_\_\_\_\_

Compression utility\_\_\_\_\_

Number of files\_\_\_\_\_

Names and sizes of files (bytes):

c. postscript

Number of files **2**  
Names and sizes of files (bytes):  
**Inversion\_TestPlan\_Rel2.ps**   **125,000 bytes**  
**Inversion\_OpsManual\_Rel2.ps** **300,000 bytes**

d. other (repeat section as needed)

Format description\_\_\_\_\_

Number of files\_\_\_\_\_

Names and sizes of files (bytes):

**D. LIST OF DELIVERY CONTENTS**

Please organize delivered items by PGE. Referring to documentation already available at the DAAC whenever applicable, **respond to 1 through 14 FOR EACH PGE:**

NUMBER of PGEs in Deliver: **1**

1. PGE Name and Function Performed:  
**runinvsurf - CERES Inversion, creates SSF product.**
2. New PGE  X  
Existing PGE \_\_\_\_\_
3. Developer-Assigned Version Number **2.0**
4. PGE Point of Contact (name, e-mail, phone, FAX): (May reference section A if the same.) **See section A.**
5. References to environment variables and site configuration of PGE (ex. Toolkit, F90, any environment variables.)

**This PGE uses the environment variables set in ceres-env.csh. The following environment variables are used.**

**PGSLIB  
F90  
CERESHOME  
CERESLIB  
PGSMMSG  
HDFLIB  
HDFINC**

6. Compilation information

a. Language(s) and version number(s):

**SGI F90 Version 7**

b. Options (compiler flags) used to assist in porting to other compilers:

**-O: Optimize. Disables production of debugging information**

**-c: Suppress the loading phase of the compilation and force object file to be produced even if only one program is compiled.**

7. Summary of files associated with this PGE

For **EACH FILE** included with this PGE delivery:

**See file PGE\_File.list included with delivery for information in section a.**

a. The **file name** and the **size in bytes** must be provided. Please specify individual file version as necessary if different from PGE version. This may be included with the delivery memo or in a separate file provided with the delivery.

b. The following information, which should be static, should be included in the **Test Plan: See Test Plan for information below**

a. file name and/or identifier

b. Format (i.e., ASCII, postscript, etc.)

c. Type (i.e., C source code, makefile, test data, defect list)

d. Short text description

- e. Deviations from established source standards
  - f. file status of data files (intermediate, archival, permanent)
8. Estimate of resources required for PGE execution(i.e., disk storage, cpu time (elapsed, user, and system), and memory which can be obtained via the unix time command). This information is necessary to enable the DAAC to plan multiple SSI&T activities.

**Wall: 357 seconds**

**CPU User: 129 seconds**

**CPU System: 93 seconds**

**Memory: 1.8 MB**

**Disk Storage: 534 MB**

9. List of processing dependencies and production rules

- a. Ancillary Data Requirements

**A list and description of all ancillary data files can be found in Table 6 in the CERES Inversion to Instantaneous TOA Fluxes and Empirical Estimates of Surface Radiation Budget Subsystems 4.5 and 4.6 Release 2 Test Plan.**

- b. Pre-processing Requirements

**None**

- c. Subsystem Dependencies (Dependencies between other CERES Subsystems)

**Subsystems 12.0 and 4.4 must have previously been run for the same data date and hour. Subsystems 5.0 and 9.0 are downstream dependencies on this PGE.**

- d. Production Rules (How often job runs, rules for job activation, etc.)

**This PGE runs once for every hour. The SSF\_Int product, the MOA product, and the ancillary data files listed in the Test Plan must be available for this PGE to run.**

10. PGE Set-up and Build Procedures

**See Test Plan for the information below.**

- a. If information is not available in other delivered documentation, please describe:

1. Operational procedures needed during compilation
2. Operational procedures needed during execution

b. If a listing of expected error codes and status messages from delivered items are not available in delivered documentation, include for each error code or status message:

1. Source of code or message (i.e., status log file, user log file, report log file, etc.)
2. Description of code or message
3. Appropriate action to be taken by the DAAC

11. Testing for PGE (May refer to Test Plan)

**See Test Plan section 4.0 for information below.**

a. Test suite to be used:

Title:  
SCF Version no:  
Date Created:

b. Expected test results:

File name:  
SCF Version no:  
Date Created:

c. Results to send to SCF for validation/verification:

12. QA Reports

**See Operations Manual for the information below.**

May refer to appropriate sections of existing documents. For EACH report, include the following information:

Title:  
Description:  
Error Conditions:  
Actions to be taken at DAAC:  
Destination of Report:

### 13. Data Products Generated (at Production Time)

May refer to appropriate sections of existing documents, data flow diagrams. The delivered items will produce the following products:

- a. Archivable data products  
Data Product: **SSF product (one per hour)**  
**See Test Plan for more details.**
- b. Intermediate data products  
Description: **None**
- c. Browse image(s)  
Description: **None**
- d. Metadata  
Description: **See Test Plan for description of metadata**

## E. DOCUMENTATION

For **each document** being delivered, please include the following information:

Title:  
Date Created:  
Format:  
Point of Contact (name, address, e-mail, phone, FAX):

#### 1. Test Plan(s)

Title: **CERES Inversion to Instantaneous TOA Fluxes and Empirical Estimates of Surface Radiation Budget Subsystems 4.5 and 4.6 Release 2 Test Plan**

Date Created: **April 1997**

Format: **Postscript**

Point of Contact: **Lynn Jimenez**  
**email - l.u.jimenez@larc.nasa.gov**  
**phone - 827-4651**  
**fax - 826-9129**

#### 2. Operations Manual

Title: **CERES Inversion to Instantaneous TOA Fluxes and Empirical Estimates of Surface Radiation Budget Subsystems 4.5 and 4.6 Release 2 Operations Manual**

Date Created: **April 1997**

Format: **Postscript**

Point of Contact: **Lynn Jimenez**  
**email - l.u.jimenez@larc.nasa.gov**  
**phone - 827-4651**  
**fax - 826-9129**

**F. REPROCESSING REQUIRED DUE TO SOFTWARE MODIFICATION**

1. Number of products to be reprocessed: **None**
2. For EACH data product, indicate the following:
  - a. Data product ID:
  - b. Beginning Date:
  - c. Ending Date:

**G. ADDITIONAL INFORMATION AND/OR INSTRUCTIONS TO BE INCLUDED WITH THIS DELIVERY: None**