# NASA Earth Observing System Data and Information System 2007 Customer Satisfaction Questionnaire

#### **Notes:**

- Items in BOLD are programming instructions
- Category headers will not appear

## Introduction

Welcome to the 2007 NASA EOSDIS Customer Satisfaction Survey.

#### NASA EOSDIS data centers

*NASA's Earth Observing System Data and Information System provides access to Earth science data through the following data centers:* [click brings up separate window]

Please think only about [insert data center name] when answering the questions even though you may have used more than one of the data centers.

The survey will take about 15 minutes to complete. To begin, please click on the "Next" button. [Next]

If you wish to answer this survey for one of the other data centers, please contact CFI Group at 734.623.1349.

#### About the survey

This study has been undertaken in partnership with the federal government as part of the American Customer Satisfaction Index. The purpose of this survey is to help NASA EOSDIS improve its services to its users. You will have the opportunity to make comments and/or suggestions at the end of the survey. Your answers are voluntary, but your opinions are very important to assess current status, improve future services and ensure NASA gets the maximum benefit from its investment in EOS.

All submitted information is collected and processed by CFI Group, an independent research and consulting firm. When you finish the survey, your responses will be sent directly to a database located on CFI Group's server, which cannot be accessed through any NASA online system. Your responses will be held completely confidential, and you will never be identified by name. This survey is authorized by Office of Management and Budget Control No. 1505-0191.

#### List of data centers in a separate window:

Alaska Satellite Facility (ASF) University of Alaska Synthetic Aperture Radar, Sea Ice, Polar Processes, Geophysics

Goddard Space Flight Center (GSFC) Earth Sciences Data and Information Services Center (DISC)

Upper Atmosphere, Atmospheric Dynamics, Solar Irradiance, Global Precipitation, Ocean Color, Sea Surface Temperature

Global Hydrology Resource Center (GHRC) Marshall Space Flight Center Lightning, Convection, Severe Weather Interactions, Hydrologic Cycle

MODAPS/LADS
MODIS Data Processing System
Goddard Space Flight Center
MODIS Level 1 and Atmosphere data products

NASA Langley Atmospheric Science Data Center (LaRC) DAAC Radiation Budget, Clouds, Aerosols, Tropospheric Chemistry

Land Processes Distributed Active Archive Center (LP DAAC) EDC, USGS
Land Processes

National Snow and Ice Data Center (NSIDC) DAAC CIRES
University of Colorado
Snow and Ice, Cryosphere and Climate

ORNL DAAC for biogeochemical dynamics/FLUXNET Oak Ridge National Laboratory Distributed Active Archive Center Biogeochemical and Ecological Data for Studying Environmental Processes

Physical Oceanography Distributed Active Archive Center (PO.DAAC) Jet Propulsion Laboratories (JPL) Oceanic Processes, Air-Sea Interactions

Socioeconomic Data and Applications Center (SEDAC)
CIESIN, Columbia University
Population, Sustainability, Geospatial Data, Multilateral Environmental Agreements

# **Screening Questions**

- 1. How did you become aware that you could get Earth science data from NASA? (select any that apply)
  - a. Colleague
  - b. Conference
  - c. Data Center's web sites (click to bring up list)
  - d. Educational Institution
  - e. Internet Search (e.g. Google, etc.)
  - f. Journal
  - g. NASA home page/site
  - h. Workshop
  - i. Other (please specify)
- 2. Which of the following best describes your reasons for requesting NASA Earth science data products? (select any that apply)
  - a. Earth science research
  - b. Applications using Earth science data
  - c. Research in another science or discipline
  - d. General interest
  - e. Higher education
  - f. K-12 education
- 3. Which of the following best describes your affiliation?
  - a. Business/Commercial
  - b. Non-Profit Organization Environmental
  - c. Non-Profit Organization Social
  - d. Education K-12
  - e. Education Higher Education
  - f. State or Local Government
  - g. US Federal Government Agency
  - h. US Federal Government Foundation
  - i. US Federal Government Military
  - i. US Federal Government Legislative
  - k. Native American Tribal Government
  - l. Non-US Government
- 4. Where are you currently located?
  - a. Within the USA
  - b. Outside the USA (please specify)

- 5. Which of the following best describes the geographic coverage you need? (select all that apply)
  - a. I need global coverage
  - b. I need regional coverage within the U.S. and its coasts
  - c. I need regional coverage outside of the U.S.
  - d. I need local coverage within the U.S. and its coasts.
  - e. I need local coverage outside of the U.S.
  - f. Does not apply
  - g. Other (please specify)
- 6. Which of the following best describes the temporal coverage you need? (select all that apply)
  - a. I need long time series throughout the year over many years
  - b. I need long time series for a season over many years
  - c. I need data covering a season within a year
  - d. I need one or two snapshots in time
  - e. Other (please specify)
- 7. Which of the following best describes the age of the data you need? (select all that apply)
  - a. I generally request historical data I need the entire collection all at once
  - b. Annual I request updates once a year
  - c. Seasonal I request updates once a season
  - d. Monthly I request updates once a month
  - e. Weekly I request updates once a week
  - f. Daily I request updates once every couple of days or as soon as possible after the observation time
  - g. Does not apply
- 8. For which disciplines do you need or use Earth science data? (select any that apply)
  - a. Agriculture
  - b. Atmosphere
  - c. Carbon Cycle
  - d. Climate/Climate Change break out
  - e. Cryosphere
  - f. Ecosystems
  - g. Land Cover/Land Use break out -
  - h. Natural Hazards
  - i. Oceans
  - j. Resources (Forestry, Mining, etc.)
  - k. Socioeconomics
  - l. Solid Earth
  - m. Space Weather
  - n. Sun-Earth Connections
  - o. Water & Energy
  - p. Weather

- q. Other (please specify)
- 9. Do you need or have you acquired data for input into a model? (e.g., climate, ocean, atmosphere, etc.)
  - a. Yes (Please specify model name/acronym)
  - b. No
- 10. How many times during a year do you request/order/download data products?
  - **a.** Daily
  - **b.** Weekly
  - **c.** Monthly
  - **d.** Once a season (about every three months)
  - **e.** Randomly (please specify about how many times numerically)
- 11. On average, how many data products do you request/order/download at a time?
  - **a.** 1 to 10
  - **b.** 11 to 100
  - **c.** More than 100
  - **d.** Does not apply

## **Product Search**

Now, please think about your most recent product search from <Data center name>.

- 12. How did you search for the data products or services you were seeking?
  - **a.** Data center's online holdings
  - **b.** EOS Data Gateway (EDG) / WIST
  - c. Global Change Master Directory
  - **d.** Direct interaction with user services personnel **(skip to Product Selection and Order)**
  - **e.** Did not search/request/order/download data products **(skip to Customer Services)**
  - **f.** Data center's search tool or web site (please specify)
  - **g.** Other (please specify)

Using a 10-point scale, on which "1" means "Poor" and "10" means "Excellent," please rate...

- 13. Ease of finding data
- 14. Ease of using search capability
- 15. How well the search results met your needs

## **Most Recent Product Selection and Order**

Now, please think about your most recent request/order/download from <Data center name>

- 16. Did you use an online or other subsetting tool before requesting/ordering/downloading the data?
  - **a.** Yes, by geographic area
  - **b.** Yes, by geophysical parameter
  - **c.** Yes, by both geographic area and geophysical parameter
  - **d.** Did not use a subsetting tool

Using a 10-point scale, on which "1" means "Poor" and "10" means "Excellent," please rate the data selection and order process on

- 17. Ease of selecting data products
- 18. Description of data products
- 19. Ease of requesting/ordering data products
- 20. Are you generally finding what you want in terms of type, format, time series, etc.?
  - **a.** Yes **(skip to 22)**
  - **b.** No
- 21. (If 20=b) Please specify what you want, but are not finding.

# Delivery

Now think about the delivery of your most recently requested data products from <Data center name>.

- 22. What instrument(s) did the data come from?
  - a. AIRS
  - b. Altimetry (QuikScat, JASON, etc.)
  - c. AMSR-E
  - d. ASTER
  - e. CERES (Terra and/or Aqua)
  - f. GLAS (ICESat)
  - g. MISR
  - h. MODIS (Terra and/or Aqua)
  - i. MOPITT
  - j. OMI
  - k. PR/TMI/VIRS (TRMM)
  - l. SAR (ERS, JERS, RADARSAT.)
  - m. TES
  - n. Don't know
  - o. Other (Please specify)
- 23. What processing was done to the instrument data?
  - a. Raw instrument data
  - b. Calibrated radiances with geolocation (e.g. Level 1b)
  - c. Unmapped geophysical parameters (e.g., swath, orbit datasets)
  - d. Mapped geophysical parameters (e.g., global, regional maps)
  - e. Imagery
- 24. How many people are using or will use the data you received?
  - a. 1 (only me)
  - b. 2-3
  - c. 4 or more
- **25.** How was your data delivered?
  - a. FTP immediate retrieval from online holdings
  - b. FTP retrieved after order
  - c. FTP via subscription
  - d. http-based download from Web
  - e. http-based batch download from Web (wget)
  - f. CD/DVD/DLT tape
- **26.** Which method of data delivery do you prefer? **(FIX)** 
  - a. FTP immediate retrieval from online holdings
  - b. FTP retrieved after order
  - c. FTP via subscription

- d. http-based download from Web
- e. http-based batch download from Web (wget)
- f. CD/DVD/DLT tape
- 27. How long did it take for you to receive your data products?
  - a. Immediate retrieve
  - b. Less than a day
  - c. 1-3 days
  - d. 4-7 days
  - e. 8-14 days
  - f. More than 14 days

Using the 10-point scale on which "1" means "Poor" and "10" means "Excellent," how would you rate...

- 28. Convenience of delivery method
- 29. Timeliness of delivery method

# **Product Quality**

- 30. In what format were your data products provided to you?
  - a. HDF-EOS/HDF
  - b. NetCDF
  - c. Binary
  - d. ASCII
  - e. TIFF or GeoTIFF
  - f. JPEG, GIF, PNG
  - g. OGC Web services (WMS, WCS, WFS, etc.)
  - h. GIS (e00,shp, bil)
  - i. Don't know
  - j. Other (please specify)
- 31. What format would/do you prefer?
  - a. HDF-EOS/HDF
  - b. NetCDF
  - c. Binary
  - d. ASCII
  - e. TIFF or GeoTIFF
  - f. JPEG, GIF, PNG
  - g. OGC Web services (WMS, WCS, WFS, etc.)
  - h. Google (KML)
  - i. GIS (e00,shp, bil)
  - j. Other or specific version of any format (please specify)

Still using the 10-point scale on which "1" means "Poor" and "10" means "Excellent," how would you rate...

- 32. Ease of using the data product in the delivered format
- 33. Overall quality of the data product
- 34. Overall usability of the data product
- 35. Did you use a tool to work with the data (e.g., format conversion, analysis, visualization, ...?
  - **a.** Yes
  - **b.** No, I couldn't find what I needed
  - **c.** No, I couldn't understand how to use it
  - **d.** No, the tool didn't work
  - e. Does not apply (skip to 36)
- 36. Please specify which tool you used to work with the data.

- 37. What documentation did you use or were you looking for?
  - a. Instrument specifications
  - b. Science algorithm
  - c. Product format
  - d. Tools
  - e. Science applications
  - f. Data product description
  - g. Production code
- 38. Was the documentation
  - a. Delivered with the data
  - b. Available online
  - c. Not found (Skip to Customer Services)

Still using the 10-point scale on which "1" means "Poor" and "10" means "Excellent," how would you rate...

- 39. Readability of the document (i.e., technical level, organization, clarity)
- 40. Extent to which the data documentation helped you use the data

## **Customer Services**

- 41. Were you aware that the <Data center name> has a user services office that you can contact for assistance with placing orders?
  - a. Yes
  - b. No
- 42. Have you requested assistance from <Data center name>'s user services staff during the past year?
  - **a.** Yes
  - **b.** No (skip to Overall Satisfaction)

Think about the user services staff you interacted with when you requested assistance from <Data center name> user services. On the same scale from 1 to 10 where 1 means "Poor" and 10 means "Excellent," how would you rate the user services staff on...

- 43. Professionalism
- 44. Technical knowledge
- 45. Accuracy of information provided
- 46. Helpfulness in selecting/finding data or products
- 47. Helpfulness in correcting a problem
- 48. Timeliness of response
- 49. Were you able to get the help you needed on your first request for assistance?
  - **a.** Yes
  - **b.** No (please comment)

#### **Overall Satisfaction**

- 50. Using a 10-point scale on which 1 means "Very Dissatisfied" and 10 means "Very Satisfied," how satisfied are you with the data products and services provided by <Data center name>?
- 51. Using a 10-point scale on which 1 now means "Falls short of your expectations" and 10 means "Exceeds your expectations," to what extent have the data products and services provided by <Data center name> fallen short of or exceeded your expectations?
- 52. Now, imagine an ideal provider of scientific data products and services. How close does <Data center name> come to that ideal organization you just imagined? Please use a 10-point scale on which 1 means "Not at all close to the ideal," and 10 means "Very close to the ideal."

#### **Outcome Measures**

- 53. Using a 10-point scale on where "1" means "Not at all likely" and "10" means "Very likely," how likely are you to recommend <Data center name> to a colleague?
- 54. Using a 10-point scale, on which "1" means "Not at all likely" and "10" means "Very likely," how likely are you to use the services provided by <Data center name> in the future?
- 55. Have you ever contacted <Data center name>'s user services office to report a problem?
  - a. Yes
  - b. No (skip to 57)
- 56. Using a 10-point scale on which "1" means "handled very poorly" and "10" means "handled very well", please rate how well problem was handled.

#### Multi- data center orders

- 57. If you have searched for temporally or spatially coincident data held at more than one of the following data centers, please select all that apply.
  - Alaska Satellite Facility (ASF)
     University of Alaska
     Synthetic Aperture Radar, Sea Ice, Polar Processes, Geophysics
  - b. Goddard Space Flight Center (GSFC) Earth Sciences Data and Information Services Center (DISC)
     Upper Atmosphere, Atmospheric Dynamics, Solar Irradiance, Global Precipitation, Ocean Color, Sea Surface Temperature
  - c. Global Hydrology Resource Center (GHRC)
     Marshall Space Flight Center
     Lightning, Convection, Severe Weather Interactions, Hydrologic Cycle
  - MODAPS/LADS
     MODIS Data Processing System
     Goddard Space Flight Center
     MODIS Level 1 and Atmosphere data products
  - **e.** NASA Langley Atmospheric Science Data Center (LaRC) DAAC Radiation Budget, Clouds, Aerosols, Tropospheric Chemistry
  - f. Land Processes Distributed Active Archive Center (LP DAAC) EDC, USGS Land Processes
  - g. National Snow and Ice Data Center (NSIDC) DAAC CIRES University of Colorado Snow and Ice, Cryosphere and Climate
  - h. ORNL DAAC for biogeochemical dynamics/FLUXNET Oak Ridge National Laboratory Distributed Active Archive Center Biogeochemical and Ecological Data for Studying Environmental Processes
  - i. Physical Oceanography Distributed Active Archive Center (PO.DAAC)
     Jet Propulsion Laboratories (JPL)
     Oceanic Processes, Air-Sea Interactions
  - j. Socioeconomic Data and Applications Center (SEDAC) CIESIN, Columbia University

Population, Sustainability, Geospatial Data, Multilateral Environmental Agreements

- **k.** Do not need (**skip to Closing**)
- 58. How did you find the temporally or spatially coincident data you needed?
  - a. EOS Data Gateway (EDG)/WIST
  - **b.** Data center website (Please specify)
  - **c.** Other web search (please specify)
  - **d.** User Services
  - e. Don't know
- 59. Do you have any comments or suggestions about your search for temporally or spatially coincident data that you would like to share? (capture)

# Closing

60. Do you have any additional comments or suggestion about possible improvements to data products, services, tools, documentation, or the websites that you would like to share? (capture)

Thank you for your time. NASA appreciates your input and will use this feedback to better serve its customers.

You have reached the end of the survey. Please click on the "Finish" button below to send your responses to CFI Group's secure database.