

GODDARD SPACE FLIGHT CENTER		TASK ORDER (Instructions and Distribution on Reverse)		PAGE 1 OF 1
1. CONTRACTOR: <b>SSAI</b>	2. CONTRACT NO.: <b>NNG12HP08C</b>	3. TASK/REVISION NO.: Task Order #069		
4. JOB ORDER NO./PROJECT:	5. FLIGHT HARDWARE /SOFTWARE; CRITICAL GSA (IF, YES, OBTAIN BLOCK 16 CONCURRENCE): YES <input checked="" type="checkbox"/> NO	6. DESIGNATED FLIGHT ASSURANCE MGR.:		
7. DESCRIPTION OF WORK TO BE PERFORMED (OBJECTIVES OR RESULTS DESIRED):  Support the MODIS and VIIRS Activities				
8. TASK DOCUMENTATION REQUIREMENTS/DELIVERABLE ITEMS:  (See Attached Task Order)				
9. PERFORMANCE/MILESTONE SCHEDULE:  <b>May 1, 2015 – April 30, 2016</b>				
10. QUALITY ASSURANCE REQUIREMENTS:  N/A				
11. TRAVEL, MATERIALS, ETC., KNOWN TO BE REQUIRED:  (See Attached Task Order)				
12. OTHER (FUNDING, NTE, HOURS, ETC.):  Total Cost: Fee: Total Price:                      \$355,461				
13. TASK ORIGINATOR/MONITOR/CODE/PHONE:  Charles Ichoku/613.0/4- 6212		18. THIS TASK ORDER IS ISSUED PURSUANT TO THE TERMS OF THE CONTRACT.		
14. BRANCH APPROVAL:	15. DIVISION CONCURRENCE:	 CONTRACTING OFFICER'S SIGNATURE/ DATE      Ayana A. Briscoe Ayana A. Briscoe      Contracting Officer TYPED OR PRINTED NAME		
16. CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE:  Joel Susskind				
17. CONTRACTOR SIGNATURE:				

Science Systems and Applications, Inc.  
NNG12HP08C  
Task Order Statement of Work

Task Order Number: CY4\_069\_Rev0

Task Order Title: Support the MODIS and VIIRS Activities

1.0 Task Monitor (TM):

Name: Charles Ichoku  
Organization: 613: Climate and Radiation Laboratory  
Email Address: charles.ichoku@nasa.gov

2.0 Description of Work to be Performed

Task 69 Support the activities of the MODIS and VIIRS science team members in maintaining, refining and evaluating the aerosol retrieval algorithms on MODIS, VIIRS and other sensors, current and future

- Ø Maintain and support the MODIS aerosol retrieval code used in processing MODIS data from the Terra and Aqua spacecraft. Support the software system that automatically co-locates MODIS aerosol retrievals with AERONET direct sun measurements, and validate the aerosol products. Continue to optimize code for efficiency, incorporate all metadata and ancillary data as required, optimize resolutions used to process data, and deliver and maintain code during maintenance and refinement phase using flight data. Contribute to web site interfaces for the easy dissemination of aerosol and complementary global data sets.
- Ø Pursue scientific inquiry into the ability of MODIS aerosol products to represent true physical parameters. Compare MODIS products with other geophysical data, and explore applications for a variety of situations. Pay particular attention to situations where MODIS products are not meeting expectations. Provide modifications and suggestions for algorithm improvement. Pursue scientific inquiry into the ability of the Suomi National Polar-orbiting Partnership (NPP) Visible Infrared Imager Radiometer Suite (VIIRS) sensor to provide a legitimate continuation of the MODIS aerosol data records.
- Ø Participate in exploratory studies that will inform the development of scientific concepts for new missions. Aid in algorithm/product development and/or evaluation for future satellite missions (e.g., GOES-R, PACE, ACE, GEO-CAPE).
- Ø Pursue scientific research to determine the source locations, seasonal patterns, strengths and characteristics of aerosol emissions on a global basis. Use a combination of data sources (e.g. MODIS, VIIRS, models) and techniques to provide more accurate estimates of aerosol forcings and effects of all types, and contribute toward applications in various societal benefit activities, including (but not limited to) climate assessments and air quality monitoring.
- Ø Perform educational outreach, including scientific and technical issues related to aerosols, aerosol retrieval, and MODIS and other satellite products. Attend professional workshops, conferences, meetings, seminars and courses necessary to communicate results, exchange ideas, and maintain expertise in various areas of aerosol remote sensing and applications.

Ø Participate in field experiments including setting up, establishing networks and maintaining airborne and ground-based instrumentation and algorithms related to work in atmospheric research and air quality, including (but not limited to) sun photometers and aerosol samplers.

### 3.0 Special Requirements

None

### 4.0 Performance/Milestone Schedule

The SAS Contract Year 4 POP is May 01, 2015 - April 30, 2016

### 5.0 Deliverables/Reporting Requirements

- Contributions to scientific publications, workshops/conferences/symposia, both oral presentations and written contributions.
- Quarterly and annual reports.
- Delivery and availability of quality-controlled datasets and web-based material.
- Software and hardware documentation.
- Reports documenting participation in conferences, workshops, symposia, working groups and field activities.

### 6.0 Other Information Needed for Performance of Task

Travel may be required to attend professional workshops, conferences, meetings, seminars and courses necessary to communicate results, exchange ideas, and maintain expertise in various areas of aerosol remote sensing and applications.

### 7.0 Data Rights

N/A

### 8.0 Safety

Staff on this task shall comply with federal, state, local, and center safety regulations. This shall be accomplished through management emphasis, technical training, and personal responsibility. Staff shall participate in safety orientation and training in accordance with the contract Safety and Health Plan, and work within the requirements of that plan.

### 9.0 Risk

Contractor shall provide ongoing risk assessment and mitigation in performance of the Task Order. Priorities shall be re-evaluated as appropriate with the TM. Cost and schedule performance shall be assessed on a regular basis (no less frequently than monthly) and significant variations discussed and acted on in consultation with the TM and COR.

10.0 Proposed Cost and Fixed Fee

In accordance with Paragraph B.8 of the contract, propose the Cost and Fixed Fee amount.