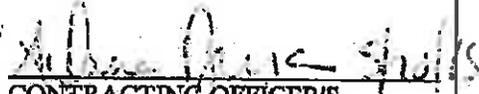


GODDARD SPACE FLIGHT CENTER		TASK ORDER (Instructions and Distribution on Reverse)		PAGE 1 OF
1. CONTRACTOR: SSAI	2. CONTRACT NO.: NNG12HP08C	3. TASK/REVISION NO.: Task Order #023		
4. JOB ORDER NO./PROJECT:	5. FLIGHT HARDWARE /SOFTWARE; CRITICAL G&A (IF, YES, OBTAIN BLOCK 16 CONCURRENCE): YES X NO	6. DESIGNATED FLIGHT ASSURANCE MGR.:		
7. DESCRIPTION OF WORK TO BE PERFORMED (OBJECTIVES OR RESULTS DESIRED): Sunder Research Team				
8. TASK DOCUMENTATION REQUIREMENTS/DELIVERABLE ITEMS: (See Attached Task Order)				
9. PERFORMANCE/MILESTONE SCHEDULE: May 1, 2015 – April 30, 2016				
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: \$896,293				
13. TASK ORIGINATOR/MONITOR/PHONE: Joel Susskind/610 0/6-7210		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		
16. CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE: Joel Susskind		Ayana A. Briscoe Contracting Officer TYPED OR PRINTED NAME		
17. CONTRACTOR SIGNATURE:				

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

Task Order Number: 023_Rev0
Task Order Title: Sounder Research Team

1.0 Task Monitor (TM):

Name: Joel Susskind
Organization: 610: Earth Sciences Division
Email Address: joel.susskind-1@nasa.gov

2.0 Description of Work to be Performed

This task consists of four subtasks all supporting the goals of the Sounder Research Team (SRT). All work is to be conducted at NASA Goddard, on-site. All equipment (hardware and software) used by contractors is provided by the government.

Subtask 1: Continued Upgrade and Assessment of the AIRS Science Team Level-2 and Level-3 Algorithms and Products

Work includes the development, testing, incorporation, and documentation of AIRS algorithm software. Software modules will be tested at GSFC and delivered to JPL for additional testing before eventual delivery to the Goddard DISC. Additional work includes optimization of quality control, and graphical, and statistical analysis of all experiments with regard to validation studies.

Additional graphics of AIRS products shall be provided for publications, presentations, posters, and distribution.

Subtask 2: Development, Testing and Implementation of an AIRS Version 6-like retrieval algorithm for Analysis of CrIS/ATMS Data on NPP

This research is being conducted in support of the Sounder Discipline of the NASA NPP Science Team. Work includes continued modification and testing of an AIRS Science Team Version 6-like retrieval algorithm, being developed at SRT, for optimal use with CrIS/ATMS radiance observations, with the goal of eventually porting the SRT CrIS/ATMS retrieval algorithm to the Sounder SIPS at JPL. The SRT CrIS/ATMS retrieval system will be validated by comparison of AIRS and CrIS monthly mean products and their inter-annual differences. This algorithm is a candidate for eventual use as the operational NPP Science Team CrIS/ATMS retrieval algorithm.

Subtask 3: Data Assimilation Experiments Using AIRS/AMSU Products

The contractor shall set up, execute, and assist in the evaluation of data impact assimilation runs to assess the impact of and potential interaction among different sources of satellite data in the GEOS-5 and NCEP GDAS/GFS Data Assimilation Systems.

- Perform data assimilation experiments to evaluate assimilation of various AIRS products, including cloud cleared radiances, in terms of improvement of global mid-range forecast skill as well as the prediction of tracks and intensities of select severe storms. Different ways of using error estimates in the assimilation of AIRS Version-6 retrievals and clear column radiances will be implemented and tested.

Subtask 4: Technical Support for the SRT

Work includes providing support to the SRT with regard to technical document preparation for scientific papers, abstracts/proposals, presentations, and lab brochures (approximately 10-15 per year).

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 is required to attend one AIRS Science Team meeting in Pasadena California.

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 Risks

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.