

Task Statement of Work (SOW)

Date: November 20, 2015
Task: Climate Informatics
Task Order: 6066/0
Task Monitor: 

I. Summary of Work

The task order covers Climate Informatics within the Computational and Information Sciences and Technology Office (CISTO).

II. Period of Performance

The period during which the work for this task shall be performed is between March 1, 2016 and February 28, 2017.

III. Task Description

Area 1: Research and Development

The contractor shall be responsible for:

- a. Maintaining currency with technologies relevant to CISTO's R&D activities through relationships with industry, University, and other Government agencies; understanding technology roadmaps; scheduling and hosting briefings; and participating in relevant meetings, conferences, and training activities.
- b. Provide support for the development of technology solutions for CISTO's R&D activities, including but not limited to Climate Analytics-as-a-Service (CAaaS), the RECOVER project, development of the NASA Science Cloud, CMAC-2 Reanalysis Ensemble Service, and deployment of the NASA Climate Data Services API.

Area 2: Applications

The contractor shall be responsible for:

- a. Supporting the integration CAaaS capabilities into end-user applications, including but not limited to CMAC-2 Program applications, the RECOVER decision support system, NASA Science Cloud applications, and Applied Sciences Program applications.
- b. Supporting capability demonstrations aimed at increasing CISTO's engagement of the Applied Sciences Program and applications community.
- c. Supporting CISTO's participation in the DEVELOP Training Program and related science and technology student educational activities.

Area 3: Outreach

The contractor shall be responsible for:

- a. Supporting development of initiatives and demonstration projects of relevance to CISTO, including but not limited to the Earth System Grid Federation - Compute Work Team, George Mason University Industry/University Cooperative Research Center, the NASA/NOAA/RENCI SIGClimate initiative, NASA Science Cloud, and NASA's participation in research relating to the ABoVE project.
- b. Supporting the publication of research results related to CISTO's technology initiatives.

Area 4: Opportunity Development

The contractor shall be responsible for:

- a. Supporting CISTO in carrying out its new technology reporting (NTR), intellectual property documentation and development, and Innovative Partnership Technology Office (IPTO) activities.
- b. Assisting with partnership development, the development of new research opportunities, and building collaborative relationships with Government agencies, universities, freestanding research organizations, industry, and other private-sector entities.
- c. Assisting with strategy design and transition planning for a future Climate Analytic Service within CISTO.

Travel and Training

At a minimum, travel and training shall include trips to relevant industry conferences, such as Supercomputing or the American Geophysical Union (AGU), University meetings, special interest groups, and other vendor sponsored events, such as user group conferences.

IV. Deliverable Items and Schedule

In addition to the day-to-day work described in section III, the following deliverables will be completed:

Number	Deliverable	Due Date
CI1	Complete work on design spec for Phase 1 Reanalysis Ensemble Service (RES), data, and API enhancements; complete RECOVER and DEVELOP technical preparations for Fire Season (FS) 2016 (1b, 2a).	March 31, 2016
CI2	Complete RES Phase 1 implementation and deploy new capabilities; complete work on design spec for Phase 2 RES, data, and API enhancements; provide operational support for RECOVER and DEVELOP FS16 activities and complete any necessary system upgrades (1b, 2a).	June 30, 2016
CI3	Complete RES Phase 2 implementation and deploy new capabilities; complete work on design spec for Phase 3 RES system, data, and API enhancements; provide continued operational support for RECOVER and DEVELOP FS16 activities and complete any necessary system upgrades (1b, 2a).	September 30, 2016

Number	Deliverable	Due Date
CI4	Complete RES Phase 3 implementation and deploy capabilities; complete work on Phase 4 RES system, data, and API enhancements; complete RECOVER and DEVELOP FS16 system upgrades; complete preliminary plan for FS17 state and agency system expansion (1b, 2a).	December 31, 2016
CI5	Final report on all Area 1-4 activities, proposed next steps, and proposed future work.	February 28, 2017

V. Travel

The contractor is expected to propose travel as necessary to perform this task. As part of the contractor's Task Order response, a spreadsheet of proposed travel shall be provided to the Government that outlines the proposed travel during the contract year. It is expected that travel plans will change throughout the contract year. Therefore, travel plans shall be updated and forwarded to the Government on a monthly basis.

Travel may include (but not be limited to):

- Attend conferences relevant to support this task.
- Travel to other centers as required.
- Attend technical meetings as required.
- Travel to training locations.
- Trips to Goddard in support of deliverable activities.

After the completion of the travel, the Contractor shall provide to the Task Monitor and Contract Management a Trip Report for both domestic and foreign travel that includes:

- Name of Traveler
- Trip Itinerary
- Task Name and Number
- Purpose of Trip
- Contact(s) and Summary of Discussion(s)
- Summary of Presentation(s)/Talk(s)
- Copy of Presented Material, if applicable

In addition to the above, the following information shall be included in all Trip Reports for foreign travel:

- Statement of and Date of Threat Vulnerability Briefing
- Statement of and Date of Threat Vulnerability Debriefing (including the date the debriefing questionnaire was mailed to the Threat Vulnerability office. If no formal debriefing was required, so state)
- Statement of and Date of Export Compliance Briefing (if not applicable, so state and provide date of approval for 1676 package)

Approvals of all travel (conferences, meetings, or training; domestic or international) must adhere to all relevant NASA directives and to the CISTO Travel Approval process.

VI. Training

It is expected that the contractor personnel assigned to this work have the necessary training at the beginning of this task to complete all deliverables. The contractor may propose training beyond what is typically expected of the proposed labor categories that they deem necessary in support of their technical approach to meet the deliverables. Training plans must be updated and forwarded to the Government on a monthly basis to include, but not limited to, the following information: training completed, upcoming training, and proposed modifications to the training plans.

Training may include (but not be limited to):

- Conferences tutorials or workshops relevant to support this task.
- Cross training at other centers as required.
- On-line training.

The Contractor shall provide to the Task Requester and Contract Management a Report for all training that includes:

- Name of Person Attending Training
- Training Content/Agenda/Overview
- Task Name and Number
- Purpose of Training
- Summary of Training/Presentation(s)/Talk(s)
- Contact(s) and Summary of Discussion(s)
- Copy of Training Material, if applicable

VII. Work Location

This work shall be performed primarily on-site at the Goddard Space Flight Center, but the contractor may be required to perform some work at the contractor's facility.

VIII. Reporting Requirements

The contractor shall:

- (B.1.2) Monthly Status Reports (MSR) shall be submitted on or before the 8th calendar day of each month for the previous month or as jointly determined following contract award. There should be one MSR per month that covers all task orders under the contract. The MSR shall be distributed electronically to the Contracting Officer (CO), Contracting Officer's Representative (COR), and all Task Monitors.
- (B.1.4) All White Papers or Reports outlined in the Deliverable Schedule shall be provided electronically to the COR and Task Monitor as specified.
- (B.1.5) Provide an electronic copy of a Monthly Highlights Report (MHR) to the COR and Task Monitors by the last business day on or before the 4th calendar day of each month. There should be one MHR per month that covers all task orders under the contract. The highlights will be

incorporated into the Monthly NCCS report written by Government personnel to the High-End Computing Portfolio Manager.

- (B.1.8) Provide a final task order report within 30 days after completion in electronic form to the Contracting Officer (CO) (letter transmittal only), Contracting Officer's Representative (COR), and Task Monitor.
- (B.1.9) Travel reports shall be included in the next MSR.
- (B.1.10) Provide an electronic copy of the NASA Form 533 for this task 10 days after the close of the Contractor's accounting period and Quarterly in accordance with Attachment. Send the 533 to Contracting Officer (CO), Contracting Officer's Representative (COR), Resource Analyst (Code 603), and Finance Office (Code 155).
- (B.1.12) The annual Financial Report of NASA Property in the Custody of Contractors (NASA Form 1018) is due October 15. This shall be submitted through the NF 1018 Electronic Submission System (NESS).
- (B.1.13) An electronic copy of the New Technology Reports is due to the Contracting Officer (CO) and New Technology Representative if one is required by any of the task orders under the contract.
- (B.1.15) Electronic monthly and annual Safety & Health Reports (S&HR) shall be submitted to Contracting Officer (CO) and Code 350. There should be one S&HR per month that covers all task orders under the contract.
- (B.1.16) An electronic Personal Identity Verification (PIV) Report shall be provided to the Contracting Officer (CO), Contracting Officer's Representative (COR), and Code 240 monthly. There should be one report per month that covers all task orders under the contract.
- Meet with the Contracting Officer's Representative (COR) and technical and financial Government representatives monthly to discuss financial status. Topics covered shall include: Funding provided by NASA, Funding planned to be provided by NASA, Funding obligated to the Task Order, Status of subcontracts for Tools and ODCs, Expenses invoiced, Funds available on the Task Order (not expensed or obligated on subcontracts), and Expected monthly labor expenses.

IX. Security Requirements

This task shall comply with IT security requirements as documented in the NCCS IT Security Plan and 600 IT Security Plan as applicable.