JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION (JOFOC)

1. **This document is a justification for other than full and open competition prepared by NASA's Goddard Space Flight Center (NASA's GSFC):**

NASA's GSFC proposes to extend the Global Modeling and Assimilation Office (GMAO) Scientific and Technical Support Services contract (NNG06HX04C) with Science Applications International Corporation (SAIC) for one year. This document justifies the determination for using other than full and open competition.

2. **The nature and/or description of the action being approved:**

This action will be a one-year contract extension for the continuation of the scientific research and development conducted at GMAO. SAIC supports the GMAO in developing, operating and maintaining data assimilation systems for the atmosphere, ocean, land surface, atmospheric constituents, and ocean biology. The data assimilation systems comprise observation characterization for the assimilation context, the analysis systems which combine model and observation information, and the models required to interface with the analysis systems. SAIC also supports the development of the coupled models (ocean-atmosphere-land surface; atmospheric dynamics with chemistry; ocean dynamics with biology, etc.) to support the assimilation systems and to address the key scientific questions and prediction goals identified by the NASA Science Mission Directorate. The GMAO, along with SAIC, is committed to advancing data assimilation and the use of satellite data for climate analyses and for weather and climate prediction, as it progresses along the path of developing an Integrated Earth System Analysis.

The current contract was awarded on January 1, 2006. This contract is a Cost-Plus-Award-Fee, indefinite delivery indefinite quantity type contract with a current maximum ordering value of $48M, and currently expires on December 31, 2010.

3. **Description of the supplies or services required, including an estimated value:**

SAIC will provide personnel with the appropriate technical expertise to support projects within the GMAO that encompass all aspects of the research, development, operation and maintenance of its assimilation and prediction systems, specifically in three areas: Scientific Research and Development Support; Development and Maintenance of Operational Capabilities; and Project Management Support. SAIC provides the GMAO with comprehensive diagnostic, monitoring and evaluation tools for GMAO prediction models and data assimilation systems for applications including: numerical weather prediction; climate analysis and prediction; observing system evaluation and design of new NASA satellite missions; and significant technical input to NASA's instrument team algorithms.

The current maximum ordering value of this contract is $48,000,000. The current task value to date is $44,566,751. The estimated value of this contract extension for one year of additional support is approximately $8,877,573 based on an in-house Government estimate. With the summation of the current task value through the end of the calendar year, and the cost for 1 year of additional support, we will need to increase our maximum ordering value by $11M, bringing the total ceiling value to $59M. Currently, the effective ordering period ends on December 31, 2010. Extending the period of performance by one year will allow for critical milestones to be completed, and for continuation of work performance through December 31, 2011, by which time the follow-on competitive contract is expected to be awarded. Procurement planning for the follow-on contract has begun and key milestone dates are as follows:

- PSM – November 23, 2010
- RFP Release – April 5, 2011
- Award – January 1, 2012

4. **Statutory authority permitting other than full and open competition:**

The statutory authority for other than full and open competition for this contract is 10 U.S.C. 2304(c) (1) – only one responsible source.

5. **A demonstration that the proposed contractor's unique qualifications or the nature of the acquisition requires use of the authority cited:**

SAIC is uniquely qualified and has the requisite skills, expertise and experience to continue the Earth system science research and development conducted at GMAO. SAIC develops, operates and maintains a suite of complex software systems for comprehensive atmospheric, oceanic and land surface data assimilation to advance the nation's capabilities in weather, climate and environmental prediction. SAIC has developed advanced methods for assimilating NASA satellite observations for: 1) meteorology, including hyperspectral and limb sounders, data in cloudy and/or raining regions, precipitation data and cloud properties; 2) atmospheric constituents, including ozone, carbon species and aerosols; 3) oceanography, including ocean altimetry, surface salinity and ocean color; and 4) land surface hydrology, including surface temperature, soil moisture and snow. SAIC has also developed effective techniques to initialize coupled climate forecasts, and use of satellite observations to improve climate forecast skill, including the conduct of experimental climate forecasts on a routine basis.

SAIC possesses the capability of providing ongoing technical support without interruption of service and quality of support. No firm, other than SAIC, can provide in-depth expertise while supporting the GMAO without receiving advanced training. SAIC's experience would enable them to perform without a learning curve. It would be difficult for another contractor to assemble a team with the necessary experience and insight required to support the GMAO in a short time frame. SAIC is the only contractor which possesses the significant and immediate knowledge and skills

necessary to perform under this contract without any interruption or degradation of services.

The contract extension is necessary to ensure program continuity and critical mission support, and to avoid significant technical impacts to NASA GSFC's programs, other agency programs and the programs of international partners. NASA has contractual commitments with other agencies and other international entities to provide data. The data must be continuously gathered and assimilated to permit, among other things, accurate weather forecasts which are so vital to protecting life and property. For instance, GMAO data assimilation systems provide near real-time data input to NASA satellite instrument teams, such as MODIS, CERES, MLS and TES, as well as to instruments onboard satellites operated by NASA's international partners, such as the Japan Aerospace Exploration Agency's SMILES instrument. Support of these requirements depends on SAIC's in-depth knowledge of GSFC and GMAO systems, management structure and personnel. An interruption and resumption of those tasks, with a new contractor unfamiliar with the NASA GSFC environment and the specific requirements of the GMAO contract, would jeopardize the success of GSFC's implementation of critical and highly visible Agency programs and potentially endanger life and property if accurate weather forecasts cannot be made.

Due to the highly specialized services required, it is impossible for a new contractor to just take over operations without a phase-in plan. During the phase-in, the new contractor's workforce learns the process and procedures that must be followed to permit accurate and proper gathering of the data and assimilation of the data. Historically, phase in has been estimated at approximately $35,000 per month. It is expected that phase-in costs would be much higher if another contractor were to take over this contract for this extension period. These costs are not expected to be recovered through competition.

6. **Description of the efforts made to ensure that offers are solicited from as many potential sources as practicable, including whether a notice was or will be publicized as required by Federal Acquisition Regulation (FAR) 5.2**:

This procurement was synopsized on the NASA Acquisition Internet Service (NAIS) and on the Federal Business Opportunities (Fed Biz Opps) websites on September 22, 2010, as required by the Federal Acquisition Regulation (FAR) Part 5. The synopsis notified all interested sources that this requirement will be issued on a sole source basis and provided them an opportunity to submit their interest and capabilities. No responses were received.

7. **A determination by the contracting officer that the anticipated cost to the Government will be fair and reasonable:**

In accordance with the Federal Acquisition Regulation requirement to determine if the anticipated costs are fair and reasonable, a thorough cost analysis of the contractor's proposal will be performed, in conjunction with field pricing support from the cognizant audit agency. There is ample cost/price data from previous procurements of

this type that will allow reliable cost/price comparisons. Further, a comprehensive in-house Government estimate was written to assist in assessing fairness and reasonableness.

8. **Description of the market research conducted, and the results, or a statement of the reasons market research was not conducted:**

Market survey activities have been conducted for the follow-on competitive award. Assigned procurement and technical personnel have conducted information interchange meetings with organizations interested in the follow-on competition. Within this limited time frame, NASA does not believe any alternate sources can take on full contract responsibility without risk of an unacceptable delay to critical milestones within the GMAO. The Government would unnecessarily incur significant additional cost if another contractor were to perform this effort. A competitive contract is expected to be awarded by the end of this proposed contract extension.

9. **Other facts supporting the use of other than full and open competition:**

A new solicitation and potential replacement of the incumbent contractor introduces risks to the project and completion of critical milestones. Also, to accommodate the extensive learning curve and set of transition activities for the new contractor, the Government is planning for a 30-day phase-in period after the competition and award to establish a new contract.

Based on the duration of this extension and the time and costs that would be involved in procuring and phasing in another contract, SAIC is the only entity possessing the detailed knowledge necessary to provide a seamless continuation of the services provided under the GMAO contract. In addition, this extension with SAIC will avoid unacceptable delays in performance and substantial duplication of cost to the Government. The duplication of costs that would be incurred if another contractor was brought on-board for a maximum of 12 months would be significant and would include duplication of phase-in costs and administrative costs associated with a Source Evaluation Board (SEB) for a short term acquisition. Furthermore, these expenses would not reasonably be expected to be recovered through competition for the maximum extension of one year. The duplicated costs would include at least a 60-day phase-in period and 60-day phase out period of contractor overlap to ensure all services remain operational and uninterrupted. Historically, phase in costs are approximately $35,000 per month, however, it is expected that the phase-in cost could be much higher if another contractor were to take over this contract. The Government would also need to review contractor submitted plans and documents, such as an Information Technology (IT) Security Plan, Safety and Health Plan, Systems Engineering Management Plan, and/or Organizational Conflict of Interest (OCI) Avoidance Plan, among others, for this extension which will also be performed for the follow-on.

10. **Sources, if any that expressed an interest, in writing, in the acquisition:**

As stated above, in accordance with requirements of FAR 5.203 (a), a notice of NASA's intent to extend the period of performance was synopsized on the NASA Acquisition Internet Service (NAIS) and on the Federal Business Opportunities (Fed Biz Opps) websites. The synopsis notified all interested sources that this requirement will be issued on a sole source basis and provided them an opportunity to submit their interest and capabilities. No responses were received.

11. **The actions the Agency may take to remove or overcome any barriers to competition before any subsequent acquisition for the supplies or services required:**

NASA expects to overcome any barriers to competition through its acquisition planning leading up to the competition and contract award in January 2012. This interim extension will provide sufficient time for transition to a new competitive contract without discontinuity of service.