To: ROSES 2013 A.46 Terra and Aqua: Algorithms – Existing Data Products PIs

For the past six years, the NASA Earth Science Division (ESD) program staff for Terra, Aqua, and the respective instruments, has discussed with the science community a plan to transition the Terra and Aqua science algorithms/data products traditionally competed in ROSES program elements to the biennial NASA ESD Senior Review (SR). The SR will, from this point onward, provide a biennial opportunity for NASA to review the ongoing maintenance of these products and allow a regular assessment of funding levels to be made available to individual algorithms/data products or in some cases suites of algorithms/data products. NASA established the ROSES 2013 program element A.46 as an opportunity to appropriately sync the missions, teams, PIs, funding, and algorithms' transition with the timing of the SR. As discussed at the last five MODIS and MODIS-VIIRS Science Team Meetings (2013-2016), we plan to transition the maintenance of the algorithms selected under the ROSES 2013 *A.46 Terra and Aqua – Algorithms – Existing Data Products* to the 2017 SR. The NASA Headquarters preparatory activities for the 2017 Senior Review are underway. ESD would like to enable as smooth a transition as possible, and thus questions on the proposed process are solicited and welcome and should be directed to Dr. Paula Bontempi, paula.bontempi@nasa.gov or 202.358.1508.

The proposed plan for the PI and his or her respective teams selected under the ROSES 2013 A.46 solicitation (list is here: https://nspires.nasaprs.com/external/solicitations/summary.do?method=init&solId={7B7E1562-19BA-6475-6C29-0890F67F833E}&path=closedPast under "selections") is to have each of the approximately 32 PIs from the 2013 Selectees List who want continued algorithm-maintenance funding to each submit one Proposal. **However, at this time, NASA will not be soliciting algorithm maintenance proposals from PI's for instruments that are no longer functioning, such as AMSR-E, so the number of proposals will be lower than 32.** Each PI working with data from a functioning Terra and/or Aqua instrument should submit one Proposal. This one proposal should include a maximum one page Statement of Work (SOW) Algorithm(s)/Data Product(s) Summary, plus a one-page budget and one page budget justification that addresses the **algorithm(s)/data product(s) maintenance portion only.** Each proposal will address each of the selected algorithm/data product or suites of algorithms/data products identified in a PI's respective 2013 proposal. The budget and justification should be for a three-year period (FY18-20). The proposal SOWs, budgets, and budget justifications will be included as Appendices to the appropriate Senior Review (Terra and/or Aqua) Proposals. The one-page SOW should briefly explain what algorithm/data product or algorithms/data products the proposal addresses, PI/Co-I/Collaborators and institutions, the intrinsic merit of the algorithm(s)/data product(s) (e.g., tie to any ATBD and timeline, a brief description of the approach, historical updates), and the relevance of the algorithm/data product and its maintenance to the NASA science (e.g., status, is/are it/they being used routinely and what data center houses the data product(s)), SR mission, and instrument. Proposals, when ready, should be submitted to the cognizant Project Scientist (or Scientists) on which the instrument resides (Terra: Dr. Kurt Thome, NASA GSFC, kurtis.thome@nasa.gov; Aqua: Dr. Claire Parkinson, NASA GSFC, claire.l.parkinson@nasa.gov) and the Senior Review Program Officer (Cheryl Yuhas,

cheryl.yuhas@nasa.gov). The due date for each of the previously selected proposals (minus non-functioning instruments such as AMSR-E) will be 3 February 2017. Please use font 10pt or higher and preferred submission format is PDF (for the complete proposal, including budget and budget justification) and Excel files (for the budget spreadsheet).

Note: if a given algorithm(s) is relevant to the two missions with duplicate sensors (e.g., MODIS on Terra and Aqua), then the identical proposal should be submitted via Email to both the Terra and Aqua mission proposals and Project Scientists, and this redundancy should be noted in the algorithm(s) proposal, budget, and justification.

Inclusion of these proposals in the NASA ESD SR provides an opportunity for scientists to continue the maintenance of Terra and Aqua algorithms and data products selected under the ROSES 2013 A.46 solicitation for instruments still collecting data, but it does not provide the opportunity for any other activities. Proposals to pursue significant changes to existing algorithms, algorithm refinement, improvement, science data analysis, and data product validation of the existing algorithms selected under the ROSES-2013 A.46 solicitations, including any research on data from instruments on board Terra and/or Aqua that are no longer functioning, are appropriate instead for the ROSES-2016 The Science of Terra, Aqua, Suomi NPP program element to be released as an amendment to ROSES 2016 in calendar year 2016 or early calendar year 2017.

Algorithm/Product maintenance includes routine quality assessment of the product, assessment of the impact of any instrument performance or ancillary data changes on the product, working with the relevant DAAC to address user inquiries concerning the algorithm/product, minor refinements to the algorithm product based on user feedback, and working with the appropriate SIPS concerning issues associated with product reprocessing, etc. Proposals should contain no calibration/validation activities beyond minimal calibration/validation activities that will be minor NASA investments given the maturity of the existing algorithms (such as algorithm refinement based on changes to the instrument) and essential for the continued product quality assessment. NO new field data collection should be proposed.

For the approximately 32 proposals selected under the ROSES 2013 A.46 Terra and Aqua: Algorithms – Existing Data Products competition, there will be up to $3.0M/year total available for all algorithm/data product maintenance. All budget figures and requests must be appropriately justified. The one-page budgets must be reasonable and appropriate to the level of effort proposed, and must be accompanied by a one-page maximum budget justification. The SR peer-review panel and NASA program managers will review all three documents (one-page proposal, one-page budget, and one-page budget justification) from each PI. SOWs and budgets will be revised by agency personnel as needed, taking into account any peer review recommendations.

In addition to their proposed investigations, researchers are encouraged to join (if they have not already done so) and support associated science teams. Proposals should identify membership to the team that, to the best of their knowledge, is most relevant to their research and budget for travel to an annual, domestic science team meeting (e.g., four days to the farthest coast).

Please direct any questions to the cognizant POC:

Dr. Paula Bontempi, MODIS Program Scientist, POC for ROSES Terra and Aqua Science

Dr. Garik Gutman, Terra Program Scientist

Dr. Ramesh Kakar, Aqua Program Scientist

Dr. Jack Kaye, Associate Director, R&A

Ms. Cheryl Yuhas, Program Executive, Operating Missions and the Senior Review

NASA Headquarters
Earth Science Division