

NOAA NESDIS OFFICE OF RESEARCH AND APPLICATIONS SOFTWARE POLICY GUIDELINES AND RECOMMENDATIONS

As the research and development arm of the National Environmental Satellite, Data, and Information Service (NESDIS) in the National Oceanic and Atmospheric Administration (NOAA), the Office of Research and Applications (ORA) is involved in the development of algorithms and software for environmental satellite applications. In this capacity, the ORA collaborates with various divisions within NOAA, other government agencies, universities, and the private sector. In an effort to promote the maximum utilization of NOAA's satellite technology, the ORA is actively involved in technology transfer activities which include the release of ORA-developed software. This document serves as a general overview of the issues involved and provides guidance for the release of ORA developed software.

Algorithms and software developed by an ORA government employee(s) as part of official duties are considered the property of ORA. Although algorithms and software cannot be copyrighted, some software may be patentable. The rights in any invention of a Government employee is determined by the agency in accordance with 37 CFR 501. The determination may range from title to the Government to all rights to the employee.

In order to further the mission of NOAA and the United States' environmental satellite program, it is vital that software produced within NOAA is made available for inter-agency and commercial applications. The ORA must share its expertise with other agencies to develop new and improved satellite design, implementation, and remote sensing applications. The benefits include providing visibility for ORA research and applications, interactions with and feedback from a wide variety of users, and enhanced research and development opportunities. In this endeavor, ORA must also protect the interests of NOAA NESDIS, ORA, and its employees. By releasing algorithms/software prior to publication in peer reviewed literature, ORA may not get credit for their efforts and premature release may result in the forfeiture of agency/developer ownership rights. Even in cases of mature, validated software, errors may be found in the code after release which may result in distrust in ORA's scientific activities. An additional concern involves the possibility of invoking liability due to inappropriate applications of or errors in ORA developed software that could result in injury or loss of life and/or property. Furthermore, once software is released, ORA no longer has control of modifications made to the code or usages. In addition resources are not available to aid others in implementing and maintaining ORA developed software.

The following guidelines were designed to address these concerns and facilitate the transfer of ORA developed software (source and/or executable code) into other government agencies and the private sector.

- Software cannot be released prior to the publication of the underlying algorithm(s) in peer reviewed literature and/or as a NOAA technical report.
- Only mature, stable, thoroughly documented and validated software can be released as part of collaborative research endeavors with other government sponsored programs (Examples of appropriate documentation can be found in Appendix 3 of NOAA/NESDIS Technical Memorandum 38 entitled "NESDIS Guide to Satellite Products and Services Implementation.").

- Software release must include a standard user agreement document (approved by the NOAA Deputy General Counsel for Atmospheric and Ocean Research and Services) containing a rights clause, disclaimers and liability waivers, and terms for distribution and modification of code. It is important to attach this document to any software being released to guarantee that the ORA retains all rights, title, and interest in the software and to protect the ORA from liability. The document should also explicitly state that the ORA will not be responsible for subsequent code maintenance and support.

- The approval of the ORA director, division chief, and developer must be obtained prior to release of ORA developed software to other government partners. The developer should be apprised of his rights as outlined in 37CFR501.

- If the software utilizes other government or commercial software packages, the user agreement must reference this and state that the onus is on the user to obtain the appropriate licenses.

- Telecommunication Analysis (TA) Services of the National Telecommunications and Information Administration (NTIA) Institute for Telecommunication Sciences (ITS) is the designated agency for the distribution of all government software. A Cooperative Research and Development Agreement (CRADA) can be developed with the private sector and the software can be made available for their use through on-line services at NTIA/ITS

CRADAs were authorized by Congress as a means to promote the timely transfer of technology from government laboratories to the private sector in accordance with the Federal Technology Transfer Act of 1986. The CRADA effort must be consistent with the mission of NOAA NESDIS, cannot adversely affect the scientific integrity of NOAA, and must be performed in the public interest. CRADAs can be established with industry, universities, state and local governments, and other Federal agencies. They provide a legal framework for working cooperatively with industry to develop new technology, foster and clarify mutually beneficial working relationships, and serve to protect the rights and interests of all parties involved (government agency, developer, private industry). By engaging in a CRADA, the government agency and the government employee who developed and implemented the algorithm/software can also obtain royalties.

These guidelines serve as a general overview of the software policy issues within ORA and do not address the nuances associated with many of the joint activities ORA is engaged in. The NOAA Deputy General Counsel for Atmospheric and Ocean Research and Services should be consulted for specific guidance in these matters.

**NOAA NESDIS OFFICE OF RESEARCH AND APPLICATIONS (ORA)
SOFTWARE USER AGREEMENT**

You are authorized to use and distribute the NAMED software within your organization. External distribution may be requested. NOAA/NESDIS makes no express or implied warranty as to the suitability of this software for any purpose. No support will be provided with the software.