Software Licensing and Copyright Policy for Research Software CODE @ MPI-M

1. Preamble

The Max Planck society is determined to promote Open Access to research data, and Open Science (Berliner Erklärung¹).

MPI for Meteorology in Hamburg (MPI-M) has developed, partly on its own, partly in collaboration with partners, various Research Software, for example the ICON Model Code², the Climate Data Operators cdo³, and others.

MPI-M believes that for the benefit of science such Research Software should be released as Open-Source Software.

2. Rules

This policy treats the issues of copyright and licensing. It is applicable and restricted to Research Software Source Code developed at MPI-M (CODE). CODE must either be copyright of MPI-M alone (i.e. new code for, or code developed earlier at MPI-M under the copyright of the institute) or code contributed by third parties to MPI-M code which has been licensed to MPI-M under a permissive license like MIT/X11, (2- or 3-Clause) BSD or Apache 2.0 under the Contributor License Agreement (CLA⁴) or where unlimited copyrights have been transferred to MPI-M by other means under similar conditions.

a. Contributor License Agreement (CLA)

Every developer of CODE at MPI-M, being an employee or in any other connection to MPI-M (freelancer, guest, post-doc, scholarship etc.) (CONTRIBUTOR) must sign a CLA to be allowed to contribute to an MPI-M project in the field of Research Software development. To clarify: MPI-M can agree upon co-operations with other institutions where this policy is not applicable.

b. License

CODE shall be licensed under the BSD-3-Clause License⁵, also see attachment. For any other open source license, you must consult with the MPI-M person responsible for licenses⁶.

¹ https://openaccess.mpg.de/Berliner-Erklarung
³ https://code.mpimet.mpg.de/projects/cdo/
⁴ Link t.b.d. on MPI-Met Internet site.
⁵ See https://opensource.org/licenses/BSD-3-Clause, SPDX short identifier: BSD-3-Clause
⁶ Currently: The person responsible for strategic IT partnerships, or the head of the MPI-M administration. mailto: licenses@mpimet.mpg.de
Software must never be distributed without a license.

c. Copyright notice
Attach a copyright notice to CODE in one of the following manners:

- ©2021 MPI-M
- ©2016-2021 MPI-M, name of coder 1, name of coder 2, etc.
- ©2020/2021 MPI-M, name of coder 1, name of coder 2, etc.; Name of Professorship

d. Distribution of Code
   a. To MPI-M
   CODE must be uploaded to the MPI-M code repository\(^7\) at a regular basis. For more details, see the coding rules of your project.

   b. To Third Parties
   This policy gives every contributor of CODE the permission to distribute CODE to any distribution channel licensed under BSD-3-Clause as open-source software. Distribution must be lawful and compliant with MPG Good Scientific Practice.

   To clarify:

   This policy gives no permission for any commercial distribution of the code or any non-open source distribution.

c. MPI-M Coding Rules
Please follow the coding rules or best practice of your project. If no such rules are obviously available, invent some; it may be a good idea to read literature like „Producing Open Source Software: How to run a successful Free Software Project“ by Karl Fogel\(^8\) first.

d. Use of Third-Party Code
Third-party code must only be included into the CODE if it is licensed under one of the following permissive open-source licenses: BSD-2-/3-Clause, MIT/X11, Apache 2.0. The same rules apply for the use, modification, incorporation, propagation, copying, distribution (with or without modification) or making available to the public of third-party code.

All code that is not contributed under the CLA is considered third-party code.

To get permission to, and advice how to incorporate any other third-party code, you must consult with the MPI-M person responsible for strategic IT partnerships, or the head of the MPI-M administration.

\(^7\) To be decided

\(^8\) See https://producingoss.com, CC BY-SA 3.0
e. Good Scientific Practice
Always work following the rules MPI-M for good scientific practice\(^9\). Useful advice on GSP for scientific software can be found here\(^10\).

3. Motivation for this Policy

a. Copyright
Work made for hire: Who is the author of the software and who is the owner of it?
Copyright protection exists from the time the work is created in fixed form (e.g. writing it down, coding software, etc.). The author is the creator of the work.

In case of software the author is the person which has materially written the program code, thus the developer(s) (or coders) of the software are the authors of the software.

If the software was created during the official duties of employment at MPI-M, according to Sec./\(\xi\) 69 b Urheberrechtsgesetz, MPG has the exclusive exploitation right and any right derived from such exclusive exploitation rights, i.e. the exclusive right of usage and distribution (sublicensing) of the software. In such case, due to the rights granted to MPG by the law, MPG/MPI-M is considered the "owner" of the software.

b. Open Source
The project license chosen is important, even crucial for publicly available projects. Project funding can end after a certain period, and maintainers may change their employers or even fields of interest. Thus, to ensure the continued availability of the project, the developers need to come to a formal agreement, i.e. a software license, under which terms the project should be available.

For reasons of traceability, connectivity of research and reusability, scientists deposit the research data and central materials underlying the publication - following the FAIR principles ("Findable, Accessible, Interoperable, Re-Usable") - e.g. accessible in recognized archives and repositories whenever possible. (Draft GSP MPG 2021).

In the eyes of MPI-M, the conclusion is that research software should be open data and open access, regardless of whether it is research data or research result. In our opinion, this is only comprehensively guaranteed by licensing as open source software.

This means you, the contributor, and MPI-M share the rights on the software in equal shares.

c. Permissive Licenses (e.g. BSD, MIT, Apache v2, etc.)
A permissive license comes with only minimal restrictions on how the software can be used, modified and redistributed. Almost all permissive licenses require that the copyright notice shall

be maintained if you modify the software or integrate/embed such software in your own program code, and it generally includes a warranty disclaimer.

Program code under a permissive license can be modified or integrated into other software, and the newly obtained program code can be distributed under a different license, theoretically also under a proprietary closed source license.

BSD licenses are a family of permissive free software licenses, imposing minimal restrictions on the use and distribution of covered software.

BSD-3-Clause was selected as the choice of license for MPI-M Code for several reasons
- It has a very simple and easy to understand text, but yet has proven to be legally sufficient sound
- BSD allows no endorsement of MPI-M: The MPG (the society, not so much the Institute) is very interested in restricting the use of its name
- It has no explicit Patent Clause: the MPG technology transfer department does not allow patent grants to be given for free.
- compatible with non-copyleft and copyleft licenses (i.e. gpl, agpl, lgpl).

One of the big advantages of BSD-licenses is the compatibility with proprietary licenses and general flexibility, meaning that the BSD-style licenses place only "minimal restrictions on future behaviour"\(^\text{11}\) and are not "legal time-bombs"\(^\text{11}\), unlike copyleft licenses. The BSD License allows proprietary use and allows the software released under the license to be incorporated into proprietary products. Works based on the material may be released under a proprietary license as closed source software, allowing usual commercial usages under them. The BSD-3-Clause license, like most permissive licenses, is compatible with almost all Free and opens source licenses (FOSS) (and as well proprietary licenses).

The version of the BSD license applicable at MPI-M can be found in the attachments to this policy.

4. Why we ask for you to sign a CLA:

No other occupational field greater level of fluctuation in the work force than science, spanning over the whole globe. The relationships between MPI-M and CONTRIBUTORS are various: Some have employee status, others don’t. Coding happens in both planned and more spontaneous ways: this leaves MPI-M with an unpredictable, unclear copyright situation for code developed under MPI-M supervision.

MPI-M believes that the solution is open science and open source. But to be allowed to license all the code, MPI-M must have permission by the copyright owner, the CONTRIBUTOR.

In cases where software is created outside the official duties of an employment at MPI-M, MPI-M does not claim ownership or exploitation rights. We only ask for the right of use under open source license conditions: MPI-M thinks that our CLA is the least invasive possible. Because MPI-M does not ask of its contributors for more than the right of use for the code under the conditions of the BSD-3-Clause license.

\(^{11}\) https://docs.freebsd.org/en/articles/bsdl-gpl/
Attachments

1. Text of BSD-3-Clause license
2. Note on Copyright notice
**Text of BSD-3-Clause License**

(also called "BSD License 2.0", "Revised BSD License", "New BSD License", or "Modified BSD License")

<table>
<thead>
<tr>
<th>The 3-Clause BSD License</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPDX short identifier: BSD-3-Clause</td>
</tr>
<tr>
<td>See <a href="https://opensource.org/licenses/BSD-3-Clause">https://opensource.org/licenses/BSD-3-Clause</a></td>
</tr>
</tbody>
</table>

Copyright <year> <copyright holder>

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the copyright holder nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.[7]
Note on Copyright notice

The registration of copyrights is not possible in Germany; it is also not required to make an explicit reference to the copyright.

However, since there are countries in which copyright can be registered and in which clear references must be made to the copyright, it is recommended that, for software coded by MPI-M employees and CONTRIBUTORS, a © or (c) mark is included in a clearly visible place along with the name of MPI-M the author(s) (the software coder) and the year of first distribution. Please note that the coders may waive their right to be named.