

PyTroll Memorandum of Understanding

Introduction

The Parties are organisations engaged in operational services processing satellite data for meteorological or other environmental purposes. The Parties have entered into the Memorandum of Understanding stating the objectives for a formalised co-operation regarding the use and development of PyTroll. In order to make this co-operation possible and to fulfill its objectives the Parties will accept the responsibilities regarding the activities to be performed within the co-operation.

PyTroll

The PyTroll project started out in 2009 as collaboration on weather satellite data processing between DMI and SMHI. PyTroll now has a growing international user base and is used operationally at several National Met Services and Research Institutes. Its objective is to provide different free and open source python modules for the reading, interpretation, and writing of weather satellite data. The provided python packages are designed to be used both in R&D environments and in 24/7 operational production.

Objectives

PyTroll may be used by the Parties as part of their operational meteorological or other environmental services. These services require a high degree of availability as they are used for operational weather forecasting for example. This requires that there has to be maintenance support in place for PyTroll. Since there is no single institute/company to provide this support, each Party has to self-organize this.

As there is a long-term history of fruitful cooperation between the Parties this Memorandum of Understanding will form the basis for agreements on the usage of PyTroll, the commitment to help each other in case of operational anomalies related to PyTroll and the encouragement to contribute to further development of PyTroll.

Partnership

Duration

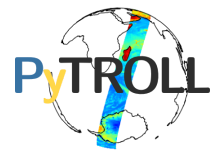
The Memorandum of Understanding is valid for a period of five years starting at the date this MoU is signed by at least two Parties. After that date the MoU enters into force for each additional Party at the time of its signature.

Withdrawal

A Party to this Memorandum of Understanding may withdraw from this co-operation by giving at least one year notice to all the Parties.

New Participants

The Parties, acting unanimously may decide to invite other organisations to be a Party to this Memorandum of Understanding.



Contact Information

Each Party will assign at least one person as contact point regarding PyTroll for the Parties to use.

Activities

Information exchange

As PyTroll is all about developing and sharing open source tools, it is paramount for its continuous successful evolution that standardised and efficient ways of exchanging information (code, bug-reports, documentation etc) is established.¹

The PyTroll resources shall be available at anytime for the Parties to use through making them publicly available at a common location on the web. Even though the information exchange mechanisms are not fixed, they should be capable of, but not limited to:

- Providing source code.
- Providing relevant documentation like user manuals, installation guides, design notes, testing.
- Providing contact information of (key) users at the Parties.
- Handling code changes (features and bugfixes) that are being provided.
- Validation of code changes before it will be incorporated in the code base, be it a person or an automated procedure.
- An issue tracking system regarding requests and bugs.

Operational contribution

Each Party is entitled to request assistance from other Parties in case of an issue that affects the operational use of PyTroll at the Parties institutes. Each Party is encouraged to assist in these cases to an extent which is acceptable for the given Party.

Development contribution

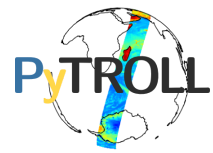
Each member is encouraged to participate in the development community of PyTroll.

- Development can consist of implementing features, bug fixes, providing documentation, test datasets, test cases, giving training, etc.
- PyTroll development participation requires exchanging code according to the GPL-compatible licensing.

Annual Meeting

To promote the exchange of PyTroll knowledge between Parties a workshop will be held at least annually at one of the member institutes. Depending on the Parties needs the workshop can focus on operational aspects, like making new satellite products or installation aspect, or working on PyTroll development, etc.

¹ Today for example all Pytroll code is on GitHub, with documentation on ReadTheDocs, and online communication among developers is mostly carried out on Slack. Pytroll code is automatically being checked using online cloud services such as Travis, Coveralls and Landscape. This is to minimise the risk that broken code is being pushed to the central repository.



Financing and Intellectual Property Rights

Each Party that participates shall carry its own costs related to the activities of this Memorandum of Understanding. All results that are provided to the PyTroll community shall become available according to the GPL-compatible license as being used by PyTroll.

Appendix 1: Signatories to the PyTroll Memorandum of Understanding



Signatory page

PyTroll Memorandum of Understanding

Swedish Meteorological and Hydrological Institute, SMHI

Name of the Party

BODIL AARHUS ANDRAE

Signatory's name

DIRECTOR CORE SERVICES

Signatory's title

Bodil Aarhus Andrae

Signature

NORRKÖPING

Place

2016-11-04

Date



Signatory page

PyTroll Memorandum of Understanding

Finnish Meteorological Institute, FMI

Name of the Party

Dr. Jussi Kaurola

Signatory's name

Director of Weather and Safety

Signatory's title

Signature

Helsinki, Finland

Place

9-11-2016

Date



Signatory page

PyTroll Memorandum of Understanding

Royal Netherlands Meteorological Institute, KNMI

Name of the Party

Prof. Gerard van der Steenhoven

Signatory's name

Director General KNMI

Signatory's title

Signature

De Bilt, The Netherlands

Place

4 Nov. '16

Date

Signatory page

PyTroll Memorandum of Understanding

Deutscher Wetterdienst

Name of the Party

Deutscher Wetterdienst

Geschäftsbereich

Forschung und Entwicklung

Postfach 10 04 63

63004 Offenbach



Signatory's name

Prof. SARAH JONED

HEAD RESEARCH AND DEVELOPMENT, MEMBER OF EXECUTIVE BOARD

Signatory's title

Deutscher Wetterdienst

Geschäftsbereich

Forschung und Entwicklung

Postfach 10 04 63

63004 Offenbach



Signature

Sarah Jones

Offenbach

Place

8.12.2016

Date

Signatory page

PyTroll Memorandum of Understanding

Swiss Federal Office for Meteorology and Climatology MeteoSwiss
Name of the Party

Christof Appenzeller

Signatory's name

Head of the Analysis and Forecasting department
Signatory's title

A handwritten signature in blue ink, appearing to be "Cl".

Signature

A handwritten signature in blue ink, appearing to be "R".A handwritten signature in blue ink, appearing to be "Genf".

Place

A handwritten date in blue ink, "8.2.17".

Date