

Experience with Github for Harmonie

Roel Stappers
Met Norway
roels@met.no

ASW 2023 Tallinn

Overview

- History
- Github
- Github actions
- Documentation
- Future plans

Suggestions for improvements welcome

hirlam.org

Hirlam uses/used hirlam.org with [trac](#) for

1. Hosting of Harmonie repository
 - a. svn (before CY43).
 - b. self hosted gitolite (CY43), Kai Sattler
2. Other repositories (HCLIM, Monitor, Obsmon, NWPtools)
3. Harmonie system documentation (wiki)
4. Training pages
5. Meeting notes
6. Several others pages, e.g. validation for tagging
7. Data portal

Move to github

- Alternatives considered to replace self hosted hirlam.org gitolite
 - Github
 - Gitlab
 - Bitbucket
- No clear preference in system group

- Hirlam github organization created Dec 2019
 - Only for open source tools
- Harmonie moved March 2021
 - Initially only used by system group (repo automatically mirrored to hirlam.org)
 - Write permissions on git.hirlam.org removed for all users
- Github webinar November 2021 (with Daniel and Eoin)
 - Hands-on practice with [Playground](#) repository
 - Repeated during working weeks afterwards
- We are on the free github plan

Main repositories in [Hirlam](#) github organization

The screenshot shows the GitHub organization page for Hirlam. At the top, there is a navigation bar with the following items: Overview (selected), Repositories (31), Projects (2), Packages, Teams (18), People (152), and Settings. Below the navigation bar, the page is titled "Pinned" with a "Customize pins" link on the right. The main content area displays a grid of six pinned repository cards. Each card includes a repository icon, the repository name, its visibility (Private or Public), a description, the programming language, and statistics for stars and forks. The repositories are: 1. **Harmonie** (Private, Fortran, 6 stars, 77 forks) - ACCORD Harmonie-Arome canonical system configuration. 2. **HCLIM** (Private, Fortran, 3 stars, 12 forks) - Version of the HARMONIE repository for climate applications. 3. **AccordDaTools** (Public, Fortran, 3 stars, 7 forks) - Collection of ACCORD DA tools. 4. **obsmon** (Public, R, 2 stars, 4 forks) - Tool for observation monitoring in the Harmonie-Arome NWP system. 5. **Monitor** (Public, Fortran, 2 stars, 2 forks) - Harmonie verification software. 6. **nwptools** (Public, JavaScript, 1 star, 1 fork) - Web based NWP tools related to running limited area models like Harmonie-AROME.

System group

Bert

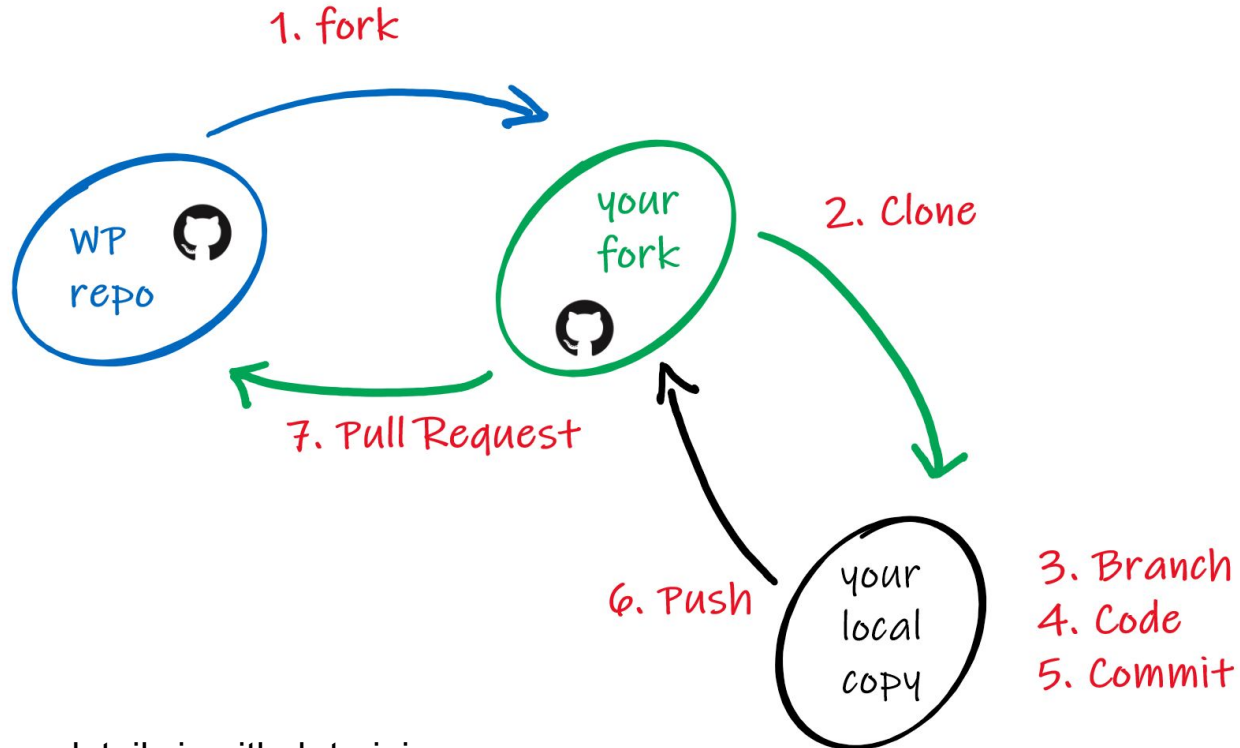
Eoin

Paulo

Ulf


























Ole

Fork-branch-pull request workflow




























More details in github training course

Github PRs

<input type="checkbox"/>	 28 Open	<input checked="" type="checkbox"/> 478 Closed	Author ▾	Label ▾	Projects ▾	Milestones ▾	Reviews ▾	Assignee ▾	Sort ▾
<input type="checkbox"/>	 Try to avoid failure in hirlam.org mirroring Github actions								 1
	#734 by ovignes was merged 16 minutes ago • Approved								
<input type="checkbox"/>	 Do not hard-code linking against auxlibs in CMake build <input checked="" type="checkbox"/> cmake								 1
	#733 by joewkr was merged 9 minutes ago								
<input type="checkbox"/>	 Modified the FAKETREE implementation. <input checked="" type="checkbox"/> enhancement surfex								 3
	#732 opened 3 hours ago by PatrickSamuelsson  CY46h								
<input type="checkbox"/>	 Dual precision fixes brought in from CARRA2 project <input checked="" type="checkbox"/>								 2
	#731 by ovignes was merged 2 hours ago • Approved								
<input type="checkbox"/>	 DM: Ice nuclei concentration <input checked="" type="checkbox"/>								 2
	#730 opened 4 days ago by DMartinPerez								
<input type="checkbox"/>	 Use CMake 3.25.3 as a temporary replacement for 3.26.0 in GitHub actions <input checked="" type="checkbox"/> cmake Github actions								 1
	#729 by joewkr was merged 4 days ago								
<input type="checkbox"/>	 DM: Modification of aerosol properties. <input checked="" type="checkbox"/>								 6
	#728 by DMartinPerez was merged 5 days ago  CY46h								
<input type="checkbox"/>	 Feature/radarwind2 <input checked="" type="checkbox"/> Radar								 1
	#727 opened last week by mridal  CY46h								

Github PRs

<input type="checkbox"/>	 31 Open	<input checked="" type="checkbox"/> 474 Closed	Author ▾	Label ▾	Projects ▾	Milestones ▾	Reviews ▾	Assignee ▾	Sort ▾
<input type="checkbox"/>		Pre cy46h1 nrtar ✓	enhancement Forecast gl						71
	#345 by DMartinPerez was merged on Aug 3, 2022  CY46h								
<input type="checkbox"/>		Feature/gl remove duplicates							50
	#69 by ConorDaly-met was merged on Jul 1, 2021 • Approved								
<input type="checkbox"/>		Cy46 cmake ✓	cmake				 1		31
	#265 by joewkr was merged on May 5, 2022 • Approved  7 of 9 tasks  CY46h								
<input type="checkbox"/>		WIP: Feature/add aa configs	enhancement						25
	#284 by ewhelan was merged on Feb 16, 2022 • Approved  CY43h2								
<input type="checkbox"/>		Feature/aero bf1 ✓							86
	#519 by Irontu was merged 3 weeks ago • Changes requested								
<input type="checkbox"/>		Harmonie 43h2.2.target.1	Forecast surfex						20
	#29 by dsantasm was merged on Apr 27, 2021  CY43h2								
<input type="checkbox"/>		Feature/pysurfex update	Data assimilation surfex						18
	#196 by trygveasp was merged on Nov 10, 2021  CY46h								
<input type="checkbox"/>		Bugfix for bindir in case of FP_PRECISION=dual							16
	#585 by uandrae was merged on Jan 20 • Approved								
<input type="checkbox"/>		Harmon eps 43h2.2 to develop	enhancement ensemble						15
	#230 by uandrae was merged on Dec 1, 2021 • Approved  CY43h2								

Edit Pins

Unwatch 13

Fork 78

Star 6

Github notifications. Click “watch” on Harmonie repo

<input type="checkbox"/>	<input type="star"/>	<input type="watch"/>	pescrbaa .. Eoin 5	[Hirlam/Harmonie] We have global fields with pressure levels at 1015 hPa. And HOST_MODE... (PR #504) - ...L=parp (ARPEGE in PL) does not need the oro...	1:25 PM
<input type="checkbox"/>	<input type="star"/>	<input type="watch"/>	ConorDaly-m. .. Eoin 8	[Hirlam/Harmonie] Conor Daly: Autodetect SP SURFEX with DP gl and adjust xundef missing... (PR #602) - Merged #602 into dev-CY46h1. — Reply to this ...	1:23 PM
<input type="checkbox"/>	<input type="star"/>	<input type="watch"/>	ConorDaly-m. .. Eoin 3	[Hirlam/Harmonie] Conor Daly: Correctly populate o_ind where only two hybrid u/v levels... (PR #541) - Merged #541 into dev-CY46h1. — Reply to this ema...	1:20 PM
<input type="checkbox"/>	<input type="star"/>	<input type="watch"/>	ConorDaly-m. .. Eoin 4	[Hirlam/Harmonie] Conor Daly: Honour fstart() for pppkey parameters (PR #630) - Merged #630 into dev-CY46h1. — Reply to this email directly, view it on ...	1:06 PM
<input type="checkbox"/>	<input type="star"/>	<input type="watch"/>	Eoin, Yurii, Eoin 3	[Hirlam/Harmonie] ADS-C ABO data not handled in obs pre-processing (#35) - Closed #35 as completed. — Reply to this email directly, view it on GitHub, or...	12:54 PM
<input type="checkbox"/>	<input type="star"/>	<input type="watch"/>	Eoin Whelan 7	[Hirlam/Harmonie] Eoin: changes needed for ADS-C AIREP (151) (PR #547) - Yes, this resolved #35 — Reply to this email directly, view it on GitHub, or unsub...	12:54 PM
<input type="checkbox"/>	<input type="star"/>	<input type="watch"/>	Yurii, Trygve .. 4	[Hirlam/Harmonie] Do not hard-code linking against auxlibs in CMake build (PR #733) - LGTM Works in my offline CARRA compilation — Reply to this email ...	12:53 PM
<input type="checkbox"/>	<input type="star"/>	<input type="watch"/>	Yurii, Ulf, Eoin 3	[Hirlam/Harmonie] Do not install the gl library since it is internal to the project (PR #724) - @uandreae approved this pull request. — Reply to this email dire...	11:39 AM
<input type="checkbox"/>	<input type="star"/>	<input type="watch"/>	Reima, Eoin 2	[Hirlam/Harmonie] Reima Eresmaa: updates to the use of IASI and CRIS (PR #609) - This incorporates the MetCoOp operational settings on the use of IASI ...	11:36 AM
<input type="checkbox"/>	<input type="star"/>	<input type="watch"/>	ConorDaly-m. .. Eoin 4	[Hirlam/Harmonie] Conor Daly: Allow user to override PERM,SCRATCH at ECMWF atos (PR #631) - This seeks to address Issue #628 by allowing a user to o...	11:34 AM
<input type="checkbox"/>	<input type="star"/>	<input type="watch"/>	Ulf, Eoin 3	[Hirlam/Harmonie] Ignore FANAME if missing in key check (PR #623) - Fixes the case when calling key has a faname but file key has not. Solves a problem if ...	11:30 AM
<input type="checkbox"/>	<input type="star"/>	<input type="watch"/>	Ole Vignes 2	[Hirlam/Harmonie] Try to avoid failure in hirlam.org mirroring (PR #734) - You can view, comment on, or merge this pull request online at: https://github.com/...	11:14 AM
<input type="checkbox"/>	<input type="star"/>	<input type="watch"/>	Ulf, Eoin 8	[Hirlam/Harmonie] WIP: Enable GRIB2 output from fullpos (PR #570) - These changes enables GRIB2 output from fullpos using the GRIB_BY_FULLPOS=yes fl...	11:11 AM
<input type="checkbox"/>	<input type="star"/>	<input type="watch"/>	Ole, Ulf 4	[Hirlam/Harmonie] Dual precision fixes brought in from CARRA2 project (PR #731) - You can view, comment on, or merge this pull request online at: https://g...	11:03 AM
<input type="checkbox"/>	<input type="star"/>	<input type="watch"/>	Patrick, Bolli 4	[Hirlam/Harmonie] Modified the FAKETREE implementation. (PR #732) - Removed FAKETREE from 1st generation ECOCLIMAP VEGTYPES only, ie NVT_C3, NV...	11:03 AM
<input type="checkbox"/>	<input type="star"/>	<input type="watch"/>	Eoin Whelan 5	[Hirlam/Harmonie] Eoin: adjut hard-coded VarBC levels (ZPLEV) (PR #548) - Should resolved #368 You can view, comment on, or merge this pull request onl...	10:15 AM

Issues

Filters

Labels 48

Milestones 3

New issue

41 Open 99 Closed

Author ▾










Label ▾

Projects ▾

Milestones ▾

Assignee ▾

Sort ▾

- Differences in geometry information between SP and DP causes problem in PREP when coupling AROME -> AROME**   4
#725 opened 3 days ago by uandrae
- Missing Pysurfex docs** documentation   0
#723 opened last week by roelstappers CY46h
- Tasks remain in submitted state indefinitely**  1
#637 opened 2 weeks ago by dschoenach
- Harmonie exp stop at ECMWF(Atos) due \$PERM mounting problem** BOND   1
#628 opened 3 weeks ago by dsantosm CY46h
- Increase time step costs on atos**  4
#611 opened on Feb 19 by uandrae
- Multiple srun executions in Harmonie Listen2file task**  2
#603 opened on Feb 14 by dsantosm

Milestones

Labels

Milestones

Edit milestone

New issue

CY46h

No due date **83%** complete

 **42 Open** ✓ 220 Closed

 **4D-Var climate generation fails with missing SOC files** 4D-Var bug


#560 opened on Dec 16, 2022 by ovignes 

 **Handle polarstereographic proejection in domain_prop** enhancement  1

#3 opened on Mar 30, 2021 by uandrae

 **Redefine shortNames for more correct display of units** enhancement

#7 opened on Mar 30, 2021 by uandrae









 **ADS-C ABO data not handled in obs pre-processing** Conv obs Data assimilation 

#35 opened on Apr 29, 2021 by ewhelan

 **Review of stations list for verification** enhancement verification  5

#47 opened on May 12, 2021 by uandrae

Github teams


<input type="checkbox"/> Select all		Visibility ▾	Members ▾
<input type="checkbox"/> Data Assimilation Upper Air and Surface Data assimilation		24 members	1 team ▾
<input type="checkbox"/> EPS EPS		15 members	4 teams ▾
<input type="checkbox"/> GPU refactoring Refactoring the code for running on GPUs		3 members	0 teams
<input type="checkbox"/> HCLIM Running HARMONIE in climate mode		18 members	0 teams
<input type="checkbox"/> MUSC MUSC developers and users		5 members	0 teams
<input type="checkbox"/> Physics HIRLAM physics group		28 members	0 teams
<input type="checkbox"/> Quality Assurance		5 members	1 team ▾
<input type="checkbox"/> System Hirlam System-Core team meeting notes and discussions. Team Discussions: Hirl...		13 members	4 teams ▾

Team Discussions will be deprecated on May 8th, 2023

Discussions












Announcements

Welcome to Harmonie Discussions!













 roelstappers

is:open category:"System team" Clear Sort by: Latest activity Label Filter: Open New discussion

Categories

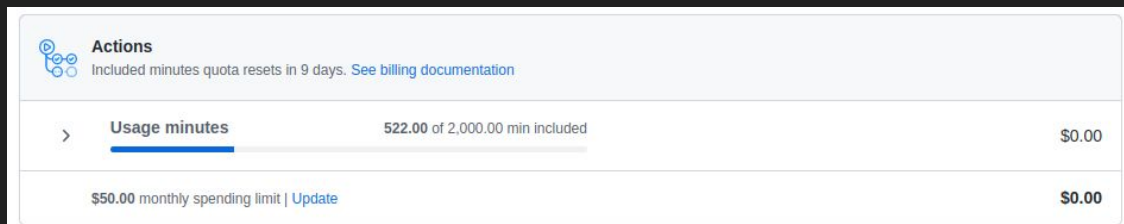
-  View all discussions
-  Announcements
-  General
-  Ideas
-  Integration/Phasing
-  Polls
-  Q&A
-  Show and tell
- System team**
-  Team Posts
-  Technical info
-  Testbed output

System team

- ↑ 1  **Regular System Team Videomeeting notes 20230213**
dsantasm asked last month in System team · Unanswered  0
- ↑ 1  **Regular System Team Videomeeting notes 20230130**
dsantasm asked on Jan 30 in System team · Unanswered  0
- ↑ 1  **HIRLAM System Working Week, DMI, Copenhagen, Dec 2022**
dsantasm asked on Dec 13, 2022 in System team · Unanswered  0
- ↑ 1  **Regular System Team Videomeeting notes 20221115**
dsantasm asked on Nov 15, 2022 in System team · Unanswered  0
- ↑ 1  **Regular System Team Video Meeting Notes 20221102**
dsantasm asked on Nov 2, 2022 in System team · Unanswered  0
- ↑ 1  **Regular System Team Video Meeting Notes 20220904**
 0

Continuous Integration (Github actions)

- `push2hirlam.yml`
 - Runs on any commit to Hirlam/Harmonie. Pushes changes to hirlam.org
- `documentation.yml`
 - Runs if changes in `docs/`
 - Creates html pages. deploys to [HarmonieSystemDocumentation](#) (public repo)
- `compile.yml`
 - Runs If changes to `src/`, `util/`
 - Runs cmake in cloud. Check e.g. project dependencies
- `CompatHelper.yml`
 - Runs monthly. Checks for new versions of Julia dependencies for `documentation.yml`



Actions	
Included minutes quota resets in 9 days. See billing documentation	
> Usage minutes	522.00 of 2,000.00 min included
	\$0.00
\$50.00 monthly spending limit Update	\$0.00

Continuous integration (Github actions)




























Example:

documentation.yml

25 lines (23 sloc) | 635 Bytes

```
1 name: Documentation
2
3 on:
4   push:
5     paths:
6       - docs/**
7   pull_request:
8     paths:
9       - docs/**
10
11 jobs:
12   build:
13     if: github.repository == 'Hirlam/Harmonie'
14     runs-on: ubuntu-latest
15     steps:
16     - uses: actions/checkout@v2
17     - uses: julia-actions/setup-julia@latest
18       with:
19         version: '1.6'
20     - name: Install Julia dependencies
21       run: julia --project=docs/ -e 'using Pkg; Pkg.instantiate()'
22     - name: Build and deploy
23     env:
24       DOCUMENTER_KEY: ${ secrets.DOCUMENTER_KEY } # For authentication with SSH deploy key
25     run: julia --project=docs/ docs/make.jl
```

Github actions

1,263 workflow runs	Event ▾	Status ▾	Branch ▾	Actor ▾
 Try to avoid failure in hirlam.org mirroring (#734) Mirroring #645: Commit f38d46f pushed by roelstappers	dev-CY46h1	 3 minutes ago  1m 6s	...	
 Do not install the gl library since it is internal to the gl project ... Compile HARMONIE-AROME #315: Commit f4f4101 pushed by ewhelan	dev-CY46h1	 1 hour ago  28m 8s	...	
 WIP: Enable GRIB2 output from fullpos Compile HARMONIE-AROME #314: Pull request #570 synchronize by ewhelan	uandrae:feature/grib2_by_...	 1 hour ago  23m 23s	...	
 Merge pull request #731 from ovignes/bugfix/dual_precision Compile HARMONIE-AROME #313: Commit 568373f pushed by ovignes	dev-CY46h1	 1 hour ago  23m 54s	...	
 Eoin: adjut hard-coded VarBC levels (ZPLEV) (#548) Compile HARMONIE-AROME #312: Commit e5a084c pushed by ewhelan	dev-CY46h1	 2 hours ago  28m 25s	...	
 Eoin: changes needed for ADS-C AIREP (151) (#547) Compile HARMONIE-AROME #311: Commit b79da99 pushed by ewhelan	dev-CY46h1	 2 hours ago  23m 40s	...	
 Do not hard-code linking against auxlibs in CMake build Compile HARMONIE-AROME #310: Pull request #733 opened by joewkr	joewkr:cmake-drop-hardcod...	 2 hours ago  23m 41s	...	
 Modified the FAKETREE implementation. Compile HARMONIE-AROME #309: Pull request #732 opened by PatrickSamuelsson	PatrickSamuelsson:modif_f...	 2 hours ago  24m 40s	...	
 Dual precision fixes brought in from CARRA2 project Compile HARMONIE-AROME #308: Pull request #731 opened by ovignes	ovignes:bugfix/dual_preci...	 2 hours ago  23m 13s	...	

Continuous Integration (plans)

Hopefully in the future testbed runs triggered from Github

Testbed ecflow-gen-nkl-001:ECMWF.atos.gnu
(testbed_UAPR589n598_b2777dbe) [Status: DIFFER (9/10)] #719

Unanswered BertvanUft asked this question in Testbed output

 BertvanUft on Feb 1 Maintainer

▶ Click to show testbed result summary for testbed_UAPR589n598_b2777dbe

↑ 1

1 suggested answer

Oldest Newest

 BertvanUft on Feb 1 Maintainer Author

Differences in this case are caused by changing default ECOSG_ALB_VERSION from SNOWFREE to SAT (#571)

Mark as answer ↑ 1

Write a reply

Cloned repo on \$PERM ecgb. Needs to be adapted for teleport login

 roelstappers commented on Feb 10, 2022 Owner Author

@testbed fars:20370127

☹️

 github-actions bot commented on Feb 10, 2022

🔥 testbed started!

☹️

Documentation

Why move the system documentation?

Problems with wiki on hirlam.org

- Code and documentation disconnected
- No proper search
- Version control at single page level
 - Duplication for tagged versions
 - Edits to tagged versions => Lost edits
- Not a commonly used format
- No reviews of documentation
- Documentation not public

Old wiki search

Warning: Search query too short. Query must be at least 3 characters long.

Search

Search

Changesets Milestones Tickets Wiki

No matches found.

Search

Changesets Milestones Tickets Wiki

Results (1 - 10 of 215)

1 2 3 4 5 6 7 8 9 10 11 →

HarmonieSystemDocumentation/PhasingWithGit/Cycle4611_bf.02: [[PageOutline]] [[Center(begin)]] = "Cycle 4611_bf.02 phasing ...
... F90 Auto-merging src/odb/pandor/module/bator_decodbuf_mod.F90 CONFLICT (content): Merge conflict in src/odb/pandor/module/bator_decodbuf_mod.F90 Auto-merging src/arprts/setup/supfl1.F90 Auto-merging src/arprts/setup/suemis_1
By icon — Sep 8, 2022, 1:20:37 PM

ReleaseNotes/harmonie-43h2.2.1: [[PageOutline]] [[Center(begin)]] = "HARMONIE 43h2" == ...
... bic grid for I4Res * Assimilation and observations * Bator adaptations for cy43 * New blacklisting procedure based on ECMWF's * New T2M rejection limit in CANARI * New observations and fixes: AMV, Hires radiosondes and bias correction, * New observations suitable for RUCRR ...
By dmunoz — Jul 19, 2022, 11:24:55 AM

HarmonieSystemDocumentation: [[PageOutline]] [[Center(begin)]] = "Harmonie System ...
... selection of observation types and blacklisting using Bator * [[wiki:HarmonieSystemDocumentation/ObservationPreprocessing/Preprocessing of observation data|wiki:HarmonieSystemDocumentation/ObservationPreprocessing?format=pdfarticle.pdf]]: Introduction * [[wiki:HarmonieSystemDocument ...
By yndrae — May 25, 2022, 11:23:09 AM

HarmonieSystemDocumentation/43h2.2/ObservationHowto/Iasi: [[PageOutline]] = IASI radiances (pre-) processing == ...
... hen echo "Iasi Iasi BUFR Iasi">>batormap in -sf "\${HM_LIB}/const/bator_param/param_bator.ctg Iasi param.ctg if ["\$IASI_SOURCE" = mars]; then in -sf "SWRK/spilObs/Iasi"/BUFR Iasi else in -sf \$OBSDIR/IasiSDTG ...
By trac — May 25, 2022, 11:22:13 AM

HarmonieSystemDocumentation/43h2.2/ObservationPreprocessing/COPE: [[PageOutline]] = ODB creation (COPE) == General Description == ...
... s Observation Pre-processing Environment, to replace 'Oulan/Bator' and BUFR2ODB at ECMWF, to improve the pre-processing of observations for use in NWP. COPE developments are made in ECMWF's git repository. A COPE [source:branches/harmonie_40h1_cope 40h1 HARMONIE branch] has been created to test COP ...
By trac — May 25, 2022, 11:22:13 AM

HarmonieSystemDocumentation/43h2.2/Binaries: [[PageOutline]] [[Center(begin)]] = "Harmonie System ...
... Contains several diagnostic tools. * BATOR : Generate ODB from observations in various formats * b95.x : Blacklist compiler, help program to generate object files from the blacklist * BLEND : Mixes to files * BLENDSUR : Mixes to files * cluster : Cluster ensemble memb ...
By trac — May 25, 2022, 11:22:13 AM

HarmonieSystemDocumentation/43h2.2/Installation/gmpack: [[PageOutline]] [[Center(begin)]] = "Harmonie System ...
... "prints blend odbtools bator reassgn mandalay # Other things to compile with gmpack]]) You could run something different than defined in hm_rev, but then there would be a mismatch between your source code and the pre-compiled libraries/modules. Ident ...
By trac — May 25, 2022, 11:22:13 AM

HarmonieSystemDocumentation/43h2.2/ObservationHowto/Scatt: [[PageOutline]] = Scatterometers == Background == The ...
... To be checked) == Observation error == Set by Bator (src/odb/pandor/module/bator_inl_mod.F90) v_err=1.39, v_err=1.54 * Suggested values from KNMI: u_err=1.4, v_err=1.4 * ZWE=2.0 set in src/arprts/obs_preprochnscat.in.F90 but not used (I think) * "ObsErr" in Jo-table is RMS of ...
By trac — May 25, 2022, 11:22:13 AM

HarmonieSystemDocumentation/43h2.2: [[PageOutline]] [[Center(begin)]] = "Harmonie System ...
... selection of observation types and blacklisting using Bator * [[wiki:HarmonieSystemDocumentation/43h2.2/ObservationPreprocessing/Preprocessing of observation data|wiki:HarmonieSystemDocumentation/43h2.2/ObservationPreprocessing?format=pdfarticle.pdf]]: Introduction * [[wiki:Harmonie ...
By trac — May 25, 2022, 11:22:13 AM

HarmonieSystemDocumentation/43h2.2/Conrad: [[PageOutline]] [[Center(begin)]] = "Harmonie System ...
... working system * Météo-France BUFR format can be read by BATOR == NMS details == met.no == Input Format || Prorad XML || Conrad conversion executable || proradpot2bufpol.F90 ...
By trac — May 25, 2022, 11:22:13 AM

1 2 3 4 5 6 7 8 9 10 11 →



Powered by Trac 1.0.9
By Edgewall Software

New system documentation

- Documentation now in `docs/` directory in Harmonie repository (cy46h)
 - All pages in markdown
 - Code and documentation use same fork-branch-pull request workflow
 - Review of documentation
 - Enforce documentation as part of PR
-
- Proper search
 - Documentation [public](#)



Search docs

Home

Getting Started

GitHub workflow

Graphical Overview

Running on Atos

Overview >

Experiment Configuration >

NWP Components

Observations >

Data Assimilation >

Boundaries >

Forecast Model >

Climate Generation >

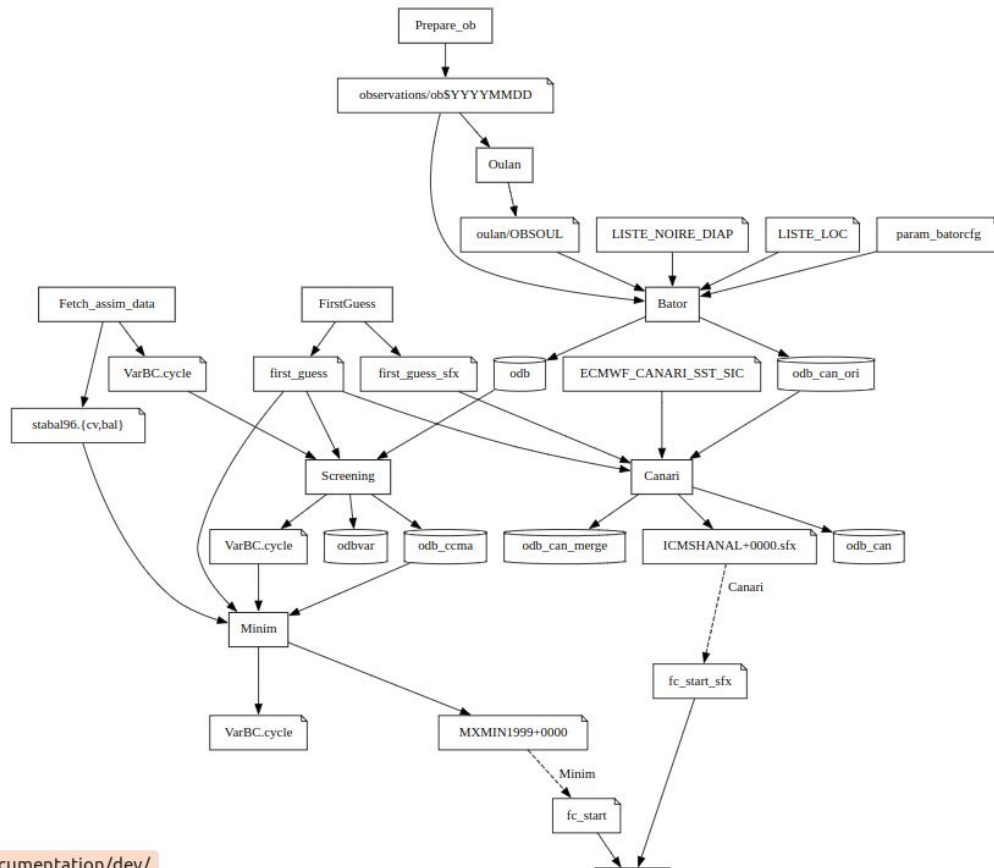
EPS >

Post Processing >

Verification >

Harmonie Data Assimilation

[click to enlarge](#) and enable links



Search



Harmonie wiki

bator

Home

Getting Started

GitHub workflow

Graphical Overview

Running on Atos

Search

Number of results: 33

- [Bator](#) (page)
- [BATOR](#) (section, Bator)
- [BATOR namelist](#) (section, AMV)
- [Processing using Bator](#) (section, Modes)
- [ODB creation: Bator](#) (section, Bator)
- [BATOR namelist and data extraction](#) (section, ATOVS)
- [NATURE](#) (section, CANARI EKF SURFEX)
- [NATURE](#) (section, CANARI OI MAIN)
- [ATOVS](#) (page)
- [WATER](#) (section, CANARI OI MAIN)
- [ATOVS radiances](#) (section, ATOVS)

Documentation

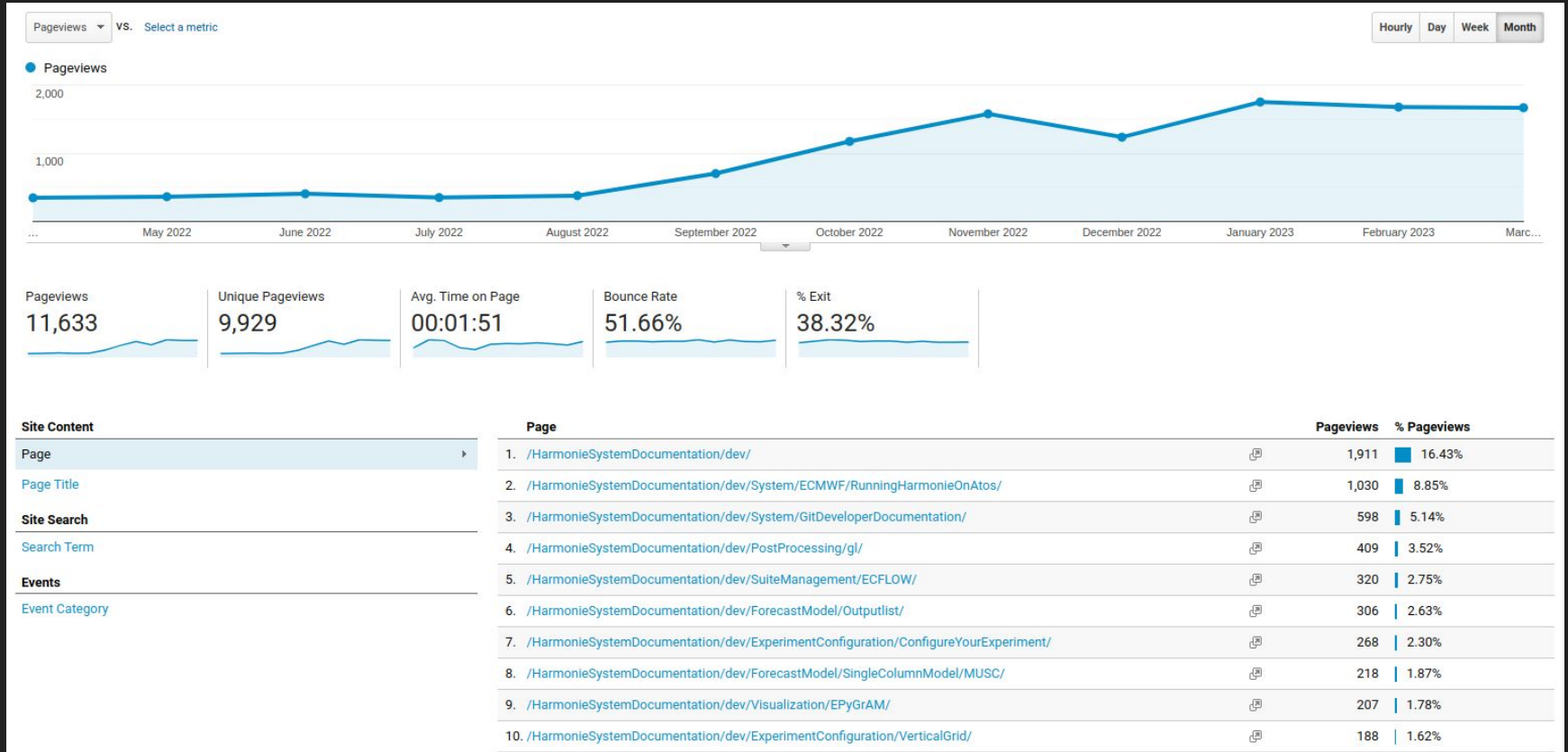
Technical setup

- HTML pages automatically created by github action (including previews for PRs)
- HTML pages deployed to public repository [HarmonieSystemDocumentation](#)
- Github automatically starts web server (github pages)
- Google search console and Google analytics
- Documentation created using Julia + `Documenter.jl`
- **Support for graphs** BlockDiag, BPMN, Bytefield, C4, D2, DBML, Dita, Erd, Excalidraw, GraphViz, Mermaid, Nomnoml, Pikchr, PlantUML, Structurizr, SvgBob, UMLet, Vega, Vega-Lite, WaveDrom, WireViz

[Why we created julia](#)

[Julialang.org](#)

Google analytics (page views)

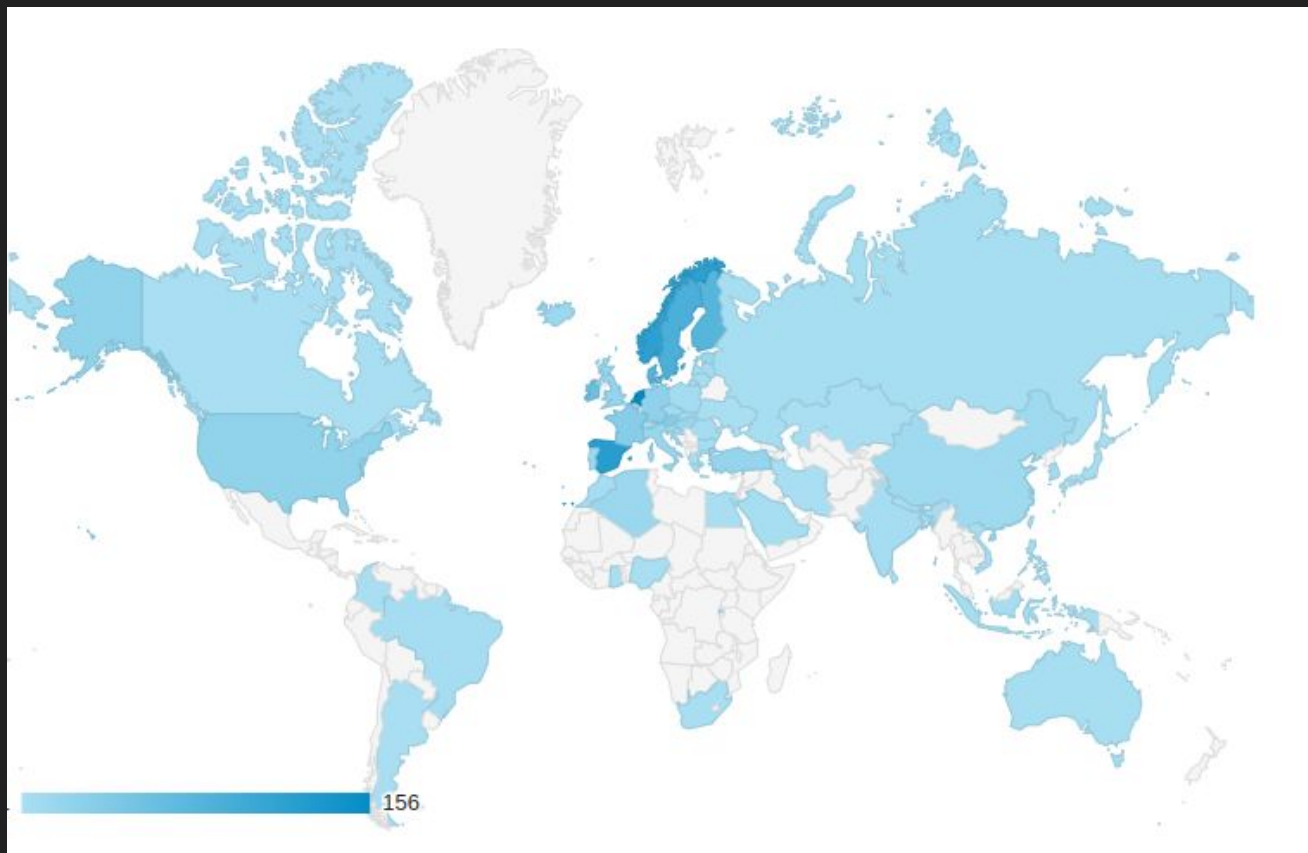


Google analytics: search

Plot Rows Secondary dimension Sort Type: Default

<input type="checkbox"/>	Page ?	Pageviews ? ↓	Unique Pageviews ?
		895 % of Total: 7.69% (11,633)	798 % of Total: 8.04% (9,929)
<input type="checkbox"/>	1. /HarmonieSystemDocumentation/dev/search/?q=epygram	20 (2.23%)	20 (2.51%)
<input type="checkbox"/>	2. /HarmonieSystemDocumentation/dev/search/?q=domain	18 (2.01%)	15 (1.88%)
<input type="checkbox"/>	3. /HarmonieSystemDocumentation/dev/search/?q=gl	16 (1.79%)	15 (1.88%)
<input type="checkbox"/>	4. /HarmonieSystemDocumentation/dev/search/?q=pysurfex	16 (1.79%)	11 (1.38%)
<input type="checkbox"/>	5. /HarmonieSystemDocumentation/dev/search/?q=output	13 (1.45%)	13 (1.63%)
<input type="checkbox"/>	6. /HarmonieSystemDocumentation/dev/search/?q=ecflow	10 (1.12%)	7 (0.88%)
<input type="checkbox"/>	7. /HarmonieSystemDocumentation/dev/search/?q=odb	10 (1.12%)	7 (0.88%)
<input type="checkbox"/>	8. /HarmonieSystemDocumentation/dev/search/?q=musc	9 (1.01%)	9 (1.13%)
<input type="checkbox"/>	9. /HarmonieSystemDocumentation/dev/search/?q=obsmon	8 (0.89%)	6 (0.75%)
<input type="checkbox"/>	10. /HarmonieSystemDocumentation/dev/search/?q=bator	7 (0.78%)	7 (0.88%)

Google Analytics



Documentation PRs

<input type="checkbox"/>	1 Open	<input checked="" type="checkbox"/> 59 Closed	Author	Label	Projects	Milestones	Reviews	Assignee	Sort
<input type="checkbox"/>		Feature/compahelper documentation	#616 by roelstappers was merged on Feb 21		CY46h				
<input type="checkbox"/>		Update RunningHarmonieOnAtos.md <input checked="" type="checkbox"/> documentation	#613 by guntherhaase was merged on Feb 20		CY46h				1
<input type="checkbox"/>		Update RunningHarmonieOnAtos.md <input checked="" type="checkbox"/> documentation	#604 by kourzeneva was merged on Feb 16		CY46h				5
<input type="checkbox"/>		Update Structurefunctions.md <input checked="" type="checkbox"/> documentation	#591 by magnuslindskog was merged on Feb 21		CY46h				4
<input type="checkbox"/>		Update ModelDomain.md <input checked="" type="checkbox"/> documentation	#584 by draelsaid was merged on Jan 19		CY46h				
<input type="checkbox"/>		Update ModelDomain.md <input checked="" type="checkbox"/> documentation	#583 by draelsaid was merged on Jan 18		CY46h				1
<input type="checkbox"/>		Building odb_api on Fedora <input checked="" type="checkbox"/> documentation	#576 by BertvanUft was merged on Jan 11	Approved		CY46h			2
<input type="checkbox"/>		Remove references to retired ecgate/ccs systems <input checked="" type="checkbox"/> BOND documentation	#562 by BertvanUft was merged on Feb 22	Approved		CY46h	2		6
<input type="checkbox"/>		Docs/cleanup <input checked="" type="checkbox"/> documentation	#558 by roelstappers was merged on Dec 21, 2022	Approved		CY46h	1		2
<input type="checkbox"/>		Update RunningHarmonieOnAtos.md <input checked="" type="checkbox"/> documentation	#507 by roelstappers was merged on Nov 16, 2022		CY46h				2

Remaining tasks for hirlam.org move

- Meeting notes
 - To Accord wiki?
- Training pages
 - To github repository in Hirlam organization
- Validation pages
 - To UWC?
- Data portal
 - UWC solution?

Avoid creating yet another platform

Future: Copilot?

[Copilot-for-pull-request](#)

Thank you for your attention