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Federal Department of Home Affairs FDHA
Federal Office of Meteorology and Climatology MeteoSwiss

GAWSIS

Progress Report

Jörg Klausen

21 January 2014

Meeting of ET-WDC, Tokyo, Japan



Overview

1. Achievements since Geneva 2012 meeting
2. Google Analytics dashboard
3. Challenges and Opportunities
4. Future



Achievements

since Geneva 2012 meeting



- Enforcement of station registration procedures
 - New stations are accepted only if application approved by WMO; or, if listed in LoA as part of a contributing network
- Mapping of GAWIDs with WMO identifiers
 - 481 stations identified (of a total of 960)
- New contributing networks included
 - ALINE, AD-Net, EANET, EARLINET, IMPROVE, NADP, NOAA-ESRL (CCG)
- Possibility for search and listing of references
- Targeted review of GAWSIS by selected stakeholders
- Comprehensive requirements engineering in preparation of re-factoring
- Continuous review of content on an opportunity basis

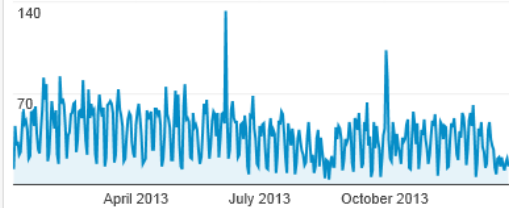


GAWSIS Site Usage

gaw.empa.ch/gawsis, Jan 2013 – Dec 2013

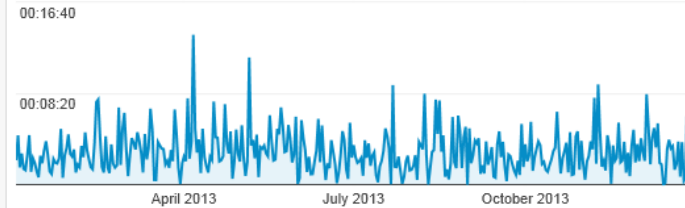
Visits

● Visits



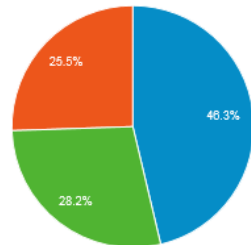
Avg. Visit Duration

● Avg. Visit Duration



Visits by Traffic Type

■ organic ■ referral ■ direct



Visits and Avg. Visit Duration by Country/Territory

Country / Territory	Visits	Avg. Visit Duration
United States	1,672	00:01:55
Switzerland	1,566	00:06:08
Japan	1,165	00:02:02
Germany	972	00:03:42
Canada	655	00:01:51
United Kingdom	619	00:03:20
France	503	00:02:36
Spain	451	00:02:20
Greece	451	00:01:58
Italy	402	00:03:34

Visits and Pageviews by Mobile

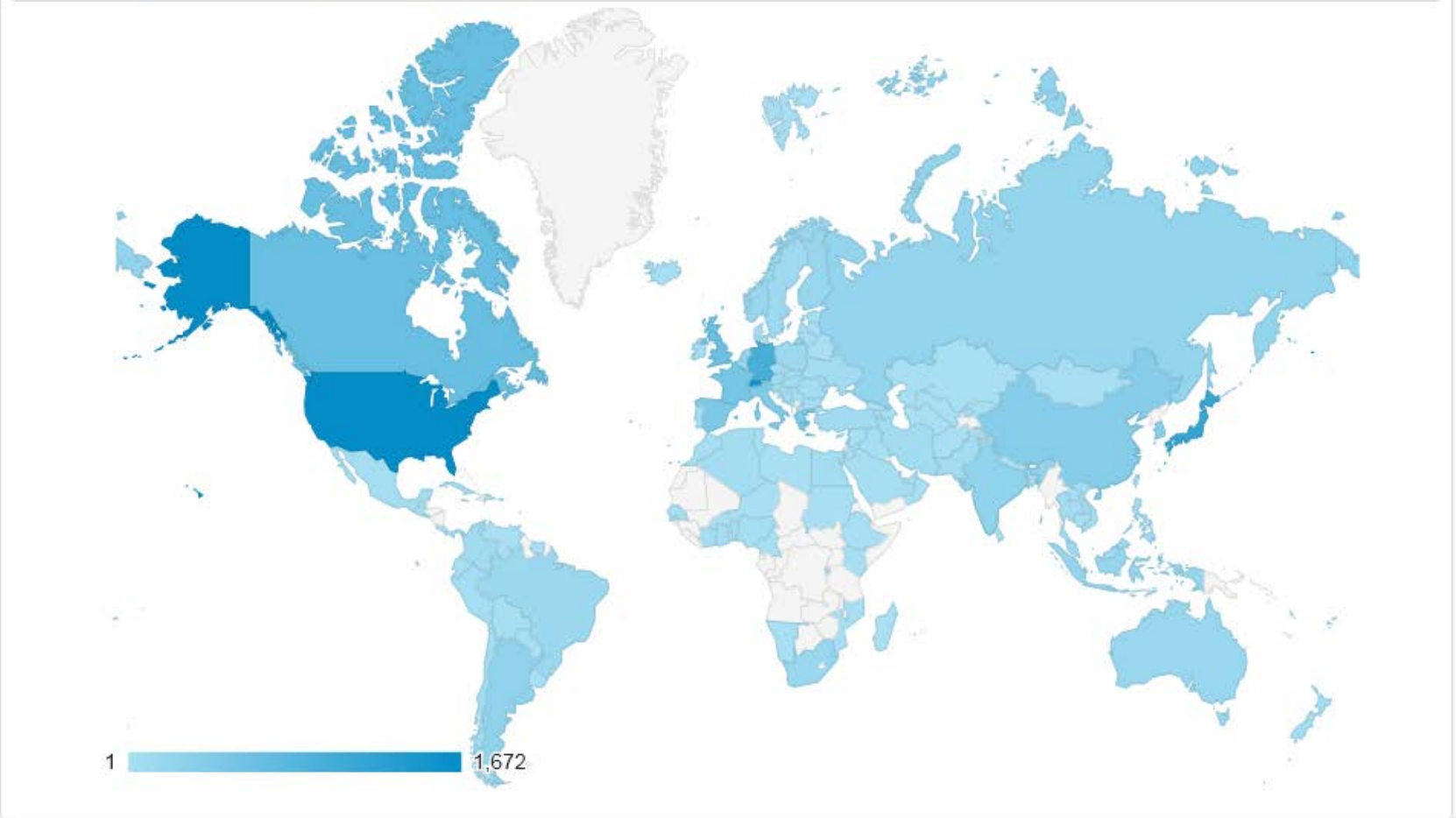
Mobile (Including Tablet)	Visits	Pageviews
No	13,357	49,825
Yes	520	789



GAWSIS site usage statistics

gaw.empa.ch/gawsis, Jan 2013 – Dec 2013

Visits and Avg. Visit Duration by Country/Territory





Challenges

- Important networks not formally engaged in GAW
 - AERONET, SKYNET, NADP (coming?), IAGOS, DEBITS, ...
- Metadata exchange and mapping
 - Controlled list of variables
→ What should be considered by GAWSIS?
 - Metadata exchange standard
→ uncontrolled vocabularies at WDC
 - Include more networks in automatic metadata intake
→ TCCON, GALION, BSRN, ...
- Migration of GAWSIS to MeteoSwiss
 - New database infrastructure
 - New web platform
 - New ICT constraints on collaboration with partners outside MeteoSwiss



Opportunities

- Expansion, re-design of database model
 - Improve granularity (station vs. Platform, data series vs. data set)
 - Improve history of changes to stations
- More comprehensive integration of metadata from diverse sources
- Value-added products useful for network development
 - More, better maps
 - Graphs, charts
- Develop „GAW performance monitoring“
- Modern web technologies, operational support

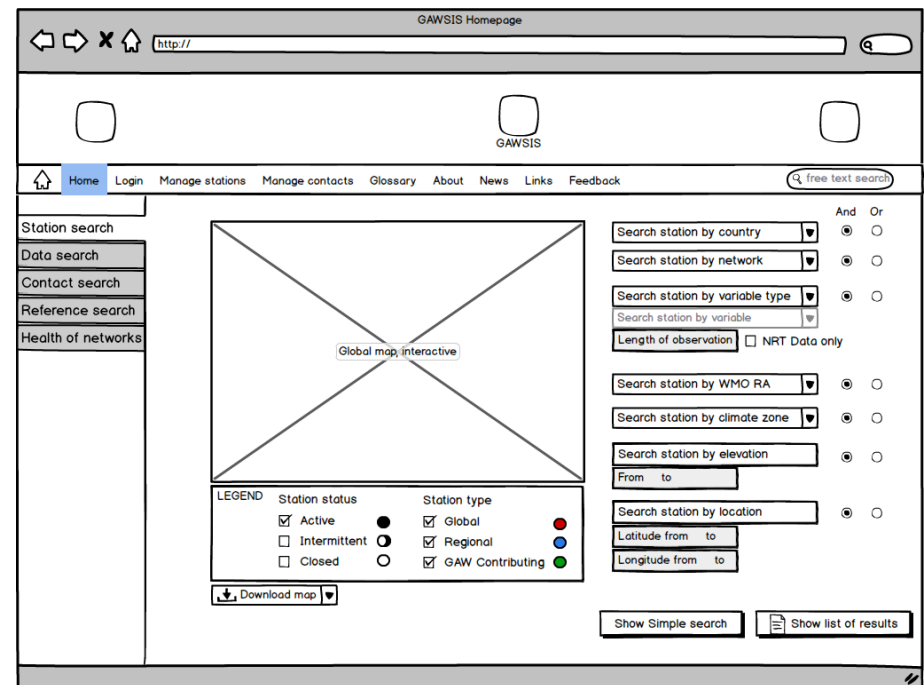
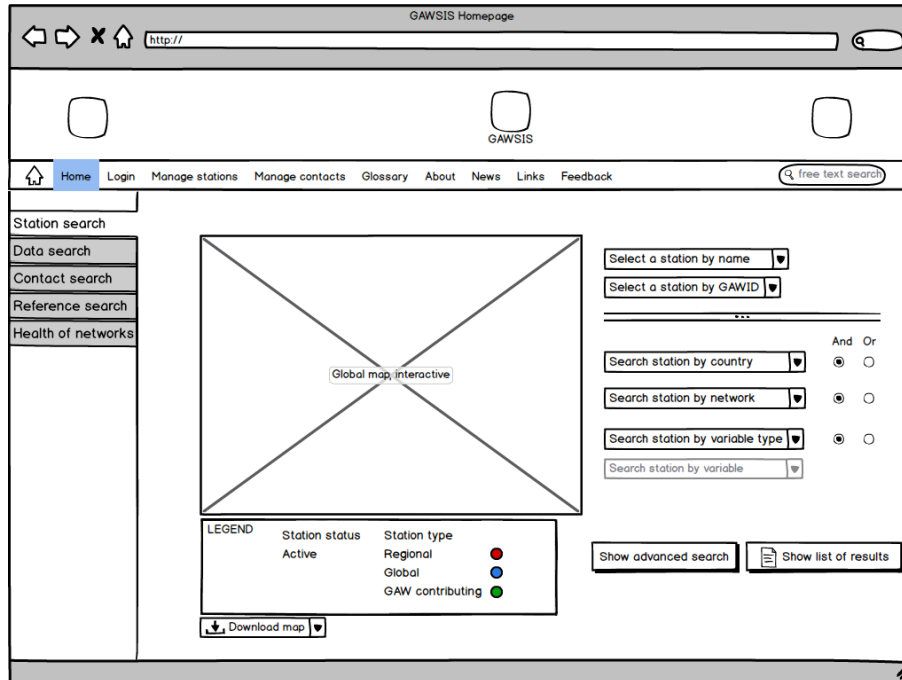


GAW SIS

New Look and Feel, Improved Services



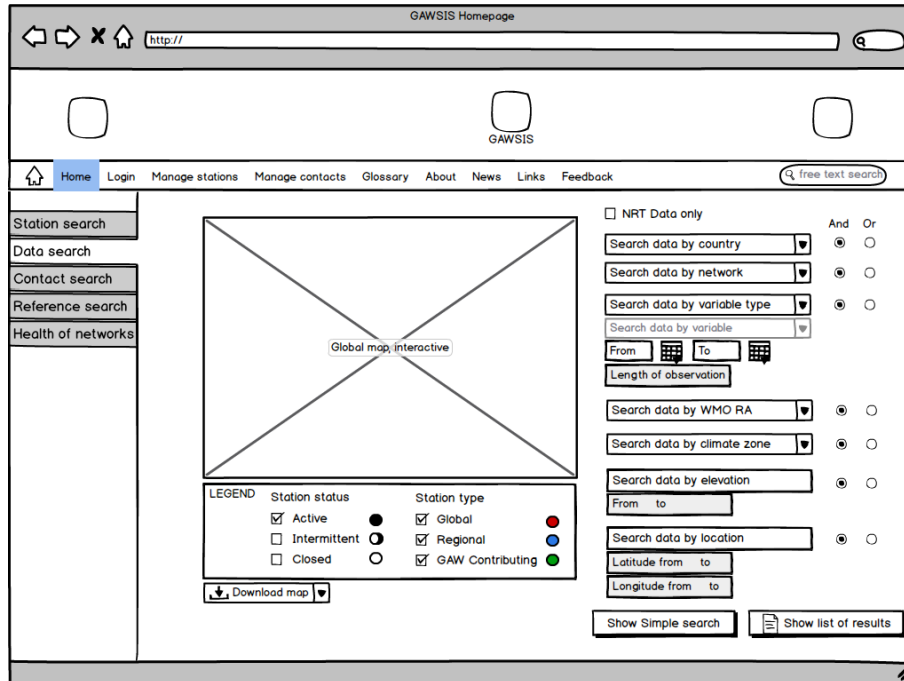
- Simplified navigation
- Faster maps



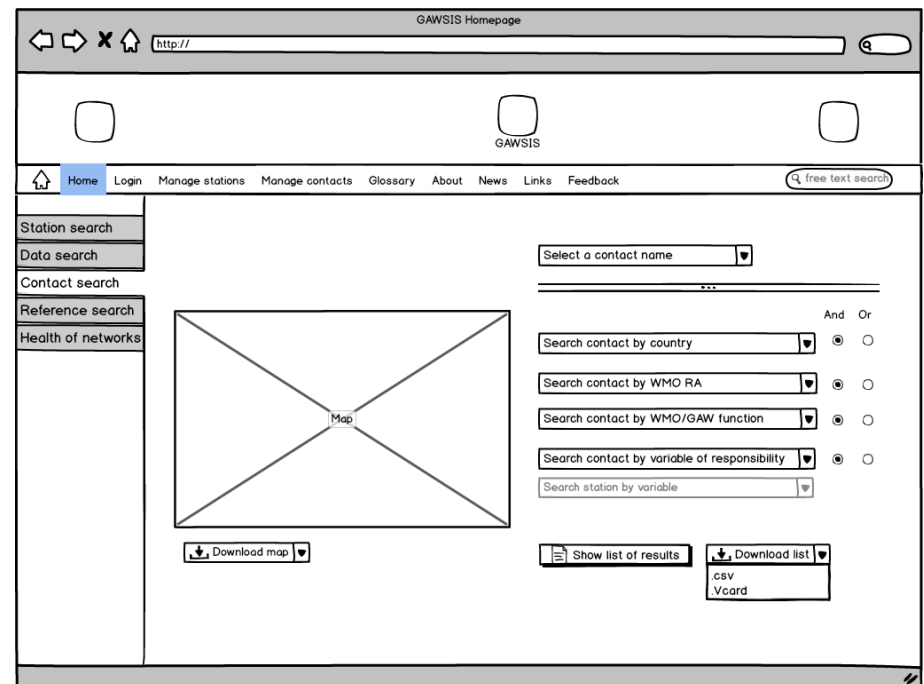


GAWSIS

New Look and Feel, Improved Services



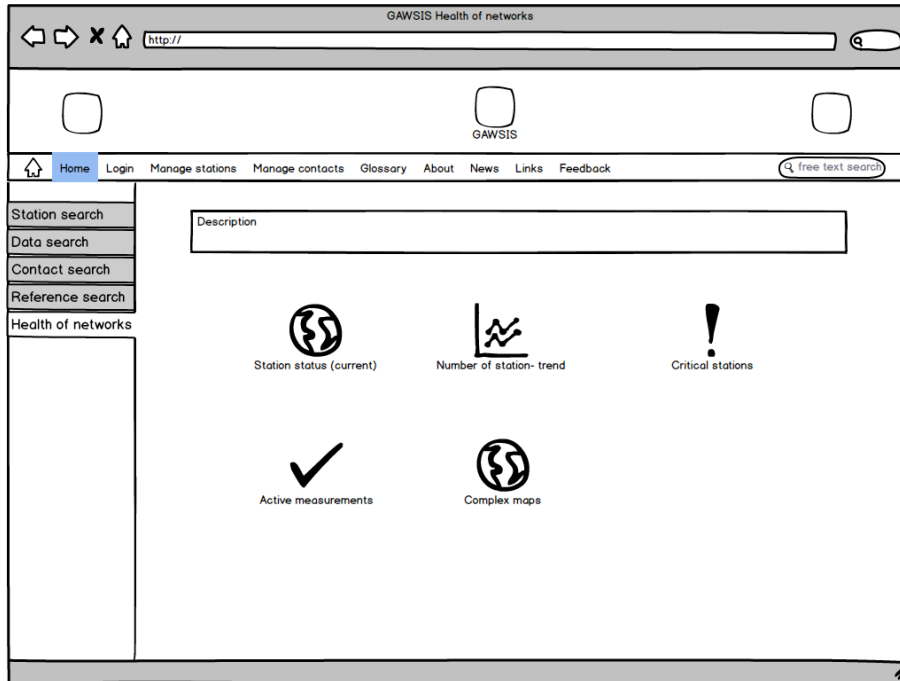
- Directly search for data (not stations)



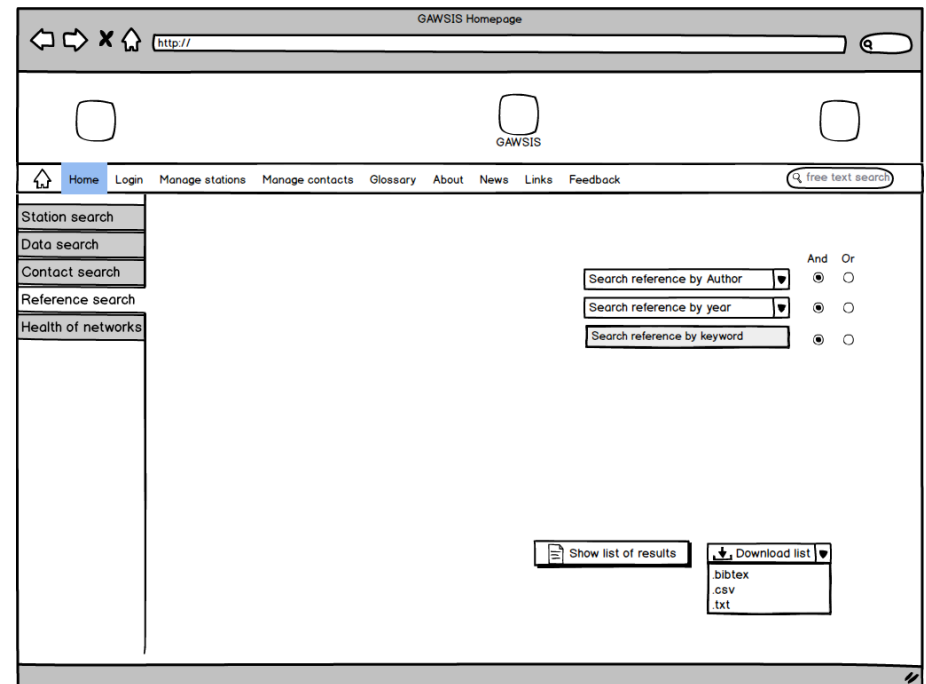


GAWSIS

New Look and Feel, Improved Services



- Various indicators on network performance and health-of-networks
- Direct search of references available





“Health-of-Networks” Indicators



- Maps of stations by length-of-record, submission delay for individual variables
- Spatial density of currently active stations, by WMO RA
- Station activity status, by variable (group)
- Trends of stations submitting by variable (group)
- Maps showing critical stations

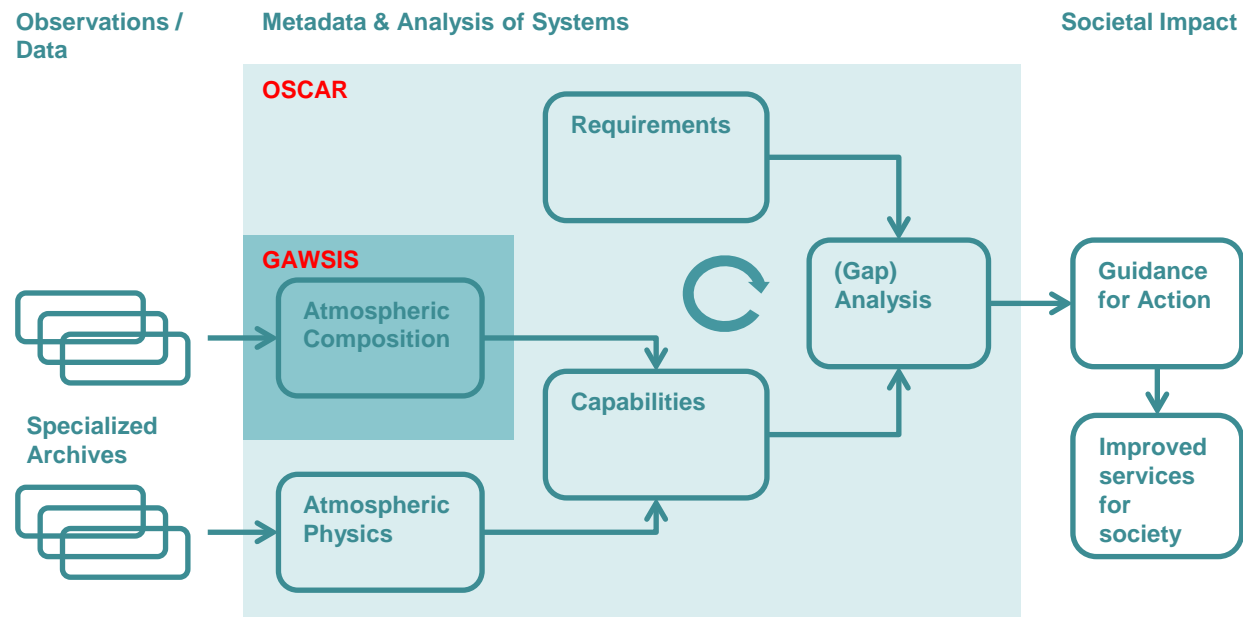


GAWSIS-OSCAR

Metadata archives & Tools for Rolling Review of Requirements



- WMO has asked MeteoSwiss to operate GAWSIS-OSCAR
→ GAWSIS will provide GAW capabilities for OSCAR





GAWSIS-OSCAR

Time-line

