

An Android app that supports OGC Met Ocean Best Practice for WMS 1.3.0

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Why?

- No mobile WMS client in previous interoperability experiments
- Get experiences in the development of apps
- Flexible client for visualization of new products
- Basis for an open source project

Functionalities

- Based on Google Maps API V1
- Supports layers with time dimension
- Multiple layer selection
- Variable WMS server selection
- Allows animations
- Supports GetFeatureInfo requests
- Stores maps in an SQLite database
- Android API level between 8 and 17



Restrictions

- No support for dimension ELEVATION nor REFERENCE_TIME
- Dialog messages are in german
- App connects to only one WMS server
- Each layer has to use its default style

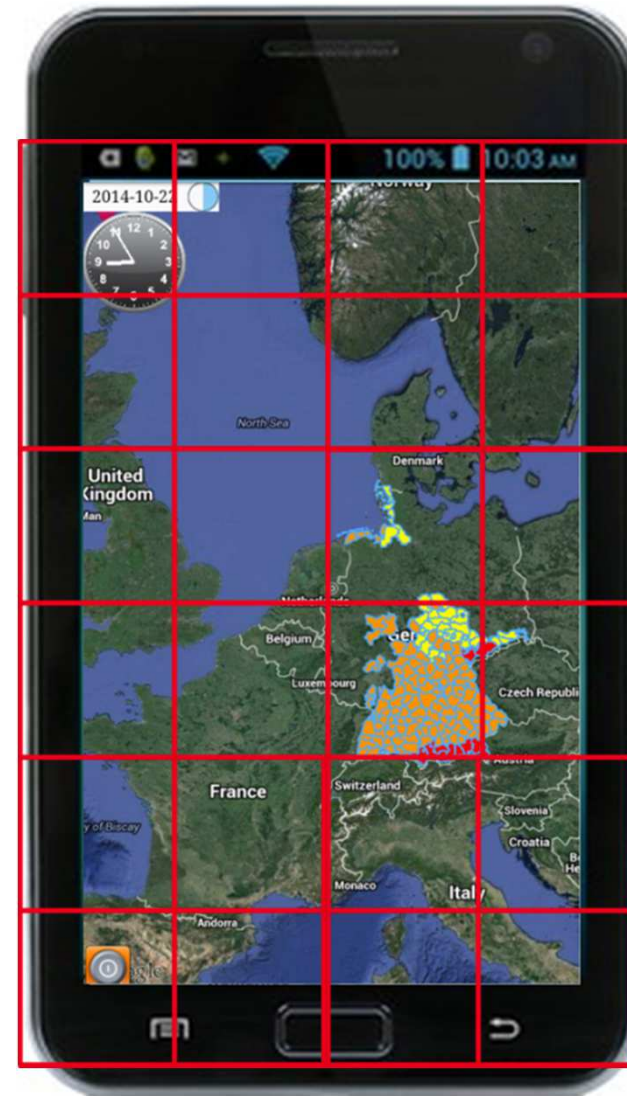


Technical design

- ➔ 256 x 256 tiles
- ➔ 1 map = n tiles
- ➔ 1 tile = 1 WMS request

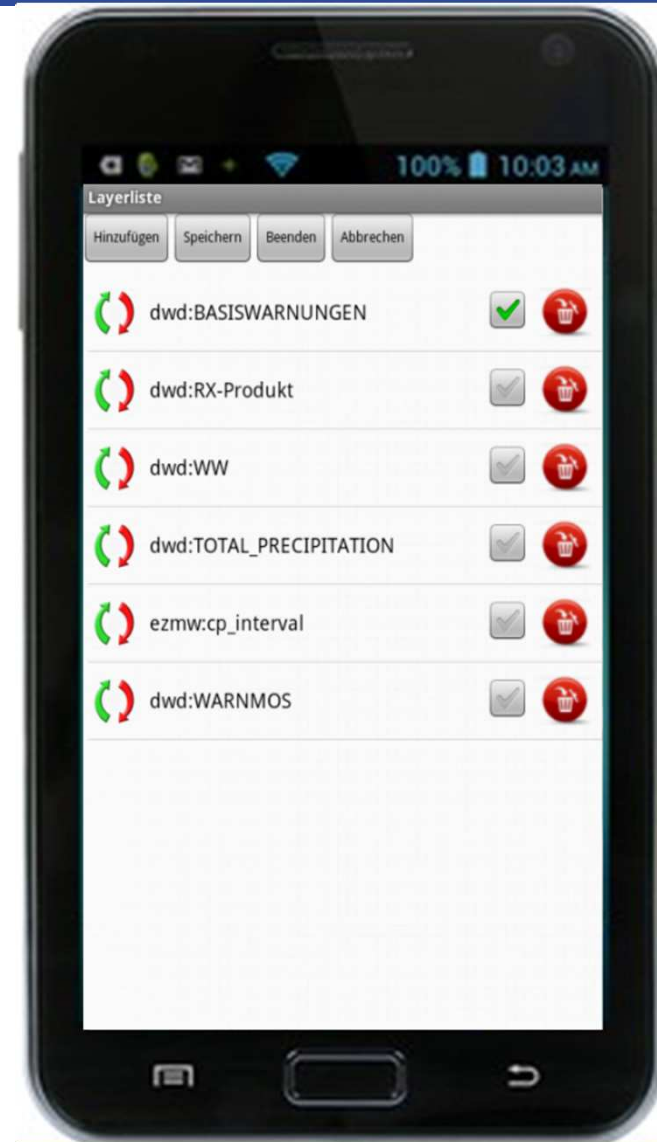
Bitmap table:

| column | type |
|------------------|------|
| * layernames | text |
| * tile_key | text |
| * time | text |
| * elevation | text |
| * reference_time | text |
| image | blob |



The layer management

- List of selected layers
- Activate / deactivate
- Move up / down
- Stored in a file on SD card



Feature information

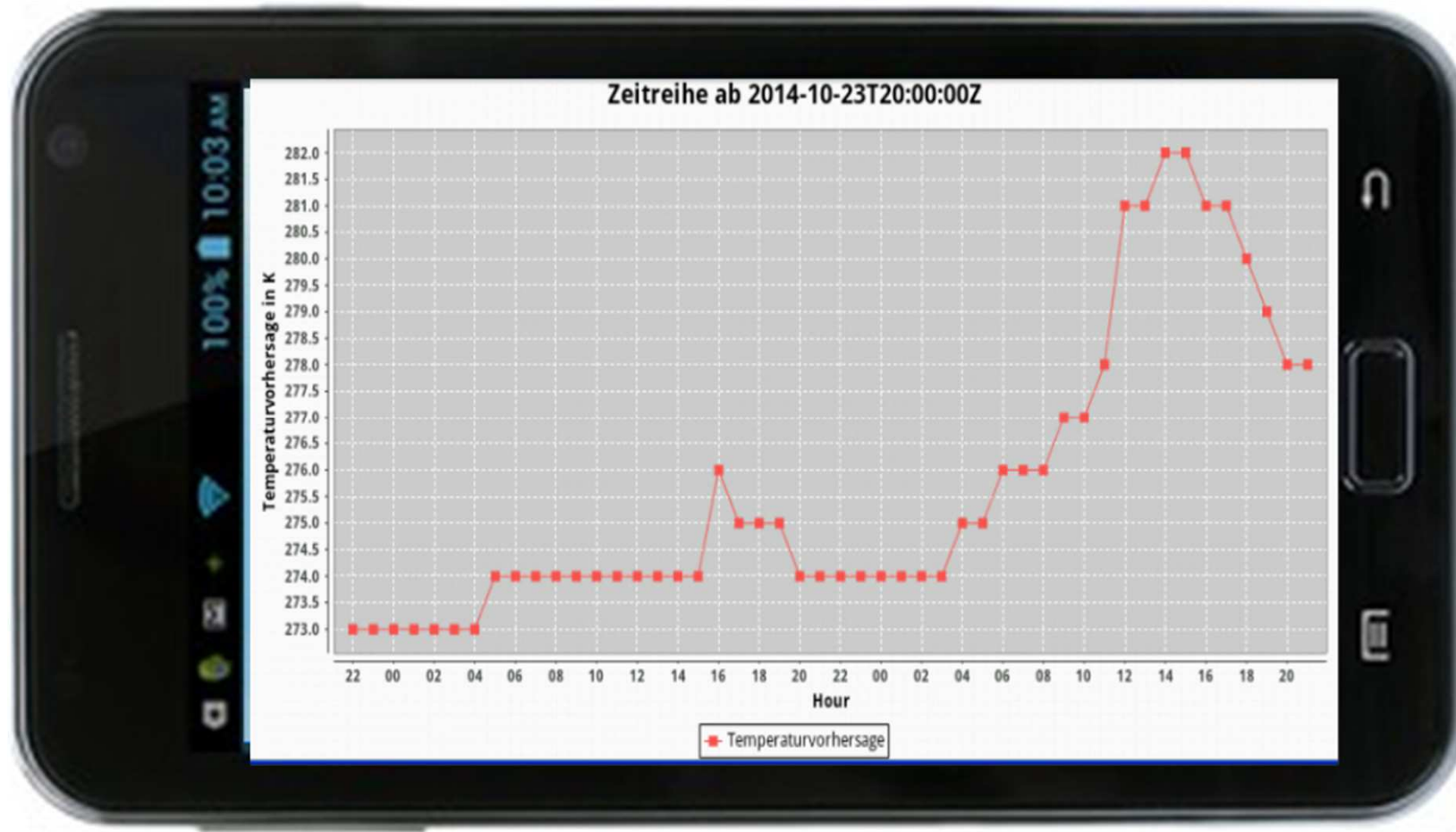
- Use of a position marker
- Plugins for specific feature types
 - CAP-Warnings
 - Timeseries
 - Bar diagrams for Model Output Statistics
- Plugin for an hourly weather forecast provides weather (WW code), temperature, precipitation and wind



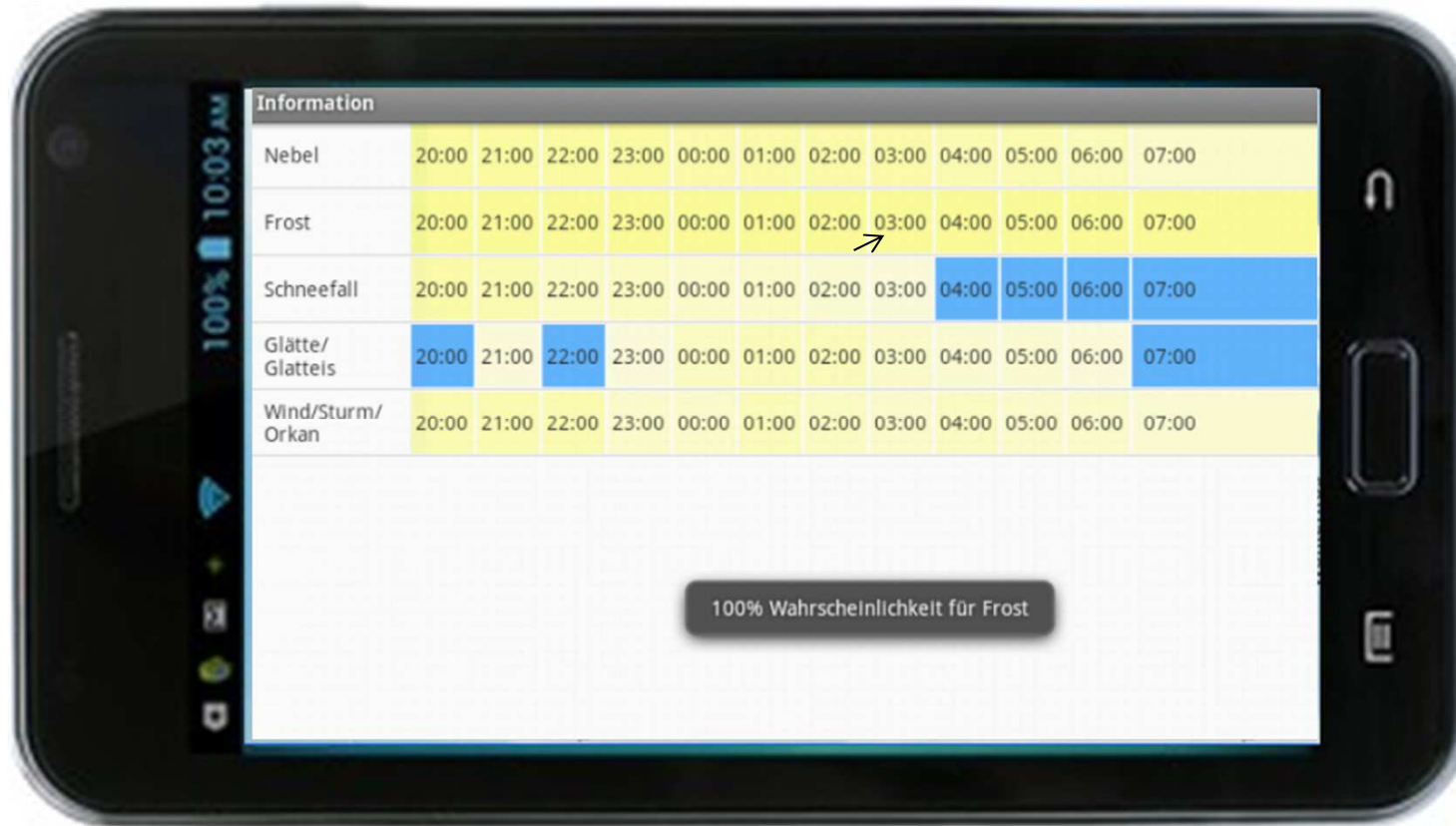
Feature information – CAP Warnings



Feature information - Timeseries



Feature information – model output statistics



Next steps

- upgrade to Google Maps Api V2
- Revise the documentation of the source code
- Publish the software on GitHub
(<https://github.com/OGCMetOceanDWG>)
- Make it multi-lingual
- Look for volunteers who want to participate on future development



Questions?