

Tameus  
Project meeting  
Friday July 15, 2011, 10:00 - 17:00  
Minutes

Participants: Böhlen, Bracher, Cafagna, Taliun

# Agenda

- 10:00 - 10:30 TODO's from 27.4.2011
- 10:30 - 11:00 Student Projects.
- 11:00 - 11:30 Online Version of Temporal Feed Database.
- 11:30 - 12:30 Project Administration and Planning.
- 12:30 - 13:30 Lunch.
- 13:30 - 14:00 Meeting on the Feed List. Participants: Bracher, Cafagna and Taliun.
- 14:00 - 15:30 Meeting Bracher and Cafagna (Parsimonious Aggregation).
- 15:30 - 16:30 Meeting Bracher and Taliun (Data Analyses and Clustering).

# TODO's from 27.4.2011

- May 10, 2011: meeting Posieux, data exchange
  - done; Cafagna, Zoppi; exchange of data works well
- Integration of temporal and geographical information
  - done; Cafagna demoed first version at Nutri11 in Posieux;  
[http://www.feed-alp.admin.ch/Prototype\\_with\\_Maps\\_Graphs](http://www.feed-alp.admin.ch/Prototype_with_Maps_Graphs)
- June, 2011: start of BSc thesis of Hannes Tresch
  - done; work on derived (computed) measures
- June 17, 2011: Nutri11 at Posieux
  - done; Böhlen, Cafagna, Taliun; ifi + ETHZ + Bracher + Boltshauser; project meeting

# TODO's from 27.4.2011

- September 20, 2011: presentation of BSc thesis of Samuele Zoppi [Taliun]
  - open
- January 20, 2012: Workshop with presentation of results [Taliun]
  - open, date was coordinated with Bee and Hinterberger

## Further Activities

- Data exchange: Cafagna got additional geo-temporal data to extend the online application.
  - Different feeds will be soon available: Hey, Grass and Mais.
  - Botanical composition: sparse data.
  - PLZ: to check the correctness of the new data. Could in 2009 half of the samples come from 1070 - Puidoux?
- Meeting on Swiss Hay-data with Marc Boessinger
  - Status: data collection has become less systematic; attractiveness has decreased; incentives to analyze/report hay samples
  - Bracher is checking and finalizing the permissions to put data online

# Student Project: GeoTemporalDatabase

## ■ Kristin Kruse

- Facharbeit, 12CP, Title: *Development of a Database System based on geographical information.*
- Start: 1.5.2011; End: 31.8.2011
- <http://www.ifi.uzh.ch/dbtg/teaching/theses/geoSFDW.pdf>
- Software: the goal is to query the Data Warehouse based on geographical parameters and to show the provenance of the data using a graphic tool (i.e. Google Maps).
- Supervisor: Cafagna
- Status: Approaching to the end.
- Bracher gets positive feedback about web application

## ■ Hannes Tresch

- BSc thesis, 17CP, Title: *Derived nutrient parameters*
- Start: June 2011; End: 30.11.2011



[http://www.ifi.uzh.ch/dbtg/teaching/theses/derived\\_measur](http://www.ifi.uzh.ch/dbtg/teaching/theses/derived_measur)

- Software: goal is to build a feed data warehouse with automatically derived nutrient measurements
- Supervisor: Cafagna
- Status: on going. All the views have been created. The next milestone will be implementing the formulas in such a way to provide data all over time.
- Starting from the Lims-Files' nutrients, which calculated parameters are need?

# BSc Thesis: Computation of Up-to-Date Summaries

## ■ Samuele Zoppi

- BSc thesis, 17CP, Title: *Up-to-date summaries*
- Start: 16.3.2011; End: 16.9.2011
- <http://www.ifi.uzh.ch/dbtg/fileadmin/storage/classes/feed>
- Software: the goal to compute of up-to-date summaries in temporal feed database;
- Supervisor: Taliun
- Status:
  - Closed: temporal database and data export, problem definition, definition of up-to-date-summaries, design of the solution, java prototype of the algorithm.
  - Open: integration into the online database, analytical or experimental evaluation, presentation of the results.



# New Student Projects

- Amino Profiles Visual Analysis and Comparison
  - supervisor: Taliun
  - outcome: an application for outliers detection
  - TODO's: preparation of the description
    - Bracher provides all existing data about amino profiles,
    - Taliun prepares first description.
- Data Quality Analyses in the Feed Database
  - supervisor: Taliun
  - outcome: an application for detection of the worst measured feed types
  - TODO's: Taliun prepares the draft description
- Statistical Information in Geo-Temporal Data
  - supervisor: open
  - outcome: enriched graphical application for data visualization
- Pentaho business intelligence solution
  - supervisor: open
  - outcome: monitoring of the feed database

# Online Version of Temporal Feed Database

- Migration from current FMDB at <http://www.feed-alp.admin.ch> to new TFMDB at [http://www.feed-alp.admin.ch/Prototype\\_with\\_Maps\\_Graphs](http://www.feed-alp.admin.ch/Prototype_with_Maps_Graphs)
- TODO's:
  - enrich TFMDB with animal species profiling, formulas to compute energy content values and feed types. Status: Bracher is working on the formulas.
  - develop two user interfaces for advanced (with temporal information) and normal users (without temporal information). Status: open.
  - change the domain into [www.feedbase.ch](http://www.feedbase.ch). Status: Bracher is contacting the authorities.
  - include logos of UZH and SNF into the main banner. Status: assigned to Taliun.
  - launch time: will be discussed at the next meeting.

# Project Administration

- Project period was adjusted to 1.9.2011 until 31.8.2014
- Contract: ongoing; first draft exists and has been exchanged; Böhlen and Boltshauser
- Non-disclosure agreement shall be signed by all students who get data; draft from unitectra
- Advertisement: Boltshauser is working on plan; add advertisement possibilities/examples to the online TFDBM

# Tameus Web Page

- <http://www.ifi.uzh.ch/dbtg/research/sfdb.html>
- The web page shall list past and planned activities and results, and provide all the information that is necessary for implementation and development:
- acknowledge SNF support on FMDB web page
- add overview (table of contents) for student projects
- add final project of Widmer
- add MSc thesis of Scheuner
- update wish list

# Parsimonious Aggregation

- LPTA (Linear Parsimonious Temporal Aggregation)
- The idea: Approximating with linear rather than with constant functions could reduce the approximation error?
- Status: Implementing.

# Data Analysis and Clustering

- Goal: identification and separation of overlapping clusters in time varying data,
- Status: solution is described, evaluated and tested in PhD thesis of Taliun,
- Open: real world application example,
- Submission: Oct. 6, 2011 EDBT or PVLD in 2011

# Plan for Meetings

- FR 19.8 10-17, ifi uzh
- FR 16.9 10-17, ifi uzh
- FR 21.10 10-17, ALP Posieux
- FR 18.11 10-17, ifi uzh
- FR 16.12 10-17, ifi uzh
- FR 20.1 10-17, ifi uzh, 1st Tameus workshop
- FR 17.2, 10-17, ALP Posieux

# Plan for Publications

- Fall 2011: paper about TFDW [Cafagna]
  - ongoing; work on parsimonious aggregation
- Fall 2011: paper about separation of overlapping clustering [Taliun]
- 2012: joint publication about up-to-date summary computation lead by Taliun



# TODO's

- Cafagna: geo application, enhancing TFMDB with new data
- Böhlen: non-disclosure agreement for the students; contract
- Bracher: data about profiling, formula and feed types; domain name; permission to put data online
- Taliun: description of new student projects, new logos, agenda for the next meeting
- Aug 26, 2011: presentation of BSc thesis of Samuele Zoppi [Taliun]
- Sep 6, 2011: presentation of internship (feed database with geographical information) of Kristin Kruse [Cafagna]
- Sep 2011: presentation of new version FMDB at Agroscope [Annelies]
- January 20, 2012: Workshop with presentation of results [Taliun]