D1.1: Published data

A partial list of data sets already published by C4DM has been produced by analysing the publications produced by the researchers in the group, and by looking at the group's official data output on the web (isophonics.net).
To limit the scope of the data assets analysis, we focused on the most recent publications (2009-2011).

This preliminary publications and data survey has been used to identify those researchers in the group that are most involved in the production and distribution of research data. In the following weeks, these researchers will be interviewed to get a better understanding of the kind of data produced within the group, as well as data storage and publication common practices.

Published dataset

Annotations (ground truth data)

http://isophonics.net/content/reference-annotations

The annotations published here fall into four categories: chords, keys, structural segmentations, and beats/bars. Annotations are available for songs by The Beatles, Queen, Carole King, and Zweieck. The data sets are hosted on the isophonics.net web server. Annotations are published in two formats: plain text and RDF (Resource Description Framework). In the RDF format, metadata regarding the artist, title, CD number, is provided based on the music ontology standard. The plain text only contains labels. References to the original audio sources are also provided on the isophonics website.
Reference paper: Mauch, M. et al. (2009), OMRAS2 Metadata Project 2009, Late-breaking session at the 10th International Conference on Music Information Retrieval, Kobe, Japan

Chord and key data (automatically extracted)

http://chordtranscriptions.net/index.php?sub=cdata

Chords and keys are annotated automatically using the std-0.6 algorithm and published in plain text format (.lab, can be opened with SonicVisualizer). The files do not contain any metadata information. 210 songs used in the 2009 MIREX Chord Detection Task, mainly rock and pop music, are annotated. The data sets are hosted on the chordtranscriptions.net web server.
Reference paper: Mauch, M. and Dixon, S. (2010), Approximate Note Transcription for the Improved Identification of Difficult Chords, to appear in the Proceedings of the 11th International Society for Music Information Retrieval Conference (ISMIR 2010)

Room Impulse Response Data Set

http://isophonics.net/content/room-impulse-response-data-set

This collection of room impulse responses was measured in the Great Hall, the Octagon, and a classroom at the Mile End campus of Queen Mary, University of London in 2008. Each IR is a 96 kHz, 32 bit wav file. These IRs are released under the Creative Commons Attribution-Noncommercial-Share-Alike license. Data sets are stored on http://kakapo.dcs.qmul.ac.uk/irs/. For each room, a zip file containing a read me.txt, a plan of the room, and some photos is also available from the same address.
Reference paper: Stewart, R. and Sandler, M. (2010). "Database of Omnidirectional and B-Format Impulse Responses", in Proc. of IEEE Int. Conf. on Acoustics, Speech, and Signal Processing (ICASSP 2010), Dallas, Texas, March 2010.

dbtune.org

DBTune hosts a number of servers, providing access to music-related structured data, in a Linked Data fashion. It now provides access to more than 14 billion RDF triples. All the services hosted here are based on open Web standards such as RDF and SPARQL. This is part of the OMRAS2 project (omras2.org). It contains only metadata.

Real Book transcriptions

www.omras2.org

Automatically extracted from Band In A Box files (http://www.pgmusic.com/), and converted to cleartext/RDF after some modification. Originally created by users of the BIAB software and retrieved from the internet.

Dynamically produced data
http://www.isophonics.net/content/sonic-annotator-web-application

Beatboxing dataset (Dan Stowell)

http://www.archive.org/details/beatboxset1

Used for onset detection and onset classification. Contains audio (collected online and self-recorded) + manual annotations (made by two interns). Published on the internet archive (archives.org) + on C4DM, with CC license.

Birdsongs recordings (Dan Stowell)

http://www.archive.org/details/swbirdsong

Some field recordings containing plenty of birdsong as well as other urban sounds. On archives.org + C4DM_datasets, CC license.

dsmushradata09

http://www.archive.org/details/dsmushradata09

Audio and data files relating to a perceptual experiment conducted in November 2009, Dan Stowell; On archives.org, example of data attached to a publication.

MIREX Multi-F0 Development Set (E. Benetos)

Wav + MIDI. It is available online after requesting credentials from mertbay@uiuc.edu and can be downloaded from: http://www.music-ir.org/evaluation/MIREX/data/2007/multiF0/index.htm No copyrights since these are purpose-made recordings and MIDI files.
Reference papers:
[1] E. Benetos and S. Dixon, "Joint multi-pitch detection using harmonic envelope estimation for polyphonic music transcription", IEEE J. Selected Topics in Signal Processing, vol. 5, no. 6, pp. 1111-1123, Oct. 2011. [2]
E. Benetos and S. Dixon, "Multiple-instrument polyphonic music transcription using a convolutive probabilistic model", in Proc. 8th Sound and Music Computing Conf., pp. 19-24, Jul. 2011.