SysSon: A Sonification platform for Climate Data

Climate data provide a good working basis for sonifications. Both model data and measured data are assessed in collaboration with the Wegener Center for Climate and Global Change. The multi dimensionality and multi variety of climate data has a great potential for auditory displays. Furthermore, there is consensus on global climate change and the necessity of intensified climate research today in the scientific community and general public. Sonification provides a new means to communicate scientific results and inform a wider audience.

SysSon is a user centered auditory platform for climate scientists to analyze data. It gives scientists broader insights by extracting hidden patterns and features from data that is not possible using a single modal visual interface. The platform is an interactive sonification tool which gives the scientists the choice of interacting with the user interface and adjusting the sonification designs and sounds dynamically while analyzing data. There's also a variety of soundscapes to chose from to avoid the fatigue by listening to the long streams of data. The initial needs assessments and user tests made the work process and the terminology of climate scientists clear. Furthermore, experiments evaluated the sound design which led to a more advanced soundscape and improvement of the auditory display.