What I'd like to do instead is submit the other project I was considering. I can write it up into a full proposal in the next week (or sooner if time is tight, but it sounded like it wasn't). I wanted to go ahead and send an informal synopsis, though, and see what you think. I'd really love to get your feedback on it.

[A number of links in the next two paragraphs -- don't feel any need to follow them all, but they provides some more background if you want it.]

I spent several months last year writing open-source [software](https://github.com/eggsyntax/sonify" \t "_blank) that turns arbitrary time-series data into audio. I used the software for several projects, one of which was to take US temperature data from six climate stations and convert it into a piece of music which provided a direct representation of temperature at each of six climate stations (as well as soil temperature and solar radiation). I used a year's worth of data from the [Climate Reference Network](https://www.ncdc.noaa.gov/crn/" \t "_blank), which is the group I worked with at NCDC. The music itself was heavily influenced by American minimalist composers like Steve Reich and Philip Glass.

You can hear the original version of that [here](http://www.tinpanalgorithm.com/workinprogress/CRN1.mp3" \t "_blank), and a slower version that I used for the opening celebration of Jimmy O'Neal's cymatics-based mural at the end of Carolina Lane [here](http://egg.homelinux.org/tinpanalgorithm/workinprogress/CrnDanceExtendedAmbient2.mp3" \t "_blank). There's some discussion of the process on my work-in-progress [blog](http://tinpanalgorithm.tumblr.com/" \t "_blank) (this [entry](http://tinpanalgorithm.tumblr.com/post/54483113147/crn-output" \t "_blank) talks particularly about the climate data piece).

What I'd like to do for Moogfest is to do a similar piece that uses global temperature data over the last fifty years or so, and compresses it into 30 minutes worth of audio, so that if you spend a little while with the piece, you can actually hear global warming happening. Once the piece catches up with the present day, it starts again at the beginning.

The visual component is as follows: a translucent plastic globe (maybe 4 feet in diameter) with a stylized outline of the continents on it. LED lights inside shift over the course of the piece, so that the colors on the surface of the globe are representing temperature (shifting from blue for cold to red for warm, which is the standard climatology representation). The sphere would be firmly mounted on a plinth (probably metal; imagine something about the size and shape of a small filing cabinet), which would contain the hardware: a computer, two speakers, and a controller for the LED lights).

The primary goal of the piece is to take climate change, a really abstract process that affects everyone, and make it a visceral sensory experience, in the hope of making it more emotionally real to people. For me, it's also part of a long-term interest in process-based music and particularly sonification (which I notice is a subject being addressed by some of the speakers at Moogfest as well). It attempts to take a somewhat novel approach to the long history of turning data into music that's actually interesting, which I discuss a bit [here](http://tinpanalgorithm.tumblr.com/post/49482713136/sonify" \t "_blank). It's also my first major foray into taking the custom tools I use to make music and making them freely available to everyone (although I haven't really taken steps yet to bring it to the attention of the sonification community).

It's important to me both that the music be a direct representation of a physical process, and that it be actually enjoyable as a piece of music (which is where a lot of sonification work falls short, in my opinion).

There are several parameters of the piece that I'm still considering, and which are open to discussion:

- Size of the plastic sphere (3 feet? 6 feet? Smaller is more manageable, of course, and I'm trying to balance that against a bigger sphere being more visually striking).

- Length of data span (30-100 years. Longer is better, in some ways, because it makes the process clearer, but reliable data gets sparser as you move backward in time)

- Length of piece (30 minutes seems about optimal in terms of audience attention. In some ways it's really tempting to make it last all day, so people can go back from time to time and check it out, but I think it's a higher priority for me to make it short enough that someone can stay through the whole thing if they want).

- Visual representation: this is really dependent on what I can pull off in the limited time span I've got. Ideally I'd want a light projected from the inside for each separate station that you're hearing (probably 6-10, spread across the planet), and have that light change as the temperature at that station changes. The much less ambitious version is to have a single light that illuminates the whole globe, which changes along with global average temperature. It'll depend on whether I find a collaborator with enough experience with computer-controlled lighting to help me with the more ambitious version.

- It'd also be really nice to have simple LED displays (like [this](http://ecx.images-amazon.com/images/I/411Y0nFyZyL._SY450_.jpg" \t "_blank)) on two sides of the plinth, showing the year (or month and year) that you're currently hearing/seeing. That may need to be an optional component, again depending on what I can pull off in the available timeframe.

Of course it'd be easy to do all of it in that amount of time -- but I've got to keep working at my job at the same time, and I've got a few other commitments that can't be put off. I've already written the tools that make the audio, and I've got lots of experience working with climate data, so I can accomplish that part of it in plenty of time. The only question is how ambitious I can manage to be with the visual representation.

Let me know what you think, both in terms of whether you think the fire marshal will be OK with it, and whether you think it's a proposal worth submitting.