HERE SPACE

A CONCEPTUAL SONIC APPLICATION

INSPIRATION

Here:Space is a data pattern analysis tool & conceptual art project that uses real time/near real ISS Telemetry data to create unique, generative aural landscapes.

Based on idea that pattern recognition is significantly different when data is interpreted aurally versus visually or textually, the translation of numerical data into sound opens up an exciting opportunity for novel engagement with a data set.

http://listen.hatnote.com/

http://www.bitlisten.com/

TECHNOLOGY

ISS TELEMETRY DATA - LONGITUDE / LATITUDE
pulled in real-time via OPEN-NOTIFY.ORG API

INPUT

ANGULAR
BOOTSTRAP
HTML5

BUILT ON

CHROMA.JS
AUDIOSYNTH.JS

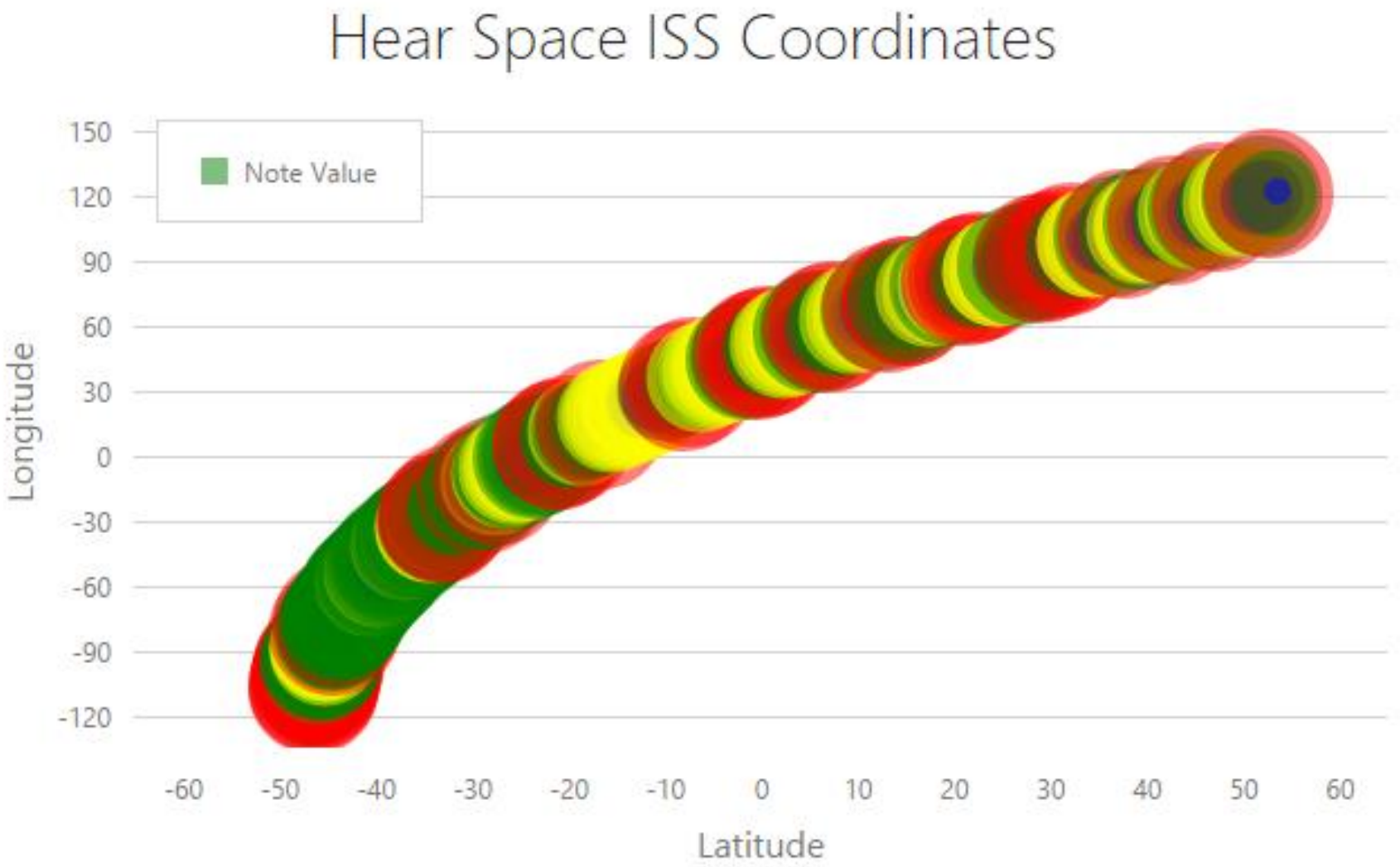
TRANSLATED BY

AUDIO.1

1) Receive longitude/latitude telemetry data from ISS API
2) Round longitude to first decimal place and parse as integer
3) Match resulting integer to a corresponding preset note within the C chromatic scale
4) Round longitude to second decimal place and parse as integer
5) Match resulting integer to one of four preset octaves
6) Generate tone according to currently selected MIDI instrument
7) Repeat

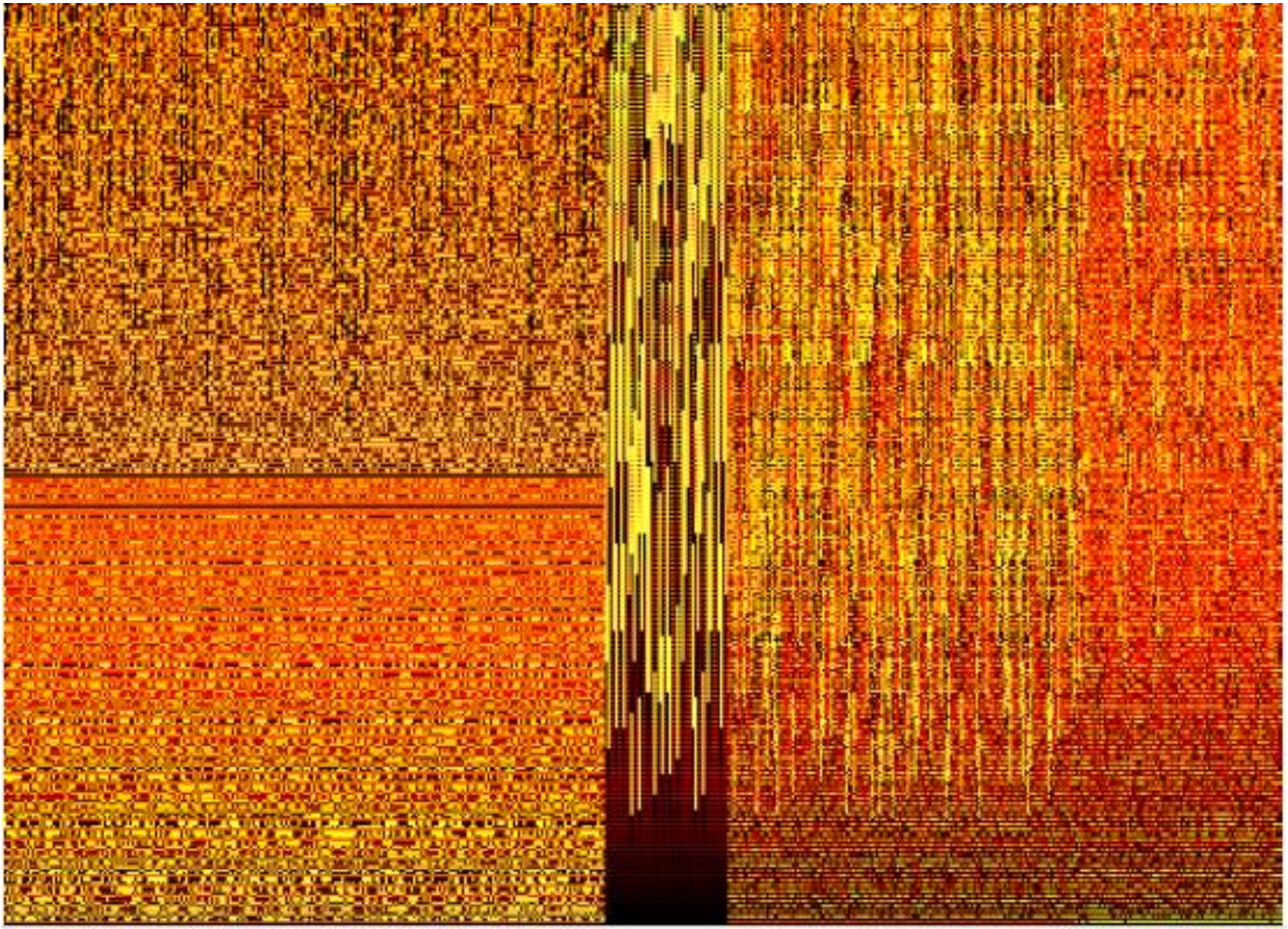
VISUAL.1

1) Receive longitude/latitude telemetry data from ISS API
2) Round longitude to first decimal place and parse as integer
3) Multiply resulting integer by five to determine circle size
4) Match new resulting integer with one of five preset colours
5) Plot circle on graph using longitude/latitude as X/Y postions
6) Repeat


Hear Space ISS Coordinates
Note Value
150
120
90
60
30
0
-30
-60
-90
-120
Longitude
-60
-50
-40
-30
-20
-10
0
10
20
30
40
50
60
Latitude

VISUAL.2

1) …
2) Numerical array representing the frequency spectrum of one tone is generated by audiosynth.js
3) Resulting array values are mapped to preset colours based on intensity level at each frequency across the spectrum
4) “Frequency color” is plotted as a one pixel wide image
5) Repeat



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HERE SPACE

HTTP://ZHENYAM.COM/