machines to end the real

electronic and digital arts exhibition cycle
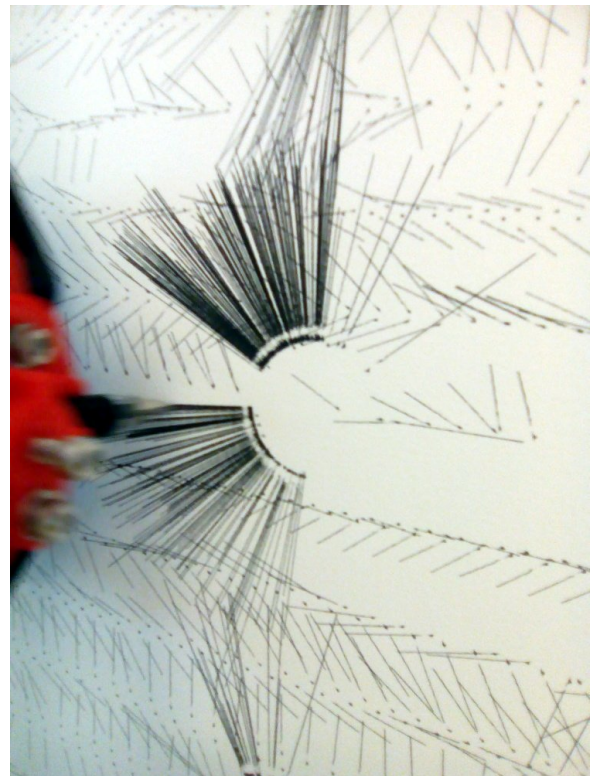
8-bit Solar Wind Machine

André Sier
1 > 7 July

The solar star, our planet's source of life and heat, is also deadly and a source of destruction. In a delicate balance, luminous waves charged with particles of lethal energies pierce the outer space of the solar system at dazzling speeds to found the energetic chain that allows all organic life to exist on our planet Earth, but not before they are shielded and filtered by the Earth's atmosphere, partially removing the dangerous cargo they carry. The solar wind that originates in the chaosmos of the explosive effervescence of the solar surface in almost eternal combustion carries an uninterrupted flow of plasma composed of electrons, protons and alpha particles of very high thermal energies. The solar wind fills the entire heliosphere in eddies of ever-changing flows, dancing irregular and unpredictable patterns that carry the whole source of life through the space in chaotic forms.

8-bit Solar Wind Machine is a piece made in audio-visual code and daily abstract drawings that are born in the violent encounter of the swirls, simultaneously deadly and life-generating, of the solar winds with the atmosphere of our planet. Through the analysis and visualization of the data obtained by geostationary satellites in the orbit of the planet, a program was created that perspectives the impact of the solar winds on Earth. The 8-bit Solar Wind Machine program paints, sonifies, and creates drawings which represent the velocities and angles of solar wind radiation as they enter the planet's atmosphere. The drawings are made daily, and each drawing has 24 horizontal lines, corresponding to the 24h of each day, where you can observe the intensities and fluctuations of the spherical phi and theta angles as well as the instantaneous velocities of the solar winds as it strikes our atmosphere. There are also one, two, or four center circles that accumulate data from the corresponding daily sections to form planetoids under the auspices of solar violence. The sound that the program generates is continuous and is obtained by transcribing the data to frequencies and volumes of sinusoidal waves. The final precision of the obtained data is reduced to a range of 8-bits, capable of 256 different values, similar to the plasma filtration of the solar winds through the atmosphere. The drawings are mechanically realized with a ballpoint pen on a plotter and are evidence of the daily oscillation to which we are subject, between turbulence and tranquility, under the sun.

André Sier is an artistic engineer with training in sciences, painting, sculpture, music and a degree in philosophy. In the past 20 years has produced works in code, 3D, video, sound, electronics, drawing, sculpture, videogames, shown at over 25 individual national and international exhibitions. Through algorithmical structures and custom human interfaces, he creates objects and serial interactive work which seeks to playfully unravel time and space relations, as well as to propose a seamless infinite virtual imaginary cosmogony synthesized on electronic substrates which could rival reality. Awarded artist at Jovens Criadores (2006), Bienal de Cerveira (2009), three times at Lisbon Maker Faire (2014,15,16), Sier is regular teacher of electronic arts since 2002, currently invited auxiliar professor at Évora University, and pursuing PhD at Planetary Collegium. Has a portfolio at http://andre-sier.com.

MACHINES TO END THE REAL is a cycle of individual exhibitions in electronic and digital arts from artists to whom the computer and other machines are essential tools in their work process of artistic artifacts production.

square waves gallery
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openings saturdays at 19h.
meeting-workshop with the artist at 18h.
tuesday to sunday 16h-22h

other schedules by appointment > 939806880 > ericeirasquarewaves@gmail.com

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