



Awakening Global Mind

Creative Consciousness In the World

**Universal Awakening Organization Meeting
October 21 2005**

**Roger Nelson
Global Consciousness Project
<http://noosphere.princeton.edu>**

The EGG Project

(aka the Global Consciousness Project)

**The people: An international collaboration
100 Scientists, Artists, Friends, ...
Network of host sites world wide**

**The tools: REG technology, Field applications
Instrumenting an EEG Analog for the earth
An ElectroGaiaGram – the EGG Network**

**The question: Can we capture a faint first
Glimmering of Global Consciousness?**

Historical Background

19th Century, Psychical Research, Experiential

1930's, Parapsychology, Rhine, Experimental

1970's, Electronics, Computers, Technological

Converging Focus

1980, PEAR, Random Event Generator, Intention

1993, FieldREG, Group Consciousness, Resonance

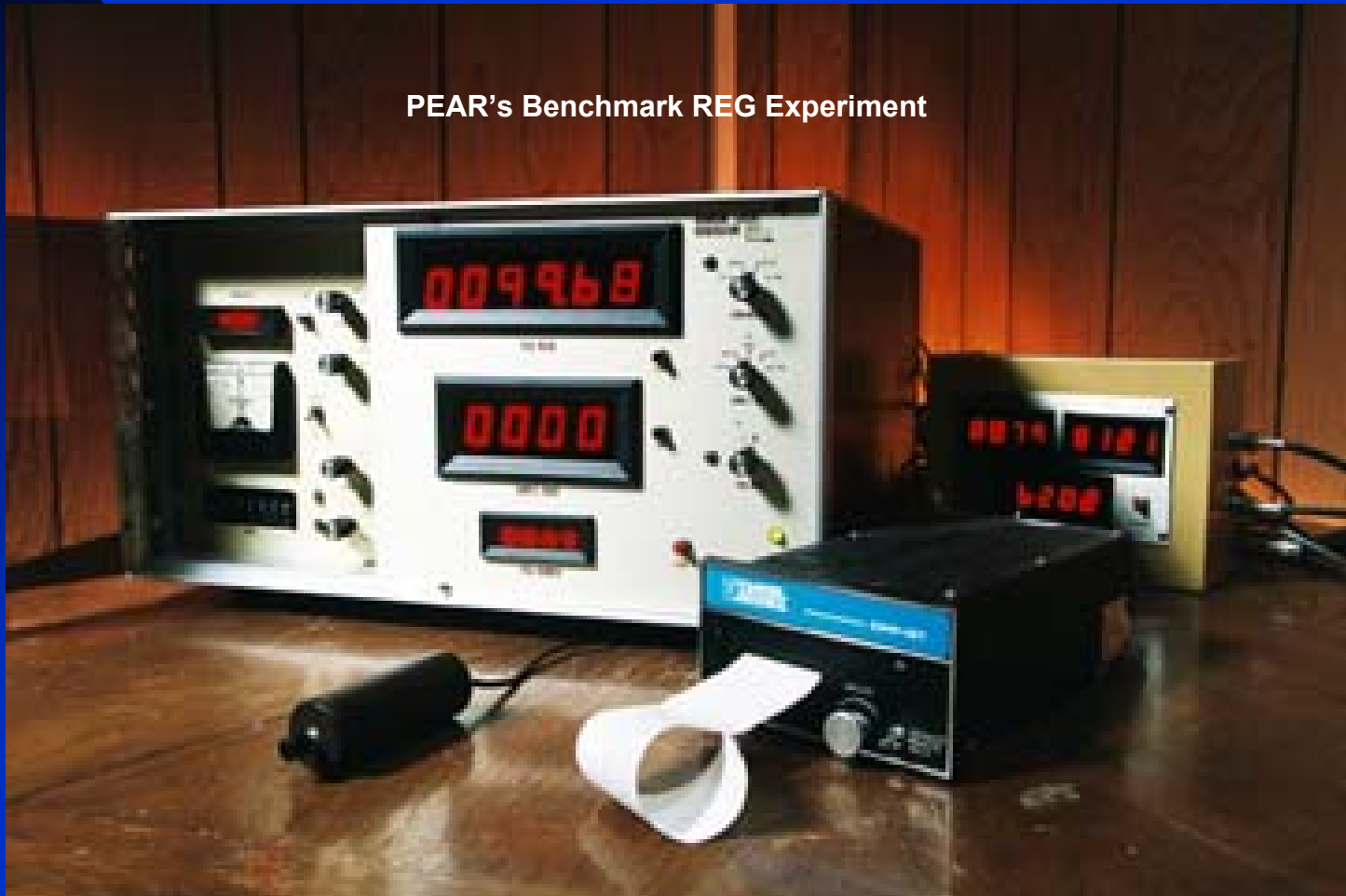
1997, Global Consciousness Project, Engagement

Mind Matter and Machines

Tools for Anomalies Research

PEAR Laboratory, Princeton University

PEAR's Benchmark REG Experiment



We have used many machines All based on Random Sources

Electronic REG/RNG



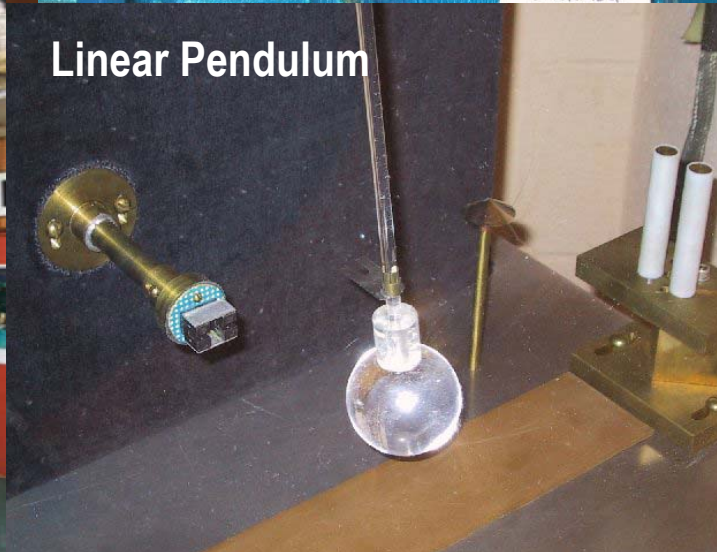
Dual Thermistor



Mechanical Cascade



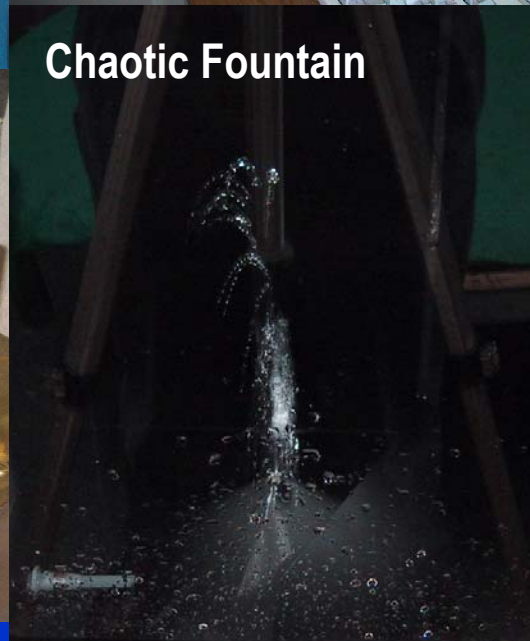
Linear Pendulum



Random Drumbeat



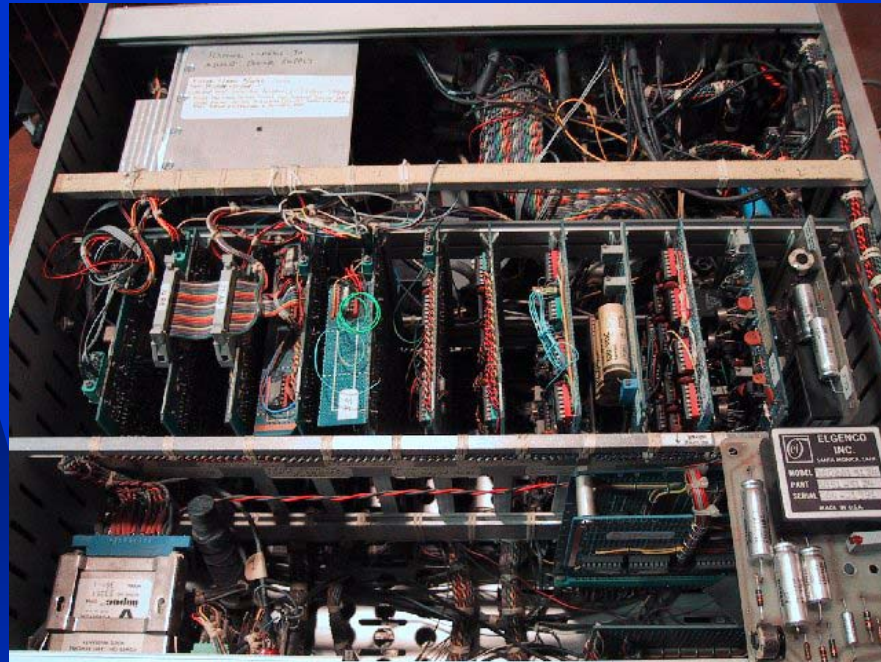
Chaotic Fountain



**Human Version of the Chick Experiment by Pe'och
An Onboard REG Controls the Path
of a Robot (With a Frog Passenger)
Poisson Distributed Rotation and Distance**



The beginning of a viable
Experiment is good design
And careful implementation



*Designing a flawless experiment
is extremely difficult, and carrying
one out is probably impossible.*

-- Jessica Utts, *Seeing Through Statistics*

New Generations of Random Sources

PEAR B-box: Thermal Johnson Noise

Mindsong: Field Effect Transistor



Palmtop Portability



Replications and Extensions

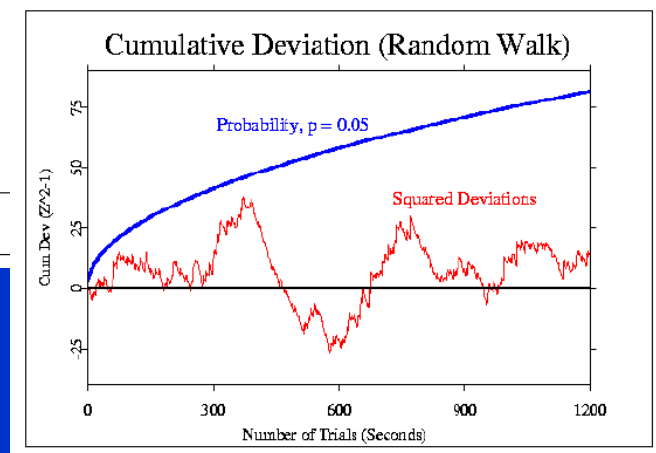
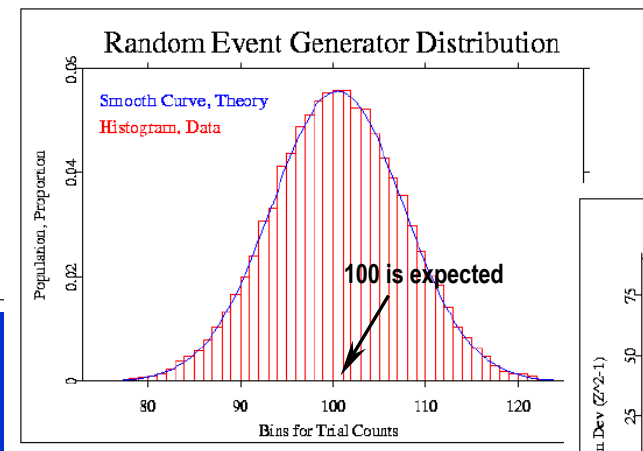
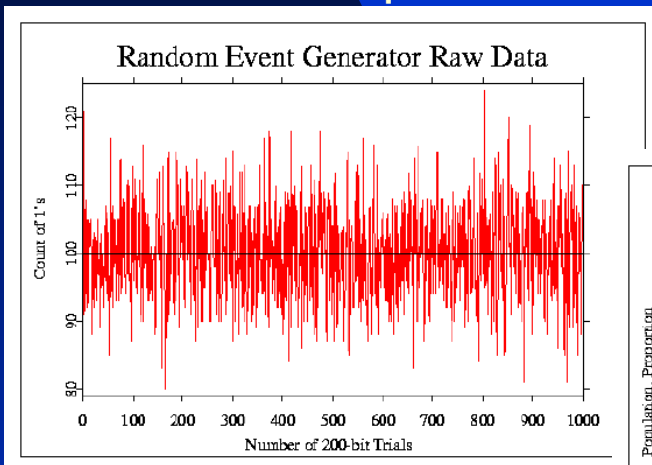
How It Works: Here's 1000 Trials From A Physical Random Source Each Trial Is the Sum of 200 Bits

Trial Scores: 100 ± 7.701
Plotted as a Sequence

Like flipping 200 coins
And counting the heads

Binomial Distribution of Data
Compared to Theoretical Normal

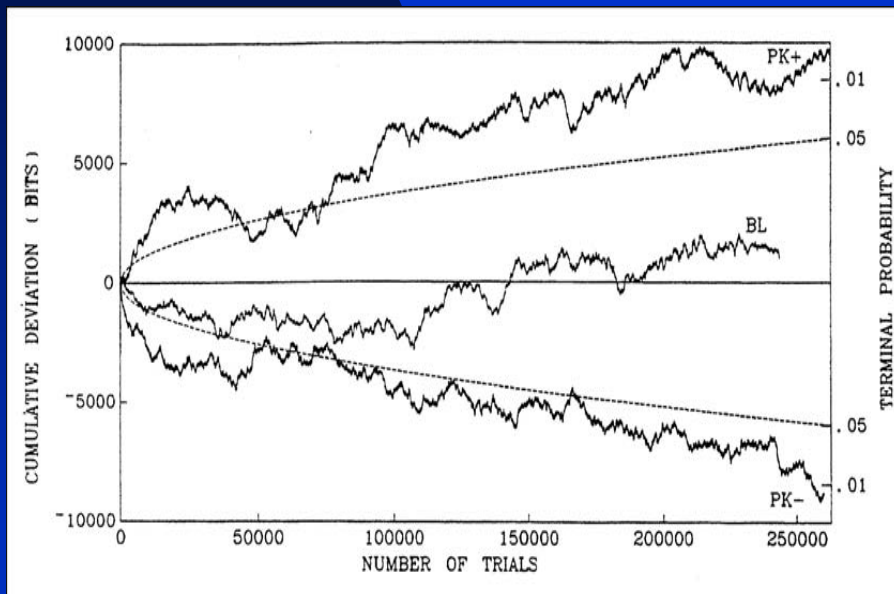
Cum Dev from Expectation
Random ("Drunkard's") Walk



PEAR REG Intention Experiment

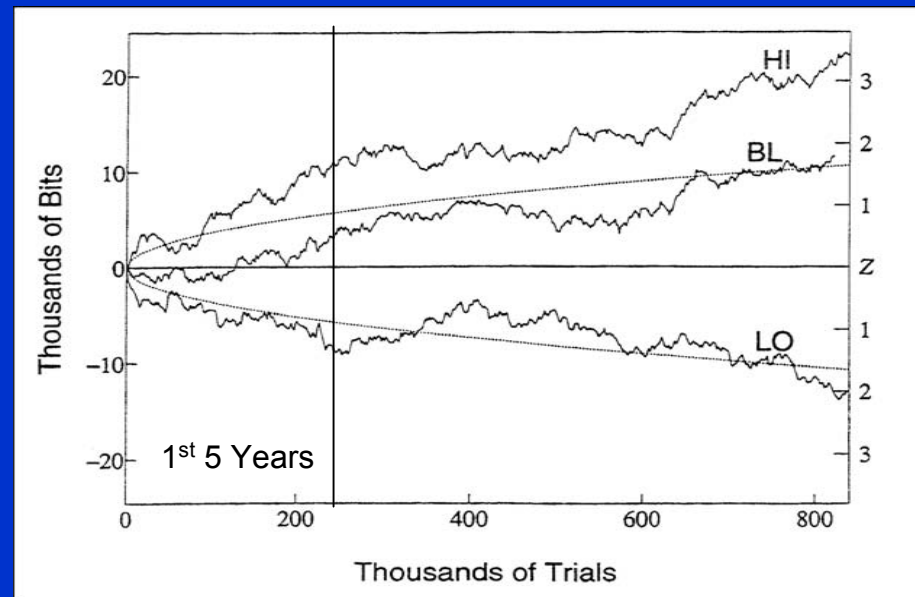
The data are not random, but take on a trend
Deviations correlated with participants' intentions

5 Years, 33 Operators, 87 Series



Expectation is a level trend

12 Years, 522 Series, 91 Operators



Moving Out of the Lab

Field REG Experiments

Take REG technology into the Field

Look for evidence of a Consciousness Field

Concerts, Operas

Churches, Cathedrals

Rituals, Ceremonies

Sacred Spaces, ...

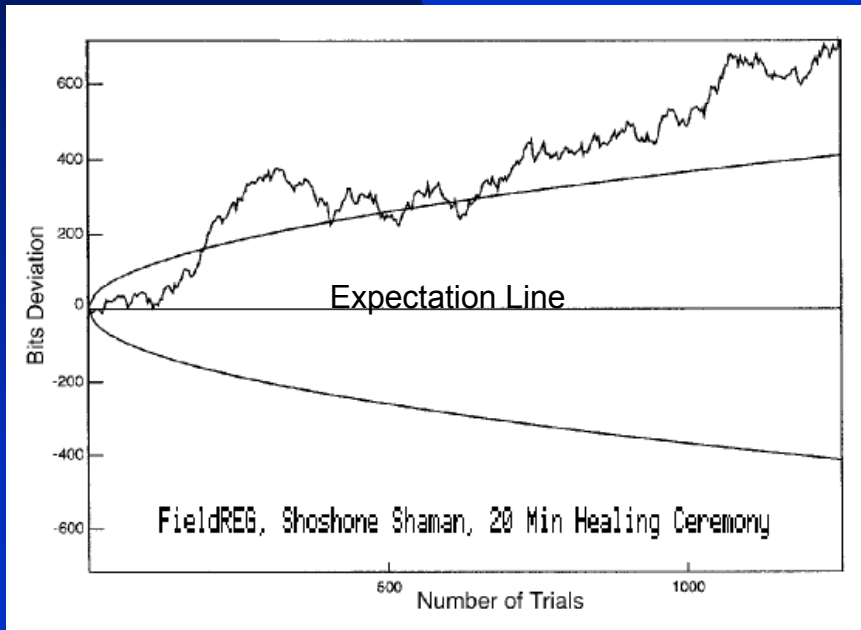
Situations with Resonance or Coherence

And -- Mundane Situations, for Comparison

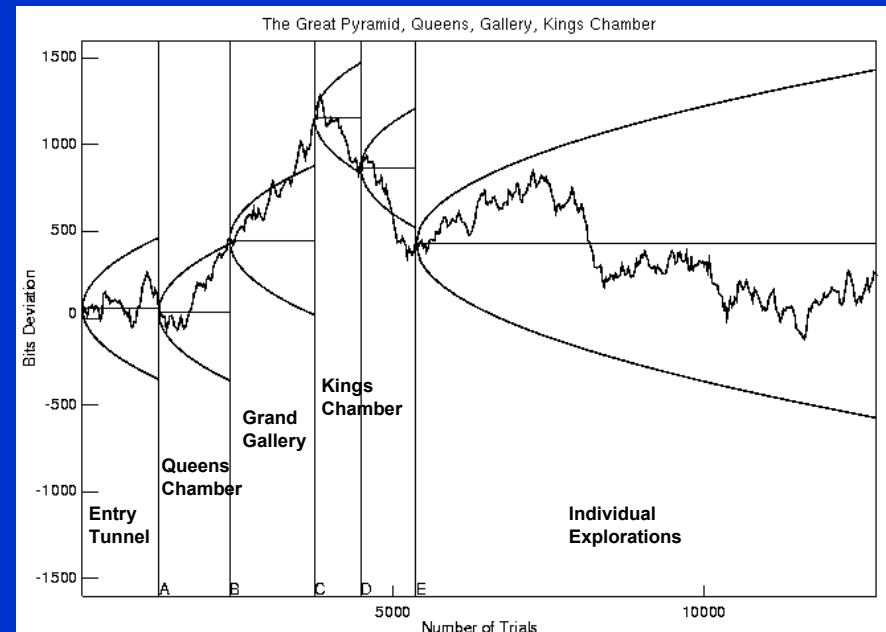
FieldREG Experiments: Deep Engagement, Coherent Group Consciousness and Emotion

Expectation is a level trend

**An Example of a Numinous Event
Shamanic Healing Ritual for Devils Tower**



**Group Chanting in Sacred Space
Great Pyramid at Giza, Inner Chambers**

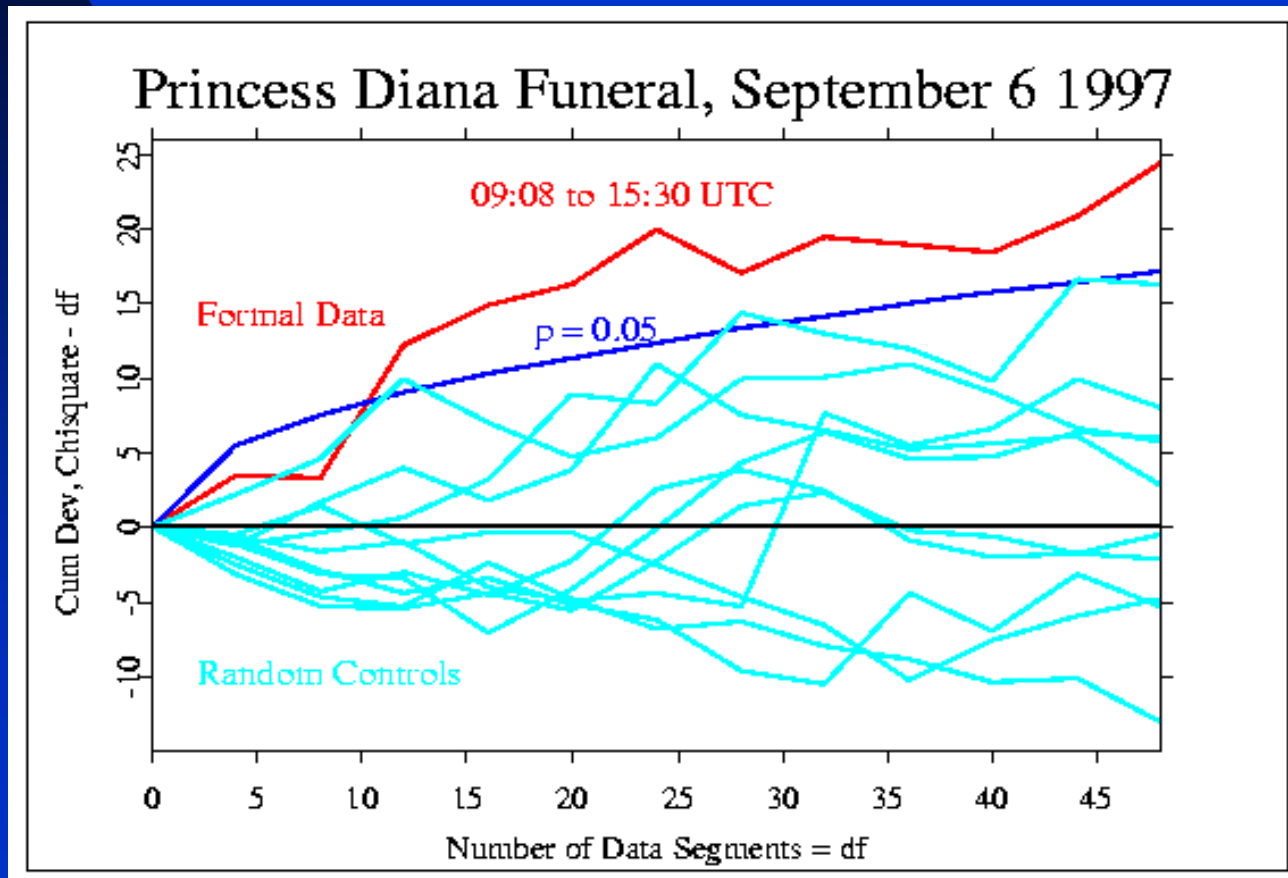


The next step: Multi-REG data recording

Colleagues in Europe and the US

Collected 12 independent data streams

Expectation is level trend



A World Spanning Network

Meaningful Patterns in Data

Yellow dots are nodes in the network



<http://noosphere.princeton.edu>

*When you put a thing in order,
and give it a name,
and you are all in accord,
it becomes.*

-- From the Navajo, *Masked Gods, Waters*, 1950

Freiburg meeting, Parapsychology and Psychophysiology
EEG for the world becomes the EGG network (ElectroGaiaGram)

GCP Homepage


http://noosphere.princeton.edu

Special Link Buttons

- Status →
- Day Sum →
- Results →
- Extract →

Presentation Split into Two Complementary Perspectives

Frame-based Web Design
Rick Berger



Registering Coherence and Resonance in the World

About Procedures Data Access NetStatus Participate

What is the nature of Global Consciousness?

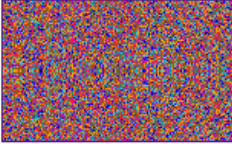
GCP Home

Global Correlations in Random Data



The Global Consciousness Project, also called the EGG Project, is an international and multidisciplinary collaboration of scientists, engineers, artists and others. This website introduces methods and technology and empirical results in one section, and presents interpretations and applications in another.

We have been collecting data from a global network of random event generators since August, 1998. The network has grown to about 65 host sites around the world running custom software that reads the output of physical random number generators and records a 200-bit trial sum once every second, continuously over months and years. The data are transmitted over the internet to a server in Princeton, NJ, USA, where they are archived for later analysis. Individual data create a tapestry of color. The [dot](#) below shows coherence.



The purpose of this project is to examine subtle correlations that appear to reflect the presence and activity of consciousness in the world. The scientific work is careful, but it is at the margins of our understanding. We believe our view may be enriched by a creative and poetic perspective. Here we present various aspects of the project, including some insight into its scientific and philosophical implications.

GCP Home

ON THE LEFT	SCIENTIFIC WORK	AESTHETIC VIEW	ON THE RIGHT
<p>scientifically treated results</p> <p>a study of apparent patterns that should not exist in truly random sequences</p> <p>analysis providing details and context to support building good models</p> <p>an unambiguous picture of data with minimal interpretation</p> <p>the goal is to learn the sources of structure and understand mechanism</p>	<p>introduction</p> <p>random sources</p> <p>egg data archive</p> <p>basic experiment</p> <p>the primary results</p> <p>hypothesis registry</p> <p>normalizing the data</p> <p>standardize the data</p> <p>eventbased analysis</p> <p>analytical extension</p> <p>long trend example</p> <p>models and theory</p> <p>free data access</p> <p>conclusions</p>	<p>introduction</p> <p>a poetic history</p> <p>hatching an egg</p> <p>egg host network</p> <p>weaving a tapestry</p> <p>the realtime display</p> <p>a musical interlude</p> <p>the original website</p> <p>noosphere's status</p> <p>production credits</p> <p>media information</p> <p>how to contribute</p> <p>what you can do</p> <p>implications</p>	<p>poetic interpretation and art</p> <p>a free hand with possibilities touching eye and ear, seeking the heart of the matter</p> <p>aesthetic and spiritual issues that are central to creative cultural evolution</p> <p>the meaning of evident links between events and observers</p> <p>the goal is to see interconnection as real & creative mind as magical</p>

Custom software to record and archive data From physical Random Event Generators (REG or RNG)

Mindsong REG

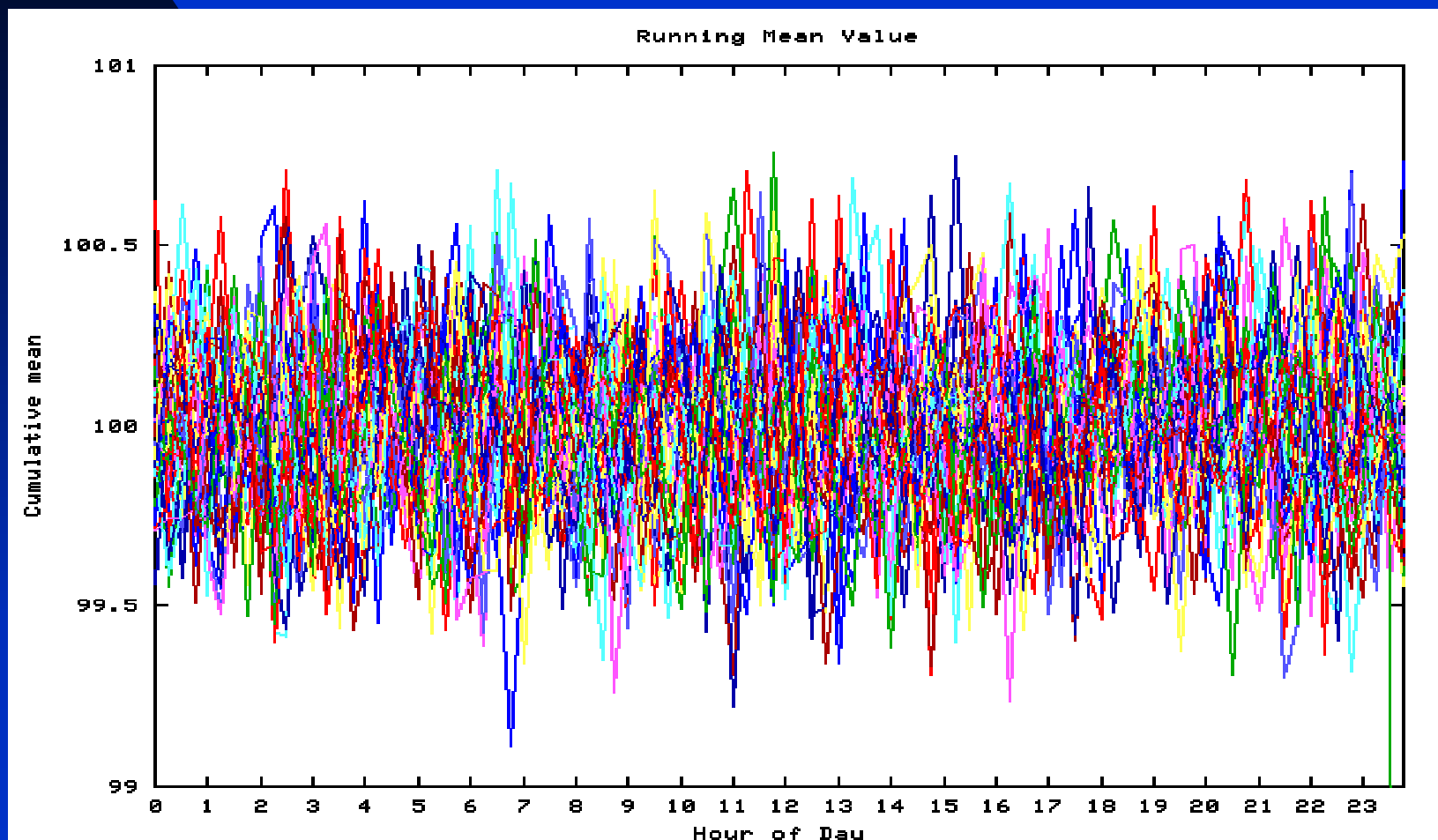


Orion RNG

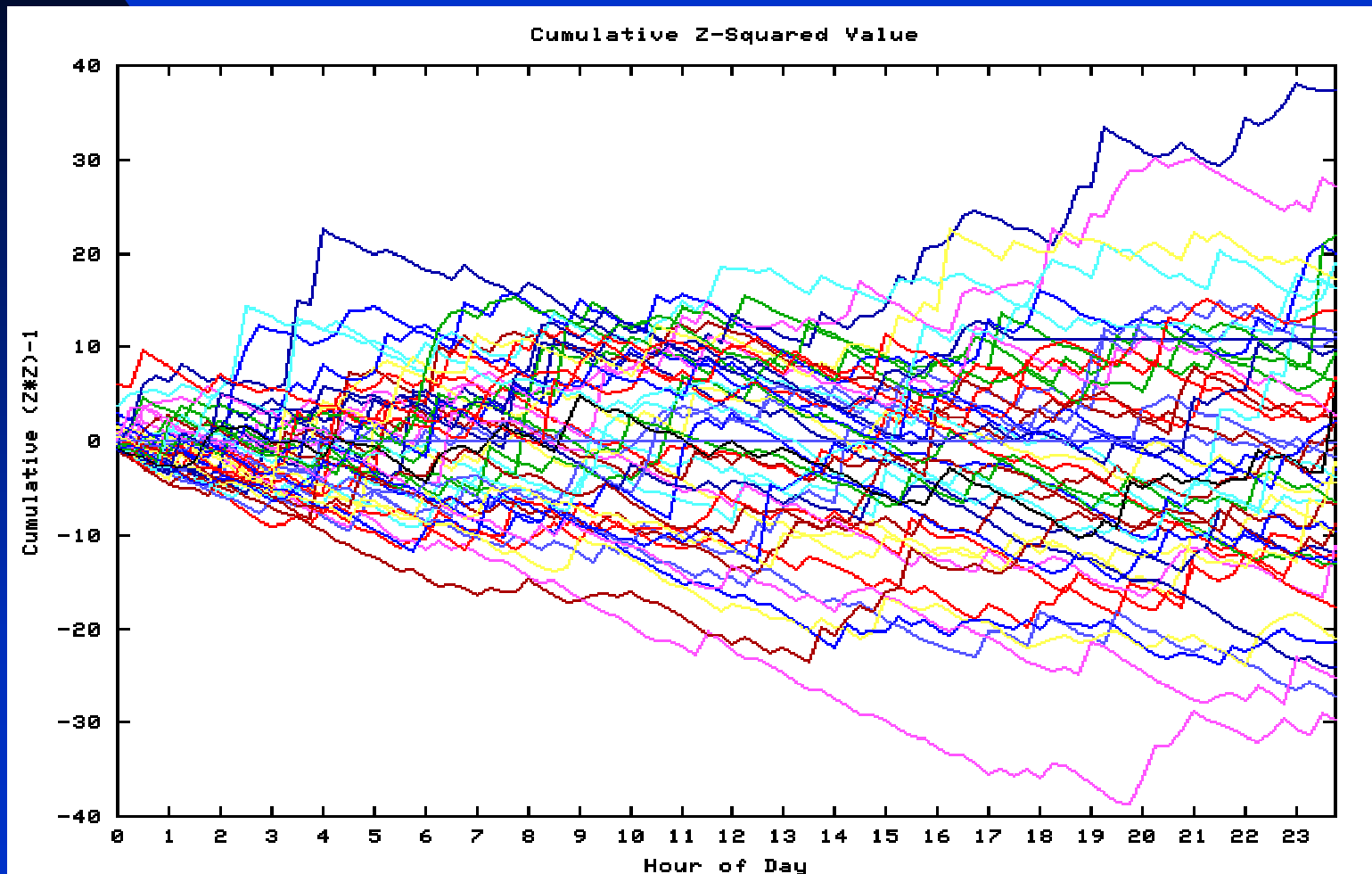
Internet transfer of data to Princeton

It looks random: Combined data

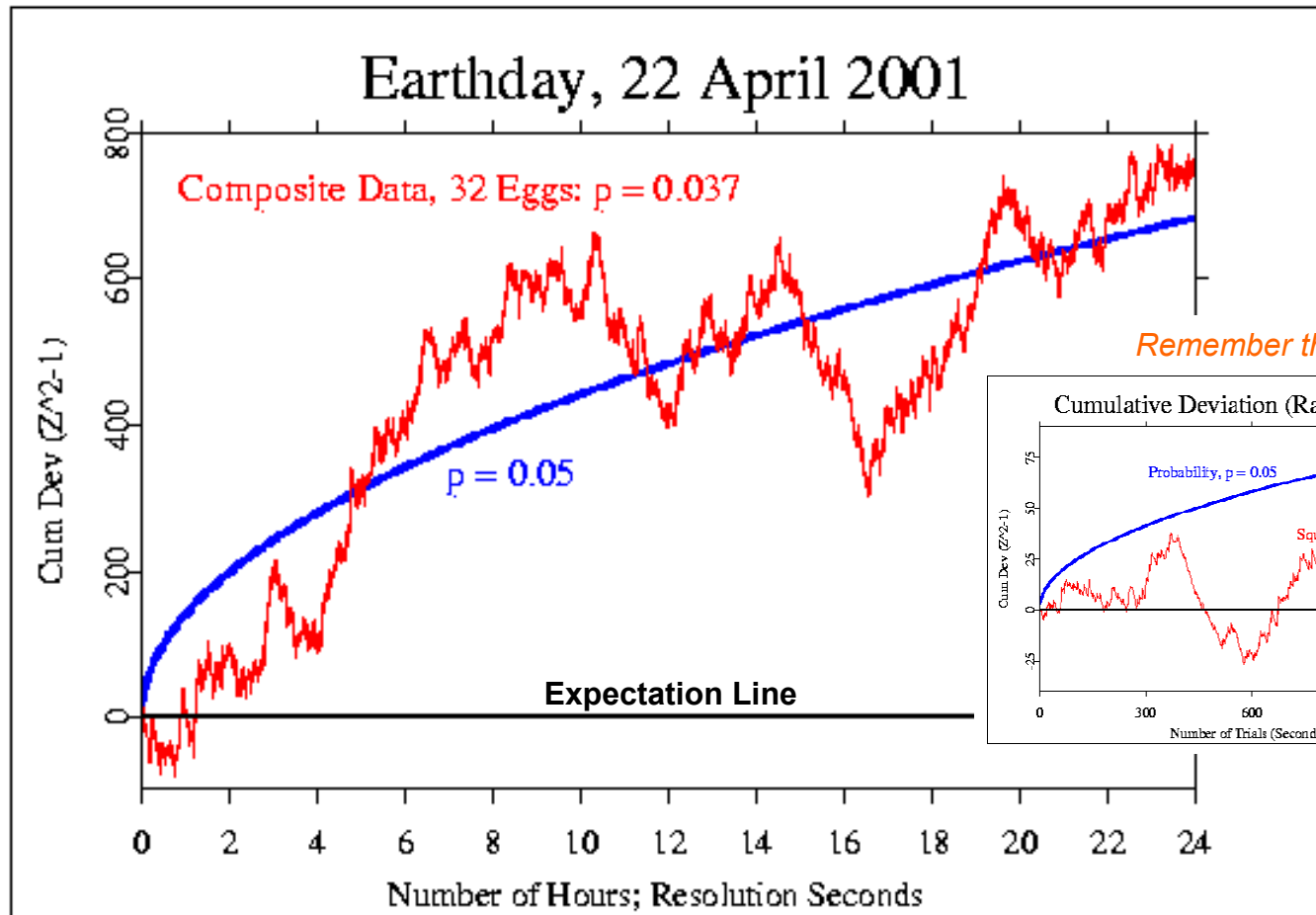
For a whole day, from 48 eggs



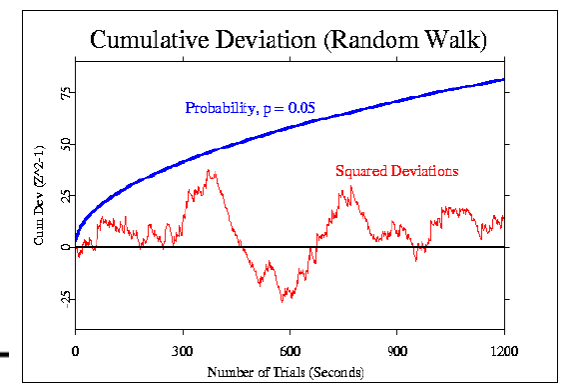
We can see better what's happening by Plotting the cumulative deviations ($\chi^2 - df$) Correlation Tilts ... Variance Spreads



When we make a composite across eggs, the cumulative deviation may show a trend

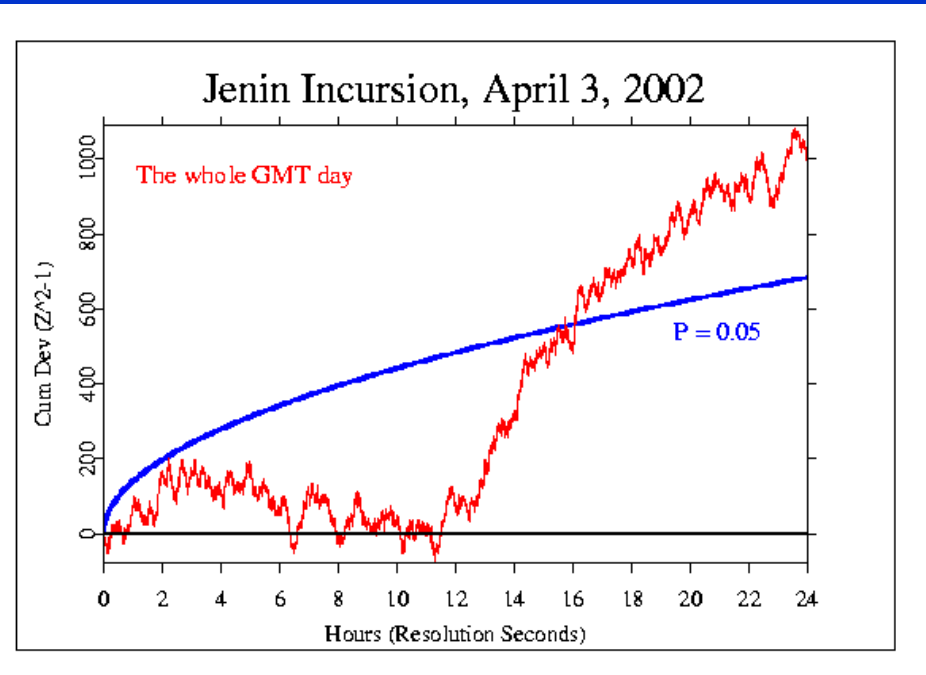
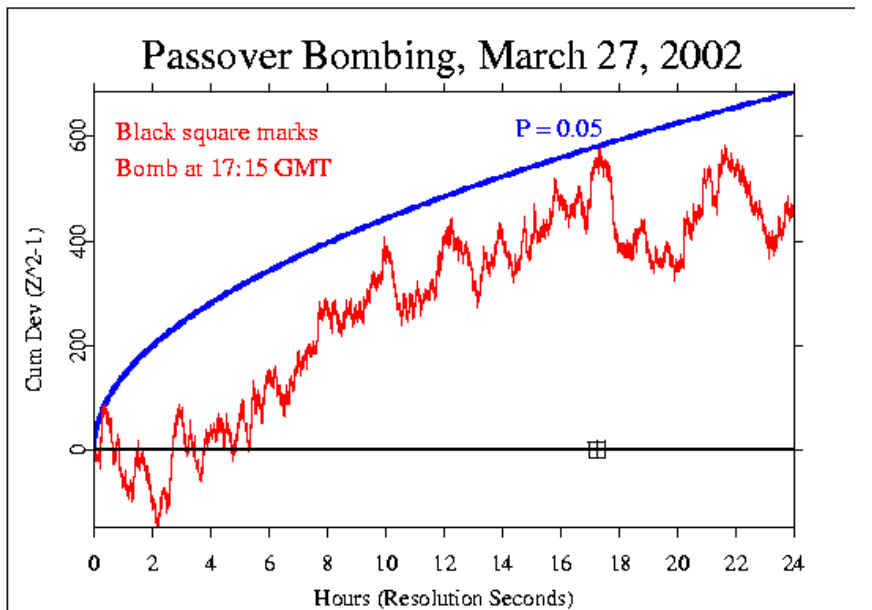
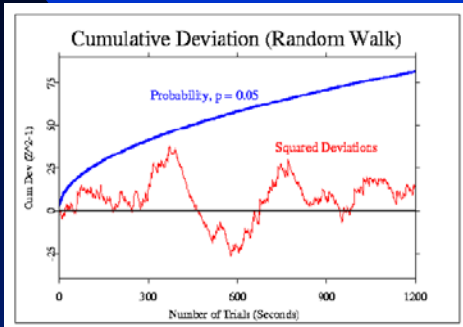


Remember this?



Maybe a trend in the cumulative Deviation is Meaningful?

This is expected



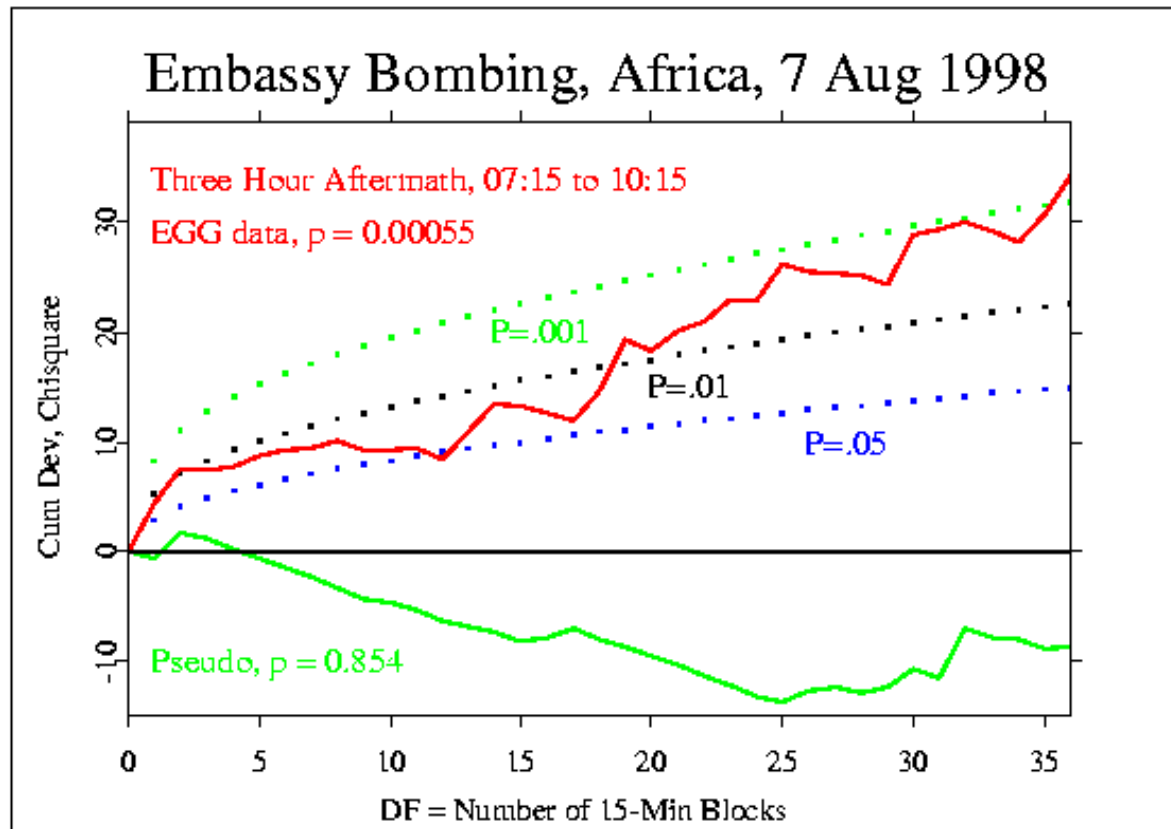
This is what we find in the data

Two white arrows point from the text to the red lines in the Passover Bombing and Jenin Incursion graphs.

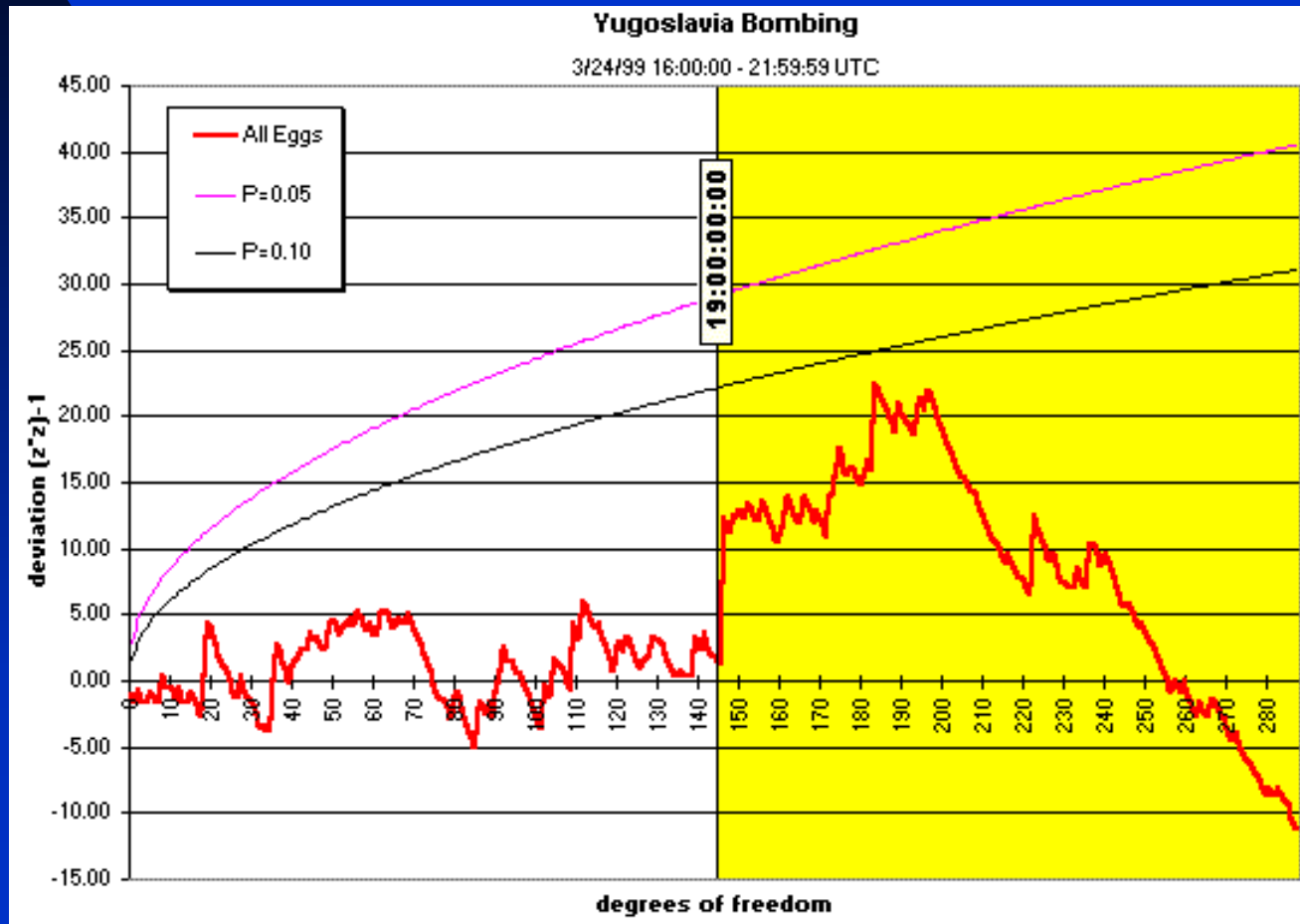
With this Global Network We can Look for Effects of Engaging Events

**Natural disasters
Terrible accidents
Beginnings of war
Grand celebrations
Political excitement
Religious pilgrimage
Astrological hot spots
World-wide meditations**

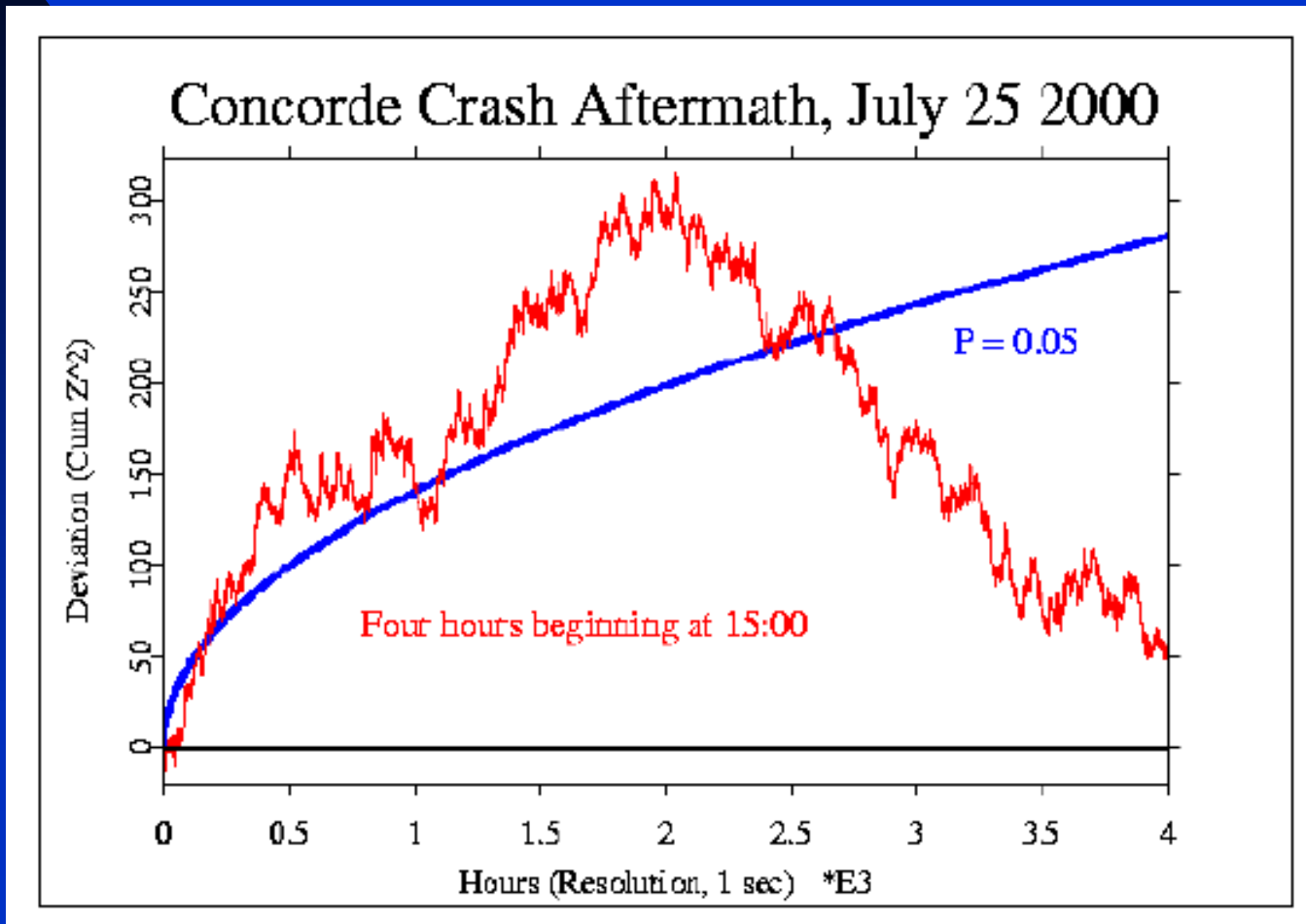
Major disasters that engage us powerfully Often correlate with big deviations This is the first GCP/EGG event



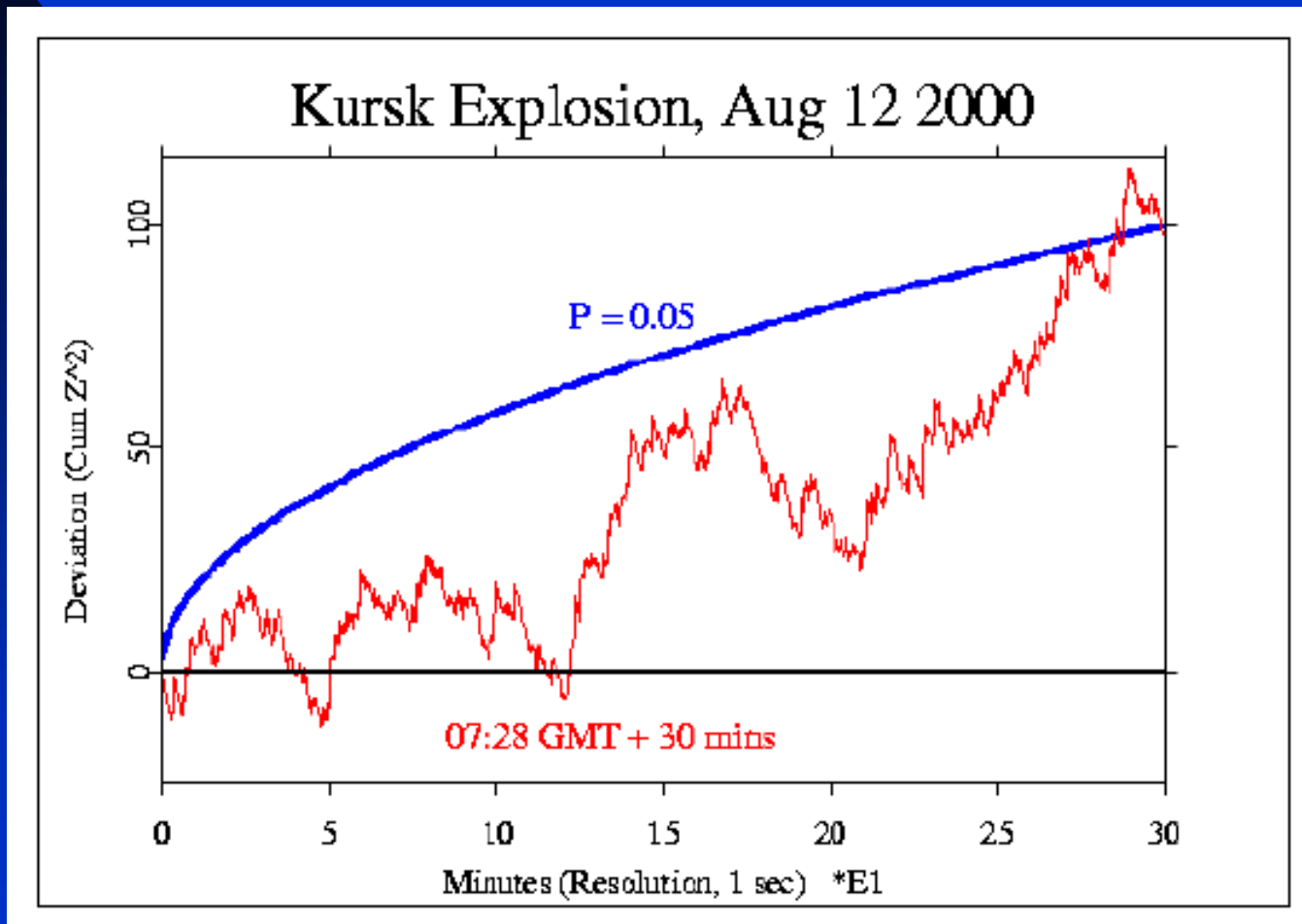
Exploration of context: Six hours of data Around the beginning of bombing in Kosovo Cumulative deviation of Z_s^2 or χ^2



The Concorde Crash July 25 2000



The Kursk Submarine Disaster August 12 2000

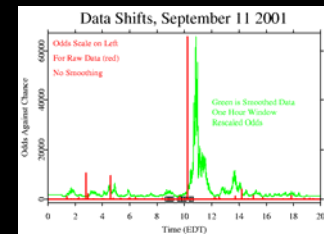


Global Emotion: Transfixed by Tragedy

On September 11 2001, early in the morning, a network of physical random event generators (called “eggs”) took on a striking trend. By 8:45 the non-random behavior was unmistakable. It peaked at about 10:30 with odds against chance of a thousand to one. See the red trace below.

Other measures also deviated from expectation on that day, creating an unmistakable pattern where there should be none. The eggs became linked across distance and time in some subtle way that we do not yet know how to explain.

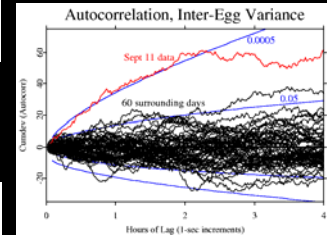
This is not a physical or electromagnetic effect. It’s not due to extraordinary mobile phone use, or saturation TV. It appears to be related to our profound engagement.



On 9/11 the data contained unique sequential structure



On 9/11 the data showed extraordinary moments



On 9/11 deviations began that persisted for 2 days



More at <http://noosphere.princeton.edu>

The jagged red line shows three days of a measure (squared cumulative deviation of variance) that represents the composite randomness of 37 eggs.

On September 11, the data show clear structure where there should be none.



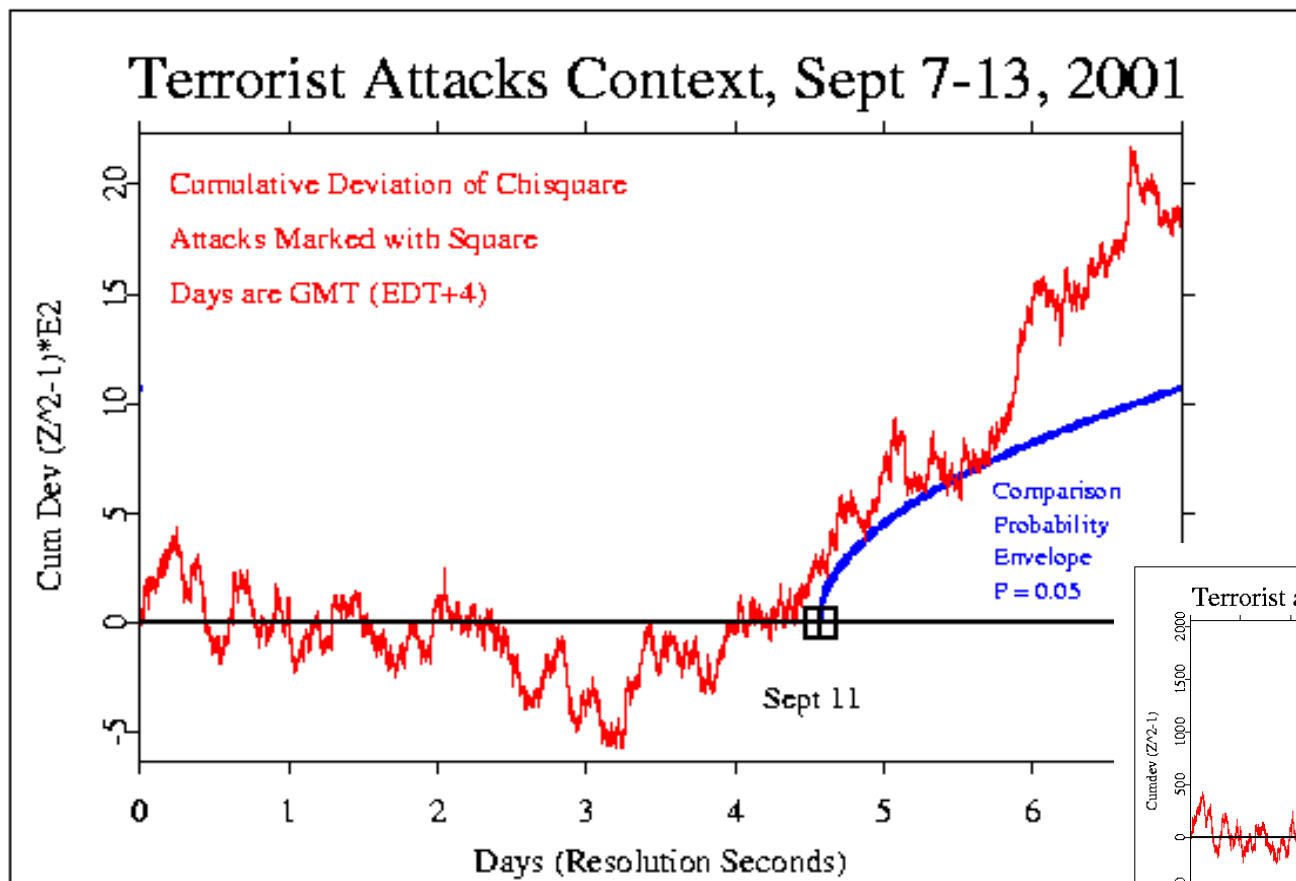
9/10

9/11

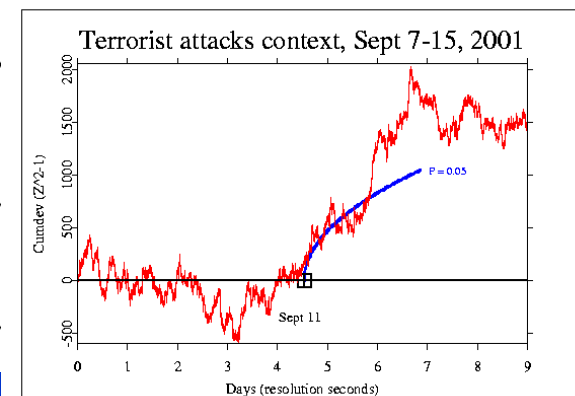
9/12

The destruction of the World Trade Towers Sept 11 2001

A 50-hour trend followed the attacks

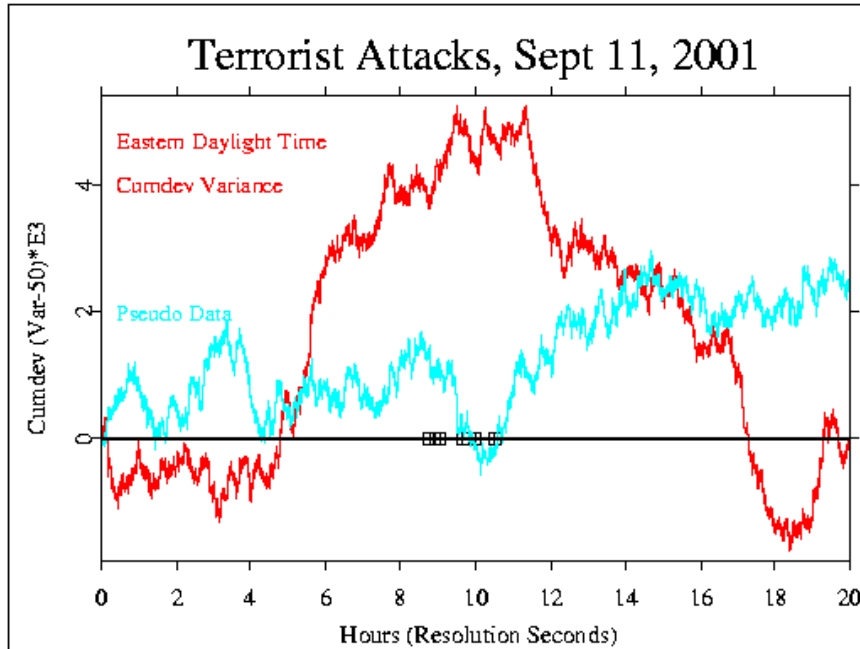


Return to level trend
After two days



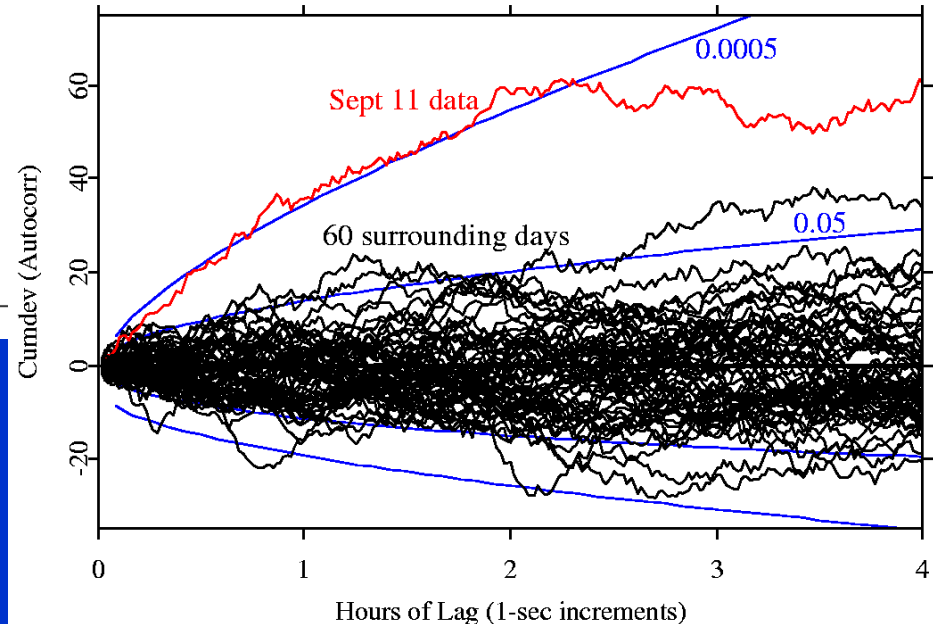
Other Views of September 11 2001

On the Left a picture of variability among the eggs
It should look like a “random walk” but ...



On the right a picture of
Sequential dependence

Autocorrelation, Inter-Egg Variance

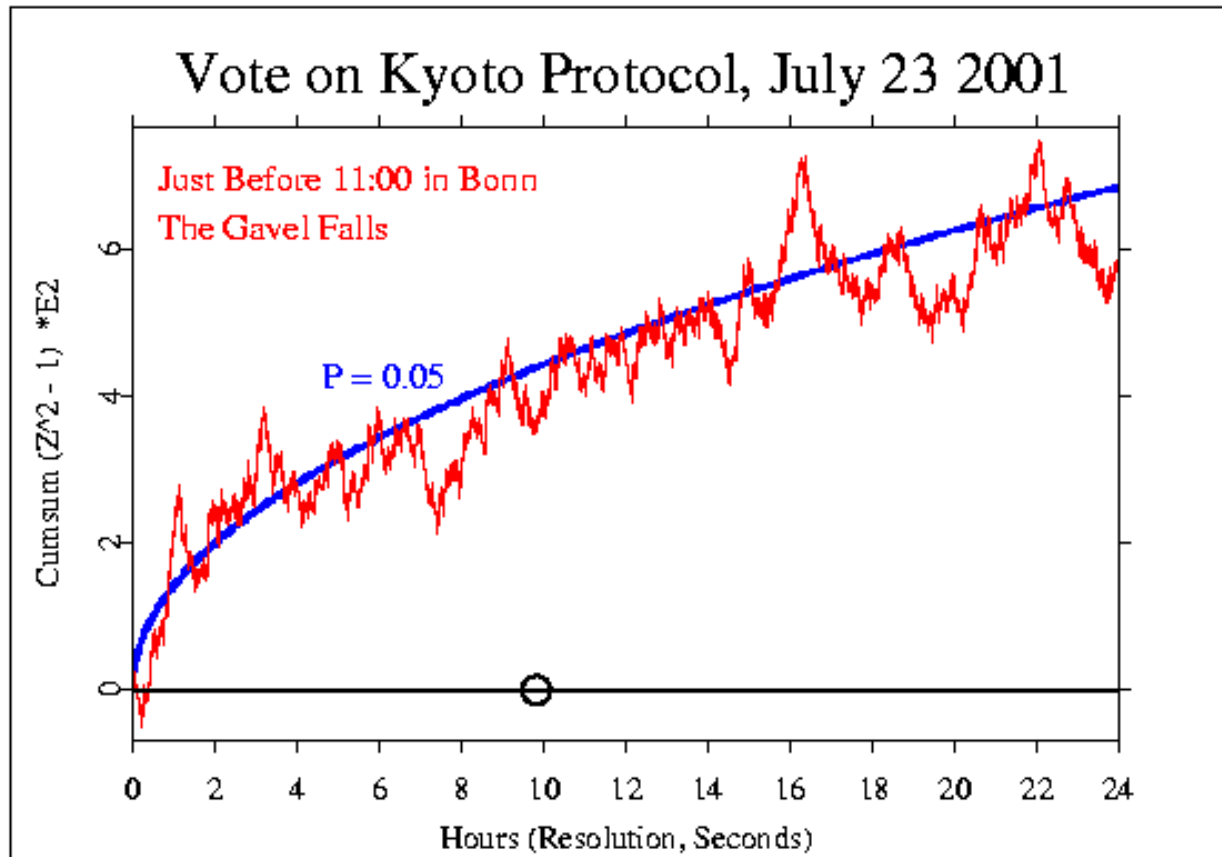


9/11 was unique
In 3 years of data

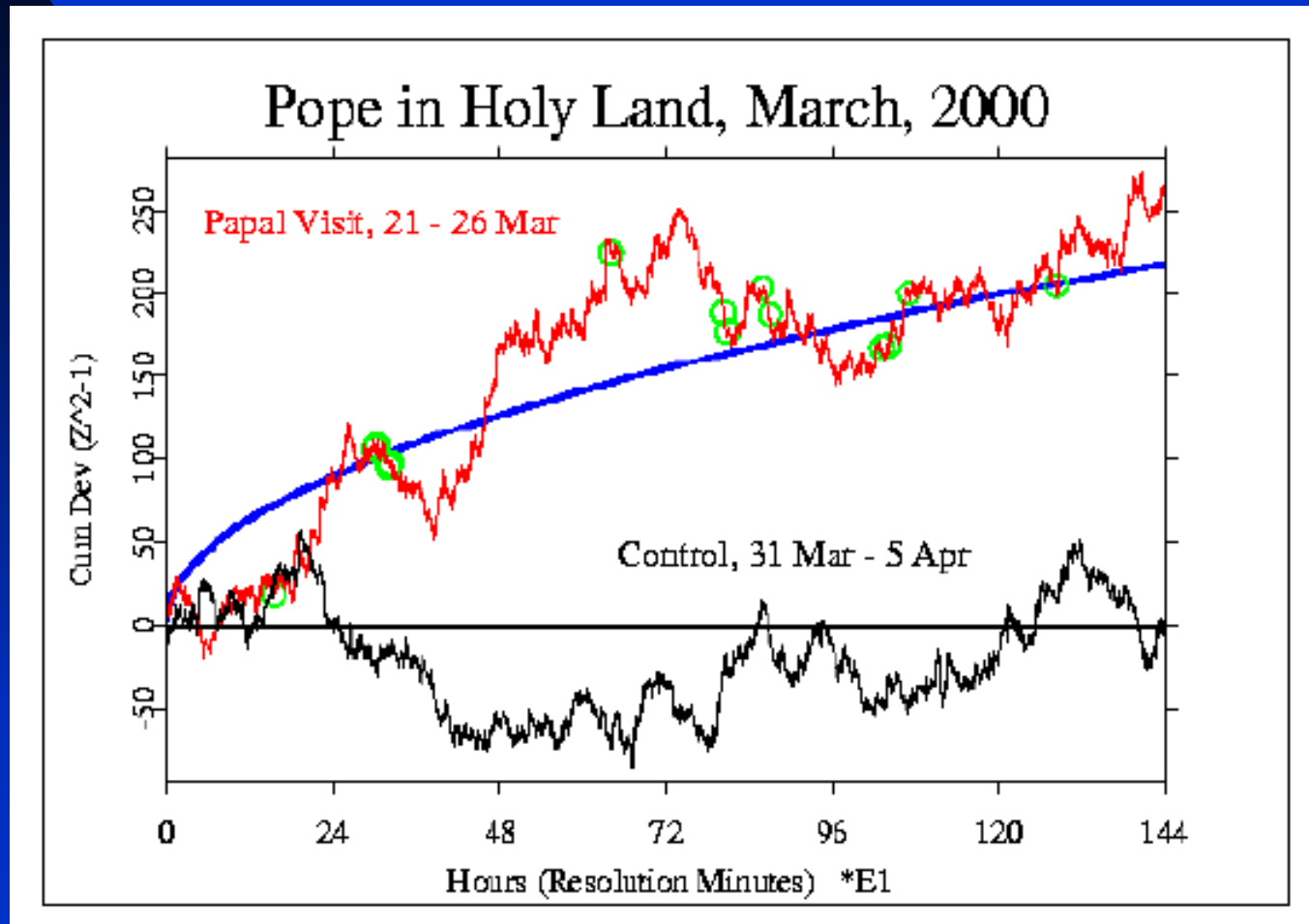
Our task must be to free ourselves from this prison [of separation] by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty.

- - Albert Einstein

A Substantial Agreement on Getting Our Ecological Act Together



The Pope's 6-day pilgrimage to the middle east An occasion of hope for resolution of differences

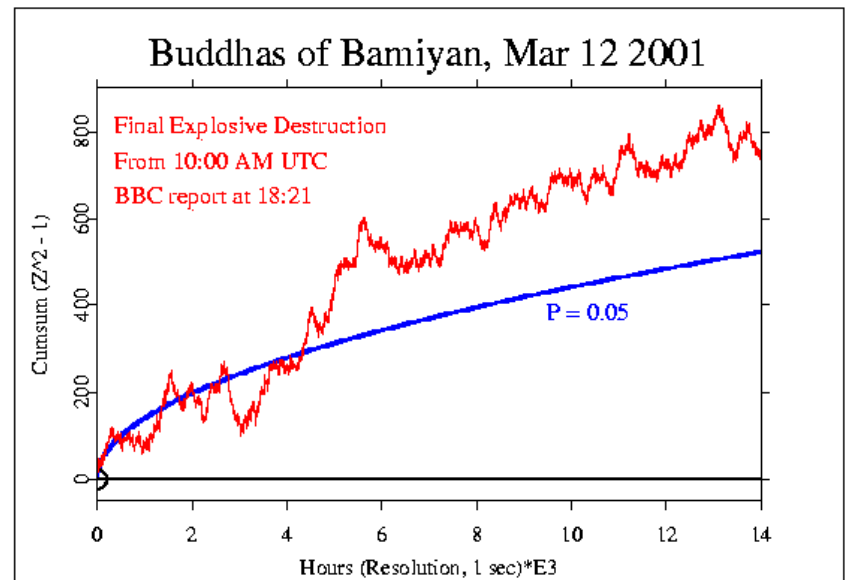
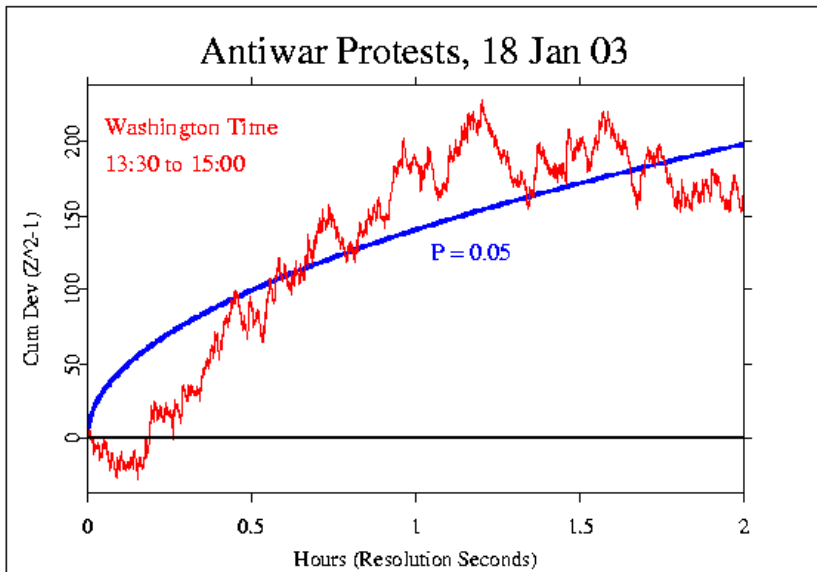


"The Age of Nations is past. The task before us now, if we would not perish, is to build the Earth."

- - Père Teilhard de Chardin

Consciousness Fields

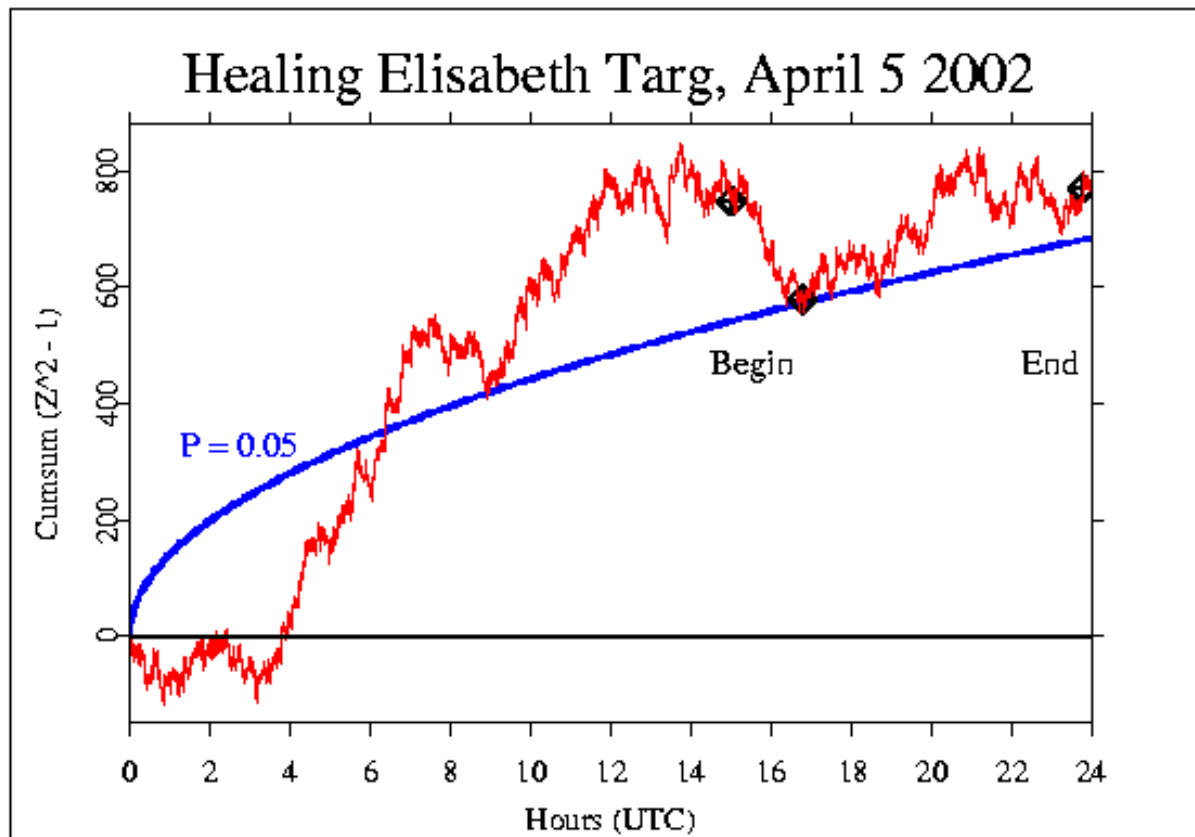
Compassion is a primary source



Apparent response to healing prayer

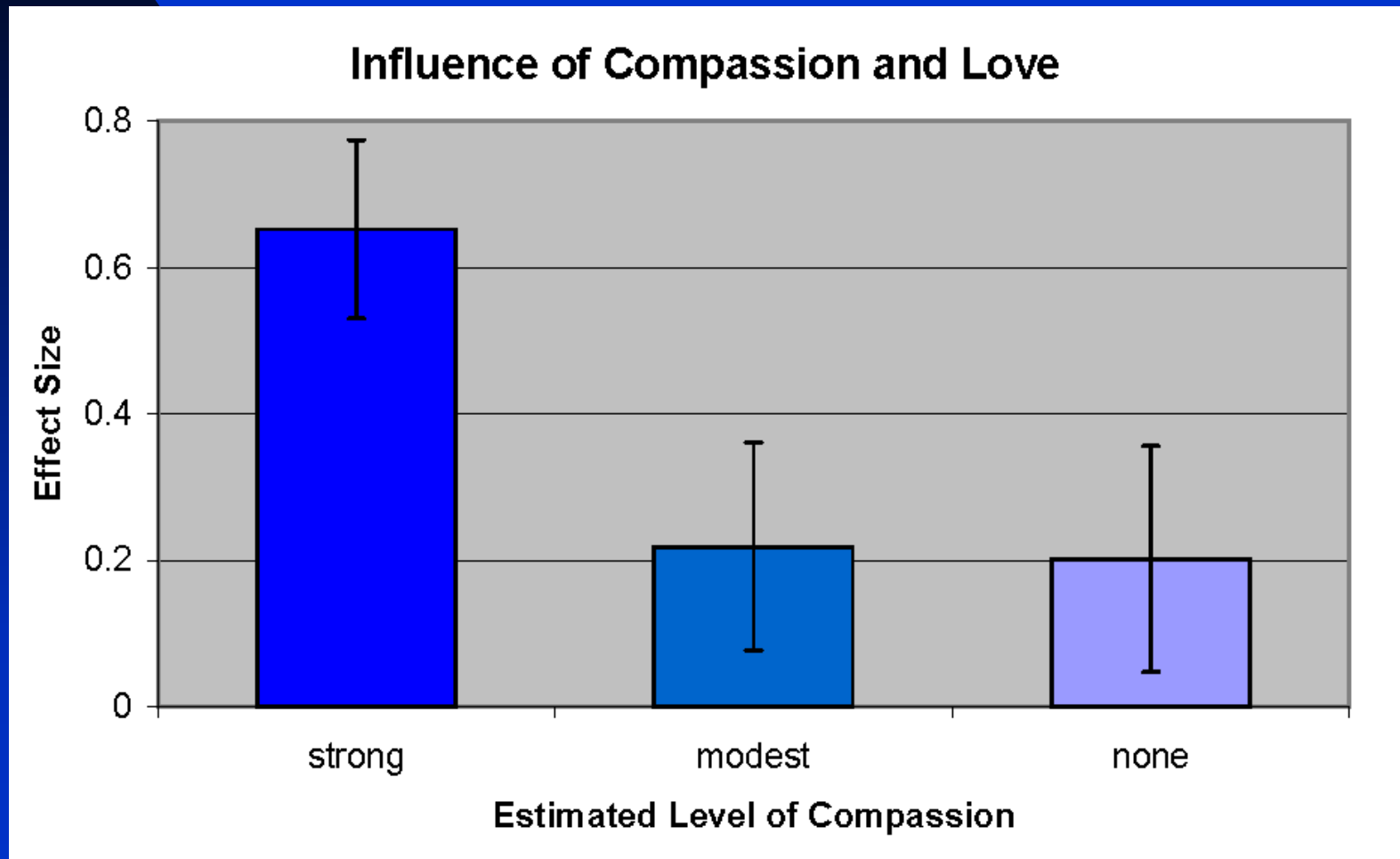
Friends and colleagues of Elisabeth Targ

Focus on positive outcome of surgery



Events That Seem to Evoke or Comprise Love and Compassion Have Larger Effects

Hypothesis proposed by Jaan Suurkula

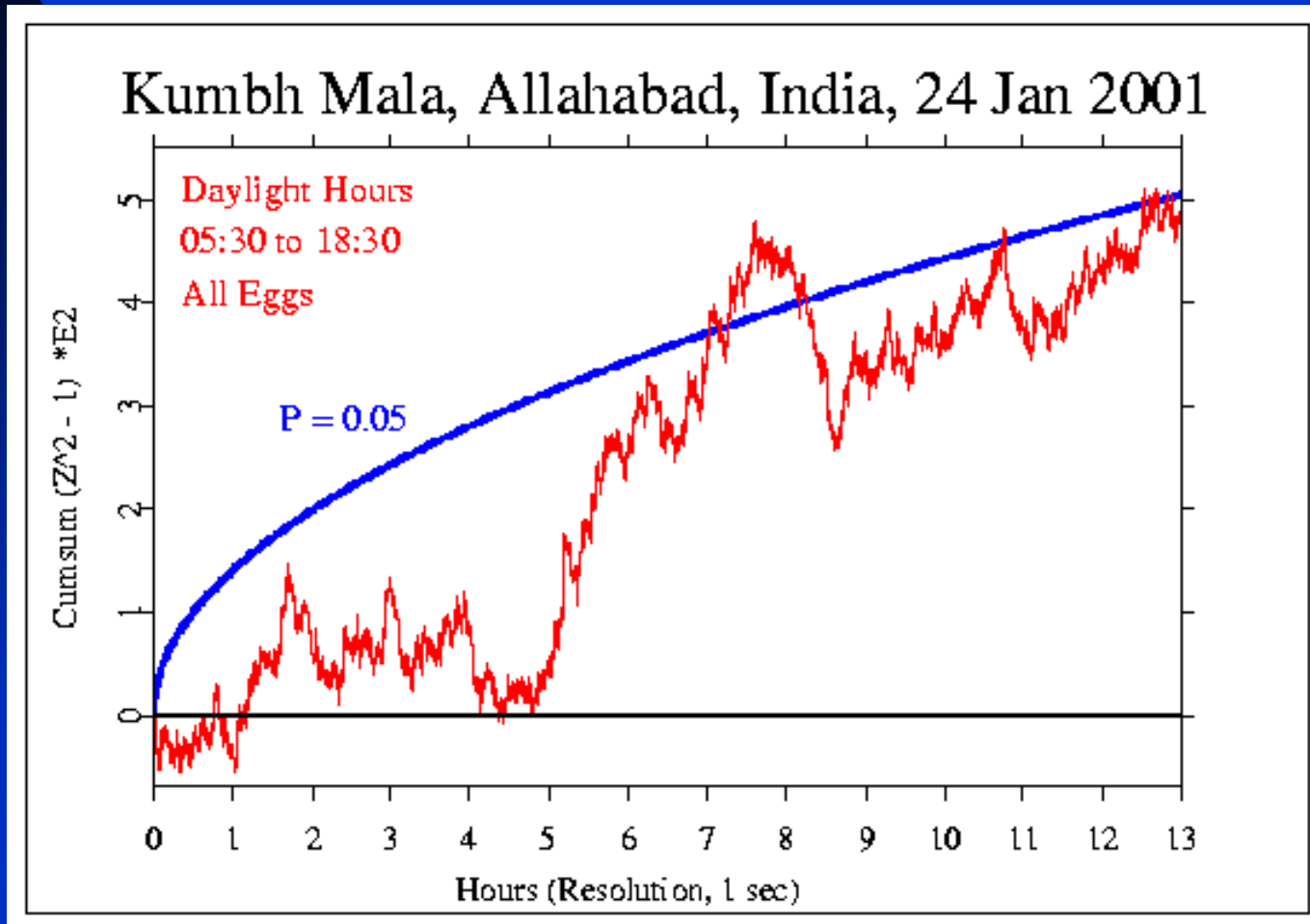


In becoming planetized humanity is acquiring new physical powers that will enable it to super-organize matter.

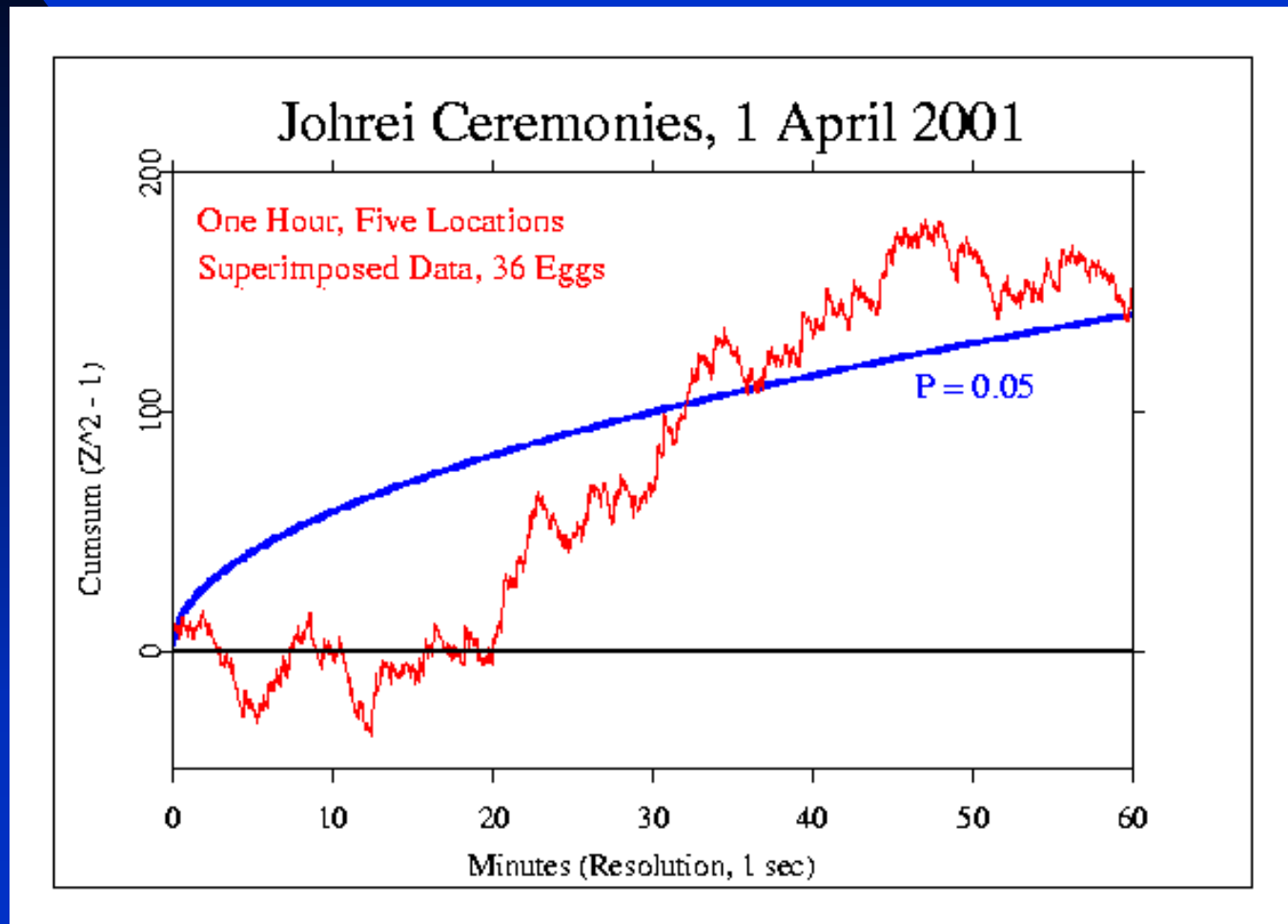
Even more important, is it not possible that by the direct converging of its members it will be able, as though by resonance, to release psychic powers whose existence is still unsuspected?

Pierre Teilhard de Chardin, *The Future of Man*

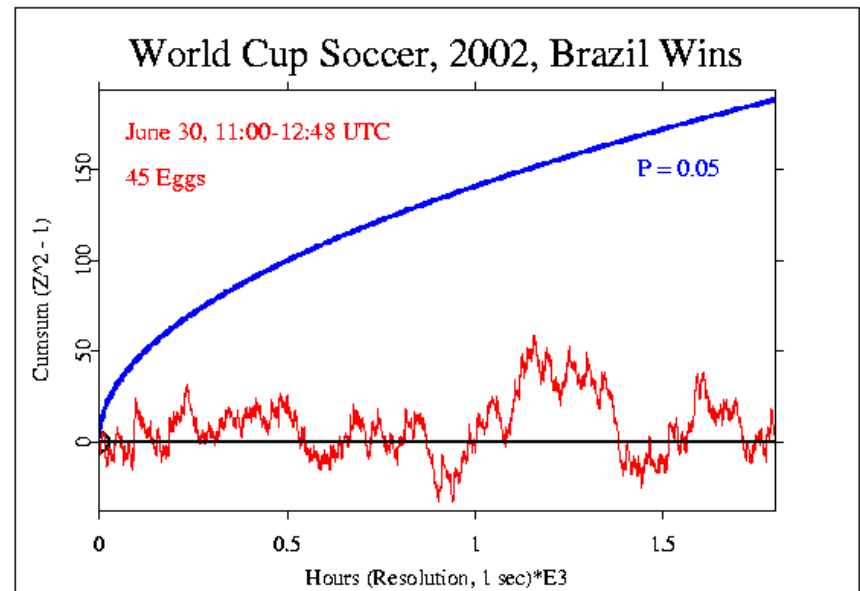
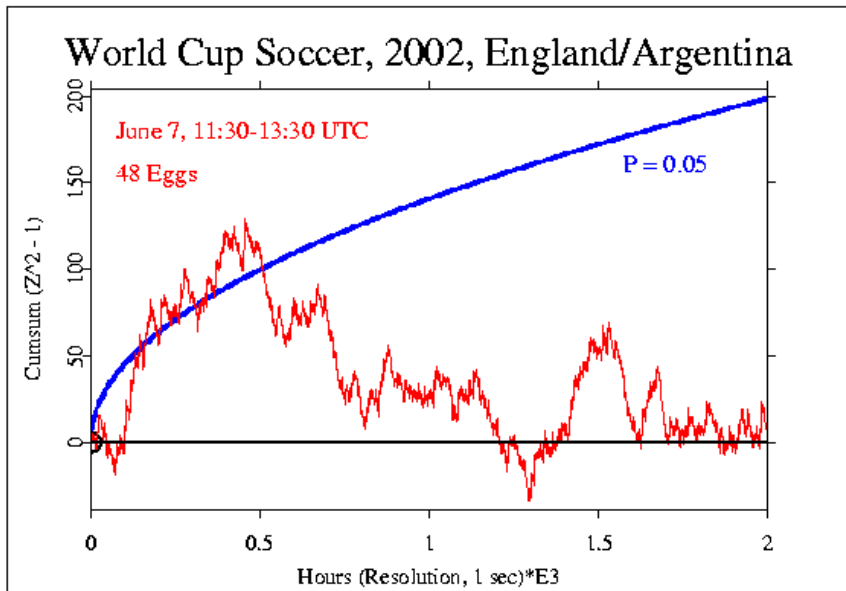
Four Million People Pilgrimage For Ritual and Prayer



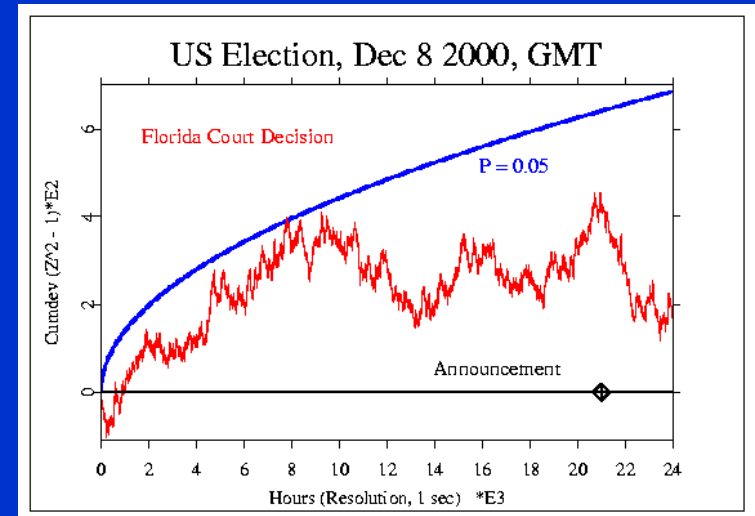
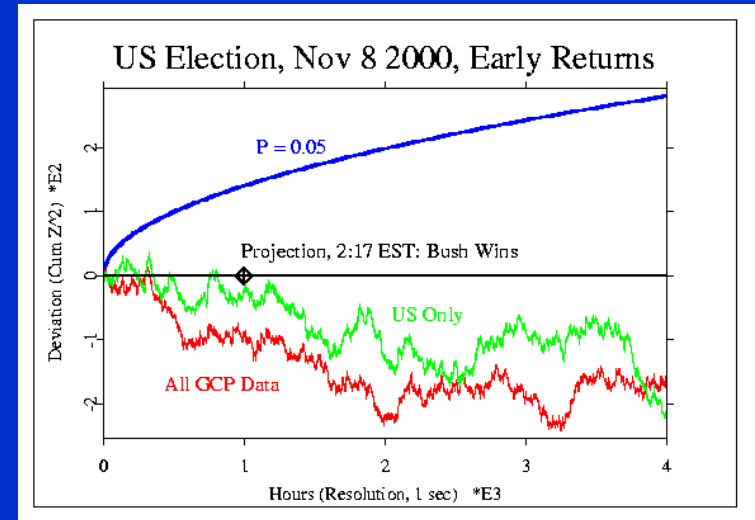
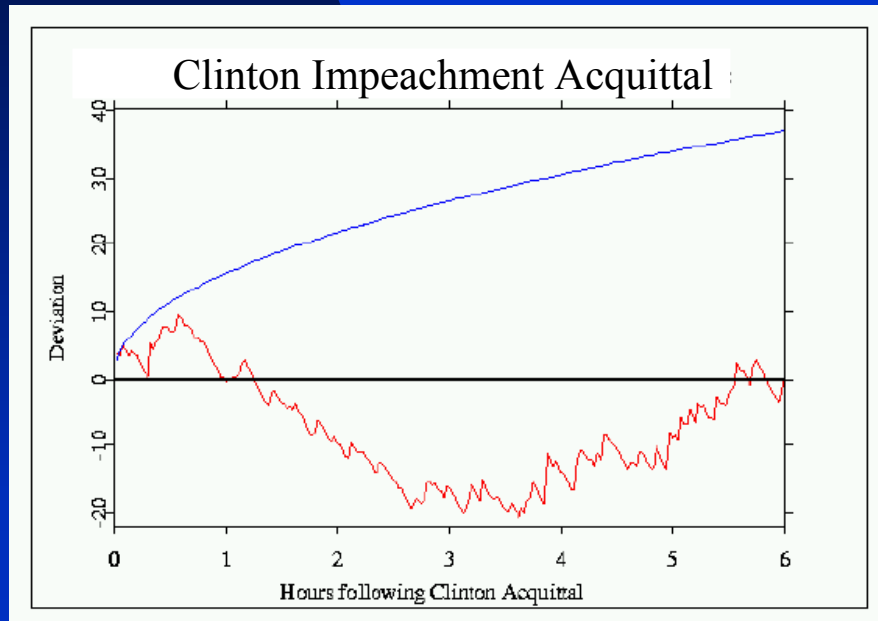
Synchronized Johrei Ceremonies Around the World, April 1 2001



In contrast to compassion, Competition, as in sporting events Seems not to produce big deviations



Political events, even big ones, are not necessarily of interest to the EGG

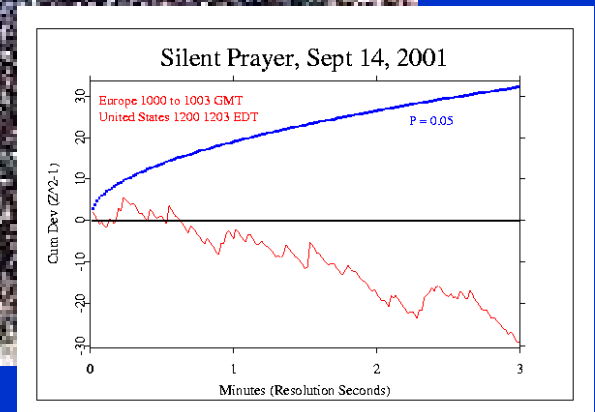
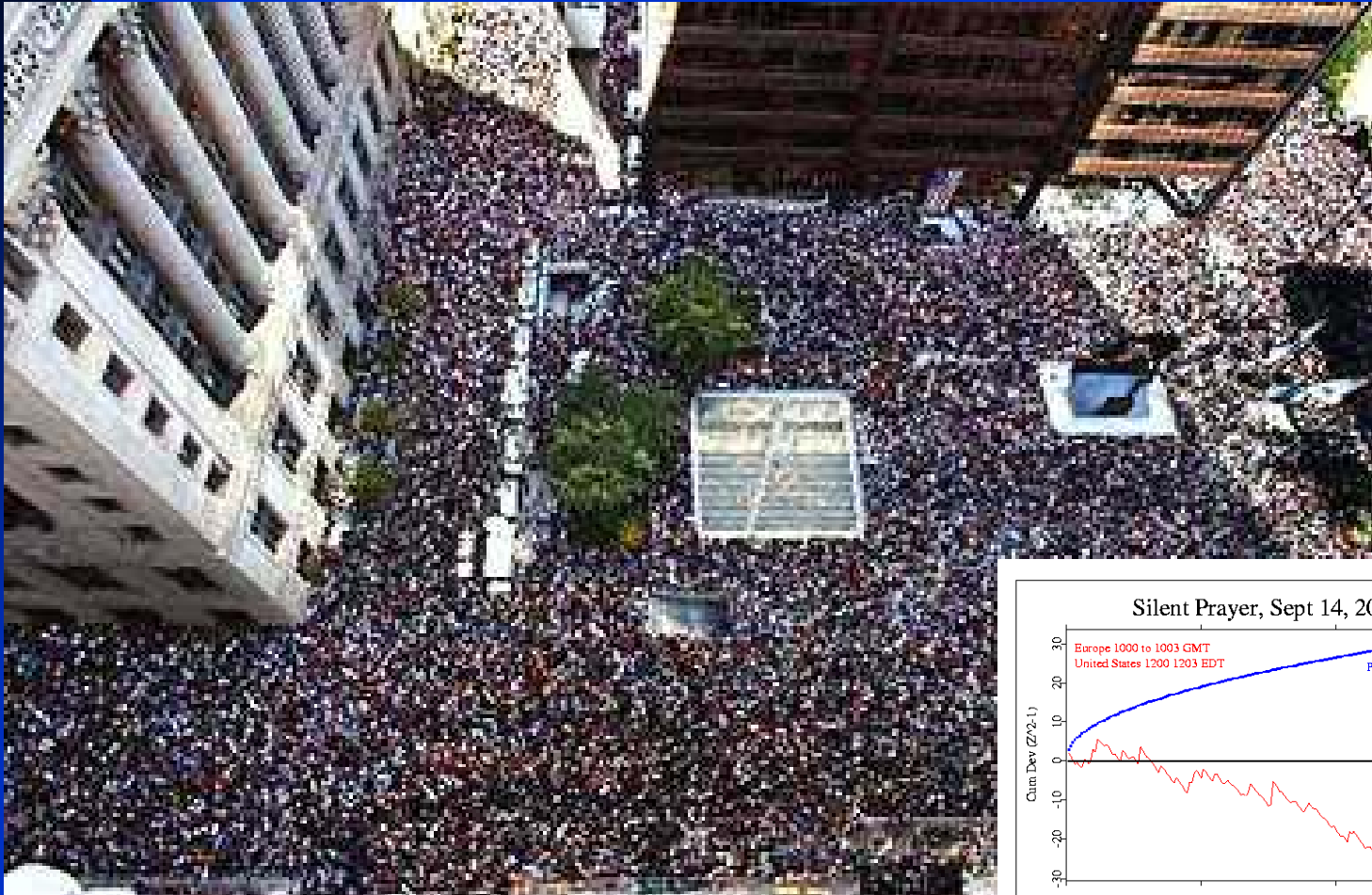


Creative source is an effortless state of being.

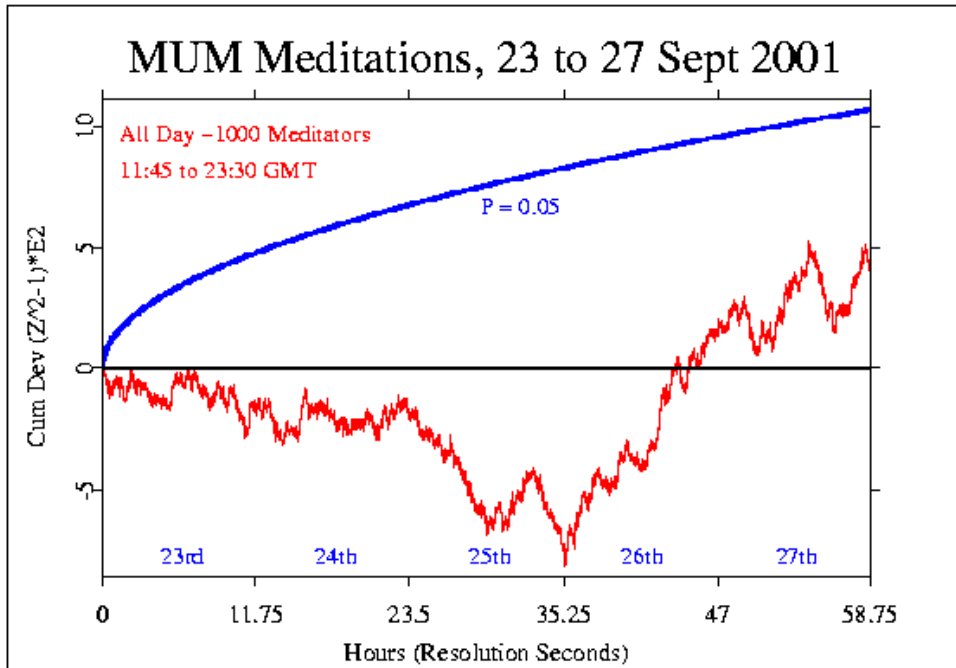
***Desiring and resisting are efforts.
Accepting and appreciating are effortless.***

- - Harry Palmer, *Living Deliberately*

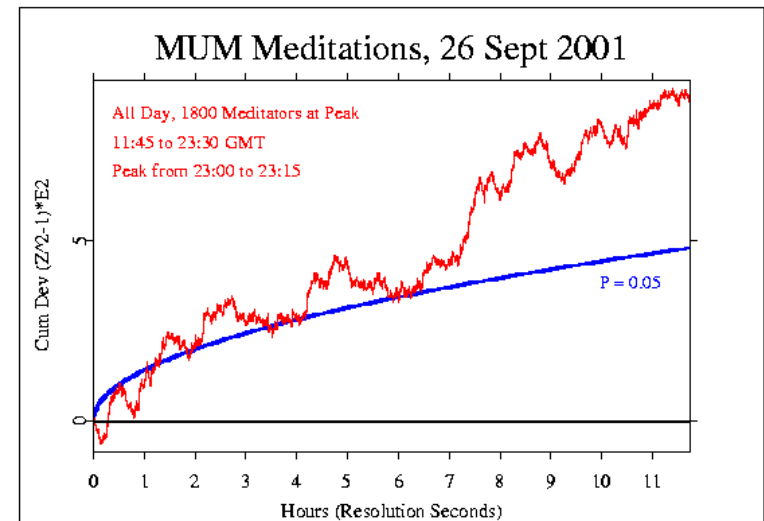
Chicago, Moment of Silence September 14 2001



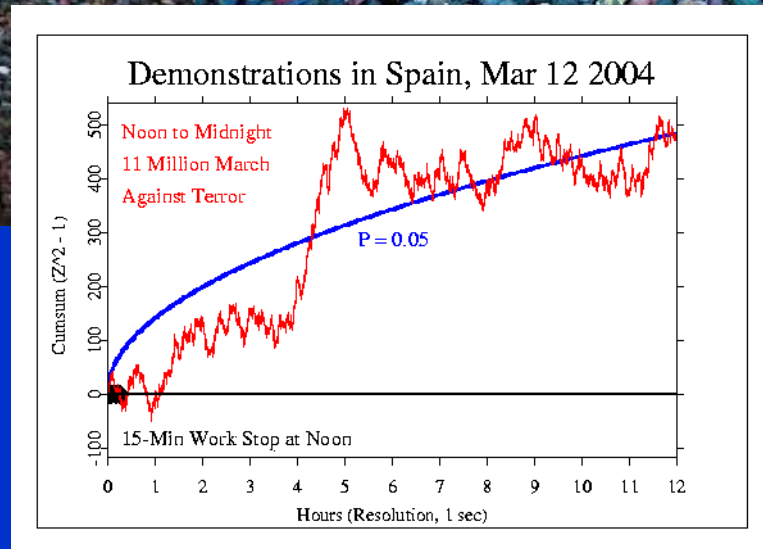
Focused Siddhi Meditations September 23 to 27, 2001



Peak Day, Maximum Numbers



After Terrorist Bombings in Madrid All of Spain Came Out in Commiseration



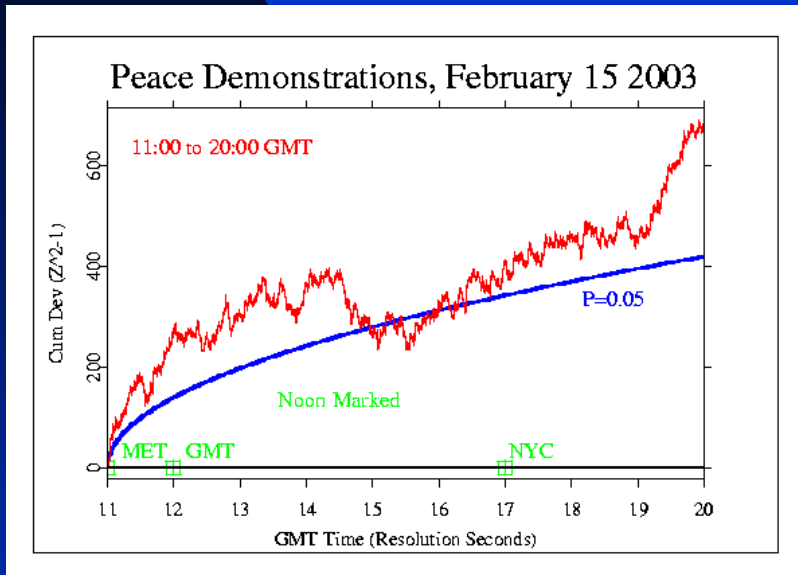
Each time a man stands up for an ideal, or acts to improve the lot of others, or strikes out against injustice, he sends forth a tiny ripple of hope, and crossing each other from a million different centers of energy and daring, those ripples build a current that can sweep down the mightiest walls of oppression and resistance.

- - Robert Kennedy, Capetown, 1966

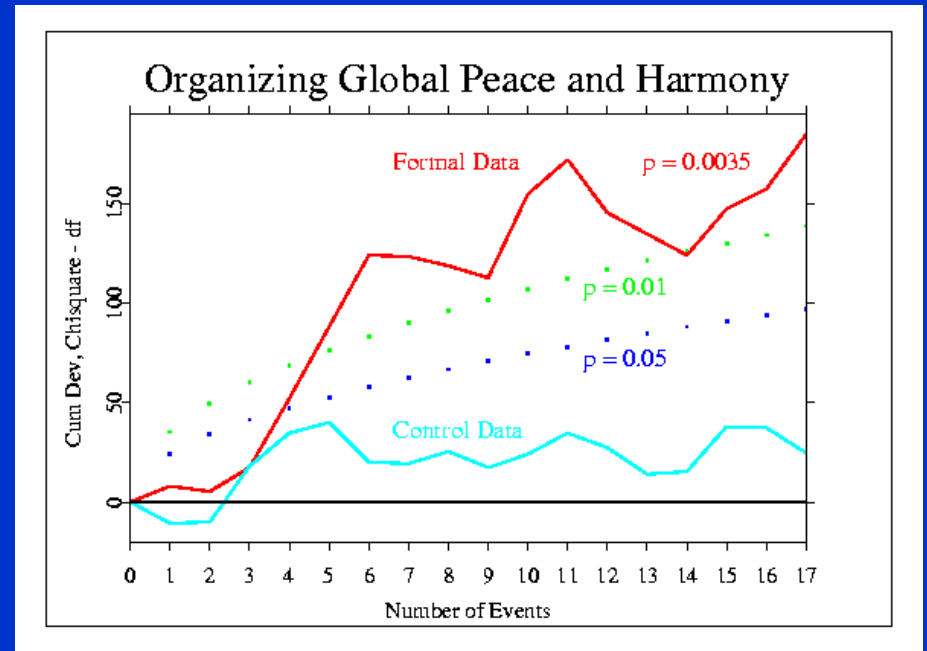
Positive Intent

An organizing field of consciousness

A poignant example



A concatenation of 17 events organized for positive intent



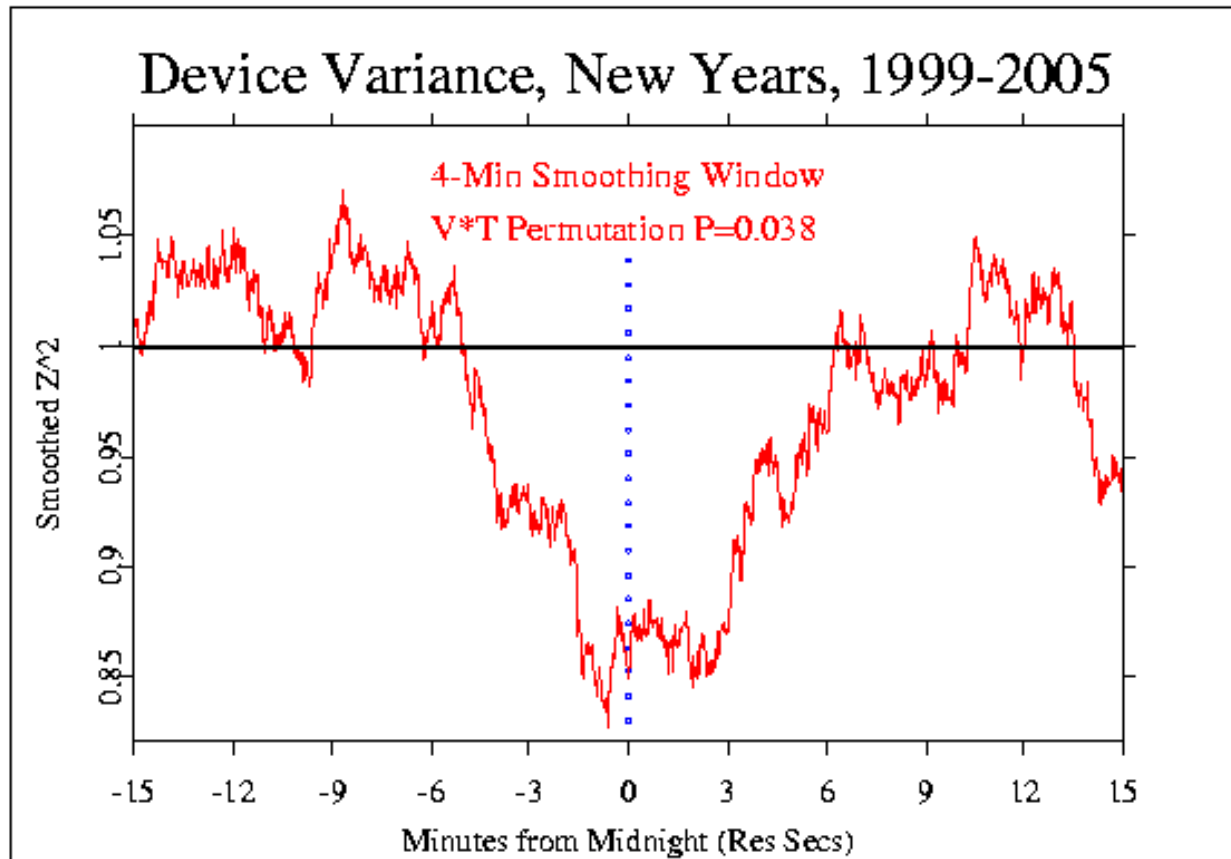
**But it seems there's more
Than focused engagement:
Sometimes we simply share, interact**

**Mere attention, enjoyment
Of the lighter side
Celebrations**

**What better example than
New Years?**

Happy New Year!

Variance Reduction, Composite for 7 New Years
Signal Averaged Across 37 Time Zones



Seven-Yr
P-value
0.038

Consciousness is creative

We take meaning from music, we know our loved ones from afar, and we leap in thought to the stars.

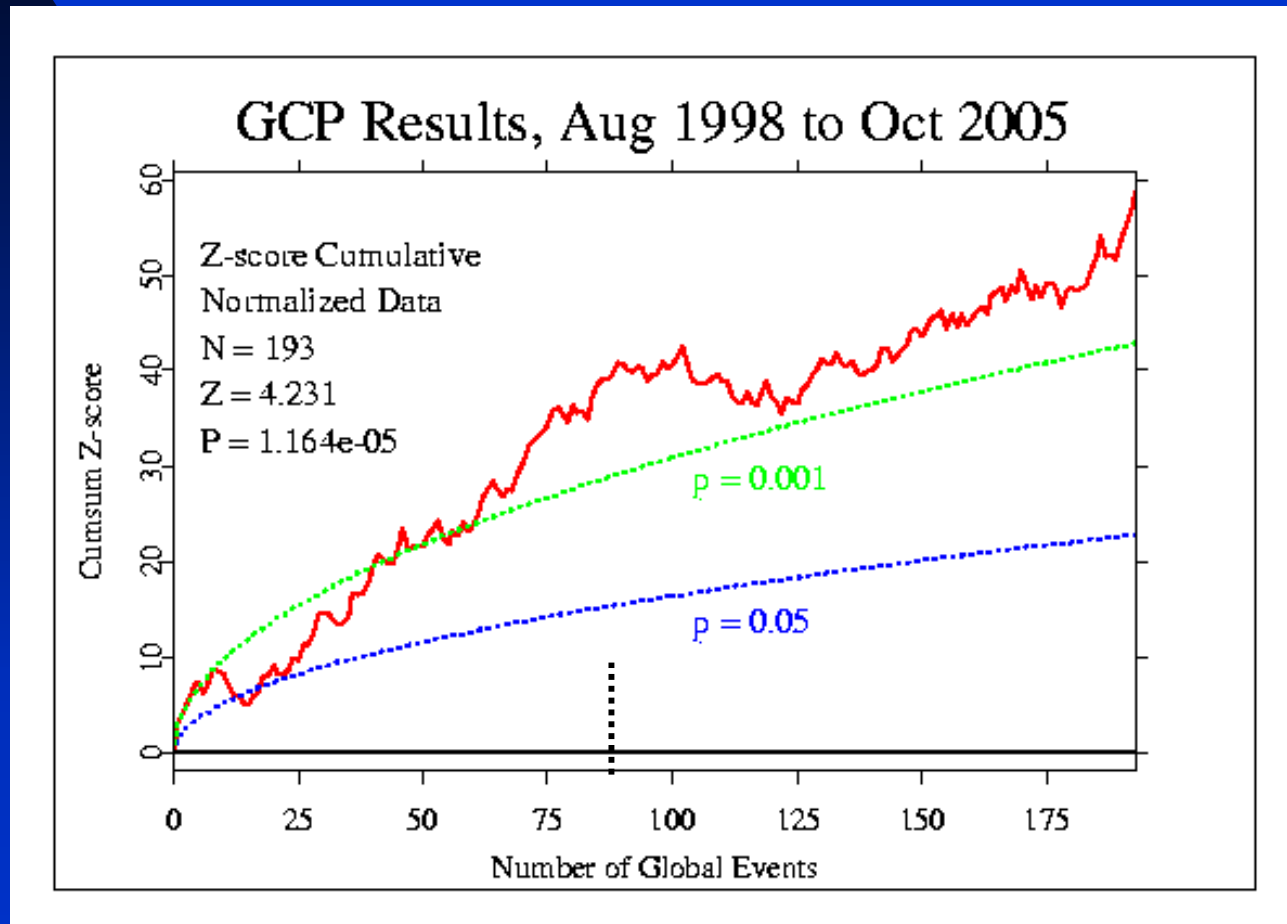
Sometimes we dissolve ourselves into a group and become a larger whole.

And we always have prayed as if it could make a difference.

Current Result: Formal Database, 7 Years

193 Rigorously Defined Global Events

Odds: About 1 part in 100,000



Questions outnumber answers

Great numbers & Deep engagement
but...

Does distance from the focus matter?

How about relevance to local people?

Is human consciousness necessary?

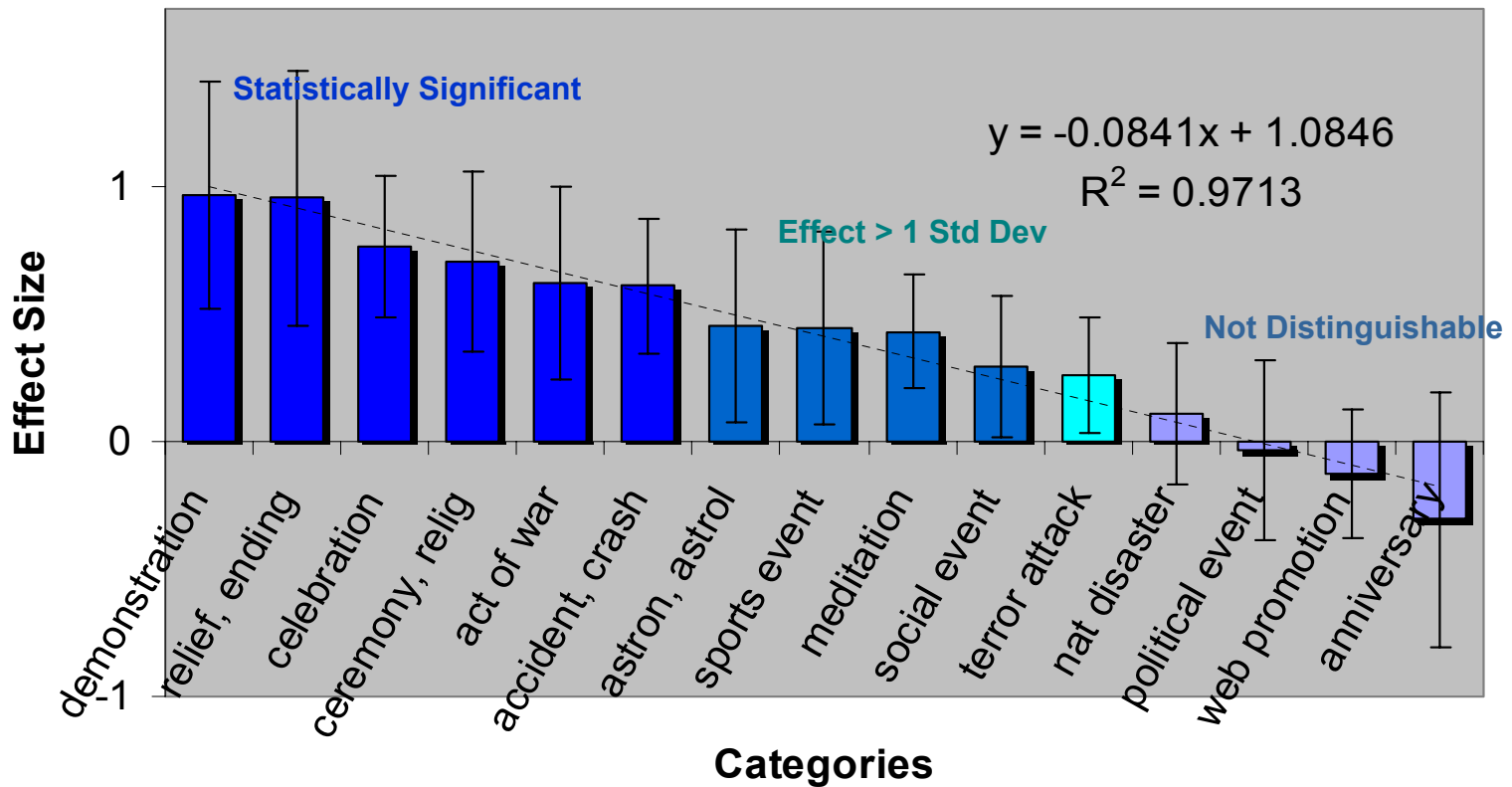
Are “experimenter effects” the source?

What kinds of events are “strongest”?

Is the effect repeatable and reliable?

Grouping into Reasonable Categories Shows a Substantial Differentiation

Effects as a Function of Event Type

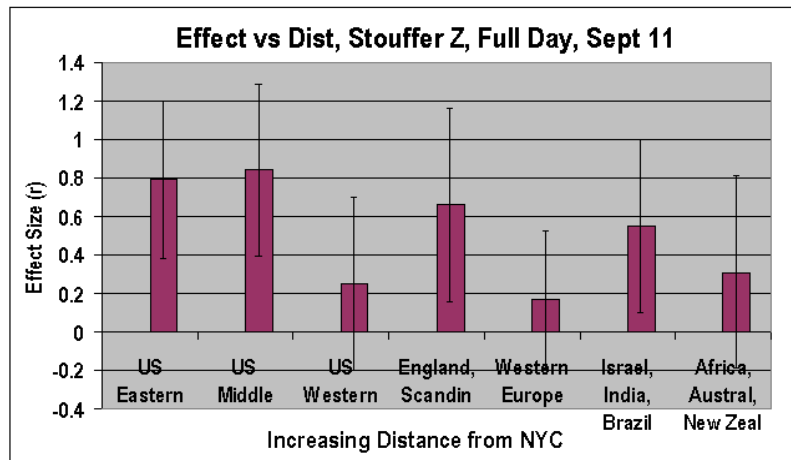


Most questions are more complex than they seem, and how you ask makes a big difference.

Here are two perspectives on Distance

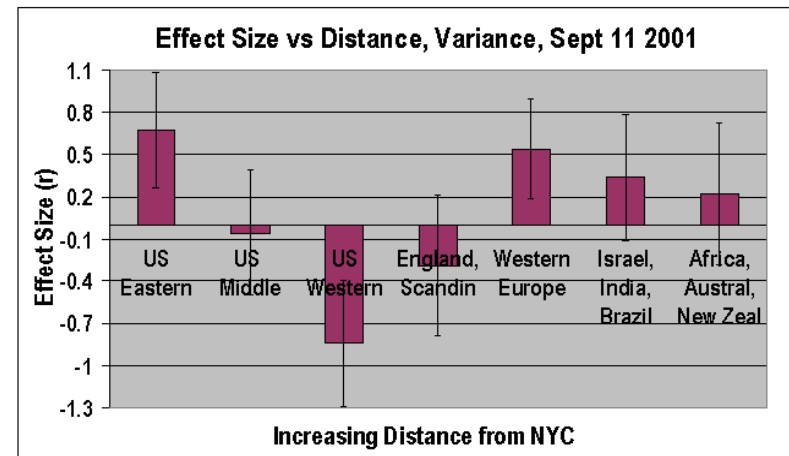
Meanshift

Distance: Effect sizes for the 11 hours beginning with the Attack, Continuing to the end of the GMT day



Variance

Distance: Effect Sizes Calculated for the Device Variance During 20 Hours Beginning at 00:00 on Sept 11th, EDT



Bottom line: It looks like there is modest evidence that closer eggs show bigger effect. *And see also*

– Dean Radin, *Distance effects of Johrei Healing*

Through technology and sheer numbers, people have become a geological force, shaping the planet's future just as rivers and earthquakes shaped its past.

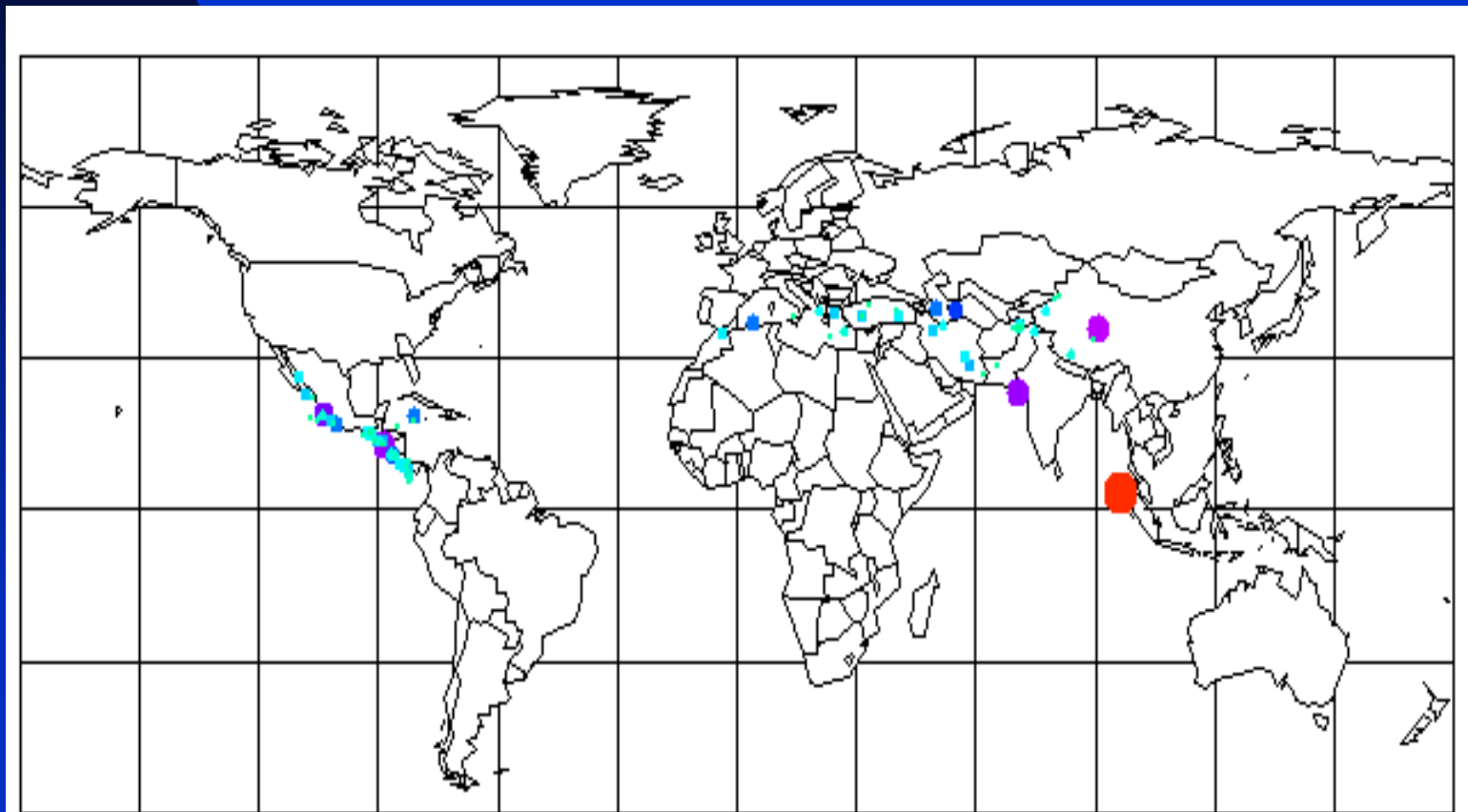
Eventually, global society, guided by science, may soften the human environmental impact, and earth will become a "noosphere," a planet of the mind.

- - Vladimir I. Vernadsky, 1926

Earthquakes: A GCP Network Response

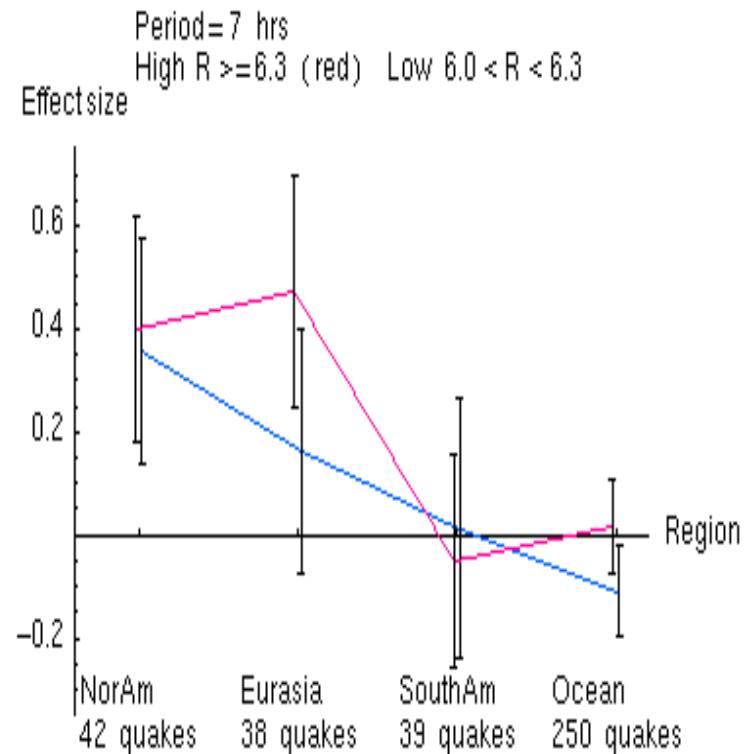
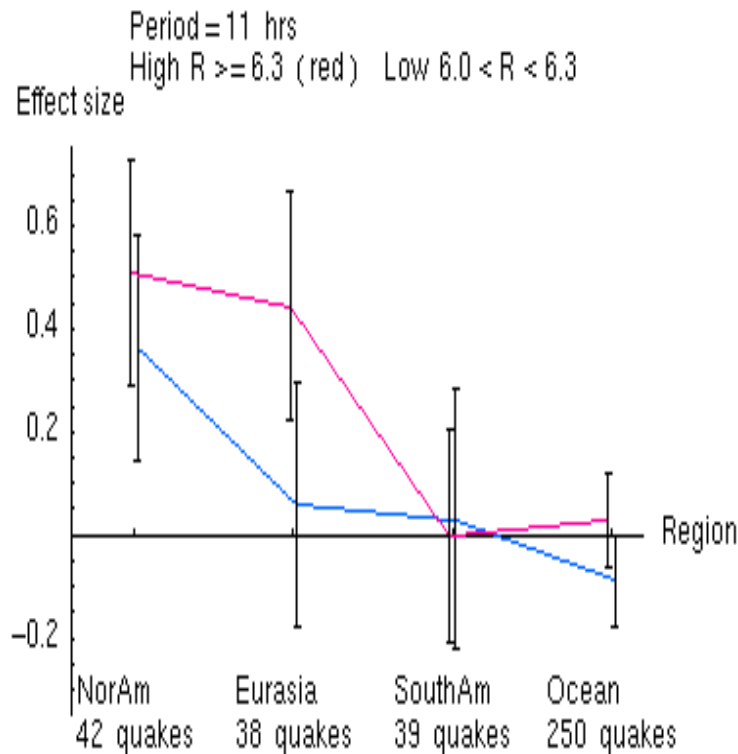
Map of Quakes: Richter 6 or More

Land Masses with People and Eggs

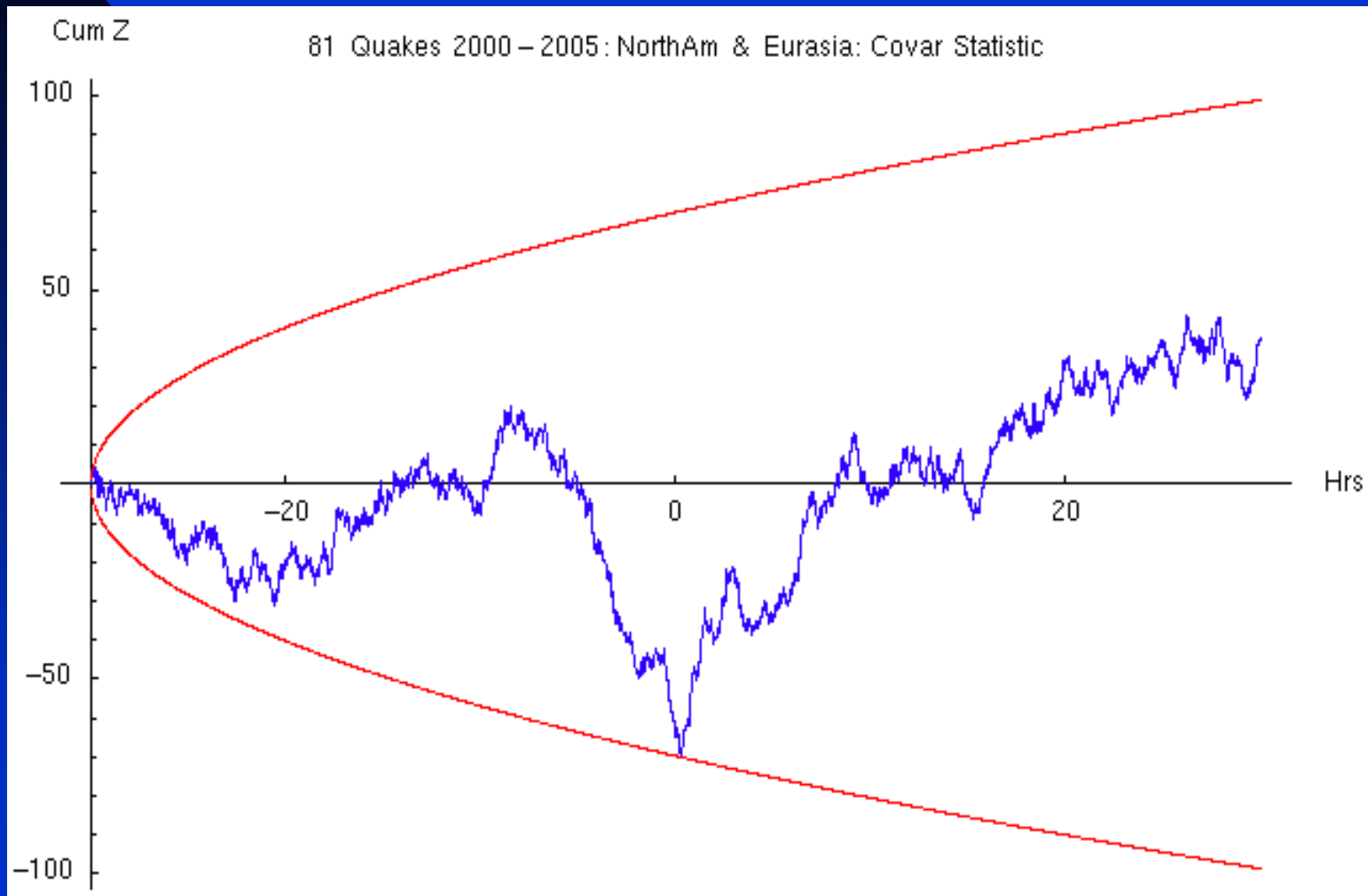


Earthquakes: EGG Network Responds To large quakes, Richter 6 or more If they occur in populated areas

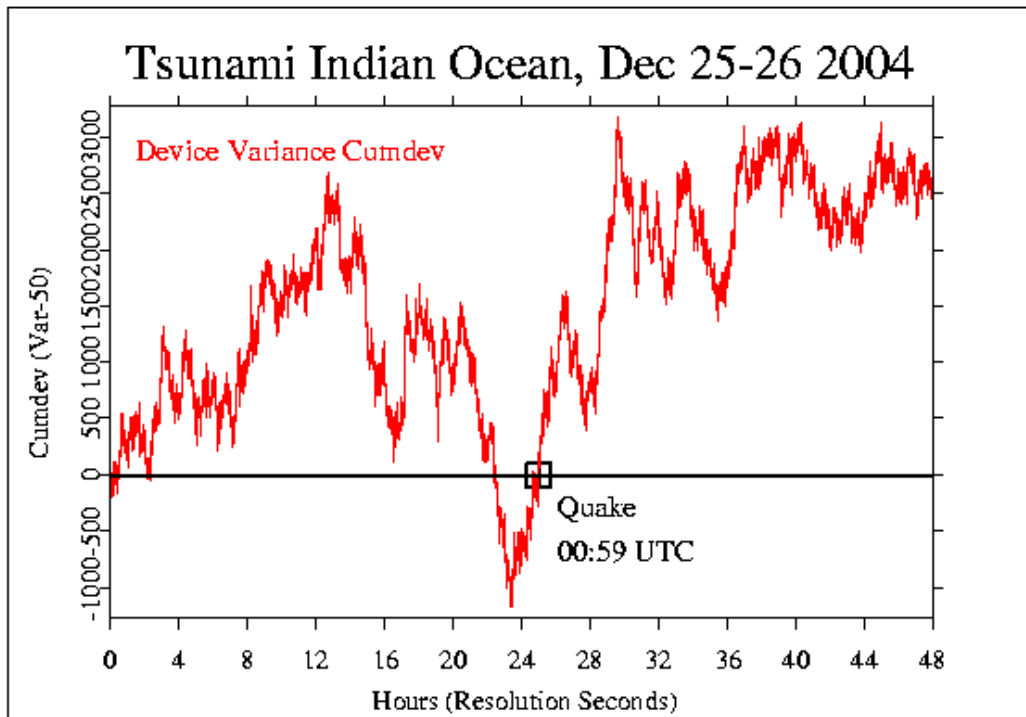
Dispersion Statistic for Earthquakes by Region 2000 - 2004



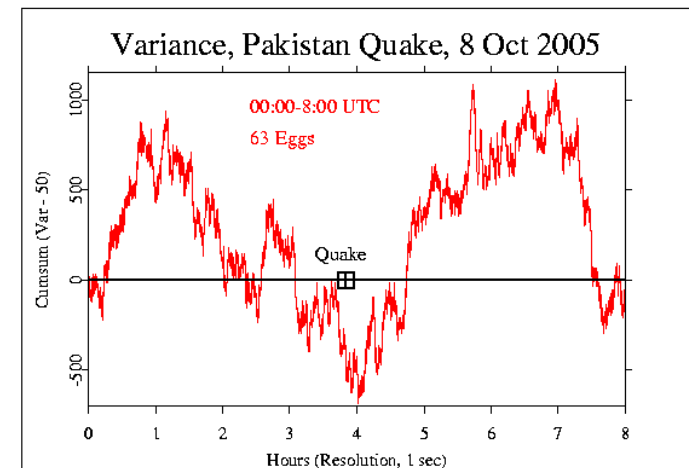
Cumulative Deviation of Covariance Measure Quake Moment ± 30 Hours



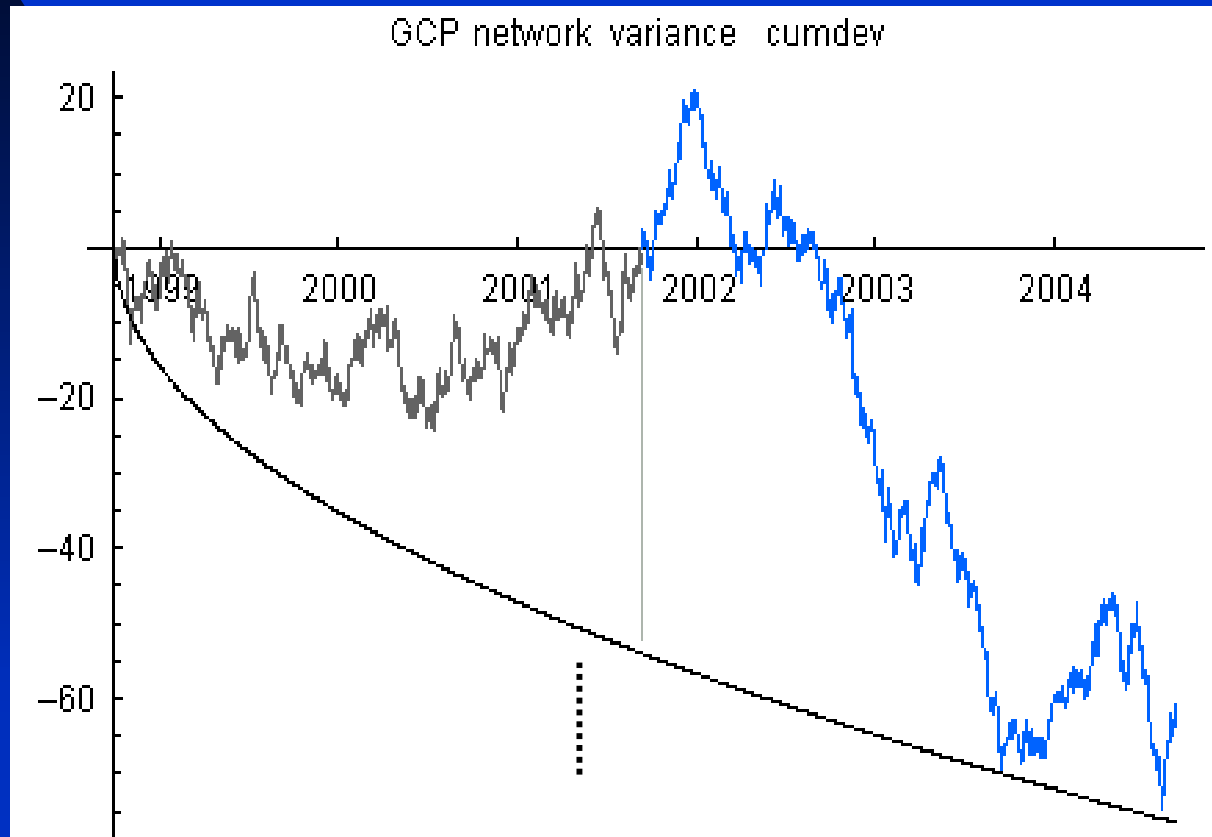
The Indian Ocean Tsunami had a Profound effect on people around the world The GCP/EGG network responded sharply



And more recently
In Pakistan & Kashmir

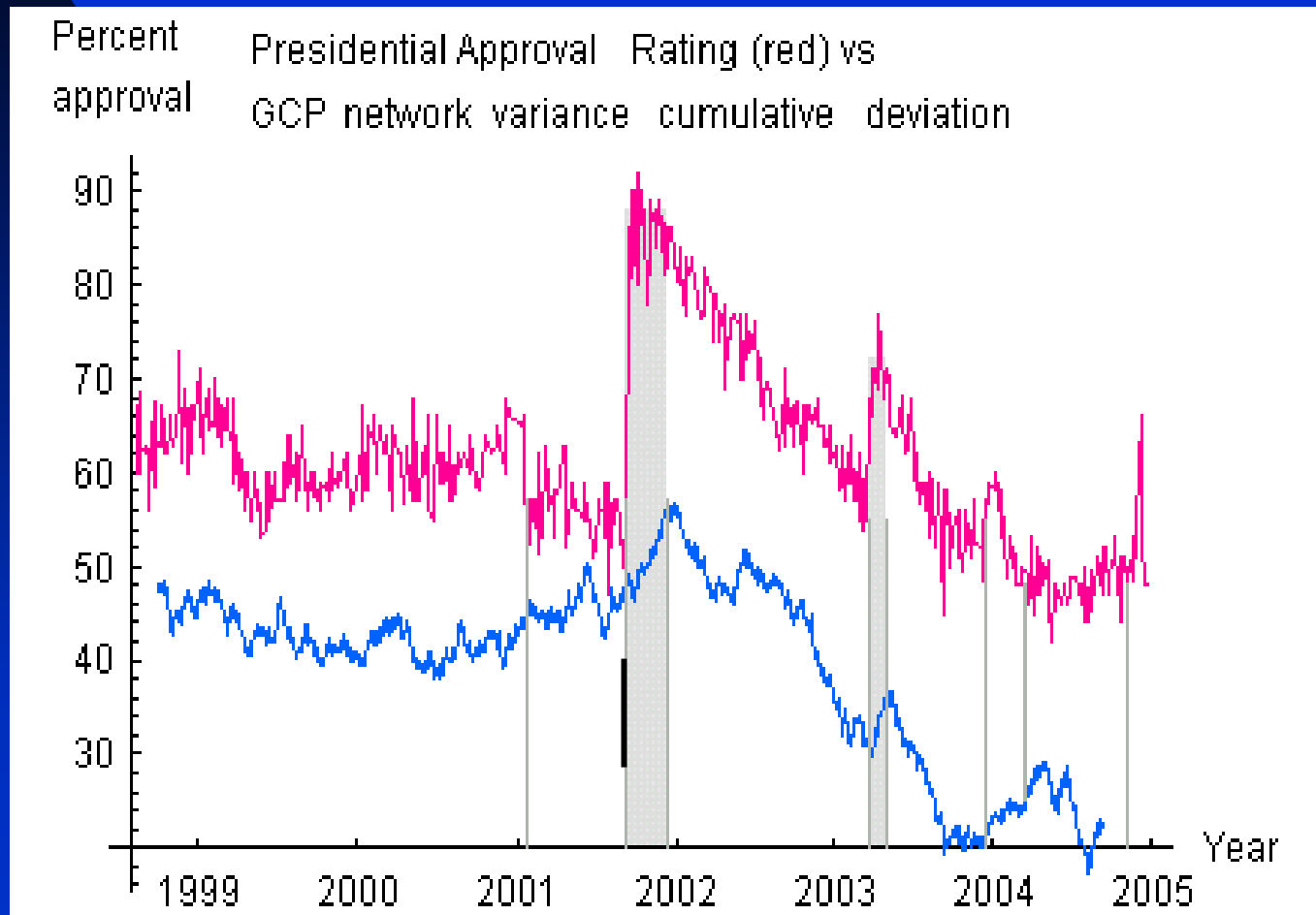


Background Long-term Trend: Network Variance (\sim Stouffer Z^2) Cumulative Deviation, Daily Values



This Downward Trend is Significant

Long-term Trend: Independent Correlation With a Sociological Measure?



Bigger Picture: What is our aspiration?

Sharpen and focus our questions

Aim for theoretical understanding

Capture insight about creative mind

Consider evidence that we are one

Contribute to better future for culture

Theory?

David Bohm, *The Implicate Order*

Active Information:

Virtual Field, Actualized at Need

e.g. Disease = Chaos, “need” for structure
Remote healing, prayer

e.g. GCP Eggs = Random, open for structure
Engaged attention, compassion

Now, if the cooperation of some thousands of millions of cells in our brain can produce our consciousness, a true singularity, the idea becomes vastly more plausible that the cooperation of humanity, or some sections of it, may determine what Comte calls a Great Being.

- - J.B.S. Haldane

We think the world apart. What would it be like to think the world together?

-- Parker Palmer, educator



<http://noosphere.princeton.edu>