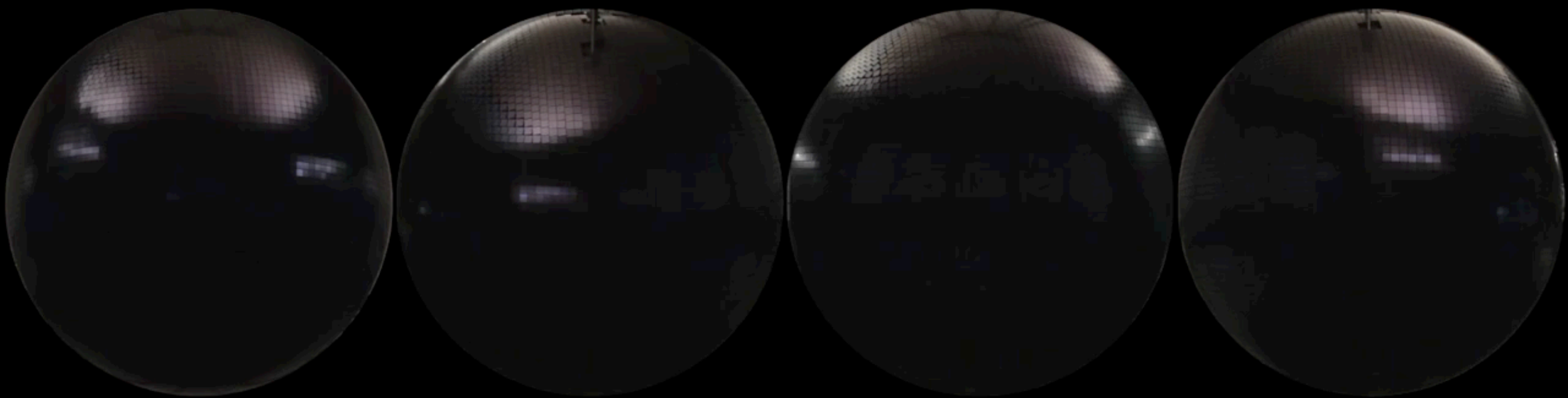
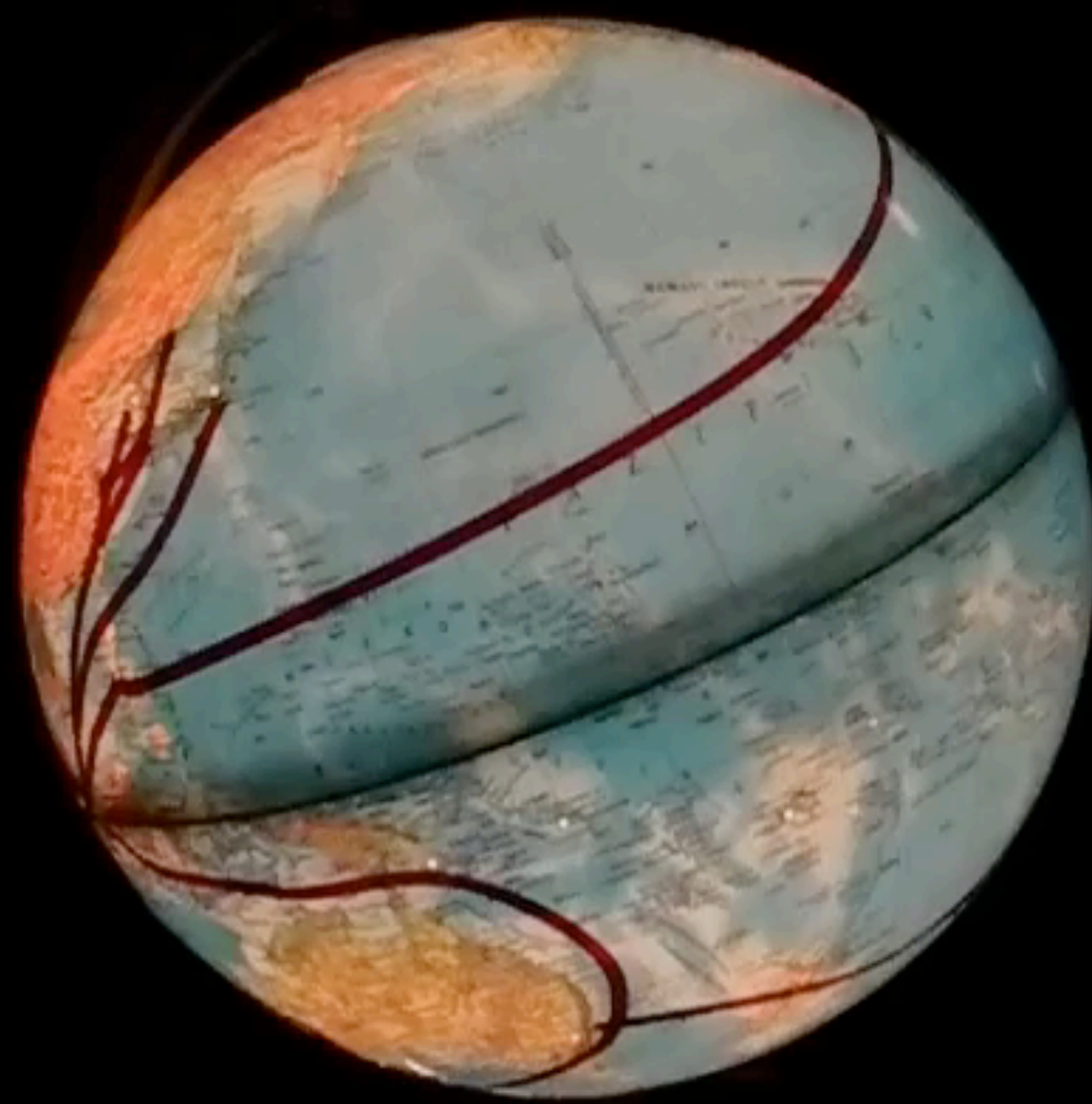




Tokyo, 3/11/2011 Miraikan



World Processor 59 Sec. Catalogue



Ryozen Kodomono-mura, Fukushima ken, Japan







Fukuoka, Japan



中華蘇維埃共和國
臨時中央政府



中國革命博物館
西安革命歷史博物館
西安革命歷史博物館
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THINK GLOBALLY

Thomas Friedman says the world is flat. Ingo Günther proves otherwise. In his *Worldprocessor* series, the New York artist maps geosocial and scientific data from newspapers and NGOs onto 12-inch-diameter plastic globes. The result is part infographic, part networking diagram, part humanistic commentary. So far, Günther has crafted some 300 globes, more than a third of which go on display in August at Kyushu University in Japan. His biggest challenge? Keeping his worldviews up-to-date. Because the underlying statistics are always changing, Günther's work can be quickly rendered obsolete, so much so that he rarely sells it. "I once considered putting expiration dates on the pieces," he says. "I'd rather lease them and then retrieve them for updating." — **Ken Taylor**

LIFE EXPECTANCY

The average number of years people in each nation live.

ASTEROID IMPACTS
Points where celestial bodies
have collided with Earth.

► [GLOBE 118] **TIME ZONES**
How the clock divides the globe

COMPANY VS. COUNTRY
A nation whose GDP rivals a corporation's gross income adopts the company's name.
Example: Pakistan becomes Sony.

ONE-TAIWAN POLICY
Taiwan on its own – a rebuke of the mainland's one-China policy.

▲ [GLOBE 252] **SATELLITE RADIO BROADCASTING FOOTPRINTS**
The coverage areas of WorldSpace satellites *AfriStar* and *AsiaStar*.

▲ [GLOBE 163-2]
MOODY'S RATING
The lower a nation's
Moody's Investors Service
credit score, the darker
it appears, and some places
vanish entirely.

◀ [GLOBE 087] RING OF FIRE
Selected fault lines and epicenters
of earthquakes (5.0 or higher on
the Richter scale).



Sha Tsou Bei, First Chinese Soviet, 2002

中華蘇維埃共和國
臨時中央政府



中國革命博物館
西安革命歷史博物館
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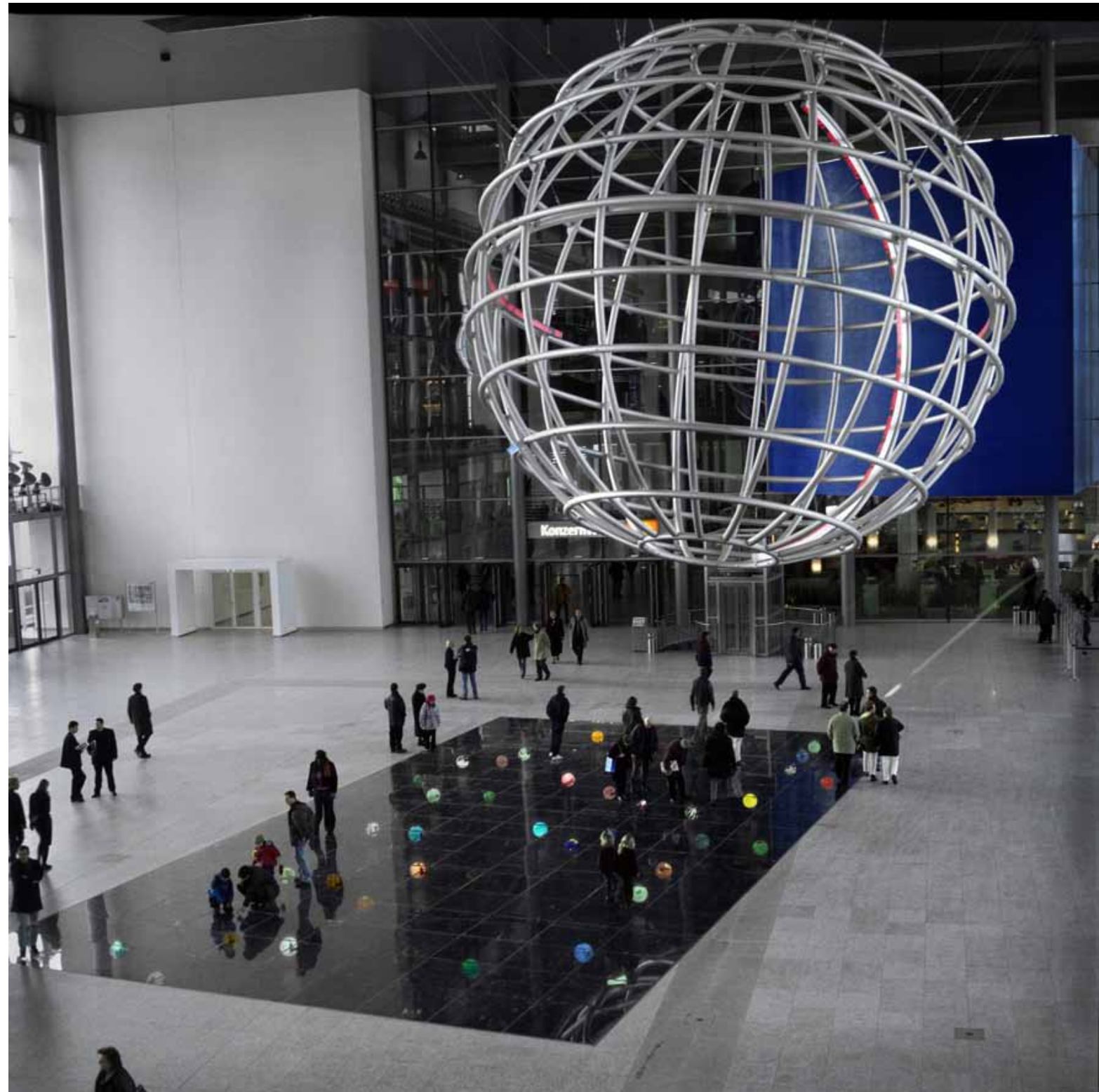




Field of Globes, Wolfsburg, Germany

WORLD PROCESSOR / EXOSPHERE, WOLFSBURG, GERMANY

Ingo Günther's two-part work Exosphere and World Processor – Field of Globes sets the tone for visitors to the Autostadt complex. Exosphere is a 12 meter, 4.5 ton, aluminium wire frame globe at the scale of 1:1 million. The massive sphere is suspended - upside down - from the ceiling. Inside but visible from the outside runs an LED banner listing historical achievements in mobility and quoting writers and artists on the subject of speed and movement. (In English, French and German) The outside of the globe sports a blue LED display with time and location data in Wolfsburg's geographical position. Below is the Field of Globes: An ever growing number of constantly updated World-processor globes are slowly spinning beneath a 250 square meter glass floor. Visitors can walk on the 6.25 cm tempered glass. Trained guides explain the significance and data sources for each globe. Bi-lingual titles and captions are integrated along the side of this permanent installation.



WORLD PROCESSOR / EXOSPHERE, WOLFSBURG, GERMANY

At first glance, Ingo Günther's glowing globes exude an aura of times past; evoking libraries from the Age of Enlightenment when such globes were on the front lines of scientific discovery. A closer look reveals that Günther has overlaid his globes with current geo-social and scientific data collected from institutions, governments, and media sources around the world, raising issues of globalization as neutrally as possible. Ralf Beil in "Serious Games", catalogue, 2011.



WORLDPROCESSOR POWERED BY GEO-COSMOS, TOKYO, JAPAN

Since June 2011 Ingo Günther's Worldprocessor powered by Geo-Cosmos (WP [x] GC) segments are a permanent fixture at the museum and shown several times daily in compositions of different lengths. A derivative iteration in the form of a synchronized projection (Quadrilateral Planetarism, 12:10 min HD video) of the work has been generated in 2014. It premiered the same year in Berlin and is slated for future screenings and installations.

<https://vimeo.com/95607550>



WORLDPROCESSOR POWERED BY GEO-COSMOS, TOKYO, JAPAN

Miraikan, located in Tokyo, is Japan's National Museum of Emerging Sciences and Innovation. Its emblematic centerpiece is a high resolution globe display of majestic proportions, called Geo-Cosmos.

This spherical screen is made from over 10,000 OLED elements, yielding an unprecedented 4K resolution - exceeding 10 million pixels. The screen measures 6 meter in diameter, the largest of its kind in the world.

While this display lends itself to off-the-shelf data sets showing the geo-physical world, mapping the planetary condition is the quintessential challenge. Translating and animating the 500-year-old geo-political globe representation presents unexpected challenges, not excluding audio, the perceptual horizon of a 360° audience, and the computation and choreography of movements on a center-less sphere.





National Museum for Emerging Sciences and Innovation [Miraikan], Tokyo



WORLDPROCESSOR POWERED BY GEO-COSMOS, TOKYO, JAPAN

Ingo Günther's Worldprocessor project, being inspired by art, journalistic and scientific research was the ideal conceptual and content determined precedent for such an endeavor. He was commissioned in 2010 to produce a dynamic, narrative cinematographic iteration of Worldprocessor specifically for Geo-Cosmos. The result is a series of short super-high-resolution (4K) movies with narrative and auditive components for a 360° laterally and 90° vertically distributed audience. New narratives were introduced with temporary blurring, fades and audio lock-stepping of visual events. The globe format was subsequently updated as a medium and catalyst to convey comprehensive data reality in the shape of intuitively accessible and comprehensive, memorable visuals.

<https://vimeo.com/88322925>



▶ ENERGY CONSUMPTION AND GNP

Numerical percentages of world energy consumption are correlated with bar graphs indicating GNP (Gross National Product) figures measured by PPP (Purchase Power Parity) as opposed to currency per \$ exchange rate.



▶ INTERNET USERS

The size of the respective national internet top-level domain code represents the number of users. The brighter the lettering, the higher percentage of the population with Internet access.



▶ WORLD TRADE CURRENT

Divided into seven major trading areas, world trade currents vary widely between different regions and partners. The width of the current represents the volume of annual trade; the narrowest carry \$1-10 billion, while the widest carry \$600 billion or greater.

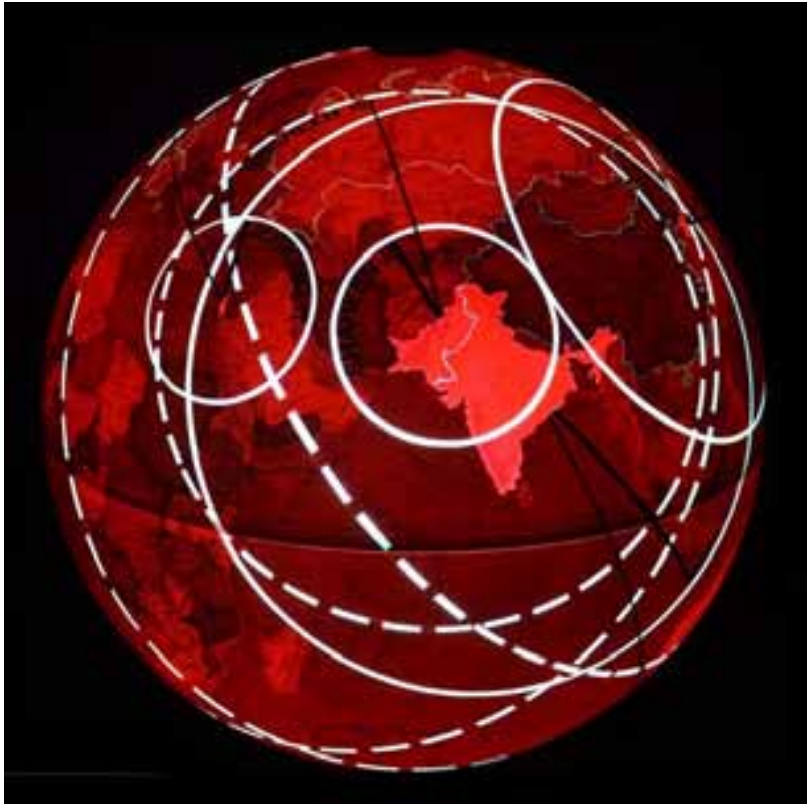


▶ LIFE EXPECTANCY

Life expectancy is a core factor in the Human Development Index. Japan has the highest life expectancy. More than thirty countries with the lowest life expectancies can be found in sub-Saharan Africa; here life expectancies average less than 52 years.

WORLD PROCESSOR

IN 1988, when the notion of globalism was barely in the air, Ingo Günther embarked on the World Processor project. He modified illuminated globes, often radically, sometimes subtly, to reflect the socio-economic and political changes impacting the entire planet. The project has continued to this day, with over 400 separate subjects covered and over 1,000 globes generated - many of which are in public collections, such as the World Economic Forum, Geneva, Kyushu University, Hiroshima City Museum, Obayashi Corporation, Tokyo, and Autostadt GmbH, Wolfsburg. Images of the Worldprocessor globes have appeared regularly on the cover of Japanese monthly magazine Foresight. While the information represented on the globes are journalistically and scientifically accurate representations of the data available at that time, the conceptual and data visualization techniques are informed by the artistic practice and intention to “give shape and form to the unspeakable”



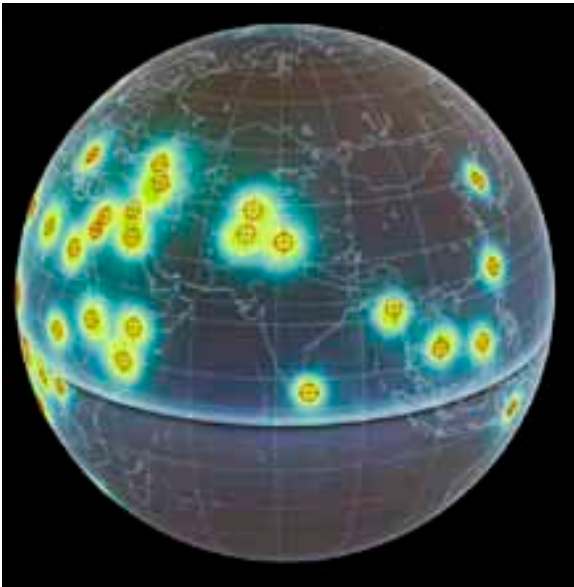
Nuclear Range



Country vs. Company



Submarine Fiber-optic Network



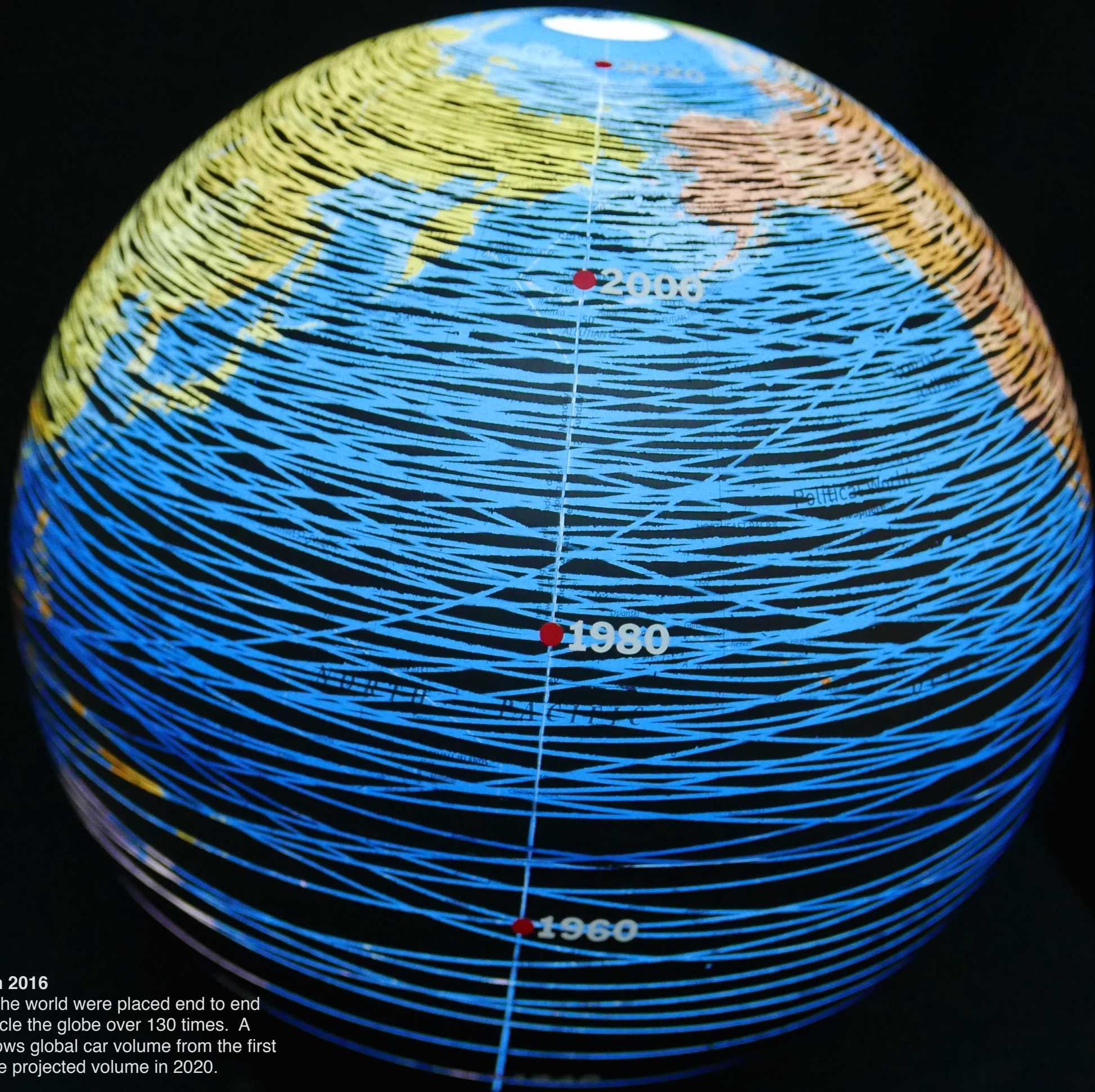
High Tension / Crisis Zones



Refugee Currents

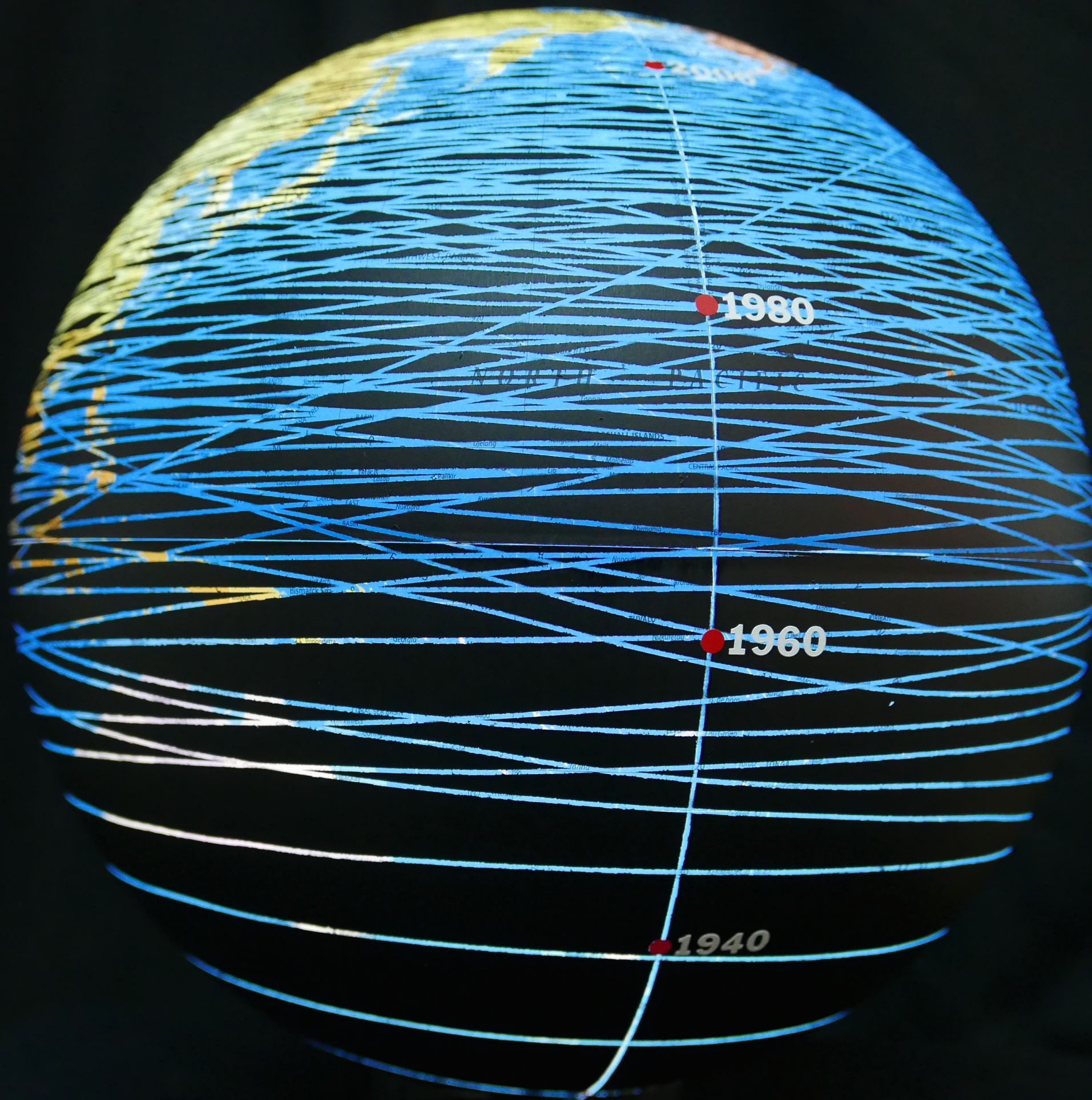


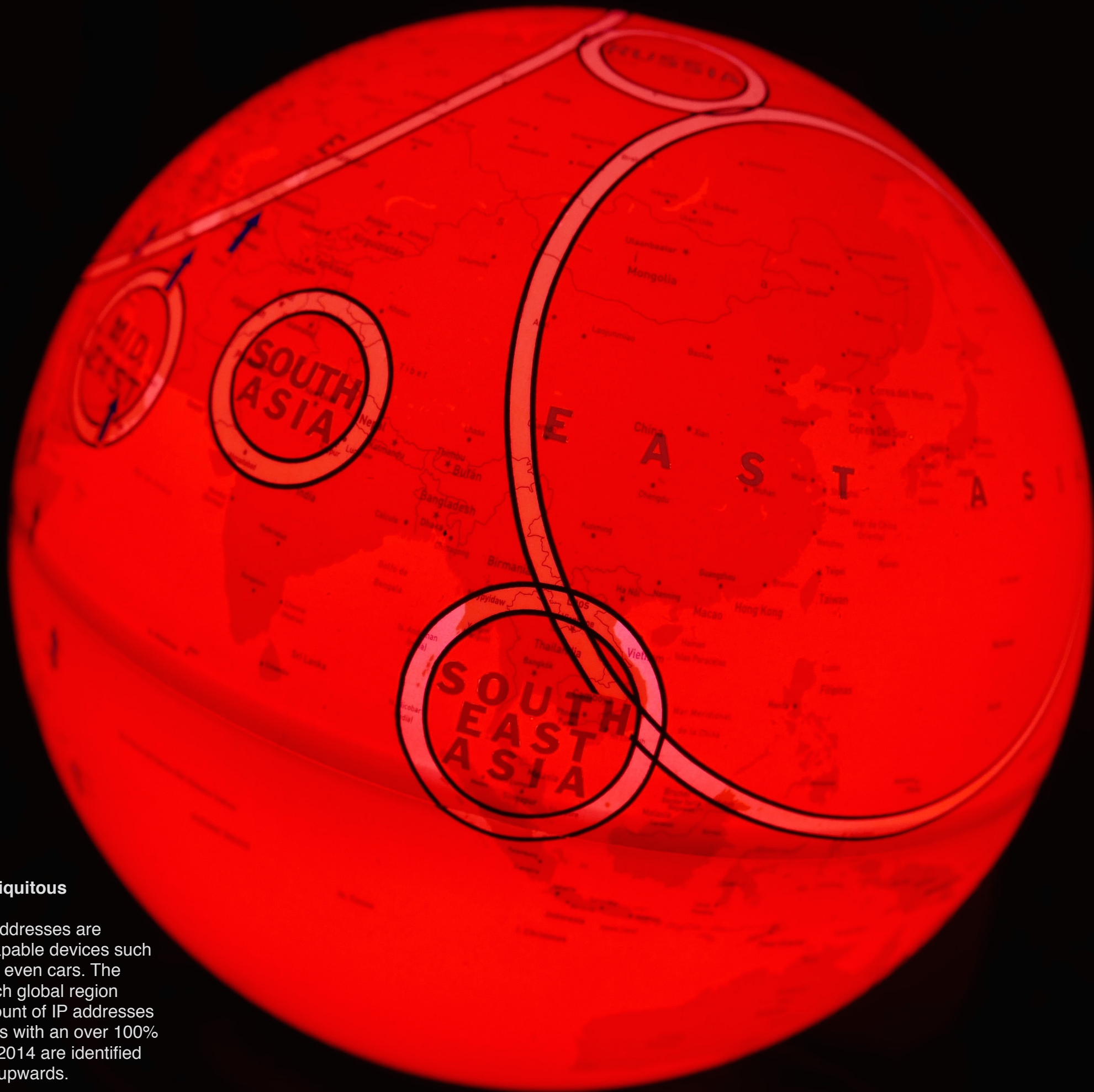
Oil Supply Routes



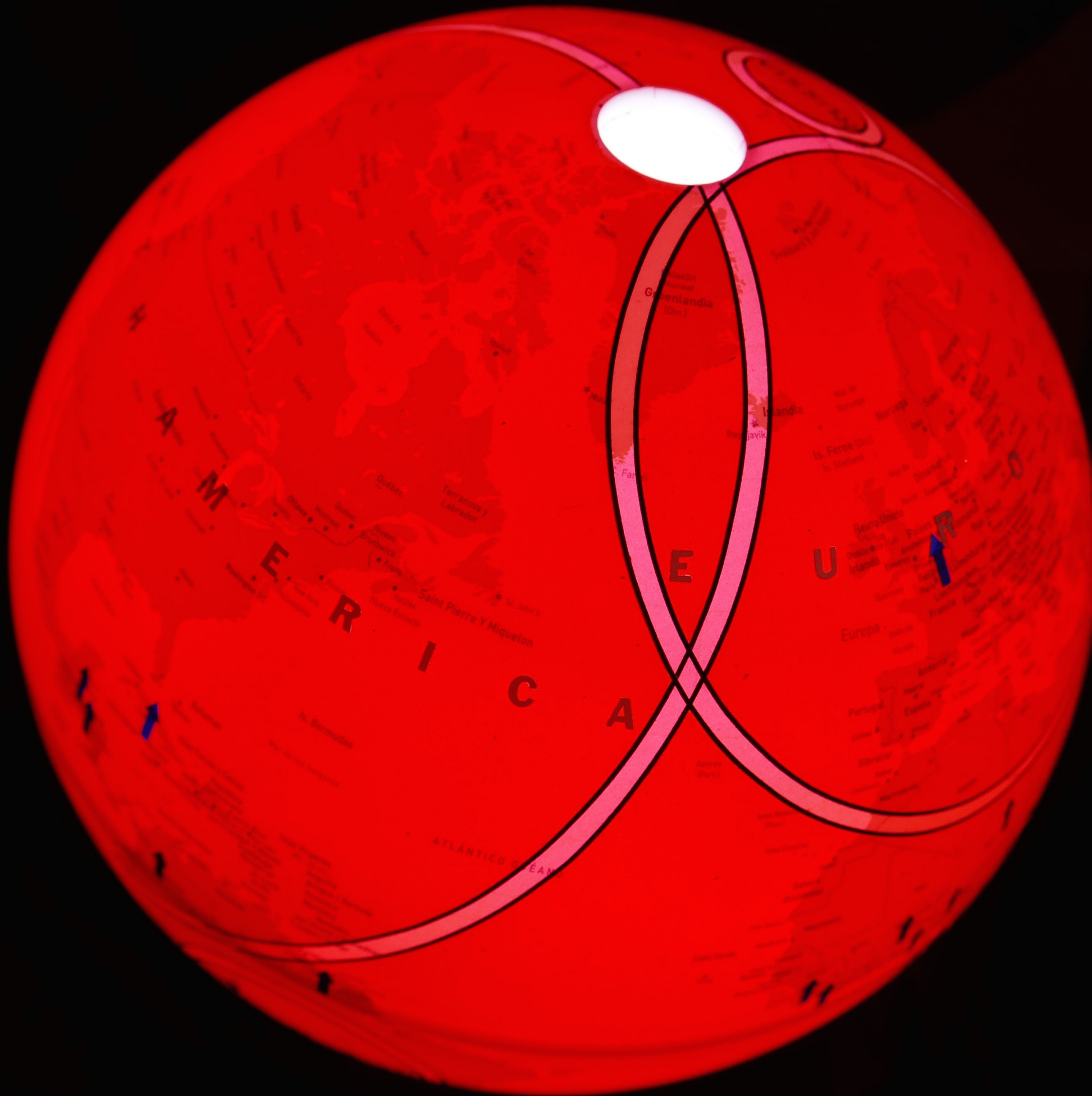
[217-7] Car Jam 2016

If all the cars in the world were placed end to end they would encircle the globe over 130 times. A spiraling line shows global car volume from the first automobile to the projected volume in 2020.



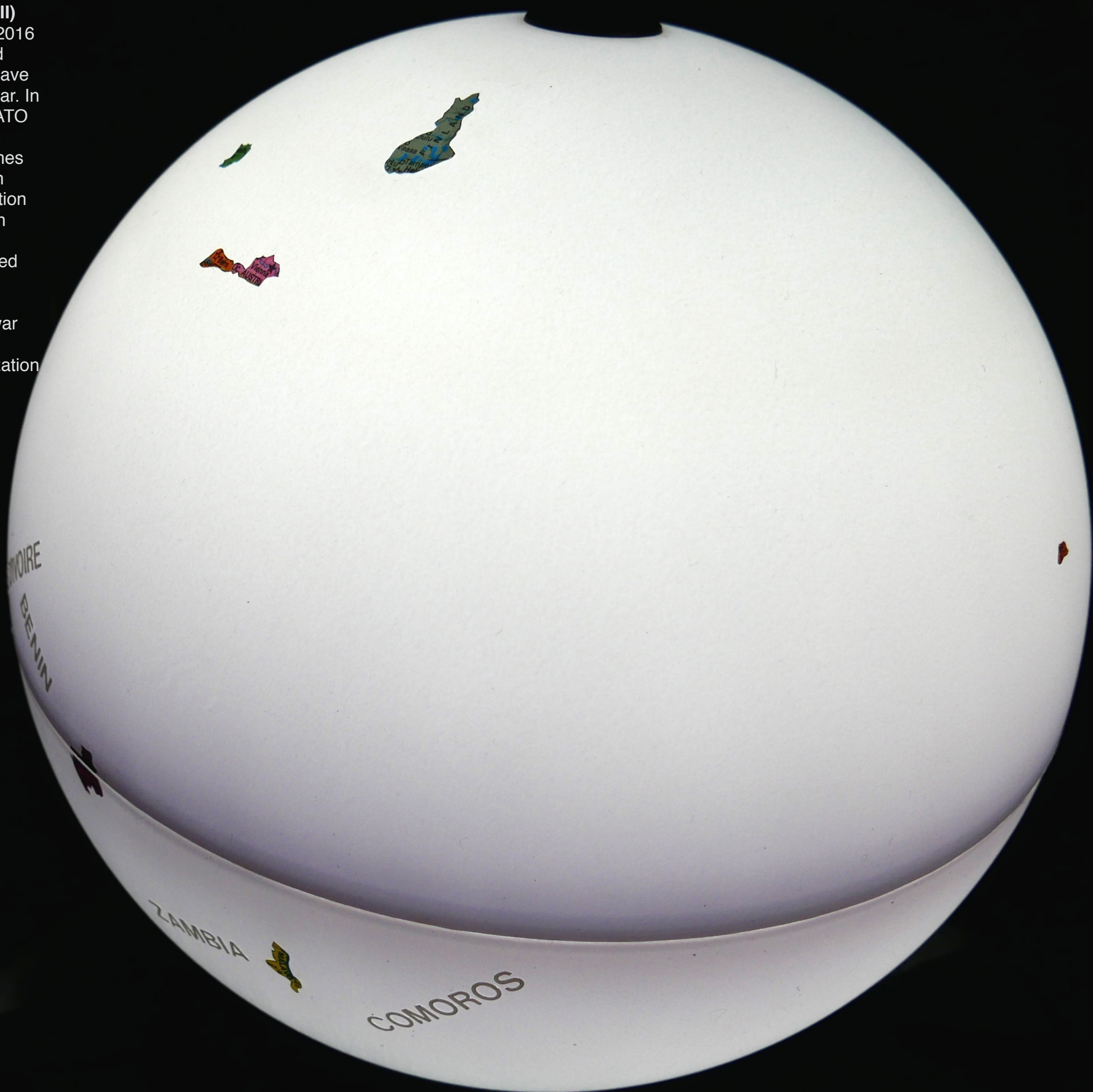


[347-7] Horizon of Ubiquitous Computing, 2016
Internet Protocol (IP) Addresses are assigned to network capable devices such as computers, phones, even cars. The circles surrounding each global region represent the total amount of IP addresses in that region. Countries with an over 100% increase from 2010 to 2014 are identified with an arrow pointing upwards.



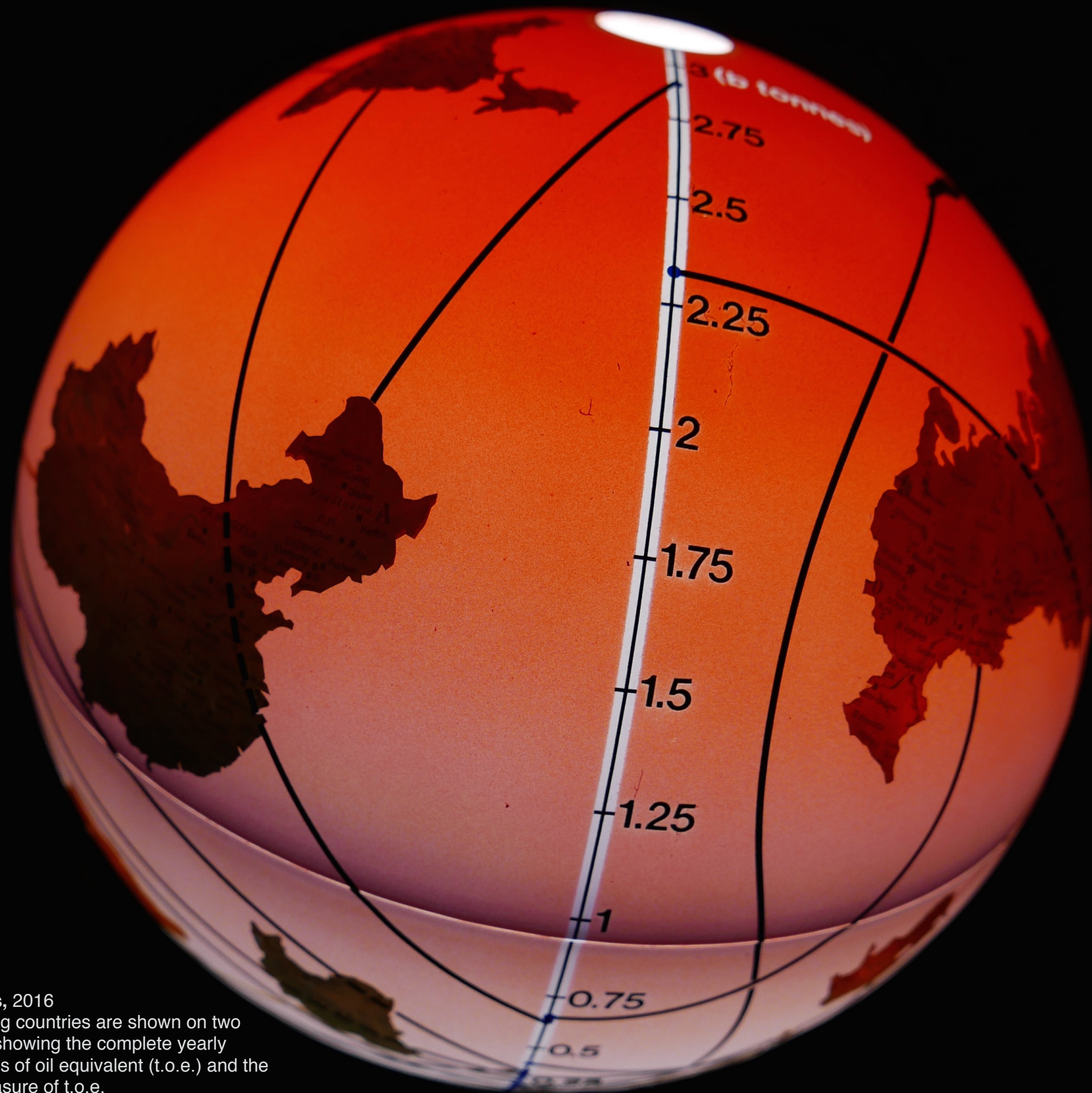
**[138-8] Postwar (WWII)
Peaceful Countries, 2016**

Since the end of World War II, few countries have not been involved in war. In recent years, many NATO countries and coalition countries (country names spelled out) have been drafted into military action in Iraq and Afghanistan further reducing the countries that have used non-military means for conflict resolution. Definitions of acts of war are not exact as for example the weaponization of finance and cyber warfare has recently expanded the conflict spectrum.



JAPAN

SOLOMON
ISLANDS



[193-5] Fuel Consumers, 2016

The top 20 fuel consuming countries are shown on two scales; one is a number showing the complete yearly consumption in billion tons of oil equivalent (t.o.e.) and the other as a per capita measure of t.o.e.

[373-2] Economic Jurisdiction, 2016

The United Nations Convention on the Law of the Seas (UNCLOS) gives nations economic jurisdiction over the so called EEZs (exclusive economic zones) which extend 200 nautical miles into the ocean. Given the information now available on ocean floors and new exploitation techniques, these ocean areas are no longer a buffer zone between countries but instead are sharply defined and occasionally defended borders. Exclusive fishing rights are considered equally existential for nations relying on dwindling fish stocks. The US has not yet ratified the treaty.



[231-2] DNA Traces, 2012

Population geneticists have traced the human family tree to an ancestral homo sapiens community of only 2,000 breeding individuals living in Africa. They began splitting up approximately 144,000 years ago and first migrating to Asia and Europe before the Americas. Analyses of mitochondrial DNA passed from mother to child have identified only one female (a mitochondrial "Eve") at the root of the DNA family tree, which is represented by orange lines; other lineages became extinct. Y chromosome sequences passed from father to son are represented by green lines and go back to a single chromosomal "Adam." It is believed that 10 principle branches in the Y chromosome tree may correspond to the world's major language groups.







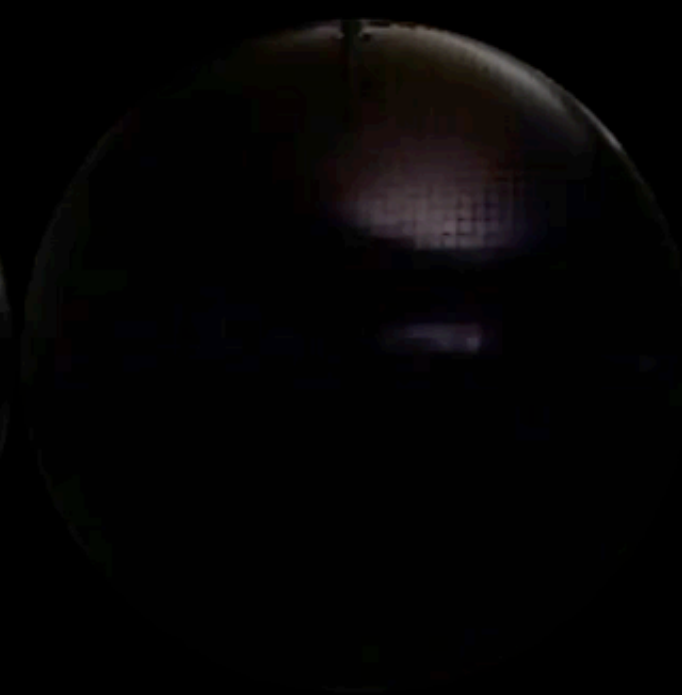


[366-6] Submarine Fiber Optic Network

Thin white lines show the world's submarine fiber-optic network. Since the year 2000, over 80% of international data volume has been transmitted using deep sea cables. Although they are more wiretap proof, they are more susceptible to damage than satellite links. Earthquakes, ship anchors and even sharks endanger the transfer of data.

BIG BANG DATA, BARCELONA, MADRID, BUENOS AIRES





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