

The Sun and our Lives

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S. U. N. Festival

Quotes about the Sun

- „The goal of life is the study of the Sun, the Moon and the skies” – Anaxagoras, 459 BC
- „What is the Sun? If the science of astronomy would be able to solve that problem, it were able to solve the riddle of the Universe itself”
Amadee Guillemin, 1870
- „The creative activity of the world as a whole must work in stars as well.” Sir Francis Younghusband, 1928

My life and the Sun



What is the Sun?

- The sky is the heaven
- The Sun is its center – the center of heaven
- The natural focus of attention
- The natural focus of heavenly powers radiating earthlings wondering on this planet
- Today the Sun is conceived through the eyeglasses of science – through physics
- Taking the physical eyeglass, the Sun is nothing but an average star, the closest to us, an incandescent ball of gas, a mass of hot plasma in which nuclear fusion proceeds.
- NASA: “A star is a big ball of gas. It is not star-shaped. Stars give off heat and light.”

Sun's fickle heart may leave us cold

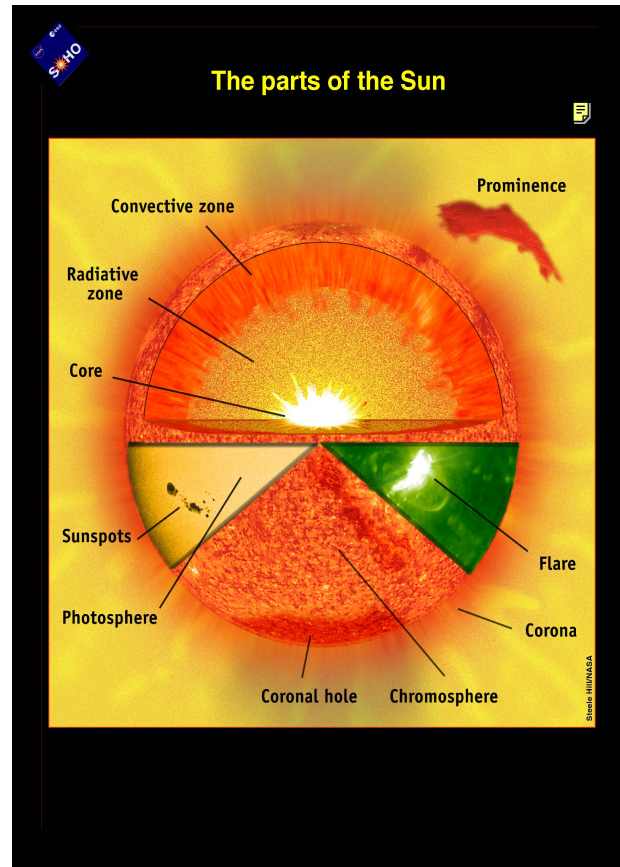
New Scientist, January 2007

There's a dimmer switch inside the sun that causes its brightness to rise and fall on timescales of around 100,000 years - exactly the same period as between ice ages on Earth. So says a physicist who has created a computer model of our star's core.

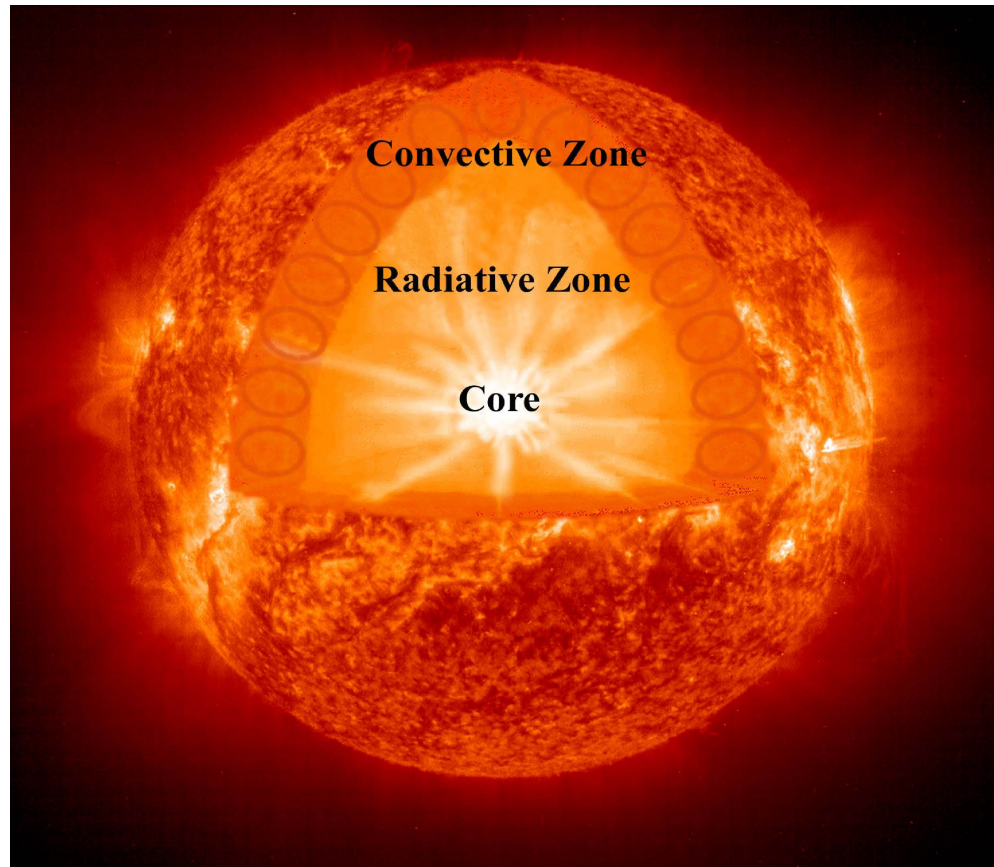
Robert Ehrlich of George Mason University in Fairfax, Virginia, modelled the effect of temperature fluctuations in the sun's interior. According to the standard view, the temperature of the sun's core is held constant by the opposing pressures of gravity and nuclear fusion. However, Ehrlich believed that slight variations should be possible.

He took as his starting point the work of Attila Grandpierre of the Konkoly Observatory of the Hungarian Academy of Sciences.

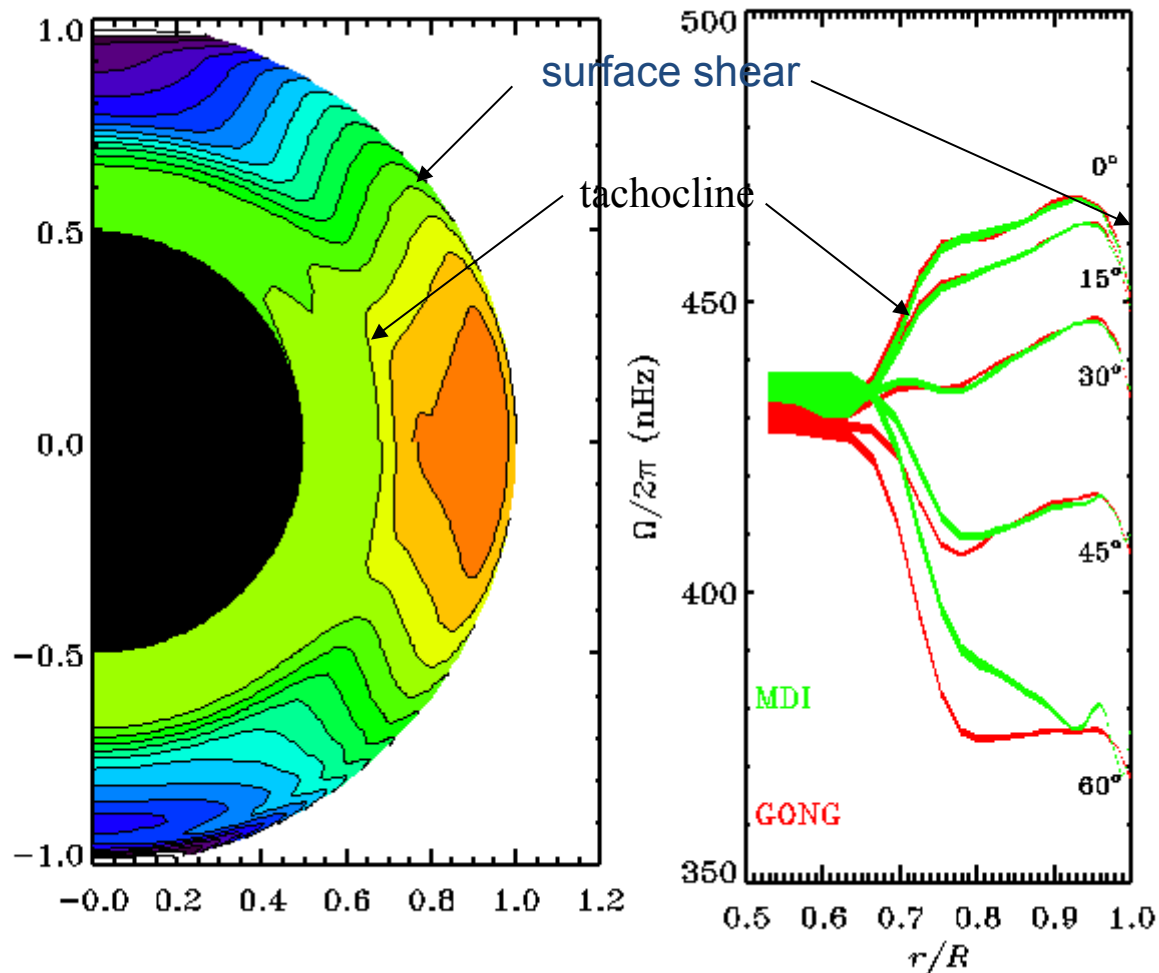
The internal structure of the Sun



The convective zone and the solar core



The internal rotation



GONG és MDI adatok (Howe, 2002)

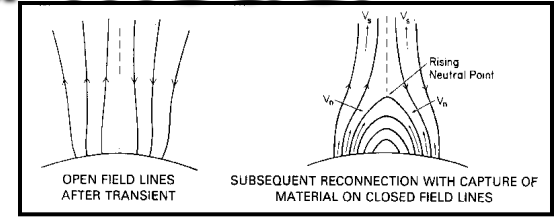
Sunspot-formation



Solar eruption

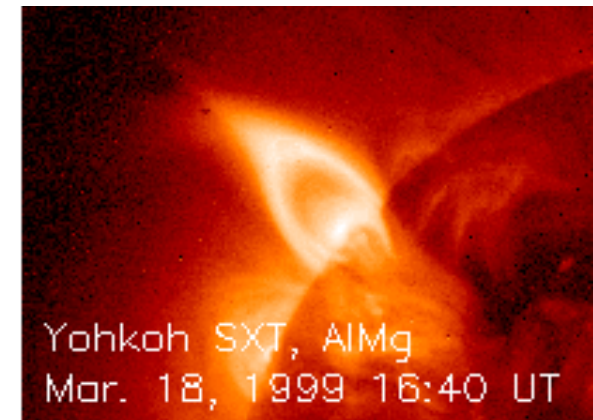
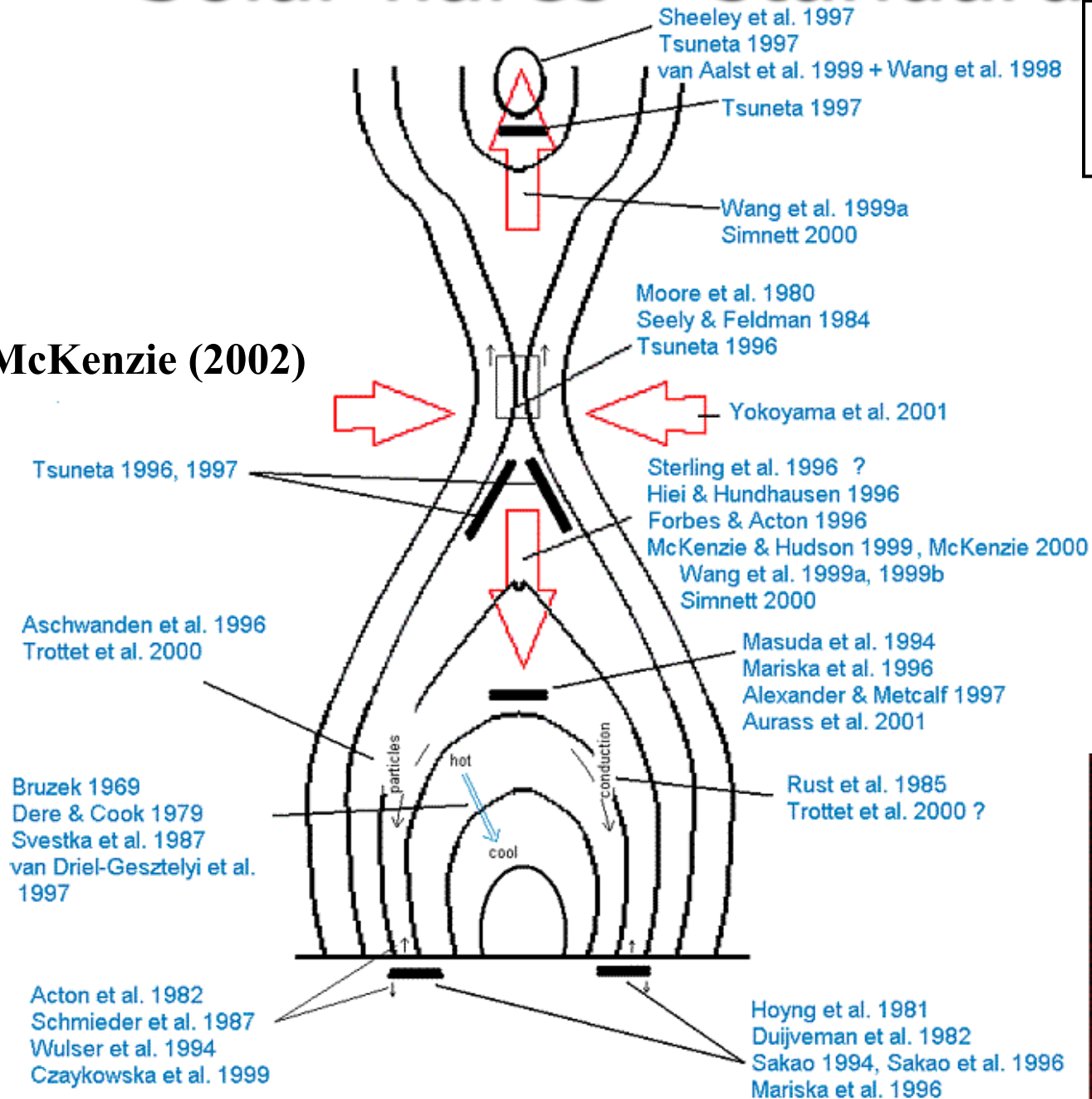


Solar flares - standard model



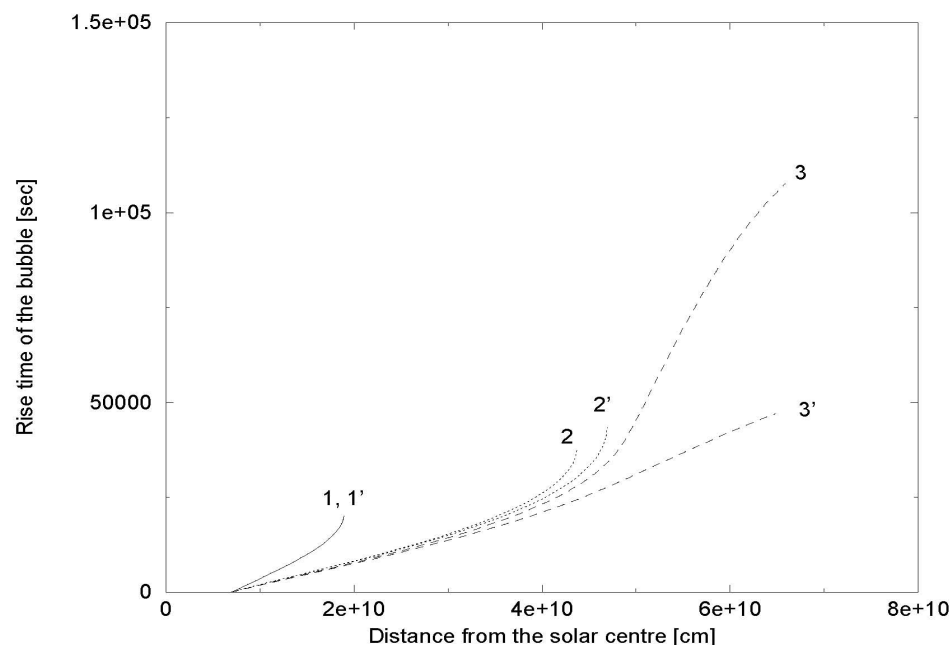
Kopp and Pneuman, 1976

McKenzie (2002)

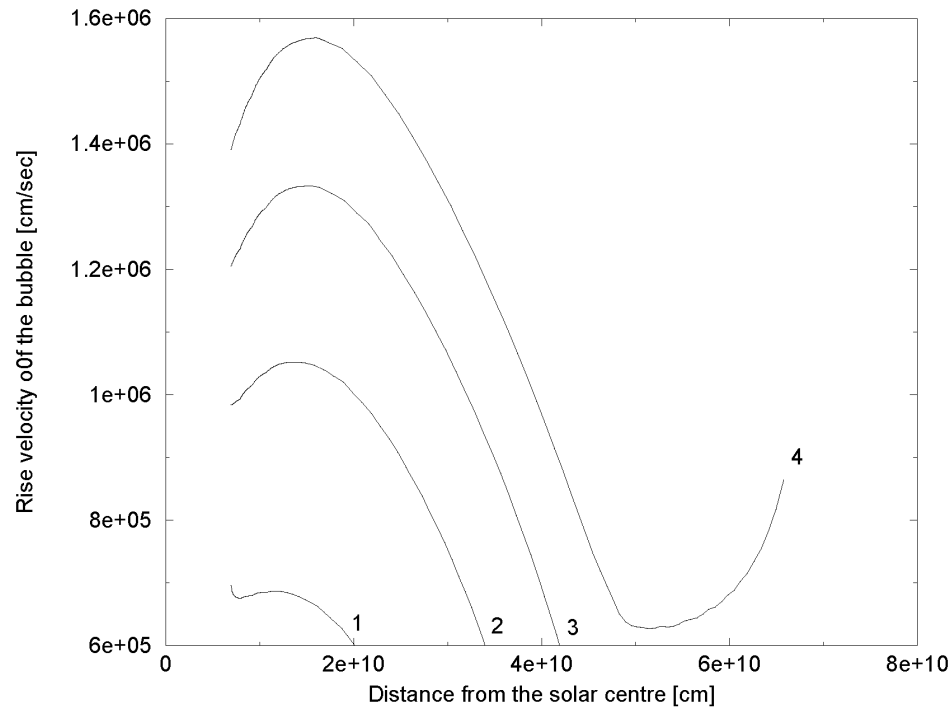


Yohkoh SXT, AIMg
Mar. 18, 1999 16:40 UT

The travel of hot bubbles from the solar core to the atmosphere – by Grandpierre and Ágoston 2005



The change of the velocity of hot bubbles on their way to the surface



Arrival of hot bubbles to the surface – by Tsuneta 1993

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S. TSUNETA

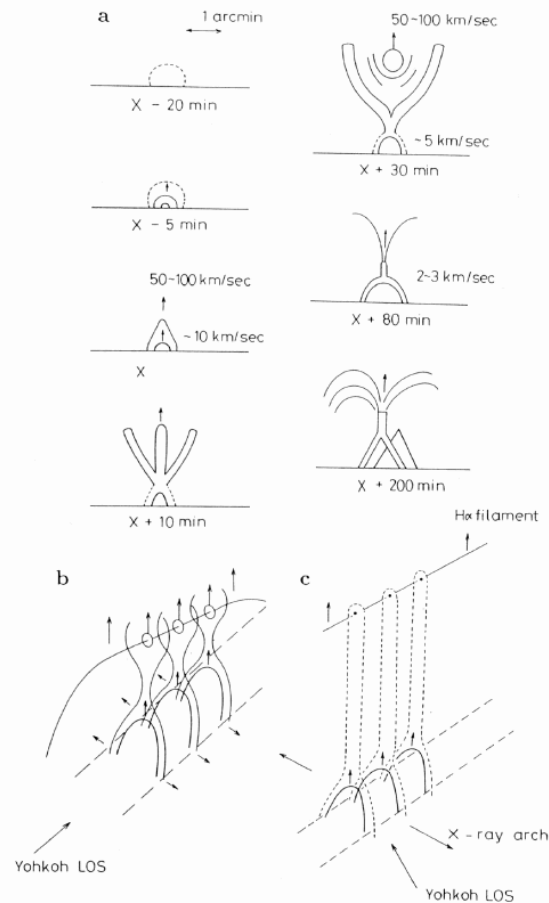
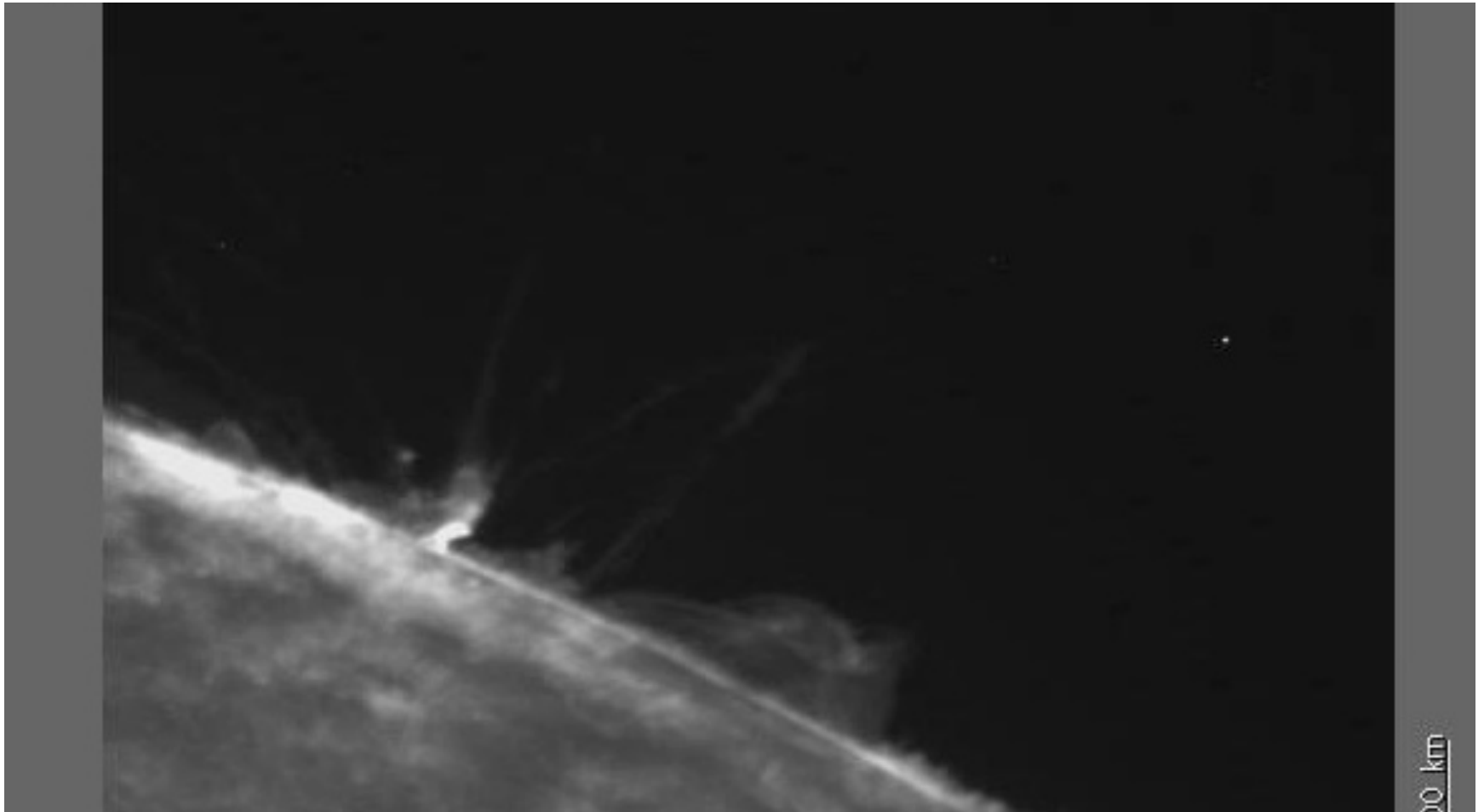


Fig. 5. (a) Evolution of 1991 December 2 flare. X is the starting time of the hard X-ray flare (4:50 UT). (b) Magnetic structure of 1991 December 2 flare. (c) Filament eruption and the formation of X-ray arcade on 1992, July 31.

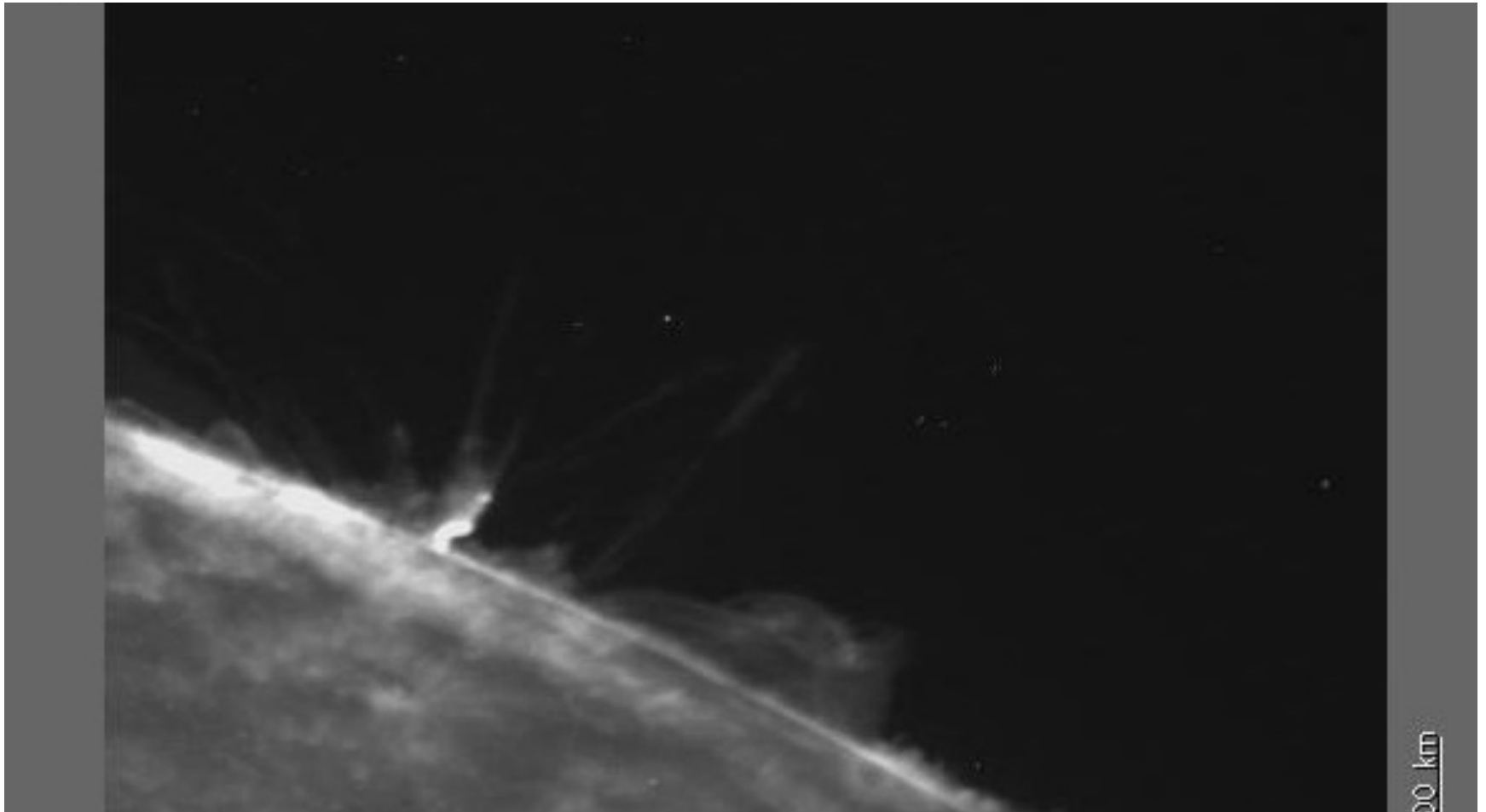
Where does the flares originate from?

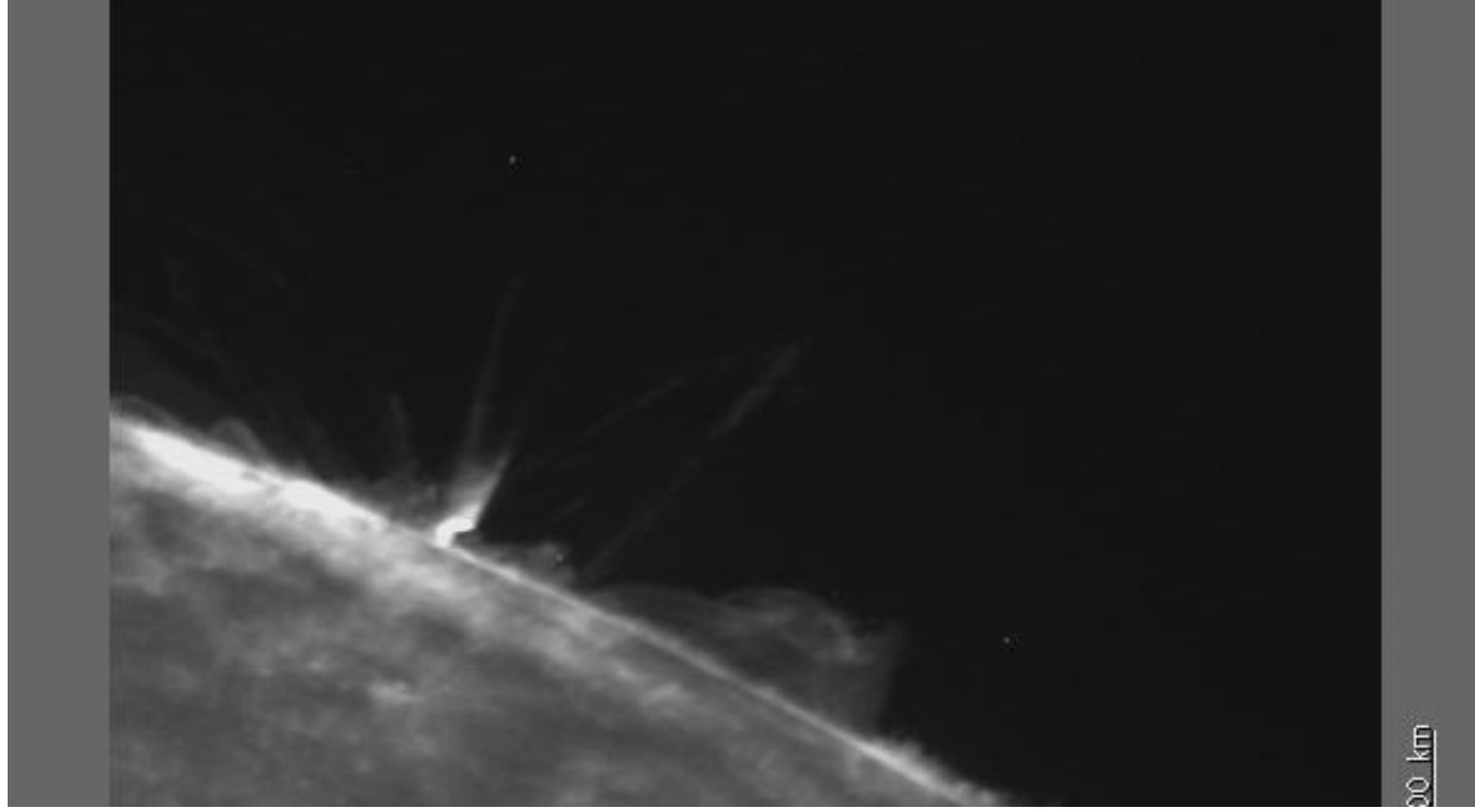
- The standard opinion is that solar flares originate in the solar atmosphere, and inject matter downwards (and upwards)
- By my interpretation solar flares originate from below the surface, from the solar core
- The characteristic cusp-shaped structure of the magnetic flux ropes of the flare region indicate that the latter is closer to reality – see the YOHKOH SXT image, Mar 18 1999, above

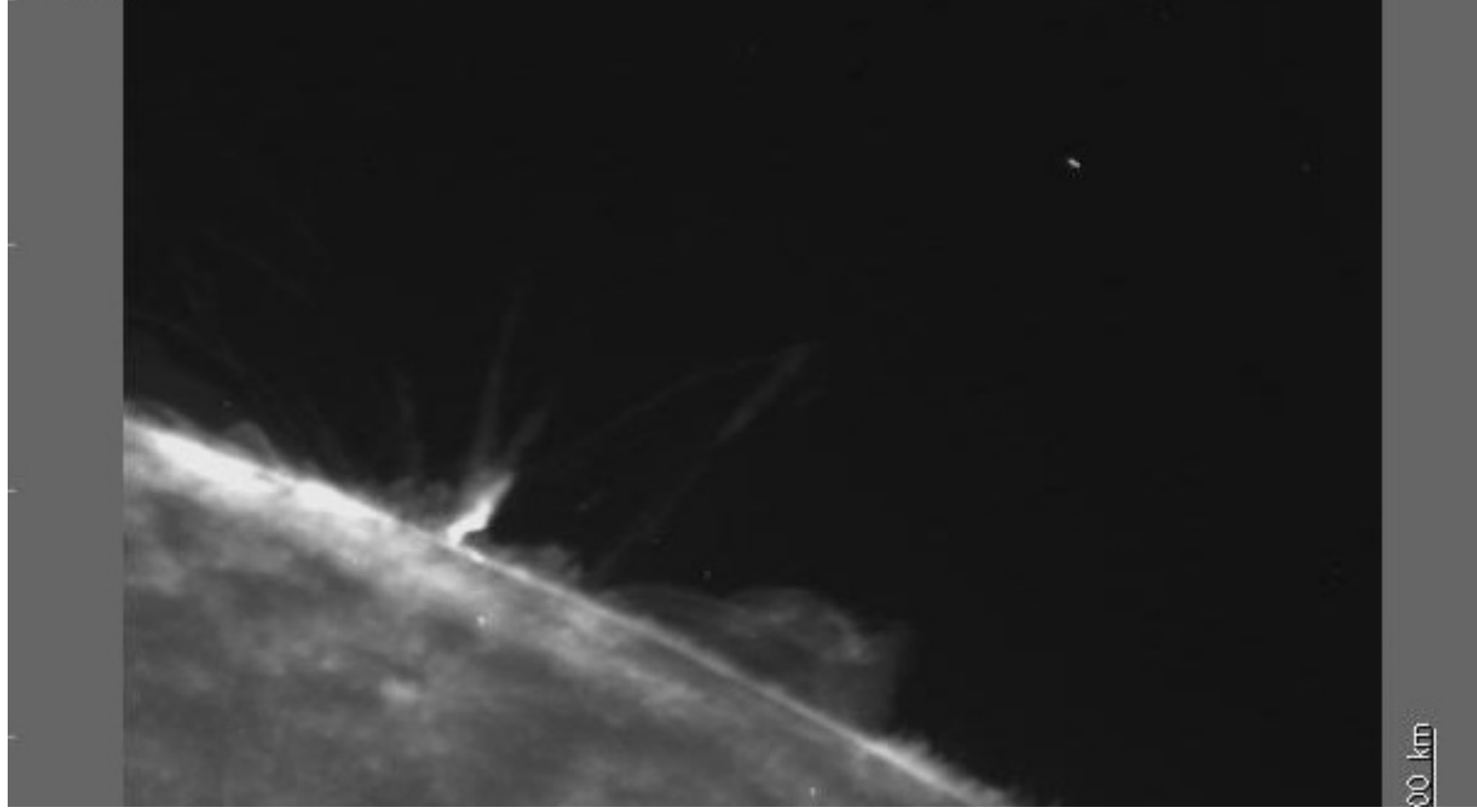
Solar eruption from below

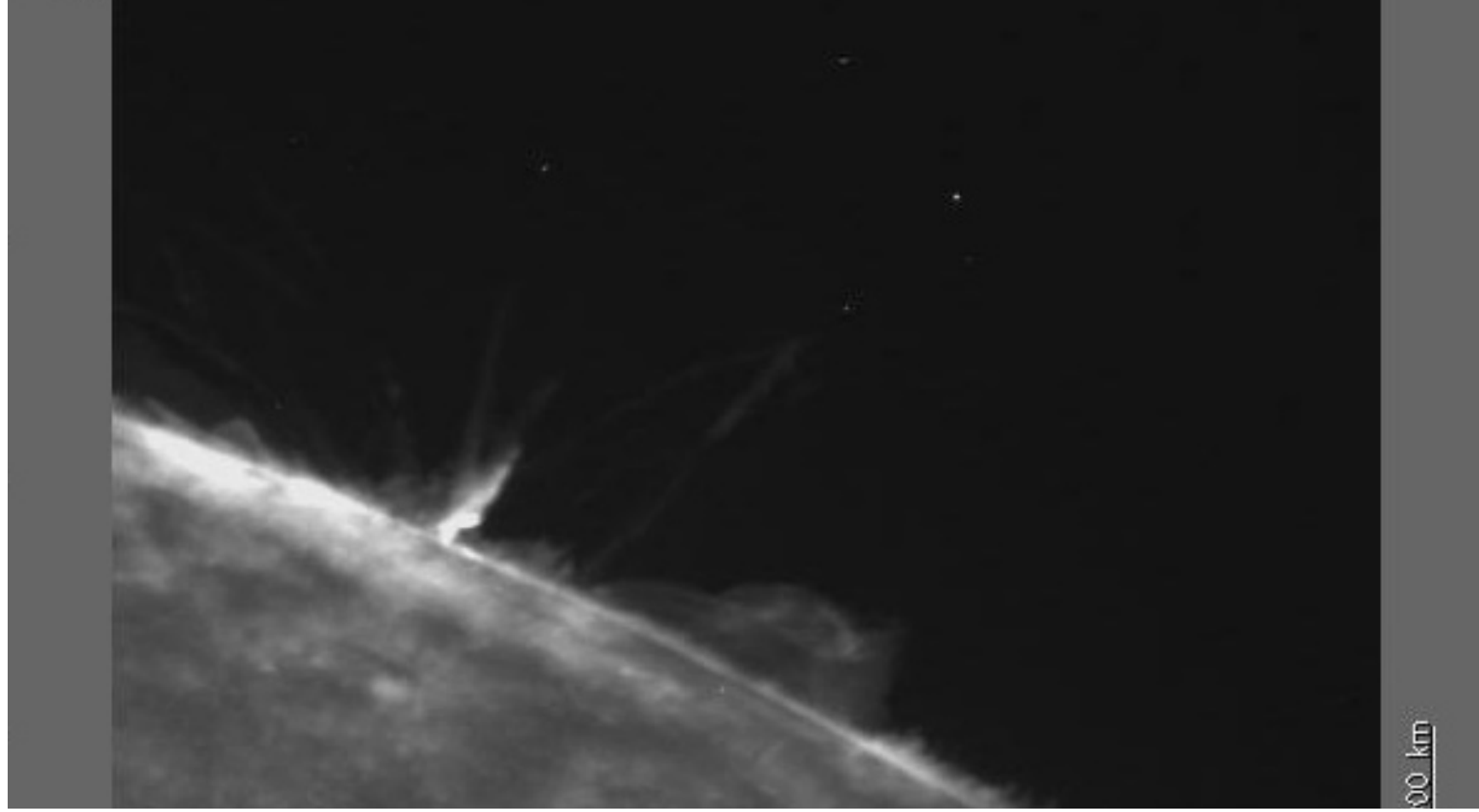


Excerpts from a movie

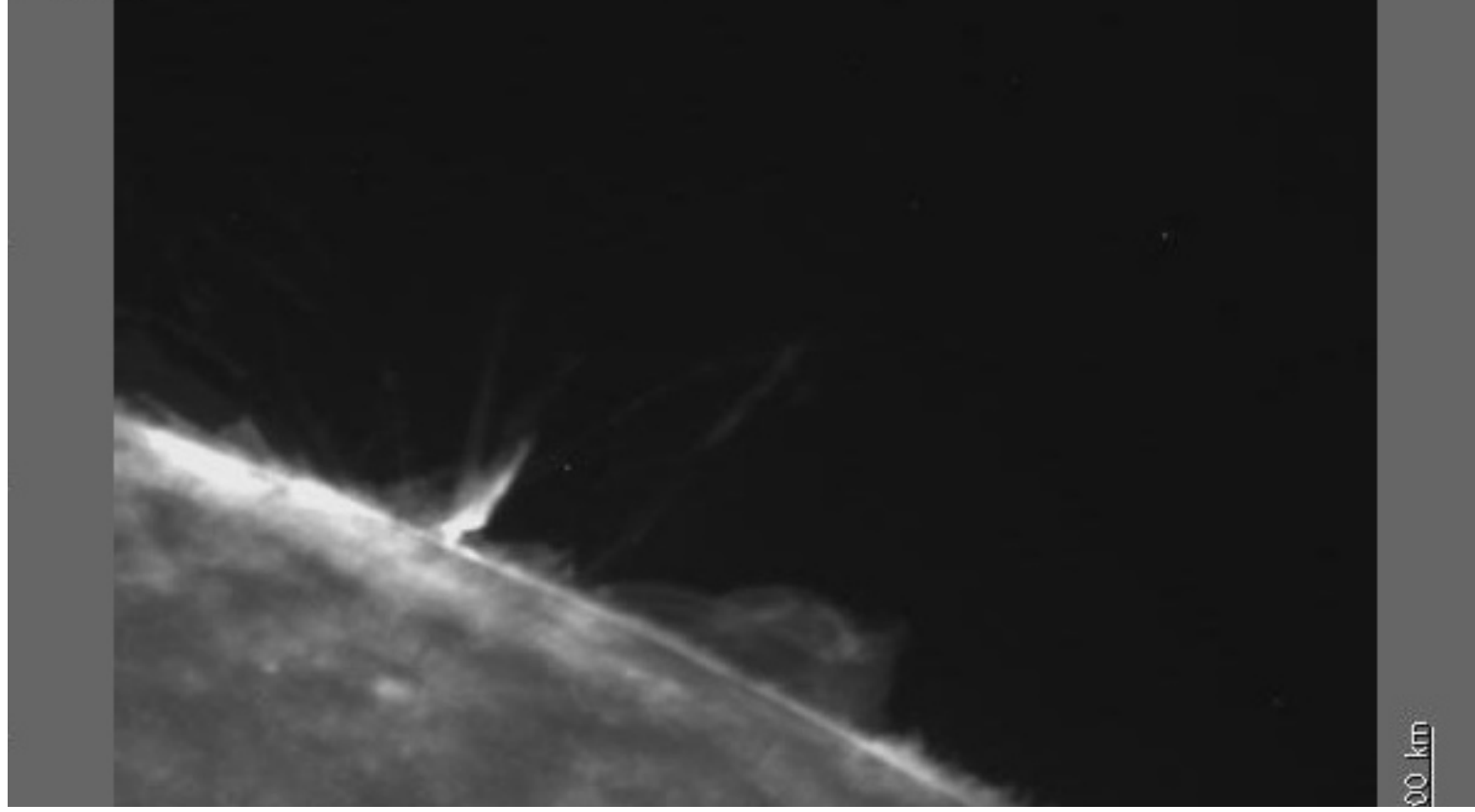




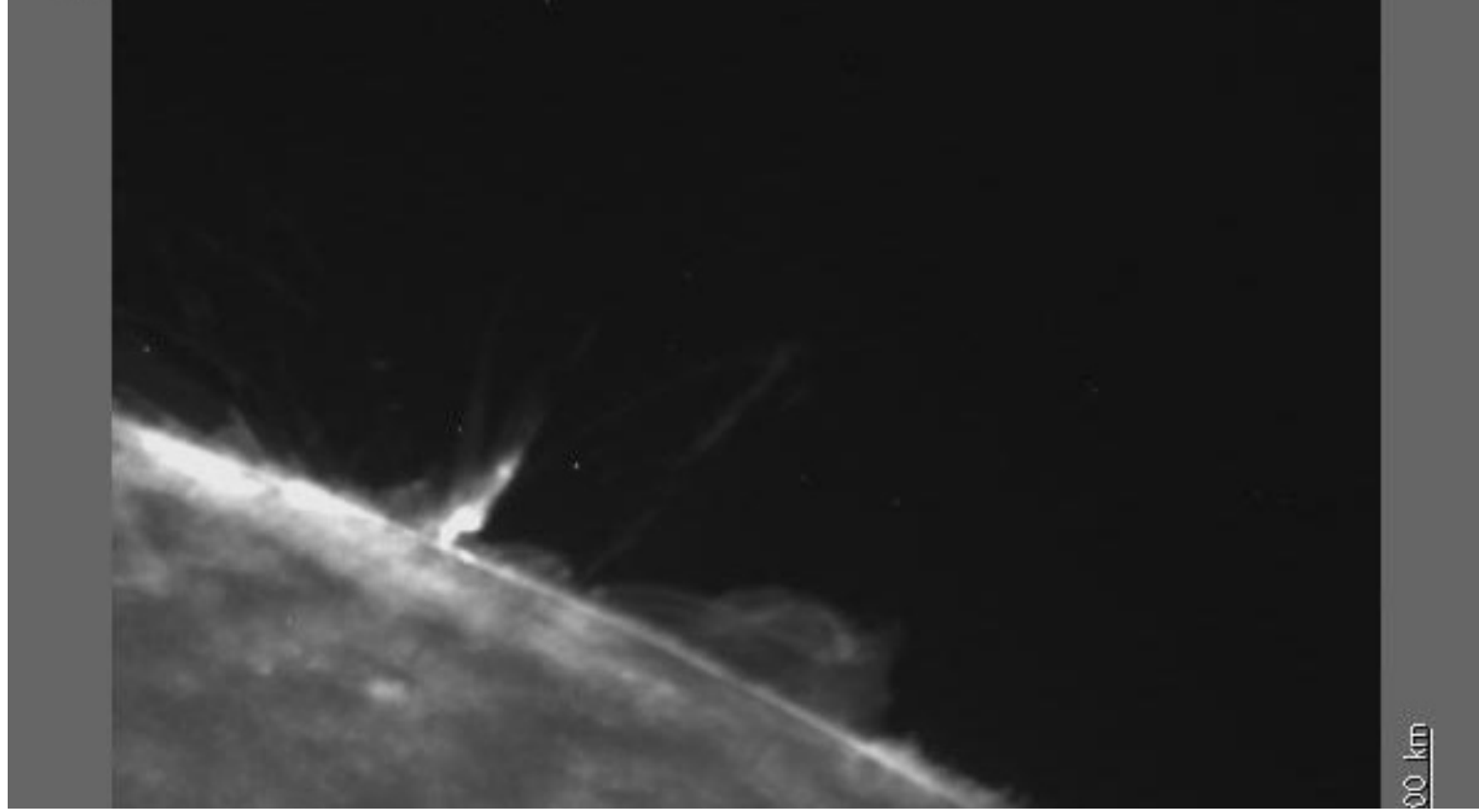




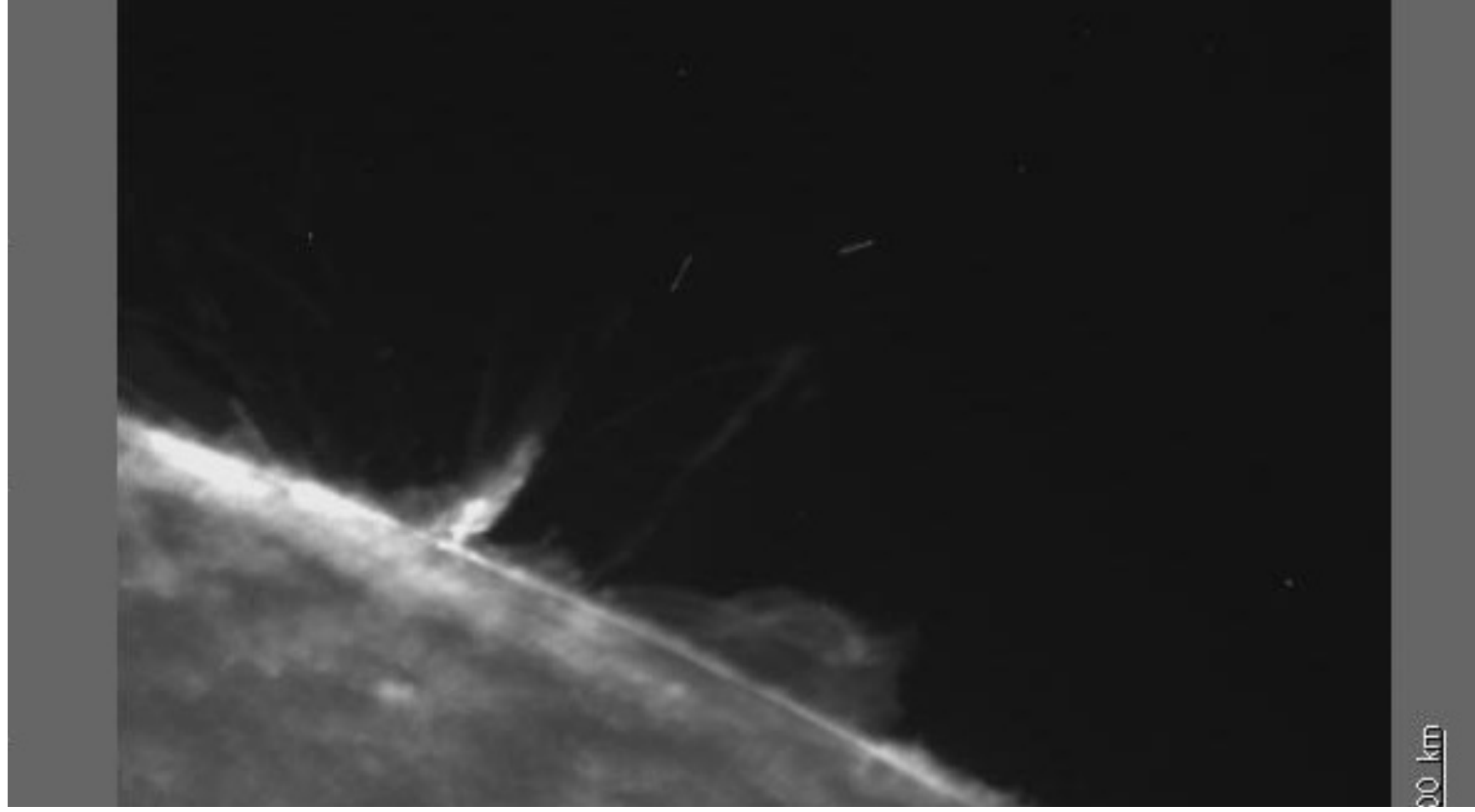
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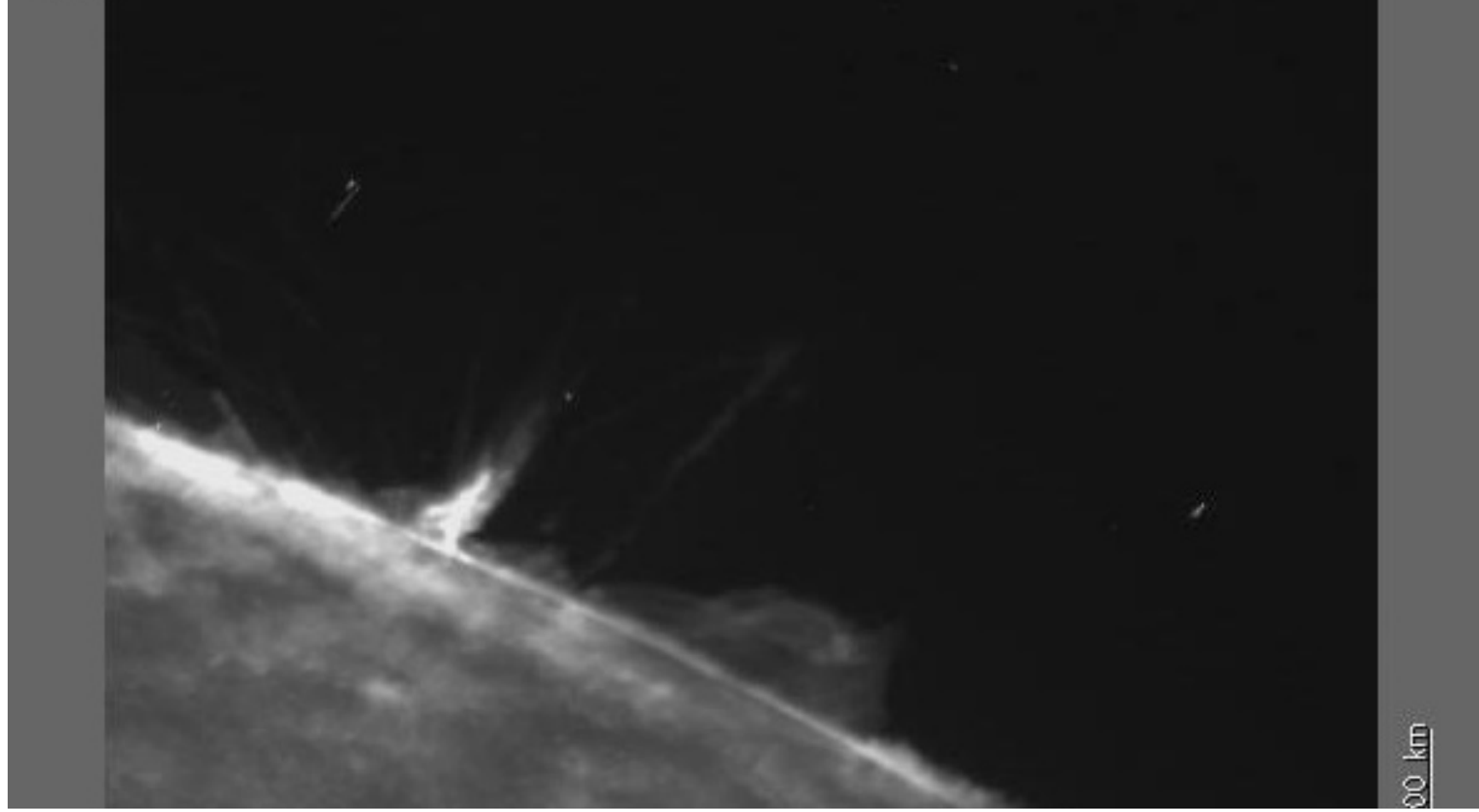


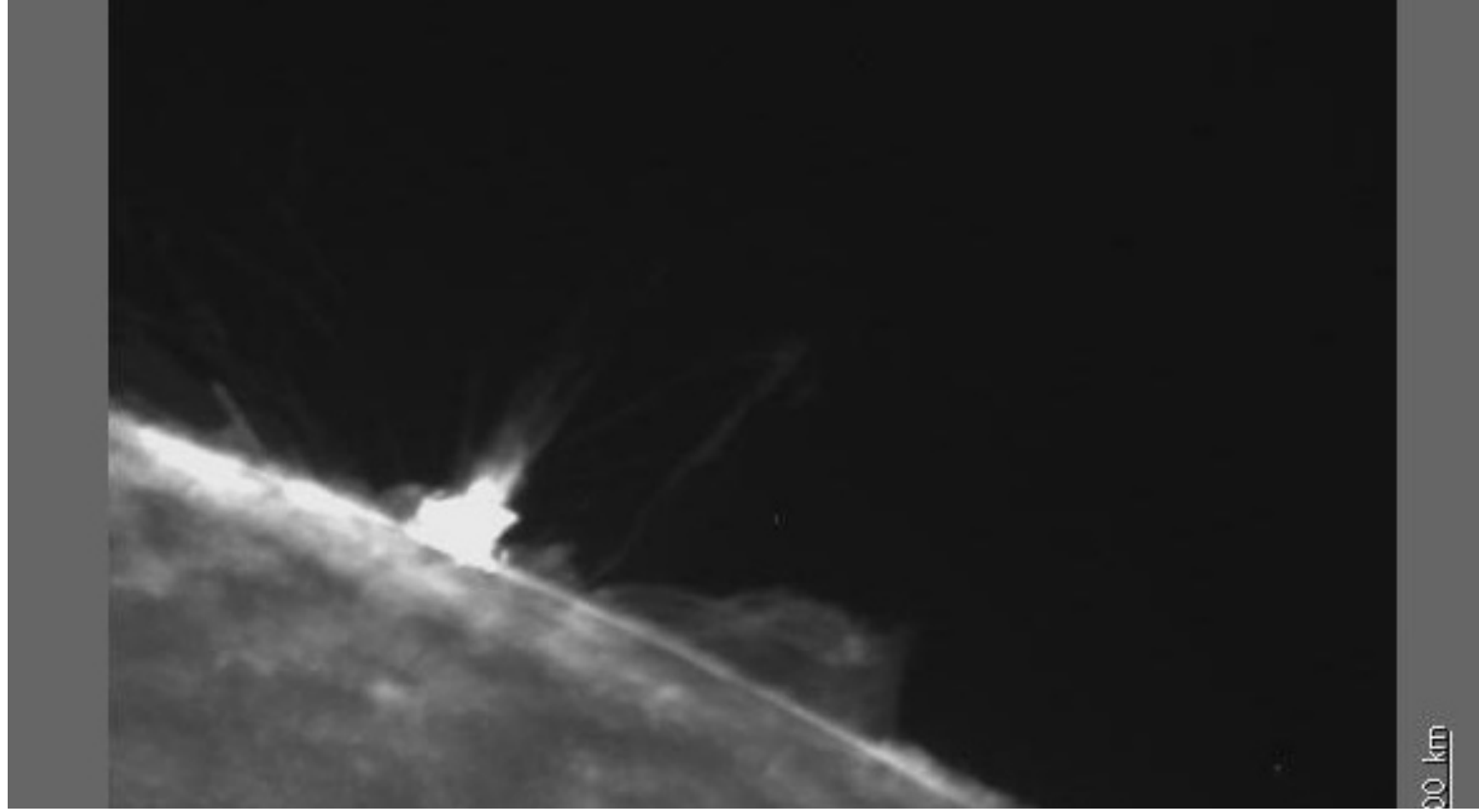
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20 km

The origin of solar activity

- Wolff (2009, 2010): 3% of solar luminosity is produced in hot bubbles discovered by Grandpierre
- Scafetta (2012): The climatic changes are in close correlation with the periods of planets. Jupiter, Saturn, Earth, Venus induce vibrations in the Sun and in the heiosphere, which induce vibrations in the electromagnetic properties of the upper atmosphere (planetary effects in solar activity, see Grandpierre, 1996)

The origin of life and the Sun

- 1: cosmic protocloud
- 2: Solar System, life, Homo Sapiens
- Conjecture: The origin of life and the Sun are closely related
- Nature acts in a wider perspective than physics

New results of my research

- Solar activity is not initiated in the solar atmosphere but in the solar core
- The Sun is an extremely sensitive in its energy production: Zeldovich, Grandpierre
- Planetary influences may be amplified in the solar core and present in the atmosphere of the Earth
- Ice Ages may arise from the solar core

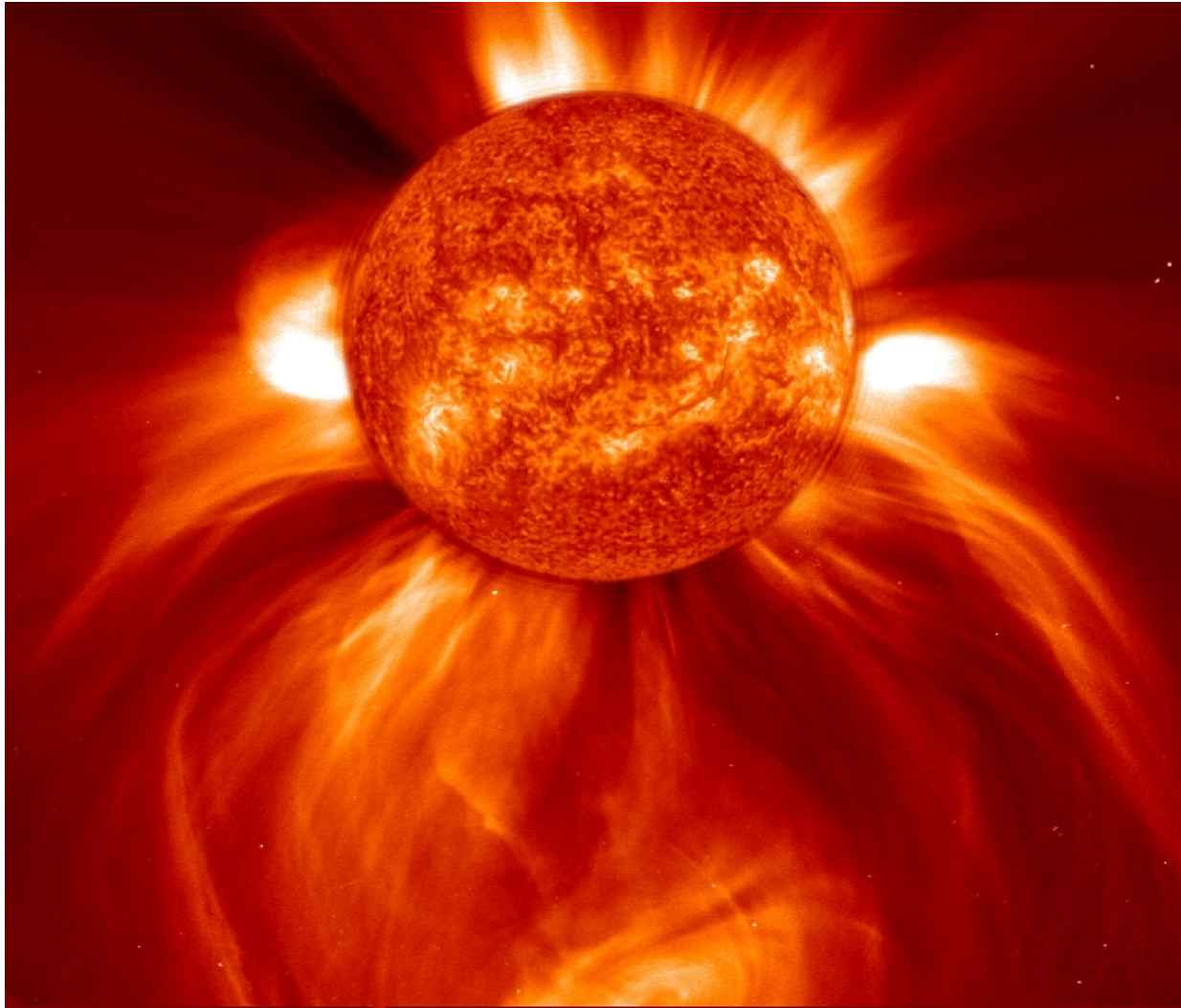
The Sun in our Lives

- What do we know about ourselves?
- In the ancient Golden Age the magic worldview perceived the dynamical, cosmic elementary powers working in every existents of the Universe. Namely, the powers which are able to act in a self-contained manner on the basis of their inner motivations and energies, like beings having a free will and faculty of thinking. For example, magic thinking conceived the Sun as a self-contained cosmic center of activity able to create its own laws of behavior and to conceive its own activity.
- The self-initiated activity of the Sun was calling the attention since most ancient times
- Our lives are governed from 150 million kilometres: awake or asleep, moods, inspirations, happiness

Hammurabi receives his famous laws from the Sun God, 1800 BC



Sympathy with the Sun in the animal kingdom – highly frightened at total eclipse



The Sun in Our Lives

- Iamblichus.: ‘For the opinion of the Phoenicians – (who are) wise and possessed of knowledge in respect of divine matters – stated that the sunlight (which is) sent forth everywhere is the immaculate action of pure mind (nous) itself.’
- Plotinus, Enneads: in the godly heaven the Mind is the Sun.
- Ancient Huns sung their laws received from the Sun
- Aristotle (Problemata 19, 28) the Scythians sing their laws and keep themselves strictly to these laws.

- Joseph Azize, The Phoenician Solar Theology (Piscataway: Gorgias Press, 2005), 15-36: All the great officers of the Babylonians and Persians took their names from some sacred title of the Sun

Is the Sun a self-acting being?

- Solar activity is governed by the Sun itself With the help of its magnetic field
- It governs its magnetic fields with internal motions
- How does it govern its inner motions? How does the Sun intervene into its mechanically arising motions? How does the Sun interact and add something to the physical processes occurring in it?
- Answer: in The Book of the Living Universe (in Hungarian, 2012)

Summer solstice an Christmas



The Book of the Living Universe

Germes of life travel in starlight

- The Sun is a cosmic life form generating information. Sunshine carries not only energy and heat, but also life-assisting information.
- Tomatoes growing open air are healthier and tastier than the ones growing in glass houses
- Suggested experiment: solarium
- Az Élő Világegyetem Könyve – 2012. The Book of the Living Universe

Solar worship



Solar Kingdom

- Ancient people revered Nature, the Sun
- Kingdom emerged from the Heavens
- Kings has crowns received from the Sun – solar corona
- Language, folk music has been born in communal feasts elevating collective mind into cosmic heights

Kingdom of solar life

