REDEARTH

ATIME GUIDE TO MARS

EARTH · SEPT.2015 - AUG.2016 MARS · YEAR 33

THE EARTH AND MARS: TWO PLANETS THAT ARE SLOWLY BECOMING INTERTWINED.

Mars is similar to Earth in many aspects, especially concerning the daily cycle, and the sequence of seasons throughout the year.

This is the result of many coincidences in the celestial movements of the two planets: The Martian day lasts for 24h 40 min long but orbits the sun in about 2 years of Earth time.

Although the red planet does not meet the conditions to support human life, there are already plans to colonize it in the near future; So getting used to the Martian calendar, precisely this calendar you have in your hands is the first step to understanding the planet.

The concept of time and the quest to spaceship where five astronauts live measure it has been the result of observing the night and day sky from

Earth. About 6,000 years ago, the Egyptians established the first 365 day calendar.

The measurement of time, the hours, days, months & years is something indispensable to the human being since

This calendar could be just as useful on Earth as on Mars, although time perception will be very different depending on the planet on which you are experiencing it, as days, months and years occur in a different way on each planet.

RED EARTH is a film that takes place in cramped conditions, inside a small

together over a long period of time on the very first manned mission to Mars. The crew will be exposed to a new concept of loneliness...

Are our minds prepared for this kind of experience? Are we prepared to leave the Earth?

RED EARTH is about the first seed, the first step for human beings in the quest to reach the planet.

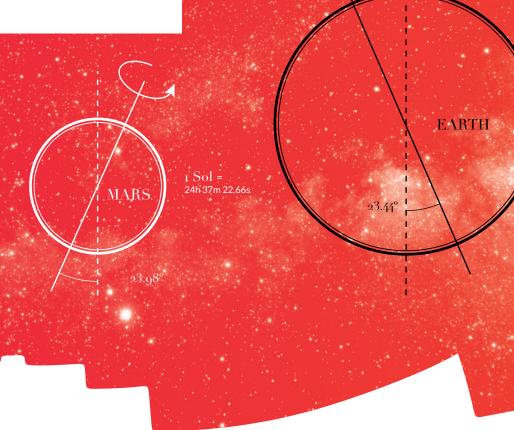
The film, does not approach this subject in terms of science fiction, but in verified data and specific elements, real information after all. Information you can find in this calendar and that will help us understand Mars, a planet that could soon become our home.

TIME Days - Nights intermittent light from the same sun.

REDEARTH

SEPTEMBER

A Martian day is slightly different to the terrestrial day due to the orbital inclination of the planet over its own axis and a similar rotation period to the Earth's. Astrophysicists call the Martian day "Sol", and it lasts 24.66 hours.



Distance to the Earth (millions of miles)

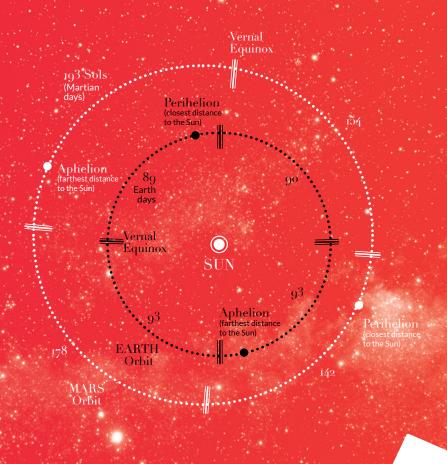
Ls _d 240° - 270°

Martian Solar Longitude

● Days Tu ● Sols Su	We Mo	Th Tu	Fr We	Sa Th	Su Fr	Mo Sa
1	2	3	4	5	6	7
8	9	RedEarth team at the Toronto International Film Festival (Canada)	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49
50	51	52	53	54	55	56

O C T O B E R

The Martian year lasts almost twice that of the Earth's: 687 days. Mars takes so many days to rotate around the sun due to an extreme oval orbit, that makes seasons take on long and odd durations.



mi ↔ ≈219

Distance to the Earth (millions of miles)

Ls ___ 270° - 300°

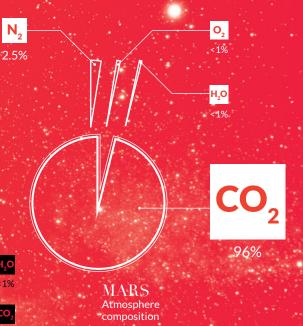
Martian Solar Longitude

°F ∄ ↑39° | ↓-99° Average monthly temperature

O _{Days} Th	Fr	Sa	Su	Мо	Tu	We
●sols Su	Мо	Tu	We	Th	Fr	Sa
1	2	3	4	5	Autumnal Equinox. Equal day and night.	7
8	RedEarth team at the International Fantastic Film festival of Catalonia. Sitges, Spain.	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49

$\mathbf{NOVEMBER}_{2015}$

4,500 years ago Mars contained enough water to cover the whole planet. Right now, its atmosphere only contains small amounts of oxygen, water and methane that make it impossible to support human life. But there are already plans to terraform the red planet, which means generating a stable atmosphere and increasing the Martian temperature.





mi ↔ ≈202

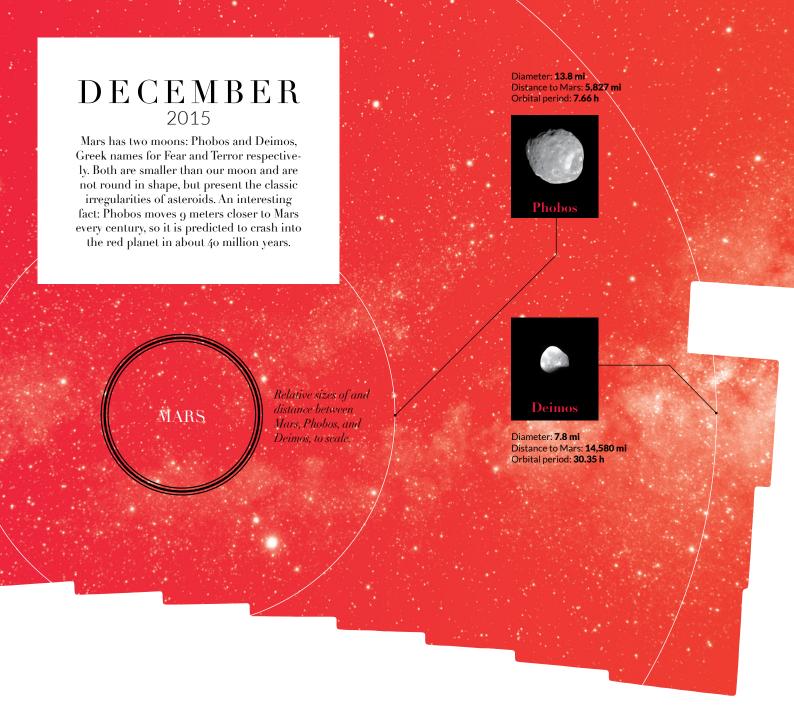
Distance to the Earth (millions of miles) $\,$

Ls _ 300° - 330°

Martian Solar Longitude

EARTH Atmosphere composition

O _{Days} Su	Mo	Tu	We	Th	Fr	Sa
●sols Su	Мо	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49



RedEarth Teaser shooting (Riotinto, Spain) Perihelion. Closest point to the sun.

mi ← ≈180

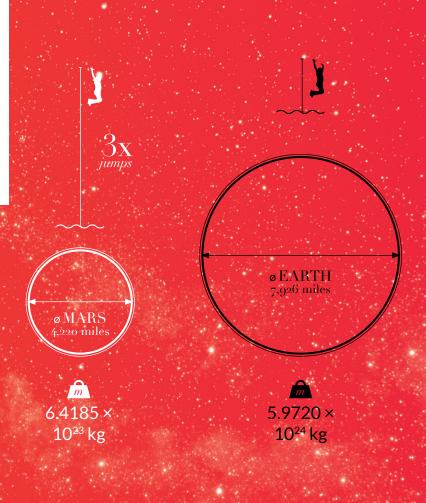
Distance to the Earth (millions of miles)

Ls _d 330° - 360°

Martian Solar Longitude

JANUARY

Mars's mass is one tenth of the Earth's, and is a little bigger than half it's size. This is the reason why the surface gravity is lower than the Earth's: only 3.7 m/s² instead 9.8 m/s². Your weight on Mars would be half that of here on Earth.



mi↔

_≈152

Distance to the Earth (millions of miles)

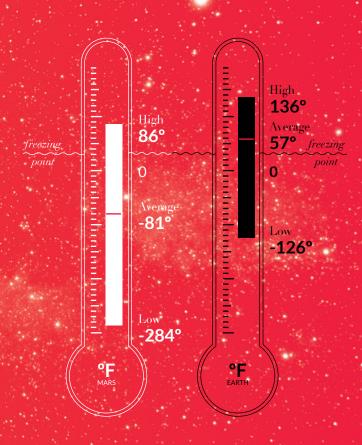
Ls _d 0° - 30°

Martian Solar Longitude

● _{Days} Fr	Sa	Su	Мо	Tu	We	Th
● sols Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49

FEBRUARY

Mars suffers great changes of temperature during the same day, with differences between the maximum and the minimum that can reach 158° F or even more. The reason for this is the tilt of the rotation axis of the red planet, that causes it to receive half the amount of solar light that we receive here on Earth.



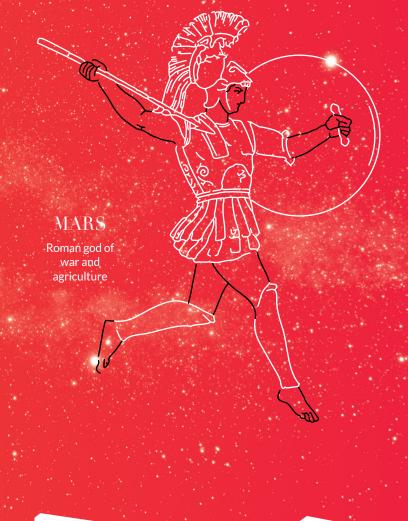
mi ← ≈123
Distance to the Earth (millions of miles)

Ls _d 30° - 60°
Martian Solar Longitude

O _{Days} MO	Tu	We	Th	Fr	Sa	Su
●sols Su	Мо	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	RedEarth team at the Internationale Filmfestspiele Berlin (Germany)	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49

MARCH 2016

In Earth's calendar the name of this month is taken from Mars, roman god of war and agriculture. The roman year started in the Martius Mensis, a month devoted to this god, that marked the beginning of the spring and the farming cycle.



mi ↔ ≈96

Distance to the Earth (millions of miles)

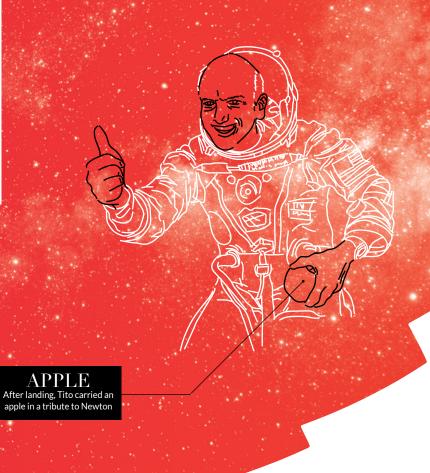
Ls _d 60° - 90°

Martian Solar Longitude

● _{Days} Tu	We	Th	Fr	Sa	Su	Мо
●sols Su	Mo	Tu	We	Th	Fr	Sa
RedEarth V5.0 Treatment of the script	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49
50	51	52	53	54	55	56

APRIL 2016

April 28th marks 15 years since the business tycoon Dennis Tito became the first space tourist. Nowadays, many private companies have developed their own technology to carry human beings into outer space. They plan to send a manned mission to planet Mars in the next 15 years.



Distance to the Earth (millions of miles)

Ls 🔟 90 - 120°

Martian Solar Longitude Average monthly Temperature

● _{Days} Fr	Sa	Su	Мо	Tu	We	Th
•sols Su	Мо	Tu	We	Th	Fr	Sa
1	2	3	Vernal Equinox. Equal day and night.	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49
50	51	52	53	54	55	56
57	58	59	60	61	62	63

Mars is the closest planet to Earth after Venus, but the distance is constantly changing as both rotate around the Sun. On 22nd May 2016 at 12.00h, the orbits of both planets will be at their closest: 47,224,196 miles away. 47M of miles Next Mars 22 2016 Sim 248M of miles (closest distance to the Earth) distance to the Earth

	Distar	nce to the Earth (milli	ons of miles) Mar	rtian Solar Longitude	e Average me	onthly temperature
O _{Days} SU	Мо	Tu	We	Th	Fr	Sa
● Sols SU	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	RedEarth team at the Festival de Cannes (France)	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49
50	51	52	53	54	55	56
57	58	59	60	61	62	63

≈52

Ls _d 120° - 150°

J U N E

33 years ago, experts decided to set a date for the start of the Martian year, following its seasons and its orbit, so the 33rd Martian year started officially last June 18th.



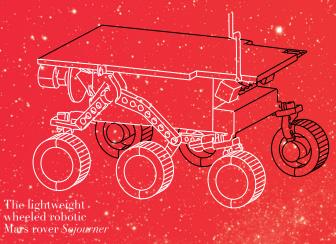
mi ← _≈47
Distance to the Earth (millions of miles)

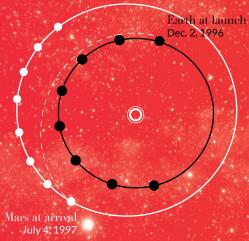
Ls **150° - 180°**Martian Solar Longitude

						y components
O _{Days} We	Th	Fr	Sa	Su	Мо	Tu
• Sols SU	Мо	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	June 39, Year 31 (Mars) Aug. 6, Year 2012 (Earth) MSL Curiosity landing	40	41	42
43	44	45	46	47	48	49
50	51	52	53	54	55	56
57	58	59	60	61	62	63
64	65	66	67	68	69	70

J U L Y 2016

The 4th July 1997 is a key date in the Martian chronology. On that day the space mission Mars Pathfinder successfully landed on the red planet and proved it is possible to send robots and scientific tools to other planets.





mi ↔ ≈55

Distance to the Earth (millions of miles)

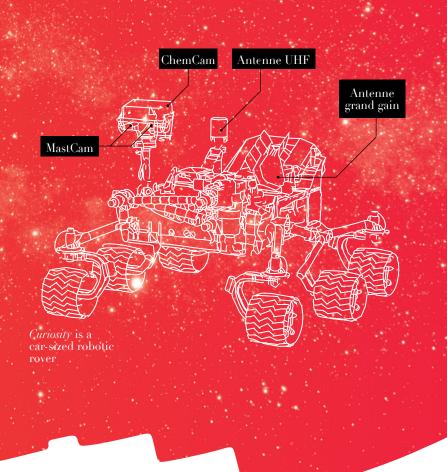
Ls _d 180° - 210°

Martian Solar Longitude

● _{Days} Fr ● _{Sols} Su	Sa Mo	Su Tu	Mo We	Tu Th	We Fr	Th Sa
1	2	3	4	5	6	7
8	9	Summer Solstice. Longest day of the year.	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49
50	51	52	53	54	55	56
57	58	59	60	61	62	63

$AU\mathop{GUST}_{2016}$

6th August 2012, Curiosity Rover arrived on Mars to study the environmental characteristics of the planet. Since that day the robot follows a specific routine on the red planet: Each day it wakes up at 8:00am and explores the planet until nightfall.



mi ↔ ≈68

Distance to the Earth (millions of miles)

Ls _d 210° - 240

Martian Solar Longitude

°F ∄ ↑34° | ↓-92° Average monthly temperature

● Days MO ● Sols SU	Tu Mo	We Tu	Th We	Fr Th	Sa Fr	Su Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49
50	51	52	53	54	55	56
57	58	59	60	61	62	63

REDEARTH

A FEATURE FILM BY CARLOS VIOLADÉ

FIVE ASTRONAUTS. ONE SPACECRAFT. OUTER SPACE. BUT THE GREATEST JOURNEY OF THEIR LIVES WILL NOT ONLY BE TO MARS BUT TO THE INTERIOR OF THEIR MINDS.

The project of **RED EARTH** first took off in October 2013 after an invitation from **The Sundance Institute**, founded by **Robert Redford** to encourage independent international cinema. The institute showed an interest in **Carlos Violadé**'s work after his short film "**Not Funny**" received an award at the Palm Springs Short Film Festival in 2013.

In February 2014 RED EARTH was the only European project to participate in the scriptwriting workshop in Oaxaca, Mexico, founded in 1994 by Bertha Navarro (producer of Guillermo del Toro's "Pan's Labyrinth") and The Sundance Institute. Laura Esquivel ("Like Water for Chocolate"), Jeremy Pikser ("Bulworth"), Beatriz Navarro ("Danzón") and Lawrence Konner ("The Sopranos", "Planet of the Apes" and "Star Trek 6") all advised on the script. In September 2014 Zachary Sklar (co-writer of "JFK" with Oliver Stone) joined the project as script-doctor.

Currently, **RED EARTH** directed by **Carlos Violadé** and produced by **LABALANZA**, is in the pre-production phase. It already has both a prestigious technical crew with Goya awards, and a team of recognized experts in

various fields of science; all interested in the story's potential, its capacity to spread popular science, and the originality of the script. Psychologist Gabriel González de la Torre -collaborator with the ESA (European Space Agency)-, Felipe Gómez, -expert on biodiversity in extreme environments, is currently working on projects that use the information collected by the CURIOSITY robot (NASA) from the surface of Mars-, the astronaut Eduardo Lurueña -currently preparing to be the second Spanish man to travel into space- and Keith M. Wright -space systems engineer with a remarkable participation in the NASA Apollo program- have all joined the project.

Although the action takes place in space, the film doesn't fall into the sci-fi genre. The interest of the film centres chiefly on the psychological factors involved in making such a journey and the personal relationships between the spacecraft's crew-members. It is unknown to scientists how human-beings will behave or how their minds will react on such a long voyage once the visual reference of the Earth is lost. The incidents which arise during the voyage make the viewer reflect on what it means for mankind to set foot on Mars, the environmental dangers

threatening our own planet, and the potentials and limits of the human condition.

The project of **RED EARTH** has opted for an independent international coproduction model and intends to participate in all the principal film festivals (Berlin, Toronto, San Sebastián, Cannes, Sundance...). It will be filmed in English with an international cast from several countries. It is expected that this, as well as the story itself (the race to Mars), will attract the attention of a culturally diverse audience and will help it to be more widely distributed.

This intriguing and disturbing film is full of suspense, action and psychological tension. When it reaches breaking-point, a totally unforeseen and unexpected outcome is revealed making us question the experience of our own reality from different points of view.

In RED EARTH the astronauts undergo for the first time in human history the experience of losing visual contact with Earth. The concept of solitude takes on a new meaning. The real challenge they face is within their own minds; the greatest journey of discovery takes place within themselves.

LABALANZA, THE PRODUCTION COMPANY

LABALANZA is an independent film production company founded in 2006 in Seville (Andalusia, Spain). Its principal objective is in making cinematographic works that, for their subject matter, originality and technical quality, aspire to spread universal or cultural values from different European territories to the rest of the world.

LABALANZA has the support of an internationally recognized technical and artistic team that foments the incorporation of new ideas in emerging cinema. Their projects, supported by regional and national film funds, have obtained international acclaim in prestigious film festivals around the world; have been shown in universities,

museums and academic institutions for their educational value and on important public and private television channels as well as different digital platforms.

In our view, to make cinema implies an enormous social responsibility and for this reason we only select projects of depth, quality and originality, as a signature stamp of our business.

MOST RECOGNIZED AWARDS:



BEST DRAMA

New York City Short Film Festival. (USA) 2014







RUNNER UP BEST SHORT FILM 15 MIN

Palm Springs International Film Fest (USA) 2014.

SELECTED FOR THE
GOLD MÉLIÈS PRIZE FOR
THE BEST EUROPEAN
SHORT FILM

Sitges International Film Festival, (Spain). 2013





BEST COMEDY SHORT FILM

Rhode Island International Film Fest (USA) 2013



BEST SHORT FILM

39th. Huelva Iberoamerican Film Festival, (Spain) 2013



GOLD MEDAL

China International
Conference of Science and
Education. Beijing (China).
2012.



THE DIRECTOR, CARLOS VIOLADÉ

His work has obtained national and international awards, awakening interest in SUNDANCE INSTITUTE and other centers that promote the incorporation of emerging filmmakers.

Red Earth is his first feature film.

■ WORK

NOT FUNNY (2013) Short Film. 15 min.

THREE (2011) Short Film. 14 min.

EVERYDAY SUNRISE (2008)

Short Film. 14 min.

INSIDE (1999) Short Film. 14 min.

PRIZES

NOT FUNNY

Bronze Remi Award WorldFest Houston USA.

Best Drama. New York City Short Film Festival 2014

Runner Up Best Short Film 15 min and under.

Palm Springs International Film Fest. California, USA. Oscar Awards.

Preselection Goya Awards 2014

Prix A Court D'amour. European Film Festival Of Lille, France.

2° Award - Horror Comedy Short - Foreign. The 2014 International Horror Hotel. Cleveland, OH. USA.

1St Prize Best Comedy Short Film. Rhode Island International Film Fest USA (Oscar Consideration)

Méliès D'Argent - Best European Fantastic Short Film & Student Jury Prize for the Best International Fantastic Short. Strasbourg European Fantastic Film Festival.

Selected for the Gold Méliès Prize for the Best European Short Film. Sitges International Film Festival.

Best Short Film. 39 Huelva Iberoamerican Film Festival

Best Short Film. X SEFF Seville European Film Festival

Audience Award. Cortogenia 2013.

2nd Best Short Film & Best Actor (Andrés Berlanga). 19° Iberic Film Festival. Badajoz.

Best Director (Asfaan Prize) 36ª Semana Internacional del Cortometraje de San Roque.

1St Prize Best Short Film. 7° Festival de Curtas na Rúa. Vigo.

*Selected In Over 80 International Film Festivals.

THREE

AISGE award Best Actor Manolo

RTVA Award Best Andalusian Work, International short festival Granada FIJR

2nd Best Short Film International Short Film Festival. Buenos Aires

EVERYDAY SUNRISE

Mention of Honor for visual aesthetic of film. Short Film Festival 2008 Oporto

Special Distinction for the best Atmosphere and Climax. International Competition Cinema of the City Mercedes, Buenos Aires. Argentina.

2nd prize for the best short Film. Festival FOC Cinema, Moncofa. Castellón.

INSTRUCTIONS FOR LIFE

Injuve Award- Ministry Of Culture Of Spain

INSIDE

Proyected in Barcelona Contemporary Art Museum, and use for educational purposes at the University Of Seville

SEDEVEL

A FEATURE FILM BY CARLOS VIOLADE

Executive Producer JULIO VERGNE | International Production JAVIER AGUAYO

Graphic Design PETESLIM. COM | Press director TALI CARRETO | Legal consultancy FERNANDO SÁNCHEZ DE CUETO

Graphic Design PETESLIM. COM | Press director TALI CARRETO | Legal consultancy FERNANDO SÁNCHEZ DE CUETO

Consultants experts / scientific advisors

PSYCHOLOGY · GABRIEL GONZÁLEZ DE LA TORRE & FRANCISCO ORTEGA

ASTRONAUTICS · EDUARDO LURUEÑA | MEDICINE · LOLÁ POSADILLO

ASTRONAUTICS · EDUARDO LURUEÑA | MEDICINE · LOLÁ POSADILLO

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