The support for our sky is the free software Stellarium 360. Based on this program, we have installed the Add-on with the content that we describe below. This content operates with our keyboard and turns Stellarium into a much more powerful software, putting it at the level of those into big planetariums.

Graphic representations of the Major Ursa

18 scripts

Scripts. Short sequences launched with shortcuts and drawn to the screen. They are useful to explain all the astronomical phenomena, from the simplest to the most complex ones, aiming to adapt to the specific audiences.

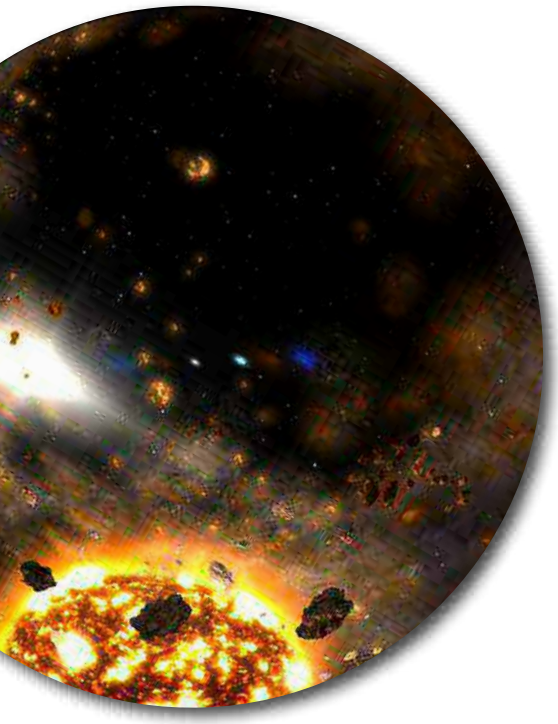
CTRL+F1: Carrousel (terrestrial rotation)
CTRL+F2: Day and Night
CTRL+F3: Gravity
CTRL+F4: Why the moon follows us
CTRL+F5: Seasons
CTRL+F6: Artificial satellites
CTRL+F7: Moon phases
CTRL+F8: Moon eclipse
CTRL+F9: Planets and asteroids
CTRL+F10: Solar system (exaggerated version)
CTRL+F11: Formation of solar system
CTRL+F12: Hubble the astronomer and galaxies
CTRL+F13: System day-month-year with the sun, the Earth and the moon
CTRL+F14: The sun's death
CTRL+F15: Change of latitude
CTRL+F16: Summer sky stars comparison
CTRL+F17: Winter sky starts comparison
CTRL+F18: Great bear representations (UMa 7 versions)

Special scripts for children

24 mini videos

Available directly from Stellarium 360, 24 short videos to complement the explanations launched from simple keystrokes, you can combine them with scripts.

F1: The sun seen by Soho 30, 4 Nm. Length: 31s
²F1: Sun UV 170n. Length: 1m 16s
F2: Comparison of planets rotation speed and their size. Length: 3 m
²F2: Rotation and South frames 12 hour in latitude 45ª. Length: 1m



Nebulose video

Video showing star trails around the South Celestial Pole

F3: Tycho crater formation. Length: 40s

²F3: A flight around the Moon. Length: 1m

F4: Old proposal: mission Constellation (eliminated return of men to the moon). Length: 3m 37s

²F4: Curiosity mission landing on Mars. Length: 1m 22s

F5: Supernova and cloud compression to form stars. Length: 15s

²F5: Solar System formation
Length: 1m 1s

F6: Flying over Saturn rings. Length: 30s

²F6: Hale-Bopp Comet. Length: 1m 10s

F7: Hubble Spatial telescope. Length: 16s

²F7: Space Shuttle and rotation through the spatial station. Length: 1m

F8: Copernican system. Length: 1m 30s

²F8: Ptolemy's system. Length: 40s

F9: Globular cumulus: evolution in time. Length: 1m 21s

²F9: Black Hole in the centre of a spiral galaxy. Length: 32s

F10: A galaxy from the side and from the top. Length: 40s

²F10: Inverse Zoom of the earth to the galaxies. Length: 1m 14s

F11: Collision of 2 galaxies. Length: 53s

²F11: Filamentous structure of a globular cumulus. Length: 1m 30s

F12: Deep zoom of the south seen with the Hubble telescope.
Length: 1m 48s

²F12: Trip trough the reconstruction of galactic densities. Length: 2m 37s

12 external mini videos

Additional videos controlled independently from the OS or from Stellarum 360: They can be used as complete shows and they are adapted full dome movies that don't need any explanation or operator on them as they have their own soundtrack. They are all run from the keyboard.

SHIFT + F1 : The Northern Lights (Norway). Length: 2m 42s

SHIFT + F2: Earth rotation in its axis. Geometrical view of the polar. Length: 1m

SHIFT + F3 : Ancient volcanoes on Mars. Length: 30s

SHIFT + F4 : Flying towards Mariner Valley. Length: 1m 30s

SHIFT + F5 : The end of the sun Length: 1m 22s

SHIFT + F6 : Magellan spacecraft, Venus fly through and Venera 13. Length: 1m 34s

SHIFT + F7 : Day to day life of ISS astronauts. Length: 4m 28s

SHIFT + F8 : View of the ecliptic in the solar system. Length: 36s

SHIFT + F9: Supernova explosion. Length: 36s

SHIFT + F10: Iridium satellite. Length: 1m

Telescopes of the VLT skyline

Mareille skyline

SHIFT + F11: Io's volcanoes. Length: 40s
SHIFT + F12: 4 Telescopes VLT. Chile. Length: 18s

Second line of additional videos, reserved for free shows of greater length or for professional videos. The client can personalize, at his liking with any new purchased videos.

Ctrl + Shift + F1: Transit of Venus (Fr). Length: 4m 36s
Ctrl + Shift + F2: The conquest of Mars (Fr). Length: 9m 50s
Ctrl + Shift + F3: LRO Mission (Fr). Length 9m 15s
Ctrl + Shift + F4: Rocketman trailer. Length 3m 40s
Ctrl + Shift + F5: Hugh (Fr). Length 8m 44s
Ctrl + Shift + F6: Light Echoes. Length 5m 13s
Ctrl + Shift + F7: Splat! Length 1m 47s
Ctrl + Shift + F8: Epsilon Aurigae (Fr). Length 6m 14s
Ctrl + Shift + F9: Sizing-up Space (Fr). Length: 12m 51s
Ctrl + Shift + F10: DNA flythrough. Length 1m
Ctrl + Shift + F11: Cosmic castaways. Length 19m 40s
Ctrl + Shift + F12: Dark. Length 20m

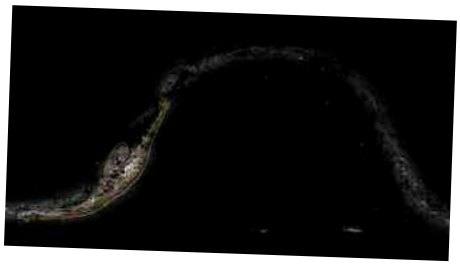
10 Dynamic viewpoints

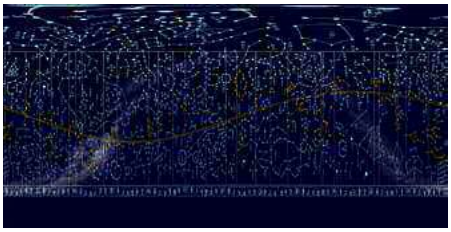
These are recorded geographical positionings on Earth or on other place of the Solar System. The sky vision and landscape is related to the viewpoint.

SHIFT + 1: Positioning in Mercury (floor)
SHIFT + 2: Sky-line in VLT (Chile, Paranal)
SHIFT + 3: Marseille landscape (you can insert your city landscape)
SHIFT + 4: Position in Mars (with Spirit rover)
SHIFT + 5: Position in Ganymede
SHIFT + 6: Position in Mimas
SHIFT + 7: View from Uranus
SHIFT + 8: Position in Triton
SHIFT + 9: Vertical view from the solar system
SHIFT + 0: Position in the moon

Rover in Mars

22 Textures

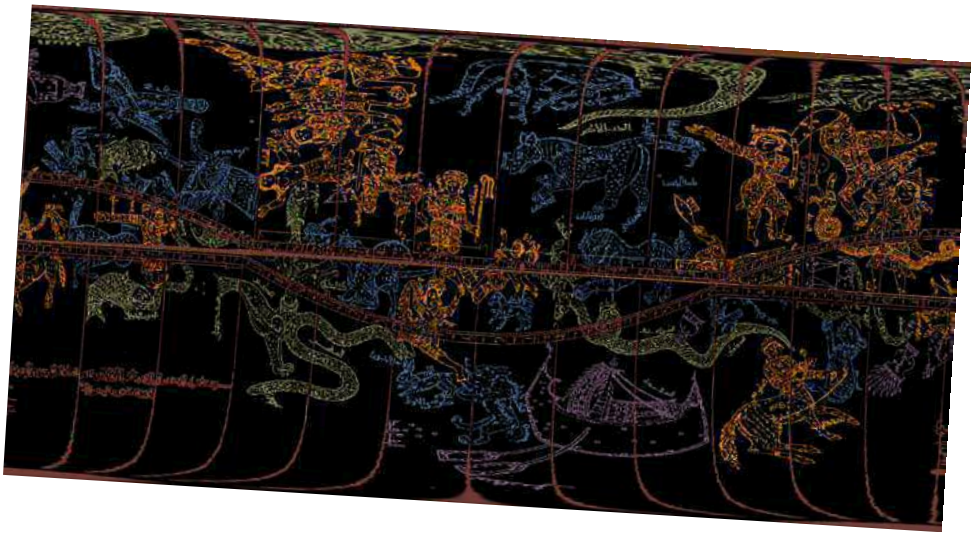




Like the sky, they are full dome images. As they are projected in a dome, only half of it is shown (the part above the Horizon). The advantage is that the operator can move the whole texture freely by clicking and moving the mouse. This tool enables to see the Earth in many ways, and also ancient firmaments and the current sky. (launched from the numerical keyboard on the right hand side):

1: Axel Mellinger's Milky way
2: Serge Brunier's Milky way
3: Earth's texture
4: Mar's texture
5: sky in 3K
6: Fermi Gamma
7: Infrared sky in 100 microns IRAS
8: A. Cellarius Constellation
9: WMAP Galaxies
0: Normal Milky way
(.): Moon's texture

²1: Arabic sky
²2: Deep sky
²3: Earth and night sky
²4: sky's texture in 408MHz
²5: Tectonic
²6: Earth altitude
²7: Infrared sky in 100 WMAP
²8: another sky in Cellarius
²9: another with MW
²0: Emu
²(.): Gamma's sky



Textures from Andreas Celarius, Arab heavens, Chinese heavens and Emu texture.