Uniview™ 3.0
Software for planetariums, dome theaters, science centers & large format screens
Uniview 3.0 – A new era for live-presentations

With Uniview 3.0 we bring the live-presenter into a new era. A new era where a live-presentation is quick, easy and reliable. All elements in a presentation are created by dragging, dropping and arranging, and presented by pressing buttons. It’s clean, smart and obvious - and you can choose between different workspaces depending on your need at the moment. At Sciss, we’ve embraced the digital revolution of planetariums and, in many cases, we are leading it. In Uniview 3.0, we have developed the most intelligent planetarium visualization software to date.

Uniview software is the beating heart of all our configurations. Powered by scientific databases from the finest scientific institutions, Uniview brings you the very latest and most beautiful visualization of real-time astronomy, planetary exploration, Earth sciences and neuroscience.

For over a decade Sciss has delivered astronomy tools and systems to planetariums, science centers, museums, and educational institutions all over the world.
The Uniview software suite

Uniview is widely recognized as the most accurate data visualization platform in the industry. Since its inception over a decade ago, Sciss has introduced a range of world-firsts, feature sets that fundamentally changed the capabilities of digital planetariums and how visitors experience science. Developed in cooperation with our user community, Uniview’s toolbox is truly unique and tailored to support the presenter and operator in the smartest way possible. It ships with high-end presentation and production tools, media playback and much more.

Amazing Real-Time Visualization & Intelligent Management Tools

Uniview can be used for many purposes and your intentions of use will vary from time to time. Sometimes you just want to start a presentation or film and sometimes you’ve set aside time for a special visualization in collaboration with the local University. To meet your different needs and reduce clutter on your screen, Uniview offers four different workspaces:

- **Presentation mode.** Includes all features and tools the presenter needs to manage a presentation.
- **Authoring mode.** Includes all features and tools the operator needs to build a presentation.
- **Domecasting mode.** Includes all features needed for joining or setting up a domecasting session.
- **Classic mode.** Includes all features and tools from earlier versions of Uniview.

Uniview 3.0 your workspace is clean and intuitive. Everything you need is right there, accessible via one single view.
Uniview has access to a network of daily updated satellite imagery that can be integrated in a show at a minute’s notice, directly to your dome. Through streaming of cloud-based data, you get access to daily updated satellite imagery, weather events, planetary and lunar exploration, and extrasolar planets. Uniview also supports the XML file format from the Google Earth community. Sciss also hosts a mirror WMS server where we collect the most important datasets, ensuring our clients have access at any time.

### Planetary Exploration

Uniview enables high resolution textures and terrain maps from a variety of NASA’s WMS servers. This allows you to follow the exploration of Mars and the Moon through high resolution texture maps from HiRISE and LRO, and engage your audience in the search for habitable planets.

### Geological Events and Climate Data

The advanced visualization capabilities include direct access to satellite imagery of the Earth. This way, you can stream and show your audience geological events as they happen, as well as climate data. Follow volcanic eruptions or natural disasters such as Deepwater Horizon and monitor them evolving over several weeks.

### Astronomy

**Tour of the Universe**

With a proud legacy in the fulldome theater world, Uniview supports over 200 datasets. This includes datasets from the entire Digital Universe 5, a 3D atlas developed by the American Museum of Natural History in collaboration with the National Aeronautic and Space Administration. It allows you to explore over 50 categories of scientific models, including all known objects in the solar system, Kepler candidates, star forming regions, star clusters, the local group, deep space objects, Sloan galaxies and quasars to name a few. Uniview allows users to virtually tour the universe seamlessly, from small objects such as satellites, to the edge of the observable universe.

**Classic Astronomy Observation**

Uniview simulates orbital motion with the same precision as NASA simulations for space missions. Day and night sky, celestial and galactic coordinate systems, meridian and ecliptic are just some features of our complete classical planetarium system.

Uniview can automatically calculate and transition to events such as sunrise, sunset, solar noon and midnight. It can also automatically transition to and from any geographical location on the surface of the Earth or any other planet, to observe the sky from different locations. All essential planetarium features are included, such as 88 constellations with lines and artwork, planets rendered as properly colored and lit points when seen from afar, the Hipparcos star catalog with proper motion, the Milky Way in various wavelengths, eclipses and much more.

### Performance & visual quality

With a team of highly talented graphics programmers, we spare no effort to ensure the representation of any given dataset is as true to realism as possible and for abstract elements carefully designed for a pleasing appearance to enhance understanding. Camera transitions between objects are fully automatic with majestic and smooth camera movements and without any fade to black. With a back-end that leverages modern hardware, Uniview 3.0 is designed to bring rich content, better visual quality, stability improvements and smoother flying.

### Live real-time navigation

With Uniview Scalegraph, the core engine of Uniview, you travel seamlessly through all datasets, without stuttering or freezing, and from the smallest conceivable scales to the largest. The live navigation function, Uniview Flight Assist, is designed to allow a cinematic feel to interactive flights without any fade to blacks. The speed is adjusted to the scale of the scene, and objects and grids are automatically enabled based on the current camera position.

### Neuroscience

**Neurotours™**

In Neurotours™, the latest neuroimaging technology becomes our observatory to discover the inner frontier of human consciousness. Through a live-presented planetarium show, real brain data comes alive around us as we scale our inner universe. During the tour your audience will explore imagery on scales ranging from the size of the entire head down to the sub-cellular scale, millions of times smaller. They will fly through the skull to the outer layers of the cerebral cortex, exploring sub-components of the brain, wandering through neurons and much more.

Neurotours is a product of the Neurodome project, led by Dr. Jonathan Fisher, a neuroscientist at New York Medical College. Working with Neurodome, Sciss introduces a real-time presentation within one of science’s most quickly developing fields.
Educator & operator tools

Together with our users we have set out to eliminate barriers for the educator and operator, giving you access to use the digital planetarium to its fullest. Uniview 3.0 is built to make live-presentations easier and smoother and to decrease complexity around all other tasks that are incorporated into running a planetarium.

Live presentation & production

Panels
A Presentation Tool for a New Era
With the Panels presentation tool you build and organize all of your presentation elements on slides – much like a PowerPoint presentation. It’s the one single tool you need when both creating and presenting your show. Simply drag your content from the Uniview library to a chosen slide and arrange it any way you like so that it fits your presentation flow.

Once you’ve built a show, you can use it over and over again. Just save it as a profile and you and your colleagues will have access to it at any time. Panels are just as easy to present with on a tablet as on your computer – allowing you to walk around in the theater during your show and discover new ways to captivate your audience.

Producer
Advanced Show Production
In production mode, you have access to Uniview Producer, modeled on the industry standard for production software. In addition to the Panels presentation tool, Producer allows you to manage more advanced show production.

Domecasting
Sharing Presentations Between Domes
Uniview allows remote collaboration and shared experiences between display venues, giving you a fantastic tool for collaborations with your local or global community. Presenter-led sessions can be shared across theaters and the same presenter can simultaneously address audiences in several interconnected theaters.

Drag & Drop Images
To add images to your presentation, simply drag and drop them directly from a web browser, or your computer’s hard drive. Release the images onto the dome view or move them to a panel to store them for a presentation.

Video and Media Player
The integrated video player is a full video solution, with slicing and encoding tools and playback technology. With an easy user interface, the player supports 24-60 frames per second and up to lossless compression.

Integrated Theater Control*
As a dome theater operator, the theater control is the main interface for managing the theater equipment and running shows. You can start the system, turn shutters on and off, start any of the available films or start and stop pre-programmed theater lighting sequences. Basic theater control functionalities can easily be managed in Uniview and incorporated into your presentations. Theater control is also fully accessible on any standard tablet computer.

*Only available for theaters with Colorspace hardware.

Uniview Store
Uniview Store is a new online platform where you can find all types of planetarium content on one single platform. Obtain and upload up-to-date and compelling show material like films, presentations and new packages of data.

The store is hosted by Sciss and driven by us, producers, and our vibrant user community. Anyone with a user account can both upload and download content, either free or for-purchase. Click on your chosen article, choose payment method and fire away.

Presentations
In the Presentations section you can find everything you need to incorporate a new live-presentation into your program: live-presentation packages that consist of Panels presentations and unique visual content, along with comprehensive storylines and marketing assets. The presentation bundles are downloaded with a few clicks and then easily imported into Uniview.

Modules
In this section you can navigate amongst the available Modules – packages of data created by Sciss and the user community that contains additional Uniview content like satellites, asteroids, or black holes. A data module can be downloaded from the Uniview Store and easily imported into your Uniview library and presentations.
Sciss has developed a thorough methodology for training in Uniview. We typically set up two training programs: One for system operators and science communicators and another for maintenance staff. Some employees are suited to attend both training courses, which is perfectly fine. Further on there's also the possibility to take more advanced training sessions. We typically operate a limit of five people per course to ensure proper hands-on training and enough attention is given to all participants.

Our support function is a long-term commitment to you and your venue. We have a devoted support staff and believe that continuity, communication and competence are key to building a relationship of trust with you as a client. With a devoted support staff in Europe, the Americas, the Middle East, and Asia, we offer phone and remote support 24/7. Beyond standard email and Skype support, you also gain access to our support website, where you can access video tutorials (excellent for your new staff and volunteers), FAQ and much more. With Uniview Upgrades included, you are always updated with the newest software releases, at no extra cost. When the time comes to replace your computers, you will always have the latest software ready to install without buying a new license.

The Uniview user community is the fastest growing community in the industry. Ideas and content are exchanged on our user forums and in the Uniview Store and our support forum is fully transparent and open to all.

At our annual user group events we host presenters from the world’s very finest institutions, such as ESO, NASA and NOAA, and we connect users from all over the world to share experiences and content.

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Sciss is a Swedish company founded in 2004 by engineers Staffan Klashed and Per Hemmingsson. The year before, the two friends had just returned to Sweden after thesis projects with the American Museum of Natural History. They had built an interactive visualization engine for the Hayden Planetarium dome, a project that would live on as Uniview.

For the first years, Sciss equipped the Uniview data visualization platform with as much value as possible for fulldome theater users. As the product took shape, the theaters welcomed the Uniview software with open arms; Denver Museum of Nature and Science merged their Cosmic Atlas, while California Academy of Sciences built their new opening show around the software, and the portable domes of the Minnesota Planetarium network started travelling to remote schools on a daily basis, sharing live presentations with the unique domecasting capabilities.

In the summer of 2011, Sciss began product development on the complete Colorspace fulldome system, which was released to the market in the fall of 2012. We have established partnerships with leading experts in the field of projection, computers, graphics and support. We also provide extensive maintenance and service programs, in order to make the most out of your investment over a longer time period.

Today, we design, build and develop turnkey solutions for planetariums and dome theaters. Our Colorspace theater system is a carefully designed package of display systems, servers, theater control, and the award-winning Uniview software. We are a fast growing community with over 150 installations worldwide – including NASA, ESA, NOAA and leading planetariums like Hayden Planetarium in New York, Moscow Planetarium and California Academy of Sciences in San Francisco.