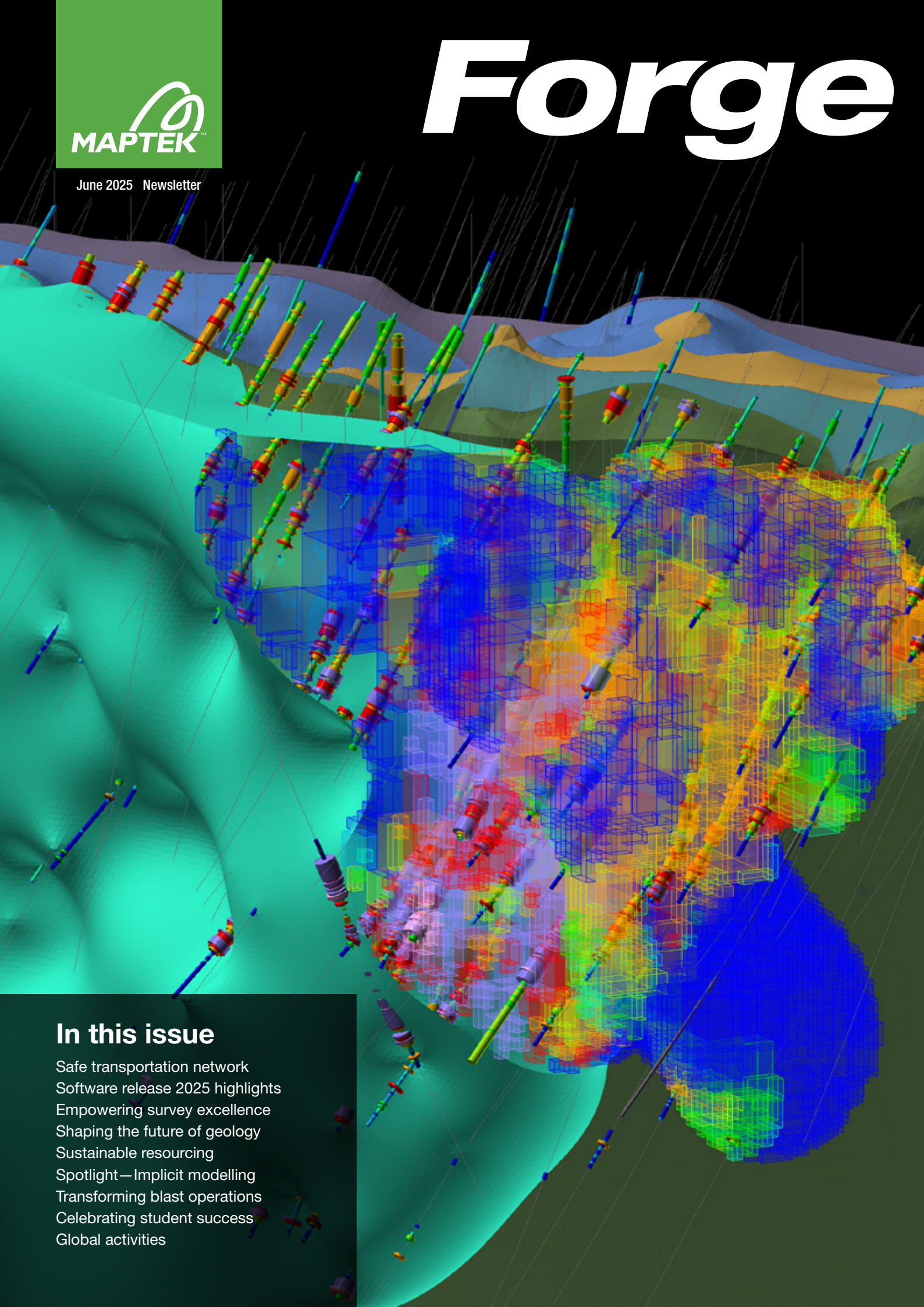
MAPTEK™

Forge

June 2025 Newsletter



In this issue

Welcome to our Forge newsletter June 2025

This issue highlights Maptek's journey from pioneering point cloud modelling to delivering world-class laser scanning and monitoring systems used across the globe. From enabling landslide recovery in Canada to supporting mine operations in Indonesia, our integrated approach to hardware and software continues to set new benchmarks.

We explore major software updates for 2025, innovations in geological modelling, and the value of our global education partnerships. Dive in to see how we are turning data into decisions, and shaping the future of mining.

We also honour our editor's 30-year journey with Maptek. Jane Ball retires after a remarkable career, leaving a lasting imprint on who we are. Her steady focus, gift for organisation and natural ability to bring people together have been central to our success. A quiet force behind many important initiatives, Jane played a key role in shaping Forge. As her final issue comes together, we mark her legacy.

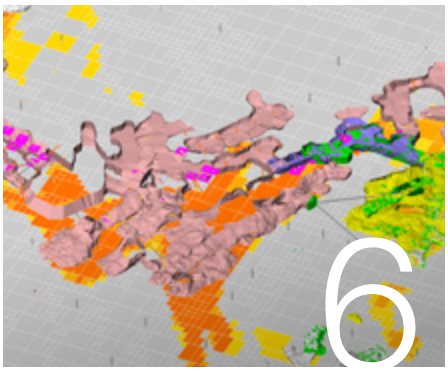
'In my entire time at Maptek, over 26 years, Jane has been a part of our success. Her contribution to the company has been so consistent and broad that it cannot be measured fairly, and words like professional, helpful, energetic and dedicated understate the way she has conducted her career. I, and others here, appreciate the time spent working with Jane over many years. I am very happy to wish Jane and her family all the best in a well deserved retirement.'
Peter Johnson, Maptek Chairman

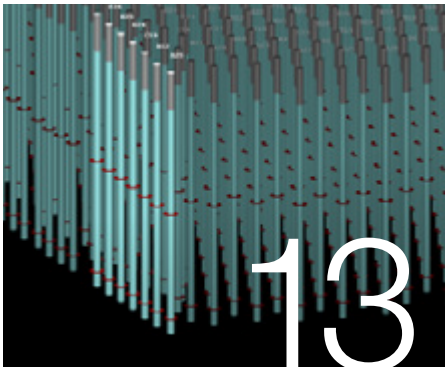
Jane's dedication helped Maptek evolve and stay relevant, and her influence will carry on into the future.

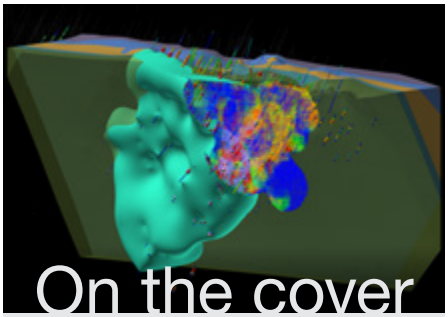
Enjoy this new chapter—you've more than earned it. On behalf of everyone at Maptek, thank you, Jane!

Eduardo Coloma
CEO

Contact us: forge@maptek.com







On the cover

The new implicit modelling engine in GeologyCore powers flexible, intuitive modelling for complex geology

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Creating a safe transportation network

Maptek™ Sentry supported a survey department to safely reopen a commercial highway in Canada following a landslide.

In August 2023 a landslide caused the temporary closure of Highway 97 between Summerland and Peachland in British Columbia, Canada, with 3000 cubic metres of rock blocking traffic in both directions.

The British Columbia Ministry of Transportation and Transit (MOTT) wanted to reopen the highway safely and efficiently. Leveraging Maptek™ Sentry achieved the necessary assurance to allow public access and restore commercial traffic.

MOTT is tasked with enhancing transportation networks and constructing new infrastructure across the province, with a primary focus on the safe and efficient movement of people and goods.

The MOTT Department of Survey and Geomatics specialises in conducting pre-engineering surveys and design, including installation of continuous monitoring stations to detect slope movements that could jeopardise roadways.

After the landslide event, geotechnical engineers discovered tension cracks extending further upslope beyond the rockfall area. Tension cracks up to 2m wide and 20m deep suggested that the initial rockfall was part of a larger event that required mitigation to protect road users and the highway.

To manage the initial emergency, a 22m high temporary soil and rock berm was constructed along the toe of the slide to resist further slope movement. This berm acted as a buttress until long term stabilisation measures can be implemented.

> A robust solution was needed for continuous monitoring to enhance confidence in reopening the highway.

During berm construction, a 24/7 landslide monitoring program was established. Early detection of movement means the highway can be closed on short notice to protect road users and site workers.

Trevor Key, Provincial Manager of Survey and Geomatics, said that deployment of the Maptek™ Sentry mobile monitoring system marked a significant turning point.

'Implementing Sentry raised confidence and safety to an all-time high. Monitoring with Sentry is mobile, reliable and fast. MOTT was able to reopen Highway 97 after a three-week closure following the Peachland landslide,' said Key.

The tension cracks above the rockfall indicated the presence of a larger slide, and geotechnical engineers determined that additional long-term stabilisation measures were required.

Blasting operations were conducted to unload a portion of the slide mass to reduce the pressure on the hillside and protect the road from further rockfalls. More than 46,500m^3 of material was removed from the slope to off-site storage.

By July 2024, blasting and removal of unstable material was completed, allowing crews to transition to stabilising the slope. Stabilisation involves installing steel rock anchors (32mm to 75mm thick and up to 30m long) in the slide zone.

After rock bolting, the temporary berm was replaced by a Mechanically Stabilised Earth retaining wall, forming a buttress to complement the anchors. The site shut down during winter, with long-term repair work planned for spring 2025.

Managing highway safety

Before Sentry was installed, monitoring stations required a substantial on-site team to handle setup, monitoring and dismantling. This approach posed significant resourcing challenges, with health and safety impacts.

Implementing Sentry significantly decreased the number of site personnel required on-site and enhanced team safety by enabling remote operation.

'Sentry has allowed us to reduce the number of workers active on the slopes. Having a team member on-site to run the scanner 24/7 was a health and safety concern,' said Dace Heide, Senior Survey and Geomatic Supervisor for the Southern Interior Region.

Operating four continuous monitoring stations across the province is part of the strategy to ensure the safety of major transportation networks.

'While these stations play a crucial role in risk management, a mobile system that can be rapidly deployed in emergencies such as landslides, is also necessary,' said Heide.

Integrating Sentry gave MOTT an efficient continuous monitoring solution for delivering real-time alerts for slope movements. Sentry also generates daily reports displaying displacement data for monitored zones. Reports are typically available by 6 am before construction crews arrive on-site.

'With Sentry, we can email reports to relevant personnel, enabling crews to start with a safety meeting, providing context for a productive workday,' said Heide.

> Sentry reporting plays a crucial role in identifying the cause of movement and distinguishing between rockfall and construction-related activities.

This information allows MOTT to respond effectively to address specific problem areas—deploying survey prisms with total stations or adjusting monitoring zones within Sentry. Custom alerts can then be configured for these areas, notifying the appropriate teams such as highway and construction.

'Tailoring alerts to specific needs helps our team devise solutions to complex issues,' Heide said.

Storing Sentry in a central location enables MOTT to deploy it within hours to meet demand. Key credits the reopening of the highway to fast deployment and dependable results.

'I would 100% recommend Sentry. The combined scanner–trailer system is great. I don't think there's another terrestrial scanning solution like it in the market.'

MOTT prioritises the safety of team members and the public. The collaborative efforts of the highway and construction teams facilitated the swift restoration of commercial traffic flow on Highway 97.

Thanks to
Trevor Key, Provincial Manager of Survey and Geomatics
Dace Heide, Senior Survey and Geomatic Supervisor for the Southern Interior Region
British Columbia Ministry of Transportation and Transit

Maptek Sentry was deployed overlooking Highway 97 in British Columbia after a 2023 landslide. The point cloud data captured from the 24/7 remote monitoring system was used by the survey department from the Ministry of Transportation and Transit to support decisions about restoration work while helping to keep site work crews safe.

Software release 2025 highlights

Discover the highlights from the latest Maptek™ software releases and ways to streamline your mine survey, modelling, design and scheduling tasks.

New features and functionality are always of interest, and a stable experience ensures customers can unlock value.

A good illustration is the more efficient use of local data caching in Maptek™ Vulcan™ to improve design database integrity, providing faster access to data with design menu options. Another is the graphics rendering enhancements that have reduced dependence on graphics card settings and driver updates.

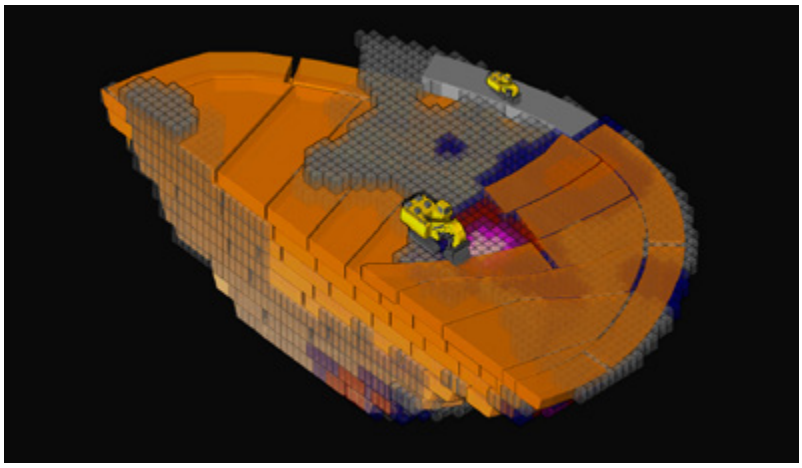
Feedback is very important to inform Maptek product development, and recent surveys indicate that functionality and stability remain the highest customer priorities. To that end, Maptek has improved crash report analytics during testing, allowing us to investigate and resolve issues early.

Vulcan 2025 & 2025.1

Vulcan 2025 introduced Mining Solids, a streamlined method for cutting phase solids as an alternative to the available Mining Blocks functions.

The Drillhole Optimiser engine is updated to enable both Kriging and Ellipsoid classification methods.

An improved interface and workflow for Gaussian Transformations and Simulation panels in Vulcan Data Analyser enhances the geostatistical analysis experience.

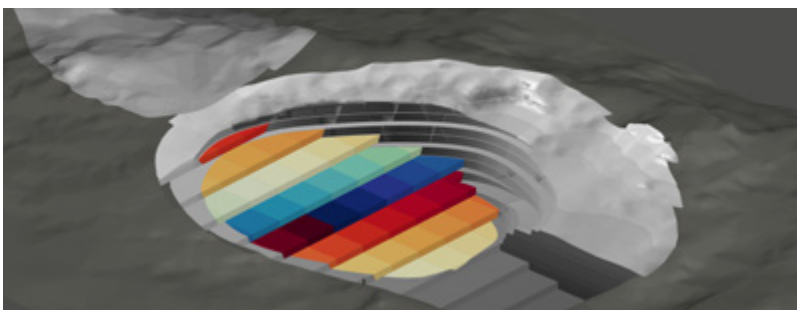


Violin plots combining boxplots and histograms are new in version 2025.1, simplifying comparison of grade distribution between different domains.

Customers using Vulcan Gantt Scheduler can now apply Python scripts to automate processes and unlock expanded functionality.

Vulcan 2025.1 sees an enhanced Build Road option in the Open Pit menu, allowing users to set a custom road profile shape, define parameter files and save outputs individually via a dockable panel. Users can dynamically preview their design as they change parameters.

Users will also notice substantial improvements when using large ISIS databases, with some routines running 20 times faster. Mapfile creation is similarly enhanced.



Evolution 2025

Evolution 2025 delivers an enhanced user experience alongside core functionality and reporting tools.

Dynamic Solids in Evolution Epoch combines block and solid models to support classifying materials and aggregating both accumulation values and grade information on the fly as users dynamically create new shapes for scheduling while maintaining access to underlying block model information.

Featuring a modular setup, the Epoch interface displays only relevant information based on schedule complexity.

Users can now import linework directly into the Epoch 3D viewer to guide scheduling decisions.

Evolution Strategy optimisation engine has been improved to process grade values directly, streamlining project setup and improving optimisation results.

Microsoft Excel reporting capabilities have been enhanced, with charts exported as native to Excel including underlying data, and live reporting is extended to Excel for dynamic updating of each period.

BlastLogic 2025

BlastLogic 2025 introduces BlastMCF—a new add-on for designing blasts that comprises drill pattern, charge plan and timing design. BlastMCF revolutionises open pit blast design with a web-based platform for rapidly generating multiple design scenarios to trade off competing objectives, for example cost, fragmentation and vibration.

The module is available via web browser and users can fine tune results with drill pattern editing tools in the browser interface while leveraging existing workflows through BlastLogic integration and export options.

GeoSpatial Manager

With enhanced usability, powerful new visualisation tools and smarter data sharing, GeoSpatial Manager puts spatial insight at the centre of your operations. With an intuitive, web-based interface, the May 2025 release makes it even easier to visualise, compare and communicate surface changes across sites.

Dynamic, automatic updating to survey surfaces produces a single source of truth for any point in time, and can be accessed securely by everyone in an organisation.

GeoSpatial Manager is now available for trial, with two options:

- Explore core features in the free Global Demonstration Instance using Maptek-supplied data.
- Test the full power of GeoSpatial Manager with a 7-day trial using your own data.

PointStudio 2025

This release brings powerful new performance upgrades driven by customer feedback to help analyse, report and share spatial data with greater accuracy and efficiency.

Photogrammetry and Haul Road html reports now allow surveyors to confidently deliver clearer, quality-driven insights to operational and production teams.

Individual failure labelling provides superior clarity for haul road analysis, where conformance to design is critical for operational safety.

Enhanced Digital Surface Model GeoTIFF export allows upload to drone flight planning software.

Improved DXF/DWG output now fully supports the transfer of edge properties to downstream applications, and users will enjoy better performance in Topographic Surface and Volume tools.

GeologyCore 2025

This release sees the addition of a new Radial Basis Function (RBF) engine, enabling key enhancements to implicit modelling, Modelling Manager and DomainMCF machine learning functionality. GeologyCore customers will now be able to easily access modelling methods for fault, vein, vein network, erosion, deposition, intrusion, numeric RBF models and machine learning.

Enhancements to RBF aid interpolation and surfacing across several tools, including Vein Modeller and Fault Manager. Modelling Manager now supports depositional and erosional surface types, enhancing accuracy when modelling stratigraphic units.

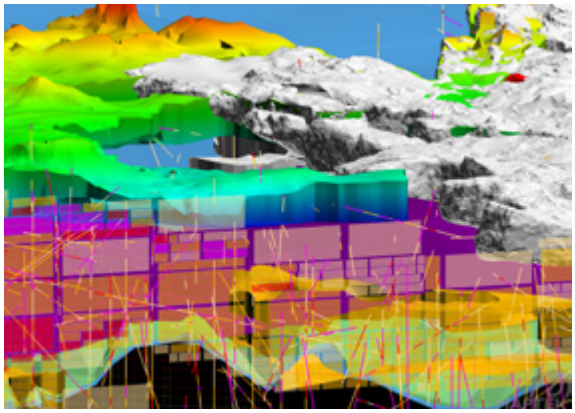
DomainMCF

The latest DomainMCF functionality is available via the GeologyCore 2025 add-on. Multivariate data imputation handles missing data, text values, numeric or assay data. Preprocessing predicts values prior to uploading into DomainMCF for training, with both text and numeric data supported.

Users can also now upload solid wireframes to provide spatial control to the machine learning process. Multiple solids are allowed and each can be assigned a priority to manage any overlapping volumes.

Solid wireframes representing fault blocks can also be uploaded and prioritised, enabling independent models within each fault block based on the input data within each solid volume. Models within fault blocks are automatically merged into a single block model output.

Multiple block model outputs can be generated in a single pass, each with different spatial location, block and sub-block parameters. Improved block coalescing honours domain boundaries, with more efficient allocation of sub-blocks. Users can define sub-blocking differently in each (x, y, z) dimension. DomainMCF machine files are now faster to upload and download.



Empowering survey excellence

Thiess Contractors Indonesia deploys Maptek™ laser scanning hardware and software solutions for safe, best practice for mine survey.

Thiess Contractors Indonesia, part of the global Thiess Group, is a leading mining services provider operating across multiple sites in Indonesia. They manage four open pit coal projects across Kalimantan.

Thiess is committed to delivering safe, efficient and sustainable mining services by embedding ESG (Environmental, Social and Governance) principles into all aspects of operations. The values are instilled in every employee as part of Thiess day-to-day work culture.

Efficiency and effectiveness are cornerstones for all departments, including how data such as mining surface area provided by the survey division, is delivered to clients.

> The right technology and reliable software are essential for delivering accurate and timely survey information.

For more than eight years Maptek™ laser scanners and Maptek™ PointStudio™ software have been trusted as essential tools in daily survey. The solutions are valued for ease of use and accuracy.

As a surveyor experienced in construction and mining roles, Thiess Mine Surveyor Adhi Permana has personally relied on Maptek technology for a wide range of tasks.

'From pit scanning and highwall monitoring using the LR3 scanner to efficient and intuitive data processing with PointStudio, compatibility with various software platforms has proven to be an added advantage,' Permana said.

Thiess extends the use of Maptek scanners beyond routine pit progress surveys, deploying them for various project-based and production support analysis, such as determining the capacity volumes of haulage trucks, excavator buckets and scanning tunnels.

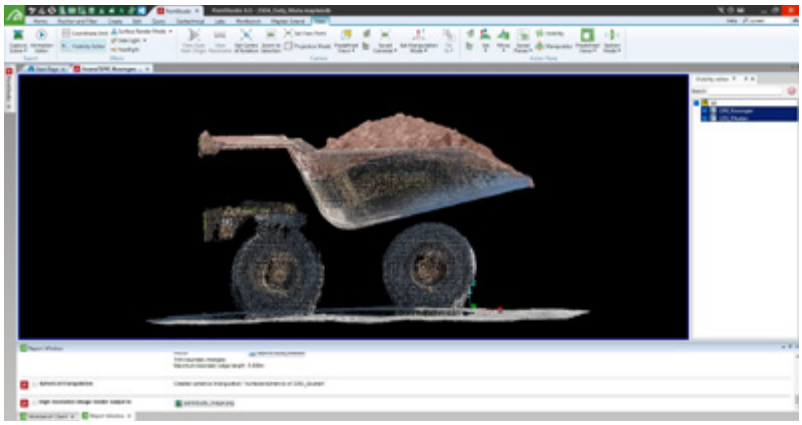
'The accuracy and clarity provided offers what we refer to as a *third eye*, allowing us to see beyond human limitations with consistent reliability,' Permana added.

One of the challenges frequently faced in open pit mining is capturing monthly progress data over vast production areas.

Traditional tools such as total stations or GNSS devices are often impractical, especially when they require halting operations, an interruption that can significantly affect the mining sequence.

'Maptek scanners enable us to efficiently capture expansive and active mining areas from just a few scan positions, minimising disruptions,' Permana said.

'The rugged in-field scanner controller performs reliably in all conditions, allowing our team to work through heat and rain.'



PointStudio filtering and processing tools streamline the generation of capacity volumes after haulage trucks are scanned by the long range LR3 laser scanner (right)

'The real-time preview feature helps us selectively scan only the areas of interest, optimising both survey time and data quality,' he added.

Thiess appreciates that point cloud processing with PointStudio is straightforward and seamlessly integrated with the hardware.

'Automatic registration and filtering features allow us to combine multiple datasets and remove unnecessary objects easily.'

'Additional tools like road conformance analysis and design conformance reporting help deliver accurate design-to-actual comparisons to other departments and clients,' Permana said.

Beyond surface mapping, Maptek technology is also used for material load capacity analysis.

Scanning haulage vessels and buckets in both loaded and empty states and processing data in PointStudio allows Thiess to accurately calculate the volume of materials being moved—a routine task that supports operational transparency and efficiency.

'Three key attributes—efficiency, safety and accuracy—make Maptek survey solutions the go-to choice for our team.'

'With this technology, we can reliably deliver surface data, conformance assessments and volume reports—whether for internal use or client reporting. The long-range scanning capability keeps our team safe, and the exceptional data quality ensures precise outcomes,' Permana concluded.

Thiess is dedicated to maintaining high standards in service delivery and operational excellence. They appreciate the Maptek continuous improvement approach to solutions development and support for the success of every project undertaken.

Thanks to
Adhi Permana
Mine Surveyor
Thiess Contractors Indonesia

Maptek laser scanning technology helps the Thiess survey division to safely collect data without interrupting operations and to generate accurate mapping and survey deliverables

Shaping the future of geology

Maptek™ Vulcan™ software has given students at Aristotle University of Thessaloniki an in-depth understanding of 3D deposit modelling and geostatistics.

Aristotle University of Thessaloniki (AUTH) is the largest university in southeastern Europe and is widely recognised as a vibrant centre of learning, playing a key role in advancing scientific knowledge on an international scale.

The Department of Mineralogy, Petrology and Economic Geology in the School of Geology focuses on ore mineral characterisation, petrological analysis and ore deposit research.

It collaborates with national and international institutions, including the National University of Athens and universities in Lorraine (France), Erlangen and Aachen (Germany). Together, they work on innovative approaches for mineral exploration, improving environmental sustainability in mining, and applying artificial intelligence to geological modelling and prediction.

Departmental research currently focuses on mineral-rich Northern Greece. This district is an emerging mining hub, with significant reserves of base, precious and rare metals, including placer, orogenic gold and antimony, world-class porphyry–copper and carbonate replacement lead–zinc deposits.

In response to increasing demand for computer skills in mineral exploration, the Department has reformed its courses, particularly the Masters programs. Maptek™ Vulcan™ is now an essential component of coursework in economic geology, mineral exploration and geostatistics.

Vulcan plays a crucial role in enhancing scientific knowledge of several deposits through student theses and practical work. Students gain hands-on experience in 3D modelling, block modelling and resource estimation applied to real-world mining scenarios.

Assistant Professor at AUTH, Grigorios Aarne Sakellaris currently supervises 11 undergraduate theses focused on 3D geological modelling of various types of deposits.

'We have already received new requests for the upcoming academic year. Since introducing Vulcan four years ago, the number of students in the Mineral Resources and Environment Masters program has grown significantly, with 10 students currently enrolled in the first year,' said Sakellaris.

> The benefits to students of using Maptek software extend far beyond learning to navigate a 3D environment.

'We are excited to attract new graduates with fresh ideas and computer programming skills, particularly in implementing AI for mineral prediction in 3D environments,' concluded Sakellaris.

Consistently positive feedback suggests that students refresh their knowledge of statistics and also gain hands-on experience with geostatistical applications. They develop a deeper understanding of natural deposit formations, structural geology and geophysics.

By bridging academic research with practical applications in mineral exploration, Vulcan provides vital skills that are directly applicable to the industry.

Several MSc graduates from AUTH have successfully transitioned into the mining industry in northern Europe, where they have established a professional community.

For example, MSc geologist Spyridon Stroggylis used Vulcan for exploration targeting in a gold-endowed belt in eastern Finland, combining 2D geostatistical interpolation methods for surface geochemical data with detailed 3D geological modelling.

'The skills and expertise I gained allowed me to advance in mineral prospectivity mapping. This ultimately led to work for a mining consultancy in Germany, where I contributed to epithermal Au–Cu projects,' he said.

Maptek is committed to providing value to all students through its university partnerships program.

Thanks to
School of Geology
Aristotle University of Thessaloniki

Sustainable resourcing

Resource engineering students at Hokkaido University are learning about sustainable mining using Maptek™ Vulcan™ for 3D modelling and mine planning.

Hokkaido University, located in Sapporo, is one of four major universities in Japan offering mining engineering studies. In 2017, Japan's first joint education program in resource engineering was led by Hokkaido and Kyushu Universities.

Students studying resource-related fields at Hokkaido University are enrolled in the Resource Recycling System Course within the Department of Environmental and Social Engineering, Faculty of Engineering. Each year, the course has approximately 35 students.

Starting this year, Maptek™ Vulcan™ will be introduced in undergraduate laboratory exercises. Since many students are unfamiliar with mining software, the aim is to provide hands-on experience and help them understand the capabilities of this globally used software.

Students who develop an interest in it may consider joining the Resource Management Laboratory, creating an opportunity to use the software in their future research.

The laboratory has adopted Vulcan for building mine and surrounding area models. Research is being conducted on integrating surface and subsurface environments, enabling teams to easily build and analyse multiple scenarios from a single digital model.

In early 2025, a project in Kazakhstan was launched as part of SATREPS (Science and Technology Research Partnership for Sustainable Development), an international joint research program promoted by the Japanese government. Vulcan will also be used in this project to help develop a mining system that prevents environmental pollution during resource extraction.

For students, this partnership is expected to provide access to online training, allowing them to become more proficient with Vulcan and apply it in their own research. Currently, it is estimated that only 20 to 30 people in Japan are capable of using Vulcan.

> For industry, increasing the number of skilled Vulcan users will contribute to greater efficiency and advancement in mining operations.

Partnering with Maptek has been instrumental in advancing knowledge around the applications of 3D modelling.

In late 2024, Maptek Senior Geologist Peter Odins visited the University to deliver lectures and practical sessions on coal deposit modelling to local and international students.

'Following the gingko-lined avenue to the University centre, I knew this was no typical stratigraphic modelling course,' Odins said.

'In addition to creating structural models, the focus was very much on model visualisation and integration with other platforms. The ability of Vulcan and GeologyCore to work with a wide range of data inputs and represent them in true 3D space was key to the success of the training,' added Odins.

Although many students were learning the basics of Vulcan for the first time, all deepened their understanding of modelling.

'All of the students picked up the software quickly, and kindly shared the best locations to sample the fabulous regional dishes Hokkaido has to offer,' Odins concluded.

These initiatives are helping to develop a framework that will support a sustainable pipeline of resource engineering professionals with advanced expertise and international competency.

Creating 3D models in Vulcan and running scenarios to test theories helps students at Hokkaido University gain skills that will serve them well in their careers

Enhanced implicit geological modelling

New surface modelling types, domaining tools, and a global RBF engine elevate geological modelling in Maptek™ GeologyCore 2025.

Maptek™ GeologyCore 2025 marks a major step forward in geological modelling, allowing geologists to represent complex geology in a more natural, efficient and unified way. Users can now construct full geological models that integrate lithologies, intrusions, veins and stratigraphic units all within the same environment.

A key enabler of these new capabilities is the introduction of a new global Radial Basis Function (RBF) engine. This advanced interpolation engine addresses modelling performance and quality, offering smoother, more geologically consistent surfaces. It removes the need for workarounds, allowing models to honour global data trends and deliver results that better reflect the real-world geology.

This opens the door to building more accurate and complete models—such as with new depositional and erosional surface types. These additions make it easier to model sedimentary and layered deposits, and to account for deformation and overprinting events that require nuanced representation.

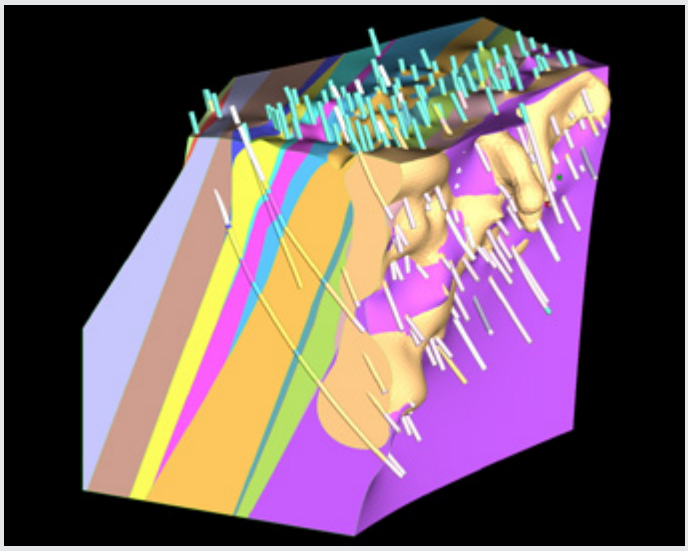
> Whether modelling stratigraphy, faulted veins, or post-intrusion events, GeologyCore 2025 provides the structure and flexibility in one place.

At the heart of the workflow is Domain Manager, which simplifies domaining of drillhole data. Users can define intervals using automated rules based on grades or lithology, or apply manual classification for more subjective interpretations.

These domains feed into Modelling Manager, where users can sequence units chronologically, apply different surface generation methods, and tweak modelling settings to suit the geological history of the deposit.

One of the most appreciated aspects of GeologyCore is its modular, sandbox-style environment. Geologists can copy and adapt models to explore alternate interpretations without having to start over—ideal for testing assumptions or presenting multiple scenarios. This helps geologists work more like geologists, iterating and refining their thinking instead of wrestling with rigid workflows.

The Maptek commitment to integration continues with GeologyCore 2025. Vulcan users can open design databases, drag-and-drop CAD data, and export geology models or drillholes directly to Vulcan or generic formats using the new ‘Publish Model’ feature. It’s an efficient way to share geological context downstream into planning and estimation.



Users of the DomainMCF add-on benefit from even tighter alignment between geology and machine learning. Structural trends and fault block solids created in GeologyCore can now be used directly in DomainMCF modelling. Customisable block sizes make it easier to match DomainMCF outputs with block models used in resource estimation.

For production geologists, usability improvements and dynamic filtering tools make a difference. GeologyCore supports fast review and labelling of key intervals—such as high-grade zones—based on cutoffs or custom filters. This ensures insights can be prompted quickly, even by geologists juggling multiple responsibilities.

Whether operating under a flexible daily licence or a longer-term subscription, users will find GeologyCore 2025 a reliable partner. It streamlines the modelling process and encourages geological thinking at every step.

Specialised tools for machine-learning assisted domain modelling, design conformance and geotechnical analysis can be added to the base licence.

GeologyCore 2025 provides more than new features—it’s about enabling better geology. With powerful tools and a more cohesive workflow, geologists now have everything they need to build models they can trust.

Transforming blast performance

Maptek™ BlastMCF revolutionises open pit blast design, transforming how open pit mines approach blast design, driving smarter, more profitable operations.

In April 2025, Maptek™ launched BlastMCF, a powerful new web-based add-on to the BlastLogic™ product family. Drill and blast activities account for up to 20% of total mining costs per tonne, indicating the importance of efficient, high-quality blast designs. BlastMCF meets the challenge with advanced capabilities that streamline design, improve control and drive profitability.

Why BlastMCF

Traditional methods—even with tools such as Maptek™ Vulcan™ and BlastLogic—remain heavily dependent on manual engineering input. Effective blast design requires aligning drill patterns, per-hole charge plans, timing and adherence to site-specific conditions.

Engineers often spend considerable time iterating scenarios, attempting to balance outcomes like vibration, fragmentation, fly rock, powder factor and cost. Fewer engineers and a growing demand for precision means this approach is no longer sustainable.

BlastMCF allows engineers to generate detailed, optimised blast designs that consider multiple competing objectives and automate complexity. Instead of manually building and comparing designs, a cross-section of the most viable options lets users select the best solution based on desired trade-offs.

BlastMCF integrates seamlessly with both the BlastLogic Enterprise System (on-premise) and BlastLogic Single Site Cloud Access, a natural enhancement for operations using Maptek solutions. Users requiring powerful blast design capabilities without the full BlastLogic suite can access BlastMCF independently through the cloud.

Creating value

BlastMCF addresses up to 70% of typical blasting scenarios—initially targeting production designs with common diameter, spacing and burden, but variable depth, charge and timing. A genetic algorithm evaluates hundreds or thousands of possibilities, converging on the most effective solutions while respecting user-defined constraints.

When constraints are tight, BlastMCF delivers the design with the least violations, keeping users in control. Typical setup requires basic mine design inputs, and cloud-based processing via the Maptek Compute Framework ensures secure, scalable and fast operations—even for complex evaluations.

> BlastMCF is more than a design tool—it is a decision support engine applying objective-based design calculators.

Engineers can benchmark blast designs routinely, evaluate trade-offs and generate multiple optimised scenarios in minutes. Responsive, intelligent software supports long-term planning as well as last-minute adjustments.

Designed for easy adoption, BlastMCF features a user-friendly interface that includes drill pattern editing tools and integrates with BlastLogic for refining timing design and on-bench execution. It supports file export to third-party systems to ensure optimal designs can be applied downstream.

When a large iron ore mine trialled BlastMCF, they found it significantly more intuitive than traditional CAD-based tools. Rapid processing allowed quick evaluation of multiple scenarios to make informed decisions based on real trade-offs.

Future-ready

BlastMCF kickstarts the automation of blast design routines for driving continual refinement. Future initiatives include orchestration of the design process through the Maptek Vestrex platform, enhancing remote design capabilities and enabling auto-creation of multiple blast designs across an entire bench.

BlastMCF empowers mining operations to maximise blast performance, reduce costs and make smarter decisions faster—a major step forward in digital transformation and operational excellence.

Celebrating student success

Congratulations to Gautam Das, winner of the 2025 Maptek™ Computer Science prize at the University of Adelaide, who describes his keys to success and career aspirations.

Favourite things about computer science
It lets you solve an endless variety of problems—from heavy computations and data storage to graphics and communication. As someone who loves solving problems, a tool this powerful feels like a superpower.

Second, the field is constantly evolving. There's always something new to learn—whether it's a technique, tool or technology—and I really enjoy that pace. It keeps me curious and constantly improving.

And finally, there's the impact. When used right, computer science can improve lives at scale, across almost every industry. That kind of reach and potential is something I'm excited to be part of.

Key to achieving meaningful results
I believe diligence matters more than just hard work. As a tutor and observing my peers, I've noticed that many people put in long hours, but not always with intention. Diligence, to me, means working with purpose—planning carefully, knowing your strengths and weaknesses, and constantly reassessing your approach.

Another key for me is focused work—a habit I picked up after reading *Deep Work* by Cal Newport in Year 11. I've practised working without distractions, and it's made a huge difference. In this broad and demanding field, being deeply focused helps you grasp concepts faster, solve problems more effectively and build long-term memory—not just for grades, but for real progress.

Lastly, I've found that discussing ideas is one of the best ways to learn. Explaining concepts, working through problems together and debating random topics sharpens thinking, exposes gaps in understanding and helps you see things from new angles.

Describe your dream career
Being a software engineer is not just about the coding, it's the whole process from breaking down a problem, designing a solution, building and refining it. I really enjoy the mental rhythm that comes with tackling challenges and making things run better.

I'm especially drawn to networks, distributed systems, and parallel computing. It's fascinating how individual components communicate and work together at scale—whether it's optimising performance, improving fault tolerance, or designing systems that stay fast and reliable under heavy load. The complexity in these areas doesn't scare me; that's what makes it exciting.

Long term, I'd love to be part of a team working on large-scale, high-impact systems that power real-world infrastructure and demand both precision and creativity.

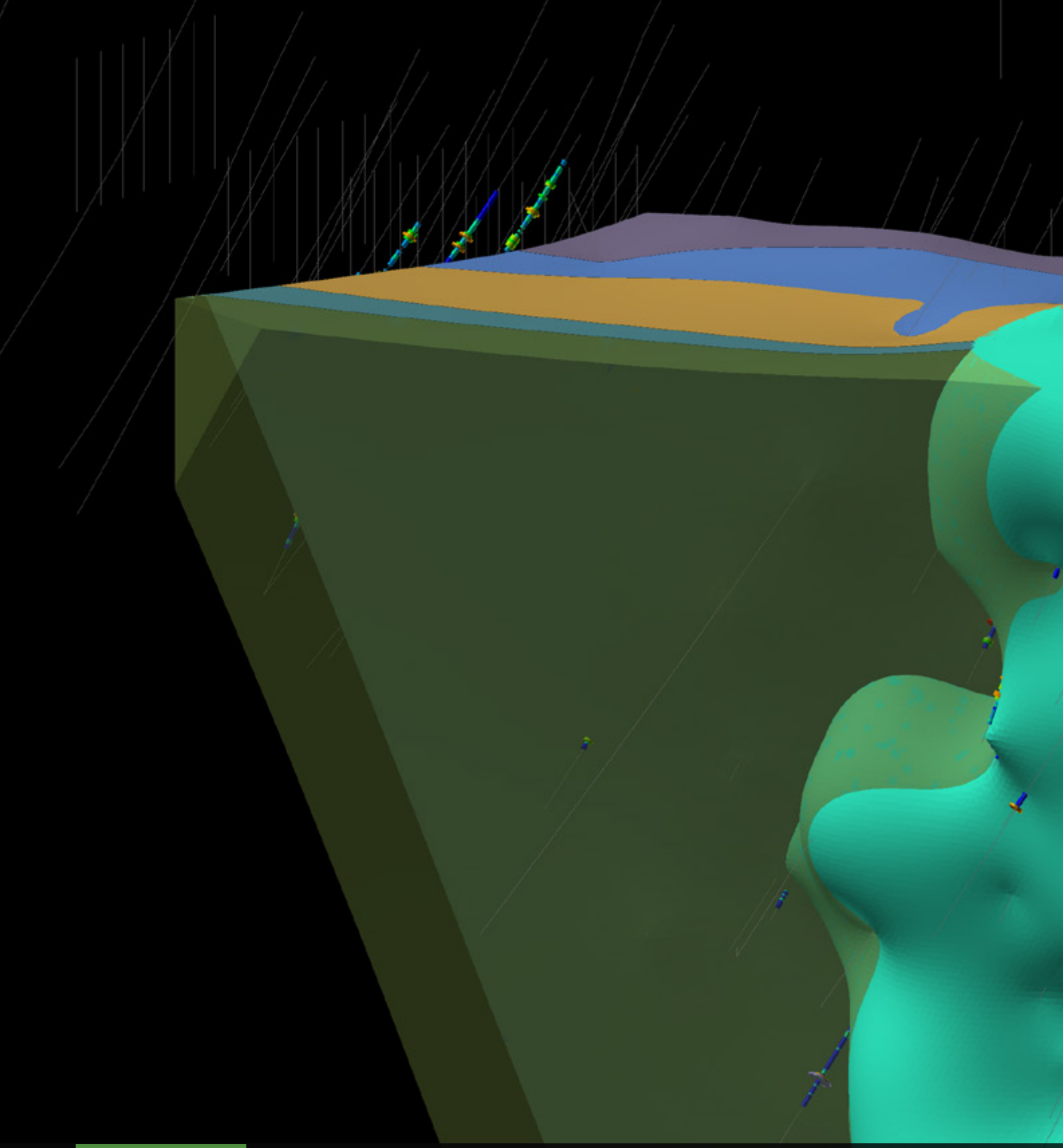
Impact of the award on your career
It's incredibly valuable, a reminder of what can be achieved by focus and hard work. Professionally, the award signals to future teams and hiring managers that I'm committed to learning and capable of delivering results. I believe it will help open doors to more opportunities.

Aspirations for the future
I'm undertaking a double degree in Mathematical and Computer Sciences. Whatever comes next, I want to push myself even further. I'm driven to learn fast, stay curious and build things that matter.

Gautam's dream of a software engineering career is on track to become a reality and Maptek wishes him well on that journey.

Gautam Das at the University of Adelaide prize ceremony with Simon Ratcliffe, Professor of Practice in Software Engineering and Head of Experimentation and Technology at Maptek

Global activities



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