

### Mining UC Guide

Your guide to mining related activities in the conference! We hope it is useful in helping you navigate the virtual platform.

### **Plenary Sessions**

Monday, July 12 | 8:30 AM-12:00 PM PDT Tuesday, July 13 | 8:30 AM-10:00 AM PDT

#### Included:

- Special Interest Group (SIG) Session
- User Presentations
- Technical Sessions
- Virtual Expo
- Things To Do

#### Virtual Info Desk

If you have any general questions during the event, please visit the Virtual Info Desk, located in the main navigation of the event platform.



## Special Interest Group

The Esri Mining community is growing, please come join the Mining User Group (MUG) to get an update on activities, progress and resources, adding a bit more structure to the MUG, and ways in which the community can interact to discuss specific technologies and workflows, through an interactive Q&A.

- Introduction | Darin Bryce, Esri, Chris Franks, Freeport McMoRan
- Mining User Group Overview
- · New Challenges and Growth
- Resources Review Web pages, Hub Sites and Esri Community Ideas/Discussion Forums
- Panel Discussion With a number of established MUG Community Members
- Open Discussion On trends, challenges, technology and the future MUG Community Members

Thursday, July 15, 9:15 - 10:15 AM (PDT)

### **Panelists**

Darin Bryce, Esri Matt Ballard, Esri Chris Franks, Freeport Mike Kelley, Teck Resources Andrew McCulloch, Oz Minerals Karl Warschau, BHP Pieter Mostert, AngloAmerican Roger Bannister, Covia Holdings Corp

#### Additional SIGs of interest

### Thursday, July 15

6:45 AM	Young Professionals Network
PDT	
8:00 AM	Pipeline
PDT	
9:15 AM	Natural Resources and Environment
PDT	
1:00 PM	Sustainable Development Goals
PDT	
1:00 PM	Corporate Social Responsibility
PDT	
1:00 PM	Petroleum User Group (PUG)
PDT	
3:30 PM	Renewable Energy
PDT	



## User Presentations

ON DEMAND SESSIONS

Available starting Sunday, July 11 at 9:00am PDT

#### Prioritization of Site Selection for Subsidence Mitigation of Abandoned Mines

The world has begun implementing programs to manage abandoned mines and mitigate subsidence. Historical records, risk assessment, jurisdiction policy, and geological investigations are all critical components to site priority. The study area is two counties in Wyoming spanning the years 2017-2020. This research hypothesized a hierarchical criteria for site prioritization and used GIS to visualize data in an effort to simplify the complex human deciding factors caused by abandoned mines.

Harry Plendl – Brierley Associates

#### **Exploration Workflow with Discover for ArcGIS Pro**

Wendi will take the audience through some of the business problems he has solved using ArcGIS Pro. Specifically around sectional representations of drilling program's and the ingestion of data from various mining software products to display in 3D and in section.

John Shippick – *Datamine* Wendi Adrian – *Mederka Copper*  Search for these great user presentations from the mining community using the filtered search capabilities on the agenda and in the event platform when it's live. Be sure to explore the other dynamic presentations from the broader Esri community as well.

### Using Esri Drone2Map to Create Orthomosaics/3D Datasets for Mine Mitigation

Brierley Associates uses ArcGIS Drone2Map as a tool for image processing including the production of orthomosaic datasets and 3D rasters from raw aerial imagery. What began as a way for Brierley to use snippets of aerial imagery for maps, figures, and presentations has morphed into a program that utilizes several drones, four FAA licensed drone pilots, a team of GIS Analysts, and a photogrammetrist turned GIS Analyst to produce high resolution orthorectified imagery for all of our GIS mapping.

Shane Zentner - Brierley Associates



## **Technical Sessions**

Monday, July 12				
Time	Session Title			
12:30 PM	ArcGIS and Microsoft 365: Better Together			
12:30 PM	ArcGIS Field Maps: An Introduction & What's New			
12:30 PM	ArcGIS Platform: A Developer's Introduction			
12:30 PM	ArcGIS Spatial Analyst: Suitability Modeler			
12:30 PM	Getting Started with Imagery			
12:30 PM	Living Atlas: An Introduction			
12:30 PM	Spatial Data Science in ArcGIS			
1:45 PM	ArcGIS API for JavaScript: An Introduction			
1:45 PM	ArcGIS Enterprise: What's New			
1:45 PM	ArcGIS Field Maps: Migrating to Field Maps			
1:45 PM	ArcGIS Image for ArcGIS Online: An Introduction			
1:45 PM	ArcGIS Pro: The Road Ahead			
3:00 PM	3D Across ArcGIS			
3:00 PM	ArcGIS Enterprise on Kubernetes: An Introduction for Administrators			
3:00 PM	Living Atlas: Livefeeds Maps and Workflows for Disaster Response			
3:00 PM	ArcGIS Enterprise: Deployment Options			
3:00 PM	ArcGIS Experience Builder: An Introduction			
3:00 PM	ArcGIS Image Analyst: An Introduction			
3:00 PM	ArcGIS Survey123: An Introduction and What's New			
3:00 PM	ArcGIS: Python Overview			

Included are a small subset of highlighted tech sessions that are of relevance to the mining industry and of general interest. You're encouraged to explore the full list of offerings and add to your favorites and schedule during the event.

Tuesday, Jul	Tuesday, July 13			
Time	Session Title			
7:15 AM	ArcGIS Hub: An Introduction			
7:15 AM	ArcGIS QuickCapture: An Introduction and What's New			
7:15 AM	ArcGIS Enterprise: The Road Ahead			
7:15 AM	ArcGIS Experience Builder: Designing Apps with Style and Layout			
7:15 AM	ArcGIS Image Server: Image Management and Analysis at Scale			
7:15 AM	ArcGIS Velocity: An Introduction			
11:45 AM	ArcGIS Survey123: Working with Online Surveys			
11:45 AM	ArcGIS Enterprise: Q&A with the Product Teams			
11:45 AM	ArcGIS Imagery: What's New			
11:45 AM	ArcGIS Online: The New Map Viewer			
11:45 AM	Living Atlas: Imagery and Elevation			
1:00 PM	ArcGIS Enterprise: Designing Sites and Pages			
1:00 PM	ArcGIS Mission: An Introduction & What's New			
1:00 PM	ArcGIS Online: The Road Ahead			
1:00 PM	ArcGIS Pro: Migrating from ArcMap			
2:15 PM	Living Atlas: Environmental Content, Mapping, and Analysis Workflows			
2:15 PM	ArcGIS Field Maps: Data Collection & Inspection Workflows			
2:15 PM	ArcGIS Pro: 3D Analysis, an Overview			
2:15 PM	ArcGIS Pro: Q&A with the Product Teams			

## **Technical Sessions**

Included are a small subset of highlighted tech sessions that are of relevance to the mining industry and of general interest. You're encouraged to explore the full list of offerings and add to your favorites and schedule during the event.

Session Title

Wednesday, July 14				
Time	Session Title			
7:30 AM	ArcGIS Dashboards: Designing Effective Dashboards			
7:30 AM	ArcGIS Field Maps: Creating and Using Smart Forms			
7:30 AM	ArcGIS Velocity: Real-Time and Big Data Analytics			
7:30 AM	ArcGIS: Introduction to Deep Learning for Imagery			
7:30 AM	ArcGIS GeoAnalytics: Spatiotemporal Analysis of Big Vector Data			
7:30 AM	ArcGIS StoryMaps: What's New and What's Coming			
10:00 AM	ArcGIS Field Apps: The Road Ahead			
10:00 AM	Living Atlas: Esri Basemaps and OpenStreet Map			
10:00 AM	ArcGIS Pro: Taking Advantage of 3D			
10:00 AM	Big Data, Spatial Analytics and Machine Learning: Workflows and Applications			
10:00 AM	Drone Imagery: Creating Orthomosaics, DTMS and 3D Mesh			
11:15 PM	ArcGIS Field Apps: Q&A with the Product Teams			
11:15 PM	ArcGIS Monitor: Beyond the Basics			
11:15 PM	ModelBuilder: Tips and Tricks			
11:15 AM	ArcGIS 3D Analyst: Lidar Classification and Feature Extraction			
11:15 AM	ArcGIS: Map Wizardry			

Time	Session Title
12:30 PM	ArcGIS Field Maps: Location Tracking
12:30 PM	ArcGIS Survey123: Field Data Collection with Smart Forms
12:30 PM	ArcGIS Enterprise: Publishing Content and Services
12:30 PM	ArcGIS Hub: Managing and Collaborating with Your Community
12:30 PM	ArcGIS Pipeline Referencing: Introduction and What's New
12:30 PM	Enabling Conservation Planning with GIS: A Vision for 30 by 30
12:30 PM	Spatial Analysis & Data Science: The Road Ahead
1:45 PM	Deep Dive Into Deep Learning
1:45 PM	ArcGIS Field Maps: Taking Your Maps Offline
1:45 PM	ArcGIS Survey123: Advanced Smart Form Design
1:45 PM	Spatial Data Science: What's New in Time Series Analysis



Included are a subset of featured partners and sponsors. Please check the full List of Sponsors and Exhibitors.

V172

V104

### con terra

V203

V125

con terra is an Esri Platinum Partner, bringing ArcGIS expertise & business-critical solutions to customers for over 25 years. This year we spotlight our security & access control solution for ArcGIS: security.manager. But security.manager isn't just about security! By allowing admins to control access to data within a service, it helps optimize workflows by filtering content without having to publish multiple services for each group. So stop struggling & start sharing, with security.manager.

### CRITIGEN

Critigen is a full-lifecycle spatial systems integrator driving business performance through spatial IT solutions. Critigen helps clients make spatial technologies "work" in organizations of all sizes, integrates spatial technologies with enterprise systems, and enables field users with mobile spatial solutions. With global reach, top-tier partnerships, and a full-lifecycle approach, Critigen delivers all components of a geospatial program: data collection, spatial processing, and analytics.



HERE Technologies moves people, businesses and cities forward by harnessing the power of location. We enable our customers to achieve better outcomes - from helping a city manage its infrastructure or a business optimize its assets to guiding drivers to their destination safely. To learn more about HERE, please visit www.here.com and http://360.here.com.

### GEOCOMM

GeoComm serves local, regional, statewide, and military agencies nationwide, empowering us to execute our mission of helping save lives and protect property by delivering Public Safety Location Intelligence®: the right location data, on the right map, for the right people at the right time.

#### GeoDecisions

GeoDecisions is an international consulting firm specializing in geospatial technology systems, cloud technology, and analytics for commercial, municipal, state, and federal government organizations. We offer a suite of SaaS and tailored solutions that equip decision-makers with the data, intelligence, and visual information critical to planning, logistics, public safety, emergency response, security, asset management, incident management, resource management, and mass notification.



SSP provides award-winning solutions to electric, gas, and water utilities; telecommunications providers; and pipeline operators across the globe. Our solutions are designed to help our customers meet their unique business challenges through a combination of deep technology expertise and unmatched familiarity with utility industry best practices.

VertiGIS

VertiGIS builds powerful GIS software for the real world. It offers solutions and services that help utilities, land management, public sector, energy, telecommunications, and industry customers make valuable connections and the build solutions they need to solve their unique business challenges. The VertiGIS product portfolio, including Geocortex, VertiGIS Utilities, ProOffice and M4 Solutions, is used by thousands of customers and millions of end-users around the world.



Founded in 1991, GISinc provides Premier GIS Services to federal and state + local governments, as well as commercial clients. Using the science and technology of geography, GISinc integrates the spatial context to business information systems. GISinc helps customers leverage this intelligence to solve complex problems across the country and worldwide.



Included are a subset of featured partners and sponsors. Please check the <u>full List of Sponsors and Exhibitors</u>.

Organization	Booth	Organization
atial Inc	V238	NASA Earth Science
ous	V110	National Audubon Society
nazon Web Services	V231	NatureServe
sociation of American Geographers	V171	NOAA
l Elf, LLC	V177	Patrick Engineering
e Raster	V109	Planet
lson Software	V115	Pro-West & Associates
terra GmbH	V203	RAMTeCH
gen	V119	ROK Technologies
N	V244	Royal Society for the Protection of Birds
Positioning Systems	V102	Safe Software Inc
t American DataTree LLC	V274	Seequent
Jobe	V170	Skytec LLC
Comm	V108	Spire Global
Decisions	V172	SSP Innovations LLC
design - Penn State University	V120	Texas A&M University
nc	V174	The Nature Conservancy
RE Technologies	V125	The Sanborn Map Company
larris Technologies	V153	The Trust for Public Land
er Technology, Inc.	V106	Trimble Inc
a Geosystems Inc.	V242	Unacast
gnolia River	V121	University of Denver - GIS Master's Program
xar	V192	Ursa Space Systems
crosoft Corporation	V270	VertiGIS
		Woods Hole Research Center

## Map Gallery

See a featured list of maps from the 2021 UC Map Gallery, that you might find relevant to your broader industry and some that are of general interest. Be sure to explore the full offerings contributed from our user community around the world.

Map ID	Map Title	Organization	Industries
_	Australian Tree Crop Map Dashboard	University of New England	Agriculture
29295	America's Red Rock Wilderness Act: Moving America Closer to 30x30	Southern Utah Wilderness Alliance	Conservation
	<u> </u>	The University of Tennessee at	
28911	Seeing the Carbon for the Trees	Chattanooga	Conservation
29148	Stream Drying Impacts on California's Anadromous Salmonids	University of California San Diego	Conservation
	Analysis of Spatiotemporal Change in Rescue Activities That Contribute to Response Teams Operation After an		
29689	Earthquake	Yokohama National University	Emergency Management
			Environment and Natural
29473	Land Emissions and Removals Navigator Tool: Estimating Community GHG Emissions from Land Use Change	Blue Raster LLC	Resources
			Environment and Natural
29089	Calgary's Glacial Water Sources Map	EN Creative	Resources
			Environment and Natural
28943	Geologic Map of the McDowell Mountains, Maricopa County, Arizona	McDowell Sonoran Land Conservancy	Resources
			Environment and Natural
29121	The Resources Driving Utah's Energy Economy	State of Utah	Resources
			Environment and Natural
29314	Analysis for Potential Grey Wolf Release Habitats in Colorado	Tufts University Data Lab	Resources
	USDA Forest Service - Rocky Mountain Region - 117th Congressional Districts, Representatives and Forest Service		Environment and Natural
25543	Administered Lands	US Department of Agriculture	Resources
			Environment and Natural
28955	Sequoia National Park Trail Map and Guide	USC Spatial Sciences Institute	Resources
	Use of UAS Imagery and Regression Tree Modeling to Calculate Fractional Shrub Cover for Greater Sage-Grouse		
	Micro-Habitat	US Geological Survey	Environmental Management
-	FSC GIS Portal	Blue Raster LLC	Forestry
		Burgex, Inc.	Mining
	GravMagApp	CGG	Mining
	Nevada Active Mines and Energy Producers	Nevada Bureau of Mines and Geology	Mining
29654		PT Sriwijaya Bangkit Energy	Mining
29380		PT. Ceria Nugraha Indotama	Mining
		Woodwell Climate Research Center	Research/Science Institutions
29521	New Mexico Uranium Mine Dashboard	NM Energy, Minerals and Natural Resource	State
28909	ls Domestic Migration Moving the United States Towards a Sustainable Energy Future?	County of San Bernardino	Sustainable Development

## Things To Do



### UC Virtual Run/Walk/Bike 2021

A fun and active way for you to get involved in this year's conference. Since we can't run together like we normally would, we are hosting a virtual event for participants of all abilities. You can run, walk, or bike as many times as you like between July 10 and July 18. Log your trips and help us reach our community goal to go around the world!

https://uc-2021-running.hub.arcgis.com/

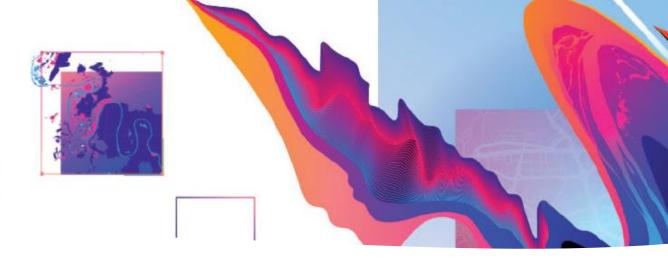
### Esri Science Symposium

Meet Dr. Dawn Wright, chief scientist of Esri, and special guest Dr. Healy Hamilton, chief scientist of NatureServe, on July 15 for a virtual, interactive discussion. Explore climate change, sustainability, geodesign, and more. The symposium theme is Working together to serve science and society. The symposium features a Q&A session and opportunities to connect with other science-minded users via our Esri Community.

https://www.esri.com/en-us/about/events/science-symposium/overview



# Esri Mining Team





Geoff Wade Community Outreach gwade@esri.com



Darin Bryce Account Executive dbryce@esri.com



Peter Will Account Executive pwill@esri.com



Matt Ballard
Natural Resources
Solution Engineer
mballard@esri.com



Sarah Powell
Natural Resources
Marketing Specialist
Sarah\_powell@esri.com

Reach out to the Esri Mining staff during the conference by **chat** or **schedule a meeting**. Plus, stay connected with the Esri Mining Community all year long!

- Twitter: <a>@EsriMining</a> (use #EsriUC while attending the virtual UC)
- LinkedIn: Mining <u>MUG Online</u> group
- Esri's Mining GeoNet Community