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Type: **Invited Talk**

Cloud based urban planning decision support

Tuesday, 2 December 2025 11:20 (20 minutes)

Urban areas across South Africa face increasing pressure to plan for sustainable growth and service delivery amid rapid change. The Urban and Regional Dynamics research group at the CSIR develops city- and provincial-level simulation and decision-support tools to assist planners and policymakers in exploring long-term urban development scenarios. These models integrate spatial, economic, and demographic data, requiring significant computational capacity for processing and visualisation. Access to the CHPC infrastructure has been critical in enabling the scalability of these systems and providing reliable, shared access for multiple users across municipalities and provinces. This talk outlines the computing challenges and successes encountered from handling large geospatial datasets to deploying interactive web-based interfaces and presents key research outcomes that demonstrate how cloud-based systems can strengthen data-driven urban planning and decision-making.

Presenting Author

Email

Student or Postdoc?

Institute

Registered for the conference?

CHPC User

CHPC Research Programme

Workshop Duration

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