

QATAR GEOLOGICAL MAPPING PROJECT PHASE II NEWSLETTER

وزارة البلدية
Ministry of Municipality
دولة قطر • State of Qatar



29, JAN , 2025

2nd Edition



In This Edition.....

We're excited to share an in-depth update on the latest advancements in the QGMP II Project. We've made significant progress in improving quality and management across all aspects of our operations.

Inside, you'll find a comprehensive overview of the key milestones we've reached and the major achievements that have played a pivotal role in Fueling the project forward.

This edition captures the momentum we've gained and the ongoing commitment to excellence driving our success.

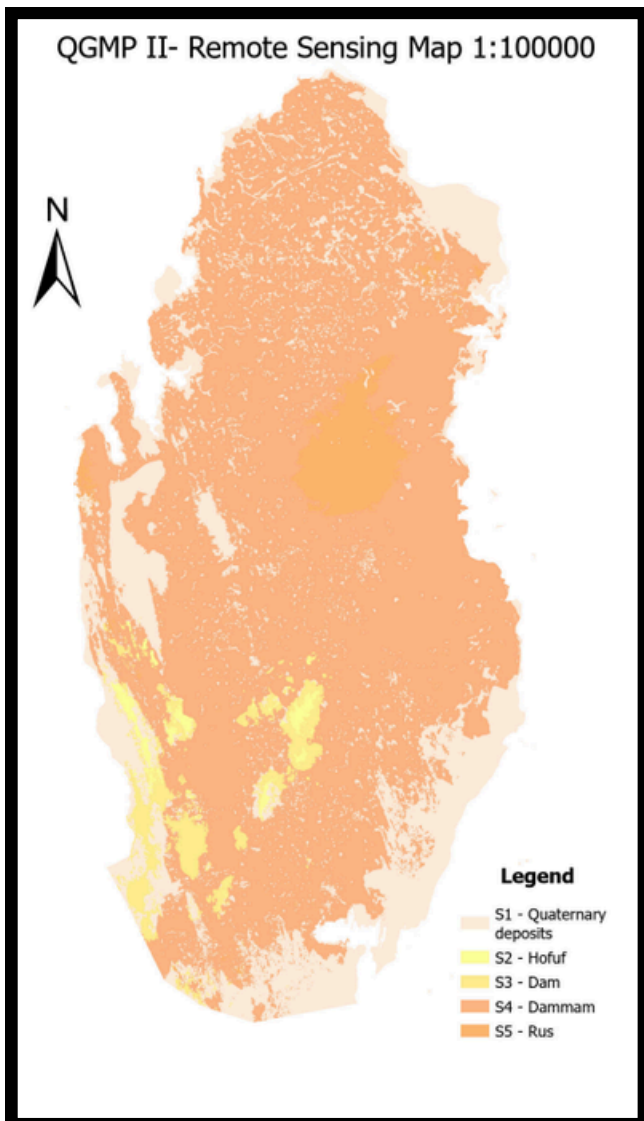


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Current Achievements

QGMPII has successfully produced a 1:100,000 scale surficial geological map of Qatar, integrating remote sensing data with ground-field inspections. A confusion matrix was used to assess the accuracy of the map, focusing on five geological formations: Damm, Dammam, Hofuf, Rus, and Quaternary. Key metrics, such as User's Accuracy (Precision) and Producer's Accuracy (Recall), were calculated to evaluate the classifier's performance in correctly predicting and identifying these formations.



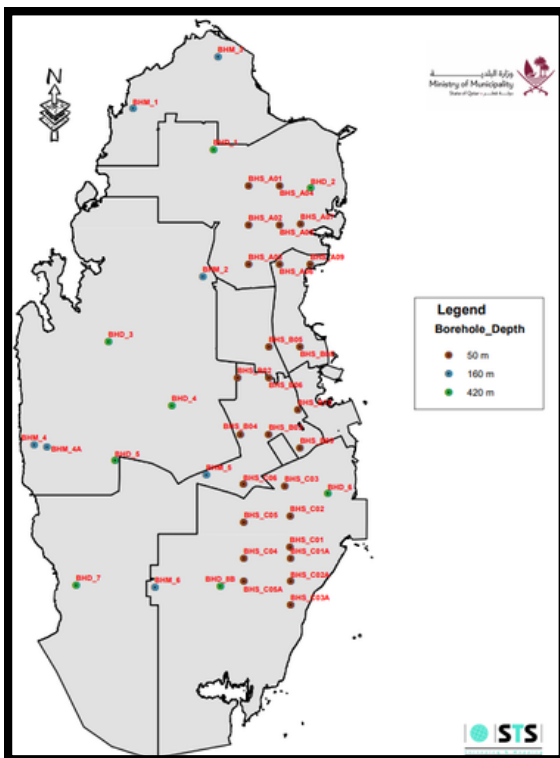
Intensive geological field visits were conducted by experts from various specializations, including stratigraphy, sedimentology, structural geology, paleontology, karstology, and mineral exploration. These visits were essential for verifying the remote sensing data and producing three geological maps at different scales: 1:100,000, 1:50,000, and 1:20,000. The expertise of these professionals ensured the accuracy and reliability of the final maps, complementing the remote sensing-derived information with on-the-ground insights.



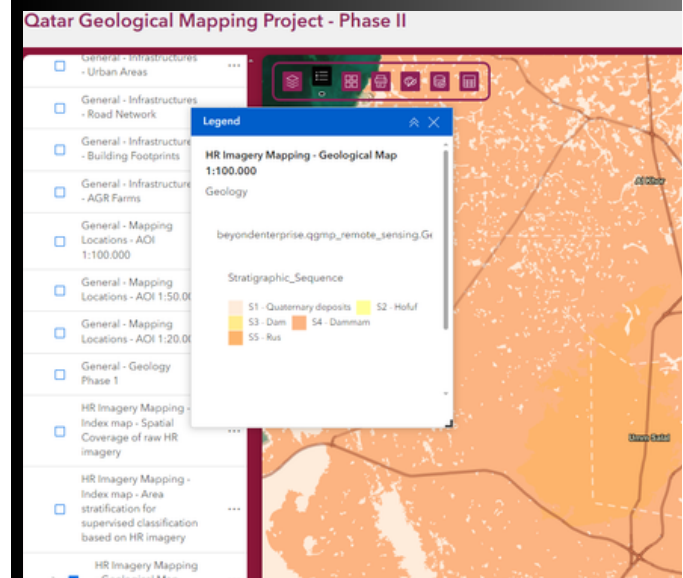
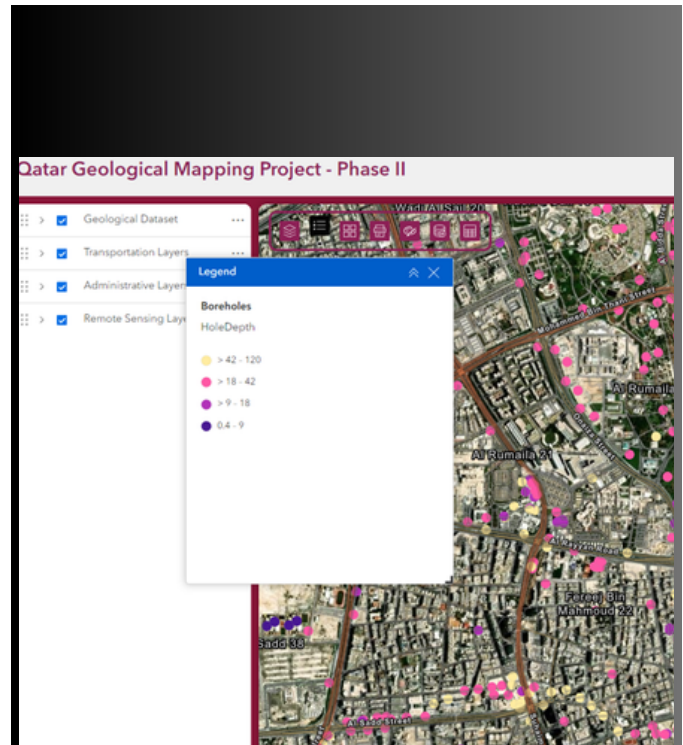
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The borehole locations have been finalized in collaboration with the MM team. Drilling permits for all proposed sites have been issued by the MOECC. The process of obtaining the Kahramaa drilling permit is currently underway, with all necessary documents prepared and shared with Kahramaa. Meanwhile, the Karstology team is completing site assessments for the geophysical surveys



The recovery and correlation of QGMP Phase I data is under processing, with consistency checks and data retrieval in progress. The first version of the geoportal was issued. As part of the CGDMS specification, an analysis of users' needs (availability, functionality, information, access, etc.) was conducted. The primary stakeholders were defined by the MM. In addition, the second version of the Geoportal was delivered on December 8, 2024, with continuous improvements to database design, data exposure, and remote sensing optimization.



Work has continued on developing the 3D Geological models for the Doha region, Al Khor, and Al Wakra-Messaied. Data analysis is ongoing to build a standardized geological and geotechnical database, with over 16,000 data points being processed. Input and source data are prepared with standards and attributes. Determining the standards of symbols and maps for each data input is aimed to be completed within a few months, to form the foundation for the 3D model. The finalized model will incorporate both existing and new drilling data from Phase-II investigations