

Supplementary materials

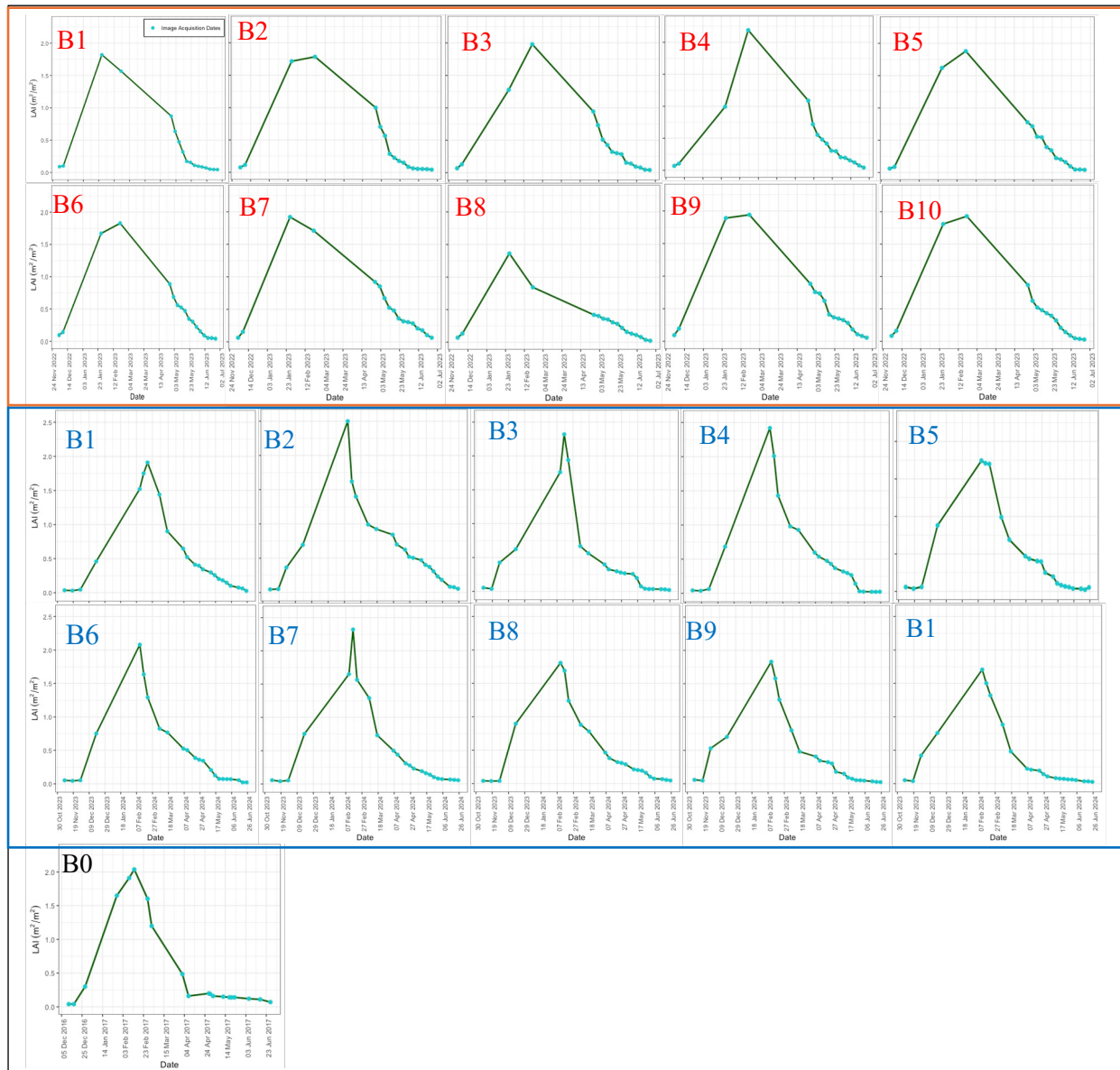


Figure S1. Temporal evolution of the maize leaf area index (LAI) in the blocks after SR calculation. B1-B10: Maize blocks that benefited from subsoiling and spreading of termite mound materials. B0: control without subsoiling and amendment with termite mound material. Red frame for the 2022-2023 growing season and blue frame for the 2023-2024 season.

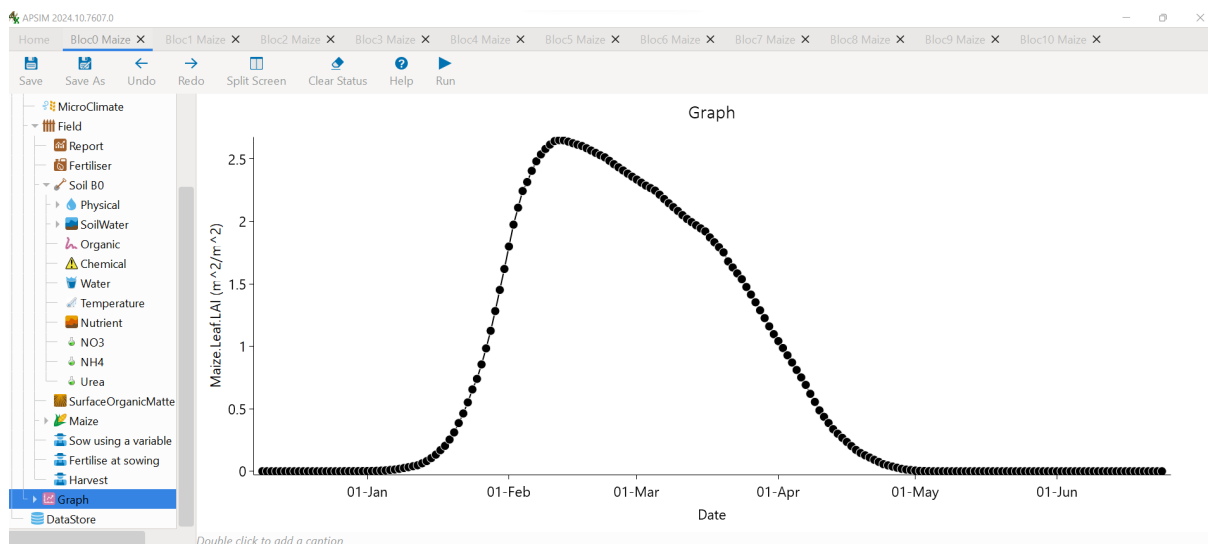


Figure S2. Screenshot of leaf area index (LAI) simulation results in APSIM for block B0 during the 2016-2017 growing season.

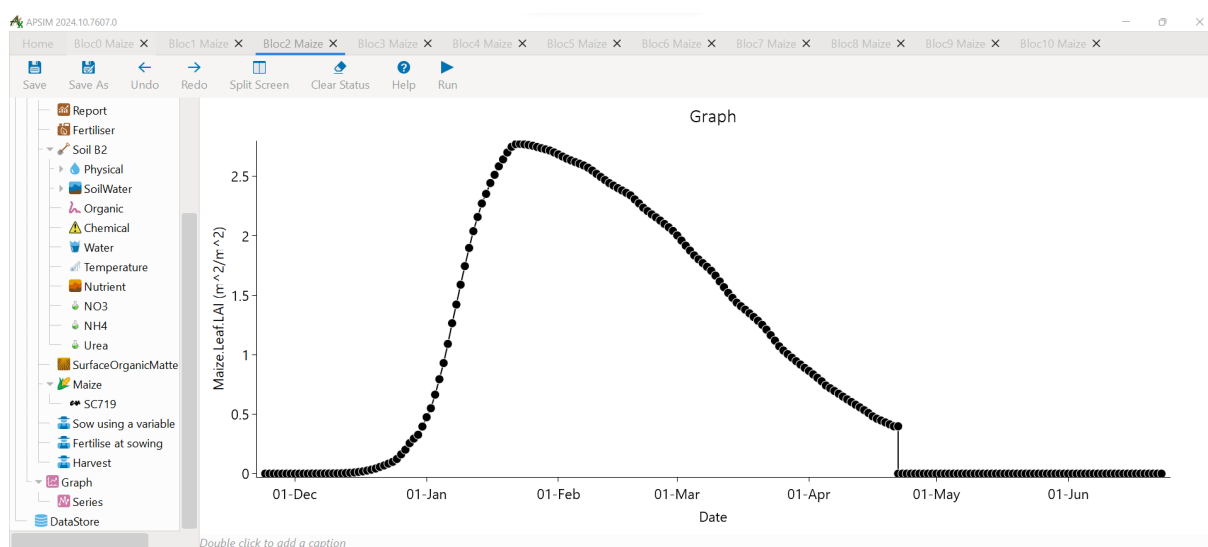


Figure S3. Screenshot of leaf area index (LAI) simulation results in APSIM for block B2 during the 2022-2023 growing season.

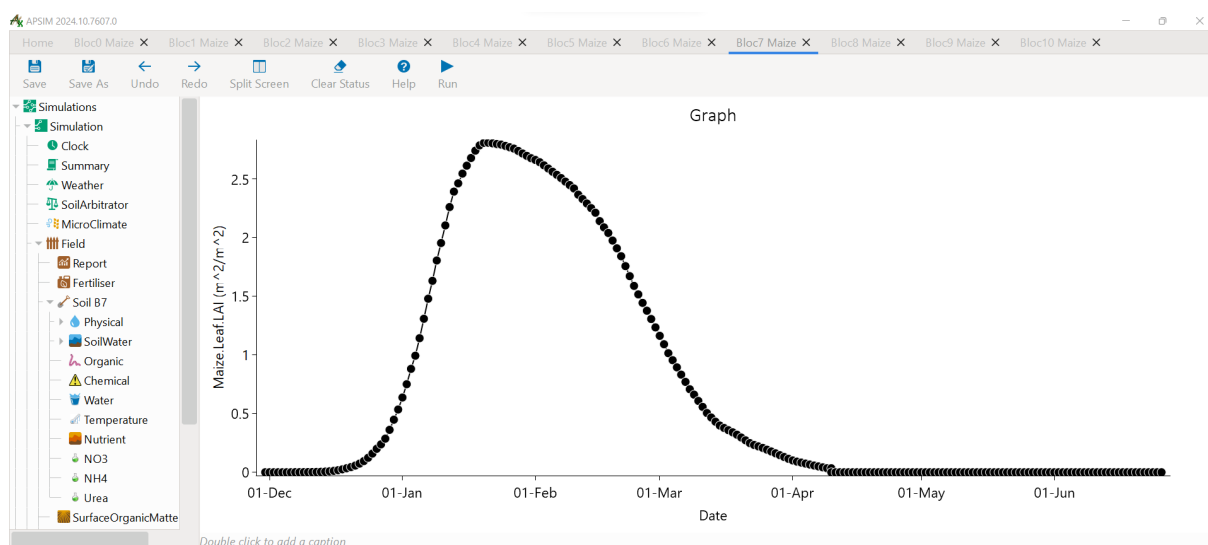


Figure S4. Screenshot of leaf area index (LAI) simulation results in APSIM for block B7 during the 2023-2024 growing season.

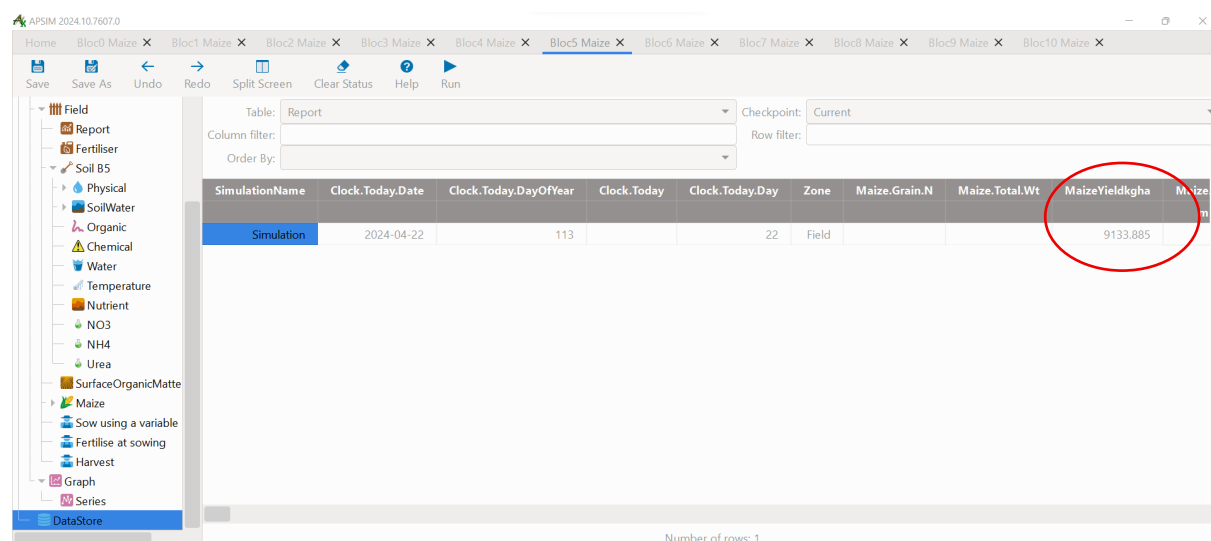


Figure S5. Screenshot of yield simulation results in APSIM for block B5 during the 2023-2024 growing season.

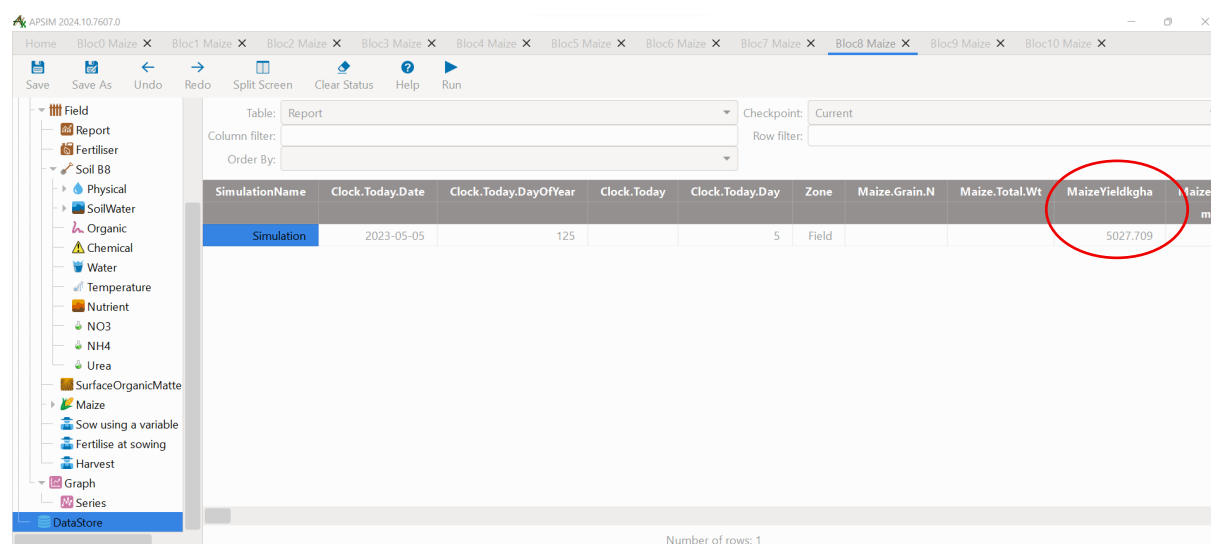


Figure S6. Screenshot of yield simulation results in APSIM for block B8 during the 2022-2023 growing season.

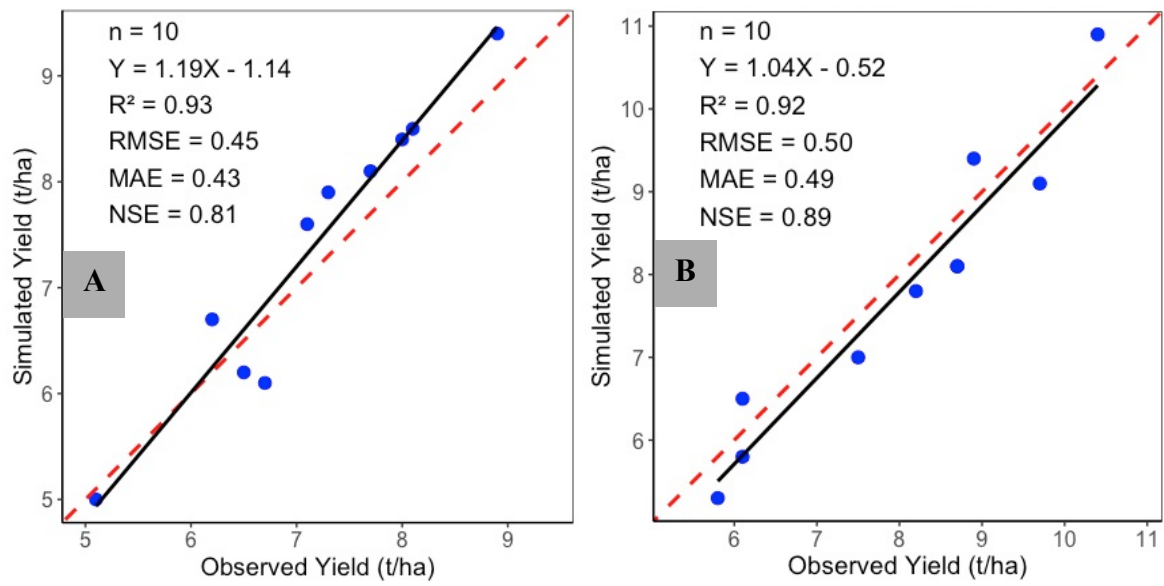


Figure S7 Simulated and observed grain maize yield in the blocks. A: 2022-2023 growing season; B: 2023-2024 growing season. The solid line represents the linear regression fit, and the dashed line represents the 1:1 line, indicating the ideal fit.