Use Case – Public Pocket Profile, Agriculture



OFF ROAD STEERINGSteering performance

Agri Use Case



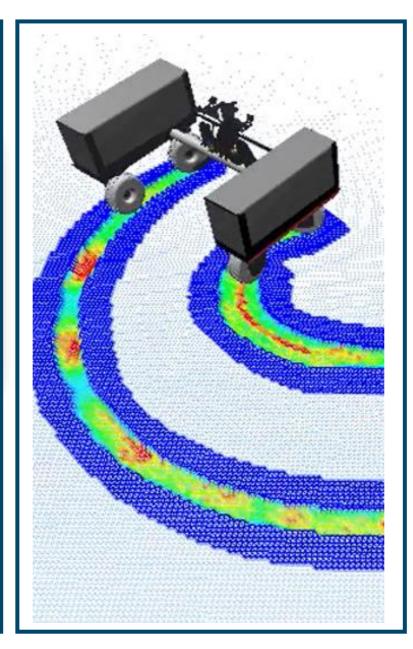
AGROINTELLI



System simulations of off-road steering are systems of high complexity and a high level of interaction. The goal is to improve steering performance in varying off-road conditions.



UPSIM will gain credibility in off-road steering performance simulations by validating the Digital Twin Readiness Level, contributing to Function-to-Simulation and Continuity Function-to-Reality-Continuity.



PROGRESS

- FMU wrapping complete for steering controller. Currently developing a "clean" Robotti model (no ROS, no graphics) to support FMU creation.
- New 3D meshes and component structure being used with json configuration files
- The Chrono GUI is being updated to load a Robotti and use ROS for input/output (instead of those features being embedded into the Robotti model)

FUTURE WORK

- Finish wrapping the FMUs
- Plan which sensors to add to collect critical data to verify model fidelity
- Improve model fidelity

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