Terabase

PlantPredict
Model Updates and Roadmap

Jason Spokes, PE (Sr. Product Director, PlantPredict)

PVPMC 2026 (May 14, 2026)

Happy Anniversary!

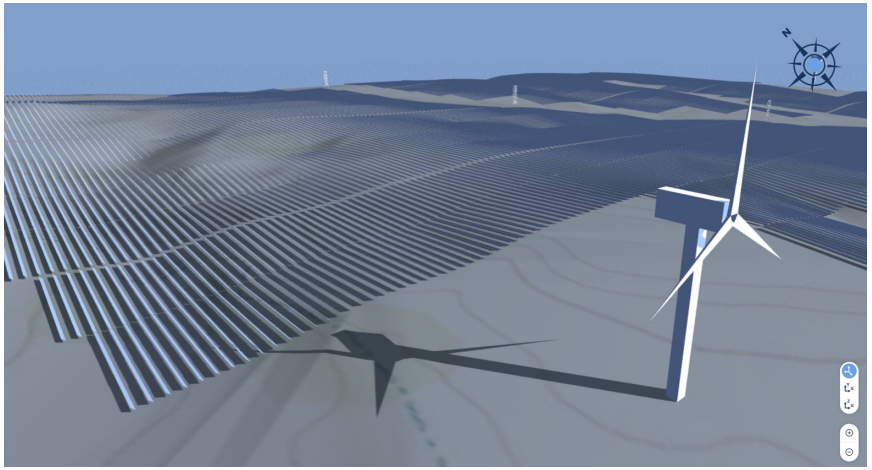
PlantPredict Timeline

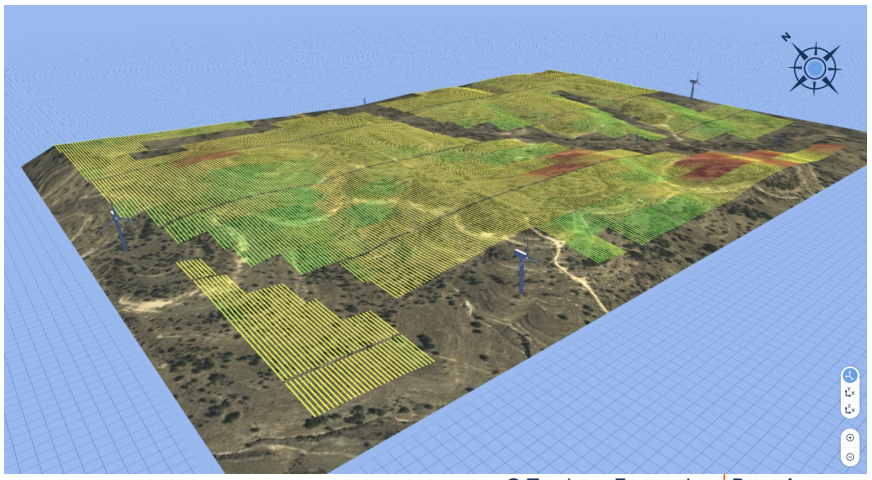
Part I
2025 Recap &
Current State

Part II
2026 Look Ahead

Part I – 3D Improvements

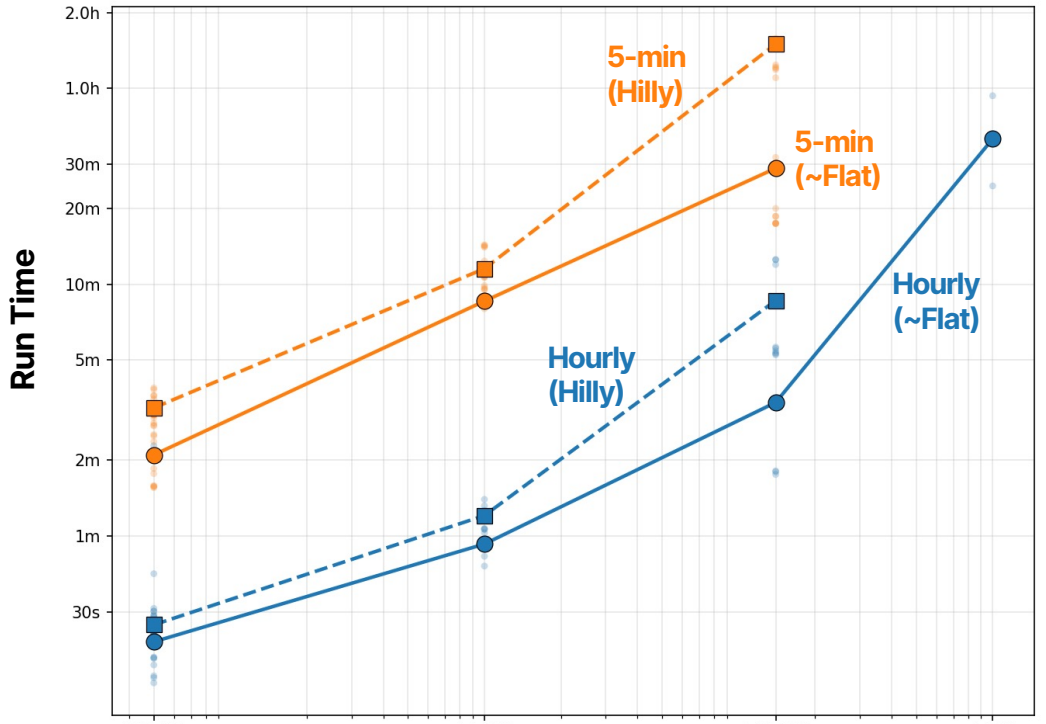
- **3D Scene** introduced in **Logic Version 12**
- Fully **API** Accessible (**AI-Ready**)
- Unlimited Orientations (**3D Transposition**)
- **PVC** (v1.4) + **SHD** File Compatible
- **Terrain-Following** Trackers Supported
- **Terrain-Aware Backtracking** Built In
- Tracker-Level Rotation Control (User-Defined)
- **Shade Object** Editing
- **Geolocation** Supported (underlay imagery)
- New **Step Fractional** Electrical Shade Effect Model
- Beam Shade Factor Table Export
- Multiple **Heatmap** Visualizations
- Giant Systems Supported (**10+GW**)
- Extremely **Fast**! (next slide)





Terabase

Shade scene calculation time (v12.26)



# of scene objects	100	2,100	29,500	210,000
Terrain Following Trackers	500 kW	10 MW	140 MW	1 GW
Planar Tracker	5 MW	100 MW	1.4 GW	10 GW

Terabase

Part I – New Integrations

PVGIS — Weather Data Integration

PVRADAR — Soiling and Cleaning Optimization

PowerUQ™ — Uncertainty Modeling (P90 / P99)

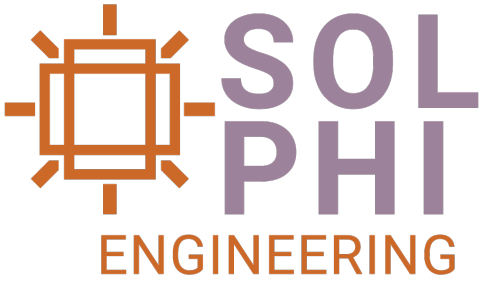
SunSolve — Rear Bifacial Losses (Annual and Hourly)

ARRAY TECHNOLOGIES — New Stow Dwell Time Parameter

Part I – Independent Engineering Reviews

IE reviews of **Logic Version 12** will be published and made available:

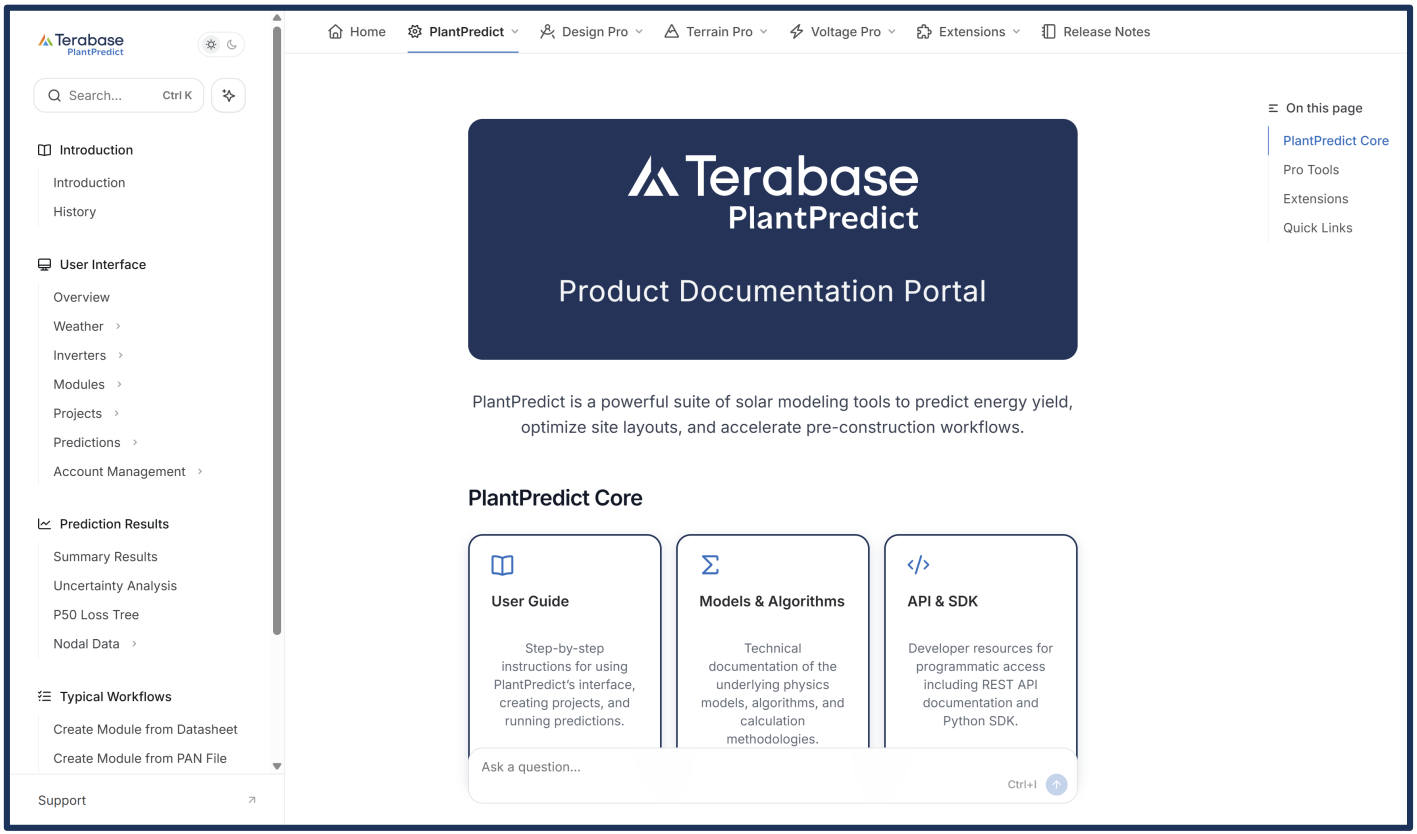
(Complete)



(June 2026)

(June 2026)

Part I – New Documentation Portal



- Complete Overhaul of User Documentation
- Current with Version 12
- LLM-Friendly Equations
- Claude Opus 4.6 Assistant

Part I – Data Security & Compliance

SOC 2 Type II

Cyber Verify Level 3

Part II – 2026 Features and Initiatives (Planned)

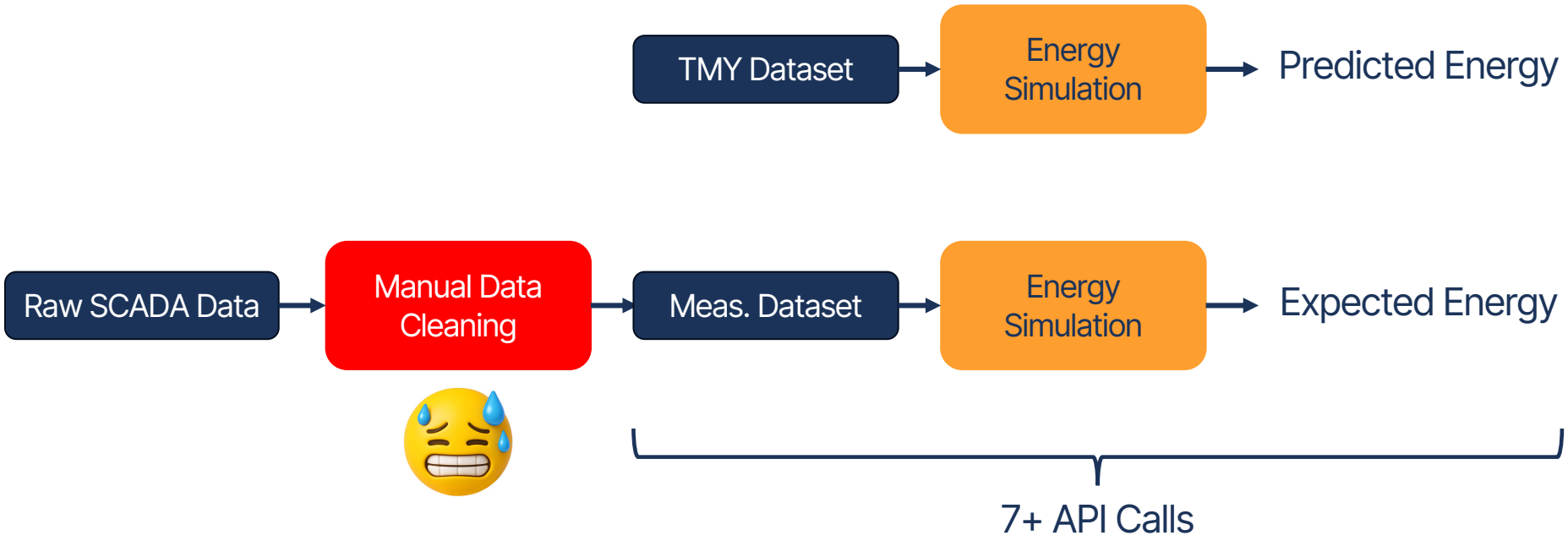
New Features:

- 3D Modeling Improvements:
  - Inverter-level loss allocation
  - Improved electrical shade effect model
  - Improved terrain-aware backtracking model
- Far shading loss on diffuse irradiance
- PVC 2.0 compatibility
- Fully redesigned, formal output report
- Improvements to Map Builder design tools
- License self-management

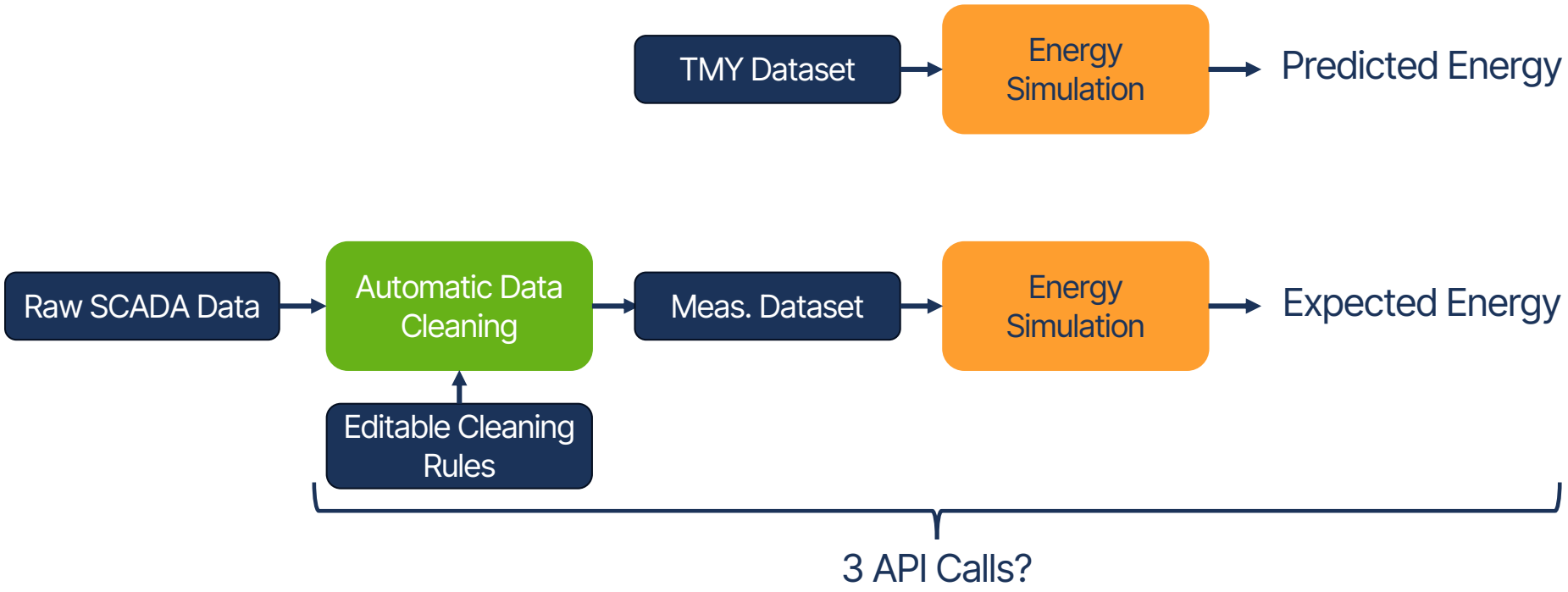
Initiatives:

- PVFARM integration
- Expected Energy Workflow Improvements (see next slide)
- AI-Ready Workflows (see last slide)

Part II – Expected Energy Workflow Improvement



Part II – Expected Energy Workflow Improvement



AI-Based Workflow. Physics-Based Model.

Terabase

Thank You

Jason Spokes, PE
Sr. Product Director, PlantPredict
jspokes@terabase.energy