

Weekly Progress Report (October 28 - November 4, 2025)

What Did You Do?

- Fixed duplicate execution issues, improved error handling, added automatic map image display and direct URL provision
- Built get_occurrence_breakdown with comprehensive parameter extraction for complex analytical queries
- Updated ReAct agent system prompts and tool selection rules for 5-tool ecosystem

What New Capabilities Does Your Agent Have?

- Can process complex queries like "What kingdoms are found within 10km of Brisbane?" and "Break down koala records by state"
- Automatically detects Australian cities and converts to coordinates with radius parameters
- Auto-displays up to distribution maps with direct image URLs for user access
- Intelligent differentiation between occurrence search, facet analysis, taxonomy lookup, and spatial distribution

What Problems Are You Facing?

- Workflows running twice due to agent architecture (partially resolved with execution guards)
- Some temporal+facet combinations not properly extracted ("groups after 2020" missing facets parameter)

What Will You Do Next Week?

- Implement visual species identification capability
- Resolve parameter extraction for combined temporal and categorical queries
- Comprehensive testing of all 5 tools with complex real-world queries