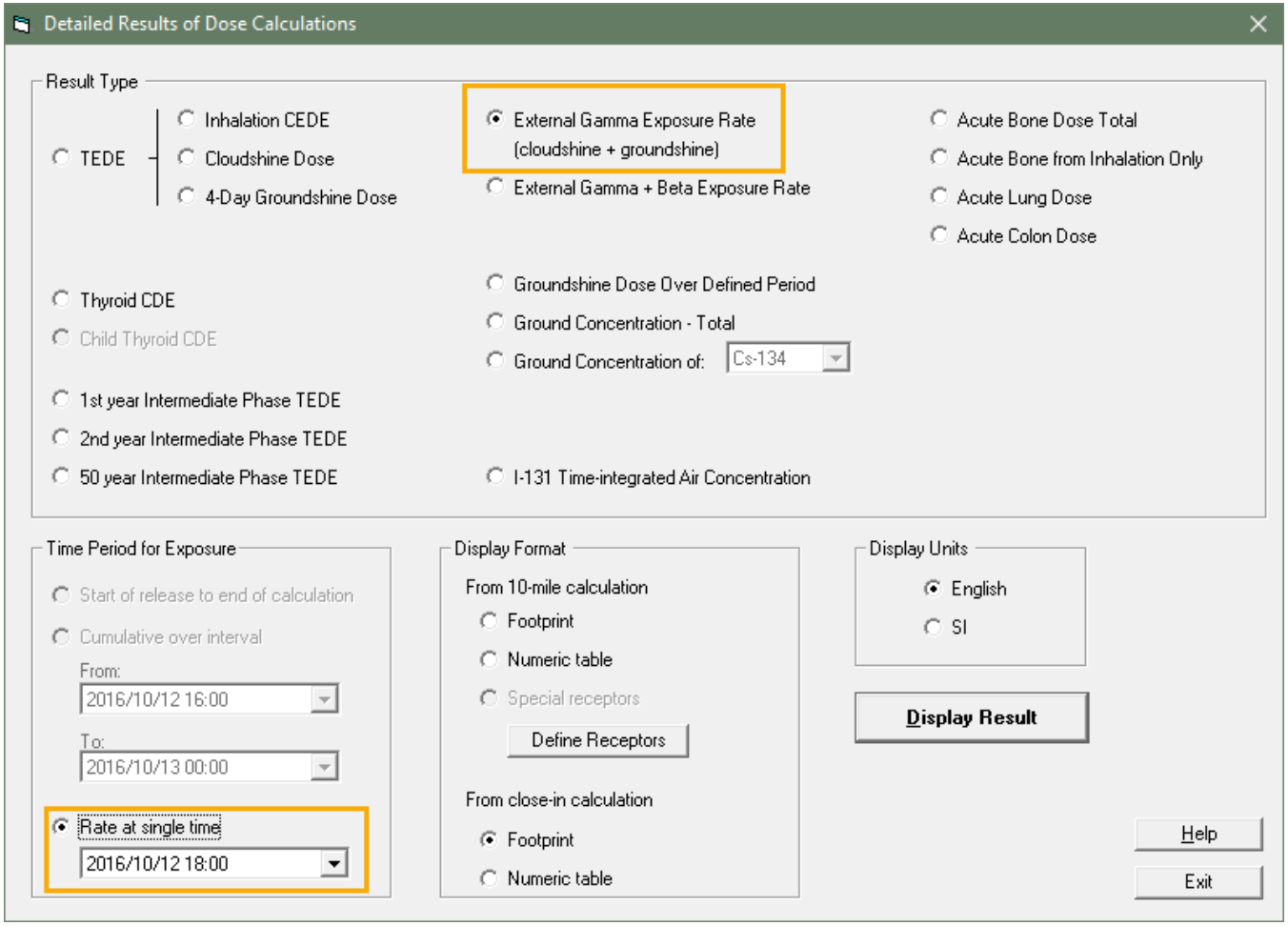
Compare STDose Results to Field Measurements

Part of the RASCAL Instructor-led Training

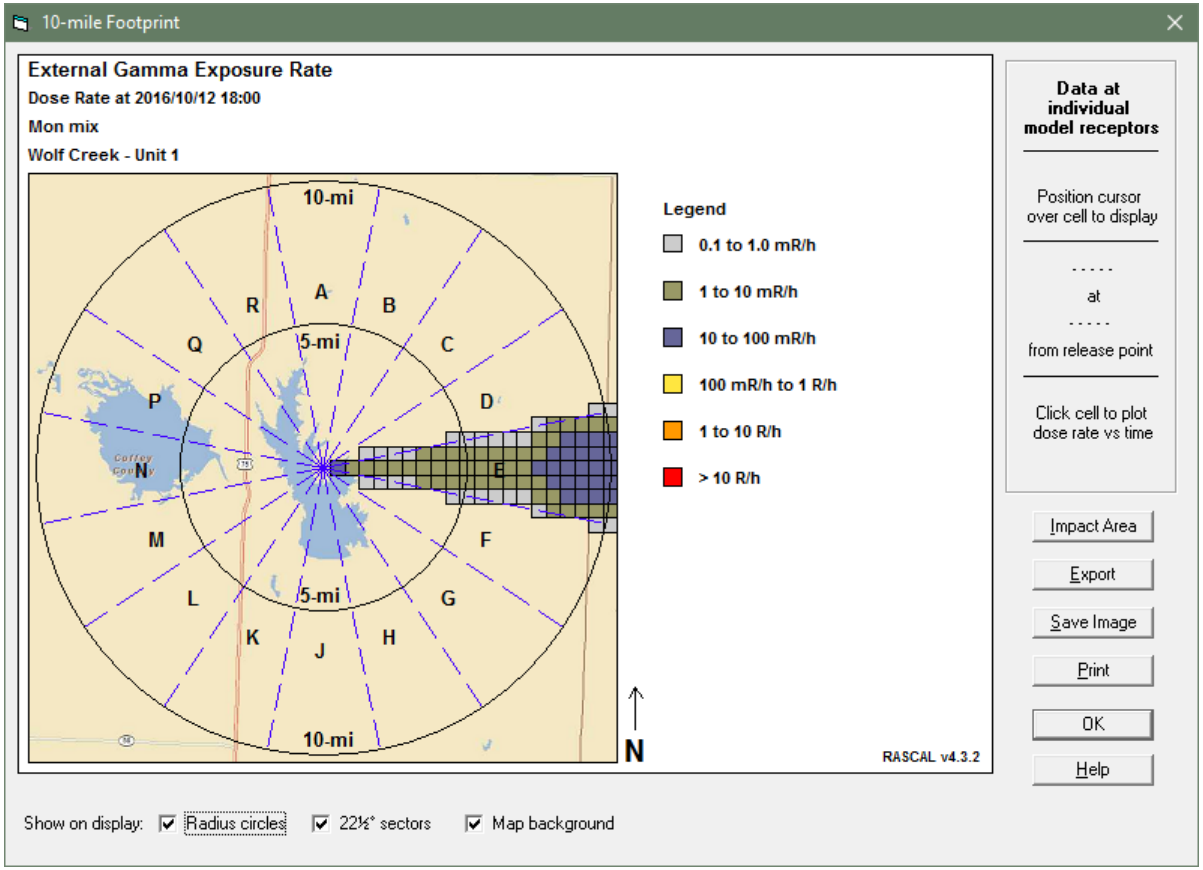
Field Team - Background

- STDose vs FMDose
  - STDose projects gamma readings for deposition on the ground
  - FMDose converts concentration at a single location to intermediate/long term doses
- Field Team Measurements
  - Types
  - Communication Process
  - Roles/Expectations

ONE OF THE DETAILED RESULTS OPTIONS IS TO VIEW THE GAMMA DOSE RATE



USE YOUR CURSOR TO INTERROGATE THE CELLS



FIELD TEAM - SCENARIO

For the previous incident at Wolf Creek, field teams have been dispatched and reported measurements at 18:00 local time. Do these readings confirm that the RASCAL TEDE and Adult Thyroid CDE projections are representative of the impact?

Field Team & Location	Gamma Reading	I-131 Air Concentration
Team 1 3 miles downwind on the centerline	4 mR/h	1.9E-10 µCi/cm3
Team 2 8 miles downwind on the centerline	32 mR/h	1.5E-7 µCi/cm3

Field Team - Results

Field Team	Measurement	Field Team Reading	RASCAL Results
Team 1 3 miles downwind on the centerline	Gamma	4 mR/h	3.3 mR/h
	I-131	1.9E-10 µCi/cm3	0
Team 2 8 miles downwind on the centerline	Gamma	32 mR/h	28 mR/h
	I-131	1.5E-7 µCi/cm3	1.2E-7 µCi/cm3

Conclusions?

- STDose vs FMDose
- What if RASCAL is higher than field team? Lower?
- Will there always be a centerline? Will it always represent the highest dose for that distance?
- If using STDose, may be possible to adjust model parameters to best fit to field team readings.