Forms and fate of carbon in soils

Density-based method

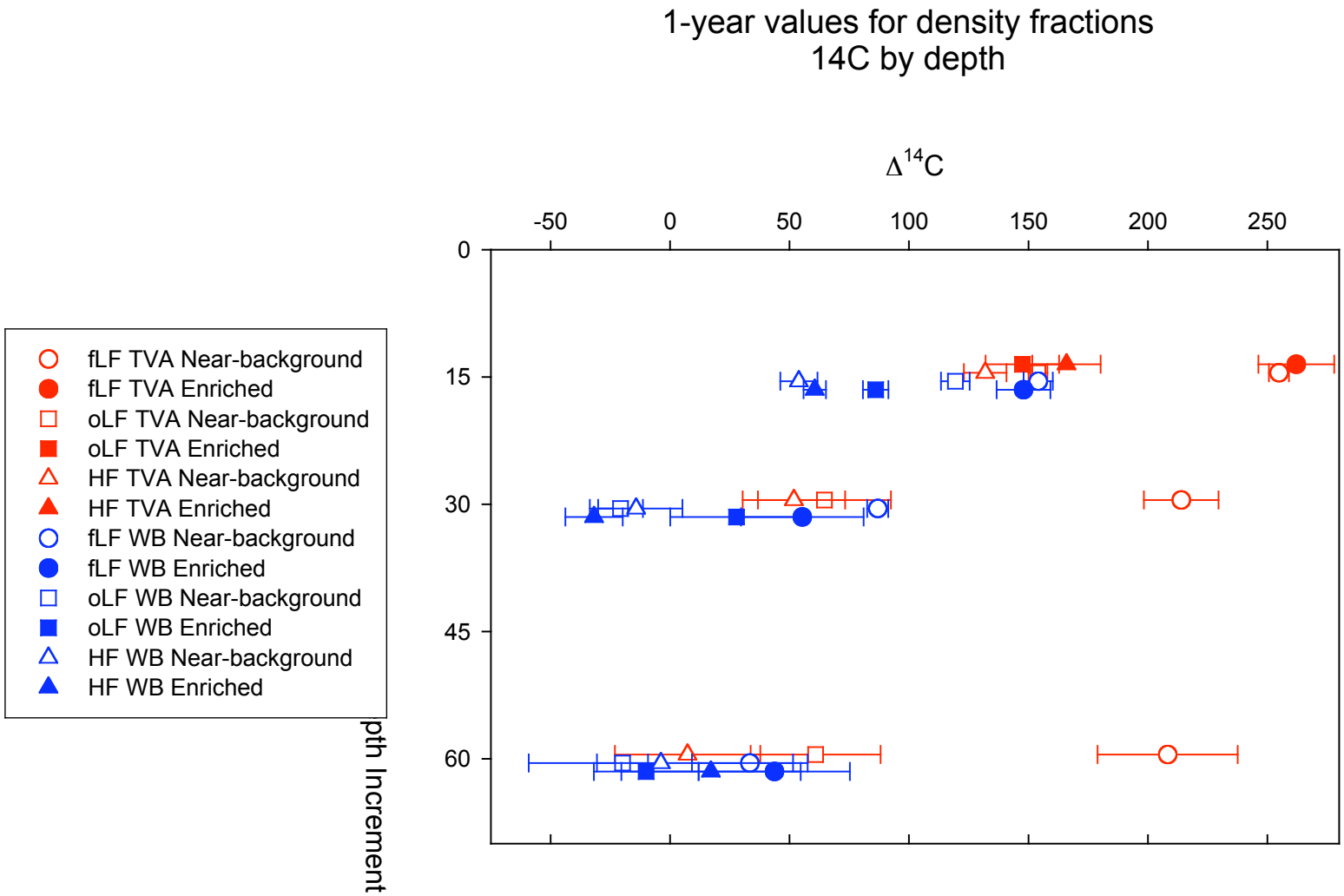
- LLNL
  - Chris Swanston
- LBL
  - Margaret Torn
  - Julie Harrison
  - Debra Williard
- ORNL
  - Paul Hanson

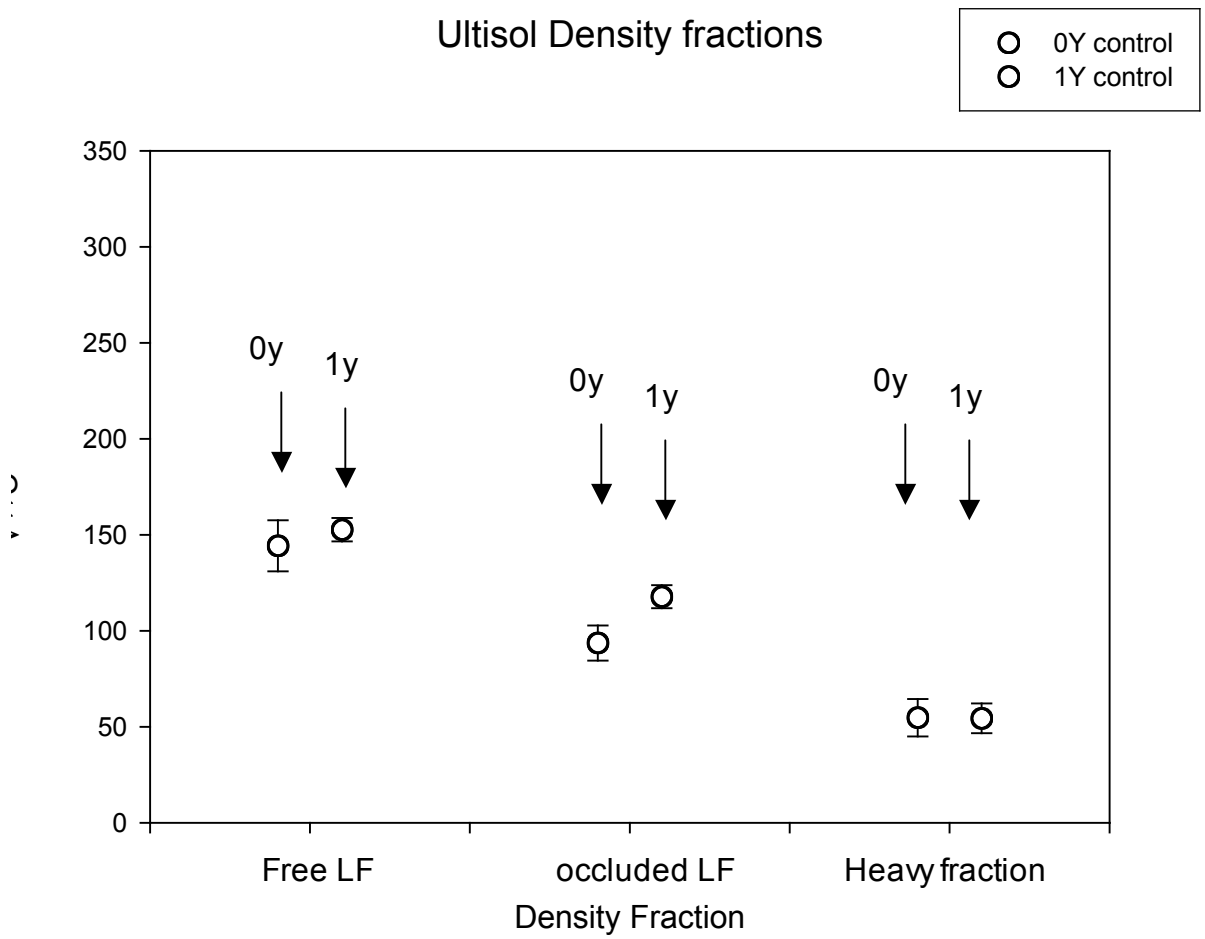
EBIS 2005 Annual Meeting
LLNL, CA

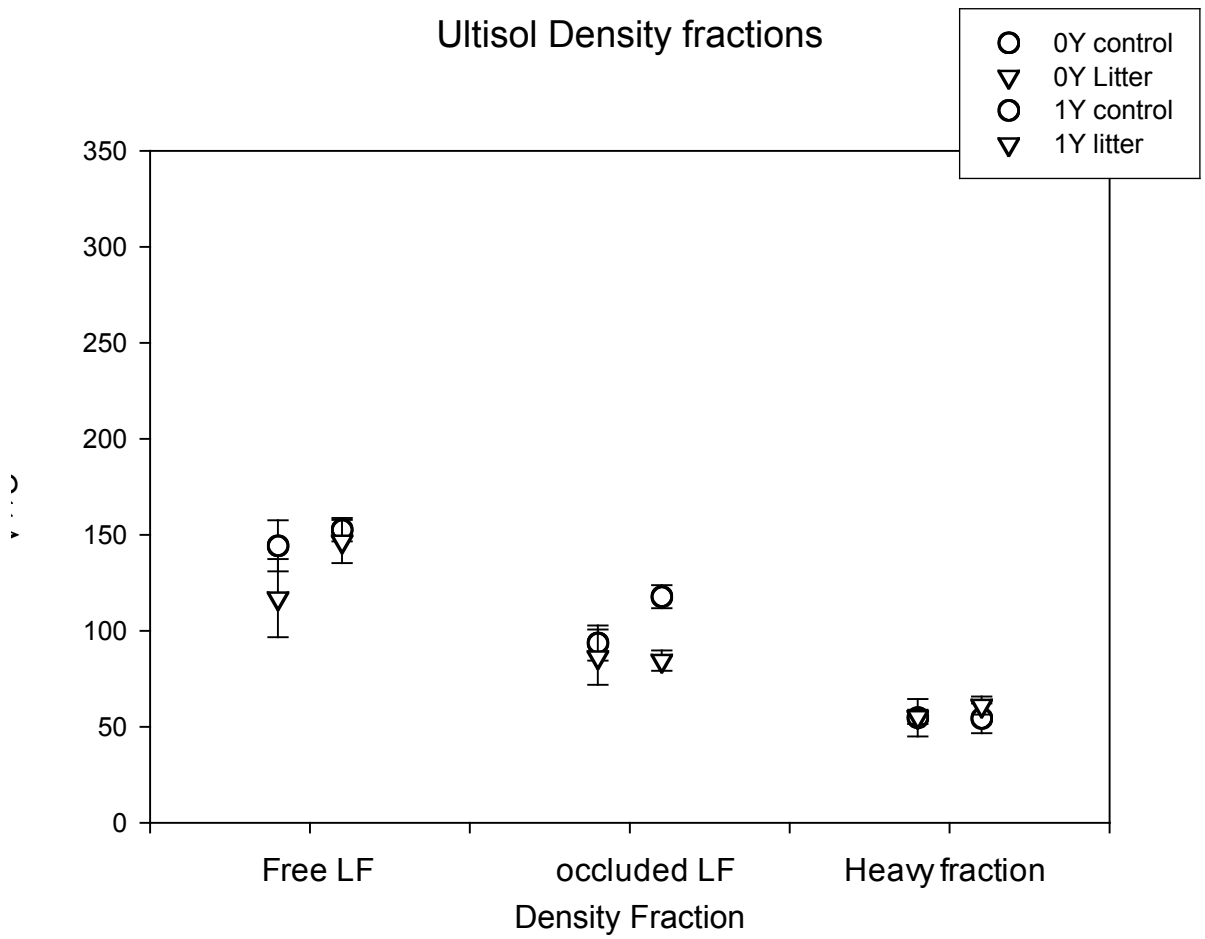
Progress to date

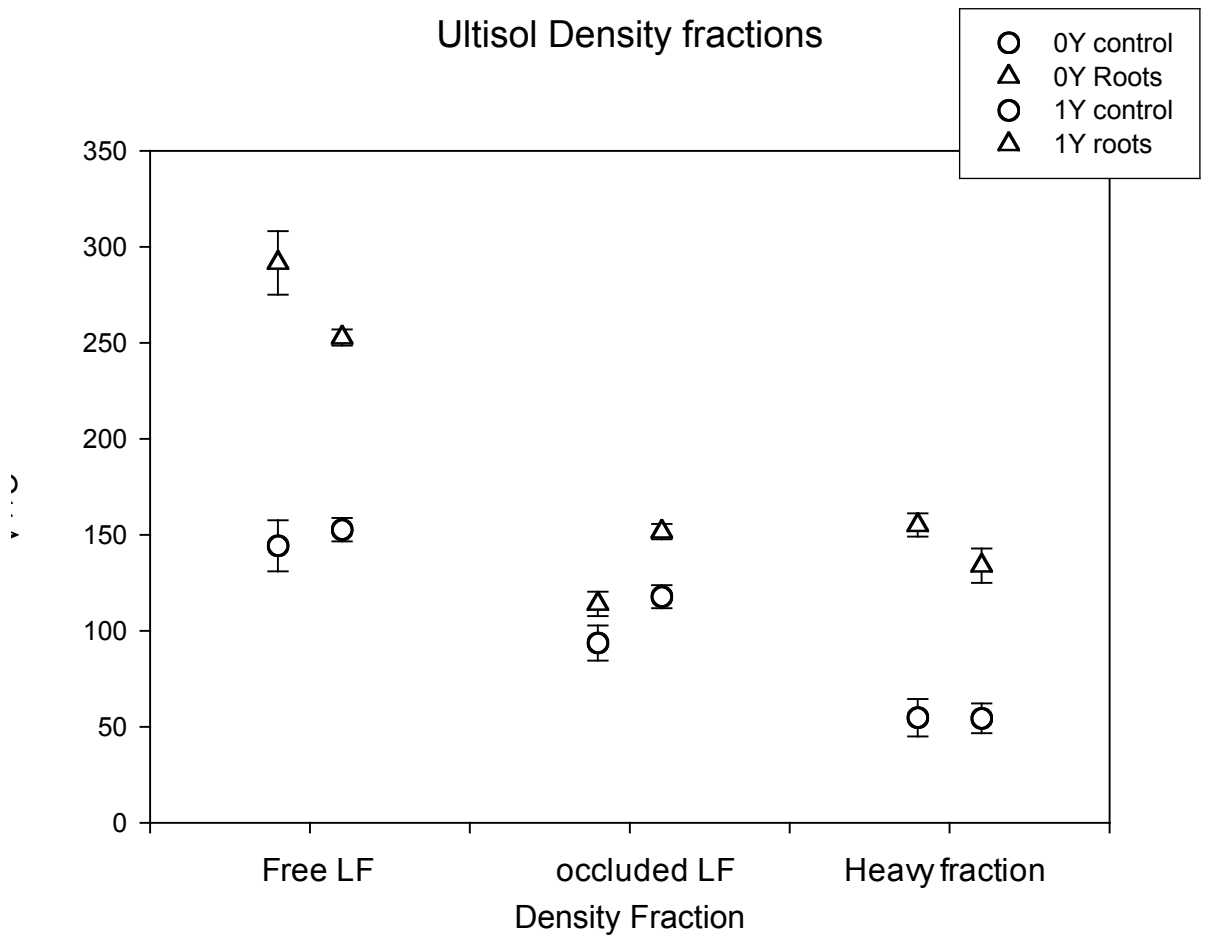
- Fractionated 0-15cm and 15-30 cm
  - All sites
  - 0-year, 1-year, 2-year
- Selected 30-60 cm
  - WB and TVA
- AMS values for 0-year and 1-year (mostly)

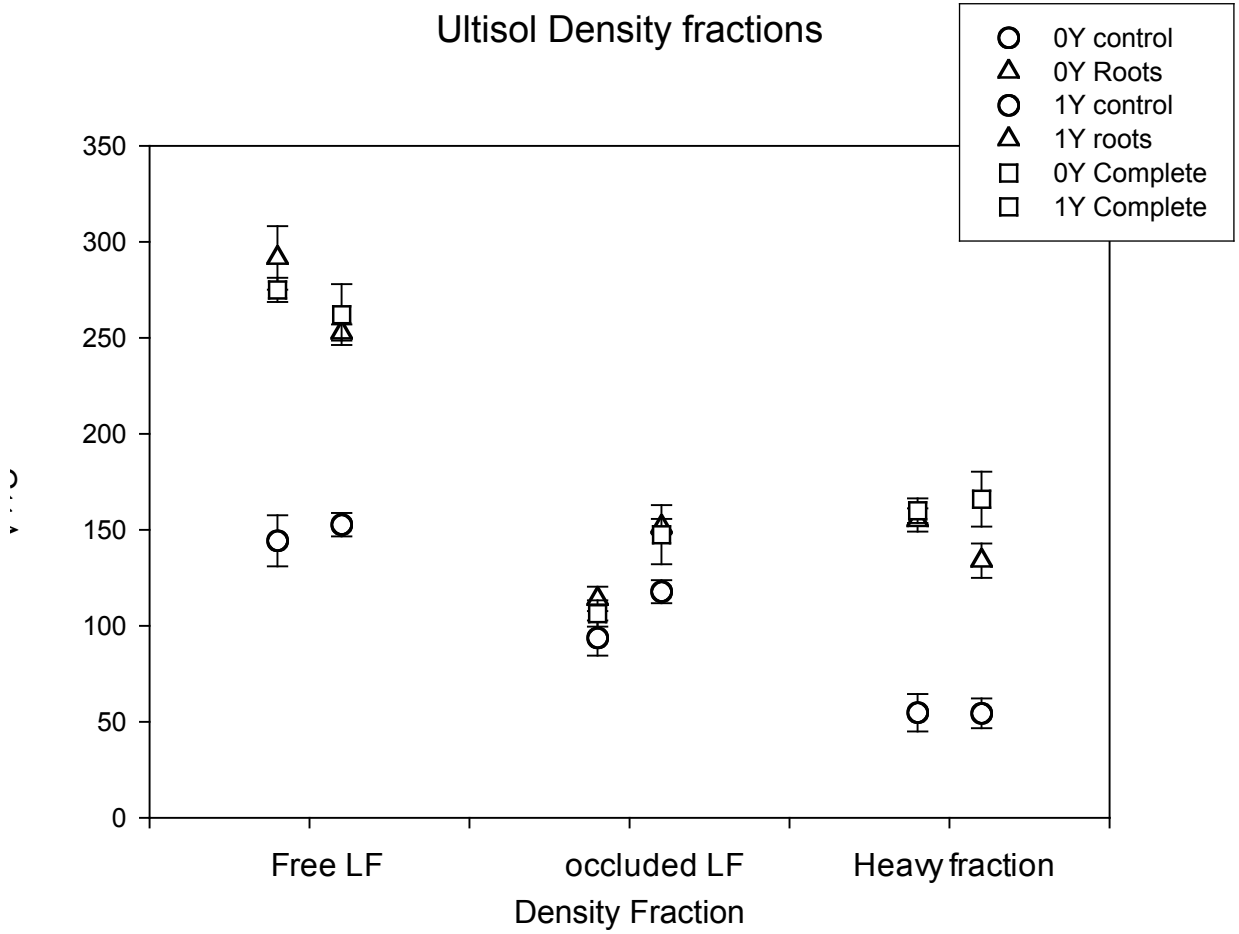
Really busy graph




Ultisol Density fractions
0Y control
1Y control
350
300
250
200
150
100
50
0
0y
1y
0y
1y
0y
1y
Free LF
occluded LF
Heavy fraction
Density Fraction


Ultisol Density fractions
0Y control
0Y Litter
1Y control
1Y litter
350
300
250
200
150
100
50
0
Free LF
occluded LF
Heavy fraction
Density Fraction


Ultisol Density fractions
0Y control
0Y Roots
1Y control
1Y roots
350
300
250
200
150
100
50
0
Free LF
occluded LF
Heavy fraction
Density Fraction


Ultisol Density fractions
0Y control
0Y Roots
1Y control
1Y roots
0Y Complete
1Y Complete
350
300
250
200
150
100
50
0
Free LF
occluded LF
Heavy fraction
Density Fraction

Goals

- Near-term (weeks)
  - Finish AMS analyses for density fractions
  - Work results into proposal (pending Friday disc)
- Longer-term (months)
  - Hydrolyze heavy fractions
    - HCl?
    - Chromic acid?
  - Manuscript(s)