Ages of Quaternary Rio Grande terrace-fill deposits, Albuquerque area, New Mexico


New Mexico Geology, v. 29, no. 4, November 2007

This section contains most of the required supplemental data used to obtain the luminescence ages reported in our paper. Thirteen samples in all were analyzed using both feldspar and quartz extracts. Because luminescence requires the technique be tested and suitable measurement conditions be validated each time it is applied (emphasis the authors Huntley and Lian 2006), a detailed account of our methodology, thorough discussion of the reliability of the ages and supporting data have to be reported. In reality, this is tedious and somewhat confusing for the non-specialist reader. The graphics presented here are for the luminescence dating specialist, and our data include general examples of curves for each sample. A full accounting of the statistical methods is given in the paper or can be discussed with S. Mahan.

Key

a). Growth curve from IRSL (feldspar-dominated) equivalent doses showing type of fits and set conditions and
b). Growth curve from blue-light OSL (quartz-dominated) equivalent doses showing type of fit and set conditions and
c). If possible, a decay curve for either TL, IRSL, or blue-light OSL sets have been included.
d). Sometimes, histograms or probability plots or radial plots have been included for blue-light OSL equivalent dose data.

Reference

Supplemental material—luminescence data

14-CA (post-Primero Alto) b). and c). No IRSL or TL curves acquired

![OSL graph]

Record: 169

![Lx/Tx graph]

Dose (s) x 1000

Mean = 156.72
Within 2 sigma = 83.3%

N = 24 Palaeodose

[Graph showing precision]
Supplemental material—luminescence data

13-LFP (Segundo Alto) b). and c). No IRSL or TL curves acquired.
Supplemental material—luminescence data

12-BP2 (Primero Alto) b). and c). No IRSL or TL curves acquired.

Graph 1: OSL vs Time (s)

Graph 2: Lx/Tx vs Dose (s) x 100
Supplemental material—luminescence data
10-PRA (Primero Alto) b), a), and d).
Supplemental material—luminescence data

9-ED (Segundo Alto) a) and b).
Supplemental material—luminescence data

8-BPU (Segundo Alto a) and c), and a TL glow curve (no blue-light OSL curves acquired)
Supplemental material—luminescence data

7-BPL (Segundo Alto) a), and TL glow curves and growth curves... (no blue-light OSL curves acquired)
Supplemental material—luminescence data

6-CF (Segundo Alto) a), and c), and a TL growth curve... (no blue-light OSL curves acquired)
Supplemental material—luminescence data

5-QaI (post-Primero Alto) a), b), and c).
Supplemental material—luminescence data

4-SWD (Segundo Alto) a). and b).
Supplemental material—luminescence data

3-SWL (Segundo Alto) a). and b).
Supplemental material—luminescence data

2-PXL (Segundo Alto) a). and b).
Supplemental material—luminescence data

1-PXU (Segundo Alto) a), b), and c).