



Endnotes for “A Remarkable, New Shroud Dating Measurement”

Fall 2023 *Bible and Spade*

Notes for introduction:

¹ Michael Kowalski, “A Remarkable, New Shroud Dating Measurement.” *British Society for the Turin Shroud Newsletter*, no. 95, ed. David Rolfe (Summer 2022): 30–36. Back issues of this newsletter can be found at <https://www.shroud.com/bstsmain.htm>, but more recent ones like issue 95 require membership.

² Michael Kowalski, *The Shroud of Christ: Evidence of a 2,000-Year Antiquity*, Jenny Stanford Series on Christian Relics and Phenomena, ed. Giulio Fanti, vol. 5 (Singapore: Jenny Stanford Publishing, 2023).

³ See “The 1978 Scientific Examination,” Shroud of Turin Education and Research Association Inc., accessed December 15, 2023, <https://www.shroud.com/78exam.htm>.

⁴ Michael Kowalski, “The Shroud of Turin: Proof of Authenticity beyond Reasonable Doubt (1 of 2),” rainbowlightstudio, August 11, 2020, video, 31:06, <https://www.youtube.com/watch?v=sJymwctqo-A&t=158s>.

⁵ P. E. Damon et al., “Radiocarbon Dating of the Shroud of Turin,” *Nature* 337, no. 6208 (February 16, 1989): 611–15, <https://doi.org/10.1038/337611a0>.

⁶ Michael Kowalski, “The Shroud of Turin 1988 Carbon Dating: Triumph or Travesty? (2 of 2),” rainbowlightstudio, August 9, 2020, video, 39:33, <https://www.youtube.com/watch?v=JBDuKZSgDSI&t=182s>.

⁷ Liberato De Caro et al., “X-ray Dating of a Turin Shroud’s Linen Sample,” *Heritage* 5, no. 2 (2022): 860–70, <https://doi.org/10.3390/heritage5020047>.

⁸ De Caro et al., 865 and Table 2.

Notes for article:

¹ Raymond N. Rogers, “Studies on the Radiocarbon Sample from the Shroud of Turin,” *Thermochimica Acta* 425, nos. 1–2 (January 20, 2005): 189–94, <https://doi.org/10.1016/j.tca.2004.09.029>.

² Giulio Fanti et al., “Non-destructive Dating of Ancient Flax Textiles by Means of Vibrational Spectroscopy,” *Vibrational Spectroscopy* 67 (July 2013): 61–70, <https://doi.org/10.1016/j.vibspec.2013.04.001>.

³ Fanti et al., 61–70.

⁴ Giulio Fanti and Pierandrea Malfi, “Multi-parametric Micro-mechanical Dating of Single Fibers Coming from Ancient Flax Textiles,” *Textile Research Journal* 84, no. 7 (May 2014): 714–27, <https://doi.org/10.1177/0040517513507366>.

⁵ Giulio Fanti and Saverio Gaeta, *Il mistero della Sindone: Le sorprendenti scoperte scientifiche sull’enigma del telo di Gesù* (Milan, Italy: Rizzoli, 2013), 72.

⁶ Liberato De Caro et al., “X-ray Dating of Ancient Linen Fabrics,” *Heritage* 2, no. 4 (2019): 2763–83, <https://doi.org/10.3390/heritage2040171>.

⁷ Giulio Fanti’s team had previously performed tests to determine the temperature that the linen fabric of the Shroud would have been exposed to in the 1532 fire. They took several samples of modern linen and heated each one in an oven, varying the exposure time and the oven temperature. The raised heat causes a yellowing of the linen fabric and by comparing the colour of the tested samples with the colour of the Shroud fabric, they were able to determine the most likely exposure temperature and time combinations. Liberato De Caro et al., “X-ray Dating of a Turin Shroud’s Linen Sample,” *Heritage* 5, no. 2 (2022): 860–70, <https://doi.org/10.3390/heritage5020047>.

⁸ De Caro et al., “Turin Shroud’s Linen Sample,” 860–70.

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- De Caro, Liberato; Giannini, Cinzia; Lassandro, Rocco; Scattarella, Francesco; Sibillano, Teresa; Matricciani, Emilio; and Fanti, Giulio. 2019. "X-ray Dating of Ancient Linen Fabrics," *Heritage* 2, no. 4: 2763–83, <https://doi.org/10.3390/heritage2040171>.
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