Descent on elliptic surfaces and transcendental Brauer elements
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Transcendental elements in the Brauer group are notoriously difficult to compute. Wittenberg and Ieronymou have worked out explicit representatives for 2-torsion elements of elliptic surfaces, in the case that the Jacobian fibration has rational 2-torsion. We use ideas from descent to develop techniques to study the 2-torsion elements of elliptic surfaces without an assumption on the 2-torsion of the Jacobian.