1019-11-32   **Jaap Top*** (`j.top@rug.nl`), IWI-RuG, P.O.Box 800, 9700AV Groningen, Netherlands. *Explicit elliptic K3 surfaces.* Preliminary report.

Every integer r from 0 to 18 appears as the Mordell-Weil rank of some elliptic K3 surface with section over the complex numbers. This is a result of D. Cox (1982). His proof is not constructive. In 2000, M. Kuwata published constructions of explicit examples for all r, except for $r = 15$. R. Kloosterman (2005) completed this result. In the talk, based on the master's thesis work of F. de Zeeuw (Groningen, 2006), a simpler argument for constructing rank 15 examples is presented. (Received July 25, 2006)