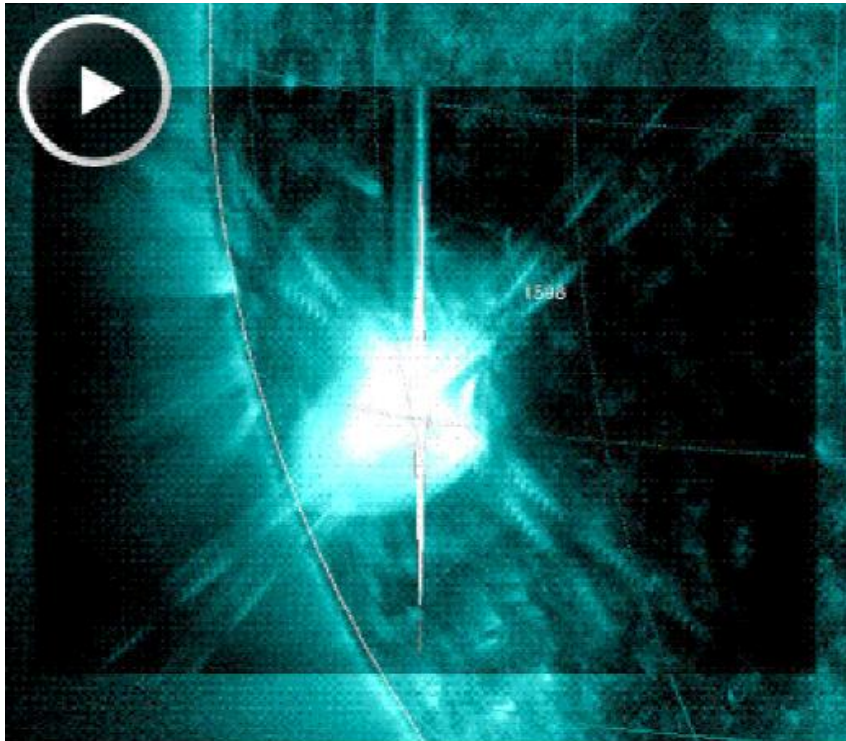


X1-class flare on October 23, 2012

New sunspot AR1598 has erupted again. On Oct. 23rd at 0322 UT, Earth orbiting satellites detected a strong X1-class solar flare. NASA's Solar Dynamics Observatory recorded the extreme ultraviolet flash:(Thursday Oct 23, 2012) at 03:22 UTC



Oct 23, 2012 X1-class X-ray flare on the GOES14 and GOES15 spacecrafts (top panel). Tupivertical telescope muon counting rate (bottom panel). The numbers 2 and 3 indicate the successive eruptions after the X1 flare (1). In all cases the delay time between the GOES and Tupi signals were of 13.28 hours

