Unpulsed gamma-ray emission from Crab: An update

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The Crab pulsar and nebular system has been extensively studied at gamma-ray energies using the Compton Gamma-Ray Observatory (CGRO) satellite. The pulsed emission is clearly detected when folded with the characteristic 33 msec period. de Jager et al (ApJ, 1997) examined the gamma-ray spectrum of the 'unpulsed' component from the Crab system using limited data from CGRO. We have re-derived the Crab unpulsed emission spectrum after including all the data from the EGRET high-energy experiment on board CGRO. This revised result covers part of an improved broad-band spectrum to address the consistency of the > 10 GeV Crab emission observed at TeV energies with an inverse Compton emission profile. The results are compared with earlier spectral models.