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## PI: Pulse Invariant

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The value of PI for an event is given by the equation:

$$PI = [ (energy/14.6 \text{ eV}) + 1 ],$$

where energy is a column in the event file. The energy is calculated from the event's PHA value, using the appropriate gain table. PI is an integer, not a real and the decimal portion of the computation is *discarded*; that is, the value is not rounded, but truncated. For example:

energy (eV)	(energy/14.6 eV) + 1	PI
992.9	69.01	69
1007.3	69.99	69

The energy and PI values are good enough to filter the event data into different bands, but not good enough for spectral analysis (since there is an implicit assumption that the RMF is infinitely good).

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<http://cxc.harvard.edu/ciao3.4/dictionary/pi.html>  
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## Dictionary Entry - CIAO 3.4