Total Solar Irradiance (TSI) Results from the ACRIMSAT/ACRIM3 Mission

Upward TSI trend since 2009 caused by increasing solar magnetic activity... leading into the next solar maximum.

The direct proportionality of TSI and solar magnetic activity is the "TSI−Solar Magnetic Activity Paradigm"\(^1\).

Sunspots block solar flux causing TSI 'dips'.

Faculae and the active network increase solar flux causing TSI 'peaks'.

Downward TSI trend to 2009 result of declining solar magnetic activity.

"Dips" ~ 0.1 % equal the yearly energy used in all human activities.

\(^1\) Willson & Hudson, Science 1991.