



AHHELP for CIAO 3.4

xspshock

Context: [sherpa](#)

Jump to: [Description](#) [Bugs](#) [See Also](#)

Synopsis

Constant temperature, plane-parallel shock plasma model. XSpec model.

Description

Constant temperature, plane-parallel shock plasma model. The references for this model can be found in the help file for the xsequil model ("ahelp xsequil").

xspshock Parameters

Number	Name	Description
1	kT	plasma temperature in keV
2	Abundanc	metal abundances (He fixed at cosmic). The elements included are C, N, O, Ne, Mg, Si, S, Ca, Fe, Ni. Abundances are set by the xspecabundan command.
3	Taul	lower limit on ionization timescales (s/cm ³) to include
4	Tauu	upper limit on ionization timescales (s/cm ³) to include
5	redshift	redshift, z
6	norm	$10^{-14} / (4 \pi (D_A (1+z))^2) \int n_e n_H dV$, where D_A is the angular size distance to the source (cm), n_e is the electron density (cm ⁻³), and n_H is the hydrogen density (cm ⁻³)

This information is taken from the [XSpec User's Guide](#). Version 11.3.1 of the XSpec models is supplied with CIAO 3.2.

Bugs

For a list of known bugs and issues with the XSPEC models, please visit the [XSPEC bugs page](#).

See Also

sherpa

[atten](#), [bbody](#), [bbodyfreq](#), [beta1d](#), [beta2d](#), [box1d](#), [box2d](#), [bpl1d](#), [const1d](#), [const2d](#), [cos](#), [delta1d](#), [delta2d](#), [dered](#), [devaucouleurs](#), [edge](#), [erf](#), [erfc](#), [farf](#), [farf2d](#), [fpsf](#), [fpsf1d](#), [frmf](#), [gauss1d](#), [gauss2d](#), [gridmodel](#), [hubble](#), [jdpileup](#), [linebroad](#), [lorentz1d](#), [lorentz2d](#), [models](#), [nbeta](#), [ngauss1d](#), [poisson](#), [polynom1d](#), [polynom2d](#), [powlaw1d](#), [ptsrc1d](#), [ptsrc2d](#), [rsp](#), [rsp2d](#), [schechter](#), [shexp](#), [shexp10](#), [shlog10](#), [shloge](#), [sin](#), [sqrt](#), [stephi1d](#), [steplo1d](#), [tan](#), [tpsf](#), [tpsf1d](#), [usermodel](#), [xs](#), [xsabsori](#), [xsacisabs](#), [xsapec](#), [xsbapec](#), [xsbbody](#), [xsbbodyrad](#), [xsbextrav](#), [xsbextriv](#), [xsbknpower](#), [xsbmc](#), [xsbremss](#), [xsbvapec](#), [xsc6mekl](#),

Ahelp: xspshock – CIAO 3.4

[xsc6pmekl](#), [xsc6pvmkl](#), [xsc6vmekl](#), [xscabs](#), [xscemekl](#), [xscvmevl](#), [xscflow](#), [xscompbb](#), [xscompls](#),
[xscompst](#), [xscomptt](#), [xsconstant](#), [xscutoffpl](#), [xscyclabs](#), [xsdisk](#), [xsdiskbb](#), [xsdiskline](#), [xsdiskm](#), [xsdisko](#),
[xsdiskpn](#), [xsdust](#), [xsedge](#), [xsequil](#), [xsexpabs](#), [xsexpdec](#), [xsexpfac](#), [xsgabs](#), [xsgaussian](#), [xsgnei](#), [xsgrad](#),
[xsgrbm](#), [xshighecut](#), [xshrefl](#), [xslaor](#), [xslorentz](#), [xsmeka](#), [xsmekal](#), [xsmkcflow](#), [xsnei](#), [xsnotch](#),
[xsnpshock](#), [xsnsa](#), [xsnteea](#), [xspcfabs](#), [xspgpwrlw](#), [xspextrav](#), [xspextriv](#), [xsphabs](#), [xsplabs](#), [xsplcabs](#),
[xsposm](#), [xspowerlaw](#), [xspwab](#), [xsraymond](#), [xsredden](#), [xsredge](#), [xsrefsch](#), [xsseedov](#), [xssmedge](#), [xsspline](#),
[xssrcut](#), [xssresc](#), [xssssice](#), [xsstep](#), [xstbabs](#), [xstbgrain](#), [xstbvarabs](#), [xsuvred](#), [xsvapec](#), [xsvvarabs](#),
[xsvbremss](#), [xsvsequil](#), [xsvgnei](#), [xsvmevl](#), [xsvmekal](#), [xsvmekal](#), [xsvnei](#), [xsvnpshock](#), [xsvphabs](#),
[xsvpshock](#), [xsvraymond](#), [xsvsedov](#), [xswabs](#), [xswndabs](#), [xsxion](#), [xszbbody](#), [xszbremss](#), [xszedge](#),
[xszgauss](#), [xszhighect](#), [xszpcfabs](#), [xszpabs](#), [xszpowerlw](#), [xsztbabs](#), [xszvarabs](#), [xszvfeabs](#), [xszvphabs](#),
[xszwabs](#), [xszwndabs](#)

slang

[usermodel](#)

The Chandra X-Ray Center (CXC) is operated for NASA by the Smithsonian
Astrophysical Observatory.
60 Garden Street, Cambridge, MA 02138 USA.
Smithsonian Institution, Copyright © 1998–2006. All rights reserved.

URL:
<http://cxc.harvard.edu/ciao3.4/xspshock.html>
Last modified: December 2006