



 AHELP for CIAO 3.4

xsvequil

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Synopsis

Ionization equilibrium collisional plasma model with variable abundances. XSpec model.

Description

Ionization equilibrium collisional plasma model. This is the equilibrium version of Kazik Borkowski's NEI models. The references for this model can be found in the help file for the xsequil model ("ahelp xsequil").

xsvequil Parameters

Number	Name	Description
1	kT	plasma temperature in keV
2–12	(element)	Abundances for He, C, N, O, Ne, Mg, Si, S, Ca, Fe, Ni with respect to Solar. Abundances are set by the xspecabundan command.
13	redshift	redshift, z
14	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](#),

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steplo1d, tan, tpsf, tpsf1d, usermodel, xs, xsabsori, xsacisabs, xsapec, xsbapec, xsbody, xsbodyrad,
xsboxray, xsboxriv, xsboxpower, xsboxmc, xsboxremss, xsboxvapec, xsc6mekl, xsc6pmekl, xsc6pvmkl,
xsc6vmekl, xscabs, xscemekl, xscvmkl, xscflow, xscmpbb, xscmpls, xscmpst, xscmpptt, xsconstant,
xscutoffpl, xscyclabs, xsdisk, xsdiskbb, xsdiskline, xsdiskm, xsdisko, xsdiskpn, xsdust, xsedge, xsequil,
xsexpabs, xsexpdec, xsexpfac, xsgabs, xsgaussian, xsgnei, xsggrad, xsgrbm, xshighcut, xshrefl, xslaor,
xslorentz, xsmeka, xsmekal, xsmkcflow, xsnei, xsnotch, xsnphock, xsnsa, xsnntee, xspcfabs,
xspgpwrlw, xspexray, xspexriv, xspfabs, xsplabs, xsplcabs, xspesm, xspowerlaw, xspshock, xspwab,
xstraymond, xstredden, xstredge, xstrefsch, xstsedov, xstmedge, xstpline, xstsrcut, xstresc, xstssice, xststep,
xstbabs, xstbgrain, xstbvarabs, xstuvred, xstvapec, xstvarabs, xstvbremss, xstvgnei, xstvmcflow, xstvmeka,
xstvmekal, xstvnei, xstvnphock, xstvphabs, xstvshock, xstvraymond, xstvsedov, xstwabs, xstwndabs, xstxion,
xstzbody, xstzbremss, xstzedge, xstzgauss, xstzhigect, xstzpcfabs, xstzphabs, xstzpowerlw, xstzbabs,
xstzvarabs, xstzveabs, xstzvphabs, xstzwabs, xstzwndabs

slang

usermodel

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URL:
<http://cxc.harvard.edu/ciao3.4/xsvequil.html>
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