

AH_{ELP} for CIAO 3.4

xscemekl

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

Synopsis

Multi-temperature mekal. XSpec model.

Description

A multi-temperature plasma emission model built from the mekal code. Emission measures follow a power law in temperature (i.e. emission measure from temperature T is proportional to $(T/T_{\max})^{\alpha}$). The abundance ratios are set by the `xspecabundanc` command. The `switch` parameter determines whether the mekal code will be run to calculate the model spectrum for each temperature, or whether the model spectrum will be interpolated from a pre-calculate table; the former is slower but more accurate. The reference for this model is Singh et al. (1996, ApJ, 456, 766).

xscemekl Parameters

Number	Name	Description
1	alpha	index for power law emissivity function
2	Tmax	maximum temperature
3	nH	nH (cm ⁻³) from mekal
4	abundanc	Abundance relative to Solar from mekal
5	redshift	redshift, z
6	switch	0 = calculate, 1 = interpolate
7	norm	normalization

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](#),

Ahelp: xscemekl – CIAO 3.4

sqrt, stephild, steploid, tan, tpsf, tpsfld, usermodel, xs, xsabsori, xsacisabs, xsapec, xsbapec,
xsbody, xsbodyrad, xsbextrav, xsbextriv, xsbknpower, xsbmc, xsbremss, xsbvapec, xsc6mekl,
xsc6pmekl, xsc6pvmkl, xsc6vmekl, xscabs, xscevmkl, xscflow, xscmpbb, xscmpls, xscmpst,
xscmpptt, 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, xnsa,
xnteea, xspcfabs, xspgpwrlw, xspextrav, xspextriv, xspfabs, xsplabs, xsplcabs, xspesm, xspowerlaw,
xspshock, xspwab, xrraymond, xredden, xredge, xrefsch, xssedov, xssmedge, xsspline, xssrcut,
xssresc, xssssice, xsstep, xstbabs, xstbgrain, xstbvarabs, xsvred, xsvapec, xsvarabs, xsvbremss,
xsvsequil, xsvgnei, xsvmcflow, xsvmeka, xsvmekal, xsvnei, xsvnpshock, xsvphabs, xsvpshock,
xsvraymond, xsvsedov, xswabs, xswndabs, xsxion, xszbody, xszbremss, xszedge, xszgauss,
xszhighcut, xszpcfabs, xszphabs, 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/xscemekl.html>
Last modified: December 2006