hdfint

All the output information is contained in `ext.sp.h5`.

[called by: xspech.]

contents

1. In addition to the input variables, which are described in global, the following quantities are written to `ext.sp.h5` :

variable	type	description
`mn`	integer	number of Fourier modes
`im(1:mn)`	integer	poloidal mode numbers
`in(1:mn)`	integer	toroidal mode numbers
`Mvol`	integer	number of interfaces = number of volumes
`iRbc(1:mn,0:Mvol)`	real	Fourier harmonics, $R_{m,n}$, of interfaces
`iZbs(1:mn,0:Mvol)`	real	Fourier harmonics, $Z_{m,n}$, of interfaces
`iRbs(1:mn,0:Mvol)`	real	Fourier harmonics, $R_{m,n}$, of interfaces
`iZbc(1:mn,0:Mvol)`	real	Fourier harmonics, $Z_{m,n}$, of interfaces
`forcetol`	real	force-balance error across interfaces
`ForceErr`	real	force-balance error across interfaces
`beltramierror`	real	error in beltrami field (volume integral)
`volume`	real	total volume = $\sum V_v$
`Mrad`	integer	the maximum radial (Chebyshev) resolution
`TT(0:Mrad,0:1,0:1)`	real	the Chebyshev polynomials, T_l, and their derivatives, evaluated at $s = \pm 1$
`Btemn(1:mn,0:1,1:Mvol)`	real	the cosine harmonics of the covariant poloidal field, i.e. $[[B_{\theta,j}]]$ evaluated on the inner and outer interface in each volume
`Bzemn(1:mn,0:1,1:Mvol)`	real	the cosine harmonics of the covariant toroidal field, i.e. $[[B_{\zeta,j}]]$ evaluated on the inner and outer interface in each volume
`Btomn(1:mn,0:1,1:Mvol)`	real	the sine harmonics of the covariant poloidal field, i.e. $[[B_{\theta,j}]]$ evaluated on the inner and outer interface in each volume
`Bzomn(1:mn,0:1,1:Mvol)`	real	the sine harmonics of the covariant toroidal field, i.e. $[[B_{\zeta,j}]]$ evaluated on the inner and outer interface in each volume
`dRbc(1:mn,0:Nvol)`	real	Fourier harmonics, R_j, of interfaces; linearly perturbed solution
`dZbs(1:mn,0:Nvol)`	real	Fourier harmonics, Z_j, of interfaces; linearly perturbed solution
`dRbs(1:mn,0:Nvol)`	real	Fourier harmonics, R_j, of interfaces; linearly perturbed solution
`dZbc(1:mn,0:Nvol)`	real	Fourier harmonics, Z_j, of interfaces; linearly perturbed solution
`lmns`	integer	resolution of straight fieldline transformation

2. All quantities marked as real should be treated as double precision.

hdfint.h last modified on ; SPEC subroutines;