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                 SOFA - Issue: 2012-03-01
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* The license terms and conditions have been changed slightly.  The
  stipulation that modified versions must not bear names that have
  the prefix "iau" or "sofa" has been clarified, and acknowledgement
  of SOFA has been downgraded to a request."

SOFA ANSI C Library
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Version number aligned with the Fortran version number to 9.


Updated/changed routines
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dat.c          Leap second for 2012 June 30 added

af2a           First argument changed from 'int s' to 'char s'
tf2a           First argument changed from 'int s' to 'char s'
tf2d           First argument changed from 'int s' to 'char s'
d2dtf          First argument changed from 'char *scale' to 'const char *scale'
dtf2d          First argument changed from 'char *scale' to 'const char *scale'

t_sofa_c       Test program updated due to the above.

sofa.h         Updated to reflect the changes listed above.

sofam.h        Note added that the constants defined in the file are
               used only in the context of the SOFA Software, and have
               no official IAU status.
               Reference Ellipsoids defined via symbols
               WGS84=1, GRS80=2 and WGS72=3.

Description of changes
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* In iauDat a leap second has been added for 2012 June 30.

* In iauAf2a, iauTf2a and iauTf2d, the data type of the sign
  argument has been changed to char, for clarity and for
  consistency with the converse functions iauA2af, iauA2tf and
  iauD2tf.

* The scale arguments of the C functions iauD2dtf and iauDtf2d have
  been changed from char* to const char* to allow read-only strings
  (in particular string literals) to be used without risking
  compiler warnings.  Analogous changes have been made to the viv
  and vvd functions inside the test program t_sofa_c.

* In iauEform, iauGc2gd and iauGd2gc can use the symbols defined in
  the sofam.h file for the reference ellipsoids WGS84=1, GRS80=2 and
  WGS72=3.

Errata/updates to the ANSI C code
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sofam.h        Function dsign(A,B) was only valid for +ve A.
               The comment for the constant DS2R has been corrected.

Errata to documentation
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d2tf.c
dtdb.c
nut06a.c
p06e.c
tdbtt.c
ut1tai.c
ut1tt.c


Cosmetic changes
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        taitt.c
        taiut1.c
        taiutc.c
        tcbtdb.c
        tdbtcb.c
        tttai.c
        tttdb.c
        ttut1.c
        ut1utc.c


        Revisions - 2012/07/10
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        Updated routines:
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        dat.c           The validation of the FD argument has been eased so as
                        to include exactly 1.0 in the acceptable range.

        plan94.c        It has been pointed out that the comments have the
                        dimensions of the PV-vector the wrong way round.

                        For pv double[3][2] planet p,v (heliocentric, J2000.0, AU,AU/d)

                        read pv double[2][3] planet p,v (heliocentric, J2000.0, AU,AU/d)

        ir.c            The array elements for these 5 routines are now set up
        rx.c            explicitly so as to improve efficiency.
        ry.c
        rz.c
        zr.c
```