This is the list of updates and changes that are actual errors. Additions, such as including the units "radians", and/or typographical alterations are not listed. They include changing capitalisation, e.g. AU \rightarrow au and Of \rightarrow of, and consistent spelling i.e. catalogue \rightarrow catalog. Corrections to Code Fortran STARPV, PVSTAR Code changes to make better use of machine precision ANSI C Starpv, Pvstar Updated parameters Fortran DAT PARAMETER (IYV = 2023) ANSI C Dat. enum { IYV = 2023 }; Changes to comments Fortran A2TF, D2TF Notes: 3, last line by testing for IHMSF(1)=24 and setting IHMSF(2-4) to zero. ATOIO Notes: 1, first line * 1) "Observed" Az,ZD means ... C2T06A Notes: 1, 2nd line, i.e. the end of the first sentence is * apportioned in any convenient way between the two arguments. FK45Z Notes: 4, last sentence stars, whether polar or not. At epoch J2000.0, ... * FK54Z Notes 3, first line is 3) Conversion from J2000.0 FK5 to B1950.0 FK4 only is provided for. HFK5Z Notes: 6, first line 6) See also iau_FK52H, iau_H2FK5, iau_FK5HZ. LTPB Notes: 1, line 3

where P ICRS is a vector in the International Celestial Reference ANSI C A2tf Note 3, last line ** by testing for ihmsf[0]=24 and setting ihmsf[1-3] to zero. Atoiq Notes: 1, first line ** 1) "Observed" Az,ZD means ... C2t06a Notes: 1, 2nd line, i.e. the end of the first sentence is < ** apportioned in any convenient way between the two arguments. Fk45z Notes: 4, last sentence ** motions for all stars, whether polar or not. At epoch J2000.0, Fk54z Notes 3, first line is ** 3) Conversion from J2000.0 FK5 to B1950.0 FK4 only is provided for. Hfk5z Notes: 6, first line ** 6) See also iauFk52h, iauH2fk5, iauFk5hz. t_sofa_c.c The test program. In the routine t_atccq the list of called routines is ** Called: iauApci13, iauAtccq, vvd Additions to Cookbooks Forty SOFA routines are not mentioned in the existing cookbooks; in some cases simply because the routine was developed after the relevant cookbook had been written. To address this deficiency, enhancements have been drafted to two of the existing cookbooks (those on astrometry and Earth attitude) and a new one (on miscellaneous topics) has been written. This new cookbook is available for each distribution i.e. sofa_misc_f.pdf for Fortran and sofa_misc_c.pdf for ANSI C. Topics include ecliptic and galactic coordinates, Hipparcos/FK5 and FK4/FK5 transformations, geodesy and solar-system ephemerides. 2023 May 31