

## List of Tables

1	Mean source structure index values at X-band (8.4 GHz) for 701 sources with VLBI images available from the USNO Radio Reference Frame Image Database (RRFID) or the Bordeaux VLBI Image Database (BVID). . . . .	32
2	Summary of Data and Model Comparisons . . . . .	44
3	Contributed Catalogs . . . . .	50
4	General characteristics of the combination catalog and the seven contributed solutions used to construct it. . . . .	50
5	Number of common sources in the catalogs (all and defining). . . . .	51
6	Weighted post-fit residuals ( $\Delta\alpha \cos \delta$ , $\Delta\delta$ ), $\mu as$ . . . . .	51
7	Comparison of catalogs: maoC08a vs. individual solutions. The first row for each pair presents the estimated parameters of the transformation model. The second rows present the corresponding standard deviations. . . . .	52
8	Comparison of catalogs: comparisons between individual solutions. The first rows of each comparison present the estimated parameters of the transformation model. The second rows present the corresponding standard deviations. . . . .	53
9	Comparison of catalogs: external uncertainties . . . . .	55
10	Solution Difference Statistics . . . . .	59
11	wrms differences of the different VLBI solutions w.r.t. IGS . . . . .	64
12	wrms differences of the different VLBI solutions w.r.t. IERS 05C04 for mutation . . . . .	64
13	wrms differences of the different VLBI solutions w.r.t. IERS 05C04 for UT1–UTC . . . . .	65
14	Helmert parameters of TRF(gsf008a) w.r.t. VTRF2008 and ITRF2005 . . . . .	67
15	Agreement between ICRF2 and frames at 24, 32, and 43 GHz . . . . .	71
16	Relative orientation and deformation parameter to transform ICRF2 into ICRF1-Ext.2. $A_1$ , $A_2$ , $A_3$ are the small rotation angles between axes of the frames; $dz$ (formerly $B_\delta$ ) is the bias in declination. All these parameters have been adjusted on the basis of the 138 defining sources in ICRF2 used for the link to ICRF1-Ext.2. $r_\alpha$ and $r_\delta$ are the wrms residuals in $\alpha \cos \delta$ and $\delta$ , respectively. Unit is $\mu as$ . . . . .	81
17	Axis stability tests: transformation parameters between ICRF2 and ICRF1-Ext.2 for various subsets of defining sources. Unit is $\mu as$ . . . . .	81
18	Coordinates of 295 ICRF2 Defining Sources at S/X-band . . . . .	100
19	Coordinates of 922 ICRF2 Non-Defining Sources at S/X-band . . . . .	109
20	Coordinates of 2197 ICRF2 VCS-only Sources at S/X-band . . . . .	136
21	Physical characteristics of ICRF2 defining sources . . . . .	199