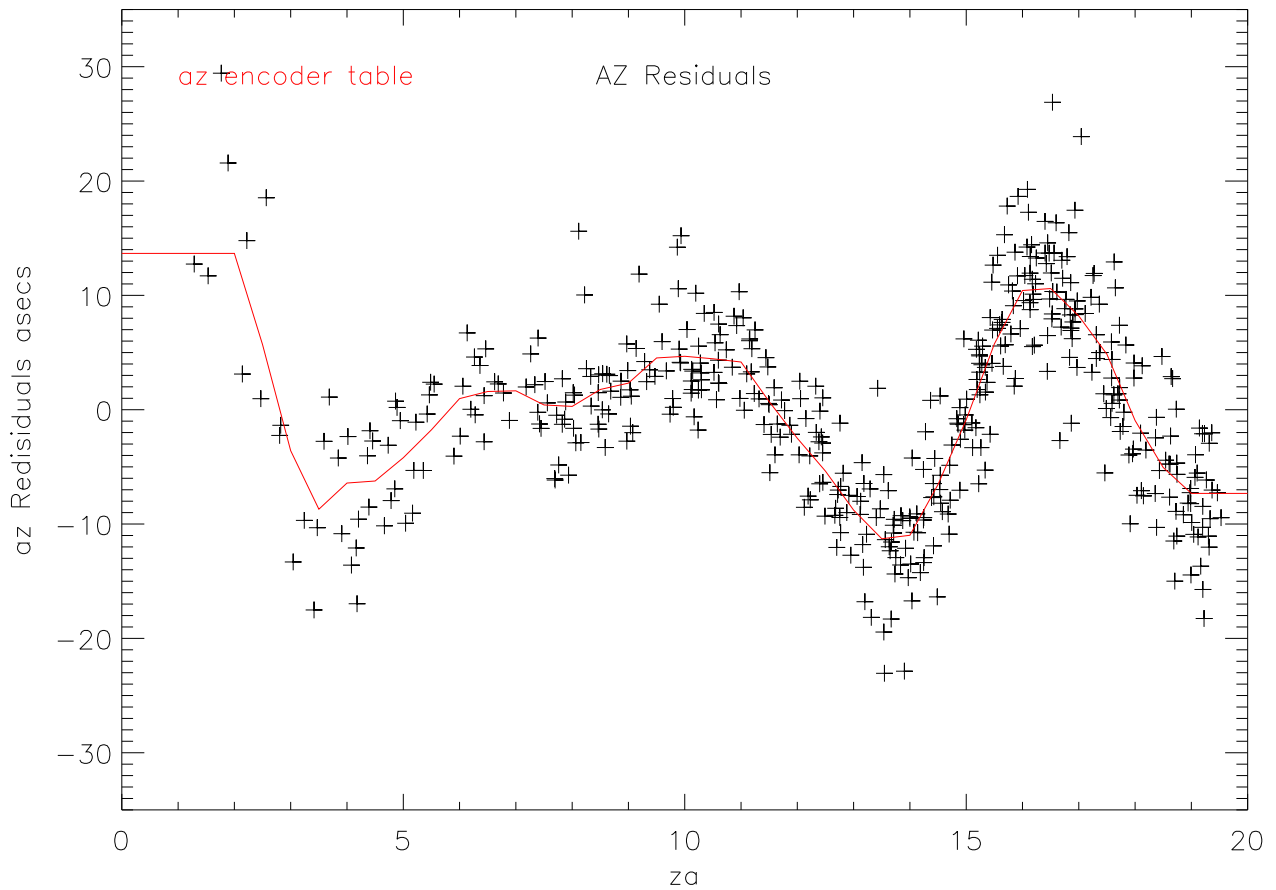
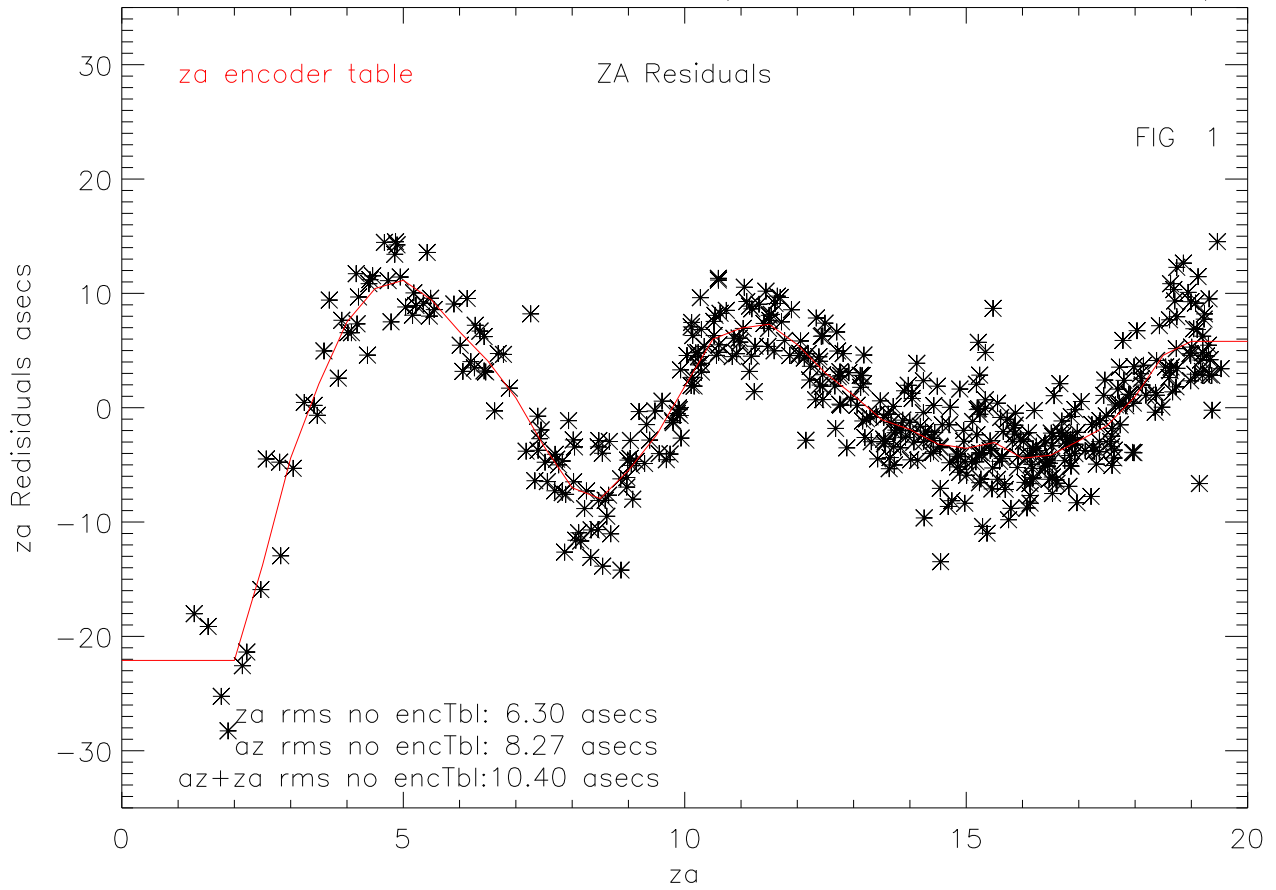
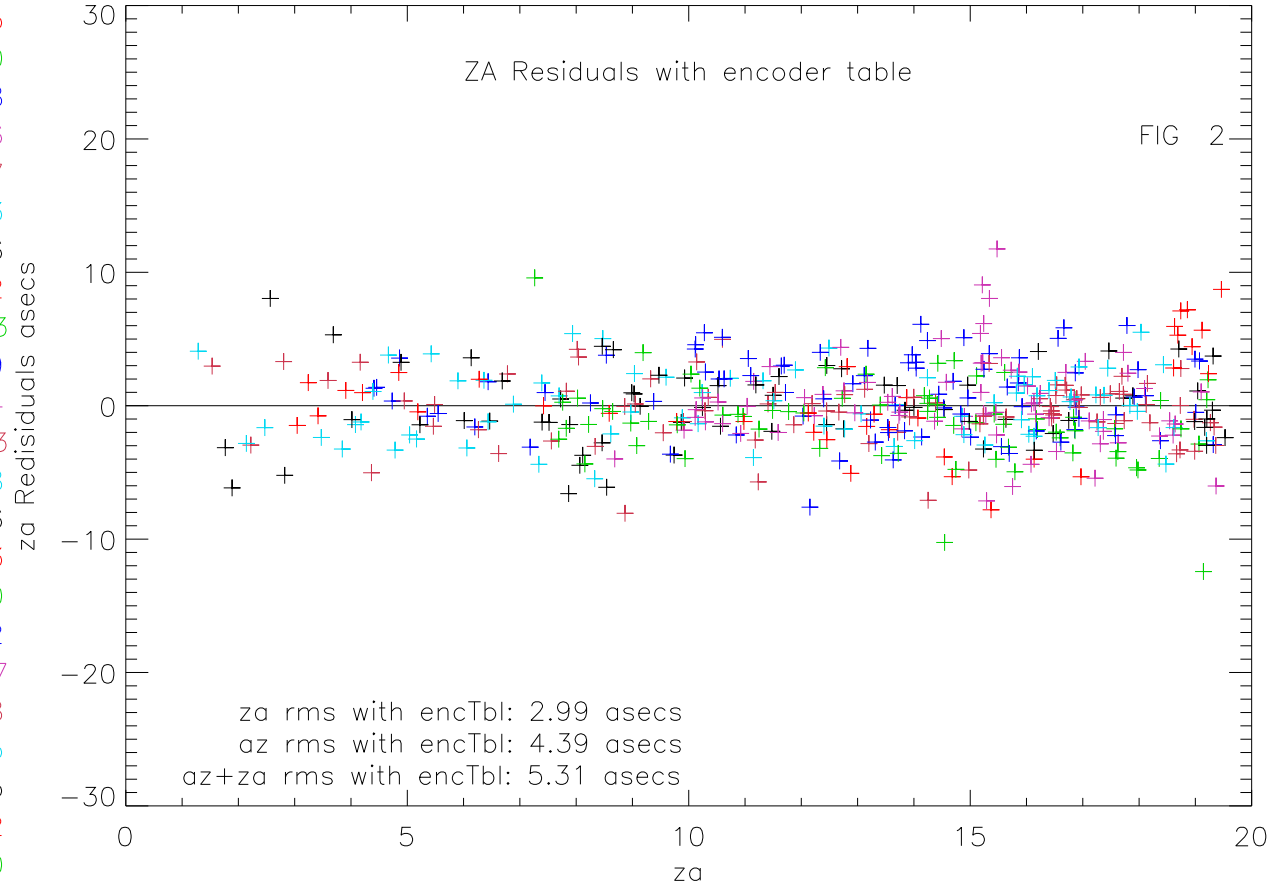


model17 residuals za,az vs za. (encoder table not included)

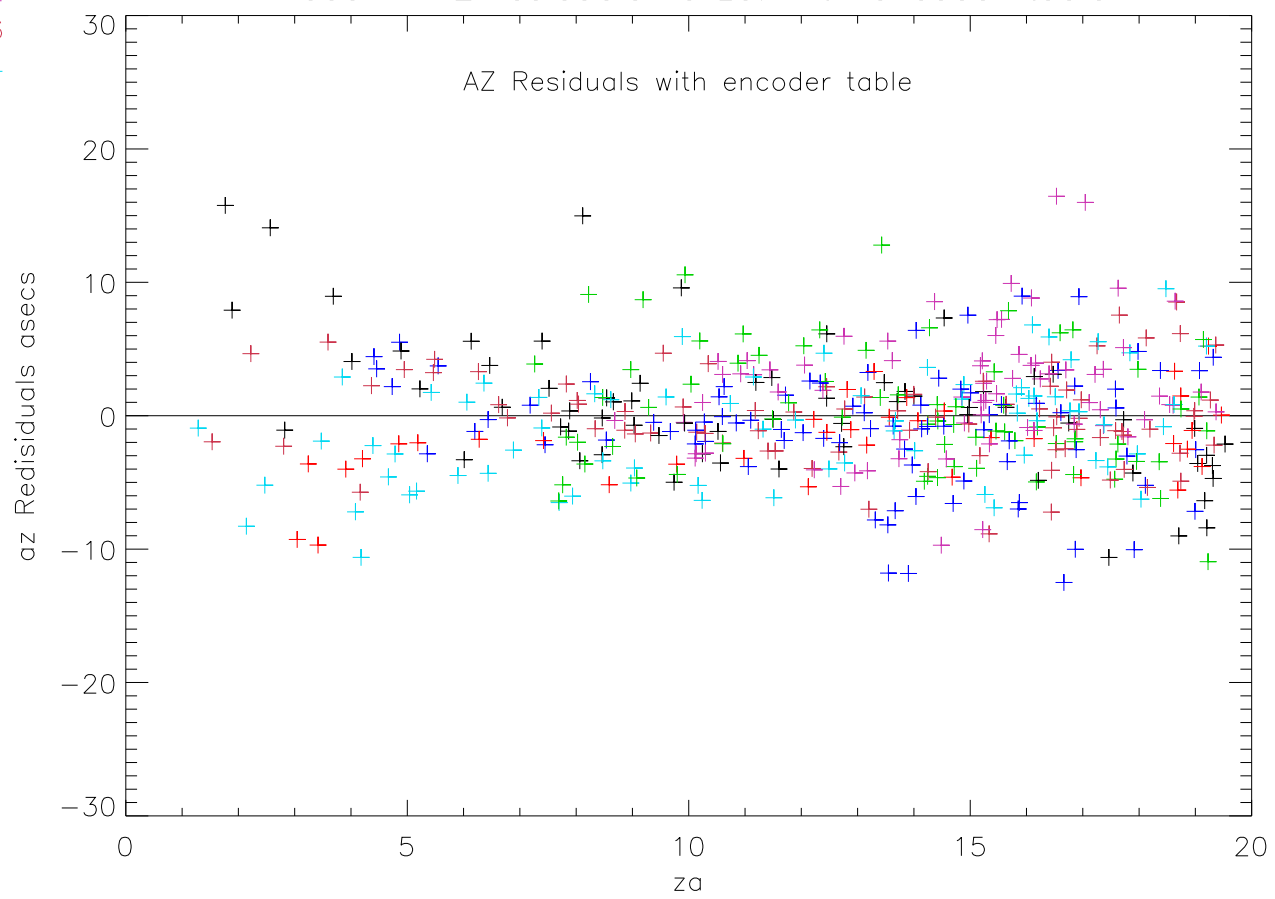


- J1504+104
- J2123+055
- J2316+040
- J0141+138
- J0431+206
- J0738+177
- J2340+223
- J0238+166
- J0442-002
- B1040+123
- J1326+319
- J1924+334
- B1939+103
- J2251+188
- J0129+236
- J0211+213
- J0403+260
- J0659+082
- B0949+287
- J1215+348
- J1352+025
- J1506+375
- J1619+062
- J1737+240
- J2148+069
- J2123+302
- J0020+156
- J0038+124

model17 ZA residuals vs za. with encoder table

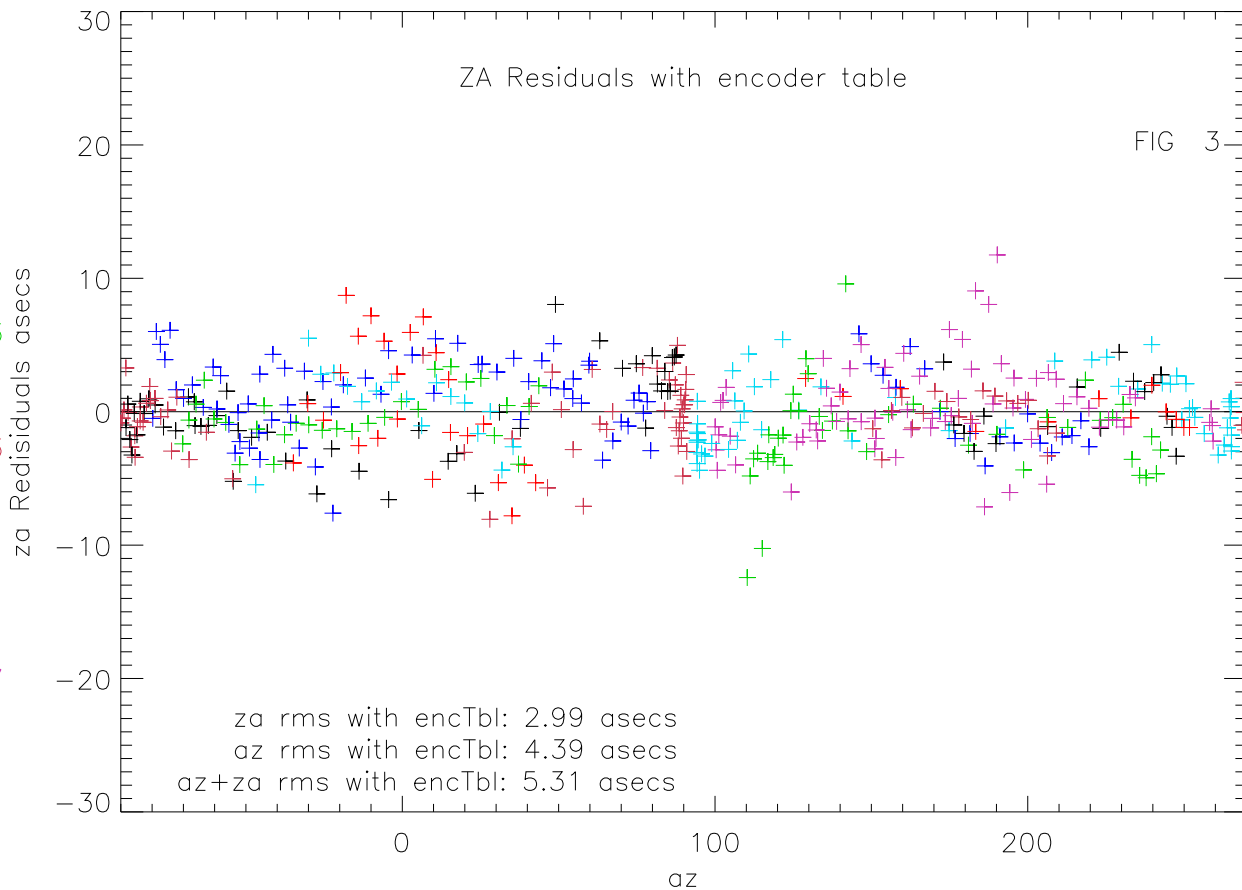


model17 AZ residuals vs za. with encoder table

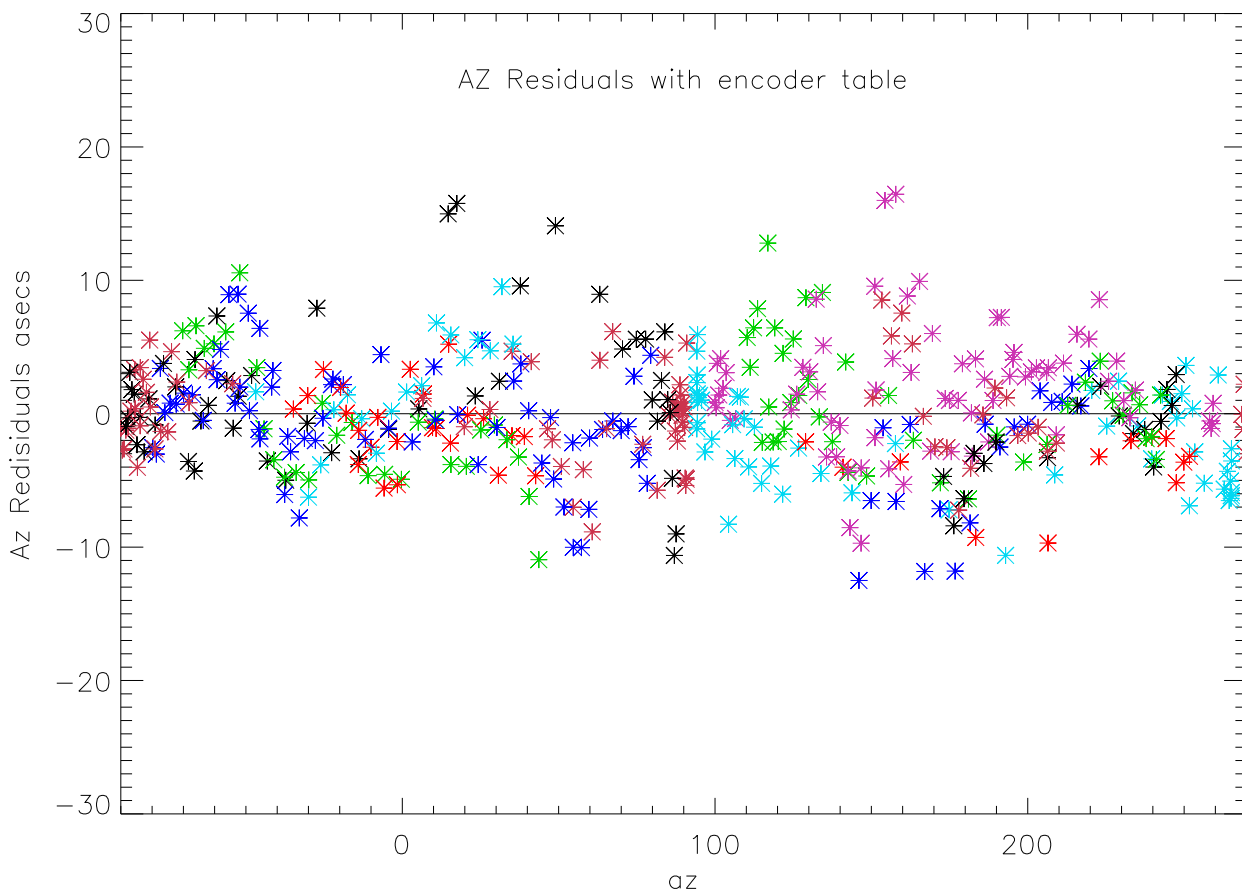


- J1504+104
- J2123+055
- J2316+040
- J0141+138
- J0431+206
- J0738+177
- J2340+223
- J0238+166
- J0442-002
- B1040+123
- J1326+319
- J1924+334
- B1939+103
- J2251+188
- J0129+236
- J0211+213
- J0403+260
- J0659+082
- B0949+287
- J1215+348
- J1352+025
- J1506+375
- J1619+062
- J1737+240
- J2148+069
- J2123+302
- J0020+156
- J0038+124

model17 ZA residuals vs az. with encoder table

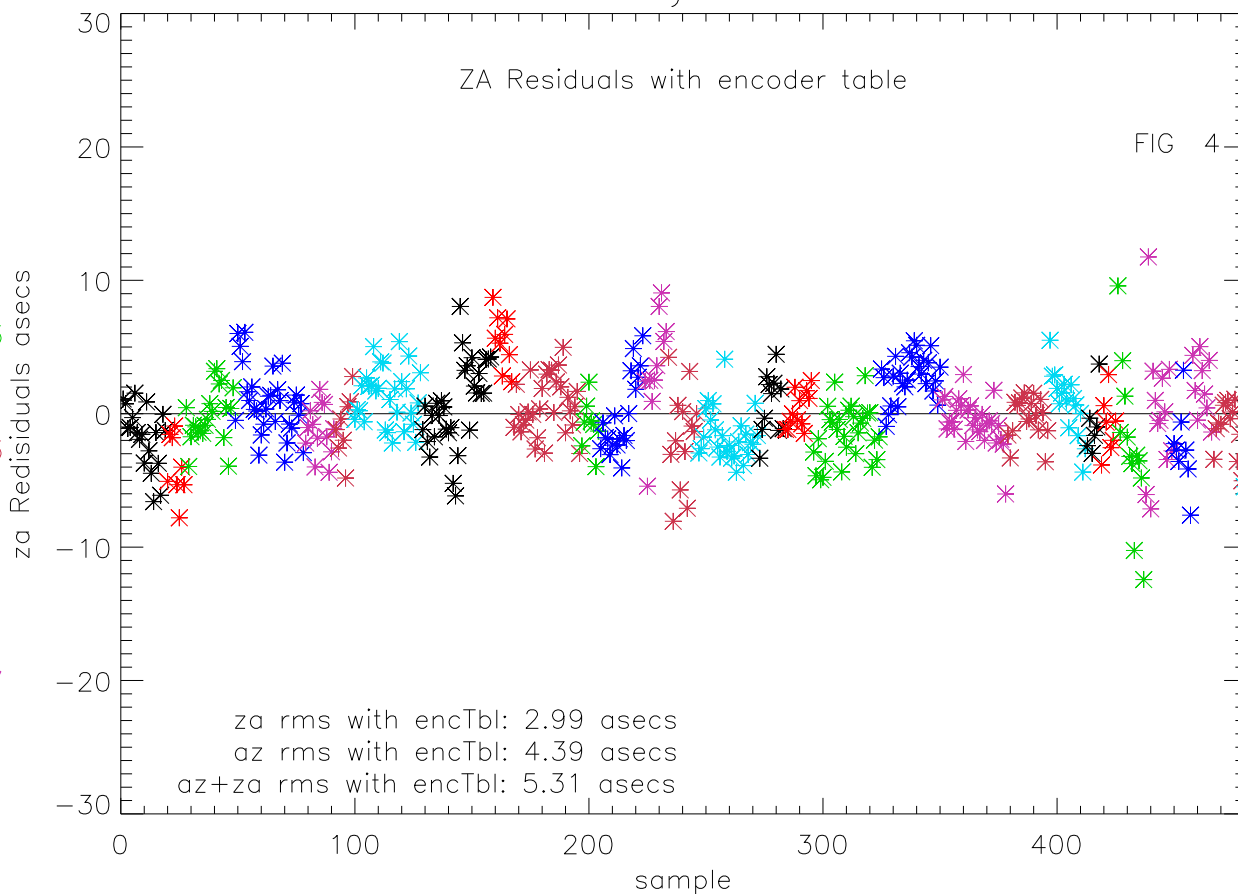


model17 AZ residuals vs az. with encoder table

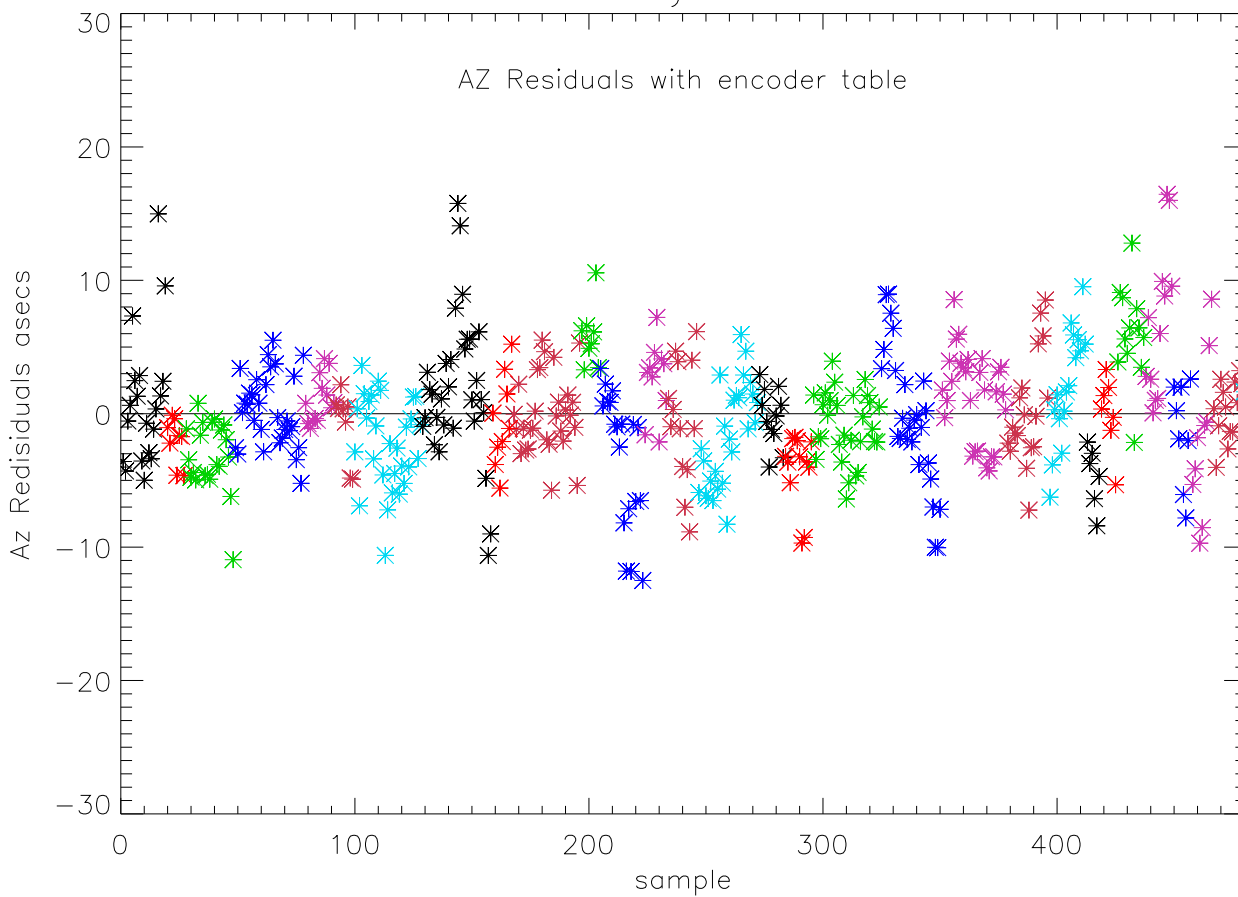


- J1504+104
- J2123+055
- J2316+040
- J0141+138
- J0431+206
- J0738+177
- J2340+223
- J0238+166
- J0442-002
- B1040+123
- J1326+319
- J1924+334
- B1939+103
- J2251+188
- J0129+236
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- J0403+260
- J0659+082
- B0949+287
- J1215+348
- J1352+025
- J1506+375
- J1619+062
- J1737+240
- J2148+069
- J2123+302
- J0020+156
- J0038+124

model17 ZA residuals by src. with encoder table

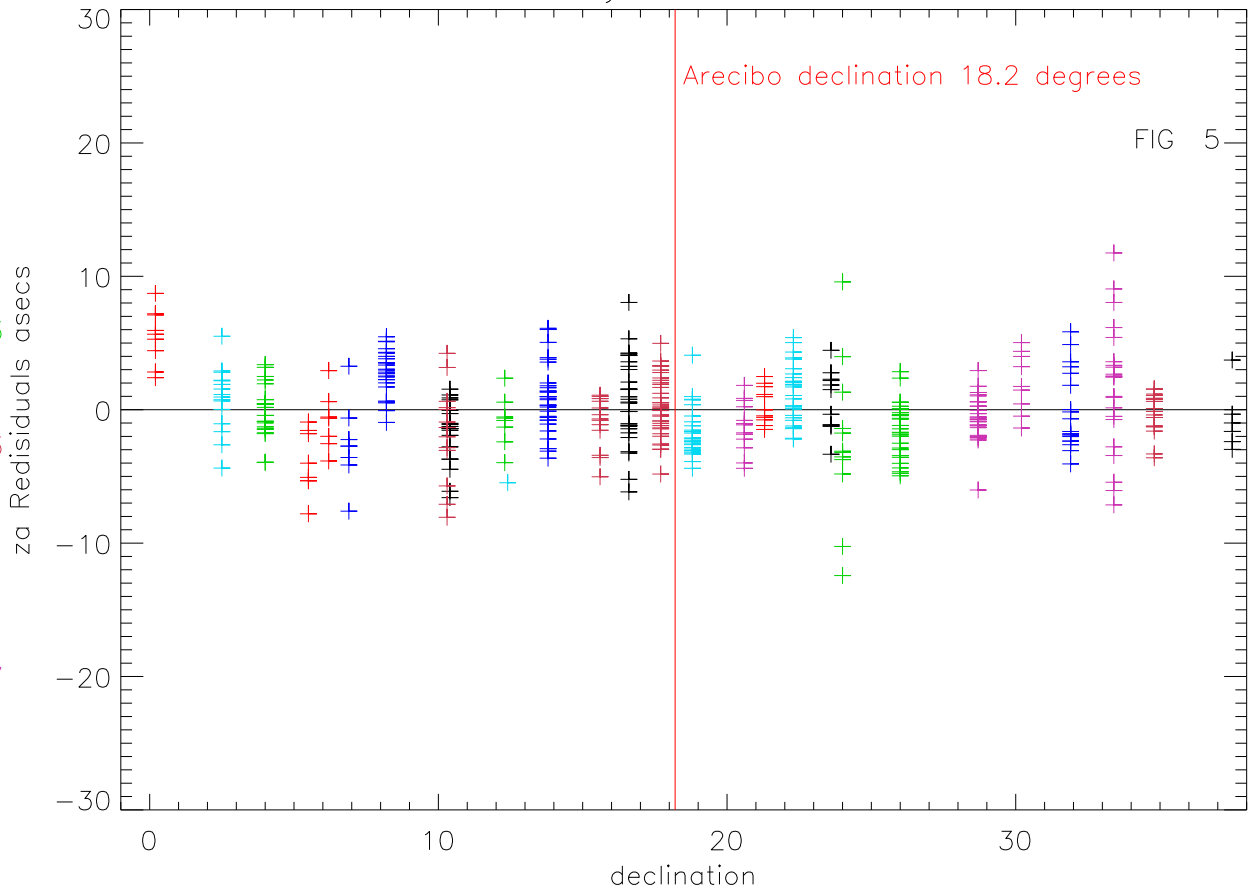


model17 AZ residuals by src. with encoder table

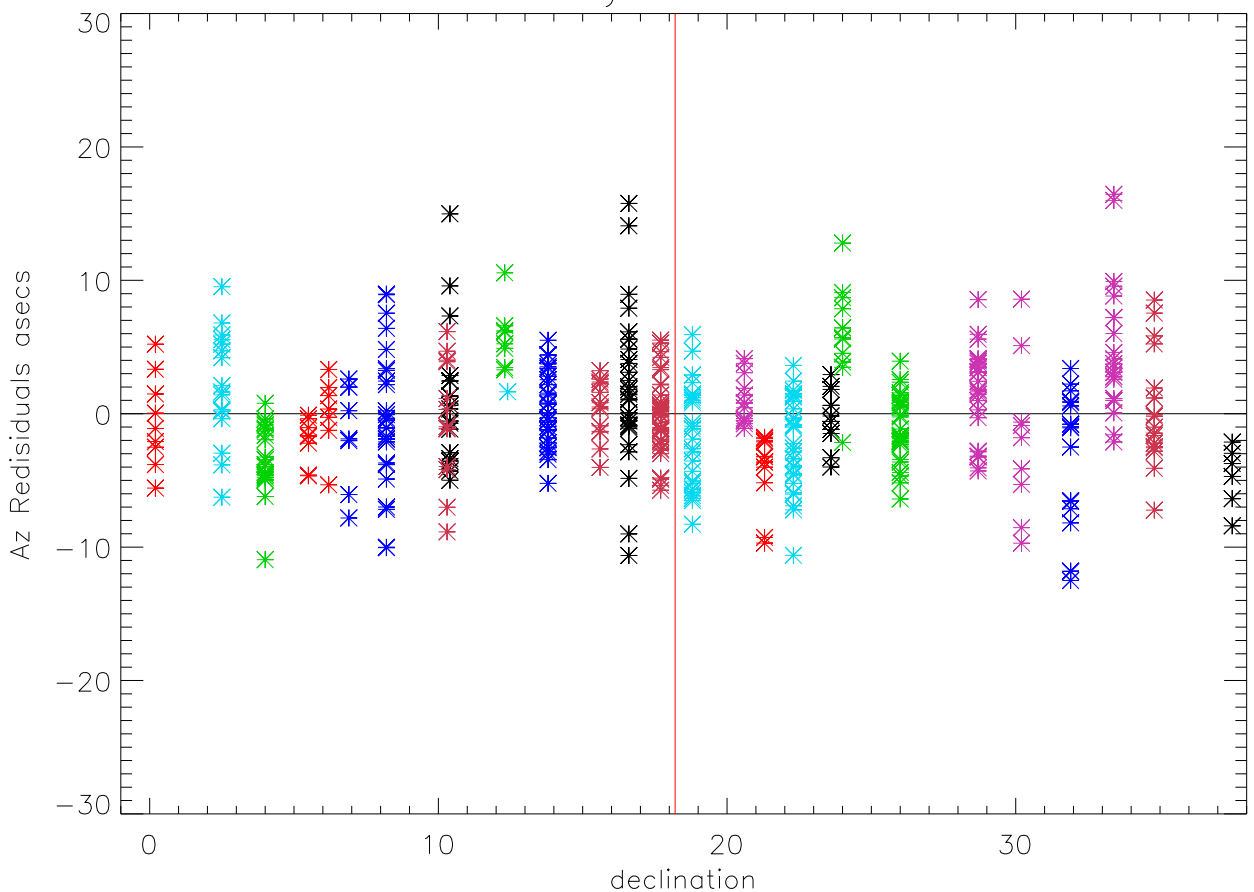


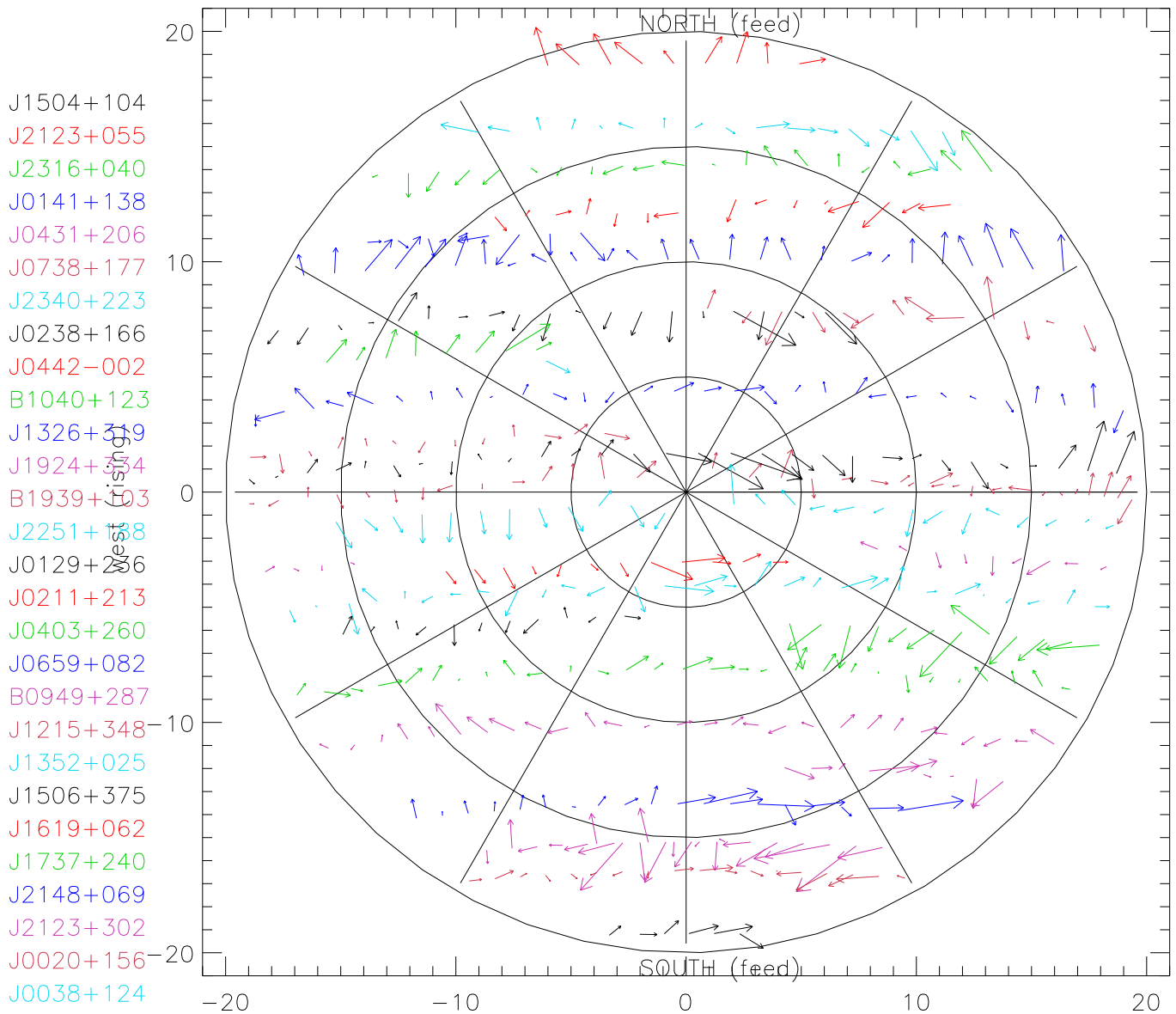
- J1504+104
- J2123+055
- J2316+040
- J0141+138
- J0431+206
- J0738+177
- J2340+223
- J0238+166
- J0442-002
- B1040+123
- J1326+319
- J1924+334
- B1939+103
- J2251+188
- J0129+236
- J0211+213
- J0403+260
- J0659+082
- B0949+287
- J1215+348
- J1352+025
- J1506+375
- J1619+062
- J1737+240
- J2148+069
- J2123+302
- J0020+156
- J0038+124

model17 ZA residuals by declination. with encoder table



model17 AZ residuals by declination. with encoder table





model 17 residuals errors [asecs] with encoder table vs az,za

1 div= 5.00Asecs

errors each 5.0deg

za	max	avg	rms
all	16.8	4.5	2.9
5	16.2	6.2	3.4
10	15.4	4.2	2.6
15	13.3	3.9	2.4
20	16.8	4.8	3.1

az za model coefficients

-34.07	-101.64	constant
-7.71	-104.18	cos(az)
100.56	-5.25	sin(az)
-776.49	125.02	sin(za)
-960.35	713.55	sin(za)**2
-24.75	-12.44	cos(3az)
-9.25	-7.98	sin(3az)
17.95	-5.13	sin(za-balance)*cos(3az)
115.98	6.49	sin(za-balance)*sin(3az)
-0.06	0.17	cos(2az)
-0.92	-2.49	sin(2az)
-2.16	0.09	cos(6az)
1.67	0.15	sin(6az)

npts chisqaz chisqza rmsAz rmsZa rmsTot

480 32771.7 19037.0 8.27 6.30 10.40 model

4.39 2.99 5.31 model + encTable