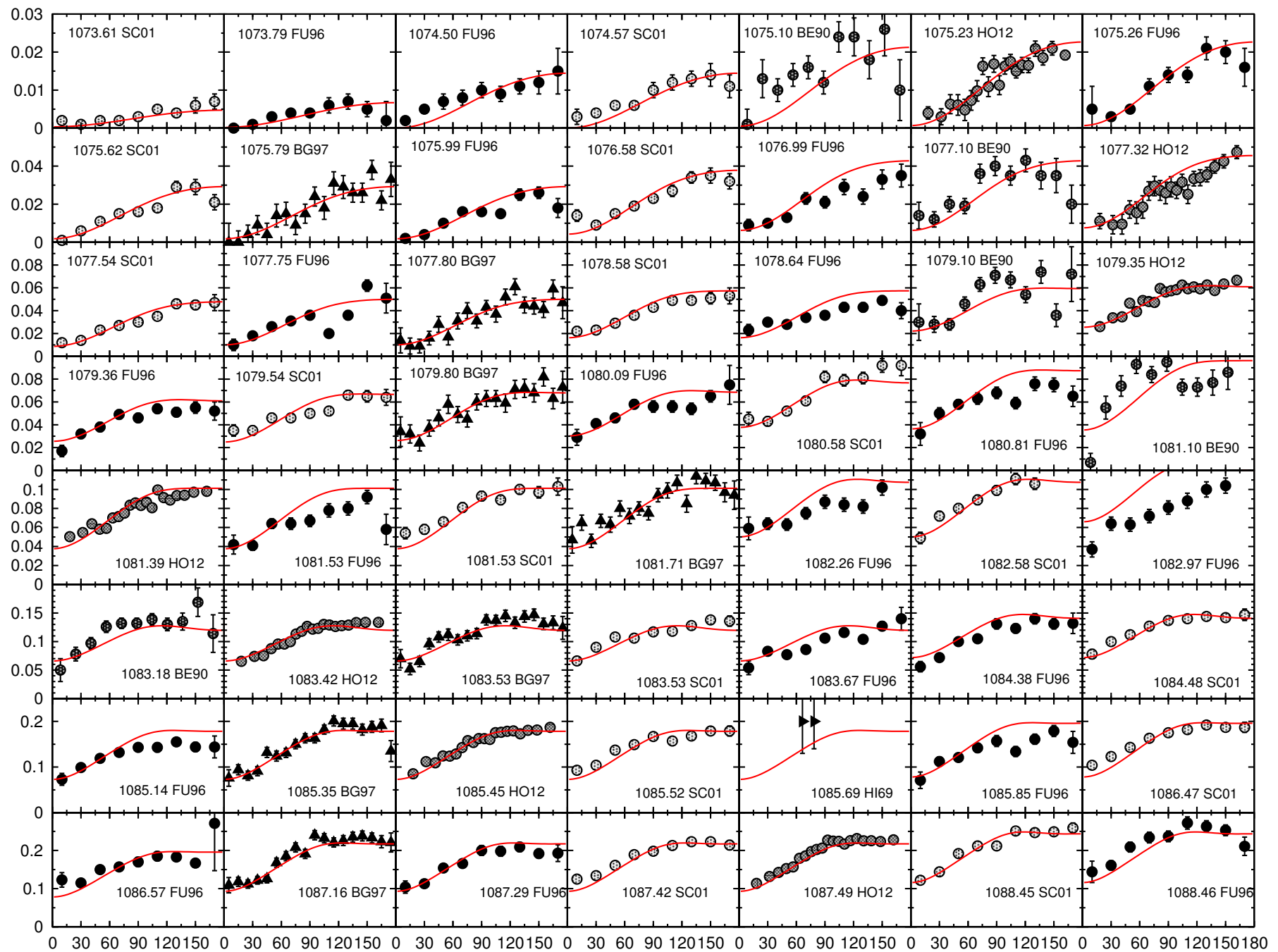
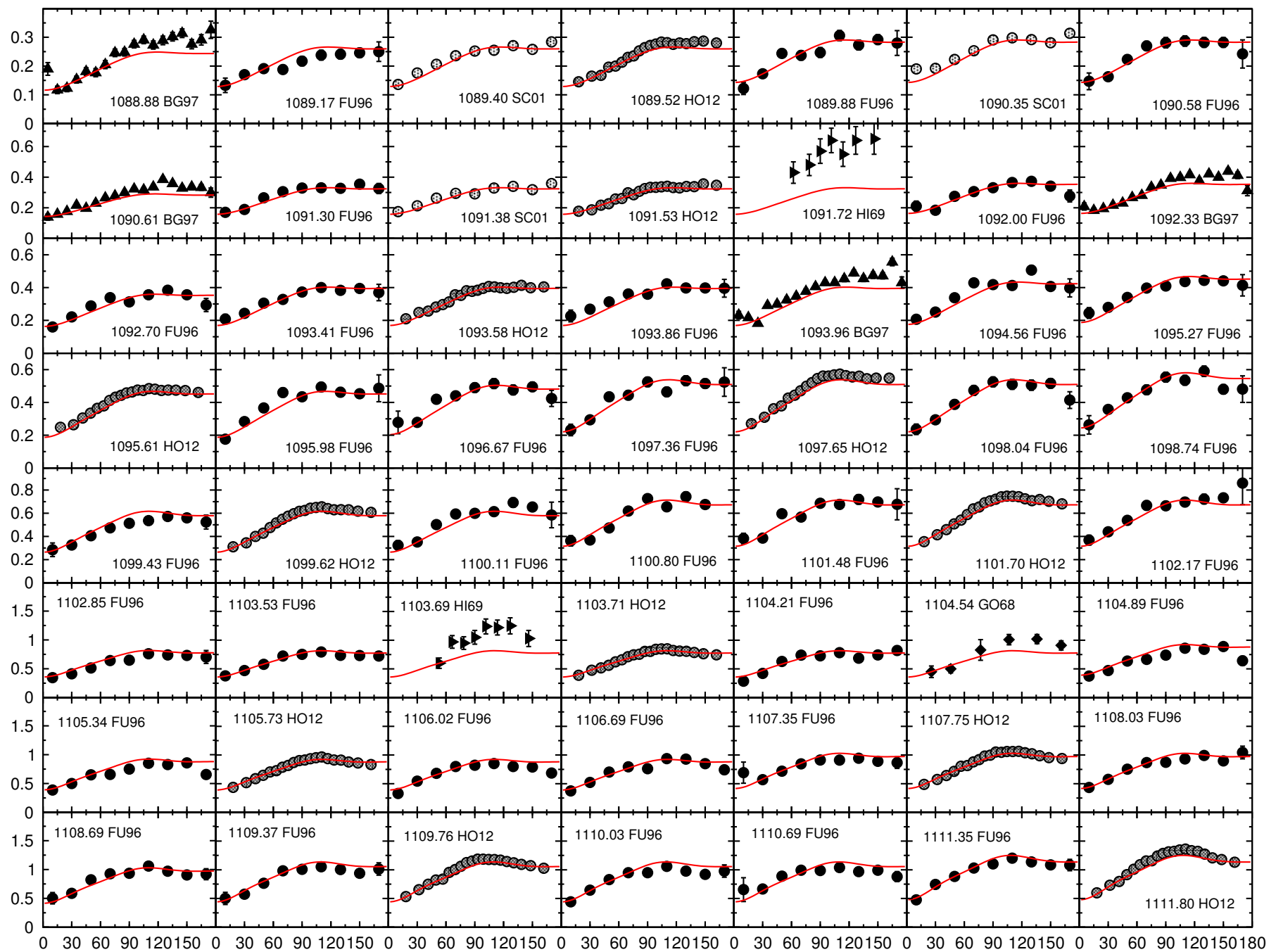
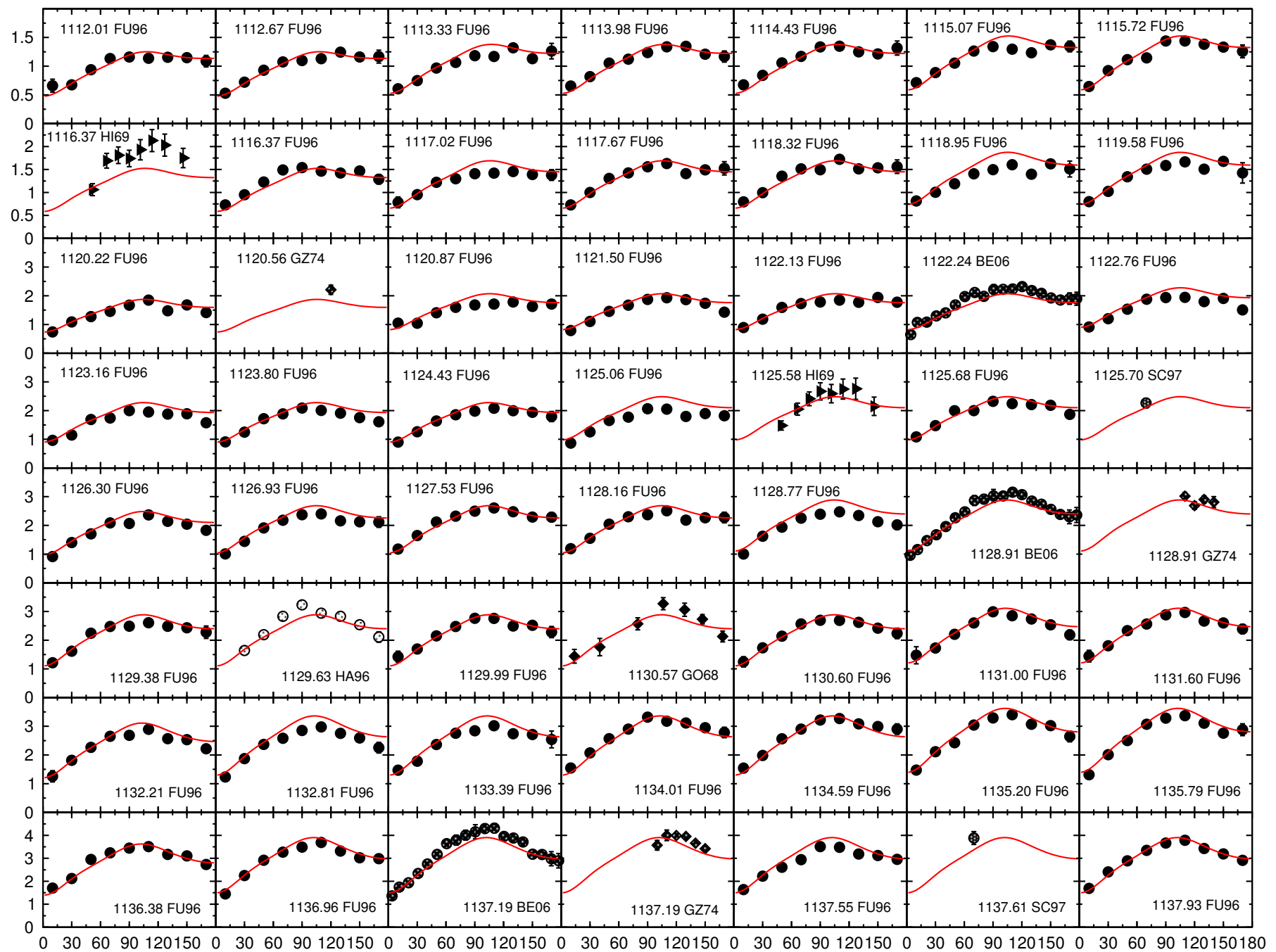
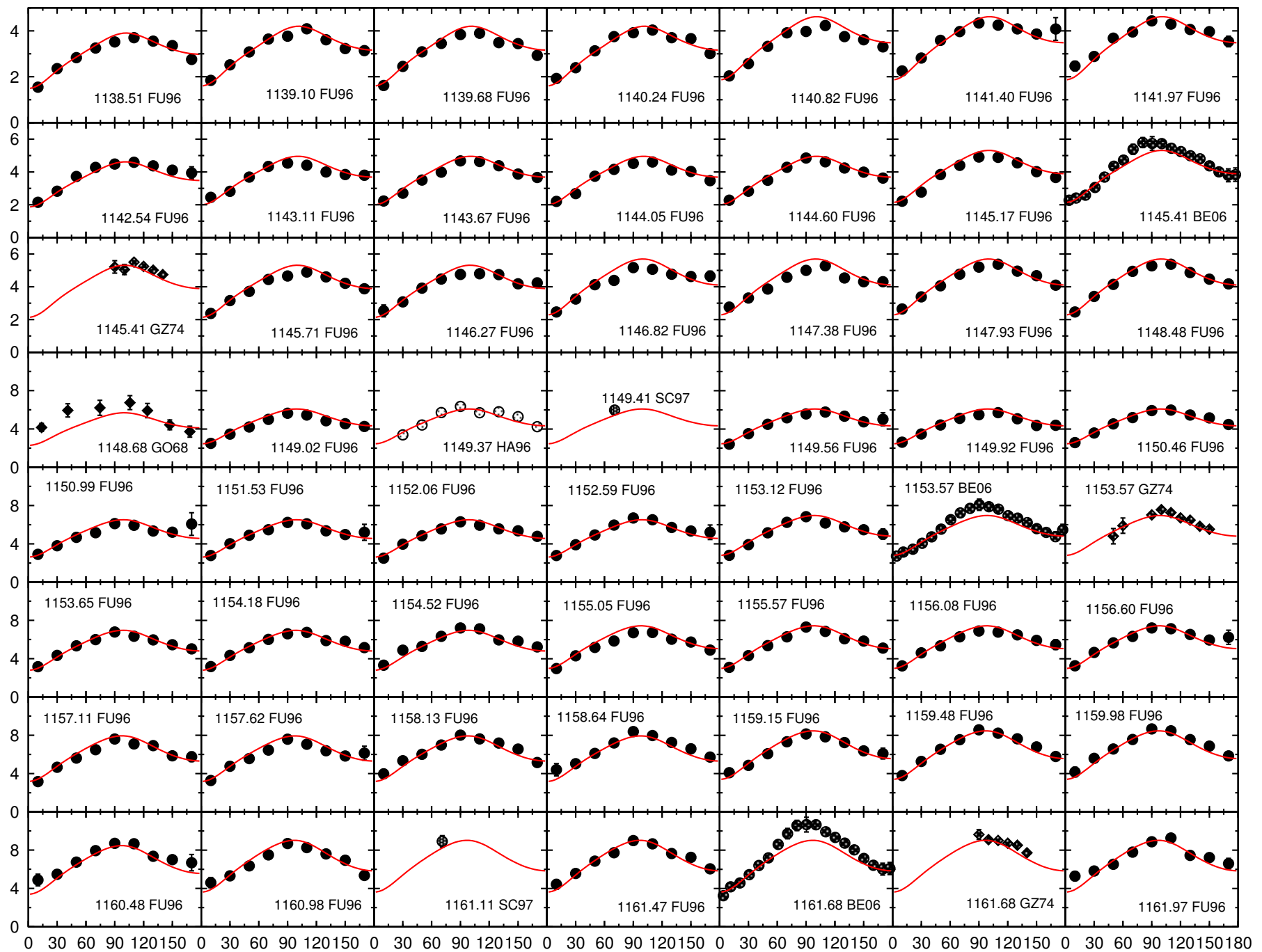
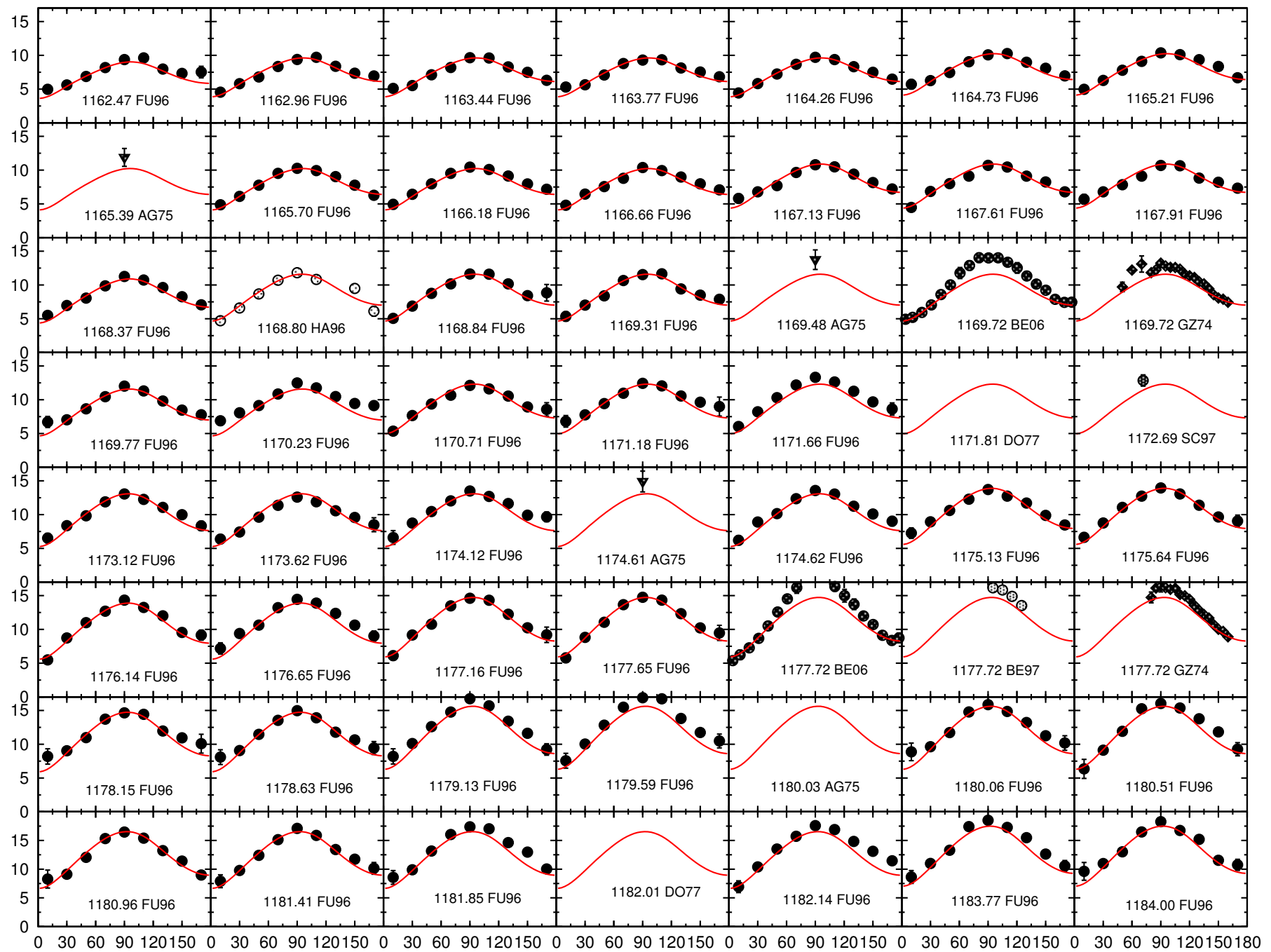


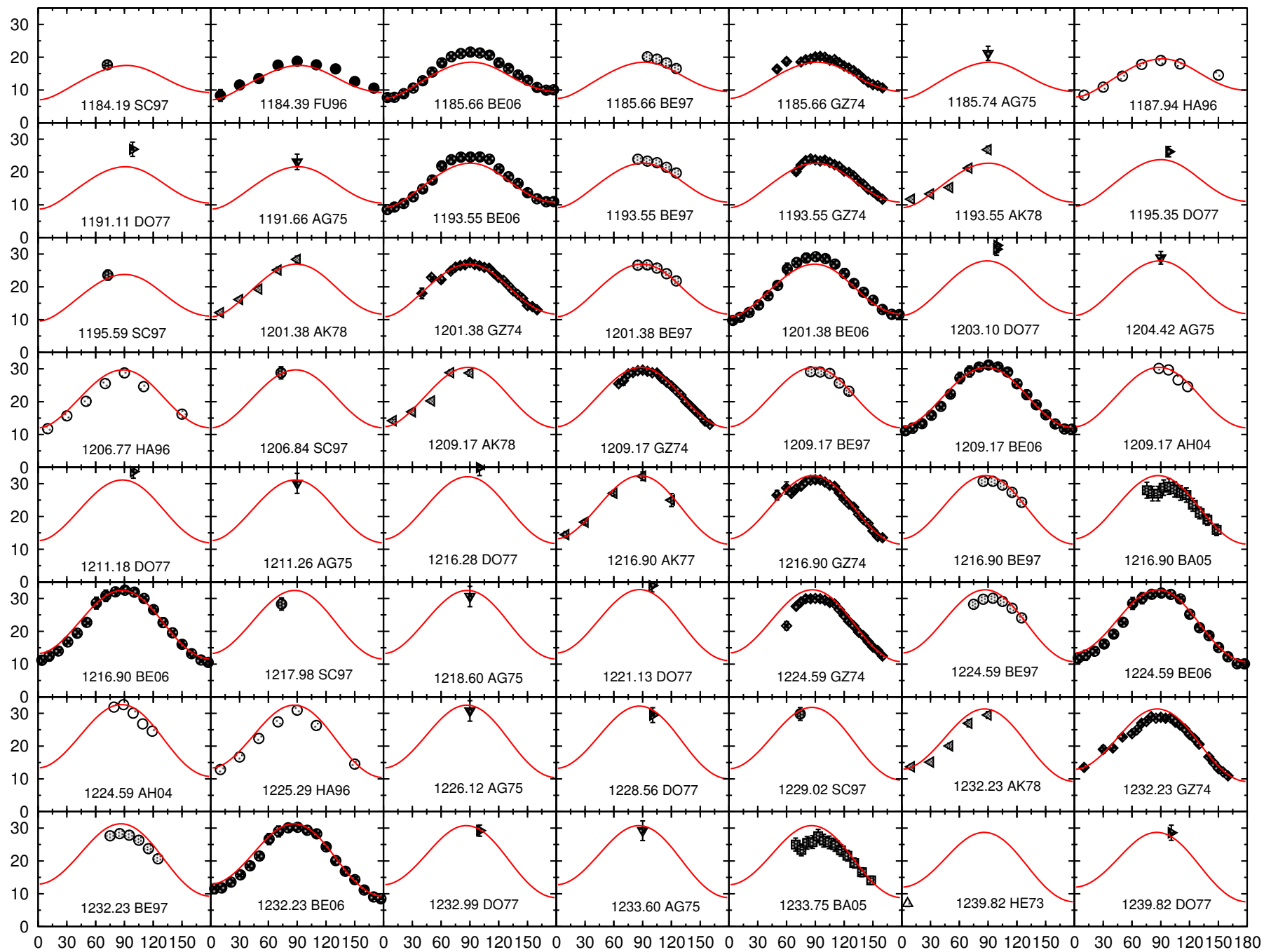


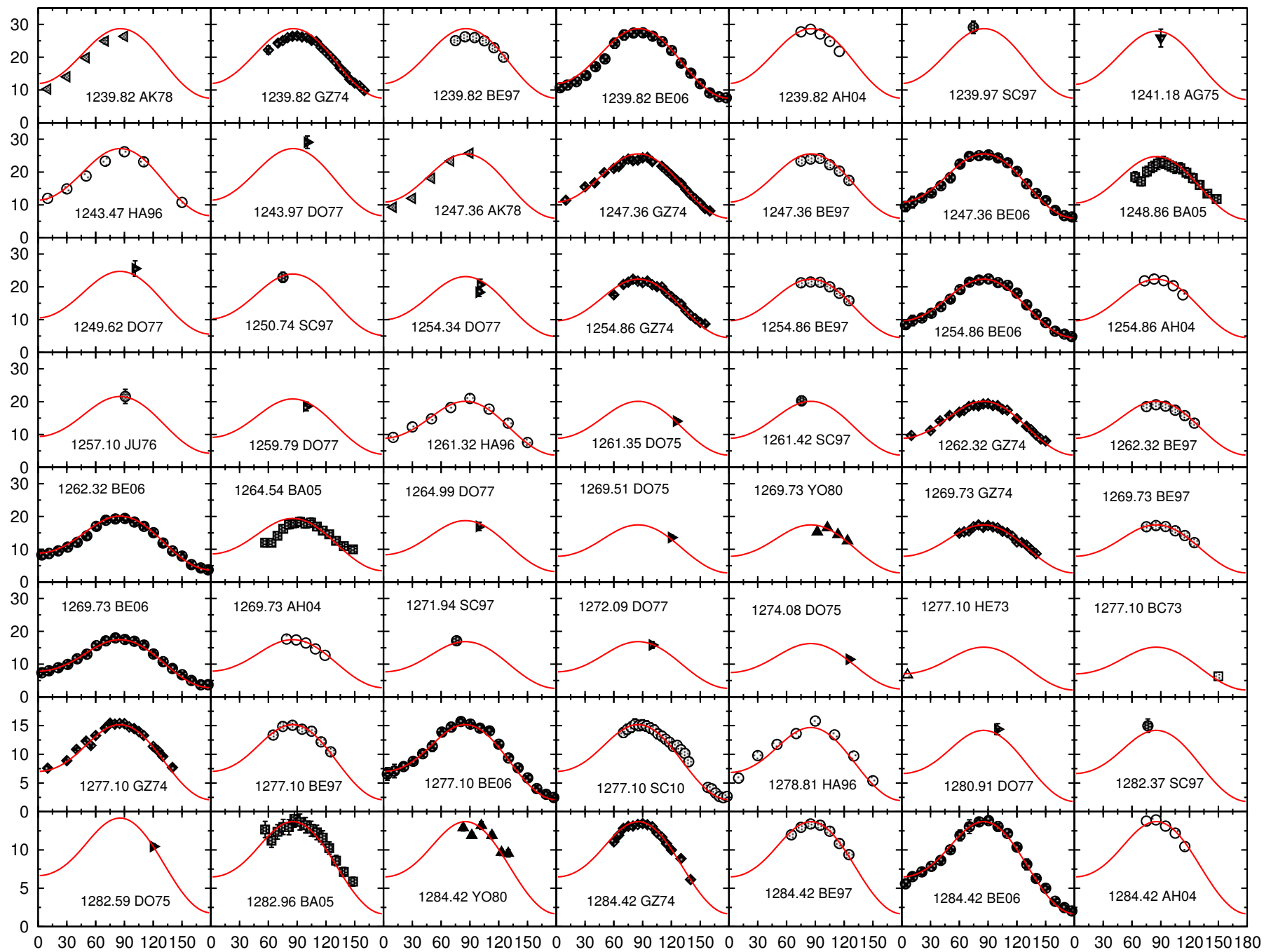


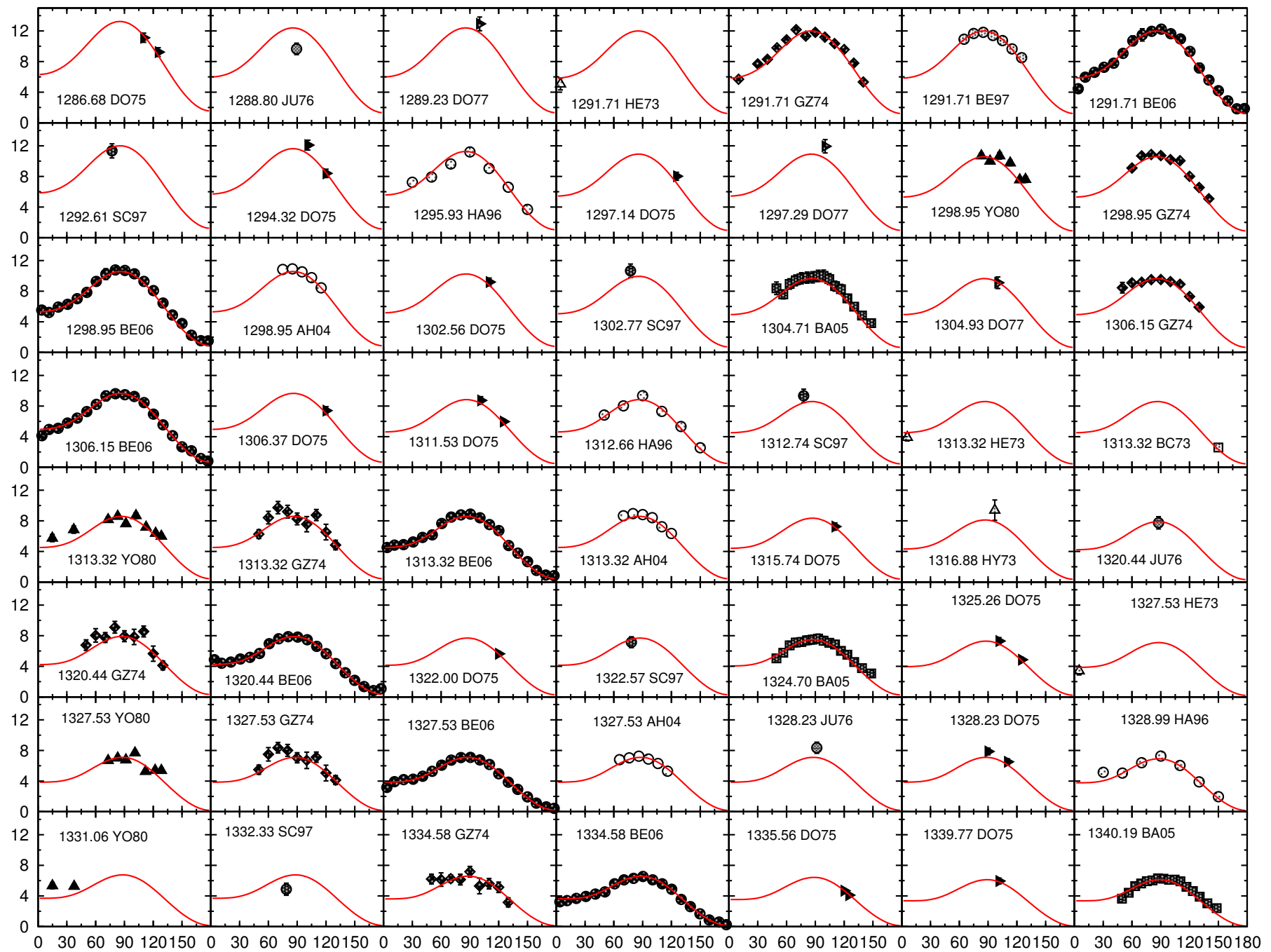


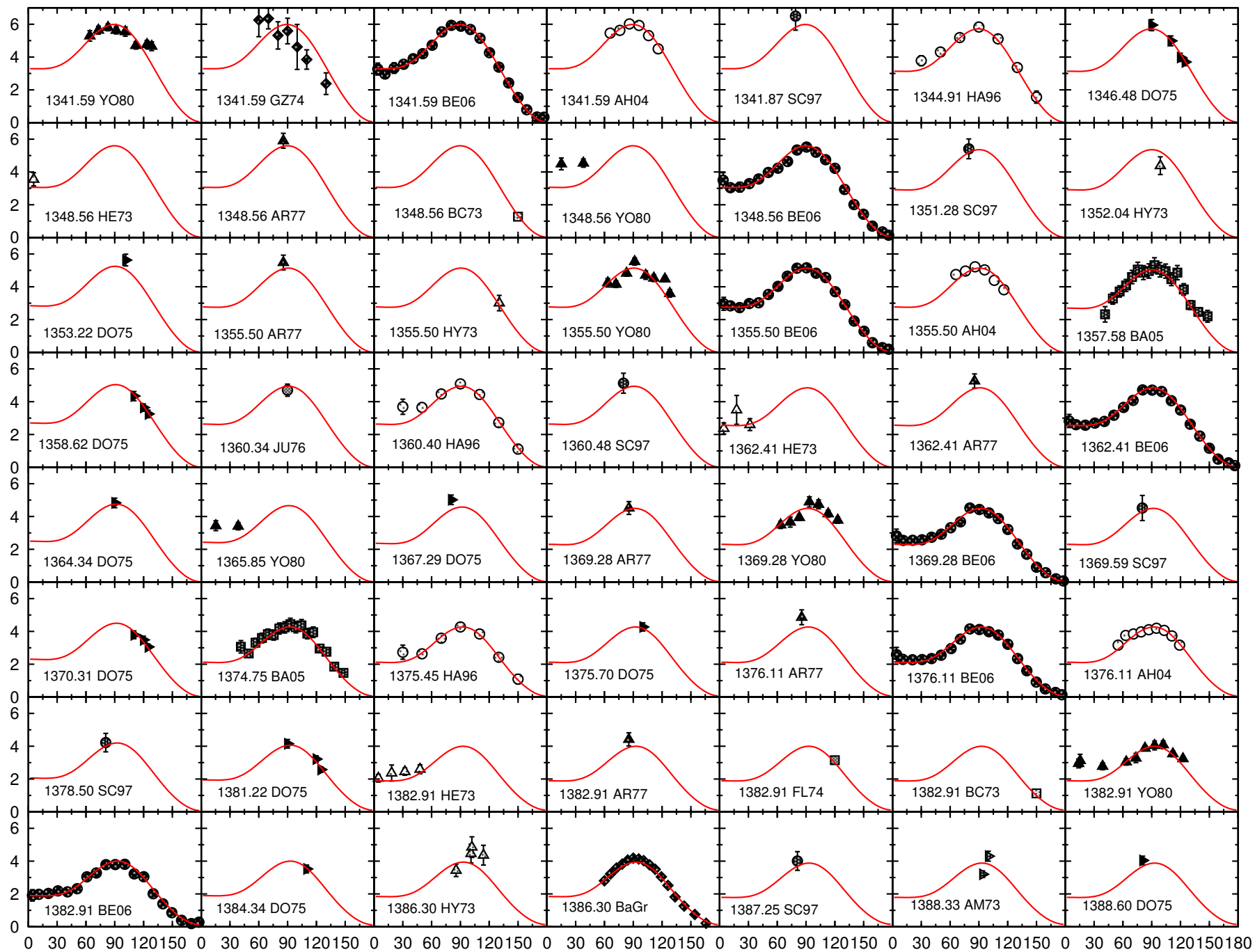


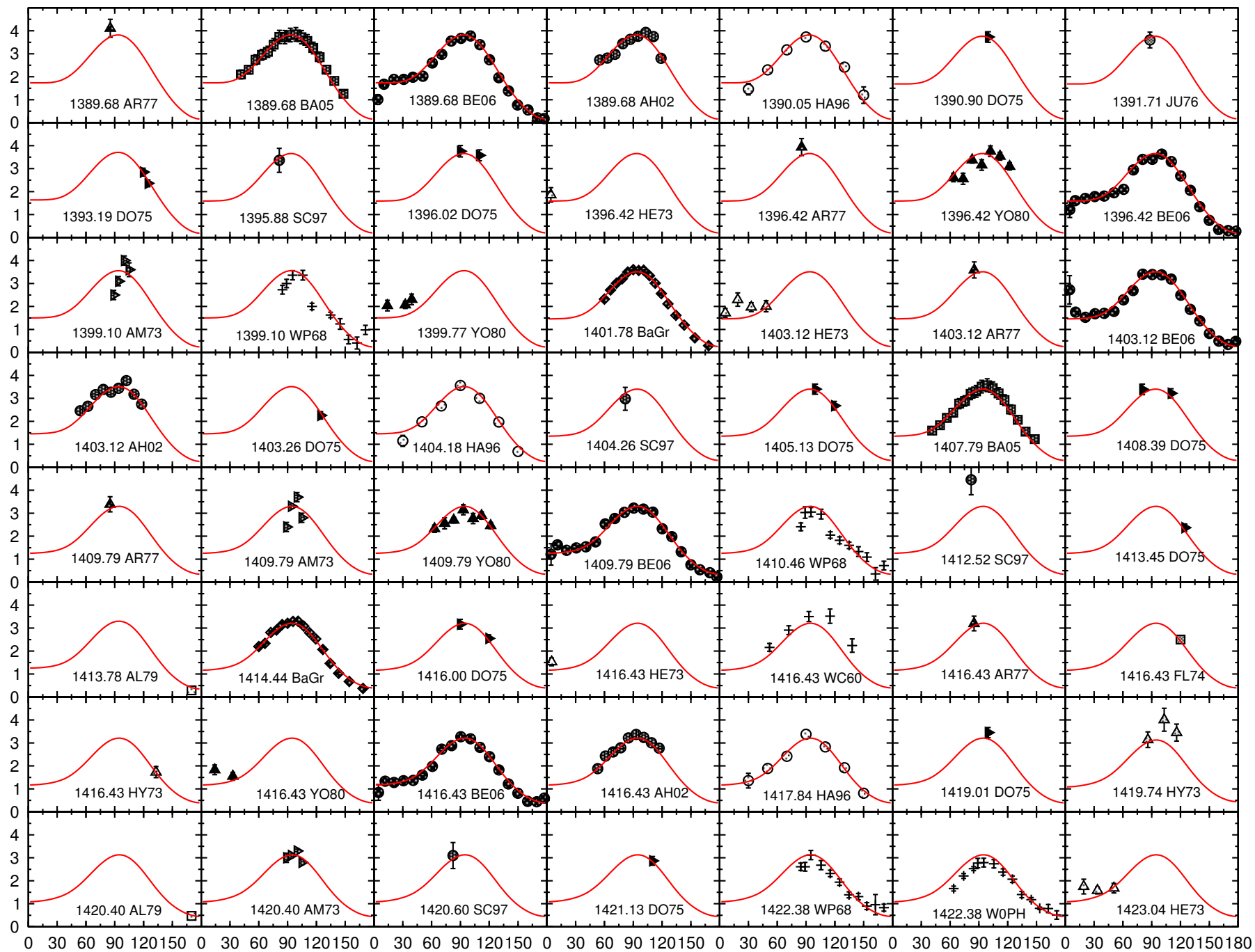


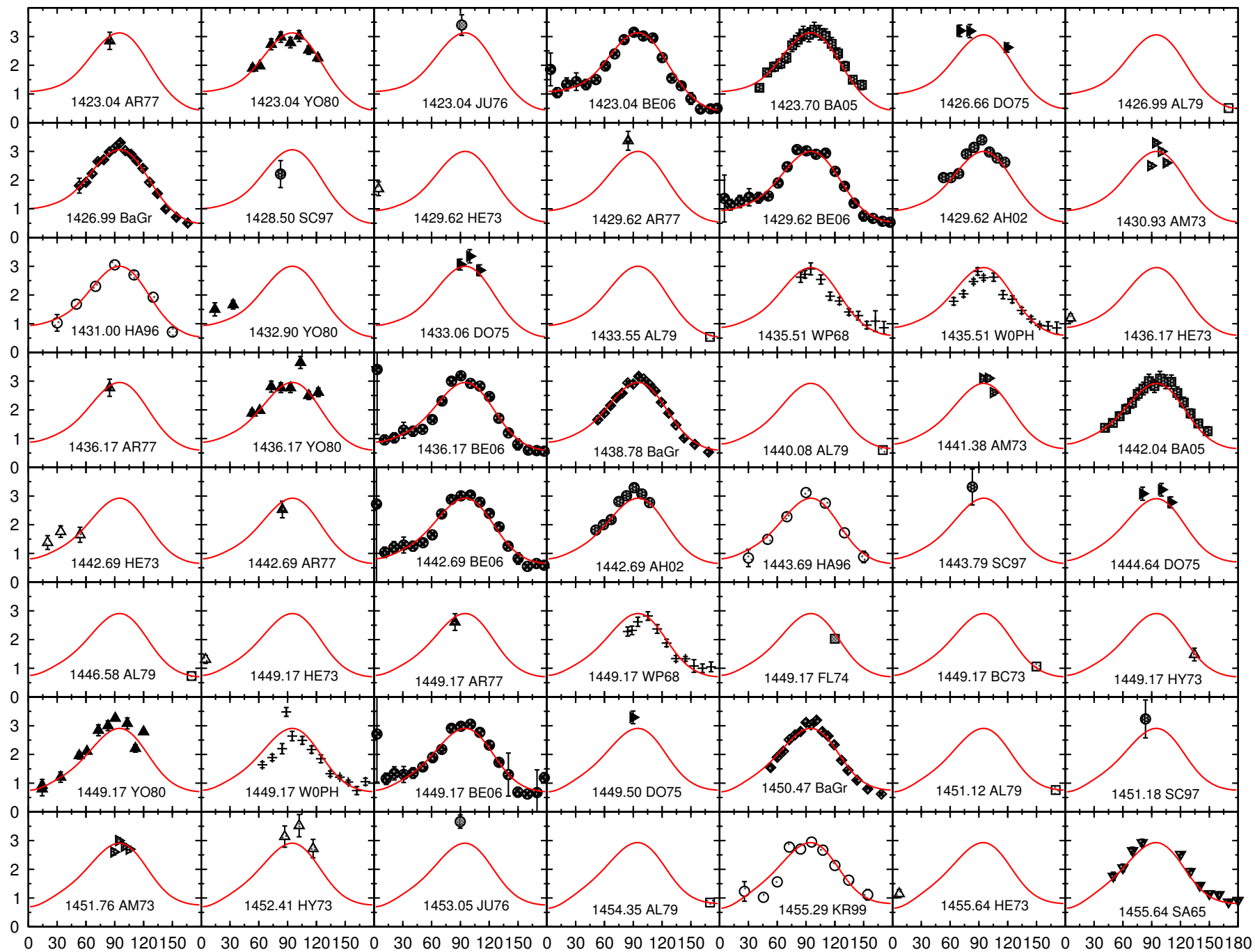


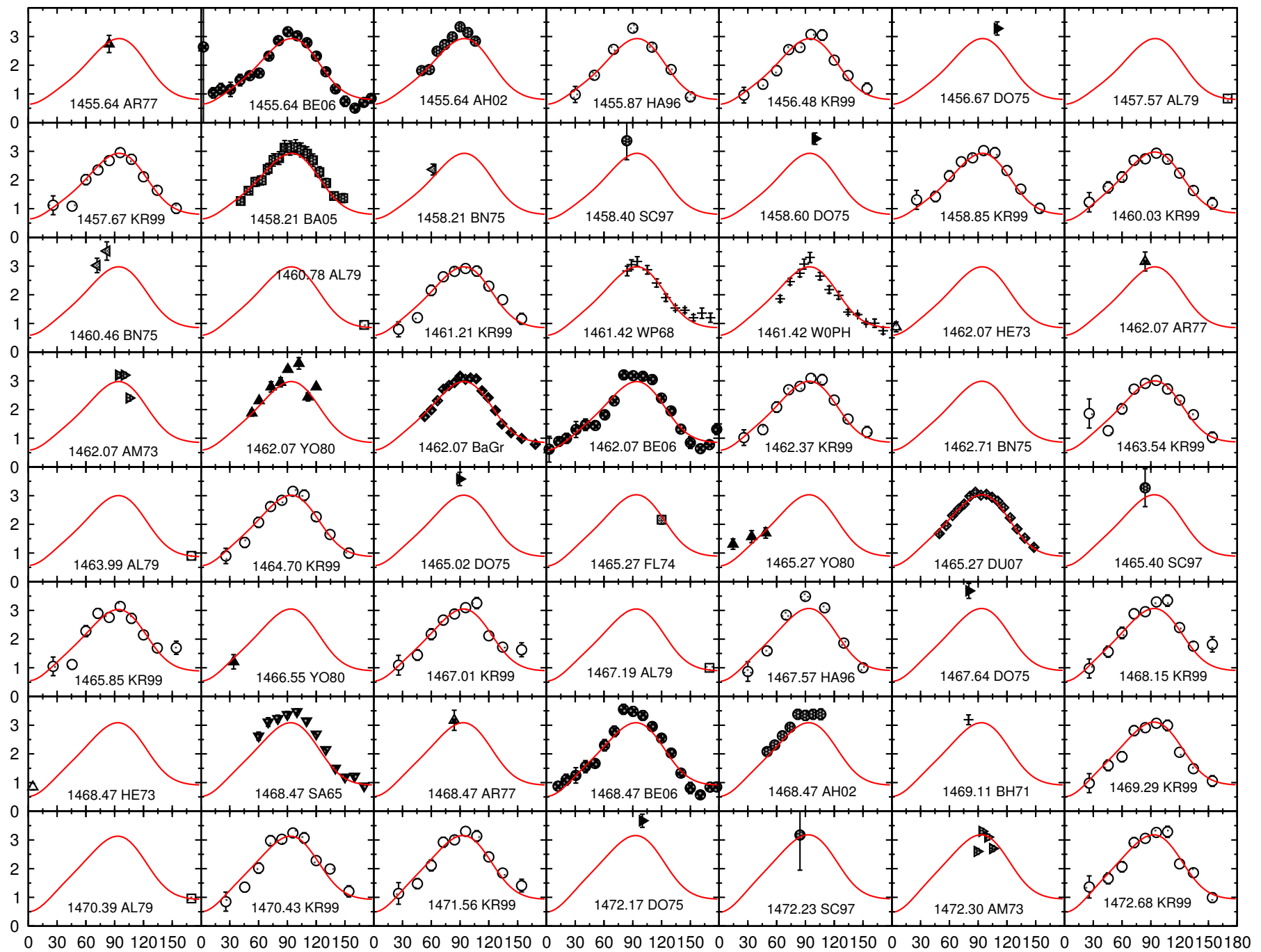


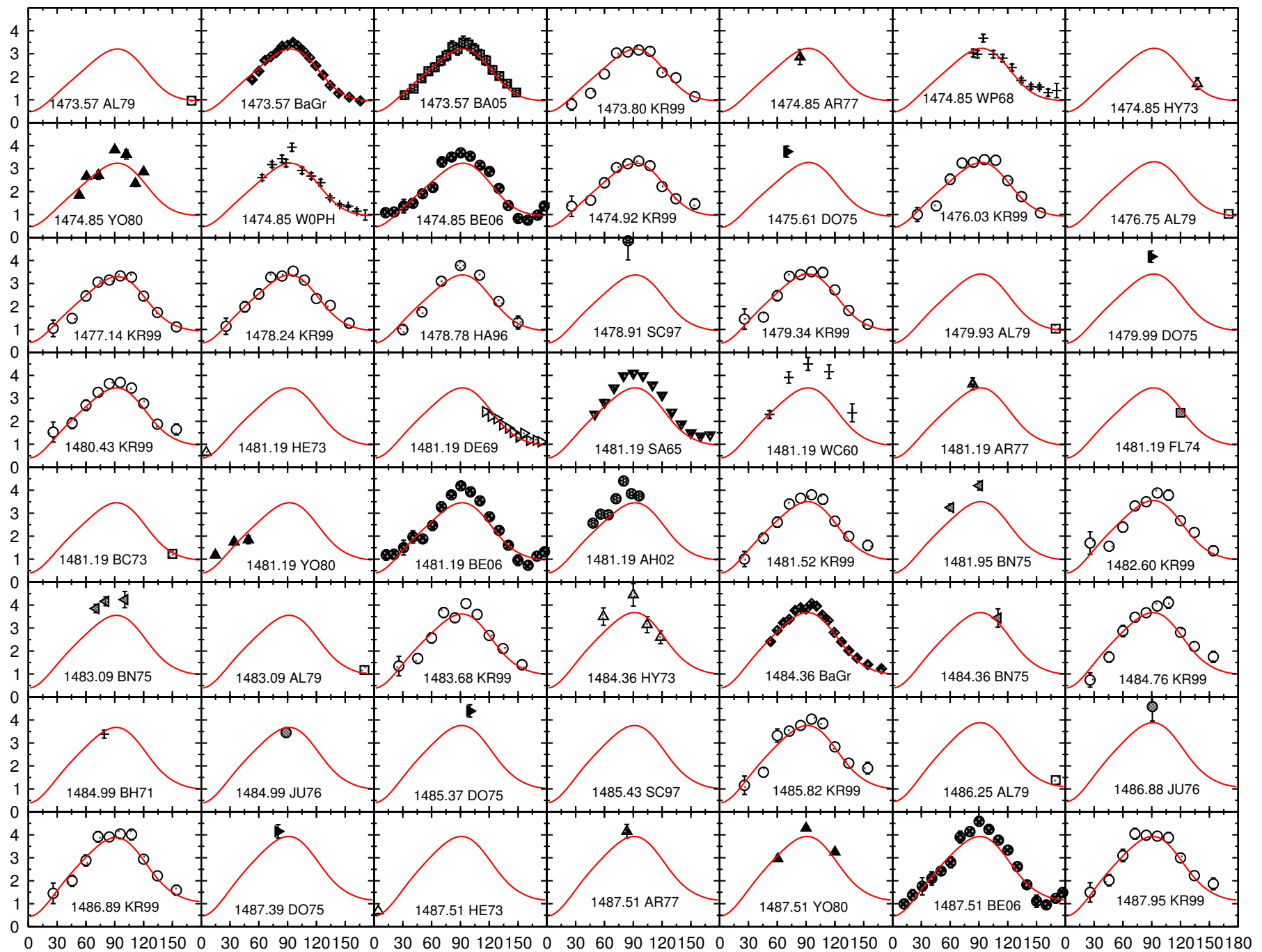


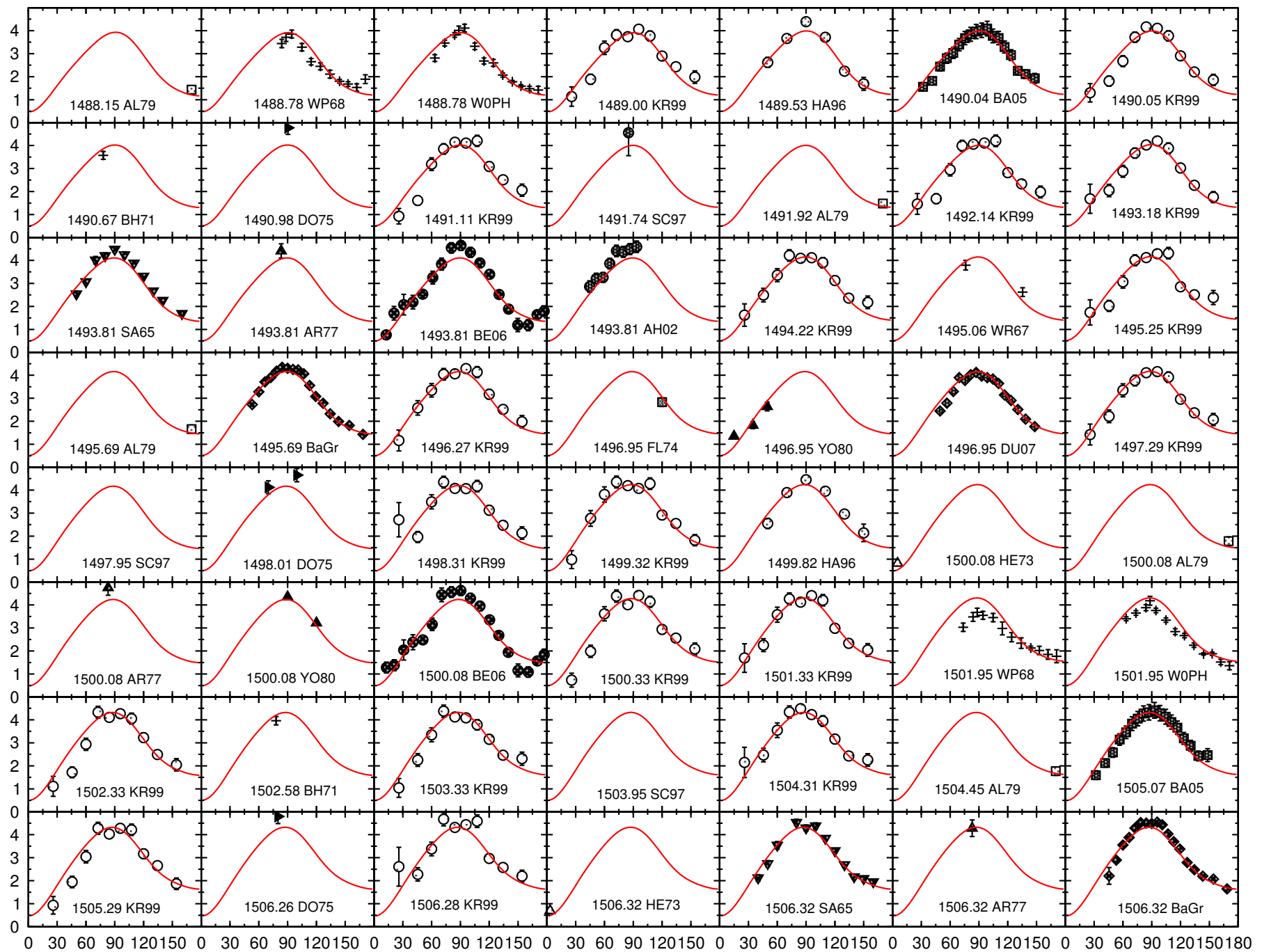


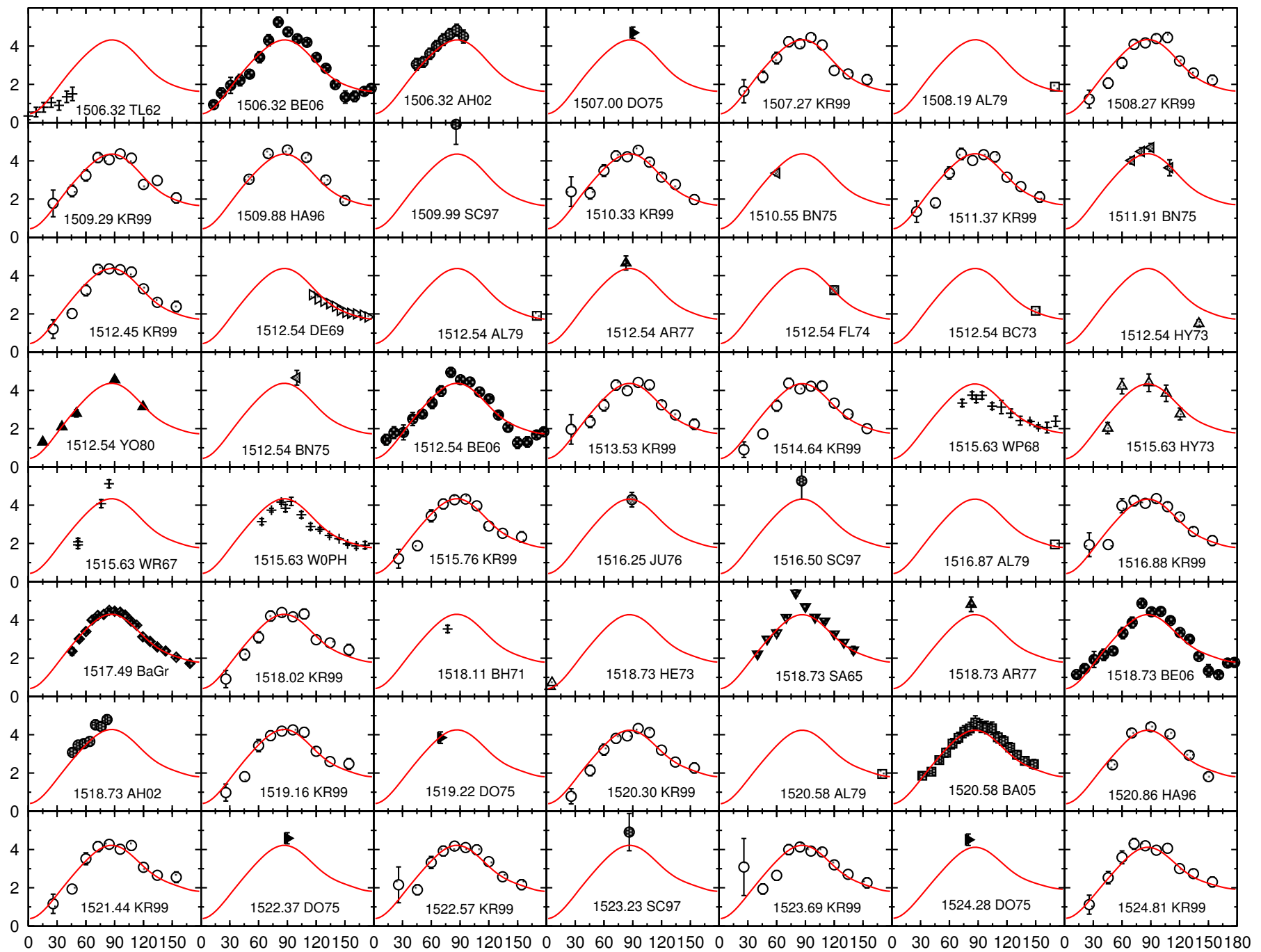


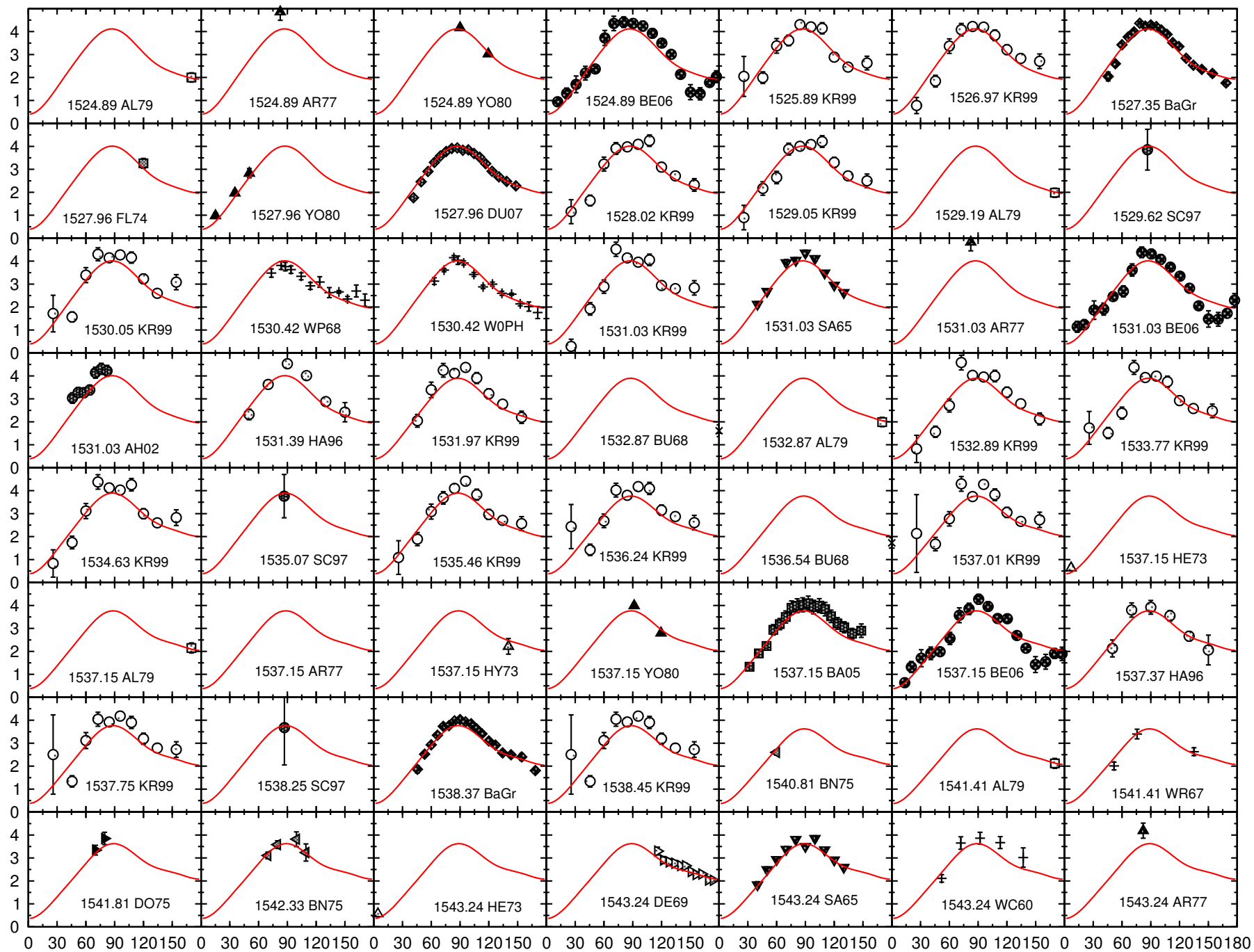


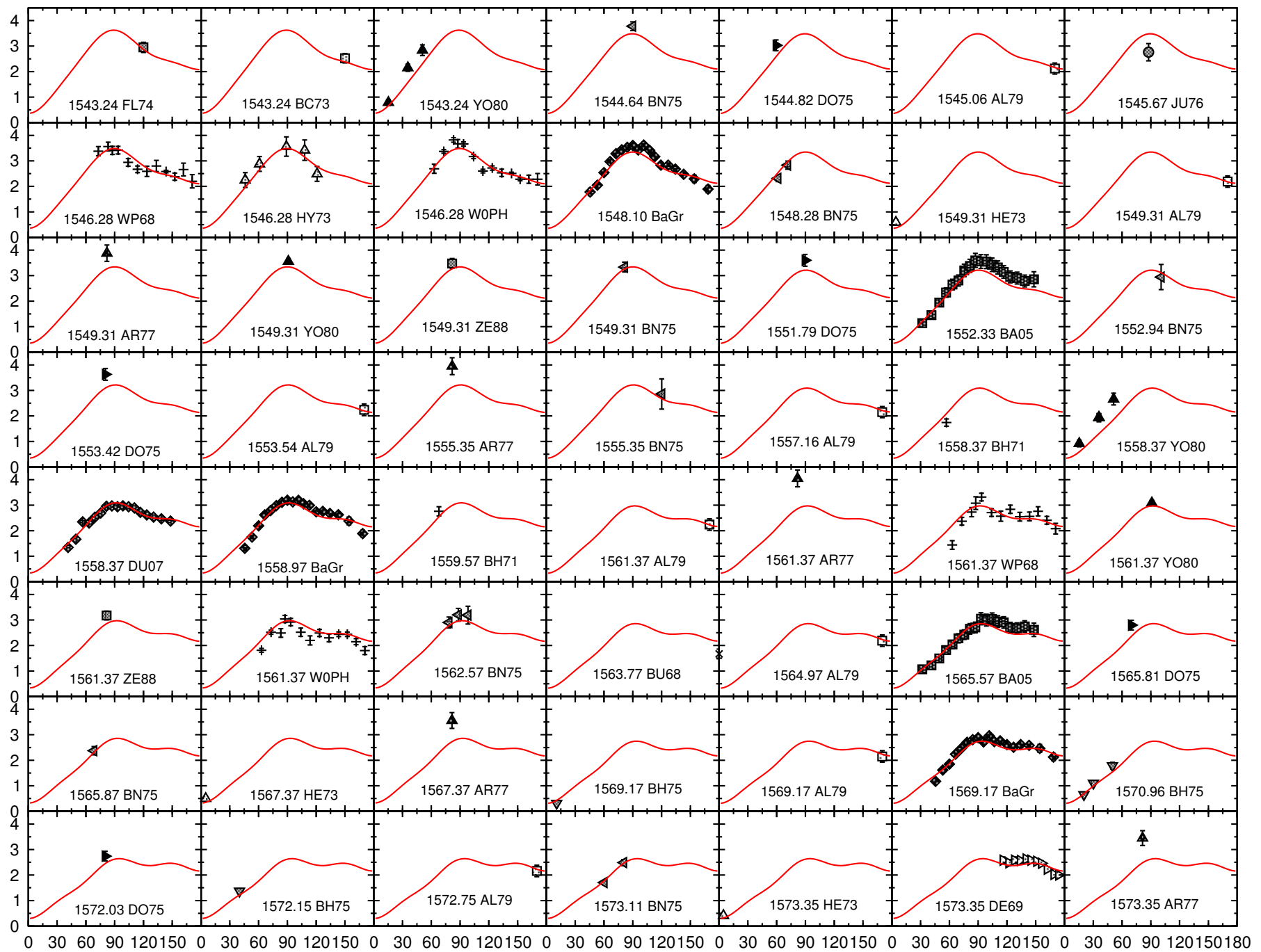


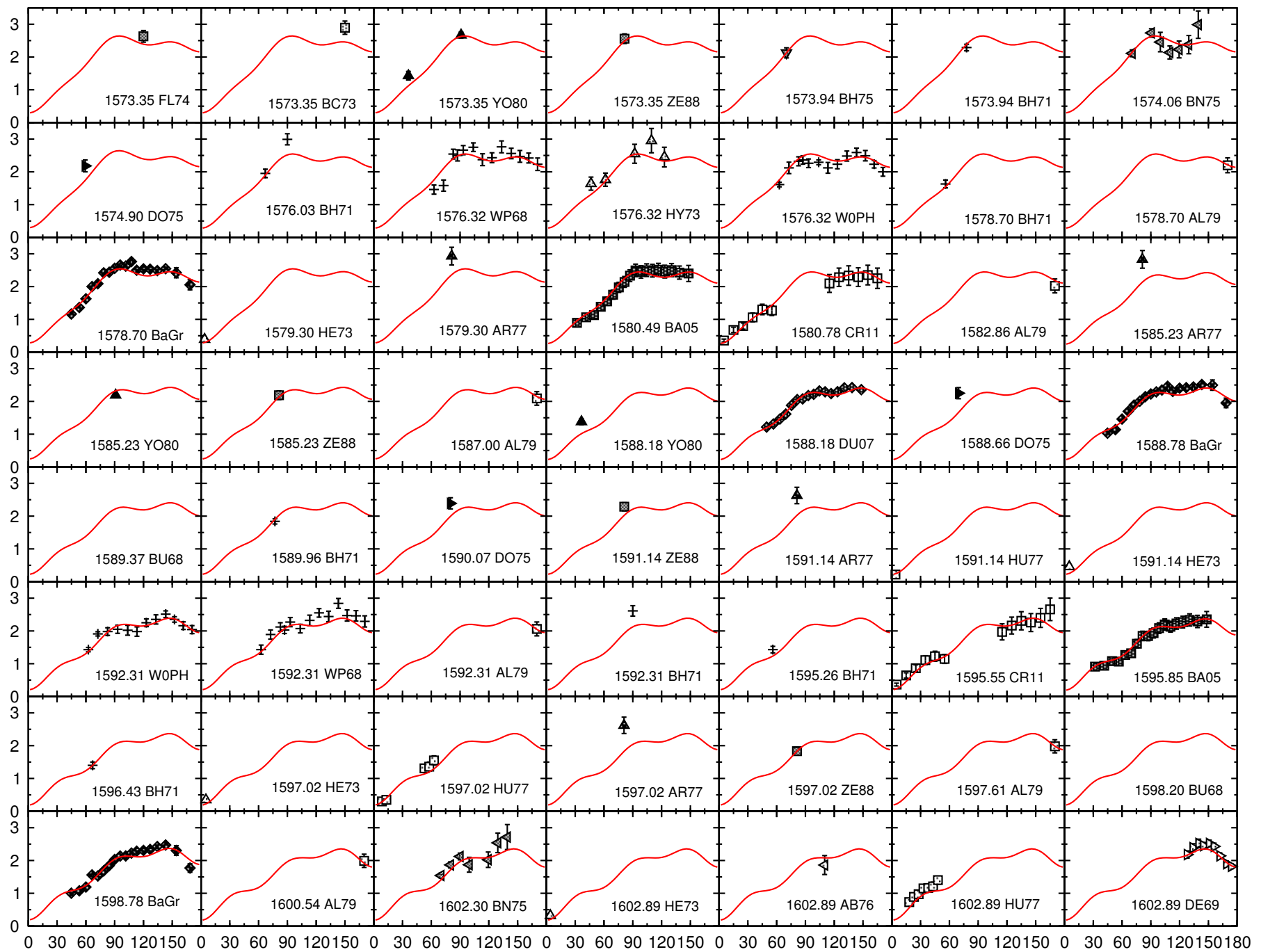


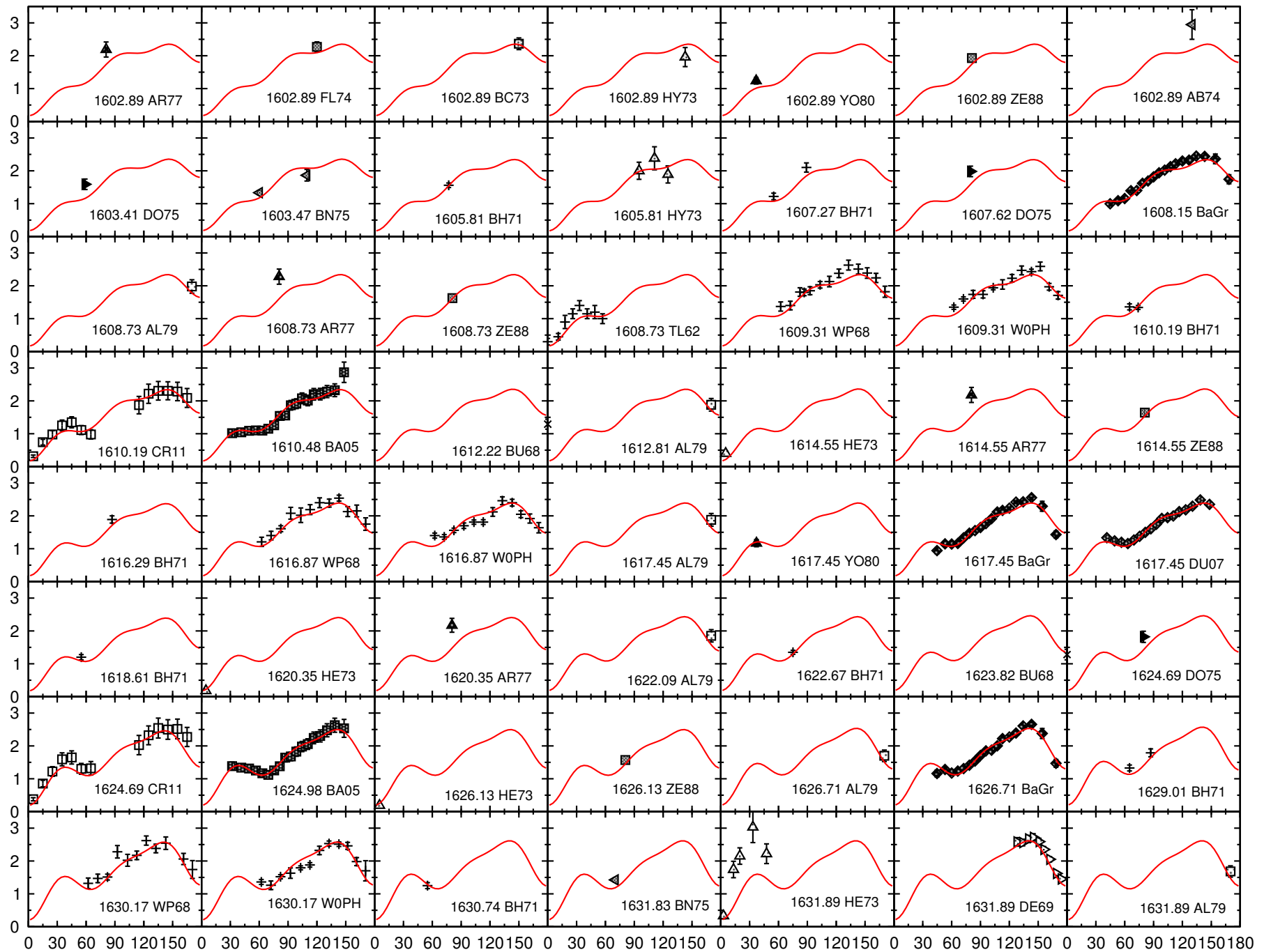


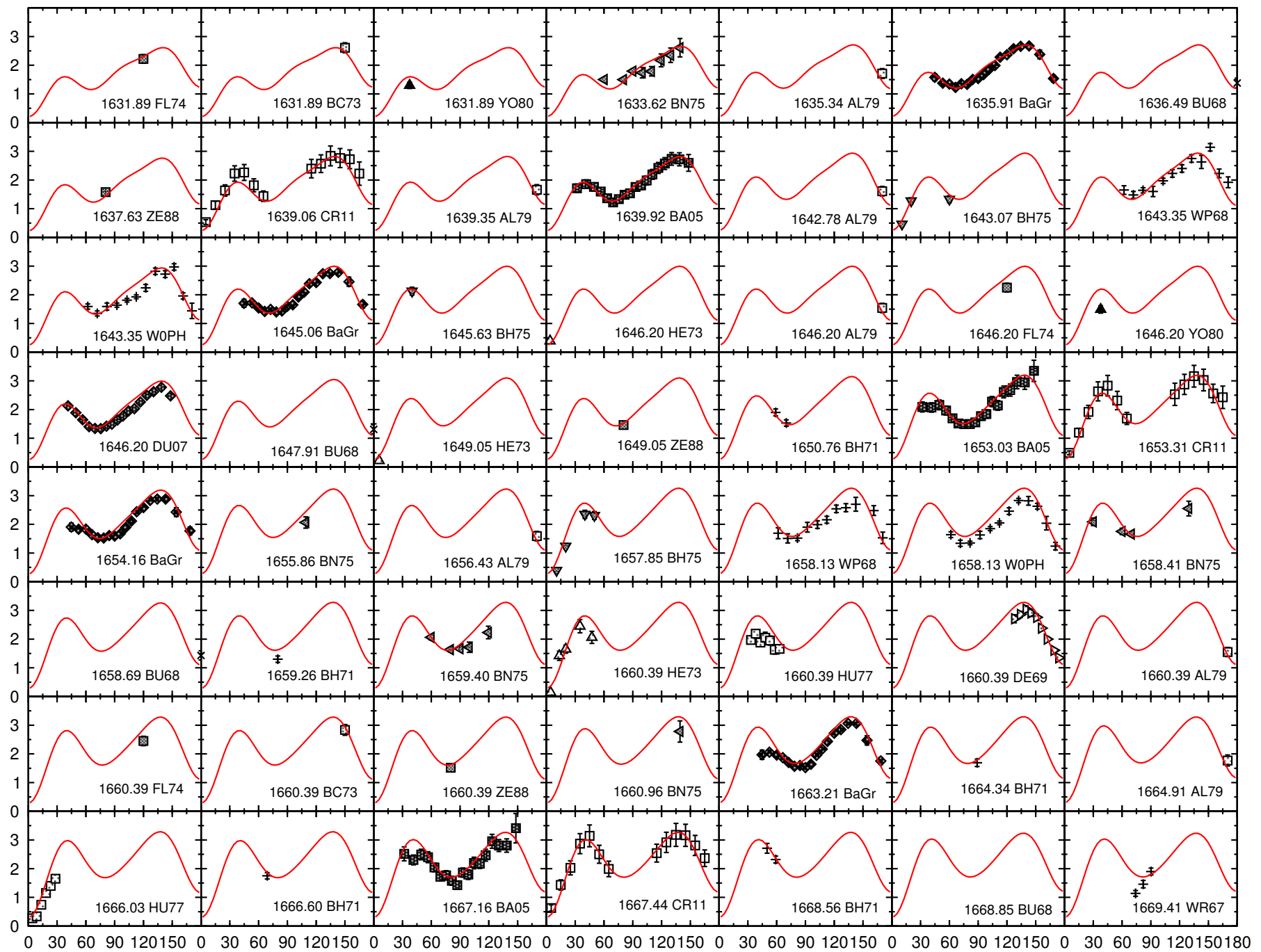


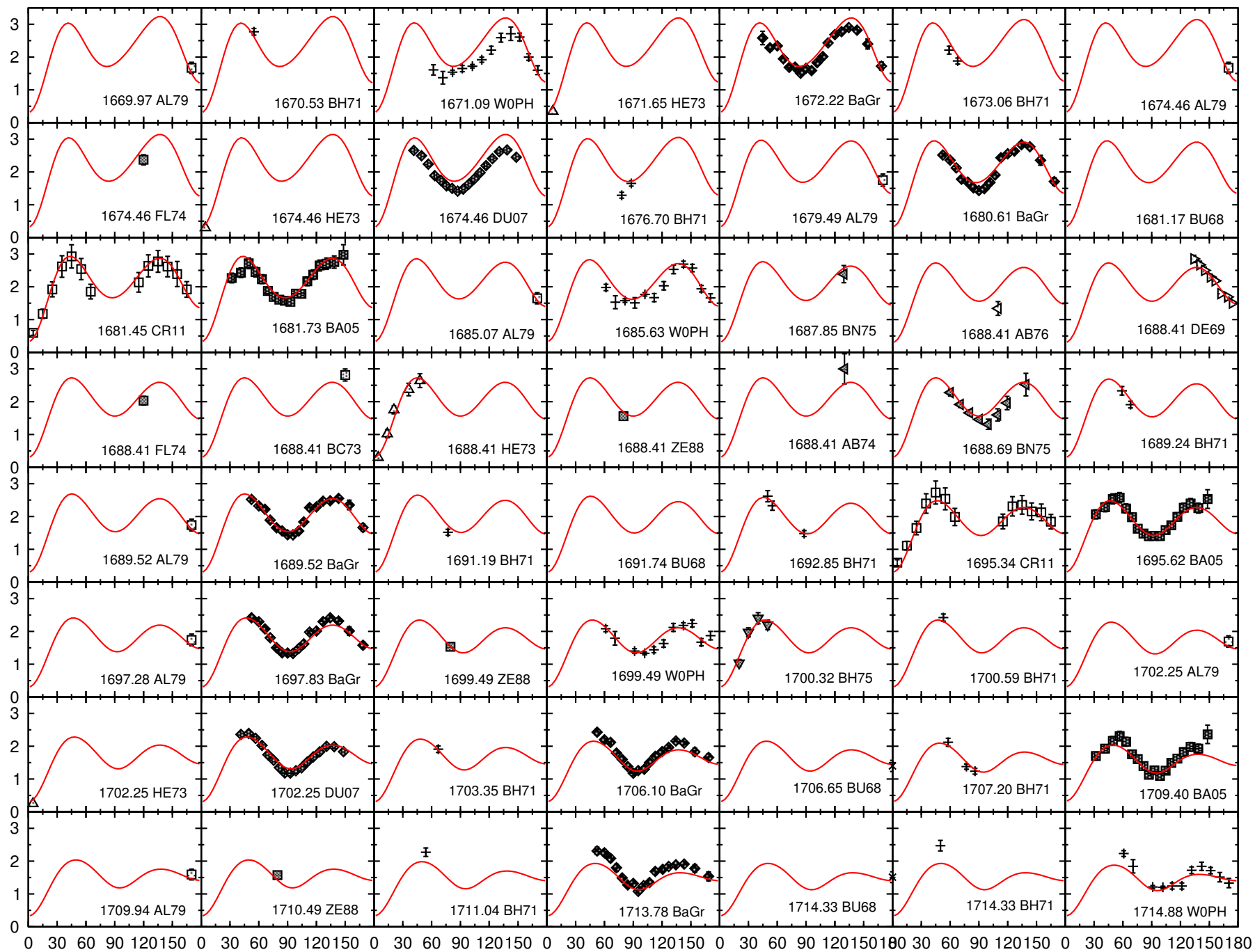


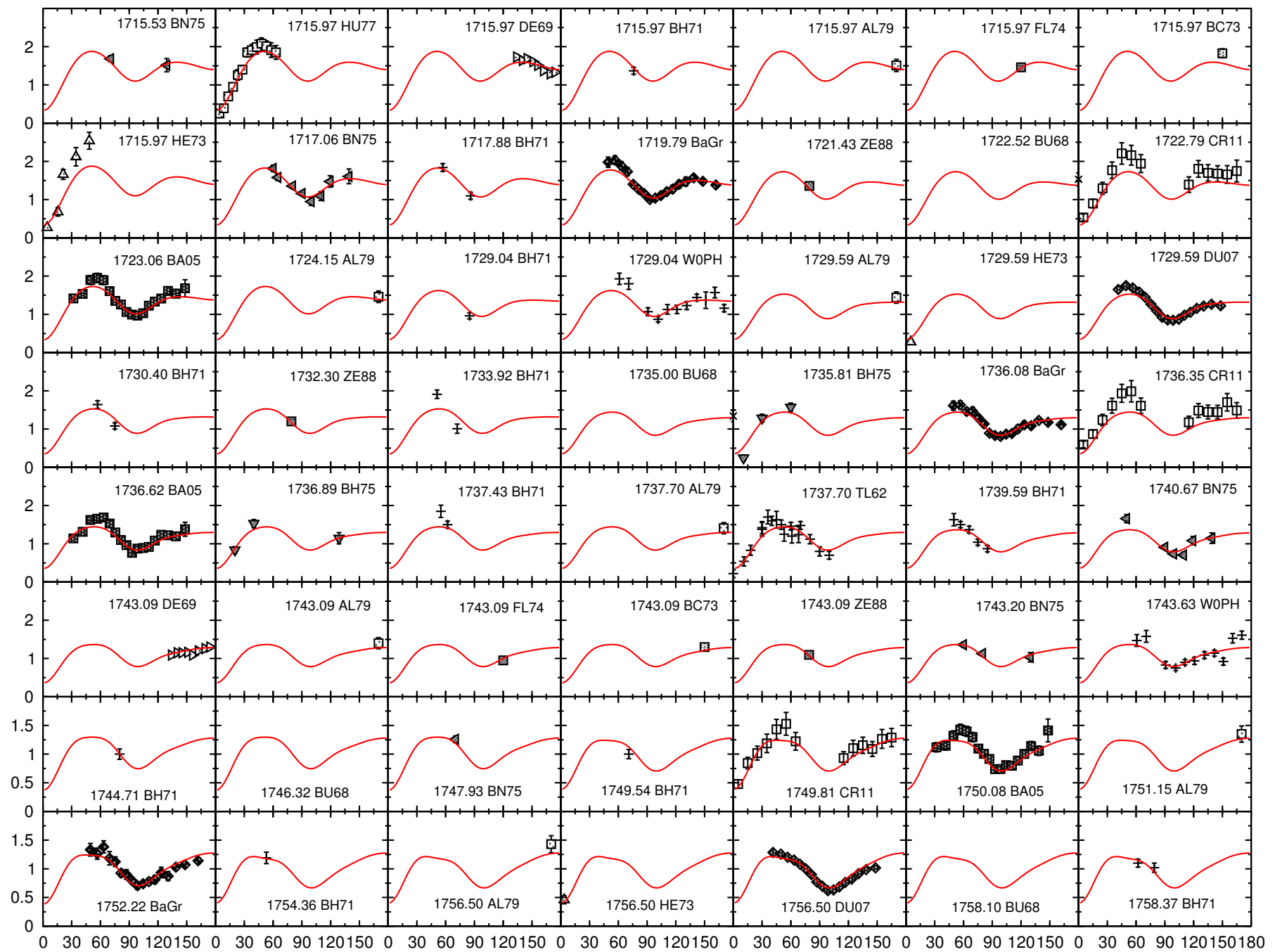


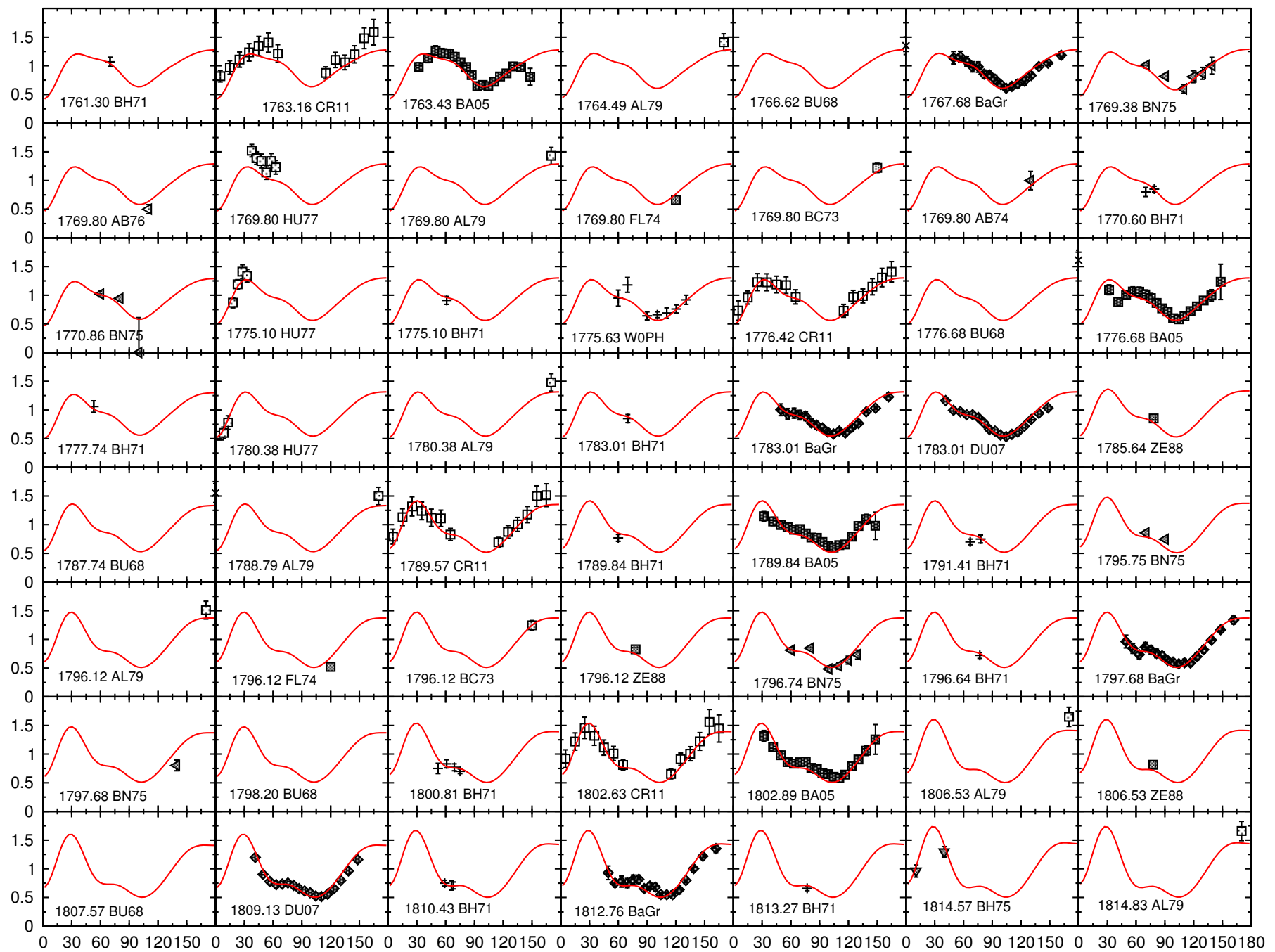


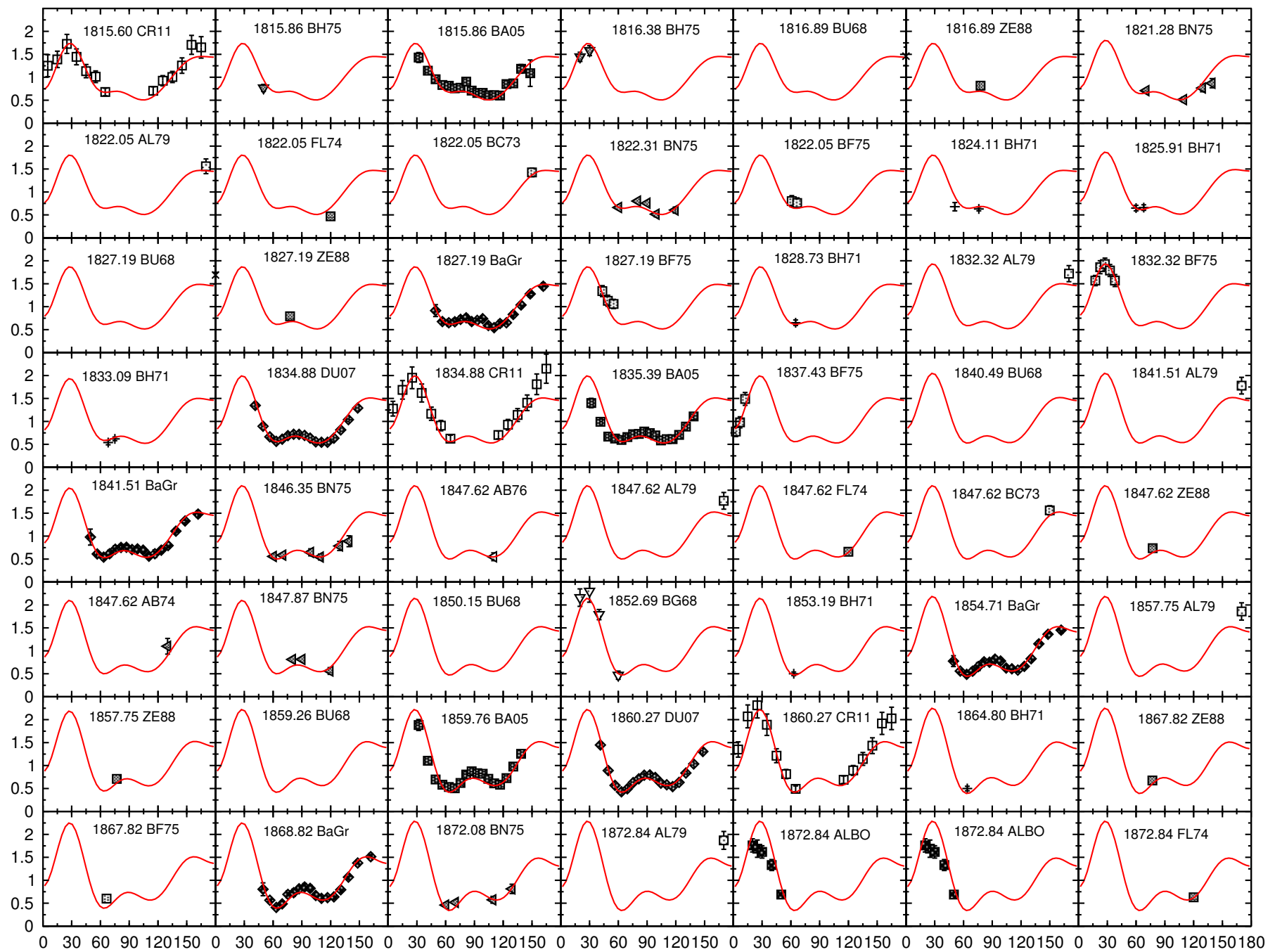


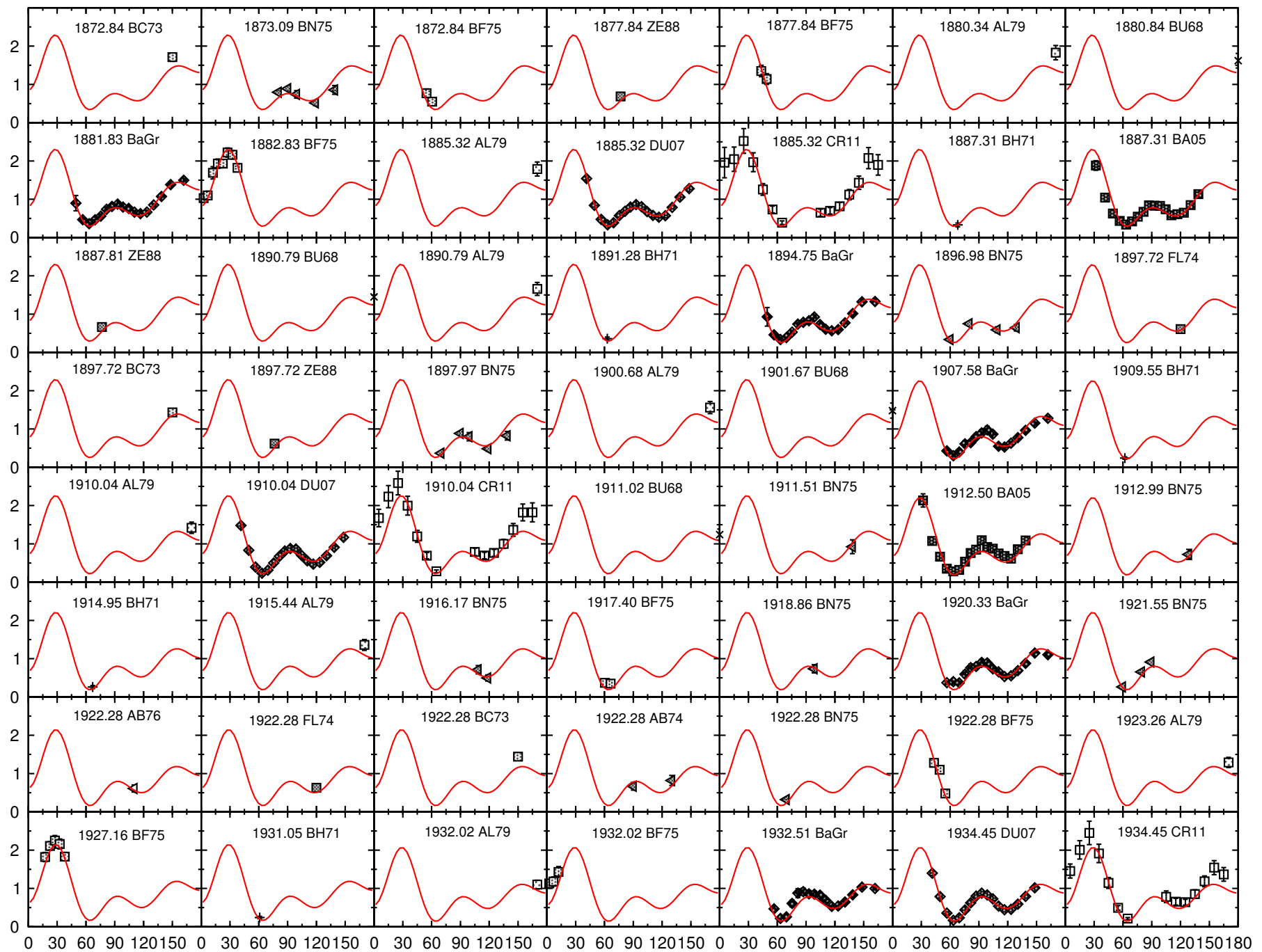


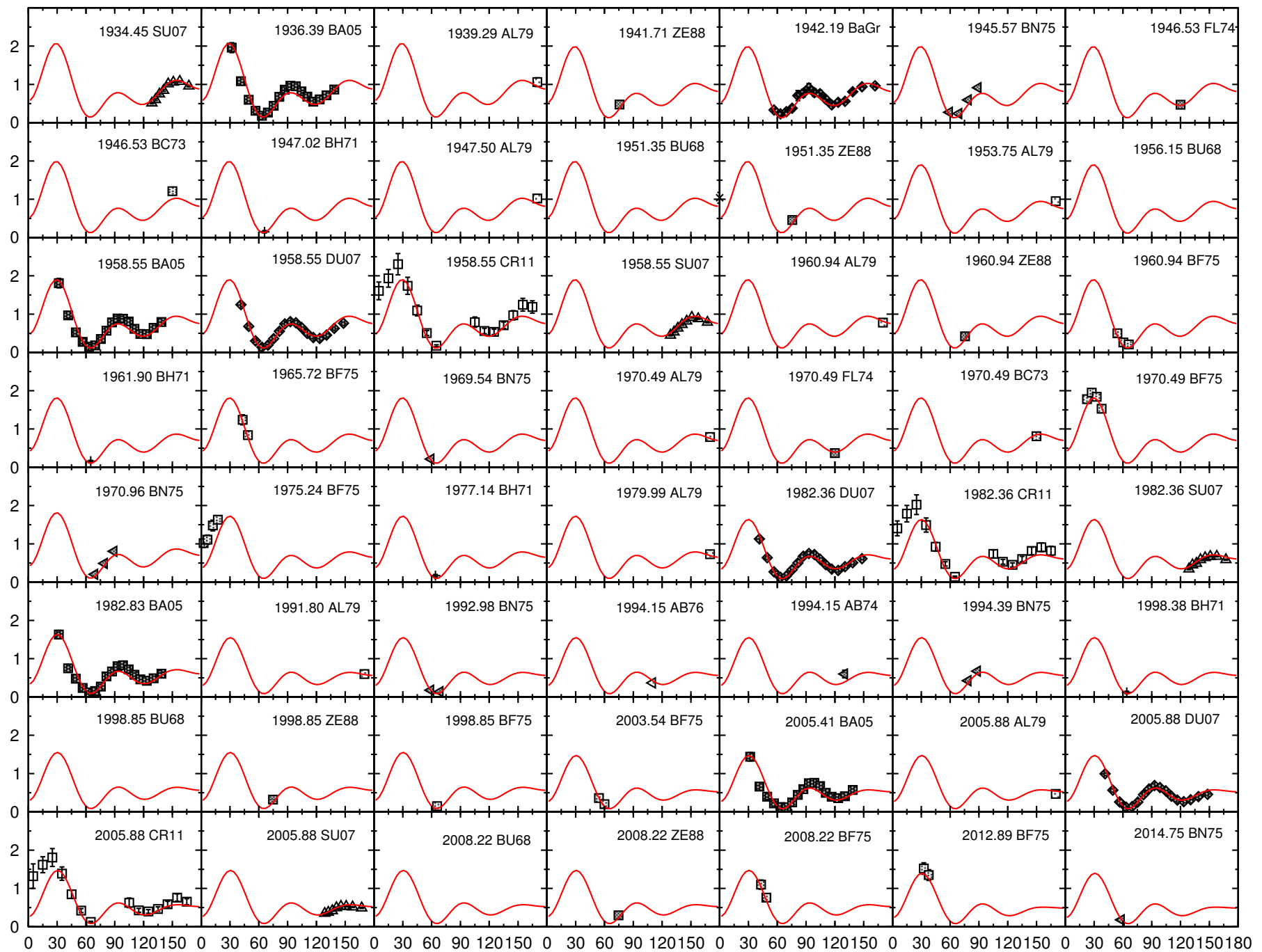


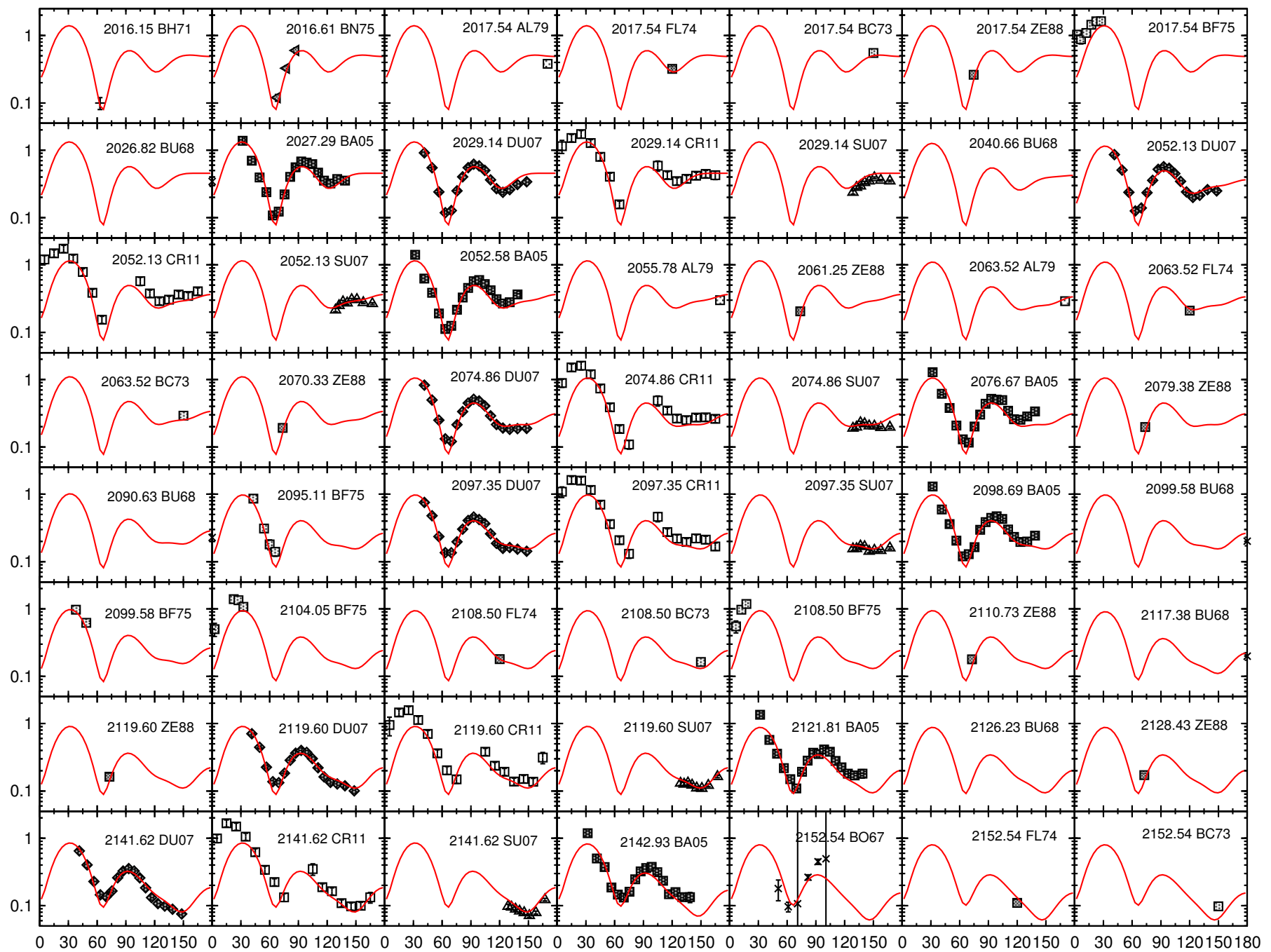


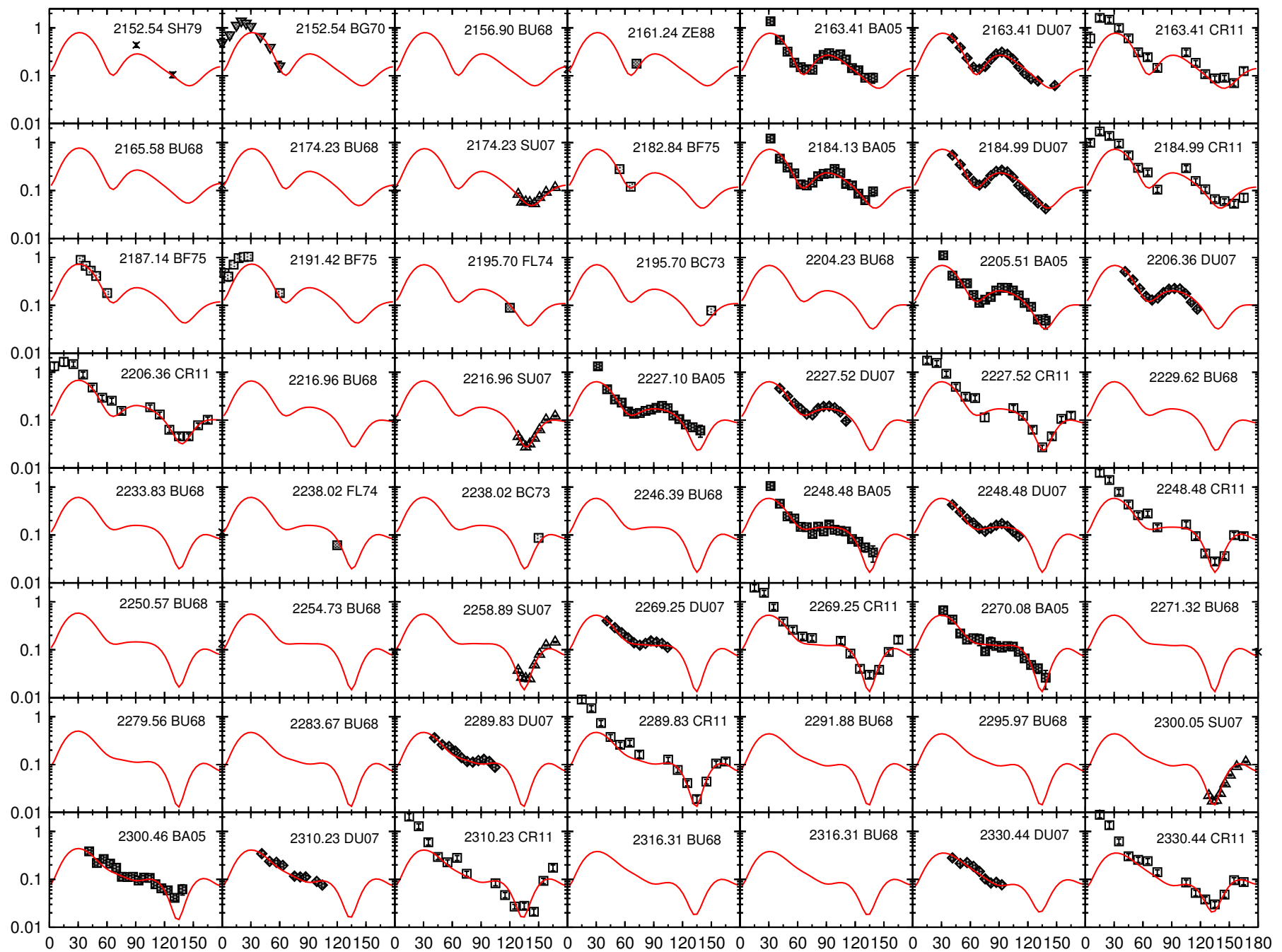


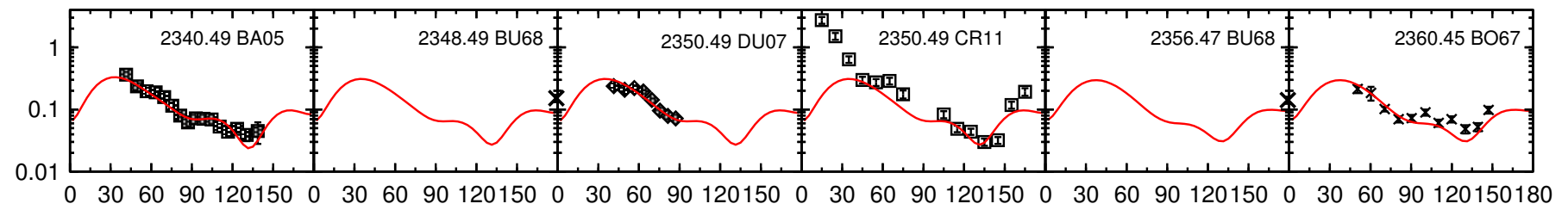


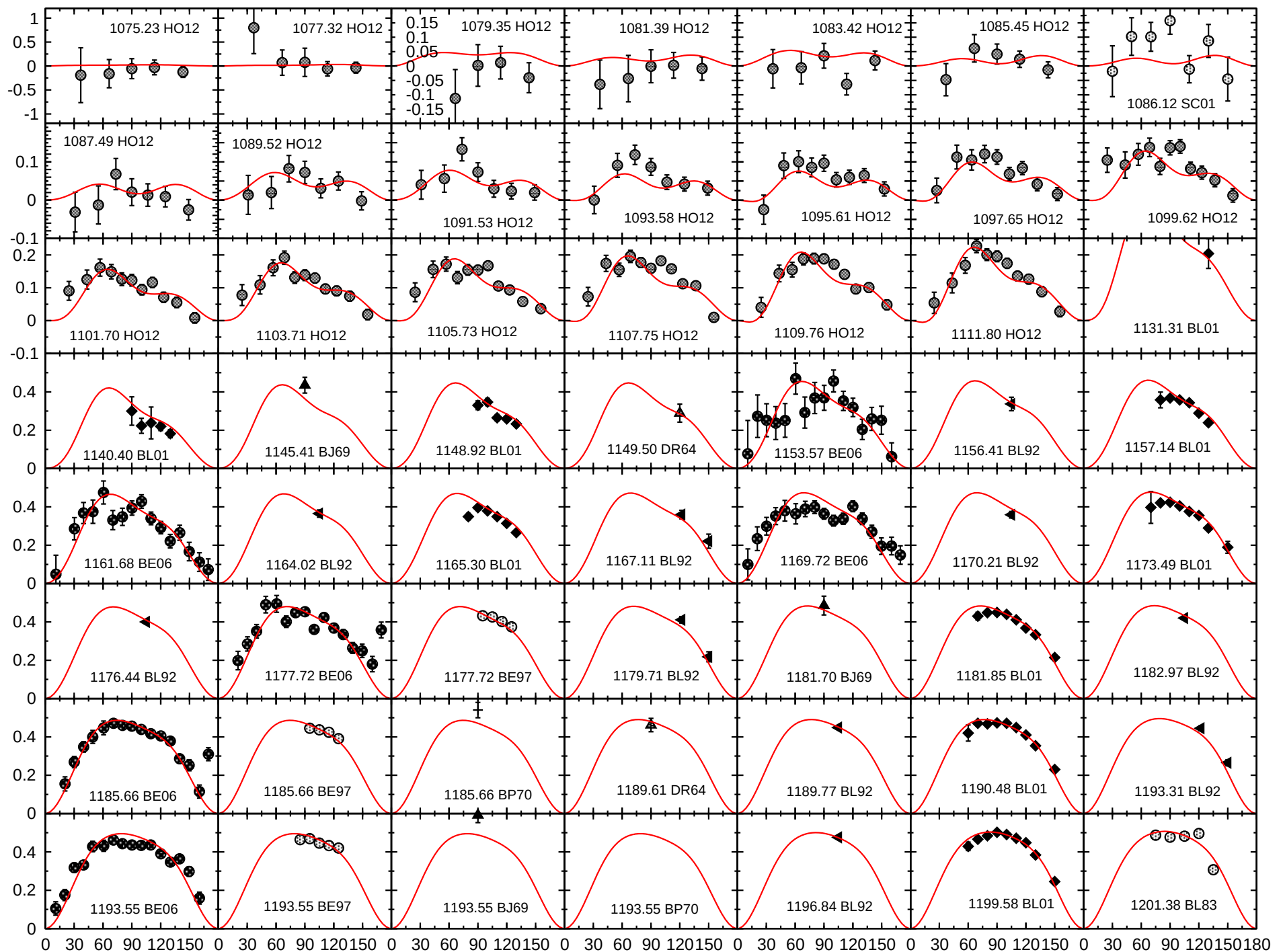


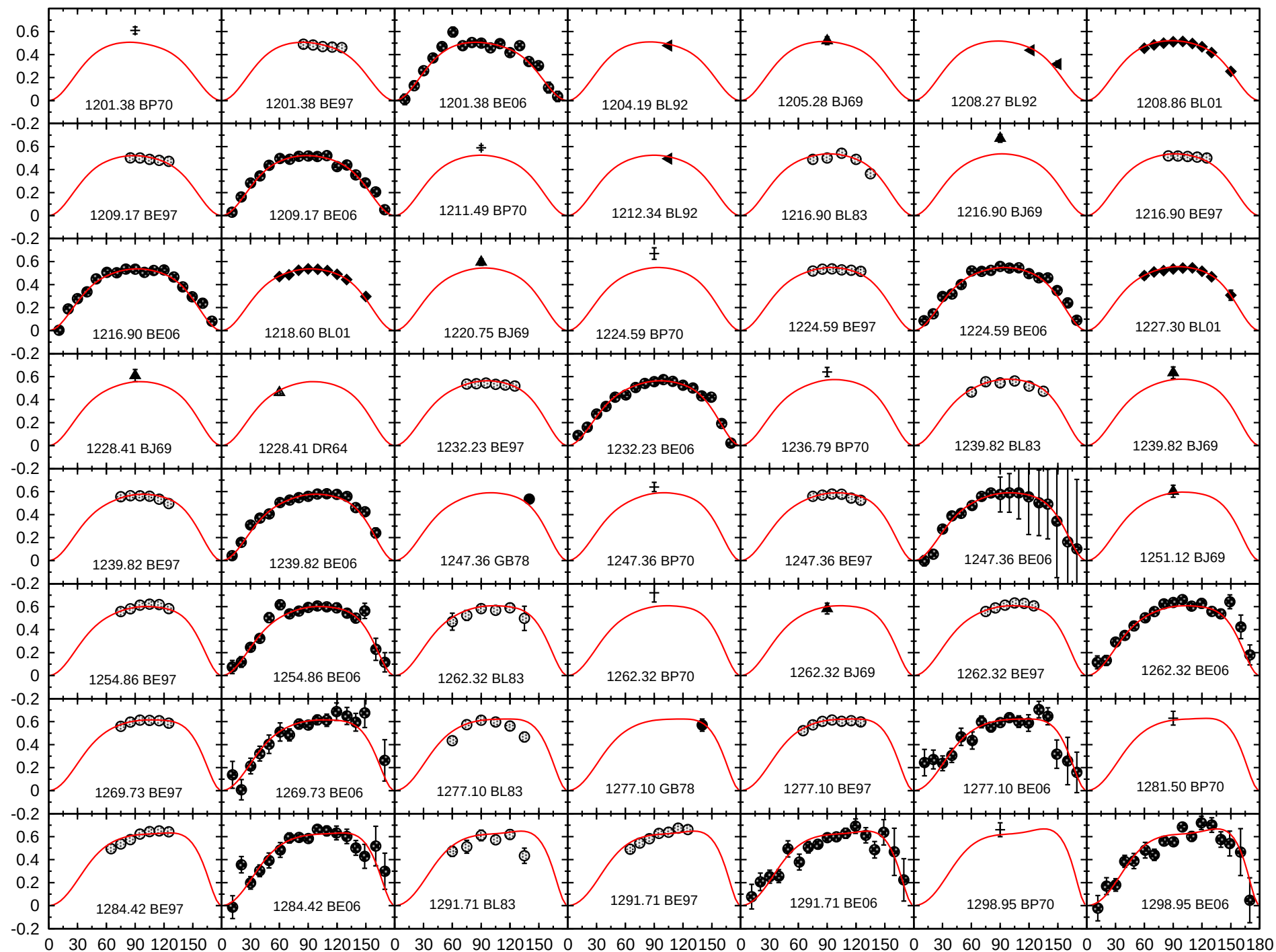


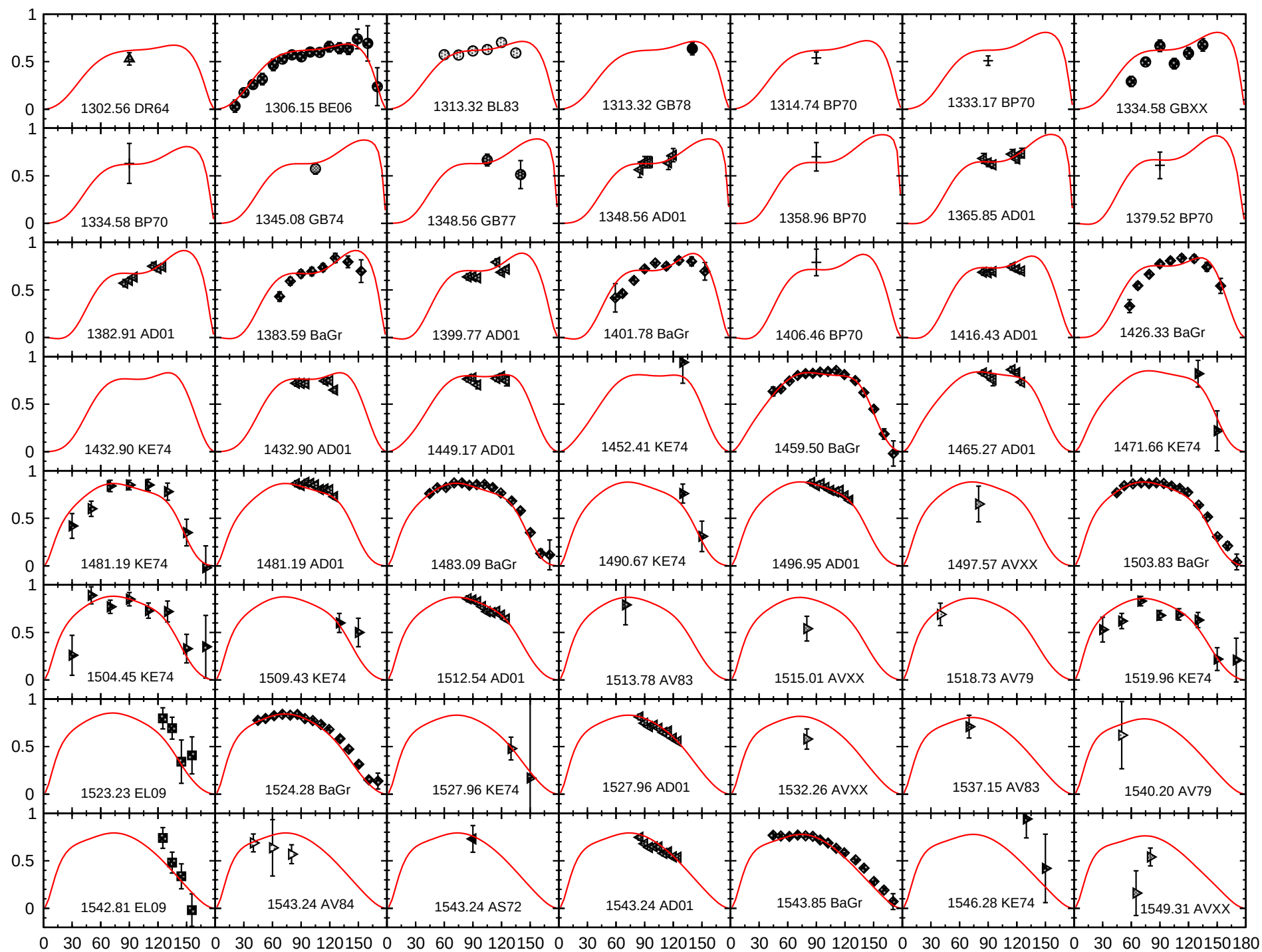


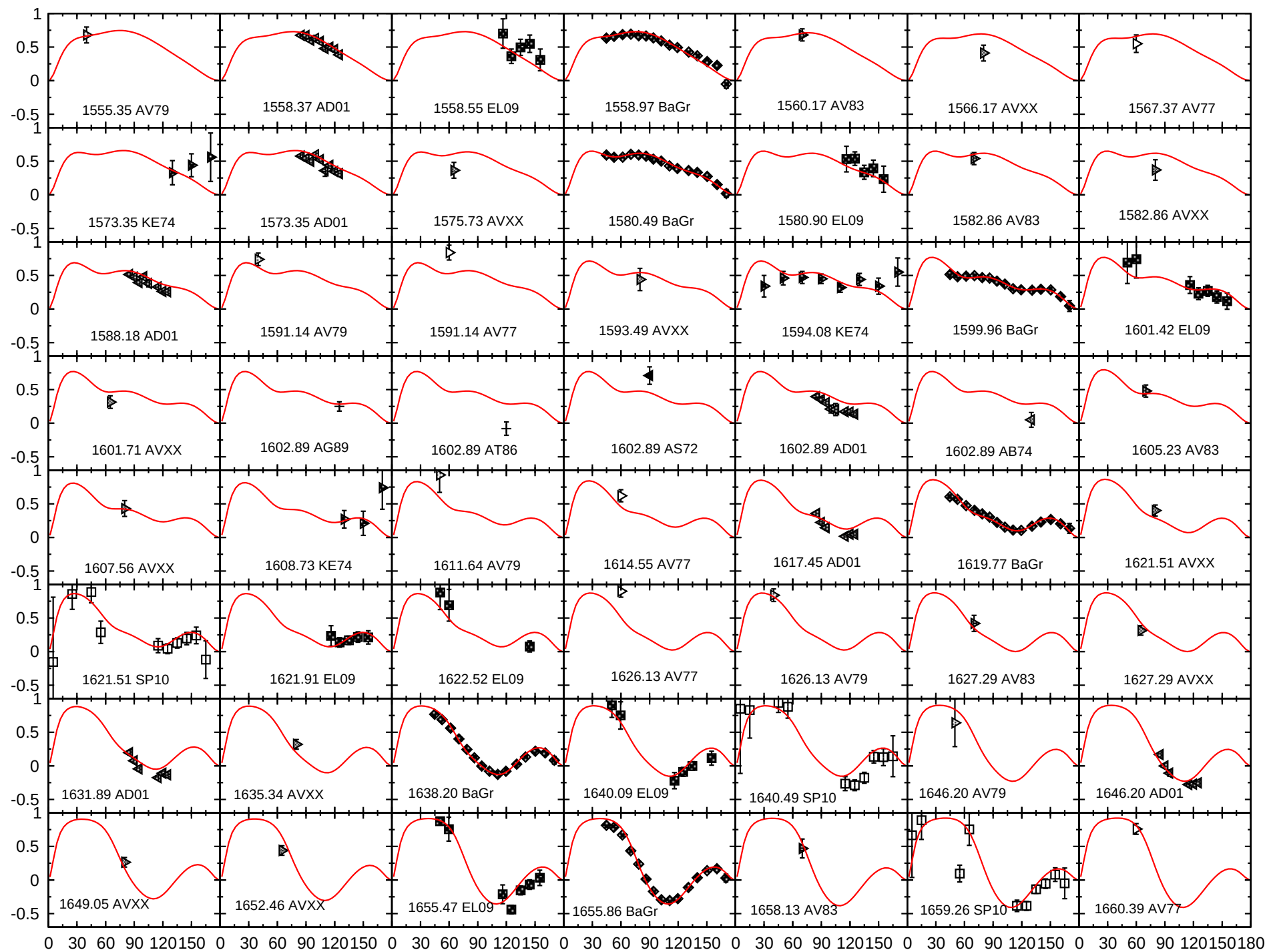


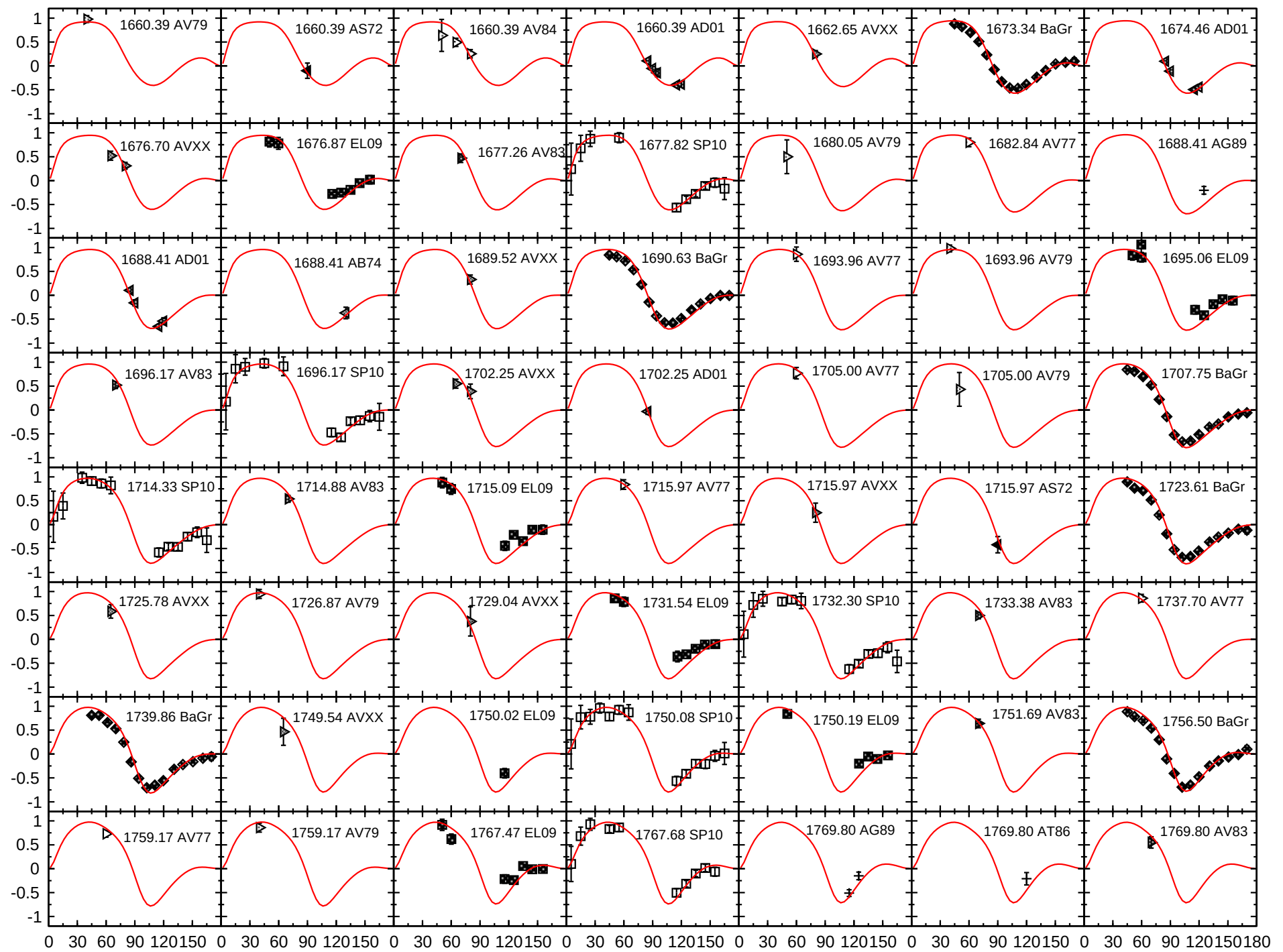


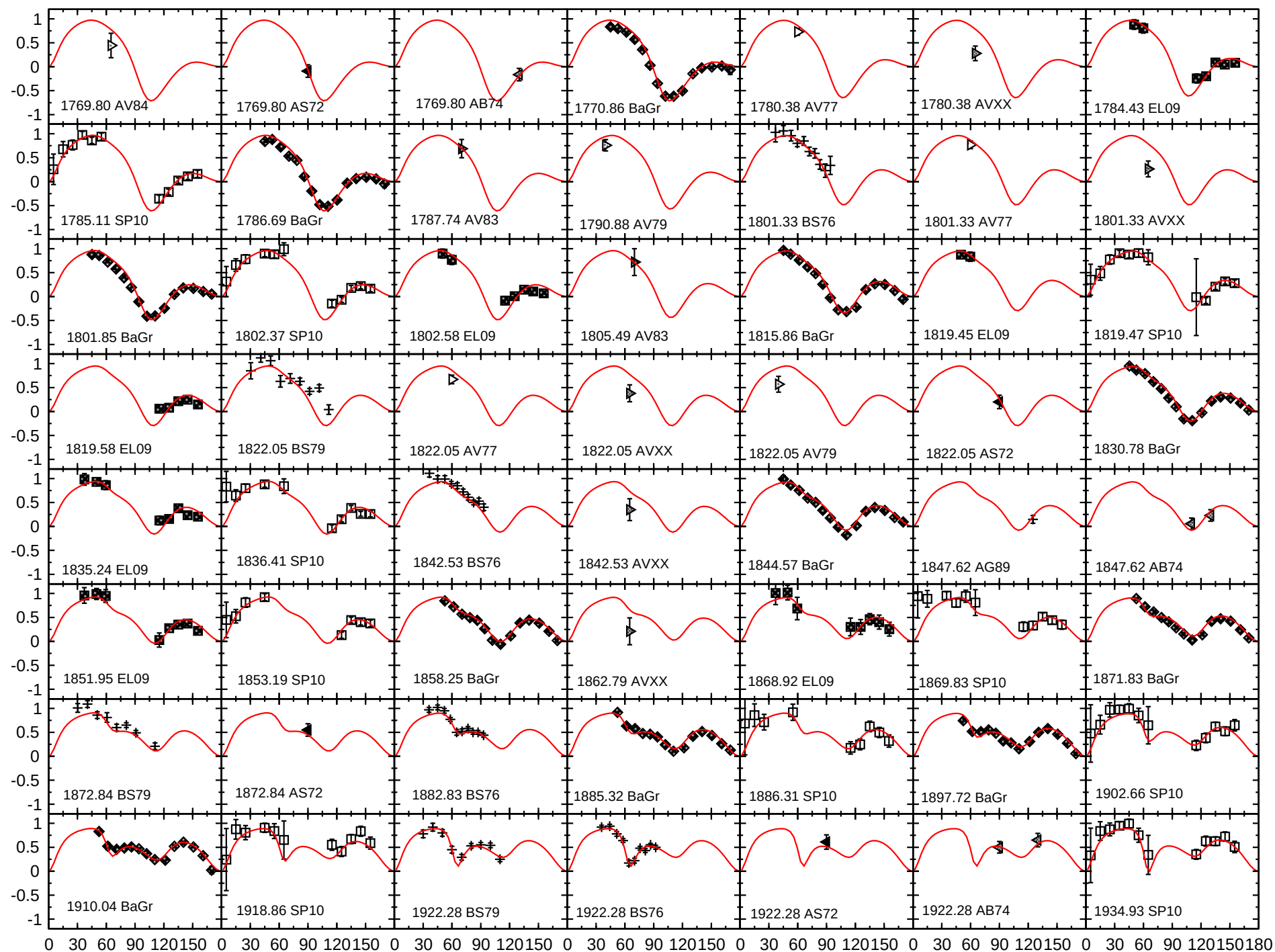


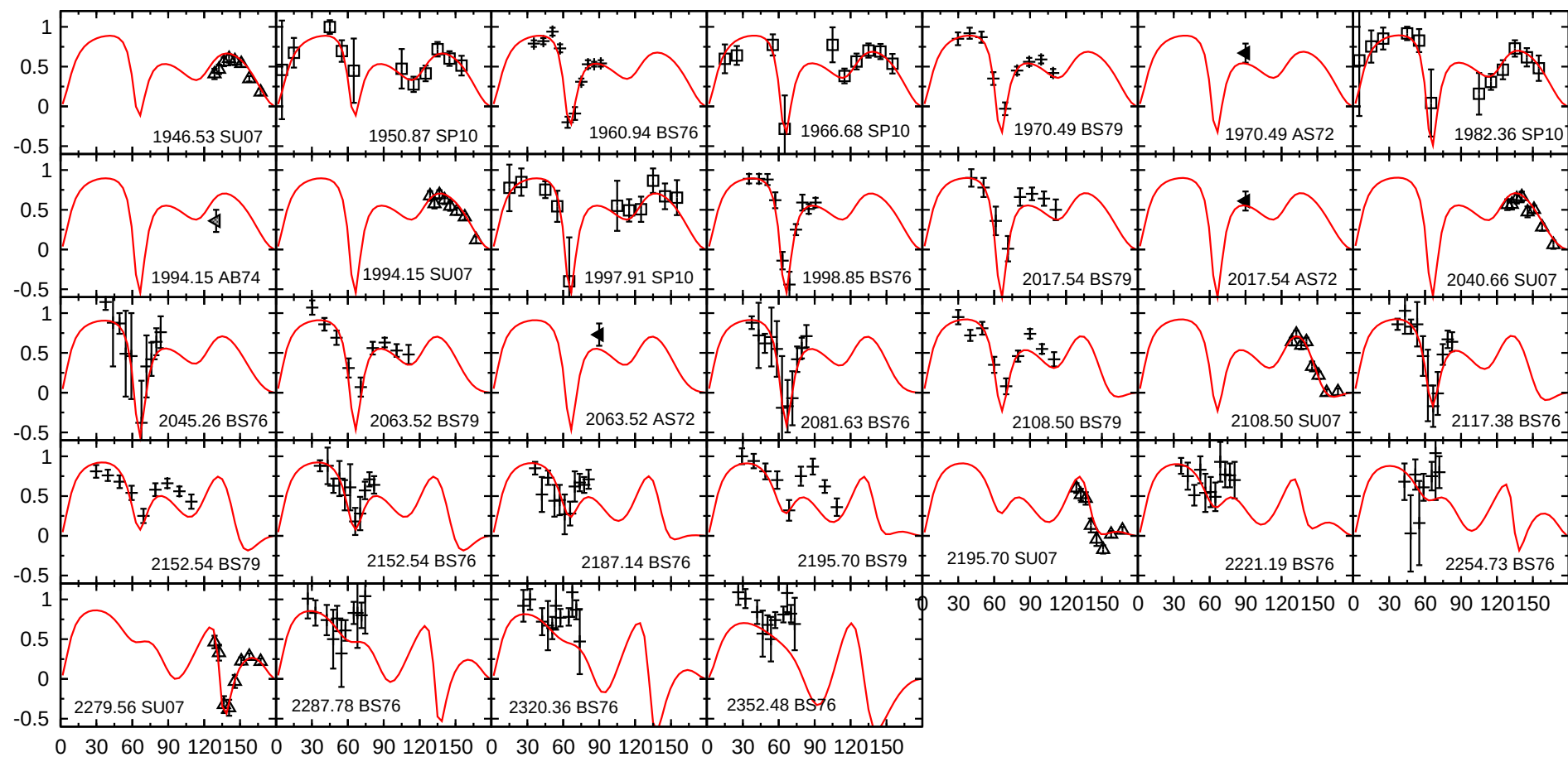












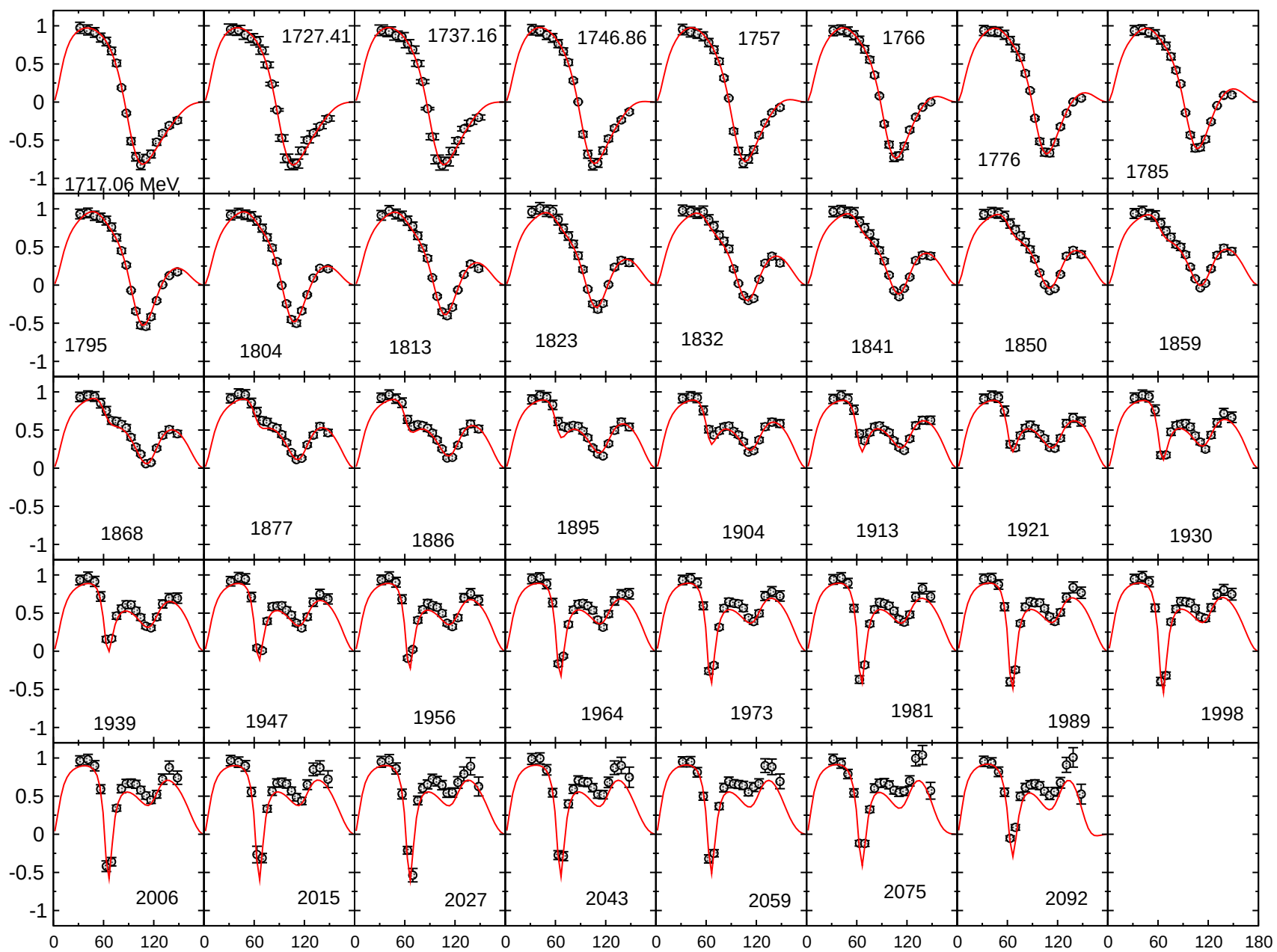
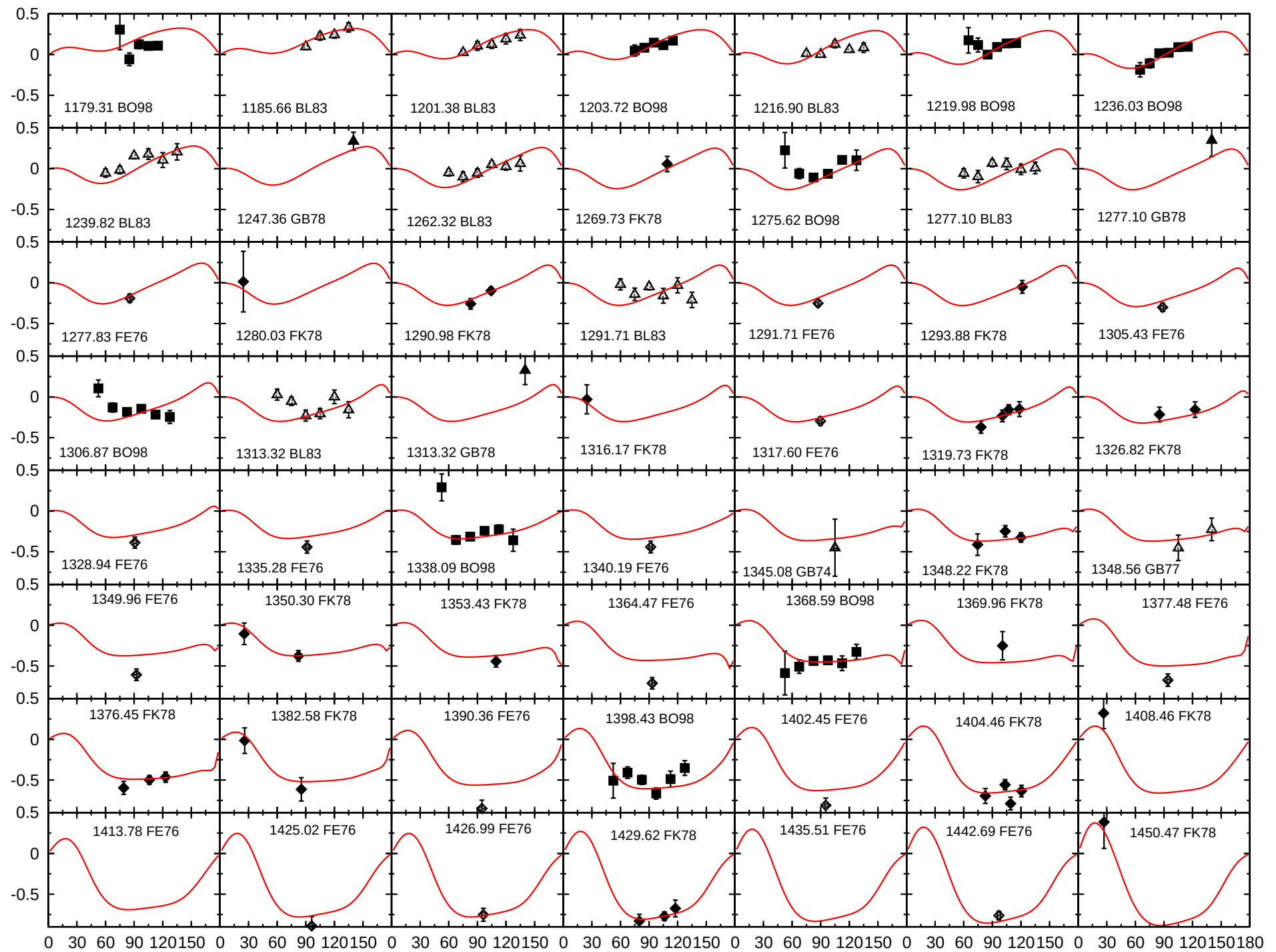
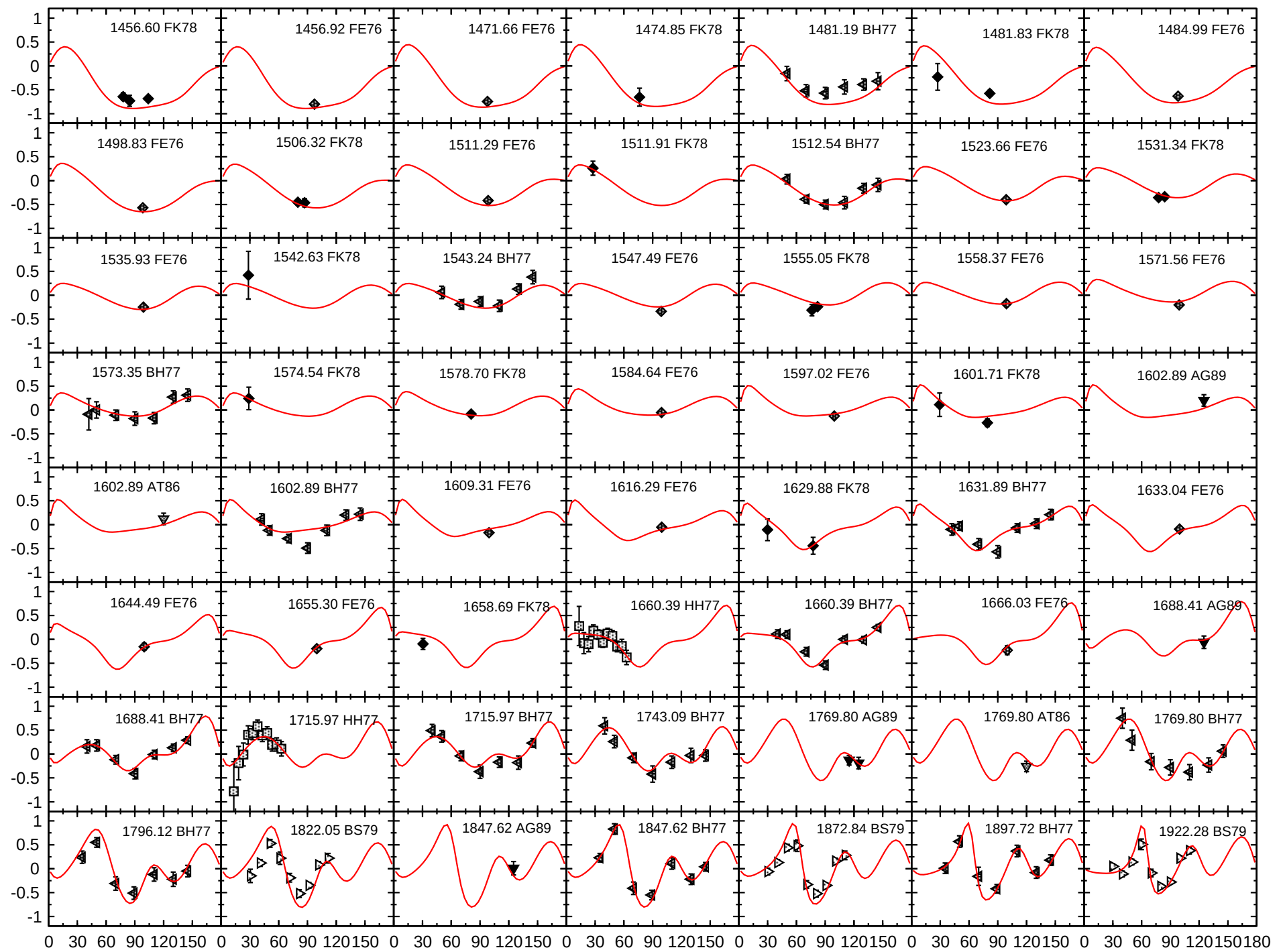
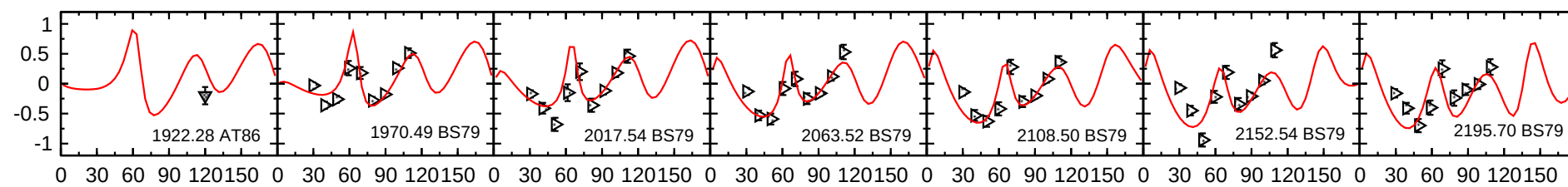
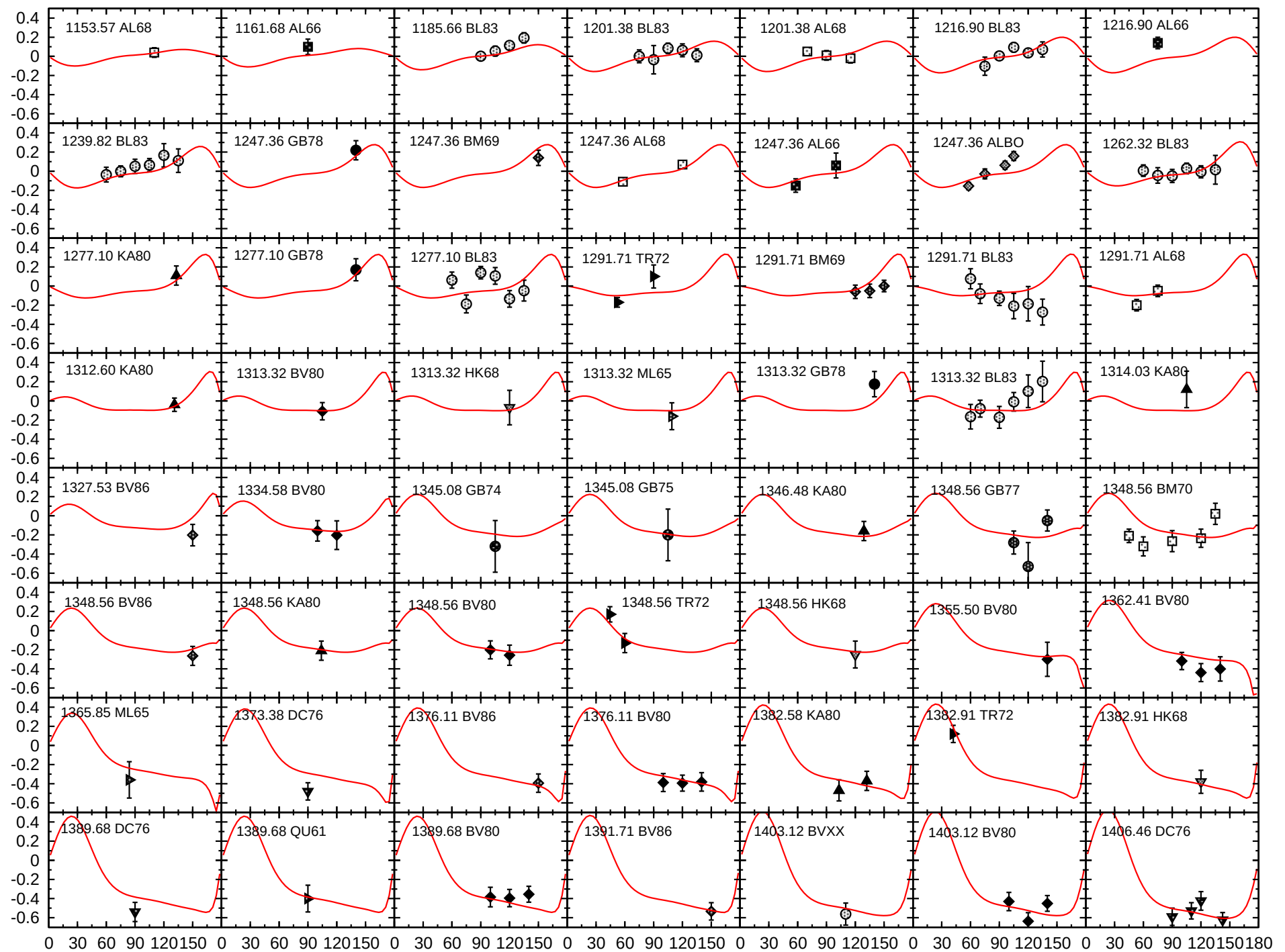


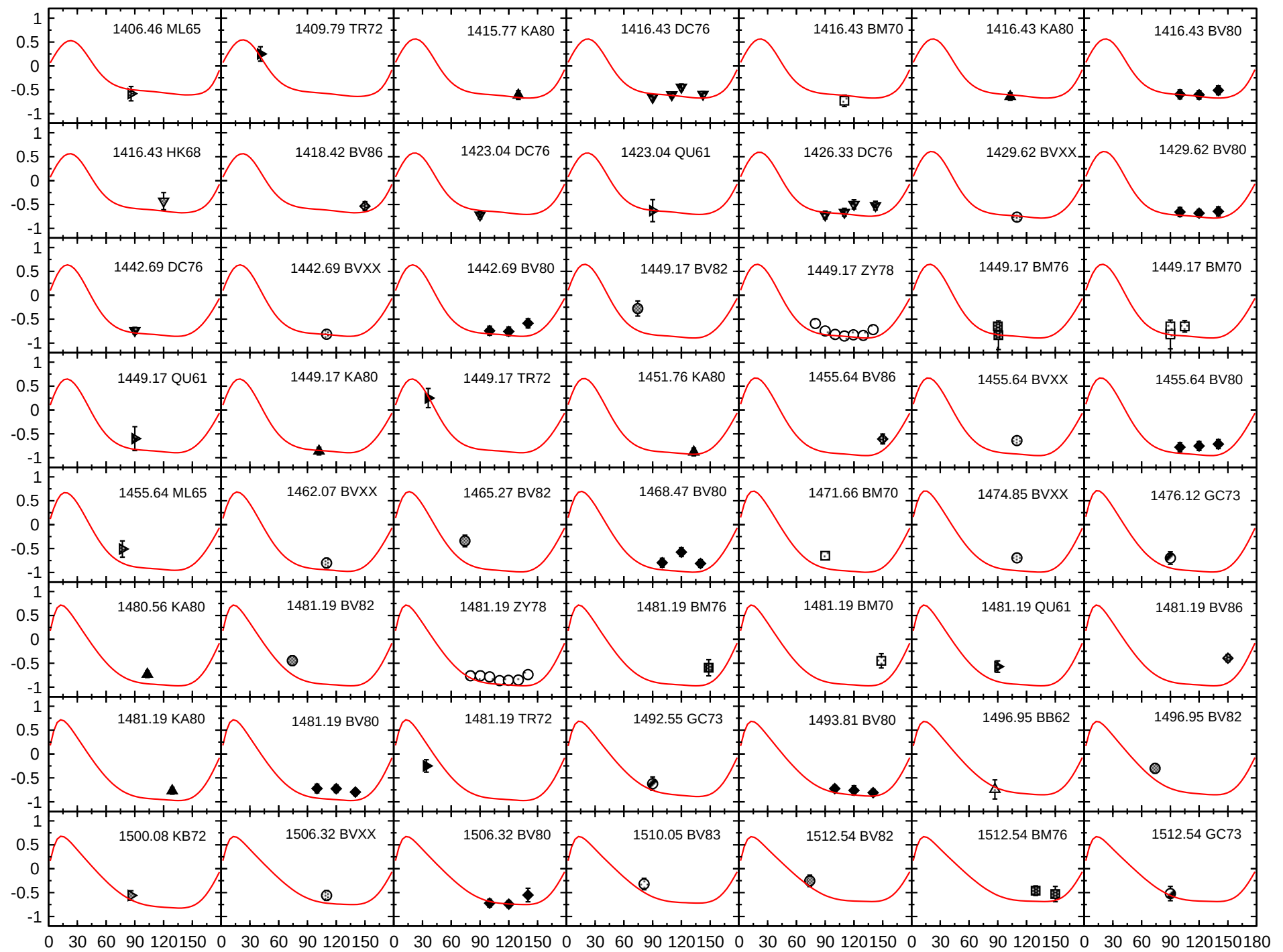
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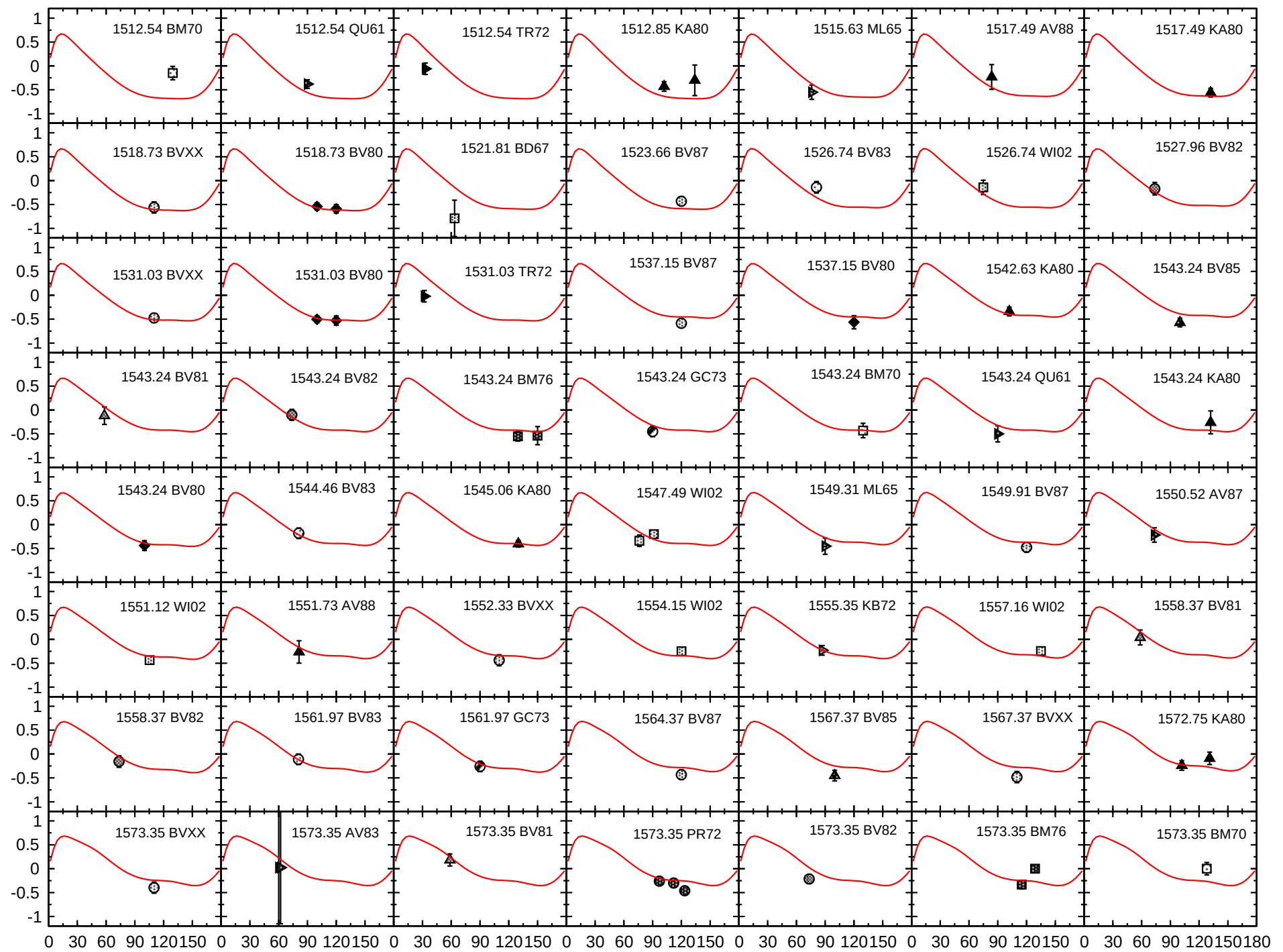


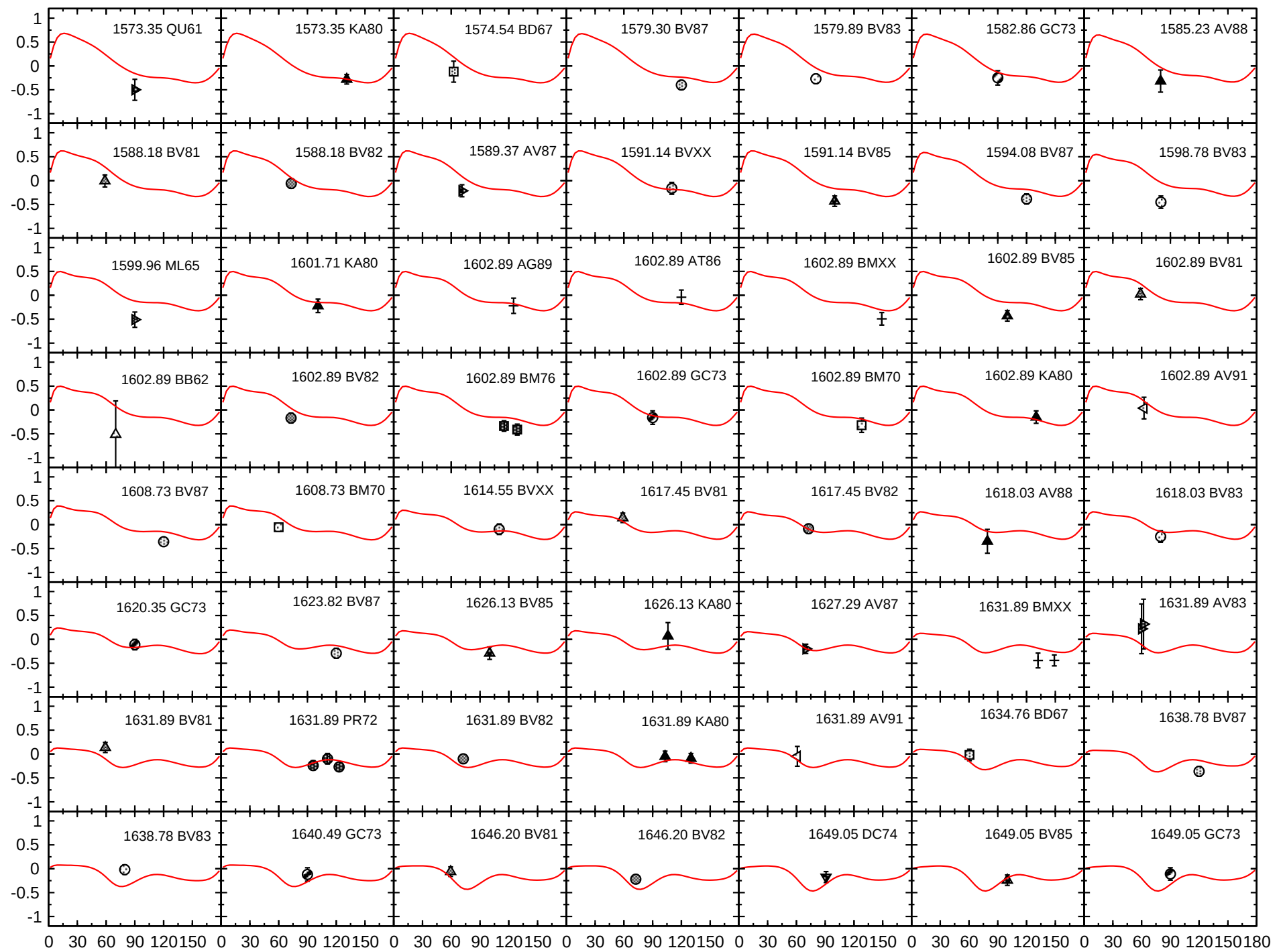


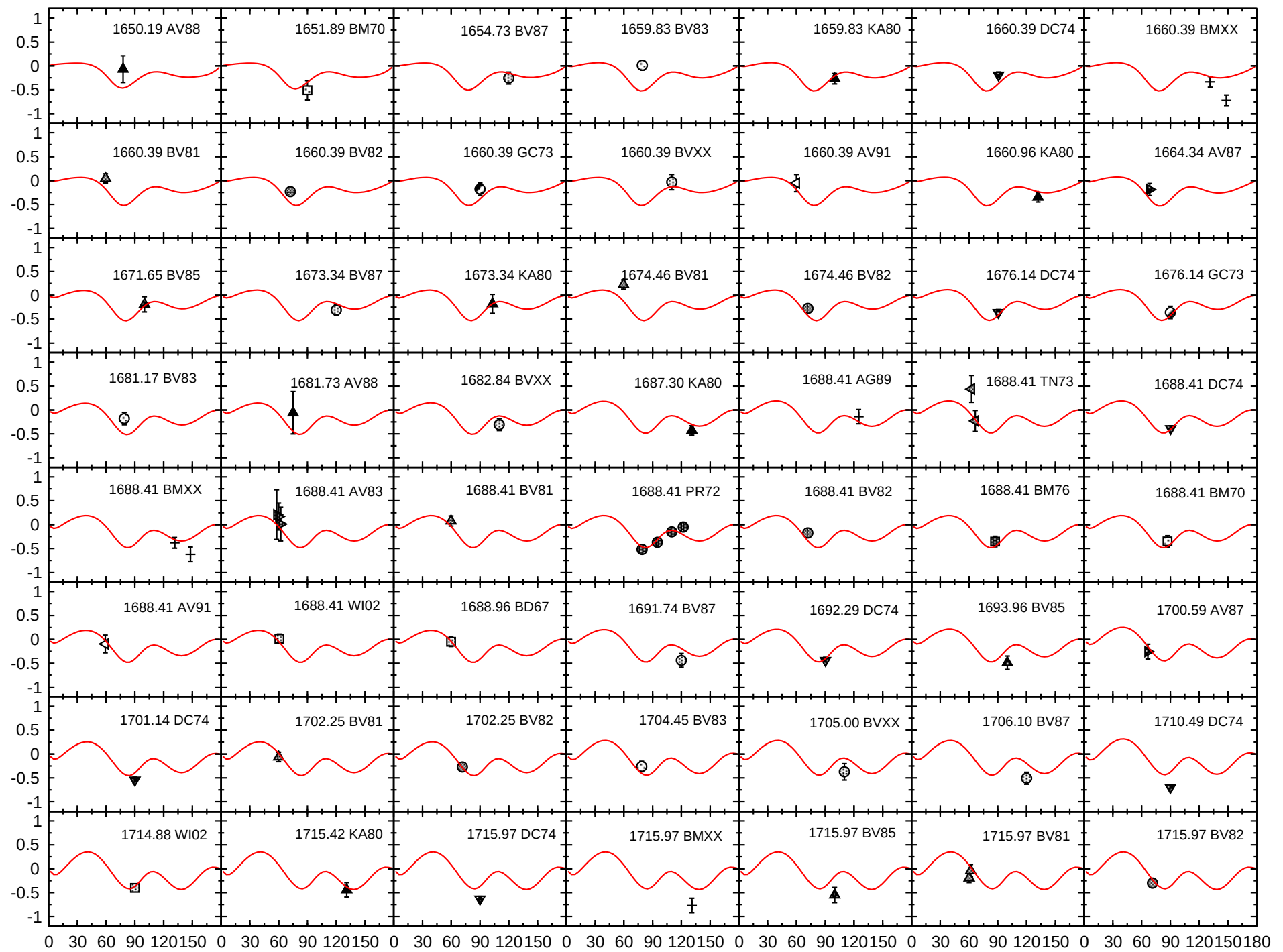


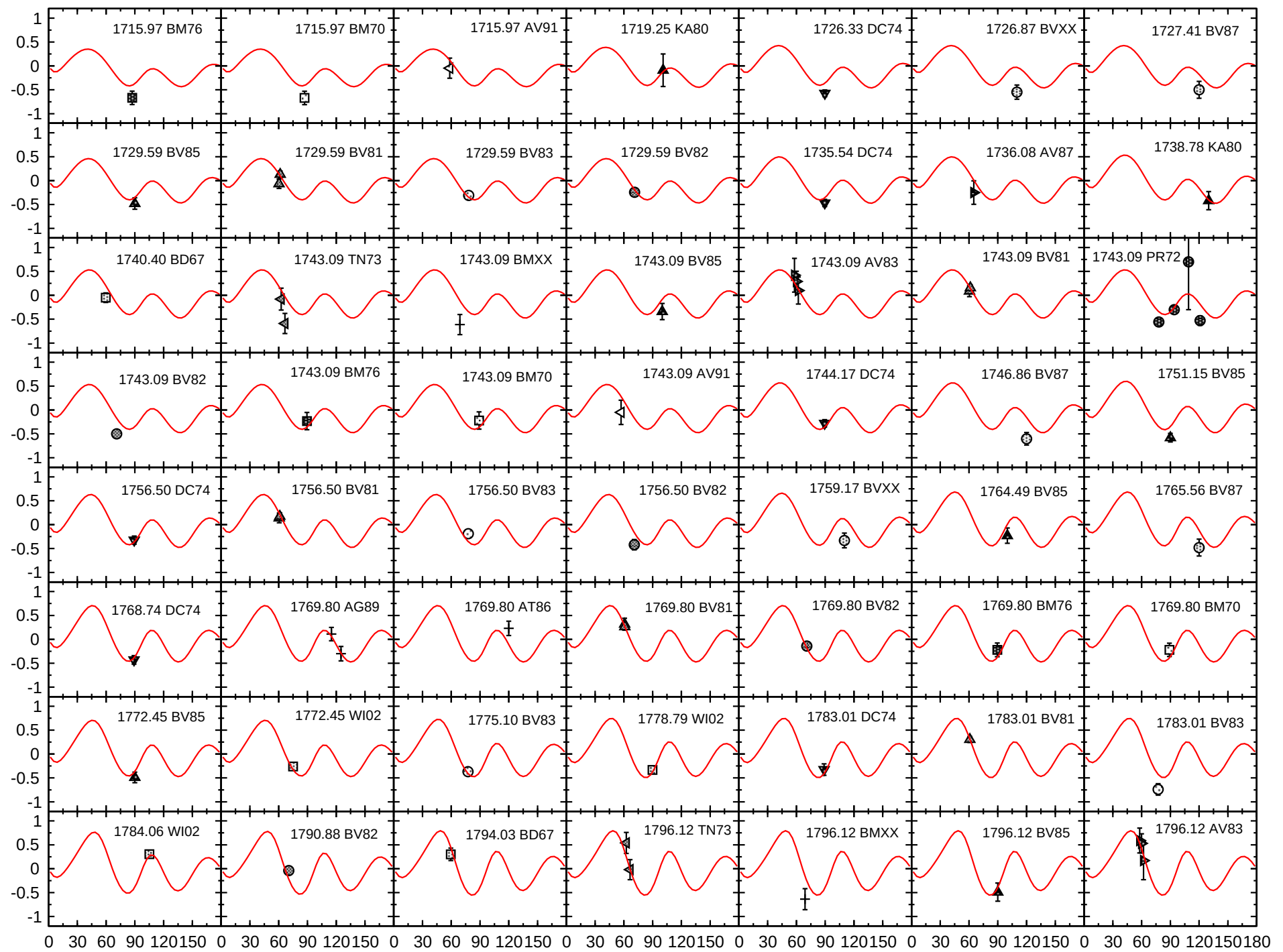


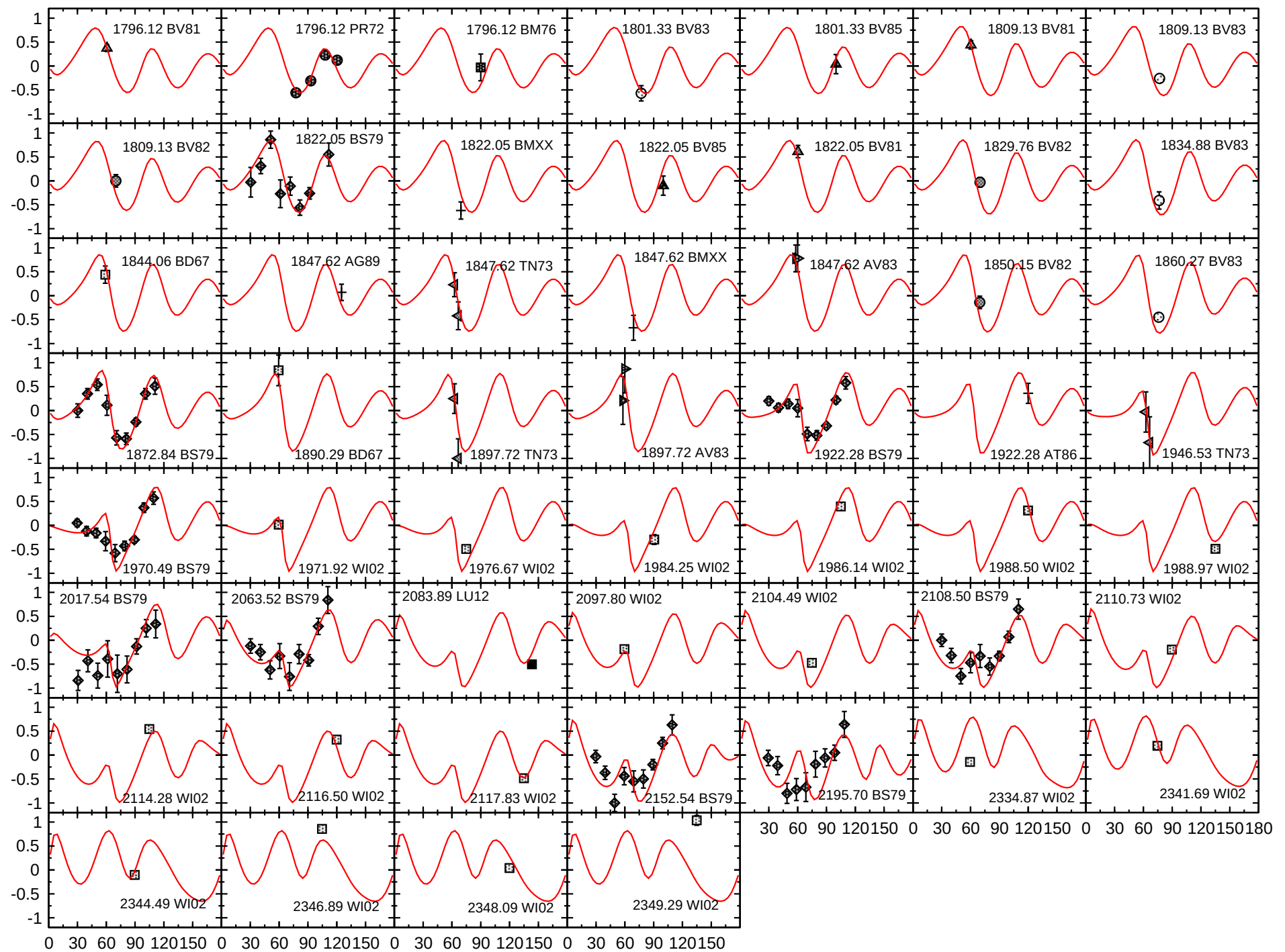


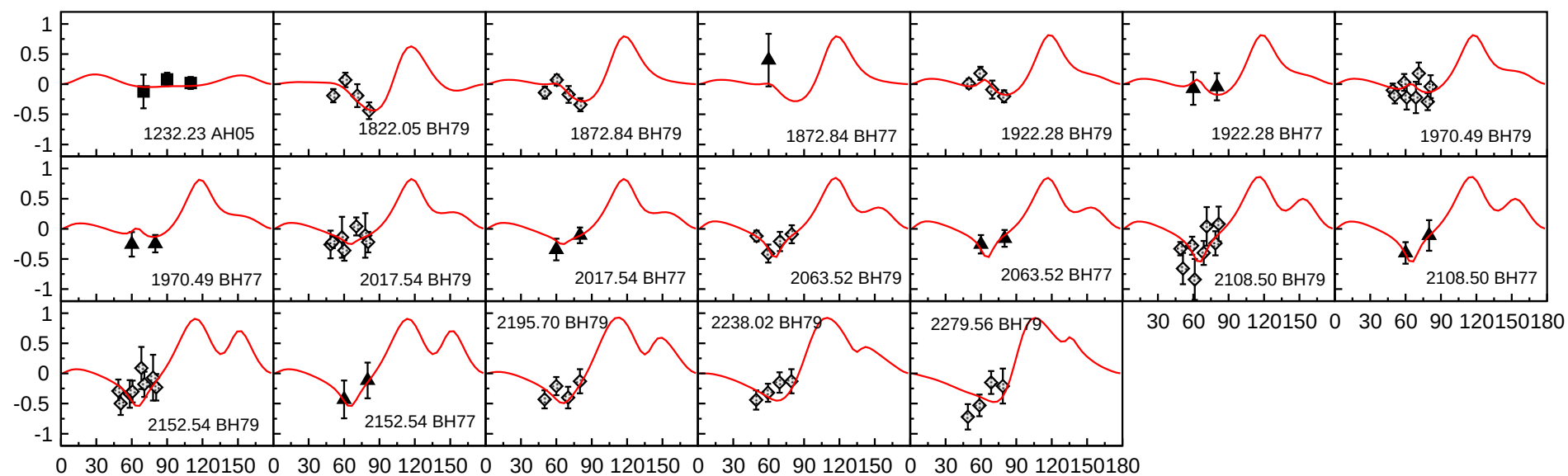


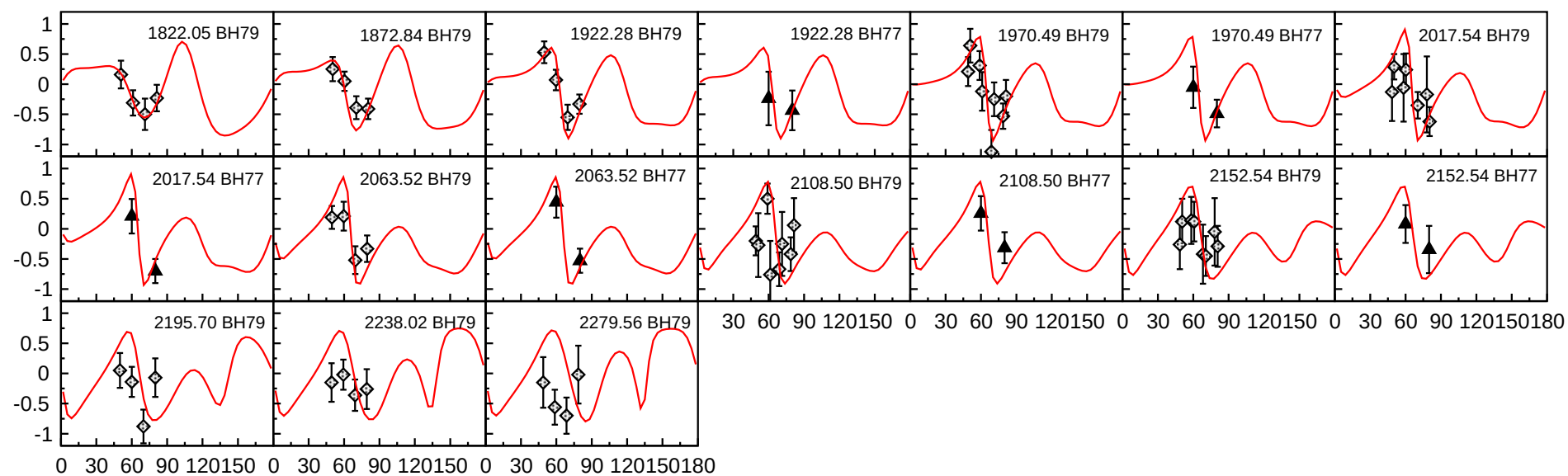


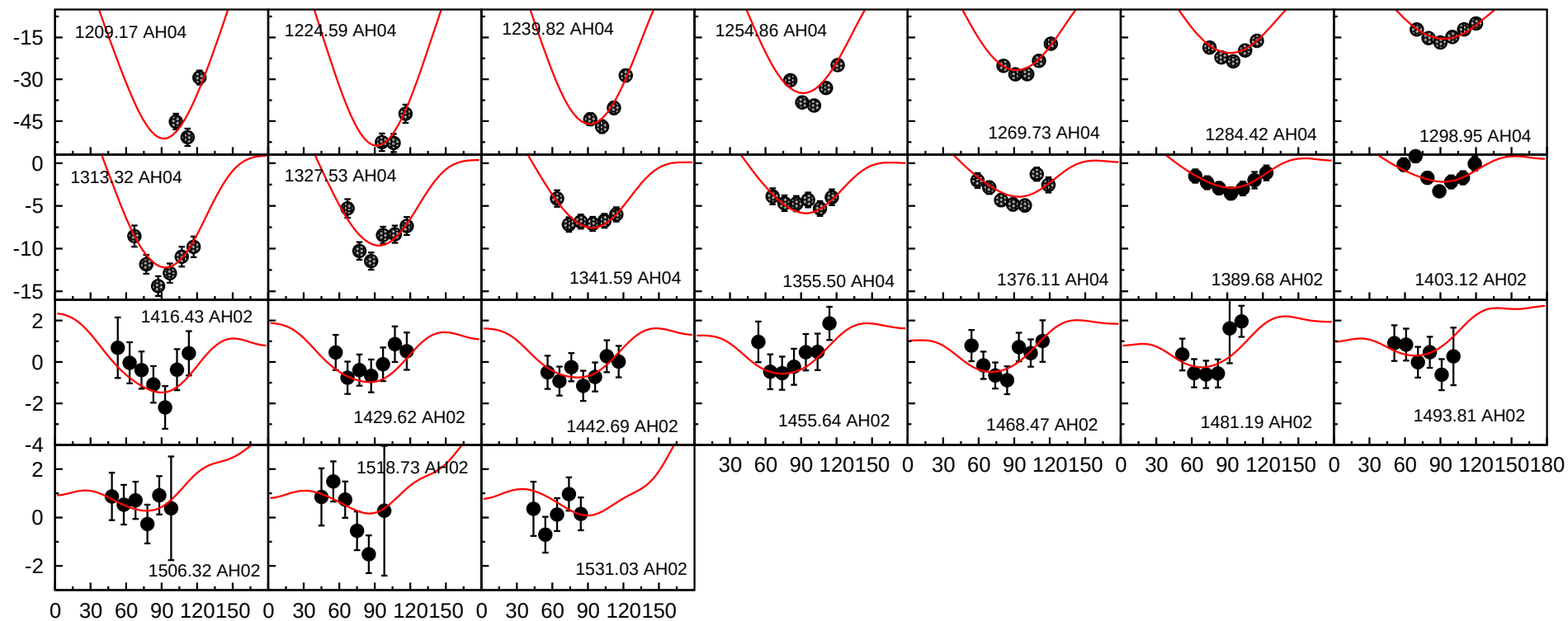


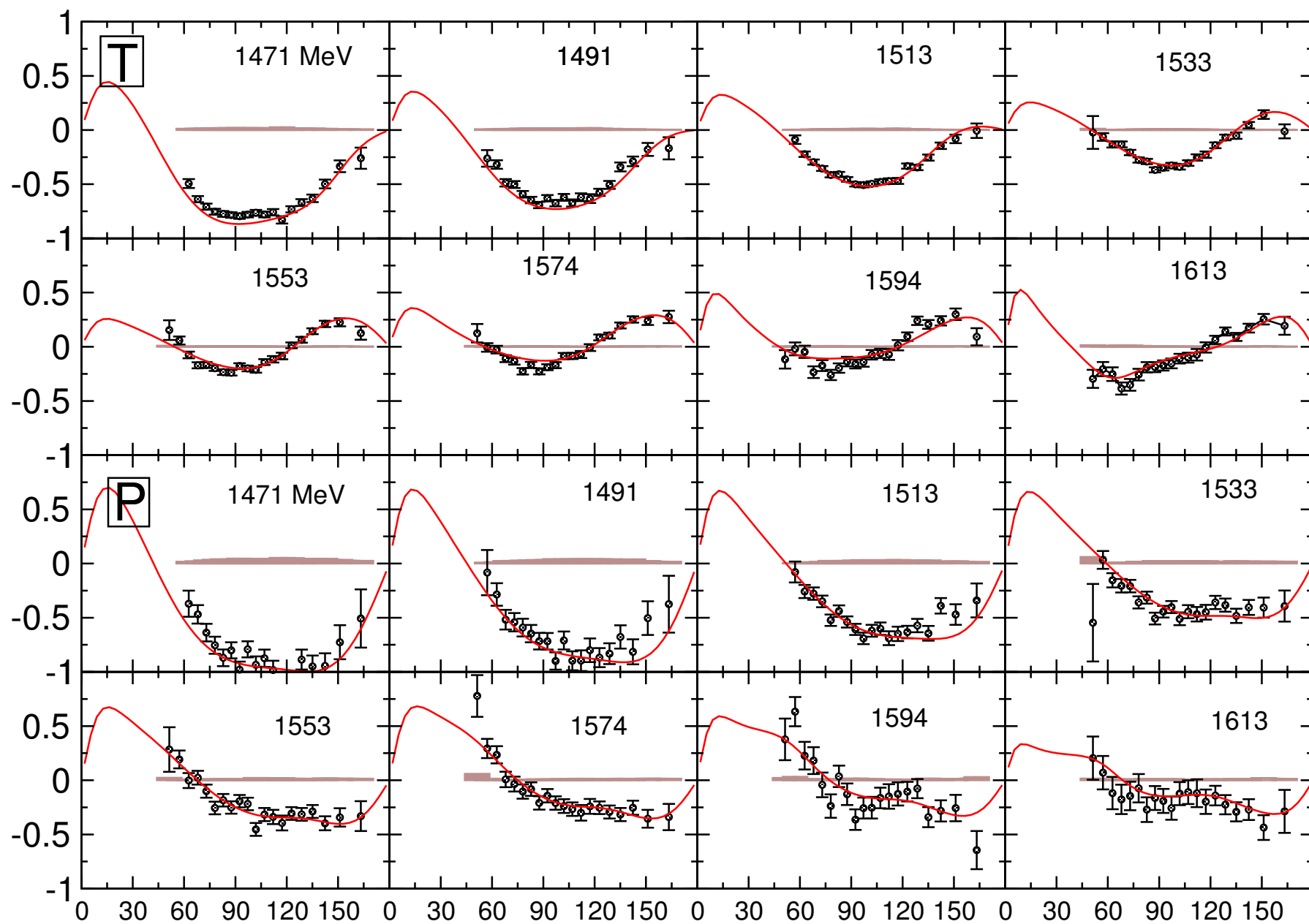


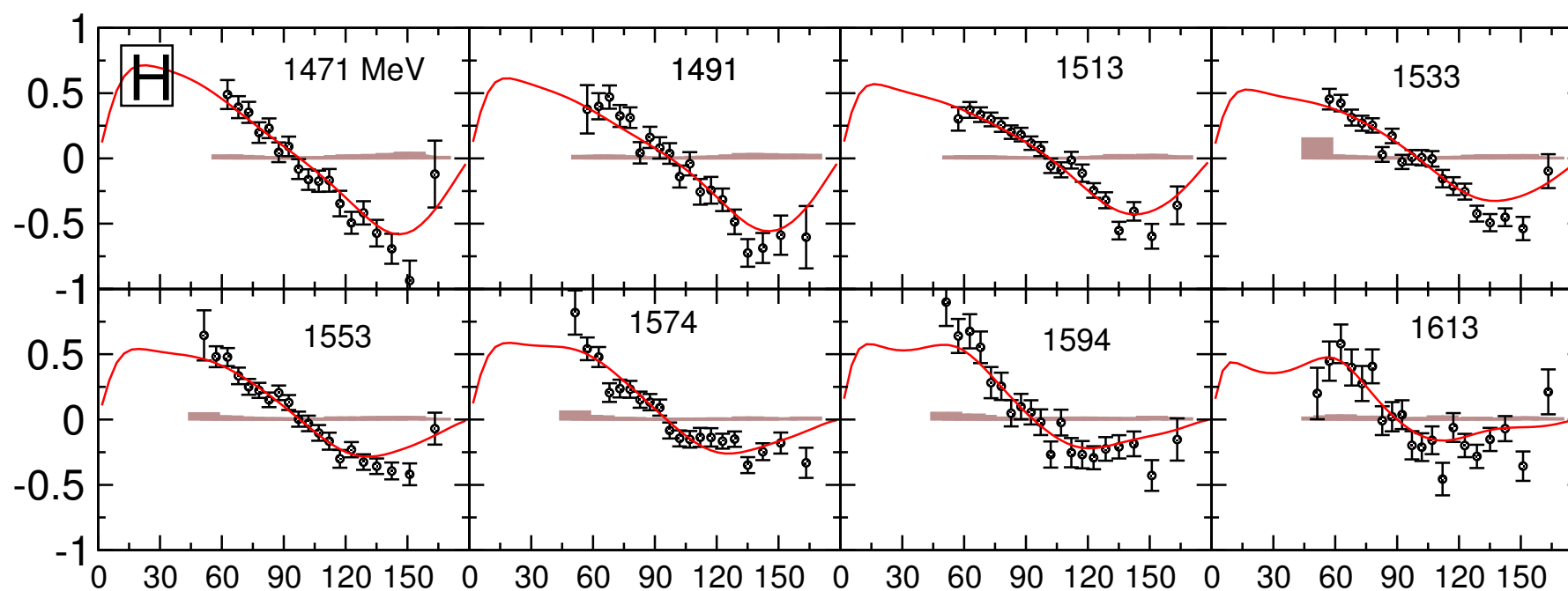


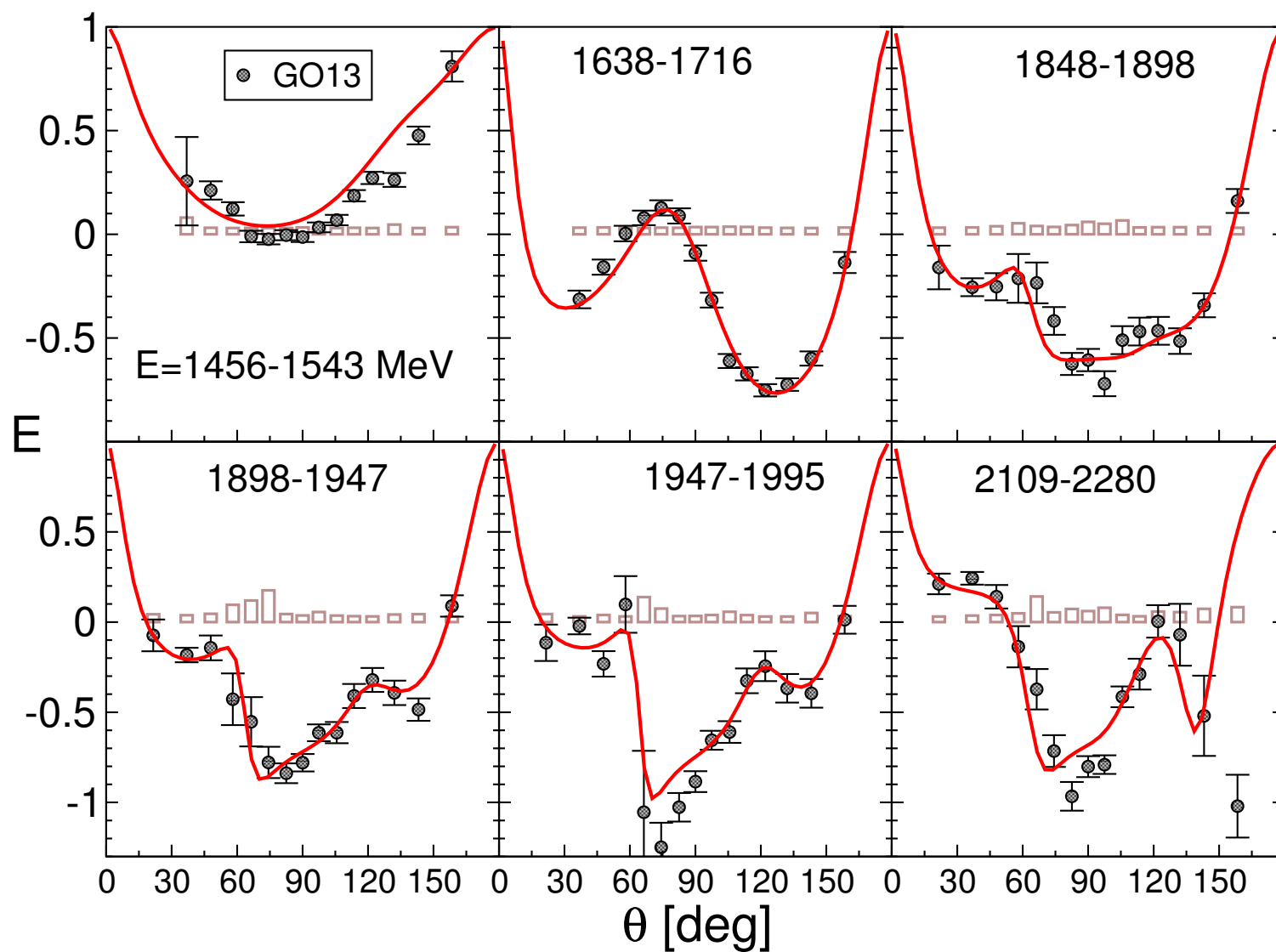


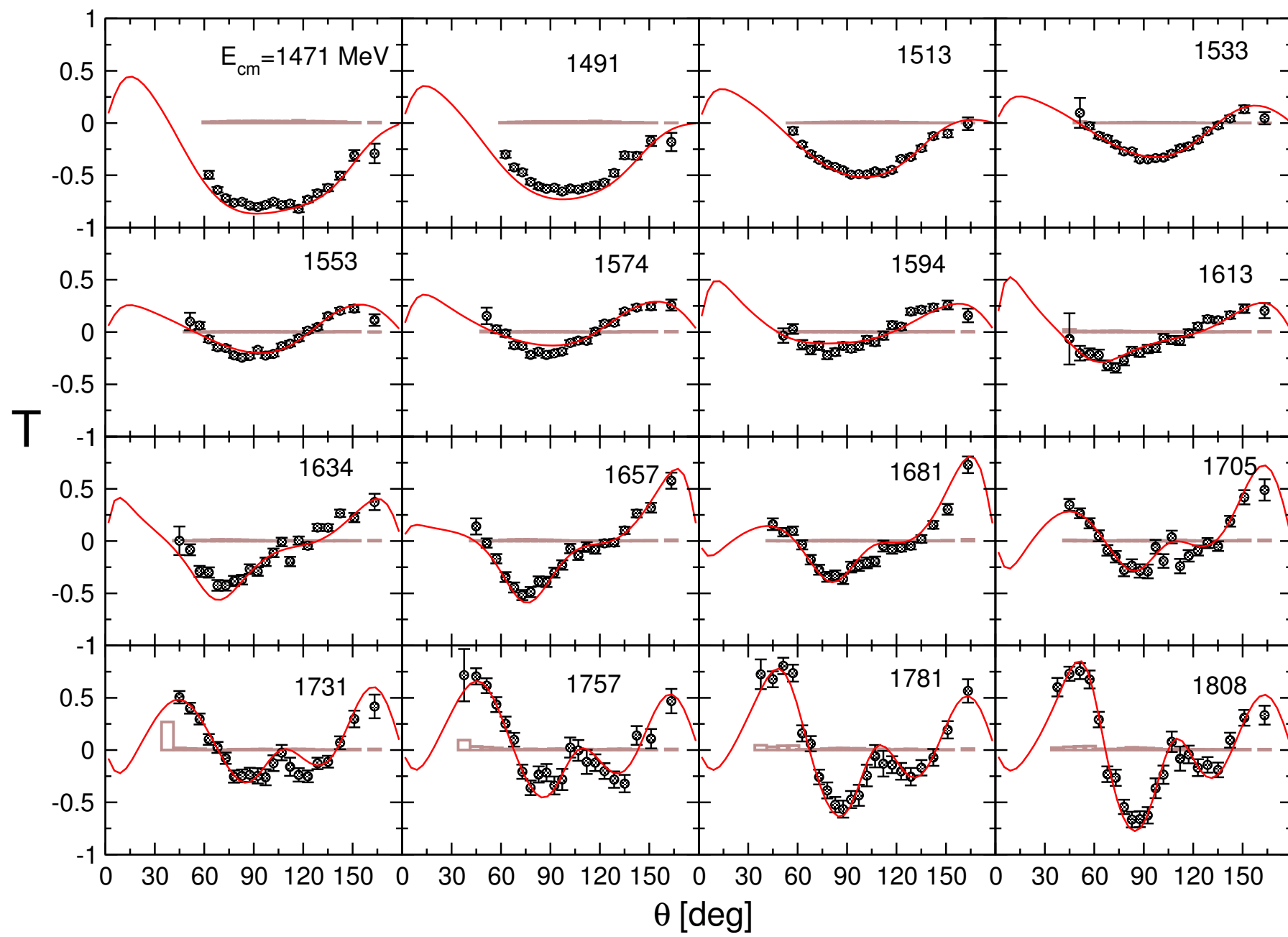


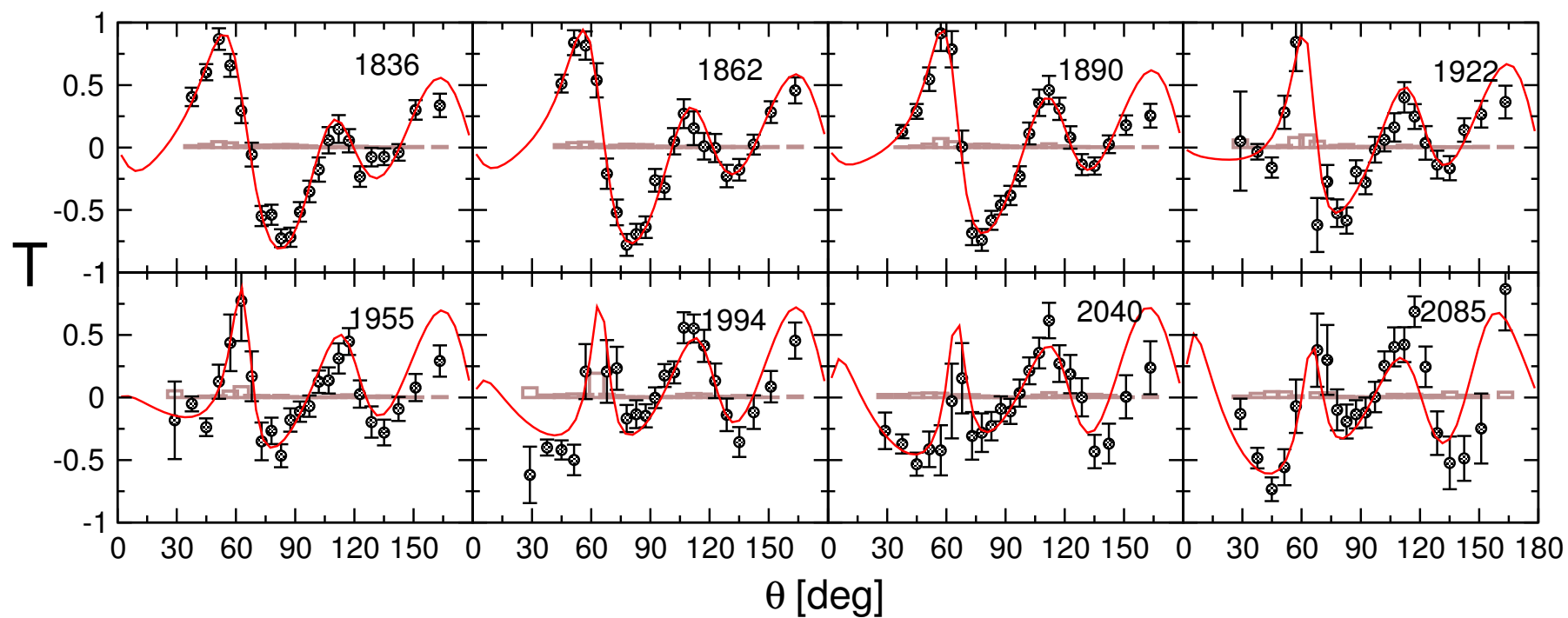


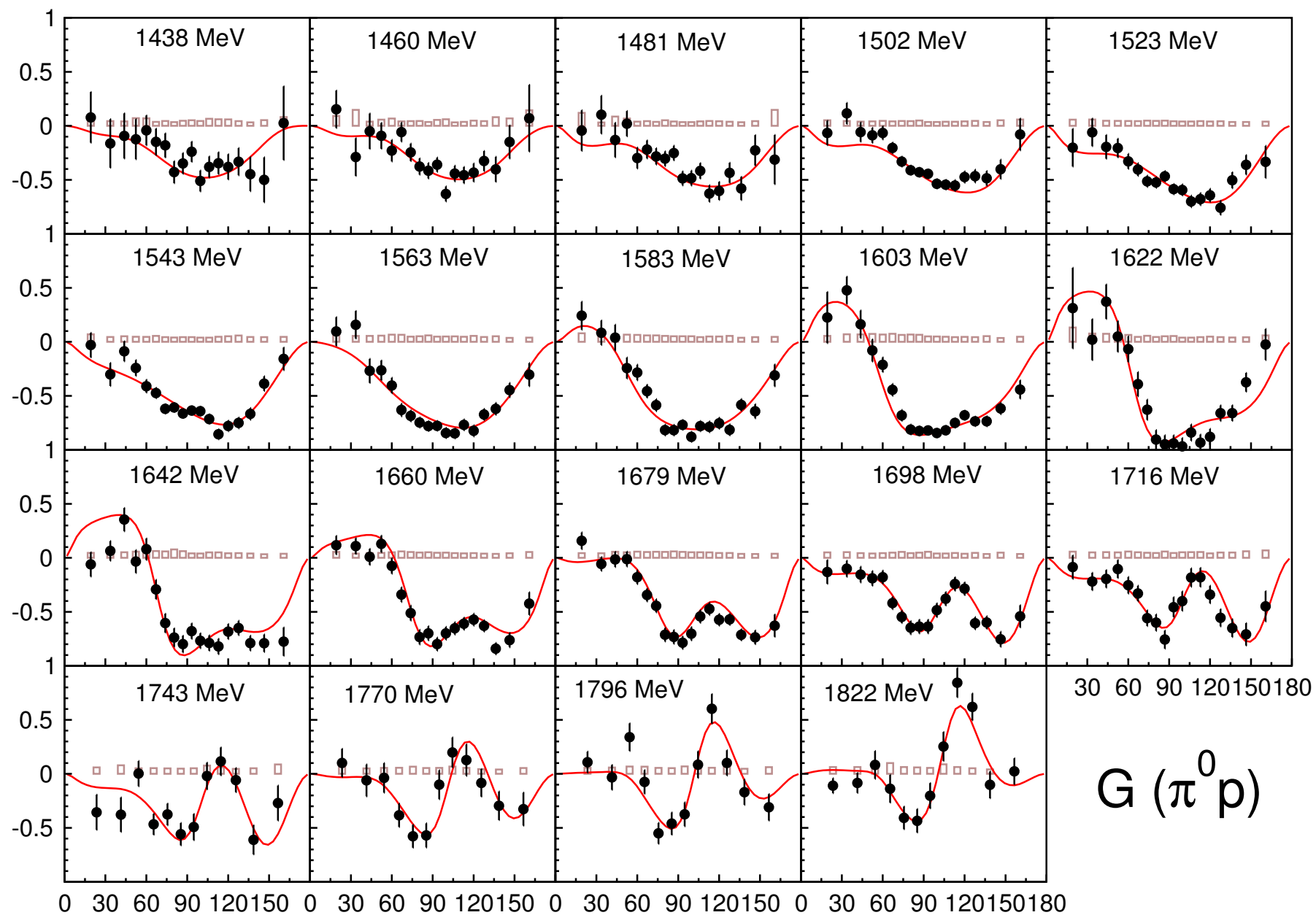


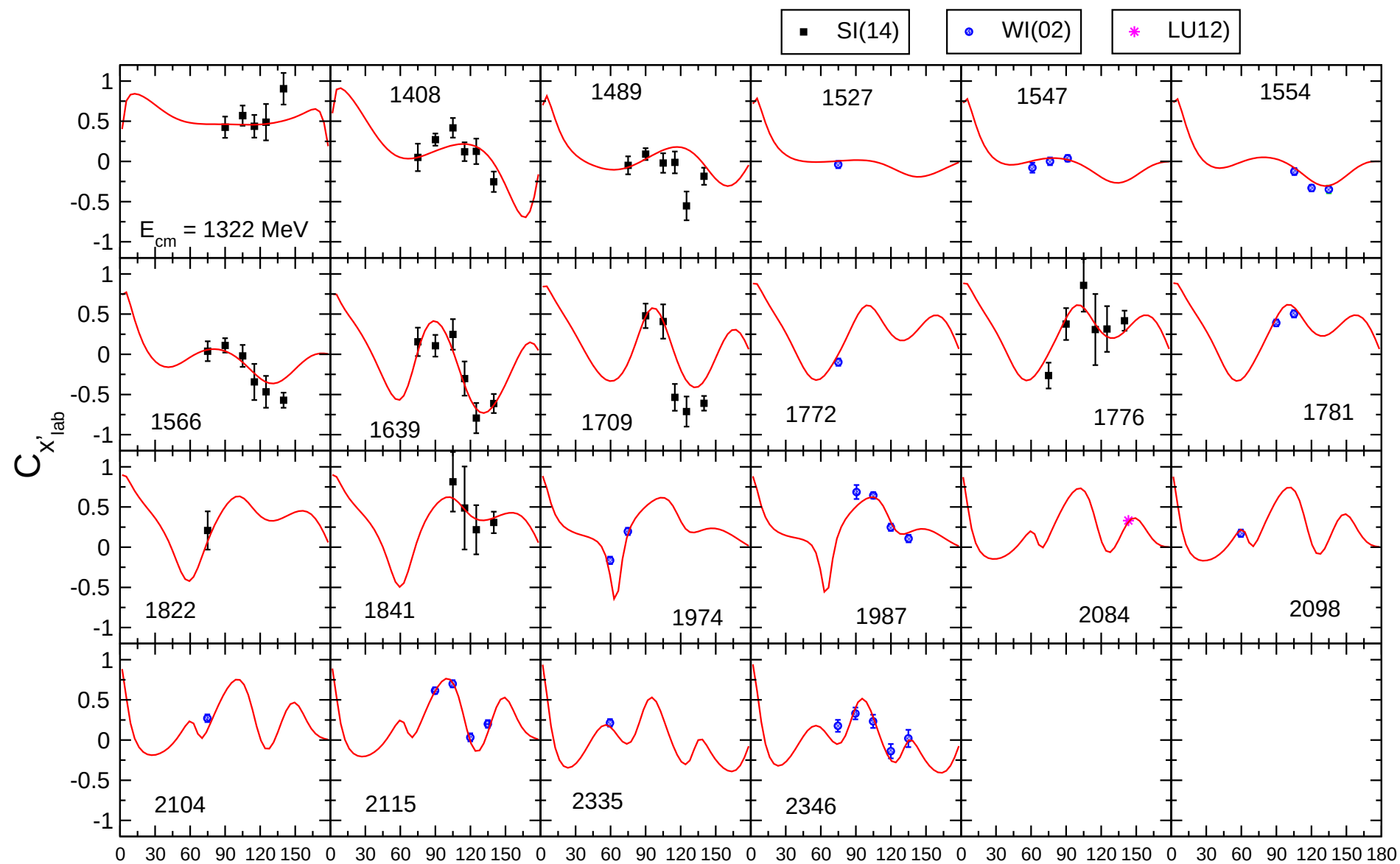


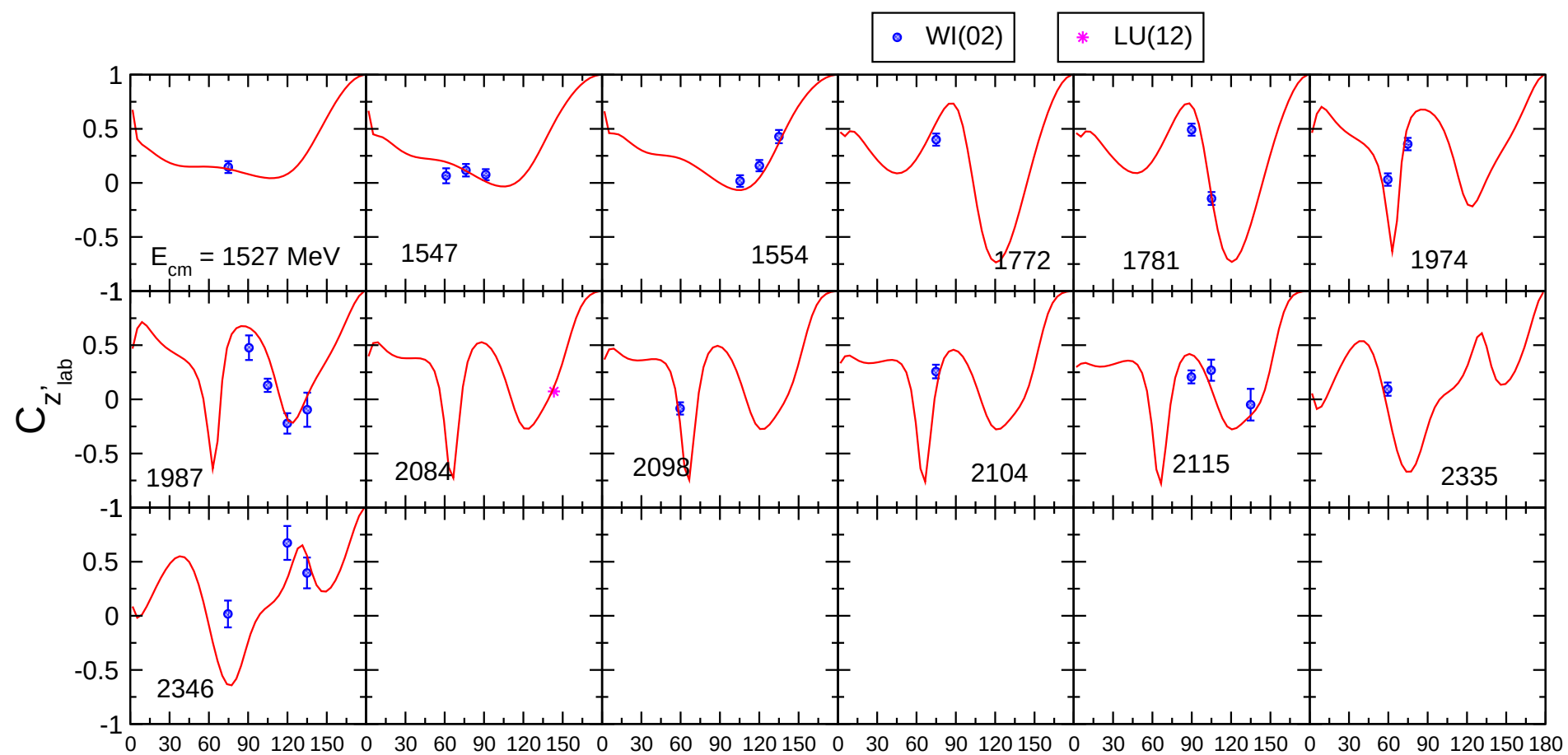


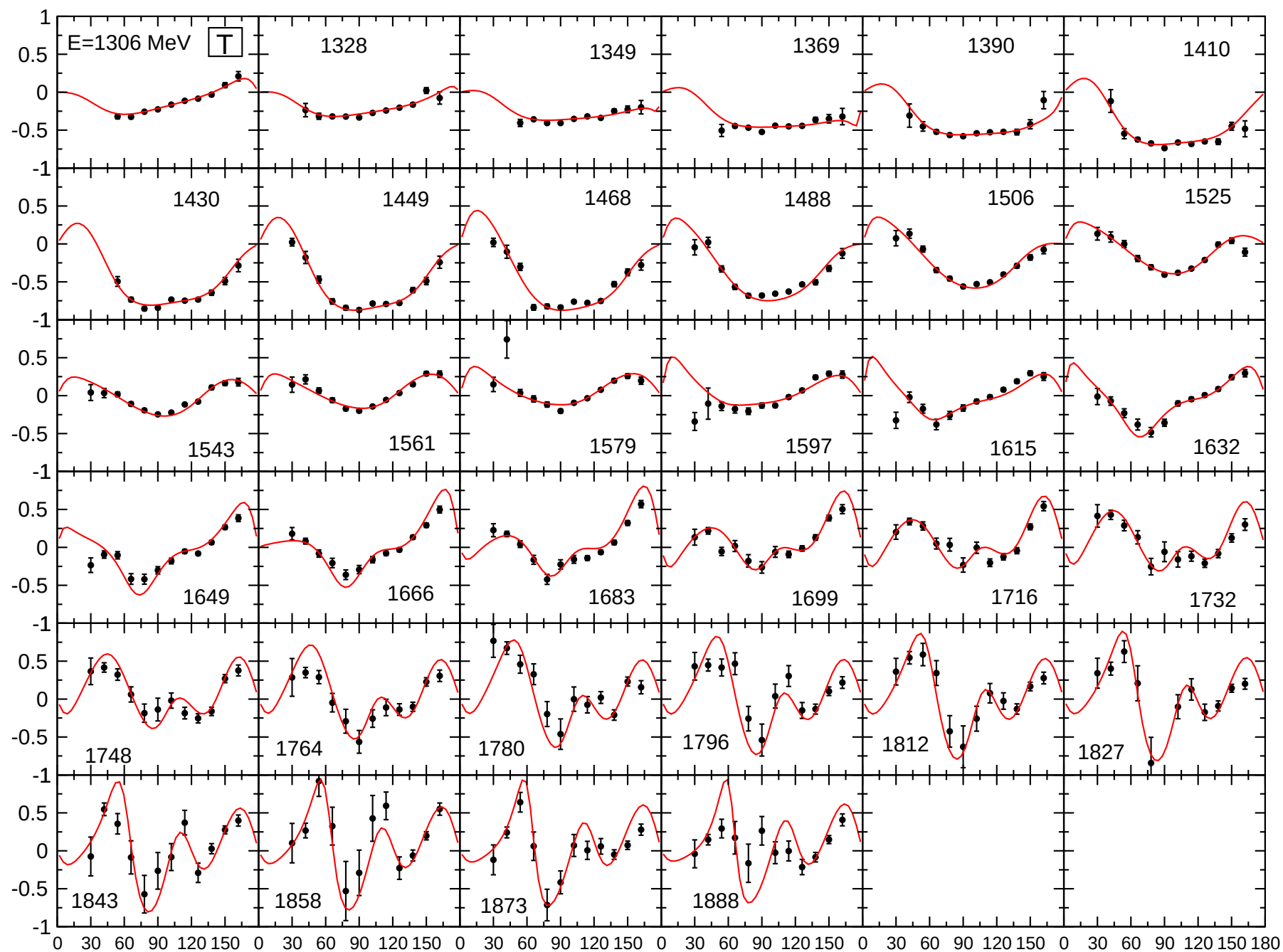


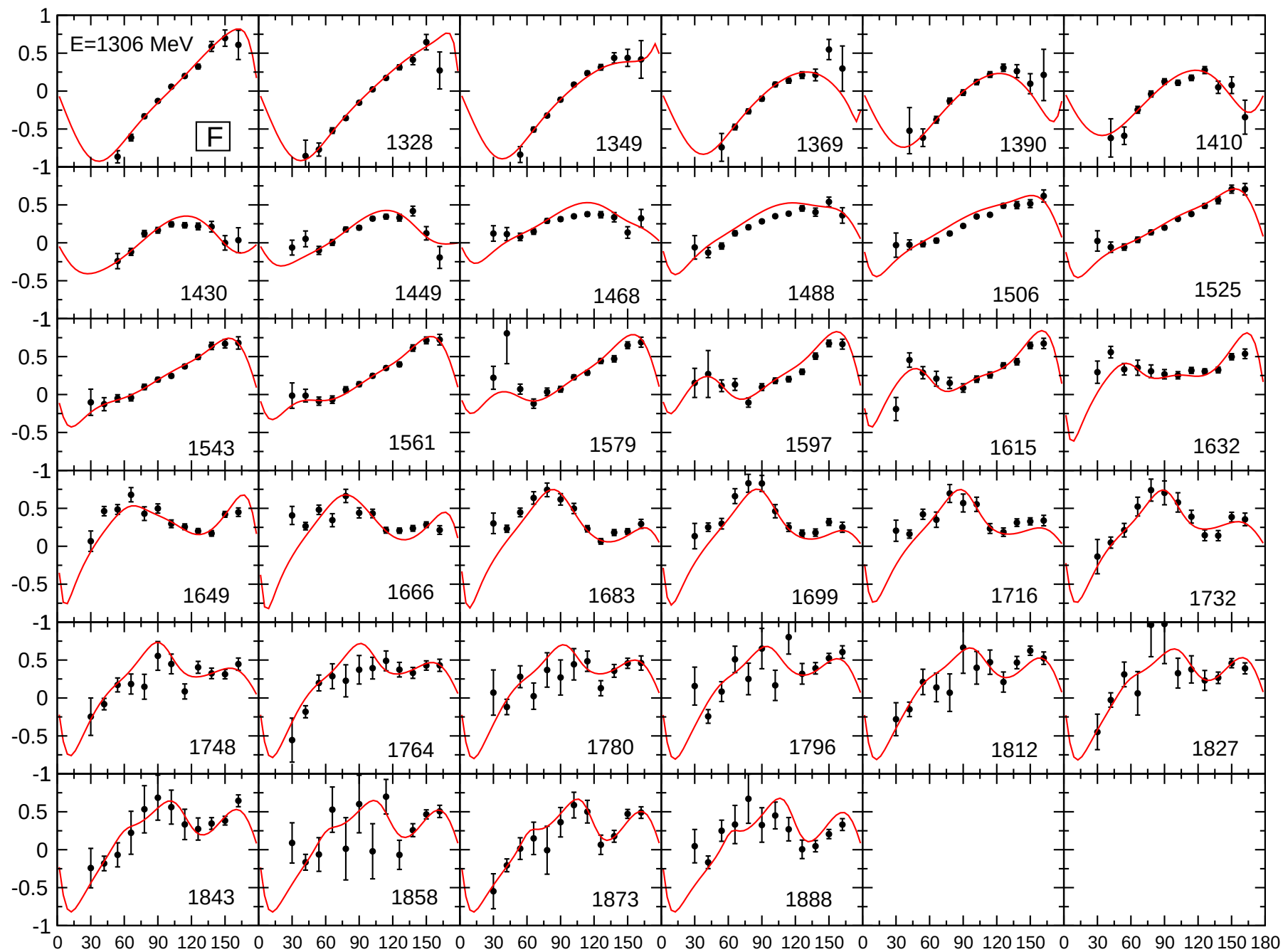












Data references

- Differential cross section $\gamma p \rightarrow \pi^0 p$:
 - SC(01) MAIN SCHMIT, PRL87, 232501(2001), BE
 - FU(96) MAIN FUCHS, PLB368, 20(96), AHRENS,
 - BE(90) MAIN BECK, PRL65, 1841(90) REVISED 7
 - HO(12)PMAIN HORNIDGE, ARXIV:1211.5495, PRAK
 - BG(97) SAL BERGSTROM, PRC55, 2016(97),
 - HI(69) BONN HITZEROTH, NCA60, 467(69)
 - GO(68) LEBE GOVORKOV, SJNP6, 370(68)
 - GZ(74)1BONN GENZEL, ZP268, 43(74)
 - BE(06) MAIN BECK, EPJA28S1, 173(2006)
 - SC(97)PMAIN SCHNEIDER, PHD THESIS, 1997, AH
 - HA(96)PMAIN HAERTER, PHD THESIS, 1996, AHRE
 - AG(75) SACL ARGAN, NPA237, 447(75)
 - DO(77) LUND DOUGAN, ZPA280, 341(77)
 - BE(97) MAIN BECK, PRL78, 606(1997)
 - AK(78) LEBE ALEKSANDROV, SJNP28, 344(78)
 - AH(04) MAIN AHRENS, EPJA21, 323(2004)
 - AK(77) LEBE ALEKSANDROV, SJNP25, 43(77)
 - BA(05) BONN BARTHOLOMY, PRL94, 012003(2005)
 - HE(73) TOKY HEMMI, PLB43, 79(73)
 - JU(76) BONN M.JUNG, PRP HE-76-15 76
 - DO(75) LUND DOUGAN, ZPA274, 73(75)
 - YO(80) TOKY YOSHIOKA, NPB168, 222(80)
 - BC(73) BONN BECK, NPB60, 267(73)
 - SC(10) MAIN SCHUMANN, EPJA43, 269(2010)
 - HY(73) TOKY HEMMI, NPB55, 333(73)
 - AR(77) TOKY ARAI, JPSJ43, 363(77)
 - FL(74) BONN FELLER, PLB49, 197(74)
 - BA(05)1GRAA BARTALINI, EPJA26, 399(2005)
 - AM(73) LUND S.ALMEHED, CONF BONN 73
 - AH(02) MAIN AHRENS, PRL88, 232002(2002)
 - WO(68) CALT F.WOLVERTON, PH.D THESIS 68
 - AL(79) BONN ALTHOFF, ZPC1, 327(79)
 - WC(60) CALT WORLOCK, PR117, 537(60)
 - WO(68)PCALT F.WOLVERTON, PH.D THESIS 1968
 - KR(99) MAIN KRUSCHE, EPJA6, 309(1999)
 - SA(65) STAN DE.STAEBLER, PRB140, 336(65)
 - BN(75) DNPL BARTON, NPB84, 449(1975)
 - DU(07) JLAB DUGGER, PRC76, 025211(2007)
 - BH(71) DNPL P.S.L.BOOTH, PRP DNPL P95 71
 - DE(69) ORSA DELCOURT, PLB29, 70(69)
 - WR(67) CALT WARD, PR159, 1176(67)

- TL(62) CALT TALMAN, PRL9, 177(1962)
- BU(68) DESY BUSCHHORN, PRL20, 230(1968)
- ZE(88)PBONN ZENZ, THESIS BONN-IR-88-12
- BH(75) DNPL BOOTH, NPB84, 437(75)
- CR(11) BONN CREDE, PRC84, 055203(2011)
- HU(77) BONN HUSMANN, NPB126, 436(77)
- AB(76) YERE ABRAHAMIAN, JETPL23, 375(76)
- AB(74) YERE ABRAHAMIAN, PLB48, 463(1974)
- BF(75) BONN BREFELD, NPB100, 93(1975)
- BG(68) DESY BRAUNSCHWEIG, PLB26, 405(1968)
- AL(79)1BONN ALTHOFF, ZPC1, 257(79)
- LO(70) BONN B.LOHR, PRP PI1-98 70
- SU(07) LEPS SUMIHAMA, PLB657, 32(2007)
- BO(67) CEA BOLON, PRL18, 926(1967)
- SH(79) CORN SHUPE, PRD19, 1921(1979)
- BG(70) DESY BRAUNSCHWEIG, NPB20, 191(1970)
- Beam asymmetry $\Sigma \gamma p \rightarrow \pi^0 p$:
 - HO(12)PMAIN HORNIDGE, ARXIV:1211.5495
 - SC(01) MAIN SCHMIT, PRL87, 232501(2001)
 - BL(01) LEGS BLANPIED, PRC64, 025203(01)
 - BJ(69) FRAS BARBIELLINI, PR184, 1402(69)
 - DR(64) STAN DRICKEY, PRB136, 543(64)
 - BE(06) MAIN BECK, EPJA28S1, 173(2006)
 - BL(92) LEGS BLANPIED, PRL69, 1880(1992), SA
 - BE(97) MAIN BECK, PRL78, 606(1997), PC 02-2
 - BP(70) FRAS G.BOLOGNA, PRP LNF-70 39 70
 - BL(83) KHAR BELYAEV, NPB213, 201(83)
 - GB(78) KHAR GORBENKO, SJNP27, 638(78)
 - GB(77)1KHAR GORBENKO, VANT2, 36(1977)
 - GB(74) KHAR GORBENKO, JETPL19, 340(74)
 - GB(77) KHAR GORBENKO, SJNP26, 167(77)
 - AD(01) YERE ADAMIAN, PRC63, 054606(2001)
 - BA(05)1GRAA BARTALINI, EPJA26, 399(2005)
 - KE(74) SLAC KNIES, PRD10, 2778(74)
 - AV(83)2YERE R.O.AVAKYAN, PRP EPI-674-6 83
 - AV(83)1YERE AVAKYAN, SJNP38, 721(83)
 - AV(79) YERE AVAKYAN, SJNP29, 625(79)
 - EL(09) BONN ELSNER, EPJA39, 373(2009)
 - AV(84) YERE AVAKYAN, SJNP40, 588(84), GRAPH
 - AS(72) CEA ALSPECTOR, PRL28, 1403(72)
 - AV(77) YERE AVAKYAN, SJNP26, 537(77)
 - AG(89) YERE AGABABYAN, SJNP50, 834(89)
 - AT(86) YERE ASATURYAN, JETPL44, 341(86)
 - AB(74) YERE ABRAHAMIAN, PLB48, 463(1974)

- SP(10) BONN SPARKS, PRC81, 065210(2010)
- BS(76) DNPL BUSSEY, NPB104, 253(76)
- BS(79)1DNPL BUSSEY, NPB154, 492(79)
- SU(07) LEPS SUMIHAMA, PLB657, 32(2007)
- DU(13) Dugger *et al.* (CLAS Collaboration) PRC88, 065203, PRC89, 029901 (2014)
- Recoil Polarization $\gamma p \rightarrow \pi^0 p$:
 - AL(68) BONN ALTHOFF, PLB26, 677(68)
 - AL(66) BONN ALTHOFF, ZP194, 135(66)
 - BL(83) KHAR BELYAEV, NPB213, 201(83)
 - GB(78) KHAR GORBENKO, SJNP27, 638(78)
 - BM(69) BONN P.BLUEM, CONF DARES 69
 - AL(66)1BONN ALTHOFF, ZP194, 144(66)
 - KA(80) TOKY KATO, NPB168, 1(80)
 - TR(72) BONN D.TRINES, PRP PI1-160 72
 - BV(80) KHAR BRATASHEVSKI, NPB166, 525(80),
 - HK(68) TOKY HAYAKAWA, JPSJ25, 307(68)
 - ML(65) STAN MALOY, PRB139, 733(65)
 - BV(86) KHAR BRATASHEVSKI, UFJ31, 1306(1986)
 - GB(74) KHAR GORBENKO, JETPL19, 340(74)
 - GB(75) KHAR GORBENKO, JETPL22, 186(75)
 - GB(77) KHAR GORBENKO, SJNP26, 167(77)
 - BM(70) BONN P.BLUEM, PRP PI1-105 70
 - DC(76) KHAR DERECHINSKI, JETP43, 218(76)
 - QU(61) FRAS QUERZOLI, NC19, 53(61)
 - BV(85)1KHAR BRATASHEVSKI, SJNP42, 417(85)
 - BV(82) KHAR BRATASHEVSKI, SJNP35, 33(82)
 - ZY(78) KHAR ZYBALOV, SJNP28, 52(78)
 - BM(76) BONN BLUEM, ZPA277, 311(76)
 - GC(73) KHAR GONCHAROV, JETP37, 205(73)
 - BB(62) FRAS BERTANZA, NC24, 734(62)
 - KB(72) TOKY KABE, NPB50, 17(72)
 - BV(83) KHAR BRATASHEVSKI, SJNP38, 233(83)
 - AV(88) YERE AVAKYAN, SJNP48, 1030(88)
 - BD(67) CALT BLOOM, PRL19, 671(67)
 - BV(87) KHAR BRATASHEVSKI, SJNP46, 635(87)
 - WI(02) JLAB WIJESOORIYA, PRC66, 034614(2002)
 - BV(85) KHAR BRATASHEVSKI, SJNP41, 960(85)
 - BV(81) KHAR BRATASHEVSKI, SJNP33, 538(81)
 - AV(87) YERE AVAKYAN, SJNP46, 853(87)
 - AV(83) YERE AVAKYAN, SJNP37, 199(83)
 - PR(72) DNPL PRENTICE, NPB41, 353(72)
 - AG(89) YERE AGABABYAN, SJNP50, 834(89)
 - AT(86) YERE ASATURYAN, JETPL44, 341(86)
 - BM(76)1BONN BLUEM, ZPA278, 275(76)

- AV(91) YERE AVAKYAN, SJNP53, 448(91)
- DC(74) KHAR DEREBCHINSKI, JETP39, 30(74)
- TN(73) CEA TANAKA, PRD8, 1(73)
- BS(79)1DNPL BUSSEY, NPB154, 492(79)
- LU(12) JLAB LUO, PRL108, 222004(2012)
- Hartmann *et al.* (CBELSA/TAPS Collaboration) PRL 113, 062001 (2014), PLB 748, 212 (2015)
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 - BO(98) BONN BOCK, PRL81, 534(1998)
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