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sources, or those in which energy is being released from active beams in the outer scintillating components in the range 0.2-2 arcsec are listed together with values of the scintillating flux density at a solar elongation of 90°. IPS selects those sources which are highly compact, such as pulsars and some unusual extragalactic exhibit diameters which angular sources lobes of intrinsically powerful radio galaxies and quasars. radio 81.5 MHz. The of 1789 catalogue (IPS) at scintillation We present a interplanetary Summary.

1 Introduction

at 81.5 MHz. The survey was made with the 3.6-ha array at Cambridge and covers the area of sky between declinations -10° and +83° at all values of right ascension. The faintest sources in the catalogue have scintillating flux densities of about 0.3 Jy rms at a solar elongation of 90°, and total flux densities of about 5 Jy at 81.5 MHz. The sensitivity of the survey is not uniform over the sky, being determined largely by the galactic background emission. Data were collected continuously during the periods 1978 August-1979 September, and 1980 January-1981 March, so that the records presented here are the result of many days of averaging. Perturbations from day-to-day fluctuations in the scattering power of the solar wind have been averaged out and false deflections We present the results of a survey of radio sources which exhibit interplanetary scintillation (IPS) due to man-made interference have been removed.

The presence of IPS indicates that there is structure in the brightness distribution of a source on scales less than 2 arcsec in extent. The scintillating flux density, ΔS , is the rms variation in the total flux density S, and is a function of angular size, the fraction of the total emission from regions function of ε , we determine the IPS angular diameter, θ , assuming that the source has a circularly within that size, and the solar elongation, ε . By observing the systematic variation in ΔS

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symmetrical gaussian brightness distribution. This determination is based upon a model of the solar wind by Readhead, Kemp & Hewish (1978). The data are presented in the form of daily measurements of ΔS plotted against solar elongation for each source, and we list values of θ and ΔS (90°), the rms scintillating flux density at an elongation of 90°. When an IPS observation is free component can also be determined if the total flux density is known. The flux density so that confusion errors are likely to be significant for S\le 20 Jy. This corresponds to a level near the from confusion from neighbouring sources, the fraction of the total emission within the compact corresponding to one source per beam area in this survey is about 2.3 Jy at 81.5 MHz bottom of the 3C catalogue.

compact sources having an overall angular size <1 arcsec, scintillation normally identifies sources from galactic sources has also drawn attention to steep-spectrum, compact objects in the galactic characterized by hotspots in the outer lobes of intrinsically powerful radio galaxies and quasars. It therefore labels those sources in which energy is being released from active beams. Scintillation IPS provides the only method currently available for the detection of sub-arcsec structure in a large number of weak radio sources at metre wavelengths. Apart from a small number of highly plane such as the millisecond pulsar.

This survey is similar to one carried out by Readhead & Hewish (1974) but is more sensitive; the 3.6-ha array has twice the collecting area and the whole sky was observed each day, as compared to once per week in the earlier work. The more frequent observations of each source provide a better average over day-to-day perturbations of the interplanetary medium and allow scintillating sources to be detected more reliably. Observations of the perturbations themselves have enabled transients to be mapped and the results have been of special value to solar-terrestrial physics (see e.g. Gapper et al. 1982).

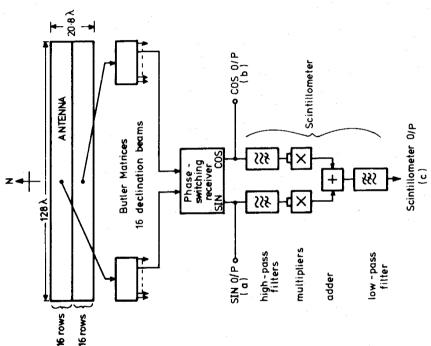


Figure 1. A schematic diagram of the 3.6-ha array.

2 The antenna

north-south phase-switching interferometer observing sources near meridian transit. The 16 row-outputs from each half of the antenna are combined in 'Butler matrices', in effect the analogue equivalents of fast Fourier transforms, to produce 16 declination beams (solid curves in Fig. 2) of half-power width 5.5 sec (52.16 $-\delta_0$) degrees, where δ_0 is the declination corresponding Readhead & Hewish in their IPS survey (1974). Its geometry is shown in Fig. 1. The dipoles are arranged in 32 east-west rows of 128 dipoles, the signals being combined in each row by a branched feeder network. The antenna is divided into two sections of 16 rows and operated as a to the peak response. The separation between the rows (0.65 wavelengths) is such as to cause The 3.6-ha array consists of 4096 full-wave dipoles and is an extension of the antenna used by multiple responses on beams 1, 2, 3 and 16.

stages, using the unshifted beams in 'year 1' (1978 August-1979 September) and the shifted gradient in the north-south direction across the array shifting the whole pattern by half a beamwidth. This results in a response shown by the dotted curves in Fig. 2. We conducted the IPS survey in two beams in 'year 2' (1980 February-1981 March). The peak response of beam number N (year 1) is Intermediate declination beams can be obtained by inserting a phase given by

 $\delta_0 = 52.16 + \arcsin[(N-10)/10.4]$ degrees.

Tappin (1984) has shown that the declination power response, D, of the antenna follows well that The corresponding intermediate positions (year 2) can be found by inserting N+0.5 in place of N. expected for an array of dipoles at $\lambda/4$ above a horizontal reflecting screen, i.e.:

 $D = \{4D_0 \sin^2[(\pi/2) \cos \phi] (\sin^2 16\psi) / \sin^2 \psi\}^2,$

where $\psi = (\pi d \sin \phi)/\lambda + (N-10)\pi/16$, $\phi = 52.16 - \delta$, d is the spacing of the rows and D_0 is the peak response. This is the function plotted in Fig. 2. It was checked by observing the deflections caused by the bright radio source cygnus A (Purvis 1981)

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continuously so that we observed the whole sky above declination -10° every 24 hr throughout for later analysis. Paper chart records of 20 of the possible 48 outputs were also made. These proved invaluable for checking the system performance, etc. As an additional check of the system, we used a device which made daily measurements of the contribution to the total system low-pass filters with bandwidths of 3 Hz were used on each declination beam. The IF gain was adjusted automatically so as to keep the post-detection noise power constant. The galactic background radiation dominated the system temperature everywhere except when a very bright 3C source passed through the antenna beam. Small gain-corrections were applied in a few cases to allow for this. The time constant of the automatic gain-control circuit (AGC) was always much longer than IPS time scales. Typical traces of the sine and cosine (phase quadrature) outputs of 3(a) and (b). These outputs were combined in a 'total power scintillometer' (Duffett-Smith 1980), a device which first filtered out the low-frequency components produced by the beam response leaving only the IPS signal and receiver noise. These signals were then squared, added, and finally integrated in a single RC stage with a time constant of 10s. The output (Fig. 3c) was proportional to the mean square scintillating flux density, multiplied by the square of the antenna power response. All three outputs (sine, cosine and scintillometer) of every receiver were monitored the period of the survey. The outputs were sampled, digitized, and recorded on to magnetic tape noise by each of the 256 first-stage preamplifiers (distributed over the $36\,000\,\mathrm{m}^2$ of the antenna). Individual phase-switching receivers having IF bandwidths 10.7 MHz and post-detection one receiver for the passage of a scintillating source through the antenna pattern are shown in Fig. Faulty preamplifiers were quickly detected and replaced.

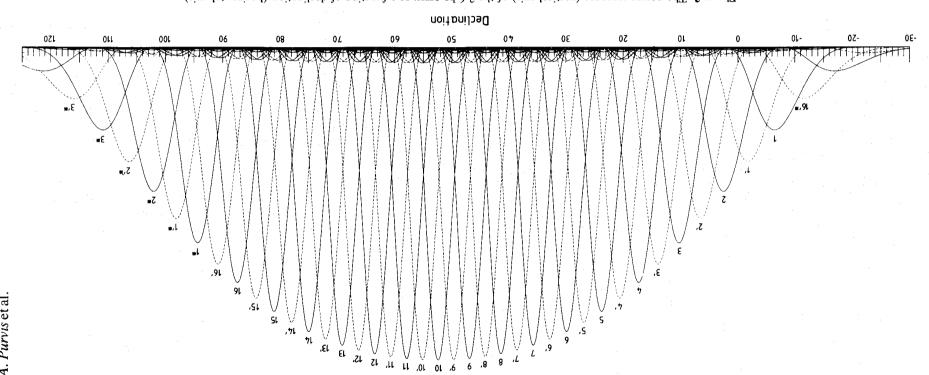
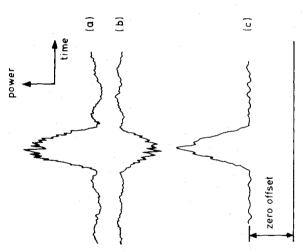


Figure 2. The power response (vertical axis) of the 3.6-ha array as a function of declination (horizontal axis).

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axis). The traces marked (a), (b) and (c) are of the sin, cos and scintillometer outputs respectively. The vertical Figure 3. The power response (vertical axis) of the 3.6-ha array to a typical source as a function of time (horizontal deflection of trace (c) is proportional to the square of the scintillating flux density.

determined these pointing errors for each declination beam by minimizing the residuals for 3C The right ascension power response of the antenna to a source at declination δ has a half-power beamwidth of $107 \sec(\delta)$ s. As the ground on which the telescope is built is not level, the peak 70 s. by about and 4C identifications, and have corrected for them in the data published here. meridian but is shifted earlier celestial response does not occur on the

3 Production of the source list

A detailed description of the reduction of the first-year data has been given by Purvis (1981), and modifications made for the second-year data have been described by Tappin (1984). Here we give a brief description of the procedure

periods of intense ionospheric scintillation. All such events were removed using both automatic unwanted signals being so diverse in character as to make automatic detection very difficult. Zero levels (the deflections caused only by system noise) were then determined for each of the cleaned The digitized records were scrutinized for man-made interference, solar radio emission, and and manual methods. Although the former was much faster, the latter proved to be more reliable, scintillometer records and subtracted.

automatically by an algorithm which used deflections for the same source on adjacent declination We used ratios only between adjacent beams recorded simultaneously (i.e. in the same 'year') in order to eliminate possible systematic effects due to gain variations, interplanetary disturbances, residual interference, etc. For each source a search was made near to the marked position in right ascension, and the best deflection common to both beams used. We assumed the The selection of the primary grid of sources was carried out manually using an interactive the elongation interval 20°-90° were displayed and the positions of possible sources marked by the operator then over declination of each putative source was programme running on a mini-computer. Sections of record averaged theoretical response of the antenna given in the previous section. The movable cursor. beams.

Some The final list of scintillating radio sources was generated from the initial source grid.

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putative sources were fictitious, and some had declinations which were in error where the declination algorithm had failed. The selection was done by inspection using averaged records plotted for three adjacent beams (at half beam spacing) with source positions and declinations marked. Any serious errors in right ascension and declination were immediately apparent, as were noise spikes marked as sources or deflections too small to be significant. Our list was now more reliable, but contained many duplicate entries, the same source having been selected on adjacent beams. We therefore plotted all the records on a single sheet (similar to Fig. 4) and chose the strongest deflection for duplicate entries as the 'true' entry. Right ascension corrections were then made where necessary to align the quoted value with the corresponding peak on the record.

For those sources where the declination algorithm had failed we examined the records by eye and determined the best position possible. Where we could not make a reasonable estimate, the central declination of the beam itself was selected as the appropriate value. The method by which each entry in the catalogue was determined is noted by a letter following the declination (see below).

source and the finite bandwidth of the receiver. Most of the sources remaining in the list displayed increase in scintillation away from the Sun were considered to be ionospheric scintillators (ionospheric scintillation is expected to increase beyond $\varepsilon = 90^{\circ}$). Sources having a flat curve lying breakthrough from bright non-scintillating sources). We rejected the latter and listed the rest as having 'pulsar-like curves'. Sources at high ecliptic latitudes covered only a small range of elongations; these were retained in the list where the signals were well above the noise level. Sources with sparse curves (because of editing or instrumental failure) were also retained on the measurements of ΔS against ε , such as those shown in Fig. 5. IPS signals show a characteristic variation. As the solar elongation decreases from its maximum value, the scintillating flux density rises, reaching a maximum at about 35° where the scattering becomes strong. Nearer the Sun the scintillating flux falls again as the scintillations become blurred due to the finite angular size of the normal curves. Sources which did not have a maximum at ε =35° but showed instead a steady well above the noise level may either have been pulsars or instrumental in origin (e.g. further improvement in the scintillating source list was made using plots of daily same basis.

4 Calibration

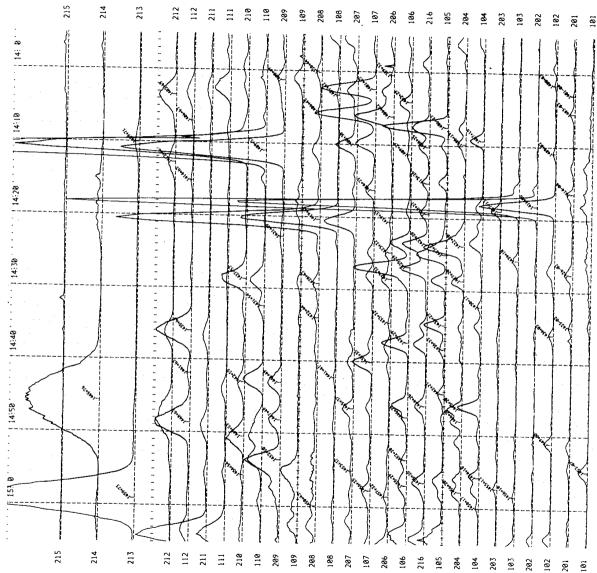
density scale of Baars et al. (1977) with the observations by Scott & Shakeshaft (1971) as response of the antenna. The variation in gain caused by the action of the AGC on the galactic background emission was measured directly as described by Purvis (1981). We used the flux secondary calibrators. We also took into account the measurements by Artyukh et al. (1969), The interferometer was calibrated by comparing the deflections on the sine and cosine records of bright 3C sources with their known flux densities, due account being taken of the declination Collins (1968), Smith (1968), Slee & Higgins (1973, 1975) and Branson (1967). The calibration curves of the scintillometers were measured directly by injecting known signals and measuring the response.

We believe that the quoted values of scintillating flux densities measured in this survey are accurate to 10 per cent.

5 Presentation of the scintillation data

forms. The first of these (Fig. 4) displays the scintillometer records in 1-hr segments averaged As a supplement to the source list, we present the scintillation measurements themselves in two over the elongation range 20°-90°. Each point is therefore the mean of many days of observation.

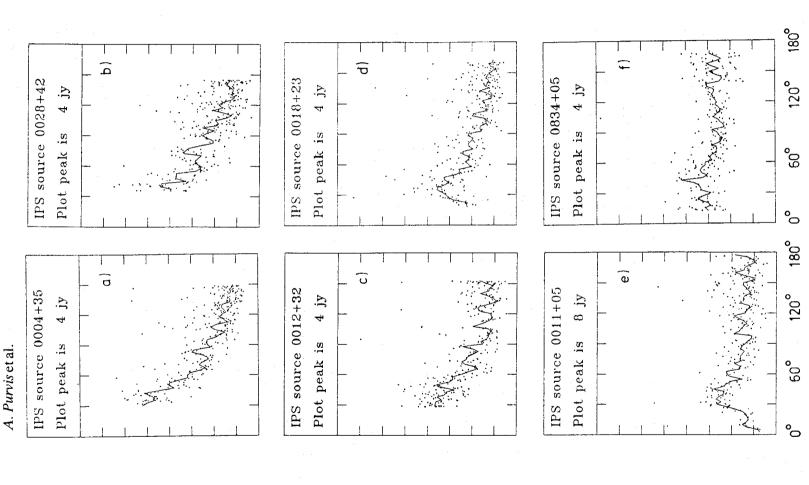
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time (figures along the top) increases to the left. The beams are arranged in order of increasing declination towards the top, and are numbered as described in the text. Vertical deflection from the horizonal dashed lines is proportional to segment of scintillometer records averaged over the elongation range 20°-90°. Local sidereal mean square scintillating flux density. Figure

4 shows a representative section; the rest are given on Microfiche 229/1 which accompanies at paper. The vertical deflection is proportional to the mean square scintillating flux density, and zero levels (shown by the dashed horizontal lines) have been subtracted. The records have scale is the same at all right ascensions. The coordinate have been corrected for pointing errors, but have not been adjusted Apparent sources which are not marked are those which we have i.e. where they were measured, been corrected for variations in system gain so that the vertical Sources are marked at the positions discarded in the compilation of the source list. approximate epoch 1980. for precession. this

Declination beams are identified by the three-figure numbers to right and left. The first figure as (1 or 2) indicates that the data were collected between 1978 August and 1979 September (1) or between 1980 February and 1981 March (2). The last two figures indicate the beam number



(c) 0...5, (d) 0...6, (e) 0...8, and (f) pulsar-like curve. The solid curve is a mean over 5° plotted every 2...5. The lower and Figure 5. Daily measurements of scintillating flux density (vertical scale) against solar elongation (horizontal scale) for six representative sources. They are arranged in order of increasing angular diameter as follows: (a) 0."2, (b) 0."3, upper bounds of each square display box have the values 0 and 'plot peak' respectively

beam 5 is indicated by 216. The gaps in the second-period records following hours divisible by 6 shown in Fig. 2, except that beam 16 was not used for technical reasons. The second period on are connected with the automatic determination of the zero levels; those in all beams following hours divisible by 4 are calibration periods when no data were collected.

4 gives a good indication of the quality of the scintillation data on which this survey is based. It is apparent that residual interference is negligible and that the data are limited mainly by confusion. No convolution with the beam pattern has been applied. Beam-shaped deflections are therefore due to celestial scintillating signals and cannot be artefacts generated on the Earth.

We also present plots showing the daily measurements of ΔS as a function of solar elongation for each source in the list. Representative plots are shown in Fig. 5(a-f); the rest are on The top line has the value given by 'plot peak'. The solar elongation (0°-180°) is plotted horizontally on a linear scale. Superposed on the individual daily measurements is a 5° median computed at 2.5 intervals. It is there simply to guide the eye and has not been used in the computations of angular sizes. The first five plots in the figure are arranged in order of increasing IPS angular size (a)-(e) while the last plot is that of a pulsar (f). Note that the slope of the data Microfiche 229/1-229/3. Scintillating flux density (Jy rms) is plotted vertically on a linear scale. between elongations 35° and 90° is a good indicator of the angular size.

All the data presented on the microfiche are also available in book form on application to the appropriate author (PJD-S).

6 The catalogue

The catalogue is presented as a list of 1789 scintillating radio sources (Table 1). Each source is designated by an A0 number (column 1) which serves as its name. The positions (columns 2 and 3)

Table 1. The list of scintillating sources. See Section 6 of the text for a description.

Possible Contributing Sources	4631.01 4615.01 4617.03 4619.01 46-0.01 362 4621.01	4C-6.01 3C3 4C40.01 4C05.03	4C45.01 4C13.01 4C32.01 PSR0012+47 4C16.01 4C17.05 4C08.03	4C-4.01 4C15.02 3C9 4C24.01 4C1.03 4C15.03	4C12.04 4C13.03¹ 4C00.03 4C37.01 4C63.02 3C11.1
Compact Flux	5.5 [5.5-6.0] 4.5 [3.5-4.5] 14.0 [12.5-14.5] 5.0 [4.5-5.5] 2.5 [2.5-3.5]	[12.0-2 [3.5- [3.0- [6.5- [3.5- [8.0-1]	5.0 [4.0- 5.8] 4.0 [4.0- 4.5] 5.0 [4.5- 6.0] 5.5 [5.0- 6.5] 4.0 [3.5- 4.5]	9.0 (7.0-11.0) 8.5 (7.0-29.0) 6.0 (8.0-14.5) 5.0 (8.0-7.5) 2.5 (2.5-3.0) 13.0 (11.5-15.5) 3.5 (3.0-7.0) 5.0 (4.0-5.5) 3.0 (2.5-3.5)	4.0 (3.5-7.0) 4.5 (4.5-13.5) 5.0 (2.5-3.0) 5.0 (4.5-5.5) 6.5 (6.0-8.0) 3.0 (2.5-3.0) 3.0 (2.5-3.0) 3.0 (2.5-3.0) 3.0 (2.5-3.0)
Angular Size	0.50 [0.50-0.65] 0.55 [0.40-0.65] 0.25 [0.10-0.35] 0.20 [0.00-0.30] 0.35 [0.20-0.60]		0.50 [0.20-0.70] 0.15 [0.00-0.30] 0.50 [0.35-0.75] 0.50 [0.25-1.15] Pulsar Like Curve 0.55 [0.30-0.70]	0.60 [0.30-0.75] 0.50 [0.25-2.10] 1.20 [0.70-1.76] 0.60 [0.55-1.76] 0.25 [0.00-0.65] 0.30 [0.20-0.45] 0.45 [0.30-0.65] 0.55 [0.40-1.35] 0.65 [0.50-0.85] 0.35 [0.25-0.50]	0.90 (0.70-1.50) 0.70 (0.60-2.50) 0.55 (0.45-0.25) 0.55 (0.40-0.25) 0.55 (0.35-0.60) 0.40 (0.35-0.60) 0.35 (0.10-0.50) 0.75 (0.50-2.50) 0.60 (0.45-1.05)
Δ5.0	0.98 0.66 2.72 1.11 0.55	2,38 0,65 0,56 0,69 1,41 1,41 3,21	0.81 1.07 0.80 0.90 0.75 0.90	1.647 1.677 0.70 0.95 0.95 0.53 0.66 0.67	0.59 0.80 0.80 0.59 0.95 0.64 1.34
Dec	29 20 N 16 45 N 01 40 N 35 15 N 23 15 N	25 15 15 15 15 15 15 15 15 15 15 15 15 15	46 30 C 14 40 H 32 05 I 58 30 H 49 05 I 17 00 I	-03 55 I 16 05 I 23 35 H -02 20 I 09 40 C -04 00 I 28 30 H 16 45 B 37 25 I	44 15 I 32 50 I 12 25 I 00 50 I 00 50 I 29 30 C 38 05 C 20 05 B 21 05 I 22 05 B
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Source	0003+29 0003+16 0003+01 0004+35	0005-07 0006+40 0009+23 0010+35 0010+40 9911+05 0011+75	0012+46 0012+14 0012+32 0013+58 0014+49 0015+16	0017-03 0017+16 0018+28 0018+23 0018-02 0019-03 0020+28 0020+16	0022+44 0022+53 0024+12 0024+12 0025+00 0025+29 0026+20 0026+38

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Angular 512e 3.8 [0.25-0.55] 3.9 [0.25-0.55] 3.0 [0.25-0.55] 3.0 [0.20-0.55] 3.0 [0.10-0.10] 3.0 [0.10
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Possible	4C49.06 4C28.04 4C58.05 4C23.06	4C04.07 4C46.04 4C07.05 4C32.08	4018.10	4C38.07 4C33.03 4C-2.08 4C43.05	4C26.05 4C-3.05 4C24.03	4C43.06 4C28.05 4C44.05	4C29.05 4C18.07 4C62.04 4C48.08	4C15.05 4C79.02 4C56.03	4C32.10 4C72.03 4C62.05	4C02.06 4C34.06 4C64.03 4C27.07	4002.07	4C-2.10 4C54.03 4C39.07 4C27.08	4C77.03 4C-0.12 4C34.07 4C51.04	4036.04	4C35.05	4C31.08 4C22.04 4C~4.06 4C41.04	4C47.06 4C28.07 4C09.11 4C09.12*
Compact Flux	20.6.6.6	111111111111		[5.0- 6.0] [10.0-23.5] 5 [4.5- 6.0] 6 [2.5- 8.5] 6 [4.5-12.0] 6 [6.0- 8.5]													4.7.6.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0
8				5.5 13.0 5.5 5.5 6.0 7.0										+			
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Table 1-c		0444+32 0											0505+35			0508-07 0510+38		0512+37 (0515+57 0515+52 0517+46		0518+29 0518+16 0519+60		0523+32 (0525+29 (0525+52 (0533+62 (0534+35 (0540+54 0541+64 0543+38							0557+52 0558+29 0600+35		0601+01 0603+01 0603+35		

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	le Contributing Source	4 0* 36154 7	9 3C155 3* 1 4C52.15*	5,13 1,17 30158 1,23 *	4038.18 600624-842 600615+848 4032.21 4033.15 4040.15 30159 4040.16	8 3 3C161 1	8 4C58.12 8 4C48.17	4008	•	7* 3C165 5		0 4 4 C 18 . 19	7 2 3C169.1 1 5 5 5 3 5 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	7 8 1. 3C171	. 2	C 4 0 0	9 3C173 9 3C172 5	35 21 · · · 20
	Possible	4C56.14 4C26.20 4C65.07	4C54.09 4C43.13 4C51.21 4C57.12	4035.1 4014.1 4031.2 4026.2	4038.1 600624 4032.2 4040.1	4C14.18 4C-5.23 4C00.21	4C62.12 4C42.18 4C59.06 4C50.18 4C46.12	4C09.24 4C19.22 4C55.14	4030.11	4C60.10 4C23.17 4C56.15 4C31.25	4029.24	4014.20	4C41.17 4C45.12 4C60.11 4C26.25 4C46.13	4C37.17 4C22.18 4C54.11.	4010.21	4C69.10 4C35.14 4C54.12 4C21.22	4C38.19 4C25.19 4C44.15	4C13.3 4C50.2 4C38.2
!	Compact Flux	0-22 0-22 0-3 0-3	0-13 5-8 0-12 0-4	[6.0-11.0] [3.0- 5.5] [8.5-12.5] [4.5- 6.0] [3.0- 4.0] [4.0-15.0]	0-5 0-5 5-46 0-2	8.5-14 2.0-3 53.0-72 3.0-4 6.0-8	0-3 0-4 5-3 0-11	5-10 5-6 5-3 0-4 5-2	8 2 4 8 8	0-4 5-8 0-9 0-3 0-23	5-10 0-10 5-7 5-5	0-3 0-2 0-7 5-11 0-8	0-3 5-5 0-8	0-10 0-10 0-9 5-5	5- 5 5- 4 0-10 0-3 0- 5	5 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	0- 3 0-17 5- 6 5-19 5-19	0-4 0-11 0-6 5-4 5-3
	COM	18.0 0.0 0.0 8.0	3.0 3.0 10.0 3.5	က သေးလုယ္ 4 လ လုလ္ဝတ္လ	8.0 8.0 8.5 0.0 2.0	10.0 2.5 62.0 3.5 7.5	8 6 8 7 5	வைவக்க	40004	4 . 8		ଅଧାରୀ ହେଉ		40044	4.0.0.4 0.0.0.4	0.25 F. 0.4 0.25 F. 0.0	3.0 16.5 4.0 19.0 4.0	9 2 4 9 8 8 0 8 8 0
	ular Siże	15-0, 45-1. 25-0, 55-1.	[0.30-0. [0.60-2. [0.40-0.					[0.26-2.50] [0.20-0.55] [0.20-0.40] [0.15-0.60] [0.20-0.65]	[0.35-0.90] [0.25-0.55] [0.25-1.20] [0.55-1.55] [0.45-1.10]	[0.30-0.75] [0.40-0.65] [0.40-0.75] [0.35-0.65] [0.35-0.95]	[0.30-0.70] [0.50-0.90] [0.70-1.40] [0.25-1.15] [0.50-1.45]	[0.00-0.35] [0.50-0.95] [0.30-2.50] [0.25-0.55] [0.50-1.00]	[0.25-0.50] [0.30-0.65] [0.30-0.60] [0.30-0.65] [0.05-1.00]	[0.35-0.85] [0.75-1.60] [0.30-0.55] [0.50-1.25] [0.20-0.90]	[0.35-0.75] [0.55-0.90] [0.90-2.75] [0.05-0.50] [0.35-0.60]	[0.25-0. [0.30-0. [0.25-0. [0.30-0.	[0.00-0. [0.50-0. [0.55-1. [0.55-0.	[0.40-1. [0.20-0. [0.40-1. [0.40-0. [0.45-1.
	Ang		0000	0.85 0.45 0.30 0.40 0.40 0.50	00000	00000	00000	-0000	00000	00000	4.00.47.	00000	00000	0 - 0 0 0	00-00	0000	00000	00000
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	Dec		20 20 40 40	29 40 I 35 25 C 16 05 I 32 15 I 26 30 C 52 25 I		20 15 00 05 55		45 30 35 35 15	25 50 10 05		50 05 35 15 25			25 20 25 05 05	44 30 I 32 30 C 10 20 I 23 25 I 29 40 I	30 25 50 45 00	45 50 30 30 30	15 55 15 35 20
continued	R	07 10 13 13	13 15 15	06 17 30 06 17 35 06 19 00 06 19 50 06 19 50	20 21 22 22 22	23 23 24 25 25 25 25	06 27 10 06 27 20 06 28 35 06 28 45 06 30 00	3 3 3 3 3 4 4 5	38 33 38	39 40 41 41	4 4 4 4 4 6 4 8 4 8 4 8 4 8 4 8 8 4 8 8 4 8 8 4 8 8 4 8	24 24 34 34 34 34	74 74 74 84 84 84	49 50 51 51	06 52 50 06 52 50 06 53 00 06 53 10	55 55 56 56	58 59 59 59	00 00 00 00 00 00 00 00 00 00 00 00 00
Table 1-	Source	0607+57 0610+26 0611+64 0613+35	0613+54 0615+43 0615+52 0616+57	0617+29 0617+35 0618+16 0619+32 0619+26 0619+52	0620+38 0620+84 0621+32 0621+40 0622+66	0622+47 0623+14 0624-04 0625+32 0625+01	0629+62 0628+60 0628+51 0629+47	0630+09 0632+19 0632+54 0634+52 0634+38	0635+29 0635+23 0636+40 0638+32 0638+30	0639+52 0640+59 0640+23 0641+54 0641+31	0641+29 0642+41 0642+47 0643+38 0643+49	0645+54 0645+26 0646+13 0646+37 0646+17	0647+40 0647+46 0648+60 0648+26 0648+46	0649+37 0650+23 0651+54 0651+35 0651+41	0652+44 0652+32 0653+10 0653+23 0653+29	0655+26 0655+69 0655+35 0656+53 0656+21	0658+30 0659+37 0659+23 0659+44 0703+57	0703+14 0703+49 0704+38 0704+29 0704+63

Possible Contributing Sources	4001.21.40.0.23	4C68.08 4C40.18		4C25.20 4C45.13 4C14.21 3C175.1	4C-2.30		4C17.40 4C19.28 4C65.08 4C54.13	4C16.21 4C39.17 4C67.14	4C47.24 4C46.14 4C14.24 3C181	4C24.15* 4C17.41	4C52.17 4C60.12 4C02.20	4C43.15 3C183 4C33.21 4C36.13	4C40.16 4C70.06 3C184 4C-1.18 4C51.24 4C53.17 4C16.22	4C15.21 4C38.21 3C186 4C57.14	4C12.31 4C50.24 4C46.16 4C16.23	4C31.31 4C34.26 4C16.24	4039.20* 6C0750+540 6C0751+534 6C0751+550 4C54.15* 4C07.21	4C29.27 4C18.23 4C39.21*	4C14.25 3C190 4C47.27
Compact Flux	5 [4.0- 5.0] 5 [2.5- 3.0]	0 [2.5- 3.0] 0 [10.5-16.0] 0 [2.0- 7.0]	5 [1.5- 4.5] 5 [3.0- 4.0]	0 [2.0- 2.5] 5 [3.0- 7.5] 5 [4.0- 4.5]	5 [3.0- 4.0] 0 [3.0- 3.5] 0 [1.5- 2.0] 5 [5.5- 6.0]	5 [2, 5, 4, 5] 0 [3, 5, 4, 5] 0 [3, 5, 4, 5] 3 [3, 0, 4, 0]	0 [2.5-3.5] 5 [3.5-5.0] 0 [3.5-5.0] 0 [2.5-3.5] 5 [6.0-8.0]	0 [3.0- 6.0] 0 [2.5- 3.5] 5 [3.5- 4.5] 0 [4.0- 5.5] 0 [3.5-10.5]	5 [2.0- 2.5] 0 [1.5- 2.5] 0 [2.5- 3.5] 5 [7.5-10.0] 5 [1.5- 2.0]	0 [2.0-5.0] 0 [3.0-4.5] 5 [2.0-2.5] 0 [4.5-5.5] 5 [4.0-4.5]	0 [2.5- 3.5] 5 [2.5- 3.5] 0 [5.5- 7.5] 0 [3.5- 4.5] 0 [6.0- 7.5]	0 [5.0- 7.5] 5 [2.0- 3.0] 5 [17.5-18.5] 5 [4.0- 4.5] 0 [19.0-29.5]	5 [3.0- 4.0] 0 [16.0-27.0] 5 [4.0- 5.0] 0 Unavailable 5 [3.5- 5.0]	5 [2.5- 4.0] 5 [3.5- 5.5] 5 [1.5- 3.0] 5 [20.5-26.5] 5 [2.5- 4.0]	5 [5.0- 7.0] 0 [2.5- 3.5] 5 [6.0- 7.0] 0 [2.5- 3.5] 0 [2.5- 3.0]	5 [2.5- 3.0] 0 [9.5-22.5] 5 [3.0- 4.0] 0 [3.5- 4.5] 5 [2.0- 2.5]	5 [3.5- 5.5] 0 [2.5- 3.5] 0 [2.5- 4.0] 5 [3.5- 4.0] 0 [2.0- 2.5]	5 [3.5- 4.0] 0 [2.5- 7.0] 0 [4.0-10.0] 5 [2.0- 2.5] 5 [3.5- 5.0]	5 [2.0- 2.5] 0 [3.5- 6.0] 5 [5.0- 8.5] 0 [8.0-15.0] 0 [5.5- 8.0]
Size	85] 60]	0.30-0.60} 3. 0.60-1.10} 12. 0.35-1.70] 5.	.40-1.60]	[0.00-0.35] 2. [0.00-1.10] 5. [0.20-0.40] 4.		00-1.00] 00-0.30] 35-0.60] 00-0.30]		60-1.35] 20-0.60] 25-0.50] 30-0.60] 60-2.50]					[0.35-0.65] 3.5 [0.55-1.10] 18.0 [0.00-0.35] 4.5 Unavallable 11.0 [0.15-0.50] 4.5					.00-0.10] .10-1.20] .35-1.50] .30-0.60]	0.05-0.35 2. 0.40-1.05 4. 0.35-0.95 6. 0.40-1.10 10. 0.25-0.65 7.
ΔS _{9.0} Angular	65 0	0.56 0.50 [1.69 0.75 [0.44 1.30 [0.48 0.75 [0.48 0.48 0.48 0.48 0.48 0.48 0.48 0.48	1.20	0.54 0.00 [0.94 0.80 [0.00 [0.00]]	0.40 0.20 0.15 0.15	.59 0.35 .70 0.45 .45 0.25	0.80 0.55 0.55 0.65 0.83	.58 0.80 .51 0.55 .81 0.30 .98 0.50	0.45 0.50 0.40 0.55 0.15	0.85 0.55 0.25 0.40 0.25	0.25 0.35 0.50 0.35 0.25	0.85 0.10 0.25 0.60	0.60 0.45 [13.10 0.65 [11.01 0.20 [12.10 0.35 // 0.75 0.40 [1	0.50 0.40 0.55 0.55 0.50	0.50 0.25 0.25 0.25	0.40 0.50 0.15 0.25 0.30	0.40 0.40 0.50 0.30 0.30	.82 0.00 .59 1.05 .81 1.15 .51 0.50 .78 0.45	0.25
Dec	55 C 30 C	30 1 30 1 05 C	50 I 05 H	26 20 1 46 20 I 14 15 I	35 H 20 I 35 I	10 1 10 1 22 1 30 1 15 B	35 C 40 B 15 I 55 C	25 H 45 H 35 H 55 I	54 00 H 49 30 C 47 10 I 14 40 I		10 1 15 C 15 1 15 H 15 I	50 1 25 1 10 1 30 1 05 1		55 1 50 1 35 C 55 1 05 1	20 1 25 C 20 1 15 1 50 I		≋ ∵ = ∵	50 1 25 C 55 I 30 C 45 I	00110
-continued RA	07 05 07 05	04	07 08 07 10		07 12 07 13 07 13 07 14	07 15 07 15 07 16 07 16	07 16 07 17 07 19 07 19	07 21 07 21 07 22 07 23		07 25 07 26 07 26 07 27	000	07 32 07 32 07 32 07 33	07 34 00 07 34 10 07 36 15 07 36 30	07 37 07 40 07 41 07 42	07 42 07 43 07 44 07 44	07 46 07 47 07 48 07 48	07 49 07 50 07 51 07 51	07 51 07 52 07 52 07 54	00 00 00 00 00 00 00 00 00 00 00 00 00
Table I Source	0705+01	0707+38 0708+69 0708+41	0708+57 0710+31	0710+26 0711+46 0711+14	0712+39 0713+43 0713+32 0713-01 0713+38	0715+20 0715+10 0716+62 0716+52 0716+02	0716+29 0717+18 0719+64 0719+54 0720+43	0721+17 0721+27 0722+38 0723+10 0723+67	0723+54 0723+49 0725+47 0725+14	0725+49 0726+23 0726+40 0727+17 0728+22	0729+44 0729+52 0730+60 0730+27 0731+02	0732+43 0732+52 0732+33 0733+23 0733+35	0734+50 0734+70 0736-01 0736+51 0736+17	0737+37 0738+16 0740+26 0741+37 0742+58	0742+11 0743+49 0744+46 0744+38	0747+30 0747+30 0748+35 0748+16 0748+61	0749+40 0749+26 0750+54 0751+23 0751+09	0752+35 0752+35 0752+18 0754+49 0755+38	0756+01 0756+38 0758+49 0759+13 0800+46

	4030.13	4C10.25 3C191 4C37.22 6C0804+663 4C67.15	4C42.25 3C194 6C0808+677	4C-5.29 6C0810+483 4C48.22 3C196		600812+589 4058.15 4017.43 40-2.35 30196.1	4038.24	4C22.20 3C197 4C71.06	4C09.28 4C47.28 3C197.1	6C0825+849 6C0818+845	4017.44 4015.25 600820+560 600820+543 4039.23	4C44.17 PSR0823+26	4C29.29 3C200 4C35.20	4C45.16 4C07.25 4C37.24	4C32 25* 6C0831+557 4C55.16*	4C17.45 3C202 4C26.27 6C0834456 6C0834+484* 4C45.17 PSR0834-16 4C05.36 6C0835-580 4C58.16 3C205	6C0835+505 6C0835+511 6C0835+523 4C50.27 4C19.31 ACN878-445 4C42 26	0.00000+420 4042.20 0.00000+420 4042.20 4071.07	6C0837+470 4C24.18 4C13.38 3C207 6C0839+511 4C51.26	4C07.26 4C15.25	4/8.0/ 6C0843+663 6C0845+514	4037.25* 4023.20* 60849+469.4646.18	4C01.23 4C14.28 3C208	6C0850+342 4C34.29 4C14.29	4C-6.19 4C29.32 6C0852+293 6C0852+291 6C0854+342 4C34.30 3C211	4C78.08	4C14.30 3C212	6C0856+406 4C40.22	4017.47 4018.27	4C19.32 6C0900+498 4C50.28 4C47.29 ¹ 6C0011-589	6C0901+670 4C67.16	6C0903+602 4C60.13*
	6.0 [5.5~ 7.0] 6.5 [5.0~ 7.0]	11.0 [9.5-15.0] 2.5 [2.5- 3.5] 3.0 [2.5- 4.0]	6.0 [4.5-12.5] 2.0 [2.0- 2.5]	2.0 { 2.0-3.0} 7.5 { 6.5-9.0] 33.0 [24.5-58.0]	2.5 [2.0- 2.5]	4.0 [3.5- 5.0] 3.0 [2.5- 3.5] 6.5 [5.0- 7.5]	3.0 [2.5- 3.0] 3.0 [3.0- 4.5]	5.0 [4.5- 8.0] 5.5 [4.5- 8.0]	2.5 [2.5- 3.0] 4.5 [4.0+ 5.0] 2.5 [2.0- 5.5]	2.5 [2.5- 8.5]	6.5 [3.0- 7.5] 2.0 [2.0- 2.5] 10.0 [8.0-11.5]	3.0 { 2.5- 6.0}	3.0 [2.0- 3.5] 5.5 [5.0- 8.0] 5.5 [5.0- 6.0] 2.5 [2.0- 3.0]	0 [2.0- 0 [2.5- 5 [12.0-1	.0 [2.5- 5 .5 [3.0- 4	9 1 1 8	[1.5- 3 [3.0- 3. [2.5- 3.	است	2.5 [2.0- 3.0] 2.0 [2.0- 2.5] 3.0 [3.0- 5.0] 3.0 [2.5- 3.5] 5.5 [4.0- 6.5]	3.5-5	3.5-4 3.0-3 3.0-3	[3.5-5 [2.5-3 [5.5-9		44	5.5 [5.0- 6.0] 6.0 [5.0- 7.0] 4.5 [4.0- 5.5]	~	- 9 5	8 -		7.0 [6.0- 8.0]	4 0 0	
	35 [C	50 CC	0.70 [0.35-1.50] 0.50 [0.40-0.55]	25 55 50 50 50 50 50 50 50 50 50 50 50 50	55 [0	55 [6	00 00 00	55 [0.35-1 55 [0.35-1	0.25 [0.00-0.50] 0.30 [0.15-0.45] 0.25 [0.10-1.20]	64 85 95 95 95 95 95 95 95 95 95 95 95 95 95	0.25 [0.05-9.50] 1.80 [0.85-2.65] 0.30 [0.20-0.50] 0.75 [0.50-0.90]	•	0.85 [0.30-1.10] 0.90 [0.75-1.40] 0.35 [0.30-0.50] 0.45 [0.00-0.65]	0.0.0	0.45 [0.25-1.05] 0.55 [0.45-0.75]	0.40 [0.15-0.55] 0.55 [0.35-0.65] 0.40 [0.00-0.55] Pulsar Like Curve 0.40 [0.20-0.75]	0.60 [0.50-1.15] 0.55 [0.40-0.65] 0.55 [0.30-0.70] 0.60 [0.48-9.0.70]	2 2	0.40 [0.35-0.60] 0.10 [0.00-0.40] 0.60 [0.50-1.20] 0.70 [0.50-0.95] 0.50 [0.20-0.65]	.65 [0.45-0 .10 [0.00-0	8 8 8	0.60 [0.45-0.90] 0.50 [0.20-0.65] 0.60 [0.50-1.00]	8.8	8 8			.55	25	0.65 [0.40-1.25]		0.55 [0.25-1.00] 0.90 [0.55-1.25] 0.30 [0.05-0.45]	5
Î	1.42	1,85 0.51 0.42	1.03	0.43 1.52 6.15	0.39	0.81 0.47 1.09	0.53	1.13 1.01 0.96	0.55	0.36	0.36	0.59	0.36 0.79 0.99	0.40	0.48	1.59 0.36 0.36 1.21 1.87	0.30 0.59 0.48	1.43	0.46 0.50 0.50 0.94	1.08	0.65	0.72	0.68	0.76	0.95 1.14 0.80	0.46	0.95		0.58	90.6	0.95	
3	8 2	38 20 C 66 05 C	15			58 45 1 17 40 1 -02 05 1	39 00 H 44 05 I		36 50 I 09 45 I 46 10 I		26 30 1 55 05 1 39 00 1	30	20 05 1 30 00 1 35 15 I 17 00 B	55 50 50	55	17 20 I 27 45 H 46 45 C 05 50 I 58 00 I	20 23 25	8	46 45 C 23 45 I 13 15 I 35 25 C 51 25 I	80 00	51 10 H	37 15 I 23 25 C 46 45 I			-07 40 C 29 35 I 32 35 C	65 45 H 77 50 C	26 40 C 14 35 I 74 45 I	40 55 I 49 30 I	17 05 C 27 20 I		35 50 I 65 40 H 26 30 C	59 55 K
į		08 02 05 08 03 30 08 04 35	90	08 09 15 08 09 40 08 09 55	2 = 5	08 12 40 08 13 00 08 13 15	13	08 14 05 08 14 45 08 16 20		08 18 10	18 18 18 18	08 21 55 08 24 00	08 24 10 08 24 35 08 24 50 08 26 00		31	08 32 10 08 32 15 08 34 20 08 34 25 08 35 20	35 36 86	34	08 37 00 08 38 05 08 38 40 08 38 40	4 1 4	4 4 6	08 47 40 08 49 25 08 49 30	50		08 52 40 08 52 50 08 54 35	08 54 45 08 55 15	08 55 25 08 56 05 08 56 20	56 56	08 57 55 08 58 25	28	09 01 40 09 01 45 09 02 20	83
;	0801+29 0801-07	0802+10 0803+38 0804+66	0806+43	0809+26 0809-06 0809+47	0810+09	0812+58 0813+17 0813-02	0813+38	0814+29 0814+23 0816+73	0816+36 0818+09 0818+46	0818+84	0819+17 0819+26 0820+55 0821+39	0821+43 0824+26	0824+20 0824+29 0824+35 0826+17	0826+46 0827+09 0828+37	0829+31 0831+54	0832+17 0832+27 0834+46 0834+05 0835+57	0835+38 0835+49 0836+21	0836+69	0836+46 0837+23 0838+13 0838+35 0839+51	0840+06 0841+16	0844+66 0845+51	0847+37 0849+23 0849+46	0849+01 0850+14	0850+32 0851+14	0852-07 0852-29 0854-32	0854+65	0855+26 0856+14 0856+74	0856+40	0857+17 0858+27	0900+49	0901+35 0901+65 0902+26	0903+59

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ing Sources			30217		30216		380 4038.27		_	*.	391 t		30219			~ *•			6C0927+469 4C48.25 4C59.10 4C36.15 3C220.2					3+361 4C36.16"	0.7				+399	4 4041.20	+535	
tribut		4C32.27	4038.26		4057.16	C52.20	600908+380		4086.08	4047.30	4C58.18 6C0913+3	24	4045.19	4063.12 4038.29	4C31.33	4032.28 4042.29	C52.23		C0927-			1054. 19	4042.30	600936+361	1058.11 1060.14 1032.3			9	6C0943	£C40.2	3C0947	00
Possible Contributing		SC0904+320 4	4C15.30 6C0905+380 4	4C18.28*	4C24.19 6C0908+570 4	300908+528 4	6C0909+382 6 4C16.27	800909+432	600911+662 4	4C25.24 6C0913+471 4		4C22.23 4C18.29 4C22.	128	6C0918+638 4 6C0918+381 4 4C08.29	6C0919+314 4	6C0922+322 4	6C0923+\$23 4C52.21 4C64.10 6C0923+649 6C0923+392 4C39.25	4C09.34	6C0926+280 6C0926+487 6C0927+591 4 6C0927+362 4	6C0928+420 4C10.26 6C0929+638	600929+389	6C0932+309 8C0933+548 4C54.19 4C04.32 3C222 6C0934+387	4C-4.31 6C0935+428	500936+3451	6C0936+584 4C58.19 6C0938+605 4C60.14 6C0938+325 4C32.31 4C14.32 3C225	4C26.29 6C0940+574	4000.30 600941+513	4C10.27 3C226 4C25.28		6C0945+477 4C00.31 6C0945+328 6C0945+408 4C40.24 4C41.3	6C0947+569 6C0949+287	6C0949+500 4C00.32 3C230 4C26.30
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Possible Contributing Sources	4C36.17* 4C-2.41 4C-4.36 6C1036+473 4C47.32	6C1037+302 4C30.19 4C03.18 6C1038+334 4C33.24* 6C1039+504 4C50.31 6C1039+424	4C12.37 3C245 6C1041-386	6C1042+531 6C1043+378 6C1043+372 4C37.28 6C1044+297 4C29.39 6C1044+464 6C1044+476¹	6C1044-476' 6C1044-496 6C1045-352 6C1045-358 4C35.23 6C1047-445	4C09.37 4C08.33 6C1047+287 4C28.27 4C00.38 6C1048+661 4C66.11 4C79.10*	4C24.23 6C1049-616 4C61.20 6C1049-487 4C48.32 4C00.39 6C1052+349	6C1052+627 4C62.14 6C1052+380 6C1055+315	6C1055-499 4C20.24 4C01.28 6C1055-373 and others. 6C1056+432 4C43.20 3C247	6C1057+528 4C52.23 4C72.16 6C1058+428	6C1059+359 6C1059+351 4C35.24 6C1059+580 4C56.18 4C10.31 4C-2.44 4C77.09 3C249.1	4C21.29 6C1101.384 6C1102.4617 6C1103.449 4C54.22* 6C1103.538	6C1103+302 4C14.40 6C1104+668 4C67.18 6C1105+314 4C31.36 4C25.34 3C250	4C37.29* 3C251 6C1106+380 4C04.35 4C03.31 4C01.29' 6C1108+359 4C35.25 3C252 6C1108+651 4C65.12	6C1110+539 4C53.23 6C1111+408 4C40.28 3C254 6C1111-333 4C33.25 6C1112+548 4C54.23	4C21.30 6C1114+282 6C1115+586 6C1115+536 6C1114+532 6C1115+520 4C-2.47 3C255 6C1117+437 6C1117+441	6C1121-435 6C1123-340 4C33.26 4C30.21 ¹ 6C1124-499 6C1125+588
mpact Flux	[1.5- 1.5] [3.5- 6.0] [4.0-12.5] [5.0- 9.0]	[5.0-13.0] [5.0- 7.0] [3.0- 4.5] [5.0- 8.5]	[2.5- 6.0] [2.0- 3.0] [1.5- 2.0] [3.0-12.0] [3.5- 6.0]	[6.0- 7.5] [4.0- 6.5] [4.5- 6.5] [5.0-14.0] [2.5- 3.0]	[3.5- 5.0] [6.0- 8.5] [4.5- 6.0] [2.5- 3.0] [4.0- 5.5]	[2.5- 3.5] [6.5-17.5] [10.0-11.5] [2.5- 5.5] [5.0-10.5]	[3.5-7.5] [5.0-7.5] [3.0-5.0] [3.0-4.5] [2.0-2.0]	[3.0- 5.0] [2.0- 3.0] [2.5- 3.5] [2.0- 4.0] [3.0- 3.5]	[2.0- 3.0] [6.0- 7.5] [3.0- 3.5] [2.0- 3.0] [8.0-11.5]	[3.5- 4.0] [2.5- 6.5] [3.5- 7.5] [3.0- 3.5] [2.5- 3.0]	[2.5- 9.0] [4.0- 4.5] [7.5-11.0] [8.5-24.0] [7.5-21.5]	[4.0- 5.0] [2.0- 2.5] [3.5-11.0] [4.0- 6.0] [3.5- 5.0]	[3.5- 4.5] [3.5- 8.0] [3.0- 6.0] [1.5- 2.0] [2.5- 7.5]	[3.5- 5.0] [5.0- 6.0] [6.0- 9.0] [8.5-13.5] [2.5-10.5]	[3.0~ 4.0] [2.0~ 2.5] [10.5~26.5] [3.5~ 4.5] [5.0~ 7.0]	[2.5- 3.0] [3.0- 6.5] [5.0- 7.0] [12.0-43.0] [2.5- 4.0]	[3.5- 4.5] [5.5- 8.5] [6.6-18.5]
≅ oე	3.5 5.5 5.5 5.5 5.5	N 10 4 10 01	8 2 E 4 4 8 8 8 9 9	8 8 8 8 8 8 9 8 9 9							3.0 [4.0 [8.0 [10.0 [
ular Size	[0.05-0.40] [0.55-1.30] [0.55-2.45] [0.40-1.10] [0.00-0.30]	55-1 75-1 05-0 60-1 25-0	75-1 00-0 25-0 10-1	[0.60-0.85] [0.45-0.95] [0.00-0.45] [0.55-1.75] [0.30-0.60]	[0.40-0.65] [0.30-0.70] [0.25-0.60] [0.00-0.30] [0.25-0.55]	[0.20-0.50] [0.45-1.60] [0.00-0.30] [0.50-1.45] [0.10-1.15]	[0.55-1.50] [0.50-1.05] [0.40-1.05] [0.05-0.60] [0.05-0.40]	[0.05-0.70] [0.35-0.90] [0.00-0.50] [0.30-1.10] [0.00-0.40]	[0.40-0.90] [0.30-0.50] [0.00-0.20] [0.00-0.60] [0.45-0.80]	[0.30-0.45] [0.00-1.15] [1.00-2.50] [0.25-0.50] [0.35-0.65]	[0.35-2.50] [0.45-0.60] [0.00-0.50] [0.65-1.90] [0.60-2.45]	[0.30-0.55] [0.25-0.50] [0.60-2.45] [0.35-0.75] [0.30-0.65]	[0.40-0.80] [0.90-2.45] [0.45-1.20] [0.20-0.55] [0.20-1,50]	[0.25-0.70] [0.50-0.70] [0.25-0.70] [0.65-1.15] [0.00-2.10]	[0.45-0.75] [0.05-0.55] [0.30-1.45] [0.25-0.60] [0.35-0.80]	.35-1. .35-0. .40-1.	85-2 20-0 45-0 00-0 60-2
Angul	0.25 0.70 0.85 0.65	0.70 0.80 0.50 0.80	1.20 0.25 0.40 0.70	0.70 0.80 0.25 0.75	0.55 0.40 0.40 0.15 0.40	0.40 0.70 0.15 0.70 0.50	0.95 0.65 0.50 0.40 0.25	0.50 0.50 0.25 0.60 0.30	0.55 0.45 0.10 0.25 0.65	0.40 0.25 1.40 0.35	0.65 0.45 0.20 0.75 1.00					0.05 0.50 0.80 0.80	
0.5°	0.30 0.58 0.88 0.95	0.75 0.63 0.73 0.67 0.38	0.38 0.53 0.37 0.82 0.55	0.94 0.75 1.08 0.95 0.43	0.60 1.27 0.89 0.52 0.78	0.59 1.17 1.60 0.39 1.04	0.59 0.79 0.50 0.63	0.64 0.41 0.53 0.45 0.64	0.34 1.38 0.57 0.48 1.52	0.81 0.58 0.46 0.60 0.52	0.48 0.76 1.41 1.50 1.34	0.91 0.43 0.50 0.83 0.68	0.58 0.53 0.54 0.38	0.79 0.76 1.27 1.41	0.55 0.42 0.95 0.95	0.53 0.73 0.95 2.41 0.60	0.57 0.90 1.05 0.55 1.02
Dec	25 25 25 25 25	30 25 H 02 00 C 32 50 I 51 15 I	66 15 C 17 05 C 26 30 C 13 30 I 35 40 I	15 15 15 50	49 25 C 35 00 I 25 25 H 18 50 H 45 00 H	8 8 8 8 8	24 10 H 62 00 H 48 10 H 02 40 I 35 25 C	23 45 1 63 25 C 38 25 H 26 40 C 31 10 H		52 20 B 06 40 I 71 50 C 43 40 I 25 35 H		21 20 1 38 20 H 61 45 H 46 15 I 54 40 1		38 15 1 05 10 I 02 00 C 35 50 I 64 30 I	55 05 C 29 40 C 40 55 I 32 50 H 54 55 I	23 25 C 27 45 H 53 00 I -02 35 I 44 00 C	43 50 C 32 40 I 50 00 I 23 55 I 58 05 I
-continued RA	10 34 35 10 35 40 10 36 05 10 36 05 10 36 10	39 39 39	39 39 40 40 41	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	10 44 50 10 45 40 10 46 05 10 46 40 10 47 25	10 47 25 10 47 30 10 48 10 10 48 30 10 48 45	10 48 50 10 49 20 10 49 50 10 50 30 10 51 45	10 52 30 10 52 55 10 53 00 10 54 55 10 55 10	10 55 10 10 55 40 10 55 50 10 56 00 10 56 15	10 57 30 10 57 35 10 58 10 10 58 45 10 58 55	35 85 85 30 55 55	11 01 10 11 01 30 11 02 05 11 03 15 11 03 25	11 03 50 11 05 00 11 05 05 11 06 10 11 06 25	11 06 40 11 07 45 11 08 40 11 08 45 11 08 50	11 10 25 11 10 30 11 11 45 11 12 00 11 12 35	11 12 45 11 14 35 11 15 10 11 17 05 11 17 20	11 21 30 11 23 40 11 24 40 11 25 25 11 25 55
Table 1-c	1034+27 1035+35 1036-02 1036+46 1036+21	1037+30 1039+02 1039+32 1039+51 1039+43	1039+66 1039+17 1040+26 1040+13 1041+35		1044+49 1045+34 1046+25 1046+18 1047+45	1047+10 1047+28 1048-00 1048+65 1048+74	1048+24 1049+62 1049+48 1050+02 1051+35	1052+23 1052+63 1052+38 1054+26 1055+31	1055+49 1055+20 1055+02 1055+38 1055+38	1057+52 1057+06 1058+71 1058+43 1058+25	1059+35 1059+57 1059+10 1059-02 1100+75	1101+21 1101+38 1102+61 1103+46 1103+54	1103+30 1104+13 1105+66 1106+32 1106+25	1106+38 1107+05 1108+02 1108+35 1108+64	1110+55 11110+29 11111+40 11111+32	1112+23 1114+27 1115+52 1117-02 1117+44	1121+43 1123+32 1124+49 1125+23 1125+58

		31.	. 89:	.65 .86		3+645	37 .33 1	270.1 6C1222+438 ¹ 4C42.35 3C272	1231+507
	0) 0)	4C20.26 4C19.39¹ 4C21. 6C1128+455 6C1129+636 4C63.14 6C1130+335 4C33.28 6C1131+437 4C43.22 6C132+556	6C1134-389 6C1135-374 4C01.31 6C1138-310 6C1136-299 6C1137-660 4C66.13 3C263 6C1137-493	6C1138+356 6C1138+594 4C59.16 4C01.32 4C22.30 3C263.1 4C00.41 4C-0.46 4C70.10 6C1142+318 4C31.37 3C265 6C1148+584 4C56.33 3C266 6C1146+544 4C54.24	4C13.45 3C267 6C1148-1887 4C38.31 6C1150-438 6C1150-498 4C49.22 6C1151-384 4C38.32 6C1151-286 4C38.32 6C1151-295 4C29.44 6C1151-255 4C58.13	4C18.33 6C1153+317 4C31.38 4465.24 6C156+541 4C54.25 4C29.45 4C25.37 6C1202+297 4C29.46* 4C64.14 3C268.3 6C1203+645	6C1204+363 4C35.27 4C37.33 ¹ 4C54.26 6C1204+544 4C23.29 4C24.25 6C1212+380 4C17.54 4C53.24 6C1213+538 4C64.15 6C1215+643 4C52.39	4009.41 4022.35 601218+339.403.29.30270.1 601220+408.4040.31 4050.34.601220+507 601222+423.601222+427'.601 4021.35	4C54.28 6C1226+540 4C02.32 3C273 6C1226+30 4C73.12** 4C72.17 6C1229-420 6C1229+405 6C1229-420 6C1229+405 6C1229-42 6C1230+519 4C24.27 6C1233+519 4C39.37** 6C1234+371 4C37.34
Vin 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	8.0 [7.5-19.0] 8.5 [5.0-6.5] 8.5 [8.0-9.5] 5.5 [3.5-9.0] 2.0 [2.0-3.0] 3.0 [2.5-6.0]	3.0 [2.5- 4.0] 10.5 [10.0-13.0] 4.5 [3.5- 7.0] 8.5 [7.5-10.0] 4.0 [3.5- 5.0] 3.0 [2.5- 5.0]	2.5 [2.0- 3.0] 5.0 [2.0- 3.5] 5.0 [2.0- 3.5] 3.0 [2.0- 3.5] 3.0 [2.5- 3.5] 13.5 [12.0-31.5] 3.5 [3.5- 5.0]	2.5 [2.5- 2.5] 11.0 [10.0-24.5] 5.5 [2.5- 9.5] 8.5 [7.5-10.0] 19.0 [15.5-23.5] 7.0 [6.5-18.5] 9.5 [8.0-10.5] 9.5 [8.0-10.5] 9.5 [8.0-10.5]	3.0 [2.5-5.0] 7.5 [7.0-23.5] 3.0 [2.5-4.0] 10.5 [2.5-4.0] 2.5 [2.5-4.0] 2.5 [2.0-3.0] 2.5 [2.0-3.0] 3.5 [3.0-4.0] 5.5 [3.0-8.5] 2.5 [3.0-8.5]	9.0 [7.5-11.0] 9.5 [9.5-11.0] 8.6 [8.0-13.5] 8.0 [3.0-3.5] 9.0 [3.5-5.0] 3.0 [3.0-3.5] 3.0 [3.0-3.5] 5.0 [4.0-7.0] 5.0 [4.0-7.0]	4.5. [4.0- 4.5] 5.0 [4.0- 5.5] 5.5 [2.0- 2.5] 5.5 [4.0- 5.0] 4.5 [4.0- 5.0] 9.5 [7.0-20.5] 3.0 [3.0-3.5] 5.5 [5.0-16.0] 8.0 [5.0-15.5] 4.0 [7.0-23.0] 6.0 [5.0-15.5]	5.0 [5.0-13.0] 5.0 [5.0-17.0] 15.0 [13.5-17.5] 6.0 [5.0-8.5] 6.5 [6.0-8.5] 7.5 [4.5-7.0] 2.5 [4.0-6.0] 1.5 [1.0-2.0] 2.5 [2.0-6.0] 2.5 [2.0-6.0]	5.5 [4.5-11.0] 3.7 5 [34.0-56.0] 3.5 [3.0-4 5] 4.0 [2.5-5.0] 3.0 [2.5-4.5] 3.0 [2.5-4.5] 3.0 [2.5-5.0] 5.0 [4.5-5.0] 5.0 [2.5-6.5] 5.0 [2.5-6.5] 5.0 [2.5-6.5] 5.0 [5.5-6.5] 5.0 [5.5-6.5] 5.0 [5.5-6.5]
	35 [0.75-2.35 [0.10-0.35 [0.85-2.25 [0.00-0.35]]	0.25 [0.00-0.55] 0.30 [0.25-0.50] 0.90 [0.75-1.45] 0.40 [0.20-0.60] 0.40 [0.30-0.60] 0.85 [0.55-1.40]	0.25 [0.10-0.55] 0.50 [0.20-0.75] 0.30 [0.05-0.45] 0.50 [0.35-0.60] 0.40 [0.25-0.55] 0.95 [0.75-2.50] 0.70 [0.60-1.10]	25 [0.05-0 30 [0.75-1 30 [0.20-0 770 [0.40-2 40 [0.25-0 60 [0.35-0 50 [0.20-0 70 [0.30-0 45 [0.30-0	40 [0.00-0 40 [0.10-0 40 [0.25-0 40 [0.25-0 95 [0.55-2 70 [0.25-0 50 [0.25-0 70 [0.80-0 90 [0.75-2		0.50 [0.35-0.55] 0.50 [0.30-0.65] 0.45 [0.20-0.50] 0.25 [0.10-0.50] 0.25 [0.00-0.40] 1.05 [0.65-2.45] 0.05 [0.00-0.30] 1.00 [0.70-2.15] 0.70 [0.60-2.45] 0.70 [0.60-2.45] 0.70 [0.55-2.45]	0.80 [0.55-2.50] 0.40 [0.25-0.53] 0.40 [0.25-0.53] 0.65 [0.45-0.95] 0.65 [0.45-0.95] 0.75 [0.65-1.20] 0.75 [0.65-1.20] 0.40 [0.20-0.65] 0.40 [0.20-0.65]	45 [0.70-1] 45 [0.70-1] 45 [0.70-1] 45 [0.70-1] 45 [0.70-1] 45 [0.70-2] 45 [0.70-2] 45 [0.70-2] 45 [0.70-2] 46 [0.70-2] 47 [0.70-2] 48 [0.70-2] 49 [0.70-2]
	1.10 0.94 1.32 0.46 0.54	25 C 0.63 05 1 2.14 25 1 0.59 40 H 1.80 25 1 0.89 25 1 0.38	1 0.40 H 0.51 I 1.05 C 0.45 H 0.58 H 1.60	20 1 0.48 10 1 1.36 10 1 1.36 40 C 0.57 35 C 1.64 35 I 2.89 00 I 0.75 05 I 1.75 05 C 0.48	20 1 0 63 55 1 1.27 55 H 0.63 40 1 1.53 45 1 0.43 25 C 0.44 35 C 0.58 35 C 0.58	45 I 1.27 40 H 1.99 30 I 0.60 55 H 1.56 30 C 0.59 35 N 0.82 40 N 0.58 25 N 1.11 35 N 1.11	35 N 0 74 20 N 0 682 35 N 1.19 35 N 1.19 30 C 1.13 30 C 1.13 45 C 1.09 45 C 1.09 55 I 0.84	25 25 25 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	54 55 C 0.64 92 10 1 7.03 93 25 C 0.64 41 15 C 0.34 94 35 C 0.67 42 50 H 0.78 95 25 C 0.67 96 35 C 0.67 97 36 C 0.67 98 35 C 0.48 98 50 C 0.48 98 50 C 0.48 98 50 C 0.68 98
5	11 26 11 26 11 27 11 27 11 27	11 28 11 29 11 29 11 31 11 32		11 38 10 11 38 15 11 38 30 11 39 50 11 40 10 11 42 35 11 42 55 11 43 05 11 43 05	11 47 00 11 47 30 11 49 05 11 50 05 11 50 30 11 51 05 11 51 40 11 51 45	11 53 11 54 11 54 11 56 11 57 11 58 12 02 12 03 12 03	12 04 12 04 12 06 12 10 12 10 12 12 12 13 12 13 13 13 14 15 15 15 16 15 17 15 18 16 16 18 16 18 18 16 18 16 18 18 16 18 18 18 18 18 18 18 18 18 18 18 18 18	200000000000000000000000000000000000000	1226+54 12 26 26 12 26 40 1226+54 12 26 45 12 26 40 1226+35 12 27 45 1228+41 12 28 55 1230+35 12 32 40 1232+42 12 32 40 1232+39 12 31 40 1233+39 12 31 40 1233+39 12 31 40 1233+39 12 31 40 1233+39 12 31 30 51 20 44 38 12 34 30 51 20 44 30 51 20 51 20 44 30 51 20 51 20 51 20 51 20 51 20 51

Possible Contributing Sources	6C1236+531 4C61.28 6C1236-612 6C1236+327 4C32.40 4C-3.46 PSR1237+25 4C72.18 4G70.13 6C1237+383 4C35.29	4C-4.43 3C275 4C-5.52 4C16.34 3C275.1 6C1242+460 6C1244-364 4C36.21 4C03.24 6C1243+554	6C1244+279 6C1244+375 6C1244+389 4C38.33 6C1244+492 4C17.55 4C22.37 6C1247+450 6C1247+458 4C44.21 4C45.26 4C33.30	4056.20 30277.1 6C1250+546 6C1250+568 6C1250+384 6C1250+484 4C43.25* 4C1250+447 4C43.25* 4C15.40 3C277.2 6C1250+308 6C1253+372 6C1253+310 6C1253+310	6C1255+370 4C36.22** 6C1256+617 6C1257+371 4C23.34 6C1258+404 6C1257+383 4C38.34 6C1259+318 6C1259+311 6C1301+354 6C1301+374 4C58.24** 6C1301+354 6C1301+598 6C1302+559 6C1302+388 6C1302+363 4C38.36	4C09.45 4C19.43 4C-5.56 4C65.14 6C1306+860 4C12.47 6C1308+373 4C21.39 4C27.24 3C284	4067.22 601311+678 4001.36 601312+578 601313+387 601312+369 601312+578 601312+563¹ 601312+558¹ 4020.31 601313+386 4039.38 601315+386 4039.38 601315+6678 601316+665	4C-0.50 6C1318+370 6C1318+378 4C37.37 6C1318+508 4C11.45 4C27.25 6C1320+32 4C03.27 6C1322+340	4C55.25 6C1322+551 4C65.15 6C1323+6K55 4C21.323-321 4C32.44* 4C21.38 6C1324+431 6C1325+436 4C43.28 4C55.26 6C1325+553 4C25.43 3C287 6C1328+307 4C30.26 3C286 4C58.25*
-									50 50 50 50 50 50 50 50 50 50 50 50 50 5
Compact Flux	2.0-3.0] 2.0-4.0] 3.0-4.0] 3.0-4.5] 4.0-7.0] 5.0-7.0] 5.0-7.0] 5.0-7.0] 5.0-7.0]	11.5-17. 7.0-10. 7.0-10. 14.0-5. 8.5-11. 8.5-11.		8.0-13. 2.0- 3. 3.0- 7. 2.0- 5. 2.0- 5. 3.5- 2.0- 5.	4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	6.5-9.5] 2.0-3.0] 3.5-8.0] 12.5-18.0] 6.5-19.5] 2.5-3.0] 2.0-2.5] 2.6-6.5]	7.5-20.0] 3.0-5.5] 2.0-3.0] 2.0-6.0] 3.5-4.5] 3.5-4.5] 5.5-8.5] 2.0-2.0] 2.0-2.0]	2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	2.0-3 2.5-7 2.5-3 3.0-4 3.0-5 4.5-14 2.5-3 17.0-21 7.5-16
Compa	0 2 2 4 4 2 0 4 4 9 2	25 4 4 9 9 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	3.55 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1				
Angular Size	0.40 [0.25-0.80] 0.50 [0.30-0.65] 0.40 [0.20-2.30] 0.50 [0.45-1.05] 0.65 [0.45-1.05] 0.50 [0.30-0.70] 0.50 [0.30-0.70] 0.50 [0.50-1.60] 0.50 [0.50-0.35] 0.40 [0.25-0.55]	50 [0.25-0.65] 60 [0.35-0.65] 50 [0.55-2.05] 65 [0.55-2.05] 75 [0.65-0.90] 50 [0.25-0.70] 64 [1.00-2.45]	[0.25-1.20] [0.35-0.58] [0.25-0.60] [0.25-0.60] [0.35-1.00] [0.15-0.45] [0.05-0.55]	[0.35-0.95] [0.40-0.65] [0.40-0.65] [0.40-1.20] [0.70-2.45] [0.50-0.95] [0.35-1.10] [0.40-1.25]	[0.40-0.75] [0.80-1.80] [0.35-0.65] [0.75-1.80] [0.46-0.75] [0.40-0.70] [0.55-2.45] [0.55-2.45]	0.45 [0.20-0.60] 0.20 [0.00-0.50] 1.95 [1.00-2.90] 0.75 [0.55-1.00] 0.75 [0.45-2.05] 0.30 [0.25-0.45] 0.70 [0.60-0.75] 0.95 [0.55-1.40] 0.60 [0.45-1.70] 0.70 [0.15-0.85]		35 25 25 35 35 40 45 45 85 85	0.55 [0.30-1.05] 0.95 [0.55-2.50] 0.40 [0.55-0.55] 0.65 [0.33-0.75] 0.70 [0.30-1.75] 0.70 [0.30-1.75] 0.30 [0.40-0.75] 0.30 [0.15-0.45] 1.10 [0.95-2.45]
°*S0	33 67 67 63 63 647 86	23 33 27 71 71	54 41 74 71 73 88 38			1.51 0.49 0.38 2.13 1.15 0.47 0.33 0.85 0.68		0.79 0.51 1.01 0.88 0.46 0.60 0.74 0.50	0.41 0.42 0.64 0.42 1.01 0.46 0.46 0.97
Dec	20 15 1 0 09 30 1 0 52 55 1 0 61 35 H 0 32 35 I 0 -02 30 C 0 74 15 I 0 29 00 I 0	20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	335 1 22 2 5 1 10 1 10 1		37 15 1 60 35 C 32 30 C 23 35 B 38 25 C 38 25 C 37 55 1 37 50 1	08 25 1 25 55 1 -07 35 C 67 25 1 13 25 1 47 30 H 22 0 0 1 27 30 H	35 I 05 I 00 I 00 I 20 I 35 I 05 C	23 20 1 -02 00 H -02 00 H 50 40 I 13 40 C 27 00 H 42 50 H 02 10 I 35 25 C	55 05 C 96 05 C 23 24 0 C 23 25 I 43 55 I 43 55 I 55 15 I 26 20 I 58 25 I
-continued RA	12 34 55 12 35 50 12 36 15 12 36 25 12 37 00 12 37 15 12 37 20 12 37 55 12 39 30	3 6 6 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	12 50 10 12 50 15 12 50 15 12 50 55 12 51 00 12 53 05 12 53 20 12 54 40		13 03 00 13 03 35 13 05 05 13 06 05 13 08 25 13 08 25 13 08 45 13 09 50	13 11 40 13 12 10 13 12 40 13 12 45 13 12 50 13 13 14 10 13 14 25 13 15 10	13 16 10 13 17 10 13 17 15 13 18 30 13 19 00 13 20 05 13 20 00 13 22 00	13 22 50 13 23 55 13 24 05 13 24 05 13 25 00 13 25 40 13 28 35 13 28 35 13 28 55 13 28 55
Table 1-	1234+20 1235+09 1236+61 1236+61 1236+32 1237-24 1237+24 1237+74 1237+74	1239-04 1241+17 1241+26 1242+44 1242+35 1243+55	1244+17 1244+37 1244+37 1245+49 1245+17 1247+43 1247+33 1247+33	1250+55 1250+38 1250+43 1250+16 1250+29 1253+74 1253+35 1253+29 1253+29	1254+37 1256+60 1257+32 1258+38 1258+38 1259+31 1259+81 1302+35 1302+57	1303+08 1303+19 1305+25 1306-07 1306+67 1308+13 1308+20 1308+20	1311+68 1312+02 1312+38 1312+57 1312+20 1313+30 1314+45 1314+45 1315+38	1316+23 1317+19 1317-01 1318+37 1319+50 1319+13 1320+27 1320+02 1320+02	1322+55 1323+66 1324+32 1324+23 1325+43 1325+65 1326+86 1328+29 1328+29

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,	6C1329+440 6C1332+327 6C1333+666 4C27_26	6C1335+479 4C47.37 4C-6.35 4CD2.37		4C10.36 4C47.38 6C1339+486 6C1339+472 6C1340+353 4C35.30 4C60,18 3C288.1 6C1340+606		6C1343-430 4C43.30 6C1343-386 6C1343-381 4C38.37 4C50.37 3C289 6C1343+500			6C1348+490 6C1347+500 4C-1.30 6C1350+316 4C31.43 3C293		4C57.23 6C1382+570 6C1351+576- 4C16.38 3C293.1 6C1352+500 6C1353+486 4C-0.52		4C19.44 6C1354+325 4C32.46 6C1356+393	4C19.45 4C26.43 4C00.48 4C53.29 4C1358+544 6C1358+538 4C43.32*			4C34.38 3C284 6C1402+310 6C1402+297 4C24.30 6C1406+635 4C17.57	6C1408+370 6C1408+398 4C37.40 4C03.28 4C71.14 6C1409+712	4C52.30 3C295 6C1410*530 6C1409*524 6C1409*51 6C1409*294 4C67.24 4C66.15 6C1412*669	4C25.45 6C1414+630 6C1414+623 4C-3.50 3C297	6C1415+361 4C36.25* 4C06.49 3C298 4C14.52 6C1417+72 4C27.28 6C1419-419 4C41.27 3C299	6C1419+345 6C1421+487 6C1421+511 6C1422+276 4C27, 29 4C20, 33 4C21, 41 4C19 6C1423+341		
,	2.5-5.0] 2.0-2.5] 5 [2.5-2.5] 5 [4.0-5.5]	[2.0- 6 [9.0-17	[4.0-10 [2.0- 4	1 3.0 1 3.0 1 3.0		5 [2.0- 3.5] 5 [2.0- 2.5] 5 [6.0-24.5]	0 [12.5-20.5] 0 [9.5-13.5] 0 [10.0-11.0]	0 [2.0- 3.0] 5 [2.0- 4.0]	5 [2.5- 3.0] 5 [2.5- 4.5] 5 [4.0-13.5] 0 [6.0- 6.5]	5 [7.5-12.5] 5 [4.0- 9.0]	$\begin{bmatrix} 4.0 - 8.5 \\ 3.5 - 4.5 \end{bmatrix}$ $\begin{bmatrix} 2.5 - 9.0 \\ 5.0 - 12.5 \end{bmatrix}$	[4.0- 6 [3.5-10	2.5-5 2.5-5 4.5-4		[1.5- 2. [4.0-10. [3.0- 5. [8.5-14. [10.5-20.		[5.0- 8 [8.5-10 [5.0- 8 [3.0- 4	4 6 6 6	5 [2.5- 3.5]	[2.0- 2. [11.0-20.	\$\begin{align*} \begin{align*} (27.0-33.5) \\ \begin{align*} (27.0-33.5) \\ \begin{align*} \begin{align*} (3.0-4.0) \\ (3.0-4.5) \\ \begin{align*} (21.5-53.0) \\ \end{align*}	[2.5- 4 [2.0- 7 [4.5- 6 [6.0- 7 [2.0- 3	[7.0-1 [3.5- [9.0-1 [8.0-2	
	0.60-1.35 3.0 0.20-0.55 2.0 0.00-0.35 2.8 0.55-0.95 4.8	60-2.50] 60-1.30] 30-0.90]	. 30-1.05]	.35-0.65] .45-0.95] .70-1.40]	.45-0.80] .15-0.50] .50-0.85]	[0.25-0.90] 2. [0.25-0.50] 2. [0.00-2.30] 6.	.40-2.55] .45-0.85] .50-0.60]		[0.35~1.00] 2.0 [0.25~0.85]† 3.1 [0.60~2.00] 5.1 [0.00~0.30] 6.1		[1.10-2.45] 5. [0.50-0.75] 4. [0.30-2.50] 3. [0.75-2.00] 6.		[0.10-0.50] 5. [0.65-1.45] 3. [0.55-1.00] 3.	[0.70-2.45]† 3.0 [0.25-0.50] 3.0 [0.25-0.70] 4.0 [0.75-1.25] 4.5 [0.20-0.85] 3.0			20-0.75] .35-0.55] Litude Source .55-1.15]	4440	Sparse Curve [0.45-0.95] 2.5 [0.20-2.30] 3.5	[0.15-0.45] 2.5 Latitude Source [0.70-1.40] 12.0		.65-1.30] .50-2.45] .25-0.60] .10-0.50]	.55-1 .45-1 .55-0 .60-2	
	0.39 0.75 0.39 0.40 0.53 0.35 0.61 0.70 0.44 0.85	36 0	57 1		20 0	000	.31 1. .60 0. .53 0.	.45 0.75	.33 0.60 .55 0.55 .77 0.90 .17 0.15	0.75	1.25 0.65 0.65 1.10	0.60	0.35 0.90 0.65	0,95 0.35 0.55 1.15 0,65	40 30 85 15	0.80 1.65 0.65 1.00 0.50	0.25 0.45 #18h 0.65	0.30 0.25 0.55 1.40	.97 Very .44 0.55 .62 0.40	0.30 #18h 0.80	0.67 0.55 5.89 0.25 0.62 0.30 0.54 0.45 3.94 0.50	40 35 0 35 0 10 50	.63 0. .65 0. .27 0.	
3	43 40 I 32 40 C 66 05 C 27 15 I 20 25 C	49 25 -07 45	37 55 27 50	10 55 H 49 25 C 35 25 C 60 15 I	29 00 14 45 32 40	43 50 38 15 49 45	-07 45 23 25 21 55	54 55 38 40	49 06 -02 31	43 10 10 20	,	39 15 02 00	18 25 31 45 38 50	20 35 26 45 02 00 55 05 44 00	32 30 02 00 49 20 35 25 -04 40	41 15 65 05 29 40 -03 35 45 00	32 40 23 55 63 35 16 55 19 45	38 25 02 71	52 30 29 15 66 05	26 40 C 63 25 C -04 30 I	35 55 I 06 50 I 13 35 C 27 15 I 41 50 I	33 49 20 32	23 20 10 20 29 05 -02 30 32 25	
	3 13 29 20 2 13 31 55 6 13 33 10 7 13 33 50 0 13 35 30	13 35 13 35 13 37	13 37 13 38	0 13 38 30 9 13 39 25 5 13 40 10 0 13 40 40	13 41 13 42 13 42	13 13	13 44 13 46 13 47	13 47 13 48	.9 13 48 20 16 13 49 10 12 13 49 45 11 13 50 05	13 50 13 50	13 52 13 52 13 52 13 54	13 54 13 54			13 59 14 00 14 01 14 01		14 04 14 06 14 06 14 07 14 08	4 4 4 4	14 09 14 09 14 12	<u> </u>	15 14 14 55 16 14 16 40 13 14 17 25 27 14 18 00 11 14 19 05	14 19 14 21 14 22 14 22 14 23	14 24 14 24 14 25 14 26 14 26	
	1329+43 1331+32 1333+66 1333+27 1335+20	1335+49 1335-07	1337+3	1338+10 1339+49 1340+35 1340+60	1341+2 1342+1 1342+3	1343+43 1343+38 1343+49	1344-07 1346+23 1347+21	1347+5 1348+3	1348+49 1349+06 1349-02 1350+31	1350+4 1350+1	1352+57 1352+17 1352+49 1354-01	1354+3 1354+0	1354+18 1354+31 1356+38	1357+20 1357+26 1357+02 1358+55 1358+44	1359+32 1400+02 1400+49 1401+35 1401-04	1401+41 1402+65 1402+29 1403-03	1404+32 1406+23 1406+63 1407+16	1408+38 1408+25 1409+02 1409+71	1409+52 1409+29 1412+66	1413+26 1414+63 1414-04	1414+35 1416+06 1417+13 1418+27 1419+41	1419+33 1421+49 1422+26 1422+20 1423+32	1423+23 1424+10 1425+29 1426-02 1427+32	

_;		An
A. Purvis et al.		SV
4. Pur		Dec
7	Table 1-continued	Vα
612	Fable 1	Source

Possible Contributing Sources	4C22.41 6C1427+543 6C1428-470 4C17.58 4C15.40 4C53.31 6C1431+538	6C1432+428 6C1433+318 4C31.46 4C-4.51 4C23.38 4C03.30	4C63.20 6C1435+635 6C1435+638 6C1435+285 4C28.36 6C1438+357 4C35.33 6C1441+409	6C1441+635 6C1441+619 4C50.38 6C1442+507 4C64.32 6C1442+549 4C28.39*	6C1445+375 4C37.41 4C77.14 3C305.1 4C77.13 3C303.1 4C20.34 3C304 4C21.43	4C50.39 6C1446+504 4C63.21 3C305 6C1448+634 4C00.32 4C54.33 6C1449+532 6C1452+301	4C50.40 6C1452+502 6C1453+501 ¹ 4C18.39 8C1455-550 6C1455+548	4C25.47 6C1454-271 6C1455-298 6C1455+287 4C28.38 4C14.56 4C18.40 6C1456-339	6C1457+321 8C1458+433 6C1458+425 6C1458+453 and others. 4C71.15 3G308.1	6C1500+399 6C1500+380 6C1501+456 6C1502-459 6C1502+287 4C03.31 4C60.19 3C311 6C1502+602 6C1503+604	4C09.53 6C1504:323 4C32.47 6C1505:368 4C01.41 4C19.48	4C14.58 PSR1508+55 4C08.44 3C313 4C10.40* 4C01.42	4C15.45 6C1510-321 4C32.48 6C1511-475 4C47.41 4C15.46 6C1513-339 6C1514+333 4C33.35	4C18.42.3C316 4C67.25.6C1515+670 6C1518+477 4C20.35.3C318	6C1518+389 4C59.22 6C1520+599 6C1520+606 4C72.24 4C13.54 6C1521+287 6C1521+272 4C28.39 4C27.31		6C1526+378 4C37.44 4C51.33 6C1527+517 6C1527+515 6C1528+340 4C34.41 PSR1529+28 4C24.34 3C321
Compact Flux	.0 [3.5- 4 .5 [6.0-15 .5 [2.5- 3 .5 [2.5- 3 .0 [6.5-13	3.5 [2.5- 7.0] 6.5 [3.5- 7.5] 4.0 [3.5- 5.0] 5.5 [4.5- 7.5] 4.5 [3.5- 5.0]			3.5 [3.5- 3.5] 4.0 [3.5- 4.5] 15.0 [13.5-46.5] 3.5 [3.0- 5.0] 3.5 [3.0- 4.5]	3.5 [3.5- 5.0] 6.0 [5.5- 7.5] 5.0 [5.0- 6.0] 3.0 [3.0- 4.0]	7.5 [6.5-10.5] 10.0 [9.0~13.0] 2.5 [1.5- 5.0] 4.5 [3.5- 5.0] 2.0 [1.5- 6.5]	3.5 [3.0- 4.0] 4.0 [3.5- 4.5] 2.5 [2.0- 3.0] 3.0 [3.0- 3.5] 6.5 [5.5-11.5]	3.5 [3.0- 6.5] 3.0 [2.5- 7.0] 4.0 [2.5- 5.0] 2.5 [2.5- 3.5] 35.0 [27.5-63.0]	3.5 [2.5- 5.0] 4.0 [3.5- 4.5] 6.5 [5.5- 8.5] 3.5 [3.0- 4.5] 12.5 [9.0-33.5]	4.5 [4.0- 5.0] 3.5 [3.5- 4.0] 2.5 [2.0- 3.5] 3.5 [3.0- 4.0] 2.5 [2.0- 3.0]	2.0 [2.0- 2.5] 10.5 [9.0-17.0] 7.0 [4.0-11.0] 2.0 [2.0- 2.5] 7.0 [6.0- 9.0]	3.5 [2.5- 4.5] 2.5 [2.5- 3.0] 10.5 [8.5-20.5] 3.5 [3.5- 4.0] 3.5 [3.0- 5.0]	8.0 [7.0-14.0] 7.0 [7.0- 7.5] 4.5 [4.0-10.5] 14.0 [13.0-15.5]	20 20	2.0 [2.0-3.5] 5.5 [4.5-8.5] 1.5 [1.5-8.0] 3.5 [2.5-3.5] 2.5 [2.0-3.0]	0 2 2 2
Angular Size	22222	4,6666	35555	Latitude Source [0.25-0.80] [0.00-1.20] [0.80-2.45] [0.30-0.60]	[0.00-0.25] [0.25-0.70] [0.00-2.30] [0.55-1.15] [0.20-0.60]	[0.00-0.75] Latitude Source [0.15-0.55] [0.00-0.50] [0.50-0.85]	[0.00-0.90] [0.00-0.50] [0.35-1.65] [0.35-0.70] [0.00-2.30]	35 [0.25-0.55] 65 [0.55-0.90] 40 [0.00-0.60] 30 [0.30-0.45] 30 [1.05-2.50]	90 [0.75-1.70] 85 [0.60-1.75] 15 [0.60-1.45] 35 [0.20-0.75] 15 [0.85-2.45]	[0.20-1.00] [0.00-0.60] [0.60-1.10] [0.00-0.60] [0.00-2.50]	0.50 [0.25-0.60] 0.15 [0.00-0.40] 0.40 [0.00-0.70] 0.35 [0.20-0.60] 0.25 [0.00-0.45]		[0.50-1.10] [0.00-0.40] [0.80-2.50] [0.30-0.50] [0.30-0.90]	[1.05-2.50] [0.00-0.20] Latitude Sourc. [0.75-2.50] [0.05-0.35]	[0.00-0.60] [0.00-2.25] Latitude Sourc [0.20-1.40] [0.00-0.25]	0.40 [0.00-0.95] 0.45 [0.25-1.00] 0.10 [0.00-2.00] 0.35 [0.00-0.50] 0.35 [0.30-0.70]	1,75 [0.80-2.70] 0.20 [0.00-0.45] 0.90 [0.80-2.45] 0.15 [0.00-0.35] Pulsar Like Curve
° • \$70	63 18 43 75	38 32 54 72		.50 .59 .67	0.60 0.60 0.87 0.49 0.62						0.71 0.65 0.41 0.67		51 27 64 61	1.01 1.54 0.50 0.68 2.82	0.57 0.71 0.84 0.63	36 88 54 54 49	0.53 1.42 0.96 0.53 0.99
Dec	88888		63 35 1 29 10 H 23 25 C 35 45 I 41 30 I	63 00 I 49 25 C 55 00 C 23 45 I 26 40 C	20 20 C 38 00 I 76 35 I 29 40 C 20 35 I	49 25 C 63 40 I 00 50 I 53 40 H 30 00 I	20 40 40 55	26 40 C 29 40 C 13 30 C 20 15 I 35 25 C	10 05 I 32 35 C 17 25 I 44 00 C	39 20 H 45 00 I 29 00 H 06 10 C 60 10 I	09 50 1 32 30 1 38 20 C 02 00 C 20 15 C	13 30 C 55 25 I 10 00 C 26 30 C 01 35 H		10 00 C 18 45 H 66 10 B 47 10 H 20 35 I	38 15 I 59 50 H 70 05 I 13 20 I 28 00 H	35 35	20 40 I 37 50 I 51 40 I 32 30 C 23 15 I
\$2	27 28 30 31	14 32 50 14 33 20 14 33 20 14 34 30	14 35 20 14 36 00 14 36 50 14 38 50 14 41 05	44444	14 45 05 14 45 20 14 45 55 14 46 20 14 46 45	7 4 4 4 8 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	14 52 35 14 53 15 14 54 20 14 54 50	14 55 15 14 55 40 14 55 50 14 56 25 14 56 30		00 01 02 03	15 03 55 15 04 05 15 05 20 15 05 50 15 06 30		10 10 11 12	15 14 25 15 14 55 15 14 55 15 17 55 15 17 55	15 18 50 15 20 25 15 20 35 15 21 10 15 21 35	25 25 25 25 25	15 26 35 15 26 40 15 27 15 15 29 40
Source	1427+20 1427+53 1428+43 1430+17 1431+54	1432+44 1433+32 1433-02 1433+23 1433+02	1435+63 1435+29 1436+23 1438+35 1441+41	1441+63 1441+49 1442+55 1442+23 1444+26	1445+20 1445+37 1445+76 1446+29 1446+20	1447+49 1448+63 1449+00 1449+53 1452+30	1452+50 1453-07 1453+37 1454+16 1454+54	1455+26 1455+29 1455+13 1456+20 1456+35	1456+10 1457+32 1458+17 1458+43 1459+73	1500+39 1501+45 1502+29 1502+06 1503+60	1503+09 1504+32 1505+38 1505+01 1506+20	1507+13 1507+55 1508+09 1509+26 1509+01	1510+17 1510+32 1511+46 1512+16 1512+16	1514+09 1514+18 1514+66 1517+47 1517+20	1518+38 1520+59 1520+70 1521+13 1521+28	1521+43 1523+01 1525+13 1525+32 1525+23	1526+20 1526+37 1527+51 1528+32 1529+23

			01 011333+33																																									5 4037.49 3034				
Possible Contributing Sources	601531+462 601531+454 601530+468	ģ	4 03	4C13.56	4016 FO 4014 FO	4C15.3U 4C14.5U		6C1542+373 4C37.45 6C1542+373 4C37.45 6C1542+323 4C32 40	4C19-51	601543+465 4046,32	6C1546+487 4C48 39 4C21 46 3C324		4062.25 30325 601549+628 4020 37* 30326	6C1551+368 4C19.52	4020.38 30326.1	4C35.39 6C1556+354 6C1555+356 6C1557+439 4C43.36	4C68.16 4C53.36 6C1558+536	4C57.27 6C1603+576 6C1603+561	4C66,17 3C330 6C1609+660	6C1610+407 4C40.34 4C22.43 3C331	4059.23 601611+598	4C14.62 4C-2.68	6C1612+278 4C27.32 4C28.41	4021.47 4020.39	ocidio+453	4C10.46 6C1619+424 4C43.38*	6C1619+378 4C37.46 4C65.20	6C1620+333 6C1620+324 4C12 57	6C1621+347 4C34.44	4C23.43 3C336 6C1623+327	4C60,23 6C1624+602 4C21,48	6C1627+289	6C16Z7+444 4C44.Z8 3C337 4C23.44 3C340	4C12.59 6C1629+439 4C43.39		4C38.41 6C1633+374 4C37.47 4C62.26 3C343	6C1631+859 4C26, 49, 3C342	4C39.47* 6C1635+396	4C-3.61	4062.27 30343.1	4C-2.69 4C13.61 4C12.60	6C1638+385 4C38.42	6C1640+300 4C30.30	6C1641+399 6C1641+375 4C39.48 3C345 4C13.62	4002.42 601643+475		4C17.71 6C1646+378 4C37.50	4C75.06
Compact Flux	_	3.0 [3.0- 3.0]											0	3.0 [3.0- 5.0]	. 5	7.5 [6.0-11.5] 4.0 [3.5-7.0]	.0 [2		4	ഹര	LO C	ກທ	~~	3.0 [2.5- 5.0]	[5.5-6.0]	[5.5- 6.5]	[3.0-3.5]	[2.5- 3.0]	[2.5- 5.5]		4.8			5.5 [4.5- 6.5] 5.0 [3.5-11.0]	, -	4	9.0 [8.0-27.5] 4.5 [4.5- 4.5]		7.5 [6.0- 9.5]	<u>^</u>	9 0 2	0.0	0 6	6. O.	4.5 [4.0-7.5] 6.0 [5.0-7.0]	,	6.5 [6.5- 7.0]	4.5-4
Angular Size	18h	0.15 [0.00-0.25] 0.55 [0.35-1.05]	9	05 (0.00-0		5 5	123	0.90 [0.60-2.40] 0.40 [0.00-0.60] 0.25 [0.00-0.40]		0.90 [0.75-2.45] 0.40 [0.10-0.55]	0.35 [0.00-2.25]	0.15 [0.00-2.05]	High Latitude Source 0.65 [0.45-1.15]	0.25 [0.00-0.90]	0.55 [0.35-0.65]	1.20 [0.85-1.70] 0.40 [0.30-1.15]	High Latitude Source 0.15 [0.00-0.75]	High Latitude Source	[0.00-0.60] Latitude Sour	0.50 [0.40-2.40] 0.50 [0.30-0.65]	0.40 [0.00-1.10]	0.85 [0.50-2.45]	0.35 [0.00-0.50]	0.50 [0.35-1.15]	0.20 [0.00-0.75]	0.25 [0.20-0.50]	0.20 [0.00-0.40] High Latitude Sour	0.30 [0.00-0.50]	0.50 [0.25-1.10]	0.70 [0.55~1.00] 0.25 [0.00~0.35]	0.15 [0.00-0.40]	0.65 [0.25-0.80]	0.35 [0.00-0.40]	0.55 [0.30-0.75] 0.90 [0.50-2.00]	High Latitude Sour	0.30 [0.00-0.40] High Latitude Sour	0.50 [0.00-2.40]	0.40 [0.30-1.75]	0.45 [0.25-0.95] 0.55 [0.20-0.75]	High Latitude Sour	0.65 [0.40-1.05] 0.20 [0.00-0.45]	0.35 [0.00-0.85]	0.45 [0.35-1.65]	0.30 [0.00-0.55]	1.20 [0.85-1.50] 0.40 [0.00-1.05] 0.55 [0.30-0.65]	High Latitude Sour	0.45 [0.35-0.70] 0.05 [0.00-0.25]	2.3
ΔS.	1.09	0.67	0.75	0.72	0.85			1.20	0.68	1.37	0.86	0.46	1.88	0.57	1.50	0.89	1.21	1.43	1.00	1.07	1.00	0.82	0.58	0.65	1.18	1.06	0.61	0.50	0.55	1.30	0.86	0.73	0.74	0.88	0.44	0.82	1.59	0.64	1.30	1.63	1.29	1.12	0.82	0.67	1.45		1.31	1.98
d Dec	35	13 35 C 35 30 N	3 8	88	-02 35 C	2 2	32	36 40 H	30	46 35 I	00	50		38 20 C 20 55 I	40	02 22	68 35 I 54 55 C	57 35 1	32	40 35 I 22 20 I	10	35	26 30 C 26 30 C	20 20	16 00	42 55	38 20 C 65 50 H	30	2 2	10 35		35	8 8	11 50 H 43 50 C	8	25	86 55 I 26 55 I	38 20	-03 45	62 45	-02 30 13 10		29 15	38 55	47 05 I -07 45 C	68 50	38	43 50 C
Table 1-continued Source RA	30	15 31 45	34	35	15 38 10	8 8	8 8	15 42 55	4 4	15 43 45	46	48	50	15 51 45 15 52 15	53	28 28	15 58 25 15 58 30	03	00	16 10 00 16 10 10	16 11 30	13	16 13 10 16 14 40	15	16 17 00	13	16 19 25 16 20 30		23	23	16 24 05 16 25 25	27	27	16 29 20 16 29 50	32	33	16 34 20 16 34 50	35	16 35 50	34	38		9		16 43 10 16 43 25 16 44 20	4	16 45 35	51
Table 1-	1530+75 1531+46	1531+13	1534+17	1535+14	1538-02	1539+38	1539+32	1542+36	1543+19	1543+46	1546+49	1548+38	1549+62	1551+38	1553+20	1556+35	1558+68	1603+57	1607+22	1610+40 1610+22	1611+59	1613-02	1613+26 1814+26	1615+20	1617+16	1619+42	1619+38 1620+65	1620+32	1621+35	1622+24	1624+60	1627+29	1627+43	1629+11	1632+54	1633+38	1634+86 1634+26	1635+38	1636-03	1637+62	1638-02 1638+13	1638+38	1640+29	1641+38	1643+47 1644-07	1644+68	1645+17	1651+75

Fable 1 – <i>c</i> Source	no.	continued RA	red	Dec		°*50	Angu	lar Size	Compa	ıct Flux	×n	Possible Contributing Sources
1652+38							0.40	0.00-0.90]	2.0	9	3.0]	C39.49
1652+27							0.40	0.30-2.35]	0.0	ວ ແ	7.0]	52+279 0UI C52,39
1652+43			55	43 55			2.00	[1.35-2.95]	6.5	7.5	.5.5	
55.5501				ວ ຄື			200	0.40-1.00	9 6	, ,	, i	2
1657+36				6 4 V			0.15	[0.00-0.25]	. 4. . 5.	5.5	4.5]	6C1657+372 *C*5.33
1658+32				2 2			0.60	0.25-1.70]	3.0	2.5	7.0]	4C32.52
1659+43				3			0.20	0.00-0.35]	5.5	5.0-		6C1659+440 4C43.41 4C43.42
1700+66				99			High	atitude Source		,		4066.18
1701+54				5 H			0.40	0.00-0.80]	4 4 0 0			6C1701+470 4C46.33
1702+29	17 (02 0	30 2	29 50			0.30	0.00-0.50	6.0	5.5	5- 7.0] 5-5-51	6C1702+298 6C1701+288 4C29.50 6C1703+387 4C38 43
1204480							9	0.00 1.10]				400.24*30351
1704+52		24		52 3	. m		0.25	[0.00-1.30]	4.5			6C1704+523
1705+23							0.95	[0.50-1.35]	2.5	, 0	5.5	
				Ö	2 1		0.50	[0.35-1.05]	3.0		5.5]	4010.48
				80.00	20		0.45	35-0	5.0 [43.6	6.5]	4024.40
				3 6			0.00	000	6.0		8.0)	6C17105+303 6C1710+539 6C1711+520 4C53.38
1711+26		11.4		26 35	35 C		0.40	[0.00-0.50]	3.5	٠, ۳	4.0]	6C1711+271 4C28.43
				4			0.25	[0.00-0.55]	3.0		3.5]	
		14:		93	35 1		1.00	[0.60-2.45]	0.9		[3.5]	4006.60
							High High	Latitude Source				#C01.33 6C1714+517
							0.30	[0.00-0.75]		9.0-	0	4643.44
1716+32	11	16 1	10 15 2	23.33	30 C 10 I		0.35	[0.00-0.50] [0.35-0.65]	3.5	4.0-	3.0] 5.0]	4022.45
	11				00		H1gh	titud			4	
	11			4 0	2 10		0.25	[0.00-0.45]	5.5	5.5	7.0]	4019.59 30354
		- 63					High	Latitude Source				4064.21
1720+38		0 -					0.10	[0.00-0.40]	2.3	2.5		
1723+49		23 1		49 2	30 I		0.45	[0.00-1.60]	6.0	0.0	13.0]	4051.36 30356 601722+485
1723+40							0.45	[0.00-0.75]	8.0	7.0-	•	3035
1724+24		24 0	15 2	24 30	30 I		0.30	[0.00-0.50]	3.5	3.5-4	4.5 [3.4	4C16.48
1726+23							0,65	[0.50-1.10]	3.0	2.5-		
1727+36					55 H 00 H		0.40	[0.25-0.80] [0.35-0.75]	3.0	9.0		4019.60
1729+44							0.40	[0.00-0.65]	4.5	4.0-	0	4043.45
1729+49		29 5	50 4	49 5	55 1		0.15	[0.00-0.80]	7.5	7.5		6C1729+501 4C50.43
1732-07			1				0.95		0.5	. 5.	. 0	PSR1732_07
1732+77							High	Latitude Source				4C79.17
1732+16		32 4		16 23 57 23	25 I 20 I		0.95 High	[0.50-1.10] Latitude Source	9.0	5.0	9.0}	4C16.49
1733+49							0.35		2.5	2.0	7.0]	
1734+43							0.10 #18h	U.UU-U.Za Latitude Source	2	,	> .	
1734+32							0.25	[0.00-1.85]		2.0-		
1735+02							0.60	[0.50-1.05]		9 - 0	۲. 4	4C03.37 4C24.42
1738+27		38 2	10 2	27 24	# C # C		0.10	[0.00-0.20]	3.4.5	4.6	4, K	4627.37
74.00.1								[0.05-0.35]	. 10	, ,	, ,	
1739+38		39 1	10 3	. 86 . 0			0.70	[0.20-1.40]	0	1 (4)		
1739+32					30 C		0.40	[0.00~0.90] [0.60~1.35]	0 10	. .	ν. O	4033.41
1741+53							0.25	[0.00-0.25]	0	4	4	4054.37* 4054.38
1741+26		42 0	00	26 4	45 I		0.10	[0.00-0.25]		G 4	4 6	4027.38
1744+42							0.45	[0.20-2.35]	lo.		اغما	
1744+18							0.40	[0.25-0.60] [0.25-2.35]		5.5	r 6	4C18.52
1745+09							0.55			5.5-	~	4009,56*
1746+66							#18h 0.40	Latitude Source [0.00-2.30]	2.5	2.0-	7.0]	4065.22
1747+60		47 3	30 6	60 1	1 01		High	Latitude Source		ď	0	4059.28
1749+01							0.50	[0.25-0.70]	6.0		7.0]	4002.45
1750+69							High	Latitude Source				4672.24
1751+27 1752+45				45 1	100 H		0.00		9.0	2. 4. -2. 7.	5.0]	4027.40 4045.37
1753+60							High	Latitude Source				40 40 40
754+3							0.05	_			0	4037.51 30364
1756+13 1756+84	11	26 3	55 8	13 5	55 I	0.66	0.60	[0.45-1.90] [0.00-2.30]	ა. დ. ა. თ. ი	3.0-10.	0.01	4013.65 601747+847
757+2					~. •0		0.40	[06.0-00.0]			_	

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g Sources	5 4008.52																															
e Contributing	3C368 4C10.55	3C372	B PSR1811+40				4036.29		4036.30	3C378	30379.1	3C380	3C381		4038.46	30390	3C390.3			3C394				a	•.			4C55.37 4C52.461 4C35.46 3C400.1	+16 4C67.31	*		
Possible	4C13.66 4C11.54	4046.36	3 2 5	3 8	4C44.29 4C37.53	4C50.44 4C70.21 4C24.45	4C40.37 4C39.56 4C17.79	4029.55	4036.31	4C53.43 4C57.32 4C09.60	4074.23	4033.45 4048.46 4029.56	4062.30 4047.49	4052.43	4C24.46 4C40.38	PSR1839+56 4C23.50 4C09.62 3C390	4026,56 4079.18 4066.20	4035.45	4042.46	4052.44	4031.52	4C28.47 4C28.47 4C20.47 4C20.47	4C51.39 4C72.26	4065.27 4060.28	4036.33 4043.49	4027.43	4C44.33	4C55.37	PSR1923	4047.52 4048. 4050.48 4021.53*	4063.24 4010.58 4002.49	4014.72
act Flux	.0-15. .0-15.	5-11.	4.0- 7.5] 3.0- 4.0] 3.0- 6.5]		3.0-6.0]		5-8.		<u>.</u> :	5.0- 7.0]	5-5.	4.0- 6.0] 19.0-63.0] 5.5- 6.0]	ı.	4.5-16.0]	[11.0-14.5]	3.5-6.5] 11.5-22.5]	3.5-13.5]	8.0-21.0] 4.0-12.5] 4.5- 8.0]	, 0	19	5-7	[5.5-20.0] [5.5-20.0] [6.0- 8.0] [5.5- 6.5] [4.0- 5.0]	7		[4.0-10.0] [4.5-:9.0]	0.10	e 1-	[10.0-12.5]		[5.5~18.5] [5.5~18.5] [18.5~25.0]	[6.0-20.0] [9.0~15.5] [4.5- 6.5]	[4.0- 5.0]
Сомр	8.5 [9.00	3.5 3.5 3.5 3.5	a. a. U.	3.5		5.5			5.0 [21.5		0.0	3.5	5.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.4.2				0.07	ď		5.0		3.5	11.0	ų. ÿ.	23.5	11.5	4.4.
gular Size	[0.65-2.45] [0.30-0.70]	0-00	.00-0 .30-0	5 5	[0.00-1.15] [0.45-2.45]	[0.20-2.35] Latitude Sour [0.35-1.05]	[0.00-0.75] [0.25-0.75] [0.45-0.65]	[0.00-1.40] [0.75-2.40]	4	[0.20-0.90] Latitude Sour [0.35-0.60]	Latitude Sour	[0.20-0.75] [0.10-2.35] [0.00-0.20]	Latitude Sour [0.20-2.40] Latitude Sour	Latitude Sour [0.00-2.20]	[0.30-0.60]	Latitude Source [0.45-1.05] [0.85-1.70] 13	Latitude Source [6.45-2.50] Latitude Source Latitude Source Latitude Source	[0.70-2.45] [0.00-2.25] [1.15-2.45] Latitude Sour	[0.50-2.45]	[0.00-1.85] [0.45-2.50] Latitude Sour	[0.00-0.75]	[0.00-0.35] [0.00-2.25] [0.00-0.50] [0.10-0.40] [0.00-0.35]	Latitude Source Latitude Source [0.60-2.45]	Latitude Sour	[0.60-1.90] [0.00-1.25]	[0.50-2.50] [0.20-0.75]	[0.00-0.40] [0.30-0.75]	4 4 -	ar Like Curve Latitude Sour	[0.25-2. [0.25-2.	[0.05-2.35] [0.50-1.15] [0.30-0.65]	[0.20-0.45]
Ang	1.30	. 6	.50	igh Ígh	0.35	0.45 #18h 0.65	40	10	50	0.25 H18h 0.45	H18h	0.50	High 0.50	H18h	0.50	#1.8h 0.60 1.20	N18h 0.75 H18h H18h	0.85 0.35 1.50 High	0.85	0.25 0.80 #18h	0.10	0.35	18h 18h	H18h	1.00	50.	.50	High 0.25	184	4.4.10	0.85	ဂ္ဗ
ο 6 SΦ	1.96	0.97	0.86	0.47	0.60	1.18	1.20	0.80	1.39	0.89 1.13 1.13	0.86	0.83 3.58 1.28	0.80	0.55	2.64	0.72 0.87 1.85	0.51 0.84 1.39 0.58	1.28 0.67 0.49 0.58	0.56	1.80	1.08	1.15 1.25 1.25 1.06 0.91	1.06	0.48	0.64	0.64	0.71	0.57 1.86			1.12	
Dec	09 50 N 09 50 N	3 6 8		10	43 50 I 38 15 C	49 25 C 69 45 I 25 45 I	39 55 H 38 15 C 18 05 H	45 15 H 28 20 H		54 55 C 57 10 I 10 30 H	25	33 50 I 48 50 I 28 35 I	00 01 6	43 50 C 52 15 I	15 15	56 40 H 23 25 C 09 50 B	57 40 C 27 00 I 79 40 I 66 00 C 63 50 I	35 45 I 57 40 C 41 05 C 57 45 I		53 50 1 13 25 B 57 25 I		28 40 H 20 35 1 20 35 1 20 10 C	25 50 15		38 15 C 43 25 1 53 50 1		30 05 I				62 25 1 09 45 B 01 20 I	
RA	17 59 05 18 02 35	90	09 10	13	14	18 17 50 18 18 05 18 18 50	18 19 25 18 19 50 18 20 05	50	21	18 22 35 18 23 45 18 24 55	28	18 27 50 18 28 20 18 29 15	32	34	37	18 40 05 18 40 55 18 43 05	18 45 00 18 46 00 18 46 00 18 47 15 18 47 50	18 48 20 18 48 45 18 50 40 18 52 45	5 2	18 55 20 18 57 20 18 58 15	01		60	112	19 12 40 19 12 50 19 12 55	14 16	19 16 15 19 19 05	23 22	23 26	33 37	19 39 10 19 39 35 19 46 30	51.5
Source	1759+09	1806+46 1809+41	1809+35 1810+18 1812+41	1813+60 1814+58	1814+43	1817+49 1818+69 1818+25	1819+39 1819+38 1820+18	1820+45 1820+28	1821+35 1821+63	1822+54 1823+57 1824+10	1826+74	1827+33 1828+48 1829+28	1831+63 1832+47 1833+66	1834+43	1837+24 1838+38	1840+56 1840+23 1843+09	1844+57 1845+27 1846+79 1847+66	1848+35 1848+57 1850+41 1852+57	1854+43	1855+53 1857+13 1858+57	1900+31	1901+34 1903+50 1904+28 1906+20 1908+20	1909+51 1909+71 1909+17	1911+66 1911+60	1912+38 1912+43 1912+53	1914+23	1916+44	1921+54	1923+16	1931+40	1939+62 1939+09 1946+01	1951+16

Possible Contributing Sources	4001.61 4000.74		4C24.48 4C22.56 4C23.53 3C409 4C55.38*	4C23.54 4C09.67.3C411	4017.84	4C07.53 4C20.51 4C18.59	4C24.49 4C19.69	4051.42 30418	4C18.61 4C59.32*	4C16.70 4C-2.80 4C23.55		4018.71	4C28.49* 4C22.57	4C87.36 4C08.60	4C33.51 4C-0 77	4C10.84 4C28.50	4C23.56*	4C28.51	4C23.57 4C62.33 3C429 4C30.42	4C15.72 4C17.86' 4C10.65	4C18.62 4C22.58 4C16.72 3C432		4008.62	4030.43	4C12.73 4C38.50	4C15.74	6C2134+846 6C2148+867 4C14.78	4004.75 4007.56 4015.75 30437	4006.69	4C24,56 4C14,80 3C437.1 4C13.82 4C32,66	4C21,59 4C45.46	4C48.56 4C18.63	4029.64	4C00.80 4C11.67	4C36.44 4C34.57 4C18.64	4024.57 4029.65 30441 4033.53	
Compact Flux	4.0 [4.0-13 6.0 [5.0-17 ce	. 4.5	9.0 [6.0 1.5 [39.0	11.0 [9.5-12.0] 12.5 [8.0-23.0]	0 [5,0- 6	0 [3.0	5.0	3 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	0 (3,5	6.0 [5.0- 9.5] 10.5 [9.0-14.5] 8.0 [7.0- 8.5]	0 [2.0	5 5.0	0 [3.5- 8	5.5 [5.0- 7.5] 3.5 [2.5- 4.0]	3.5 (2.0- 4	6.5	5.5 [4.0~12 9.0 [6.0–12	6.0	5.5 [4 9.0 [8 14.5 [14	6.0 [5	222	Ξ		9 .						8.5 [7.0-10.5] 9.0 [7.0-10.0] 3.5 [3.0- 4.0]			ΞΞ	3.5-4 7.0-9 7.5-7	[7.0- 9 [3.0- 3	4.5 [4.0- 5.5] 8.5 [6.0-14.0] 3.5 [3.5- 4.0]	
Angular Size	0.25 [0.00-2.15] 0.65 [0.50-2.50] High Latitude Sour	[0.65-2.50] Latitude So	0.90 [0.50-0.90]. 1.30 [0.75-2.50] High Latitude Sour		High Latitude Sour 0.45 [0.30-0.55] 1.45 [0.85-2.45] [†]	-2-2		222	22	0.95 [0.75-1.55] 0.70 [0.55-1.15] 0.50 [0.35-0.60]		1.30 [1.05-2.45] 0.90 [0.65-2.35] High Latitude Sou	0.60 [0.35~1.35] 0.75 [0.55~1.55]	0.25 [0.00-0.80] 0.50 [0.25-0.65]	0.70 [0.00=1.05]	0.50 [0.35-0.80] 0.85 [0.35-0.90] 0.85 [0.50-0.90]	1.00 [0.65-2.45] 1.10 [0.65-1.45]	0.60 [0.50-1.05] 0.50 [0.40-0.85]	0.55 [0.35-0.65] 0.25 [0.00-0.85] 0.65 [0.60-0.85]	0.40 [0.25-0.55] 1.20 [0.85-1.75]	1.40 [1.20-2.45] 2.55 [2.50-3.50] 0.80 [0.65-1.25]	0.55 [0.50-0.85]	0.90 [0.65-1.40] 0.05 [0.00-0.25] 0.20 [0.05-0.30]	0.50 [0.30-0.55]	0.60 [0.35-0.85] 0.80 [0.70-1.70] 0.50 [0.40-1.05]	55	10 45	0.55 [0.25-0.90] 0.55 [0.25-0.90] 0.55 [0.40-1.10]	50	0.55 [0.35-0.80] 0.50 [0.15-0.65] 0.50 [0.35-0.65]	20 30	8 8 9 0 0 0	25	85 50 0 0 0	0.50 [0	0.35	
.°€SO OS€°	57 30 I 0.74 01 45 I 1.52 80 35 I 1.92	10 1 20 C 0	23 30 I 1.18 23 05 I 6.76 56 40 I 1.08	15 I 1 15 I 1	64 25 H 0.59 16 50 B 0.98 20 15 C 0.50	50 1 0 10 C 0	23 25 C 0.88 19 45 I 0.90	25 I 15 H	40 H 0	16 50 I 0.71 -01 45 I 1.61 23 00 I 1.37	50 C 0	09 50 1 0.62 16 10 H 0.64 64 40 H 0.56	45 1 0	57 20 H 1.02 09 45 C 0.54	25 C 0) O O	35 I 10 I	45 C 0 25 B 0	40 H 25 H 30 I	45 H 35 H	17 05 H 0.55 23 20 I 0.80 16 50 B 1.77	50 H		20 I	н н	40 I 15 H	05 C 0	19 35 1 0.68 05 40 I 0.68 15 55 H 0.81	40 H 0	24 15 1 1.36 13 30 C 1.68 32 20 C 0.57	45 H 1 10 I 0	24 10 H 0.62 48 25 I 1.76 20 05 C 0.51	50 I 2 50 I 0	29 10 H 0.74 00 35 I 1.57 12 50 I 0.65	20 I 1 55 C 0	22 50 I 0.83 29 35 I 1.15 32 20 C 0.57	
Table 1-continued	1 19 0 19	20 04 20 05	07 12 13	20 18 20 19		20 28		20 36 20 36 20 37	20 39 05 20 4 0 05	42 40 44 40 45 40	20 46 10 20 46 25	2048+09 20 48 35 2049+16 20 49 20 2050+64 20 50 20	20 53	2054+57 20 54 50 2055+09 20 55 25	20 55	20 57 21 00	21 01	21 06 21 07	2107+23 21 07 50 2111+62 21 11 40 21111+30 21 11 40	21 12 21 13		21 21	2125+09 21 25 15 2128+09 21 28 55 2128+22 21 28 55	21 29	31	21 34	21 37	222	21 45 21 45		21 49 21 52		21 56 21 58		22 01 22 02	2203+22 22 03 05 2203+29 22 03 35 2204+32 22 04 35	

Possible Contributing Sources	4037.65	4C42.52 4C35.51	4C16.74 4C08.65* 4C13.83 3C442 4C35.52*	***************************************	4C-U.81 6C2216+836 6C2211+836 4C01.70	4C46.45 PSR2217+47 4C16.75	4C28.54	4C43.54 4C05.84		408.67 408.62	4044.41	4C11.69 4C01.71 4C35.53	4C46.46 4C47.59 4C40.46	4033.56	4043.55 4033.57	4017, 90 30453	4C-3.81 4C39.71 ² 3C452 ² 4C36.47	4C20.55	4035.54	4C14.82 4C71.20 3C454.1 4C18.67 3C454	4C43.57 4C03.55	4C15.76 3C454.3 4C12.79 3C455	A 1 1 8 8 0	4C09.71 4C70.24	4C48.58	4C08.68	4044.42	4C40.48 4C-5.95 4C00.84	4C03.56 4C40.49		4C25.59 4C16.82 4C09.73 3C456 4C46.47	403.57.30459	4C53.52 4C37.69 4C12.83
Compact Flux	3.5 [3.5- 4.0] 5.0 [4.5- 5.5]	4.0 [3.0- 6.0] 6.0 [5.5- 7.0] 5.5 [5.0- 6.5]	4.0 [4.0- 4.5] 5.0 [4.5- 6.0] 7.0 [5.0-13.0] 9.0 [4.0-10.5]	2.5 [2.0-8.0]	8.0 [6.0- 9.5] 2.5 [2.0- 7.5] 7.5 [6.5- 8.5]	7.5 [6.5- 9.0] 3.0 [3.0- 4.5]	10.0 [4.5-12.0] 4.5 [4.5- 5.5]	8.5 [7.0-18.5] 3.0 [3.0- 3.5] 4.5 [4.5- 5.5]	9.0 [8.0-10.0] 35.0 [25.0-74.0]	6.5 [6.0+ 8.0] 5.0 [4.5+ 5.5] 5.0 [4.0- 5.0]	4.5 [3.0- 6.5]	4.5 [4.0- 5.5] 7.0 [6.0-10.0] 9.5 [8.0-10.5]	5.5 [5.0- 8.5] 7.0 [7.0- 7.0]	2.5 [2.0- 2.5] 3.0 [3.0- 3.5] 2.5 [2.5- 3.0]	4.0 [3.0~ 4.5] 5.5 [5.0~ 8.5] 3.5 [3.5~ 4.0]	7.5 [6.5~ 8.0] 4.0 [3.0~ 4.0]	7.5 [6.0- 8.0] 6.0 [3.5-10.5] 2.0 [1.5- 2.5]	6.5 [6.5- 7.0] 6.0 [5.5- 8.0]	4.5 [3.5- 5.0] 5.0 [5.0- 5.0]	4.0 [4.0- 5.5] 16.0 [13.5-26.0] 11.5 [10.5-16.0]	6.0 [5.0- 9.0] 7.0 [6.0-12.0]	12.0 [8.0-15.5] 6.5 [6.0- 6.5] 6.5 [5.5- 9.5]	7.5 [6,5-10.5] 2.5 [2.5- 4.5] 4.5 [4.5-5.5	3.0 [3.0- 3.5] 10.0 [7.5-28.0]	6.5 [6.0- 8.5] 3.5 [3.0- 4.0]	2.0 [2.0- 3.0] 4.0 [4.0- 5.5] 4.0 [4.0- 4.0]	7.5 [7.0- 8.5] 4.5 [4.5- 5.0]	6.0 [5.5- 8.0] 6.0 [5.0- 6.5] 7.5 [6.5- 8.5]	3.5 [2.5- 7.0] 5.5 [5.0- 6.0]	3.0 { 2.5- 4.0} 4.0 [3.5-12.0] 4.0 [3.5- 5.0]	4.0 [3.5- 4.5] 6.0 [5.5- 7.0] 4.0 [3.0- 5.0] 10.5 [9.5-12.0] 12.5 [11.5-15.0]	6.5 [5.5- 9.5]	5.0 [4.5- 6.5] 3.5 [3.0- 6.5]
Angular Size	15 [0.00-0 25 [0.00-0	0.90 [0:65-1.40] 0.45 [0.30-0.60] 0.55 [0.40-0.70]	30 [0.20-0 50 [0.25-0 00 [0.60-1	55 [0.35-2.	0.65 [0.30-0.85] 0.40 [0.00-2.30] 0.50 [0.25-0.60]	55 [0.35-0 55 [0.45-0	20 [0.25-1 30 [0.20-0	0.90 [0.70-1.85] 0.25 [0.20-0.40] 0.25 [0.00-0.55]	25 [0.00-0. 10 [0.65-2.	0.40 [0.25-0.55] 0.25 [0.00-0.35] 0.45 [0.20-0.55]	85 [0.50-1. 50 [0.35-0.	0.40 [0.25-0.60] 0.65 [0.50-1.05] 0.65 [0.45-0.75]	45 [0.25-1 05 [0.00-0	25 [0.10-0 30 [0.20-0 20 [0.05-0	50 [0 55 [0 25 [0	30 [0.00-0 60 [0.30-0	50 [0.25-0 85 [0.30-1 25 [0.00-0	05 [0.00-0 15 [0.00-0	35 [0.10-0 20 [0.00-0	15 [0.00-0 40 [0.00-1 30 [0.15-0	45 [0.25-0 75 [0.55-1	1.10 [0.60-1.40] 0.10 [0.00-0.20] 0.30 [0.00-0.75]	60 [0.45-0 60 [0.45-1 35 [0.30-0	10 [0.00-0 65 [0.30-2	65 [0.50-0 65 [0.45-0	30 [0.00-0 25 [0.20-0 15 [0.00-0	15 [0.00-0 10 [0.00-0	40 [0.30-0 55 [0.30-0 50 [0.35-0	40 [0.00-1 35 [0.20-0	45 [0.30-0. 75 [0.55-2. 45 [0.25-0.	0.40 [0.25-0.50] 0.40 [0.25-0.50] 0.50 [0.25-0.75] 0.25 [0.15-0.45]	75 [0.60-1. 60 [0.30-0.	0.35 [0.00-0.95] 0.50 [0.45-1.00] 0.35 [0.00-0.95]
Dec ∆S₃₀	35 I 0	23 15 B 0.51 42 30 H 1.11 35 25 C 0.83	45 I 50 C 05 I	02 C 0	00 15 1 1,21 84 05 C 0,50 00 20 I 1,16	30 C 1 55 C 0	05 I 1	43 45 I 1.06 32 35 I 0.66 04 25 H 0.97	20 I 1 15 H 4	34 25 I 1.13 09 20 I 0.92 24 50 H 0.85	55 I 0	11 45 H 0.93 01 45 C 1.02 36 35 I 1.36	30 H 1		55 C 0 15 I 0 20 C 0	55 C 1	10 I 1 55 H C 10 I C	25 H 1	40 I C	13 20 C 0.90 69 50 I 2.84 18 55 I 2.44	35 H 1	38 00 I 1.31 16 30 H 1.11 13 45 I 1.21	30 1 1	05 1	50 I 1	20 00 1 0.61 09 40 C 0.72 23 15 B 0.79	40 1 00 1 0		30 C C	000	25 C 0.73 26 C 1 1.04 16 10 1 0.64 09 30 1 1.80 47 10 1 2.40	30 C 1.	0.0
\$		22 08 25 22 22 09 05 4 22 09 15 3	35 35 35 35	14 30	15 20 17 40 18 00	18 10 18 50	20 05 -	21 10 22 15 22 50	22 55 23 10	25 55 26 30 27 15	27 20 28 30	30 15 31 10 31 20	32 10 33 35	34 05 34 45 34 45	05 00 25	41 35 42 40	43 55 - 44 10 45 25	45 55 46 50	46 50 47 30	47 55 48 55 49 05	49 50 50 00	50 15 51 45 52 35	53 30 54 30 54 35	55 00 55 20	57 55 58 20	58 25 5 50 00 30	01 35 02 20	23 02 30 23 03 55 - 23 04 20	05	06 07 08	23 08 40 23 09 05 23 09 45 23 09 50 23 11 10	177	23 14 35 23 16 15 23 17 30
Source	2206+29	2208+23 2209+42 2209+35	2210+17 2211+09 2212+13	2214+38	2215-00 2217+84 2218+00	2218+46 2218+16	2220-02	2221+43 2222+32 2222+04	2222+25	2225+34 2226+09 2227+24	2227+43 2228+32	2230+11 2231+01 2231+36	2232+47 2233+40	2234+32 2234+23 2234+29	2237+16 2237+42 2239+32	2241+16 2242+28	2243-03 2244+37 2245+26	2245+18	2246+35 2247+28	2247+13 2248+69 2249+18	2249+42	2250+37 2251+16 2252+13	2253+45	2255+10 2255+70	2257+48 2258+43	2258+19 2258+09 2300+23	2301+44	2302+41 2303-07 2304+02	2304+06	2306+23 2307+49 2308+41	2309+35 2309+26 2309+16 2309+09	2311+29	2314+52 2316+38 2317+13

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Table 1-continued

	Dec	% \$	Angular Size	Compact Flux	Possible Contributing Sources
23 25 C 71 50 C 29 55 I		2.60	0.35 [0.25-0.55] 0.15 [0.00-0.25] 0.60 [0.45-0.75]	14.0 [13.0-16.0] 4.0 [4.0-4.0] 30.0 [26.0-33.0]	4C23.58 3C460 4C71.22 4C29.89
		2.02			4C17.94 4C-2.88
23 20 I 43 40 I 15 55 I 35 25 C 09 55 I		0.87 0.74 0.92 0.84	0.20 [0.00-0.40] 0.40 [0.35-0.60] 0.55 [0.35-0.65] 0.50 [0.35-1.55] 0.50 [0.30-0.60]	4.0 [4.0 - 5.0] 3.5 [3.5 - 4.5] 5.0 [4.0 - 5.5] 5.0 [4.5 - 13.0] 3.0 [2.5 - 3.5]	4008.70
29 20 C 03 00 H -03 35 I 46 25 I 13 10 I		1.17 1.22 1.04 1.34 0.92	0.90 [0.75-1.10] 0.40 [0.25-0.70] 0.65 [0.35-2.45] 1.00 [0.70-1.85] 0.65 [0.45-1.25]	9.0 [8.0-10.5] 5.5 [4.5-7.0] 5.5 [4.5-16.0] 9.5 [7.5-19.5] 6.0 [5.0-9.5]	4C03.59 4C-4.89 4C-2.89 4C13.88
35 25 1 22 20 1 05 50 C 12 40 1	0 0 0	0.68 1.89 1.15 0.62 0.36	0.30 [0.20-0.35] 0.50 [0.25-0.70] 0.20 [0.00-0.40] 0.50 [0.35-0.75] 0.80 [0.55-1.60]	4.0 [3.5- 4.0] 11.0 [9.5-13.0] 5.5 [5.5- 7.0] 3.5 [3.0- 4.0] 2.5 [2.0- 4.5]	4C22.63 3C466 4C04.81
52 10 C 1 29 50 I 1 65 15 H 1 09 40 C 0 43 50 C 0	1 1 0	1.56 1.09 1.22 0.72 0.55	0.10 [0.00-0.25] 0.40 [0.20-0.60] 1.05 [0.75-2.45] 0.30 [0.00-0.45] 0.60 [0.50-0.90]	8.0 [8.0- 8.5] 6.0 [5.5- 7.5] 10.5 [8.0-20.5] 3.5 [3.0- 4.0] 3.0 [2.5- 4.0]	4053.53 4029.70 4065.32 4009.74
51 30 1 1.50 18 30 H 0.89 29 30 C 0.66 05 50 C 0.54 09 40 C 0.71	0.00	0004	0.55 [0.30-0.85] 0.20 [0.00-0.60] 0.45 [0.20-0.60] 0.35 [0.10-0.80] 0.15 [0.00-0.35]	1 4.0-1 1 3.5- 1 3.5- 1 3.0-	4C50.58 3C468 4C18.71 4C06.76 4C04.83
-02 50 I 1.65 63 35 I 2.74 09 40 C 0.65 23 25 C 0.92 43 50 C 0.83	1.000	.65 .65 .83	0.55 [0.30-1.70] 0.30 [0.00-0.80] 0.25 [0.00-0.45] 0.40 [0.00-0.55] 0.40 [0.30-0.60]	9.0 [7.5-23.5] 14.0 [12.5-20.5] 3.5 [3.0- 4.0] 5.5 [4.5- 6.0] 4.5 [4.5- 5.5]	4C-2.90 4C64.25 3C468.1 4C10.74 4C21.63 4C45.50
05 C 20 I 40 I 00 I 00 I 1	0.00	0 10 4 01 L 0		5 [4.5- 0 [9.0-1 0 [4.0- 5 [13.0-2 0 [3.0-	4C41.46 4C28.58 4C28.57
08 40 I 0.77 29 00 I 1.18 16 55 C 0.56 13 30 C 0.66	0 - 0 0	. 18 . 56 . 66	0.25 [0.00-0.35] 0.55 [0.35-0.65] 0.15 [0.00-0.25] 0.15 [0.00-0.30]	3.5 [3.0- 3.5] 7.0 [6.0- 8.0] 3.0 [2.5- 3.0] 3.0 [2.5- 3.0]	4C28.59
23 10 1 0.85 44 00 1 1.62 35 15 N 0.45 -07 55 N 1.63	3131	2222	0.50 [0.00-0.60] 0.55 [0.40-0.70] 0.60 [0.30-1.45] 0.55 [0.35-0.70]	5.5 [4.0- 6.0] 10.5 [9.0-12.0] 3.0 [2.0- 6.0] 8.0 [7.0- 9.5]	4C22.65 4C43.59 3C470

are those derived from the scintillation measurements precessed to epoch 1950. Right ascensions (column 2) are correct to 5s of time. The declination (column 3) is followed by a code which indicates the method by which it was derived as follows:

successful determination by the computer algorithm;

H determined by hand.

In each of the following categories, the central declination of the beam was used:

C source confused;

V insufficient data to measure declination;

B adjacent beam record apparently contradictory.

dependent on the environment of the source. Categories B and C have errors of about half a The errors in declination for sources determined by methods I and H are typically 30 arcmin, declination beamwidth, while for category N the error is about one beamwidth.

90°, was ΔS_{90} (4) gives the scintillating flux density of the source at elongation determined as the median scintillating flux density in the range 80°-100°. This elongation selected as the only elongation common to sources at all ecliptic latitudes. The column

The angular diameters given in column 5 are in arcsec and have been derived from the data

to make adequate estimates of the errors and a note has been inserted. Where an angular size is elongations, a note to that effect replaces the figure. A dagger follows the error estimate for the small number of sources where the data were too sparse for a reliable estimate of the angular (1978). One sigma formal error limits follow in square brackets. In a few cases it was not possible between elongations 40° and 90° by fitting theoretical curves from the model by Readhead et al. meaningless, either because the source is a pulsar or because it covers too small a range diameter to be made.

.622.2AMM78e1

The compact flux density (column 6) is that inferred for the scintillating component in fitting the model curves to derive the angular diameters. The formal errors (square brackets) are 1σ values.

Identifications (column 7) are given from the 4C survey (with 3C numbers where applicable), from a 1-Jy sample of the 6C survey where it currently exists (Hales et al., in preparation), and a pulsar list compiled by Seiradakis (1978, private communication). As noted above, the antenna pattern was too broad for reliable identifications in most cases so that several possibilities are listed as 'contributing sources'. Those which make only a minor contribution to the measured appears. Sources from the 4C catalogue for which positional agreement would be improved by signal are marked with superscript 1. In the case of confusion by a system artefact a superscript lobe shifting' are marked with a superscript asterisk.

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The Cambridge IPS survey at 81.5 MHz

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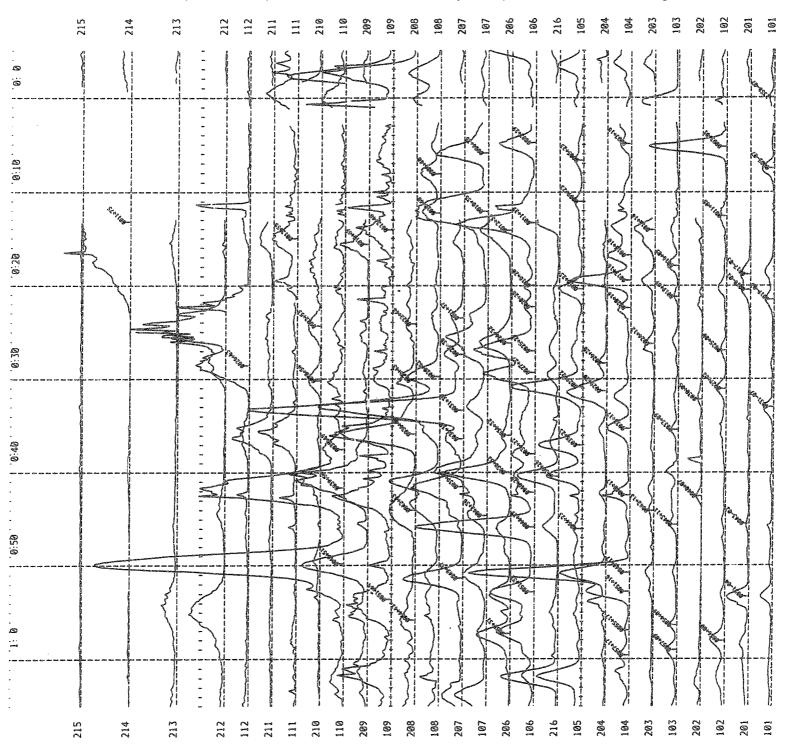
The microfiches are 105 × 148mm archivally permanent silver halide film produced to internationally accepted standards in the NMA 98-image format Microfiches produced by Micromedia, Bicester, Oxon

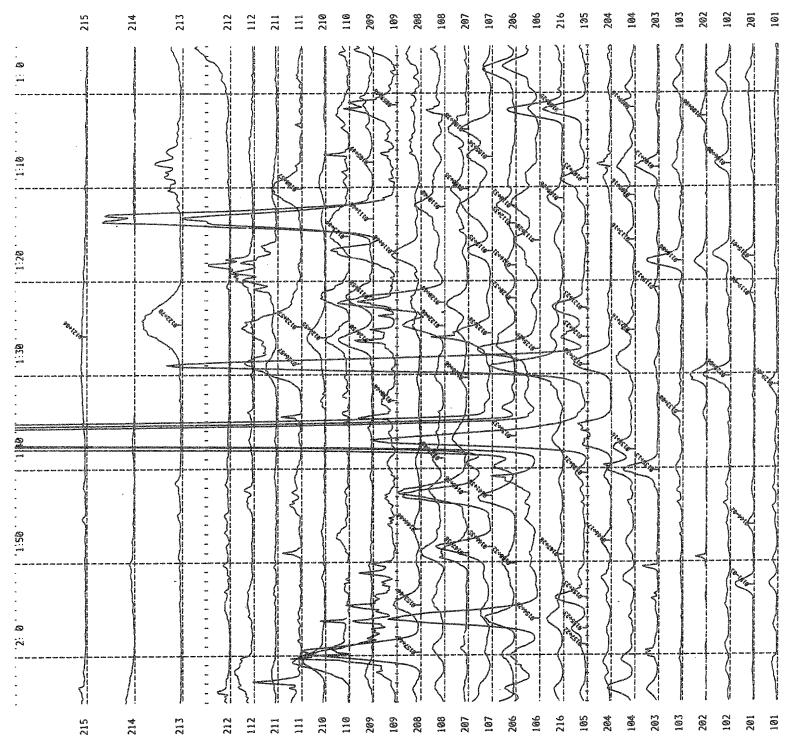
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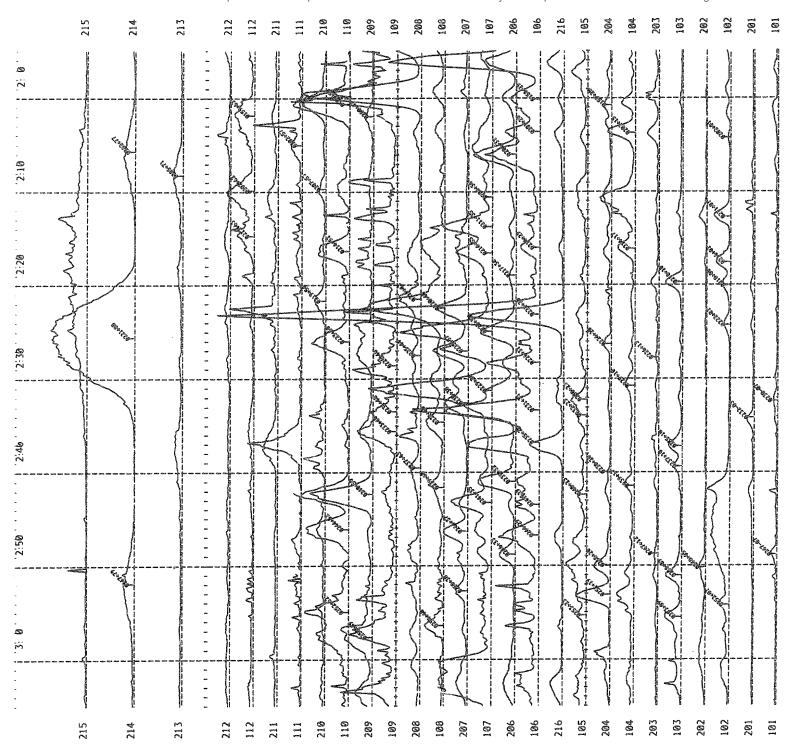
Figure

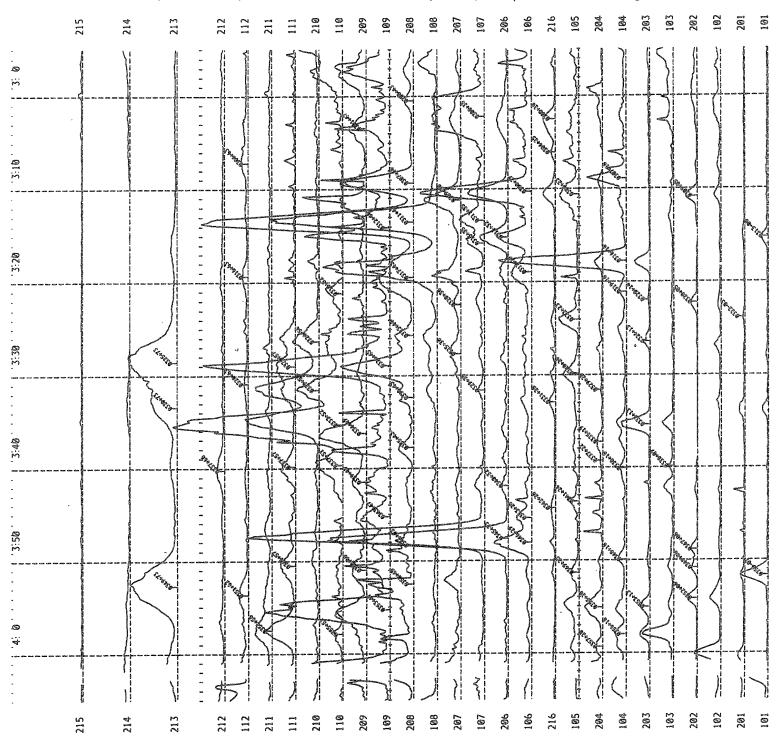
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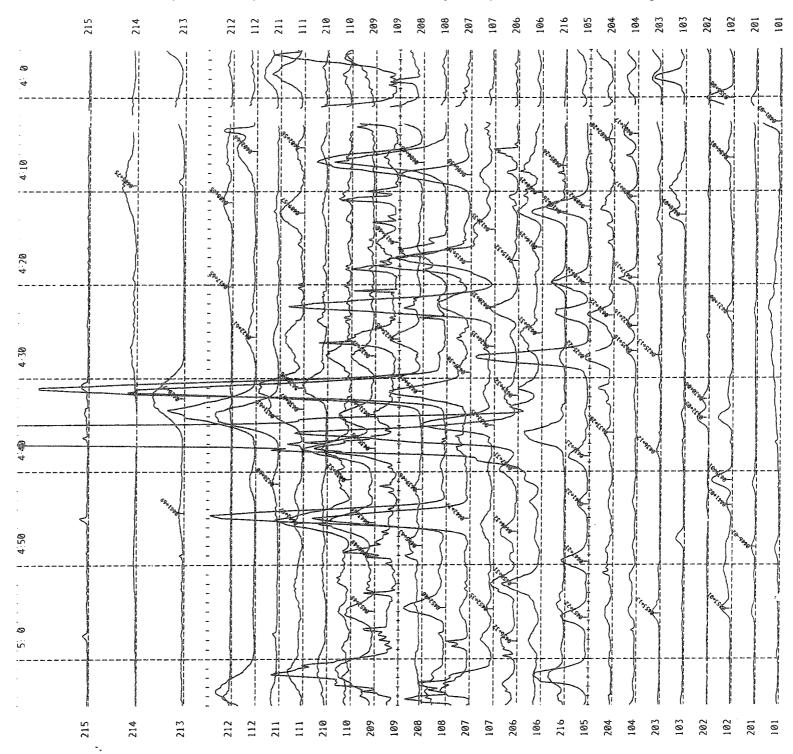
range Vertical 40 declination mean increases elongation 9 proportional text. increasing top) the 17. 19. the the <u>C</u> over along **ળ** •⊢• described G averaged lines order (figures dashed (m) **M** records arranged numbered density time the horizontal scintillometer sidereal flux 0 14 0 a H O and The beams scintillating Local top from **44** e T deflection 000 segment left, towards square t e Ŝ Ø,

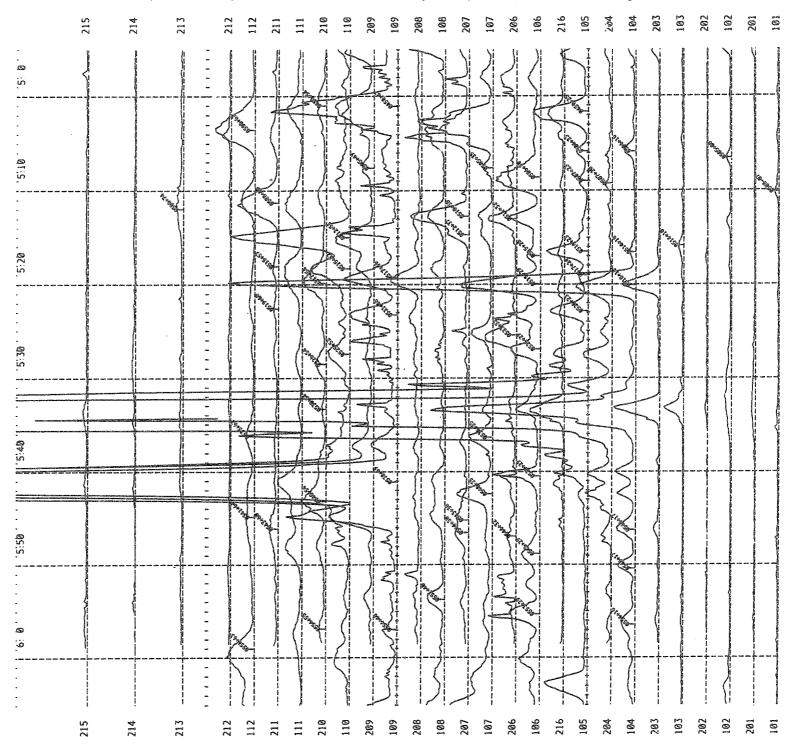


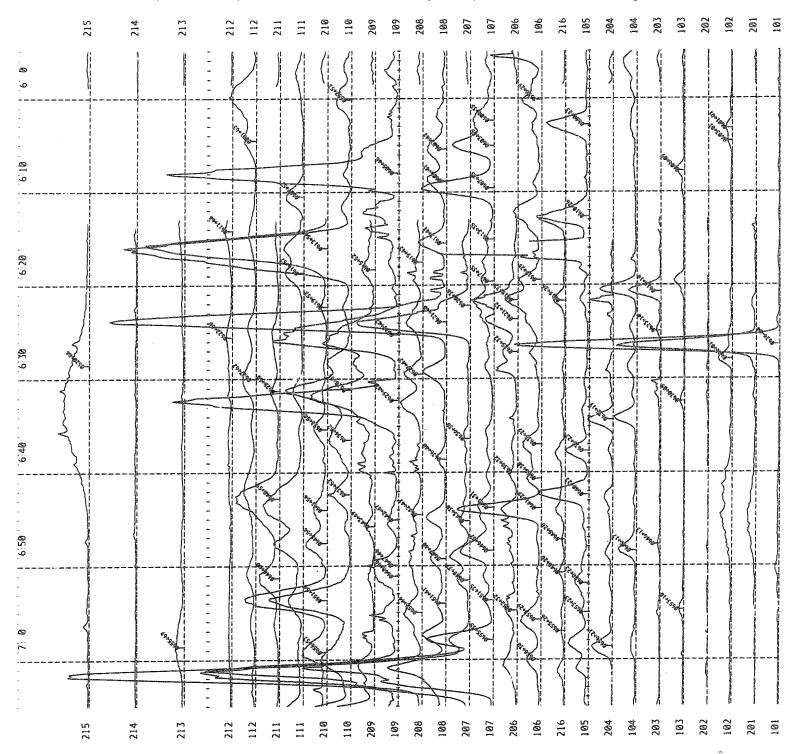


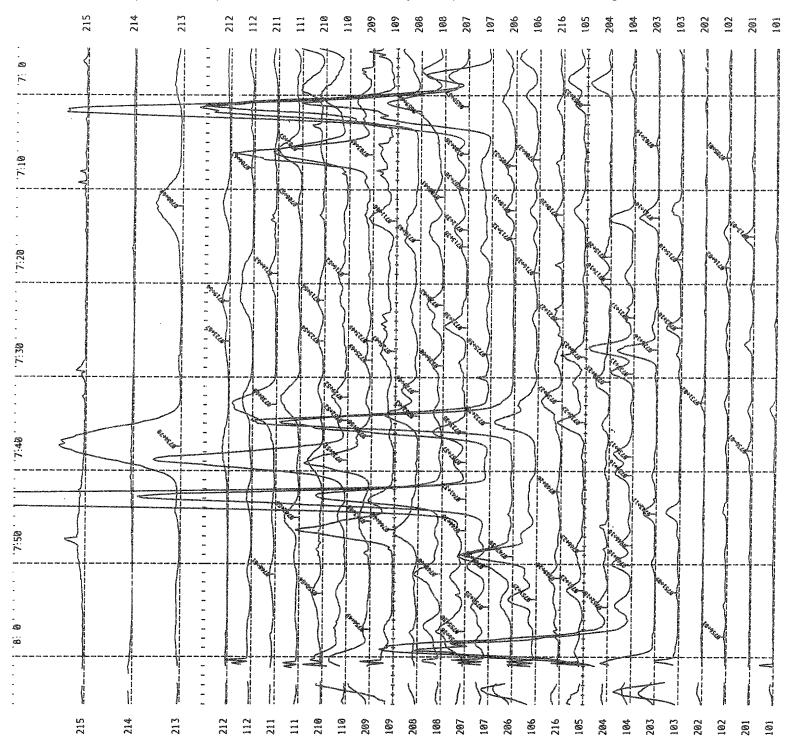


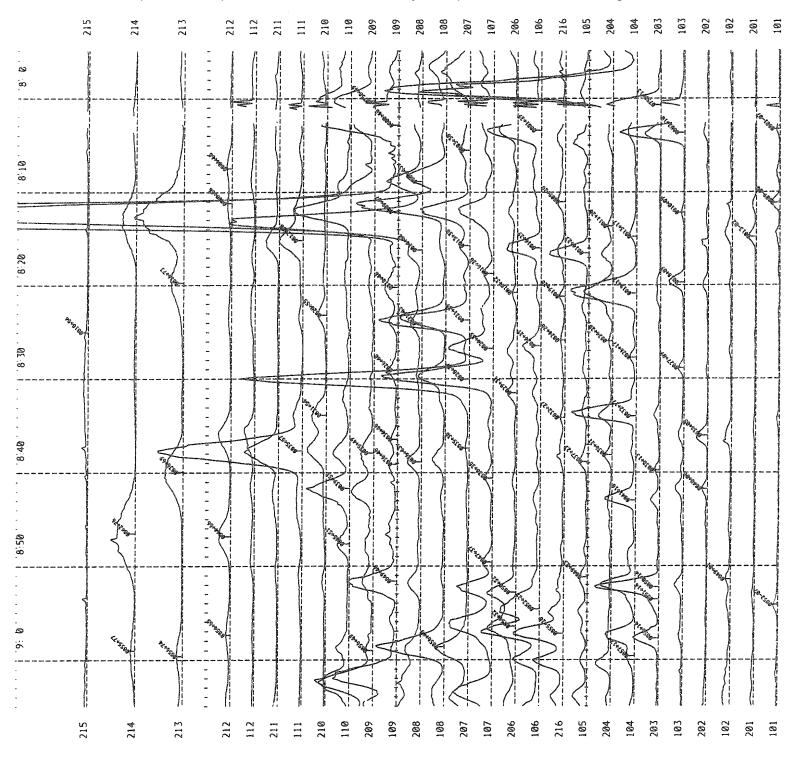


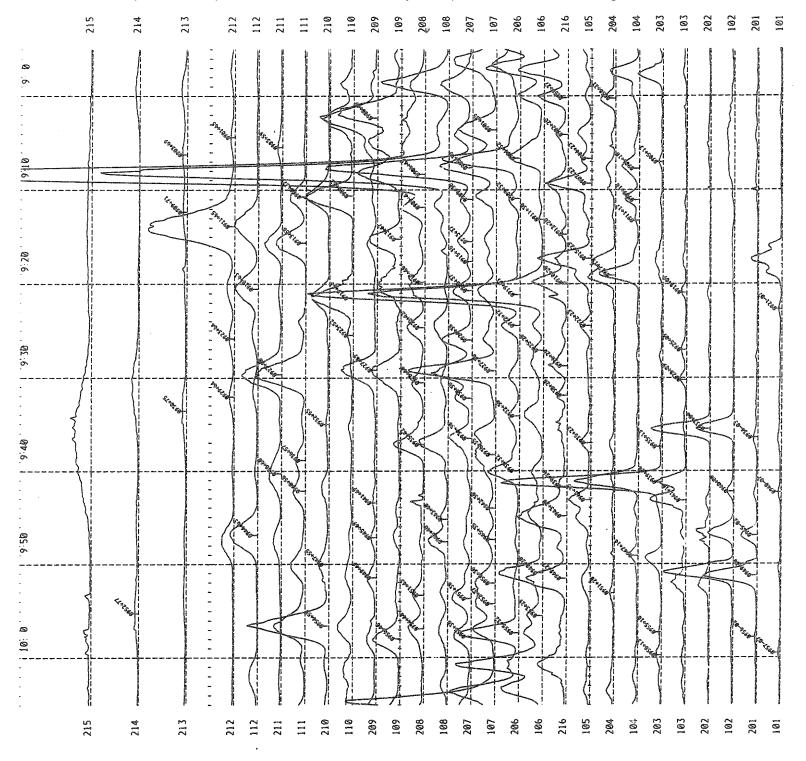


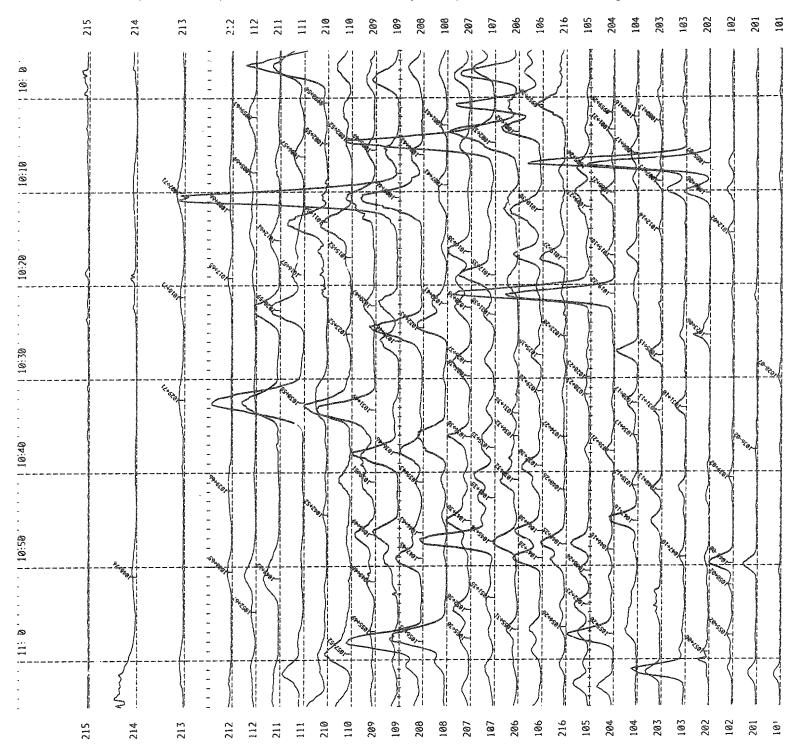


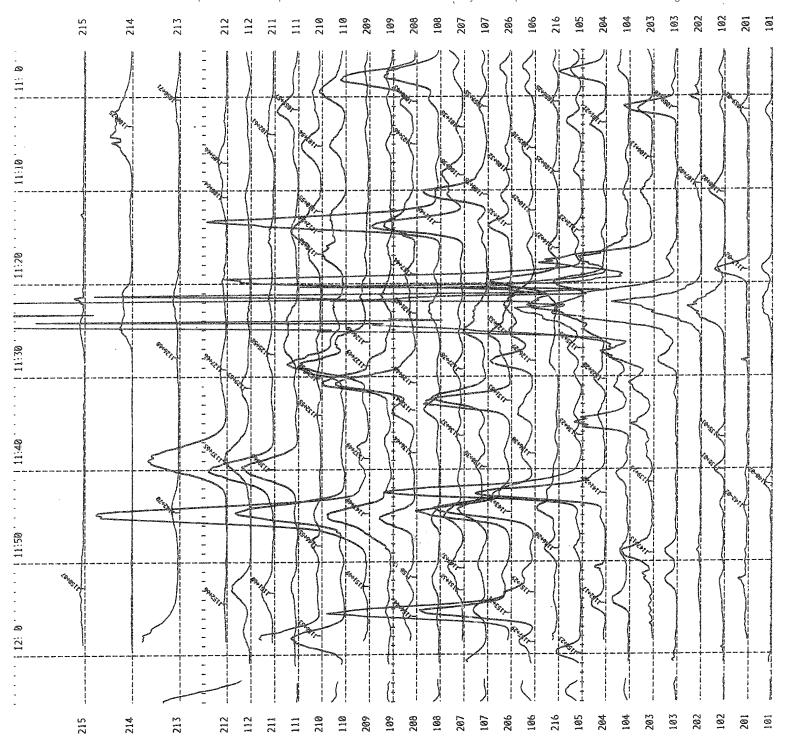


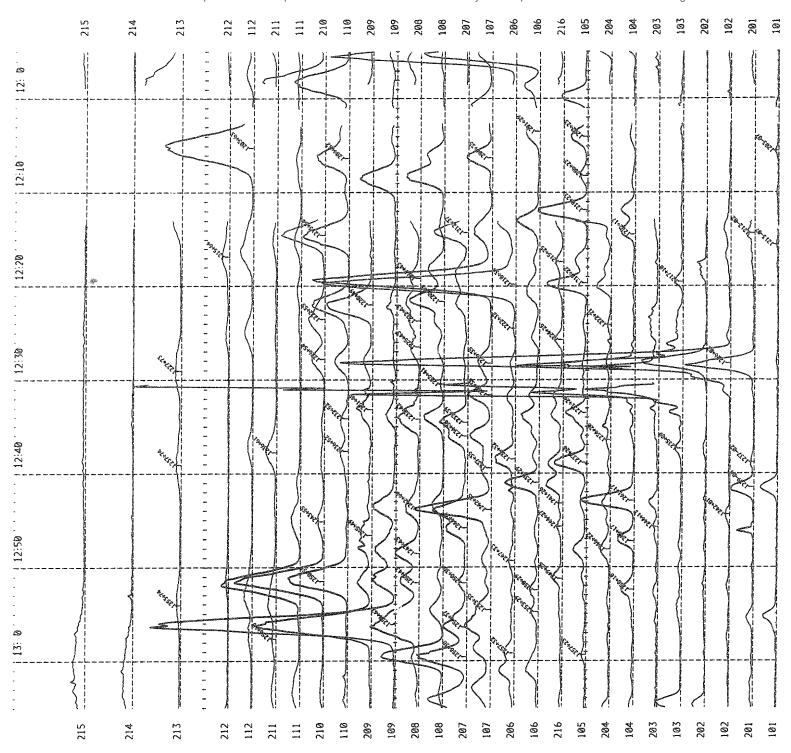


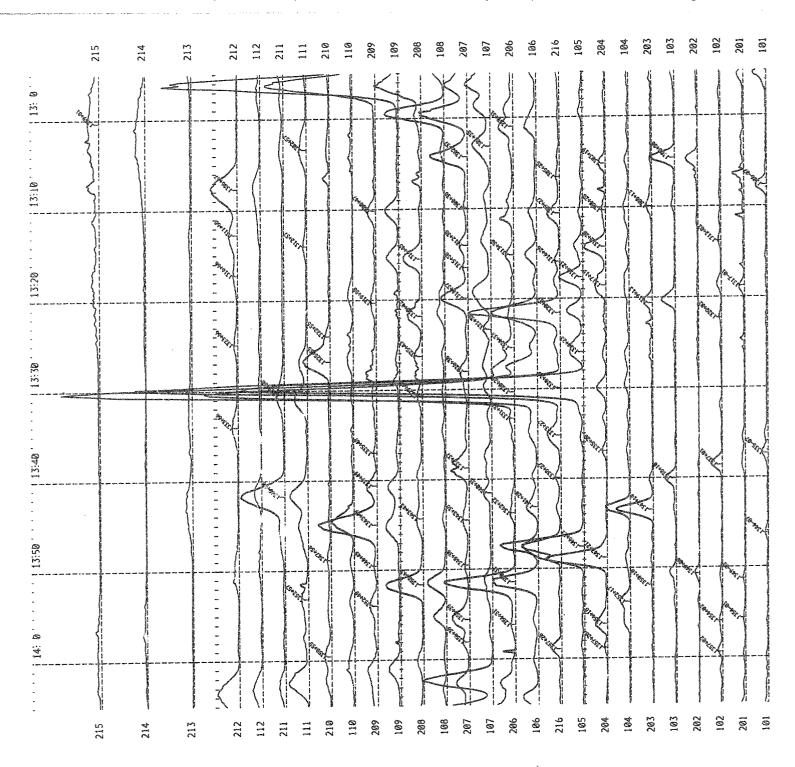


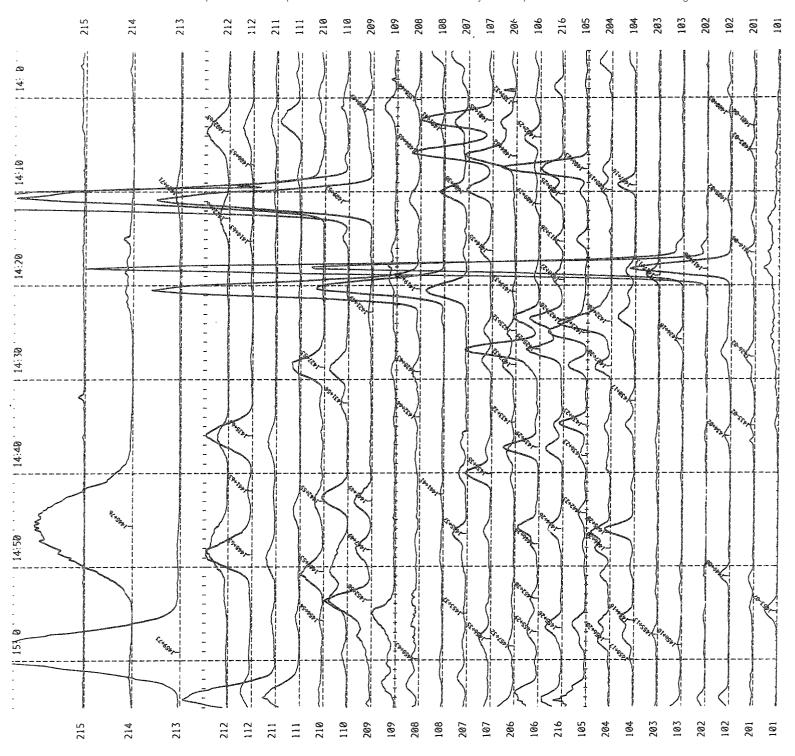


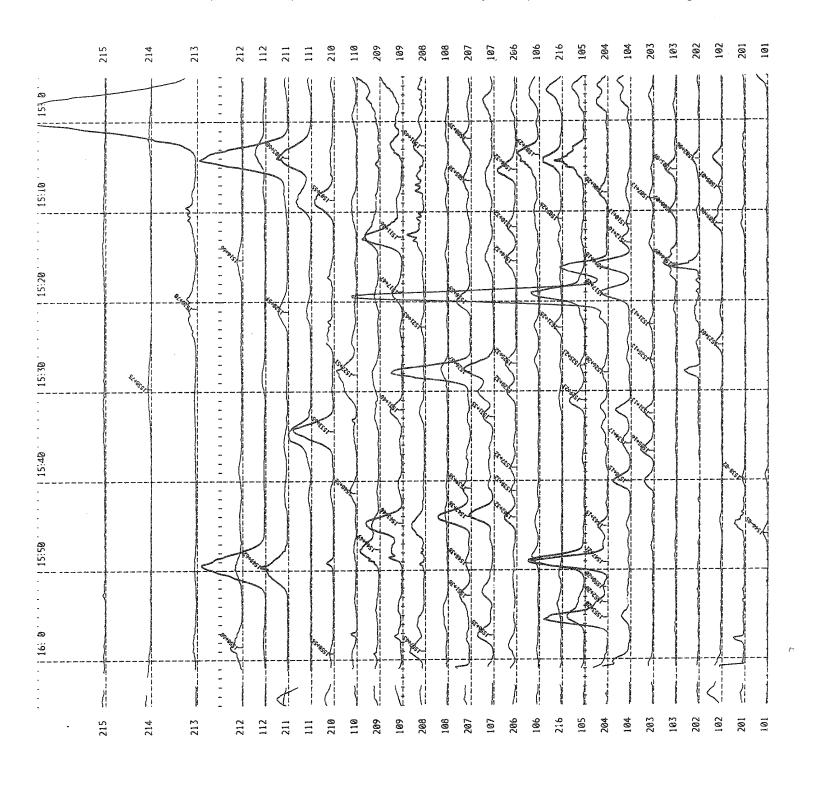


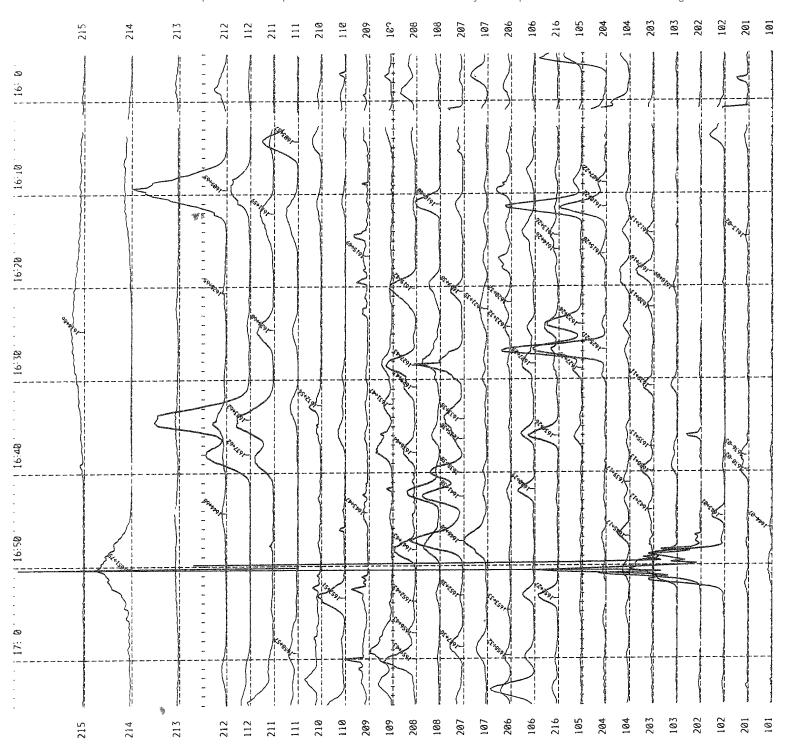


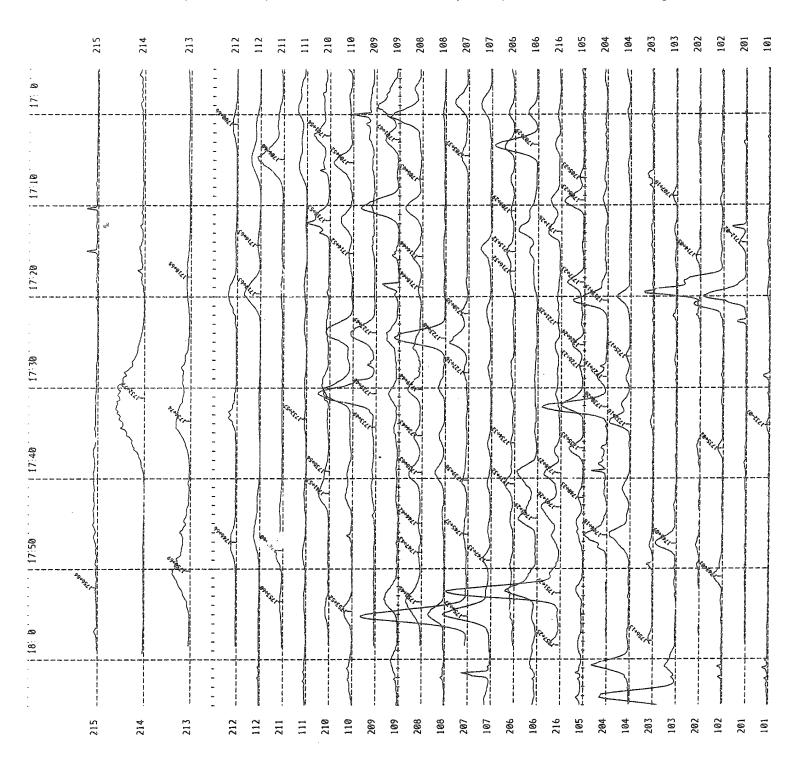


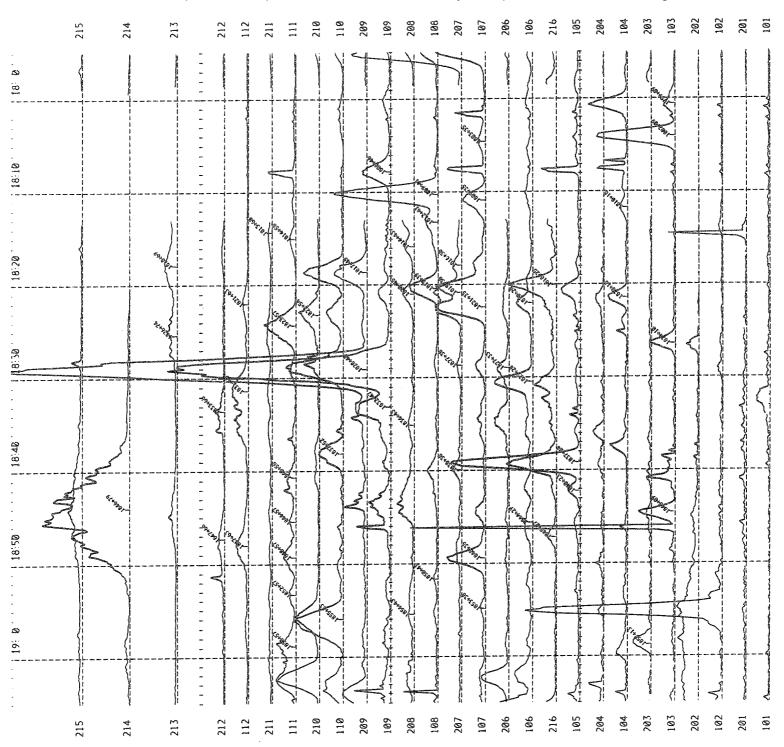


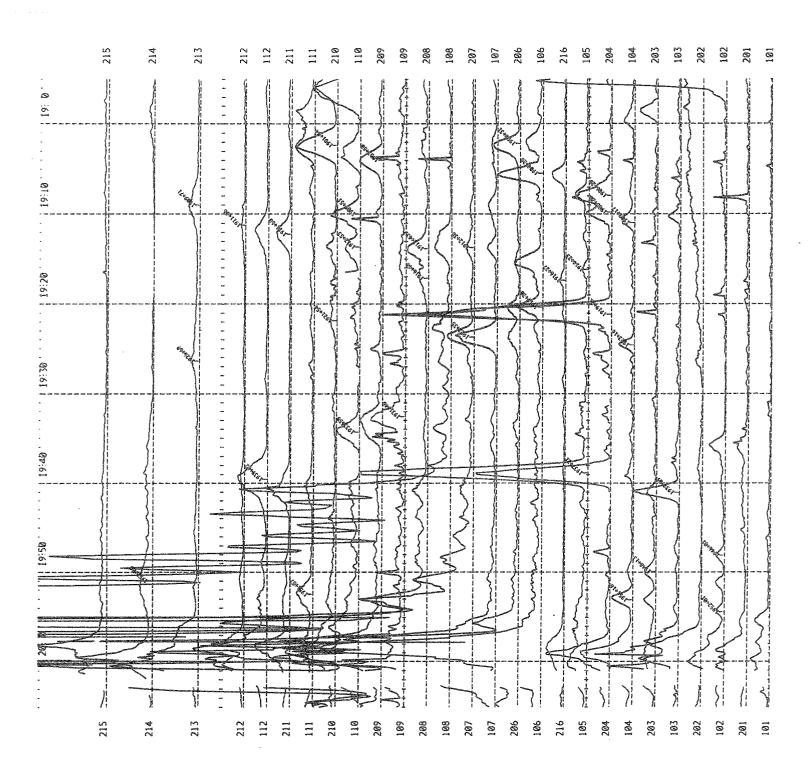


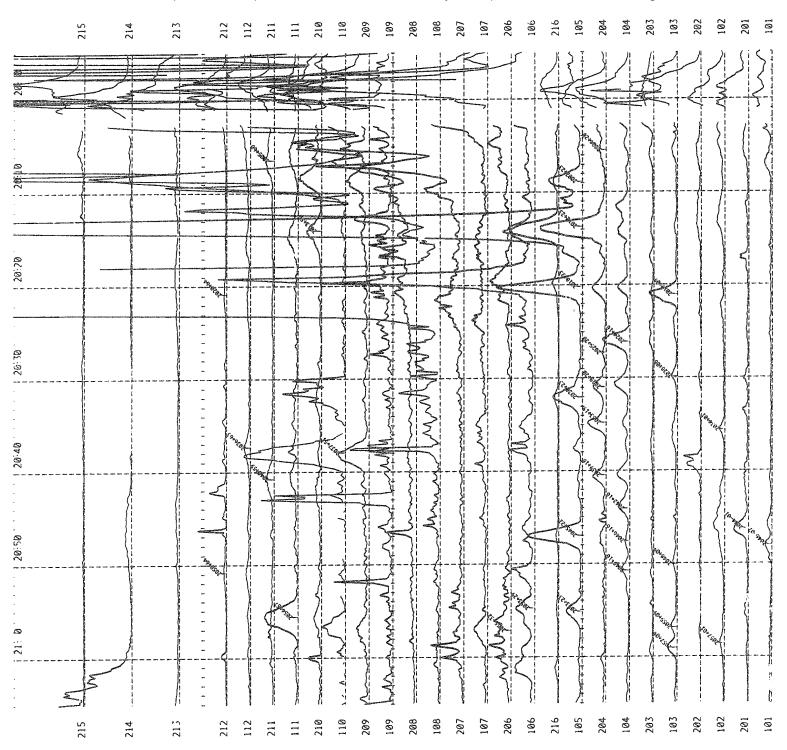


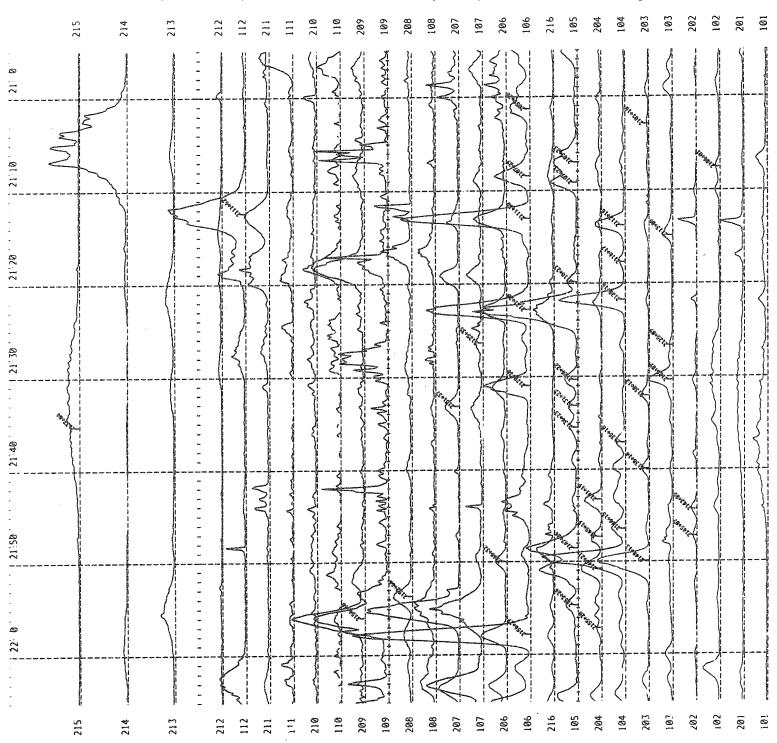


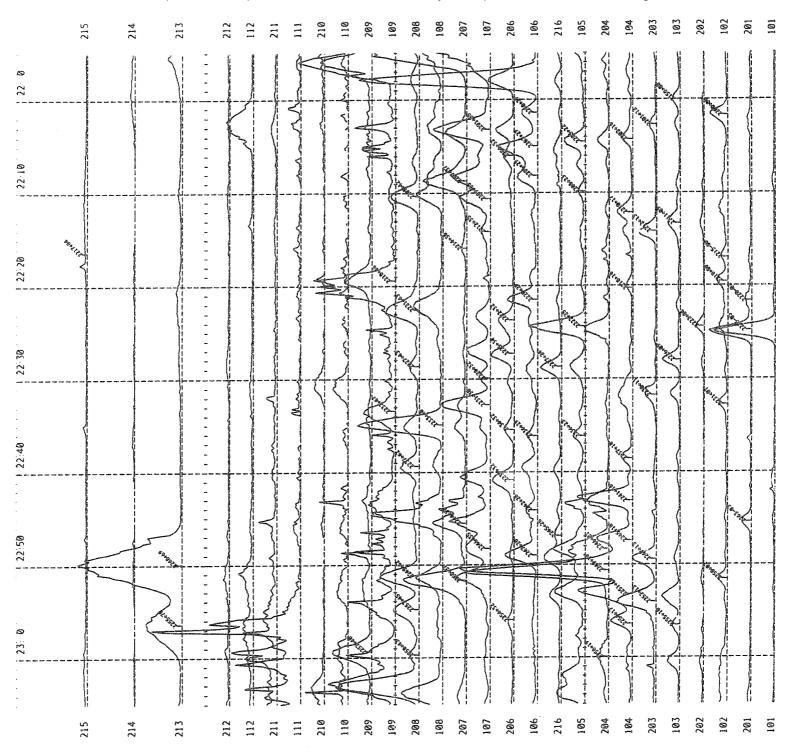












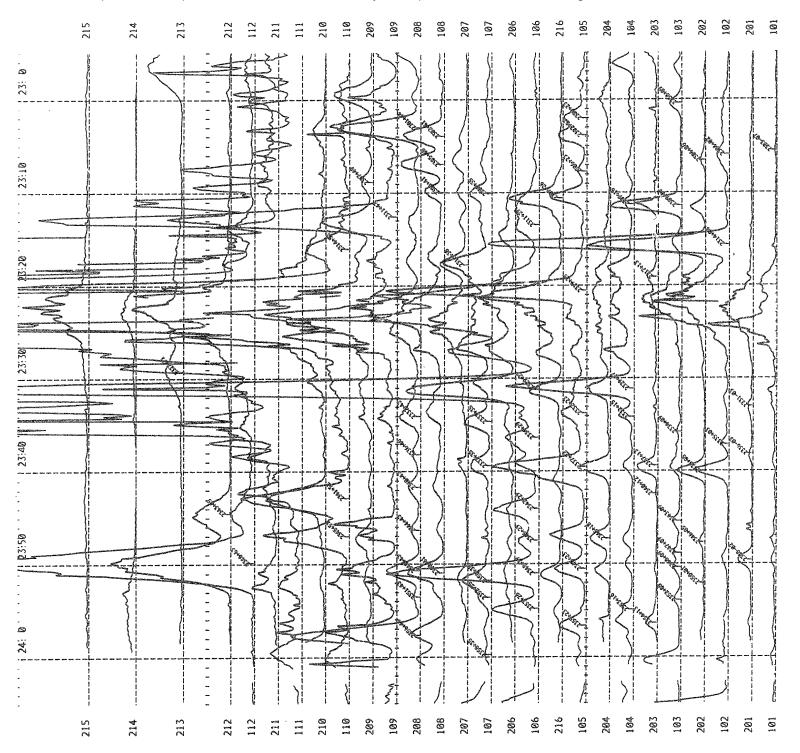
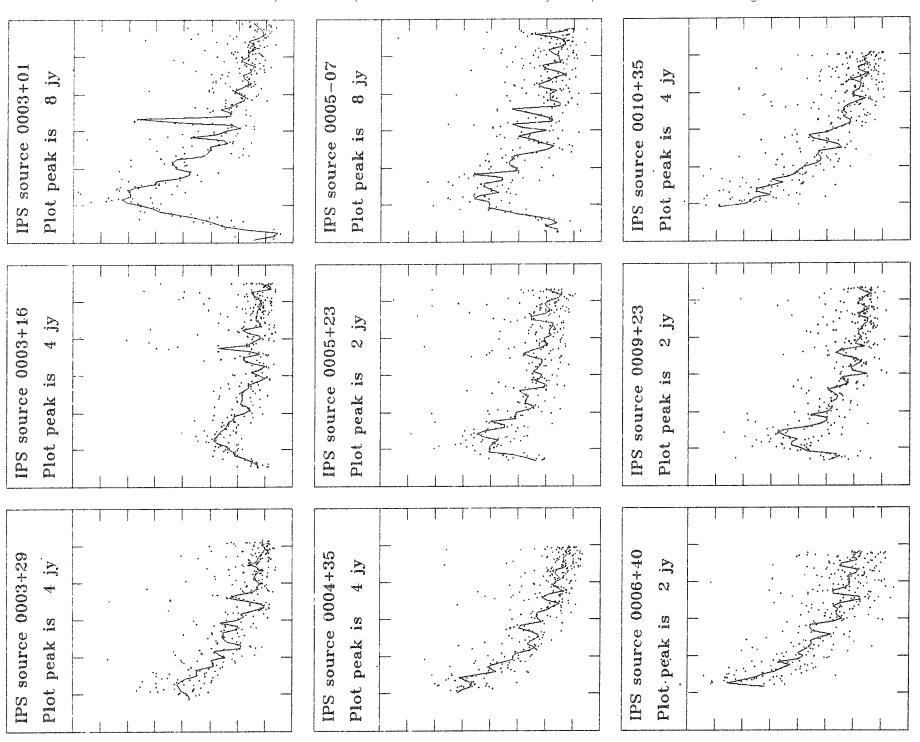


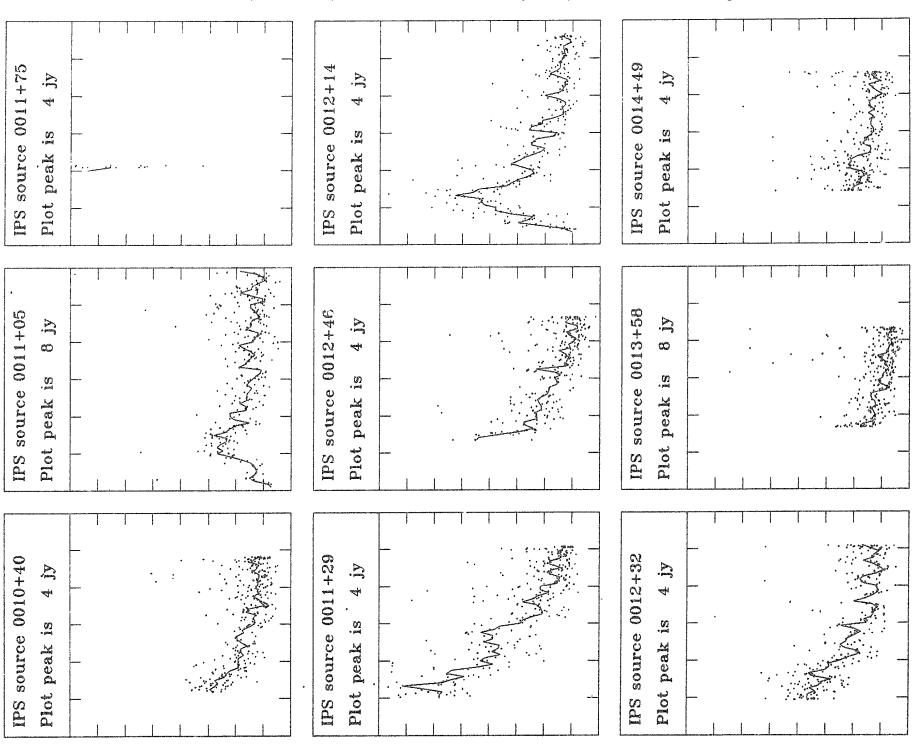
Figure 5

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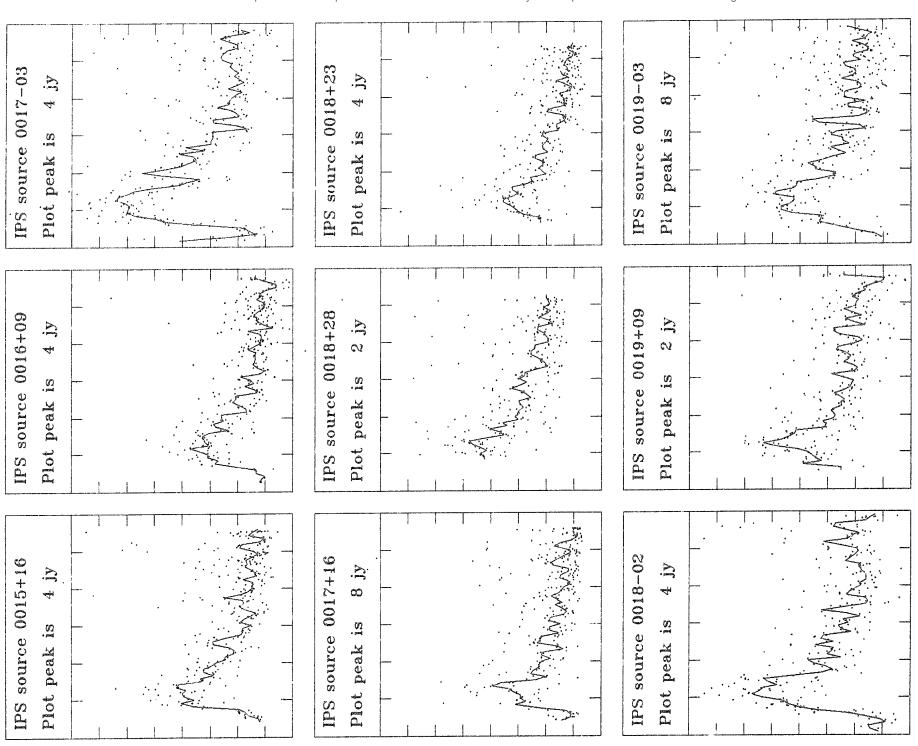


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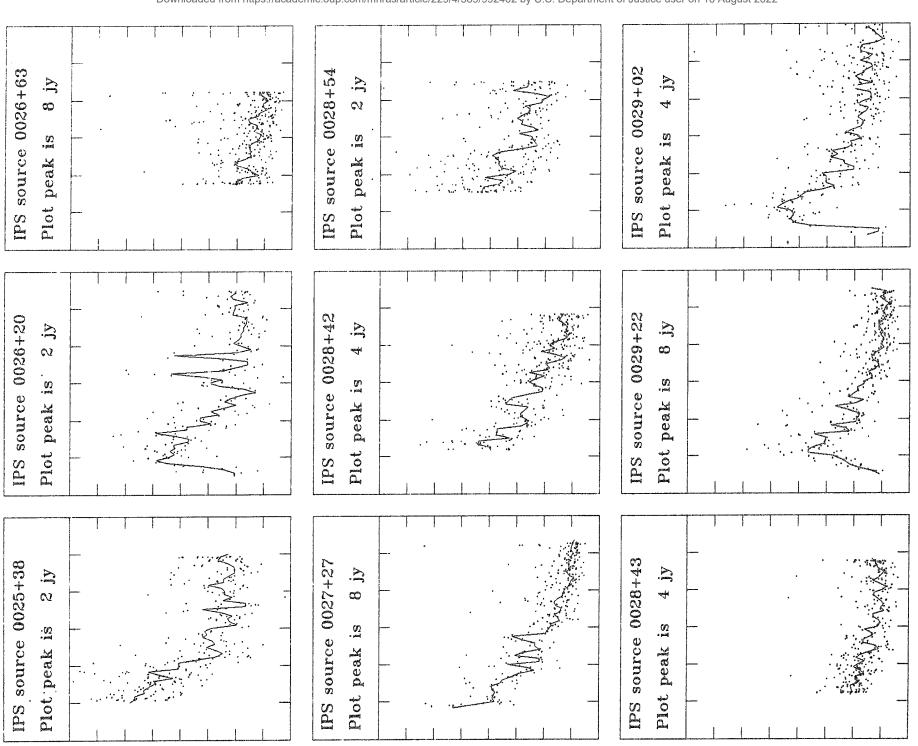


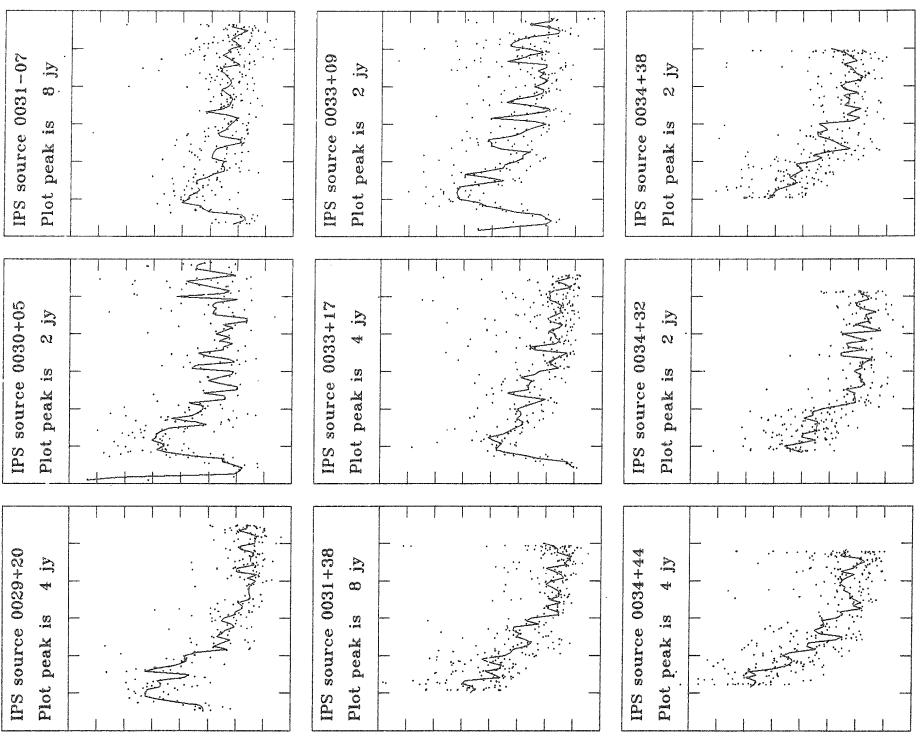


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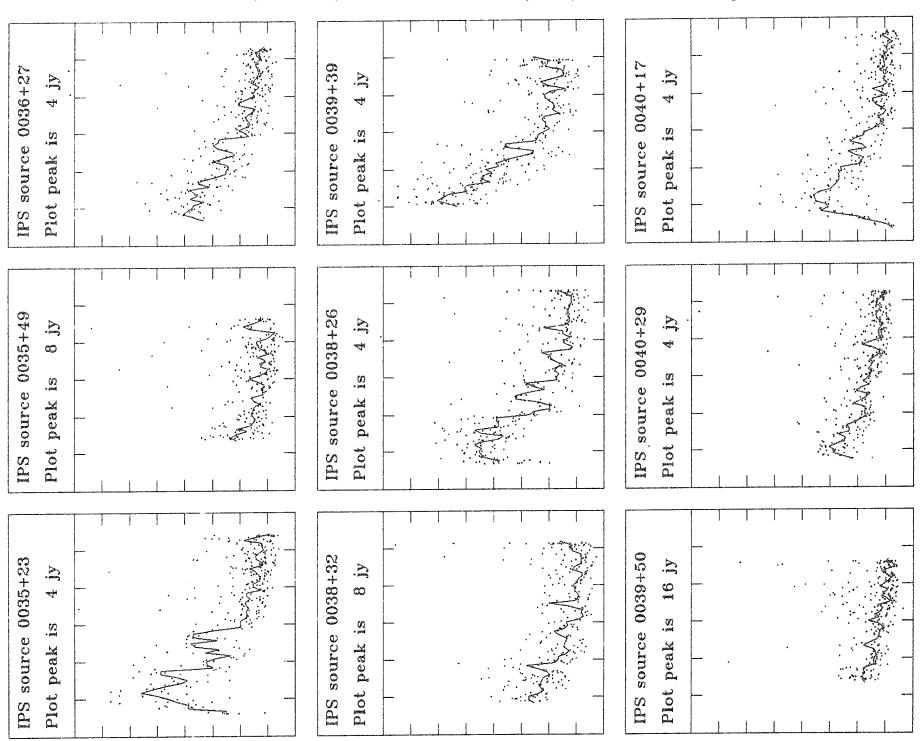


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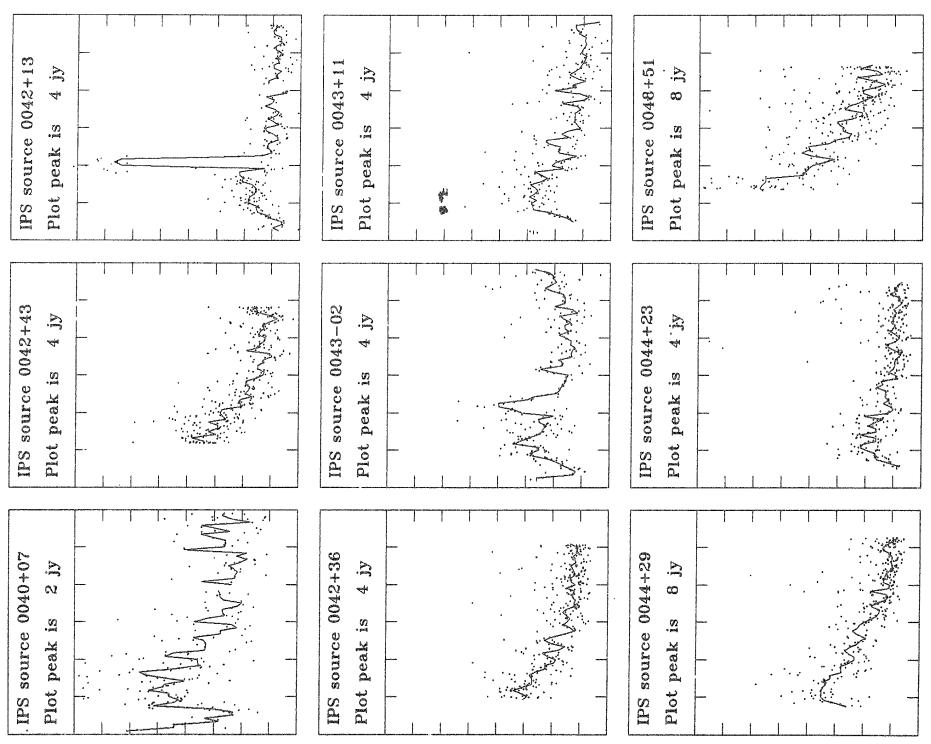




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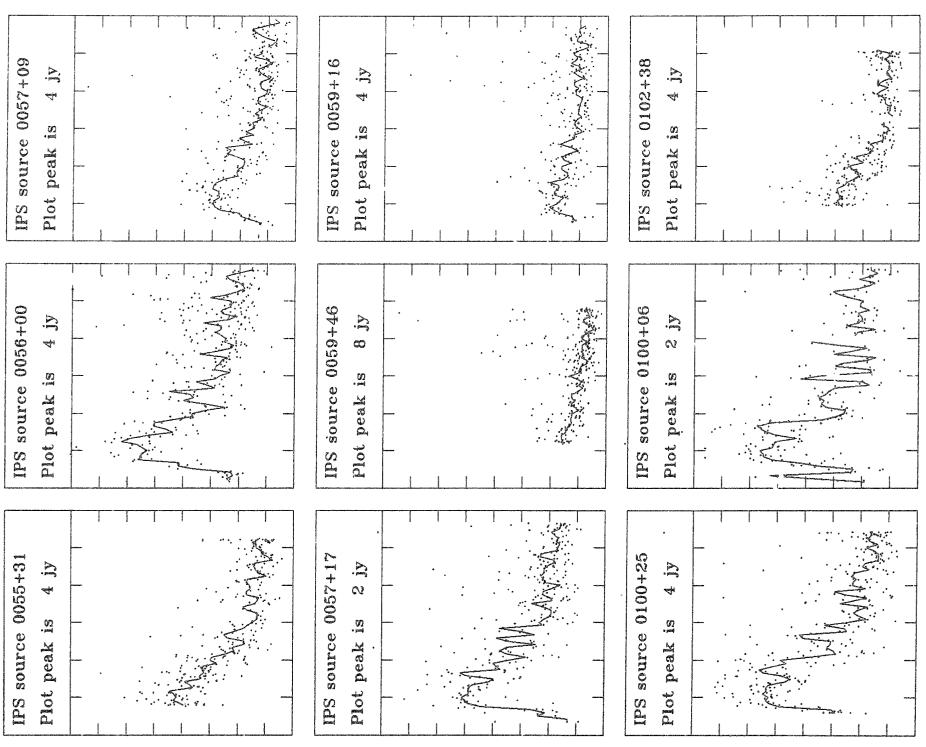


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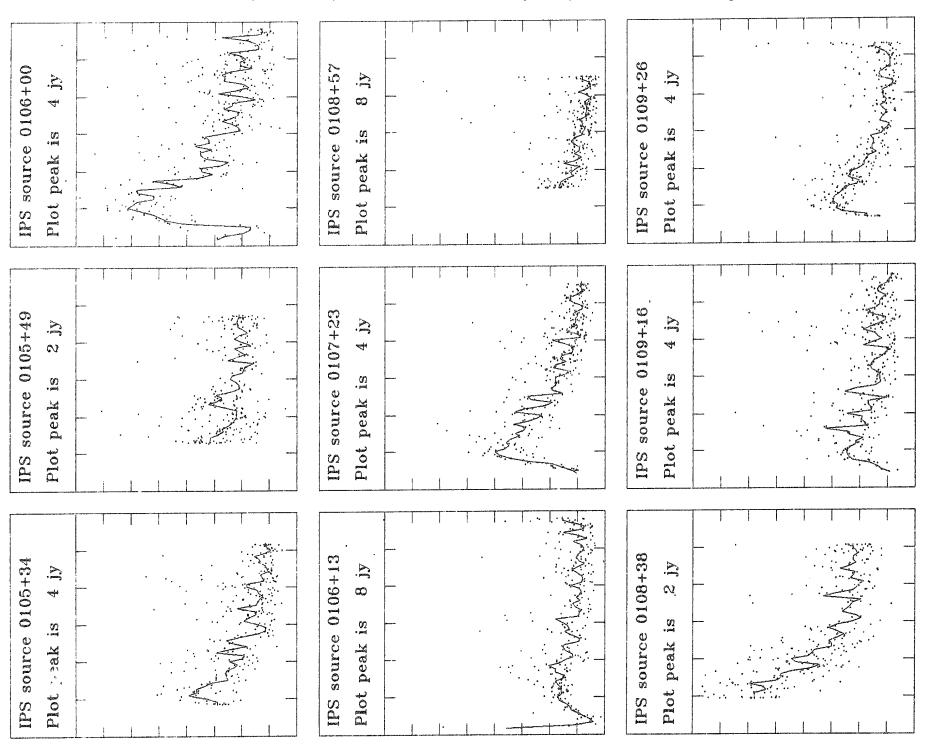


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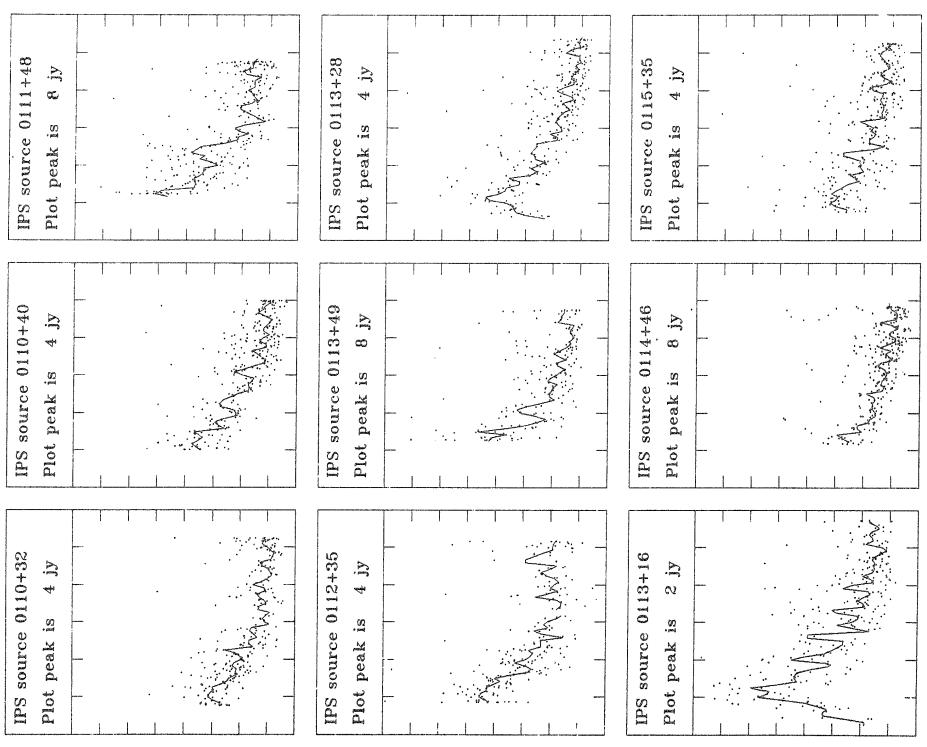
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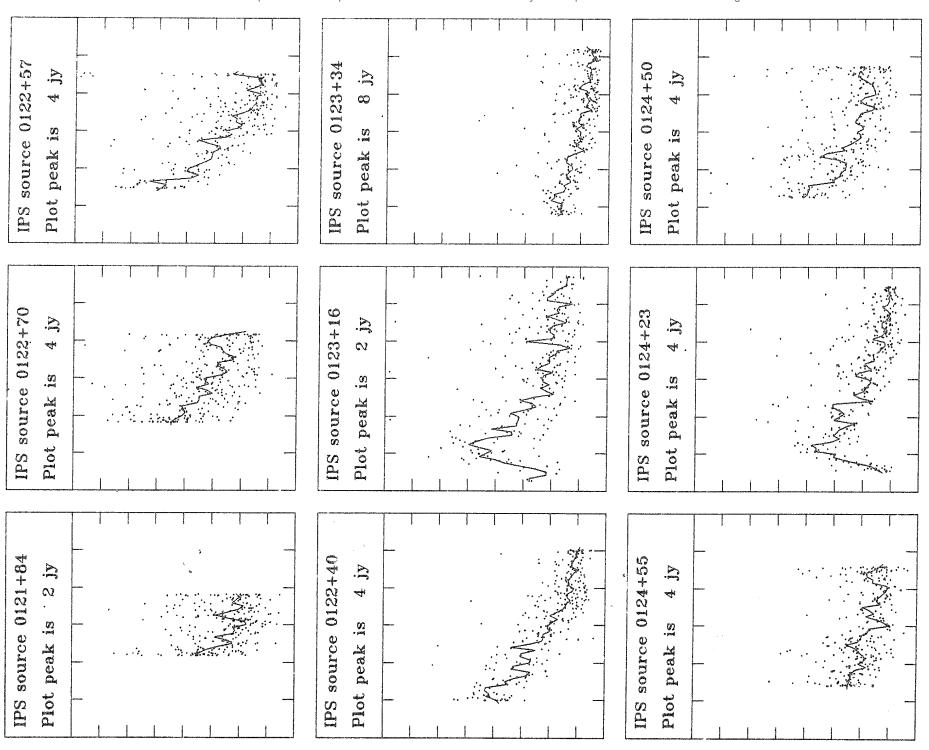


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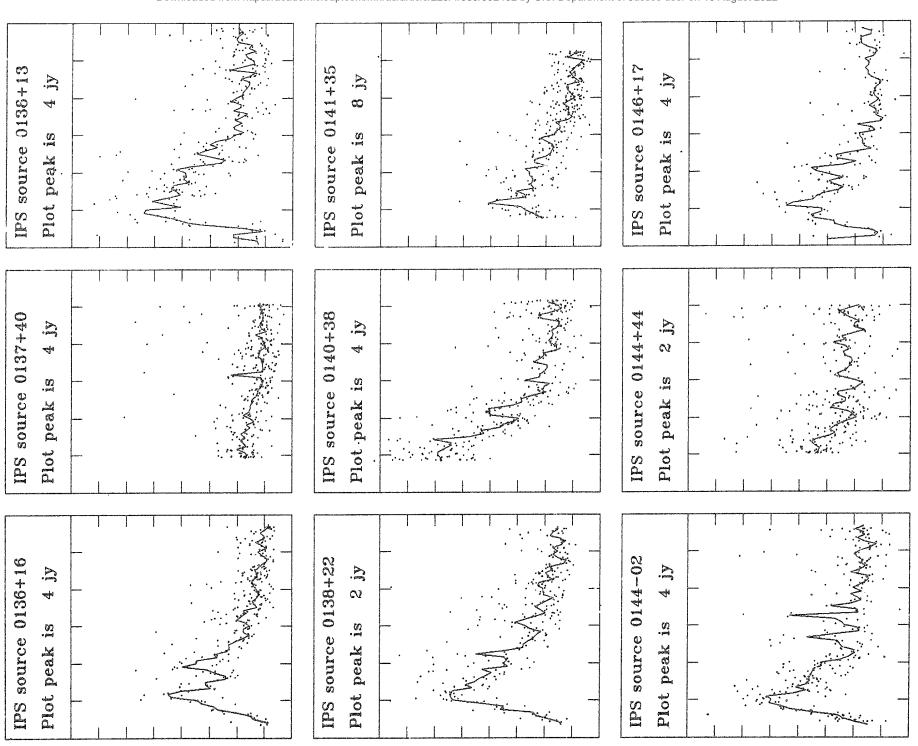
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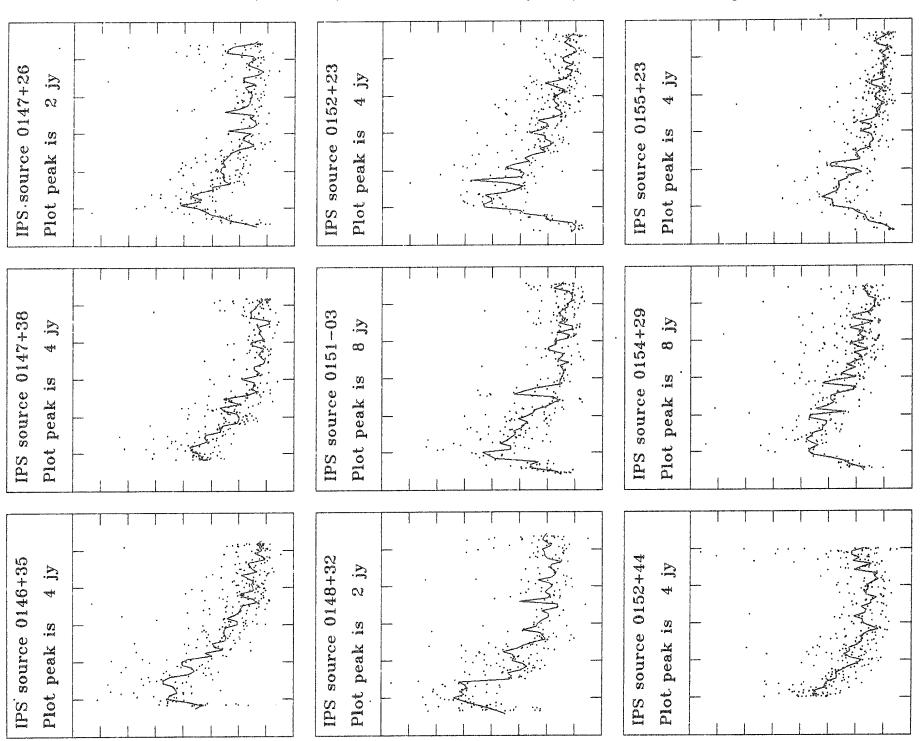
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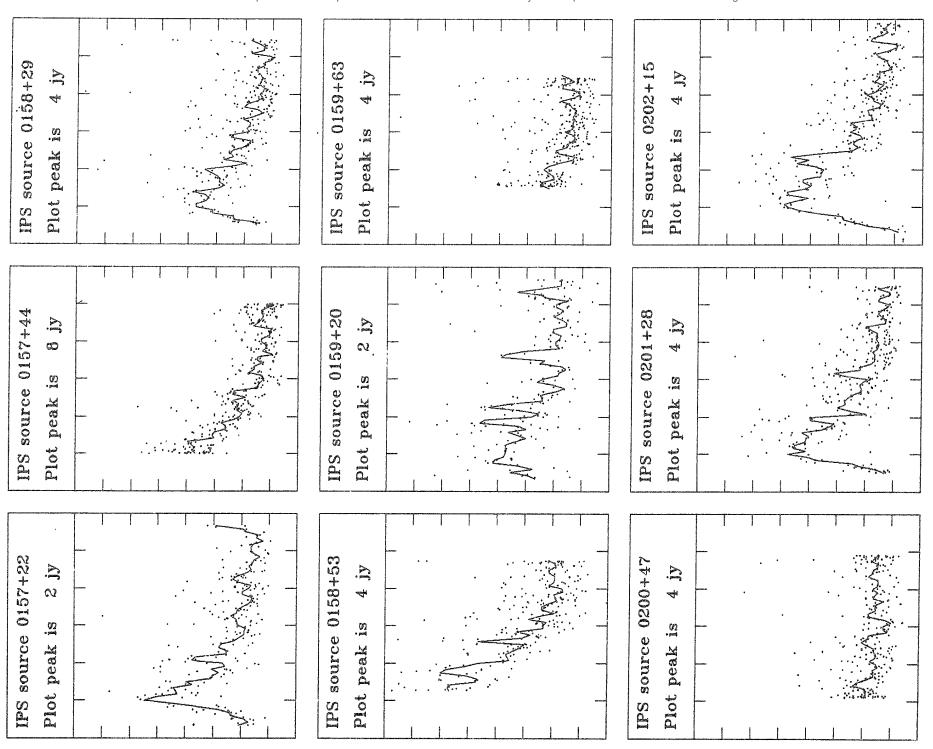
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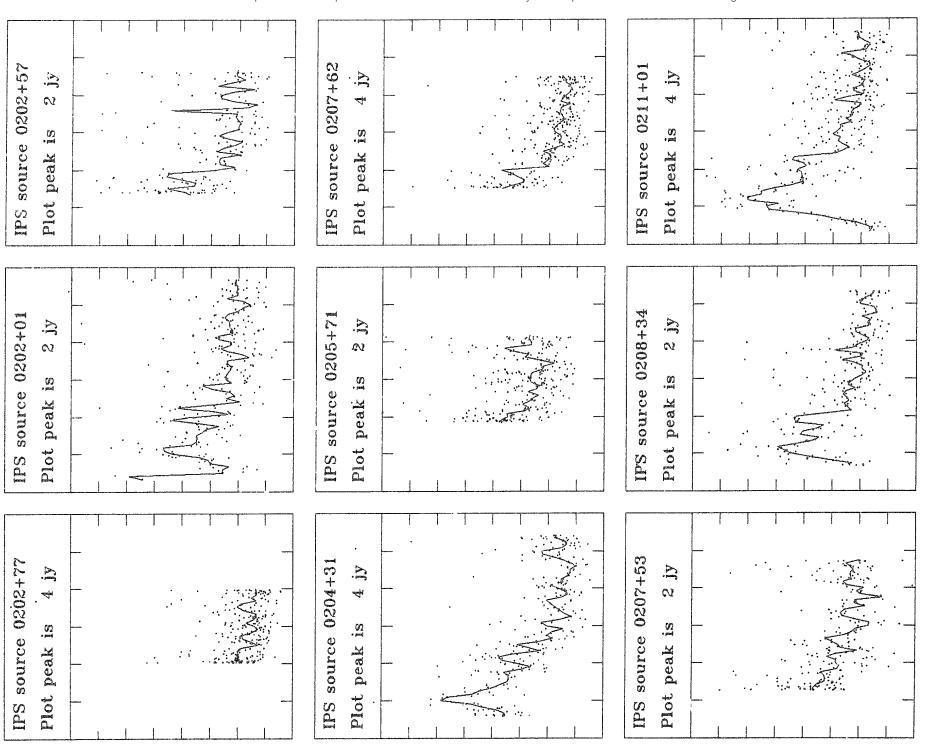




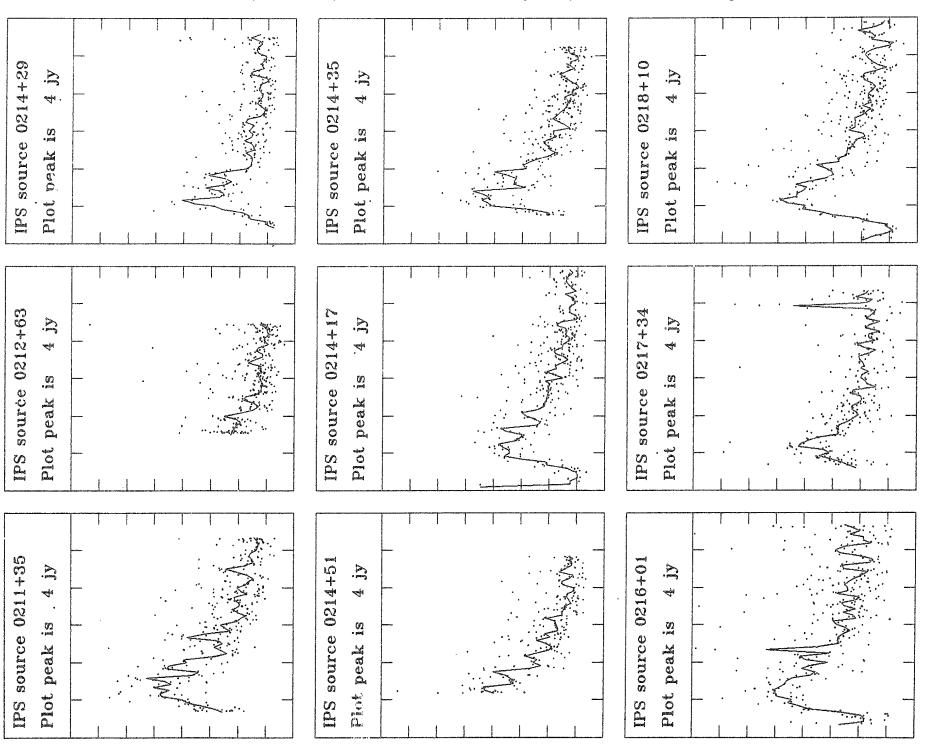
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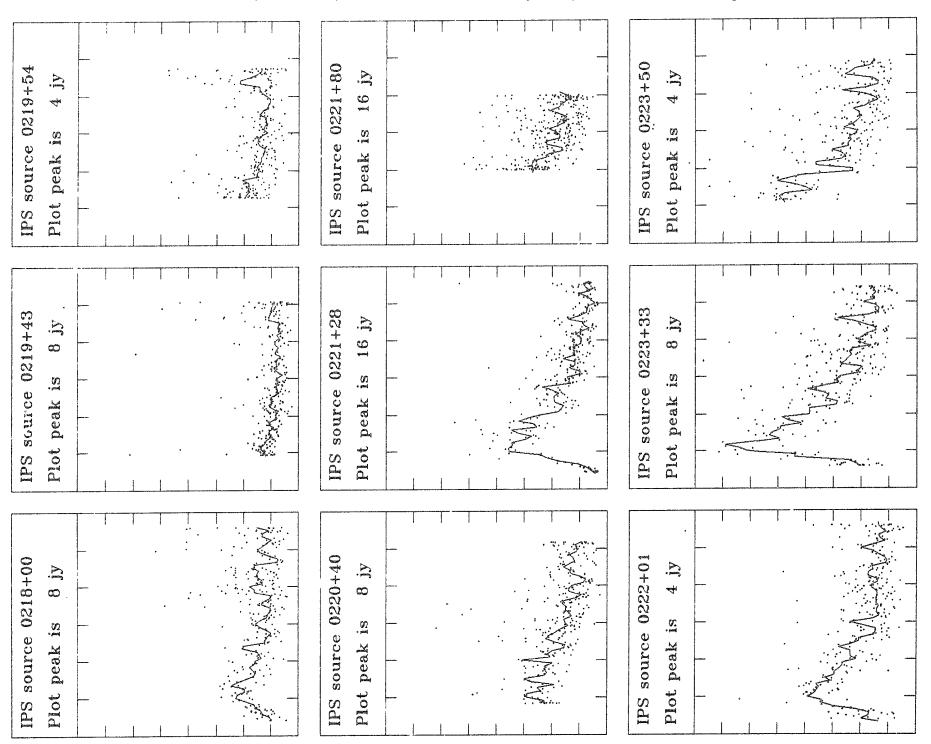
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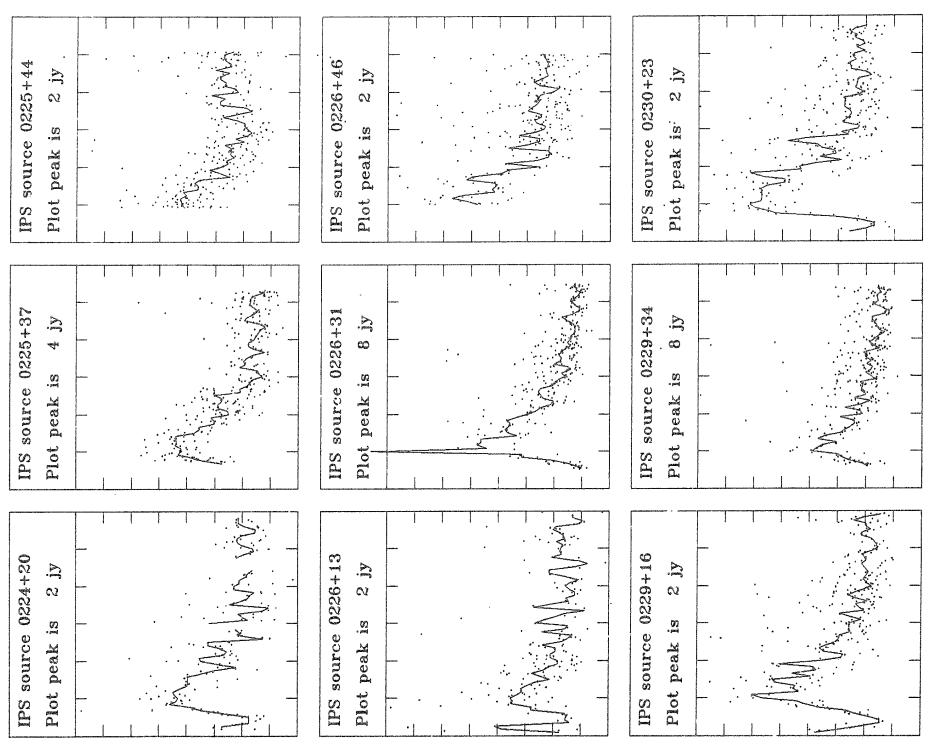
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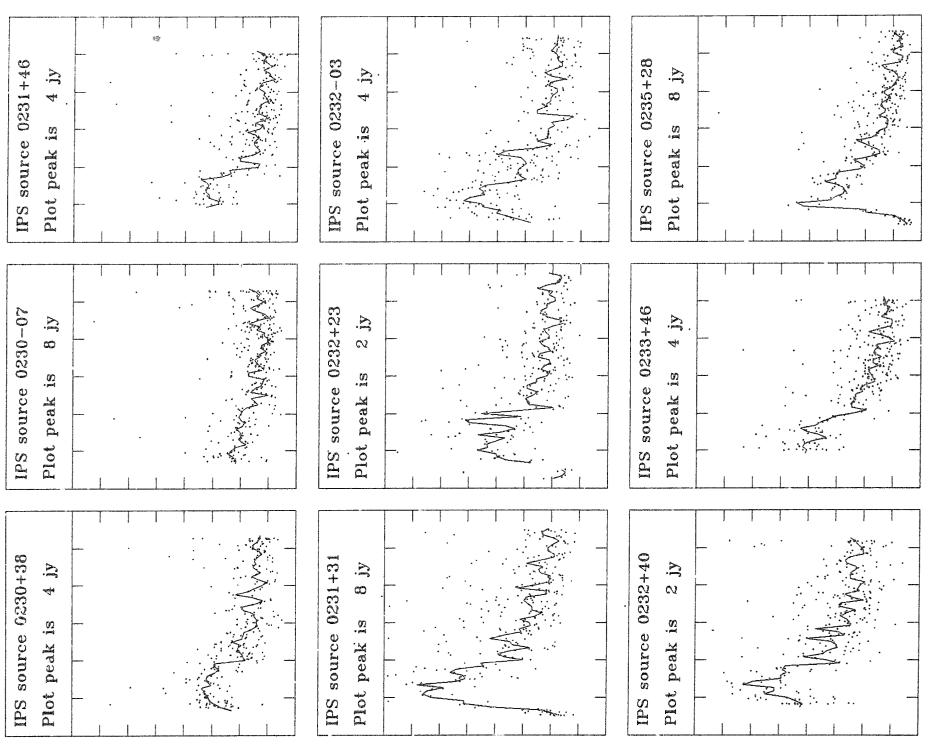
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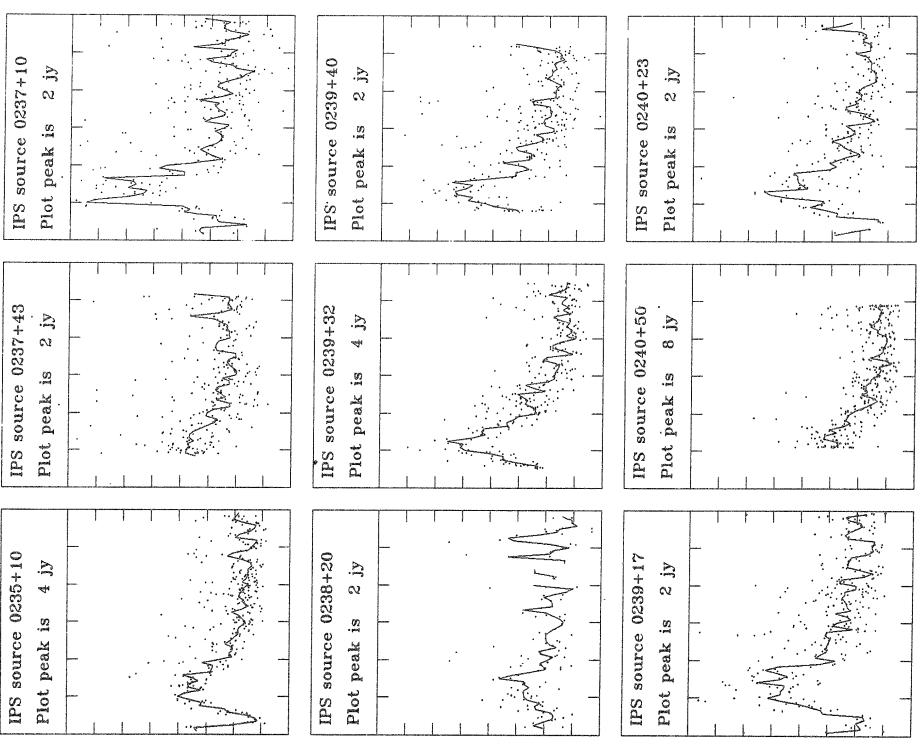
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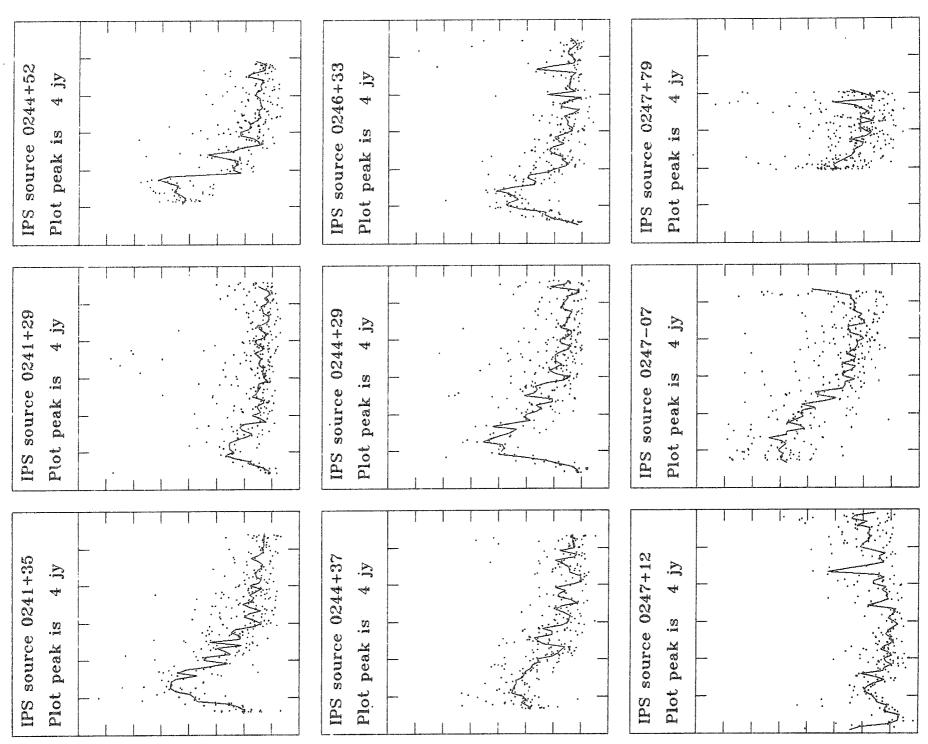
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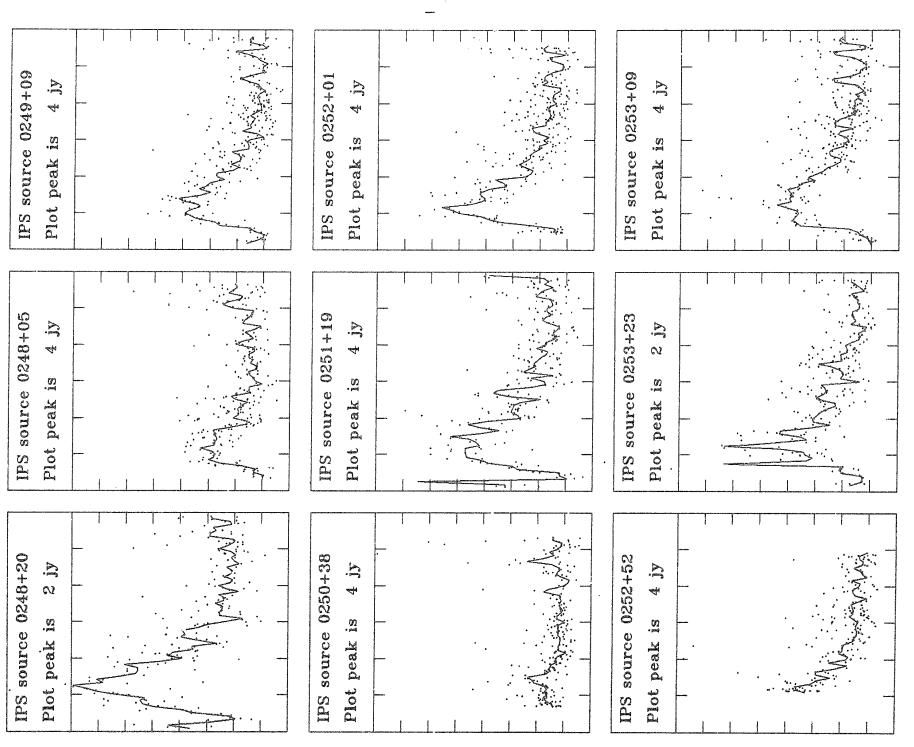
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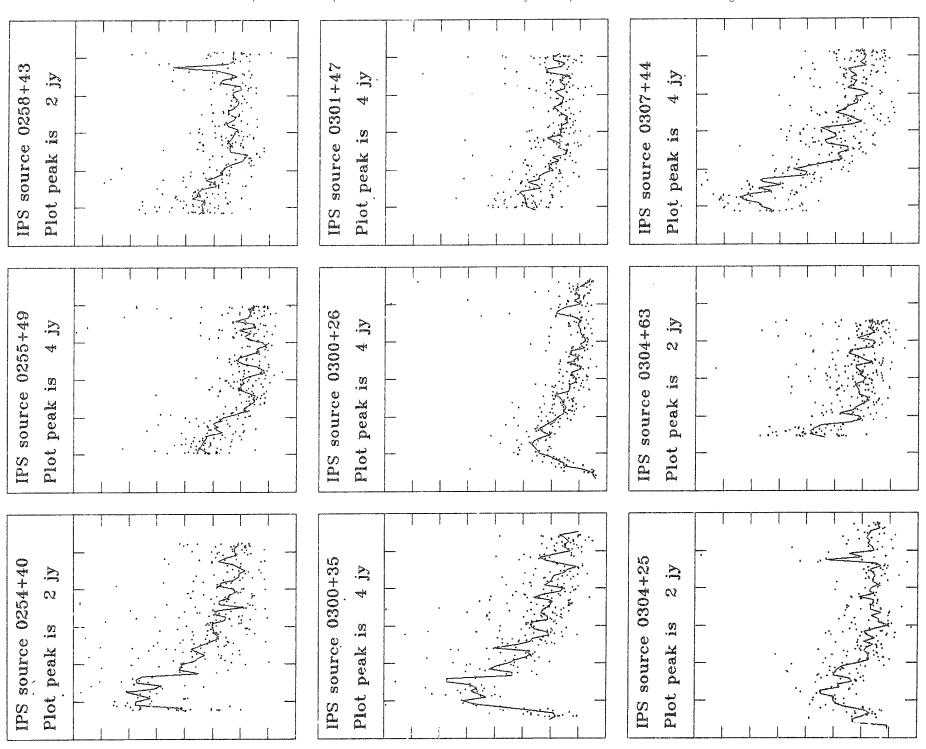
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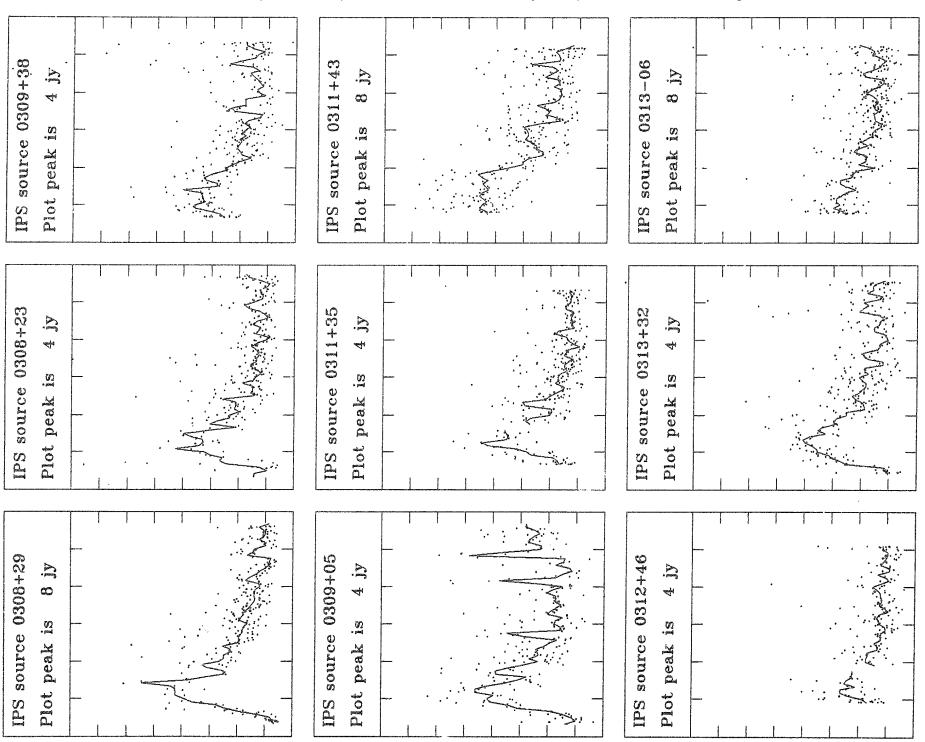
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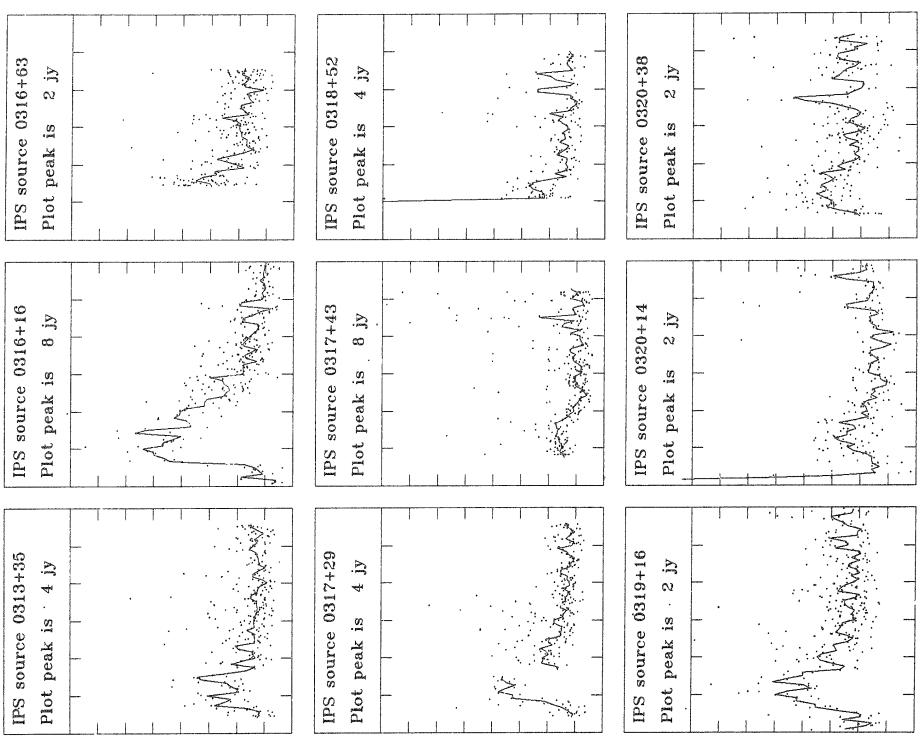
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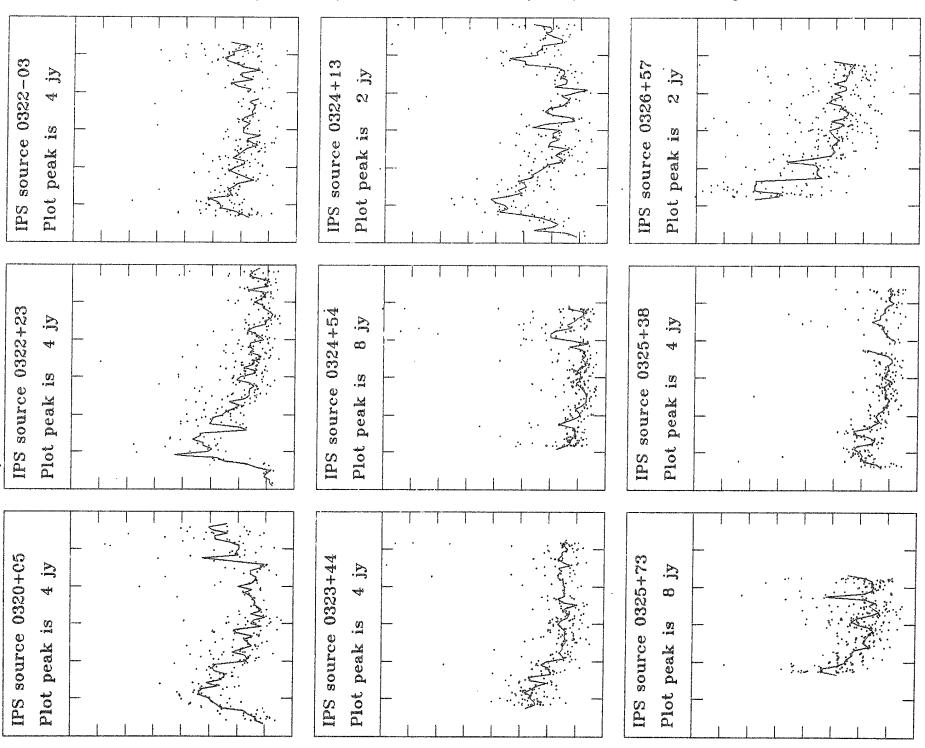
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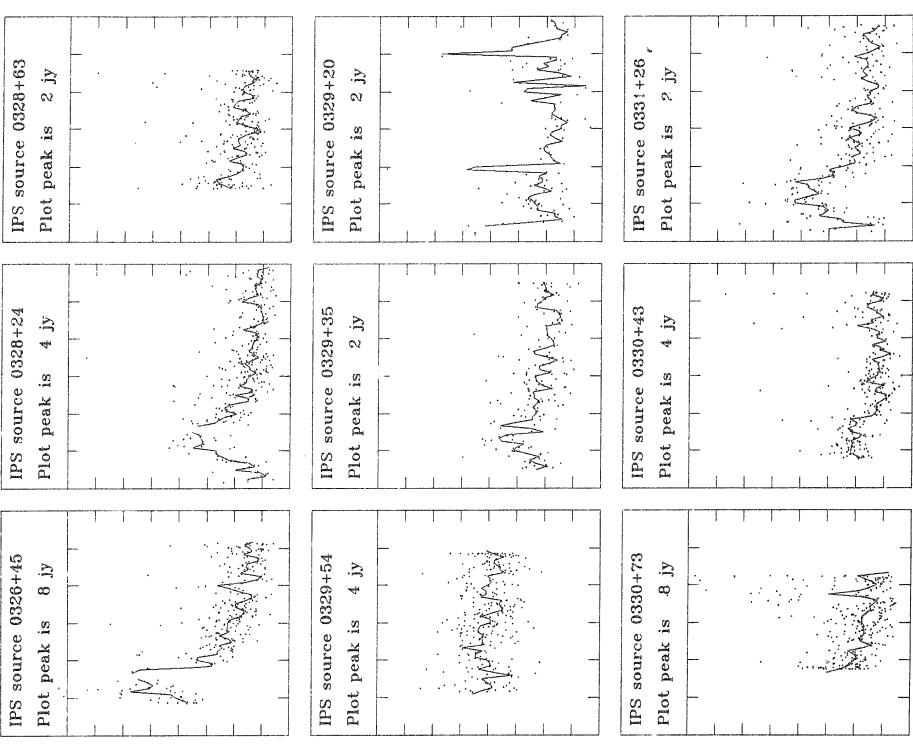
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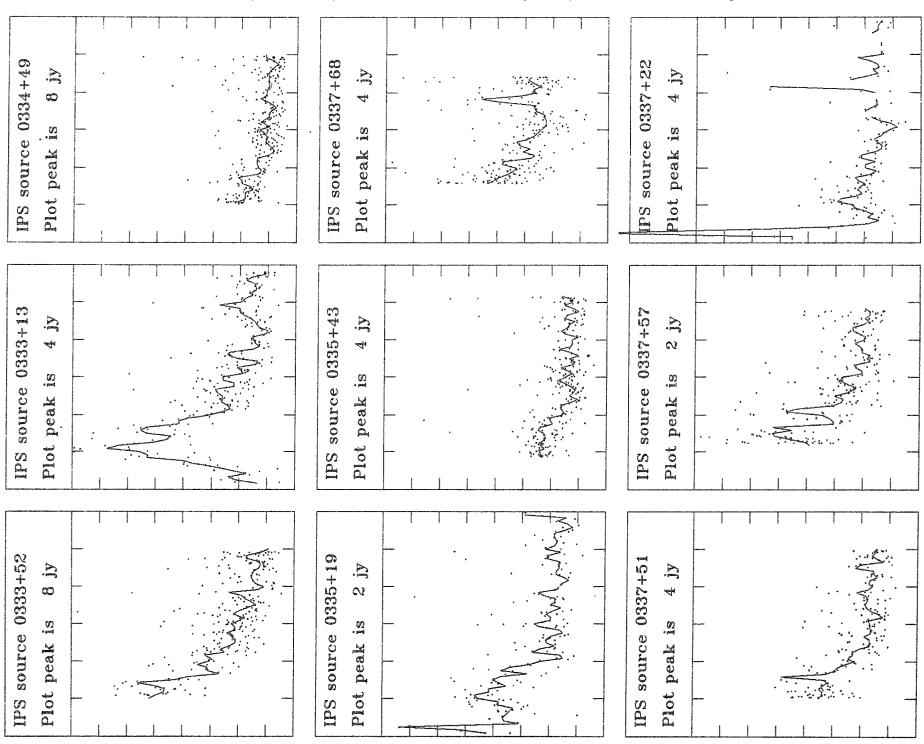
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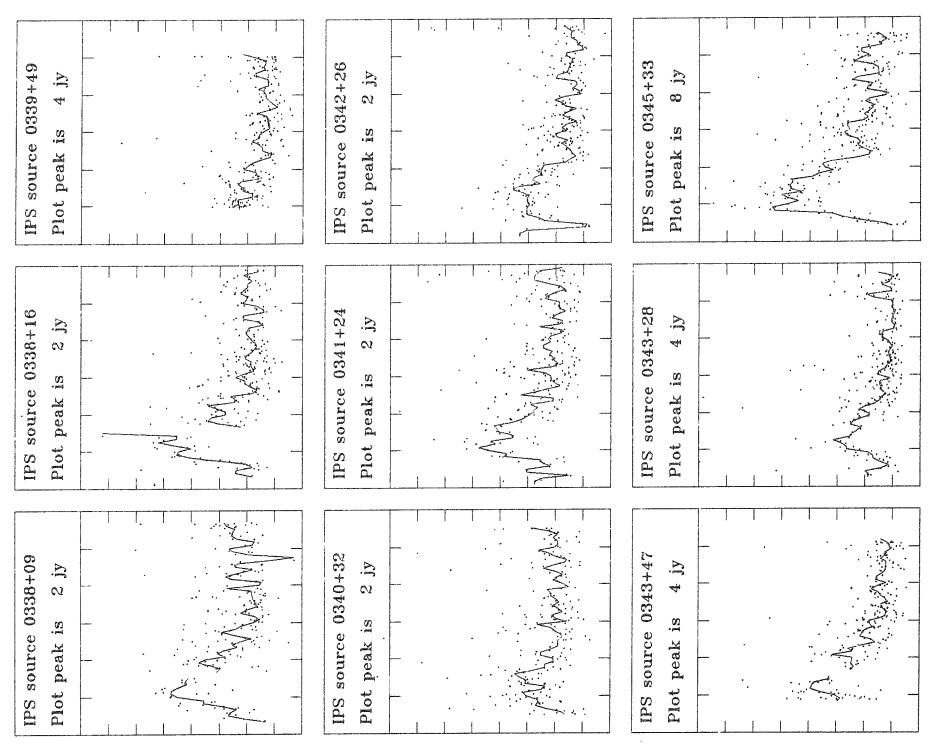
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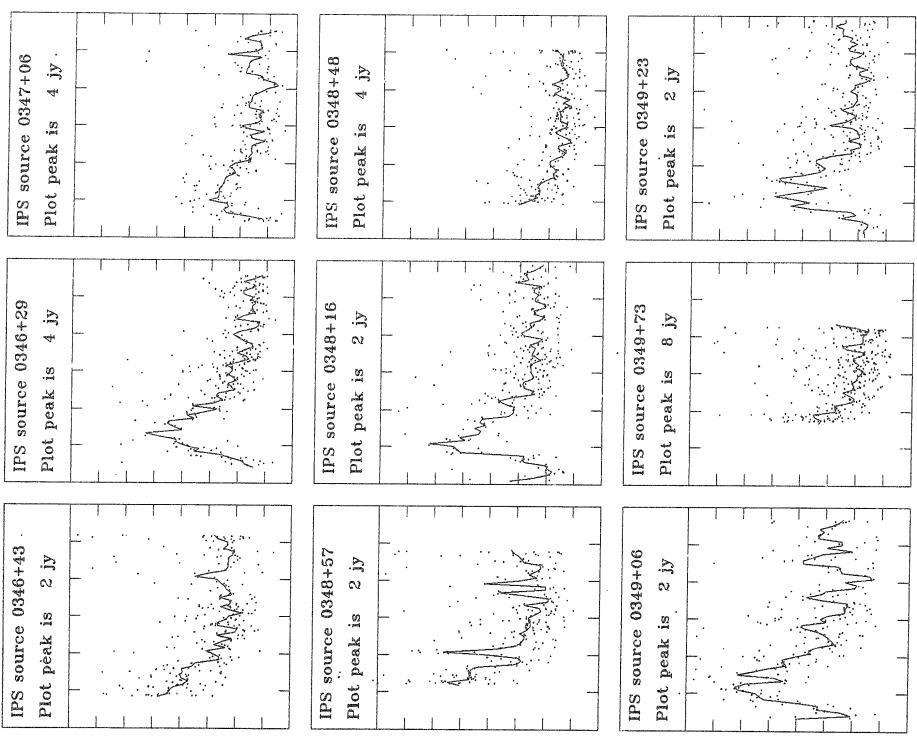
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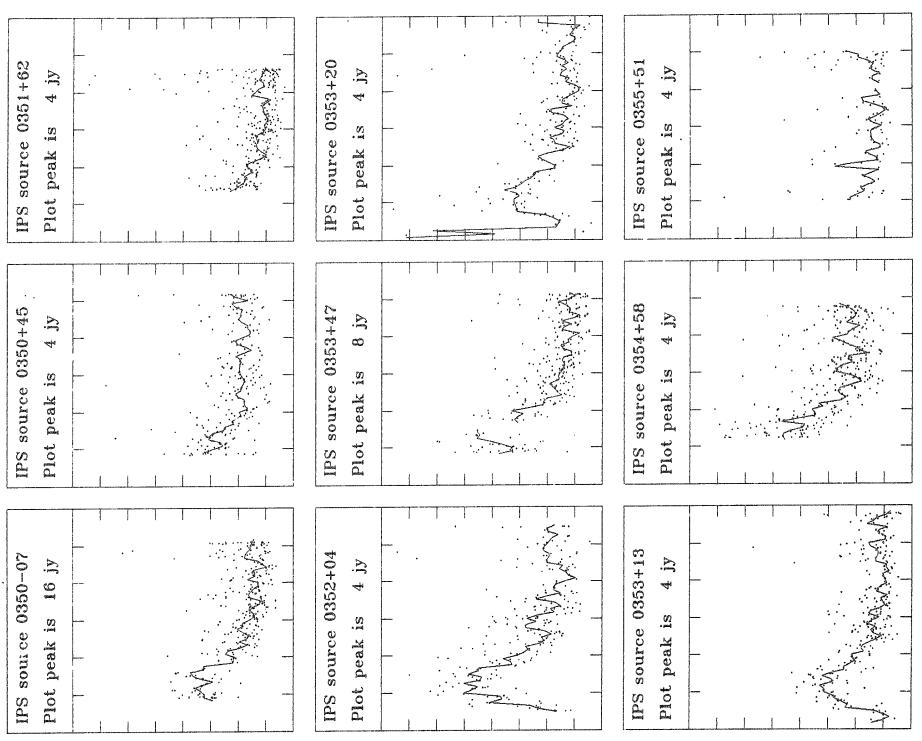
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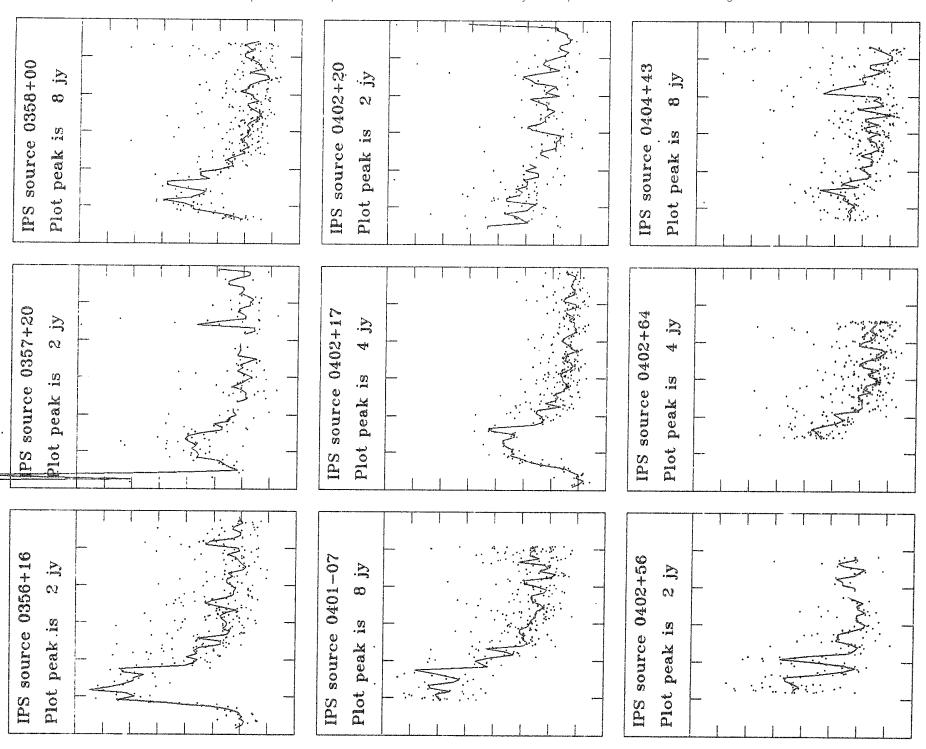
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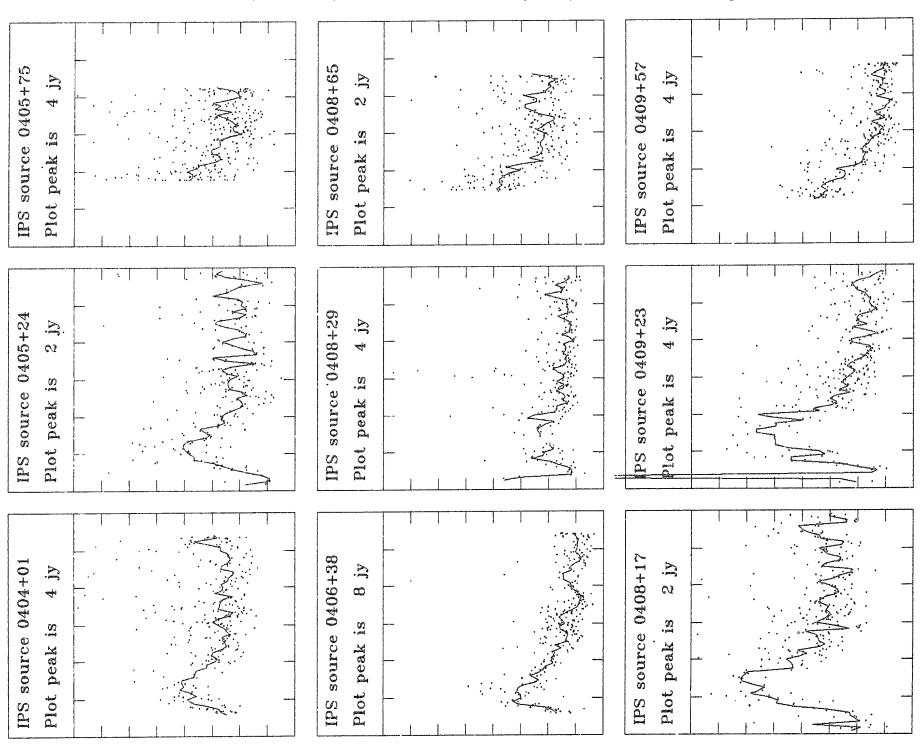
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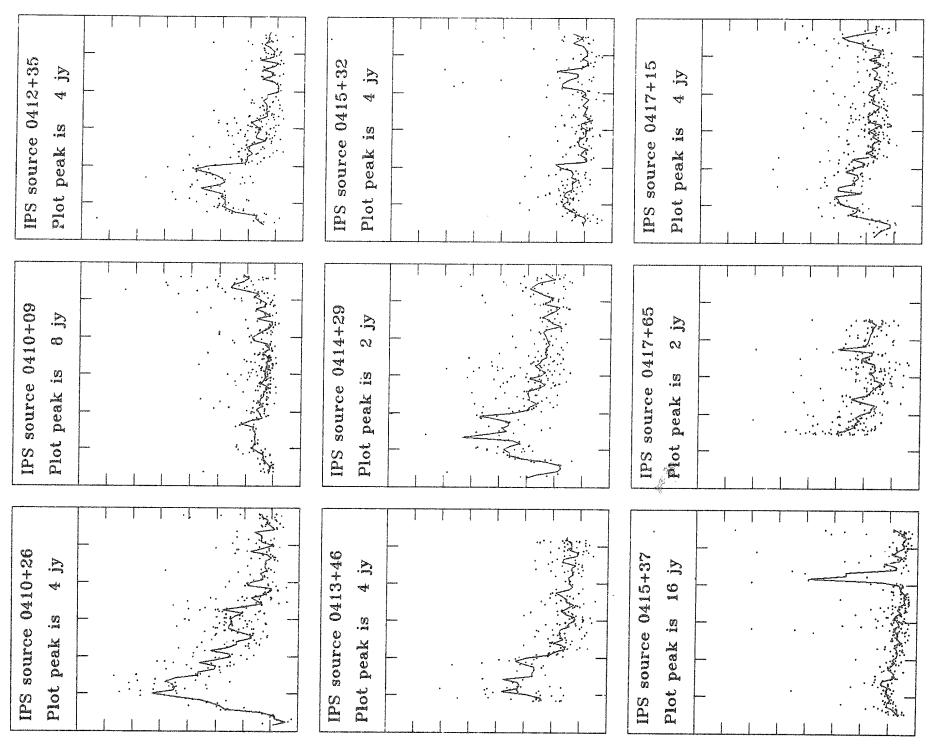
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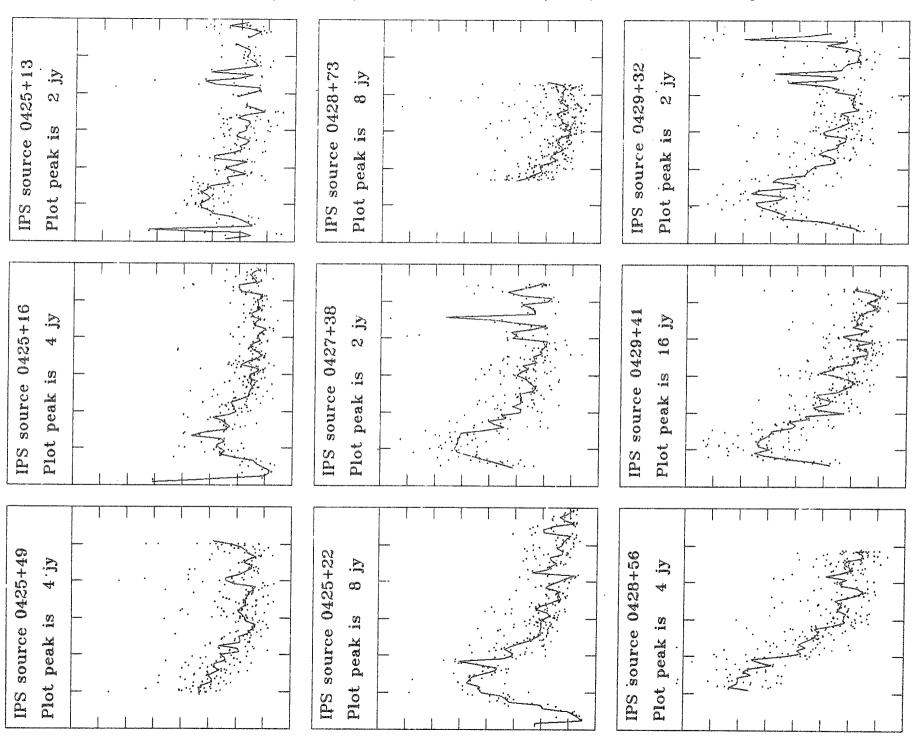


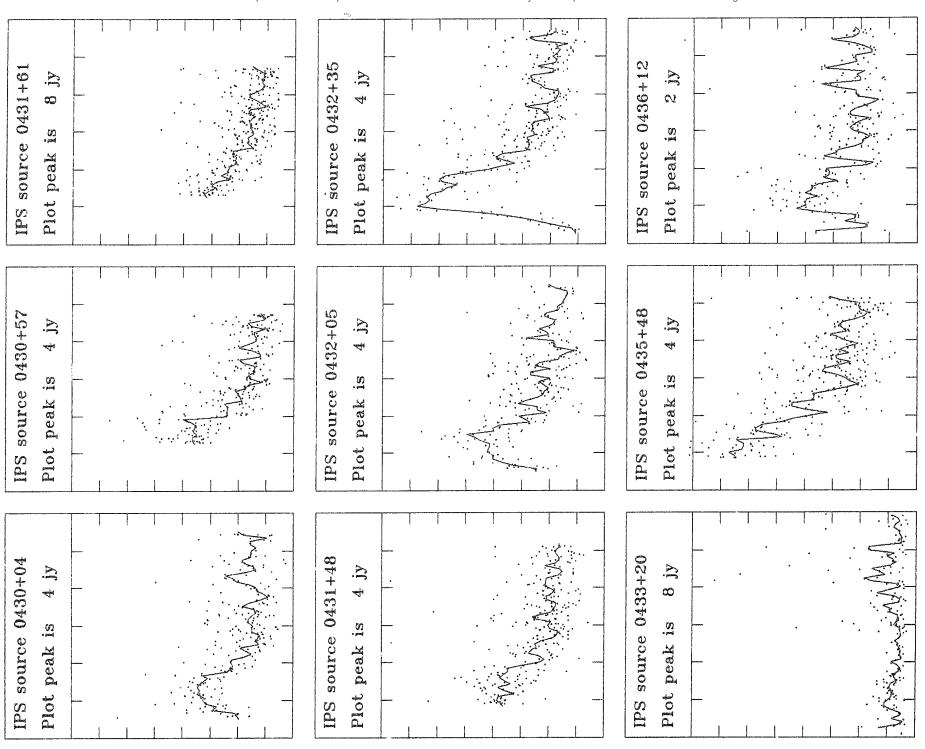
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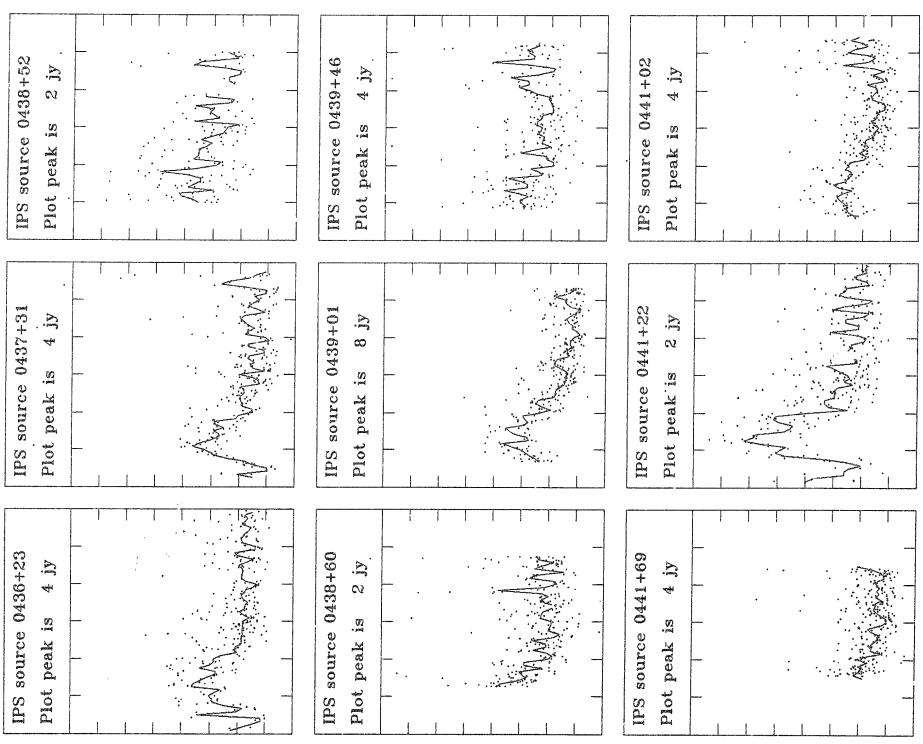
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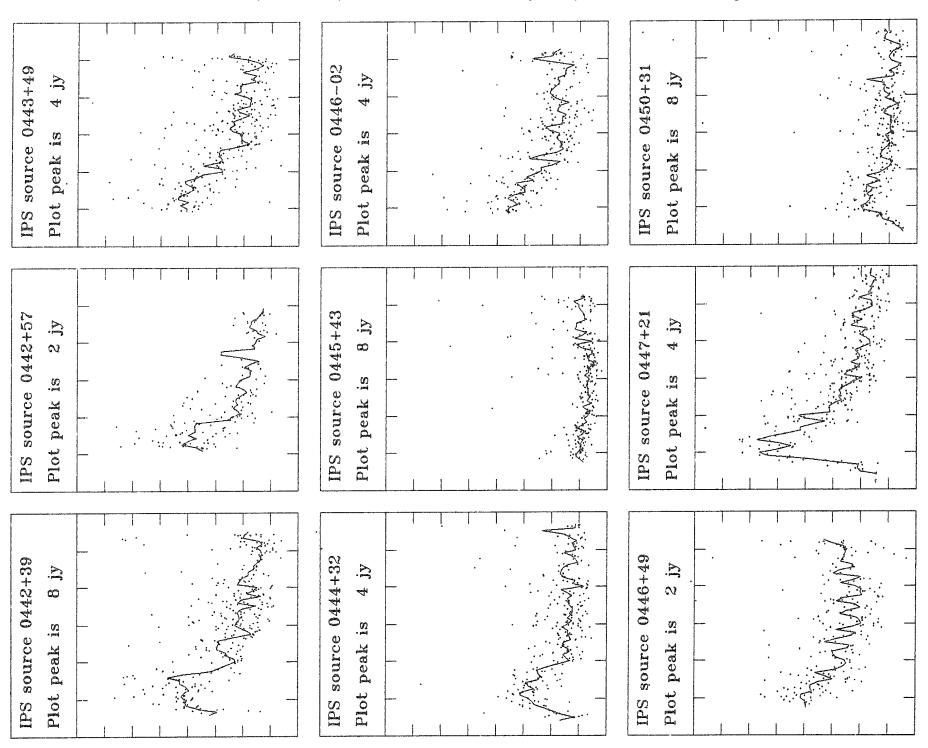




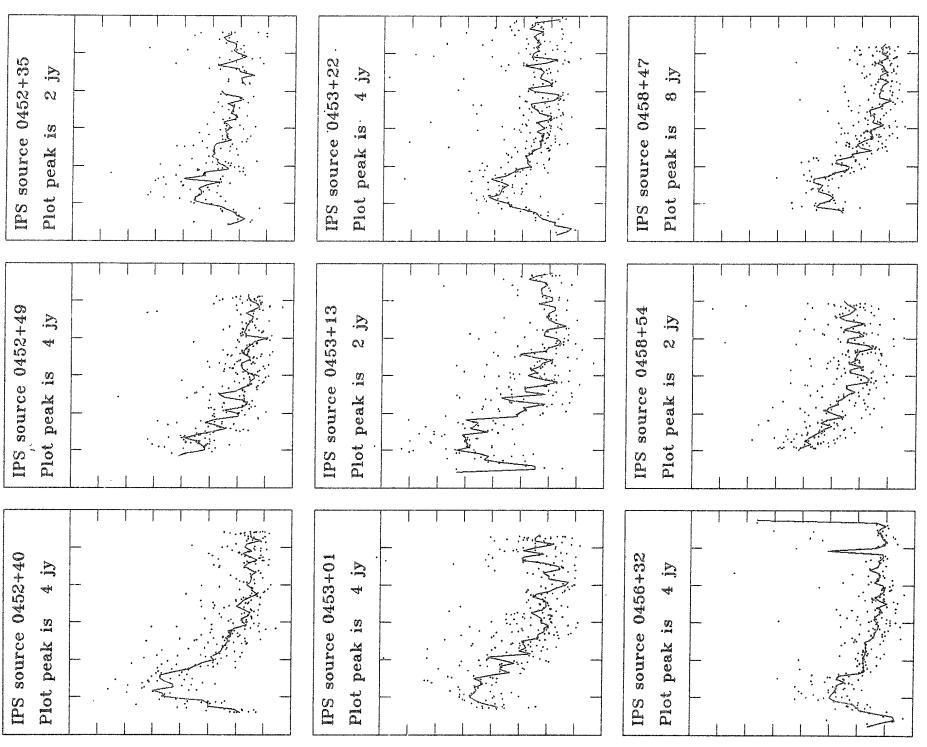
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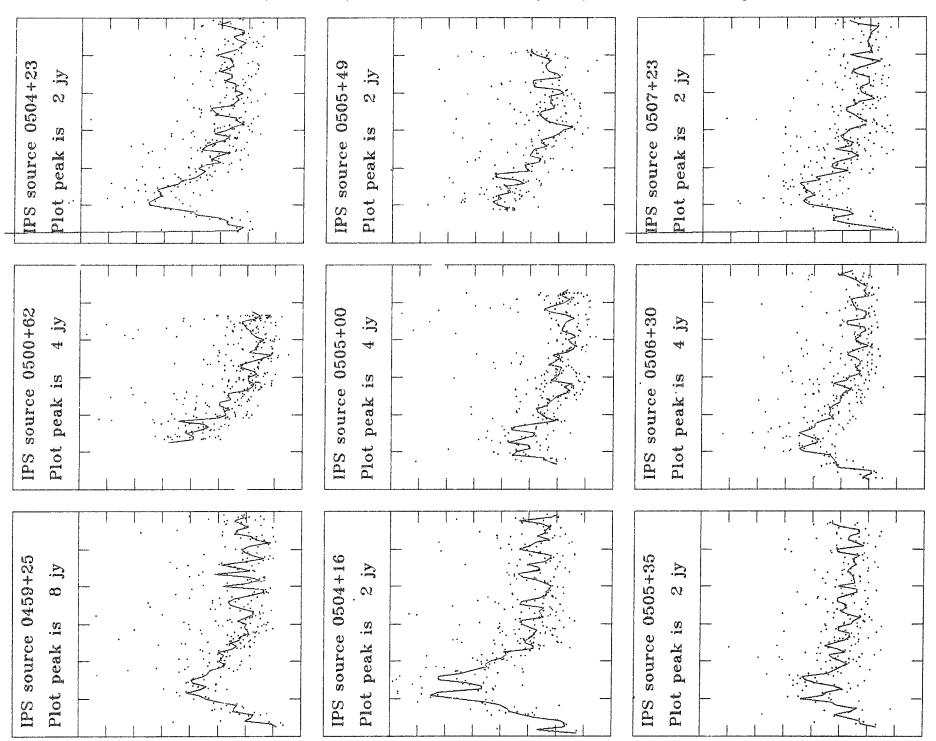
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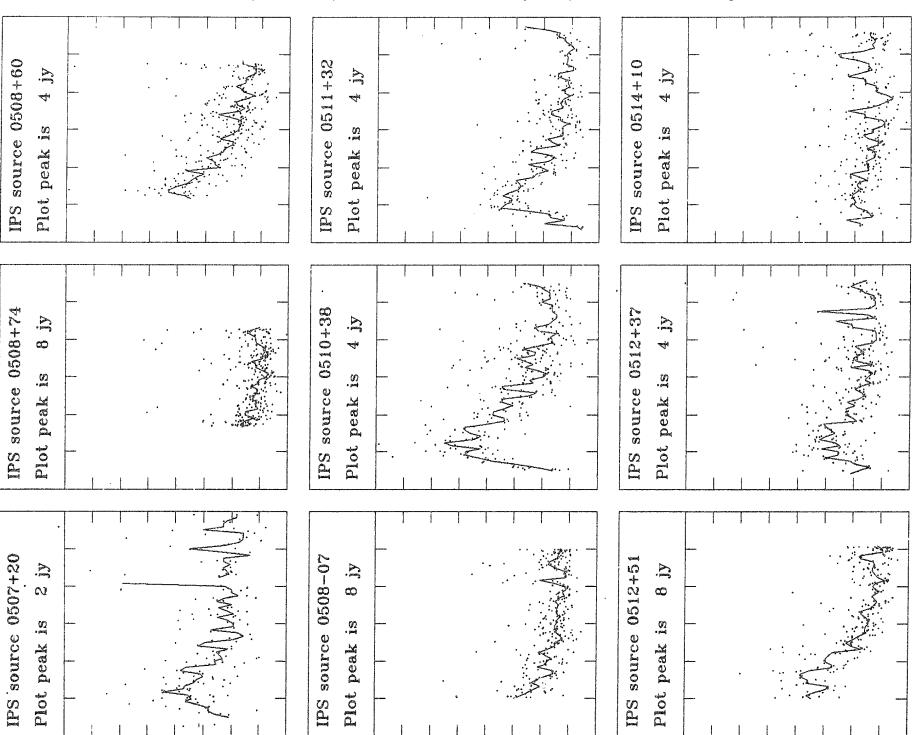
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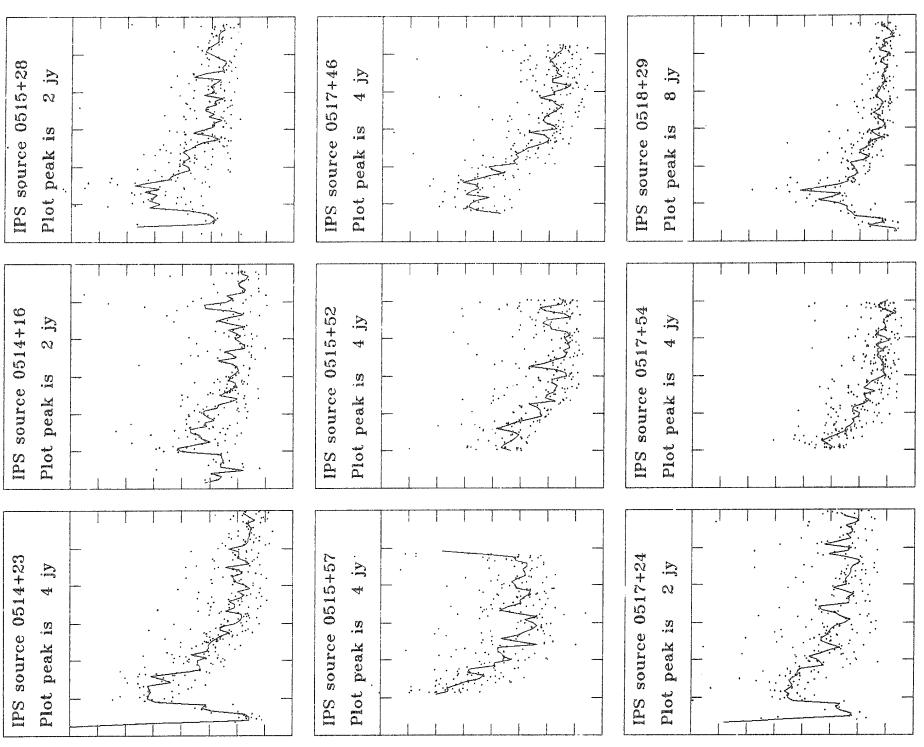
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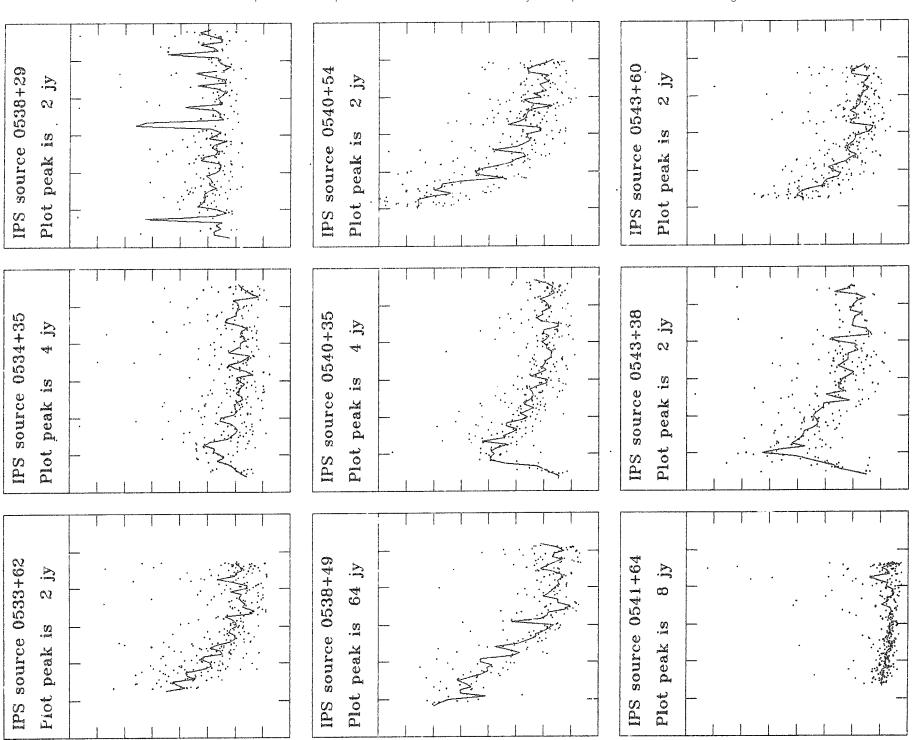


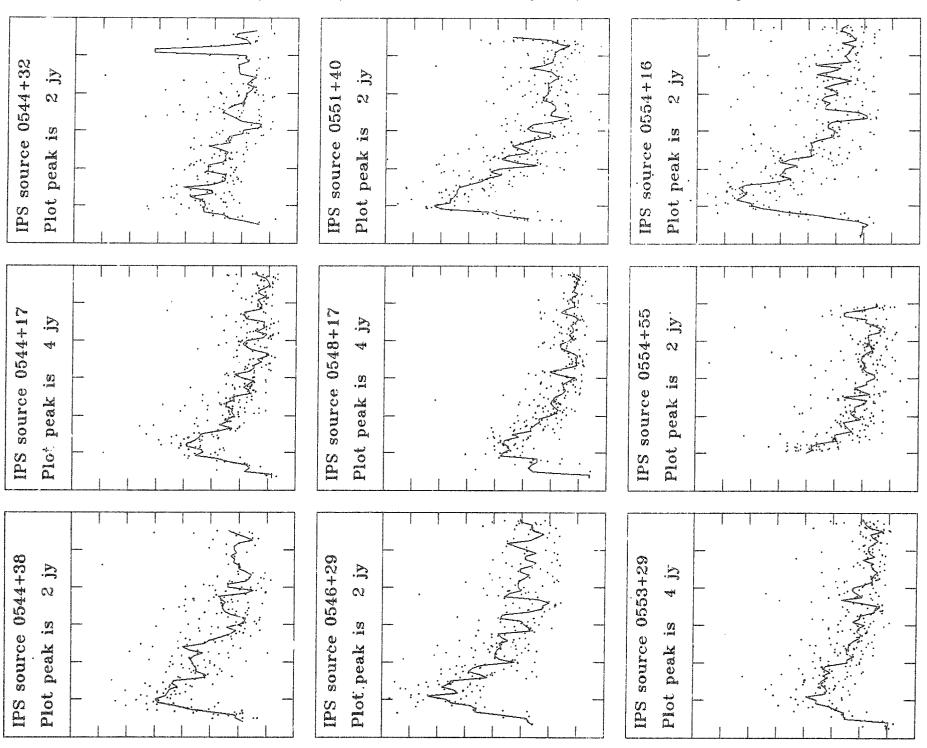
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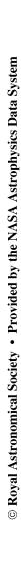
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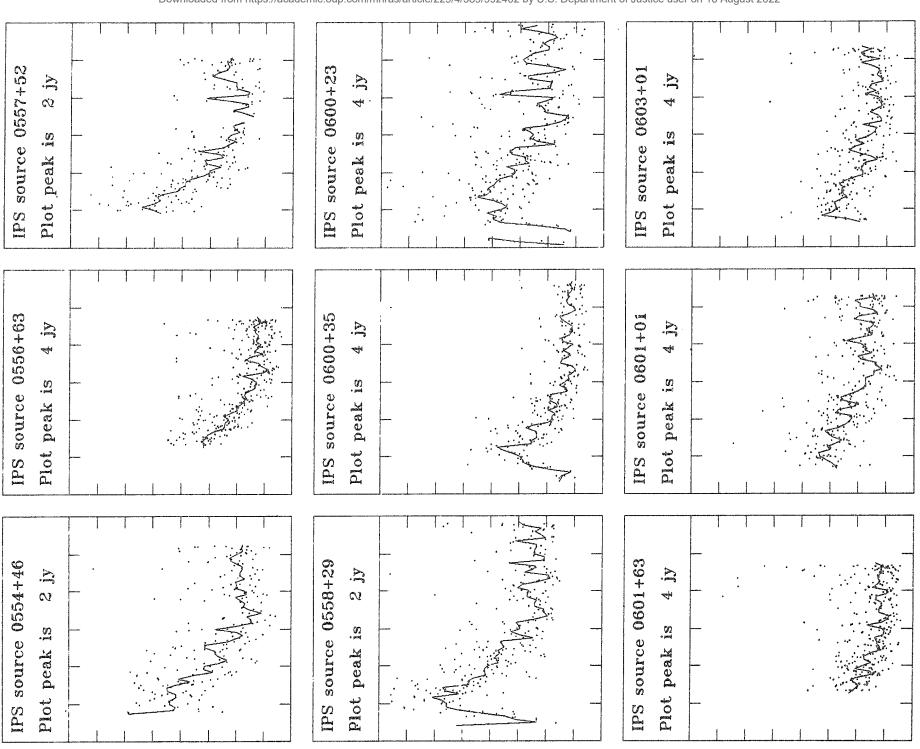
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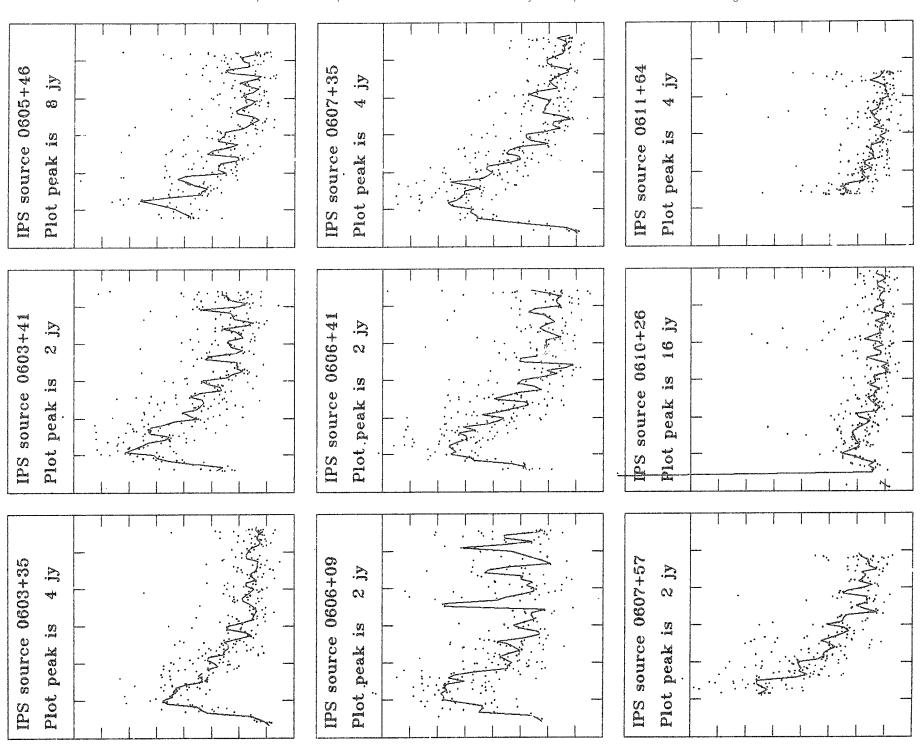




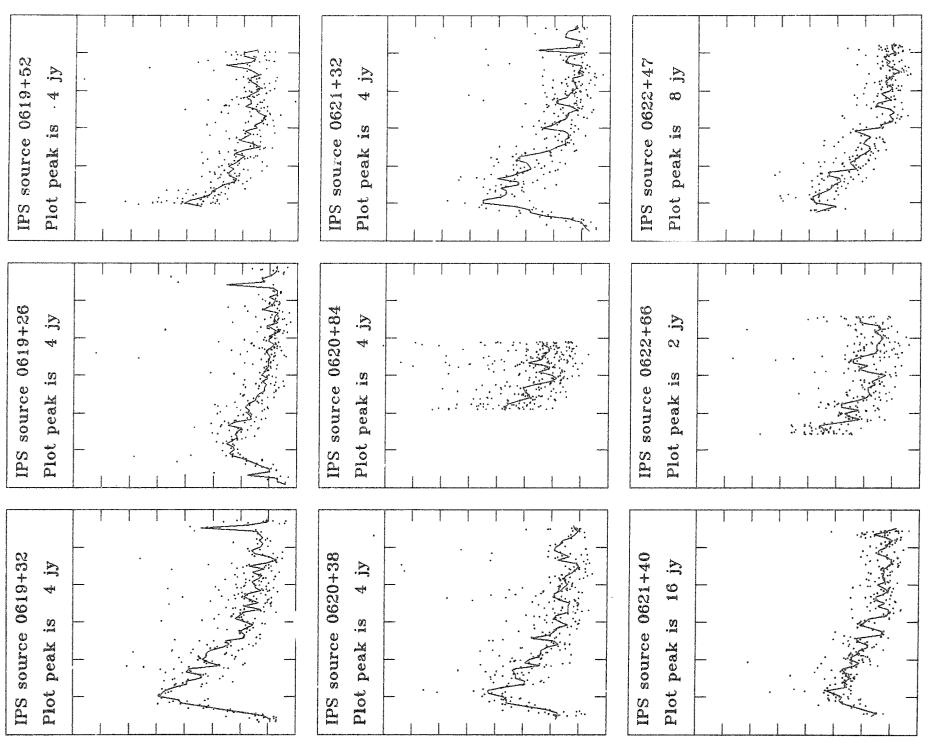
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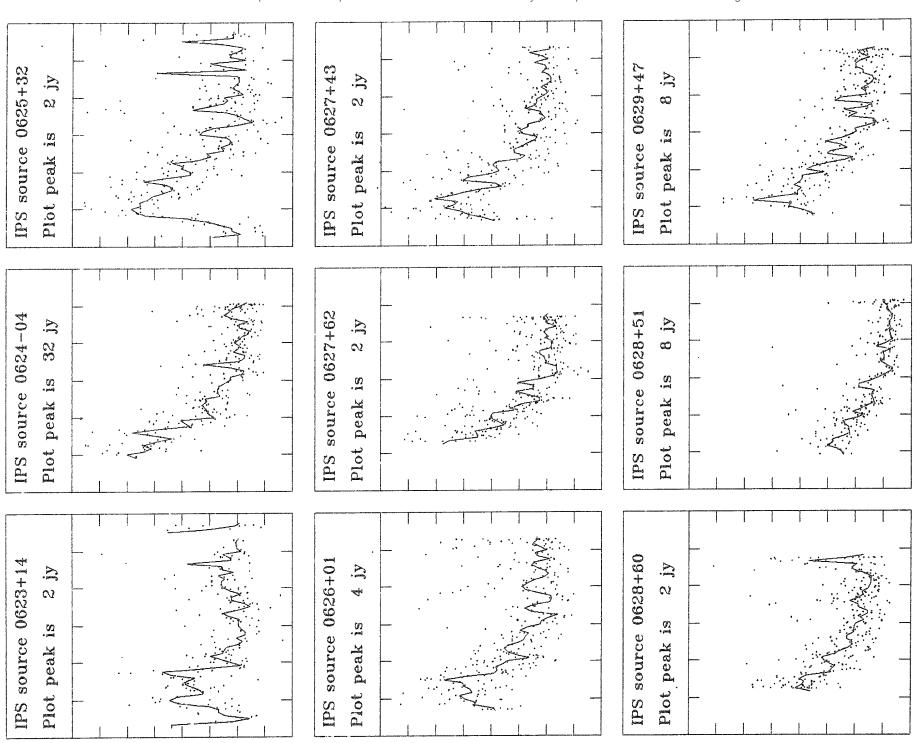


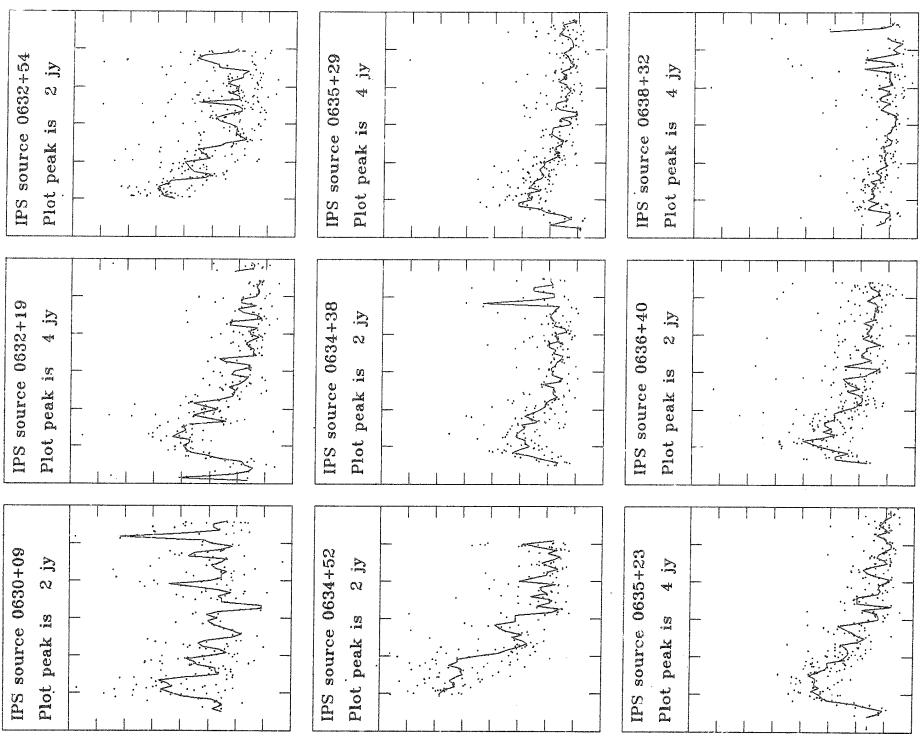


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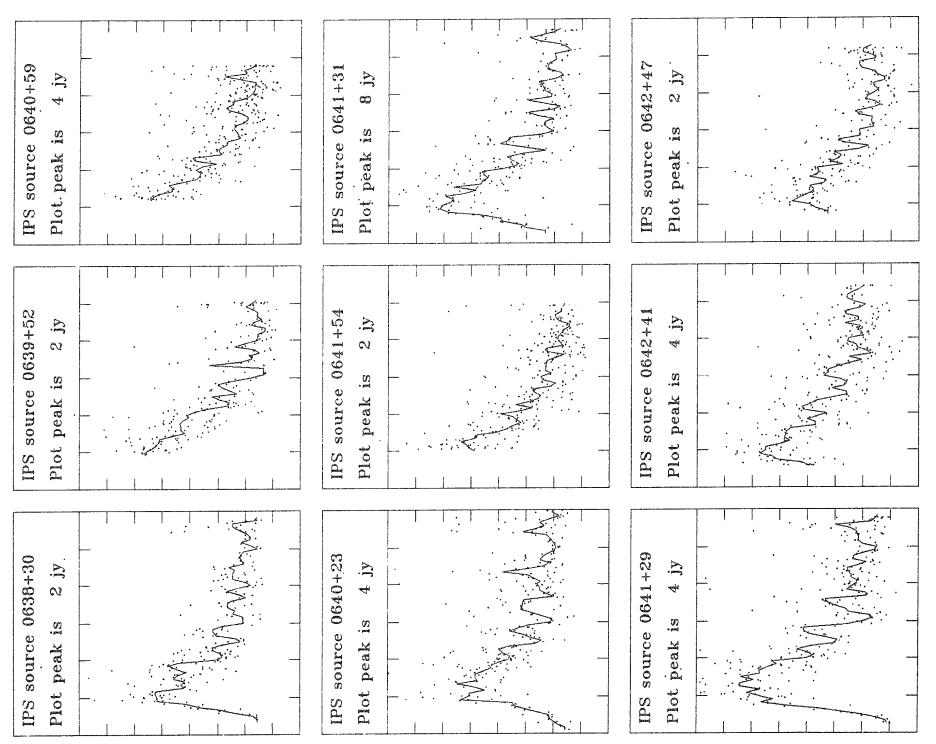


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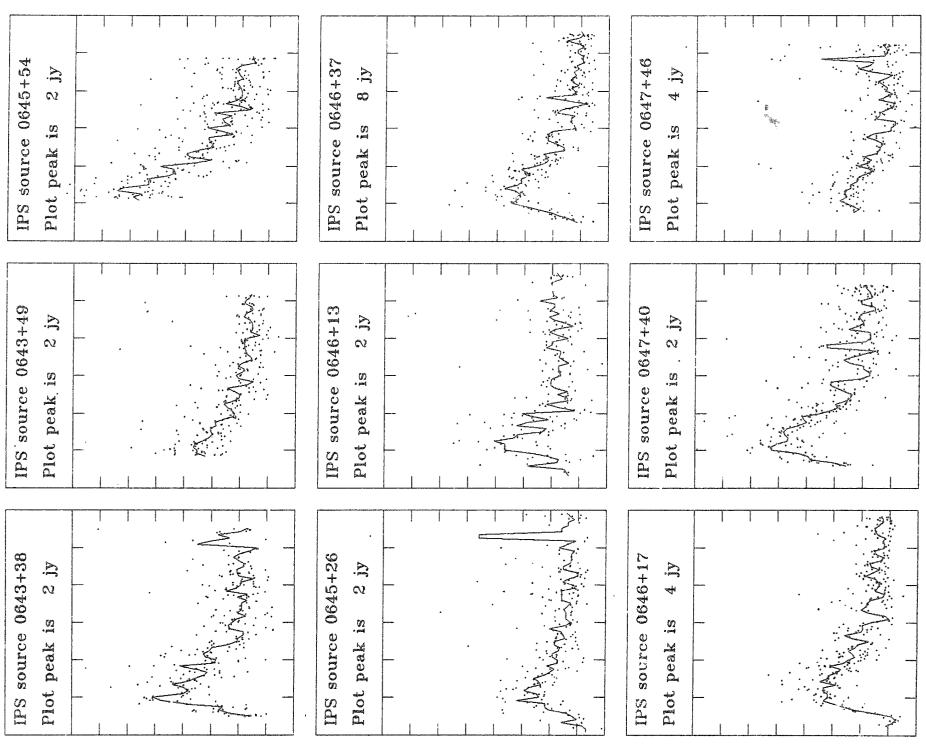




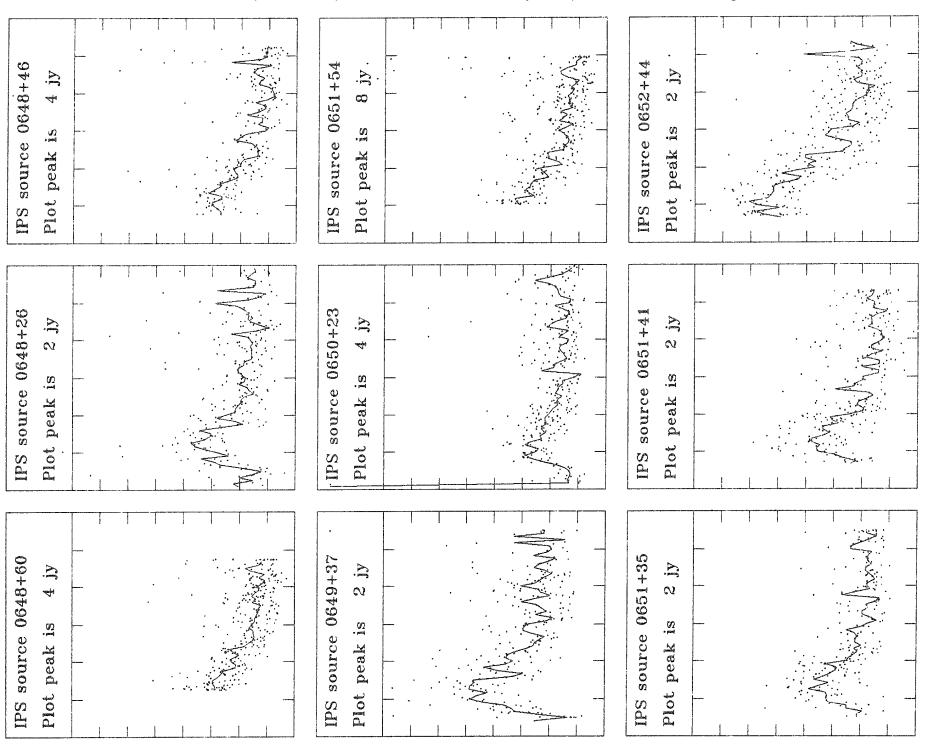
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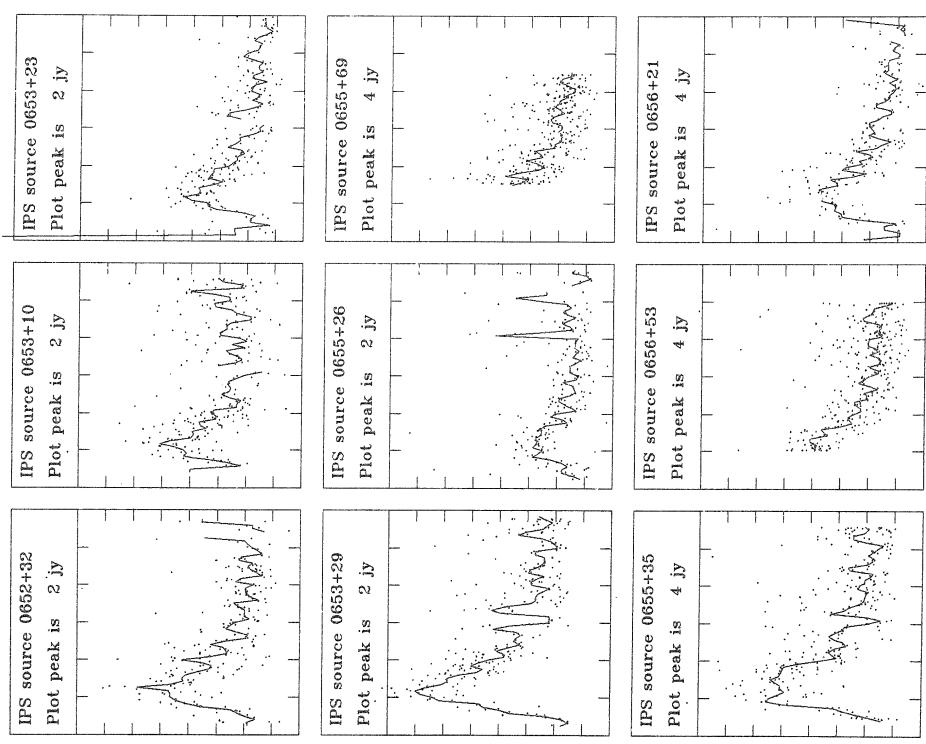
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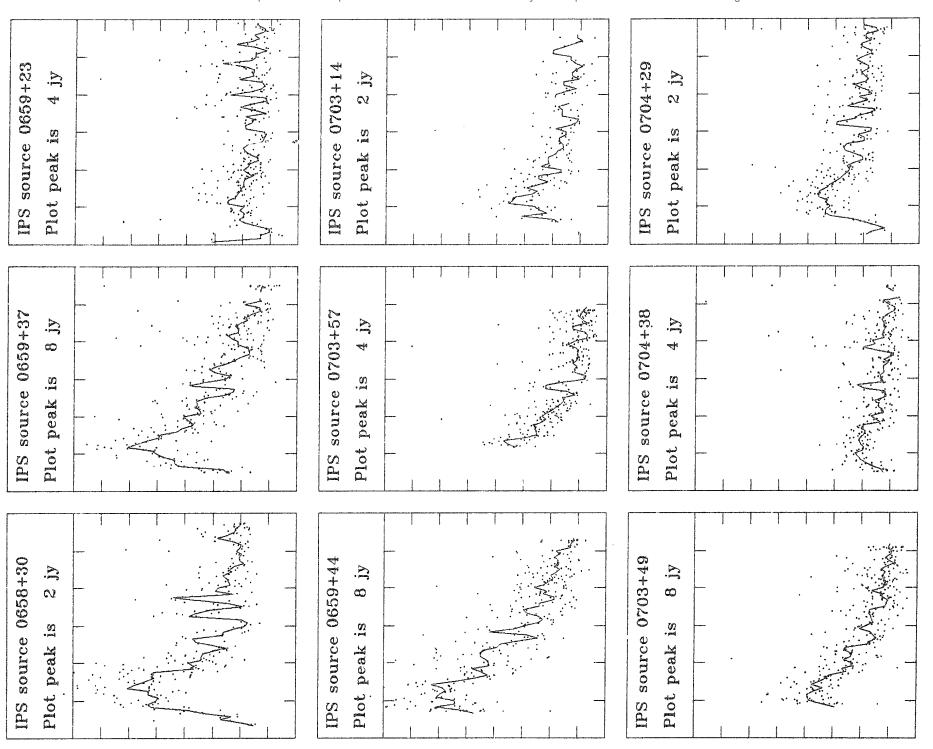
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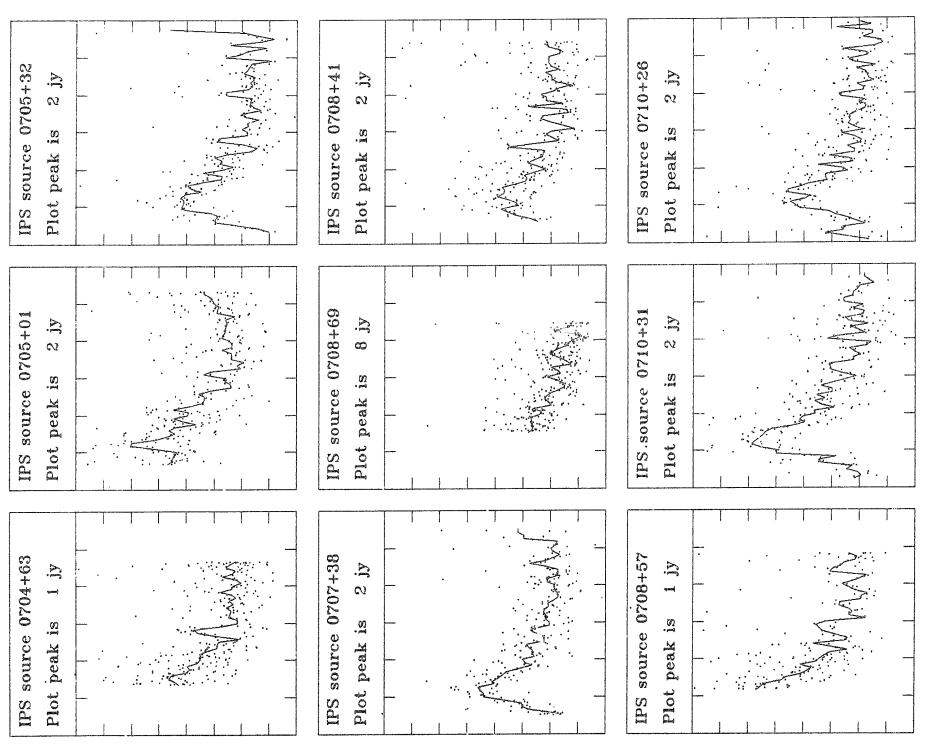
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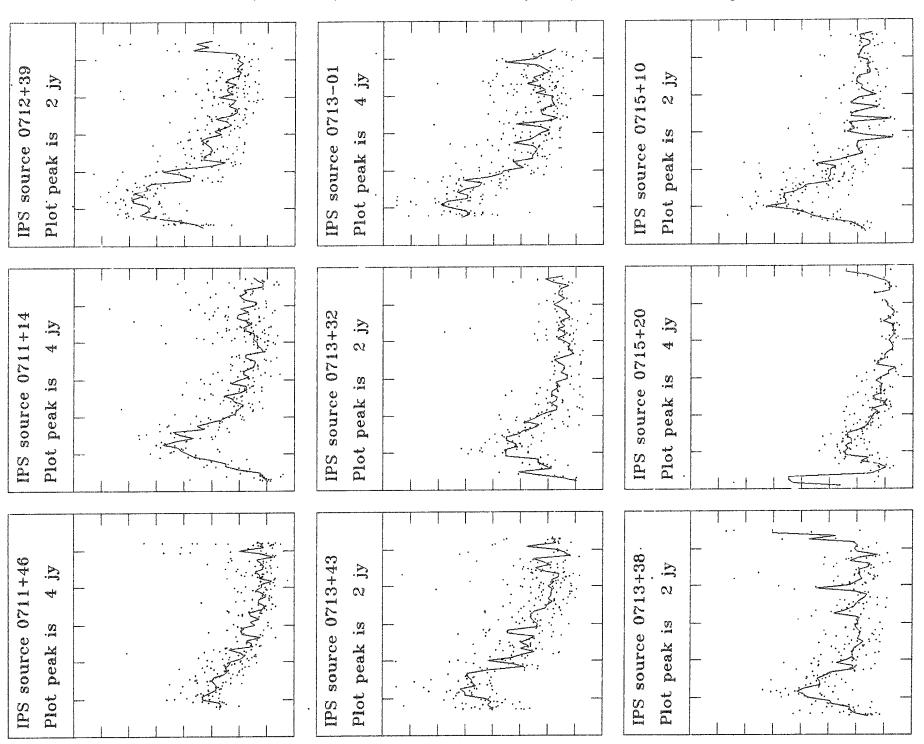
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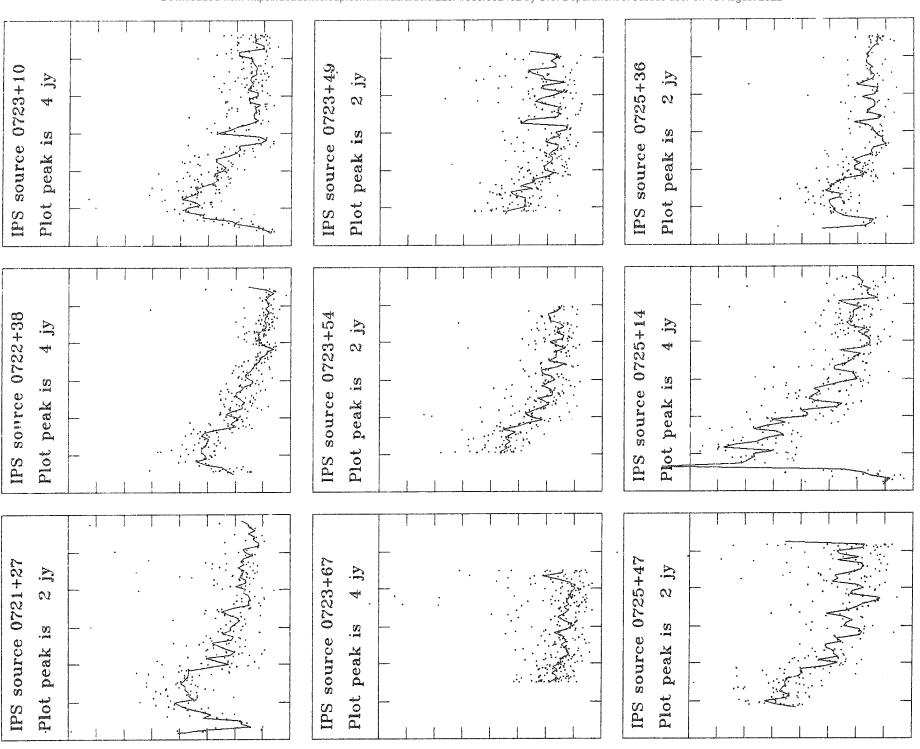


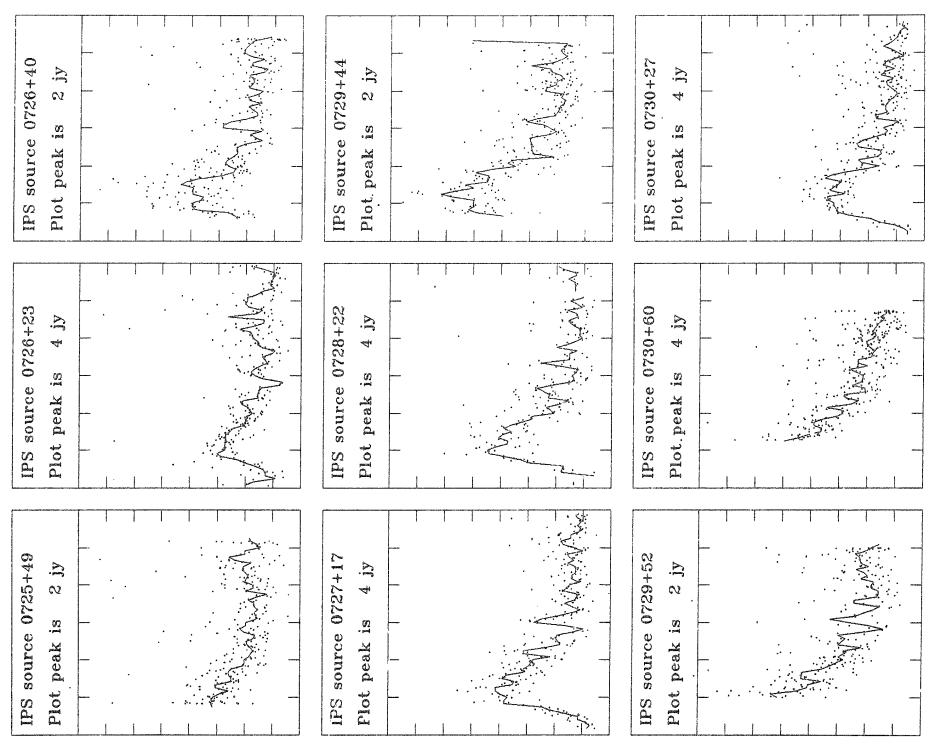
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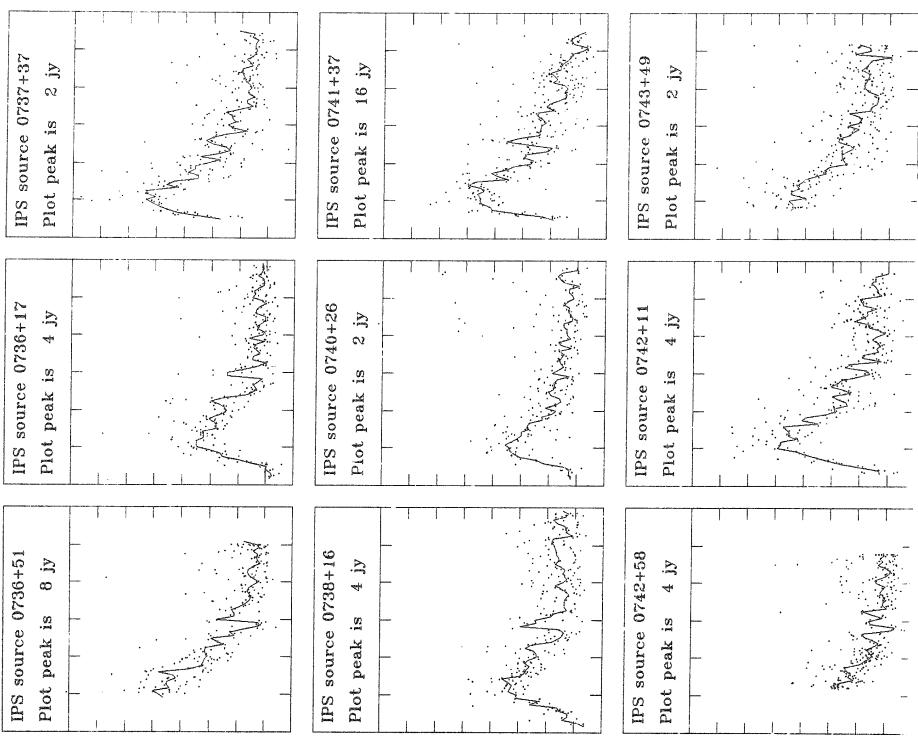
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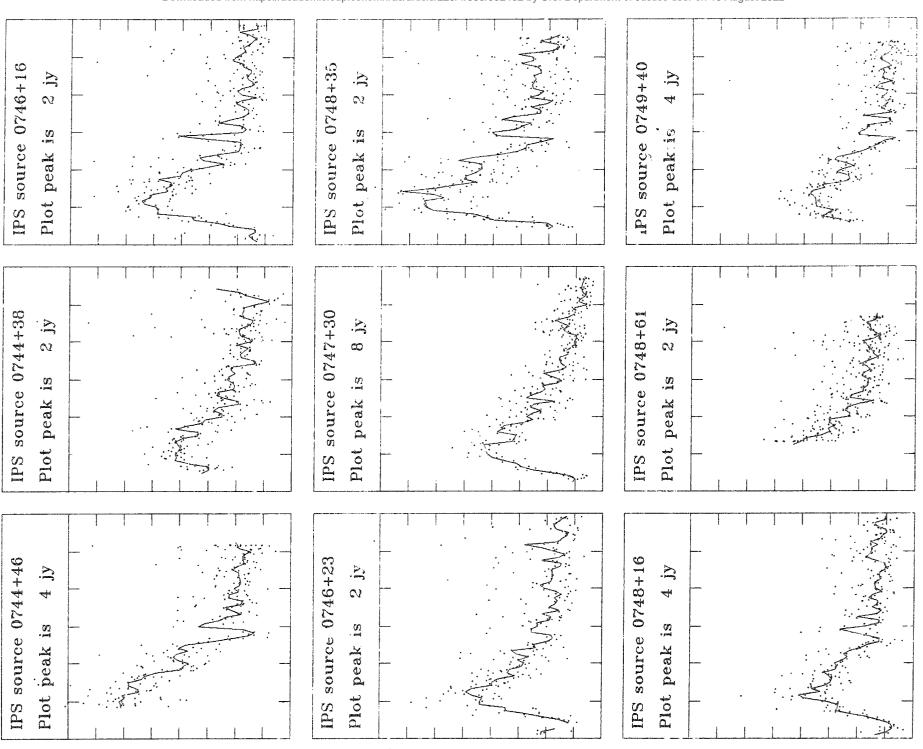


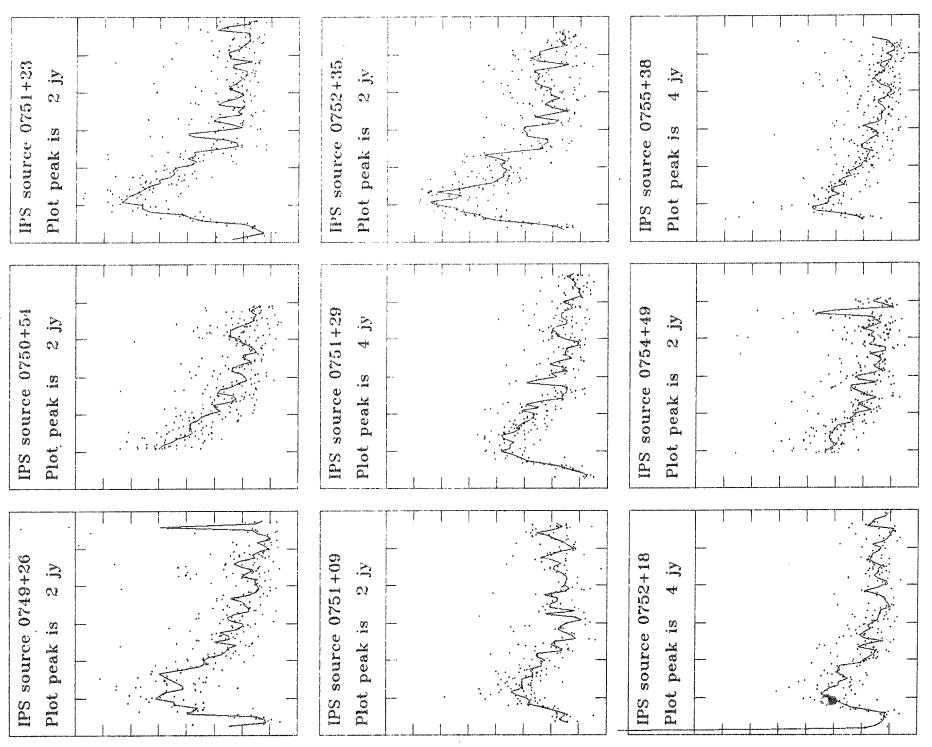
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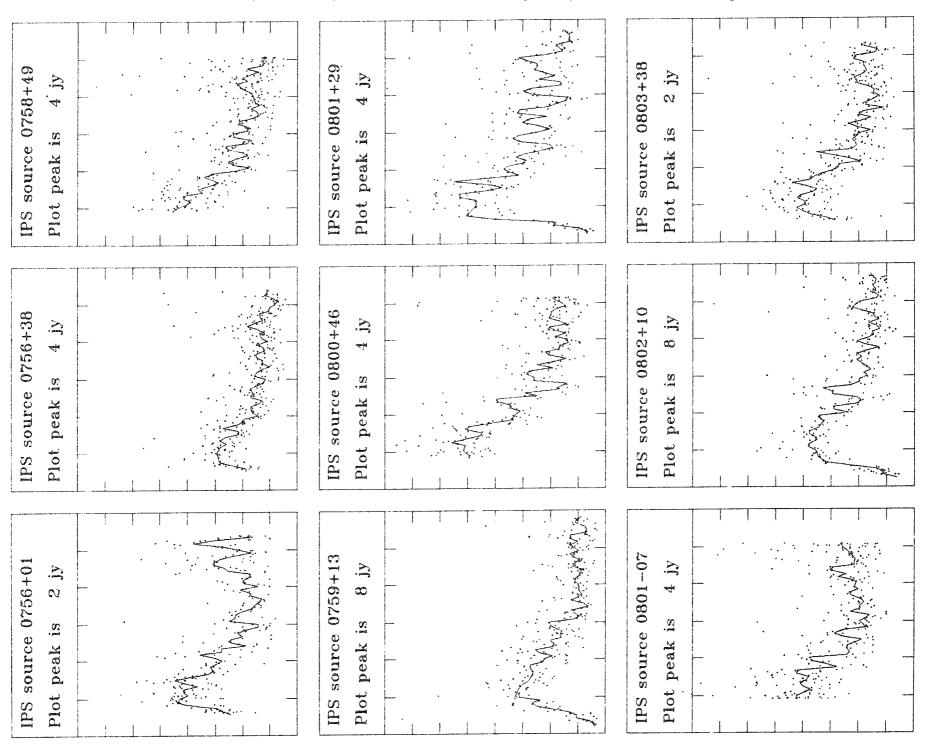


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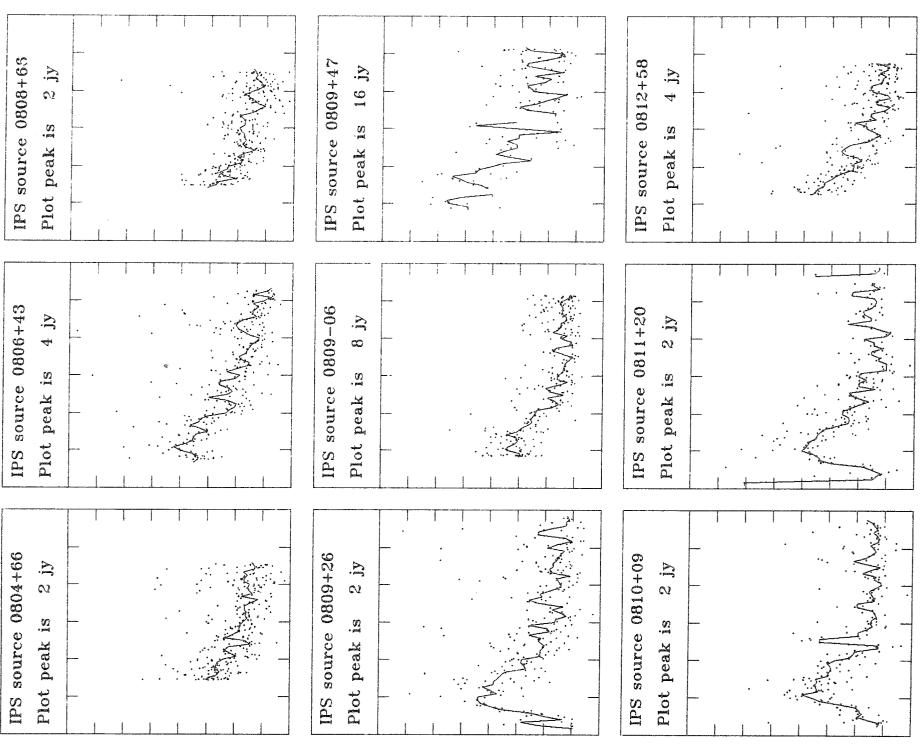




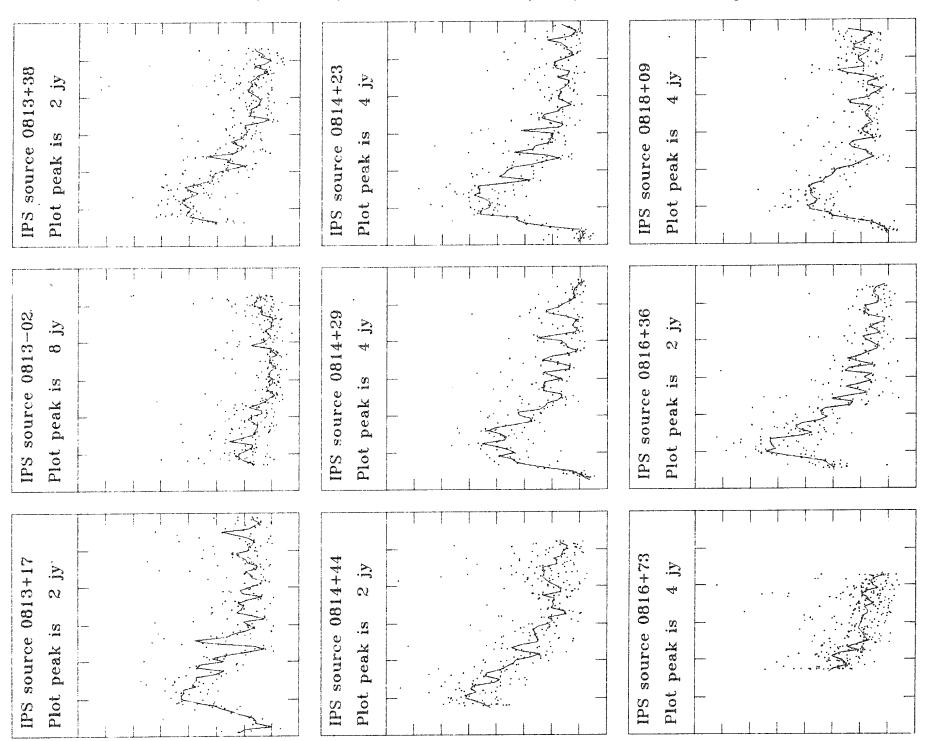
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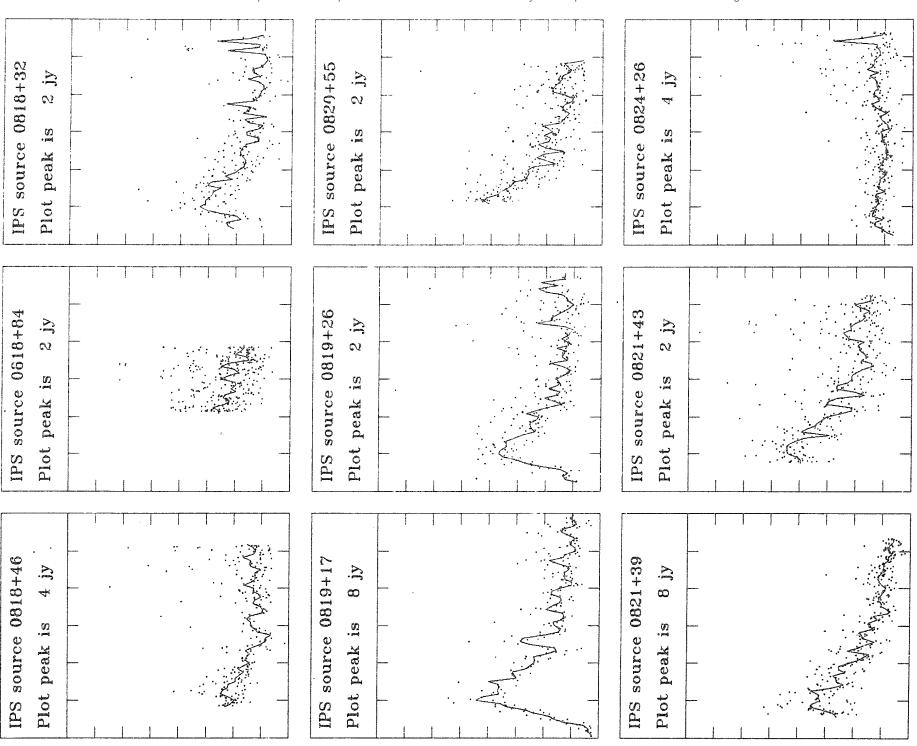
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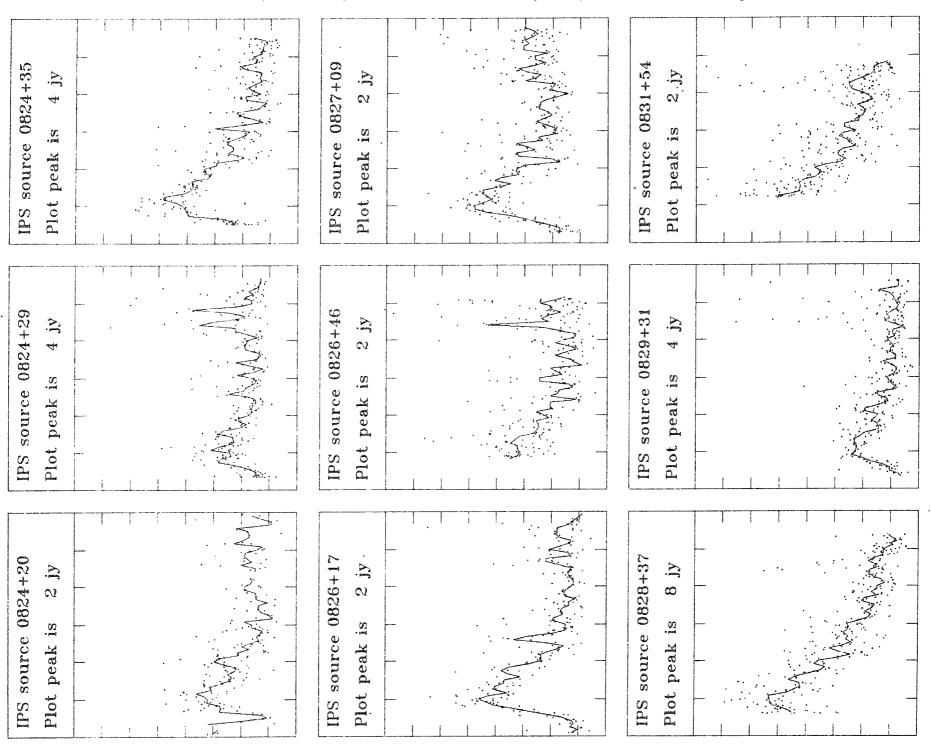


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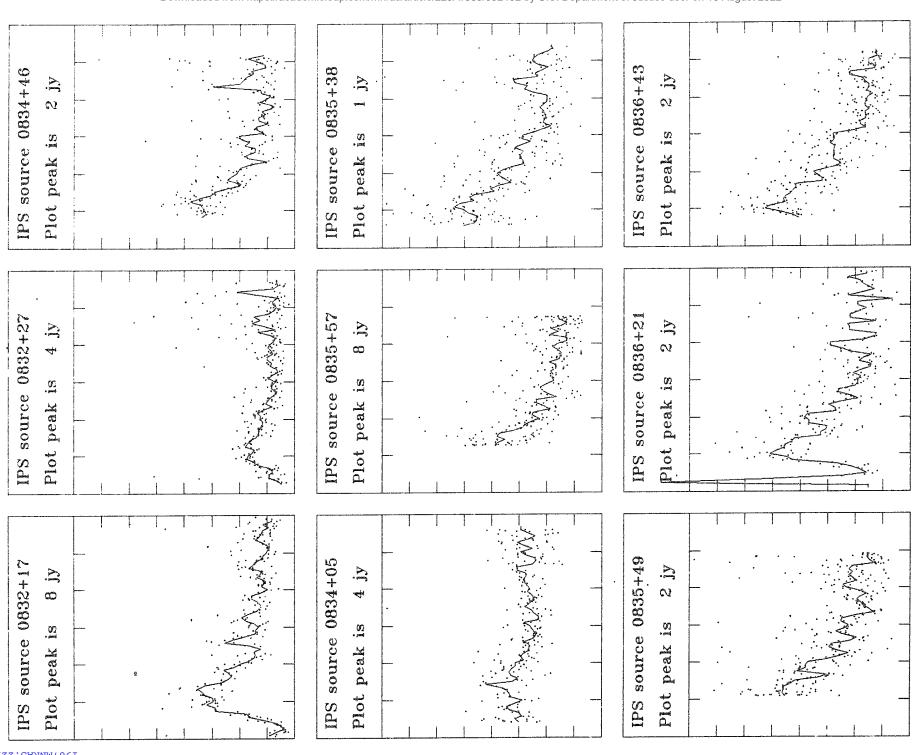


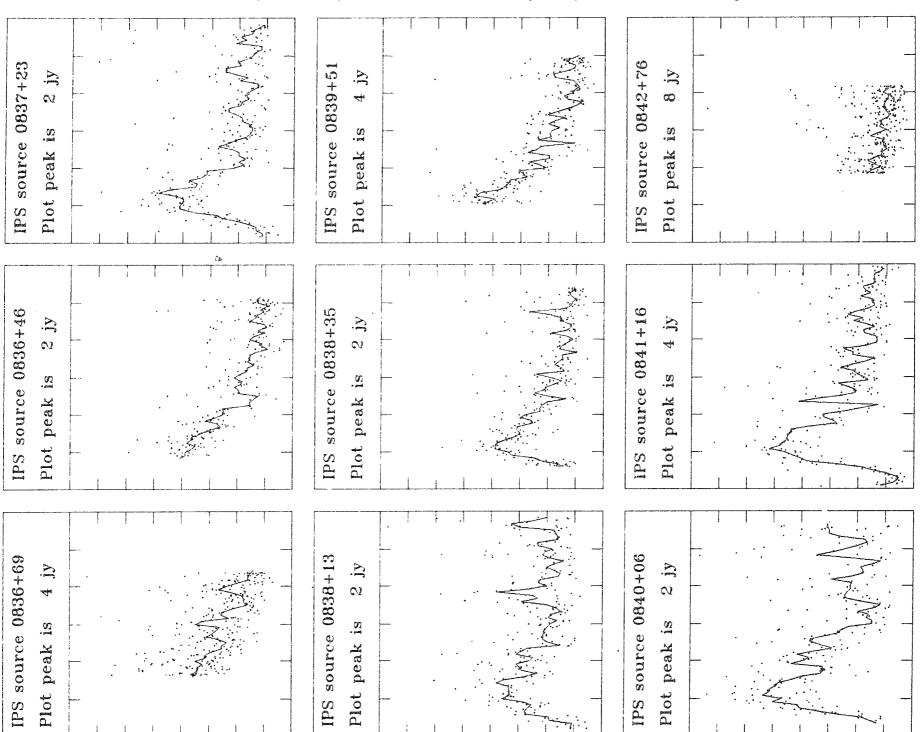
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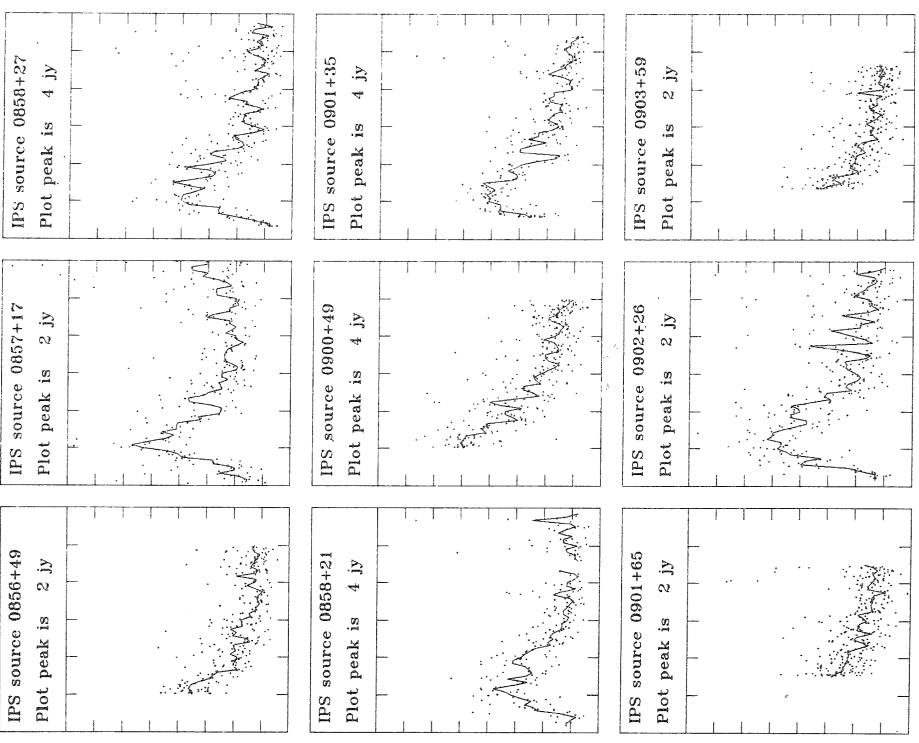




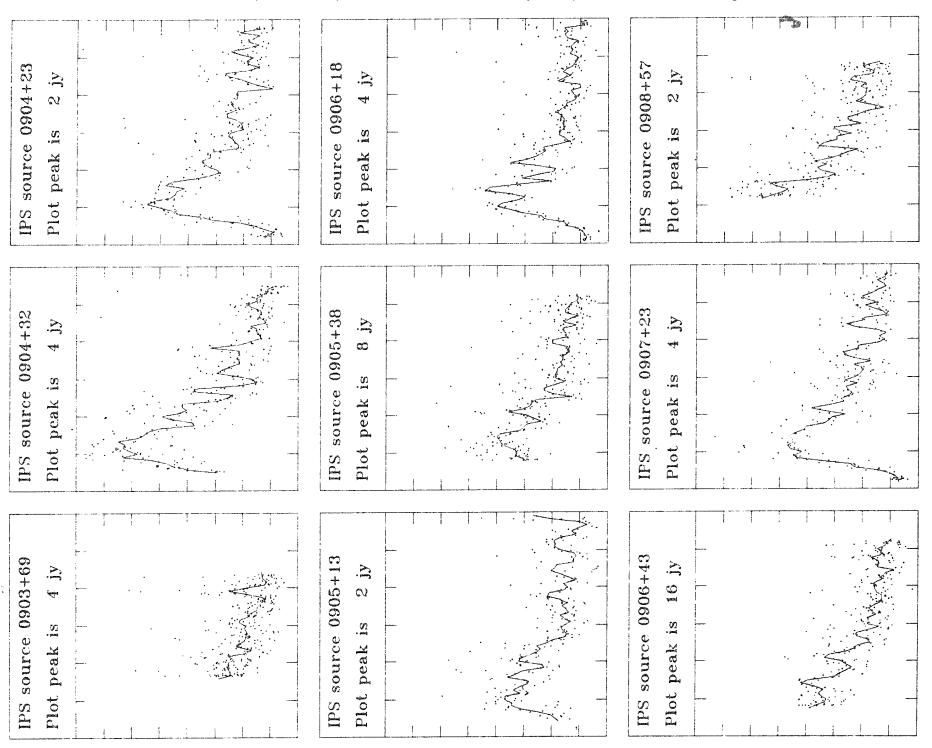
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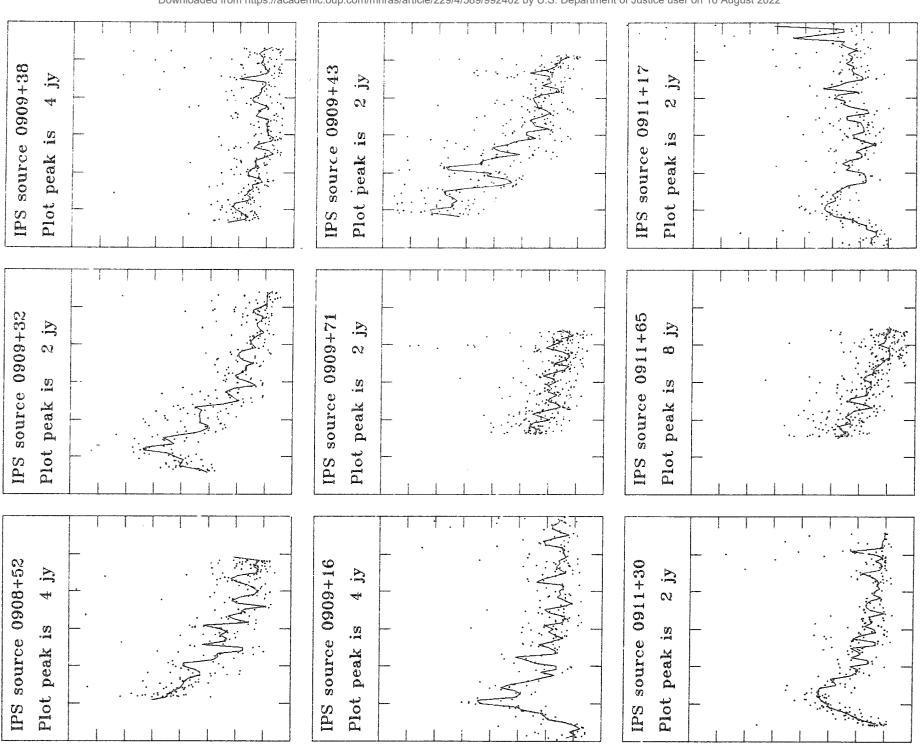
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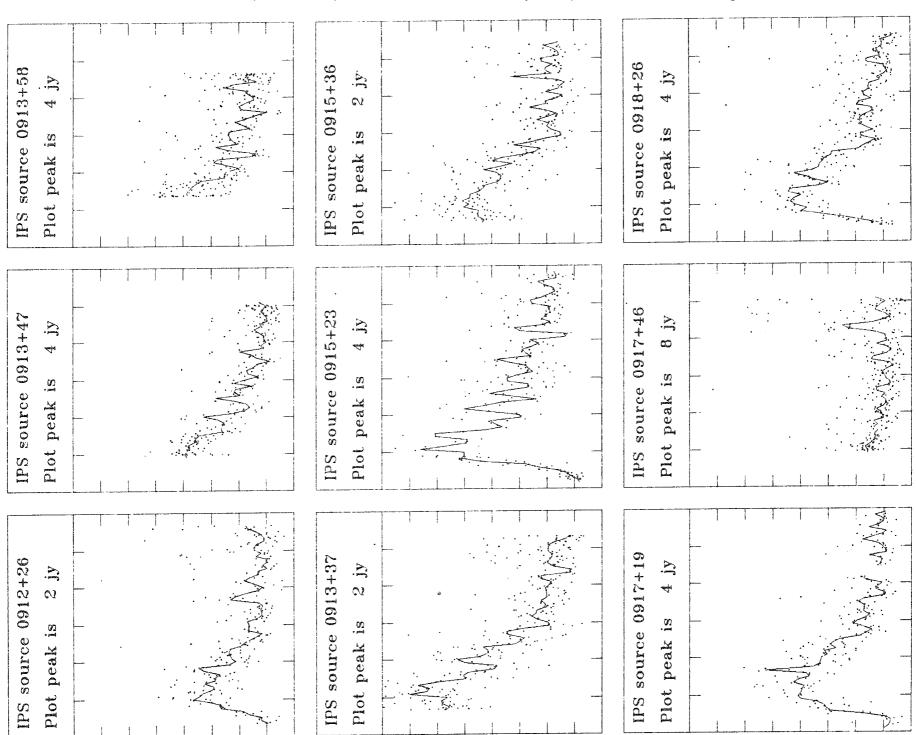


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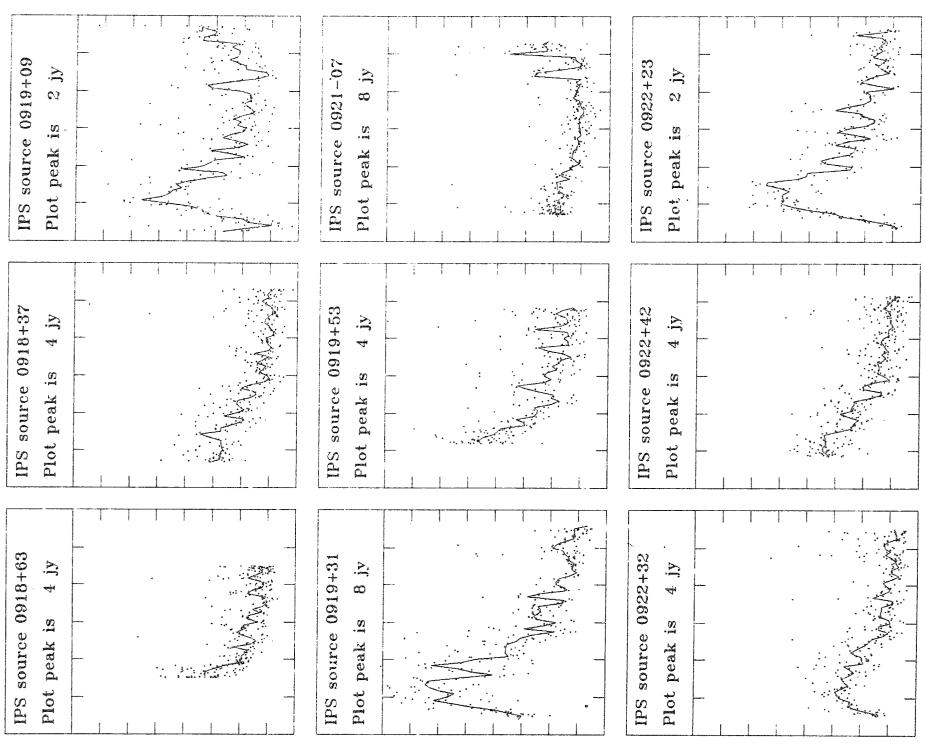


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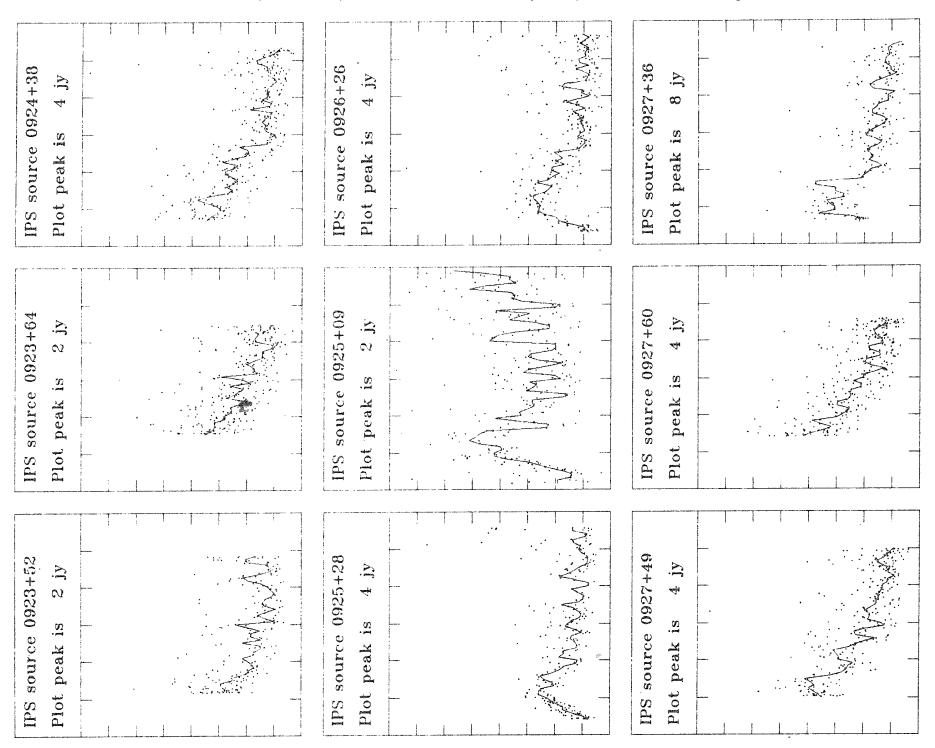




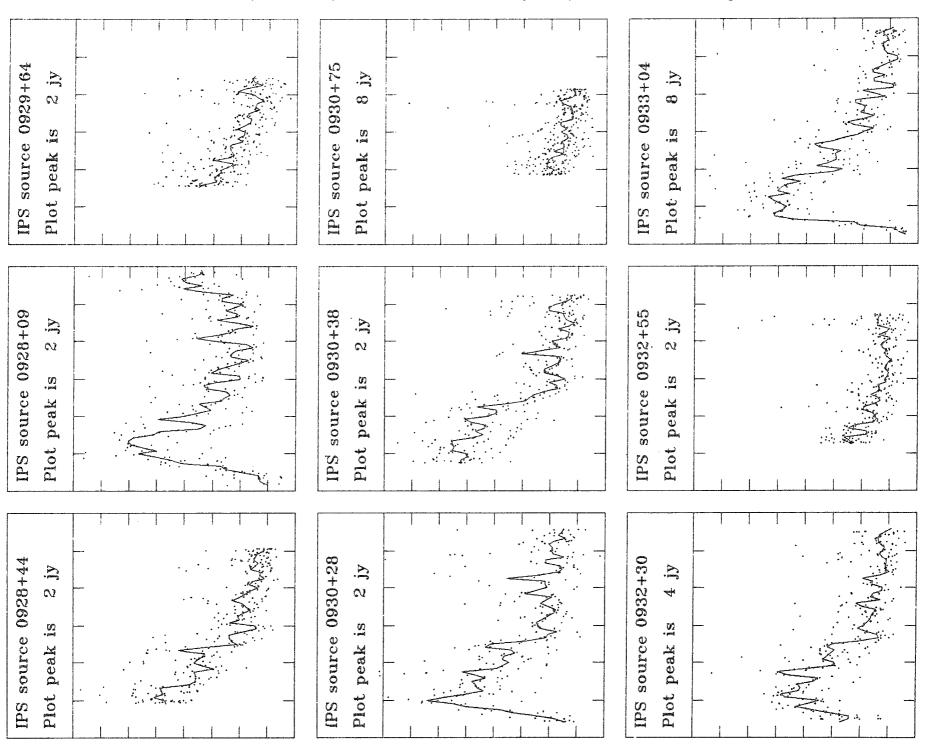
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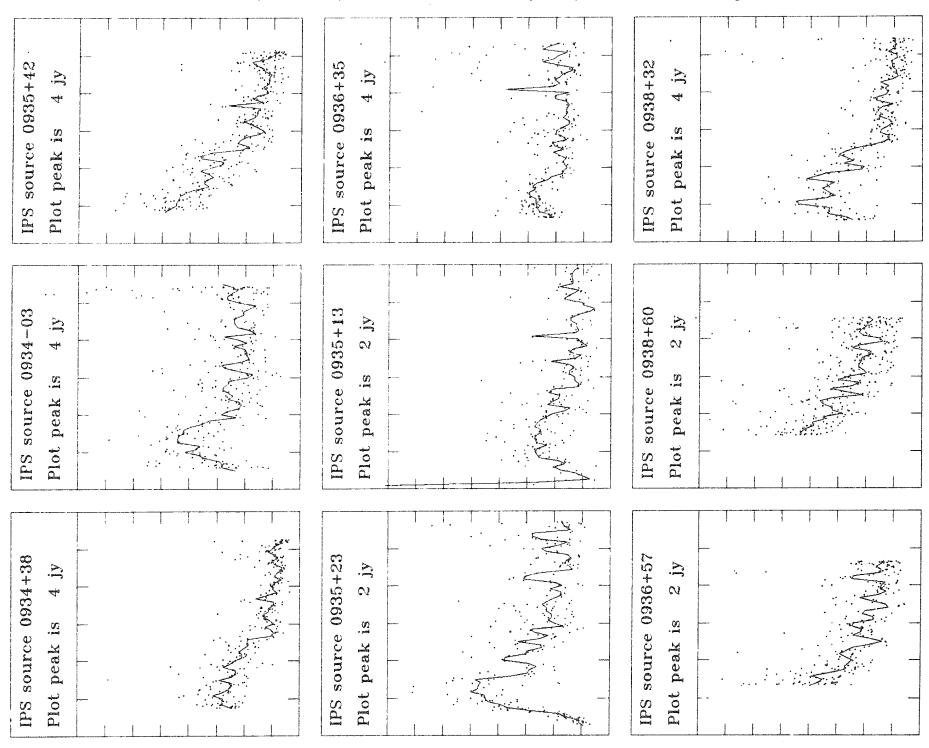
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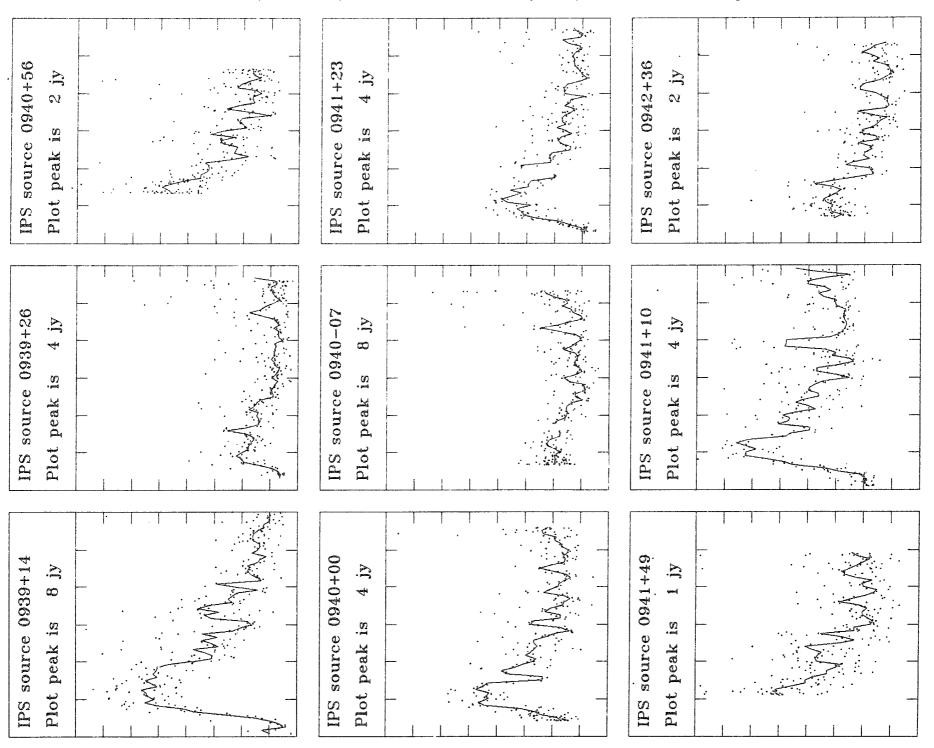
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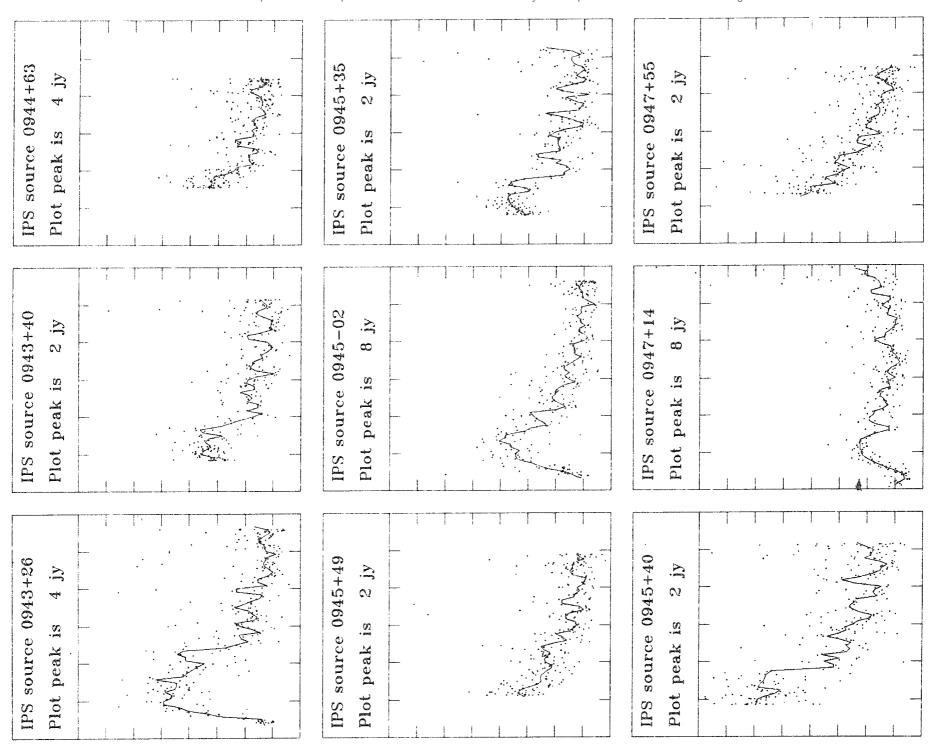
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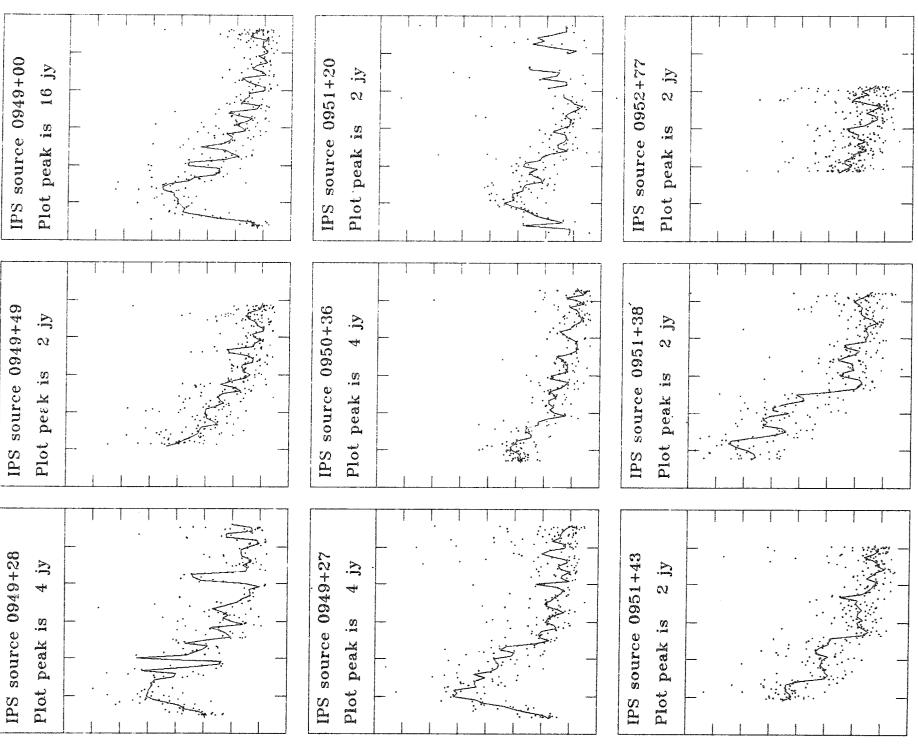
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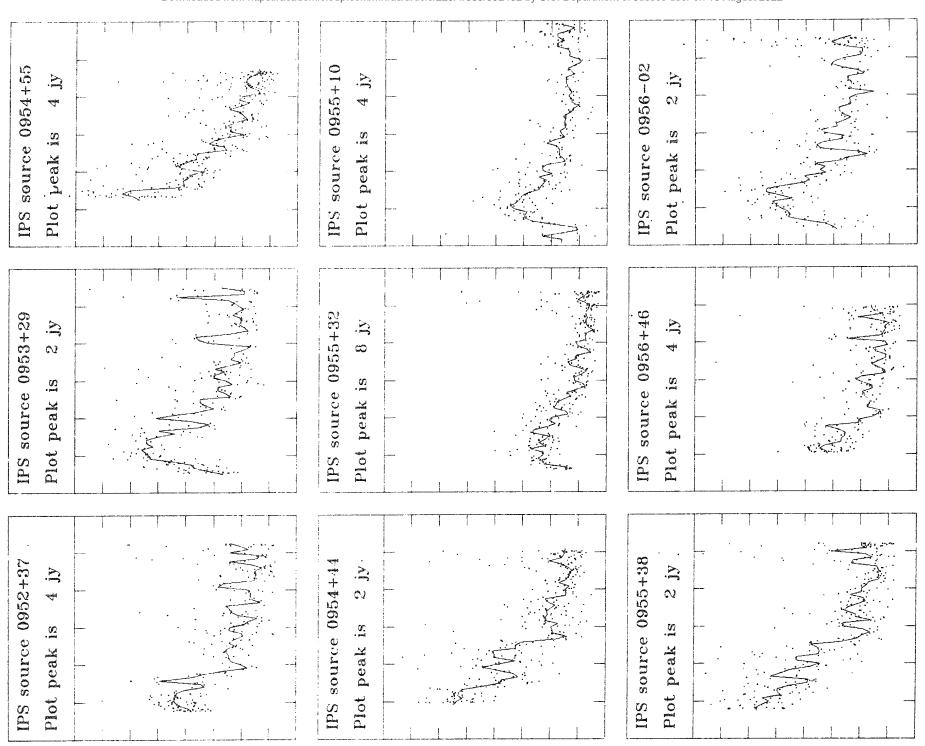
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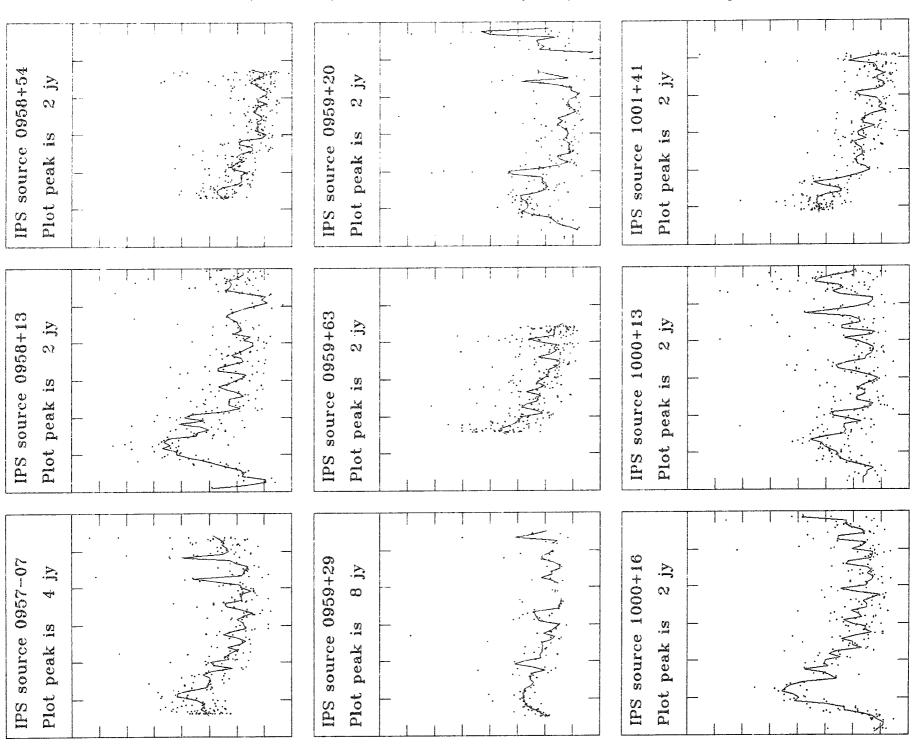


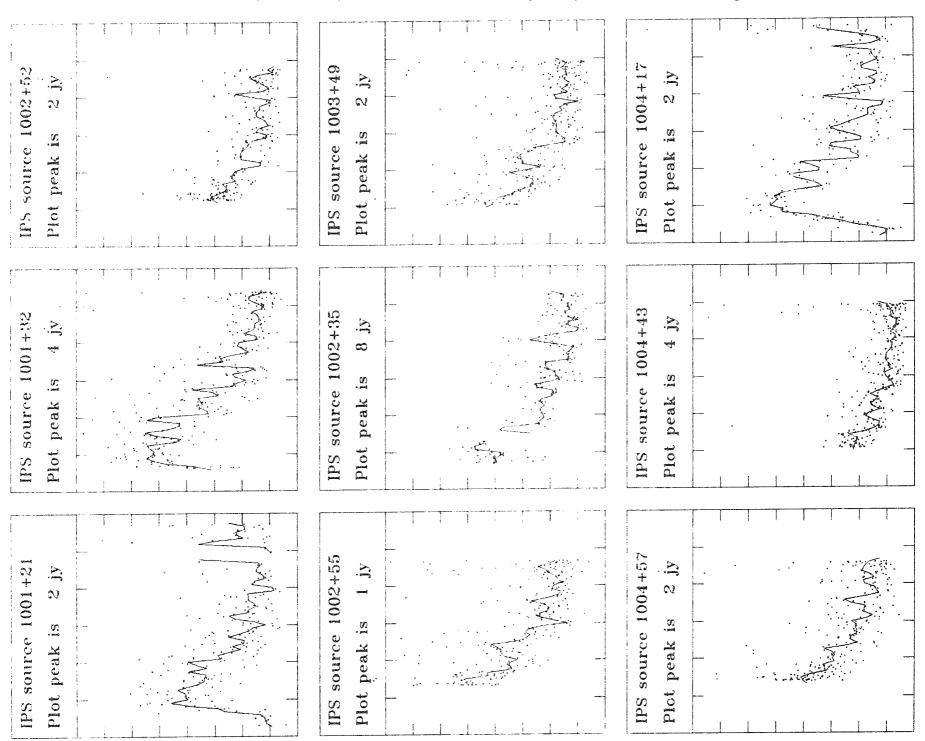
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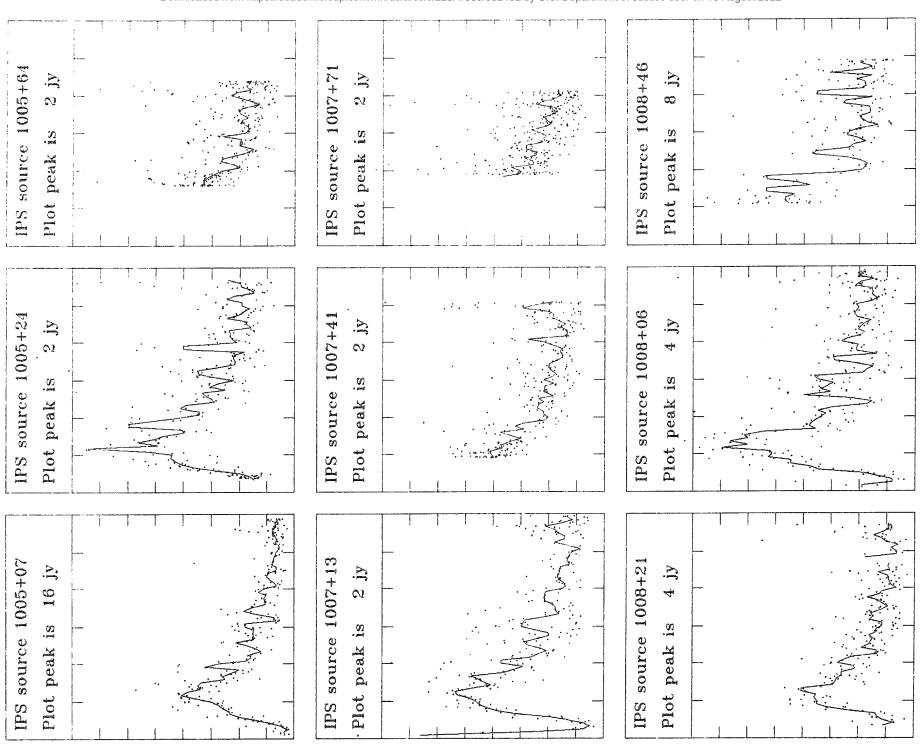
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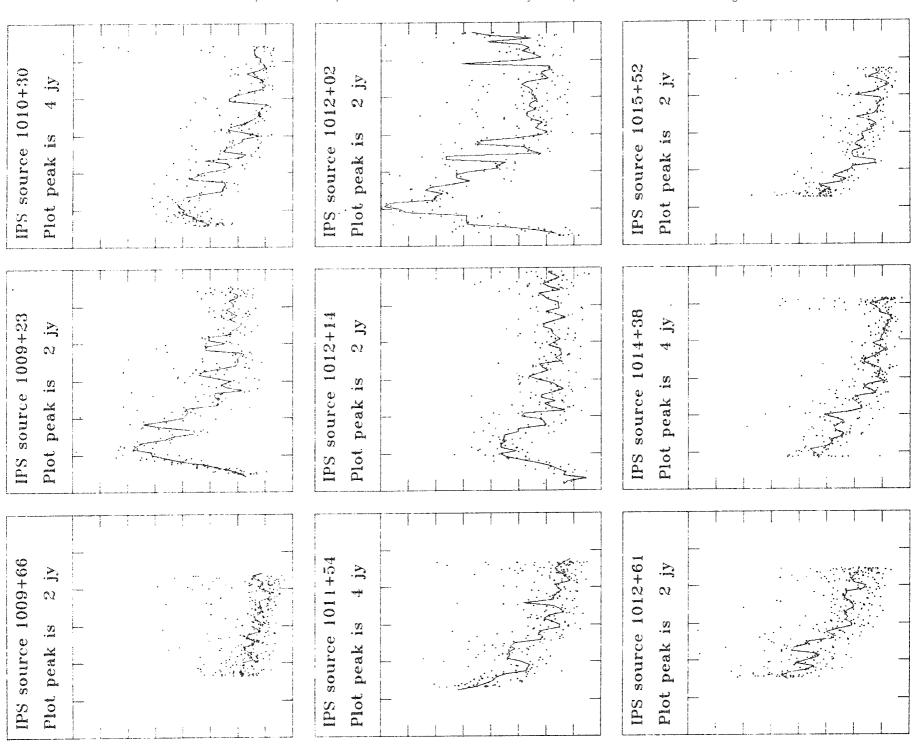


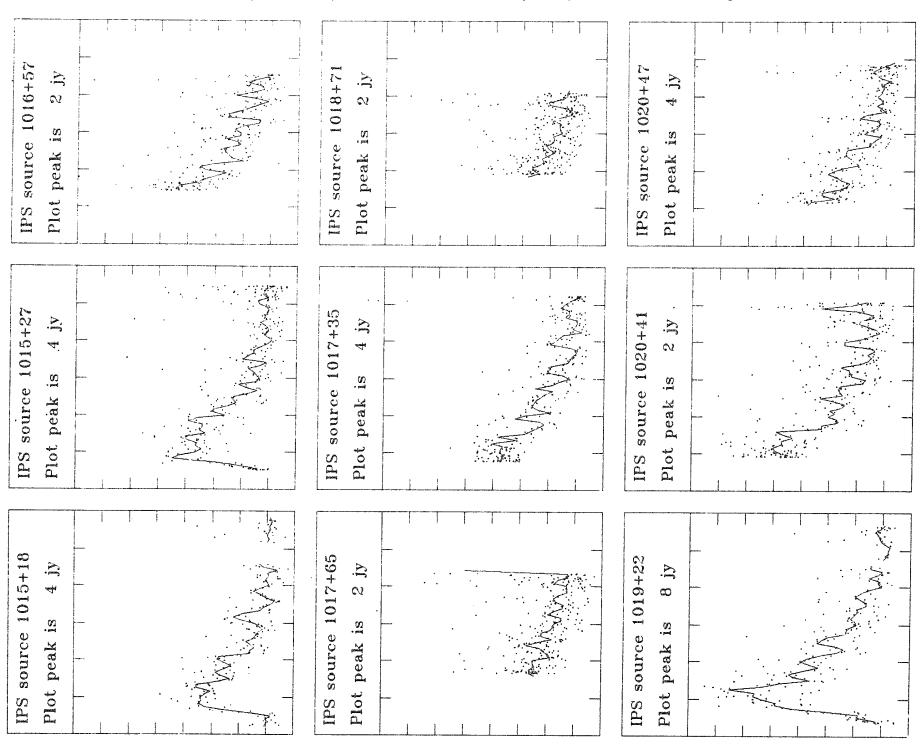




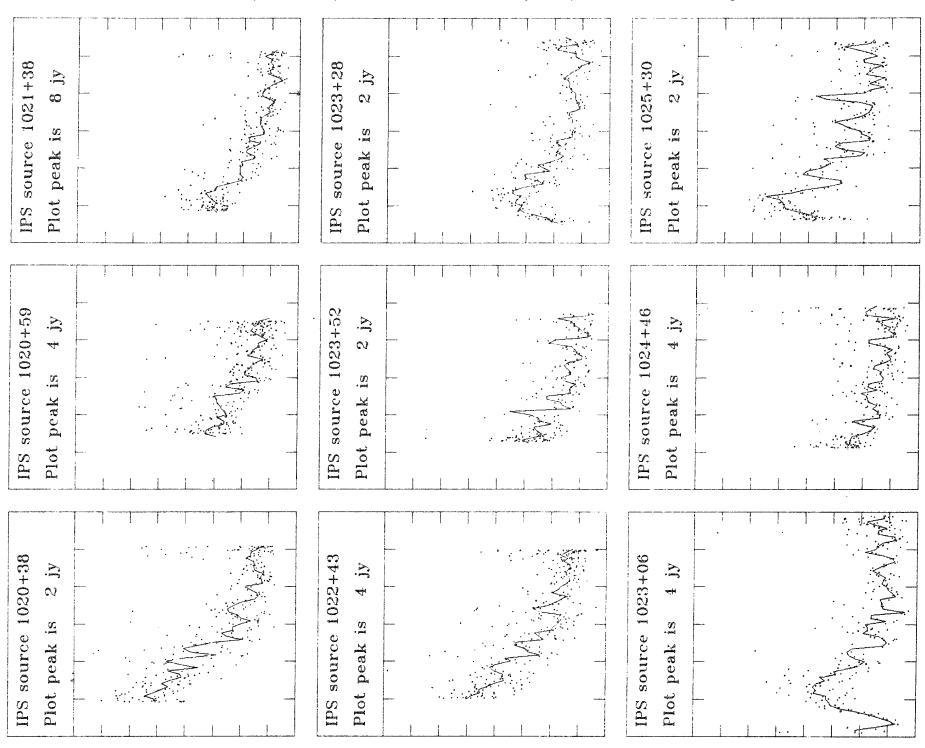
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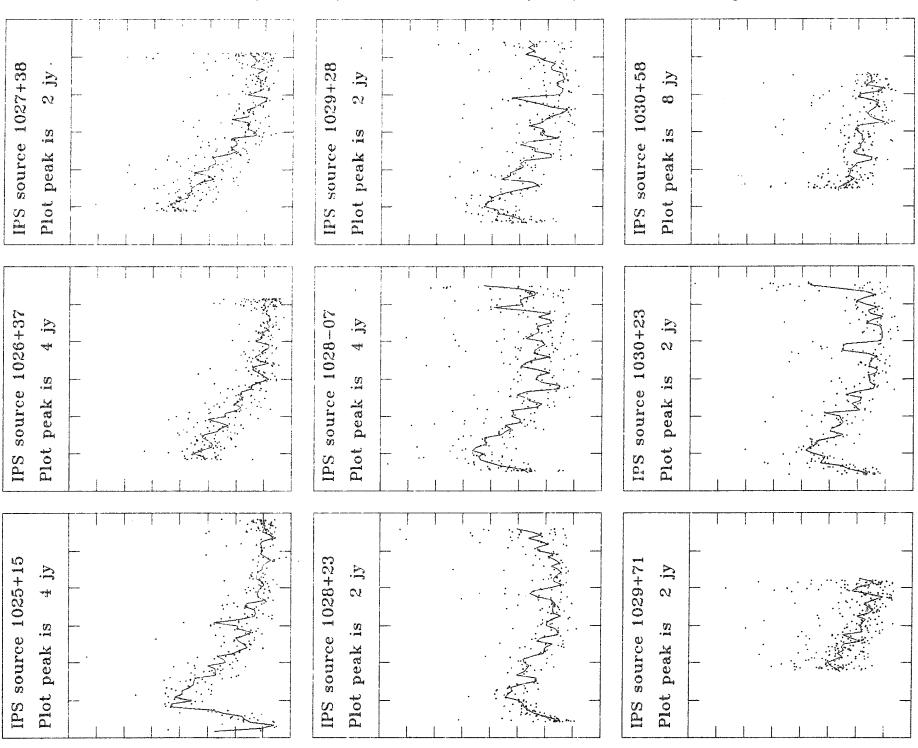




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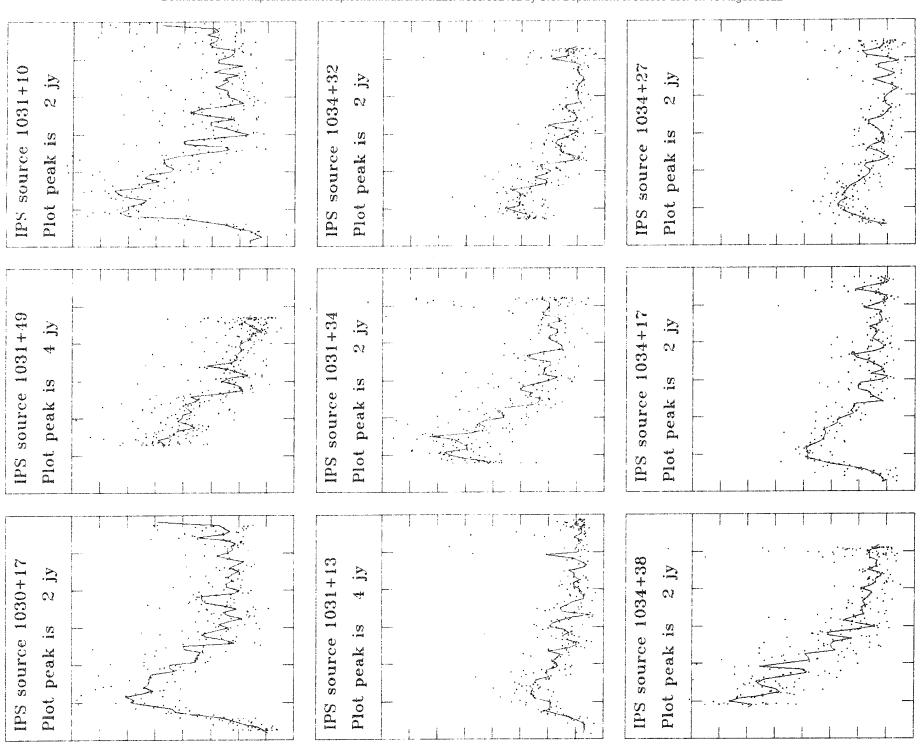


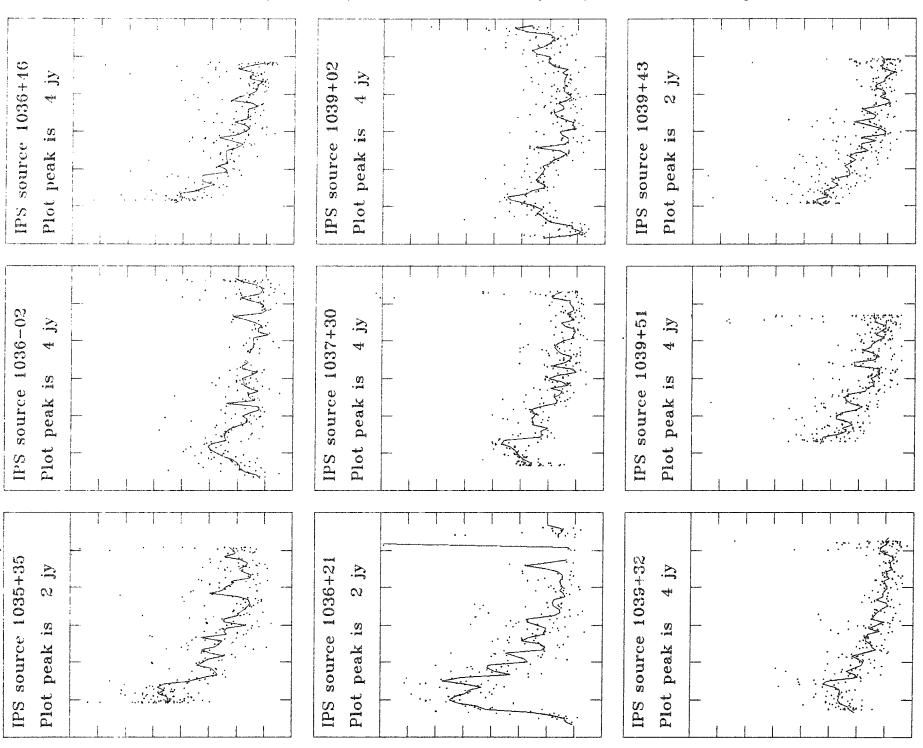
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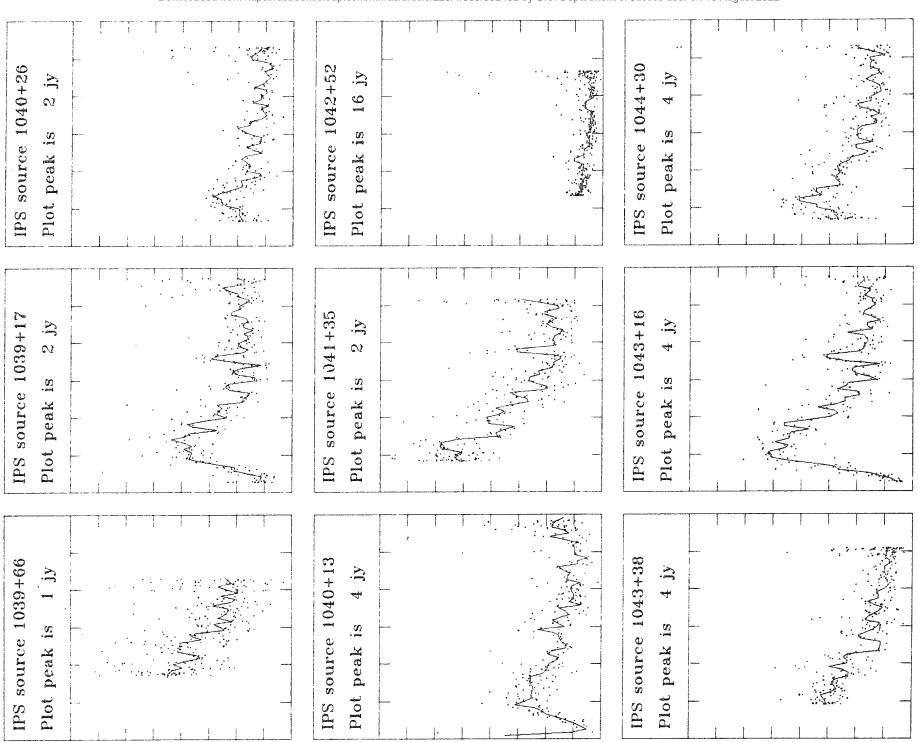


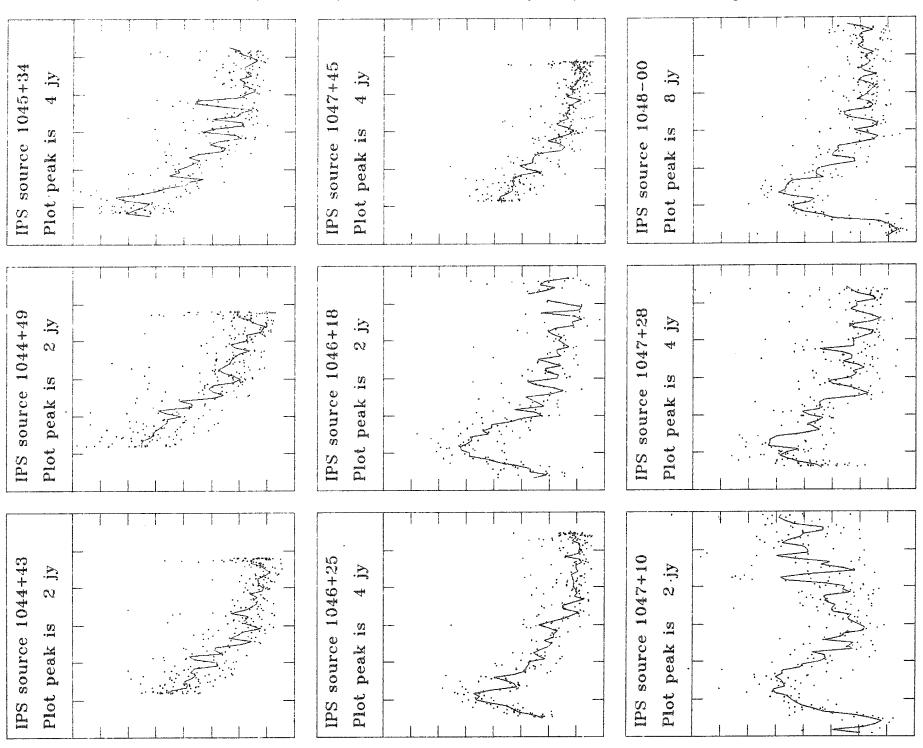
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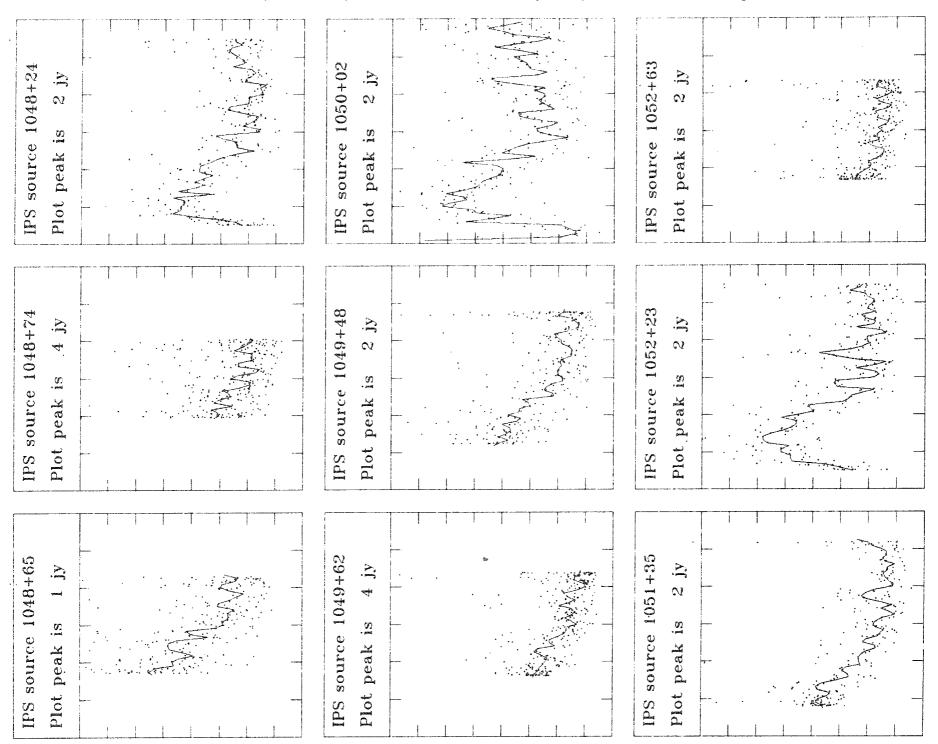




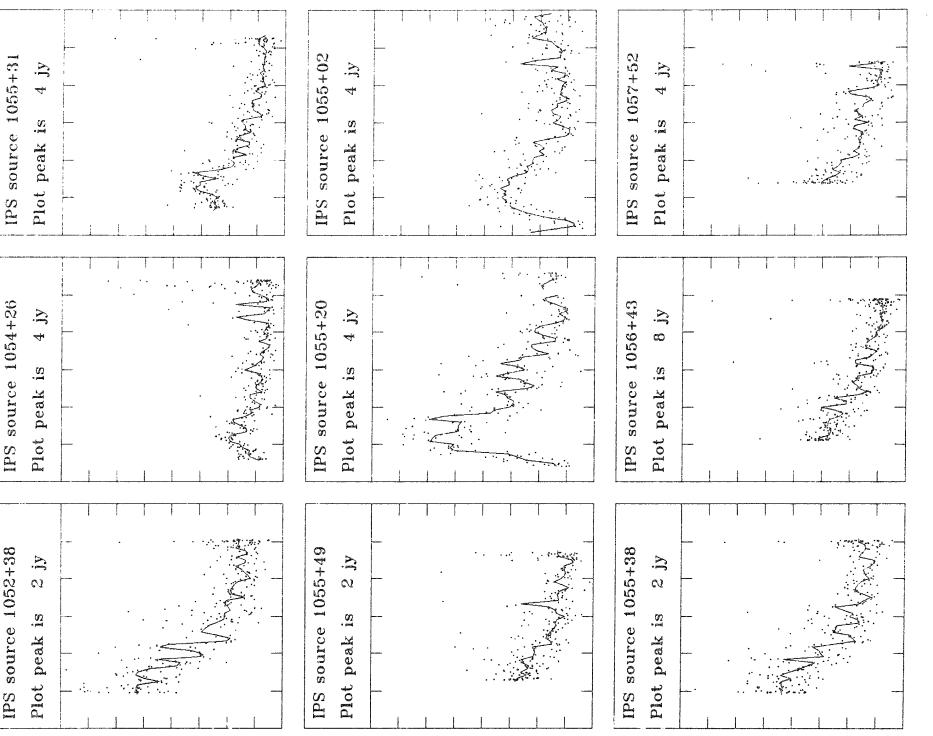








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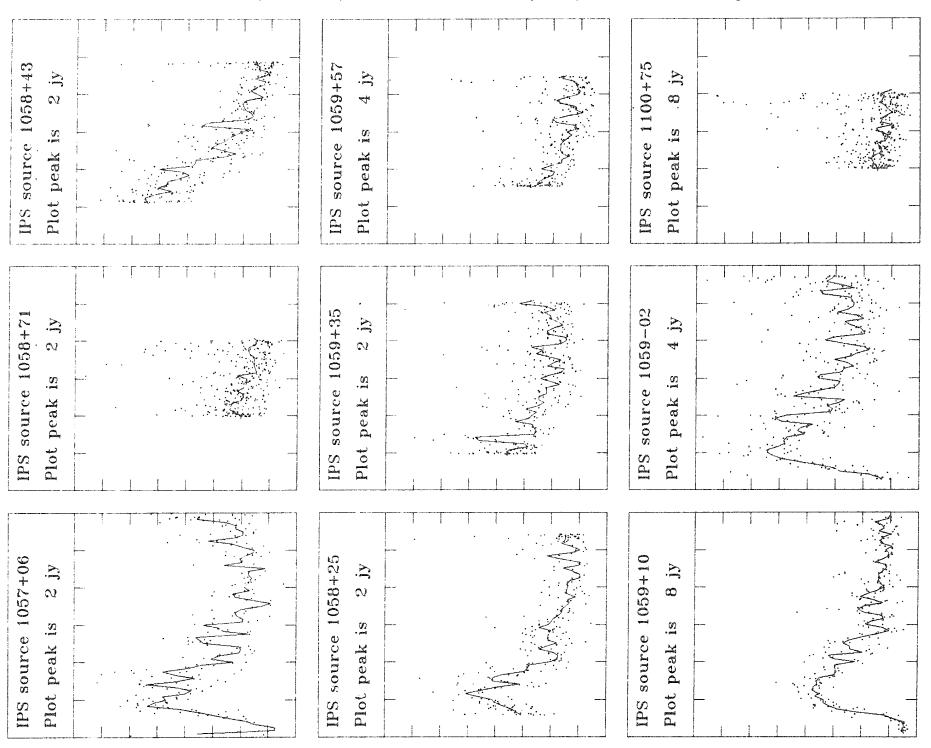


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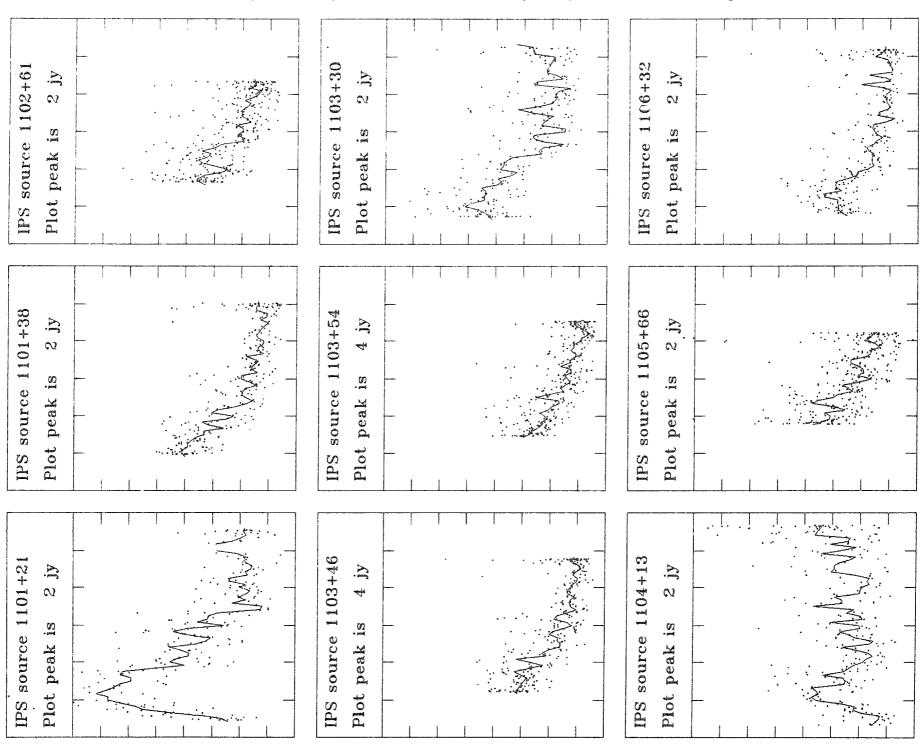
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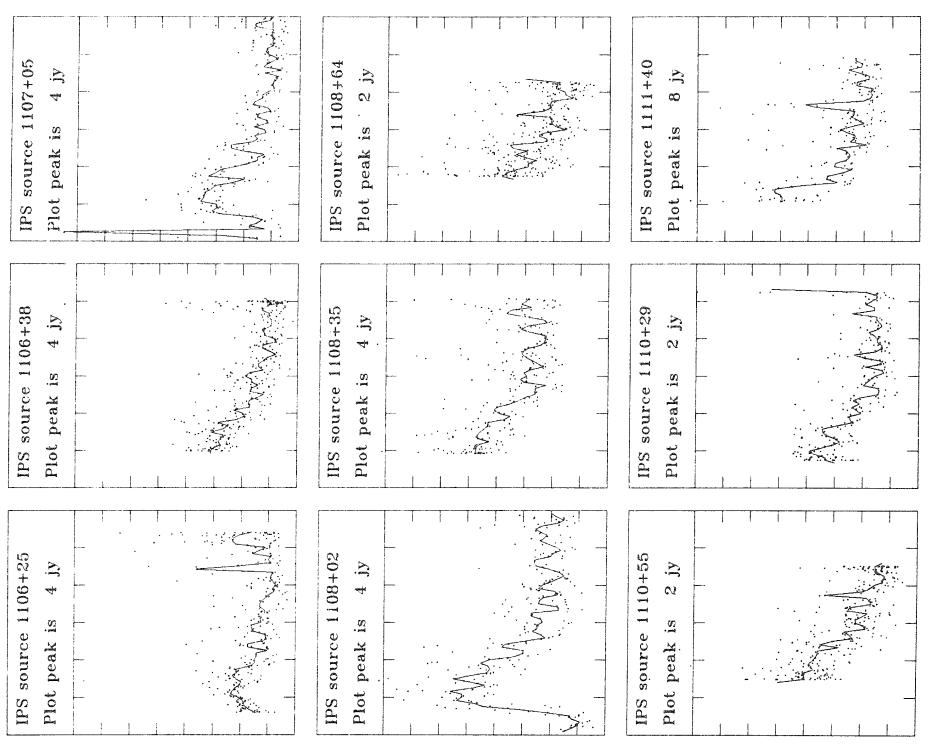
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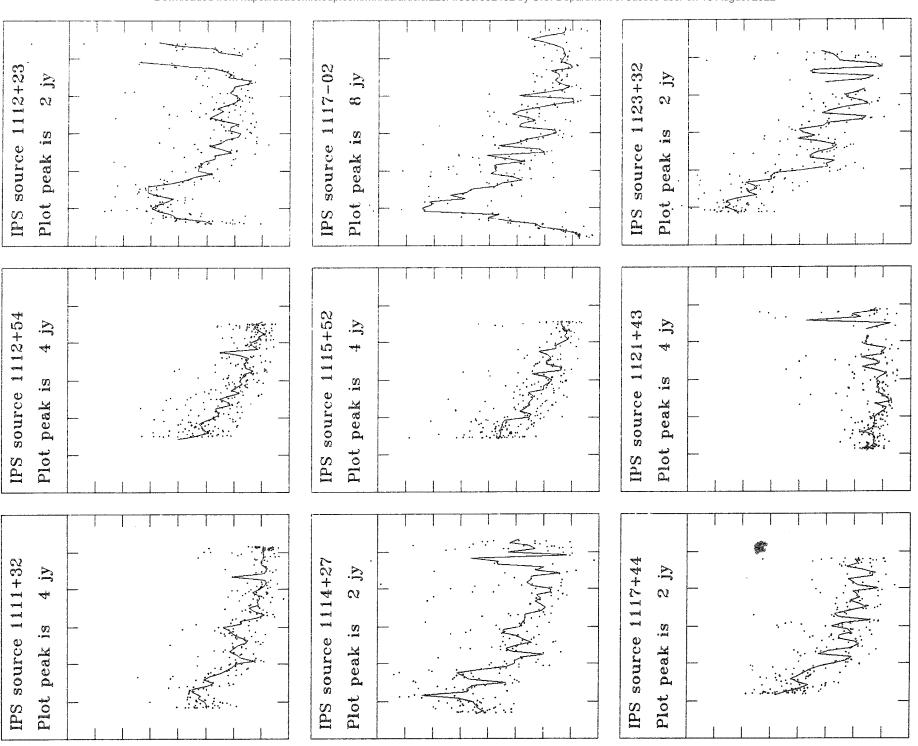
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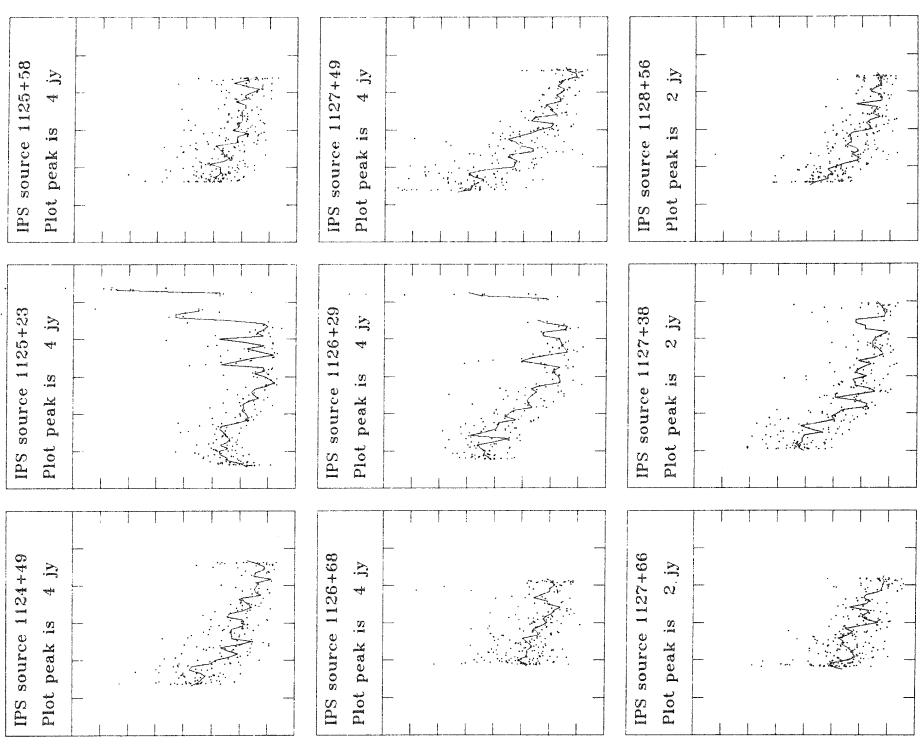


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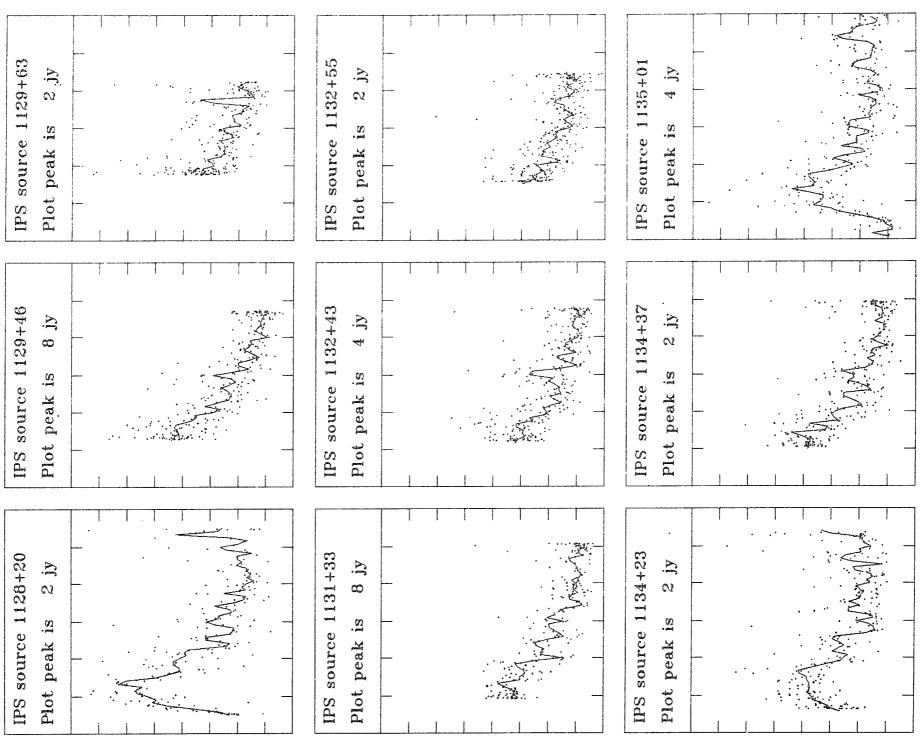


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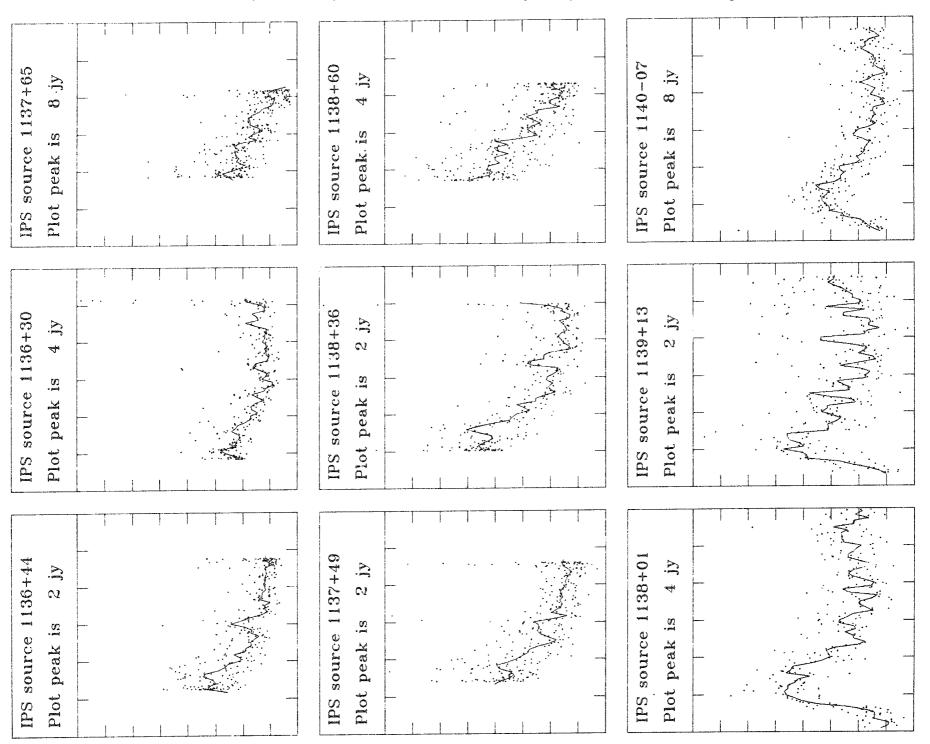
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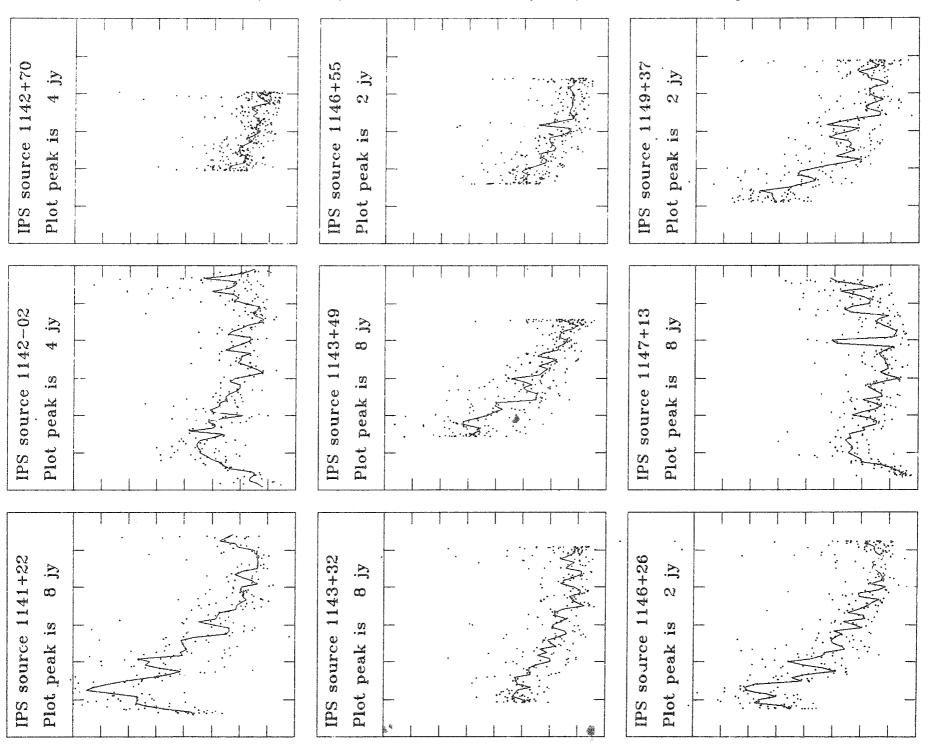
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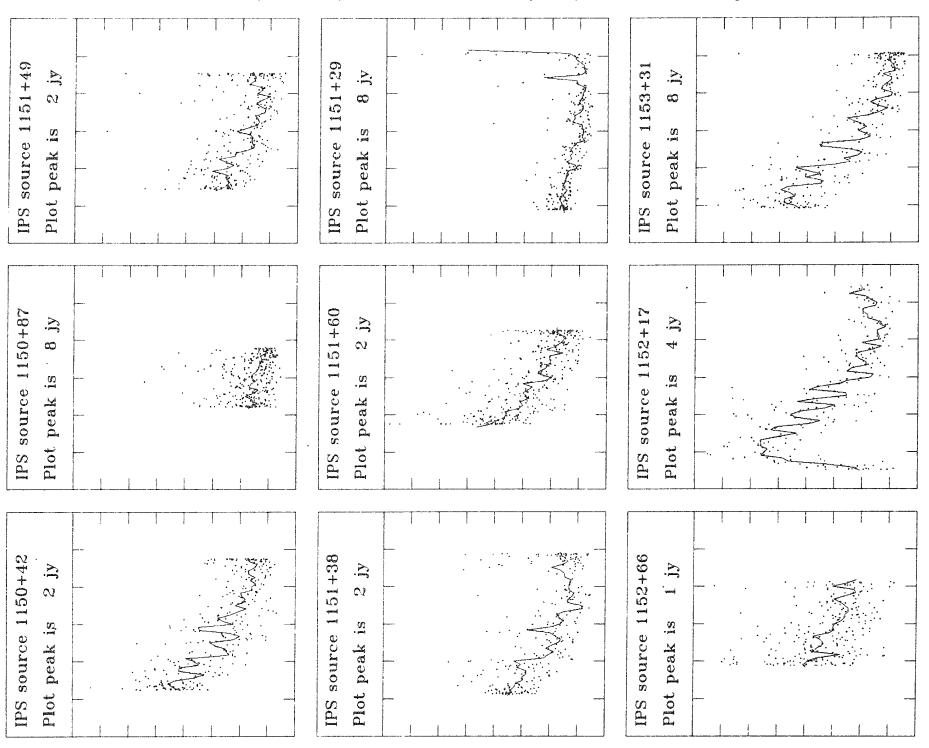
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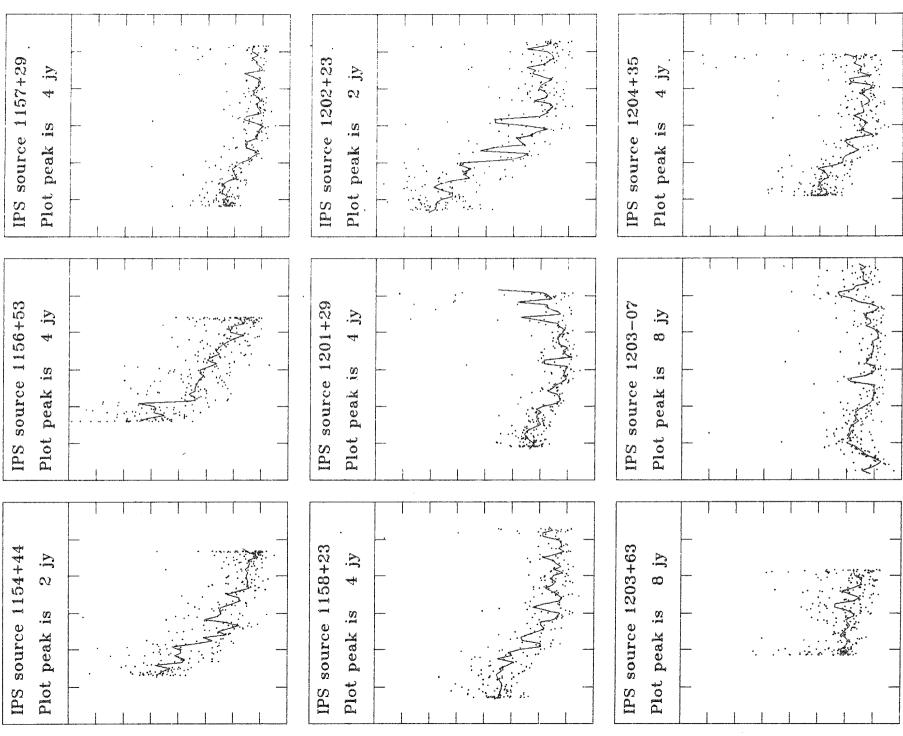
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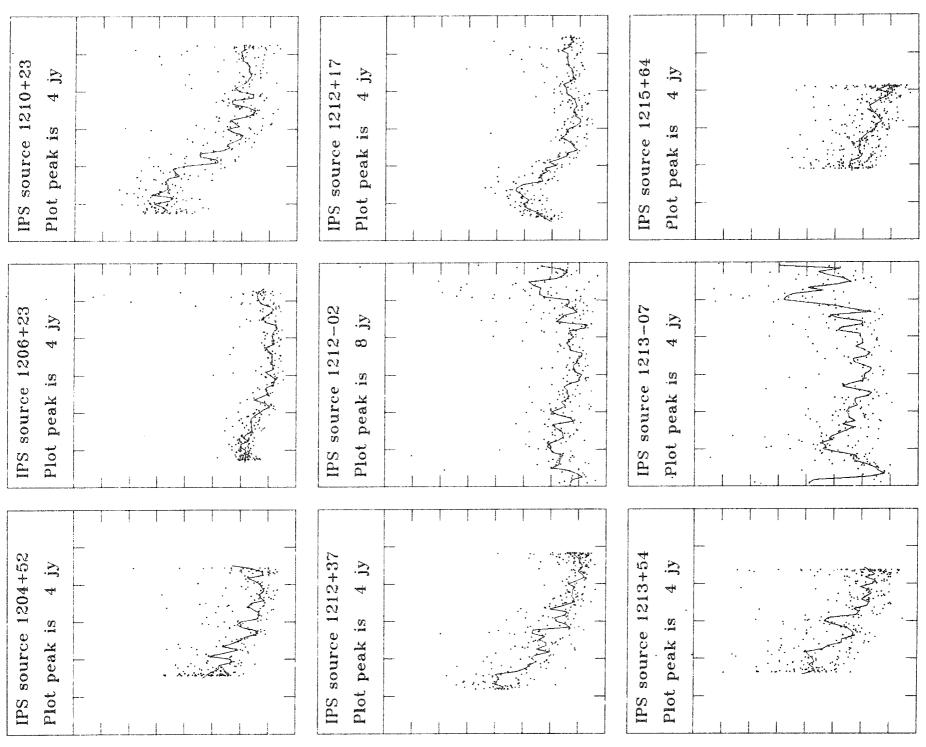


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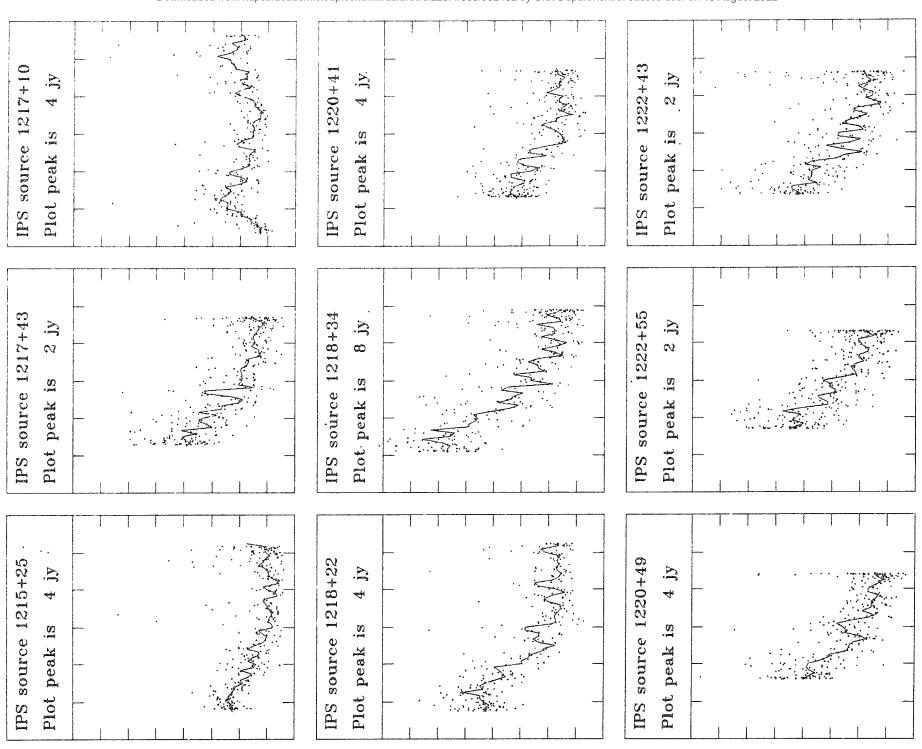


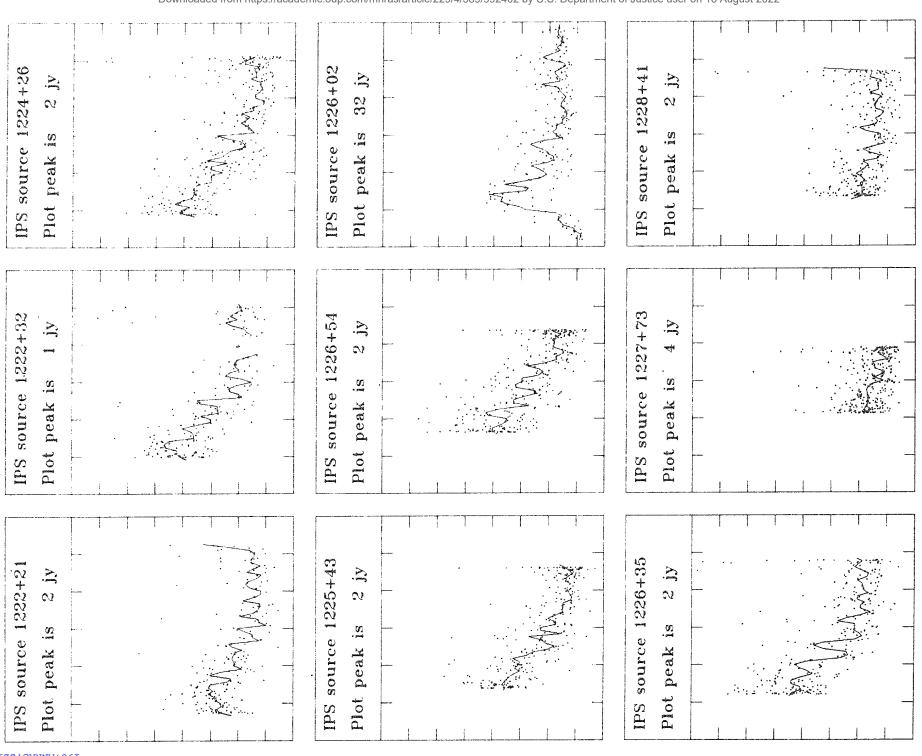
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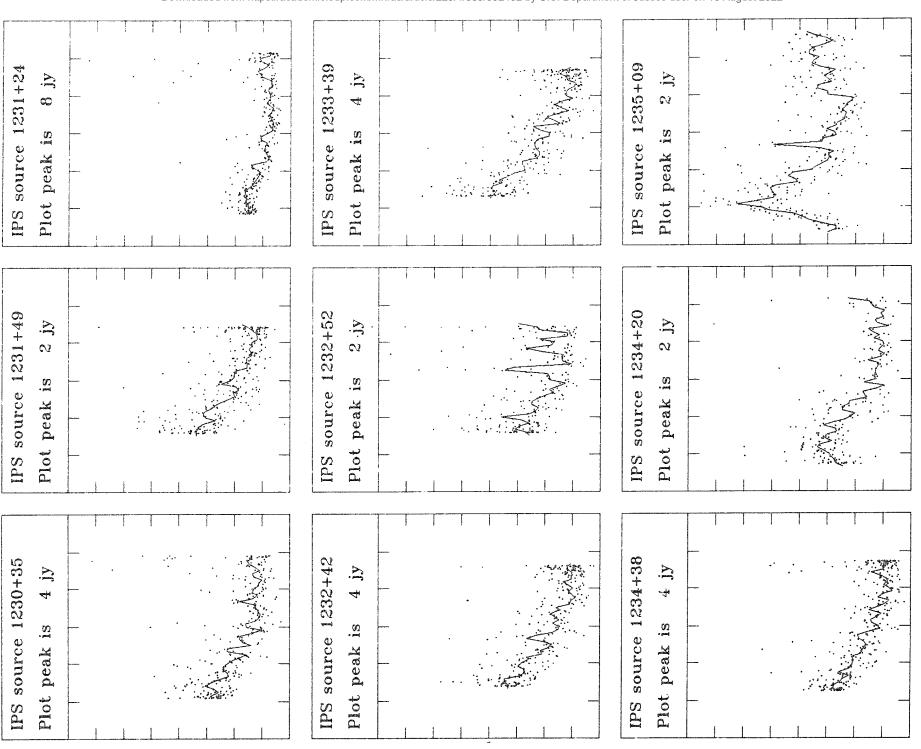


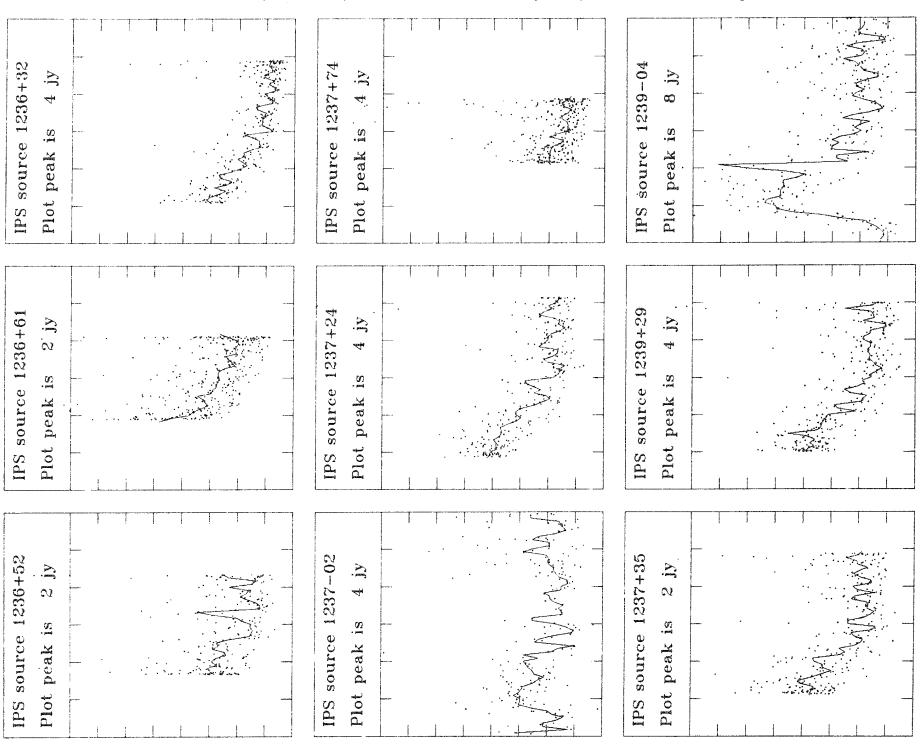


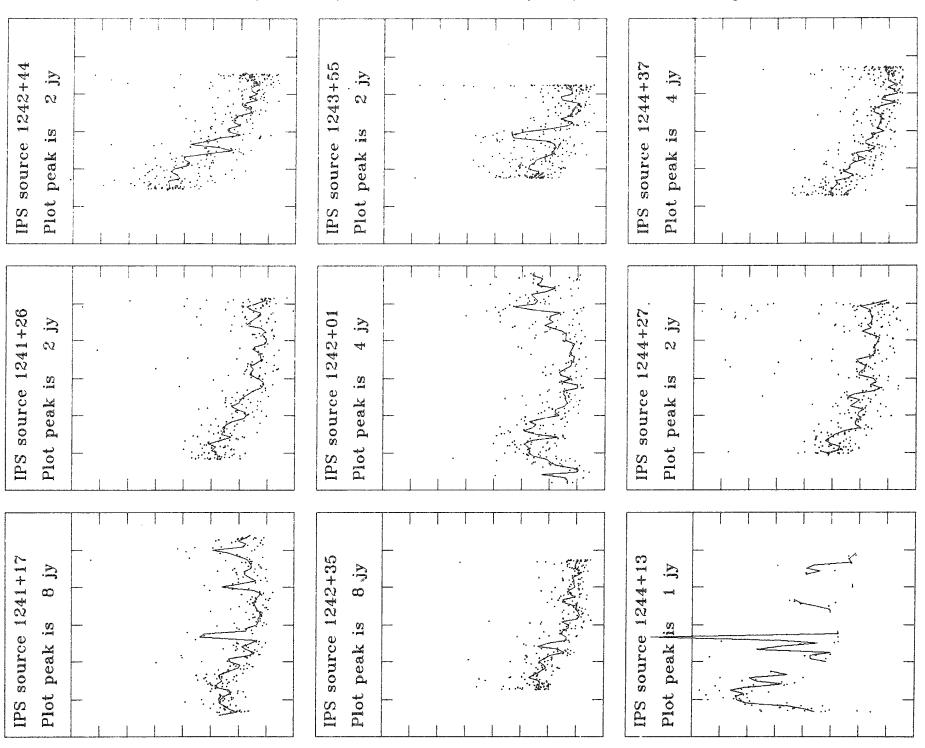
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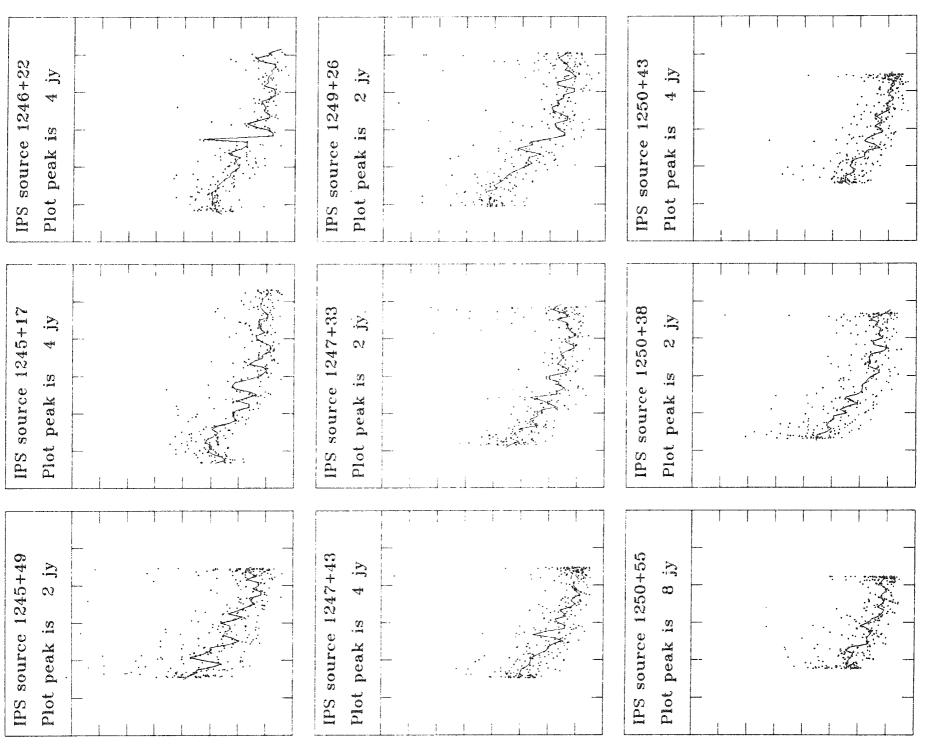




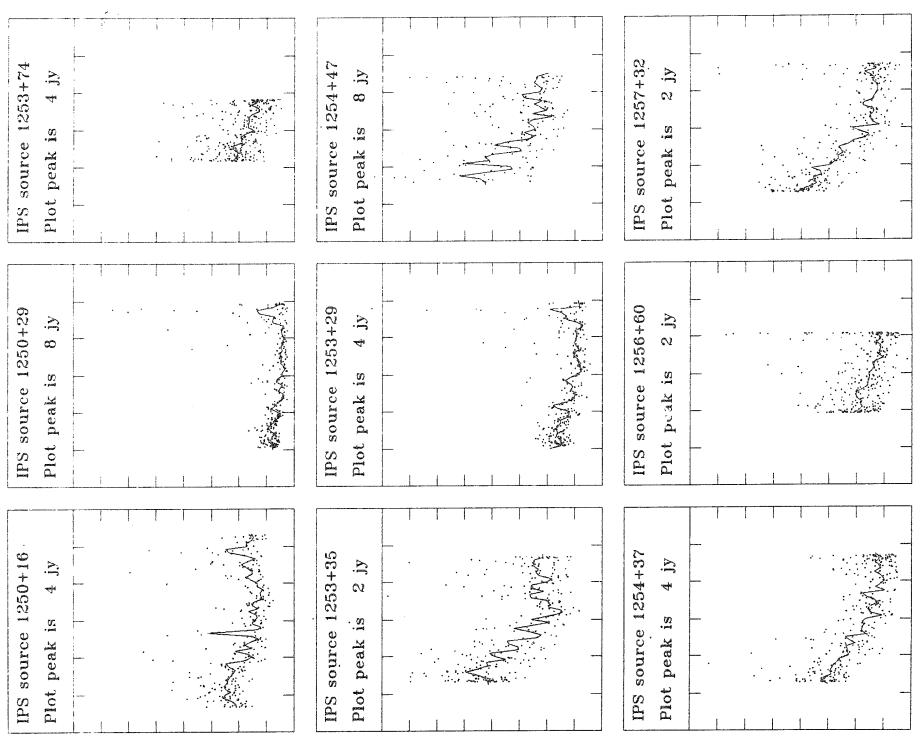




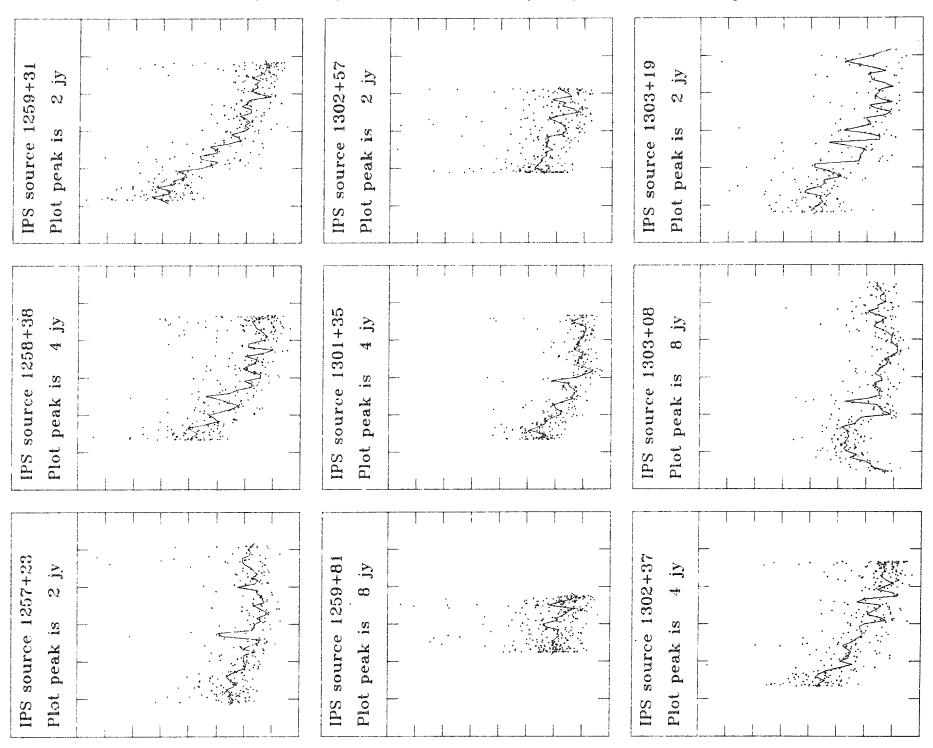
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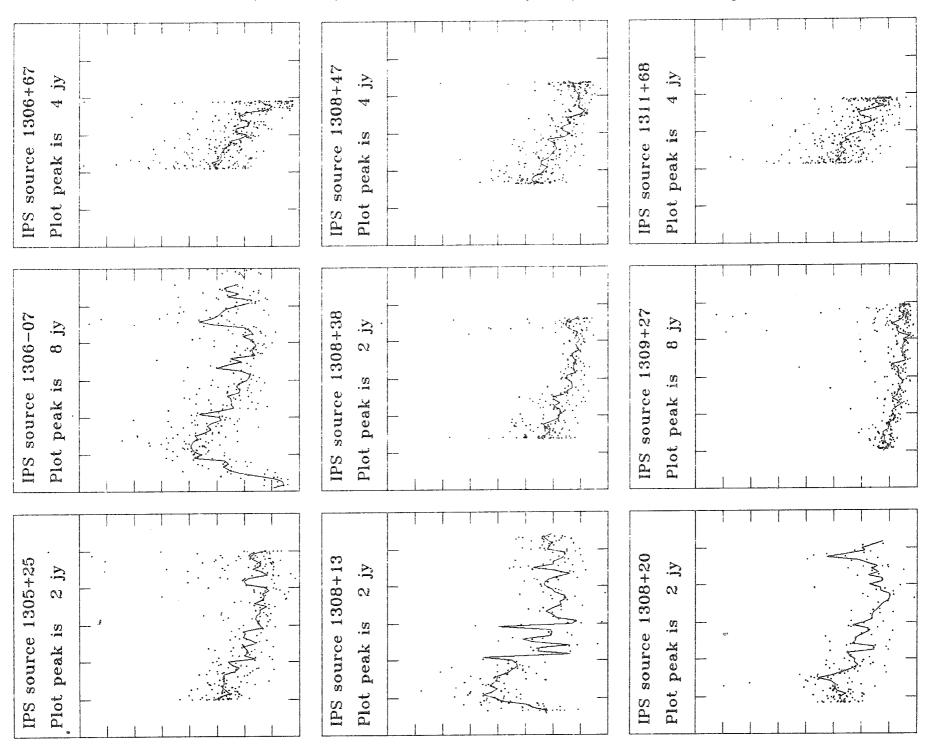
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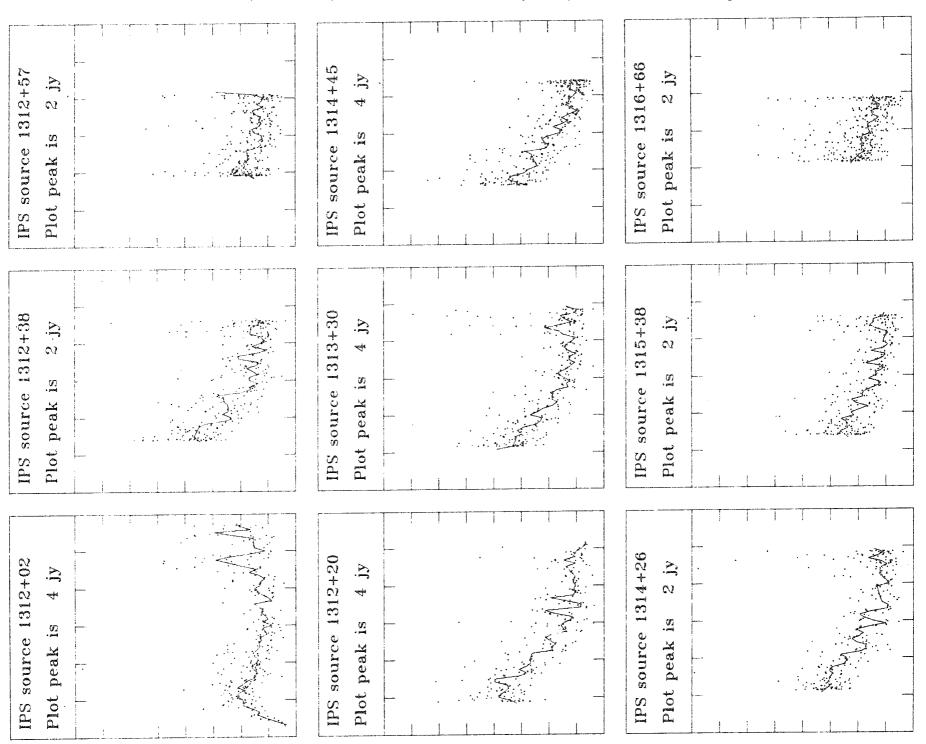
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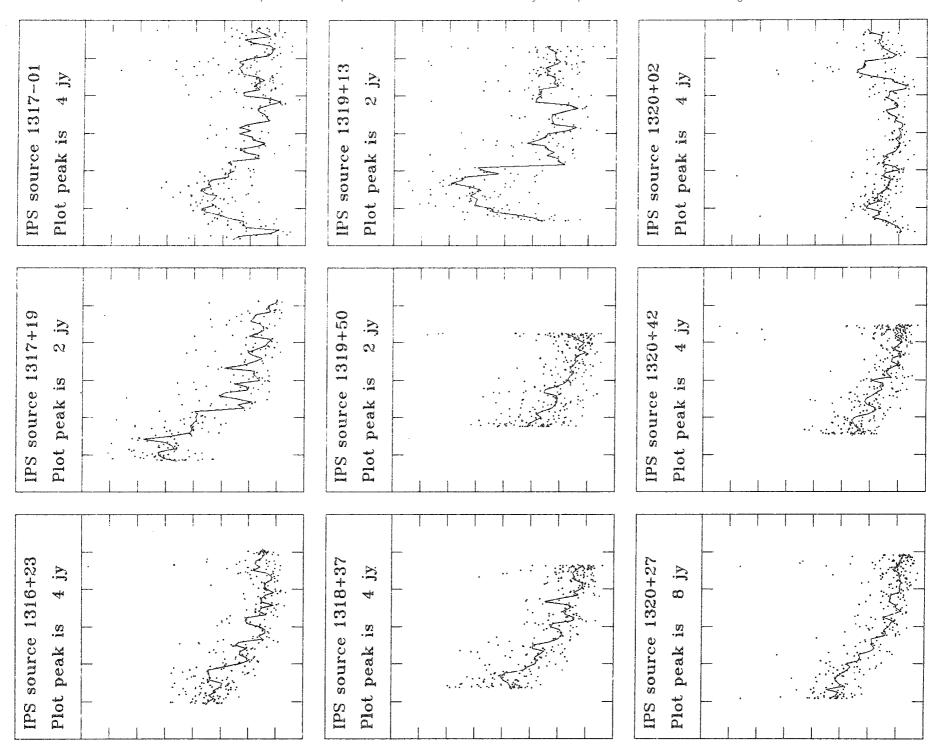
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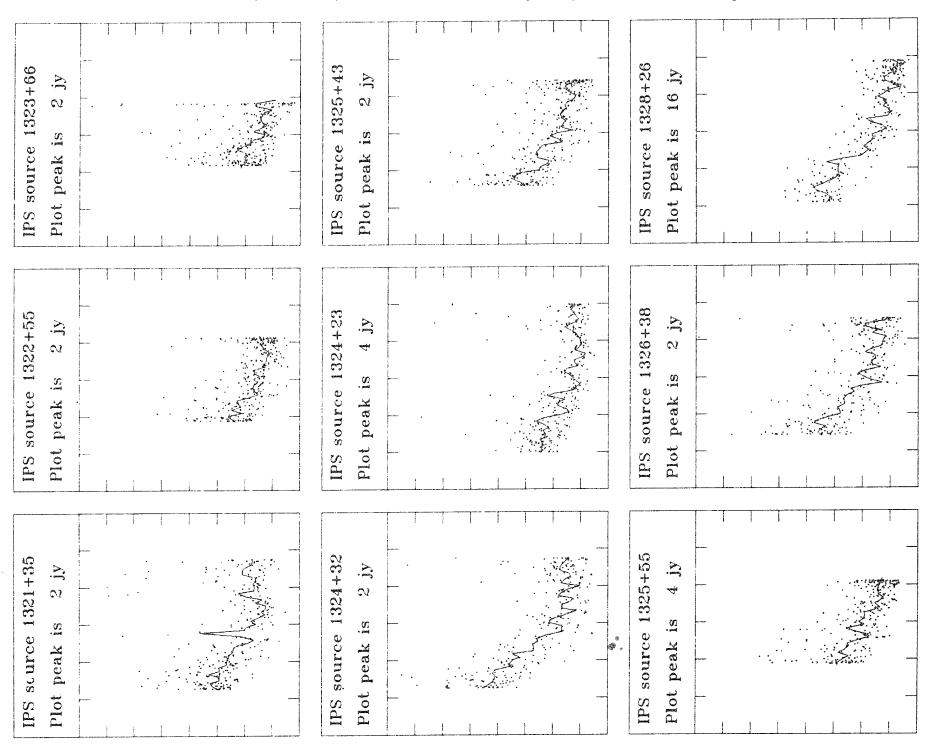


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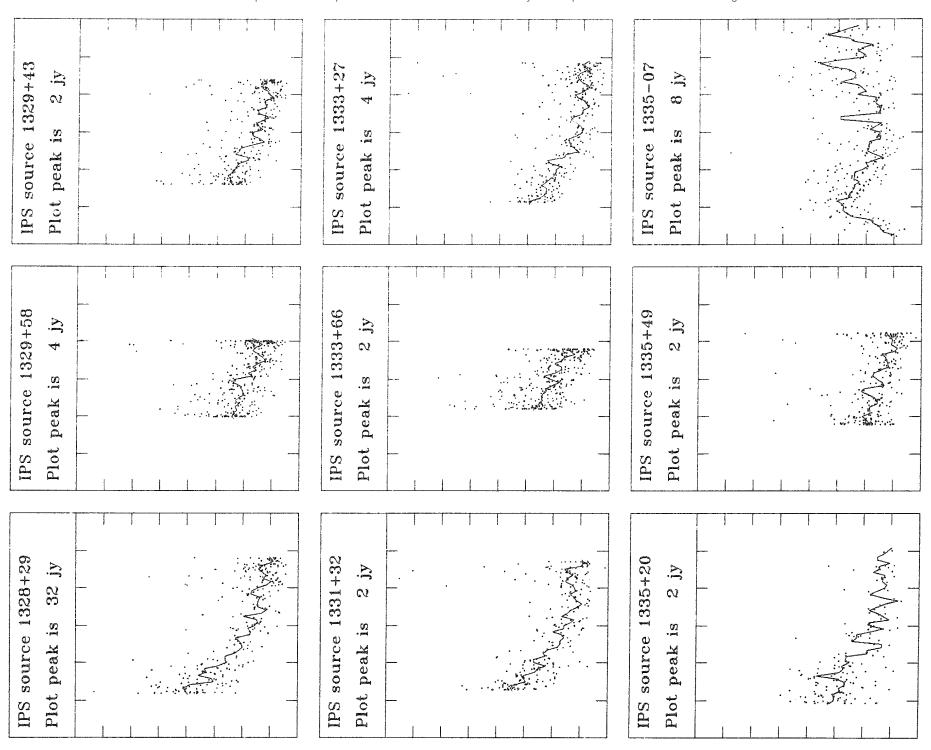


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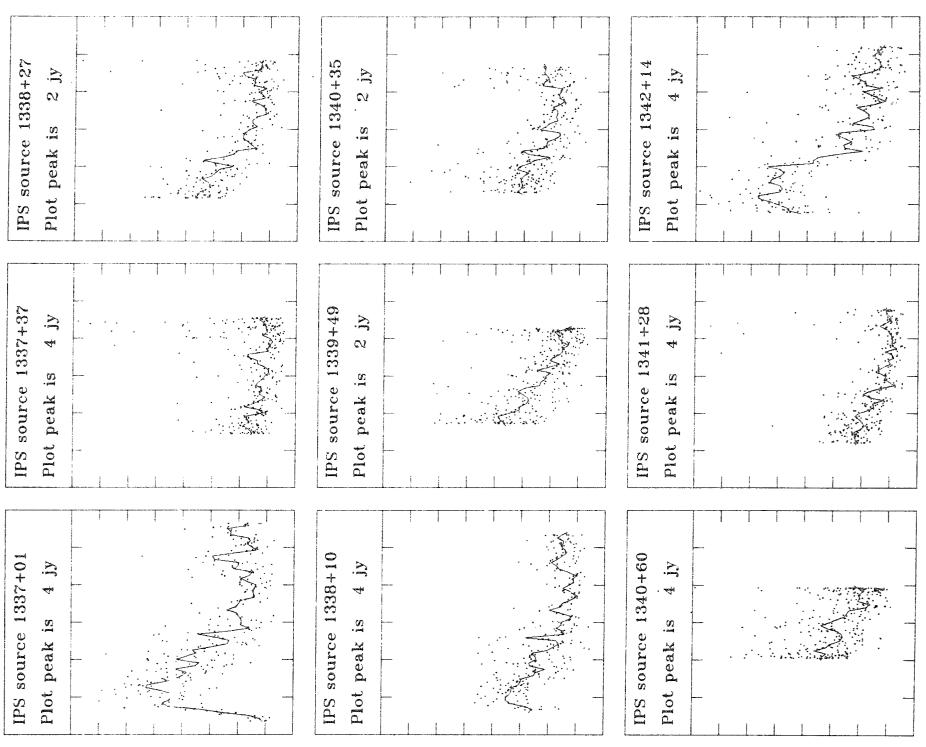
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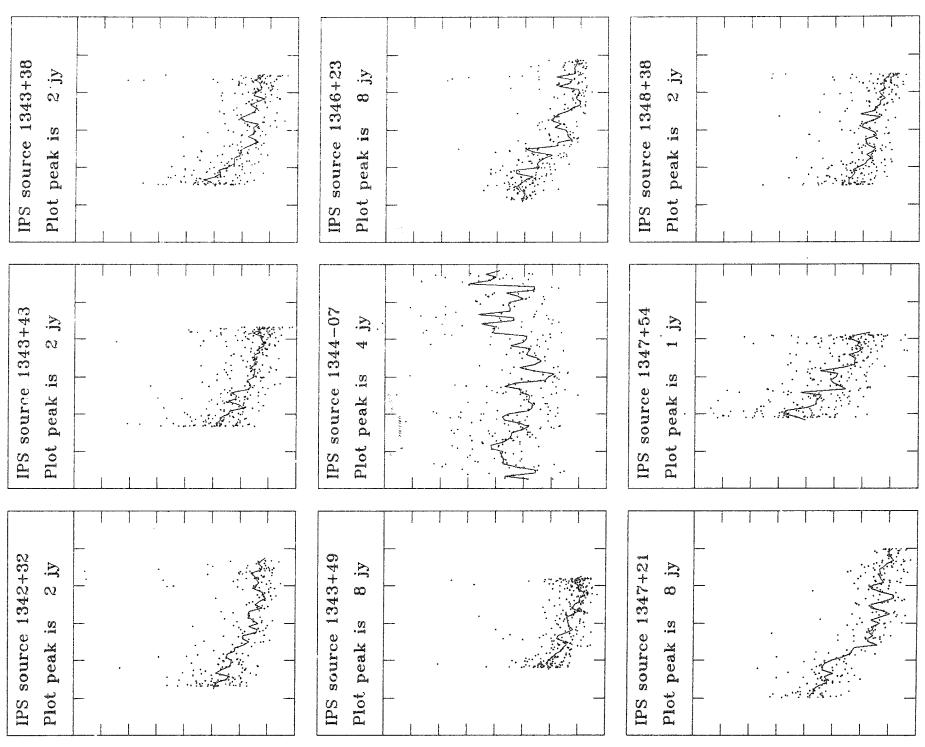
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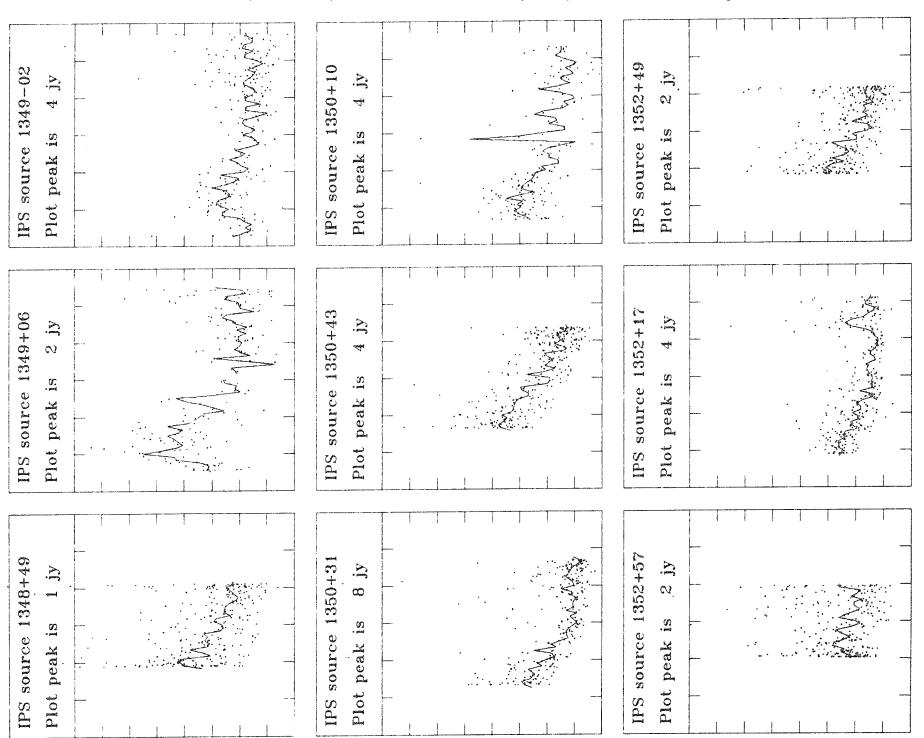
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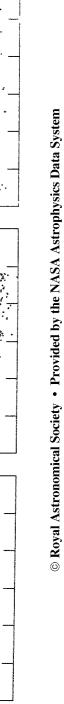
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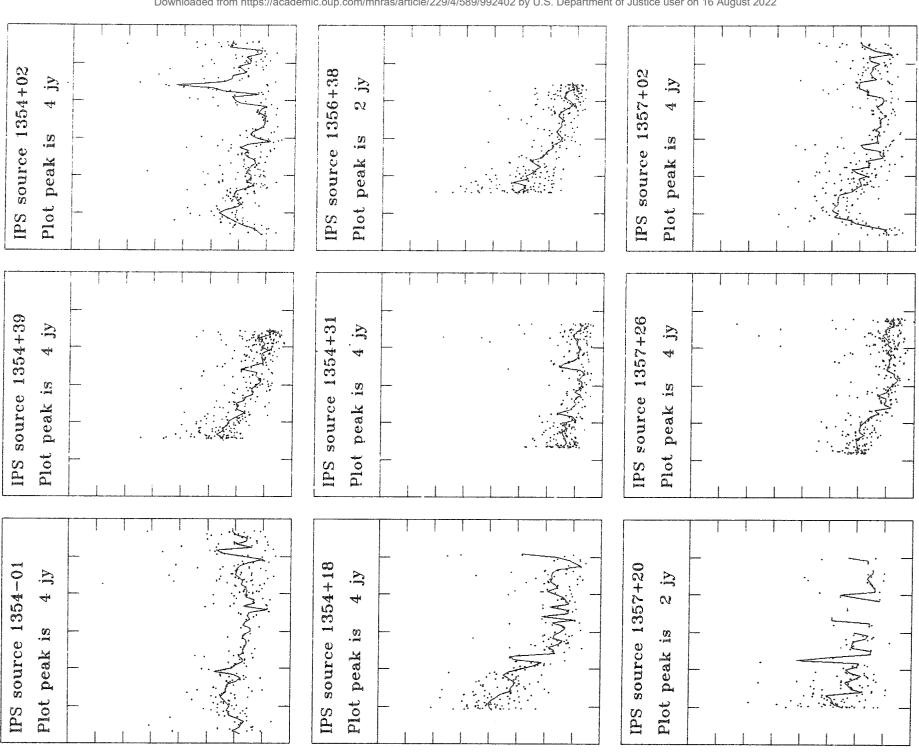


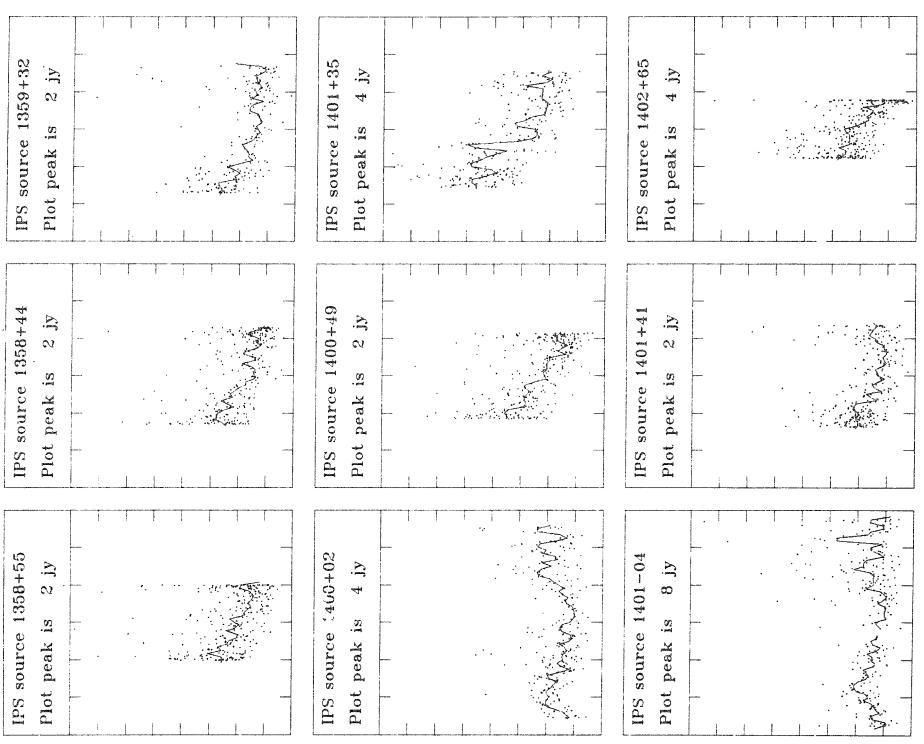
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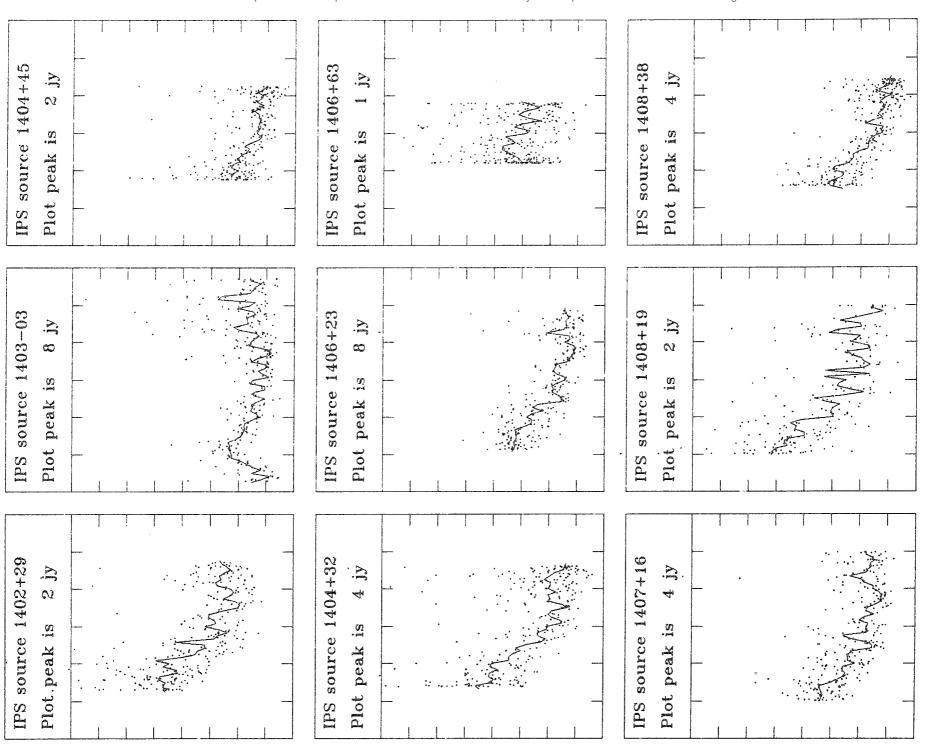
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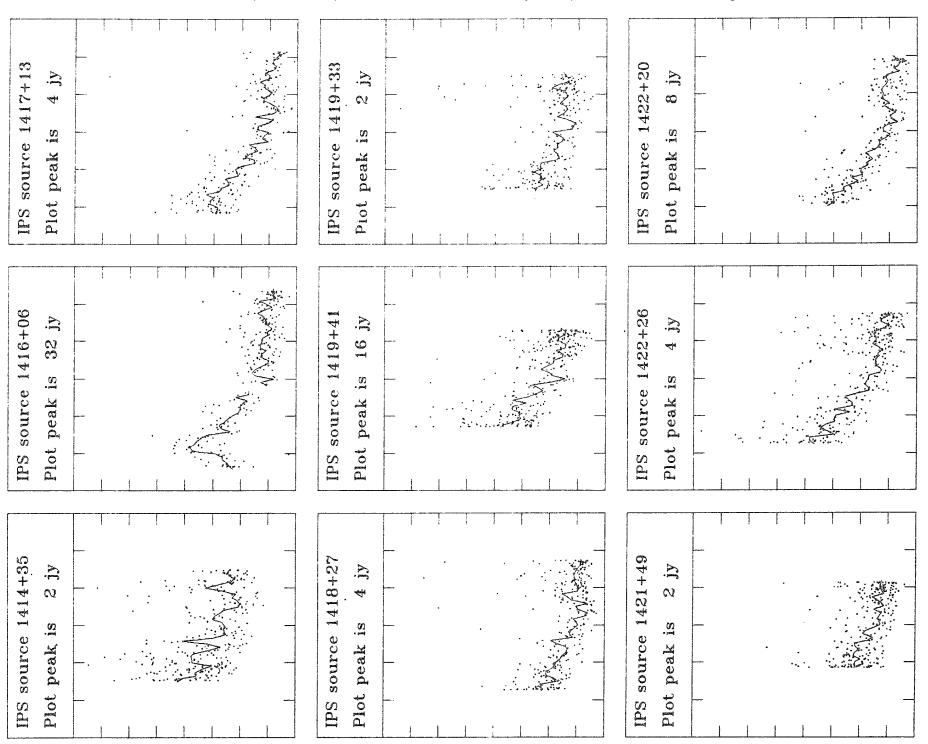


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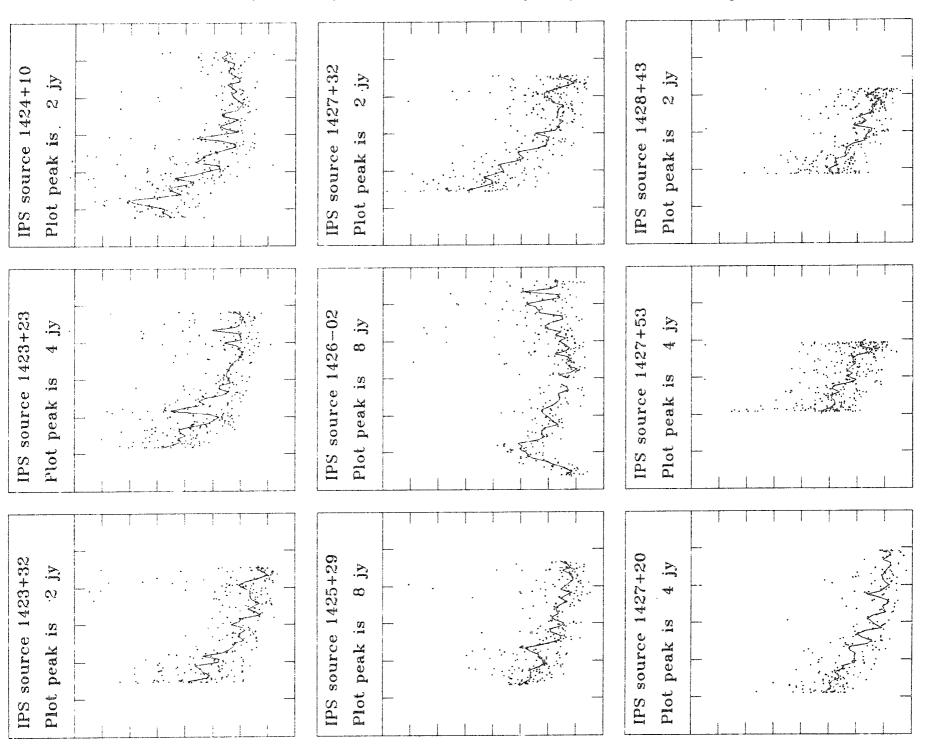


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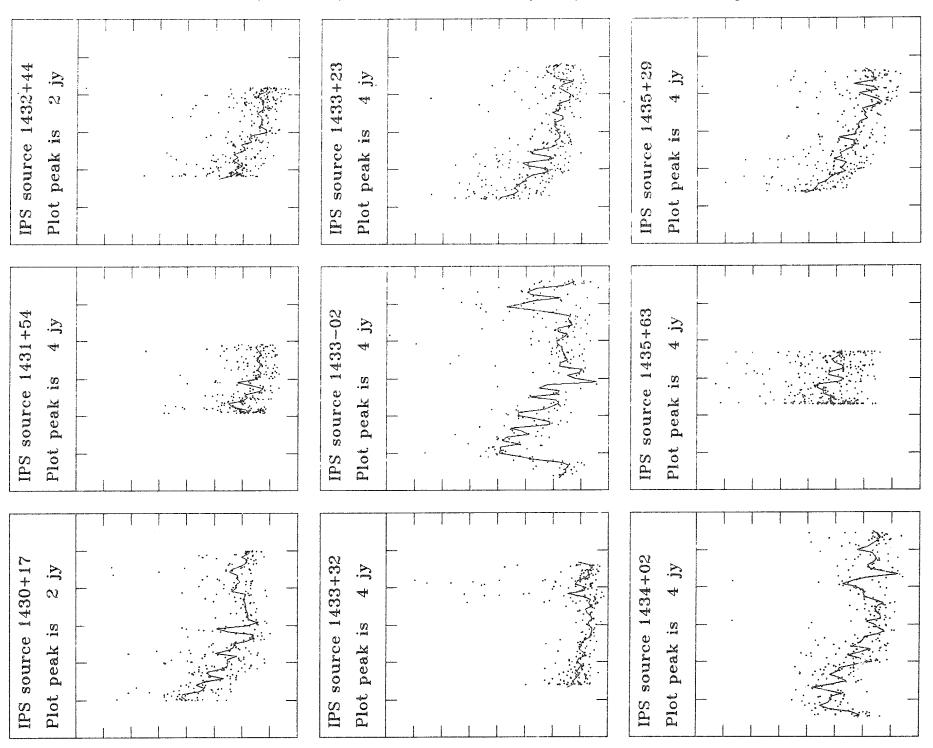
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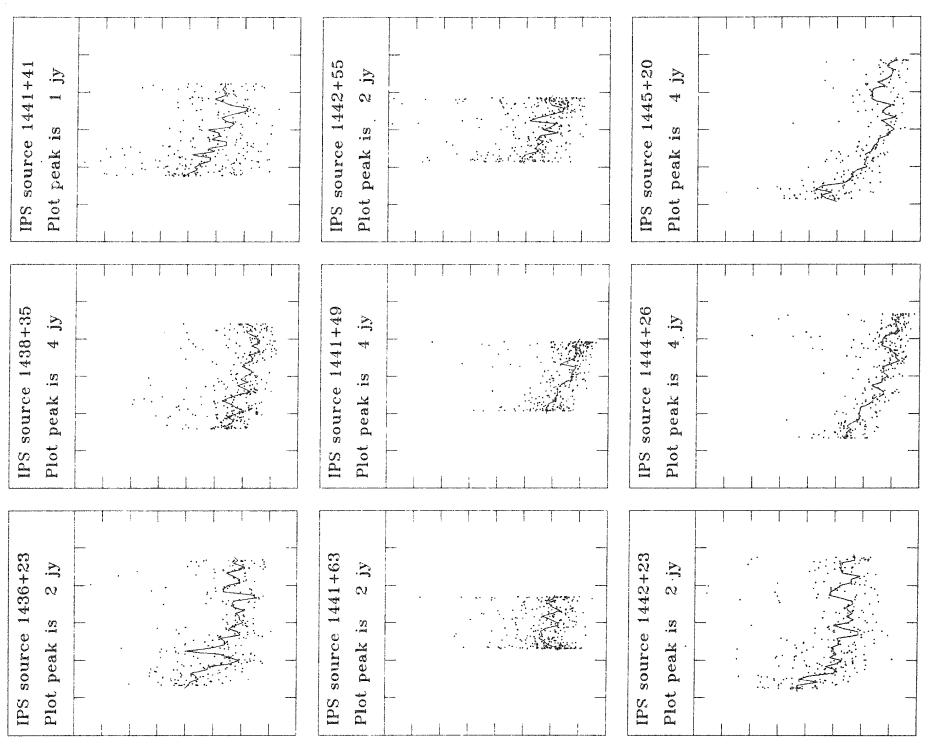
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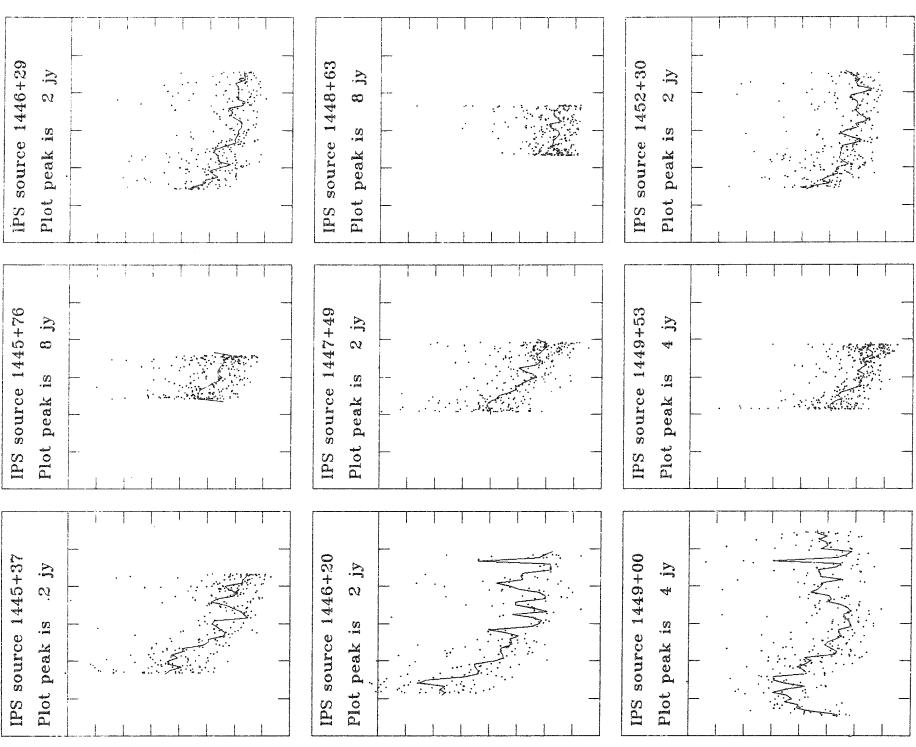
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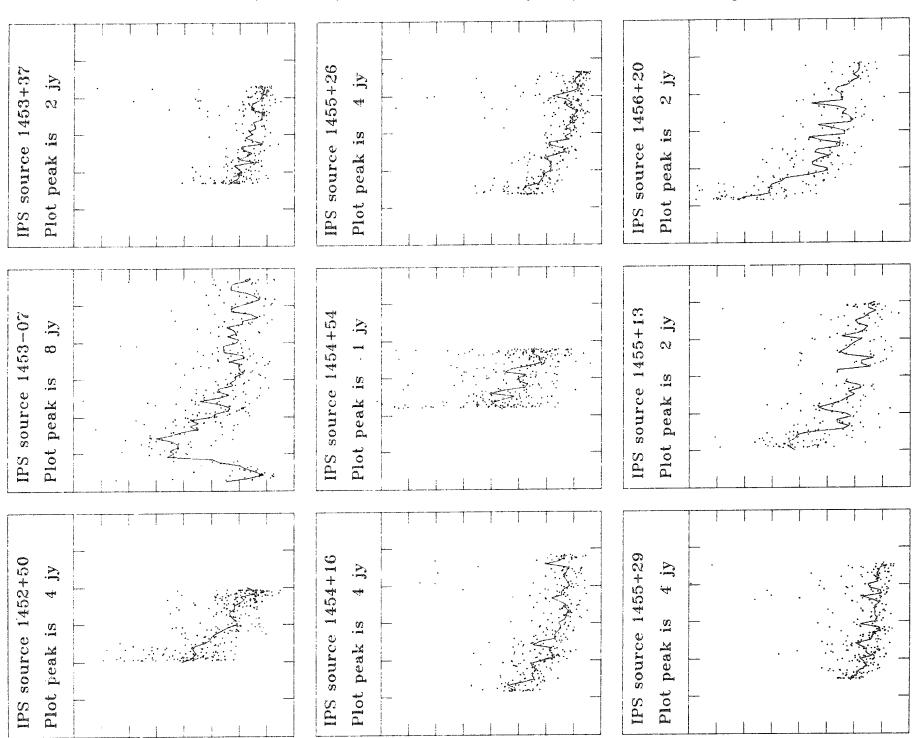
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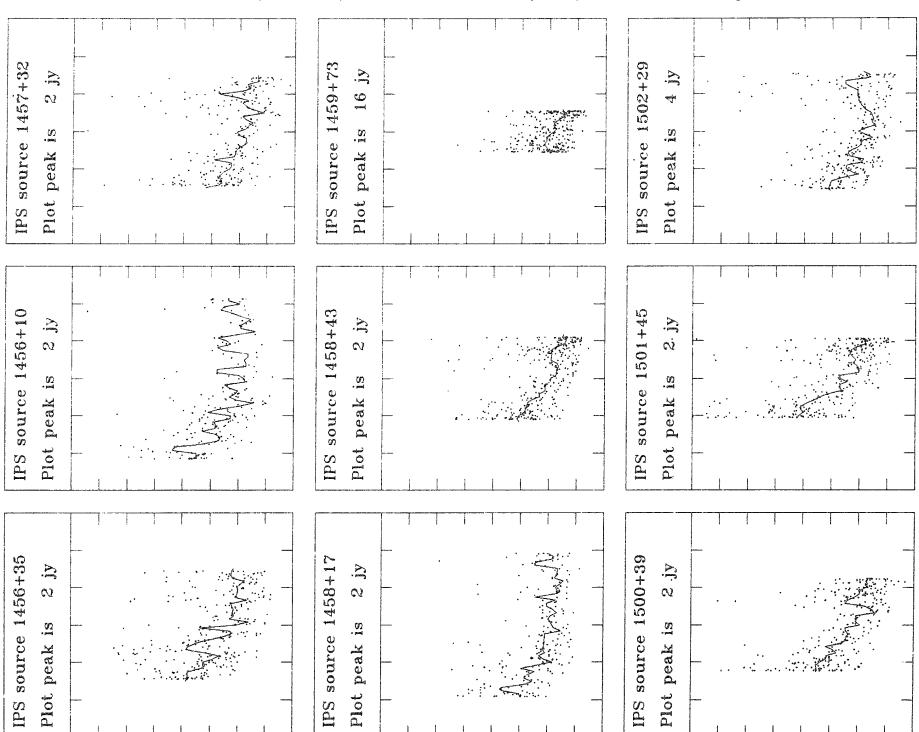
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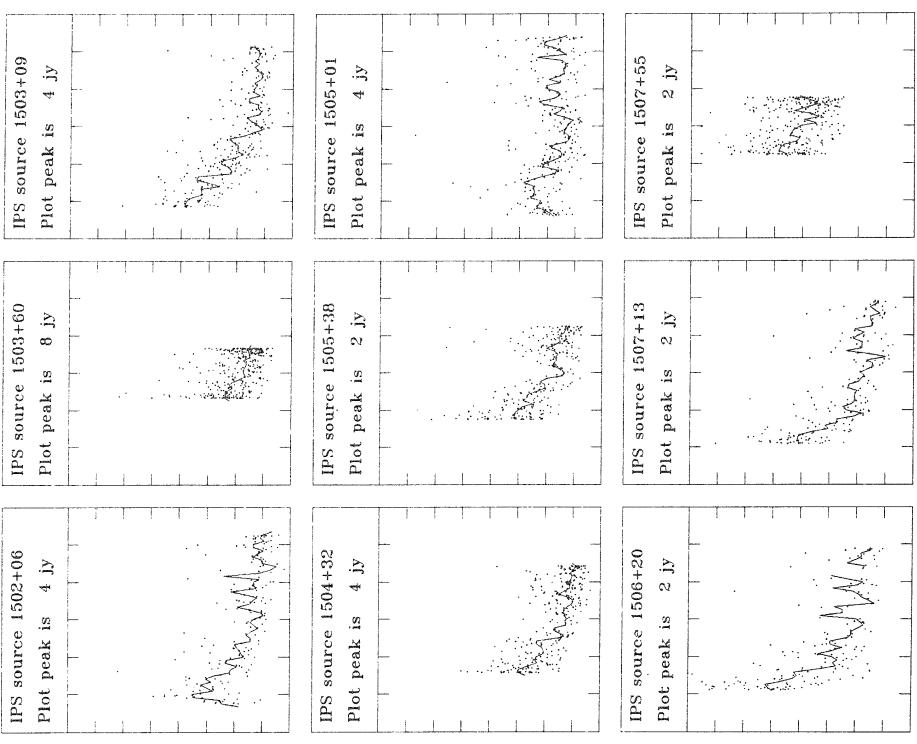
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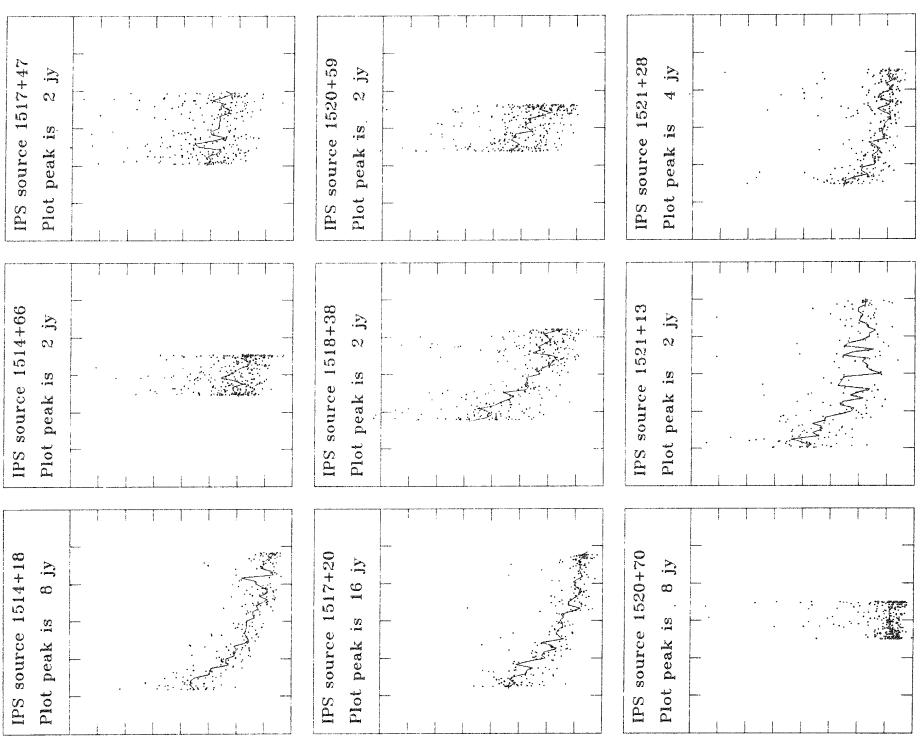


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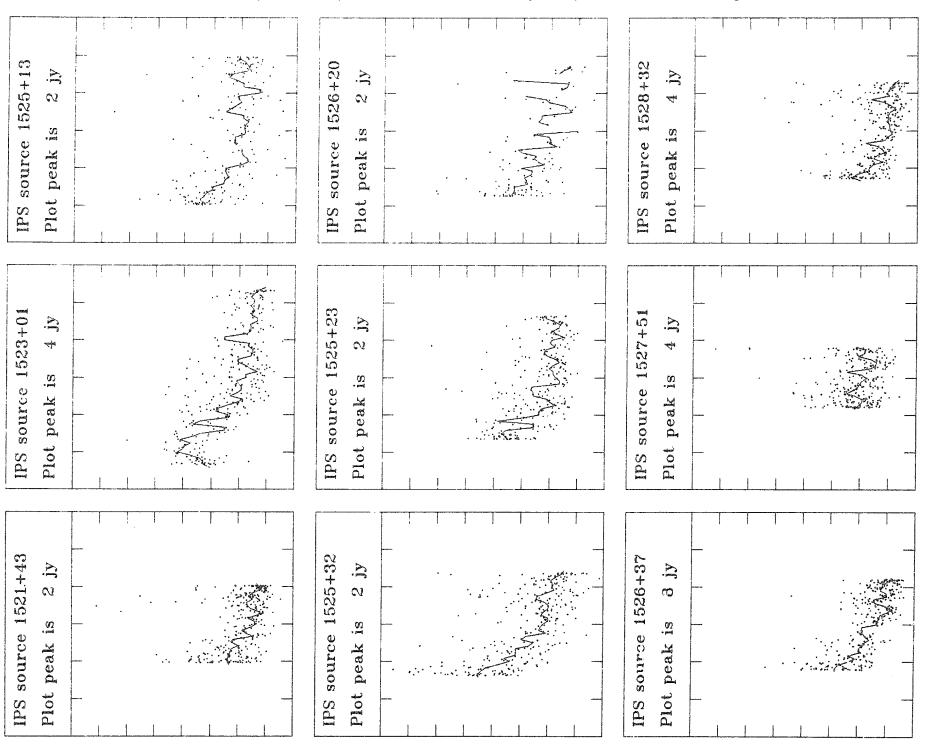


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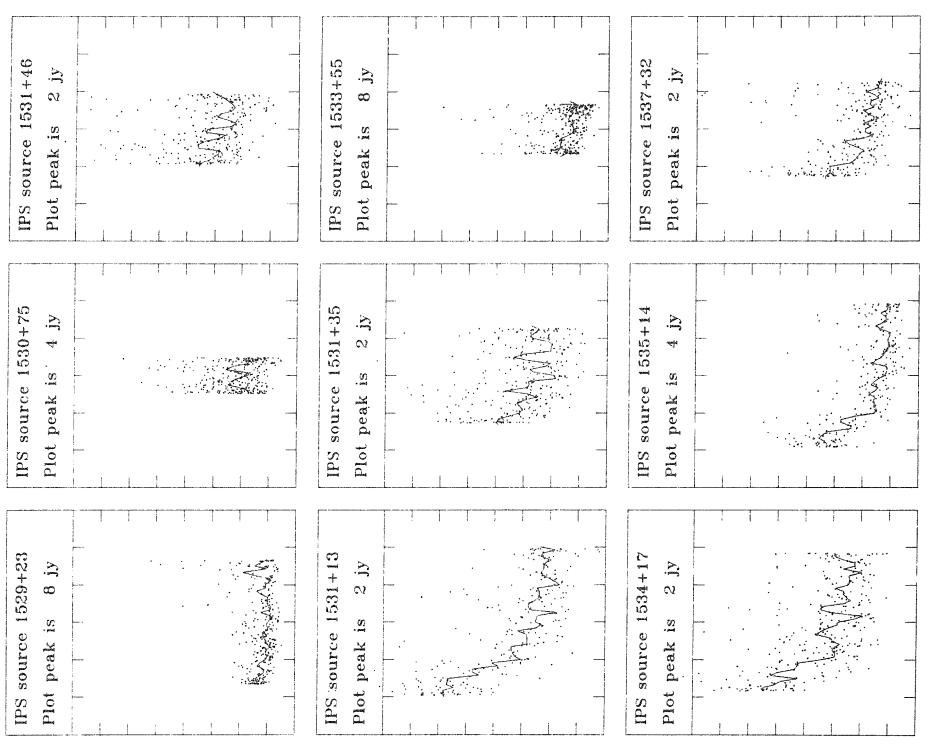
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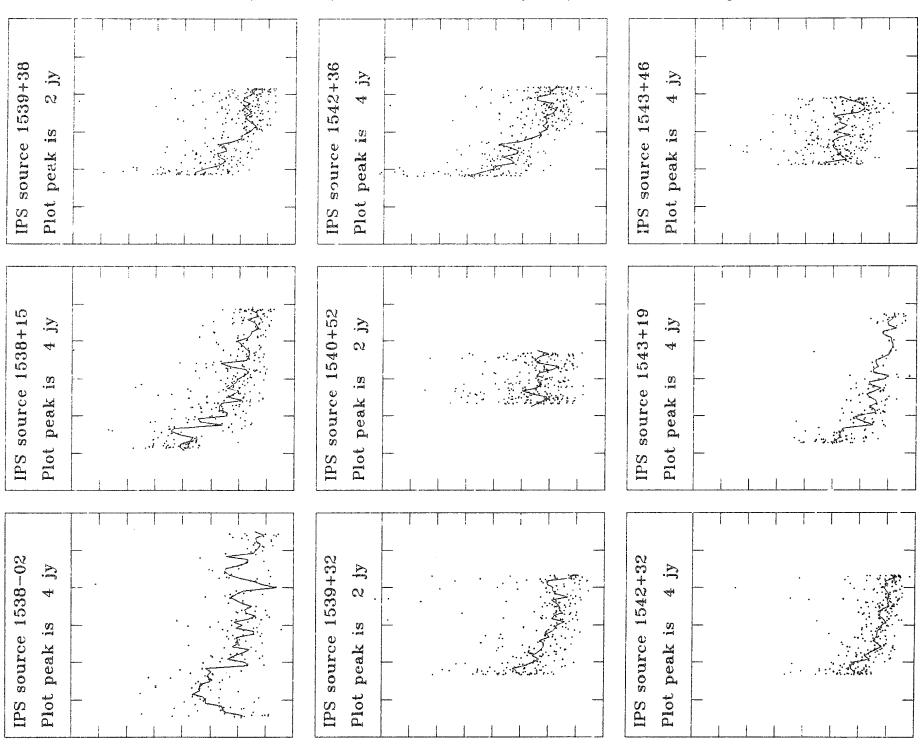
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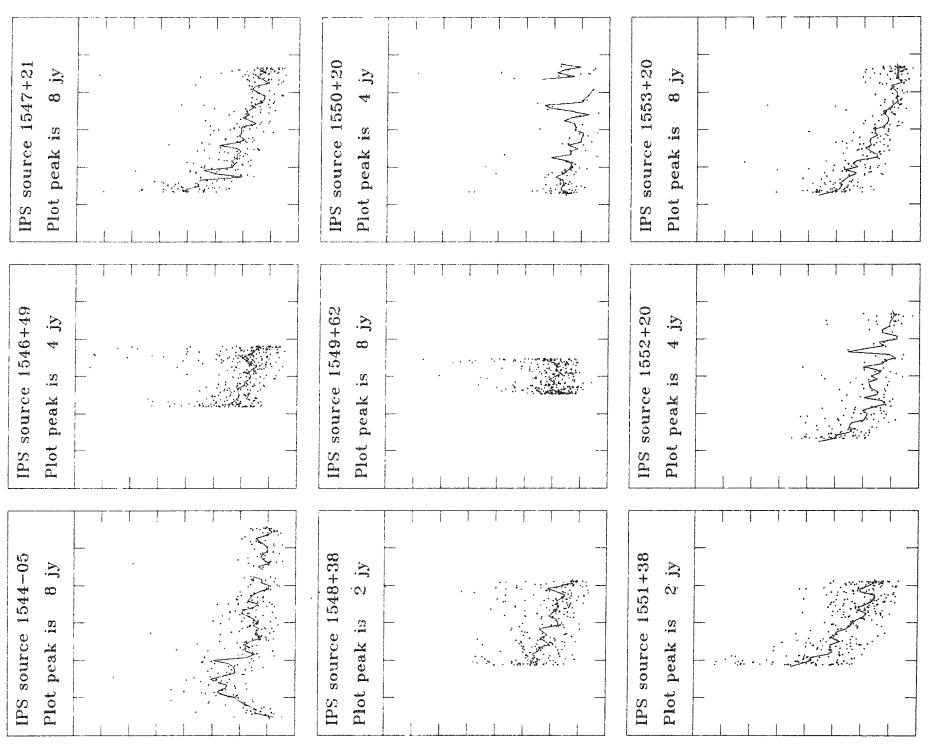
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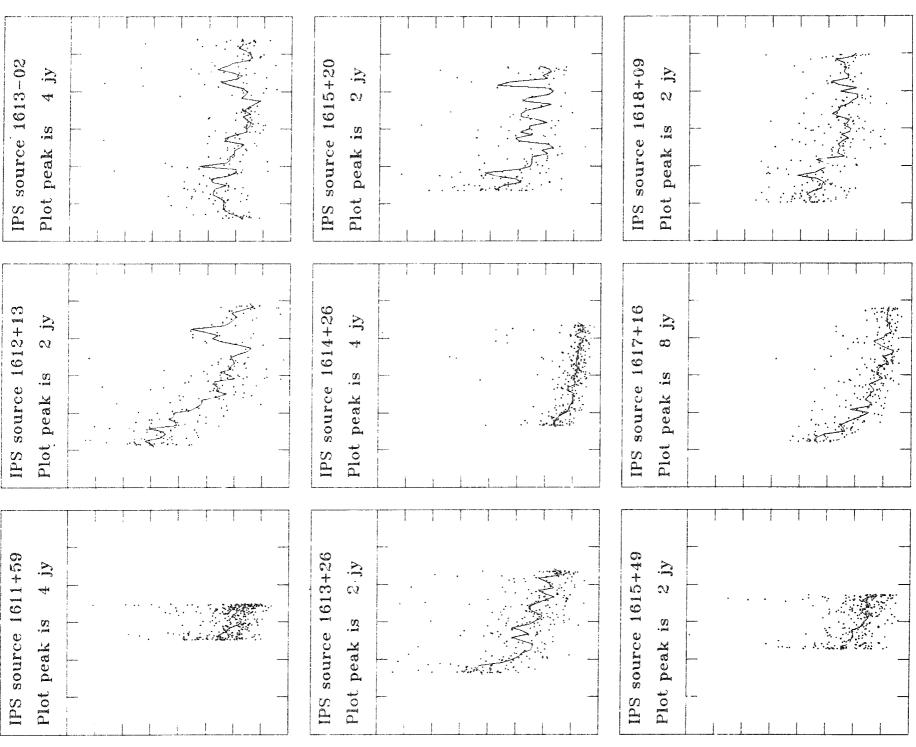


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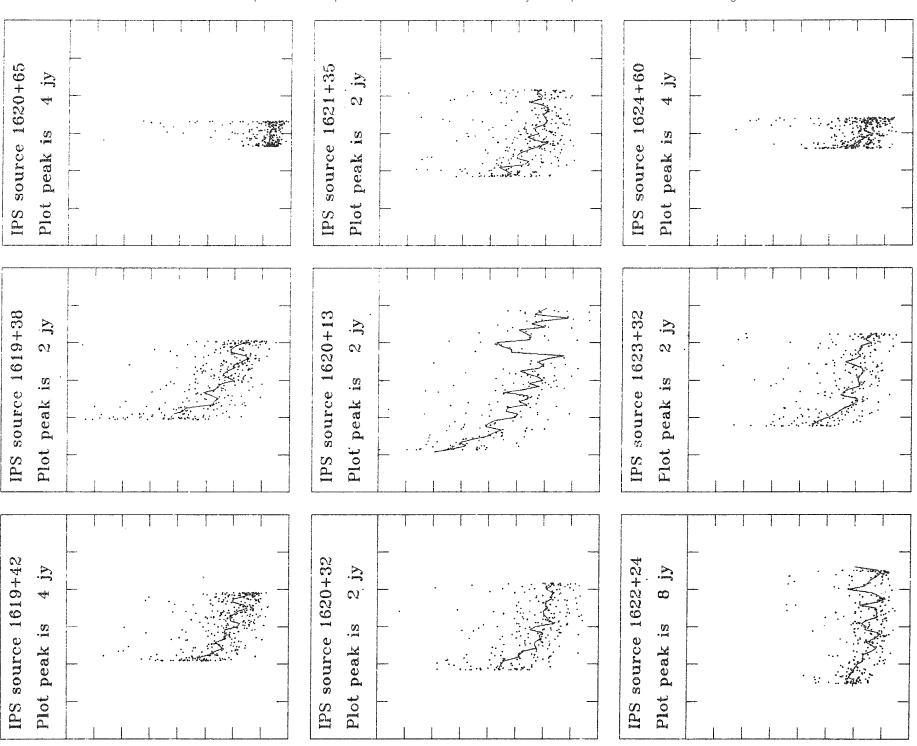


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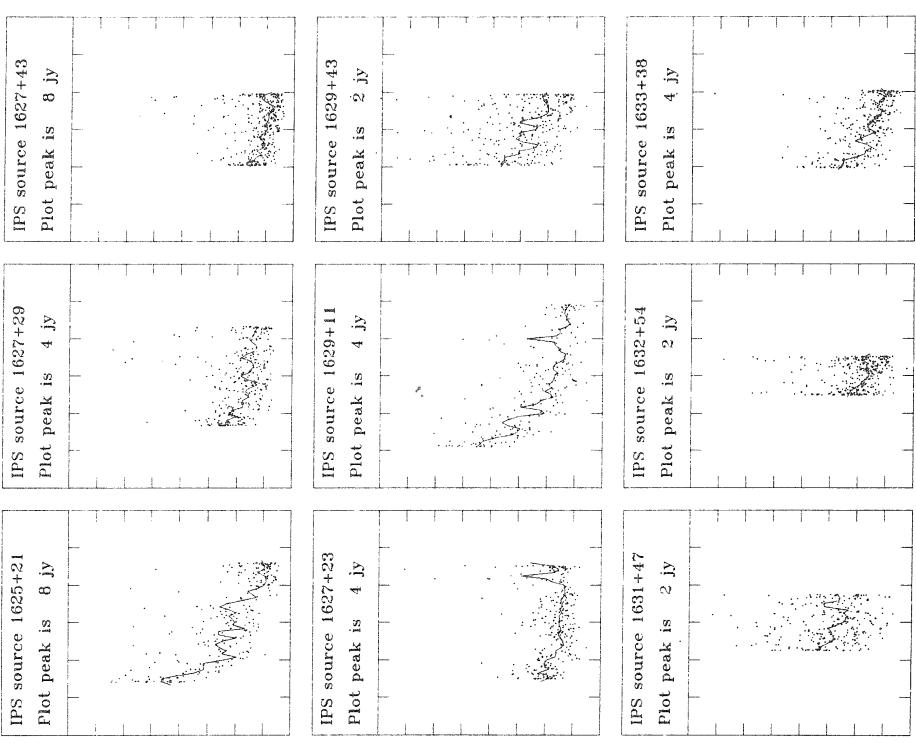
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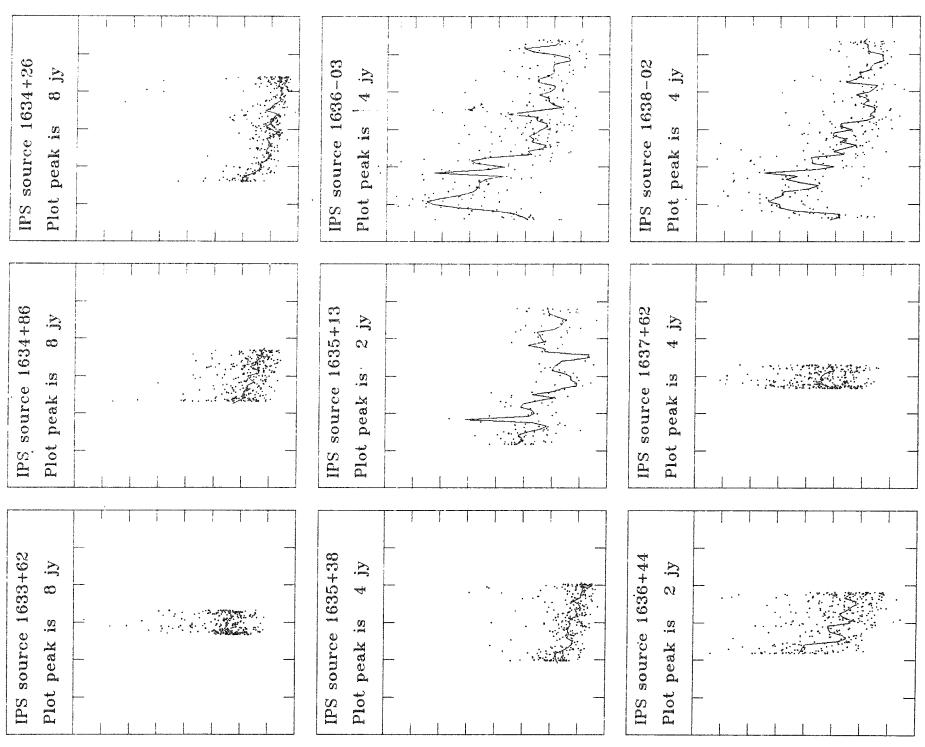
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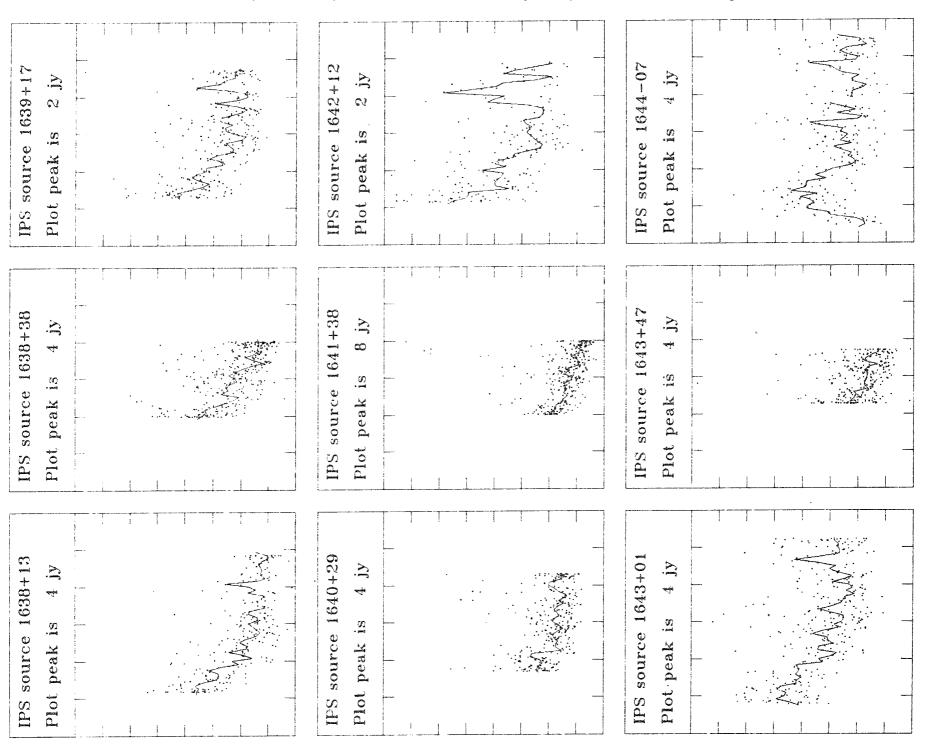
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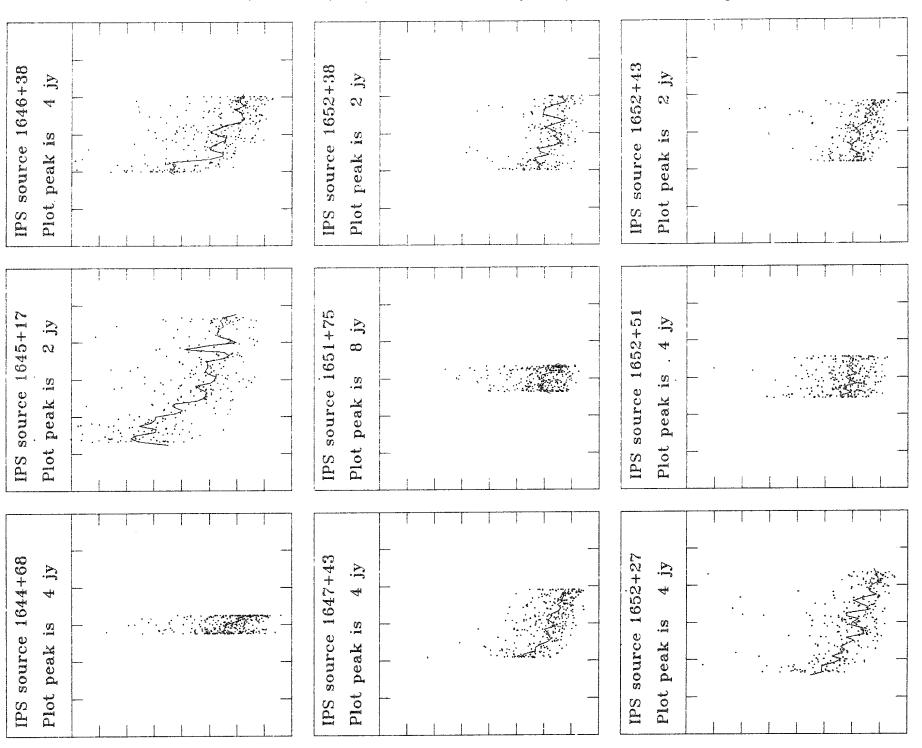
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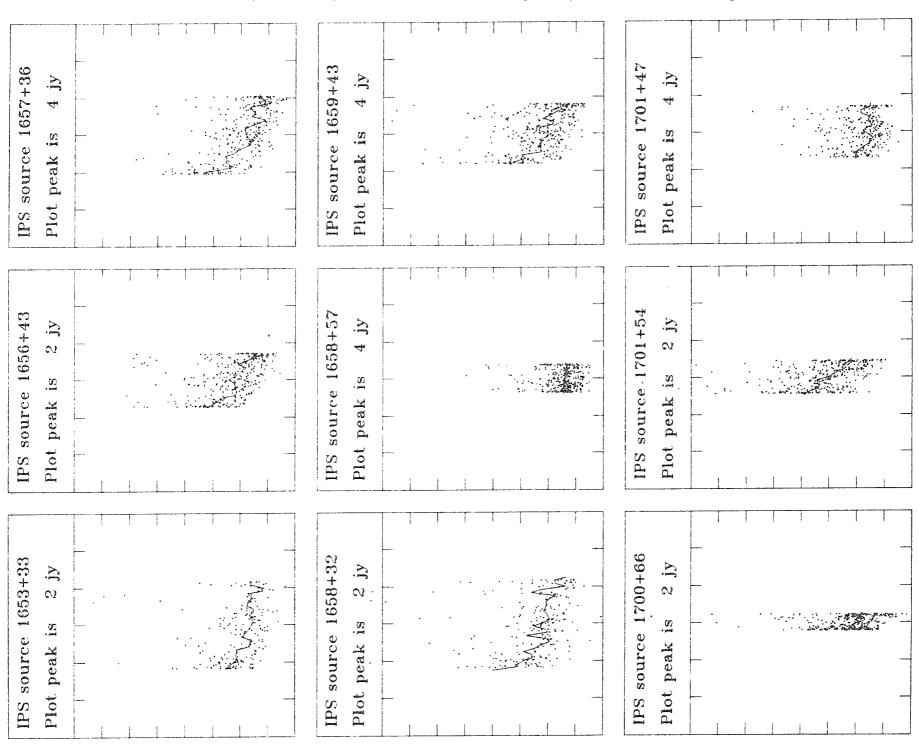
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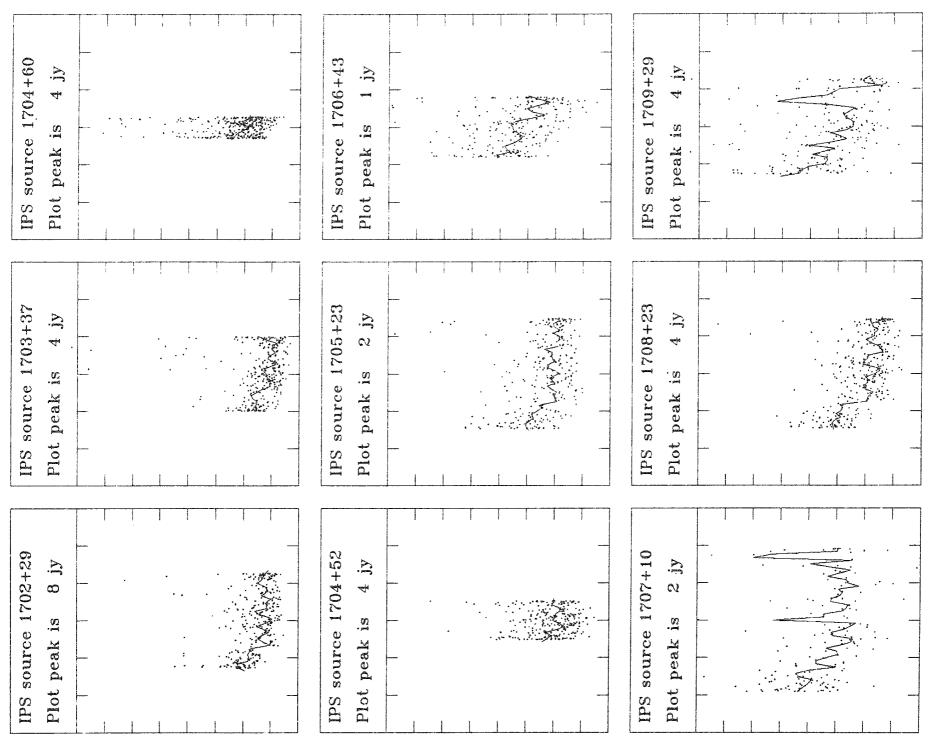
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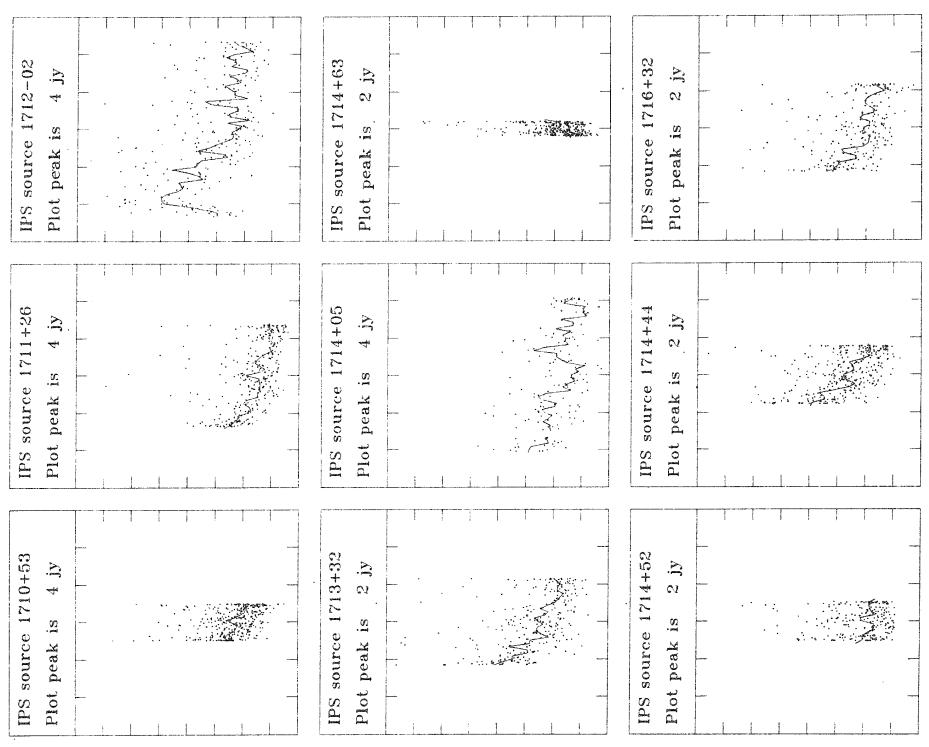
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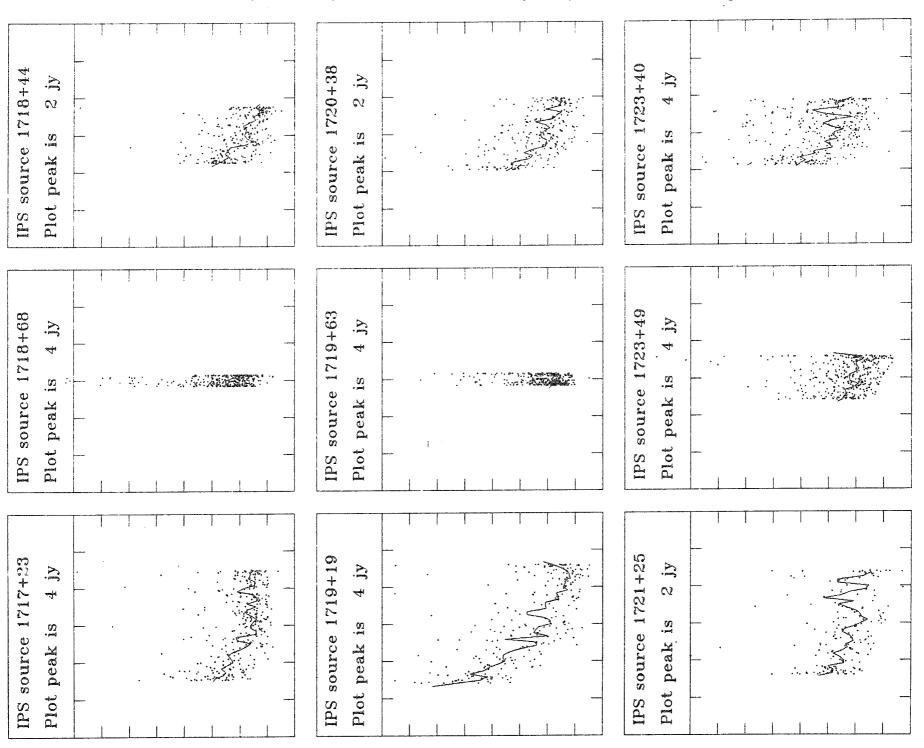
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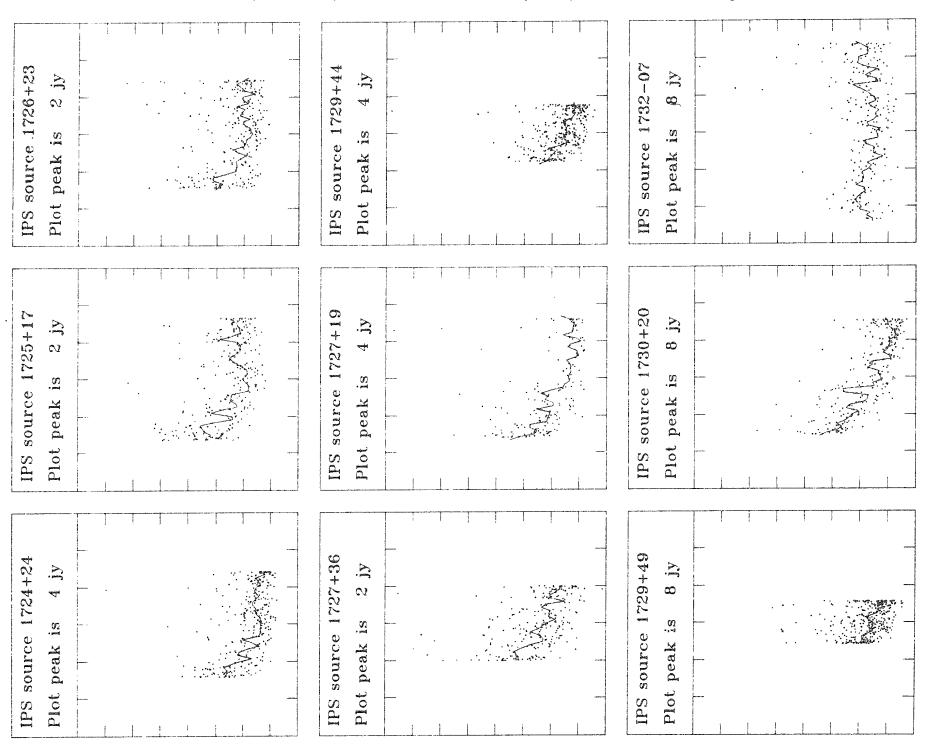
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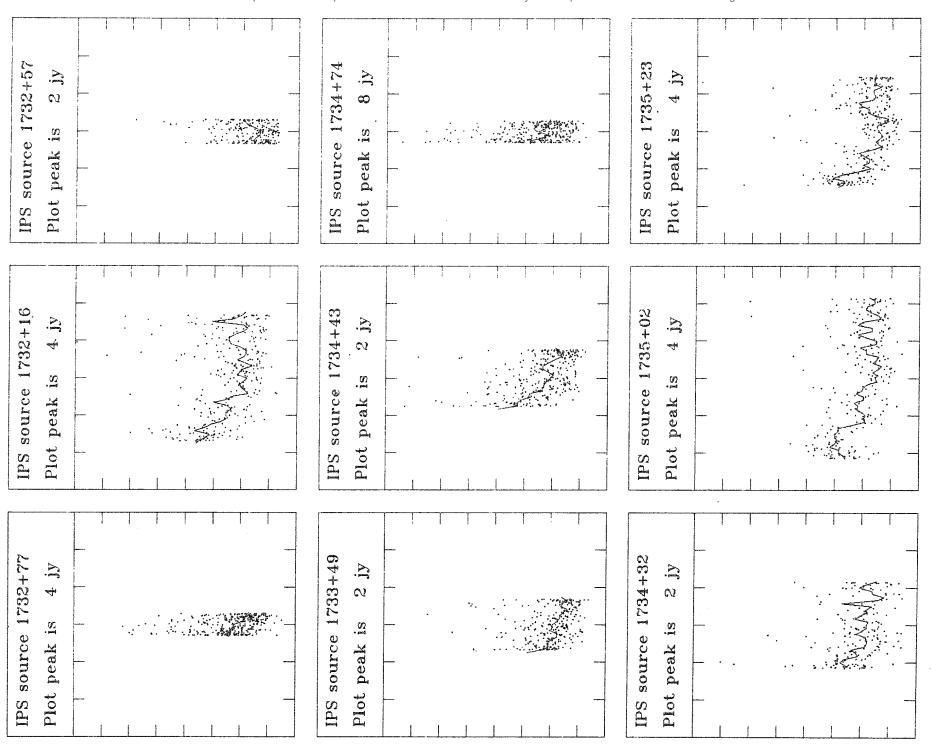
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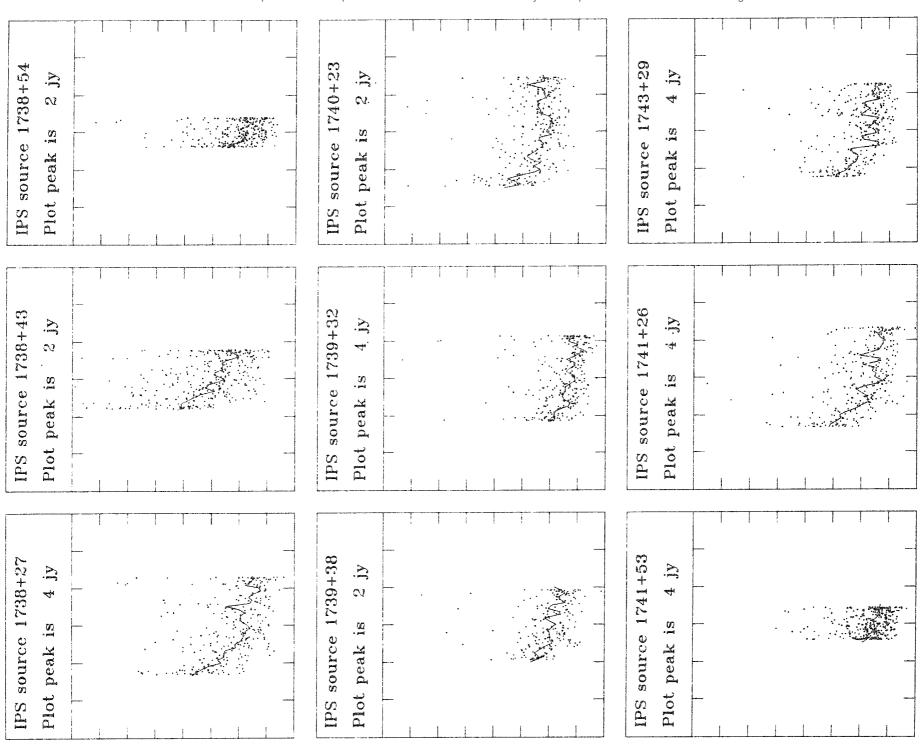
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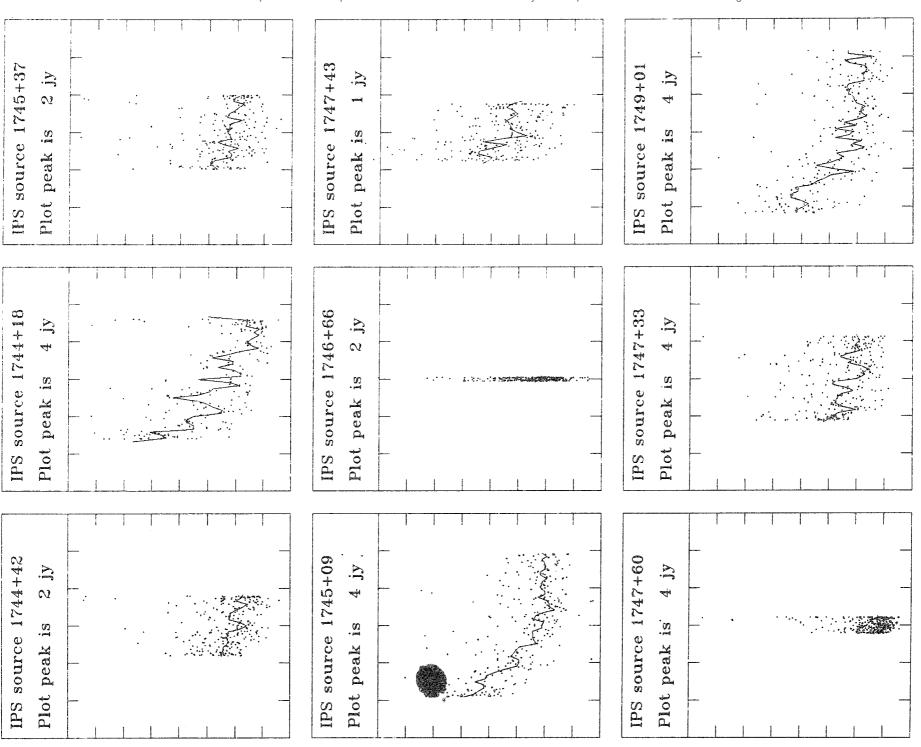
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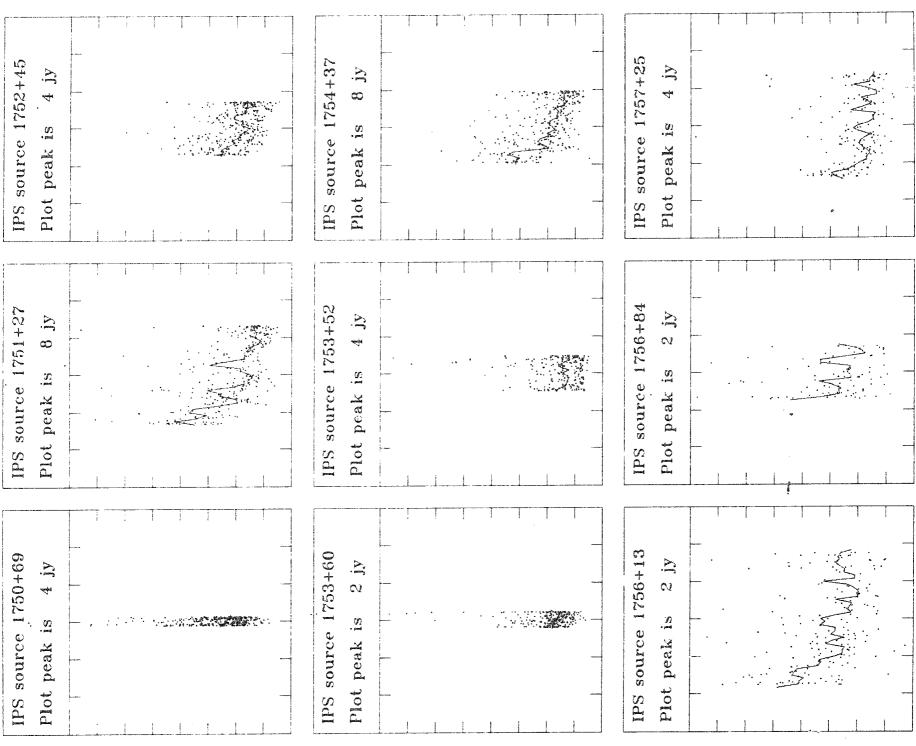
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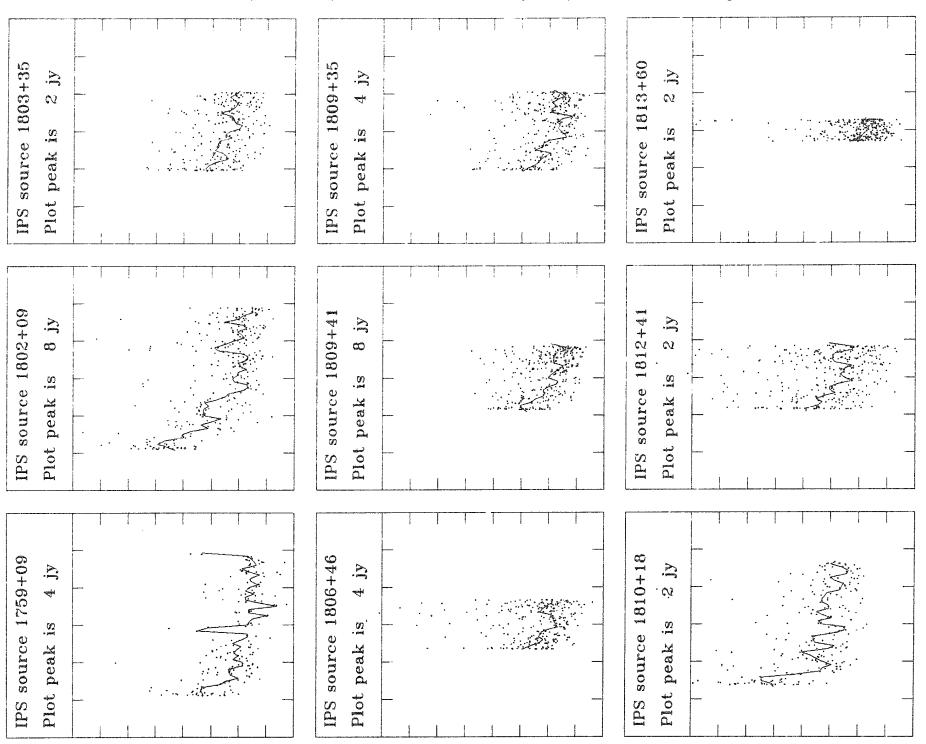
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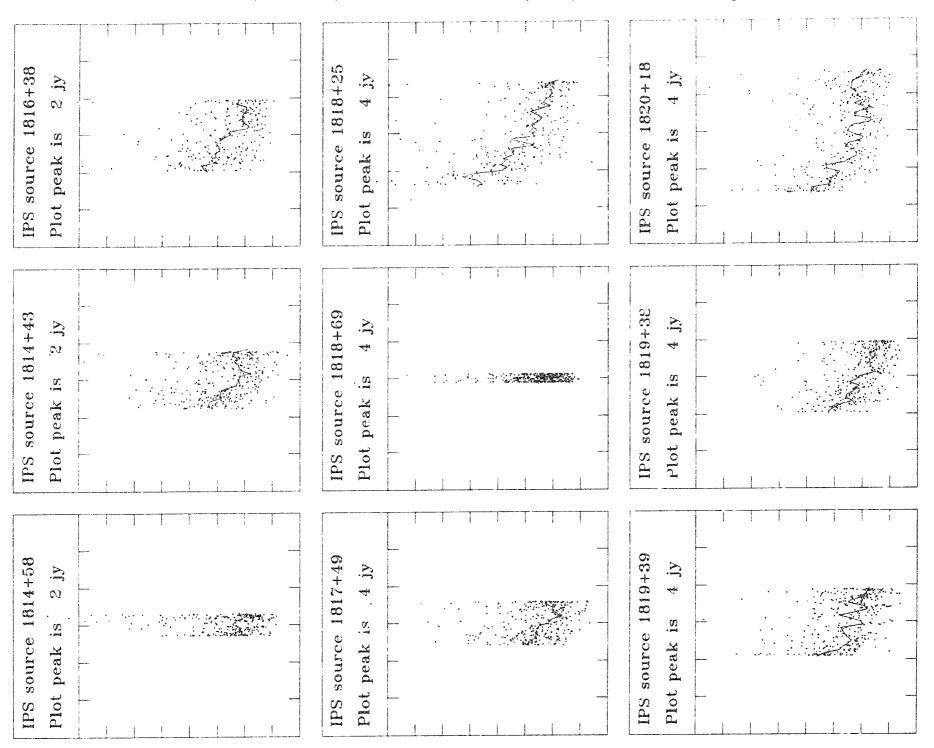
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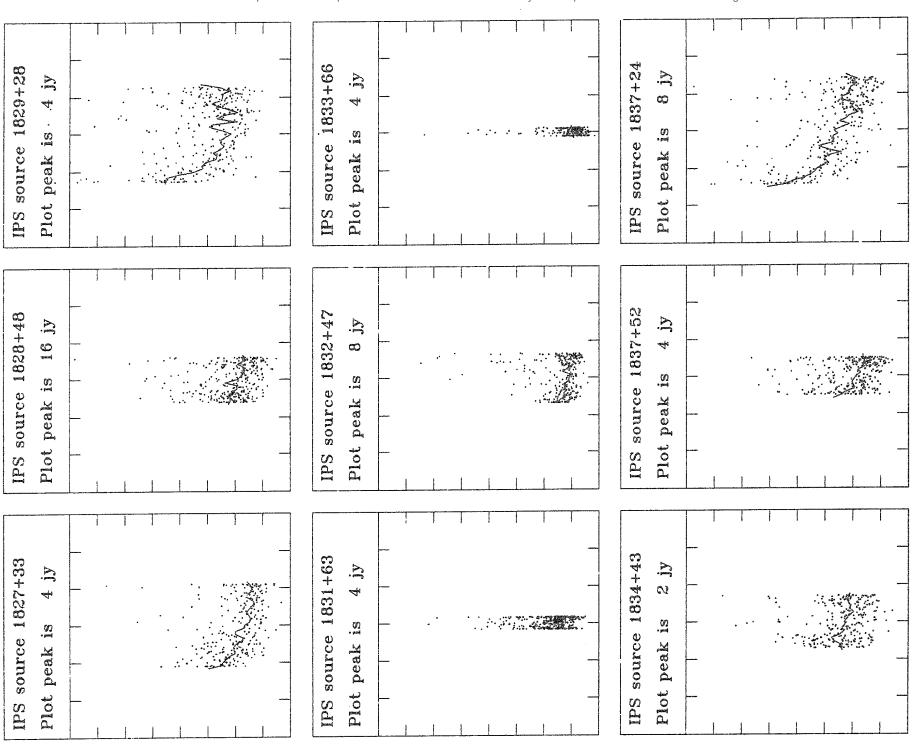


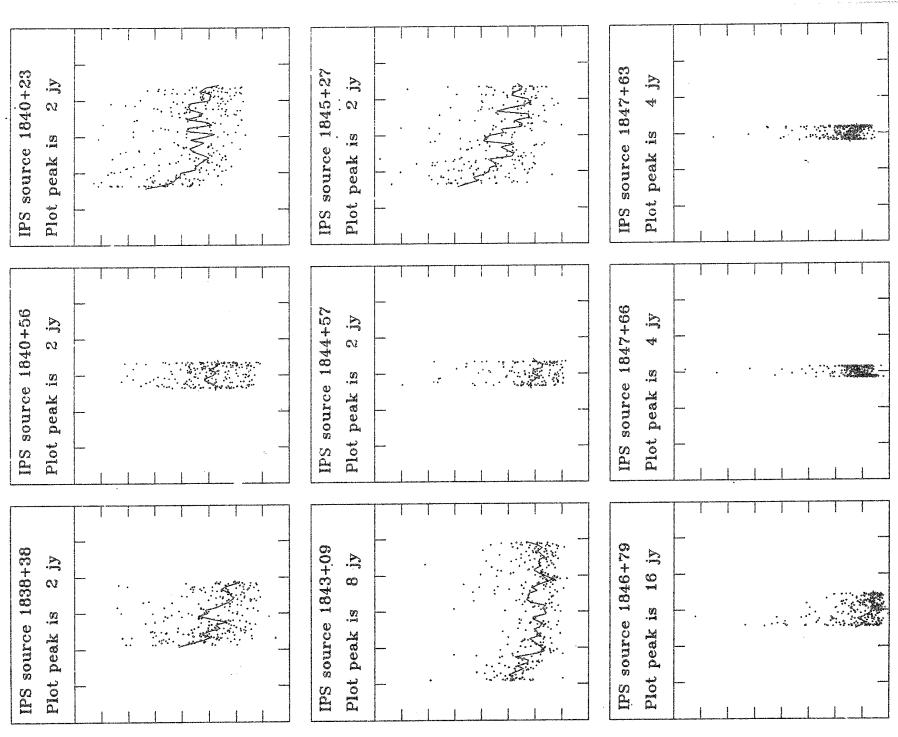
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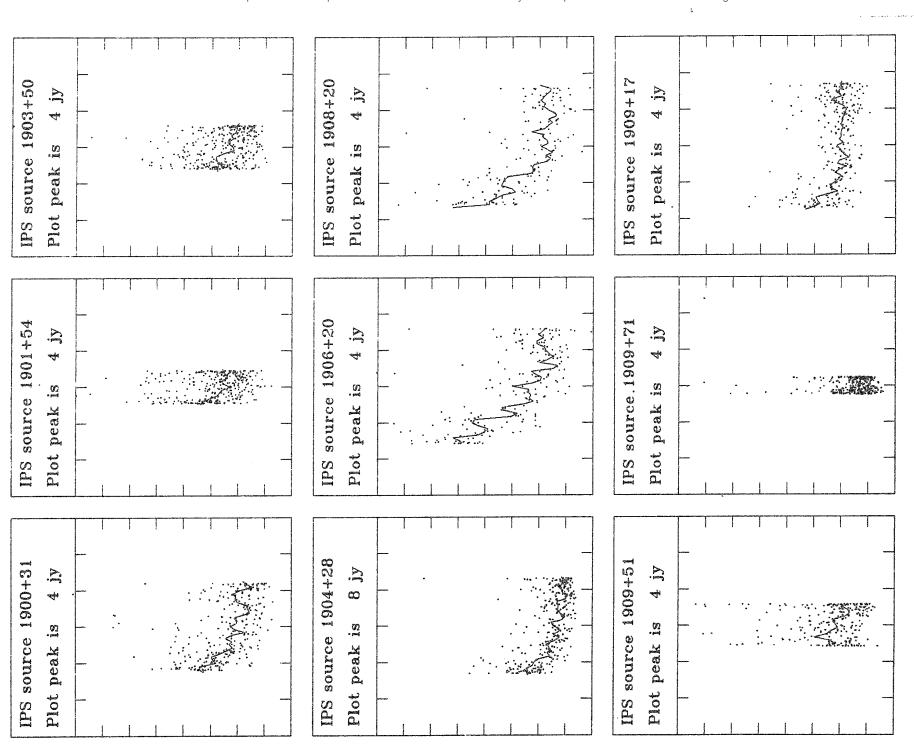
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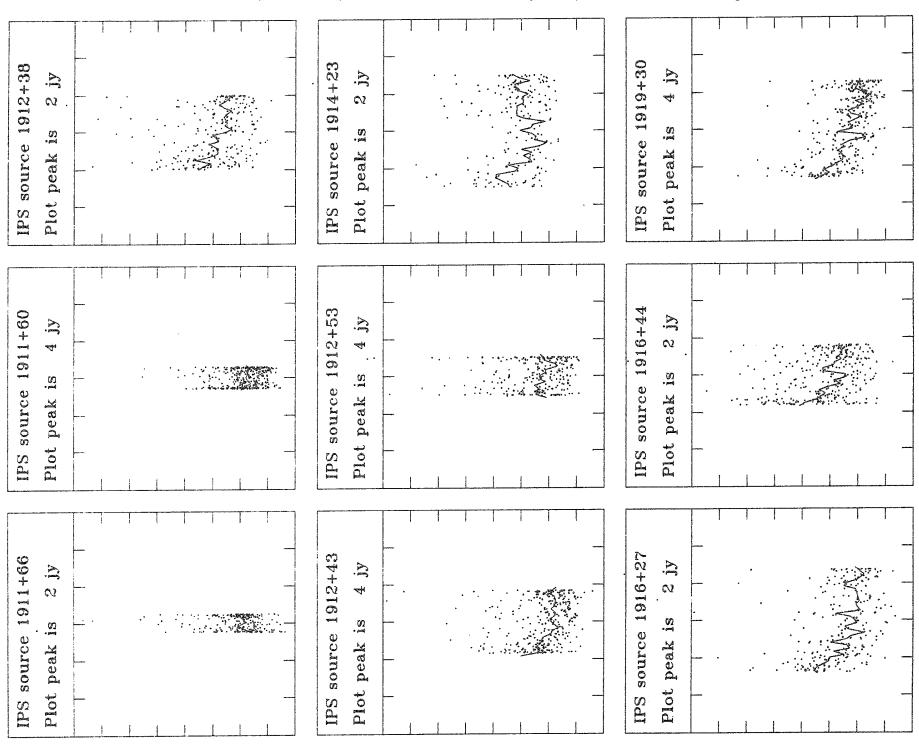




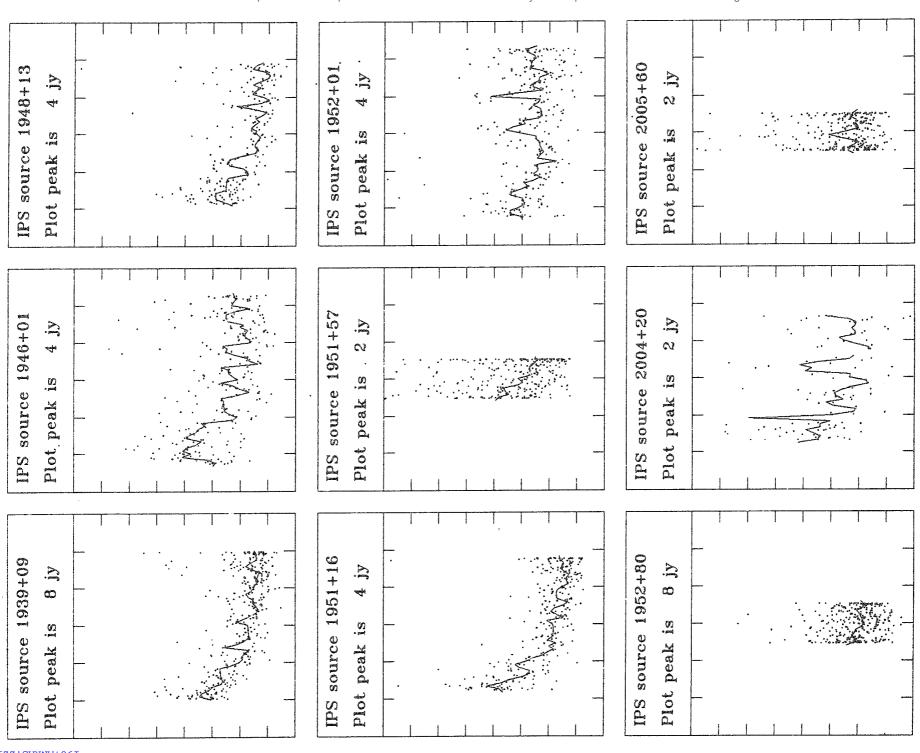
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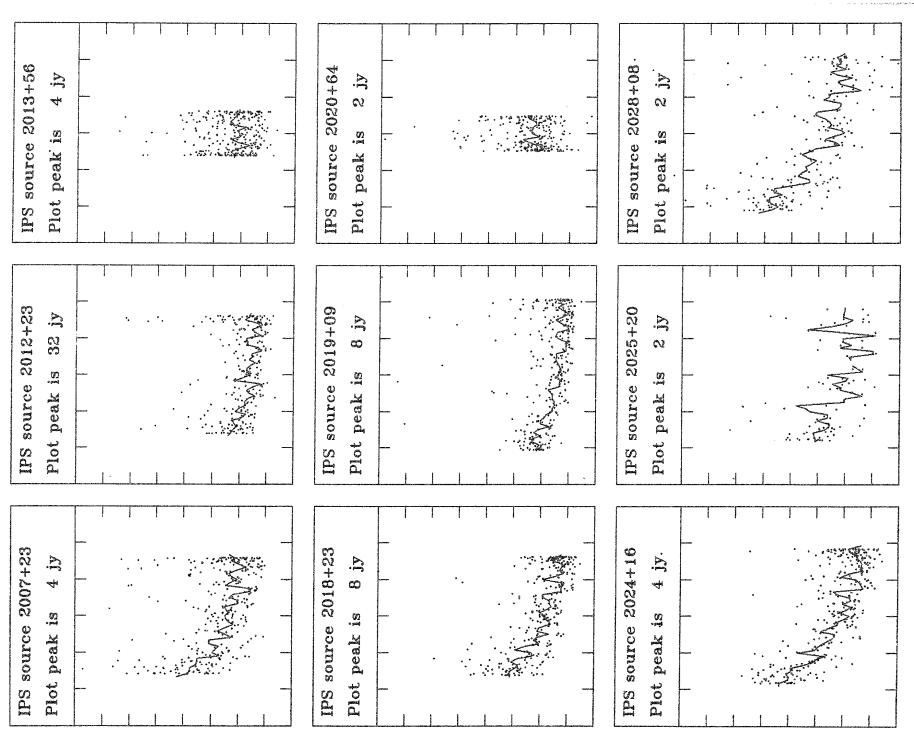


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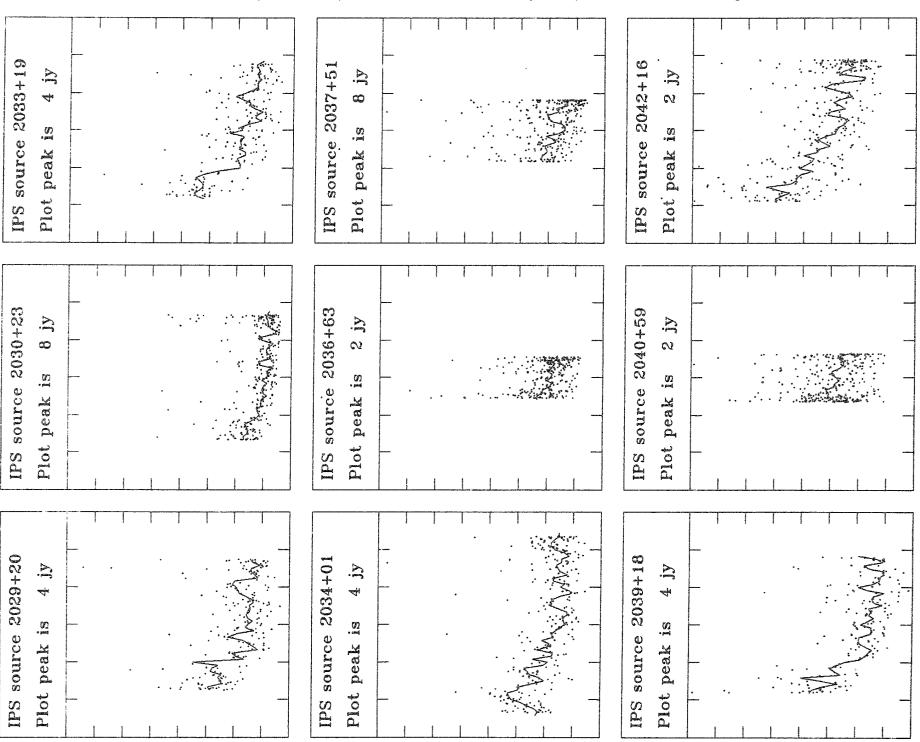


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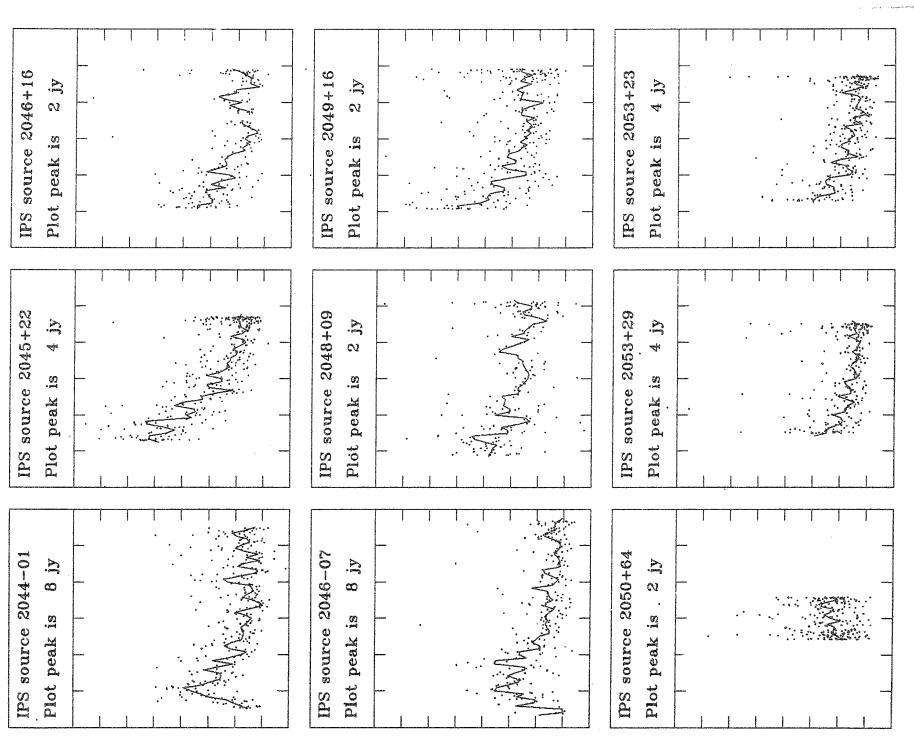




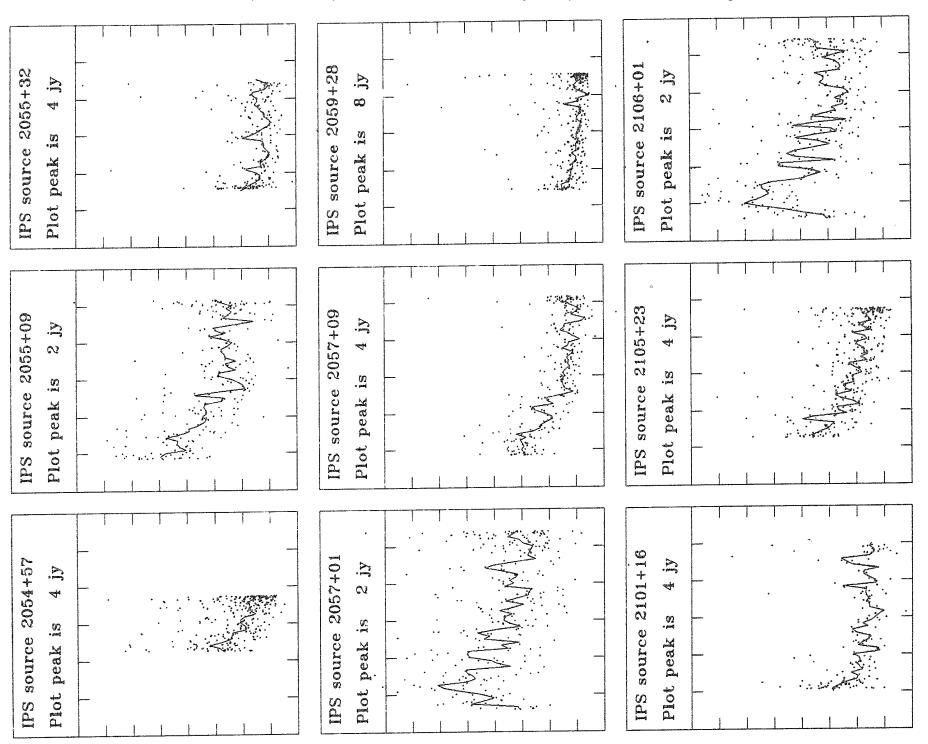
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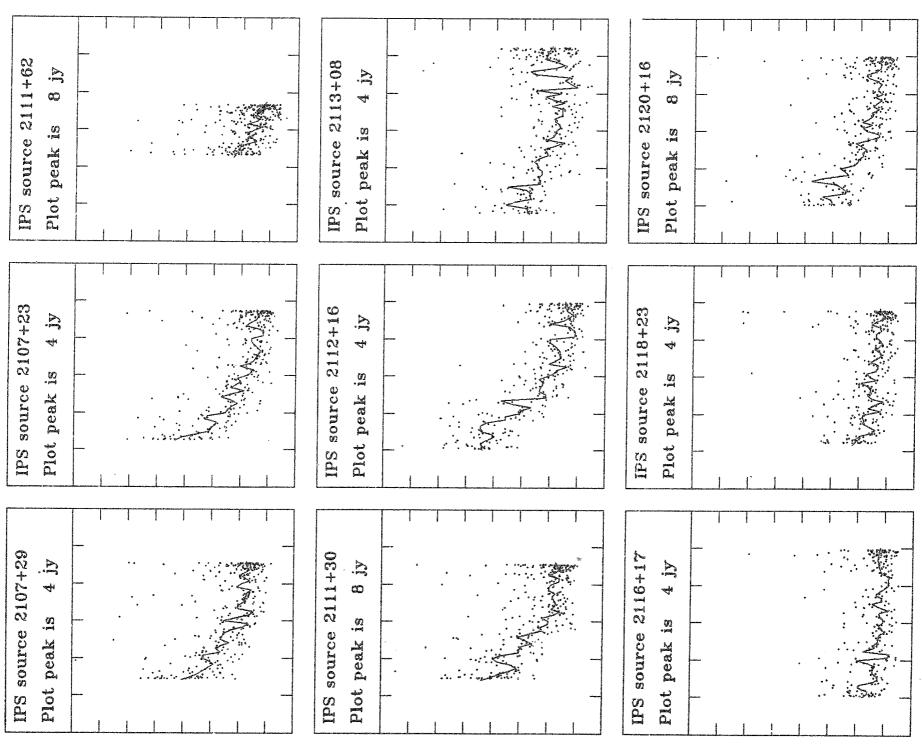
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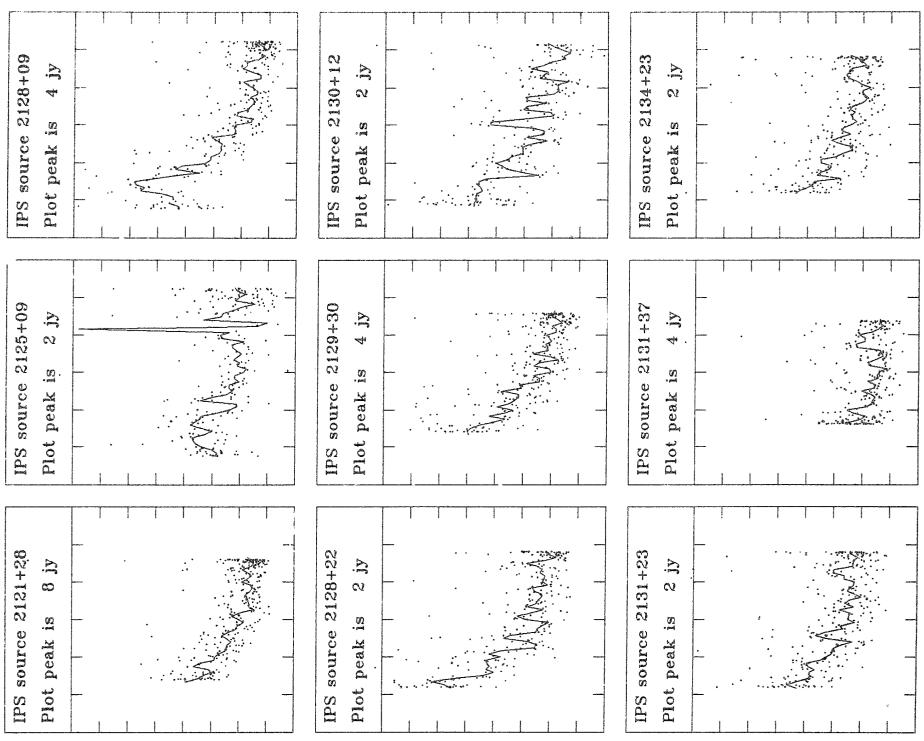
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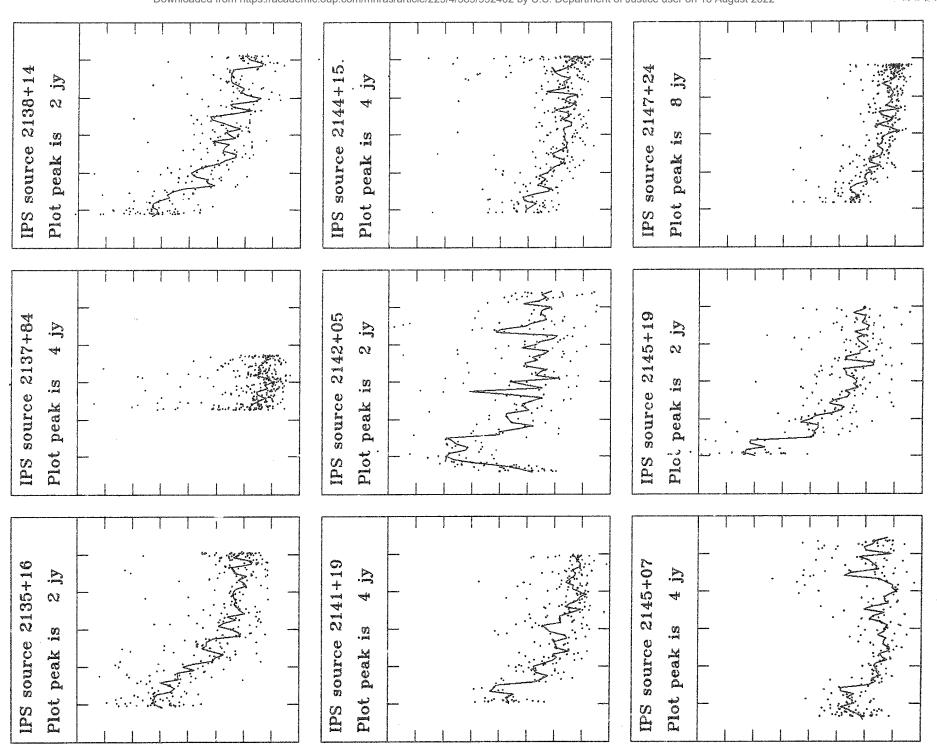
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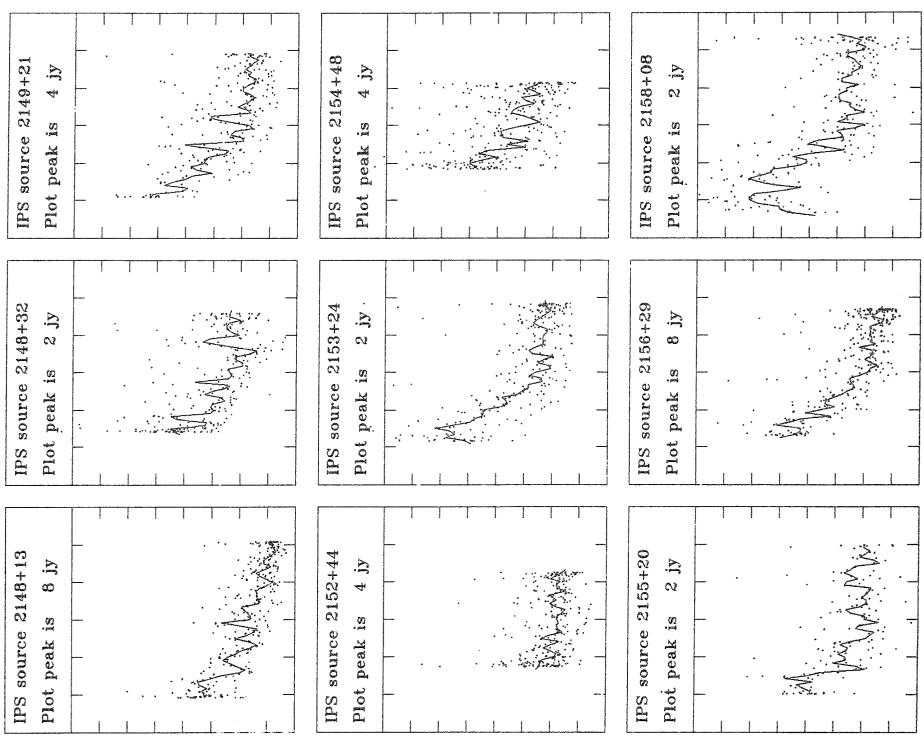


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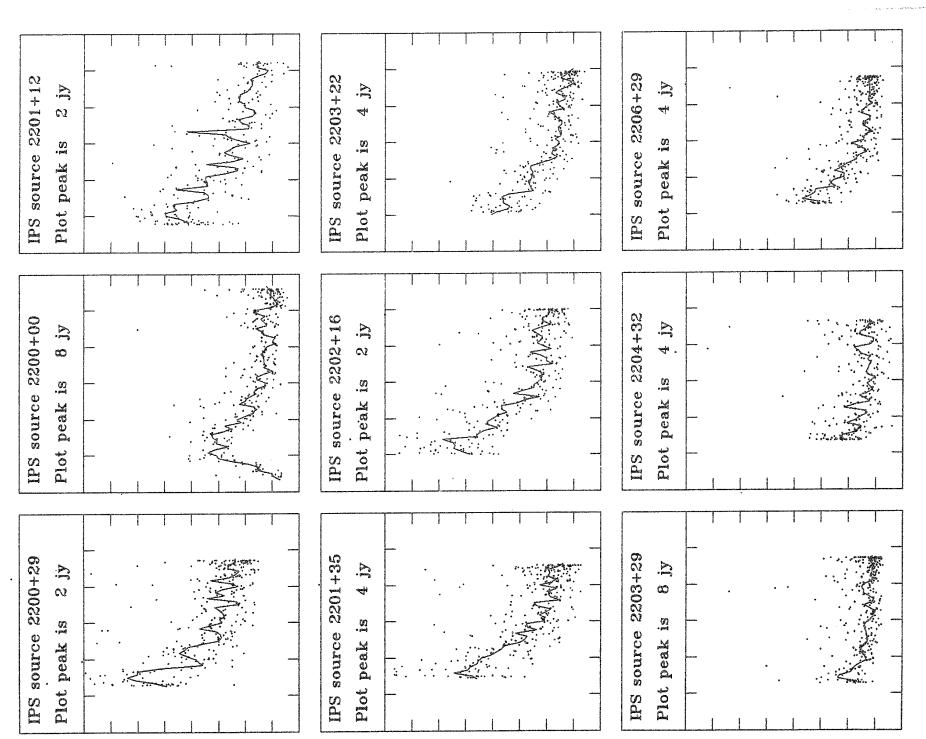


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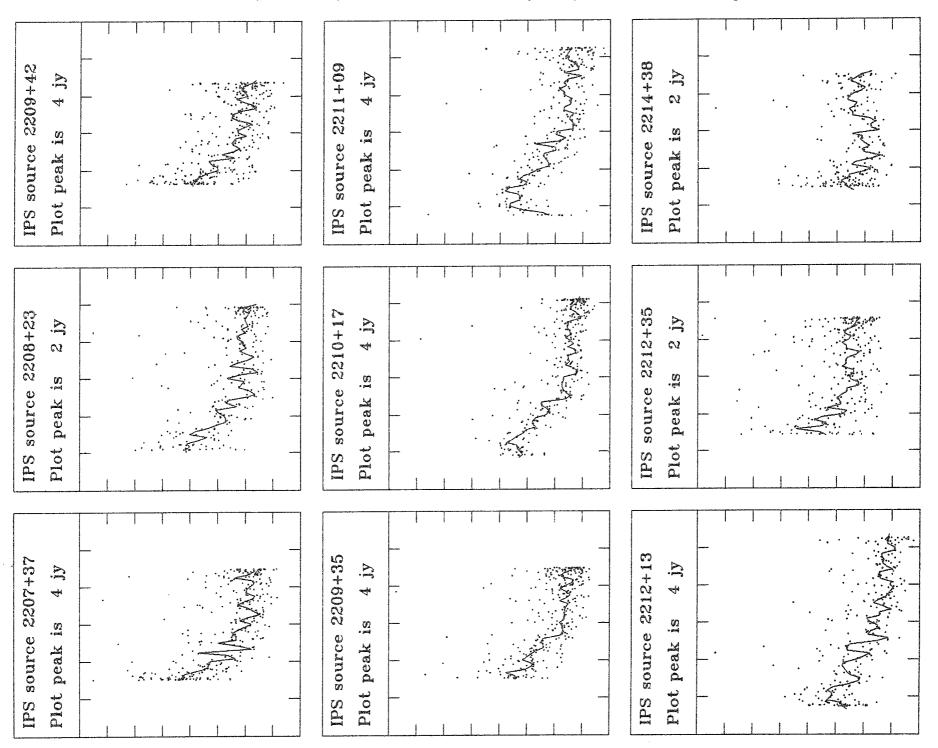




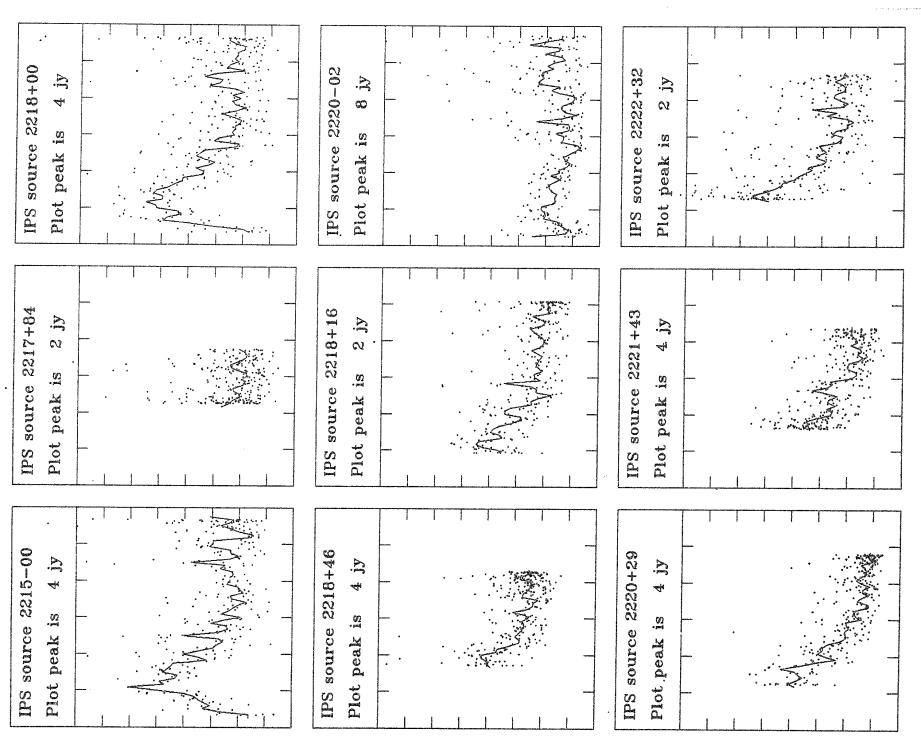
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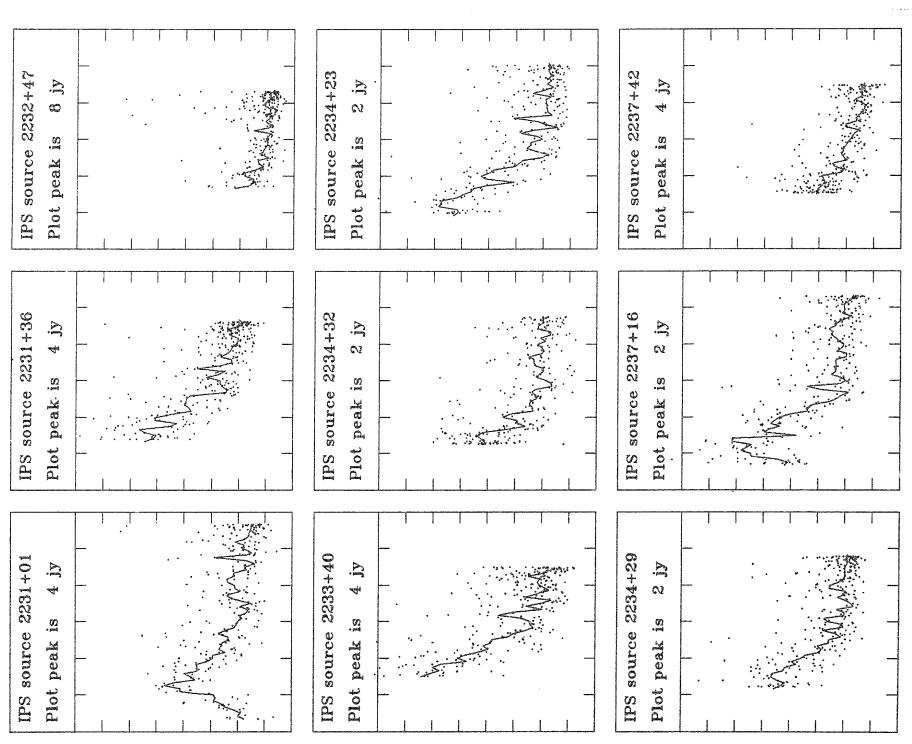


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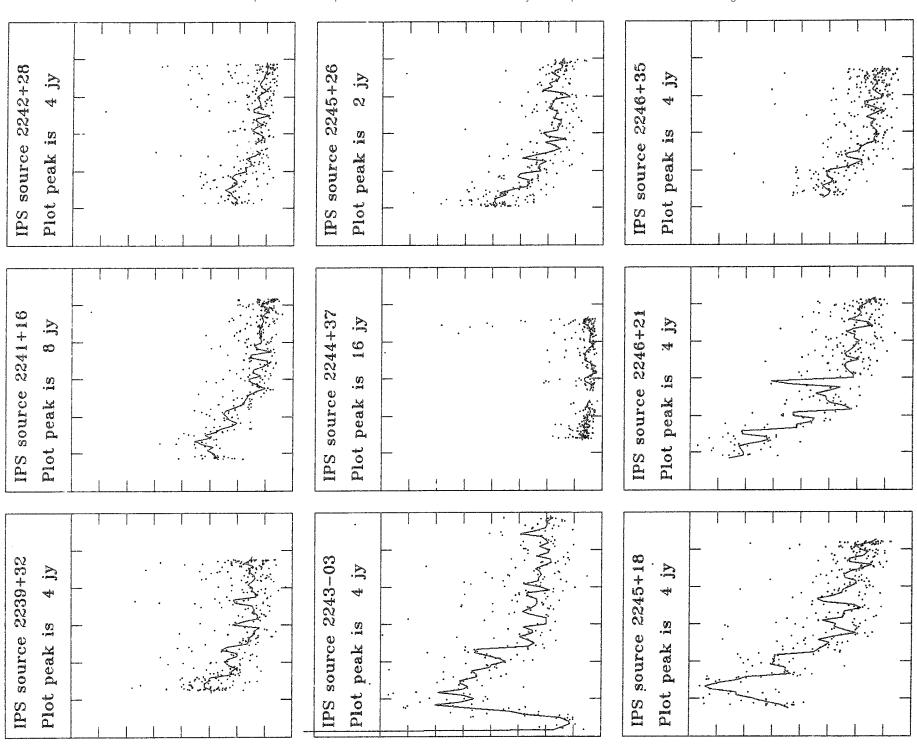


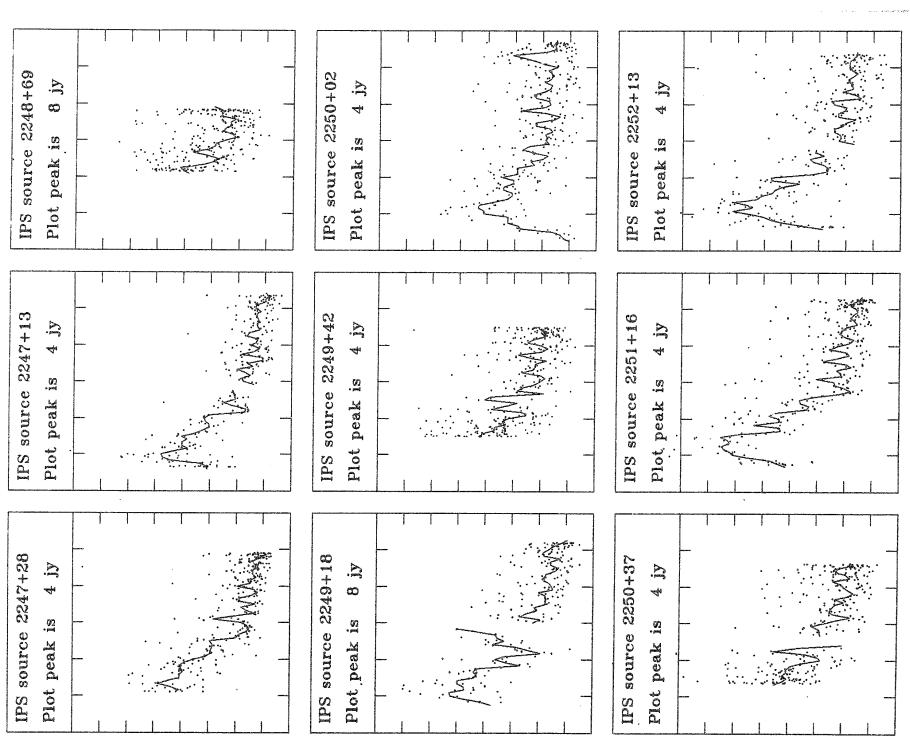
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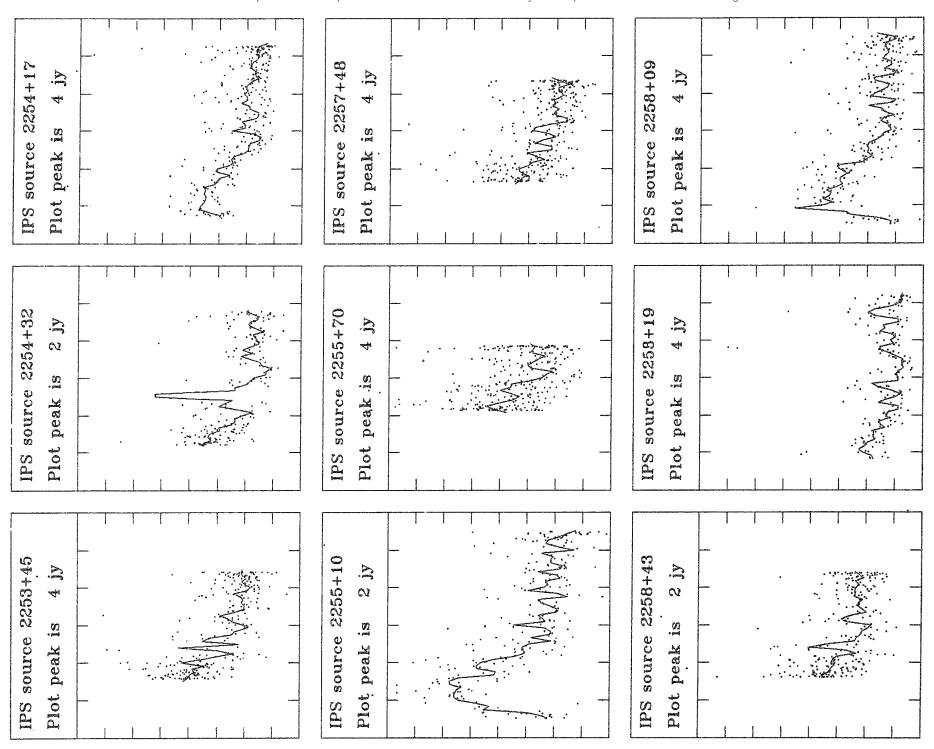
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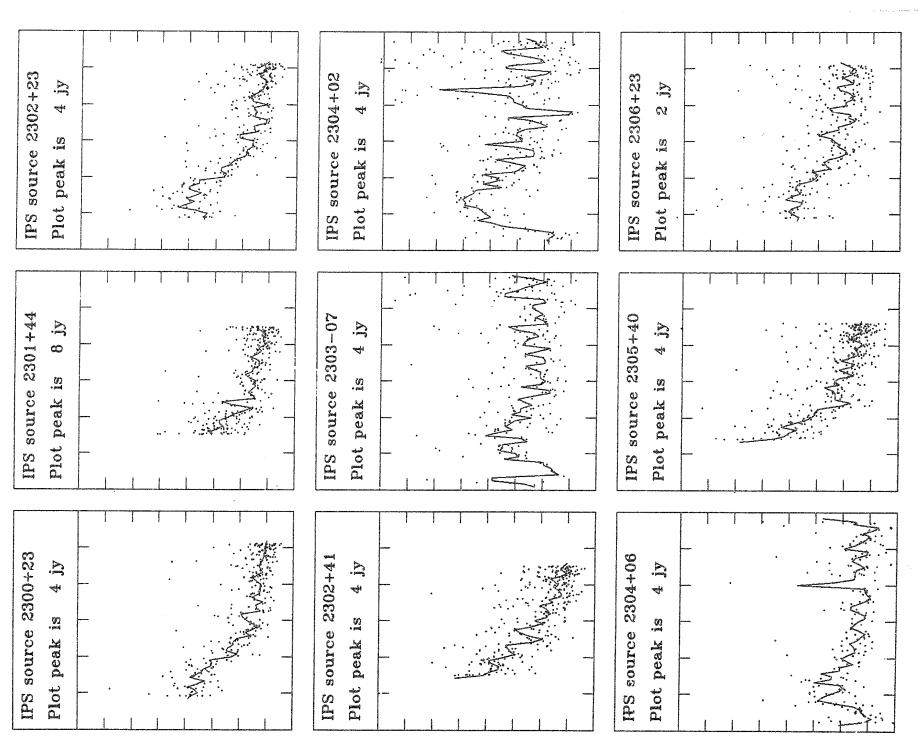
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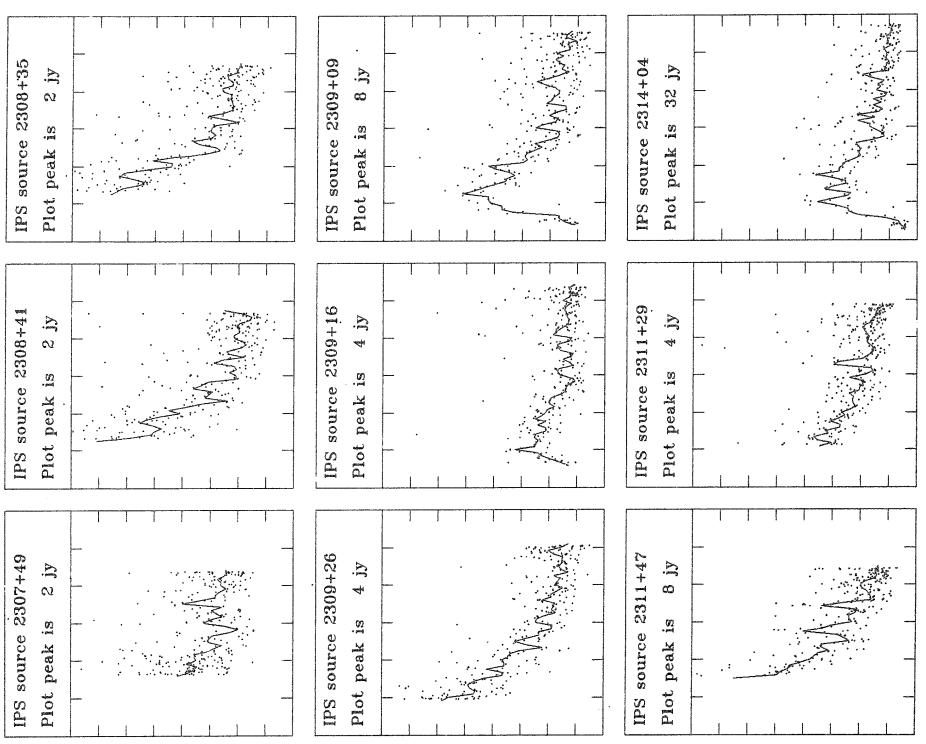




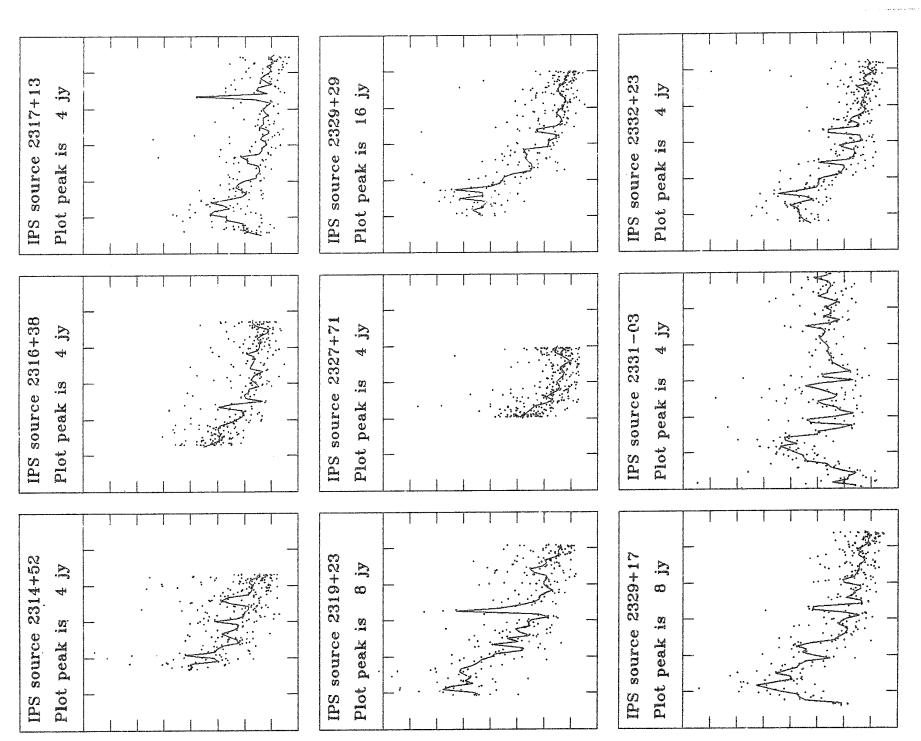
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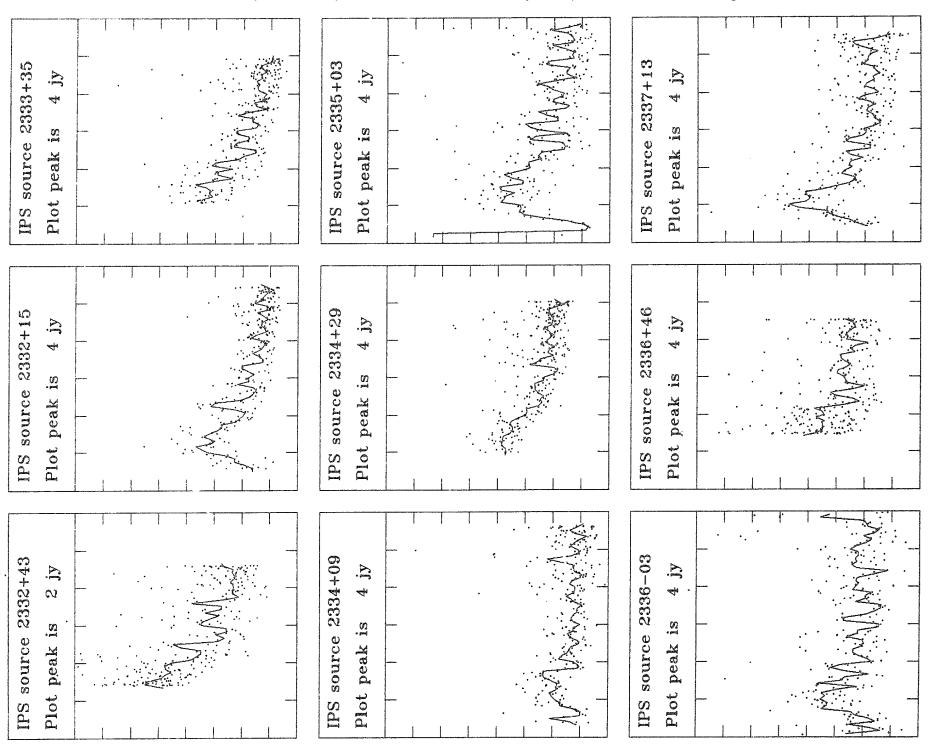
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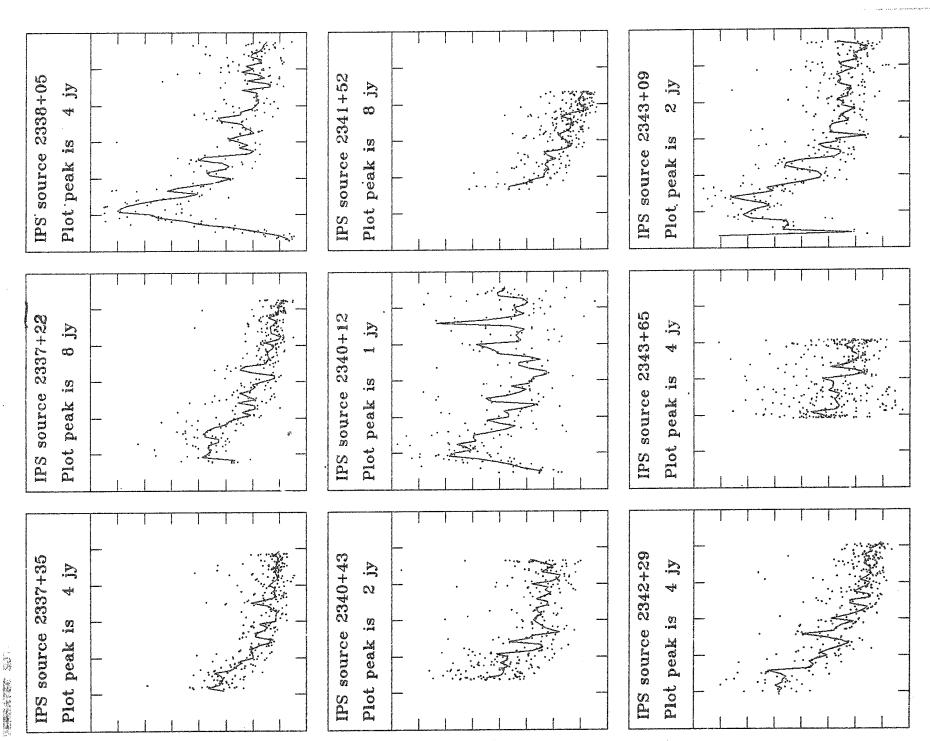
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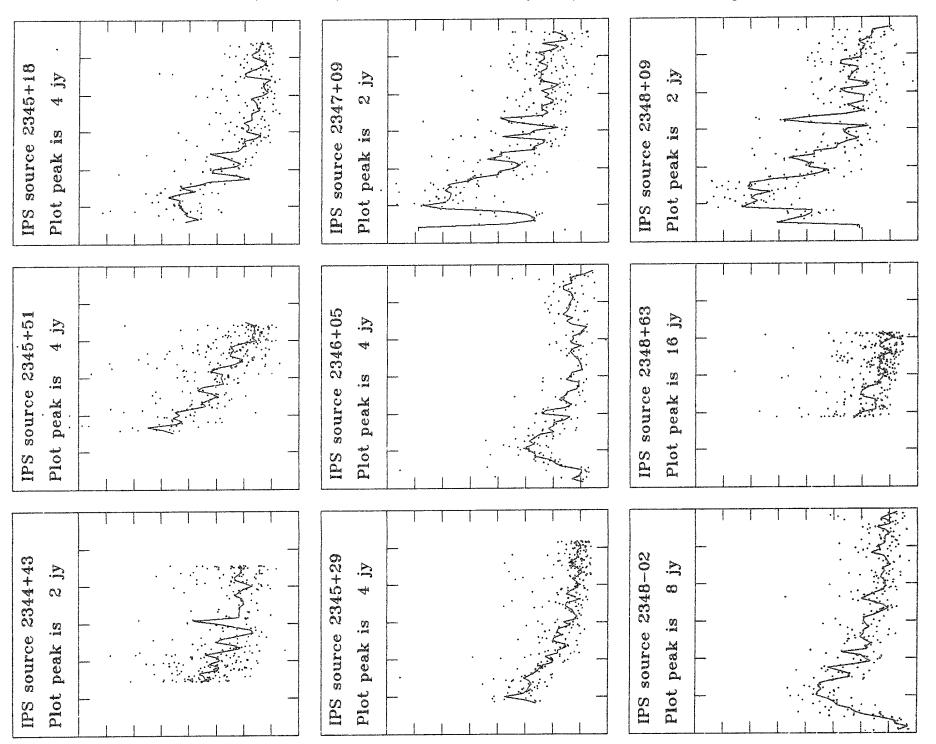
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