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THE EARTHQUAKE MECHANISMS OF THE BALKAN REGION

by

A.R. Ritsema

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## PREFACE

This is the final report on the study of

### The Earthquake Mechanisms of the Balkan Region

executed at the Royal Netherlands Meteorological Institute, at the request of UNESCO, and under contract no. 256.280 dated 6 January 1972, for the UNDP/UNESCO Project "Survey of the Seismicity of the Balkan Region".

The preliminary selection and treatment of basic data was performed to an important extent by Mr. G. Houtgast and other co-workers of the Geophysical Division of the Royal Netherlands Meteorological Institute. The Computer Department of the Institute took care of data sorting, listing and printing-out. The results are available on punched cards and on magnetic tape.

The work was directed by Dr. A.R. Ritsema, who is responsible for the interpretation of the data and results and for the writing of the report.

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January 1974

Dr. M.W.F. Schregardus  
Director in Chief

## A B S T R A C T

Compression and dilatation data of 702 earthquakes of the Balkan region have been investigated with a view on the determination of the focal mechanism. 256 shocks produced reasonably reliable solutions that can be used for an evaluation of the regional earthquake generating stress systems. The solutions were divided into four different groups:

- pressure type with reversed faults,
- tension type with normal faults;
- thrust type with thrust or vertical faults,
- transcurrent type with faults of the strike-slip kind.

Significant differences in distribution of these types with depth have been demonstrated: percentages of transcurrent and tension type earthquakes decrease with depth, those of pressure and thrust type increase with depth. For the region as a whole the direction of tectonic transport is in Northeast and Southwest azimuths.

Characteristics of the positions of stress axes in several sub-regions have been studied separately. Nearly always some sort of a pattern is clearly distinguishable. This shows that, although individual solutions may diverge widely in a given sub-region, for most of the solutions of a separate region a common base is available. This gives an indication of the position of the regional stress system.

From a mutual comparison of these stress fields in the region it is shown that the Balkan region can be divided into two parts each with its own stress regime:

1. The compressional stress regime stretches from the Alps in the North via the Dalmatian coast, Albania, Western and Southern Greece into the Aegean arc and up to the Southwestern tip of Anatolia. The deep earthquakes of the Aegean arc are included in this regime. Throughout the area the direction of compression generally is in Northeast - Southwest azimuths, in accordance with an interpretation as the zone of collision between the African and the European and Anatolian plates. The deep earthquakes of the Carpathian arc also belong to the regime.
2. The tensional regime comprises Western Anatolia, the Aegean basin including the inland side of the Aegean arc from Crete in the South through Greece, up to South Bulgaria in the North. This area is collapsing under tension.

Apparently the two regimes are rather independent from each other, but further study is needed for a more definite statement.

It is argued that the search for correlations of the individual solutions with the data of other geo-disciplines most fruitfully should be executed by local experts.

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## INTRODUCTION AND PRESENTATION OF THE MATERIAL

### 1. Towards a comprehensive Catalogue of solutions

The study is based on the polarity of P and PKP wave data. No S wave and surface waves have been considered. The solutions are presented in the Catalogue annex to the report.

The nucleus of the Catalogue is formed by the solutions of European and in the present context of Balkan earthquakes, compiled in the framework of the former ESC Working Group on Earthquake Mechanisms, presently the Sub-Commission on Earthquake Mechanism and Earthquake Prediction, and presented at the General Assemblies of the European Seismological Commission of the years 1966 and 1970. This first compilation was extended with the more recent data on Balkan earthquakes from literature. Before inclusion in the Catalogue all these and former solutions were once more critically reviewed.

Independently, a study was made of a series of 36 shocks of the region of the years 1969-1972, using NOAA Seismogram filmcopies of the WWNSS and data from seismograms of selected stations in the region itself.

Thirdly and lastly, a great number of Balkan earthquakes of the last 15 years was investigated with the help of the compression/dilatation data enlisted in station bulletins, the bulletins of the BCIS, the ISS and ISC (July 1970 inclusive), the USCGS, NOAA and USGS (July 1973 inclusive), and the station readings especially made in answer to requests to certain individual stations of which the location was crucial with respect to the particular solution of the earthquake.

### 2. Explanation of the Catalogue

Column:

1- 6: Date: year, month and day.

7-14: Time: hour, minute, second to one-tenth of a second. An asterisk following the time means that the presented solution is non-unique, and that other possible solutions are given in the Catalogue.

15-19: Latitude to one-hundredth of a degree North.

20-25: Longitude to one-hundredth of a degree East.

- 26-28: Region number according to Flinn-Engdahl (see figure 1). This division with rectilinear boundaries has been chosen because of the ease of this system with respect to machine operations.
- 29-31: Depth in kilometers. A 9 in column 29 means that for the solution it is assumed that the focus is situated within the earth's crust with a longitudinal wave velocity of 6.25 km/sec. If in column 29 there is no 9, a velocity of 8.2 km/sec is assumed for the longitudinal wave in the focal region, irrespective of the sometimes less than 33 km depth figure given in columns 30 and 31. For depths greater than 33 km the appropriate velocity at that depth is used.
- 32-33:  $m_B$  to one-tenth of a unit. From the year 1963 onwards the values are those of the USCGS, NOAA and USGS preliminary determinations. Other data are from different sources. Use has been made of a pre-print of the catalogue of Balkan earthquakes 1901-1970 by Karnik. Not in all cases the difference between the values of  $m_B$  and those of  $M_s$  is clearly defined.
- 35-36:  $M_s$  to one-tenth of a unit. For the years up to 1955 magnitude values of Gutenberg & Richter (1954) and Karnik (1969) have been used, for the years up to 1965 the values of Rothé (1971). For more recent years values are from different sources, see also remark at  $m_B$ .
- 38-40: Number of recording stations used for the epicenter determination by ISS for the years 1963 and earlier, by ISC for the years 1964-July 1970, and by NOAA, USGS for later years.
- 41-45: Orientation of the A-axis or direction of fault motion (see also C-axis). The first three columns give the azimuth North through East in degrees, the last two the downward plunge in degrees. An asterisk following the last column means that the particular orientation has a high degree of certitude.
- 46-50: Orientation of the B-axis or "null vector" or line of intersection of the two nodal planes for longitudinal waves. For explanation see A-axis.

51-55: Orientation of the C-axis or the direction perpendicular to the fault plane. For explanation see A-axis.

Note that the A- and C-axes cannot be distinguished from P/PKP polarity data alone. In the Catalogue, arbitrarily, the choice has been made such that always the plunge of the A-axis is smaller than that of the C-axis.

56-60: Orientation of the P-axis or direction of greatest compressive stress assuming a homogeneous fault rock (angles of 45° with both A- and C-axes). For explanation see A-axis.

61-65: Orientation of the T-axis or direction of least compressive or greatest tensional stress assuming a homogeneous fault rock. For explanation see A-axis.

66-67: Mechanism type, according to the following rules:

66: 0: P-type, the P-axis plunges at a smaller angle with the horizontal than the T-axis;

1: T-type, the T-axis plunges at a smaller angle with the horizontal than the P-axis;

2: --type, the plunge of both P- and T-axes is equal.

67: 0: dip-slip fault motion, reversed fault, the plunge of the P-axis is smaller than that of the A-axis,

1: dip-slip fault motion, normal fault, the plunge of the T-axis is smaller than that of the A-axis;

2: dip-slip fault motion, thrust fault or vertical fault motion, the plunge of the A-axis is smaller than that of both P- and T-axes;

3: strike-slip, right lateral transcurrent or dextral fault;

4: strike-slip, left lateral transcurrent or sinistral fault.

An asterisk following column 67 means that the mechanism type is certain although the position of the main axes is not always known with sufficient accuracy.

68-72: The first three columns give the number of consistent P and PKP wave data, the last two that of the inconsistent data. When only the last two columns are occupied this means that they give the total number of compression and/or dilatation data together, and that the actual numbers of consistent and inconsistent data are unknown to the present author. A 9 in column 68 means that only a data-plot has been found in literature but that no station list of data is known.

73: Quality of the solution, according to the following rules:

- A: certain, possible variation of individual main axes less than  $10^{\circ}$ ;
- B: reasonably good, at least one of the axes has been fixed with certainty (possible variation in position less than  $10^{\circ}$ ), the orientation of the other axes, however, may vary up to  $25^{\circ}$  without influencing greatly the number of consistent and inconsistent readings;
- C: tentative, possible variation in position of axes great without effecting the numbers of consistent and inconsistent data. The solution given, although the most likely, is certainly not the only possible one. Often only the mechanism type is fixed by the data;
- D: poor, or no solution at all.

Whenever in the text or figures solutions of C<sub>1</sub> quality are mentioned, it concerns those earthquakes of the C group that have at least 10 consistent initial motion data of P or PKP waves.

The Catalogue of solutions has been divided into three parts:

Part I gives the earthquakes with quality A and B solutions in order of chronology;

Part II gives the earthquakes with quality C and D solutions in chronological order, and

Part III gives the same data but now arranged in blocks of region numbers. The sequence in each block is at first the quality A and B shocks, followed by the quality C and D solutions, each group in chronological order.

RESULTS

3. The number and type of solutions

In total a number of 702 earthquakes of the region have been considered and taken up into the Catalogue. Of these a number of 86 or about 12% give a quality A solution. 170 earthquakes, or about 24%, produce a quality B solution. Together, the solutions of these earthquakes may be used for purposes of local and regional stress determinations.

For 218 additional earthquakes, or 31% of the total number, a solutions is given in the Catalogue based upon at least 10 consistent data. These are also indicated as quality C<sub>1</sub> solutions. The remaining part, 228 earthquakes or about 33% of the total number, is given only for the sake of completeness of the considered material. These latter two categories of solutions naturally are of limited value and only may be considered with all possible reserve and in conjunction with the solutions of other earthquakes of the same region.

4. Distribution in time

Table 1

Quality	A	B	C + D		totals
			C <sub>1</sub>	rest	
-1949	5	9	20	35	69
1950-1959	18	29	40	47	134
1960-1965	23	31	38	39	131
1966-1967	7	35	44	46	132
1968-1969	20	33	36	31	120
1970-1973,VII	13	33	40	30	116
Totals	86	170	218	228	702

Only about 10% of the considered shocks (69 out of 702) is of the years before 1950, and only around 5% of the quality A and B solutions (14 out of 256). In the periods 1950-1959 and 1960-1965 the average annual number of solutions of the quality A-B are respectively 5 and 9, and for the quality C-D respectively 9 and 13.

Since 1966 there is an annual average of 19 shocks with quality A-B solutions, and 30 shocks with a quality C-D solution. The percentage of earthquakes with a quality A or B solution over the total number of considered shocks for a given period seems to increase gradually from 20% in the pre-1950 years, via 35% in the period 1950-1959, to about 40% in later years.

5. Regional distribution of the solutions

Table 2

Region number	Number of earthquakes with a solution of quality				
	A	B	C + D		
			C <sub>1</sub>	rest	
358	12	10	14	13	Rumania
359					Bulgaria
363		1	2		Greece-Bulgaria border
364	7	21	26	38	Greece
365	5	9	13	13	Aegean Sea
366A	4	12	9	9	Turkey > 39½°N
366B	9	19	18	17	Turkey 38-39½°N
366C	7	11	9	12	Turkey < 38°N
368	3	14	15	18	Southern Greece
369	13	18	25	22	Dodecanese Isls.
370	10	20	31	37	Crete
371	1	2	7	7	Eastern Mediterranean
382		1	2	3	Adriatic Sea
383	4	11	8	13	Yugoslavia
391	1	6	14	7	Albania
392	4		10	1	Greece-Albania border
399	5	5	2	7	Ionian Sea
400	1	7	6	9	Mediterranean Sea
545	1	1	1		Northern Italy
546		1	5	2	Austria
549			1		Hungary
Total	702	86	170	218	Balkan region

Completeness and balance in the regional distribution, as shown in Table 2, has not yet been reached. Some regions are over-represented by the aftershocks of an heavy earthquake in this period as for example regions 366B, 364 and 369, or by the occurrence of many deep shocks to which extra attention was paid, such as region 358. Other regions such as 359 and 363 are under-represented by a lack of sufficiently large earthquakes in the period.

#### 6. Distribution of earthquake mechanism types

Table 3

	compressional				tensional				neutral			
Mechanism type	00	02	03	04	11	12	13	14	22	23	24	Total
Numbers	54	33	18	15	51	29	19	13	11	7	6	256

The quality A and B solutions (Table 3) are symmetrically distributed with respect to the character of the main horizontal stress, the numbers of each corresponding compressional and tensional mechanism type are about equal. The different mechanism types are illustrated in the figure 2.

The material also has been divided into groups of reversed fault earthquakes (mechanism type 00), normal fault earthquakes (mechanism type 11), thrust fault earthquakes (mechanism types 02, 12 and 22), and transcurrent fault earthquakes (mechanism types 03, 04, 13, 14, 23 and 24). It appears that there are about 20% of the first two types earthquakes each, and about 30% of the latter two earthquake types each.

7. Type distribution in depth

Table 4

	P-type thrust	T-type transcurrent	totals	
crust (9)	13	25	39	57
sub-crust < 60 km	18	27	11	18
depth ≥ 60 km	23	21	1	3
<b>totals</b>	<b>54</b>	<b>73</b>	<b>51</b>	<b>256</b>

A conspicuous differentiation of mechanism types in depth seems to be valid (see figure 3). Transcurrent fault motions are the most common in crust earthquakes (about 42%). In depth they rapidly decrease in number. Tensional type earthquakes are three times more common in the crust than pressure type earthquakes. At depth this relation is just reversed with an overwhelming majority of P-type earthquakes. The number of thrust earthquakes is about equal in the three different depth ranges of Table 4, but the percentage is steadily increasing from 19% in the crust to 44% at depths greater than 60 km. More than 90% of the deepest earthquakes are of the P- and thrust type together, whereas in crustal earthquakes only 28% is of these types. The sub-crustal shocks shallower than 60 km are clearly intermediate between these two groups with 36% of the thrust type and 34, 16 and 34% of P-, T- and transcurrent type earthquakes respectively.

8. Type distribution in classes of magnitude

The earthquakes were divided into magnitude groups  $m_B$  to investigate the effect of magnitude on earthquake mechanism type. For the earthquakes for which only an  $M_s$  value is given a conversion factor was used to make an estimate of the equivalent  $m_B$  value. The relation

$$M_s = m_B + 0.6$$

was used, it is a good first approximation of the data for which both  $m_B$  and  $M_s$  are available.

Table 5

	P-type thrust	T-type transcurrent	totals
$m_B \geq 6$	4	4	10
$5\frac{1}{2} - 6$	7	16	14
$5 - 5\frac{1}{2}$	17	27	31
< 5	26	26	23
<b>totals</b>	<b>54</b>	<b>73</b>	<b>256</b>

The percentage of transcurrent shocks decreases in the lower magnitude groups, which is valid for all depth levels. There is also a tendency for increasing percentages of P-type mechanisms and decreasing percentages of T-type earthquakes with decreasing magnitude (see figure 4). The differences, however, are so slight that the data cannot be considered to be in favour of any supposed relationship between the magnitude of the shock and the mechanism type.

### STRESS PATTERNS

#### 9. General insight in the overall stress directions

The quality A and B solutions were divided into four groups:

- a. the P-type with the P-axis more or less horizontal, 00;
- b. the thrust type with the A-axis more or less horizontal, 02, 12 and 22;
- c. the T-type with the T-axis more or less horizontal, 11;
- d. the transcurrent type with both P- and T-axes about horizontal, 03, 04, 13, 14, 23 and 24.

For each of these groups a frequency diagram of the azimuth of the main horizontal axis (axes) was calculated. The  $10^{\circ}$  interval values were smoothed over an azimuth interval of  $30^{\circ}$  and plotted in the figures 5-8.

The P-axes of the 54 reversed fault earthquakes (figure 5) have a pronounced maximum around  $N40^{\circ}E$  and a secondary maximum in the about  $N120^{\circ}E$  direction. The major maximum for the greater part originates from the southwestern edge between the Aegean arc - Greece included - and the Ionian basin; the secondary maximum seems to be associated with the transcurrent motions of dextral kind such as occur in the about East-West directed North Anatolian fault zone.

The T-axes of the 51 normal fault earthquakes (figure 6) have a pronounced maximum in the about  $N15^{\circ}E$  azimuth. It seems to be valid all through the region from Northwestern Greece to the Aegean Sea and well within the Anatolian part of Turkey.

The thrust motion direction (A-axis) of the 73 thrust (or vertical block motion) type earthquakes (figure 7) occur broadly in Northeast - Southwest azimuths, the minimum in the about  $N115^{\circ}E$  direction is the more conspicuous. The broad maximum consists of two sub-maxima in directions of about  $N15^{\circ}E$  and  $N70^{\circ}E$  respectively. The maxima for the most important part are associated with under-thrusting motions of the Ionian Sea sector under the Aegean arc.

The azimuths of the P- and T-axes of the 78 earthquakes with a transcurrent fault solution (figure 8) are distributed rather evenly in all directions. There is a certainly not pronounced maximum of P directions in an azimuth of about  $N105^{\circ}E$ , and a

corresponding maximum of the T-axes in an about  $N15^{\circ}E$  azimuth. These slight predominances are caused by the consistently dextral fault motions in the region of the North Anatolian fault zone.

From these four data-sets it can be concluded that in general the direction of tectonic transport in the region has an orientation in the Northeast - Southwest or/and Southwest - Northeast azimuths. For more details the data of the whole area have to be divided into regional sub-groups (next par.).

In figure 9 the location of the earthquakes with quality A and B solutions are given. P-, T- and =-types have been discriminated. P-types (horizontal pressures) occur preferably at the Southwest border of the seismic field, and T-types (horizontal tensions) within the area.

#### 10. Regional stress patterns

For a determination of the regional orientation of stresses use has been made of composite plots of the P- and T-axes of the earthquakes of certain separate seismic regions within the area.

a. Carpathian arc, deep shocks only, region no. 358, figure 10.

25 P-axes out of the 31 considered earthquakes deeper than 60 km have an orientation within a cone of  $45^{\circ}$  around the direction  $N270^{\circ}E$ , dipping  $5^{\circ}$ , and only 1 T-axis is situated within the same cone. 28 of the available 31 T-axes fall within the  $45^{\circ}$  cone around the direction  $N90^{\circ}E$ ,  $85^{\circ}$ , and only 3 P-axes have a similar orientation. It is clear that in this region a vertical extension of the deep earthquake zone is prevalent, combined with an about East-West directed horizontal compression.

b. Eastern Alps, no deep shocks, region 545, 546 and 549, figure 11.

Of the 10 considered earthquakes 8 P-axes are situated in the  $45^{\circ}$  cone around direction  $N165^{\circ}E$ ,  $15^{\circ}$ . All T-axes except one are situated outside this cone.

Another possible system in the orientation of P- and T-axes of the region is a division in two quadrants with a compressional centre in  $N5^{\circ}E$  direction for the P-axes and a tensional centre in  $N95^{\circ}E$  direction for the T-axes. 9 out of 10 P-axes and all T-axes are in accordance with this distribution.

It may be concluded that in general the compressive stress has an about North-South azimuth the tensional stress is either dipping steeply or has an about East-West azimuth. In both cases the compressive stress in North-South azimuths may be considered as the principal agent causing the earthquakes.

- c. Dinarides of Yugoslavia and Albania, no deep shocks, region 382, 383, 391 and 392, figure 12.

The P-axes of 22 of the 27 quality A and B solutions have an orientation within a  $45^{\circ}$  cone around the direction  $N215^{\circ}E$ ,  $15^{\circ}$ , and only 3 T-axes are falling in the same category. The main earthquake-causing agent clearly is the compressive stress about perpendicular to the seismic and tectonic zone. The stress may either be relieved by underthrusting from the Southwest to the Northeast, equivalent to an overthrusting from Northeast to Southwest, or by faulting of the reversed or transcurrent kind.

- d. Western and Central Greece, all depths, region 399, 364, figure 13.

There are 40 earthquakes of all depths with quality A or B solutions in the region. The distribution of P- and T-axes is not simple in this case, but for a part conflicting. Most of the P-axes have an about Southwest or East azimuth, and most of the T-axes North or South. Tentatively, a quadrantal distribution of P- and T-axes is indicated in the figure, around  $N266^{\circ}E$ ,  $3^{\circ}$  as the centre of the compressional quadrant and  $N358^{\circ}E$ ,  $25^{\circ}$  as that of the T-axes. Of the 40 P-axes 27 are in accordance with this model, of the 40 T-axes 28. From the many inconsistencies it is clear that the earthquakes of this region are from different regimes. A more detailed study, also taking into account the precise location of the earthquakes and the local tectonic structural lines and other related evidence, could clarify the present picture.

- e. Southern Greece, all depths, region 400, 368, figure 14.

The greater part of the 25 earthquakes with a quality A or B solution certainly is of a common type. 22 of the 25 P-axes have an orientation within the quadrant of which the direction  $N230^{\circ}E$ ,  $45^{\circ}$  is the centre, and for 21 of the 25 T-axes the same is true for the quadrant centered around  $N50^{\circ}E$ ,  $45^{\circ}$ . Moreover, within these quadrants there are local strong concentrations of axes: 18 P-axes are located inside the  $45^{\circ}$  cone around the direction  $N205^{\circ}E$ ,  $45^{\circ}$ , and 17 T-axes within the  $33^{\circ}$  cone around  $N65^{\circ}E$ ,  $61^{\circ}$ .

The average dip of the T-axis is  $15-20^{\circ}$  larger than that of the average P-axis. The general type of motion indicated by these data is that of underthrusting of the Ionian Sea block under the Aegean arc along planes dipping at small angles of about  $15^{\circ}$  in Northeast direction, or overthrusting of the Aegean block in SW direction over the Ionian Sea region.

f. Region of Crete, all depths, region 370, figure 15.

27 of the available 30 P-axes of quality A and B solutions, and 26 of the 30 T-axes are in agreement with a quadrantal distribution of P- and T-axes around the direction N $215^{\circ}$ E,  $40^{\circ}$  for the P-axes, and N $35^{\circ}$ E,  $50^{\circ}$  for the T-axes. Moreover, 24 of the 30 P-axes are situated within the  $45^{\circ}$  cone around the direction N $210^{\circ}$ E,  $45^{\circ}$ . Again, the general type of motion indicated by these data is that of under- or overthrusting fault motions in identical azimuths as found in the Southern Greece region. Contrary to the already treated regions, in this salient the direction of main stress components and fault motion is not directed perpendicular to the local seismic and tectonic trends but clearly oblique. The agreement of the direction of transport with that of Southern Greece and with that of the supposed drift direction of the Anatolian sub-block (see later) points to an interconnection between these movements.

g. Aegean arc, deep shocks only, region 364, 368, 369, 370, fig. 16.

There are 40 earthquakes of all quality classes. 31 P-axes of the 40 solutions have an orientation within the  $50^{\circ}$  cone around the direction N $210^{\circ}$ E,  $15^{\circ}$ , and only 4 of the 40 T-axes are not outside this cone. 26 of the 40 T-axes, moreover, dip steeply within the  $45^{\circ}$  cone around N $30^{\circ}$ E,  $80^{\circ}$ . Again, this points to underthrusting motions of the Ionian block or overthrust motions of the Aegean block in Northeast or Southwest direction respectively. That also in depth these types of motions prevail suggests a connection with the frontal part of the African plate plunging under the Aegean arc.

h. Dodecanese Islands region, all depths, region 369, figure 17.

There is some similarity in the distribution of the 32 P- and T-axes of quality A and B solutions with that of region 364. Again, the quadrantal distribution seems to be the most acceptable, in this case around N $27^{\circ}$ E,  $2^{\circ}$  for the P-axes and around N $296^{\circ}$ E,  $16^{\circ}$  for the T-axes. 28 of the 32 P-axes and 27 of the 32 T-axes are in

confirmation with this model. There is an additional higher concentration of T-axes in the  $45^{\circ}$  cone around N $300^{\circ}$ E,  $45^{\circ}$  of 21 out of 32. Whereas, in comparison with regions 370 and 368, the general azimuth of the P-axes has remained the same, the direction of the T-axes has shifted through an angle of more or less  $90^{\circ}$ . It seems as if the general direction of the T-axes is determined by the location of the Aegean basin with respect to that of the particular earthquakes. The direction of the P-axes on the contrary seems to be independent of the trend of the local arc structure and to be determined only by the relative motion direction of the African plate and the Anatolian sub-plate. The result of these conflicting regimes is that transcurrent motions prevail but that all other types of mechanisms are possible and in effect do occur in the region without strongly violating the general rules indicated here.

- i. Western Turkey, South of  $38^{\circ}$ N, no deep shocks, region 366C, figure 18.

19 T-axes of the total of 27 earthquakes with solutions of all quality are located within the  $50^{\circ}$  cone around the direction N $295^{\circ}$ E,  $15^{\circ}$ . Only 2 of 27 P-axes are not outside this cone. The general direction of the T-axes corresponds with that of the T-axes of the adjacent region of the Dodecanese Islands. Like in the case of regions 364 and 369, however, there are several exceptional T-axes with directions quite unlike the general trend, indicating complications in the stress field of the region.

- j. Western Turkey,  $38-39\frac{1}{2}^{\circ}$ N, no deep shocks, region 366B, figure 19.

There are 45 earthquakes with solutions that have been used. The composite plot shows that 39 of the 45 T-axes are oriented inside a  $45^{\circ}$  cone around N $20^{\circ}$ E,  $0^{\circ}$  direction, and only 2 of the 45 P-axes are not outside this same cone. It is clear that an horizontal extension of the region in NNE-SSW direction is prevalent. More than 2/3 of the shocks are of the normal fault type with steeply dipping P-axes. It is remarkable that at such small distances as region 366C is situated, the general direction of stresses differs so abruptly and significantly. The stress configuration, with respect to that in region 366C, has rotated over an angle of about  $90^{\circ}$ .

- k. Western Turkey, North of  $39\frac{1}{2}^{\circ}$ N, no deep shocks, region 366A, figure 20.

In comparison with the adjacent region 366B the general azimuths of the P- and T-axes have remained the same. In this region, however, it are apparently the P-axes that have the most close location. 21 of the 25 P-axes of considered earthquakes have an orientation within the  $45^{\circ}$  cone around the  $N110^{\circ}$ E,  $30^{\circ}$  direction, and none of the 25 T-axes has an anomalous orientation with respect to these. When considered in the quadrantal mode, there are 23 of the 25 P-axes inside the P quadrant centered around the  $N102^{\circ}$ E,  $14^{\circ}$  direction and 24 out of the 25 T-axes inside the remaining quadrant centered around the  $N8^{\circ}$ E,  $14^{\circ}$  direction. It is clear that transcurrent fault motions prevail and that they confirm the dextral motions along the North Anatolian fault zone. Although the region is under tension directed about North-South, the main earthquake generating agent seems to be the pressure exerted by the Westward moving Anatolian block relative to the region in the North.

- l. North Aegean Sea and South Bulgaria, no deep shocks, region 363, 365, figure 21.

There is a clear preference for about North-South tensions in the region. 21 of the 33 T-axes of mechanism solutions of all qualities are situated within the  $45^{\circ}$  cone around the  $N170^{\circ}$ E,  $0^{\circ}$  direction. Only 3 of the 33 P-axes have an orientation not outside this cone. If only quality A and B solutions are considered the score amounts to 13 out of 16 T-axes and 15 out of 16 P-axes. It is clear that the region is subject to an about North-South directed tensional stress.

11. The maps of generalized stress patterns

The main stress component for a sub-region is defined as the one which in the composite stress diagram shows the greater concentration in orientation. In this sense, and as a summary of the regional treatment, the following stresses prevail in the sub-regions (see Table 6):

In figure 22 the regional stress directions of P and T as determined from the composite plots for the sub-regions are summarized. Some remarks can be made:

In the whole zone from the Northern Dinarides in Yugoslavia through Greece, Crete to in the Dodecanese salient of the arc compressive stress is directed in about SW-NE azimuths. The dip of the Pressure axis is mostly slightly to the outside of the arc, i.e. to the Southwest. In the Eastern Alps and the Carpathian arc too the Pressure stress is horizontal and directed more or less perpendicular or slightly oblique to the local trend of the mountain ranges.

In the region from the Dodecanese Islands through Turkey and Aegean Sea, South Bulgaria and Central Greece horizontal tensions seem to prevail, mostly in about North-South azimuths. Exceptional directions are found in Southern Turkey and adjacent region 369 where an abrupt change to WNW-ESE azimuths is apparent.

If the individual P- and T-axes of the separate earthquakes are considered, something can be said about the changes in position of the stress field within the sub-regions and in between the different provinces. In the figure 23 the main horizontal stress axes directions have been plotted for respectively the quality A, quality B and the quality C + D shocks. Deep earthquakes of the region have been treated separately.

Although the deviations of individual solutions sometimes are great, also here the general trend found in the composite plots can be traced. Moreover, it is possible now to sketch in more detail the local trend of the compressive and tensional stresses. This has been done in two steps. At first the map was constructed of the general direction of compressive stress in the region as derived from the data of the figure 23. Continuity of directions throughout the area and in between the sub-regions was pursued. Figure 24 gives the general picture of the compressive stress field in the region. In the outlined area P-axes normally have a more horizontal position than T-axes which means that within the area the compressive stress is the main agent in the generation of earthquakes. The deep earthquakes of both the Carpathian and the Aegean arcs are included in the field because they are of this particular type. Where the outline of the field is not well defined by lack of earthquake mechanism solutions this is indicated by a dotted line.

Table 6

Region no.	Flinn/Engdahl	depth km	P *)	score *)	T *)	score *)
Carpathian arc	358	≥ 60	N270°E, 5°	25-31	N 90°E, 85°	28-31
Eastern Alps	545, 546, 549	< 60	N165 E, 15	8-10		
			N 5 E, 0	9-10	N 95 E, 0	10-10
Dinarides	382, 383, 391, 392	< 60	N215 E, 15	22-27		
Western Greece	364, 399	all	(N266 E, 3)	27-40	(N358 E, 25)	28-40
Southern Greece	368, 400	all	N205 E, 45	18-25	N 65 E, 61	17-25
			N230 E, 45	22-25	N 50 E, 45	21-25
Crete	370	all	N215 E, 40	27-30	N 35 E, 50	26-30
Aegean arc	364, 368, 369, 370	≥ 60	N210 E, 45	24-30		
Dodecanese Isls	369	all	N 27 E, 2	28-32	N296 E, 16	27-32
					N300 E, 45	21-32
Western < 38°N	366C	< 60			N295 E, 15	19-27
38-39½°N	366B	< 60			N 20 E, 0	39-48
Turkey > 39½°N	366A	< 60	N110 E, 30	21-25		
			N102 E, 14	23-25	N 8 E, 14	24-25
Aegean Sea, Bulgaria	363, 365	< 60			N170 E, 0	21-33

\*) P = the centre of the compressional stress cone or quadrant;

T = the centre of the tensional stress cone or quadrant;

"score" gives the number of earthquakes for which the individual axis has a position that is in confirmation with the central direction indicated in the column before, followed by the total number of earthquakes used for that particular region.

The compressional stress field seems to be continuous throughout the region with the only exception in the Southern part of Western Anatolia where the stress lines have an orientation that suggests a singularity.

In the same way the map of the general trend of tensional stress in the region was constructed from the data of figure 23. The result is shown in figure 25. Within the enclosed area the tensional stress has the most horizontal position, and consequently it is considered the main earthquake generating agent in the region. It is seen that within the Aegean basin itself there is a region devoid of any major earthquake. The tensional stresses always seem more or less directed towards the centre of this area. Singularities in the tensional stress field do occur in Southern Turkey exactly in the zone where also the compressional stress field changed trend abruptly, and in Central Greece (region 364) where the composite plot of P- and T-axes already suggested complications of some kind.

A comparison of the last two figures shows that in the greater part of the Balkan region the direction of the main compressional and tensional stresses are about perpendicular to each other. A notable exception occurs in the Southern Greece area where both stresses have about the same azimuth and which - consequently - is characterized by a great percentage of thrust type earthquake mechanisms (9 out of 17 of quality A and B).

Figure 26 is a combination of the two former figures and summarizes the general lines of the earthquake mechanisms of the region as deduced from the data of the Catalogue and as discussed in the foregoing tables and figures. The two main sub-regions have clearly been distinguished, the one under horizontal tension and the other one under horizontal pressure.

I. The region of predominant pressures in a horizontal sense stretches from the Alps in the North all along the Dalmatian coast of Yugoslavia and Albania, Western Greece and along the Cretian arc into the Southwestern tip of Anatolia. Under Western and Southern Greece and the Southern part of the Aegean Sea this area of horizontal pressures extends in depth all along the zone of mantle earthquakes with depths equal or greater than 60 km.

In general the orientation of the pressure stress is about North-east - Southwest. That means that it is about perpendicular to the structural lines of Dinarides and Hellenides, but oblique and even parallel to the structural trends in the South and Southeastern sectors of the Aegean system. In the Yugoslavian, Albanian and Western Greece sectors the tensional stress too, often has an about horizontal position, giving rise to transcurrent fault motions. In the South the tensional stresses mostly are steeply dipping, resulting in thrust and reversed faulting.

The Pressure regime coincides with the collision zone between the European and the African plates. Its downward extension in the zone of deep earthquakes of the Aegean arc marks the downward plunging frontal part of the African plate. The zone coincides with an arc of uplift at the earth's surface for at least the past several million years. The young tectonic structures and recent crustal movements in the region, for so far known, are not in contradiction with such a type of stress field.

A second province of mainly horizontal pressures is the pocket of mantle earthquakes in the Carpathian arc of Rumania. The azimuth of the pressure stress has an about East-West direction, also in this case thus not exactly perpendicular to the local structural lines.

II. The region of predominant tensions in a horizontal sense extends all over Western Turkey and the Aegean Sea from South Bulgaria and Yugoslavia in the North to the mainland of Greece and the innerpart of the Aegean arc and Crete in the South. It is the region of the crustal segment of the Aegean basin sensu lato. In general the azimuth of the tensional stress is in Northerly directions from Northeast in the East over North to Northwest in the West. There is a clear tendency for a direction towards the centre of the Aegean basin. In the Northern part of the region the pressure stress often also has an about horizontal position, giving rise to transcurrent fault motions of the sense known to be active in Northern Anatolia. In the Southern part pressure stresses often steeply dip, resulting in normal and dip-slip thrust faulting in Northeasterly azimuths.

Evidently, the earth crust in this tensional regime is in a state of collapse, which in itself is an indication for basin formation. This type of motion is also in accordance with the geomorphological data of the region. A remarkable note is that the Western and Central part of the volcanic arc in the centre of the collapse area is devoid of any major seismic activity, indicating that adjustments to the existing stresses in the region do occur in a non-elastic way, possibly by a lower viscosity of the material.

## CONCLUSIONS

### 12. Merits and limitations of the present study

The data-set of this report, presented in the form of the Catalogue and figures is the most complete of its kind that ever has been published for any region of the world of the dimensions of the Balkans. The number of solutions, their quality and their completeness as part of a time sequence compare favourably with studies of other regions.

A more or less clear picture has been obtained of the prevailing earthquake generating stresses in the region. The two stress regimes that were found could be linked to

- a. the zone of collision compressions from the Alps in the North to the Aegean arc in the South between the African plate on the one hand and the European plate and Anatolian sub-plate on the other side; and
- b. the influence of the subsiding Aegean Sea basin causing a tensional regime in the whole of the innerpart of the region to far inland in the Anatolian and South European blocks.

Notwithstanding the good conditions in terms of numbers of earthquakes and of recording stations in the region for a study like this, it is not well possible for the present author to go into much more detail in the explanation of the individual earthquake mechanism solutions. Therefore, a more intimate knowledge of the basic facts of other geo-disciplines in the region is imperative, such as local build-up of the earth's crust and upper mantle, the young geological and tectonic structures, recent crustal movements, and possibly gravity and magnetic anomaly fields. Such an interpretation on a smaller scale should be made by local workers in the field as a natural and necessary extension of the present report.

### 13. Recommendations

- a. The interpretation of the individual solutions of the Catalogue lists should be undertaken by local workers in the field. Comparisons should be made with local structure, young tectonics, seismicity, recent crustal movements and data from other geo-disciplines.

Correlations between the two should be studied for a discrimination between the regional stress field as established in the present report and local anomalies on this field, and with the goal to clarify observed characteristics of seismicity and geological structure.

b. The quality C and D solutions of the Catalogue should be reconsidered in view of the present results based on quality A and B solutions, and for the sake of finding supporting evidence for the found rules and correlations in the solutions from a given sub-region.

c. For a new separate and special study a list of earthquakes, presently without a mechanism solution, should be set up. Reasons for the selection could be the particular magnitude, depth, location or time of occurrence of the shock. In the first place one thinks of a completion of the mechanism work for areas for which only small numbers of solutions are available, or only low-quality solutions of small magnitude shocks. The regions 359 and 363 of Bulgaria and Thessaloniki are prime candidates for this regional choice; also Northern Yugoslavia that is equally under-represented in the Catalogue. In the second place one can think of a systematic study of older earthquakes of the pre-1960 and pre-1950 years. The annual numbers of solutions for these periods are very much lower than for more recent years. Partly, this is a natural effect of the density of reliable seismic stations in the region in time. As it is clear that the magnitude level for which a solution still can be made with confidence will shift to higher values for the earlier years. There is, however, still a reservoir of data piled up in the archives of the seismic stations with a relatively long history. This is especially true when the study of these older events is linked to comparable readings of more recent earthquakes of the region for which a good quality solution is available.

d. Maintenance of the information flow of this kind by a determination on routine basis of the fault plane solutions of current earthquakes in the region is of great importance. A Service Bureau in the region gathering continuously all information on compression/dilatation data of earthquakes of the region might be very helpful in this respect. A preliminary solution could be made within a

year of the time of occurrence of the earthquake, a final determination should be made later when more data of distant stations and of central bulletins are available. The Bureau could issue yearly additions to the present Catalogue of data. It could also act as a centre of co-operation between research groups of the different participating nations.

e. Extension of the fault plane work by the use of S wave readings and radiation of surface waves is the next step. This work most fruitfully might be done by certain research groups in the participating countries. Potentially it is of the utmost importance for a better definition of the earthquake mechanism and studies in this direction should be strongly encouraged. On the other hand, the results of such studies are not per definition less controversial because they are based not only upon data of a qualitative kind such as in the classical work, either + or -, but also on quantitative measurements of amplitudes. It is clear that additional uncertainties are introduced and that studies of this kind are not "a priori" more reliable. A separate development of the two kinds of approaches seems to be the most fruitful in this stage of the investigations, and for the time being this work of a more specialist kind should be executed there where the expectations for results are optimal.

f. A natural development will be that additional studies are carried out on the problems relating the present kind of earthquake mechanism work with that of earthquake sequences in particular regions. Ultimately, the efforts directed in this field could possibly support the investigation of the problem of earthquake prediction. Investigations of this co-ordinated kind are best executed on the spot by local experts.

g. A Resolution of the Balkan Project group should be sent to the authorities in Libya with the suggestion to set up some seismic stations in Cyrenaica and Libya itself. Often, in the course of the present study, the lack of data from this region was of decisive importance in the qualification of the solution as unreliable. For future researches the data from some stations in this country could very much enhance the reliability of location, depth and mechanism solution of the earthquakes of the Balkan region.

h. A good exchange of data between all nations in the region on a routine basis is considered a "conditio sine qua non" for the development of future research in the field.

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F I G U R E S

## REGIONNUMBERS FLINN - ENGDAHL

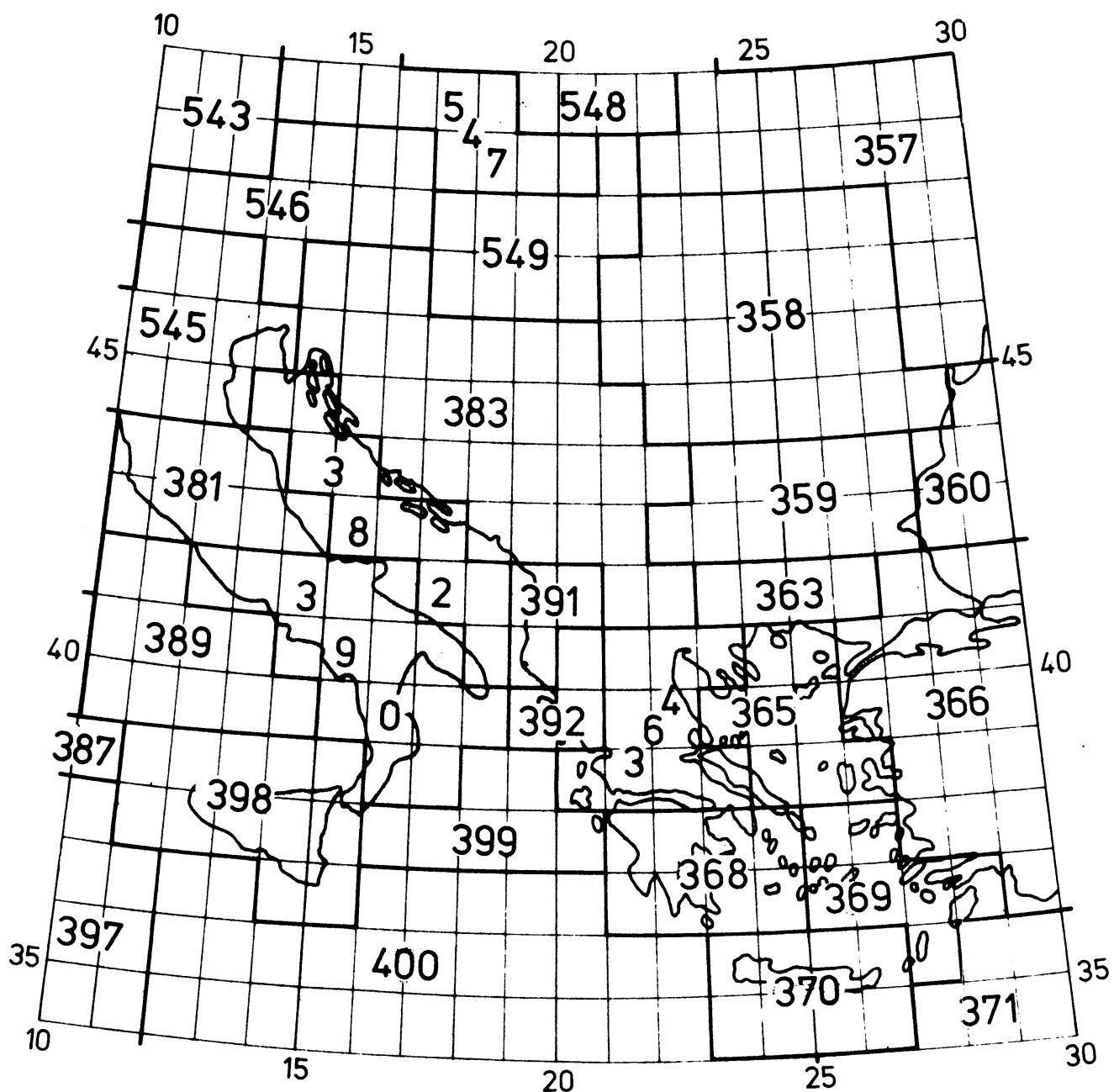


Figure 1. The outlines and numbers of the regional division of the Balkan according to Flinn-Engdahl.

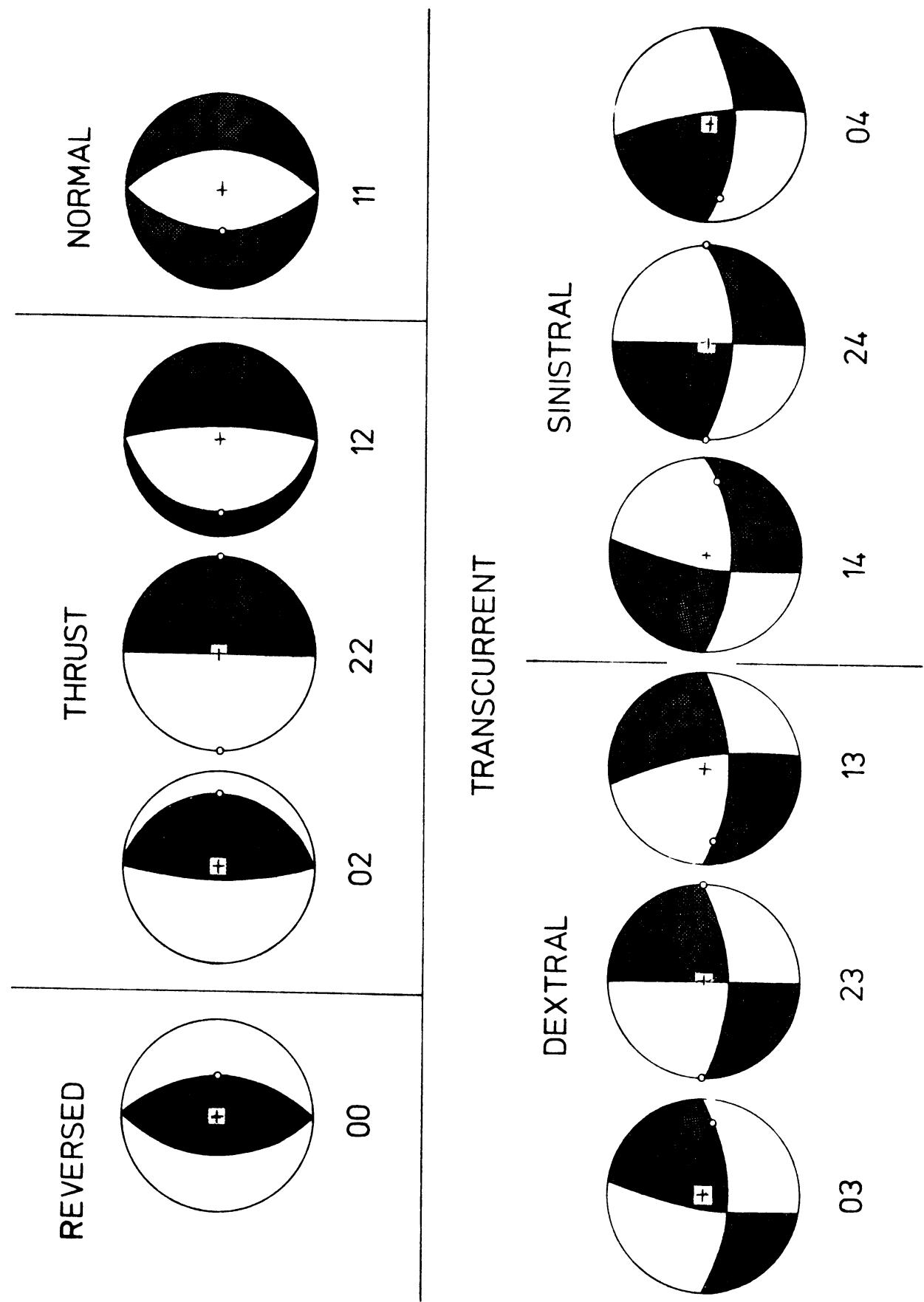


Figure 2. The different types of earthquake mechanism solutions.

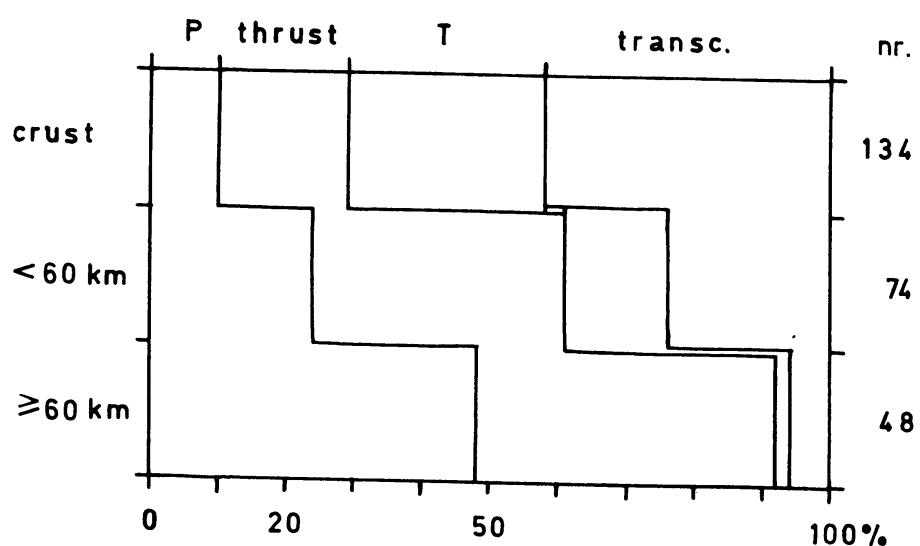


Figure 3. The distribution of earthquake mechanism types in depth.

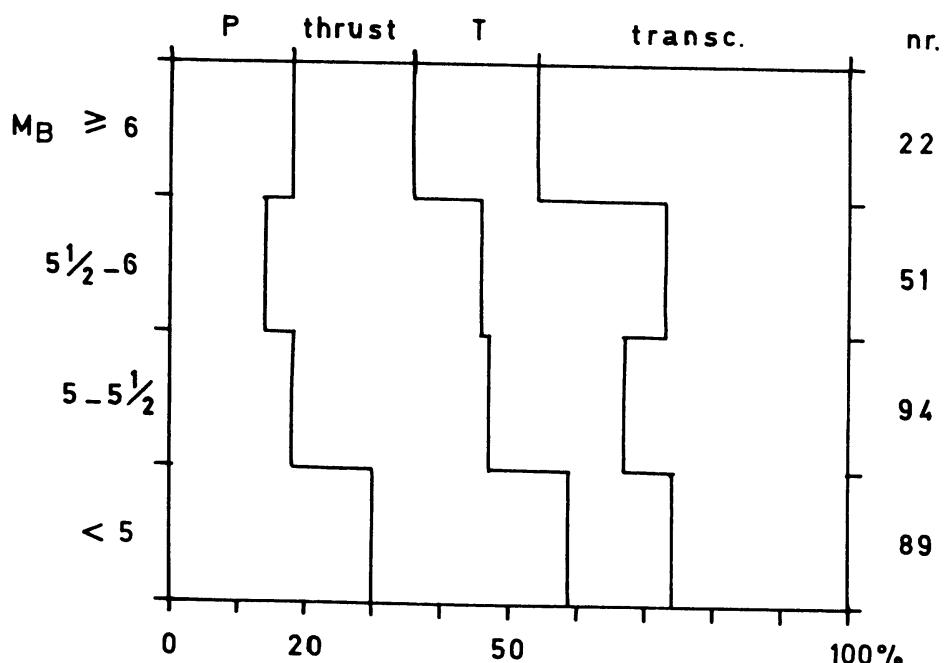


Figure 4. The distribution of earthquake mechanism types in magnitude classes.

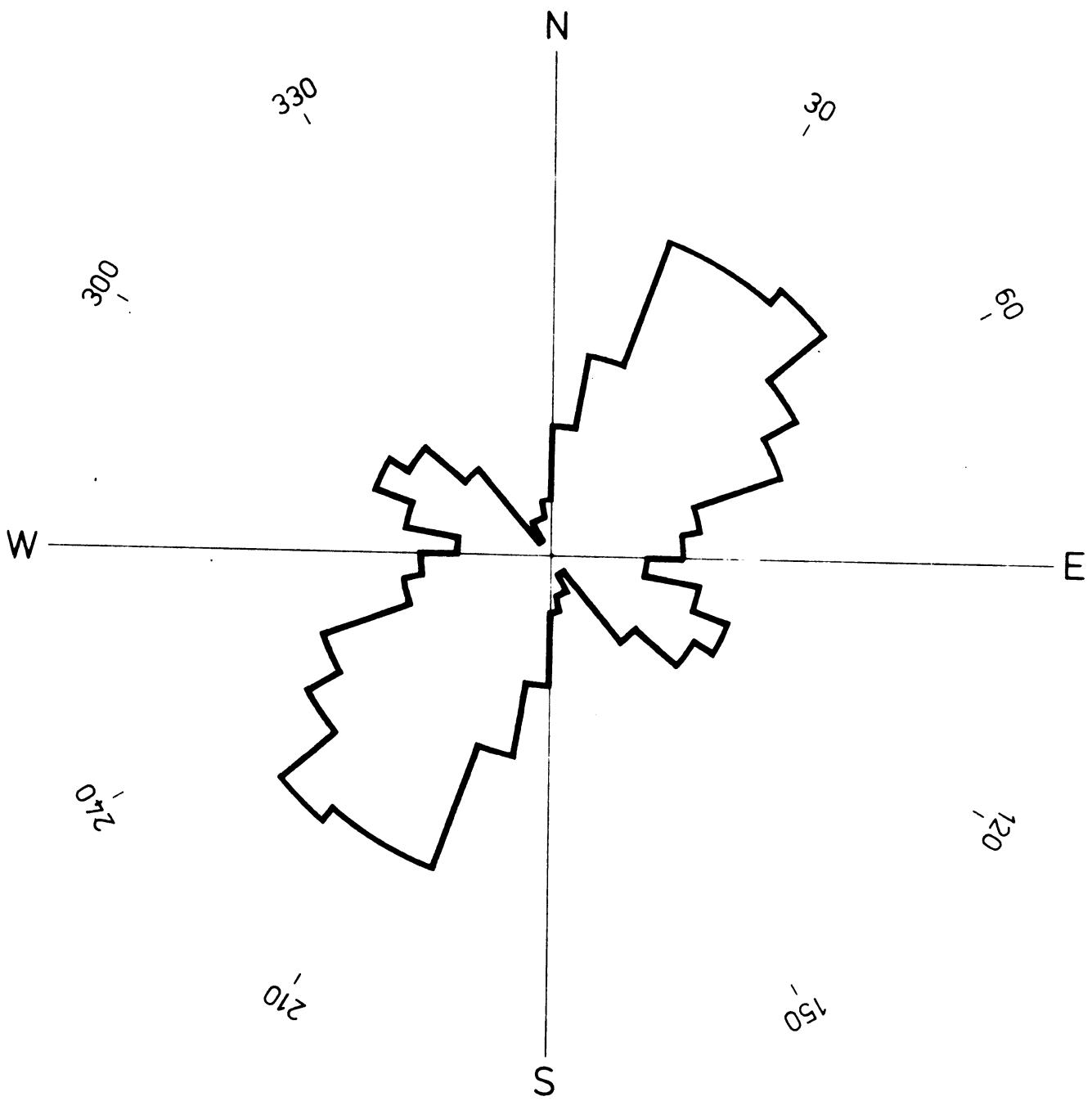


Figure 5. The azimuth distribution of the P-axes of 54 Balkan earthquakes of the reversed fault motion type (P-type).

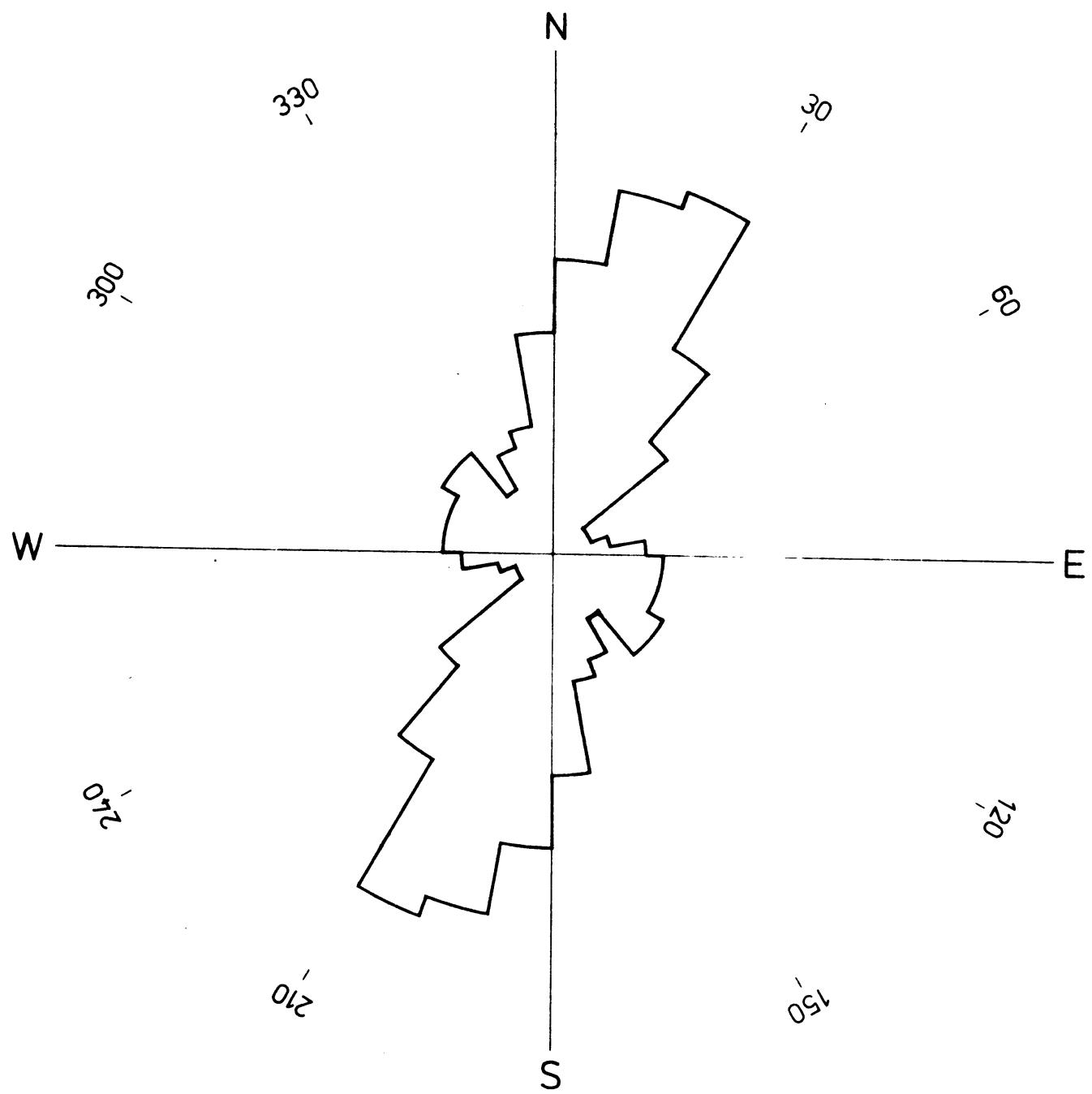


Figure 6. The azimuth distribution of the T-axes of 51 Balkan earthquakes of the normal fault motion type (T-type).

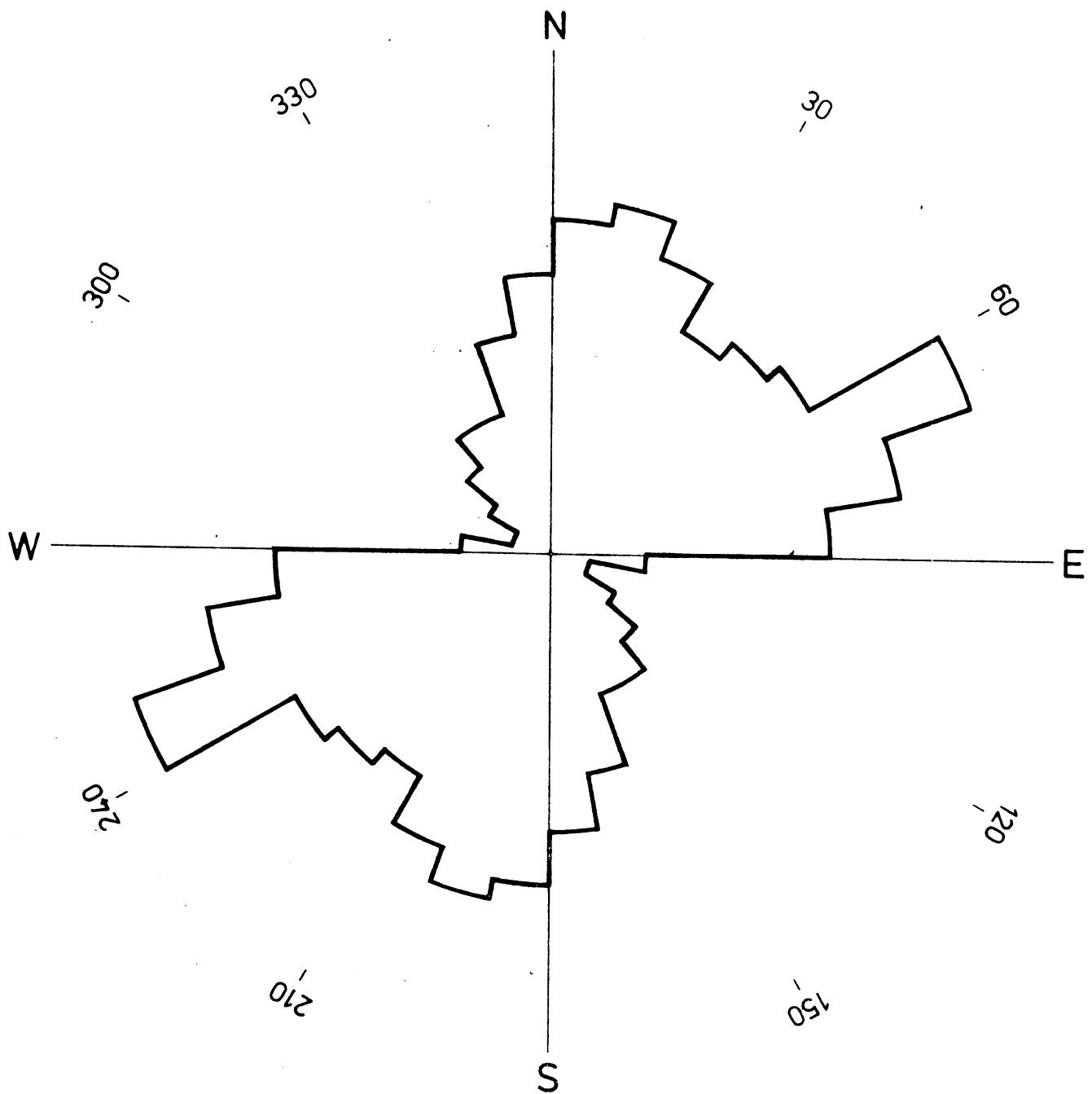


Figure 7. The azimuth distribution of the A-axes of 73 Balkan earthquakes of the thrust (or vertical block) motion type.

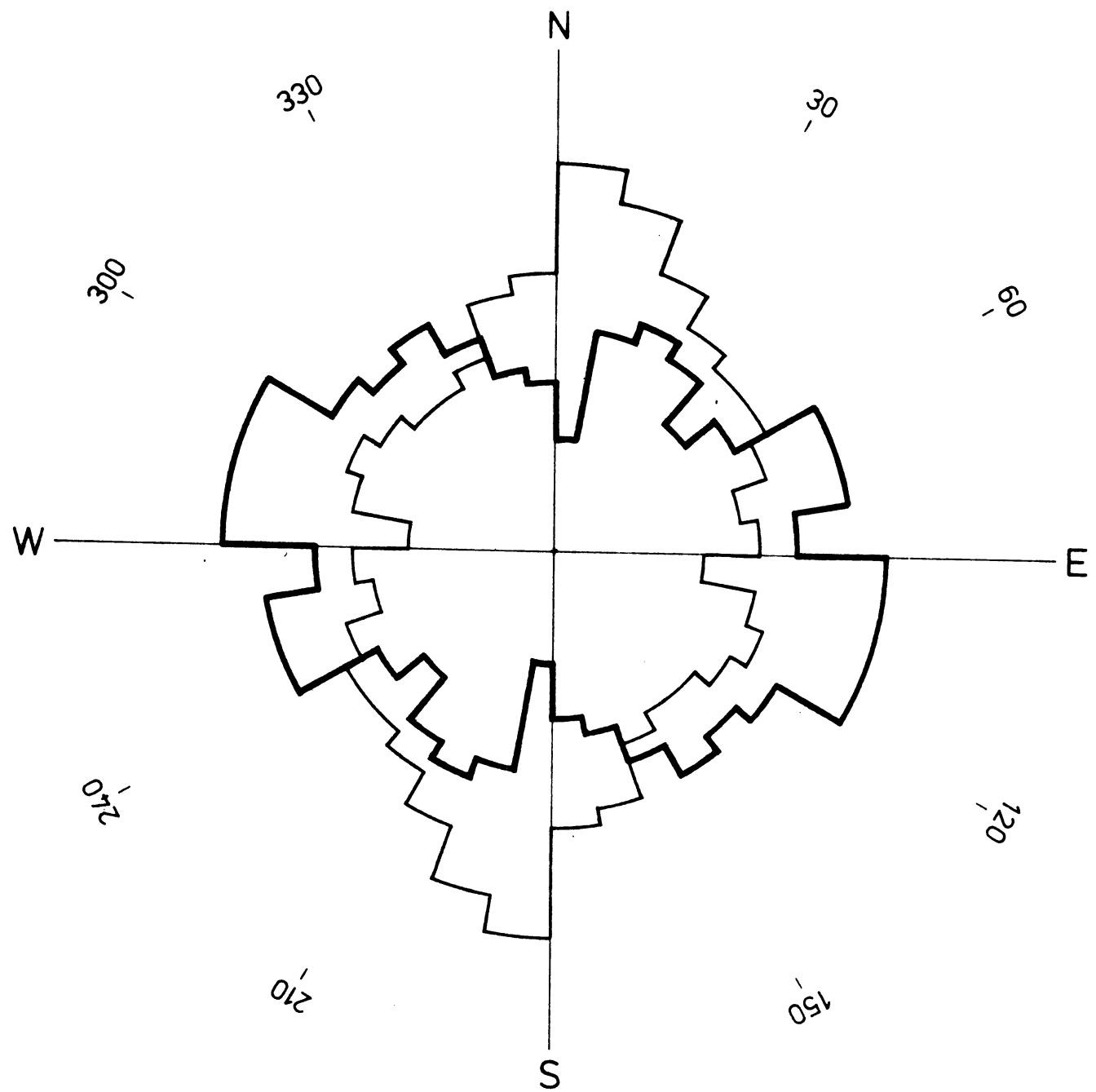


Figure 8. The azimuth distribution of the P-axes (thick line) and T-axes (thin line) of 78 Balkan earthquakes of the transcurrent fault motion type.

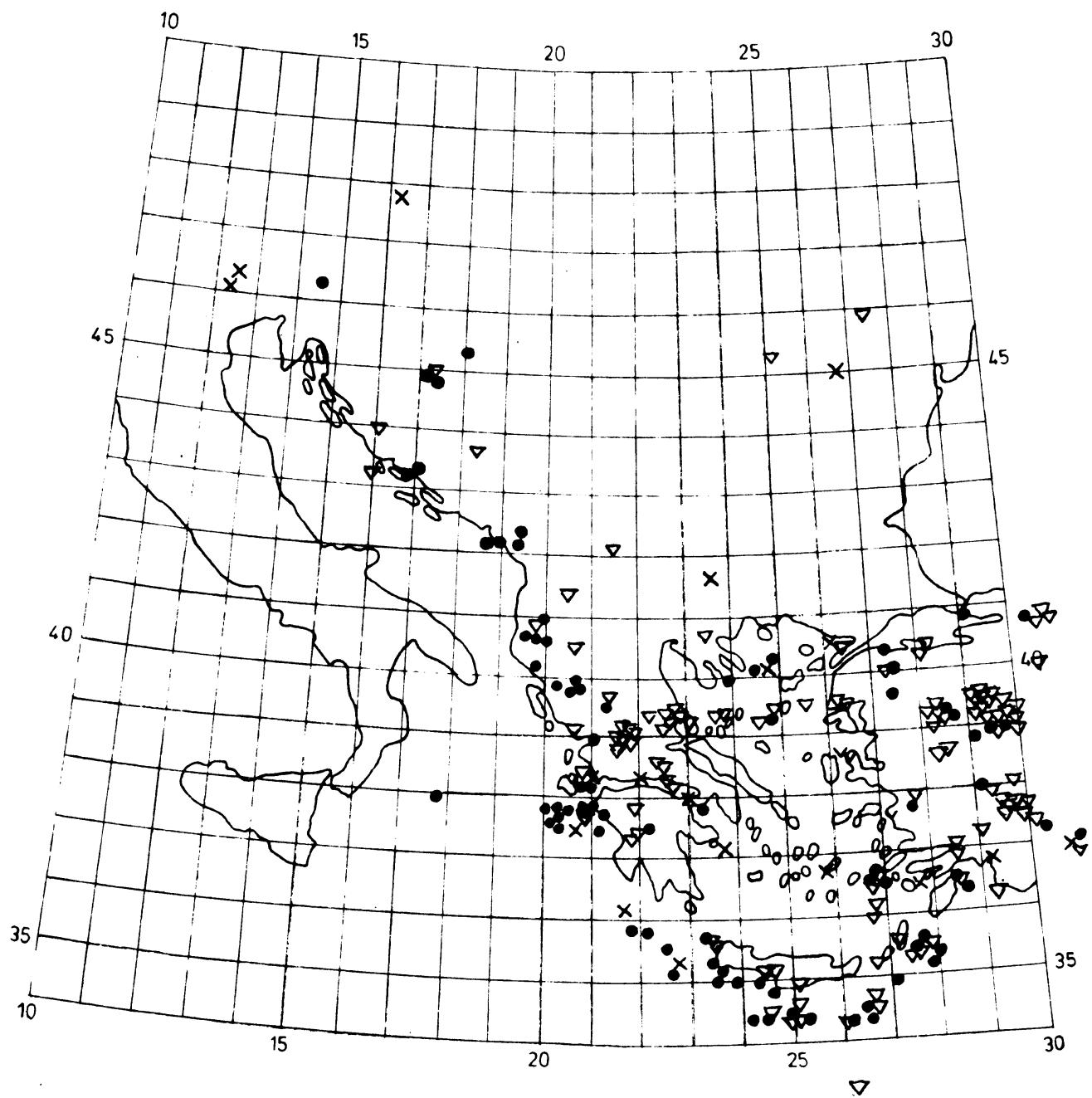


Figure 9. The location of the earthquakes with quality A or B solutions of the P-type (dots), T-type (triangles) and =-type (crosses). In P-type earthquakes the plunge of the P-axis is smaller than that of the T-axis, in T-type earthquakes the other way around, and in =-type earthquakes the angles of plunge are equal.

Region 358  
 $h > 60$  km

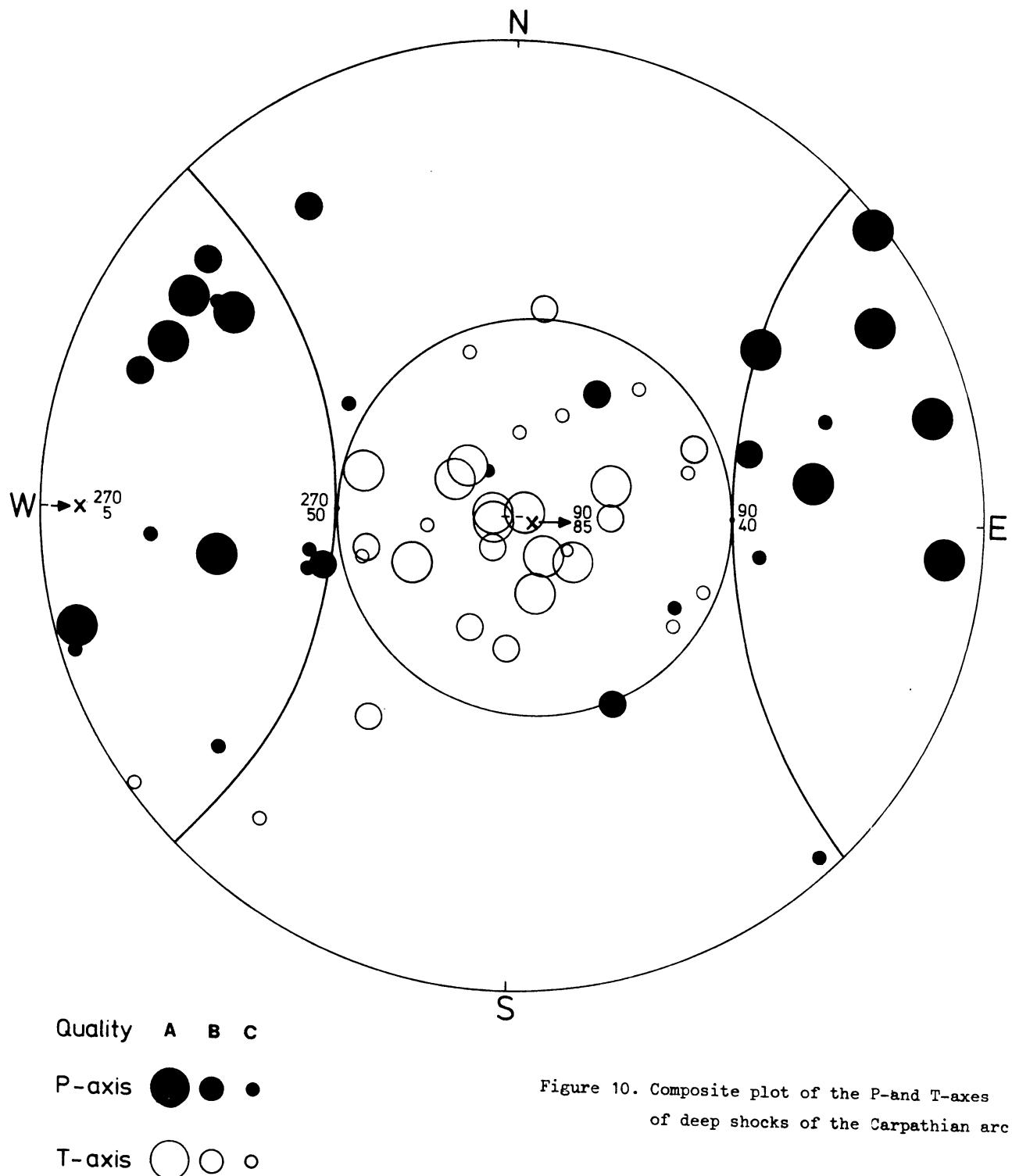


Figure 10. Composite plot of the P-and T-axes  
of deep shocks of the Carpathian arc.

Region 545, 546, 549  
 $h < 60$  km

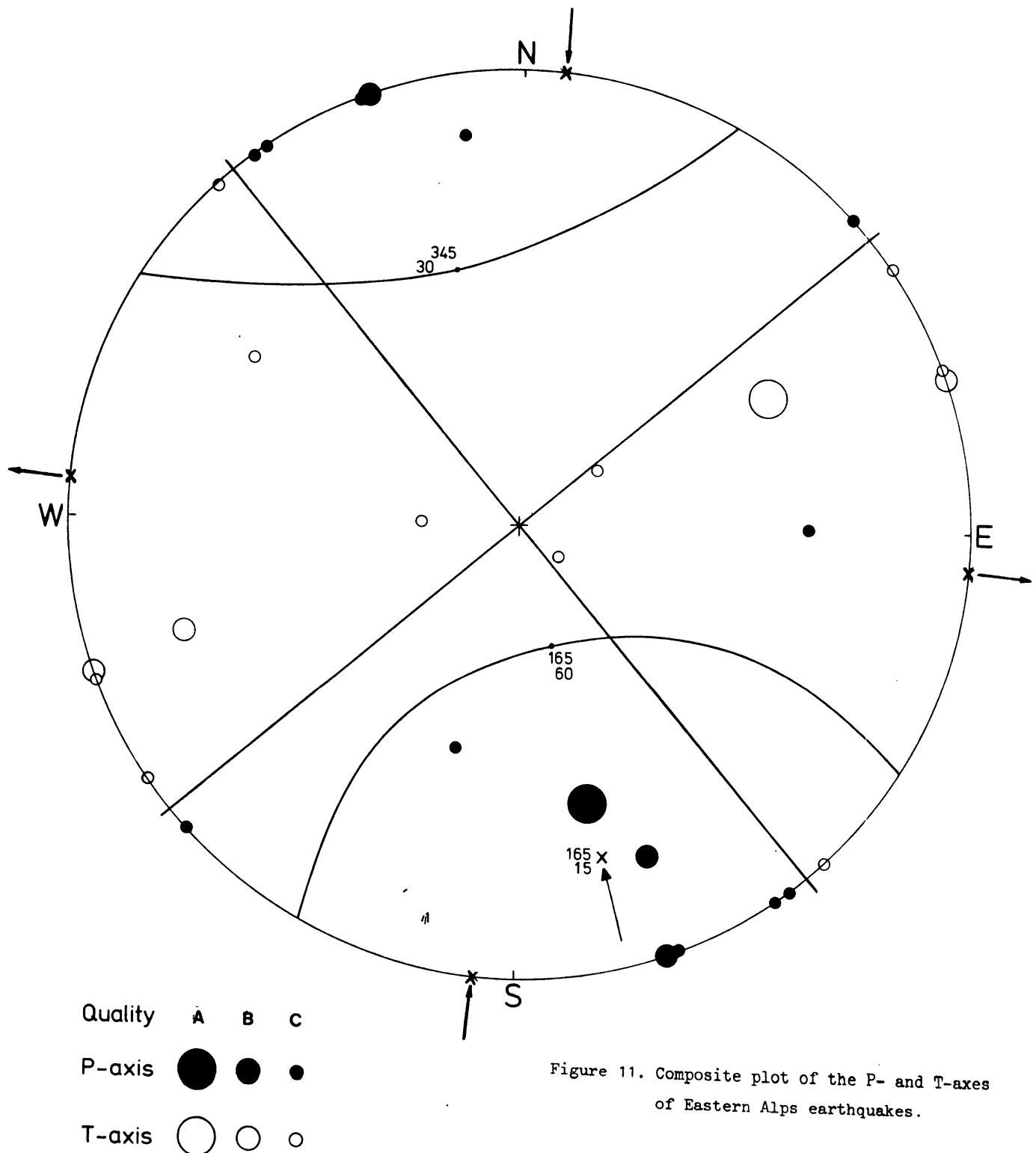


Figure 11. Composite plot of the P- and T-axes  
of Eastern Alps earthquakes.

Region 382/383/391/392  
 $h < 60\text{ km}$

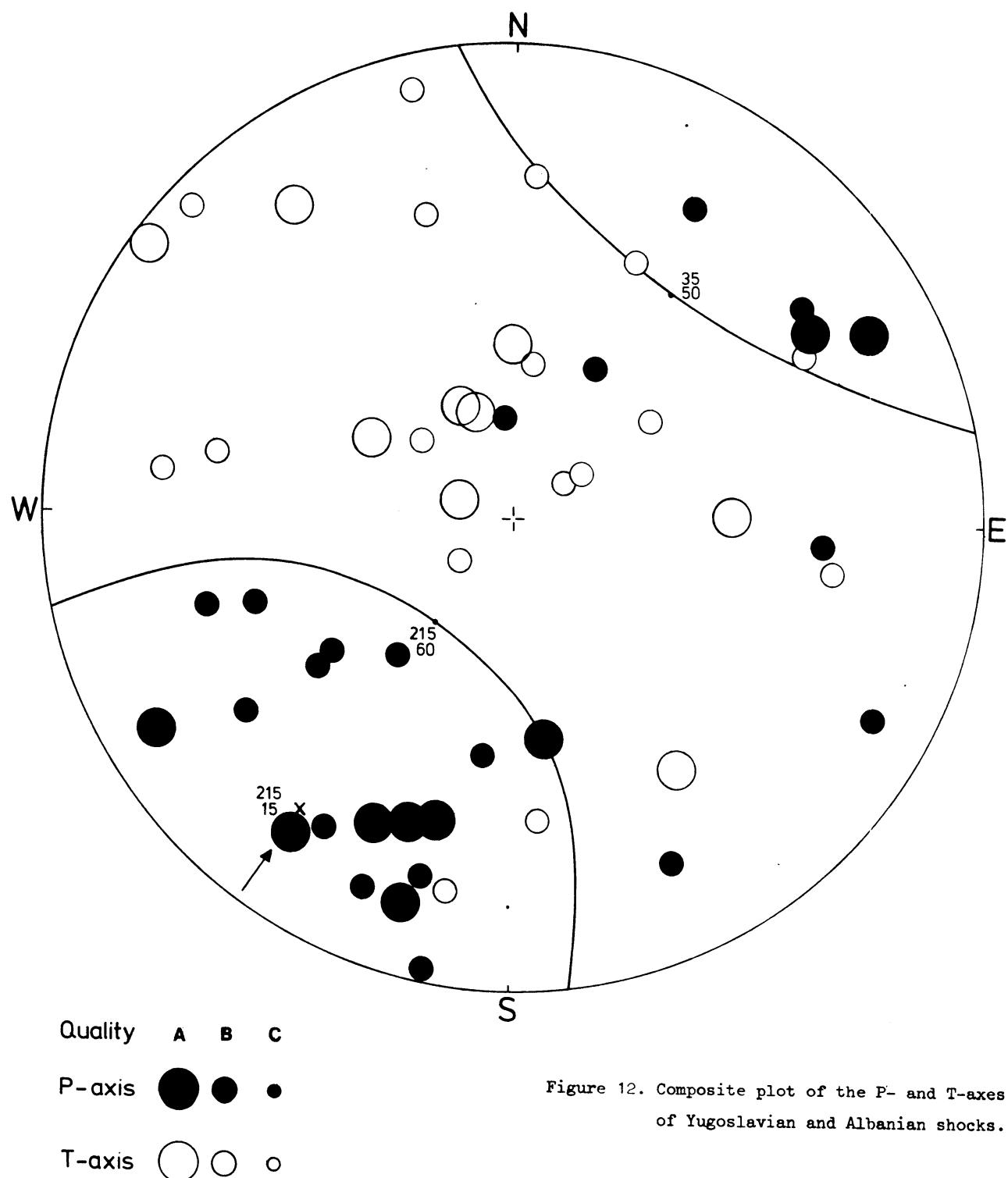


Figure 12. Composite plot of the P- and T-axes of Yugoslavian and Albanian shocks.

Region 364/399  
all depths

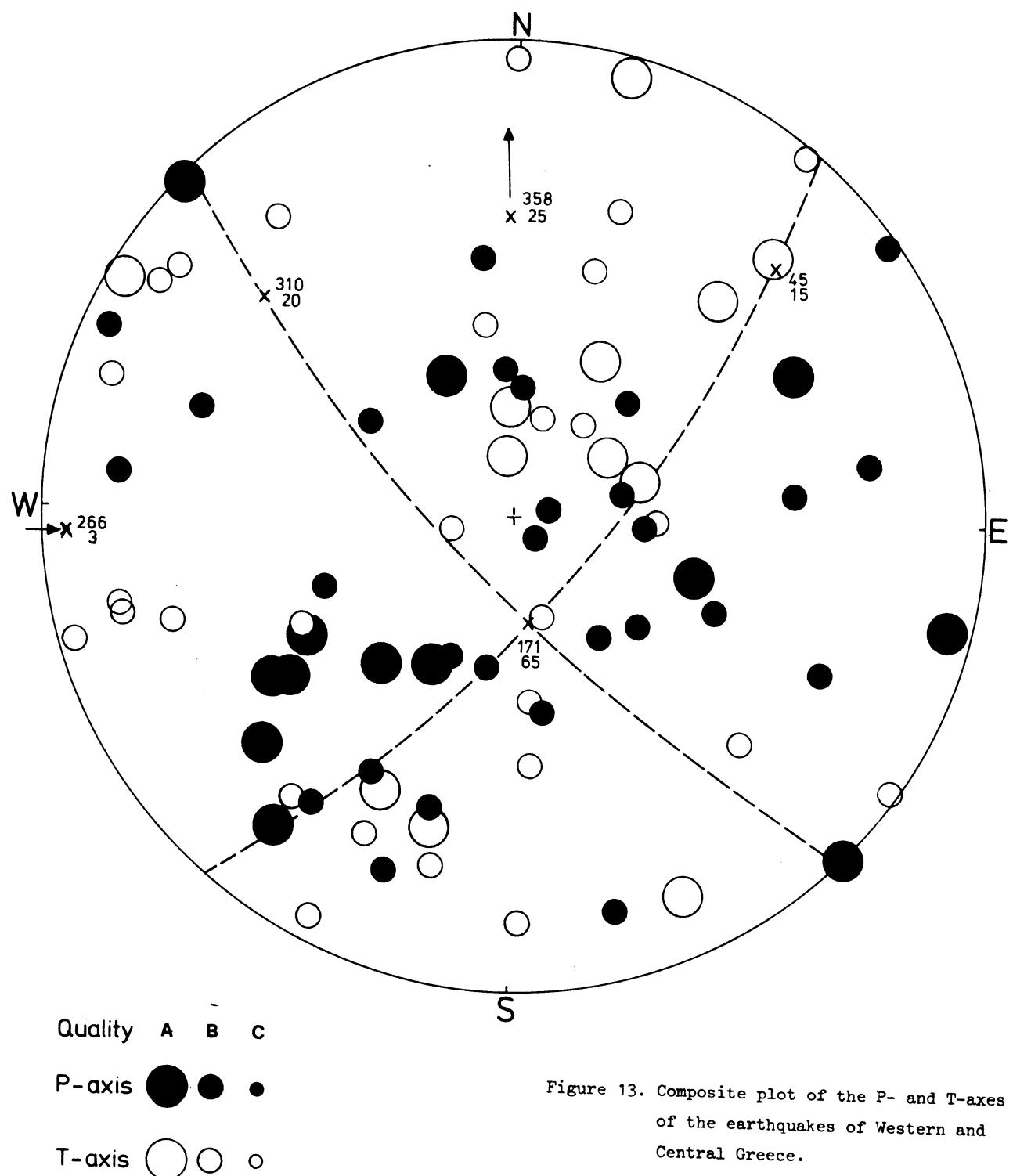


Figure 13. Composite plot of the P- and T-axes of the earthquakes of Western and Central Greece.

Region 368, 400  
all depths

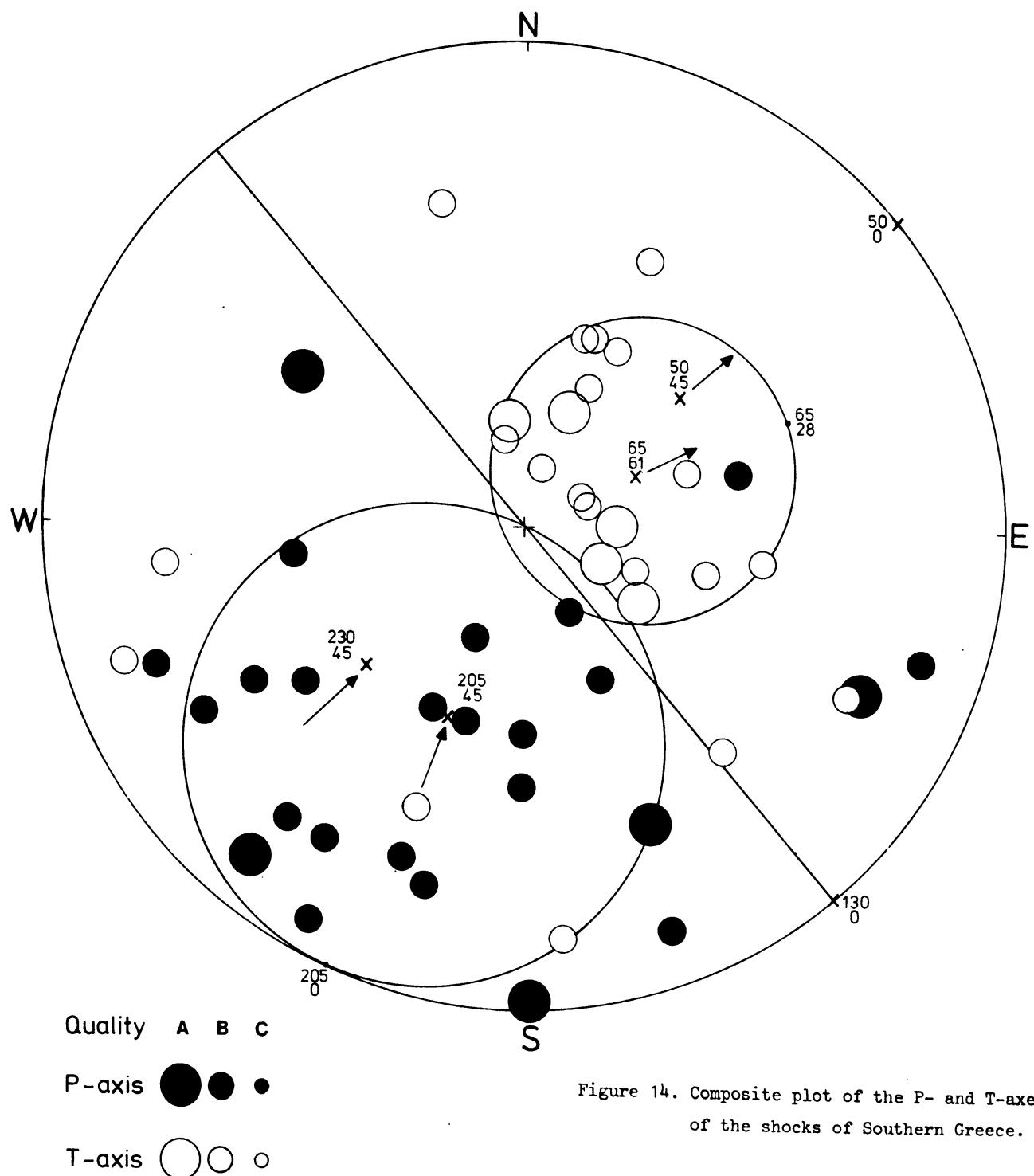


Figure 14. Composite plot of the P- and T-axes of the shocks of Southern Greece.

Region 370  
all depths

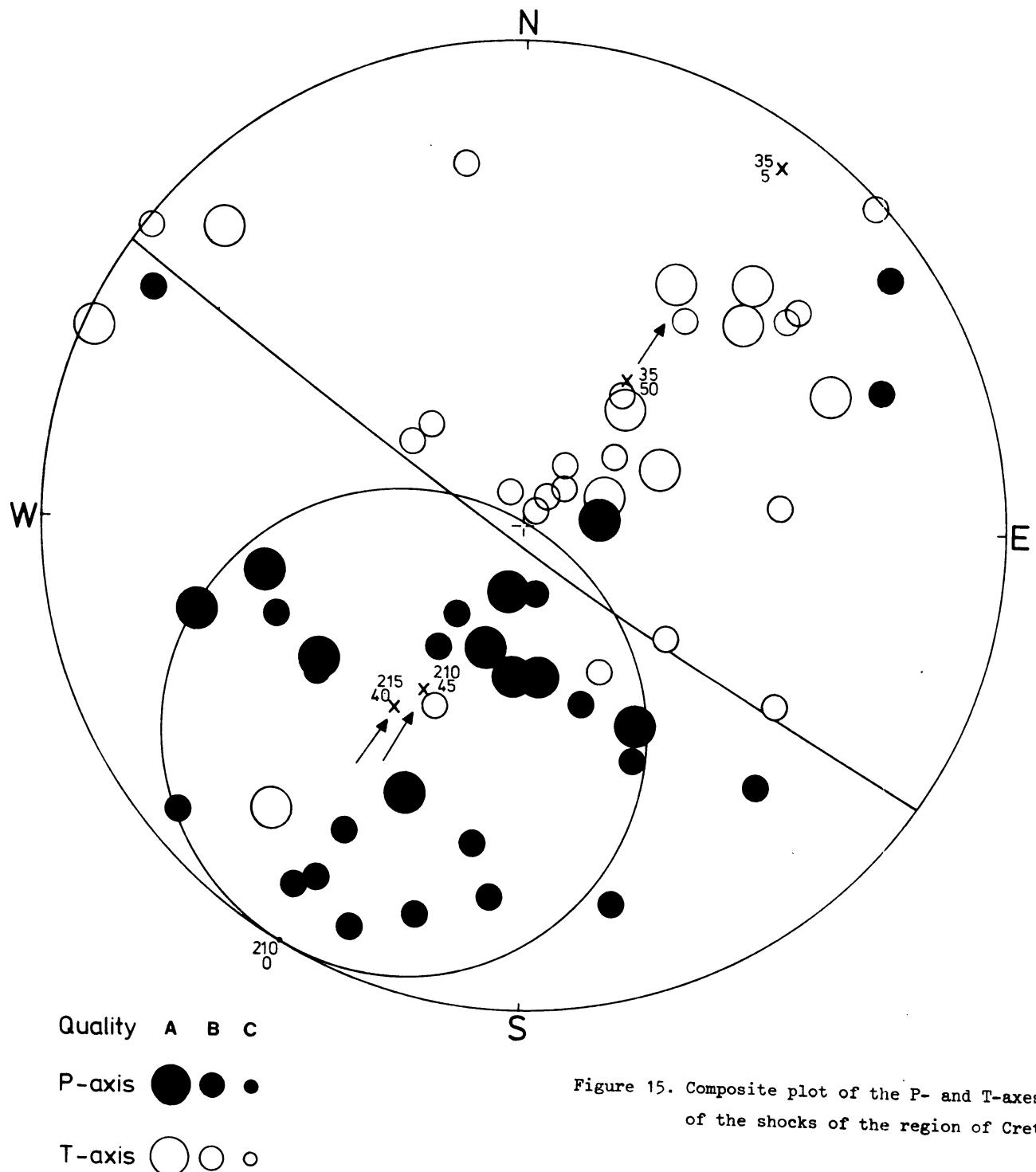


Figure 15. Composite plot of the P- and T-axes of the shocks of the region of Crete.

Region 364/368/369/370  
 $h > 60$  km

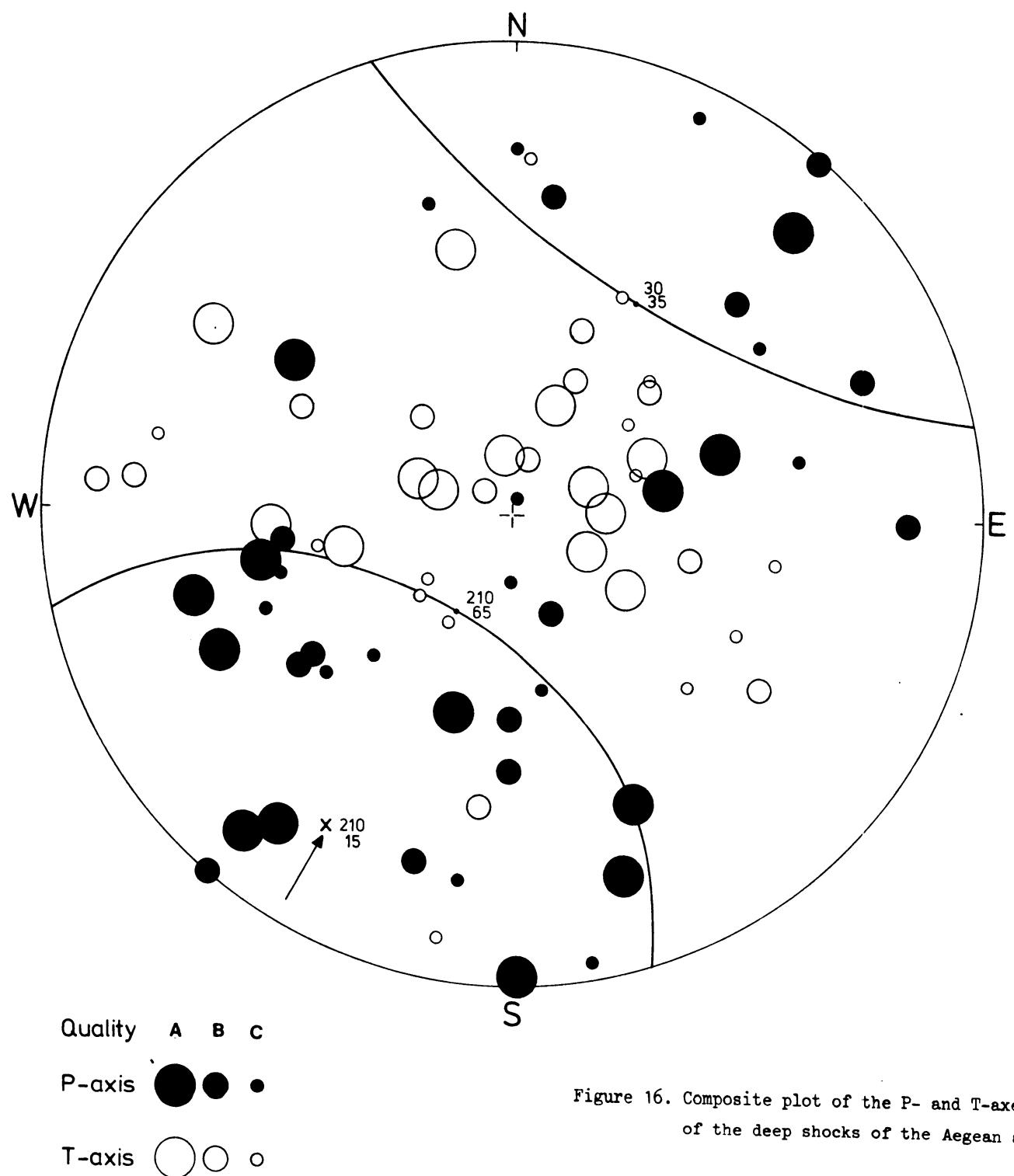


Figure 16. Composite plot of the P- and T-axes of the deep shocks of the Aegean arc

Region 369  
all depths

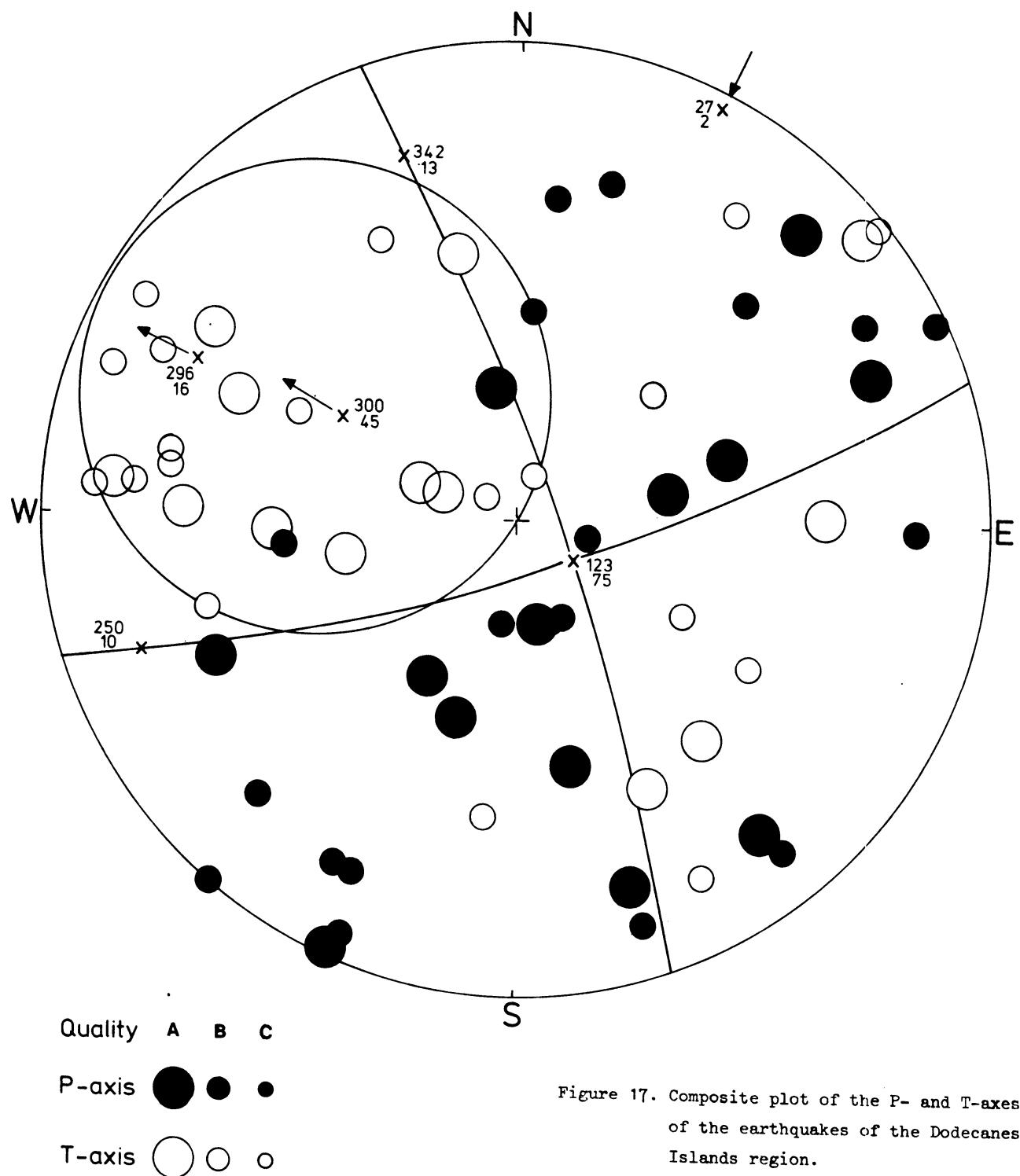


Figure 17. Composite plot of the P- and T-axes of the earthquakes of the Dodecanese Islands region.

Region 366C  
 $h < 60\text{ km}$

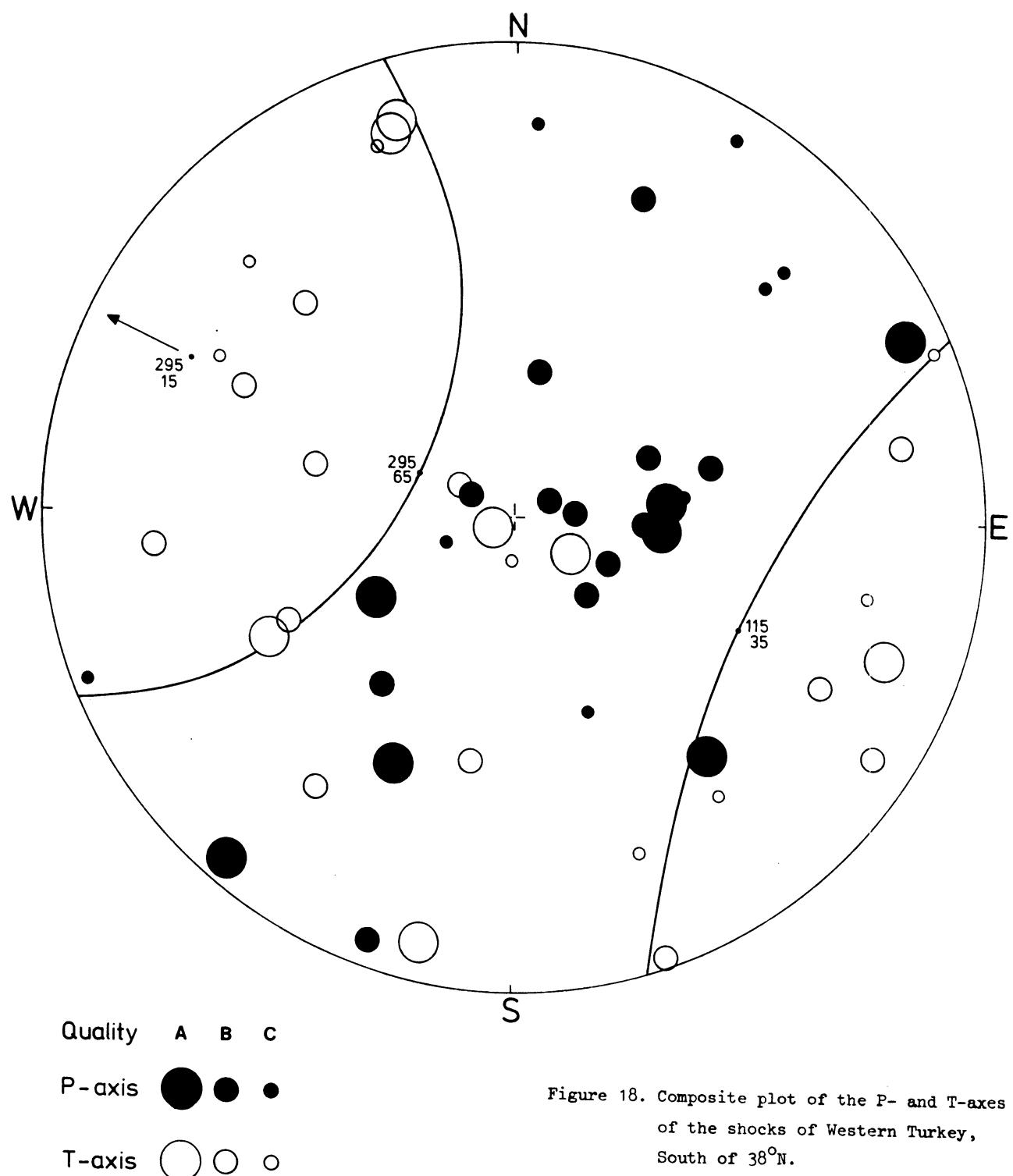
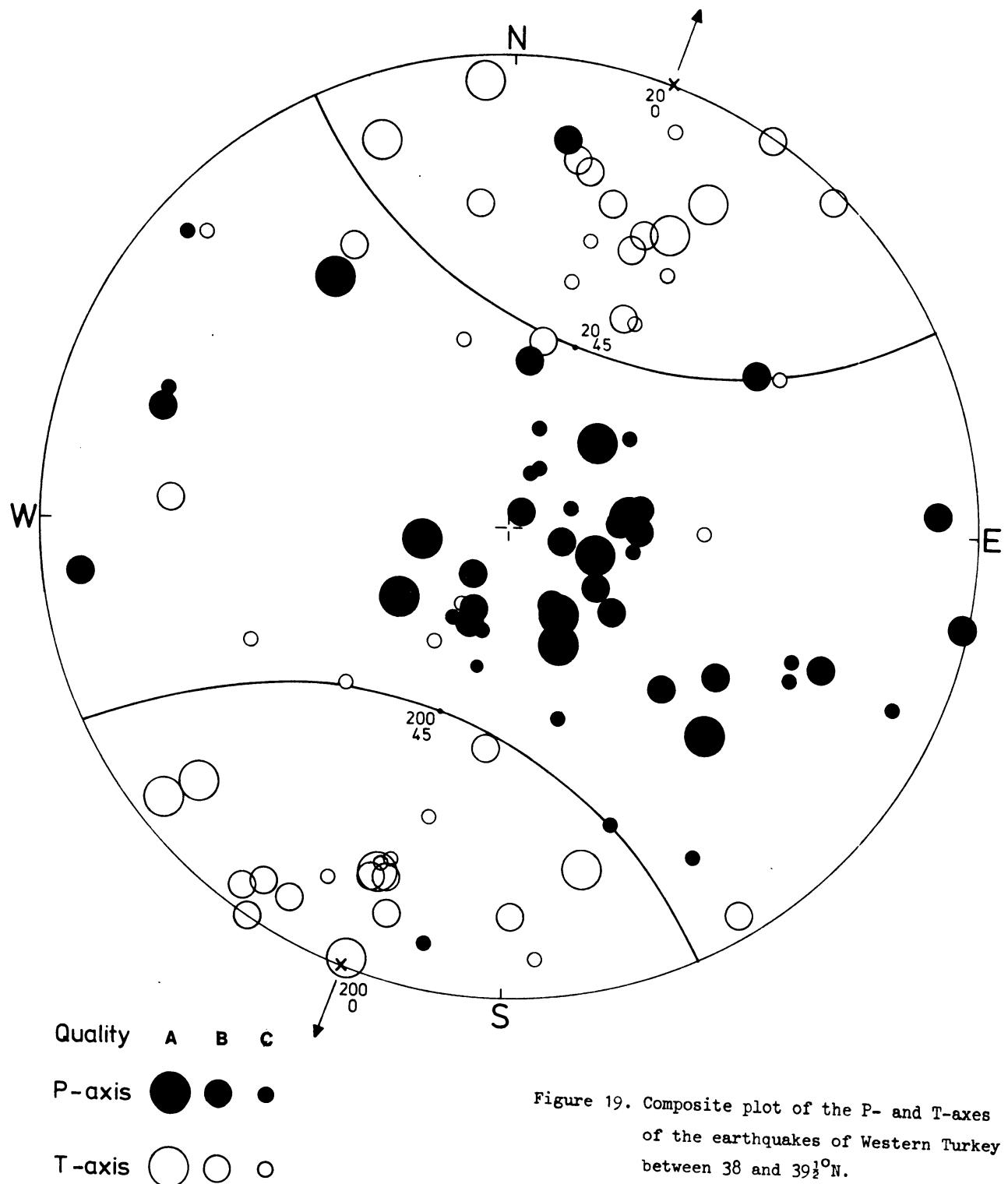


Figure 18. Composite plot of the P- and T-axes of the shocks of Western Turkey, South of  $38^{\circ}\text{N}$ .

Region 366 B  
 $h < 60$  km



Region 366 A  
 $h < 60$  km

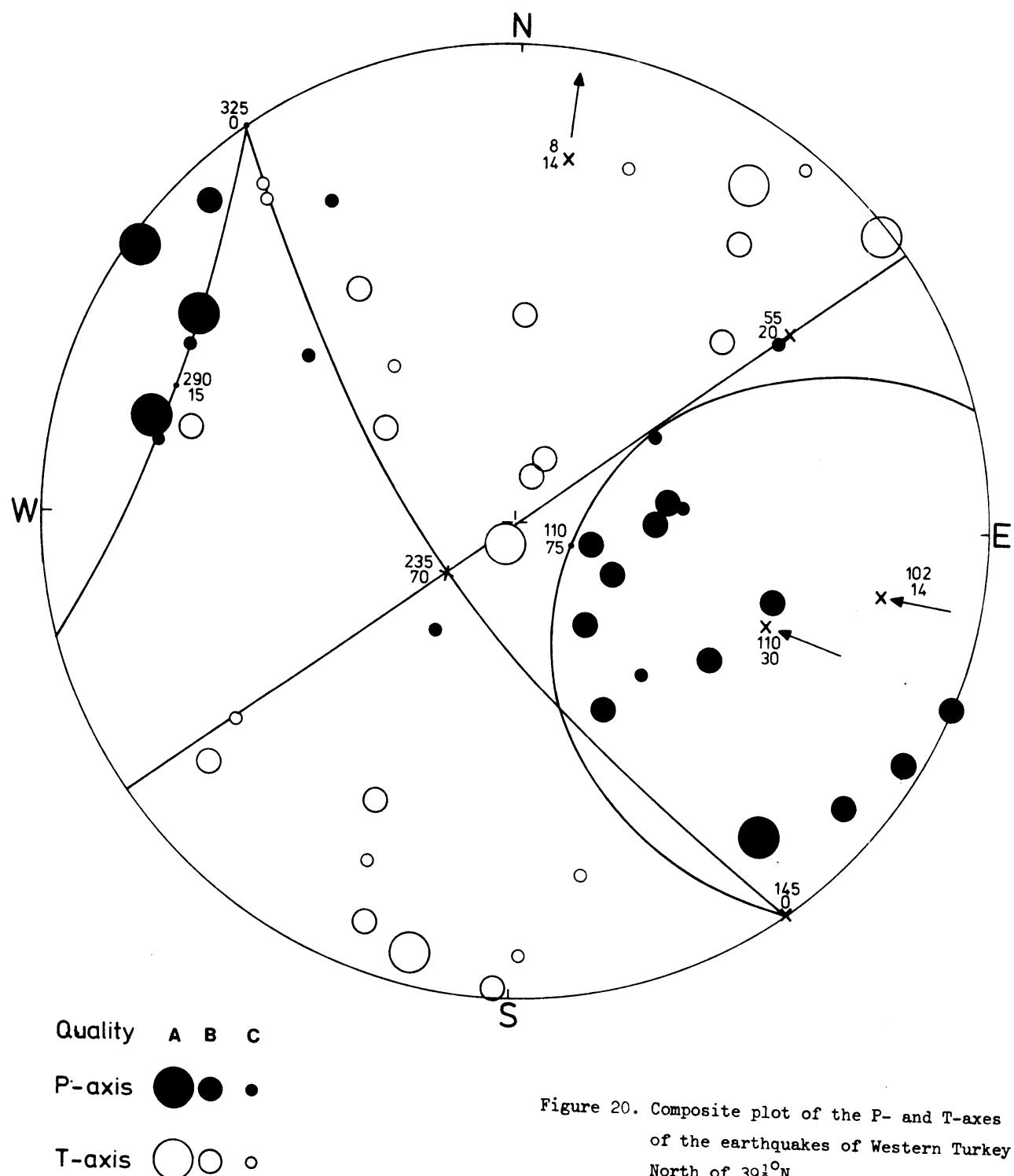


Figure 20. Composite plot of the P- and T-axes of the earthquakes of Western Turkey North of  $39\frac{1}{2}^{\circ}$  N.

Region 363/365  
 $h < 60$  km

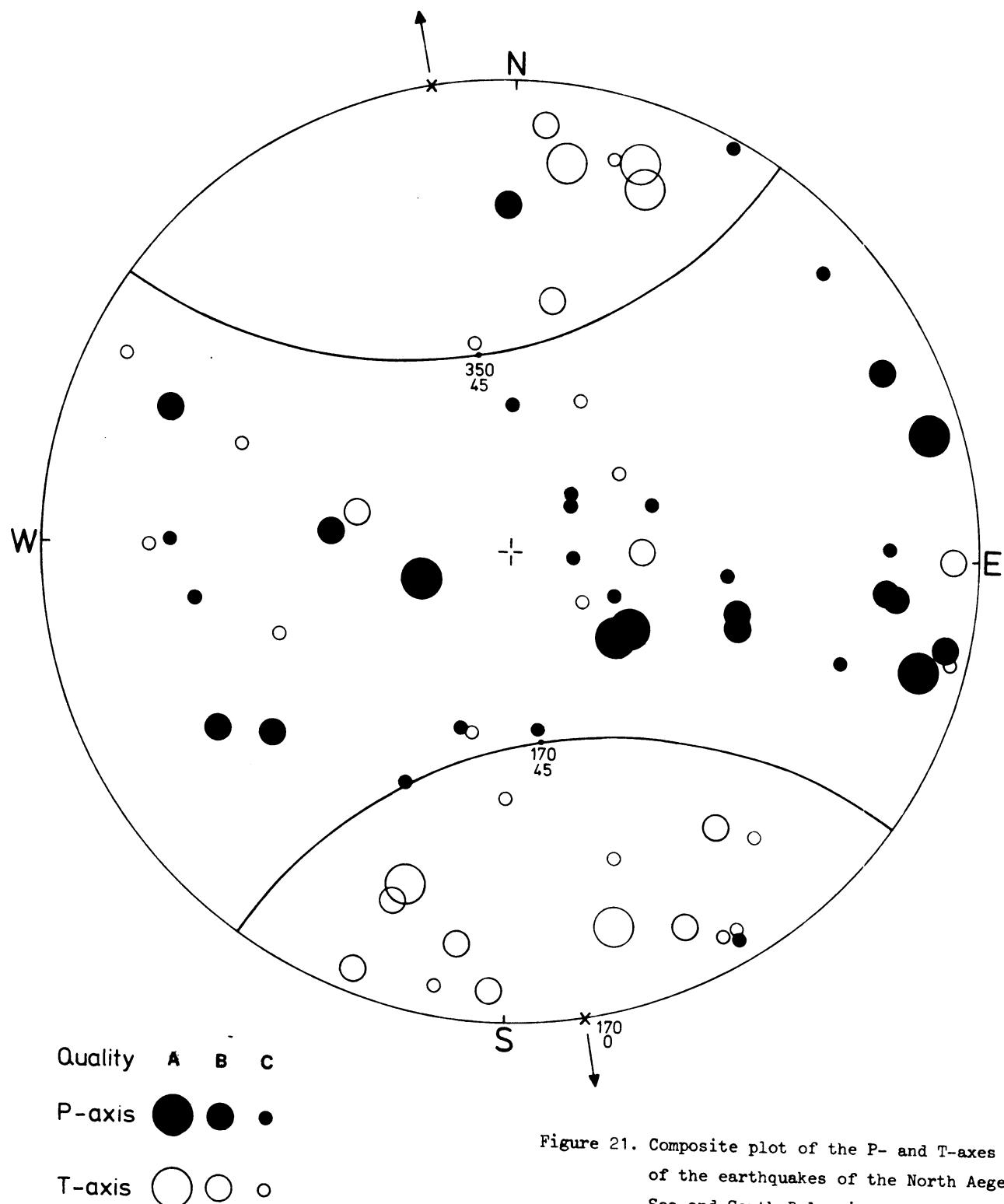


Figure 21. Composite plot of the P- and T-axes of the earthquakes of the North Aegean Sea and South Bulgaria.

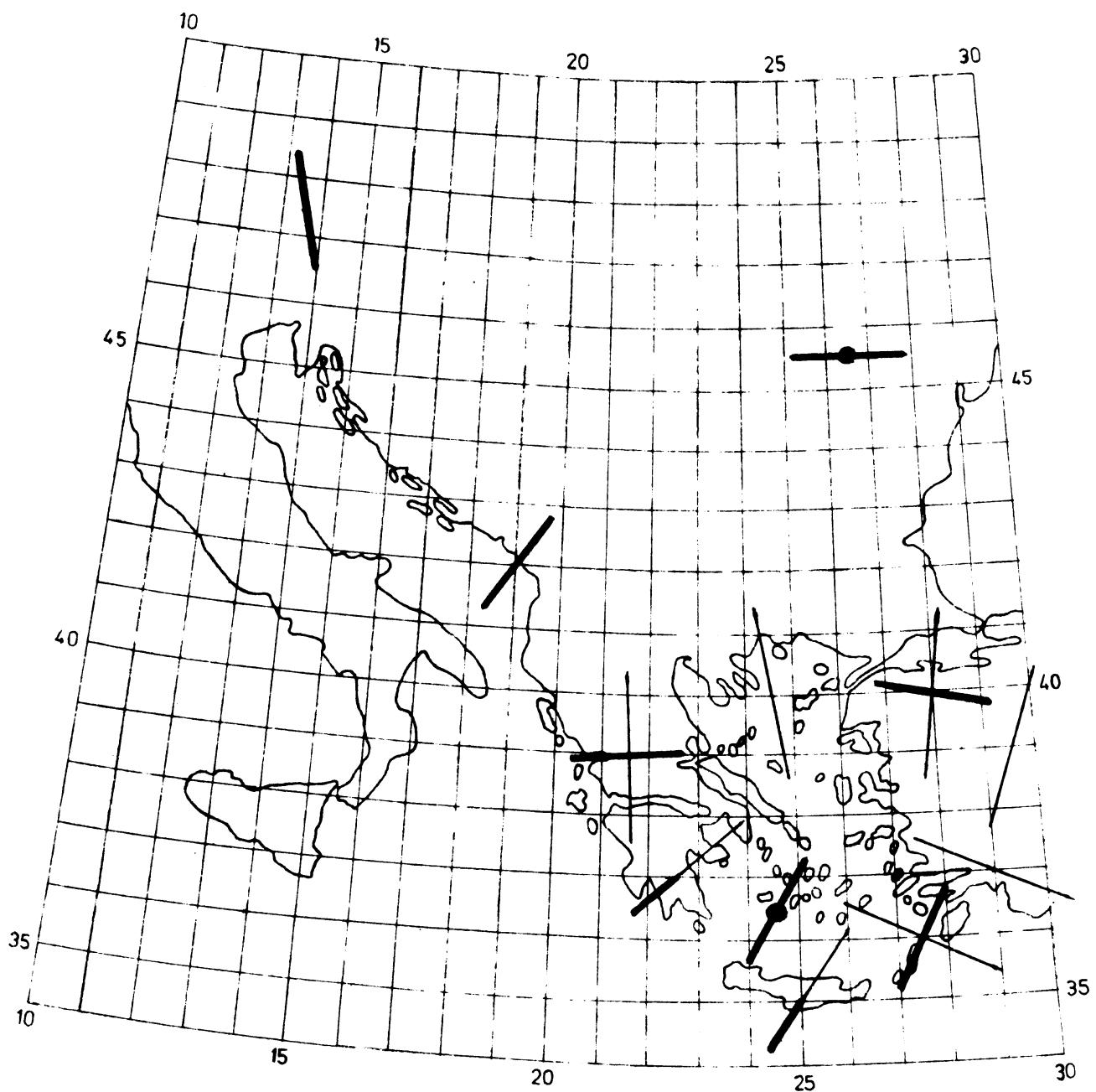
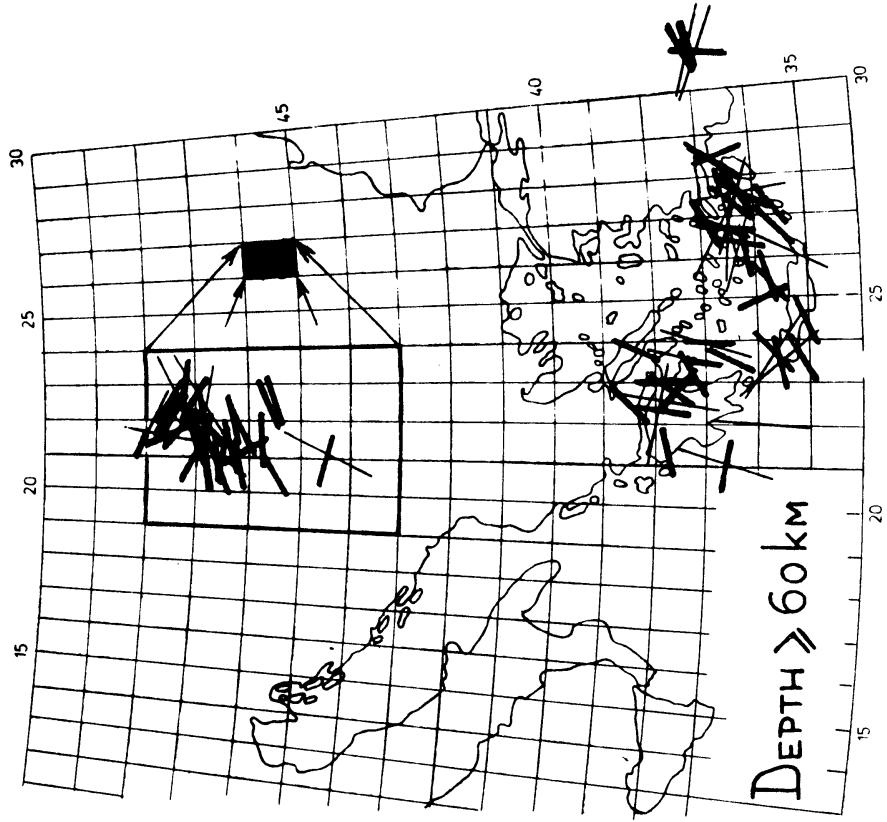
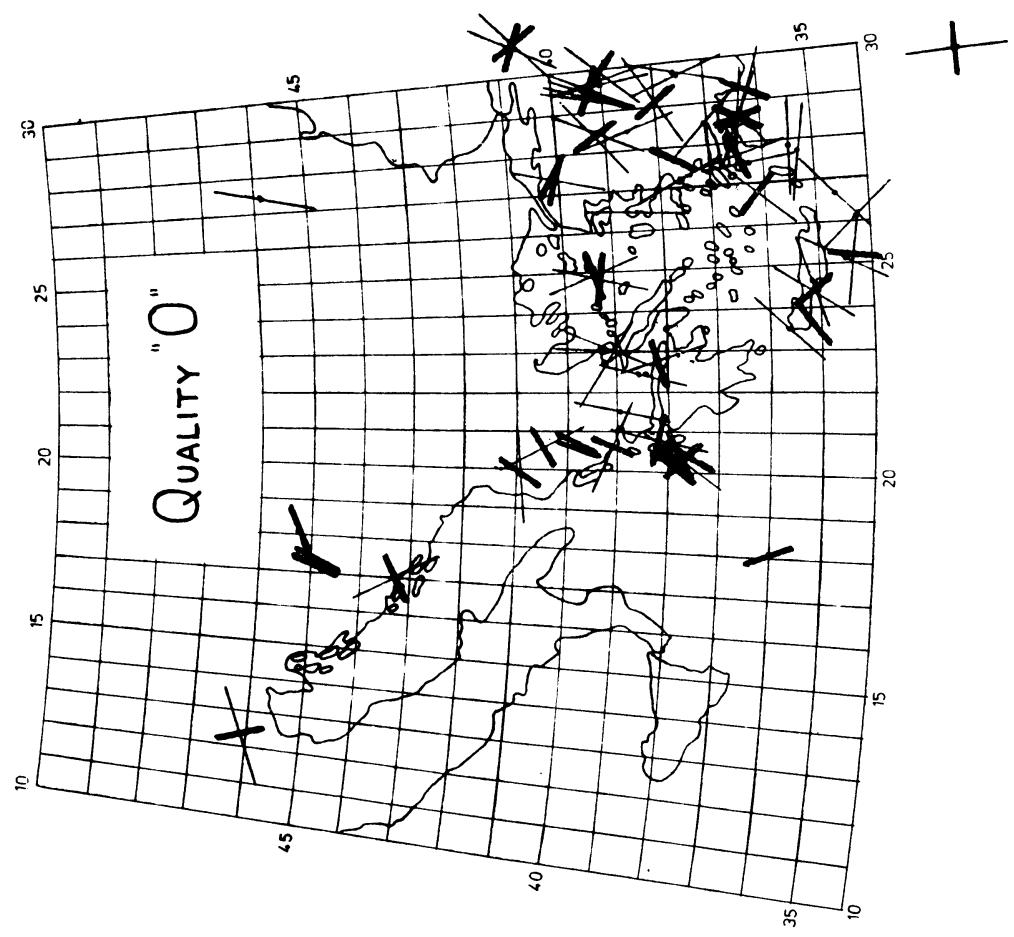


Figure 22. Regional directions of the main earthquake generating stresses.  
Compressional stress (solid bar), tensional stress (thin bar),  
deep earthquake zones (solid bar with central dot).

Earthquake Mechanism Solutions



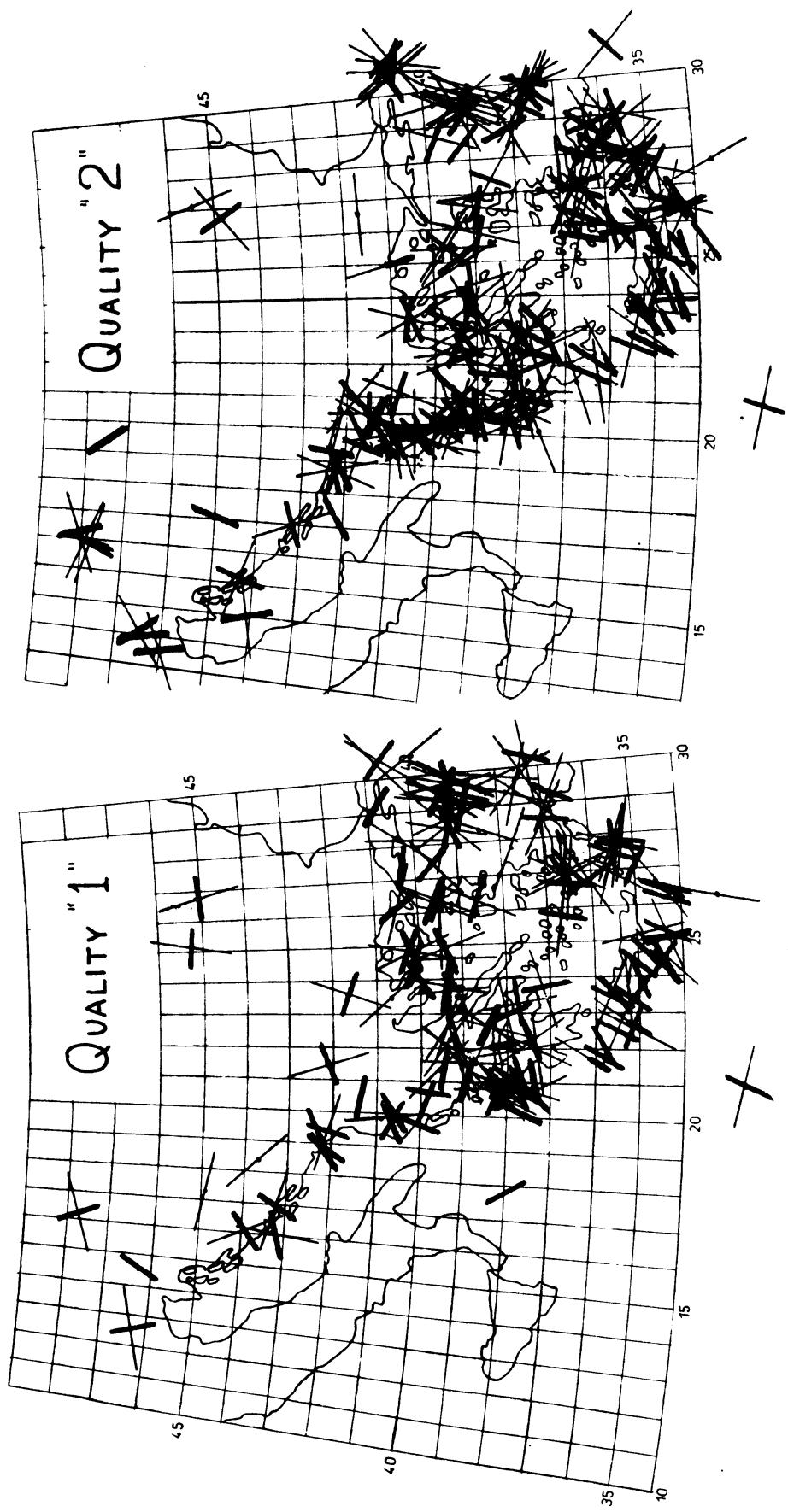


Figure 23. The direction of P- and T-axes in individual earthquakes with solutions of quality A (or 0), quality B (or 1) and quality- C+D (or 2) for foci down to 60 km, and for the deep earthquakes of the region.

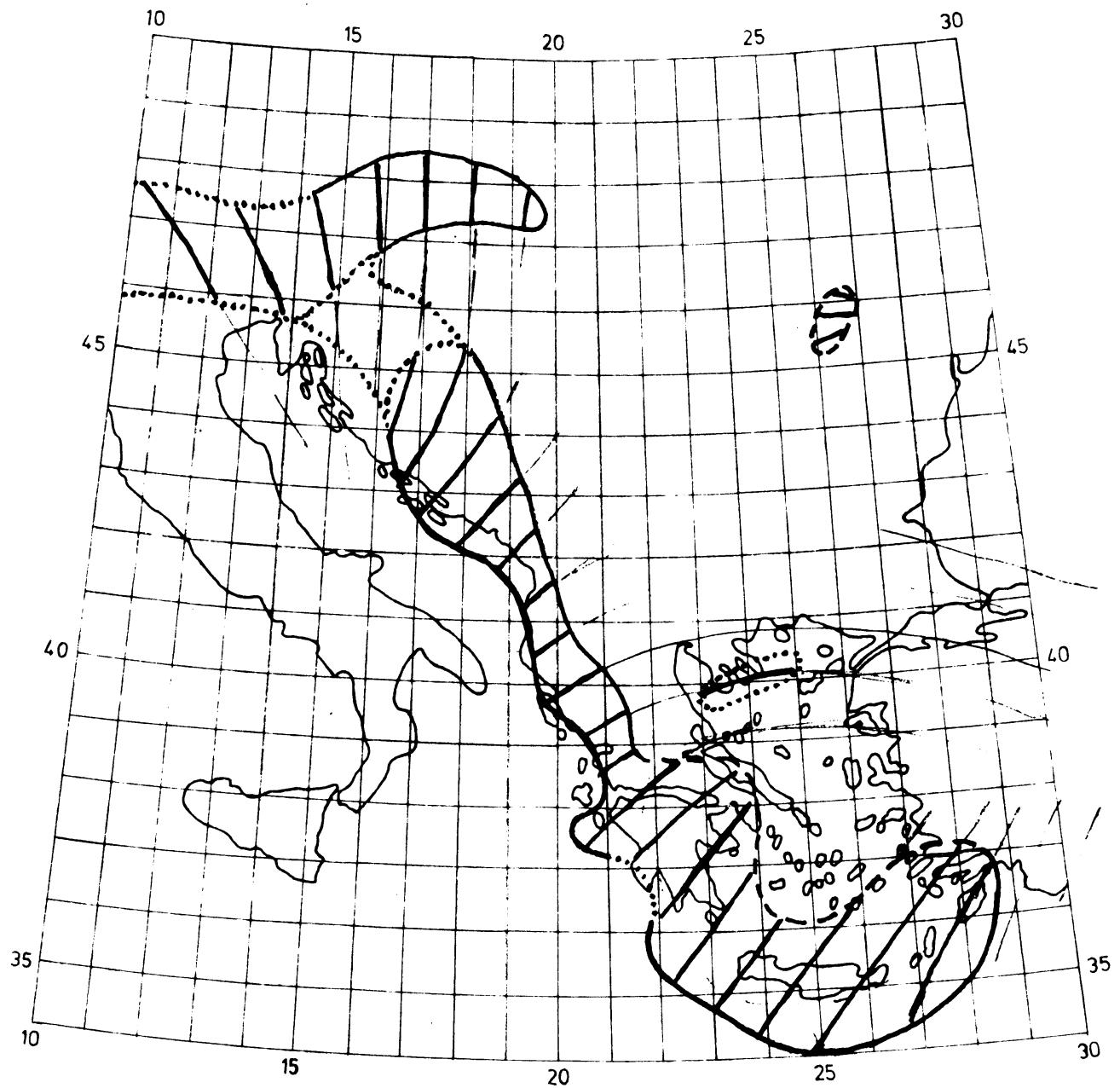


Figure 24. The general direction of compressive stress throughout the Balkan region. In the outlined area the P-axis normally plunges at a smaller angle than the T-axis. Dashed line : deep-focus part.

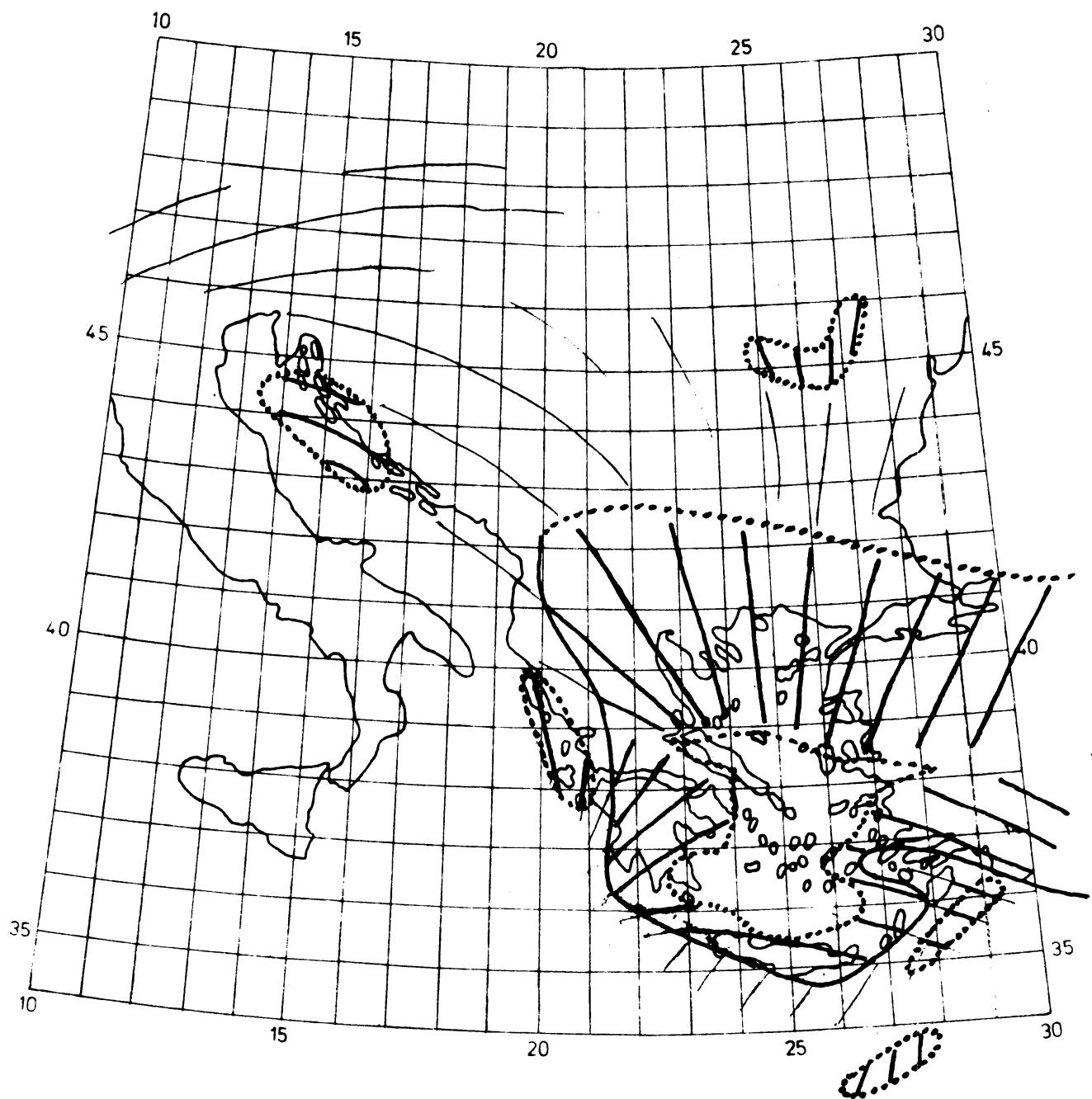


Figure 25. The general direction of tensional stress throughout the Balkan region. In the outlined area the T-axis normally plunges at a smaller angle than the P-axis.

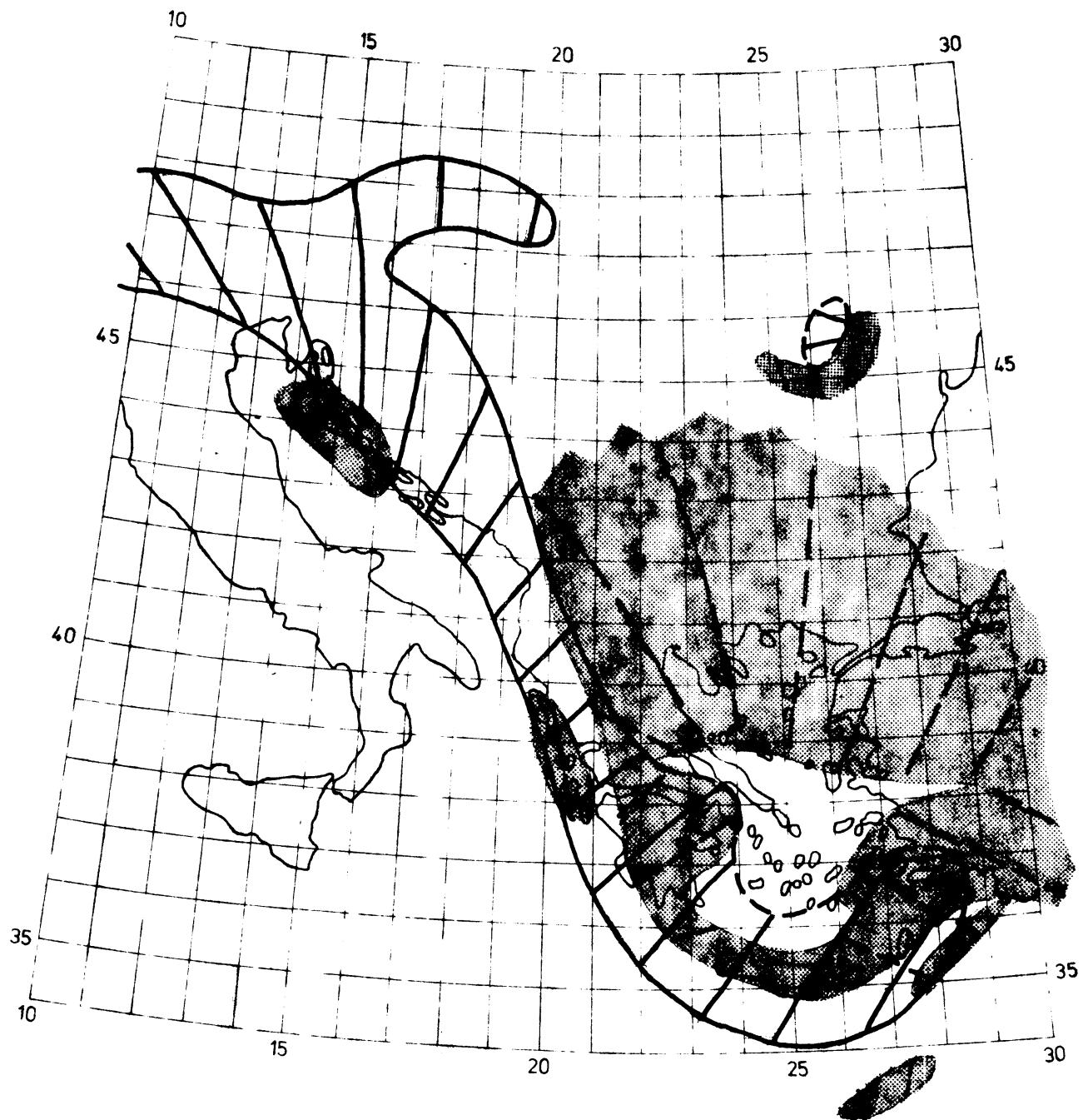


Figure 26. The generalized stress pattern in the Balkan region.

Solid lines : the compressional regime with the direction of P-axes,  
contours are dashed for subcrustal events.

Dotted field : the tensional regime with the direction of T-axes.

CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS  
OF THE BALKAN REGION

Part I : The earthquake mechanism solutions  
of quality A or B in chronological  
order

Part II : The earthquake mechanism solutions  
of quality C or D in chronological  
order

Part III: Regional lists of quality A/B and  
of quality C/D solutions in  
chronological order

== BALKAN PROJECT == CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS ===== KNM|731210 = 52 ==  
 --- PART 1 : QUALITY A AND B SOLUTIONS IN CHRONOLOGICAL ORDER ---

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70			
340329	200646	*	458	N	265	E	358	150		76	7820	17004	27070	26226	7265 02	3101 A	
340329	200646	*	458	N	265	E	358	150	62	76	23512	18150	33538	27836	2017 13	2903 B	
340608	031709		463	N	125	E	545	920	45	34	2500	90	11500	16000	7000 24	1500 B	
361018	031012		461	N	123	E	545	910	56	64	2400	29452	11438	16626	6226 24	3400 A	
400624	055724		459	N	266	E	358	115	53	41	12527	3500	30563	30518	12572 00	2601 A	
401022	063700		458	N	264	E	358	130	62	92	12831	3013	27955	29612	16371 00	5501 A	
401110	013909		458	N	267	E	358	140	73	150	12634	3404	29856	30311	14078 00	5403 A	
430620	153250	*	408	N	304	E	366	915	65	91	3508	23673	8513	13005	3816 04	2101 B	
430620	153250	*	408	N	304	E	366	915	65	91	7000	16000	90	25045	7045 22	2200 B	
450907	154822	*	453	N	264	E	358	100	65	53	9830	33642	21033	24402	15248 00	2603 B	
451209	060845		453	N	264	E	358	100	62	50	3510	12500	21500	3555	21535 12	2202 B	
470604	002955		400	N	240	E	365	80	62	69	6518	33016	20065	23225	9859 02	1601 B	
480529	044855	*	459	N	267	E	358	150	60	66	195030	4426	28048	30910	20062 00	2702 B	
480529	044855	*	459	N	267	E	358	150	60	66	12730	22411	33258	31714	9872 00	2603 B	
480724	060305	*	344	N	245	E	370	960	64	70	151	9013	31871	18314	13719	22700 13	3902 B
480724	060305	*	352	N	245	E	370	60	64	70	151	13540	4500	31550	31505	13585 00	3605 B
480911	085232	*	372	N	232	E	368	80	65	88	10020	515	24065	26284	12462 02	1704 B	
480911	085232	*	372	N	232	E	368	80	65	88	7510	34125	18563	23532	10248 02	1704 B	
490723	150330	*	386	N	263	E	365	920	66	140	19020	27457	5025	10033	903 14	3914 A	
490723	150330	*	386	N	263	E	365	920	66	140	5822	29355	16026	10736	20003 13	4013 B	
500620	011853		459	N	265	E	358	170	56	49	17000	26020	8070	15142	942 22	2200 B	
521217	230357	*	344	N	245	E	370	945	64	71	255	25024	14924	2055	5116	29061 00	6304 B
530338	190613		400	N	273	E	366	9	75	297	33006	8677	23912	28513	19304 14	5509 A	
530809	074107		382	N	208	E	364	914	62	182	24013	668	14617	10303	19422 03	4306 A	
530811	033222	*	383	N	208	E	364	9	65	263	23522	34134	18484	8114	19053 00	2804 B	
530811	033222	*	383	N	208	E	364	33	65	263	26030	17000	8060	8015	26075 00	2804 B	
530812	060801	*	383	N	208	E	364	9	50	70	7534	16500	25554	7581	25509 11	2003 B	
530812	060801	*	383	N	208	E	364	9	50	70	3602	29480	12710	17206	8109 04	1904 B	
530812	092352	*	381	N	208	E	364	22	70	290	26520	35809	11068	9225	25164 02	5621 B	
530812	092352	*	381	N	208	E	364	9	70	290	6112	18668	32717	29403	1821 03	6017 B	
530812	120521	*	381	N	208	E	364	33	61	167	3018	29983	20072	20827	3662 02	5811 B	
530905	140839		383	N	208	E	364	33	57	104	7010	30772	16215	11518	20603 13	3810 B	
541223	162718		380	N	230	E	364	9	56	100	12000	3078	21012	16409	25609 23	2002 B	
531021	183951		383	N	208	E	364	9	61	185	3812	28561	13426	8428	17809 13	1802 B	
540430	130236	*	393	N	222	E	364	920	68	246	12558	3500	30552	12583	30507 11	7522 B	
540430	130236	*	3924	N	2217	E	364	0	70	246	6828	16106	26361	5172	25317 11	9 80	
540803	181813	*	401	N	245	E	365	935	58	120	28408	1400	10482	10437	28453 02	3007 B	
541223	162718		379	N	211	E	368	9 5	55	77	2530	12516	24055	21914	34768 00	1401 B	

== BALKAN PROJECT == CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS ===== KNM|731210 = 52 ==  
 --- PART 1 : QUALITY A AND B SOLUTIONS IN CHRONOLOGICAL ORDER ---

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70		
550419	164719		393	N	231	E	365	9	61	145	17129	28233	5144	12156	1808 11	5510 A
550421	071818		393	N	231	E	365	9	58	135	17527	28331	5347	12857	2011 11	4508 A
550501	212252		455	N	263	E	358	150	54	53	25515	15824	1461	5625	28654 02	2503 A
550716	070712		379	N	271	E	366	9	68	266	19026	7936	30743	24053	34209 11	8820 A
550912	060924	*	322	N	296	E	371	33	61	267	12624	35854	22825	26701	17736 04	8317 A
550912	060924	*	3220	N	296	E	371	33	61	267	12435	535	24536	27401	18356 00	8317 B
560106	121541		404	N	263	E	366	9 0	55	110	10520	1500	28564	10571	25519 12	2003 B
560220	203137	*	399	N	304	E	366	920	60	148	14516*	5500	32574	14561	32529 12	5711 B
560220	203137	*	399	N	304	E	366	920	60	148	16613	28944	6343	12540	1819 12	5711 B
560709	031140	*	3673	N	2580	E	369	9 0	75	317	5901	14900	23989	5946	23944 12	8226 B
560709	031140	*	3673	N	2580	E	369	9 0	75	317	5700	14765	32725	1517	27917 22	8622 B
560815	120255		4322	N	1599	E	382	9 0	55	128	22007	12054	31535*	25230	0318 13	2904 B
570308	121414	*	3930	N	2272	E	364	9 0	65	177	15030	3734	27041	20355	30206 11	5915 B
570308	121414	*	3930	N	2272	E	364	9 0	65	177	17021	8000	35069	17066	35024 12	5717 B
570308	122113		3933	N	2263	E	364	9 0	67	184	13630	2235	25541	18958	28806 11	4508 B
570308	233509		3924	N	2277	E	364	9 0	55	126	15132	03138	26735	20852	30002 11	5709 A
570424	191013	*	3637	N	2859	E	369	948	67	302	12707	3046	22343	16535	27424 13	9711 A
570424	191013	*	3637	N	2859	E	369	48	67	302	34116	11066	24618	20401	29324 03	9810 A
570425	022542	*	3647	N	2856	E	369	953	67	314	12204	2558	21432	16325	26219 13	11218 A
570526	063334		4057	N	3086	E	366	9 0	67	314	12710	2648	22540	16735	27220 13	11218 A
570529	183910		3714	N	2374	E	368	9 0	53	87	11500	8580	20510	15907	25107 23	1902 B
571127	030804	*	3923	N	2261	E	364	9 0	59	116	9328	34432	21545	14356	25302 11	1901 B
571127	030804	*	3923	N	2261	E	364	928	59	116	9328	20536	33542	4253	30108 11	1901 B
580116	041815		3951	N	2545	E	365	9 0	56	115	31310	18773	4514	35917	9003 13	1703 B
580503	201820	*	3615	N	2174	E	368	27	55	120	2700	11700	90	20745	2745 22	1602 B
580503	201820	*	3615	N	2174	E	368	927	55	120	4510	13500	22580	22335	4555 02	1602 B
580509	024045		3644	N	2769	E	369	9 0	56	139	20710	31560	22812	6712	15327 03	3607 A
580527	182745		3684	N	2675	E	369	166 49	52	128	25505	16504	4084	7240	26050 02	6108 A
580630	084245	*	3636	N	2732	E	369	109	57	157	25808	16045	35644	4623	29636 02	6306 B
580630	084245	*	3636	N	2732	E	369	109	57	157	25808	16613	2075	6736	27352 02	6108

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS ===== KNM1731210 = S2 ==  
 --- PART 1 : QUALITY A AND B SOLUTIONS IN CHRONOLOGICAL ORDER ---

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70					
590531	121543	*	4589	N	2739	E	358	9	0	52	110	8000	17000	90	8045	26045	22	3207	B
590610	041602		3556	N	2357	E	370	910	49	55	148	15040	3825	28540	21865	12800	11	2503	B
591005	203404		4089	N	1985	E	391	910		55	112	35520	8500	17570	35565	17525	12	1802	B
591007	083040		4093	N	1987	E	391	9	0	52	178	5010	31042	15146	19822	8840	02	4910	A
591115	170843		3783	N	2047	E	399	100		66	233	4506	13717	29572	24037	2348	02	7014	A
591127	002222		3771	N	2016	E	399	910		51	98	4325	29731	16448	19913	9056	00	1602	B
591201	123845		3776	N	2023	E	399	9	0	52	144	9010	29576	35810	13400	4414	03	3806	A
600104	125159	*	4506	N	2677	E	358	41		54	110	13000	22065	4025	8818	35218	24	2509	B
600104	125159	*	4506	N	2677	E	358	41		54	110	30024	18546	04636	08609	34743	04	29	
600126	202704		4577	N	2633	E	358	180		52	112	25720	35007	09769	08324	24464	02	03506	A
600526	051011		4051	N	2056	E	392	9	0	63	214	10003	20700	00920	05716	32412	14	08733	A
601013	022125		4566	N	2643	E	358	161		55	111	25648	18600	7650	7605	25685	00	4205	A
601105	202048		3909	N	2060	E	392	9	0	57	170	17007	4578	16110	21512	30602	13	2605	A
610523	024520		3671	N	2846	E	369	65		63	253	33031	6914	18055	16213	29171	00	8709	A
610622	005605		4244	N	1935	E	383	43		50	115	5429	14400	23465	23420	5470	00*	1403	B
611211	165310		3540	N	2337	E	368	69	48	91	1530	10500	19560	19515	1575	00*	1705	B	
620107	100315		4327	N	1696	E	383	913		59	177	10514	34464	20021	24405	15126	04	3904	B
620111	050905	*	4331	N	1694	E	383	931	61	212	10013	34264	19622	23907	14626	04	05406	A	
620111	050905	*	4331	N	1694	E	383	31	61	212	28508	1714	16674	26951	11736	12	05109	B	
620121	025135		4315	N	1702	E	383	925		52	96	12070	34964	21618	25801	17726	04	03002	A
620126	081735	*	3524	N	2273	E	400	9	0	62	212	1808	10800	090	19845	1845	22	06510	B
620126	081735	*	3524	N	2273	E	400	0		62	212	10624	21940	35440	31810	5648	00	49	
620318	153030	*	4070	N	1969	E	391	913		62	218	1604	27667	10823	15413	6019	04	05710	B
620318	153030	*	4070	N	1969	E	391	913		62	218	6518	15500	24578	24533	6557	02	05611	B
620410	213707		3779	N	2011	E	399	940		63	225	5618*14600	23672	23627	5663	02	06209	A	
620428	111859	*	3606	N	2679	E	369	51		60	192	18504	31283	9505	14007	5001	14	03106	B
620428	111859	*	3606	N	2679	E	369	51		60	192	2024	28149	12632	16506	7341	04	28	
620428	124349		3612	N	2685	E	369	45		54	185	18605	30278	9510	14111	5003	04	03506	A
620611	071537		4385	N	1831	E	383	9	0	60	202	16530	4641	27935	22049	31303	11	04913	B
620706	091616		3778	N	2016	E	399	48		55	187	6015	32808	21073	23430	7159	02	3608	A
620828	105956		3782	N	2289	E	368	95		67	274	2040	27022	15842	17901	8768	00	11615	A
620910	093624		3464	N	2667	E	370	30		55	174	21016	36620	8564	18356	4626	12	4104	A
630114	183324	*	4584	N	2678	E	358	122		54	117	26040	38708	9649	9605	21081	00	04231	B
630221	171437		3269	N	2097	E	400	0	55	174	5512	32248	15540	20118	9737	04	3907	B	
630304	151017	*	3491	N	2516	E	370	39	52	145	17030	8000	35060	17075	35015	11	02609	B	
630304	151017	*	3491	N	2516	E	370	39	52	145	10904	35978	20011	24505	15411	04	02908	B	
630311	072721		3799	N	2912	E	366	31	56	167	28304	1850	19040	14024	24430	03	04008	A	
630519	100008	*	4627	N	1453	E	383	53	47	118	21530	12206	2260	3015	23274	00	02404	B	
630519	100008	*	4627	N	1453	E	383	933	54	118	20024	8840	32420	34910	24848	10	02305	B	
630726	041712	*	4204	N	2138	E	383	910		61	222	18429	7628	31147	23460	34210*11	05714	B	
630918	165808	*	4080	N	2913	E	366	921		64	210	30408*	3400	12482	12437	30453	02	05016	B
630918	165808	*	4080	N	2913	E	366	21		64	210	19230	30332	6943	14057	3807	11	14818	B
640130	1745570	*	3741	N	2989	E	366	59	56	123	6510	15500	24580	6555	24535	12	02607	B	
640130	1745570	*	3741	N	2989	E	366	59	56	123	17000	26065	8025	1217	12817	23	02509	C	
640408	1412285		3504	N	2429	E	370	64	51	119	7325	16503	20605	25520	6870	00	03906	A	
640411	180043	*	4030	N	2483	E	365	933	54	136	32020	20648	6535	10610	841	03	02205	B	
640413	0829599	*	4527	N	1804	E	383	9	55	158	25035	15310	5053	4209	29676	00	04108	A	
640429	0421051		3925	N	2372	E	365	920	54	137	14004	24377	4912	9512	405	14	02607	B	
640717	0234267		3805	N	2363	E	364	155	57	62	241	2834	12510	22955	21711	35375	00	08915	A
640718	0340194		3613	N	2601	E	369	99	50	57	139	6706	18919	20270	26437	4747	02	3107	B
641006	1429570		4024	N	2816	E	366	923	52	151	3036	27233	15337	2057	18201	11	03309	B	
641006	1431230		4030	N	2823	E	366	15	59	68	210	19736	29004	2554	17980	2109	11	7425	B
641231	161802		3576	N	2551	E	370	89	50	110	7512	16607	28576	26033	6656	02	04308	A	
650107	1022172		3650	N	2665	E	369	35	50	79	19828*29926	6054	15666	3513	11	01502	B		
650110	0252256		4576	N	2654	E	378	137	50	138	25452	14016	3544	5001	32874	00	03605	A	
650302	2200072		3847	N	2833	E	366	942	56	115	4030	29229	16746	9059	19709	11	3303	B	
650309	1757545	*	3934	N	2382	E	365	18	57	63	215	5101	31675	14115	951	18710	13	110	
650331	0947263		3838	N	2226	E	364	45	63	71	279	3224	13019	24459	22719	35863	00	12510	A
650405	0312546	*	3770	N	2180	E	368	34	57	218	3516	28254	13632	17810	8235	13	9	45	
650409	0312546	*	3775	N	2200	E	368	34	54	62	218	17224	25304	34166	15368	34521	11	79	
650409	2357020	*	3506	N	2431	E	370	39	59	65	210	19012*29243	8844	15040	4220	12	08014	A	
650409	2357020	*	3506	N	2431	E	370	39	59	65	210	34103	24377	07220	11812	2416	04	7717	B
650427	1409056		3565	N	2353	E	370	37	55	58	1082	5030	3131	20558	8072	22114	11	07210	A
650529	0414561		3519	N	2257	E	400	43	47	69	24815	362	15224	18084	20227	03	1600	B	
650610	1524417		3644	N	2664	E	369	142	48	50	5210	16768	31820	771	27407	14	01800	B	
650613	2001508		3785	N	2932	E	366	33	51	59	165	2000*11000	90	2045	20045	22	06111	B	
650613	2001508		3785	N	2932	E	366	933	51	59	165	1010*10000	19080	1055	19735	12	06111	B	
650706	0318421		3837	N	2240	E	364	18	58	244	515	10225	24760	3453	20525	12	08220</		

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS ===== KNM1731210 = S2 ==  
 --- PART 1 : QUALITY A AND B SOLUTIONS IN CHRONOLOGICAL ORDER ---

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70			
660205	0258012	3911	N	2191	E	364	50	50	130	4025	30021	17556	7663	20417	11 02302	B	
660214	1757501*	3496	N	2711	E	371	43	48	115	32041	21615	11045	12502	2674	00 03008	B	
660214	1757501*	3496	N	2711	E	371	43	48	115	29040	2000	11050	11005	29085	00 02999	B	
660311	200145	3440	N	2423	E	370	30	49	126	20632	32236	8738	5504	15154	00 02505	B	
660403	1136261*	3894	N	2153	E	364	934	48	134	3510	13953	29835	35232	25216	14 01802	B	
660403	1136261*	3894	N	2153	E	364	934	48	134	17512	8500	35578	35533	17557	02 01604	B	
660504	063659	3894	N	2147	E	364	927	49	141	16028	28244	5033	10646	1402	11 02303	A	
660504	2149018	3774	N	2771	E	366	37	47	126	5640	31116	20445	22003	12074	00 02506	A	
660507	1308169*	3775	N	2779	E	366	9	50	54	146	26824	2849	16232	21842	12305	14 03108	B
660507	1308169*	3775	N	2779	E	366	9	50	54	146	17327	8300	35363	17372	35318	11 02910	C
660509	004253	3443	N	2644	E	370	913	53	58	206	2339	11300	20351	20306	2384	00 06617	B
660509	0351101	3705	N	3098	E	366	132	49	117	24540	15500	6550	6505	24585	00 03008	A	
660509	0608296	3431	N	2644	E	370	43	47	88	2034	28606	17855	19511	1377	00 01403	B	
660604	0416575*	3663	N	2097	E	400	82	48	99	20518*	11500	2572	20563	2527	12 01500	B	
660604	0416575*	3663	N	2097	E	400	82	48	125	31027	21019	9056	11515*	35065	00 04104	B	
660604	0616575*	3663	N	2097	E	400	82	48	125	33508	21568	5820	10309*	1020	04 03906	B	
660611	1205027	3737	N	2108	E	368	47	48	91	7806	16806	30081	26338	7151	02 01904	B	
660712	025622*	3590	N	2249	E	400	9	7	50	99	26010	3273	16812	21417	12401	14 01400	B
660712	025622*	3590	N	2249	E	400	9	7	50	144	7208	31374	16414	20904	11716*	04 03608	B
660712	025622*	3590	N	2249	E	400	9	7	50	144	28508	1500	10582	28553	10537*	12 03212	C
660805	1747434*	4216	N	1876	E	383	935	50	61	5310	14300	23380	23335*	5350	02 01502	B	
660805	1747434*	4216	N	1876	E	383	935	50	61	20818	9451	31033	25537*	35209	13 01502	C	
660816	0353417	4016	N	1975	E	391	920	49	61	19210	9148	29040	23235*	33720	13 01403	C	
660821	0130435	4033	N	2740	E	366	912	49	113	00031	16726	23048	20210	31161	00 02204	B	
660821	0130435	4033	N	2740	E	366	912	49	154	10044	10212	30444	11200	2278	00 02903	B	
660901	1422569*	3746	N	2212	E	368	915	53	56	198	9902	653	19037	24024	13827	04 04815	B
660901	1422569*	3746	N	2212	E	368	15	53	53	198	12701	3580	21730	26620	16821	14 05102	B
661015	0659192	4564	N	2650	E	358	141	51	157	27540	500	9550	9505	27585	00 05212	A	
661029	0239248*	3890	N	2110	E	364	9	1	58	266	13516	3335	24550	28820	17448	02 08726	B
661029	0239248*	3890	N	2110	E	364	9	1	58	266	13516	4500	31574	31529	13561	02 08528	B
661119	071238	3503	N	2346	E	370	917	52	176	15526	3743	26535	30205	20646	00 03912	B	
661208	1131206	4217	N	1887	E	383	47	51	132	3530	30304	20560	21115	5075	00 02510	B	
670104	0558925	3837	N	2204	E	364	9	1	53	172	17000	08000	90	17045	35045	22 03108	B
670304	1758090*	3925	N	2460	E	365	60	60	65	329	02541	12207	22048	32882	21204*	11*10623	B
670404	1659062	3559	N	2356	E	370	73	47	93	27206	08844	17645	23535	12525	12 01902	B	
670501	0709030	3960	N	2129	E	364	34	55	62	301	33020	23221	10060	00259	13322	12 06716	B
670501	0950082	3951	N	2130	E	364	33	48	110	11332	922	25050	27510	16166	00 02206	B	

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS ===== KNM1731210 = S2 ==  
 --- PART 1 : QUALITY A AND B SOLUTIONS IN CHRONOLOGICAL ORDER ---

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70			
670514	0415599*	3770	N	2117	E	368	48	48	132	8024*	34216	21860	24911	11063	02 02906	B	
670514	0415599*	3770	N	2117	E	368	48	48	132	8024*	17512	29063	27020	5766	02 02906	B	
670515	0812579*	3453	N	2664	E	370	35	49	178	20214*	30636	9148	16249	5018	12 03306	B	
670601	1039235	3681	N	2926	E	366	43	50	148	16000	25045	7025	2217	11817	23 04609	B	
670612	0251058	3815	N	2277	E	364	35	50	160	1610	26266	11021	6222	15408	13 03504	A	
670722	1656580	3067	N	3069	E	366	33	60	70	399	18705	31280	96	8	14110	51 1 14 10118	A
671005	1200537	3774	N	2080	E	399	37	50	210	7030	32624	20450	11864	23111	11*07007	B	
671026	0455393*	3722	N	2905	E	366	46	49	150	5522	31524	18257	9259	21619	11 02711	B	
671026	0455393*	3722	N	2905	E	366	46	49	150	14418	1264	24018	10200	19226	04 02909	C	
671130	0723504*	4141	N	2044	E	391	921	59	66	312	5007	30763	14426	9423	19013	13 08020	B
671205	0520031	3683	N	2685	E	369	137	47	83	10122	20327	33953	6157	30217	11 76	B	
680207	2222190	3665	N	2674	E	369	153	50	146	15317	04741	26044	19644	30216	12 05409	A	
680209	1322545	4561	N	2642	E	358	128	46	98	13028	23120	35255	32614	09066	00 03305	B	
680212	101850	3796	N	1787	E	399	10	52	158	31516	4912	17370	14520	29859	02 5111	B	
680219	2245424	3940	N	2494	E	365	9	7	60	70	333	20905	32579	11810	07304	16411 03 08915	A
680328	0739595*	3784	N	2089	E	399	923	53	58	225	01520	10500	19570	19525	01565	02 06011	B
680424	0818033	3933	N	2488	E	365	920	51	53	227	24027	35572	15016	10506	19717	03 06208	A
680530	1740244*	3545	N	2788	E	369	27	53	59	222	29213	32628	11858	19749	7227	12 78	B
680704	2147536	3776	N	2323	E	368	20	52	57	226	02821	27347	13435	07541	17409*	13 05813	B
680708	1741064	3447	N	2508	E	370	38	53	194	19714	29117	07068	17456	03128	12 06209	A	
680804	1818384	3536	N	2777	E	369	942	45	93	2533	11500	20557	20512	2578	00 1402	B	
680815	0229431	3518	N	2670	E	370	48	50	159	21612*	12600	03678	21657	03633	12 03002	B	
681019	153454	3524	N	2340	E	370	9	6	48	133	04212	29552	14035	18515	08434	04 01801	B
681031	032214*	3662	N	2701	E	369	9	2	50	159	28515	15567	02017	06401	33323	04 03012	B
681031	0322140*	3662	N	2701	E	369	2	50	159	5309	18961	31827	27313	926	04	52	B
681103	0449337	4210	N	1935	E	383	928	51	214	33015	09766	23518	19102	28224	03 02605	B	
681103	1840017	3881	N	2911	E	366	23	48	104	31530	19244	06531	10101	01046	04 02203	B	
681120	0151156	4565	N	2660	E	358	124	42	40	25510	16504	07080	07435	25755	02 01101	B	
681204	193722	3650	N	2702	E	369	932	47	87	07420	32442	18341	22313	11946	00 01501	B	
681205	0752111*	3660	N	2692	E	369	931	54	206	01609	28677	16013	06010	15210	23 05718	B	
681205	0752111*	3660	N	2692	E	369	31	54	206	3329	27342	14534	8648	18003	11 5322	C	
681225	1217191	3499	N	2431	E	370	958	50	156	02538	12108	22057	21207	34080	00 02810	B	
690114	2312062	3611	N	2919	E	366	922	56	60	263							

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS ===== KNM 731210 = 82 \*\*  
 --- PART 1 : QUALITY A AND B SOLUTIONS IN CHRONOLOGICAL ORDER ---

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70					
690115	0846290	4562	N	2655	E	358	129	46	91	25336	15314	04551	06208	30074	00	03404	A		
690131	144004	3429	N	2614	E	370	31	48	78	35020	8924	22558	18923	30657	02	2104	B		
690303	0059105	4008	N	2750	E	366	9	56	53	225	15044	03505	30046	30501	20385	00	07524	A	
690323	2108421	3914	N	2848	E	366	9	56	56	256	19530	29620	05553	15067	03112	11	10214	A	
690324	0159340	3911	N	2851	E	366	930	50	156	19326	30335	07543	14453	04010	11	03511	B		
690324	0159340	3911	N	2851	E	366	930	50	156	18726	31350	08228	13540	04401	14	03808	B		
690325	1321342	3925	N	2844	E	366	937	55	60	197	01015	13464	27420	32426	23104	14	06515	A	
690328	0148295*	3855	N	2846	E	366	9	48	296	120	15500	24564	6526	11318	1718	24	2505	B	
690328	0148295*	3855	N	2846	E	366	9	48	296	00624	26424	13555	04560	16717	11	09028	A		
690403	2212219	4066	N	1998	E	391	921	50	55	197	23300+14300	05360	05315	23375	00	05212	B		
690408	0349339	3847	N	2641	E	365	916	56	55	229	20432	16120	34551	25268	00810	11	08519	A	
690412	2038418*	4531	N	2512	E	358	923	49	181	33913	23262	07525	11808	02527	04	03204	B		
690412	2038418*	4531	N	2512	E	358	923	49	138	06218	31836	17348	10248+21518	12	03011	B			
690416	2255405	3532	N	2777	E	366	952	51	173	30010	05568	20620	16107	25421	03	04211	B		
690416	2321062*	3523	N	2772	E	369	58	51	181	35522	9116	21362	18721	32764	00	3816	B		
690430	202032*	3912	N	2852	E	366	9	50	181	33903	09679	24810	20303	29411	03	04113	B		
690430	202032*	3912	N	2852	E	366	9	50	141	5920	31818	19062	8361	22022	12	2410	B		
690501	1802164*	3541	N	2768	E	369	51	51	180	13027	02223	26744	18867	29005	11	04718	B		
690501	1802164*	3541	N	2768	E	369	51	51	180	00800	27863	09827	05018	14618	23	04817	C		
690514	1005171	3533	N	2773	E	369	67	47	142	23010	34063	13525	9010	18626	03	2205	B		
690514	1205568*	3528	N	2773	E	369	946	48	143	04325	29928	16851	20115+08658	00	02804	B			
690515	1205568*	3528	N	2773	E	369	946	48	143	16405	05277	25152	20812+30105	13	02804	B			
690516	0727011	3913	N	2182	E	364	39	50	153	5404	14509	28578	4452	24237	12	2109	B		
690612	1513309*	3443	N	2504	E	370	922	58	58	288	00528	26224	13852	16613	05063	00+10018	B		
690612	1513309*	3443	N	2504	E	370	922	58	58	288	9500	18562	18517	573	00	9917	B		
690614	1347264*	3434	N	2505	E	370	921	50	154	19510	29649	09740	15435	05019	14	04011	B		
690614	1347264*	3434	N	2505	E	370	921	50	154	00604	27245	10045	15226	04334	04	03912	B		
690708	080915	3750	N	2031	E	399	9	0	55	54	212	04200	13200	90	22245	04225	22	08211	A
690906	2030403	3673	N	2835	E	369	72	50	137	24232	13821	02050	04409	29266	00	05312	A		
690928	225408	3430	N	2515	E	370	29	53	55	203	15510	02762	25220	20428	29401	13	06107	A	
691007	050912*	3920	N	2840	E	366	913	49	148	23005	12769	32220	00810	27418	04	02701	B		
691007	050912*	3920	N	2840	E	366	913	49	148	6000	15000	90	6045	24045	22	2503	B		
691012	1334199	3976	N	2056	E	392	46	50	163	01024	10817	23060	20420	34163	00	03404	A		
691013	0102308*	3978	N	2059	E	392	27	54	57	236	35505	26404	14084	17140	36050	02	06822	A	
691013	0102308*	3978	N	2059	E	392	27	54	57	236	404	27325	10365	16336	2944	02	102		

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS ===== KNM 731210 = 82 \*\*  
 --- PART 1 : QUALITY A AND B SOLUTIONS IN CHRONOLOGICAL ORDER ---

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70				
691026	1536524	4484	N	1730	E	383	33	51	56	212	00020	09717	22563	19423	33360	02	04606	A
691027	0810582	4485	N	1722	E	383	33	53	61	265	34725	09837	23242	19810	29851	00	06007	A
691231	1318333	4488	N	1723	E	383	933	48	115	07020+14536	31747	02850	27716	11	02005	B		
700124	1543540	3721	N	2345	E	368	105	47	42	01000	28010	10080	18044	02044	22	01100	B	
700211	1901189	3759	N	2267	E	368	79	49	125	05736	31220	20048	22007	11170	00	04108	A	
700328	2102235	3921	N	2951	E	366	918	60	71	347	04027	29625	17051	08461	20014	12	17513	A
700328	2311434	3915	N	2956	E	366	931	48	158	1535	18500	19855	3580	19510	11	3808	B	
700328	2328277	3923	N	2950	E	366	930	44	98	05540	36325	19040	12385	03300	11+01401	B		
700329	0656244	3906	N	2974	E	366	929	51	195	18530	07530	31045	23759	34108	11	05207	A	
700329	191143	3914	N	2932	E	366	922	47	122	07214	18051	33235	28814	02836	03	01902	B	
700330	075952*	3934	N	2926	E	366	916	51	176	19022	29022	06058	15560	02819	11	04012	A	
700330	075952*	3934	N	2926	E	366	916	51	176	19022	10000	1068	19047	1023	12	4012	B	
700331	005136	3933	N	2941	E	366	918	46	87	07520	31157	17525	12434	21603	13	01300	B	
700401	1556046	3932	N	2927	E	366	935	48	120	17025	27426	4352	12859	1234	11	3103	B	
700407	1705119	3934	N	2932	E	366	933	51	184	4040	29022	18042	10668	20001	11	6012	A	
700408	1350283*	3834	N	2266	E	364	923	58	63	281	35515	9141	25045	31443	20619	12	7227	B
700408	1350283*	3834	N	2256	E	364	923	58	63	281	34520	9036	23147	30250	19256	11	7326	B
700416	1042223	3902	N	2991	E	366	931	54	208	9013	33660	18626	13528	23009	13	6911	A	
700419	1329365	3903	N	2976	E	366	918	55	88	245	18108	9100	182	18153	137	12	7331	C
700419	1329365	3903	N	2976	E	366	918	55	88	4010	15970	30717	26305	35420	03	7826	B	
700419	1347350	3903	N	2980	E	366	924	54	58	221	20424	12400	2466	20469	2421	11	7415	B
700422	0524060	3902	N	2977	E	366	937	51	160	505	9500	18585	550	18540	12	4310	B	
700422	1838501	3908	N	2942	E	366	948	46	101	4539	38513	20048	10277	21405	11	1706	B	
700423	0429482	3751	N	2273	E	368	74	48	133	12414	21401	31076	30531	12259	02	4210	A	
700423	0901266*	3913	N	2865	E	366	928	52	56	208	18222	9200	268	18267	223	12	6419	B
700423	0901266*	3913	N	2865	E	366	928	52	56	208	15024	6000	33066	15069	33021	11	6518	B
700424	0040014	3901	N	2985	E	366	932	48	129	20321	13100	2369	20366	2324	12	3607	B	
700424	0040014	3901	N	2985	E	366	932	48	83	19510	09544	29545	23439	34322	12	04112	B	
701220	1101479*	3940	N	2924	E	366	38	50	55	88	19538	18107	00057	21876	01013+11	02003	B	
701220	1101479*	3940	N	2924	E	366	38	50	55	88	17538	28624	04042	11166	01702+11	01904	B	
710222	1427446	3724	N	3027	E	366	45	50	77	00540	10815	21546	19903	30075	00+01503	B		
710223	1941230	3960	N	2737	E	366	915	50	54	88	09518	21859	35724	31504	04830	03	02306	B
710318	1608041	3651	N	2696	E	369	154	47	49	08310	17404	28579	07854</					

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\* KNMI731210 = S2 \*\*  
 --- PART 1 : QUALITY A AND B SOLUTIONS IN CHRONOLOGICAL ORDER ---

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70				
710811	0537287*	3696	N	2391	E	368	120	49		43	23037	33418	08448	6504	17172	00	2107	B
710811	0537287*	3696	N	2391	E	368	120	49		42	01010	27812	14074*18034	02454	02	02206	B	
710909	1510033	3730	N	3024	E	366	923	53		84	08530*17500	26960	08575	26515	11	02303	B	
711013	0326271	3426	N	2609	E	370	27	51		99	14536	04612	30051	19376	31407	11	02804	A
711217	0206052	3496	N	2397	E	370	33	47		60	05510*14817	29470	25033	03552	02	01201	B	
720416	1010035*	4773	N	1612	E	546	918	49		43	11500	02570	20520	15814	25214*23	01401	B	
720416	1010035*	4773	N	1612	E	546	918	49		43	07020	18616	29064	04562	26222*11	01401	B	
720426	0630239	3950	N	2635	E	366	926	50		78	06017	30058	15826	10631	20006	13	02305	B
720426	1559450*	3951	N	2634	E	366	928	48		73	33512	28063	07024	11408*02025	04	01404	B	
720426	1559450*	3951	N	2634	E	366	928	48		73	31541	21115	10545	12102*02474	00	01602	B	
720429	1829382	3481	N	2463	E	370	47	51		102	08230	32340	19736	23004	12650	00	02202	B
720504	2140009*	3512	N	2361	E	370	46	59	63	100	06620	16625	30156	26620	03157	02	05003	A
720504	2140009*	3512	N	2361	E	370	46	59	63	100	4809	14008	27378	23636	3953	02	133	
720508	0920545*	4164	N	2353	E	363	910	50		57	10505	01500	29585	28540*10550	02	01701	B	
720508	0920545*	4164	N	2353	E	363	910	50		57	15506	06570	24520	29214*19814	24	01701	B	
730105	0549175	3581	N	2183	E	400	33	53	51	109	4030	38510	20058	21315	6775	00*	3805	B
730126	0750128	3582	N	2210	E	400	58	47		60	6030	19000	24060	24015	6075	00	1303	B
730406	1413541	3443	N	2525	E	370	916	51		89	3027	18000	21063	21018	3072	00	2401	B
730714	1238183	3790	N	2107	E	368	936	47		59	7515	33923	19562	23726	10454	02	1303	B

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KNM1731210 = 52 \*\*  
 --- PART 2 : QUALITY C AND D SOLUTIONS IN CHRONOLOGICAL ORDER ---

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70	
280327	083228	464	N	130	E	546	920	58	73	16535	26007	00054	35108	13178 00	1100 C
291101	065721	459	N	266	E	358	198	53	75	8030	34214	23056	24914	11670 00	1201 C
330423	055738	368	N	273	E	359	50	54	133						8
330511	190944	405	N	237	E	364	915	53	109	12200	3280	21210*24807	16607	24 900 C	
330719	200710	382	N	297	E	366	100	60	64						7
341109	134056	3675	N	2575	E	369	140	63	71						7
341130	025819	441	N	140	E	382	930	56	54	12000	21070	3020	34317	7714 23	2409 C
350225	025137	358	N	250	E	370	80	71	130	18020	6221	31060	34421	23260 02	1700 C
350318	084041	355	N	270	E	349	130	65	72	23526	14500	5570	5525	23565 02	1401 C
350713	000348	460	N	265	E	358	150	53	49	12300	3300	90	30345	12345 22	1000 C
360613	003237	327	N	225	E	400	9	50	54						6
361019	070554	460	N	125	E	545	910	45	23	2400	90	11400	15900	6900 24	1103 C
371216	173527	350	N	235	E	370	100	63	70	6308	90	15300	1800	10800 24	900 C
380327	111624	462	N	168	E	383	9 7	56	69	22010	18000	4080	4035	22055 02	700 C
380720	002335	383	N	238	E	364	913	61	89	23316	38942	12843	19043	8516 12	1300 C
380918	035028	380	N	225	E	364	100	62	76	19050	10000	1040	1085	19005 11	801 C
390803	123247	398	N	296	E	366	912	55	51	6420	34738	17545	10848	21515 11	900 C
390809	234344	398	N	296	E	366	915	51	33	1821	27034	13048	5852	16916 11	400 C
390915	231626	398	N	296	E	366	916	57	70	1521	27034	13048	5852	16916 11	1204 C
390920	001926	380	N	215	E	364	80	58	68	5520	30840	16543	20614	10047 00	600 C
390922	003632	390	N	269	E	366	920	66	101	1039	26715	16047	7074	17605 11	1200 C
400106	190433	357	N	259	E	370	916	56	50	24224	449	14032	19640	10006 14	700 C
400229	160744	357	N	259	E	370	932	60	92	4012	18000	22075	22030	4060 02	1502 C
400816	160223	357	N	308	E	371	940	55	42	24040	18000	6050	6005	24085 00	700 C
400818	182312	357	N	308	E	371	925	52	39	24040	18000	6050	6005	24085 00	1000 C
401108	120044	457	N	262	E	358	100	53	21						2 D
401111	063417	460	N	268	E	358	150	50	36	12634	3404	29856	30311	14078 00	600 C
410301	035247	395	N	225	E	364	915	62	73	15000	24065	6025	10888	1218 24	1301 C
410514	083620	393	N	224	E	364	915	55	48	6000	15080	90	6045	24045 22	600 C
410523	195152	372	N	283	E	366	9 8	60	67						11
410523	223409	372	N	283	E	366	910	53	44						5
410713	153926	376	N	258	E	369	915	59	52	6025	18000	24065	6070	24020 11	701 C
420616	054227	404	N	280	E	366	915	56	43						7
420621	043834	364	N	274	E	369	130	64	47						7
420627	061411	416	N	205	E	391	912	60	59	6008	15000	90	24045	6045 22	1100 D
430120	123819	432	N	164	E	383	927	53	29						700 C
431016	150846	364	N	279	E	369	110	66	69						6
440106	074404	364	N	274	E	369	916	56	36						16 D
440527	235225	372	N	283	E	366	100	62	32						7 D
441006	023441	394	N	267	E	366	920	68	90	8000	38070	17020	12314	21714 23	801 C

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KNM1731210 = 52 \*\*  
 --- PART 2 : QUALITY C AND D SOLUTIONS IN CHRONOLOGICAL ORDER ---

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70	
450312	205147	457	N	268	E	358	150	58	28						
450902	115405	344	N	289	E	371	80	64	76	13045	4000	31045	13000	90 00	601 D
460221	154304	383	N	318	E	366	9	56	58						800 C
460405	205358	351	N	234	E	370	100	57	63	6914	18900	24976	24931	6959 02	1300 C
460716	052626	338	N	253	E	371	915	57	82	5518	14500	23580	23535	5555 02	1000 C
470601	111835	366	N	215	E	368	917	55	64	9014	000	27076	27031	9059 22	600 C
470707	223538	372	N	208	E	399	100	52	62	52					7 D
470830	222131	351	N	234	E	370	915	64	99	15000	24083	6007	1505	10505 23	1500 C
471006	195534	369	N	220	E	368	925	69	137	11723	34955	21824	16835	25801 13	901 C
480209	125813	355	N	272	E	369	930	71	151	10028	4000	28062	10073	28017 11	2203 C
480422	104245	388	N	206	E	364	913	66	125	5000	14000	90	23045	5045 22	900 C
480630	122113	388	N	206	E	364	916	64	108	35833	14223	23540	20504	30157 00	1501 C
480827	104046	417	N	195	E	391	911	55	61	6500*	90	15500	2000	11000 24	1101 C
481010	174301	351	N	234	E	370	915	57	70	24027	15000	6073	24062	6028 12	801 C
481018	085953	355	N	272	E	369	915	55	58	32020	9000	13070	13025	32065 02	1400 C
500923	062340	348	N	256	E	370	9 9	53	95						
510824	102726	373	N	213	E	368	9 3	49	76						8 D
510831	122937	355	N	228	E	370	915	55	107						700 D
511001	012633	345	N	265	E	370	915	50	79						9
520319	012723	398	N	287	E	366	926	54	126	16000	7070	25020	29714	20314 24	1405 C
520603	055322	457	N	268	E	358	922	45	49	28038	2418	13548	11606	22471 00	800 C
520612	110008	348	N	262	E	370	9	45	39						9
520613	010722	373	N	221	E	368	9 4	47	71						10 D
520902	232007	372	N	216	E	368	9 7	46	17						5
521005	105456	375	N	208	E	399	924	56	129						14
521013	164227	388	N	232	E	364	9 8	50	64						
521022	041495	367	N	279	E	368	915	52	42						600 D
521231	171843	355	N	257	E	370	912	52	112						7
530207	223105	347	N	241	E	370	9 6	53	152	25520	18500	7570	7525	25565 02	1904 C
530214	084313	355	N	265	E	370	60	57	132	4500	18500	90	22545	4545 22	1603 C
530603	160524	401	N	288	E	366	9 8	53	70						
530618	054406	417	N	266	E	383	917	51	120	9030	000	27060	9075	27015 11	1000 C
530623	015310	357	N	293	E	370	100	61	73	5010	14000	23080	23035	5035 02	902 C
530722	150933	391	N	285	E	366	925	52	93						6
530812	113346	383	N	208	E	364	910	53	73						10
530812	133920	380	N	210	E	364	33	52	75	5000	14000	90	23045	5045 22	3206 C
530812	160830	380	N	210	E	364	910	51	71	4200	34248	13242	18628	7828 24	2606 C
530813	032204	381	N	208	E	364	33	52	71	20807	38545	11144	16936	6223 14	2309 C
53091															

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KNM1731210 = 32 \*\*  
 --- PART 2 I QUALITY C AND D SOLUTIONS IN CHRONOLOGICAL ORDER ---

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70					
531228	023844	383	N	208	E	364	917	52	82	5120	28359	15022	10031	19102	13	1102	C		
540308	081718	380	N	206	E	364	918	53	73							7			
540417	205246	379	N	229	E	368	9	52	79	17000	26070	8020	3314	12714	23	1100	C		
540501	205325	377	N	270	E	366	917	52	69							7			
540504	164321	393	N	222	E	364	914	56	87	13546	4500	31544	13501	31589	00	900	C		
540504	164527	393	N	222	E	364	914	46	79							800	D		
540525	220332	393	N	222	E	364	922	55	96	6040	18000	24050	24005	6085	00	1001	C		
540718	144230	376	N	212	E	368	917	52	71	7510	16500	25580	25555	7555	02	801	C		
540805	203908	358	N	275	E	369	915	47	58							9			
551001	1330	455	N	271	E	358	51	50		33020	6410	18068	31363	15824	12	1000	C		
551011	164525	463	N	131	E	546	910	43								7	D		
541230	020721	405	N	230	E	364	9	46	50							5			
541230	110556	361	N	217	E	368	915	53	73							11	D		
550103	010704	392	N	221	E	364	910	52	106	2540	11500	20550	2585	20505	11	1205	C		
550108	075258	395	N	221	E	364	911	50	61	4010	13000	22080	22035	4055	02	700	C		
550128	074159	339	N	236	E	400	9	52	43	1010	18000	19080	19035	1055	02	900	C		
550413	204546	373	N	226	E	368	9	53	108	1402	28064	10526	5619	15316	13	2007	C		
550602	233433	404	N	258	E	365	910	53	78							7			
550709	235342	407	N	222	E	364	9	51	76	2515	11500	20575	2560	20530	12	700	C		
550828	133919	375	N	273	E	366	917	52	55							6			
560112	054609	475	N	193	E	549	9	57	113	12040	23324	34540	14300	5366	00	1404	C		
560410	1252	461	N	274	E	358	925	45								6	D		
560515	2256	3	374	N	209	E	399	910	51	58	73	6020	18000	24070	24025	6065	02	0802	C
560518	220828	390	N	228	E	364	920	58	76	6020	15000	24070	24025	6065	02	0802	C		
560709	032403	3663	N	2570	E	369	920	55	60	5700	14765	32725	1517	27917	22	1202	C		
560709	061907	3665	N	2580	E	369	920	51	59	5700	14765	32725	1517	27917	22	0702	C		
560709	062246	3477	N	2589	E	369	920	54	53	5700	14765	32725	1517	27917	22	0804	D		
560710	030125	3671	N	2625	E	369	920	55	83	33088	9874	24614	20204	29216	03	2507	C		
560722	032858	3684	N	2630	E	369	910	48	63	5408	14470	32420	1114	27714	24	0902	C		
560730	091457	3586	N	2596	E	370	910	57	113	4518	15646	30038	25912	0041	03	1302	C		
561102	160433	3932	N	2309	E	365	910	52	93	25030	1142	13734	19548	10302	11	1405	C		
561105		4650	N	1308	E	546	9	48		1000	90	10000	14500	5500	24	1100	C		
570123	172651	3670	N	2164	E	368	30	52	68	6207*	15417	31072	25636	4450	02	0901	C		
570219	074359	3622	N	2158	E	368	30	55	126	23538	34221	9545	17568	7404	11	1703	C		
570328	222801	3930	N	2270	E	364	920	57	95	18605	30979	9510	9603	14111	03	1000	C		
570426	063336	3621	N	2887	E	369	923	59	147	21514	33664	11922	16826	7605	14	2005	C		
570521	132418	3941	N	2283	E	364	10	57	97							10			
570526	085445	4058	N	3074	E	366	9	50		6000	18070	33020	28314	1714	23	1103	C		
570527	110127	4077	N	3077	E	366	9	60	129	25820	13257	35824	30732	3902	13	2205	C		
570527	110127	4070	N	3097	E	366	9	55	125	19102	9767	28223	32914	23418	04	2107	C		

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KNM1731210 = 32 \*\*  
 --- PART 2 I QUALITY C AND D SOLUTIONS IN CHRONOLOGICAL ORDER ---

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70				
571005	113644	3444	N	2664	E	370	910	48	100	7008	18000	090	25045	7045	22	1202	C	
571030	014259	3515	N	2720	E	369	910	57	106	6314	21679	33205	10704	1710	03	1601	C	
571030	073018	3525	N	2769	E	369	910	57	124	5300	14355	32335	27224	1424	23	1605	C	
571223	2338	454	N	269	E	358	25	40		29020	19610	8068	30764	10224	12	700	C	
580102	020814	3616	N	2231	E	368	920	58	106	6000	15000	90	24045	6045	22	1202	C	
580315	062707	4077	N	2108	E	364	920	53	102	15500	24575	6515	11111	1911	24	1000	C	
580403	022342	4114	N	1985	E	391	910	55	13x	20612	18248	30640	24837	35217	13	2206	C	
580403	071833	3487	N	2745	E	371	910	50	104	21618	12800	3872	21883	3827	12	2404	C	
580605	132946	3699	N	2066	E	400	916	58	89							8		
580715	075917	3535	N	2357	E	370	20	50	93							11	D	
580717	053706	4061	N	2336	E	364	910	55	143	23618	35858	13725	9505	19132	03	2405	C	
580904	000286	3659	N	2669	E	369	50	52	93	21012	27316	8470	19154	4331	12	1201	C	
581115	054240	3770	N	2202	E	368	920	55	124	14025	8000	32045	32020	14070	00	3310	C	
590449	173853	3735	N	2093	E	399	20	50	73	19036	18000	1054	1009	19081	00	0801	D	
590626	134440	4586	N	2653	E	358	140	50	43	35030	22842	10233	13702	4548	00	1502	C	
590817	013314	4089	N	1984	E	391	920	59	163	2308	29366	11324	16016	6516	24	2609	C	
590818	220402	4104	N	1980	E	391	910	47	71	12040	1122	26042	18868	28101	11	0800	C	
590909	113740	4092	N	1976	E	391	910	61	206	9030	35412	24558	24115	12172	00	3312	C	
590916	051356	3517	N	2603	E	370	920	48	94	6000	15000	90	24045	6045	22	1400	C	
591119	140028	3891	N	2659	E	365	910	52	103	4524	28350	15030	9540	18904	13	1000	C	
591227	052238	3488	N	2621	E	370	910	50	71							17	D	
590903	040202	4075	N	1971	E	391	910	45	71							1808	C	
590916	051356	3517	N	2603	E	370	914	44	5	78	3010	18000	21080	21035	3055	02	0902	C
600713	130101	4056	N	2337	E	364	910	50	142	10015	23368	0615	5322	14300	14	1203	C	
601001	053040	3525	N	2604	E	370	57	45	84	00000	90	09000	04500	13500	23	01101	C	
601111	053126	3877	N	2080	E	364	9	51	57	122						10		
601201	040237	3837	N	3047	E	376	70	53								0800	D	
601229	181941	3494	N	2252	E	400	58	50	67							9		
610107	103053	3545	N	2617	E	370	75	50	97	19007	28219	8070	17049	2635	12	1704	C	
610107	155301	3778	N	2110	E	368	88	48	89	24818	34212	10586	7826	22861	02	1300	C	
610128	071816	303	N	220	E	400	89	47	5504	32230	19560	8442	21033	12	1500	C		
610313	191716	3446	N	2667	E	370	918	49	115							13		
610719	230056	3771	N	2012	E	399	910	48	106	3045	12000	21045	90	4500	11	0901	C	
610827	220848	3559	N	2341	E	370	62	49	119	10500	4535	19555	25636	13436	22	1702	C	
611002	072139	3662	N	2188	E	368	910	58	152	2010	11000	2						

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KNM1731210 = 52 \*\*  
 --- PART 2 : QUALITY C AND D SOLUTIONS IN CHRONOLOGICAL ORDER ---

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70
620404 205937	*	3426	N	2511	E	370	42	47	57	102				
620404 205937	*	3426	N	2511	E	370	42	47	57	102	13822	26052	3730	9038 35705 14 10
620416 104730	3767	N	2011	E	399	920	53	57	169	6110*15100	24180	6155	24135 12 01910 C	
620416 001522	3780	N	2063	E	399	103	50		100				12	
620417 100342	4212	N	1720	E	382	10		55	127	5510	14817	29570	25034 3652 02 2507 C	
620417 113351	3772	N	1995	E	399	20	51		103					
620508 235357	3519	N	2417	E	370	85	55	88					11	
620628 065106	4082	N	2072	E	392	38	50	55	112				11	
620830 074600	455	N	267	E	358	100	49		26025	16304	6764	7220 26470 00	1501	
621004 194609	3787	N	2235	E	368	43		52	145	17740	6623	31441	24468 33601 11 2006 C	
621026 112607	3355	N	2762	E	371	100	52	108	15037	6000	33053	15082 33008 11 2209 C		
621109 021452	458	N	267	E	358	130	47		4242	14413	24745	32877 23401 11 1701		
630131 150704	3592	N	2186	E	400	62	49	78	4030	28240	15536	9550 16904 11*01302 D		
630214 131857	4433	N	1512	E	383	950	51		85	14520	2850	24832	19339 28908 13 01701 C	
630215 101826	4035	N	1970	E	391	41	46	82	000	9080	27010	22407 31607 23 00700 D		
630221 171431	3269	N	2097	E	400	10	56	174	5512	31248	15540	20118 9737 04 3907 C		
630221 202639	3266	N	2110	E	400	0		88					10	
630222 141254	4040	N	2000	E	391	44	52	123	12700	3785	21705	17204 26204 23 01302 D		
630423 140258	4203	N	1960	E	383	54	46		102	12530*	3500	30560	12575 30515 11 01702 C	
630515 111544	4172	N	2006	E	391	29	44	88					12	
630604 221130	3893	N	2051	E	364	9	8	47	100	3008	90	12000	7500 16500 23 01503 C	
630708 160231	3646	N	2803	E	369	57	47	90					11	
630924 021041	4085	N	2888	E	366	10	47	86					16	
631002 210512	3483	N	2346	E	370	56	45		74	5500	14500	90	23545 5545 22 1501 C	
631112 070632	3558	N	2964	E	371	73	50	106						
631202 064905	4803	N	1620	E	546	9	0		84	27020	000	9070	9025 27065 02 01403 C	
631216 134755	3704	N	2102	E	368	940	56		181	18044	0000	046	001 18089 00*03218 C	
640223 2241039	3921	N	2373	E	365	10	54	53	131	6520	16933	31050	27118 2451 00*02112 C	
640318 1643206	4554	N	1435	E	383	20	47		42				7	
640425 1244150	3546	N	2770	E	369	61	48		67					
640429 1700013	3914	N	2355	E	365	915	50		99	7010	16000	25080	7055 25035 12 1503 C	
640630 1229590	4773	N	1592	E	546	9	3	47	48	200	90	9200	4700 13700 23 01303 C	
640817 0017485	3528	N	2590	E	370	14	46	95					11	
640825 1111820	3575	N	2884	E	371	51	48	55	125	8020	33044	18840	12644 22912 11 2102 C	
640827 1931597	3556	N	2884	E	371	38	48	54	113	14500	5500	90	14545 32545*22 01600 C	
640918 0008476	3569	N	2907	E	371	40	47	52	95	4500	12530	31560	25238 1838 23 1100 C	
641013 1842	421	N	215	E	383	4				33510	7540	23050	29540 18020 12 5 D	
641017 0950280	3502	N	2543	E	370	918	48		117				14	
641022 2330	421	N	215	E	383	10				15035	4520	29050	20070 31505 11 5 D	

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KNM1731210 = 52 \*\*  
 --- PART 2 : QUALITY C AND D SOLUTIONS IN CHRONOLOGICAL ORDER ---

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70
641024 1509	421	N	215	E	383	5			19505	18515	30075	040	21050	02 5 D
641027 1946091	4785	N	1995	E	546	9	1	54	88	14525	5448	25340	19636 30120 13 02903 C	
650206 0347578	3541	N	2704	E	369	71	49		59				10	
650304 0531	421	N	215	E	383	3			23010	33050	13040	8520	19035	03 5 D
650309 183756	3928	N	2393	E	365	33	51		85				10	
650310 0136058	3908	N	2377	E	365	18	50	59	101	18408	28877	09113	4706 13813	03 25
650313 0408406	3911	N	2397	E	365	11	48	59	62	23724	33720	10258	20263 7319	11 11
650313 0409379	3903	N	2368	E	365	33	51		78				11	
650326 2029226*	3682	N	3094	E	366	111	50		67	26534	17007	7055	29678 7910	11 02402 C
650326 2029226*	3682	N	3094	E	366	111	50		67	15500	24545	6545	1030 12030	22 02303 C
650403 1430482	3824	N	2050	E	364	25	49		66					
650410 0019597	3490	N	2437	E	370	55	47		47				10	
650511 2236004	4583	N	2686	E	358	94	46		38				16	
650516 0135560	3526	N	2785	E	369	41	46		80				9	
650603 1831510	3972	N	2321	E	365	933	48		107	19040	29922	5042	2901 12269	00 01202 C
650617 0258250	3777	N	2936	E	366	937	47		84	25310	13271	34616	3004 29819	04 01301 C
650629 1540315	3420	N	2623	E	370	33	46		67				15 D	
650804 1915046	353	N	265	E	370	52	46		35				7	
650825 0457457	3472	N	2508	E	370	910	48		95	16810	8649	26639	20935 30320	13 01801 C
651102 0327074	3948	N	2532	E	365	95	47	56	94	010	9000	18080	055 18035	12 01202 C
651204 1639575	3426	N	2625	E	370	912	48		68				7	
660102 281218	3767	N	2318	E	368	912	50		93	4234	13200	22256	22211 4279	00*01303 C
660114 183391	3472	N	2700	E	371	22	45		54				13	
660115 1807465	3672	N	2309	E	368	37	47		60				10	
660116 2015300	3561	N	2580	E	370	47	46		73	34020*	7615	20065	17224 31762	02 01102 C
660118 2020270	4585	N	2677	E	358	93	47		51					
660118 2120026	3512	N	2349	E	370	60	45		47				11	
660120 0039006	3920	N	2444	E	365	12	44		49				13	
660122 0023443	3765	N	2995	E	366	32	48		85	26832	8132	14542	11406 21358	00 01102 C
660204 083803	3437	N	2394	E	370	33	47		94	8508	35316	20072	10350 25236	12 01402 C
660208 1816222	3623	N	2811	E	369	979	46		62	29510	3236	19252	14326 26043	02 01002 C
660208 200804	4108	N	2497	E	363	921	47		105	24307	38974	15115	19916 10605	14 02307 C
660308 1851475	3887	N	2142	E	364	44	47		65	17004	8000	35086	17049 35041	12 02307 C
660314 1808412	3907	N	2136	E	364	45	46		62	31010	4738	20850	27342	15825 12 00900 C
660401 131505	3872	N	2149	E	364	45	47		91				15 D	
660407 032545	3783	N	2114	E	368	925	48		106	18015	9000	00075	18060 00030	12 01504 C
660414 185144	3455	N	2386	E	370	914	48		83	35037	8607	18552	17708 31080	00*01301 C
660421 0649269	3449	N	2569	E	370	51	50		99				20 D	
660428 1147339	3889	N	2128	E	364	53	43		48				8	

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KNM1731210 = S2 \*\*  
 --- PART 2 : QUALITY C AND D SOLUTIONS IN CHRONOLOGICAL ORDER ---

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70
660510	024748	3438	N	2651	E	370	64	44	30					
660511	1506025	3437	N	2642	E	370	39	47	92	12530	24440	1036	33704	7150 00 01202 c
660513	1311509	3447	N	2647	E	370	37	46	86	15500	24584	6506	2004	11004 23 00900 c
660515	101108	3517	N	2716	E	369	34	45	61	16520	6428	28554	20455	32320 12 00600 D
660516	1730561	3448	N	2646	E	370	41	46	91	18040	28921	4043	11269	2001 11 01102 c
660522	073729	3870	N	2792	E	366	23	51	57					6
660524	0939265	3733	N	2189	E	368	934	48	128	11021	535	22548	15352	26416 11 02103 c
660524	0939265*	3733	N	2189	E	368	934	48	128	7916	34464	17520	12626	21803 13 2203 c
660524	1743323	3487	N	2462	E	370	43	47	63	2000	11020	29070	142	21942 22 00600 D
660525	090657	4032	N	1982	E	391	921	50	82	6013	31940	16548	9034	21021 12 01302 c
660605	0914068	3907	N	2934	E	366	36	44	52					10
660611	1021554	3884	N	2150	E	364	43	47	109	8505	20178	35410	4011	30904 14 01505 c
660619	175530	3855	N	2735	E	366	919	47	82	4525	28745	15435	19106*	9545 00 01301 c
660806	023103	4218	N	1879	E	383	9	3	52					11 D
660806	0552018	4230	N	1895	E	383	48	48	141	5525	14500	23565	5570	23520 11 02715 c
660806	183232	3790	N	222	E	368	25	44	79					16
660809	0334151	4022	N	1986	E	391	38	49	43					8
660810	1522402	3640	N	2222	E	368	39	46	92	21520	31050	7565	4823	19162 02 01303 c
660811	0023408	3765	N	2099	E	399	48	46	80	23030	12820	1053	3412	27266 00 01201 c
660811	043413	* 3874	N	2176	E	364	9	46	73	10500	1500	90	28545	10545 22 01003 D
660811	043413	* 3874	N	2176	E	364	9	46	84	5010	14000	23080	23035	5055 02 1102 c
660818	2209012	3622	N	2335	E	369	133	44	84	14310	4443	24345	18239	29122 12 01201 D
660820	1205193	4218	N	1865	E	383	933	54	43	14500	5570	23520	18814	28214 23 1201 c
660820	1908216	4210	N	1879	E	383	42	47	76	35515	12267	26018	30824	21702 14 01406 c
660820	041811	4215	N	1875	E	383	922	46	78	24550	33602	7060	6715	23876 00 01100 c
660820	0129292	4577	N	2663	E	358	130	43	77	7040	16000	25050	25005	7085 00 01002 c
660906	1231573	3666	N	2663	E	369	158	45	54	9500	515	18575	26043	11043 22 01201 c
660910	1055167	3653	N	2690	E	369	146	45	28					11
660924	2021175	3806	N	2215	E	364	71	44	33					11
660924	2021175	3806	N	2215	E	364	71	44	45					11
661021	1617040	3955	N	2211	E	364	957	46	64	16000	7000	90	16045	34045 22 02000 c
661029	1213068	3474	N	2754	E	371	64	46	42					9
661030	021014	3875	N	2158	E	364	26	47	72					12
661218	074220	3510	N	2692	E	370	33	47	88					10
661229	0630024	4554	N	2648	E	358	123	43	43	6827	17022	29554	26615	2763 00 1101 c
670209	1408182*	3992	N	2026	E	392	1	56	207	5217	34135	16450	20620	9348 02 5525
670209	1408182*	3992	N	2026	E	392	9	56	207	16040	08110	32048	33104	22080 00 05525 c
670220	1408182*	3992	N	2026	E	392	1	56	207	12738	02121	26746	28905	18669 00 05624 c
670228	1421513	3753	N	2118	E	368	46	47	103	09720	33753	19929	14536	23908*13 01504 c
							85							14

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KNM1731210 = S2 \*\*  
 --- PART 2 : QUALITY C AND D SOLUTIONS IN CHRONOLOGICAL ORDER ---

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70
670304	1838010	3899	N	2480	E	365	15	47	55					
670328	000428	3844	N	2542	E	365	29	46	76					10
670404	1806067	4572	N	2632	E	358	161	45	50					00901 D
670503	1841472	3953	N	2134	E	364	37	48	117	34028	7716	20062	31263	17421 11 01002 c
670504	1331078	3963	N	2126	E	364	39	47	72	6505	32830	16360	22033	9442 02 1101 c
670505	0626379	3950	N	2129	E	364	57	47	80					
670526	1733006	4543	N	2617	E	358	163	43	39					17
670530	2353316	3417	N	2867	E	371	35	45	59					7
670611	0535050	3814	N	2291	E	364	40	45	71					16
670612	0129095	3808	N	2290	E	364	47	46	78					10
670612	1812466	3906	N	2127	E	364	46	46	72					11
670703	025343	4402	N	1918	E	383	9	51	70					15
670705	0053168	3673	N	2150	E	368	50	47	140	21324	32337	9843	16551	6111 12 01503 c
670713	1438884	4066	N	1967	E	391	73	47	68					8
670719	0906222	3810	N	2887	E	366	41	48	105	2000	29056	11034	16023	6023 24 01706 c
670720	1903304	4072	N	1988	E	391	58	45	58					
670722	1748065	4066	N	3062	E	366	26	50	106	10010	21567	620	5522	322 7 14 01802 c
670722	1809554	4072	N	3051	E	366	35	50	97	16530	5630	29045	21659	32109 11 01102 c
670722	203540	4079	N	3042	E	366	4	47	67					15
670722	2341598	4064	N	3053	E	366	930	47	98	3030	23339	14537	8451	17905 11 01301 c
670723	0403396	4061	N	3035	E	366	21	45	59					
670726	091606	4061	N	3067	E	366	21	44	69					12
670804	145432	4281	N	1762	E	382	22	46	66					14
670814	200925	4074	N	3037	E	366	925	46	68	14000	8000	90	14045	32045 22 1301 c
670815	0435529	3654	N	1928	E	400	33	46	51					12
670906	045923	3506	N	2309	E	370	20	48	104					
670908	020445	4060	N	2008	E	392	9	51	110	18045	9000	36045	00000	90 00 01906 c
670912	144642	3923	N	2146	E	364	25	47	56					13
670924	2211204	4086	N	1970	E	391	35	46	74	24510	38817	12570	22552	7933 12 1100 c
670927	072434	3442	N	2660	E	370	49	46	80	6020	15410	27067	24924	4363 02 1202 c
671118	023136	3525	N	2305	E	370	34	46	97					13
671126	0324574	3940	N	2049	E	392	37	49	51	8008	34629	18560	23731	11945 02 1300 c
671202	1244427	4132	N	2029	E	391	916	53	172	250	8	14167	34322	29422 28 9 13 03713 c
671209	0309560	4200	N	1641	E	382	66	46	83					11
671219	0832323	4149	N	2043	E	391	929	49	110	22604	12572	31718	27016	310 13 02003 c
671221	000940	4216	N	2062	E	383	926	46	71	24522	35642	13540	19846	9611 11 1302 c
671229	1949241	4141	N	2027	E	391	946	48	101	6827	30250	17328	12040	21001 13 02205 c
680106	1023505	4576	N	2646	E	358	173	46	100	07023	31841	18140	11847	21910 11 02708 c
680109	2315428	3552	N	2254	E	400	46	47	69	24515	461	14824	19928	10506 14 1403 c
680220	0039157	3973	N	2537	E	365	937	50	88	34538	23920	12845	04770	14804 11 01105 c

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS ===== KNM1731210 = S2 \*\*  
 --- PART 2 : QUALITY C AND D SOLUTIONS IN CHRONOLOGICAL ORDER ---

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70	
680220	022152	3956	N	2545	E	365	9	8	50	90	11218*0200	29272	11263	29227	12 01302 C
680220	0939516	3941	N	2488	E	365	933	45	98	34538	23920	12845	04770	14804 11 00901 C	
680220	0941099	3935	N	2495	E	365	933	47	116	34538	23920	12845	04770	14804 11 01804 C	
680222	045747	3939	N	2502	E	365	19	47	78					16	
680224	1323545	4574	N	2655	E	358	142	42	62					22	
680227	1337454	3961	N	2551	E	365	35	47	67					10	
680310	0648171	3910	N	2436	E	365	33	45	72					11	
680310	0710590	3913	N	2423	E	365	9	50	167	12000	3060	21030	26021	16021 24 2805 C	
680316	1811058	3938	N	2494	E	365	43	45	86					12	
680323	1725550	3976	N	2548	E	365	33	46	127	15520	03256	25526	20334	29605 13 01402 C	
680328	1637473	3949	N	2038	E	392	918	46	50	129	16000	07075	25015	20411	29611 23 01404 C
680425	1034038	3786	N	2247	E	368	98	42	36	18230	9200	260	18275	215 11 1200 C	
680612	090504	3530	N	2789	E	369	916	46	77	23016	33235	12050	19248	07720 12 00801 C	
680618	1116360	3795	N	2345	E	368	172	43	33	02530	14580	20560	02575	20515 11 00900 C	
680704	2317539	3542	N	2787	E	369	49	45	70					12	
680709	1500474	3439	N	2510	E	370	49	46	80					21	
680725	220529	4095	N	2009	E	392	923	45	79	22530	11530	35045	02108	27759 00 01100 C	
680727	024551	3543	N	2792	E	369	29	50	59	213	03010	29142	13046	17823	06840 02 03507 C
680731	1929297	3554	N	2800	E	369	49	48	126	17003	07926	26664	19643	32836 12 02305 C	
680804	2324222	3781	N	2102	E	368	32	46	53					12	
680819	1535522	3374	N	2568	E	371	33	49	54					12	
680915	0455584	3470	N	2505	E	370	917	48	144	05500+14500		90	05545	23545 22 02003 C	
680918	0401159	3474	N	2501	E	370	30	46	96					D	
681006	150643	3696	N	2638	E	369	917	47	99	08505	17730	34760	29034	05642 12 01403 C	
681017	235604	3821	N	2017	E	364	17	45	81					9	
681020	2315040	4581	N	2659	E	358	120	46	104	04030	13814	25056	23113	00370 00 01805 C	
681021	181641	3525	N	2335	E	370	1	48	106					106	
681028	125430	3889	N	2582	E	365	9	45	67	15206	26071	06018	10717	01408 14 01102 C	
681104	200559	3644	N	2698	E	369	935	46	55	5515	14500	23575	23530	5560 02 1101 C	
681110	125037	3444	N	2377	E	370	11	50	39					10	
681110	142933	3445	N	2386	E	370	10	44	30					6	
681111	235307	3661	N	2710	E	369	933	45	50	27515*00500	09575	09530	27560	02 01002 C	
681112	033739	3674	N	2711	E	369	926	47	104	16500	07500	90	16545	34545 22 01806 C	
681203	2057310	4451	N	1845	E	383	9	46	80					15	
681209	2022175	3652	N	2712	E	369	44		40					13 D	
681221	003640	3660	N	2707	E	369	930	45	88	15000	6080	24010	19507	28507 23 1300 C	
690113	0546404	3831	N	2252	E	364	46	48	75					14	
690113	0757076	3457	N	2493	E	370	60	45	56					14	
690305	1441164	4006	N	2756	E	366	33	47	92					14	
														22	

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS ===== KNM1731210 = S2 \*\*  
 --- PART 2 : QUALITY C AND D SOLUTIONS IN CHRONOLOGICAL ORDER ---

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70
690324	1134340	3917	N	2870	E	366	37	46	72					
690325	132112	3906	N	2841	E	366	922	49	104	19412	10400	1478	19457	1433 12 1804 C
690325	1613304	3908	N	2844	E	366	942	47	65	15038	4321	29045	31104	21169 00 1402 C
690328	1002174	3913	N	2845	E	366	937	49	124	22404	33378	13312	08705	17911 03 02106 C
690416	0454128	3530	N	2790	E	369	915	48	143	13515	04500	31575	13560	31530 12 02010 C
690417	0054382	3519	N	2783	E	369	955	48	132	13500	4500	90	13545	31545 22 1505 C
690421	203640	3942	N	2509	E	365	9	47	83	35534	24131	12040	14804	05358 00 01303 C
690424	1445488	3635	N	2873	E	369	53	47	79	03023	12000	21067	21022	03068 00 01304 C
690516	0509344	3500	N	2454	E	370	951	46	70	7820	16800	25870	25825	7865 02 1500 C
690613	0123146	3435	N	2514	E	370	941	47	89	6520	15500	24570	24525	6565 02 1402 C
690615	0558432	3430	N	2513	E	370	935	46	67	8016	17000	26074	26029	8061 02 1502 C
690616	1606256	3811	N	2028	E	364	40	46	82					14
690724	2321193	3493	N	2600	E	370	60	45	81					14
690809	1625359	4233	N	1922	E	383	930	45	101	4500	32560	13530	18421	9621 24 1403 C
690813	040603	3837	N	2175	E	364	24	45	66					11
690826	0215371	4173	N	2003	E	391	28	49	118	7132	16100	25158	25113	7177 00 2206 C
690904	1925266	3511	N	2717	E	369	943	48	83	30520	3500	12570	12525	30565 02 1100 C
690922	0817434	3657	N	2801	E	369	86	47	42	16520	28956	06530	02403	11734 04 01301 C
691027	025534	4498	N	1704	E	383	918	45	83	19540	10500	01550	19585	00 01302 C
691027	0853427	4491	N	1699	E	383	9	48	68					23
691201	2018038	3485	N	2422	E	370	35	51	136	08513	18330	33556	28926	05248 02 03707 C
691220	1740363	3659	N	2346	E	368	90	50	65					20
691231	0537025	3436	N	2613	E	370	27	50	52					24
700102	0731379	4550	N	2635	E	358	133	47	54					8
700217	0016283	3934	N	2062	E	392	53	46	89	01000	28085	10005	05503	14503 23 01001 C
700222	154831	3521	N	2524	E	370	943	51	58	18010*09000	00080	00035	18055	02 00602 C
700222	1552171	3538	N	2527	E	370	934	48	73	18010*09000	00080	00035	18055	02 00901 C
700304	0151307	3447	N	2648	E	370	944	47	60	14810	01676	24010	19414	28400 13 01602 C
700323	205601	3904	N	2049	E	392	9	45	119	16025*07000	34065	16070	34020	11 02006 C
700328	2159109	3928	N	2946	E	366	917	48	71	07514	18352	33535	29114	03136 03 01200 C
700328	2344001	3907	N	2976	E	366	932	50	145					11 1508 C
700329	1437196	3874	N	2783	E	366	56	45	94					15
700330	0646249	3909	N	2903	E	366	923	45	57	20210*11200	02280	20255	02235	12 00801 C
700330	0649050	3943	N	2940	E	366	933	46	73	21120*12100	03170	21165	03125	11 01405 C
700330	1632365	3909	N	2959	E	366	30	47	127					24
700330	203805	3905	N	2962	E	366	928	45	54	03020	12000	21070	03065	21025 11 00801 C
700331	0346511	3903	N	2979	E	366	935	47	127	01520	10500	19570	01565	19525 12*02306 C
700331	1157599	3889	N	2973	E	366	41	46	54					12
700407	091844	3457	N	2614	E	370	920	49	111	17018	8000	35072	17063	35027 12 1905 C
700409	1012304	3911	N	2941	E	366	934	47	121	2030	11000	20060	2075	20015 11 1707 C

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS ===== KNM1731210 = S2 ==  
 --- PART 2 : QUALITY C AND D SOLUTIONS IN CHRONOLOGICAL ORDER ---

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70			
700415	162958	3934	N	2930	E	366	928	46	94	29010	3860	19528	15013	24628	03	1500	C
700416	1143223	3898	N	2995	E	366	943	48	86	5030	30228	17847	9960	20710	11	1202	C
700416	2239313*	4067	N	2345	E	364	920	49	159	27506	15478	610	5301	32012	04	2306	C
700420	1539316	3827	N	2268	E	364	938	51	159	11530	22024	34250	6963	31511	11	2207	C
700423	0718318	3894	N	3001	E	366	932	49	129	19520	18500	1570	19565	1525	12	1906	C
700424	1117122	3991	N	1961	E	392	41	43	46	2040	27715	17046	8874	18603	11	1200	C
700427	0154126	3894	N	2981	E	366	937	44	86	16012	28066	6620	11423	2205	14	1500	C
700427	222443	3906	N	2954	E	366	911	47	112	16500	7500	90	16545	34545	22	1703	C
700430	235909	3909	N	2959	E	366	929	45	80	2030	11000	20060	2075	20015	11	1707	C
700508	0249146	3893	N	2998	E	366	20	46	109						20		
700512	2249032	3821	N	2255	E	364	939	48	146	21040	12000	3050	21085	3005	11	1706	C
700819	0201530	4110	N	1977	E	391	933	52	57	101	05005*14000	23085	23040	05050	02	01002	C
701001	2221549	3813	N	2276	E	364	924	47	33	16518	29060	06723	02503	11830	03	00700	C
701001	2238352	3804	N	2279	E	364	929	50	55	17808	28968	08520	04008	13320*03	01303	C	
701111	2058132	3612	N	2821	E	369	43	49	55	06400	38450	15440	20727	10127	24	01402	C
710103	2318412	3467	N	2634	E	370	932	52	76	03315	28550	13437	17814	08537	04	02107	C
710119	2333567	3440	N	2401	E	370	933	48	63	07404*16400	25486	25441	07449	02	01201	C	
710215	0819561	3917	N	2940	E	366	928	49	71	26510	00543	16545	11722	22639*02	01102	C	
710419	0243921	3895	N	2049	E	364	916	51	53	11530	00136	23540	26706	16854	00	01202	C
710512	2013081	3749	N	2988	E	366	936	48	63	21227	33647	10530	15943	06802	14	01503	C
710513	0445274	3746	N	2974	E	366	914	48	52	11310	34474	20512	24902	19596	04	02101	C
710514	2218230	3767	N	3000	E	366	933	45	36	15030	28840	03536	09550	00104	11	00701	C
710516	0925014	3757	N	2974	E	366	933	49	44	14528	05500	32562	14573	32517	11	00901	C
710517	1416179	3767	N	2988	E	366	933	48	59	00500	27565	09525	04718	14318	23	01201	C
710520	0306452	3758	N	2998	E	366	933	48	47	18335	09300	00355	00310	18380	00	01002	C
710608	1659248	3752	N	2977	E	366	910	47	35	00500	90	09500	05000	14000	23	00801	C
710615	2255455	3705	N	2896	E	366	933	46	37	26018	14567	35420	03907	30522	04	00900	C
710620	2337399	3755	N	2982	E	366	933	48	58	09000	18070	02000	04714	31314*24	01001	C	
710629	0426311	3746	N	2989	E	366	928	49	56	13025	24138	01542	08250	33910	12	00802	C
710718	1618227	4571	N	2631	E	358	137	46	42	04032	16039	28535	25202	34551*00	01602	C	
710921	1648516	3727	N	3016	E	366	37	48	55	29042	01009	11558	25173	10215	11	01301	C
710928	0510248	3712	N	3011	E	366	36	47	40						9		
711106	1943468	3902	N	2973	E	366	914	50	58	09000	18070	02000	04714	31314*24	01001	C	
720112	1351201	3499	N	2347	E	370	48	49	43	02026	27921	15555	06063	18316	11	01402	C
720206	0134224	4401	N	1319	E	382	9	49	30						8		
720228	1052487	3698	N	2416	E	368	11	48	51						9		
720314	1405458	3928	N	2942	E	366	33	54	49	104					36		

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS ===== KNM1731210 = S2 ==  
 --- PART 2 : QUALITY C AND D SOLUTIONS IN CHRONOLOGICAL ORDER ---

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70				
720331	0258024	3646	N	2122	E	368	9	47	63						11			
720331	2032008	3662	N	2714	E	369	18	45	40						8			
720416	0003316	4553	N	2644	E	358	136	46	36	32515	28115	09869	13328	34658	00	00802	C	
720416	1104442	4773	N	1602	E	346	919	44	49	14512	28862	05025	00508	10027	03	00900	C	
720615	0033236	3634	N	2220	E	364	926	49	87	06540	15500	24550	24505	06585	00	01402	C	
720913	0413205	3793	N	2239	E	368	83	60	158	14211	24855	4533	36014	9931	03	123		
720917	1407156	3828	N	2034	E	364	33	56	63	114	30607	5569	21420	26219	16909	14	82	
721030	1432131	3833	N	2037	E	364	933	53	92	04609	29764	14024	18410	0*024	04	01300	C	
721120	0330278	3940	N	2180	E	364	933	49	36	25615	00651	15535	11213	21137	30	00701	C	
721124	0348351	3951	N	2034	E	392	911	53	71	10500	01565	19525	14718	24318	23	01601	C	
721219	1934314	3548	N	2781	E	369	54	46	65						14			
730116	2245166	3514	N	2256	E	400	28	45	58	3010	18000	21080	21035	3055	02	1001	C	
730312	2030438	3594	N	2178	E	400	44	47	55	5700	14720	32770	28542	3942	22	900	C	
730422	1339461	3518	N	2339	E	370	56	45	31	7030	18000	25060	25015	7075	00	1100	C	

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KNEW731210 = S2 ==  
 PART 3 : REGIONAL LISTS OF QUALITY A/B AND QUALITY C/D SOLUTIONS IN CHRONOLOGICAL ORDER

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70			
340329	200648	*	458	N	265	E	358	150	59	76	7820	17004	27070	26226	7245 02	3101 A	
340329	200648	*	458	N	265	E	358	150	59	76	23512	13150	33538	27836	2017 13	2903 B	
400624	095724	*	459	N	266	E	358	115	53	41	12527	3590	30563	30518	12572 00	2601 A	
401022	063700	*	458	N	264	E	358	130	62	94	12631	3013	27955	29612	16371 00	5501 A	
401110	013909	*	458	N	267	E	358	140	73	150	12634	3404	29856	30311	14078 00	5403 A	
450907	154822	*	453	N	264	E	358	100	65	53	9830	33642	21033	24402	15248 00	2603 B	
451209	060845	*	453	N	264	E	358	100	65	53	13329	2628	26047	29010	18259 00	2702 B	
480529	044855	*	459	N	267	E	358	150	60	66	15030	12500	21580	3555	21535 12	2202 B	
480529	044855	*	459	N	267	E	358	150	60	66	166	12730	22411	33258	31714	9872 00	2603 B
500620	011853	*	459	N	265	E	358	170	56	49	17008	26020	8070	15142	942 22	2200 B	
550501	212292	*	455	N	263	E	358	150	54	53	25515	15824	1461	5625	28654 02	2503 A	
590581	121543	*	4589	N	2739	E	358	9 0	52	110	5500	14500	90	5545	23545 22	3306 A	
600104	125159	*	4506	N	2677	E	358	41	54	118	13000	22065	4025	8818	35218 24	2509 B	
600104	125159	*	4506	N	2677	E	358	41	54	110	30022	18546	04636	08609	34743 04	29	
600126	202704	*	4577	N	2633	E	358	160	52	112	25720	38087	09769	08324	24464 02	03506 A	
601013	022125	*	4566	N	2643	E	358	161	55	111	25640	16600	7650	7605	25685 00	4205 A	
630114	183324	*	4584	N	2678	E	358	122	54	117	26040	35788	9649	9605	21081 00	04211 B	
650110	0252256	*	4576	N	2654	E	358	137	50	138	24542	14016	3544	5001	31874 00	03605 A	
661002	1121452	*	4577	N	2650	E	358	141	51	157	27540	500	9550	9505	27585 00	05212 A	
661015	0659192	*	4564	N	2638	E	358	140	47	93	7200	12063	34287	25545	6945 22	02704 B	
661234	1449597	*	4572	N	2639	E	358	151	48	121	7542	16500	25544	25503	7587 00	03805 A	
680209	1322945	*	4561	N	2642	E	358	128	46	98	13028	23120	32614	09066	00 03305 B		
681120	0151156	*	4565	N	2660	E	358	124	42	40	25518	16500	07080	07435	25755 02	01101 B	
690115	0846290	*	4562	N	2659	E	358	129	46	91	25336	15314	04551	06208	30074 00	03404 A	
690412	2038418*	*	4531	N	2512	E	358	923	49	138	06218	31836	17348	10248+21518	12 03011 B		
690412	2038418*	*	4531	N	2512	E	358	923	49	138	04022	28051	14430	09038+18505	13 03209 B		
291101	065721	*	459	N	266	E	358	198	66	75	8030	34214	23056	24914	11670 00	1201 C	
350713	000348	*	460	N	265	E	358	150	53	49	12300	3300	90	30345	12345 22	1000 C	
401108	120044	*	457	N	262	E	358	100	53	21						2 D	
401111	063417	*	460	N	268	E	358	150	50	36	12634	3404	29856	30311	14078 00	600 C	
450312	205147	*	457	N	268	E	358	150	58	28						801 D	
520603	055322	*	457	N	268	E	358	94	46	38						6 D	
541001	1330	*	455	N	271	E	358	51	50	49	28036	2418	13548	11606	22471 00	800 C	
560418	1252	*	461	N	274	E	358	925	45	50	33020	6410	18068	31363	15824 12	1000 C	
571223	2338	*	454	N	269	E	358	25	40	29020	19610	8068	30764	10224 12	700 C		
590606	134440	*	4586	N	2653	E	358	140	50	43	35030	22842	10233	13702	4548 00	1502 C	
611118	0318	*	455	N	267	E	358	100	47	7503	16500	25587	25542	7548 02	1101		

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KNEW731210 = S2 ==  
 PART 3 : REGIONAL LISTS OF QUALITY A/B AND QUALITY C/D SOLUTIONS IN CHRONOLOGICAL ORDER

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70		
620227	2134	*	457	N	264	E	358	150	48	26810	012	14274	9834	25454 02	01500	
620830	074600	*	455	N	267	E	358	100	49	26025	18304	6764	7220	26470 00	1501	
621109	021452	*	458	N	267	E	358	130	47	4242	14413	24745	32877	23401 11	1701	
650511	2236004	*	4583	N	2686	E	358	94	46						9	
660118	2020270	*	4585	N	2677	E	358	93	47	51					11	
660904	0129292	*	4577	N	2663	E	358	130	43	54	9500	515	18575	26043	11043 22	01201 C
661229	0630024	*	4554	N	2648	E	358	123	43	43	6827	17022	29554	26615	2763 00	1101 C
670227	210042	*	4486	N	2669	E	358	93	50	103	09720	33753	19929	14536	23908+13	01504 C
670404	1806067	*	4572	N	2632	E	358	163	45	50					8	
670526	1733006	*	4543	N	2617	E	358	163	43	39					7	
680104	1023505	*	4576	N	2646	E	358	173	46	100	07023	31841	18140	11847	21910 11	02708 C
680224	1323545	*	4574	N	2655	E	358	142	42	62					22	
681020	2315040	*	4581	N	2659	E	358	120	46	106	04030	13814	25056	23113	00370 00	01805 C
700102	0731379	*	4550	N	2635	E	358	133	47	54					8	
710718	1618227	*	4571	N	2631	E	358	137	46	42	04032	16039	28535	25202	34551+00	01602 C
720416	0003316	*	4553	N	2644	E	358	136	46	36	32515	23115	09869	13328	34658 00	00802 C
720508	0920545*	*	4164	N	2353	E	363	910	50	57	10505	01500	28585	28540+10550	02 01701 B	
720508	0920545*	*	4164	N	2353	E	363	910	50	57	15500	06570	24520	29214+19814	24 01701 B	
530618	054406	*	417	N	266	E	363	917	51	120	9030	000	27060	9075	27015 11	1000 C
660208	200804	*	4108	N	2497	E	363	921	47	105	24307	35974	15115	19916	10605 14	02307 C
660208	200804	*	4108	N	2497	E	363	921	47	105	17004	8000	35086	17049	35041 12	02307 C
530809	074107	*	382	N	208	E	364	914	62	182	24013	668	14617	10303	19422 03	4306 A
530811	033222	*	383	N	208	E	364	9	65	263	23522	34134	11848	8114	19053 00	2804 B
530811	033222	*	383	N	208	E	364	33	65	263	26030	17000	8060	8015	26075 00	2804 B
530812	060801	*	383	N	208	E	364	9	50	70	7336	16500	25554	7581	25509 11	2003 B
530812	060801	*	383	N	208	E	364	9	50	70	3602	29480	12710	17206	8109 04	1984 B
530812	092352	*	381	N	208	E	364	22	70	290	26520	35809	11068	9225	25164 02	5621 B
530812	092352	*	381	N	208	E	364	9	70	290	612	18668	32717	29403	1821 03	6017 B
530812	120521	*	381	N	208	E	364	33	61	167	3038	29903	20072	20827	3662 02	5811 B
530812	140839	*	383	N	208	E	364	33	57	104	7010	38772	16215	11519	20603 13	3810 B
530905	141841	*	380	N	230	E	364	9	56	100	12000	3078	21012	16409	25609 23	2002 B
531021	183051	*	383	N	208	E	364	9	61	185	3812	28561	13426	8428	17809 13	1802 B
540430	130236	*	393	N	222	E	364	920	68	246	12538	3500	30592	12583	30507 11	7522 B
570308	121414	*	393	N	2272	E</										

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KMW1731210 = S2 \*\*  
 PART 3 : REGIONAL LISTS OF QUALITY A/B AND QUALITY C/D SOLUTIONS IN CHRONOLOGICAL ORDER

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70					
570308	121414	*	3930	N	2272	E	364	9	0	65	177	17021	8000	35069	17066	35024	12	5717	B
570308	122113		3933	N	2263	E	364	9	0	67	184	13630	2235	25541	18955	28806	11	4508	B
570308	233509		3924	N	2277	E	364	9	0	55	126	15132	03138	26735	20852	30002	11	5709	A
571127	030804	*	3923	N	2261	E	364	9	0	59	116	9328	34432	21545	14356	25302	11	1901	B
571127	030804	*	3923	N	2261	E	364	9	28	59	116	9328	26536	33542	4253	30108	11	1901	B
640717	0234267		3805	N	2363	E	364	155	57	62	241	2394	12510	22995	21711	35375	00	08915	A
650331	0947263		3838	N	2226	E	364	45	63	71	279	3224	13019	24459	22719	35863	00	12910	A
650706	0318421		3837	N	2240	E	364	18	58	244	515	10225	24760	33453	20525	12	08220	A	
660205	0201453*		3910	N	2174	E	364	916	56	63	261	18733	30738	7035	12992	3801	11	09720	B
660205	0201453*		3910	N	2174	E	364	916	56	63	261	10355	1500	28555	10580	28510	11	09522	B
660205	0258012		3910	N	2170	E	364	916	56	63	261	15035	26936	3036	9054	001	11	9423	B
660403	1136261*		3911	N	2191	E	364	50	50	130	4025	30021	17356	7663	20417	11	02302	B	
660403	1136261*		3894	N	2153	E	364	934	48	134	3510	13953	29835	35232	29216	14	01802	B	
660504	063659		3894	N	2147	E	364	927	49	141	17512	8500	35578	35533	17557	02	01604	B	
660624	2234261		3873	N	2153	E	364	34	47	99	26010	3273	16812	21417	12401	14	01400	B	
661029	0239248*		3890	N	2110	E	364	9	58	266	13516	3335	24550	28820	17448	02	08726	B	
661029	0239248*		3890	N	2110	E	364	9	58	266	13516	4500	31574	31529	13561	02	08528	B	
670501	0709030		3960	N	2129	E	364	34	55	62	301	33020	28221	10060	00239	13372	12	06716	B
670501	0950082		3951	N	2130	E	364	33	48	110	11332	922	25050	27510	16166	00	02206	B	
670612	0251058		3815	N	2277	E	364	35	50	160	1610	26266	11021	6222	15408	13	03504	A	
700408	1350263*		3834	N	2266	E	364	9	50	153	540	14509	28578	4452	24237	12	2109	B	
700408	1350263*		3834	N	2256	E	364	923	58	63	281	35515	9141	25045	31443	20619	12	7227	B
330511	190944		405	N	237	E	364	915		63	109	12200	3280	21210	24807	16607	24	900	C
380720	002335		383	N	238	E	364	913		61	89	23316	33942	12843	19043	8516	12	1300	C
380918	035028		380	N	225	E	364	100		62	76	19050	10000	1040	1085	19005	11	801	C
390920	001926		380	N	215	E	364	80		58	60	5920	38840	16543	20514	10047	00	600	C
410301	035247		395	N	225	E	364	915		62	73	15000	24065	6025	10818	1218	24	1301	C
410514	083620		393	N	224	E	364	915		55	48	6000	18000	90	6045	24045	22	600	C
480422	104245		388	N	206	E	364	913		66	125	5000	14000	90	23045	5045	22	900	C
480630	122113		388	N	206	E	364	916		64	108	35833	11232	23540	20504	30157	00	1501	C
521013	164227		388	N	232	E	364	9	8	50	64					600	D		
530812	113346		383	N	208	E	364	910		53	73					10			
530812	133920		380	N	210	E	364	33		52	73	5000	14080	90	23045	5045	22	3206	C
530812	160830		380	N	210	E	364	910		51	71	4200	31248	13242	18628	7828	24	2606	C
530813	032204		381	N	208	E	364	33		52	71	20807	30545	11144	16936	6223	14	2309	C
530914	145614		383	N	208	E	364	9	8	53	81	6514	15500	24576	24531	6559	02	800	C

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KMW1731210 = S2 \*\*  
 PART 3 : REGIONAL LISTS OF QUALITY A/B AND QUALITY C/D SOLUTIONS IN CHRONOLOGICAL ORDER

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70					
531021	113101		383	N	208	E	364	914		54	87	5015	14000	23075	23030	5060	02	701	C
531228	023844		383	N	208	E	364	917		52	82	5120	28359	15022	10031	19102	13	1102	C
540308	081718		380	N	206	E	364	918		53	73						7		
540504	164321		393	N	222	E	364	914		56	87	13546	4500	31544	13501	31589	00	900	C
540504	164527		393	N	222	E	364	914		46	79						00	800	D
540523	220332		393	N	222	E	364	922		55	96	6040	15000	24050	24005	6045	00	1001	C
541230	020721		405	N	230	E	364	9	9	46	50						5		
550103	010704		392	N	221	E	364	910		52	106	2540	11500	20550	2585	20505	11	1205	C
550108	075258		395	N	221	E	364	911		50	61	4010	13000	22080	22035	4055	02	700	C
550709	235342		407	N	222	E	364	9	6	51	76	2515	11500	20575	2560	20530	12	700	C
560518	220828		390	N	228	E	364	920		58	76	6020	16000	24070	24025	6065	02	0802	C
570388	222901		3930	N	2270	E	364	920		57	95	18605	38579	9510	5003	14111	03	1000	C
570521	132418		3941	N	2283	E	364	10		57	97						10		
580315	062707		4077	N	2108	E	364	920		53	102	15500	24575	6515	11111	1911	24	1000	C
580717	053706		4065	N	2336	E	364	910		55	142	23618	35858	13725	9805	19132	03	2405	C
600713	130101		4056	N	2337	E	364	910		50	142	10015	23368	0615	5322	14300	14	1203	C
601111	053126		3877	N	2080	E	364	9	8	51	57	122					10		
630604	221130		3893	N	2051	E	364	9	8	47	100	3000	90	12000	7500	16500	23	01503	C
650403	1430482		3824	N	2050	E	364	25	49	66							10		
660308	1851475		3887	N	2142	E	364	44	47	65							8	D	
660314	1408412		3907	N	2136	E	364	45	46	62	31010	4738	20850	27342	15825	12	00900	C	
660401	131508		3872	N	2149	E	364	45	47	91						15	D		
660408	1147339		3885	N	2128	E	364	53	43	48						8			
660611	1021554		3884	N	2150	E	364	43	47	109	8505	20178	35410	4011	30904	14	01505	C	
660720	101606		3883	N	2139	E	364	922	45	64						11	D		
660811	043413	*	3874	N	2176	E	364	9	6	46	84	5010	14000	23080	23035	5055	02	1102	C
660811	043413	*	3874	N	2176	E	364	9	6	46	84	14301	4443	24345	18239	29122	12	01201	D
661021	1617040		3953	N	2211	E	364	957	46	64	16000	7000	90	16045	34045	22	02000	C	
670503	1841472		3953	N	2134	E	364	37	48	72						12			
670504	1331078		3963	N	2126	E	364	39	47	117	34022	7716	20062	31263	17421	11	01002	C</td	

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KNM1731210 = S2 \*\*  
 PART 3 : REGIONAL LISTS OF QUALITY A/B AND QUALITY C/D SOLUTIONS IN CHRONOLOGICAL ORDER

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70	
690813	040603	3837	N	2175	E	364	24	45	66						
700416	2239313*	4067	N	2345	E	364	929	49	159	27506	15478	610	5301	32012 04 2306 c	
700416	2239313*	4067	N	2345	E	364	920	49	159	11530	22024	34250	6963	31511 11 2207 c	
700420	1539316	3827	N	2268	E	364	938	51	193	2015	32446	17340	11340	21716 13 3310 c	
700512	2249032	3821	N	2255	E	364	939	48	146	21040	12000	3050	21085	3005 11 1706 c	
701001	2221549	3813	N	2276	E	364	924	47	33	18518	29660	06723	02930	11810 03 00700 c	
701001	2238352	3804	N	2279	E	364	929	50	55	17808	28968	04008	04008	13320*03 01303 c	
710419	0243521	3895	N	2049	E	364	916	51	53	11530	08136	23540	26706	16854 00 01202 c	
720615	0033236	3834	N	2220	E	364	926	49	87	08540	15500	24550	24505	06555 00*01402 c	
720917	1407156	3828	N	2034	E	364	33	56	63	114	30607	5569	21420	26219	16999 14 82
721030	1432131	3833	N	2037	E	364	933	53	93	04609	29764	14024	18410*09024	04 01300 c	
721120	0330278	3940	N	2180	E	364	933	49	36	25615	00651	19535	11213	21137 30 00701 c	
470604	002955	400	N	240	E	365	80	62	69	6518	33016	20065	23225	8859 02 1601 b	
490723	150330 *	386	N	263	E	365	920	66	140	15020	27457	5025	10033	903 14 394 c	
540803	181813	401	N	245	E	365	935	58	120	28408	1400	10482	10437	28453 02 3007 b	
550459	1647179	393	N	231	E	365	9	61	145	17129	28233	5144	12156	1808 11 5510 A	
550481	071818	393	N	231	E	365	9	58	153	17527	28331	5347	12857	2011 11 4508 A	
580116	041815	3951	N	2545	E	365	9 0	56	115	31310	18773	4514	35917	9003 13 1703 b	
640411	160043	4030	N	2483	E	365	933	54	55	136	32020	26468	6535	10610	841 03 02205 b
640411	160043	4030	N	2483	E	365	933	54	55	136	32020	19557	6025	10103	933 04 2205 b
650309	1757545*	3934	N	2382	E	365	918	57	63	215	17516	8500	35574	17561 35529 12 06811 b	
651220	0008160	4021	N	2482	E	365	933	52	59	175	10000	1064	19026	23818	14218 24 02903 b
670304	1758090*	3925	N	2460	E	365	60	60	65	329	02541	12207	22048	32882	21204*11*10623 b
680219	2248424	3940	N	2494	E	365	9 7	60	70	333	20905	32579	11810	07304	18411 03 08915 A
680404	0818033	3933	N	2488	E	365	920	51	55	227	24207	35572	19016	10506	19717 03 06208 A
690406	0349339	3847	N	2641	E	365	916	56	55	229	20432	16120	34551	25268	00810 11 08519 A
950602	233433	404	N	258	E	365	910	53	78					7	
561102	160433	3932	N	2369	E	365	910	52	93	25030	1142	13734	19548	10302 11 1405 c	
591119	140028	3891	N	2659	E	365	910	52	103	4524	28350	15030	9540	18994 13 1000 c	
640223	2241039	3921	N	2373	E	365	10	54	53	131	6520	16933	31050	27118	2451 00*02112 c
650309	1837546	3928	N	2393	E	365	915	50	99	7010	16080	25080	7055	25035 12 1503 c	
650310	0136058	3908	N	2377	E	365	18	50	59	101	18402	28877	09113	4706	13813 03 25

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KNM1731210 = S2 ==  
 PART 3 : REGIONAL LISTS OF QUALITY A/B AND QUALITY C/D SOLUTIONS IN CHRONOLOGICAL ORDER

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70	
650313	0408406	3911	N	2397	E	365	11	48	59	62	23724	33720	10258	20263	7319 11 11
650313	0409379	3903	N	2368	E	365	33	51	78					7	
650603	1831510	3972	N	2321	E	365	933	48	107	19040	29922	5042	2901	12269 00 01202 c	
651102	0327074	3948	N	2532	E	365	9 5	47	56	94	010	9000	18080	055	18035 12 01202 c
660120	0039006	3920	N	2444	E	365	12	44	49					6	
670304	183810	3989	N	2480	E	365	15	47	55					10	
670328	000428	3844	N	2542	E	365	29	46	76					00901 D	
680220	0039157	3973	N	2537	E	365	937	50	88	34538	23920	12845	04770	14804 11 01105 c	
680220	022129	3956	N	2545	E	365	9 8	50	90	1121*02200	29272	11263	29227	12 01302 c	
680220	0941099	3941	N	2488	E	365	933	45	98	34538	23920	12845	04770	14804 11 00901 c	
680222	045747	3939	N	2502	E	365	19	47	78	116	34538	23920	12845	04770 14804 11 01804 c	
680227	1337454	3961	N	2551	E	365	35	47	67					16	
680310	0648171	3910	N	2436	E	365	33	45	72					10	
680310	0710500	3913	N	2423	E	365	9 9	50	167	12000	3060	21030	26021	16021 24 2805 c	
680316	1811058	3938	N	2494	E	365	43	48	66					12	
680323	1725550	3976	N	2548	E	365	33	46	127	15528	03256	25526	20334	29605 13 01402 c	
681028	125430	3889	N	2582	E	365	9 4	45	67	15206	26071	06018	10717	01408 14 01102 c	
690421	203640	3942	N	2509	E	365	9 1	47	83	35534	24131	12040	14804	05358 00 01303 c	
430620	153250 *	408	N	304	E	366	915	65	91	35308	23673	8513	13005	3816 04 2101 b	
430620	153250 *	408	N	304	E	366	915	65	91	7000	16000	90	25045	7045 22 2200 b	
530318	190613	400	N	273	E	366	9	75	297	33006	8677	23912	28513	19304 14 5509 A	
550716	070712	379	N	271	E	366	9	68	266	19026	7936	30743	24053	34229 11 8820 A	
560106	121541	404	N	263	E	366	9 0	55	110	10520	1500	28564	10571	28519 11 2003 B	
560220	203137 *	399	N	304	E	366	920	60	148	14516*	5590	32574	14561	32529 12 5711 B	
570526	063334	4067	N	3086	E	366	9 0	60	142	16613	26944	6343	12540	1819 12 5711 B	
630311	072721	3799	N	2912	E	366	31	56	167	28304	1850	19040	14024	24430 03 04008 A	
630918	165808 *	4080	N	2913	E	366	921	64	210	30408*	3400	12482	12437	30453 02 05016 B	
630918	165808 *	4080	N	2913	E	366	21	64	210	19230	36332	6943	14057	3807 11 04818 B	
640130	1745570*	3741	N	2989	E	366	59	56	55	123	6510	15500	24580	6555 24535 12 02607 B	
640130	1745570*	3741	N	2989	E	366	59	56	55	123	17000	26065	8025	3217 12817 23 02508 C	
641006	1429579	4024	N	2816	E	366	923	52	151	3036	27233	15337	9057	18201 11 03309 B	
650302	2200072	3847	N	2833	E	366	942	50	66	115	4030	29229	16746	9059 19709 11 3303 B	
650613	2001508*	3785	N	2932	E	366	33	51	59	165	2000*11000	90	2045	20045 22 06111 B	
650823	1408586	4051	N	2617	E	366	33	51	55	170	16800	25815	7875	15443 243 22 02807 B	

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS ===== KNM1731210 = S2 ==  
 PART 3 : REGIONALISTS OF QUALITY A/B AND QUALITY C/D SOLUTIONS IN CHRONOLOGICAL ORDER

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70	
660504	2149018	3774	N	2771	E	366	37	47	52	126	5640	31116	20445	22003	12074 00 02506 A
660507	1308169*	3775	N	2779	E	366	9	50	54	146	26824	2849	16232	21842	12305 14 03108 B
660509	0351101	3775	N	2779	E	366	9	50	54	146	17327	8300	35363	17372	35318 11 02910 C
660821	0130435	4033	N	2740	E	366	132	49	117	24504	15500	6550	6505	24585 00*03008 A	
670601	1039235	3681	N	2926	E	366	43	50	154	10044	10212	30444	11200	2278 00 02903 B	
670722	1656580	4057	N	3069	E	366	33	60	70	399	18705	31280	96	8 14110 51 1 14 10118 A	
670730	0131018	4072	N	3052	E	366	918	54	210	7030+32624	20450	11864	23111	11*07007 B	
671026	0455393*	3722	N	2905	E	366	46	49	150	5522	31524	18257	9259	21619 11 02711 B	
671026	0455393*	3722	N	2905	E	366	46	49	150	14418	1264	24018	10200	19226 04 02909 C	
681103	1840017	3881	N	2911	E	366	23	48	104	31530	19244	06531	10101	01046 04 02203 B	
690114	2312026	3611	N	2919	E	366	922	56	60	263	25213	00458	15528	20630	11010 14 08024 A
690303	0059105	4008	N	2750	E	366	9	56	53	225	13044	03505	30046	30501	20385 00 07524 A
690304	0147258	3698	N	3104	E	366	109	48	92	08900	17915	35975	07543	28443 22 02705 B	
690323	2108421	3914	N	2848	E	366	9	56	56	256	19530	29620	05553	15067	03112 11 10214 A
690324	0159340*	3911	N	2851	E	366	930	50	156	19326	36335	07543	14453	04010 11 03511 B	
690325	1321342	3925	N	2844	E	366	937	55	60	197	01015	13464	27420	32426	23174 14 06515 A
690328	0148295*	3855	N	2846	E	366	9	56	64	294	00624	26244	13555	04540	16717 11 09028 A
690430	202032*	3912	N	2852	E	366	9	50	141	5520	31818	19062	8361	22022 12 2410 B	
691007	050912*	3920	N	2840	E	366	913	49	148	23005	12769	32220	00810	27418 04 02701 B	
700328	2102235	3921	N	2951	E	366	918	60	71	347	04027	29625	17051	08461	20014 12 17513 A
700328	2311434	3915	N	2956	E	366	931	48	158	1535	10500	19555	3580	19510 11 3808 B	
700329	0656244	3906	N	2974	E	366	929	51	195	18530	07530	31045	23759	34108 11 05207 A	
700329	191143	3914	N	2942	E	366	922	47	122	07214	16051	33235	28814	02836 03 01902 B	
700330	075952*	3934	N	2926	E	366	916	51	176	19022	29022	06058	15560	02819 11 04012 A	
700331	005136	3933	N	2941	E	366	918	46	87	07522	31157	17525	12434	21603 13 01300 B	
700401	1556046	3932	N	2927	E	366	935	48	120	17025	27426	4352	12859	1214 11 3103 B	
700407	1705119	3934	N	2932	E	366	933	51	184	4040	29022	18042	10668	20011 11 6012 A	
700416	1042223	3902	N	2991	E	366	931	54	208	9013	33660	18626	13928	23009 13 6911 A	
700419	1329365*	3903	N	2976	E	366	913	55	58	246	18108	9100	182	18153 137 12 7331 C	
700419	1329365*	3903	N	2976	E	366	918	55	58	246	4010	15970	30717	26305	35420 03 7826 B
700422	0524060	3902	N	2977	E	366	937	51	160	505	9500	18585	550	18540 12 4310 B	

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS ===== KNM1731210 = S2 ==  
 PART 3 : REGIONALISTS OF QUALITY A/B AND QUALITY C/D SOLUTIONS IN CHRONOLOGICAL ORDER

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70	
700422	1838501	3908	N	2942	E	366	948	46	101	4539	38513	20048	10277	21405 11 1706 B	
700423	0901266*	3913	N	2865	E	366	928	52	56	208	18222	9200	268	18267 223 12 6419 B	
700423	0901266*	3913	N	2865	E	366	928	52	56	208	15024	6000	33066	15069	33021 11 6518 B
700424	0040014	3901	N	2985	E	366	932	48	129	20321	11300	2369	20366	2324 12 3607 B	
701220	1101479*	3940	N	2924	E	366	38	50	55	88	19532	10107	00057	21876 1013*11 02003 B	
701220	1101479*	3940	N	2924	E	366	38	50	55	88	17538	28624	04042	11166 01702*11 01904 B	
710222	1427446	3724	N	3027	E	366	45	50	88	00540	18015	21546	19903	30075 00*01503 B	
710223	1941230	3960	N	2737	E	366	915	50	54	88	09518	21859	35724	31504 04830 03 02306 B	
710413	1252345	3903	N	2989	E	366	913	51	69	03040	12000	21050	03085	21005 11*01907 B	
710512	0625129	3759	N	2976	E	366	923	55	59	129	04031	28535	16040	09455 17205 11 05906 A	
710512	1010372	3755	N	2973	E	366	933	55	91	13528	24735	01742	08454 3430 11 04803 A		
710512	1257247	3758	N	2960	E	366	933	54	52	120	13520*04500	31570	13565	31525 12 05909 B	
710512	1712254	3758	N	2996	E	366	928	47	57	35043	25010	15045	06580	16005 11 01706 B	
710525	0543270	3903	N	2974	E	366	924	58	55	169	19558	08721	33544	26069	35603 11 06506 A
710609	1510033	3730	N	3024	E	366	928	48	40	11520*02500	29570	11565	29525	12 01101 B	
720426	0630239	3950	N	2635	E	366	926	50	84	08530*17500	26560	08575	26515	11 02303 B	
720426	1559450*	3951	N	2634	E	366	928	48	73	33512	22063	07024	11408*02025	04 01404 B	
720426	1559450*	3951	N	2634	E	366	928	48	73	31541	21115	10545	12102*02474	00 01002 B	
330719	200710	382	N	297	E	366	900	60	64					7	
390803	123247	398	N	296	E	366	912	55	51	6420	31738	17545	10848	21515 11 900 C	
390809	234344	398	N	296	E	366	915	51	33	1921	27034	13048	5852	16916 11 400 C	
390915	231626	398	N	296	E	366	916	50	70	13621	27034	13048	5852	16916 11 1204 C	
390922	003632	390	N	269	E	366	920	66	101	1039	26715	16047	7074	17605 11 1200 C	
410523	195152	372	N	283	E	366	9	58	60	67				11	
410523	223409	372	N	283	E	366	910	53	44					5	
420616	054227	404	N	280	E	366	915	56	43					7	
440527	235225	372	N	283	E	366	100	62	32					8 D	
441006	023441	394	N	267	E	366	920	68	90	8000	35070	17020	12314	21714 23 801 C	
460221	154304	383	N	318	E	366	9	56	50					12	
520319	012723	398	N	287	E	366	926	54	126	16000	7070	25020	29714	20314 24 1405 C	
530603	160524	401	N	288	E	366	9	58	53	70				10	
530722	150933	391	N	285	E	366	925	52	93					6	
540501	205325	377	N	270	E	366	917	52	69					7	
550828	133919	375	N	273	E	366	917	52	55					6	
570526	085445	4058	N	3074	E	366	9	0	88	6000	15070	33020	28314	1714 23 1103 C	
570526	093637	4077	N	3077	E	366	9	0	60	129	25828	13257	35824	30732	3902 13 2205 C
570527	110127	4070	N	3097	E	366	9	0	55	125	19102	9767	28223	32914	23418 04 2107 C
600410	220526	3769	N	2776	E	366	914	44	5	78	3010	18000	21080	21035	3055 02 0902 C

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KNM1731210 = S2 \*\*  
 PART 3 : REGIONAL LISTS OF QUALITY A/B AND QUALITY C/D SOLUTIONS IN CHRONOLOGICAL ORDER

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70
601201	040237	3837	N	3047	E	366	70		53					
630924	021041	4085	N	2888	E	366	10	47	86					0800 D
650324	2029226*	3682	N	3094	E	366	111	51	67	26534	17007	7055	29678	7910 11 02402 C
650324	2029226*	3682	N	3094	E	366	111	50	67	15500	24545	6545	1030 12030 22 02303 C	
650617	0258250	3777	N	2936	E	366	937	47	84	25310	15271	34616	3004 29819 04 01301 C	
660122	0023443	3765	N	2995	E	366	32	48	85	26832	2132	14542	11406 21358 00 01102 C	
660522	073729	3870	N	2792	E	366	23	51	57					6
660605	0914068	3907	N	2934	E	366	36	44	52					10
660619	175530	3895	N	2735	E	366	919	47	82	4525	28745	15435	19106* 9545 00 01301 C	
670719	0906222	3810	N	2887	E	366	41	48	105	2000	29056	11034	16023 6023 24 01786 C	
670722	1748065	4066	N	3062	E	366	26	50	106	10010	21567	620	5522 322 7 14 01802 C	
670722	1809554	4072	N	3051	E	366	35	50	97	16530	5630	29045	21659 32109 11 01102 C	
670722	203540	4079	N	3042	E	366	4	47	67					15
670722	2341598	4064	N	3053	E	366	930	47	98	3030	27339	14537	8451 17905 11 01301 C	
670723	0403396	4061	N	3035	E	366	21	45	59					12
670728	091606	4061	N	3067	E	366	21	44	69					14
670814	200925	4074	N	3037	E	366	925	46	68	14000	8000	90	14045 32045 22 1301 C	
690305	1441164	4006	N	2756	E	366	33	47	92					22
690324	1134340	3917	N	2870	E	366	37	46	73					14
690325	152112	3906	N	2841	E	366	928	49	104	19412	10400	1478	19457 1433 12 1804 C	
690325	1613304	3908	N	2844	E	366	942	47	65	19038	4321	29045	31104 21189 00 1402 C	
690328	1002174	3915	N	2845	E	366	937	49	124	22404	33378	15312	08705 17911 03 02106 C	
700328	2159109	3928	N	2946	E	366	917	48	71	07514	18352	33535	29114 03136 03 01200 C	
700328	2344001	3907	N	2976	E	366	932	50	142					11
700329	1437196	3874	N	2783	E	366	56	45	94					15
700330	0646249	3909	N	2903	E	366	923	45	57	20218*11200	02280	20255	02235 12 00801 C	
700330	0649050	3943	N	2940	E	366	933	46	73	21129*12100	03170	21165	03125 11 01405 C	
700330	1632355	3909	N	2959	E	366	36	47	127					24
700330	203805	3905	N	2962	E	366	928	45	54	03028	12000	21070	03065 21025 11 00801 C	
700331	0346511	3903	N	2979	E	366	935	47	127	01520	18500	19570	01565 19525 12*02306 C	
700409	1012304	3911	N	2941	E	366	934	47	54					12
700425	162958	3934	N	2930	E	366	928	46	121	2030	11000	20060	2075 20015 11 1707 C	
700446	1143223	3898	N	2995	E	366	943	48	94	29010	3860	19528	15013 24628 03 1500 C	
700483	0718318	3894	N	3001	E	366	932	49	86	5080	38228	17847	9960 20710 11 1202 C	
700487	0154126	3894	N	2981	E	366	937	44	129	19520	10500	1570	19565 1925 12 1906 C	
700487	222443	3906	N	2954	E	366	911	47	86	16018	28066	6620	11423 2205 14 1500 C	
700488	235909	3909	N	2959	E	366	929	45	112	16500	7580	90	16545 34545 22 1703 C	
700508	0249146	3893	N	2998	E	366	20	46	80	2030	11080	20060	2075 20015 11 1707 C	
710215	0819561	3917	N	2940	E	366	928	49	109					20
									71	26510	08543	16545	11722 22639*02 01102 C	

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KNM1731210 = S2 \*\*  
 PART 3 : REGIONAL LISTS OF QUALITY A/B AND QUALITY C/D SOLUTIONS IN CHRONOLOGICAL ORDER

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70
710512	2013081	3749	N	2988	E	366	936	48	63	21227	33647	10530	15943	06802 14 01503 C
710513	0445274	3746	N	2974	E	366	914	48	52	11310	34474	20512	24902	15916 04 02101 C
710514	2218230	3787	N	3000	E	366	933	45	36	15030	26840	03536	09550 00104 11 00701 C	
710517	0029014	3797	N	2974	E	366	933	49	44	14528	05500	32562	14573 32517 11 00901 C	
710520	0306452	3758	N	2998	E	366	933	48	59	00500	27565	09525	04718 14318 23 01201 C	
710608	1659248	3752	N	2977	E	366	910	47	47	18335	09380	00355	00310 18380 00 01002 C	
710610	0931544	3911	N	2960	E	366	9	49	35	00500	90	09500	05000 14000 23 00801 C	
710615	2255455	3705	N	2896	E	366	933	46	33					8
710628	2337399	3755	N	2982	E	366	9	47	37	26010	14567	35420	03907 30522 04 00900 C	
710629	0426311	3746	N	2989	E	366	928	49	58	09000	18070	02000	04714 31314*24 01001 C	
710921	1648516	3727	N	3016	E	366	37	48	56	13025	24158	01542	08290 33910 12 00802 C	
710928	0510248	3712	N	3011	E	366	36	47	53	29042	01009	11558	25173 10215 11 01301 C	
711106	1943468	3902	N	2973	E	366	914	50	40					9
720314	1405458	3928	N	2942	E	366	33	54	49	106	10530	21935	34640	05254 31306 14 01101 C
									36					
480911	085232	* 372	N	232	E	366	80	65	88	10020	515	24065	26824 12462 02 1704 B	
480911	085232	* 372	N	232	E	366	80	65	88	7910	34125	18563	23532 10248 02 1704 B	
541223	182718	379	N	211	E	368	9	5	55	77	2530	12516	24055	21914 34768 00 1401 B
570529	183910	3714	N	2374	E	368	9	0	53	82	11500	2580	20510	15907 25173 23 1902 B
580503	201820	* 3615	N	2174	E	368	27	55	120	2700	11700	90	20745 2745 22 1602 B	
580503	201820	* 3615	N	2174	E	368	927	55	120	4510	13500	22580	22535 4555 02 1602 B	
611211	165310	3640	N	2337	E	368	69	48	91	1530	10500	19560	19515 1575 00* 1705 B	
620828	105936	3782	N	2289	E	368	95	67	274	2040	27022	15842	17901 8768 00 11615 A	
650409	0312546	3770	N	2180	E	368	34	57	218	3516	26254	13632	17810 8235 13 9 45	
650409	0312546	3775	N	2200	E	368	34	54	62	218	3516	21512	29063 27020 5766 02 02906 B	
660524	1109254	3737	N	2202	E	368	43	48	99	20518*11500	2572	20563	2527 12 01500 B	
660611	1205027	3737	N	2108	E	368	47	48	91	7808	16806	30081	26338 7151 02 01904 B	
660901	1422569	3746	N	2212	E	368	915	53	56	198	9902	655	19037 24024 13827 04 04815 B	
670544	0415599	3770	N	2117	E	368	48	48	132	8024*34218	21866	24911	11063 02 02906 B	
670544	0415599	3770	N	2117	E	368	48	48	132	8024*17512	29063	27020	5766 02 02906 B	
680704	2147556	3776	N	2323	E	368	920	52	57	224	02821	27347	13433 07841 17409*13 05813 B	
680704	2147556	3776	N	2323	E	368	20	52	57	226	01330	27021	15052 03966 17612*11 05813 B	
700124	1543840	3721	N	2345	E	368	105	47	42	01000	28010	10088	18044 20244 22 01100 B	
700221	1901189	3759	N	2267	E	368	79	49	125	05736	34220	20048	22007 11170 00 04108 A	
700423	0429482	3751	N	2273	E	368	74	48	133	12414	21401	31076	30331 12259 02 4210 A	
710811	0537287*	3696	N	2391	E	368	120	49	42	23037	33418	08448	6504 17212 00 2107 B	
710811	0537287*	3696	N	2391	E	368	120	49	42	01010	27812	14074*18034	02454 02 02206 B	

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KNM1731210 = S2 \*\*  
 PART 3 : REGIONAL LISTS OF QUALITY A/B AND QUALITY C/D SOLUTIONS IN CHRONOLOGICAL ORDER

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70					
730714	1238183	3790	N	2107	E	368	936	47		59	7515	33923	19562	23726	10454	02	1303	B	
470601	111835	366	N	215	E	368	917		55	64	9014	000	27076	27031	9059	22	600	C	
471006	195534	369	N	220	E	368	925		59	137	11723	34955	21824	16835	25801	13	901	C	
510824	102726	373	N	213	E	368	9	3	49	76							700	D	
520653	010722	373	N	221	E	368	9	4	47	71							10	D	
520902	232007	372	N	216	E	368	9	7	46	17							5		
521022	041455	367	N	279	E	368	915		52	42							7		
540437	205246	379	N	229	E	368	9	6	52	79	17000	24070	8020	3314	12714	23	1100	C	
540718	144230	376	N	212	E	368	917		52	71	7510	18500	25580	25535	7555	02	801	C	
541230	110556	361	N	217	E	368	915		53	72							11	D	
550413	204546	373	N	226	E	368	9	6	53	108	1402	28064	10526	5619	15316	13	2007	C	
570123	172651	3670	N	2164	E	368	30		52	68	6207*	15417	31072	25636	4450	02	0901	C	
570219	074359	3622	N	2158	E	368	30		53	126	23558	34221	9545	17568	7404	11	1703	C	
580102	020814	3616	N	2231	E	368	920		58	106	6008	15000	90	24045	6045	22	1202	C	
581115	054240	3770	N	2202	E	368	920		55	124	14025	5000	32065	32020	14070	00	3310	C	
610107	155301	3778	N	2110	E	368	88		48	89	24818	34212	10568	7826	22861	02	1300	C	
611002	072139	3662	N	2188	E	368	910		58	152	2010	11000	20080	20035	2055	02	3503	C	
621004	194609	3787	N	2235	E	368	43		52	142	17740	6623	31441	24468	33601	11	2006	C	
631216	134753	3704	N	2102	E	368	940	56	181	18044	9000	046	001	18089	00	03218	C		
660102	231218	3767	N	2318	E	368	912	50	92	4234	13200	22256	22211	4279	00	01303	C		
660115	1807465	3672	N	2309	E	368	37	47	60							10			
660407	032545	3783	N	2114	E	368	925	48	106	18015	9000	00075	18060	00030	12	01504	C		
660524	0939265*	3733	N	2189	E	368	934	48	128	11021	535	23548	15352	26416	11	02103	C		
660806	183232	3790	N	222	E	368	25	44	43	128	7916	31464	17520	12626	21803	13	2203	C	
660810	1522402	3640	N	2222	E	368	39	46	80	23030	12820	1053	3412	27266	00	01201	C		
670223	1421513	3755	N	2118	E	368	46	47	85							14			
670705	0053168	3673	N	2190	E	368	50	47	140	21324	32337	9843	16551	6111	12	01503	C		
680425	1034038	3786	N	2247	E	368	98	42	38	18230	9200	260	18275	215	11	1200	C		
680618	1116360	3795	N	2345	E	368	172	43	33	02530	11500	20560	02575	20515	11	00900	C		
680804	2324222	3781	N	2102	E	368	32	46	53							12			
691220	1740363	3659	N	2346	E	368	90	50	65							20			
720228	1052437	3698	N	2416	E	368	11	48	51							9			
720331	0298024	3646	N	2122	E	368	9	47	63							11			
720913	0413205	3793	N	2239	E	368	83	60	158	14211	24855	4533	36014	9931	03	123			
560709	031140	*	3673	N	2580	E	369	9	0	75	317	5901	14900	23989	5946	23944	12	8226	B
560709	031140	*	3673	N	2580	E	369	9	0	75	317	5700	14765	32725	1517	27917	22	8622	B

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KNM1731210 = S2 \*\*  
 PART 3 : REGIONAL LISTS OF QUALITY A/B AND QUALITY C/D SOLUTIONS IN CHRONOLOGICAL ORDER

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70					
570424	191013	*	3637	N	2859	E	369	948		67	302	12707	3046	22343	16535	27424	13	9711	A
570424	191015	*	3637	N	2859	E	369	48		67	302	34116	11066	24618	20401	29324	03	9810	A
570425	022542	*	3647	N	2856	E	369	953		67	314	12204	2558	21432	16325	26219	13	11218	A
570425	022542	*	3647	N	2856	E	369	53		67	314	12710	2648	22540	16735	27220	13	11218	A
580509	024045	3644	N	2769	E	369	9	0	56	139	20710	34560	11228	6712	15377	03	3607	A	
580527	182745	3684	N	2675	E	369	166	49	52	128	25505	16504	4084	7240	26050	02	6108	A	
580630	084245	*	3636	N	2732	E	369	109		57	157	25808	16613	2075	6736	27352	02	6108	B
590425	002639	*	3697	N	2850	E	369	0		62	163	33016	23615	10568	35158	13828	12	5311	A
590425	002639	*	3697	N	2850	E	369	9		62	163	35518	25038	10547	3647	14618	11	5212	B
590425	010540	*	3695	N	2858	E	369	10	52	56	105	33007	23534	7055	342	12230	12	2907	B
610525	024520	*	3671	N	2846	E	369	65		56	105	18510	9500	580	535	16555	02	2907	B
620428	111859	*	3606	N	2679	E	369	51		60	192	18504	31283	9505	16213	29171	00	8709	A
620428	111859	*	3606	N	2679	E	369	51		60	192	2024	26149	12632	16506	7141	04	28	
620428	124349	*	3612	N	2685	E	369	45		54	165	18605	30278	9510	14111	5003	14	03506	A
640718	0340194	*	3613	N	2801	E	369	99	50	57	139	6706	19319	32070	26437	4747	02	3107	B
650107	1022172	*	3650	N	2885	E	369	35	50	79	19828	29920	6054	15666	3513	11	01502	B	
650610	1524171	*	3644	N	2664	E	369	142	48	50	5210	16768	31820	721	27407	14	01800	B	
651128	052605	*	3612	N	2743	E	369	73	57	59	209	3005	14754	29636	24821	35028	03	10004	A
671205	0520031	*	3653	N	2685	E	369	137	47	83	11330	1021	25052	15866	27552	11	02506	B	
680207	2222190	*	3665	N	2674	E	369	153	50	146	15317	04741	26044	19644	30216	12	05409	A	
680220	1650448	*	3615	N	2739	E	369	64	49	121	23044	13010	03045	04000	31080	00	01805	B	
680530	1740244*	*	3545	N	2788	E	369	27	53	59	222	29213	32628	11858	19749	7227	12	78	
680804	1818384	*	3536	N	2777	E	369	942	45	93	2533	14500	20557	20512	2578	00	1402	B	
681031	032214	*	3662	N	2701	E	369	9	50	159	26515	15567	20217	06401	33323	04	03012	B	
681031	0322140	*	3662	N	2701	E	369	2	50	159	5307	15961	31827	27313	926	04	52		
681204	039322	*	3650	N	2702	E	369	932	47	87	07420	32442	18341	22313	11946	00	01501	B	
681205	0752111	*	3660	N	2692	E	369	931	54	206	01600	28677	10613	06010	15210	23	05718	B	
681205	0752111	*	3660	N	2692	E	369	31	54	206	3329	27342	14534	8648	18003	11	5322	C	
690416	2255405	*	3532	N	2777	E	369	952	51	173	30010	05568	20202	16107	25421	03	04211	B	
690416	2321062	*	3523	N	2772	E	369	58	51	181	35522	9116	21362	18721	32764	00	3816	B	
690416	2321062	*	3523	N	2772	E	369	58	51	181	33905	09679	24810	20303	29411	03	04113	B	
690501	1802164*	*	3541	N	2768	E	369	51	51	180	13027	02223	26744	18867	29005	11	04718	B	
690501	1802164*	*	3541	N	2768	E	369	51	51	180	08081	27863	09827	05018	14618	23	04817	C	
690514	1005171	*	3533	N	2772	E	369	43	51	181</									

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KNM1731210 = S2 \*\*  
 PART 3 : REGIONAL LISTS OF QUALITY A/B AND QUALITY C/D SOLUTIONS IN CHRONOLOGICAL ORDER

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70			
690906	2030403	3673	N	2835	E	369	72	50	137	24232	13821	02050	04409	29266	00	05312	A
710318	1608041	3651	N	2696	E	369	154	47	49	08310	17404	28579	07854	26736	12	02100	A
330423	055738	368	N	273	E	369	50	64	133								8
341109	134056	3675	N	2575	E	369	140	63	71								7
350318	084041	355	N	270	E	369	130	65	72	23520	14500	5570	5525	23565	02	1401	C
410713	15328	376	N	258	E	369	915	59	55	6025	15000	24065	6070	24020	11	701	C
420621	043834	364	N	274	E	369	130	64	47							1100	D
431036	130846	364	N	279	E	369	110	66	69							16	D
440105	074404	364	N	274	E	369	916	56	36							7	D
450209	125813	355	N	272	E	369	930	71	151	10028	1000	28062	10073	28017	11	2203	C
461018	085953	355	N	272	E	369	915	55	58	32020	5000	13070	13025	32065	02	1400	C
540809	203908	358	N	275	E	369	915	47	58							9	
560709	032403	3663	N	2570	E	369	920	55	60	5700	14765	32725	1517	27917	22	1202	C
560709	061907	3665	N	2580	E	369	920	51	59	5700	14765	32725	1517	27917	22	0702	C
560710	062246	3677	N	2589	E	369	920	54	53	5700	14765	32725	1517	27917	22	0804	D
560710	030125	3671	N	2625	E	369	920	55	63	33808	9874	24614	20204	29216	03	2507	C
560722	032858	3684	N	2630	E	369	910	48	63	5400	14470	32420	1114	27714	24	0902	C
570406	063336	3621	N	2887	E	369	923	59	147	21514	33664	1922	16826	7605	14	2005	C
571030	014259	3515	N	2720	E	369	910	57	106	6310	21679	33208	10704	1710	03	1601	C
571030	073018	3525	N	2769	E	369	910	57	124	5300	14355	32355	27224	1424	23	1605	C
580904	000256	3659	N	2669	E	369	50	52	93	21012	27316	8470	19154	4331	12	1201	C
630708	160231	3646	N	2803	E	369	57	47	90							15	
640425	1244150	3546	N	2770	E	369	61	48	67							11	
650206	0347578	3541	N	2704	E	369	71	49	59							11	
650516	0135560	3526	N	2785	E	369	41	46	80							10	
660208	1316222	3623	N	2811	E	369	979	46	62	29510	3236	19252	14326	26043	02	01002	C
660515	101108	3517	N	2716	E	369	34	45	61	16520	6428	28554	20455	32320	12	00600	D
660818	2209012	3622	N	2635	E	369	133	44	43	14500	5570	23520	18814	28214	23	1201	C
660906	1231573	3666	N	2663	E	369	158	45	28							11	
660910	1055167	3653	N	2690	E	369	146	45	33							11	
660612	090504	3530	N	2789	E	369	916	46	77	23016	33235	12050	19248	07720	12	00801	C
680727	024551	3542	N	2787	E	369	49	45	70							12	
680731	1929297	3554	N	2800	E	369	49	48	126	17003	07926	26664	19643	32836	12	02305	C
681006	150643	3696	N	2638	E	369	917	47	99	08505	17730	34760	29034	05642	12	01403	C
681104	200559	3644	N	2698	E	369	935	46	55	5515	14500	23575	23530	5560	02	1101	C
681111	235307	3661	N	2710	E	369	933	45	50	27515	*00500	09575	09530	27560	02	01002	C
681112	033739	3674	N	2711	E	369	926	47	104	16500	07500	90	16545	34545	22	01806	C
681112	0608556	3664	N	2716	E	369	24	46	92								

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 PART 3 : REGIONAL LISTS OF QUALITY A/B AND QUALITY C/D SOLUTIONS IN CHRONOLOGICAL ORDER

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70					
681209	2022175	3652	N	2712	E	369	44	40								11			
681221	003640	3660	N	2707	E	369	930	45	88	15000	6080	24010	19507	28507	23	1300	C		
690416	0454128	3530	N	2790	E	369	915	48	143	13515	04500	31575	13560	31530	12	02010	C		
690417	0054382	3519	N	2783	E	369	955	48	132	13500	4500	90	13545	31545	22	1505	C		
690424	1445488	3635	N	2873	E	369	53	47	79	03028	12000	21067	21022	03068	00	01304	C		
690904	1925266	3511	N	2717	E	369	943	48	83	30920	3500	12570	12525	30565	02	1100	C		
690922	0817434	3657	N	2801	E	369	86	47	42	16520	28956	06530	02403	11734	04	01301	C		
701111	2058132	3612	N	2821	E	369	43	49	55	06400	33450	15440	20727	10127	24	01402	C		
720331	2032008	3662	N	2714	E	369	18	45	40							8			
721219	1934314	3548	N	2781	E	369	54	46	65							14			
480724	060305	*	344	N	245	E	370	960	64	70	151	9013	31071	18314	13719	2270	13	3902	B
480724	040305	*	352	N	245	E	370	60	64	70	151	13540	4500	31550	31505	13585	00	3605	B
521217	230357	*	344	N	245	E	370	945	64	71	255	25024	14924	2055	5116	29061	00	6304	B
590514	063656	*	3514	N	2458	E	370	0	60	227	23022	32819	9460	19862	6550	11	5708	A	
590514	063656	*	3514	N	2458	E	370	9	60	227	22517	33142	11843	18244	76	6	11	5708	A
590610	041602	3556	N	2357	E	370	910	49	55	148	19040	3825	21665	2180	11	2503	B		
620910	093624	3444	N	2667	E	370	30	55	174	21010	30620	8564	18356	4626	12	4104	A		
630304	151017	*	3491	N	2516	E	370	39	52	145	17030	8000	3560	17075	35015	11	02809	B	
630304	151017	*	3491	N	2516	E	370	39	52	145	10904	35973	20011	24505	15411	04	02908	B	
640408	1412285	3504	N	2429	E	370	64	51	119	7325	16503	26065	25520	6870	00	03906	A		
641231	161802	3576	N	2552	E	370	89	50	110	7512	16407	28576	26033	6656	02	04308	A		
650409	2357020	3506	N	2431	E	370	39	59	65	210	17012	29243	8844	15040	4220	12	08014	A	
650409	2357020	3506	N	2431	E	370	39	59	65	210	34103	24370	0720	11812	2416	04	7717	B	
650427	1409056	3565	N	2353	E	370	37	55	58	182	5030	31310	20558	8072	22114	11	07210	A	
650824	0111072	3567	N	2350	E	370	35	49	56	3075	17000	21055	21010	3080	00	1300	B		
660311	200145	3440	N	2423	E	370	30	49	126	20632	32326	8738	5504	15154	00	02505	B		
660509	004253	3443	N	2644	E	370	913	53	205	2339	11300	20351	20306	2334	00	06617	B		
661119	071238	3503	N	2346	E	370	917	52	176	15526	3743	26535	30205	20646	00	03912	B		
670404	1659062	3559	N	2356	E	370	73	47	93	27206	08844	17645	23535	12525	12	01902	B		
670515	0812579	3453	N	2664	E	370	35	49	178	20218*	30630	9148	16249	5018	12	03306	B		
670515	0812579	3453	N	2664	E	370	35	49	178	18322*	27170	2866	16566	1121	12	03207	B		
680708	1741064	3447	N	2508	E	370	38	53	194	19714	29117	07068	17456	03128	12	06209	A		
680815	0229481	3518	N	2670	E	370	48	50	159	21612*	12600	03678	21657	03633	12	03002	B		
681019	153454	3524	N	2340	E	370	37	6	48	133	04212	29552	14035	18515	08434	04	01801	B	
681225	1217191	3499	N	2431	E	370	958	50	158	02938	12108	22057	21207	34080	00	02810	B		

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KMW1731210 # 82 \*\*  
 PART 3 : REGIONAL LISTS OF QUALITY A/B AND QUALITY C/D SOLUTIONS IN CHRONOLOGICAL ORDER

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70	
690612	1513309*	3443	N	2504	E	370	922	58	58	288	00528	26224	13852	16613	05063 00*10018 B
690612	1513309*	3443	N	2504	E	370	922	58	58	288	528	9500	18562	18517	573 00 9917 B
690614	1347264*	3434	N	2505	E	370	921	57	154	19510	29649	09740	15435	05019 14 04011 B	
690614	1347264*	3434	N	2505	E	370	921	50	154	00604	27245	10045	19226	04334 04 03912 B	
690928	225408	3430	N	2515	E	370	29	53	55	203	15518	02762	25220	20428	29401 13 06107 A
711013	0326271	3426	N	2609	E	370	27	51	99	14536	04612	30051	19376	31407 11 02804 A	
711217	0206052	3496	N	2397	E	370	33	47	60	05510*14817	29670	25033	03552	02 01201 B	
720429	1829382	3481	N	2463	E	370	47	51	102	08230	32340	19736	23004	12650 00 02202 B	
720504	2140009*	3512	N	2361	E	370	46	59	63	100	06620	16625	30156	26620	03157 02 05003 A
720504	2140009*	3512	N	2361	E	370	46	59	63	100	4809	14008	27378	23636	3953 02 133
730406	14135941	3443	N	2525	E	370	916	51	89	3027	12000	21063	21018	3072 00 2401 B	
350225	025137	358	N	250	E	370	80	71	130	18020	8221	31040	34421	21260 02 1700 C	
371216	173527	350	N	235	E	370	100	63	70	6300	90	19300	1800	10800 24 900 C	
400106	190433	357	N	259	E	370	916	56	58	24522	449	14032	19640	10006 14 700 C	
400229	160744	357	N	259	E	370	932	60	92	4015	18000	22075	22030	4060 02 1502 C	
460405	205388	351	N	234	E	370	100	57	63	6914	18900	24976	24931	6959 02 1300 C	
470830	222131	351	N	234	E	370	915	64	99	15000	24083	6007	1505	10505 23 1500 C	
481810	174301	351	N	234	E	370	915	57	70	24017	18000	6073	24062	6028 12 801 C	
500923	062340	348	N	256	E	370	9 9	53	95						8 D
511001	012633	345	N	265	E	370	915	50	79						5
520612	110008	348	N	262	E	370	9	45	39						9
521231	171843	355	N	257	E	370	912	52	112						7
530207	223105	347	N	241	E	370	9 6	53	152	25520	16500	7570	7525	25565 02 1904 C	
530214	084813	355	N	265	E	370	60	57	132	4500	13500	90	22545	4545 22 1603 C	
530623	019810	357	N	253	E	370	100	61	73	5010	14000	23080	23035	5055 02 902 C	
560703	091497	3586	N	2596	E	370	910	57	113	4518	15646	30038	25912	0041 03 1302 C	
571005	113644	3444	N	2664	E	370	910	48	100	7000	18000	090	25045	7045 22 1202 C	
580715	075917	3535	N	2357	E	370	20	50	93						11 D
590916	051380	3517	N	2603	E	370	920	48	94	6000	18000	90	24045	6045 22 1400 C	
591227	092238	3488	N	2621	E	370	910	50	71						17 9 D
601001	053040	3525	N	2604	E	370	57	45	84	00000	90	09000	04500	13500 23 01101 C	
610107	103053	3545	N	2617	E	370	75	50	97	19007	28219	8070	17049	2635 12 1704 C	
610313	191716	3446	N	2667	E	370	918	49	115						13
610827	220848	3559	N	2341	E	370	62	49	119	10500	1535	19555	25636	13436 22 1702 C	
620404	205937*	3426	N	2511	E	370	42	47	57	103					15 D
620404	205937*	3426	N	2511	E	370	42	47	57	103					10
620506	235387	3519	N	2417	E	370	85	55	88						11
631002	210512	3483	N	2346	E	370	56	45	74	5500	14500	90	23545	5545 22 1501 C	
640817	0017485	3528	N	2590	E	370	14	46	95						11

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KMW1731210 # 82 \*\*  
 PART 3 : REGIONAL LISTS OF QUALITY A/B AND QUALITY C/D SOLUTIONS IN CHRONOLOGICAL ORDER

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70	
641017	0950280	3502	N	2543	E	370	918	48	117						14
650410	0019597	3490	N	2487	E	370	55	47	47						16
650629	1540315	3420	N	2623	E	370	33	46	67						15 D
650804	1915046	353	N	265	E	370	52	46	35						7
650895	0457457	3472	N	2508	E	370	910	48	95	16810	6649	26639	20935	30320 13 01801 C	
651204	1639975	3426	N	2625	E	370	912	48	68						7
660116	2015300	3561	N	2580	E	370	37	47	46	73	34020*	7615	20065	17224	31762 02 01102 C
660118	2120024	3512	N	2349	E	370	60	45	47						13
660204	083803	3437	N	2394	E	370	33	47	94	8508	35316	20072	10350	25236 12 01402 C	
660414	185144	3495	N	2386	E	370	914	48	83	35037	8607	18552	17708	31080 00 01301 C	
660481	0645269	3449	N	2569	E	370	51	50	99						20 D
660510	024748	3438	N	2651	E	370	64	44	30						6
660511	1504025	3437	N	2642	E	370	39	47	92	12580	24440	1036	33704	7150 00 01202 C	
660513	1311509	3447	N	2647	E	370	37	46	86	15500	24584	6506	2004	11004 23 00900 C	
660516	1730561	3448	N	2646	E	370	41	46	91	18040	28921	4043	11269	2001 11 01102 C	
660524	1743323	3487	N	2442	E	370	43	47	63	2000	11020	29070	142	21942 22 00600 D	
661218	074220	3510	N	2692	E	370	33	47	88						10
670906	045923	3506	N	2309	E	370	20	48	104						18
670927	072484	3442	N	2660	E	370	49	46	80	6020	18410	27067	24924	4363 02 1202 C	
671118	023136	3525	N	2305	E	370	34	46	97						13
680709	1500474	3439	N	2510	E	370	49	46	80						21
680915	0455584	3470	N	2505	E	370	917	48	144	05500*14500	90	05545	23545	22 02003 C	
680918	040159	3474	N	2501	E	370	30	46	96						D
681110	182641	3525	N	2335	E	370	1	48	106						12
681110	125037	3444	N	2377	E	370	11	50	39						10
681110	142933	3445	N	2386	E	370	10	44	30						6
690113	0757076	3457	N	2493	E	370	60	45	56						14
690516	0509344	3500	N	2454	E	370	951	46	70	7820	16800	25870	25825	7865 02 1500 C	
690613	0123146	3438	N	2514	E	370	941	47	89	6520	15500	24570	24525	6545 02 1402 C	
690615	0558432	3430	N	2513	E	370	935	46	67	8016	17000	26074	26029	8061 02 1502 C	
690724	2321193	3493	N	2600	E	370	60	45	81						14
691201	2018038	3485	N	2422	E	370	35	51	136	08513	18330	33556	28926	05248 02 03707 C	
691231	0537025	3436	N	2613	E	370	27	50	52						24
700222	154831	3521	N	2924	E	370	943	51	58	18010*09000	00080	00035	18055	02 00602 C	
700222	1552171	3538	N	2527	E	370	934	48	75	18010*09000	00080	00035	18055	02 00901 C	
700304	0151307	3447	N	2648	E	370	944	47	60	14810	01576	24010	19414	28400 13 01602 C	
700407	091844	3457	N	2614	E	370	920	49	111	17018	8000	35072	17063	35027 12 1905 C	
710103	2318442	3467	N	2634	E	370	932	52	74	0315	28550	13437	17814	08537 04 02107 C	
710119	2333567	3440	N	2401	E	370	933								

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KNM1731210 = S2 \*\*  
 PART 3 : REGIONALISTS OF QUALITY A/B AND QUALITY C/D SOLUTIONS IN CHRONOLOGICAL ORDER

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70
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730422 1339461 3518 N 2339 E 370 56 45 31 7030 16000 25060 25015 7075 00 1100 C

550912 060924 \* 322 N 296 E 371 33 61 267 12624 35854 22825 26701 17736 04 8317 A  
 550912 060924 \* 3220 N 296 E 371 33 61 267 12435 535 24536 27401 18356 00 8317 B  
 660214 1852011 3319 N 2609 E 371 33 47 103 35012 8625 23662 32052 19028 11 02906 B  
 660214 17575014 3496 N 2711 E 371 43 48 115 32041 21615 11045 12502 2674 00\*03008 B  
 660214 17575014 3496 N 2711 E 371 43 48 115 29040 8000 11050 11005 29045 00\*02909 B  
 400816 160223 357 N 308 E 371 940 55 42 24040 15000 6050 6005 24085 00 700 C  
 400816 182312 357 N 308 E 371 925 52 39 24040 18000 6050 6005 24085 00 1000 C  
 450902 115405 344 N 289 E 371 80 64 76 13045 4000 31045 13000 90 00 800 C  
 460716 052026 338 N 253 E 371 915 57 82 5510 14500 23580 23535 5555 02 1000 C  
 560403 071853 3487 N 2745 E 371 910 50 104 21818 12800 3872 21863 3827 12 2404 C  
 621026 112607 3355 N 2762 E 371 100 52 108 15037 6000 33053 15082 3308 11 2209 C  
 631112 070632 3538 N 2964 E 371 73 50 106  
 640825 1111520 3575 N 2884 E 371 51 48 55 125 8020 32044 18840 12644 22912 11 2102 C  
 640827 1931597 3556 N 2884 E 373 38 48 54 113 14500 5500 90 14545 32545\*22 01600 C  
 640918 0008476 3569 N 2907 E 371 40 47 52 95 4500 12530 31560 25238 1838 23 1100 C  
 660114 1839351 3474 N 2700 E 371 45 54  
 661029 1213068 3474 N 2734 E 371 64 46 42  
 670580 2353316 3417 N 2667 E 371 35 45 59  
 680819 1535522 3374 N 2568 E 371 33 49 54  
 560815 120255 4322 N 1599 E 382 9 0 55 128 22007 12054 31535\*25230 0318 13 2904 B  
 341130 025819 441 N 140 E 382 930 56 54 12008 21070 3020 34317 7714 23 2409 C  
 620417 100342 4212 N 1720 E 382 10 55 127 5510 14817 29570 25034 3652 02 2507 C  
 670804 145432 4281 N 1762 E 382 22 46 66  
 671209 0309560 4200 N 1641 E 382 66 46 83  
 720206 0134224 4401 N 1319 E 382 9 49 30  
 11  
 11  
 8  
 610622 005605 4244 N 1935 E 383 43 50 115 5425 14400 23465 23420 5470 00 1403 B  
 620107 100315 4327 N 1696 E 383 913 59 177 10514 34464 20021 24405 15126 04 3904 B  
 620111 050505 \* 4331 N 1694 E 383 931 61 212 10013 34264 19622 23907 14626 04 05406 A  
 620121 025135 \* 4331 N 1694 E 383 31 61 212 28508 1714 16674 26951 11736 12 05109 B  
 620411 071537 4365 N 1831 E 383 9 0 60 202 16530 4641 27935 22049 31303 11 04913 B

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KNM1731210 = S2 \*\*  
 PART 3 : REGIONALISTS OF QUALITY A/B AND QUALITY C/D SOLUTIONS IN CHRONOLOGICAL ORDER

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70
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630519 100008 \* 4627 N 1453 E 383 53 47 118 21530 12206 2260 3015 23274 00 02404 B  
 630519 100008 \* 4627 N 1453 E 383 933 47 118 20024 8840 31240 34910 24848 00 02305 B  
 630726 041712 \* 4204 N 2138 E 383 910 61 223 20812 8768 30218 25422 34604\*13 05714 B  
 640413 0829599 4527 N 1804 E 383 910 61 224 18429 7628 31147 23460 34210\*11 05714 B  
 660805 1747424\* 4216 N 1876 E 383 935 55 158 20535 15130 5053 6209 29076 00 04108 A  
 660805 1747434\* 4216 N 1876 E 383 935 50 61 5310 14380 23380 23335\* 5350 02 01502 B  
 660805 1747484\* 4216 N 1876 E 383 935 50 61 20818 9451 31033 25537\*35209 13 01502 C  
 663205 1131206 4217 N 1887 E 383 47 51 132 3530 38304 20860 21115 5075 00 02510 B  
 681103 0449337 4210 N 1935 E 383 928 51 214 33015 09766 23518 19102 28224 03 02605 B  
 691026 1536524 4484 N 1730 E 383 33 51 56 212 00020 09717 22563 19423 33360 02 04606 A  
 691027 0810582 4485 N 1722 E 383 33 53 61 262 34725 09837 23242 19610 29851 00 06007 A  
 691231 1318333 4488 N 1723 E 383 933 48 115 07020\*17536 31747 02850 27716 11 32005 B  
 700907 2058497 4895 N 1606 E 383 9 5 55 83 19510 09544 29545 23439 34322 12 04112 B  
 380327 111624 462 N 168 E 383 9 7 56 69 22010 13000 4080 4035 22055 02 700 C  
 430120 123819 432 N 164 E 383 927 53 29  
 630214 131857 4433 N 1512 E 383 950 51 83 14520 2850 24832 19339 28908 13 01701 C  
 630423 140258 4203 N 1960 E 383 54 46 71  
 640318 1463206 4554 N 1435 E 383 20 47 45  
 641013 1842 421 N 215 E 383 4 7  
 641022 2330 421 N 215 E 383 10 15035 4520 29050 20070 31505 11 5 D  
 641024 1509 421 N 215 E 383 5 19505 18515 30075 040 21050 02 5 D  
 650304 0331 421 N 215 E 383 3 23019 33050 13040 8520 19035 03 5 D  
 660806 028103 4218 N 1879 E 383 9 3 52 141 5525 14500 23565 5570 23520 11 02715 C  
 660806 0552018 4230 N 1895 E 383 48 48 79  
 660820 1203193 4218 N 1865 E 383 933 54 76 35515 12267 26018 30824 21702 14 01406 C  
 660820 1908218 4210 N 1879 E 383 42 47 78 24530 33602 7060 6715 23876 00 01100 C  
 660828 041811 4215 N 1875 E 383 922 46 77 7040 16000 25050 25005 7085 00 01002 C  
 670703 025343 4402 N 1916 E 383 9 1 51 70  
 671221 000940 4216 N 2062 E 383 926 46 71 24522 35642 13540 19846 9611 11 1302 C  
 681203 2057310 4451 N 1845 E 383 9 5 46 80  
 691009 1625359 4233 N 1922 E 383 930 45 181 4508 31560 13530 18421 9621 24 1403 C  
 691027 025534 4498 N 1704 E 383 918 45 83 19540 10580 01550 01505 19585 00 01302 C  
 691027 0853427 4491 N 1699 E 383 9 48 68  
 700825 0140095 4329 N 1841 E 383 910 52 40 15200 24285 06205 01704 10714 23 00803 C  
 23  
 III - 9

591005 203404 4089 N 1985 E 391 910 55 112 35920 8500 17570 35565 17525 12 1802 B  
 591007 083040 4093 N 1987 E 391 9 0 52 178 5010 31042 19146 19822 8840 02 4910 A

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KNMI731210 = 52 \*\*  
 PART 3 : REGIONAL LISTS OF QUALITY A/B AND QUALITY C/D SOLUTIONS IN CHRONOLOGICAL ORDER

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70
620318 153030 *	4070 N	1965	E 391 913	62	218	1604	27667	10823	15413	6019	04	05710	B	
620318 153030 *	4070 N	1965	E 391 913	62	218	6512	15500	24578	24533	6557	02	05611	B	
660816 0353417	4016 N	1975	E 391 920 49	113	00031	18726	23048	20210	31161	00	02204	B		
671130 0723504*	4141 N	2044	E 391 921 59	66	312	5007	36763	14426	9423	19013	13	08020	B	
671130 0723504*	4141 N	2044	E 391 21 59	66	312	10122	28327	33953	6157	30217	11	76		
690403 221219	4066 N	1998	E 391 921 50	55	197	23330+14300	05360	05315	23375	00	05212	B		
690408 1548504	4067 N	1977	E 391 917 48	128	33913	2362	07525	11808	02527	04	03206	B		
420827 061411	416 N	205	E 391 912	60	59	6000	15000	90	24045	6045	22	700	C	
480827 104406	417 N	195	E 391 911	55	61	6500*	90 15500	2000	11000	24	1101	C		
580403 022342	4114 N	1985	E 391 910	55	131	20612	16248	30640	24837	39217	13	2206	C	
590817 013314	4089 N	1984	E 391 920	59	163	2300	29366	11324	16016	6516	24	2609	C	
590818 220402	4104 N	1980	E 391 910	47	71	12040	1122	26042	18868	28101	11	0800	C	
590901 113740	4092 N	1976	E 391 910	61	200	9030	35412	24558	24115	12172	00	3312	C	
590903 040202	4075 N	1971	E 391 910	45	71	6								
600312 115400	4183 N	2094	E 391 910	55	162	26607	13080	35707	22300	31210	04	02908		
630215 101826	4038 N	1970	E 391 41	46	82	000	9080	27010	22407	31607	23	07000	D	
630222 141254	4040 N	2000	E 391 44	52	123	12700	3785	21705	17204	26204	23	01302	D	
630515 111544	4172 N	2006	E 391 29	44	88	12								
660925 090657	4032 N	1982	E 391 921 50	82	6013	31940	16548	9034	21021	12	01302	C		
660809 0334151	4022 N	1986	E 391 38	49	92	21520	31050	7565	4823	19162	02	01303	C	
670713 1438584	4066 N	1967	E 391 73	47	62	8								
670720 1903304	4072 N	1988	E 391 58	45	58									
670924 2211204	4086 N	1970	E 391 35	46	74	24510	33817	12570	22552	7933	12	1100	C	
671202 1244427	4132 N	2029	E 391 916	53	172	250 8	14167	34322	29422	28	9	13	03713	C
671229 0832323	4149 N	2043	E 391 929	49	110	22604	12572	31718	27016	310	13	02003	C	
690826 0215371	4173 N	2003	E 391 28	49	101	6827	38250	17328	12040	21001	13	02205	C	
700819 0201530	4110 N	1977	E 391 933	52	57	101	05005+14000	23085	23040	05050	02	01002	C	
600526 051011	4051 N	2056	E 392 9 0	63	214	10003	28070	00920	05716	32412	14	08733	A	
601105 202048	3909 N	2060	E 392 9 0	57	170	17007	4578	16110	21512	30602	13	2605	A	
691012 1334199	3976 N	2056	E 392 46	50	163	01024	18817	23060	20420	34163	00	03404	A	
691013 0102308*	3978 N	2059	E 392 27	54	57	236	35505	26404	14084	17140	36050	02	06822	A
691013 0102308*	3978 N	2059	E 392 27	54	57	236	404	27325	10365	16336	2944	02	102	
620628 065106	4082 N	2072	E 392 38	50	55	112								
630317 141723	3940 N	2082	E 392 956	47	102	12530+	3500	30560	12575	30515	11	01702	C	
670209 1408182*	3992 N	2026	E 392 1	56	207	5217	31135	16450	20620	9348	02	5525		

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS \*\*\*\*\* KNMI731210 = 52 \*\*  
 PART 3 : REGIONAL LISTS OF QUALITY A/B AND QUALITY C/D SOLUTIONS IN CHRONOLOGICAL ORDER

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70
670209 1408182*	3992 N	2026	E 392 9 1	56	207	16040	08110	32048	33104	22080	00+05525	C		
670209 1408182*	3992 N	2026	E 392 1	56	207	12736	02121	26746	28905	18669	00+05624	C		
671126 0324974	3940 N	2049	E 392 9 1	51	110	1804	36045	00000	90	00	01906	C		
680328 1637473	3949 N	2038	E 392 37	49	51	8000	34629	18560	23731	11945	02	1300	C	
680725 220529	4095 N	2009	E 392 918	46	50	129	16000	07075	25015	20411	29611	23	01484	C
700217 0016283	3934 N	2062	E 392 53	46	89	01000	28085	10005	05903	14503	23	01001	C	
700323 205601	3904 N	2049	E 392 9 7	45	119	16025+07000	34065	16070	34020	11	02006	C		
700424 1117122	3991 N	1961	E 392 41	43	46	2040	27715	17046	8874	18603	11	1200	C	
721124 0348351	3951 N	2034	E 392 911	53	71	10500	01565	19525	14718	24318	23	01601	C	
580827 151634 *	3745 N	2072	E 399 940	64	192	35510	8500	17580	35555	17535	12	2707	B	
580827 151634 *	3745 N	2072	E 399 40	64	192	19812	29738	9450	4623	16043	02	3103	B	
591115 170843	3783 N	2047	E 399 100	66	233	4506	13717	29572	24037	2848	02	7014	A	
591127 002222	3771 N	2016	E 399 910	51	98	4325	29731	16448	19913	9056	00	1602	B	
591201 123845	3776 N	2023	E 399 9 0	52	144	9010	22576	35810	13400	4414	03	3806	A	
620410 213707	3779 N	2011	E 399 940	62	225	5618+16608	23672	23267	5663	02	06209	A		
620706 091616	3778 N	2016	E 399 48	55	187	6015	32808	21073	23430	7159	02	3608	A	
671005 1200537	3774 N	2080	E 399 37	50	145	22007+12629	32260	24944	1732	12	02707	B		
680223 101850	3796 N	1787	E 399 10	52	158	31516	4912	17370	14520	29859	02	5111	B	
680328 0739595*	3784 N	2089	E 399 23	53	58	225	2423	11606	22067	20922	1347	02	6011	B
680328 0739595*	3784 N	2089	E 399 923	53	58	225	01520	10500	19570	19525	01565	02	6011	B
690708 080915	3750 N	2031	E 399 9 0	55	54	212	04200	13200	90	22245	04225	22	08211	A
470707 223538	372 N	208	E 399 100	52	62	55	7 D							
521005 105456	375 N	208	E 399 924	56	125	14								
560315 2256 3	374 N	209	E 399 910	51	58	73	6020	15000	24070	24025	6065	02	0802	C
590419 1738533	3735 N	2093	E 399 20	50	73	19036	10000	1054	1009	19081	00	0801	D	
610719 230056	3771 N	2012	E 399 910	48	106	3045	12000	21045	90	4500	11*	0901	C	
620411 104730	3767 N	2011	E 399 920	53	57	189	6110+15100	24180	6155	24135	12	01910	C	
620416 001522	3780 N	2063	E 399 103	50	100	12								
620417 113351	3772 N	1995	E 399 20	51	103	11								
660811 0023408	3765 N	2099	E 399 48	46	73	10500	1500	90	28545	10545	22	01003	D	
620126 081735 *	3524 N	2273	E 400 9 0	62	212	1800	10800	090	19845	1845	22	06510	B	
620126 081735 *	3524 N	2273	E 400 0	62	212	10624	21940	35440	31810	5648	00	49		
630221 171437	3269 N	2097	E 400 0	55	174	5512	31248	15540	20118	9737	04	3907	B	
630929 221637	3600 N	1898	E 400 37	51	176	35020	29318	12563	15623	2161	02	05113	A	

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS ===== KNM1731210 = S2 ==  
 PART 3 : REGIONALISTS OF QUALITY A/B AND QUALITY C/D SOLUTIONS IN CHRONOLOGICAL ORDER

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70				
650529 0414561	3519	N	2257	E	400	43	47	69	24813	362	15224	10808	20227	03	1600	B		
660604 0616575*	3663	N	2097	E	400	82	48	125	31027	21019	9056	11515*	35065	00	04104	B		
660604 0616575*	3663	N	2097	E	400	82	48	125	33508	21568	5820	10309*	1020	04	03906	B		
660712 025622 *	3550	N	2249	E	400	9	7	50	144	7208	31374	16414	20904	11716*	04	03608	B	
730105 0549175	3581	N	2183	E	400	33	53	51	109	4030	30510	20058	21315	6775	00*	3805	B	
730126 0750128	3582	N	2210	E	400	58	47	60	6030	15000	24060	24015	6075	00	1303	B		
360613 003237	327	N	225	E	400	9		50	54						6			
510831 122937	355	N	228	E	400	915		55	107						9			
590128 074159	339	N	236	E	400	9		52	43	1010	10000	19080	19035	1055	02	900	C	
580605 132946	3699	N	2066	E	400	916		58	89						8			
600201 115939	3528	N	2299	E	400	910		55	118	21507*	12500	3583	21552	3538	12	1808	C	
601229 181941	3494	N	2252	E	400	58	50	67							9			
610128 071816	303	N	220	E	400	89	47		5506	32230	15560	8442	21033	12	1500			
620110 123633	3583	N	2253	E	400	87	44	55	53						12			
630131 150704	3592	N	2186	E	400	62	49		78	4030	28240	15536	9550	18904	11*01302	D		
630221 171431	3269	N	2097	E	400	10		56	174	5512	31248	15540	20118	9737	04	3907	C	
630221 202639	3266	N	2110	E	400	0		88							10			
670815 0435929	3654	N	1928	E	400	33	46		51						12			
680109 2315428	3552	N	2254	E	400	46	47		69	24515	461	14824	19928	10506	14	1403	C	
730116 2245166	3514	N	2256	E	400	28	45		58	3010	12000	21080	21035	3055	02	1001	C	
730312 2030438	3591	N	2178	E	400	44	47		55	5700	14720	32770	25542	3942	22	900	C	
340608 031709	463	N	125	E	545	920		45	34	2500	90	11500	16000	7000	24	1500	B	
361018 031012	461	N	123	E	545	910		56	64	2400	29452	11438	16626	6226	24	3400	A	
361019 070554	460	N	125	E	545	910		45	23	2400	90	11400	15900	6900	24	1103	C	
720416 1810035*	4773	N	1612	E	546	918	49		43	11588	02570	20520	15814	25214*	23	01401	B	
720416 1810035*	4773	N	1612	E	546	918	49		45	07020	16616	29064	04562	26222*	11	01401	B	
280327 083228	464	N	130	E	546	920		58	73	16535	26007	00054	35108	13178	00	1100	C	
541011 164925	463	N	131	E	546	910		43							7	D		
561105	4650	N	1308	E	546	9	2		48		1000	90	10000	14500	5500	24	1100	C
631202 064905	4803	N	1620	E	546	9	0		82	27020	000	9070	9025	27065	02	01403	C	
640630 1229590	4773	N	1592	E	546	9	3	47	48	200	90	9200	4700	13700	23	01303	C	
641027 1946091	4785	N	1595	E	546	9	1	54		88	14525	5448	23340	19636	30120	13	02903	C

\*\*\* BALKAN PROJECT \*\*\* CATALOGUE OF EARTHQUAKE MECHANISM SOLUTIONS ===== KNM1731210 = S2 ==  
 PART 3 : REGIONALISTS OF QUALITY A/B AND QUALITY C/D SOLUTIONS IN CHRONOLOGICAL ORDER

1	5	10	15	20	25	30	35	40	45	50	55	60	65	70				
720416 1104442	4773	N	1602	E	546	919	44		49	14512	28862	05025	00508	10027	03	00900	C	
560112 054609	475	N	193	E	549	9	0		57	113	12040	23324	34540	14300	5366	00	1404	C

