ASTRO-advanced manual

Manual ASTRO-advanced

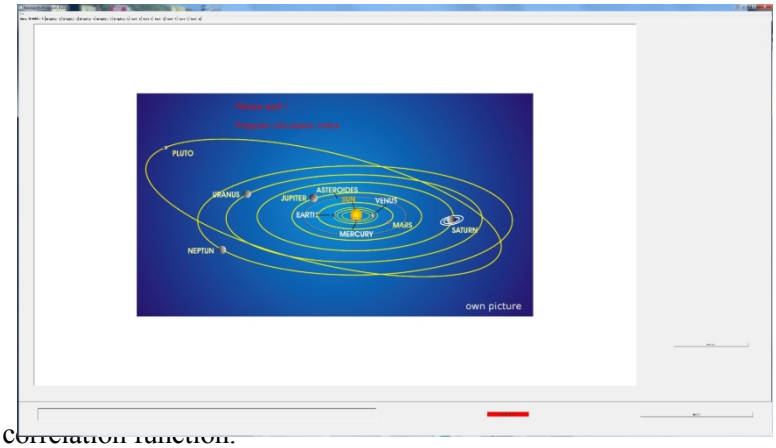
The program calculates the gravitational interactions of the Sun, Moon, and planets up to Pluto according to [Jean Meeus (1992) Astronomical Algorithms. Barth, Johann Ambrosius, Germany pp. 464.]. Asteroids are not calculated. The calculated correlation function can be interpreted as an oscillating vector field with higher harmonics.

Starting the program

The program "astro-advanced.exe" is started by double-clicking in the ASTRO-advanced directory.

Important: The *.txt files already in the directory must not be changed. The start screen

appears:

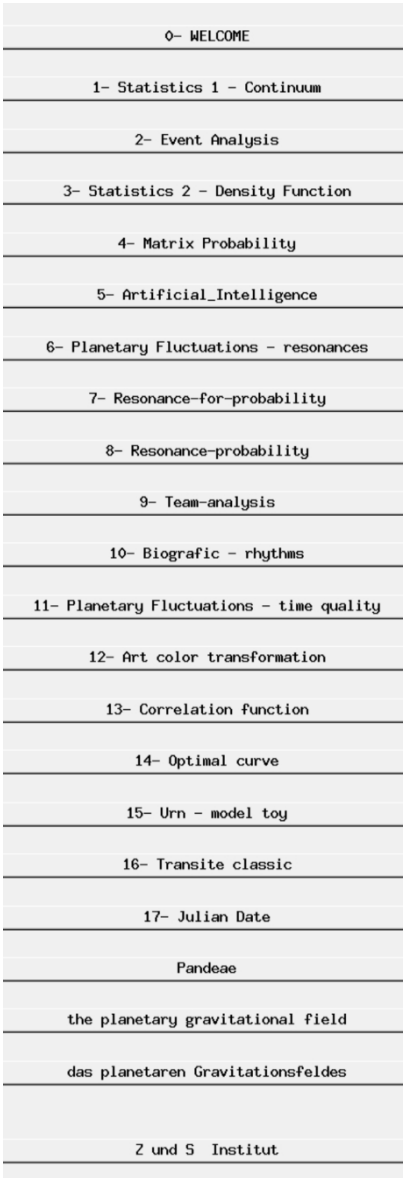


correlation function.

This calculation is displayed in the upper left corner and at the bottom right.
The duration of these calculations depends on the performance of the computer. Once these calculations are complete, the actual investigations can begin. The menu then appears on the right-hand side of the screen. Research usually begins with 1- Statistics 1 – Continuum. The program remembers the data entered here, so it does not need to be re-entered later. This is followed by 2- Event Analysis.
Then the order of the other programs is selected according to the task.

It is recommended that you follow the example below to understand how to use the program. Once you have completed this example, you will be able to solve many other research tasks.

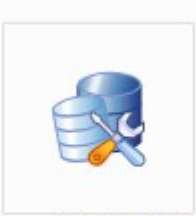
Before you can start entering data, the program calculates the lists for orders 1 to 12 of the



1. Statistics 1 - Continuum

	A	B	C	D	E	F	G	H	I	J	K	L
1	NAME,C,200	VORNAME,C,20	ORT,C,200	LAENGE	BREITE	ZEIT	DATUM,C,2	ZEIT,C,20	S	KATEGORIE	TYP,C,30	NOTIZEN,C,0
2	China	Tangshan	Peking	116.25	39.55	8	28.7.1976	03:42:00	0			
3	Japan	Yokohama	Yokohama	141.15	41.4	10	1.9.1923	11:58:00	0			
4	China	Gansu	Peking	116.25	39.55	8	16.12.1920	20:06:53	0			
5	Peru	Norden	Lima	-77.3	-12.3	-5	31.5.1970	11:23:00	0			
6	Iran	Nordwesten	Teheran	51.26	35.4	3	21.6.1990	00:30:00	0			
7	Tuerkei	Osten	Ankara	32.52	39.56	2	27.12.1939	01:57:00	0			
8	Chile	Chillan	Santiago	-70.4	-33.27	-5	24.1.1939	23:32:00	0			
9	Iran	Nordosten	Teheran	56.55	33.35	3	16.9.1978	19:38:00	0			
10	Armenien	Nordwesten	Jerewan	44.30	40.11	4	7.12.1988	11:41:00	0			
11	Guatemala	Guatemala	Guatemala City	90.77	14.6	-6	4.2.1976	03:02:00	0			
12	Indien	SW	Bombay	72.5	18.58	5	30.9.1993	03:56:00	0			
13	Chile	Valparaiso	Santiago	-70.4	-33.27	-5	16.8.1906	19:55:00	0			
14	Mexico	Mexico	Mexiko City	-99.9	19.24	-6	19.9.1985	07:18:00	0			
15	Japan	Kobe	Tokyo	139.46	35.42	9	17.1.1995	05:46:00	0			
16	Afghanistan	NO	Kabul	70.0	35.0	4	4.2.1998	10:33:00	0			
17	Tuerkei	XY	Ankara	32.52	39.56	2	17.8.1999	03:02:00	0			
18	L1-1	Nordjapan	Nordjapan	148.50	44.30	9	6.11.1958	22:58:00	0			
19	L1-2	Kurilen	Kurilen	161.0	53.0	10	3.2.1923	16:01:00	0			
20	L1-3	Mitteljapan	Mitteljapan	144.50	39.20	9	2.3.1933	17:30:00	0			
21	L1-5	Mongolei	Mongolei	98.0	49.0	6	23.7.1905	2:46:00	0			
22	L1-4	Mongolei	Mongolei	99.0	49.0	6	9.7.1905	9:40:00	0			
23	L1-6	Molukken	Molukken	130.50	-5.20	9	1.2.1938	19:04:00	0			
24	L1-7	Chile	Chile	-70.0	-28.50	-4	11.11.1920	4:32:00	0			
25	L1-8	Kurilen	Kurilen	149.50	44.80	10	13.10.1963	5:17:00	0			
26	L1-9	Nordindien	Nordindien	96.50	28.60	6	15.8.1950	14:09:00	0			
27	L1-10	Aleuten	Aleuten	178.60	51.30	13	4.2.1965	5:01:00	0			
28	L1-11	Kolumbien	Kolumbien	-81.50	1.0	-5	31.1.1906	15:36:00	0			
29	L1-12	Nordkurilen	Nordkurilen	161.0	52.30	12	4.11.1952	16:58:00	0			
30	L1-13	Aleuten	Aleuten	-175.80	51.30	-11	9.3.1957	14:22:00	0			
31	L1-14	Alaska	Alaska	-147.60	61.10	-10	28.3.1964	3:36:00	0			
32	L1-15	Chile	Chile	-74.50	-39.50	-4	22.5.1960	19:11:00	0			
33	L2-1	China	China	77.0	40.0	8	22.8.1902	3:00:00	0			
34	L2-2	Japan	Japan	143.0	42.50	9	4.3.1952	6:03:00	0			
35	L2-3	Ecuador	Ecuador	-76.80	-8.0	-5	16.11.1907	10:10:00	0			
36	L2-4	Marianen	Arianen	143.0	22.0	10	24.11.1914	11:53:00	0			
37	L2-5	Samoa	Samoa	-173.0	-15.50	-10	26.6.1917	5:49:00	0			
38	L2-6	Nicobaren	Nicobaren	92.50	12.50	5	26.6.1941	11:52:00	0			
39	L2-7	S	S	131.0	28.0	10	15.6.1911	12:00:00	0			
40	L2-8	S	S	-158.0	55.50	-10	10.11.1938	20:18:00	0			
41	L2-9	Westchina	westchina	77.50	43.50	8	3.1.1911	23:25:00	0			
42	L2-10	Nordneuseeland	Nordneuseeland	-176.40	-28.10	-12	20.10.1986	6:46:00	0			

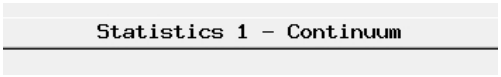
(Example 41 Earthquakes)
The earthquake file is saved in database format *.dbf. It can also be edited with OpenOffice.org Writer. Other formats are not supported.
It is useful to label the database with the number of events and the time period.
Calculations can be found in the book "Microgravity; Chapter 2.1 A preliminary study of 41 of the strongest earthquakes."

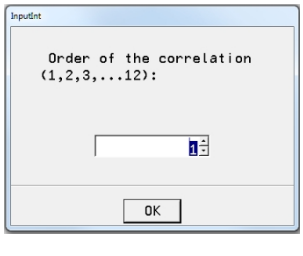

events1-41-1900-2000n.dbf

When creating your own databases, it is important to enter at least columns A (name), D (geographical longitude), E (geographical latitude), F (time zone), G (date), and H (time of event).

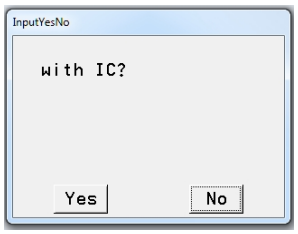
	A	B	C	D	E	F	G	H	I	
1	NAME,C,200	VORNAME,C,20	ORT,C,200	LAENGE	BREITE	ZEIT	DATUM,C,2	ZEIT,C,20	S	KA
2	China	Tangshan	Peking	116.25	39.55	8	28.7.1976	03:42:00	0	

For statistical analyses, calculations always begin with the Statistics 1 – Continuum program.

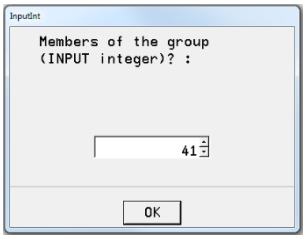




First, the order is requested. The lower orders are used for general time qualities, while the higher orders are used for triggering events.



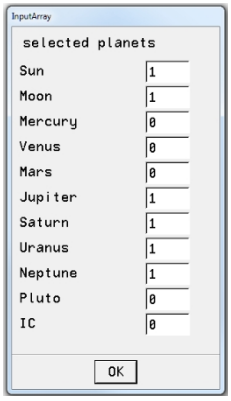
Query for the IC (direction to the center of the earth). The IC is only calculated if the earth is to be included in the analysis. It produces the highest frequencies in the correlation function and is not suitable for trends.



Next, the number of events is queried.

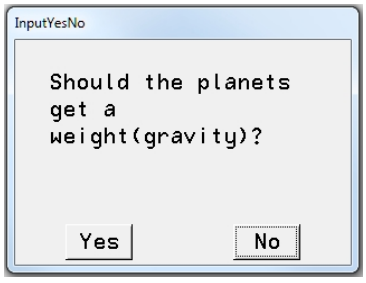
Should only certain planets be selected?

If this question is answered with Yes:

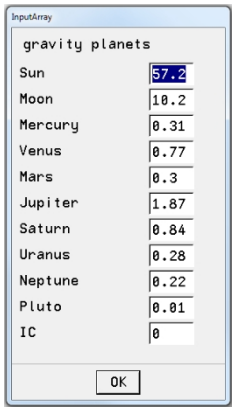


Here, planets can be selected with 1 or deselected with 0.

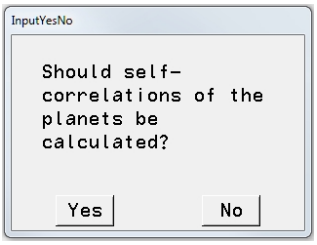
If this question is answered with No:



If this question is answered with Yes, the following appears:



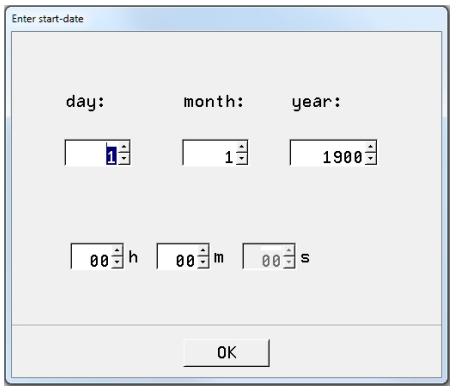
However, a weighting in numerical format 12.05 can also be entered.
These are approximately the square roots of the gravitational effect. However, this weighting has proven to be of little use, as other interactions are relevant here. These numbers can be changed.



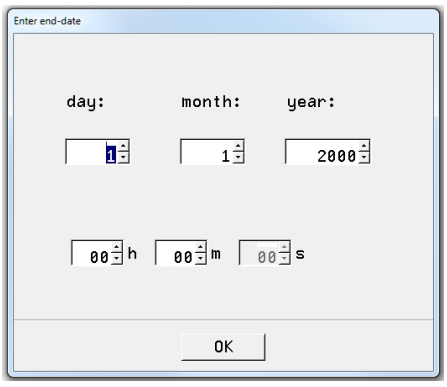
This query is usually answered with No for statistical analyses. It is relevant for calculations with resonances, in which case Yes is clicked.

The following entries define the period for which the mean value for the correlation function is to be calculated.

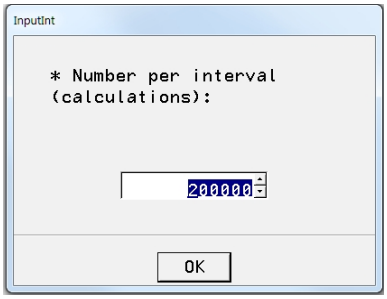
Start of calculations:



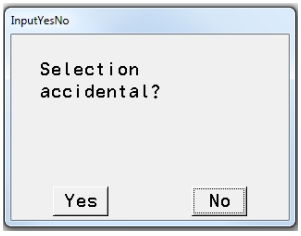
End of calculations:



This entry determines the number of calculations in the previously selected time interval. The value 100,000 is preselected and can be calculated by most computers within a reasonable time.

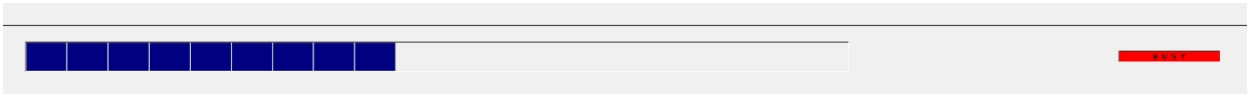


ATTENTION If "<= " is selected for "Number per interval," the following message appears *(for 1000)*: `***Compare group: 1000 in optimization compare ***`
The "Compare group" consists of the files: bjuliandat.txt and datgroupb.txt in the OPT-COMPARE/new directory.
These files can be used to optimize an AI pattern (menu 5-Artificial_Intelligence).

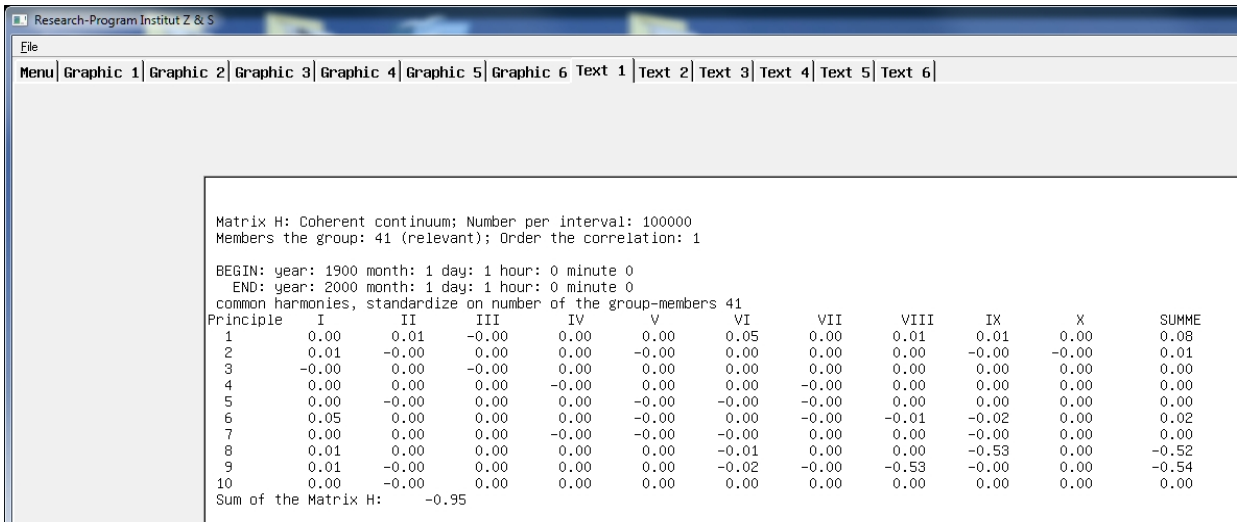


One last question is asked before the calculation begins. Should events in the period be calculated randomly or continuously (at equal intervals)? This question can be answered with No. The differences are minor.

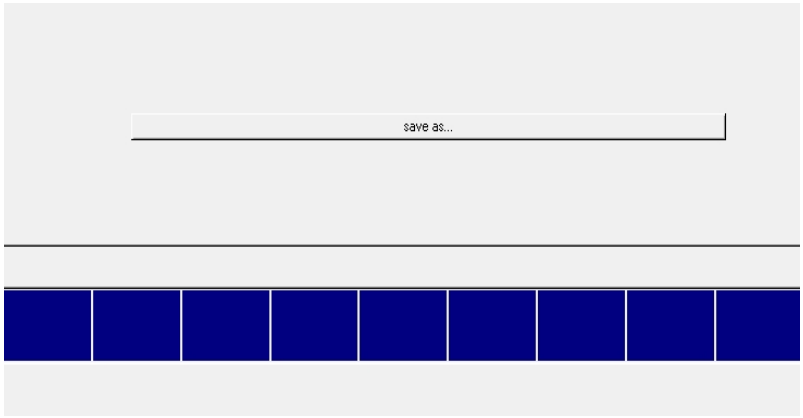
The blue bar shows the progress of the calculation:



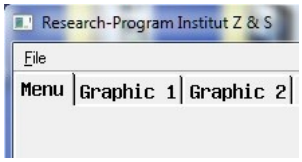
The results can be found in the Text 1 text field:



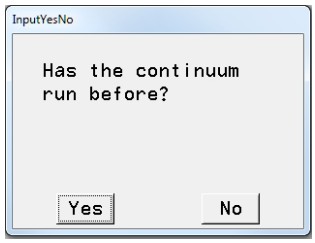
The results of the calculation can now be saved as a text file using "save as...".



2. Event Analysis

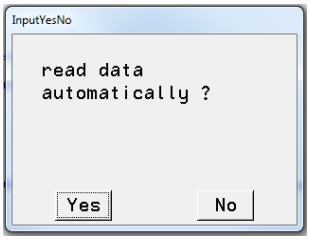


After the Statistic 1- Continuum program has finished, click on the Menu button to open the "Event Analysis" program.

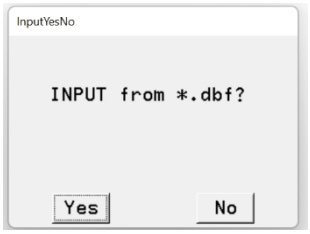


If the continuum has already been calculated, the queries are simplified and the values already saved are adopted. If the question is answered with No, the entries must be made again.

Please run the Statistics 1 - Continuum program beforehand so that the event analysis can be evaluated.



The events are automatically imported if this query is answered with Yes.
If you answer No, you must select the events by double-clicking on them.



If you click on the "Yes" button, the selection button

1. "No" selection

If you click on the "No" button, the selection button appears

If only the GMT data is available for an event group, a 0 is entered in the *Last name, First name, City, Longitude, Latitude*, and *Summer time* lines. See the image on the right.

The following *.txt files must be present in **the Current_files/** directory: **members.txt** * Lastname.txt * Firstname.txt * City.txt * Longitude.txt * Latitude.txt * **Timezone.txt Year.txt * Month.txt * Day.txt * Hour.txt * Minute.txt** * Summertime.txt

The text files marked in red must always be present!

The individual values in the files are each written on a separate line. Example Day.txt

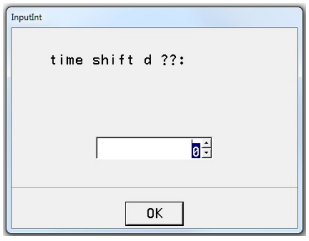
9
6
19
...

The log of the imported data appears in the menu for verification:

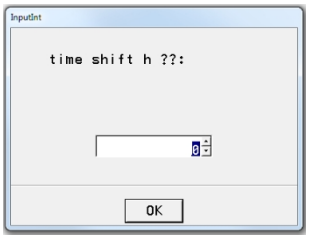
```
INPUT from *.txt
You have chosen:
Time zone,
Year, Month, Day, Hour, Minute,

The following files must be available:
 Timezone.txt,
 Year.txt, Month.txt, Day.txt, Hour.txt, Minute.txt,

ATTENTION * GMT is calculated *

INPUT members 20

Timezone
0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
Year
2023  2023  2023  2023  2023  2023  2023  2023  2023  2023  2023  2023  2023  2023  2023  2023  2023  2023  2023  2023
Month
1  2  5  12  5  2  4  7  6  12  11  8  5  1  4  1  12  11  10  9
Day
9  6  19  2  10  6  24  16  15  7  8  28  20  18  2  8  3  24  7  8
Hour
17  1  2  14  16  10  20  6  18  12  4  19  1  6  18  12  19  9  8  9
Minute
47  17  57  37  2  24  0  48  6  56  53  55  51  6  4  32  49  5  40  9
```

2. Select "Yes."

Double-click or click once and then click "Open" at the bottom to open the file.



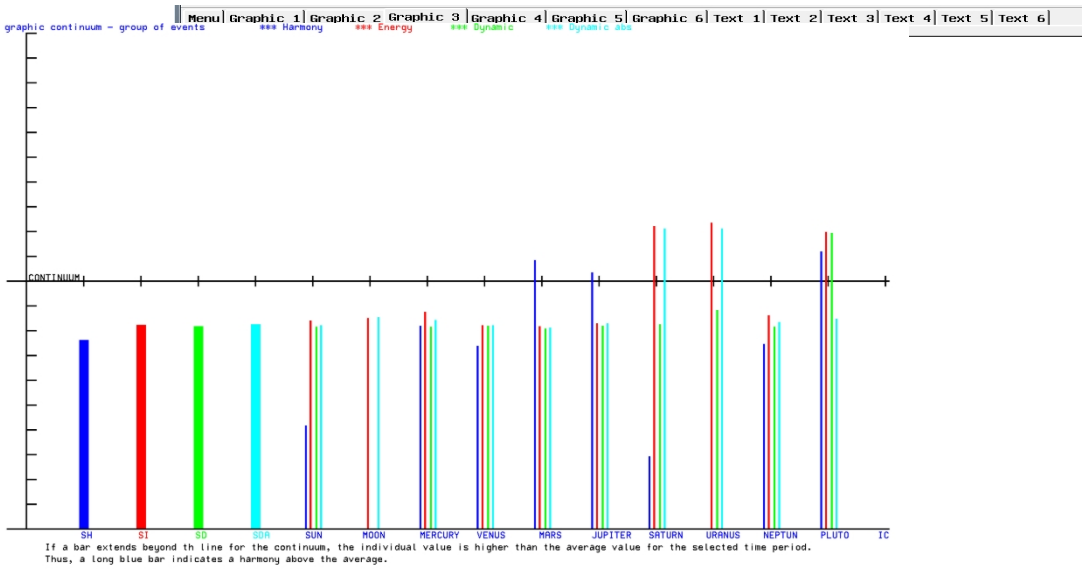
Before the invoices start, you can still move the calculation of the correlation function to before or after the actual event. The following boxes can be used to move the events by days and hours.



The following query determines the start of the data in the event file. If the file only contains the events to be examined, the offset will usually be 1. However, several groups can also be combined in one file. In this case, the offset is the line where the group begins.

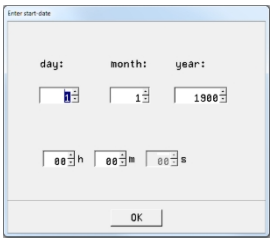
If this question is answered with Yes, a "Compare group" consisting of the files bjuliandat.txt and datgroupb.txt is created in the OPT-COMPARE/new/ directory.
These files can be used to optimize an AI pattern (Menu 5—Artificial Intelligence).

The results are shown in Graphic 3 and Text 2 and can be saved with "Save as...".
Example:

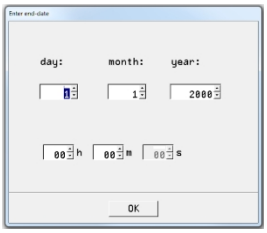


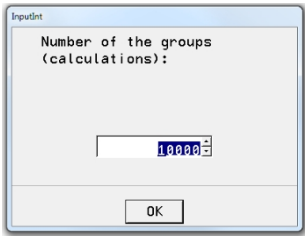
3. Statistics 2 – Density Function

This module calculates the density function and thus provides an initial graphical representation of the special properties of the events examined. If the correlation function is at the edge of the (almost Gaussian) distribution, then the group of events is probably not random in this time period. This module does not need to be calculated if only the probabilities are to be calculated. This module is **not** a prerequisite for starting the ***Statistics 3 – probability*** module.

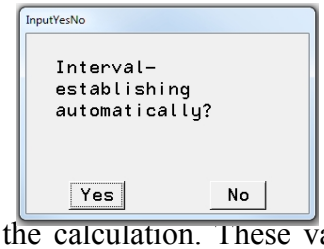


At the beginning, the time period of the events is queried again. If no changes to the time period are necessary (normal case), the displayed data only needs to be accepted with OK.





Next, you will be asked to specify the control groups to be calculated. The number of control groups should not be less than 1000 (*per thousand range*), otherwise the probabilities will become unreliable.

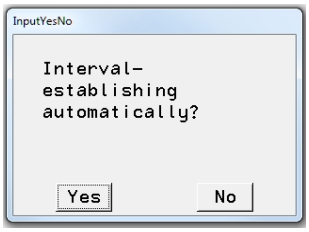


Should the intervals for the tests be set automatically? This question should normally be answered with Yes at first. If the results in the graphs do not meet expectations because the density curve is too narrow or too wide, the program must be restarted.
The program has noted the maximum and minimum values during the calculation. These values can now be entered manually to better fit the curves into the specified graph.

```
!!! Limits:
  minH: -15.97 maxH : 16.02
  minI: 64.78 maxI: 88.82
  minD: -109.76 maxD : 85.65
  minDA: 445.34 maxDA: 590.25
```

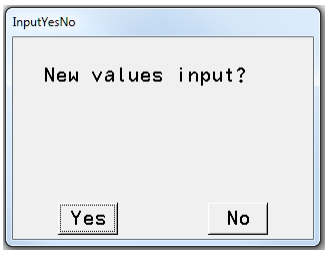
These values can be found in the manual. In this case, we recommend entering the following values:

H:	-16	16.1
I	64.	89
D	-109	86
DA	445	591

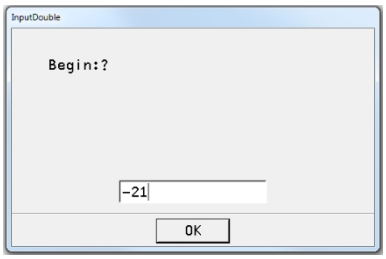


The module is now restarted. The query for setting the interval is now answered with No. The automatically generated values appear in the manual (lower left corner):
The following window asks whether these values should be re-entered.

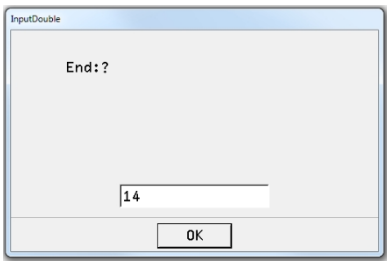
```
automatically generated values (matrix-sum - Amplitude)
Begin= -25.014753  End= 23.300213
```



If you want to re-enter the values, answer Yes and the input window for the start of the interval will appear.



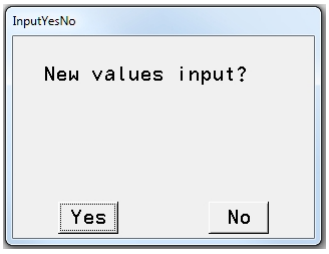
The new value can now be entered here. For the above example, enter -16.



After clicking OK, the window for the end of the interval opens.

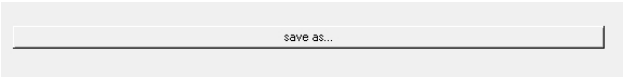
Following the example above, enter 16.1 here.

This completes the entry for correlation function H (Matrix Harmony) and the query for correlation function I (Matrix I) appears.



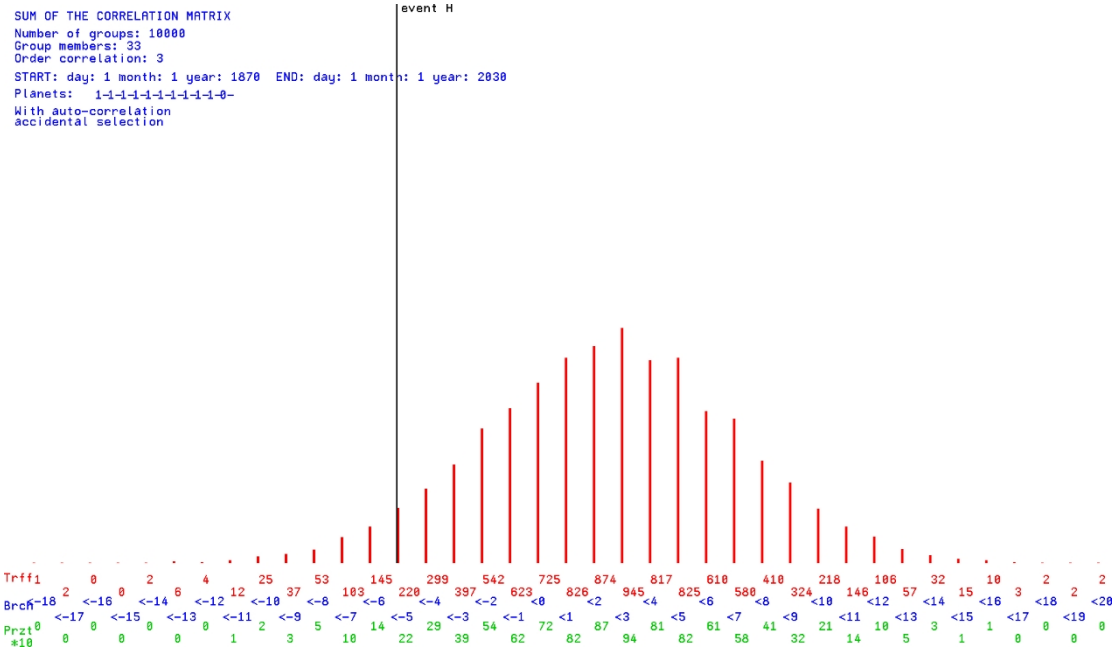
This is repeated until the values for the DA (absolute dynamics) matrix have been entered.

After a slightly longer calculation, the results are displayed in the graphic fields Graph 1 to Graph 4. . These graphs can be saved individually using the button:



.

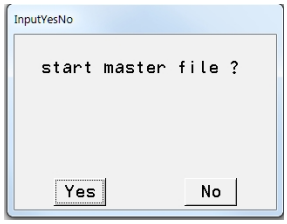
Example:



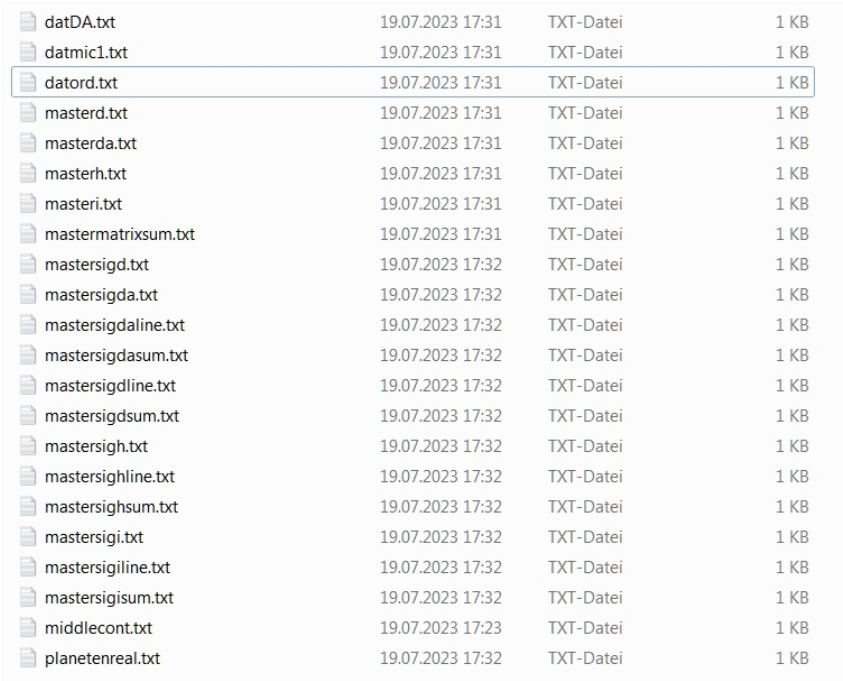
The black vertical line shows the probability of events in the Gaussian distribution.

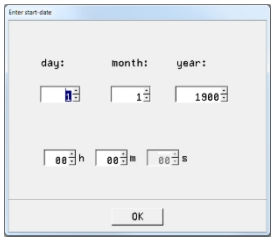
4. Matrix Probability

This module compares the group of events with randomly selected groups of the same strength in the selected time period (Monte Carlo simulation).

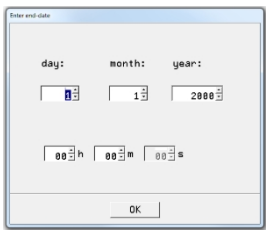


Should a master be generated for an AI pattern?
If you answer Yes, the following files will be saved in the "master-new" directory:

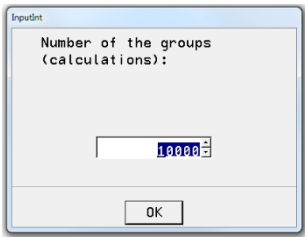




The time period is queried. *If the Continuum module has been run, this only needs to be confirmed with OK.*
The **Event Analysis** module must have been calculated beforehand (at some point!).

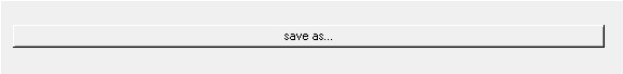


The last query is:



The program now calculates, and if there are a large number of events per group, it may take a little longer.

The results can be found in Text 3 and Graphics 1 to 6. You can save them again individually using the



.

Example:

Statistics 4: Probability of events: correlation matrix H
Order of the correlation: 7 ; time shift d: 0 h: 0;
Range in +- of Julian date= 10
GROUP MEMBERS: 33; NUMBER OF GROUPS: 10000
Accidental selection; TEST: Number of accidental selection>= correlation

CORRELATION-MATRIX H AS INPUT

	1	2	3	4	5	6	7	8	9	10	lineS
1	0.02	-0.04	-0.04	0.03	-0.00	0.04	-0.00	0.02	0.05	-0.03	0.04
2	-0.02	-0.00	-0.02	-0.04	-0.01	-0.05	-0.01	0.01	0	0.03	-0.11
3	0.00	-0.00	0.00	0.01	0.04	-0.01	-0.03	0.01	-0.02	0.00	0.02
4	0.03	-0.01	-0.01	-0.02	-0.02	-0.06	-0.02	0	-0.01	-0.04	-0.14
5	-0.04	-0.03	-0.02	-0.01	0.02	0	-0.00	0.01	0.02	0.	-0.06
6	0.01	-0.02	0.00	0.03	-0.01	-0.01	-0.01	0.01	-0.00	-0.01	-0.01
7	0.01	-0.01	-0.04	-0.01	0.03	0.02	-0.05	0.02	0.03	0.00	0.00
8	-0.00	0.01	0.06	-0.04	-0.02	0.00	0.00	-0.03	-0.00	-0.03	-0.06
9	0	0	-0.01	-0.05	0.01	-0.03	0.01	-0.01	0.03	0.01	-0.01
10	-0.04	0.01	-0.02	0.03	-0.02	-0.00	0.01	0.01	-0.02	-0.00	-0.04

Matrix SH=-0.366

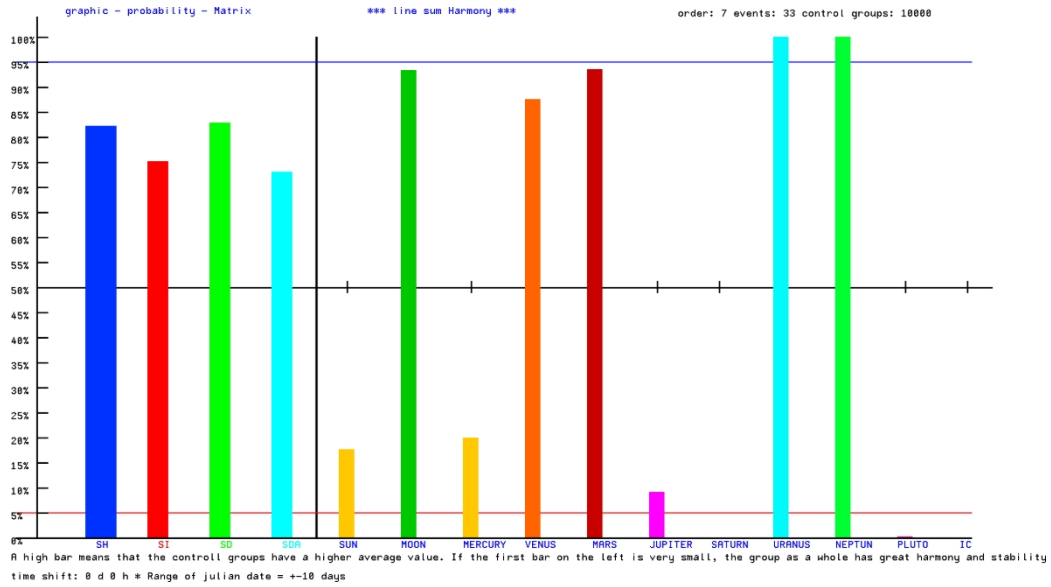
Matrix H of the probability of error:

	1	2	3	4	5	6	7	8	9	10		
1	22.52	86.15	95.14	13.25	59.83	5.98	44.75	26.05	0.38	76.73	PR	17.61
2	86.15	56.87	76.43	95.75	70.26	98.41	62.37	36.95	43.49	7.96	PR	93.35
3	95.14	76.43	40.83	20.91	1.13	67.73	87.19	66.11	49.78	25.05	PR	19.95
4	13.25	95.75	20.91	53.65	74.22	98.25	82.52	16.27	76.69	96.84	PR	87.54
5	59.83	70.26	1.13	74.22	11.26	7.06	71.84	44.73	14.56	43.25	PR	93.57
6	5.98	98.41	67.73	98.25	7.06	35.87	99.92	0.86	24.52	89.88	PR	9.12
7	44.75	62.37	87.19	82.52	71.84	99.92	83.57	0.29	0.13	62.33	PR	0.00
8	26.05	36.95	66.11	16.27	44.73	0.86	0.29	55.89	0.74	100.00	PR	100.00
9	0.38	43.49	49.78	76.69	14.56	24.52	0.13	0.74	50.81	0.00	PR	10
10	76.73	7.96	25.05	96.84	43.25	89.88	62.33	100.00	0.00	47.68	PR	0.25

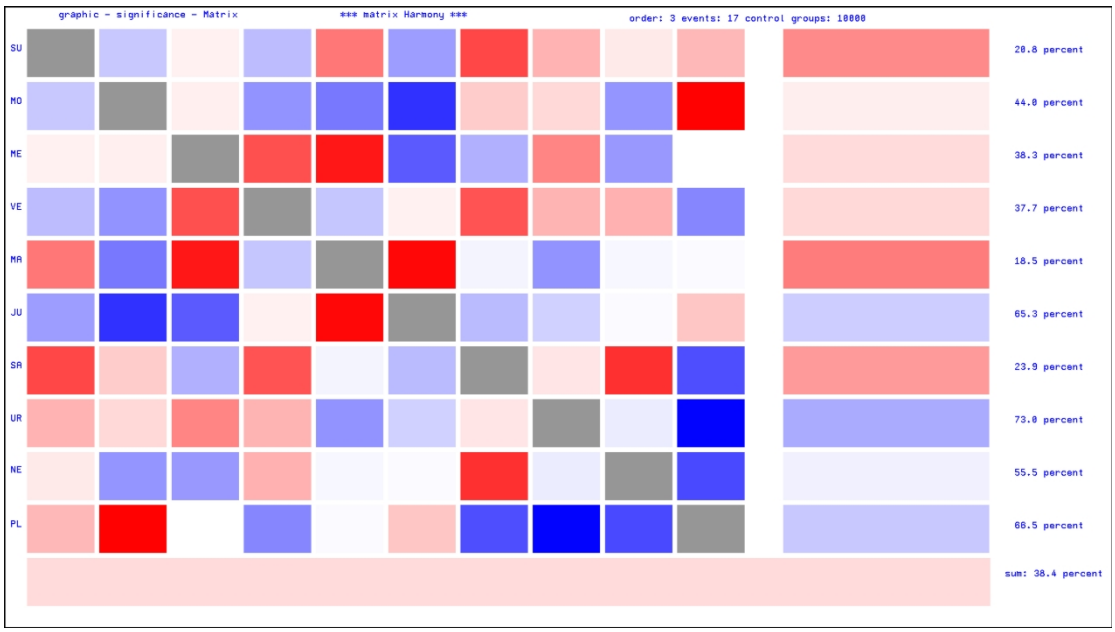
bigger are: 82.260 %

1=SUN; 2=MOON; 3=MERCURY; 4=VENUS; 5=MARS; 6=JUPITER; 7=SATURN; 8=URANUS; 9=NEPTUNE; 10=PLUTO; 11=IC;

The significant correlations (>=95 and<= 5) are highlighted in red and blue. The results are also displayed in graphs.



The graph below shows the planetary interactions as color patterns: blue indicates all correlations for which the control groups have a higher value; red indicates all correlations in which the control groups have a lower value. The bottom long bar shows the state of the overall matrix. The longer bars in the right column show the states of the planets.



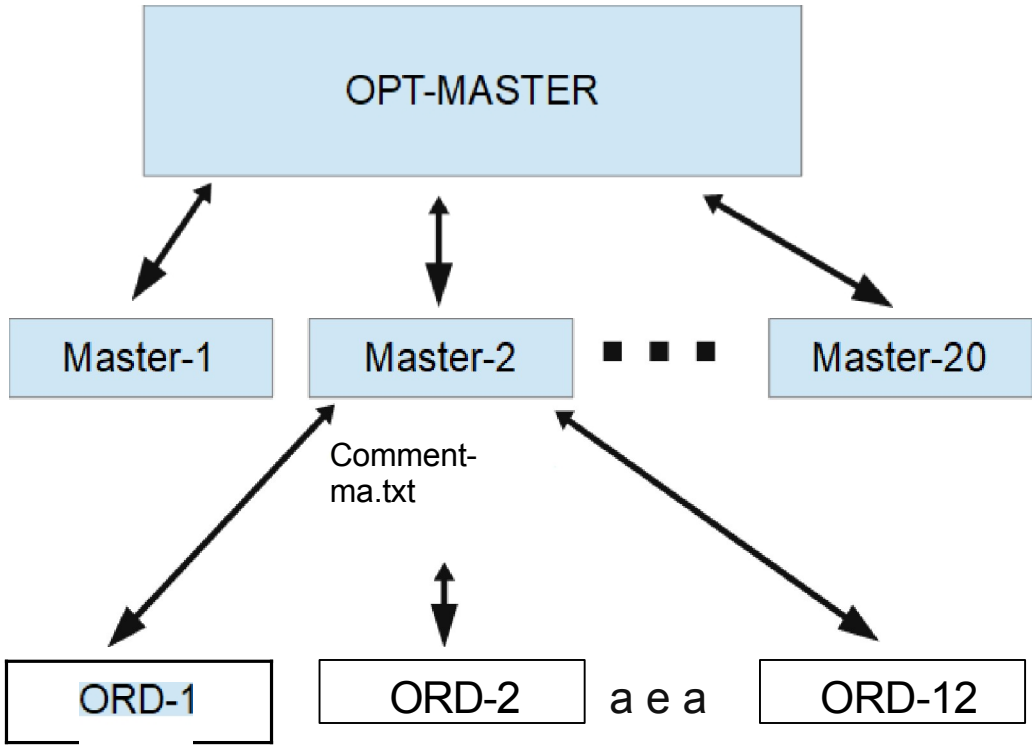
5. Artificial Intelligence

Warning! Using this program requires a lot of experience!

5.1 Scanning a variable period with a selected pattern

Attention: The master is created beforehand in menu item **4- Matrix Probability**. The comment on the master must be entered manually in the file OPT-MASTER/master-#/comment-ma.txt.

The structure of the directories used for artificial intelligence is shown on the following pages.



datDA.txt

datmic1.txt

datord.txt

masterd.

masterh.txt

masleri.txl

'| masteslgd.cct

@ inastersigdÆ+e.tzt

maslersiqdasum.txl

mastersigdline.txt

mastelslgdsum.fxt

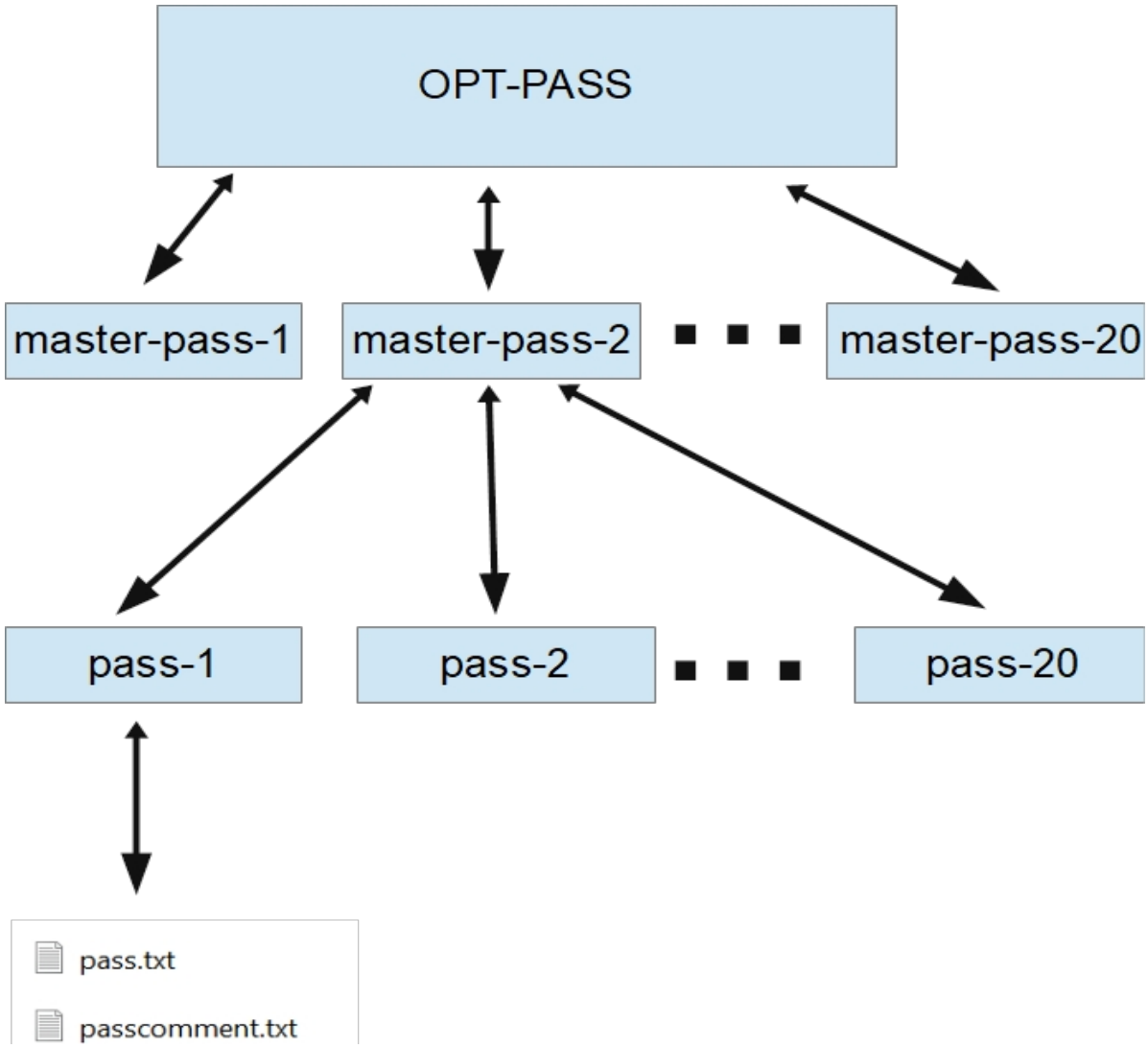
mastersighline.txt

maslersiqhsum.txl
moster 3igh lxl

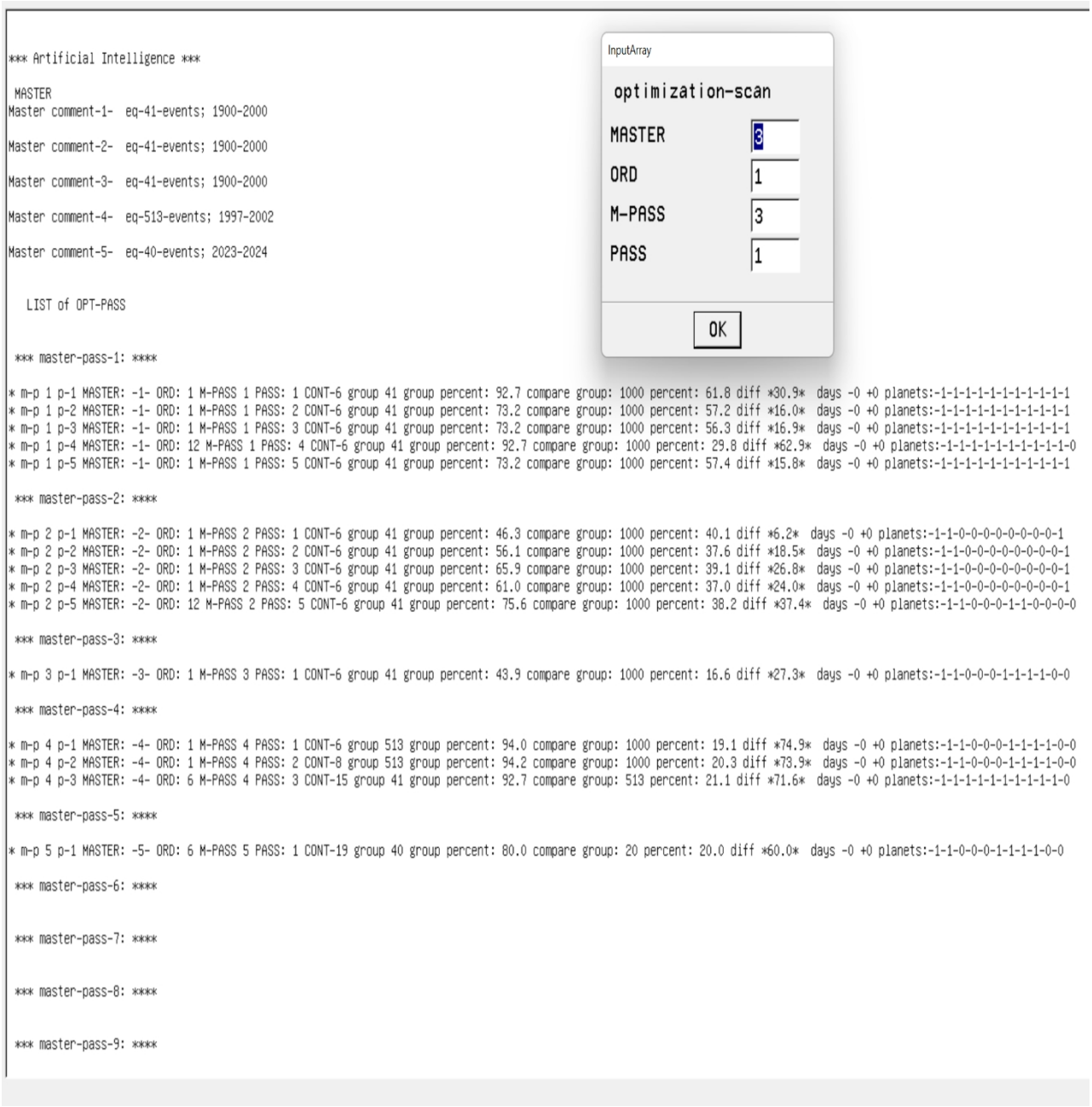
Œi9*

mosterai isum1xt

planetenreal.txl

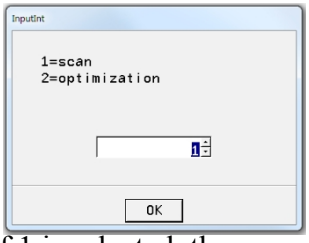

OPT-PASS
master-pass-1
master-pass-2
master-pass-20
pass-1
pass-2
pass-20
pass.txt
passcomment.txt

In the menu, click on menu item **5- Artifical_Intelligence**.
A list of the currently available optimized frequency patterns appears in text field 4: Currently, 5 masters with comments are listed. The comments must be entered manually in the file OPT-MASTER/master-#/comment-ma.txt.



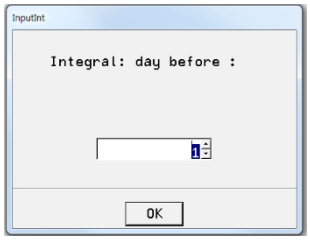
An event group (master) can be stored in 12 orders of the correlation function. The master and order are queried in the "optimization-scan" window. The master pass (M-pass) normally has the same number as the master. Different passes can be stored under the M-pass.

The selection window appears:



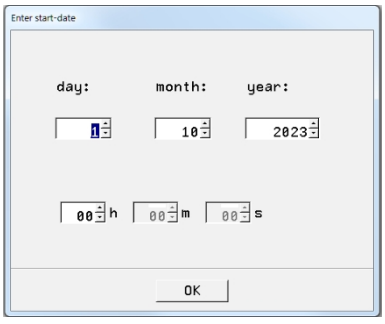
If 1 is selected, the probability curve for events of the selected pattern can be displayed for a period of time to be determined. Option 2 is the program for optimizing a pattern.

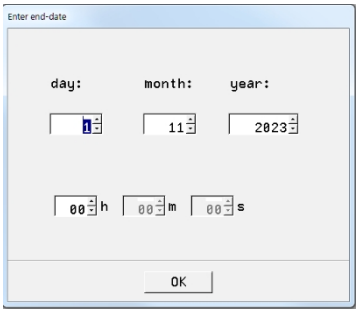
If 1 is selected, the scan process is started. The button appears:

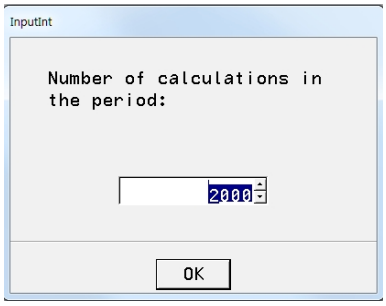


For certain events, it makes sense to include the period before and after the event in the calculations. The first button can be used to specify the period before the event in days, and the second button can be used to specify the period after the event.

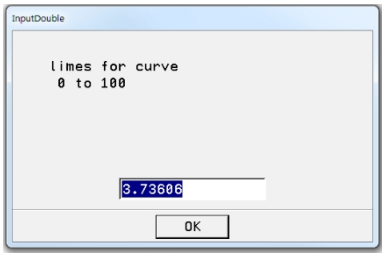
The following two buttons define the time period:



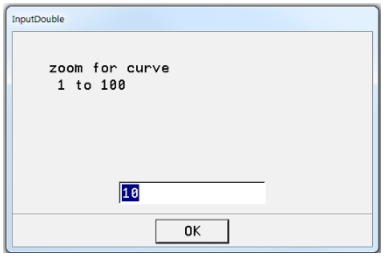




This button determines how many calculations are to be performed in the specified time interval.



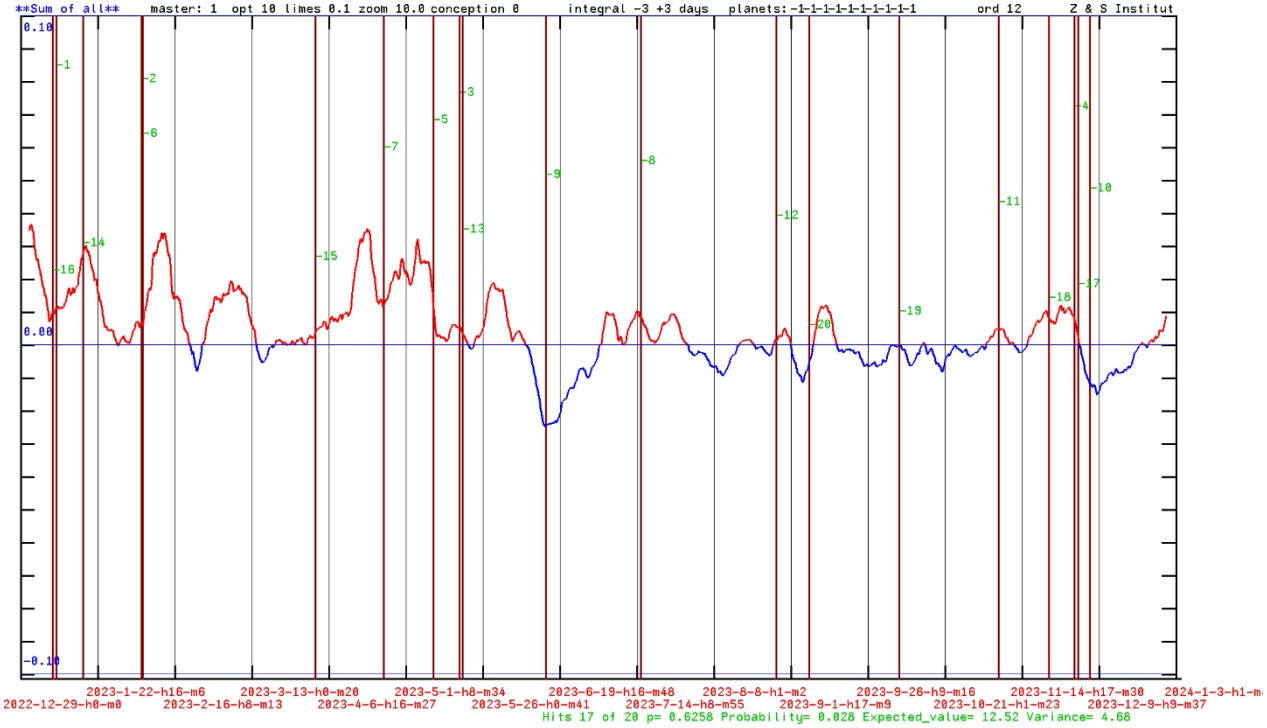
The next button allows you to change the basis of the curve. Normally, you just press OK here.



This button allows you to stretch the curve in the y-direction.

With **Yes**, the events from the **Data-marking-events/** directory are marked if they fall within the time period. The directory contains the files:
bjuliandat.txt; datgroupb.txt and datgroupc.txt

The result is the curve of probabilities in the period.

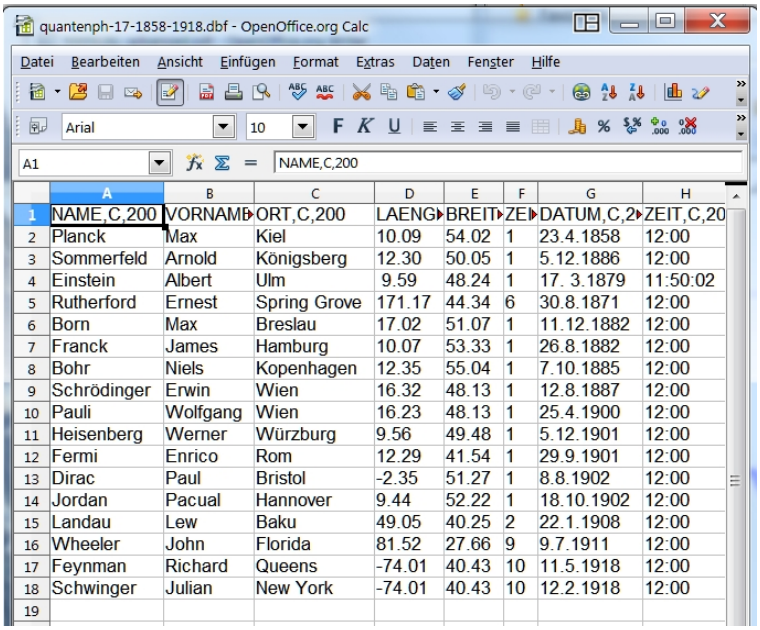


(Period January to December 2023; 17 hits out of 20; The red area above the center line indicates an increased probability of earthquakes (magnitude>= 6.5). The probability of a hit in the area above the center line (red area) is 0.6258 for equal distribution. Expected value with equal distribution: 12.52 hits. The probability of error for 17 or more hits is 0.028 (2.8%). This is within the significance range of 5%. The earthquake events are marked by highlighted vertical lines and the (green) number.)

5.2 Creating a template for an event group

To create a pattern, you must select the menu items
1- Statistics 1 - Continuum
2- Event Analysis
4- Matrix Probability
must be called up again before you can start with
menu item 5- Artificial_Intelligence

can be started. The pattern is created using the example of 17 quantum physicists. These are:

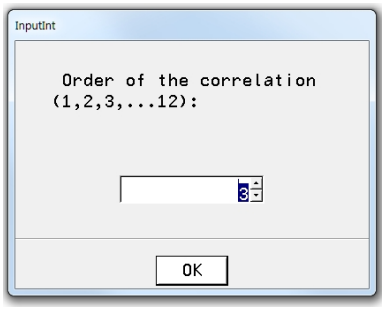


	A	B	C	D	E	F	G	H
1	NAME,C,200	VORNAME	ORT,C,200	LAENG	BREIT	ZE	DATUM,C,2	ZEIT,C,20
2	Planck	Max	Kiel	10.09	54.02	1	23.4.1858	12:00
3	Sommerfeld	Arnold	Königsberg	12.30	50.05	1	5.12.1886	12:00
4	Einstein	Albert	Ulm	9.59	48.24	1	17. 3.1879	11:50:02
5	Rutherford	Ernest	Spring Grove	171.17	44.34	6	30.8.1871	12:00
6	Born	Max	Breslau	17.02	51.07	1	11.12.1882	12:00
7	Franck	James	Hamburg	10.07	53.33	1	26.8.1882	12:00
8	Bohr	Niels	Kopenhagen	12.35	55.04	1	7.10.1885	12:00
9	Schrödinger	Erwin	Wien	16.32	48.13	1	12.8.1887	12:00
10	Pauli	Wolfgang	Wien	16.23	48.13	1	25.4.1900	12:00
11	Heisenberg	Werner	Würzburg	9.56	49.48	1	5.12.1901	12:00
12	Fermi	Enrico	Rom	12.29	41.54	1	29.9.1901	12:00
13	Dirac	Paul	Bristol	-2.35	51.27	1	8.8.1902	12:00
14	Jordan	Pacual	Hannover	9.44	52.22	1	18.10.1902	12:00
15	Landau	Lew	Baku	49.05	40.25	2	22.1.1908	12:00
16	Wheeler	John	Florida	81.52	27.66	9	9.7.1911	12:00
17	Feynman	Richard	Queens	-74.01	40.43	10	11.5.1918	12:00
18	Schwinger	Julian	New York	-74.01	40.43	10	12.2.1918	12:00
19								

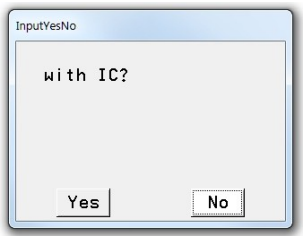
The exact time of birth was only known for Einstein, so 12 noon was entered for all other physicists. The rapidly changing IC (direction toward the center of the Earth) is not taken into account in the calculations.

Start of menu item **1- Statistics 1 -Continuum**

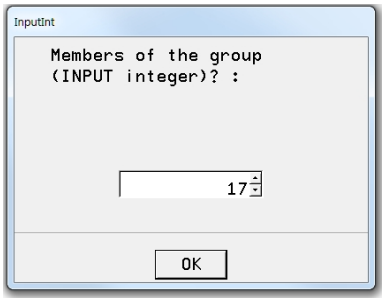
The button appears



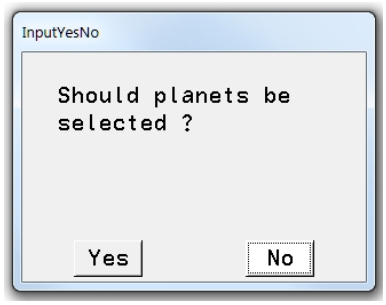
Select the 3rd order here. Later, it must be determined whether another order might be more suitable.



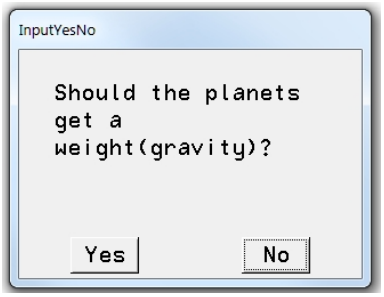
If the exact time is not known, always select "No."



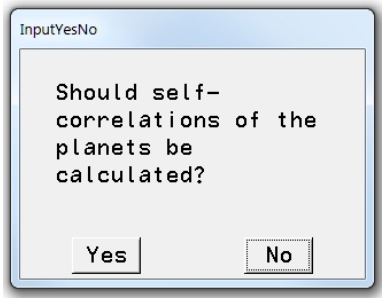
There are 17 quantum physicists, so 17 is entered here.



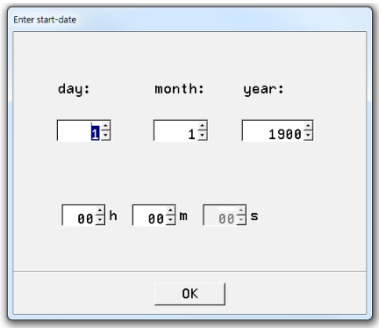
If all planets are taken into account in the calculations, this question is answered with "No."



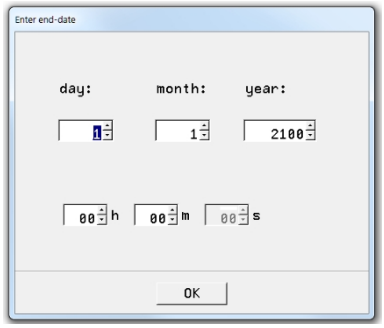
The gravitational force of the planets is not taken into account. The correlation takes place on an informative level.



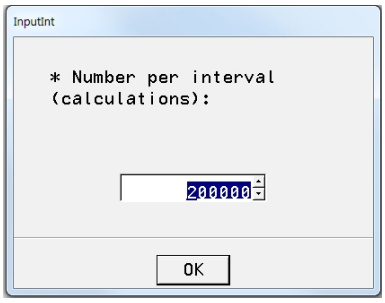
Autocorrelation of the planets is not taken into account. The question is answered with "No."



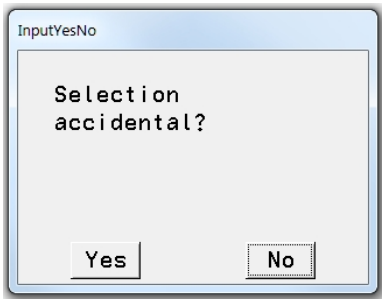
Here, the start date 1900-1-1 is entered.



Next, the end date is entered as 2100-1-1.



To represent the continuum, 200,000 calculations are performed in the time interval in this example.



The selection of the 200,000 calculations in the period can be random or continuous. In the example, No was selected.

The values for the continuum now appear in text field 1:

Matrix H: Coherent continuum; Number per interval: 200000

Members of the group: 17 (relevant); Order the correlation:

3 BEGIN: year: 1900 month: 1 day: 1 hour: 0 minute 0
END: year: 2100 month: 1 day: 1 hour: 0 minute 0
common harmonies, standardize on number of the group members 17

Principle	I	II	III	IV	V	VI	VII	VIII	IX	X	TOTAL
1	0.00	0.0	-0.09	0.03	0.05	0.02	0.01	0	0.00	0.00	0.02
2	0.00	-0.00	0.00	0	-0.00	0	0	0.00	-0.00	-0.00	0.01
3	-0.09	0	-0.00	0.15	0.02	0.02	0.02	0.01	0.01	0.01	0.14
4	0.03	0.00	0.15	-0.00	0.07	0.02	-0.00	0.00	-0.00	-0.00	0.26
5	0.05	-0.00	0.02	0.07	-0.00	-0.04	0.00	0	-0.00	-0.02	0.08
6	0.02	0.00	0.02	0.02	-0.04	0.00	0.05	0.00	0.00	-0.03	0.05
7	0.01	0.00	0.02	-0.00	0.00	0.05	0.00	0.01	0.02	0.05	0.17
8	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	-0.16	-0.01	-0.13
9	0	-0.00	0.01	-0.00	-0.00	0.00	0.02	-0.16	-0.00	0.56	0.44
10	0.00	-0.00	0.01	-0.00	-0.02	-0.03	0.05	-0.01	0.56	0	0.56

Sum of the Matrix H: 1.6

Matrix ISquare root of the energy, standardized on number per interval

Principle:	I	II	III	IV	V	VI	VII	VIII	IX	X	TOTAL
1	0.00	1.13	0.31	0.25	0.87	1.05	1.09	1.11	1.11	1.12	8.04
2	1.13	0.00	1.13	1.13	1.12	1.12	1.13	1.12	1.13	1.13	10.13
3	0.31	1.13	0.00	0.44	0.85	1.05	1.08	1.11	1.12	1.11	8.19
4	0.25	1.13	0.44	0.00	0.92	1.07	1.09	1.11	1.12	1.11	8.24
5	0.87	1.12	0.85	0.92	0.00	1.12	1.11	1.14	1.09	1.12	9.33
6	1.05	1.12	1.05	1.07	1.12	0	1.13	1.10	1.13	1.10	9.87
7	1.09	1.13	1.08	1.09	1.11	1.13	0.00	1.13	1.11	1.09	9.95
8	1.11	1.12	1.11	1.11	1.14	1.10	1.13	0.00	1.20	1.13	10.16
9	1.11	1.13	1.12	1.12	1.09	1.13	1.11	1.20	0.00	1.12	10.12
10	1.12	1.13	1.11	1.11	1.12	1.10	1.09	1.13	1.12	0	10.02

Sum of the Matrix I: 94.05

Matrix D First derivation, standardize on number of group members

Principle:	I	II	III	IV	V	VI	VII	VIII	IX	X	TOTAL
1	0.00	0.00	-0.07	-0.02	-0.00	0	-0.00	-0.00	-0.00	0	-0.09
2	0	0	-0.00	0	0.00	0.00	0	-0.00	0	-0.00	-0.00
3	-0.07	-0.00	0	-0.00	-0.06	0.09	0.23	-0.01	-0.01	-0.20	-0.02
4	-0.02	0	-0.00	0	-0.06	0.	-0.19	0.10	-0.02	0.19	0.01
5	-0.00	0	-0.06	-0.06	0.00	0.06	0.11	0.06	0.10	0.23	0.44
6	0.00	0.00	0.09	0.01	0.06	0.00	-0.68	0.19	0.64	0.12	0.44
7	-0.00	0.00	0.23	-0.19	0.11	-0.68	0.00	0.22	0.07	-0.79	-1.04
8	-0.00	-0.00	-0.01	0.10	0.06	0.19	0.22	0.00	-0.11	0.05	0.50
9	-0.00	0	-0.01	-0.02	0.10	0.64	0.07	-0.11	0.00	-0.30	0.37
10	0	-0.00	-0.20	0.19	0.23	0.12	-0.79	0.05	-0.30	0	-0.69

Sum of the matrix D: -0.08

Matrix DA First derivation (absolute), standardize on number per interval

Principle:	I	II	III	IV	V	VI	VII	VIII	IX	X	TOTAL
1	0.00	28.32	9.14	6.69	21.47	26.42	27.27	27.84	27.89	28.03	203.08
2	28.32	0.00	28.36	28.33	28.31	28.24	28.23	28.27	28.29	28.29	254.64
3	9.14	28.36	0.00	10.43	21.30	26.41	27.26	27.84	28.05	28.04	206.83
4	6.69	28.33	10.43	0	22.78	26.64	27.49	28.01	27.94	28.22	206.53
5	21.47	28.31	21.30	22.78	0.00	28.13	28.09	28.47	27.66	28.13	234.35
6	26.42	28.24	26.41	26.64	28.13	0.00	27.85	28.18	28.10	27.96	247.93
7	27.27	28.23	27.26	27.49	28.09	27.85	0.00	28.12	27.92	28.09	250.32
8	27.84	28.27	27.84	28.01	28.47	28.18	28.12	0	30.35	28.22	255.31
9	27.89	28.29	28.05	27.94	27.66	28.10	27.92	30.35	0.00	24.63	250.83
10	28.03	28.29	28.04	28.22	28.13	27.96	28.09	28.22	24.63	0.00	249.60

Sum of the Matrix DA: 2359.42 Standardize on number per interval

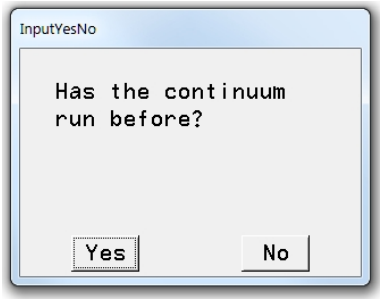
1= SUN; 2= MOON; 3= MERCURY; 4= VENUS; 5= MARS;
6= JUPITER; 7= SATURN; 8= URANUS; 9= NEPTUNE; 10= PLUTO; 11= EARTH-IC;

sun weight: 1.00
moon weight: 1.00
mercury weight: 1.00
venus weight: 1.00
Mars weight: 1.00
Jupiter weight: 1.00
Saturn weight: 1.00
uranus weight: 1.00
Neptune weight: 1.00
Pluto weight: 1.00

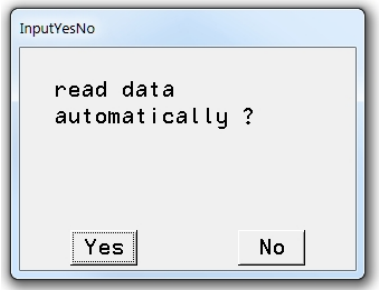
This completes the calculation of the continuum.

Start menu item **2—Event Analysis**

The button appears:



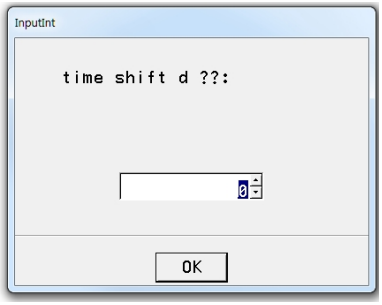
Here you must ensure that the continuum has already been calculated. Answer Yes to this question.



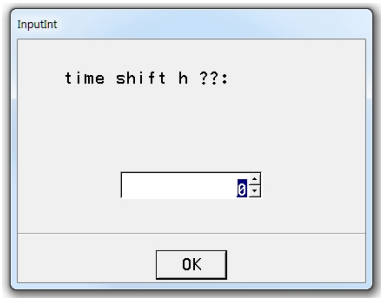
Answer Yes to this question if you want to calculate a sequence of events from a list.

Next, you will be asked for the directory where the list of events is located (in the example, the quantum physicists).

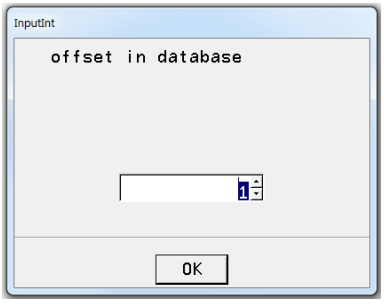
Double-click on this symbol in the dbf file.



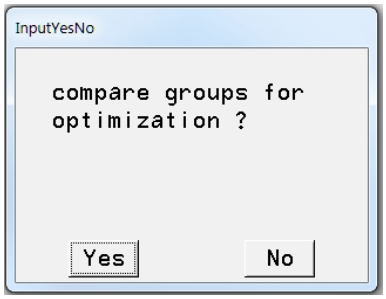
If you want to move the birth times forward or backward by days, enter the number of days here. In this example, the value remains 0.



Here, the event time can be shifted by hours. In the example, nothing is shifted.



If the calculations start with the first event in the list, enter 1 here.



Should this event group serve as a comparison group for other optimization processes? In our example, the group of quantum physicists is compared with the continuum. The question is answered with No.

The results appear in text field 2 and in graphic 3.

Outlay matrix H coherent analysis
Number of elements: 17
Order of correlation: 3; time shift d: 0 h: 0; Matrix of common harmony

Principle	I	II	III	IV	V	VI	VII	VIII	IX	X	TOTAL
1	-0.00	-0.19	-0.07	-0.02	0.38	-0.28	0.60	0.26	0.09	0.23	1.00
2	-0.19	0.00	0.07	-0.34	-0.43	-0.75	0.18	0.15	-0.35	1.89	0.24
3	-0.07	0.07	-0.00	0.36	0.75	-0.48	-0.23	0.41	-0.32	0.02	0.51
4	-0.02	-0.34	0.36	0.00	-0.10	0.08	0.55	0.25	0.26	-0.39	0.66
5	0.38	-0.43	0.75	-0.10	0.00	1.11	-0.03	-0.34	-0.03	-0.03	1.29
6	-0.28	-0.75	-0.48	0.08	1.11	-0.00	-0.19	-0.15	-0.01	0.17	-0.50
7	0.6	0.18	-0.23	0.55	-0.03	-0.19	0.00	0.11	0.74	-0.50	1.24
8	0.26	0.15	0.41	0.25	-0.34	-0.15	0.11	0.00	-0.22	-1.51	-1.03
9	0.09	-0.35	-0.32	0.26	-0.03	-0.01	0.74	-0.22	0.00	0.07	0.24
10	0.23	1.89	0.02	-0.39	-0.03	0.17	-0.50	-1.51	0.07	-0.00	-0.04

Harmony of command wave: 3.6

Matrix of common energy (standardize number of elements)

Principle:	I	II	III	IV	V	VI	VII	VIII	IX	X	TOTAL
1	0.00	1.34	0.28	0.31	0.70	1.02	1.45	0.90	0.49	0.75	7.24
2	1.34	0.00	0.56	0.84	0.99	1.74	1.01	1.59	0.75	2.67	11.49
3	0.28	0.56	0.00	0.44	1.10	2.17	1.38	0.82	1.46	0.73	8.95
4	0.31	0.84	0.44	0.00	0.47	0.61	0.85	0.55	1.91	0.91	6.90
5	0.70	0.99	1.10	0.47	0.00	1.81	0.44	1.43	0.72	0.90	8.57
6	1.02	1.74	2.17	0.61	1.81	0.00	0.90	0.79	1.21	0.80	11.07
7	1.45	1.01	1.38	0.85	0.44	0.90	0.00	0.76	0.96	0.61	8.36
8	0.90	1.59	0.82	0.55	1.43	0.79	0.76	0	1.78	2.67	11.30
9	0.49	0.75	1.46	1.91	0.72	1.21	0.96	1.78	0.00	0.28	9.55
10	0.75	2.67	0.73	0.91	0.90	0.80	0.61	2.67	0.28	0.00	10.33

energy of command wave: 93.75

Matrix of common time dynamics

Principle:	I	II	III	IV	V	VI	VII	VIII	IX	X	TOTAL
1	0.00	-2.91	-2.18	-0.42	-3.80	-15.26	5.37	1.70	-7.78	15.31	-9.97
2	-2.91	0.00	3.77	3.36	-12.80	-8.80	14.69	-18.58	1.58	-3.83	-23.51
3	-2.18	3.77	0	-2.76	-4.97	-1.08	-3.45	-3.67	-1.19	-10.21	-25.74
4	-0.42	3.36	-2.76	0.00	6.49	9.72	-1.74	3.92	13.86	-16.21	16.23
5	-3.80	-12.80	-4.97	6.49	0.00	5.19	-7.84	2.25	2.30	3.16	-10.03
6	-15.26	-8.80	-1.08	9.72	5.19	0.00	6.85	9.04	-20.39	8.50	-6.24
7	5.37	14.69	-3.45	-1.74	-7.84	6.85	0.00	-10.98	-13.33	-0.74	-11.19
8	1.70	-18.58	-3.67	3.92	2.25	9.04	-10.98	0.00	-5.35	36.48	14.80
9	-7.78	1.58	-1.19	13.86	2.30	-20.39	-13.33	-5.35	0.00	2.94	-27.36
10	15.31	-3.83	-10.21	-16.21	3.16	8.50	-0.74	36.48	2.94	0.00	35.41

Time dynamics of command wave: -47.60

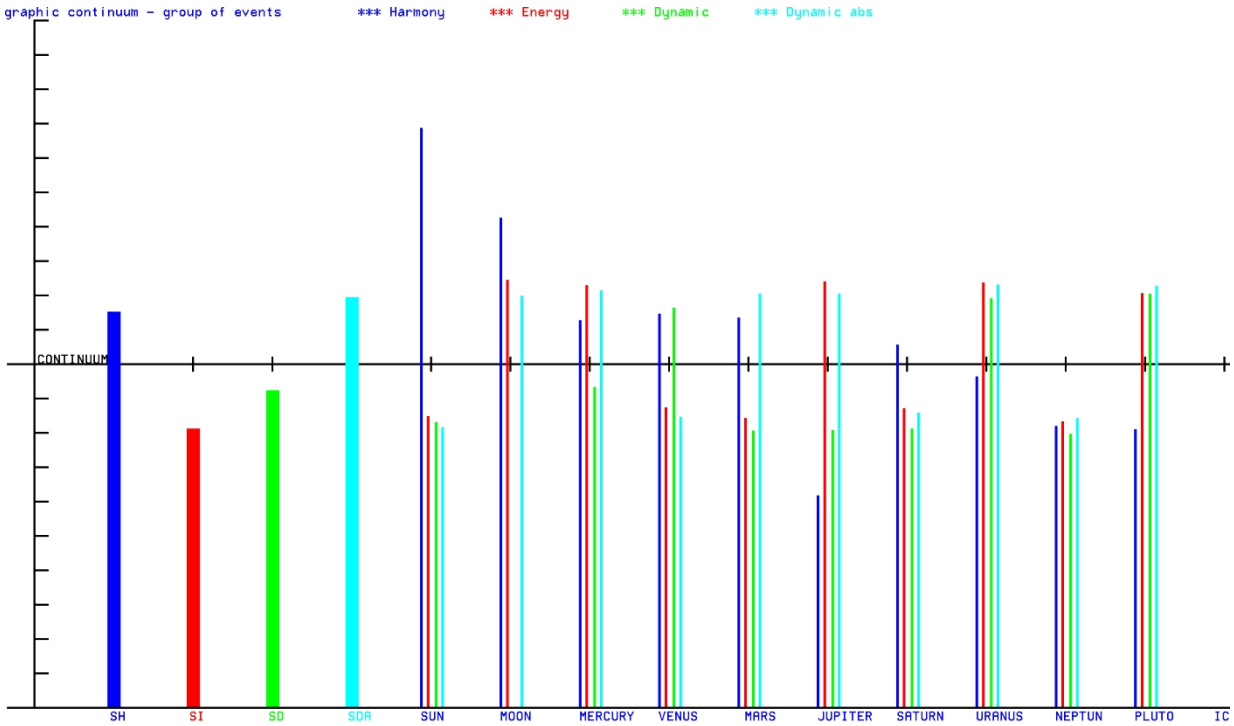
Matrix of common time dynamics (absolute)

Principle:	I	II	III	IV	V	VI	VII	VIII	IX	X	TOTAL
1	0.00	22.32	12.25	6.58	25.12	30.67	27.75	21.37	20.15	34.72	200.93
2	22.32	0.00	27.12	26.67	27.76	35.99	32.12	29.44	16.60	39.57	257.58
3	12.25	27.12	0.00	12.42	18.77	30.76	22.74	27.67	39.31	26.86	217.90
4	6.58	26.67	12.42	0.00	18.60	20.39	28.03	18.73	22.03	33.76	187.21
5	25.12	27.76	18.77	18.60	0	35.11	23.19	37.91	23.54	30.78	240.79
6	30.67	35.99	30.76	20.39	35.11	0.00	12.56	24.36	39.14	25.84	254.80
7	27.75	32.12	22.74	28.03	23.19	12.56	0.00	28.54	31.30	13.28	219.49
8	21.37	29.44	27.67	18.73	37.91	24.36	28.54	0.00	31.71	59.96	279.68
9	20.15	16.60	39.31	22.03	23.54	39.14	31.30	31.71	0.00	6.49	230.27
10	34.72	39.57	26.86	33.76	30.78	25.84	13.28	59.96	6.49	0.00	271.26

Time dynamics of command wave (absolute): 2359.91

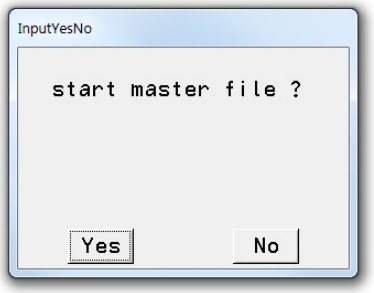
Totals: h 3.599441 i 93.753572 d -47.597856 da 2359.906861

SH sum: 61.190504 SI sum: 1593.810728 SD sum: -809.163558 SDAsum: 40118.416644



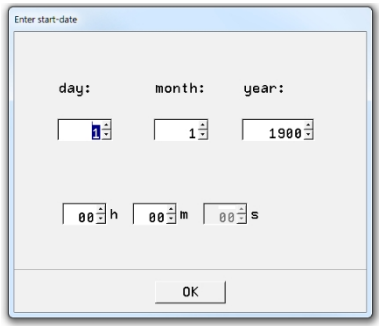
If a bar extends beyond th line for the continuum, the individual value is higher than the average value for the selected time period.
Thus, a long blue bar indicates a harmony above the average.

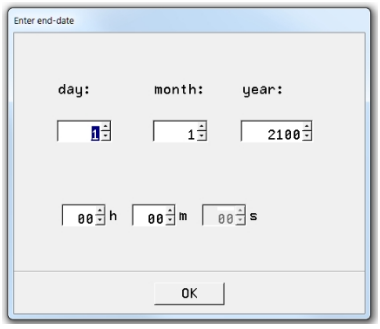
Start of menu item **4- Matrix Probability**

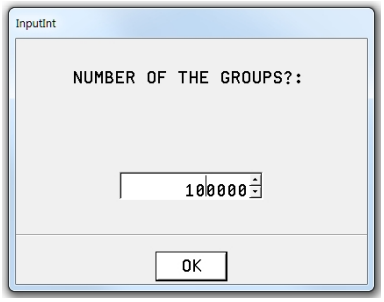


This question is answered with **Yes**.

The period for the control groups will generally correspond to the period of the continuum.







Here, enter the number of comparison groups, each consisting of 17 events in the period specified above. A large number will increase the calculation time and will not significantly change the result. Internally, the large number 100000 is reduced to 90000.

The results are shown in text field 3 and in graphic fields 1 to 6.

```
  Statistics 4: Probability of events: correlation matrix H

Order of the correlation: 3 ; time shift d: 0 h: 0;
GROUP MEMBERS: 17 ; NUMBER OF GROUPS: 100000
Julian date start: 2415019.458333 Julian date end: 2488068.458345
Accidental selection; TEST: Number of accidental selections>= e correlation
 CORRELATION MATRIX AS INPUT
          1       2       3       4       5       6       7       8       9      10

 1       *      -0.19   -0.07   -0.02    0.38   -0.28    0.60    0.26    0.09    0.23
 2     -0.19     *       0.07   -0.34   -0.43   -0.75    0.18    0.15   -0.35    1.89
 3     -0.07    0.07     *       0.36    0.75   -0.48   -0.23    0.41   -0.32    0.02
 4     -0.02   -0.34    0.36     *      -0.10    0.08    0.55    0.25    0.26   -0.39
 5      0.38   -0.43    0.75   -0.10     *       1.11   -0.03   -0.34   -0.03   -0.03
 6     -0.28   -0.75   -0.48    0.08    1.11     *      -0.19   -0.15   -0.01    0.17
 7      0.60    0.18   -0.23    0.55   -0.03   -0.19     *       0.11    0.74   -0.50
 8      0.26    0.15    0.41    0.25   -0.34   -0.15    0.11     *      -0.22   -1.51
 9      0.09   -0.35   -0.32    0.26   -0.03   -0.01    0.74   -0.22     *       0.07
10      0.23    1.89    0.02   -0.39   -0.03    0.17   -0.50   -1.51    0.07     *

 Matrix H of the probability of error:
          1       2       3       4       5       6       7       8       9      10

 1       *      66.56   43.96   69.63   17.81   75.94   10.03   28.89   42.71   30.62 PR  20.91
 2     66.56     *      44.19   77.16   82.45   93.78   34.81   37.40   77.89    0.02 PR  44.07
 3     43.96   44.19     *      10.60    2.81   87.28   71.82   18.94   77.12   49.50 PR  38.44
 4     69.63   77.16   10.60     *      66.76   44.62   11.42   29.45   28.28   79.77 PR  37.34
 5     17.81   82.45    2.81   66.76     *       0.94   53.49   77.59   52.16   51.40 PR  18.56
 6     75.94   93.78   87.28   44.62    0.94     *      70.12   63.97   51.25   32.66 PR  65.07
 7     10.03   34.81   71.82   11.42   53.49   70.12     *      41.61    6.54   88.93 PR  23.33
 8     28.89   37.40   18.94   29.45   77.59   63.97   41.61     *      57.05   99.70 PR  73.36
 9     42.71   77.89   77.12   28.28   52.16   51.25    6.54   57.05     *      89.61 PR  55.52
10     30.62    0.02   49.50   79.77   51.40   32.66   88.93   99.70   89.61     *    PR  66.64
 Bigger are:   37.80
1=SUN; 2=MOON; 3=MERCURY; 4=VENUS; 5=MARS; 6=JUPITER; 7=SATURN; 8=URANUS; 9=NEPTUNE; 10=PLUTO; 11=IC;
BEGIN: year: 1900 month: 1 day: 1 hour: 0 END: year: 2100 month: 1 day: 1 hour: 0


  Statistics 4: Probability of events: energy I
Order of the correlation: 3 ; GROUP MEMBERS: 17 ; NUMBER OF GROUPS: 100000 Accidental
selection; TEST: Number of accidental selections >= correlation
 MATRIX I energy AS INPUT (absolute)
          1       2       3       4       5       6       7       8       9      10

 1       *       1.34    0.28    0.31    0.70    1.02    1.45    0.90    0.49    0.75
 2      1.34     *       0.56    0.84    0.99    1.74    1.01    1.59    0.75    2.67
 3      0.28    0.56     *       0.44    1.10    2.17    1.38    0.82    1.46    0.73
 4      0.31    0.84    0.44     *       0.47    0.61    0.85    0.55    1.91    0.91
 5      0.70    0.99    1.10    0.47     *       1.81    0.44    1.43    0.72    0.90
 6      1.02    1.74    2.17    0.61    1.81     *       0.90    0.79    1.21    0.80
 7      1.45    1.01    1.38    0.85    0.44    0.90     *       0.76    0.96    0.61
 8      0.90    1.59    0.82    0.55    1.43    0.79    0.76     *       1.78    2.67
 9      0.49    0.75    1.46    1.91    0.72    1.21    0.96    1.78     *       0.28
10      0.75    2.67    0.73    0.91    0.90    0.80    0.61    2.67    0.28     *

 Matrix I of the probability of error:
          1       2       3       4       5       6       7       8       9      10

 1       *      27      61.77   24.51   65.36   48.09   17.54   65.95   97.86   81.45 PR  77.46
 2     27.07     *      95.25   73.14   58.39    7.64   56.77   12.77   81.98    0.12 PR  14.02
 3     61.77   95.25     *      47.77   19.94    0.82   20.57   73.57   18.89   82.89 PR  22.95
 4     24.51   73.14   47.77     *      93.74   89.67   69.52   95.25    3.90   65.36 PR  90.21
 5     65.36   58.39   19.94   93.74     *       6.14   98.86   21.87   82.10   66.31 PR  72.77
 6     48.09    7.64    0.82   89.67    6.14     *      67.58   76.21   37.70   75.12 PR  16.57
 7     17.54   56.77   20.57   69.52   98.86   67.58     *      81.19   60.55   91.22 PR  90.39
 8     65.95   12.77   73.57   95.25   21.87   76.21   81.19     *      10.62    0.14 PR  17.56
 9     97.86   81.98   18.89    3.90   82.10   37.70   60.55   10.62     *      99.99 PR  66.98
10     81.45    0.12   82.89   65.36   66.31   75.12   91.22    0.14   99.99     *    PR  38.67
 bigger are:   51.04
1=SUN; 2=MOON; 3=MERCURY; 4=VENUS; 5=MARS; 6=JUPITER; 7=SATURN; 8=URANUS; 9=NEPTUNE; 10=PLUTO; 11=IC;
BEGIN: year: 1900 month: 1 day: 1 hour: 0 END: year: 2100 month: 1 day: 1 hour: 0

   Statistics 4: Probability of events: dynamics
Order of the correlation: 3 ; GROUP MEMBERS: 17 ; NUMBER OF GROUPS: 100000 Accidental
selection; TEST: Number of accidental selections &gt;= correlation
 MATRIX D dynamics AS INPUT
          1       2       3       4       5       6       7       8       9      10

 1       *      -2.91   -2.18   -0.42   -3.80  -15.26    5.37    1.70   -7.78   15.31
 2     -2.91     *       3.77    3.36  -12.80   -8.80   14.69  -18.58    1.58   -3.83
 3     -2.18    3.77     *      -2.76   -4.97   -1.08   -3.45   -3.67   -1.19  -10.21
 4     -0.42    3.36   -2.76     *       6.49    9.72   -1.74    3.92   13.86  -16.21
 5     -3.80  -12.80   -4.97    6.49     *       5.19   -7.84    2.25    2.30    3.16
 6    -15.26   -8.80   -1.08    9.72    5.19     *       6.85    9.04  -20.39    8.50
 7      5.37   14.69   -3.45   -1.74   -7.84    6.85     *     -10.98  -13.33   -0.74
 8      1.70  -18.58   -3.67    3.92    2.25    9.04  -10.98     *      -5.35   36.48
 9     -7.78    1.58   -1.19   13.86    2.30  -20.39  -13.33   -5.35     *       2.94
10     15.31   -3.83  -10.21  -16.21    3.16    8.50   -0.74   36.48    2.94     *
 Matrix D of the probability of error:
```

	1	2	3	4	5	6	7	8	9	10		
1	*	61.64	78.48	57.54	69.23	94.58	28.65	43.14	78.55	6.23	PR	65.11
2	61.64	*	35.11	36.60	89.91	81.33	7.12	96.76	43.46	65.18	PR	78.40
3	78.48	35.11	*	79.12	73.98	55.30	64.89	64.81	54.93	84.70	PR	84.39
4	57.54	36.60	79.12	*	21.00	15.18	56.35	34.76	8.00	94.78	PR	26.15
5	69.23	89.91	73.98	21.00	*	30.08	79.15	40.94	40.85	38.14	PR	64.42
6	94.58	81.33	55.30	15.18	30.08	*	21.89	18.44	98.11	19.74	PR	58.72
7	28.65	7.12	64.89	56.35	79.15	21.89	*	87.15	91.52	50.20	PR	63.36
8	43.14	96.76	64.81	34.76	40.94	18.44	87.15	*	69.04	0.03	PR	31.49
9	78.55	43.46	54.93	8.00	40.85	98.11	91.52	69.04	*	34.47	PR	82.52
10	6.23	65.18	84.70	94.78	38.14	19.74	50.20	0.03	34.47	*	PR	10.71

Bigger are: 64.45

1=SUN; 2=MOON; 3=MERCURY; 4=VENUS; 5=MARS; 6=JUPITER; 7=SATURN; 8=URANUS; 9=NEPTUNE; 10=PLUTO; 11=IC;

BEGIN: year: 1900 month: 1 day: 1 hour: 0 END: year: 2100 month: 1 day: 1 hour: 0

Statistics 4: Probability of events: dynamics abs

Order of the correlation: 3 ; GROUP MEMBERS: 17 ; NUMBER OF GROUPS: 100000 Accidental selection TEST: Number of accidental selections >= correlation

MATRIX DA dynamics abs AS INPUT (absolute)

	1	2	3	4	5	6	7	8	9	10
1	*	22.32	12.25	6.58	25.12	30.67	27.75	21.37	20.15	34.72
2	22.32	*	27.12	26.67	27.76	35.99	32.12	29.44	16.60	39.57
3	12.25	27.12	*	12.42	18.77	30.76	22.74	27.67	39.31	26.86
4	6.58	26.67	12.42	*	18.60	20.39	28.03	18.73	22.03	33.76
5	25.12	27.76	18.77	18.60	*	35.11	23.19	37.91	23.54	30.78
6	30.67	35.99	30.76	20.39	35.11	*	12.56	24.36	39.14	25.84
7	27.75	32.12	22.74	28.03	23.19	12.56	*	28.54	31.30	13.28
8	21.37	29.44	27.67	18.73	37.91	24.36	28.54	*	31.71	59.96
9	20.15	16.60	39.31	22.03	23.54	39.14	31.30	31.71	*	6.49
10	34.72	39.57	26.86	33.76	30.78	25.84	13.28	59.96	6.49	*

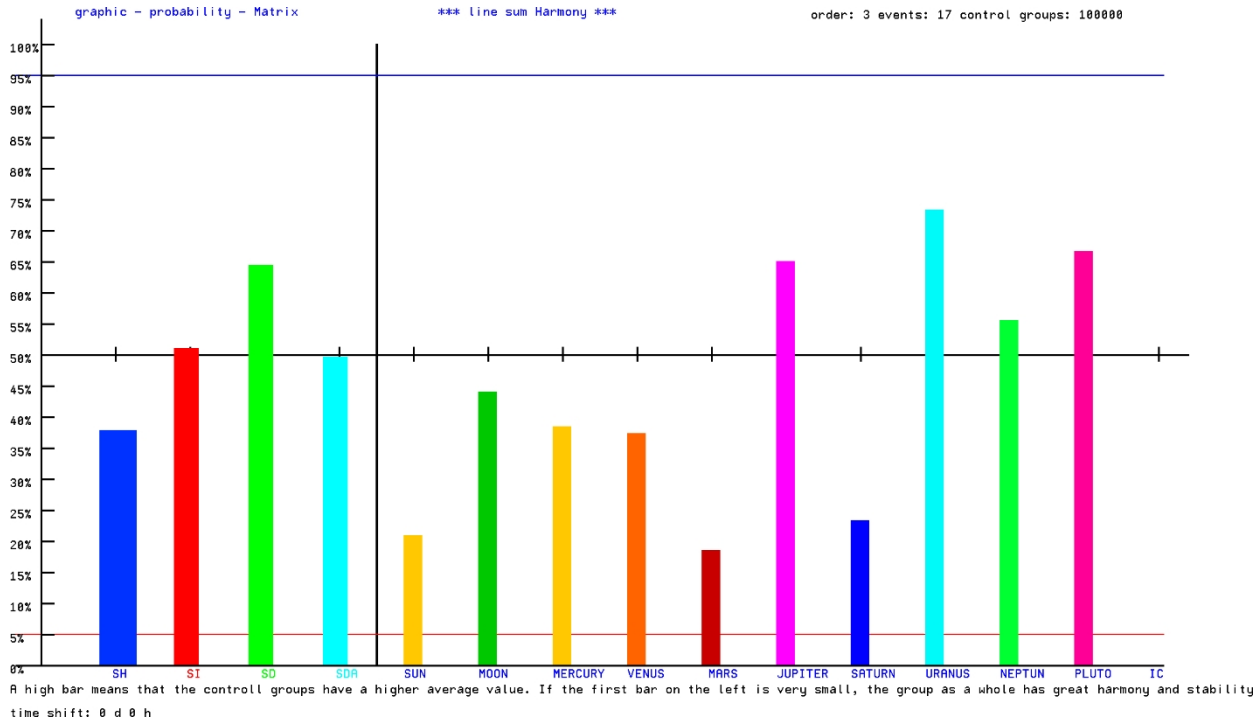
Matrix DA of the probability of error:

	1	2	3	4	5	6	7	8	9	10		
1	*	78.44	2.39	51.21	25.34	25.65	44.05	80.81	85.98	17.40	PR	53.16
2	78.44	*	53.09	55.87	49.48	14.39	28.42	40.19	96.29	7.29	PR	43.84
3	2.39	53.09	*	19.07	63.14	25.23	71.53	47.74	7.24	53.17	PR	27.09
4	51.21	55.87	19.07	*	73.06	80.74	43.59	91.18	78.21	21.63	PR	84.23
5	25.34	49.48	63.14	73.06	*	17.12	72.66	10.72	69.42	33.27	PR	37.89
6	25.65	14.39	25.23	80.74	17.12	*	99.56	67.81	7.73	58.00	PR	37.61
7	44.05	28.42	71.53	43.59	72.66	99.56	*	44.60	29.82	99.44	PR	90.32
8	80.81	40.19	47.74	91.18	10.72	67.81	44.60	*	40.21	0.02	PR	15.06
9	85.98	96.29	7.24	78.21	69.42	7.73	29.82	40.21	*	100.00	PR	80.55
10	17.40	7.29	53.17	21.63	33.27	58.00	99.44	0.02	100.00	*	PR	17.7

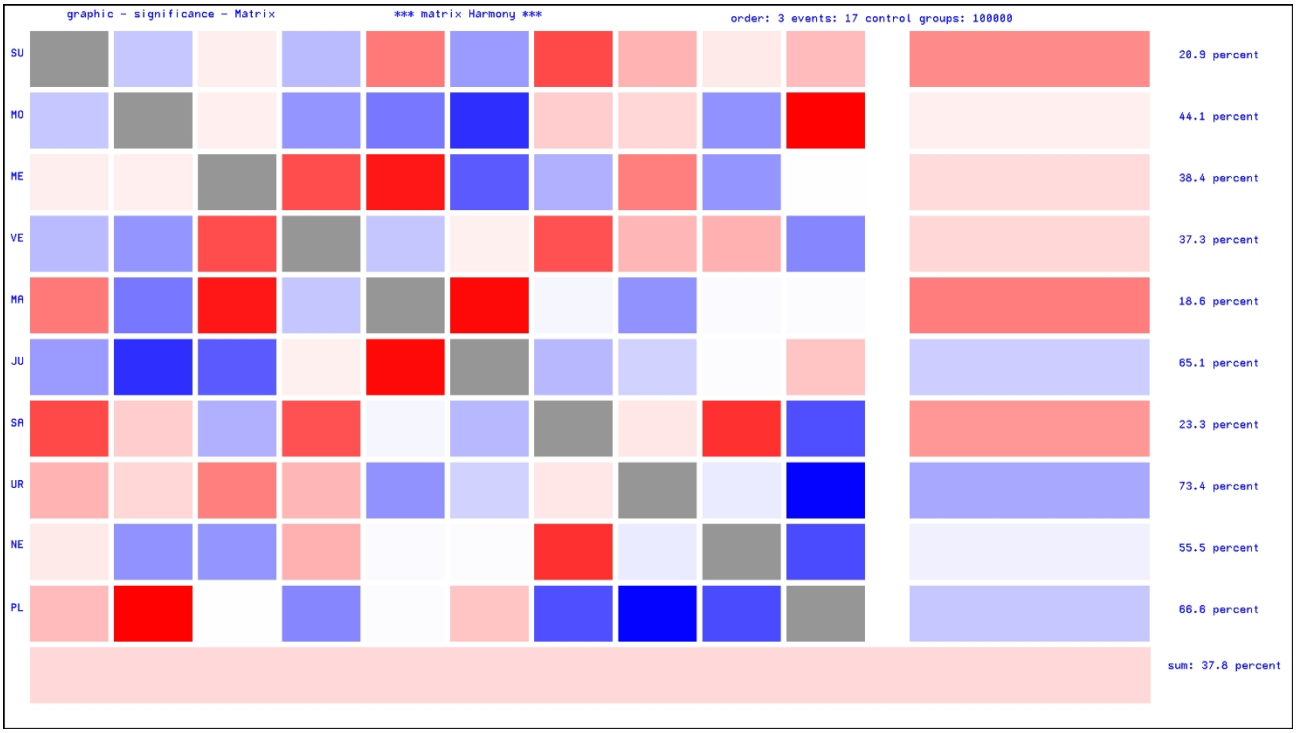
bigger are: 49.61

1=SUN; 2=MOON; 3=MERCURY; 4=VENUS; 5=MARS; 6=JUPITER; 7=SATURN; 8=URANUS; 9=NEPTUNE; 10=PLUTO; 11=IC;

BEGIN: year: 1900 month: 1 day: 1 hour: 0 END: year: 2100 month: 1 day: 1 hour: 0



Graphic field 1



Graphic field 5

IMPORTANT: The pattern was created in the previous program:

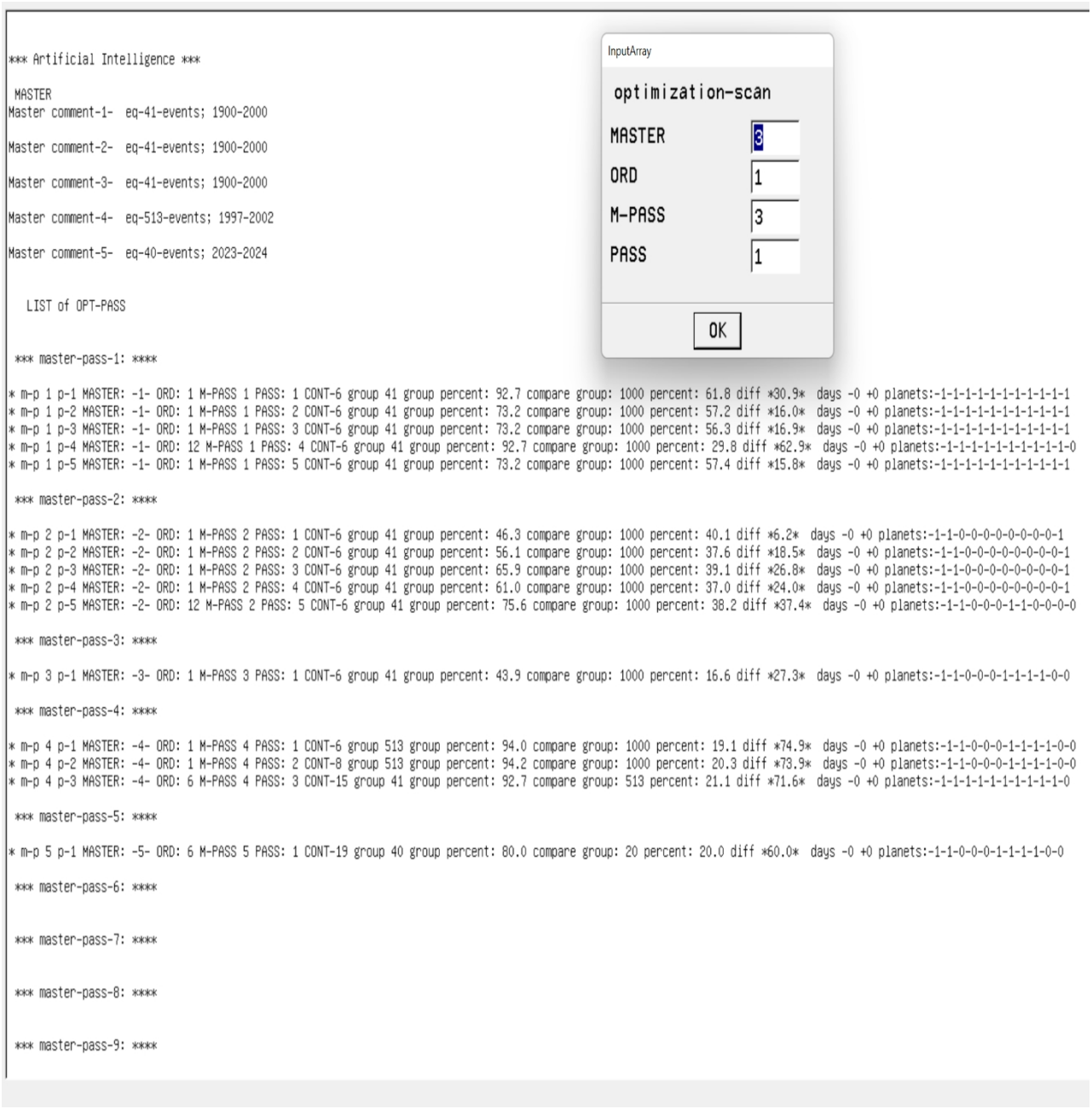
The files for the quantum physicists' pattern are now in the master-new directory:

datDA.txt	27.07.2023 10:11	TXT-Datei	1 KB
datmic1.txt	27.07.2023 10:13	TXT-Datei	1 KB
datord.txt	27.07.2023 10:13	TXT-Datei	1 KB
masterd.txt	27.07.2023 10:13	TXT-Datei	1 KB
masterda.txt	27.07.2023 10:13	TXT-Datei	1 KB
masterh.txt	27.07.2023 10:13	TXT-Datei	1 KB
masteri.txt	27.07.2023 10:13	TXT-Datei	1 KB
mastermatrixsum.txt	27.07.2023 10:11	TXT-Datei	1 KB
mastersigd.txt	27.07.2023 10:18	TXT-Datei	1 KB
mastersigda.txt	27.07.2023 10:18	TXT-Datei	1 KB
mastersigdaline.txt	27.07.2023 10:18	TXT-Datei	1 KB
mastersigdasum.txt	27.07.2023 10:18	TXT-Datei	1 KB
mastersigdline.txt	27.07.2023 10:18	TXT-Datei	1 KB
mastersigdsum.txt	27.07.2023 10:18	TXT-Datei	1 KB
mastersigh.txt	27.07.2023 10:18	TXT-Datei	1 KB
mastersighline.txt	27.07.2023 10:18	TXT-Datei	1 KB
mastersighsum.txt	27.07.2023 10:18	TXT-Datei	1 KB
mastersigi.txt	27.07.2023 10:18	TXT-Datei	1 KB
mastersigiline.txt	27.07.2023 10:18	TXT-Datei	1 KB
mastersigisum.txt	27.07.2023 10:18	TXT-Datei	1 KB
middlecont.txt	27.07.2023 09:42	TXT-Datei	1 KB
planetenreal.txt	27.07.2023 10:18	TXT-Datei	1 KB

All these files must now be moved to a free directory **OPT-MASTER/master-#/ORD-#/** .
Furthermore, the following must be copied into the directory **OPT-MASTER/master-#/** with a comment on the contents of the master and the text file **number-event.txt** containing the number of events must be entered

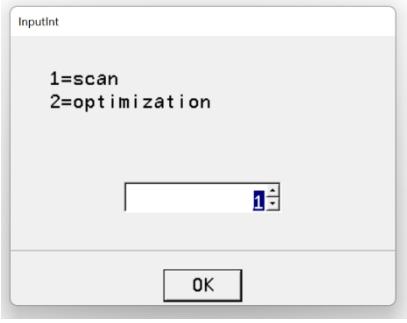
Start of menu item **5 - Artificial_Intelligence** for master optimization

A list of the currently available optimized frequency patterns appears in text field 4: Currently, 5 masters with comments are listed. The comment must be entered manually in the file OPT-MASTER/master-#/comment-ma.txt.

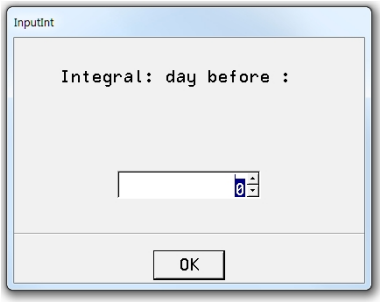


An event group (master) can be saved in 12 orders of the correlation function. The master and the order are requested in the "optimization-scan" window. The master pass (M-pass) normally has the same number as the master. Different passes can be saved under the M-pass.

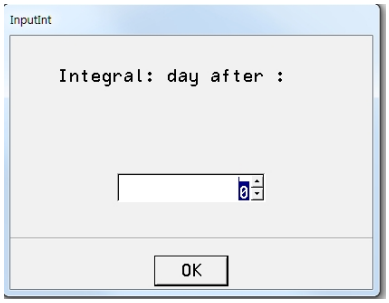
The selection window appears:

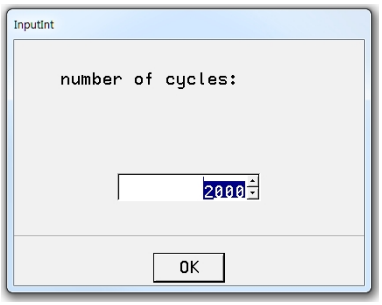


Option 2 starts the program for optimizing a pattern.



Next, you will be asked whether the optimization should cover a longer period of time. This does not make much sense in this example.

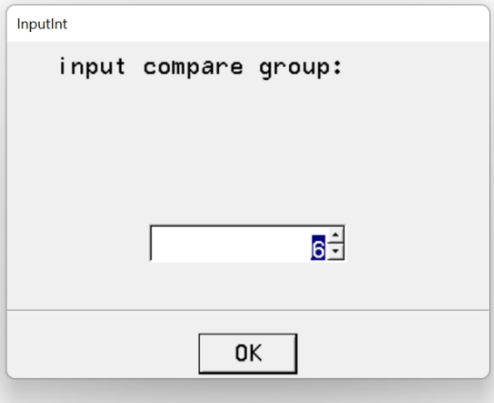




This button is used to specify the number of optimization cycles. It is advisable not to enter more than 10,000 cycles. Fewer cycles are recommended at the beginning. The calculation time can be significantly longer if both the list of groups to be optimized and the comparison group contain many events.

A list of existing comparison groups for optimization appears:

```
 Planets  -1-1-0-0-0-1-1-1-1-0-0
Degree of correlation 1
 Events per Group = 41
 Harmony of master wave:    -11.02
Energy of master wave:    525.13

*** Optimization   with dynamic DDA  ***

optimization 1 to 100
Number of groups :  41  daydiff: 0.00

++++++++++++++ LIST of the Compare-Group ++++++++++++


CONT-1:Continuum:2024 - 2025 events: 100 random

CONT-2:Continuum 2023 20 events;  no earthquakes

CONT-3:Continuum:1800 - 2100 events: 1000

CONT-4:Continuum:2024 - 2025 events: 20 random

CONT-5:Continuum 1900-2000; 1000 events;

CONT-6:Continuum 1900-2000; 1000 events;

CONT-7:Continuum  1900-2000; 1000 events;

CONT-8:Continuum  1900-2100; 1000 events;

CONT-9:Continuum 1900-2100; 1000 events;

CONT-10:Continuum 1948-2001; 1000 events;

CONT-11:Continuum  1997-2002; 1000 events;

CONT-12:Continuum  1997-2002; 1000 events;

CONT-13:Continuum:1977 - 2004 events: 1000
CONT-14:Continuum:1977 - 2004 events: 269

CONT-15:Continuum:1997 - 2002 events: 513 no earthquakes

CONT-16:Continuum:1997 - 2002 events: 1000 random

CONT-17:Continuum:2020 - 2030 events: 500
CONT-18:Continuum: 2023 events: 500

CONT-19:Continuum: 2024 - 2025 events: 20

CONT-20:Continuum: 2024 - 2025 events: 20

CONT-21:Continuum:2024 - 2025 events: 20

!!!! OPT-COMPARE/CONT-22/datgroupc.txt not exist or not closed !!!


CONT-23:Continuum: 2024 - 2025 events: 900
```



The comparison group is selected in the **input compare group** window.

The goal of optimization:

Do you want to optimize a group of highly intelligent people with a group of less intelligent people? In this case, the comparison group consists of the list of less intelligent people. The optimization will attempt to identify as many people as possible from the list of the group to be optimized and as few people as possible from the comparison group.

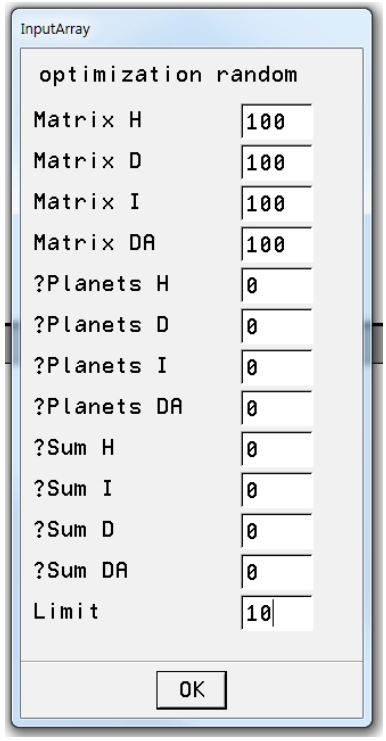
Important for optimization: The Julian data of the master must be contained in the Current_files directory. These are the files:

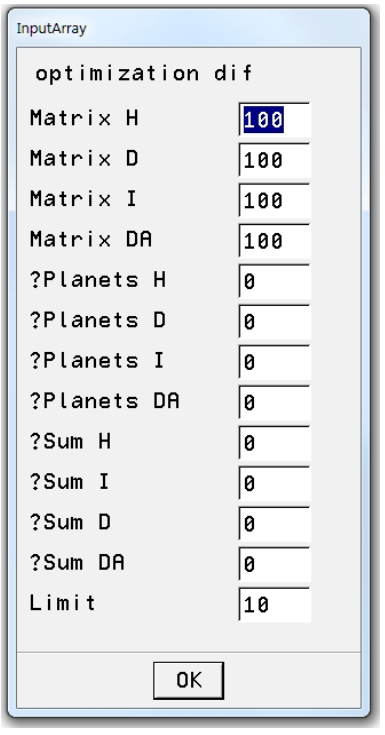
bjuliandat.txt; *(Julian dates of the master's events)*

datgroupb.txt *(number of events)*

These files can be generated in menu item **2- Event Analysis**.

A comparison group can also be created in menu item **1- Statistics 1 -Continuum**. The interval divider should not be >1000.



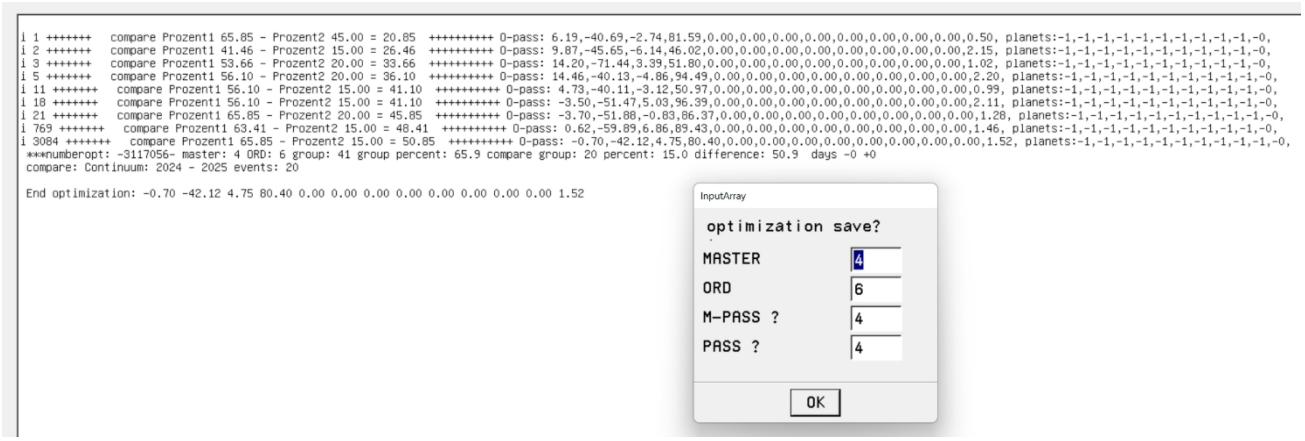


Optimization of probability:
Probability = $\mathbf{a1*Hi,j} + \mathbf{a2*Ii,j} + \mathbf{a3*Di,j} + \mathbf{a4*DAi,j}$ The coefficients a_i are determined using an optimization process. The coefficients a_i indicate the significance of the matrices for the group of events being examined. If harmony or disharmony is significant for a group, then the matrix **Hi,j** will be weighted particularly heavily.
The following assignment applies:
Hi,j - for harmony and disharmony
Ii,j - for the absolute value (energy) of the superimposed waves **Di,j** -for the speed of change of the oscillation state (1st derivative)
DAi,j - for the acceleration (force) of the change in velocity

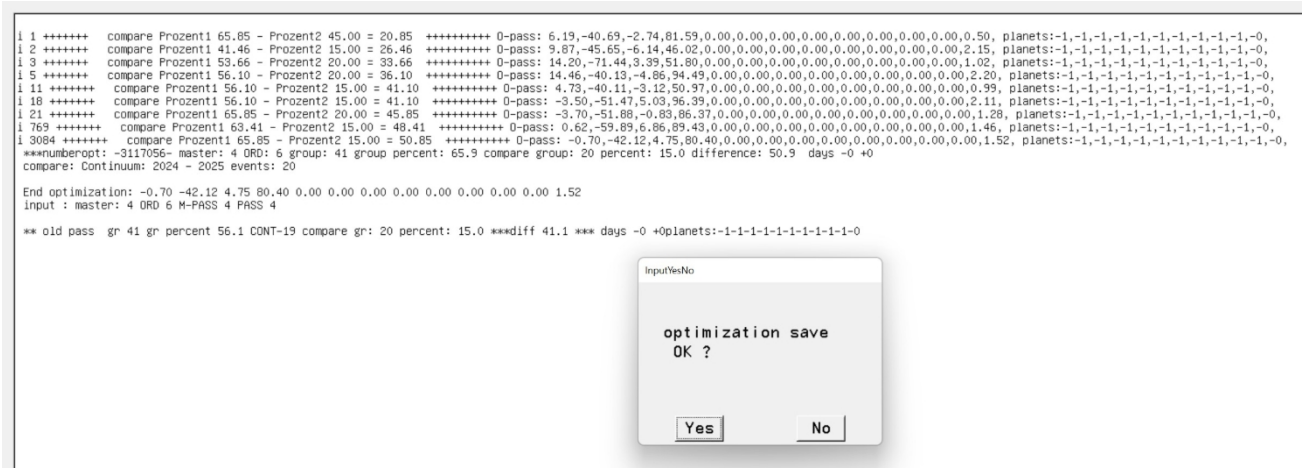
Research has shown that these four matrices yield the best optimization results. The addition of other parameters (*e.g.*, *Planets H=* , *vibration states of the planets*) is possible but does not yield better optimization results.

This table asks for the range of variation in which the optimization should take place. At the beginning, these can be the same values as the initial values.
The optimization takes place in a 4D space. If initial results for local maxima have already been achieved, these values can be smaller in order to further improve the existing maxima.

After entering this table, the optimization process begins.



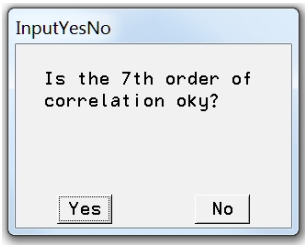
Once the optimization process is complete, you will be asked where you want to save the passport. In general, just click OK.
The system checks whether the new pass really should be saved. If available, the previous optimization process is displayed.



In the previous optimization process, a difference of 41.1 was achieved, and the current value is 50.9. The improvement can be saved. If this was the first optimization process, the result should be saved so that it can be compared with a new optimization process later.

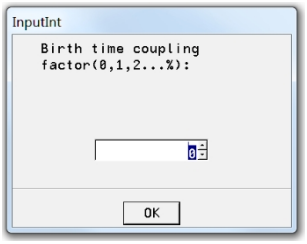
6. Planetary Fluctuations – resonance

This part of the program calculates the correlations of a period of time relative to a fixed point in time (e.g., birth time). Experience has shown that the 7th order of correlation is well suited for resonances related to individuals.

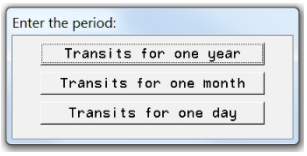


The question can be answered with "Yes" for individuals.

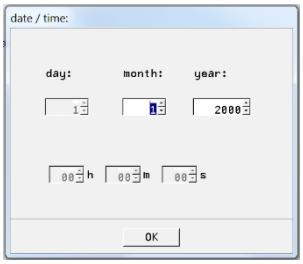
Next, the event is selected from a *.dbf file



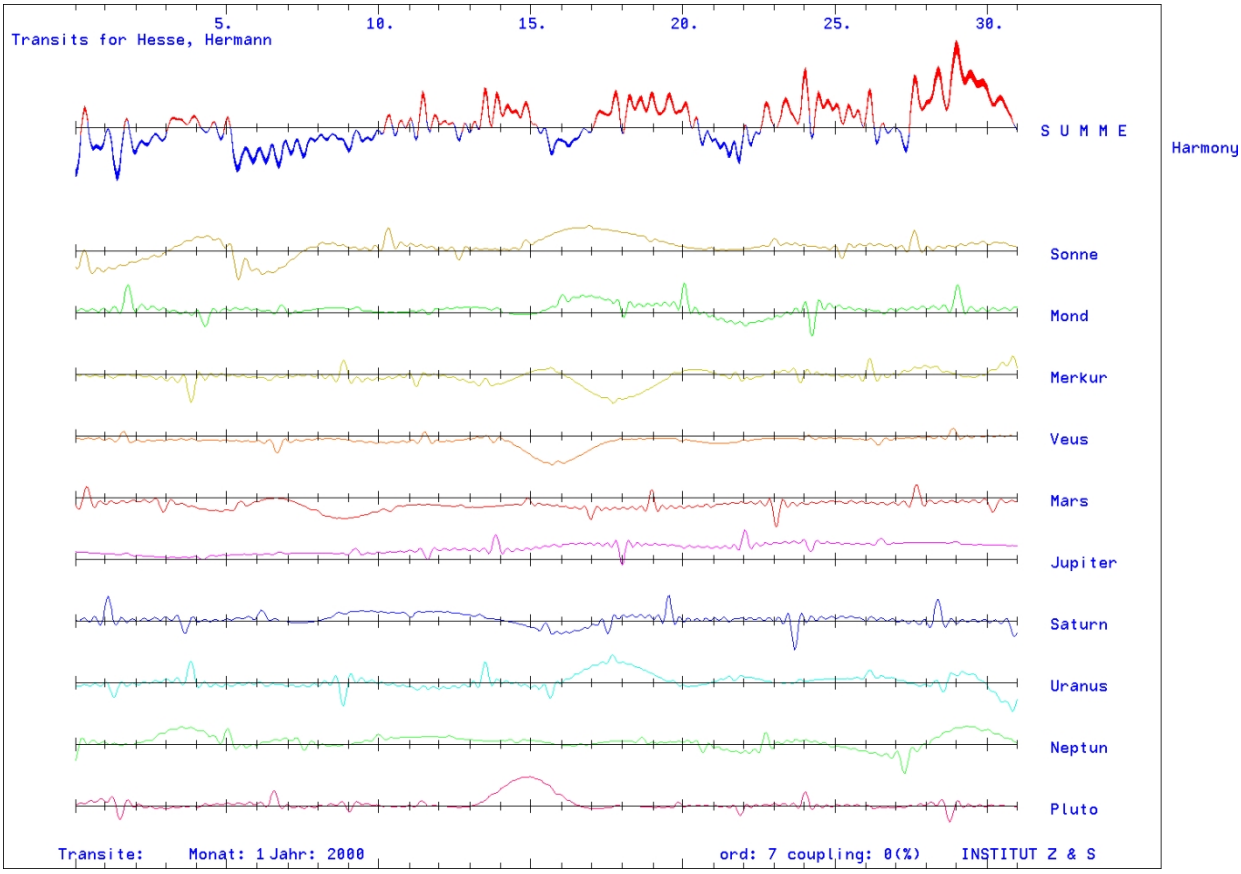
Should the resonances be linked to the qualities of the event? Experience will show when this makes sense. Initially, 0 should be selected here.



Next, the time range is defined.

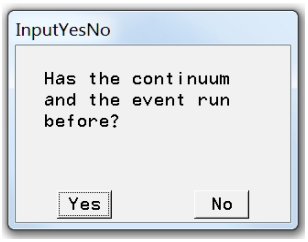


The results (curves) are shown in graphs 1 to 4
Example:



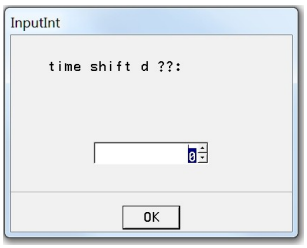
7. Resonance for probability

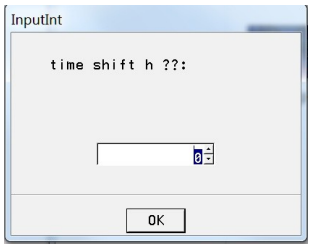
This program prepares the calculation of the probability for a group of transits.



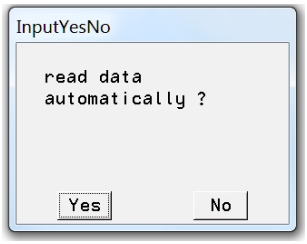
The prerequisites are programs 1. Statistics 1 – Continuum and 2. Event Analysis.

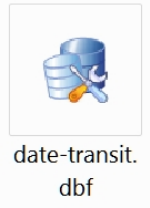
It is possible to shift the time of the transit.

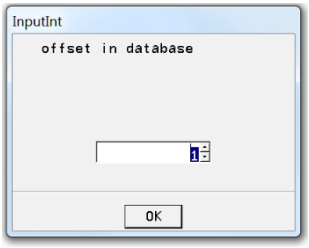




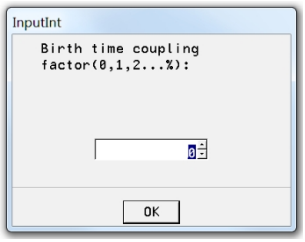
Next, the times and input mode of the transits are requested:





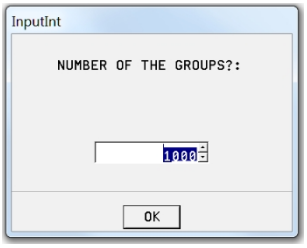


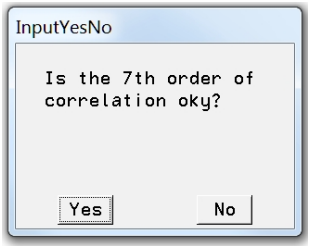
Finally, you have the option of including the quality of the reference time in the correlation.

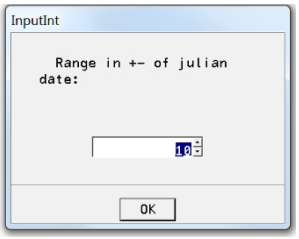


8. Resonance probability

This part of the program calculates the probability of transits by comparing them with control groups.
The group size, the order of the correlation, and the time range around the transit for the control groups can be varied here.
To repeat the calculations with different parameters, it is not necessary to call up the Resonance for probability program.

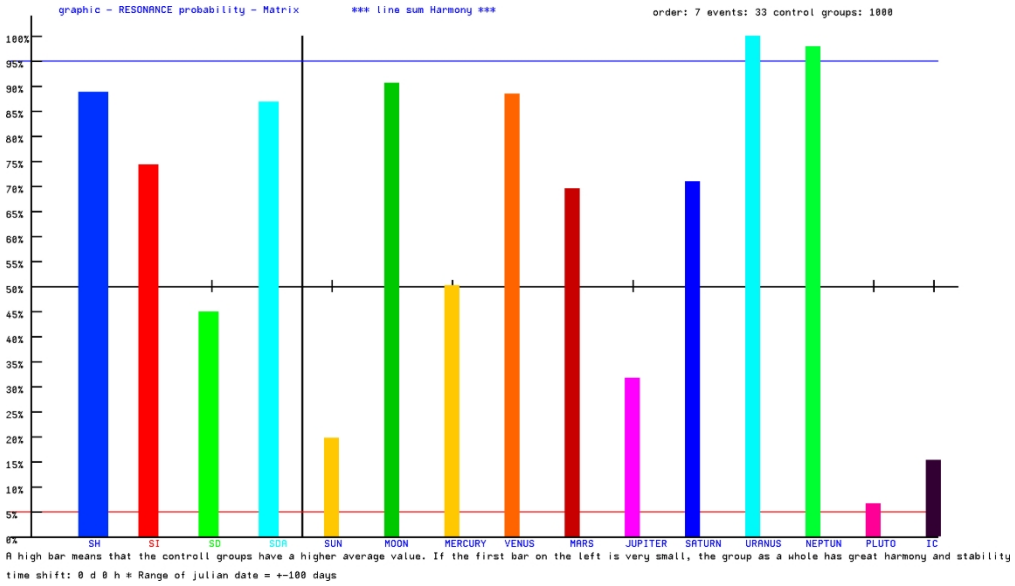






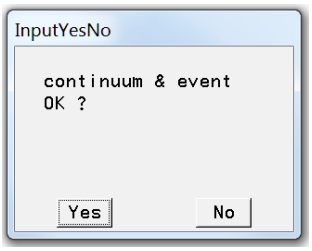
Results: Figures 1 to 4, probability matrices in text 5.

Example for graphic:



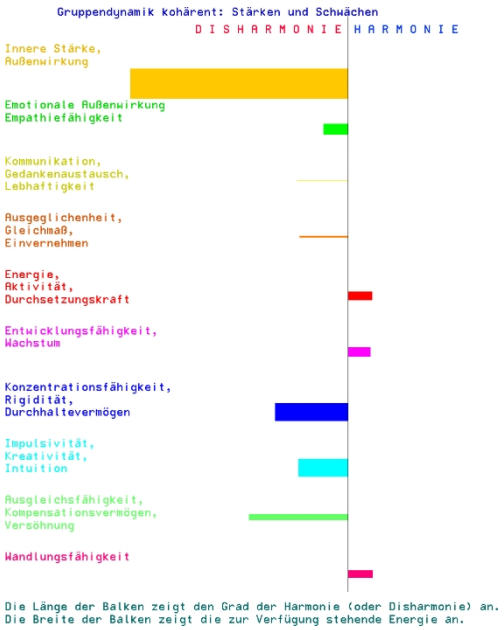
9. Team analysis

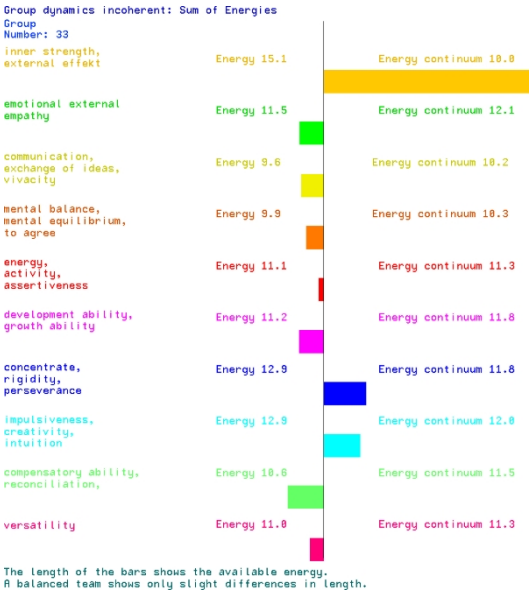
The program compares the group calculated in the second event analysis with the values of the continuum. Programs 1. Statistics 1 – Continuum and 2. Event Analysis must have been run beforehand. Correct results will only be obtained if "Yes" is selected.



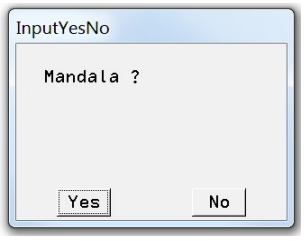
The results are shown in Figures 5 and 6 in German and English.

Example



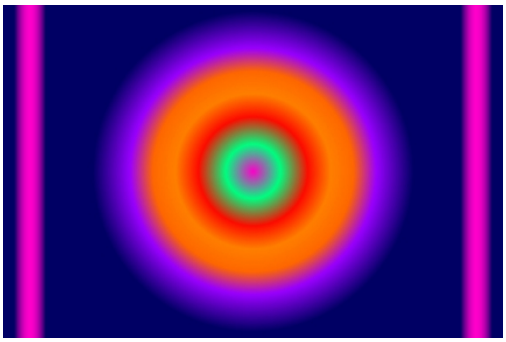


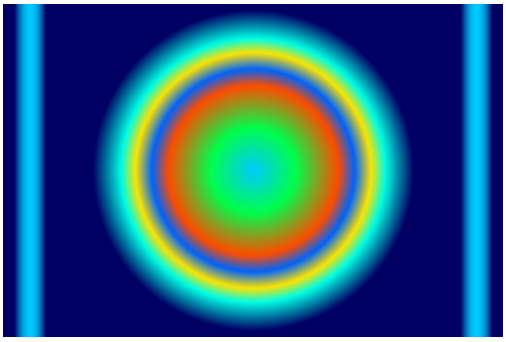
It is also possible to convert the harmonious and disharmonious qualities of the group into character colors (mandalas).



The results are shown in Text 5 and 6. The mandalas are shown in Graphics 1 and 2.

Example



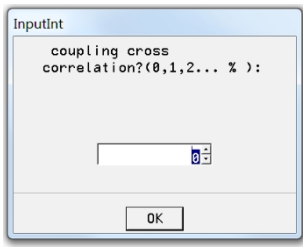


10. Biographical rhythms

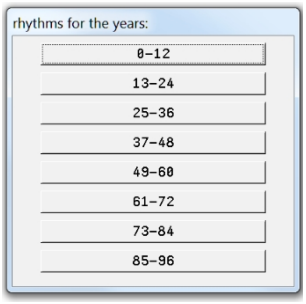
This part of the program calculates the biographical rhythms for a selected period of 12 years.

A name is selected.

Information on cross-correlation.
The value 0 means that all events (births) in a larger period have very similar rhythms (generational aspect).
The value 100 takes into account the qualities of the event and is therefore only similar in a small period around the event (strongly individual rhythm).

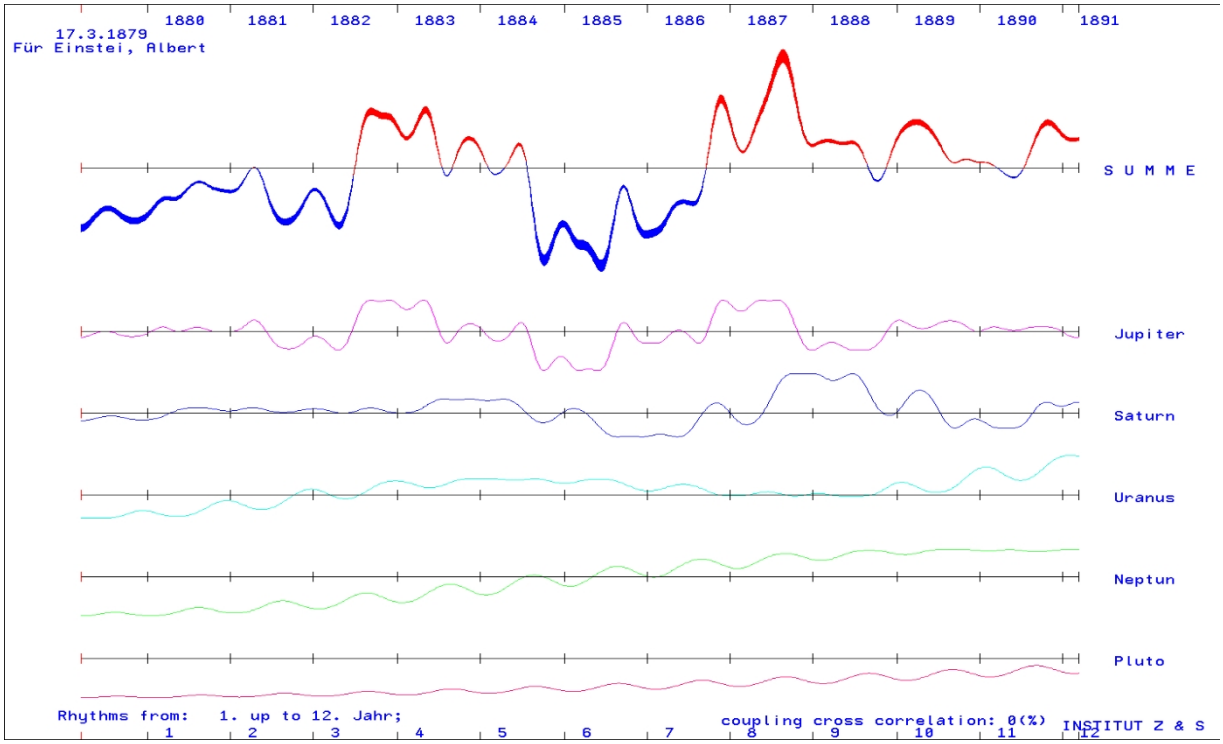


The stage of life is selected here:



Results in graph 1

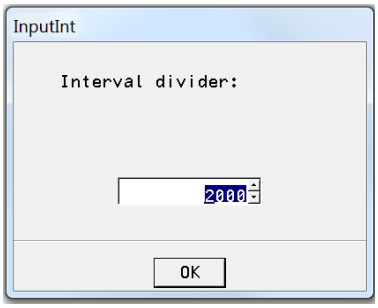
Example:



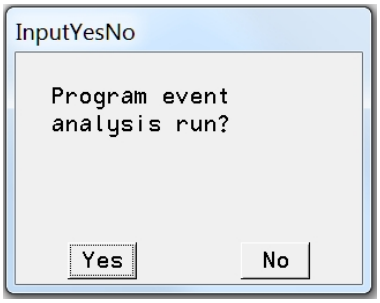
11. Planetary Fluctuations – time quality

This module calculates the correlation function for a selected period of time.

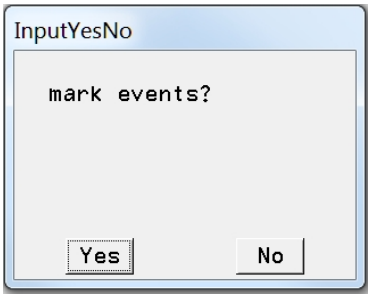
The first query determines the interval to be calculated. Please note: The resolution of the graph is limited (1920 x 1080). Therefore, it must be noted that the high frequencies (IC, Moon, Mercury, Venus) can only be calculated meaningfully for small periods of time such as days and months.

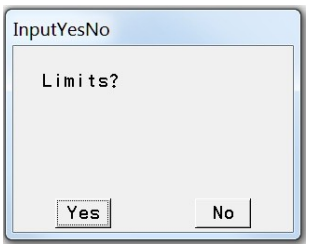


The graph has a horizontal range of 1920 bits. It is not normally necessary to increase the interval divider. However, it should not be less than 1920.



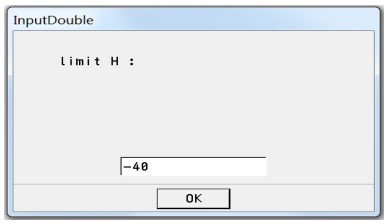
If the "event analysis" program has been run previously, the events can be displayed as vertical lines in the graph. To do this, the following input must be answered with Yes.





This module can calculate how many events exceed a limit value for the events in this period. Here, it may be useful to select a larger "Interval divider"
(up to 100,000).

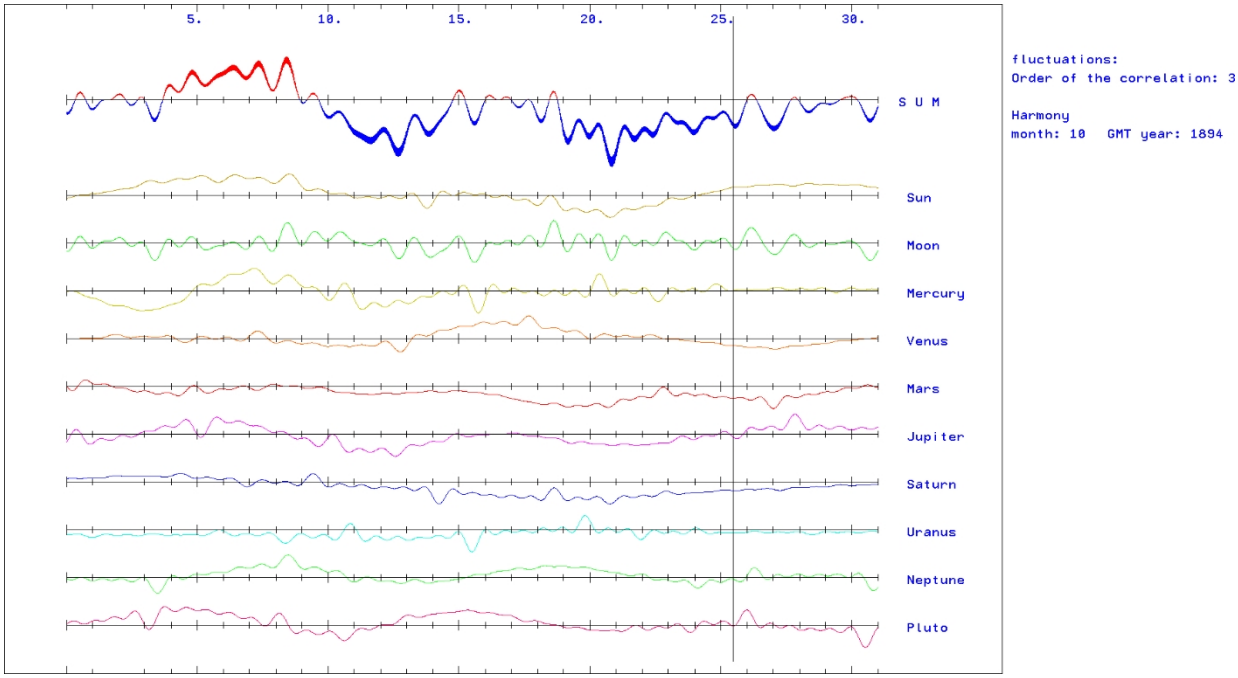
The limit values for H, then for I, D, and DA are queried.



The curves are shown in Graph 1 to 4, the limits in Text 1 to Text 4.
The numbers of the events in the list and the value of the matrix are specified.

Example:

```
year 1911.00 month 6.00 day 15.00 hour 1.00 minute 59.00
i=37  event H    -41.319
year 1911.00 month 1.00 day 3.00 hour 15.00 minute 24.00
i=39  event H    -38.072

** limit H: -40.00 events: 2 *  1 events over limit **
```

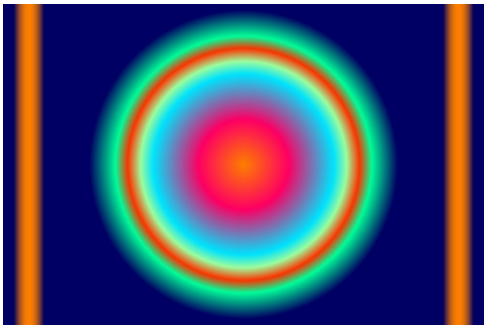


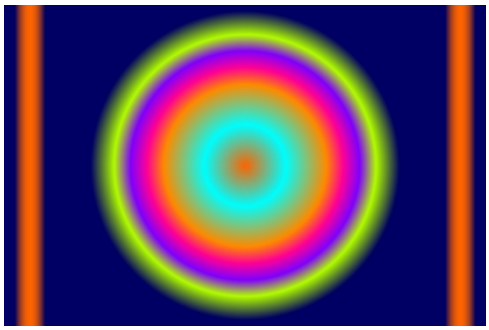
The vertical black line indicates an event that occurs during this period.

12. Art color transformation

For an event (birthday), the program converts the harmonic (Graphic 4) and disharmonic (Graphic 5) correlations into character colors.

Example

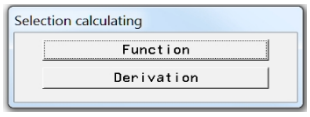




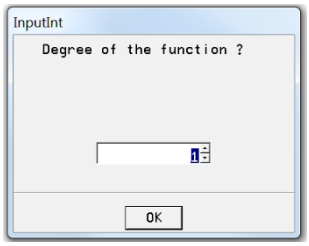
13. Correlation function

The program calculates the correlation function.

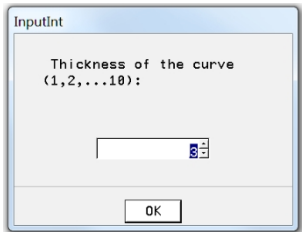
You are asked whether the function or the first derivative should be calculated.



Then you are asked for the order of the correlation. The order can be any value from 1 to 12.

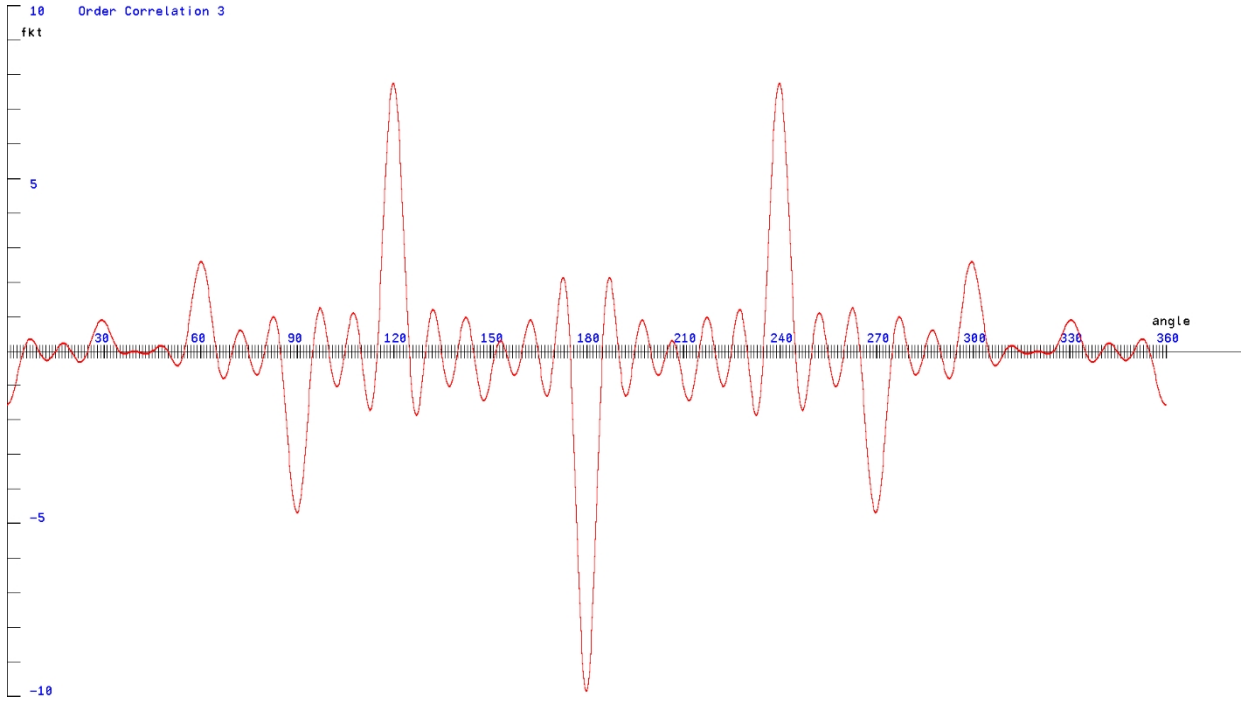


For better visualization, the thickness of the curve can also be specified.



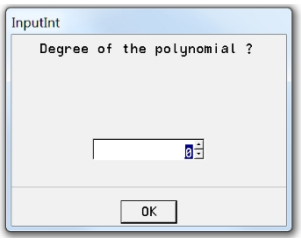
The values of the curve are in Text 1, the curve is in Graphic 1.

Example:

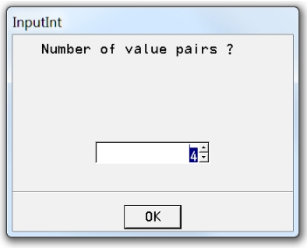


14. Optimal curve

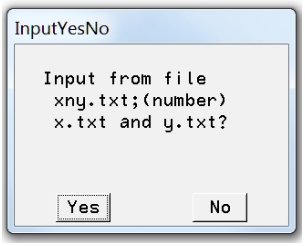
This utility program calculates a Gaussian fitting curve from given pairs of values. First, the degree of the polynomial is specified.



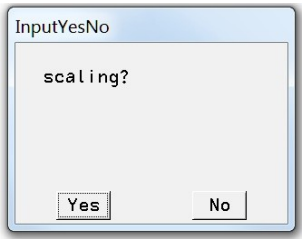
The minimum number of value pairs is then displayed. If there are more value pairs, the number for individual entry must be specified here.



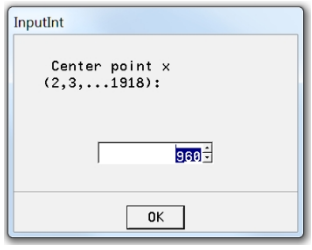
It is better to write the value pairs in *.txt files beforehand. Examples are available in the file directory.
xny.txt (number of value pairs) x.txt
and y.txt (value pair x/y)
The following always applies: one line per value!

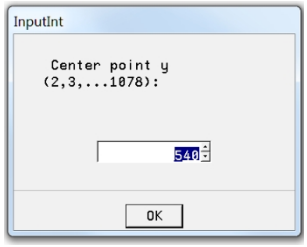


For a better display, it is possible to stretch or compress both the x and y values by a factor. If this is necessary, answer Yes.

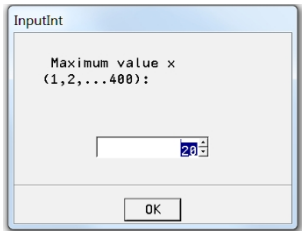


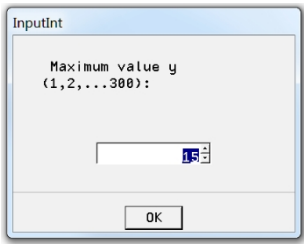
Next, the origin of the coordinate system is defined.



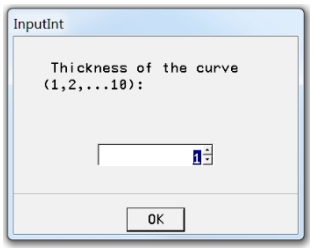


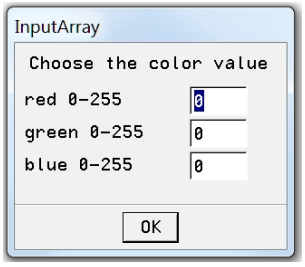
Specifying the maximum values allows the curve to be better adjusted to the graph.



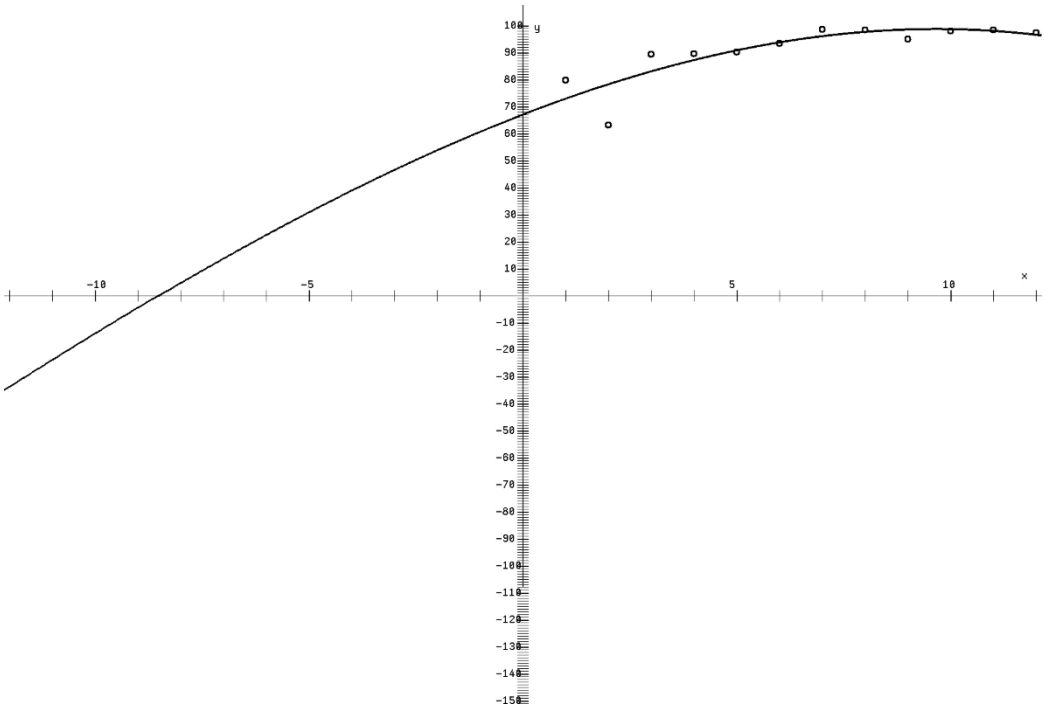


These entries determine the thickness and color of the curve.





The results are shown in Text 1 and Graph 1.
Example:

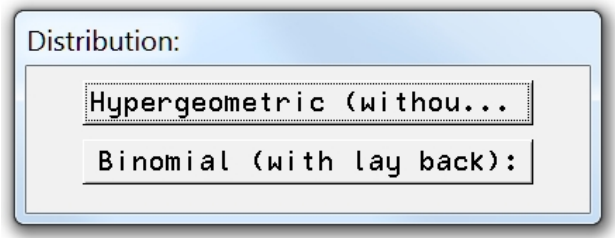


15. Urn model toy

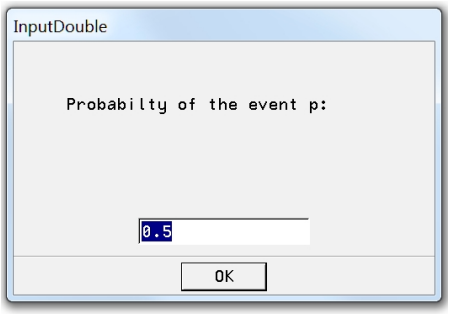
This utility program requires knowledge of probability theory. It queries the urn

model.

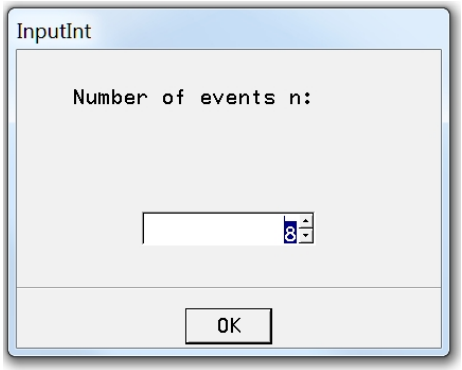
1. Hypergeometric (colored balls in the urn, drawn without replacing the balls)
2. Binomial distribution (with replacement)



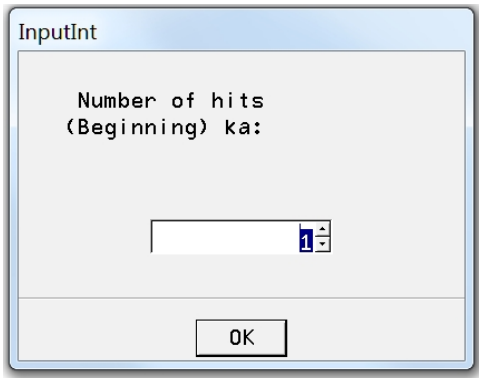
The second urn model is required to check the probability matrices.
It starts with a query about the probability of the event. *(If the significance correlations are to be examined, then the probability is 0.95 or 0.05.)*

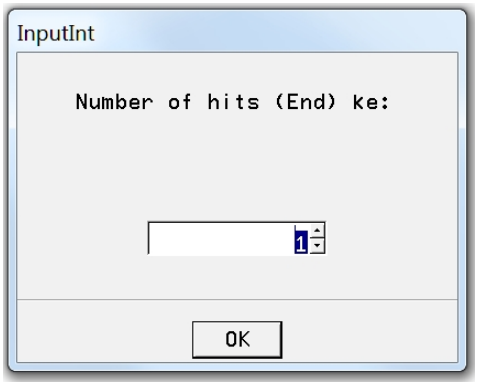


How many events are there in total?



How many events should be encountered? (-from to-)





The results are in Text 1.

Example:

Binomial (with lay back)
p: 0.500000 n: 8 ka: 1 ke: 3
j: 1 a: 0.031250
j: 2 a: 0.109375
j: 3 a: 0.218750
k: 1 ke: 3 Probability in range: 0.359375
Expected value: 4.000000 Variance: 2.000000

16. Classic transits

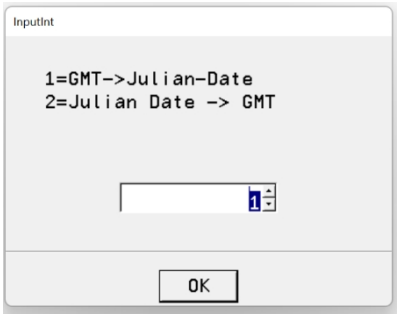
This part of the program calculates transits according to classical astrology (aspects) and is self-explanatory for astrologers. It is comparable to program part 6, Planetary Fluctuations – Resonances.

Example:

```
Month*Day*Hour * TRANSITS * Orbis of aspects: 1.000000
 1    5    1       sx  Sat-  qd  Wed-  qd  Sat-  sx So-Ju qd Ne-Ur op Sa-Pl tr Me-AC
                       Sun       Mon       Mon
 1    10    20     sx  Sat-  sx  Wed-  qd Th-Mon op  Wed-  op  Mon-  Sat-Pl
                       Sun       Wed               Sat       Sun
 1    1     1      sx  Sat-  sx  Mon-  qd  Thu-  Sat Fri-  tr  Wed-  op Sat-Pl op Mon-Mk qd Mon-AC kj
                       Sun       Mon       Mon       Wed       Fri  Mon-MC
 1    2     7      sx  Sat-  qd  Wed-  sx  Wed-  qd Ne-Ma sx Ju-Mk tr Ju-MC
                       Sun       Mon       Mon
 1    26    12     sx Ju-Mo kj  Mon-  qd Th-Mon qd  Sat-  qd Th-Th sx Wed-Thu tr Wed-Thu
                             Fri                       Wed
 1    31    17     tr Ma-Mo qd Th-Mon qd  Sat-  qd Th-Sat kj  Mon-  tr Mon-AC op Mon-MC
                                       Wed                     Wed
 2    5    2       qd  Sun-  qd  Wed-  qd  Sat-
                       Fri       Mon       Wed
 2    11    3      qd  Sun-  qd  Sat-  sx  Sun-  qd Th-Mon kj Mon-Ur
                       Wed       Wed       Mon
 2    16    8      qd  Mon-  tr  Sat-  sx  Fri-  sx  Mon-  qd  Sat-  qd Wed-Mon
                       Wed       Mon       Fri       Fri       Fri
 2    2      1     tr Ne-Me qd  Sat-  qd Th-Mon
                             Fri
 2    2     19     sx  Wed-  qd  Wed-  sx Th-Wed tr Ne-Me sx  Mon-  op Wed-Fri
                       Sun       Sun                     Thu
 3    4    0       qd So-So tr  Ne-Me  sx Me-Ma  tr  Ju-Ju  tr  Me-Ur  tr Sa-Ur
 3    9    5       tr Ne-Me tr  Ju-Ju  tr  Sa-Ur  tr Mon-AC
```

17. Julian date

This part of the program can be used to calculate the Julian date. This is necessary if events are to be marked in a graphics field.

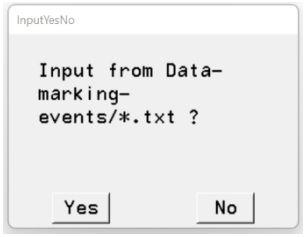


17.1 GMT→ Julian date

If 1 is selected in the window, the Julian date is calculated from the following files in the Data-marking-events/ directory.

members.txt * Timezone.txt * Year.txt * Month.txt * Day.txt * Hour.txt * Minute.txt

If the files are present in the directory, click Yes in the adjacent window.

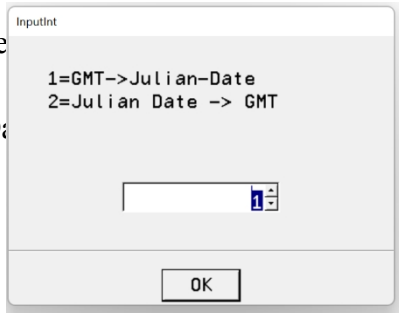


The number of events found is displayed for verification purposes.

Click OK to display the imported data in the menu. The Julian dates are stored in the file ajulian.txt.

```
Calculation of the Julian date from GMT
If not GMT, enter time zone
The Julian date is stored in the file ajulian.txt
The number of members of the groups is in the file members.txt

 20
Timezone
0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
Year
2023  2023  2023  2023  2023  2023  2023  2023  2023  2023  2023  2023  2023  2023  2023  2023  2023  2023  2023  2023
Month
1  2  5  12  5  2  4  7  6  12  11  8  5  1  4  1  12  11  10  9
Day
9  6  19  2  10  6  24  16  15  7  8  28  20  18  2  8  3  24  7  8
Hour
17  1  2  14  16  10  20  6  18  12  4  19  1  6  18  12  19  9  8  9
Minute
47  17  57  37  2  24  0  48  6  56  53  55  51  6  4  32  49  5  40  9
0 2023-1-9-17-47-zz0
1 2023-2-6-1-17-zz0
2 2023-5-19-2-57-zz0
3 2023-12-2-14-37-zz0
4 2023-5-10-16-2-zz0
5 2023-2-6-10-24-zz0
6 2023-4-24-20-0-zz0
7 2023-7-16-6-48-zz0
8 2023-6-15-18-6-zz0
9 2023-12-7-12-56-zz0
10 2023-11-8-4-53-zz0
11 2023-8-28-19-55-zz0
12 2023-5-20-1-51-zz0
13 2023-1-18-6-6-zz0
14 2023-4-2-18-4-zz0
15 2023-1-8-12-32-zz0
16 2023-12-3-19-49-zz0
17 2023-11-24-9-5-zz0
18 2023-10-7-8-40-zz0
19 2023-9-8-9-9-zz0
```

17.2 Julian date→ GMT



If you enter a 2 in the adjacent window, the Julian date will be converted to GMT.
The files members.txt and ajulian.txt must be present in the Da marking-events/ directory.

The results are displayed in text field 1.

```
members: 20

0 Juliandate 2459954.240970  2023-1-9-17-46
1 Juliandate 2459981.553470  2023-2-6-1-16
2 Juliandate 2460083.622920  2023-5-19-2-57
3 Juliandate 2460281.109030  2023-12-2-14-37
4 Juliandate 2460075.168060  2023-5-10-16-2
5 Juliandate 2459981.933330  2023-2-6-10-23
6 Juliandate 2460059.333330  2023-4-24-19-59
7 Juliandate 2460141.783330  2023-7-16-6-47
8 Juliandate 2460111.254170  2023-6-15-18-6
9 Juliandate 2460286.038890  2023-12-7-12-56
10 Juliandate 2460256.703470  2023-11-8-4-52
11 Juliandate 2460185.329860  2023-8-28-19-54
12 Juliandate 2460084.577080  2023-5-20-1-50
13 Juliandate 2459962.754170  2023-1-18-6-6
14 Juliandate 2460037.252780  2023-4-2-18-4
15 Juliandate 2459953.022220  2023-1-8-12-31
16 Juliandate 2460282.325690  2023-12-3-19-48
17 Juliandate 2460272.878470  2023-11-24-9-4
18 Juliandate 2460224.861110  2023-10-7-8-39
19 Juliandate 2460195.881250  2023-9-8-9-9
```

This GMT data can now also be saved in the Data-marking-events/ directory as text files: members.txt * Timezone.txt * Year.txt * Month.txt * Day.txt * Hour.txt * Minute.txt * Timezone.txt

We hope you enjoy using the program.
If you encounter any problems or have suggestions for improvement, please contact:
michael.nitsche@lettris.de
or visit the homepage: www.planetare-korrelation.eu