



ASTRO-RESEARCH CENTER 'ZENITH'

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" SUMER " a program for BABYLONIAN ASTRONOMY 3D

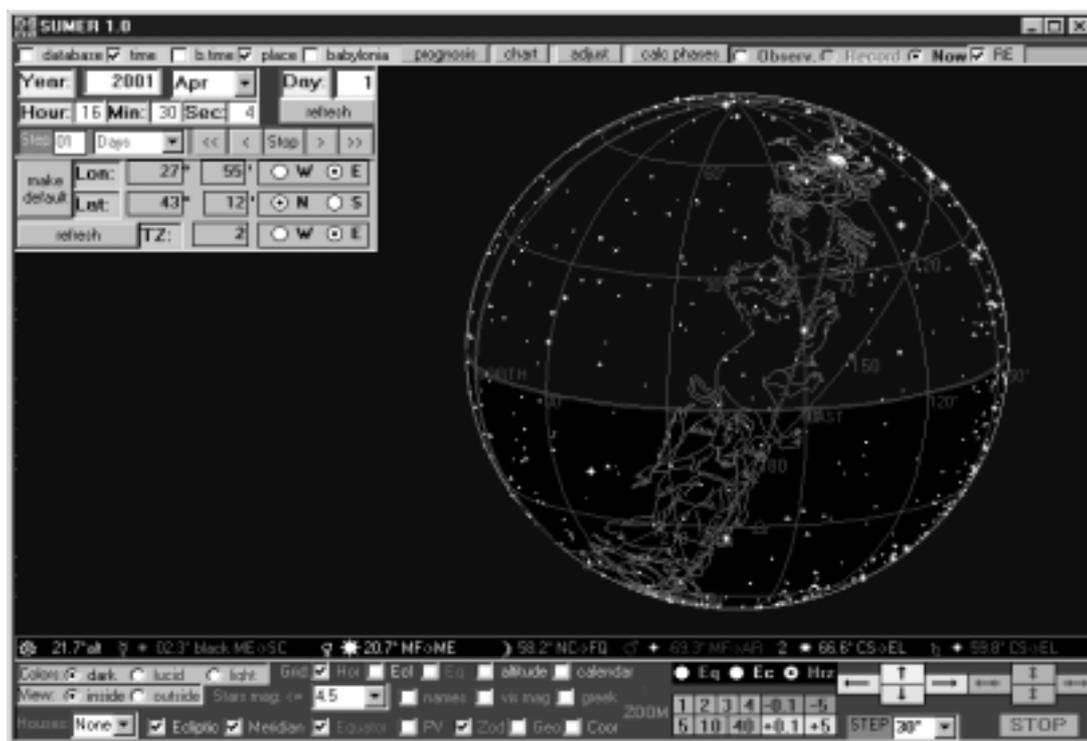


HOW TO USE

First, please read the manual for the program 'BABYLONIA' and the book 'THE BABYLONIAN ASTRONOMY & ASTROLOGY' or the correspondance lectures. Major part (all modules that deals with the Babylonian Astrology) of the program 'Babylonia' are included into SUMER.

THE FIRST SCREEN

Below is the first screen you will see when the program pops up.

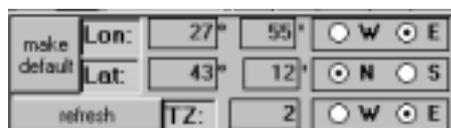


What you see in the left right corner are:



TIME PANEL (GREGORIAN)

This is for input of time. The 'REFRESH' button you click after you input time and want to see the updated celstial globe or other info. The 'STEP' field is to choose step for the animation buttons at right of it. They are '>' (one step) and '>>' (automatic) to move vorward in time. The '<' and '<<' are for backwards in time. With 'STOP' you stop the animation if it's in automatic mode.

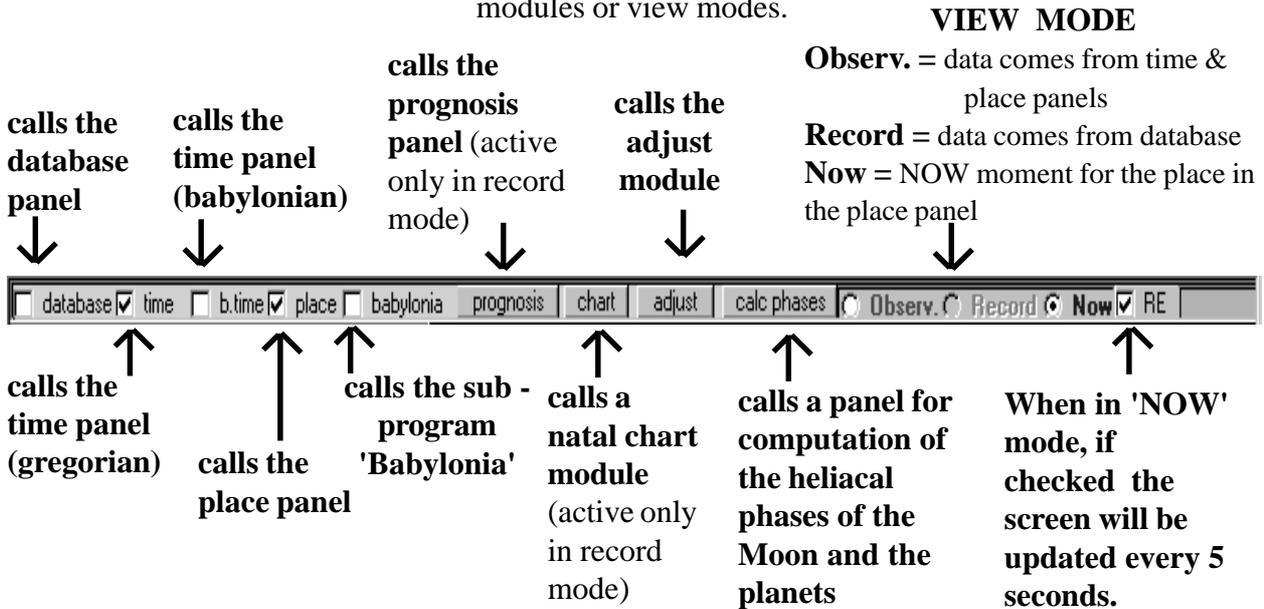


PLACE PANEL

This is for input of place. The 'REFRESH' button you click after you input new place. The 'MAKE DEFAULT' button is to make this data default when you start the program next time.

PANELS CONTROL

This is the long thin panel at the top of the screen. You call and switch off different panels, other modules or view modes.



NOTE !!!

If you input gregorian dates BC, the rule is:

1 AD = 1; 1 BC = 0; 2 BC = -1;

X BC = -(X-1).

If you want 183 BC, you should input -182.

DATABASE PANEL



If you click to call the database panel, it will show up as below.

DATABASES-LIST

Click to choose a database (**babplac.mdb** has all bab. horoscopes from the book by F.Rochberg; **bg*** is for Bulgaria; **eu*** is for Europe, **jp*** is for Japan; **us*** is for USA.



RECORDS-LIST

After you open a database you should click and then double-click a record in order to open it. Then below will show the name of the record and the coordinates of the place.

You should double-click the database in order to open it. If successful then the record list in the right top corner will fill with records.

After you open a record, then if you want to see the 3D chart of that record, you should click on the record view mode.



THE DATABASE PANEL

after opening a database and a record

Click the 'OPEN' button to open a database that is in another directory. Click the 'NEW' button to create a new database. Click the 'DEL' button to delete the database that is chosen.



Click the 'NEW' button to input new record. Write the name of the record, then click the 'CITY-BASE' button and choose a city. Then input the time in the time-panel and click 'SAVE' to save the new record. Click the 'DEL' to delete the chosen record.

calls the CITY-BASE panel where you can choose, add, edit or delete a city.

choose if Day-Light Saving time

choose a default house-system for the chart module



NOTE !!! When you input the time of birth for the new record, switch off the REFRESH option if you are in 'NOW' mode. Otherwise the time in the time panel will be changed to the present moment.

NOTE !!! When you create a new database, please name it with the key-word *PLAC* so that the program can recognize and load it. Otherwise you won't be able to open it.

NOTE !!! When you delete a record, the program automatically goes to 'NOW' mode.

THE CITY-BASE PANEL

CITY-LIST

Click to choose a city for the new record. Then double-click or click 'OK' to transfer the data into the place panel.



Click 'ADD' to add a city. Click 'EDIT' to edit a chosen city. Click 'DELETE' to delete the chosen city. Click 'OK' to transfer the chosen city into the place panel when you are inputting a new record

Arrow to convert from GREG. to BAB. dates



BAB TIME PANEL

Arrow to convert from BAB. to GREG. dates

Babylonian ERA options:

- g:** Gregorian
- artx1:** Artaxerxes1
- artx2:** Artaxerxes2
- nab:** Nabonassar
- d:** Darius
- sc:** Seleucid
- arsc:** Arsacid



Refresh the screen after you input date/time of interest

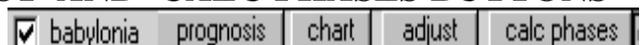
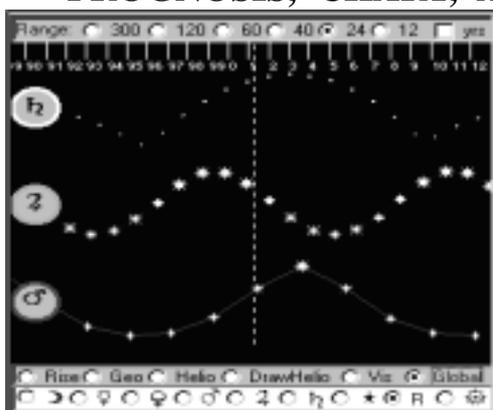
Panel for animation

NOTE !!! The gregorian era option (g) still means that the babylonian year starts with Nisan 1st.

I.e. 25 March 2001 = 30 Addar **2000**; 26 March 2001 = 1 Nisan **2001**

BABYLONIA PANEL

PROGNOSIS, CHART, ADJUST AND CALC PHASES BUTTONS



For these options you should check the help-brochure for the program 'Babylonia'

There is one new option in the Babylonia Panel: GLOBAL. This is for computations of the global Babylonian cycles of the planets. They are measured with the brightness of the planet when in opposition with the Sun. This is on the Y-axis. On the X-axis is the time. You can change the years-range from the top. Wherever you point the mouse, will pop up the time for that place.

THE 3D CONTROL PANEL at the bottom of the program



NOTE !!! Whenever you click with the mouse on the 3D celestial sphere, the program will center on that point.



The first row shows the current altitude and heliacal babylonian phase of the planets. MF-->AR means that the planet is between MF and AR phases. Check the book or the lectures. If the planet is in grey color, it's heliacally invisible for the current time. FOR MERCURY: 'black cycle' means that it's invisible during the whole current cycle. 'bm' (black morning) means invisible as a morning star. 'be' (black evening) means invisible as an evening star.

changes the colors of the sphere

**draws grids: Hor: horizontal
Ecl: ecliptical, Eq: equatorial**

draws altitude circles every 5 degrees and colors them

calls a calendar

shows the greek letter and constellation of the stars

*shows a panel that contains all coordinates
You point on the sphere with the mouse: the coordinates change.*

Shows a map of Earth projected onto the celestial sphere. Should be in 'inside' View to see well.

Shows drawings of the zodiacal constellations

PV: Prime Vertical

shows the circle in question

shows the stars above horizon with their real brightness (decreased by extinction)

shows starts <= of the magnitude in the drop-down box

shows the names of the stars

View the sphere from inside (as from Earth) OR from outside

Shows the house circles on the sphere

How you see the sphere: along which axis.

Eq: equator...

Zoom

Step to move the sphere with

Move the sphere automatically with the given step.

Stop the automatic movement of the sphere ('>>' or '<<')

Move the sphere only once