

Sol's Violin

A Work for Music of the Spheres

31 July - 31 August, 2003.
IMA, Brisbane.

Andrew Kettle
2003

an audio composition of 521 hours in its entirety. Tones are established for the 9 planets based on the geophysical properties of planetary mass and orbital period.

$$\text{Frequency} = ((1/\text{Orbit}) \times \text{weight}) / 2^{48}$$

Tone is manipulated by astronomical data specific to Brisbane between 31 July - 31 August, 2003.

A Planets rising and setting times controls the volume envelope with Geocentric position attributed to modulation.

A simple installation of distributed sound consists of envelopes of volume and modulation in 4 1/2 weeks blocks.

$$♂ = \frac{1}{7600521.6 \text{ sec}} \times 0.3322 \times 10^{24} = 4.344438676 \text{ NO}^{16}$$

$$\div 2^{47} = 308.691 \text{ hz}$$

$$\div 2^{48} = 154.345$$

$$♀ \left(\frac{1}{224.701 \text{ d}} \times 4.8685 \times 10^{24} \right) \div 2^{47} = 1781.831 \text{ hz}$$

$$\div 2^{48} = 890.915$$

$$\otimes \left(\frac{1}{365.256 \text{ d}} \times 5.9736 \times 10^{24} \right) \div 2^{47} = 1344.978 \text{ hz}$$

$$\div 2^{48} = 672.489$$

$$\odot \left(\frac{1}{686.980 \text{ d}} \times 0.64185 \times 10^{24} \right) \div 2^{47} = 76.836 \text{ hz}$$

$$\div 2^{48} = 38.418$$

$$♀ \left(\frac{1}{4332.589 \text{ d}} \times 18.9866 \times 10^{24} \right) \div 2^{47} = 36038.146$$

$$\div 2^{48} = 18019.073$$

$$\ddagger \left(\frac{1}{10759.22 \text{ d}} \times 568.46 \times 10^{24} \right) \div 2^{47} = 43450.58$$

$$\div 2^{48} = 2172.529$$

$$\ddagger \left(\frac{1}{30685.4 \text{ d}} \times 86.832 \times 10^{24} \right) \div 2^{47} = 232.715$$

$$\div 2^{48} = 116.357$$

$$\ddagger \left(\frac{1}{60189 \text{ d}} \times 102.43 \times 10^{24} \right) \div 2^{47} = 139.954$$

$$\div 2^{48} = 69.977$$

49

SOLAR 48th Octave (2⁴⁸)

♂	= 154.345 hz	(77.172)
♀	= 890.915 hz	(445.457)
⊗	= 672.489 hz	(336.244)
⊙	= 38.418 hz	(19.209)
♀	= 18019.073 hz	(9009.536)
‡	= 2172.529 hz	(1086.264)
‡	= 116.357 hz	(58.178)
‡	= 69.977 hz	(34.988)

2ND AUGUST (SATURDAY).

⊙ 6:29 - 17:20 +17.56N

③ 9:11 - 21:15 +05.36N

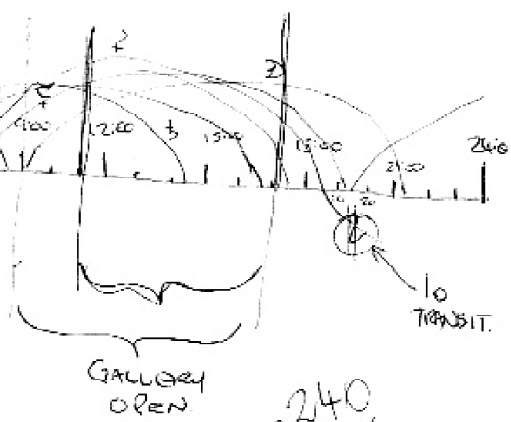
♂ 7:49 - 19:11 +10.30N

♀ 6:17 - 16:56 +20.00N

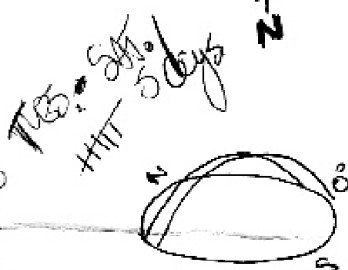
♂ 19:30 - 8:35 -13.32S

♀ 7:23 - 18:27 +14.01N

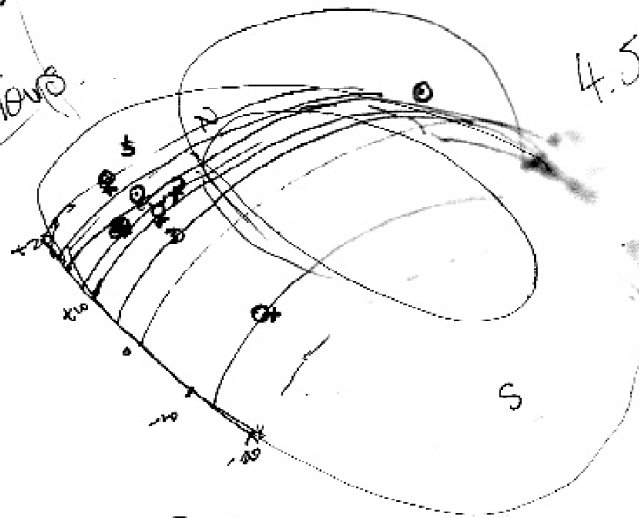
♂ 19:15.10 TR.
 ♀ 2:57 - 8:42 +22.28.09
 ♂ 4:27 - 14:32



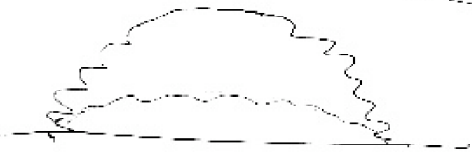
6.94 days
 10,000.
 66.66 hours



2240
 6
 1440
 6
 19.11

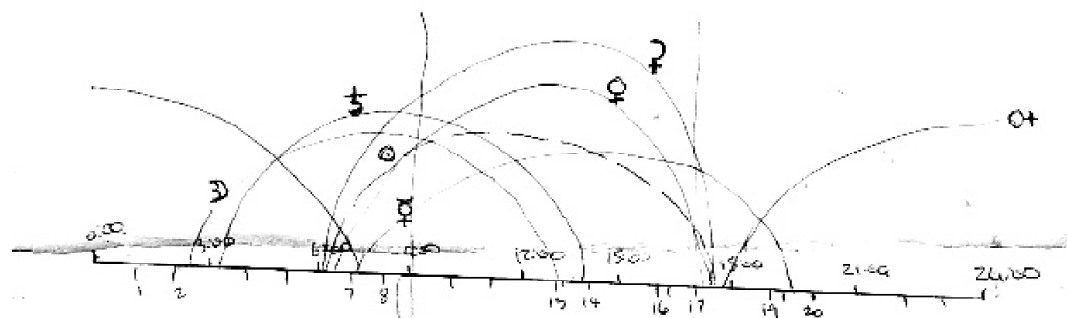


4.56 7.11
 55.56
 60
 356
 2200



23 AUGUST (SATURDAY)

- ⊙ 6:12 - 17:30 +11.40N
- ⊕ 2:39 - 15:00 +26.29N
- ♀ 7:16 - 19:25 -00.58S
- ♀ 6:21 - 17:34 +12.32N
- ⊕ 17:51 - 7:04 -15.20S
- ♀ 6:15 - 17:25 +12.35N
- ♂ 3:14 13:40 +22.20 N.



Cause
OPEN.

