

# SYMBOLS for ORCUS



Variations on a theme of 'Pluto Up-Side-Down'!!! This reflects the astronomy, as the orbit of Orcus 'mirrors' the orbit of Pluto in an amazingly precise way.

# ORCUS EPHEMERIS

You will use mainly the first few columns from the left, up to ZODIAC  
Computed 10.2009 by Melanie Reinhart, with RIYAL.

[www.expreso.co.cr](http://www.expreso.co.cr) for free download.

May be freely shared.

ORCUS	UT	ZODIAC lon	iau	lat	dec	gdist	velocity	helio	hdist	Ang
1 Jan 1900	0 00 00	15Pi24'48"	Peg	20n02	12n43	30.905	0 01 16	17Pi12	30.53	1°30'
1 Jan 1901	0 00 00	17Pi53'58"	Peg	20n11	13n47	30.901	0 01 11	19Pi43	30.57	1°56'
1 Jan 1902	0 00 00	20Pi23'23"	Peg	20n18	14n50	30.906	0 01 06	22Pi15	30.62	2°21'
1 Jan 1903	0 00 00	22Pi52'51"	Peg	20n22	15n51	30.919	0 01 00	24Pi46	30.67	2°43'
1 Jan 1904	0 00 00	25Pi22'14"	Peg	20n25	16n51	30.940	0 00 54	27Pi16	30.74	3°05'
31 Dec 1904	0 00 00	27Pi51'15"	Peg	20n26	17n50	30.968	0 00 48	29Pi47	30.81	3°27'
31 Dec 1905	0 00 00	0Ar19'45"	Peg	20n25	18n47	31.004	0 00 42	2Ar16	30.89	3°49'
31 Dec 1906	0 00 00	2Ar47'31"	Peg	20n21	19n43	31.047	0 00 36	4Ar44	30.97	4°13'
31 Dec 1907	0 00 00	5Ar14'24"	Peg	20n16	20n36	31.100	0 00 30	7Ar11	31.07	4°37'
30 Dec 1908	0 00 00	7Ar40'19"	Peg	20n09	21n27	31.161	0 00 24	9Ar36	31.17	5°03'
30 Dec 1909	0 00 00	10Ar05'10"	Peg	19n59	22n17	31.231	0 00 19	12Ar00	31.29	5°28'
30 Dec 1910	0 00 00	12Ar28'52"	And	19n48	23n03	31.310	0 00 13	14Ar23	31.41	5°53'
30 Dec 1911	0 00 00	14Ar51'22"	And	19n35	23n48	31.398	0 00 07	16Ar44	31.54	6°17'
29 Dec 1912	0 00 00	17Ar12'37"	And	19n20	24n30	31.494	0 00 01	19Ar04	31.67	6°40'
29 Dec 1913	0 00 00	19Ar32'31"	And	19n03	25n10	31.599	-0 00 04	21Ar22	31.82	7°01'
29 Dec 1914	0 00 00	21Ar51'00"	Psc	18n45	25n48	31.710	-0 00 09	23Ar38	31.97	7°20'
29 Dec 1915	0 00 00	24Ar07'57"	Psc	18n26	26n23	31.828	-0 00 14	25Ar53	32.13	7°37'
28 Dec 1916	0 00 00	26Ar23'14"	Psc	18n05	26n55	31.952	-0 00 19	28Ar06	32.29	7°53'
28 Dec 1917	0 00 00	28Ar36'44"	Psc	17n42	27n25	32.082	-0 00 24	0Ta17	32.46	8°09'
28 Dec 1918	0 00 00	0Ta48'18"	Psc	17n19	27n53	32.217	-0 00 29	2Ta26	32.63	8°26'
28 Dec 1919	0 00 00	2Ta57'55"	Tri	16n54	28n17	32.358	-0 00 33	4Ta33	32.81	8°44'
27 Dec 1920	0 00 00	5Ta05'31"	Tri	16n28	28n39	32.505	-0 00 37	6Ta38	32.99	9°02'

27 Dec 1921	0 00 00	7Ta11'08"	Tri	16n02	28n59	32.659	-0 00 41	8Ta40	33.18	9°21'
27 Dec 1922	0 00 00	9Ta14'49"	Tri	15n34	29n15	32.820	-0 00 45	10Ta41	33.37	9°40'
27 Dec 1923	0 00 00	11Ta16'38"	Tri	15n05	29n29	32.986	-0 00 48	12Ta40	33.57	9°59'
26 Dec 1924	0 00 00	13Ta16'37"	Tri	14n36	29n41	33.159	-0 00 52	14Ta37	33.77	10°16'
26 Dec 1925	0 00 00	15Ta14'53"	Ari	14n06	29n50	33.338	-0 00 55	16Ta32	33.98	10°31'
26 Dec 1926	0 00 00	17Ta11'28"	Ari	13n35	29n57	33.522	-0 00 58	18Ta25	34.19	10°44'
26 Dec 1927	0 00 00	19Ta06'22"	Ari	13n04	30n02	33.709	-0 01 00	20Ta17	34.40	10°54'
25 Dec 1928	0 00 00	20Ta59'35"	Ari	12n33	30n04	33.900	-0 01 03	22Ta06	34.62	11°03'
25 Dec 1929	0 00 00	22Ta51'05"	Ari	12n01	30n05	34.093	-0 01 05	23Ta55	34.84	11°11'
25 Dec 1930	0 00 00	24Ta40'49"	Ari	11n29	30n03	34.289	-0 01 07	25Ta41	35.06	11°19'
25 Dec 1931	0 00 00	26Ta28'46"	Ari	10n56	29n59	34.488	-0 01 09	27Ta26	35.28	11°28'
24 Dec 1932	0 00 00	28Ta14'54"	Tau	10n23	29n53	34.689	-0 01 11	29Ta08	35.50	11°38'
24 Dec 1933	0 00 00	29Ta59'17"	Tau	9n50	29n45	34.893	-0 01 12	0Ge49	35.72	11°49'
24 Dec 1934	0 00 00	1Ge41'59"	Tau	9n17	29n36	35.101	-0 01 14	2Ge29	35.95	12°00'
24 Dec 1935	0 00 00	3Ge23'03"	Tau	8n44	29n24	35.312	-0 01 15	4Ge07	36.17	12°12'
23 Dec 1936	0 00 00	5Ge02'34"	Tau	8n11	29n11	35.526	-0 01 16	5Ge43	36.40	12°22'
23 Dec 1937	0 00 00	6Ge40'39"	Tau	7n38	28n57	35.743	-0 01 17	7Ge18	36.64	12°30'
23 Dec 1938	0 00 00	8Ge17'22"	Tau	7n05	28n41	35.963	-0 01 18	8Ge52	36.87	12°36'
23 Dec 1939	0 00 00	9Ge52'46"	Tau	6n32	28n24	36.184	-0 01 19	10Ge24	37.10	12°40'
22 Dec 1940	0 00 00	11Ge26'55"	Tau	5n59	28n05	36.405	-0 01 19	11Ge56	37.33	12°40'
22 Dec 1941	0 00 00	12Ge59'48"	Tau	5n26	27n46	36.626	-0 01 20	13Ge26	37.57	12°40'
22 Dec 1942	0 00 00	14Ge31'23"	Tau	4n54	27n25	36.847	-0 01 20	14Ge54	37.79	12°40'
22 Dec 1943	0 00 00	16Ge01'41"	Tau	4n22	27n03	37.067	-0 01 20	16Ge22	38.02	12°40'
21 Dec 1944	0 00 00	17Ge30'42"	Tau	3n50	26n40	37.287	-0 01 21	17Ge48	38.25	12°42'
21 Dec 1945	0 00 00	18Ge58'28"	Tau	3n18	26n16	37.507	-0 01 21	19Ge13	38.48	12°46'
21 Dec 1946	0 00 00	20Ge25'02"	Tau	2n46	25n52	37.728	-0 01 21	20Ge37	38.70	12°50'
21 Dec 1947	0 00 00	21Ge50'29"	Tau	2n15	25n26	37.950	-0 01 21	22Ge00	38.93	12°54'
20 Dec 1948	0 00 00	23Ge14'53"	Tau	1n44	25n00	38.172	-0 01 21	23Ge22	39.15	12°59'
20 Dec 1949	0 00 00	24Ge38'17"	Tau	1n13	24n33	38.395	-0 01 20	24Ge43	39.38	13°02'
20 Dec 1950	0 00 00	26Ge00'47"	Tau	0n42	24n06	38.619	-0 01 20	26Ge03	39.60	13°03'
20 Dec 1951	0 00 00	27Ge22'27"	Tau	0n12	23n38	38.842	-0 01 20	27Ge22	39.83	13°01'
19 Dec 1952	0 00 00	28Ge43'17"	Tau	0s17	23n09	39.064	-0 01 19	28Ge40	40.05	12°56'
19 Dec 1953	0 00 00	0Ca03'16"	Gem	0s47	22n40	39.285	-0 01 19	29Ge58	40.27	12°50'
19 Dec 1954	0 00 00	1Ca22'23"	Gem	1s16	22n10	39.503	-0 01 18	1Ca15	40.48	12°44'
19 Dec 1955	0 00 00	2Ca40'36"	Gem	1s45	21n40	39.718	-0 01 18	2Ca31	40.70	12°38'
18 Dec 1956	0 00 00	3Ca57'54"	Ori	2s13	21n10	39.932	-0 01 17	3Ca46	40.91	12°34'
18 Dec 1957	0 00 00	5Ca14'18"	Gem	2s41	20n39	40.145	-0 01 16	5Ca00	41.11	12°31'
18 Dec 1958	0 00 00	6Ca29'51"	Gem	3s09	20n08	40.356	-0 01 16	6Ca14	41.32	12°30'

18	Dec	1959	0 00 00	7Ca44'36"	Gem	3s36	19n37	40.566	-0 01 15	7Ca27	41.53	12°30'
17	Dec	1960	0 00 00	8Ca58'38"	Gem	4s03	19n06	40.776	-0 01 14	8Ca39	41.73	12°30'
17	Dec	1961	0 00 00	10Ca12'01"	Gem	4s29	18n34	40.985	-0 01 13	9Ca50	41.93	12°29'
17	Dec	1962	0 00 00	11Ca24'52"	Gem	4s56	18n03	41.194	-0 01 12	11Ca01	42.13	12°26'
17	Dec	1963	0 00 00	12Ca37'14"	Gem	5s21	17n31	41.401	-0 01 12	12Ca12	42.33	12°20'
16	Dec	1964	0 00 00	13Ca49'09"	Gem	5s47	16n59	41.607	-0 01 11	13Ca22	42.53	12°11'
16	Dec	1965	0 00 00	15Ca00'39"	Gem	6s12	16n27	41.809	-0 01 10	14Ca32	42.72	11°59'
16	Dec	1966	0 00 00	16Ca11'40"	Gem	6s36	15n54	42.008	-0 01 09	15Ca41	42.91	11°48'
16	Dec	1967	0 00 00	17Ca22'09"	Gem	7s00	15n22	42.203	-0 01 07	16Ca50	43.10	11°36'
15	Dec	1968	0 00 00	18Ca32'06"	Gem	7s24	14n50	42.395	-0 01 06	17Ca58	43.28	11°27'
15	Dec	1969	0 00 00	19Ca41'29"	Gem	7s48	14n17	42.584	-0 01 05	19Ca06	43.46	11°18'
15	Dec	1970	0 00 00	20Ca50'19"	Gem	8s11	13n45	42.771	-0 01 04	20Ca13	43.63	11°12'
15	Dec	1971	0 00 00	21Ca58'37"	Gem	8s33	13n12	42.956	-0 01 03	21Ca20	43.80	11°06'
14	Dec	1972	0 00 00	23Ca06'24"	Gem	8s56	12n40	43.138	-0 01 02	22Ca26	43.98	11°01'
14	Dec	1973	0 00 00	24Ca13'46"	CMi	9s17	12n07	43.320	-0 01 01	23Ca32	44.14	10°56'
14	Dec	1974	0 00 00	25Ca20'44"	CMi	9s39	11n35	43.500	-0 00 59	24Ca37	44.31	10°49'
14	Dec	1975	0 00 00	26Ca27'23"	CMi	10s00	11n02	43.677	-0 00 58	25Ca43	44.47	10°40'
13	Dec	1976	0 00 00	27Ca33'46"	CMi	10s21	10n30	43.852	-0 00 57	26Ca48	44.64	10°26'
13	Dec	1977	0 00 00	28Ca39'52"	Cnc	10s41	9n57	44.023	-0 00 55	27Ca52	44.79	10°11'
13	Dec	1978	0 00 00	29Ca45'40"	CMi	11s01	9n25	44.190	-0 00 54	28Ca57	44.94	9°55'
13	Dec	1979	0 00 00	0Le51'10"	Cnc	11s21	8n53	44.352	-0 00 53	0Le01	45.09	9°39'
12	Dec	1980	0 00 00	1Le56'18"	Cnc	11s40	8n20	44.510	-0 00 51	1Le05	45.23	9°25'
12	Dec	1981	0 00 00	3Le01'06"	Cnc	11s59	7n48	44.665	-0 00 50	2Le09	45.37	9°12'
12	Dec	1982	0 00 00	4Le05'33"	Cnc	12s18	7n16	44.816	-0 00 49	3Le12	45.51	9°02'
12	Dec	1983	0 00 00	5Le09'41"	Cnc	12s36	6n44	44.965	-0 00 47	4Le15	45.64	8°53'
11	Dec	1984	0 00 00	6Le13'31"	Hya	12s54	6n12	45.111	-0 00 46	5Le18	45.77	8°45'
11	Dec	1985	0 00 00	7Le17'06"	Hya	13s11	5n41	45.256	-0 00 44	6Le20	45.90	8°38'
11	Dec	1986	0 00 00	8Le20'31"	Hya	13s28	5n09	45.398	-0 00 43	7Le23	46.02	8°30'
11	Dec	1987	0 00 00	9Le23'47"	Hya	13s45	4n37	45.538	-0 00 41	8Le25	46.15	8°19'
10	Dec	1988	0 00 00	10Le26'57"	Hya	14s01	4n06	45.675	-0 00 40	9Le27	46.27	8°04'
10	Dec	1989	0 00 00	11Le30'00"	Hya	14s17	3n35	45.808	-0 00 38	10Le29	46.38	7°47'
10	Dec	1990	0 00 00	12Le32'55"	Hya	14s33	3n03	45.937	-0 00 37	11Le31	46.49	7°29'
10	Dec	1991	0 00 00	13Le35'39"	Hya	14s48	2n32	46.061	-0 00 35	12Le33	46.60	7°11'
9	Dec	1992	0 00 00	14Le38'08"	Hya	15s03	2n01	46.181	-0 00 34	13Le34	46.70	6°54'
9	Dec	1993	0 00 00	15Le40'23"	Hya	15s18	1n30	46.297	-0 00 32	14Le36	46.80	6°38'
9	Dec	1994	0 00 00	16Le42'23"	Hya	15s32	0n59	46.409	-0 00 31	15Le37	46.89	6°24'
9	Dec	1995	0 00 00	17Le44'07"	Hya	15s46	0n28	46.518	-0 00 29	16Le38	46.98	6°13'
8	Dec	1996	0 00 00	18Le45'40"	Hya	16s00	0s03	46.625	-0 00 28	17Le39	47.07	6°03'

8 Dec 1997	0 00 00	19Le47'03"	Hya	16s13	0s33	46.729	-0 00 26	18Le40	47.15	5°54'
8 Dec 1998	0 00 00	20Le48'22"	Hya	16s26	1s03	46.830	-0 00 24	19Le41	47.24	5°44'
8 Dec 1999	0 00 00	21Le49'41"	Hya	16s38	1s33	46.929	-0 00 23	20Le41	47.32	5°31'
7 Dec 2000	0 00 00	22Le51'02"	Hya	16s50	2s03	47.025	-0 00 21	21Le42	47.39	5°15'
7 Dec 2001	0 00 00	23Le52'27"	Hya	17s02	2s33	47.117	-0 00 19	22Le43	47.47	4°57'
7 Dec 2002	0 00 00	24Le53'55"	Hya	17s14	3s03	47.205	-0 00 18	23Le44	47.53	4°36'
7 Dec 2003	0 00 00	25Le55'21"	Hya	17s25	3s33	47.287	-0 00 16	24Le45	47.60	4°15'
6 Dec 2004	0 00 00	26Le56'45"	Hya	17s36	4s03	47.365	-0 00 14	25Le46	47.65	3°55'
6 Dec 2005	0 00 00	27Le58'05"	Hya	17s46	4s32	47.438	-0 00 13	26Le46	47.71	3°37'
6 Dec 2006	0 00 00	28Le59'16"	Hya	17s56	5s02	47.507	-0 00 11	27Le47	47.76	3°20'
6 Dec 2007	0 00 00	0Vi00'21"	Sex	18s06	5s31	47.572	-0 00 09	28Le48	47.80	3°05'
5 Dec 2008	0 00 00	1Vi01'18"	Sex	18s16	6s00	47.634	-0 00 08	29Le48	47.84	2°52'
5 Dec 2009	0 00 00	2Vi02'08"	Sex	18s25	6s29	47.693	-0 00 06	0Vi49	47.88	2°41'
5 Dec 2010	0 00 00	3Vi02'56"	Sex	18s34	6s58	47.750	-0 00 04	1Vi49	47.92	2°30'
5 Dec 2011	0 00 00	4Vi03'45"	Sex	18s42	7s26	47.803	-0 00 02	2Vi50	47.95	2°17'
4 Dec 2012	0 00 00	5Vi04'36"	Sex	18s51	7s55	47.854	-0 00 01	3Vi50	47.98	2°01'
4 Dec 2013	0 00 00	6Vi05'33"	Sex	18s58	8s23	47.900	0 00 01	4Vi51	48.01	1°42'
4 Dec 2014	0 00 00	7Vi06'32"	Sex	19s06	8s51	47.942	0 00 03	5Vi52	48.03	1°22'
4 Dec 2015	0 00 00	8Vi07'34"	Sex	19s13	9s20	47.980	0 00 05	6Vi53	48.04	1°01'
3 Dec 2016	0 00 00	9Vi08'37"	Sex	19s20	9s48	48.012	0 00 06	7Vi54	48.06	0°40'
3 Dec 2017	0 00 00	10Vi09'39"	Sex	19s26	10s15	48.039	0 00 08	8Vi55	48.06	0°20'
3 Dec 2018	0 00 00	11Vi10'40"	Sex	19s33	10s43	48.062	0 00 10	9Vi56	48.07	0°02'
3 Dec 2019	0 00 00	12Vi11'40"	Sex	19s38	11s11	48.082	0 00 11	10Vi57	48.06	-0°13'
2 Dec 2020	0 00 00	13Vi12'37"	Sex	19s44	11s38	48.097	0 00 13	11Vi58	48.06	-0°26'
2 Dec 2021	0 00 00	14Vi13'37"	Hya	19s49	12s05	48.110	0 00 15	12Vi59	48.05	-0°37'
2 Dec 2022	0 00 00	15Vi14'41"	Hya	19s54	12s32	48.121	0 00 17	14Vi00	48.04	-0°48'
2 Dec 2023	0 00 00	16Vi15'51"	Hya	19s58	12s59	48.129	0 00 19	15Vi01	48.03	-1°00'
1 Dec 2024	0 00 00	17Vi17'12"	Hya	20s02	13s25	48.134	0 00 20	16Vi03	48.01	-1°14'
1 Dec 2025	0 00 00	18Vi18'43"	Hya	20s06	13s52	48.135	0 00 22	17Vi04	48.00	-1°31'
1 Dec 2026	0 00 00	19Vi20'24"	Hya	20s09	14s18	48.132	0 00 24	18Vi06	47.97	-1°51'
1 Dec 2027	0 00 00	20Vi22'13"	Hya	20s13	14s45	48.124	0 00 26	19Vi08	47.94	-2°11'
30 Nov 2028	0 00 00	21Vi24'05"	Crt	20s15	15s11	48.111	0 00 27	20Vi10	47.91	-2°31'
30 Nov 2029	0 00 00	22Vi26'01"	Crt	20s18	15s37	48.093	0 00 29	21Vi13	47.87	-2°51'

## INGRESSES and STATIONS OF ORCUS, 2007 - 2013

Note that for most of this period, Orcus is aligned (in zodiacal longitude) with the Fixed Star Regulus, currently at 29Leo57. The dates on which this is exact are listed. Regulus ('Coeur de Lion') is one of the four Royal Stars of the Persians, and said to be the 'Watcher of the North'. These stars are each said to relate to a particular human nemesis, and Regulus refers to revenge. By this token, in the 'Heart of the Lion' we may find the fires of rage which given the opportunity, can burn through to forgiveness in the individual human soul and end the cycle of harm.

Contemplating Orcus when it is stationary, (marked R = Retrograde or D = Direct) will yield an attunement to its process. This period of time lasts about 10 days, from about a week (or sometimes even more) before the date listed, until a few days after.

### Themes of Orcus

Alignment with the soul's contract and oaths, clearing what is in the way of fulfilling them – healing of and from the cosmic matrilineal line and personal issues to do with bonding or entanglement – discerning deeply hidden aggression and allowing the energy to transform – anchoring extra-terrestrial communication – allowing new life to surface, perhaps heralded by dreams. 'Belly of the Whale' experiences – feeling 'swallowed' by person or circumstance. Watery feeling 'understood'. Echolocation, clairaudience, sensing the emotional qualities within personal 'impact'.

Orcus	D		11 May 2007	19:45	26°Le57' D	
ORCUS	CONJUNCT	REGULUS	12/13 Nov 2007			
Orcus	Enters	Virgo	21 Nov 2007	08:01	00°Vi00' D	00°Vi00' D
Orcus	R		29 Nov 2007	16:51	00°Vi00' R	
Orcus	Re-enters	Leo	8 Dec 2007	01:40	00°Vi00' R	00°Vi00' D
ORCUS	CONJUNCT	REGULUS	16/17 Dec 2007			
Orcus	D		12 May 2008	00:17	27°Le58' D	
ORCUS	CONJUNCT	REGULUS	10 Sept 2008			
Orcus	Enters	Virgo	12 Sep 2008	08:11	00°Vi00' D	00°Vi00' D
Orcus	R		29 Nov 2008	23:39	01°Vi01' R	
Orcus	Re-enters	Leo	19 Feb 2009	17:06	00°Vi00' R	00°Vi00' D
ORCUS	CONJUNCT	REGULUS	22 Feb 2009			
Orcus	D		13 May 2009	06:06	28°Le58' D	
ORCUS	CONJUNCT	REGULUS	30 Jul 2009			
Orcus	Enters	Virgo	1 Aug 2009	01:16	00°Vi00' D	00°Vi00' D
Orcus	R		1 Dec 2009	05:46	02°Vi02' R	
Orcus	Re-enters	Leo	7 May 2010	23:39	00°Vi00' R	00°Vi00' D
Orcus	D		14 May 2010	12:22	29°Le59' D	
ORCUS	CONJUNCT	REGULUS (not exact)	DURING THIS STATION PERIOD			
Orcus	Enters	Virgo	21 May 2010	03:59	00°Vi00' D	00°Vi00' D
Orcus	R		2 Dec 2010	10:29	03°Vi03' R	
Orcus	D		15 May 2011	20:04	01°Vi00' D	
Orcus	R		3 Dec 2011	14:41	04°Vi03' R	
Orcus	D		16 May 2012	05:03	02°Vi00' D	
Orcus	R		3 Dec 2012	23:30	05°Vi04' R	

# ORCUS

- **Stations**
- **Conjunctions or oppositions with the Sun**
- **Ingresses**

Sun	Opp	Orcus	17 Feb 2007	27°Aq59' D	27°Le59' R
Orcus	D		11 May 2007	26°Le57' D	
Sun	Cnj	Orcus	21 Aug 2007	28°Le29' D	28°Le29' D
Orcus	Enters	Vir	21 Nov 2007	00°Vi00' D	00°Vi00' D
Orcus	R		29 Nov 2007	00°Vi00' R	
Orcus	Enters	Leo	7 Dec 2007	00°Vi00' R	00°Vi00' D
Sun	Opp	Orcus	18 Feb 2008	29°Aq00' D	29°Le00' R
Orcus	D		11 May 2008	27°Le58' D	
Sun	Cnj	Orcus	22 Aug 2008	29°Le30' D	29°Le30' D
Orcus	Enters	Vir	12 Sep 2008	00°Vi00' D	00°Vi00' D
Orcus	R		29 Nov 2008	01°Vi01' R	
Sun	Opp	Orcus	18 Feb 2009	00°Pi01' D	00°Vi01' R
Orcus	Enters	Leo	19 Feb 2009	00°Vi00' R	00°Vi00' D
Orcus	D		13 May 2009	28°Le58' D	
Orcus	Enters	Vir	31 Jul 2009	00°Vi00' D	00°Vi00' D
Sun	Cnj	Orcus	23 Aug 2009	00°Vi31' D	00°Vi31' D
Orcus	R		1 Dec 2009	02°Vi02' R	
Sun	Opp	Orcus	19 Feb 2010	01°Pi01' D	01°Vi01' R
Orcus	Enters	Leo	8 May 2010	00°Vi00' R	00°Vi00' D
Orcus	D		14 May 2010	29°Le59' D	
Orcus	Enters	Vir	20 May 2010	00°Vi00' D	00°Vi00' D
Sun	Cnj	Orcus	24 Aug 2010	01°Vi32' D	01°Vi32' D
Orcus	R		2 Dec 2010	03°Vi03' R	
Sun	Opp	Orcus	21 Feb 2011	02°Pi02' D	02°Vi02' R
Orcus	D		15 May 2011	01°Vi00' D	
Sun	Cnj	Orcus	26 Aug 2011	02°Vi32' D	02°Vi32' D
Orcus	R		3 Dec 2011	04°Vi03' R	
Sun	Opp	Orcus	22 Feb 2012	03°Pi03' D	03°Vi03' R
Orcus	D		16 May 2012	02°Vi01' D	
Sun	Cnj	Orcus	26 Aug 2012	03°Vi33' D	03°Vi33' D
Orcus	R		3 Dec 2012	05°Vi04' R	
Sun	Opp	Orcus	22 Feb 2013	04°Pi04' D	04°Vi04' R
Orcus	D		17 May 2013	03°Vi01' D	
Sun	Cnj	Orcus	27 Aug 2013	04°Vi34' D	04°Vi34' D
Orcus	R		5 Dec 2013	06°Vi05' R	





# TNOs and SDOs

## Definitions

**TNO = Trans-Neptunian-Object**

**SDO = Scattered Disk Object, those believed to have been ‘scattered’ from the Kuiper Belt into more distant and unusual orbits.**

**Plutino = KBO orbiting in 2:3 ratio to Neptune. (UR-NE-PL = 1:2:3)**

**One Astronomical Unit = Distance from Earth to Sun = 149,597,870,671 km**

(At 100mph, it would take over 100yr to travel One AU !!)

NAME	Number(s)	Discovered	Named	Perihelion	Aphelion	Diam. (km)	Zodiac 3.2010	Orbit (yr)	MSD in au
<b>PLUTO</b>	MP134340	18.2.1930	1.5.1930	29.66au	49.3an	2274	6CAP	247	30
<b>SEDNA</b>	2003VB12	14.11.2003	28.9.2004	76au	913au	1180-1180	22TAU	11483	495
<b>ERIS</b>	2003 UB313	21.10.2003		37au	97.56au	3086	22ARI	556	67
<b>ORCUS</b>	<b>2004 DW</b>	<b>17.2.2004</b>	<b>22.11.2004</b>	<b>30au</b>	<b>48au</b>	<b>946</b>	<b>0VIR</b>	<b>247</b>	<b>39</b>
<b>QUAOAR</b>	2002LM60	4.6.02		41.93au	45.29au	1260	22SAG	282	43
<b>VARUNA</b>	20000	28.11.2000		41au	45au	874	20CAN	282	42
<b>HAUMEA</b>	2003 EL61	25.7.2005		34.72au	45.29au	1500	19LIB	285	43
<b>MAKEMAKE</b>	2005 FY9	31.3.2005	7.2008	38.5au	53au	1300-1900	26VIR	310	46

## Notes:

- Haumea [2003 EL61] is called ‘the strangest known object in the Kuiper Belt’. It is followed in its orbit by a swarm of icy bodies ejected from its surface, possibly in a ‘catastrophic disruption’ which occurred in its history. Its orbit is very unstable. A name from Hawaiian mythology has been proposed, in honour of the team at Mauna Kea who found it. Controversy around who discovered it first, as information was accessed on the Internet before announcement. (‘Santa’ was its first nickname)
- The IAU’s rules say that TNOs are supposed to be named after creation gods.
- Pluto travels inside Neptune’s orbit: last time 2/1979 – 2/1999. Details of its orbit included here for reference.
- Orcus is also a Plutino, but doesn’t enter Neptune’s sphere. It’s orbital inclination is also opposite to Pluto, and the orbit length is similar.
- Dysnomia, moon of Eris, is also name of a condition where names remain ‘on the tip of the tongue’ and one can’t remember them!

# CHIRON AND ORCUS – A selection

This list is not complete, but shows the major Ingresses of Chiron and Orcus, with their conjunctions and oppositions marked in red, 1900 – 2020. Forthcoming aspects and ingresses include the time, in GMT. For more detail, download RIYAL at [www.expreso.co.cr/centaurs](http://www.expreso.co.cr/centaurs). This information below was computed with Solar Fire DeLuxe.

Orcus Enters	Ari	13 Mar 1905			
<b>Chiron Enters</b>	<b>Pis</b>	<b>20 Mar 1910</b>			
<b>Chiron Enters</b>	<b>Aqu</b>	<b>29 Aug 1910 R</b>			
<b>Chiron Enters</b>	<b>Pis</b>	<b>15 Jan 1911</b>			
Orcus Enters	Tau	24 May 1917			
<b>Chiron Enters</b>	<b>Ari</b>	<b>31 Mar 1918</b>			
<b>Chiron Enters</b>	<b>Pis</b>	<b>22 Oct 1918 R</b>			
<b>Chiron Enters</b>	<b>Ari</b>	<b>28 Jan 1919</b>			
Orcus Enters	Gem	31 Jul 1932			
<b>Chiron Cnj</b>	<b>Orcus Tr-Tr</b>	<b>15 Jun 1933 00°Ge35' D</b>			
<b>Chiron Cnj</b>	<b>Orcus Tr-Tr</b>	<b>21 Dec 1933 00°Ge02' R</b>			
<b>Chiron Cnj</b>	<b>Orcus Tr-Tr</b>	<b>18 Mar 1934 29°Ta46' D</b>			
<b>Chiron Opp</b>	<b>Orcus Tr-Tr</b>	<b>29 Dec 1950 25°Sg48' D</b>			
<b>Chiron Opp</b>	<b>Orcus Tr-Tr</b>	<b>26 Jul 1951 27°Sg41' R</b>			
<b>Chiron Opp</b>	<b>Orcus Tr-Tr</b>	<b>18 Oct 1951 28°Sg25' D</b>			
Orcus Enters	Can	16 Jul 1953			
<b>Chiron Enters</b>	<b>Pis</b>	<b>26 Mar 1960</b>			
<b>Chiron Enters</b>	<b>Aqu</b>	<b>19 Aug 1960 R</b>			
<b>Chiron Enters</b>	<b>Pis</b>	<b>21 Jan 1961</b>			
<b>Chiron Enters</b>	<b>Ari</b>	<b>1 Apr 1968</b>			
<b>Chiron Enters</b>	<b>Pis</b>	<b>18 Oct 1968 R</b>			
<b>Chiron Enters</b>	<b>Ari</b>	<b>30 Jan 1969</b>			
Orcus Enters	Leo	7 Oct 1978			
Orcus Enters	Vir	21 Nov 2007			
Orcus Enters	Leo	7 Dec 2007 R			
Orcus Enters	Vir	12 Sep 2008			
Orcus Enters	Leo	19 Feb 2009 R			
Orcus Enters	Vir	31 Jul 2009			
<b>Chiron Enters</b>	<b>Pis</b>	<b>20 Apr 2010</b>			
<b>Chiron Opp</b>	<b>Orcus Tr-Tr</b>	<b>22 Apr 2010</b>	<b>05:15</b>	<b>00°Pi04' D</b>	<b>00°Vi04' R</b>
Orcus Enters	Leo	7 May 2010			
Orcus Enters	Vir	21 May 2010			
<b>Chiron Opp</b>	<b>Orcus Tr-Tr</b>	<b>6 Jul 2010</b>	<b>19:00</b>	<b>00°Pi28' R</b>	<b>00°Vi28' D</b>
<b>Chiron Enters</b>	<b>Aqu</b>	<b>20 Jul 2010 09:40</b>			
<b>Chiron Enters</b>	<b>Pis</b>	<b>8 Feb 2011 19:56</b>			
<b>Chiron Opp</b>	<b>Orcus Tr-Tr</b>	<b>6 Mar 2011</b>	<b>23:10</b>	<b>01°Pi46' D</b>	<b>01°Vi46' R</b>
<b>Chiron Opp</b>	<b>Orcus Tr-Tr</b>	<b>2 Sep 2011</b>	<b>01:03</b>	<b>02°Pi42' R</b>	<b>02°Vi42' D</b>
<b>Chiron Opp</b>	<b>Orcus Tr-Tr</b>	<b>29 Jan 2012</b>	<b>21:11</b>	<b>03°Pi30' D</b>	<b>03°Vi30' R</b>
<b>Chiron Opp</b>	<b>Orcus Tr-Tr</b>	<b>11 Nov 2012</b>	<b>19:53</b>	<b>04°Pi59' R</b>	<b>04°Vi59' D</b>
<b>Chiron Opp</b>	<b>Orcus Tr-Tr</b>	<b>28 Nov 2012</b>	<b>10:04</b>	<b>05°Pi04' D</b>	<b>05°Vi04' D</b>
<b>Chiron Enters</b>	<b>Ari</b>	<b>17 Apr 2018</b>	<b>08:10</b>		
<b>Chiron Enters</b>	<b>Pis</b>	<b>26 Sep 2018</b>	<b>00:11</b>		
<b>Chiron Enters</b>	<b>Ari</b>	<b>18 Feb 2019</b>	<b>09:07</b>		

## ORCUS, NEPTUNE and CHIRON 2010 – 2018

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Neptune	Cnj	Chiron	17 Feb 2010	26°Aq14' D	26°Aq14' D
Chiron	Opp	Orcus	22 Apr 2010	00°Pi04' D	00°Vi04' R
Orcus D			14 May 2010	29°Le59' D	
Neptune	R		31 May 2010	28°Aq42' R	
Chiron	R		4 Jun 2010	00°Pi59' R	
Chiron	Opp	Orcus	6 Jul 2010	00°Pi28' R	00°Vi28' D
Chiron	D		5 Nov 2010	26°Aq04' D	
Neptune	D		7 Nov 2010	25°Aq54' D	
Orcus R			2 Dec 2010	03°Vi02' R	
Chiron	Opp	Orcus	6 Mar 2011	01°Pi46' D	01°Vi46' R
Orcus D			15 May 2011	01°Vi00' D	
Neptune	R		3 Jun 2011	00°Pi55' R	
Chiron	R		8 Jun 2011	05°Pi28' R	
Chiron	Opp	Orcus	1 Sep 2011	02°Pi42' R	02°Vi42' D
Neptune	D		9 Nov 2011	28°Aq08' D	
Chiron	D		10 Nov 2011	00°Pi38' D	
Orcus R			3 Dec 2011	04°Vi03' R	
Chiron	Opp	Orcus	29 Jan 2012	03°Pi30' D	03°Vi30' R
Neptune	Opp	Orcus	7 Apr 2012	02°Pi16' D	02°Vi16' R
Orcus D			15 May 2012	02°Vi01' D	
Neptune	R		4 Jun 2012	03°Pi09' R	
Chiron	R		12 Jun 2012	09°Pi45' R	
Neptune	Opp	Orcus	17 Jul 2012	02°Pi40' R	02°Vi40' D
Neptune	D		11 Nov 2012	00°Pi21' D	
Chiron	Opp	Orcus	11 Nov 2012	04°Pi59' R	04°Vi59' D
Chiron	D		14 Nov 2012	04°Pi59' D	
Chiron	Opp	Orcus	27 Nov 2012	05°Pi04' D	05°Vi04' D
Orcus R			3 Dec 2012	05°Vi04' R	
Neptune	Opp	Orcus	15 Mar 2013	03°Pi39' D	03°Vi39' R
Orcus D			17 May 2013	03°Vi01' D	
Neptune	R		7 Jun 2013	05°Pi22' R	
Chiron	R		16 Jun 2013	13°Pi49' R	
Neptune	Opp	Orcus	15 Aug 2013	04°Pi17' R	04°Vi17' D
Neptune	D		13 Nov 2013	02°Pi34' D	
Chiron	D		19 Nov 2013	09°Pi07' D	
Orcus R			4 Dec 2013	06°Vi05' R	
Neptune	Opp	Orcus	24 Feb 2014	05°Pi04' D	05°Vi04' R
Orcus D			18 May 2014	04°Vi02' D	

Neptune	R		9 Jun 2014	07°Pi35' R	
Chiron	R		20 Jun 2014	17°Pi45' R	
Neptune	Opp	Orcus	9 Sep 2014	05°Pi52' R	05°Vi52' D
Neptune	D		16 Nov 2014	04°Pi48' D	
Chiron	D		23 Nov 2014	13°Pi05' D	
Orcus	R		6 Dec 2014	07°Vi06' R	
Neptune	Opp	Orcus	5 Feb 2015	06°Pi28' D	06°Vi28' R
Orcus	D		19 May 2015	05°Vi03' D	
Neptune	R		12 Jun 2015	09°Pi48' R	
Chiron	R		24 Jun 2015	21°Pi33' R	
Neptune	Opp	Orcus	7 Oct 2015	07°Pi28' R	07°Vi28' D
Neptune	D		18 Nov 2015	07°Pi01' D	
Chiron	D		28 Nov 2015	16°Pi56' D	
Orcus	R		7 Dec 2015	08°Vi07' R	
Neptune	Opp	Orcus	13 Jan 2016	07°Pi52' D	07°Vi52' R
Orcus	D		19 May 2016	06°Vi05' D	
Neptune	R		13 Jun 2016	12°Pi02' R	
Chiron	R		27 Jun 2016	25°Pi14' R	
Neptune	D		19 Nov 2016	09°Pi14' D	
Chiron	D		1 Dec 2016	20°Pi40' D	
Orcus	R		7 Dec 2016	09°Vi08' R	
Orcus	D		21 May 2017	07°Vi06' D	
Neptune	R		16 Jun 2017	14°Pi15' R	
Chiron (7)	R		1 Jul 2017	28°Pi51' R	
Neptune	D		22 Nov 2017	11°Pi28' D	
Chiron	D		5 Dec 2017	24°Pi19' D	
Orcus	R		9 Dec 2017	10°Vi09' R	