

ภาคผนวก จ

ค่า O – C ของระบบดาวคู่ RW Comae Berenices และระบบดาวคู่ V1799 Orion

ตารางที่ จ-1 ค่า O – C และค่า Residual ของระบบดาวคู่ RW Comae Berenices

HJD (O)	Epoch	O-C	Residual	Referencs
2439637.445	-1622	0.0027117	-0.0025	BBSAG Bull....7
2439638.392	-1618	0.0003307	-0.00489	BBSAG Bull....7
2439646.461	-1584	-0.0004082	-0.00562	BBSAG Bull....7
2439648.404	-1576	0.0438298	0.03862	BBSAG Bull....7
2439666.399	-1500	0.00059	-0.00461	BBSAG Bull....7
2439670.43	-1483	-0.0032794	-0.00847	BBSAG Bull....8
2439914.423	-455	-0.0012067	-0.00625	BBSAG Bull...11
2439935.304	-367	-0.0065896	-0.01162	BBSAG Bull...11
2439990.371	-135	-0.0036899	-0.00869	BBSAG Bull...12
2440024.449	8.5	0.0152653	-0.00528	BBSAG Bull...13
2440316.362	1238.5	-0.0064045	-0.00498	BBSAG Bull...18
2440316.365	1238.5	-0.0034045	0.01028	BBSAG Bull...17
2440317.422	1243	-0.0144582	-0.01123	BBSAG Bull...18
2440319.331	1251	-0.0042203	-0.00823	BBSAG Bull...18
2440319.338	1251	0.0027797	-0.01929	BBSAG Bull...18
2440321.35	1259.5	-0.002655	-0.00905	BBSAG Bull...18
2440321.361	1259.5	0.008345	-0.00205	BBSAG Bull...18
2440325.386	1276.5	-0.0015244	-0.00748	BBSAG Bull...18
2440330.49	1298	-0.0004475	0.00352	BBSAG Bull...18
2440344.49	1357	-0.0038178	-0.00635	BBSAG Bull...18
2440350.548	1382.5	0.0018781	-0.00527	BBSAG Bull...18
2440353.382	1394.5	-0.0122651	-0.00863	BBSAG Bull...18
2440353.395	1394.5	0.0007349	-0.00293	BBSAG Bull...18
2440354.538	1399.5	-0.0429914	-0.01708	BBSAG Bull...18

ตารางที่ จ-1 ค่า O – C และค่า Residual ของระบบดาวคู่ RW Comae Berenices (ต่อ)

HJD(O)	Epoch	O-C	Residual	References
2440362.411	1432.5	-0.0023849	-0.00408	BBSAG Bull...18
2440368.586	1458.5	0.0016383	-0.0478	BBSAG Bull...18
2440381.403	1512.5	0.0019943	-0.00719	BBSAG Bull...18
2440382.486	1517	0.0169406	-0.00317	BBSAG Bull...18
2440589.547	2389.5	-0.0057988	-0.0028	BBSAG Bull...22
2440674.399	2747	-0.0047292	0.01214	BBSAG Bull...23
2440682.589	2781.5	-0.0031407	-0.0105	BBSAG Bull...23
2440688.41	2806	0.0029004	-0.0094	BBSAG Bull...23
2440688.417	2806	0.0099004	-0.00781	BBSAG Bull...23
2440692.303	2822.5	-0.0202963	-0.00177	BBSAG Bull...24
2440692.431	2823	-0.010969	0.00523	BBSAG Bull...24
2440698.383	2848	0.0073995	-0.02496	BBSAG Bull...24
2440711.429	2903	-0.0005898	-0.01563	BBSAG Bull...24
2440711.542	2903.5	-0.0062624	-0.00274	BBSAG Bull...24
2440720.58	2941.5	0.0126177	-0.00525	BBSAG Bull...24
2440725.426	2962	-0.0069601	-0.01092	BBSAG Bull...24
2440731.469	2987.5	-0.0162642	0.00796	BBSAG Bull...24
2440735.402	3004	0.000539	-0.01161	BBSAG Bull...24
2440741.456	3029.5	0.0022348	-0.02091	BBSAG Bull...24
2440742.403	3033.5	-0.0001462	-0.00411	BBSAG Bull...24
2440947.702	3898.5	-0.0047961	-0.00241	BBSAG Bull...28
2441059.494	4369.5	-0.0024136	-0.00479	BBSAG Bull...30
2441390.447	5764	-0.0273786	-0.00937	BBSAG Bull.2
2441391.42	5768	-0.0037597	-0.00695	BBSAG Bull.2
2441392.37	5772	-0.0031407	-0.03183	BBSAG Bull.2
2441436.404	5957.5	0.0033136	-0.00821	BBSAG Bull.3
2441439.367	5970	-0.0005022	-0.00759	BBSAG Bull.3

ตารางที่ จ-1 ค่า O – C และค่า Residual ของระบบดาวคู่ RW Comae Berenices (ต่อ)

HJD(O)	Epoch	O-C	Residual	References
2441439.372	5970	0.0044978	-0.00113	BBSAG Bull.3
2441440.424	5974.5	-0.0115559	-0.00494	BBSAG Bull.3
2441471.406	6105	-0.0031123	5.77E-05	BBSAG Bull.3
2441506.404	6252.5	-0.0135381	-0.016	BBSAG Bull.4
2441706.62	7096	0.001735	-0.00755	BBSAG Bull.7
2441707.929	7101.5	0.0053361	-0.01796	BBSAG Bull.8
2441747.676	7269	-0.0029949	-0.00266	BBSAG Bull.8
2441747.806	7269.5	0.0083324	9.43E-04	BBSAG Bull.8
2441761.443	7327	-0.00202	-0.00738	BBSAG Bull.8
2441764.775	7341	0.0071463	0.00394	BBSAG Bull.8
2441765.715	7345	-0.0022347	-0.00641	BBSAG Bull.8
2441768.687	7357.5	0.0029495	0.00276	BBSAG Bull.8
2441774.504	7382	0.0049907	-0.00662	BBSAG Bull.9
2441792.776	7459	0.0014057	-0.00144	BBSAG Bull.9
2441793.725	7463	0.0010246	6.06E-04	BBSAG Bull.9
2441794.321	7465.5	0.0036615	-0.00298	BBSAG Bull.9
2441823.39	7588	-0.0021329	-0.00336	BBSAG Bull.9
2441828.5	7609.5	0.004944	-7.21E-04	BBSAG Bull.9
2441830.382	7617.5	-0.011818	-0.00651	BBSAG Bull.9
2441834.666	7635.5	-3.273E-05	5.66E-04	BBSAG Bull.9
2441837.399	7647	0.0034968	-0.0162	BBSAG Bull.10
2441837.4	7647	0.0044968	-0.00441	BBSAG Bull.10
2441841.676	7665	0.0082821	-8.80E-04	BBSAG Bull.10
2441847.606	7690	0.0046506	1.20E-04	BBSAG Bull.10
2441847.607	7690	0.0056506	0.00391	BBSAG Bull.10
2442004.724	8352	8.848E-05	2.74E-04	BBSAG Bull.12
2442026.679	8444.5	0.0006519	0.00127	BBSAG Bull.13

ตารางที่ จ-1 ค่า O – C และค่า Residual ของระบบดาวคู่ RW Comae Berenices (ต่อ)

HJD(O)	Epoch	O-C	Residual	References
2442054.696	8562.5	0.0109113	-0.00427	BBSAG Bull.13
2442089.456	8709	-0.0001693	-0.00371	BBSAG Bull.14
2442119.362	8835	0.0003279	0.00655	BBSAG Bull.14
2442132.425	8890	0.0093386	-0.00453	BBSAG Bull.14
2442139.662	8920.5	-0.0073082	-0.00403	BBSAG Bull.15
2442145.346	8944.5	-0.0049781	0.00498	BBSAG Bull.15
2442146.419	8949	-3.174E-05	0.00295	BBSAG Bull.15
2442147.378	8953	0.0095872	-0.00933	BBSAG Bull.15
2442148.327	8957	0.0092062	-0.00439	BBSAG Bull.15
2442156.37	8991	-0.0175327	0.00523	BBSAG Bull.15
2442157.342	8995	0.0050863	0.00485	BBSAG Bull.15
2442158.529	9000	0.00536	-0.02189	BBSAG Bull.15
2442177.399	9079.5	0.0064118	7.31E-04	BBSAG Bull.15
2442177.4	9079.5	0.0074118	0.001	BBSAG Bull.15
2442187.368	9121.5	0.0069109	0.00206	BBSAG Bull.15
2442193.414	9147	0.0006068	0.00306	BBSAG Bull.15
2442223.444	9273.5	0.0064314	0.00256	BBSAG Bull.16
2442427.556	10133.5	0.0015078	-0.00375	BBSAG Bull.20
2442439.544	10184	0.0035722	0.00208	BBSAG Bull.20
2442501.379	10444.5	0.0101319	-0.00285	BBSAG Bull.21
2442503.398	10453	0.0116972	-7.85E-04	BBSAG Bull.21
2442504.46	10457.5	0.0056436	0.00577	BBSAG Bull.22
2442509.57	10479	0.0127205	0.00734	BBSAG Bull.22
2442510.626	10483.5	0.0006668	0.00128	BBSAG Bull.22
2442517.389	10512	-0.0006731	0.00836	BBSAG Bull.22
2442521.429	10529	0.0044575	-0.00369	BBSAG Bull.22
2442524.522	10542	0.0119691	-0.00503	BBSAG Bull.22

ตารางที่ จ-1 ค่า O – C และค่า Residual ของระบบดาวคู่ RW Comae Berenices (ต่อ)

HJD(O)	Epoch	O-C	Residual	References
2442528.565	10559	0.0200997	9.64E-05	BBSAG Bull.22
2442532.342	10575	-0.0004245	0.00761	BBSAG Bull.22
2442534.37	10583.5	0.0101408	0.01574	BBSAG Bull.22
2442540.426	10609	0.0138367	-0.00479	BBSAG Bull.22
2442541.375	10613	-0.0134556	0.00578	BBSAG Bull.22
2442549.431	10647	-0.0002832	0.00947	BBSAG Bull.22
2442550.392	10651	0.0113357	0.00909	BBSAG Bull.22
2442561.411	10697.5	-0.0062188	-0.00465	BBSAG Bull.22
2442568.418	10727	-0.000904	0.00697	BBSAG Bull.23
2442570.443	10735.5	0.0066613	-0.01058	BBSAG Bull.23
2442571.386	10739.5	0.0002802	-0.00527	BBSAG Bull.23
2442572.456	10744	0.0022266	0.0023	BBSAG Bull.23
2442745.722	11474	0.0061868	-0.00408	BBSAG Bull.24
2442753.678	11507.5	0.0111205	-0.00214	BBSAG Bull.25
2442775.63	11600	0.008684	0.00181	BBSAG Bull.25
2442830.337	11830.5	0.0076016	0.00674	BBSAG Bull.26
2442864.395	11974	0.0065568	0.0043	BBSAG Bull.27
2442866.292	11982	0.0047947	0.00321	BBSAG Bull.27
2442866.424	11982.5	0.0181221	0.00216	BBSAG Bull.27
2442867.364	11986.5	0.008741	3.98E-04	BBSAG Bull.27
2442869.383	11995	0.0103063	0.01373	BBSAG Bull.27
2442870.33	11999	0.0079253	0.00434	BBSAG Bull.27
2442871.634	12004.5	0.0065263	0.00591	BBSAG Bull.27
2442872.36	12007.5	0.0204906	0.00353	BBSAG Bull.27
2442873.649	12013	0.0040916	0.00213	OMT #1
2442874.369	12016	0.0120558	0.01609	BBSAG Bull.27
2442874.609	12017	0.0147106	-3.06E-04	OMT #1

ตารางที่ จ-1 ค่า O – C และค่า Residual ของระบบดาวคู่ RW Comae Berenices (ต่อ)

HJD(O)	Epoch	O-C	Residual	References
2442885.408	12062.5	0.0145013	0.00766	BBSAG Bull.27
2442886.346	12066.5	0.0031202	0.01031	BBSAG Bull.27
2442897.63	12114	0.0132204	0.0101	OMT #1
2442899.404	12121.5	0.0071309	-0.00128	BBSAG Bull.27
2442900.353	12125.5	-0.0067499	0.00882	BBSAG Bull.28
2442900.368	12125.5	0.0217499	0.00273	BBSAG Bull.28
2442904.373	12142.5	-0.0081195	0.00235	BBSAG Bull.28
2442904.395	12142.5	0.0138805	0.01735	BBSAG Bull.28
2442913.409	12180.5	0.0087606	-0.01252	BBSAG Bull.28
2442916.375	12193	0.0079448	0.00948	BBSAG Bull.28
2442916.394	12193	0.0269448	0.00436	BBSAG Bull.28
2442917.679	12198.5	0.0065459	0.00354	OMT #1
2442920.643	12211	0.0037301	-0.02254	IBVS 1249
2442922.665	12219.5	0.0082954	0.00214	IBVS 1249
2442923.371	12222.5	0.0022597	-6.75E-04	BBSAG Bull.28
2442925.638	12232	0.0144797	0.00389	IBVS 1249
2442932.747	12262	0.0031219	-0.00215	OMT #1
2442932.753	12262	0.0091219	0.01007	OMT #1
2442932.755	12262	0.0111219	-0.00129	OMT #1
2442933.696	12266	0.0027408	0.00471	OMT #1
2442937.378	12281.5	0.0058893	0.00671	BBSAG Bull.28
2442937.728	12283	-0.0001286	-0.00167	OMT #1
2442951.379	12340.5	0.003519	0.00148	BBSAG Bull.28
2442953.412	12349	0.0190843	-0.00454	BBSAG Bull.28
2442958.384	12370	0.0068338	-8.91E-04	BBSAG Bull.28
2442975.353	12441.5	0.0056477	0.01467	BBSAG Bull.29
2443165.827	13244	0.0100766	0.00242	OMT #1

ตารางที่ จ-1 ค่า O – C และค่า Residual ของระบบดาวคู่ RW Comae Berenices (ต่อ)

HJD(O)	Epoch	O-C	Residual	References
2443165.834	13244	0.0170766	0.00123	OMT #1
2443210.33	13431.5	0.0108403	0.00562	BBSAG Bull.33
2443212.339	13440	0.0024056	0.01262	BBSAG Bull.33
2443244.394	13575	0.0157955	0.00638	GEOS EB 3
2443249.391	13596	0.028545	-0.00206	GEOS EB 3
2443250.324	13600	0.012164	0.01133	BBSAG Bull.33
2443250.329	13600	0.017164	0.02407	GEOS EB 3
2443254.358	13617	0.0112946	0.00769	BBSAG Bull.33
2443260.767	13644	0.0119726	0.01269	OMT #1
2443260.768	13644	0.0129726	0.00682	OMT #1
2443281.407	13731	0.0029349	0.0075	BBSAG Bull.33
2443288.412	13760.5	0.0062498	0.0085	BBSAG Bull.33
2443291.388	13773	0.015434	-0.00154	GEOS EB 3
2443299.451	13807	0.0086952	0.00177	GEOS EB 3
2443326.38	13920.5	-0.0009918	0.01095	BBSAG Bull.34
2443447.673	14431.5	0.0085803	0.00421	BBSAG Bull.35
2443549.861	14862	0.0194459	-0.00548	OMT #1
2443568.368	14940	0.0135156	0.00406	BBSAG Bull.36
2443610.731	15118.5	0.0103867	0.01489	OMT #1
2443616.425	15142.5	0.0081005	0.00895	BBSAG Bull.37
2443622.364	15167.5	0.013469	0.00581	BBSAG Bull.37
2443659.386	15323.5	0.0096084	0.00352	BBSAG Bull.37
2443663.41	15340.5	-0.001261	0.00889	BBSAG Bull.37
2443713.388	15551	0.0155617	0.00502	BBSAG Bull.38
2443831.7	16049.5	0.0109496	-0.00585	BBSAG Bull.40
2443932.338	16473.5	0.0145594	0.01095	BBSAG Bull.42
2443957.379	16579	0.0156345	0.0063	BBSAG Bull.42

ตารางที่ จ-1 ค่า O – C และค่า Residual ของระบบดาวคู่ RW Comae Berenices (ต่อ)

HJD(O)	Epoch	O-C	Residual	References
2443982.774	16686	0.0146916	0.00987	OMT #1
2443983.365	16688.5	0.0123285	0.01093	BBSAG Bull.43
2444008.405	16794	0.0124036	0.00998	BBSAG Bull.43
2444010.424	16802.5	0.0139688	0.00761	BBSAG Bull.43
2444017.421	16832	-0.0092837	0.00768	BBSAG Bull.43
2444039.38	16924.5	0.0138471	0.00924	BBSAG Bull.44
2444046.381	16954	0.013162	0.00455	BBSAG Bull.44
2444238.872	17765	0.0171561	0.00911	OMT #1
2444279.799	17937.5	0.0020988	0.00842	OMT #1
2444290.375	17982	0.0162347	0.01232	BBSAG Bull.46
2444316.361	18091.5	0.0129287	-0.00275	BBSAG Bull.47
2444337.375	18180	0.0218732	0.01138	BBSAG Bull.47
2444342.343	18201	0.0056227	-0.00806	BBSAG Bull.47
2444343.409	18205.5	0.0035691	0.01699	BBSAG Bull.47
2444358.362	18268.5	0.0038177	7.39E-04	BBSAG Bull.47
2444371.446	18323.5	0.0338284	-0.00132	BBSAG Bull.48
2444395.398	18424.5	0.0139571	-0.00107	BBSAG Bull.48
2444402.391	18454	0.005272	0.02893	BBSAG Bull.48
2444670.718	19584.5	0.0134555	0.00905	OMT #1
2444691.367	19671.5	0.0134179	3.57E-04	BBSAG Bull.53
2444701.44	19714	-0.0007556	0.00839	BBSAG Bull.54
2444704.423	19726.5	0.0154286	0.00834	GEOS EB 13
2444704.538	19727	0.011756	-0.00584	GEOS EB 13
2444736.701	19862.5	0.0144733	0.01034	OMT #1
2444744.42	19895	0.0197523	0.00667	BBSAG Bull.54
2444770.39	20004.5	0.0004463	0.00937	BBSAG Bull.55
2445044.299	21158.5	0.0130163	0.01464	BBSAG Bull.59

ตารางที่ จ-1 ค่า O – C และค่า Residual ของระบบดาวคู่ RW Comae Berenices (ต่อ)

HJD(O)	Epoch	O-C	Residual	References
2445054.375	21201	0.0018427	-0.00468	BBSAG Bull.59
2445055.333	21205	0.0104617	0.00771	BBSAG Bull.59
2445056.4	21209.5	0.009408	-0.00347	BAV-M 34
2445056.524	21210	0.0147354	0.00515	BAV-M 34
2445060.667	21227.5	-0.0041934	0.00409	OMT #1
2445101.38	21399	0.0124813	0.00942	BBSAG Bull.60
2445115.384	21458	0.0131109	-0.00112	BBSAG Bull.60
2445120.365	21479	0.0098605	0.00714	BBSAG Bull.60
2445138.405	21555	0.0116207	0.00776	BBSAG Bull.61
2445159.411	21643.5	0.0125652	0.0045	BBSAG Bull.61
2445162.369	21656	0.0037494	0.00625	BBSAG Bull.61
2445397.34	22646	0.002942	0.00718	BBSAG Bull.65
2445407.314	22688	0.0084411	-0.00164	BBSAG Bull.65
2445428.456	22777	0.026713	-0.00262	BBSAG Bull.66
2445441.377	22831.5	0.0123963	0.00287	BBSAG Bull.66
2445492.754	23048	0.0041475	0.02113	OMT #1
2445518.383	23156	-0.0001406	0.0068	BBSAG Bull.68
2445762.744	24185.5	0.0139143	-0.00149	OMT #1
2445811.4	24390.5	0.014136	-0.0058	AV-M 39 K
2445812.336	24394.5	0.0007549	0.00805	BBSAG Bull.71
2445813.42	24399	0.0167013	0.00823	BAAVSS 61,14
2445816.371	24411.5	0.0008855	-0.00515	BBSAG Bull.71
2445816.623	24412.5	0.0155403	0.01079	BBSAG Bull.72
2445820.411	24428.5	0.0060161	-0.00502	BAV-M 39
2445820.526	24429	0.0023435	0.00963	BAV-M 39
2445837.625	24501	0.0124847	1.03E-04	BBSAG Bull.72
2446112.465	25659	0.0066737	-0.00357	BAV-M 50

ตารางที่ จ-1 ค่า O – C และค่า Residual ของระบบดาวคู่ RW Comae Berenices (ต่อ)

HJD(O)	Epoch	O-C	Residual	References
2446112.583	25659.5	0.006001	0.00656	BAV-M 50
2446113.418	25663	0.0102926	4.93E-04	BAAVSS 63,19
2446120.892	25694.5	0.0079169	-1.80E-04	OMT #1
2446136.44	25760	0.0098024	0.00411	BAAVSS 63,19
2446140.715	25778	-0.0125877	0.00173	OMT #1
2446142.615	25786	0.0138256	0.0036	OMT #1
2446173.34	25915.5	0.0026145	0.00638	BBSAG Bull.76
2446175.358	25924	0.0031798	0.00762	BBSAG Bull.76
2446210.369	26071.5	0.0057539	-0.00362	BBSAG Bull.77
2446230.67	26157	0.0137342	-0.00306	OMT #1
2446249.403	26236	-0.0035414	-5.21E-04	BBSAG Bull.77
2446263.658	26296	0.010743	0.00744	OMT #1
2446535.414	27441	0.0064203	-0.00985	BBSAG Bull.80
2446552.377	27512.5	-0.0007657	0.00442	BBSAG Bull.80
2446553.694	27518	0.0108353	-1.85E-04	OMT #1
2446554.633	27522	0.0004543	-0.00739	OMT #1
2446560.69	27547.5	0.0051502	0.00421	OMT #1
2446561.391	27550.5	-0.0058856	-0.00617	BBSAG Bull.80
2446561.764	27552	0.0110965	-0.00148	OMT #1
2446573.384	27601	0.0011787	-0.01252	BBSAG Bull.80
2446606.377	27740	0.0031876	0.00446	BBSAG Bull.80
2446610.395	27757	-0.0136818	-0.00547	BBSAG Bull.80
2446821.417	28646	0.008382	-0.00349	BBSAG Bull.84
2446875.648	28874.5	0.0059901	-0.02037	OMT #1
2446875.775	28875	0.0143175	0.00146	OMT #1
2446892.372	28945	-0.0028507	-9.89E-04	BBSAG Bull.84
2446901.391	28983	-0.0029706	0.00734	BBSAG Bull.83

ตารางที่ จ-1 ค่า O – C และค่า Residual ของระบบดาวคู่ RW Comae Berenices (ต่อ)

HJD(O)	Epoch	O-C	Residual	References
2446903.534	28992	0.0039221	-0.00985	BBSAG Bull.84
2446904.365	28995.5	0.0042137	-0.00998	BBSAG Bull.83
2446915.639	29043	0.0043138	-0.00309	OMT #1
2446939.373	29143	0.0037878	-0.0028	BBSAG Bull.84
2446976.399	29299	0.0039273	-0.00271	BBSAG Bull.86
2447219.803	30324.5	0.0103631	-0.00326	OMT #1
2447263.596	30509	0.0131627	-0.00317	BBSAG Bull.89
2447263.603	30509	0.0201627	0.00298	BBSAG Bull.89
2447266.323	30520.5	0.0106922	0.00572	BBSAG Bull.88
2447273.436	30550.5	0.0033344	0.01272	BBSAG Bull.88
2447276.417	30563	0.0175186	0.00325	BBSAG Bull.88
2447303.47	30677	0.013159	-0.00412	BBSAG Bull.88
2447330.399	30790.5	0.003472	-0.01006	BBSAG Bull.89
2447590.423	31886	0.0157396	0.00567	BBSAG Bull.91
2447612.371	31978.5	0.0093031	-0.00405	BBSAG Bull.91
2447613.439	31983	0.0092494	0.00788	BBSAG Bull.91
2447640.62	32097.5	0.0142172	0.00142	OMT #1
2447958.431	33436.5	0.019914	0.00136	BBSAG Bull.94
2447969.343	33482.5	0.014032	0.00629	BBSAG Bull.94
2447983.353	33541.5	0.0206617	0.01155	BBSAG Bull.95
2447985.6	33551	0.0128817	0.00566	OMT #1
2448013.363	33668	0.0064863	0.01227	BBSAG Bull.95
2448232.675	34592	0.0114661	0.00448	BRNO 31
2448331.776	35009.5	0.02082	-0.00195	OMT #1
2448348.612	35080.5	0.0053066	0.00271	OMT #1
2448357.404	35117.5	0.015532	0.01192	BBSAG Bull.97
2448357.637	35118.5	0.0111867	-0.00362	OMT #1

ตารางที่ จ-1 ค่า O – C และค่า Residual ของระบบดาวคู่ RW Comae Berenices (ต่อ)

HJD(O)	Epoch	O-C	Residual	References
2448385.398	35235.5	0.0027913	0.00659	BBSAG Bull.98
2448390.397	35256.5	0.0175408	0.00224	BBSAG Bull.98
2448397.626	35287	0.0075104	-0.00619	OMT #1
2448411.634	35346	0.01214	0.00855	OMT #1
2448654.905	36371	0.0042485	-0.00149	OMT #1
2448709.734	36602	0.0064935	0.00311	OMT #1
2448720.319	36646.5	0.0296294	-0.00515	BBSAG Bull.101
2448737.387	36718.5	0.0087707	-0.003	BBSAG Bull.101
2448760.414	36815.5	0.0132805	0.02012	BBSAG Bull.101
2448762.663	36825	0.0075005	-7.64E-04	OMT #1
2448788.416	36933.5	0.0085398	0.00371	BBSAG Bull.101
2448802.421	36992.5	0.0101695	-0.00207	BBSAG Bull.101
2449060.42	38079.5	0.0148718	-0.00108	BBSAG Bull.103
2449066.359	38104.5	0.0202403	5.30E-04	BBSAG Bull.103
2449090.331	38205.5	0.0203691	0.00481	BBSAG Bull.104
2449107.428	38277.5	0.0285104	0.01017	BBSAG Bull.104
2449116.428	38315.5	0.0093905	0.01025	BBSAG Bull.104
2449163.425	38513.5	0.012029	0.01837	BBSAG Bull.104
2449416.437	39579.5	0.0139818	-7.70E-04	BBSAG Bull.106
2449416.671	39580.5	0.0106366	0.00179	BBSAG Bull.106
2449472.443	39815.5	0.0065005	0.0033	BBSAG Bull.106
2449473.403	39819.5	0.0171194	-4.42E-05	BBSAG Bull.106
2449484.434	39866	0.0115648	-0.00428	BBSAG Bull.106
2449520.396	40017.5	0.015758	0.00634	BBSAG Bull.107
2449776.365	41096	0.007895	7.63E-04	BBSAG Bull.108
2449801.413	41201.5	0.0159701	0.00489	BBSAG Bull.108
2449810.31	41239	0.0125229	-0.00344	BBSAG Bull.109

ตารางที่ จ-1 ค่า O – C และค่า Residual ของระบบดาวคู่ RW Comae Berenices (ต่อ)

HJD(O)	Epoch	O-C	Residual	References
2449840.334	41365.5	0.0123475	0.00459	BBSAG Bull.109
2449895.399	41597.5	0.0132472	0.00113	BBSAG Bull.109
2450100.69	42462.5	0.0005973	8.94E-04	BBSAG Bull.111
2450152.444	42680.5	0.0133306	0.00169	BBSAG Bull.111
2450190.419	42840.5	0.013089	-0.01135	BBSAG Bull.112
2450487.69	44093	0.0091508	0.00128	BBSAG Bull.116
2450518.427	44222.5	0.0099397	9.63E-04	BBSAG Bull.114
2450555.332	44378	0.0077517	-0.00357	BBSAG Bull.115
2450563.402	44412	0.0084129	-0.00284	IBVS 4534
2450563.524	44412.5	0.0112403	-0.00511	IBVS 4534
2450577.405	44471	0.0076425	-0.00446	BBSAG Bull.115
2450578.829	44477	0.007571	-0.00164	OMT #5
2450595.439	44547	0.0034028	-0.00526	BBSAG Bull.115
2450900.431	45832	0.0067437	-0.00534	BBSAG Bull.117
2450902.341	45840	0.0179816	-0.00954	BBSAG Bull.117
2451256.689	47333	0.0095084	-0.00684	OMT #5
2451258.702	47341.5	0.0045737	0.00439	IBVS 5027
2451288.729	47468	0.0076983	-0.00485	IBVS 5027
2451648.779	48985	0.0052389	-0.00979	IBVS 5040
2451660.41	49034	0.0066212	-0.00673	BBS 122
2451967.535	50328	0.0064547	-0.01002	BBS 124
2451968.482	50332	0.0042137	-0.00866	OEJV 0074
2451968.601	50332.5	0.0041711	-0.00955	OEJV 0074
2451985.451	50403.5	0.0030876	-0.0118	IBVS 5583
2451986.638	50408.5	0.0032613	-0.01184	AOEB 7
2452001.352	50470.5	0.0013852	-0.01296	OEJV 0074
2452001.474	50471	0.0046125	-0.01279	OEJV 0074

ตารางที่ จ-1 ค่า O – C และค่า Residual ของระบบดาวคู่ RW Comae Berenices (ต่อ)

HJD(O)	Epoch	O-C	Residual	References
2452001.593	50471.5	0.0049099	-0.0147	OEJV 0074
2452015.594	50530.5	0.0032396	-0.01148	AOEB 7
2452039.448	50631	0.0034409	-0.01118	BBS 125
2452311.448	51777	0.006373	-0.01288	IBVS 5898
2452318.093	51805	0.0059057	-0.01274	VSB 40
2452338.506	51891	0.0068133	-0.01048	IBVS 5898
2452338.621	51891.5	0.0033407	-0.01096	IBVS 5898
2452339.452	51895	0.0038323	-0.0101	IBVS 5898
2452339.57	51895.5	0.0027597	-0.01358	IBVS 5898
2452341.708	51904.5	0.0042523	-0.01309	AOEB 7
2452345.506	51920.5	0.0046282	-0.01416	IBVS 5898
2452373.633	52039	0.0062149	-0.01267	AOEB 7
2452597.926	52984	0.0081442	-0.01231	AOEB 10
2452611.929	53043	0.0076738	-0.01079	AOEB 10
2452618.338	53070	0.0085518	-0.00943	VSB 40
2452685.148	53351.5	0.0057611	-0.00994	VSB 42
2452685.269	53352	0.0085885	-0.00907	VSB 42
2452694.526	53391	0.0085233	-0.01204	IBVS 5643
2452724.785	53518.5	0.0068027	-0.00921	IBVS 5493
2452735.704	53564.5	0.0075207	-0.0093	AOEB 10
2452739.621	53581	0.0085239	-0.0111	AOEB 10
2452753.388	53639	0.0095989	-0.01041	IBVS 5438
2452801.448	53841.5	0.0070837	-0.00941	IBVS 5676
2452993.938	54652.5	0.0097778	-0.00838	AOEB 10
2453007.941	54711.5	0.009555	-0.01102	IBVS 5602
2453008.06	54712	0.0102349	-0.00883	IBVS 5602
2453050.784	54892	0.0117881	-0.00909	AOEB 10

ตารางที่ จ-1 ค่า O – C และค่า Residual ของระบบดาวคู่ RW Comae Berenices (ต่อ)

HJD(O)	Epoch	O-C	Residual	References
2453095.406	55080	0.0130792	-0.00841	IBVS 5643
2453095.52	55080.5	0.0083066	-0.00697	IBVS 5643
2453106.441	55126.5	0.0111246	-0.0058	IBVS 5657
2453110.357	55143	0.0106278	-0.01057	IBVS 5643
2453110.476	55143.5	0.0111552	-0.00778	IBVS 5643
2453110.595	55144	0.0116826	-0.00829	JAAVSO 41;328
2453179.664	55435	0.0132119	-0.00776	AOEB 10
2453406.449	56390.5	0.014916	-0.00724	IBVS 5668
2453406.569	56391	0.0156433	-0.00589	IBVS 5668
2453407.636	56395.5	0.0149897	-0.00481	IBVS 5668
2453409.532	56403.5	0.0127276	-0.00408	IBVS 5668
2453409.653	56404	0.015055	-0.00474	IBVS 5668
2453409.654	56404	0.015955	-0.00701	IBVS 5657
2453413.69	56421	0.0162855	-0.00468	AOEB 10
2453459.023	56612	0.0172409	-0.00378	VSJ 44
2453459.141	56612.5	0.0156683	-0.00346	VSJ 44
2453461.396	56622	0.0162983	-0.00263	OEJV 0074
2453462.346	56626	0.0169072	-0.0042	IBVS 5657
2453462.462	56626.5	0.0145346	-0.00358	IBVS 5657
2453462.584	56627	0.017162	-0.00297	IBVS 5657
2453463.533	56631	0.0167809	-0.00535	IBVS 5657
2453464.361	56634.5	0.0148725	-0.00272	IBVS 5731
2453466.62	56644	0.0187926	-0.0031	AOEB 10
2453476.466	56685.5	0.0151643	-0.00501	IBVS 5657
2453476.586	56686	0.0165916	-0.0011	IBVS 5657
2453486.674	56728.5	0.0169181	-0.00475	IBVS 5636
2453489.404	56740	0.0171476	-0.00333	AOEB 10

ตารางที่ จ-1 ค่า O – C และค่า Residual ของระบบดาวคู่ RW Comae Berenices (ต่อ)

HJD(O)	Epoch	O-C	Residual	References
2453494.74	56762.5	0.0136792	-0.00303	IBVS 5636
2453495.1	56764	0.0168614	-0.00281	VSB 44
2453525.717	56893	0.0166228	-0.00629	IBVS 5636
2453529.752	56910	0.0167534	-0.00311	IBVS 5636
2453531.769	56918.5	0.0163187	-0.00343	IBVS 5636
2453538.771	56948	0.0168335	-0.00331	IBVS 5636
2453540.67	56956	0.0172714	-0.00375	IBVS 5636
2453548.74	56990	0.0171326	-0.00326	IBVS 5636
2453553.724	57011	0.0169821	-0.00283	IBVS 5636
2453760.571	57882.5	0.0176881	-0.00299	IBVS 5777
2453760.689	57883	0.0172154	-0.00315	IBVS 5777
2453764.605	57899.5	0.0172186	-0.00303	IBVS 5802
2453798.902	58044	0.0176286	-0.0035	AOEB 12
2453808.04	58082.5	0.0177361	-0.00351	VSB 45
2453808.158	58083	0.0172634	-0.0032	VSB 45
2453817.415	58122	0.0178983	-0.00312	IBVS 5802
2453818.482	58126.5	0.0165446	-0.00359	IBVS 5777
2453818.6	58127	0.015372	-0.00298	IBVS 5777
2453826.791	58161.5	0.0178605	-0.00434	IBVS 5760
2453827.384	58164	0.0180174	-0.00551	IBVS 5707
2453830.588	58177.5	0.0179363	-0.00305	JAAVSO 41;328
2453832.487	58185.5	0.0184043	-0.00289	OEJV 0074
2453833.436	58189.5	0.0181532	-0.00298	OEJV 0074
2453840.438	58219	0.0177081	-0.00252	IBVS 5731
2453845.303	58239.5	0.0178302	-0.00277	IBVS 5707
2453863.338	58315.5	0.0140905	-0.00324	IBVS 5707
2453863.342	58315.5	0.0184905	-0.00313	IBVS 5731

ตารางที่ จ-1 ค่า O – C และค่า Residual ของระบบดาวคู่ RW Comae Berenices (ต่อ)

HJD(O)	Epoch	O-C	Residual	References
2453863.46	58316	0.0175178	-0.00692	IBVS 5731
2453863.58	58316.5	0.0188452	-0.00252	IBVS 5731
2453895.977	58453	0.0186172	-0.0035	VSB 45
2454149.581	59521.5	0.0186069	-0.00217	IBVS 5898
2454154.565	59542.5	0.0182565	-0.00249	IBVS 5802
2454167.383	59596.5	0.0199124	-0.00324	IBVS 5777
2454170.587	59610	0.0194914	-0.0036	OEJV 0074
2454174.384	59626	0.0188272	-0.00199	IBVS 5777
2454174.503	59626.5	0.0191546	-0.00242	IBVS 5802
2454174.623	59627	0.020482	-0.00309	IBVS 5802
2454176.875	59636.5	0.018502	-0.00276	AOEB 12
2454182.334	59659.5	0.018261	-0.00144	IBVS 5777
2454186.37	59676.5	0.0192916	-0.00342	IBVS 5802
2454187.437	59681	0.0185379	-0.00368	IBVS 5898
2454187.558	59681.5	0.0201653	-0.00266	IBVS 5898
2454189.337	59689	0.0191759	-0.00342	IBVS 5898
2454189.456	59689.5	0.0194032	-0.00179	IBVS 5898
2454201.442	59740	0.0197676	-0.00279	IBVS 5795
2454203.341	59748	0.0204055	-0.00256	IBVS 5898
2454203.459	59748.5	0.0197329	-0.00223	IBVS 5898
2454203.576	59749	0.0179603	-0.0016	IBVS 5898
2454204.406	59752.5	0.0173619	-0.00227	OEJV 0074
2454207.375	59765	0.0196361	-0.00404	IBVS 5874
2454209.63	59774.5	0.0194561	-0.00465	IBVS 5898
2454209.749	59775	0.0195835	-0.00238	IBVS 5898
2454211.529	59782.5	0.019594	-0.00257	IBVS 5898
2454216.393	59803	0.0183162	-0.00244	IBVS 5802

ตารางที่ จ-1 ค่า O – C และค่า Residual ของระบบดาวคู่ RW Comae Berenices (ต่อ)

HJD(O)	Epoch	O-C	Residual	References
2454216.394	59803	0.0192162	-0.00243	IBVS 5802
2454216.512	59803.5	0.0181436	-0.00373	IBVS 5802
2454217.7	59808.5	0.0198173	-0.00283	AOEB 12
2454219.36	59815.5	0.0184005	-0.0039	OEJV 0074
2454235.38	59883	0.0171954	-0.00223	IBVS 5898
2454235.5	59883.5	0.0183228	-0.00365	IBVS 5898
2454260.303	59988	0.0192431	-0.0049	OEJV 0073
2454260.421	59988.5	0.0185705	-0.00378	OEJV 0073
2454267.661	60019	0.0199401	-0.00293	AOEB 12
2454513.551	61055	0.0201507	-0.0036	IBVS 5898
2454520.789	61085.5	0.0191203	-0.00226	JAVSO..36..171
2454523.521	61097	0.0208498	-0.00278	IBVS 5898
2454556.748	61237	0.0200134	-0.00384	IBVS 5875
2454570.751	61296	0.020043	-0.00212	JAVSO..36..186
2454573.6	61308	0.0199999	-0.00305	JAVSO..36..186
2454593.417	61391.5	0.0194707	-0.00307	IBVS 5874
2454597.689	61409.5	0.019156	-0.00312	JAVSO..36..186
2454620.712	61506.5	0.0189658	-0.00371	JAVSO..36..186
2454802.995	62274.5	0.0214061	-0.00403	IBVS 5875
2454803.114	62275	0.0215335	-0.0043	IBVS 5875
2454854.5	62491.5	0.0219847	-0.00242	IBVS 5887
2454854.619	62492	0.0225121	-0.00229	IBVS 5887
2454865.536	62538	0.0219301	-0.002	IBVS 5887
2454865.654	62538.5	0.0212575	-0.00147	IBVS 5887
2454874.908	62577.5	0.0188924	-0.00209	IBVS 5894
2454883.456	62613.5	0.022563	-0.00276	IBVS 5898
2454891.408	62647	0.0227968	-0.00516	IBVS 5898

ตารางที่ จ-1 ค่า O – C และค่า Residual ของระบบดาวคู่ RW Comae Berenices (ต่อ)

HJD(O)	Epoch	O-C	Residual	References
2454911.582	62732	0.0231497	-0.00151	IBVS 5887
2454912.769	62737	0.0228234	-0.0013	JAVSO..38...85
2454914.549	62744.5	0.0226339	-0.00101	IBVS 5887
2454916.684	62753.5	0.0223266	-0.00134	JAVSO..38...85
2454930.333	62811	0.0230741	-0.00154	IBVS 5887
2454930.45	62811.5	0.0222015	-0.00185	IBVS 5887
2454933.418	62824	0.0230858	-0.00115	IBVS 5918
2454933.537	62824.5	0.0236131	-0.00202	IBVS 5918
2454933.655	62825	0.0228405	-0.00115	JAVSO..38...85
2454937.454	62841	0.0237163	-6.19E-04	IBVS 5918
2454937.571	62841.5	0.0222437	-0.00139	IBVS 5918
2454955.729	62918	0.0239313	-5.28E-04	IBVS 5894
2454964.391	62954.5	0.0223293	-0.002	IBVS 5918
2455163.883	63795	0.0261383	-3.70E-04	JAVSO..38..183
2455219.541	64029.5	0.0265748	-0.002	IBVS 5980
2455279.828	64283.5	0.0275788	0.00118	IBVS 5974
2455280.659	64287	0.0274704	0.00143	JAVSO..39...94
2455283.744	64300	0.027682	0.00224	IBVS 5945
2455310.09	64411	0.0279581	0.00213	VSJ 51
2455310.209	64411.5	0.0283855	0.00234	VSJ 51
2455310.446	64412.5	0.0277402	0.00253	IBVS 5959
2455310.565	64413	0.0280676	0.00295	IBVS 5959
2455567.613	65496	0.031151	0.00231	OEJV 0137
2455567.614	65496	0.032151	0.00263	OEJV 0137
2455572.835	65518	0.0316553	0.00488	JAVSO..39..177
2455586.722	65576.5	0.0341576	0.00588	IBVS 5980
2455594.671	65610	0.0317914	0.00537	JAVSO..39..177

ตารางที่ จ-1 ค่า O – C และค่า Residual ของระบบดาวคู่ RW Comae Berenices (ต่อ)

HJD(O)	Epoch	O-C	Residual	References
2455596.807	65619	0.0322841	0.00782	JAVSO..39..177
2455609.861	65674	0.0322948	0.00543	IBVS 5992
2455609.98	65674.5	0.0319221	0.00591	IBVS 5992
2455624.577	65736	0.0323886	0.00588	IBVS 6044
2455628.612	65753	0.0323192	0.00551	JAVSO..39..177
2455637.393	65790	0.0317446	0.00593	JAVSO..39..177
2455642.377	65811	0.0320941	0.00584	JAVSO..39..177
2455642.378	65811	0.0327941	0.00524	IBVS 6010
2455642.495	65811.5	0.0308215	0.00557	IBVS 6010
2455643.327	65815	0.0323131	0.00627	IBVS 5990
2455646.412	65828	0.0318247	0.0043	JAVSO..39..177
2455654.485	65862	0.0348859	0.00579	OEJV 0160
2455656.262	65869.5	0.0318964	0.00529	IBVS 5990
2455656.381	65870	0.0325238	0.00833	IBVS 5990
2455656.499	65870.5	0.0315512	0.00533	IBVS 5990
2455659.347	65882.5	0.0317081	0.00596	IBVS 5990
2455659.467	65883	0.0324354	0.00498	IBVS 5990
2455659.585	65883.5	0.0317628	0.00513	IBVS 5990
2455661.365	65891	0.0321733	0.00586	IBVS 5990
2455661.483	65891.5	0.0317007	0.00519	IBVS 5990
2455662.315	65895	0.0322923	0.00559	IBVS 5990
2455662.433	65895.5	0.0324197	0.00512	IBVS 6010
2455662.553	65896	0.033047	0.00571	IBVS 6010
2455663.382	65899.5	0.0318386	0.00583	IBVS 5990
2455663.501	65900	0.032466	0.00646	IBVS 5990
2455675.37	65950	0.034203	0.00525	IBVS 6010
2455675.487	65950.5	0.0321304	0.00588	IBVS 6010

ตารางที่ จ-1 ค่า O – C และค่า Residual ของระบบดาวคู่ RW Comae Berenices (ต่อ)

HJD(O)	Epoch	O-C	Residual	References
2455675.607	65951	0.0331577	0.00757	IBVS 6010
2455679.757	65968.5	0.0294157	0.0055	IBVS 5992
2455679.88	65969	0.0344431	0.00653	IBVS 5992
2455690.088	66012	0.0364969	0.00277	VSB 53
2455921.973	66989	0.0346779	0.0078	JAVSO..40..975
2455924.94	67001.5	0.0351621	0.00982	JAVSO..40..975
2455932.891	67035	0.0349959	0.00722	IBVS 6050
2455981.902	67241.5	0.0343997	0.00769	IBVS 6029
2456007.418	67349	0.0360143	0.0075	OEJV 0160
2456046.699	67514.5	0.0358437	0.00674	IBVS 6029
2456061.414	67576.5	0.0358376	0.00827	IBVS 6070
2456061.651	67577.5	0.0355924	0.00796	JAVSO..41..122
2456336.739	68736.5	0.040036	0.00791	JAVSO..41..328
2456357.033	68822	0.0412163	0.00766	VSB 56
2456357.151	68822.5	0.0402437	0.01115	VSB 56
2456357.27	68823	0.041071	0.01226	VSB 56
2456368.188	68869	0.0409891	0.01129	VSB 56
2456368.306	68869.5	0.0401164	0.01212	VSB 56
2456385.515	68942	0.0421851	0.012	IBVS 6125
2456386.701	68947	0.0413588	0.01112	JAVSO..41..328
2456413.64	69060.5	0.0409718	0.01313	JAVSO..41..328
2456427.643	69119.5	0.0413014	0.0123	JAVSO..41..328
2456725.873	70376	0.0462822	0.01182	JAVSO..42..426
2456738.689	70430	0.0461382	0.0121	JAVSO..42..426
2456741.654	70442.5	0.0441225	0.01381	JAVSO..42..426
2456746.401	70462.5	0.0443173	0.01398	IBVS 6149
2457428.351	73335.5	0.0473853	0.01455	งานวิจัยครั้งนี้

ตารางที่ จ-2 ค่า O – C ของระบบดาวคู่ V1799 Orion

HJD	Epoch	O – C	References
2451524.82900	0	0	IBVS 5699
2455113.85320	12363	-0.07833	IBVS 5929
2455135.91870	12439	-0.07639	IBVS 5920
2455135.77270	12438.5	-0.077235	IBVS 5920
2454756.92260	11133.5	-0.072785	IBVS 5871
2455506.92480	13717	-0.08647	IBVS 5960
2455937.59000	15200.5	-0.096155	IBVS 6029
2455937.73530	15201	-0.09601	IBVS 6029
2456237.90930	16235	-0.10255	IBVS 6042
2451946.79300	1454	-0.14674	Diethelm Roger
2455849.62730	14897.5	-0.094925	Brat Lubos
2455859.49810	14931.5	-0.094665	Raetz M
2458105.16652	22667	-0.11927	งานวิจัยครั้งนี้
2458105.31390	22667.5	-0.117025	งานวิจัยครั้งนี้