TABLE FOR DOODSON NUMBERS (SOLAR HOURS)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | PARAMETERS | T | s | h | p | N | Ps | 90 | u | AngularSpeed ⁰/h | NODE FACTOR f  1/f = F |
|  | DOODSON N. | D1 | D2 | D3 | D4 | D5 | D6 | D7 |  |  |  |
| No | COMPONENT |  | | | | | | |  |  |  |
| 1 | Mm | 0 | 1 | 0 | -1 | 0 | 0 | 0 | 0 | 0.5443747 | [2/3-sin2(I)]/0.5021 |
| 2 | MSf | 0 | 2 | -2 | 0 | 0 | 0 | 0 | 0 | 1.0158958 | [2/3-sin2(I)]/0.5021 |
| 3 | Mf | 0 | 2 | 0 | 0 | 0 | 0 | 0 | -2ξ | 1.0980331 | sin2(I)/0.1578 |
| 4 | Ssa | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0.0821373 | 1 |
| 5 | Sa | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0.0410686 | 1 |
| 6 | O1 | 1 | -2 | 1 | 0 | 0 | 0 | 1 | 2ξ-ν | 13.9430356 | sin(I)cos2(I/2)/0.3800 |
| 7 | Q1 | 1 | -3 | 1 | 1 | 0 | 0 | 1 | 2ξ-ν | 13.3986609 | sin(I)cos2(I/2)/0.3800 |
| 8 | 2Q1 | 1 | -4 | 1 | 2 | 0 | 0 | 1 | 2ξ-ν | 12.8542862 | sin(I)cos2(I/2)/0.3800 |
| 9 | (RHO) ρ1 | 1 | -3 | 3 | -1 | 0 | 0 | 1 | 2ξ-ν | 13.4715145 | sin(I)cos2(I/2)/0.3800 |
| 10 | (SIGMA) σ1 | 1 | -4 | 3 | 0 | 0 | 0 | 1 | 2ξ-ν | 12.9271398 | sin(I)cos2(I/2)/0.3800 |
| 11 | J1 | 1 | 1 | 1 | -1 | 0 | 0 | -1 | -ν | 15.5854433 | sin(2I)/0.7214 |
| 12 | (CHI) χ1 | 1 | -1 | 3 | -1 | 0 | 0 | -1 | -ν | 14.5695476 | sin(2I)/0.7214 |
| 13 | (THETA) Θ1 | 1 | 1 | -1 | 1 | 0 | 0 | -1 | -ν | 15.5125897 | sin(2I)/0.7214 |
| 14 | MP1 | 1 | -2 | 3 | 0 | 0 | 0 | -1 | -ν | 14.0251729 | sin(2I)/0.7214 |
| 15 | SO1 | 1 | 2 | -1 | 0 | 0 | 0 | -1 | -ν | 16.0569644 | sin(2I)/0.7214 |
| 16 | OO1 | 1 | 2 | 1 | 0 | 0 | 0 | -1 | -2ξ-ν | 16.1391017 | sin(I)sin2(I/2)/0.0164 |
| 17 | KQ1 | 1 | 3 | 1 | -1 | 0 | 0 | -1 | -2ξ-ν | 16.6834764 | sin(I)sin2(I/2)/0.0164 |
| 18 | P1 | 1 | 0 | -1 | 0 | 0 | 0 | 1 | 0 | 14.9589314 | 1 |
| 19 | (PI) π1 | 1 | 0 | -2 | 0 | 0 | 1 | 1 | 0 | 14.9178647 | 1 |
| 20 | (PSI) Ψ1 | 1 | 0 | 2 | 0 | 0 | -1 | -1 | 0 | 15.0821353 | 1 |
| 21 | (PHI) φ1 | 1 | 0 | 3 | 0 | 0 | 0 | -1 | 0 | 15.1232059 | 1 |
| 22 | S1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15.0000000 | 1 |
| 23 | M1\* | 1 | -1 | 1 | 0 | 0 | 0 | -1 | ξ-ν+Q | 14.4966939 | sqrt(2.307)\* sin(I)cos2(I/2)/(0.3800\*Qa) |
| 24 | K1 | 1 | 0 | 1 | 0 | 0 | 0 | -1 | - ν’ | 15.0410686 | (0.8965sin2(2I)+0.6001sin(2I)cos(ν) + 0.1006)1/2 |
| 25 | M2 | 2 | -2 | 2 | 0 | 0 | 0 | 0 | 2ξ-2ν | 28.9841042 | cos4(I/2)/0.9154 |
| 26 | N2 | 2 | -3 | 2 | 1 | 0 | 0 | 0 | 2ξ-2ν | 28.4397295 | cos4(I/2)/0.9154 |
| 27 | 2N2 | 2 | -4 | 2 | 2 | 0 | 0 | 0 | 2ξ-2ν | 27.8953548 | cos4(I/2)/0.9154 |
| 28 | (NU) ν2 | 2 | -3 | 4 | -1 | 0 | 0 | 0 | 2ξ-2ν | 28.5125831 | cos4(I/2)/0.9154 |
| 29 | (LAMDA) λ2 | 2 | -1 | 0 | 1 | 0 | 0 | 2 | 2ξ-2ν | 29.4556253 | cos4(I/2)/0.9154 |
| 30 | (MU) μ2 | 2 | -4 | 4 | 0 | 0 | 0 | 0 | 2ξ-2ν | 27.9682084 | cos4(I/2)/0.9154 |
| 31 | KJ2 | 2 | 1 | 2 | -1 | 0 | 0 | 0 | -2ν | 30.6265120 | sin2(I)/0.1565 |
| 32 | S2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30.0000000 | 1 |
| 33 | T2 | 2 | 0 | -1 | 0 | 0 | 1 | 0 | 0 | 29.9589333 | 1 |
| 34 | R2 | 2 | 0 | 1 | 0 | 0 | -1 | 2 | 0 | 30.0410667 | 1 |
| 35 | L2 | 2 | -1 | 2 | -1 | 0 | 0 | 2 | 2ξ-2ν -R | 29.5284789 | cos4(I/2)/(0.9154\*Ra) |
| 36 | K2 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | -2ν‘’ | 30.0821373 | (19.0444sin4(I)+2.7702sin2(I)cos(2ν) + 0.0981)1/2 |
| 37 | M3 | 3 | -3 | 3 | 0 | 0 | 0 | 0 | 3ξ-3ν | 43.4761563 | cos6(I/2)/0.8758 |
| 38 | S3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45.0000000 | 1 |
| 39 | MNS2 | 2 | -5 | 4 | 1 | 0 | 0 | 0 | 4ξ-4ν | 27.4238337 | f2(M2) |
| 40 | 2SM2 | 2 | 2 | -2 | 0 | 0 | 0 | 0 | -2ξ+2ν | 31.0158958 | f(M2) |
| 41 | MK3 | 3 | -2 | 3 | 0 | 0 | 0 | -1 | 2ξ-2ν-ν’ | 44.0251729 | f(M2)\* f(K1) |
| 42 | 2MK3 | 3 | -4 | 3 | 0 | 0 | 0 | 1 | 4ξ-4ν+ν’ | 42.9271398 | f2(M2)\* f(K1) |
| 43 | SK3 | 3 | 0 | 1 | 0 | 0 | 0 | -1 | -ν’ | 45.0410686 | f(K1) |
| 44 | SO3 | 3 | -2 | 1 | 0 | 0 | 0 | 1 | 2ξ-ν | 43.9430356 | f(O1) |
| 45 | M4 | 4 | -4 | 4 | 0 | 0 | 0 | 0 | 4ξ-4ν | 57.9682084 | f2(M2) |
| 46 | MS4 | 4 | -2 | 2 | 0 | 0 | 0 | 0 | 2ξ-2ν | 58.9841042 | f2(M2) |
| 47 | MN4 | 4 | -5 | 4 | 1 | 0 | 0 | 0 | 4ξ-4ν | 57.4238337 | f2(M2) |
| 48 | MK4 | 4 | -2 | 4 | 0 | 0 | 0 | 0 | 2ξ-2ν-2ν’’ | 59.0662415 | f(M2)\* f(K2) |
| 49 | S4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60.0000000 | 1 |
| 50 | M6 | 6 | -6 | 6 | 0 | 0 | 0 | 0 | 6ξ-6ν | 86.9523127 | f3(M2) |
| 51 | 2MS6 | 6 | -4 | 4 | 0 | 0 | 0 | 0 | 4ξ-4ν | 87.9682084 | f2(M2) |
| 52 | 2MN6 | 6 | -7 | 6 | 1 | 0 | 0 | 0 | 6ξ-6ν | 86.4079380 | f3(M2) |
| 53 | 2SM6 | 6 | -2 | 2 | 0 | 0 | 0 | 0 | 2ξ-2ν | 88.9841042 | f(M2) |
| 54 | MSN6 | 6 | -5 | 4 | 1 | 0 | 0 | 0 | 4ξ-4ν | 87.4238337 | f2(M2) |
| 55 | S6 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90.0000000 | 1 |
| 56 | M8 | 8 | -8 | 8 | 0 | 0 | 0 | 0 | 8ξ-8ν | 115.9364169 | f4(M2) |
| 57 | 3MS8 | 8 | -6 | 6 | 0 | 0 | 0 | 0 | 6ξ-6ν | 116.9523127 | f3(M2) |
| 58 | 2(MS)8 | 8 | -4 | 4 | 0 | 0 | 0 | 0 | 4ξ-4ν | 117.9682084 | f2(M2) |
| 59 | 2MSN8 | 8 | -7 | 6 | 1 | 0 | 0 | 0 | 6ξ-6ν | 116.4079380 | f3(M2) |
| 60 | S8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 120.0000000 | 1 |