

18 SPCS SP Ephemeris Format

Earth-Centered Inertial (ECI) True Equator, Mean Equinox (TEME) of date

Columns	1	2	3	4	5	6	7	8	9	10	11
Line 1	25544	0.743668599541789E-01	0.637813630000000E+04	2016005094155.055							SP
Line 2	2016005094155.055	-5765.359948	-383.169686	3529.720212	3.114027238	-5.389184367	4.496013533				
Line 3	2016005094406.305	-5294.543824	-1083.670971	4078.592678	4.047013272	-5.265465193	3.852359491				
	2016005094617.555	-4706.948284	-1760.274593	4537.250671	4.890256182	-5.025722757	3.123876744				
	2016005094828.805	-4015.590907	-2398.080202	4895.605841	5.625252218	-4.675364954	2.326770344				
	2016005095040.055	-3235.762539	-2983.057911	5145.797453	6.235930274	-4.222224127	1.478717680				
	2016005095251.305	-2384.684159	-3502.354741	5282.359622	6.708998594	-3.676366932	0.598467295				
	2016005095502.555	-1481.123236	-3944.573495	5302.334881	7.034223663	-3.049864964	-0.294580785				
	2016005095713.805	-544.979596	-4300.017721	5205.331038	7.204609721	-2.356516241	-1.180804320				
	2016005095943.805	538.357871	-4590.087264	4954.136754	7.205238093	-1.501833816	-2.160356324				

Line 1			
2-6	Satellite Catalog Number		
8-28	Square Root of Earth Gravitational Constant (Earth Radius 3/2/minute)		
30-50	Earth Radius		
52-68	Epoch Time (UTC YYYYDDDDHHMMSS.SSS) of last orbit determination		
113-114	Propagator used to generate ephemeris (SP for Special Perturbation or GP for General Perturbation)		
Line 2: Epoch and state of last orbit determination		Line 3: Epoch and state of first propagated ephemeris point	
2-18	Time of point (UTC YYYYDDDDHHMMSS.SSS)	2-18	Time of point (UTC YYYYDDDDHHMMSS.SSS)
20-34	x-position component (km)	20-34	x-position component (km)
36-50	y-position component (km)	36-50	y-position component (km)
52-66	z-position component (km)	52-66	z-position component (km)
68-82	x-velocity component (km/sec)	68-82	x-velocity component (km/sec)
84-98	y-velocity component (km/sec)	84-98	y-velocity component (km/sec)
100-114	z-velocity component (km/sec)	100-114	z-velocity component (km/sec)