



Year	Month	Day	Hour	Minute	Second	Latitude	Longitude	Altitude	Time	Value 1	Value 2	Value 3	Value 4	Value 5	Value 6	Value 7	Value 8	Value 9	Value 10
2016	9	28	0	0	0	4.170	64.536	1.091	4.093e+01	4.573e+03	0.000e+00	0.000e+00	4.093e+01	0.000e+00	9.995e+01				
2016	9	28	0	5		94.672	46.334	1.090	4.093e+01	4.573e+03	0.000e+00	0.000e+00	4.093e+01	0.000e+00	9.995e+01				
2016	9	28	0	10		89.419	27.830	1.088	4.093e+01	4.573e+03	0.000e+00	0.000e+00	4.093e+01	0.000e+00	9.995e+01				
2016	9	28	0	15		85.368	-9.230	1.087	4.093e+01	4.573e+03	0.000e+00	0.000e+00	4.093e+01	0.000e+00	9.995e+01				
2016	9	28	0	20		81.606	9.404	1.087	4.093e+01	4.573e+03	0.000e+00	0.000e+00	4.093e+01	0.000e+00	9.995e+01				
2016	9	28	0	25		77.544	28.032	1.087	4.093e+01	4.573e+03	0.000e+00	0.000e+00	4.093e+01	0.000e+00	9.995e+01				
2016	9	28	0	30		72.254	46.588	1.088	4.093e+01	4.573e+03	0.000e+00	0.000e+00	4.093e+01	0.000e+00	9.995e+01				
2016	9	28	0	35		62.586	64.853	1.088	4.093e+01	4.573e+03	0.000e+00	0.000e+00	4.093e+01	0.000e+00	9.995e+01				
2016	9	28	0	40		22.390	80.789	1.089	4.093e+01	4.573e+03	0.000e+00	0.000e+00	4.093e+01	0.000e+00	9.995e+01				
2016	9	28	0	45		85.266	74.423	1.089	4.093e+01	4.573e+03	0.000e+00	0.000e+00	4.093e+01	0.000e+00	9.995e+01				
2016	9	28	0	50		67.135	56.752	1.088	4.093e+01	4.573e+03	0.000e+00	0.000e+00	4.093e+01	0.000e+00	9.995e+01				
2016	9	28	0	55		60.183	38.308	1.088	4.093e+01	4.573e+03	0.000e+00	0.000e+00	4.093e+01	0.000e+00	9.995e+01				
2016	9	28	1	0		55.618	19.712	1.087	4.093e+01	4.573e+03	0.000e+00	0.000e+00	4.093e+01	0.000e+00	9.995e+01				
2016	9	28	1	5		51.769	1.081	1.087	4.093e+01	4.573e+03	0.000e+00	0.000e+00	4.093e+01	0.000e+00	9.995e+01				
2016	9	28	1	10		47.954	17.537	1.088	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	1	15		43.532	36.101	1.089	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	1	20		37.072	54.513	1.090	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	1	25		21.856	72.310	1.091	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	1	30		35.575	81.917	1.091	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	1	35		82.728	67.274	1.091	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	1	40		71.771	49.174	1.090	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	1	45		66.174	30.695	1.089	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	1	50		62.016	12.105	1.088	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	1	55		58.248	6.527	1.087	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	2	0		54.276	25.159	1.087	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	2	5		49.279	43.733	1.088	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	2	10		40.771	62.077	1.088	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	2	15		11.225	78.894	1.089	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	2	20		67.842	76.876	1.089	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	2	25		44.771	59.566	1.088	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	2	30		37.085	41.170	1.088	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	2	35		32.311	22.587	1.087	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	2	40		28.404	3.958	1.087	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	2	45		24.620	14.665	1.088	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	2	50		20.350	33.241	1.089	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	2	55		14.387	51.689	1.090	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	3	0		1.737	69.667	1.091	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	3	5		32.864	82.387	1.091	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	3	10		61.876	69.970	1.091	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	3	15		48.974	52.006	1.090	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	3	20		42.959	33.558	1.089	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	3	25		38.673	14.879	1.088	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	3	30		34.866	3.649	1.087	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	3	35		30.985	22.284	1.087	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	3	40		26.234	40.873	1.087	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	3	45		18.630	59.278	1.088	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	3	50		56.154	76.634	1.089	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	3	55		53.101	79.107	1.089	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	4	0		22.659	62.362	1.088	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	4	5		14.045	44.029	1.088	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	4	10		9.022	25.461	1.087	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	4	15		5.042	6.835	1.087	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	4	20		1.275	11.792	1.088	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	4	25		97.131	30.378	1.089	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	4	30		91.577	48.856	1.090	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	4	35		80.807	66.966	1.091	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	4	40		29.843	81.801	1.091	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	4	45		41.871	72.605	1.091	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	4	50		26.305	54.830	1.090	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	4	55		19.781	36.415	1.089	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	5	0		15.340	17.852	1.088	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	5	5		11.521	0.772	1.087	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				
2016	9	28	5	10		7.675	19.409	1.087	4.094e+01	4.573e+03	0.000e+00	0.000e+00	4.094e+01	0.000e+00	9.995e+01				

그림 2-17 csv 파일로 재가공된 과학기술위성 3호의 5분단위 누적 우주방사선량의 2016년