

Lampiran 1. Contoh data RINEX observasi dan navigasi GPS (contoh data 9 April)

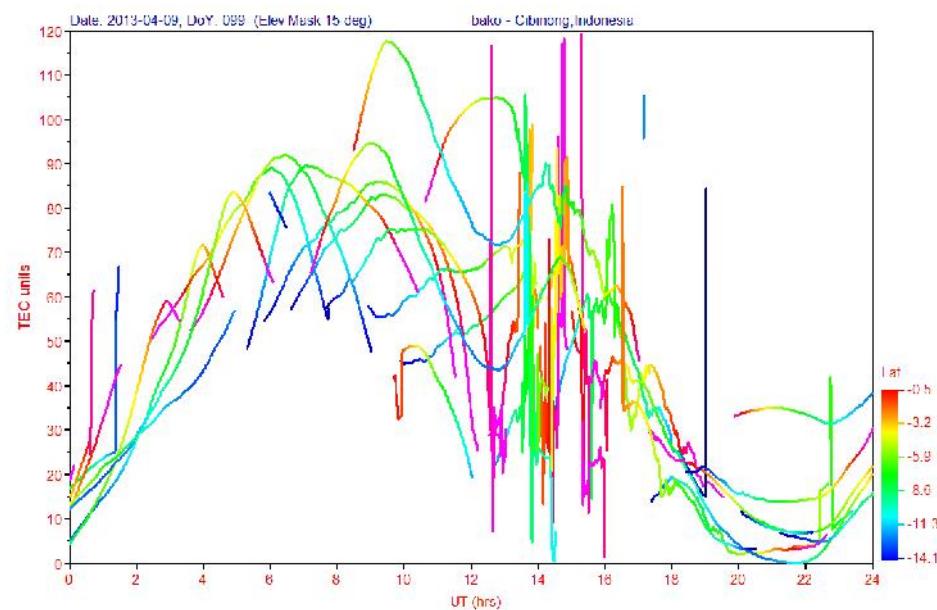
- a. Data GPS RINEX (*.o) dan (*.n) yang telah diolah menggunakan GPS TEC (*.cmn), untuk mendapatkan parameter S₄

bako indonesia			Data sintilasi (S4)								
Latitude	Longitude	altitude	Az	Ele	Lat	Lon	Stec	Vtec	S4		
-6.49106	106.8489	158.116									
2456392	8.70833	1	241.64	6.13	-12.66	94.8	101.88	40.67	-99		
2456392	8.71667	1	241.44	6.17	-12.69	94.85	101.39	40.53	-99		
2456392	8.725	1	241.23	6.22	-12.72	94.9	101.06	40.44	-99		
2456392	8.75833	1	240.42	6.39	-12.83	95.09	84.02	34.81	-99		
2456392	8.76667	1	240.21	6.44	-12.86	95.14	83.76	34.75	-99		
2456392	8.775	1	240.01	6.48	-12.89	95.19	96.69	39.11	-99		
2456392	8.78333	1	239.81	6.53	-12.91	95.24	96.13	38.94	-99		
2456392	8.80833	1	239.2	6.66	-12.99	95.39	99.33	40.09	-99		
2456392	8.81667	1	239	6.71	-13.01	95.44	98.85	39.95	-99		
2456392	8.85833	1	237.98	6.94	-13.14	95.7	95.39	38.91	0.28		
2456392	8.9	1	236.97	7.17	-13.25	95.95	224.74	82.97	-99		
2456392	8.925	1	236.37	7.32	-13.31	96.1	203.39	75.89	-99		
2456392	8.93333	1	236.17	7.37	-13.33	96.15	93.56	38.52	-99		
2456392	8.94167	1	235.97	7.42	-13.35	96.21	111.22	44.57	-99		
2456392	8.95	1	235.77	7.47	-13.37	96.26	105.89	42.78	-99		
2456392	8.95833	1	235.57	7.52	-13.39	96.31	115.65	46.15	-99		
2456392	8.96667	1	235.37	7.56	-13.41	96.36	114.82	45.9	-99		
2456392	8.975	1	235.17	7.62	-13.43	96.41	111.57	44.82	-99		
2456392	8.98333	1	234.97	7.67	-13.45	96.46	118.01	47.06	-99		
2456392	8.99167	1	234.77	7.72	-13.47	96.51	117.38	46.88	0.33		
2456392	9	1	234.57	7.77	-13.48	96.57	116.78	46.71	-99		
2456392	9.00833	1	234.37	7.82	-13.5	96.62	116.25	46.57	-99		
2456392	9.01667	1	234.17	7.87	-13.52	96.67	115.55	46.36	-99		
2456392	9.025	1	233.97	7.92	-13.54	96.72	145.05	56.55	-99		
2456392	9.03333	1	233.77	7.97	-13.55	96.77	144.3	56.34	-99		
2456392	9.04167	1	233.57	8.03	-13.57	96.82	119.47	47.82	-99		
2456392	9.05833	1	233.17	8.13	-13.6	96.93	119.87	48.04	-99		
2456392	9.06667	1	232.97	8.18	-13.62	96.98	119.22	47.86	-99		
2456392	9.075	1	232.77	8.24	-13.63	97.03	118.68	47.71	-99		
2456392	9.08333	1	232.57	8.29	-13.65	97.08	117.95	47.5	0.17		
2456392	9.1	1	232.18	8.4	-13.67	97.19	137.22	54.27	-99		
2456392	9.10833	1	231.98	8.45	-13.69	97.24	136.77	54.16	-99		
2456392	9.11667	1	231.78	8.51	-13.7	97.29	129.06	51.53	-99		

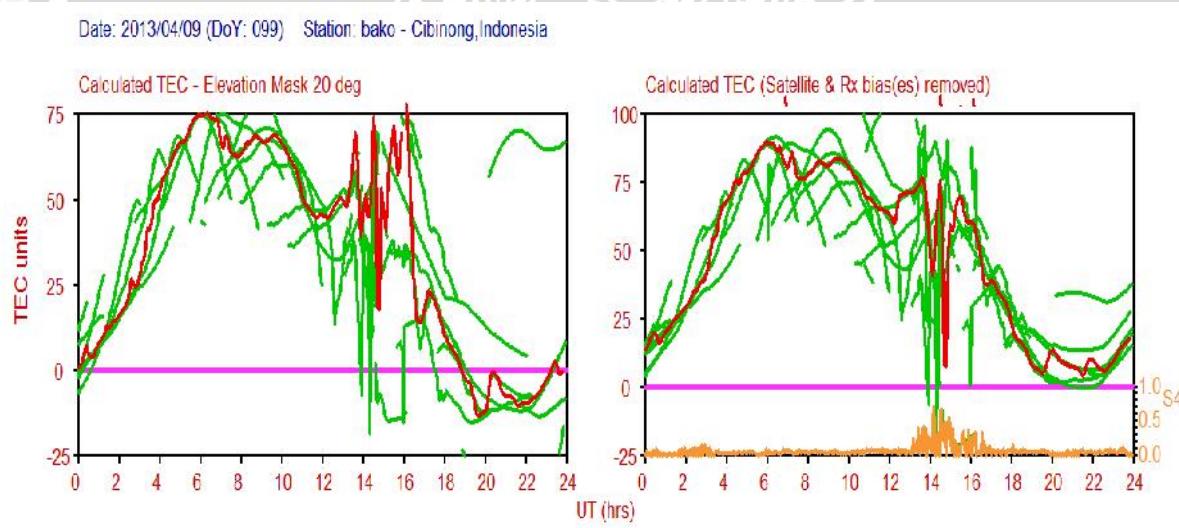
b. Data GPS RINEX yang telah diolah pada software RTKLib berupa data (*.pos) berupa (pengukuran posisi absolut)

% program : RTKPOST ver.2.4.1														
% inp file : E:\data bako observasi\04_April\observasi\bako0990.13o														
% inp file : E:\data bako observasi\04_April\observasi\bako0990.13n														
% obs start : 2013/04/09 00:00:00.0 GPST (week1735 172800.0s)														
% obs end : 2013/04/09 23:59:30.0 GPST (week1735 259170.0s)														
% pos mode : single														
% elev mask : 15.0 deg														
% snr mask : 0.0 dBHz														
% ionos opt : broadcast														
% tropo opt : saastamoinen														
% ephemeris : broadcast														
% (lat/lon/height=WGS84/ellipsoidal,Q=1:fix,2:float,3:sbas,4:dgps,5:single,6:ppp,ns=# of satellites)														
% GPSTime	lat(deg)	long(deg)	alt(m)	Q	ns	sdn(m)	sde(m)	sdu(m)	sdne(m)	sdeu(m)	sdun	age(s)	ratio	
2013/04/09 00:00:00.000	-6.491064250	106.848901394	161.4341	5	8	2.4463	2.8025	8.2518	-0.8012	0.1957	-1.5715	0.00	0.0	
2013/04/09 00:00:30.000	-6.491064310	106.848901628	161.5502	5	8	2.4501	2.8095	8.2357	-0.7980	0.3168	-1.5573	0.00	0.0	
2013/04/09 00:01:00.000	-6.491064427	106.848902059	161.7859	5	8	2.4539	2.8165	8.2194	-0.7948	0.4032	-1.5429	0.00	0.0	
2013/04/09 00:01:30.000	-6.491064060	106.848902418	161.8979	5	8	2.4578	2.8236	8.2030	-0.7917	0.4743	-1.5285	0.00	0.0	
2013/04/09 00:02:00.000	-6.491063503	106.848903036	161.8725	5	8	2.4617	2.8307	8.1865	-0.7885	0.5361	-1.5138	0.00	0.0	
2013/04/09 00:02:30.000	-6.491063201	106.848903416	161.7034	5	8	2.4657	2.8379	8.1698	-0.7853	0.5916	-1.4991	0.00	0.0	
2013/04/09 00:03:00.000	-6.491063106	106.848903123	161.2775	5	8	2.4698	2.8452	8.1530	-0.7822	0.6424	-1.4842	0.00	0.0	
2013/04/09 00:03:30.000	-6.491063483	106.848902947	160.9409	5	8	2.4739	2.8526	8.1361	-0.7790	0.6896	-1.4692	0.00	0.0	
2013/04/09 00:04:00.000	-6.491064045	106.848902624	160.7993	5	8	2.4781	2.8600	8.1191	-0.7759	0.7338	-1.4541	0.00	0.0	
2013/04/09 00:04:30.000	-6.491065054	106.848902445	160.9343	5	8	2.4823	2.8675	8.1021	-0.7728	0.7755	-1.4389	0.00	0.0	
2013/04/09 00:05:00.000	-6.491065204	106.848901839	161.0732	5	8	2.4867	2.8751	8.0850	-0.7697	0.8152	-1.4236	0.00	0.0	
2013/04/09 00:05:30.000	-6.491065415	106.848901283	161.0114	5	8	2.4911	2.8827	8.0679	-0.7666	0.8531	-1.4082	0.00	0.0	
2013/04/09 00:06:00.000	-6.491065570	106.848901187	161.1449	5	8	2.4955	2.8904	8.0508	-0.7635	0.8894	-1.3927	0.00	0.0	
2013/04/09 00:06:30.000	-6.491065162	106.848901441	161.2045	5	8	2.5000	2.8982	8.0336	-0.7604	0.9243	-1.3771	0.00	0.0	
2013/04/09 00:07:00.000	-6.491064643	106.848901473	161.3098	5	8	2.5046	2.9060	8.0164	-0.7574	0.9580	-1.3614	0.00	0.0	
2013/04/09 00:07:30.000	-6.491064655	106.848901269	161.3743	5	8	2.5093	2.9139	7.9993	-0.7544	0.9905	-1.3457	0.00	0.0	
2013/04/09 00:08:00.000	-6.491068778	106.848899487	163.3274	5	7	2.8900	2.9553	9.6431	0.2591	-1.1632	-3.0791	0.00	0.0	
2013/04/09 00:08:30.000	-6.491068301	106.848899721	163.5117	5	7	2.8908	2.9625	9.6117	0.2478	-1.1174	-3.0592	0.00	0.0	
2013/04/09 00:09:00.000	-6.491067783	106.848900044	163.6231	5	7	2.8918	2.9698	9.5801	0.2358	-1.0697	-3.0392	0.00	0.0	
2013/04/09 00:09:30.000	-6.491067490	106.848899973	163.5746	5	7	2.8928	2.9772	9.5483	0.2232	-1.0197	-3.0190	0.00	0.0	
2013/04/09 00:10:00.000	-6.491067578	106.848900120	163.1602	5	7	2.8938	2.9846	9.5165	0.2098	-0.9672	-2.9988	0.00	0.0	
2013/04/09 00:10:30.000	-6.491067709	106.848899701	162.8788	5	7	2.8950	2.9922	9.4846	0.1954	-0.9117	-2.9786	0.00	0.0	
2013/04/09 00:11:00.000	-6.491068050	106.848899612	162.7553	5	7	2.8963	2.9998	9.4526	0.1798	-0.8528	-2.9583	0.00	0.0	
2013/04/09 00:11:30.000	-6.491068298	106.848899817	162.6860	5	7	2.8976	3.0075	9.4207	0.1627	-0.7895	-2.9379	0.00	0.0	
2013/04/09 00:12:00.000	-6.491068722	106.848900037	162.6017	5	7	2.8990	3.0152	9.3887	0.1435	-0.7208	-2.9176	0.00	0.0	
2013/04/09 00:12:30.000	-6.491069482	106.848900214	162.6386	5	7	2.9006	3.0231	9.3569	0.1211	-0.6450	-2.8973	0.00	0.0	
2013/04/09 00:13:00.000	-6.491069591	106.848900468	162.7909	5	7	2.9022	3.0311	9.3251	0.0934	-0.5593	-2.8770	0.00	0.0	
2013/04/09 00:13:30.000	-6.491069164	106.848901282	162.8482	5	7	2.9039	3.0391	9.2934	0.0524	-0.4581	-2.8567	0.00	0.0	
2013/04/09 00:14:00.000	-6.491068973	106.848901780	162.8190	5	7	2.9057	3.0472	9.2618	-0.0571	-0.3273	-2.8365	0.00	0.0	
2013/04/09 00:14:30.000	-6.491068725	106.848901042	162.6118	5	7	2.9077	3.0554	9.2304	-0.0964	-0.0690	-2.8163	0.00	0.0	
2013/04/09 00:15:00.000	-6.491068605	106.848900786	162.4431	5	7	2.9097	3.0637	9.1992	-0.1240	0.3120	-2.7962	0.00	0.0	
2013/04/09 00:15:30.000	-6.491068120	106.848901143	162.3921	5	7	2.9118	3.0720	9.1682	-0.1466	0.4462	-2.7762	0.00	0.0	
2013/04/09 00:16:00.000	-6.491068460	106.848901825	162.5271	5	7	2.9140	3.0805	9.1373	-0.1663	0.5482	-2.7563	0.00	0.0	
2013/04/09 00:16:30.000	-6.491068947	106.848902188	162.5943	5	7	2.9164	3.0890	9.1068	-0.1841	0.6337	-2.7365	0.00	0.0	
2013/04/09 00:17:00.000	-6.491069538	106.848901760	162.6232	5	7	2.9188	3.0976	9.0764	-0.2005	0.7088	-2.7169	0.00	0.0	
2013/04/09 00:17:30.000	-6.491070185	106.848901565	162.6598	5	7	2.9213	3.1063	9.0464	-0.2157	0.7764	-2.6973	0.00	0.0	

Grafik 1. Menunjukkan variasi nilai TEC (unit) per waktu



Grafik 2. Menunjukkan variasi nilai TEC (unit) dan sintilasi perwaktu (UT)



Grafik 3. Menunjukkan variasi nilai TEC (unit) persatlit (PRN) berdasarkan waktu

