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## New Developments in GPR

*Of potential interest to the FWD community*



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[www.geophysical.com](http://www.geophysical.com)  
[sales@geophysical.com](mailto:sales@geophysical.com)

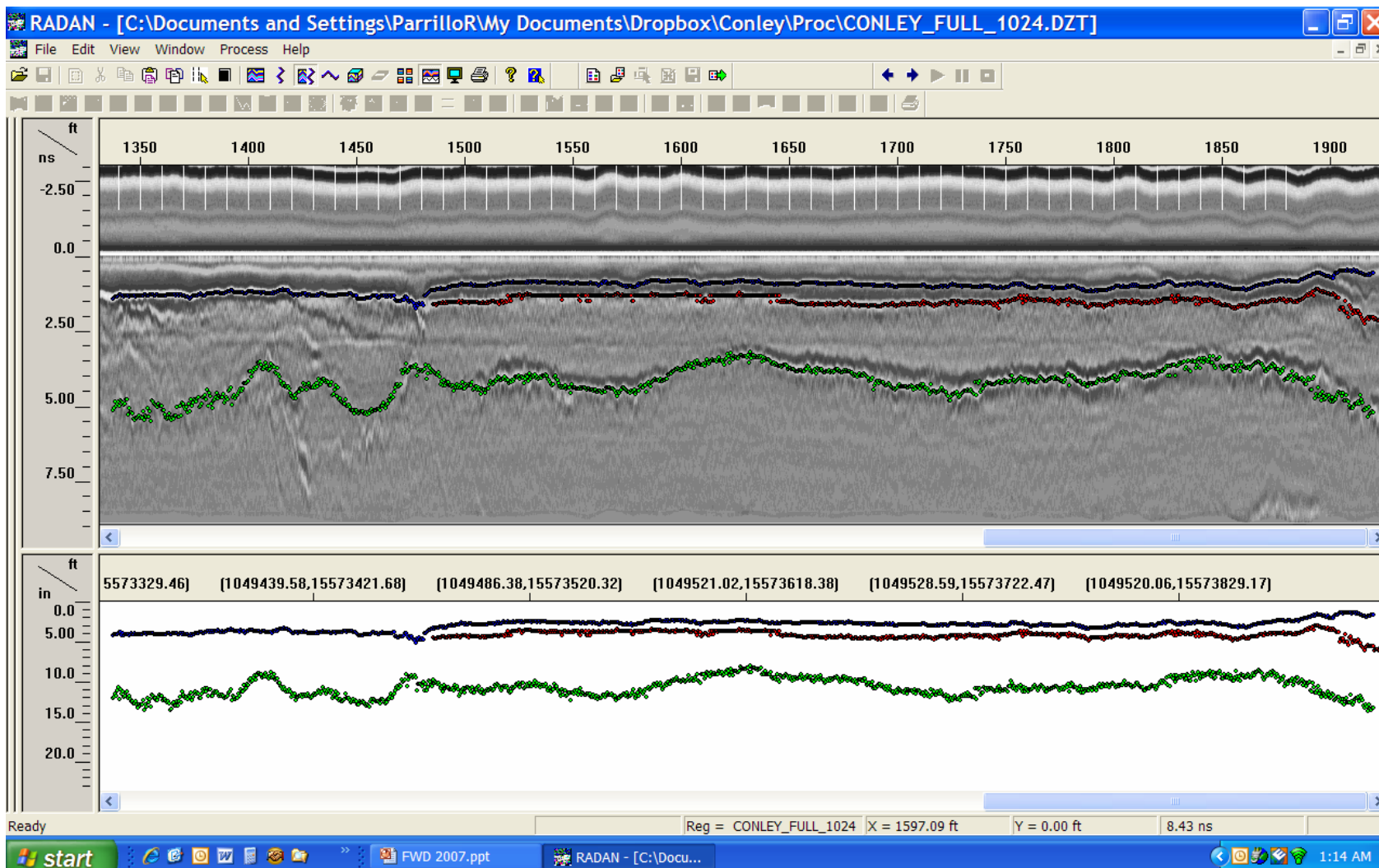
Last year you said:

*We need to see deeper*  
*We need base layer thickness*



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# 2 GHz horn antenna penetrates 2 - 2 1/2 ft



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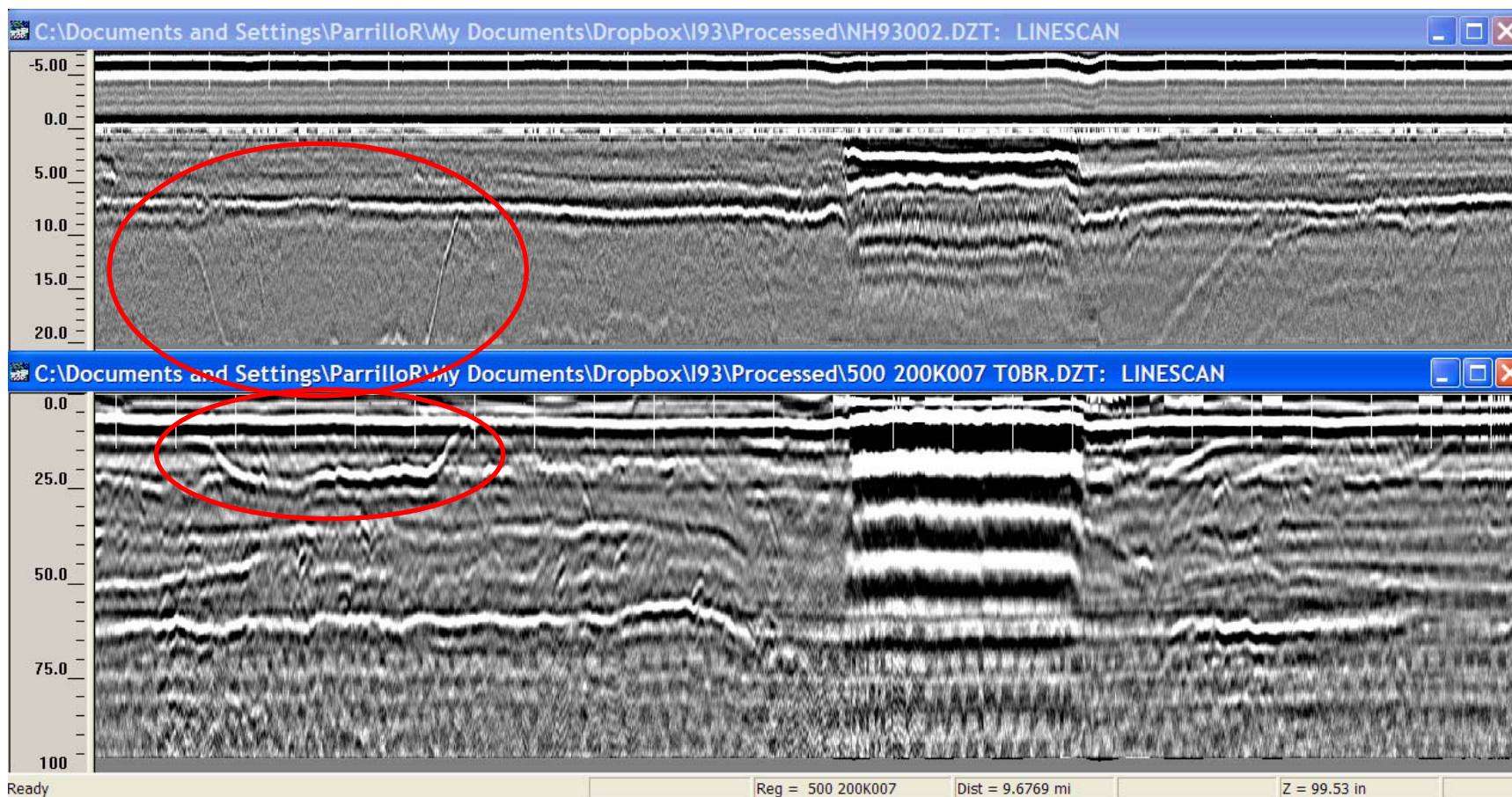
Announcing the development of:

***500 MHz air-launched antenna***



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## 2 GHz antenna



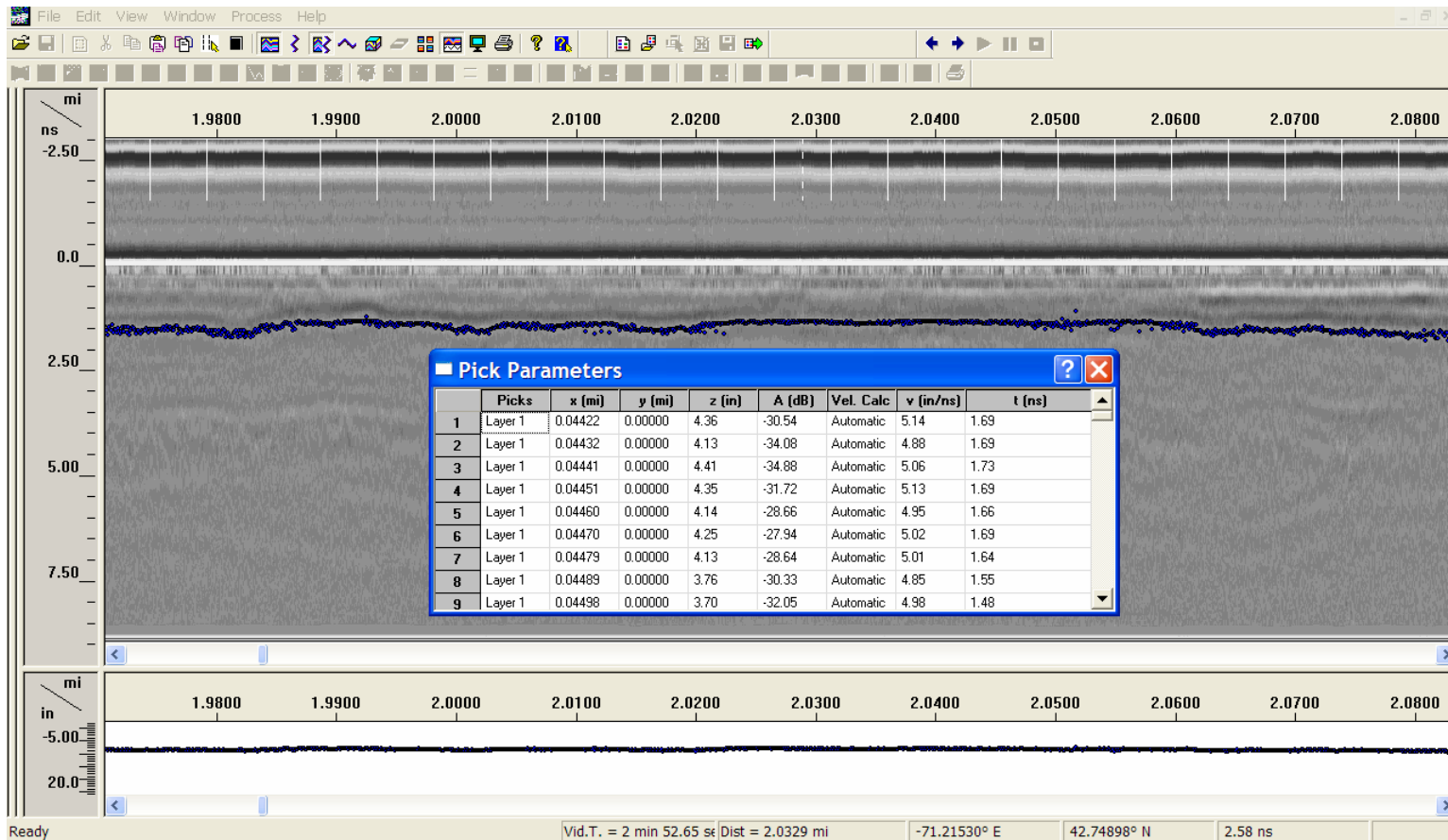
## 500 MHz antenna (preliminary data)



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# GPR data formats

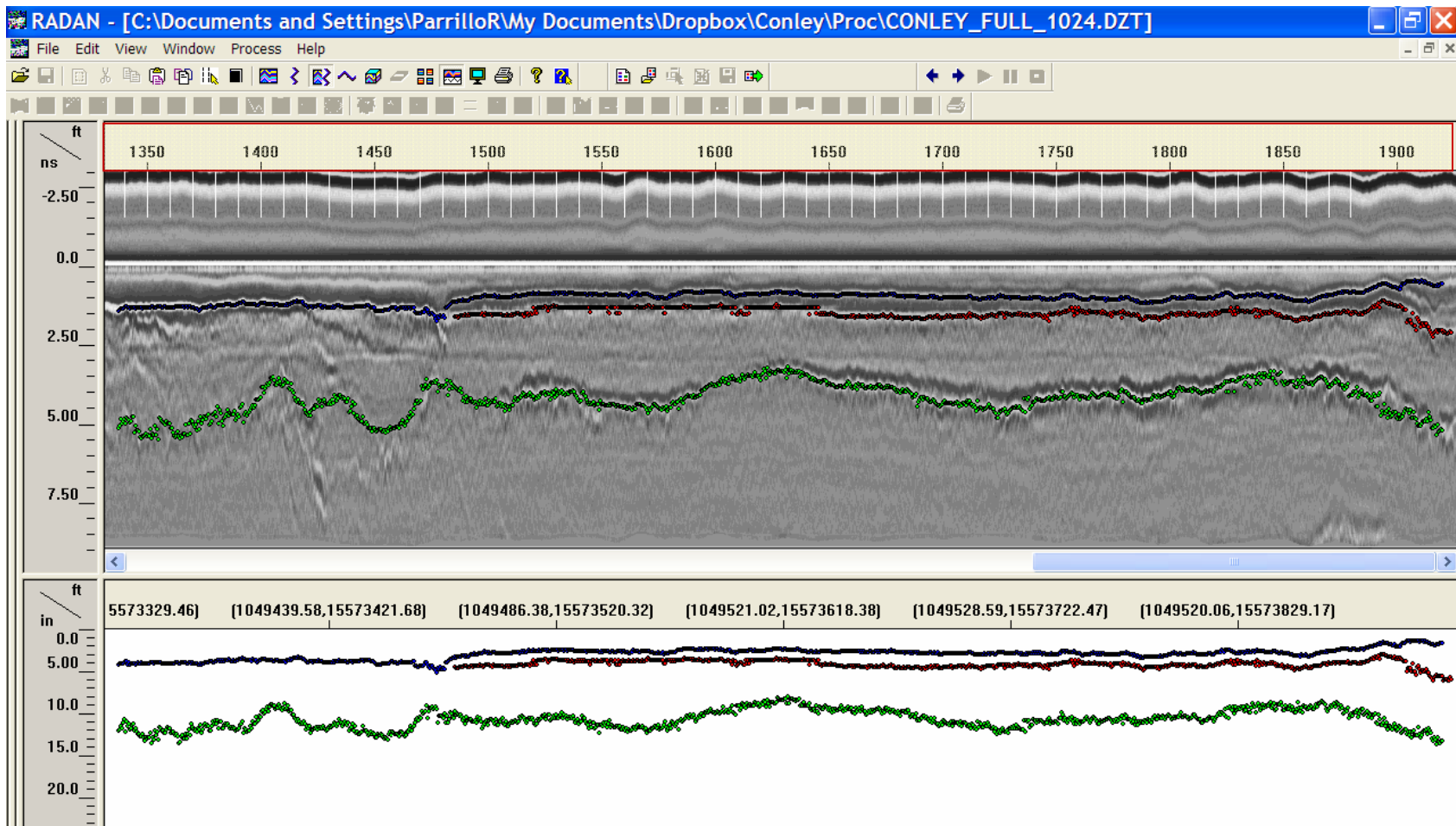
How do we use the GPR results?



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# GPR data formats

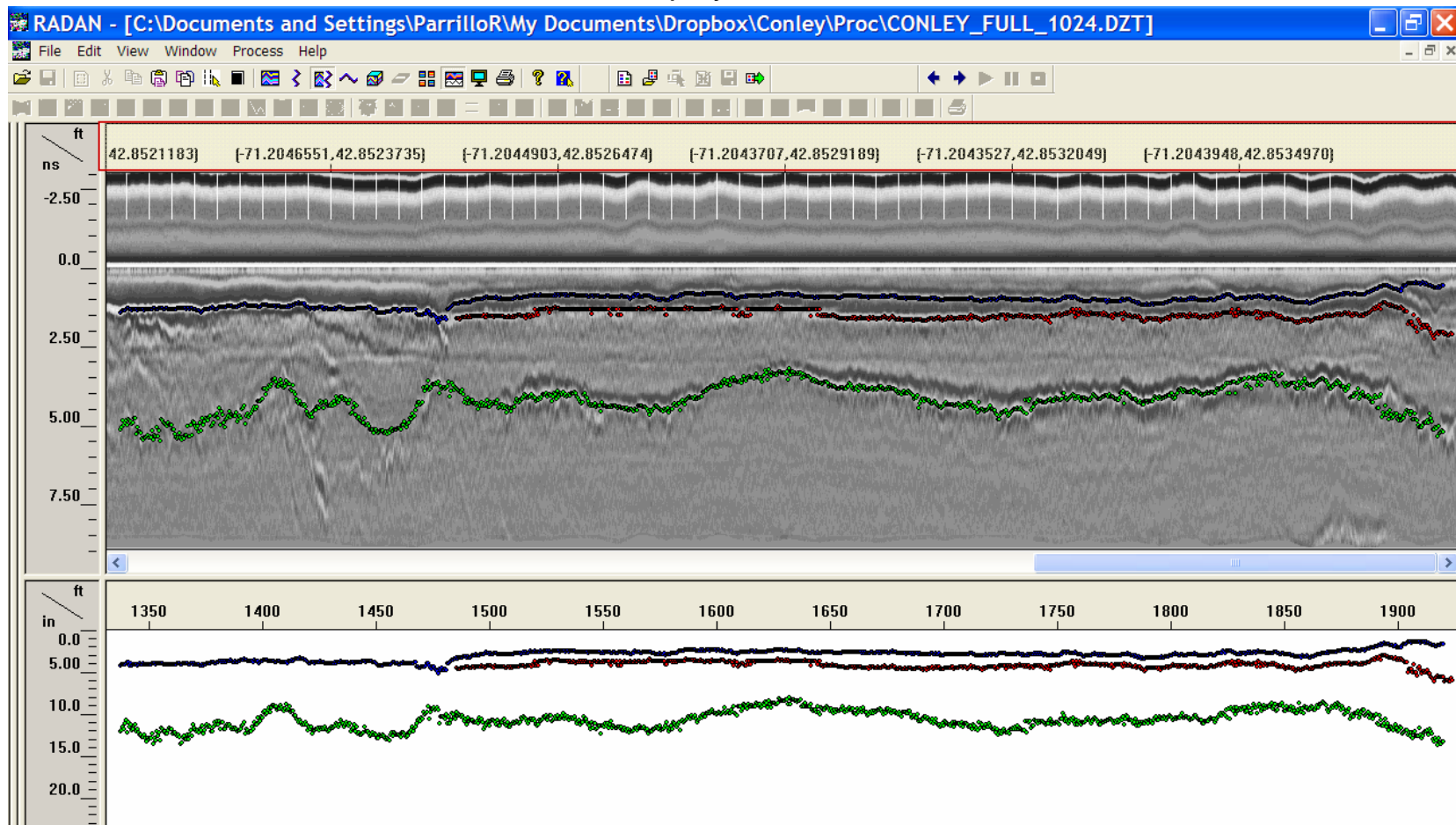
Data displayed as a linear distance



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# GPR data formats

Data displayed in GPS coordinates

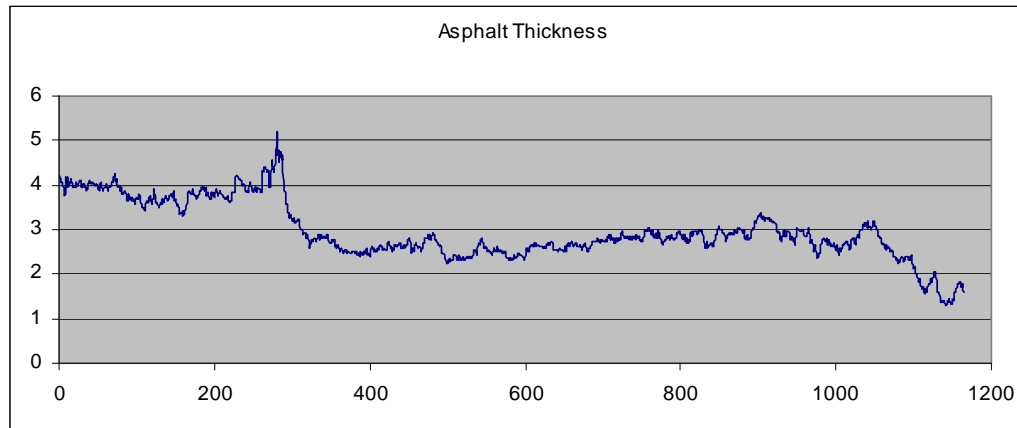


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# GPR data formats

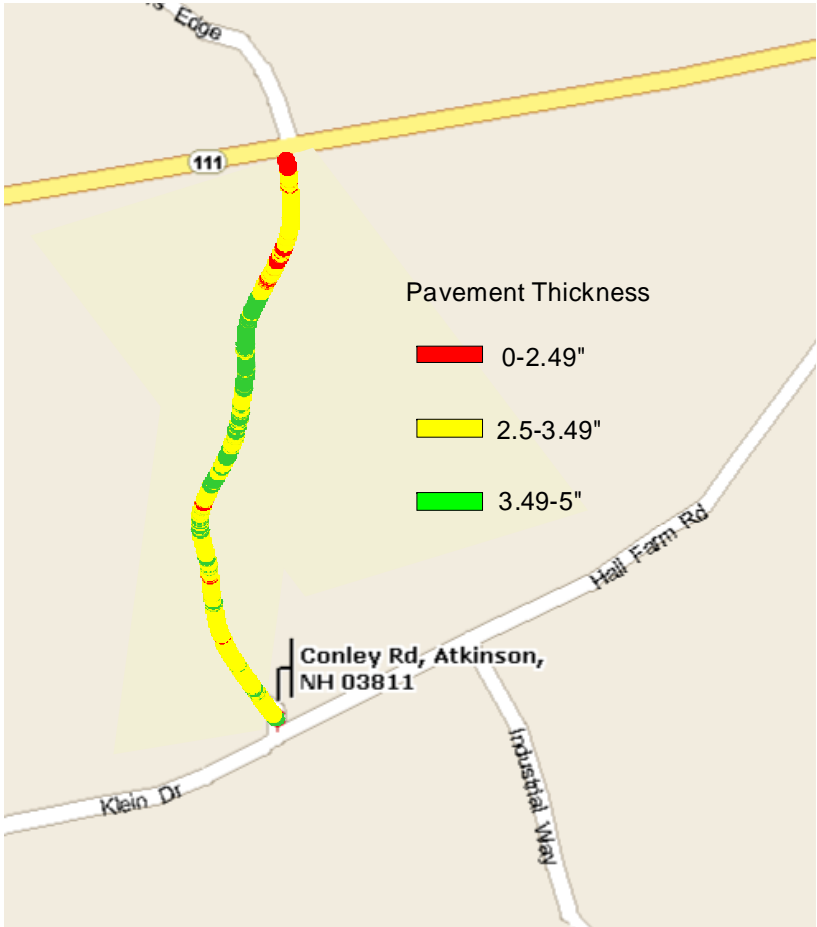
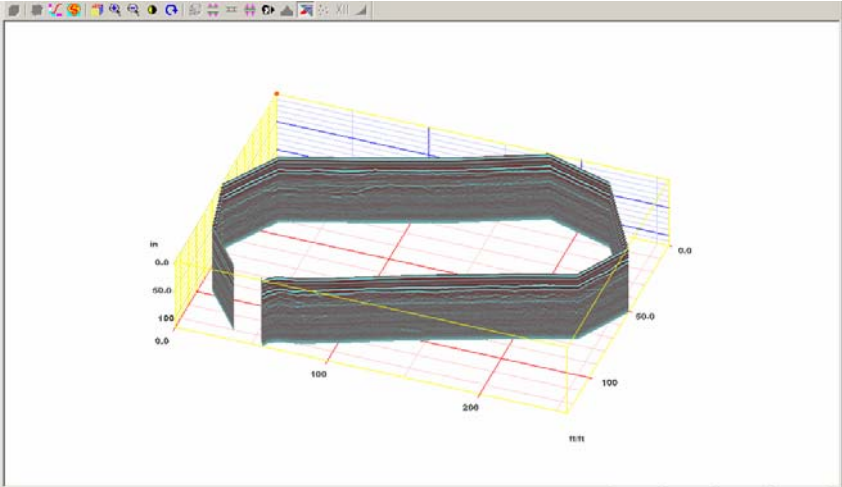
## Results in Spreadsheet

File	Ch#	Scan#	x(ft)	y(ft)	Layer	z(in)	Amp	Dev(ft)	% Scans	Vel. Type	v(in/ns)	t(ns)	Layer 2	z(in)	Amp	Dev(ft)	% Scans	Vel. Type	v(in/ns)	t(ns)	Layer 3	z(in)	
1	CONLEY_FULL_1024	1	2675	1049409.125	15573336	Layer 1	4.223	-15.02	-0.39	100	Automatic	5.972	1.406	None	0	0	0	0	Specify	0	0	Layer 3	12.0
2	CONLEY_FULL_1024	1	2676	1049409.25	15573336	Layer 1	4.072	-15.82	-0.39	100	Automatic	5.858	1.383	None	0	0	0	0	Specify	0	0	Layer 3	11.8
3	CONLEY_FULL_1024	1	2677	1049409.375	15573337	Layer 1	4.071	-15.49	-0.39	100	Automatic	5.957	1.359	None	0	0	0	0	Specify	0	0	Layer 3	11.5
4	CONLEY_FULL_1024	1	2678	1049409.375	15573337	Layer 1	4.068	-14.79	-0.39	100	Automatic	6.055	1.336	None	0	0	0	0	Specify	0	0	Layer 3	11.7
5	CONLEY_FULL_1024	1	2679	1049409.5	15573338	Layer 1	4.001	-13.98	-0.39	100	Automatic	5.906	1.348	None	0	0	0	0	Specify	0	0	Layer 3	11.0
6	CONLEY_FULL_1024	1	2680	1049409.625	15573338	Layer 1	3.942	-13.46	-0.39	100	Automatic	5.921	1.324	None	0	0	0	0	Specify	0	0	Layer 3	10.7
7	CONLEY_FULL_1024	1	2681	1049409.75	15573339	Layer 1	3.775	-16.79	-0.39	100	Automatic	5.933	1.266	None	0	0	0	0	Specify	0	0	Layer 3	12.0
8	CONLEY_FULL_1024	1	2682	1049409.875	15573339	Layer 1	3.798	-14.2	-0.39	100	Automatic	5.913	1.277	None	0	0	0	0	Specify	0	0	Layer 3	10.8
9	CONLEY_FULL_1024	1	2683	1049410	15573340	Layer 1	4.16	-13.44	-0.39	100	Automatic	6.299	1.313	None	0	0	0	0	Specify	0	0	Layer 3	11.
10	CONLEY_FULL_1024	1	2684	1049410.125	15573340	Layer 1	3.96	-14.67	-0.39	100	Automatic	5.949	1.324	None	0	0	0	0	Specify	0	0	Layer 3	11.
11	CONLEY_FULL_1024	1	2685	1049410.25	15573341	Layer 1	4.159	-14.67	-0.39	100	Automatic	6.189	1.336	None	0	0	0	0	Specify	0	0	Layer 3	11.
12	CONLEY_FULL_1024	1	2686	1049410.25	15573341	Layer 1	4.011	-15.55	-0.39	100	Automatic	6.024	1.324	None	0	0	0	0	Specify	0	0	Layer 3	11.7
13	CONLEY_FULL_1024	1	2687	1049410.375	15573342	Layer 1	3.997	-14.68	-0.39	100	Automatic	6.11	1.301	None	0	0	0	0	Specify	0	0	Layer 3	11.3
14	CONLEY_FULL_1024	1	2688	1049410.5	15573342	Layer 1	3.991	-14.65	-0.39	100	Automatic	6.047	1.313	None	0	0	0	0	Specify	0	0	Layer 3	11.2
15	CONLEY_FULL_1024	1	2689	1049410.625	15573343	Layer 1	4.051	-13.76	-0.39	100	Automatic	6.083	1.324	None	0	0	0	0	Specify	0	0	Layer 3	12.0
16	CONLEY_FULL_1024	1	2690	1049410.75	15573343	Layer 1	4.155	-14.16	-0.39	100	Automatic	6.079	1.359	None	0	0	0	0	Specify	0	0	Layer 3	11.7
17	CONLEY_FULL_1024	1	2691	1049410.875	15573343	Layer 1	4.008	-14.96	-0.39	100	Automatic	6.02	1.324	None	0	0	0	0	Specify	0	0	Layer 3	12.2
18	CONLEY_FULL_1024	1	2692	1049411	15573344	Layer 1	3.931	-16.22	-0.39	100	Automatic	5.957	1.313	None	0	0	0	0	Specify	0	0	Layer 3	12.4
19	CONLEY_FULL_1024	1	2693	1049411	15573344	Layer 1	3.986	-15.22	-0.39	100	Automatic	6.039	1.313	None	0	0	0	0	Specify	0	0	Layer 3	12.4
20	CONLEY_FULL_1024	1	2694	1049411.125	15573345	Layer 1	3.994	-14.58	-0.39	100	Automatic	6.106	1.301	None	0	0	0	0	Specify	0	0	Layer 3	12.7
21	CONLEY_FULL_1024	1	2695	1049411.25	15573345	Layer 1	3.949	-15.04	-0.39	100	Automatic	5.984	1.313	None	0	0	0	0	Specify	0	0	Layer 3	12.6
22	CONLEY_FULL_1024	1	2696	1049411.375	15573346	Layer 1	4.054	-14.58	-0.39	100	Automatic	6.035	1.336	None	0	0	0	0	Specify	0	0	Layer 3	12.4
23	CONLEY_FULL_1024	1	2697	1049411.5	15573346	Layer 1	4	-15.6	-0.39	100	Automatic	6.008	1.324	None	0	0	0	0	Specify	0	0	Layer 3	12.7
24	CONLEY_FULL_1024	1	2698	1049411.625	15573347	Layer 1	4.038	-16.57	-0.39	100	Automatic	6.118	1.313	None	0	0	0	0	Specify	0	0	Layer 3	13.2
25	CONLEY_FULL_1024	1	2699	1049411.75	15573347	Layer 1	4.002	-15.38	-0.39	100	Automatic	6.118	1.301	None	0	0	0	0	Specify	0	0	Layer 3	12.7
26	CONLEY_FULL_1024	1	2700	1049411.875	15573348	Layer 1	4.074	-15.41	-0.39	100	Automatic	6.118	1.324	None	0	0	0	0	Specify	0	0	Layer 3	12.9
27	CONLEY_FULL_1024	1	2701	1049412	15573349	Layer 1	4.106	-14.95	-0.39	100	Automatic	6.165	1.324	None	0	0	0	0	Specify	0	0	Layer 3	12.7
28	CONLEY_FULL_1024	1	2702	1049412.125	15573349	Layer 1	4.103	-14.95	-0.39	100	Automatic	6.161	1.324	None	0	0	0	0	Specify	0	0	Layer 3	12.8
29	CONLEY_FULL_1024	1	2703	1049412.25	15573349	Layer 1	3.968	-15.09	-0.39	100	Automatic	6.067	1.301	None	0	0	0	0	Specify	0	0	Layer 3	12.2
30	CONLEY_FULL_1024	1	2704	1049412.375	15573350	Layer 1	3.961	-16.34	-0.39	100	Automatic	6.165	1.277	None	0	0	0	0	Specify	0	0	Layer 3	13.4
31	CONLEY_FULL_1024	1	2705	1049412.5	15573350	Layer 1	3.977	-15.65	-0.39	100	Automatic	6.134	1.289	None	0	0	0	0	Specify	0	0	Layer 3	12.8
32	CONLEY_FULL_1024	1	2706	1049412.625	15573351	Layer 1	4.028	-15.71	-0.39	100	Automatic	6.157	1.301	None	0	0	0	0	Specify	0	0	Layer 3	13.0



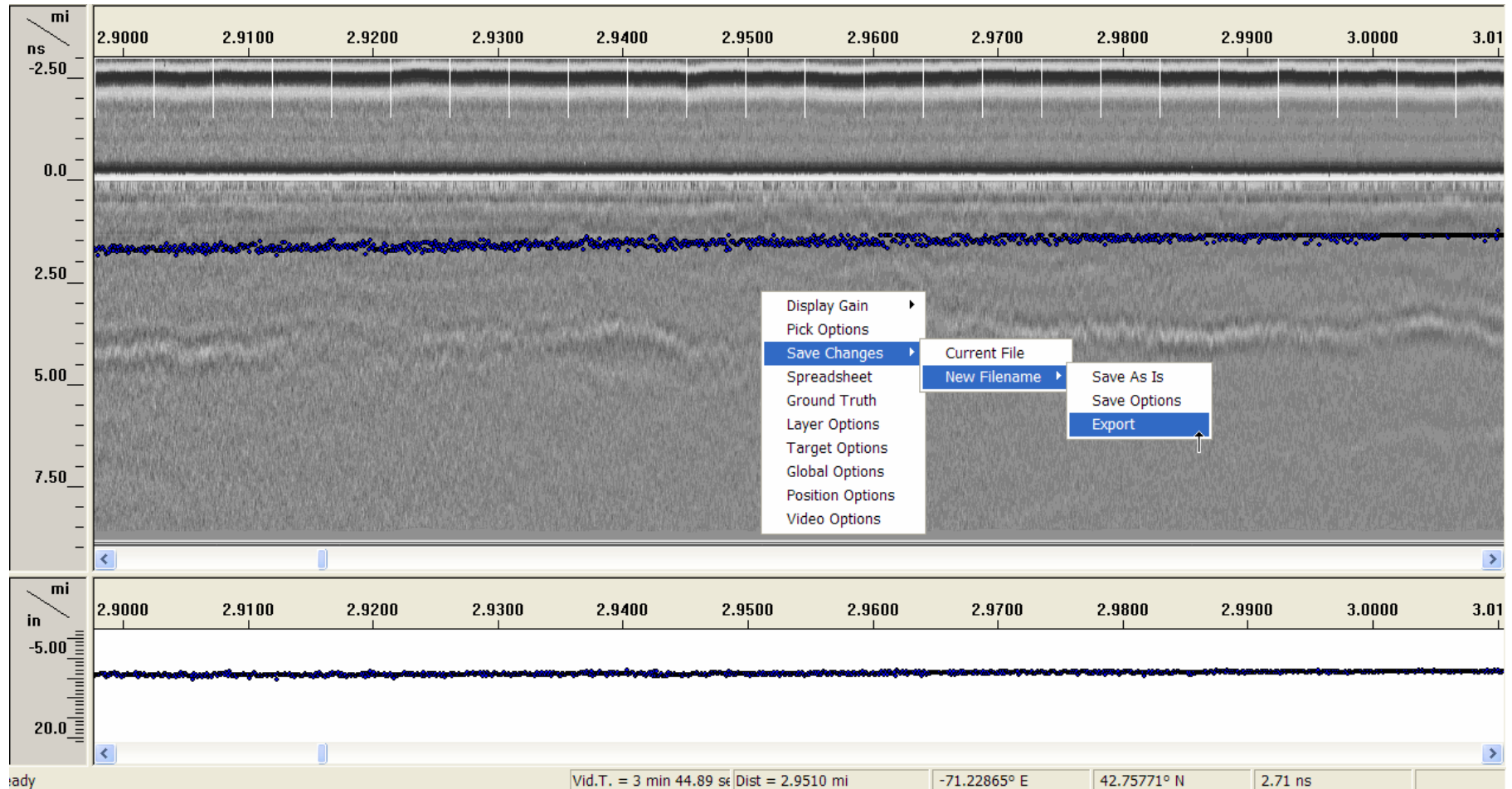
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# GPS Integration



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## GSSI RADAN Mapping Module Export Results to Google Earth KML file



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## GSSI RADAN Mapping Module Export Results to Google Earth KML file

**KML Output Options** [X]

Layer: 1 [v]  
Channel: All [v]  
Output Parameter: Depth [v]

Distance Placemarks  
Dist. Interval (mi): 1 [text]

Minimum (in): 2.00 [text]  
Maximum (in): 6.00 [text]  
Number of Intervals: 6 [v]

Range (in)	Colors
< 2.00	Black [v]
2.00 - 2.67	Brown [v]
2.67 - 3.33	Purple [v]
3.33 - 4.00	Blue [v]
4.00 - 4.67	Green [v]
4.67 - 5.33	Yellow [v]
5.33 - 6.00	Orange [v]
> 6.00	Magenta [v]

OK [button]    Cancel [button]    Help [button]



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**Thank You!**



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