

WLAN 1

Como podemos observar en la imagen, en una línea fluorescente, la página a la que intentamos acceder es *en.wikipedia.org*, que es a la que hacemos el primer GET:

No.	Time	Source	Destination	Protocol	Length	Info
439	13.405660	192.168.0.50	66.230.200.100	HTTP	699	GET /wiki/Landshark HTTP/1.1
519	14.390505	192.168.0.50	66.230.200.228	HTTP	630	GET /fundraising/2006/meter.png HTTP/1.1
541	14.496485	66.230.200.228	192.168.0.50	HTTP	510	HTTP/1.0 200 OK (PNG)
778	26.219523	192.168.0.50	209.188.21.206	HTTP	707	GET /75/75d jaws2.phtml HTTP/1.1
786	26.310502	209.188.21.206	192.168.0.50	HTTP	1576	[TCP Previous segment not captured] Continuation
789	26.346504	209.188.21.206	192.168.0.50	HTTP	651	[TCP Previous segment not captured] Continuation
797	26.571516	192.168.0.50	209.188.21.206	HTTP	583	GET /style.css HTTP/1.1
800	26.618552	209.188.21.206	192.168.0.50	HTTP	869	HTTP/1.1 200 OK (text/css)
810	26.719455	192.168.0.50	209.188.21.206	HTTP	588	GET /75/space2.gif HTTP/1.1
820	26.772424	209.188.21.206	192.168.0.50	HTTP	1151	HTTP/1.1 200 OK (GIF89a) (image/gif)
823	26.773438	192.168.0.50	209.188.21.206	HTTP	595	GET /75/pics/75d jaws2.jpg HTTP/1.1
832	26.789429	192.168.0.50	209.188.21.206	HTTP	595	GET /75/pics/75d jaws1.jpg HTTP/1.1
840	26.814423	192.168.0.50	209.188.21.206	HTTP	595	[TCP ACKed unseen segment] GET /75/pics/75d jaws3.jpg HTTP/1.1
857	26.855414	192.168.0.50	209.188.21.206	HTTP	583	[TCP ACKed unseen segment] GET /line.jpg HTTP/1.1
868	26.878523	192.168.0.50	72.14.255.99	HTTP	1174	GET /pagead/ads?client=ca-pub-9011062396508188&dt=1167891175069&mt=11678
870	26.892408	209.188.21.206	192.168.0.50	HTTP	1069	HTTP/1.1 200 OK (JPEG JFIF image)
890	27.450348	192.168.0.50	209.188.21.206	HTTP	529	[TCP ACKed unseen segment] GET /favicon.ico HTTP/1.1
892	27.493311	209.188.21.206	192.168.0.50	HTTP/XML	607	[TCP ACKed unseen segment] [TCP Previous segment not captured] HTTP/1.1 4

> Frame 439: 699 bytes on wire (5592 bits), 699 bytes captured (5592 bits) on interface 0
> Radiotap Header v0, Length 24
> 802.11 radio information
> IEEE 802.11 Data, Flags: .p.....TC
> Logical-Link Control
> Internet Protocol Version 4, Src: 192.168.0.50, Dst: 66.230.200.100
> Transmission Control Protocol, Src Port: 51689, Dst Port: 80, Seq: 1, Ack: 1, Len: 571
> Hypertext Transfer Protocol
> GET /wiki/Landshark HTTP/1.1\r\n
Host: en.wikipedia.org\r\n
User-Agent: Mozilla/5.0 (Macintosh; U; PPC Mac OS X Mach-O; en-US; rv:1.8.0.9) Gecko/20061206 Firefox/1.5.0.9\r\n
Accept: text/xml,application/xml,application/xhtml+xml,text/html;q=0.9,text/plain;q=0.8,image/png,*/*;q=0.5\r\n
Accept-Language: en-us,en;q=0.5\r\n
Accept-Encoding: gzip,deflate\r\n
Accept-Charset: ISO-8859-1,utf-8;q=0.7,*;q=0.7\r\n
Keep-Alive: 300\r\n
Connection: keep-alive\r\n
Referer: http://www.google.com/search?q=%22land+shark&start=0&ie=utf-8&oe=utf-8&client=firefox-a&rls=org.mozilla:en-US:official\r\n
\r\n
[Full request URI: http://en.wikipedia.org/wiki/Landshark]

QUIZ 2

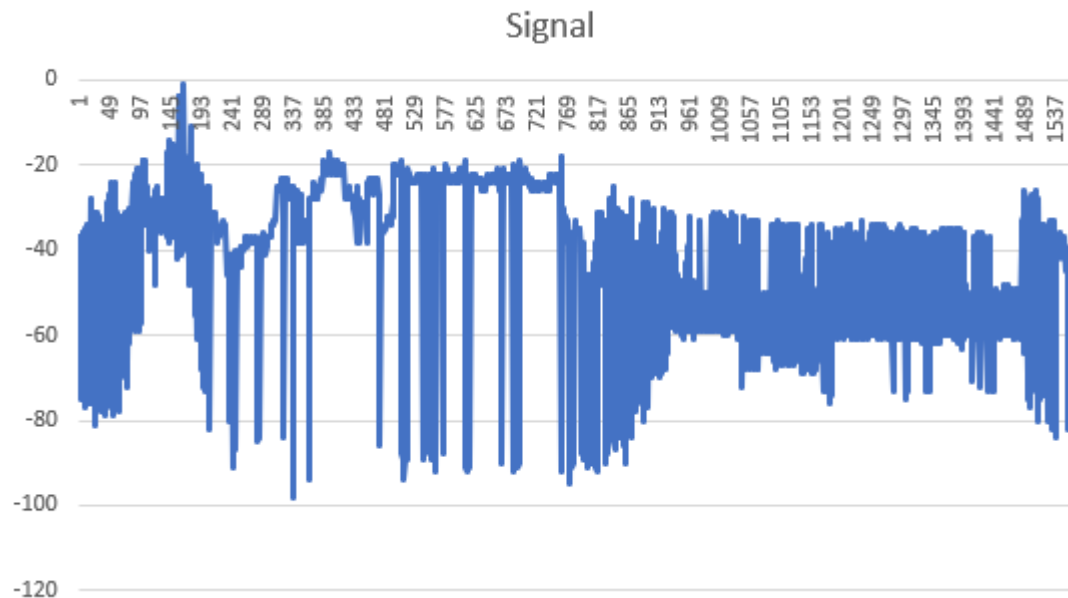
a) ¿Cuál es la señal recibida más baja?

Añadiendo las columnas que se especifican en el enunciado y ordenando por le columna ‘canal’ de menor a mayor, obtenemos lo siguiente:

No.	Time	Source	Destination	Protocol	Length	Info	Signal	TX Rate	SSID
337	430.725511	192.168.0.1	192.168.0.106	ICMP	128	Echo (ping) reply id=0x0001, seq=149/38144, ttl=127 (request in...	-98 dBm	1.0	

La señal recibida más baja tiene -98 dBm, y es la traza número 337.

b) Representa con una gráfica en Excel evolución temporal de la señal:



c) ¿Qué canal está usando? ¿Hay cambio de canal?

No.	Time	Source	Destination	Protocol	Length	Info	Signal	TX Rate	SSID	Channel
322	437.723424	192.168.0.186	192.168.0.1	ICMP	128	Echo (ping) request Id=0x0001, seq=146/57688, ttl=128 (no response)	-84 dBm	1.0		11
1	0.000000	192.168.0.186	192.168.0.1	ICMP	128	Echo (ping) request Id=0x0001, seq=21/5376, ttl=128 (reply in 2)	-37 dBm	48.0		11
2	0.000921	192.168.0.1	192.168.0.186	ICMP	128	Echo (ping) reply Id=0x0001, seq=21/5376, ttl=127 (request in 1)	-75 dBm	36.0		11

El canal usado comúnmente es el 11, aunque también se utiliza el número 6 en única traza.

QUIZ 3

El tráfico que se observa cantidad de tramas del tipo **Probe request y Probe response**, es decir, constantes intentos malogrados de acceder al punto de acceso, y por ello algunas tramas se vuelven corruptas en el proceso. También se observa tráfico de tipo **Beacon**, pero al aplicar el filtro `!wlan[0]==0x80` se eliminan de la vista.

!wlan[0] == 0x80							Expression...
No.	Time	Source	Destination	Protocol	Length	Info	
194	22.640073	IntelCor_d0:27:d7	Broadcast	802.11	69	Probe Request, SN=280, FN=0, Flag	
195	22.642334	D-Link_cc:a3:ea	IntelCor_d0:27:d7	802.11	120	Probe Response, SN=2309, FN=0, Fl	
196	22.647946	IntelCor_d0:27:d7	Broadcast	802.11	69	Probe Request, SN=282, FN=0, Flag	
197	22.658946	D-Link_cc:a3:ea	IntelCor_d0:27:d7	802.11	95	Probe Response, SN=2310, FN=0, Fl	
198	22.660699	D-Link_cc:a3:ea	IntelCor_d0:27:d7	802.11	120	Probe Response, SN=2310, FN=0, Fl	
199	22.686849	IntelCor_d0:27:d7	Broadcast	802.11	69	Probe Request, SN=288, FN=0, Flag	
200	22.702198	IntelCor_d0:27:d7	Broadcast	802.11	69	Probe Request, SN=292, FN=0, Flag	
201	22.705480	D-Link_cc:a3:ea	IntelCor_d0:27:d7	802.11	120	Probe Response, SN=2311, FN=0, Fl	
202	22.709067	D-Link_cc:a3:ea	IntelCor_d0:27:d7	802.11	120	Probe Response, SN=2311, FN=0, Fl	
203	22.710445	D-Link_cc:a3:ea	IntelCor_d0:27:d7	802.11	120	Probe Response, SN=2312, FN=0, Fl	
204	22.713570	D-Link_cc:a3:ea	IntelCor_d0:27:d7	802.11	120	Probe Response, SN=2312, FN=0, Fl	
207	22.837820	IntelCor_d0:27:d7	Broadcast	802.11	69	Probe Request, SN=296, FN=0, Flag	
277	31.305140	IntelCor_d0:27:d7	Broadcast	802.11	69	Probe Request, SN=331, FN=0, Flag	
278	31.312760	D-Link_cc:a3:ea	IntelCor_d0:27:d7	802.11	120	Probe Response, SN=2402, FN=0, Fl	
472	52.737583	IntelCor_d0:27:d7	Broadcast	802.11	69	Probe Request, SN=453, FN=0, Flag	
473	52.758469	D-Link_cc:a3:ea	IntelCor_d0:27:d7	802.11	120	Probe Response, SN=2698, FN=0, Fl	
488	54.524950	D-Link_cc:a3:ea	LiteonTe_58:2b:0d	802.11	120	Probe Response, SN=2716, FN=0, Fl	
492	54.834948	D-Link_cc:a3:ea	LiteonTe_58:2b:0d	802.11	120	Probe Response, SN=2720, FN=0, Fl	
493	54.836069	D-Link_cc:a3:ea	LiteonTe_58:2b:0d	802.11	110	Probe Response, SN=2720, FN=0, Fl	
494	54.838318	D-Link_cc:a3:ea	LiteonTe_58:2b:0d	802.11	120	Probe Response, SN=2720, FN=0, Fl	
495	54.839946	D-Link_cc:a3:ea	LiteonTe_58:2b:0d	802.11	120	Probe Response, SN=2720, FN=0, Fl	
519	57.754240	D-Link_cc:a3:ea	Broadcast	802.11	221	Data, SN=2761, FN=0, Flags=.p...	
599	67.541640	IntelCor_d0:27:d7	Broadcast	802.11	69	Probe Request, SN=456, FN=0, Flag	
703	78.752828	IntelCor_d0:27:d7	Broadcast	802.11	69	Probe Request, SN=457, FN=0, Flag	
704	78.754945	D-Link_cc:a3:ea	IntelCor_d0:27:d7	802.11	120	Probe Response, SN=2996, FN=0, Fl	