

# **BumpRecorder Web**

IRI data download

(2017.12.18)

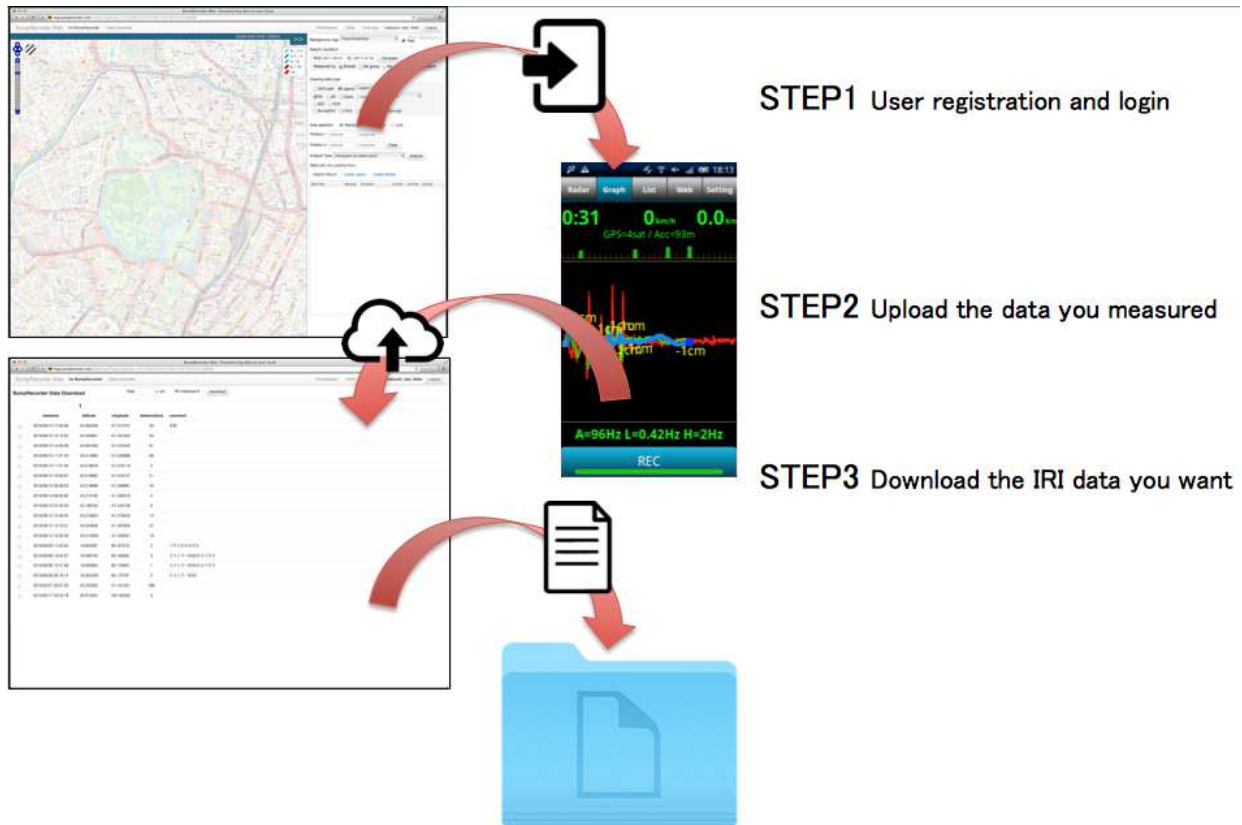
**BumpRecorder** Co., Ltd.

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# 1. OUTLINE

Using **BumpRecorder**, you can easily download IRI data for Mesh Size 8 that is about 90m segment length at Tokyo of latitude 36 degree. It cost is just 1 USD / km!



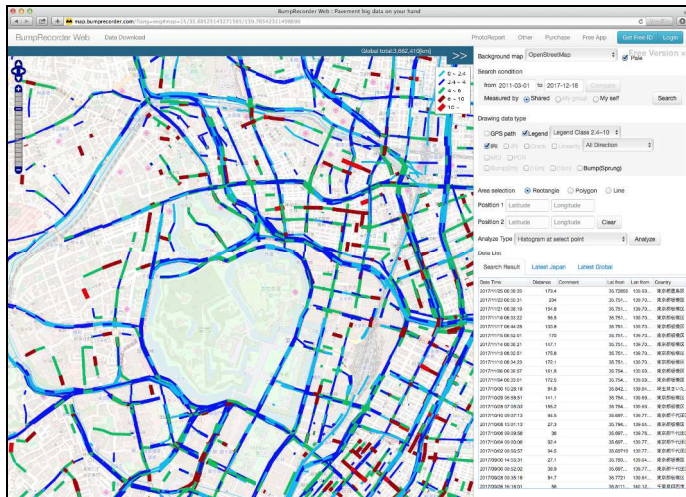
## NOTES

- User ID is required for data download. ID registration is free!
- Payment method is PayPal(online payment).
- Data is measured by the smartphone application **BumpRecorder**.  
You can download **BumpRecorder** from "Google Play" on the following URL link.  
<https://play.google.com/store/apps/details?id=jp.traffichazard.BumpRecorder>
- When you want to use other segment length, or another indexes instead IRI, please don't hesitate to contact us .

## 2. IRI DATA DOWNLOAD PROCEDURE

### 2-1. Access to **BumpRecorder Web**

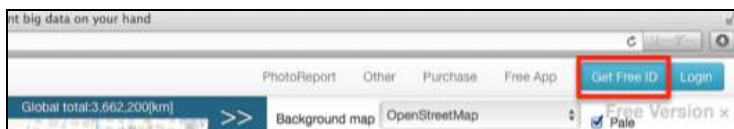
Using PC browser, visit following URL : <http://www.map.bumprecorder.com/>



### 2-2. ID registration

If you still not have your ID, please register your ID first.

On the upper right of **BumpRecorder Web**, there is "Get Free ID" button. Please press this button to open user registration page.



The user registration page has input form as follows.

**Username**

**Password**

**Confirm Password**

acceptable use policy

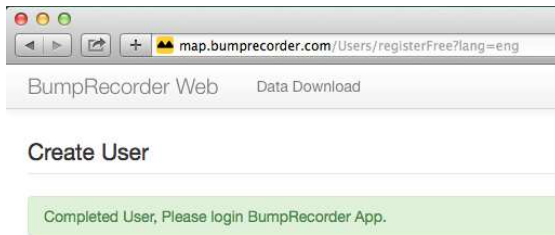
"User name" is your account ID. When someone already use same name, you should use another one.

"Password" is required when accessing **BumpRecorder Web**.

"Confirm Password" is required to verify password.

When you read and agree for the Terms & Conditions, check "acceptable use policy" checkbox and press the "Submit" button

.If there is no problem with the entered contents, user registration is completed at this point.



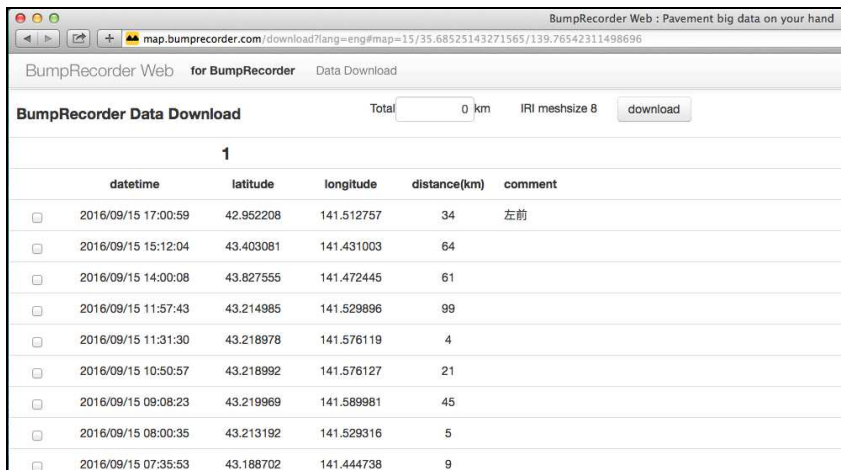
### 2-3. Set your ID to smartphone application **BumpRecorder**

Install **BumpRecorder** from "Play store" on the Android smartphone, After open application, select [Setting] tab, and tap the "ID setting", enter the your ID that - user name - and password which you registered previous step, and press the "Setting" button to login.

### 2-4. Access to the Download page

After recording and uploading data by using **BumpRecorder** App, please access **BumpRecorder Web** download page. <http://map.bumprecorder.com/download>

The uploaded data will be listed as below.



BumpRecorder Data Download					
					Total
					0 km
					IRI meshsize 8
					download
1					
	datetime	latitude	longitude	distance(km)	comment
<input type="checkbox"/>	2016/09/15 17:00:59	42.952208	141.512757	34	左前
<input type="checkbox"/>	2016/09/15 15:12:04	43.403081	141.431003	64	
<input type="checkbox"/>	2016/09/15 14:00:08	43.827555	141.472445	61	
<input type="checkbox"/>	2016/09/15 11:57:43	43.214985	141.529896	99	
<input type="checkbox"/>	2016/09/15 11:31:30	43.218978	141.576119	4	
<input type="checkbox"/>	2016/09/15 10:50:57	43.218992	141.576127	21	
<input type="checkbox"/>	2016/09/15 09:08:23	43.219969	141.589981	45	
<input type="checkbox"/>	2016/09/15 08:00:35	43.213192	141.529316	5	
<input type="checkbox"/>	2016/09/15 07:35:53	43.188702	141.444738	9	

#### NOTE

- When you have not uploaded data yet, or you are not input your ID and password at BumpRecorder App, no data is listing.

## 2-5. Select download data

BumpRecorder Data Download								
					Total	0 km	IRI meshsize 8	download
1								
	datetime	latitude	longitude	distance(km)	comment			
<input type="checkbox"/>	2016/09/15 17:00:59	42.952208	141.512757	34	左前			
<input type="checkbox"/>	2016/09/15 15:12:04	43.403081	141.431003	64				

"datetime" is same as **BumpRecorder** App [List] tab. Data are listing in reverse order.

"latitude" and "longitude" are the starting points location of measurement.

"distance(km)" is the driving distance that is calculated by GPS data. Usually, downloading IRI data is shorter than this distance, that is why some segment can not calculate IRI because too much slow or other reasons. of the measurement. "comment" that is your input comment on the [List] tab of **BumpRecorder** App.

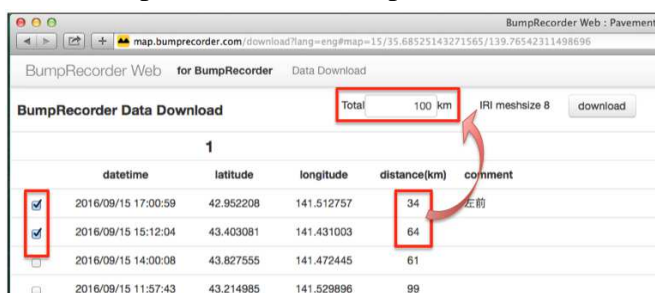
## 2-6. Data Download

Find the download data, check the check box on the left side of the screen.

	datetime	latitude	longitude	distance(km)	comment
<input checked="" type="checkbox"/>	2016/09/15 17:00:59	42.952208	141.512757	34	左前
<input type="checkbox"/>	2016/09/15 15:12:04	43.403081	141.431003	64	

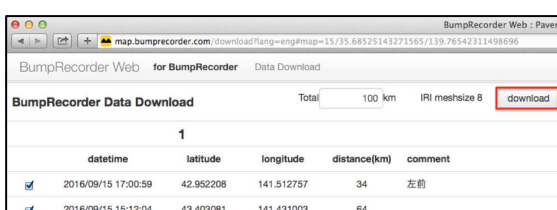
### NOTE

- Multiple checks are also possible.



BumpRecorder Data Download								
					Total	100 km	IRI meshsize 8	download
1								
	datetime	latitude	longitude	distance(km)	comment			
<input checked="" type="checkbox"/>	2016/09/15 17:00:59	42.952208	141.512757	34	左前			
<input checked="" type="checkbox"/>	2016/09/15 15:12:04	43.403081	141.431003	64				
<input type="checkbox"/>	2016/09/15 14:00:08	43.827555	141.472445	61				
<input type="checkbox"/>	2016/09/15 11:57:43	43.214985	141.529896	99				

Total distance of the selected data are displayed at the top of the screen.



BumpRecorder Data Download								
					Total	100 km	IRI meshsize 8	download
1								
	datetime	latitude	longitude	distance(km)	comment			
<input checked="" type="checkbox"/>	2016/09/15 17:00:59	42.952208	141.512757	34	左前			
<input checked="" type="checkbox"/>	2016/09/15 15:12:04	43.403081	141.431003	64				

Click the "download" button at the top of the screen.

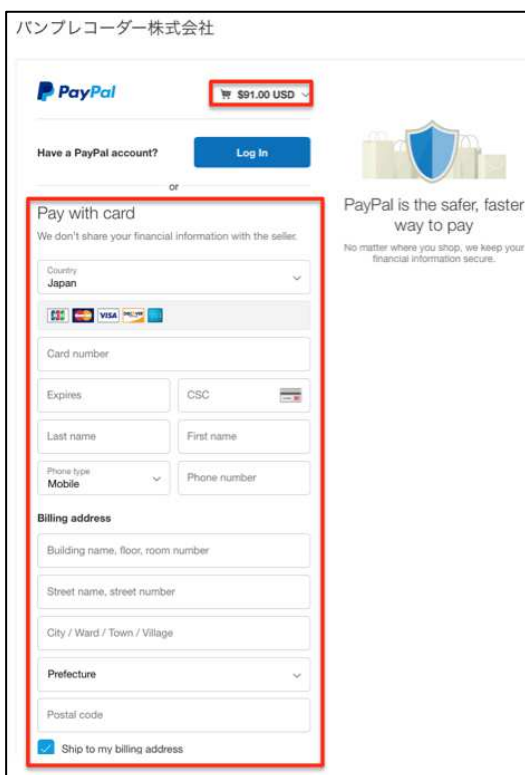
datetime	distance(km)	amount
2016/09/15 15:12:04	60km	\$60
2016/09/15 17:00:59	31km	\$31
Total	91km	\$91

Confirmation dialog window will open. Distance is actual IRI distance which you can download. Please confirm and press "Pay" button to proceed to payment by PayPal.

Costs are 1 USD / km for each data files. First 1km is 1USD. Over distance is shorter than 100m, it is free. It is longer than 100m, it's cost is same as 1km.

Measured distance	0km~1.09km	1.1~2.09km	2.1km~3.09km	3.1km~4.09km	...
Accounting distance	1km	2km	3km	4km	...

## 2-7. PayPal payment



After confirmation of the amount, please proceed PayPal payment.

After payment, download process will start automatically.

### NOTE

When you cancel payment process, it is return back to the data download page.

## 2-8. Re-download

After payment, the purchased data will show "Purchased".



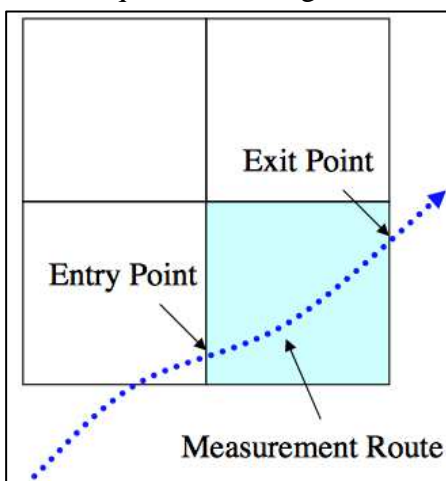
datetime	latitude	longitude	distance(km)	comment
2016/09/15 17:00:59	42.952208	141.512757	34	左前
2017/11/24 21:05:45	-1.958081	30.096473	8	マイクロバス 右後ろ席
2016/09/15 14:00:08	43.827555	141.472445	61	
2016/09/15 11:57:43	43.214985	141.529896	99	

You can download purchased data again. Check and press "download" button, There is no deadline or number limit.

## 3. DATA DETAIL

From this function, providing IRI has segment length of "Mesh Size 8" of Square Mesh Segment.

About Square Mesh Segment :



It is standard segment length of the **BumpRecorder**.

Square Mesh is defined by only using latitude and longitude, instead using road location markers.

For measurement route, a cross over section is used for IRI calculation.

In case of Tokyo at latitude 36 degrees, the length of one side is 88 m.

### NOTES

- Depending on the Measurement Route, the segment length may differ greatly even in neighboring segments.
- For more detail information, please visit the following URL.



[http://www.bumprecorder.com/wp-content/uploads/2017/06/SquareMesh\\_170629\\_eng.pdf](http://www.bumprecorder.com/wp-content/uploads/2017/06/SquareMesh_170629_eng.pdf)

datetime	devicetime	meshsize	latcode	loncode	lat1	lon1	lat2	lon2	l	speed	iri			
20171124_210545	1511550392885	8	-16040	246544	-1.957627	30.096496	-1.957353	30.096679	36.6	3.17	11.6			
20171124_210545	1511550404130	8	-16040	246552	-1.957353	30.09668	-1.957019	30.097656	114.6	3.92	10.0			
20171124_210545	1511550483072	8	-16032	246552	-1.956205	30.097656	-1.956409	30.09668	110.7	8.32	3.7			
20171124_210545	1511550496587	8	-16032	246544	-1.956409	30.09668	-1.956651	30.096041	75.9	9.72	1.7			
20171124_210545	1511550521478	8	-16032	246536	-1.956651	30.095254	-1.955675	30.095608	115.3	6.31	2.2			
20171124_210545	1511550539610	8	-16024	246536	-1.955674	30.095608	-1.954699	30.09592	113.8	7.84	2.2			
20171124_210545	1511550553852	8	-16016	246544	-1.954699	30.09592	-1.953723	30.095775	109.6	6.31	4.8			
20171124_210545	1511550572510	8	-16008	246536	-1.953723	30.095775	-1.952747	30.095172	127.6	10.28	2.5			
20171124_210545	1511550585007	8	-16000	246536	-1.952747	30.095172	-1.952241	30.094727	74.9	13.76	1.2			
20171124_210545	1511550590485	8	-16000	246528	-1.952241	30.094726	-1.951771	30.09419	79.2	13.84	1.4			
20171124_210545	1511550596165	8	-15992	246520	-1.951771	30.09419	-1.950795	30.09355	130.8	12.09	2.4			
20171124_210545	1511550606995	8	-15984	246512	-1.950795	30.09355	-1.949819	30.092605	151.3	9.70	2.4			
20171124_210545	1511550628975	8	-15984	246512	-1.949819	30.092356	-1.950795	30.092392	108.5	7.20	3.9			
20171124_210545	1511550643418	8	-15992	246512	-1.950795	30.092392	-1.951771	30.092367	108.4	8.75	1.8			
20171124_210545	1511550655578	8	-16000	246512	-1.951771	30.092367	-1.952747	30.092334	108.5	8.61	2.2			
20171124_210545	1511550679860	8	-16000	246504	-1.952747	30.091563	-1.952128	30.09082	107.4	11.39	1.9			

datetime	Date and time when the data was measured		
devicetime	Time indicated by OS UTC [ms]		
meshsize	Mesh size	Mesh Size 8 Square Mesh	
latcode	Latitude		
loncode	Longitude		
lat1	Latitude on the origin side of the IRI calculation section		
lon1	Longitude on the origin side of the IRI calculation section		
lat2	Latitude on the end side of the IRI calculation section		
lon2	Longitude on the end side of the IRI calculation section		
l	Section length [m]		
speed	Average velocity in section [m/s]		
iri	IRI[mm/m]		

Contact address

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