

WeatherPhilippines improves AWS network of 50 priority sites

In 2016, WeatherPhilippines partnered with WxBunka Foundation of Japan to create a weather-preparedness culture that is deeply embedded in the Filipino consciousness. To help WeatherPhilippines improve its services, WxBunka Foundation donated JPY2.5M (PhP1.7M).

This donation facilitated the conversion of 50 Automated Weather Stations (AWS) into solar-powered units that are installed in priority meteorological sites where power outages are frequent. These include the following locations: Eastern Samar, Northern Samar, Leyte, Southern Leyte, La Union, Laguna, Rizal, Misamis Occidental, and Batangas.

With the conversion completed in 2017, the solar-powered AWS units' reliability improved, and helped ensure the accuracy and reliability of localized weather information delivered to the public.

From an average of 60-70% per month, it went up to as much as 95-99% for all of the weather stations that were converted.

City /Municipality	Province	Region	Longitude	Latitude	AWS Brand	Date Installed	Before		After
							Frequency of Downtime	due to power outage	Frequency of Downtime (Cause by)
Baco	Samar	Region VII	125.067800	11.281400	Ljft	May	60%-70%	Availability/month	Availability went up to 95% with available solar power
Milawa	Samar	Region VII	124.928300	11.567800	Ljft	May	60%-70%	Availability/month	Availability went up to 95% with available solar power
Jabong	Samar	Region VII	124.950586	11.762464	Ljft	May	60%-70%	Availability/month	Availability went up to 95% with available solar power
Bolavolga	Eastern Samar	Region VII	125.386353	11.109221	Ljft	May	60%-70%	Availability/month	Availability went up to 95% with available solar power
Moyalong	Eastern Samar	Region VII	125.501189	11.500087	Ljft	May	60%-70%	Availability/month	Availability went up to 95% with available solar power
Taft	Eastern Samar	Region VII	125.418058	11.903908	Ljft	May	60%-70%	Availability/month	Availability went up to 95% with available solar power
Hermon	Eastern Samar	Region VII	125.629336	11.323781	Ljft	May	60%-70%	Availability/month	Availability went up to 95% with available solar power
Alon	Northern Samar	Region VII	124.284345	12.504667	Ljft	May	60%-70%	Availability/month	Availability went up to 95% with available solar power
Si Vison	Eastern Samar	Region VII	125.721283	11.034203	Ljft	May	60%-70%	Availability/month	Availability went up to 95% with available solar power
Mercedes	Eastern Samar	Region VII	125.709121	11.097626	Ljft	May	60%-70%	Availability/month	Availability went up to 95% with available solar power
Abayog	Leyte	Region VII	125.013052	10.747200	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Alvarez	Leyte	Region VII	124.694231	10.916005	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Boybay City	Leyte	Region VII	124.738390	10.676627	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Carigora	Leyte	Region VII	124.680900	11.307400	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Davao	Leyte	Region VII	125.013821	10.953289	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Napulitan	La Union	Region I	120.387000	16.533700	Ljft	August	60%-70%	Availability/month	Availability went up to 95% with available solar power
Calamba City	Laguna	Region IIIA	121.133500	14.197700	Ljft	August	60%-70%	Availability/month	Availability went up to 95% with available solar power
Hilangas	Leyte	Region VII	124.748800	10.379200	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
MacArthur	Leyte	Region VII	125.002241	10.466968	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Paopaoan	Leyte	Region VII	124.740300	10.499700	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Jayrol	Leyte	Region VII	124.634500	10.365900	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Tanauan	Leyte	Region VII	125.016900	11.116600	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Pulampuan	Leyte	Region VII	124.383300	11.050000	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Tubagon	Leyte	Region VII	124.370300	11.307400	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Pala	Leyte	Region VII	124.990585	11.158468	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Tolosa	Leyte	Region VII	125.017910	11.063216	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
San Isidro	Leyte	Region VII	124.330556	11.061111	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Pala	Leyte	Region VII	125.003174	11.177859	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Antipolo City	Rizal	Region IIIA	121.221300	14.641600	Ljft	April	60%-70%	Availability/month	Availability went up to 95% with available solar power
Catmon	Northern Samar	Region VII	124.638500	12.499000	Ljft	May	60%-70%	Availability/month	Availability went up to 95% with available solar power
Cotabig	Northern Samar	Region VII	125.053142	12.408389	Ljft	May	60%-70%	Availability/month	Availability went up to 95% with available solar power
Glamey	Northern Samar	Region VII	125.302461	12.385599	Ljft	May	60%-70%	Availability/month	Availability went up to 95% with available solar power
Looang	Northern Samar	Region VII	125.010571	12.570013	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
San Jose	Northern Samar	Region VII	124.485160	12.373000	Ljft	May	60%-70%	Availability/month	Availability went up to 95% with available solar power
Pambujan	Northern Samar	Region VII	124.926700	12.562900	Ljft	May	60%-70%	Availability/month	Availability went up to 95% with available solar power
Pudra Burgos	Southern Leyte	Region VII	125.017258	10.030149	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Silogo	Southern Leyte	Region VII	125.162857	10.527867	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Liluan	Southern Leyte	Region VII	125.117859	10.156251	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Macrahan	Southern Leyte	Region VII	124.944618	10.073054	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Hunangan	Southern Leyte	Region VII	125.158502	10.394213	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
San Ricardo	Southern Leyte	Region VII	125.276600	9.811400	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Maitbog	Southern Leyte	Region VII	125.003853	10.157987	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Saint Bernard	Southern Leyte	Region VII	125.137700	10.281100	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Dolores	Eastern Samar	Region VII	125.484521	12.035679	Ljft	May	60%-70%	Availability/month	Availability went up to 95% with available solar power
Giandara	Samar	Region VII	124.811600	12.013200	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Calamba City	Laguna	Region IIIA	121.080955	14.204878	Ljft	August	60%-70%	Availability/month	Availability went up to 95% with available solar power
Calamba	Marikina Occidental	Region IV	123.638300	8.564300	Ljft	August	60%-70%	Availability/month	Availability went up to 95% with available solar power
Boisalis	Batangas	Region IIIA	121.205200	13.841000	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power
Tomac Claver	Southern Leyte	Region VII	124.980500	10.305200	Ljft	June	60%-70%	Availability/month	Availability went up to 95% with available solar power

Based on the actual observation after the conversion of the 50 weather stations from commercial power to solar power, the availability of the AWS went up significantly from 60%-70% to 95% to 99%. Before, commercial power outage was the major cause of downtime and when it was converted to an independent solar power source, the power related cause of downtime was almost eliminated.

AWS converted to solar power funded by the grant aid of WN WxBunka Foundation

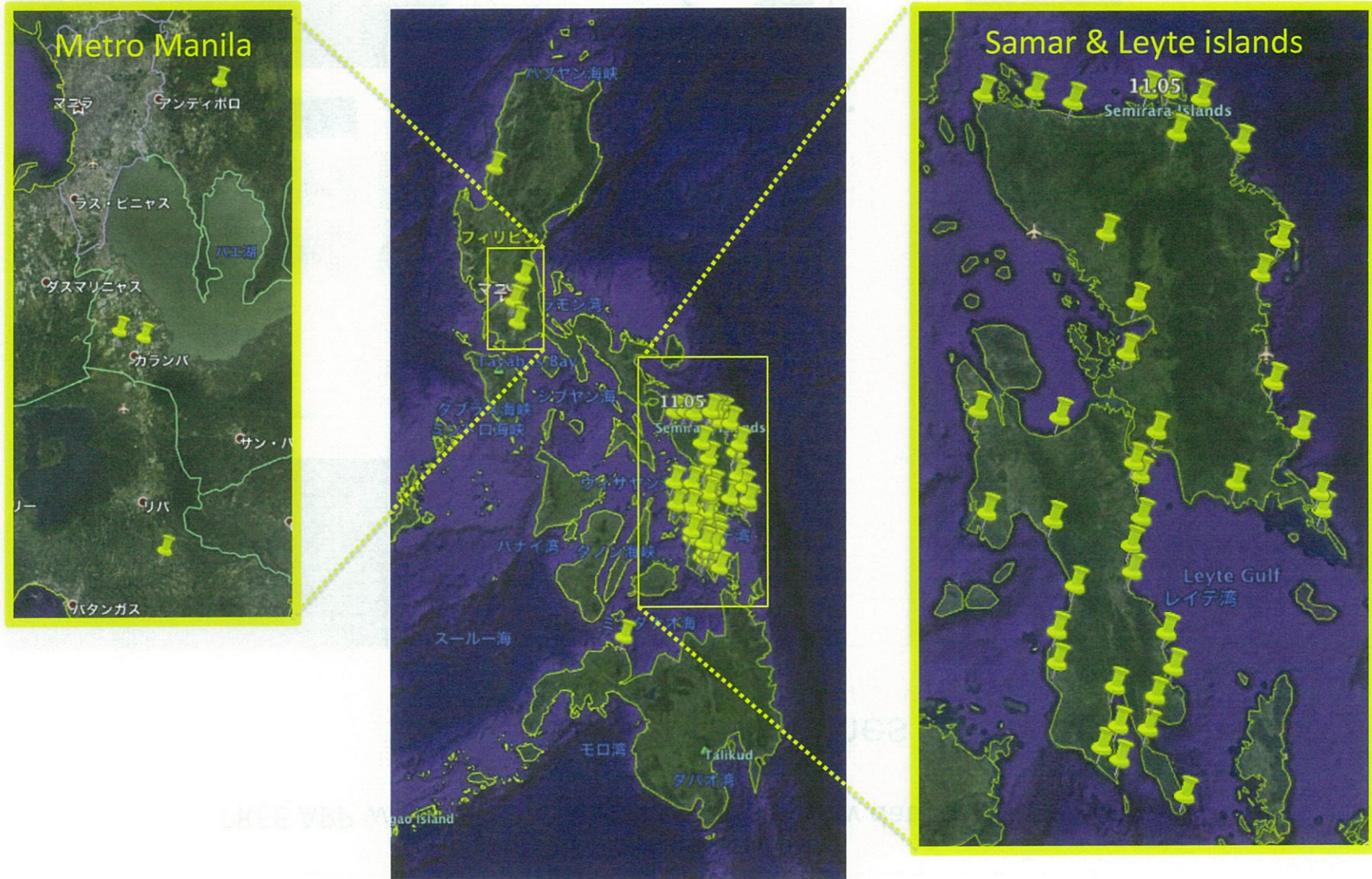


AWS of found refers to automatic to station system

Sample picture of installation of solar panel to AWS



Map of AWS converted to solar power, funded by the grant aid of WN WxBunka Foundation



FREE APP where we can see the data, as raw data and alert signal

