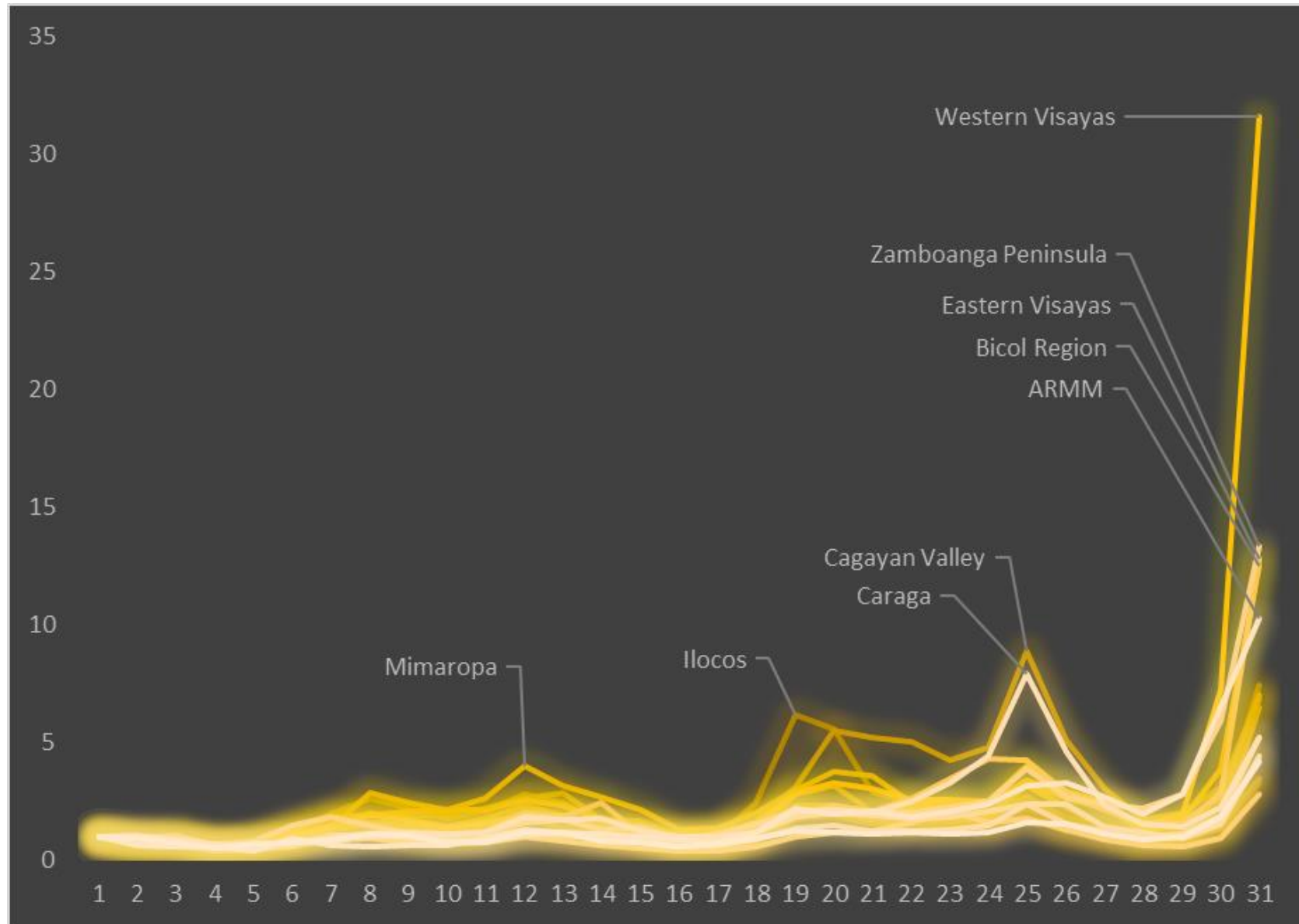
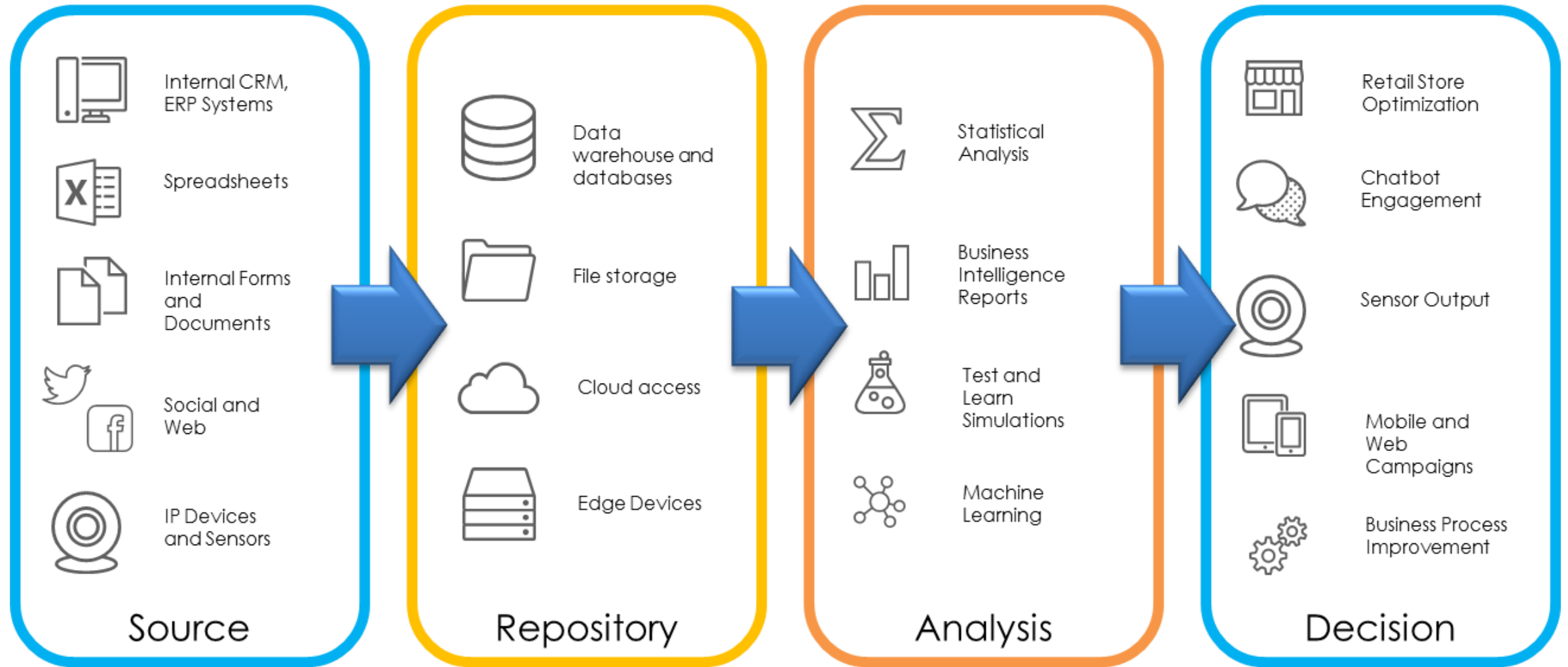


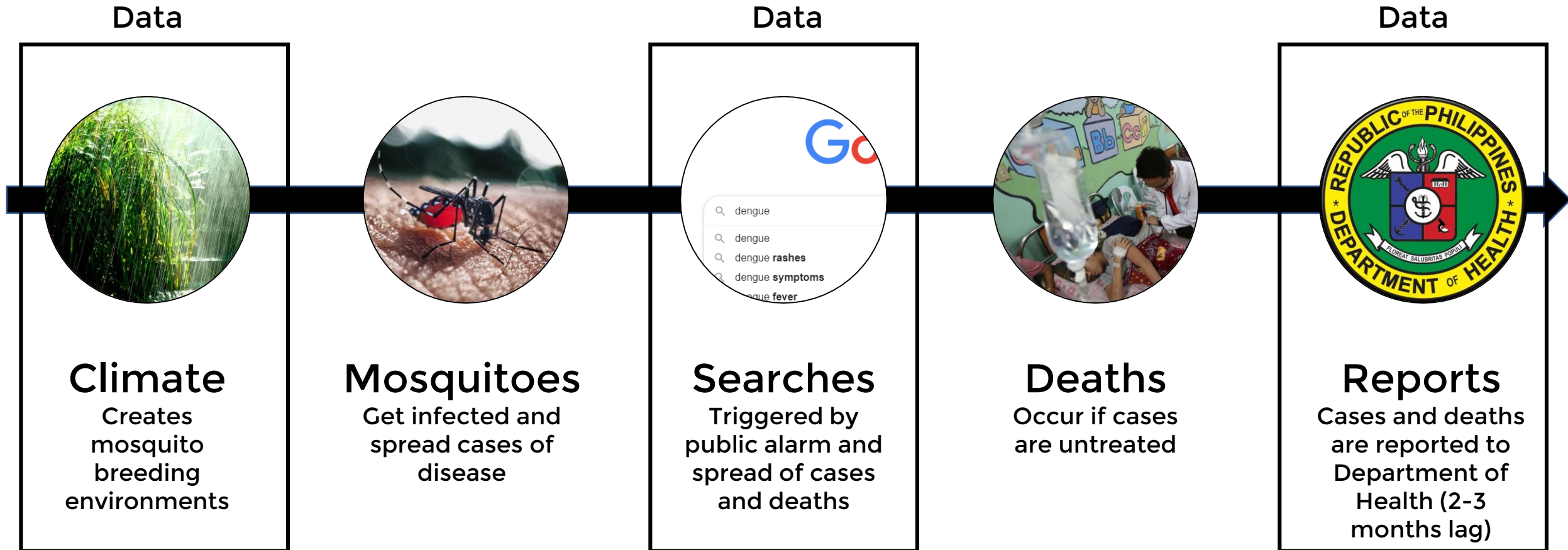
Dengue Searches



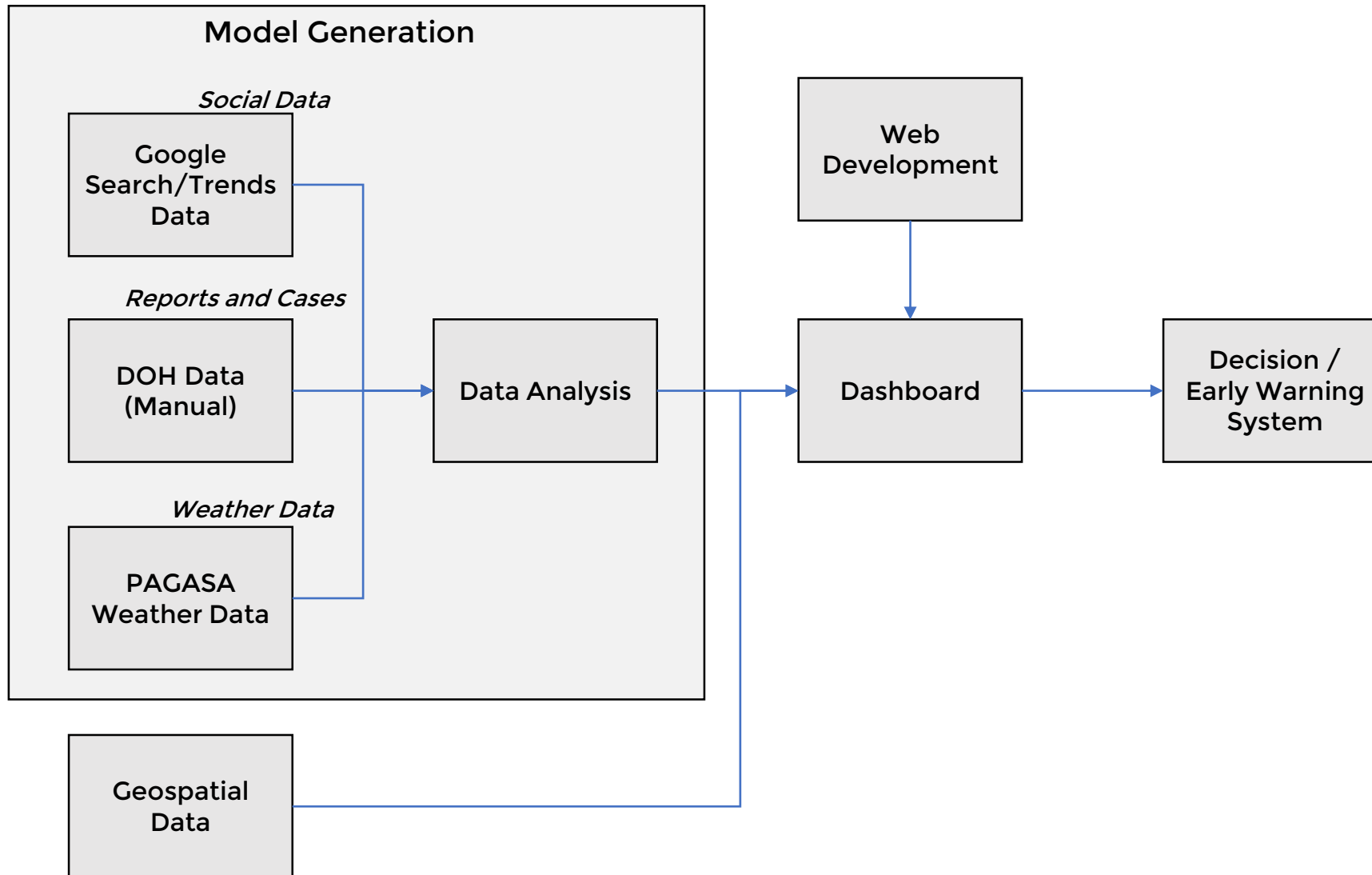
Data Value Chain



Dengue Data Cycle



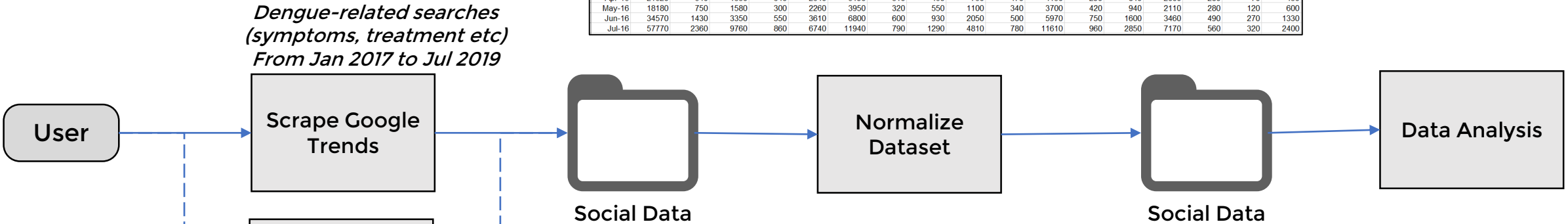
AEDES Process



Data Gathering (Social Data)

Searches for DENGUE	NCR	Ilocos	Cordillera	Cagayan Valley	Central Luzon	Calabarzon	Mimaropa	Bicol Region	Western Visayas	Eastern Visayas	Central Visayas	Zamboanga Peninsula	North Mindanao	Davao Region	Caraga	ARMM	Region12
Aug-15	73120	2670	1320	1020	5640	10570	480	950	1570	310	9080	660	1300	3330	320	130	710
Sep-15	91820	2700	1700	1180	7170	17720	570	1090	2220	340	11370	720	1740	3820	460	170	650
Oct-15	121810	2080	1620	940	7940	25080	540	1340	2830	430	15080	590	1980	4300	700	210	810
Nov-15	73430	2190	1740	790	8710	15510	270	1080	1690	370	10810	580	1810	4970	620	240	940
Dec-15	46490	1420	1380	640	5640	9730	270	840	1310	300	8460	710	1690	3520	620	180	950
Jan-16	53400	1700	1490	730	6240	12850	440	1050	1650	610	9140	750	2370	4300	750	210	1120
Feb-16	44320	1300	1740	650	5020	9040	410	1010	1450	570	8420	510	1580	3760	570	250	730
Mar-16	32570	950	1680	730	3800	7030	250	720	1070	370	6180	380	1420	2940	460	140	610
Apr-16	21620	640	1330	340	2640	5190	310	460	760	470	4150	290	840	2000	280	70	430
May-16	18180	750	1580	300	2260	3950	320	550	1100	340	3700	420	940	2110	280	120	600
Jun-16	34570	1430	3350	550	3610	6800	600	930	2050	500	5970	750	1600	3460	490	270	1330
Jul-16	57770	2360	9760	860	6740	11940	790	1290	4810	780	11610	960	2850	7170	560	320	2400

Raw Dataset

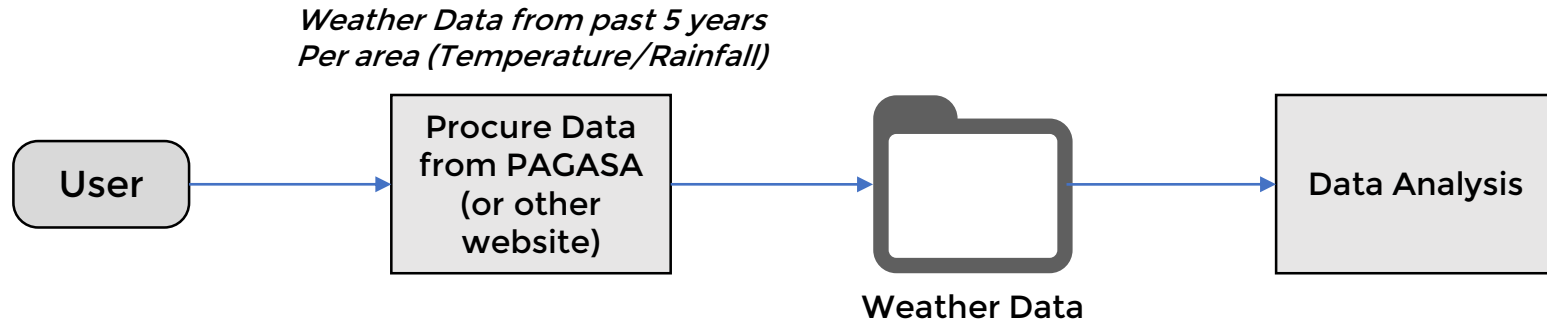


	NCR	Ilocos	Cordillera	Cagayan Valley	Central Luzon	Calabarzon	Mimaropa	Bicol Region	Western Visayas	Eastern Visayas	Central Visayas	Zamboanga Peninsula	North Mindanao	Davao Region	Caraga	ARMM	Region12
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1.255744	1.011236	1.287879	1.156863	1.271277	1.676443	1.1875	1.147368	1.414013	1.096774	1.252203	1.090909	1.338462	1.147147	1.4375	1.307692	0.915493	
1.665892	0.779026	1.227273	0.921569	1.407801	2.372753	1.125	1.410526	1.802548	1.387097	1.660793	0.893939	1.523077	1.291291	2.1875	1.615385	1.140845	
1.00424	0.820225	1.318182	0.77451	1.544326	1.46736	0.5625	1.136842	1.076433	1.193548	1.190529	0.878788	1.392308	1.492492	1.9375	1.846154	1.323944	
0.635804	0.531835	1.045455	0.627451	1	0.92053	0.5625	0.884211	0.834395	0.967742	0.931718	1.075758	1.3	1.057057	1.9375	1.384615	1.338028	
0.730306	0.636704	1.128788	0.715686	1.106383	1.215705	0.916667	1.105263	1.050955	1.967742	1.006608	1.136364	1.823077	1.291291	2.34375	1.615385	1.577465	
0.606127	0.486891	1.318182	0.637255	0.890071	0.855251	0.854167	1.063158	0.923567	1.83871	0.927313	0.772727	1.215385	1.129129	1.78125	1.923077	1.028169	
0.445432	0.355805	1.272727	0.715686	0.673759	0.66509	0.520833	0.757895	0.681529	1.193548	0.680617	0.575758	1.092308	0.882883	1.4375	1.076923	0.859155	
0.295678	0.2397	1.007576	0.333333	0.468085	0.491012	0.645833	0.484211	0.484076	1.516129	0.457048	0.439394	0.646154	0.600601	0.875	0.538462	0.605634	
0.248632	0.280899	1.19697	0.294118	0.400709	0.373699	0.666667	0.578947	0.700637	1.096774	0.407489	0.636364	0.723077	0.633634	0.875	0.923077	0.84507	
0.472784	0.535581	2.537879	0.539216	0.640071	0.643333	1.25	0.978947	1.305732	1.612903	0.657489	1.136364	1.230769	1.039039	1.53125	2.076923	1.873239	
0.790071	0.863895	7.393939	0.843137	1.195035	1.129612	1.645833	1.357895	3.063694	2.516129	1.278634	1.454545	2.192308	2.153153	1.75	2.461538	3.380282	
1.297183	1.382022	0.630303	1.352941	2.001773	1.910123	2.020833	1.778947	5.726115	3.645161	2.028634	2.030303	3	2.552553	2.3125	3	3.887324	
1.120213	1.397004	3.931818	1.107843	1.966312	1.66036	1.6875	1.547368	4.687898	3.580645	1.955947	1.651515	2.869231	1.756757	2.25	2.153846	2.830986	
0.808124	0.827715	2.068182	0.784314	1.406028	1.421949	1.333333	1.6	2.452229	3.096774	1.632159	1.560606	2.253846	1.516517	2.28125	2	2.295775	
0.583561	0.756554	1.613636	0.892157	1.335106	1.192053	1.375	1.631579	1.815287	3.354839	1.442731	1.5	2.076923	1.288288	2.84375	2.307692	2.43662	
0.455005	0.554307	1.204545	0.676471	1.054965	0.969726	1.0625	1.315789	1.292994	3.387097	1.161894	0.984848	1.546154	1.06006	1.96875	2.153846	2.15493	

Normalized Dataset

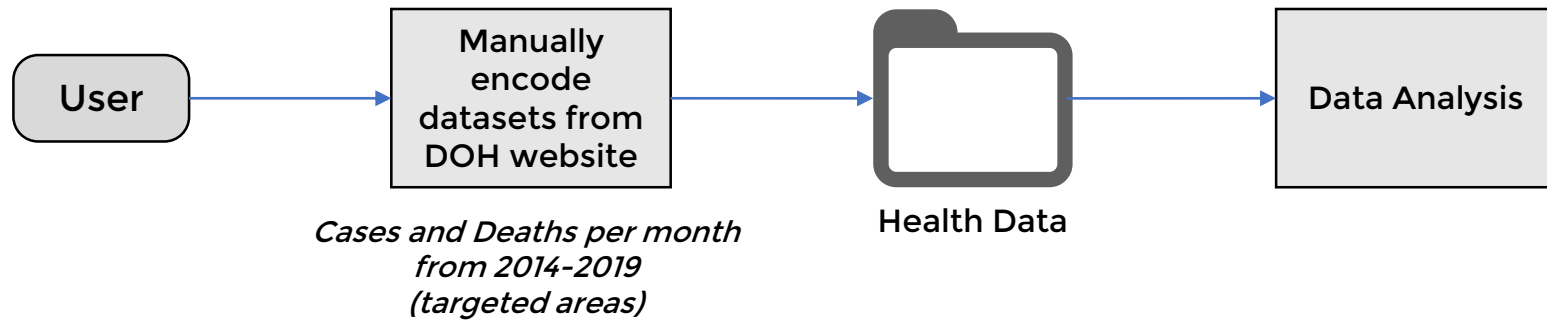
- NCR
 - Ilocos
 - Cordillera
 - Cagayan Valley
- Central Luzon
 - Calabarzon
 - Mimaropa
 - Bicol Region
- Western Visayas
 - Eastern Visayas
 - Central Visayas
 - Zamboanga
- Peninsula
 - North Mindanao
 - Davao Region
 - Caraga
- ARMM
 - Region12

Data Gathering (Weather Data)



- NCR
- Ilocos
- Cordillera
- Cagayan Valley
- Central Luzon
- Calabarzon
- Mimaropa
- Bicol Region
- Western Visayas
- Eastern Visayas
- Central Visayas
- Zamboanga
- Peninsula
- North Mindanao
- Davao Region
- Caraga
- ARMM
- Region12

Data Gathering (Reports and Cases)

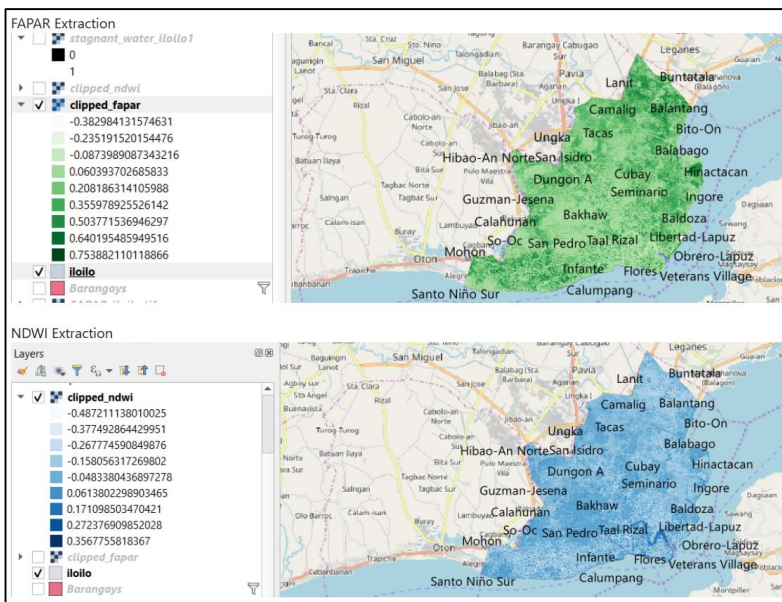
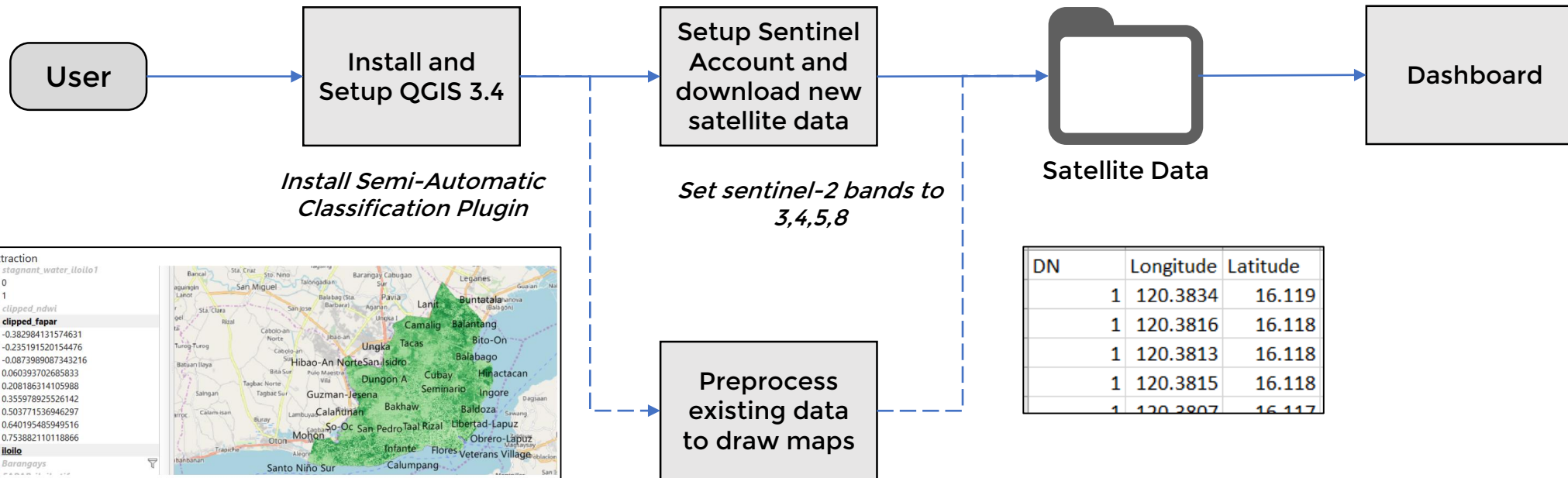


Note that there are months with missing data

Date	Cases	Deaths	Cases	Deaths	Start Date	End Date	Start Date	End Date
8/31/2019	3456	26	1601	18	1/1/2019	8/31/2019	1/1/2018	8/31/2018
7/31/2019	2457	19	1293	16	1/1/2019	7/27/2019	1/1/2018	7/27/2018
6/30/2019	1784	17	913	13	1/1/2019	6/29/2019	1/1/2018	6/29/2018
5/31/2019	1167	11	595	7	1/1/2019	5/25/2019	1/1/2018	5/25/2018
4/30/2019	936	9	445	6	1/1/2019	4/27/2019	1/1/2018	4/27/2018
3/31/2019	637	5	364	4	1/1/2019	3/30/2019	1/1/2018	3/30/2018

- Eastern Visayas
- Western Visayas
- ARMM
- NCR

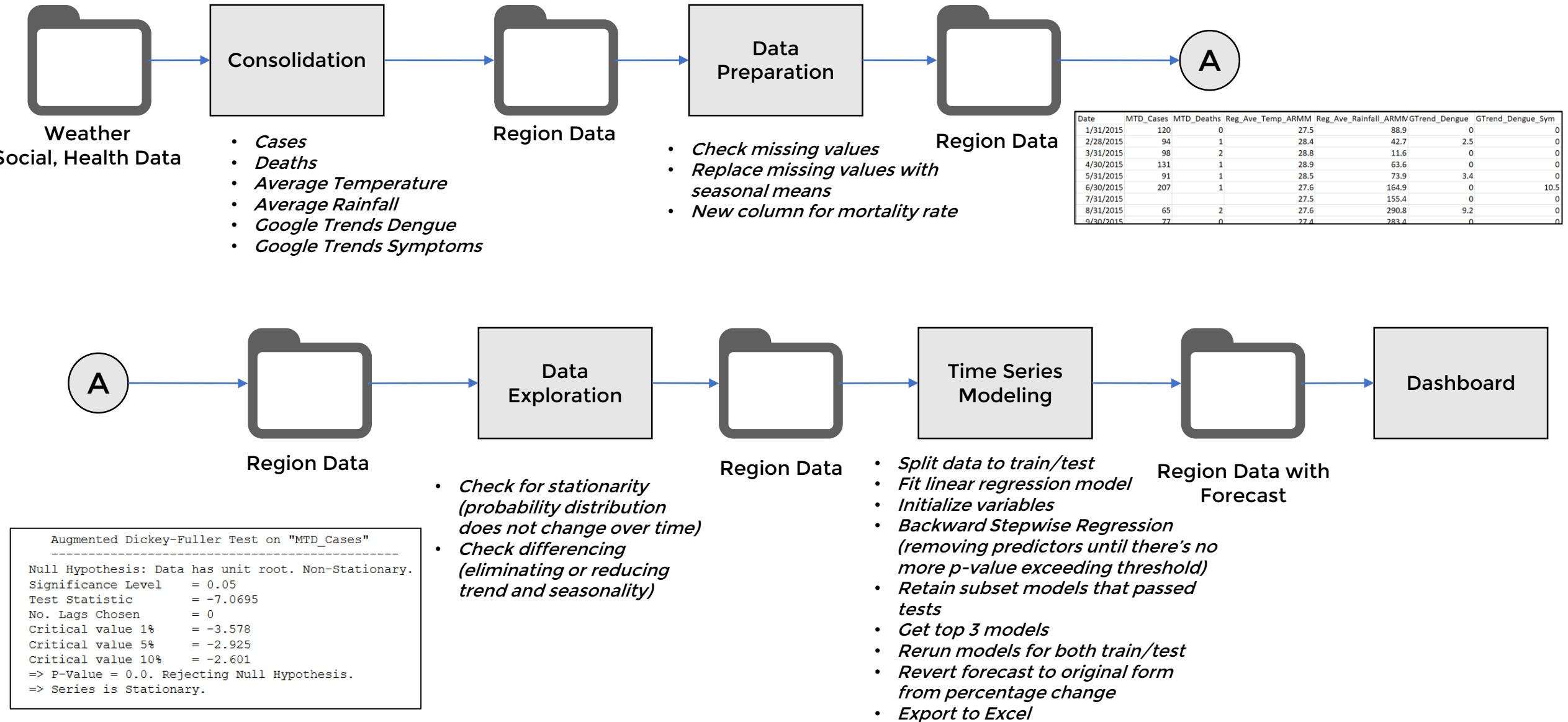
Data Gathering (Geospatial Data)



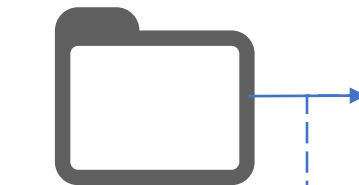
DN	Longitude	Latitude
1	120.3834	16.119
1	120.3816	16.118
1	120.3813	16.118
1	120.3815	16.118
1	120.3807	16.117

- FAPAR (Fraction of Absorbed Photosynthetically Active Radiation) – for Vegetation index
- NDWI (Normalized Difference Water Index) – for Water Index

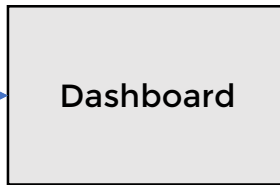
Data Analysis



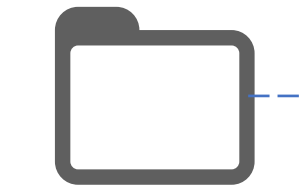
Dashboard



Region Data with Forecast



- *Data Visualization through Chart.js*
- *Mapping with Openstreetmap*
- *Cycling through different regions*



Satellite Data

