

Movement Schema

Field Name	Description	Data Type	Example	Schema Type
ad_id	Mobile advertising ID. A consistent ID that uniquely and pseudonymously identifies the device from which the location record originated	STRING	000061c0-41h8-26cz-jf5e-fe2653573fv2	BASIC
utc_timestamp	Timestamp in UTC timezone	TIMESTAMP	2022-05-31T13:32:11.000+0000	BASIC
horizontal_accuracy	Estimate of the radius of uncertainty of the location measurement as defined by the Apple or Android device (meters)	STRING	5.0	BASIC
id_type	Indicates whether device is Android (aaid) or iOS (idfa) or other (connectedtv, car gps, etc)	STRING	idfa	BASIC
ip_address	IP address	STRING	63.151.246.0	BASIC
latitude	Coordinate	STRING	37.776801	BASIC
longitude	Coordinate	STRING	-122.416601	BASIC
iso_country_code	2 digit country code	STRING	US	BASIC
country	Country	STRING	united states of america	BASIC (except HDAT)

Field Name	Description	Data Type	Example	Schema Type
quality_fields	Data quality fields.	MAP. All elements are within the MAP as key value pairs.	{"ping_lat_precision": "5", "source_type": "agg", "ping_long_precision": "5", "ping_near_replicate_matches": "1", "ping_sink_matches": "1", "ping_cell_tower": "0", "ping_circle_score": "0.03", "ha_type": "inferred", "ping_origin_type": "gps"}	FULL
geo_fields	Geo/location fields.	MAP. All elements are within the MAP as key value pairs.	{"city": "rockwall", "zipcode": "75032", "h3_res10": "8a26c82e5107fff", "geohash": "9vg7jjkus", "h3_res12": "8c26c82e5105dff", "region": "texas"}	FULL

Quality Column Package Details

Field Name	Description	Helps Identify	Example
ping_lat_precision	Number of decimal places for latitude	<ul style="list-style-type: none"> ✓ Coarse Location Services ✓ Gridding Locations 	5
ping_long_precision	Number of decimal places for longitude	<ul style="list-style-type: none"> ✓ Coarse Location Services ✓ Gridding Locations 	5
ping_near_replicate_matches	Count of records with same lat/long/timestamp in a given event date	<ul style="list-style-type: none"> ✓ IDfV / GAID for Advertisers ✓ Cache device signals 	1
ping_sink_matches	Count of records with same lat/long pair on a given event date	<ul style="list-style-type: none"> ✓ ISP Reverse Geo ✓ Google Coarse Gridding ✓ General Sinks 	1
ping_cell_tower	Matches longitude/latitude to known cell tower points. (1 for match and 0 otherwise.)	<ul style="list-style-type: none"> ✓ Cell company driven sink locations ✓ Carriers 	0
ping_circle_score	Likelihood of a record falling into a suspicious circle. 0-1 scale, from least to most likely.	<ul style="list-style-type: none"> ✓ Crop circle structures 	0.03
source_type	Indicates if the source of the data is from an app, sdk, or agg (aggregator)	<ul style="list-style-type: none"> ✓ Trustworthy data from apps and SDKs 	app
ha_type	Indicates if the horizontal accuracy is collected directly (collected) or inferred based on decimal precision (inferred)	<ul style="list-style-type: none"> ✓ Trustworthy data from apps and SDKs 	collected
ping_origin_type	Indicates if the ping coordinate origin is from GPS, IP address, or User Provided. <i>Values: gps, ipaddress, userprovided</i>	<ul style="list-style-type: none"> ✓ Collection method ✓ Accuracy of ping location 	ipaddress

Geo Column

Field Name	Description	Example
region	State in the US Region globally	texas
city	City, globally	rockwall
zipcode	Five digit numeric code that identifies a collection of mailing addresses, US only	75032
h3_res10	H3 polygon with a resolution of 10, globally	8a26c82e5107fff
h3_res12	H3 polygon with a resolution of 12, globally	8c26c82e5105dff
geohash	geohash 9 of the lat/long, globally	9vg7jjkus

Quality Filters

Field Name	Filter Criteria (Keep if)
ping_lat_precision/ping_long_precision	ping_long_precision ≥ 5 OR ping_lat_precision ≥ 5
ping_sink_matches	ping_sink_matches ≤ 25
ping_cell_tower	ping_cell_tower = 0
ping_circle_score	ping_circle_score < 0.3
calculated_velocity	calculated_velocity ≤ 250 kmph