

Key	Value
Company Name	Caterpillar, Inc.
Company Ticker	CAT
Location	Decatur, Illinois
Facility Description	Construction and Resource Industries (off-highway trucks) manufacturing plant
Time Zone	America/Chicago
Sensor FOV	Public access roadway and rail spur crossing

Data File Contents

Field	Description
Location	Physical location of the facility monitored
UTC	Date and time the target was acquired (UTC format)
Count	Number of targets acquired at that time
Type	Type of the target captured
Direction	Direction the target was traveling
Flag	Sensor status reading

Type	Description
OffHwyTruck	Fully completed and/or partially completed cab and chassis off-highway trucks
OffHwyChassis	Off-highway truck chassis
Grader	Motograder
Loader	Wheel loader
Scraper	Wheel tractor-scraper
DumpBed	Dumped for off-highway truck
Arm	Excavator attachment arm for bucket
Axle	Off-highway truck axle
Bucket	Excavator bucket or loader bucket
Cab	Cab for off-highway truck or motograder
DozerBlade	Bulldozer blade attachment
Engine	Engine
LargeTire	Large off-highway tire
Parts	Miscellaneous parts
ScraperCab	Cab for wheel tractor-scraper
ScraperPan	Scraper pan for wheel tractor-scraper
Telehandler	Aerial lift
Tires	Off-highway tire

Direction	Description
in	Targets entering the production facility
out	Targets exiting the production facility
staging	Targets moving within the production facility among staging areas

Flag	Description
0	Sensor had a malfunction
1	Sensor operated normally
2	Sensor was obscured by weather

Notes
1. Targets move among Caterpillar staging/storage areas during the manufacturing process.
2. Products are delivered via 18-wheeler or rail.
3. Telehandlers are not manufactured in Decatur but are used in the manufacturing process.
4. Net direction calculations are $(\text{cumsum}(\text{out}) - \text{cumsum}(\text{in})) - \text{lag}((\text{cumsum}(\text{out}) - \text{cumsum}(\text{in})), 1 \text{ day})$.
5. Flag field readings of 0 and 2 are logged on a per hour basis; any issue within the hour causes the entire hour to be flagged.