

Eyedeia MMR SDK

Technical sheet

Version 2.24.0



ADVANCED COMPUTER VISION SOLUTIONS

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1 What's New

Eyedeas MMR 2.24.0

Release date: 2024/12/05

- **REMINDER:** DAT modules are not compatible with the previous versions of the SDK. Inferior accuracy will result from using the new DAT modules with the previous versions of the SDK.
- Added FLOPS counts to the DAT module information table.
- Added new classifier "view8". Allows for improved category and tag classification. See the Developer's Guide for more information.
- Added new tag "tag_truck_is_semi". Allows to distinguish between semi-trucks and straight(full) trucks.
- Added new tag "tag_rider_present". Allows to recognize if a rider is present on animal, bike, kickbike or motorbike.
- Added new tag "tag_helmet". Allows to recognize if rider (if present) has a helmet. Only the driving person helmet is considered.
- Improvements of soft mobility category classification.
- Significant improvement in the classification of traffic data from South America.
- Removed explink examples, no longer required to load SDK. See example on how to load MMR SDK.
- Algorithm adjustments for better accuracy of classifiers. Computation time adjustments, mostly decrease in computation time by 20%, slow down possible on 32 bit architectures. Check the Technical Sheet timing table.
- Completely new binary modules for vehicle classification with actual data for 2024/Q4. Based on data from Europe, Americas, Middle East, Africa, and Australia.
- **EOL NOTICE:** We are EOL 32 bit architectures (armv7l, i686, Win32) in December 2024. This is the last release to contain 32 bit packages. In the future, only contractual customers of pre-2025 contracts will receive on-demand 32 bit packages.

Eyedeas MMR 2.23.0

Release date: 2024/06/20

- Improvements for initial support of soft mobility category classification.
- Significant improvement in the classification of traffic data from the USA.
- Added "tag_towed" also to the license plate-based modules to recognize vehicles which are being towed.
- Completely new binary modules for vehicle classification with actual data for 2024/Q2. Based on data from Europe, North America, Middle East, Africa, and Australia.

Eyedeas MMR 2.22.0

Release date: 2023/12/01

- Improvements for initial support of soft mobility category classification. Added soft mobility benchmark to benchmark sets.
- Added "tag_tank_truck" to recognize tank truck vehicles (cisterns).
- Added "tag_mixer_truck" to recognize mixer truck vehicles (agitator truck, concrete mixer).
- Completely new binary modules for vehicle classification with actual data for 2023/Q4. Based on data from Europe, North America, East Asia, Middle East, Africa, and Australia.

Eyedeas MMR 2.21.0

Release date: 2023/06/20



- **BREAKING CHANGE:** Module names changed; customer name dropped from .DAT module name for private releases.
- **BREAKING CHANGE:** Module path dropped “mmr” suffix. Module path “edftf2lite-mmr” changed to “edftf2lite”, module path “edftrt-mmr” changed to “edftrt”. In case you previously used internal beta packages with “mmrbox” suffix, this has been dropped as well. This change enables license plate detection-based and road user detection-based recognition in a single package.
- **BREAKING CHANGE:** Variable names “EDF_COMPUTATIONMODE_CPU|GPU” changed to “ER_COMPUTATION_MODE_CPU|GPU”. These are contained in the new header file “er_type.h”.
- Changed name convention (“vehicle”, “car”), now entities that are recognized are not only vehicles, but all “road users”.
- Added recognition modules based on road user detection. Previously, only license plate-based modules were available. The road user detection .DAT modules have prefix “MMRBOX_”. See examples on how to use road user detection-based modules.
- Extended benchmarks with road user detection-based modules, also added benchmark sets with direct comparison between license plate-based and road user-based detection as input to MMR SDK.
- Added “tag_towed” to recognize vehicles which are being towed.
- Road user detection-based modules: added new categories to be recognized for soft mobility scenarios (PEDESTRIAN, KICKBIKE, ANIMAL, TROLLEY).
- Updated example project and wrappers.
- Completely new binary modules for vehicle classification with actual data for 2023/Q2. Based on data from Europe, North America, East Asia, Middle East, Africa, and Australia.
- Extended set of supported makes with rear vehicle model classification.

Eyedeia MMR 2.20.0

Release date: 2022/12/06

- **BREAKING CHANGE:** Module names changed to signalize unification of MMR and COLOR modules. Single module now returns classifications of all tasks. For example, previous module named “MMR_VCMM_PREC_2022Q2.dat” is renamed to “MMR_VCMMCT_PREC_2022Q4.dat” which means it also returns classifications of COLOR and TAGS. Examples were updated to implement this change. Clients no longer need to initialize two library objects to recognize MMR and COLOR.
- Added TAG classification to recognize various traits of the vehicle. For example, to recognize caravans, government vehicles, or vehicles transporting livestock. More information is available in the Developer’s Guide.
- Updated example project and wrappers.
- Completely new binary modules for vehicle classification with actual data for 2022/Q4. Based on data from Europe, North America, East Asia, Middle East, Africa, and Australia.
- Extended set of supported makes with rear vehicle model classification. List of makes supporting rear model classification is in table [Model Availability](#).

Eyedeia MMR 2.12.0

Release date: 2022/06/30

- **BREAKING CHANGE:** On Windows, the MMR SDK DLL file was renamed from “eyedentify-x64-MT.dll” to “eyedentify-x64.dll” for 64-bit architecture, and from “eyedentify-Win32-MT.dll” to “eyedentify-Win32.dll” for 32-bit architecture. This filename is used in the example inside *loadEyedentify* function. If you are using edf-explink codes inside your app, please update them to the current version. If using wrappers, make sure to update them to the current version.
- **BREAKING CHANGE:** Function definition of *edfFreeCropImage* has changed. The function now consumes state variable as well as the image crop. Make sure to update your app. If using wrappers,

make sure to update them to the current version.

- **BREAKING CHANGE:** Structure *EdfInitConfig* changed, additional member *num_threads* is added. Make sure to clean up the structure before use, by zeroing all members. In CPU mode, setting *num_threads* to a value larger than 1 can speed up the *edfComputeDesc* function. If using wrappers, make sure to update them to the current version.
- New function to explicitly link MMR SDK added, *edfLinkAPI*. This function can be used to link all other API functions, resulting in less code in client apps. Users can continue to use the previous implementation of linkage.
- New version of MMR SDK with TensorRT backend available for NVIDIA Jetson.
- Updated example project and wrappers.
- Tool *gpu-devices* from examples folder moved to tools folder.
- Improved SDK processing time measurement tool to better reflect real usage of the SDK. Running times reported have increased for GPU versions, but actually are the same as in previous release, where the reported times were overly optimistic.
- Completely new binary modules for vehicle classification with actual data for 2022/Q2. Based on data from Europe (incl. Russia), North America, East Asia, Middle East, Africa, and Australia.
- Added support for caravan make recognition. A future release will contain a yes/no caravan classifier to identify caravans in traffic.
- Extended set of supported makes with rear vehicle model classification. List of makes supporting rear model classification is in table *Model Availability*.

Eyedeas MMR 2.11.0

Release date: 2021/11/30

- Completely new binary modules for vehicle classification with actual data for 2021/Q4. Based on data from Europe (incl. Russia), North America, East Asia, Middle East, Africa, and Australia.
- Extended set of supported makes with rear vehicle model classification. List of makes supporting rear model classification is in table *Model Availability*.
- Added information and description of benchmark results table.
- Backend updated, faster computation on selected CPU platforms.

Eyedeas MMR 2.10.0

Release date: 2021/06/15

- Bugfix classification accuracy on Nvidia Jetson in GPU mode.
- New product branding as "Eyedeas MMR", all "VCL" tags replaced with "MMR"
 - Module path changed, replace "edftf2lite-vcl" with "edftf2lite-mmr" in *EdfInitConfig* structure, variable *module_path*.
 - Macro changed, replace "EDF_VCL_CROP_POINTS" with "EDF_MMR_CROP_POINTS"
 - Macro changed, replace "EDF_VCL_CROP_VALUES" with "EDF_MMR_CROP_VALUE"
- Completely new binary modules for vehicle classification with actual data for 2021/Q2. Based on data from Europe (incl. Russia), North America, East Asia, Middle East, Africa, and Australia.
- Significant improvement on night images.
- New input image format YCbCr NV12 supported.
- Extended set of supported makes with rear vehicle model classification. List of makes supporting rear model classification is in table *Model Availability*.
- Extended Developers Guide with MMR results explained.
- Generation and variation classification licensing added.
- Added category SPECIAL (industrial machines, agricultural tractors). See chapter Task category in Developer's Guide.
- Behavior change: If *computation_mode* is set to EDF_COMPUTATIONMODE_GPU, but no GPU is

found or the build does not support GPU, error message will be printed and the SDK will call exit. Previously, the SDK would fallback to EDF_COMPUTATIONMODE_CPU without any warning.

Eyedentify MMR 2.9.0

Release date: 2020/11/30

- Module path changed. Replace “edfdeep-vcl” string with “edftf2lite-vlc” in *EdfInitConfig* structure, variable *module_path*.
- Completely new binary modules for vehicle classification with actual data for 2020/Q4.
- Processing speed improvement for FAST modules.
- Extended set of supported makes with rear vehicle model classification. List of makes supporting rear model classification is in table *Model Availability*.
- Added dependency for GPU enabled packages. Please see the Installation Guide chapter in Developers Guide.
- Changed descriptor template sizes (output of *EdfComputeDesc*).
- Batch processing is disabled (see *EdfComputeDescConfig* in SDK Application Interface chapter in Developers Guide).

Eyedentify MMR 2.8.0

Release date: 2020/06/30

- Completely new binary modules for vehicle classification with actual data for 2020/Q2.
- Added new category CYCLE for rear view.
- Added new category MTB for frontal view.
- Category TO1 changed to TO12 – trailer O1, O2 (trailers up to 3.5 ton).
- Added new category TRUCK – grouped category of LGT, HVT, TO34 (trailers over 3.5 ton) for rear view.
- Adding new testing sets for Asia and Middle East.
- Extended set of supported makes with rear vehicle model classification. List of supporting rear model classification is in table *Model Availability*.

Eyedentify MMR 2.7.0

Release date: 2019/12/18

- Completely new binary models for vehicle classification with actual data for 2019/Q4.
- Added new category TO1 – trailer O1 (small personal car trailer)
- Improved invariance to camera position – top view, view from the same level
- Extended set of supported makes with rear vehicle model classification. (rear model classification supported for “Alfa Romeo”, “BMW”, “Citroen”, “Dacia”, “Fiat”, “Ford”, “Honda”, “Hyundai”, “Kia”, “Lancia”, “Mazda”, “Mercedes”, “Mitsubishi”, “Nissan”, “Opel”, “Peugeot”, “Renault”, “Seat”, “Skoda”, “Suzuki”, “Tesla”, “Toyota”, “VW” makes)
- Ubuntu 18.04_x86_64 build with Java 11 support

Eyedentify MMR 2.6.0

Release date: 2019/06/27

- Completely new binary models for vehicle classification with actual data for 2019/Q2.
- Newly added rear vehicle model classification. (rear model classification supported for “Alfa Romeo”, “Citroen”, “Dacia”, “Fiat”, “Ford”, “Honda”, “Hyundai”, “Kia”, “Lancia”, “Mazda”, “Mitsubishi”, “Nissan”, “Peugeot”, “Renault”, “Skoda”, “Suzuki”, “Tesla”, “Toyota”, “VW” makes)
- The GPU version build with CUDA® Toolkit 10.0.

Eyedentify MMR 2.5.0-BETA

Release date: 2018/12/12

- Completely new binary models for vehicle classification with actual data for 2018/Q4.
- Added support for batch descriptor computation.
- Added support for GPU descriptor computation.
- The GPU version build with CUDA® Toolkit 9.1.
- Added gpu-devices binary which can be used for listing installed CUDA® GPUs.
- Java Wrapper built with the Java version 1.8.0_191.

Eyedentify MMR 2.4.1

Release date: 2018/06/27

- Completely new binary models for vehicle classification with actual data for 2018/Q1.
- Added BGRA image color model support.
- Sentinel Run-time updated to the newest version 7.80.
- Java Wrapper built with the Java version 1.8.0_171.
- Bugfixes in SDK Wrappers.

Eyedentify MMR 2.3.1

Release date: 2017/11/13

- Completely new binary models for vehicle classification with actual data for 2017/Q3.
- Binary models for vehicle classification now support view recognition feature.
View type (frontal, rear) is now the one of the vehicle classification outputs. Separate binary models for frontal and rear view are not the part of the distribution anymore, one binary model for both views can be used.
- Eyedentify shared library now supports explicit linking only. Example codes for explicit linking are the part of the release package. Static linking was removed.
- Added new structure *ERImage* for image manipulation which internally uses OpenCV library. *ERImage* API is defined in the *er_image.h* and *er_explink.h* header files. *EdfImage* structure was removed.
- Header file *edf_utils.h* removed. Contained functions for *EdfCropParams* structure manipulation (*edfCropParamsAllocate*, *edfCropParamsWrap* and *edfCropParamsFree*) moved to the *edf.h* header. Remaining functions from *edf_utils.h* were removed from the public API or replaced by the *ERImage* API functions.
- *EdfCropImageConfig* structure updated with antialiasing settings.
- Structure *EdfClassifyConfig* for classification configuration added.
Function *edfClassify* can be configured using the *EdfClassifyConfig* instance on the input.
- New version of licensing software Sentinel LDK 7.6 used.
- Example image data moved to the package root folder data.
- Java Wrapper built with the Java version 1.8.0_151.

Eyedentify MMR 2.1.0

Release date: 2017/02/08

- Initial release

2 Distribution Contents

The following list is an excerpt from the Eyedea MMR SDK directory structure, highlighting the most important directories and files contained in the software distribution. A brief description of the items is given.

- 📁 [Eyedea MMR SDK] *distribution main folder*
- 📁 documentation *documentation folder*
 - 📁 3rdparty-licenses *licenses to used 3rd party libraries*
 - 📄 Eyedea MMR SDK - Developer's Guide.pdf *SDK Developer's Guide*
 - 📄 Eyedea MMR SDK - Technical sheet.pdf *SDK Technical Sheet*
- 📁 examples *examples source files*
 - 📁 edf-explink *explicit linking support sources*
 - 📁 example-edf-explink *explicit linking example*
 - 📁 example-mmr-API *basic MMR API example*
- 📁 tools *library tools*
 - ⚙️ gpu-devices *utility for GPU devices listing*
- 📁 hasp *software protection binaries*
- 📁 sdk *Eyedea MMR SDK mandatory data*
 - 📁 include *header files*
 - 📁 lib *Eyedentify library*
 - 📁 modules *recognition modules folder*
 - 📁 edftf2lite (or edftrt) *MMR recognition module*
 - 📁 lib *recognition module shared library*
 - 📁 model *recognition module binary models*
- 📁 wrappers *API wrappers*
 - 📁 java *Java API wrapper*
 - 📁 csharp *C# API wrapper*
 - 📁 python *python wrapper*
- 📄 LICENSE.txt *SDK license*
- 📄 README.txt *SDK Readme file*



3 Hardware Requirements

3.1 Minimal Requirements

- Processor:** 1.0 GHz, single core, x86 platform, embedded (i.e. Intel Atom)
or
ARM Cortex-A7, armv7l platform (EOL)
or
ARM Cortex-A35, aarch64 platform
- RAM:** 2 GB
- Hard disk:** 1 GB free space

3.2 Recommended Requirements

- Processor:** 2.0 GHz, dual core, x86 platform (i.e. Intel i5)
or
ARM Cortex-A15, armv7l platform (EOL)
or
ARM Cortex-A57, aarch64 platform
- RAM:** 4 GB
- Hard disk:** 2 GB free space

3.3 Supported GPU Requirements (x64, x86_64)

- GPU:** NVIDIA® GeForce® GTX 10 series and higher GPU supporting OpenCL

3.4 Supported GPU Requirements (aarch64)

- GPU – OpenGL backend:** NVIDIA® Jetson® with JetPack 4.2 and higher
GPU – TensorRT backend: NVIDIA® Jetson® with JetPack 4.6, 5.1, 6.0 and 6.1

IMPORTANT: The OpenGL backend requires the DISPLAY environment variable be set! Problems can appear especially with ssh connection with X forwarding. Setting the DISPLAY environment solves the problem.

This can be done by: `export DISPLAY=:0`



3.5 Supported Operating Systems

3.5.1 Windows

- Microsoft Windows 7/8/8.1/10/11
 - Win32 (EOL) and x64 platform
 - GPU version supports x64 platform only



3.5.2 Linux

- Ubuntu 18.04 and higher
 - i686 (EOL) and x86_64 platform
 - GPU version supports x86_64 and aarch64 platforms only



4 Input Requirements

The input of the MMR system is divided into two parts: image data and scene specification. The first part, which is in the *Input Image section*, specifies the image capture criteria and the way how to represent the image data. The second part, which is covered in the *Road User Position, Scale in Pixels per Meter* and *Image Rotation* sections, describes how to set the input parameters of the MMR system.

4.1 Input Image

The results of the road user classification are dependent on two facts: the way the image was taken and the way the image is stored. Image capture requirements are specified in the *Scene Criteria* section.

4.1.1 Scene Criteria

To get the highest possible recognition accuracy, several rules must be respected during the road user input image data collection. The criteria specify camera scene setting in case of *Road User Alignment* and *Image Borders* paragraphs. The camera capture quality criteria are specified in *Blurred Image* and *Aspect Ratio* paragraphs.

Road User Alignment

The front/back of the road user in the input image should be aligned in the way the license plate is horizontally aligned, in case of road user without license plate, the object should be aligned. The alignment could be done on the user's side or in case of license plate-based MMR using the Eyedea MMR SDK with specifying the rotation compensation parameter (see *Image Rotation*).



WRONG:

The front of the car is not horizontally aligned.



CORRECT:

Image with compensated in-plane rotation. The front of the car is now horizontally aligned.

Image Borders

The road user should be sufficiently distant from image borders, should not be cropped or occluded. In case of license plate-based MMR, the surrounding red rectangle in the illustration should not go out of the image and should be fully visible to achieve the best recognition accuracy. In case of road user detection-based MMR, the whole object should not go out of the image and should be fully visible to achieve the best recognition accuracy



**WRONG:**

The car is too close to the image edge.

**CORRECT:**

The car is sufficiently distant from image edges.

Blurred Image

The road user in the input image should not be blurred by motion or by wrong camera settings. All details on the road user must be clearly visible for successful recognition.

**WRONG:**

Wrong camera settings and fast motion causes that the car is blurred.

**CORRECT:**

The image of the car is very sharp and all the details are clearly visible.

Resolution

Resolution of the input images should be 30 pixels per meter at least. For example, pedestrians should be about 50 pixel tall. Vehicles with 520mmx110mm license plate should be captured with approximately 15-pixel plate width. For more information about the pixels per meter unit see the chapter *Scale in Pixels per Meter*.



15 pixels at least

Aspect Ratio

Pixel aspect ratio should be 1:1. Other aspect ratios are not supported.



WRONG:

Pixel aspect ratio is not 1:1.



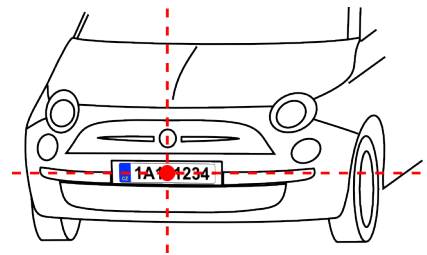
CORRECT:

Pixel aspect ratio is 1:1.

4.2 Road User Position

4.2.1 License plate detection-based MMR

The position of the road user of interest is defined using the 2D point in the image coordinate system. To get the road user position from the image automatically, a license plate detector software must be used (Eyedea LPM, or other). The input of the MMR system defining the vehicle position is then specified as a 2D point representing the center of the license plate in the input image coordinate system.



The license plate detection output, defined as four 2D points representing the corners, is used to compute the license plate center.

4.2.2 Road user detection-based MMR

In this case, the whole 2D bounding rectangle of the road user is used as input. The rectangle is aligned with x and y image axis, and is specified as 2 points, top left corner, and bottom right corner.

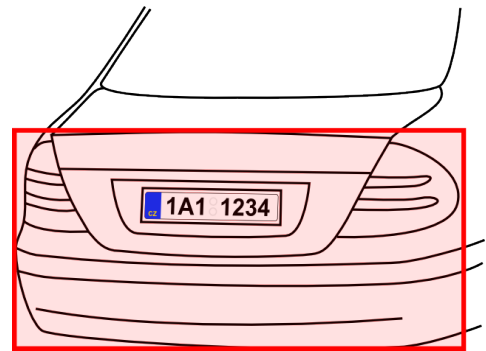
4.3 Scale in Pixels per Meter

Only used in license plate detection-based MMR. Regarding the fact that the position of the road user is specified by one 2D point only for correct vehicle localization the scale must be defined. The scale is defined in the pixels per meter – how many pixels in the image represent one meter in the real world.

4.3.1 Description

Scale in pixels per meter is the unit used in Eyedea MMR SDK to define the resolution of the input image with respect to the dimensions of the observed object in real world. We will call this unit using shortened name *scale_px_per_m* which also appears as the name of the variable in the SDK.

The known *scale_px_per_m* is used during the input photo preparation where the image data is transformed with respect to the location of the road user. We need the scale unit defined for the front/rear vertical plane of the road user. The vertical plane is illustrated in the *Illustration 1*.



*Illustration 1: Horizontal plane on the vehicle's rear where the *scale_px_per_m* should be defined.*

We use the fact that the license plate dimensions are well defined and also Eyedea SDK is usually connected with the detector which is searching for the license plate or one of its parts in the input image, so we compute the *scale_px_per_m* with respect to the license plate dimensions.

When the license plate or its part is detected in the input image, we have the dimensions measured in the image from the detection in pixels. The physical dimensions of the license plate and its parts are defined by law in each country of origin but in many cases the same format is used. Latest OCR software can recognize license plate dimensions in metric system (Eyedea LPM).

The formula below defines the relation between the size of the object (license plate or its part) in the image in pixels and in real world where the result is the *scale_px_per_m*.

4.3.2 Formula

$$scale_px_per_m = \frac{\text{size of the object in the image [px]}}{\text{size of the object in real world [m]}}$$

There are several important facts that must be considered to get correct results:

- The *scale_px_per_m* varies across the image due to perspective projection.
- The engine allows error max. +/- 20% in *scale_px_per_m*. To achieve this a stable *scale_px_per_m* estimate (i.e. license plate/road user detector) is needed.
- Estimate of *scale_px_per_m* on small objects has higher error than on large ones (especially on low resolution images). It is therefore recommended to estimate the *scale_px_per_m* from license plate width rather than from license plate's letter height.

4.3.3 Use Cases

License plate width

The scale is computed from the measured width of the license plate detection.

$$scale = \frac{\text{license plate detection width [px]}}{\text{physical width of the license plate [m]}} \quad [px/m]$$

License plate's letter height

The scale is computed from the height of the detected license plate's letter.

$$scale = \frac{\text{height of the detected license plate's letter [px]}}{\text{physical height of the license plate's letter [m]}} \quad [px/m]$$

License plate's OCR

The scale is computed from the width of the license plates OCR area.

$$scale = \frac{\text{license plates OCR area width [px]}}{\text{physical width of the licenseplate's letter area [m]}} \quad [px/m]$$

Road user's width

The scale is computed from the width of the road user detection.

$$scale = \frac{\text{width of the vehicle detection [px]}}{\text{physical width of the road user [m]}} \quad [px/m]$$

Static camera setting

Scale could be precomputed for the specific static camera setting. In this case the scale must be defined for each possible road user position in the camera image. If the camera is set to observe the road lane(s) we can generate the scales for the camera view using the fact that the road users are always placed on the plane representing the visible part of the road (green plane in the image).

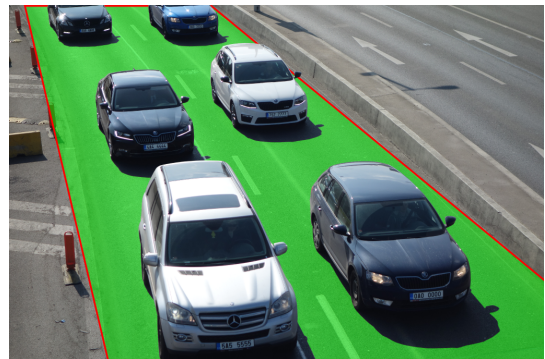
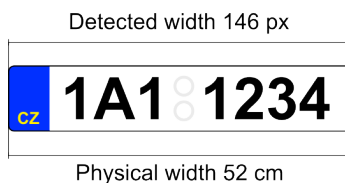


Illustration 2: Road lane with green highlighted plane where cars are placed.

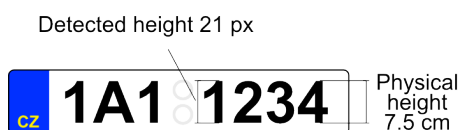
4.3.4 Examples

- License plate width used to get the scale in pixels per meter:



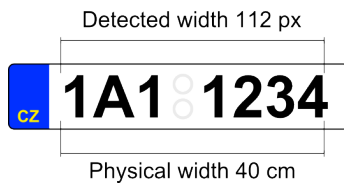
$$scale_px_per_m = \frac{\text{detected width [px]}}{\text{physical width [m]}} = \frac{146}{0.52} \approx 280 \text{ px/m}$$

- License plate's letter height used to get the scale in pixels per meter:



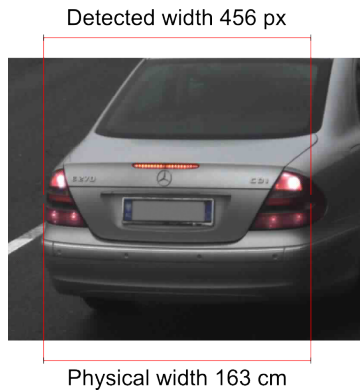
$$scale_px_per_m = \frac{\text{detected height [px]}}{\text{physical height [m]}} = \frac{21}{0.075} \approx 280 \text{ px/m}$$

- License plate's OCR used to get the scale in pixels per meter:



$$\text{scale_px_per_m} = \frac{\text{detected height [px]}}{\text{physical height [m]}} = \frac{112}{0.40} \approx 280 \text{ px/m}$$

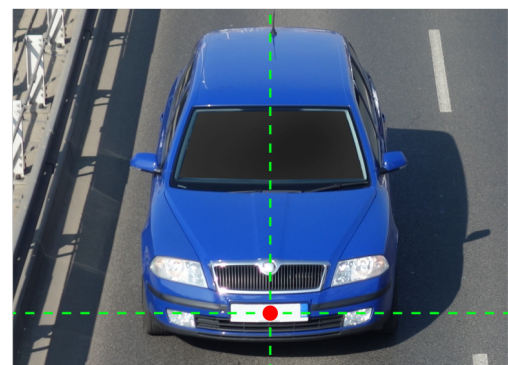
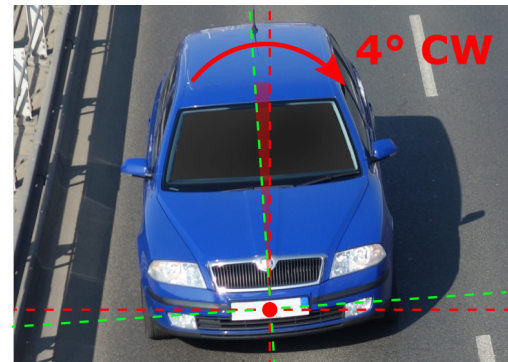
- Road user's width used to get the scale in pixels per meter:



$$\text{scale_px_per_m} = \frac{\text{detected width [px]}}{\text{physical width [m]}} = \frac{456}{1.63} \approx 280 \text{ px/m}$$

4.4 Image Rotation

Only used in license plate detection-based MMR. Road user image, before it could be processed by the MMR SDK, should be vertically aligned as described in the Vehicle Alignment chapter. In the case of license plate-based MMR, the SDK supports rotation parameter setting during input image preparation. The rotation parameter specifies the clockwise rotation of the input image in degrees. The center of rotation is the specified vehicle position in the image (see Vehicle Position) – center of the license plate. In case of road user detection-based MMR, the client is responsible for the rotation compensation.



5 Binary Models

5.1 Description, Supported Outputs

Classification models are distributed in PRECISE and FAST versions. Also, two detection versions exist, one license plate detection and one for road user detection. The versions differ in evaluation speed, memory requirements and classification accuracy.

View	Frontal/Rear
Category	Category (BUS, CAR, HVT, LGT, VAN, MTB, TO12, TRUCK, SPECIAL, CYCLE,...)
Make	Manufacturer of the vehicle (e.g. VW, Ford, Fiat ...)
Model	Vehicle instance defined by a bodywork (e.g. Golf, Mondeo, 500 ...)
Generation	Vehicle mark and first model year (e.g. Mk VI (2019), Mk I (2020) ...)
Variation	Vehicle trim level and/or body type (e.g. AMG, AMG-Line SUV, Coupe ...)
Color	Color of the vehicle bodywork
Tags	Special vehicle trait, like caravan or fire brigade, etc.

Binary .DAT module name	View	Category	Make	Model	Generation	Variation	Color	Tags
MMR_VCCT_PREC_2024Q4	2	11	-	-	-	-	10	10
MMR_VCCT_FAST_2024Q4	2	11	-	-	-	-	10	10
MMRBOX_VCCT_PREC_2024Q4	3	16	-	-	-	-	10	17
MMRBOX_VCCT_FAST_2024Q4	3	16	-	-	-	-	10	17
MMR_VCMCT_PREC_2024Q4	2	11	336	-	-	-	10	10
MMR_VCMCT_FAST_2024Q4	2	11	336	-	-	-	10	10
MMRBOX_VCMCT_PREC_2024Q4	3	16	335	-	-	-	10	17
MMRBOX_VCMCT_FAST_2024Q4	3	16	335	-	-	-	10	17
MMR_VCMCT_PREC_2024Q4	2	11	336	2722	-	-	10	10
MMR_VCMCT_FAST_2024Q4	2	11	336	2722	-	-	10	10
MMRBOX_VCMCT_PREC_2024Q4	3	16	335	2713	-	-	10	17
MMRBOX_VCMCT_FAST_2024Q4	3	16	335	2713	-	-	10	17
MMR_VCMCT_PREC_2024Q4	2	11	336	2722	7122	3186	10	10
MMR_VCMCT_FAST_2024Q4	2	11	336	2722	7122	3186	10	10
MMRBOX_VCMCT_PREC_2024Q4	3	16	335	2713	7101	3171	10	17
MMRBOX_VCMCT_FAST_2024Q4	3	16	335	2713	7101	3171	10	17

Binary module name	CPU processing time [ms]	GPU processing time [ms]	ARM processing time [ms]
FAST VCMMCT MMR (20241121)	5.19 ⁽¹⁾ 7.61 ⁽²⁾ 6.56 ⁽³⁾ 131 ^(P1)	1.93 ⁽¹⁾ 16.7 ^(2_A) 16.9 ^(2_B) 18.1 ^(2_C) 1.95 ⁽³⁾ 17.0 ^(4_A) 6.10 ^(4_B) 8.25 ^(4_C)	436 ⁽¹⁾ 34.2 ⁽²⁾ 11.9 ⁽³⁾ 35.1 ⁽⁴⁾ 431 ^(P1)
PRECISE VCMMCT MMR (20241120)	778 ⁽¹⁾ 1410 ⁽²⁾ 914 ⁽³⁾ 32 900 ^(P1)	8.86 ⁽¹⁾ 949 ^(2_A) 64.6 ^(2_B) 100 ^(2_C) 5.13 ⁽³⁾ 84.8 ^(4_A) 18.4 ^(4_B) 19.4 ^(4_C)	64 700 ⁽¹⁾ 6120 ⁽²⁾ 1650 ⁽³⁾ 5980 ⁽⁴⁾ 58 200 ^(P1)
FAST VCMMGVCT MMR (20241121)	6.55 ⁽¹⁾ 9.37 ⁽²⁾ 8.67 ⁽³⁾ 143 ^(P1)	3.48 ⁽¹⁾ 29.3 ^(2_A) 32.7 ^(2_B) 34.1 ^(2_C) 4.05 ⁽³⁾ 23.5 ^(4_A) 8.12 ^(4_B) 8.93 ^(4_C)	477 ⁽¹⁾ 42.1 ⁽²⁾ 15.0 ⁽³⁾ 41.9 ⁽⁴⁾ 562 ^(P1)
PRECISE VCMMGVCT MMR (20241121)	778 ⁽¹⁾ 1410 ⁽²⁾ 915 ⁽³⁾ 32 900 ^(P1)	10.3 ⁽¹⁾ 955 ^(2_A) 69.0 ^(2_B) 105 ^(2_C) 7.12 ⁽³⁾ 85.5 ^(4_A) 29.8 ^(4_B) 30.3 ^(4_C)	64 700 ⁽¹⁾ 6130 ⁽²⁾ 1660 ⁽³⁾ 6060 ⁽⁴⁾ 58 000 ^(P1)
FAST VCMMCT MMRBOX (20241122)	6.39 ⁽¹⁾ 9.51 ⁽²⁾ 7.99 ⁽³⁾ 170 ^(P1)	2.12 ⁽¹⁾ 18.4 ^(2_A) 20.3 ^(2_B) 20.5 ^(2_C) 2.18 ⁽³⁾ 19.0 ^(4_A) 6.40 ^(4_B) 8.89 ^(4_C)	539 ⁽¹⁾ 43.4 ⁽²⁾ 14.4 ⁽³⁾ 44.8 ⁽⁴⁾ 546 ^(P1)

Binary module name	CPU processing time [ms]	GPU processing time [ms]	ARM processing time [ms]
PRECISE VCMMCT MMRBOX (20241123)	804 ⁽¹⁾ 1450 ⁽²⁾ 944 ⁽³⁾ 33 800 ^(P1)	9.28 ⁽¹⁾ 958 ^(2_A) 65.2 ^(2_B) 100 ^(2_C) 5.41 ⁽³⁾ 87.3 ^(4_A) 24.5 ^(4_B) 21.9 ^(4_C)	66 600 ⁽¹⁾ 6140 ⁽²⁾ 1690 ⁽³⁾ 6190 ⁽⁴⁾ 60 000 ^(P1)
FAST VCMMGVCT MMRBOX (20241121)	7.69 ⁽¹⁾ 11.1 ⁽²⁾ 9.96 ⁽³⁾ 182 ^(P1)	3.63 ⁽¹⁾ 29.5 ^(2_A) 30.4 ^(2_B) 31.2 ^(2_C) 4.20 ⁽³⁾ 25.0 ^(4_A) 8.66 ^(4_B) 11.0 ^(4_C)	583 ⁽¹⁾ 50.9 ⁽²⁾ 17.4 ⁽³⁾ 51.2 ⁽⁴⁾ 671 ^(P1)
PRECISE VCMMGVCT MMRBOX (20241122)	805 ⁽¹⁾ 1460 ⁽²⁾ 946 ⁽³⁾ 33 800 ^(P1)	10.5 ⁽¹⁾ 965 ^(2_A) 69.3 ^(2_B) 105 ^(2_C) 7.13 ⁽³⁾ 90.4 ^(4_A) 30.8 ^(4_B) 34.4 ^(4_C)	66 600 ⁽¹⁾ 6210 ⁽²⁾ 1690 ⁽³⁾ 6200 ⁽⁴⁾ 60 000 ^(P1)

Notes:

- CPU1, CPU2, CPU3 and GPU1, GPU3 versions were tested on the Ubuntu 22.04.1 LTS x86_64.
- ARM1 version was tested on the Ubuntu 22.04.1 LTS armv7l.
- ARM2 version was tested on the Jetpack 4.6 running in power mode 0.
- ARM3 version was tested on the Jetpack 6.0 running in power mode 0.
- All tests were done on library versions without licensing protection. With Developer's License (Limited Count) descriptor calculation (*EdfComputeDesc*) takes 25ms longer regardless of platform. That's how long it takes to decrease one count from the HL key. This slowdown does not affect deployment license.

5.3 Category Specification

Categories are defined in Developer's Guide (chapter *Task category*).

5.3.1 License plate-based detection

Category	Frontal Classification	Rear Classification	Frontal Make Available	Rear Make Available	Frontal Color Available	Rear Color Available
BUS	BUS	BUS	YES	YES	YES	YES
CAR	CAR	CAR	YES	YES	YES	YES
CYCLE	—	CYCLE	—	NO	—	NO
HVT	HVT	TRUCK	YES	—	YES	—
LGT	LGT	TRUCK	YES	—	YES	—
MTB	MTB	MTB	NO	NO	NO	NO
SPECIAL	SPECIAL	SPECIAL	YES	YES	YES	YES
TO12	TO12*	TO12	—	NO	—	YES
TO34	TO34*	TRUCK	—	—	—	—
TRUCK	—	TRUCK	—	NO	—	YES
VAN	VAN	VAN	YES	YES	YES	YES

Table 1: Classification availability for vehicle category in frontal and rear view.

* Only recognized if they have frontal license plate, which they typically do not have.

— - category classification is not supported in current view

NO - category classification is supported but make/color is not available

5.3.2 Road user-based detection

Category	Classification	Make Available	Color Available
ANIMAL	ANIMAL	NO	NO
BUS	BUS	YES	YES
CAR	CAR	YES	YES
CYCLE	CYCLE	NO	NO
HVT	HVT for all views except rear exact (TRUCK for rear exact)	YES except for rear exact view	YES
KICKBIKE	KICKBIKE	NO	NO
LGT	LGT for all views except rear exact (TRUCK for rear exact)	YES except for rear exact view	YES
LUGGAGE	LUGGAGE	NO	NO
MTB	MTB	NO	NO
PEDESTRIAN	PEDESTRIAN	NO	NO
SPECIAL	SPECIAL	YES	YES
TO12	TO12	NO	YES
TO34	TO34 for all views except rear exact (TRUCK for rear exact)	NO	YES
TROLLEY	TROLLEY	NO	NO
TRUCK	TRUCK for rear exact view only	NO	YES
VAN	VAN	YES	YES

Table 2: Classification availability for vehicle categories in road user-based detection.

Left and right view classification is available for all categories with the exception of TRUCK. However, the left and right view does not support make classification.

5.3.3 ANIMAL category

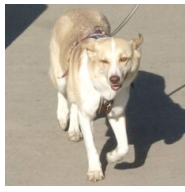



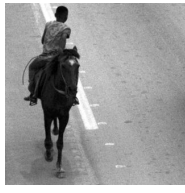
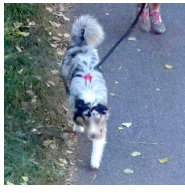


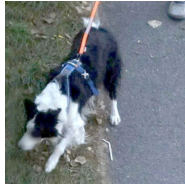

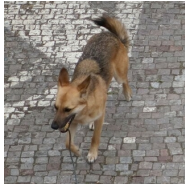



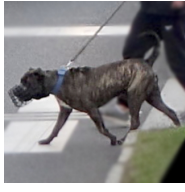
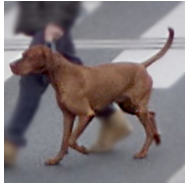



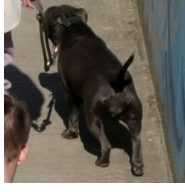
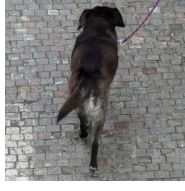
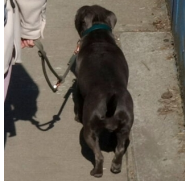
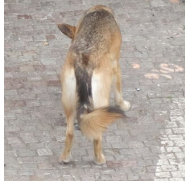
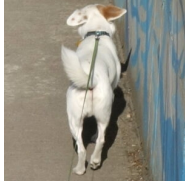


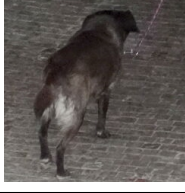
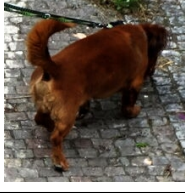
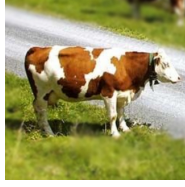


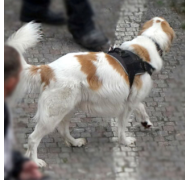
frontal+right				
frontal exact				
frontal+left				
left				
rear+left				
rear exact				
rear+right				
right				

Table 3: Example images with the ANIMAL category from all supported views.

5.3.4 BUS category

frontal+right				
frontal exact				
frontal+left				
left				
rear+left				
rear exact				
rear+right				
right				

Table 4: Example images with the BUS category from all supported views.



5.3.5 CAR category

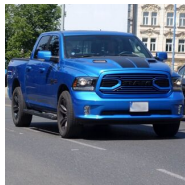



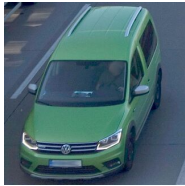




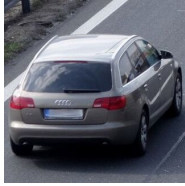


frontal+right				
frontal exact				
frontal+left				
left				
rear+left				
rear exact				
rear+right				
right				

Table 5: Example images with the CAR category from all supported views.

5.3.6 CYCLE category

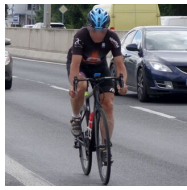





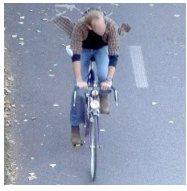





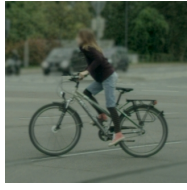

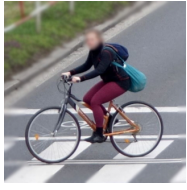



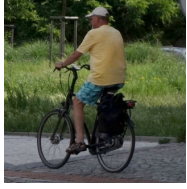
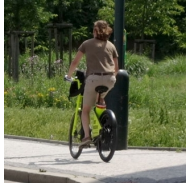
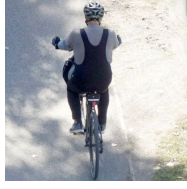
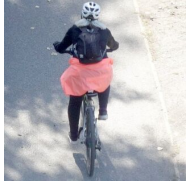


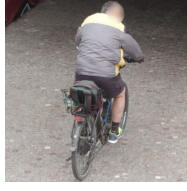

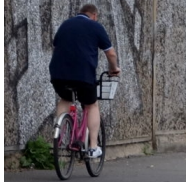
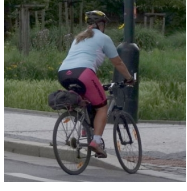

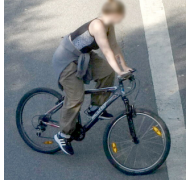
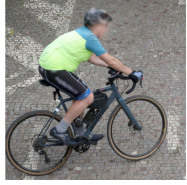
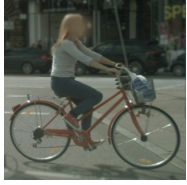
frontal+right				
frontal exact				
frontal+left				
left				
rear+left				
rear exact				
rear+right				
right				

Table 6: Example images with the CYCLE category from all supported views.

5.3.7 HVT category

frontal+right				
frontal exact				
frontal+left				
left				
rear+left				
rear exact classified as TRUCK				
rear+right				
right				

Table 7: Example images with the HVT category from all supported views.

5.3.8 KICKBIKE category

frontal+right				
frontal exact				
frontal+left				
left				
rear+left				
rear exact				
rear+right				
right				

Table 8: Example images with the KICKBIKE category from all supported views.

5.3.9 LGT category

frontal+right				
frontal exact				
frontal+left				
left				
rear+left				
rear exact classified as TRUCK				
rear+right				
right				

Table 9: Example images with the LGT category from all supported views.



5.3.10 LUGGAGE category



Table 10: Example images with the LUGGAGE category.



5.3.11 MTB category

frontal+right				
frontal exact				
frontal+left				
left				
rear+left				
rear exact				
rear+right				
right				

Table 11: Example images with the MTB category from all supported views.

5.3.12 PEDESTRIAN category







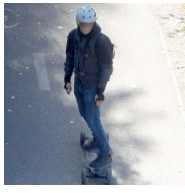

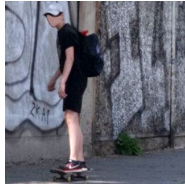

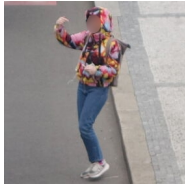
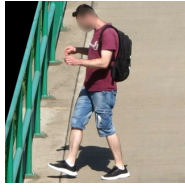
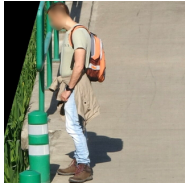
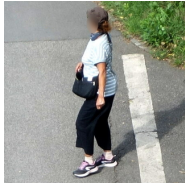
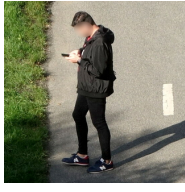
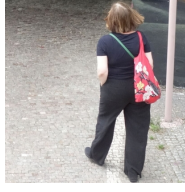

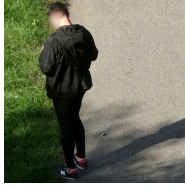

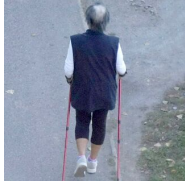
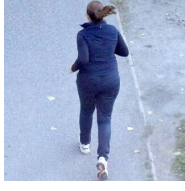
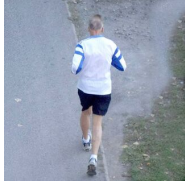

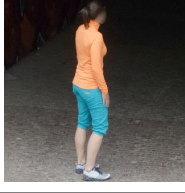

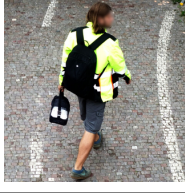


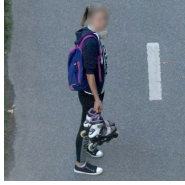
frontal+right				
frontal exact				
frontal+left				
left				
rear+left				
rear exact				
rear+right				
right				

Table 12: Example images with the PEDESTRIAN category from all supported views.



5.3.13 SPECIAL category

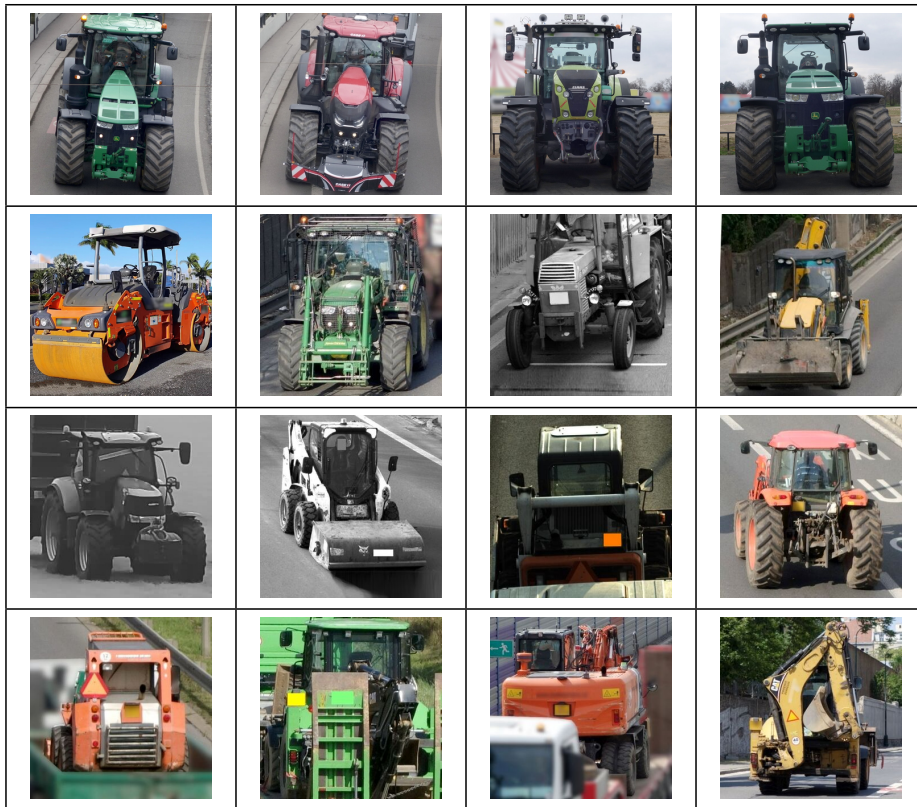


Table 13: Example images with the SPECIAL category.



5.3.14 TO12 category

frontal+right				
frontal exact				
frontal+left				
left				
rear+left				
rear exact				
rear+right				
right				

Table 14: Example images with the TO12 category from all supported views.

5.3.15 TO34 category





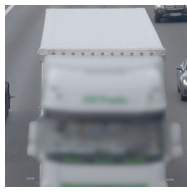


























frontal+right				
frontal exact				
frontal+left				
left				
rear+left				
rear exact classified as TRUCK				
rear+right				
right				

Table 15: Example images with the TO34 category from all supported views.

5.3.16 TROLLEY category

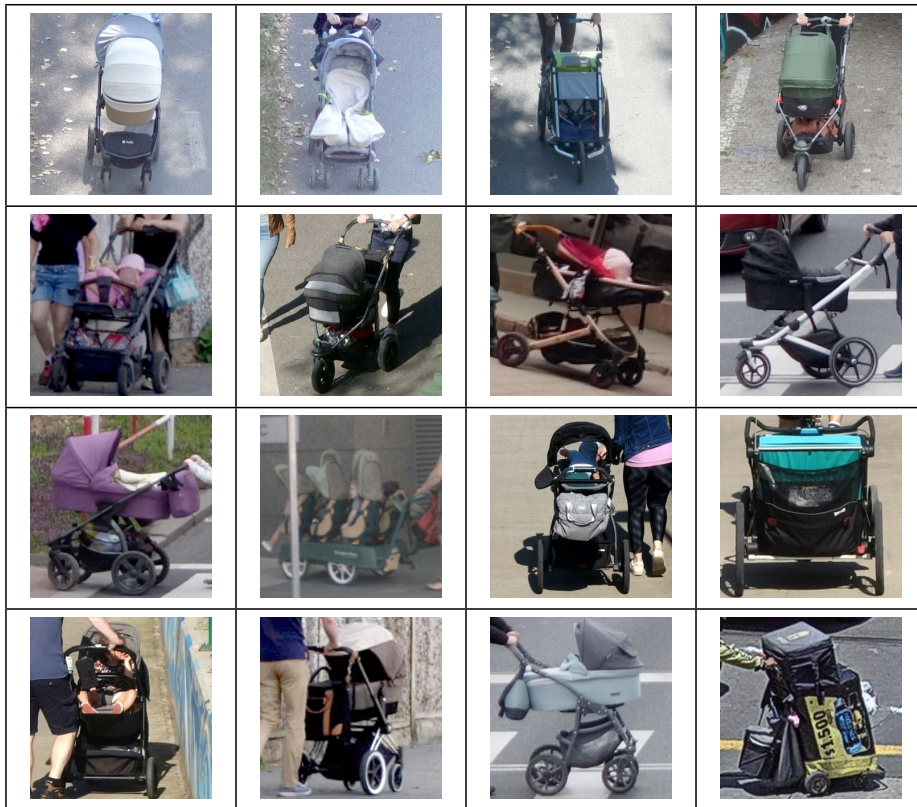


Table 16: Example images with the TROLLEY category.



5.3.17 VAN category

frontal+right				
frontal exact				
frontal+left				
left				
rear+left				
rear exact				
rear+right				
right				

Table 17: Example images with the VAN category from all supported views.



5.4 Make Availability

Make	Frontal Model Available	Rear Model Available
Acura	YES	YES
Adria	YES	YES
Aero	YES	YES
AITO	YES	YES
Aiways	YES	YES
Aixam	YES	YES
Akia	YES	YES
Alexander Dennis	YES	YES
Alfa Romeo	YES	YES
Alpheon	YES	YES
Alpine	YES	YES
Ankai	YES	YES
ARI	YES	YES
Ariel	YES	YES
ARO	YES	YES
Ashok Leyland	YES	YES
Aston Martin	YES	YES
Astra	YES	NO
Audi	YES	YES
Autosan	YES	YES
AutoTrail	YES	YES
Avatr	YES	YES
AVIA	YES	NO
BAIC	YES	YES
Baojun	YES	YES
Bavaria	YES	YES
BeiBen Truck	YES	NO
Benimar	YES	YES
Bentley	YES	YES
Berkhof	YES	YES
Bestune	YES	YES
Beulas	YES	YES
Blue Bird	YES	YES
BMC	YES	YES
BMW	YES	YES
Bobcat	YES	YES
Brilliance	YES	YES
Bugatti	YES	YES
Buick	YES	YES

Make	Frontal Model Available	Rear Model Available
Burstner	YES	YES
Busscar	YES	YES
BYD	YES	YES
Cadillac	YES	YES
Caetano	YES	YES
CAMC	YES	NO
CandC	YES	NO
Carado	YES	YES
Caravans International	YES	YES
Carthago	YES	YES
Case IH	YES	YES
Caterham	YES	YES
Caterpillar	YES	YES
Cenntro	YES	YES
Challenger	YES	YES
Changan	YES	YES
Changhe	YES	YES
Chatenet	YES	YES
Chausson	YES	YES
Chenglong	YES	NO
Chery	YES	YES
Chevrolet	YES	YES
Chien Thang	YES	YES
Chrysler	YES	YES
Citroen	YES	YES
CMC	YES	YES
Concorde	YES	YES
Cupra	YES	YES
Dacia	YES	YES
Daehan	YES	YES
Daewoo	YES	YES
DAF	YES	YES
Daihatsu	YES	YES
Datsun	YES	YES
Deepal	YES	YES
DEMAG	YES	NO
Dennis	YES	YES
Dethleffs	YES	YES
Deva	YES	NO

Make	Frontal Model Available	Rear Model Available
Dodge	YES	YES
Dongben	YES	YES
Dongfeng	YES	YES
Dothan	YES	YES
DR	YES	YES
DS	YES	YES
Eagle	YES	YES
ElBlesk	YES	YES
Elnagh	YES	YES
Englon	YES	YES
Etrusco	YES	YES
Eura Mobil	YES	YES
Euro Liner	YES	YES
Everus	YES	YES
Exeed	YES	YES
FAW	YES	YES
Ferrari	YES	YES
Fiat	YES	YES
Fisker	YES	YES
Ford	YES	YES
Foton	YES	YES
Frankia	YES	YES
Freightliner	YES	YES
GAC	YES	YES
Gaz	YES	YES
Geely	YES	YES
Genesis	YES	YES
Gillig	YES	YES
GMC	YES	YES
Golden Dragon	YES	YES
Goupil	YES	YES
Great Wall	YES	YES
Guleryuz	YES	YES
Hafei	YES	YES
Haima	YES	YES
Haval	YES	YES
Heuliez Bus	YES	YES
Higer	YES	YES
Hino	YES	YES

Table 18: Makes availability for frontal and rear view. Part 1.

Make	Frontal Model Available	Rear Model Available	Make	Frontal Model Available	Rear Model Available	Make	Frontal Model Available	Rear Model Available
Hobby	YES	YES	King Long	YES	YES	Mercedes	YES	YES
Holden	YES	YES	Knaus	YES	YES	Mercury	YES	YES
Honda	YES	YES	KTM	YES	YES	MG	YES	YES
Hongqi	YES	YES	Lada	YES	YES	Microcar	YES	YES
Hozon	YES	YES	Laika	YES	YES	Mini	YES	YES
Hummer	YES	YES	Lamborghini	YES	YES	Mitsubishi	YES	YES
Hunaghai	YES	YES	Lancia	YES	YES	Mobilvetta	YES	YES
Hymer	YES	YES	Land Rover	YES	YES	Morelo	YES	YES
Hyundai	YES	YES	Landwind	YES	YES	Moskvitch	YES	YES
IC Bus	YES	YES	LDV	YES	YES	Multicar	YES	YES
IFA	YES	NO	Leapmotor	YES	YES	Naza	YES	YES
Ikarus	YES	YES	LEVC	YES	YES	Neobus	YES	YES
IKCO	YES	YES	Lexus	YES	YES	Neoplan	YES	YES
Indcar	YES	YES	Li Auto	YES	YES	New Flyer	YES	YES
Infiniti	YES	YES	LIAZ	YES	NO	New Holland	YES	YES
International Trucks	YES	YES	Liebherr	YES	NO	Niesmann	YES	YES
Irisbus	YES	YES	Lifan	YES	YES	Nio	YES	YES
Irizar	YES	YES	Ligier	YES	YES	Nissan	YES	YES
Isuzu	YES	YES	Lincoln	YES	YES	Oldsmobile	YES	YES
Itineo	YES	YES	LMC	YES	YES	Oltcit	YES	YES
Iveco	YES	YES	Lotus	YES	YES	Opel	YES	YES
JAC	YES	YES	LTI	YES	YES	Optare	YES	YES
Jaguar	YES	YES	Lucid	YES	YES	Ora	YES	YES
Jeep	YES	YES	Luxgen	YES	YES	Otokar	YES	YES
Jetour	YES	YES	Lynk and Co	YES	YES	Pagani	YES	YES
JMC	YES	YES	MACK	YES	NO	PAZ	YES	YES
John Deere	YES	YES	Magma	YES	YES	Perodua	YES	YES
Jonckheere	YES	YES	Mahindra	YES	YES	Peterbilt	YES	NO
Jonway	YES	YES	MAN	YES	YES	Peugeot	YES	YES
Kabe	YES	YES	Maple	YES	YES	Piaggio	YES	YES
Kaipan	YES	YES	Marcopolo	YES	YES	Pilote	YES	YES
Kama	YES	NO	Maserati	YES	YES	Plaxton	YES	YES
Kamaz	YES	NO	Maxus	YES	YES	Plymouth	YES	YES
Karosa	YES	YES	Maybach	YES	YES	Polestar	YES	YES
Karry	YES	YES	MAZ	YES	YES	Pontiac	YES	YES
Karsan	YES	YES	Mazda	YES	YES	Porsche	YES	YES
Kenbo	YES	YES	MCI	YES	YES	Praga	YES	YES
Kenworth	YES	NO	McLaren	YES	YES	Prevost	YES	YES
Kia	YES	YES	McLouis	YES	YES	Proton	YES	YES

Table 19: Makes availability for frontal and rear view. Part 2.

Make	Frontal Model Available	Rear Model Available	Make	Frontal Model Available	Rear Model Available	Make	Frontal Model Available	Rear Model Available
Puch	YES	YES	Sterling	YES	NO	VDL	YES	YES
Qoros	YES	YES	Steyr	YES	NO	VEAM	YES	YES
Radar	YES	YES	Streetscooter	YES	YES	Venucia	YES	YES
Rapido	YES	YES	Subaru	YES	YES	Victory	YES	YES
Ravon	YES	YES	Sunlight	YES	YES	Vinaxuki	YES	YES
Renault	YES	YES	Sunlong	YES	YES	Vinfast	YES	YES
Rivian	YES	YES	Sunsundegui	YES	YES	Viseon	YES	YES
Riviera	YES	YES	Sunwin	YES	YES	Volare	YES	YES
Roewe	YES	YES	Suzuki	YES	YES	Volgren	YES	YES
Roller Team	YES	YES	Swift	YES	YES	Volvo	YES	YES
Rolls-Royce	YES	YES	SWM	YES	YES	Voyah	YES	YES
Rover	YES	YES	SYM	YES	YES	VPG	YES	YES
Saab	YES	YES	Tank	YES	YES	VW	YES	YES
Samco	YES	YES	Tata	YES	YES	Wartburg	YES	YES
Samsung	YES	YES	Tatra	YES	YES	Weinsberg	YES	YES
Santana	YES	YES	TEDOM	YES	YES	Weiwang	YES	YES
Saturn	YES	YES	Temsa	YES	YES	Weltmeister	YES	YES
Scania	YES	YES	Tesla	YES	YES	Western Star	YES	NO
Scion	YES	YES	Thaco	YES	YES	Westfalia	YES	YES
Seat	YES	YES	Thairung	YES	YES	Wey	YES	YES
Secma	YES	YES	Think	YES	YES	Wright	YES	YES
Sehol	YES	YES	Thomas	YES	YES	Wuling	YES	YES
Setra	YES	YES	TMT	YES	YES	XEV	YES	YES
Shacman	YES	NO	Tofas	YES	YES	XPeng	YES	YES
Shelby	YES	YES	Togg	YES	YES	Youngman	YES	YES
Sinotruk	YES	NO	Toyota	YES	YES	Yuejin	YES	NO
Skoda	YES	YES	TPC	YES	YES	Yutong	YES	YES
Skywell	YES	YES	Trabant	YES	YES	ZAZ	YES	YES
Smart	YES	YES	Traum	YES	YES	Zeekr	YES	YES
Sojen	YES	YES	Triumph	YES	YES	Zetor	YES	YES
Solaris	YES	YES	UAZ	YES	YES	ZhiDou	YES	YES
SOR	YES	YES	UD	YES	YES	Zhongtong	YES	YES
Soueast	YES	YES	Van Hool	YES	YES	Zotye	YES	YES
Ssangyong	YES	YES	Vauxhall	YES	YES	ZX Auto	YES	YES

Table 20: Makes availability for frontal and rear view. Part 3.

5.5 Model Availability

Make	Frontal Model Available	Rear Model Available	Make	Frontal Model Available	Rear Model Available	Make	Frontal Model Available	Rear Model Available
Acura	YES	YES	Burstner	NO	NO	Dodge	YES	YES
Adria	NO	NO	Busscar	NO	NO	Dongben	NO	NO
Aero	NO	NO	BYD	YES	YES	Dongfeng	YES	YES
AITO	YES	YES	Cadillac	YES	YES	Dothan	NO	NO
Aiways	YES	YES	Caetano	NO	NO	DR	NO	NO
Aixam	YES	YES	CAMC	NO	NO	DS	YES	YES
Akia	NO	NO	CandC	NO	NO	Eagle	NO	NO
Alexander Dennis	YES	YES	Carado	NO	NO	ELBlesk	NO	NO
Alfa Romeo	YES	YES	Caravans International	NO	NO	Elnagh	NO	NO
Alpheon	NO	NO	Carthago	NO	NO	Englon	NO	NO
Alpine	YES	YES	Case IH	NO	NO	Etrusco	NO	NO
Ankai	NO	NO	Caterham	NO	NO	Eura Mobil	NO	NO
ARI	NO	NO	Caterpillar	NO	NO	Euro Liner	NO	NO
Ariel	NO	NO	Cenntro	NO	NO	Everus	YES	YES
ARO	NO	NO	Challenger	NO	NO	Exeed	NO	NO
Ashok Leyland	NO	NO	Changan	YES	YES	FAW	NO	NO
Aston Martin	YES	YES	Changhe	NO	NO	Ferrari	YES	YES
Astra	NO	NO	Chatenet	NO	NO	Fiat	YES	YES
Audi	YES	YES	Chausson	NO	NO	Fisker	YES	YES
Autosan	NO	NO	Chenglong	YES	NO	Ford	YES	YES
AutoTrail	NO	NO	Chery	YES	YES	Foton	YES	YES
Avatr	YES	YES	Chevrolet	YES	YES	Frankia	NO	NO
AVIA	YES	NO	Chien Thang	NO	NO	Freightliner	YES	YES
BAIC	YES	YES	Chrysler	YES	YES	GAC	YES	YES
Baojun	NO	NO	Citroen	YES	YES	Gaz	YES	YES
Bavaria	NO	NO	CMC	YES	YES	Geely	YES	YES
BeiBen Truck	NO	NO	Concorde	NO	NO	Genesis	YES	YES
Benimar	NO	NO	Cupra	YES	YES	Gillig	NO	NO
Bentley	YES	YES	Dacia	YES	YES	GMC	YES	YES
Berkhof	NO	NO	Daehan	NO	NO	Golden Dragon	NO	NO
Bestune	YES	YES	Daewoo	YES	YES	Goupil	YES	YES
Beulas	NO	NO	DAF	YES	NO	Great Wall	YES	YES
Blue Bird	NO	NO	Daihatsu	YES	YES	Guleryuz	NO	NO
BMC	YES	YES	Datsun	YES	YES	Hafei	NO	NO
BMW	YES	YES	Deepal	YES	YES	Haima	NO	NO
Bobcat	NO	NO	DEMAG	NO	NO	Haval	YES	YES
Brilliance	YES	YES	Dennis	YES	YES	Heuliez Bus	NO	NO
Bugatti	NO	NO	Dethleffs	NO	NO	Higer	NO	NO
Buick	YES	YES	Deva	NO	NO	Hino	YES	YES

Table 21: Makes with model availability for frontal and rear view. Part 1.

Make	Frontal Model Available	Rear Model Available	Make	Frontal Model Available	Rear Model Available	Make	Frontal Model Available	Rear Model Available
Hobby	NO	NO	King Long	NO	NO	Mercedes	YES	YES
Holden	YES	YES	Knaus	NO	NO	Mercury	YES	YES
Honda	YES	YES	KTM	YES	YES	MG	YES	YES
Hongqi	YES	YES	Lada	YES	YES	Microcar	NO	NO
Hozon	YES	YES	Laika	NO	NO	Mini	YES	YES
Hummer	YES	YES	Lamborghini	YES	YES	Mitsubishi	YES	YES
Hunaghai	NO	NO	Lancia	YES	YES	Mobilvetta	NO	NO
Hymer	NO	NO	Land Rover	YES	YES	Morelo	NO	NO
Hyundai	YES	YES	Landwind	NO	NO	Moskvitch	NO	NO
IC Bus	NO	NO	LDV	YES	YES	Multicar	NO	NO
IFA	NO	NO	Leapmotor	NO	NO	Naza	NO	NO
Ikarus	YES	YES	LEVC	NO	NO	Neobus	NO	NO
IKCO	NO	NO	Lexus	YES	YES	Neoplan	YES	YES
Indcar	NO	NO	Li Auto	YES	YES	New Flyer	NO	NO
Infiniti	YES	YES	LIAZ	NO	NO	New Holland	NO	NO
International Trucks	YES	YES	Liebherr	NO	NO	Niesmann	NO	NO
Irisbus	YES	YES	Lifan	NO	NO	Nio	YES	YES
Irizar	YES	YES	Ligier	YES	YES	Nissan	YES	YES
Isuzu	YES	YES	Lincoln	YES	YES	Oldsmobile	YES	YES
Itineo	NO	NO	LMC	NO	NO	Oltcit	NO	NO
Iveco	YES	YES	Lotus	YES	YES	Opel	YES	YES
JAC	YES	YES	LTI	NO	NO	Optare	YES	YES
Jaguar	YES	YES	Lucid	YES	YES	Ora	YES	YES
Jeep	YES	YES	Luxgen	YES	YES	Otokar	YES	YES
Jetour	YES	YES	Lynk and Co	YES	YES	Pagani	NO	NO
JMC	YES	YES	MACK	YES	NO	PAZ	NO	NO
John Deere	NO	NO	Magma	YES	YES	Perodua	NO	NO
Jonckheere	NO	NO	Mahindra	YES	YES	Peterbilt	YES	NO
Jonway	NO	NO	MAN	YES	YES	Peugeot	YES	YES
Kabe	NO	NO	Maple	NO	NO	Piaggio	NO	NO
Kaipan	NO	NO	Marcopolo	NO	NO	Pilote	NO	NO
Kama	NO	NO	Maserati	YES	YES	Plaxton	YES	YES
Kamaz	NO	NO	Maxus	YES	YES	Plymouth	YES	YES
Karosa	NO	NO	Maybach	NO	NO	Polestar	YES	YES
Karry	NO	NO	MAZ	NO	NO	Pontiac	YES	YES
Karsan	NO	NO	Mazda	YES	YES	Porsche	YES	YES
Kenbo	NO	NO	MCI	NO	NO	Praga	YES	NO
Kenworth	YES	NO	McLaren	NO	NO	Prevost	NO	NO
Kia	YES	YES	McLouis	NO	NO	Proton	YES	YES

Table 22: Makes with model availability for frontal and rear view. Part 2.

Make	Frontal Model Available	Rear Model Available	Make	Frontal Model Available	Rear Model Available	Make	Frontal Model Available	Rear Model Available
Puch	NO	NO	Sterling	NO	NO	VDL	YES	YES
Qoros	YES	YES	Steyr	NO	NO	VEAM	YES	YES
Radar	YES	YES	Streetscooter	NO	NO	Venucia	NO	NO
Rapido	NO	NO	Subaru	YES	YES	Victory	NO	NO
Ravon	NO	NO	Sunlight	NO	NO	Vinaxuki	NO	NO
Renault	YES	YES	Sunlong	NO	NO	Vinfast	YES	YES
Rivian	YES	YES	Sunsundegui	NO	NO	Viseon	NO	NO
Riviera	NO	NO	Sunwin	NO	NO	Volare	NO	NO
Roewe	NO	NO	Suzuki	YES	YES	Volgren	YES	YES
Roller Team	NO	NO	Swift	NO	NO	Volvo	YES	YES
Rolls-Royce	YES	YES	SWM	NO	NO	Voyah	YES	YES
Rover	YES	YES	SYM	NO	NO	VPG	YES	YES
Saab	YES	YES	Tank	NO	NO	VW	YES	YES
Samco	YES	YES	Tata	YES	YES	Wartburg	YES	YES
Samsung	YES	YES	Tatra	YES	YES	Weinsberg	NO	NO
Santana	NO	NO	TEDOM	NO	NO	Weiwang	YES	YES
Saturn	YES	YES	Temsa	YES	YES	Weltmeister	NO	NO
Scania	YES	YES	Tesla	YES	YES	Western Star	NO	NO
Scion	YES	YES	Thaco	YES	YES	Westfalia	NO	NO
Seat	YES	YES	Thairung	NO	NO	Wey	YES	YES
Secma	NO	NO	Think	NO	NO	Wright	YES	YES
Sehol	NO	NO	Thomas	NO	NO	Wuling	NO	NO
Setra	YES	YES	TMT	NO	NO	XEV	NO	NO
Shacman	NO	NO	Tofas	YES	YES	XPeng	YES	YES
Shelby	NO	NO	Togg	YES	YES	Youngman	NO	NO
Sinotruk	YES	NO	Toyota	YES	YES	Yuejin	NO	NO
Skoda	YES	YES	TPC	NO	NO	Yutong	NO	NO
Skywell	YES	YES	Trabant	NO	NO	ZAZ	NO	NO
Smart	YES	YES	Traum	NO	NO	Zeekr	YES	YES
Sojen	NO	NO	Triumph	NO	NO	Zetor	NO	NO
Solaris	NO	NO	UAZ	YES	YES	ZhiDou	NO	NO
SOR	YES	YES	UD	NO	NO	Zhongtong	NO	NO
Soueast	NO	NO	Van Hool	NO	NO	Zotye	YES	YES
Ssangyong	YES	YES	Vauxhall	YES	YES	ZX Auto	NO	NO

Table 23: Makes with model availability for frontal and rear view. Part 3.

6 Camera Installation Examples

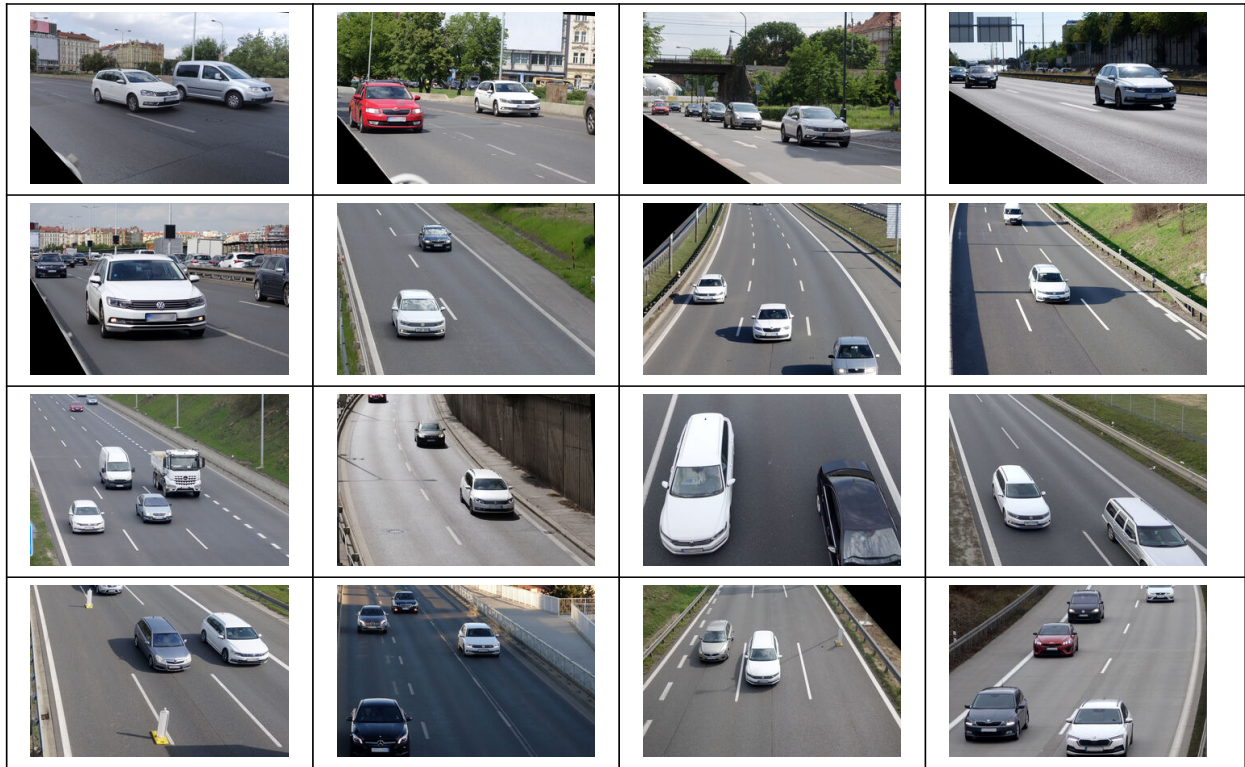


Table 24: Example images from a frontal camera. Camera can be installed also in a mirrored case.

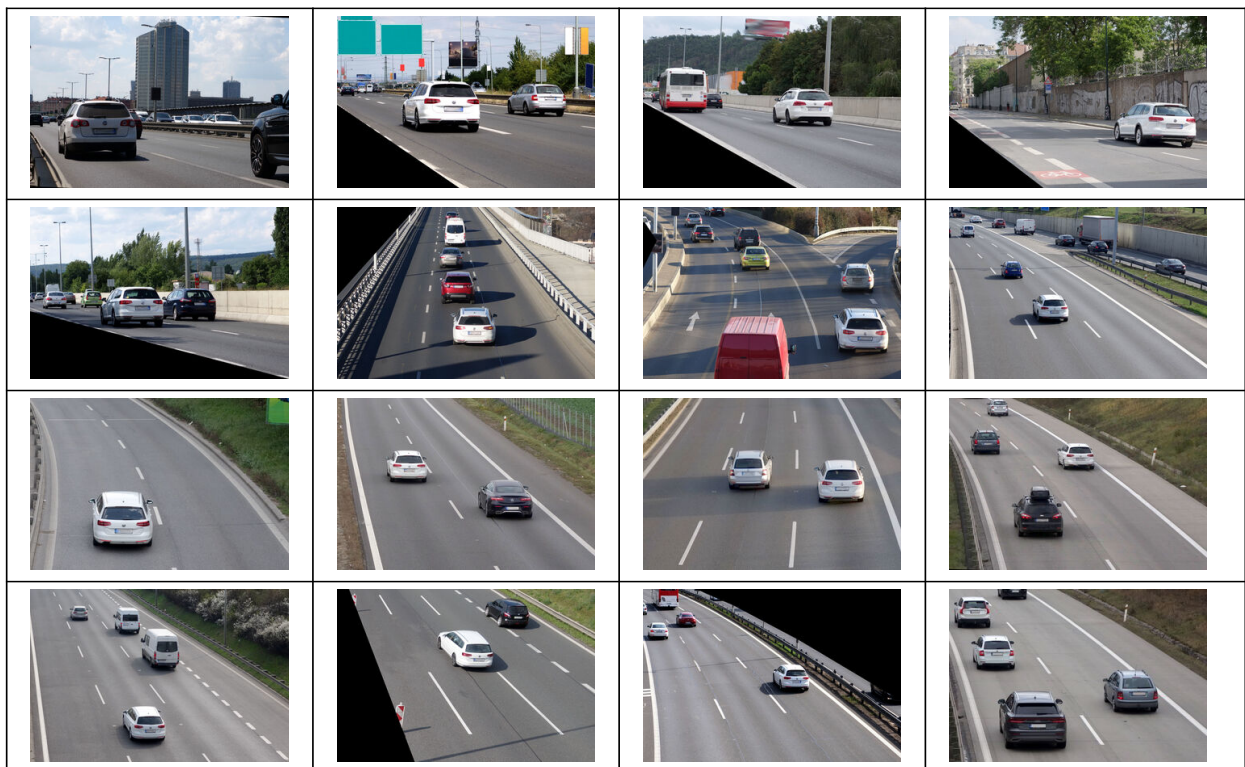


Table 25: Example images from a rear camera. Camera can be installed also in a mirrored case.

A Benchmarks

Benchmark results are reported for selected testing sets. Reported quantities are explained in [Benchmark Description](#). Color results are evaluated only on day-shot images.



A.1 Benchmark Description

Set 60 ¹Qatar 2014-2021

Country: Qatar ² View: front ³ and rear Year: 2014 ⁴ 2021
 Illumination: day ⁵ and night Color: color ⁶ and gray

Class	View	View8	Category	Make	Model	Generation	Variation	Color
Total vehicles ⁸	3813	3813	3813	3813	3813	3813	3813	3811
Annotation failed ⁹	0	0	7	60	65	65	65	32
Annotation unfinished ¹⁰	0	0	0	0	0	73	73	0
Evaluated vehicles ¹¹	3813 100.0 %	3813 100.0 %	3806 99.8 %	3753 98.4 %	3748 98.3 %	3675 96.4 %	3675 96.4 %	3779 99.2 %

Table 26: Evaluated vehicles of set 60.

Module Name ¹²	Dtype	View		View8		Category		Make		Model		Generation		Variation		Color			
		Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty		
MMR_VCMMGV_FAST_2021Q2 (20210515)	F32	99.8 %	0	98.8 %	0	98.6 %	0	95.5 %	235	96.4 %	324	96.0 %	364	93.4 %	2618	455	X	X	
MMR_VCMMGV_PREC_2021Q2 (20210517)	D8	99.9 %	0	99.1 %	0	99.2 %	1	98.0 %	252	99.0 %	332	99.1 %	353	98.6 %	2641	452	X	X	
MMR_COLOR_FAST_2021Q2 (20210521)	F32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	83.4 %	0
MMR_COLOR_PREC_2021Q2 (20210523)	F32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	86.7 %	0

Table 27: Classification results of set 60.

- ¹ **Set name** – Name of the benchmark.
- ² **Country** – Specifies country of acquisition of images used in benchmark.
- ³ **View** – Specifies whether frontal or rear images were used in benchmark.
- ⁴ **Year** – Specifies date of acquisition of images used in benchmark.
- ⁵ **Illumination** – Specifies whether dayshots or nightshots were used in benchmark.
- ⁶ **Color** – Specifies whether color or gray (infra) images were used in benchmark.
- ⁷ **Class** – Columns of this row are types of SDK responses.
- ⁸ **Total vehicles** – Number of vehicles in the benchmark.
- ⁹ **Annotation failed** – Number of vehicles where annotation was not successful. This can happen in bad weather conditions, bad quality of images or occlusion.
- ¹⁰ **Annotation unfinished** – Number of vehicles where annotation is not yet finished.
- ¹¹ **Evaluated vehicles** – Number of actually evaluated vehicles, considering failed and unfinished annotation.
- ¹² **Module Name** – Name of the .dat file evaluated.
- ¹³ **Dtype** – Data type used for representing numerical values in the computations. F32 (Float32): 32-bit floating point , D8 (Uint8): 8-bit unsigned integer.
- ¹⁴ **Correct** – Percentage given by following formula. Number of cases where the annotation value is the same as SDK response except those where SDK response is empty, divided by number of evaluated vehicles except those where SDK response is empty.
- ¹⁵ **Empty** – The SDK response is empty. This can happen in cases when classification is not supported (e.g. make for TRUCK category), in cases when model is not supported for make in question, or in cases of error.
- ¹⁶ **Singled** – For variation only. The car in question does not have any possible variation, and the SDK response is empty.

A.2 Set 19 - Belgium 2020

Country: Belgium

View: frontal

Year: 2020

Illumination: day and night

Color: gray

Class	View	View8	Category	Make	Model	Generation	Variation	Color
Total vehicles	1201	1201	1201	1201	1201	1201	1201	0
Annotation failed	0	0	1	45	83	90	90	0
Annotation unfinished	0	200	0	0	0	0	0	0
Evaluated vehicles	1201 100%	1001 83.3%	1200 99.9%	1156 96.3%	1118 93.1%	1111 92.5%	1111 92.5%	0 0.0%

Table 28: Evaluated vehicles of set 19.

Module Name	Dtype	View		View8		Category		Make		Model		Generation		Variation			Color	
		Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Singled	Empty	Correct	Empty
MMR_VCMMGVCT_FAST_2024Q2 (20240517)	F32	99.8%	0	X	X	99.6%	0	99.4%	0	99.2%	1	99.0%	2	97.0%	936	7	X	X
MMR_VCMMGVCT_FAST_2024Q4 (20241121)	F32	100%	0	X	X	99.4%	0	99.5%	0	99.5%	3	99.5%	4	99.4%	939	3	X	X
MMR_VCMMGVCT_PREC_2024Q2 (20240518)	F32	99.9%	0	X	X	99.3%	0	100%	0	99.6%	1	99.5%	3	98.8%	938	5	X	X
MMR_VCMMGVCT_PREC_2024Q4 (20241120)	F32	100%	0	X	X	99.2%	0	99.9%	0	99.6%	2	99.5%	2	99.4%	939	2	X	X

Table 29: Classification results of set 19.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	1052	0	0	0	0	0	0	0	0	0	0	0	0	0	4
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	117

Table 30: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Category confusion matrix of set 19.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	1050	0	0	0	0	0	0	0	0	0	0	0	0	0	6
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	117

Table 31: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Category confusion matrix of set 19.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	1049	0	0	0	0	0	0	0	0	0	0	0	0	0	7
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	117

Table 32: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Category confusion matrix of set 19.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	1047	0	1	0	0	0	0	0	0	0	0	0	0	0	8
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	118

Table 33: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Category confusion matrix of set 19.

A.3 Set 20 - Belgium 2020

Country: Belgium

View: rear

Year: 2020

Illumination: day and night

Color: gray

Class	View	View8	Category	Make	Model	Generation	Variation	Color
Total vehicles	1137	1137	1137	1137	1137	1137	1137	0
Annotation failed	0	0	1	22	25	27	28	0
Annotation unfinished	0	300	0	0	0	0	0	0
Evaluated vehicles	1137 100%	837 73.6%	1136 99.9%	1115 98.1%	1112 97.8%	1110 97.6%	1109 97.5%	0 0.0%

Table 34: Evaluated vehicles of set 20.

Module Name	Dtype	View		View8		Category		Make		Model		Generation		Variation			Color	
		Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Singled	Empty	Correct	Empty
MMR_VCMMGVCT_FAST_2024Q2 (20240517)	F32	99.1%	0	X	X	99.5%	0	97.8%	30	97.9%	42	96.2%	49	96.0%	495	12	X	X
MMR_VCMMGVCT_FAST_2024Q4 (20241121)	F32	99.4%	0	X	X	99.7%	1	97.9%	31	97.9%	40	96.7%	49	96.6%	500	16	X	X
MMR_VCMMGVCT_PREC_2024Q2 (20240518)	F32	99.8%	0	X	X	99.6%	0	99.4%	31	99.2%	35	98.1%	37	98.0%	497	6	X	X
MMR_VCMMGVCT_PREC_2024Q4 (20241120)	F32	99.5%	0	X	X	99.7%	0	99.0%	32	99.2%	37	98.4%	41	99.0%	502	8	X	X

Table 35: Classification results of set 20.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	984	0	0	0	0	0	0	0	0	0	0	0	0	0	1
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	24	0	0
VAN	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	116	0

Table 36: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Category confusion matrix of set 20.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	985	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	25	0	0
VAN	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	116	0

Table 37: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Category confusion matrix of set 20.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	985	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0
VAN	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	115	0

Table 38: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Category confusion matrix of set 20.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	984	0	0	0	0	0	0	0	0	0	0	0	0	0	1
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	1	0
VAN	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	117	0

Table 39: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Category confusion matrix of set 20.

A.4 Set 29 - Saudi Arabia 2019

Country: Saudi Arabia

View: rear

Year: 2019

Illumination: day and night

Color: color

Class	View	View8	Category	Make	Model	Generation	Variation	Color
Total vehicles	436	436	436	436	436	436	436	436
Annotation failed	0	0	0	5	6	9	9	176
Annotation unfinished	0	283	0	0	0	0	0	0
Evaluated vehicles	436 100 %	153 35.1 %	436 100 %	431 98.9 %	430 98.6 %	427 97.9 %	427 97.9 %	260 59.6 %

Table 40: Evaluated vehicles of set 29.

Module Name	Dtype	View		View8		Category		Make		Model		Generation		Variation			Color	
		Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Singled	Empty	Correct	Empty
MMR_VCMMGVCT_FAST_2024Q2 (20240517)	F32	100 %	0	X	X	98.6 %	0	95.5 %	188	97.0 %	194	97.8 %	198	98.4 %	364	2	80.4 %	0
MMR_VCMMGVCT_FAST_2024Q4 (20241121)	F32	100 %	0	X	X	98.9 %	0	95.9 %	190	97.4 %	196	98.3 %	198	98.4 %	364	2	81.9 %	0
MMR_VCMMGVCT_PREC_2024Q2 (20240518)	F32	100 %	0	X	X	99.5 %	1	97.9 %	191	97.5 %	194	97.8 %	196	98.4 %	364	2	83.8 %	0
MMR_VCMMGVCT_PREC_2024Q4 (20241120)	F32	100 %	0	X	X	99.1 %	0	97.5 %	190	98.3 %	195	97.8 %	195	98.4 %	364	2	83.8 %	0

Table 41: Classification results of set 29.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN	
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	233	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	188	2	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0

Table 42: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Category confusion matrix of set 29.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN	
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
CAR	0	0	0	0	234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	189	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0

Table 43: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Category confusion matrix of set 29.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN	
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	190	2	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0

Table 44: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Category confusion matrix of set 29.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN	
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	190	1	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0

Table 45: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Category confusion matrix of set 29.

Label	Class	DEPRECATED												
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE		
BLUE	0	0	1	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	1	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	1	0	0	0	0	0	1	0	0	0
GRAY	0	0	1	0	1	60	0	0	0	7	4	0	0	0
GREEN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	2	0	1	0	0	0	0
WHITE	0	0	0	0	0	25	0	2	103	1	0	0	0	0
BLACK	0	0	1	1	0	5	0	0	0	0	42	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 46: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 29.

Label	Class	DEPRECATED												
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE		
BLUE	0	0	0	0	0	0	0	0	1	0	0	0	0	0
BROWN	0	0	0	0	0	0	0	0	0	0	0	1	0	0
YELLOW	0	0	0	0	1	0	0	0	0	0	1	0	0	0
GRAY	0	0	1	0	0	60	0	0	0	7	5	0	0	0
GREEN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	2	0	1	0	0	0	0
WHITE	0	0	0	0	0	23	0	0	107	1	0	0	0	0
BLACK	0	0	0	0	0	5	0	0	1	0	43	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 47: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 29.

Label	Class	DEPRECATED												
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE		
BLUE	0	0	0	0	0	1	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	1	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	0	0	0	0	0	1	0	1	0	0
GRAY	0	0	1	0	0	58	0	0	10	4	0	0	0	0
GREEN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	2	0	1	0	0	0	0
WHITE	0	0	0	0	0	18	0	0	113	0	0	0	0	0
BLACK	0	0	0	0	0	3	0	0	1	45	0	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 48: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 29.

Label	Class	DEPRECATED												
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE		
BLUE	0	0	0	0	0	1	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	1	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	1	0	0	0	0	1	0	0	0	0
GRAY	0	0	0	0	0	63	0	0	6	4	0	0	0	0
GREEN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	2	0	1	0	0	0	0
WHITE	0	0	0	0	1	23	0	0	107	0	0	0	0	0
BLACK	0	0	0	0	1	3	0	0	0	45	0	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 49: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 29.

A.5 Set 30 - Italy 2019

Country: Italy
 Illumination: night

View: frontal
 Color: color

Year: 2019

Class	View	View8	Category	Make	Model	Generation	Variation	Color
Total vehicles	56	56	56	56	56	56	56	0
Annotation failed	0	0	5	56	56	56	56	0
Annotation unfinished	0	56	0	0	0	0	0	0
Evaluated vehicles	56 100 %	0 0.0 %	51 91.1 %	0 0.0 %	0 0.0 %	0 0.0 %	0 0.0 %	0 0.0 %

Table 50: Evaluated vehicles of set 30.

Module Name	Dtype	View		View8		Category		Make		Model		Generation		Variation			Color	
		Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Singled	Empty	Correct	Empty
MMR_VCMMGVCT_FAST_2024Q2 (20240517)	F32	100 %	0	X	X	98.0 %	0	X	X	X	X	X	X	X	X	X	X	X
MMR_VCMMGVCT_FAST_2024Q4 (20241121)	F32	100 %	0	X	X	98.0 %	0	X	X	X	X	X	X	X	X	X	X	X
MMR_VCMMGVCT_PREC_2024Q2 (20240518)	F32	100 %	0	X	X	94.1 %	0	X	X	X	X	X	X	X	X	X	X	X
MMR_VCMMGVCT_PREC_2024Q4 (20241120)	F32	100 %	0	X	X	100 %	0	X	X	X	X	X	X	X	X	X	X	X

Table 51: Classification results of set 30.



A.6 Set 32 - Saudi Arabia 2019-2020

Country: Saudi Arabia

View: frontal

Year: 2019-2020

Illumination: day and night

Color: color

Class	View	View8	Category	Make	Model	Generation	Variation	Color
Total vehicles	160	160	160	160	160	160	160	101
Annotation failed	0	0	0	2	7	11	11	0
Annotation unfinished	0	134	0	0	0	0	0	0
Evaluated vehicles	160 100 %	26 16.2 %	160 100 %	158 98.8 %	153 95.6 %	149 93.1 %	149 93.1 %	101 100 %

Table 52: Evaluated vehicles of set 32.

Module Name	Dtype	View		View8		Category		Make		Model		Generation		Variation			Color	
		Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Singled	Empty	Correct	Empty	
MMR_VCMMGVCT_FAST_2024Q2 (20240517)	F32	100 %	0	X	X	99.4 %	0	98.7 %	0	98.7 %	3	97.2 %	5	100 %	139	1	81.2 %	0
MMR_VCMMGVCT_FAST_2024Q4 (20241121)	F32	100 %	0	X	X	100 %	0	98.7 %	0	98.7 %	1	98.6 %	3	100 %	139	0	79.2 %	0
MMR_VCMMGVCT_PREC_2024Q2 (20240518)	F32	100 %	0	X	X	100 %	0	100 %	0	99.3 %	1	98.6 %	2	100 %	139	1	77.2 %	0
MMR_VCMMGVCT_PREC_2024Q4 (20241120)	F32	100 %	0	X	X	100 %	0	100 %	0	99.3 %	0	98.6 %	1	100 %	139	0	79.2 %	0

Table 53: Classification results of set 32.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	130	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	16	0	1	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Table 54: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Category confusion matrix of set 32.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	130	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Table 55: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Category confusion matrix of set 32.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	130	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Table 56: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Category confusion matrix of set 32.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	130	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Table 57: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Category confusion matrix of set 32.

Label	Class	Class												
		DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE	
BLUE	0	0	1	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	1	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	0	0	0	0	0	1	0	0	0	0
GRAY	0	0	0	0	0	18	1	0	0	10	1	0	0	0
GREEN	0	0	1	0	0	3	5	0	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	5	0	1	0	0	0
WHITE	0	0	0	1	0	5	0	0	0	85	0	0	0	0
BLACK	0	0	0	0	0	2	0	0	0	0	17	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 58: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 32.

Label	Class	Class												
		DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE	
BLUE	0	0	2	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	1	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	0	0	0	0	0	1	0	0	0	0
GRAY	0	0	0	0	0	18	0	0	0	12	0	0	0	0
GREEN	0	0	0	0	0	6	1	0	0	1	1	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	5	0	1	0	0	0
WHITE	0	0	0	0	0	8	0	0	0	81	2	0	0	0
BLACK	0	0	0	0	0	2	0	0	0	0	17	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 59: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 32.

Label	Class	Class												
		DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE	
BLUE	0	0	2	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	1	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	0	0	0	0	0	1	0	0	0	0
GRAY	0	0	0	0	0	21	1	0	0	8	0	0	0	0
GREEN	0	0	1	1	1	4	0	0	0	2	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	6	0	0	0	0	0
WHITE	0	0	0	0	0	9	0	0	1	81	0	0	0	0
BLACK	0	0	0	0	0	5	0	0	1	0	13	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 60: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 32.

Label	Class	Class												
		DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE	
BLUE	0	0	1	0	0	0	0	0	0	0	1	0	0	0
BROWN	0	0	0	0	0	1	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	0	0	0	0	0	1	0	0	0	0
GRAY	0	0	0	0	0	21	1	0	0	8	0	0	0	0
GREEN	0	0	0	0	0	7	1	0	0	1	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	6	0	0	0	0	0
WHITE	0	0	0	0	0	8	0	0	0	83	0	0	0	0
BLACK	0	0	0	0	0	2	0	0	0	0	17	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 61: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 32.

A.7 Set 33 - Saudi Arabia 2020

Country: Saudi Arabia

View: rear

Year: 2020

Illumination: day and night

Color: color

Class	View	View8	Category	Make	Model	Generation	Variation	Color
Total vehicles	273	273	273	273	273	273	273	205
Annotation failed	0	0	1	5	7	10	10	76
Annotation unfinished	0	237	0	0	0	0	0	0
Evaluated vehicles	273 100 %	36 13.2 %	272 99.6 %	268 98.2 %	266 97.4 %	263 96.3 %	263 96.3 %	129 62.9 %

Table 62: Evaluated vehicles of set 33.

Module Name	Dtype	View		View8		Category		Make		Model		Generation		Variation			Color	
		Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Singled	Empty	Correct	Empty
MMR_VCMMGVCT_FAST_2024Q2 (20240517)	F32	100 %	0	X	X	99.3 %	0	94.7 %	41	94.5 %	47	94.3 %	51	90.4 %	209	2	82.2 %	0
MMR_VCMMGVCT_FAST_2024Q4 (20241121)	F32	99.6 %	0	X	X	99.6 %	0	96.4 %	43	96.8 %	47	96.2 %	51	93.9 %	209	5	86.8 %	0
MMR_VCMMGVCT_PREC_2024Q2 (20240518)	F32	99.6 %	0	X	X	99.6 %	0	96.5 %	42	98.1 %	50	96.7 %	52	95.8 %	211	4	81.4 %	0
MMR_VCMMGVCT_PREC_2024Q4 (20241120)	F32	99.6 %	0	X	X	98.9 %	0	97.8 %	43	98.6 %	46	97.2 %	47	96.0 %	210	3	85.3 %	0

Table 63: Classification results of set 33.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	220	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	41	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5

Table 64: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Category confusion matrix of set 33.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	220	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	42	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5

Table 65: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Category confusion matrix of set 33.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	220	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	42	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5

Table 66: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Category confusion matrix of set 33.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	218	0	0	1	0	0	0	0	0	0	0	0	0	0	1
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	42	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5

Table 67: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Category confusion matrix of set 33.

Label	Class	Class												
		DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE	
BLUE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAY	0	0	0	0	0	41	0	0	0	12	1	0	0	0
GREEN	0	0	0	0	0	0	0	0	0	1	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	0	0	1	0	0	0
WHITE	0	0	0	0	0	9	0	0	1	81	0	0	0	0
BLACK	0	0	0	0	0	4	0	0	0	0	22	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 68: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 33.

Label	Class	Class												
		DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE	
BLUE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAY	0	0	0	0	0	46	0	0	0	8	0	0	0	0
GREEN	0	0	0	0	0	0	1	0	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	0	0	1	0	0	0
WHITE	0	0	0	0	0	8	0	0	0	83	0	0	0	0
BLACK	0	0	0	0	0	5	0	0	0	0	21	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 69: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 33.

Label	Class	Class												
		DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE	
BLUE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAY	0	0	0	0	0	40	2	0	0	12	0	0	0	0
GREEN	0	0	0	0	0	0	0	0	0	1	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	0	0	1	0	0	0
WHITE	0	0	0	0	0	8	0	0	1	82	0	0	0	0
BLACK	0	0	0	0	0	6	0	0	0	0	20	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 70: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 33.

Label	Class	Class												
		DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE	
BLUE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAY	0	0	0	0	0	44	0	0	0	10	0	0	0	0
GREEN	0	0	0	0	0	0	0	0	0	1	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	0	0	1	0	0	0
WHITE	0	0	0	0	0	4	0	0	0	86	1	0	0	0
BLACK	0	0	0	0	0	8	0	0	0	0	18	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 71: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 33.

A.8 Set 34 - Thailand 2019

Country: Thailand

View: frontal

Year: 2019

Illumination: day and night

Color: color

Class	View	View8	Category	Make	Model	Generation	Variation	Color
Total vehicles	895	895	895	895	895	895	895	734
Annotation failed	0	0	0	1	2	4	5	0
Annotation unfinished	0	853	0	0	0	0	0	0
Evaluated vehicles	895 100 %	42 4.7 %	895 100 %	894 99.9 %	893 99.8 %	891 99.6 %	890 99.4 %	734 100 %

Table 72: Evaluated vehicles of set 34.

Module Name	Dtype	View		View8		Category		Make		Model		Generation		Variation			Color	
		Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Singled	Empty	Correct	Empty
MMR_VCMMGVCT_FAST_2024Q2 (20240517)	F32	100 %	0	X	X	99.8 %	0	99.6 %	1	98.5 %	6	97.7 %	12	93.1 %	750	9	85.8 %	0
MMR_VCMMGVCT_FAST_2024Q4 (20241121)	F32	100 %	0	X	X	99.8 %	0	99.7 %	0	99.0 %	3	98.1 %	6	94.9 %	753	1	85.6 %	0
MMR_VCMMGVCT_PREC_2024Q2 (20240518)	F32	100 %	0	X	X	100 %	0	99.9 %	0	99.2 %	5	98.2 %	7	93.3 %	750	5	91.8 %	0
MMR_VCMMGVCT_PREC_2024Q4 (20241120)	F32	100 %	0	X	X	99.9 %	0	100 %	0	99.4 %	5	98.6 %	6	95.6 %	753	0	89.9 %	0

Table 73: Classification results of set 34.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	795	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	1	0	14	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79

Table 74: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Category confusion matrix of set 34.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	795	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	1	0	14	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79

Table 75: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Category confusion matrix of set 34.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	795	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80

Table 76: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Category confusion matrix of set 34.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	795	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79

Table 77: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Category confusion matrix of set 34.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	9	0	0	2	0	0	0	0	7	0
BROWN	0	0	0	0	0	0	0	0	0	0	1	0
YELLOW	0	0	0	6	3	0	0	0	3	0	0	0
GRAY	0	0	1	0	214	0	0	1	26	43	0	0
GREEN	0	0	0	0	1	1	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	8	3	7	0	0	0
WHITE	0	0	1	0	0	32	0	0	315	7	0	0
BLACK	0	0	0	0	4	0	0	0	2	189	0	0
ORANGE	0	0	0	2	0	1	0	2	1	1	2	0

Table 78: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 34.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	6	0	0	5	0	0	0	7	0	0
BROWN	0	0	0	0	0	0	0	0	0	1	0	0
YELLOW	0	0	0	6	3	0	0	0	2	1	0	0
GRAY	0	0	1	0	208	0	0	0	27	49	0	0
GREEN	0	0	0	0	0	1	0	0	1	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	1	0	7	2	7	1	0
WHITE	0	0	0	0	20	0	0	0	330	5	0	0
BLACK	0	0	0	0	3	0	0	0	2	190	0	0
ORANGE	0	0	0	0	2	0	0	3	1	1	2	0

Table 79: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 34.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	11	0	0	4	0	0	1	2	0	0
BROWN	0	0	0	0	0	0	0	0	0	1	0	0
YELLOW	0	0	0	6	4	0	0	0	2	0	0	0
GRAY	0	0	2	1	0	245	0	0	11	26	0	0
GREEN	0	0	0	0	0	1	0	0	1	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	11	2	4	1	0	0
WHITE	0	0	0	0	0	20	0	0	333	2	0	0
BLACK	0	0	0	0	6	0	0	1	1	187	0	0
ORANGE	0	0	0	3	0	1	0	1	1	0	3	0

Table 80: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 34.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	7	0	0	5	0	0	0	6	0	0
BROWN	0	0	0	0	0	0	0	0	0	1	0	0
YELLOW	0	0	0	6	5	0	0	0	1	0	0	0
GRAY	0	0	0	1	0	241	0	0	10	33	0	0
GREEN	0	0	0	0	0	2	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	10	1	6	1	0	0
WHITE	0	0	0	0	0	27	0	0	325	3	0	0
BLACK	0	0	0	0	3	0	0	0	1	191	0	0
ORANGE	0	0	0	2	1	2	0	0	1	0	3	0

Table 81: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 34.

A.9 Set 36 - Thailand 2020

Country: Thailand

View: frontal

Year: 2020

Illumination: day and night

Color: color

Class	View	View8	Category	Make	Model	Generation	Variation	Color
Total vehicles	1071	1071	1071	1071	1071	1071	1071	849
Annotation failed	0	0	2	15	31	38	40	0
Annotation unfinished	0	820	0	0	0	0	0	0
Evaluated vehicles	1071 100 %	251 23.4 %	1069 99.8 %	1056 98.6 %	1040 97.1 %	1033 96.5 %	1031 96.3 %	849 100 %

Table 82: Evaluated vehicles of set 36.

Module Name	Dtype	View		View8		Category		Make		Model		Generation		Variation			Color	
		Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Singled	Empty	Correct	Empty	
MMR_VCMMGVCT_FAST_2024Q2 (20240517)	F32	100 %	0	X	X	99.5 %	0	99.1 %	0	98.5 %	4	97.9 %	11	97.1 %	848	9	91.0 %	0
MMR_VCMMGVCT_FAST_2024Q4 (20241121)	F32	100 %	0	X	X	99.8 %	0	99.3 %	0	98.9 %	1	98.1 %	6	97.8 %	849	4	91.6 %	0
MMR_VCMMGVCT_PREC_2024Q2 (20240518)	F32	100 %	0	X	X	99.4 %	0	99.7 %	1	99.0 %	5	98.4 %	10	98.3 %	848	7	92.2 %	0
MMR_VCMMGVCT_PREC_2024Q4 (20241120)	F32	100 %	0	X	X	99.9 %	0	99.7 %	0	99.3 %	3	98.6 %	6	98.9 %	849	5	93.1 %	0

Table 83: Classification results of set 36.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	1005	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	1	0	14	0	1	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	2	0	13	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31

Table 84: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Category confusion matrix of set 36.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	1005	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	1	0	15	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31

Table 85: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Category confusion matrix of set 36.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	1005	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	13	0	2	0	0	0	0	0	0	0	0	0	0	1
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	1	0	14	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	30

Table 86: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Category confusion matrix of set 36.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	1005	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31

Table 87: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Category confusion matrix of set 36.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	6	0	0	4	1	0	0	0	4	0
BROWN	0	0	0	3	0	7	0	0	0	0	9	0
YELLOW	0	0	0	0	14	1	1	0	0	0	0	0
GRAY	0	0	0	1	0	246	2	0	1	24	13	0
GREEN	0	0	0	0	1	1	1	0	0	0	1	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	24	0	0	1
WHITE	0	0	1	0	0	1	0	0	0	311	0	0
BLACK	0	0	0	0	0	1	0	0	0	1	163	0
ORANGE	0	0	0	0	0	0	0	0	1	0	0	5

Table 88: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 36.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	8	0	0	4	0	0	0	0	3	0
BROWN	0	0	0	1	0	7	0	0	0	0	11	0
YELLOW	0	0	0	0	16	0	0	0	0	0	0	0
GRAY	0	0	0	0	0	251	0	0	0	20	16	0
GREEN	0	0	1	0	1	1	0	0	0	0	1	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	0	25	0	0
WHITE	0	0	0	0	0	0	0	0	0	313	0	0
BLACK	0	0	0	0	0	5	0	0	0	1	159	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	6

Table 89: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 36.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	10	0	0	2	2	0	0	0	1	0
BROWN	0	0	0	2	0	7	1	0	1	0	8	0
YELLOW	0	0	0	0	14	0	1	0	0	1	0	0
GRAY	0	0	4	0	0	257	1	0	0	16	9	0
GREEN	0	0	0	0	1	1	1	0	0	0	1	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	24	0	0	1
WHITE	0	0	0	0	0	0	0	0	0	313	0	0
BLACK	0	0	0	0	0	5	0	0	0	2	158	0
ORANGE	0	0	0	0	0	0	0	0	1	0	0	5

Table 90: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 36.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	9	0	0	3	1	0	0	0	2	0
BROWN	0	0	0	1	0	9	0	0	0	0	9	0
YELLOW	0	0	0	0	15	0	1	0	0	0	0	0
GRAY	0	0	1	0	0	267	1	0	0	12	6	0
GREEN	0	0	0	0	1	1	2	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	0	21	0	4
WHITE	0	0	0	0	0	1	0	0	0	312	0	0
BLACK	0	0	0	0	0	6	0	0	0	1	158	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	6

Table 91: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 36.

A.10 Set 37 - Indonesia 2020

Country: Indonesia

View: frontal

Year: 2020

Illumination: day and night

Color: color

Class	View	View8	Category	Make	Model	Generation	Variation	Color
Total vehicles	911	911	911	911	911	911	911	888
Annotation failed	0	0	0	2	2	2	2	2
Annotation unfinished	0	773	0	0	0	0	0	0
Evaluated vehicles	911 100%	138 15.1%	911 100%	909 99.8%	909 99.8%	909 99.8%	909 99.8%	886 99.8%

Table 92: Evaluated vehicles of set 37.

Module Name	Dtype	View		View8		Category		Make		Model		Generation		Variation			Color	
		Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Singled	Empty	Correct	Empty
MMR_VCMMGVCT_FAST_2024Q2 (20240517)	F32	99.2%	0	X	X	100%	0	95.0%	729	96.0%	734	95.4%	736	77.8%	898	2	93.6%	714
MMR_VCMMGVCT_FAST_2024Q4 (20241121)	F32	99.7%	0	X	X	99.9%	0	95.0%	728	94.3%	735	95.3%	738	80.0%	898	1	93.6%	713
MMR_VCMMGVCT_PREC_2024Q2 (20240518)	F32	99.7%	0	X	X	100%	0	97.8%	729	98.9%	733	98.3%	733	100%	900	3	95.9%	714
MMR_VCMMGVCT_PREC_2024Q4 (20241120)	F32	100%	0	X	X	99.9%	0	98.3%	728	98.3%	730	97.8%	730	81.8%	898	0	93.1%	713

Table 93: Classification results of set 37.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	176	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	729	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

Table 94: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Category confusion matrix of set 37.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	176	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	728	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

Table 95: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Category confusion matrix of set 37.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	176	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	729	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

Table 96: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Category confusion matrix of set 37.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	176	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	728	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

Table 97: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Category confusion matrix of set 37.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	20	0	55	0	0	1	0	0	0	0	1	0	
BROWN	0	0	0	0	2	0	0	0	0	0	1	0	
YELLOW	0	0	0	0	0	0	0	0	0	0	0	0	
GRAY	36	0	1	0	20	0	0	0	1	2	0	0	
GREEN	4	0	0	0	0	0	0	0	0	0	0	0	
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	
RED	43	0	0	0	0	0	0	5	0	0	0	0	
WHITE	53	0	0	0	0	0	0	0	17	0	0	0	
BLACK	134	0	2	0	0	0	0	0	0	64	0	0	
ORANGE	6	0	0	0	0	0	0	0	0	0	0	1	

Table 98: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 37.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	20	0	53	0	0	2	0	0	0	0	2	0	
BROWN	0	0	0	0	1	0	0	1	0	1	0	0	
YELLOW	0	0	0	0	0	0	0	0	0	0	0	0	
GRAY	36	0	0	0	0	22	0	0	0	0	2	0	
GREEN	4	0	0	0	0	0	0	0	0	0	0	0	
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	
RED	43	0	0	0	0	0	0	4	0	0	1	0	
WHITE	53	0	0	0	0	0	0	0	17	0	0	0	
BLACK	134	0	0	0	0	0	0	0	0	66	0	0	
ORANGE	6	0	0	0	0	0	0	0	0	0	0	1	

Table 99: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 37.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	20	0	56	0	0	1	0	0	0	0	0	0	
BROWN	0	0	1	0	2	0	0	0	0	0	0	0	
YELLOW	0	0	0	0	0	0	0	0	0	0	0	0	
GRAY	36	0	0	0	23	0	0	0	0	1	0	0	
GREEN	4	0	0	0	0	0	0	0	0	0	0	0	
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	
RED	43	0	0	0	0	0	0	4	0	0	1	0	
WHITE	53	0	0	0	0	0	0	0	17	0	0	0	
BLACK	134	0	1	0	0	0	0	0	0	65	0	0	
ORANGE	6	0	0	0	0	0	0	1	0	0	0	0	

Table 100: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 37.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	20	0	52	0	0	3	0	0	0	0	2	0	
BROWN	0	0	1	0	2	0	0	0	0	0	0	0	
YELLOW	0	0	0	0	0	0	0	0	0	0	0	0	
GRAY	36	0	0	0	21	1	0	0	0	2	0	0	
GREEN	4	0	0	0	0	0	0	0	0	0	0	0	
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	
RED	43	0	0	0	0	0	0	4	0	0	1	0	
WHITE	53	0	0	0	0	0	0	0	17	0	0	0	
BLACK	134	0	0	0	1	0	0	0	0	65	0	0	
ORANGE	6	0	0	0	0	0	0	0	0	0	0	1	

Table 101: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 37.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAY	0	0	0	0	0	0	1	0	0	0	0	0	0
GREEN	0	0	0	0	0	0	0	0	0	2	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	2	0	0	0	0
WHITE	0	0	0	0	0	36	1	0	0	263	0	0	0
BLACK	0	0	0	0	0	0	0	0	0	0	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 108: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 38.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAY	0	0	0	0	0	0	1	0	0	0	0	0	0
GREEN	0	0	0	0	0	0	1	0	0	0	1	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	0	0	0	2	0
WHITE	0	0	0	0	0	12	0	0	0	288	0	0	0
BLACK	0	0	0	0	0	0	0	0	0	0	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 109: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 38.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAY	0	0	0	0	0	0	0	0	0	0	1	0	0
GREEN	0	0	0	0	0	0	1	0	0	1	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	0	0	2	0	0
WHITE	0	0	0	0	0	19	0	0	0	281	0	0	0
BLACK	0	0	0	0	0	0	0	0	0	0	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 110: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 38.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAY	0	0	0	0	0	0	1	0	0	0	0	0	0
GREEN	0	0	0	0	0	0	1	0	0	0	1	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	0	0	0	2	0
WHITE	0	0	0	0	0	13	0	0	0	287	0	0	0
BLACK	0	0	0	0	0	0	0	0	0	0	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 111: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 38.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	132	0	0	1	0	0	0	2	3	0
BROWN	0	0	0	0	1	0	0	0	13	1	1	0
YELLOW	0	0	0	0	23	0	0	0	1	1	0	0
GRAY	0	0	5	0	0	123	0	0	0	35	7	0
GREEN	0	0	2	0	0	0	11	0	0	6	3	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	1	0	0	25	2	0	0
WHITE	0	0	0	0	0	0	0	0	214	0	0	0
BLACK	0	0	1	1	0	4	2	0	0	0	74	0
ORANGE	0	0	0	0	1	0	0	0	1	0	0	5

Table 118: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 44.

Label	Class	DEPRECATED											
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE	
BLUE	0	0	130	0	0	0	0	0	0	1	6	1	0
BROWN	0	0	0	0	0	1	0	0	15	0	0	0	0
YELLOW	0	0	0	0	24	0	0	0	0	1	0	0	0
GRAY	0	0	7	0	0	118	0	0	0	38	7	0	0
GREEN	0	0	2	0	0	1	10	0	1	5	3	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	26	1	0	1	0
WHITE	0	0	1	0	0	0	0	0	0	213	0	0	0
BLACK	0	0	5	0	0	8	0	0	0	0	69	0	0
ORANGE	0	0	0	0	1	0	0	0	1	1	0	4	0

Table 119: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 44.

Label	Class	DEPRECATED											
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE	
BLUE	0	0	132	0	0	0	0	0	0	5	1	0	0
BROWN	0	0	0	1	0	0	0	0	14	0	1	0	0
YELLOW	0	0	0	0	19	2	0	0	0	4	0	0	0
GRAY	0	0	5	0	0	123	3	0	0	28	11	0	0
GREEN	0	0	4	0	0	0	13	0	0	3	2	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	1	0	0	0	0	0	22	2	0	3	0
WHITE	0	0	2	0	0	0	0	0	0	212	0	0	0
BLACK	0	0	1	0	0	4	0	0	0	1	76	0	0
ORANGE	0	0	0	0	1	0	0	0	1	0	1	4	0

Table 120: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 44.

Label	Class	DEPRECATED											
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE	
BLUE	0	0	134	0	0	1	0	0	0	0	3	0	0
BROWN	0	0	0	0	1	0	0	0	14	0	1	0	0
YELLOW	0	0	1	0	24	0	0	0	0	0	0	0	0
GRAY	0	0	3	0	0	136	2	0	0	18	11	0	0
GREEN	0	0	1	0	0	0	18	0	0	1	2	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	1	0	0	0	0	0	20	1	0	6	0
WHITE	0	0	1	0	0	0	0	0	1	210	1	1	0
BLACK	0	0	1	0	0	5	1	0	0	0	75	0	0
ORANGE	0	0	0	0	1	0	0	0	1	0	0	5	0

Table 121: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 44.

Label	Class	DEPRECATED												
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE		
BLUE	0	0	7	0	0	1	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAY	0	0	1	0	0	8	0	0	0	3	0	0	0	0
GREEN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	6	0	0	0	0	0	0
WHITE	0	0	0	0	0	0	0	0	10	0	0	0	0	0
BLACK	0	0	1	0	0	0	0	0	0	10	0	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	1	0

Table 128: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 48.

Label	Class	DEPRECATED												
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE		
BLUE	0	0	7	0	0	0	1	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAY	0	0	0	0	0	11	0	0	0	1	0	0	0	0
GREEN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	6	0	0	0	0	0	0
WHITE	0	0	0	0	0	0	0	0	10	0	0	0	0	0
BLACK	0	0	0	0	0	0	0	0	0	11	0	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	1	0

Table 129: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 48.

Label	Class	DEPRECATED												
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE		
BLUE	0	0	8	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAY	0	0	0	0	0	11	1	0	0	0	0	0	0	0
GREEN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	6	0	0	0	0	0	0
WHITE	0	0	0	0	0	0	0	0	10	0	0	0	0	0
BLACK	0	0	1	0	0	0	0	0	0	10	0	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	1	0

Table 130: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 48.

Label	Class	DEPRECATED												
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE		
BLUE	0	0	7	0	0	1	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAY	0	0	0	0	0	11	0	0	0	1	0	0	0	0
GREEN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	6	0	0	0	0	0	0
WHITE	0	0	0	0	0	0	0	0	10	0	0	0	0	0
BLACK	0	0	0	0	0	0	0	0	0	11	0	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	1	0

Table 131: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 48.

Label	Class	DEPRECATED												
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE		
BLUE	0	0	3	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAY	0	0	0	0	6	0	0	0	1	3	0	0	0	0
GREEN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	5	0	0	0	0	0	0
WHITE	0	0	1	0	1	1	0	0	0	11	1	0	0	0
BLACK	0	0	1	0	1	1	0	0	0	0	11	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 138: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 49.

Label	Class	DEPRECATED												
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE		
BLUE	0	0	3	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAY	0	0	0	0	8	0	0	0	0	2	0	0	0	0
GREEN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	4	0	0	1	0	0	0
WHITE	0	0	1	0	1	0	0	0	0	12	1	0	0	0
BLACK	0	0	1	0	1	1	0	0	0	0	11	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 139: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 49.

Label	Class	DEPRECATED												
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE		
BLUE	0	0	3	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAY	0	0	1	0	0	8	0	0	0	1	0	0	0	0
GREEN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	5	0	0	0	0	0	0
WHITE	0	0	1	0	0	0	0	0	1	13	0	0	0	0
BLACK	0	0	0	0	0	1	0	0	0	1	12	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 140: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 49.

Label	Class	DEPRECATED												
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE		
BLUE	0	0	3	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAY	0	0	0	0	9	0	0	0	1	0	0	0	0	0
GREEN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	4	0	0	1	0	0	0
WHITE	0	0	0	0	0	0	0	0	0	15	0	0	0	0
BLACK	0	0	1	0	1	0	0	0	0	0	12	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 141: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 49.

A.15 Set 51 - United States 2020

Country: United States View: rear Year: 2020
 Illumination: day and night Color: color and gray

Class	View	View8	Category	Make	Model	Generation	Variation	Color
Total vehicles	2331	2331	2331	2331	2331	2331	2331	2309
Annotation failed	0	0	0	0	0	0	0	0
Annotation unfinished	0	1867	0	0	0	0	0	0
Evaluated vehicles	2331 100 %	464 19.9 %	2331 100 %	2331 100 %	2331 100 %	2331 100 %	2331 100 %	2309 100 %

Table 142: Evaluated vehicles of set 51.

Module Name	Dtype	View		View8		Category		Make		Model		Generation		Variation			Color	
		Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Singled	Empty	Correct	Empty	
MMR_VCMMGVCT_FAST_2024Q2 (20240517)	F32	100 %	0	X	X	100 %	0	97.9 %	0	98.2 %	31	97.2 %	58	94.7 %	2000	10	82.4 %	0
MMR_VCMMGVCT_FAST_2024Q4 (20241121)	F32	100 %	0	X	X	99.8 %	0	98.1 %	0	98.7 %	34	97.7 %	51	95.6 %	2003	12	83.5 %	0
MMR_VCMMGVCT_PREC_2024Q2 (20240518)	F32	100 %	0	X	X	99.9 %	0	99.6 %	0	99.7 %	11	99.0 %	17	98.8 %	2006	2	87.1 %	0
MMR_VCMMGVCT_PREC_2024Q4 (20241120)	F32	100 %	0	X	X	100 %	0	99.7 %	0	99.8 %	9	99.6 %	14	99.7 %	2007	2	87.3 %	0

Table 143: Classification results of set 51.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	2313	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	1	0	0	0	12	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5

Table 144: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Category confusion matrix of set 51.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	2311	0	0	2	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	2	0	0	0	11	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4

Table 145: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Category confusion matrix of set 51.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	2312	0	0	1	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4

Table 146: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Category confusion matrix of set 51.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	2313	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	1	0	0	12	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5

Table 147: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Category confusion matrix of set 51.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	53	0	0	29	0	0	0	0	18	0
BROWN	0	0	0	3	2	17	0	0	0	1	1	0
YELLOW	0	0	0	0	1	0	0	0	0	0	0	0
GRAY	0	0	5	2	0	593	0	0	1	26	16	0
GREEN	0	0	0	0	0	8	1	0	0	2	1	0
PURPLE	0	0	0	0	0	1	0	0	2	0	2	0
RED	0	0	0	13	0	12	0	0	210	5	19	13
WHITE	0	0	0	0	0	33	0	0	1	573	0	0
BLACK	0	0	12	2	0	163	0	0	0	1	467	0
ORANGE	0	0	0	0	1	0	0	0	1	1	0	3

Table 148: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 51.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	60	0	0	20	0	0	0	0	20	0
BROWN	0	0	0	2	0	20	0	0	0	1	1	0
YELLOW	0	0	0	0	1	0	0	0	0	0	0	0
GRAY	0	0	4	1	1	601	0	0	0	19	17	0
GREEN	0	0	0	0	1	8	1	0	0	1	1	0
PURPLE	0	0	0	0	0	1	0	0	1	0	3	0
RED	0	0	0	15	0	7	0	0	222	0	15	13
WHITE	0	0	1	0	0	58	0	0	0	548	0	0
BLACK	0	0	9	4	0	130	1	0	3	1	497	0
ORANGE	0	0	0	0	0	0	0	0	4	0	1	1

Table 149: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 51.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	85	0	0	10	0	0	0	0	5	0
BROWN	0	0	0	3	0	21	0	0	0	0	0	0
YELLOW	0	0	0	0	1	0	0	0	0	0	0	0
GRAY	0	0	6	5	1	604	0	0	1	18	8	0
GREEN	0	0	0	0	1	6	4	0	0	1	0	0
PURPLE	0	0	2	0	0	0	0	0	1	0	2	0
RED	0	0	0	17	0	0	0	0	234	0	10	11
WHITE	0	0	0	1	0	23	0	0	0	583	0	0
BLACK	0	0	29	1	0	115	1	0	0	0	499	0
ORANGE	0	0	0	1	0	0	0	0	3	0	0	2

Table 150: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 51.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	71	0	0	14	0	0	0	0	15	0
BROWN	0	0	0	3	0	21	0	0	0	0	0	0
YELLOW	0	0	0	0	1	0	0	0	0	0	0	0
GRAY	0	0	1	4	0	609	1	0	0	9	19	0
GREEN	0	0	0	0	1	4	5	0	0	0	2	0
PURPLE	0	0	1	0	0	0	0	0	1	0	3	0
RED	0	0	0	30	0	8	0	0	208	2	10	14
WHITE	0	0	1	0	0	32	0	0	0	573	1	0
BLACK	0	0	10	0	0	86	0	0	1	0	548	0
ORANGE	0	0	0	0	0	0	0	0	2	1	0	3

Table 151: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 51.

A.16 Set 61 - Germany 2021

Country: Germany

View: frontal

Year: 2021

Illumination: day and night

Color: color and gray

Class	View	View8	Category	Make	Model	Generation	Variation	Color
Total vehicles	262	262	262	262	262	262	262	196
Annotation failed	0	0	0	3	6	7	7	1
Annotation unfinished	0	58	0	0	0	0	0	0
Evaluated vehicles	262 100%	204 77.9%	262 100%	259 98.9%	256 97.7%	255 97.3%	255 97.3%	195 99.5%

Table 152: Evaluated vehicles of set 61.

Module Name	Dtype	View		View8		Category		Make		Model		Generation		Variation			Color	
		Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Singled	Empty	Correct	Empty	
MMR_VCMMGVCT_FAST_2024Q2 (20240517)	F32	100%	0	X	X	99.2%	0	98.8%	0	98.4%	3	98.4%	4	91.2%	220	1	90.8%	0
MMR_VCMMGVCT_FAST_2024Q4 (20241121)	F32	100%	0	X	X	98.9%	0	98.8%	0	98.0%	3	98.4%	5	93.9%	221	1	88.2%	0
MMR_VCMMGVCT_PREC_2024Q2 (20240518)	F32	100%	0	X	X	99.6%	0	99.6%	0	99.6%	3	99.6%	4	97.0%	222	0	92.8%	0
MMR_VCMMGVCT_PREC_2024Q4 (20241120)	F32	100%	0	X	X	99.2%	0	99.6%	0	98.8%	3	98.8%	4	97.0%	221	1	93.3%	0

Table 153: Classification results of set 61.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	144	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	114

Table 154: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Category confusion matrix of set 61.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	144	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	113

Table 155: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Category confusion matrix of set 61.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	144	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	115

Table 156: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Category confusion matrix of set 61.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	144	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	114

Table 157: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Category confusion matrix of set 61.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	11	0	0	1	0	0	0	0	1	0
BROWN	0	0	0	6	0	0	0	0	0	0	1	0
YELLOW	0	0	0	0	4	0	0	0	0	1	0	0
GRAY	0	0	2	1	0	50	0	0	0	1	1	0
GREEN	0	0	0	0	0	0	3	0	0	0	0	0
PURPLE	0	0	1	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	9	0	0	0	0
WHITE	0	0	0	0	0	1	0	0	0	55	0	0
BLACK	0	0	2	1	0	4	0	0	0	0	38	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	1

Table 158: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 61.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	11	0	0	2	0	0	0	0	0	0
BROWN	0	0	0	6	0	0	0	0	0	0	1	0
YELLOW	0	0	0	0	5	0	0	0	0	0	0	0
GRAY	0	0	2	1	1	48	1	0	0	2	0	0
GREEN	0	0	0	0	0	0	3	0	0	0	0	0
PURPLE	0	0	1	0	0	0	0	0	0	0	0	0
RED	0	0	0	1	0	0	0	0	8	0	0	0
WHITE	0	0	0	0	0	2	0	0	0	54	0	0
BLACK	0	0	2	1	0	4	2	0	0	0	36	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	1

Table 159: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 61.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	10	0	0	0	1	0	0	0	2	0
BROWN	0	0	0	7	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	4	0	0	0	0	1	0	0
GRAY	0	0	1	1	0	52	0	0	0	1	0	0
GREEN	0	0	0	0	0	0	3	0	0	0	0	0
PURPLE	0	0	1	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	9	0	0	0	0
WHITE	0	0	0	0	0	1	0	0	0	55	0	0
BLACK	0	0	2	0	0	3	0	0	0	0	40	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	1

Table 160: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 61.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	9	0	0	1	0	0	0	0	3	0
BROWN	0	0	0	6	0	0	0	0	0	0	1	0
YELLOW	0	0	0	0	5	0	0	0	0	0	0	0
GRAY	0	0	0	0	0	55	0	0	0	0	0	0
GREEN	0	0	0	0	0	0	3	0	0	0	0	0
PURPLE	0	0	1	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	9	0	0	0
WHITE	0	0	0	0	0	2	0	0	0	54	0	0
BLACK	0	0	1	0	0	4	0	0	0	0	40	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	1

Table 161: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 61.

A.17 Set 62 - Germany 2021

Country: Germany View: rear Year: 2021
 Illumination: day and night Color: color and gray

Class	View	View8	Category	Make	Model	Generation	Variation	Color
Total vehicles	238	238	238	238	238	238	238	184
Annotation failed	0	0	0	2	5	7	7	1
Annotation unfinished	0	87	0	0	0	0	0	0
Evaluated vehicles	238 100 %	151 63.4 %	238 100 %	236 99.2 %	233 97.9 %	231 97.1 %	231 97.1 %	183 99.5 %

Table 162: Evaluated vehicles of set 62.

Module Name	Dtype	View		View8		Category		Make		Model		Generation		Variation			Color	
		Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Singled	Empty	Correct	Empty	
MMR_VCMMGVCT_FAST_2024Q2 (20240517)	F32	99.2 %	0	X	X	99.2 %	0	94.0 %	20	97.1 %	28	98.0 %	31	97.5 %	103	7	86.1 %	3
MMR_VCMMGVCT_FAST_2024Q4 (20241121)	F32	99.6 %	0	X	X	97.9 %	0	94.0 %	19	96.2 %	25	95.6 %	25	95.9 %	103	6	86.7 %	3
MMR_VCMMGVCT_PREC_2024Q2 (20240518)	F32	100 %	0	X	X	98.7 %	0	96.8 %	20	98.6 %	26	99.0 %	27	98.4 %	103	5	91.1 %	3
MMR_VCMMGVCT_PREC_2024Q4 (20241120)	F32	100 %	0	X	X	98.3 %	0	96.3 %	20	97.1 %	23	98.5 %	26	97.6 %	103	4	90.6 %	3

Table 163: Classification results of set 62.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN	
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	0	138	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	78

Table 164: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Category confusion matrix of set 62.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN	
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	0	137	0	0	0	0	0	0	0	0	0	0	0	0	0	1
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	1
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	77

Table 165: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Category confusion matrix of set 62.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN	
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	0	136	0	0	0	0	0	0	0	0	0	0	0	0	0	2
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	79

Table 166: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Category confusion matrix of set 62.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN	
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	0	137	0	0	0	0	0	0	0	0	0	0	0	0	0	1
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	1
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	78

Table 167: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Category confusion matrix of set 62.

Label	Class	DEPRECATED												
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE		
BLUE	0	0	10	0	0	4	0	0	0	0	0	0	0	0
BROWN	0	0	0	1	0	1	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	4	0	0	0	0	0	0	0	0	0
GRAY	0	0	1	0	0	54	3	0	0	3	4	0	0	0
GREEN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	8	0	0	0	0	0	0
WHITE	0	0	0	0	0	0	0	0	39	0	0	0	0	0
BLACK	0	0	0	1	0	1	3	0	0	0	38	0	0	0
ORANGE	0	0	0	1	0	0	0	0	2	1	0	2	0	0

Table 168: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 62.

Label	Class	DEPRECATED												
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE		
BLUE	0	0	12	0	0	1	0	0	0	0	0	1	0	0
BROWN	0	0	0	2	0	0	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	4	0	0	0	0	0	0	0	0	0
GRAY	0	0	1	2	0	53	1	0	0	5	2	1	0	0
GREEN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	7	0	0	0	1	0
WHITE	0	0	0	0	0	2	0	0	0	37	0	0	0	0
BLACK	0	0	0	0	0	1	2	0	0	0	40	0	0	0
ORANGE	0	0	0	0	0	1	0	0	3	0	0	2	0	0

Table 169: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 62.

Label	Class	DEPRECATED												
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE		
BLUE	0	0	14	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	2	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	4	0	0	0	0	0	0	0	0	0
GRAY	0	0	1	0	0	57	2	0	1	2	2	0	0	0
GREEN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	6	0	0	0	2	0	0
WHITE	0	0	0	0	0	0	0	0	39	0	0	0	0	0
BLACK	0	0	1	1	0	1	0	0	0	0	40	0	0	0
ORANGE	0	0	0	0	0	0	0	1	0	0	0	5	0	0

Table 170: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 62.

Label	Class	DEPRECATED												
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE		
BLUE	0	0	11	0	0	3	0	0	0	0	0	0	0	0
BROWN	0	0	0	2	0	0	0	0	0	0	0	0	0	0
YELLOW	0	0	0	0	3	0	0	0	0	0	0	0	1	0
GRAY	0	0	1	0	0	60	0	0	0	2	2	0	0	0
GREEN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	1	0	0	0	0	7	0	0	0	0	0
WHITE	0	0	0	0	0	1	0	0	0	38	0	0	0	0
BLACK	0	0	0	1	0	2	0	0	0	0	40	0	0	0
ORANGE	0	0	0	0	1	0	0	0	2	0	0	3	0	0

Table 171: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 62.

A.18 Set 67 - Turkey 2021

Country: Turkey
Illumination: day

View: frontal
Color: gray

Year: 2021

Class	View	View8	Category	Make	Model	Generation	Variation	Color
Total vehicles	648	648	648	648	648	648	648	0
Annotation failed	0	0	0	2	2	2	2	0
Annotation unfinished	0	93	0	0	0	0	0	0
Evaluated vehicles	648 100%	555 85.6%	648 100%	646 99.7%	646 99.7%	646 99.7%	646 99.7%	0 0.0%

Table 172: Evaluated vehicles of set 67.

Module Name	Dtype	View		View8		Category		Make		Model		Generation		Variation			Color	
		Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Singled	Empty	Correct	Empty	
MMR_VCMMGVCT_FAST_2024Q2 (20240517)	F32	100%	0	X	X	99.8%	0	99.7%	0	99.5%	4	98.4%	4	97.8%	551	2	X	X
MMR_VCMMGVCT_FAST_2024Q4 (20241121)	F32	100%	0	X	X	100%	0	99.8%	0	99.4%	3	98.9%	5	97.9%	552	0	X	X
MMR_VCMMGVCT_PREC_2024Q2 (20240518)	F32	100%	0	X	X	100%	0	99.8%	0	99.2%	1	98.8%	3	98.9%	552	2	X	X
MMR_VCMMGVCT_PREC_2024Q4 (20241120)	F32	100%	0	X	X	99.8%	0	100%	0	99.4%	1	98.6%	3	98.9%	552	0	X	X

Table 173: Classification results of set 67.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	446	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	0	127	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	1	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50

Table 174: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Category confusion matrix of set 67.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	446	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	0	127	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50

Table 175: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Category confusion matrix of set 67.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	446	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	0	127	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50

Table 176: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Category confusion matrix of set 67.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	446	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	0	127	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	1	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50

Table 177: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Category confusion matrix of set 67.

A.19 Set 68 - France 2022

Country: France
Illumination: day

View: any view
Color: gray

Year: 2022

Class	View	View8	Category	Make	Model	Generation	Variation	Color
Total vehicles	491	491	491	491	491	491	491	0
Annotation failed	0	0	2	54	54	54	54	0
Annotation unfinished	0	369	0	0	0	0	0	0
Evaluated vehicles	491 100%	122 24.8%	489 99.6%	437 89.0%	437 89.0%	437 89.0%	437 89.0%	0 0.0%

Table 178: Evaluated vehicles of set 68.

Module Name	Dtype	View		View8		Category		Make		Model		Generation		Variation			Color	
		Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Singled	Empty	Correct	Empty
MMR_VCMMGVCT_FAST_2024Q2 (20240517)	F32	99.8%	0	X	X	98.8%	0	97.8%	27	98.0%	28	97.8%	31	97.4%	164	4	X	X
MMR_VCMMGVCT_FAST_2024Q4 (20241121)	F32	100%	0	X	X	98.0%	0	97.8%	25	98.1%	26	97.3%	27	96.0%	162	2	X	X
MMR_VCMMGVCT_PREC_2024Q2 (20240518)	F32	100%	0	X	X	98.2%	0	98.8%	26	98.8%	26	98.3%	27	97.8%	162	4	X	X
MMR_VCMMGVCT_PREC_2024Q4 (20241120)	F32	100%	0	X	X	99.0%	0	99.0%	25	99.5%	28	99.8%	31	99.3%	164	5	X	X

Table 179: Classification results of set 68.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	330	0	0	0	0	0	1	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0
VAN	0	0	0	3	0	0	0	0	0	0	0	1	0	0	1	0	1	127	0

Table 180: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Category confusion matrix of set 68.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	329	0	0	0	0	0	1	0	0	0	0	0	0	0	1
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	2	0
VAN	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	3	126	0	0

Table 181: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Category confusion matrix of set 68.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	330	0	0	0	0	0	1	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	1	0
VAN	0	0	0	1	0	0	0	0	0	0	0	1	0	0	5	125	0	0	0

Table 182: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Category confusion matrix of set 68.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	330	0	0	0	0	0	1	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	1	0
VAN	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2	129	0	0	0

Table 183: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Category confusion matrix of set 68.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	4435	2	0	222	27	0	3	17	153	0
BROWN	0	0	0	793	15	158	5	0	5	3	77	3
YELLOW	0	0	0	5	542	10	16	0	0	12	0	3
GRAY	0	0	104	87	19	7494	40	0	4	187	151	0
GREEN	0	0	28	4	5	44	826	0	0	11	35	0
PURPLE	0	0	1	1	0	0	0	0	0	0	6	0
RED	0	0	5	4	2	9	0	1	3756	16	17	30
WHITE	0	0	14	0	3	85	6	0	6	12940	4	0
BLACK	0	0	53	91	0	233	18	1	10	6	3801	0
ORANGE	0	0	0	3	3	0	0	0	23	0	0	261

Table 214: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 73.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	4448	3	0	214	34	0	2	10	148	0
BROWN	0	0	0	825	15	127	4	0	4	5	78	1
YELLOW	0	0	0	9	544	14	14	0	0	7	0	0
GRAY	0	0	117	88	47	7424	68	0	8	160	173	1
GREEN	0	0	23	2	4	39	841	0	0	10	34	0
PURPLE	0	0	1	0	0	0	0	0	1	0	6	0
RED	0	0	4	5	3	8	4	0	3735	14	18	49
WHITE	0	0	27	0	8	121	6	0	3	12888	4	1
BLACK	0	0	55	84	0	205	18	2	7	3	3839	0
ORANGE	0	0	0	2	3	0	0	0	15	0	1	269

Table 215: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 73.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	4659	4	0	101	27	1	1	12	54	0
BROWN	0	0	1	881	11	93	6	0	3	6	57	1
YELLOW	0	0	0	6	559	7	2	0	0	9	0	5
GRAY	0	0	159	106	35	7519	33	0	4	126	100	4
GREEN	0	0	22	2	8	40	851	0	0	12	18	0
PURPLE	0	0	3	0	0	0	0	0	1	0	4	0
RED	0	0	4	9	0	1	4	0	3771	12	5	34
WHITE	0	0	15	0	3	43	3	0	1	12984	4	5
BLACK	0	0	104	86	0	115	22	5	13	5	3863	0
ORANGE	0	0	0	4	4	0	0	0	11	0	0	271

Table 216: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 73.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	4451	0	0	215	33	3	1	19	137	0
BROWN	0	0	0	831	20	123	2	0	1	5	77	0
YELLOW	0	0	3	5	550	17	11	0	0	2	0	0
GRAY	0	0	50	64	43	7733	22	0	5	52	113	4
GREEN	0	0	11	2	11	58	835	0	0	9	27	0
PURPLE	0	0	2	0	0	0	0	0	1	0	5	0
RED	0	0	3	25	0	6	4	0	3717	11	15	59
WHITE	0	0	6	1	3	81	2	0	2	12956	4	3
BLACK	0	0	32	38	0	149	22	1	10	3	3958	0
ORANGE	0	0	0	5	4	0	0	0	6	0	0	275

Table 217: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 73.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	3321	2	1	222	33	0	17	66	97	1	
BROWN	0	0	2	712	12	110	3	0	3	12	50	2	
YELLOW	0	0	1	7	245	62	4	0	4	51	0	7	
GRAY	0	0	108	100	20	8482	55	0	50	252	104	0	
GREEN	0	0	28	8	11	76	564	0	13	31	19	0	
PURPLE	0	0	5	0	0	3	0	2	1	0	0	0	
RED	0	0	36	3	5	76	3	1	2511	61	25	31	
WHITE	1	0	78	0	6	501	13	0	27	8246	1	8	
BLACK	2	0	76	34	1	128	7	3	8	14	3103	1	
ORANGE	0	0	0	2	9	3	0	0	17	6	0	154	

Table 224: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 74.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	3285	3	1	281	28	0	14	64	83	1	
BROWN	0	0	0	729	14	99	5	1	1	9	47	1	
YELLOW	0	0	1	5	272	48	6	0	6	34	0	9	
GRAY	0	0	104	107	40	8531	50	0	48	197	94	0	
GREEN	0	0	20	2	4	65	601	0	15	23	20	0	
PURPLE	0	0	5	0	0	3	0	2	1	0	0	0	
RED	0	0	33	13	5	95	3	0	2492	58	23	30	
WHITE	1	0	68	0	15	520	16	0	32	8216	8	5	
BLACK	4	0	47	26	5	149	25	4	5	18	3094	0	
ORANGE	0	0	0	1	11	3	0	0	14	4	0	158	

Table 225: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 74.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	3481	2	1	145	17	0	16	52	45	1	
BROWN	0	0	1	745	9	93	3	0	0	14	40	1	
YELLOW	0	0	3	10	289	30	2	0	12	30	0	5	
GRAY	0	0	138	101	31	8472	44	0	52	257	76	0	
GREEN	0	0	26	9	7	62	595	0	17	27	7	0	
PURPLE	0	0	5	0	0	3	0	2	1	0	0	0	
RED	0	0	20	3	4	83	3	0	2539	58	14	28	
WHITE	1	0	64	3	6	349	5	0	30	8419	0	4	
BLACK	2	0	88	19	5	106	7	5	4	17	3123	1	
ORANGE	0	0	2	2	6	5	0	0	6	3	0	167	

Table 226: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 74.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	3281	0	5	266	26	0	14	64	103	1	
BROWN	0	0	2	710	10	123	3	0	0	11	47	0	
YELLOW	0	0	2	6	287	43	5	0	4	23	4	7	
GRAY	0	0	57	70	20	8669	30	0	49	200	73	3	
GREEN	0	0	10	9	5	71	595	0	19	30	11	0	
PURPLE	0	0	5	0	0	3	0	2	1	0	0	0	
RED	0	0	20	13	6	91	1	0	2506	58	20	37	
WHITE	1	0	54	2	8	463	5	0	28	8316	4	0	
BLACK	2	0	29	18	5	115	5	4	6	17	3175	1	
ORANGE	0	0	0	6	6	5	0	0	8	4	0	162	

Table 227: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 74.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	476	2	0	198	2	2	0	7	44	0
BROWN	0	0	4	97	2	52	0	0	0	1	16	2
YELLOW	0	0	0	1	96	2	1	0	0	8	0	1
GRAY	0	0	65	25	0	1259	6	0	0	34	22	0
GREEN	2	0	8	0	3	10	59	0	0	5	3	0
PURPLE	0	0	2	1	0	5	0	0	4	0	2	0
RED	0	0	0	2	3	0	0	0	336	3	0	10
WHITE	0	0	2	0	1	93	0	0	1	2271	1	0
BLACK	0	0	36	10	0	45	1	2	3	2	701	0
ORANGE	0	0	0	0	6	0	0	0	0	1	0	38

Table 234: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 75.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	486	3	0	188	2	0	0	6	46	0
BROWN	0	0	1	99	2	54	0	1	0	0	15	2
YELLOW	0	0	0	0	91	3	1	0	1	9	0	4
GRAY	0	0	51	29	1	1283	3	0	1	22	21	0
GREEN	0	0	6	0	1	16	60	0	0	4	3	0
PURPLE	0	0	0	1	0	6	0	3	3	0	1	0
RED	0	0	0	1	0	0	0	0	337	4	0	12
WHITE	0	0	2	0	1	98	0	0	1	2266	1	0
BLACK	0	0	33	16	0	38	2	1	0	2	708	0
ORANGE	0	0	0	0	0	0	0	0	3	1	0	41

Table 235: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 75.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	507	3	0	172	1	0	0	9	39	0
BROWN	0	0	2	104	3	48	0	0	1	3	13	0
YELLOW	0	0	0	0	99	2	1	0	0	7	0	0
GRAY	0	0	38	24	1	1264	3	0	0	63	18	0
GREEN	0	0	2	1	0	9	66	0	0	6	6	0
PURPLE	0	0	1	1	0	5	0	3	3	0	1	0
RED	0	0	0	2	2	1	0	0	337	3	0	9
WHITE	0	0	4	0	1	75	0	0	2	2287	0	0
BLACK	0	0	23	11	0	34	1	0	0	2	729	0
ORANGE	0	0	0	0	2	0	0	0	3	1	0	39

Table 236: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 75.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	430	3	0	226	2	2	0	4	64	0
BROWN	0	0	0	97	4	55	0	0	0	0	18	0
YELLOW	0	0	0	0	99	2	1	0	0	5	0	2
GRAY	0	0	14	20	1	1326	4	0	0	25	21	0
GREEN	1	0	2	0	1	11	64	0	0	4	7	0
PURPLE	0	0	0	0	0	6	0	3	3	0	2	0
RED	0	0	0	3	1	0	0	0	332	3	0	15
WHITE	0	0	0	0	1	100	0	0	1	2266	1	0
BLACK	0	0	7	6	0	33	0	0	0	3	751	0
ORANGE	0	0	0	1	5	0	0	0	1	1	0	37

Table 237: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 75.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	118	0	0	12	2	0	4	5	11	0
BROWN	0	0	0	30	1	10	0	0	0	0	4	0
YELLOW	0	0	0	0	14	1	0	0	0	1	0	1
GRAY	0	0	40	15	2	620	4	0	1	20	11	0
GREEN	0	0	0	1	0	3	13	0	0	3	4	0
PURPLE	0	0	0	0	0	1	0	0	0	0	0	0
RED	0	0	0	1	0	0	0	0	101	1	0	0
WHITE	0	0	5	0	0	36	1	0	6	618	0	0
BLACK	0	0	12	3	0	16	2	0	0	4	281	0
ORANGE	0	0	0	0	1	0	0	0	1	1	0	5

Table 244: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 76.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	122	0	0	13	3	0	1	3	10	0
BROWN	0	0	0	23	1	17	0	0	1	0	3	0
YELLOW	0	0	0	0	15	0	0	0	0	1	0	1
GRAY	0	0	58	10	3	597	12	0	4	14	15	0
GREEN	0	0	2	0	0	5	15	0	0	2	0	0
PURPLE	0	0	0	0	0	1	0	0	0	0	0	0
RED	0	0	1	0	0	4	0	0	95	1	1	1
WHITE	0	0	8	0	1	57	1	0	5	594	0	0
BLACK	0	0	21	3	0	15	4	0	2	3	270	0
ORANGE	0	0	0	0	1	0	1	0	1	1	0	4

Table 245: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 76.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	121	0	0	13	1	0	5	4	8	0
BROWN	0	0	1	25	0	14	0	0	2	0	3	0
YELLOW	0	0	1	0	13	0	0	0	1	1	0	1
GRAY	0	0	35	10	3	620	3	0	2	29	11	0
GREEN	0	0	1	0	0	6	13	0	0	2	2	0
PURPLE	0	0	0	0	0	1	0	0	0	0	0	0
RED	0	0	0	0	0	2	0	0	98	2	0	1
WHITE	0	0	8	0	2	29	0	0	1	625	0	1
BLACK	0	0	6	2	0	14	1	0	2	4	289	0
ORANGE	0	0	0	0	1	0	1	0	0	1	0	5

Table 246: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 76.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	108	0	1	18	1	0	3	6	15	0
BROWN	0	0	0	26	2	13	0	0	0	0	4	0
YELLOW	0	0	0	0	12	2	0	0	0	1	0	2
GRAY	0	0	24	10	3	644	2	0	1	15	14	0
GREEN	0	0	0	0	0	4	15	0	0	2	3	0
PURPLE	0	0	0	0	0	1	0	0	0	0	0	0
RED	0	0	0	0	0	4	0	0	95	2	0	2
WHITE	0	0	3	0	1	47	0	0	1	613	0	1
BLACK	0	0	4	1	0	9	0	0	1	4	299	0
ORANGE	0	0	0	0	1	0	0	0	1	1	0	5

Table 247: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 76.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	164	0	0	25	0	0	0	1	20	0
BROWN	0	0	0	11	0	24	0	0	0	0	6	0
YELLOW	0	0	0	0	21	3	1	0	0	1	0	0
GRAY	0	0	15	11	1	743	0	0	2	39	73	0
GREEN	0	0	7	1	1	7	23	0	0	1	9	0
PURPLE	0	0	1	0	0	0	0	0	1	0	0	0
RED	0	0	1	0	0	2	0	0	224	1	5	1
WHITE	0	0	5	0	2	64	0	0	0	1211	2	0
BLACK	0	0	13	0	0	11	0	1	2	2	304	0
ORANGE	0	0	0	0	0	0	0	0	3	0	0	6

Table 254: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 77.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	183	0	0	13	0	0	0	1	13	0
BROWN	0	0	2	11	3	20	0	0	0	0	5	0
YELLOW	0	0	0	0	21	4	0	0	0	0	1	0
GRAY	0	0	18	8	0	755	1	0	0	45	57	0
GREEN	0	0	7	0	1	4	20	0	0	6	11	0
PURPLE	0	0	1	0	0	0	0	0	1	0	0	0
RED	0	0	0	0	0	0	0	0	228	1	4	1
WHITE	0	0	6	0	0	29	0	0	0	1247	2	0
BLACK	0	0	13	1	0	20	0	0	0	2	297	0
ORANGE	0	0	0	0	1	0	0	0	2	0	0	6

Table 255: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 77.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	188	0	0	11	0	0	0	2	9	0
BROWN	0	0	0	6	2	22	1	0	0	1	9	0
YELLOW	0	0	0	0	23	3	0	0	0	0	0	0
GRAY	0	0	19	8	0	760	5	0	0	53	39	0
GREEN	0	0	5	0	1	4	33	0	0	2	4	0
PURPLE	0	0	1	0	0	0	0	0	1	0	0	0
RED	0	0	0	0	0	0	0	0	230	0	2	2
WHITE	0	0	8	0	0	18	1	0	0	1257	0	0
BLACK	0	0	17	1	0	24	0	1	0	3	287	0
ORANGE	0	0	0	0	1	0	0	0	2	0	0	6

Table 256: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 77.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	170	0	0	22	0	0	0	2	16	0
BROWN	0	0	0	4	1	26	1	0	0	0	9	0
YELLOW	0	0	0	0	23	3	0	0	0	0	0	0
GRAY	0	0	6	1	2	786	1	0	0	38	50	0
GREEN	0	0	2	0	1	7	31	0	0	2	6	0
PURPLE	0	0	0	0	0	0	0	0	1	0	1	0
RED	0	0	0	0	0	2	0	0	223	1	5	3
WHITE	0	0	0	0	0	20	0	0	0	1262	2	0
BLACK	0	0	2	0	0	20	0	0	1	2	308	0
ORANGE	0	0	0	1	1	0	0	0	2	0	0	5

Table 257: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 77.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE		0	0	5	0	0	1	0	0	0	6	12	0
BROWN		0	0	0	1	0	3	0	0	5	2	3	0
YELLOW		0	0	0	0	3	2	0	0	0	1	0	0
GRAY		0	0	4	0	0	83	3	0	1	13	13	0
GREEN		0	0	0	0	0	0	0	0	0	0	0	0
PURPLE		0	0	0	0	0	0	0	0	0	0	0	0
RED		0	0	1	0	0	0	0	33	1	5	0	0
WHITE		0	0	1	0	1	6	4	0	5	85	1	0
BLACK		0	0	0	0	0	3	0	0	1	0	47	0
ORANGE		0	0	0	0	0	0	0	0	1	0	0	0

Table 264: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 78.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE		0	0	4	0	0	1	0	0	1	8	10	0
BROWN		0	0	1	0	1	3	0	0	1	1	7	0
YELLOW		0	0	0	0	2	2	1	0	0	1	0	0
GRAY		0	0	1	0	0	85	0	0	1	13	17	0
GREEN		0	0	0	0	0	0	0	0	0	0	0	0
PURPLE		0	0	0	0	0	0	0	0	0	0	0	0
RED		0	0	1	0	0	1	0	0	25	10	3	0
WHITE		0	0	1	0	0	7	1	0	0	93	1	0
BLACK		0	0	0	0	0	1	0	0	0	0	50	0
ORANGE		0	0	0	0	0	0	0	0	1	0	0	0

Table 265: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 78.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE		0	0	5	0	0	2	0	0	0	8	9	0
BROWN		0	0	0	1	0	3	0	0	1	3	6	0
YELLOW		0	0	0	0	2	2	0	0	0	1	0	1
GRAY		0	0	0	0	2	84	6	0	3	12	10	0
GREEN		0	0	0	0	0	0	0	0	0	0	0	0
PURPLE		0	0	0	0	0	0	0	0	0	0	0	0
RED		0	0	0	0	0	1	0	0	34	5	0	0
WHITE		0	0	0	0	0	4	1	0	1	96	1	0
BLACK		0	0	0	0	0	2	0	0	0	1	48	0
ORANGE		0	0	0	0	0	0	0	0	0	0	0	1

Table 266: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 78.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE		0	0	6	0	0	4	0	0	0	4	10	0
BROWN		0	0	0	1	0	3	0	0	0	4	6	0
YELLOW		0	0	0	1	2	2	0	0	0	1	0	0
GRAY		0	0	0	0	0	93	2	0	0	10	12	0
GREEN		0	0	0	0	0	0	0	0	0	0	0	0
PURPLE		0	0	0	0	0	0	0	0	0	0	0	0
RED		0	0	0	0	0	8	0	0	25	5	2	0
WHITE		0	0	0	0	0	9	2	0	0	92	0	0
BLACK		0	0	0	0	0	1	0	0	0	0	50	0
ORANGE		0	0	0	0	0	0	0	0	0	0	0	1

Table 267: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 78.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE		0	0	5	0	0	1	0	0	0	6	10	0
BROWN		0	0	0	2	0	1	0	0	3	2	5	0
YELLOW		0	0	0	0	2	1	0	0	0	2	0	0
GRAY		0	0	1	0	0	87	0	0	0	10	16	0
GREEN		0	0	0	0	0	0	0	0	0	0	0	0
PURPLE		0	0	0	0	0	0	0	0	0	0	0	0
RED		0	0	0	0	0	1	0	0	21	4	5	0
WHITE		0	0	1	0	0	11	1	0	0	83	0	0
BLACK		0	0	0	0	0	1	0	0	1	0	48	0
ORANGE		0	0	0	0	0	0	0	1	0	0	0	0

Table 298: MMRBOX_VCMMGVCT_FAST_2024Q2 (20240519) module - Color confusion matrix of set 82.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE		0	0	7	0	0	2	0	0	0	5	8	0
BROWN		0	0	0	2	0	3	0	0	4	2	2	0
YELLOW		0	0	0	0	1	2	0	0	0	2	0	0
GRAY		0	0	1	0	0	84	1	0	2	13	13	0
GREEN		0	0	0	0	0	0	0	0	0	0	0	0
PURPLE		0	0	0	0	0	0	0	0	0	0	0	0
RED		0	0	0	0	1	1	0	0	24	4	1	0
WHITE		0	0	0	0	0	2	1	0	2	90	1	0
BLACK		0	0	0	0	0	4	0	0	1	0	45	0
ORANGE		0	0	0	0	0	0	0	0	1	0	0	0

Table 299: MMRBOX_VCMMGVCT_FAST_2024Q4 (20241122) module - Color confusion matrix of set 82.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE		0	0	5	0	0	2	0	0	0	6	9	0
BROWN		0	0	0	1	0	3	0	0	1	2	6	0
YELLOW		0	0	0	0	2	2	0	0	0	0	0	1
GRAY		0	0	0	0	2	83	6	0	3	10	10	0
GREEN		0	0	0	0	0	0	0	0	0	0	0	0
PURPLE		0	0	0	0	0	0	0	0	0	0	0	0
RED		0	0	0	0	0	1	0	0	28	2	0	0
WHITE		0	0	0	0	0	4	1	0	1	89	1	0
BLACK		0	0	0	0	0	2	0	0	0	0	48	0
ORANGE		0	0	0	0	0	0	0	0	0	0	0	1

Table 300: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 82.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE		0	0	6	0	0	3	0	0	0	3	10	0
BROWN		0	0	0	1	0	3	0	0	0	3	6	0
YELLOW		0	0	0	0	2	2	0	0	0	1	0	0
GRAY		0	0	0	0	0	92	2	0	0	8	12	0
GREEN		0	0	0	0	0	0	0	0	0	0	0	0
PURPLE		0	0	0	0	0	0	0	0	0	0	0	0
RED		0	0	0	0	0	5	0	0	23	3	0	0
WHITE		0	0	0	0	0	7	2	0	0	87	0	0
BLACK		0	0	0	0	0	1	0	0	0	0	49	0
ORANGE		0	0	0	0	0	0	0	0	0	0	0	1

Table 301: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 82.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE		0	0	4	0	0	5	0	0	0	5	8	0
BROWN		0	0	0	1	0	6	0	0	1	1	4	0
YELLOW		0	0	0	0	2	3	0	0	0	0	0	0
GRAY		0	0	1	0	2	89	3	0	1	8	10	0
GREEN		0	0	0	0	0	0	0	0	0	0	0	0
PURPLE		0	0	0	0	0	0	0	0	0	0	0	0
RED		0	0	0	0	0	3	0	0	26	2	0	0
WHITE		0	0	0	0	0	3	1	0	1	89	1	1
BLACK		0	0	0	0	0	3	0	0	0	0	47	0
ORANGE		0	0	0	0	0	0	0	0	0	0	0	1

Table 302: MMRBOX_VCMMGVCT_PREC_2024Q2 (20240520) module - Color confusion matrix of set 82.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE		0	0	7	0	0	6	0	0	0	3	6	0
BROWN		0	0	0	0	0	5	0	0	0	2	6	0
YELLOW		0	0	0	0	2	3	0	0	0	0	0	0
GRAY		0	0	0	0	0	95	1	0	0	8	10	0
GREEN		0	0	0	0	0	0	0	0	0	0	0	0
PURPLE		0	0	0	0	0	0	0	0	0	0	0	0
RED		0	0	0	0	0	2	0	0	27	1	1	0
WHITE		0	0	0	0	0	7	2	0	1	86	0	0
BLACK		0	0	0	0	0	1	0	0	0	0	49	0
ORANGE		0	0	0	0	0	0	0	0	0	0	0	1

Table 303: MMRBOX_VCMMGVCT_PREC_2024Q4 (20241123) module - Color confusion matrix of set 82.

Label	Class	Class																	
		DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS		0	0	0	79	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR		0	0	0	0	6564	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT		0	0	0	0	0	133	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT		0	0	0	0	0	0	0	90	0	0	0	0	0	0	0	0	0	1
LUGGAGE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	755

Table 358: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Category confusion matrix of set 91.

Label	Class	Class																	
		DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS		0	0	0	79	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR		0	0	0	0	6564	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT		0	0	0	0	0	133	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT		0	0	0	0	0	0	0	90	0	0	0	0	0	0	0	0	0	1
LUGGAGE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	755

Table 359: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Category confusion matrix of set 91.

Label	Class	Class																	
		DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS		0	0	0	79	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR		0	0	0	0	6564	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT		0	0	0	0	0	133	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT		0	0	0	0	0	0	0	91	0	0	0	0	0	0	0	0	0	0
LUGGAGE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	754

Table 360: MMRBOX_VCMMGVCT_PREC_2024Q2 (20240520) module - Category confusion matrix of set 91.

Label	Class	Class																	
		DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS		0	0	0	79	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR		0	0	0	0	6564	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT		0	0	0	0	0	133	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT		0	0	0	0	0	0	0	1	0	90	0	0	0	0	0	0	0	0
LUGGAGE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	755

Table 361: MMRBOX_VCMMGVCT_PREC_2024Q4 (20241123) module - Category confusion matrix of set 91.

Label	Class	Class																	
		DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	729	0	0	0	0	0	0	0	0	0	0	0	0	0	1
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	1
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 368: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Category confusion matrix of set 92.

Label	Class	Class																	
		DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	729	0	0	0	0	0	0	0	0	0	0	0	0	0	1
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	1
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 369: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Category confusion matrix of set 92.

Label	Class	Class																	
		DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	730	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	20	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 370: MMRBOX_VCMMGVCT_PREC_2024Q2 (20240520) module - Category confusion matrix of set 92.

Label	Class	Class																	
		DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	0	730	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	12	0	1	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	1	0	20	0	0	0	0	0	0	0	0	1	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 371: MMRBOX_VCMMGVCT_PREC_2024Q4 (20241123) module - Category confusion matrix of set 92.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	173	0	2	23	1	0	0	6	18	0	
BROWN	0	0	1	14	3	22	0	0	3	3	6	0	
YELLOW	0	0	0	1	17	5	2	0	0	4	0	0	
GRAY	3	0	22	10	5	813	5	0	6	70	62	1	
GREEN	0	0	0	1	1	8	34	0	1	0	9	1	
PURPLE	0	0	0	0	0	0	0	0	1	0	1	0	
RED	0	0	0	1	1	3	0	0	232	5	2	2	
WHITE	0	0	5	1	0	69	1	0	6	1266	4	0	
BLACK	0	0	8	0	0	30	0	0	2	1	303	0	
ORANGE	0	0	0	0	0	0	0	0	2	0	0	8	

Table 378: MMRBOX_VCMMGVCT_FAST_2024Q2 (20240519) module - Color confusion matrix of set 93.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	179	0	2	24	0	0	0	7	11	0	
BROWN	0	0	0	12	7	15	1	0	3	2	12	0	
YELLOW	0	0	0	0	22	3	0	0	0	4	0	0	
GRAY	3	0	17	5	4	807	1	0	9	86	65	0	
GREEN	0	0	1	0	3	7	33	0	1	4	6	0	
PURPLE	0	0	1	0	0	0	0	0	1	0	0	0	
RED	2	0	1	0	2	1	0	0	230	6	2	2	
WHITE	1	0	3	0	4	41	1	0	3	1295	4	0	
BLACK	1	0	7	1	0	16	1	0	3	3	312	0	
ORANGE	0	0	0	0	0	1	0	0	4	0	0	5	

Table 379: MMRBOX_VCMMGVCT_FAST_2024Q4 (20241122) module - Color confusion matrix of set 93.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	191	0	0	12	1	0	1	8	10	0	
BROWN	1	0	2	10	1	24	1	0	1	4	8	0	
YELLOW	0	0	0	1	20	4	1	0	0	3	0	0	
GRAY	5	0	22	4	11	801	4	0	9	87	54	0	
GREEN	0	0	2	0	3	4	37	0	0	3	6	0	
PURPLE	0	0	0	0	0	0	0	1	1	0	0	0	
RED	0	0	0	0	1	1	0	0	234	5	1	4	
WHITE	1	0	8	0	3	42	2	0	1	1293	2	0	
BLACK	0	0	14	1	0	19	0	0	2	5	303	0	
ORANGE	0	0	0	0	0	0	0	0	2	0	0	8	

Table 380: MMRBOX_VCMMGVCT_PREC_2024Q2 (20240520) module - Color confusion matrix of set 93.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	185	0	2	22	0	0	1	5	8	0	
BROWN	0	0	0	8	3	27	1	0	2	2	8	1	
YELLOW	0	0	0	1	20	5	2	0	0	1	0	0	
GRAY	2	0	16	3	2	887	6	0	6	55	20	0	
GREEN	1	0	1	2	1	8	34	0	1	3	4	0	
PURPLE	0	0	1	0	0	0	0	0	1	0	0	0	
RED	0	0	1	0	2	3	0	0	235	2	2	1	
WHITE	0	0	4	0	2	55	1	0	8	1282	0	0	
BLACK	0	0	9	0	0	45	1	1	0	5	283	0	
ORANGE	0	0	0	0	2	0	0	0	2	0	0	6	

Table 381: MMRBOX_VCMMGVCT_PREC_2024Q4 (20241123) module - Color confusion matrix of set 93.

Table 388: MMR_VCMGVCT_PREC_2024Q2 (20240518) module - Category confusion matrix of set 94.

Table 389: MMR_VCMGVCT_PREC_2024Q4 (20241120) module - Category confusion matrix of set 94.

Table 388: MMR_VCMGVCT_PREC_2024Q2 (20240518) module - Category confusion matrix of set 94.

Table 389: MMR_VCMGVCT_PREC_2024Q4 (20241120) module - Category confusion matrix of set 94.

Table 390: MMRBOX_VCMGVCT_PREC_2024Q2 (20240520) module - Category confusion matrix of set 94.

Table 391: MMRBOX_VCMGVCT_PREC_2024Q4 (20241123) module - Category confusion matrix of set 94.

Table 390: MMRBOX_VCMGVCT_PREC_2024Q2 (20240520) module - Category confusion matrix of set 94.

Table 391: MMRBOX_VCMGVCT_PREC_2024Q4 (20241123) module - Category confusion matrix of set 94.

Table 392: MMR_VCMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 94.

Table 393: MMR_VCMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 94.

Table 392: MMR_VCMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 94.

Table 393: MMR_VCMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 94.



Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	171	0	0	19	0	0	0	2	18	0
BROWN	0	0	0	14	3	16	0	0	1	1	6	0
YELLOW	0	0	0	1	15	4	2	0	0	3	0	0
GRAY	0	0	19	10	2	752	1	0	5	37	57	1
GREEN	0	0	0	1	1	5	32	0	0	0	9	1
PURPLE	0	0	0	0	0	0	0	0	1	0	1	0
RED	0	0	0	1	0	1	0	0	225	2	2	2
WHITE	0	0	4	1	0	53	0	0	2	1220	4	0
BLACK	0	0	8	0	0	25	0	0	2	0	298	0
ORANGE	0	0	0	0	0	0	0	0	2	0	0	7

Table 394: MMRBOX_VCMMGVCT_FAST_2024Q2 (20240519) module - Color confusion matrix of set 94.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	176	0	0	21	0	0	0	2	11	0
BROWN	0	0	0	12	6	8	1	0	1	1	12	0
YELLOW	0	0	0	0	20	2	0	0	0	3	0	0
GRAY	0	0	12	5	3	742	0	0	4	60	58	0
GREEN	0	0	1	0	3	4	31	0	0	4	6	0
PURPLE	0	0	1	0	0	0	0	0	1	0	0	0
RED	0	0	1	0	0	0	0	0	226	2	2	2
WHITE	0	0	3	0	2	26	0	0	0	1252	1	0
BLACK	0	0	7	1	0	13	1	0	2	3	306	0
ORANGE	0	0	0	0	0	1	0	0	4	0	0	4

Table 395: MMRBOX_VCMMGVCT_FAST_2024Q4 (20241122) module - Color confusion matrix of set 94.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	188	0	0	11	0	0	0	2	9	0
BROWN	0	0	0	6	2	22	1	0	0	1	9	0
YELLOW	0	0	0	0	22	3	0	0	0	0	0	0
GRAY	0	0	19	8	0	760	5	0	0	53	39	0
GREEN	0	0	5	0	1	4	33	0	0	2	4	0
PURPLE	0	0	1	0	0	0	0	0	1	0	0	0
RED	0	0	0	0	0	0	0	0	229	0	2	2
WHITE	0	0	8	0	0	18	1	0	0	1257	0	0
BLACK	0	0	17	1	0	24	0	1	0	3	287	0
ORANGE	0	0	0	0	1	0	0	0	2	0	0	6

Table 396: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 94.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	170	0	0	22	0	0	0	2	16	0
BROWN	0	0	0	4	1	26	1	0	0	0	9	0
YELLOW	0	0	0	0	22	3	0	0	0	0	0	0
GRAY	0	0	6	1	2	786	1	0	0	38	50	0
GREEN	0	0	2	0	1	7	31	0	0	2	6	0
PURPLE	0	0	0	0	0	0	0	0	1	0	1	0
RED	0	0	0	0	0	2	0	0	222	1	5	3
WHITE	0	0	0	0	0	20	0	0	0	1262	2	0
BLACK	0	0	2	0	0	20	0	0	1	2	308	0
ORANGE	0	0	0	1	1	0	0	0	2	0	0	5

Table 397: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 94.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	189	0	0	9	1	0	0	1	10	0
BROWN	0	0	1	10	1	19	1	0	0	1	8	0
YELLOW	0	0	0	1	19	4	0	0	0	1	0	0
GRAY	0	0	17	3	2	771	2	0	2	38	49	0
GREEN	0	0	1	0	2	4	35	0	0	2	5	0
PURPLE	0	0	0	0	0	0	0	1	1	0	0	0
RED	0	0	0	0	0	0	0	0	229	1	1	2
WHITE	0	0	6	0	0	34	2	0	0	1242	0	0
BLACK	0	0	11	1	0	19	0	0	1	2	299	0
ORANGE	0	0	0	0	0	0	0	0	2	0	0	7

Table 398: MMRBOX_VCMMGVCT_PREC_2024Q2 (20240520) module - Color confusion matrix of set 94.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	182	0	0	19	0	0	0	1	8	0
BROWN	0	0	0	8	1	24	1	0	0	0	7	0
YELLOW	0	0	0	1	17	5	2	0	0	0	0	0
GRAY	0	0	15	3	0	821	1	0	0	25	19	0
GREEN	0	0	1	1	1	7	32	0	1	2	4	0
PURPLE	0	0	1	0	0	0	0	0	1	0	0	0
RED	0	0	1	0	0	3	0	0	226	0	2	1
WHITE	0	0	3	0	1	39	1	0	1	1239	0	0
BLACK	0	0	9	0	0	41	1	1	0	3	278	0
ORANGE	0	0	0	0	1	0	0	0	2	0	0	6

Table 399: MMRBOX_VCMMGVCT_PREC_2024Q4 (20241123) module - Color confusion matrix of set 94.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE		0	0	5	0	0	1	0	0	0	6	10	0
BROWN		0	0	0	2	0	1	0	0	3	2	5	0
YELLOW		0	0	0	0	2	1	0	0	0	2	0	0
GRAY		0	0	1	0	0	89	0	0	0	13	16	0
GREEN		0	0	0	0	0	0	0	0	0	0	0	0
PURPLE		0	0	0	0	0	0	0	0	0	0	1	0
RED		0	0	0	0	0	1	0	0	22	4	6	0
WHITE		0	0	1	0	0	11	1	0	0	95	0	0
BLACK		0	0	0	0	0	2	0	0	1	1	50	0
ORANGE		0	0	0	0	0	0	0	1	0	0	0	0

Table 406: MMRBOX_VCMMGVCT_FAST_2024Q2 (20240519) module - Color confusion matrix of set 95.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE		0	0	7	0	0	2	0	0	0	5	8	0
BROWN		0	0	0	2	0	3	0	0	4	2	2	0
YELLOW		0	0	0	0	1	2	0	0	0	2	0	0
GRAY		0	0	1	0	0	88	1	0	2	14	13	0
GREEN		0	0	0	0	0	0	0	0	0	0	0	0
PURPLE		0	0	0	0	0	0	0	0	0	0	1	0
RED		0	0	0	0	1	1	0	0	26	4	1	0
WHITE		0	0	0	0	0	4	1	0	2	100	1	0
BLACK		0	0	0	0	0	4	0	0	1	1	48	0
ORANGE		0	0	0	0	0	0	0	1	0	0	0	0

Table 407: MMRBOX_VCMMGVCT_FAST_2024Q4 (20241122) module - Color confusion matrix of set 95.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE		0	0	4	0	0	5	0	0	0	5	8	0
BROWN		0	0	0	1	0	6	0	0	1	1	4	0
YELLOW		0	0	0	0	2	3	0	0	0	0	0	0
GRAY		0	0	1	0	2	94	3	0	1	8	10	0
GREEN		0	0	0	0	0	0	0	0	0	0	0	0
PURPLE		0	0	0	0	0	1	0	0	0	0	0	0
RED		0	0	0	0	0	3	0	0	28	2	0	0
WHITE		0	0	0	0	0	4	1	0	2	99	1	1
BLACK		0	0	0	0	0	4	0	0	0	1	49	0
ORANGE		0	0	0	0	0	0	0	0	0	0	0	1

Table 408: MMRBOX_VCMMGVCT_PREC_2024Q2 (20240520) module - Color confusion matrix of set 95.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE		0	0	7	0	0	6	0	0	0	3	6	0
BROWN		0	0	0	0	0	5	0	0	0	2	6	0
YELLOW		0	0	0	0	2	3	0	0	0	0	0	0
GRAY		0	0	0	0	0	100	1	0	0	8	10	0
GREEN		0	0	0	0	0	0	0	0	0	0	0	0
PURPLE		0	0	0	0	0	1	0	0	0	0	0	0
RED		0	0	0	0	0	2	0	0	29	1	1	0
WHITE		0	0	0	0	0	7	2	0	1	98	0	0
BLACK		0	0	0	0	0	2	0	0	0	1	51	0
ORANGE		0	0	0	0	0	0	0	0	0	0	0	1

Table 409: MMRBOX_VCMMGVCT_PREC_2024Q4 (20241123) module - Color confusion matrix of set 95.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	1069	0	3	55	25	0	0	7	31	0
BROWN	0	0	0	278	10	15	0	0	1	3	0	5
YELLOW	0	0	1	18	124	9	0	0	0	3	0	0
GRAY	0	0	14	23	5	2165	13	0	0	42	34	0
GREEN	0	0	0	8	2	8	238	0	0	0	4	0
PURPLE	0	0	0	0	0	4	0	0	0	2	0	0
RED	0	0	0	2	0	0	0	0	766	2	0	4
WHITE	0	0	3	0	1	18	1	0	1	2421	0	0
BLACK	0	0	10	41	0	47	5	1	0	4	1196	0
ORANGE	0	0	0	1	4	1	0	0	2	0	0	55

Table 422: MMRBOX_VCMMGVCT_FAST_2024Q2 (20240519) module - Color confusion matrix of set 96.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	1076	0	3	53	19	0	0	7	32	0
BROWN	0	0	0	275	7	17	0	0	1	3	2	7
YELLOW	0	0	0	14	126	12	2	0	0	1	0	0
GRAY	0	0	12	23	7	2163	14	0	0	48	29	0
GREEN	0	0	2	7	2	9	237	0	0	3	0	0
PURPLE	0	0	0	0	0	4	0	1	1	0	0	0
RED	0	0	0	3	0	0	0	0	764	2	0	5
WHITE	0	0	1	0	1	13	4	0	0	2426	0	0
BLACK	0	0	11	32	0	37	3	1	3	1	1216	0
ORANGE	0	0	0	3	0	0	0	0	4	0	0	56

Table 423: MMRBOX_VCMMGVCT_FAST_2024Q4 (20241122) module - Color confusion matrix of set 96.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	1131	0	3	31	10	0	0	5	10	0
BROWN	0	0	0	282	6	14	0	0	2	3	0	5
YELLOW	0	0	0	16	129	10	0	0	0	0	0	0
GRAY	0	0	12	25	1	2208	13	0	0	16	21	0
GREEN	0	0	2	7	2	8	235	0	0	2	4	0
PURPLE	0	0	0	1	0	0	0	2	3	0	0	0
RED	0	0	0	1	0	0	0	0	765	2	0	6
WHITE	0	0	3	0	1	18	1	0	0	2422	0	0
BLACK	0	0	12	25	0	43	3	2	0	4	1215	0
ORANGE	0	0	0	2	0	1	0	0	0	0	0	60

Table 424: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 96.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	1082	0	3	63	9	0	0	3	30	0
BROWN	0	0	0	276	5	23	0	0	0	3	0	5
YELLOW	0	0	0	12	133	10	0	0	0	0	0	0
GRAY	0	0	9	20	5	2207	7	0	0	15	33	0
GREEN	0	0	0	8	1	9	236	0	0	0	6	0
PURPLE	0	0	0	0	0	4	0	0	2	0	0	0
RED	0	0	0	3	0	0	0	0	763	2	0	6
WHITE	0	0	1	0	1	25	1	0	0	2416	1	0
BLACK	0	0	3	28	0	40	3	1	0	5	1224	0
ORANGE	0	0	0	1	0	0	0	0	0	1	0	61

Table 425: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 96.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	1103	0	3	41	17	0	0	1	25	0
BROWN	0	0	0	287	6	8	0	0	1	3	0	7
YELLOW	0	0	0	17	127	11	0	0	0	0	0	0
GRAY	0	0	12	22	5	2199	12	0	0	20	26	0
GREEN	0	0	1	7	1	9	235	0	0	0	7	0
PURPLE	0	0	0	0	0	2	0	2	2	0	0	0
RED	0	0	0	0	0	0	0	0	768	1	0	5
WHITE	0	0	5	0	3	15	1	0	0	2421	0	0
BLACK	0	0	7	32	0	31	2	4	0	4	1224	0
ORANGE	0	0	0	0	0	0	0	0	3	0	0	60

Table 426: MMRBOX_VCMMGVCT_PREC_2024Q2 (20240520) module - Color confusion matrix of set 96.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	1119	0	3	41	12	0	0	0	15	0
BROWN	0	0	0	279	4	18	0	0	1	3	0	7
YELLOW	0	0	1	17	127	10	0	0	0	0	0	0
GRAY	0	0	14	21	4	2226	9	0	0	16	6	0
GREEN	0	0	0	7	0	18	233	0	0	1	1	0
PURPLE	0	0	0	0	0	3	0	0	3	0	0	0
RED	0	0	0	1	0	0	0	0	763	3	0	7
WHITE	0	0	1	0	1	20	0	0	0	2423	0	0
BLACK	0	0	11	44	0	57	2	3	2	3	1182	0
ORANGE	0	0	0	0	0	1	0	0	2	0	0	60

Table 427: MMRBOX_VCMMGVCT_PREC_2024Q4 (20241123) module - Color confusion matrix of set 96.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	1456	1	4	116	20	0	2	26	38	0	
BROWN	0	0	1	390	4	25	0	0	1	4	12	7	
YELLOW	0	0	5	9	99	28	5	0	0	3	3	0	
GRAY	0	0	33	59	11	3299	23	0	10	61	56	0	
GREEN	0	0	5	8	0	16	265	0	0	1	5	0	
PURPLE	0	0	0	0	0	0	9	3	0	0	0	0	
RED	0	0	3	0	1	14	0	0	941	8	0	10	
WHITE	1	0	19	2	0	160	3	0	4	2967	4	1	
BLACK	8	0	10	28	0	89	10	2	6	14	1689	0	
ORANGE	0	0	0	1	1	0	0	0	12	1	0	55	

Table 440: MMRBOX_VCMMGVCT_FAST_2024Q2 (20240519) module - Color confusion matrix of set 97.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	1	0	1464	1	1	114	21	0	2	30	29	0	
BROWN	0	0	0	396	7	22	0	0	0	3	9	7	
YELLOW	0	0	0	10	103	29	4	0	1	5	0	0	
GRAY	2	0	36	60	15	3308	22	0	5	62	42	0	
GREEN	0	0	2	6	2	20	266	0	0	3	1	0	
PURPLE	0	0	3	0	0	0	9	0	0	0	0	0	
RED	1	0	2	0	0	14	0	0	942	7	1	10	
WHITE	4	0	12	0	4	143	2	0	4	2988	4	0	
BLACK	10	0	7	38	0	97	8	2	7	6	1681	0	
ORANGE	0	0	0	0	0	0	0	0	14	2	0	54	

Table 441: MMRBOX_VCMMGVCT_FAST_2024Q4 (20241122) module - Color confusion matrix of set 97.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	1508	1	0	79	18	0	4	30	23	0	
BROWN	0	0	0	401	4	14	0	0	1	12	5	7	
YELLOW	0	0	5	15	98	20	2	0	3	4	5	0	
GRAY	0	0	37	52	16	3350	9	0	10	47	28	3	
GREEN	0	0	3	7	1	13	269	0	0	3	4	0	
PURPLE	0	0	0	0	0	0	9	3	0	0	0	0	
RED	0	0	5	0	0	13	2	0	938	11	0	8	
WHITE	2	0	19	2	2	133	0	0	6	2993	4	0	
BLACK	8	0	16	37	0	71	9	3	1	12	1699	0	
ORANGE	0	0	0	1	0	2	0	0	4	1	0	62	

Table 442: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 97.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	1442	1	0	111	16	0	9	34	50	0	
BROWN	0	0	0	394	6	27	0	0	0	4	7	6	
YELLOW	0	0	4	14	101	23	0	0	0	5	5	0	
GRAY	0	0	17	41	17	3384	6	0	9	43	34	1	
GREEN	0	0	1	6	0	23	261	0	0	3	6	0	
PURPLE	0	0	0	0	0	0	9	3	0	0	0	0	
RED	0	0	1	2	0	14	1	0	924	19	0	16	
WHITE	1	0	13	0	3	178	3	0	18	2938	7	0	
BLACK	8	0	9	26	0	63	6	0	0	10	1734	0	
ORANGE	0	0	0	3	0	0	0	0	1	3	0	63	

Table 443: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 97.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	1512	1	0	89	11	0	2	22	26	0	
BROWN	0	0	0	403	7	16	0	0	1	7	3	7	
YELLOW	0	0	1	13	105	25	1	0	0	2	5	0	
GRAY	0	0	27	49	13	3349	13	0	11	58	32	0	
GREEN	0	0	4	7	0	17	266	0	0	2	4	0	
PURPLE	0	0	0	0	0	0	9	3	0	0	0	0	
RED	0	0	1	0	0	13	0	0	943	6	0	14	
WHITE	1	0	9	1	1	121	2	0	42	2978	4	2	
BLACK	8	0	4	32	0	63	7	2	3	12	1725	0	
ORANGE	0	0	0	0	0	0	0	0	4	0	0	66	

Table 444: MMRBOX_VCMMGVCT_PREC_2024Q2 (20240520) module - Color confusion matrix of set 97.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	2	0	1511	1	0	99	15	0	2	19	14	0	
BROWN	0	0	0	406	6	21	1	0	1	3	0	6	
YELLOW	0	0	1	12	109	22	1	0	0	1	6	0	
GRAY	2	0	18	47	13	3384	17	0	7	43	19	2	
GREEN	0	0	3	6	2	25	264	0	0	0	0	0	
PURPLE	0	0	0	0	0	0	9	3	0	0	0	0	
RED	0	0	1	0	1	15	1	0	944	6	0	9	
WHITE	4	0	10	0	2	143	1	0	23	2974	4	0	
BLACK	8	0	8	40	0	84	8	3	1	12	1692	0	
ORANGE	0	0	0	0	0	0	0	0	9	0	0	61	

Table 445: MMRBOX_VCMMGVCT_PREC_2024Q4 (20241123) module - Color confusion matrix of set 97.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE		0	0	0	0	0	0	0	0	0	0	0	0
BROWN		0	0	0	0	0	0	0	0	0	0	0	0
YELLOW		0	0	0	0	0	0	0	0	0	0	0	0
GRAY		0	0	0	0	0	0	0	0	0	0	0	0
GREEN		0	0	0	0	0	0	0	0	0	0	0	0
PURPLE		0	0	0	0	0	0	0	0	0	0	0	0
RED		0	0	0	0	0	0	0	0	0	0	0	0
WHITE		0	0	0	0	0	0	0	0	0	0	0	0
BLACK		0	0	0	0	0	0	0	0	0	0	0	0
ORANGE		0	0	0	0	0	0	0	0	0	0	0	0

Table 452: MMRBOX_VCMMGVCT_FAST_2024Q2 (20240519) module - Color confusion matrix of set 98.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE		0	0	0	0	0	0	0	0	0	0	0	0
BROWN		0	0	0	0	0	0	0	0	0	0	0	0
YELLOW		0	0	0	0	0	0	0	0	0	0	0	0
GRAY		0	0	0	0	0	0	0	0	0	0	0	0
GREEN		0	0	0	0	0	0	0	0	0	0	0	0
PURPLE		0	0	0	0	0	0	0	0	0	0	0	0
RED		0	0	0	0	0	0	0	0	0	0	0	0
WHITE		0	0	0	0	0	0	0	0	0	0	0	0
BLACK		0	0	0	0	0	0	0	0	0	0	0	0
ORANGE		0	0	0	0	0	0	0	0	0	0	0	0

Table 453: MMRBOX_VCMMGVCT_FAST_2024Q4 (20241122) module - Color confusion matrix of set 98.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE		0	0	0	0	0	0	0	0	0	0	0	0
BROWN		0	0	0	0	0	0	0	0	0	0	0	0
YELLOW		0	0	0	0	0	0	0	0	0	0	0	0
GRAY		0	0	0	0	0	0	0	0	0	0	0	0
GREEN		0	0	0	0	0	0	0	0	0	0	0	0
PURPLE		0	0	0	0	0	0	0	0	0	0	0	0
RED		0	0	0	0	0	0	0	0	0	0	0	0
WHITE		0	0	0	0	0	0	0	0	0	0	0	0
BLACK		0	0	0	0	0	0	0	0	0	0	0	0
ORANGE		0	0	0	0	0	0	0	0	0	0	0	0

Table 454: MMRBOX_VCMMGVCT_PREC_2024Q2 (20240520) module - Color confusion matrix of set 98.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE		0	0	0	0	0	0	0	0	0	0	0	0
BROWN		0	0	0	0	0	0	0	0	0	0	0	0
YELLOW		0	0	0	0	0	0	0	0	0	0	0	0
GRAY		0	0	0	0	0	0	0	0	0	0	0	0
GREEN		0	0	0	0	0	0	0	0	0	0	0	0
PURPLE		0	0	0	0	0	0	0	0	0	0	0	0
RED		0	0	0	0	0	0	0	0	0	0	0	0
WHITE		0	0	0	0	0	0	0	0	0	0	0	0
BLACK		0	0	0	0	0	0	0	0	0	0	0	0
ORANGE		0	0	0	0	0	0	0	0	0	0	0	0

Table 455: MMRBOX_VCMMGVCT_PREC_2024Q4 (20241123) module - Color confusion matrix of set 98.



A.50 Set 99 - United States 2023

Country: United States
Illumination: day

View: any view
Color: color and gray

Year: 2023

Class	View	View8	Category	Make	Model	Generation	Variation	Color
Total vehicles	1895	1895	1895	1895	1895	1895	1895	950
Annotation failed	0	0	0	19	20	20	20	0
Annotation unfinished	0	0	0	0	0	0	0	0
Evaluated vehicles	1895 100%	1895 100%	1895 100%	1876 99.0%	1875 98.9%	1875 98.9%	1875 98.9%	950 100%

Table 456: Evaluated vehicles of set 99.

Module Name	Dtype	View		View8		Category		Make		Model		Generation		Variation			Color	
		Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Singled	Empty	Correct	Empty
MMR_VCMMGVCT_FAST_2024Q2 (20240517)	F32	99.9%	0	X	X	99.5%	0	97.8%	1	97.4%	36	97.0%	68	95.6%	1554	27	81.1%	0
MMR_VCMMGVCT_FAST_2024Q4 (20241121)	F32	99.9%	0	X	X	99.6%	0	98.1%	1	97.8%	35	98.1%	65	95.7%	1557	17	84.5%	0
MMRBOX_VCMMGVCT_FAST_2024Q2 (20240519)	F32	99.9%	0	X	X	99.3%	0	93.4%	1	94.0%	105	93.8%	175	90.0%	1545	39	84.2%	0
MMRBOX_VCMMGVCT_FAST_2024Q4 (20241122)	F32	100%	0	99.9%	1	99.3%	0	94.5%	2	94.6%	72	94.2%	119	89.2%	1544	43	86.2%	0
MMR_VCMMGVCT_PREC_2024Q2 (20240518)	F32	100%	0	X	X	99.7%	0	99.3%	0	99.0%	18	98.7%	33	98.4%	1558	8	87.7%	0
MMR_VCMMGVCT_PREC_2024Q4 (20241120)	F32	100%	0	X	X	99.8%	0	99.2%	0	99.0%	15	99.1%	30	97.7%	1557	10	88.8%	0
MMRBOX_VCMMGVCT_PREC_2024Q2 (20240520)	F32	100%	0	X	X	99.6%	0	98.3%	1	98.5%	29	98.4%	55	96.7%	1558	10	89.8%	0
MMRBOX_VCMMGVCT_PREC_2024Q4 (20241123)	F32	99.9%	0	99.8%	1	99.6%	0	98.8%	0	98.6%	23	98.4%	40	97.4%	1558	12	90.1%	0

Table 457: Classification results of set 99.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	1851	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	5	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1	23

Table 458: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Category confusion matrix of set 99.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	1851	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	5	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	24

Table 459: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Category confusion matrix of set 99.

Label	Class	Class										
		DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK
BLUE	0	0	40	0	0	10	1	0	0	3	5	0
BROWN	0	0	0	1	0	7	0	0	2	0	5	0
YELLOW	0	0	0	0	1	0	0	0	0	0	0	0
GRAY	0	0	4	2	0	231	0	0	0	13	26	0
GREEN	0	0	0	0	0	0	0	0	0	1	3	0
PURPLE	0	0	0	0	0	0	0	0	0	0	2	0
RED	0	0	0	1	0	8	0	0	102	1	13	0
WHITE	0	0	0	0	0	31	0	0	0	201	0	0
BLACK	0	0	28	0	0	12	0	0	0	1	189	0
ORANGE	0	0	0	0	1	0	0	0	0	0	0	5

Table 466: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 99.

Label	Class	Class										
		DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK
BLUE	0	0	49	0	0	3	0	0	0	2	5	0
BROWN	0	0	0	0	0	8	0	0	2	0	5	0
YELLOW	0	0	0	0	1	0	0	0	0	0	0	0
GRAY	0	0	8	2	1	234	0	0	0	7	24	0
GREEN	0	0	1	0	0	0	0	0	0	0	3	0
PURPLE	0	0	0	0	0	0	0	0	0	0	2	0
RED	0	0	0	0	0	0	0	0	118	1	6	0
WHITE	0	0	0	0	0	36	0	0	0	193	3	0
BLACK	0	0	23	0	0	4	0	0	0	0	203	0
ORANGE	0	0	0	0	1	0	0	0	0	0	0	5

Table 467: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 99.

Label	Class	Class										
		DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK
BLUE	0	0	37	0	0	9	1	0	0	3	9	0
BROWN	0	0	0	1	0	8	0	0	1	0	5	0
YELLOW	0	0	0	0	0	1	0	0	0	0	0	0
GRAY	0	0	3	1	0	239	1	0	0	8	24	0
GREEN	0	0	1	0	0	0	1	0	0	0	2	0
PURPLE	0	0	0	0	0	0	0	0	0	0	2	0
RED	0	0	0	0	0	15	0	0	103	0	6	1
WHITE	0	0	0	0	0	25	0	0	0	207	0	0
BLACK	0	0	5	0	0	15	0	0	0	0	210	0
ORANGE	0	0	0	0	0	0	0	4	0	0	0	2

Table 468: MMRBOX_VCMMGVCT_FAST_2024Q2 (20240519) module - Color confusion matrix of set 99.

Label	Class	Class										
		DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK
BLUE	0	0	43	0	0	5	0	0	0	3	8	0
BROWN	0	0	0	1	0	7	0	0	2	0	5	0
YELLOW	0	0	0	0	0	1	0	0	0	0	0	0
GRAY	0	0	0	0	0	252	0	0	0	3	21	0
GREEN	0	0	0	0	0	1	1	0	0	0	2	0
PURPLE	0	0	0	0	0	0	0	0	0	0	2	0
RED	0	0	0	0	0	1	0	0	122	0	2	0
WHITE	0	0	0	0	0	44	0	0	0	188	0	0
BLACK	0	0	6	0	0	14	0	0	1	0	209	0
ORANGE	0	0	0	0	1	0	0	0	2	0	0	3

Table 469: MMRBOX_VCMMGVCT_FAST_2024Q4 (20241122) module - Color confusion matrix of set 99.

Label	Class	Class										
		DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK
BLUE	0	0	54	0	0	1	0	0	0	3	1	0
BROWN	0	0	0	2	0	8	0	0	1	1	2	1
YELLOW	0	0	0	0	1	0	0	0	0	0	0	0
GRAY	0	0	1	1	1	239	2	0	0	7	25	0
GREEN	0	0	1	0	0	0	2	0	0	0	1	0
PURPLE	0	0	0	0	0	0	0	1	0	1	0	0
RED	0	0	1	0	0	1	0	0	118	0	3	2
WHITE	0	0	0	0	0	19	1	0	0	211	1	0
BLACK	0	0	22	0	0	7	0	0	0	1	200	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	6

Table 470: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 99.

Label	Class	Class										
		DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK
BLUE	0	0	51	0	0	2	1	0	0	2	3	0
BROWN	0	0	0	2	0	8	1	0	1	1	2	0
YELLOW	0	0	0	0	1	0	0	0	0	0	0	0
GRAY	0	0	0	1	0	254	1	0	0	2	18	0
GREEN	0	0	0	0	0	0	1	0	0	0	3	0
PURPLE	0	0	0	0	0	0	0	0	0	0	2	0
RED	0	0	0	0	0	2	0	0	117	2	4	0
WHITE	0	0	0	0	0	22	0	0	0	210	0	0
BLACK	0	0	13	0	0	11	0	0	0	0	206	0
ORANGE	0	0	0	0	1	0	0	0	3	0	0	2

Table 471: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 99.

Label	Class	Class										
		DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK
BLUE	0	0	49	0	0	4	0	0	1	2	3	0
BROWN	0	0	0	2	0	7	0	0	0	0	6	0
YELLOW	0	0	0	0	1	0	0	0	0	0	0	0
GRAY	0	0	1	4	0	243	1	0	1	2	24	0
GREEN	0	0	0	0	0	0	1	0	0	0	3	0
PURPLE	0	0	0	0	0	0	0	0	0	0	2	0
RED	0	0	0	0	0	1	0	0	124	0	0	0
WHITE	0	0	0	0	0	17	0	0	0	215	0	0
BLACK	0	0	7	0	0	10	0	0	0	0	213	0
ORANGE	0	0	0	0	0	0	0	0	1	0	0	5

Table 472: MMRBOX_VCMMGVCT_PREC_2024Q2 (20240520) module - Color confusion matrix of set 99.

Label	Class	Class										
		DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK
BLUE	0	0	54	0	0	3	0	0	0	2	0	0
BROWN	0	0	0	2	0	8	0	0	1	0	4	0
YELLOW	0	0	0	0	1	0	0	0	0	0	0	0
GRAY	0	0	3	0	0	266	0	0	0	0	7	0
GREEN	0	0	1	0	0	1	0	0	0	0	2	0
PURPLE	0	0	0	0	0	0	0	0	0	0	2	0
RED	0	0	0	0	0	1	0	0	123	0	1	0
WHITE	0	0	0	0	0	25	0	0	0	207	0	0
BLACK	0	0	14	0	0	18	0	0	0	0	198	0
ORANGE	0	0	0	0	0	0	0	0	1	0	0	5

Table 473: MMRBOX_VCMMGVCT_PREC_2024Q4 (20241123) module - Color confusion matrix of set 99.



Label	Class	Class										
		DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK
BLUE	0	0	62	0	0	22	0	0	0	0	21	0
BROWN	0	0	8	0	17	0	1	0	0	12	0	0
YELLOW	0	0	1	12	11	0	0	0	1	0	0	0
GRAY	0	0	2	7	0	558	0	0	39	39	0	0
GREEN	0	0	0	0	9	6	0	0	1	2	0	0
PURPLE	0	0	1	0	3	0	0	0	0	2	0	0
RED	0	0	1	0	0	0	88	2	8	1	0	0
WHITE	0	0	0	0	51	0	0	0	907	2	0	0
BLACK	0	0	9	6	0	25	0	0	0	290	0	0
ORANGE	0	0	0	0	0	0	0	2	0	0	1	0

Table 486: MMRBOX_VCMMGVCT_FAST_2024Q2 (20240519) module - Color confusion matrix of set 100.

Label	Class	Class										
		DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK
BLUE	0	0	72	0	0	18	0	0	0	2	13	0
BROWN	0	0	5	0	19	0	0	0	0	14	0	0
YELLOW	0	0	2	14	7	0	0	0	2	0	0	0
GRAY	0	0	10	0	0	554	0	0	55	26	0	0
GREEN	0	0	1	0	0	6	8	0	1	2	0	0
PURPLE	0	0	1	0	0	2	0	0	0	3	0	0
RED	0	0	1	0	2	0	0	89	2	5	1	0
WHITE	0	0	0	0	40	0	0	0	919	1	0	0
BLACK	0	0	18	1	0	28	0	0	1	282	0	0
ORANGE	0	0	0	0	0	0	0	1	0	0	2	0

Table 487: MMRBOX_VCMMGVCT_FAST_2024Q4 (20241122) module - Color confusion matrix of set 100.

Label	Class	Class										
		DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK
BLUE	0	0	76	0	0	15	0	0	0	1	13	0
BROWN	0	0	10	0	17	0	1	0	1	9	0	0
YELLOW	0	0	3	10	11	0	0	0	1	0	0	0
GRAY	0	0	6	6	0	572	2	0	35	24	0	0
GREEN	0	0	3	0	4	9	0	0	0	1	0	0
PURPLE	0	0	2	0	3	0	0	0	0	1	0	0
RED	0	0	1	1	0	0	93	1	4	0	0	0
WHITE	0	0	0	0	22	0	0	0	938	0	0	0
BLACK	0	0	13	3	0	16	0	0	0	298	0	0
ORANGE	0	0	0	0	0	0	0	2	0	0	1	0

Table 488: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 100.

Label	Class	Class										
		DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK
BLUE	0	0	69	0	0	19	0	0	0	17	0	0
BROWN	0	0	11	0	17	0	0	0	0	10	0	0
YELLOW	0	0	2	10	12	0	0	0	1	0	0	0
GRAY	0	0	1	4	0	584	0	0	30	26	0	0
GREEN	0	0	2	0	0	9	4	0	0	3	0	0
PURPLE	0	0	1	0	0	2	0	0	0	3	0	0
RED	0	0	1	1	0	0	88	2	8	0	0	0
WHITE	0	0	0	0	28	0	0	0	932	0	0	0
BLACK	0	0	6	2	0	19	0	0	1	301	0	0
ORANGE	0	0	0	0	0	0	0	1	0	0	2	0

Table 489: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 100.

Label	Class	Class										
		DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK
BLUE	0	0	72	0	0	16	0	0	0	1	16	0
BROWN	0	0	9	0	18	0	0	0	0	11	0	0
YELLOW	0	0	1	12	11	0	0	0	1	0	0	0
GRAY	0	0	4	3	0	568	0	0	27	43	0	0
GREEN	0	0	2	0	0	5	6	0	0	4	0	0
PURPLE	0	0	2	0	0	1	0	0	0	3	0	0
RED	0	0	0	1	0	0	92	1	5	0	0	0
WHITE	0	0	0	1	0	29	0	0	930	0	0	0
BLACK	0	0	11	1	0	18	0	0	1	299	0	0
ORANGE	0	0	0	0	0	0	0	2	0	0	1	0

Table 490: MMRBOX_VCMMGVCT_PREC_2024Q2 (20240520) module - Color confusion matrix of set 100.

Label	Class	Class										
		DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK
BLUE	0	0	75	0	0	18	0	0	0	12	0	0
BROWN	0	0	9	0	21	0	1	0	0	7	0	0
YELLOW	0	0	2	10	12	1	0	0	0	0	0	0
GRAY	0	0	5	5	0	595	0	0	14	26	0	0
GREEN	0	0	1	0	0	10	5	0	1	1	0	0
PURPLE	0	0	1	0	0	2	0	0	0	3	0	0
RED	0	0	0	1	0	1	0	94	1	2	0	0
WHITE	0	0	0	0	49	0	0	0	911	0	0	0
BLACK	0	0	12	3	0	28	0	0	0	287	0	0
ORANGE	0	0	0	0	0	0	0	1	0	0	2	0

Table 491: MMRBOX_VCMMGVCT_PREC_2024Q4 (20241123) module - Color confusion matrix of set 100.

A.52 Set 101 - Switzerland 2023

Country: Switzerland

View: any view

Year: 2023

Illumination: day and night

Color: gray

Class	View	View8	Category	Make	Model	Generation	Variation	Color
Total vehicles	1387	1387	1387	1387	1387	1387	1387	0
Annotation failed	0	0	0	71	110	122	122	0
Annotation unfinished	0	0	0	0	0	0	0	0
Evaluated vehicles	1387 100 %	1387 100 %	1387 100 %	1316 94.9 %	1277 92.1 %	1265 91.2 %	1265 91.2 %	0 0.0 %

Table 492: Evaluated vehicles of set 101.

Module Name	Dtype	View		View8		Category		Make		Model		Generation		Variation		Color		
		Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Singled	Empty	Correct	Empty	
MMR_VCMMGVCT_FAST_2024Q2 (20240517)	F32	99.8 %	0	X	X	99.2 %	0	99.1 %	16	98.3 %	26	98.0 %	37	96.1 %	845	10	X	X
MMR_VCMMGVCT_FAST_2024Q4 (20241121)	F32	99.9 %	0	X	X	99.2 %	0	99.1 %	14	98.7 %	26	97.9 %	32	94.2 %	845	7	X	X
MMRBOX_VCMMGVCT_FAST_2024Q2 (20240519)	F32	100 %	0	X	X	99.4 %	0	98.6 %	15	97.9 %	28	97.5 %	44	95.3 %	841	21	X	X
MMRBOX_VCMMGVCT_FAST_2024Q4 (20241122)	F32	100 %	0	98.8 %	1	99.8 %	0	99.0 %	14	98.1 %	28	97.9 %	42	96.3 %	847	10	X	X
MMR_VCMMGVCT_PREC_2024Q2 (20240518)	F32	99.9 %	0	X	X	99.4 %	1	99.7 %	15	99.4 %	19	99.2 %	25	97.6 %	847	5	X	X
MMR_VCMMGVCT_PREC_2024Q4 (20241120)	F32	99.9 %	0	X	X	99.4 %	0	99.8 %	15	99.4 %	19	99.0 %	24	97.1 %	849	2	X	X
MMRBOX_VCMMGVCT_PREC_2024Q2 (20240520)	F32	100 %	0	X	X	99.4 %	0	99.8 %	15	99.4 %	19	99.2 %	21	98.3 %	847	5	X	X
MMRBOX_VCMMGVCT_PREC_2024Q4 (20241123)	F32	100 %	0	98.8 %	1	99.8 %	0	99.8 %	13	99.5 %	22	99.4 %	25	98.1 %	849	1	X	X

Table 493: Classification results of set 101.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	1264	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	1	0	0	0	0	12	0	1	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	72	0

Table 494: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Category confusion matrix of set 101.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	0	0	1265	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	2	0	0	0	0	11	0	1	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	72	0

Table 495: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Category confusion matrix of set 101.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	1108	0	3	49	19	0	0	4	27	0
BROWN	0	0	0	282	9	13	0	0	0	3	1	5
YELLOW	0	0	2	13	137	10	0	0	0	2	0	0
GRAY	0	0	17	25	6	2168	15	0	0	26	47	0
GREEN	0	0	0	7	0	8	244	0	0	0	5	0
PURPLE	0	0	0	0	0	3	0	0	3	0	0	0
RED	0	0	0	2	0	0	0	0	781	2	0	3
WHITE	0	0	1	0	2	25	5	0	1	2496	1	1
BLACK	0	0	5	33	0	44	5	2	2	4	1212	0
ORANGE	0	0	0	2	1	0	0	0	0	0	0	60

Table 508: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 102.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	1137	0	3	36	15	0	0	3	16	0
BROWN	0	0	0	287	4	12	0	0	0	3	2	5
YELLOW	0	0	2	18	134	8	0	0	0	2	0	0
GRAY	0	0	12	24	5	2175	27	0	0	21	40	0
GREEN	0	0	0	6	2	8	240	0	0	0	8	0
PURPLE	0	0	0	0	0	4	0	0	2	0	0	0
RED	0	0	0	0	0	0	0	0	775	3	1	9
WHITE	0	0	0	0	2	26	7	0	0	2493	1	3
BLACK	0	0	4	27	0	39	7	3	0	4	1223	0
ORANGE	0	0	0	2	0	0	0	0	2	0	0	59

Table 509: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 102.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	1151	0	3	31	10	0	0	5	10	0
BROWN	0	0	0	282	6	14	0	0	2	3	0	6
YELLOW	0	0	0	16	138	10	0	0	0	0	0	0
GRAY	0	0	12	25	1	2214	13	0	0	17	21	1
GREEN	0	0	3	7	2	8	238	0	0	2	4	0
PURPLE	0	0	0	1	0	0	0	2	3	0	0	0
RED	0	0	0	1	0	0	0	0	779	2	0	6
WHITE	0	0	3	0	2	18	1	0	0	2508	0	0
BLACK	0	0	12	25	0	43	3	2	0	4	1218	0
ORANGE	0	0	0	2	0	1	0	0	0	0	0	60

Table 510: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 102.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	1101	0	3	63	10	0	0	3	30	0
BROWN	0	0	0	277	5	23	0	0	0	3	0	5
YELLOW	0	0	0	12	142	10	0	0	0	0	0	0
GRAY	0	0	10	20	5	2212	8	0	0	15	34	0
GREEN	0	0	0	8	1	9	240	0	0	0	6	0
PURPLE	0	0	0	0	0	4	0	0	2	0	0	0
RED	0	0	0	3	0	0	0	0	777	2	0	6
WHITE	0	0	1	0	2	25	1	0	0	2502	1	0
BLACK	0	0	3	28	0	40	3	1	0	5	1227	0
ORANGE	0	0	0	1	0	0	0	0	0	1	0	61

Table 511: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 102.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	1202	0	15	69	26	0	9	52	45	0	
BROWN	0	0	1	297	12	21	0	0	2	4	0	5	
YELLOW	0	0	8	18	149	15	0	0	3	16	0	0	
GRAY	0	0	49	32	10	2383	19	0	25	209	63	1	
GREEN	0	0	0	8	2	12	260	0	2	9	5	0	
PURPLE	0	0	0	0	0	4	0	0	0	2	0	0	
RED	0	0	0	3	1	4	2	0	857	25	0	5	
WHITE	0	0	6	1	2	35	3	0	8	2842	0	1	
BLACK	0	0	18	45	0	54	6	1	0	5	1274	0	
ORANGE	0	0	0	1	4	1	0	0	2	0	0	60	

Table 518: MMRBOX_VCMMGVCT_FAST_2024Q2 (20240519) module - Color confusion matrix of set 103.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	1194	1	20	73	20	0	10	54	46	0	
BROWN	0	0	2	293	10	20	0	0	2	5	3	7	
YELLOW	0	0	6	14	153	16	2	0	3	15	0	0	
GRAY	0	0	45	30	12	2372	23	0	30	223	53	3	
GREEN	0	0	2	7	2	10	264	0	2	10	1	0	
PURPLE	0	0	0	0	0	4	0	1	1	0	0	0	
RED	0	0	0	4	2	1	2	0	861	22	0	5	
WHITE	0	0	3	0	3	19	6	0	8	2852	3	4	
BLACK	0	0	18	37	0	50	4	1	3	2	1288	0	
ORANGE	0	0	0	3	0	0	0	0	4	0	0	61	

Table 519: MMRBOX_VCMMGVCT_FAST_2024Q4 (20241122) module - Color confusion matrix of set 103.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	1217	1	21	55	18	0	8	55	43	0	
BROWN	0	0	0	302	7	16	0	0	3	4	3	7	
YELLOW	0	0	6	17	149	17	0	0	4	16	0	0	
GRAY	0	0	37	32	9	2430	20	0	30	182	50	1	
GREEN	0	0	1	7	1	10	260	0	2	8	9	0	
PURPLE	0	0	0	0	0	2	0	2	2	0	0	0	
RED	0	0	0	0	1	3	3	0	859	26	0	5	
WHITE	0	0	7	0	5	23	4	0	5	2849	4	1	
BLACK	0	0	12	37	0	36	3	4	0	5	1306	0	
ORANGE	0	0	0	0	0	0	0	0	3	1	0	64	

Table 520: MMRBOX_VCMMGVCT_PREC_2024Q2 (20240520) module - Color confusion matrix of set 103.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	1237	0	16	65	13	0	11	47	29	0	
BROWN	0	0	0	296	6	26	0	0	2	4	1	7	
YELLOW	0	0	6	17	149	20	0	0	3	14	0	0	
GRAY	0	0	42	29	7	2486	17	0	33	159	14	4	
GREEN	0	0	0	7	0	19	260	0	2	8	2	0	
PURPLE	0	0	0	0	0	3	0	0	3	0	0	0	
RED	0	0	0	1	1	2	1	0	863	21	0	8	
WHITE	0	0	2	0	2	38	0	0	7	2847	1	1	
BLACK	0	0	17	48	0	68	4	3	3	3	1257	0	
ORANGE	0	0	0	0	0	1	0	0	2	0	0	65	

Table 521: MMRBOX_VCMMGVCT_PREC_2024Q4 (20241123) module - Color confusion matrix of set 103.

A.60 Set 109 - United States 2024

Country: United States
Illumination: day

View: any view
Color: color and gray

Year: 2024

Class	View	View8	Category	Make	Model	Generation	Variation	Color
Total vehicles	8675	8675	8675	8675	8675	8675	8675	8675
Annotation failed	0	0	0	8	8	10	13	0
Annotation unfinished	0	0	0	0	0	0	0	0
Evaluated vehicles	8675 100 %	8675 100 %	8675 100 %	8667 99.9 %	8667 99.9 %	8665 99.9 %	8662 99.9 %	8675 100 %

Table 556: Evaluated vehicles of set 109.

Module Name	Dtype	View		View8		Category		Make		Model		Generation		Variation		Color		
		Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Correct	Empty	Singled	Empty	Correct	Empty	
MMR_VCMMGVCT_FAST_2024Q2 (20240517)	F32	100 %	0	X	X	99.6 %	0	99.3 %	3	98.9 %	76	97.9 %	131	97.4 %	6997	22	78.1 %	0
MMR_VCMMGVCT_FAST_2024Q4 (20241121)	F32	100 %	0	X	X	99.7 %	0	99.5 %	1	99.3 %	59	99.1 %	100	98.7 %	7004	13	84.4 %	0
MMRBOX_VCMMGVCT_FAST_2024Q2 (20240519)	F32	100 %	0	X	X	99.7 %	0	98.2 %	2	97.8 %	134	96.8 %	244	95.9 %	6984	45	80.0 %	0
MMRBOX_VCMMGVCT_FAST_2024Q4 (20241122)	F32	100 %	0	80.7 %	1	99.8 %	0	98.3 %	2	98.6 %	128	98.2 %	214	98.0 %	6999	52	84.5 %	0
MMR_VCMMGVCT_PREC_2024Q2 (20240518)	F32	100 %	0	X	X	99.9 %	0	99.7 %	1	99.4 %	50	98.6 %	100	98.2 %	7006	5	85.0 %	0
MMR_VCMMGVCT_PREC_2024Q4 (20241120)	F32	100 %	0	X	X	99.9 %	0	99.8 %	1	99.7 %	38	99.3 %	52	99.5 %	7008	7	87.7 %	0
MMRBOX_VCMMGVCT_PREC_2024Q2 (20240520)	F32	100 %	0	X	X	99.7 %	0	99.2 %	3	99.1 %	91	98.3 %	148	98.2 %	7001	21	83.6 %	0
MMRBOX_VCMMGVCT_PREC_2024Q4 (20241123)	F32	100 %	0	82.9 %	1	99.8 %	0	99.3 %	2	99.5 %	72	99.1 %	112	98.7 %	7005	15	87.7 %	0

Table 557: Classification results of set 109.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	7	0	0	7	0	2	0	0	0	0	0	0	0	0	0	1
CAR	0	0	0	8383	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	1	0	38	0	0	0	0	0	0	0	0	0	0	0	0	2
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	7	0	0	76	0	0	0	0	0	0	0	0	0	1	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	1	4	0	1	0	4	0	0	0	0	0	0	0	0	0	136

Table 558: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Category confusion matrix of set 109.

Label	Class	DEPRECATED	EMPTY	ANIMAL	BUS	CAR	CYCLE	HVT	KICKBIKE	LGT	LUGGAGE	MTB	PEDESTRIAN	SPECIAL	TO12	TO34	TROLLEY	TRUCK	VAN
ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUS	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
CAR	0	0	0	8383	0	0	2	0	0	0	0	0	0	0	0	0	1	1	0
CYCLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVT	0	0	0	1	0	39	0	1	0	0	0	0	0	0	0	0	0	0	0
KICKBIKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LGT	0	0	0	8	0	1	0	74	0	0	0	0	0	0	0	0	1	0	0
LUGGAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MTB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEDESTRIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPECIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROLLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAN	0	0	0	2	2	0	1	0	1	0	0	0	0	0	0	0	0	0	140

Table 559: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Category confusion matrix of set 109.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	190	0	0	133	2	0	1	7	191	0
BROWN	0	0	0	22	0	49	0	0	3	0	74	1
YELLOW	0	0	0	2	27	35	2	0	0	8	2	5
GRAY	0	0	2	39	4	1981	12	0	11	141	504	0
GREEN	0	0	0	3	0	13	1	0	0	0	18	0
PURPLE	0	0	1	0	0	15	0	0	0	0	15	0
RED	0	0	0	16	0	125	0	0	813	30	111	9
WHITE	0	0	0	1	3	186	1	0	0	1987	12	0
BLACK	0	0	9	3	1	83	2	0	7	2	1744	0
ORANGE	0	0	0	1	1	3	0	0	1	2	0	8

Table 566: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 109.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	273	0	0	121	0	0	0	8	122	0
BROWN	0	0	0	22	0	58	0	0	9	0	59	1
YELLOW	0	0	0	3	25	42	0	0	0	10	0	1
GRAY	0	0	14	11	2	2266	3	1	9	63	325	0
GREEN	0	0	2	2	0	11	0	0	0	0	20	0
PURPLE	0	0	4	0	0	13	0	0	0	2	12	0
RED	0	0	0	6	0	64	0	0	976	7	47	4
WHITE	0	0	1	3	2	176	0	0	3	1998	6	1
BLACK	0	0	17	6	0	73	0	0	3	0	1752	0
ORANGE	0	0	0	0	0	0	0	0	5	0	0	11

Table 567: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 109.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	200	0	0	140	2	0	1	5	176	0
BROWN	0	0	0	31	0	74	0	0	2	2	40	0
YELLOW	0	0	0	6	23	36	0	0	1	12	0	3
GRAY	0	0	7	57	1	2186	4	0	3	144	292	0
GREEN	0	0	1	0	0	16	0	0	0	0	18	0
PURPLE	0	0	3	0	0	17	0	0	0	1	10	0
RED	0	0	1	9	0	222	0	0	807	25	38	2
WHITE	0	0	1	0	2	149	0	0	0	2029	9	0
BLACK	0	0	9	13	0	157	0	0	7	8	1657	0
ORANGE	0	0	0	3	1	2	0	0	1	0	0	9

Table 568: MMRBOX_VCMMGVCT_FAST_2024Q2 (20240519) module - Color confusion matrix of set 109.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	269	0	0	125	1	0	2	6	121	0
BROWN	0	0	0	25	0	62	0	0	8	1	52	1
YELLOW	0	0	0	3	35	37	0	0	0	6	0	0
GRAY	0	0	6	37	4	2237	2	0	12	124	272	0
GREEN	0	0	0	1	0	18	1	0	0	0	15	0
PURPLE	0	0	0	0	0	17	0	0	0	2	12	0
RED	0	0	0	9	0	40	0	0	1011	18	21	5
WHITE	0	0	0	0	0	122	0	0	1	2066	1	0
BLACK	0	0	10	6	0	136	0	0	13	2	1684	0
ORANGE	0	0	0	4	1	0	0	0	4	1	0	6

Table 569: MMRBOX_VCMMGVCT_FAST_2024Q4 (20241122) module - Color confusion matrix of set 109.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	308	0	0	89	1	2	1	5	117	1
BROWN	0	0	0	42	0	46	0	0	12	1	46	2
YELLOW	0	0	0	13	11	37	0	0	0	12	1	7
GRAY	0	0	11	63	4	2230	9	2	12	86	277	0
GREEN	0	0	2	1	0	13	3	0	0	0	16	0
PURPLE	0	0	2	0	0	16	0	1	3	1	8	0
RED	0	0	0	8	2	33	0	2	1008	30	20	1
WHITE	0	0	2	1	0	166	0	0	1	2015	5	0
BLACK	0	0	11	9	0	76	1	0	7	2	1745	0
ORANGE	0	0	0	0	0	0	0	0	1	0	0	15

Table 570: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 109.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	331	0	0	84	0	0	0	4	105	0
BROWN	0	0	0	40	0	55	0	0	2	0	52	0
YELLOW	0	0	0	2	16	48	0	0	0	10	0	5
GRAY	0	0	6	19	1	2386	6	0	1	45	230	0
GREEN	0	0	1	0	0	16	4	0	0	0	14	0
PURPLE	0	0	3	0	0	17	0	1	0	1	9	0
RED	0	0	0	4	0	45	0	1	1024	6	22	2
WHITE	0	0	0	0	0	151	1	0	0	2036	2	0
BLACK	0	0	13	1	0	82	0	0	0	1	1754	0
ORANGE	0	0	0	0	0	0	0	0	3	1	0	12

Table 571: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 109.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	278	0	0	102	0	4	6	6	128	0
BROWN	0	0	0	27	0	45	0	1	18	0	56	2
YELLOW	0	0	0	6	10	44	0	0	0	9	0	12
GRAY	0	0	11	45	2	2177	1	3	47	81	326	1
GREEN	0	0	1	0	0	13	2	0	0	0	19	0
PURPLE	0	0	1	0	0	13	0	0	8	2	7	0
RED	0	0	0	1	0	49	0	1	1019	6	26	2
WHITE	0	0	0	1	1	187	0	0	0	1995	6	0
BLACK	0	0	14	9	1	69	0	1	11	6	1739	1
ORANGE	0	0	0	0	0	0	0	0	7	0	0	9

Table 572: MMRBOX_VCMMGVCT_PREC_2024Q2 (20240520) module - Color confusion matrix of set 109.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	351	0	0	94	0	1	1	5	72	0
BROWN	0	0	0	33	0	71	0	0	10	0	35	0
YELLOW	0	0	0	4	18	48	0	0	1	9	0	1
GRAY	0	0	15	23	1	2452	1	0	5	29	168	0
GREEN	0	0	3	1	0	14	1	0	0	0	16	0
PURPLE	0	0	2	0	0	18	0	0	4	2	5	0
RED	0	0	0	0	0	36	0	0	1049	6	11	2
WHITE	0	0	2	2	0	186	0	0	0	1999	1	0
BLACK	0	0	21	11	0	124	0	0	1	1	1693	0
ORANGE	0	0	0	1	0	0	0	0	3	0	0	12

Table 573: MMRBOX_VCMMGVCT_PREC_2024Q4 (20241123) module - Color confusion matrix of set 109.



Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	23	0	0	4	1	0	0	1	11	0
BROWN	0	0	0	1	0	3	0	0	0	0	10	0
YELLOW	0	0	1	2	7	4	0	0	0	2	1	0
GRAY	0	0	1	0	0	105	1	0	0	26	28	0
GREEN	0	0	0	0	0	1	3	0	0	0	3	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	8	0	0	0	0	45	1	2	11
WHITE	0	0	0	0	0	0	0	0	0	248	1	0
BLACK	0	0	0	0	0	0	0	0	0	0	90	0
ORANGE	0	0	0	3	1	0	0	0	1	1	0	8

Table 590: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 113.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	18	0	0	7	1	0	0	1	13	0
BROWN	0	0	0	1	1	3	0	0	1	0	8	0
YELLOW	0	0	0	2	10	4	1	0	0	0	0	0
GRAY	0	0	4	0	0	115	1	0	0	22	19	0
GREEN	0	0	0	0	0	1	1	0	0	3	2	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	1	2	0	0	0	42	0	1	21
WHITE	0	0	0	0	0	0	0	0	0	249	0	0
BLACK	0	0	0	0	0	0	0	0	0	0	90	0
ORANGE	0	0	0	1	0	0	0	0	3	2	0	8

Table 591: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 113.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	23	0	0	5	0	0	0	1	11	0
BROWN	0	0	0	5	1	2	0	0	0	0	6	0
YELLOW	0	0	0	3	10	3	0	0	0	0	1	0
GRAY	0	0	5	0	0	125	0	0	0	15	16	0
GREEN	0	0	0	0	0	1	3	0	0	1	2	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	6	0	0	0	0	24	1	2	34
WHITE	0	0	0	0	0	0	0	0	0	249	0	0
BLACK	0	0	0	0	0	1	0	0	0	0	89	0
ORANGE	0	0	0	2	2	0	0	0	1	1	0	8

Table 592: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 113.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	24	0	0	2	0	0	0	1	13	0
BROWN	0	0	0	3	1	3	0	0	0	0	7	0
YELLOW	0	0	0	1	11	4	0	1	0	0	0	0
GRAY	0	0	3	0	0	128	1	0	0	11	18	0
GREEN	0	0	0	1	0	1	2	0	0	1	2	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	7	1	0	0	0	15	0	1	43
WHITE	0	0	0	0	0	0	0	0	0	249	0	0
BLACK	0	0	0	0	0	0	0	0	0	0	90	0
ORANGE	0	0	0	4	2	0	0	0	0	1	0	7

Table 593: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 113.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	17	0	0	1	0	0	0	1	2	0
BROWN	0	0	0	0	1	0	0	0	0	0	0	0
YELLOW	0	0	0	2	1	0	0	0	0	0	0	0
GRAY	0	0	1	0	47	0	0	1	8	6	0	0
GREEN	0	0	0	1	0	0	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	16	1	0	5	0
WHITE	0	0	0	0	0	0	0	0	67	0	0	0
BLACK	0	0	0	0	0	0	0	5	0	18	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0

Table 600: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 116.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	15	0	1	2	0	0	0	1	2	0
BROWN	0	0	0	0	1	0	0	0	0	0	0	0
YELLOW	0	0	0	1	2	0	0	0	0	0	0	0
GRAY	0	0	0	0	50	0	0	1	5	7	0	0
GREEN	0	0	0	1	0	0	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	16	1	0	5	0
WHITE	0	0	0	0	1	0	0	0	66	0	0	0
BLACK	0	0	2	0	1	0	0	0	0	20	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0

Table 601: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 116.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	18	0	0	0	0	0	1	2	0	0
BROWN	0	0	0	0	1	0	0	0	0	0	0	0
YELLOW	0	0	0	1	2	0	0	0	0	0	0	0
GRAY	0	0	3	1	50	0	0	0	6	3	0	0
GREEN	0	0	0	0	0	1	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	8	1	0	13	0
WHITE	0	0	0	0	0	0	0	0	67	0	0	0
BLACK	0	0	2	0	0	0	2	0	0	19	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0

Table 602: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 116.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	17	0	0	0	0	0	1	3	0	0
BROWN	0	0	0	0	1	0	0	0	0	0	0	0
YELLOW	0	0	0	1	2	0	0	0	0	0	0	0
GRAY	0	0	1	0	54	0	0	0	6	2	0	0
GREEN	0	0	0	0	0	1	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	1	0	0	0	0	9	1	0	11	0
WHITE	0	0	0	0	1	0	0	0	66	0	0	0
BLACK	0	0	2	0	0	0	0	0	1	20	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0

Table 603: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 116.

Label	Class	DEPRECATED												
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE		
BLUE	0	0	4	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	1	0	0	0	0	1	0	0	0	0	0
YELLOW	0	0	0	0	1	0	0	0	0	0	0	0	0	0
GRAY	0	0	1	1	1	45	0	0	0	7	1	1	1	1
GREEN	0	0	0	0	0	0	0	0	0	1	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	15	0	0	0	0	0
WHITE	0	0	0	2	0	26	0	0	0	132	1	0	0	0
BLACK	0	0	1	0	0	5	0	0	0	0	45	0	0	0
ORANGE	0	0	0	0	1	0	0	0	0	1	0	0	1	1

Table 610: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 118.

Label	Class	DEPRECATED												
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE		
BLUE	0	0	4	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	1	0	0	0	0	1	0	0	0	0	0
YELLOW	0	0	0	0	1	0	0	0	0	0	0	0	0	0
GRAY	0	0	0	1	2	48	1	0	0	2	2	1	1	1
GREEN	0	0	0	0	0	0	0	0	0	1	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	14	0	0	0	1	1
WHITE	0	0	0	0	0	29	0	0	0	132	0	0	0	0
BLACK	0	0	0	0	0	3	1	0	0	0	47	0	0	0
ORANGE	0	0	0	0	1	0	0	0	0	1	0	0	1	1

Table 611: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 118.

Label	Class	DEPRECATED												
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE		
BLUE	0	0	4	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	1	0	0	0	0	1	0	0	0	0	0
YELLOW	0	0	0	0	1	0	0	0	0	0	0	0	0	0
GRAY	0	0	0	4	3	43	1	0	1	3	2	0	0	0
GREEN	0	0	0	0	0	0	1	0	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	13	0	0	2	0	2
WHITE	0	0	0	2	0	31	0	0	0	128	0	0	0	0
BLACK	0	0	0	1	0	3	1	0	0	0	46	0	0	0
ORANGE	0	0	0	0	1	0	0	0	0	1	0	0	1	1

Table 612: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 118.

Label	Class	DEPRECATED												
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE		
BLUE	0	0	4	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	1	0	0	0	0	1	0	0	0	0	0
YELLOW	0	0	0	0	1	0	0	0	0	0	0	0	0	0
GRAY	0	0	0	0	1	49	0	0	0	4	2	1	1	1
GREEN	0	0	0	0	0	0	1	0	0	0	0	0	0	0
PURPLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED	0	0	0	0	0	0	0	0	13	0	0	2	0	2
WHITE	0	0	0	0	0	34	0	0	0	127	0	0	0	0
BLACK	0	0	0	1	0	6	1	0	0	0	43	0	0	0
ORANGE	0	0	0	0	1	0	0	0	0	1	0	0	1	1

Table 613: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 118.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	215	0	0	39	2	0	0	6	48	0
BROWN	0	0	2	6	0	11	0	0	2	0	12	0
YELLOW	0	0	0	0	12	0	0	0	0	2	0	0
GRAY	0	0	53	2	0	1505	2	0	0	29	65	0
GREEN	0	0	7	1	1	14	36	0	0	1	13	0
PURPLE	0	0	1	0	0	4	0	0	0	0	2	0
RED	0	0	0	1	0	1	0	0	417	1	0	6
WHITE	0	0	3	1	1	75	0	0	8	1677	0	0
BLACK	0	0	30	0	0	16	0	0	0	1	315	0
ORANGE	0	0	0	0	0	0	0	0	3	1	0	10

Table 632: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 121.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	213	0	0	56	1	0	0	5	35	0
BROWN	0	0	1	3	0	17	0	0	0	0	12	0
YELLOW	0	0	0	0	11	0	0	0	0	3	0	0
GRAY	0	0	41	1	0	1504	0	0	1	67	42	0
GREEN	0	0	10	1	1	19	26	0	0	1	15	0
PURPLE	0	0	1	0	0	4	0	0	0	0	2	0
RED	0	0	0	0	0	4	0	0	417	1	1	3
WHITE	0	0	6	0	1	32	0	0	4	1720	2	0
BLACK	0	0	24	2	1	27	0	0	0	0	308	0
ORANGE	0	0	0	1	0	0	0	0	3	2	0	8

Table 633: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 121.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	282	0	1	15	0	0	0	1	11	0
BROWN	0	0	5	6	0	13	0	0	4	0	5	0
YELLOW	0	0	0	0	14	0	0	0	0	0	0	0
GRAY	0	0	141	9	0	1446	0	3	5	29	23	0
GREEN	0	0	22	4	0	15	22	0	0	0	10	0
PURPLE	0	0	2	0	0	2	0	0	0	0	3	0
RED	0	0	2	0	0	0	1	1	408	3	2	9
WHITE	0	0	7	0	0	21	0	2	4	1727	3	1
BLACK	0	0	51	1	1	11	0	0	0	0	298	0
ORANGE	0	0	0	0	0	0	0	0	0	2	0	12

Table 634: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 121.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	227	0	3	56	0	1	0	3	20	0
BROWN	0	0	0	6	0	19	0	0	3	0	5	0
YELLOW	0	0	0	0	14	0	0	0	0	0	0	0
GRAY	0	0	23	2	10	1553	0	1	1	39	27	0
GREEN	0	0	16	1	0	25	18	0	0	0	13	0
PURPLE	0	0	0	0	0	3	0	0	0	0	4	0
RED	0	0	0	0	0	2	2	0	401	3	3	15
WHITE	0	0	1	0	1	29	0	0	2	1728	3	1
BLACK	0	0	24	0	0	19	0	1	0	1	317	0
ORANGE	0	0	0	1	0	0	0	0	0	2	0	11

Table 635: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 121.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	221	0	0	57	0	0	0	5	36	1	
BROWN	0	0	2	6	0	14	0	0	2	0	10	0	
YELLOW	0	0	0	0	11	0	1	0	0	2	0	0	
GRAY	0	0	50	4	0	1555	0	0	1	44	45	0	
GREEN	0	0	14	2	0	17	33	0	0	1	8	0	
PURPLE	0	0	1	0	0	4	0	0	0	0	2	0	
RED	1	0	0	0	0	3	0	0	413	9	1	6	
WHITE	1	0	14	1	1	65	0	0	3	1717	3	0	
BLACK	1	0	33	0	1	26	0	0	0	0	309	0	
ORANGE	0	0	2	1	0	0	0	0	6	1	0	7	

Table 642: MMRBOX_VCMMGVCT_FAST_2024Q2 (20240519) module - Color confusion matrix of set 122.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	2	0	212	0	0	64	2	0	0	6	33	1	
BROWN	0	0	0	3	0	18	0	0	0	0	13	0	
YELLOW	0	0	0	0	10	0	1	0	0	3	0	0	
GRAY	0	0	59	0	0	1569	1	0	0	41	29	0	
GREEN	0	0	13	1	0	23	25	0	0	3	10	0	
PURPLE	0	0	1	0	0	5	0	0	0	0	1	0	
RED	0	0	0	2	0	5	0	0	409	3	6	8	
WHITE	1	0	8	0	1	61	0	0	0	1733	1	0	
BLACK	1	0	27	0	1	27	2	0	0	1	311	0	
ORANGE	0	0	0	1	1	0	0	0	5	1	0	9	

Table 643: MMRBOX_VCMMGVCT_FAST_2024Q4 (20241122) module - Color confusion matrix of set 122.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	242	0	2	48	0	1	0	5	22	0	
BROWN	0	0	2	3	0	19	0	0	3	0	7	0	
YELLOW	0	0	0	0	13	0	1	0	0	0	0	0	
GRAY	0	0	47	2	10	1569	0	3	2	31	35	0	
GREEN	0	0	15	5	0	19	23	0	0	1	12	0	
PURPLE	0	0	0	0	0	4	0	0	1	0	2	0	
RED	0	0	1	0	2	4	0	0	418	3	1	4	
WHITE	0	0	2	0	3	32	0	1	2	1765	0	0	
BLACK	0	0	20	0	1	13	1	0	1	2	332	0	
ORANGE	0	0	1	1	0	1	0	0	1	1	0	12	

Table 644: MMRBOX_VCMMGVCT_PREC_2024Q2 (20240520) module - Color confusion matrix of set 122.

Label	Class	DEPRECATED	EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	235	0	2	60	0	0	0	3	20	0	
BROWN	0	0	3	4	0	21	0	0	1	0	5	0	
YELLOW	0	0	0	0	13	0	0	0	0	1	0	0	
GRAY	0	0	36	1	3	1619	0	1	1	19	19	0	
GREEN	0	0	19	0	0	23	20	0	0	0	13	0	
PURPLE	0	0	2	0	0	2	0	0	0	0	3	0	
RED	0	0	0	0	0	2	0	0	420	2	1	8	
WHITE	0	0	6	0	0	44	0	0	4	1748	3	0	
BLACK	1	0	28	0	1	39	0	0	0	1	299	1	
ORANGE	0	0	0	0	1	1	0	0	1	2	0	12	

Table 645: MMRBOX_VCMMGVCT_PREC_2024Q4 (20241123) module - Color confusion matrix of set 122.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	160	0	1	7	1	0	0	5	20	0
BROWN	0	0	0	3	0	3	0	0	0	0	14	0
YELLOW	0	0	1	1	18	4	3	0	0	3	1	1
GRAY	0	0	41	5	0	487	35	0	3	27	85	0
GREEN	0	0	0	1	1	4	16	0	0	1	9	0
PURPLE	0	0	1	0	0	0	0	0	0	0	3	0
RED	0	0	2	2	1	0	0	0	178	1	14	3
WHITE	0	0	15	0	2	96	42	0	4	1150	19	0
BLACK	0	0	11	0	0	9	6	0	1	5	177	0
ORANGE	0	0	0	0	0	1	0	0	1	0	1	3

Table 652: MMR_VCMMGVCT_FAST_2024Q2 (20240517) module - Color confusion matrix of set 123.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	158	0	2	13	2	0	0	2	17	0
BROWN	0	0	0	2	0	3	0	0	0	0	14	1
YELLOW	0	0	0	2	18	6	1	0	0	4	1	0
GRAY	0	0	41	1	0	484	27	0	0	45	85	0
GREEN	0	0	1	0	1	7	13	0	1	4	5	0
PURPLE	0	0	2	0	0	0	0	0	0	0	2	0
RED	0	0	2	9	1	12	1	0	154	4	16	2
WHITE	0	0	18	0	6	72	61	0	3	1161	7	0
BLACK	0	0	11	1	0	7	6	0	0	5	179	0
ORANGE	0	0	0	2	0	0	0	0	1	0	1	2

Table 653: MMR_VCMMGVCT_FAST_2024Q4 (20241121) module - Color confusion matrix of set 123.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	164	0	1	6	2	0	0	4	17	0
BROWN	0	0	0	3	0	5	0	0	1	0	10	1
YELLOW	0	0	0	1	20	5	1	0	0	2	2	1
GRAY	0	0	37	2	0	519	21	1	0	31	72	0
GREEN	0	0	2	0	3	5	14	0	1	4	3	0
PURPLE	0	0	2	0	0	0	0	0	2	0	0	0
RED	0	0	2	0	0	0	0	0	182	1	11	5
WHITE	0	0	17	0	1	38	14	0	3	1240	15	0
BLACK	0	0	3	0	0	4	5	0	0	5	192	0
ORANGE	0	0	0	2	0	0	0	0	0	0	2	2

Table 654: MMR_VCMMGVCT_PREC_2024Q2 (20240518) module - Color confusion matrix of set 123.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	143	0	1	20	1	0	0	2	27	0
BROWN	0	0	0	2	0	5	0	0	0	0	13	0
YELLOW	0	0	0	0	19	9	1	0	0	1	0	2
GRAY	0	0	15	0	0	554	5	0	0	35	74	0
GREEN	0	0	1	1	1	6	13	0	1	5	4	0
PURPLE	0	0	0	0	0	1	0	0	0	0	3	0
RED	0	0	0	5	1	0	0	0	178	1	11	5
WHITE	0	0	5	0	3	44	6	0	1	1253	16	0
BLACK	0	0	3	0	2	1	2	0	0	4	197	0
ORANGE	0	0	0	2	0	0	0	0	0	0	1	3

Table 655: MMR_VCMMGVCT_PREC_2024Q4 (20241120) module - Color confusion matrix of set 123.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	165	0	0	32	3	0	2	2	33	0
BROWN	0	0	0	5	0	6	0	0	0	0	14	0
YELLOW	0	0	0	0	19	6	2	0	0	3	0	3
GRAY	1	0	31	5	2	625	16	0	4	56	129	0
GREEN	0	0	2	0	3	11	11	0	3	3	7	0
PURPLE	0	0	0	0	0	1	0	0	3	0	0	0
RED	0	0	2	13	1	2	1	0	220	2	11	3
WHITE	0	0	11	0	1	83	23	0	11	1564	24	0
BLACK	0	0	5	2	2	12	3	1	0	5	218	0
ORANGE	0	0	0	3	0	0	0	0	1	0	1	5

Table 662: MMRBOX_VCMMGVCT_FAST_2024Q2 (20240519) module - Color confusion matrix of set 124.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	180	0	0	29	1	0	2	5	20	0
BROWN	0	0	0	3	0	8	0	0	1	0	12	1
YELLOW	0	0	0	0	20	6	1	0	0	3	0	3
GRAY	1	0	45	5	2	634	8	0	0	82	92	0
GREEN	0	0	2	0	1	11	13	0	1	3	9	0
PURPLE	0	0	3	0	0	0	0	0	0	0	1	0
RED	0	0	4	14	0	12	0	0	209	2	8	6
WHITE	1	0	9	0	0	89	13	0	7	1585	13	0
BLACK	0	0	14	2	1	19	2	1	4	6	198	1
ORANGE	0	0	0	2	0	0	0	0	3	0	0	5

Table 663: MMRBOX_VCMMGVCT_FAST_2024Q4 (20241122) module - Color confusion matrix of set 124.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	170	0	0	27	2	0	1	2	35	0
BROWN	0	0	0	5	0	4	0	0	2	1	13	0
YELLOW	0	0	0	1	19	7	2	0	0	1	1	2
GRAY	0	0	26	6	3	660	16	1	0	42	115	0
GREEN	0	0	2	0	1	3	21	0	2	5	6	0
PURPLE	0	0	0	0	0	0	0	0	2	0	1	1
RED	0	0	0	0	0	3	0	0	236	4	9	3
WHITE	2	0	17	2	3	61	23	0	6	1581	22	0
BLACK	0	0	3	2	0	12	2	0	0	3	226	0
ORANGE	0	0	0	2	0	1	0	0	1	0	0	6

Table 664: MMRBOX_VCMMGVCT_PREC_2024Q2 (20240520) module - Color confusion matrix of set 124.

Label	Class	DEPRECATED										
		EMPTY	BLUE	BROWN	YELLOW	GRAY	GREEN	PURPLE	RED	WHITE	BLACK	ORANGE
BLUE	0	0	191	0	0	29	2	0	0	1	14	0
BROWN	0	0	0	5	0	6	0	0	1	0	12	1
YELLOW	0	0	0	0	21	7	1	0	0	1	1	2
GRAY	1	0	20	2	1	736	9	0	0	36	64	0
GREEN	1	0	3	1	1	7	16	0	2	2	7	0
PURPLE	0	0	0	0	0	0	0	0	3	1	0	0
RED	1	0	0	12	1	2	0	0	224	3	6	6
WHITE	1	0	6	0	6	83	9	0	2	1601	9	0
BLACK	0	0	6	0	3	24	0	0	0	1	214	0
ORANGE	0	0	0	3	0	0	0	0	5	0	0	2

Table 665: MMRBOX_VCMMGVCT_PREC_2024Q4 (20241123) module - Color confusion matrix of set 124.

B Precision/Recall of Tags Classification

The precision and recall of the tag classification models were evaluated on the testing set.

Precision is the proportion of true positive predictions among all positive predictions. It is a measure of the accuracy of a classifier when predicting the positive class.

Recall, also known as sensitivity, is the proportion of true positive predictions among all actual positives. It is a measure of the ability of a classifier to identify all relevant instances.

The tables below present precision and recall values for each tag across different thresholds.

The tables present precision and recall values for each tag across different thresholds, for both 'yes' and 'no' classifications. Each row in the table corresponds to a different tag. The columns correspond to different thresholds used for classifying a prediction as positive or negative. For each tag, threshold, and classification ('yes' or 'no'), the precision and recall values are given.

The graphs are Precision-Recall curves for each classification of each tag. Each point on a curve corresponds to a different threshold. The x-axis represents recall, and the y-axis represents precision. A point at the top right corner of the graph indicates a perfect classifier (precision and recall are both 1). A point at the bottom right corner indicates a classifier that finds all positive instances but also produces many false positives (precision is low but recall is 1). A point at the top left corner indicates a classifier that produces no false positives but also misses many positive instances (precision is 1 but recall is low).

To use this information, consider the trade-off between precision and recall for your application. If it is more important to avoid false positives, look for a threshold that gives high precision. If it is more important to find all positive instances, look for a threshold that gives high recall. If you need to balance the two, consider using the F1 score, which is the harmonic mean of precision and recall.



Tag	precision t=0.50	recall t=0.50	precision t=0.80	recall t=0.80	precision t=0.90	recall t=0.90	precision t=0.99	recall t=0.99
tag_ambulance: no	0.993	0.995	0.996	0.987	0.997	0.979	0.999	0.916
tag_ambulance: yes	0.925	0.896	0.970	0.840	0.983	0.789	0.996	0.603
tag_animal_transport: no	0.972	0.996	0.975	0.995	0.978	0.994	0.983	0.971
tag_animal_transport: yes	0.982	0.629	1.000	0.584	1.000	0.528	1.000	0.427
tag_caravan: no	0.999	1.000	1.000	0.999	1.000	0.999	1.000	0.990
tag_caravan: yes	0.983	0.971	0.998	0.951	0.998	0.926	1.000	0.820
tag_fire_brigade: no	0.997	0.999	0.998	0.997	0.999	0.994	0.999	0.957
tag_fire_brigade: yes	0.834	0.558	0.919	0.422	0.961	0.348	0.962	0.142
tag_law_enforcement: no	0.998	0.998	0.999	0.993	0.999	0.987	1.000	0.931
tag_law_enforcement: yes	0.961	0.961	0.985	0.926	0.992	0.904	0.999	0.787
tag_pickup: no	0.993	0.997	0.997	0.996	0.997	0.993	1.000	0.970
tag_pickup: yes	0.994	0.963	0.998	0.949	0.998	0.942	1.000	0.890
tag_push_bumper: no	0.996	0.997	0.998	0.994	0.998	0.986	0.999	0.934
tag_push_bumper: yes	0.976	0.966	0.985	0.952	0.990	0.937	0.993	0.856
tag_rear_mount: no	0.983	0.980	0.987	0.960	0.990	0.943	0.991	0.800
tag_rear_mount: yes	0.986	0.984	0.992	0.984	0.992	0.982	0.994	0.976
tag_towed: no	0.988	0.994	0.991	0.982	0.992	0.966	0.997	0.814
tag_towed: yes	0.805	0.649	0.922	0.572	0.947	0.523	0.988	0.379
tag_wood_truck: no	0.975	0.955	0.986	0.948	0.986	0.948	0.992	0.910
tag_wood_truck: yes	0.916	0.916	0.935	0.867	0.960	0.867	0.973	0.855

Table 666: Precision/Recall results of tag classification for MMR_VCMMGVCT_FAST_2024Q4 (20241121) module.

Tag	precision t=0.50	recall t=0.50	precision t=0.80	recall t=0.80	precision t=0.90	recall t=0.90	precision t=0.99	recall t=0.99
tag_ambulance: no	0.993	0.993	0.996	0.983	0.997	0.973	0.999	0.912
tag_ambulance: yes	0.900	0.893	0.961	0.822	0.977	0.766	0.998	0.562
tag_animal_transport: no	0.980	0.994	0.987	0.988	0.986	0.980	0.987	0.938
tag_animal_transport: yes	0.939	0.687	0.953	0.612	0.952	0.597	1.000	0.463
tag_caravan: no	0.998	0.998	0.999	0.995	0.999	0.992	1.000	0.957
tag_caravan: yes	0.959	0.933	0.983	0.894	0.988	0.873	0.999	0.760
tag_fire_brigade: no	0.997	0.999	0.998	0.997	0.998	0.994	0.999	0.951
tag_fire_brigade: yes	0.834	0.499	0.948	0.363	0.972	0.300	1.000	0.159
tag_helmet: no	0.922	0.840	0.951	0.804	0.961	0.776	0.979	0.631
tag_helmet: yes	0.966	0.963	0.976	0.951	0.979	0.938	0.988	0.876
tag_law_enforcement: no	0.997	0.997	0.998	0.993	0.999	0.988	1.000	0.938
tag_law_enforcement: yes	0.964	0.951	0.984	0.915	0.990	0.891	0.998	0.771
tag_mixer_truck: no	0.977	0.938	0.995	0.914	0.997	0.897	1.000	0.813
tag_mixer_truck: yes	0.935	0.935	0.994	0.903	1.000	0.881	1.000	0.832
tag_pickup: no	0.988	0.996	0.993	0.992	0.996	0.987	0.998	0.947
tag_pickup: yes	0.989	0.938	0.995	0.906	0.996	0.884	0.999	0.736
tag_push_bumper: no	0.995	0.997	0.997	0.993	0.998	0.989	1.000	0.950
tag_push_bumper: yes	0.970	0.951	0.987	0.922	0.990	0.900	0.995	0.817
tag_rear_mount: no	0.991	0.968	0.994	0.959	0.997	0.947	1.000	0.868
tag_rear_mount: yes	0.978	0.991	0.985	0.987	0.989	0.987	0.995	0.965
tag_rickshaw: no	0.916	0.817	0.924	0.808	0.941	0.800	0.967	0.725
tag_rickshaw: yes	0.995	0.987	0.996	0.985	0.998	0.984	0.998	0.974
tag_rider_present: no	0.988	0.568	0.991	0.559	0.995	0.557	0.999	0.529
tag_rider_present: yes	0.998	0.974	0.998	0.973	0.998	0.973	0.999	0.970
tag_tank_truck: no	0.920	0.927	0.932	0.916	0.941	0.906	0.977	0.837
tag_tank_truck: yes	0.919	0.874	0.950	0.862	0.959	0.862	0.986	0.805
tag_taxi: no	0.962	0.957	0.973	0.925	0.979	0.898	0.991	0.735
tag_taxi: yes	0.926	0.933	0.962	0.897	0.977	0.873	0.992	0.777
tag_towed: no	0.995	0.996	0.996	0.992	0.997	0.988	0.999	0.948
tag_towed: yes	0.936	0.882	0.970	0.824	0.985	0.788	0.995	0.646
tag_truck_is_semi: no	0.993	0.954	0.996	0.948	0.997	0.942	0.999	0.898
tag_truck_is_semi: yes	0.973	0.973	0.983	0.962	0.989	0.952	0.990	0.903
tag_wood_truck: no	0.989	0.986	0.992	0.983	0.993	0.980	0.998	0.969
tag_wood_truck: yes	0.953	0.824	0.968	0.811	0.968	0.811	0.982	0.743

Table 667: Precision/Recall results of tag classification for MMRBOX_VCMMGVCT_FAST_2024Q4 (20241122) module.

Tag	precision t=0.50	recall t=0.50	precision t=0.80	recall t=0.80	precision t=0.90	recall t=0.90	precision t=0.99	recall t=0.99
tag_ambulance: no	0.996	0.998	0.997	0.994	0.998	0.990	0.999	0.946
tag_ambulance: yes	0.969	0.937	0.992	0.912	0.995	0.888	1.000	0.807
tag_animal_transport: no	0.971	0.993	0.979	0.993	0.980	0.990	0.988	0.966
tag_animal_transport: yes	0.933	0.629	1.000	0.551	1.000	0.438	1.000	0.303
tag_caravan: no	1.000	1.000	1.000	0.999	1.000	0.998	1.000	0.983
tag_caravan: yes	0.980	0.985	0.994	0.956	0.998	0.933	1.000	0.793
tag_fire_brigade: no	0.998	1.000	0.999	0.999	0.999	0.998	1.000	0.978
tag_fire_brigade: yes	0.920	0.758	0.952	0.672	0.968	0.610	0.988	0.481
tag_law_enforcement: no	0.999	0.999	0.999	0.997	0.999	0.993	1.000	0.962
tag_law_enforcement: yes	0.984	0.978	0.994	0.968	0.997	0.957	0.999	0.915
tag_pickup: no	0.993	0.996	0.996	0.995	0.997	0.993	0.999	0.971
tag_pickup: yes	0.986	0.961	0.992	0.944	0.994	0.932	1.000	0.875
tag_push_bumper: no	0.997	0.998	0.998	0.997	0.998	0.994	0.999	0.970
tag_push_bumper: yes	0.984	0.970	0.989	0.963	0.993	0.946	0.998	0.840
tag_rear_mount: no	0.990	0.975	0.992	0.953	0.992	0.936	0.991	0.790
tag_rear_mount: yes	0.980	0.990	0.984	0.988	0.988	0.982	0.998	0.953
tag_towed: no	0.992	0.997	0.994	0.991	0.995	0.984	0.998	0.902
tag_towed: yes	0.908	0.764	0.970	0.706	0.984	0.665	0.996	0.560
tag_wood_truck: no	0.979	0.986	0.979	0.979	0.986	0.972	0.993	0.920
tag_wood_truck: yes	0.987	0.929	0.987	0.881	0.986	0.869	1.000	0.845

Table 668: Precision/Recall results of tag classification for MMR_VCMMGVCT_PREC_2024Q4 (20241120) module.



Tag	precision t=0.50	recall t=0.50	precision t=0.80	recall t=0.80	precision t=0.90	recall t=0.90	precision t=0.99	recall t=0.99
tag_ambulance: no	0.996	0.998	0.997	0.994	0.998	0.991	0.999	0.957
tag_ambulance: yes	0.969	0.935	0.989	0.902	0.992	0.877	0.998	0.775
tag_animal_transport: no	0.983	0.993	0.986	0.992	0.988	0.987	0.991	0.931
tag_animal_transport: yes	0.909	0.746	0.958	0.687	0.977	0.642	0.970	0.478
tag_caravan: no	0.998	0.999	0.999	0.998	0.999	0.997	1.000	0.982
tag_caravan: yes	0.984	0.939	0.994	0.912	0.995	0.894	1.000	0.789
tag_fire_brigade: no	0.998	0.999	0.999	0.999	0.999	0.997	1.000	0.978
tag_fire_brigade: yes	0.927	0.751	0.970	0.652	0.986	0.603	1.000	0.456
tag_helmet: no	0.953	0.881	0.969	0.851	0.975	0.830	0.987	0.706
tag_helmet: yes	0.980	0.974	0.985	0.964	0.988	0.956	0.995	0.895
tag_law_enforcement: no	0.999	0.999	0.999	0.997	0.999	0.994	1.000	0.968
tag_law_enforcement: yes	0.983	0.977	0.992	0.967	0.995	0.953	0.999	0.897
tag_mixer_truck: no	0.983	0.973	0.997	0.951	0.997	0.929	1.000	0.803
tag_mixer_truck: yes	0.972	0.941	0.994	0.892	1.000	0.870	1.000	0.778
tag_pickup: no	0.990	0.998	0.994	0.995	0.996	0.991	0.999	0.963
tag_pickup: yes	0.993	0.949	0.999	0.913	1.000	0.880	1.000	0.717
tag_push_bumper: no	0.995	0.998	0.997	0.996	0.997	0.992	0.999	0.956
tag_push_bumper: yes	0.986	0.958	0.994	0.939	0.998	0.920	1.000	0.823
tag_rear_mount: no	0.997	0.971	1.000	0.941	1.000	0.927	1.000	0.845
tag_rear_mount: yes	0.981	0.998	0.993	0.991	0.996	0.991	1.000	0.961
tag_rickshaw: no	0.962	0.850	0.971	0.825	0.970	0.808	0.986	0.575
tag_rickshaw: yes	0.995	0.993	0.998	0.988	1.000	0.985	1.000	0.953
tag_rider_present: no	0.981	0.677	0.991	0.672	0.993	0.669	0.996	0.645
tag_rider_present: yes	0.999	0.973	0.999	0.973	0.999	0.971	0.999	0.967
tag_tank_truck: no	0.930	0.961	0.940	0.917	0.944	0.896	0.985	0.768
tag_tank_truck: yes	0.960	0.885	0.974	0.865	0.977	0.837	0.996	0.794
tag_taxi: no	0.978	0.981	0.983	0.964	0.985	0.945	0.991	0.830
tag_taxi: yes	0.966	0.961	0.979	0.942	0.987	0.929	0.998	0.858
tag_towed: no	0.995	0.998	0.997	0.997	0.998	0.995	0.999	0.966
tag_towed: yes	0.972	0.893	0.984	0.854	0.987	0.819	0.997	0.748
tag_truck_is_semi: no	0.994	0.986	0.997	0.981	0.998	0.975	0.998	0.939
tag_truck_is_semi: yes	0.983	0.979	0.992	0.958	0.994	0.946	0.998	0.888
tag_wood_truck: no	0.985	0.983	0.989	0.981	0.993	0.979	0.998	0.949
tag_wood_truck: yes	0.951	0.784	0.967	0.784	1.000	0.784	1.000	0.743

Table 669: Precision/Recall results of tag classification for MMRBOX_VCMMGVCT_PREC_2024Q4 (20241123) module.

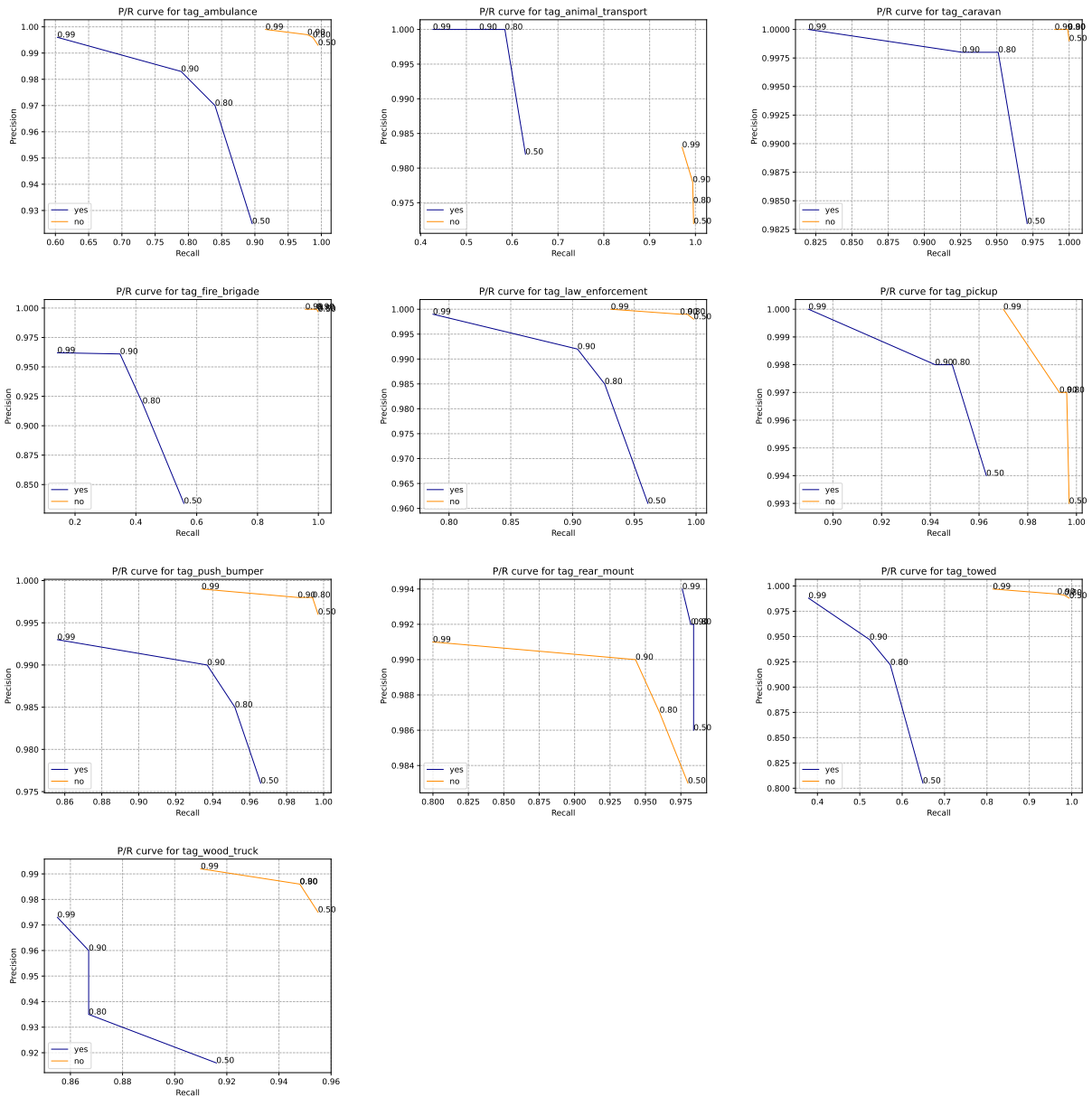


Table 670: Precision/Recall curves for MMR_VCMGVCT_FAST_2024Q4 (20241121) module.

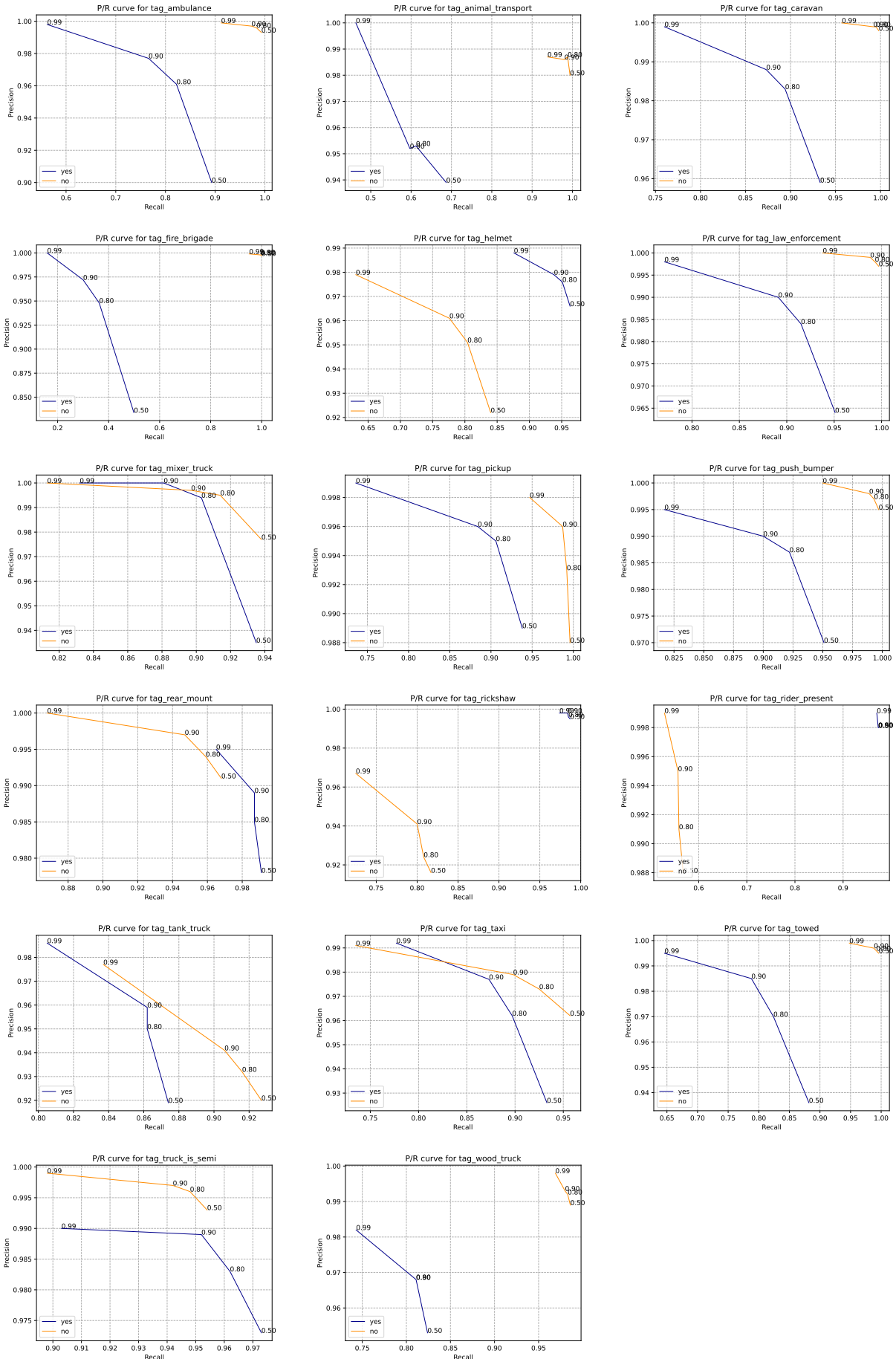


Table 671: Precision/Recall curves for MMRBOX_VCMGVCT_FAST_2024Q4 (20241122) module.

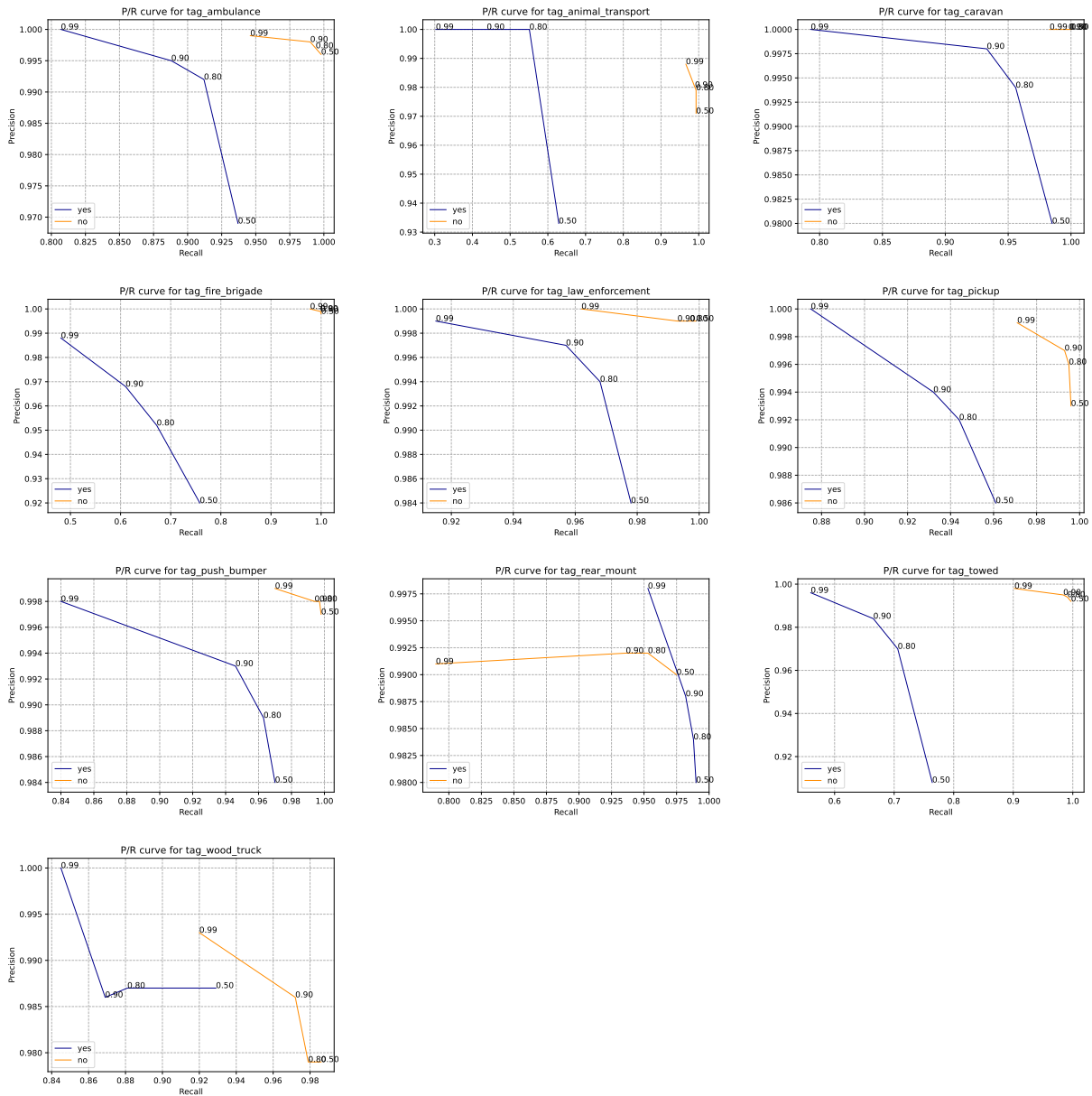


Table 672: Precision/Recall curves for MMR_VCMIMGVCT_PREC_2024Q4 (20241120) module.

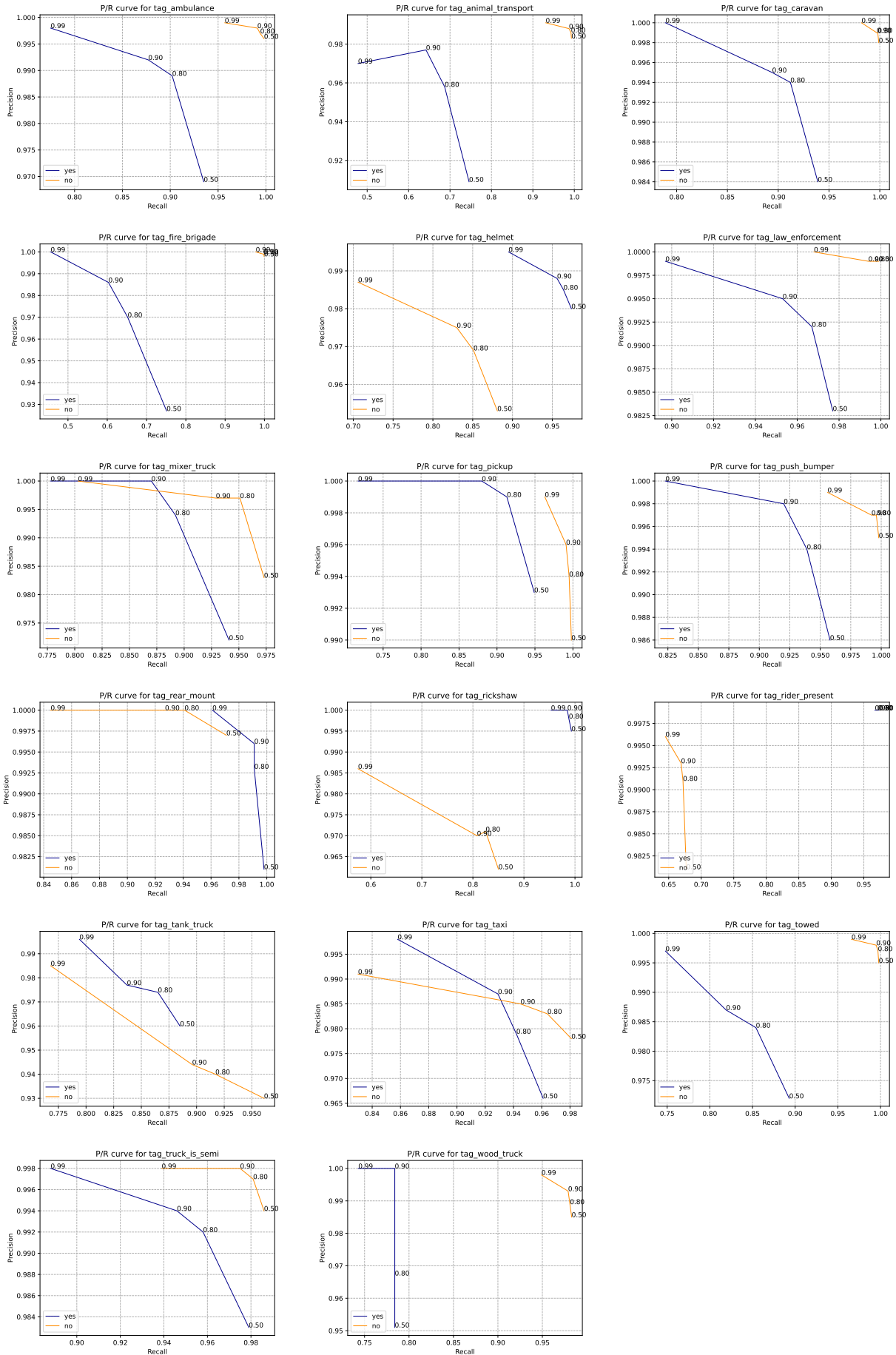


Table 673: Precision/Recall curves for MMRBOX_VCGMMGVCT_PREC_2024Q4 (20241123) module.