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# RegionView3D(bpy\_struct)

base class — `bpy_struct`

**class** `bpy.types.RegionView3D(bpy_struct)`

3D View region data

**clip\_planes**

**TYPE:**

float multi-dimensional array of 6 \* 4 items in `[-inf, inf]`, default `((0.0, 0.0, 0.0, 0.0), (0.0, 0.0, 0.0, 0.0), (0.0, 0.0, 0.0, 0.0), (0.0, 0.0, 0.0, 0.0), (0.0, 0.0, 0.0, 0.0), (0.0, 0.0, 0.0, 0.0))`

**is\_orthographic\_side\_view**

Whether the current view is aligned to an axis (does not check whether the view is orthographic, use “`is_perspective`” for that). Setting this will rotate the view to the closest axis

**TYPE:**

boolean, default `False`

**is\_perspective**

**TYPE:**

boolean, default `False`

**lock\_rotation**

Lock view rotation of side views to Top/Front/Right

**TYPE:**

boolean, default `False`

**perspective\_matrix**

Current perspective matrix (`window_matrix * view_matrix`)

**TYPE:**

`mathutils.Matrix` of 4 \* 4 items in `[-inf, inf]`, default `((0.0, 0.0, 0.0, 0.0), (0.0, 0.0, 0.0, 0.0), (0.0, 0.0, 0.0, 0.0), (0.0, 0.0, 0.0, 0.0))`, (readonly)

**show\_sync\_view**

Sync view position between side views

**TYPE:**

boolean, default `False`

**use\_box\_clip**

Clip view contents based on what is visible in other side views

**TYPE:**

boolean, default `False`

**use\_clip\_planes**

**TYPE:**

boolean, default `False`

**view\_camera\_offset**

View shift in camera view

**TYPE:**

float array of 2 items in  $[-\text{inf}, \text{inf}]$ , default (0.0, 0.0)

**view\_camera\_zoom**

Zoom factor in camera view

**TYPE:**

float in  $[-30, 600]$ , default 0.0

**view\_distance**

Distance to the view location

**TYPE:**

float in  $[0, \text{inf}]$ , default 0.0

**view\_location**

View pivot location

**TYPE:**

`mathutils.Vector` of 3 items in  $[-\text{inf}, \text{inf}]$ , default (0.0, 0.0, 0.0)

**view\_matrix**

Current view matrix

**TYPE:**

`mathutils.Matrix` of 4 \* 4 items in  $[-\text{inf}, \text{inf}]$ , default ((0.0, 0.0, 0.0, 0.0), (0.0, 0.0, 0.0, 0.0), (0.0, 0.0, 0.0, 0.0), (0.0, 0.0, 0.0, 0.0))

**view\_perspective**

View Perspective

**TYPE:**

enum in ['PERSP', 'ORTHO', 'CAMERA'], default 'ORTHO'

**view\_rotation**

Rotation in quaternions (keep normalized)

**TYPE:**

`mathutils.Quaternion` rotation of 4 items in  $[-\text{inf}, \text{inf}]$ , default (0.0, 0.0, 0.0, 0.0)

**window\_matrix**

Current window matrix

**TYPE:**

`mathutils.Matrix` of 4 \* 4 items in  $[-\text{inf}, \text{inf}]$ , default ((0.0, 0.0, 0.0, 0.0), (0.0, 0.0, 0.0, 0.0), (0.0, 0.0, 0.0, 0.0), (0.0, 0.0, 0.0, 0.0)), (readonly)

**update()**

Recalculate the view matrices

**classmethod bl\_rna\_get\_subclass(id, default=None)****PARAMETERS:**

**id** (*str*) – The RNA type identifier.

**RETURNS:**

The RNA type or default when not found.

**RETURN TYPE:**

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

**PARAMETERS:**

**id** (*str*) – The RNA type identifier.

**RETURNS:**

The class or default when not found.

**RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`

## References

- `Context.region_data`
- `SpaceView3D.region_quadviews`
- `SpaceView3D.region_3d`