

```
nicolobattaini@MacBook-Pro-di-Nicolo PX4-Autopilot % FG_BINARY="/Applications/FlightGear.app/Contents/MacOS/fgfs" make
px4_sitl_nolockstep flightgear_rascal
-- PX4 version: v1.12.3-1-g55374fe589
-- PX4 config file: /Users/nicolobattaini/PX4-Autopilot/boards/px4/sitl/nolockstep.cmake
-- Building without lockstep
-- PX4 config: px4_sitl_nolockstep
-- PX4 platform: posix
-- PX4 lockstep: disabled
-- cmake build type: RelWithDebInfo
-- The CXX compiler identification is AppleClang 14.0.0.14000029
-- The C compiler identification is AppleClang 14.0.0.14000029
-- The ASM compiler identification is Clang with GNU-like command-line
-- Found assembler: /Applications/Xcode.app/Contents/Developer/Toolchains/XcodeDefault.xctoolchain/usr/bin/cc
-- Detecting CXX compiler ABI info
-- Detecting CXX compiler ABI info - done
-- Check for working CXX compiler: /Applications/Xcode.app/Contents/Developer/Toolchains/XcodeDefault.xctoolchain/usr/bin/c++ - skipped
-- Detecting CXX compile features
-- Detecting CXX compile features - done
-- Detecting C compiler ABI info
-- Detecting C compiler ABI info - done
-- Check for working C compiler: /Applications/Xcode.app/Contents/Developer/Toolchains/XcodeDefault.xctoolchain/usr/bin/cc - skipped
-- Detecting C compile features
-- Detecting C compile features - done
-- Building for code coverage
-- ccache enabled (export CCACHE_DISABLE=1 to disable)
-- Found PythonInterp: /Users/nicolobattaini/.pyenv/shims/python3 (found suitable version "3.9.6", minimum required is "3")
-- build type is RelWithDebInfo
-- PX4 ECL: Very lightweight Estimation & Control Library v1.9.0-rc1-591-gb3fed06
-- ROMFS: ROMFS/px4fmu_common
-- Configuring done
-- Generating done
-- Build files have been written to: /Users/nicolobattaini/PX4-Autopilot/build/px4_sitl_nolockstep
[0/812] git submodule src/drivers/gps/devices
[1/812] git submodule src/lib/ecl
[2/812] git submodule mavlink/include/mavlink/v2.0
[10/812] git submodule Tools/flightgear_bridge
[18/812] Performing configure step for 'flightgear_bridge'
CMake Warning (dev) in CMakeLists.txt:
  No project() command is present.  The top-level CMakeLists.txt file must
  contain a literal, direct call to the project() command.  Add a line of
  code such as

    project(ProjectName)
```

near the top of the file, but after `cmake_minimum_required()`.

CMake is pretending there is a `project(Project)` command on the first line.

This warning is for project developers. Use `-Wno-dev` to suppress it.

```
-- The C compiler identification is AppleClang 14.0.0.14000029
-- The CXX compiler identification is AppleClang 14.0.0.14000029
-- Detecting C compiler ABI info
-- Detecting C compiler ABI info - done
-- Check for working C compiler: /Applications/Xcode.app/Contents/Developer/Toolchains/XcodeDefault.xctoolchain/usr/bin/cc - skipped
-- Detecting C compile features
-- Detecting C compile features - done
-- Detecting CXX compiler ABI info
-- Detecting CXX compiler ABI info - done
-- Check for working CXX compiler: /Applications/Xcode.app/Contents/Developer/Toolchains/XcodeDefault.xctoolchain/usr/bin/c++ - skipped
-- Detecting CXX compile features
-- Detecting CXX compile features - done
```

CMake Deprecation Warning at CMakeLists.txt:1

(`cmake_minimum_required`):

Compatibility with CMake < 2.8.12 will be removed from a future version of CMake.

Update the `VERSION` argument `<min>` value or use a `...<max>` suffix to tell

CMake that the project does not need compatibility with older versions.

```
-- Found MAVLink: /Users/nicolobattaini/PX4-Autopilot/mavlink/include (found version "2.0")
-- /Users/nicolobattaini/PX4-Autopilot/mavlink/include
-- Configuring done
-- Generating done
-- Build files have been written to: /Users/nicolobattaini/PX4-Autopilot/build/px4_sitl_nolockstep/build_flightgear_bridge
[20/812] Performing build step for 'flightgear_bridge'
[1/6] Building CXX object CMakeFiles/flightgear_bridge.dir/src/geo_mag_declination.cpp.o
FAILED: CMakeFiles/flightgear_bridge.dir/src/geo_mag_declination.cpp.o
/Applications/Xcode.app/Contents/Developer/Toolchains/XcodeDefault.xctoolchain/usr/bin/c++ -I/Users/nicolobattaini/PX4-Autopilot/mavlink/include -isystem /usr/local/include/eigen3 -isysroot /Applications/Xcode.app/Contents/Developer/Platforms/MacOSX.platform/Developer/SDKs/MacOSX12.3.sdk -g -fexceptions -Wno-cast-align -Wno-address-of-packed-member -MD -MT CMakeFiles/flightgear_bridge.dir/src/geo_mag_declination.cpp.o -MF CMakeFiles/
```

```
flightgear_bridge.dir/src/geo_mag_declination.cpp.o.d -o CMakeFiles/
flightgear_bridge.dir/src/geo_mag_declination.cpp.o -c /Users/
nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.cpp
```

```
In file included from /Users/nicolobattaini/PX4-Autopilot/Tools/
flightgear_bridge/src/geo_mag_declination.cpp:49:
/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.h:45:15: error: unknown type name 'constexpr'
static inline constexpr const Scalar &constrain(const Scalar &val,
const Scalar &min_val, const Scalar &max_val)
      ^
```

```
/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.h:45:31: warning: variable templates are a C++14
extension [-Wc++14-extensions]
```

```
static inline constexpr const Scalar &constrain(const Scalar &val,
const Scalar &min_val, const Scalar &max_val)
      ^
```

```
/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.h:45:8: warning: inline variables are a C++17
extension [-Wc++17-extensions]
```

```
static inline constexpr const Scalar &constrain(const Scalar &val,
const Scalar &min_val, const Scalar &max_val)
      ^
```

```
/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.h:45:37: error: expected ';' at end of
declaration
```

```
static inline constexpr const Scalar &constrain(const Scalar &val,
const Scalar &min_val, const Scalar &max_val)
      ^
```

```
;
```

```
/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.h:45:55: error: unknown type name 'Scalar'
static inline constexpr const Scalar &constrain(const Scalar &val,
const Scalar &min_val, const Scalar &max_val)
      ^
```

```
/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.h:45:74: error: unknown type name 'Scalar'
static inline constexpr const Scalar &constrain(const Scalar &val,
const Scalar &min_val, const Scalar &max_val)
```

```
^
```

```
/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.h:45:97: error: unknown type name 'Scalar'
static inline constexpr const Scalar &constrain(const Scalar &val,
const Scalar &min_val, const Scalar &max_val)
```

```
^
```

```
/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.h:45:39: error: C++ requires a type specifier
for all declarations
```

```
static inline constexpr const Scalar &constrain(const Scalar &val,
const Scalar &min_val, const Scalar &max_val)
      ^
```

```
/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
```

```

geo_mag_declination.cpp:59:8: error: unknown type name 'constexpr'
static constexpr const int8_t declination_table[13][37] = \
    ^
/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.cpp:59:30: error: expected ';' after top level
declarator
static constexpr const int8_t declination_table[13][37] = \
    ^
    ;
/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.cpp:77:8: error: unknown type name 'constexpr'
static constexpr const int8_t inclination_table[13][37] = \
    ^
/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.cpp:77:30: error: expected ';' after top level
declarator
static constexpr const int8_t inclination_table[13][37] = \
    ^
    ;
/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.cpp:95:8: error: unknown type name 'constexpr'
static constexpr const int8_t strength_table[13][37] = \
    ^
/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.cpp:95:30: error: expected ';' after top level
declarator
static constexpr const int8_t strength_table[13][37] = \
    ^
    ;
/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.cpp:164:34: error: use of undeclared identifier
'declination_table'
    return get_table_data(lat, lon, declination_table);
                                   ^
/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.cpp:169:34: error: use of undeclared identifier
'inclination_table'
    return get_table_data(lat, lon, inclination_table);
                                   ^
/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.cpp:174:34: error: use of undeclared identifier
'strength_table'
    return get_table_data(lat, lon, strength_table);
                                   ^
2 warnings and 15 errors generated.
[2/6] Building CXX object CMakeFiles/flightgear_bridge.dir/src/
vehicle_state.cpp.o
FAILED: CMakeFiles/flightgear_bridge.dir/src/vehicle_state.cpp.o
/Applications/Xcode.app/Contents/Developer/Toolchains/
XcodeDefault.xctoolchain/usr/bin/c++ -I/Users/nicolobattaini/PX4-
Autopilot/mavlink/include -isystem /usr/local/include/eigen3
-isysroot /Applications/Xcode.app/Contents/Developer/Platforms/
MacOSX.platform/Developer/SDKs/MacOSX12.3.sdk -g -fexceptions -Wno-
cast-align -Wno-address-of-packed-member -MD -MT CMakeFiles/

```

```

flightgear_bridge.dir/src/vehicle_state.cpp.o -MF CMakeFiles/
flightgear_bridge.dir/src/vehicle_state.cpp.o.d -o CMakeFiles/
flightgear_bridge.dir/src/vehicle_state.cpp.o -c /Users/
nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
vehicle_state.cpp
In file included from /Users/nicolobattaini/PX4-Autopilot/Tools/
flightgear_bridge/src/vehicle_state.cpp:45:
/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.h:45:15: error: unknown type name 'constexpr'
static inline constexpr const Scalar &constrain(const Scalar &val,
const Scalar &min_val, const Scalar &max_val)
      ^

/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.h:45:31: warning: variable templates are a C++14
extension [-Wc++14-extensions]
static inline constexpr const Scalar &constrain(const Scalar &val,
const Scalar &min_val, const Scalar &max_val)
      ^

/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.h:45:8: warning: inline variables are a C++17
extension [-Wc++17-extensions]
static inline constexpr const Scalar &constrain(const Scalar &val,
const Scalar &min_val, const Scalar &max_val)
      ^

/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.h:45:37: error: expected ';' at end of
declaration
static inline constexpr const Scalar &constrain(const Scalar &val,
const Scalar &min_val, const Scalar &max_val)
      ^
;

/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.h:45:55: error: unknown type name 'Scalar'
static inline constexpr const Scalar &constrain(const Scalar &val,
const Scalar &min_val, const Scalar &max_val)
      ^

/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.h:45:74: error: unknown type name 'Scalar'
static inline constexpr const Scalar &constrain(const Scalar &val,
const Scalar &min_val, const Scalar &max_val)
      ^

/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.h:45:97: error: unknown type name 'Scalar'
static inline constexpr const Scalar &constrain(const Scalar &val,
const Scalar &min_val, const Scalar &max_val)
      ^

/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/
geo_mag_declination.h:45:39: error: C++ requires a type specifier
for all declarations
static inline constexpr const Scalar &constrain(const Scalar &val,
const Scalar &min_val, const Scalar &max_val)
      ^

```

2 warnings and 6 errors generated.

[3/6] Building CXX object CMakeFiles/flightgear_bridge.dir/src/fg_communicator.cpp.o

In file included from /Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/fg_communicator.cpp:44:

/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/fg_communicator.h:78:28: warning: default member initializer for non-static data member is a C++11 extension [-Wc++11-extensions]
const int FGOutPortBase=15200;
^

/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/fg_communicator.h:79:27: warning: default member initializer for non-static data member is a C++11 extension [-Wc++11-extensions]
const int FGInPortBase=15300;
^

2 warnings generated.

[4/6] Building CXX object CMakeFiles/flightgear_bridge.dir/src/flightgear_bridge.cpp.o

In file included from /Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/flightgear_bridge.cpp:50:

/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/px4_communicator.h:79:23: warning: default member initializer for non-static data member is a C++11 extension [-Wc++11-extensions]
const int portBase=4560;
^

In file included from /Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/flightgear_bridge.cpp:51:
/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/fg_communicator.h:78:28: warning: default member initializer for non-static data member is a C++11 extension [-Wc++11-extensions]
const int FGOutPortBase=15200;
^

/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/fg_communicator.h:79:27: warning: default member initializer for non-static data member is a C++11 extension [-Wc++11-extensions]
const int FGInPortBase=15300;
^

3 warnings generated.

[5/6] Building CXX object CMakeFiles/flightgear_bridge.dir/src/px4_communicator.cpp.o

In file included from /Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/px4_communicator.cpp:43:

/Users/nicolobattaini/PX4-Autopilot/Tools/flightgear_bridge/src/px4_communicator.h:79:23: warning: default member initializer for non-static data member is a C++11 extension [-Wc++11-extensions]
const int portBase=4560;
^

1 warning generated.

ninja: build stopped: subcommand failed.

[97/812] Generating component_information/checksums.h

FAILED: external/Stamp/flightgear_bridge/flightgear_bridge-build /Users/nicolobattaini/PX4-Autopilot/build/px4_sitl_nolockstep/external/Stamp/flightgear_bridge/flightgear_bridge-build
cd /Users/nicolobattaini/PX4-Autopilot/build/px4_sitl_nolockstep/

```
build_flightgear_bridge && /usr/local/Cellar/cmake/3.25.0/bin/cmake
--build .
[100/812] Generating uORB topic sources
ninja: build stopped: subcommand failed.
make: *** [px4_sitl_nolockstep] Error 1
nicolobattaini@MacBook-Pro-di-Nicolo PX4-Autopilot %
```