Flexcom 2022.1.2

Flexcom 2022.1.2 (February 2024) is the latest version on general release. This version corrects several program faults identified in the preceding version, Flexcom 2022.1.1.

Our policy is to provide complete transparency to our Flexcom user community regarding any known software errors or limitations. Refer to Known Software Faults for further information on known faults in recent versions of Flexcom.

For your convenience, the fault corrections provided by Flexcom 2022.1.2 are also summarised here.

No.	Issue	Severity
1	Application of wind loads ignores turbine yaw	Major
2	Wind Field Generator app can truncate file names occasionally	Minor
3	Flexcom's GUI requires a license to open	Minor
4	Element convected axes display	Minor

Issue 1: Application of wind loads ignores turbine yaw

- **Related Topics**: Wind Turbine Modelling
- **Description**: Wind loads are not correctly rotated from the AeroDyn coordinate system to the Flexcom coordinate system. This means that turbine yaw is not taken into account, and the windward force always acts in a direction which is aligned with the Global Y axis in Flexcom. Wind turbine models in Flexcom (e.g., the standard examples shipped with the software) have the turbine initially facing along the negative Global Y axis (a prerequisite for initial alignment of AeroDyn and Flexcom coordinate systems), with the turbine typically facing the dominant wind direction. So if you are considering wind loading from a single direction only, the global response will be correct. However if you are applying wind from different directions, and using ServoDyn to rotate the turbine to face the oncoming wind, then the global response will be incorrect
- **Workaround**: There is no workaround, so you are advised to upgrade to Flexcom 2022.1.2 or later.

Issue 2: Wind Field Generator app can truncate file names occasionally

- **Related Topics**: Wind Field Generator
- **Description**: The naming convention for generated files is controlled by the File Name Pattern input. If you using decimal places in your file names (e.g. wind speed = 32.85m/s), the WFG app can truncate the file names. This can cause confusion if you have several files with similar names.
- **Workaround**: There is no workaround, so you are advised to upgrade to Flexcom 2022.1.2 or later.

Issue 3: Flexcom's GUI requires a license to open

- **Related Topics**: Licensing Options
- **Description**: Flexcom's user interface is designed to operate without a license, so tasks like model building and post-processing can be done without occupying a license seat. The license should only be required when performing numerical simulations. However, a bug in Flexcom 2022.1.1 means that the Flexcom GUI will not open without taking a license seat from the available pool.
- **Workaround**: Use a previous version of Flexcom if you need to use the GUI without a license. You are advised to upgrade to Flexcom 2022.1.2 or later.

Issue 4: Element convected axes display in Model View

- **Related Topics**: Model View
- **Description**: The local convected axes displayed in the Model View is incorrect, as the user interface is incorrectly reading the relevant data from the database (it is mixing up rows and columns of the orientation matrix).
- **Workaround**: Use the *PRINT keyword to manually examine the convected axes instead. Or upgrade to Flexcom 2022.1.2 or later.