# Framework atmosphere model - software tool for model coupling

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The authors present the concept of the framework atmosphere model developed as a universal modelling tool for studying the interrelationship and couplings of the broad range of various processes and phenomena in the atmosphere. The original global Upper Atmosphere Model (UAM) was reformed and updated into the open framework which includes the controlling software (manager) and several subordinate models of separate atmospheric regions and processes. At present these sub-models include an ionosphere model, a neutral atmosphere model, an electric field model, a thermosphere wind model, a field-aligned currents model. The framework architecture is flexible to include a variety of computer models of the near Earth environment with minor adaptations. Each included model is independent from the others and calculates the certain set of physical parameters of the modelling object. These sub-models exchange data through the manager using the unified interface. This approach allows for the integration of a wide range of data sources of different kinds, both experimental and modelled.