CCMC Simulation Outputs Onboarding Questionnaire

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| By completing this questionnaire, you agree to the [CCMC DATA Collection Consent Agreement](https://ccmc.gsfc.nasa.gov/consent/).  |

# 1. Simulation Output Originator Metadata

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| --- |
| **Contact Information** (add a copy of this table for each contact) |
| **First name** |  |
| **Middle name** (optional) |  |
| **Last name** |  |
| **Organization Name** |  |
| **Email** (work/school) |  |
| **Role** (check all that apply) | [ ] Model User[ ]  Model Developer |

# 2. General Model Metadata

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| --- | --- |
| **Model Name** (e.g., WSA) |  |
| **Model Full Name if applicable** (e.g., Wang-Sheeley-Arge Model) |  |
| **Model Release Date** |  |
| **Model Version** (e.g., 3.8) |  |
| **Code Languages** (e.g., IDL, Fortran, C++) |  |
| **Model Description** |  |
| **Change Log** (notable changes compared to previous version) |  |
| **Inputs Description** |  |
| **Outputs Description** |  |
| **Model Caveats** |  |
| **Model institution acknowledgement** (Optional. Add rows as needed) |
| **Name** |  |
| **URL** |  |
| **Relevant Links, if any** (example: link to source code on Github, link to online documentation about the model):  |
| **Brief link name**  |  |
| **URL**  |  |
| **Long link Description** (optional) |  |
| **Publication(s)** (add rows as needed) |
| **DOI** | **Title** |
|  |  |
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# 3. Model and Science Use Metadata

*These are used to filter models on the CCMC website model catalog*

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| **Simulation Type** (required; can select more than one):[ ]  Data Assimilation [ ]  Empirical [ ]  Ensemble [ ]  Physics-based[ ]  Physics-based.Kinetic [ ]  Physics-based.MHD [ ]  Post\_Processing\_Tools**Temporal Dependence Possible?** Can the results evolve with time?[ ]  True[ ]  False | **Model Domains** (required; can select more than one):[ ]  Solar [ ]  Heliosphere.Inner\_Heliosphere[ ]  Heliosphere.Outer\_Heliosphere [ ]  Geospace[ ]  Magnetosphere.Global\_Magnetosphere[ ]  Magnetosphere.Inner\_Magnetosphere.Plasmasphere [ ]  Magnetosphere.Inner\_Magnetosphere.RadiationBelt [ ]  Magnetosphere.Inner\_Magnetosphere.RingCurrent [ ]  Local\_Physics[ ]  Global\_Ionosphere [ ]  High\_Latitude\_Ionosphere/Auroral\_Region[ ]  Thermosphere |

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| **Space Weather Impacts:**[ ]  Atmosphere variability (satellite/debris drag)[ ]  Galactic cosmic rays - GCRs (human exploration, aviation safety, aerospace assets functionality)[ ]  Geomagnetically induced currents - GICs (electric power systems)[ ]  Ionosphere variability (navigation, communications)[ ]  Near-earth radiation and plasma environment (aerospace assets functionality)[ ]  Solar energetic particles - SEPs (human exploration, aviation safety, aerospace assets functionality) |
| **List of Phenomena (This is domain specific)****Solar List:** [ ]  Solar\_Magnetic\_Field[ ]  Coronal\_Holes[ ]  Coronal\_Mass\_Ejections[ ]  Solar\_Electromagnetic\_Emissions[ ]  Solar\_Energetic\_Particles[ ]  Solar\_Flares[ ]  Solar\_Spectral\_Irradiance**Heliosphere List:**[ ]  Solar\_Energetic\_Particles[ ]  Ambient\_Solar\_Wind [ ]  Magnetic\_Connectivity [ ]  High\_Speed\_Stream[ ]  Stream\_Interaction\_Regions[ ]  Interplanetary\_Shocks[ ]  Heliospheric\_Current\_Sheet[ ]  Interplanetary\_Scintillation[ ]  Coronal\_Mass\_Ejections\_Propagation[ ]  Coronal\_Mass\_Ejection\_Arrival**Global Magnetosphere List:**[ ]  Geomagnetic\_Storms[ ]  Geomagnetic\_Sub-storms[ ]  Magnetosphere\_Current\_Systems[ ]  Plasma\_Sheet [ ]  Magnetopause[ ]  Bow-shock[ ]  Cusp[ ]  Magnetosheath[ ]  Magnetic\_Mapping[ ]  Magnetotail\_Dynamics[ ]  Plasmoids[ ]  Magnetic\_Perturbations\_at\_Geosynchronous\_Orbit[ ]  Ground\_Magnetic\_Perturbations[ ]  Ultra\_Low\_Frequency\_Waves[ ]  Flux\_Transfer\_Events[ ]  Busty\_Bulk\_Flows[ ]  Kelvin-Helmholtz\_Instabilities[ ]  Distant\_Tail[ ]  Near-Earth\_Neutral\_Line[ ]  Magnetic\_Reconnection | **Inner Magnetosphere List:**[ ]  Ultra\_Low\_Frequency\_Waves[ ]  Whistler\_Chorus\_Waves[ ]  Plasmaspheric\_Hiss[ ]  Electromagnetic\_Ion\_Cyclotron\_Waves[ ]  Other\_Tyes\_of\_Waves[ ]  Wave-particle\_Interactions[ ]  Particle\_Dynamics[ ]  Plasmasphere/Plasmapause\_Dynamics[ ]  Inner\_Magnetosphere-ionosphere-thermosphere\_Coupling[ ]  Inner\_Magnetosphere\_and\_Outer\_Magnetosphere/Tail\_Coupling[ ]  Seed\_Population\_for\_the\_Ring\_Current\_and\_Radiation\_Belt/ Preconditioning**Geospace List:**[ ]  Coupled\_Geospace\_System\_Response\_To\_Drivers[ ]  Magnetosphere-ionosphere\_Convection[ ]  Energy\_Distribution\_In\_Coupled Geospace\_System **Ionosphere List:**[ ]  Variablility\_of\_Plasma\_Density[ ]  Ion\_Drift\_Velocity[ ]  Equatorial\_Anomaly[ ]  Traveling\_Ionospheric\_Disturbances[ ]  Ionospheric\_Scintillations[ ]  HF\_Signal\_Absorption**Thermosphere List**:[ ]  Atmosphere\_Expansion[ ]  Neutral\_Composition\_Change[ ]  Neutral\_Wind\_Change[ ]  Traveling\_Atmospheric\_Disturbances**High Latitude Ionosphere/Auroral Region List**:[ ]  Ionosphere\_Electrodynamics[ ]  Particle\_Precipitation[ ]  Energy\_Flow\_into\_Ionosphere[ ]  Joule\_Heating[ ]  Ionosphere\_Convection[ ]  Polar\_Wind[ ]  Ionosphere\_Particle\_Outflow[ ]  Field-aligned\_Currents[ ]  Cross-polarcap\_Electric\_Potential |

# 4. Resources

What storage/hardware resources does the simulation(s) outputs need?

What **hardware resources** does this model need? (List here or attach documentation)

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| --- | --- |
| **Total Size/Disk Space needed (e.g. 500 GB)** |  |
| **Any special requirements or notes that CCMC should be aware of?** |  |
| **Have these simulations been used/referenced in any publication? If so, please provide the list of publication name and the associate DOI.**  |  |

What **software resources** does the output reader/interpolation/visualization code need including any **version dependency**? (List here or attach documentation)

|  |  |
| --- | --- |
| **Specialized/licensed software and toolkits** (e.g., IDL, Matlab) |  |
| **Compilers** (e.g., Intel, Nvidia, gcc) |  |
| **Libraries** |  |
| **Other** (e.g., Python, Java) |  |
| List any **licensing info** for the code and any third-party open-source software used by the code |  |

# 5. Guidelines for the Delivery Package to CCMC

**Delivery package should include the following:**

* Simulation(s) output
* Pre-and post-processing, visualization, validation, interpolation, and/or output reader scripts/codes
* Documentation on how to use the output (and any other documentation