CCMC Simulation Outputs Onboarding Questionnaire

By completing this questionnaire, you agree to the CCMC DATA Collection Consent Agreement.

1. Simulation Output Originator Metadata

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

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**

3. Model and Science Use Metadata

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

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

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

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

☐ Flux_Transfer_Events	☐ Ionosphere_Particle_Outflow
☐ Busty_Bulk_Flows	☐ Field-aligned_Currents
☐ Kelvin-Helmholtz_Instabilities	☐ Cross-polarcap_Electric_Potential
☐ Distant_Tail	
☐ Near-Earth_Neutral_Line	
☐ Magnetic_Reconnection	

4. Resources

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

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

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