simulation_plan — *activity.activity*

inherited properties
rationale: str [0.1]
previously_known_as: str [0.N]
responsible_parties: shared.responsibility [0.N]
name: str [1.1]
long_name: str [0.1]
keywords: str [0.1]
internal_name: str [0.1]
duration: time.time_period [0.1]
description: str [0.1]
citations: shared.citation [0.N]
canonical_name: str [0.1]
alternative_names: str [0.N]

properties
expected_model: science.model [1.1]
expected_performance_sypd: float [0.1]
expected_platform: platform.machine [0.1]

constraints
cardinality: {duration=1.1}

---

multi_ensemble — *designing.numerical_requirement*

constraints
cardinality: {additional_requirements=0.0}

---

initialisation_requirement — *designing.numerical_requirement*

branch_time_in_initialisation_source: time.date_time [0.1]
initialise_from_data: data.dataset [0.1]

constraints
mutually_exclusive: {('initialise_from_experiment', 'initialise_from_data')=1.1}

---

forcing_constraint — *designing.numerical_requirement*

additional_constraint: str [0.1]
category: str [0.1]
code: str [0.1]
data_link: data.dataset [0.1]
group: str [0.1]
origin: shared.citation [0.1]

constraints
cardinality: {additional_requirements=0.0}

---

numerical_experiment — *activity.activity*

inherited properties
rationale: str [0.1]
previously_known_as: str [0.N]
responsible_parties: shared.responsibility [0.N]
name: str [1.1]
long_name: str [0.1]
keywords: str [0.1]
internal_name: str [0.1]
duration: time.time_period [0.1]
description: str [0.1]
citations: shared.citation [0.N]
canonical_name: str [0.1]
alternative_names: str [0.N]

properties
tier: int [0.1]

constraints
cardinality: {duration=0.0}
cardinality: {rationale=1.1}

---

forcing_types

historical
idealised
scenario
driven

---

ensemble_requirement — *designing.numerical_requirement*

minimum_size: int [1.1]

constraints
cardinality: {additional_requirements=0.0}

---

ensemble_types

Perturbed Physics
Initialisation Method
Realization
Start Date
Forced
Resolution
Driven

---

numerical_requirement — *activity.activity*

inherited properties
rationale: str [0.1]
previously_known_as: str [0.N]
responsible_parties: shared.responsibility [0.N]
name: str [1.1]
long_name: str [0.1]
keywords: str [0.1]
internal_name: str [0.1]
duration: time.time_period [0.1]
description: str [0.1]
citations: shared.citation [0.N]
canonical_name: str [0.1]
alternative_names: str [0.N]

properties
is_conformance_requested: bool [1.1]
is_conformance_info_required: bool [1.1]

constraints
cardinality: {duration=0.0}

---

project — *activity.activity*

inherited properties
rationale: str [0.1]
previously_known_as: str [0.N]
responsible_parties: shared.responsibility [0.N]
name: str [1.1]
long_name: str [0.1]
keywords: str [0.1]
internal_name: str [0.1]
duration: time.time_period [0.1]
description: str [0.1]
citations: shared.citation [0.N]
canonical_name: str [0.1]
alternative_names: str [0.N]

properties
homepage: str [0.1]
objectives: str [0.N]

constraints
cardinality: {description=1.1}

---

temporal_constraint — *designing.numerical_requirement*

required_calendar: time.calendar [0.1]
required_duration: time.time_period [0.1]
start_date: time.date_time [0.1]
start_flexibility: time.time_period [0.1]

constraints
cardinality: {additional_requirements=0.0}

---

numerical_requirement_scope

mip-era
mip-group
mip
experiment

---

domain_requirements — *designing.numerical_requirement*

required_extent: science.topic [0.1]
required_resolution: science.topic [0.1]

constraints
cardinality: {additional_requirements=0.0}

---

experimental_relationships

is_constrained_by
is_constrainer_of
is_perturbation_from
is_control_for
is_initialized_by
is_initializer_of
is_sibling_of

---

output_requirement — *designing.numerical_requirement*

formal_data_request: shared.online_resource [0.1]

constraints
cardinality: {additional_requirements=0.0}

---

start_date_ensemble — *designing.numerical_requirement*

ensemble_members: time.datetime_set [1.1]

constraints
cardinality: {additional_requirements=0.0}

Relationships:
- ensemble axis (1.N)
- initialise from experiment (0.1)
- will support experiments (1.N)
- forcing type (1.1)
- related experiments (0.N)
- ensemble type (1.1)
- ensemble member (0.N)
- requirements (0.N)
- governing mips (0.N)
- related mips (0.N)
- required experiments (0.N)
- governed experiments (0.N)
- required period (1.1)
- additional requirements (0.N)
- previous projects (0.N)
- sub projects (0.N)
- scope (0.1)