Evaluation and review procedures for the Geohazard Supersites and Natural Laboratories initiative

# Purpose of this document

This document describes the submission, evaluation and review procedures for proposals submitted to the Geohazard Supersites and Natural Laboratories (GSNL) initiative.

The Annexes contain templates to help the writing of Supersite proposals, forms for the review of Supersite proposals, and forms for the periodic reporting of approved Supersites.

# Proposals and Submission Dates

Proposals are submitted by the prospective Supersite Coordinator (SC), and should follow the templates provided in Annexes A or B. Candidate and Permanent Supersite and Natural Laboratory proposals are reviewed three times each year. Proposals should be received by 31 January, 31 May or 30 September.

Event Supersite proposals will be reviewed at any time, as soon as possible after submission.

# The Supersite Coordinator

It is the main scope of the GEO Geohazard Supersites initiative to promote an easy and regular access to in-situ and satellite data and the provision of the scientific results to end users. The Supersite partnership is composed by data providers and research institutions which should guarantee the provision of the necessary data and the relevant analysis and interpretation at the highest scientific level and within reasonable time limits. They should also commit to support geohazard assessment and emergency response by the end-users.

The Supersite Coordinator is expected to have proven capabilities to coordinate and manage the project as a whole. He/she should be proactively promoting the use of the project results by the end user communities. The Supersite Coordinator institution should support his/her activity to some extent.

All institutions and scientists involved in each Supersite are committed to provide open access to both in-situ data and scientific products generated for the site, according to a specific Data Policy which will be defined and agreed between GEO-GSNL and the proposal partnership taking in due consideration possible local limitations[[1]](#footnote-1). The Data Policy will also describe the rules for the dissemination of non-validated sensitive information during the disaster management process, if relevant to the Supersite.

# The Evaluation Framework

The evaluation procedure is supported by the GEO Secretariat. Proposals are evaluated by the GSNL Scientific Advisory Committee (SAC) and the CEOS Data Coordination Team (DCT). The GSNL governance is described in this document (link to the document).

All decisions are taken by the SAC using the procedure described in the following document: <http://www.earthobservations.org/documents/gsnl/201412_SAC_decision_making_procedures.pdf>. To maintain the necessary transparency all decisions are documented and made publicly accessible on the GEO-GSNL website. SAC members who have a direct personal interest in the decision outcome shall abstain from voting.

# Evaluation Procedure for Candidate Supersites, Permanent Supersites or Natural Laboratories

The evaluation procedure consists of two consecutive phases. The first one is the evaluation by the SAC. The second phase is the evaluation by the DCT.

## Proposal evaluation by the SAC

Throughout the evaluation steps, the SAC verifies the proposals against the criteria described in section 5.1.1.

1. Proposals, prepared according to the templates in Annex A, are submitted to the GEO Secretariat support person and to the SAC Chair. The GEO Sec immediately submits the document for publication on the GSNL website.
2. The SAC Chair makes a first check of the proposal to verify that all sections in the template have been addressed. If not, the SAC Chair returns the proposal to the SC asking for amendments.
3. The SAC Chair forwards the proposal to the SAC members in order to identify three experts (who may be external to SAC) willing to review the proposal and write an evaluation report within one month. They will use the template in Annex C.
4. When the reviews have been received (in case of excessive delays two reviewers are sufficient), the GEO Secretariat organizes a SAC teleconference in which the SAC must approve, reject, or request amendments to the proposal.
5. Then:
	1. If the SAC approves the proposal, the SAC Chair notifies the decision to the proposers, and to the CEOS DCT, to start the second evaluation phase (section 5.2).
	2. If the SAC requests amendments, the SAC Chair notifies the motivated decision to the proposers, who should return the amended proposal within one month to the SAC Chair. The latter will check the proposal and if all issues have been addressed, will transmit the proposal to the CEOS DCT for the second evaluation phase (section 5.2).
	3. If the SAC rejects the proposal, the SAC Chair notifies the motivated decision to the proposers. Proposals can be resubmitted at the next submission date, provided that the issues causing rejection are thoroughly addressed.

###  The SAC Evaluation Criteria

This section describes the criteria used by the SAC for the evaluation of Candidate/Permanent Supersite and Natural Laboratory proposals.

*Permanent Supersites*

The criteria for the selection of Permanent Supersites are:

1. The proposed Supersite fulfils the objectives of the [GEO GSNL Initiative](http://www.earthobservations.org/ts.php?id=163).
2. There is a broad scientific interest to work on the selected site as a consequence of well-identified threats and geohazards, and there are well-identified societal benefits foreseen in Disaster Risk Management.
3. The Supersite partners are qualified, as described in section 3, and are committed to carry out the Supersite objectives.
4. There is clear evidence of existing, developing or planned infrastructures and procedures allowing the open access to a considerable amount of past and future in-situ and EO data
5. The partners agree to define together a specific Supersite Data Policy respecting the spirit of GEO. Any limitation the partners need or want to apply with respect to open access for any dataset or product should be mentioned at the proposal stage.
6. Web-services for data access should be already in place or planned.
7. The partners agree to formally commit to provide access to data and digital science products generated in the Supersite framework.
8. The area of interest is well identified, and details on the type and amount of requested EO data are given.
9. Evidence of a long-term sustainability of the existing monitoring infrastructures and facilities is given.
10. The proposal team is open to collaborations with other supersites and other international initiatives to support the GSNL initiative.
11. There is a good level of involvement of the local scientific and DRM end-user communities.
12. At least part of the proposal team commits to support the end-users' uptake of the science products generated for the Supersite.

*Natural Laboratories*

The criteria for the selection of Natural Laboratory (NL) proposals are the same as for Permanent Supersites, with the following additions:

1. The NLs must cover a large region (several 100s of km2) and must be subject to strong hazard levels from multiple sources having the potential to generate high societal impacts.
2. The added value (for science and society) of creating a Natural Laboratory should be clearly expressed.
3. There is evidence of a clear benefit from the multi-disciplinary and cross-disciplinary research that should be facilitated by the Natural Laboratory.

Note: since NLs are very demanding in terms of satellite image coverage, they may be approved only if the criteria 2 and 3 above are convincingly addressed also for the CEOS DCT.

*Candidate Supersites*

Sites for which the requirements no. 4, 5, 6 above are not met, but for which there is a clear intention of fulfilment and there is a roadmap in this sense, can be accepted as Candidate Supersites. The status of Permanent versus Candidate can be requested in the proposal or determined by the SAC during the evaluation process.

## Proposal evaluation by the CEOS DCT (this section to be modified by CEOS DCT)

The CEOS DCT expects Supersite proposals to be presented following the template defined in Annex A. Then the DCT verifies the proposals against the criteria described in section 5.2.1.

The Chair of the DCT will notify the proposers and the SAC Chair about the evaluation result and about the timing of the formal acceptance of the proposal. The latter require approval by the CEOS Plenary or by the CEOS Special Implementation Team (SIT), which meet 2 times each year.

The formal acceptance letter is sent by the DCT to the proposers and the SAC Chair, and specifies the number of image datasets allocated for each year and each sensor.

During the various steps the GEO Secretariat is always in cc in all communications.

###  The CEOS DCT Evaluation Criteria for Permanent Supersites and Natural Laboratories

The DCT will evaluate the proposed Supersite with respect to the following criteria:

* Substantial interest of a broad scientific community, e.g. demonstrated by a minimum number of 5 research teams
* Level of commitment of the partnership of the Supersite proposal.
* Availability of relevant in situ data
* The proposed Supersite has different objectives than other existing Supersites
* The ability of CEOS Agencies to provide sufficient remote sensing satellite resources to make a meaningful contribution to observation/analysis of the new Supersite
* A Supersite Scientific Coordinator has been identified and is committed to coordinate space data requests and scientific reporting.
* ....

# Evaluation Procedure for Event Supersites

The establishment of Event Supersites needs to be fast to allow the prospective planning of EO data acquisitions at the first usable satellite passes. This requires a simplified evaluation procedure which is expected to be carried out in few days.

1. Proposals are submitted directly to the SAC Chair and to the Chair of the CEOS DCT, using the template in Annex B.
2. The SAC and the DCT Chairs coordinate to check if all sections of the template have been well addressed and if the criteria listed in section 6.1 are met.
3. Then:

3.1 If no proposal clarifications/amendments are needed, the DCT Chair sends the proposal to the CEOS DCT, soliciting a rapid response.

3.2 Otherwise, if some information is missing or the criteria are not met, the SAC Chair returns the proposal requesting the necessary amendments or providing a motivation for rejecting the proposal.

##  Evaluation Criteria for Event Supersites

Mandatory requirements for the successful evaluation of an Event Supersite proposal are:

1. The proposed Supersite fulfils the objectives of the GEO GSNL Initiative in terms of scientific interest and societal benefits.
2. The event is particularly relevant in terms of either magnitude, social/economic impact or scientific issues.
3. The area of interest is well identified, and details on the type and amount of the requested EO data are given.
4. The science teams accept to share their research results in numerical format with other science teams and with risk managers and users, according to an Event Supersite Data Policy.
5. The partners agree to define together a specific Supersite Data Policy respecting the spirit of GEO. Any limitation the partners need or want to apply with respect to open access for any dataset or product should be mentioned at the proposal stage.

Optional requirements for the evaluation of an Event Supersite proposal by SAC are:

1. In-situ data available for the event are provided to the scientific teams.
2. The proposal identifies some End-users interested to the scientific products generated by the teams.

## Event Supersite proposal evaluation by the CEOS DCT

As mentioned, the CEOS DCT will receive a proposal which has been initially verified by the DCT Chair against the common criteria described in section 6.1.

Then the single space agencies will independently decide to what extent they can support the Event Supersite, based also on other constraints (e.g. agreements with their commercial partners, conflicts with ongoing acquisition plans, etc.). Approval by the CEOS Plenary is not needed, and the Supersite Coordinator will be informed about the results of the evaluation (and the allowed image quota) by the SAC or the DCT Chair.

During the various steps the GEO Secretariat is always in cc in all communications.

# Periodic Review Process

The review process is meant to verify the fulfilment of the general GEO goals, as well as the accomplishment of the specific objectives of each Supersite. The review process is also aiming to stimulate transfer of hazard and risk information between the scientific and user communities and should promote coordination among the Supersites.

The review is carried out using pre-defined forms (Annex D & E).

## Review procedures for Candidate Supersites, Permanent Supersites or Natural Laboratories

Two different reports are solicited.

A **synthetic 1-page report** is compiled online by all the Science Teams every odd year after the date of the notification letter. A link to an online questionnaire will be sent to the Supersite Coordinator from the GEO Secretariat one month before the deadline. See example in the Annex D.

The synthetic report is sent to the SAC and DCT mail lists, and is assessed by the SAC Chair to verify the presence of specific issues that may jeopardize the Supersite success. If any such issues arise, decisions by the SAC and/or DCT may be requested, and specific actions may be solicited to the Supersite Coordinator.

A more **comprehensive 2-8 page report** is requested every even year after the date of the notification letter or when solicited by the SAC. It should be sent to the SAC Chair and the GEO Secretariat. A remind will be sent to the Supersite Coordinator from the GEO Secretariat one month before the deadline. Use the form in Annex E.

In the comprehensive report the Supersite Coordinator should summarize the contributions received by all Science Teams. A SAC teleconference will be organised to discuss the report and give an assessment.

The DCT also provides an assessment of the comprehensive report............ (this part to be integrated by DCT)

The final outcome of the comprehensive report review may be:

1. The report is positively evaluated. If the report concerns a Candidate Supersite, and if the requirements for Permanent Supersites are met (section 5.1.1), the status is changed to Permanent Supersite.
2. The report is negatively evaluated. Specific actions may be requested to the involved teams.
3. The report is negatively evaluated and follows a similarly negative assessment of the previous report. In this case the SAC and the DCT will discontinue support to the specific Supersite or Natural Laboratory.

## Review procedures for Event Supersites

One report is solicited no later than 6 months after the end of EO data provision by CEOS agencies.

The Supersite Coordinator is requested to provide the synthetic report according to the form in Annex F.

The report must be sent to the SAC and CEOS DCT Chairs, as well as to the points of contact of the single space agencies supporting the Event Supersite.

# Reporting to GEO

The SAC Chair summarizes the Supersite Coordinators' reports and all GSNL activities in an annual report to the GEO Disaster Task leader.

**Annex A**

**GSNL Proposal Template for Permanent Supersite/Natural Laboratories**

**A.1 Proposal Title**

**A.2 Supersite Coordinator**

|  |  |
| --- | --- |
| Email (Organization only) |   |
| Name: |  |
| Surname: |  |
| Position: |  |
| Personal web page: | *<In case a personal web page does not exist, please provide a CV below this table>* |
| Institution: |  |
| Institution type (Government, Education, other): |  |
| Institution web address:  |  |
| Street address: |  |
| City: |  |
| Postal Code/Zip Code: |  |
| Country: |  |
| Province, Territory, State, or County: |  |
| Phone Number: |  |

**A.3 Core Supersite Team**

##### This section should provide the contact information of each participant to the initial Supersite team (the Core team). Further participants may be added at any time.

##### Note that most space agencies require that each person using the data (i.e. at least the Supersite team members) should sign a license agreement with specific rules on data use.

|  |  |
| --- | --- |
| Email (Organization only) |   |
| Name: |  |
| Surname: |  |
| Position: |  |
| Personal web page: | *<In case a personal web page does not exist, please provide a CV below this table>* |
| Institution: |  |
| Institution type (Government, Education, other): |  |
| Institution web address:  |  |
| Street address: |  |
| City: |  |
| Postal Code/Zip Code: |  |
| Country: |  |
| Province, Territory, State, or County: |  |
| Phone Number: |  |

*Repeat table above as needed*

**A.4 Region of Interest**

##### Identify the region of interest (use a figure) and specify geographic coordinates in Lat/Long (please attach a shapefile or KML file).

**A.5 Supersite (or Natural Laboratory) motivation (2-4 pages)**

##### This section should provide a description of the state of the art (include comprehensive reference list), scientific problems, available data, further data needs, benefits of the Supersite for science and society, also in terms of risk prevention. Please address here criteria 1,2,3,9,11,12 of section 5.1.1

*Please give a clear statement on Supersite objectives.*

**A.6 In situ data**

*This section should provide a detailed description of the in situ data available to the Supersite participants, at the time of proposal submission as well as following Supersite implementation.* *Please address here criteria 4,9 of section 5.1.1*

|  |  |  |
| --- | --- | --- |
| Type of data  | Data source | Data access |
|  *e.g. seismic waveforms, GPS time series, gas measurements, etc.* | *……* | *Please describe how to access the data, type of access (unregistered, registered, limited to GSNL scientists, etc.), and future developments in the Supersite framework.* |
| … | *……* | *…* |
| … | *……* | *…* |

**A.7 Supersite activity schedule**

##### This section should describe the schedule of the Supersite implementation, e.g. in terms of scientific activities, in situ and EO data provision to participants, implementation of data infrastructures, benefits for end-users, etc. Please address here criteria 4,6,9,12 of section 5.1.1

#####

**A.8 Available Resources**

##### Describe resources and funding available to carry out the Supersite objectives.

**A.9 EO data requirements**

*This section should provide details on the EO data requirements for each mission. It should also provide justification for the requested EO data with respect to the Supersite objectives.*

***MISSION NAME*** *(e.g. COSMO-SkyMed, TerraSAR X, Radarsat 2, etc.)*

|  |  |  |
| --- | --- | --- |
|  |  Information | Notes |
| Image mode | e.g. STRIPMAP, SCANSAR, etc. |  |
| Orbit pass  |  |  |
| Look direction |  |  |
| Beam or incidence angle (range) |  |  |
| Polarization  |  |  |
| Type of Product  | (i.e. SLC, RAW) |  |
| Number of archive images requested |  |  |
| Number of new images requested, per year |  |  |

*Repeat table above for each sensor/system*

**A.10 Declaration of commitment**

##### The investigator(s) should explicitly declare here that they agree to what required in the criteria 3,5,7,10,11,12 of section 5.1.1.

**A.11 Further comments**

##### The investigator(s) may provide additional comments or information to ensure that the request is properly understood.

**Annex B**

**GSNL Proposal Template for Event Supersites**

**B.1 Proposal Title**

**B.2 Event Supersite Coordinator**

|  |  |
| --- | --- |
| Email (Organization only) |   |
| Name: |  |
| Surname: |  |
| Position: |  |
| Personal web page: | *<In case a personal web page does not exist, please provide a CV below this table>* |
| Institution: |  |
| Institution type (Government, Education, other): |  |
| Institution web address:  |  |
| Street address: |  |
| City: |  |
| Postal Code/Zip Code: |  |
| Country: |  |
| Province, Territory, State, or County: |  |
| Phone Number: |  |

**B.3 Event Supersite Team**

##### This section should provide the contact information of each participant to the initial Event Supersite team. Further participants may be added at any time.

##### Note that most space agencies require that each person using the data (i.e. at least the Supersite team members) should sign a license agreement, with specific rules on data use.

|  |  |
| --- | --- |
| Email (Organization only) |   |
| Name: |  |
| Surname: |  |
| Position: |  |
| Personal web page: | *<In case a personal web page does not exist, please provide a CV below this table>* |
| Institution: |  |
| Institution type (Government, Education, other): |  |
| Institution web address:  |  |
| Street address: |  |
| City: |  |
| Postal Code/Zip Code: |  |
| Country: |  |
| Province, Territory, State, or County: |  |
| Phone Number: |  |

*Repeat table above as needed*

**B.4 Region of Interest**

##### Identify the region of interest (use a figure) and specify geographic coordinates in Lat/Long (please attach a shapefile or KML file).

**B.5 Event Supersite motivation (2 pages)**

##### This section should provide a description of the event, scientific problems, available data, further data needs, benefits of the Event Supersite for science and society, also in terms of emergency management. Please address here criteria 2 and 6 of section 6.1

*Please give a clear statement on Event Supersite objectives.*

**B.6 In situ data**

*This section should provide a detailed description of the in situ data available to the Event Supersite participants.* *Please address here criteria 5 of section 6.1*

|  |  |  |
| --- | --- | --- |
| Type of data  | Data source | Data access |
|  *e.g. seismic waveforms, GPS time series, gas measurements, etc.* | *……* | *Please describe how to access the data, type of access (unregistered, registered, limited to GSNL scientists, etc.), and future developments in the Supersite framework.* |
| … | *……* | *…* |
| … | *……* | *…* |

**B.7 Available Resources**

##### Describe resources and funding available to carry out the Event Supersite objectives.

**B.8 EO data requirements**

*This section should provide details on the EO data requirements for each mission. It should also provide justification for the requested EO data with respect to the Supersite objectives.*

***MISSION NAME*** *(e.g. COSMO-SkyMed, TerraSAR X, Radarsat 2, etc.)*

|  |  |  |
| --- | --- | --- |
|  |  Information | Notes |
| Image mode | e.g. STRIPMAP, SCANSAR, etc. |  |
| Orbit pass  |  |  |
| Look direction |  |  |
| Beam or incidence angle (range) |  |  |
| Polarization  |  |  |
| Type of Product  | (i.e. SLC, RAW) |  |
| Number of archive images requested |  |  |
| Number of new images requested, per year |  |  |

*Repeat table above for each sensor/system*

**B.9 Declaration of commitment**

##### The investigator(s) should explicitly declare here that they agree to what required in criteria 4 and 5 of section 6.1.

**A.11 Further comments**

##### The investigator(s) may provide additional comments or information to ensure that the request is properly understood.

**Annex C**

**Supersite proposal review form**

**C.1 Proposal Title and Coordinator**

**C.2 Reviewer name**

**C.3 Site, rationale and team**

##### In this section the reviewer should provide an evaluation of sections A.2 to A.8 of a Permanent Supersite/Nat. Laboratory proposal, or B.2 to B.7 of an Event Supersite proposal.

##### The evaluation should consider the criteria stated in sections 5.1.1 and 6.1 of this document.

*Overall judgement should be given as : good, average, poor.*

##### The evaluation should consider also the following aspects:

1. Capacity of the Supersite framework to stimulate an advanced scientific understanding of the geophysical processes acting at the site?
2. Quality of the Supersite Coordinator and scientific team, and of their capacity to address the proposal objectives.
3. Capacity of the partnership in promoting a faster uptake of the new scientific findings by the relevant disaster management agencies.
4. Promotion of new collaborative research and improvement of capacity building at the local scale.

**C.4 Data**

##### In this section the reviewer should provide an evaluation of the adequacy of the In situ and EO data volume and quality, with respect to the Supersite objectives.

##### The evaluation should consider the criteria stated in sections 5.1.1 and 6.1 of this document.

*Overall judgement should be given as : good, average, poor.*

##### The evaluation should consider also the following aspects:

1. Ability of the Supersite framework to stimulate a better data access for the site.
2. How likely the improved Supersite data access can lead to new scientific discoveries and/or improve the monitoring procedures.
3. Adequacy of the data sharing infrastructure and capacity to provide data access through web services.
4. How well designed is the EO data acquisition plan (viewing geometry, imaging frequency, synergies between sensors). How good is the balance between an effective use of satellite resources and the needs of the scientific and user communities.
5. Capacity of the new data and science to eventually provide tangible benefits in terms of disaster management (prevention and/or emergency management).

**C.5 Dissemination of results**

##### In this section the reviewer should provide an evaluation of the adequacy of the proposal for the dissemination of the scientific results to all stakeholders: scientific community, disaster managers and the society in general (at the respective levels of detail).

*Overall judgement should be given as : good, average, poor.*

##### The evaluation should consider also the following aspects:

1. Commitment of the partnership to the definition of a data policy in the spirit of the GEO principles.

**C.6 Overall assessment**

##### In this section the reviewers should score the proposal according to the following codes:

##### A =Proposal can be accepted as is

##### B= Proposal needs amendments/integrations

##### C= Proposal should be rejected

##### The reviewers should also indicate whether the Supersite can be accepted as Permanent or Candidate.

**Annex D**

Synthetic online annual report for Candidate/Permanent Supersites

*To be submitted by the Coordinator every odd year after Supersite approval*

***General***

|  |  |
| --- | --- |
| Name of Supersite\* |  |
| Your name and affiliation\* |  |

\* mandatory fields

Tick box if you are the Supersite Coordinator

***Data access***

|  |  |
| --- | --- |
|  Type of in situ data you have provided to Supersite |  |
| Type of in situ data you have accessed  |  |
| How did you access the in situ data |  |
| Type of satellite EO data you have accessed  |  |
| How did you access the EO data |  |
| Data access issues you want to point out (policy, technical, etc.)  |  |

***Research results***

|  |  |
| --- | --- |
| Please list all publications obtained using datasets (in situ and EO) obtained through the Supersite |  |
| Please list all research products you generated using Supersite data (in situ and EO) |  |
| Research issues you want to point out |  |

***Other information***

|  |  |
| --- | --- |
| Please describe what actions (other than publication) have been made to inform the public, the scientific community and the stakeholders, of the existence of the Supersite and the related scientific opportunities, results, benefits. |  |
| Please describe what funding you have used for the activities described above.  |  |
| Please describe who are the stakeholders of your Supersite; what societal benefits have been achieved through your Supersite, and who have been the most benefiting stakeholders. |  |

***Your suggestions***

|  |  |
| --- | --- |
| Please give us your comments and suggestions for the improvement of the GSNL initiative  |  |

**Annex E**

Biennial report for Candidate/Permanent Supersite

***Name of Supersite***

|  |  |
| --- | --- |
| Status | *Candidate or Permanent Supersite* |
| Proposal documents | *Link to the proposal (on the GSNL website) and any other submitted document* |
| Acceptance letter(s) | *Link to acceptance letter(s)from SAC and/or CEOS* |
| Previous reviews | *Link to previous review report or n.a.* |
| Point of Contact | *Name, affiliation, address* |

1. **Science teams**

*<In this section please list all science teams who used/received data in the table below>*

|  |  |
| --- | --- |
| Team 1 | *Name, affiliation, address, e-mail, website/personal page of team leader* |
| Team 2 | *……* |
| Team 3 | *……* |

***Science team issues***

*<In this subsection please describe existing issues regarding the organization of the scientific research on the Supersite, e.g. if there are too few science teams, how to improve participation, coordination issues, etc.>*

1. **In situ data**

*<In this section please list all in situ data types available for the Supersite in the table below>*

|  |  |  |  |
| --- | --- | --- | --- |
| Type of data  | Data provider | How to access | Type of access |
|  *e.g. seismic waveforms, GPS time series, gas measurements, etc.* | *……* | *Link to data repository or description of procedure for data access* | *E.g. unregistered public, registered public, limited to GSNL scientists, etc.*  |
| … | *……* | *…* | *…* |
| … | *……* | *…* | *…* |

***In situ data issues***

*<In this subsection please describe existing issues regarding the open access to in situ data, e.g. if there are some datasets which are not open, why, if access is straightforward or cumbersome, future developments, etc. >*

1. **Satellite data**

*<In this section please list all satellite data types available for the Supersite in the table below>*

|  |  |  |  |
| --- | --- | --- | --- |
| Type of data  | Data provider | How to access | Type of access |
| *TerraSAR X. COSMO-SkyMed, Radarsat 2, ALOS-1/2, etc.* | *DLR, ASI, CSA, JAXA, etc.* | *Link to data repository or description of procedure for data access* | *E.g. unregistered public, registered public, limited to GSNL scientists, etc.*  |
| *…* | *…* | *…* | *…* |

***Satellite data issues***

*<In this section please describe existing issues regarding the access to satellite data, e.g. if there are some datasets which are not open, why, if access is straightforward or cumbersome, future developments, etc. >*

1. **Research results**

*<Here please give an overview of the scientific achievements, also with reference to the original Supersite proposal >*

***Publications***

*<In this subsection please list all publications obtained using datasets (in situ and EO) obtained through the Supersite initiative>*

|  |
| --- |
| Peer reviewed journal articles |
| *…* |
| *…* |
| *…* |
| Conference presentations/proceedings |
| *…* |
| *…* |
| *…* |

***Research products***

*<In this subsection please list all research products available for the Supersite in the table below>*

|  |  |  |  |
| --- | --- | --- | --- |
| Type of product | Product provider | How to access | Type of access |
| *e.g. ground deformation time series, source model, etc.* | *Name of scientist(s)* | *Link to publication, research product repository or description of procedure for access* | *E.g. public, registered, limited to GSNL scientists, etc.*  |
| *…* | *…* | *…* | *…* |
| *…* | *…* | *…* | *…* |

***Research product issues***

*<In this subsection please describe existing issues regarding how the science teams provide access to their research products, e.g. if products are open to other scientists (in numerical form), if they are open to the public, how access is provided, future developments, etc. >*

1. **Dissemination and outreach**

*<In this section please describe what other actions (other than publication) have been made to inform the public, the scientific community and the stakeholders, of the existence of your Supersite, of the scientific opportunities, results, benefits, and any other relevant aspects.>*

1. **Funding**

*<In this section please describe if and what funding has been used for the activities described above. Please provide reference to projects and proposals related to the Supersite. >*

1. **Societal benefits**

*<In this section please describe who are the stakeholders (other than the scientific community); what societal benefits have been achieved through your Supersite during the reference period, and who have been the most benefiting stakeholders. We remind you that GSNL is included in the GEO Disasters Benefit Area.>*

1. **Conclusive remarks and suggestions for improvement**

*<In this section the Point of Contact is asked to summarize the achievements and the issues, and to provide comments, impressions, remarks, and suggestions to improve the GSNL initiative and/or the specific Supersite activities.>*

1. The WOVOdat data policy may serve as an example for volcano Supersites: <http://www.wovodat.org/populate/dataPolicy.php> [↑](#footnote-ref-1)