

# Tyngdkraft Nedladdning v1.0 - teknisk beskrivning 1.0.1



Dokumentversion 1.0

## Gränssnittsdefinition

### Åtkomstpunkt

Atomflöde Produktion	<a href="https://api.lantmateriet.se/tyngdkraft-nedladdning/atom/v1">https://api.lantmateriet.se/tyngdkraft-nedladdning/atom/v1</a>
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## Inspire

### Information

Inspire Geology Dataspecifikation	<a href="http://inspire.ec.europa.eu/id/document/tg/ge">http://inspire.ec.europa.eu/id/document/tg/ge</a>
Inspire tekniska riktlinjer	<a href="http://inspire.jrc.ec.europa.eu/documents/Network_Services/Technical_Guidance_Download_Services_v3.1.pdf">http://inspire.jrc.ec.europa.eu/documents/Network_Services/Technical_Guidance_Download_Services_v3.1.pdf</a>

### Schema

Inspire Geology Geophysics	<a href="http://namespace.lantmateriet.se/distribution/produkter/tyngdkraft/v1/tyngdkraft-1.0.0.xsd">http://namespace.lantmateriet.se/distribution/produkter/tyngdkraft/v1/tyngdkraft-1.0.0.xsd</a>
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## Specification of the DGD data exchange file format

- The file should be printed with fixed lengths for each column, but it is read using free format.
- Blanks are used as separator between the columns. Use "" for empty character fields.
- The following data types are used:
  - Number(X, Y): A decimal number with X significant digits, whereof Y decimals. Point as decimal separator, no thousands separator.
  - Boolean: T for true, F for false.
  - String: String of variable length, enclosed in quotes ("").
  - String(X): String with exact length X, enclosed in quotes ("")
  - Date: YYYY-MM-DD (with leading zeroes)

No	Name	Type
1	Measurement_id	Number(9)
Unique identifier for measurement. Auto incremented serial number.		
2	Current_measurement	Boolean
True if the measurement is current and should be used, otherwise false.		
3	Point	String
The name of the point in DGA ("punktnummer"). Applicable when such a point exists.		
4	Name	String
Name of the point. Sometimes/often blank, e.g. for old detail points. Non-unique.		
5	Old_id	String
Old identity used during measurement and calculation before the measurement was stored in DGD.		
6	Owner	String

Owner of the data related to the measurement. Use exactly:

- LM: Lantmäteriet

7	Rights	Number(2,0)
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How to handle public access to the data.

- 1: All measurements are public.
- 2: Single measurements are public.
- 3: Classified. Contact owner.

8	Measured_on	Date
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The date the measurement was made on, if known. Otherwise 1111-11-11.

9	Measurement_epoch	Number(6,2)
---	-------------------	-------------

Observation epoch in years.

10	Project	String(4)
----	---------	-----------

A four letter short code in line with the following examples:

- DOLD: From old detail gravity database
- DTC5: Detail gravity measurements using CG5
- RG2K: Base point (or equivalent)
- MARE: Marine gravimetry (involving LM)

11	Extra_info	String
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May contain arbitrary information.

12	Observer	Number(4,0)
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ID for the main observer, or 9999 if not known.

13	Gravimeter_manufacturer	String
----	-------------------------	--------

Use exactly:

- CG5: Scintrex CG5
- L&R: Lacoste and Romberg
- WORDEN: Worden
- WORDEN M: Worden Master

14	Gravimeter_serial	String
----	-------------------	--------

Serial numbers (possibly with letters).

15	Position_method	Number(2,0)
----	-----------------	-------------

- 1: SWEPOS Network RTK/VR
- 2: Static GNSS
- 3: Float GNSS
- 4: DGPS (relative code)
- 5: Map or similar (e.g. digitised)
- 6: Absolute GNSS (absolute code)
- 15: Hidden point
- 99: Unknown.

16	Height_method	Number(2,0)
----	---------------	-------------

- 1: SWEPOS Network RTK/VR
- 2: Static GNSS
- 3: Float GNSS
- 4: DGPS (Code)
- 5: Map or similar (e.g. digitised)
- 6: Levelling
- 7: Lake level or sea level
- 8: Trigonometric
- 9: Barometer
- 10: Depth measurement
- 11: DEM/DTM
- 15: Hidden point
- 99: Unknown

17	Geoid	String
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Geoid model used to compute Height from Ellh. Use "" if the point have been determined without GNSS, or if it is not known.

It is not the intention that the geoid model will ever be updated for a certain measurement. It is just for information.

Use exactly:

- SWEN08\_RH2000
- SWEN17\_RH2000

18	Position_system	String
----	-----------------	--------

Reference system/frame used for Lat, Long and Ellh.

- SWEREF 99

19	Latitude	Number(11,8)
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Geodetic latitude. Decimal degrees.

20	Longitude	Number(12,8)
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Longitude. Decimal degrees.

21	Position_sigma_hor	Number(7,3)
----	--------------------	-------------

Standard uncertainty of the horizontal coordinates (meters).

22	Ellipsoid_h	Number(8,4)
----	-------------	-------------

Height above the ellipsoid. Meters. 9999.0 for instance if the point has not been determined by GNSS (e.g. levelled).

23	Height_system	String
----	---------------	--------

Height system used for Height/Depth.

- RH 2000
- MSL

24	Height_type	String
----	-------------	--------

As in the NKG gravity database:

- 1: Land (on the surface)
- 2: Subsurface
- 3: Ocean surface
- 4: Ocean submerged
- 5: Ocean bottom
- 6: Lake surface
- 8: Lake bottom
- C: Ice cap
- D: Ice cap (same as C)
- E: Airborne

25	Height	Number(8,4)
----	--------	-------------

Height or depth. Meters.

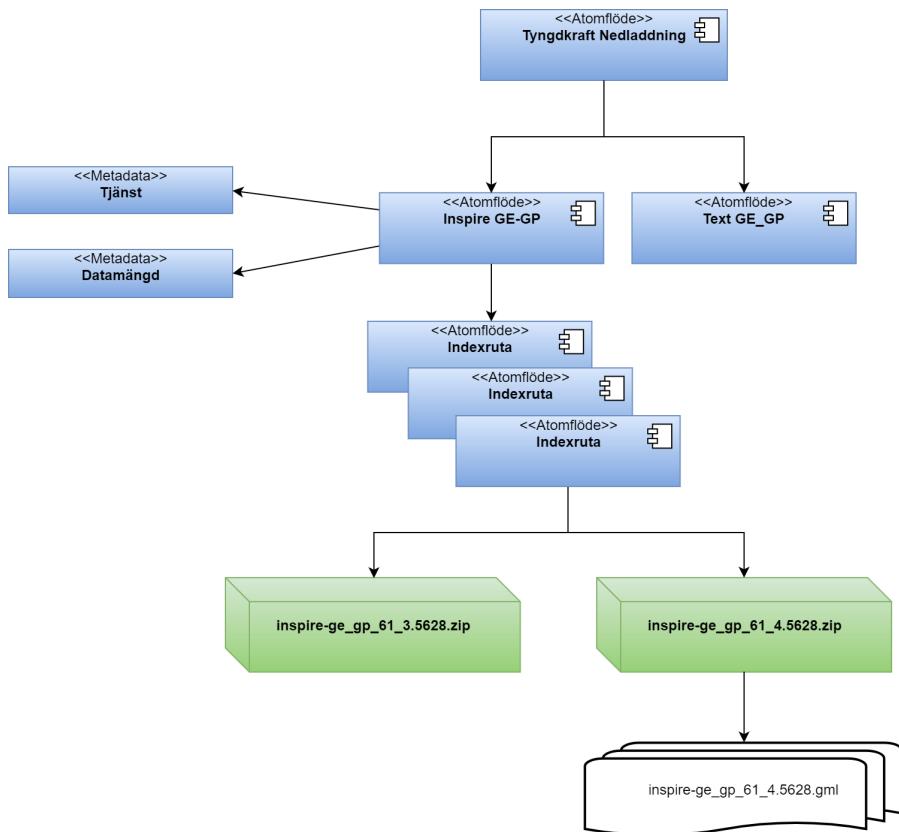
Meaning depends on station\_height\_type: Height for 1, 2, 6, 8, C and E. Depth, stored positive, for 3, 4 and 5.

26	Supplement_H	Number(8,4)
Supplemental "height" according to the NKG database. Meters.		
Used for the following values of the station_height_type according to:		
<ul style="list-style-type: none"> <li>• 2: Subsurface depth (positive)</li> <li>• 4: Depth of the gravity measurement (positive)</li> <li>• 6: Depth of lake (positive)</li> <li>• 8: Depth of lake (positive)</li> <li>• C: Thickness of ice cap (positive)</li> <li>• E: Ground elevation</li> </ul>		
Otherwise 9999.0000.		
27	Height_sigma	Number(6,3)
Standard uncertainty of the height (meters).		
28	Gravity_id	Number(3,0)
Identifier for gravity value. Unique for current measurement. Auto incremented serial number.		
29	Original	Boolean
True if the gravity value is an original measurement, false if it has been transformed.		
30	Gravity_system	String
If the gravity epoch and/or permanent tide system is different from the system definitions, then specify Gravity_epoch and Gravity_perm_tide. Use "" if unknown of original value.		
Use exactly:		
<ul style="list-style-type: none"> <li>• RG 2000</li> </ul>		
31	Gravity_epoch	Number(6,2)
In years. 9999.00 if unknown.		
32	Gravity_perm_tide	String
Permanent tide system. Use exactly:		
<ul style="list-style-type: none"> <li>• ZERO</li> </ul>		
33	Gravity	Number(10,3)
Gravity in Gravity_system with Gravity_perm_tide at Gravity_Epoch (mGal).		
See Height_type above for what the gravity value refers to.		
The IAG atmospheric correction (Moritz 1980, 0.87 mGal at sea level) is not included.		
34	Gravity_sigma	Number(5,2)
Standard uncertainty of the gravity value (mGal).		
35	Gravity_transformation	Number(2,0)
Between Gravity_original_system and Gravity_system. Use 99 if unknown or if gravity system is original (for instance when the computation is made in RG 2000).		
<ol style="list-style-type: none"> <li>1. NKG2005LU_g with the shift +0.025 mGal  <math>g_{RG82} = g_{ABS\_G} + -0.154^*NKG2005LU\_ABS^* (1982-Obs\_epoch) + 0.025</math> mGal. Used for NKG2015.</li> <li>2. The transformation from RG 62 to RG 82 derived by Mikael Lilje in 2001. A second-degree polynomial, derived from 33 stations with gravity values in both systems (gravity values from Lars-Åke Haller).</li> <li>3. Transformation from RG 82 to RG 2000 made using the official grid 'RG2000_minus_RG82_grid.grl' (2018-02-27), which is the same thing as NKG2016LU_gdot plus an inclined plane; see RG 2000 documentation.</li> <li>4. Transformation from RG 62 to RG 2000 using first number 2 and then number 3 above (= official transformation between RG 62 and RG 2000).</li> <li>5. Transformation from RG 62 to RG 2000 using the difference for the starting point between the systems.</li> <li>6. Transformation from RG 82 to RG 2000 using the difference for the starting point between the systems.</li> <li>7. Recalculated in RG 2000 from the original data read in the protocol book.</li> </ol>		
36	Gravity_origin	Number(3,0)
Gravity_id for the gravity value the current value was transformed from. Use 0 if unknown or current value is original.		

37	Gravity_original_system	String
Gravity system used for the original measurement.		
Use one of the alternatives from Gravity_system.		
38	Free_air_anomaly	Number(5,2)
Free air or surface gravity anomaly (depending on Height_system).		
39	Free_air_normal_field	String
<ul style="list-style-type: none"> <li>GRS 80: Only one used in the world now, but might change in the future</li> </ul>		
40	Free_air_surface_method	String
Method used to transfer gravity measured inside the masses to the surface. Required for Height_type 2, 4, 5 and 8. If not applicable, use "".		
<ul style="list-style-type: none"> <li>PREY: Only one used in Sweden/NKG now, but might change in the future</li> </ul>		
41	Free_air_sigma	Number(5,2)
Standard uncertainty of the gravity anomaly (mGal).		
Computed from sigma_gravity and sigma_height. Presently sigma_hori_pos is not used here.		
42	Base_point_number	Number(4,0)
Number of base points. Use 0 if the point is a basepoint. Use 9999 if unknown.		
43	Base_points	String
A blank space separated list (e.g. "one two three") of the names of base points ("punktnummer" in DGA) used for the measurement.		

## Atomflöde

### Logisk struktur



## Exempel

Atomflöde för tema, Inspire Geology Geophysics

### Exempel

```
<feed xmlns:georss="http://www.georss.org/georss" xmlns="http://www.w3.org/2005/Atom" xmlns:inspire_dls="http://inspire.ec.europa.eu/schemas/inspire_dls/1.0" xml:lang="sv">
  <id>https://api.lantmateriet.se/tyngdkraft-nedladdning/atom/v1/inspire/ge_gp</id>
  <title>Inspire Geology Geophysics</title>
  <subtitle>Fördefinierade datamängder per indexruta för Inspire Geology Geophysics</subtitle>
  <updated>2017-07-03T12:59:26+02:00</updated>
  <link href="https://api.lantmateriet.se/tyngdkraft-nedladdning/atom/v1/inspire/ge_gp" rel="self" type="application/atom+xml" hreflang="sv" title="Detta dokument"/>
  <link href="http://www.geodata.se/InspireCSWProxy/csv?REQUEST=GetRecordById&SERVICE=CSW&VERSION=2.0.2&ELEMENTSETNAME=full&OUTPUTSCHEMA=http://www.isotc211.org/2005/gmd&ID=69c466b6-185d-498f-8a38-684d42c03da5" rel="describedby" type="application/vnd.iso.19139+xml" hreflang="sv" title="Metadata, nedladdningstjänst för Inspire Geology Geophysics"/>
  <link href="http://www.geodata.se/GeodataExplorer/GetMetaData?UUID=69c466b6-185d-498f-8a38-684d42c03da5" rel="alternate" type="text/html" hreflang="sv" title="Metadata, nedladdningstjänst för Inspire Geology Geophysics (HTML)"/>
  <link href="https://www.geodata.se/geodataportalen/opensearch/swe/69c466b6-185d-498f-8a38-684d42c03da5/OpenSearchDescription.xml" rel="search" type="application/opensearchdescription+xml" hreflang="sv" title="Opensearch-dokument för Inspireanpassad nedladdningstjänst"/>
  <rights>Produkten omfattas av upphovsrätt. Avtal för användning krävs, avgifter för användning tas ut. Användningen förutsätter ändamålsprövning.</rights>
  <author>
    <name>Geodatasupport</name>
    <email>geodatasupport@lm.se</email>
  </author>
  <entry>
    <id>https://api.lantmateriet.se/tyngdkraft-nedladdning/atom/v1/inspire/ge_gp/61_3</id>
    <title>Inspire Geology Geophysics, 61_3</title>
    <summary>Fördefinierad datamängd Inspire Geology Geophysics, indexruta 61_3</summary>
    <updated>2017-07-03T12:57:56+02:00</updated>
    <inspire_dls:spatial_dataset_identifier_code>61_3</inspire_dls:spatial_dataset_identifier_code>
    <inspire_dls:spatial_dataset_identifier_namespace>SE.LM.GP</inspire_dls:spatial_dataset_identifier_namespace>
    <link href="https://api.lantmateriet.se/tyngdkraft-nedladdning/atom/v1/inspire/ge_gp/61_3" rel="alternate" type="application/atom+xml" hreflang="sv" title="Inspire Geology Geophysics, 61_3"/>
    <link href="https://www.geodata.se/geodataportalen/srv/swe/csw-inspire?request=GetRecordById&service=CSW&version=2.0.2&elementSetName=full&id=b6b5fb29-59f0-4650-9ef1-724db13567c1&outputSchema=csw:IsoRecord" rel="describedby" type="application/xml" hreflang="sv" title="Metadata för datamängden Inspire Geology Geophysics"/>
    <link href="https://www.geodata.se/geodataportalen/GetMetaDataById?id=b6b5fb29-59f0-4650-9ef1-724db13567c1" rel="describedby" type="text/html" hreflang="sv" title="Metadata för datamängden Inspire Geology Geophysics (HTML)"/>
    <category term="http://www.opengis.net/def/crs/EPSG/0/5628" label="SWEREF99 + RH2000"/>
    <georss:polygon>13.3992179405328 55.9349761192402 13.4352342908872 55.036748927685 11.8724179391881 55.0066041015946 11.8005410078308 55.9038087823536 13.3992179405328 55.9349761192402</georss:polygon>
  </entry>
  ...
</feed>
```

Atomflöde för datamängd (indexruta 61\_3), Inspire Geology Geophysics

## Exempel

```
<feed xmlns:georss="http://www.georss.org/georss" xmlns="http://www.w3.org/2005/Atom" xmlns:inspire_dls="http://inspire.ec.europa.eu/schemas/inspire_dls/1.0" xml:lang="sv">
  <id>https://api.lantmateriet.se/tyngdkraft-nedladdning/atom/v1/inspire/ge_gp/61_3</id>
  <title>Fördefinierad datamängd Inspire Geology Geophysics, 61_3</title>
  <subtitle>Fördefinierad datamängd i olika referenssystem och format</subtitle>
  <updated>2017-07-03T12:57:56+02:00</updated>
  <link href="https://api.lantmateriet.se/tyngdkraft-nedladdning/atom/v1/inspire/ge_gp/61_3" rel="self" type="application/atom+xml" hreflang="sv" title="Detta dokument"/>
  <link href="https://api.lantmateriet.se/tyngdkraft-nedladdning/atom/v1/inspire/ge_gp" rel="up" type="application/atom+xml" hreflang="sv" title="Inspire Geology Geophysics"/>
  <link href="http://inspire.ec.europa.eu/featureconcept/GeophStation/" rel="describedby" type="text/html" title="Featuretype GeophStation"/>
  <rights>Produkten omfattas av upphovsrätt. Avtal för användning krävs, avgifter för användning tas ut. Användningen förutsätter ändamålsprövning.</rights>
  <author>
    <name>Geodatasupport</name>
    <email>geodatasupport@lm.se</email>
  </author>
  <entry>
    <id>https://api.lantmateriet.se/tyngdkraft-nedladdning/atom/v1/inspire/ge_gp/61_3/dataset?srss=5628&format=application/zip</id>
    <title>Inspire Geology Geophysics, 61_3 [EPSG:5628, GML]</title>
    <updated>2017-07-03T12:57:56+02:00</updated>
    <link href="https://api.lantmateriet.se/tyngdkraft-nedladdning/atom/v1/inspire/ge_gp/61_3/dataset?srss=5628&format=application/zip" rel="alternate" type="application/zip" hreflang="sv" title="inspire_ge_gp_61_3.5628.zip" length="15989"/>
    <category term="http://www.opengis.net/def/crs/EPSC/0/5628" label="SWEREF99 + RH2000"/>
  </entry>
  ...
</feed>
```

## Datamängd GML (indexruta 61\_3), Inspire Geology Geophysics

## Exempel

```
<?xml version="1.0" encoding="UTF-8"?>
<wfs:FeatureCollection xmlns:sam="http://www.opengis.net/sampling/2.0" xmlns:wfs="http://www.opengis.net/wfs/2.0" xmlns:base="http://inspire.ec.europa.eu/schemas/base/3.3" xmlns:dgd="http://namespace.lantmateriet.se/distribution/produkter/tyngdkraft/v1" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:om="http://www.opengis.net/om/2.0" xmlns:sams="http://www.opengis.net/samplingSpatial/2.0" xmlns:gml="http://www.opengis.net/gml/3.2" xmlns:base2="http://inspire.ec.europa.eu/schemas/base2/2.0" xmlns:gmd="http://www.isotc211.org/2005/gmd" xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:gco="http://www.isotc211.org/2005/gco" xsi:schemaLocation="http://namespace.lantmateriet.se/distribution/produkter/tyngdkraft/v1.0/tyngdkraft-1.0.0.xsd http://www.opengis.net/om/2.0 http://schemas.opengis.net/om/2.0/observation.xsd http://www.opengis.net/samplingSpatial/2.0 http://schemas.opengis.net/samplingSpatial/2.0/spatialSamplingFeature.xsd http://www.opengis.net/wfs/2.0 http://schemas.opengis.net/wfs/2.0/wfs.xsd http://inspire.ec.europa.eu/schemas/base2/2.0 http://inspire.ec.europa.eu/schemas/base2/2.0/BaseTypes2.xsd" timeStamp="2017-09-21T12:43:13" numberMatched="169" numberReturned="169">
  <wfs:boundedBy>
    <gml:Envelope srsName="urn:ogc:def:crs:EPSG::5628">
      <gml:lowerCorner>55.339896 12.677118</gml:lowerCorner>
      <gml:upperCorner>55.928008 13.414999</gml:upperCorner>
    </gml:Envelope>
  </wfs:boundedBy>
  <wfs:member>
    <dgd:GravityStation gml:id="SE.LM.GETP.81">
      <sam:sampledFeature xsi:nil="true" nilReason="http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unknown"/>
      <sam:relatedObservation>
        <om:OM_Observation gml:id="SE.LM.GETP.81.Observation">
          <om:phenomenonTime>
            <gml:TimeInstant gml:id="SE.LM.GETP.81.phenomenonTime">
              <gml:timePosition>1963</gml:timePosition>
            </gml:TimeInstant>
          </om:phenomenonTime>
        </om:OM_Observation>
      </sam:relatedObservation>
    </dgd:GravityStation>
  </wfs:member>
</wfs:FeatureCollection>
```

```

<om:resultTime xlink:href="#SE.LM.GETP.81.phenomenonTime"/>
<om:procedure>
    <dgd:GravityProcedure>
        <dgd:instrumentManufacturer>WORDEN M</dgd:instrumentManufacturer>
<instrumentManufacturer>
    <dgd:serialNumber/>
    <dgd:basePoints>Bulltofta_1p</dgd:basePoints>
</dgd:GravityProcedure>
</om:procedure>
<om:observedProperty xsi:nil="true" nilReason="http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unknown" />
<om:featureOfInterest xlink:href="#SE.LM.GETP.81"/>
<om:result>
    <dgd:GravityResult>
        <dgd:gravity>981522.955</dgd:gravity>
        <dgd:system>RG 2000</dgd:system>
        <dgd:epoch>2000</dgd:epoch>
        <dgd:permTide>ZERO</dgd:permTide>
        <dgd:sigma>0.17</dgd:sigma>
        <dgd:freeAirAnomaly>-13.06</dgd:freeAirAnomaly>
        <dgd:freeAirSigma>0.2</dgd:freeAirSigma>
        <dgd:freeAirNormalField>GRS 80</dgd:freeAirNormalField>
        <dgd:freeAirSurfaceMethod/>
    </dgd:GravityResult>
</om:result>
</om:OM_Observation>
</sam:relatedObservation>
<sams:positionalAccuracy>
    <gmd:DQ_RelativeInternalPositionalAccuracy>
        <gmd:result>
            <gmd:DQ_QuantitativeResult>
                <gmd:valueUnit/>
                <gmd:value>
                    <gco:Record>0.1</gco:Record>
                </gmd:value>
            </gmd:DQ_QuantitativeResult>
        </gmd:result>
    </gmd:DQ_RelativeInternalPositionalAccuracy>
</sams:positionalAccuracy>
<sams:shape>
    <gml:Point gml:id="SE.LM.GETP.81.shape" srsName="http://www.opengis.net/def/crs
/EPSG/0/5628">
        <gml:pos>55.350637999496556 13.262382000000125 3.97</gml:pos>
    </gml:Point>
</sams:shape>
<ge_gp:inspireId xmlns:ge_gp="http://inspire.ec.europa.eu/schemas/ge_gp/4.0">
    <base:Identifier>
        <base:localId>81</base:localId>
        <base:namespace>SE.LM.GETP</base:namespace>
    </base:Identifier>
</ge_gp:inspireId>
<ge_gp:citation xmlns:ge_gp="http://inspire.ec.europa.eu/schemas/ge_gp/4.0">
    <base2:DocumentCitation gml:id="SE.LM.GETP.81.citation">
        <base2:name>INSPIRE Data Specification on Geology - Technical
Guidelines</base2:name>
        <base2:date>
            <gmd:CI_Date>
                <gmd:date>
                    <gco:Date>2013-12-10</gco:Date>
                </gmd:date>
                <gmd:dateType>
                    <gmd:CI_DateTypeCode codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_Schemas/resources/codelist/ML_gmxCodelists.xml"
codeListValue="publication">publication</gmd:CI_DateTypeCode>
                    </gmd:dateType>
                </gmd:CI_Date>
            </base2:date>
            <base2:link>http://inspire.ec.europa.eu/id/document/tg/ge</base2:link>
        </base2:DocumentCitation>
</ge_gp:citation>
<ge_gp:projectedGeometry xmlns:ge_gp="http://inspire.ec.europa.eu/schemas/ge_gp/4.0">

```

```

xlink:href="#SE.LM.GETP.81.shape"/>
    <ge_gp:verticalExtent xmlns:ge_gp="http://inspire.ec.europa.eu/schemas/ge_gp/4.0" xsi:nil="true" nilReason="http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unknown"/>
        <ge_gp:distributionInfo xmlns:ge_gp="http://inspire.ec.europa.eu/schemas/ge_gp/4.0" xsi:nil="true" nilReason="http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unknown"/>
            <ge_gp:largerWork xmlns:ge_gp="http://inspire.ec.europa.eu/schemas/ge_gp/4.0" xsi:nil="true" nilReason="http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unknown"/>
                <ge_gp:relatedModel xmlns:ge_gp="http://inspire.ec.europa.eu/schemas/ge_gp/4.0" xsi:nil="true" nilReason="http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unknown"/>
                    <ge_gp:platformType xmlns:ge_gp="http://inspire.ec.europa.eu/schemas/ge_gp/4.0" xlink:href="http://inspire.ec.europa.eu/codelist/PlatformTypeValue/ground"/>
                        <ge_gp:relatedNetwork xmlns:ge_gp="http://inspire.ec.europa.eu/schemas/ge_gp/4.0" xsi:nil="true" nilReason="http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unknown"/>
                            <ge_gp:stationType xmlns:ge_gp="http://inspire.ec.europa.eu/schemas/ge_gp/4.0" xlink:href="http://inspire.ec.europa.eu/codelist/StationTypeValue/gravityStation"/>
                                <ge_gp:stationRank xmlns:ge_gp="http://inspire.ec.europa.eu/schemas/ge_gp/4.0" xsi:nil="true" nilReason="http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unknown"/>
                                    <dgd:point xsi:nil="true" nilReason="http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unknown"/>
                                        <dgd:name xsi:nil="true" nilReason="http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unknown"/>
                                            <dgd:measurementEpoch>1963</dgd:measurementEpoch>
                                            <dgd:owner>LM</dgd:owner>
                                            <dgd:project>DOLD</dgd:project>
                                            <dgd:positionMethod>5</dgd:positionMethod>
                                            <dgd:heightMethod>6</dgd:heightMethod>
                                            <dgd:heightType>1</dgd:heightType>
                                            <dgd:geoid xsi:nil="true" nilReason="http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unknown"/>
                                                </dgd:GravityStation>
                                            </wfs:member>
                                        ...
                                    </wfs:FeatureCollection>

```

Datamängd DGD data exchange file (indexruta 61\_3), Tyngdkraftspunkter

#### Exempel

81	T	" "	" "	"12775101"	"LM"	1	1111-11-11	1963.00	"DOLD"
" "				1013	"WORDEN M"	" "		5	6
" "	"SWEREF 99"	55.35063800	13.26238200	200.000	9999.0000	"RH 2000"		"1"	
3.9700	9999.0000	0.100	2 F "RG 2000"	2000.00	"ZERO"	981522.955	0.17	5	0 "RG
62"	-13.06	"GRS 80"	" "	0.20	1 "Bulltofta_lp"				
23965	T	" "	"085_Torsnäs"	" "	"LM"	1	2013-05-28	2013.41	"DTC5"
" "				2	"CG5"	"740"		1	1
"SWEN17_RH2000"	"SWEREF 99"	55.89826525	13.13869932	0.020	84.9547	"RH 2000"		"1"	
48.6777	9999.0000	0.030	1 T "RG 2000"	2000.00	"ZERO"	981596.067	0.05	99	0 "RG
2000"	27.57	"GRS 80"	" "	0.05	1 "Helsingborg_AA"				
23966	T	" "	"091_Vistofta"	" "	"LM"	1	2013-05-28	2013.41	"DTC5"
" "				2	"CG5"	"740"		1	1
"SWEN17_RH2000"	"SWEREF 99"	55.91350639	13.17896723	0.020	112.1842	"RH 2000"		"1"	
75.8926	9999.0000	0.030	1 T "RG 2000"	2000.00	"ZERO"	981593.162	0.05	99	0 "RG
2000"	31.78	"GRS 80"	" "	0.05	1 "Helsingborg_AA"				
26842	T	" "	"Bulltofta_lp"	" "	"LM"	1	1111-11-11	2000.00	"RG2K"
" "				1012	"MULTIPLE"	" "		5	5
"SWEN17_RH2000"	"SWEREF 99"	55.59726700	13.06172400	10.000	9999.0000	"RH 2000"		"1"	
10.0700	9999.0000	5.000	1 T "RG 2000"	2000.00	"ZERO"	981543.845	0.02	99	0 "RG
2000"	-11.17	"GRS 80"	" "	1.54	9999 "				
26843	T	" "	"Saxtorp_lp"	" "	"LM"	1	1111-11-11	2000.00	"RG2K"
" "				1012	"WORDEN M"	" "		15	15
"SWEN17_RH2000"	"SWEREF 99"	55.83994173	12.96064772	0.070	9999.0000	"RH 2000"		"1"	
13.5000	9999.0000	0.300	1 T "RG 2000"	2000.00	"ZERO"	981569.598	0.03	99	0 "RG
2000"	-4.84	"GRS 80"	" "	0.10	9999 "				
26934	T	" "	"Sturup_flygplatzs"	" "	"LM"	1	1111-11-11	2000.00	"RG2K"
" "				1012	"L&R"	" "		5	5
"SWEN17_RH2000"	"SWEREF 99"	55.53333300	13.36666700	10.000	9999.0000	"RH 2000"		"1"	
70.0000	9999.0000	5.000	1 T "RG 2000"	2000.00	"ZERO"	981530.148	0.02	99	0 "RG
2000"	-0.97	"GRS 80"	" "	1.54	9999 "				
28494	T	" "	"Landskrona_Kaj*"	" "	"LM"	1	2018-10-02	2018.75	"DTC5"
" "				12	"CG5"	"740"		1	1
"SWEN17_RH2000"	"SWEREF 99"	55.86637440	12.82382833	0.020	38.0790	"RH 2000"		"1"	
2.0278	9999.0000	0.030	1 T "RG 2000"	2000.00	"ZERO"	981569.182	0.03	99	0 "RG
2000"	-11.02	"GRS 80"	" "	0.03	1 "Helsingborg_AA"				
28562	T	"022*1*5909"	"Dalby"	" "	"LM"	1	1111-11-11	2000.00	"RG2K"
" "				1	"MULTIPLE"	" "		3	6
"SWEN17_RH2000"	"SWEREF 99"	55.68303740	13.35210425	1.500	9999.0000	"RH 2000"		"1"	
90.0260	9999.0000	0.003	1 T "RG 2000"	2000.00	"ZERO"	981565.663	0.01	99	0 "RG
2000"	28.07	"GRS 80"	" "	0.01	9999 "				
28688	T	" "	"Maglarp_AA"	" "	"LM"	1	1111-11-11	2000.00	"RG2K"
" "				101	"MULTIPLE"	" "		1	1
"SWEN17_RH2000"	"SWEREF 99"	55.38249909	13.06949413	0.020	9999.0000	"RH 2000"		"1"	
14.3980	9999.0000	0.030	1 T "RG 2000"	2000.00	"ZERO"	981521.755	0.01	99	0 "RG
2000"	-13.74	"GRS 80"	" "	0.01	9999 "				
28939	T	" "	"Kaj_JacHag*"	" "	"LM"	1	2017-05-30	2017.41	"DTC5"
" "				2	"CG5"	"740"		1	1
"SWEN17_RH2000"	"SWEREF 99"	55.61445649	12.99179535	0.020	38.5036	"RH 2000"		"1"	
2.7919	9999.0000	0.030	1 T "RG 2000"	2000.00	"ZERO"	981546.291	0.03	99	0 "RG
2000"	-12.42	"GRS 80"	" "	0.03	1 "Maglarp_AA"				
28940	T	" "	"Kaj_JH-Syd*"	" "	"LM"	1	2017-05-31	2017.41	"DTC5"
" "				2	"CG5"	"740"		1	1
"SWEN17_RH2000"	"SWEREF 99"	55.61338889	12.99294444	0.020	38.2060	"RH 2000"		"1"	
2.4955	9999.0000	0.030	1 T "RG 2000"	2000.00	"ZERO"	981546.354	0.05	99	0 "RG
2000"	-12.36	"GRS 80"	" "	0.05	1 "Kaj_JacHag*"				
28983	T	" "	"Malmö_Kaj_1"	" "	"LM"	1	2017-05-30	2017.41	"DTC5"
" "				2	"CG5"	"740"		1	1
"SWEN17_RH2000"	"SWEREF 99"	55.61445649	12.99179535	0.020	38.5036	"RH 2000"		"1"	
2.7919	9999.0000	0.030	1 T "RG 2000"	2000.00	"ZERO"	981546.291	0.02	99	0 "RG
2000"	-12.42	"GRS 80"	" "	0.02	1 "Maglarp_AA"				
28984	T	" "	"Malmö_Kaj_2"	" "	"LM"	1	2017-05-31	2017.41	"DTC5"
" "				2	"CG5"	"740"		1	1
"SWEN17_RH2000"	"SWEREF 99"	55.61338889	12.99294444	0.020	38.2060	"RH 2000"		"1"	
2.4955	9999.0000	0.030	1 T "RG 2000"	2000.00	"ZERO"	981546.360	0.04	99	0 "RG
2000"	-12.35	"GRS 80"	" "	0.04	1 "Malmö_Kaj_1"				

...

