

UMM JSON Full Example

```
"MetadataLanguage": "English",
```

```
  "MetadataDates": [  
    {  
      "Date": "2006-01-01T00:00:00.000Z",  
      "Type": "CREATE"  
    },  
    {  
      "Date": "2007-01-01T00:00:00.000Z",  
      "Type": "UPDATE"  
    },  
    {  
      "Date": "2018-01-01T00:00:00.000Z",  
      "Type": "DELETE"  
    },  
    {  
      "Date": "2008-01-01T00:00:00.000Z",  
      "Type": "REVIEW"  
    }  
  ],
```

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```
{  
  "MetadataLanguage": "English",  
  "MetadataDates": [  
    {  
      "Date": "2006-01-01T00:00:00.000Z",  
      "Type": "CREATE"  
    },  
    {  
      "Date": "2007-01-01T00:00:00.000Z",  
      "Type": "UPDATE"  
    },  
    {  
      "Date": "2018-01-01T00:00:00.000Z",  
      "Type": "DELETE"  
    },  
    {  
      "Date": "2008-01-01T00:00:00.000Z",  
      "Type": "REVIEW"  
    }  
  ],  
  "DirectoryNames": [  
    {  
      "ShortName": "GOSIC/GTOS"  
    },  
    {  
      "ShortName": "ISRO/UOPS",  
      "LongName": "User Order Processing System"  
    }  
  ],  
  "ShortName": "Mapping Short Name2",  
  "Version": "1",  
  "EntryTitle": "Mapping Example for UMM-C 2",  
  "DOI": {  
    "DOI": "10.12345/DOIID",  
    "Authority": "Data Center or Creator of the DOI - not the DOI registration service"  
  },  
  "VersionDescription": "Mapping Version 1 Description",  
  "Abstract": "This record is a Mapping Example.",  
  "Purpose": "This record is to be used to demonstrate how the CMR maps from one specification to another",  
  "DataLanguage": "English",  
  "DataDates": [  

```

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{
  "Date": "2002-01-01T00:00:00.000Z",
  "Type": "CREATE"
},
{
  "Date": "2003-01-01T00:00:00.000Z",
  "Type": "UPDATE"
},
{
  "Date": "2019-01-01T00:00:00.000Z",
  "Type": "DELETE"
},
{
  "Date": "2004-01-01T00:00:00.000Z",
  "Type": "REVIEW"
}
],
"DataCenters": [
  {
    "Roles": ["PROCESSOR"],
    "ShortName": "AMSR-E SIPS-GHCC"
  },
  {
    "Roles": ["ARCHIVER"],
    "ShortName": "NSIDC"
  },
  {
    "Roles": ["ORIGINATOR"],
    "ShortName": "AMSR-E",
    "LongName": "Advanced Microwave Scanning Radiometer - Earth Observing System",
    "ContactPersons": [{
      "Roles": [ "Science Contact", "Investigator", "Data Center Contact" ],
      "NonDataCenterAffiliation": "Not affiliated",
      "ContactInformation": {
        "ContactMechanisms": [ {
          "Type" : "Email",
          "Value" : "anEmail1@server.com"
        }, {
          "Type" : "Email",
          "Value" : "anEmail2@server.com"
        }, {
          "Type" : "Fax",
          "Value" : "111-222-3458"
        }, {
          "Type" : "Fax",
          "Value" : "111-222-3459"
        }, {
          "Type" : "Telephone",
          "Value" : "111-222-3456"
        }, {
          "Type" : "Telephone",
          "Value" : "111-222-3457"
        }
      ],
      "Addresses": [ {
        "StreetAddresses": [ "123 Main Street", "Suite 5" ],
        "City": "City",
        "StateProvince": "State",
        "Country": "USA",
        "PostalCode": "11111"
      }
    ]
  },
  "FirstName": "Data Center Personnel First Name",
  "MiddleName": "Data Center Personnel Middle Name",
  "LastName": "Data Center Personnel Last Name"
}, {
  "Roles": [ "Technical Contact", "Data Center Contact" ],
  "ContactInformation": {
    "ContactMechanisms": [ {
      "Type" : "Email",
      "Value" : "anEmail1@server.com"
    }, {

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        "Type" : "Email",
        "Value" : "anEmail2@server.com"
    }, {
        "Type" : "Fax",
        "Value" : "211-222-3458"
    }, {
        "Type" : "Fax",
        "Value" : "211-222-3459"
    }, {
        "Type" : "Telephone",
        "Value" : "211-222-3456"
    }, {
        "Type" : "Telephone",
        "Value" : "211-222-3457"
    } ],
    "Addresses" : [ {
        "StreetAddresses" : [ "223 Main Street", "Suite 6" ],
        "City" : "City",
        "StateProvince" : "State",
        "Country" : "USA",
        "PostalCode" : "21111"
    } ]
},
"FirstName" : "Data Center Personnel2 First Name",
"MiddleName" : "Data Center Personnel2 Middle Name",
"LastName" : "Data Center Personnel2 Last Name"
}],
"ContactGroups" : [{
    "Roles" : ["User Services"],
    "NonDataCenterAffiliation": "Not affiliated",
    "ContactInformation" : {
        "ContactMechanisms" : [ {
            "Type" : "Email",
            "Value" : "anEmail1@server.com"
        }, {
            "Type" : "Email",
            "Value" : "anEmail2@server.com"
        }, {
            "Type" : "Fax",
            "Value" : "111-222-3458"
        }, {
            "Type" : "Fax",
            "Value" : "111-222-3459"
        }, {
            "Type" : "Telephone",
            "Value" : "111-222-3456"
        }, {
            "Type" : "Telephone",
            "Value" : "111-222-3457"
        } ],
        "Addresses" : [ {
            "StreetAddresses" : [ "123 Main Street", "Suite 5" ],
            "City" : "City",
            "StateProvince" : "State",
            "Country" : "USA",
            "PostalCode" : "11111"
        } ]
    },
    "GroupName" : "Data Center User Services"
}, {
    "Roles" : ["Science Software Development"],
    "ContactInformation" : {
        "ContactMechanisms" : [ {
            "Type" : "Email",
            "Value" : "anEmail1@server.com"
        }, {
            "Type" : "Email",
            "Value" : "anEmail2@server.com"
        }, {
            "Type" : "Fax",
            "Value" : "211-222-3458"
        } ]
    }
}

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    }, {
      "Type" : "Fax",
      "Value" : "211-222-3459"
    }, {
      "Type" : "Telephone",
      "Value" : "211-222-3456"
    }, {
      "Type" : "Telephone",
      "Value" : "211-222-3457"
    } ],
    "Addresses" : [ {
      "StreetAddresses" : [ "223 Main Street", "Suite 6" ],
      "City" : "City",
      "StateProvince" : "State",
      "Country" : "USA",
      "PostalCode" : "21111"
    } ],
    "RelatedUrls": [{
      "Description": "AMSR-E/AMSR Product page at NSIDC",
      "URLContentType": "DataContactURL",
      "Type": "HOME PAGE",
      "URL": "http://nsidc.org/data/amsre/"
    } ]
  },
  "GroupName" : "DAAC Software Development"
}]
},
{
  "Roles": ["DISTRIBUTOR"],
  "ShortName": "NSIDC",
  "LongName" : "National Snow and Ice Data Center",
  "ContactInformation": {
    "ServiceHours": "8am-5pm (Mountain Time) Monday through Friday",
    "ContactInstruction": "contact by e-mail first",
    "ContactMechanisms": [
      {
        "Type": "Telephone",
        "Value": "303-492-6199"
      },
      {
        "Type": "Fax",
        "Value": "303-492-2468"
      },
      {
        "Type": "Email",
        "Value": "nsidc@kryos.colorado.edu"
      }
    ],
    "Addresses": [{
      "StreetAddresses": ["1540 30th St Campus Box 449"],
      "City": "Boulder",
      "StateProvince": "CO",
      "Country": "USA",
      "PostalCode": "80303-0449"
    } ],
    "RelatedUrls": [
      {
        "Description": "AMSR-E/AMSR Product page at NSIDC",
        "URLContentType": "DataCenterURL",
        "Type": "HOME PAGE",
        "URL": "http://nsidc.org/data/amsre/"
      }
    ]
  }
}
],
"ContactPersons" : [{
  "Roles" : [ "Metadata Author", "Data Center Contact" ],
  "NonDataCenterAffiliation": "Not affiliated",
  "ContactInformation" : {
    "ContactMechanisms" : [ {

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        "Type" : "Email",
        "Value" : "anEmail1@server.com"
    }, {
        "Type" : "Email",
        "Value" : "anEmail2@server.com"
    }, {
        "Type" : "Fax",
        "Value" : "111-222-3458"
    }, {
        "Type" : "Fax",
        "Value" : "111-222-3459"
    }, {
        "Type" : "Telephone",
        "Value" : "111-222-3456"
    }, {
        "Type" : "Telephone",
        "Value" : "111-222-3457"
    } ],
    "Addresses" : [ {
        "StreetAddresses" : [ "123 Main Street", "Suite 5" ],
        "City" : "City",
        "StateProvince" : "State",
        "Country" : "USA",
        "PostalCode" : "11111"
    } ]
},
"FirstName" : "Personnel First Name",
"MiddleName" : "Personnel Middle Name",
"LastName" : "Personnel Last Name"
}, {
    "Roles" : [ "Technical Contact", "Data Center Contact" ],
    "ContactInformation" : {
        "ContactMechanisms" : [ {
            "Type" : "Email",
            "Value" : "anEmail1@server.com"
        }, {
            "Type" : "Email",
            "Value" : "anEmail2@server.com"
        }, {
            "Type" : "Fax",
            "Value" : "211-222-3458"
        }, {
            "Type" : "Fax",
            "Value" : "211-222-3459"
        }, {
            "Type" : "Telephone",
            "Value" : "211-222-3456"
        }, {
            "Type" : "Telephone",
            "Value" : "211-222-3457"
        } ],
        "Addresses" : [ {
            "StreetAddresses" : [ "223 Main Street", "Suite 6" ],
            "City" : "City",
            "StateProvince" : "State",
            "Country" : "USA",
            "PostalCode" : "21111"
        } ]
    },
    "FirstName" : "Personnel2 First Name",
    "MiddleName" : "Personnel2 Middle Name",
    "LastName" : "Personnel2 Last Name"
}],
"ContactGroups" : [{
    "Roles" : ["User Services"],
    "NonDataCenterAffiliation": "Not affiliated",
    "ContactInformation" : {
        "ContactMechanisms" : [ {
            "Type" : "Email",
            "Value" : "anEmail1@server.com"
        }, {

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        "Type" : "Email",
        "Value" : "anEmail2@server.com"
    }, {
        "Type" : "Fax",
        "Value" : "111-222-3458"
    }, {
        "Type" : "Fax",
        "Value" : "111-222-3459"
    }, {
        "Type" : "Telephone",
        "Value" : "111-222-3456"
    }, {
        "Type" : "Telephone",
        "Value" : "111-222-3457"
    } ],
    "Addresses" : [ {
        "StreetAddresses" : [ "123 Main Street", "Suite 5" ],
        "City" : "City",
        "StateProvince" : "State",
        "Country" : "USA",
        "PostalCode" : "11111"
    } ]
},
"GroupName" : "DAAC USER SERVICES"
}, {
    "Roles" : ["Science Software Development"],
    "ContactInformation" : {
        "ContactMechanisms" : [ {
            "Type" : "Email",
            "Value" : "anEmail1@server.com"
        }, {
            "Type" : "Email",
            "Value" : "anEmail2@server.com"
        }, {
            "Type" : "Fax",
            "Value" : "211-222-3458"
        }, {
            "Type" : "Fax",
            "Value" : "211-222-3459"
        }, {
            "Type" : "Telephone",
            "Value" : "211-222-3456"
        }, {
            "Type" : "Telephone",
            "Value" : "211-222-3457"
        } ],
        "Addresses" : [ {
            "StreetAddresses" : [ "223 Main Street", "Suite 6" ],
            "City" : "City",
            "StateProvince" : "State",
            "Country" : "USA",
            "PostalCode" : "21111"
        } ]
    },
    "GroupName" : "DAAC Software Development"
}],
"CollectionDataType": "SCIENCE_QUALITY",
"ProcessingLevel": {
    "ProcessingLevelDescription": "GRID",
    "Id": "3"
},
"CollectionCitations": [{
    "Creator": "Collection Citations Creators1",
    "Editor": "Collection Citation Editors1",
    "Title": "Collection Citation Title1",
    "SeriesName": "Series Name 1",
    "ReleaseDate": "2017-01-01T12:00:00Z",
    "ReleasePlace": "New York, NY",
    "Publisher": "Some Publishing Co.",
    "Version": "1",
    "IssueIdentification": "12345",

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    "DataPresentationForm": "Word",
    "OtherCitationDetails": "Other Citation Details",
    "OnlineResource" : {
        "Linkage" : "http://www.google.com?q=publishers",
        "Protocol" : "http",
        "ApplicationProfile" : "Microsoft Word",
        "Name" : "Collection Citations Online Resource 1",
        "Description" : "Collection Citations Online Resource 1",
        "Function" : "information"
    }
},
{
    "Creator": "Collection Citations Creators2",
    "Editor": "Collection Citation Editors2",
    "Title": "Collection Citation Title2",
    "SeriesName": "Series Name 2",
    "ReleaseDate": "2017-01-01T13:00:00Z",
    "ReleasePlace": "New York, NY",
    "Publisher": "Some Publishing Co.",
    "Version": "2",
    "IssueIdentification": "12345",
    "DataPresentationForm": "Word",
    "OtherCitationDetails": "Other Citation Details",
    "OnlineResource" : {
        "Linkage" : "http://www.google.com?q=publishers",
        "Protocol" : "http",
        "ApplicationProfile" : "Microsoft Word",
        "Name" : "Collection Citations Online Resource 1",
        "Description" : "Collection Citations Online Resource 1",
        "Function" : "information"
    }
}],
"CollectionProgress": "In Work",
"Quality": "Some quality statement",
"UseConstraints": "None",
"AccessConstraints": {
    "Description": "Testing",
    "Value": 1
},
"MetadataAssociations": [{
    "Type": "SCIENCE ASSOCIATED",
    "Description": "This is a description of the metadata association",
    "EntryId": "C1234453343-ECHO_REST",
    "Version": "1"
}],
{
    "Type": "LARGER CITATION WORKS",
    "Description": "This is a description of the metadata association 2",
    "EntryId": "C1234453342-ECHO_REST",
    "Version": "2"
}],
"PublicationReferences": [{
    "Author" : "Andersen, Ole Baltazar",
    "PublicationDate" : "1994-01-01T00:00:00.000Z",
    "Title" : "ERS-1 altimetry on the Greenland ice sheet: Preliminary investigations of annual
variations.",
    "Series" : "Geophysical Research Letters",
    "Edition" : "21",
    "Volume" : "15",
    "Issue" : "5",
    "ReportNumber" : "6",
    "PublicationPlace" : "New York, NY",
    "Publisher" : "NASA",
    "Pages" : "1655-1658",
    "ISBN" : "123455666",
    "DOI" : {
        "DOI": "10.1234/Ref",
        "Authority": "NASA"
    },
    "OnlineResource" : {
        "Linkage": "http://www.yahoo.com",
        "Name": "Reference Online Resource",

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```

        "Description": "Reference Online Resource"
    },
    "OtherReferenceDetails": "Lots of other details."
}, {
    "OtherReferenceDetails": "Lots of other details 2.",
    "OnlineResource" : {
        "Linkage": "http://www.yahoo.com",
        "Name": "Reference Online Resource",
        "Description": "Reference Online Resource"
    }
}, {
    "OnlineResource" : {
        "Linkage": "http://www.yahoo.com",
        "Name": "Reference Online Resource",
        "Description": "Reference Online Resource"
    }
}],
"ISOTopicCategories": ["boundaries", "climatologyMeteorologyAtmosphere"],
"ScienceKeywords": [
    {
        "Category": "EARTH SCIENCE",
        "Topic": "HYDROSPHERE",
        "Term": "SNOW/ICE",
        "VariableLevel1": "SNOW WATER EQUIVALENT"
    },
    {
        "Category": "EARTH SCIENCE",
        "Topic": "CRYOSPHERE",
        "Term": "SNOW/ICE",
        "VariableLevel1": "SNOW WATER EQUIVALENT",
        "DetailedVariable": "SLEET"
    }
],
"AncillaryKeywords": ["AncillaryKeyword1", "AncillaryKeyword2"],
"AdditionalAttributes": [{
    "Group" : "Metadata Group",
    "Value" : "2",
    "Name" : "SomeOtherFullElement",
    "Description" : "Metadata Description",
    "DataType" : "INT"
}], {
    "Name": "An Additional Attribute Name",
    "Description": "An Additional Attribute Description",
    "Value": "5",
    "DataType": "INT",
    "MeasurementResolution": "MeasurementResolution",
    "ParameterRangeBegin": "1",
    "ParameterRangeEnd": "10",
    "ParameterUnitsOfMeasure": "ParameterUnitsOfMeasure",
    "ParameterValueAccuracy": "ParameterValueAccuracy",
    "ValueAccuracyExplanation": "ValueAccuracyExplanation",
    "Group": "gov.nasa.esdis.umm.additionalattribute",
    "UpdateDate": "2017-03-03T01:00:00Z"
}],
"RelatedUrls": [
    {
        "URLContentType": "PublicationURL",
        "Type": "VIEW RELATED INFORMATION",
        "URL": "http://wwwghcc.msfc.nasa.gov/AMSR/qa.html"
    },
    {
        "Description": "Guide Document for this product at NSIDC",
        "URLContentType": "PublicationURL",
        "Type": "VIEW RELATED INFORMATION",
        "Subtype": "USER'S GUIDE",
        "URL": "http://nsidc.org/data/docs/daac/ae_swe_ease-grids.gd.html"
    },
    {
        "Description": "AMSR-E/AMSR Product page at NSIDC",
        "URLContentType": "PublicationURL",
        "Type": "VIEW RELATED INFORMATION",
    }
]

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        "URL": "http://nsidc.org/data/amsre/"
    },
    {
        "Description": "Testing Related url GET DATA translations",
        "URLContentType": "DistributionURL",
        "Type": "GET DATA",
        "URL": "http://www.foo.com",
        "GetData": {
            "Format": "ASCII",
            "Size": 10.0,
            "Unit": "MB",
            "Fees": "fees",
            "Checksum": "12345"
        }
    }
],
"TemporalExtents": [{
    "TemporalRangeType": "Continuous Range",
    "PrecisionOfSeconds": 1,
    "EndsAtPresentFlag": true,
    "RangeDateTimes": [{
        "BeginningDateTime": "2001-01-01T00:00:00.000Z",
        "EndingDateTime": "2001-06-01T00:00:00.000Z"
    }]
}],
"TemporalKeywords": ["TemporalKeyword1", "TemporalKeyword2"],
"PaleoTemporalCoverages": [
    {
        "StartDate": "350 ka",
        "EndDate": "0 ka",
        "ChronostratigraphicUnits": [
            {
                "Eon": "PHANEROZOIC",
                "Era": "CENOZOIC",
                "Period": "QUATERNARY",
                "Epoch": "PLEISTOCENE",
                "Stage": "STAGE",
                "DetailedClassification": "SOME DEEPER CLASSIFICATION"
            }
        ]
    }
],
"SpatialExtent": {
    "SpatialCoverageType": "HORIZONTAL",
    "HorizontalSpatialDomain": {
        "ZoneIdentifier": "1",
        "Geometry": {
            "CoordinateSystem": "CARTESIAN",
            "GPolygons": [{
                "Boundary": {
                    "Points": [ {"Longitude":-10, "Latitude":-10}, {"Longitude":10, "Latitude":-10},
{"Longitude":10, "Latitude":10}, {"Longitude":-10, "Latitude":10}, {"Longitude":-10, "Latitude":-10}]
                },
                "ExclusiveZone": {
                    "Boundaries": [{
                        "Points": [{"Longitude":-5, "Latitude":-5}, {"Longitude":-1, "Latitude":-5},
{"Longitude":-1, "Latitude":-1}, {"Longitude":-5, "Latitude":-1}, {"Longitude":-5, "Latitude":-5}]
                    }
                ],
                {
                    "Points": [{"Longitude":0, "Latitude":0}, {"Longitude":5, "Latitude":0},
{"Longitude":5, "Latitude":5}, {"Longitude":0, "Latitude":5}, {"Longitude":0, "Latitude":0}]
                }
            ]
        }
    }
}],
"VerticalSpatialDomains": [{"Type": "VerticalSpatialDomainType", "Value":
"VerticalSpatialDomainValue1",
    {"Type": "VerticalSpatialDomainType1", "Value":
"VerticalSpatialDomainValue2"}
],

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    "OrbitParameters": {"SwathWidth": 22,
                        "Period": 1,
                        "InclinationAngle": 4,
                        "NumberOfOrbits": 1,
                        "StartCircularLatitude": 1},
    "GranuleSpatialRepresentation": "CARTESIAN"
  },
  "TilingIdentificationSystems": [
    {
      "TilingIdentificationSystemName": "TileSystem1",
      "Coordinate1": {
        "MinimumValue": -100,
        "MaximumValue": -50
      },
      "Coordinate2": {
        "MinimumValue": 50,
        "MaximumValue": 100
      }
    }
  ],
  "SpatialInformation": {
    "SpatialCoverageType": "HORIZONTAL"
  },
  "LocationKeywords": [{
    "Category": "LocationKeywordCategory",
    "Type": "LocationKeywordType",
    "Subregion1": "LocationKeywordSubregion1",
    "Subregion2": "LocationKeywordSubregion2",
    "Subregion3": "LocationKeywordSubregion3",
    "DetailedLocation": "LocationKeywordDetailedLocation"
  }, {
    "Category": "LocationKeywordCategory",
    "Type": "LocationKeywordType",
    "Subregion1": "LocationKeywordSubregion1",
    "DetailedLocation": "LocationKeywordDetailedLocation"
  }],
  "Platforms": [{
    "Type": "Spacecraft",
    "ShortName": "Aqua",
    "LongName": "First EOS Polar Orbiting Satellite, 1:30 PM Ascending Equator Crossing",
    "Characteristics": [{
      "Name": "PlatformCharacteristicName",
      "Description": "Platform Characteristics Description",
      "DataType": "Integer",
      "Unit": "Degrees",
      "Value": "50"
    }
  ]
},
  "Instruments": [{
    "ShortName": "AMSR-E",
    "LongName": "Advanced Microwave Scanning Radiometer-EOS",
    "Technique": "Broadband scanning radiometry",
    "Characteristics": [{
      "Name": "InstrumentCharacteristicName",
      "Description": "Instrument Characteristics Description",
      "DataType": "Integer",
      "Unit": "Calvin",
      "Value": "150"
    }
  ]
},
  "NumberOfInstruments": 1,
  "ComposedOf": [{
    "ShortName": "AMSR-E",
    "LongName": "Advanced Microwave Scanning Radiometer-EOS",
    "Technique": "Radiometry",
    "Characteristics": [{
      "Name": "ChildInstrumentCharacteristicName",
      "Description": "Child Instrument Characteristics Description",
      "DataType": "Integer",
      "Unit": "Pascals",
      "Value": "250"
    }
  ]
}
}],

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```
        "OperationalModes": ["Mode1","Mode2"]
    }
  ],
  "Projects": [
    {
      "ShortName": "Project Short Name",
      "Campaigns": ["Campaign1","Campaign2"],
      "LongName": " Project Long Name",
      "StartDate": "2000-01-01T00:00:00Z",
      "EndDate": "2018-01-01T00:00:00Z"
    }
  ]
}
```