

CDSSG Meeting

Friday 26th February 2016, 10.00-14.30, room 103, LO22 University of Reading, London Road campus

MINUTES

Beth Greenaway (Chair), Debbie Clifford (Coordinator), Alison Arkell (Secretary)

Ben Carlton (PML), Geoff Buswell (Telespazio), Alex Haywood (Telespazio), Steve Groom (PML), Victoria Bennett (STFC), Derek Greer (Telespazio), Claire Macintosh (IEA), Barry Latter (RAL Space), Brian Kerridge (NCEO), Richard Brook (IGS), Zof Stott (Assimila), Chetan Predan (CGI), Alan Whitelaw (CGI), Stewart Turner (Met Office), Andrea Sharpe (NERC), John Remedios (NCEO), Colin McKinnon (IEA), Chris Merchant (University of Reading), Adrian Broad (Met Office)

Slides for all presentations detailed below are available at: www.the-iea.org/cdssg/

1. Welcome and introductions

Beth welcomed the attendees to this key meeting which will review the outputs from the years' work programme and discuss future direction and strategy. All were asked to introduce themselves

2. Co-ordinator Review (Debbie Clifford presentation)

Debbie Clifford presented a update of community notices, highlighting the need for a UK Voice on the EU CO2 task force in the coming year and encouraging stakeholders to register as experts on the Copernicus website, it was noted that some people experienced problems uploading CVs. CGI have people already registered and involved.

DC reported back from the UK CCI Meeting on 1st. It was suggested that a study to look at current use of the CCI data, particularly outside of academia, would benefit the community and strategic investment. The group discussed the importance of understanding which users are already downloading and using climate data from space, and through which interfaces.

The updates on the work plan were outlined and will be described in more detail below.

The group noted the following UK representation at upcoming conferences and meetings:

- CEOS/CGMS WG-Climate, Caroline Poulson is the UK representative
- GCOS, Chris Merchant and Bob Brewin (PML) presenting others attending and whole conference available on web

ACTION: Claire Macintosh to create a list of UK climate relevant interface sites for easy data access and visualisation e.g. TAMSAT, CPOM etc. by end March

ACTION: Stakeholders to register as experts on the Copernicus website in order to be considered for the Task forces on Copernicus Evolution by end March

**3. Updates on 2015/16 work plan:
Mapping the Seamless Supply Chain (Zof Stott, Assimila presentation)**

Zof Stott presented a mapping of the seamless supply chain, summarising the information gathered by CDSSG over the past 2 years.

Accessing satellite data is an international issue and the importance of understanding the UKs place in the international landscape was highlighted.

The group discussed the need to link the climate monitoring community and the climate services community in order to translate the UK success in R&D areas to sustained production of CDRs in the UK.

Various weaknesses in the supply chain were noted (see slides for details). Victoria Bennett, STFC, noted that often it is assumed that the supporting work for CDR production (e.g. ingesting new data sources) is already being done and being paid for when this is not always the case.

The group accepted Zof's analysis and agreed that sustainability of CDR Production and translating from research to operations is the key funding gap, even with C3S providing operational funding.

4. Near Real Time data for operational services (Barry Latter, RAL Space presentation)

Barry Latter presented the work done at RAL Space to provide NRT Ozone and Methane products to the community, and ECMWF in particular.

Two potential news stories were highlighted:

- Installation of the new Eumetcast dish
- The development of the first global NRT methane product.

The group noted the need to engage further with NEODAAS Dundee about supplying operational satellite data as input to processing.

ACTION: Barry to alert UKSA when a 'good news story could be generated' as soon as possible

ACTION: Beth Greenaway to ask Chris Hall to circulate Paper on EU & ESA plans on ground segment NRT annex data availability to CDSSG start March 2016

Victoria Bennett raised the issue that when groups need new input data streams (e.g. S5P, Cris) it needs to be clear who would be resourcing the effort in to get the data and lay it out in the archive.

5. Requirements and system design for operational processing at JASMIN/CEMS (Debbie Clifford, IEA presentation)

Debbie Clifford informed the group this is a new system being designed by Jane Lewis at the University of Reading, to address the needs of multiple UK CDR production groups and make their processing more robust and efficient. The systems design document should be circulated in March.

STFC are also identifying any licensing issues associated with the data required for operational processing at JASMIN/CEMS. The report will be part of the deliverable set for this phase of work, due 18th March 2016.

6. Costing for implementing system design (Alex Hayward, Telespazio presentation)

Debbie Clifford and Alex Hayward presented the systems design work for improving data handling and processing at CEMS.

The costs of the proposed system are not yet known (due 11 March); John Remedios and Beth Greenaway asked for an initial estimate as soon as possible so a funding case can be made. Other agencies can fund this in addition to UKSA; NERC and NCEO were mentioned as potential contributors once set-up and on-going costs have been established.

ACTION: Telespazio Vega UK to supply a rough initial estimate as soon as possible and help make the case by 4th March 2016 - COMPLETE

7. Demonstration application for exploring climate data from space (Ben Carlton, PML Applications)

Ben Carlton previewed the visualisation demonstrator to the group which can be accessed at: <http://cdsug.eofrom.space> and <http://jasmin.eofrom.space> and the group were encouraged to test the tool out during the lunch session.

The visualisation tool has a unique collaboration feature which allows users to connect virtually via screen share software and each take away their own versions of the tool, still with the data, enabling them to independently work on their own projects.

Ben Carlton noted that this has the potential to replace commercial services supplying data as static PNG files.

8. Where next for climate services? (Beth Greenaway, UKSA presentation)

Beth proposed setting up a community framework programme to take forward the IGS action on positioning the UK as a major player in the supply and use of climate data from space. A small group had met on 18th Jan and a straw man proposal was presented and discussed. Overall there was wide enthusiasm for a dedicated effort / programme to realise the clear potential.

ACTION: Debbie Clifford to update slides with the group's comments and circulate before end February

The group, led by the UK Space Agency and an identified person needs to convert the strawman into a full programme proposal which can be signed up to by the various bodies. It was agreed that the most urgent task is to assign resources to develop the framework which will then determine the costs and the funding needed for the programme. IEA and NCEO offered contributions, and industry partners including CGI and Telespazio Vega UK also offered support.

Richard Brook suggested that a sub-task of the Programme Manager should be to map the engagement within the UK and throughout Europe to make sure the UK has influence. He noted the UK Space European Affairs Group already has an engagement plan with EU Officials and influencers.

ACTION: UKSA and IEA to identify a resource to create the programme proposal and business case by end July. Others to contribute to discussions and investment.

9. Round table discussion, updates from the stakeholders and achievements of the CDSSG from stakeholder perspective:

Adrian Broad, Met Office:

1. The Met Office leads H2020 co-ordination and support action, co-ordinating Climate KIC, JPI Climate and Cop Climate Change service. They are also advising the EU Commission on pull through of science to climate services implementation of EU Road Map for climate services.
2. Implementation group of experts to support Commission on Road Map. The UK has 3 people in the group, 1 of whom (Chris Hewitt) is from the Met office. Others are Roger Street, Oxford UKCIP, Martin Parry IPCC. They are advising on where EU is placing funding
3. Met Office involved in other relevant H2020 projects: Primavera and Crescendo
4. There is no other forum with seamless supply chain and stakeholders around the same table than the CDSSG
5. The CDSSG should try to get DEFRA or DECC back involved

Chris Merchant, University of Reading:

1. Currently involved in Sea surface temperature project bid as part of Copernicus Climate Services
2. GCOS conference in Amsterdam, attending as part of the FIDUCEO project
3. Talking to GCOS about lakes based on work in Globolakes: the definition of the ECV is too narrow
4. The CDSSG is a very good source of community relevant information

Colin McKinnon IEA:

1. The IEA have won 3 ECWMF bids
2. The CDSSG helps keep communication channels open so organisations can work together on projects

John Remedios, NCEO

1. Working with NERC & the Met Office, NCEO evaluating the NERC UK Earth System Model
2. There are other satellite data groups around but focus on climate data is unique to CDSSG

Andrea Sharpe, NERC

1. Took the opportunity to highlight the Environmental Risk funding structure, a call looking at working with infra-structure owners and operators and mentioned a specific 8th March brokering event for researchers.
2. CDSSG helps innovation. The seamless supply chain is of particular interest, how can the CDSSG pull through the NERC science data with different industries?

Stewart Turner, Met Office

1. Noted that there is climate-relevant data coming from multiple SAFs, not just climate SAF, and that they are all coming to EUMETSAT Council for approval of the next 5-year period this summer.
2. The activities of CDSSG are linked to activity on the Collaborative Ground Segment
3. EUMETSAT has just kicked off a project looking at their IT infrastructure for the future

Alan Whitelaw, CGI

1. There are real environmental risks to infrastructure, must stress the importance of understanding extremes as well as averages when data products are defined.

Chetan Predan, CGI

1. Awarded the WISC contract from ECWMF, looking at commercial user sector (insurance) for climate data. The IEA, Reading, Telespazio and Met Office involved.
2. CDSSG is a great networking forum.

Zof Stott, on behalf of NCEO

1. Involved in the ERANet for Climate Services, also involved are the Met Office and NCAS in Reading.

Richard Brook, IGS:

1. Talked about the NERC Sandpit to fund climate related PoC studies, including a flood monitoring project that had obtained data from a flood two weeks later; awaiting the outcomes from funded projects in near future
2. It would be useful to know which UK entities in successful ECMWF projects

ACTION: DC to compile a list of UK successes in ECMWF projects by end March - COMPLETE

3. The CDSSG is incredibly useful to keep track of relevant events via the mailing list
4. The plan of what the CDSSG will do going forward could itself be a story, state the ambition to raise awareness of the CDSSG

Brian Kerridge, RAL Space:

1. RAL has provided input to the international Tropospheric Ozone Assessment

Derek Greer, Telespazio:

1. Telespazio has a successful ECWMF SIS bid with the IEA, Met Office and CGI among others
2. Telespazio are a major partner in the CCI Toolbox project which involves several UK partners

Victoria Bennett, STFC:

1. The CDSSG give a huge steer on the community requirements and encourages new and different requirements which in turn leads to very interesting R&D.
2. JASMIN-CEMS is an R&D infrastructure meaning it does new things - pushing the boundaries of both infrastructure and the data themselves.

Steve Groom, PML:

1. PML have won a Copernicus Land project and a NERC sandpit project looking at jelly fish ingress to nuclear power stations
2. GloboLakes has delivered a first set of data and Ocean Colour CCI version 3 expected soon
3. The UK South West recently won a Catapult Centre of Excellence
4. CDSSG is a unique forum bringing together academia and industry and is very useful for keeping informed of community relevant information

Geoff Buswell, Telespazio:

1. Always have a useful conversation at CDSSG meetings
2. The CDSSG is unique in that it has everyone in the supply chain through to the end-users involved in round table discussions
3. The combination of more money being available and the CDSSG helping create collaboration with the right people has meant the community can do really interesting things and we are starting to see economic benefits of this.