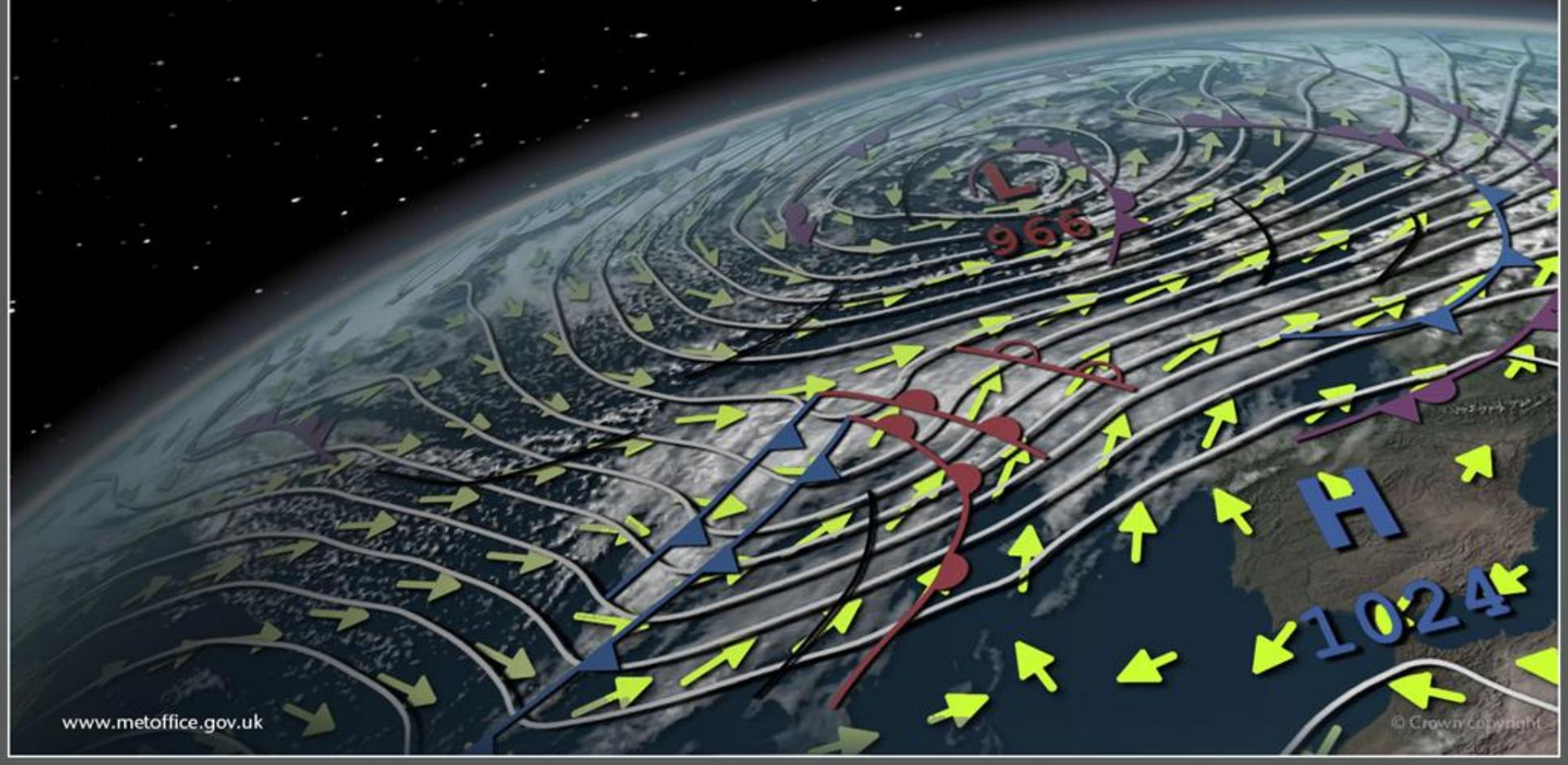




Welcome and introduction

Matt Martin, Andy Moore and Kirsten Wilmer-Becker

GODAE OceanView DA-TT workshop, May 2015.



Welcome

Welcome to the Met Office for the first GODAE OceanView Data Assimilation Task Team (DA-TT) workshop.

Contents of this presentation:

- Safety and logistics information:
 - Health & Safety information
 - Facilities
 - Workshop dinner
- Overview of the mission of the DA-TT
- Aims and structure of the workshop

Fire and Emergency

- Actions upon discovering a fire
- Methods of raising the alarm
- Emergency No. (Ext 2222)
- Fire fighting facilities
- Conference 'Responsible Person'
- Voice Alarm System (V.A.S.)





Met Office

Site Information

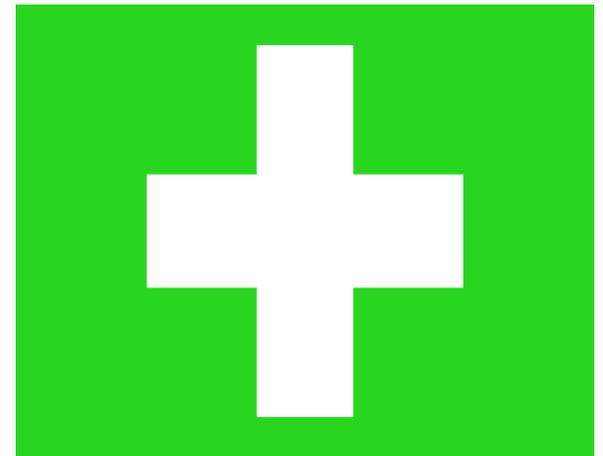


Conference assembly point

Smokers via reception

First Aid

- First Aid boxes & First Aider lists
- First Aid room – See Reception
- Accident book – See Reception
- Accident? – report to sponsor
- Emergency No. (Ext 2222)



Security

- Access to conference facilities and access to the “street”.
- Please wear passes / name badge. Please leave behind when leaving on Friday.
- Access to building via reception only
- No bags left unattended outside of conference area
- No photography unless approved by security

Environment

- Environmental Management System
- How we can all play a part
- Recycling facilities



Other information

- Wifi username and password included in name badge.
- Teas/coffees will be available mid-morning and mid-afternoon outside the conference room on the balcony. Feel free to take them in to look at the posters.
- Lunch will be available outside the conference room on the balcony.
- Location of toilets.
- Speakers please upload your talks before the session in which you are speaking.
- Please pay the workshop fee £45 if you haven't already done so.
- Registration desk is open during break times on Wednesday.
- Tour of Met Office building on Friday 2-3pm. Meet at reception.
- Taxi bookings at reception.

Workshop dinner at the “Cosy Club”

1 Southernhay Gardens, Exeter, EX1 1SG
General info:

On Thursday, 21 May 2015

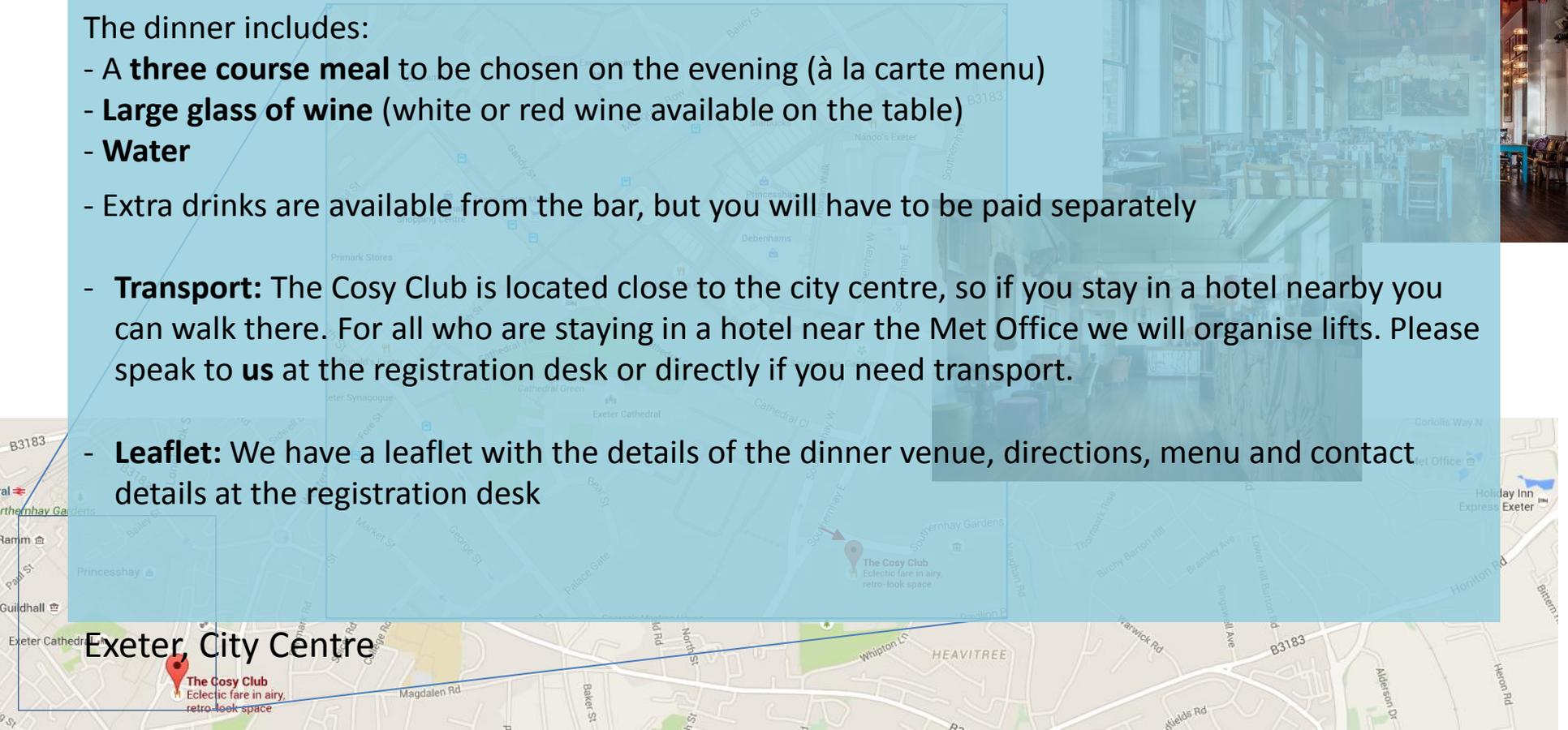
Payment for the dinner is £30

Please arrive before 19:30 which is when we will take our tables. You are welcome to arrive earlier and have a drink at the bar.

- must be made **at the registration desk before tomorrow evening** (receipt and confirmation of participation)

The dinner includes:

- A **three course meal** to be chosen on the evening (à la carte menu)
- **Large glass of wine** (white or red wine available on the table)
- **Water**
- Extra drinks are available from the bar, but you will have to be paid separately
- **Transport:** The Cosy Club is located close to the city centre, so if you stay in a hotel nearby you can walk there. For all who are staying in a hotel near the Met Office we will organise lifts. Please speak to **us** at the registration desk or directly if you need transport.
- **Leaflet:** We have a leaflet with the details of the dinner venue, directions, menu and contact details at the registration desk



Exeter, City Centre





Met Office



Overview of the DA-TT

- Bit of history about the DA-TT
- How the DA-TT fits into GOV and the other TTs
- Overview of the DA-TT objectives and work plan.
- Members of the TT
- Aims and structure of meeting

History of the DA-TT

...is not very long!

- The DA in **GODAE**, so viewed as crucial to the operational ocean forecasting systems.
- However, GOV Science Team (GOVST) meetings didn't allow significant time for discussion of DA related topics.
- Other international forums for ocean-specific DA topics at some scientific conferences, but they don't always allow in-depth discussions, or foster collaborations/inter-comparisons.
- A review of the first 5 years of GOV was held after the GOV symposium in Baltimore in 2013, which suggested some more focus on underlying development of ocean forecasting systems.
- It was proposed and agreed at the GOVST in Beijing in late 2014 that the DA-TT should be set-up.
- GOV Strategic Plan was published in Dec 2014 which includes short-term plans for DA-TT activities

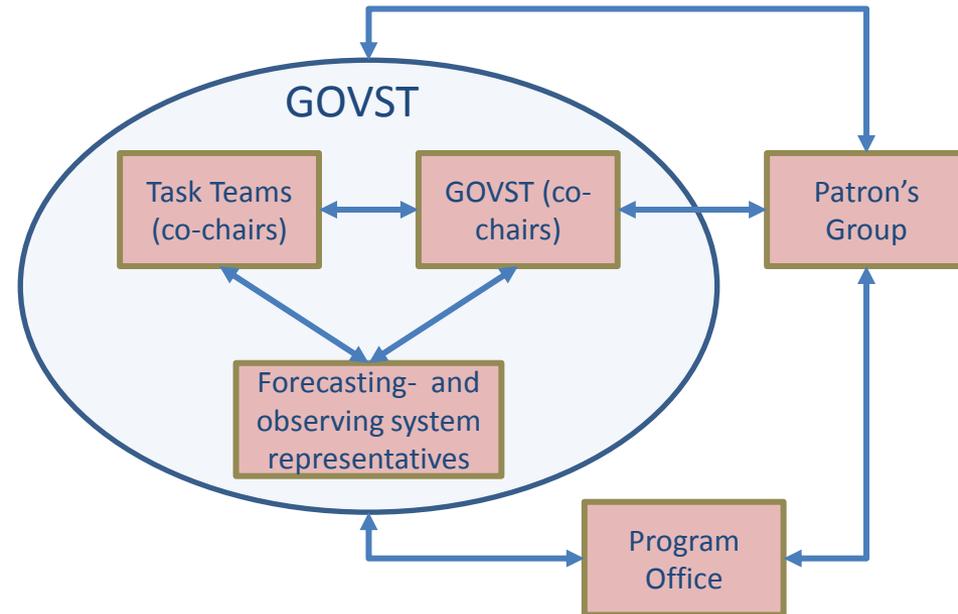


GOV Science Team (GOVST)

“Core Goal”: GODAE OceanView continues the legacy of GODAE in providing leadership in consolidating and improving R&D for global & regional ocean analysis and forecasting systems.

GODAE Ocean View (GOV) is represented by the **GOV Science Team** or **GOVST**:

- *Representatives* from national, international and intergovernmental organisations with an expertise in operational ocean monitoring and forecasting



GOVST co-Chairs: Andreas Schiller (CSIRO, Australia) and Fraser Davidson (DFO, Canada)

The GOVST is guided by a **group of Patrons** providing advice and advocacy to the members of the GOVST with regard to science activities, collaborations and resources.

The GOV is supported by the **programme office**.

GOV structure & task teams



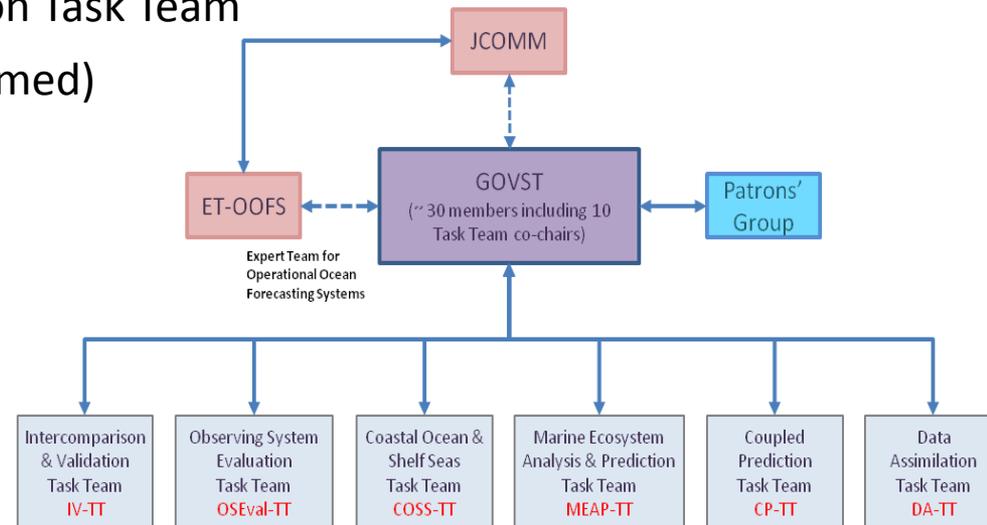
Task Teams: “GODAE OceanView aims to coordinate the development of new capabilities through a number of Task Teams (or TTs) which focus on specific topics of particular importance to GODAE OceanView.”

The current GODAE OceanView task teams are:

- **COSS-TT:** Coastal Ocean and Shelf Seas Task Team
- **CP-TT:** Coupled Prediction (*renamed Oct 2014*)
- **IV-TT:** Intercomparisons and Validation Task Team
- **MEAP-TT:** Marine Ecosystem Analysis and Prediction Task Team
- **OSEval-TT:** Observing System Evaluation Task Team
- **DA-TT:** Data Assimilation (recently formed)

All task team chairs are members of the GOVST.

- TT address specific topics of particular interest to GOV
- TT work in collaboration with international programmes and research groups



Data Assimilation Task Team (DA-TT)



The DA-TT will foster the development and evaluation of data assimilation systems relevant to GOV. It will coordinate and improve the assimilation of ocean and sea-ice data into ocean, sea-ice and coupled models and provide a focus for diagnosing and understanding model and observation biases through the use of data assimilation techniques, and discussing the results with model developers and observation specialists.

Co-Chairs: Matt Martin (Met Office) and Andrew M Moore (UCSC)

History

DA-TT was formed in Nov, 2014 and its members comprise data assimilation experts from operational centres, research laboratories and universities

Objectives

- To coordinate and improve the assimilation of ocean and sea-ice data into models by providing a forum for discussion, and by creating a framework for inter-comparison of aspects of data assimilation.
- To provide a focus for diagnosing and understanding model and observation biases through the use of data assimilation techniques



DA-TT (continued)

Themes

- Improving the representation and parameterisations of error covariances for data assimilation
- Improving the capacity of current data assimilation systems to make use of all available observations
- Development of data assimilation systems for coupled models
- Development of hybrid data assimilation for the ocean

Current Activities

- Improving understanding of error covariances in existing DA systems via a common set of coordinated single observation experiments
- Identifying and quantifying model and forcing bias that are common to global data assimilation systems via coordinated experiments
- Promoting the development of hybrid data assimilation methods in the ocean (eg. ensemble variational methods)
- Organise a meeting of the TT to foster the development of data assimilation, establish linkages, forge collaborations, and encourage joint publications

Current DA-TT members

- Matt Martin (Met Office)
- Andy Moore (UCSC)
- Greg Smith (EC and IV-TT)
- Pavel Sakov (BoM)
- Peter Oke (CSIRO and OSEval-TT)
- Charles-Emmanuel Testut (Mercator)
- Laurent Bertino (NERSC)
- Anthony Weaver (CERFACS)
- Magdalena Balmaseda (ECMWF)
- Andrea Storto (CMCC)
- Clemente Tanajura (REMO)
- Pierre De Mey (LEGOS and COSS-TT)
- Norihisa Usui (JMA/MRI)
- Jim Cummings (NRL)
- Avichal Mera and Carlos Lozano (NCEP)
- Alexander Kurapov (Oregon State University/NOAA)
- Francois Counillon (NERSC)
- Paulo Oddo (CMRE)

Aims of this DA-TT workshop

Main objectives are:

- To discuss and agree on the way forward on each of the work plan items:
 1. Improving understanding of error covariances in existing DA systems via a common set of coordinated single observation experiments
 2. Identifying and quantifying model and forcing bias that are common to global data assimilation systems via coordinated experiments
 3. Promoting the development of hybrid data assimilation methods in the ocean (eg. ensemble variational methods)
 4. *Organise a meeting of the TT to foster the development of data assimilation, establish linkages, forge collaborations, and encourage joint publications*
- To provide a forum for discussion of latest developments in ocean and coupled data assimilation.

Structure of the workshop

- Sessions 1-3 to provide an overview of some of the existing global and regional ocean and coupled DA systems.
- Session 4: developments in error covariance representation.
- Sessions 5-7 to provide an overview and in-depth discussions on the work plan items:
 - Model error and bias
 - Hybrid data assimilation – including a talk on the experience from NWP systems
 - Observation impact and sensitivity
- Final discussion and agreement on way forward with the work plan.
- Workshop is set up as a video conference with some participation from outside the room.