#### SPECIAL PROJECT PROGRESS REPORT

Progress Reports should be 2 to 10 pages in length, depending on importance of the project. All the following mandatory information needs to be provided.

Reporting year 2016

**Project Title:** Assessing sources of seasonal forecast skill over Europe

in summer using relaxation experiments

Computer Project Account: spgborei

**Principal Investigator(s):** Christopher O'Reilly

Tim Woollings Laure Zanna

**Affiliation:** University of Oxford

Name of ECMWF scientist(s) collaborating to the project

Antje Weisheimer

(if applicable)

**Start date of the project:** Jan 2016

**Expected end date:** Dec 2018

# Computer resources allocated/used for the current year and the previous one

(if applicable)

Please answer for all project resources

		Previous year		Current year	
		Allocated	Used	Allocated	Used
High Performance Computing Facility	(units)	N/a	N/a	12000000	0
Data storage capacity	(Gbytes)	N/a	N/a	20000	0

#### Summary of project objectives

(10 lines max)

The objective of the project is to investigate potential sources of skill in seasonal forecasts over Europe during the summertime. Our plan is to investigate sources of skill using various prescribed SST experiments and a series of relaxation experiments to assess the forcing of seasonal circulation anomalies over Europe.

#### Summary of problems encountered (if any)

(20 lines max)

N/a

# **Summary of results of the current year** (from July of previous year to June of current year)

This section should comprise 1 to 8 pages and can be replaced by a short summary plus an existing scientific report on the project

Since January we have mainly been analysing experiments previously performed by collaborators at ECMWF. These include various seasonal forecasts of the boreal summer (i.e. JJA) initialised at the beginning of May. One experiment of particular focus was performed for each summer from 1900-2010 using the ERA-20C to initialise the simulations. This along with analysis of observational relationships has been the focus of the last 6 months of the project.

### List of publications/reports from the project with complete references

N/a

## Summary of plans for the continuation of the project

(10 lines max)

Begin tropical relaxation experiments, after some initial testing on initial conditions and prescribed SST conditions. This is to allow comparison with similar experiments we have been analysing during the winter season.