

A teal banner featuring a background image of people working at computers. Overlaid on this are several white weather icons: a sun, a snowflake, and a cloud with raindrops. Each icon is enclosed in a dotted circle, and thin white lines connect these circles across the banner. The text 'ECMWF's SUMMER OF Weather Code' is centered in white.

# ECMWF's

## SUMMER OF

# Weather Code

Julia Wagemann, Claudia Vitolo and Anna Ghelli

Using ECMWF's Forecasts meeting 2018 | Reading, 7 June 2018





# SUMMER OF Weather Code

TEAM UP WITH METEOROLOGY EXPERTS  
TO DEVELOP INNOVATIVE WEATHER-RELATED SOFTWARE

FROM JAN  
**22ND**  
2018

—  —  
5 SELECTED PROJECTS  
EACH RECEIVES A £5,000 GRANT

TO SEP  
**15TH**  
2018

#ESoWC

**4** months

**5** projects

**5000** £



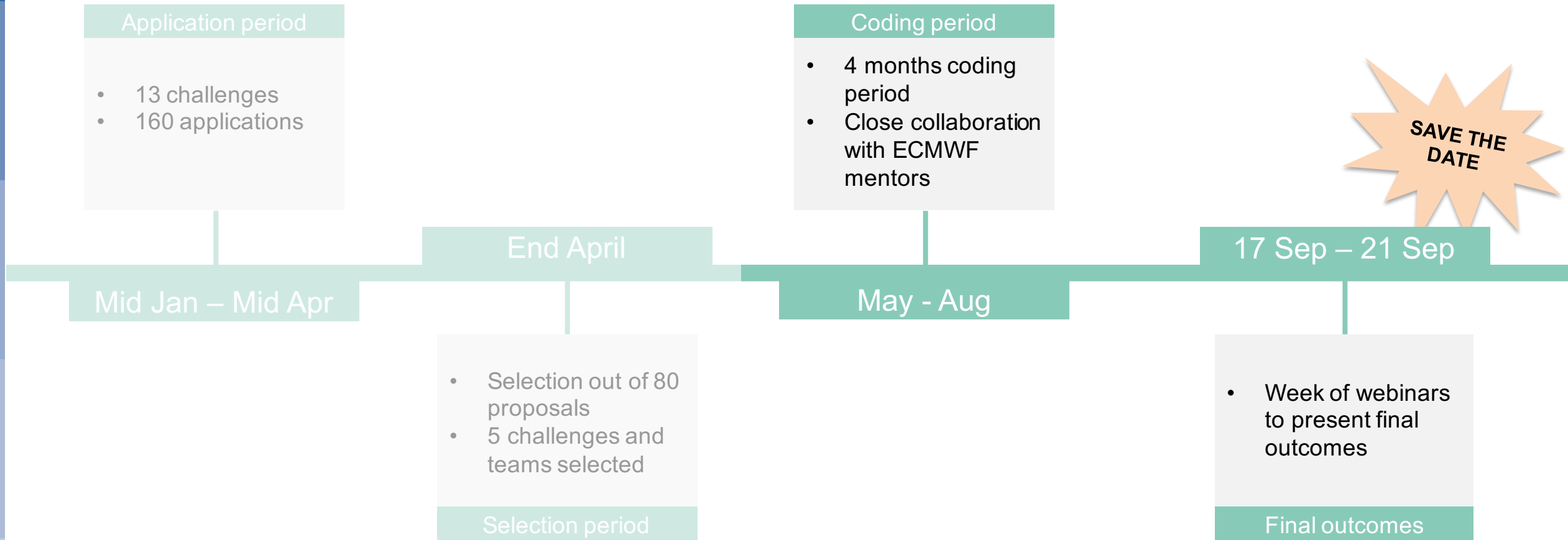
# SUMMER OF Weather Code

TEAM UP WITH METEOROLOGY EXPERTS  
TO DEVELOP INNOVATIVE WEATHER-RELATED SOFTWARE



- Bring **new skills and ideas** to ECMWF
- **Exploration of new tools** and technologies
- **Improvement** of existing tools
- Development of tools where there is **usually no time / skills for**

# Timeline



# 5 challenges

1

Enhanced GIS area selection widget

2

Innovative Visualisation

3

Web Crawler for hydrological data

4

NetCDF managed as filesystem

5

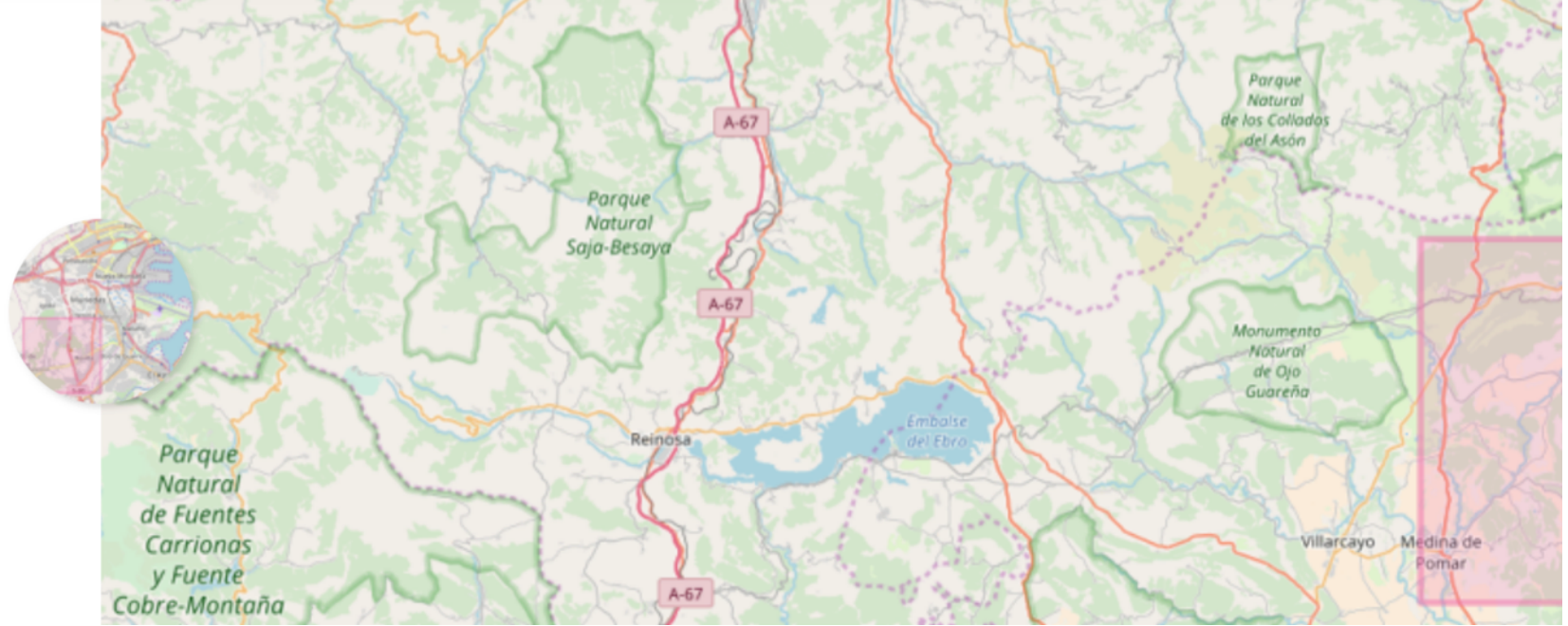
Migration of calibration software to Python and development of its GUI



## Enhanced GIS area selection...

Provide a widget to select and display areas on a map and that can be utilised across existing web...

Fernando Martin Marlasca  
Daniel San Martin  
Markel Garcia



## WEB CRAWLER FOR HYDRO...

Development of a tool to search the web systematically, identifying data sources for observed envi...

Norwin Roosen  
Matthes Rieke  
Simon Jirka



## NetCDF filesystem

Represent the structure of a NetCDF dataset as a virtual filesystem. Edit NetCDF structure with g...



Dr. Declan A. Valters

## Innovative Visualisation

Communicate Weather



Helena Schmidt  
Rebecca Husemann



## MIGRATION TO PYTHON AND GUI OF EXISTING CALIBRATION SOFTWARE

Translate calibration software code into a widely-used free scripting language (e.g Python) and create its GUI to increase users' uptake.

Anirudha Bose



# ECMWF's

## SUMMER OF Weather Code

# Thank you!

More information:

<http://esowc.ecmwf.int>

<http://esowc.hackathon.com>

**17 – 21 Sep 2018**  
**Week of webinars**

**SAVE THE  
DATE**