



FLARECAST

LESSONS LEARNED AND FUTURE OPPORTUNITIES

D. Shaun Bloomfield

UNN – Newcastle upon Tyne, United Kingdom

29 November 2017

<u>Full Title</u>: Flare Likelihood and Region

Eruption Forecasting

Acronym: FLARECAST Project No.: 640216

2nd Stakeholder Workshop ESWW14, Ostende, Belgium

Lessons Learned



General operational forecasting comments

- Always have a data back-up
- Start simple
- Talk to stakeholders
- Try to *really* understand stakeholder requirements

- HMI "holiday" / alignment issue
- 24-hr forecasts (user familiarity)
- Research in vacuum, not operations
- May not be able to address needs now, but necessary for progression

Next Steps



How should the flare forecasting community respond to these?

- Quantified verification of forecasts
- Forecast "believability"
- Science service provider stakeholder relation
- Link to other space weather prediction services

- Error assessment (how good is a skill?)
- Education on forecasts and case studies
- Difficult to get relevant stakeholder tolerance (use existing pathways)
- Coupling of models and/or prediction systems

Next Steps



Future opportunities

- Ensemble forecasting
- Real-time verification
- Grand challenges / forecasting scoreboards
- Condition forecast training on stakeholder C/L information

- Give forecasters more context
- Applied at MO, but still "young"
- Direct comparison between diverse external methods (see next talk)
- Even ball-park figures will improve relevance of forecast training