

WEAVE management (as relevant to SV), general info and information flow

14 November 2019, IAC, Tenerife

Shoko Jin (Deputy Project Scientist)

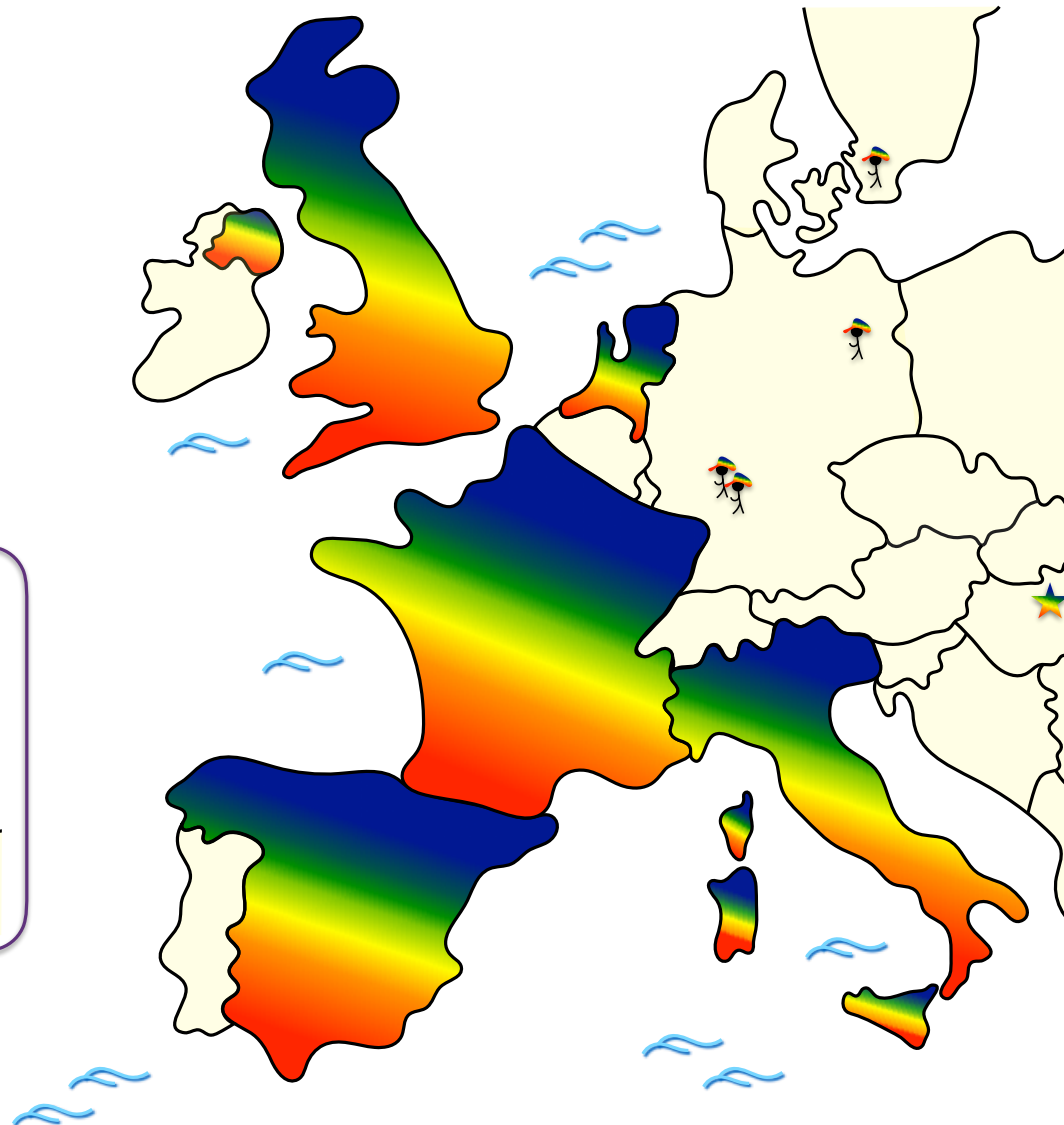
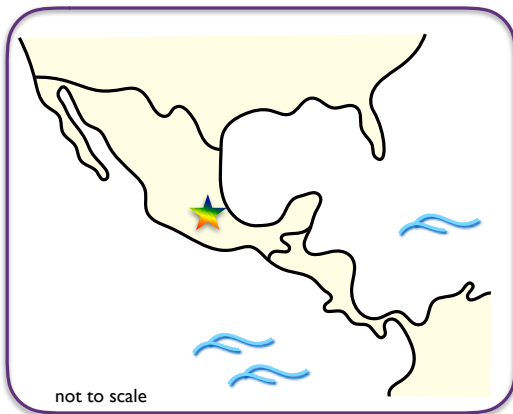
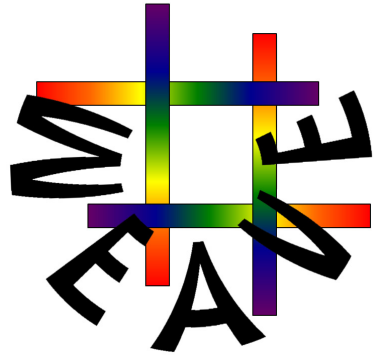
&

The WEAVE Survey Consortium

WEAVE management: the big picture

- WEAVE composed of two main parts:
 - **WEAVE Project / Instrument Consortium** – responsible for delivery WEAVE instrument and facility (software as well as hardware)
 - **WEAVE Science Team / Survey Consortium** – responsible for preparing for WEAVE Survey operations (both prior to and after first light)
- Within each part are **many teams and sub-teams** (just like any large collaboration)
 - **PIs/Co-Is** of PI-led SV programmes will **interact with set teams/individuals** from the **Instrument** and **Survey Consortia**
- WEAVE PI is **Gavin Dalton (Oxford)**, Project Scientist is **Scott Trager (Groningen)**, Project manager is **Don Carlos Abrams (ING)**, Instrument Scientist is **Chris Benn (ING)**
- WEAVE Project (and Science) Executive members represent the main partner countries (ING countries – Spain, UK, the Netherlands + France, Italy, Mexico)

Who is involved in WEAVE?



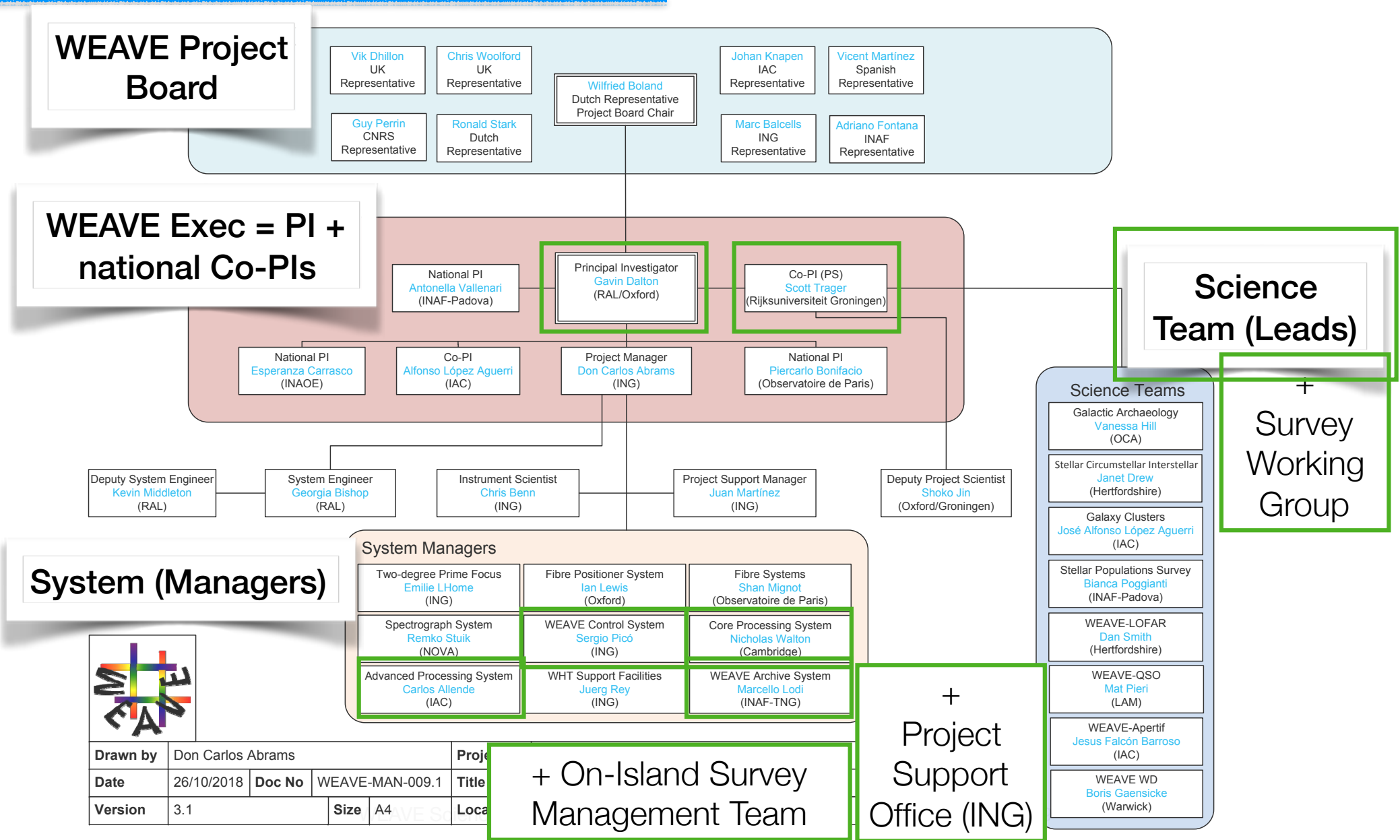
- UK
- Netherlands
- Spain
- France (CNRS)
- Italy (INAF)

- Mexico (INAOE)
- Hungary (Konkoly)

- Lund
- Potsdam
- Heidelberg (x2)
- Pennsylvania

- + MoUs (x4)

WEAVE management: the big picture



| | | | | | |
|----------|-------------------|--------|-----------------|-------|--|
| Drawn by | Don Carlos Abrams | | | Proj | |
| Date | 26/10/2018 | Doc No | WEAVE-MAN-009.1 | Title | |
| Version | 3.1 | Size | A4 | Loca | |

+ On-Island Survey Management Team

+ Project Support Office (ING)

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WEAVE information/data flow for SV

Phase 1

ING portal for proposal submission (Chris, Javier @ING)

joint ING-WEAVE SV TAC (Marc, Chris, Scott, Shoko)

Phase 2

input FITS catalogues (Clare @CASU)

WEAVE Automated Submission Platform
(WASP – David @CASU)

field configurations
(Survey Working Group, coordinated by Shoko @Groningen)

SV observations

On-Island Survey Management Team (OISMT @ING)

Operational Repository (OR – David @Cambridge)

Data access

WEAVE Archive System (WAS @TNG)

WEAVE information/data flow for SV

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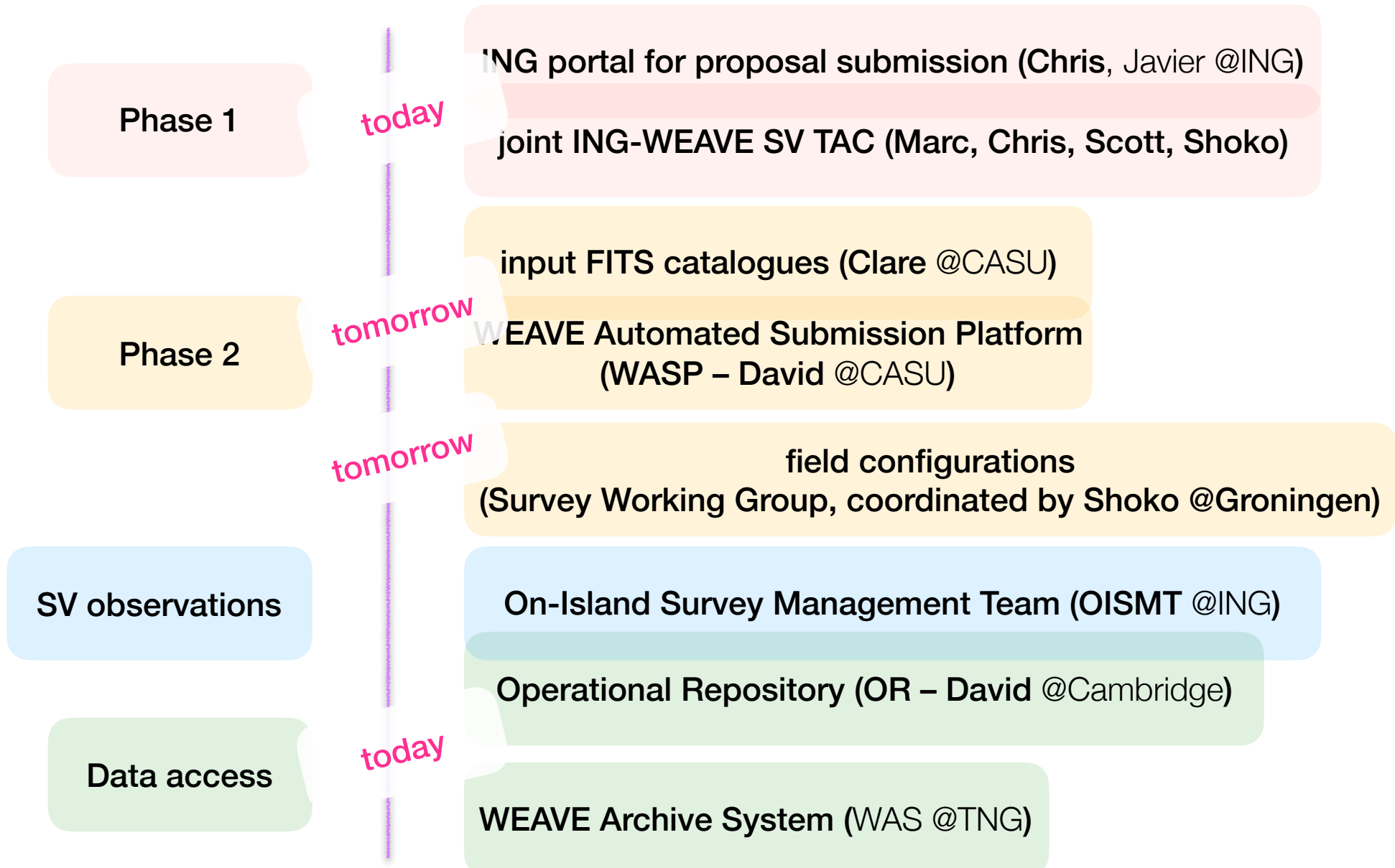
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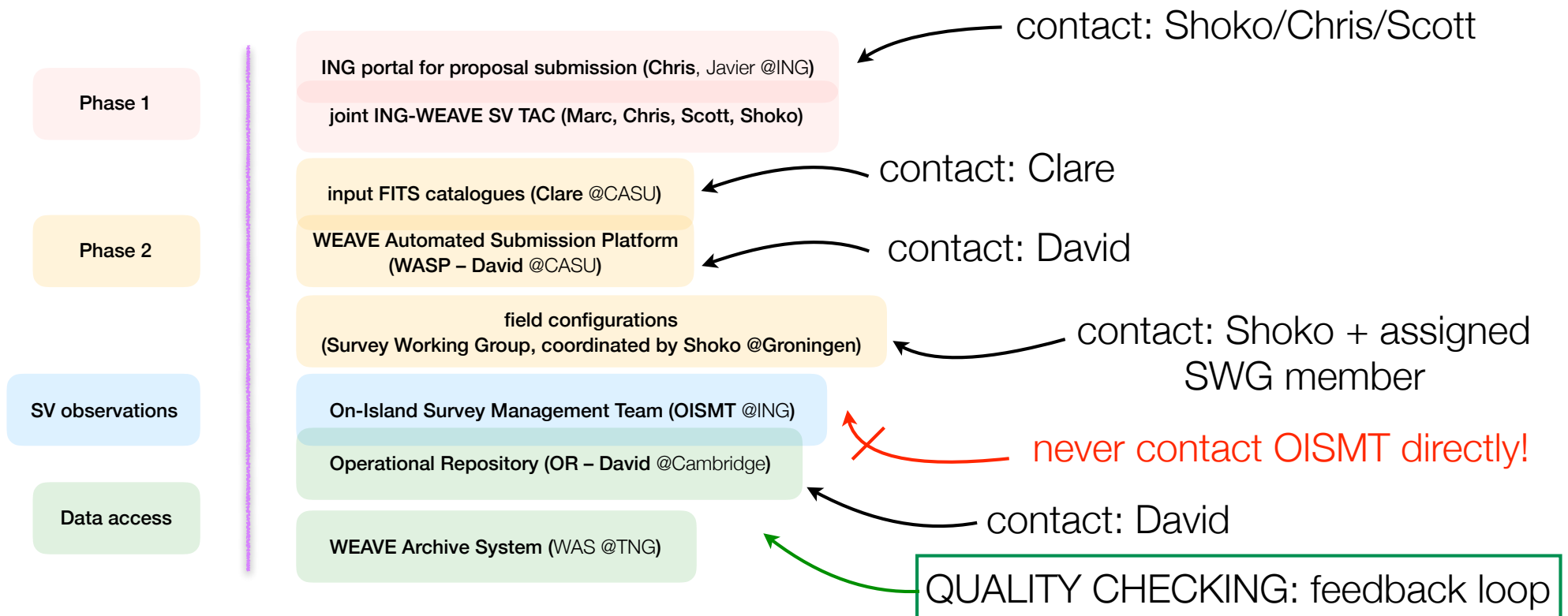
WEAVE Archive System (WAS @TNG)

“Duplo” version of real-life info/data flow... but pretty accurate!

WEAVE information/data flow for SV



What/who does PI-led SV interact with?



For **any** questions, feel free to email Shoko (and please Cc Shoko on other emails)

Quality checking feedback mech.

- Access to data for quality-checking purposes will be through Operational Repository (OR – more info in David’s and Shoko’s talks later today)
- Quality Assurance Groups (QAGs) of WEAVE surveys will be checking CPS and APS outputs for unexpected mishaps not caught by CPS and APS quality control checks...
- Much of data from PI-led SV programmes looking at different targets and science output than those used to test WEAVE data analysis pipelines (i.e. Survey science)...
- Science verification **needs your help!**



Exact mechanism for feedback to/from CPS and APS for PI-led and Survey SV data still to be discussed.

Known need for clear communication channels and formalised mechanisms (not just emails... maybe also reports?).

Timeline (current estimate)

- 14-15 November 2019 – WEAVE SV workshop – your chance to ask any questions in person before submission of full proposal
- 2 December 2019 – SV proposal form goes online; PIs asked to submit full proposals will be notified ([WEAVE SV proposal online form](#))
- 15 December 2019 – SV proposal deadline
- mid January 2020 – responses from ING-WEAVE SV TAC to PIs
- April 2020 – PIs contacted regarding preparation and submission of input FITS catalogues
- May 2020 – input FITS catalogues due
- May-June 2020 – SWG dry-run of field configurations (interactively with PIs)
- July/August 2020 – probable WEAVE first light, followed by commissioning
- August 2020 – SV observations for LIFU mode (might) start
- September 2020 – SV observations for MOS (plate A, then plate B), then mIFU

Phase 1 = proposal submission

WEAVE Open-Time Science Verification – Phase 1

| Personal information | |
|---|---|
| Principal investigator | <input type="text"/> <i>Ex. 'James Smith', 'Maria Gonzalez'.</i> |
| E-mail | <input type="text"/> Again: <input type="text"/> <i>If more than one email, please separate with commas.</i> |
| Telephone [help] | <input type="text"/> Daytime <input type="text"/> Evening (<i>optional</i>) |
| Institution | <input type="text"/> <i>Ex. 'University of Bristol'.</i> |
| Country [help] | <input type="radio"/> Spain <input type="radio"/> The Netherlands <input type="radio"/> United Kingdom |
| Co-investigators | <input type="text"/> <i>Ex. 'John Maxwell (Leicester University), Pedro Hernandez (IAC)'.</i> |
| Scientific case | |
| Title | <input type="text"/> <i>Ex. 'Spectroscopic monitoring of comet 67P/Churyumov-Gerasimenko'.</i> |
| Scientific category | <input type="radio"/> Extra-galactic <input type="radio"/> Galactic <input type="radio"/> Planetary systems |
| Scientific justification [help] | <input type="text"/> |

WEAVE Open-Time Science Verification – Phase 1

| | | Technical case | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---|--|-----------------|-----------------|-----------------------------|---------|-----------|------|-----------------------------|---------|------------|-------------|-------|-----------|-----------|--------|-----------|------------|-------------|-------|--------|------------|--------|-----------|------------|-------------|-------|--------|------------|--------|---------|------------|-------------|-------|--------|------------|--------|
| Principal investigator | <input type="text"/> | Observations requested and justification [help] | <div style="border: 1px solid black; height: 200px;"></div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E-mail | <input type="text"/> <i>If more than one, separate by comma</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Telephone [help] | <input type="text"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Institution | <input type="text"/> <i>Ex. 'University of ...'</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Country [help] | <input type="radio"/> Spain <input type="radio"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Co-investigators | <input type="text"/> <i>Ex. 'John M. ...'</i> | WEAVE setup | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Information | <p>Technical information about WEAVE's observational capabilities can be found on the WEAVE instrumental overview page. For additional advice about observing strategy, or about observations with unusual setup, acquisition, tracking or scheduling requirements, contact any of Shoko Jin (jin@astro.rug.nl), Scott Trager (sctrager@astro.rug.nl) or Chris Benn (crb@ing.iac.es).</p> <p>Please indicate below the main focal-plane mode (MOS, mIFUs or LIFU) and spectroscopic mode required. If more than one combination of the two modes is required, indicate this in the table of targets below.</p> <p>The detector on each arm of the spectrograph is a mosaic of two 6k x 6k e2V CCDs. The default readout mode is slow, with no binning. A requirement for a different readout mode should be justified in the technical case above.</p> <p>More detailed information, required to construct the WEAVE observing blocks, will be sought in phase 2.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Title | <input type="text"/> <i>Ex. 'Spectroscopy of ...'</i> | Focal-plane mode | <input checked="" type="radio"/> MOS <input type="radio"/> mIFUs <input type="radio"/> LIFU | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Scientific category | <input type="radio"/> Extra-galactic | Spectrograph mode | <input checked="" type="radio"/> Low-resolution blue+red <input type="radio"/> High-resolution blue+red <input type="radio"/> High-resolution green+red | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Scientific justification [help] | <input type="text"/> | Targets and calibrations | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Default | Appropriate bias, flat-field and wavelength-calibration exposures will be provided by default. Any additional required calibrations should be justified in the technical case above. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Targets and blind offsets | <p><i>Provide summary information about the fields to be observed, following the example table below.</i></p> <table border="1"> <thead> <tr> <th>Name (one word)</th> <th>RA (hh:mm:ss.s)</th> <th>Dec (±dd:mm:ss.s)</th> <th>Equinox</th> <th>Band=Mag.</th> <th>Mode</th> <th>Exposure time and split (s)</th> </tr> </thead> <tbody> <tr> <td>Coma_25</td> <td>10:20:30.5</td> <td>+15:36:24.7</td> <td>J2000</td> <td>Vmin=22.3</td> <td>MOS+LR_BR</td> <td>3*1800</td> </tr> <tr> <td>Virgo_AB1</td> <td>10:20:30.5</td> <td>+15:36:24.7</td> <td>J2000</td> <td>V=18.5</td> <td>mIFU+HR_GR</td> <td>3*1200</td> </tr> <tr> <td>Virgo_AB2</td> <td>10:20:30.5</td> <td>+15:36:24.7</td> <td>J2000</td> <td>V=18.5</td> <td>mIFU+HR_BR</td> <td>3*1200</td> </tr> <tr> <td>ngc2467</td> <td>10:20:30.5</td> <td>+15:36:24.7</td> <td>J2000</td> <td>V=18.5</td> <td>LIFU+HR_BR</td> <td>3*1200</td> </tr> </tbody> </table> <div style="border: 1px solid black; height: 40px; margin-top: 5px;"></div> | Name (one word) | RA (hh:mm:ss.s) | Dec (±dd:mm:ss.s) | Equinox | Band=Mag. | Mode | Exposure time and split (s) | Coma_25 | 10:20:30.5 | +15:36:24.7 | J2000 | Vmin=22.3 | MOS+LR_BR | 3*1800 | Virgo_AB1 | 10:20:30.5 | +15:36:24.7 | J2000 | V=18.5 | mIFU+HR_GR | 3*1200 | Virgo_AB2 | 10:20:30.5 | +15:36:24.7 | J2000 | V=18.5 | mIFU+HR_BR | 3*1200 | ngc2467 | 10:20:30.5 | +15:36:24.7 | J2000 | V=18.5 | LIFU+HR_BR | 3*1200 |
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| Virgo_AB1 | 10:20:30.5 | +15:36:24.7 | J2000 | V=18.5 | mIFU+HR_GR | 3*1200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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WEAVE Open-Time Science Verification – Phase 1

Principal investigator

E-mail
If more than one, please use a comma

Telephone
[help]

Institution
Ex. 'University of ...'

Country Spain ...
[help]

Co-investigators
Ex. 'John M. ...'

Title
Ex. 'Spectral ...'

Scientific category Extra-galactic ...

Scientific justification
[help]

Observations requested and justification
[help]

Information
Technical information about WEAVE observations. For additional advice about scheduling requirements, contact Benn (crb@ing.iac.es).

Focal-plane mode MOS mIFUs LIFU

Spectrograph mode Low-resolution blue+red ...

Default
Appropriate bias, flat-field and calibrations should be justified in the justification.

Targets and blind offsets
Provide summary information about the fields to be observed, following the example table below.

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| ngc2467 | 10:20:30.5 | +15:36:24.7 | J2000 | V=18.5 | LIFU+HR_BR | 3*1200 |

Targets and blind offsets

Scheduling

Observing conditions

Sky brightness Any/Bright Grey/Dark Dark
[help]

Transparency Any/Non-photometric Photometric
[help]
Photometric: clear sky (extinction stable and homogenous — no clouds, no/little dust); non-photometric: extinction variable or high — cloudy and/or dusty. At phase 2, specify how to proceed in case of highly variable, heavy extinction.

Worst FWHM arcsec
[help]

Maximum airmass
[help]

Proposal handling and submission

Save/Retrieve No file chosen

Check *Select 'Create PDF' and check that your text fits in every provided box.*

Submission

Form goes online 25 December.
Pls will be notified of link.

WEAVE Science Verification ING-community workshop – 14-15 November 2019

Phase 2 = rest of input work...

... which we'll cover tomorrow!

Rest of today is about WEAVE outputs
(+ one more “general” talk)