



ALICE

Silicon Pixel Detector

Domenico Colella¹ and Cristina Terrevoli²
for the SPD team

¹INFN, Bari, Italy

²Università and INFN, Padova, Italy

SPD team (2017)



- Team Leader: Vito Manzari
- Operations
 - System Run Coordinator: Domenico Colella
 - System Run Coordinator (deputy): Cristina Terrevoli
 - On-call operators
 - Bari: Marianna Mazzilli, Giuseppe Trombetta, Fabio Colamaria, Domenico C.
 - Catania: Kunal Gang
 - Padova: Cristina Terrevoli, Andrea Rossi, Xinye Peng, Mattia Faggin, Rosario Turrisi
- Online/Offline monitoring and QA
 - Coordinator: Giuseppe Trombetta
 - Operators: Giuseppe Trombetta, Marianna Mazzilli, Fabio Colamaria, Andrea Festanti (OCDB), Xinye Peng
- Experts
 - DCS: Andrea Alici
 - Hardware: Michel Morel
 - Firmware: Gianluca Aglieri Rinella
 - Online/Offline monitoring and QA: Annalisa Mastroserio
 - Cooling plant: Rosario Turrisi

SPD on-call shifter daily duties



- ① Be aware of the detector and machine plans.
 - Check the plan with the previous on-call shifter; collect all the possible information in the control room from shifters, shift leader or run manager.
 - Follow the LHC activity on [Opvistars](#).
 - Follow the activity in ALICE control room also by remote: [DCS monitoring](#), [ECS display](#).
- ② Mark daily the taken runs as GOOD/BAD in the [Logbook](#), after checking at the DQM plots present there and update the [SPD Run2 DataTaking sheet](#)
- ③ Report about any daily activity to the ITS RC before the operation daily meeting at P2 (16:30); you are strongly suggested to join the daily meeting and follow the ALICE activity.
- ④ In case the SPD stops a Physics run or suffered whatever problem, fast reaction is needed. SPD is a fundamental detector and data taking cannot continue until it is back. We must react fast.
 - Solve the problem as soon as possible; procedures are described in the [operational manual](#).
 - Enter a detailed description of the fact in the [Logbook](#) (tick “on-call interventions” and “SPD” as system). If needed, enter a useful comment for the offline as a follow-up to the last stopped run by SPD.
 - Add a line in the [configuration sheet](#) if a change in the configuration of the detector happened, otherwise add a line in the [hardware intervention sheet](#).

SPD private logbook and documentations



- Private logbook: <https://drive.google.com/open?id=1ALu-dclrcyfGPN53uaNbNRP2ru5-BEOUHDlyVKIJ3s>

configuration_sheet

ID	Component	Model	Serial	Part Number	Notes
10000001	SPD	...	...	...	...
10000002	SPD	...	...	...	...
10000003	SPD	...	...	...	...

hardware_intervention_sheet

Date	Description	Resolution	Link
2016-11-10
2016-11-11
2016-11-12

Date	Component	Status	Notes
2016-11-10	SPD	OK	...
2016-11-11	SPD	OK	...
2016-11-12	SPD	OK	...

- Data Taking summary: <https://docs.google.com/spreadsheets/d/12Q6mYsKPeWQuYrmEnpA1e6j6WtaFH2RaG9jVJyB9MIHc/edit#gid=1905141983>

SPD private logbook and documentations



Documents

- Operational Manual:
<https://drive.google.com/file/d/OB5nG1xNTPzEJODk4bkFyZW5QWUk/view?usp=sharing>
- On-call shift duty:
<https://drive.google.com/file/d/OB5nG1xNTPzEJdVNWZ3JMbFNKME0/view?usp=sharing>
- JIRA project:
<https://alice.its.cern.ch/jira/projects/SPD/summary>
- GitLab repository:
https://gitlab.cern.ch/dcolella/SPD_Offline

A screenshot of the JIRA "Open issues" page. The page title is "Open issues" with a "Switch filter" dropdown. The main content area shows a list of issues ordered by priority. The first issue is "SPD-59 New switching ON procedure". The right sidebar shows details for the selected issue, including its type (Sub-task), status (OPEN), priority (Major), and assignee (Andrea Alici).

Issue ID	Summary
SPD-59	New switching ON procedure
SPD-58	DCS improvements EYETS 2017
SPD-54	JTAG button
SPD-17	Usage of Fast-EOR or PAR to solve Router cdh error
SPD-48	SPDDataTaking2016
SPD-55	Powering System Inventory
SPD-56	SPD Test Station
SPD-57	Readout boards revision

A screenshot of the GitLab repository page for "Domenico Colella / SPD_Offline". The page shows the "Repository" tab with a table of files and their commit history. The table has columns for "Name", "Last commit", and "Last Update".

Name	Last commit	Last Update
Calibration	Unuseful file	10 months ago
QA	Package to run QA code on raw data (new version, with and without L...	3 months ago
macros	macro to display FO maps in online mode	11 months ago
QAandCalibOverview.pdf	Added general slides from Annalisa	a year ago

LHC 2018 calendar

2018 Run Preparation meeting:
https://indico.cern.ch/event/704590/contributions/2890494/attachments/1599339/2535020/2018_Run_Preparation.pdf



LHC and ALICE

- pp@13 TeV + Pb–Pb@5.02 TeV
 - ~130 days of pp physics data taking from April to October
 - ~25 days of Pb–Pb physics data taking during November
- Long Shutdown 2 from week 49

SPD

- Shifts on-call starts on 5th March and ends on 2nd December (39 weeks, ~273 days)
 - Bari: 22 weeks
 - Catania: 1 + 2 weeks
 - Padova: 14 weeks

Useful links



SPD

- [1] Main website: <http://alice-spd.web.cern.ch>
- [2] SPD operational manual: <https://drive.google.com/file/d/OB5nG1xNTPzEJODk4bkFyZW5QWUk/view?usp=sharing>
- [3] SPD on-call instructions: <https://drive.google.com/file/d/OB5nG1xNTPzEJdVNWZ3JMbFNKMEO/view?usp=sharing>
- [4] Private logbook: <https://drive.google.com/open?id=1ALu-dclrcyfGPN53uaNbNRP2ru5-BEOUUhDIyVKIJ3s>
- [5] Run2 data-taking : <https://drive.google.com/open?id=12Q6mYsKPeWOuYrmEnpA1ej6WtaFH2RaG9jVJyB9MIHc>
- [6] JIRA project: <https://alice.its.cern.ch/jira/projects/SPD/summary>
- [7] GitLab Offline project: https://gitlab.cern.ch/dcolella/SPD_Offline

ARC@P2

- [8] Logbook: https://alice-logbook.cern.ch/logbook/date_online.php?p_cont=lc&p_cvm=Compact&pcf_ctc=.,20&p_cpn=1
- [9] ECS display: <https://aldaqweb.cern.ch/sd/>
- [10] DCS monitoring: <http://alicedcs.web.cern.ch/AliceDCS/monitoring/main.aspx>
- [11] LHC page 1: <https://op-webtools.web.cern.ch/vistar/vistars.php?usr=LHC1>
- [12] ALICE Run Coordination webpage: http://alice-collaboration.web.cern.ch/run_coordination/run/index.html
- [13] ALICE data taking description (Federico R. 28 Nov 2014 Junior's day):
<https://indico.cern.ch/event/347071/session/0/contribution/72/material/slides/2.pdf>

Backup



SPD station at P2

- A dedicated station is present at P2, as shown on right. Actually one could log as SPD operator from all the PC present in ARC. Login credential are reported in the [operation manual\[2\]](#).
- Open the detector control environment:
 - SPD control panel – Log in to alispdon001 (rdesktop – a16 –g2550x980 alispdon001) using your personal NICE account. Click on the interface icon and log in with SPD account (credential in [operation manual\[2\]](#)).
 - PIT control panel – Accessible from the same machine as the SPD control panel. Click on the interface icon and log in with SPD.
- Access to the detector control environment from remote
 - Install on your laptop Microsoft Remote Desktop
 - If you are within the CERN network, you can access directly to the P2 network through the gateway, alidcsgw, using your NICE account. Remember to put “CERN\” before your name account.
 - If you are out of the CERN network, you have to access to the gateway, cernts.cern.ch, using your NICE account. After that you can proceed as in the previous case, using the available remote desktop in the gateway interface.

