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2011 Data Alignment

From Global tag "cond-20130111" used in Reco14

align-v6.2-20130109 align-v6.2-20130109-1 align-v6.2-20130109-2 <https://savannah.cern.ch/patch/?5588>

- Update the TT/IT/OT alignment
 - ◆ TT modules Tx, Rz, layers Tz.
 - ◆ IT boxes Tx, Tz, Rz. Tx layers fixed to different values before/after 07/07 (after 07/07 is survey values)
 - ◆ OT C-frame Tx, Rz, C-frame layers Tz, modules Tx, Rz.
- Update VELO alignment (same alignment for all 2011 data):
 - ◆ Module Tx,Ty,Tz,Rz
 - ◆ Sensors Tx, Ty
 - ◆ 2 halves Tx,Ty,Tz,Rx,Ry,Rz
- Alignment for 2011 reprocessed data
- Alignment set after each magnet polarity and/or technical stop
- IOVs:

TABLE NEEDS TO BE UPDATED

Time Validity	Run Range	Magnet Polarity	Comments
2011-03-01 / 2011-04-26	86033-90207	Up	resumed data-taking, valid also for lower energies taken before 2011-04-25
2011-04-26 / 2011-04-29	90319-90328	Down	polarity change
2011-04-29 / 2011-06-11	90329-93282	Down	after technical stop
2011-06-11 / 2011-07-07	93398-94386	Up	polarity change
2011-07-07 / 2011-07-27	95948-97028	Up	after technical stop
2011-07-27 / 2011-08-17	97114-98882	Down	polarity change
2011-08-17 / 2011-09-01	98900-100256	Up	polarity change
2011-09-01 / 2011-09-16	101373-101862	Up	after technical stop
2011-09-16 / 2011-09-28	101891-102452	Down	polarity change
2011-09-28 / 2011-10-05	102499-102907	Up	polarity change
2011-10-05 / 2011-10-22	103049-103863	Down	polarity change
2011-10-22 / 2011-10-31	103936-104414	Up	polarity change

From Global tag "head-20110914" used in Reco12

align-20110914 <https://savannah.cern.ch/patch/index.php?5058>

- same dof as previous alignment for IT/TT/OT including also the y alignment for full 2011
 - ◆ TT modules Tx, Rz
 - ◆ IT modules Tx, Rz, boxes Tx, Tz, Rz
 - ◆ OT modules Tx, Rz, C-frame layers Tz
 - ◆ TT is fixed in its nominal z position and so is OT3-1.
 - ◆ Ty for TT/IT/OT
- constants for 4 different IOVs for all 2011 data till the end of August
- data taken from September use the same alignment as the one in July/August period
- IOV: [2011-03-01 - 2011-03-28 - 2011-05-11 - 2011-07-08 - inf).
- Runs [87219 - 88182/89333 - 90763/91556 - 94386/95929 - 104414]

velo-20110914 <https://savannah.cern.ch/patch/index.php?5057>

- include new sensor and module alignment and 2 half alignment strongly reduces the weak mode
- no alignment for Tz at module or sensor level (fix to the metrology)

From Global tag "head-20110901"

align-20110901 <https://savannah.cern.ch/patch/index.php?5026>

- Update the TT/IT/OT alignment
 - ◆ TT modules Tx, Rz
 - ◆ IT modules Tx, Rz, boxes Tx, Tz, Rz
 - ◆ OT modules Tx, Rz, C-frame layers Tz
 - ◆ TT is fixed in its nominal z position and so is OT3-1.
- new alignment constants v5.4.3
- Update Ty for TT/IT/OT
- IOV: [2011-07-08]

From Global tag "head-20110620" and used in Reco11 and Reco11a

st-align-20110617 <https://savannah.cern.ch/patch/index.php?4924>

- Update the TT/IT/OT alignment *TT modules Tx, Rz *IT modules Tx, Rz, boxes Tx, Tz, Rz *OT modules Tx, Rz, C-frame layers Tz *TT is fixed in its nominal z position and so is OT3-1.
- new alignment constants v5.4
- using new field map
- IOV: [2011-03-01 - 2011-03-28 - 2011-05-11 - inf).

From Global tag "head-20110524"

st-align-20110524 <https://savannah.cern.ch/patch/index.php?4876>

- Update the TT/IT/OT alignment * TT modules Tx, Rz * IT modules Tx, Rz, boxes Tx, Tz, Rz * OT modules Tx, Rz, C-frame layers Tz * TT is fixed in its nominal z position and so is OT3-1.
- new alignment constants v5.3.2
- IOV [2011-05-11 - inf]

From Global tag "head-20110512" and used in Reco10

velo-20110511 <https://savannah.cern.ch/patch/index.php?5057>

- new VELO 2 half alignment for data at 1.4 TeV with the VELO open ± 5 mm
- IOV [2011-03-25_05:00 - 2011-03-28_07:00]

st-align-20110510 <https://savannah.cern.ch/patch/index.php?4854>

- Update the TT/IT/OT alignment * TT modules Tx, Rz * IT modules Tx, Rz, boxes Tx, Tz, Rz * OT modules Tx, Rz, C-frame layers Tz * TT is fixed in its nominal z position and so is OT3-1.
- new alignment constants v5.3
- IOV [2011-03-01 - inf]

From Global tag "head-20110328"

st-align-20110328 <https://savannah.cern.ch/patch/index.php?4785>

- Update the TT/IT/OT alignment
- using J/psi mass constraint
- new alignment constants v5.2
- IOV [2011-03-01 - inf]

From Global tag "head-20110318" and used in Reco09

st-align-20110318 <https://savannah.cern.ch/patch/index.php?4751>

- First 2011 the TT/IT/OT alignment
- new alignment constants v5.0
- IOV [2011-03-01 - inf]

-- SilviaBorghi - 29-Aug-2012

This topic: LHCb > 2011alignment

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