

1) Validated / official products

No.	Product	Class	Sub-Class	Accuracy	Latency	Updates	Links / DOIs
1.01	Definition of ETRS89	Reference Systems and Frames	Definition	1 cm	-	-	ETRS89 homepage
1.02	Definition of EVRS	Reference Systems and Frames	Definition	1 cm	-	-	EVRS homepage
1.03	Transformation between ETRF and ITRF	Reference Systems and Frames	Transformation Parameter	1 cm	-	Simultaneous with new ITRF realization	ETRS89/ITRS transformation
1.04	ETRF/ITRF transformation service	Reference Systems and Frames	Transformation Parameter	1 cm	Few seconds	On request	EPN coordinate transformation service https://doi.org/10.24414/rob-euref-ectt
1.05	CRS - Transformation between national coordinate system and ETRS89	Reference Systems and Frames	Transformation Parameter	1 m	-	According supply by countries	CRS homepage
1.06	CRS - Transformation between national height system and EVRS	Reference Systems and Frames	Transformation Parameter	1 - 10 cm	-	According supply by countries	CRS homepage
1.07	EPN station coordinates Class A	Station	Coordinate	1 cm	15 weeks	15 weeks	EPN coordinates https://doi.org/10.24414/ROB-EUREF-CWWW
1.08	EPN station velocities Class A	Station	Velocity	~ 1 mm /year uncertainty	15 weeks	15 weeks	EPN coordinates https://doi.org/10.24414/ROB-EUREF-CWWW
1.09	EPN station coordinates Class B	Station	Coordinate	> 1 cm	15 weeks	15 weeks	EPN coordinates
1.10	Weekly coordinates of EPN stations	Station	Coordinate	0.5 - 1.5 cm	5 weeks	weekly	Weekly EPN solutions



No.	Product	Class	Sub-Class	Accuracy	Latency	Updates	Links / DOIs
1.11	Daily coordinates of EPN stations	Station	Coordinate	0.5 - 1.5 cm	3 weeks	daily	Daily EPN solutions
1.12	EPN station position time series	Station	Coordinate	1 cm	15 weeks	15 weeks	EPN position time series
1.13	Station coordinates of validated EUREF campaigns	Station	Coordinate	1 - 5 cm	1 year	-	EUREF campaigns
1.14	EVRF2019	Station	Physical Height	1 - 5 cm	-	5 - 10 years	EVRF2019
1.15	EUVN-DA	Station	Physical Height	1 - 10 cm	-	5 - 10 years	EUVN-DA
1.16	Hourly troposphere parameters for EPN stations	Station	Troposphere parameter	4 - 6 mm ZTD	3 weeks	weekly	EPN tropospheric delays
1.17	GNSS broadcast satellite orbit correction	Satellite	Orbit	10 - 15 cm	real-time	10 sec.	ASI broadcaster BKG broadcaster ROB broadcaster
1.18	GNSS satellite clock correction	Satellite	Clock	0.3 ns	real-time	10 sec.	ASI broadcaster BKG broadcaster ROB broadcaster



2) Observational & meta data

No.	Product	Class	Sub-Class	Accuracy	Latency	Updates	Links / DOIs
2.01	Daily observation files of EPN stations	Observation	Data File	-	30 min	daily	BEV data centre BKG data centre ROB historical data centre ROB historical data centre (portal)
2.02	Hourly observation files of EPN stations	Observation	Data File	-	5 - 15 min	hourly	BEV data centre BKG data centre
2.03	Real-time observations of EPN stations using NTRIP	Observation	Data Stream	-	real-time	real-time	EPN real-time page ASI broadcaster BKG broadcaster ROB broadcaster
2.04	High rate observation files of EPN stations	Observation	Data File	-	5 - 10 min	Quarter of an hour	BEV data centre BKG data centre
2.05	Meta data and monitoring of EPN stations	Station		-	Few minutes	According to notification by station provider	EPN station list
2.06	Station site log submission (M3G)	Station			Few seconds	On request	EPN CB station sitelog check https://doi.org/10.24414/rob-gnss-m3g



3) Internal and other products / monitoring

No.	Product	Class	Sub-Class	Accuracy	Latency	Updates	Links
3.01	Rapid daily coordinates of EPN stations	Station	Coordinate	1 - 2 cm	1 day	daily	BKG data centre
3.02	EPN sub-network solution as contribution to the TIGA Project of IGS	Station	Coordinate	0.5 - 1.5 cm	3 weeks	weekly	
3.03	Site information of EPN stations	Station				Daily or after configuration change	EPN site info



4) EUREF Standardization and Guidelines

No.	Product	Class	Sub-Class	Accuracy	Latency	Updates	Links / DOIs
4.01	Guidelines for EPN Stations	Station				If necessary	EPN guidelines https://doi.org/10.24414/rob-euref-guidelines-station
4.02	Procedure for Becoming an EPN Station	Station				If necessary	EPN guidelines https://doi.org/10.24414/rob-euref-proc-new-station
4.03	Guidelines for EPN Data Centres & EPN broadcasters					If necessary	EPN guidelines
4.04	Guidelines for EPN Analysis Centres					If necessary	EPN guidelines
4.05	Guidelines for EUREF Densifications	Station				If necessary	EUREF guidelines https://doi.org/10.24414/rob-euref-guidelines-dens